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CNC CHARLESTON
5090.3a

PROJECT COMPLETION REPORT CLEARANCE OF UTILITY CORRIDOR AREA OF CONCERN 724 (AOC 724) APPENDIX F VOLUME 1 OF 2 CNC CHARLESTON SC
11/1/2003
KEMRON

Project Completion Report

Revision No. 00

Clearance of Utility Corridor (AOC 724) Appendix F, Volume 1

Charleston Naval Complex Charleston, South Carolina

Contract No. N62467-01-D-0331
Contract Task Order No. 0005

November 2003

PREPARED FOR

Department of the Navy, Southern Division
Naval Facilities Engineering Command
2155 Eagle Drive
North Charleston, South Carolina 29406

Scan all 4 volumes
Project Completion
Reports - Utility
= Compliance

Appendix F

Volume 1

Kemron Reports L0304618 and L0304594

KEMRON REPORT L0304618

PREPARED FOR CCI

WORK ID: 177511/AOC UTILITY CORR

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KEMRON
ENVIRONMENTAL SERVICES

109 Starlite Park ▪ Marietta, OH 45750 ▪ Telephone (740) 373-4071 ▪ FAX (740) 373-4835

Laboratory Report Number: **L0304618**

Please find attached the results for samples you submitted to Kemron Environmental Services. Review and compilation of your report was completed by Kemron Team 1 representatives. If you have questions, comments or require further assistance please contact me or any of the team 1 members listed below at 800-373-4071. We can also be reached at the e-mail addresses listed below.

Cindy Arnold-Team Leader
carnold@kemron-lab.com

Stephanie Mossburg-Team Chemist/Data Specialist
smossburg@kemron-lab.com

Debbie Tornes-Customer Service/Invoicing Specialist
dtornes@kemron-lab.com

Reviewed by: Stephanie Mossburg Date: 5/12/03

Certified by: David E. Vandenberg
David E. Vandenberg
Laboratory Director

This laboratory report shall not be reproduced, except in full, without the written approval of KEMRON Environmental Services

This report contains a total of 85 pages.

NYDOH NELAP Id: 10861

1.0 Summary Report

1.1 Laboratory Report

Cover Page
Laboratory Narrative
Laboratory Results

L0304618

05/05/03 14:39

Submitted By

Kemron Environmental Services
109 Starlite Park
Marietta, Ohio 45750
(740)373-4071

For

Account Name: CH2MHill Constructors, Inc. (CCI)
CH2M HILL Constructors, Inc.
115 Perimeter Center Place NE Suite 700
Atlanta, GA 30346
Attention: Melissa Aycock

Account Number: 207-SC-728
Work ID: 177511/AOC UTILITY CORR

Sample Summary

Client ID	Lab ID	Date Collected	Date Recieved
05-177511-DW4-042803	L0304618-01	28-APR-03	29-APR-03
05-177511-DW5-042803	L0304618-02	28-APR-03	29-APR-03

KEMRON ENVIRONMENTAL SERVICES
REPORT NARRATIVE

L0304618

CHAIN OF CUSTODY:

The chain of custody number was 177511-01-042803.

SHIPMENT CONDITIONS:

The chain of custody forms were received sealed in a cooler. The cooler temperature was 4 ° C.

SAMPLE MANAGEMENT:

All samples received were intact.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

REVIEWED: Stephanie Massburg DATE: 4/30/03

REPORT NARRATIVE
FORMALDEHYDE by HPLC

KEMRON Login No.: L0304618

METHOD

Preparation: SW- 846 8315A
Analysis: SW-846 8315A

HOLDING TIMES

Sample Preparation: All holding times were met.
Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial calibrations: For all compounds linear equations were applied. All acceptance criteria were met.
Alternate Source Standards: The alternate source yielded a %D that was outside of the advisory limit.
Continuing Calibration : All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.
Laboratory Control Samples: All acceptance criteria were met.
Matrix Spikes: An MS/MSD were not associated with this sample delivery group.

SAMPLES

Samples: All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: RDC REVIEWED: _____ DATE: 5/7/03

Rev. 7/14/00

REPORT NARRATIVE
GENERAL CHEMISTRY

KEMRON Login No: L0304618

METHOD

Analysis: See report for method reference.

HOLDING TIMES

Sample Preparation: All holding times were met.
Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.
Laboratory Control Sample: All acceptance criteria were met.
Duplicates: All acceptance criteria were met
Matrix Spikes: All acceptance criteria were met.

SAMPLES

There were no technical difficulties with this sample group

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: dih__ REVIEWED: dih DATE: 5/7/03

Rev. 6/00

Error Report Summary

- Navy RAC

Error Level	Process Name	Process Description	Number
	No errors or warnings.		

Error Report Detail

- Navy RAC

Process	Message	Resolution
--		
	-- Post-Import QC Query began at: 5/14/2003 10:33	
	Key: SDG [L0304618]	
	-- Post-Import QC Query ended at: 5/14/2003 10:33	
	Key:	

Report Date :May 5, 2003

Sample Number: L0304618-01
Client ID: 05-177511-DW4-042803
Matrix: Water
Workgroup Number: WG139431
Collect Date: 28-APR-03

Prep Method: SM5210B
Analytical Method: SM5210B
Analyst: GSG
Dilution: 1
Units: mg/L

Instrument: YSI-58
Prep Date: 04/30/2003 08:00
Cal Date:
Run Date: 04/30/2003 08:00
File ID:

Analyte	CAS. Number	Result	Qual	RL	MDL
Biochemical Oxygen Demand		1.70	J	3.00	1.00

J This compound was detected at a level above the method detection limit, but below the reporting limit.

Sample Number: L0304618-01
Client ID: 05-177511-DW4-042803
Matrix: Water
Workgroup Number: WG139529
Collect Date: 28-APR-03
Sample Tag: 01

Prep Method: METHOD
Analytical Method: 8315A
Analyst: RDC
Dilution: 1
Units: ug/L

Instrument: HPLC3
Prep Date: 05/01/2003 12:15
Cal Date: 05/01/2003 19:11
Run Date: 05/01/2003 20:38
File ID: 3L002474.F

Analyte	CAS. Number	Result	Qual	RL	MDL
Formaldehyde	50-00-0		U	50.0	25.0

Sample Number: L0304618-02
Client ID: 05-177511-DW5-042803
Matrix: Water
Workgroup Number: WG139431
Collect Date: 28-APR-03

Prep Method: SM5210B
Analytical Method: SM5210B
Analyst: GSG
Dilution: 1
Units: mg/L

Instrument: YSI-58
Prep Date: 04/30/2003 08:00
Cal Date:
Run Date: 04/30/2003 08:00
File ID:

Analyte	CAS. Number	Result	Qual	RL	MDL
Biochemical Oxygen Demand		6.90		3.00	1.00

Sample Number: L0304618-02
Client ID: 05-177511-DW5-042803
Matrix: Water
Workgroup Number: WG139529
Collect Date: 28-APR-03
Sample Tag: 01

Prep Method: METHOD
Analytical Method: 8315A
Analyst: RDC
Dilution: 1
Units: ug/L

Instrument: HPLC3
Prep Date: 05/01/2003 12:15
Cal Date: 05/01/2003 19:11
Run Date: 05/01/2003 20:51
File ID: 3L002475.F

Analyte	CAS. Number	Result	Qual	RL	MDL
Formaldehyde	50-00-0	58.3		50.0	25.0

WORKGROUP SUMMARY BY METHOD

WORKGROUP SUMMARY BY METHOD

Analysis: Biochemical Oxygen Demand
Analytical Method: SM5210B
Workgroup: WG139431

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304618-01	05-177511-DW4-042803			04/30/03 08:00		YSI-58	GSG
L0304618-02	05-177511-DW5-042803			04/30/03 08:00		YSI-58	GSG

Analysis: Formaldehyde - HPLC
Extraction Method: 8315A
Workgroup: WG139514

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304618-01	05-177511-DW4-042803	04/30/03 09:00	05/01/03 12:15			SEP-FUNNEL	CEB
L0304618-02	05-177511-DW5-042803	04/30/03 09:00	05/01/03 12:15			SEP-FUNNEL	CEB

Analysis: Formaldehyde - HPLC
Analytical Method: 8315A
Workgroup: WG139529

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304618-01	05-177511-DW4-042803		05/01/03 12:15	05/01/03 20:38	01	HPLC3	RDC
L0304618-02	05-177511-DW5-042803		05/01/03 12:15	05/01/03 20:51	01	HPLC3	RDC

KEMRON ENVIRONMENTAL SERVICES
BLANK REPORT

Login Number: L0304618 Run Date: 05/01/2003 Sample ID: WG139514-01
Instrument ID: HPLC3 Run Time: 19:36 Prep Method: METHOD
File ID: 3L002469.F Analyst: RDC Method: 8315A
Workgroup (AAB#): WG139529 Matrix: Water Units: ug/L
Contract #: Cal ID: HPLC3-01-MAY-03

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Formaldehyde	25.0	50.0	25.0	1	U

KEMRON FORMS - Modified 05/02/2003
Version 1.3
Report generated 05/06/2003 09:42

KEMRON ENVIRONMENTAL SERVICES
LABORATORY CONTROL SAMPLE

Login Number: L0304618 Run Date: 05/01/2003 Sample ID: WG139514-02
Instrument ID: HPLC3 Run Time: 19:48 Prep Method: METHOD
File ID: 3L002470.F Analyst: RDC Method: 8315A
Workgroup (AAB#): WG139529 Matrix: Water Units: ug/L
Contract #: Cal ID: HPLC3-01-MAY-2003 19:11

Analytes	Expected	Found	% Rec	LCS Limits	Q
Formaldehyde	250	275	110	39 - 153	

KEMRON FORMS - Modified 05/01/2003
Version 1.3
Report generated 05/06/2003 09:42

KEMRON ENVIRONMENTAL SERVICES
BLANK REPORT

Login Number: L0304618 Run Date: 04/30/2003 Sample ID: WG139431-03
Instrument ID: YSI-58 Run Time: 08:00 Prep Method: SM5210B
File ID: Analyst: GSG Method: SM5210B
Workgroup (AAB#): WG139431 Matrix: Water Units: mg/L
Contract #: Cal ID: YSI-58 -

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Biochemical Oxygen Demand	1.00	3.00	1.00	1	U

KEMRON FORMS - Modified 05/02/2003
Version 1.3
Report generated 05/06/2003 09:43

KEMRON ENVIRONMENTAL SERVICES
LABORATORY CONTROL SAMPLE

Login Number: L0304618 Run Date: 04/30/2003 Sample ID: WG139431-04
Instrument ID: YSI-58 Run Time: 08:00 Prep Method: SM5210B
File ID: Analyst: GSG Method: SM5210B
Workgroup (AAB#): WG139431 Matrix: Water Units: mg/L
Contract #: Cal ID: YSI-58 -

Analytes	Expected	Found	% Rec	LCS Limits	Q
Biochemical Oxygen Demand	200	209	105	84 - 114	

KEMRON FORMS - Modified 05/01/2003
Version 1.3
Report generated 05/06/2003 09:43

1.2 Attachments

Kemron Environmental Services
Analyst Listing
Tuesday, April 1 2003

AJF - AMANDA J. FICKIESEN
ALT - ANN L. THAYER
ARS - ANGELINA R. SCOTT
BRF - BRENT F. FOOS
BRG - BRENDA R. GREGORY
CAF - CHERYL A. FLOWERS
CAK - CHERYL A. KOELSCH
CEB - CHAD E. BARNES
CLC - CHRYS L. CRAWFORD
CLK - CARL L. KING
CLW - CHARISSA L. WINTERS
CMS - CRYSTAL M. STEVENS
CRC - CARLA R. COCHRAN
CSH - CHRIS S. HILL
DAD - DAVE A. DAULEY
DAH - DON A. HUNTER
DAS - DALLAS A. SULLIVAN
DAT - DEBBIE A. TORNES
DEL - DON E. LIGHTFRITZ
DEV - DAVID E. VANDENBERG
DGB - DOUGLAS G. BUTCHER
DIH - DEANNA I. HESSON
DLA - DENISE L. ADAMS
DLB - DAVID L. BUMGARNER
DLN - DEANNA L. NORTON
DLP - DOROTHY L. PAYNE
DLR - DIANNA L. RAUCH
DOV - DENISE O. VANDENBERG
DP - DEANNA L. PIERSON
DRB - DOUG R. BARNETT
DSM - DAVID S. MOSSOR
DST - DENNIS S. TEPE
ECL - ERIC C. LAWSON
GSG - GALEN S. GEORGE
HV - HEMA VILASAGAR
JAL - JOHN A. LENT
JEA - JOSH E. ARNOLD
JJG - JAKE J. GREUEY
JKW - JANE K. THOMPSON
JLS - JANICE L. SCHIMMEL
JMM - JARROD M. MARTIN
JWR - JOHN W. RICHARDS
JWS - JACK W. SHEAVES
JYH - JI Y. HU
KHR - KIM H. RHODES
KRA - KATHY R. ALBERTSON
LKN - LINDA K. NEDEFF
LRR - LUCYNDA R. ROBERTS
LSA - LUCINDA S. ARNOLD
LSB - LESLIE S. BUCINA
MDA - MICHAEL D. ALBERTSON
MDC - MICHAEL D. COCHRAN
MEF - MIKE E. FLANAGAN
MES - MARY E. SCHILLING
MKZ - MARILYN K. ZUMBRO
MLR - MARY L. ROCHOTTE
MLS - MICHAEL L. SCHIMMEL
MMB - MAREN M. BEERY
MSW - MATT S. WILSON
NJB - NATALIE J. BOOTH
OGT - OKEY G. TUCKER
RDC - REBECCA D. CUTLIP
REK - ROBERT E. KYER
RJW - RHONDA J. WITTEKIND
RWC - ROD W. CAMPBELL
SH - SHAUNA M. HYDE
SLM - STEPHANIE L. MOSSBURG
SLP - SHERI L. PFALZGRAF
TJH - TIM J. HOEFLICH
TLT - TIFFINI L. TINGLER
TMM - TAMMY M. MORRIS
VC - VICKI COLLIER
VKL - VICKY K. LAUER

KEMRON FORMS: JUL-25-02
Printed: APR-01-03 14:35:03

List of Valid Qualifiers
August 5, 2002

Standard Qualifiers

These are KEMRON's Standard Report Qualifiers

B	Present in the method blank
C	Confirmed by GC/MS
CG	Confluent growth
D	The analyte was quantified at a secondary dilution factor
DL	Surrogate or spike was diluted out
E	Estimated concentration due to sample matrix interference
FL	Free liquid
I	Semi-quantitative result, out of instrument calibration range
J	Present below nominal reporting limit
L	Sample reporting limits elevated due to matrix interference
N	Tentatively Identified Compound (TIC)
NA	Not applicable
ND	Not detected at or above the reporting limit (RL)
NF	Not found
NFL	No free liquid
NI	Non-ignitable
NS	Not spiked
P	Concentration >40% difference between The two GC columns
QNS	Quantity not sufficient to perform analysis
RA	Re analysis confirms reported results
RE	Re analysis confirms sample matrix interference
S	Analyzed by method of standard addition
SMI	Sample matrix interference on surrogate
SP	Reported results are for spike compounds only
TNTC	Too numerous to count
U	Analyzed for but not detected
W	Post-digestion spike for furnace AA out o f control limits
X	Exceeds regulatory limit
Z	Can not be resolved from isomer.***
~	Correlation coefficient for the MSA is less than 0.995
<	Less than
>	Greater than
*	Surrogate or spike compound out of range

***** Special Notes for Organic Analytes**

1. Acrolein and acrylonitrile by method 624 are semi-quantitative screens only
2. 1,2-Diphenylhydrazine is unstable and is reported as azobenzene
3. N-nitrosodiphenylamine cannot be separated from diphenylamine
4. 3-Methyphenol and 4-Methyphenol are unresolvable compounds
5. m-Xylene and p-Xylene are unresolvable compounds
6. The reporting limits for Appendix II IX compounds by method 8270 are based on EPA estimated PQLs referenced in 40 CFR Part 264. Appendix IX. They are not always achievable for every compound and are matrix dependent

AFCEE Qualifiers

These are KEMRON's AFCEE Report Qualifiers

J	The analyte was positively identified, the quantitation is an estimation
U	The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL
F	The analyte was positively identified but the associated numerical value is below the RL
R	The data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria
B	The analyte was found in an associated blank, as well as in the sample
M	The matrix effect was present
S	To be applied to all field screening data
T	Tentatively identified compound (using GC/MS)

H:\DATA\COMMON\Qualifier List 08-05-02.doc

CHAIN-OF-CUSTODY RECORD

177511-01-042803

Fax No: (770) 804-9282

PROJECT NAME: Charleston Naval Cpx	PROJECT NUMBER: 177511	LAB NAME AND CONTACT: Kemron Environmental	FAX AND MAIL REPORTS/EDD TO: RECIPIENT 1 (Name and Company): Bonnie Hogue	RECIPIENT 1 (Address, Tel No., and Fax No.): 115 Perimeter Ctr NE Ste 700 Atlanta Ga 30346
PROJECT PHASE/SITE/TASK: AOC Utility Corr.	CTO OR DO NUMBER: 0005	LAB PO NUMBER: 5259	FAX AND MAIL REPORTS/EDD TO: RECIPIENT 2 (Name and Company): Melissa Dyrsol	RECIPIENT 2 (Address, Tel No., and Fax No.): 115 Perimeter Ctr NE Ste 700 Atlanta Ga 30346
PROJECT CONTACT: Caren Jordan	PROJECT TEL NO AND FAX NO: 770-313-9571	LAB TEL NO AND FAX NO: 770-373-4071 P 770-373-4835 F	FAX AND MAIL REPORTS/EDD TO: RECIPIENT 3 (Name and Company): Russell Henderson	RECIPIENT 3 (Address, Tel No., and Fax No.): 115 Perimeter Ctr NE Ste 700 Atlanta Ga 30346

ANALYSES REQUIRED (Include Method Numbers): BOD 405.1; Formaldehyde 8315A

ITEM	SAMPLE IDENTIFIER	SAMPLE DESCRIPTION/LOCATION	MATRIX (see codes on SOP)	DATE COLLECTED	TIME COLLECTED	DATA PKG LEVEL (see notes on SOP)	TAT (calendar days)	BOD 405.1	Formaldehyde 8315A	SAMPLE TYPE (see codes on SOP)	COMMENTS/ SCREENING READINGS	LAB ID (for lab's use)
1	05-17511-DM4-042803	CFVP706C	W	4/28/03	1200	III/B	7	1	1	N	waste char.	
2	05-17511-DM5-042803	483	W	4/28/03	1230	III/B	7	1	1	N	waste char.	
3	TEMP Blank		W	NA	NA		7	TEMP		QC		
4												
5												
6												
7												
8												
9												
10												

SAMPLER(S) AND COMPANY: (please print): Caren Jordan / CCT

COURIER AND SHIPPING NUMBER: FedEx 8348 4219 1782

SAMPLES TEMPERATURE AND CONDITION UPON RECEIPT (for lab's use): Checked Intact Cooler temp 4

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Printed Name and Signature: Gwendolyn Jordan	4/28/03	1655	Printed Name and Signature: Fedex	4/28/03	1700
Printed Name and Signature:			Printed Name and Signature: Brenda Gregory / Brenda Gregory	4/29/03	1008
Printed Name and Signature:			Printed Name and Signature:		

Distribution: [ ] Original - Laboratory (To be returned with Analytical Report); [ ] Copy 1 - Project File; [ ] Copy 2 - PMO

Form CC001, Rev 06/00

KEMRON Internal Laboratory Chain of Custody

Work Order: L0304418 Client: CCI # of Samples: 2 Due Date: 5/6 Page:

Sample #	Analysis	Reason	Removed By ADT	Removed From	Moved To	Reliq. by	Ret'd By ADT	Ret'd To	Rec'd By	Reason
01402A	8010	Anal	04-30-03 0830	walk-in	wet	BLG	04-30-03 1540	Archived	JET	Archive
01402A	8315	Analysis	Rec'd 5/1/03 @ 0930	walk-in	SV	BLG	Rec'd 5/2/03 14:45	Archive	Rec'd 5/2/03 BLG	archive

Report Sent 5/8/03

KEMRON Environmental Services — SAMPLES RECEIPT FORM — Marietta Laboratory

CLIENT: CH2M	DATE: 4-29-03	SHIPPED BY: (✓) FED-EX ( ) AIRBORNE ( ) UPS ( ) EMERY ( ) RPS ( ) US MAIL ( ) KEMRON ( ) CLIENT
BRC Other _____		

COOLER ID: KL263	COOLER ID:	COOLER ID:
INDEX #: 834842191782	INDEX #:	INDEX #:
SEALED (✓) YES ( ) NO	SEALED ( ) YES ( ) NO	SEALED ( ) YES ( ) NO
CUSTODY (✓) YES ( ) NO	CUSTODY ( ) YES ( ) NO	CUSTODY ( ) YES ( ) NO
TEMP: (D) (E) 4 °C	TEMP: (D) (E) °C	TEMP: (D) (E) °C
TEMP IN RANGE (4°C ± 2°) (✓) YES ( ) NO	TEMP IN RANGE (4°C ± 2°) ( ) YES ( ) NO	TEMP IN RANGE (4°C ± 2°) ( ) YES ( ) NO
WET ICE (✓) BLUE ICE ( )	WET ICE ( ) BLUE ICE ( )	WET ICE ( ) BLUE ICE ( )
ICE FROZEN (✓) MELTED ( )	ICE FROZEN ( ) MELTED ( )	ICE FROZEN ( ) MELTED ( )
RADIATION CHECKED (✓) YES ( ) NO	RADIATION CHECKED ( ) YES ( ) NO	RADIATION CHECKED ( ) YES ( ) NO
SAMPLE INTACT (✓) YES ( ) NO	SAMPLE INTACT ( ) YES ( ) NO	SAMPLE INTACT ( ) YES ( ) NO
SALVAGEBLE ( ) YES ( ) NO	SALVAGEBLE ( ) YES ( ) NO	SALVAGEBLE ( ) YES ( ) NO
SAMPLE TYPE: WATER (✓) SOIL ( ) OTHER ( )	SAMPLE TYPE: WATER ( ) SOIL ( ) OTHER ( )	SAMPLE TYPE: WATER ( ) SOIL ( ) OTHER ( )
LABELS: INTACT (✓) YES ( ) NO	LABELS: INTACT ( ) YES ( ) NO	LABELS: INTACT ( ) YES ( ) NO
LEGIBLE (✓) YES ( ) NO	LEGIBLE ( ) YES ( ) NO	LEGIBLE ( ) YES ( ) NO
MATCH COC (✓) YES ( ) NO	MATCH COC ( ) YES ( ) NO	MATCH COC ( ) YES ( ) NO
pH IN RANGE (2 - >9 - >12) (✓) YES ( ) NO AS APPROPRIATE N/A	pH IN RANGE (2 - >9 - >12) ( ) YES ( ) NO AS APPROPRIATE	pH IN RANGE (2 - >9 - >12) ( ) YES ( ) NO AS APPROPRIATE
SAMPLES FROZEN? ( ) YES (✓) NO	SAMPLES FROZEN? ( ) YES ( ) NO	SAMPLES FROZEN? ( ) YES ( ) NO
LOG-IN COMMENTS	LOG-IN COMMENTS	LOG-IN COMMENTS

TSR COMMENTS

CONTACT:	DATE:	TIME:
COMMENTS: ( ) VOICE ( ) FAX ( ) E-MAIL		

Revised 05/29/02

COOLER RECEIPT FORM

Contractor Cooler _____
MRD Cooler # _____
Number of Coolers 1

PROJECT: 177511/AOC Utility LIMS# L0304618

USE OTHER SIDE OF THIS FORM TO NOTE DETAILS CONERNING CHECK-IN PROBLEMS

A. **PRELIMINARY EXAMINATION PHASE:** Date cooler opened: 4/29/03 C-of-C Number: 177511-01-042803
by (print) Brenda Gregory (sign) Brenda Gregory

1. Did cooler come with a shipping slip (air bill, etc.)? ..... YES NO
   If YES, enter carrier name & air bill number here: fed ex - 834842191782
2. Were custody seals on outside of cooler? ..... YES NO
   How many & where? 2-front, seal date: 4-28-03 seal name: Custody Seal
3. Were custody seals unbroken and intact at the data and time of arrival? ..... YES NO
4. Did you screen samples for radioactivity using the Geiger Counter? ..... YES NO
5. Were custody papers sealed in a plastic bag & taped inside to the lid? ..... YES NO
6. Were custody papers filled out properly (ink, signed, etc.)? ..... YES NO
7. Did you sign custody papers in the appropriate place? ..... YES NO
8. Was project identifiable from custody papers? If yes, enter project name at the top of this form ..... YES NO
9. If required, was enough ice used? ..... Type of ice: wet Temp 4 °C ..... YES NO
10. Have designated person initial here to acknowledge receipt of cooler: BG (date) 4-29-03

B. **LOG-IN PHASE:** Date samples were logged-in: 4-29-03
by (print) Brenda Gregory (sign) Brenda Gregory
log 4-29-03

11. Describe type of packing in cooler: bubble ~~bag~~ wrap
12. Were all bottles sealed in separate plastic bags? ..... YES NO
13. Did all bottles arrive unbroken & were labels in good condition? ..... YES NO
14. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? ..... YES NO
15. Did all bottle labels agree with custody papers? ..... YES NO
16. Were correct containers used for the tests indicated? ..... YES NO
17. Were correct preservatives added to samples? ..... YES NO
18. Was a sufficient amount of sample sent for tests indicated? ..... YES NO
19. Were bubbles absent in volatile samples? If NO, list by Sample # _____ YES NO
20. Was the project manager called and status discussed? If YES, give details on the back of this form ..... YES NO
21. Who was called? _____ By whom? _____ (date) _____

2.0 Full Sample Data Package

2.2 Semivolatiles

2.2.15 Formaldehyde (8315A)

REPORT NARRATIVE
FORMALDEHYDE by HPLC

KEMRON Login No.: L0304618

METHOD

Preparation: SW- 846 8315A
Analysis: SW-846 8315A

HOLDING TIMES

Sample Preparation: All holding times were met.
Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial calibrations: For all compounds linear equations were applied. All acceptance criteria were met.
Alternate Source Standards: The alternate source yielded a %D that was outside of the advisory limit.
Continuing Calibration : All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.
Laboratory Control Samples: All acceptance criteria were met.
Matrix Spikes: An MS/MSD were not associated with this sample delivery group.

SAMPLES

Samples: All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: RDC REVIEWED: Meredith Cash DATE: 5/7/03

Rev. 7/14/00

FORMALDEHYDE (8315A)

Login Number L0304618

A. QC Summary

- ✓ Method Blank Summary
- ✓ Method Blank Results
- ✓ Laboratory Control Sample (LCS)
- NA Matrix Spike/Matrix Spike Duplicate (MS/MSD)
- NA Sample Duplicate
- ✓ Holding Time Summary
- ✓ Initial Calibration Summary
- ✓ Initial Calibration Verification (ICV) Form (Second Source)
- ✓ Continuing Calibration Verification (CCV)
- ✓ Instrument Run Log
- ✓ Extraction Bench Sheet

B. Sample Data

- ___ Target analyte results summary (See Summary Report)
- ✓ Chromatograms and quantitation report

C. Standards Data

- ✓ Initial calibration (ICAL) summary form
- ✓ Chromatograms and quantitation report for ICAL standards
- ✓ Initial calibration verification (ICV/second source) summary forms
- ✓ Initial calibration verification (ICV/second source) quantitation reports and chromatograms
- ✓ Continuing Calibration Verification (CCV) summary forms
- ✓ Continuing Calibration Verification (CCV) quantitation reports and chromatograms
- NA Retention Time Window Summary

D. Raw QC Data

- ✓ Method blank chromatogram and quantitation report
- ✓ LCS chromatogram and quantitation report
- NA MS/MSD chromatogram and quantitation report
- NA Duplicate chromatogram and quantitation report
- ✓ Instrument Run Log
- ✓ Extraction Bench Sheet
- ✓ Daily Checklist
- ✓ Example Calculations

Checked By: RRC Date: 5/6/03

2.2.15.1 QC Summary

METHOD BLANK SUMMARY

Login Number: L0304618
Blank File ID: 3L002469.F
Date Analyzed: 05/01/03
Time Analyzed: 19:36
Analyst: RDC

Work Group: WG139529
Blank Sample ID: WG139514-01
Instrument ID: HPLC3
Method: 8315A

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG139514-02	3L002470.F	05/01/03 19:48	01
LCS2	WG139514-03	3L002471.F	05/01/03 20:01	01
05-177511-DW4-042803	L0304618-01	3L002474.F	05/01/03 20:38	01
05-177511-DW5-042803	L0304618-02	3L002475.F	05/01/03 20:51	01

KEMRON FORMS - Modified 03/21/2003
Version 1.2
Report generated 05/06/2003 18:28

KEMRON ENVIRONMENTAL SERVICES
BLANK REPORT

Login Number: L0304618 Run Date: 05/01/2003 Sample ID: WG139514-01
Instrument ID: HPLC3 Run Time: 19:36 Prep Method: METHOD
File ID: 3L002469.F Analyst: RDC Method: 8315A
Workgroup (AAB#): WG139529 Matrix: Water Units: ug/L
Contract #: Cal ID: HPLC3-01-MAY-03

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Formaldehyde	25.0	50.0	25.0	1	U

KEMRON FORMS - Modified 05/02/2003
Version 1.3
Report generated 05/06/2003 18:28

KEMRON ENVIRONMENTAL SERVICES
LABORATORY CONTROL SAMPLES

Loginnum: L0304618 Worknum: WG139529 Method: 8315A
Instrument ID: HPLC3 Cal ID: HPLC3-01-MAY-2003 19:11 Matrix: Water
Analyst: RDC Contract #: Units: ug/L
Sample ID: WG139514-02 LCS File ID: 3L002470.F Run Date: 05/01/2003 19:48
Sample ID: WG139514-03 LCS2 File ID: 3L002471.F Run Date: 05/01/2003 20:01

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Limit	Q
	Known	Found	% REC	Known	Found	% REC				
Formaldehyde	250	275	110	250	223	89.3	20.9	39 - 153	30	

* FAILS %REC LIMIT

\# FAILS RPD LIMIT

KEMRON FORMS - Modified 05/01/2003
Version 1.2
Report generated 05/06/2003 18:28

KEMRON ENVIRONMENTAL SERVICES
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 8315A

AAB#: WG139529

Login Number: L0304618

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
05-177511-DW4-042803	04/28/03	04/29/03	05/01/03	3	3.01	05/01/03	3	0.350	*EXT
05-177511-DW5-042803	04/28/03	04/29/03	05/01/03	3	2.99	05/01/03	3	0.358	

* EXT = MISSED EXTRACTION HOLD TIME
*ANAL = MISSED ANALYTICAL HOLD TIME

KEMRON FORMS - Modified 12/06/2002
Version 1.2
Report generated 05/06/2003 18:28

Calibration Table

8315A formaldehyde

Calib. Data Modified : 5/2/03 8:58:44 AM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 3.000 %
Abs. Reference Window : 0.000 min
Rel. Non-ref. Window : 3.000 %
Abs. Non-ref. Window : 0.500 min
Uncalibrated Peaks : using compound Formaldehyde
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: VWD1 A, Wavelength=360 nm

RetTime [min]	Sig	Lvl	Amount [ug/L]	Area	Amt/Area	Ref	Grp	Name
5.151	1	1	500.00000	1352.38623	3.69717e-1			Formaldehyde
		2	1000.00000	1968.12866	5.08097e-1			
		3	5000.00000	6788.33398	7.36558e-1			
		4	1.00000e4	1.23163e4	8.11931e-1			
		5	2.00000e4	2.45237e4	8.15537e-1			
6.251	1	1	5000.00000	7922.96387	6.31077e-1			Acetaldehyde NA

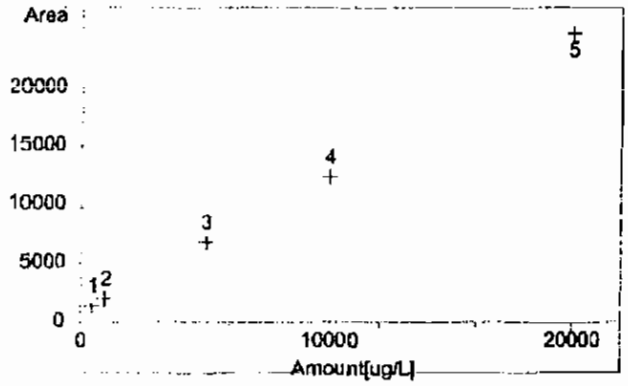
1 Warnings or Errors :

Warning : Curve requires more calibration points., (Acetaldehyde)

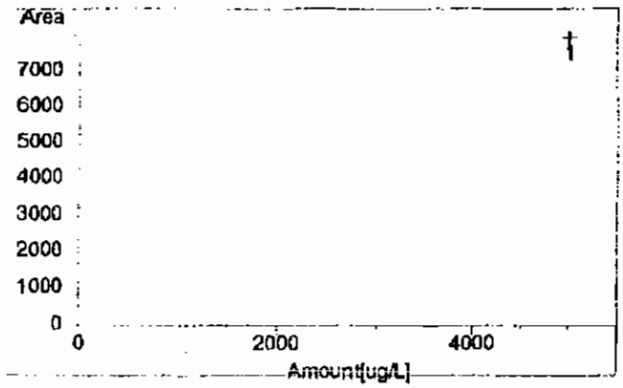
Peak Sum Table

No Entries in table

Calibration Curves



Formaldehyde at exp. RT: 5.151
VWD1 A, Wavelength=360 nm
Correlation: 0.99986
Residual Std. Dev.: 181.52991
Formula: y = mx + b
m: 1.18359
b: 749.57099
x: Amount [ug/L]
y: Area



Acetaldehyde at exp. RT: 6.251
VWD1 A, Wavelength=360 nm
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: y = mx + b
m: 1.58459
b: 0.00000
x: Amount [ug/L]
y: Area

NA

Check Standard Report

==========

Data File C:\HPCHEM\1\DATA\050103\3L002468.D Sample Name: WG139531-06 ALT.
HPLC3 5/2/03 9:00:44 AM RDC

1,1 SOS64-42 250 ug/L

==========

Injection Date : 5/1/03 7:23:36 PM Seq. Line : 7

Signal 1: VWD1 A, Wavelength=360 nm

Compound	RT	Known Conc.	Cal. Conc.	%D
Formaldehyde	5.154	5,000.0	4,119.918	-17.6 #
Acetaldehyde	6.251	5,000.0	5,000.000	0.0 NA

= Failed 15.0% Criteria

Check Standard Report

==========

Data File C:\HPCHEM\1\DATA\050103\3L002476.D Sample Name: WG139531-07 CCV
HPLC3 5/2/03 9:04:48 AM RDC

1,1 SOS64-41 @ 250 ug/L

==========

Injection Date : 5/1/03 9:03:31 PM Seq. Line : 15

Signal 1: VWD1 A, Wavelength=360 nm

Compound	RT	Known Conc.	Cal. Conc.	%D
Formaldehyde	5.165	5,000.0	5,141.872	2.8
Acetaldehyde	6.280	5,000.0	2,661.333	-46.8 # NA

= Failed 15.0% Criteria

Sequence Table:

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	1	AcCN blank	8315	1	Sample		
2	2	WG139531-01 STD5	8315	1	Sample		
3	3	WG139531-02 STD4	8315	1	Sample		
4	4	WG139531-03 STD3	8315	1	Sample		
5	5	WG139531-04 STD2	8315	1	Sample		
6	6	WG139531-05 STD1	8315	1	Sample		
7	7	WG139531-06 ALT.	8315	1	Sample		
8	8	WG139514-01 BLK	8315	1	Sample		
9	9	WG139514-02 LCS	8315	1	Sample		
10	10	WG139514-03 LCS2	8315	1	Sample		
11	11	WG139462-01 TBLK	8315	1	Sample		
12	12	L0304610-01	8315	1	Sample		
13	13	L0304618-01	8315	1	Sample		
14	14	L0304618-02	8315	1	Sample		
15	4	WG139531-07 CCV	8315	1	Sample		

RDC 5/2/03

No	1	1	8315	3L002462	01:01✓		AcCN blank
No	2	2	8315	3L002463	02:01✓	SOS 64-41	WG139531-01
No	3	3	8315	3L002464	03:01✓		WG139531-02 ST
No	4	4	8315	3L002465	04:01✓		WG139531-03 ST
No	5	5	8315	3L002466	05:01✓		WG139531-04 ST
No	6	6	8315	3L002467	06:01✓		WG139531-05 ST
No	7	7	8315	3L002468	07:01cc	SOS 64-42	WG139531-06 AL
No	8	8	8315	3L002469	08:01✓		WG139514-01 BL
No	9	9	8315	3L002470	09:01✓		WG139514-02 LC
No	10	10	8315	3L002471	10:01✓		WG139514-03 LC
No	11	11	8315	3L002472	11:01✓		WG139462-01 TB
No	12	12	8315	3L002473	12:01✓		L0304610-01
No	13	13	8315	3L002474	13:01✓		L0304618-01
No	14	14	8315	3L002475	14:01✓		L0304618-02
No	15	4	8315	3L002476	15:01✓	SOS 64-41	WG139531-07 CC

AWC
5/2/03
[illegible] 5/2/03

HPLC Laboratory Maintenance Log

Analysis Date/Time May 01, 2003 Instrument ID HPLC3 Column ID LC-PAH Data Subdirectory 050103
Analyst Initials [illegible] SOP # HPLC01 Rev. # 4 ____ 8310 SOP # HPLC02 Rev. # 3 ____ 8330
8315A formaldehyde ✓

Daily Check
- ☑ Mobile phase reservoir
- ☑ System pressure 41 bar
- ☑ Waste container

Returned to Control?
Yes ____ No ____

Additional Maintenance
Problem: _____

Action Taken: _____

Comments

alt source % D was >15 @ 17.6 % low

Reviewed By: [illegible] 5/2/03

Parameter: 8315 H_2O SOP #: EXFORM Revision #: 0
Extraction Analyst(s): CEB TV/KD Analyst(s): CEB/GSB
Date/Time Extracted: 5-1-3 @ 1215 Date TV/KD: 5-1-3
Spike/Surrogate Analyst: ROC Witness: CEB
Surrogate #: – Earliest Hold Date: 5-1-03
Spike #: A = 50364-41 Spike #: B = 50364-42

Extraction Work Group WG 139514
Analytical Work Group WG 139527
Extract Relinquished By: CEB
Extract Received By & Date: [illegible] 5/2/03

CEB 5/1/03

	Sample ID	Test Code	5.0 pH ± 0.1 ≤2	N	≥12	Initial Vol / Wt	Amount Surrogate	Amount Spike	Final Volume	Extract Color	Emulsions ✓ A	BN	N	Comments
1	Blank				5.02	100mL	N/A		5.0 mL					WG 139514-01
2	LCS				5.04			250µl A						WG -02
3	LCS DUP				5.05									WG -03
4	TBK H2O	8315 FORM			4.93									WG139462-01
5	04-610-01				4.90									
6	04-618-01				4.94									
7	-02				5.04									
8	STD #5				5.06			1000µl A						
9	#4				5.01			500µl A						
10	#3				5.06			250µl A						
11	#2				5.01			50µl A						
12	#1				5.01			25µl A						
13	ALT				4.90			250µl B						
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														

CEB 5/1/03

Methylene Chloride Lot #: 43010
Hexane Lot #: –
Ether Lot #: –
Methanol Lot #: –
Solvent: CH3CN Lot #: X32823
Reagent: DNPH Lot #: EP0005-9
Reagent: ACETATE BUFFER Lot #: EP0005-12
Reagent: 6M NaOH Lot #: EP2146
Acid: 6M HCL Lot #: EP2147
Florisil Lot #: –
Silica Gel Lot #: –
IR Analyst / Date / Time: –
Dried Na_2SO_4 Lot #: EP0005-29

Color Code
T = Transparent
C = Colored
O = Opaque

SW-846 Method			On	Off	On	Off
Continuous	3520C					
Soxhlet	3540C					
ASE*	3545					
Sep Funnel	3510C					
Sonication	3550B					
Waste	3580A					

SW-846 8315A ☑

* Accelerated Solvent Extractor (ASE)

Clean-ups			
Florisil 3620B		GPC 3640A	
Silica Gel 3630C		Other	
Acid 3665A		N/A	✓
Sulfur 3660B			

Peer Reviewed By: [signature] Date: 5-2-03

Extraction Notes For Volume # 201 Page # 115

General Comments: pH calibration 4 → 2315
7 → 3060

SONIC BATH SET @ 40°C, power set @ 1
ON - 1230
OFF - 1330
ON - 1435
OFF - 1535

Extraction Anomalies: NONE

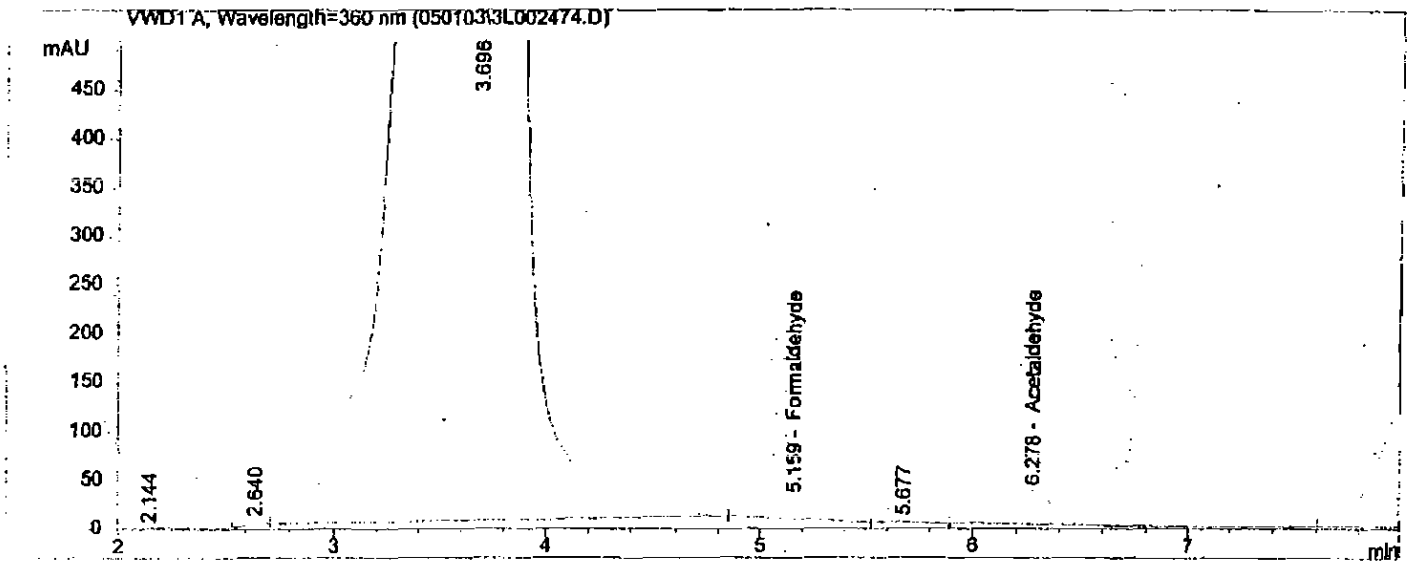
Concentration Anomalies: NONE

Clean-Up Anomalies: N/A

Supervisor Review: _____ Date: _____

2.2.15.2 Sample Data

```
==================================================================
Injection Date  : 5/1/03 8:38:38 PM                Seq. Line :  13
Sample Name     : L0304618-01                           Vial :  13
Acq. Operator   : RDC                                    Inj :   1
                                                 Inj Volume : 15 µl
Acq. Method     : C:\HPCHEM\1\METHODS\8315.M
Last changed    : 3/6/03 1:44:46 PM by RDC
Analysis Method : C:\HPCHEM\1\METHODS\83150418.M
Last changed    : 5/2/03 8:58:49 AM by RDC
                  (modified after loading)
8315A calibrated 050103 @ 19:11
==================================================================
```




```
==================================================================
                      External Standard Report
==================================================================

Sorted By              :      Signal
Calib. Data Modified   :      5/2/03 8:58:44 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=360 nm
```

RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/L]	Grp	Name
5.159	BB	251.08029	0.00000	0.00000	2-mol	Formaldehyde
6.278	BBA	511.36816	6.31077e-1	322.71267		Acetaldehyde

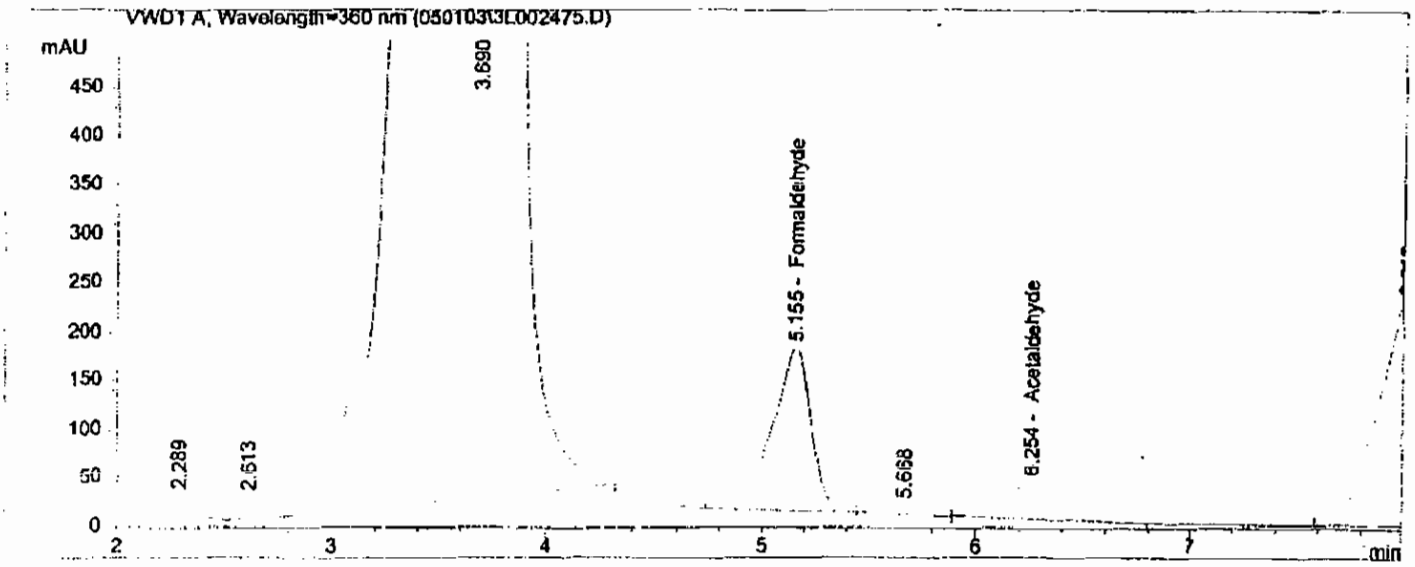
Totals : 7.76661e4

Results obtained with enhanced integrator!
6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Negative results set to zero (cal. curve intercept)
Warning : Negative results set to zero (cal. curve intercept)

```
==================================================================
Injection Date  : 5/1/03 8:38:38 PM                Seq. Line :  13
Sample Name     : L0304618-01                           Vial :  13
Acq. Operator   : RDC                                    Inj :   1
                                                  Inj Volume : 15 µl
Acq. Method     : C:\HPCHEM\1\METHODS\8315.M
Last changed    : 3/6/03 1:44:46 PM by RDC
Analysis Method : C:\HPCHEM\1\METHODS\83150418.M
Last changed    : 5/2/03 8:58:49 AM by RDC
                  (modified after loading)
8315A calibrated 050103 @ 19:11
==================================================================

Warning : Negative results set to zero (cal. curve intercept)
Warning : Negative results set to zero (cal. curve intercept), (Formaldehyde
Warning : Negative results set to zero (cal. curve intercept)

==================================================================
                        *** End of Report ***
```

```
==================================================================
Injection Date   : 5/1/03 8:51:02 PM                Seq. Line :  14
Sample Name      : L0304618-02                          Vial :  14
Acq. Operator    : RDC                                   Inj :   1
                                                  Inj Volume : 15 µl
Acq. Method      : C:\HPCHEM\1\METHODS\8315.M
Last changed     : 3/6/03 1:44:46 PM by RDC
Analysis Method  : C:\HPCHEM\1\METHODS\83150418.M
Last changed     : 5/2/03 8:58:49 AM by RDC
                   (modified after loading)
8315A calibrated 050103 @ 19:11
==================================================================
```




```
==================================================================
                      External Standard Report
==================================================================

Sorted By              :      Signal
Calib. Data Modified   :      5/2/03 8:58:44 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=360 nm

RetTime  Type     Area      Amt/Area     Amount   Grp   Name
 [min]          mAU   *s                 [ug/L]
-------|------|----------|----------|----------|--|-----------------
  5.155 BB     2129.25757 5.47458e-1 1165.68001 ✓  Formaldehyde
  6.254 BBA     582.44208 6.31077e-1  367.56578     Acetaldehyde

Totals :                                7.77598e4

 Results obtained with enhanced integrator!
5 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Negative results set to zero (cal. curve intercept)
Warning : Negative results set to zero (cal. curve intercept)
```

```
==================================================================
Injection Date  : 5/1/03 8:51:02 PM              Seq. Line :  14
Sample Name     : L0304618-02                         Vial :  14
Acq. Operator   : RDC                                  Inj :   1
                                                Inj Volume : 15 µl
Acq. Method     : C:\HPCHEM\1\METHODS\8315.M
Last changed    : 3/6/03 1:44:46 PM by RDC
Analysis Method : C:\HPCHEM\1\METHODS\83150418.M
Last changed    : 5/2/03 8:58:49 AM by RDC
                  (modified after loading)
8315A calibrated 050103 @ 19:11
==================================================================

Warning : Negative results set to zero (cal. curve intercept)
Warning : Negative results set to zero (cal. curve intercept)

==================================================================
                        *** End of Report ***
```

2.2.15.3 Standards Data

Calibration Table

8315A formaldehyde

Calib. Data Modified : 5/2/03 8:58:44 AM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 3.000 %
Abs. Reference Window : 0.000 min
Rel. Non-ref. Window : 3.000 %
Abs. Non-ref. Window : 0.500 min
Uncalibrated Peaks : using compound Formaldehyde
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: VWD1 A, Wavelength=360 nm

RetTime [min]	Sig	Lvl	Amount [ug/L]	Area	Amt/Area	Ref	Grp	Name
5.151	1	1	500.00000	1352.38623	3.69717e-1			Formaldehyde
		2	1000.00000	1968.12866	5.08097e-1			
		3	5000.00000	6788.33398	7.36558e-1			
		4	1.00000e4	1.23163e4	8.11931e-1			
		5	2.00000e4	2.45237e4	8.15537e-1			
6.251	1	1	5000.00000	7922.96387	6.31077e-1			Acetaldehyde NA

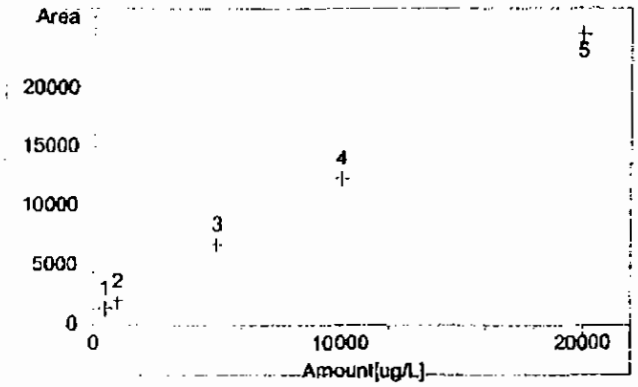
1 Warnings or Errors :

Warning : Curve requires more calibration points., (Acetaldehyde)

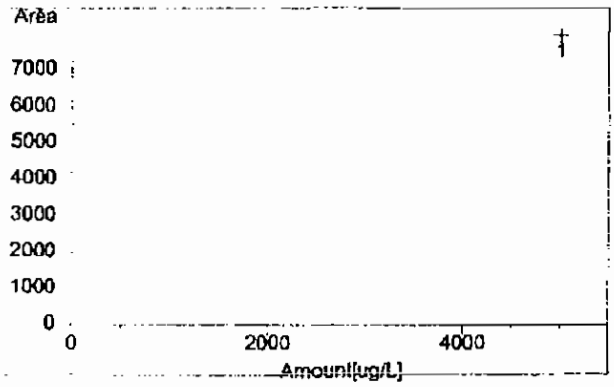
Peak Sum Table

No Entries in table

Calibration Curves



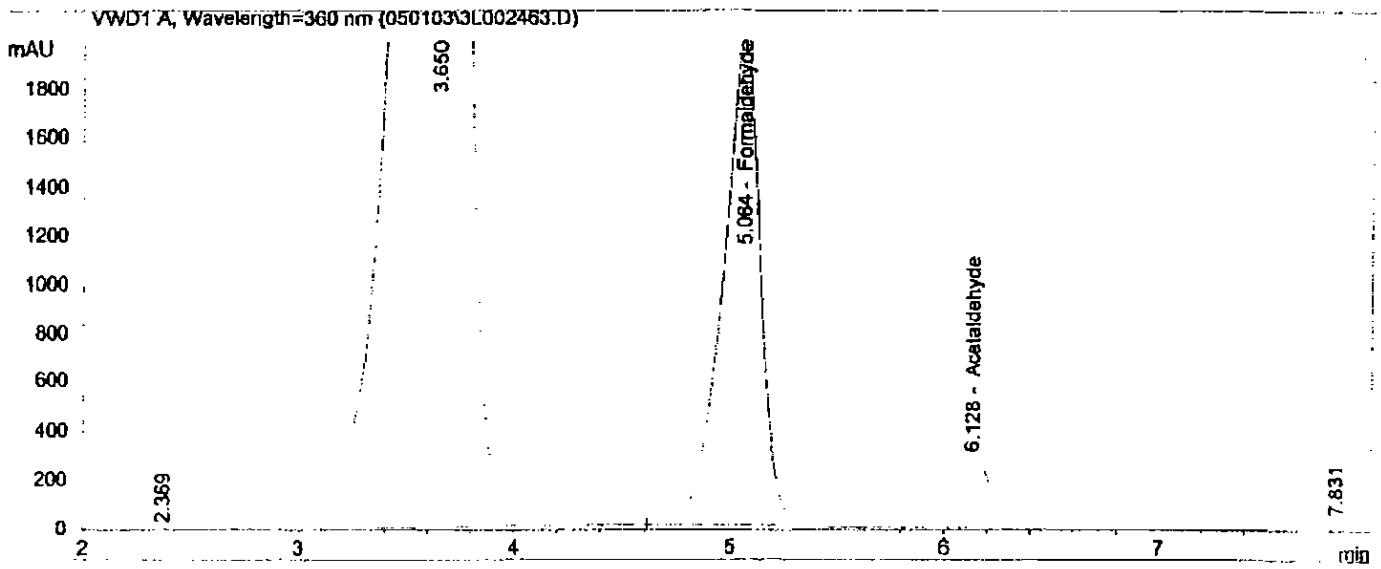
Formaldehyde at exp. RT: 5.151
VWD1 A, Wavelength=360 nm
Correlation: 0.99986
Residual Std. Dev.: 181.52991
Formula: y = mx + b
m: 1.18359
b: 749.57099
x: Amount [ug/L]
y: Area



Acetaldehyde at exp. RT: 6.251
VWD1 A, Wavelength=360 nm
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: y = mx + b
m: 1.58459
b: 0.00000
x: Amount [ug/L]
y: Area

NA

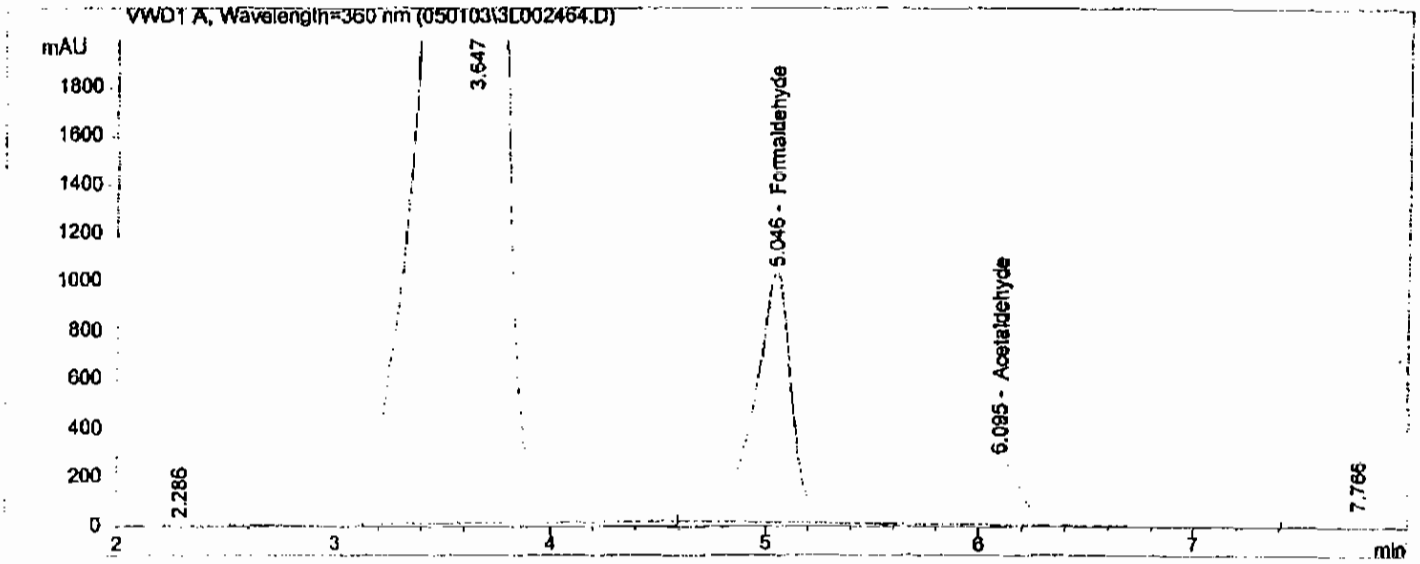
```
==================================================================
Injection Date  : 5/1/03 6:21:12 PM                Seq. Line :   2
Sample Name     : WG139531-01 STD5                      Vial :   2
Acq. Operator   : RDC                                    Inj :   1
                                                 Inj Volume : 15 µl
Acq. Method     : C:\HPCHEM\1\METHODS\8315.M
Last changed    : 3/6/03 1:44:46 PM by RDC
Analysis Method : C:\HPCHEM\1\METHODS\83150418.M
Last changed    : 5/2/03 8:54:02 AM by RDC
                  (modified after loading)
8315A calibrated 050103 @ 19:11
==================================================================
```




```
==================================================================
                      External Standard Report
==================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Friday, May 02, 2003 8:52:51 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=360 nm

RetTime  Type     Area       Amt/Area    Amount    Grp   Name
 [min]          mAU   *s                [ug/L]
-------|------|----------|----------|----------|--|------------------
  5.064 BB     2.45237e4  8.20063e-1 2.01110e4      Formaldehyde
  6.128 BBA    4409.67383    6.35715 2.80330e4      Acetaldehyde

Totals :                              1.21257e5

 Results obtained with enhanced integrator!
3 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Negative results set to zero (cal. curve intercept)
Warning : Negative results set to zero (cal. curve intercept)
```

```
==================================================================
Injection Date  : 5/1/03 6:21:12 PM              Seq. Line :   2
Sample Name     : WG139531-01 STD5                    Vial :   2
Acq. Operator   : RDC                                  Inj :   1
                                                Inj Volume : 15 µl
Acq. Method     : C:\HPCHEM\1\METHODS\8315.M
Last changed    : 3/6/03 1:44:46 PM by RDC
Analysis Method : C:\HPCHEM\1\METHODS\83150418.M
Last changed    : 5/2/03 8:54:02 AM by RDC
                  (modified after loading)
8315A calibrated 050103 @ 19:11
==================================================================

==================================================================
                        *** End of Report ***
```

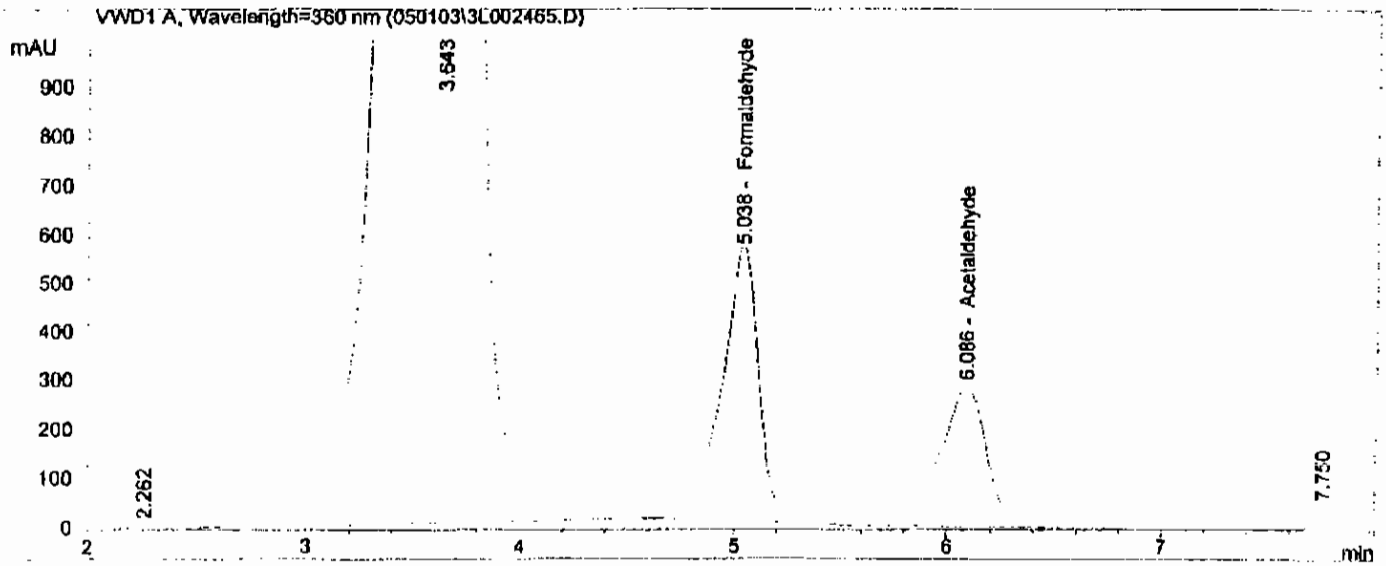
```
==================================================================
Injection Date   : 5/1/03 6:33:40 PM                Seq. Line :   3
Sample Name      : WG139531-02 STD4                      Vial :   3
Acq. Operator    : RDC                                    Inj :   1
                                                   Inj Volume : 15 µl
Acq. Method      : C:\HPCHEM\1\METHODS\8315.M
Last changed     : 3/6/03 1:44:46 PM by RDC
Analysis Method  : C:\HPCHEM\1\METHODS\83150418.M
Last changed     : 5/2/03 8:54:42 AM by RDC
                   (modified after loading)
8315A calibrated 050103 @ 19:11
==================================================================
```




```
==================================================================
                      External Standard Report
==================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Friday, May 02, 2003 8:54:36 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=360 nm

RetTime  Type     Area       Amt/Area    Amount    Grp   Name
 [min]          mAU   *s                [ug/L]
-------|------|----------|----------|----------|--|------------------
  5.046 BB     1.23163e4  8.12928e-1 1.00123e4      Formaldehyde
  6.095 BBA    4263.61865   6.35715 2.71045e4      Acetaldehyde

Totals :                              1.12589e5

 Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Negative results set to zero (cal. curve intercept)
```

```
==================================================================
Injection Date  : 5/1/03 6:33:40 PM              Seq. Line :   3
Sample Name     : WG139531-02 STD4                    Vial :   3
Acq. Operator   : RDC                                  Inj :   1
                                                Inj Volume : 15 µl
Acq. Method     : C:\HPCHEM\1\METHODS\8315.M
Last changed    : 3/6/03 1:44:46 PM by RDC
Analysis Method : C:\HPCHEM\1\METHODS\83150418.M
Last changed    : 5/2/03 8:54:42 AM by RDC
                  (modified after loading)
8315A calibrated 050103 @ 19:11
==================================================================

==================================================================
                        *** End of Report ***
```

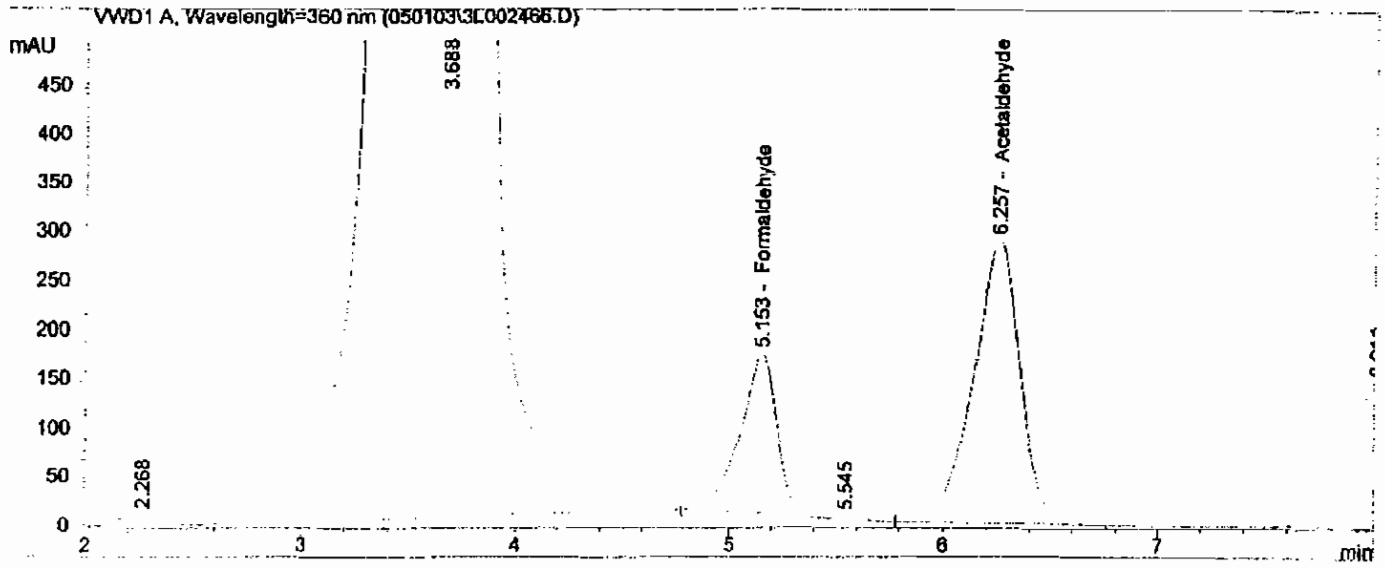
```
==================================================================
Injection Date   : 5/1/03 6:46:08 PM                Seq. Line :   4
Sample Name      : WG139531-03 STD3                      Vial :   4
Acq. Operator    : RDC                                    Inj :   1
                                                   Inj Volume : 15 µl
Acq. Method      : C:\HPCHEM\1\METHODS\8315.M
Last changed     : 3/6/03 1:44:46 PM by RDC
Analysis Method  : C:\HPCHEM\1\METHODS\83150418.M
Last changed     : 5/2/03 8:55:42 AM by RDC
                   (modified after loading)
8315A calibrated 050103 @ 19:11
==================================================================
```




```
==================================================================
                      External Standard Report
==================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Friday, May 02, 2003 8:55:37 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=360 nm

RetTime  Type     Area       Amt/Area     Amount   Grp   Name
 [min]          mAU    *s                 [ug/L]
-------|------|----------|----------|----------|--|-----------------
  5.038 BB     6788.33398 7.77570e-1 5278.40612     Formaldehyde
  6.086 BBA    4286.03516    6.35715 2.72470e4      Acetaldehyde

Totals :                                1.09421e5

 Results obtained with enhanced integrator!
3 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Negative results set to zero (cal. curve intercept)
Warning : Negative results set to zero (cal. curve intercept)
```

```
==================================================================
Injection Date  : 5/1/03 6:46:08 PM              Seq. Line :   4
Sample Name     : WG139531-03 STD3                    Vial :   4
Acq. Operator   : RDC                                  Inj :   1
                                                Inj Volume : 15 µl
Acq. Method     : C:\HPCHEM\1\METHODS\8315.M
Last changed    : 3/6/03 1:44:46 PM by RDC
Analysis Method : C:\HPCHEM\1\METHODS\83150418.M
Last changed    : 5/2/03 8:55:42 AM by RDC
                  (modified after loading)
8315A calibrated 050103 @ 19:11
==================================================================

==================================================================
                        *** End of Report ***
```

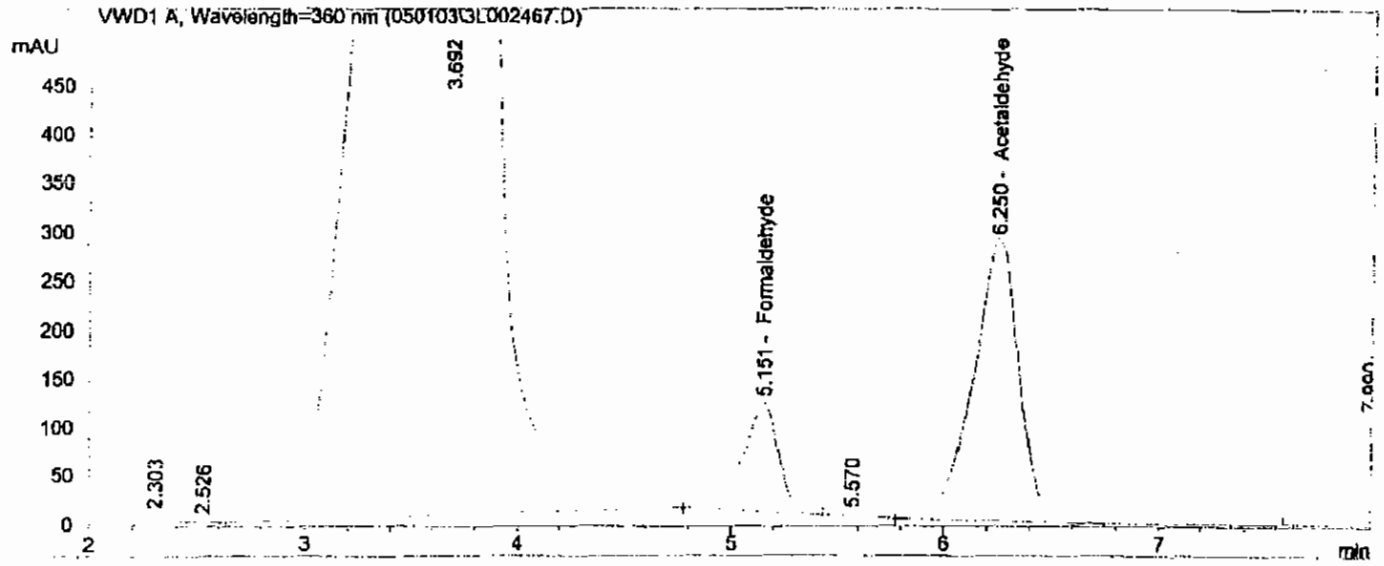
```
==================================================================
Injection Date   : 5/1/03 6:58:41 PM                Seq. Line :   5
Sample Name      : WG139531-04 STD2                      Vial :   5
Acq. Operator    : RDC                                    Inj :   1
                                                   Inj Volume : 15 µl
Acq. Method      : C:\HPCHEM\1\METHODS\8315.M
Last changed     : 3/6/03 1:44:46 PM by RDC
Analysis Method  : C:\HPCHEM\1\METHODS\83150418.M
Last changed     : 5/2/03 8:56:37 AM by RDC
                   (modified after loading)
8315A calibrated 050103 @ 19:11
==================================================================
```




```
==================================================================
                      External Standard Report
==================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Friday, May 02, 2003 8:56:29 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=360 nm

RetTime  Type     Area       Amt/Area    Amount    Grp   Name
 [min]          mAU    *s                [ug/L]
-------|------|----------|----------|----------|--|-----------------
  5.153 BB     1968.12866 5.86792e-1 1154.88121     Formaldehyde
  6.257 BBA    4292.93018    6.35715 2.72908e4      Acetaldehyde

Totals :                                1.06911e5

 Results obtained with enhanced integrator!
4 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Negative results set to zero (cal. curve intercept)
Warning : Negative results set to zero (cal. curve intercept)
```

```
==================================================================
Injection Date   : 5/1/03 6:58:41 PM              Seq. Line :   5
Sample Name      : WG139531-04 STD2                    Vial :   5
Acq. Operator    : RDC                                  Inj :   1
                                                 Inj Volume : 15 µl
Acq. Method      : C:\HPCHEM\1\METHODS\8315.M
Last changed     : 3/6/03 1:44:46 PM by RDC
Analysis Method  : C:\HPCHEM\1\METHODS\83150418.M
Last changed     : 5/2/03 8:56:37 AM by RDC
                   (modified after loading)
8315A calibrated 050103 @ 19:11
==================================================================

Warning : Negative results set to zero (cal. curve intercept)

==================================================================
                        *** End of Report ***
```

```
==========================================================================
Injection Date   : 5/1/03 7:11:11 PM                Seq. Line :   6
Sample Name      : WG139531-05 STD1                      Vial :   6
Acq. Operator    : RDC                                    Inj :   1
                                                   Inj Volume : 15 µl
Acq. Method      : C:\HPCHEM\1\METHODS\8315.M
Last changed     : 3/6/03 1:44:46 PM by RDC
Analysis Method  : C:\HPCHEM\1\METHODS\83150418.M
Last changed     : 5/2/03 8:57:18 AM by RDC
                   (modified after loading)
8315A calibrated 050103 @ 19:11
==========================================================================
```




```
==========================================================================
                          External Standard Report
==========================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Friday, May 02, 2003 8:57:12 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=360 nm

RetTime  Type     Area      Amt/Area    Amount   Grp   Name
 [min]          mAU   *s                [ug/L]
-------|------|----------|----------|----------|--|------------------
  5.151 BB     1352.38623 3.76602e-1  509.31109     Formaldehyde
  6.250 BBA    4276.28320    1.16924 5000.00000     Acetaldehyde

Totals :                                8.77082e4

 Results obtained with enhanced integrator!
5 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Negative results set to zero (cal. curve intercept)
Warning : Negative results set to zero (cal. curve intercept)
```

```
==================================================================
Injection Date  : 5/1/03 7:11:11 PM                Seq. Line :   6
Sample Name     : WG139531-05 STD1                      Vial :   6
Acq. Operator   : RDC                                    Inj :   1
                                                 Inj Volume : 15 µl
Acq. Method     : C:\HPCHEM\1\METHODS\8315.M
Last changed    : 3/6/03 1:44:46 PM by RDC
Analysis Method : C:\HPCHEM\1\METHODS\83150418.M
Last changed    : 5/2/03 8:57:18 AM by RDC
                  (modified after loading)
8315A calibrated 050103 @ 19:11
==================================================================

Warning : Negative results set to zero (cal. curve intercept)
Warning : Negative results set to zero (cal. curve intercept)

==================================================================
                        *** End of Report ***
```

Check Standard Report

==========

Data File C:\HPCHEM\1\DATA\050103\3L002468.D Sample Name: WG139531-06 ALT.
HPLC3 5/2/03 9:00:44 AM RDC

1,1 SOS64-42 250 ug/L

==========

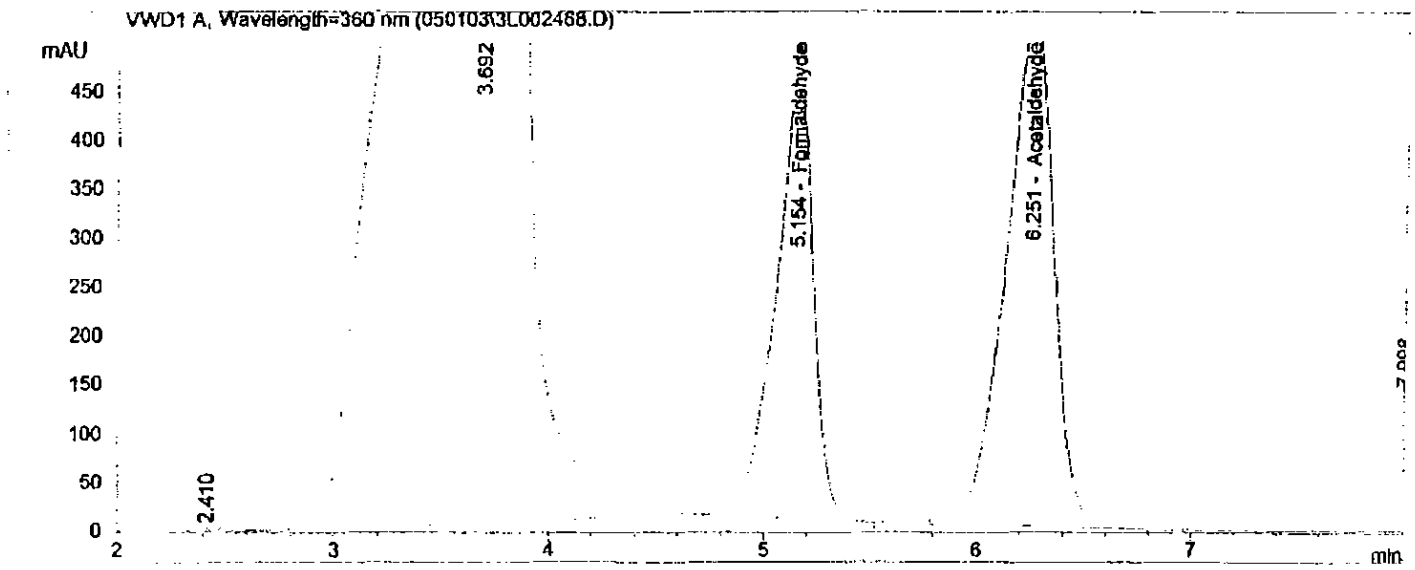
Injection Date : 5/1/03 7:23:36 PM Seq. Line : 7

Signal 1: VWD1 A, Wavelength=360 nm

Compound	RT	Known Conc.	Cal. Conc.	%D
Formaldehyde	5.154	5,000.0	4,119.918	-17.6 #
Acetaldehyde	6.251	5,000.0	5,000.000	0.0 NA

= Failed 15.0% Criteria

```
==================================================================
Injection Date   : 5/1/03 7:23:36 PM                Seq. Line :   7
Sample Name      : WG139531-06 ALT.                     Vial :   7
Acq. Operator    : RDC                                   Inj :   1
                                                  Inj Volume : 15 µl
Acq. Method      : C:\HPCHEM\1\METHODS\8315.M
Last changed     : 3/6/03 1:44:46 PM by RDC
Analysis Method  : C:\HPCHEM\1\METHODS\83150418.M
Last changed     : 5/2/03 8:58:49 AM by RDC
                   (modified after loading)
8315A calibrated 050103 @ 19:11
==================================================================
```




```
==================================================================
                      External Standard Report
==================================================================

Sorted By              :      Signal
Calib. Data Modified   :      5/2/03 8:58:44 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=360 nm

RetTime  Type     Area      Amt/Area    Amount   Grp   Name
 [min]          mAU   *s                [ug/L]
-------|------|----------|----------|----------|--|------------------
  5.154 BBA    5625.86279 7.32318e-1 4119.91823     Formaldehyde
  6.251 BBA    7922.96387 6.31077e-1 5000.00000     Acetaldehyde

Totals :                                8.86070e4

 Results obtained with enhanced integrator!
3 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Negative results set to zero (cal. curve intercept)
Warning : Negative results set to zero (cal. curve intercept)
```

```
==================================================================
Injection Date  : 5/1/03 7:23:36 PM                Seq. Line :   7
Sample Name     : WG139531-06 ALT.                      Vial :   7
Acq. Operator   : RDC                                    Inj :   1
                                                  Inj Volume : 15 µl
Acq. Method     : C:\HPCHEM\1\METHODS\8315.M
Last changed    : 3/6/03 1:44:46 PM by RDC
Analysis Method : C:\HPCHEM\1\METHODS\83150418.M
Last changed    : 5/2/03 8:58:49 AM by RDC
                  (modified after loading)
8315A calibrated 050103 @ 19:11
==================================================================

==================================================================
                          *** End of Report ***
```

Check Standard Report

==========

Data File C:\HPCHEM\1\DATA\050103\3L002476.D Sample Name: WG139531-07 CCV
HPLC3 5/2/03 9:04:48 AM RDC

1,1 SOS64-41 @ 250 ug/L

==========

Injection Date : 5/1/03 9:03:31 PM Seq. Line : 15

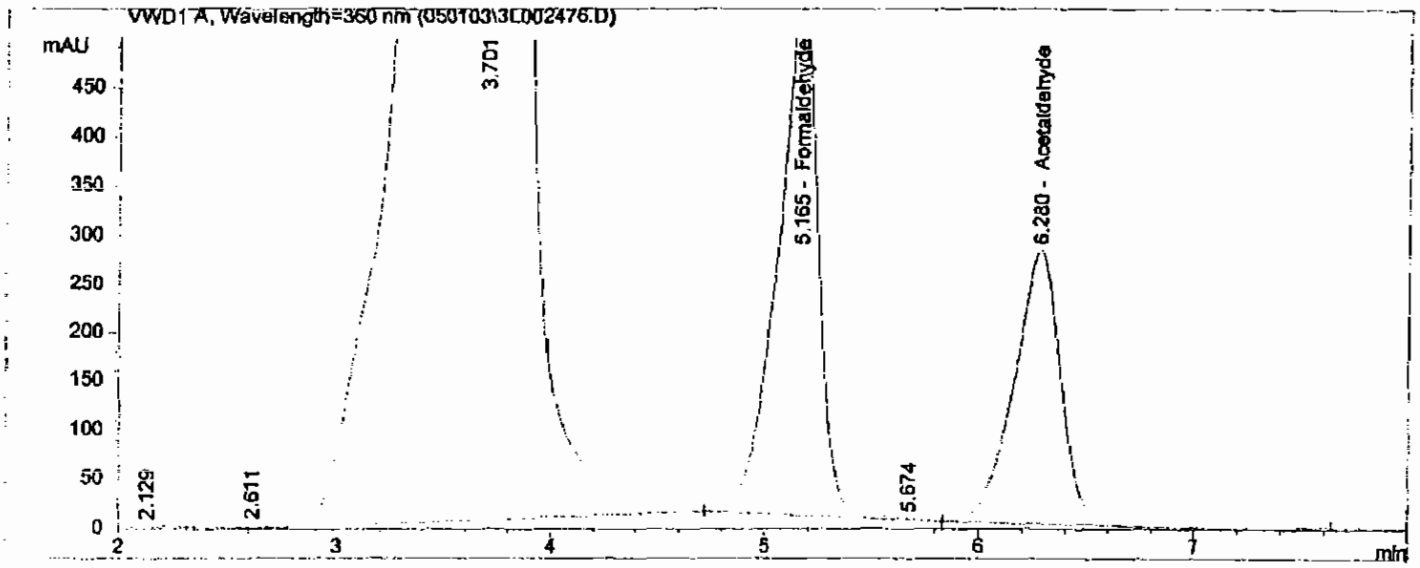
Signal 1: VWD1 A, Wavelength=360 nm

Compound	RT	Known Conc.	Cal. Conc.	%D
Formaldehyde	5.165	5,000.0	5,141.872	2.8
Acetaldehyde	6.280	5,000.0	2,661.333	-46.8 # NA

= Failed 15.0% Criteria

63

```
==================================================================
Injection Date   : 5/1/03 9:03:31 PM                Seq. Line :  15
Sample Name      : WG139531-07 CCV                       Vial :   4
Acq. Operator    : RDC                                    Inj :   1
                                                   Inj Volume : 15 µl
Acq. Method      : C:\HPCHEM\1\METHODS\8315.M
Last changed     : 3/6/03 1:44:46 PM by RDC
Analysis Method  : C:\HPCHEM\1\METHODS\83150418.M
Last changed     : 5/2/03 8:58:49 AM by RDC
                   (modified after loading)
8315A calibrated 050103 @ 19:11
==================================================================
```




```
==================================================================
                      External Standard Report
==================================================================

Sorted By              :      Signal
Calib. Data Modified   :      5/2/03 8:58:44 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=360 nm

RetTime  Type     Area       Amt/Area     Amount    Grp   Name
 [min]          mAU    *s                [ug/L]
-------|------|----------|----------|----------|--|-----------------
  5.165 BB     6835.43701 7.52238e-1 5141.87242     Formaldehyde
  6.280 BBA    4217.12842 6.31077e-1 2661.33261     Acetaldehyde

Totals :                                8.66822e4

 Results obtained with enhanced integrator!
5 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Negative results set to zero (cal. curve intercept)
Warning : Negative results set to zero (cal. curve intercept)
```

```
==================================================================
Injection Date  : 5/1/03 9:03:31 PM              Seq. Line :  15
Sample Name     : WG139531-07 CCV                     Vial :   4
Acq. Operator   : RDC                                  Inj :   1
                                                Inj Volume : 15 µl
Acq. Method     : C:\HPCHEM\1\METHODS\8315.M
Last changed    : 3/6/03 1:44:46 PM by RDC
Analysis Method : C:\HPCHEM\1\METHODS\83150418.M
Last changed    : 5/2/03 8:58:49 AM by RDC
                  (modified after loading)
8315A calibrated 050103 @ 19:11
==================================================================

Warning : Negative results set to zero (cal. curve intercept)
Warning : Negative results set to zero (cal. curve intercept)

==================================================================
                        *** End of Report ***
```

2.2.15.4 Raw Data

Sequence Table:

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	1	AcCN blank	8315	1	Sample		
2	2	WG139531-01 STD5	8315	1	Sample		
3	3	WG139531-02 STD4	8315	1	Sample		
4	4	WG139531-03 STD3	8315	1	Sample		
5	5	WG139531-04 STD2	8315	1	Sample		
6	6	WG139531-05 STD1	8315	1	Sample		
7	7	WG139531-06 ALT.	8315	1	Sample		
8	8	WG139514-01 BLK	8315	1	Sample		
9	9	WG139514-02 LCS	8315	1	Sample		
10	10	WG139514-03 LCS2	8315	1	Sample		
11	11	WG139462-01 TBLK	8315	1	Sample		
12	12	L0304610-01	8315	1	Sample		
13	13	L0304618-01	8315	1	Sample		
14	14	L0304618-02	8315	1	Sample		
15	4	WG139531-07 CCV	8315	1	Sample		

RDC 5/2/03

No	1	1	8315	3L002462	01:01✓		AcCN blank
No	2	2	8315	3L002463	02:01✓	SOS 64-41	WG139531-0
No	3	3	8315	3L002464	03:01✓		WG139531-02 ST
No	4	4	8315	3L002465	04:01✓		WG139531-03 ST
No	5	5	8315	3L002466	05:01✓		WG139531-04 ST
No	6	6	8315	3L002467	06:01✓		WG139531-05 ST
No	7	7	8315	3L002468	07:01cc	SOS 64-42	WG139531-06 AL
No	8	8	8315	3L002469	08:01✓		WG139514-01 BL
No	9	9	8315	3L002470	09:01✓		WG139514-02 LC
No	10	10	8315	3L002471	10:01✓		WG139514-03 LC
No	11	11	8315	3L002472	11:01✓		WG139462-01 TB
No	12	12	8315	3L002473	12:01✓		L0304610-01
No	13	13	8315	3L002474	13:01✓		L0304618-01
No	14	14	8315	3L002475	14:01✓		L0304618-02
No	15	4	8315	3L002476	15:01✓	SOS 64-41	WG139531-07 CC

RWC
5/2/03
[illegible] 5/2/03

HPLC Laboratory Maintenance Log

Analysis Date/Time May 01, 2003 Instrument ID HPLC3 Column ID LC-PAH Data Subdirectory 050103
Analyst Initials [illegible] SOP # HPLC01 Rev. # 4 8310 SOP # HPLC02 Rev. # 3 8330
8315A formaldehyde ✓

Daily Check
- ☑ Mobile phase reservoir
- ☑ System pressure 41 bar
- ☑ Waste container

Returned to Control?
Yes ____ No ____

Additional Maintenance
Problem: _____

Action Taken: _____

Comments

alt source % D was >15 @ 17.6 % low

Reviewed By: [illegible] 5/2/03

Parameter: 8315 H_2O SOP #: EXFORM Revision #: 0
Extraction Analyst(s): CEB TV/KD Analyst(s): CEB/GSG
Date/Time Extracted: 5-1-3 @ 1215 Date TV/KD: 5-1-3
Spike/Surrogate Analyst: ROC Witness: CEB
Surrogate #: — Earliest Hold Date: 5-1-03
Spike #: A = 50364-41 Spike #: B = 50364-42

Extraction Work Group WG 139514
Analytical Work Group WG 139529
Extract Relinquished By: CEB
Extract Received By & Date: [illegible] 5/2/03

CEB 5/1/03

	Sample ID	Test Code	5.0 pH ±0.1 ≤2	N	≥12	Initial Vol / Wt	Amount Surrogate	Amount Spike	Final Volume	Extract Color	Emulsions / A	BN	N	Comments
1	Blank				5.02	100mL	N/A		5.0 mL					WG 139514-01
2	LCS				5.04			250µl A						WG -02
3	LCS DUP				5.05									WG -03
4	TBK 4/30	8315 FORM			4.93									WG139462-01
5	04-610-01				4.90									
6	04-618-01				4.94									
7	-02				5.04									
8	STD #5				5.06			1000µl A						
9	#4				5.04			500µl A						
10	#3				5.06			250µl A						
11	#2				5.01			50µl A						
12	#1				5.01			25µl A						
13	ALT				4.90			250µl B						
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														

CEB 5/1/03

Methylene Chloride Lot #: 43010
Hexane Lot #: —
Ether Lot #: —
Methanol Lot #: —
Solvent: CH_3CN Lot #: X32823
Reagent: DNPH Lot #: ER0005-9
Reagent: ACETATE BUFFER Lot #: ER0005-12
Reagent: 6M NaOH Lot #: ER2146
Acid: 6M HCL Lot #: ER2147
Florisil Lot #: —
Silica Gel Lot #: —
IR Analyst / Date / Time: —
Dried Na_2SO_4 Lot #: ER0005-29

Color Code
T = Transparent
C = Colored
O = Opaque

SW-846 Method			On	Off	On	Off
Continuous	3520C					
Soxhlet	3540C					
ASE*	3545					
Sep Funnel	3510C					
Sonication	3550B					
Waste	3580A					

SW-846 8315A ☑

* Accelerated Solvent Extractor (ASE)

Clean-ups			
Florisil 3620B		GPC 3640A	
Silica Gel 3630C		Other	
Acid 3665A		N/A	✓
Sulfur 3660B			

Peer Reviewed By: [signature] Date: 5-2-03

Extraction Notes For Volume # 201 Page # 115

General Comments: pH calibration 4 → 2315
7 → 3060

SONIC BATH SET @ 40°C, power set @ 1
ON - 1230
OFF - 1330
ON - 1435
OFF - 1535

Extraction Anomalies: NONE

Concentration Anomalies: NONE

Clean-Up Anomalies: N/A

Supervisor Review: _____ Date: _____

Workorders:	Due Date:	Priority:
04-610	5/2/2003	P1
04-618	5/6/2003	P1

Run Date: 1-May-03

Analyst: RDC

Instrument: HPLC3

		Analyst
Initial Calibration:	Average RF	NA
	Linear or quadratic regression	√
	Alt Source Check	√
Continuing Calibration:	Continuing Calibration	√
	Client Specific Requirements	√
	Special Standards	NA
Blanks:	Quant Report/Chromatogram	√
Laboratory Control Sample:	Quant Report/Chromatogram	√
	Spike Compounds	√
	MS/MSD	√
	Kemron Forms	√
Samples:	TCL Hits	√
	Correct Factors	√
	Dilutions	NA
	Check Sample Histories	NA
	Corrective Action	NA
Data Package:	Manual re-integrations	NA
	Level 2	
	Level 3	
	Level 4	√
	Case narrative	

Alternate source for formaldehyde %D > 15.
Alt. source recovered low at -17.6%.

04-618

	Supervisor
Case Narrative:	
Corrective Action:	
Results Reporting/Data Qualifiers:	
Client Data Package Assembly:	
Check for Completeness:	
Check for compliance with method and project requirements:	
Check the reasonableness of results:	

Primary Reviewer: RDC 5/2/03

Secondary Reviewer: [illegible] 5/2/03 √

Supervisor Review: [illegible] 5/2/03 NA

Example 8315 Calculations

1.0 Calulating the Calibration Factor (CF) from the initial calibration (ICAL) data:

	CF = Cs/As		Example:
Where:	As = Area of the compound being measured in the standard		10000
	Cs = Concentration of the compound being measured (ug/ml).		100
		CF	**0.01**

2.0 Calculating the concentration (C) of a compound in water using data from prep log and quantitation report:*

	C = [(Ax)(Vf)(D)(CF)(1000)] / Vi		Example:
Where:	Ax = Area of the compound being measured		10000
	Vf = Final volume of sample extract (mL). (prep log)		5
	D = Dilution factor for sample as a multiplier (10X = 10).		1
	CF = Calibration factor from ICAL calculated above.		0.01
	Vi = Initial volume of sample (mL). (prep log)		100
		C (ug/L) =	**5**

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

2.4 General Chemistry Data

REPORT NARRATIVE
GENERAL CHEMISTRY

KEMRON Login No: L0304618

METHOD

Analysis: See report for method reference.

HOLDING TIMES

Sample Preparation: All holding times were met.
Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.
Laboratory Control Sample: All acceptance criteria were met.
Duplicates: All acceptance criteria were met
Matrix Spikes: All acceptance criteria were met.

SAMPLES

There were no technical difficulties with this sample group

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: dih__ REVIEWED: dih DATE: 5/7/03

Rev. 6/00

GENERAL CHEMISTRY DATA

Login Number: L0304618

Analyte: BOD

A. QC Summary

✓ Batch QC Summary Form(s)

B. Raw Data

✓ Cover Page
✓ Analysis benchsheet
✓ Calculation spreadsheet
✓ Calibration data
✓ Example calculation
(at end of package)

Checked By: dlh Date: 5/6/03

A. QC SUMMARY

KENTRON ENVIRONMENTAL SERVICES
OHIO VALLEY LABORATORY
QUALITY CONTROL SUMMARY

WORKGROUP: WG139431
METHOD: 405.1
MATRIX: Water
UNITS: mg/L

RUN DATE: 4/30/03
ANALYST: GSG
DUPLICATE: 04-614-01
SPIKE: 04-615-01

ANALYTE	MDL	Blank	CONCENTRATION PPM T-LCS	LCS	REP1	REP2	SAMPLE RESULT	T-MS	MS	PERCENT RECOVERY LCS	LCS LCL	LCS UCL	MS	MS LCL	MS UCL	PERCENT RPD REP RPD	RPD UCL
BOD	1.000	ND	200.000	209.000	ND	ND	1.500	26.000	24.700	104.50	84.00	114.00	116.00	80.00	116.00	NA	10.00

NOTES & DEFINITIONS :
RDL = REPORTING DETECTION LIMIT
DL = DILUTED OUT
NA = NOT APPLICABLE
ND = NOT DETECTED
J = RDL > BLANK >= MDL
OR = OVERRANGE

LCS = LABORATORY CONTROL SAMPLE
T-LCS = TRUE VALUE OF LCS
REP1 = UNSPIKED SAMPLE REPLICATE 1
REP2 = UNSPIKED SAMPLE REPLICATE 2
SAMPLE RESULT = CONCENTRATION OF UNSPIKED MATRIX
T-MS = TRUE VALUE OF MATRIX SPIKE
MS = MATRIX SPIKE
LCL = LOWER CONTROL LIMIT
UCL = UPPER CONTROL LIMIT

REP RPD = RELATIVE PERCENT DIFFERENCE OF SAMPLE REPLICATES

B. RAW DATA

Wet Lab

Parameter: BOD
Analyst/Date/Time: [illegible] 04/30/03 @ 0800
SOP: K- 4051 **Revision:** 10
Work Group(s): WG 137931
Preservation Check: Yes _____ **No** _____

	Analyst	
Calibration/Linearity	✓	Date: 4/30
Second Source Check	✓	
ICV/CCV (std)		
ICB/CCB		
Blank	✓	
LCS	✓	
MS/MSD	✓	
Duplicate	✓	
Record On ACS Benchsheet	✓	
Data Upload		
EXCEL QC Sheet	✓	
QC Violation Sheet		
Signed Raw Data	✓	
STD/LCS On Benchsheet	✓	

Primary Reviewer Initials & Date Checked [illegible] 05/05/03

Secondary Reviewer Initials & Date Checked dlh 5/5/03

✓ • Check for compliance with Method and project-specific requirements
✓ • Check the completeness of the reported information
✓ • Check the information for the report narrative
✓ • Check the reasonableness of results

Supervisory Review Initials & Date Checked dlh 5/5/03

Comments: _____

√- Checked & OK
NA - Not Applicable
DL - Diluted Out

KEMRON Environmental Services

TEST CODE: BOD NAME: BIOCHEMICAL OXYGEN DEMAND

METHOD: EPA METHOD 405.1

UNITS: mg/L O ADT: GSG/04/30/03/08:00

Sam	Blan	DOA1	DOA2	VolA	BODA	DOB1	DOB2	VolB	BODB	DOC1	DOC2	VolC	BODC	NVBD	ilBOD	Results
LCS04/30/03	0.5		****		0	8.62	3.73	6	214.7	8.63	3.97	6	203.3	2	1	209	209
STD	0.5		****		0	8.65	4.16	3	389.5	8.66	4.13	3	393.5	2	1	391.5	391.5
L0304614-01	0.5		****		0			****	0	9.21	7.13	200	2.2	1	1	2.2	<3
614-02	0.5		****		0			****	0	9.59	7.73	200	1.9	1	1	1.9	<3
*618-01	0.5		****		0			****	0	8.01	6.27	200	1.7	1	1	1.7	1.7
*DUP 618-01	0.5		****		0			****	0	8.04	6.59	200	1.3	1	1	1.3	1.3
*618-02	0.5		****		0	8.08	5.78	75	6.8	6.61	1.35	200	7	2	1	6.9	6.9
645-01	0.5		****		0			****	0	8.96	8.07	200	0.4	1	1	0.4	<3
MS CALC	0.5		****		0	8.58	7.77	20	3.2	8.62	8.07	50	-0.3	2	1	1.5	1.5
MS 645-01	0.5		****		0	8.59	6.12	20	24.1	8.48	4.33	50	21.3	2	1	24.7	24.7
684-01	0.5		****		0			****	0	9.21	8.47	200	0.2	1	1	0.2	<3
654-06	0.5		****		0			****	0	8.67	7.85	200	0.3	1	1	0.3	<3

dlm

Daily Dilution: [illegible] 50(200)(500) = 20

ADT – ON: 04-30-03 @ 0800

2ND SOURCE: CS-05-50-16

ADT – OFF: 05-05-03 @ 08:30

✓ LCS made fresh today	✓ LCS added to bottles
✓ LCS pH (6.5-7.5) pH = 7.00	✓ Spike added to sample
✓ Dilution water D.O. = 8.77	✓ Nitrification inhibitor added to BOD-C
✓ Dilution water made: 04-30-03	✓ Chlorine checked on all samples
✓ Seed 1 cap. Per 700 mL DI water	✓ Duplicate analyzed
✓ Meter calibrated before use	

EPA Method 405.1 SOP K4051 Revision #: 10

		Volume (mL)	Initial D.O.	Final D.O.	
UNSEEDED BLANK		200	8.60	8.50	0.1

		Volume (mL)	Initial D.O.	Final D.O.	
SEEDED BLANK (2 mL SEED)	1	200	8.555 8.48	7.935 7.76	0.62
	2	200	8.63	8.11	

		Volume (mL)	Initial D.O.	Final D.O.	
SEEDED BLANK (10 mL SEED)	1	200	8.05 8.59	5.64 5.69	0.595
	2	200	8.64	5.54	

		Volume (mL)	Initial D.O.	Final D.O.	
BOD-C BLANK (2 mL SEED)	1	200	8.645 8.67	7.885 7.83	0.66
	2	200	8.62	8.14	

		Volume (mL)	Initial D.O.	Final D.O.
LCS (200 mg/L)	1	6	8.67	3.73
	2	6	8.63	3.97

		Volume (mL)	Initial D.O.	Final D.O.
2nd SOURCE (400 mg/L)	1	3	8.65	4.16
	2	3	8.66	4.13

	Volume (mL)	Initial D.O.	Final D.O.
CLIENT: [redacted] - 111	5	8.65	
SOURCE: 009	10	8.63	
SAMPLE No: 04-614-01	25	8.76	7.85
pH: 7.9 Chlorine: —	100	9.21	7.13
COMMENTS:			

	Volume (mL)	Initial D.O.	Final D.O.
CLIENT: [redacted] - 111	5	8.61	
SOURCE: 011	10	8.63	
SAMPLE No: 614-02	20	8.64	
pH: 7.9 Chlorine: —	25	8.87	
COMMENTS:	100	9.59	7.73

Reviewed by: dlh 5/5/03

Page 1 of 2

BIOCHEMICAL OXYGEN DEMAND WG: 139431

CLIENT: CCI -SC 228	Volume (mL)	Initial D.O.	Final D.O.
SOURCE: 05-177511-0W4-042803	5	8.59	
SAMPLE No: 618-01	20	8.54	
pH: 7.7 Chlorine: —	75	8.44	
COMMENTS: DUP	200	8.01	6.27
	DUP 200	8.04	6.59

CLIENT: CCI - 228	Volume (mL)	Initial D.O.	Final D.O.
SOURCE: 05-177511-0W5-042803	5	8.58	
SAMPLE No: 618-02	20	8.54	7.44
pH: 7.3 Chlorine: —	75	8.08	5.78
COMMENTS:	200	6.61	1.35

CLIENT: [redacted] 51	Volume (mL)	Initial D.O.	Final D.O.
SOURCE: outfall 002	20	8.58	7.77
SAMPLE No: 645-01	50	8.62	8.07
pH: 8.1 Chlorine: —	75	8.70	
COMMENTS: MS	100	8.46	8.07
	MS 20	8.59	6.12
	MS 50	8.48	4.53

CLIENT: [redacted] - 591	Volume (mL)	Initial D.O.	Final D.O.
SOURCE: Pond 010	1	8.52	
SAMPLE No: 684-01	5	8.57	
pH: 8.4 Chlorine: —	20	8.59	
COMMENTS:	75	8.78	
	200	9.21	8.47

CLIENT: [redacted] 69	Volume (mL)	Initial D.O.	Final D.O.
SOURCE: 003/Comp	20	8.63	
SAMPLE No: 659-06	75	8.71	
pH: 8.5 Chlorine: —	200	8.67	7.89
COMMENTS:			

Page 2 of 2

EXAMPLE CALCULATION

BOD

(B1 - B2) * F = B

[(D1 - D2) - B]/(volume/300) = mg/l O

where: B1 = initial DO of the seeded blank
B2 = final DO of the seeded blank
F = ratio of seed in sample to seed in the blank in decimal form
D1 = initial DO of the sample
D2 = final DO of the sample
volume = ml of sample used
300 = total ml in the BOD bottle (sample and dilution water)

Final BOD result is the average of 1, 2, or 3 bottles that meet the criteria stated in the SOP.

Bromide

[(C - A) * D]/(G * H) = X =mg/l Iodide
[(B - A) * D]/(E * F) = Y = mg/L Bromide + Iodide
[Y - X] * 13320 = mg/L Bromide

where: A = mL of titrant needed to titrate the blank
B = mL of titrant needed to titrate for Br + I
C = mL of titrant needed to titrate for Iodide
D = normality of titrant
E = volume (mL) of sample used for Br + I
F = dilution for Br + I determination in decimal form (ex. 1/5 dilution = 0.2)
G = volume (mL) of sample used for Iodide
H = dilution for Iodide determination in decimal form (ex. 1/5 dilution = 0.2)
13320 = equivalent weight

Ash

[(WT3 - WT1)/(WT2 - WT1)] * 100 = % weight as ASH

where: WT1 = empty crucible (grams)
WT2 = crucible and wet sample (grams)
WT3 = final weight of crucible and sample after ashing (grams)
100 = factor to get result in percent weight

KEMRON REPORT L0304594

PREPARED FOR CCI

WORK ID: CTO-0005

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KEMRON
ENVIRONMENTAL SERVICES

109 Starlite Park ▪ Marietta, OH 45750 ▪ Telephone (740) 373-4071 ▪ FAX (740) 373-4835

Laboratory Report Number: **L0304594**

Please find attached the results for samples you submitted to Kemron Environmental Services. Review and compilation of your report was completed by Kemron Team 1 representatives. If you have questions, comments or require further assistance please contact me or any of the team 1 members listed below at 800-373-4071. We can also be reached at the e-mail addresses listed below.

Cindy Arnold-Team Leader
carnold@kemron-lab.com

Stephanie Mossburg-Team Chemist/Data Specialist
smossburg@kemron-lab.com

Debbie Tornes-Customer Service/Invoicing Specialist
dtornes@kemron-lab.com

Reviewed by: Stephanie Mossburg Date: 5/14/03

Certified by: David E. Vandenberg
David E. Vandenberg
Laboratory Director

This laboratory report shall not be reproduced, except in full, without the written approval of KEMRON Environmental Services

This report contains a total of 1767 pages.

NYDOH NELAP Id: 10861

1.0 Summary Report

1.1 Laboratory Report

Cover Page
Laboratory Narrative
Laboratory Results

LABORATORY REPORT

L0304594

05/09/03 15:04

Submitted By

Kemron Environmental Services
109 Starlite Park
Marietta, Ohio 45750
(740)373-4071

For

Account Name: CH2MHill Constructors, Inc. (CCI)
CH2M HILL Constructors, Inc.
115 Perimeter Center Place NE Suite 700
Atlanta, GA 30346
Attention: Melissa Aycock

Account Number: 207-SC-728
Work ID: CTO-0005/

Sample Summary

Client ID	Lab ID	Date Collected	Date Recieved
05-177511-DW2-042503	L0304594-01	25-APR-03	26-APR-03
05-177511-DW3-042503	L0304594-02	25-APR-03	26-APR-03
05-177511-SP2-042503	L0304594-03	25-APR-03	26-APR-03
TRIP BLANK	L0304594-04	25-APR-03	26-APR-03

KEMRON ENVIRONMENTAL SERVICES
REPORT NARRATIVE

L0304594

CHAIN OF CUSTODY:

The chain of custody number was 177511-03-042503.

SHIPMENT CONDITIONS:

The chain of custody forms were received sealed in a cooler. The cooler temperatures were 4 and 4 ° C.

SAMPLE MANAGEMENT:

One 8260 vial of fraction STRSH20016 was received broken. All other samples received were intact.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

REVIEWED: Stephanie T Mossburg DATE: 4/28/03

REPORT NARRATIVE
GC/MS VOLATILE ORGANICS

KEMRON Login No: L0304594

METHOD

Preparation: SW-846 5030B
Analysis: SW-846 8260B

HOLDING TIMES

Sample Preparation: All holding times were met.
Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial calibrations: For all compounds which yielded a %RSD greater than 15%, linear or higher order equations were applied or if the mean %RSD for all analytes was less than 15% the average response factors were used. All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Continuing Calibration and Tune : All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Samples: All acceptance criteria were met.

Matrix Spikes: The MS/MSD results were not associated with this sample delivery group (SDG).

SAMPLES

Internal Standards: All acceptance criteria were met.

Surrogates: All acceptance criteria were met.

Samples: All acceptance criteria were met.

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Analyst: CMS REVIEWED: [signature] DATE: 5/7/03

Rev. 7/14/00

REPORT NARRATIVE
GC/MS SEMIVOLATILE ORGANICS

KEMRON Report No.: L0304594

METHOD

Preparation: SW- 846 3550B(Soils) 3510C(Waters)
Analysis: SW-846 8270C

HOLDING TIMES

Sample Preparation: All holding times were met.
Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial calibrations: For all compounds which yielded a %RSD greater than 15%, linear or higher order equations were applied or if the mean % RSD for all analytes was less than 15%, the average response factors were used. All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Continuing Calibration and Tune: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.
Laboratory Control Samples: All acceptance criteria were met.
Matrix Spikes: The MS/MSD were not associated with these samples.

SAMPLES

Internal Standards: All acceptance criteria were met.
Surrogates: Samples 01, and 02 yielded a % recovery for 2-fluorobiphenyl that was below the lower advisory limit. All other acceptance criteria were met.
Samples: Sample 01 was analyzed at a 5x dilution due to viscosity. All acceptance criteria were met.

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Analyst: ALT REVIEWED: _____ DATE: 5/6/03

Rev. 6/00

REPORT NARRATIVE
GC PESTICIDES

KEMRON Report No.: L0304594

METHOD

Preparation: SW- 846 3550B(Soils) 3510C(Waters)
Analysis: SW-846 8081

HOLDING TIMES

Sample Preparation: All holding times were met.
Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial calibrations: For all compounds which yielded a %RSD greater than 20 %, linear or higher order equations were applied. All acceptance criteria were met.
Alternate Source Standards: All acceptance criteria were met.
Continuing Calibration : All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.
Laboratory Control Samples: The LCS duplicate associated with WG139389 yielded % recoveries for 4 compounds that were above the acceptance limit. The LCS associated with WG139387 yielded % recoveries for 4 compounds that were above the acceptance limit. All other acceptance criteria were met.
Matrix Spikes: There were no MS/MSD results associated with this sample delivery group.

SAMPLES

Surrogates: All acceptance criteria were met.
Endrin/ DDT Breakdown : All acceptance criteria were met.
Samples: For all samples which yielded results with an RPD of greater than 40% between the primary and confirmation column the appropriate flag was applied. All acceptance criteria were met.

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Analyst: ECL REVIEWED: [signature] DATE: 5/6/03

Rev. 7/14/00

REPORT NARRATIVE
GC PESTICIDES

KEMRON Report No.: L0304594

METHOD

Preparation: SW- 846 3550B(Soils) 3510C(Waters)
Analysis: SW-846 8081

HOLDING TIMES

Sample Preparation: All holding times were met.
Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial calibrations: For all compounds which yielded a %RSD greater than 20 %, linear or higher order equations were applied. All acceptance criteria were met.
Alternate Source Standards: All acceptance criteria were met.
Continuing Calibration : All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.
Laboratory Control Samples: The LCS duplicate associated with samples 01 and 02 yielded % recoveries for 4 compounds that were above the acceptance limit. The LCS associated with sample 03 yielded % recoveries for 4 compounds that were above the acceptance limit. Sample 03 was re-extracted within hold with an acceptable LCS. All other acceptance criteria were met.
Matrix Spikes: There were no MS/MSD results associated with this sample delivery group.

SAMPLES

Surrogates: All acceptance criteria were met.
Endrin/ DDT Breakdown : All acceptance criteria were met.
Samples: For all samples which yielded results with an RPD of greater than 40% between the primary and confirmation column the appropriate flag was applied. All acceptance criteria were met.

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Analyst: ECL REVIEWED: [signature] DATE: 5/19/03

Rev. 7/14/00

REPORT NARRATIVE
GC PCB

KEMRON Report No.: L0304594

METHOD

Preparation: SW-846 3550B(Soils) 3510C(Waters)
Analysis: SW-846 8082

HOLDING TIMES

Sample Preparation: All holding times were met.
Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial calibrations: For all compounds which yielded a %RSD greater than 20 %, linear or higher order equations were applied. All acceptance criteria were met.
Alternate Source Standards: All acceptance criteria were met.
Continuing Calibration: All acceptance criteria were met.

BATCH QA/QC

Method Blank: The blank associated with WG139386 yielded a % recovery for decachlorobiphenyl that was above the acceptance limit. All other acceptance criteria were met.
Laboratory Control Samples: All acceptance criteria were met.
Matrix Spikes: There were no MS/MSD results associated with this sample delivery group.

SAMPLES

Surrogates: Sample fraction -03 yielded a % recovery for decachlorobiphenyl that was above the acceptance limit. This was due to sample matrix interference. All other acceptance criteria were met.
Samples: For all samples which yielded results with an RPD of greater than 40% between the primary and confirmation column the appropriate flag was applied. All acceptance criteria were met.

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Analyst: ECL REVIEWED: _____ DATE: _____

Rev. 7/14/00

REPORT NARRATIVE
GC HERBICIDES

KEMRON Report No.: L0304594

METHOD

Preparation: SW- 846 3550B(Soils) 3510C(Waters)
Analysis: SW-846 8151

HOLDING TIMES

Sample Preparation: All holding times were met.
Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial calibrations: For all compounds which yielded a %RSD greater than 15%, linear or higher order equations were applied. All acceptance criteria were met.
Alternate Source Standards: All acceptance criteria were met.
Continuing Calibration : All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.
Laboratory Control Samples: The LCS yielded a % recovery for MCPP that was above the acceptance limit. All other acceptance criteria were met.
Matrix Spikes: The MS/MSD results were not associated with this sample delivery group.

SAMPLES

Surrogates: All acceptance criteria were met.
Samples: For all samples which yielded results with an RPD of greater than 40% between the primary and confirmation column the appropriate flag was applied. All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: ECL REVIEWED: Michael Cash DATE: 5/5/03

Rev. 7/14/00

REPORT NARRATIVE
HPLC-EXPLOSIVE RESIDUES

KEMRON Report No.: L0304594
Note: Tetryl readily decomposes in the presence of methanol/water or heat. False negative results for this analyte are possible.

METHOD

Analysis: SW-846 8330

HOLDING TIMES

Sample Preparation: All holding times were met.
Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial calibrations: For all compounds linear equations were applied. All acceptance criteria were met.
Alternate Source Standards: All acceptance criteria were met.
Continuing Calibration : All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.
Laboratory Control Samples: All acceptance criteria were met.
Matrix Spikes: An MS/MSD were not associated with this sample delivery group.

SAMPLES

Surrogates: Sample fraction 01 yielded a percent recovery for the surrogate that was above the advisory limit. There is chromatographic evidence of sample matrix interference.
Samples: All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: RDC REVIEWED: [signature] DATE: 5/13/03

Rev. 7/14/00

REPORT NARRATIVE
METALS

KEMRON Login No: L0304594

METHOD

Analysis: SW-846 6010/6020/7000

HOLDING TIMES

Sample Preparation: All holding times were met.
Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial calibrations: All acceptance criteria were met.
Alternate Source Standards: All acceptance criteria were met.
Continuing Calibration : All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.
Laboratory Control Sample: All acceptance criteria were met.

SAMPLES

All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: JYH/SLP REVIEWED: Maren Beery DATE: 05/09/03

Rev. 6/00

REPORT NARRATIVE
GENERAL CHEMISTRY

KEMRON Login No: L0304594

METHOD

Analysis: See report for method reference.

HOLDING TIMES

Sample Preparation: All holding times were met.
Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.
Laboratory Control Sample: All acceptance criteria were met.
Duplicates: All acceptance criteria were met
Matrix Spikes: All acceptance criteria were met.

SAMPLES

There were no technical difficulties with this sample group

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: dih__ REVIEWED: _____ DATE: 5/2/03

Rev. 6/00

Error Report Summary

- Navy RAC

Error Level	Process Name	Process Description	Number
WARNING	zaqrya_EDD4_Recovery_C	Recovery <0 or >200	4
WARNING	zaqrya_EDD4_Units_F	Units is not like "L' and <>'PERCENT' or <> '%' where Matrix is like 'W*'.	3

Error Report Detail

- Navy RAC

Process	Message	Resolution
--		
	-- Post-Import QC Query began at: 5/22/2003 09:58	
	Key: SDG [L0304594]	
	-- Post-Import QC Query ended at: 5/22/2003 09:58	
	Key:	
zaqrya_EDD4_Recovery_C		
	WARNING: Recovery [1150] value is a bit extreme and may be in error.	
	Key: RecNum [456]: FieldID [05-177511-SP2-042503CF1], AnMth [SW8082], ExMth [SW3550B], LchMth [NONE], PrmID [CL10BZ2]	
	WARNING: Recovery [204] value is a bit extreme and may be in error.	
	Key: RecNum [80]: FieldID [05-177511-DW2-042503], AnMth [SW8330], ExMth [SW3535], LchMth [NONE], PrmID [DNT34]	
	WARNING: Recovery [263] value is a bit extreme and may be in error.	
	Key: RecNum [1177]: FieldID [WG139542-0403], AnMth [SW6010B], ExMth [TOTAL], LchMth [NONE], PrmID [PB]	
	WARNING: Recovery [893] value is a bit extreme and may be in error.	
	Key: RecNum [447]: FieldID [05-177511-SP2-042503], AnMth [SW8082], ExMth [SW3550B], LchMth [NONE], PrmID [CL10BZ2]	
zaqrya_EDD4_Units_F		
	WARNING: Units [UNITS] may be incorrect for the result of a water sample with Matrix [WATER].	
	Key: RecNum [600]: FieldID [WG139251-02DUP], AnMth [SW9040], ExMth [NONE], LchMth [NONE], PrmID [CORRTY]	
	Key: RecNum [292]: FieldID [05-177511-DW3-042503], AnMth [SW9040], ExMth [NONE], LchMth [NONE], PrmID [CORRTY]	
	Key: RecNum [49]: FieldID [05-177511-DW2-042503], AnMth [SW9040], ExMth [NONE], LchMth [NONE], PrmID [CORRTY]	

Report Number: L0304594
Report Date : May 9, 2003

Sample Number: L0304594-01
Client ID: 05-177511-DW2-042503
Matrix: Water
Workgroup Number: WG139297
Collect Date: 25-APR-03

Prep Method: 1010
Analytical Method: 1010
Analyst: DIB
Dilution: 1
Units: Degrees C

Instrument: PRECISION
Prep Date: 04/29/2003 07:45
Cal Date:
Run Date: 04/29/2003 07:45
File ID:

Analyte	CAS. Number	Result	Qual	RL	MDL
Ignitability		95.0	>		

> Greater than

Sample Number: L0304594-01
Client ID: 05-177511-DW2-042503
Matrix: Water
Workgroup Number: WG139258
Collect Date: 25-APR-03

Prep Method: 1664A
Analytical Method: 1664A
Analyst: DLP
Dilution: 1
Units: mg/L

Instrument: HORIZON
Prep Date: 04/28/2003 08:15
Cal Date:
Run Date: 04/28/2003 08:15
File ID: ON.0304280815-15

Analyte	CAS. Number	Result	Qual	RL	MDL
n-Hexane Extractable Material (HEM)		17.8		5.43	2.72

Sample Number: L0304594-01
Client ID: 05-177511-DW2-042503
Matrix: Water
Workgroup Number: WG139649
Collect Date: 25-APR-03

Prep Method: 9010B
Analytical Method: 9010B
Analyst: DLN
Dilution: 1
Units: mg/L

Instrument: UV-120-1V
Prep Date: 05/02/2003 11:00
Cal Date: 02/18/2003 09:00
Run Date: 05/02/2003 11:00
File ID: 1V.0305021100-08

Analyte	CAS. Number	Result	Qual	RL	MDL
Cyanide	57-12-5	0.0136		0.0100	0.00500

Sample Number: L0304594-01
Client ID: 05-177511-DW2-042503
Matrix: Water
Workgroup Number: WG139616
Collect Date: 25-APR-03
Sample Tag: 01

Prep Method: 3005A
Analytical Method: 6010B
Analyst: MSW
Dilution: 1
Units: mg/L

Instrument: PE-ICP
Prep Date: 05/01/2003 09:00
Cal Date: 05/02/2003 10:44
Run Date: 05/02/2003 13:21
File ID: PE.050203.132123

Analyte	CAS. Number	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5		U	0.100	0.0500
Silver, Total	7440-22-4		U	0.0100	0.00500
Arsenic, Total	7440-38-2		U	0.00400	0.00200
Barium, Total	7440-39-3	0.115		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.0100	0.000250
Calcium, Total	7440-70-2	51.0		0.200	0.100
Cadmium, Total	7440-43-9		U	0.0100	0.00250
Cobalt, Total	7440-48-4		U	0.0200	0.00250

Report Number: L0304594
Report Date : May 9, 2003

Sample Number: L0304594-01
Client ID: 05-177511-DW2-042503
Matrix: Water
Workgroup Number: WG139616
Collect Date: 25-APR-03
Sample Tag: 01

Prep Method: 3005A
Analytical Method: 6010B
Analyst: MSW
Dilution: 1
Units: mg/L

Instrument: PE-ICP
Prep Date: 05/01/2003 09:00
Cal Date: 05/02/2003 10:44
Run Date: 05/02/2003 13:21
File ID: PE.050203.132123

Analyte	CAS. Number	Result	Qual	RL	MDL
Chromium, Total	7440-47-3		U	0.0200	0.00250
Copper, Total	7440-50-8	0.0104	J	0.0200	0.00500
Iron, Total	7439-89-6	4.64		0.0400	0.0200
Potassium, Total	7440-09-7	21.9		1.00	0.250
Magnesium, Total	7439-95-4	34.9		0.500	0.250
Manganese, Total	7439-96-5	0.207		0.0100	0.00100
Sodium, Total	7440-23-5	180		0.500	0.250
Nickel, Total	7440-02-0	0.00649	J	0.0400	0.00500
Lead, Total	7439-92-1		U	0.00500	0.00250
Vanadium, Total	7440-62-2		U	0.0100	0.00500
Zinc, Total	7440-66-6	0.0100	J	0.0200	0.00500

J This compound was detected at a level above the method detection limit, but below the reporting limit.
U This analyte was not detected in the sample.

Sample Number: L0304594-01
Client ID: 05-177511-DW2-042503
Matrix: Water
Workgroup Number: WG139770
Collect Date: 25-APR-03
Sample Tag: DL01

Prep Method: 3015
Analytical Method: 6020A
Analyst: JYH
Dilution: 2
Units: mg/L

Instrument: ELAN-ICP
Prep Date: 05/02/2003 10:00
Cal Date: 05/06/2003 11:00
Run Date: 05/06/2003 13:00
File ID: EL.050603.130045

Analyte	CAS. Number	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.00408		0.00100	0.000500
Selenium, Total	7782-49-2	0.00506		0.00100	0.000500

Sample Number: L0304594-01
Client ID: 05-177511-DW2-042503
Matrix: Water
Workgroup Number: WG139770
Collect Date: 25-APR-03
Sample Tag: DL02

Prep Method: 3015
Analytical Method: 6020A
Analyst: JYH
Dilution: 2
Units: mg/L

Instrument: ELAN-ICP
Prep Date: 05/02/2003 10:00
Cal Date: 05/06/2003 14:26
Run Date: 05/06/2003 16:06
File ID: EL.050603.160653

Analyte	CAS. Number	Result	Qual	RL	MDL
Thallium, Total	7440-28-0	0.000605		0.000200	0.000100

Report Number: L0304594
Report Date : May 9, 2003

Sample Number: L0304594-01
Client ID: 05-177511-DW2-042503
Matrix: Water
Workgroup Number: WG139661
Collect Date: 25-APR-03
Sample Tag: 01

Prep Method: METHOD
Analytical Method: 7470A
Analyst: MMB
Dilution: 1
Units: mg/L

Instrument: P8202
Prep Date: 05/01/2003 12:00
Cal Date: 05/02/2003 09:57
Run Date: 05/02/2003 10:25
File ID: P8.050203.102534

Analyte	CAS. Number	Result	Qual	RL	MDL
Mercury, Total	7439-97-6		U	0.000200	0.0000520

U This analyte was not detected in the sample.

Sample Number: L0304594-01
Client ID: 05-177511-DW2-042503
Matrix: Water
Workgroup Number: WG139389
Collect Date: 25-APR-03
Sample Tag: 01

Prep Method: 3510C
Analytical Method: 8081A
Analyst: ECL
Dilution: 1
Units: ug/L

Instrument: HP9
Prep Date: 04/29/2003 09:00
Cal Date: 04/30/2003 15:33
Run Date: 05/01/2003 11:23
File ID: 9G23097.R

Analyte	CAS. Number	Result	Qual	RL	MDL
4,4'-DDD	72-54-8		U	0.115	0.0287
4,4'-DDE	72-55-9		U	0.115	0.0287
4,4'-DDT	50-29-3		U	0.115	0.0287
Aldrin	309-00-2		U	0.0575	0.0115
alpha-BHC	319-84-6		U	0.0575	0.0115
beta-BHC	319-85-7	0.211	J	0.0575	0.0115
delta-BHC	319-86-8		U	0.0575	0.0115
Dieldrin	60-57-1		U	0.115	0.0287
Endosulfan I	959-98-8		U	0.0575	0.0115
Endosulfan II	33213-65-9		U	0.115	0.0287
Endosulfan sulfate	1031-07-8		U	0.115	0.0287
Endrin	72-20-8		U	0.115	0.0287
Endrin aldehyde	7421-93-4		U	0.115	0.0287
gamma-BHC (Lindane)	58-89-9	0.0683	J	0.0575	0.0115
Heptachlor	76-44-8		U	0.0575	0.0115
Heptachlor epoxide	1024-57-3		U	0.0575	0.0115
Methoxychlor	72-43-5		U	0.575	0.0287
Endrin ketone	53494-70-5		U	0.115	0.0287
alpha Chlordane	5103-71-9		U	0.0575	0.0115
gamma Chlordane	5103-74-2		U	0.0575	0.0115
Toxaphene	8001-35-2		U	1.15	0.575

Analyte	% Recovery	Lower	Upper	Qual
2,4,5,6-Tetrachloro-m-xylene	83.7	20	180	
Decachlorobiphenyl	48.9	25	140	

U This analyte was not detected in the sample.
J The % difference between the reported result and the confirmation result exceeds 40.

Sample Number: L0304594-01
Client ID: 05-177511-DW2-042503
Matrix: Water
Workgroup Number: WG139389
Collect Date: 25-APR-03
Sample Tag: CF1

Prep Method: 3510C
Analytical Method: 8081A
Analyst: ECL
Dilution: 1
Units: ug/L

Instrument: HP9
Prep Date: 04/29/2003 09:00
Cal Date: 04/30/2003 15:33
Run Date: 05/01/2003 10:59
File ID: 9G23097.F

Analyte	CAS. Number	Result	Qual	RL	MDL
4,4'-DDD	72-54-8		U	0.115	0.0287
4,4'-DDE	72-55-9		U	0.115	0.0287
4,4'-DDT	50-29-3		U	0.115	0.0287
Aldrin	309-00-2		U	0.0575	0.0115
alpha-BHC	319-84-6		U	0.0575	0.0115

Report Number: L0304594
Report Date : May 9, 2003

Sample Number: L0304594-01
Client ID: 05-177511-DW2-042503
Matrix: Water
Workgroup Number: WG139389
Collect Date: 25-APR-03
Sample Tag: CF1

Prep Method: 3510C
Analytical Method: 8081A
Analyst: ECL
Dilution: 1
Units: ug/L

Instrument: HP9
Prep Date: 04/29/2003 09:00
Cal Date: 04/30/2003 15:33
Run Date: 05/01/2003 10:59
File ID: 9G23097.F

Analyte	CAS. Number	Result	Qual	RL	MDL
beta-BHC	319-85-7	0.0773	J	0.0575	0.0115
delta-BHC	319-86-8		U	0.0575	0.0115
Dieldrin	60-57-1		U	0.115	0.0287
Endosulfan I	959-98-8		U	0.0575	0.0115
Endosulfan II	33213-65-9		U	0.115	0.0287
Endosulfan sulfate	1031-07-8		U	0.115	0.0287
Endrin	72-20-8		U	0.115	0.0287
Endrin aldehyde	7421-93-4		U	0.115	0.0287
gamma-BHC (Lindane)	58-89-9	0.188	J	0.0575	0.0115
Heptachlor	76-44-8		U	0.0575	0.0115
Heptachlor epoxide	1024-57-3		U	0.0575	0.0115
Methoxychlor	72-43-5		U	0.575	0.0287
Endrin ketone	53494-70-5		U	0.115	0.0287
alpha Chlordane	5103-71-9		U	0.0575	0.0115
gamma Chlordane	5103-74-2		U	0.0575	0.0115
Toxaphene	8001-35-2		U	1.15	0.575

Analyte	% Recovery	Lower	Upper	Qual
2,4,5,6-Tetrachloro-m-xylene	90.8	20	180	
Decachlorobiphenyl	40.6	25	140	

U This analyte was not detected in the sample.
J The % difference between the reported result and the confirmation result exceeds 40.

Sample Number: L0304594-01
Client ID: 05-177511-DW2-042503
Matrix: Water
Workgroup Number: WG139386
Collect Date: 25-APR-03
Sample Tag: 01

Prep Method: 3510C
Analytical Method: 8082
Analyst: ECL
Dilution: 1
Units: ug/L

Instrument: HP4
Prep Date: 04/29/2003 09:00
Cal Date: 03/17/2003 17:05
Run Date: 04/30/2003 17:46
File ID: 4GR17910

Analyte	CAS. Number	Result	Qual	RL	MDL
Aroclor-1016	12674-11-2		U	0.575	0.287
Aroclor-1221	11104-28-2		U	0.575	0.287
Aroclor-1232	11141-16-5		U	0.575	0.287
Aroclor-1242	53469-21-9		U	0.575	0.287
Aroclor-1248	12672-29-6		U	0.575	0.287
Aroclor-1254	11097-69-1		U	0.575	0.287
Aroclor-1260	11096-82-5		U	0.575	0.287

Analyte	% Recovery	Lower	Upper	Qual
2,4,5,6-Tetrachloro-m-xylene	105	30	132	
Decachlorobiphenyl	84.7	36	144	

U This analyte was not detected in the sample.

Report Number:L0304594
Report Date :May 9, 2003

Sample Number:L0304594-01
Client ID:05-177511-DW2-042503
Matrix:Water
Workgroup Number:WG139504
Collect Date:25-APR-03
Sample Tag:01

Prep Method:METHOD
Analytical Method:8151A
Analyst:ECL
Dilution:1
Units:ug/L

Instrument:HP1
Prep Date:04/30/2003 15:00
Cal Date:04/15/2003 18:16
Run Date:05/01/2003 22:28
File ID:105883.F

Analyte	CAS. Number	Result	Qual	RL	MDL
2,4-D	94-75-7		U	2.22	1.11
2,4-DB	94-82-6		U	2.22	1.11
2,4,5-T	93-76-5		U	0.222	0.111
2,4,5-TP (Silvex)	93-72-1		U	0.222	0.111
Dalapon	75-99-0		U	5.56	2.78
Dicamba	1918-00-9		U	0.222	0.111
Dichloroprop	120-36-5		U	2.22	1.11
Dinoseb	88-85-7		U	1.11	0.556
MCPA	94-74-6		U	278	111
MCPP	93-65-2		U	278	111
Pentachlorophenol	87-86-5	0.414		0.222	0.111

Analyte	% Recovery	Lower	Upper	Qual
2,4-Dichlorophenylacetic acid	97.4	20	144	

U This analyte was not detected in the sample.

Sample Number:L0304594-01
Client ID:05-177511-DW2-042503
Matrix:Water
Workgroup Number:WG139504
Collect Date:25-APR-03
Sample Tag:CF1

Prep Method:METHOD
Analytical Method:8151A
Analyst:ECL
Dilution:1
Units:ug/L

Instrument:HP1
Prep Date:04/30/2003 15:00
Cal Date:04/15/2003 18:16
Run Date:05/01/2003 23:04
File ID:105883.R

Analyte	CAS. Number	Result	Qual	RL	MDL
2,4-D	94-75-7		U	2.22	1.11
2,4-DB	94-82-6		U	2.22	1.11
2,4,5-T	93-76-5		U	0.222	0.111
2,4,5-TP (Silvex)	93-72-1		U	0.222	0.111
Dalapon	75-99-0		U	5.56	2.78
Dicamba	1918-00-9		U	0.222	0.111
Dichloroprop	120-36-5		U	2.22	1.11
Dinoseb	88-85-7		U	1.11	0.556
MCPA	94-74-6		U	278	111
MCPP	93-65-2		U	278	111
Pentachlorophenol	87-86-5	0.409		0.222	0.111

Analyte	% Recovery	Lower	Upper	Qual
2,4-Dichlorophenylacetic acid	160	20	144	*,SMI

*,SMI
U This analyte was not detected in the sample.

Sample Number:L0304594-01
Client ID:05-177511-DW2-042503
Matrix:Water
Workgroup Number:WG139456
Collect Date:25-APR-03

Prep Method:5030B
Analytical Method:8260B
Analyst:CMS
Dilution:1
Units:ug/L

Instrument:HPMS11
Prep Date:05/01/2003 15:58
Cal Date:04/17/2003 14:20
Run Date:05/01/2003 15:58
File ID:11M14696

Analyte	CAS. Number	Result	Qual	RL	MDL
Chloromethane	74-87-3		U	10.0	0.250
Bromomethane	74-83-9		U	10.0	0.500
Vinyl chloride	75-01-4		U	10.0	0.250
Chloroethane	75-00-3		U	10.0	0.500
Methylene chloride	75-09-2	0.442	J	5.00	0.250
Acetone	67-64-1	22.8		10.0	2.50

Report Number: L0304594
Report Date : May 9, 2003

Sample Number: L0304594-01
Client ID: 05-177511-DW2-042503
Matrix: Water
Workgroup Number: WG139456
Collect Date: 25-APR-03

Prep Method: 5030B
Analytical Method: 8260B
Analyst: CMS
Dilution: 1
Units: ug/L

Instrument: HPMS11
Prep Date: 05/01/2003 15:59
Cal Date: 04/17/2003 14:20
Run Date: 05/01/2003 15:58
File ID: 11M14696

Analyte	CAS. Number	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	5.00	0.500
1,1-Dichloroethane	75-35-4		U	5.00	0.500
1,1-Dichloroethane	75-34-3		U	5.00	0.125
1,2-Dichloroethene (Total)	540-59-0		U	5.00	0.250
Chloroform	67-66-3		U	5.00	0.125
1,2-Dichloroethane	107-06-2		U	5.00	0.250
2-Butanone	78-93-3	3.22	J	10.0	2.50
1,1,1-Trichloroethane	71-55-6		U	5.00	0.250
Carbon tetrachloride	56-23-5		U	5.00	0.250
Bromodichloromethane	75-27-4		U	5.00	0.250
1,2-Dichloropropane	78-87-5		U	5.00	0.125
cis-1,3-Dichloropropene	10061-01-5		U	5.00	0.250
Trichloroethene	79-01-6		U	5.00	0.250
Dibromochloromethane	124-48-1		U	5.00	0.250
1,1,2-Trichloroethane	79-00-5		U	5.00	0.250
Benzene	71-43-2	5.72		5.00	0.125
trans-1,3-Dichloropropene	10061-02-6		U	5.00	0.500
Bromoform	75-25-2		U	5.00	0.540
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
Tetrachloroethene	127-18-4		U	5.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.125
Toluene	108-88-3	26.3		5.00	0.250
Chlorobenzene	108-90-7	0.243	J	5.00	0.125
Ethyl benzene	100-41-4	4.31	J	5.00	0.250
Styrene	100-42-5	1.38	J	5.00	0.125
Xylenes, Total	1330-20-7	23.5		5.00	0.500

Analyte	% Recovery	Lower	Upper	Qual
Dibromofluoromethane	99.6	86	118	
1,2-Dichloroethane-d4	106	80	120	
Toluene-d8	101	88	110	
p-Bromofluorobenzene	99.0	86	115	

J This compound was detected at a level above the method detection limit, but below the reporting limit.
U This analyte was not detected in the sample.

Sample Number: L0304594-01
Client ID: 05-177511-DW2-042503
Matrix: Water
Workgroup Number: WG139687
Collect Date: 25-APR-03
Sample Tag: 01

Prep Method: 3510C
Analytical Method: 8270C
Analyst: ALT
Dilution: 5
Units: ug/L

Instrument: HPMS5
Prep Date: 04/30/2003 09:19
Cal Date: 05/01/2003 16:03
Run Date: 05/03/2003 00:32
File ID: 5M26165

Analyte	CAS. Number	Result	Qual	RL	MDL
Phenol	108-95-2	26.1	J	27.8	13.9
Bis(2-Chloroethyl)ether	111-44-4		U	27.8	13.9
2-Chlorophenol	95-57-8		U	27.8	13.9
1,3-Dichlorobenzene	541-73-1		U	27.8	13.9
1,4-Dichlorobenzene	106-46-7		U	27.8	13.9
1,2-Dichlorobenzene	95-50-1		U	27.8	13.9
2-Methylphenol	95-48-7		U	27.8	13.9
bis(2-Chloroisopropyl)ether	108-60-1		U	27.8	13.9
3-,4-Methylphenol	106-44-5		U	27.8	13.9
N-Nitroso-di-n-propylamine	621-64-7		U	27.8	13.9
Hexachloroethane	67-72-1		U	27.8	13.9
Nitrobenzene	98-95-3		U	27.8	13.9
Isophorone	78-59-1		U	27.8	13.9

Report Number: L0304594
Report Date : May 9, 2003

Sample Number: L0304594-01
Client ID: 05-177511-DW2-042503
Matrix: Water
Workgroup Number: WG139687
Collect Date: 25-APR-03
Sample Tag: 01

Prep Method: 3510C
Analytical Method: 8270C
Analyst: ALT
Dilution: 5
Units: ug/L

Instrument: HPMS5
Prep Date: 04/30/2003 09:19
Cal Date: 05/01/2003 16:03
Run Date: 05/03/2003 00:32
File ID: 5M26165

Analyte	CAS. Number	Result	Qual	RL	MDL
2-Nitrophenol	88-75-5		U	27.8	13.9
2,4-Dimethylphenol	105-67-9		U	27.8	13.9
Bis(2-Chloroethoxy)Methane	111-91-1		U	27.8	13.9
2,4-Dichlorophenol	120-83-2		U	27.8	13.9
1,2,4-Trichlorobenzene	120-82-1		U	27.8	13.9
Naphthalene	91-20-3		U	27.8	13.9
4-Chloroaniline	106-47-8		U	27.8	13.9
Hexachlorobutadiene	87-68-3		U	27.8	13.9
4-Chloro-3-methylphenol	59-50-7		U	27.8	13.9
2-Methylnaphthalene	91-57-6		U	27.8	13.9
Hexachlorocyclopentadiene	77-47-4		U	27.8	13.9
2,4,6-Trichlorophenol	88-06-2		U	27.8	13.9
2,4,5-Trichlorophenol	95-95-4		U	27.8	13.9
2-Chloronaphthalene	91-58-7		U	27.8	13.9
2-Nitroaniline	88-74-4		U	139	69.4
Dimethylphthalate	131-11-3		U	27.8	13.9
Acenaphthylene	208-96-8		U	27.8	13.9
2,6-Dinitrotoluene	606-20-2		U	27.8	13.9
3-Nitroaniline	99-09-2		U	139	69.4
Acenaphthene	83-32-9		U	27.8	13.9
2,4-Dinitrophenol	51-28-5		U	139	69.4
4-Nitrophenol	100-02-7		U	139	69.4
Dibenzofuran	132-64-9		U	27.8	13.9
2,4-Dinitrotoluene	121-14-2		U	27.8	13.9
Diethylphthalate	84-66-2		U	27.8	13.9
4-Chlorophenyl-phenyl ether	7005-72-3		U	27.8	13.9
Fluorene	86-73-7		U	27.8	13.9
4-Nitroaniline	100-01-6		U	139	69.4
4,6-Dinitro-2-methylphenol	534-52-1		U	139	69.4
N-Nitrosodiphenylamine	86-30-6		U	27.8	13.9
4-Bromophenyl-phenylether	101-55-3		U	27.8	13.9
Hexachlorobenzene	118-74-1		U	27.8	13.9
Pentachlorophenol	87-86-5		U	139	69.4
Phenanthrene	85-01-8		U	27.8	13.9
Anthracene	120-12-7		U	27.8	13.9
Carbazole	86-74-8		U	27.8	13.9
Di-N-Butylphthalate	84-74-2		U	27.8	13.9
Fluoranthene	206-44-0		U	27.8	13.9
Pyrene	129-00-0		U	27.8	13.9
Butylbenzylphthalate	85-68-7		U	27.8	13.9
3,3'-Dichlorobenzidine	91-94-1		U	55.6	13.9
Benzo(a)anthracene	56-55-3		U	27.8	13.9
Chrysene	218-01-9		U	27.8	13.9
bis(2-Ethylhexyl)phthalate	117-81-7		U	27.8	13.9
Di-n-octylphthalate	117-84-0		U	27.8	13.9
Benzo(b)fluoranthene	205-99-2		U	27.8	13.9
Benzo(k)fluoranthene	207-08-9		U	27.8	13.9
Benzo(a)pyrene	50-32-8		U	27.8	13.9
Indeno(1,2,3-cd)pyrene	193-39-5		U	27.8	13.9
Dibenzo(a,h)Anthracene	53-70-3		U	27.8	13.9
Benzo(g,h,i)Perylene	191-24-2		U	27.8	13.9

Report Number: L0304594
Report Date : May 9, 2003

Sample Number: L0304594-01
Client ID: 05-177511-DW2-042503
Matrix: Water
Workgroup Number: WG139687
Collect Date: 25-APR-03
Sample Tag: 01

Prep Method: 3510C
Analytical Method: 8270C
Analyst: ALT
Dilution: 5
Units: ug/L

Instrument: HPMS5
Prep Date: 04/30/2003 09:19
Cal Date: 05/01/2003 16:03
Run Date: 05/03/2003 00:32
File ID: 5M26165

Analyte	% Recovery	Lower	Upper	Qual
2-Fluorophenol	25.0	21	100	
Phenol-d5	17.3	10	94	
Nitrobenzene-d5	39.4	35	114	
2-Fluorobiphenyl	39.9	43	116	*
2,4,6-Tribromophenol	75.5	10	123	
p-Terphenyl-d14	54.9	33	141	

J This compound was detected at a level above the method detection limit, but below the reporting limit.
U This analyte was not detected in the sample.

Sample Number: L0304594-01
Client ID: 05-177511-DW2-042503
Matrix: Water
Workgroup Number: WG139350
Collect Date: 25-APR-03
Sample Tag: 01

Prep Method: 3535
Analytical Method: 8330
Analyst: RDC
Dilution: 1
Units: ug/L

Instrument: HPLC4
Prep Date: 04/28/2003 07:15
Cal Date: 04/24/2003 21:05
Run Date: 04/30/2003 12:57
File ID: 4L004885.F

Analyte	CAS. Number	Result	Qual	RL	MDL
1,3,5-Trinitrobenzene	99-35-4	1.39	J	1.11	0.278
1,3-Dinitrobenzene	99-65-0	1.03	J	1.11	0.278
2,4,6-Trinitrotoluene	118-96-7		U	1.11	0.278
2,4-Dinitrotoluene	121-14-2	0.436	J	1.11	0.278
2,6-Dinitrotoluene	606-20-2		U	1.11	0.278
2-Amino-4,6-dinitrotoluene	35572-78-2		U	1.11	0.278
2-Nitrotoluene	88-72-2		U	1.11	0.278
3-Nitrotoluene	99-08-1	0.902	J	1.11	0.278
4-Nitrotoluene	99-99-0	1.81	J	1.11	0.278
4-Amino-2,6-dinitrotoluene	19406-51-0		U	1.11	0.278
HMX	2691-41-0	0.372	J	1.11	0.278
Nitrobenzene	98-95-3		U	1.11	0.278
RDX	121-82-4	2.14		1.11	0.278
Tetryl	479-45-8	0.840	J	1.11	0.278

Analyte	% Recovery	Lower	Upper	Qual
3,4-Dinitrotoluene	204	50	150	*,SMI

*,SMI
J This compound was detected at a level above the method detection limit, but below the reporting limit.
U This analyte was not detected in the sample.
J The % difference between the reported result and the confirmation result exceede 40.

Sample Number: L0304594-01
Client ID: 05-177511-DW2-042503
Matrix: Water
Workgroup Number: WG139350
Collect Date: 25-APR-03
Sample Tag: CF1

Prep Method: 3535
Analytical Method: 8330
Analyst: RDC
Dilution: 1
Units: ug/L

Instrument: HPLC2
Prep Date: 04/28/2003 07:15
Cal Date: 05/07/2003 20:40
Run Date: 05/09/2003 01:30
File ID: 2L002984.F

Analyte	CAS. Number	Result	Qual	RL	MDL
1,3,5-Trinitrobenzene	99-35-4	0.661	J	1.11	0.278
1,3-Dinitrobenzene	99-65-0		U	1.11	0.278
2,4,6-Trinitrotoluene	118-96-7		U	1.11	0.278
2,4-Dinitrotoluene	121-14-2		U	1.11	0.278
2,6-Dinitrotoluene	606-20-2		U	1.11	0.278
2-Amino-4,6-dinitrotoluene	35572-78-2		U	1.11	0.278
2-Nitrotoluene	88-72-2		U	1.11	0.278

Report Number: L0304594
Report Date : May 9, 2003

Sample Number: L0304594-01
Client ID: 05-177511-DW2-042503
Matrix: Water
Workgroup Number: WG139350
Collect Date: 25-APR-03
Sample Tag: CF1

Prep Method: 3535
Analytical Method: 8330
Analyst: RDC
Dilution: 1
Units: ug/L

Instrument: HPLC2
Prep Date: 04/28/2003 07:15
Cal Date: 05/07/2003 20:40
Run Date: 05/09/2003 01:30
File ID: 2L002984.F

Analyte	CAS. Number	Result	Qual	RL	MDL
3-Nitrotoluene	99-08-1		U	1.11	0.278
4-Nitrotoluene	99-99-0	0.662	F,*	1.11	0.278
4-Amino-2,6-dinitrotoluene	19406-51-0		U	1.11	0.278
HMX	2691-41-0		U	1.11	0.278
Nitrobenzene	98-95-3		U	1.11	0.278
RDX	121-82-4	3.22		1.11	0.278
Tetryl	479-45-8		U	1.11	0.278

Analyte	% Recovery	Lower	Upper	Qual
3,4-Dinitrotoluene	54.2	50	150	

J This compound was detected at a level above the method detection limit, but below the reporting limit.
F,*
U This analyte was not detected in the sample.

Sample Number: L0304594-01
Client ID: 05-177511-DW2-042503
Matrix: Water
Workgroup Number: WG139251
Collect Date: 25-APR-03

Prep Method: 9040
Analytical Method: 9040
Analyst: TMM
Dilution: 1
Units: UNITS

Instrument: ORION-710A
Prep Date: 04/23/2003 15:45
Cal Date:
Run Date: 04/23/2003 15:45
File ID:

Analyte	CAS. Number	Result	Qual	RL	MDL
Corrosivity pH		7.38			

Sample Number: L0304594-02
Client ID: 05-177511-DW3-042503
Matrix: Water
Workgroup Number: WG139297
Collect Date: 25-APR-03

Prep Method: 1010
Analytical Method: 1010
Analyst: DIH
Dilution: 1
Units: Degrees C

Instrument: PRECISION
Prep Date: 04/29/2003 07:45
Cal Date:
Run Date: 04/29/2003 07:45
File ID:

Analyte	CAS. Number	Result	Qual	RL	MDL
Ignitability		95.0	>		

> Greater than

Report Number: L0304594
Report Date : May 9, 2003

Sample Number: L0304594-02
Client ID: 05-177511-DW3-042503
Matrix: Water
Workgroup Number: WG139258
Collect Date: 25-APR-03

Prep Method: 1664A
Analytical Method: 1664A
Analyst: DLP
Dilution: 1
Units: mg/L

Instrument: HORIZON
Prep Date: 04/28/2003 08:15
Cal Date:
Run Date: 04/28/2003 08:15
File ID: ON.0304280815-16

Analyte	CAS. Number	Result	Qual	RL	MDL
n-Hexane Extractable Material (HEM)			U	5.56	2.78

U This analyte was not detected in the sample.

Sample Number: L0304594-02
Client ID: 05-177511-DW3-042503
Matrix: Water
Workgroup Number: WG139649
Collect Date: 25-APR-03

Prep Method: 9010B
Analytical Method: 9010B
Analyst: DLN
Dilution: 1
Units: mg/L

Instrument: UV-120-1V
Prep Date: 05/02/2003 11:00
Cal Date: 02/18/2003 09:00
Run Date: 05/02/2003 11:00
File ID: 1V.0305021100-09

Analyte	CAS. Number	Result	Qual	RL	MDL
Cyanide	57-12-5		U	0.0100	0.00500

U This analyte was not detected in the sample.

Sample Number: L0304594-02
Client ID: 05-177511-DW3-042503
Matrix: Water
Workgroup Number: WG139616
Collect Date: 25-APR-03
Sample Tag: 01

Prep Method: 3005A
Analytical Method: 6010B
Analyst: MSW
Dilution: 1
Units: mg/L

Instrument: PE-ICP
Prep Date: 05/01/2003 09:00
Cal Date: 05/02/2003 10:44
Run Date: 05/02/2003 12:51
File ID: PE.050203.125159

Analyte	CAS. Number	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	3.03		0.100	0.0500
Silver, Total	7440-22-4		U	0.0100	0.00500
Arsenic, Total	7440-38-2	0.0103		0.00400	0.00200
Barium, Total	7440-39-3	0.313		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.0100	0.000250
Calcium, Total	7440-70-2	59.8		0.200	0.100
Cadmium, Total	7440-43-9		U	0.0100	0.00250
Cobalt, Total	7440-48-4		U	0.0200	0.00250
Chromium, Total	7440-47-3	0.0195	J	0.0200	0.00250
Copper, Total	7440-50-8	0.287		0.0200	0.00500
Iron, Total	7439-89-6	2.41		0.0400	0.0200
Potassium, Total	7440-09-7	22.9		1.00	0.250
Magnesium, Total	7439-95-4	31.9		0.500	0.250
Manganese, Total	7439-96-5	0.0901		0.0100	0.00100
Nickel, Total	7440-02-0	0.0128	J	0.0400	0.00500
Lead, Total	7439-92-1	0.109		0.00500	0.00250
Vanadium, Total	7440-62-2	0.0358		0.0100	0.00500
Zinc, Total	7440-66-6	0.302		0.0200	0.00500

J This compound was detected at a level above the method detection limit, but below the reporting limit.
U This analyte was not detected in the sample.

Report Number: L0304594
Report Date : May 9, 2003

Sample Number: L0304594-02
Client ID: 05-177511-DW3-042503
Matrix: Water
Workgroup Number: WG139616
Collect Date: 25-APR-03
Sample Tag: DL01

Prep Method: 3005A
Analytical Method: 6010B
Analyst: MSW
Dilution: 100
Units: mg/L

Instrument: PE-ICP
Prep Date: 05/01/2003 09:00
Cal Date: 05/02/2003 10:44
Run Date: 05/02/2003 17:13
File ID: PE.050203.171356

Analyte	CAS. Number	Result	Qual	RL	MDL
Sodium, Total	7440-23-5	190		50.0	25.0

Sample Number: L0304594-02
Client ID: 05-177511-DW3-042503
Matrix: Water
Workgroup Number: WG139770
Collect Date: 25-APR-03
Sample Tag: DL01

Prep Method: 3015
Analytical Method: 6020A
Analyst: JYH
Dilution: 2
Units: mg/L

Instrument: ELAN-ICP
Prep Date: 05/02/2003 10:00
Cal Date: 05/06/2003 11:00
Run Date: 05/06/2003 13:05
File ID: EL.050603.130541

Analyte	CAS. Number	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.0582		0.00100	0.000500
Selenium, Total	7782-49-2	0.00564		0.00100	0.000500

Sample Number: L0304594-02
Client ID: 05-177511-DW3-042503
Matrix: Water
Workgroup Number: WG139770
Collect Date: 25-APR-03
Sample Tag: DL02

Prep Method: 3015
Analytical Method: 6020A
Analyst: JYH
Dilution: 2
Units: mg/L

Instrument: ELAN-ICP
Prep Date: 05/02/2003 10:00
Cal Date: 05/06/2003 14:26
Run Date: 05/06/2003 16:11
File ID: EL.050603.161149

Analyte	CAS. Number	Result	Qual	RL	MDL
Thallium, Total	7440-28-0	0.000596		0.000200	0.000100

Sample Number: L0304594-02
Client ID: 05-177511-DW3-042503
Matrix: Water
Workgroup Number: WG139661
Collect Date: 25-APR-03
Sample Tag: 01

Prep Method: METHOD
Analytical Method: 7470A
Analyst: MMB
Dilution: 1
Units: mg/L

Instrument: PS202
Prep Date: 05/01/2003 12:00
Cal Date: 05/02/2003 09:57
Run Date: 05/02/2003 10:26
File ID: PS.050203.102640

Analyte	CAS. Number	Result	Qual	RL	MDL
Mercury, Total	7439-97-6	0.000941		0.000200	0.0000520

Report Number: L0304594
Report Date : May 9, 2003

Sample Number: L0304594-02
Client ID: 05-177511-DW3-042503
Matrix: Water
Workgroup Number: WG139389
Collect Date: 25-APR-03
Sample Tag: 01

Prep Method: 3510C
Analytical Method: 8081A
Analyst: ECL
Dilution: 1
Units: ug/L

Instrument: HP9
Prep Date: 04/29/2003 09:00
Cal Date: 04/30/2003 15:33
Run Date: 05/01/2003 11:47
File ID: 9G23098.R

Analyte	CAS. Number	Result	Qual	RL	MDL
4,4'-DDD	72-54-8		U	0.109	0.0272
4,4'-DDE	72-55-9		U	0.109	0.0272
4,4'-DDT	50-29-3		U	0.109	0.0272
Aldrin	309-00-2		U	0.0543	0.0109
alpha-BHC	319-84-6		U	0.0543	0.0109
beta-BHC	319-85-7		U	0.0543	0.0109
delta-BHC	319-86-8		U	0.0543	0.0109
Dieldrin	60-57-1		U	0.109	0.0272
Endosulfan I	959-98-8		U	0.0543	0.0109
Endosulfan II	33213-65-9		U	0.109	0.0272
Endosulfan sulfate	1031-07-8		U	0.109	0.0272
Endrin	72-20-8		U	0.109	0.0272
Endrin aldehyde	7421-93-4		U	0.109	0.0272
gamma-BHC (Lindane)	58-89-9		U	0.0543	0.0109
Heptachlor	76-44-8		U	0.0543	0.0109
Heptachlor epoxide	1024-57-3		U	0.0543	0.0109
Methoxychlor	72-43-5		U	0.543	0.0272
Endrin ketone	53494-70-5		U	0.109	0.0272
alpha Chlordane	5103-71-9		U	0.0543	0.0109
gamma Chlordane	5103-74-2		U	0.0543	0.0109
Toxaphene	8001-35-2		U	1.09	0.543

Analyte	% Recovery	Lower	Upper	Qual
2,4,5,6-Tetrachloro-m-xylene	48.7	20	180	
Decachlorobiphenyl	61.8	25	140	

U This analyte was not detected in the sample.

Sample Number: L0304594-02
Client ID: 05-177511-DW3-042503
Matrix: Water
Workgroup Number: WG139386
Collect Date: 25-APR-03
Sample Tag: 01

Prep Method: 3510C
Analytical Method: 8082
Analyst: ECL
Dilution: 1
Units: ug/L

Instrument: HP4
Prep Date: 04/29/2003 09:00
Cal Date: 03/17/2003 17:05
Run Date: 04/30/2003 18:03
File ID: 4GR17911

Analyte	CAS. Number	Result	Qual	RL	MDL
Aroclor-1016	12674-11-2		U	0.543	0.272
Aroclor-1221	11104-28-2		U	0.543	0.272
Aroclor-1232	11141-16-5		U	0.543	0.272
Aroclor-1242	53469-21-9		U	0.543	0.272
Aroclor-1248	12672-29-6		U	0.543	0.272
Aroclor-1254	11097-69-1		U	0.543	0.272
Aroclor-1260	11096-82-5		U	0.543	0.272

Analyte	% Recovery	Lower	Upper	Qual
2,4,5,6-Tetrachloro-m-xylene	74.1	30	132	
Decachlorobiphenyl	86.0	36	144	

U This analyte was not detected in the sample.

Report Number: L0304594
Report Date : May 9, 2003

Sample Number: L0304594-02
Client ID: 05-177511-DW3-042503
Matrix: Water
Workgroup Number: WG139504
Collect Date: 25-APR-03
Sample Tag: 01

Prep Method: METHOD
Analytical Method: 8151A
Analyst: ECL
Dilution: 1
Units: ug/L

Instrument: HP1
Prep Date: 04/30/2003 15:00
Cal Date: 04/15/2003 18:16
Run Date: 05/01/2003 23:04
File ID: 1G5884.X

Analyte	CAS. Number	Result	Qual	RL	MDL
2,4-D	94-75-7		U	2.09	1.05
2,4-DB	94-82-6		U	2.09	1.05
2,4,5-T	93-76-5		U	0.209	0.105
2,4,5-TP (Silvex)	93-72-1		U	0.209	0.105
Dalapon	75-99-0		U	5.24	2.62
Dicamba	1918-00-9		U	0.209	0.105
Dichloroprop	120-36-5		U	2.09	1.05
Dinoseb	88-85-7		U	1.05	0.524
MCPA	94-74-6		U	262	105
MCPP	93-65-2		U	262	105
Pentachlorophenol	87-86-5		U	0.209	0.105

Analyte	% Recovery	Lower	Upper	Qual
2,4-Dichlorophenylacetic acid	99.7	20	144	

U This analyte was not detected in the sample.

Sample Number: L0304594-02
Client ID: 05-177511-DW3-042503
Matrix: Water
Workgroup Number: WG139456
Collect Date: 25-APR-03

Prep Method: 5030B
Analytical Method: 8260B
Analyst: CMS
Dilution: 1
Units: ug/L

Instrument: HPMS11
Prep Date: 05/01/2003 16:28
Cal Date: 04/17/2003 14:20
Run Date: 05/01/2003 16:28
File ID: 11M14697

Analyte	CAS. Number	Result	Qual	RL	MDL
Chloromethane	74-87-3		U	10.0	0.250
Bromomethane	74-83-9		U	10.0	0.500
Vinyl chloride	75-01-4		U	10.0	0.250
Chloroethane	75-00-3		U	10.0	0.500
Methylene chloride	75-09-2		U	5.00	0.250
Acetone	67-64-1		U	10.0	2.50
Carbon disulfide	75-15-0		U	5.00	0.500
1,1-Dichloroethene	75-35-4		U	5.00	0.500
1,1-Dichloroethane	75-34-3		U	5.00	0.125
1,2-Dichloroethene (Total)	540-59-0		U	5.00	0.250
Chloroform	67-66-3		U	5.00	0.125
1,2-Dichloroethane	107-06-2		U	5.00	0.250
2-Butanone	78-93-3		U	10.0	2.50
1,1,1-Trichloroethane	71-55-6		U	5.00	0.250
Carbon tetrachloride	56-23-5		U	5.00	0.250
Bromodichloromethane	75-27-4		U	5.00	0.250
1,2-Dichloropropane	78-87-5		U	5.00	0.125
cis-1,3-Dichloropropene	10061-01-5		U	5.00	0.250
Trichloroethene	79-01-6		U	5.00	0.250
Dibromochloromethane	124-48-1		U	5.00	0.250
1,1,2-Trichloroethane	79-00-5		U	5.00	0.250
Benzene	71-43-2	0.229	J	5.00	0.125
trans-1,3-Dichloropropene	10061-02-6		U	5.00	0.500
Bromoform	75-25-2		U	5.00	0.540
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
Tetrachloroethene	127-18-4		U	5.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.125
Toluene	108-88-3	0.686	J	5.00	0.250
Chlorobenzene	108-90-7		U	5.00	0.125
Ethyl benzene	100-41-4	0.833	J	5.00	0.250
Styrene	100-42-5		U	5.00	0.125
Xylenes, Total	1330-20-7	4.86	J	5.00	0.500

Report Number: L0304594
Report Date : May 9, 2003

Sample Number: L0304594-02
Client ID: 05-177511-DW3-042503
Matrix: Water
Workgroup Number: WG139456
Collect Date: 25-APR-03

Prep Method: 5030B
Analytical Method: 8260B
Analyst: CMS
Dilution: 1
Units: ug/L

Instrument: HPMS11
Prep Date: 05/01/2003 16:28
Cal Date: 04/17/2003 14:20
Run Date: 05/01/2003 16:28
File ID: 11M14697

Analyte	% Recovery	Lower	Upper	Qual
Dibromofluoromethane	98.6	86	118	
1,2-Dichloroethane-d4	105	80	120	
Toluene-d8	101	88	110	
p-Bromofluorobenzene	101	86	115	

J This compound was detected at a level above the method detection limit, but below the reporting limit.
U This analyte was not detected in the sample.

Sample Number: L0304594-02
Client ID: 05-177511-DW3-042503
Matrix: Water
Workgroup Number: WG139687
Collect Date: 25-APR-03
Sample Tag: 01

Prep Method: 3510C
Analytical Method: 8270C
Analyst: ALT
Dilution: 1
Units: ug/L

Instrument: HPMS5
Prep Date: 04/30/2003 09:19
Cal Date: 05/01/2003 16:03
Run Date: 05/03/2003 00:02
File ID: 5M26164

Analyte	CAS. Number	Result	Qual	RL	MDL
Phenol	108-95-2		U	5.43	2.72
Bis(2-Chloroethyl)ether	111-44-4		U	5.43	2.72
2-Chlorophenol	95-57-8		U	5.43	2.72
1,3-Dichlorobenzene	541-73-1		U	5.43	2.72
1,4-Dichlorobenzene	106-46-7		U	5.43	2.72
1,2-Dichlorobenzene	95-50-1		U	5.43	2.72
2-Methylphenol	95-48-7		U	5.43	2.72
bis(2-Chloroisopropyl)ether	108-60-1		U	5.43	2.72
3-,4-Methylphenol	106-44-5		U	5.43	2.72
N-Nitroso-di-n-propylamine	621-64-7		U	5.43	2.72
Hexachloroethane	67-72-1		U	5.43	2.72
Nitrobenzene	98-95-3		U	5.43	2.72
Isophorone	78-59-1		U	5.43	2.72
2-Nitrophenol	88-75-5		U	5.43	2.72
2,4-Dimethylphenol	105-67-9		U	5.43	2.72
Bis(2-Chloroethoxy)Methane	111-91-1		U	5.43	2.72
2,4-Dichlorophenol	120-83-2		U	5.43	2.72
1,2,4-Trichlorobenzene	120-82-1		U	5.43	2.72
Naphthalene	91-20-3		U	5.43	2.72
4-Chloroaniline	106-47-8		U	5.43	2.72
Hexachlorobutadiene	87-68-3		U	5.43	2.72
4-Chloro-3-methylphenol	59-50-7		U	5.43	2.72
2-Methylnaphthalene	91-57-6		U	5.43	2.72
Hexachlorocyclopentadiene	77-47-4		U	5.43	2.72
2,4,6-Trichlorophenol	88-06-2		U	5.43	2.72
2,4,5-Trichlorophenol	95-95-4		U	5.43	2.72
2-Chloronaphthalene	91-58-7		U	5.43	2.72
2-Nitroaniline	88-74-4		U	27.2	13.6
Dimethylphthalate	131-11-3		U	5.43	2.72
Acenaphthylene	208-96-8		U	5.43	2.72
2,6-Dinitrotoluene	606-20-2		U	5.43	2.72
3-Nitroaniline	99-09-2		U	27.2	13.6
Acenaphthene	83-32-9		U	5.43	2.72
2,4-Dinitrophenol	51-28-5		U	27.2	13.6
4-Nitrophenol	100-02-7		U	27.2	13.6
Dibenzofuran	132-64-9		U	5.43	2.72
2,4-Dinitrotoluene	121-14-2		U	5.43	2.72
Diethylphthalate	84-66-2		U	5.43	2.72
4-Chlorophenyl-phenyl ether	7005-72-3		U	5.43	2.72
Fluorene	86-73-7		U	5.43	2.72
4-Nitroaniline	100-01-6		U	27.2	13.6

Report Number: L0304594
Report Date : May 9, 2003

Sample Number: L0304594-02
Client ID: 05-177511-DW3-042503
Matrix: Water
Workgroup Number: WG139687
Collect Date: 25-APR-03
Sample Tag: 01

Prep Method: 3510C
Analytical Method: 8270C
Analyst: ALT
Dilution: 1
Units: ug/L

Instrument: HPMS5
Prep Date: 04/30/2003 09:19
Cal Date: 05/01/2003 16:03
Run Date: 05/03/2003 00:02
File ID: 5M26164

Analyte	CAS. Number	Result	Qual	RL	MDL
4,6-Dinitro-2-methylphenol	534-52-1		U	27.2	13.6
N-Nitrosodiphenylamine	86-30-6		U	5.43	2.72
4-Bromophenyl-phenylether	101-55-3		U	5.43	2.72
Hexachlorobenzene	118-74-1		U	5.43	2.72
Pentachlorophenol	87-86-5		U	27.2	13.6
Phenanthrene	85-01-8		U	5.43	2.72
Anthracene	120-12-7		U	5.43	2.72
Carbazole	86-74-8		U	5.43	2.72
Di-N-Butylphthalate	84-74-2		U	5.43	2.72
Fluoranthene	206-44-0		U	5.43	2.72
Pyrene	129-00-0		U	5.43	2.72
Butylbenzylphthalate	85-68-7		U	5.43	2.72
3,3'-Dichlorobenzidine	91-94-1		U	10.9	2.72
Benzo(a)anthracene	56-55-3		U	5.43	2.72
Chrysene	218-01-9		U	5.43	2.72
bis(2-Ethylhexyl)phthalate	117-81-7		U	5.43	2.72
Di-n-octylphthalate	117-84-0		U	5.43	2.72
Benzo(b)fluoranthene	205-99-2		U	5.43	2.72
Benzo(k)fluoranthene	207-08-9		U	5.43	2.72
Benzo(a)pyrene	50-32-8		U	5.43	2.72
Indeno(1,2,3-cd)pyrene	193-39-5		U	5.43	2.72
Dibenzo(a,h)Anthracene	53-70-3		U	5.43	2.72
Benzo(g,h,i)Perylene	191-24-2		U	5.43	2.72

Analyte	% Recovery	Lower	Upper	Qual
2-Fluorophenol	28.8	21	100	
Phenol-d5	18.5	10	94	
Nitrobenzene-d5	44.4	35	114	
2-Fluorobiphenyl	41.8	43	116	*
2,4,6-Tribromophenol	61.8	10	123	
p-Terphenyl-d14	40.2	33	141	

U This analyte was not detected in the sample.

Sample Number: L0304594-02
Client ID: 05-177511-DW3-042503
Matrix: Water
Workgroup Number: WG139350
Collect Date: 25-APR-03
Sample Tag: 01

Prep Method: 3535
Analytical Method: 8330
Analyst: RDC
Dilution: 1
Units: ug/L

Instrument: HPLC4
Prep Date: 04/28/2003 07:15
Cal Date: 04/24/2003 21:05
Run Date: 04/30/2003 13:50
File ID: 4L004886.F

Analyte	CAS. Number	Result	Qual	RL	MDL
1,3,5-Trinitrobenzene	99-35-4		U	1.05	0.263
1,3-Dinitrobenzene	99-65-0		U	1.05	0.263
2,4,6-Trinitrotoluene	118-96-7		U	1.05	0.263
2,4-Dinitrotoluene	121-14-2		U	1.05	0.263
2,6-Dinitrotoluene	606-20-2		U	1.05	0.263
2-Amino-4,6-dinitrotoluene	35572-78-2		U	1.05	0.263
2-Nitrotoluene	88-72-2		U	1.05	0.263
3-Nitrotoluene	99-08-1		U	1.05	0.263
4-Nitrotoluene	99-99-0		U	1.05	0.263
4-Amino-2,6-dinitrotoluene	19406-51-0	0.455	J	1.05	0.263
HMX	2691-41-0		U	1.05	0.263
Nitrobenzene	98-95-3		U	1.05	0.263
RDX	121-82-4	0.318	J	1.05	0.263
Tetryl	479-45-8		U	1.05	0.263

Report Number: L0304594
Report Date : May 9, 2003

Sample Number: L0304594-02
Client ID: 05-177511-DW3-042503
Matrix: Water
Workgroup Number: WG139350
Collect Date: 25-APR-03
Sample Tag: 01

Prep Method: 3535
Analytical Method: 8330
Analyst: RDC
Dilution: 1
Units: ug/L

Instrument: HPLC4
Prep Date: 04/28/2003 07:15
Cal Date: 04/24/2003 21:05
Run Date: 04/30/2003 13:50
File ID: 4L004886.F

Analyte	% Recovery	Lower	Upper	Qual
3,4-Dinitrotoluene	56.7	50	150	

J This compound was detected at a level above the method detection limit, but below the reporting limit.
U This analyte was not detected in the sample.

Sample Number: L0304594-02
Client ID: 05-177511-DW3-042503
Matrix: Water
Workgroup Number: WG139251
Collect Date: 25-APR-03

Prep Method: 9040
Analytical Method: 9040
Analyst: TMM
Dilution: 1
Units: UNITS

Instrument: ORION-710A
Prep Date: 04/23/2003 15:45
Cal Date:
Run Date: 04/23/2003 15:45
File ID:

Analyte	CAS. Number	Result	Qual	RL	MDL
Corrosivity pH		7.68			

Sample Number: L0304594-03
Client ID: 05-177511-SP2-042503
Matrix: Soil
Workgroup Number: WG139297
Collect Date: 25-APR-03

Prep Method: 1010
Analytical Method: 1010
Analyst: DIH
Dilution: 1
Units: Degrees C

Instrument: PRECISION
Prep Date: 04/29/2003 07:45
Cal Date:
Run Date: 04/29/2003 07:45
File ID:

Analyte	CAS. Number	Result	Qual	RL	MDL
Ignitability		95.0	>		

> Greater than

Sample Number: L0304594-03
Client ID: 05-177511-SP2-042503
Matrix: Leachate
Sample Tag: 01

Workgroup Number: WG139383
Analytical Method: 6010B
Analyst: JYH
Dilution: 1
Units: mg/L

Instrument: IRIS-ICP
Cal Date: 04/30/2003 11:28
Run Date: 04/30/2003 13:26
Run Time: 13:26
File ID: IR.043003.132600

Analyte	CAS.Number	Result	Qual	RL	MDL	EPA HW#	Reg. Limit
Silver, TCLP	7440-22-4		U	.1	.05	D011	5
Arsenic, TCLP	7440-38-2		U	1	.1	D004	5
Barium, TCLP	7440-39-3	0.573		.1	.025	D005	100
Cadmium, TCLP	7440-43-9		U	.1	.025	D006	1
Chromium, TCLP	7440-47-3		U	.2	.025	D007	5
Lead, TCLP	7439-92-1	0.159	J	1	.1	D008	5
Selenium, TCLP	7782-49-2		U	.8	.5	D010	1

J This compound was detected at a level above the method detection limit, but below the reporting limit.
U This analyte was not detected in the sample.

Report Number: L0304594
Report Date : May 9, 2003

Sample Number: L0304594-03
Client ID: 05-177511-SP2-042503
Matrix: Leachate
Sample Tag 01

Workgroup Number: WG139511
Analytical Method: 7470A
Analyst: KHR
Dilution: 1
Units: mg/L

Instrument PS202
Cal Date: 05/01/2003 13:57
Run Date 05/01/2003 14:34
Run Time 14:34
File ID: PS.050103.143455

Analyte	CAS.Number	Result	Qual	RL	MDL	EPA HW#	Reg. Limit
Mercury, TCLP	7439-97-6		U	.005	.000052	D009	0.2

U This analyte was not detected in the sample.

Sample Number: L0304594-03
Client ID: 05-177511-SP2-042503
Matrix: Leachate
Sample Tag: 01

Workgroup Number: WG139387
Analytical Method: 8081A
Analyst: ECL
Dilution: 1
Units: ug/L

Instrument: HP9
Cal Date: 04/30/2003 15:33
Run Date: 04/30/2003 18:23
Run Time: 18:23
File ID: 9G23055.R

Analyte	CAS.Number	Result	Qual	RL	MDL	EPA HW#	Reg. Limit
Endrin	72-20-8		U	.1	.025	D012	20
Lindane	58-89-9		U	.05	.01	D013	400
Methoxychlor	72-43-5		U	.5	.025	D014	10000
Toxaphene	8001-35-2		U	1	.5	D015	500
Chlordane	57-74-9		U	.5	.01	D020	30
Heptachlor	76-44-8		U	.05	.01	D031	8
Heptachlor Epoxide	1024-57-3		U	.05	.01	D031	8

Surrogate	% Recovery	Lower	Upper
2,4,5,6-Tetrachloro-m-xylene	60.9	20	20
Decachlorobiphenyl	99.3	25	25

U This analyte was not detected in the sample.

Sample Number: L0304594-03
Client ID: 05-177511-SP2-042503
Matrix: Soil
Workgroup Number: WG139446
Collect Date: 25-APR-03
Sample Tag: 01

Prep Method: 3550B
Analytical Method: 8082
Analyst: ECL
Dilution: 1
Units: ug/kg
Percent Solid: 73.3

Instrument: HP4
Prep Date: 04/30/2003 08:50
Cal Date: 03/17/2003 17:05
Run Date: 05/01/2003 16:29
File ID: 4GR17935

Analyte	CAS. Number	Result	Qual	RL	MDL
Aroclor-1016	12674-11-2		U	22.5	11.2
Aroclor-1221	11104-28-2		U	22.5	11.2
Aroclor-1232	11141-16-5		U	22.5	11.2
Aroclor-1242	53469-21-9		U	22.5	11.2
Aroclor-1248	12672-29-6		U	22.5	11.2
Aroclor-1254	11097-69-1		U	22.5	11.2
Aroclor-1260	11096-82-5	175		22.5	11.2

Analyte	% Recovery	Lower	Upper	Qual
2,4,5,6-Tetrachloro-M-Xylene	80.8	29	133	
Decachlorobiphenyl	893	30	173	*,SMI

*,SMI
U This analyte was not detected in the sample.

Report Number: L0304594
Report Date : May 9, 2003

Sample Number: L0304594-03
Client ID: 05-177511-SP2-042503
Matrix: Soil
Workgroup Number: WG139446
Collect Date: 25-APR-03
Sample Tag: CF1

Prep Method: 3550B
Analytical Method: 8082
Analyst: ECL
Dilution: 1
Units: ug/kg
Percent Solid: 73.3

Instrument: HP4
Prep Date: 04/30/2003 08:50
Cal Date: 05/02/2003 15:00
Run Date: 05/02/2003 21:07
File ID: 4GF17549

Analyte	CAS. Number	Result	Qual	RL	MDL
Aroclor-1016	12674-11-2		U	22.5	11.2
Aroclor-1221	11104-28-2		U	22.5	11.2
Aroclor-1232	11141-16-5		U	22.5	11.2
Aroclor-1242	53469-21-9		U	22.5	11.2
Aroclor-1248	12672-29-6		U	22.5	11.2
Aroclor-1254	11097-69-1		U	22.5	11.2
Aroclor-1260	11096-82-5	145		22.5	11.2

Analyte	% Recovery	Lower	Upper	Qual
2,4,5,6-Tetrachloro-M-Xylene	89.4	29	133	
Decachlorobiphenyl	1150	30	173	*,SMI

*,SMI
U This analyte was not detected in the sample.

Sample Number: L0304594-03
Client ID: 05-177511-SP2-042503
Matrix: Leachate
Sample Tag: 01

Workgroup Number: WG139504
Analytical Method: 8151A
Analyst: ECL
Dilution: 1
Units: ug/L

Instrument: HP1
Cal Date: 04/15/2003 18:16
Run Date: 05/02/2003 00:50
Run Time: 00:50
File ID: 1G5887.F

Analyte	CAS.Number	Result	Qual	RL	MDL	EPA HW#	Reg. Limit
2,4-D	94-75-7		U	10	1	D016	10000
2,4,5-TP (Silvex)	93-72-1		U	2	.1	D017	1000

Surrogate	% Recovery	Lower	Upper
2,4-Dichlorophenylacetic acid	84.1	20	20

U This analyte was not detected in the sample.

Sample Number: L0304594-03
Client ID: 05-177511-SP2-042503
Matrix: Leachate

Workgroup Number: WG139442
Analytical Method: 8260B
Analyst: CMS
Dilution: 10
Units: ug/L

Instrument: HPMS11
Cal Date: 04/17/2003 14:20
Run Date: 05/01/2003 02:53
Run Time: 02:53
File ID: 11M14671

Analyte	CAS.Number	Result	Qual	RL	MDL	EPA HW#	Reg. Limit
Benzene	71-43-2		U	50	1.25	D018	500
Carbon tetrachloride	56-23-5		U	50	2.5	D019	500
Chlorobenzene	108-90-7		U	50	1.25	D021	100000
Chloroform	67-66-3		U	50	1.25	D022	6000
1,2-Dichloroethane	107-06-2		U	50	2.5	D028	500
1,1-Dichloroethene	75-35-4		U	50	5	D029	700
Methyl ethyl ketone	78-93-3		U	1000	25		
Tetrachloroethene	127-18-4		U	50	2.5	D039	700
Trichloroethene	79-01-6		U	50	2.5	D040	500
Vinyl chloride	75-01-4		U	100	2.5	D043	200

Surrogate	% Recovery	Lower	Upper
Dibromofluoromethane	99.3	86	86
1,2-Dichloroethane-d4	106	80	80
Toluene-d8	100	88	88
4-Bromofluorobenzene	99.5	86	86

U This analyte was not detected in the sample.

Report Number: L0304594
Report Date : May 9, 2003

Sample Number: L0304594-03
Client ID: 05-177511-SP2-042503
Matrix: Leachate
Sample Tag: 01

Workgroup Number: WG139481
Analytical Method: 8270C
Analyst: MDC
Dilution: 1
Units: ug/L

Instrument: HPMS4
Cal Date: 04/29/2003 21:00
Run Date: 04/30/2003 14:13
Run Time: 14:13
File ID: 4M1B466

Analyte	CAS.Number	Result	Qual	RL	MDL	EPA HW#	Reg. Limit
o-Cresol	95-48-7		U	50	25	D023	200000
m-,p-Cresol	106-44-5		U	50	50	D025	200000
1,4-Dichlorobenzene	106-46-7		U	50	25	D027	7500
2,4-Dinitrotoluene	121-14-2		U	50	25	D030	130
Hexachlorobenzene	118-74-1		U	50	25	D032	130
Hexachlorobutadiene	87-68-3		U	50	25	D033	500
Hexachloroethane	67-72-1		U	50	25	D034	3000
Nitrobenzene	98-95-3		U	50	25	D036	2000
Pentachlorophenol	87-86-5		U	250	25	D037	100000
Pyridine	110-86-1		U	500	250	D038	5000
2,4,5-Trichlorophenol	95-95-4		U	250	25	D041	400000
2,4,6-Trichlorophenol	88-06-2		U	50	25	D042	2000

Surrogate	% Recovery	Lower	Upper
2-Fluorophenol	34.5	21	21
Phenol-d5	23.8	10	10
Nitrobenzene-d5	58.8	35	35
2-Fluorobiphenyl	56.2	43	43
2,4,6-Tribromophenol	78.4	10	10
p-Terphenyl-d14	86.4	33	33

U This analyte was not detected in the sample.

Sample Number: L0304594-03
Client ID: 05-177511-SP2-042503
Matrix: Soil
Workgroup Number: WG139534
Collect Date: 25-APR-03
Sample Tag: 01

Prep Method: METHOD
Analytical Method: 8330
Analyst: RDC
Dilution: 1
Units: mg/kg
Percent Solid: 73.3

Instrument: HPLC4
Prep Date: 04/30/2003 10:42
Cal Date: 05/02/2003 23:11
Run Date: 05/04/2003 23:57
File ID: 4L004919.F

Analyte	CAS. Number	Result	Qual	RL	MDL
1,3,5-Trinitrobenzene	99-35-4		U	0.333	0.133
1,3-Dinitrobenzene	99-65-0		U	0.333	0.133
2,4,6-Trinitrotoluene	118-96-7		U	0.333	0.133
2,4-Dinitrotoluene	121-14-2		U	0.333	0.133
2,6-Dinitrotoluene	606-20-2		U	0.346	0.133
2-Amino-4,6-dinitrotoluene	35572-78-2		U	0.346	0.133
2-Nitrotoluene	88-72-2		U	0.333	0.133
3-Nitrotoluene	99-08-1		U	0.333	0.133
4-Nitrotoluene	99-99-0		U	0.333	0.133
4-Amino-2,6-dinitrotoluene	19406-51-0		U	0.346	0.133
HMX	2691-41-0		U	2.93	0.133
Nitrobenzene	98-95-3		U	0.346	0.173
RDX	121-82-4		U	1.33	0.133
Tetryl	479-45-8		U	0.865	0.266

Analyte	% Recovery	Lower	Upper	Qual
3,4-Dinitrotoluene	89.7	50	150	

U This analyte was not detected in the sample.

Report Number: L0304594
Report Date : May 9, 2003

Sample Number: L0304594-03
Client ID: 05-177511-SP2-042503
Matrix: Soil
Workgroup Number: WG139251
Collect Date: 25-APR-03

Prep Method: 9045C
Analytical Method: 9045C
Analyst: TMM
Dilution: 1
Units: UNITS

Instrument: ORION-710A
Prep Date: 04/23/2003 15:45
Cal Date:
Run Date: 04/23/2003 15:45
File ID:

Analyte	CAS. Number	Result	Qual	RL	MDL
Corrosivity pH		8.52			

Sample Number: L0304594-03
Client ID: 05-177511-SP2-042503
Matrix: Soil
Workgroup Number: WG139244
Collect Date: 25-APR-03

Prep Method: D2216-90
Analytical Method: D2216-90
Analyst: TMM
Dilution: 1
Units: weight %

Instrument: OVEN
Prep Date: 04/28/2003 10:55
Cal Date:
Run Date: 04/28/2003 10:55
File ID:

Analyte	CAS. Number	Result	Qual	RL	MDL
Percent Solids	10-02-6	73.3		1.00	1.00

Sample Number: L0304594-04
Client ID: TRIP BLANK
Matrix: Water
Workgroup Number: WG139456
Collect Date: 25-APR-03

Prep Method: 5030B
Analytical Method: 8260B
Analyst: CMS
Dilution: 1
Units: ug/L

Instrument: HPMS11
Prep Date: 05/01/2003 09:21
Cal Date: 04/17/2003 14:20
Run Date: 05/01/2003 09:21
File ID: 11M14683

Analyte	CAS. Number	Result	Qual	RL	MDL
Chloromethane	74-87-3		U	10.0	0.250
Bromomethane	74-83-9		U	10.0	0.500
Vinyl chloride	75-01-4		U	10.0	0.250
Chloroethane	75-00-3		U	10.0	0.500
Methylene chloride	75-09-2	4.04	J	5.00	0.250
Acetone	67-64-1		U	10.0	2.50
Carbon disulfide	75-15-0		U	5.00	0.500
1,1-Dichloroethene	75-35-4		U	5.00	0.500
1,1-Dichloroethane	75-34-3		U	5.00	0.125
1,2-Dichloroethene (Total)	540-59-0		U	5.00	0.250
Chloroform	67-66-3		U	5.00	0.125
1,2-Dichloroethane	107-06-2		U	5.00	0.250
2-Butanone	78-93-3		U	10.0	2.50
1,1,1-Trichloroethane	71-55-6		U	5.00	0.250
Carbon tetrachloride	56-23-5		U	5.00	0.250
Bromodichloromethane	75-27-4		U	5.00	0.250
1,2-Dichloropropane	78-87-5		U	5.00	0.125
cis-1,3-Dichloropropene	10061-01-5		U	5.00	0.250
Trichloroethene	79-01-6		U	5.00	0.250
Dibromochloromethane	124-48-1		U	5.00	0.250
1,1,2-Trichloroethane	79-00-5		U	5.00	0.250
Benzene	71-43-2		U	5.00	0.125
trans-1,3-Dichloropropene	10061-02-6		U	5.00	0.500
Bromoform	75-25-2		U	5.00	0.540
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50

Report Number: L0304594
Report Date : May 9, 2003

Sample Number: L0304594-04
Client ID: TRIP BLANK
Matrix: Water
Workgroup Number: WG139456
Collect Date: 25-APR-03

Prep Method: 5030B
Analytical Method: 8260B
Analyst: CMS
Dilution: 1
Units: ug/L

Instrument: HPMS11
Prep Date: 05/01/2003 09:21
Cal Date: 04/17/2003 14:20
Run Date: 05/01/2003 09:21
File ID: 11M14683

Analyte	CAS. Number	Result	Qual	RL	MDL
Tetrachloroethene	127-18-4		U	5.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.125
Toluene	108-88-3		U	5.00	0.250
Chlorobenzene	108-90-7		U	5.00	0.125
Ethyl benzene	100-41-4		U	5.00	0.250
Styrene	100-42-5		U	5.00	0.125
Xylenes, Total	1330-20-7		U	5.00	0.500

Analyte	% Recovery	Lower	Upper	Qual
Dibromofluoromethane	99.4	86	118	
1,2-Dichloroethane-d4	106	80	120	
Toluene-d8	103	88	110	
p-Bromofluorobenzene	101	86	115	

J This compound was detected at a level above the method detection limit, but below the reporting limit.
U This analyte was not detected in the sample.

WORKGROUP SUMMARY BY METHOD

WORKGROUP SUMMARY BY METHOD

Analysis: Explosives
Extraction Method: 8330
Workgroup: WG139189

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-01	05-177511-DW2-042503		04/28/03 07:15			SEP-FUNNEL	CEB
L0304594-02	05-177511-DW3-042503		04/28/03 07:15			SEP-FUNNEL	CEB

Analysis: Percent Solids
Analytical Method: D2216-90
Workgroup: WG139244

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-03	05-177511-SP2-042503			04/28/03 10:55		OVEN	TMM

Analysis: Corrosivity pH
Analytical Method: 9040
Workgroup: WG139251

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
04594-01	05-177511-DW2-042503			04/23/03 15:45		ORION-710A	TMM
L0304594-01	05-177511-DW2-042503			04/23/03 15:45		ORION-710A	TMM
L0304594-02	05-177511-DW3-042503			04/23/03 15:45		ORION-710A	TMM
L0304594-02	05-177511-DW3-042503			04/23/03 15:45		ORION-710A	TMM
L0304594-03	05-177511-SP2-042503			04/23/03 15:45		ORION-710A	TMM
L0304594-03	05-177511-SP2-042503			04/23/03 15:45		ORION-710A	TMM

Analysis: n-Hexane Extractable Material (HEM)
Analytical Method: 1664A\METHOD
Workgroup: WG139258

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-01	05-177511-DW2-042503			04/28/03 08:15		HORIZON	DLP
L0304594-02	05-177511-DW3-042503			04/28/03 08:15		HORIZON	DLP

Analysis: n-Hexane Extractable Material (HEM)
Extraction Method: 1664A\METHOD
Workgroup: WG139258

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-01	05-177511-DW2-042503			04/28/03 08:15		HORIZON	DLP
L0304594-02	05-177511-DW3-042503			04/28/03 08:15		HORIZON	DLP

WORKGROUP SUMMARY BY METHOD

Analysis: Pesticides
Extraction Method: 8081A\3510C
Workgroup: WG139269

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-01	05-177511-DW2-042503		04/29/03 09:00			SONICATION	CAF
L0304594-02	05-177511-DW3-042503		04/29/03 09:00			SONICATION	CAF

Analysis: PCB
Extraction Method: 8082\3510C
Workgroup: WG139270

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-01	05-177511-DW2-042503		04/29/03 09:00			SEP-FUNNEL	CAF
L0304594-02	05-177511-DW3-042503		04/29/03 09:00			SEP-FUNNEL	CAF

Analysis: Pesticides - TCLP
Extraction Method: 8081A\3510C\1311
Workgroup: WG139296

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-03	05-177511-SP2-042503	04/28/03 09:00	04/29/03 14:20			SEP-FUNNEL	CAF
L0304594-03	05-177511-SP2-042503	04/28/03 09:00	04/29/03 14:20			SEP-FUNNEL	CAF

Analysis: Ignitability
Analytical Method: 1010
Workgroup: WG139297

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-01	05-177511-DW2-042503			04/29/03 07:45		PRECISION	DIH
L0304594-02	05-177511-DW3-042503			04/29/03 07:45		PRECISION	DIH
L0304594-03	05-177511-SP2-042503			04/29/03 07:45		PRECISION	DIH

Analysis: Metals Analysis
Extraction Method: 6010B\3005A
Workgroup: WG139316

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-03	05-177511-SP2-042503		04/29/03 11:00			MICROWAVE	VC
L0304594-03	05-177511-SP2-042503		04/29/03 11:00			MICROWAVE	VC

WORKGROUP SUMMARY BY METHOD

Analysis: Semivolatile Organics - TCLP
Extraction Method: 8270C\3510B\1311
Workgroup: WG139340

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-03	05-177511-SP2-042503	04/28/03 09:00	04/29/03 17:00			SEP-FUNNEL	DP
L0304594-03	05-177511-SP2-042503	04/28/03 09:00	04/29/03 17:00			SEP-FUNNEL	DP

Analysis: Explosives
Analytical Method: 8330
Workgroup: WG139350

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-01	05-177511-DW2-042503		04/28/03 07:15	04/30/03 12:57	01	HPLC4	RDC
L0304594-01	05-177511-DW2-042503		04/28/03 07:15	05/09/03 01:30	CF1	HPLC2	RDC
L0304594-02	05-177511-DW3-042503		04/28/03 07:15	04/30/03 13:50	01	HPLC4	RDC

Analysis: PCB
Extraction Method: 8082\3550
Workgroup: WG139368

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-03	05-177511-SP2-042503		04/30/03 08:50			SONICATION	CAF

Analysis: TCL Semivolatiles
Extraction Method: 8270C\3510C
Workgroup: WG139371

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-01	05-177511-DW2-042503		04/30/03 09:19			SEP-FUNNEL	CAF
L0304594-02	05-177511-DW3-042503		04/30/03 09:19			SEP-FUNNEL	CAF

Analysis: Metals Analysis
Analytical Method: 6010B\3005A
Workgroup: WG139383

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-03	05-177511-SP2-042503	04/28/03 15:00	04/29/03 11:00	04/30/03 13:26	01	IRIS-ICP	JYH

WORKGROUP SUMMARY BY METHOD

Analysis: PCB
Analytical Method: 8082\3510C
Workgroup: WG139386

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-01	05-177511-DW2-042503		04/29/03 09:00	04/30/03 17:46	01	HP4	ECL
L0304594-02	05-177511-DW3-042503		04/29/03 09:00	04/30/03 18:03	01	HP4	ECL

Analysis: Pesticides - TCLP
Analytical Method: 8081A\3510C\1311
Workgroup: WG139387

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-03	05-177511-SP2-042503	04/28/03 15:00	04/29/03 14:20	04/30/03 18:23	01	HP9	ECL
L0304594-03	05-177511-SP2-042503	04/28/03 15:00	04/29/03 14:20	04/30/03 18:23	01	HP9	ECL
L0304594-03	05-177511-SP2-042503	04/28/03 15:00	04/29/03 14:20	04/30/03 17:59	C101	HP9	ECL
L0304594-03	05-177511-SP2-042503	04/28/03 15:00	04/29/03 14:20	04/30/03 17:59	C101	HP9	ECL

Analysis: Pesticides
Analytical Method: 8081A\3510C
Workgroup: WG139389

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-01	05-177511-DW2-042503		04/29/03 09:00	05/01/03 11:23	01	HP9	ECL
L0304594-01	05-177511-DW2-042503		04/29/03 09:00	05/01/03 10:59	CF1	HP9	ECL
L0304594-02	05-177511-DW3-042503		04/29/03 09:00	05/01/03 11:47	01	HP9	ECL
L0304594-02	05-177511-DW3-042503		04/29/03 09:00	05/01/03 11:23	C101	HP9	ECL

Analysis: Explosives
Extraction Method: 8330
Workgroup: WG139397

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-03	05-177511-SP2-042503		04/30/03 10:42			SONICATION	CEB

Analysis: Herbicides
Extraction Method: 8151A\8151A
Workgroup: WG139417

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-01	05-177511-DW2-042503		04/30/03 15:00			SEP-FUNNEL	DP
L0304594-02	05-177511-DW3-042503		04/30/03 15:00			SEP-FUNNEL	DP
L0304594-03	05-177511-SP2-042503	04/28/03 09:00	04/30/03 15:00			SEP-FUNNEL	DP
L0304594-03	05-177511-SP2-042503	04/28/03 09:00	04/30/03 15:00			SEP-FUNNEL	DP

WORKGROUP SUMMARY BY METHOD

Analysis: Volatile Organics - TCLP
Analytical Method: 8260B\5030B\1311
Workgroup: WG139442

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-03	05-177511-SP2-042503	04/28/03 15:00		05/01/03 02:53		HPMS11	CMS
L0304594-03	05-177511-SP2-042503	04/28/03 15:00		05/01/03 02:53		HPMS11	CMS

Analysis: Volatile Organics - TCLP
Extraction Method: 8260B\5030B\1311
Workgroup: WG139442

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-03	05-177511-SP2-042503				139442	HPMS11	CMS
L0304594-03	05-177511-SP2-042503				139442	HPMS11	CMS

Analysis: Mercury, TCLP
Extraction Method: 7470A\7470A
Workgroup: WG139443

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
04594-03	05-177511-SP2-042503		04/30/03 09:00			WATER BATH	TLT
L0304594-03	05-177511-SP2-042503		04/30/03 09:00			WATER BATH	TLT

Analysis: PCB
Analytical Method: 8082\3550
Workgroup: WG139446

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-03	05-177511-SP2-042503		04/30/03 08:50	05/01/03 16:29	01	HP4	ECL
L0304594-03	05-177511-SP2-042503		04/30/03 08:50	05/02/03 21:07	CF1	HP4	ECL

Analysis: TCL Volatiles
Analytical Method: 8260B\5030B
Workgroup: WG139456

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-01	05-177511-DW2-042503			05/01/03 15:58		HPMS11	CMS
L0304594-02	05-177511-DW3-042503			05/01/03 16:28		HPMS11	CMS
L0304594-04	TRIP BLANK			05/01/03 09:21		HPMS11	CMS

WORKGROUP SUMMARY BY METHOD

Analysis: TCL Volatiles
Extraction Method: 8260B\5030B
Workgroup: WG139456

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-01	05-177511-DW2-042503				139456	HPMS11	CMS
L0304594-02	05-177511-DW3-042503				139456	HPMS11	CMS
L0304594-04	TRIP BLANK				139456	HPMS11	CMS

Analysis: Semivolatile Organics - TCLP
Analytical Method: 8270C\3510B\1311
Workgroup: WG139481

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-03	05-177511-SP2-042503	04/28/03 15:00	04/29/03 17:00	04/30/03 14:13	01	HPMS4	MDC
L0304594-03	05-177511-SP2-042503	04/28/03 15:00	04/29/03 17:00	04/30/03 14:13	01	HPMS4	MDC

Analysis: Herbicides
Analytical Method: 8151A\8151A
Workgroup: WG139504

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-01	05-177511-DW2-042503		04/30/03 15:00	05/01/03 22:28	01	HP1	ECL
L0304594-01	05-177511-DW2-042503		04/30/03 15:00	05/01/03 23:04	CF1	HP1	ECL
L0304594-02	05-177511-DW3-042503		04/30/03 15:00	05/01/03 23:04	01	HP1	ECL
L0304594-02	05-177511-DW3-042503		04/30/03 15:00	05/01/03 23:39	C202	HP1	ECL
L0304594-03	05-177511-SP2-042503	04/28/03 15:00	04/30/03 15:00	05/02/03 00:50	01	HP1	ECL
L0304594-03	05-177511-SP2-042503	04/28/03 15:00	04/30/03 15:00	05/02/03 00:50	01	HP1	ECL
L0304594-03	05-177511-SP2-042503	04/28/03 15:00	04/30/03 15:00	05/02/03 01:25	C202	HP1	ECL
L0304594-03	05-177511-SP2-042503	04/28/03 15:00	04/30/03 15:00	05/02/03 01:25	C202	HP1	ECL

Analysis: Mercury, TCLP
Analytical Method: 7470A\7470A
Workgroup: WG139511

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-03	05-177511-SP2-042503		04/30/03 09:00	05/01/03 14:34	01	PS202	KHR
L0304594-03	05-177511-SP2-042503		04/30/03 09:00	05/01/03 14:34	01	PS202	KHR

Analysis: Explosives
Analytical Method: 8330
Workgroup: WG139534

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-03	05-177511-SP2-042503		04/30/03 10:42	05/04/03 23:57	01	HPLC4	RDC

WORKGROUP SUMMARY BY METHOD

Analysis: Mercury, Total
Extraction Method: 7470A\7470A
Workgroup: WG139541

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-01	05-177511-DW2-042503		05/01/03 12:00			WATER BATH	TLT
L0304594-02	05-177511-DW3-042503		05/01/03 12:00			WATER BATH	TLT

Analysis: Metals Analysis
Extraction Method: 6010B\3005A
Workgroup: WG139542

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-01	05-177511-DW2-042503		05/01/03 09:00			HOT PLATE	TLT
L0304594-01	05-177511-DW2-042503		05/01/03 09:00			HOT PLATE	TLT
L0304594-02	05-177511-DW3-042503		05/01/03 09:00			HOT PLATE	TLT
L0304594-02	05-177511-DW3-042503		05/01/03 09:00			HOT PLATE	TLT

Analysis: Metals Analysis
Analytical Method: 6010B\3005A
Workgroup: WG139616

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-01	05-177511-DW2-042503		05/01/03 09:00	05/02/03 13:21	01	PE-ICP	MSW
L0304594-01	05-177511-DW2-042503		05/01/03 09:00	05/02/03 13:21	01	PE-ICP	MSW
L0304594-02	05-177511-DW3-042503		05/01/03 09:00	05/02/03 12:51	01	PE-ICP	MSW
L0304594-02	05-177511-DW3-042503		05/01/03 09:00	05/02/03 12:51	01	PE-ICP	MSW
L0304594-02	05-177511-DW3-042503		05/01/03 09:00	05/02/03 17:13	DL01	PE-ICP	MSW
L0304594-02	05-177511-DW3-042503		05/01/03 09:00	05/02/03 17:13	DL01	PE-ICP	MSW

Analysis: Cyanide, Total
Analytical Method: 9010B\9014
Workgroup: WG139649

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-01	05-177511-DW2-042503			05/02/03 11:00		UV-120-1V	DLN
L0304594-02	05-177511-DW3-042503			05/02/03 11:00		UV-120-1V	DLN

Analysis: Cyanide, Total
Extraction Method: 9010B\9014
Workgroup: WG139649

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-01	05-177511-DW2-042503			05/02/03 11:00		UV-120-1V	DLN
L0304594-02	05-177511-DW3-042503			05/02/03 11:00		UV-120-1V	DLN

WORKGROUP SUMMARY BY METHOD

Analysis: Mercury, Total
Analytical Method: 7470A\7470A
Workgroup: WG139661

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-01	05-177511-DW2-042503		05/01/03 12:00	05/02/03 10:25	01	PS202	MMB
L0304594-02	05-177511-DW3-042503		05/01/03 12:00	05/02/03 10:26	01	PS202	MMB

Analysis: TCL Semivolatiles
Analytical Method: 8270C\3510C
Workgroup: WG139687

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-01	05-177511-DW2-042503		04/30/03 09:19	05/03/03 00:32	01	HPMS5	ALT
L0304594-02	05-177511-DW3-042503		04/30/03 09:19	05/03/03 00:02	01	HPMS5	ALT

Analysis: Antimony, Total
Extraction Method: 6020A\3015
Workgroup: WG139750

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-01	05-177511-DW2-042503		05/02/03 10:00			MICROWAVE	VC
L0304594-01	05-177511-DW2-042503		05/02/03 10:00			MICROWAVE	VC
L0304594-01	05-177511-DW2-042503		05/02/03 10:00			MICROWAVE	VC
L0304594-01	05-177511-DW2-042503		05/02/03 10:00			MICROWAVE	VC
L0304594-01	05-177511-DW2-042503		05/02/03 10:00			MICROWAVE	VC
L0304594-02	05-177511-DW3-042503		05/02/03 10:00			MICROWAVE	VC
L0304594-02	05-177511-DW3-042503		05/02/03 10:00			MICROWAVE	VC
L0304594-02	05-177511-DW3-042503		05/02/03 10:00			MICROWAVE	VC
L0304594-02	05-177511-DW3-042503		05/02/03 10:00			MICROWAVE	VC
L0304594-02	05-177511-DW3-042503		05/02/03 10:00			MICROWAVE	VC

Analysis: Metals Analysis
Analytical Method: 6020A\3015
Workgroup: WG139770

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0304594-01	05-177511-DW2-042503		05/02/03 10:00	05/06/03 13:00	DL01	ELAN-ICP	JYH
L0304594-01	05-177511-DW2-042503		05/02/03 10:00	05/06/03 16:06	DL02	ELAN-ICP	JYH
L0304594-02	05-177511-DW3-042503		05/02/03 10:00	05/06/03 13:05	DL01	ELAN-ICP	JYH
L0304594-02	05-177511-DW3-042503		05/02/03 10:00	05/06/03 16:11	DL02	ELAN-ICP	JYH

1.2 Attachments

Kemron Environmental Services
Analyst Listing
Tuesday, April 1 2003

AJF - AMANDA J. FICKIESEN
ALT - ANN L. THAYER
ARS - ANGELINA R. SCOTT
BRF - BRENT F. FOOS
BRG - BRENDA R. GREGORY
CAF - CHERYL A. FLOWERS
CAK - CHERYL A. KOELSCH
CEB - CHAD E. BARNES
CLC - CHRYS L. CRAWFORD
CLK - CARL L. KING
CLW - CHARISSA L. WINTERS
CMS - CRYSTAL M. STEVENS
CRC - CARLA R. COCHRAN
CSH - CHRIS S. HILL
DAD - DAVE A. DAULEY
DAH - DON A. HUNTER
DAS - DALLAS A. SULLIVAN
DAT - DEBBIE A. TORNES
DEL - DON E. LIGHTFRITZ
DEV - DAVID E. VANDENBERG
DGB - DOUGLAS G. BUTCHER
DIH - DEANNA I. HESSON
DLA - DENISE L. ADAMS
DLB - DAVID L. BUMGARNER
DLN - DEANNA L. NORTON
DLP - DOROTHY L. PAYNE
DLR - DIANNA L. RAUCH
DOV - DENISE O. VANDENBERG
DP - DEANNA L. PIERSON
DRB - DOUG R. BARNETT
DSM - DAVID S. MOSSOR
DST - DENNIS S. TEPE
ECL - ERIC C. LAWSON
GSG - GALEN S. GEORGE
HV - HEMA VILASAGAR
JAL - JOHN A. LENT
JEA - JOSH E. ARNOLD
JJG - JAKE J. GREUBY
JKW - JANE K. THOMPSON
JLS - JANICE L. SCHIMMEL
JMM - JARROD M. MARTIN
JWR - JOHN W. RICHARDS
JWS - JACK W. SHEAVES
JYH - JI Y. HU
KHR - KIM H. RHODES
KRA - KATHY R. ALBERTSON
LKN - LINDA K. NEDEFF
LRA - LUCYNDA R. ROBERTS
LSA - LUCINDA S. ARNOLD
LSB - LESLIE S. BUCINA
MDA - MICHAEL D. ALBERTSON
MDC - MICHAEL D. COCHRAN
MEF - MIKE E. FLANAGAN
MES - MARY E. SCHILLING
MKZ - MARILYN K. ZUMBRO
MLR - MARY L. ROCHOTTE
MLS - MICHAEL L. SCHIMMEL
MMB - MAREN M. BEERY
MSW - MATT S. WILSON
NJB - NATALIE J. BOOTH
OGT - OREY G. TUCKER
RDC - REBECCA D. CUTLIP
REK - ROBERT E. KYER
RJW - RHONDA J. WITTEKIND
RWC - ROD W. CAMPBELL
SH - SHAUNA M. HYDE
SLM - STEPHANIE L. MOSSBURG
SLP - SHERI L. PFALZGRAF
TJH - TIM J. HOEFLICH
TLT - TIFFINI L. TINGLER
TMM - TAMMY M. MORRIS
VC - VICKI COLLIER
VKL - VICKY K. LAUER

KEMRON FORMS: JUL-25-02
Printed: APR-01-03 14:35:03

KEMRON Environmental Services, Inc
List of Valid Qualifiers
August 5, 2002

Standard Qualifiers

These are KEMRON's Standard Report Qualifiers

B	Present in the method blank
C	Confirmed by GC/MS
CG	Confluent growth
D	The analyte was quantified at a secondary dilution factor
DL	Surrogate or spike was diluted out
E	Estimated concentration due to sample matrix interference
FL	Free liquid
I	Semi-quantitative result, out of instrument calibration range
J	Present below nominal reporting limit
L	Sample reporting limits elevated due to matrix interference
N	Tentatively Identified Compound (TIC)
NA	Not applicable
ND	Not detected at or above the reporting limit (RL)
NF	Not found
NFL	No free liquid
NI	Non-ignitable
NS	Not spiked
P	Concentration >40% difference between The two GC columns
QNS	Quantity not sufficient to perform analysis
RA	Re analysis confirms reported results
RE	Re analysis confirms sample matrix interference
S	Analyzed by method of standard addition
SMI	Sample matrix interference on surrogate
SP	Reported results are for spike compounds only
TNTC	Too numerous to count
U	Analyzed for but not detected
W	Post-digestion spike for furnace AA out o f control limits
X	Exceeds regulatory limit
Z	Can not be resolved from isomer.***
+	Correlation coefficient for the MSA is less than 0.995
<	Less than
>	Greater than
*	Surrogate or spike compound out of range

***** Special Notes for Organic Analytes**

1. Acrolein and acrylonitrile by method 624 are semi-quantitative screens only
2. 1,2-Diphenylhydrazine is unstable and is reported as azobenzene
3. N-nitrosodiphenylamine cannot be separated from diphenylamine
4. 3-Methyphenol and 4-Methyphenol are unresolvable compounds
5. m-Xylene and p-Xylene are unresolvable compounds
6. The reporting limits for Appendix II/IX compounds by method 8270 are based on EPA estimated PQLs referenced in 40 CFR Part 264, Appendix IX. They are not always achievable for every compound and are matrix dependent

AFCEE Qualifiers

These are KEMRON's AFCEE Report Qualifiers

J	The analyte was positively identified, the quantitation is an estimation
U	The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL
F	The analyte was positively identified but the associated numerical value is below the RL
R	The data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria
B	The analyte was found in an associated blank, as well as in the sample
M	The matrix effect was present
S	To be applied to all field screening data
T	Tentatively identified compound (using GC/MS)

H:\DATA\COMMON\Qualifier List 08-05-02.doc

177511-03-042503

PROJECT NAME	PROJECT NUMBER	LAB NAME AND CONTACT	FAX AND MAIL REPORTS/EDD TO: RECIPIENT 1 (Name and Company)	RECIPIENT 1 (Address, Tel No., and Fax No.)
CNC	177511	Remote Env. Services	Bonnie Hague	115 Perimeter Ctr NE Ste 700 ATLANTA GA 30346
PROJECT PHA SESITE/TASK:	CTO OR DO NUMBER:	LAB PO NUMBER:	FAX AND MAIL REPORTS/EDD TO: RECIPIENT 2 (Name and Company)	RECIPIENT 2 (Address, Tel No., and Fax No.):
AOC Utility Corr	CTO-0005	5259	Melissa Aycock	115 Perimeter Ctr NE Ste 700 ATLANTA GA 30346
PROJECT CONTACT:	PROJECT TEL NO AND FAX NO:	LAB TEL NO AND FAX NO:	FAX AND MAIL REPORTS/EDD TO: RECIPIENT 3 (Name and Company)	RECIPIENT 3 (Address, Tel No., and Fax No.):
Gwen Jordan	678-642-7211	740-373-4071 P 740-373-4835 F	Russell Henderson	same as Above

ANALYSES REQUIRED (include Method Numbers)

ITEM	SAMPLE IDENTIFIER	SAMPLE DESCRIPTION/LOCATION	MATRIX (see codes on SOP)	DATE COLLECTED	TIME COLLECTED	DATA REQ LEVEL (see codes on SOP)	TAT (calendar days)	8VAN1DC 8260.2	Ignitability 1010	CR6/CSN/Hg 9056							SAMPLE TYPE (see codes on SOP)	COMMENTS/ SCREENING READINGS	LAB ID (for lab's use)
1	DS-177511-DW2-042503	TANK 483	W	042503	1030	B	7	1	1	1							N	WASTE CHARACTERIZATION	
2	DS-177511-DW3-042503	CFVP2076L	W	042503	1110	B	7	1	1	1							N	WASTE CHARACTERIZATION	
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

SAMPLER(S) AND COMPANY: (please print)	COURIER AND SHIPPING NUMBER:	SAMPLES TEMPERATURE AND CONDITION UPON RECEIPT (for lab's use)
Gwen Jordan / CCI	FEDEX 837729090074	

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Printed Name and Signature: Gwen Jordan	4/25/03	1700	Printed Name and Signature: FEDEX	1800 4/25/03	
Printed Name and Signature:			Printed Name and Signature: Brenda Gregory / Brenda Gregory	4/27/03	1100
Printed Name and Signature:			Printed Name and Signature:		

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Form CC1001, Rev 06/00

Consultants, Inc.

Fax No. (770) 504-8202

CHAIN-OF-CUSTODY RECORD

177511-01-042503

PROJECT NAME:	PROJECT NUMBER:	LAB NAME AND CONTACT:	FAX AND MAIL REPORTS/BDD TO: RECIPIENT 1 (Name and Company)	RECIPIENT 1 (Address, Tel No., and Fax No.):
Charleston Naval Ctr	177511	Kemron Env. Services	Bonnie Hogue - CCI	115 Perimeter Ctr. NE Ste 700 Atlanta, GA 30346
PROJECT PHASE/SITE/TASK:	CTO OR DO NUMBER:	LAB JO NUMBER:	FAX AND MAIL REPORTS/BDD TO: RECIPIENT 2 (Name and Company)	RECIPIENT 2 (Address, Tel No., and Fax No.):
Arc Utility corr.	CTO-0005	5259	Melissa Aycock - CCI	115 Perimeter Ctr. NE Ste 700 Atlanta, GA 30346
PROJECT CONTACT:	PROJECT TEL NO AND FAX NO:	LAB TEL NO AND FAX NO.	FAX AND MAIL REPORTS/BDD TO: RECIPIENT 3 (Name and Company)	RECIPIENT 3 (Address, Tel No., and Fax No.):
Gwendolyn Jordan	678-642-7211	740-373-4071(P) 740-373-4835(F)	Russell Henderson	115 Perimeter Ctr NE Ste 700 Atlanta, GA 30346

ANALYSES REQUIRED (Include Method Numbers)

ITEM	SAMPLE IDENTIFIER	SAMPLE DESCRIPTION/LOCATION	MATRIX (see codes on SOP)	DATE COLLECTED	TIME COLLECTED	DATA PKG LEVEL (see codes on SOP)	TAT (calendar days)	TCLP VOA 8260B	TCLP SVOA 8270C	TCLP Pest 8081A	TCLP Herb 8151A	Explosives 8330	ALL 3 8082	TCLP metals	Ignitability	Corrosivity		SAMPLE TYPE (see codes on SOP)	COMMENTS/ SCREENING READINGS	LAB ID (for lab's use)
1	05-177511-SP2-042503	SP2 Quad 3/4	S	042503	1337	2/B	7	1	1	1	1	1	1	1	1	1		N	WASTE CHARACTERIZATION	
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				

SAMPLER(S) AND COMPANY: (please print)
Gwen Jordan/CCI

COURIER AND SHIPPING NUMBER:
FEDEX 837729040074

SAMPLES TEMPERATURE AND CONDITION UPON RECIPT (for lab's use)

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Printed Name and Signature: Gwendolyn Jordan	4/25/03	1730	Printed Name and Signature: Fedex	4/25/03	1802
Printed Name and Signature:			Printed Name and Signature:		
Printed Name and Signature:			Printed Name and Signature:		

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Form CC1001, Rev 06/00

Consultants, Inc.

Fax No: (770) 464-9287

CHAIN-OF-CUSTODY RECORD

177511-C2-142503

* PROJECT NAME:	* PROJECT NUMBER:	* LAB NAME AND CONTACT:	** FAX AND MAIL REPORTS/EDD TO: RECIPIENT 1 (Name and Company)	** RECIPIENT 1 (Address, Tel No., and Fax No.):
CNC	177511	Pomonen Scales	Bonnie Hogue	115 Perimeter Ctr NE Ste 700 Atlanta Ga 30346
* PROJECT PHASE/SITE/TASK:	* CTO OR DO NUMBER:	* LAB PO NUMBER:	** FAX AND MAIL REPORTS/EDD TO: RECIPIENT 2 (Name and Company)	** RECIPIENT 2 (Address, Tel No., and Fax No.):
PCC Utility Corr.	CTO-0005	5259	Melissa Arnold	115 Perimeter Ctr NE Ste 700 Atlanta Ga 30346
* PROJECT CONTACT:	* PROJECT TEL NO AND FAX NO:	* LAB TEL NO AND FAX NO.	** FAX AND MAIL REPORTS/EDD TO: RECIPIENT 3 (Name and Company)	** RECIPIENT 3 (Address, Tel No., and Fax No.):
Gwen Jordan	678 642-7211	740-373-4071 P 740-373-4835 F	Russell Henderson	Same as above

* ITEM	* SAMPLE IDENTIFIER	* SAMPLE DESCRIPTION/LOCATION	** MATRIX (see codes on SOP)	** DATE COLLECTED	** TIME COLLECTED	** DATA PKG LEVEL (see codes on SOP)	* T.A.T. (calendar days)	* ANALYSES REQUIRED (Include Method Numbers) TCL VOA 524.2 CLP	TCL SVOA 8270 CLP	TCL HAZID 8151A	TCL PEST 8081A	EXPLOSIVES 8330	TCL PCBs 8082	TCL METALS (ICP/CV)	FERROUS IRON 8146	OIL & GREASE 1664	BOD-NHET	* SAMPLE TYPE (see codes on SOP)	* COMMENTS/ SCREENING READINGS	* LAB ID (for lab's use)
1	CS-177511-DW2-142503	Tank 483	W	142503	1030	III B	7	1	1	1	1	1	1	1	X	1	X	N	Waste Characterization	107
2	CS-177511-DW3-142503	Cap & Rel	W	142503	1110	III B	7	1	1	1	1	1	1	1		1		N	Waste Characterization	
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				

** SAMPLER(S) AND COMPANY (please print)	** COURIER AND SHIPPING NUMBER:	** SAMPLES TEMPERATURE AND CONDITION UPON RECEIPT (for lab's use)
Gwen Jordan/CCI	FEDEX 833728940 4	

** RELINQUISHED BY	DATE	TIME	** RECEIVED BY	DATE	TIME
Printed Name and Signature: Gwen Jordan	04/25/03	1730	Printed Name and Signature: Fedex	1800 4/25/03	
Printed Name and Signature:			Printed Name and Signature:		
Printed Name and Signature:			Printed Name and Signature:		

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Form CC001, Rev 06/00

Constructors, Inc.

Tel No: (770) 604-9182
Fax No: (770) 604-9282

CHAIN-OF-CUSTODY RECORD

17511-C3-C4-5503

PROJECT NAME: CAC	PROJECT NUMBER: 17511	LAB NAME AND CONTACT: [illegible]	FAX AND MAIL REPORTS/BDD TO: RECIPIENT 1 (Name and Company): Bruce Hesse	RECIPIENT 1 (Address, Tel No., and Fax No.): 115 Perimeter Center Place Ste 700 Atlanta GA 30346
PROJECT PHASE/SITE/TASK: ACC Utility Corr	CTO OR DO NUMBER: CTO-CCCS	LAB PO NUMBER: 5253	FAX AND MAIL REPORTS/BDD TO: RECIPIENT 2 (Name and Company): Melissa Agnew	RECIPIENT 2 (Address, Tel No., and Fax No.): 115 Perimeter Center Place Ste 700 Atlanta GA 30346
PROJECT CONTACT: Gwen Teodoro	PROJECT TEL NO AND FAX NO.: 678-669-7211	LAB TEL NO AND FAX NO: 770-373-9011P 770-373-7855F	FAX AND MAIL REPORTS/BDD TO: RECIPIENT 3 (Name and Company): Russell Henderson	RECIPIENT 3 (Address, Tel No., and Fax No.): Same as Above

ANALYSES REQUIRED (Include Method Numbers)

ITEM	SAMPLE IDENTIFIER	SAMPLE DESCRIPTION/LOCATION	MATRIX (see codes on SOP)	DATE COLLECTED	TIME COLLECTED	DATA PKG LEVEL (see codes on SOP)	TAT (calendar days)	CYAN-DL 1250.1	Aqueous 1613	Cr(VI) 7196A							SAMPLE TYPE (see codes on SOP)	COMMENTS/ SCREENING READINGS	LAB ID (for lab's use)
1	15-17511-DA2-0103	TMW483	W	04/25/05	1030	[illegible]	7	1	1	1							N	[illegible]	
2	15-17511-DA3-0103	CFP2082	W	04/25/05	1110	[illegible]	7	1	1	1							N	[illegible]	
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

SAMPLER(S) AND COMPANY: (please print)	COURIER AND SHIPPING NUMBER:	SAMPLES TEMPERATURE AND CONDITION UPON RECEIPT (for lab's use)
Gwen Teodoro / CCI	FEDEX 837174104014	

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Printed Name and Signature: Henderson	4/25/05	1720	Printed Name and Signature: FEDEX	1800 4/25/05	
Printed Name and Signature:			Printed Name and Signature:		
Printed Name and Signature:			Printed Name and Signature:		

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Form CC1001, Rev 06/00

PROJECT NAME:	PROJECT NUMBER:	LAB NAME AND CONTACT:	FAX AND MAIL REPORTS/BDD TO: RECIPIENT 1 (Name and Company)	RECIPIENT 1 (Address, Tel No., and Fax No.):
Charleston Naval Ctr	177511	Kemron Env. Services	Bonnie Hogue - CCI	115 Perimeter Ctr. NE Ste 700 Atlanta, GA 30346
PROJECT PHASE/SITE/TASK:	CTO OR DO NUMBER:	LAB PO NUMBER:	FAX AND MAIL REPORTS/BDD TO: RECIPIENT 2 (Name and Company)	RECIPIENT 2 (Address, Tel No., and Fax No.):
AOC Utility corr.	CTO-0005	5259	Melissa Aycock - CCI	115 Perimeter Ctr NE Ste 700 Atlanta, GA 30346
PROJECT CONTACT:	PROJECT TEL NO AND FAX NO.	LAB TEL NO AND FAX NO:	FAX AND MAIL REPORTS/BDD TO: RECIPIENT 3 (Name and Company)	RECIPIENT 3 (Address, Tel No., and Fax No.):
Gwendolyn Jordan	678-642-7211	740-373-4071(P) 740-373-4835(F)	Russell Henderson	115 Perimeter Ctr NE Ste 700 Atlanta, GA 30346

ANALYSES REQUIRED (Include Method Numbers)

ITEM	SAMPLE IDENTIFIER	SAMPLE DESCRIPTION/LOCATION	MATRIX (see codes on SOP)	DATE COLLECTED	TIME COLLECTED	DATA PKG LEVEL (see codes on SOP)	TAT (calendar days)	TCLP VOA 8260B	TCLP SOA 8270C	TCLP Metals 6010B	TCLP Pest 8081B	Explosives 8330	PCB's 8082	ELP Metals	Ignitability	Corrosivity		SAMPLE TYPE (see codes on SOP)	COMMENTS/ SCREENING READINGS	LAB ID (for lab's use)
1	05-177511-SP2-0402-03	SP2 Quad 3/4	S	04/25/03	1337	N/A	7	1	1	1	1	1	1	1	1	1		N	Waste characterization	
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				

SAMPLER(S) AND COMPANY: (please print)	COURIER AND SHIPPING NUMBER:	SAMPLES TEMPERATURE AND CONDITION UPON RECEIPT (for lab's use)
Gwen Jordan / CCI	FEDEX 837729044074	

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Printed Name and Signature: Gwendolyn Jordan	4/25/03	1730	Printed Name and Signature: Fedex	4/25/03	1800
Printed Name and Signature:			Printed Name and Signature: Brenda Gregory Brenda Gregory	4/27/03	1100
Printed Name and Signature:			Printed Name and Signature:		

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Constructors, Inc. Fax No: (770) 504-8082

11'1'1511-Od-042503

PROJECT NAME:	PROJECT NUMBER:	LAB NAME AND CONTACT:	FAX AND MAIL REPORTS/BDD TO: RECIPIENT 1 (Name and Company)	RECIPIENT 1 (Address, Tel No., and Fax No.)
CNC	177511	Kemron Env. Services	Bonnie Hogue	115 Perimeter Ctr NE Ste 700 Atlanta Ga 30346
PROJECT PHASE/SITE/TASK:	CTO OR DO NUMBER:	LAB PO NUMBER:	FAX AND MAIL REPORTS/BDD TO: RECIPIENT 2 (Name and Company)	RECIPIENT 2 (Address, Tel No., and Fax No.):
AOC Utility Corr.	CTO-0005	5259	Melissa Ayock	115 Perimeter Ctr NE Ste 700 Atlanta Ga 30346
PROJECT CONTACT:	PROJECT TEL NO AND FAX NO:	LAB TEL NO AND FAX NO:	FAX AND MAIL REPORTS/BDD TO: RECIPIENT 3 (Name and Company)	RECIPIENT 3 (Address, Tel No., and Fax No.).
Gwen Jordan	678-612-7211	740-373-4071 P 740-373-4835 F	Russell Henderson	Same as above

ANALYSES REQUIRED (Include Method Numbers)

ITEM	SAMPLE IDENTIFIER	SAMPLE DESCRIPTION/LOCATION	MATRIX (see codes on SOP)	DATE COLLECTED	TIME COLLECTED	DATA PKG LEVEL (see codes on SOP)	TAT (calendar days)	TCL VOA 8260/OB	TCL SVOA 8270C	TCL Metals ELISA	TCL Pest+ 8081A	Explosives 8330	PCBs 8082	TCL Metals 6010/6	Formaldehyde 8315A	CL Cyanide Total	BOD-Nitrat	SAMPLE TYPE (see codes on SOP)	COMMENTS/ SCREENING READINGS	LAB ID (for lab's use)
1	05-177511-DW2-042503	Tank 483	W	042503	1030	B	7	1	1	1	1	1	1	1	1	1	1	N	Waste Characterization	
2	05-177511-DW3-042503	CEVP2026	W	042503	1110	B	7	1	1	1	1	1	1	1		1		N	Waste Characterization	
3																				
4																				
5																				
6																				
7																				
8																				
9																			SAS rec'd 4/26/03	
10																			Stored in Locked Cooler	

SAMPLER(S) AND COMPANY: (please print)	COURIER AND SHIPPING NUMBER:	SAMPLES TEMPERATURE AND CONDITION UPON RECEIPT (for lab's use):
Gwen Jordan/CCI	FEDEX 837729040 74	

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Printed Name and Signature: Gwen Jordan	04/25/03	1730	Printed Name and Signature: Fedex	1800 4/25/03	
Printed Name and Signature:			Printed Name and Signature: Brenda Gregory/Brenda Gregory	4/27/03	1100
Printed Name and Signature:			Printed Name and Signature:	C/C Dated & intact	

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Form CC001, Rev 06/00

Cooler Temps 4/4 bro

KEMRON Internal Laboratory Chain of Custody

Work Order: 1030594 Client: CCI # of Samples: 4 Due Date: 5/5 Page:

Sample #	Analysis	Reason	Removed By ADT	Removed From	Moved To	Reliq. by	Ret'd By ADT	Ret'd To	Rec'd By	Reason
1,2	8330	EXT	CEB 4/28/03 @0700	WALKIN	ELAB	DEL	4-28-03 DEL 0530	crusher	CEB	disposal
03	TCLP	EXT	Rec 4-28-03 @0750 1235	WALKIN	TCLP	JKT	Rec 4-28-03 1605	WALKIN	BLG	Hold
1,2	Hom	Anal	DWS 4-28-03	walk-IN	wet	BLG	DWS 5-01-03 8:00	Crusher	DEL	Crusher
1,2,4	8260	AN	WS 4-28-03 1420	V-1	ORG-4	BLG	BLG 5-10-03 8:00	arch-2	BLG	Archive
1,2	PH	test	Tmm 4/28/03 @1420	Walkin	wet	BLG	Tmm 4/28/03 @1600	walkin	BLG	Storage
03	TCTS	test	Tmm 4/28/03 @1420	walkin	wet	BLG	Tmm 4/28/03 @1600	walkin	BLG	Storage
1,2A	PESTICIDE	EXT	CEB 4/28/03 @1630	WALKIN	ELAB	DEL	04-30-03 DEL 0415	crusher	CEB	disposal
03, 01-02	Flash	test	WS 4/28/03 0735	walkin	wet	DEL	WS 4/28/03 1600	archive 2	BLG	Archive
03A	PCB	EXT	CEB 4/30/03 @0830	WALKIN	ELAB	DEL	CEB 4/30/03 @1050	WALKIN	BLG	HOLD
1,2A	BNA	EXT	CEB 4/30/03 @0830	WALKIN	ELAB	BLG	05-01-03 DEL 0400	crusher	CEB	disposal
1,3	Met	dig	4/24/03 @0900	walkin	met	BLG	5/5/03	Archive	BLG	Arch
03A	8330	EXT	CEB 4/30/03 @1032	WALKIN	ELAB	BLG	CEB 4/30/03 1050	WALKIN	BLG	HOLD
1,2A	8151	EXT	CEB 4/30/03 @1030	WALKIN	ELAB	JKT	05-01-03 DEL 0400	crusher	CEB	disposal
1,2	CN	anal	DWS 5/2/03	walkin	wet	BLG	@0850 DWS 5/5/03	Archive 2	JKT	Archive
03	TCLP Rect	EXT	Rec 5-08-03 @1135	Login	TCLP	JKT	Rec 5-08-03 @825	Archive	JKT	Archive

CLIENT:	DATE:	SHIPPED BY:
CH2 -AH IRG Other SMH	4-26-03 9/2	(✓) FED-EX ( ) AIRBORNE ( ) UPS ( ) EMERY ( ) RPS ( ) US MAIL ( ) KEMRON ( ) CLIENT

COOLER ID: KL-12605	COOLER ID: KL1005	COOLER ID:
INDEX # : 8377 72904074	INDEX # : 7930046308 14	INDEX # :
SEALED (✓) YES ( ) NO	SEALED (✓) YES ( ) NO	SEALED ( ) YES ( ) NO
CUSTODY (✓) YES ( ) NO	CUSTODY (✓) YES ( ) NO	CUSTODY ( ) YES ( ) NO
TEMP : (D) (E) 4 °C	TEMP : (D) (E) 4 °C	TEMP : (D) (E) °C
TEMP IN RANGE (4°C ± 2°) (✓) YES ( ) NO	TEMP IN RANGE (4°C ± 2°) (✓) YES ( ) NO	TEMP IN RANGE (4°C ± 2°) ( ) YES ( ) NO
WET ICE (✓) BLUE ICE ( )	WET ICE (✓) BLUE ICE ( )	WET ICE ( ) BLUE ICE ( )
ICE FROZEN (✓) MELTED ( )	ICE FROZEN (✓) MELTED ( )	ICE FROZEN ( ) MELTED ( )
RADIATION CHECKED (✓) YES ( ) NO	RADIATION CHECKED (✓) YES ( ) NO	RADIATION CHECKED ( ) YES ( ) NO
SAMPLE INTACT (✓) YES ( ) NO SALVAGEBLE ( ) YES ( ) NO	SAMPLE INTACT (✓) YES ( ) NO SALVAGEBLE ( ) YES ( ) NO	SAMPLE INTACT ( ) YES ( ) NO SALVAGEBLE ( ) YES ( ) NO
SAMPLE TYPE: WATER (✓) SOIL ( ) OTHER ( )	SAMPLE TYPE: WATER (✓) SOIL (✓) OTHER ( )	SAMPLE TYPE: WATER ( ) SOIL ( ) OTHER ( )
LABELS: INTACT (✓) YES ( ) NO LEGIBLE (✓) YES ( ) NO MATCH COC (✓) YES ( ) NO	LABELS: INTACT (✓) YES ( ) NO LEGIBLE (✓) YES ( ) NO MATCH COC (✓) YES ( ) NO	LABELS: INTACT ( ) YES ( ) NO LEGIBLE ( ) YES ( ) NO MATCH COC ( ) YES ( ) NO
pH IN RANGE (2 - >9 - >12) (✓) YES ( ) NO AS APPROPRIATE	pH IN RANGE (2 - >9 - >12) (✓) YES ( ) NO AS APPROPRIATE	pH IN RANGE (2 - >9 - >12) ( ) YES ( ) NO AS APPROPRIATE
SAMPLES FROZEN? ( ) YES (✓) NO	SAMPLES FROZEN? ( ) YES (✓) NO	SAMPLES FROZEN? ( ) YES ( ) NO
LOG-IN COMMENTS	LOG-IN COMMENTS SP2 - SOIL DW2 - All DW3 - VOA'S T.B.	LOG-IN COMMENTS

TSR COMMENTS

CONTACT:	DATE:	TIME:
COMMENTS: ( ) VOICE ( ) FAX ( ) E-MAIL		

Revised 05/29/02

CRF#4

Sample Receipt Form #2

Client: CCI Project: _____

Date Received: 4-26-03

_____Cooler temperature > than 6 degrees Celcius

Reason_____

✓ Samples received not on chain of custody

Trip Blank

_____Samples on chain of custody not received

_____Information on sample containers different from chain of custody

_____Sample containers received broken, leaking or not sealed (List sample ID)

_____pH out (List sample ID, which container, pH prior to adjusting, amount of acid, preservative)

_____Insufficient sample volume

_____Air bubbles present in Voa vials (List sample ID)

_____Hold time expired (List sample ID)

TSR:

Was client notified regarding information: YES NO

Name of person contacted:_____ Company:_____

TSR:_____ Date:_____

2.0 Full Sample Data Package

2.1.1 Volatiles GCMS Data (8260)

REPORT NARRATIVE
GC/MS VOLATILE ORGANICS

KEMRON Login No: L0304594

METHOD

Preparation: SW-846 5030B
Analysis: SW-846 8260B

HOLDING TIMES

Sample Preparation: All holding times were met.
Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial calibrations: For all compounds which yielded a %RSD greater than 15%, linear or higher order equations were applied or if the mean %RSD for all analytes was less than 15% the average response factors were used. All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Continuing Calibration and Tune: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Samples: All acceptance criteria were met.

Matrix Spikes: The MS/MSD results were not associated with this sample delivery group (SDG).

SAMPLES

Internal Standards: All acceptance criteria were met.

Surrogates: All acceptance criteria were met.

Samples: All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: CMS REVIEWED: [signature] DATE: 5/7/03

Rev. 7/14/00

VOLATILES GC/MS DATA – (8260B)

Login Number: LO364594

A. QC Summary

- ✓ Method Blank Summary
- ✓ Method Blank Results
- ✓ Laboratory Control Sample (LCS)
- na Matrix Spike / Matrix Spike Duplicate (MS/MSD)
- ✓ Holding Time Summary
- ✓ Surrogate Recovery Summary
- ✓ Instrument Tune Summary
- ✓ Initial Calibration Summary
- ✓ Initial Calibration Verification Form (ICV/second source)
- ✓ Continuing Calibration Verification (CCV)
- ✓ Internal Standard Area Summary
- ✓ Instrument Run Log

B. Sample Data

- ✓ Target compound and surrogate results summary (see Summary Report)
- na Tentatively Identified Compounds (TICs) (see Summary Report if requested)
- ✓ Chromatograms (RIC) and quantitation reports
- ✓ Raw and background corrected mass spectra
- na Mass spectra for TICs with three best library matches (if requested)

C. Standards Data

- ✓ Initial calibration summary (ICAL)
- ✓ ICAL Standards, chromatograms and quantitation reports
- ✓ Initial calibration verification (ICV/second source) summary forms
- ✓ Initial calibration verification (ICV/second source) chromatograms and quantitation reports
- ✓ Continuing calibration verification (CCV) summary forms
- ✓ Continuing calibration verification (CCV) chromatograms and quantitation reports

D. Raw QC Data

- ✓ GC/MS instrument performance check (BFB)
- ✓ Method blank chromatograms and quantitation reports
- ✓ LCS chromatograms and quantitation reports
- na MS/MSD chromatograms and quantitation reports
- ✓ Instrument run logs
- na 5035 Logs (if applicable)
- ✓ Daily checklists
- ✓ Example calculations

Checked By: C Winters **Date:** 05/07/03

2.1.1.1 QC Summary

KEMRON ENVIRONMENTAL SERVICES
METHOD BLANK SUMMARY

Login Number: L0304594
Blank File ID: 11M14655
Date Analyzed: 04/30/03
Time Analyzed: 18:36
Analyst: CMS

Work Group: WG139442
Blank Sample ID: WG139442-01
Instrument ID: HPMS11
Method: 8260B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG139442-02	11M14656	04/30/03 19:07	
LCS2	WG139442-03	11M14657	04/30/03 19:37	
05-177511-SP2-042503	L0304594-03	11M14671	05/01/03 02:53	

KEMRON FORMS - Modified 03/21/2003
Version 1.2
Report generated 05/07/2003 13:09

KEMRON ENVIRONMENTAL SERVICES
BLANK REPORT

Login Number: L0304594 Run Date: 04/30/2003 Sample ID: WG139442-01
Instrument ID: HPMS11 Run Time: 18:36 Prep Method: 5030B
File ID: 11M14655 Analyst: CMS Method: 8260B
Workgroup (AAB#): WG139442 Matrix: Water Units: ug/L
Contract #: Cal ID: HPMS11-17-APR-03

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Vinyl chloride	0.250	10.0	0.250	1	U
1,1-Dichloroethene	0.500	5.00	0.500	1	U
Methyl ethyl ketone	2.50	100	2.50	1	U
Chloroform	0.125	5.00	0.125	1	U
Carbon tetrachloride	0.250	5.00	0.250	1	U
1,2-Dichloroethane	0.250	5.00	0.250	1	U
Benzene	0.125	5.00	0.125	1	U
Trichloroethene	0.250	5.00	0.250	1	U
Tetrachloroethene	0.250	5.00	0.250	1	U
Chlorobenzene	0.125	5.00	0.125	1	U

Surrogates	% Recovery	Surrogate Limits			Qualifier
Dibromofluoromethane	98.0	86	-	118	PASS
1,2-Dichloroethane-d4	104	80	-	120	PASS
Toluene-d8	102	88	-	110	PASS
4-Bromofluorobenzene	99.9	86	-	115	PASS

* Analyte detected above RDL
ND Analyte Not detected at or above reporting limit

KEMRON FORMS - Modified 05/02/2003
Version 1.3
Report generated 05/07/2003 13:09

KEMRON ENVIRONMENTAL SERVICES
LABORATORY CONTROL SAMPLES

Loginnum: L0304594 Worknum: WG139442 Method: 8260B
Instrument ID: HPMS11 Cal ID: HPMS11 - 17-APR-2003 14:20 Matrix: Water
Analyst: CMS Contract #: Units: ug/L
Sample ID: WG139442-02 LCS File ID: 11M14656 Run Date: 04/30/2003 19:07
Sample ID: WG139442-03 LCS2 File ID: 11M14657 Run Date: 04/30/2003 19:37

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Limit	Q
	Known	Found	% REC	Known	Found	% REC				
Vinyl chloride	20.0	20.6	103	20.0	18.8	93.9	9.1	65 - 140	46	
1,1-Dichloroethene	20.0	21.9	109	20.0	20.5	102	6.77	80 - 132	26	
Methyl ethyl ketone	20.0	20.0	100	20.0	19.8	98.9	1.18	58 - 149	56	
Chloroform	20.0	23.2	116	20.0	22.3	111	3.93	80 - 125	23	
Carbon tetrachloride	20.0	23.6	118	20.0	22.1	111	6.35	80 - 137	32	
1,2-Dichloroethane	20.0	22.9	115	20.0	22.2	111	3.09	80 - 129	29	
Benzene	20.0	22.0	110	20.0	21.0	105	4.76	80 - 121	21	
Trichloroethene	20.0	24.3	121	20.0	22.9	114	5.95	80 - 122	21	
Tetrachloroethene	20.0	22.7	114	20.0	21.7	109	4.62	80 - 124	22	
Chlorobenzene	20.0	22.2	111	20.0	21.6	108	2.4	80 - 120	16	

Surogates	LCS % Recovery	LCS2 % Recovery	Surrogate Limits	Qualifier
Dibromofluoromethane	101	100	86 - 118	PASS
1,2-Dichloroethane-d4	105	105	80 - 120	PASS
Toluene-d8	100	101	88 - 110	PASS
Bromofluorobenzene	101	101	86 - 115	PASS

* FAILS %REC LIMIT

\# FAILS RPD LIMIT

KEMRON FORMS - Modified 05/01/2003
Version 1.2
Report generated 05/07/2003 13:09

KEMRON ENVIRONMENTAL SERVICES
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method:8260B

AAB#:NG139442

Login Number:L0304594

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
05-177511-SP2-042503	04/25/03	04/26/03	05/01/03	17.1	5.55	05/01/03	14	5.55	

* EXT = MISSED EXTRACTION HOLD TIME
*ANAL = MISSED ANALYTICAL HOLD TIME

KEMRON FORMS - Modified 12/06/2002
Version 1.2
Report generated 05/07/2003 13:08

KEMRON ENVIRONMENTAL SERVICES
SURROGATE STANDARDS

Login Number: L0304594
Instrument Id: HPMS11
Workgroup (AAB#): WG139442

Method: 8260
CAL ID: HPMS11 - 17-APR-03
Matrix: WATER

Sample Number	Dilution Tag	1	2	3	4
L0304594-03	10.0	106	99.3	99.5	100
WG139442-01	1.00	104	98.0	99.9	102
WG139442-02	1.00	105	101	101	100
WG139442-03	1.00	105	100	101	101

Surrogates	Surrogate Limits		
1 - 1,2-Dichloroethane-d4	80	-	120
2 - Dibromofluoromethane	86	-	118
3 - 4-Bromofluorobenzene	86	-	115
4 - Toluene-d8	88	-	110

Underline = Result out of surrogate limits

DL = surrogate diluted out

ND = surrogate not detected

KEMRON FORMS - Modified 01/22/2003
Version 1.2
Report generated 05/07/2003 13:09

KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L0304594
Instrument: HPMS11
Analyst: CMS
Workgroup: WG138555

Tune ID: WG138555-01
Run Date: 04/17/2003
Run Time: 06:32
File ID: 11M14388
Cal ID: HPMS11-17-APR-03

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	23.0	22250	PASS
75.0	95.0	30.0	60.0	44.4	42925	PASS
95.0	95.0	100	100	100	96738	PASS
96.0	95.0	5.00	9.00	6.21	6007	PASS
173	174	0	2.00	0.803	484	PASS
174	95.0	50.0	100	62.3	60274	PASS
175	174	5.00	9.00	7.60	4582	PASS
176	174	95.0	101	97.9	59024	PASS
177	176	5.00	9.00	6.38	3764	PASS

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

Lab ID	Client ID	Tag	Date Analyzed	Q
WG138555-02	STD	01	04/17/2003 07:38	
WG138555-03	STD	01	04/17/2003 08:09	
WG138555-04	STD	01	04/17/2003 10:13	
WG138555-05	STD	01	04/17/2003 10:43	
WG138555-06	CCV	01	04/17/2003 11:14	
WG138555-07	STD	01	04/17/2003 11:44	
WG138555-09	STD	01	04/17/2003 12:15	
WG138555-08	STD	01	04/17/2003 14:20	

* Sample past 12 hour tune limit

KEMRON FORMS - Modified 02/14/2003
Version 1.2
Report generated 05/07/2003 13:12

KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK
BFB

Login Number: L0304594
Instrument: HPMS11
Analyst: CMS
Workgroup: WG138731

Tune ID: WG138731-01
Run Date: 04/21/2003
Run Time: 06:19
File ID: 11M14406
Cal ID: HPMS11-17-APR-03

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	22.3	45648	PASS
75.0	95.0	30.0	60.0	45.0	91882	PASS
95.0	95.0	100	100	100	204288	PASS
96.0	95.0	5.00	9.00	6.72	13730	PASS
173	174	0	2.00	0.837	1172	PASS
174	95.0	50.0	100	68.6	140074	PASS
175	174	5.00	9.00	7.54	10559	PASS
176	174	95.0	101	97.1	136064	PASS
177	176	5.00	9.00	6.31	8587	PASS

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

Lab ID	Client ID	Tag	Date Analyzed	Q
WG138555-10	SSCV	01	04/21/2003 08:40	

* Sample past 12 hour tune limit

KEMRON FORMS - Modified 02/14/2003
Version 1.2
Report generated 05/07/2003 13:12

KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L0304594
Instrument: HPMS11
Analyst: CMS
Workgroup: WG139441

Tune ID: WG139441-01
Run Date: 04/30/2003
Run Time: 17:32
File ID: 11M14653
Cal ID: HPMS11 -17-APR-03

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	23.5	15023	PASS
75.0	95.0	30.0	60.0	46.9	30010	PASS
95.0	95.0	100	100	100	63930	PASS
96.0	95.0	5.00	9.00	7.03	4496	PASS
173	174	0	2.00	0.635	254	PASS
174	95.0	50.0	100	62.6	40026	PASS
175	174	5.00	9.00	7.30	2922	PASS
176	174	95.0	101	98.6	39464	PASS
177	176	5.00	9.00	5.79	2286	PASS

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

Lab ID	Client ID	Tag	Date Analyzed	Q
WG139442-01	BLANK		04/30/2003 18:36	
WG139442-02	LCS		04/30/2003 19:07	
WG139442-03	LCS2		04/30/2003 19:37	
L0304594-03	05-177511-SP2-042503		05/01/2003 02:53	

* Sample past 12 hour tune limit

KEMRON FORMS - Modified 11/19/2002
Version 1.2
Report generated 05/07/2003 13:08

Login Number: L0304594
Analytical Method: 8260
Instrument ID: HPMS11

Analyst: CMS
Initial Calibration Date: 17-APR-03

Summary

Analyte		AVG RF	% RSD	R^2	Q
ETHYLBENZENE	CCC	.445	15.7		
TOLUENE	CCC	1.27	10.2		
1,2-DICHLOROPROPANE	CCC	.245	6.63		
CHLOROFORM	CCC	.364	9.52		
1,1-DICHLOROETHENE	CCC	.19	12.5		
VINYL CHLORIDE	CCC	.114	13.7		
1,1,2,2-TETRACHLOROETHANE	SPCC	.411	6.9		
BROMOFORM	SPCC	.103	20.1		
CHLOROBENZENE	SPCC	.82	13.8		
1,1-DICHLOROETHANE	SPCC	.442	12.2		
CHLOROMETHANE	SPCC	.179	6.9		
1,2,3-TRICHLOROBENZENE		.633	7.34		
NAPHTHALENE		1.48	4.98		
HEXACHLOROBUTADIENE		.288	9.29		
1,2,4-TRICHLOROBENZENE		.772	8.57		
1,2-DIBROMO-3-CHLOROPROPANE		.0683	9.2		
1,2-DICHLOROBENZENE		1.21	6.74		
N-BUTYLBENZENE		2.47	11.9		
1,4-DICHLOROBENZENE		1.37	8.23		
1,3-DICHLOROBENZENE		1.36	8.84		
P-ISOPROPYLTOLUENE		2.65	12.4		
SEC-BUTYLBENZENE		3.17	12.5		
1,2,4-TRIMETHYLBENZENE		2.53	13.3		
TERT-BUTYLBENZENE		2.23	14.8		
A-METHYLSTYRENE		1.46	7.42		
4-CHLOROTOLUENE		2.09	13.8		
2-CHLOROTOLUENE		2.21	12.2		
1,3,5-TRIMETHYLBENZENE		2.39	14.8		
BROMOBENZENE		.61	10.7		
N-PROPYLBENZENE		3.46	16.5		
TRANS-1,4-DICHLORO-2-BUTENE		.152	4.69		
1,2,3-TRICHLOROPROPANE		.119	7.57		
F-BROMOFLUOROBENZENE		.925	5.63		
ISOPROPYLBENZENE		1.43	14.9		
STYRENE		.905	13.2		
O-XYLENE		.562	12.7		
M-,P-XYLENE		.559	14.3		
1,1,1,2-TETRACHLOROETHANE		.233	12.9		
1-CHLOROHEXANE		.44	10.4		
1,2-DIBROMOETHANE		.181	9.12		
DIBROMOCHLOROMETHANE		.203	18.9		
TETRACHLOROETHENE		.218	18.6		
1,3-DICHLOROPROPANE		.362	4.62		
2-HEXANONE		.12	3.52		

KEMRON FORMS - Modified 11/20/2002
Version 1.0
Report generated 05/07/2003 13:08

Login Number: L0304594 Analyst: CMS

Analytical Method: 8260 Initial Calibration Date: 17-APR-03

Instrument ID: HPMS11

Analyte	AVG RF	% RSD	R^2	Q
1,1,2-TRICHLOROETHANE	.189	7.14		
TRANS-1,3-DICHLOROPROPENE	.355	12.2		
ETHYL METHACRYLATE	.248	4.44		
TOLUENE-D8	1.14	6.77		
DIMETHYL DISULFIDE	.181	7.97		
CIS-1,3-DICHLOROPROPENE	.316	11.0		
4-METHYL-2-PENTANONE	.0502	4.13		
2-CHLOROETHYL VINYL ETHER	.0973	7.66		
DIBROMOMETHANE	.094	8.5		
BROMODICHLOROMETHANE	.255	11.2		
TRICHLOROETHENE	.206	13.1		
BENZENE	.884	7.74		
1,2-DICHLOROETHANE	.281	7.41		
1,2-DICHLOROETHANE-D4	.217	5.86		
CARBON TETRACHLORIDE	.264	18.5		
1,1-DICHLOROPROPENE	.295	13.7		
CYCLOHEXANE	.525	3.6		
1,1,1-TRICHLOROETHANE	.306	21.5		
DIBROMOFLUOROMETHANE	.206	4.95		
BROMOCHLOROMETHANE	.0887	10.3		
CIS-1,2-DICHLOROETHENE	.226	9.35		
2,2-DICHLOROPROPANE	.331	12.4		
2-BUTANONE	.0545	3.25		
VINYL ACETATE	.33	6.48		
N-HEXANE	.394	9.57		
TRANS-1,2-DICHLOROETHENE	.21	14.2		
METHYLTERT-BUTYL ETHER	.432	3.43		
ACRYLONITRILE	.0551	4.1		
CARBON DISULFIDE	.684	8.53		
METHYLENE CHLORIDE	.201	6.22		
IODOMETHANE	.226	6.67		
DIMETHYL SULFIDE	.279	3.11		
ACETONE	.0372	6.21		
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	.208	1.42		
ACROLEIN	.0161	6.04		
ISOPRENE	.383	3.95		
TRICHLOROFLUOROMETHANE	.354	15.6		
CHLOROETHANE	.188	8.1		
BROMOMETHANE	.153	13.9		
DICHLORODIFLUOROMETHANE	.27	15.2		
	Average %RSD:	9.86		

= CC

* = SPCC

KENRON FORMS - Modified 11/20/2002
Version 1.0
Report generated 05/07/2003 13:08

INITIAL CALIBRATION

Login Number: L0304594 Analyst: CMS
Analytical Method: 8260 Initial Calibration Date: 17-APR-03
Instrument ID: HPMS11

Analyte		Sample # WG138555-02 Conc	File # 11M14390 Response	Level 1 RF
ETHYLBENZENE	CCC	0.4	4238	.3933
TOLUENE	CCC	0.4	11835	1.098
1,2-DICHLOROPROPANE	CCC	0.4	3308	.2222
CHLOROFORM	CCC	0.4	4524	.3038
1,1-DICHLOROETHENE	CCC			
VINYL CHLORIDE	CCC			
1,1,2,2-TETRACHLOROETHANE	SPCC	0.4	1924	.3579
BROMOFORM	SPCC			
CHLOROBENZENE	SPCC	0.4	9238	.8573
1,1-DICHLOROETHANE	SPCC	0.4	5181	.348
CHLOROMETHANE	SPCC			
1,2,3-TRICHLOROBENZENE		0.4	3330	.6195
NAPHTHALENE		0.4	7887	1.467
HEXACHLOROBUTADIENE				
1,2,4-TRICHLOROBENZENE		0.4	3724	.6928
1,2-DIBROMO-3-CHLOROPROPANE				
1,2-DICHLOROBENZENE		0.4	6357	1.183
N-BUTYLBENZENE				
1-DICHLOROBENZENE		0.4	6924	1.288
1,3-DICHLOROBENZENE		0.4	6414	1.193
P-ISOPROPYLTOLUENE				
SEC-BUTYLBENZENE				
1,2,4-TRIMETHYLBENZENE		0.4	10739	1.998
TERT-BUTYLBENZENE				
A-METHYLSTYRENE				
4-CHLOROTOLUENE		0.4	9040	1.682
2-CHLOROTOLUENE		0.4	9849	1.832
1,3,5-TRIMETHYLBENZENE		0.4	9829	1.829
BROMOBENZENE		0.4	2888	.5373
N-PROPYLBENZENE		0.4	13033	2.425
TRANS-1,4-DICHLORO-2-BUTENE				
1,2,3-TRICHLOROPROPANE				
P-BROMOFLUOROBENZENE				
ISOPROPYLBENZENE		0.4	11783	1.094
STYRENE		0.4	7873	.7306
O-XYLENE		0.4	4997	.4637
M-,P-XYLENE		0.8	10430	.484
1,1,1,2-TETRACHLOROETHANE		0.4	2072	.1923
1-CHLOROHEXANE				
1,2-DIBROMOETHANE		0.4	1564	.1451
DIBROMOCHLOROMETHANE		0.4	1484	.1377
TETRACHLOROETHENE		0.4	1628	.1511
-DICHLOROPROPANE		0.4	3652	.3389

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Analyst: CMS
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Analyte	Sample # WG138555-02 Conc	File # 11M14390 Response	Level 1 RF
2-HEXANONE			
1,1,2-TRICHLOROETHANE	0.4	1816	.1685
TRANS-1,3-DICHLOROPROPENE	0.4	2969	.2755
ETHYL METHACRYLATE			
TOLUENE-D8			
DIMETHYL DISULFIDE			
CIS-1,3-DICHLOROPROPENE	0.4	3901	.262
4-METHYL-2-PENTANONE			
2-CHLOROETHYL VINYL ETHER			
DIBROMOMETHANE	0.4	1196	.0803
BROMODICHLOROMETHANE	0.4	3136	.2106
TRICHLOROETHENE	0.4	2348	.1577
BENZENE	0.4	11890	.7986
1,2-DICHLOROETHANE	0.4	3576	.2402
1,2-DICHLOROETHANE-D4			
CARBON TETRACHLORIDE			
1,1-DICHLOROPROPENE			
CYCLOHEXANE			
1,1,1-TRICHLOROETHANE	0.4	2693	.1809
DIBROMOFLUOROMETHANE			
BROMOCHLOROMETHANE	0.4	1021	.0686
CIS-1,2-DICHLOROETHENE	0.4	2815	.1891
2,2-DICHLOROPROPANE			
2-BUTANONE			
VINYL ACETATE			
N-HEXANE			
TRANS-1,2-DICHLOROETHENE	0.4	2273	.1527
METHYLTERT-BUTYL ETHER			
ACRYLONITRILE			
CARBON DISULFIDE			
METHYLENE CHLORIDE	0.4	2653	.1782
IODOMETHANE			
DIMETHYL SULFIDE			
ACETONE			
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE			
ACROLEIN			
ISOPRENE			
TRICHLOROFLUOROMETHANE			
CHLOROETHANE			
BROMOMETHANE			
DICHLORODIFLUOROMETHANE			

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Analyte		Sample # WG138555-03 Conc	File # 11M14391 Response	Level 2 RF
ETHYLBENZENE	CCC	1.0	11446	.4192
TOLUENE	CCC	1.0	30069	1.101
1,2-DICHLOROPROPANE	CCC	1.0	8375	.2241
CHLOROFORM	CCC	1.0	11827	.3165
1,1-DICHLOROETHENE	CCC	1.0	5133	.1374
VINYL CHLORIDE	CCC	1.0	3612	.0967
1,1,2,2-TETRACHLOROETHANE	SPCC	1.0	5372	.3953
BROMOFORM	SPCC	1.0	1808	.0662
CHLOROBENZENE	SPCC	1.0	22526	.8249
1,1-DICHLOROETHANE	SPCC	1.0	13648	.3652
CHLOROMETHANE	SPCC	1.0	6809	.1822
1,2,3-TRICHLOROBENZENE		1.0	8521	.6271
NAPHTHALENE		1.0	19908	1.465
HEXACHLOROBUTADIENE		1.0	3155	.2322
1,2,4-TRICHLOROBENZENE		1.0	10690	.7867
1,2-DIBROMO-3-CHLOROPROPANE				
1,2-DICHLOROBENZENE		1.0	15646	1.151
N-BUTYLBENZENE		1.0	25538	1.879
1-DICHLOROBENZENE		1.0	17641	1.298
3-DICHLOROBENZENE		1.0	17708	1.303
P-ISOPROPYLTOLUENE		1.0	27322	2.011
SEC-BUTYLBENZENE		1.0	32410	2.385
1,2,4-TRIMETHYLBENZENE		1.0	29135	2.144
TERT-BUTYLBENZENE		1.0	21195	1.56
A-METHYLSTYRENE				
4-CHLOROTOLUENE		1.0	27364	2.014
2-CHLOROTOLUENE		1.0	26171	1.926
1,3,5-TRIMETHYLBENZENE		1.0	26987	1.986
BROMOBENZENE		1.0	7929	.5835
N-PROPYLBENZENE		1.0	38314	2.82
TRANS-1,4-DICHLORO-2-BUTENE				
1,2,3-TRICHLOROPROPANE		1.0	1393	.1025
P-BROMOFLUOROBENZENE				
ISOPROPYLBENZENE		1.0	30948	1.133
STYRENE		1.0	20767	.7605
O-XYLENE		1.0	13459	.4929
M-,P-XYLENE		2.0	28386	.5198
1,1,1,2-TETRACHLOROETHANE		1.0	5781	.2117
1-CHLOROHEXANE		1.0	9462	.3465
1,2-DIBROMOETHANE		1.0	4653	.1704
DIBROMOCHLOROMETHANE		1.0	4208	.1541
TETRACHLOROETHENE		1.0	4410	.1615
-DICHLOROPROPANE		1.0	9677	.3544

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Analyte	Sample # WG138555-03 Conc	File # 11M14391 Response	Level 2 RF
2-HEXANONE			
1,1,2-TRICHLOROETHANE	1.0	4713	.1726
TRANS-1,3-DICHLOROPROPENE	1.0	8211	.3007
ETHYL METHACRYLATE			
TOLUENE-D8			
DIMETHYL DISULFIDE			
CIS-1,3-DICHLOROPROPENE	1.0	9793	.262
4-METHYL-2-PENTANONE			
2-CHLOROETHYL VINYL ETHER	1.0	3067	.0821
DIBROMOMETHANE	1.0	3178	.085
BROMODICHLOROMETHANE	1.0	7923	.212
TRICHLOROETHENE	1.0	6416	.1717
BENZENE	1.0	29317	.7845
1,2-DICHLOROETHANE	1.0	10120	.2708
1,2-DICHLOROETHANE-D4			
CARBON TETRACHLORIDE	1.0	5890	.1576
1,1-DICHLOROPROPENE	1.0	7675	.2054
CYCLOHEXANE			
1,1,1-TRICHLOROETHANE	1.0	8272	.2213
DIBROMOFLUOROMETHANE			
BROMOCHLOROMETHANE	1.0	3186	.0853
CIS-1,2-DICHLOROETHENE	1.0	7532	.2015
2,2-DICHLOROPROPANE	1.0	8917	.2386
2-BUTANONE			
VINYL ACETATE	1.0	11485	.3073
N-HEXANE	1.0	11616	.3108
TRANS-1,2-DICHLOROETHENE	1.0	6541	.175
METHYLTERT-BUTYL ETHER	1.0	16710	.4471
ACRYLONITRILE			
CARBON DISULFIDE	1.0	20902	.5593
METHYLENE CHLORIDE	1.0	7090	.1897
IODOMETHANE			
DIMETHYL SULFIDE			
ACETONE			
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE			
ACROLEIN			
ISOPRENE			
TRICHLOROFLUOROMETHANE	1.0	8566	.2292
CHLOROETHANE	1.0	5742	.1536
BROMOMETHANE	1.0	4091	.1095
DICHLORODIFLUOROMETHANE	1.0	6698	.1792

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Analyte		Sample # WG138555-04 Conc	File # 11M14395 Response	Level 3 RF
ETHYLBENZENE	CCC	5.0	73739	.5475
TOLUENE	CCC	5.0	190625	1.416
1,2-DICHLOROPROPANE	CCC	5.0	48359	.2638
CHLOROFORM	CCC	5.0	69957	.3816
1,1-DICHLOROETHENE	CCC	5.0	36065	.1967
VINYL CHLORIDE	CCC	5.0	25262	.1378
1,1,2,2-TETRACHLOROETHANE	SPCC	5.0	29178	.4296
BROMOFORM	SPCC	5.0	11441	.085
CHLOROBENZENE	SPCC	5.0	130452	.9687
1,1-DICHLOROETHANE	SPCC	5.0	87786	.4789
CHLOROMETHANE	SPCC	5.0	36687	.2001
1,2,3-TRICHLOROBENZENE		5.0	46908	.6906
NAPHTHALENE		5.0	103438	1.523
HEXACHLOROBUTADIENE		5.0	20349	.2996
1,2,4-TRICHLOROBENZENE		5.0	57111	.8408
1,2-DIBROMO-3-CHLOROPROPANE		5.0	3872	.057
1,2-DICHLOROBENZENE		5.0	88150	1.298
N-BUTYLBENZENE		5.0	177907	2.619
1-DICHLOROBENZENE		5.0	101949	1.501
,3-DICHLOROBENZENE		5.0	101658	1.497
P-ISOPROPYLTOLUENE		5.0	194516	2.864
SEC-BUTYLBENZENE		5.0	229973	3.386
1,2,4-TRIMETHYLBENZENE		5.0	190562	2.806
TERT-BUTYLBENZENE		5.0	148367	2.184
A-METHYLSTYRENE		5.0	99410	1.464
4-CHLOROTOLUENE		5.0	161894	2.384
2-CHLOROTOLUENE		5.0	167159	2.461
1,3,5-TRIMETHYLBENZENE		5.0	183813	2.706
BROMOBENZENE		5.0	46345	.6823
N-PROPYLBENZENE		5.0	263591	3.881
TRANS-1,4-DICHLORO-2-BUTENE		5.0	9536	.1404
1,2,3-TRICHLOROPROPANE		5.0	8259	.1216
P-BROMOFLUOROBENZENE		2.5	29803	.8776
ISOPROPYLBENZENE		5.0	216960	1.611
STYRENE		5.0	135903	1.009
O-XYLENE		5.0	86492	.6422
M-,P-XYLENE		10.0	179462	.6663
1,1,1,2-TETRACHLOROETHANE		5.0	34817	.2585
1-CHLOROHEXANE		5.0	60948	.4526
1,2-DIBROMOETHANE		5.0	25275	.1877
DIBROMOCHLOROMETHANE		5.0	25361	.1883
TETRACHLOROETHENE		5.0	34122	.2534
-DICHLOROPROPANE		5.0	50417	.3744

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Analyte	Sample # WG138555-04 Conc	File # 11M14395 Response	Level 3 RF
2-HEXANONE	5.0	15841	.1176
1,1,2-TRICHLOROETHANE	5.0	26961	.2002
TRANS-1,3-DICHLOROPROPENE	5.0	48721	.3618
ETHYL METHACRYLATE	5.0	32626	.2423
TOLUENE-D8	2.5	68435	1.016
DIMETHYL DISULFIDE	5.0	28252	.1541
CIS-1,3-DICHLOROPROPENE	5.0	58396	.3186
4-METHYL-2-PENTANONE	5.0	9102	.0497
2-CHLOROETHYL VINYL ETHER	5.0	17670	.0964
DIBROMOMETHANE	5.0	18553	.1012
BROMODICHLOROMETHANE	5.0	45687	.2492
TRICHLOROETHENE	5.0	40944	.2234
BENZENE	5.0	173723	.9477
1,2-DICHLOROETHANE	5.0	55269	.3015
1,2-DICHLOROETHANE-D4	2.5	19791	.2159
CARBON TETRACHLORIDE	5.0	46431	.2533
1,1-DICHLOROPROPENE	5.0	55545	.303
CYCLOHEXANE	5.0	94937	.5179
1,1,1-TRICHLOROETHANE	5.0	61938	.3379
DIBROMOFLUOROMETHANE	2.5	17142	.187
BROMOCHLOROMETHANE	5.0	17250	.0941
CIS-1,2-DICHLOROETHENE	5.0	44067	.2404
2,2-DICHLOROPROPANE	5.0	61121	.3334
2-BUTANONE	5.0	10057	.0549
VINYL ACETATE	5.0	57987	.3163
N-HEXANE	5.0	74087	.4042
TRANS-1,2-DICHLOROETHENE	5.0	42057	.2294
METHYLTERT-BUTYL ETHER	5.0	79125	.4316
ACRYLONITRILE	5.0	10062	.0549
CARBON DISULFIDE	5.0	127848	.6974
METHYLENE CHLORIDE	5.0	39233	.214
IODOMETHANE	5.0	40569	.2213
DIMETHYL SULFIDE	5.0	52031	.2838
ACETONE	5.0	7305	.0398
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5.0	38587	.2105
ACROLEIN	10.0	5251	.0143
ISOPRENE	5.0	66265	.3615
TRICHLOROFLUOROMETHANE	5.0	69282	.3779
CHLOROETHANE	5.0	36361	.1984
BROMOMETHANE	5.0	26223	.143
DICHLORODIFLUOROMETHANE	5.0	55495	.3027

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Analyte		Sample # WG138555-05 Conc	File # 11M14396 Response	Level 4 RF
ETHYLBENZENE	CCC	20.0	292518	.5349
TOLUENE	CCC	20.0	778815	1.424
1,2-DICHLOROPROPANE	CCC	20.0	194977	.261
CHLOROFORM	CCC	20.0	294305	.3939
1,1-DICHLOROETHENE	CCC	20.0	154063	.2062
VINYL CHLORIDE	CCC	20.0	92065	.1232
1,1,2,2-TETRACHLOROETHANE	SPCC	20.0	119540	.4438
BROMOFORM	SPCC	20.0	54840	.1003
CHLOROBENZENE	SPCC	20.0	515730	.943
1,1-DICHLOROETHANE	SPCC	20.0	362676	.4854
CHLOROMETHANE	SPCC	20.0	139433	.1866
1,2,3-TRICHLOROBENZENE		20.0	184560	.6852
NAPHTHALENE		20.0	423745	1.573
HEXACHLOROBUTADIENE		20.0	83942	.3116
1,2,4-TRICHLOROBENZENE		20.0	230843	.857
1,2-DIBROMO-3-CHLOROPROPANE		20.0	17424	.0647
1,2-DICHLOROBENZENE		20.0	354991	1.318
N-BUTYLBENZENE		20.0	746501	2.771
4-DICHLOROBENZENE		20.0	410696	1.525
3-DICHLOROBENZENE		20.0	409978	1.522
P-ISOPROPYLTOLUENE		20.0	807099	2.996
SEC-BUTYLBENZENE		20.0	969237	3.598
1,2,4-TRIMETHYLBENZENE		20.0	795220	2.952
TERT-BUTYLBENZENE		20.0	608937	2.261
A-METHYLSTYRENE		20.0	430660	1.599
4-CHLOROTOLUENE		20.0	661601	2.456
2-CHLOROTOLUENE		20.0	692407	2.571
1,3,5-TRIMETHYLBENZENE		20.0	756946	2.81
BROMOBENZENE		20.0	188801	.7009
N-PROPYLBENZENE		20.0	1095098	4.066
TRANS-1,4-DICHLORO-2-BUTENE		20.0	41579	.1544
1,2,3-TRICHLOROPROPANE		20.0	34202	.127
P-BROMOFLUOROBENZENE		10.0	135884	1.009
ISOPROPYLBENZENE		20.0	905495	1.656
STYRENE		20.0	573644	1.049
O-XYLENE		20.0	357238	.6532
M-,P-XYLENE		40.0	728630	.6661
1,1,1,2-TETRACHLOROETHANE		20.0	149813	.2739
1-CHLOROHEXANE		20.0	265770	.486
1,2-DIBROMOETHANE		20.0	106436	.1946
DIBROMOCHLOROMETHANE		20.0	118199	.2161
TETRACHLOROETHENE		20.0	141067	.2579
3-DICHLOROPROPANE		20.0	210224	.3844

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	Sample #	File #	Level
	WG138555-05	11M14396	4
Analyte	Conc	Response	RF
2-HEXANONE	20.0	65980	.1206
1,1,2-TRICHLOROETHANE	20.0	111425	.2037
TRANS-1,3-DICHLOROPROPENE	20.0	210836	.3855
ETHYL METHACRYLATE	20.0	138902	.254
TOLUENE-D8	10.0	340275	1.244
DIMETHYL DISULFIDE	20.0	135080	.1808
CIS-1,3-DICHLOROPROPENE	20.0	254028	.34
4-METHYL-2-PENTANONE	20.0	36946	.0494
2-CHLOROETHYL VINYL ETHER	20.0	74047	.0991
DIBROMOMETHANE	20.0	75129	.1006
BROMODICHLOROMETHANE	20.0	205119	.2745
TRICHLOROETHENE	20.0	174566	.2336
BENZENE	20.0	721785	.966
1,2-DICHLOROETHANE	20.0	224146	.3
1,2-DICHLOROETHANE-D4	10.0	86495	.2315
CARBON TETRACHLORIDE	20.0	209519	.2804
1,1-DICHLOROPROPENE	20.0	240335	.3217
CYCLOHEXANE	20.0	408043	.5461
1,1,1-TRICHLOROETHANE	20.0	259015	.3467
DIBROMOFLUOROMETHANE	10.0	80462	.2154
BROMOCHLOROMETHANE	20.0	72844	.0975
CIS-1,2-DICHLOROETHENE	20.0	185331	.248
2,2-DICHLOROPROPANE	20.0	260617	.3488
2-BUTANONE	20.0	40798	.0546
VINYL ACETATE	20.0	225160	.3014
N-HEXANE	20.0	313136	.4191
TRANS-1,2-DICHLOROETHENE	20.0	175531	.2349
METHYLTERT-BUTYL ETHER	20.0	323498	.433
ACRYLONITRILE	20.0	38751	.0519
CARBON DISULFIDE	20.0	547545	.7328
METHYLENE CHLORIDE	20.0	159013	.2128
IODOMETHANE	20.0	181835	.2434
DIMETHYL SULFIDE	20.0	215063	.2878
ACETONE	20.0	27980	.0374
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	20.0	155651	.2083
ACROLEIN	40.0	23928	.016
ISOPRENE	20.0	297291	.3979
TRICHLOROFLUOROMETHANE	20.0	279859	.3746
CHLOROETHANE	20.0	144255	.1931
BROMOMETHANE	20.0	113980	.1525
DICHLORODIFLUOROMETHANE	20.0	215750	.2888

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Analyte		Sample # WG138555-06 Conc	File # 11M14397 Response	Level 5 RF
ETHYLBENZENE	CCC	50.0	682669	.4883
TOLUENE	CCC	50.0	1916639	1.371
1,2-DICHLOROPROPANE	CCC	50.0	490510	.2583
CHLOROFORM	CCC	50.0	745542	.3926
1,1-DICHLOROETHENE	CCC	50.0	385117	.2028
VINYL CHLORIDE	CCC	50.0	229098	.1207
1,1,2,2-TETRACHLOROETHANE	SPCC	50.0	307613	.4375
BROMOFORM	SPCC	50.0	161598	.1156
CHLOROBENZENE	SPCC	50.0	1210682	.8659
1,1-DICHLOROETHANE	SPCC	50.0	908928	.4787
CHLOROMETHANE	SPCC	50.0	341322	.1798
1,2,3-TRICHLOROBENZENE		50.0	468470	.6662
NAPHTHALENE		50.0	1102280	1.568
HEXACHLOROBUTADIENE		50.0	210895	.2999
1,2,4-TRICHLOROBENZENE		50.0	576507	.8199
1,2-DIBROMO-3-CHLOROPROPANE		50.0	50688	.0721
1,2-DICHLOROBENZENE		50.0	890511	1.266
N-BUTYLBENZENE		50.0	1851714	2.633
4-DICHLOROBENZENE		50.0	1021682	1.453
,3-DICHLOROBENZENE		50.0	1018141	1.448
P-ISOPROPYLTOLUENE		50.0	2010174	2.859
SEC-BUTYLBENZENE		50.0	2391293	3.401
1,2,4-TRIMETHYLBENZENE		50.0	1960224	2.788
TERT-BUTYLBENZENE		50.0	1827204	2.599
A-METHYLSTYRENE		50.0	1084954	1.543
4-CHLOROTOLUENE		50.0	1631580	2.32
2-CHLOROTOLUENE		50.0	1698494	2.416
1,3,5-TRIMETHYLBENZENE		50.0	1870468	2.66
BROMOBENZENE		50.0	465225	.6616
N-PROPYLBENZENE		50.0	2721632	3.871
TRANS-1,4-DICHLORO-2-BUTENE		50.0	111948	.1592
1,2,3-TRICHLOROPROPANE		50.0	89998	.128
P-BROMOFLUOROBENZENE		25.0	336773	.9579
ISOPROPYLBENZENE		50.0	2224118	1.591
STYRENE		50.0	1422996	1.018
O-XYLENE		50.0	868078	.6209
M-,P-XYLENE		100.0	1727635	.6178
1,1,1,2-TETRACHLOROETHANE		50.0	367282	.2627
1-CHLOROHEXANE		50.0	662135	.4736
1,2-DIBROMOETHANE		50.0	273851	.1959
DIBROMOCHLOROMETHANE		50.0	327104	.234
TETRACHLOROETHENE		50.0	342124	.2447
-DICHLOROPROPANE		50.0	534183	.3821

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Instrument ID: HPMS11

Analyst: CMS
Initial Calibration Date: 17-APR-03

	Sample #	File #	Level
	WG138555-06	11M14397	5
Analyte	Conc	Response	RF
2-HEXANONE	50.0	177930	.1273
1,1,2-TRICHLOROETHANE	50.0	284045	.2032
TRANS-1,3-DICHLOROPROPENE	50.0	550682	.3939
ETHYL METHACRYLATE	50.0	369357	.2642
TOLUENE-D8	25.0	830184	1.188
DIMETHYL DISULFIDE	50.0	367236	.1934
CIS-1,3-DICHLOROPROPENE	50.0	657699	.3464
4-METHYL-2-PENTANONE	50.0	100396	.0529
2-CHLOROETHYL VINYL ETHER	50.0	200430	.1056
DIBROMOMETHANE	50.0	193059	.1017
BROMODICHLOROMETHANE	50.0	530369	.2793
TRICHLOROETHENE	50.0	427688	.2252
BENZENE	50.0	1785659	.9404
1,2-DICHLOROETHANE	50.0	566649	.2984
1,2-DICHLOROETHANE-D4	25.0	219815	.2315
CARBON TETRACHLORIDE	50.0	551346	.2904
1,1-DICHLOROPROPENE	50.0	606699	.3195
CYCLOHEXANE	50.0	1033176	.5441
1,1,1-TRICHLOROETHANE	50.0	660735	.348
DIBROMOFLUOROMETHANE	25.0	202415	.2132
BROMOCHLOROMETHANE	50.0	182112	.0959
CIS-1,2-DICHLOROETHENE	50.0	465700	.2453
2,2-DICHLOROPROPANE	50.0	655054	.345
2-BUTANONE	50.0	106894	.0563
VINYL ACETATE	50.0	648218	.3414
N-HEXANE	50.0	785476	.4137
TRANS-1,2-DICHLOROETHENE	50.0	438995	.2312
METHYLTERT-BUTYL ETHER	50.0	854274	.4499
ACRYLONITRILE	50.0	110225	.0581
CARBON DISULFIDE	50.0	1382018	.7279
METHYLENE CHLORIDE	50.0	398458	.2099
IODOMETHANE	50.0	460751	.2427
DIMETHYL SULFIDE	50.0	546624	.2879
ACETONE	50.0	75251	.0396
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	50.0	400487	.2109
ACROLEIN	100.0	64136	.0169
ISOPRENE	50.0	758814	.3996
TRICHLOROFLUOROMETHANE	50.0	710538	.3742
CHLOROETHANE	50.0	365591	.1925
BROMOMETHANE	50.0	316237	.1665
DICHLORODIFLUOROMETHANE	50.0	539977	.2844

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Analyte		Sample # WG138555-07 Conc	File # 11M14398 Response	Level 6 RF
ETHYLBENZENE	CCC	100.0	1192935	.4209
TOLUENE	CCC	100.0	3638669	1.284
1,2-DICHLOROPROPANE	CCC	100.0	936167	.2495
CHLOROFORM	CCC	100.0	1432947	.3819
1,1-DICHLOROETHENE	CCC	100.0	738699	.1969
VINYL CHLORIDE	CCC	100.0	425698	.1135
1,1,2,2-TETRACHLOROETHANE	SPCC	100.0	609231	.4248
BROMOFORM	SPCC	100.0	336685	.1188
CHLOROBENZENE	SPCC	100.0	2138672	.7546
1,1-DICHLOROETHANE	SPCC	100.0	1751757	.4669
CHLOROMETHANE	SPCC	100.0	622221	.1658
1,2,3-TRICHLOROBENZENE		100.0	895357	.6243
NAPHTHALENE		100.0	2143357	1.495
HEXACHLOROBUTADIENE		100.0	421207	.2937
1,2,4-TRICHLOROBENZENE		100.0	1096417	.7645
1,2-DIBROMO-3-CHLOROPROPANE		100.0	104444	.0728
1,2-DICHLOROBENZENE		100.0	1705190	1.189
N-BUTYLBENZENE		100.0	3618761	2.523
-DICHLOROBENZENE		100.0	1945950	1.357
1,3-DICHLOROBENZENE		100.0	1949377	1.359
P-ISOPROPYLTOLUENE		100.0	3857358	2.69
SEC-BUTYLBENZENE		100.0	4637278	3.234
1,2,4-TRIMETHYLBENZENE		100.0	3751037	2.616
TERT-BUTYLBENZENE		100.0	3495291	2.437
A-METHYLSTYRENE		100.0	2073158	1.446
4-CHLOROTOLUENE		100.0	3156088	2.201
2-CHLOROTOLUENE		100.0	3230883	2.253
1,3,5-TRIMETHYLBENZENE		100.0	3551754	2.477
BROMOBENZENE		100.0	872519	.6084
N-PROPYLBENZENE		100.0	5219627	3.64
TRANS-1,4-DICHLORO-2-BUTENE		100.0	227826	.1589
1,2,3-TRICHLOROPROPANE		100.0	178793	.1247
P-BROMOFLUOROBENZENE		50.0	662535	.924
ISOPROPYLBENZENE		100.0	4242257	1.497
STYRENE		100.0	2643085	.9326
O-XYLENE		100.0	1614168	.5695
M-,P-XYLENE		200.0	3076565	.5428
1,1,1,2-TETRACHLOROETHANE		100.0	671700	.237
1-CHLOROHEXANE		100.0	1279398	.4514
1,2-DIBROMOETHANE		100.0	528608	.1865
DIBROMOCHLOROMETHANE		100.0	654789	.231
TETRACHLOROETHENE		100.0	653980	.2307
-DICHLOROPROPANE		100.0	1028927	.363

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Analyte	Sample # WG138555-07 Conc	File # 11M14398 Response	Level 6 RF
2-HEXANONE	100.0	349310	.1232
1,1,2-TRICHLOROETHANE	100.0	548514	.1935
TRANS-1,3-DICHLOROPROPENE	100.0	1079255	.3808
ETHYL METHACRYLATE	100.0	716295	.2527
TOLUENE-D8	50.0	1604458	1.132
DIMETHYL DISULFIDE	100.0	726265	.1936
CIS-1,3-DICHLOROPROPENE	100.0	1285351	.3426
4-METHYL-2-PENTANONE	100.0	196894	.0525
2-CHLOROETHYL VINYL ETHER	100.0	385203	.1027
DIBROMOMETHANE	100.0	368442	.0982
BROMODICHLOROMETHANE	100.0	1038611	.2768
TRICHLOROETHENE	100.0	813830	.2169
BENZENE	100.0	3393683	.9045
1,2-DICHLOROETHANE	100.0	1086981	.2897
1,2-DICHLOROETHANE-D4	50.0	412066	.2196
CARBON TETRACHLORIDE	100.0	1091721	.291
1,1-DICHLOROPROPENE	100.0	1163911	.3102
CYCLOHEXANE	100.0	1980544	.5278
1,1,1-TRICHLOROETHANE	100.0	1275927	.3401
DIBROMOFLUOROMETHANE	50.0	394864	.2105
BROMOCHLOROMETHANE	100.0	346518	.0924
CIS-1,2-DICHLOROETHENE	100.0	878299	.2341
2,2-DICHLOROPROPANE	100.0	1319943	.3518
2-BUTANONE	100.0	211570	.0564
VINYL ACETATE	100.0	1345164	.3585
N-HEXANE	100.0	1545441	.4119
TRANS-1,2-DICHLOROETHENE	100.0	835987	.2228
METHYLTERT-BUTYL ETHER	100.0	1639898	.4371
ACRYLONITRILE	100.0	214708	.0572
CARBON DISULFIDE	100.0	2632815	.7017
METHYLENE CHLORIDE	100.0	767054	.2044
IODOMETHANE	100.0	779548	.2078
DIMETHYL SULFIDE	100.0	1040036	.2772
ACETONE	100.0	140187	.0374
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	100.0	782222	.2085
ACROLEIN	200.0	127478	.017
ISOPRENE	100.0	1455008	.3878
TRICHLOROFLUOROMETHANE	100.0	1413778	.3768
CHLOROETHANE	100.0	725419	.1933
BROMOMETHANE	100.0	627205	.1672
DICHLORODIFLUOROMETHANE	100.0	1059728	.2824

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Analyte		Sample # WG138555-08 Conc	File # 11M14402 Response	Level 7 RF
ETHYLBENZENE	CCC	150.0	1667196	.3985
TOLUENE	CCC	150.0	5351499	1.279
1,2-DICHLOROPROPANE	CCC	150.0	1382929	.2429
CHLOROFORM	CCC	150.0	2152315	.3781
1,1-DICHLOROETHENE	CCC	150.0	1132864	.199
VINYL CHLORIDE	CCC	150.0	633994	.1114
1,1,2,2-TETRACHLOROETHANE	SPCC	150.0	863417	.4073
BROMOFORM	SPCC	150.0	492296	.1177
CHLOROBENZENE	SPCC	150.0	2941043	.7031
1,1-DICHLOROETHANE	SPCC	150.0	2641047	.4639
CHLOROMETHANE	SPCC	150.0	935805	.1644
1,2,3-TRICHLOROBENZENE		150.0	1263982	.5963
NAPHTHALENE		150.0	3028151	1.429
HEXACHLOROBUTADIENE		150.0	642897	.3033
1,2,4-TRICHLOROBENZENE		150.0	1565054	.7383
1,2-DIBROMO-3-CHLOROPROPANE		150.0	153492	.0724
1,2-DICHLOROBENZENE		150.0	2451712	1.157
N-BUTYLBENZENE		150.0	5340516	2.519
4-DICHLOROBENZENE		150.0	2776960	1.31
,3-DICHLOROBENZENE		150.0	2815825	1.328
P-ISOPROPYLTOLUENE		150.0	5668884	2.674
SEC-BUTYLBENZENE		150.0	6847311	3.23
1,2,4-TRIMETHYLBENZENE		150.0	5430563	2.562
TERT-BUTYLBENZENE		150.0	5078310	2.396
A-METHYLSTYRENE		150.0	2929190	1.382
4-CHLOROTOLUENE		150.0	4023799	1.898
2-CHLOROTOLUENE		150.0	4653365	2.195
1,3,5-TRIMETHYLBENZENE		150.0	5124536	2.418
BROMOBENZENE		150.0	1234172	.5822
N-PROPYLBENZENE		150.0	7688828	3.627
TRANS-1,4-DICHLORO-2-BUTENE		150.0	314690	.1485
1,2,3-TRICHLOROPROPANE		150.0	251340	.1186
P-BROMOFLUOROBENZENE		75.0	963434	.909
ISOPROPYLBENZENE		150.0	6204361	1.483
STYRENE		150.0	3747782	.8959
O-XYLENE		150.0	2283038	.5458
M-,P-XYLENE		300.0	4268000	.5101
1,1,1,2-TETRACHLOROETHANE		150.0	926153	.2214
1-CHLOROHEXANE		150.0	1870128	.4471
1,2-DIBROMOETHANE		150.0	775799	.1855
DIBROMOCHLOROMETHANE		150.0	969591	.2318
TETRACHLOROETHENE		150.0	963239	.2303
-DICHLOROPROPANE		150.0	1480275	.3539

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Analyte	Sample # WG138555-08 Conc	File # 11M14402 Response	Level 7 RF
2-HEXANONE	150.0	486026	.1162
1,1,2-TRICHLOROETHANE	150.0	787700	.1883
TRANS-1,3-DICHLOROPROPENE	150.0	1576445	.3769
ETHYL METHACRYLATE	150.0	991307	.237
TOLUENE-D8	75.0	2386724	1.141
DIMETHYL DISULFIDE	150.0	1043597	.1833
CIS-1,3-DICHLOROPROPENE	150.0	1895627	.333
4-METHYL-2-PENTANONE	150.0	274970	.0483
2-CHLOROETHYL VINYL ETHER	150.0	557585	.0979
DIBROMOMETHANE	150.0	531158	.0933
BROMODICHLOROMETHANE	150.0	1540792	.2707
TRICHLOROETHENE	150.0	1211453	.2128
BENZENE	150.0	5028614	.8834
1,2-DICHLOROETHANE	150.0	1575800	.2768
1,2-DICHLOROETHANE-D4	75.0	580279	.2039
CARBON TETRACHLORIDE	150.0	1663658	.2922
1,1-DICHLOROPROPENE	150.0	1752080	.3078
CYCLOHEXANE	150.0	2932809	.5152
1,1,1-TRICHLOROETHANE	150.0	1935701	.34
DIBROMOFLUOROMETHANE	75.0	587287	.2063
BROMOCHLOROMETHANE	150.0	505843	.0889
CIS-1,2-DICHLOROETHENE	150.0	1306774	.2296
2,2-DICHLOROPROPANE	150.0	2015447	.354
2-BUTANONE	150.0	296861	.0521
VINYL ACETATE	150.0	1942803	.3413
N-HEXANE	150.0	2319753	.4075
TRANS-1,2-DICHLOROETHENE	150.0	1250197	.2196
METHYLTERT-BUTYL ETHER	150.0	2323493	.4082
ACRYLONITRILE	150.0	306056	.0538
CARBON DISULFIDE	150.0	3942811	.6926
METHYLENE CHLORIDE	150.0	1165435	.2047
IODOMETHANE	150.0	1206101	.2119
DIMETHYL SULFIDE	150.0	1531878	.2691
ACETONE	150.0	197601	.0347
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	150.0	1191250	.2093
ACROLEIN	300.0	181994	.016
ISOPRENE	150.0	2151806	.378
TRICHLOROFLUOROMETHANE	150.0	2168043	.3809
CHLOROETHANE	150.0	1085194	.1906
BROMOMETHANE	150.0	940067	.1651
DICHLORODIFLUOROMETHANE	150.0	1584904	.2784

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Analyte		Sample # WG138555-09 Conc	File # 11M14399 Response	Level 8 RF
ETHYLBENZENE	CCC	200.0	1962335	.3586
TOLUENE	CCC	200.0	6574115	1.202
1,2-DICHLOROPROPANE	CCC	200.0	1754220	.2362
CHLOROFORM	CCC	200.0	2720639	.3664
1,1-DICHLOROETHENE	CCC	200.0	1403463	.189
VINYL CHLORIDE	CCC	200.0	688840	.0928
1,1,2,2-TETRACHLOROETHANE	SPCC	200.0	1139974	.3952
BROMOFORM	SPCC	200.0	656308	.1199
CHLOROBENZENE	SPCC	200.0	3521483	.6436
1,1-DICHLOROETHANE	SPCC	200.0	3360588	.4526
CHLOROMETHANE	SPCC	200.0	1299938	.1751
1,2,3-TRICHLOROBENZENE		200.0	1596367	.5535
NAPHTHALENE		200.0	3892769	1.35
HEXACHLOROBUTADIENE		200.0	802948	.2784
1,2,4-TRICHLOROBENZENE		200.0	1957522	.6787
1,2-DIBROMO-3-CHLOROPROPANE		200.0	203505	.0706
1,2-DICHLOROBENZENE		200.0	3121141	1.082
N-BUTYLBENZENE		200.0	6696771	2.322
4-DICHLOROBENZENE		200.0	3495639	1.212
1,3-DICHLOROBENZENE		200.0	3552421	1.232
P-ISOPROPYLTOLUENE		200.0	7127606	2.471
SEC-BUTYLBENZENE		200.0	8558448	2.967
1,2,4-TRIMETHYLBENZENE		200.0	6821731	2.365
TERT-BUTYLBENZENE		200.0	6340819	2.199
A-METHYLSTYRENE		200.0	3746560	1.299
4-CHLOROTOLUENE		200.0	5176874	1.795
2-CHLOROTOLUENE		200.0	5751400	1.994
1,3,5-TRIMETHYLBENZENE		200.0	6351947	2.202
BROMOBENZENE		200.0	1520935	.5273
N-PROPYLBENZENE		200.0	9573686	3.319
TRANS-1,4-DICHLORO-2-BUTENE		200.0	434710	.1507
1,2,3-TRICHLOROPROPANE		200.0	326457	.1132
P-BROMOFLUOROBENZENE		100.0	1255915	.8709
ISOPROPYLBENZENE		200.0	7666466	1.401
STYRENE		200.0	4622646	.8448
O-XYLENE		200.0	2789379	.5098
M-,P-XYLENE		400.0	5114345	.4673
1,1,1,2-TETRACHLOROETHANE		200.0	1114628	.2037
1-CHLOROHEXANE		200.0	2330600	.4259
1,2-DIBROMOETHANE		200.0	995165	.1819
DIBROMOCHLOROMETHANE		200.0	1245815	.2277
TETRACHLOROETHENE		200.0	1182938	.2162
3-DICHLOROPROPANE		200.0	1895899	.3465

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Analyte	Sample # WG138555-09 Conc	File # 11M14399 Response	Level 8 RF
2-HEXANONE	200.0	642350	.1174
1,1,2-TRICHLOROETHANE	200.0	1006343	.1839
TRANS-1,3-DICHLOROPROPENE	200.0	2010358	.3674
ETHYL METHACRYLATE	200.0	1294200	.2365
TOLUENE-D8	100.0	3024588	1.106
DIMETHYL DISULFIDE	200.0	1361460	.1833
CIS-1,3-DICHLOROPROPENE	200.0	2399833	.3232
4-METHYL-2-PENTANONE	200.0	357376	.0481
2-CHLOROETHYL VINYL ETHER	200.0	724853	.0976
DIBROMOMETHANE	200.0	681059	.0917
BROMODICHLOROMETHANE	200.0	1972101	.2656
TRICHLOROETHENE	200.0	1515589	.2041
BENZENE	200.0	6303532	.8489
1,2-DICHLOROETHANE	200.0	2015609	.2714
1,2-DICHLOROETHANE-D4	100.0	751634	.2024
CARBON TETRACHLORIDE	200.0	2083427	.2806
1,1-DICHLOROPROPENE	200.0	2186577	.2945
CYCLOHEXANE	200.0	3686117	.4964
1,1,1-TRICHLOROETHANE	200.0	2444149	.3291
DIBROMOFLUOROMETHANE	100.0	762876	.2055
BROMOCHLOROMETHANE	200.0	647386	.0872
CIS-1,2-DICHLOROETHENE	200.0	1640942	.221
2,2-DICHLOROPROPANE	200.0	2540029	.3421
2-BUTANONE	200.0	392203	.0528
VINYL ACETATE	200.0	2541507	.3423
N-HEXANE	200.0	2919720	.3932
TRANS-1,2-DICHLOROETHENE	200.0	1581406	.213
METHYLTERT-BUTYL ETHER	200.0	3109866	.4188
ACRYLONITRILE	200.0	406071	.0547
CARBON DISULFIDE	200.0	5038666	.6785
METHYLENE CHLORIDE	200.0	1448331	.195
IODOMETHANE	200.0	1682072	.2265
DIMETHYL SULFIDE	200.0	1998789	.2692
ACETONE	200.0	255474	.0344
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	200.0	1505338	.2027
ACROLEIN	400.0	241206	.0162
ISOPRENE	200.0	2757322	.3713
TRICHLOROFLUOROMETHANE	200.0	2694559	.3629
CHLOROETHANE	200.0	1422217	.1915
BROMOMETHANE	200.0	1238019	.1667
DICHLORODIFLUOROMETHANE	200.0	2020230	.2721

ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L0304594
File ID: 11M14410
ALT ID: WG138555-10
Units: ug/L

Instrument ID: HPMS11
Run Date: 04/21/2003
Run Time: 08:40
Analyst: CMS
Cal ID:HPMS11 - 17-APR-03

Analyte		Expected	Found	RF	%D	Q
Ethylbenzene	CCC	20	23.6	0.526	18.0	
Toluene	CCC	20	21.9	1.39	9.5	
1,2-Dichloropropane	CCC	20	20.9	0.256	4.5	
Chloroform	CCC	20	21.9	0.400	9.5	
1,1-Dichloroethene	CCC	20	22.0	0.208	10.0	
Vinyl Chloride	CCC	20	21.2	0.121	6.0	
1,1,2,2-Tetrachloroethane	SPCC	20	20.6	0.424	3.0	
Bromoform	SPCC	20	19.9	0.103	0.5	
Chlorobenzene	SPCC	20	22.3	0.915	11.5	
1,1-Dichloroethane	SPCC	20	21.7	0.479	8.5	
Chloromethane	SPCC	20	17.0	0.152	15.0	
1,2,3-Trichlorobenzene		20	21.5	0.682	7.5	
Naphthalene		20	21.1	1.56	5.5	
Hexachlorobutadiene		20	21.3	0.307	6.5	
1,2,4-Trichlorobenzene		20	22.1	0.852	10.5	
1,2-Dibromo-3-Chloropropane		20	19.8	0.0675	1.0	
1,2-Dichlorobenzene		20	21.3	1.28	6.5	
n-Butylbenzene		20	21.7	2.67	8.5	
1,4-Dichlorobenzene		20	21.0	1.44	5.0	
1,3-Dichlorobenzene		20	21.2	1.44	6.0	
p-Isopropyltoluene		20	21.3	2.82	6.5	
sec-Butylbenzene		20	21.7	3.44	8.5	
1,2,4-Trimethylbenzene		20	21.9	2.77	9.5	
tert-Butylbenzene		20	21.3	2.38	6.5	
a-Methylstyrene		20		0.000400		
4-Chlorotoluene		20	23.1	2.42	15.5	
2-Chlorotoluene		20	21.2	2.33	6.0	
1,3,5-Trimethylbenzene		20	22.5	2.69	12.5	
Bromobenzene		20	22.2	0.677	11.0	
n-Propylbenzene		20	22.5	3.89	12.5	
trans-1,4-Dichloro-2-Butene		20		0		
1,2,3-Trichloropropane		20	21.6	0.129	8.0	
Isopropylbenzene		20	21.8	1.57	9.0	
Styrene		20	23.5	1.07	17.5	
o-Xylene		20	22.9	0.643	14.5	
m-,p-Xylene		40	46.3	0.647	15.8	
1,1,1,2-Tetrachloroethane		20	24.1	0.281	20.5	
1-Chlorohexane		20	22.1	0.487	10.5	
1,2-Dibromoethane		20	21.4	0.193	7.0	
Dibromochloromethane		20	21.9	0.222	9.5	
Tetrachloroethene		20	22.9	0.250	14.5	
1,3-Dichloropropane		20	20.8	0.376	4.0	
2-Hexanone		20	19.6	0.118	2.0	
1,1,2-Trichloroethane		20	21.2	0.201	6.0	

KEMRON FORMS - Modified 12/05/2002
Version 1.2
Report generated 05/07/2003 13:08

ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L0304594
File ID: 11M14410
ALT ID: WG138555-10
Units: ug/L

Instrument ID: HPMS11
Run Date: 04/21/2003
Run Time: 08:40
Analyst: CMS
Cal ID:HPMS11 17-APR-03

Analyte	Expected	Found	RF	%D	Q
trans-1,3-Dichloropropene	20	22.5	0.400	12.5	
Ethyl Methacrylate	20		0		
Dimethyl Disulfide	20		0		
cis-1,3-Dichloropropene	20	22.9	0.362	14.5	
4-Methyl-2-Pentanone	20	21.2	0.0531	6.0	
2-Chloroethyl Vinyl Ether	20	21.8	0.106	9.0	
Dibromomethane	20	22.0	0.104	10.0	
Bromodichloromethane	20	21.8	0.278	9.0	
Trichloroethene	20	24.3	0.250	21.5	
Benzene	20	21.8	0.964	9.0	
1,2-Dichloroethane	20	21.0	0.295	5.0	
Carbon Tetrachloride	20	22.2	0.292	11.0	
1,1-Dichloropropene	20	22.5	0.331	12.5	
Cyclohexane	20		0.000500		
1,1,1-Trichloroethane	20	23.5	0.359	17.5	
Bromochloromethane	20	22.1	0.0981	10.5	
cis-1,2-Dichloroethene	20	22.0	0.249	10.0	
2,2-Dichloropropane	20	22.4	0.371	12.0	
2-Butanone	20	18.8	0.0513	6.0	
Vinyl Acetate	20	18.9	0.311	5.5	
n-Hexane	20	21.6	0.425	8.0	
trans-1,2-Dichloroethene	20	23.1	0.242	15.5	
Methyl Tert Butyl Ether	20	20.8	0.450	4.0	
Acrylonitrile	20		0		
Carbon Disulfide	20	15.8	0.540	21.0	
Methylene Chloride	20	21.4	0.215	7.0	
Iodomethane	20	21.0	0.237	5.0	
Dimethyl Sulfide	20		0		
Acetone	20	16.9	0.0314	15.5	
1,1,2-Trichloro-1,2,2-Trifluoroethane	20		0		
Acrolein	40		0		
Isoprene	20		0		
Trichlorofluoromethane	20	18.1	0.320	9.5	
Chloroethane	20	19.5	0.183	2.5	
Bromomethane	20	19.8	0.152	1.0	
Dichlorodifluoromethane	20	18.1	0.244	9.5	

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

KEMRON FORMS - Modified 12/05/2002
Version 1.2
Report generated 05/07/2003 13:08

CONTINUING CALIBRATION REPORT

Login Number: L0304594
File ID: 11M14654
CCV ID: WG139441-02
Units: ug/L

Instrument ID: HPMS11
Run Date: 04/30/2003
Run Time: 18:01
Analyst: CMS
Cal ID: HPMS11 - 17-APR-03

Analyte		Expected	Found	RF	%D	Q
Ethylbenzene	CCC	50	53.9	0.480	7.8	
Toluene	CCC	50	53.1	1.35	6.2	
1,2-Dichloropropane	CCC	50	52.3	0.256	4.6	
Chloroform	CCC	50	56.2	0.410	12.4	
1,1-Dichloroethene	CCC	50	54.5	0.207	9.0	
Vinyl Chloride	CCC	50	55.4	0.126	10.8	
1,1,2,2-Tetrachloroethane	SPCC	50	50.8	0.418	1.6	
Bromoform	SPCC	50	53.0	0.110	6.0	
Chlorobenzene	SPCC	50	51.9	0.851	3.8	
1,1-Dichloroethane	SPCC	50	55.5	0.491	11.0	
Chloromethane	SPCC	50	59.2	0.212	18.4	
1,2,3-Trichlorobenzene		50	49.0	0.620	2.0	
Naphthalene		50	49.7	1.47	0.6	
Hexachlorobutadiene		50	44.2	0.255	11.6	
1,2,4-Trichlorobenzene		50	48.8	0.753	2.4	
1,2-Dibromo-3-Chloropropane		50	47.5	0.0648	5.0	
1,2-Dichlorobenzene		50	50.5	1.22	1.0	
n-Butylbenzene		50	49.1	2.42	1.8	
1,4-Dichlorobenzene		50	51.2	1.40	2.4	
1,3-Dichlorobenzene		50	51.3	1.40	2.6	
p-Isopropyltoluene		50	50.7	2.69	1.4	
sec-Butylbenzene		50	50.0	3.17	0.0	
1,2,4-Trimethylbenzene		50	53.8	2.72	7.6	
tert-Butylbenzene		50	55.6	2.48	11.2	
a-Methylstyrene		50	50.9	1.48	1.8	
4-Chlorotoluene		50	55.3	2.32	10.6	
2-Chlorotoluene		50	53.7	2.37	7.4	
1,3,5-Trimethylbenzene		50	54.1	2.58	8.2	
Bromobenzene		50	52.9	0.646	5.8	
n-Propylbenzene		50	54.0	3.73	8.0	
trans-1,4-Dichloro-2-Butene		50	52.6	0.160	5.2	
1,2,3-Trichloropropane		50	52.6	0.126	5.2	
Isopropylbenzene		50	54.3	1.56	8.6	
Styrene		50	53.8	0.974	7.6	
o-Xylene		50	53.7	0.604	7.4	
m-,p-Xylene		100	108	0.606	8.0	
1,1,1,2-Tetrachloroethane		50	57.0	0.265	14.0	
1-Chlorohexane		50	51.4	0.453	2.8	
1,2-Dibromoethane		50	52.3	0.189	4.6	
Dibromochloromethane		50	56.7	0.230	13.4	
Tetrachloroethene		50	55.3	0.242	10.6	
1,3-Dichloropropane		50	50.7	0.367	1.4	

KENRON FORMS - Modified 12/05/2002
Version 1.2
Report generated 05/07/2003 13:08

CONTINUING CALIBRATION REPORT

Login Number: L0304594
File ID: 11M14654
CCV ID: WG139441-02
Units: ug/L

Instrument ID: HPMS11
Run Date: 04/30/2003
Run Time: 18:01
Analyst: CMS
Cal ID:HPMS11 17-APR-03

Analyte	Expected	Found	RF	%D	Q
2-Hexanone	50	49.7	0.120	0.6	
1,1,2-Trichloroethane	50	51.3	0.194	2.6	
trans-1,3-Dichloropropene	50	54.8	0.390	9.6	
Ethyl Methacrylate	50	49.2	0.244	1.6	
Dimethyl Disulfide	50	50.5	0.183	1.0	
cis-1,3-Dichloropropene	50	54.2	0.343	8.4	
4-Methyl-2-Pentanone	50	48.0	0.0482	4.0	
2-Chloroethyl Vinyl Ether	50	51.1	0.0995	2.2	
Dibromomethane	50	54.2	0.102	8.4	
Bromodichloromethane	50	56.0	0.286	12.0	
Trichloroethene	50	54.5	0.224	9.0	
Benzene	50	53.3	0.942	6.6	
1,2-Dichloroethane	50	56.1	0.315	12.2	
Carbon Tetrachloride	50	59.6	0.314	19.2	
1,1-Dichloropropene	50	55.8	0.329	11.6	
Cyclohexane	50	51.0	0.535	2.0	
1,1,1-Trichloroethane	50	60.8	0.371	21.6	
Bromochloromethane	50	53.5	0.0949	7.0	
cis-1,2-Dichloroethene	50	54.0	0.244	8.0	
2,2-Dichloropropane	50	56.2	0.372	12.4	
2-Butanone	50	49.5	0.0539	1.0	
Vinyl Acetate	50	52.4	0.346	4.8	
n-Hexane	50	49.7	0.392	0.6	
trans-1,2-Dichloroethene	50	55.7	0.234	11.4	
Methyl Tert Butyl Ether	50	49.0	0.423	2.0	
Acrylonitrile	50	52.2	0.0575	4.4	
Carbon Disulfide	50	53.2	0.728	6.4	
Methylene Chloride	50	52.2	0.210	4.4	
Iodomethane	50	54.4	0.246	8.8	
Dimethyl Sulfide	50	49.8	0.278	0.4	
Acetone	50	52.5	0.0391	5.0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	51.0	0.213	2.0	
Acrolein	100	107	0.0173	7.0	
Isoprene	50	51.7	0.396	3.4	
Trichlorofluoromethane	50	57.7	0.408	15.4	
Chloroethane	50	51.8	0.194	3.6	
Bromomethane	50	49.1	0.150	1.8	
Dichlorodifluoromethane	50	56.8	0.306	13.6	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

KEMRON FORMS - Modified 12/05/2002
Version 1.2
Report generated 05/07/2003 13:08

KEMRON ENVIRONMENTAL SERVICES
INTERNAL STANDARD RETENTION TIME SUMMARY

Login Number: L0304594
Instrument ID: HPMS11
Workgroup (AAB#): WG139442

CCV Number: WG139441-02
CAL ID: HPMS11-17-APR-03
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG139441-02	NA	NA	17.79	14.97	11.33
Upper Limit	NA	NA	17.89	15.07	11.43
Lower Limit	NA	NA	17.69	14.87	11.23
L0304594-03	10.0		17.79	14.97	11.33

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

Underline = Response outside limits

KEMRON FORMS - Modified 11/19/2002
Version 1.2
Report generated 05/07/2003 13:09

KEMRON ENVIRONMENTAL SERVICES
INTERNAL STANDARD AREA SUMMARY

Login Number: L0304594
Instrument ID: HPMS11
Workgroup (AAB#): WG139442

CCV Number: WG139441-02
CAL ID: HPMS11-17-APR-03
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG139441-02	NA	NA	349058	696661	933013
Upper Limit	NA	NA	698116	1393322	1866026
Lower Limit	NA	NA	174529	348331	466507
L0304594-03	10.0		337567	685896	941397

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

Underline = Response outside limits

KEMRON FORMS - Modified 12/13/2002
Version 1.2
Report generated 05/07/2003 13:09

Directory: C:\MSDCHEM\1\DATA\041703

IS: SV10842
SS: SV10843

Analyst: CMS

	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
	1	11M14388.D	1.	✓WG138555-01 BFB 50NG STD 8260	1,1 SV10835	17 Apr 2003 06:32
	2	11M14389.D	1.	DNR WG138555 0.30 PPB STD 8260	1,1 SV10829	17 Apr 2003 07:07
	3	11M14390.D	1.	✓WG138555-02 0.40 PPB STD 8260	1,1 SV10829	17 Apr 2003 07:38
	4	11M14391.D	1.	✓WG138555-03 1 PPB STD 8260	1,1 SV10829	17 Apr 2003 08:09
	5	11M14392.D	1.	DNR WG138555 2 PPB STD 8260	1,1 SV10829	17 Apr 2003 08:41
	6	11M14393.D	1.	⊥ WG138555 5 PPB STD 8260	1,1 SV10829	17 Apr 2003 09:11
	7	11M14394.D	1.	DNR WG138555 2 PPB STD 8260	1,1 SV10829	17 Apr 2003 09:43
	8	11M14395.D	1.	✓WG138555-04 5 PPB STD 8260	1,1 SV10829	17 Apr 2003 10:13
	9	11M14396.D	1.	✓WG138555-05 20 PPB STD 8260	1,1 SV10829	17 Apr 2003 10:43
0	10	11M14397.D	1.	✓WG138555-06 50 PPB STD 8260	1,1 SV10829	17 Apr 2003 11:14
1	11	11M14398.D	1.	✓WG138555-07 100 PPB STD 8260	1,1 SV10829	17 Apr 2003 11:44
2	12	11M14399.D	1.	✓WG138555-09 200 PPB STD 8260	1,1 SV10829	17 Apr 2003 12:15
3	13	11M14400.D	1.	✓SYSTEM BLANK	1,1	17 Apr 2003 12:46
4	14	11M14401.D	1.	✓SYSTEM BLANK	1,1	17 Apr 2003 13:16
5	15	11M14402.D	1.	✓WG138555-08 150 PPB STD 8260	1,1 SV10829	17 Apr 2003 14:20
6	16	11M14403.D	1.	✓SYSTEM BLANK	1,1	17 Apr 2003 14:50
7	17	11M14404.D	1.	✓SYSTEM BLANK	1,1	17 Apr 2003 15:20
8	18	11M14405.D	1.	RR WG138555-12 20 PPB ALT SOURCE STD 8260	1,1 SV10847	17 Apr 2003 15:51

WG138555

reanalyze alternate source (TCE4)

Directory: C:\MSDCHEM\1\DATA\042103

Analyst: CMS

IS: SV10842
SS: SV10843

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	11M14406.D	1.	✓WG138731-01 BFB 50NG STD 8260	1,1 SV10835	21 Apr 2003 06:19
2	2	11M14407.D	1.	✓WG138731-02 50 PPB STD 8260	1,1 SV10829	21 Apr 2003 06:52
3	3	11M14408.D	1.	✓WG138732-01 VBLK0421 BLANK 8260	1,1	21 Apr 2003 07:38
4	4	11M14409.D	1.	✓WG138732-01 VBLK0421 BLANK 8260	1,1	21 Apr 2003 08:09
5	5	11M14410.D	1.	✓WG138555-10 20PPB ALT SOURCE STD 8260	1,1 SV10847	21 Apr 2003 08:40
6		11M14411.D	1.			

WG138555

No reanalyses /R-flags

Directory: C:\MSDCHEM\1\DATA\043003

Analyst: CMS

IS: SV10842
SS: SV10843

Pg 1 of 2

	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	11M14630.D	1.	✓WG139364-01 BFB 50NG STD 8260	1,1 SV10835	30 Apr 2003 04:43
2	2	11M14631.D	1.	✓WG139364-02 50 PPB STD 8260	1,1 SV10906	30 Apr 2003 05:12
3	3	11M14632.D	1.	✓WG139365-01 VBLK0430 BLANK 8260	1,1	30 Apr 2003 05:49
4	4	11M14633.D	1.	✓WG139365-02 20 PPB LCS STD 8260	1,1 SV10847	30 Apr 2003 06:20
5	5	11M14634.D	1.	✓WG139365-03 20 PPB LCS DUP STD 8260	1,1 SV10847	30 Apr 2003 06:51
6	6	11M14635.D	1.	✓L0304497-11 B 00 8260	1,1 pH=7	30 Apr 2003 08:23
7	7	11M14636.D	1. RR5x -	L0304508-01 A 50X D1 8260 - DNR	1,50	30 Apr 2003 08:54
8	8	11M14637.D	1. RR5x -	L0304508-03 A 50X D1 8260 - DNR	1,50	30 Apr 2003 09:26
9	9	11M14638.D	1.	✓L0304508-06 B 10X D2 8260	1,10	30 Apr 2003 09:57
10	10	11M14639.D	1.	✓L0304497-07 B 1000X D1 8260	1,1000	30 Apr 2003 10:28
11	11	11M14640.D	1.	✓L0304497-09 B 1000X D1 8260	1,1000	30 Apr 2003 10:59
12	12	11M14641.D	1.	✓L0304497-10 B 10X 00 8260	1,10	30 Apr 2003 11:29
13	13	11M14642.D	1.	✓L0304501-03 B 100X D1 826-TC	17,100 (4/28@1500)	30 Apr 2003 11:59
14	14	11M14643.D	1. RR10x	L0304529-02 B 00 8260	1,1 pH<2	30 Apr 2003 12:30
15	15	11M14644.D	1.	✓L0304529-04 A 00 8260	1,1 ↓	30 Apr 2003 13:00
16	16	11M14645.D	1. RR 5x	L0304529-03 A 50X ~~00~~ 8260 D1	1,50	30 Apr 2003 13:30
17	17	11M14646.D	1. RR 5x	L0304529-08 A 100X 00 8260 - DNR	1,100	30 Apr 2003 14:01
18	18	11M14647.D	1. RR 5tr.	L0304529-07 A 100X 00 8260 - DNR	1,100	30 Apr 2003 14:31
19	19	11M14648.D	1. RR 5tr.	L0304529-06 A 500X 00 8260 - DNR	1,500	30 Apr 2003 15:01
20	20	11M14649.D	1. RR 5tr.	L0304529-10 A 100X ~~00~~ 8260 D1	1,100	30 Apr 2003 15:31
21	21	11M14650.D	1. RR 50x	L0304529-09 A 100X 00 8260 - DNR	1,100	30 Apr 2003 16:02
22	22	11M14651.D	1. RR 5x	L0304529-05 A 100X 00 8260 - DNR	1,100	30 Apr 2003 16:32
23	1	11M14652.D	1. RR	WG139441-01 BFB 50NG STD 8260	1,1 SV10835	30 Apr 2003 17:03
24	2	11M14653.D	1.	✓WG139441-01 BFB 50NG STD 8260	1,1 SV10835	30 Apr 2003 17:32
25	3	11M14654.D	1.	✓WG139441-02 50 PPB STD 8260	1,1 SV10906	30 Apr 2003 18:01
26	4	11M14655.D	1.	✓WG139442-01 VBLK0430 BLANK 8260	1,1	30 Apr 2003 18:36
27	5	11M14656.D	1.	✓WG139442-02 20 PPB LCS STD 8260	1,1 SV10847	30 Apr 2003 19:07
28	6	11M14657.D	1.	✓WG139442-03 20 PPB LCS DUP STD 8260	1,1 SV10847	30 Apr 2003 19:37
29	7	11M14658.D	1.	✓L0304508-01 B 5X D2 8260	1,5	30 Apr 2003 20:08
30	8	11M14659.D	1.	✓L0304508-03 B 5X D2 8260	1,5	30 Apr 2003 20:38
31	9	11M14660.D	1.	✓L0304501-05 B 50X 00 826-TC	17,50 (4/28@1500)	30 Apr 2003 21:09
32	10	11M14661.D	1. RR10x	L0304529-07 B 00 8260	1,1 pH<2	30 Apr 2003 21:40
33	11	11M14662.D	1. RR50x	L0304529-06 B 00 8260	1,1 ↓	30 Apr 2003 22:11
34	12	11M14663.D	1. RR100x	L0304529-10 B 00 8260	1,1 pH=12	30 Apr 2003 22:42
35	13	11M14664.D	1.	✓L0304529-01 B 50X ~~D1~~ 8260 00	1,50	30 Apr 2003 23:14
36	14	11M14665.D	1.	✓L0304529-02 B 10X D1 8260	1,10	30 Apr 2003 23:45
37	15	11M14666.D	1. RR50x	L0304529-03 B 5X 00 8260	1,5	1 May 2003 00:16
38	16	11M14667.D	1. RR50x	L0304529-05 B 5X 00 8260	1,5	1 May 2003 00:47
39	17	11M14668.D	1.	✓L0304529-08 B 5X 00 8260	1,5	1 May 2003 01:19
40	18	11M14669.D	1.	✓L0304529-09 B 50X 00 8260	1,50	1 May 2003 01:50
41	19	11M14670.D	1.	✓L0304554-01 10X 00 826-TC	17,10 (4/28@1500)	1 May 2003 02:22
42	20	11M14671.D	1.	✓L0304594-03 A 10X 00 826-TC	17,10 (4/28@1500)	1 May 2003 02:53
43	21	11M14672.D	1.	✓L0304649-01 A 00 826-SPE-VO-S	2,1 pH=7	1 May 2003 03:24
44	22	11M14673.D	1.	✓L0304649-02 A 00 826-SPE-VO-S	2,1 pH=10	1 May 2003 03:56
45	23	11M14674.D	1.	✓L0304~~469~~-03 A 00 826-SPE-VO-S 649 ~~[illegible]~~	2,1 pH=7	1 May 2003 04:27
46	24	11M14675.D	1.	✓L0304516-02 A 00 826-BETX	1,1 pH<2	1 May 2003 04:58

01 May 2003 05:31

WG139365 reanalyses

L0304508-01 @ 5x (D2) - 2-Butanone - 11M14658
-03 @ 5x (D2) ⊥ ⊥ 659

L0304529-02 @ 10X : Acetone - 11M14665
-03 @ 5x : (00) - 11M14666
-10 @ str. : (00) - 11M14649 663

WG139442 reanalyses

L0304529-07 @ 10X : Acetone
-06 @ 50x : Acetone, 2-Butanone
-10 @ 100X : PCE : 11M14649
-03 @ 50X : Carbon tet. - 11M14645
-05 @ 50X : Acetone

KEMRON ENVIRONMENTAL SERVICES
METHOD BLANK SUMMARY

Login Number: L0304594
Blank File ID: 11M14678
Date Analyzed: 05/01/03
Time Analyzed: 06:45
Analyst: CMS

Work Group: WG139456
Blank Sample ID: WG139456-01
Instrument ID: HPMS11
Method: 8260B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG139456-02	11M14679	05/01/03 07:16	
TRIP BLANK	L0304594-04	11M14683	05/01/03 09:21	
05-177511-DW2-042503	L0304594-01	11M14696	05/01/03 15:58	
05-177511-DW3-042503	L0304594-02	11M14697	05/01/03 16:28	

KEMRON FORMS - Modified 03/21/2003
Version 1.2
Report generated 05/07/2003 13:14

KEMRON ENVIRONMENTAL SERVICES
BLANK REPORT

Login Number: L0304594 Run Date: 05/01/2003 Sample ID: WG139456-01
Instrument ID: HPMS11 Run Time: 06:45 Prep Method: 5030B
File ID: 11M14678 Analyst: CMS Method: 8260B
Workgroup (AAB#): WG139456 Matrix: Water Units: µg/L
Contract #: Cal ID: HPMS11-17-APR-03

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Chloromethane	0.250	10.0	0.250	1	U
vinyl chloride	0.250	10.0	0.250	1	U
Bromomethane	0.500	10.0	0.500	1	U
Chloroethane	0.500	10.0	0.500	1	U
Acetone	2.50	10.0	2.50	1	U
1,1-Dichloroethene	0.500	5.00	0.500	1	U
Methylene chloride	0.250	5.00	0.250	1	U
Carbon disulfide	0.500	5.00	0.500	1	U
1,1-Dichloroethane	0.125	5.00	0.125	1	U
2-Butanone	2.50	10.0	2.50	1	U
1,2-Dichloroethane (Total)	0.250	5.00	0.250	1	U
Chloroform	0.125	5.00	0.125	1	U
1,1,1-Trichloroethane	0.250	5.00	0.250	1	U
Carbon tetrachloride	0.250	5.00	0.250	1	U
1,2-Dichloroethane	0.250	5.00	0.250	1	U
Benzene	0.125	5.00	0.125	1	U
Trichloroethene	0.250	5.00	0.250	1	U
1,2-Dichloropropane	0.125	5.00	0.125	1	U
Bromodichloromethane	0.250	5.00	0.250	1	U
4-Methyl-2-pentanone	2.50	10.0	2.50	1	U
cis-1,3-Dichloropropene	0.250	5.00	0.250	1	U
Toluene	0.250	5.00	0.250	1	U
trans-1,3-Dichloropropene	0.500	5.00	0.500	1	U
1,1,2-Trichloroethane	0.250	5.00	0.250	1	U
2-Hexanone	2.50	10.0	2.50	1	U
Tetrachloroethene	0.250	5.00	0.250	1	U
Dibromochloromethane	0.250	5.00	0.250	1	U
Chlorobenzene	0.125	5.00	0.125	1	U
Ethyl benzene	0.250	5.00	0.250	1	U
Xylenes	0.500	5.00	0.500	1	U
Styrene	0.125	5.00	0.125	1	U
Bromoform	0.540	5.00	0.540	1	U
1,1,2,2-Tetrachloroethane	0.125	5.00	0.125	1	U

Surrogates	% Recovery	Surrogate Limits			Qualifier
Dibromofluoromethane	100	86	-	118	PASS
1,2-Dichloroethane-d4	106	80	-	120	PASS
Toluene-d8	102	88	-	110	PASS
p-Bromofluorobenzene	99.4	86	-	115	PASS

* Analyte detected above RDL
ND Analyte Not detected at or above reporting limit

KEMRON FORMS - Modified 05/02/2003
Version 1.3
Report generated 05/07/2003 13:14

KEMRON ENVIRONMENTAL SERVICES
LABORATORY CONTROL SAMPLE

Login Number: L0304594 Run Date: 05/01/2003 Sample ID: WG139456-02
Instrument ID: HPMS11 Run Time: 07:16 Prep Method: 5030B
File ID: 11M14679 Analyst: CMS Method: 8260B
Workgroup (AAB#): WG139456 Matrix: Water Units: ug/L
Contract #: Cal ID: HPMS11-17-APR-2003 14:20

Analytes	Expected	Found	% Rec	LCS Limits	Q
1,1,1-Trichloroethane	20.0	24.1	121	80 - 134	
1,1,2,2-Tetrachloroethane	20.0	22.2	111	79 - 125	
1,1,2-Trichloroethane	20.0	21.9	110	80 - 125	
1,1-Dichloroethane	20.0	22.4	112	80 - 125	
1,1-Dichloroethene	20.0	21.4	107	80 - 132	
1,2-Dichloroethane	20.0	23.6	118	80 - 129	
1,2-Dichloroethene (Total)	40.0	45.6	114	80 - 124	
1,2-Dichloropropane	20.0	21.5	108	80 - 120	
2-Butanone	20.0	22.8	114	58 - 149	
2-Hexanone	20.0	22.0	110	56 - 136	
4-Methyl-2-pentanone	20.0	21.3	107	64 - 140	
Acetone	20.0	20.7	103	40 - 142	
Benzene	20.0	21.9	109	80 - 121	
Bromodichloromethane	20.0	22.8	114	80 - 131	
Bromoform	20.0	20.1	100	74 - 130	
Bromomethane	20.0	18.0	90.0	61 - 151	
Carbon disulfide	20.0	17.6	88.1	58 - 138	
Carbon tetrachloride	20.0	22.9	114	80 - 137	
Chlorobenzene	20.0	22.3	112	80 - 120	
Chloroethane	20.0	19.2	96.2	77 - 133	
Chloroform	20.0	23.2	116	80 - 125	
Chloromethane	20.0	17.7	88.3	60 - 130	
cis-1,3-Dichloropropene	20.0	23.2	116	80 - 132	
Dibromochloromethane	20.0	22.6	113	80 - 127	
Ethyl benzene	20.0	23.0	115	80 - 122	
Methylene chloride	20.0	21.9	110	80 - 123	
Styrene	20.0	22.7	113	80 - 123	
Tetrachloroethene	20.0	21.8	109	80 - 124	
Toluene	20.0	21.6	108	80 - 124	
trans-1,3-Dichloropropene	20.0	23.3	116	80 - 130	
Trichloroethene	20.0	23.9	119	80 - 122	
Vinyl chloride	20.0	19.4	96.9	65 - 140	
Xylenes	60.0	67.2	112	80 - 121	

Surrogates	% Recovery	Surrogate Limits	Qualifier
1,2-Dichloroethane-d4	108	80 - 120	PASS
Dibromofluoromethane	103	86 - 118	PASS
p-Bromofluorobenzene	102	86 - 115	PASS
Toluene-d8	101	88 - 110	PASS

* Analyte outside control limits

NS Analyte not spiked

KEMRON FORMS - Modified 05/01/2003
Version 1.3
Report generated 05/07/2003 13:15

KEMRON ENVIRONMENTAL SERVICES
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 8260B

AAB#: WG139456

Login Number: L0304594

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
05-177511-DW2-042503	04/25/03	04/26/03	05/01/03	14	6.23	05/01/03	14	6.23	
05-177511-DW3-042503	04/25/03	04/26/03	05/01/03	14	6.22	05/01/03	14	6.22	
TRIP BLANK	04/25/03	04/26/03	05/01/03	14	5.39	05/01/03	14	5.39	

* EXT = MISSED EXTRACTION HOLD TIME
*ANAL = MISSED ANALYTICAL HOLD TIME

KEMRON FORMS - Modified 12/06/2002
Version 1.2
Report generated 05/07/2003 13:13

KEMRON ENVIRONMENTAL SERVICES
SURROGATE STANDARDS

Login Number: L0304594
Instrument Id: HPMS11
Workgroup (AAB#): WG139456

Method: 8260
CAL ID: HPMS11-17-APR-03
Matrix: WATER

Sample Number	Dilution	Tag	1	2	3	4
L0304594-01	1.00		106	99.6	99.0	101
L0304594-02	1.00		105	98.6	101	101
L0304594-04	1.00		106	99.4	101	103
WG139456-01	1.00		106	100	99.4	102
WG139456-02	1.00		108	103	102	101

Surrogates	Surrogate Limits		
1 - 1,2-Dichloroethane-d4	80	-	120
2 - Dibromofluoromethane	86	-	118
3 - p-Bromofluorobenzene	86	-	115
4 - Toluene-d8	88	-	110

Underline = Result out of surrogate limits

DL = surrogate diluted out

ND = surrogate not detected

KEMRON FORMS - Modified 01/22/2003
Version 1.2
Report generated 05/07/2003 13:14

KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L0304594
Instrument: HPMS11
Analyst: CMS
Workgroup: WG138555

Tune ID: WG138555-01
Run Date: 04/17/2003
Run Time: 06:32
File ID: 11M14388
Cal ID: HPMS11-17-APR-03

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	23.0	22250	PASS
75.0	95.0	30.0	60.0	44.4	42925	PASS
95.0	95.0	100	100	100	96738	PASS
96.0	95.0	5.00	9.00	6.21	6007	PASS
173	174	0	2.00	0.803	484	PASS
174	95.0	50.0	100	62.3	60274	PASS
175	174	5.00	9.00	7.60	4582	PASS
176	174	95.0	101	97.9	59024	PASS
177	176	5.00	9.00	6.38	3764	PASS

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

Lab ID	Client ID	Tag	Date Analyzed	Q
WG138555-02	STD	01	04/17/2003 07:38	
WG138555-03	STD	01	04/17/2003 08:09	
WG138555-04	STD	01	04/17/2003 10:13	
WG138555-05	STD	01	04/17/2003 10:43	
WG138555-06	CCV	01	04/17/2003 11:14	
WG138555-07	STD	01	04/17/2003 11:44	
WG138555-09	STD	01	04/17/2003 12:15	
WG138555-08	STD	01	04/17/2003 14:20	

* Sample past 12 hour tune limit

KEMRON FORMS - Modified 02/14/2003
Version 1.2
Report generated 05/07/2003 13:16

KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L0304594
Instrument: HPMS11
Analyst: CMS
Workgroup: WG138731

Tune ID: WG138731-01
Run Date: 04/21/2003
Run Time: 06:19
File ID: 11M14406
Cal ID: HPMS11-17-APR-03

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	22.3	45648	PASS
75.0	95.0	30.0	60.0	45.0	91882	PASS
95.0	95.0	100	100	100	204288	PASS
96.0	95.0	5.00	9.00	6.72	13730	PASS
173	174	0	2.00	0.837	1172	PASS
174	95.0	50.0	100	68.6	140074	PASS
175	174	5.00	9.00	7.54	10559	PASS
176	174	95.0	101	97.1	136064	PASS
177	176	5.00	9.00	6.31	8587	PASS

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

Lab ID	Client ID	Tag	Date Analyzed	Q
WG138555-10	SSCV	01	04/21/2003 08:40	

* Sample past 12 hour tune limit

KEMRON FORMS - Modified 02/14/2003
Version 1.2
Report generated 05/07/2003 13:16

KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L0304594
Instrument: HPMS11
Analyst: CMS
Workgroup: WG139455

Tune ID: WG139455-01
Run Date: 05/01/2003
Run Time: 05:40
File ID: 11M14676
Cal ID: HPMS11-17-APR-03

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	24.0	13529	PASS
75.0	95.0	30.0	60.0	46.5	26250	PASS
95.0	95.0	100	100	100	56461	PASS
96.0	95.0	5.00	9.00	6.36	3591	PASS
173	174	0	2.00	1.02	379	PASS
174	95.0	50.0	100	66.0	37277	PASS
175	174	5.00	9.00	6.18	2302	PASS
176	174	95.0	101	96.8	36077	PASS
177	176	5.00	9.00	5.75	2074	PASS

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

Lab ID	Client ID	Tag	Date Analyzed	Q
WG139456-01	BLANK		05/01/2003 06:45	
WG139456-02	LCS		05/01/2003 07:16	
L0304594-04	TRIP BLANK		05/01/2003 09:21	
L0304594-01	05-177511-DW2-042503		05/01/2003 15:58	
L0304594-02	05-177511-DW3-042503		05/01/2003 16:28	

* Sample past 12 hour tune limit

KEMRON FORMS - Modified 11/19/2002
Version 1.2
Report generated 05/07/2003 13:13

Login Number: L0304594 Analyst: CMS

Analytical Method: 8260 Initial Calibration Date: 17-APR-03

Instrument ID: HPMS11

Analyte		Summary AVG RF	% RSD	R^2	Q
ETHYLBENZENE	CCC	.445	15.7		
TOLUENE	CCC	1.27	10.2		
1,2-DICHLOROPROPANE	CCC	.245	6.63		
CHLOROFORM	CCC	.364	9.52		
1,1-DICHLOROETHENE	CCC	.19	12.5		
VINYL CHLORIDE	CCC	.114	13.7		
1,1,2,2-TETRACHLOROETHANE	SPCC	.411	6.9		
BROMOFORM	SPCC	.103	20.1		
CHLOROBENZENE	SPCC	.82	13.8		
1,1-DICHLOROETHANE	SPCC	.442	12.2		
CHLOROMETHANE	SPCC	.179	6.9		
1,2,3-TRICHLOROBENZENE		.633	7.34		
NAPHTHALENE		1.48	4.98		
HEXACHLOROBUTADIENE		.288	9.29		
1,2,4-TRICHLOROBENZENE		.772	8.57		
1,2-DIBROMO-3-CHLOROPROPANE		.0683	9.2		
1,2-DICHLOROBENZENE		1.21	6.74		
N-BUTYLBENZENE		2.47	11.9		
1,4-DICHLOROBENZENE		1.37	8.23		
1,3-DICHLOROBENZENE		1.36	8.84		
P-ISOPROPYLTOLUENE		2.65	12.4		
SEC-BUTYLBENZENE		3.17	12.5		
1,2,4-TRIMETHYLBENZENE		2.53	13.3		
TERT-BUTYLBENZENE		2.23	14.8		
A-METHYLSTYRENE		1.46	7.42		
4-CHLOROTOLUENE		2.09	13.8		
2-CHLOROTOLUENE		2.21	12.2		
1,3,5-TRIMETHYLBENZENE		2.39	14.8		
BROMOBENZENE		.61	10.7		
N-PROPYLBENZENE		3.46	16.5		
TRANS-1,4-DICHLORO-2-BUTENE		.152	4.69		
1,2,3-TRICHLOROPROPANE		.119	7.57		
P-BROMOFLUOROBENZENE		.925	5.63		
ISOPROPYLBENZENE		1.43	14.9		
STYRENE		.905	13.2		
O-XYLENE		.562	12.7		
M-,P-XYLENE		.559	14.3		
1,1,1,2-TETRACHLOROETHANE		.233	12.9		
1-CHLOROHEXANE		.44	10.4		
1,2-DIBROMOETHANE		.181	9.12		
DIBROMOCHLOROMETHANE		.203	18.9		
TETRACHLOROETHENE		.218	18.6		
1,3-DICHLOROPROPANE		.362	4.62		
2-HEXANONE		.12	3.52		

KEMRON FORMS - Modified 11/20/2002
Version 1.0
Report generated 05/07/2003 13:13

INITIAL CALIBRATION

Login Number: L0304594 Analyst: CMS
Analytical Method: 8260 Initial Calibration Date: 17-APR-03
Instrument ID: HPMS11

Analyte	AVG RF	% RSD	R^2	Q
1,1,2-TRICHLOROETHANE	.189	7.14		
TRANS-1,3-DICHLOROPROPENE	.355	12.2		
ETHYL METHACRYLATE	.248	4.44		
TOLUENE-D8	1.14	6.77		
DIMETHYL DISULFIDE	.181	7.97		
CIS-1,3-DICHLOROPROPENE	.316	11.0		
4-METHYL-2-PENTANONE	.0502	4.13		
2-CHLOROETHYL VINYL ETHER	.0973	7.66		
DIBROMOMETHANE	.094	8.5		
BROMODICHLOROMETHANE	.255	11.2		
TRICHLOROETHENE	.206	13.1		
BENZENE	.884	7.74		
1,2-DICHLOROETHANE	.281	7.41		
1,2-DICHLOROETHANE-D4	.217	5.86		
CARBON TETRACHLORIDE	.264	18.5		
1,1-DICHLOROPROPENE	.295	13.7		
CYCLOHEXANE	.525	3.6		
1,1,1-TRICHLOROETHANE	.306	21.5		
DIBROMOFLUOROMETHANE	.206	4.95		
BROMOCHLOROMETHANE	.0887	10.3		
CIS-1,2-DICHLOROETHENE	.226	9.35		
2,2-DICHLOROPROPANE	.331	12.4		
2-BUTANONE	.0545	3.25		
VINYL ACETATE	.33	6.48		
N-HEXANE	.394	9.57		
TRANS-1,2-DICHLOROETHENE	.21	14.2		
METHYLTERT-BUTYL ETHER	.432	3.43		
ACRYLONITRILE	.0551	4.1		
CARBON DISULFIDE	.684	8.53		
METHYLENE CHLORIDE	.201	6.22		
IODOMETHANE	.226	6.67		
DIMETHYL SULFIDE	.279	3.11		
ACETONE	.0372	6.21		
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	.208	1.42		
ACROLEIN	.0161	6.04		
ISOPRENE	.383	3.95		
TRICHLOROFLUOROMETHANE	.354	15.6		
CHLOROETHANE	.188	8.1		
BROMOMETHANE	.153	13.9		
DICHLORODIFLUOROMETHANE	.27	15.2		
	Average %RSD:	9.86		

= CC

* = SPCC

KEMRON FORMS - Modified 11/20/2002
Version 1.0
Report generated 05/07/2003 13:13

INITIAL CALIBRATION

Login Number: L0304594
Analytical Method: 8260
Instrument ID: HPMS11

Analyst: CMS
Initial Calibration Date: 17-APR-03

Analyte		Sample # WG138555-02 Conc	File # 11M14390 Response	Level 1 RF
ETHYLBENZENE	CCC	0.4	4238	.3933
TOLUENE	CCC	0.4	11835	1.098
1,2-DICHLOROPROPANE	CCC	0.4	3308	.2222
CHLOROFORM	CCC	0.4	4524	.3038
1,1-DICHLOROETHENE	CCC			
VINYL CHLORIDE	CCC			
1,1,2,2-TETRACHLOROETHANE	SPCC	0.4	1924	.3579
BROMOFORM	SPCC			
CHLOROBENZENE	SPCC	0.4	9238	.8573
1,1-DICHLOROETHANE	SPCC	0.4	5181	.348
CHLOROMETHANE	SPCC			
1,2,3-TRICHLOROBENZENE		0.4	3330	.6195
NAPHTHALENE		0.4	7887	1.467
HEXACHLOROBUTADIENE				
1,2,4-TRICHLOROBENZENE		0.4	3724	.6928
1,2-DIBROMO-3-CHLOROPROPANE				
1,2-DICHLOROBENZENE		0.4	6357	1.183
N-BUTYLBENZENE				
4-DICHLOROBENZENE		0.4	6924	1.288
3-DICHLOROBENZENE		0.4	6414	1.193
P-ISOPROPYLTOLUENE				
SEC-BUTYLBENZENE				
1,2,4-TRIMETHYLBENZENE		0.4	10739	1.998
TERT-BUTYLBENZENE				
A-METHYLSTYRENE				
4-CHLOROTOLUENE		0.4	9040	1.682
2-CHLOROTOLUENE		0.4	9849	1.832
1,3,5-TRIMETHYLBENZENE		0.4	9829	1.829
BROMOBENZENE		0.4	2888	.5373
N-PROPYLBENZENE		0.4	13033	2.425
TRANS-1,4-DICHLORO-2-BUTENE				
1,2,3-TRICHLOROPROPANE				
P-BROMOFLUOROBENZENE				
ISOPROPYLBENZENE		0.4	11783	1.094
STYRENE		0.4	7873	.7306
O-XYLENE		0.4	4997	.4637
M-,P-XYLENE		0.8	10430	.484
1,1,1,2-TETRACHLOROETHANE		0.4	2072	.1923
1-CHLOROHEXANE				
1,2-DIBROMOETHANE		0.4	1564	.1451
DIBROMOCHLOROMETHANE		0.4	1484	.1377
TETRACHLOROETHENE		0.4	1628	.1511
3-DICHLOROPROPANE		0.4	3652	.3389

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Analyte	Sample # WG138555-02 Conc	File # 11M14390 Response	Level 1 RF
2-HEXANONE			
1,1,2-TRICHLOROETHANE	0.4	1816	.1685
TRANS-1,3-DICHLOROPROPENE	0.4	2969	.2755
ETHYL METHACRYLATE			
TOLUENE-D8			
DIMETHYL DISULFIDE			
CIS-1,3-DICHLOROPROPENE	0.4	3901	.262
4-METHYL-2-PENTANONE			
2-CHLOROETHYL VINYL ETHER			
DIBROMOMETHANE	0.4	1196	.0803
BROMODICHLOROMETHANE	0.4	3136	.2106
TRICHLOROETHENE	0.4	2348	.1577
BENZENE	0.4	11890	.7986
1,2-DICHLOROETHANE	0.4	3576	.2402
1,2-DICHLOROETHANE-D4			
CARBON TETRACHLORIDE			
1,1-DICHLOROPROPENE			
CYCLOHEXANE			
1,1,1-TRICHLOROETHANE	0.4	2693	.1809
DIBROMOFLUOROMETHANE			
BROMOCHLOROMETHANE	0.4	1021	.0686
CIS-1,2-DICHLOROETHENE	0.4	2815	.1891
2,2-DICHLOROPROPANE			
2-BUTANONE			
VINYL ACETATE			
N-HEXANE			
TRANS-1,2-DICHLOROETHENE	0.4	2273	.1527
METHYLTERT-BUTYL ETHER			
ACRYLONITRILE			
CARBON DISULFIDE			
METHYLENE CHLORIDE	0.4	2653	.1782
IODOMETHANE			
DIMETHYL SULFIDE			
ACETONE			
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE			
ACROLEIN			
ISOPRENE			
TRICHLOROFLUOROMETHANE			
CHLOROETHANE			
BROMOMETHANE			
DICHLORODIFLUOROMETHANE			

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Analyte		Sample # WG138555-03 Conc	File # 11M14391 Response	Level 2 RF
ETHYLBENZENE	CCC	1.0	11446	.4192
TOLUENE	CCC	1.0	30069	1.101
1,2-DICHLOROPROPANE	CCC	1.0	8375	.2241
CHLOROFORM	CCC	1.0	11827	.3165
1,1-DICHLOROETHENE	CCC	1.0	5133	.1374
VINYL CHLORIDE	CCC	1.0	3612	.0967
1,1,2,2-TETRACHLOROETHANE	SPCC	1.0	5372	.3953
BROMOFORM	SPCC	1.0	1808	.0662
CHLOROBENZENE	SPCC	1.0	22526	.8249
1,1-DICHLOROETHANE	SPCC	1.0	13648	.3652
CHLOROMETHANE	SPCC	1.0	6809	.1822
1,2,3-TRICHLOROBENZENE		1.0	8521	.6271
NAPHTHALENE		1.0	19908	1.465
HEXACHLOROBUTADIENE		1.0	3155	.2322
1,2,4-TRICHLOROBENZENE		1.0	10690	.7867
1,2-DIBROMO-3-CHLOROPROPANE				
1,2-DICHLOROBENZENE		1.0	15646	1.151
N-BUTYLBENZENE		1.0	25538	1.879
4-DICHLOROBENZENE		1.0	17641	1.298
3-DICHLOROBENZENE		1.0	17708	1.303
P-ISOPROPYLTOLUENE		1.0	27322	2.011
SEC-BUTYLBENZENE		1.0	32410	2.385
1,2,4-TRIMETHYLBENZENE		1.0	29135	2.144
TERT-BUTYLBENZENE		1.0	21195	1.56
A-METHYLSTYRENE				
4-CHLOROTOLUENE		1.0	27364	2.014
2-CHLOROTOLUENE		1.0	26171	1.926
1,3,5-TRIMETHYLBENZENE		1.0	26987	1.986
BROMOBENZENE		1.0	7929	.5835
N-PROPYLBENZENE		1.0	38314	2.82
TRANS-1,4-DICHLORO-2-BUTENE				
1,2,3-TRICHLOROPROPANE		1.0	1393	.1025
P-BROMOFLUOROBENZENE				
ISOPROPYLBENZENE		1.0	30948	1.133
STYRENE		1.0	20767	.7605
O-XYLENE		1.0	13459	.4929
M-,P-XYLENE		2.0	28386	.5198
1,1,1,2-TETRACHLOROETHANE		1.0	5781	.2117
1-CHLOROHEXANE		1.0	9462	.3465
1,2-DIBROMOETHANE		1.0	4653	.1704
DIBROMOCHLOROMETHANE		1.0	4208	.1541
TETRACHLOROETHENE		1.0	4410	.1615
-DICHLOROPROPANE		1.0	9677	.3544

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Analyte	Sample # WG138555-03 Conc	File # 11M14391 Response	Level 2 RF
2-HEXANONE			
1,1,2-TRICHLOROETHANE	1.0	4713	.1726
TRANS-1,3-DICHLOROPROPENE	1.0	8211	.3007
ETHYL METHACRYLATE			
TOLUENE-D8			
DIMETHYL DISULFIDE			
CIS-1,3-DICHLOROPROPENE	1.0	9793	.262
4-METHYL-2-PENTANONE			
2-CHLOROETHYL VINYL ETHER	1.0	3067	.0821
DIBROMOMETHANE	1.0	3178	.085
BROMODICHLOROMETHANE	1.0	7923	.212
TRICHLOROETHENE	1.0	6416	.1717
BENZENE	1.0	29317	.7845
1,2-DICHLOROETHANE	1.0	10120	.2708
1,2-DICHLOROETHANE-D4			
CARBON TETRACHLORIDE	1.0	5890	.1576
1,1-DICHLOROPROPENE	1.0	7675	.2054
CYCLOHEXANE			
1,1,1-TRICHLOROETHANE	1.0	8272	.2213
DIBROMOFLUOROMETHANE			
BROMOCHLOROMETHANE	1.0	3186	.0853
CIS-1,2-DICHLOROETHENE	1.0	7532	.2015
2,2-DICHLOROPROPANE	1.0	8917	.2386
2-BUTANONE			
VINYL ACETATE	1.0	11485	.3073
N-HEXANE	1.0	11616	.3108
TRANS-1,2-DICHLOROETHENE	1.0	6541	.175
METHYLTERT-BUTYL ETHER	1.0	16710	.4471
ACRYLONITRILE			
CARBON DISULFIDE	1.0	20902	.5593
METHYLENE CHLORIDE	1.0	7090	.1897
IODOMETHANE			
DIMETHYL SULFIDE			
ACETONE			
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE			
ACROLEIN			
ISOPRENE			
TRICHLOROFLUOROMETHANE	1.0	8566	.2292
CHLOROETHANE	1.0	5742	.1536
BROMOMETHANE	1.0	4091	.1095
DICHLORODIFLUOROMETHANE	1.0	6698	.1792

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Analyte		Sample # WG138555-04 Conc	File # 11M14395 Response	Level 3 RF
ETHYLBENZENE	CCC	5.0	73739	.5475
TOLUENE	CCC	5.0	190625	1.416
1,2-DICHLOROPROPANE	CCC	5.0	48359	.2638
CHLOROFORM	CCC	5.0	69957	.3816
1,1-DICHLOROETHENE	CCC	5.0	36065	.1967
VINYL CHLORIDE	CCC	5.0	25262	.1378
1,1,2,2-TETRACHLOROETHANE	SPCC	5.0	29178	.4296
BROMOFORM	SPCC	5.0	11441	.085
CHLOROBENZENE	SPCC	5.0	130452	.9687
1,1-DICHLOROETHANE	SPCC	5.0	87786	.4789
CHLOROMETHANE	SPCC	5.0	36687	.2001
1,2,3-TRICHLOROBENZENE		5.0	46908	.6906
NAPHTHALENE		5.0	103438	1.523
HEXACHLOROBUTADIENE		5.0	20349	.2996
1,2,4-TRICHLOROBENZENE		5.0	57111	.8408
1,2-DIBROMO-3-CHLOROPROPANE		5.0	3872	.057
1,2-DICHLOROBENZENE		5.0	88150	1.298
N-BUTYLBENZENE		5.0	177907	2.619
4-DICHLOROBENZENE		5.0	101949	1.501
3-DICHLOROBENZENE		5.0	101658	1.497
P-ISOPROPYLTOLUENE		5.0	194516	2.864
SEC-BUTYLBENZENE		5.0	229973	3.386
1,2,4-TRIMETHYLBENZENE		5.0	190562	2.806
TERT-BUTYLBENZENE		5.0	148367	2.184
A-METHYLSTYRENE		5.0	99410	1.464
4-CHLOROTOLUENE		5.0	161894	2.384
2-CHLOROTOLUENE		5.0	167159	2.461
1,3,5-TRIMETHYLBENZENE		5.0	183813	2.706
BROMOBENZENE		5.0	46345	.6823
N-PROPYLBENZENE		5.0	263591	3.881
TRANS-1,4-DICHLORO-2-BUTENE		5.0	9536	.1404
1,2,3-TRICHLOROPROPANE		5.0	8259	.1216
P-BROMOFLUOROBENZENE		2.5	29803	.8776
ISOPROPYLBENZENE		5.0	216960	1.611
STYRENE		5.0	135903	1.009
O-XYLENE		5.0	86492	.6422
M-,P-XYLENE		10.0	179462	.6663
1,1,1,2-TETRACHLOROETHANE		5.0	34817	.2585
1-CHLOROHEXANE		5.0	60948	.4526
1,2-DIBROMOETHANE		5.0	25275	.1877
DIBROMOCHLOROMETHANE		5.0	25361	.1883
TETRACHLOROETHENE		5.0	34122	.2534
3-DICHLOROPROPANE		5.0	50417	.3744

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Analyte	Sample # WG138555-04 Conc	File # 11M14395 Response	Level 3 RF
2-HEXANONE	5.0	15841	.1176
1,1,2-TRICHLOROETHANE	5.0	26961	.2002
TRANS-1,3-DICHLOROPROPENE	5.0	48721	.3618
ETHYL METHACRYLATE	5.0	32626	.2423
TOLUENE-D8	2.5	68435	1.016
DIMETHYL DISULFIDE	5.0	28252	.1541
CIS-1,3-DICHLOROPROPENE	5.0	58396	.3186
4-METHYL-2-PENTANONE	5.0	9102	.0497
2-CHLOROETHYL VINYL ETHER	5.0	17670	.0964
DIBROMOMETHANE	5.0	18553	.1012
BROMODICHLOROMETHANE	5.0	45687	.2492
TRICHLOROETHENE	5.0	40944	.2234
BENZENE	5.0	173723	.9477
1,2-DICHLOROETHANE	5.0	55269	.3015
1,2-DICHLOROETHANE-D4	2.5	19791	.2159
CARBON TETRACHLORIDE	5.0	46431	.2533
1,1-DICHLOROPROPENE	5.0	55545	.303
CYCLOHEXANE	5.0	94937	.5179
1,1,1-TRICHLOROETHANE	5.0	61938	.3379
DIBROMOFLUOROMETHANE	2.5	17142	.187
BROMOCHLOROMETHANE	5.0	17250	.0941
CIS-1,2-DICHLOROETHENE	5.0	44067	.2404
2,2-DICHLOROPROPANE	5.0	61121	.3334
2-BUTANONE	5.0	10057	.0549
VINYL ACETATE	5.0	57987	.3163
N-HEXANE	5.0	74087	.4042
TRANS-1,2-DICHLOROETHENE	5.0	42057	.2294
METHYLTERT-BUTYL ETHER	5.0	79125	.4316
ACRYLONITRILE	5.0	10062	.0549
CARBON DISULFIDE	5.0	127848	.6974
METHYLENE CHLORIDE	5.0	39233	.214
IODOMETHANE	5.0	40569	.2213
DIMETHYL SULFIDE	5.0	52031	.2838
ACETONE	5.0	7305	.0398
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5.0	38587	.2105
ACROLEIN	10.0	5251	.0143
ISOPRENE	5.0	66265	.3615
TRICHLOROFLUOROMETHANE	5.0	69282	.3779
CHLOROETHANE	5.0	36361	.1984
BROMOMETHANE	5.0	26223	.143
DICHLORODIFLUOROMETHANE	5.0	55495	.3027

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Analyte		Sample # WG138555-05 Conc	File # 11M14396 Response	Level 4 RF
ETHYLBENZENE	CCC	20.0	292518	.5349
TOLUENE	CCC	20.0	778815	1.424
1,2-DICHLOROPROPANE	CCC	20.0	194977	.261
CHLOROFORM	CCC	20.0	294305	.3939
1,1-DICHLOROETHENE	CCC	20.0	154063	.2062
VINYL CHLORIDE	CCC	20.0	92065	.1232
1,1,2,2-TETRACHLOROETHANE	SPCC	20.0	119540	.4438
BROMOFORM	SPCC	20.0	54840	.1003
CHLOROBENZENE	SPCC	20.0	515730	.943
1,1-DICHLOROETHANE	SPCC	20.0	362676	.4854
CHLOROMETHANE	SPCC	20.0	139433	.1866
1,2,3-TRICHLOROBENZENE		20.0	184560	.6852
NAPHTHALENE		20.0	423745	1.573
HEXACHLOROBUTADIENE		20.0	83942	.3116
1,2,4-TRICHLOROBENZENE		20.0	230843	.857
1,2-DIBROMO-3-CHLOROPROPANE		20.0	17424	.0647
1,2-DICHLOROBENZENE		20.0	354991	1.318
N-BUTYLBENZENE		20.0	746501	2.771
4-DICHLOROBENZENE		20.0	410696	1.525
1,3-DICHLOROBENZENE		20.0	409978	1.522
P-ISOPROPYLTOLUENE		20.0	807099	2.996
SEC-BUTYLBENZENE		20.0	969237	3.598
1,2,4-TRIMETHYLBENZENE		20.0	795220	2.952
TERT-BUTYLBENZENE		20.0	608937	2.261
A-METHYLSTYRENE		20.0	430660	1.599
4-CHLOROTOLUENE		20.0	661601	2.456
2-CHLOROTOLUENE		20.0	692407	2.571
1,3,5-TRIMETHYLBENZENE		20.0	756946	2.81
BROMOBENZENE		20.0	188801	.7009
N-PROPYLBENZENE		20.0	1095098	4.066
TRANS-1,4-DICHLORO-2-BUTENE		20.0	41579	.1544
1,2,3-TRICHLOROPROPANE		20.0	34202	.127
P-BROMOFLUOROBENZENE		10.0	135884	1.009
ISOPROPYLBENZENE		20.0	905495	1.656
STYRENE		20.0	573644	1.049
O-XYLENE		20.0	357238	.6532
M-,P-XYLENE		40.0	728630	.6661
1,1,1,2-TETRACHLOROETHANE		20.0	149813	.2739
1-CHLOROHEXANE		20.0	265770	.486
1,2-DIBROMOETHANE		20.0	106436	.1946
DIBROMOCHLOROMETHANE		20.0	118199	.2161
TETRACHLOROETHENE		20.0	141067	.2579
3-DICHLOROPROPANE		20.0	210224	.3844

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Analyst: CMS
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Analyte	Sample # WG138555-05 Conc	File # 11M14396 Response	Level 4 RF
2-HEXANONE	20.0	65980	.1206
1,1,2-TRICHLOROETHANE	20.0	111425	.2037
TRANS-1,3-DICHLOROPROPENE	20.0	210836	.3855
ETHYL METHACRYLATE	20.0	138902	.254
TOLUENE-D8	10.0	340275	1.244
DIMETHYL DISULFIDE	20.0	135080	.1808
CIS-1,3-DICHLOROPROPENE	20.0	254028	.34
4-METHYL-2-PENTANONE	20.0	36946	.0494
2-CHLOROETHYL VINYL ETHER	20.0	74047	.0991
DIBROMOMETHANE	20.0	75129	.1006
BROMODICHLOROMETHANE	20.0	205119	.2745
TRICHLOROETHENE	20.0	174566	.2336
BENZENE	20.0	721785	.966
1,2-DICHLOROETHANE	20.0	224146	.3
1,2-DICHLOROETHANE-D4	10.0	86495	.2315
CARBON TETRACHLORIDE	20.0	209519	.2804
1,1-DICHLOROPROPENE	20.0	240335	.3217
CYCLOHEXANE	20.0	408043	.5461
1,1,1-TRICHLOROETHANE	20.0	259015	.3467
DIBROMOFLUOROMETHANE	10.0	80462	.2154
BROMOCHLOROMETHANE	20.0	72844	.0975
CIS-1,2-DICHLOROETHENE	20.0	185331	.248
2,2-DICHLOROPROPANE	20.0	260617	.3488
2-BUTANONE	20.0	40798	.0546
VINYL ACETATE	20.0	225160	.3014
N-HEXANE	20.0	313136	.4191
TRANS-1,2-DICHLOROETHENE	20.0	175531	.2349
METHYLTERT-BUTYL ETHER	20.0	323498	.433
ACRYLONITRILE	20.0	38751	.0519
CARBON DISULFIDE	20.0	547545	.7328
METHYLENE CHLORIDE	20.0	159013	.2128
IODOMETHANE	20.0	181835	.2434
DIMETHYL SULFIDE	20.0	215063	.2878
ACETONE	20.0	27980	.0374
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	20.0	155651	.2083
ACROLEIN	40.0	23928	.016
ISOPRENE	20.0	297291	.3979
TRICHLOROFLUOROMETHANE	20.0	279859	.3746
CHLOROETHANE	20.0	144255	.1931
BROMOMETHANE	20.0	113980	.1525
DICHLORODIFLUOROMETHANE	20.0	215750	.2888

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Analyte		Sample # WG138555-06 Conc	File # 11M14397 Response	Level 5 RF
ETHYLBENZENE	CCC	50.0	682669	.4883
TOLUENE	CCC	50.0	1916639	1.371
1,2-DICHLOROPROPANE	CCC	50.0	490510	.2583
CHLOROFORM	CCC	50.0	745542	.3926
1,1-DICHLOROETHENE	CCC	50.0	385117	.2028
VINYL CHLORIDE	CCC	50.0	229098	.1207
1,1,2,2-TETRACHLOROETHANE	SPCC	50.0	307613	.4375
BROMOFORM	SPCC	50.0	161598	.1156
CHLOROBENZENE	SPCC	50.0	1210682	.8659
1,1-DICHLOROETHANE	SPCC	50.0	908928	.4787
CHLOROMETHANE	SPCC	50.0	341322	.1798
1,2,3-TRICHLOROBENZENE		50.0	468470	.6662
NAPHTHALENE		50.0	1102280	1.568
HEXACHLOROBUTADIENE		50.0	210895	.2999
1,2,4-TRICHLOROBENZENE		50.0	576507	.8199
1,2-DIBROMO-3-CHLOROPROPANE		50.0	50688	.0721
1,2-DICHLOROBENZENE		50.0	890511	1.266
N-BUTYLBENZENE		50.0	1851714	2.633
1-DICHLOROBENZENE		50.0	1021682	1.453
1,3-DICHLOROBENZENE		50.0	1018141	1.448
P-ISOPROPYLTOLUENE		50.0	2010174	2.859
SEC-BUTYLBENZENE		50.0	2391293	3.401
1,2,4-TRIMETHYLBENZENE		50.0	1960224	2.788
TERT-BUTYLBENZENE		50.0	1827204	2.599
A-METHYLSTYRENE		50.0	1084954	1.543
4-CHLOROTOLUENE		50.0	1631580	2.32
2-CHLOROTOLUENE		50.0	1698494	2.416
1,3,5-TRIMETHYLBENZENE		50.0	1870468	2.66
BROMOBENZENE		50.0	465225	.6616
N-PROPYLBENZENE		50.0	2721632	3.871
TRANS-1,4-DICHLORO-2-BUTENE		50.0	111948	.1592
1,2,3-TRICHLOROPROPANE		50.0	89998	.128
P-BROMOFLUOROBENZENE		25.0	336773	.9579
ISOPROPYLBENZENE		50.0	2224118	1.591
STYRENE		50.0	1422996	1.018
O-XYLENE		50.0	868078	.6209
M-,P-XYLENE		100.0	1727635	.6178
1,1,1,2-TETRACHLOROETHANE		50.0	367282	.2627
1-CHLOROHEXANE		50.0	662135	.4736
1,2-DIBROMOETHANE		50.0	273851	.1959
DIBROMOCHLOROMETHANE		50.0	327104	.234
TETRACHLOROETHENE		50.0	342124	.2447
-DICHLOROPROPANE		50.0	534183	.3821

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INITIAL CALIBRATION

Login Number: L0304594 Analyst: CMS

Analytical Method: 8260 Initial Calibration Date: 17-APR-03

Instrument ID: HPMS11

	Sample #	File #	Level
	WG138555-06	11M14397	5
Analyte	Conc	Response	RF
2-HEXANONE	50.0	177930	.1273
1,1,2-TRICHLOROETHANE	50.0	284045	.2032
TRANS-1,3-DICHLOROPROPENE	50.0	550682	.3939
ETHYL METHACRYLATE	50.0	369357	.2642
TOLUENE-D8	25.0	830184	1.188
DIMETHYL DISULFIDE	50.0	367236	.1934
CIS-1,3-DICHLOROPROPENE	50.0	657699	.3464
4-METHYL-2-PENTANONE	50.0	100396	.0529
2-CHLOROETHYL VINYL ETHER	50.0	200430	.1056
DIBROMOMETHANE	50.0	193059	.1017
BROMODICHLOROMETHANE	50.0	530369	.2793
TRICHLOROETHENE	50.0	427688	.2252
BENZENE	50.0	1785659	.9404
1,2-DICHLOROETHANE	50.0	566649	.2984
1,2-DICHLOROETHANE-D4	25.0	219815	.2315
CARBON TETRACHLORIDE	50.0	551346	.2904
1,1-DICHLOROPROPENE	50.0	606699	.3195
CYCLOHEXANE	50.0	1033176	.5441
1,1,1-TRICHLOROETHANE	50.0	660735	.348
DIBROMOFLUOROMETHANE	25.0	202415	.2132
BROMOCHLOROMETHANE	50.0	182112	.0959
CIS-1,2-DICHLOROETHENE	50.0	465700	.2453
2,2-DICHLOROPROPANE	50.0	655054	.345
2-BUTANONE	50.0	106894	.0563
VINYL ACETATE	50.0	648218	.3414
N-HEXANE	50.0	785476	.4137
TRANS-1,2-DICHLOROETHENE	50.0	438995	.2312
METHYLTERT-BUTYL ETHER	50.0	854274	.4499
ACRYLONITRILE	50.0	110225	.0581
CARBON DISULFIDE	50.0	1382018	.7279
METHYLENE CHLORIDE	50.0	398458	.2099
IODOMETHANE	50.0	460751	.2427
DIMETHYL SULFIDE	50.0	546624	.2879
ACETONE	50.0	75251	.0396
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	50.0	400487	.2109
ACROLEIN	100.0	64136	.0169
ISOPRENE	50.0	758814	.3996
TRICHLOROFLUOROMETHANE	50.0	710538	.3742
CHLOROETHANE	50.0	365591	.1925
BROMOMETHANE	50.0	316237	.1665
DICHLORODIFLUOROMETHANE	50.0	539977	.2844

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Analyte		Sample # WG138555-07 Conc	File # 11M14398 Response	Level 6 RF
ETHYLBENZENE	CCC	100.0	1192935	.4209
TOLUENE	CCC	100.0	3638669	1.284
1,2-DICHLOROPROPANE	CCC	100.0	936167	.2495
CHLOROFORM	CCC	100.0	1432947	.3819
1,1-DICHLOROETHENE	CCC	100.0	738699	.1969
VINYL CHLORIDE	CCC	100.0	425698	.1135
1,1,2,2-TETRACHLOROETHANE	SPCC	100.0	609231	.4248
BROMOFORM	SPCC	100.0	336685	.1188
CHLOROBENZENE	SPCC	100.0	2138672	.7546
1,1-DICHLOROETHANE	SPCC	100.0	1751757	.4669
CHLOROMETHANE	SPCC	100.0	622221	.1658
1,2,3-TRICHLOROBENZENE		100.0	895357	.6243
NAPHTHALENE		100.0	2143357	1.495
HEXACHLOROBUTADIENE		100.0	421207	.2937
1,2,4-TRICHLOROBENZENE		100.0	1096417	.7645
1,2-DIBROMO-3-CHLOROPROPANE		100.0	104444	.0728
1,2-DICHLOROBENZENE		100.0	1705190	1.189
N-BUTYLBENZENE		100.0	3618761	2.523
4-DICHLOROBENZENE		100.0	1945950	1.357
3-DICHLOROBENZENE		100.0	1949377	1.359
P-ISOPROPYLTOLUENE		100.0	3857358	2.69
SEC-BUTYLBENZENE		100.0	4637278	3.234
1,2,4-TRIMETHYLBENZENE		100.0	3751037	2.616
TERT-BUTYLBENZENE		100.0	3495291	2.437
A-METHYLSTYRENE		100.0	2073158	1.446
4-CHLOROTOLUENE		100.0	3156088	2.201
2-CHLOROTOLUENE		100.0	3230883	2.253
1,3,5-TRIMETHYLBENZENE		100.0	3551754	2.477
BROMOBENZENE		100.0	872519	.6084
N-PROPYLBENZENE		100.0	5219627	3.64
TRANS-1,4-DICHLORO-2-BUTENE		100.0	227826	.1589
1,2,3-TRICHLOROPROPANE		100.0	178793	.1247
P-BROMOFLUOROBENZENE		50.0	662535	.924
ISOPROPYLBENZENE		100.0	4242257	1.497
STYRENE		100.0	2643085	.9326
O-XYLENE		100.0	1614168	.5695
M-,P-XYLENE		200.0	3076565	.5428
1,1,1,2-TETRACHLOROETHANE		100.0	671700	.237
1-CHLOROHEXANE		100.0	1279398	.4514
1,2-DIBROMOETHANE		100.0	528608	.1865
DIBROMOCHLOROMETHANE		100.0	654789	.231
TETRACHLOROETHENE		100.0	653980	.2307
-DICHLOROPROPANE		100.0	1028927	.363

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Analyte	Sample # WG138555-07 Conc	File # 11M14398 Response	Level 6 RF
2-HEXANONE	100.0	349310	.1232
1,1,2-TRICHLOROETHANE	100.0	548514	.1935
TRANS-1,3-DICHLOROPROPENE	100.0	1079255	.3808
ETHYL METHACRYLATE	100.0	716295	.2527
TOLUENE-D8	50.0	1604458	1.132
DIMETHYL DISULFIDE	100.0	726265	.1936
CIS-1,3-DICHLOROPROPENE	100.0	1285351	.3426
4-METHYL-2-PENTANONE	100.0	196894	.0525
2-CHLOROETHYL VINYL ETHER	100.0	385203	.1027
DIBROMOMETHANE	100.0	368442	.0982
BROMODICHLOROMETHANE	100.0	1038611	.2768
TRICHLOROETHENE	100.0	813830	.2169
BENZENE	100.0	3393683	.9045
1,2-DICHLOROETHANE	100.0	1086981	.2897
1,2-DICHLOROETHANE-D4	50.0	412066	.2196
CARBON TETRACHLORIDE	100.0	1091721	.291
1,1-DICHLOROPROPENE	100.0	1163911	.3102
CYCLOHEXANE	100.0	1980544	.5278
1,1,1-TRICHLOROETHANE	100.0	1275927	.3401
DIBROMOFLUOROMETHANE	50.0	394864	.2105
BROMOCHLOROMETHANE	100.0	346518	.0924
CIS-1,2-DICHLOROETHENE	100.0	878299	.2341
2,2-DICHLOROPROPANE	100.0	1319943	.3518
2-BUTANONE	100.0	211570	.0564
VINYL ACETATE	100.0	1345164	.3585
N-HEXANE	100.0	1545441	.4119
TRANS-1,2-DICHLOROETHENE	100.0	835987	.2228
METHYLTERT-BUTYL ETHER	100.0	1639898	.4371
ACRYLONITRILE	100.0	214708	.0572
CARBON DISULFIDE	100.0	2632815	.7017
METHYLENE CHLORIDE	100.0	767054	.2044
IODOMETHANE	100.0	779548	.2078
DIMETHYL SULFIDE	100.0	1040036	.2772
ACETONE	100.0	140187	.0374
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	100.0	782222	.2085
ACROLEIN	200.0	127478	.017
ISOPRENE	100.0	1455008	.3878
TRICHLOROFLUOROMETHANE	100.0	1413778	.3768
CHLOROETHANE	100.0	725419	.1933
BROMOMETHANE	100.0	627205	.1672
DICHLORODIFLUOROMETHANE	100.0	1059728	.2824

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Analyte		Sample # WG138555-08 Conc	File # 11M14402 Response	Level 7 RF
ETHYLBENZENE	CCC	150.0	1667196	.3985
TOLUENE	CCC	150.0	5351499	1.279
1,2-DICHLOROPROPANE	CCC	150.0	1382929	.2429
CHLOROFORM	CCC	150.0	2152315	.3781
1,1-DICHLOROETHENE	CCC	150.0	1132864	.199
VINYL CHLORIDE	CCC	150.0	633994	.1114
1,1,2,2-TETRACHLOROETHANE	SPCC	150.0	863417	.4073
BROMOFORM	SPCC	150.0	492296	.1177
CHLOROBENZENE	SPCC	150.0	2941043	.7031
1,1-DICHLOROETHANE	SPCC	150.0	2641047	.4639
CHLOROMETHANE	SPCC	150.0	935805	.1644
1,2,3-TRICHLOROBENZENE		150.0	1263982	.5963
NAPHTHALENE		150.0	3028151	1.429
HEXACHLOROBUTADIENE		150.0	642897	.3033
1,2,4-TRICHLOROBENZENE		150.0	1565054	.7383
1,2-DIBROMO-3-CHLOROPROPANE		150.0	153492	.0724
1,2-DICHLOROBENZENE		150.0	2451712	1.157
N-BUTYLBENZENE		150.0	5340516	2.519
4-DICHLOROBENZENE		150.0	2776960	1.31
1,3-DICHLOROBENZENE		150.0	2815825	1.328
P-ISOPROPYLTOLUENE		150.0	5668884	2.674
SEC-BUTYLBENZENE		150.0	6847311	3.23
1,2,4-TRIMETHYLBENZENE		150.0	5430563	2.562
TERT-BUTYLBENZENE		150.0	5078310	2.396
A-METHYLSTYRENE		150.0	2929190	1.382
4-CHLOROTOLUENE		150.0	4023799	1.898
2-CHLOROTOLUENE		150.0	4653365	2.195
1,3,5-TRIMETHYLBENZENE		150.0	5124536	2.418
BROMOBENZENE		150.0	1234172	.5822
N-PROPYLBENZENE		150.0	7688828	3.627
TRANS-1,4-DICHLORO-2-BUTENE		150.0	314690	.1485
1,2,3-TRICHLOROPROPANE		150.0	251340	.1186
P-BROMOFLUOROBENZENE		75.0	963434	.909
ISOPROPYLBENZENE		150.0	6204361	1.483
STYRENE		150.0	3747782	.8959
O-XYLENE		150.0	2283038	.5458
M-,P-XYLENE		300.0	4268000	.5101
1,1,1,2-TETRACHLOROETHANE		150.0	926153	.2214
1-CHLOROHEXANE		150.0	1870128	.4471
1,2-DIBROMOETHANE		150.0	775799	.1855
DIBROMOCHLOROMETHANE		150.0	969591	.2318
TETRACHLOROETHENE		150.0	963239	.2303
3-DICHLOROPROPANE		150.0	1480275	.3539

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Analyte	Sample # WG138555-08 Conc	File # 11M14402 Response	Level 7 RF
2-HEXANONE	150.0	486026	.1162
1,1,2-TRICHLOROETHANE	150.0	787700	.1883
TRANS-1,3-DICHLOROPROPENE	150.0	1576445	.3769
ETHYL METHACRYLATE	150.0	991307	.237
TOLUENE-D8	75.0	2386724	1.141
DIMETHYL DISULFIDE	150.0	1043597	.1833
CIS-1,3-DICHLOROPROPENE	150.0	1895627	.333
4-METHYL-2-PENTANONE	150.0	274970	.0483
2-CHLOROETHYL VINYL ETHER	150.0	557585	.0979
DIBROMOMETHANE	150.0	531158	.0933
BROMODICHLOROMETHANE	150.0	1540792	.2707
TRICHLOROETHENE	150.0	1211453	.2128
BENZENE	150.0	5028614	.8834
1,2-DICHLOROETHANE	150.0	1575800	.2768
1,2-DICHLOROETHANE-D4	75.0	580279	.2039
CARBON TETRACHLORIDE	150.0	1663658	.2922
1,1-DICHLOROPROPENE	150.0	1752080	.3078
CYCLOHEXANE	150.0	2932809	.5152
1,1,1-TRICHLOROETHANE	150.0	1935701	.34
DIBROMOFLUOROMETHANE	75.0	587287	.2063
BROMOCHLOROMETHANE	150.0	505843	.0889
CIS-1,2-DICHLOROETHENE	150.0	1306774	.2296
2,2-DICHLOROPROPANE	150.0	2015447	.354
2-BUTANONE	150.0	296861	.0521
VINYL ACETATE	150.0	1942803	.3413
N-HEXANE	150.0	2319753	.4075
TRANS-1,2-DICHLOROETHENE	150.0	1250197	.2196
METHYLTERT-BUTYL ETHER	150.0	2323493	.4082
ACRYLONITRILE	150.0	306056	.0538
CARBON DISULFIDE	150.0	3942811	.6926
METHYLENE CHLORIDE	150.0	1165435	.2047
IODOMETHANE	150.0	1206101	.2119
DIMETHYL SULFIDE	150.0	1531878	.2691
ACETONE	150.0	197601	.0347
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	150.0	1191250	.2093
ACROLEIN	300.0	181994	.016
ISOPRENE	150.0	2151806	.378
TRICHLOROFLUOROMETHANE	150.0	2168043	.3809
CHLOROETHANE	150.0	1085194	.1906
BROMOMETHANE	150.0	940067	.1651
DICHLORODIFLUOROMETHANE	150.0	1584904	.2784

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Analyte		Sample # WG138555-09 Conc	File # 11M14399 Response	Level 8 RF
ETHYLBENZENE	CCC	200.0	1962335	.3586
TOLUENE	CCC	200.0	6574115	1.202
1,2-DICHLOROPROPANE	CCC	200.0	1754220	.2362
CHLOROFORM	CCC	200.0	2720639	.3664
1,1-DICHLOROETHENE	CCC	200.0	1403463	.189
VINYL CHLORIDE	CCC	200.0	688840	.0928
1,1,2,2-TETRACHLOROETHANE	SPCC	200.0	1139974	.3952
BROMOFORM	SPCC	200.0	656308	.1199
CHLOROBENZENE	SPCC	200.0	3521483	.6436
1,1-DICHLOROETHANE	SPCC	200.0	3360588	.4526
CHLOROMETHANE	SPCC	200.0	1299938	.1751
1,2,3-TRICHLOROBENZENE		200.0	1596367	.5535
NAPHTHALENE		200.0	3892769	1.35
HEXACHLOROBUTADIENE		200.0	802948	.2784
1,2,4-TRICHLOROBENZENE		200.0	1957522	.6787
1,2-DIBROMO-3-CHLOROPROPANE		200.0	203505	.0706
1,2-DICHLOROBENZENE		200.0	3121141	1.082
N-BUTYLBENZENE		200.0	6696771	2.322
4-DICHLOROBENZENE		200.0	3495639	1.212
,3-DICHLOROBENZENE		200.0	3552421	1.232
P-ISOPROPYLTOLUENE		200.0	7127606	2.471
SEC-BUTYLBENZENE		200.0	8558448	2.967
1,2,4-TRIMETHYLBENZENE		200.0	6821731	2.365
TERT-BUTYLBENZENE		200.0	6340819	2.199
A-METHYLSTYRENE		200.0	3746560	1.299
4-CHLOROTOLUENE		200.0	5176874	1.795
2-CHLOROTOLUENE		200.0	5751400	1.994
1,3,5-TRIMETHYLBENZENE		200.0	6351947	2.202
BROMOBENZENE		200.0	1520935	.5273
N-PROPYLBENZENE		200.0	9573686	3.319
TRANS-1,4-DICHLORO-2-BUTENE		200.0	434710	.1507
1,2,3-TRICHLOROPROPANE		200.0	326457	.1132
P-BROMOFLUOROBENZENE		100.0	1255915	.8709
ISOPROPYLBENZENE		200.0	7666466	1.401
STYRENE		200.0	4622646	.8448
O-XYLENE		200.0	2789379	.5098
M-,P-XYLENE		400.0	5114345	.4673
1,1,1,2-TETRACHLOROETHANE		200.0	1114628	.2037
1-CHLOROHEXANE		200.0	2330600	.4259
1,2-DIBROMOETHANE		200.0	995165	.1819
DIBROMOCHLOROMETHANE		200.0	1245815	.2277
TETRACHLOROETHENE		200.0	1182938	.2162
-DICHLOROPROPANE		200.0	1895899	.3465

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Analyte	Sample # WG138555-09 Conc	File # 11M14399 Response	Level 8 RF
2-HEXANONE	200.0	642350	.1174
1,1,2-TRICHLOROETHANE	200.0	1006343	.1839
TRANS-1,3-DICHLOROPROPENE	200.0	2010358	.3674
ETHYL METHACRYLATE	200.0	1294200	.2365
TOLUENE-D8	100.0	3024588	1.106
DIMETHYL DISULFIDE	200.0	1361460	.1833
CIS-1,3-DICHLOROPROPENE	200.0	2399833	.3232
4-METHYL-2-PENTANONE	200.0	357376	.0481
2-CHLOROETHYL VINYL ETHER	200.0	724853	.0976
DIBROMOMETHANE	200.0	681059	.0917
BROMODICHLOROMETHANE	200.0	1972101	.2656
TRICHLOROETHENE	200.0	1515589	.2041
BENZENE	200.0	6303532	.8489
1,2-DICHLOROETHANE	200.0	2015609	.2714
1,2-DICHLOROETHANE-D4	100.0	751634	.2024
CARBON TETRACHLORIDE	200.0	2083427	.2806
1,1-DICHLOROPROPENE	200.0	2186577	.2945
CYCLOHEXANE	200.0	3686117	.4964
1,1,1-TRICHLOROETHANE	200.0	2444149	.3291
DIBROMOFLUOROMETHANE	100.0	762876	.2055
BROMOCHLOROMETHANE	200.0	647386	.0872
CIS-1,2-DICHLOROETHENE	200.0	1640942	.221
2,2-DICHLOROPROPANE	200.0	2540029	.3421
2-BUTANONE	200.0	392203	.0528
VINYL ACETATE	200.0	2541507	.3423
N-HEXANE	200.0	2919720	.3932
TRANS-1,2-DICHLOROETHENE	200.0	1581406	.213
METHYLTERT-BUTYL ETHER	200.0	3109866	.4188
ACRYLONITRILE	200.0	406071	.0547
CARBON DISULFIDE	200.0	5038666	.6785
METHYLENE CHLORIDE	200.0	1448331	.195
IODOMETHANE	200.0	1682072	.2265
DIMETHYL SULFIDE	200.0	1998789	.2692
ACETONE	200.0	255474	.0344
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	200.0	1505338	.2027
ACROLEIN	400.0	241206	.0162
ISOPRENE	200.0	2757322	.3713
TRICHLOROFLUOROMETHANE	200.0	2694559	.3629
CHLOROETHANE	200.0	1422217	.1915
BROMOMETHANE	200.0	1238019	.1667
DICHLORODIFLUOROMETHANE	200.0	2020230	.2721

KEMRON FORMS - Modified 02/03/2003
Version 1.0
Report generated 05/07/2003 13:13

ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L0304594
File ID: 11M14410
ALT ID: WG138555-10
Units: ug/L

Instrument ID: HPMS11
Run Date: 04/21/2003
Run Time: 08:40
Analyst: CMS
Cal ID:HPMS11 - 17-APR-03

Analyte		Expected	Found	RF	%D	Q
Ethylbenzene	CCC	20	23.6	0.526	18.0	
Toluene	CCC	20	21.9	1.39	9.5	
1,2-Dichloropropane	CCC	20	20.9	0.256	4.5	
Chloroform	CCC	20	21.9	0.400	9.5	
1,1-Dichloroethane	CCC	20	22.0	0.208	10.0	
Vinyl Chloride	CCC	20	21.2	0.121	6.0	
1,1,2,2-Tetrachloroethane	SPCC	20	20.6	0.424	3.0	
Bromoform	SPCC	20	19.9	0.103	0.5	
Chlorobenzene	SPCC	20	22.3	0.915	11.5	
1,1-Dichloroethane	SPCC	20	21.7	0.479	8.5	
Chloromethane	SPCC	20	17.0	0.152	15.0	
1,2,3-Trichlorobenzene		20	21.5	0.682	7.5	
Naphthalene		20	21.1	1.56	5.5	
Hexachlorobutadiene		20	21.3	0.307	6.5	
1,2,4-Trichlorobenzene		20	22.1	0.852	10.5	
1,2-Dibromo-3-Chloropropane		20	19.8	0.0675	1.0	
1,2-Dichlorobenzene		20	21.3	1.28	6.5	
n-Butylbenzene		20	21.7	2.67	8.5	
1,4-Dichlorobenzene		20	21.0	1.44	5.0	
1,3-Dichlorobenzene		20	21.2	1.44	6.0	
p-Isopropyltoluene		20	21.3	2.82	6.5	
sec-Butylbenzene		20	21.7	3.44	8.5	
1,2,4-Trimethylbenzene		20	21.9	2.77	9.5	
tert-Butylbenzene		20	21.3	2.38	6.5	
a-Methylstyrene		20		0.000400		
4-Chlorotoluene		20	23.1	2.42	15.5	
2-Chlorotoluene		20	21.2	2.33	6.0	
1,3,5-Trimethylbenzene		20	22.5	2.69	12.5	
Bromobenzene		20	22.2	0.677	11.0	
n-Propylbenzene		20	22.5	3.89	12.5	
trans-1,4-Dichloro-2-Butene		20		0		
1,2,3-Trichloropropane		20	21.6	0.129	8.0	
Isopropylbenzene		20	21.8	1.57	9.0	
Styrene		20	23.5	1.07	17.5	
o-Xylene		20	22.9	0.643	14.5	
m-,p-Xylene		40	46.3	0.647	15.8	
1,1,1,2-Tetrachloroethane		20	24.1	0.281	20.5	
1-Chlorohexane		20	22.1	0.487	10.5	
1,2-Dibromoethane		20	21.4	0.193	7.0	
Dibromochloromethane		20	21.9	0.222	9.5	
Tetrachloroethene		20	22.9	0.250	14.5	
1,3-Dichloropropane		20	20.8	0.376	4.0	
2-Hexanone		20	19.6	0.118	2.0	
1,1,2-Trichloroethane		20	21.2	0.201	6.0	

KEMRON FORMS - Modified 12/05/2002
Version 1.2
Report generated 05/07/2003 13:14

ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L0304594
File ID: 11M14410
ALT ID: WG138555-10
Units: ug/L

Instrument ID: HPMS11
Run Date: 04/21/2003
Run Time: 08:40
Analyst: CMS
Cal ID:HPMS11 17-APR-03

Analyte	Expected	Found	RF	%D	Q
trans-1,3-Dichloropropene	20	22.5	0.400	12.5	
Ethyl Methacrylate	20		0		
Dimethyl Disulfide	20		0		
cis-1,3-Dichloropropene	20	22.9	0.362	14.5	
4-Methyl-2-Pentanone	20	21.2	0.0531	6.0	
2-Chloroethyl Vinyl Ether	20	21.8	0.106	9.0	
Dibromomethane	20	22.0	0.104	10.0	
Bromodichloromethane	20	21.8	0.278	9.0	
Trichloroethene	20	24.3	0.250	21.5	
Benzene	20	21.8	0.964	9.0	
1,2-Dichloroethane	20	21.0	0.295	5.0	
Carbon Tetrachloride	20	22.2	0.292	11.0	
1,1-Dichloropropene	20	22.5	0.331	12.5	
Cyclohexane	20		0.000500		
1,1,1-Trichloroethane	20	23.5	0.359	17.5	
Bromochloromethane	20	22.1	0.0981	10.5	
cis-1,2-Dichloroethene	20	22.0	0.249	10.0	
2,2-Dichloropropane	20	22.4	0.371	12.0	
2-Butanone	20	18.8	0.0513	6.0	
Vinyl Acetate	20	18.9	0.311	5.5	
n-Hexane	20	21.6	0.425	8.0	
trans-1,2-Dichloroethene	20	23.1	0.242	15.5	
Methyl Tert Butyl Ether	20	20.8	0.450	4.0	
Acrylonitrile	20		0		
Carbon Disulfide	20	15.8	0.540	21.0	
Methylene Chloride	20	21.4	0.215	7.0	
Iodomethane	20	21.0	0.237	5.0	
Dimethyl Sulfide	20		0		
Acetone	20	16.9	0.0314	15.5	
1,1,2-Trichloro-1,2,2-Trifluoroethane	20		0		
Acrolein	40		0		
Isoprene	20		0		
Trichlorofluoromethane	20	18.1	0.320	9.5	
Chloroethane	20	19.5	0.183	2.5	
Bromomethane	20	19.8	0.152	1.0	
Dichlorodifluoromethane	20	18.1	0.244	9.5	

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

KEMRON FORMS - Modified 12/05/2002
Version 1.2
Report generated 05/07/2003 13:14

CONTINUING CALIBRATION REPORT

Login Number: L0304594
File ID: 11M14677
CCV ID: WG139455-02
Units: ug/L

Instrument ID: HPMS11
Run Date: 05/01/2003
Run Time: 06:10
Analyst: CMS
Cal ID:HPMS11 - 17-APR-03

Analyte		Expected	Found	RF	%D	Q
Ethylbenzene	CCC	50	53.6	0.477	7.2	
Toluene	CCC	50	52.7	1.34	5.4	
1,2-Dichloropropane	CCC	50	52.4	0.257	4.8	
Chloroform	CCC	50	56.1	0.409	12.2	
1,1-Dichloroethene	CCC	50	54.1	0.205	8.2	
Vinyl Chloride	CCC	50	54.6	0.124	9.2	
1,1,2,2-Tetrachloroethane	SPCC	50	53.5	0.440	7.0	
Bromoform	SPCC	50	54.8	0.113	9.6	
Chlorobenzene	SPCC	50	51.4	0.844	2.8	
1,1-Dichloroethane	SPCC	50	55.4	0.491	10.8	
Chloromethane	SPCC	50	54.0	0.193	8.0	
1,2,3-Trichlorobenzene		50	47.7	0.604	4.6	
Naphthalene		50	52.1	1.54	4.2	
Hexachlorobutadiene		50	40.7	0.235	18.6	
1,2,4-Trichlorobenzene		50	46.3	0.716	7.4	
1,2-Dibromo-3-Chloropropane		50	53.4	0.0729	6.8	
1,2-Dichlorobenzene		50	50.3	1.21	0.6	
n-Butylbenzene		50	43.9	2.16	12.2	
1,4-Dichlorobenzene		50	50.4	1.38	0.8	
1,3-Dichlorobenzene		50	50.9	1.39	1.8	
p-Isopropyltoluene		50	46.4	2.46	7.2	
sec-Butylbenzene		50	45.8	2.90	8.4	
1,2,4-Trimethylbenzene		50	51.9	2.63	3.8	
tert-Butylbenzene		50	42.9	1.91	14.2	
a-Methylstyrene		50	49.2	1.43	1.6	
4-Chlorotoluene		50	48.9	2.05	2.2	
2-Chlorotoluene		50	50.8	2.24	1.6	
1,3,5-Trimethylbenzene		50	52.0	2.48	4.0	
Bromobenzene		50	52.6	0.642	5.2	
n-Propylbenzene		50	52.0	3.59	4.0	
trans-1,4-Dichloro-2-Butene		50	55.5	0.169	11.0	
1,2,3-Trichloropropane		50	55.3	0.132	10.6	
Isopropylbenzene		50	52.3	1.50	4.6	
Styrene		50	53.6	0.970	7.2	
o-Xylene		50	53.3	0.600	6.6	
m-,p-Xylene		100	106	0.595	6.0	
1,1,1,2-Tetrachloroethane		50	57.5	0.268	15.0	
1-Chlorohexane		50	49.2	0.433	1.6	
1,2-Dibromoethane		50	54.3	0.197	8.6	
Dibromochloromethane		50	57.5	0.233	15.0	
Tetrachloroethene		50	54.1	0.236	8.2	
1,3-Dichloropropane		50	52.4	0.380	4.8	

KEMRON FORMS - Modified 12/05/2002
Version 1.2
Report generated 05/07/2003 13:13

CONTINUING CALIBRATION REPORT

Login Number: L0304594
File ID: 11M14677
CCV ID: WG139455-02
Units: ug/L

Instrument ID: HPMS11
Run Date: 05/01/2003
Run Time: 06:10
Analyst: CMS
Cal ID:HPMS11 17-APR-03

Analyte	Expected	Found	RF	%D	Q
2-Hexanone	50	53.8	0.130	7.6	
1,1,2-Trichloroethane	50	52.2	0.198	4.4	
trans-1,3-Dichloropropene	50	55.8	0.396	11.6	
Ethyl Methacrylate	50	51.7	0.256	3.4	
Dimethyl Disulfide	50	50.6	0.183	1.2	
cis-1,3-Dichloropropene	50	55.1	0.348	10.2	
4-Methyl-2-Pentanone	50	51.3	0.0514	2.6	
2-Chloroethyl Vinyl Ether	50	53.7	0.105	7.4	
Dibromomethane	50	54.8	0.103	9.6	
Bromodichloromethane	50	56.5	0.288	13.0	
Trichloroethene	50	54.4	0.224	8.8	
Benzene	50	53.3	0.942	6.6	
1,2-Dichloroethane	50	56.3	0.317	12.6	
Carbon Tetrachloride	50	58.4	0.308	16.8	
1,1-Dichloropropane	50	54.9	0.324	9.8	
Cyclohexane	50	49.0	0.515	2.0	
1,1,1-Trichloroethane	50	59.5	0.363	19.0	
Bromochloromethane	50	54.4	0.0965	8.8	
cis-1,2-Dichloroethene	50	53.5	0.242	7.0	
2,2-Dichloropropane	50	56.0	0.370	12.0	
2-Butanone	50	55.2	0.0602	10.4	
Vinyl Acetate	50	53.8	0.355	7.6	
n-Hexane	50	46.2	0.364	7.6	
trans-1,2-Dichloroethene	50	55.7	0.234	11.4	
Methyl Tert Butyl Ether	50	50.3	0.435	0.6	
Acrylonitrile	50	54.5	0.0600	9.0	
Carbon Disulfide	50	52.4	0.718	4.8	
Methylene Chloride	50	53.3	0.215	6.6	
Todomethane	50	47.0	0.212	6.0	
Dimethyl Sulfide	50	49.9	0.279	0.2	
Acetone	50	56.8	0.0423	13.6	
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	49.5	0.207	1.0	
Acrolein	100	109	0.0176	9.0	
Isoprene	50	50.3	0.385	0.6	
Trichlorofluoromethane	50	57.3	0.406	14.6	
Chloroethane	50	52.5	0.197	5.0	
Bromomethane	50	51.2	0.157	2.4	
Dichlorodifluoromethane	50	55.1	0.297	10.2	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

KEMRON FORMS - Modified 12/05/2002
Version 1.2
Report generated 05/07/2003 13:13

KEMRON ENVIRONMENTAL SERVICES
INTERNAL STANDARD RETENTION TIME SUMMARY

Login Number: L0304594
Instrument ID: HPMS11
Workgroup (AAB#): WG139456

CCV Number: WG139455-02
CAL ID: HPMS11-17-APR-03
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG139455-02	NA	NA	17.79	14.97	11.33
Upper Limit	NA	NA	17.89	15.07	11.43
Lower Limit	NA	NA	17.69	14.87	11.23
L0304594-01	1.00		17.79	14.97	11.33
L0304594-02	1.00		17.79	14.97	11.33
L0304594-04	1.00		17.79	14.97	11.33

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

Underline = Response outside limits

KEMRON FORMS - Modified 11/19/2002
Version 1.2
Report generated 05/07/2003 13:14

KEMRON ENVIRONMENTAL SERVICES
INTERNAL STANDARD AREA SUMMARY

Login Number: L0304594
Instrument ID: HPMS11
Workgroup (AAB#): WG139456

CCV Number: WG139455-02
CAL ID: HPMS11-17-APR-03
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG139455-02	NA	NA	354783	705727	946564
Upper Limit	NA	NA	709566	1411454	1893128
Lower Limit	NA	NA	177392	352864	473282
L0304594-01	1.00		336601	655423	888638
L0304594-02	1.00		330341	658988	890429
L0304594-04	1.00		329131	665363	920005

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

Underline = Response outside limits

KEMRON FORMS - Modified 12/13/2002
Version 1.2
Report generated 05/07/2003 13:14

Directory: C:\MSDCHEM\1\DATA\041703

IS: SV10842
SS: SV10843

Analyst: CHS

L	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	11M14388.D	1.	✓WG138555-01 BFB 50NG STD 8260	1,1 SV10835	17 Apr 2003 06:32
2	2	11M14389.D	1.	DNR WG138555 0.30 PPB STD 8260	1,1 SV10829	17 Apr 2003 07:07
3	3	11M14390.D	1.	✓WG138555-02 0.40 PPB STD 8260	1,1 SV10829	17 Apr 2003 07:38
4	4	11M14391.D	1.	✓WG138555-03 1 PPB STD 8260	1,1 SV10829	17 Apr 2003 08:09
5	5	11M14392.D	1.	DNR WG138555 2 PPB STD 8260	1,1 SV10829	17 Apr 2003 08:41
6	6	11M14393.D	1.	⊥ WG138555 5 PPB STD 8260	1,1 SV10829	17 Apr 2003 09:11
7	7	11M14394.D	1.	DNR WG138555 2 PPB STD 8260	1,1 SV10829	17 Apr 2003 09:43
8	8	11M14395.D	1.	✓WG138555-04 5 PPB STD 8260	1,1 SV10829	17 Apr 2003 10:13
9	9	11M14396.D	1.	✓WG138555-05 20 PPB STD 8260	1,1 SV10829	17 Apr 2003 10:43
10	10	11M14397.D	1.	✓WG138555-06 50 PPB STD 8260	1,1 SV10829	17 Apr 2003 11:14
11	11	11M14398.D	1.	✓WG138555-07 100 PPB STD 8260	1,1 SV10829	17 Apr 2003 11:44
12	12	11M14399.D	1.	✓WG138555-09 200 PPB STD 8260	1,1 SV10829	17 Apr 2003 12:15
13	13	11M14400.D	1.	✓SYSTEM BLANK	1,1	17 Apr 2003 12:46
14	14	11M14401.D	1.	✓SYSTEM BLANK	1,1	17 Apr 2003 13:16
15	15	11M14402.D	1.	✓WG138555-08 150 PPB STD 8260	1,1 SV10829	17 Apr 2003 14:20
16	16	11M14403.D	1.	✓SYSTEM BLANK	1,1	17 Apr 2003 14:50
17	17	11M14404.D	1.	✓SYSTEM BLANK	1,1	17 Apr 2003 15:20
18	18	11M14405.D	1.	RR WG138555-12 20 PPB ALT SOURCE STD 8260	1,1 SV10847	17 Apr 2003 15:51

WG138555

reanalyze alternate source (TCE 4)

Analyst: CMS

IS: SV10842
SS: SV10843

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	11M14406.D	1.	✓WG138731-01 BFB 50NG STD 8260	1,1 SV10835	21 Apr 2003 06:19
2	2	11M14407.D	1.	✓WG138731-02 50 PPB STD 8260	1,1 SV10829	21 Apr 2003 06:52
3	3	11M14408.D	1.	✓WG138732-01 VBLK0421 BLANK 8260	1,1	21 Apr 2003 07:38
4	4	11M14409.D	1.	✓WG138732-01 VBLK0421 BLANK 8260	1,1	21 Apr 2003 08:09
5	5	11M14410.D	1.	✓WG138555-10 20PPB ALT SOURCE STD 8260	1,1 SV10847	21 Apr 2003 08:40
6		11M14411.D	1.			

WG138555

No reanalyses /R-flags

Directory: C:\MSDchem\1\DATA\030503

Analyst: CMS

SS: SV10843

I	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	11M14676.D	1.	✓WG139455-01 BFB 50NG STD 8260	1,1 SV10835	1 May 2003 05:40
2	2	11M14677.D	1.	✓WG139455-02 50 PPB STD 8260	1,1 SV10906	1 May 2003 06:10
3	3	11M14678.D	1.	✓WG139456-01 VBLK0501 BLANK 8260	1,1	1 May 2003 06:45
4	4	11M14679.D	1.	✓WG139456-02 20 PPB LCS STD 8260	1,1 SV10847	1 May 2003 07:16
5	5	11M14680.D	1.	✓L0304529-05 A 50X D1 8260	1,50	1 May 2003 07:48
6	6	11M14681.D	1.	✓L0304529-06 A 50X D1 8260	1,50	1 May 2003 08:19
7	7	11M14682.D	1.	✓L0304529-07 A 50X D1 8260	1,50	1 May 2003 08:50
8	8	11M14683.D	1.	✓L0304594-04 A 00 826-TCL	1,1	1 May 2003 09:21
9	9	11M14684.D	1.	✓L0304587-01 A 00 8260	1,1	1 May 2003 09:52
10	10	11M14685.D	1.	✓L0304587-02 A 00 8260	1,1	1 May 2003 10:23
11	11	11M14686.D	1. DNR	✓L0304532-06 A 00 8260 syringe screw fell out	1,1	1 May 2003 10:53
12	12	11M14687.D	1. L	✓L0304532-07 A 00 8260 L	1,1	1 May 2003 11:23
13	13	11M14688.D	1.	✓L0304532-06 B 00 8260	1,1	1 May 2003 11:56
14	14	11M14689.D	1.	✓L0304532-07 A 00 8260	1,1	1 May 2003 12:26
15	15	11M14690.D	1.	✓L0304532-01 A 00 8260	1,1	1 May 2003 12:57
16	16	11M14691.D	1.	✓L0304532-02 MS A 00 8260	1,1 SV10847	1 May 2003 13:27
17	17	11M14692.D	1.	✓L0304532-03 MSD A 00 8260	1,1 SV10847	1 May 2003 13:57
18	18	11M14693.D	1. RR 10X	L0304516-01 A 00 826-BETX	1,1	1 May 2003 14:27
19	19	11M14694.D	1.	✓L0304532-04 A 00 8260	1,1	1 May 2003 14:57
20	20	11M14695.D	1.	✓L0304532-05 A 00 8260	1,1	1 May 2003 15:28
21	21	11M14696.D	1.	✓L0304594-01 A 00 826-TCL	1,1	1 May 2003 15:58
22	22	11M14697.D	1.	✓L0304594-02 A 00 826-TCL	1,1	1 May 2003 16:28
23	23	11M14698.D	1.	RR WG139551-01 BFB 50NG STD 8260	1,1 SV10835	1 May 2003 17:05
24	24	11M14699.D	1.	RR WG139551-01 BFB 50NG STD 8260	1,1 SV10835	1 May 2003 17:34
25	25	11M14700.D	1.	✓ WG139551-01 BFB 50NG STD 8260	1,1 SV10835	1 May 2003 18:03
26	26	11M14701.D	1.	✓ WG139551-02 50 PPB STD 8260	1,1 SV10906	1 May 2003 18:35
27	27	11M14702.D	1.	RR WG139552-01 VBLK0501 BLANK 8260	1,1	1 May 2003 19:11
28	28	11M14703.D	1.	✓WG139552-01 VBLK0501 BLANK 8260	1,1	1 May 2003 19:41
29	29	11M14704.D	1.	✓WG139552-02 20 PPB LCS STD 8260	1,1 SV10847	1 May 2003 20:11
30	30	11M14705.D	1.	✓ L0304516-01 B 10X D1 826-BETX	1,10	1 May 2003 20:47
31	31	11M14706.D	1.	✓L0304586-05 A 00 8260	1,1	1 May 2003 21:18
32	32	11M14707.D	1.	✓L0304588-03 A 00 826-LOW	1,1	1 May 2003 21:48
33	33	11M14708.D	1.	✓L0304625-04 A 00 826-LOW	1,1	1 May 2003 22:18
34	34	11M14709.D	1.	✓L0304608-01 A 00 826-LOW	1,1	1 May 2003 22:49
35	35	11M14710.D	1.	✓L0304608-02 A 00 826-LOW	1,1	1 May 2003 23:20
36	36	11M14711.D	1.	✓L0304586-01 A 00 8260	1,1	1 May 2003 23:51
37	37	11M14712.D	1.	✓L0304586-02 MS A 00 8260	1,1 SV10924	2 May 2003 00:22
38	38	11M14713.D	1.	✓L0304586-03 MSD A 00 8260	1,1 SV10924	2 May 2003 00:53
39	39	11M14714.D	1.	✓SYSTEM BLANK	1,1	2 May 2003 01:24
40	40	11M14715.D	1.	✓L0304586-04 A 00 8260	1,1	2 May 2003 01:55
41	41	11M14716.D	1. RR 10X	L0304588-01 A 00 826-LOW	1,1	2 May 2003 02:26
42	42	11M14717.D	1. RR c/o	L0304588-02 A 00 826-LOW	1,1	2 May 2003 02:57
43	43	11M14718.D	1. RR c/o	L0304625-01 A 00 826-LOW	1,1	2 May 2003 03:29
44	44	11M14719.D	1.	✓L0304625-02 A 00 826-LOW	1,1	2 May 2003 04:00
45	45	11M14720.D	1.	✓L0304625-03 A 00 826-LOW	1,1	2 May 2003 04:31
46	46	11M14721.D	1.	✓L0304608-03 A 00 826-LOW	1,1	2 May 2003 05:02
47	47	11M14722.D	1.	✓L0304608-04 A 00 826-LOW	1,1	2 May 2003 05:34
48	48	11M14723.D	1.	✓L0304608-05 A 00 826-LOW	1,1	2 May 2003 06:05

WG139456 reanalyses

L0304516-01 @ 10X: Benzene, Toluene

WG139552 reanalyses

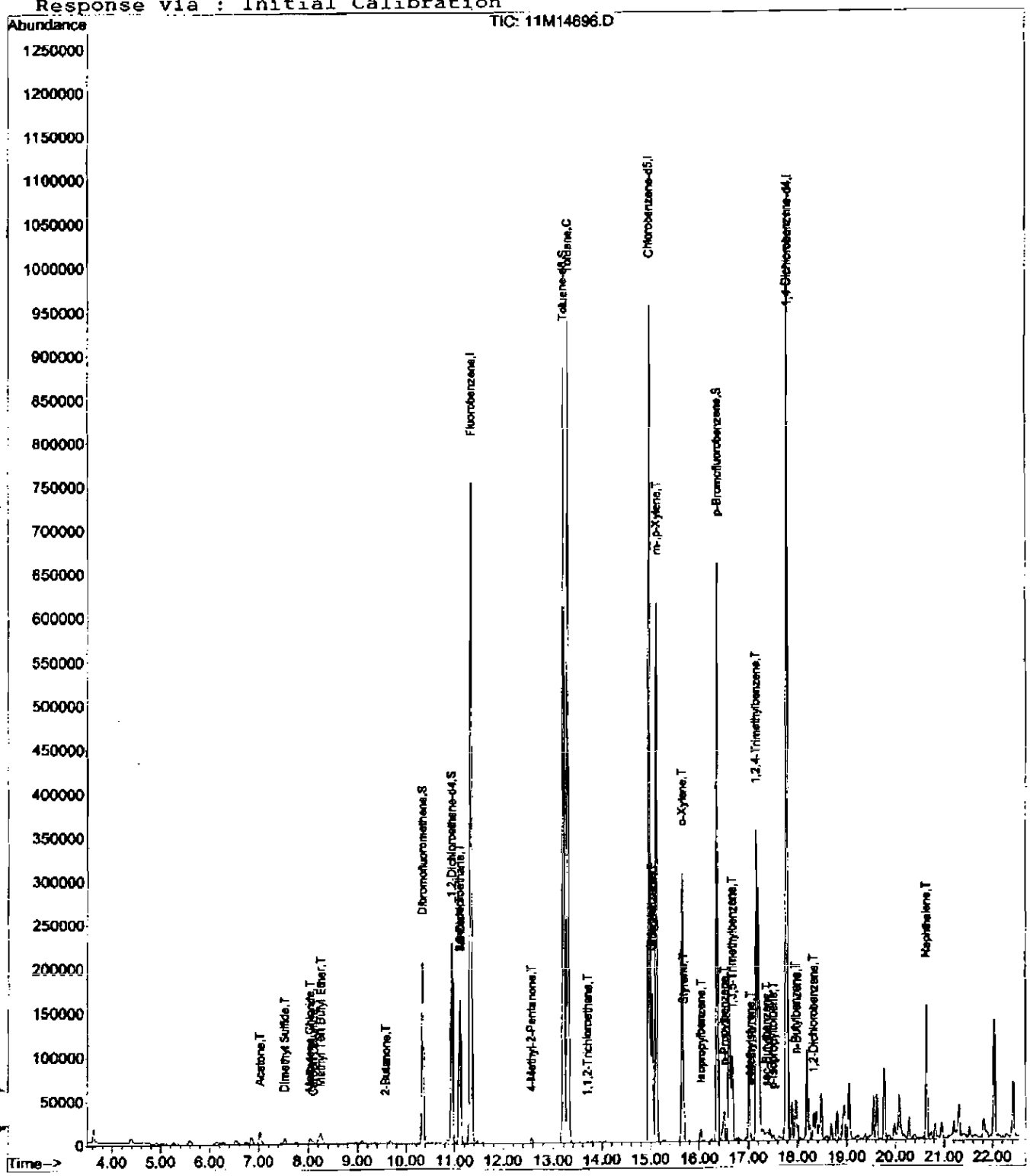
L0304588-01 @ 10X: PCE

02 May 2003 07:06

2.1.1.2 Sample Data

Data File : C:\MSDchem\1\DATA\050103\11M14696.D Vial: 21
Acq On : 1 May 2003 15:58 Operator: CMS
Sample : L0304594-01 A 00 826-TCL Inst : HPMS11
Misc : 1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 1 16:20 2003 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration



Data File : C:\MSDchem\1\DATA\050103\11M14696.D Vial: 21
Acq On : 1 May 2003 15:58 Operator: CMS
Sample : L0304594-01 A 00 826-TCL Inst : HPMS11
Misc : 1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 01 16:20:51 2003 Quant Results File: 8260WT.RES

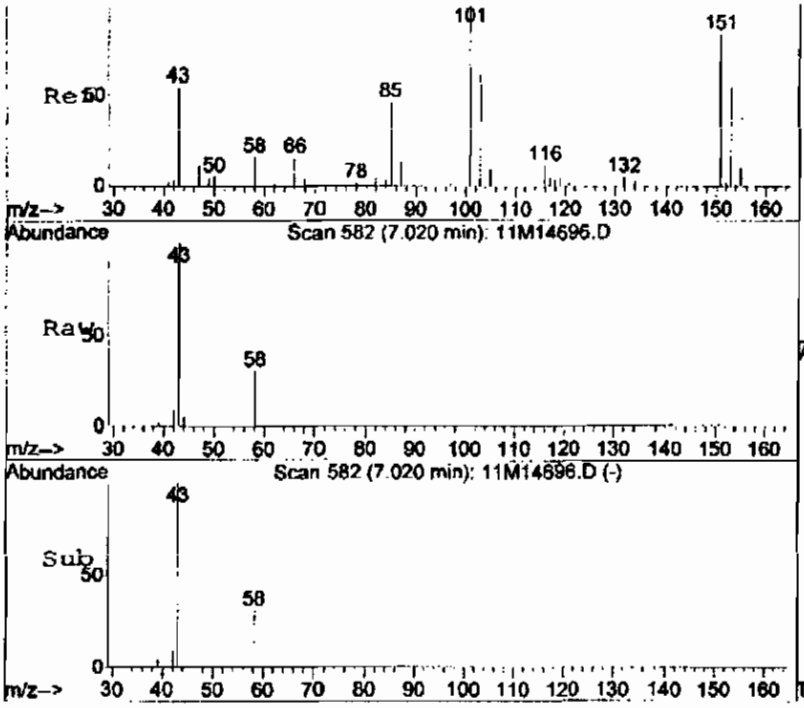
Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.33	96	888638	25.00 ug/L	0.00
44) Chlorobenzene-d5	14.97	117	655423	25.00 ug/L	0.00
64) 1,4-Dichlorobenzene-d4	17.79	152	336601	25.00 ug/L	0.00

System Monitoring Compounds					
28) Dibromofluoromethane	10.34	111	182557	24.8934 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 99.56%		
33) 1,2-Dichloroethane-d4	10.94	65	204164	26.4091 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 105.64%		
45) Toluene-d8	13.19	98	754844	25.3039 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 101.20%		
66) p-Bromofluorobenzene	16.36	95	308291	24.7616 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 99.04%		

Target Compounds					Qvalue
11) Acetone	7.02	43	30147	22.7779 ug/L #	34
13) Dimethyl Sulfide	7.53	62	4712	0.4748 ug/L	84
15) Methylene Chloride	8.02	84	3158	0.4418 ug/L F	78
16) Carbon Disulfide	8.11	76	4523	~~0.1859 ug/L #~~	85
18) Methyl Tert Butyl Ether	8.25	73	21770	1.4169 ug/L #	65
23) 2-Butanone	9.57	43	6244	3.2220 ug/L F#	100
34) 1,2-Dichloroethane	11.11	62	1349	~~0.1350 ug/L #~~	1
35) Benzene	11.11	78	179925	5.7245 ug/L	88
41) 4-Methyl-2-Pentanone	12.57	58	2509	1.4076 ug/L #	100
46) Toluene	13.29	91	876452	26.2859 ug/L	95
49) 1,1,2-Trichloroethane	13.70	97	1250	~~0.2519 ug/L #~~	14
56) Chlorobenzene	15.02	112	5235	0.2435 ug/L F	99
58) Ethylbenzene	15.03	106	50341	4.3135 ug/L F	79
59) m-,p-Xylene	15.12	106	235060	16.0312 ug/L	84
60) o-Xylene	15.65	106	110443	7.4924 ug/L	84
61) Styrene	15.68	104	32635	1.3754 ug/L F#	68
63) Isopropylbenzene	16.04	105	14775	0.3932 ug/L	93
69) n-Propylbenzene	16.51	91	37803	0.8124 ug/L	92
71) 1,3,5-Trimethylbenzene	16.67	105	61054	1.9005 ug/L	85
74) a-Methylstyrene	17.05	118	2496	0.1274 ug/L #	1
76) 1,2,4-Trimethylbenzene	17.16	105	263441	7.7374 ug/L	93
77) sec-Butylbenzene	17.37	105	5155	0.1207 ug/L	99
78) p-Isopropyltoluene	17.51	119	4740	0.1327 ug/L	88
81) n-Butylbenzene	17.96	91	6115	0.1841 ug/L #	1
82) 1,2-Dichlorobenzene	18.30	146	2938	0.1810 ug/L	91
86) Naphthalene	20.64	128	136716	6.8442 ug/L #	83

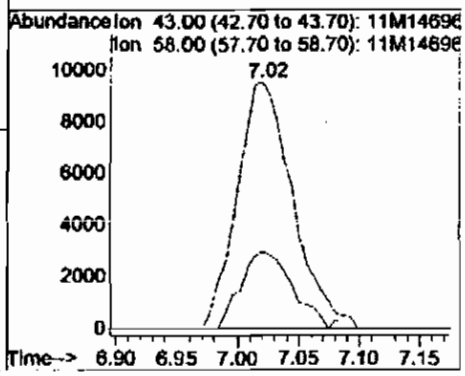
(#) = qualifier out of range (m) = manual integration

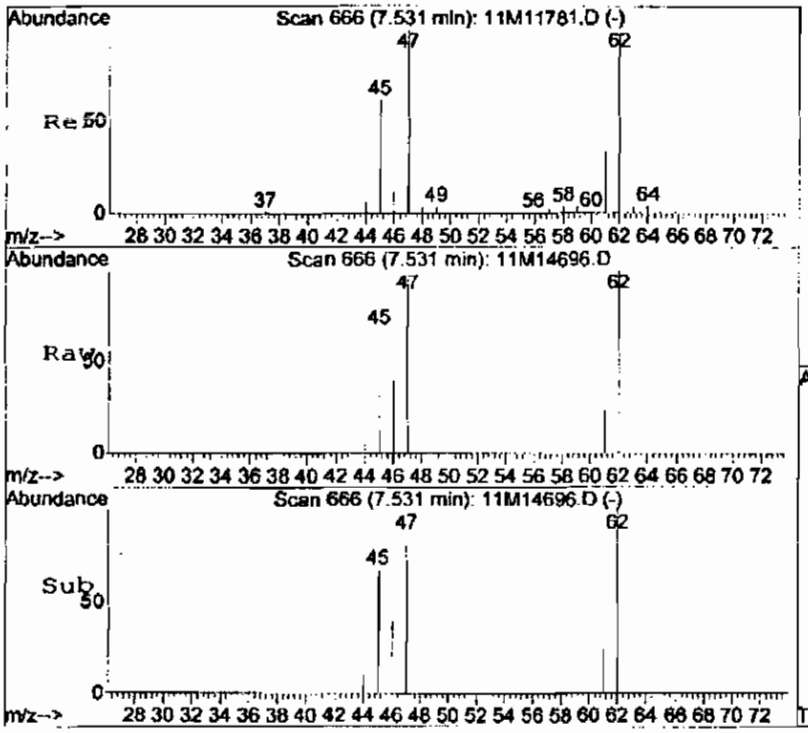


Acetone
Concen: 22.78 ug/L
RT: 7.02 min Scan# 582
Delta R.T. 0.00 min
Lab File: 11M14696.D
Acq: 1 May 2003 15:58

Tgt Ion: 43 Resp: 30147

Ion	Ratio	Lower	Upper
43	100		
58	29.0	4.0	9.2#

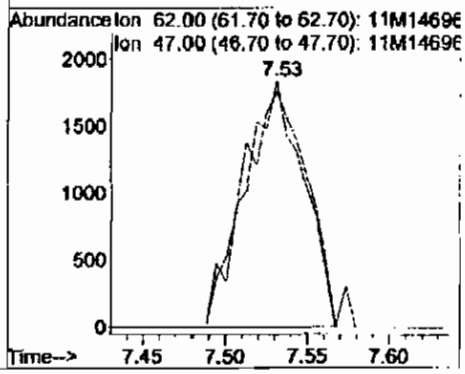


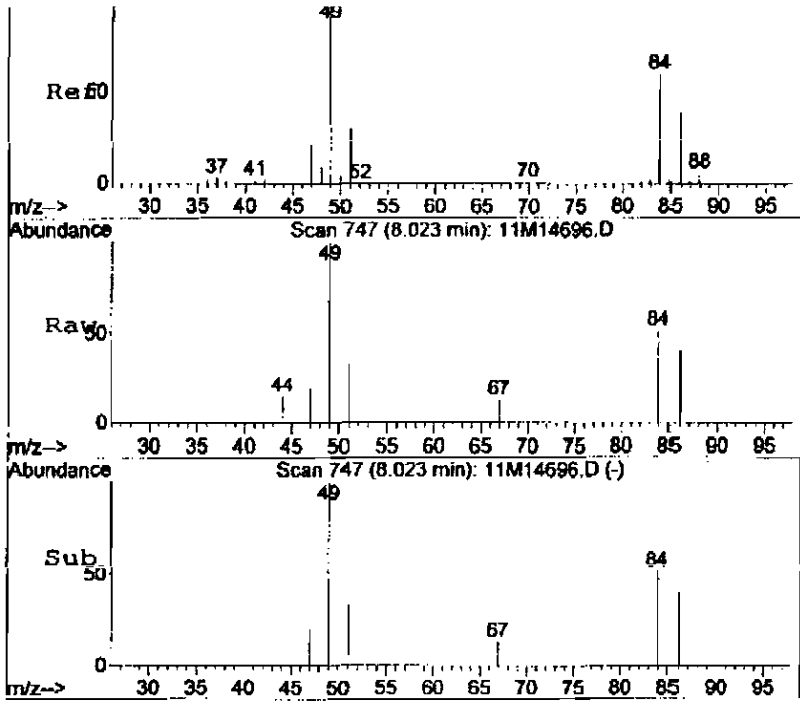


#13
Dimethyl Sulfide
Concen: 0.47 ug/L
RT: 7.53 min Scan# 666
Delta R.T. 0.01 min
Lab File: 11M14696.D
Acq: 1 May 2003 15:58

Tgt Ion: 62 Resp: 4712

Ion	Ratio	Lower	Upper
62	100		
47	102.0	52.5	122.5

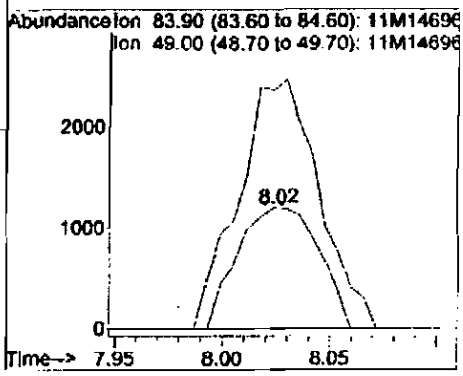


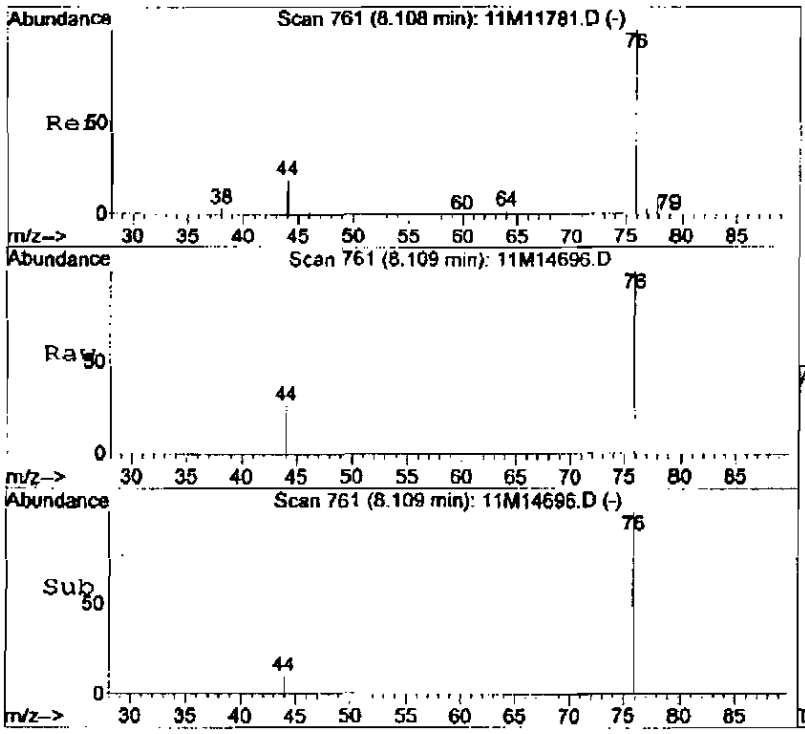


Methylene Chloride
Concen: 0.44 ug/L
RT: 8.02 min Scan# 747
Delta R.T. 0.00 min
Lab File: 11M14696.D
Acq: 1 May 2003 15:58

Tgt Ion: 84 Resp: 3158

Ion	Ratio	Lower	Upper
84	100		
49	202.5	103.1	240.5

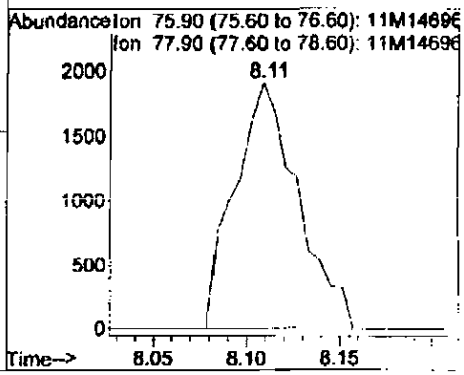


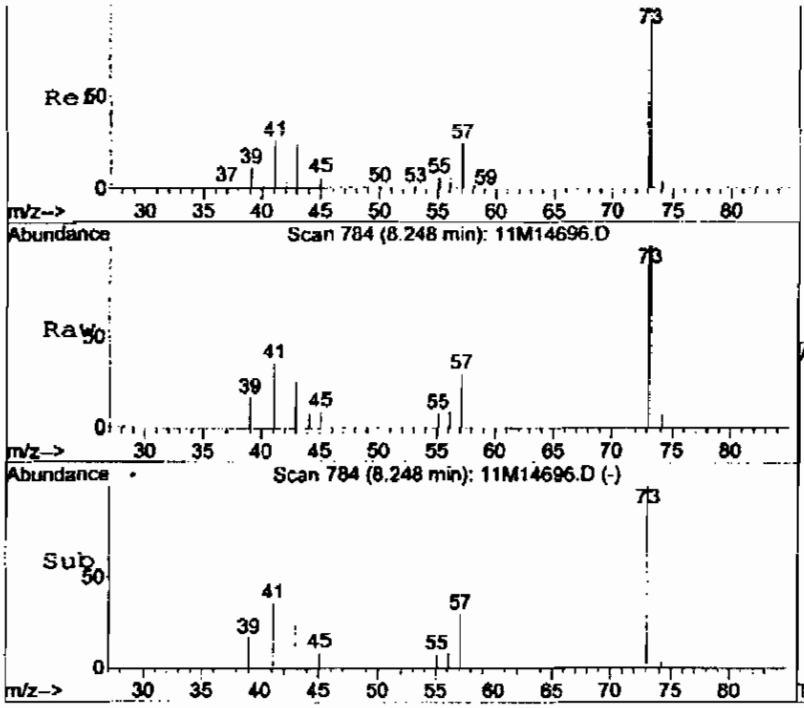


#16
Carbon Disulfide
Concen: 0.19 ug/L
RT: 8.11 min Scan# 761
Delta R.T. 0.00 min
Lab File: 11M14696.D
Acq: 1 May 2003 15:58

Tgt Ion: 76 Resp: 4523

Ion	Ratio	Lower	Upper
76	100		
78	0.0	3.0	7.0#

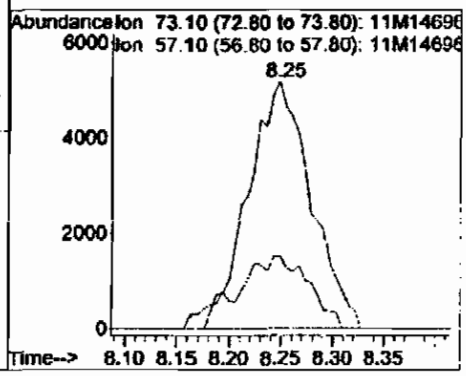


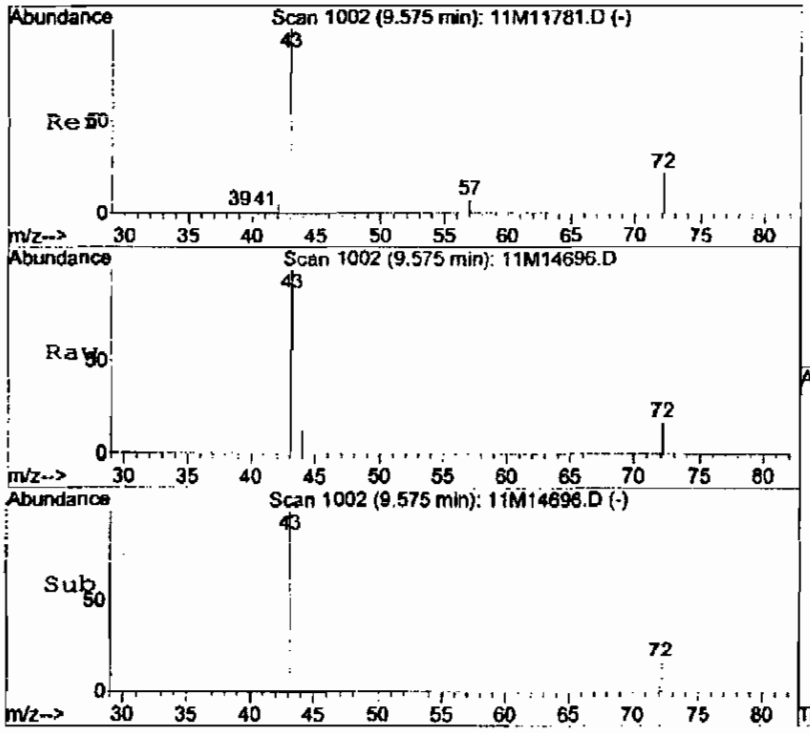


Methyl Tert Butyl Ether
Concen: 1.42 ug/L
RT: 8.25 min Scan# 784
Delta R.T. 0.01 min
Lab File: 11M14696.D
Acq: 1 May 2003 15:58

Tgt Ion: 73 Resp: 21770

Ion	Ratio	Lower	Upper
73	100		
57	28.6	8.6	20.2#

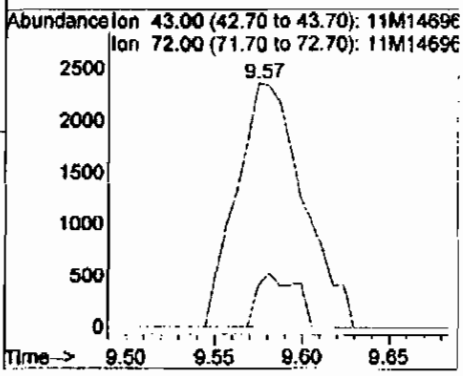


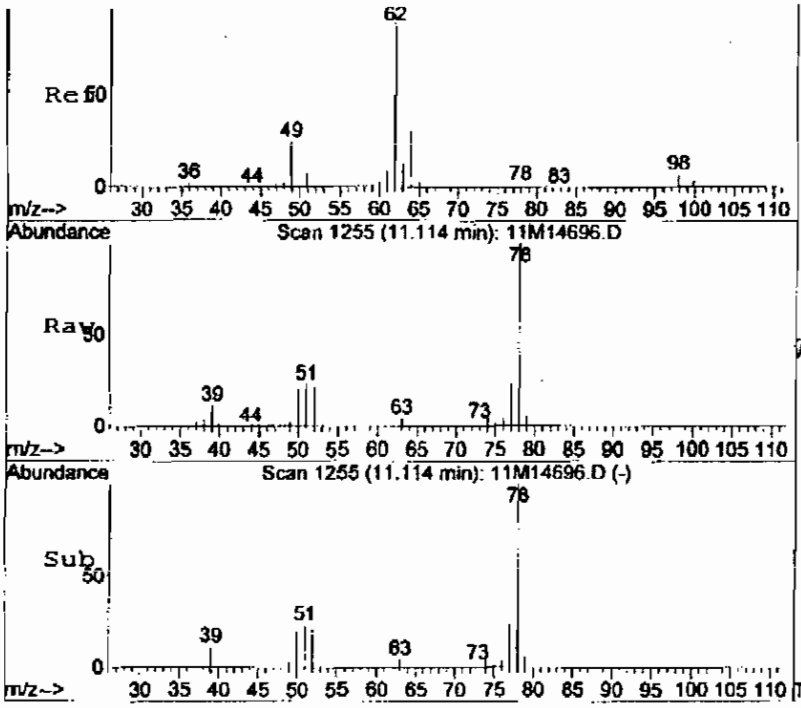


#23
2-Butanone
Concen: 3.22 ug/L
RT: 9.57 min Scan# 1002
Delta R.T. 0.00 min
Lab File: 11M14696.D
Acq: 1 May 2003 15:58

Tgt Ion: 43 Resp: 6244

Ion	Ratio	Lower	Upper
43	100		
72	12.7	0.0	0.0#

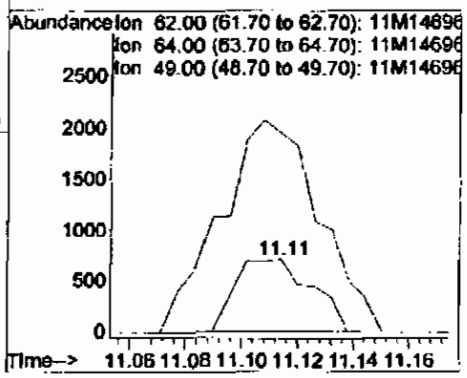


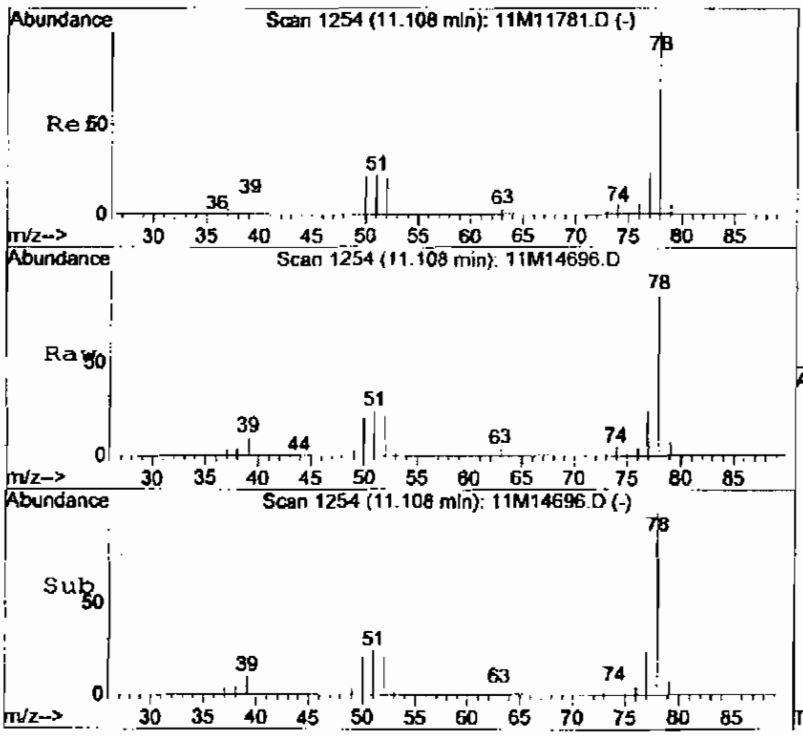


1,2-Dichloroethane
Concen: 0.14 ug/L
RT: 11.11 min Scan# 1255
Delta R.T. 0.06 min
Lab File: 11M14696.D
Acq: 1 May 2003 15:58

Tgt Ion: 62 Resp: 1349

Ion	Ratio	Lower	Upper
62	100		
64	0.0	12.8	29.8#
49	377.9	9.7	22.7#

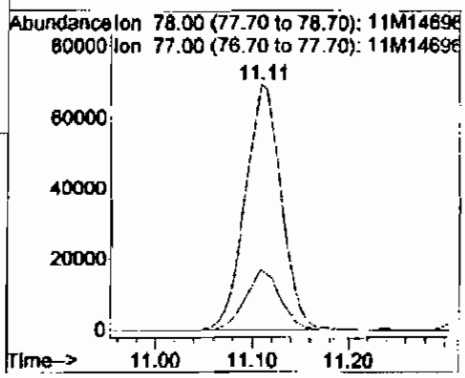


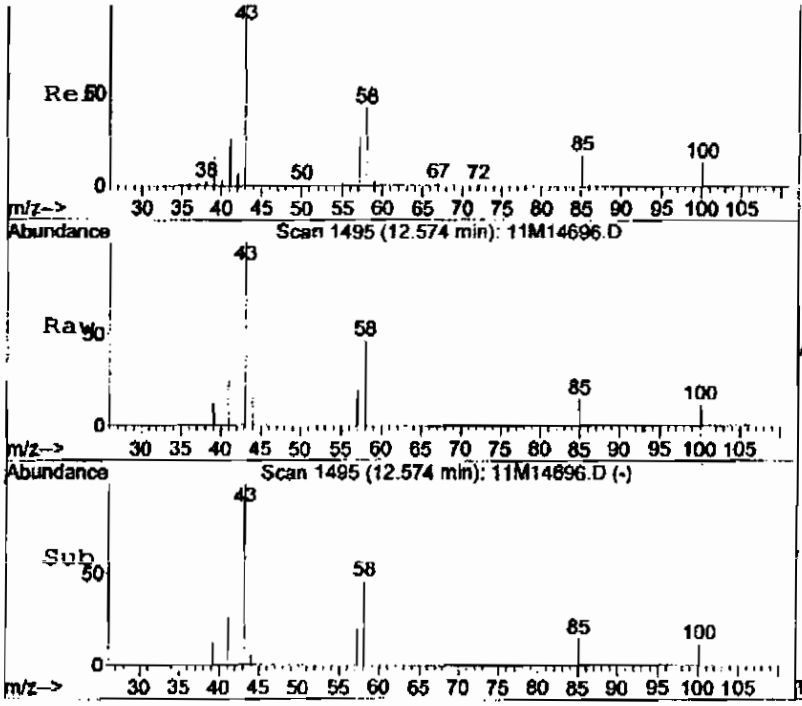


#35
Benzene
Concen: 5.72 ug/L
RT: 11.11 min Scan# 1254
Delta R.T. -0.01 min
Lab File: 11M14696.D
Acq: 1 May 2003 15:58

Tgt Ion: 78 Resp: 179925

Ion	Ratio	Lower	Upper
78	100		
77	23.2	10.9	25.3

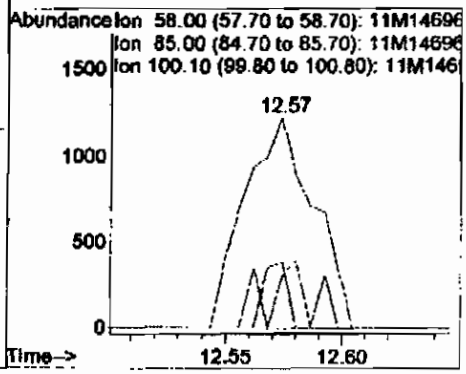


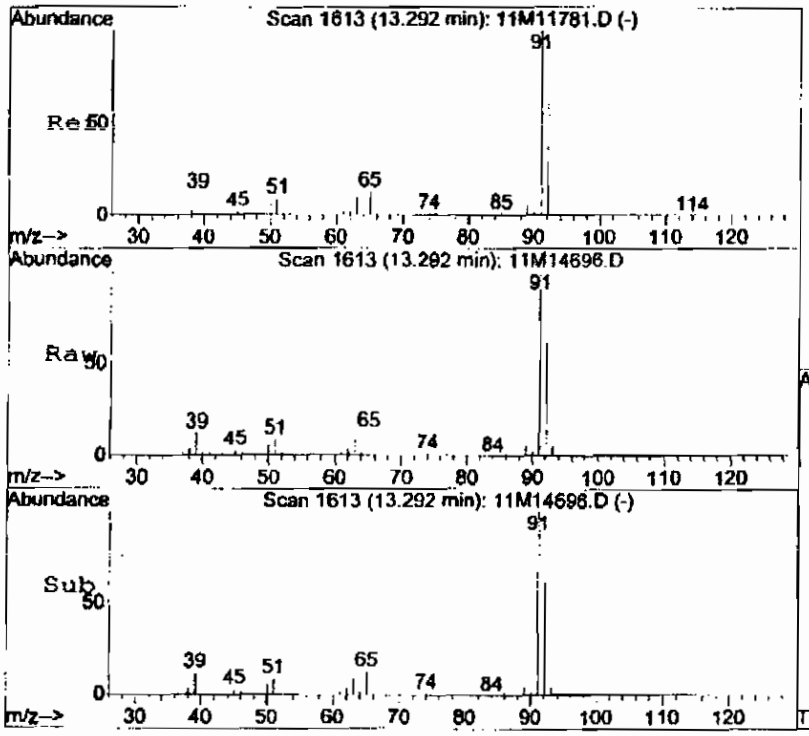


4-Methyl-2-Pentanone
Concen: 1.41 ug/L
RT: 12.57 min Scan# 1495
Delta R.T. 0.00 min
Lab File: 11M14696.D
Acq: 1 May 2003 15:58

Tgt Ion: 58 Resp: 2509

Ion	Ratio	Lower	Upper
58	100		
85	10.7	0.0	0.0#
100	19.6	0.0	0.0#

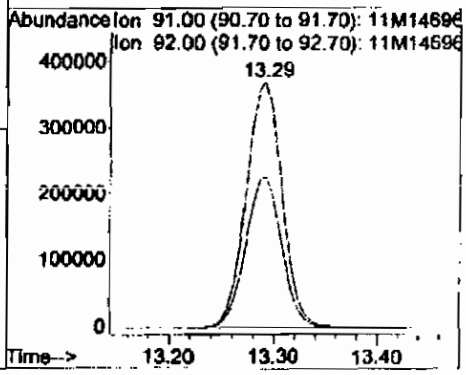


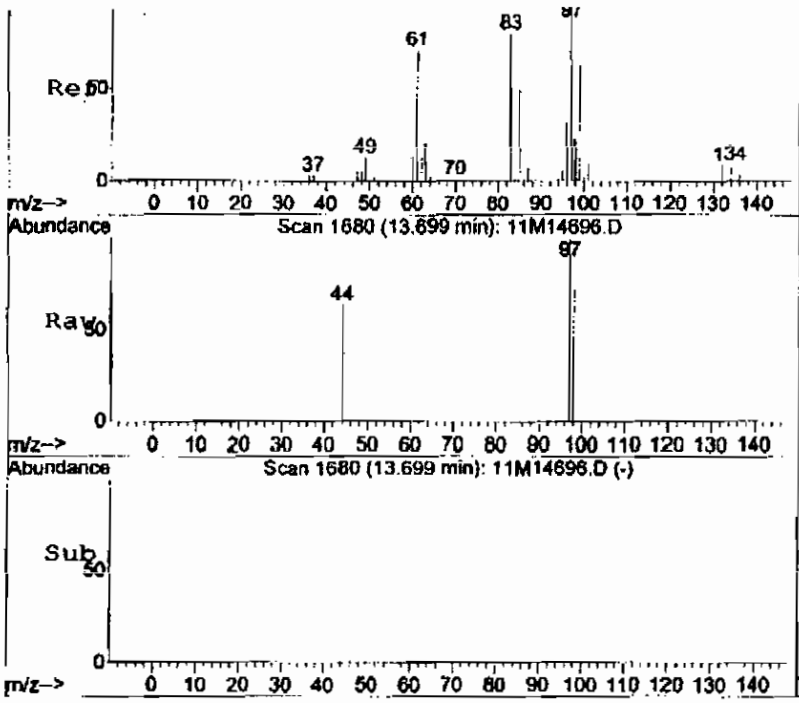


#46
Toluene
Concen: 26.29 ug/L
RT: 13.29 min Scan# 1613
Delta R.T. 0.00 min
Lab File: 11M14696.D
Acq: 1 May 2003 15:58

Tgt Ion: 91 Resp: 876452

Ion	Ratio	Lower	Upper
91	100		
92	60.7	34.1	79.7

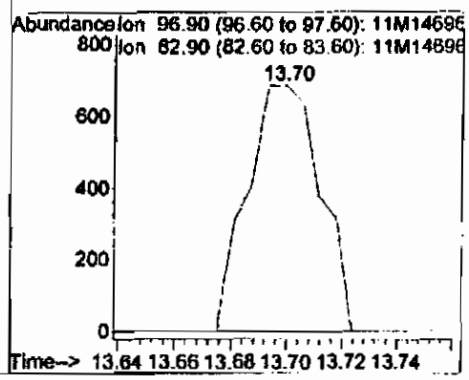


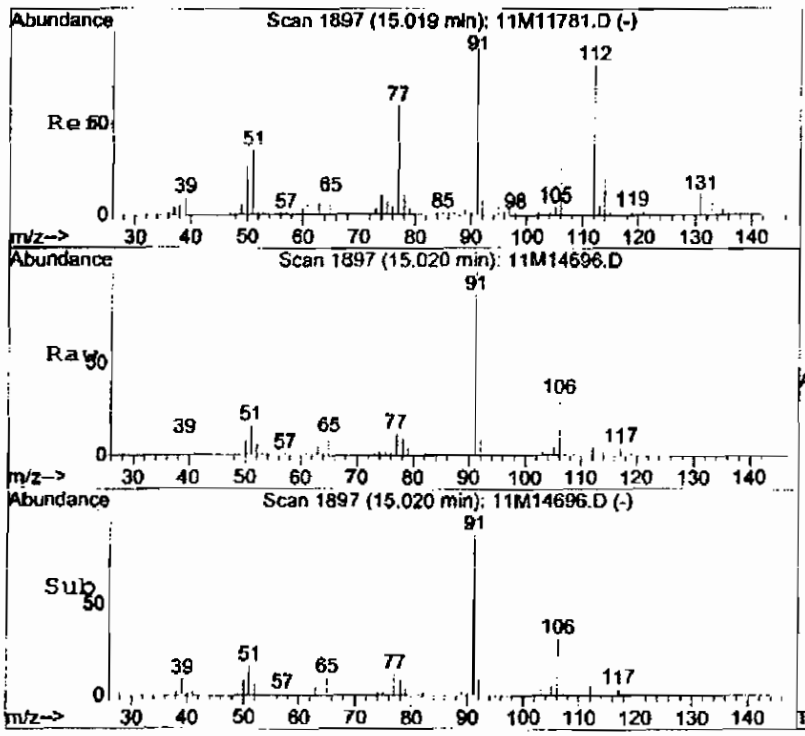


1,1,2-Trichloroethane
Concen: 0.25 ug/L
RT: 13.70 min Scan# 1680
Delta R.T. 0.06 min
Lab File: 11M14696.D
Acq: 1 May 2003 15:58

Tgt Ion: 97 Resp: 1250

Ion	Ratio	Lower	Upper
97	100		
83	0.0	42.5	99.3#

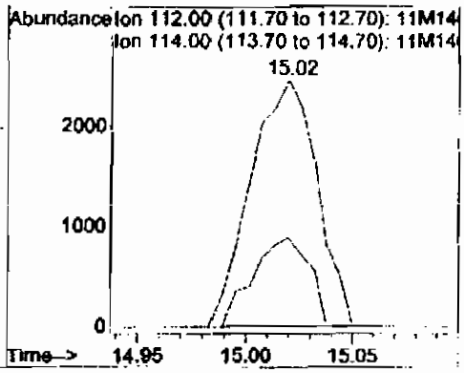


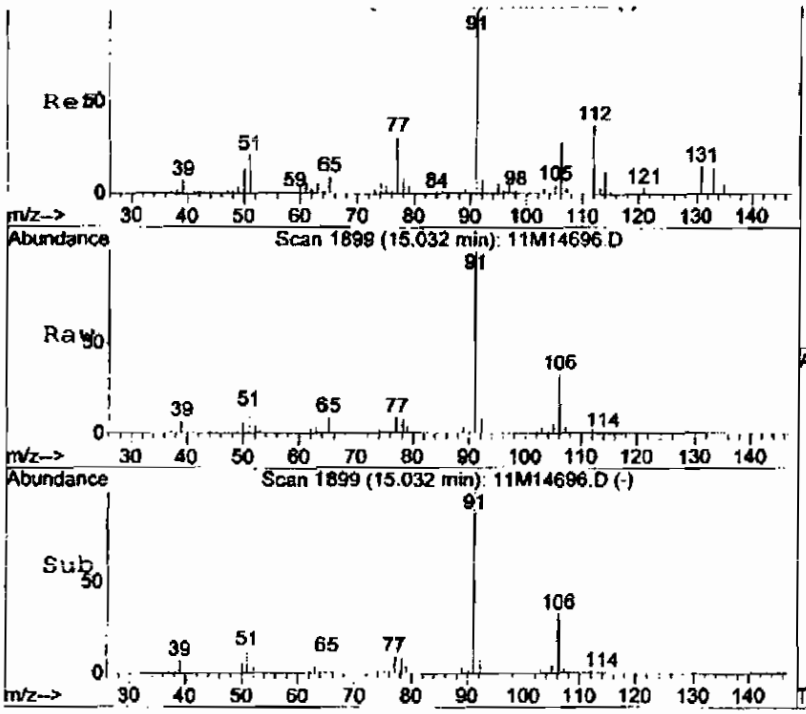


#56
Chlorobenzene
Concen: 0.24 ug/L
RT: 15.02 min Scan# 1897
Delta R.T. 0.00 min
Lab File: 11M14696.D
Acq: 1 May 2003 15:58

Tgt Ion:112 Resp: 5235

Ion	Ratio	Lower	Upper
112	100		
114	30.4	18.5	43.3

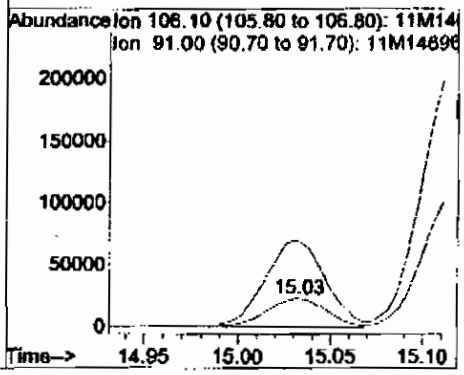


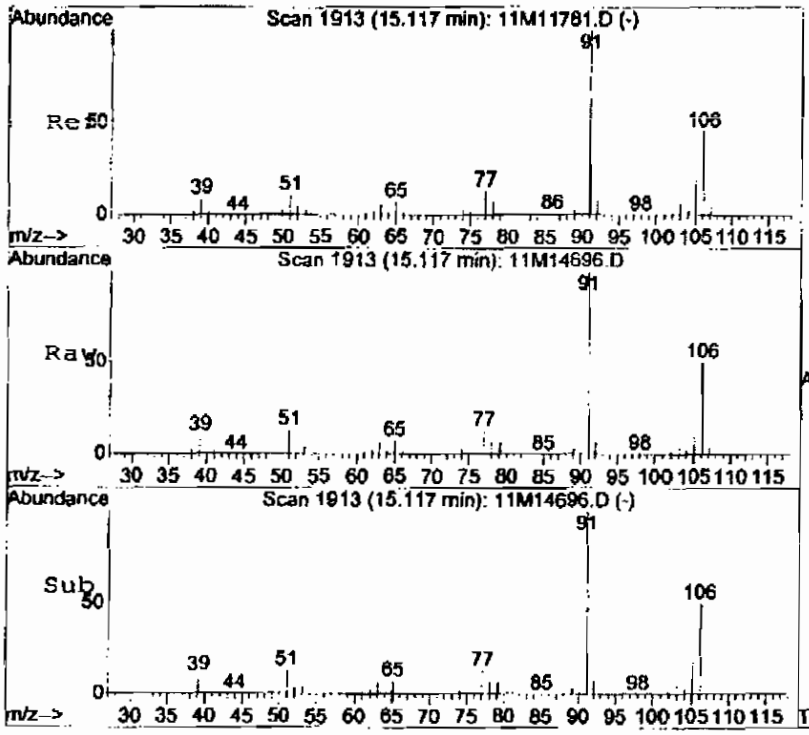


Ethylbenzene
Concen: 4.31 ug/L
RT: 15.03 min Scan# 1899
Delta R.T. 0.00 min
Lab File: 11M14696.D
Acq: 1 May 2003 15:58

Tgt Ion:106 Resp: 50341

Ion	Ratio	Lower	Upper
106	100		
91	313.2	215.4	502.6

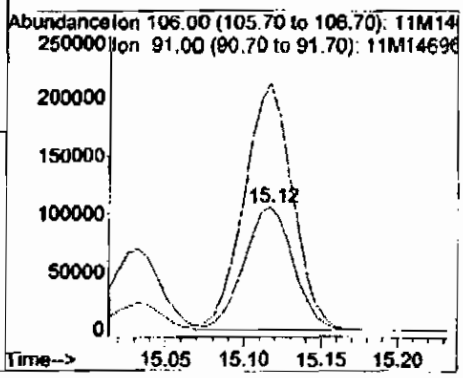


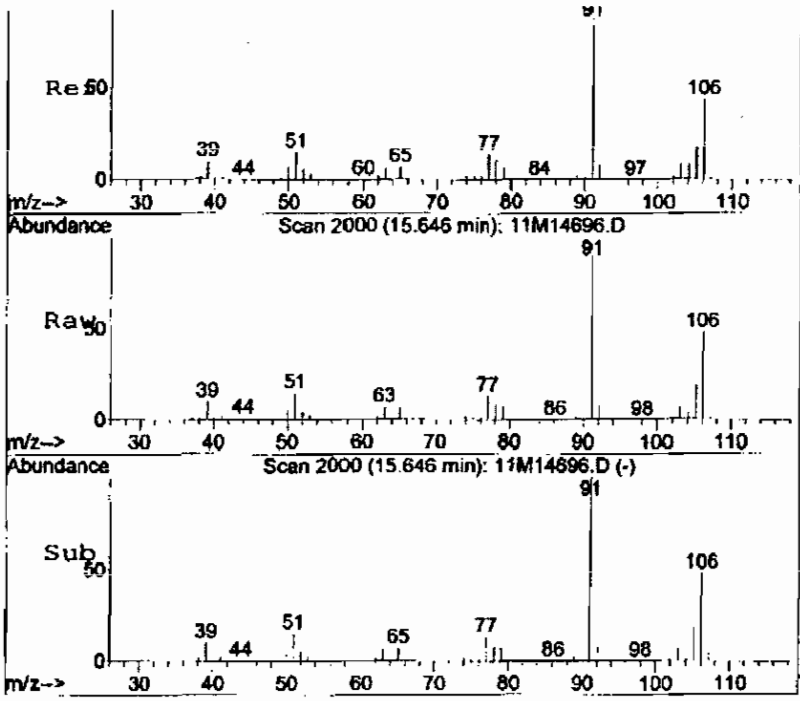


#59
m-,p-Xylene
Concen: 16.03 ug/L
RT: 15.12 min Scan# 1913
Delta R.T. 0.00 min
Lab File: 11M14696.D
Acq: 1 May 2003 15:58

Tgt Ion:106 Resp: 235060

Ion	Ratio	Lower	Upper
106	100		
91	196.6	133.9	312.3

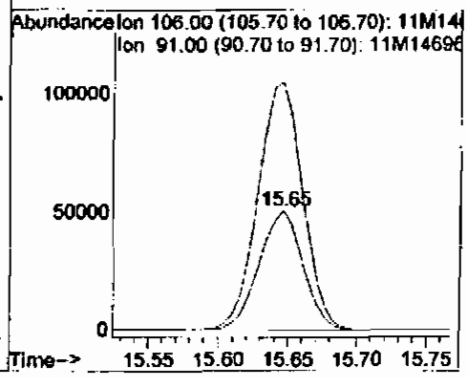


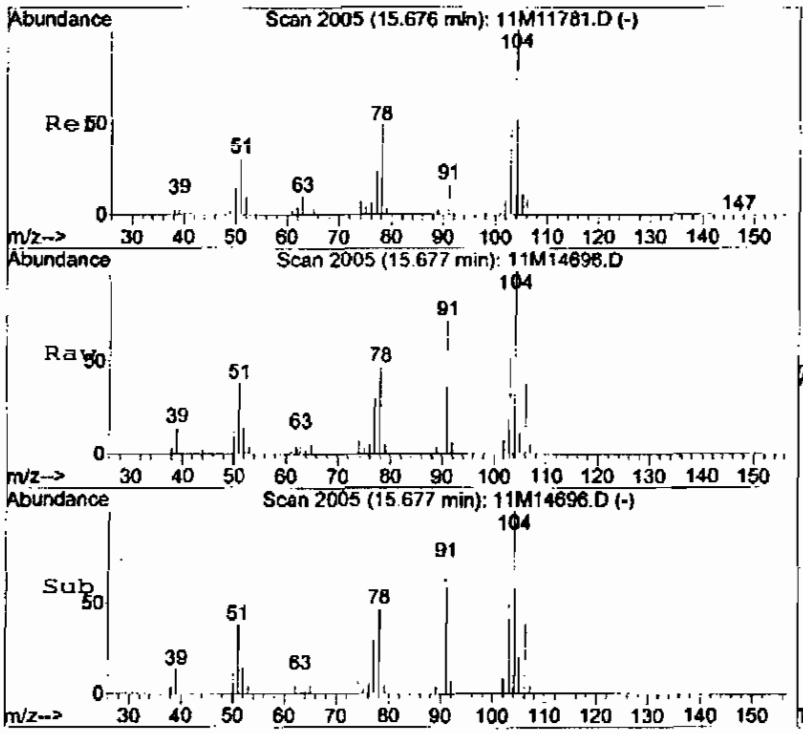


o-Xylene
Concen: 7.49 ug/L
RT: 15.65 min Scan# 2000
Delta R.T. 0.00 min
Lab File: 11M14696.D
Acq: 1 May 2003 15:58

Tgt Ion:106 Resp: 110443

Ion	Ratio	Lower	Upper
106	100		
91	211.9	143.3	334.3

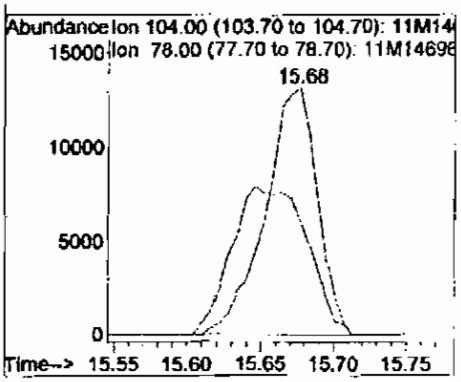


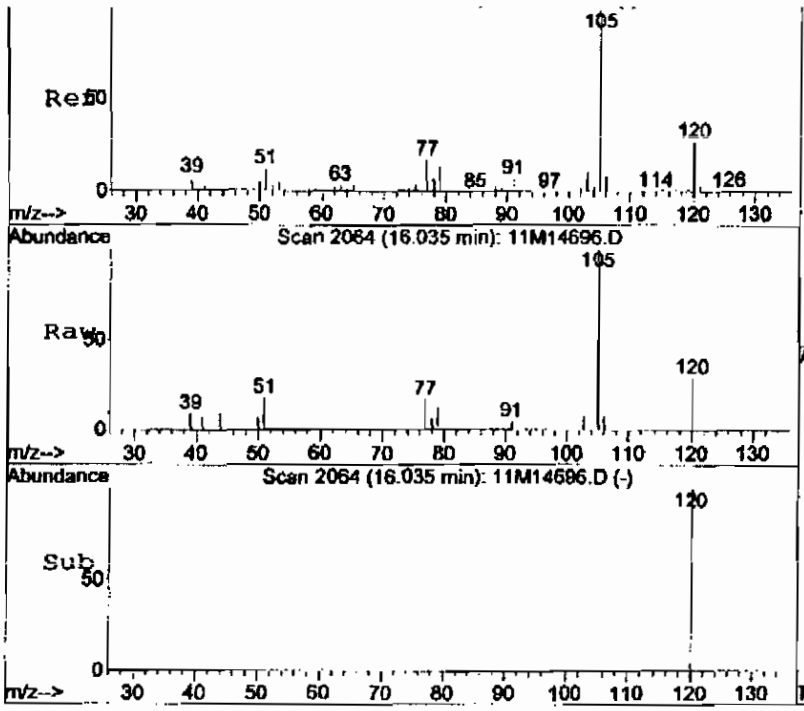


#61
Styrene
Concen: 1.38 ug/L
RT: 15.68 min Scan# 2005
Delta R.T. 0.00 min
Lab File: 11M14696.D
Acq: 1 May 2003 15:58

Tgt Ion:104 Resp: 32635

Ion	Ratio	Lower	Upper
104	100		
78	86.4	37.0	86.4#

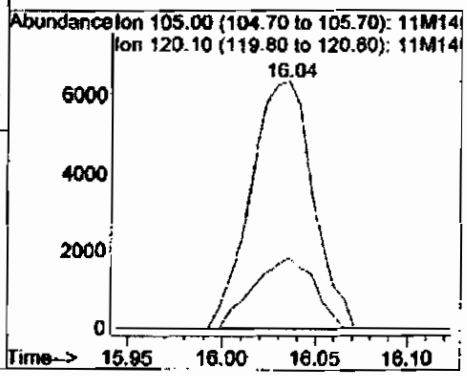


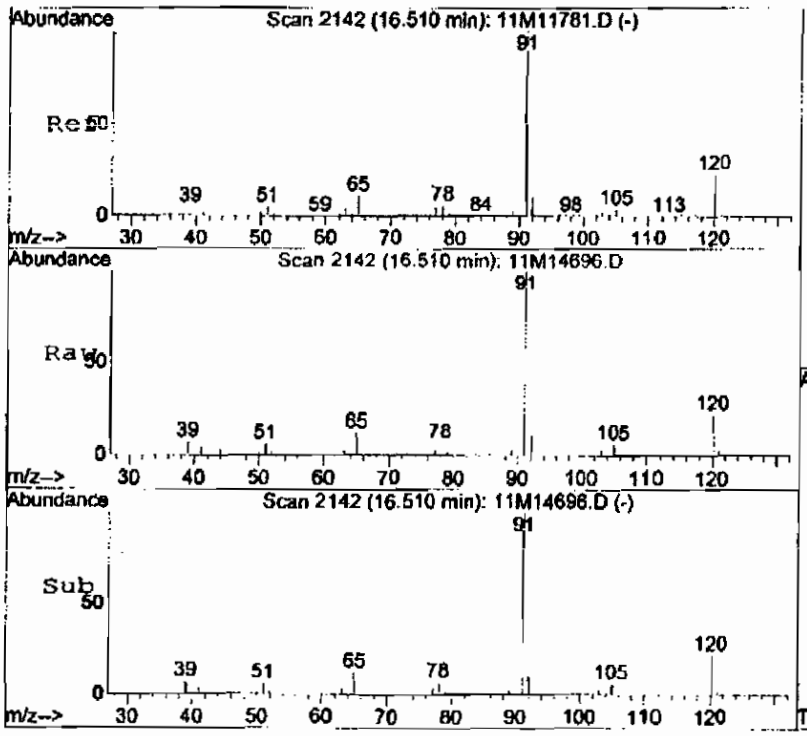


Isopropylbenzene
Concen: 0.39 ug/L
RT: 16.04 min Scan# 2064
Delta R.T. 0.00 min
Lab File: 11M14696.D
Acq: 1 May 2003 15:58

Tgt Ion:105 Resp: 14775

Ion	Ratio	Lower	Upper
105	100		
120	28.3	15.0	35.0

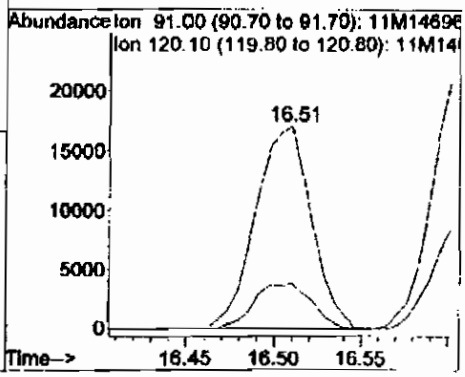


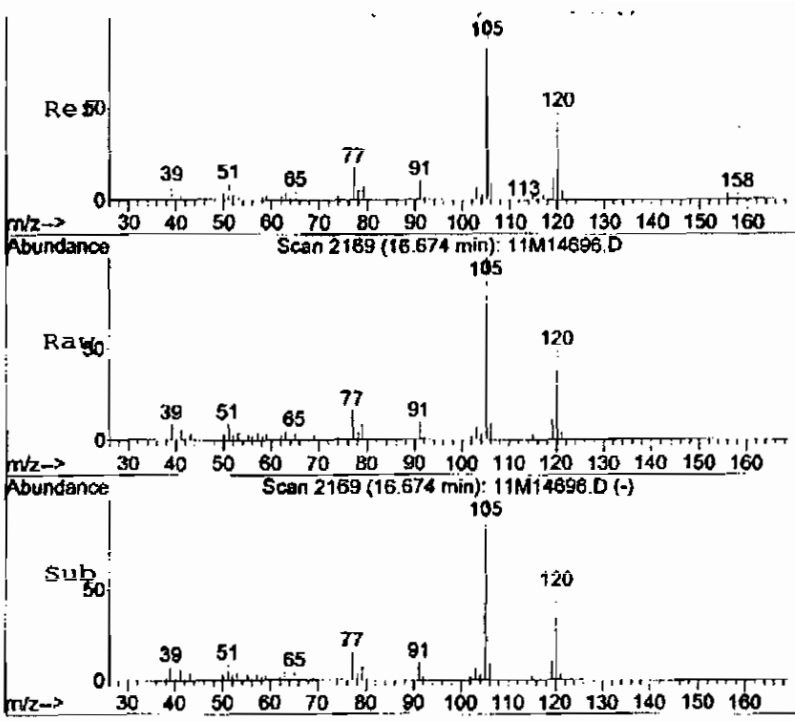


#69
n-Propylbenzene
Concen: 0.81 ug/L
RT: 16.51 min Scan# 2142
Delta R.T. -0.00 min
Lab File: 11M14696.D
Acq: 1 May 2003 15:58

Tgt Ion: 91 Resp: 37803

Ion	Ratio	Lower	Upper
91	100		
120	23.0	11.6	27.0

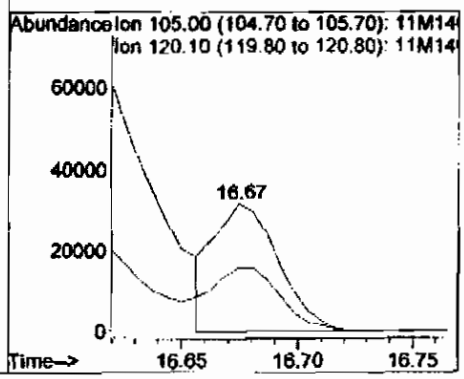


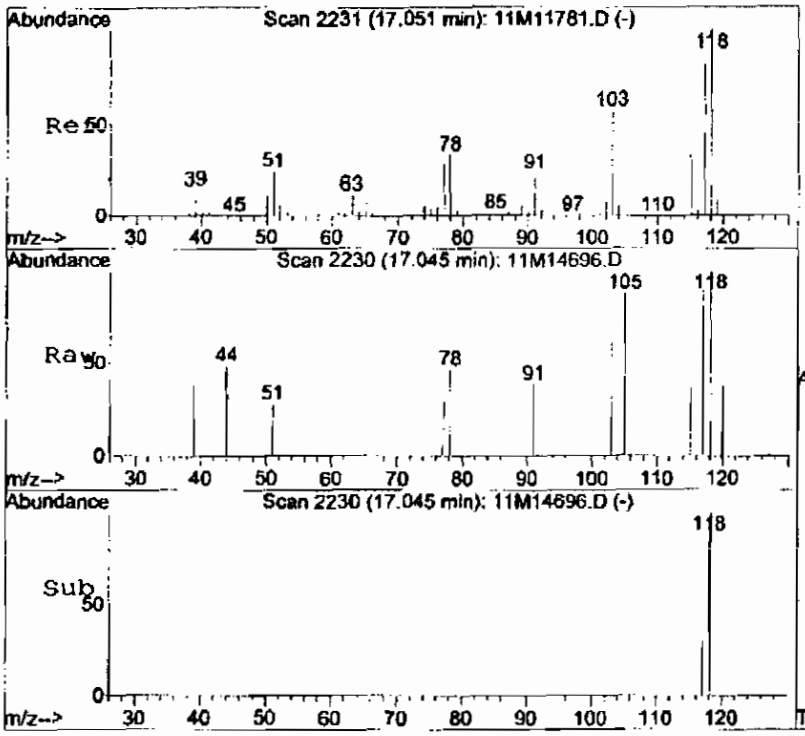


1,3,5-Trimethylbenzene
Concen: 1.90 ug/L
RT: 16.67 min Scan# 2169
Delta R.T. -0.01 min
Lab File: 11M14696.D
Acq: 1 May 2003 15:58

Tgt Ion:105 Resp: 61054

Ion	Ratio	Lower	Upper
105	100		
120	55.6	27.4	63.8

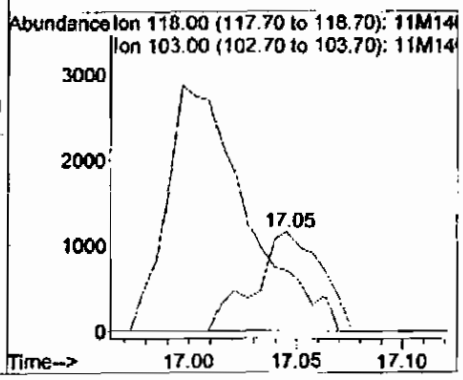


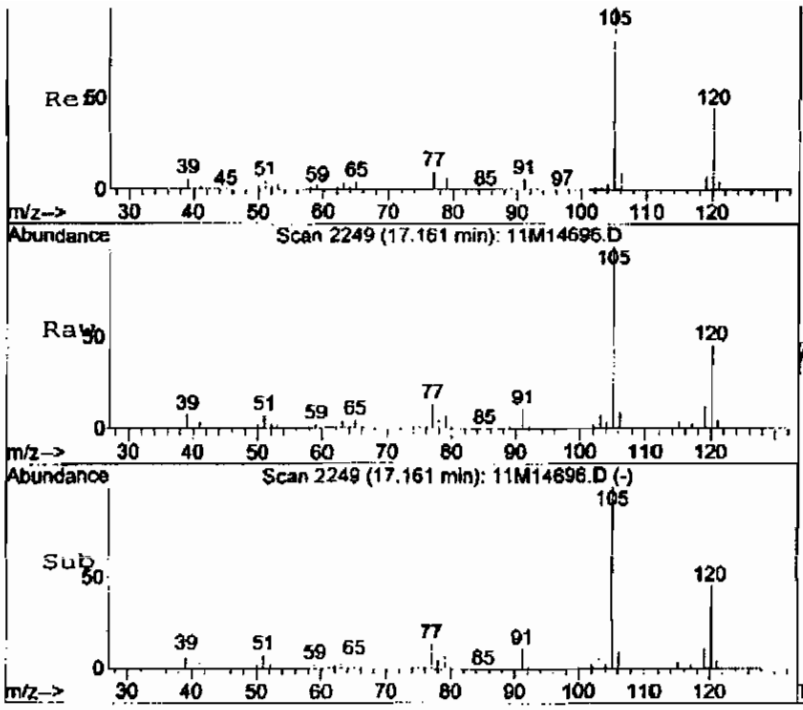


#74
a-Methylstyrene
Concen: 0.13 ug/L
RT: 17.05 min Scan# 2230
Delta R.T. -0.01 min
Lab File: 11M14696.D
Acq: 1 May 2003 15:58

Tgt Ion:118 Resp: 2496

Ion	Ratio	Lower	Upper
118	100		
103	296.9	25.0	58.4#

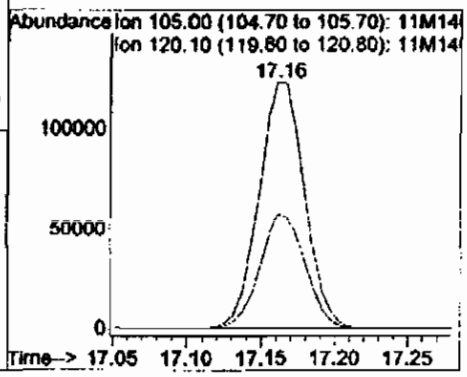


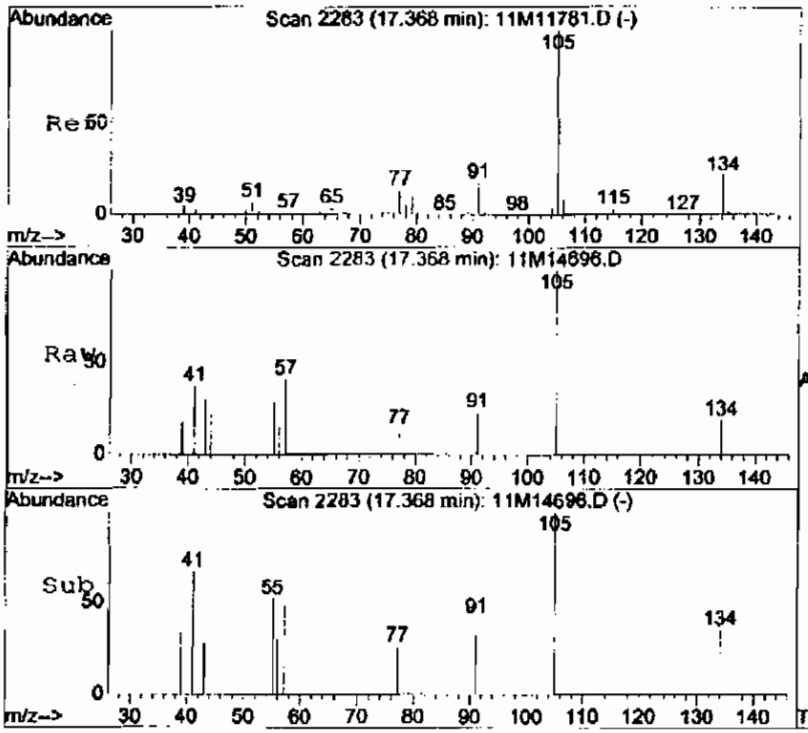


1,2,4-Trimethylbenzene
Concen: 7.74 ug/L
RT: 17.16 min Scan# 2249
Delta R.T. -0.01 min
Lab File: 11M14696.D
Acq: 1 May 2003 15:58

Tgt Ion:105 Resp: 263441

Ion	Ratio	Lower	Upper
105	100		
120	46.4	25.3	58.9

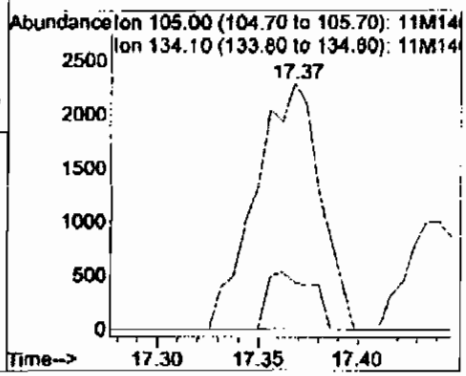


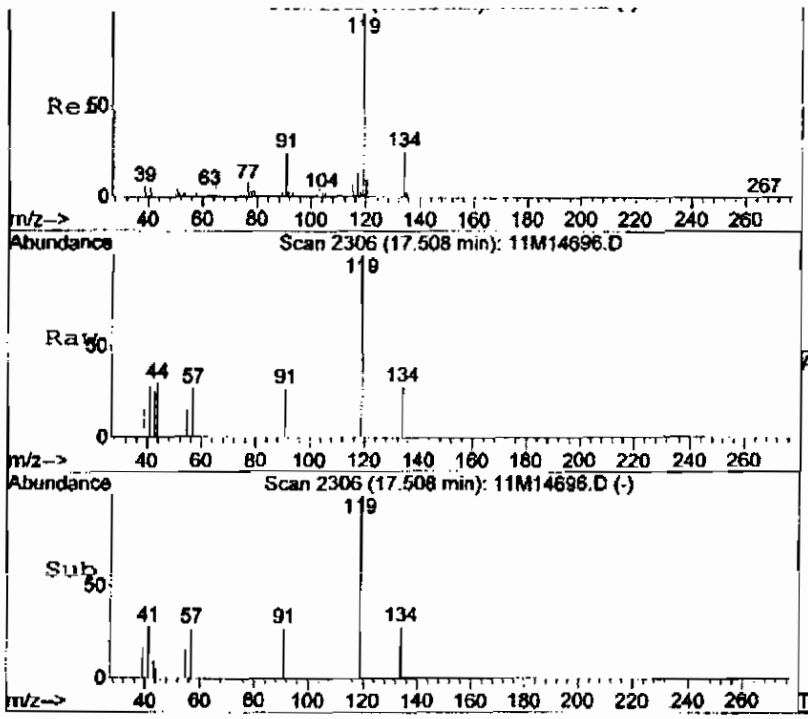


#77
sec-Butylbenzene
Concen: 0.12 ug/L
RT: 17.37 min Scan# 2283
Delta R.T. 0.00 min
Lab File: 11M14696.D
Acq: 1 May 2003 15:58

Tgt Ion:105 Resp: 5155

Ion	Ratio	Lower	Upper
105	100		
134	16.0	10.0	23.2

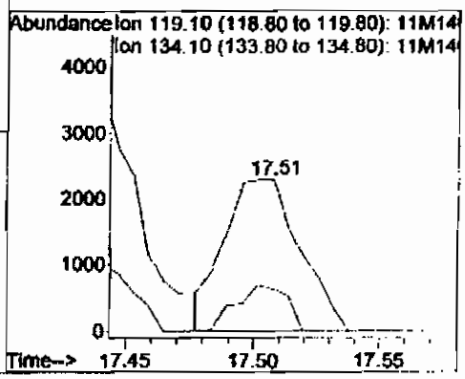


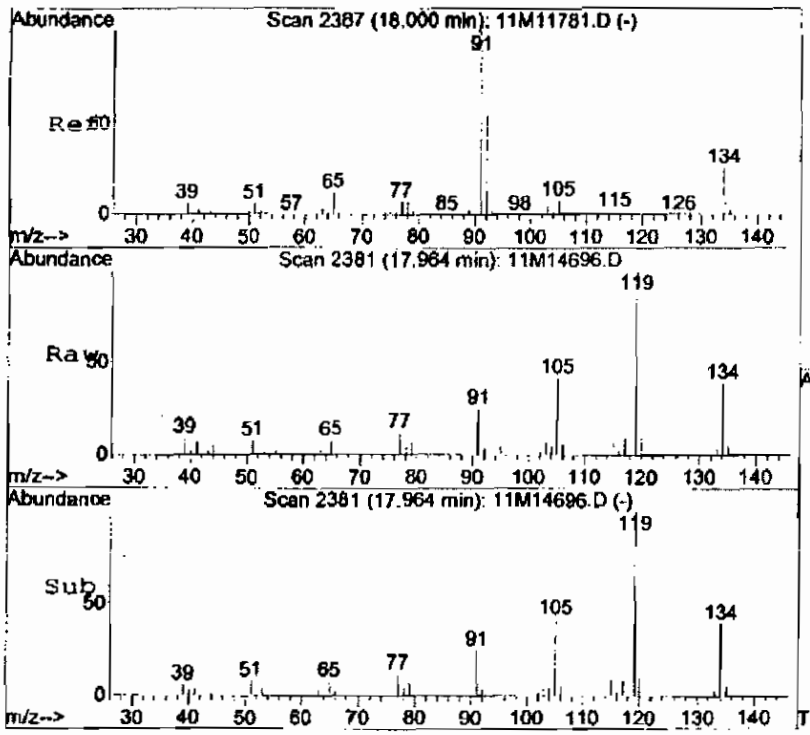


p-Isopropyltoluene
Concen: 0.13 ug/L
RT: 17.51 min Scan# 2306
Delta R.T. 0.00 min
Lab File: 11M14696.D
Acq: 1 May 2003 15:58

Tgt Ion:119 Resp: 4740

Ion	Ratio	Lower	Upper
119	100		
134	20.4	16.0	37.4

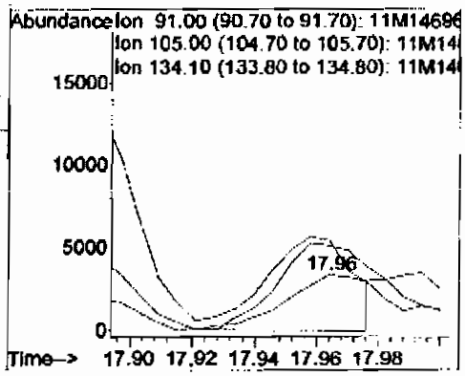


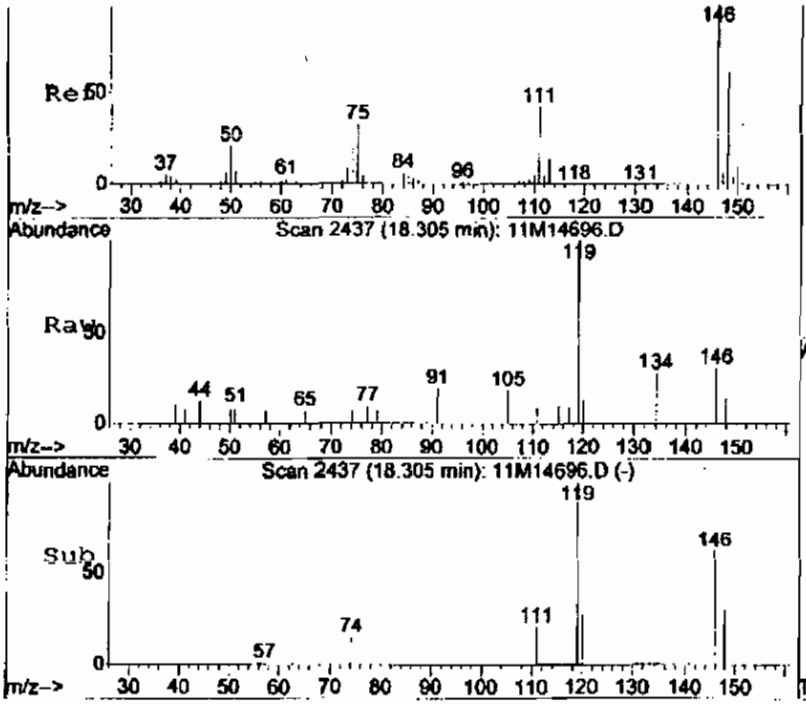


#81
n-Butylbenzene
Concen: 0.18 ug/L
RT: 17.96 min Scan# 2381
Delta R.T. -0.04 min
Lab File: 11M14696.D
Acq: 1 May 2003 15:58

Tgt Ion: 91 Resp: 6115

Ion	Ratio	Lower	Upper
91	100		
105	230.4	2.2	5.2#
134	225.8	16.2	37.8#

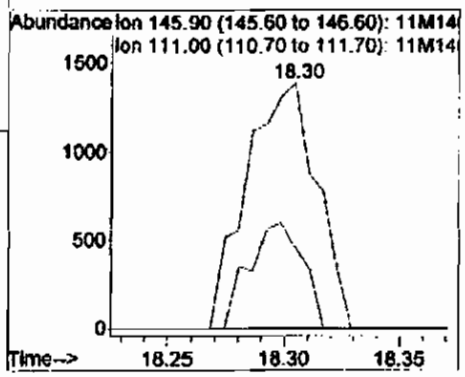


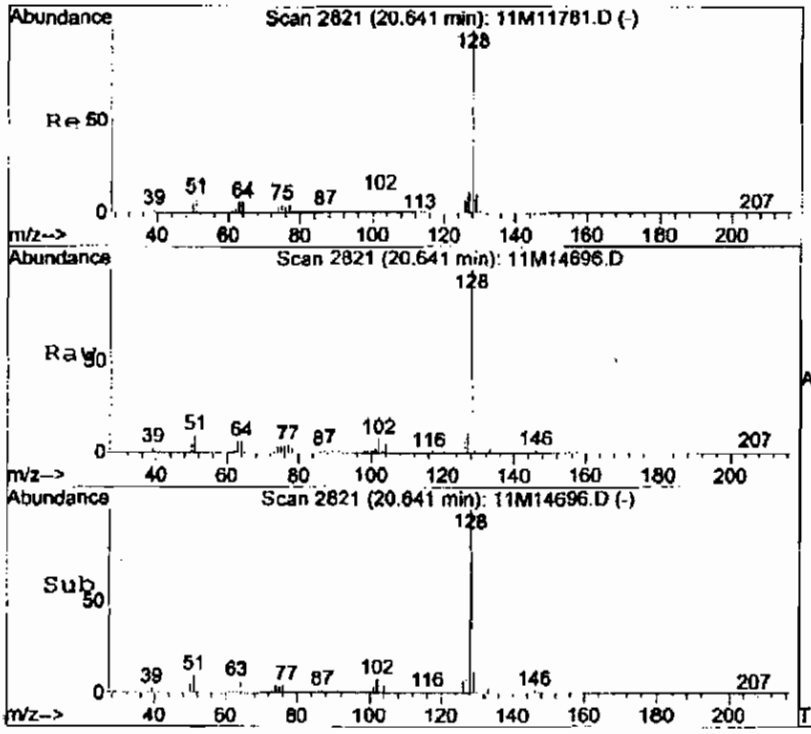


1,2-Dichlorobenzene
Concen: 0.18 ug/L
RT: 18.30 min Scan# 2437
Delta R.T. 0.01 min
Lab File: 11M14696.D
Acq: 1 May 2003 15:58

Tgt Ion:146 Resp: 2938

Ion	Ratio	Lower	Upper
146	100		
111	32.8	23.0	53.6

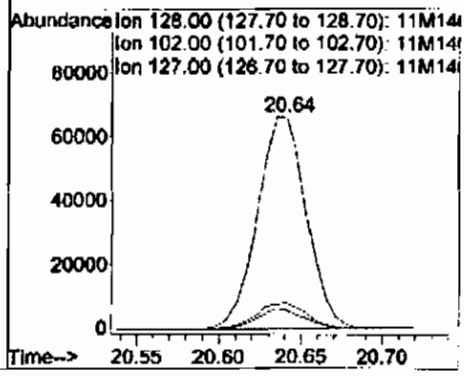




#86
Naphthalene
Concen: 6.84 ug/L
RT: 20.64 min Scan# 2821
Delta R.T. 0.00 min
Lab File: 11M14696.D
Acq: 1 May 2003 15:58

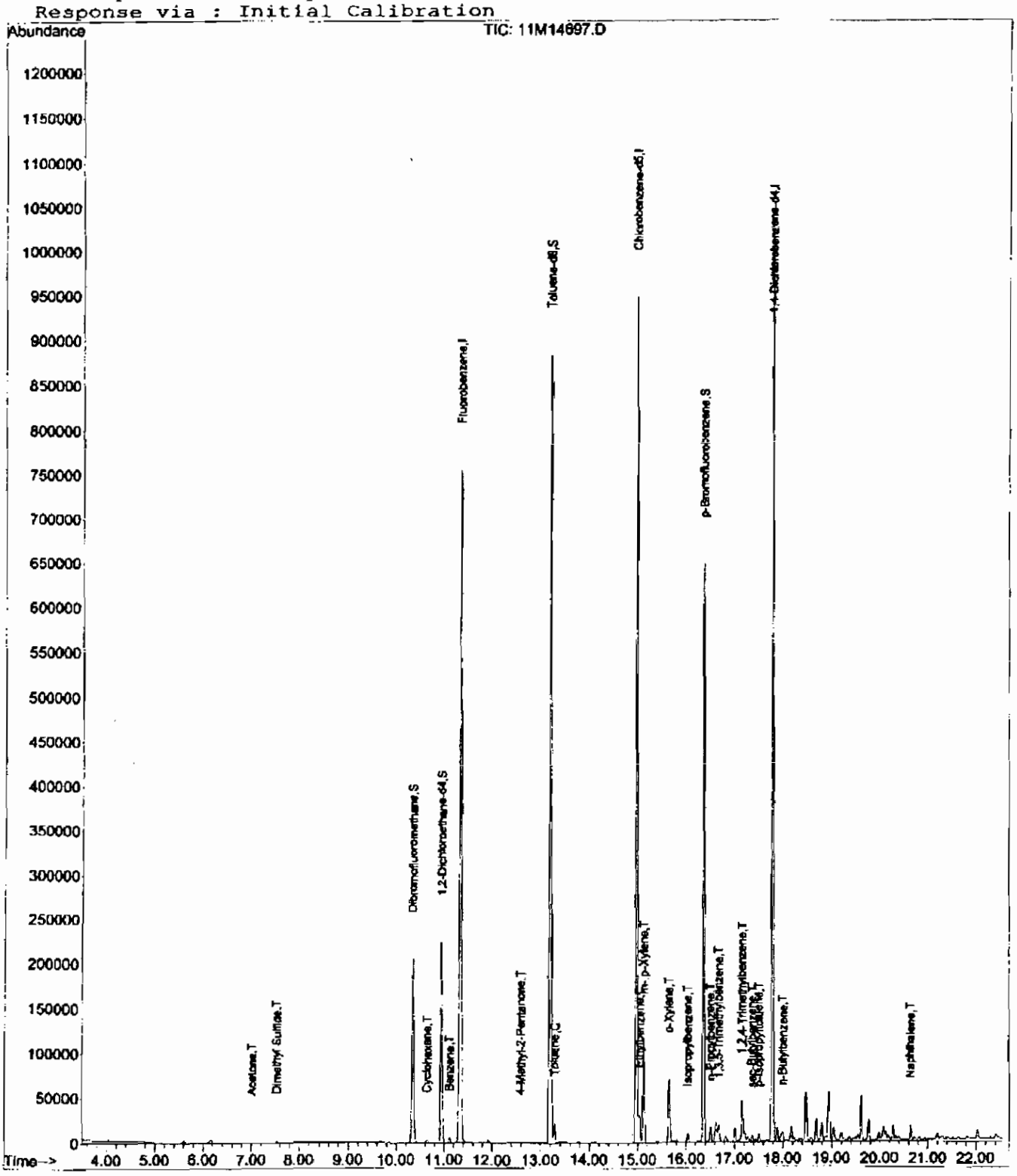
Tgt Ion:128 Resp: 136716

Ion	Ratio	Lower	Upper
128	100		
102	8.5	0.0	0.0#
127	12.1	5.6	6.8#



Data File : C:\MSDchem\1\DATA\050103\11M14697.D Vial: 22
Acq On : 1 May 2003 16:28 Operator: CMS
Sample : L0304594-02 A 00 826-TCL Inst : HPMS11
Misc : 1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 1 16:51 2003 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration



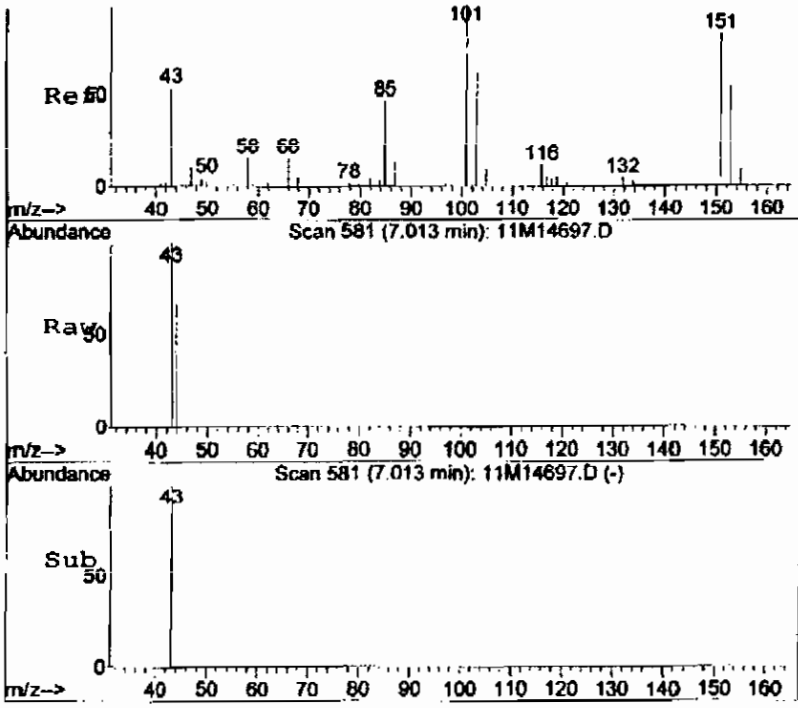
Data File : C:\MSDchem\1\DATA\050103\11M14697.D Vial: 22
Acq On : 1 May 2003 16:28 Operator: CMS
Sample : L0304594-02 A 00 826-TCL Inst : HPMS11
Misc : 1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 01 16:51:03 2003 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.33	96	890429	25.00 ug/L	0.00
44) Chlorobenzene-d5	14.97	117	658988	25.00 ug/L	0.00
64) 1,4-Dichlorobenzene-d4	17.79	152	330341	25.00 ug/L	0.00
System Monitoring Compounds					
28) Dibromofluoromethane	10.34	111	181064	24.6402 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 98.56%		
33) 1,2-Dichloroethane-d4	10.94	65	204203	26.3610 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 105.44%		
45) Toluene-d8	13.19	98	758274	25.2814 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 101.12%		
66) p-Bromofluorobenzene	16.36	95	308982	25.2874 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 101.16%		

Target Compounds					Qvalue
11) Acetone	7.01	43	679	~~0.5120 ug~~/L #	81
13) Dimethyl Sulfide	7.52	62	1685	0.1695 ug/L #	60
30) Cyclohexane	10.65	56	3437	0.1839 ug/L	80
35) Benzene	11.11	78	7181	0.2280 ug/L F	98
41) 4-Methyl-2-Pentanone	12.59	58	381	~~0.2133 ug/L~~ #	100
46) Toluene	13.29	91	23006	0.6862 ug/L F	98
58) Ethylbenzene	15.03	106	9779	0.8334 ug/L F	86
59) m-,p-Xylene	15.12	106	44470	3.0165 ug/L F	84
60) o-Xylene	15.65	106	27390	1.8481 ug/L F	80
63) Isopropylbenzene	16.03	105	8797	0.2329 ug/L	97
69) n-Propylbenzene	16.50	91	19190	0.4202 ug/L	95
71) 1,3,5-Trimethylbenzene	16.67	105	13039	0.4136 ug/L	87
76) 1,2,4-Trimethylbenzene	17.16	105	33333	0.9976 ug/L	95
77) sec-Butylbenzene	17.37	105	8855	0.2113 ug/L	97
78) p-Isopropyltoluene	17.50	119	8896	0.2538 ug/L	99
81) n-Butylbenzene	17.99	91	6692	0.2053 ug/L #	43
86) Naphthalene	20.63	128	10625	0.5420 ug/L #	79

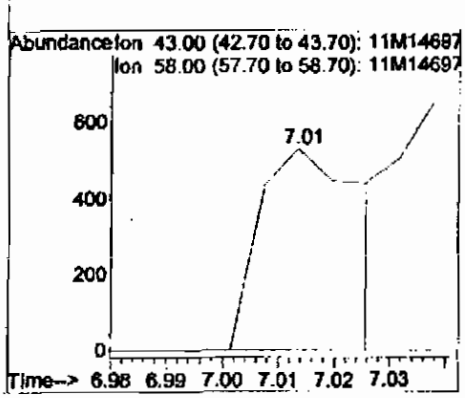
(#) = qualifier out of range (m) = manual integration

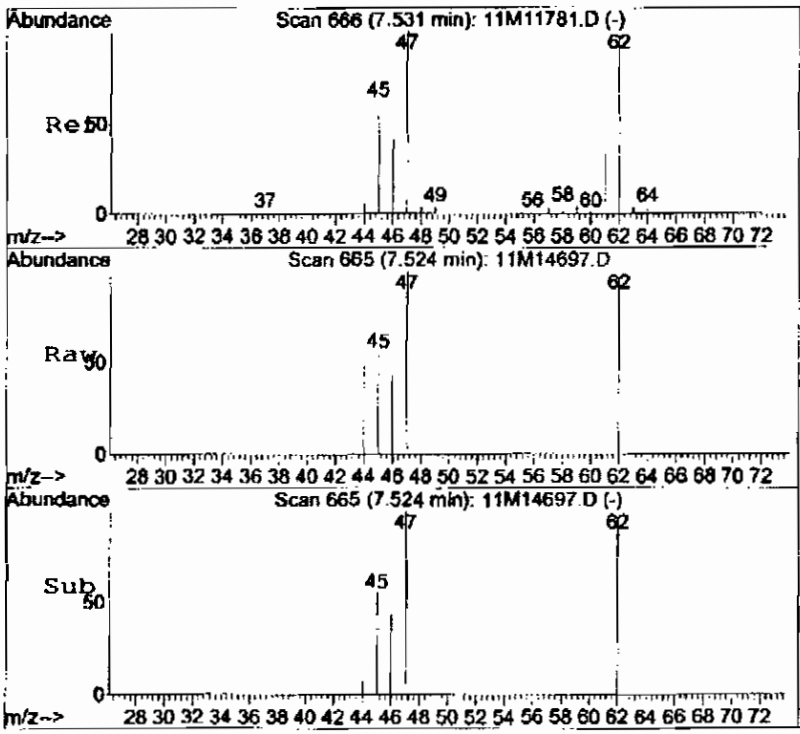


Acetone
Concen: 0.51 ug/L
RT: 7.01 min Scan# 581
Delta R.T. -0.01 min
Lab File: 11M14697.D
Acq: 1 May 2003 16:28

Tgt Ion: 43 Resp: 679

Ion	Ratio	Lower	Upper
43	100		
58	0.0	4.0	9.2#

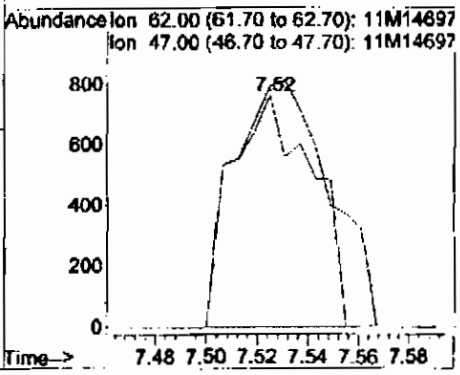


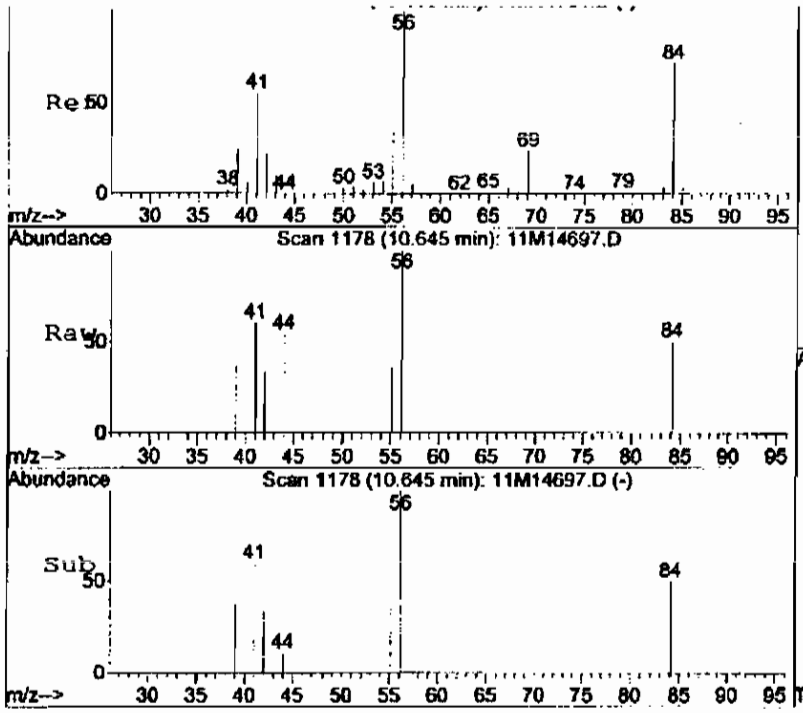


#13
Dimethyl Sulfide
Concen: 0.17 ug/L
RT: 7.52 min Scan# 665
Delta R.T. 0.00 min
Lab File: 11M14697.D
Acq: 1 May 2003 16:28

Tgt Ion: 62 Resp: 1685

Ion	Ratio	Lower	Upper
62	100		
47	124.9	52.5	122.5#

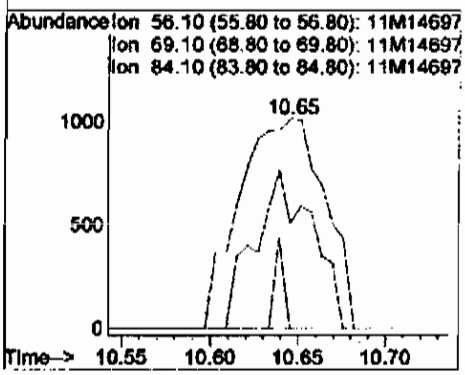


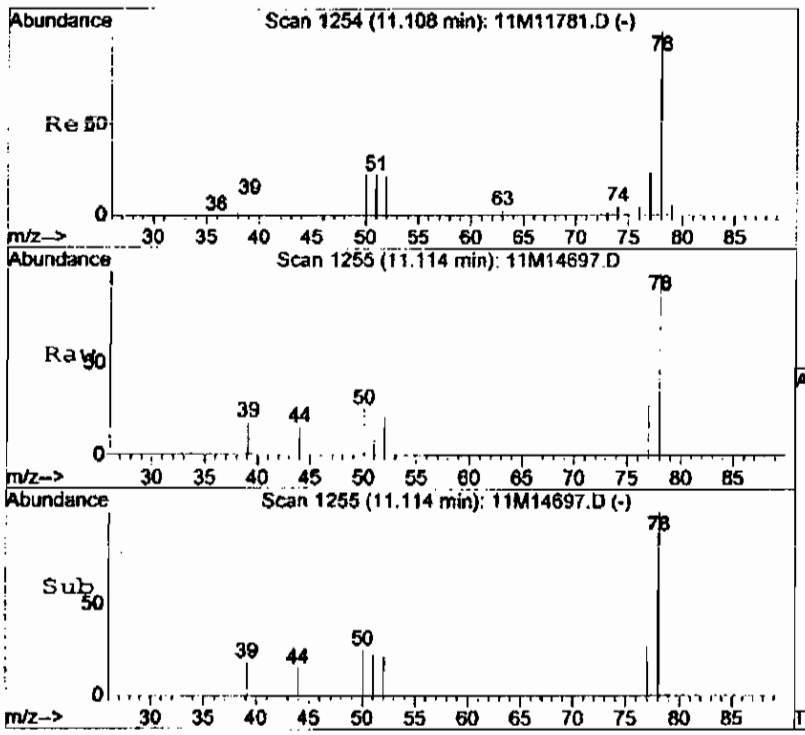


Cyclohexane
Concen: 0.18 ug/L
RT: 10.65 min Scan# 1178
Delta R.T. 0.01 min
Lab File: 11M14697.D
Acq: 1 May 2003 16:28

Tgt Ion: 56 Resp: 3437

Ion	Ratio	Lower	Upper
56	100		
69	4.7	2.4	5.6
84	51.0	40.9	95.5

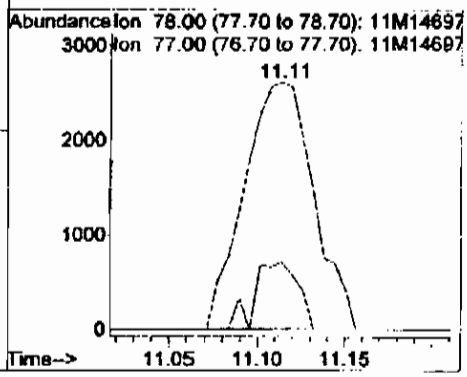


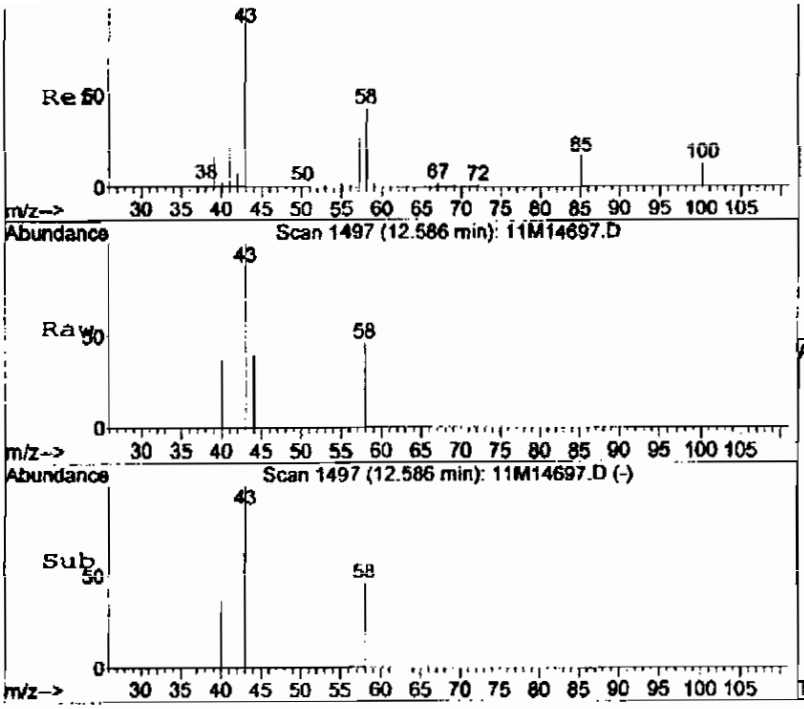


#35
Benzene
Concen: 0.23 ug/L
RT: 11.11 min Scan# 1255
Delta R.T. 0.00 min
Lab File: 11M14697.D
Acq: 1 May 2003 16:28

Tgt Ion: 78 Resp: 7181

Ion	Ratio	Lower	Upper
78	100		
77	17.0	10.9	25.3

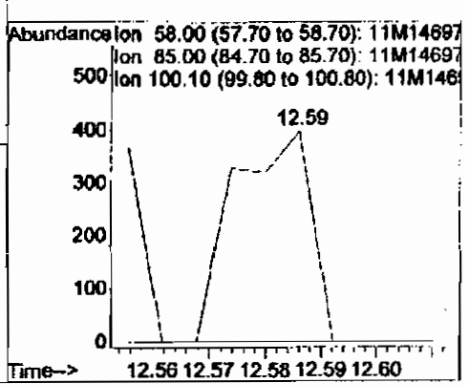


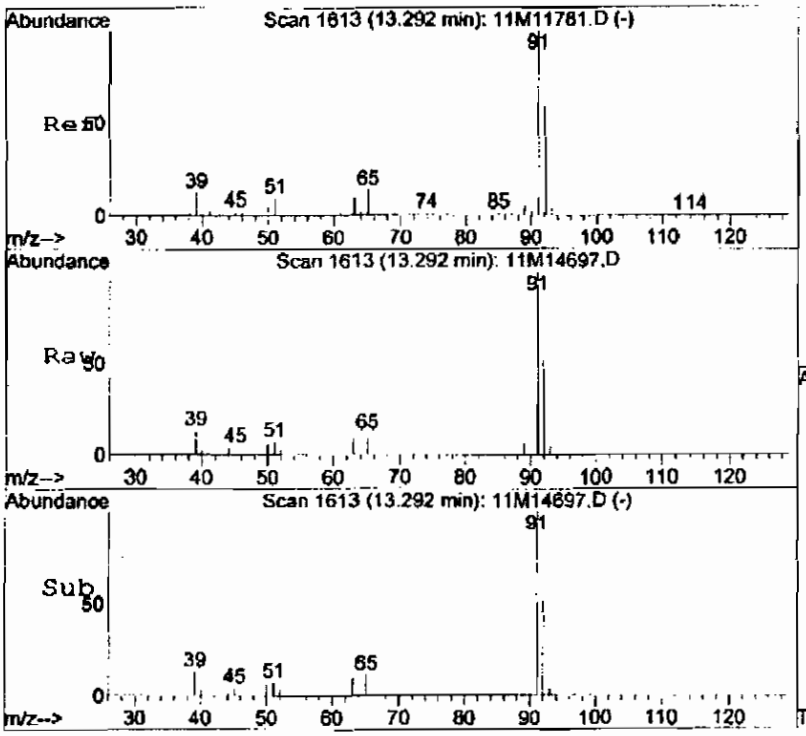


4-Methyl-2-Pentanone
Concen: 0.21 ug/L
RT: 12.59 min Scan# 1497
Delta R.T. 0.01 min
Lab File: 11M14697.D
Acq: 1 May 2003 16:28

Tgt Ion: 58 Resp: 381

Ion	Ratio	Lower	Upper
58	100		
85	0.0	0.0	0.0
100	0.0	0.0	0.0

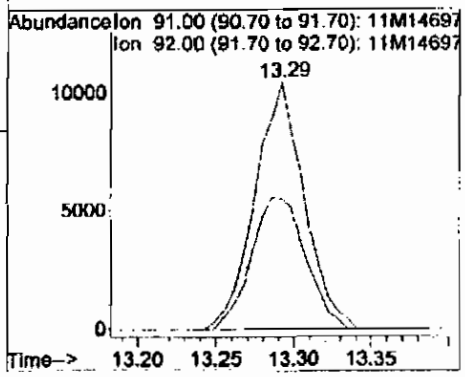


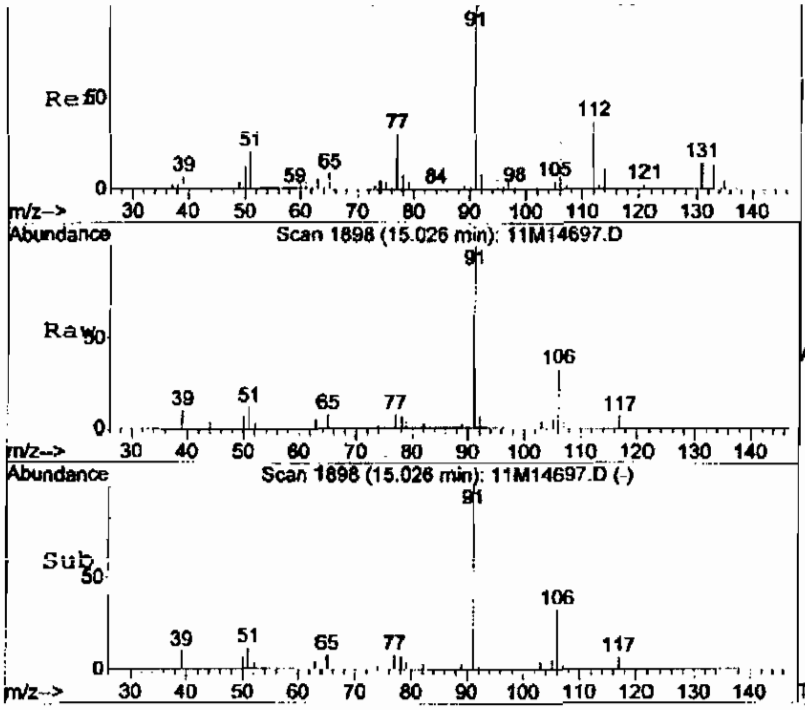


#46
Toluene
Concen: 0.69 ug/L
RT: 13.29 min Scan# 1613
Delta R.T. 0.00 min
Lab File: 11M14697.D
Acq: 1 May 2003 16:28

Tgt Ion: 91 Resp: 23006

Ion	Ratio	Lower	Upper
91	100		
92	58.0	34.1	79.7

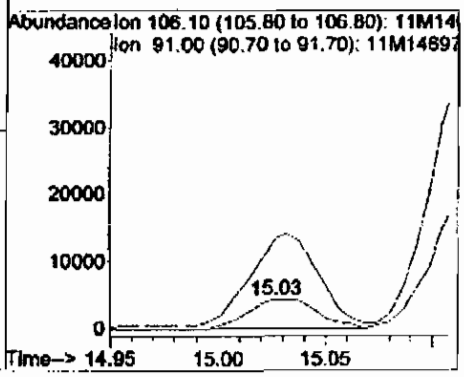


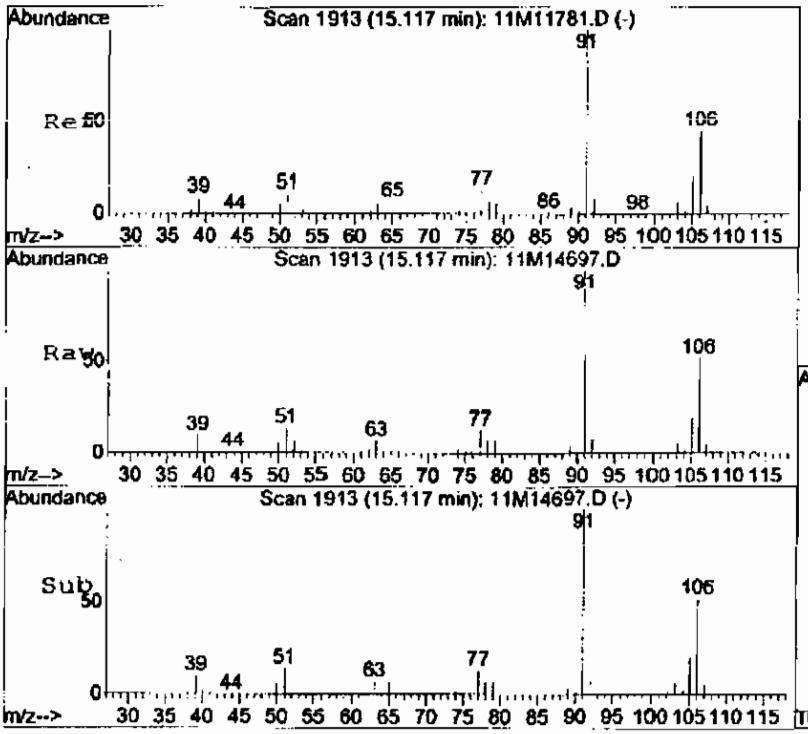


Ethylbenzene
Concen: 0.83 ug/L
RT: 15.03 min Scan# 1898
Delta R.T. -0.01 min
Lab File: 11M14697.D
Acq: 1 May 2003 16:28

Tgt Ion:106 Resp: 9779

Ion	Ratio	Lower	Upper
106	100		
91	327.6	215.4	502.6

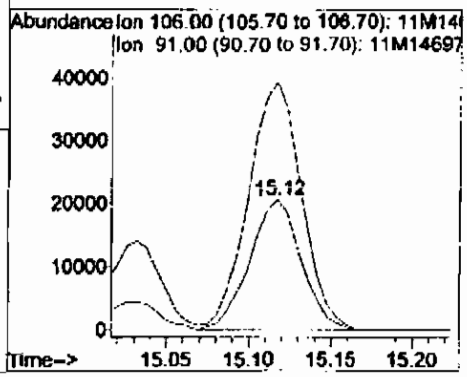


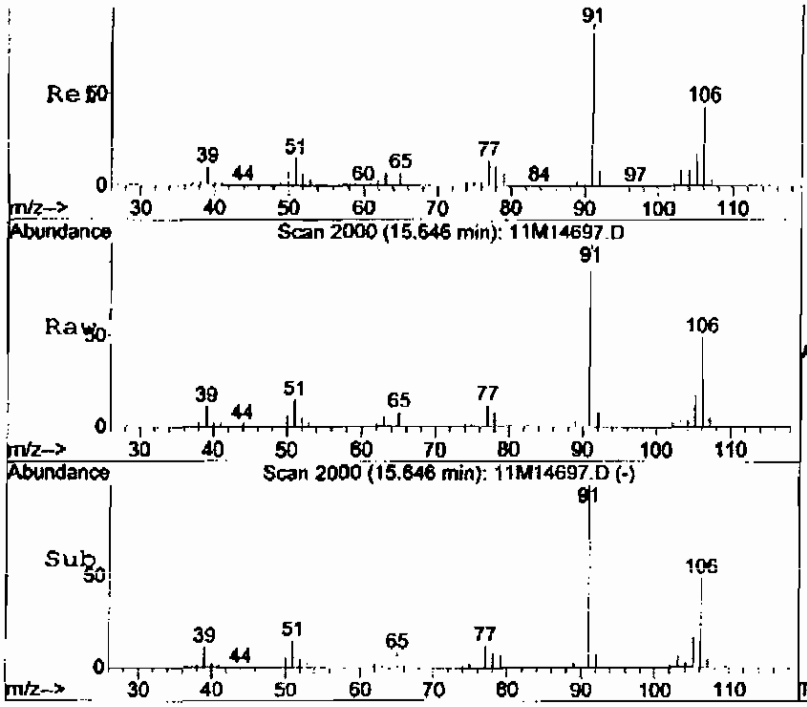


#59
m-,p-Xylene
Concen: 3.02 ug/L
RT: 15.12 min Scan# 1913
Delta R.T. 0.00 min
Lab File: 11M14697.D
Acq: 1 May 2003 16:28

Tgt Ion:106 Resp: 44470

Ion	Ratio	Lower	Upper
106	100		
91	197.3	133.9	312.3

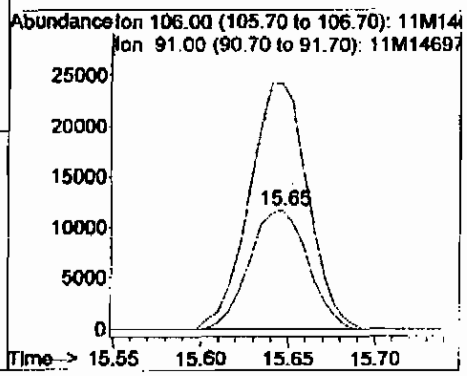


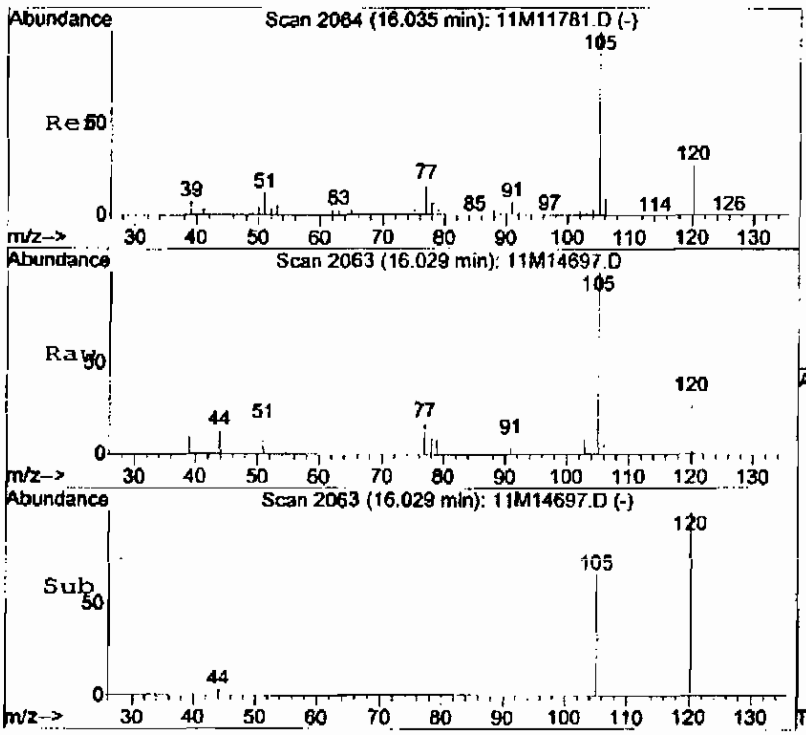


o-Xylene
Concen: 1.85 ug/L
RT: 15.65 min Scan# 2000
Delta R.T. 0.00 min
Lab File: 11M14697.D
Acq: 1 May 2003 16:28

Tgt Ion:106 Resp: 27390

Ion	Ratio	Lower	Upper
106	100		
91	205.7	143.3	334.3

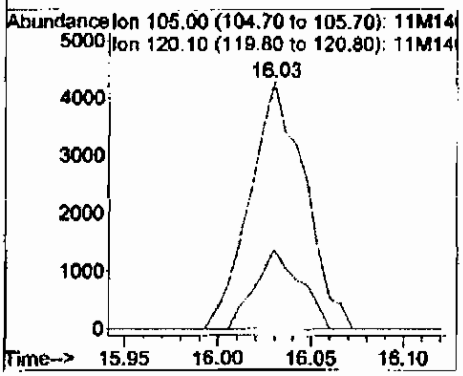


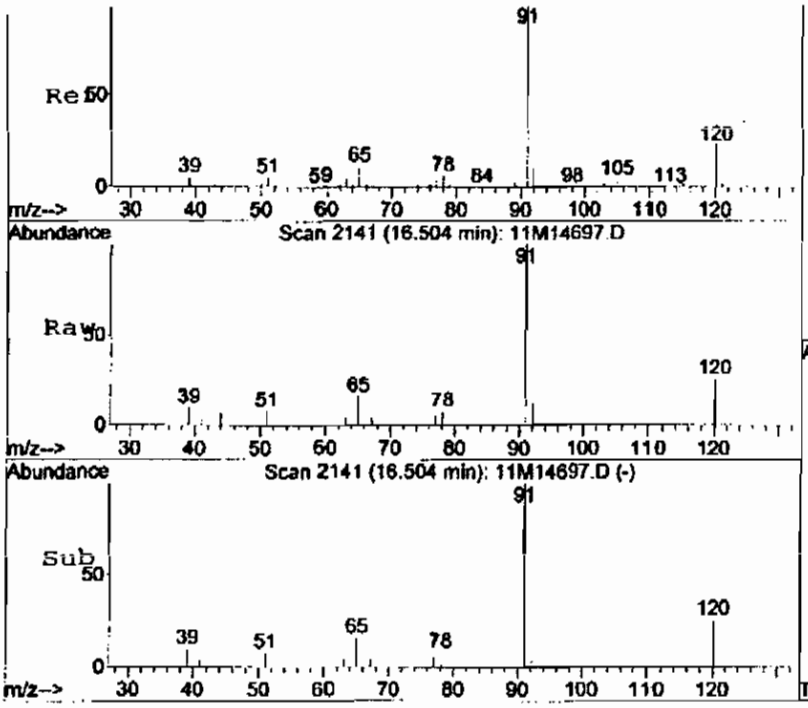


#63
Isopropylbenzene
Concen: 0.23 ug/L
RT: 16.03 min Scan# 2063
Delta R.T. -0.01 min
Lab File: 11M14697.D
Acq: 1 May 2003 16:28

Tgt Ion:105 Resp: 8797

Ion	Ratio	Lower	Upper
105	100		
120	26.4	15.0	35.0

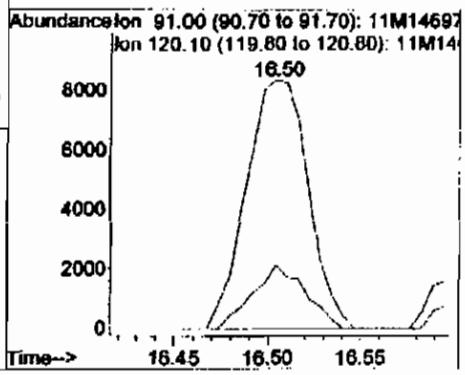


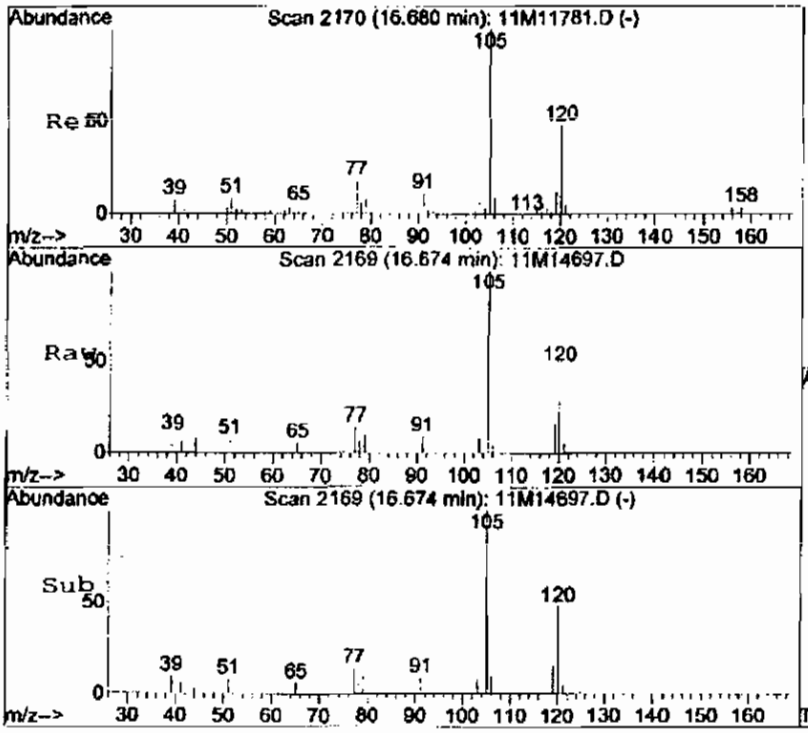


n-Propylbenzene
Concen: 0.42 ug/L
RT: 16.50 min Scan# 2141
Delta R.T. -0.01 min
Lab File: 11M14697.D
Acq: 1 May 2003 16:28

Tgt Ion: 91 Resp: 19190

Ion	Ratio	Lower	Upper
91	100		
120	21.6	11.6	27.0

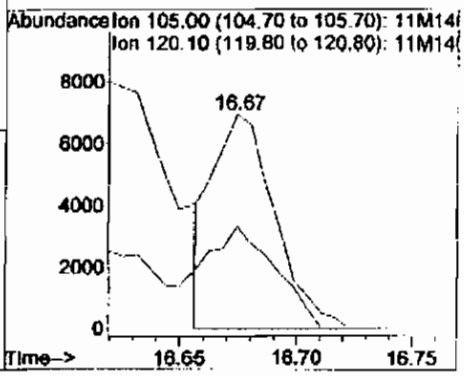


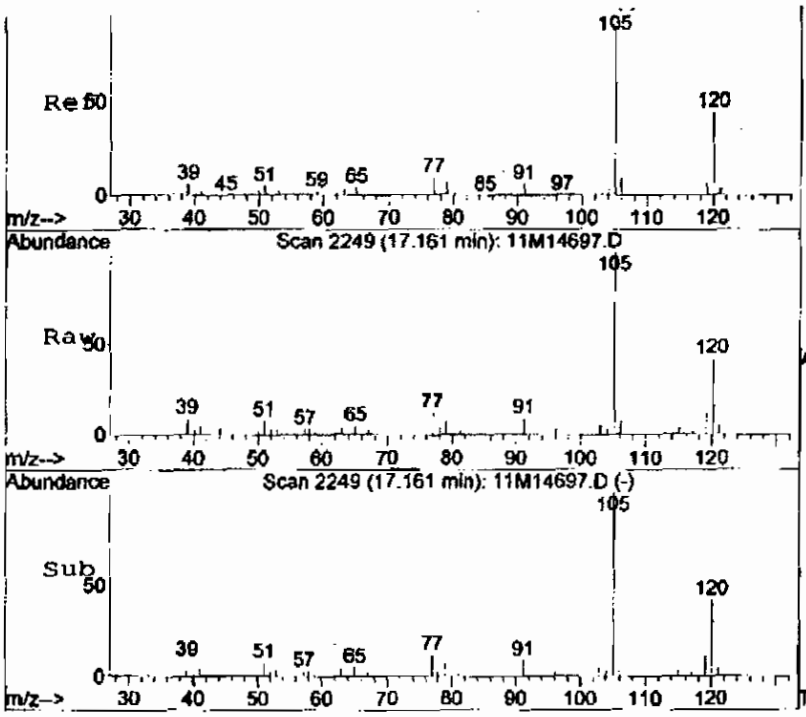


#71
1,3,5-Trimethylbenzene
Concen: 0.41 ug/L
RT: 16.67 min Scan# 2169
Delta R.T. -0.01 min
Lab File: 11M14697.D
Acq: 1 May 2003 16:28

Tgt Ion:105 Resp: 13039

Ion	Ratio	Lower	Upper
105	100		
120	53.9	27.4	63.8

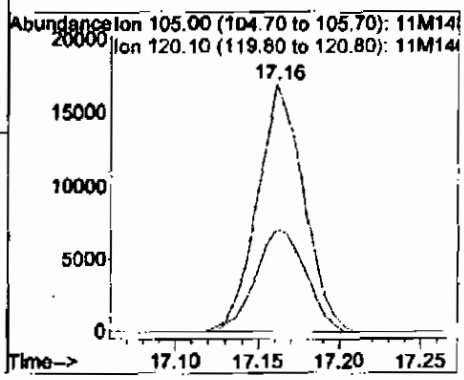


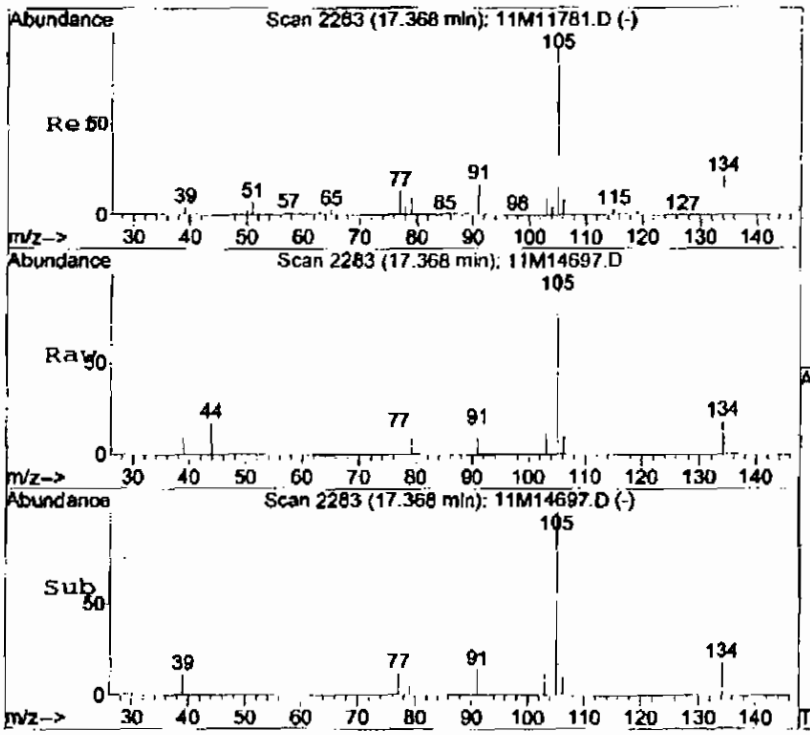


1,2,4-Trimethylbenzene
Concen: 1.00 ug/L
RT: 17.16 min Scan# 2249
Delta R.T. -0.01 min
Lab File: 11M14697.D
Acq: 1 May 2003 16:28

Tgt Ion:105 Resp: 33333

Ion	Ratio	Lower	Upper
105	100		
120	45.0	25.3	58.9

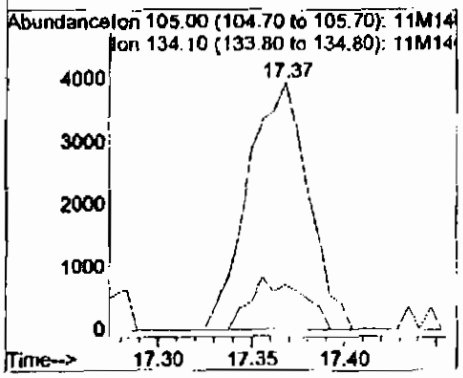


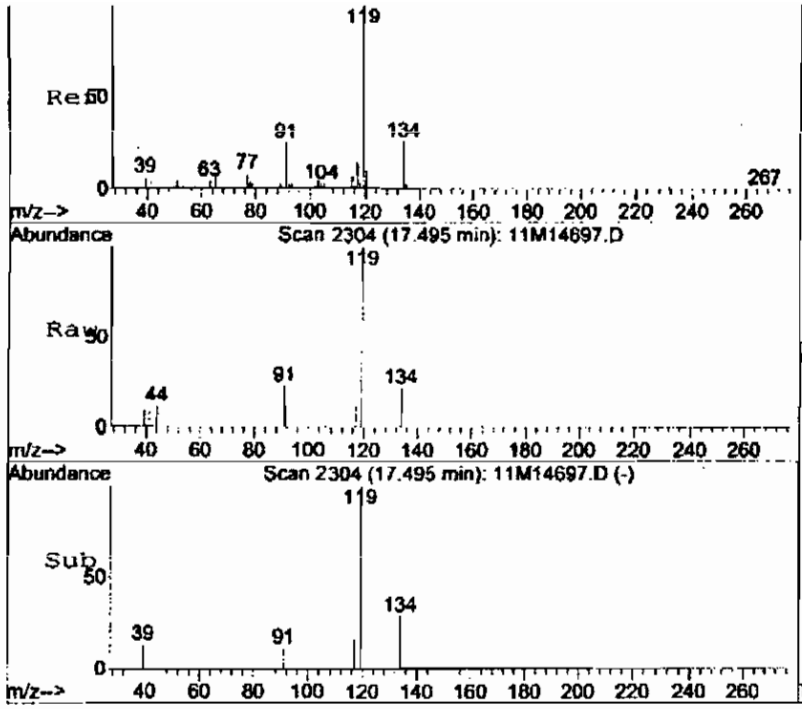


#77
sec-Butylbenzene
Concen: 0.21 ug/L
RT: 17.37 min Scan# 2283
Delta R.T. 0.00 min
Lab File: 11M14697.D
Acq: 1 May 2003 16:28

Tgt Ion:105 Resp: 8855

Ion	Ratio	Lower	Upper
105	100		
134	18.1	10.0	23.2

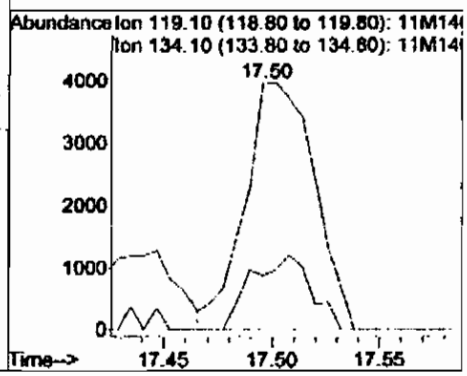


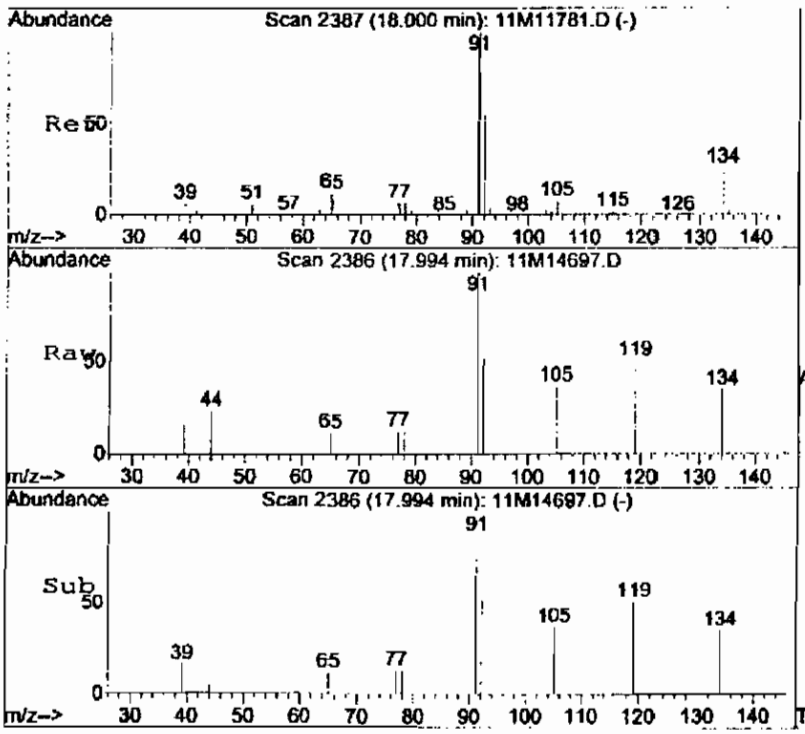


p-Isopropyltoluene
Concen: 0.25 ug/L
RT: 17.50 min Scan# 2304
Delta R.T. -0.01 min
Lab File: 11M14697.D
Acq: 1 May 2003 16:28

Tgt Ion:119 Resp: 8896

Ion	Ratio	Lower	Upper
119	100		
134	26.1	16.0	37.4

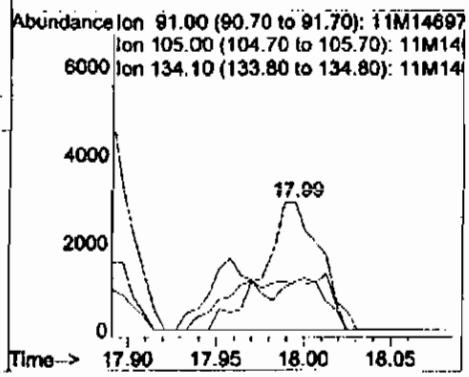


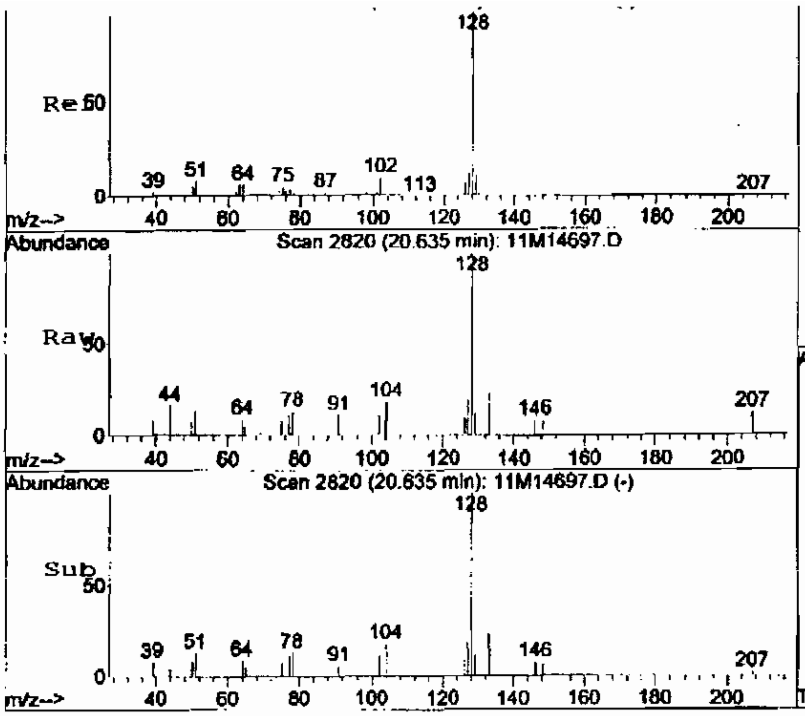


#81
n-Butylbenzene
Concen: 0.21 ug/L
RT: 17.99 min Scan# 2386
Delta R.T. -0.01 min
Lab File: 11M14697.D
Acq: 1 May 2003 16:28

Tgt Ion: 91 Resp: 6692

Ion	Ratio	Lower	Upper
91	100		
105	33.9	2.2	5.2#
134	0.0	16.2	37.8#

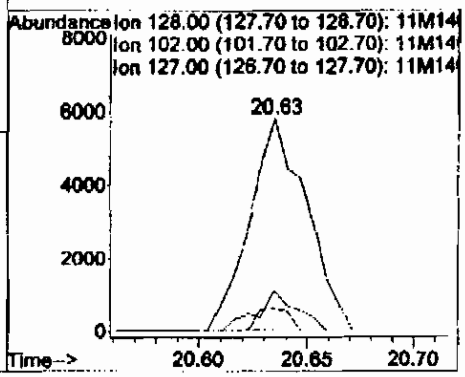




Naphthalene
Concen: 0.54 ug/L
RT: 20.63 min Scan# 2820
Delta R.T. -0.01 min
Lab File: 11M14697.D
Acq: 1 May 2003 16:28

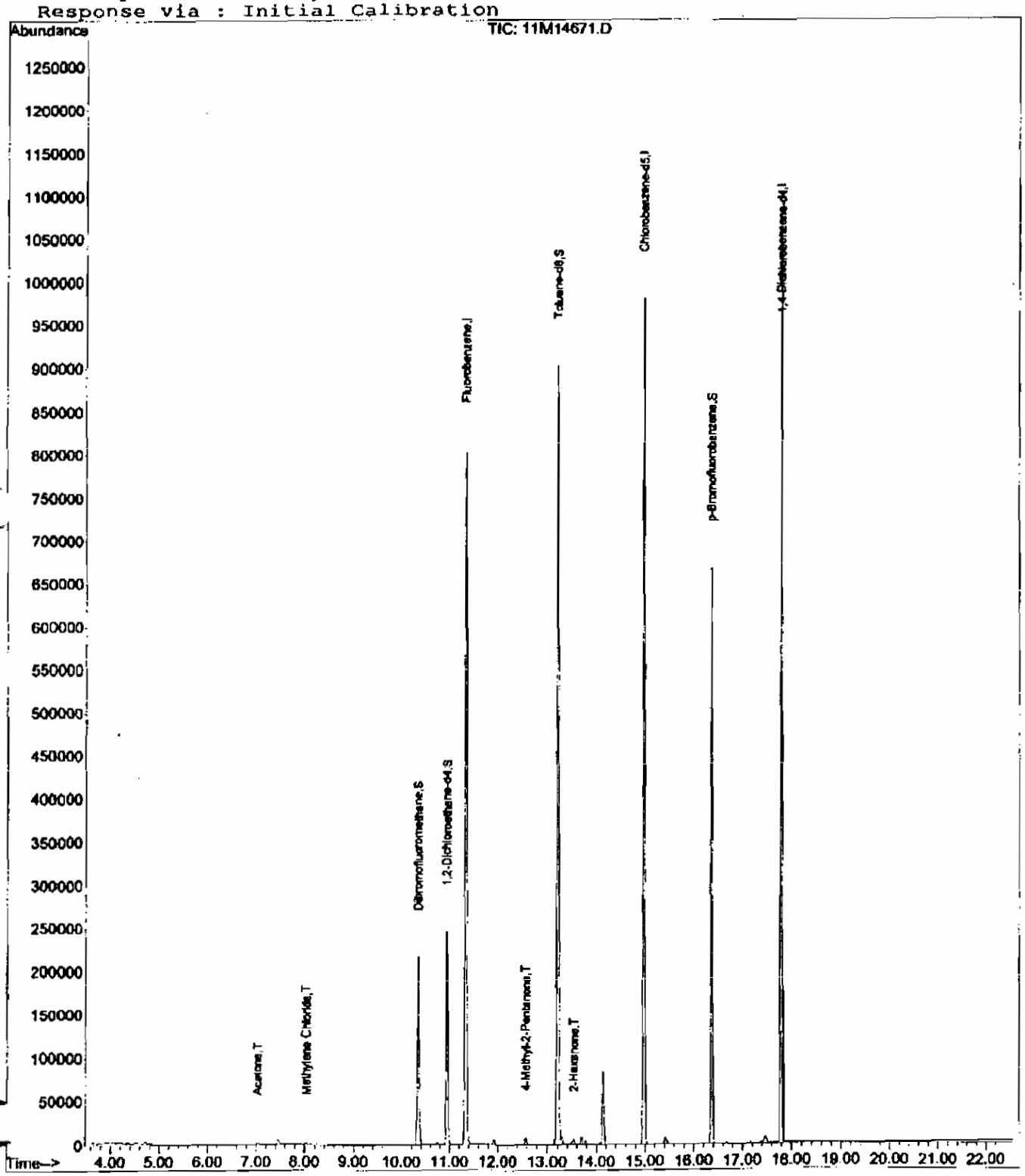
Tgt Ion:128 Resp: 10625

Ion	Ratio	Lower	Upper
128	100		
102	5.9	0.0	0.0#
127	13.5	5.6	6.8#



Data File : C:\MSDCHEM\1\DATA\043003\11M14671.D Vial: 20
Acq On : 1 May 2003 2:53 Operator: CMS
Sample : L0304594-03 A 10X 00 826-TC Inst : HPMS11
Misc : 17,10 (4-28@1500) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 1 3:16 2003 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\043003\11M14671.D Vial: 20
Acq On : 1 May 2003 2:53 Operator: CMS
Sample : L0304594-03 A 10X 00 826-TC Inst : HPMS11
Misc : 17,10 (4-28@1500) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 01 03:16:05 2003 Quant Results File: 8260WT.RES

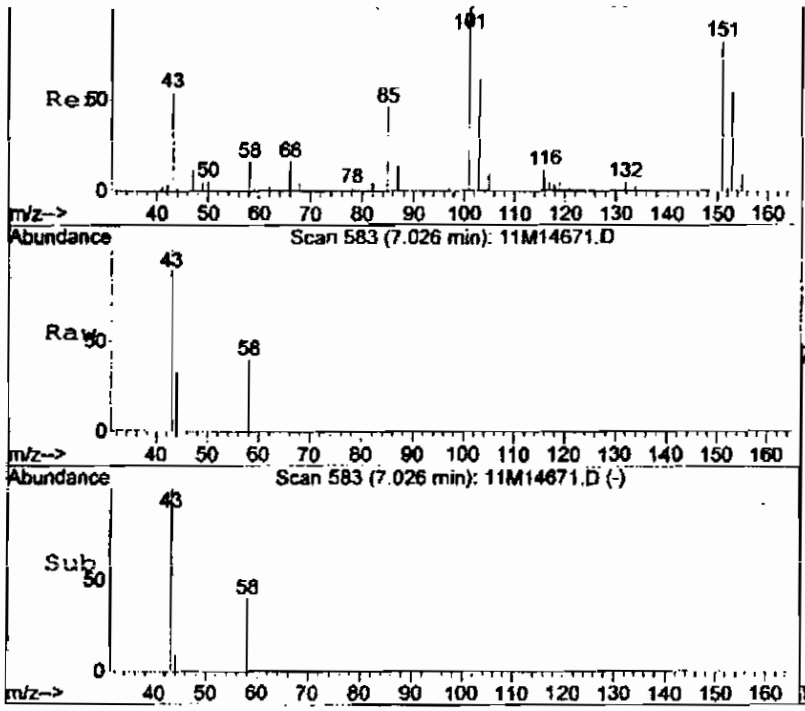
Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.33	96	941397	25.00 ug/L	0.00
44) Chlorobenzene-d5	14.97	117	685896	25.00 ug/L	0.00
64) 1,4-Dichlorobenzene-d4	17.79	152	337567	25.00 ug/L	0.00

System Monitoring Compounds					
28) Dibromofluoromethane	10.34	111	192942	24.8350 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 99.36%		
33) 1,2-Dichloroethane-d4	10.94	65	216929	26.4877 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 105.96%		
45) Toluene-d8	13.20	98	782475	25.0648 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 100.24%		
66) p-Bromofluorobenzene	16.36	95	310500	24.8677 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 99.48%		

Target Compounds					Qvalue
11) Acetone	7.03	43	5501	3.9234 ug/L #	28
15) Methylene Chloride	8.04	84	1665	0.2199 ug/L	83
41) 4-Methyl-2-Pentanone	12.58	58	463	~~0.2452 ug~~/L #	100
50) 2-Hexanone	13.54	43	6739	~~2.0402 ug/L~~ #	1

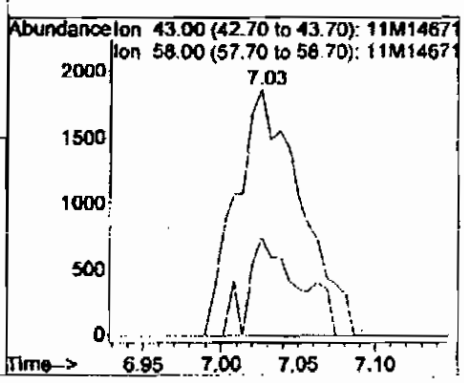
(#) = qualifier out of range (m) = manual integration
11M14671.D 8260WT.M Thu May 01 04:30:29 2003 Page 1

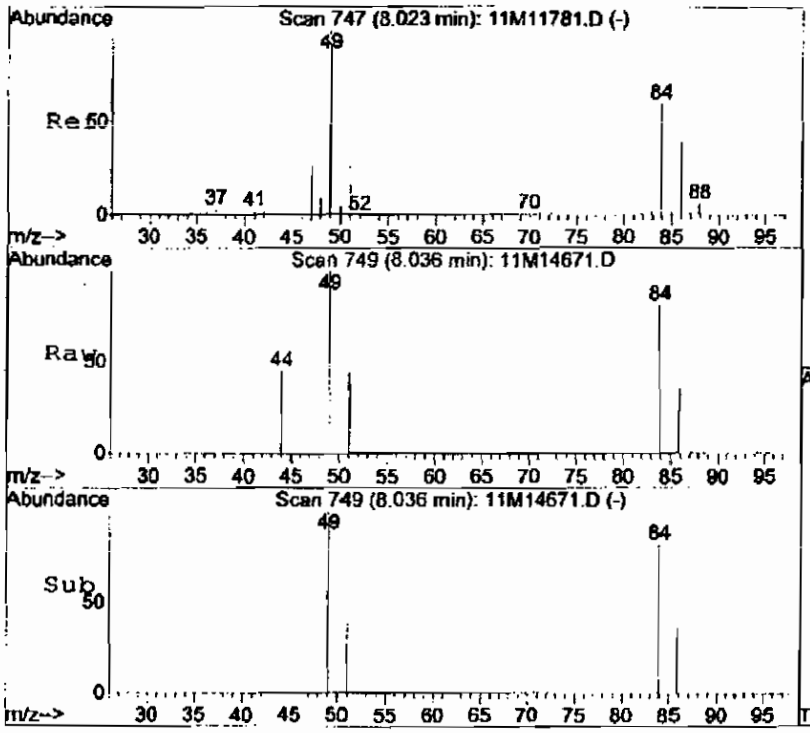


Acetone
Concen: 3.92 ug/L
RT: 7.03 min Scan# 583
Delta R.T. 0.01 min
Lab File: 11M14671.D
Acq: 1 May 2003 2:53

Tgt Ion: 43 Resp: 5501

Ion	Ratio	Lower	Upper
43	100		
58	31.2	4.0	9.2#

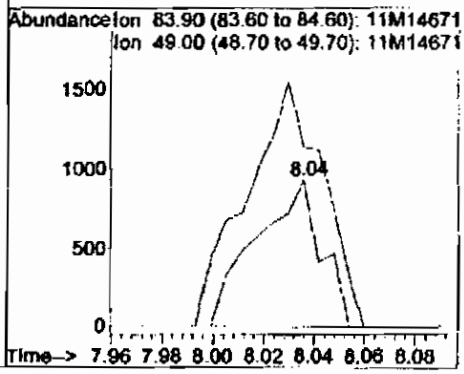


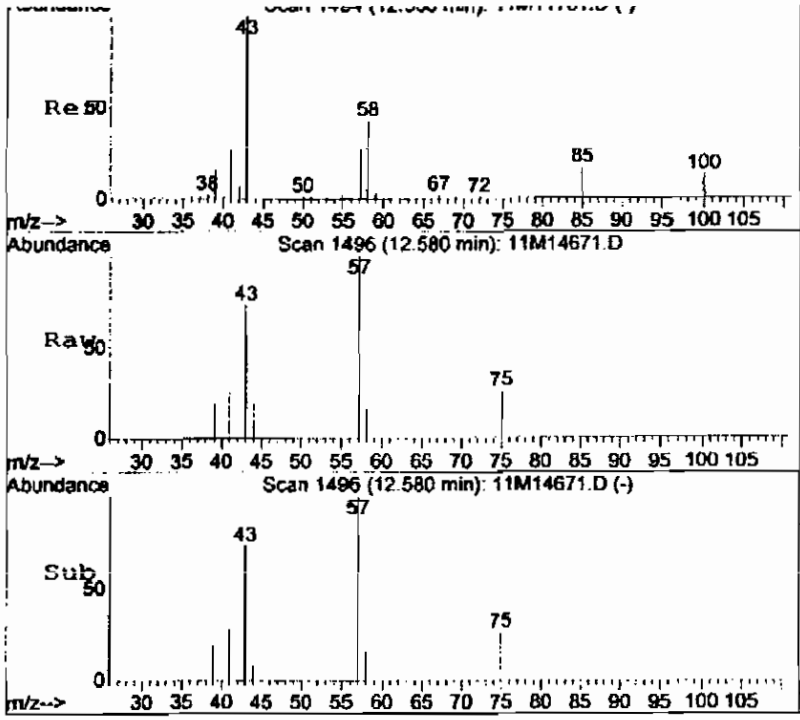


#15
Methylene Chloride
Concen: 0.22 ug/L
RT: 8.04 min Scan# 749
Delta R.T. 0.01 min
Lab File: 11M14671.D
Acq: 1 May 2003 2:53

Tgt Ion: 84 Resp: 1665

Ion	Ratio	Lower	Upper
84	100		
49	195.6	103.1	240.5

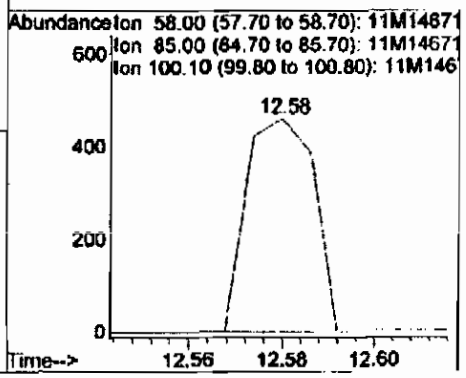


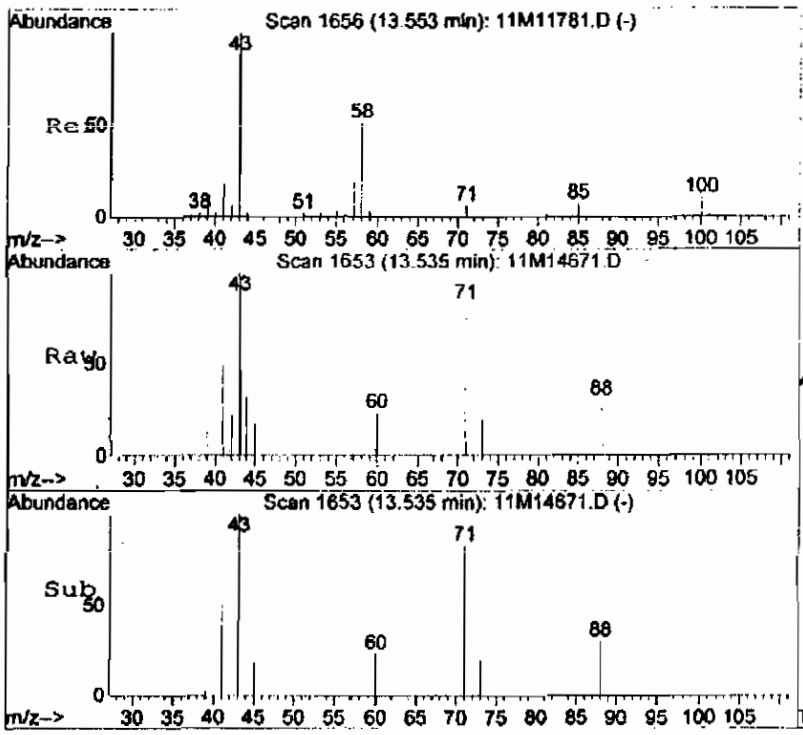


#41
4-Methyl-2-Pentanone
Concen: 0.25 ug/L
RT: 12.58 min Scan# 1496
Delta R.T. 0.01 min
Lab File: 11M14671.D
Acq: 1 May 2003 2:53

Tgt Ion: 58 Resp: 463

Ion	Ratio	Lower	Upper
58	100		
85	0.0	0.0	0.0
100	0.0	0.0	0.0

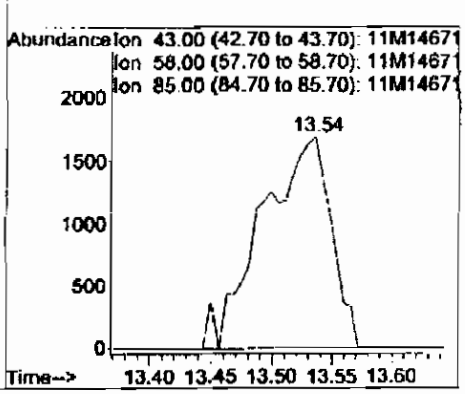




#50
2-Hexanone
Concen: 2.04 ug/L
RT: 13.54 min Scan# 1653
Delta R.T. -0.02 min
Lab File: 11M14671.D
Acq: 1 May 2003 2:53

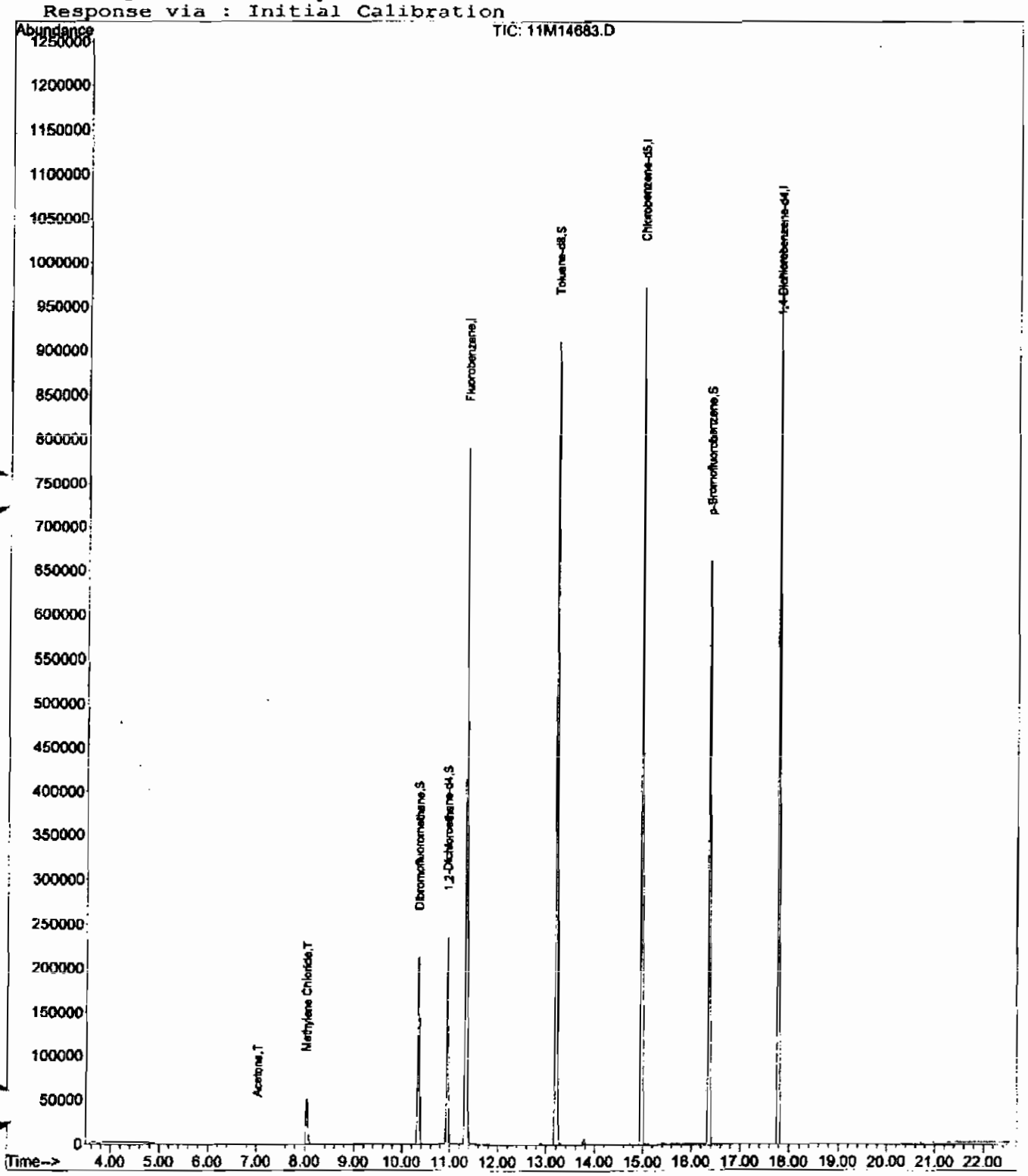
Tgt Ion: 43 Resp: 6739

Ion	Ratio	Lower	Upper
43	100		
58	0.0	5.6	13.0#
85	0.0	95.5	222.9#



Data File : C:\MSDchem\1\DATA\050103\11M14683.D Vial: 8
Acq On : 1 May 2003 9:21 Operator: CMS
Sample : L0304594-04 A 00 826-TCL Inst : HPMS11
Misc : 1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 1 9:44 2003 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration

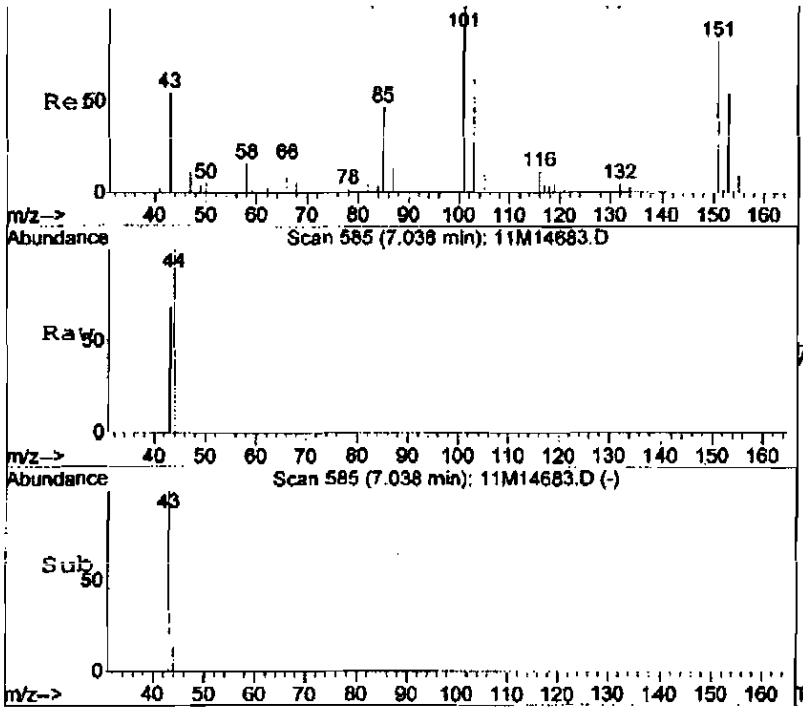


Data File : C:\MSDchem\1\DATA\050103\11M14683.D Vial: 8
Acq On : 1 May 2003 9:21 Operator: CMS
Sample : L0304594-04 A 00 826-TCL Inst : HPMS11
Misc : 1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 01 09:43:59 2003 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.33	96	920005	25.00 ug/L	0.00
44) Chlorobenzene-d5	14.97	117	665363	25.00 ug/L	0.00
64) 1,4-Dichlorobenzene-d4	17.79	152	329131	25.00 ug/L	0.00
System Monitoring Compounds					
28) Dibromofluoromethane	10.34	111	188743	24.8594 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 99.44%		
33) 1,2-Dichloroethane-d4	10.94	65	212903	26.6006 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 106.40%		
45) Toluene-d8	13.19	98	776563	25.6431 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 102.56%		
66) p-Bromofluorobenzene	16.36	95	308515	25.3420 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 101.36%		
Target Compounds					Qvalue
11) Acetone	7.04	43	823	~~0.6006 ug/L #~~	74
15) Methylene Chloride	8.03	84	29864	4.0354 ug/L F	95

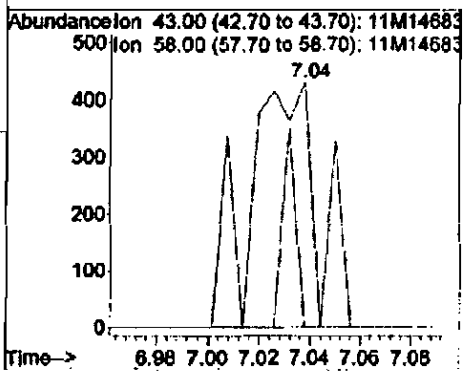
(#) = qualifier out of range (m) = manual integration
11M14683.D 8260WT.M Thu May 01 09:44:01 2003 Page 1

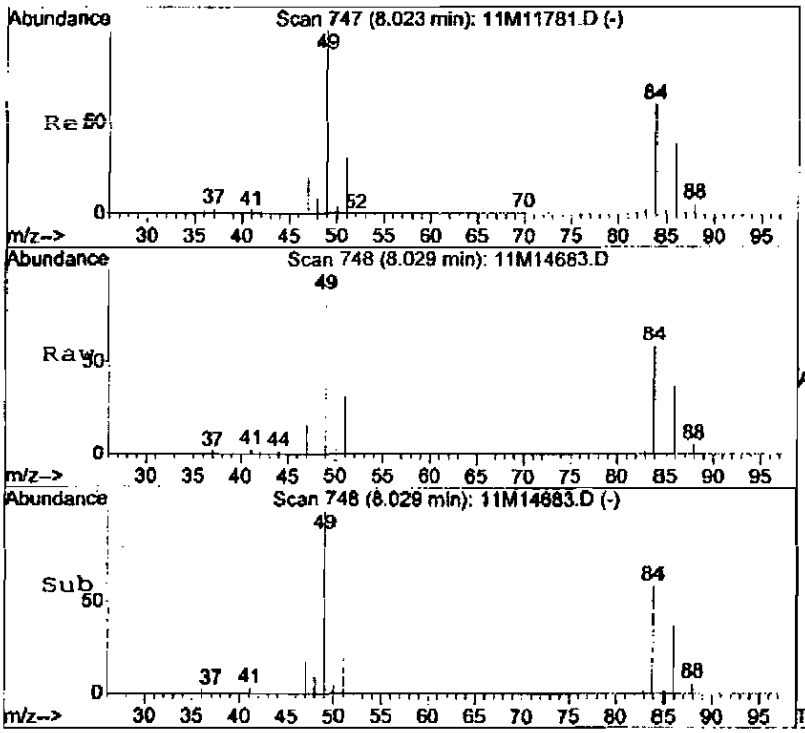


Acetone
Concen: 0.60 ug/L
RT: 7.04 min Scan# 585
Delta R.T. 0.02 min
Lab File: 11M14683.D
Acq: 1 May 2003 9:21

Tgt Ion: 43 Resp: 823

Ion	Ratio	Lower	Upper
43	100		
58	15.6	4.0	9.2#

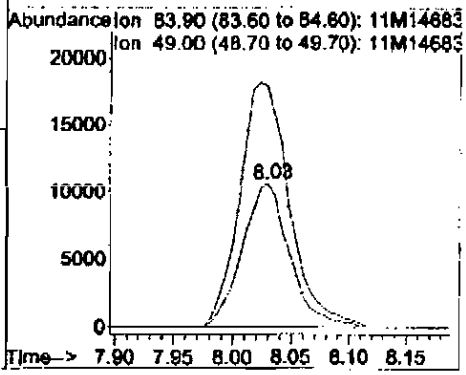




#15
Methylene Chloride
Concen: 4.04 ug/L
RT: 8.03 min Scan# 748
Delta R.T. 0.01 min
Lab File: 11M14683.D
Acq: 1 May 2003 9:21

Tgt Ion: 84 Resp: 29864

Ion	Ratio	Lower	Upper
84	100		
49	179.4	103.1	240.5



2.1.1.3 Standards Data

Calibration Table Report
Method: 8260WT.M
Title: Method 8260B Water Analysis 04/17/03 HPMS 11
Last Calibration: Thu Apr 17 15:11:50 2003

AVE % RSD=9.86%

✓ 4/21/03

Calibration Files

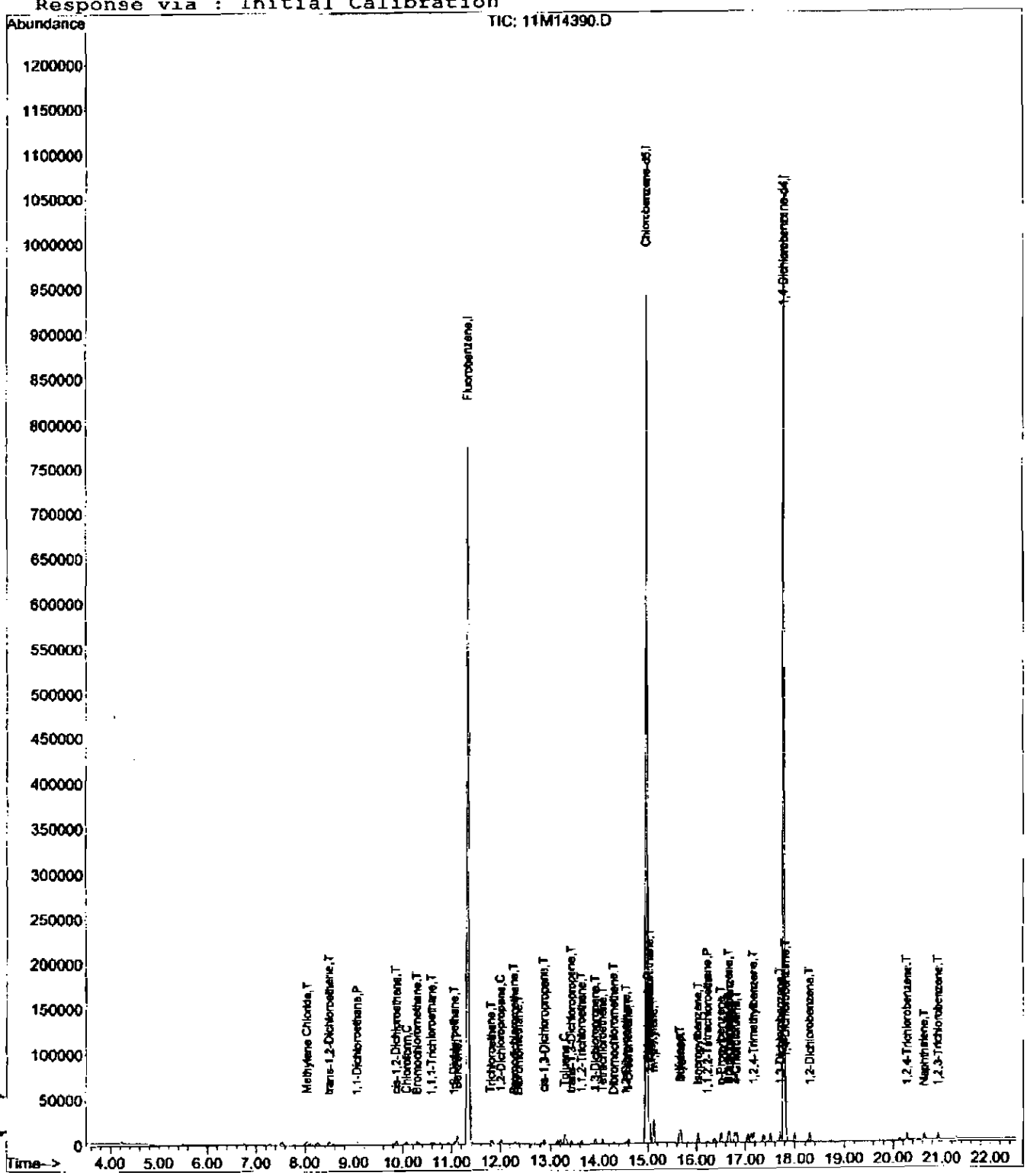
	Compound	0.4	1	5	20	50	200	100	150	Avg	%RSD
		11M14390.D	11M14391.D	11M14395.D	11M14396.D	11M14397.D	11M14399.D	11M14398.D	11M14402.D		
I	Fluorobenzene	ISTD									
T	Dichlorodifluoromethane		0.179	0.303	0.289	0.284	0.272	0.282	0.278	0.270	15.211
P	Chloromethane		0.182	0.200	0.187	0.180	0.175	0.166	0.164	0.179 ✓	6.903
C	Vinyl Chloride		0.097	0.138	0.123	0.121	0.093	0.113	0.111	0.114	13.693 ✓
T	Bromomethane		0.109	0.143	0.153	0.167	0.167	0.167	0.165	0.153	13.905
T	Chloroethane		0.154	0.198	0.193	0.193	0.192	0.193	0.191	0.188	8.085
T	Trichlorofluoromethane		0.229	0.378	0.375	0.374	0.363	0.377	0.381	0.354	15.611
T	Isoprene			0.361	0.398	0.400	0.371	0.388	0.378	0.383	3.955
T	Acrolein			0.014	0.016	0.017	0.016	0.017	0.016	0.016	5.972
T	1,1,2-Trichloro-1,2,2-Trifluoroethan			0.210	0.208	0.211	0.203	0.208	0.209	0.208	1.420
T	Acetone			0.040	0.037	0.040	0.034	0.037	0.035	0.037	6.243
C	1,1-Dichloroethene		0.137	0.197	0.206	0.203	0.189	0.197	0.199	0.190	12.498 ✓
T	Dimethyl Sulfide			0.284	0.288	0.288	0.269	0.277	0.269	0.279	3.115
T	Iodomethane			0.221	0.243	0.243	0.227	0.208	0.212	0.226	6.672
T	Methylene Chloride	0.178	0.190	0.214	0.213	0.210	0.195	0.204	0.205	0.201	6.224
T	Carbon Disulfide		0.559	0.697	0.733	0.728	0.679	0.702	0.693	0.684	8.532
T	Acrylonitrile			0.055	0.052	0.058	0.055	0.057	0.054	0.055	4.115
T	Methyl Tert Butyl Ether		0.447	0.432	0.433	0.450	0.419	0.437	0.408	0.432	3.430
T	trans-1,2-Dichloroethene	0.153	0.175	0.229	0.235	0.231	0.213	0.223	0.220	0.210	14.211
T	n-Hexane		0.311	0.404	0.419	0.414	0.393	0.412	0.408	0.394	9.567
T	Vinyl Acetate		0.307	0.316	0.301	0.341	0.342	0.359	0.341	0.330	6.482
T	1,1-Dichloroethane	0.348	0.365	0.479	0.485	0.479	0.453	0.467	0.464	0.442 ✓	12.244
	2-Butanone			0.055	0.055	0.056	0.053	0.056	0.052	0.055	3.207
T	2,2-Dichloropropane		0.239	0.333	0.349	0.345	0.342	0.352	0.354	0.331	12.437
T	cis-1,2-Dichloroethene	0.189	0.202	0.240	0.248	0.245	0.221	0.234	0.230	0.226	9.351
C	Chloroform	0.304	0.316	0.382	0.394	0.393	0.366	0.382	0.378	0.364	9.522 ✓
T	Bromochloromethane	0.069	0.085	0.094	0.097	0.096	0.087	0.092	0.089	0.089	10.359
S	Dibromofluoromethane			0.187	0.215	0.213	0.205	0.210	0.206	0.206	4.942
T	1,1,1-Trichloroethane	0.181	0.221	0.338	0.347	0.348	0.329	0.340	0.340	0.305	21.468
T	Cyclohexane			0.518	0.546	0.544	0.496	0.528	0.515	0.525	3.600
T	1,1-Dichloropropene		0.205	0.303	0.322	0.320	0.294	0.310	0.308	0.295	13.722
T	Carbon Tetrachloride		0.158	0.253	0.280	0.290	0.281	0.291	0.292	0.264	18.451
S	1,2-Dichloroethane-d4			0.216	0.232	0.232	0.202	0.220	0.204	0.217	5.864
T	1,2-Dichloroethane	0.240	0.271	0.301	0.300	0.298	0.271	0.290	0.277	0.281	7.414
T	Benzene	0.799	0.784	0.948	0.966	0.940	0.849	0.904	0.883	0.884	7.744
T	Trichloroethene	0.158	0.172	0.223	0.234	0.225	0.204	0.217	0.213	0.206	13.142
C	1,2-Dichloropropane	0.222	0.224	0.264	0.261	0.258	0.236	0.250	0.243	0.245	6.632 ✓
T	Bromodichloromethane	0.211	0.212	0.249	0.275	0.279	0.266	0.277	0.271	0.255	11.155
T	Dibromomethane	0.080	0.085	0.101	0.101	0.102	0.092	0.098	0.093	0.094	8.476
T	2-Chloroethyl Vinyl Ether		0.082	0.096	0.099	0.106	0.098	0.103	0.098	0.097	7.660
T	4-Methyl-2-Pentanone			0.050	0.049	0.053	0.048	0.052	0.048	0.050	4.094
T	cis-1,3-Dichloropropene	0.262	0.262	0.319	0.34	0.346	0.323	0.343	0.333	0.3160	10.950
T	Dimethyl Disulfide			0.154	0.181	0.193	0.183	0.194	0.183	0.1814	7.966
I	Chlorobenzene-d5	ISTD									
S	Toluene-d8			1.016	1.244	1.188	1.106	1.132	1.141	1.1379	6.771
C	Toluene	1.098	1.101	1.415	1.424	1.371	1.201	1.284	1.279	1.2718	10.209 ✓
T	Ethyl Methacrylate			0.242	0.254	0.264	0.237	0.253	0.237	0.2478	4.443
T	trans-1,3-Dichloropropene	0.276	0.301	0.362	0.386	0.394	0.367	0.381	0.377	0.3553	12.152
T	1,1,2-Trichloroethane	0.169	0.173	0.2	0.204	0.203	0.184	0.194	0.188	0.1892	7.140
T	2-Hexanone			0.118	0.121	0.127	0.117	0.123	0.116	0.1204	3.520
T	1,3-Dichloropropane	0.339	0.354	0.374	0.384	0.382	0.346	0.363	0.354	0.3622	4.616
	etrachloroethene	0.151	0.161	0.253	0.258	0.245	0.216	0.231	0.23	0.2182	18.611
	ibromochloromethane	0.138	0.154	0.188	0.216	0.234	0.228	0.231	0.232	0.2026	18.862
T	1,2-Dibromoethane	0.145	0.17	0.188	0.195	0.196	0.182	0.187	0.185	0.1809	9.106
T	1-Chlorohexane		0.347	0.453	0.486	0.474	0.426	0.451	0.447	0.4404	10.370

P	Chlorobenzene	0.857	0.825	0.969	0.943	0.866	0.644	0.755	0.703	0.8201✓	13.813
T	1,1,1,2-Tetrachloroethane	0.192	0.212	0.259	0.274	0.263	0.204	0.237	0.221	0.2327	12.924
C	Ethylbenzene	0.393	0.419	0.548	0.535	0.488	0.359	0.421	0.399	0.4452	15.657✓
T	m-,p-Xylene	0.484	0.52	0.666	0.666	0.618	0.467	0.543	0.51	0.5593	14.285
T	o-Xylene	0.464	0.493	0.642	0.653	0.621	0.51	0.57	0.546	0.5623	12.703
T	Styrene	0.731	0.761	1.009	1.049	1.018	0.845	0.933	0.896	0.9050	13.208
P	Bromoform		0.066	0.085	0.1	0.116	0.12	0.119	0.118	0.1034✓	20.127
T	Isopropylbenzene	1.093	1.133	1.611	1.656	1.591	1.401	1.497	1.483	1.4332	14.892
I	1,4-Dichlorobenzene-d4	ISTD									
P	1,1,2,2-Tetrachloroethane	0.358	0.395	0.43	0.444	0.437	0.395	0.425	0.407	0.4114✓	6.894
S	p-Bromofluorobenzene			0.878	1.009	0.958	0.871	0.924	0.909	0.9247	5.632
T	1,2,3-Trichloropropane		0.103	0.122	0.127	0.128	0.113	0.125	0.119	0.1194	7.558
T	trans-1,4-Dichloro-2-Butene			0.14	0.154	0.159	0.151	0.159	0.148	0.1520	4.684
T	n-Propylbenzene	2.425	2.82	3.881	4.066	3.87	3.319	3.64	3.627	3.4559	16.493
T	Bromobenzene	0.537	0.584	0.682	0.701	0.662	0.527	0.608	0.582	0.6105	10.680
T	1,3,5-Trimethylbenzene	1.829	1.986	2.706	2.81	2.66	2.202	2.477	2.418	2.3860	14.786
T	2-Chlorotoluene	1.832	1.926	2.461	2.571	2.415	1.994	2.253	2.195	2.2060	12.201
T	4-Chlorotoluene	1.682	2.014	2.384	2.456	2.32	1.795	2.201	1.898	2.0937	13.769
T	a-Methylstyrene			1.464	1.599	1.543	1.299	1.446	1.382	1.4553	7.418
T	tert-Butylbenzene		1.56	2.184	2.261	2.599	2.198	2.437	2.396	2.2336	14.842
T	1,2,4-Trimethylbenzene	1.998	2.144	2.806	2.952	2.788	2.365	2.616	2.562	2.5288	13.270
T	sec-Butylbenzene		2.385	3.386	3.598	3.401	2.967	3.234	3.23	3.1716	12.534
T	p-Isopropyltoluene		2.011	2.864	2.996	2.859	2.471	2.69	2.674	2.6521	12.431
T	1,3-Dichlorobenzene	1.193	1.303	1.497	1.522	1.448	1.232	1.359	1.328	1.3603	8.837
T	1,4-Dichlorobenzene	1.288	1.298	1.501	1.525	1.453	1.212	1.357	1.31	1.3680	8.220
T	n-Butylbenzene		1.879	2.619	2.771	2.633	2.322	2.523	2.519	2.4669	11.886
T	1,2-Dichlorobenzene	1.183	1.151	1.298	1.318	1.266	1.082	1.189	1.157	1.2055	6.739
T	1,2-Dibromo-3-Chloropropane			0.057	0.065	0.072	0.071	0.073	0.072	0.0683	9.205
T	1,2,4-Trichlorobenzene	0.693	0.787	0.841	0.857	0.82	0.679	0.765	0.738	0.7724	8.565
T	Hexachlorobutadiene		0.232	0.3	0.312	0.3	0.278	0.294	0.303	0.2884	9.292
T	Naphthalene	1.467	1.465	1.523	1.573	1.568	1.35	1.495	1.429	1.4836	4.986
T	1,2,3-Trichlorobenzene	0.62	0.627	0.691	0.685	0.666	0.553	0.624	0.596	0.6328	7.341

Thu Apr 17 15:16:14 2003 9.856

Data File : C:\MSDCHEM\1\DATA\041703\11M14390.D Vial: 3
Acq On : 17 Apr 2003 7:38 Operator: CMS
Sample : WG138555-02 0.40 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10829 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 15:22 2003 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\041703\11M14390.D Vial: 3
Acq On : 17 Apr 2003 7:38 Operator: CMS
Sample : WG138555-02 0.40 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10829 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 15:21:36 2003 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.33	96	930586	25.00	ug/L	0.00
44) Chlorobenzene-d5	14.97	117	673482	25.00	ug/L	0.00
64) 1,4-Dichlorobenzene-d4	17.79	152	335941	25.00	ug/L	0.00

System Monitoring Compounds						
28) Dibromofluoromethane	0.00	111	0d	0.0000	ug/L	
Spiked Amount 25.000	Range 86 - 118		Recovery	=	0.00%#	
33) 1,2-Dichloroethane-d4	0.00	65	0d	0.0000	ug/L	
Spiked Amount 25.000	Range 80 - 120		Recovery	=	0.00%#	
45) Toluene-d8	0.00	98	0d	0.0000	ug/L	
Spiked Amount 25.000	Range 88 - 110		Recovery	=	0.00%#	
66) p-Bromofluorobenzene	0.00	95	0d	0.0000	ug/L	
Spiked Amount 25.000	Range 86 - 115		Recovery	=	0.00%#	

Target Compounds						Qvalue
15) Methylene Chloride	8.02	84	2653	0.3544	ug/L	95
19) trans-1,2-Dichloroethene	8.49	96	2273	0.2910	ug/L	84
22) 1,1-Dichloroethane	9.06	63	5181	0.3146	ug/L #	88
25) cis-1,2-Dichloroethene	9.87	96	2815	0.3345	ug/L	88
26) Chloroform	10.07	83	4524	0.3336	ug/L	87
27) Bromochloromethane	10.28	128	1021	0.3092	ug/L	81
29) 1,1,1-Trichloroethane	10.59	97	2693	0.2368	ug/L #	85
34) 1,2-Dichloroethane	11.05	62	3576	0.3418	ug/L #	75
35) Benzene	11.11	78	11890	0.3612	ug/L	93
36) Trichloroethene	11.82	130	2348	0.3067	ug/L	80
37) 1,2-Dichloropropane	12.01	63	3308	0.3631	ug/L #	71
38) Bromodichloromethane	12.29	83	3136	0.3306	ug/L #	87
39) Dibromomethane	12.37	93	1196	0.3418	ug/L	80
42) cis-1,3-Dichloropropene	12.88	75	3901	0.3317	ug/L #	69
46) Toluene	13.29	91	11835	0.3454	ug/L	97
48) trans-1,3-Dichloropropene	13.43	75	2969	0.3102	ug/L #	60
49) 1,1,2-Trichloroethane	13.64	97	1816	0.3562	ug/L	84
51) 1,3-Dichloropropane	13.92	76	3652	0.3743	ug/L	100
52) Tetrachloroethene	14.07	164	1628	0.2769	ug/L	98
53) Dibromochloromethane	14.30	129	1484	0.2719	ug/L	99
54) 1,2-Dibromoethane	14.55	107	1564	0.3209	ug/L	95
55) 1-Chlorohexane	14.59	91	1738	0.1465	ug/L	95
56) Chlorobenzene	15.02	112	9238	0.4181	ug/L	97
57) 1,1,1,2-Tetrachloroethane	15.04	131	2072	0.3306	ug/L	85
58) Ethylbenzene	15.03	106	4238	0.3534	ug/L	83
59) m-,p-Xylene	15.12	106	10430	0.6923	ug/L	87
60) o-Xylene	15.65	106	4997	0.3299	ug/L	84
61) Styrene	15.68	104	7873	0.3229	ug/L	91
63) Isopropylbenzene	16.04	105	11783	0.3052	ug/L	97
65) 1,1,2,2-Tetrachloroethane	16.23	83	1924	0.3480	ug/L	81
69) n-Propylbenzene	16.50	91	13033	0.2806	ug/L	93
70) Bromobenzene	16.66	156	2888	0.3521	ug/L	64
71) 1,3,5-Trimethylbenzene	16.67	105	9829	0.3066	ug/L	96
72) 2-Chlorotoluene	16.78	91	9849	0.3323	ug/L	93
73) 4-Chlorotoluene	16.82	91	9040	0.3213	ug/L	95
76) 1,2,4-Trimethylbenzene	17.17	105	10739	0.3160	ug/L	88
79) 1,3-Dichlorobenzene	17.71	146	6414	0.3509	ug/L	89
80) 1,4-Dichlorobenzene	17.83	146	6924	0.3767	ug/L	74
82) 1,2-Dichlorobenzene	18.30	146	6357	0.3924	ug/L	99

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

Data File : C:\MSDCHEM\1\DATA\041703\11M14390.D Vial: 3
Acq On : 17 Apr 2003 7:38 Operator: CMS
Sample : WG138555-02 0.40 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10829 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 15:21:36 2003 Quant Results File: 8260WT.RES

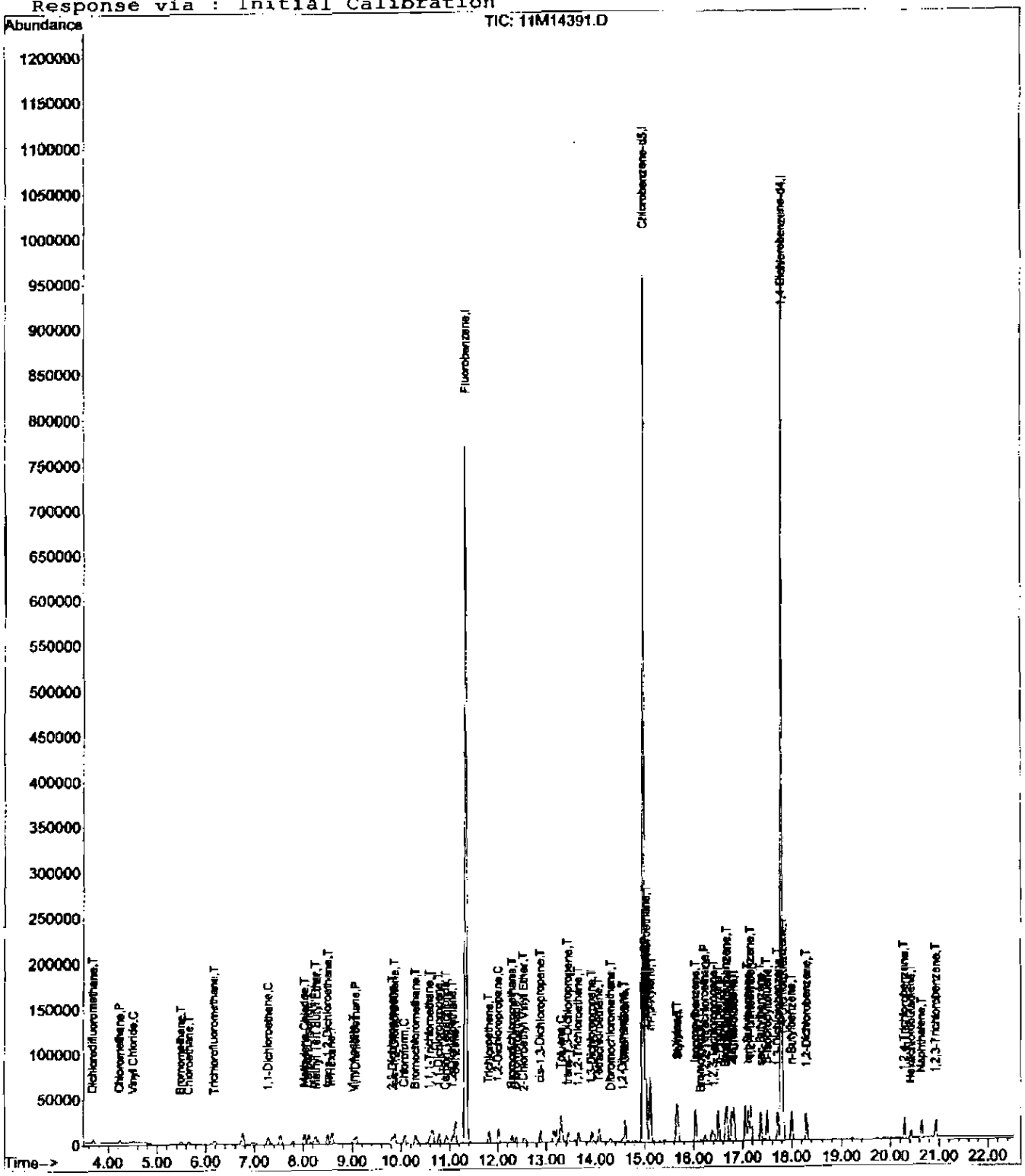
Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
84) 1,2,4-Trichlorobenzene	20.28	180	3724	0.3588 ug/L	93
86) Naphthalene	20.64	128	7887	0.3956 ug/L #	95
87) 1,2,3-Trichlorobenzene	20.93	180	3330	0.3916 ug/L	91

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

Data File : C:\MSDCHEM\1\DATA\041703\11M14391.D Vial: 4
Acq On : 17 Apr 2003 8:09 Operator: CMS
Sample : WG138555-03 1 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10829 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 15:24 2003 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\041703\11M14391.D Vial: 4
Acq On : 17 Apr 2003 8:09 Operator: CMS
Sample : WG138555-03 1 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10829 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 15:23:39 2003 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.33	96	934281	25.00 ug/L	0.00
44) Chlorobenzene-d5	14.97	117	682670	25.00 ug/L	0.00
64) 1,4-Dichlorobenzene-d4	17.79	152	339714	25.00 ug/L	0.00

System Monitoring Compounds					
28) Dibromofluoromethane	0.00	111	0d	0.0000 ug/L	
Spiked Amount 25.000	Range 86 - 118		Recovery	=	0.00%#
33) 1,2-Dichloroethane-d4	0.00	65	0d	0.0000 ug/L	
Spiked Amount 25.000	Range 80 - 120		Recovery	=	0.00%#
45) Toluene-d8	0.00	98	0d	0.0000 ug/L	
Spiked Amount 25.000	Range 88 - 110		Recovery	=	0.00%#
66) p-Bromofluorobenzene	0.00	95	0d	0.0000 ug/L	
Spiked Amount 25.000	Range 86 - 115		Recovery	=	0.00%#

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.69	85	6698	0.6645 ug/L #	80
3) Chloromethane	4.23	50	6809	1.0171 ug/L	91
4) Vinyl Chloride	4.51	62	3612	0.8500 ug/L #	80
5) Bromomethane	5.49	94	4091	0.7157 ug/L	89
6) Chloroethane	5.66	64	5742	0.8191 ug/L	87
7) Trichlorofluoromethane	6.17	101	8566m	0.6479 ug/L	
12) 1,1-Dichloroethene	7.28	96	5133	0.7240 ug/L	58
15) Methylene Chloride	8.04	84	7090	0.9434 ug/L	97
16) Carbon Disulfide	8.11	76	20902	0.8173 ug/L #	85
18) Methyl Tert Butyl Ether	8.25	73	16710	1.0345 ug/L #	73
19) trans-1,2-Dichloroethene	8.49	96	6541	0.8341 ug/L	83
20) n-Hexane	8.57	57	11616	0.7882 ug/L #	99
21) Vinyl Acetate	9.01	43	11485	0.9319 ug/L	96
22) 1,1-Dichloroethane	9.06	63	13648	0.8254 ug/L #	77
24) 2,2-Dichloropropane	9.82	77	8917	0.7219 ug/L #	90
25) cis-1,2-Dichloroethene	9.88	96	7532	0.8913 ug/L	85
26) Chloroform	10.07	83	11827	0.8686 ug/L	91
27) Bromochloromethane	10.29	128	3186	0.9610 ug/L	64
29) 1,1,1-Trichloroethane	10.58	97	8272	0.7245 ug/L #	88
31) 1,1-Dichloropropene	10.78	75	7675	0.6972 ug/L #	30
32) Carbon Tetrachloride	10.91	117	5890	0.5978 ug/L #	88
34) 1,2-Dichloroethane	11.05	62	10120	0.9633 ug/L #	76
35) Benzene	11.11	78	29317	0.8872 ug/L	91
36) Trichloroethene	11.82	130	6416	0.8347 ug/L	82
37) 1,2-Dichloropropane	12.01	63	8375	0.9156 ug/L	81
38) Bromodichloromethane	12.29	83	7923	0.8319 ug/L #	83
39) Dibromomethane	12.38	93	3178	0.9046 ug/L	84
40) 2-Chloroethyl Vinyl Ether	12.54	63	3067	0.8432 ug/L #	100
42) cis-1,3-Dichloropropene	12.88	75	9793	0.8294 ug/L	88
46) Toluene	13.29	91	30069	0.8658 ug/L	95
48) trans-1,3-Dichloropropene	13.43	75	8211	0.8463 ug/L #	58
49) 1,1,2-Trichloroethane	13.64	97	4713	0.9120 ug/L	86
51) 1,3-Dichloropropane	13.92	76	9677	0.9784 ug/L	88
52) Tetrachloroethene	14.08	164	4410	0.7401 ug/L	82
53) Dibromochloromethane	14.31	129	4208	0.7607 ug/L	80
54) 1,2-Dibromoethane	14.55	107	4653	0.9417 ug/L	91
55) 1-Chlorohexane	14.61	91	9462	0.7867 ug/L	89
56) Chlorobenzene	15.02	112	22526	1.0058 ug/L	98
57) 1,1,1,2-Tetrachloroethane	15.04	131	5781	0.9099 ug/L	90

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

Data File : C:\MSDCHEM\1\DATA\041703\11M14391.D Vial: 4
Acq On : 17 Apr 2003 8:09 Operator: CMS
Sample : WG138555-03 1 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10829 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 15:23:39 2003 Quant Results File: 8260WT.RES

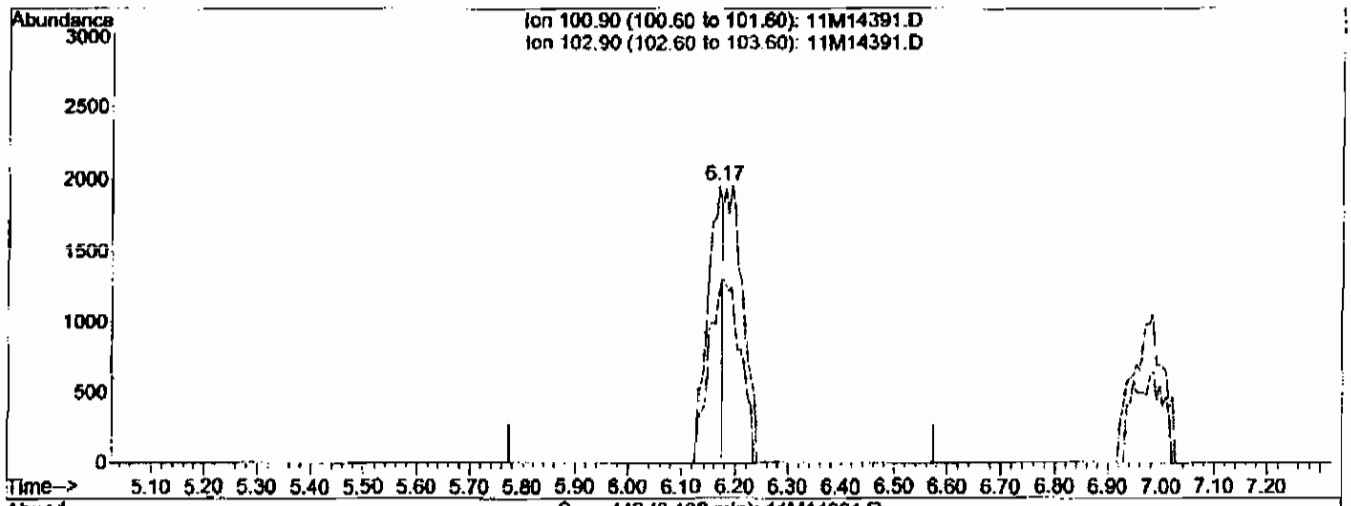
Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

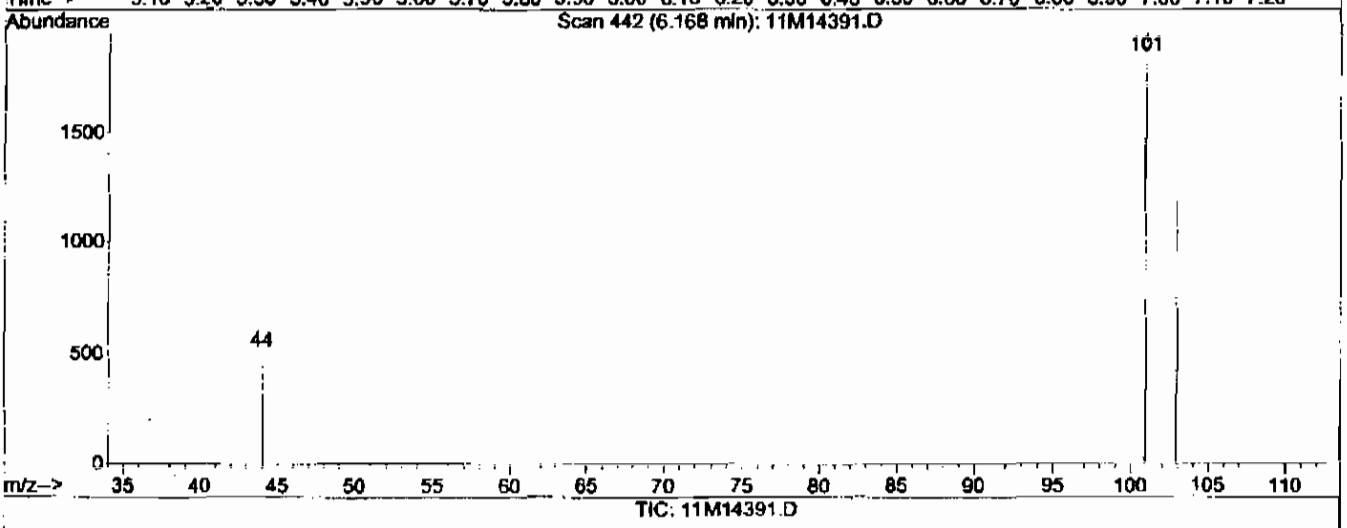
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
58)	Ethylbenzene	15.03	106	11446	0.9416 ug/L		74
59)	m-,p-Xylene	15.12	106	28386	1.8587 ug/L		81
60)	o-Xylene	15.65	106	13459	0.8766 ug/L		81
61)	Styrene	15.68	104	20767	0.8403 ug/L		87
62)	Bromoform	16.15	173	1808	0.6406 ug/L		92
63)	Isopropylbenzene	16.04	105	30948	0.7908 ug/L		94
65)	1,1,2,2-Tetrachloroethane	16.22	83	5372	0.9609 ug/L		88
67)	1,2,3-Trichloropropane	16.40	110	1393	0.8589 ug/L		85
69)	n-Propylbenzene	16.51	91	38314	0.8159 ug/L		92
70)	Bromobenzene	16.65	156	7929	0.9559 ug/L		76
71)	1,3,5-Trimethylbenzene	16.67	105	26987	0.8324 ug/L		93
72)	2-Chlorotoluene	16.78	91	26171	0.8731 ug/L		85
73)	4-Chlorotoluene	16.81	91	27364	0.9618 ug/L		88
75)	tert-Butylbenzene	17.11	119	21195	0.6983 ug/L	#	89
76)	1,2,4-Trimethylbenzene	17.17	105	29135	0.8479 ug/L		87
77)	sec-Butylbenzene	17.36	105	32410	0.7520 ug/L		92
78)	p-Isopropyltoluene	17.51	119	27322	0.7581 ug/L		99
79)	1,3-Dichlorobenzene	17.71	146	17708	0.9580 ug/L		94
80)	1,4-Dichlorobenzene	17.83	146	17641	0.9490 ug/L		78
81)	n-Butylbenzene	17.99	91	25538	0.7618 ug/L	#	98
82)	1,2-Dichlorobenzene	18.30	146	15646	0.9551 ug/L		89
84)	1,2,4-Trichlorobenzene	20.28	180	10690	1.0186 ug/L		99
85)	Hexachlorobutadiene	20.42	225	3155	0.8051 ug/L	#	97
86)	Naphthalene	20.64	128	19908	0.9875 ug/L	#	86
87)	1,2,3-Trichlorobenzene	20.93	180	8521	0.9909 ug/L	#	63

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

Data File : C:\MSDCHEM\1\DATA\041703\11M14391.D Vial: 4
Acq On : 17 Apr 2003 8:09 Operator: CMS
Sample : WG138555-03 1 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10829 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 15:24 2003 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Multiple Level Calibration





(7) Trichlorofluoromethane (T)

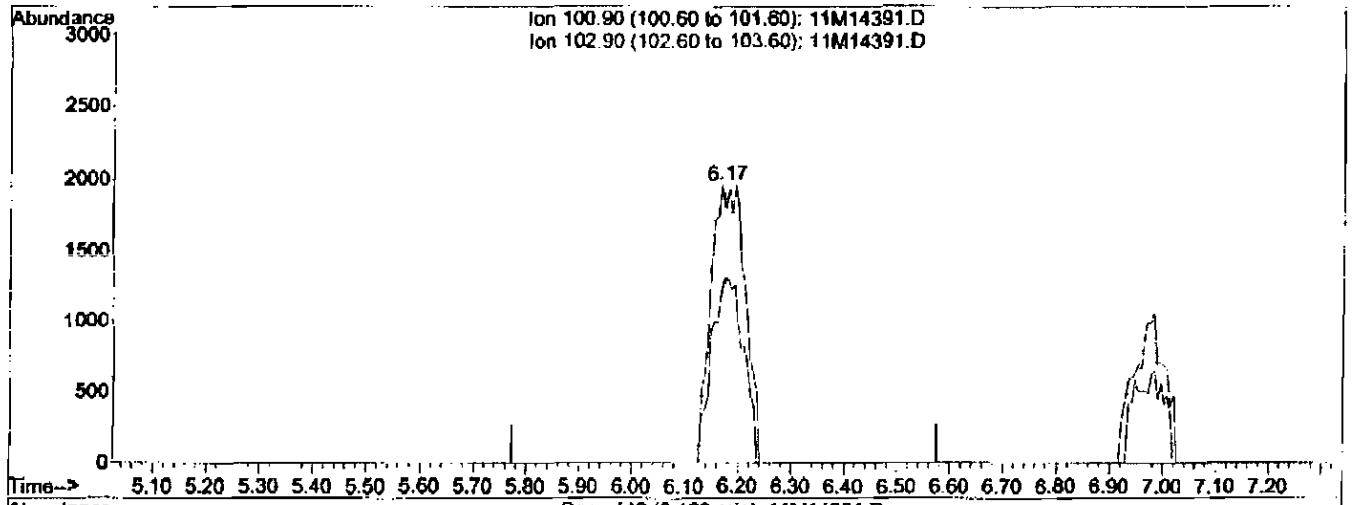
6.17min 0.29ug/L

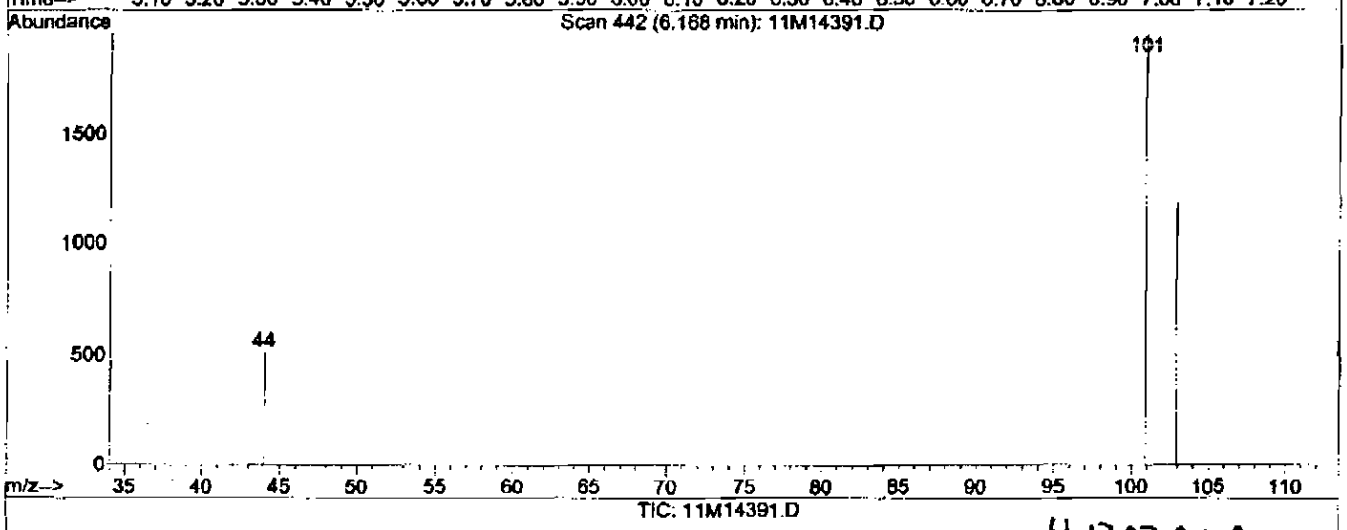
response 3835

Ion	Exp%	Act%
100.90	100	100
102.90	61.40	137.42#
0.00	0.00	0.00
0.00	0.00	0.00

Data File : C:\MSDCHEM\1\DATA\041703\11M14391.D Vial: 4
Acq On : 17 Apr 2003 8:09 Operator: CMS
Sample : WG138555-03 1 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10829 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 15:24 2003 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Multiple Level Calibration





4-17-03 cmg

(7) Trichlorofluoromethane (T)

6.17min 0.65ug/L m

response 8566

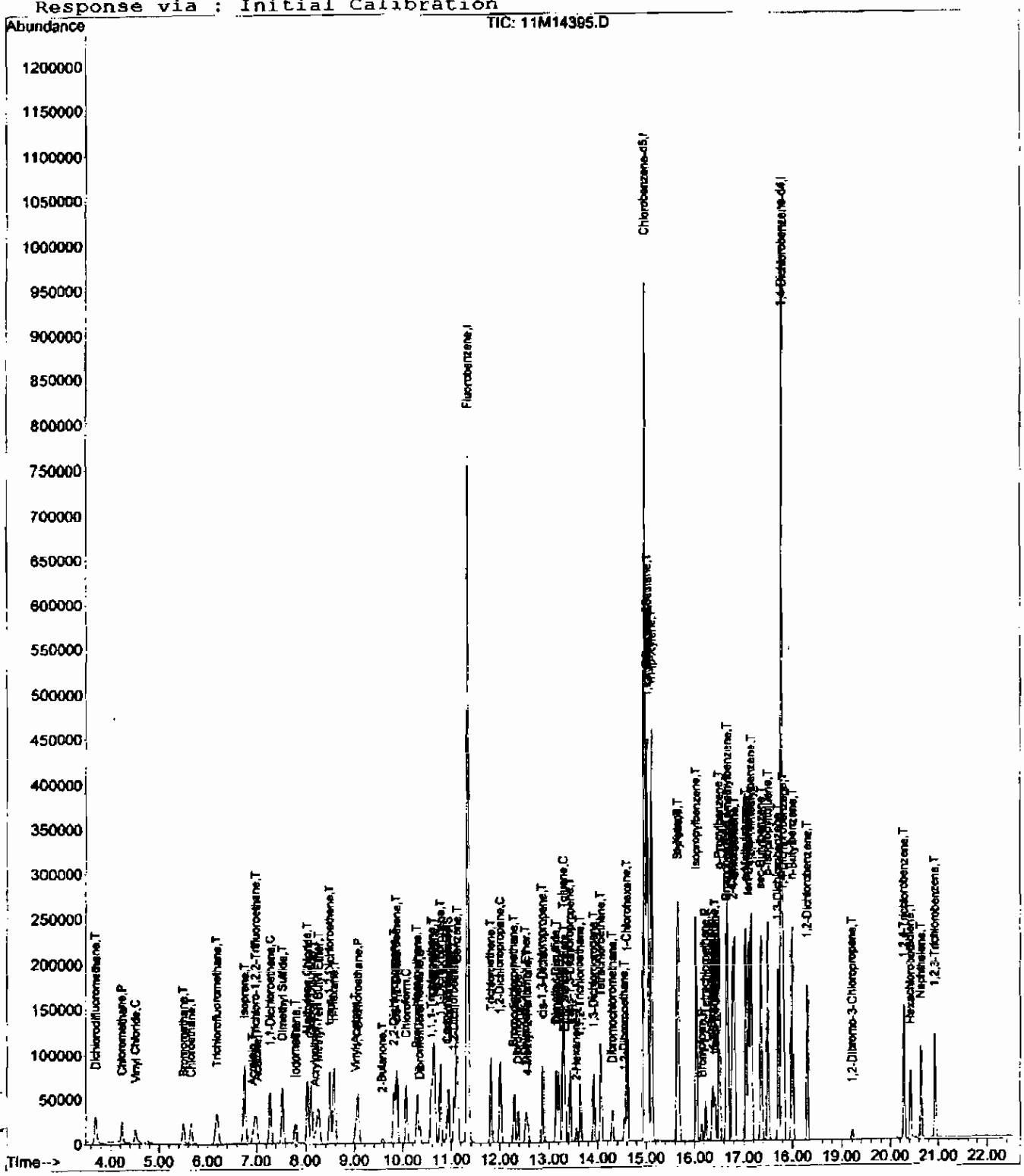
Ion	Exp%	Act%
100.90	100	100
102.90	61.40	61.52
0.00	0.00	0.00
0.00	0.00	0.00

4/17/03

#2

Data File : C:\MSDCHEM\1\DATA\041703\11M14395.D Vial: 8
Acq On : 17 Apr 2003 10:13 Operator: CMS
Sample : WG138555-04 5 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10829 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 15:25 2003 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\041703\11M14395.D Vial: 8
Acq On : 17 Apr 2003 10:13 Operator: CMS
Sample : WG138555-04 5 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10829 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 15:25:33 2003 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.33	96	916576	25.00 ug/L	0.00
44) Chlorobenzene-d5	14.97	117	673357	25.00 ug/L	0.00
64) 1,4-Dichlorobenzene-d4	17.79	152	339614	25.00 ug/L	0.00
System Monitoring Compounds					
28) Dibromofluoromethane	10.34	111	17142	2.2662 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery	= 9.08%#	
33) 1,2-Dichloroethane-d4	10.94	65	19791	2.4820 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery	= 9.92%#	
45) Toluene-d8	13.19	98	68435	2.2330 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery	= 8.92%#	
66) p-Bromofluorobenzene	16.36	95	29803	2.3725 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery	= 9.48%#	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.69	85	55495	5.6120 ug/L	90
3) Chloromethane	4.23	50	36687	5.5858 ug/L	86
4) Vinyl Chloride	4.51	62	25262	6.0599 ug/L #	63
5) Bromomethane	5.49	94	26223	4.6764 ug/L	91
6) Chloroethane	5.66	64	36361	5.2870 ug/L	98
7) Trichlorofluoromethane	6.18	101	69282	5.3415 ug/L	95
8) Isoprene	6.75	67	66265	4.7230 ug/L	96
9) Acrolein	6.92	56	5251	8.9108 ug/L	72
10) 1,1,2-Trichloro-1,2,2-Trif	6.97	101	38587	5.0511 ug/L #	46
11) Acetone	7.02	43	7305	5.3511 ug/L #	45
12) 1,1-Dichloroethene	7.28	96	36065	5.1851 ug/L	63
13) Dimethyl Sulfide	7.53	62	52031	5.0835 ug/L	85
14) Iodomethane	7.79	142	40569	4.9053 ug/L	93
15) Methylene Chloride	8.02	84	39233	5.3212 ug/L	97
16) Carbon Disulfide	8.11	76	127848	5.0957 ug/L #	88
17) Acrylonitrile	8.18	53	10062	4.9827 ug/L #	1
18) Methyl Tert Butyl Ether	8.25	73	79125	4.9930 ug/L #	67
19) trans-1,2-Dichloroethene	8.48	96	42057	5.4670 ug/L	85
20) n-Hexane	8.58	57	74087	5.1245 ug/L #	92
21) Vinyl Acetate	9.01	43	57987	4.7960 ug/L	95
22) 1,1-Dichloroethane	9.07	63	87786	5.4118 ug/L #	77
23) 2-Butanone	9.57	43	10057	5.0314 ug/L #	100
24) 2,2-Dichloropropane	9.82	77	61121	5.0437 ug/L #	61
25) cis-1,2-Dichloroethene	9.87	96	44067	5.3156 ug/L	78
26) Chloroform	10.07	83	69957	5.2369 ug/L	91
27) Bromochloromethane	10.29	128	17250	5.3035 ug/L	66
29) 1,1,1-Trichloroethane	10.58	97	61938	5.5300 ug/L #	86
30) Cyclohexane	10.64	56	94937	4.9361 ug/L #	96
31) 1,1-Dichloropropene	10.77	75	55545	5.1431 ug/L #	17
32) Carbon Tetrachloride	10.92	117	46431	4.8037 ug/L #	91
34) 1,2-Dichloroethane	11.05	62	55269	5.3627 ug/L #	73
35) Benzene	11.11	78	173723	5.3587 ug/L	90
36) Trichloroethene	11.82	130	40944	5.4297 ug/L	88
37) 1,2-Dichloropropane	12.01	63	48359	5.3891 ug/L	83
38) Bromodichloromethane	12.29	83	45687	4.8898 ug/L #	86
39) Dibromomethane	12.38	93	18553	5.3833 ug/L	86
40) 2-Chloroethyl Vinyl Ether	12.53	63	17670	4.9515 ug/L #	100
41) 4-Methyl-2-Pentanone	12.57	58	9102	4.9507 ug/L #	100
42) cis-1,3-Dichloropropene	12.87	75	58396	5.0410 ug/L #	86

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

Data File : C:\MSDCHEM\1\DATA\041703\11M14395.D Vial: 8
Acq On : 17 Apr 2003 10:13 Operator: CMS
Sample : WG138555-04 5 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10829 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 15:25:33 2003 Quant Results File: 8260WT.RES

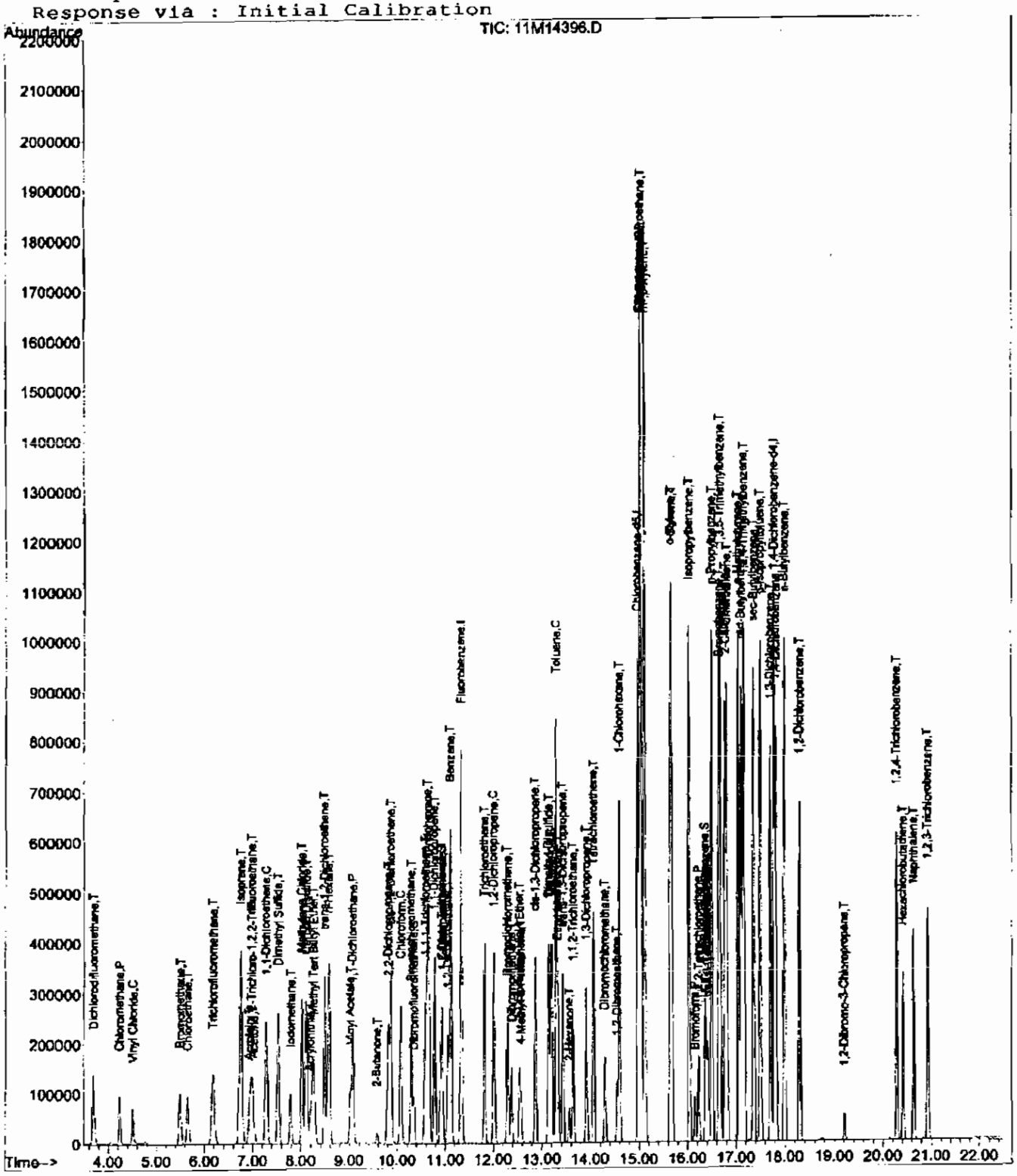
Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
43) Dimethyl Disulfide	13.15	79	28252	4.2474 ug/L		94
46) Toluene	13.29	91	190625	5.5648 ug/L		94
47) Ethyl Methacrylate	13.33	69	32626	4.8887 ug/L	#	100
48) trans-1,3-Dichloropropene	13.43	75	48721	5.0911 ug/L	#	50
49) 1,1,2-Trichloroethane	13.64	97	26961	5.2893 ug/L		82
50) 2-Hexanone	13.56	43	15841	4.8851 ug/L	#	1
51) 1,3-Dichloropropane	13.92	76	50417	5.1681 ug/L		95
52) Tetrachloroethene	14.06	164	34122	5.8053 ug/L		93
53) Dibromochloromethane	14.31	129	25361	4.6477 ug/L		82
54) 1,2-Dibromoethane	14.54	107	25275	5.1861 ug/L		92
55) 1-Chlorohexane	14.60	91	60948	5.1378 ug/L		90
56) Chlorobenzene	15.02	112	130452	5.9055 ug/L		99
57) 1,1,1,2-Tetrachloroethane	15.04	131	34817	5.5561 ug/L		93
58) Ethylbenzene	15.03	106	73739	6.1501 ug/L		74
59) m-,p-Xylene	15.12	106	179462	11.9134 ug/L		83
60) o-Xylene	15.65	106	86492	5.7113 ug/L		79
61) Styrene	15.67	104	135903	5.5752 ug/L		85
62) Bromoform	16.15	173	11441	4.1101 ug/L		77
63) Isopropylbenzene	16.04	105	216960	5.6205 ug/L		95
65) 1,1,2,2-Tetrachloroethane	16.22	83	29178	5.2204 ug/L		84
67) 1,2,3-Trichloropropane	16.40	110	8259	5.0937 ug/L		81
68) trans-1,4-Dichloro-2-Buten	16.42	53	9536	4.6182 ug/L	#	68
69) n-Propylbenzene	16.50	91	263591	5.6146 ug/L		90
70) Bromobenzene	16.65	156	46345	5.5886 ug/L		72
71) 1,3,5-Trimethylbenzene	16.68	105	183813	5.6711 ug/L		92
72) 2-Chlorotoluene	16.78	91	167159	5.5781 ug/L		93
73) 4-Chlorotoluene	16.81	91	161894	5.6921 ug/L		95
74) a-Methylstyrene	17.05	118	99410	5.0284 ug/L		80
75) tert-Butylbenzene	17.11	119	148367	4.8899 ug/L	#	84
76) 1,2,4-Trimethylbenzene	17.16	105	190562	5.5473 ug/L		89
77) sec-Butylbenzene	17.36	105	229973	5.3377 ug/L		92
78) p-Isopropyltoluene	17.50	119	194516	5.3990 ug/L		100
79) 1,3-Dichlorobenzene	17.71	146	101658	5.5012 ug/L		91
80) 1,4-Dichlorobenzene	17.83	146	101949	5.4859 ug/L		83
81) n-Butylbenzene	17.99	91	177907	5.3088 ug/L	#	97
82) 1,2-Dichlorobenzene	18.30	146	88150	5.3828 ug/L		90
83) 1,2-Dibromo-3-Chloropropan	19.22	157	3872	4.1755 ug/L		76
84) 1,2,4-Trichlorobenzene	20.28	180	57111	5.4433 ug/L		89
85) Hexachlorobutadiene	20.42	225	20349	5.1942 ug/L	#	76
86) Naphthalene	20.64	128	103438	5.1323 ug/L	#	82
87) 1,2,3-Trichlorobenzene	20.93	180	46908	5.4564 ug/L	#	62

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

Data File : C:\MSDCHEM\1\DATA\041703\11M14396.D Vial: 9
Acq On : 17 Apr 2003 10:43 Operator: CMS
Sample : WG138555-05 20 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10829 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 15:26 2003 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\041703\11M14396.D Vial: 9
Acq On : 17 Apr 2003 10:43 Operator: CMS
Sample : WG138555-05 20 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10829 Multiplr: 1.00
4S Integration Params: rteint.p
Quant Time: Apr 17 15:26:49 2003 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.33	96	933959	25.00 ug/L	0.00
44) Chlorobenzene-d5	14.97	117	683622	25.00 ug/L	0.00
64) 1,4-Dichlorobenzene-d4	17.79	152	336693	25.00 ug/L	0.00
System Monitoring Compounds					
28) Dibromofluoromethane	10.34	111	80462	10.4394 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 41.76%#		
33) 1,2-Dichloroethane-d4	10.94	65	86495	10.6454 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 42.60%#		
45) Toluene-d8	13.19	98	340275	10.9362 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 43.76%#		
66) p-Bromofluorobenzene	16.36	95	135884	10.9111 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 43.64%#		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.69	85	215750	21.4120 ug/L	91
3) Chloromethane	4.23	50	139433	20.8345 ug/L	88
4) Vinyl Chloride	4.50	62	92065	21.6737 ug/L #	59
5) Bromomethane	5.49	94	113980	19.9479 ug/L	91
6) Chloroethane	5.66	64	144255	20.5846 ug/L	95
7) Trichlorofluoromethane	6.18	101	279859	21.1751 ug/L	96
8) Isoprene	6.75	67	297291	20.7947 ug/L	99
9) Acrolein	6.92	56	23928	39.8496 ug/L	84
10) 1,1,2-Trichloro-1,2,2-Trif	6.98	101	155651	19.9958 ug/L	87
11) Acetone	7.02	43	27980	20.1147 ug/L #	36
12) 1,1-Dichloroethene	7.28	96	154063	21.7377 ug/L	63
13) Dimethyl Sulfide	7.53	62	215063	20.6210 ug/L	84
14) Iodomethane	7.79	142	181835	21.5768 ug/L	91
15) Methylene Chloride	8.02	84	159013	21.1658 ug/L	98
16) Carbon Disulfide	8.11	76	547545	21.4176 ug/L #	87
17) Acrylonitrile	8.18	53	38751	18.8325 ug/L #	1
18) Methyl Tert Butyl Ether	8.24	73	323498	20.0337 ug/L #	67
19) trans-1,2-Dichloroethene	8.49	96	175531	22.3925 ug/L	87
20) n-Hexane	8.57	57	313136	21.2560 ug/L #	92
21) Vinyl Acetate	9.01	43	225160	18.2761 ug/L	94
22) 1,1-Dichloroethane	9.07	63	362676	21.9420 ug/L #	77
23) 2-Butanone	9.57	43	40798	20.0310 ug/L #	100
24) 2,2-Dichloropropane	9.81	77	260617	21.1059 ug/L #	59
25) cis-1,2-Dichloroethene	9.87	96	185331	21.9397 ug/L	80
26) Chloroform	10.07	83	294305	21.6214 ug/L	90
27) Bromochloromethane	10.29	128	72844	21.9789 ug/L	63
29) 1,1,1-Trichloroethane	10.58	97	259015	22.6950 ug/L #	86
30) Cyclohexane	10.65	56	408043	20.8205 ug/L #	96
31) 1,1-Dichloropropene	10.77	75	240335	21.8393 ug/L #	21
32) Carbon Tetrachloride	10.93	117	209519	21.2730 ug/L #	92
34) 1,2-Dichloroethane	11.05	62	224146	21.3439 ug/L #	72
35) Benzene	11.11	78	721785	21.8500 ug/L	91
36) Trichloroethene	11.82	130	174566	22.7187 ug/L	87
37) 1,2-Dichloropropane	12.01	63	194977	21.3238 ug/L	83
38) Bromodichloromethane	12.29	83	205119	21.5448 ug/L #	86
39) Dibromomethane	12.37	93	75129	21.3934 ug/L	85
40) 2-Chloroethyl Vinyl Ether	12.54	63	74047	20.3633 ug/L #	100
41) 4-Methyl-2-Pentanone	12.57	58	36946	19.7214 ug/L #	100
42) cis-1,3-Dichloropropene	12.87	75	254028	21.5207 ug/L #	87

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

Data File : C:\MSDCHEM\1\DATA\041703\11M14396.D Vial: 9
Acq On : 17 Apr 2003 10:43 Operator: CMS
Sample : WG138555-05 20 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10829 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 15:26:49 2003 Quant Results File: 8260WT.RES

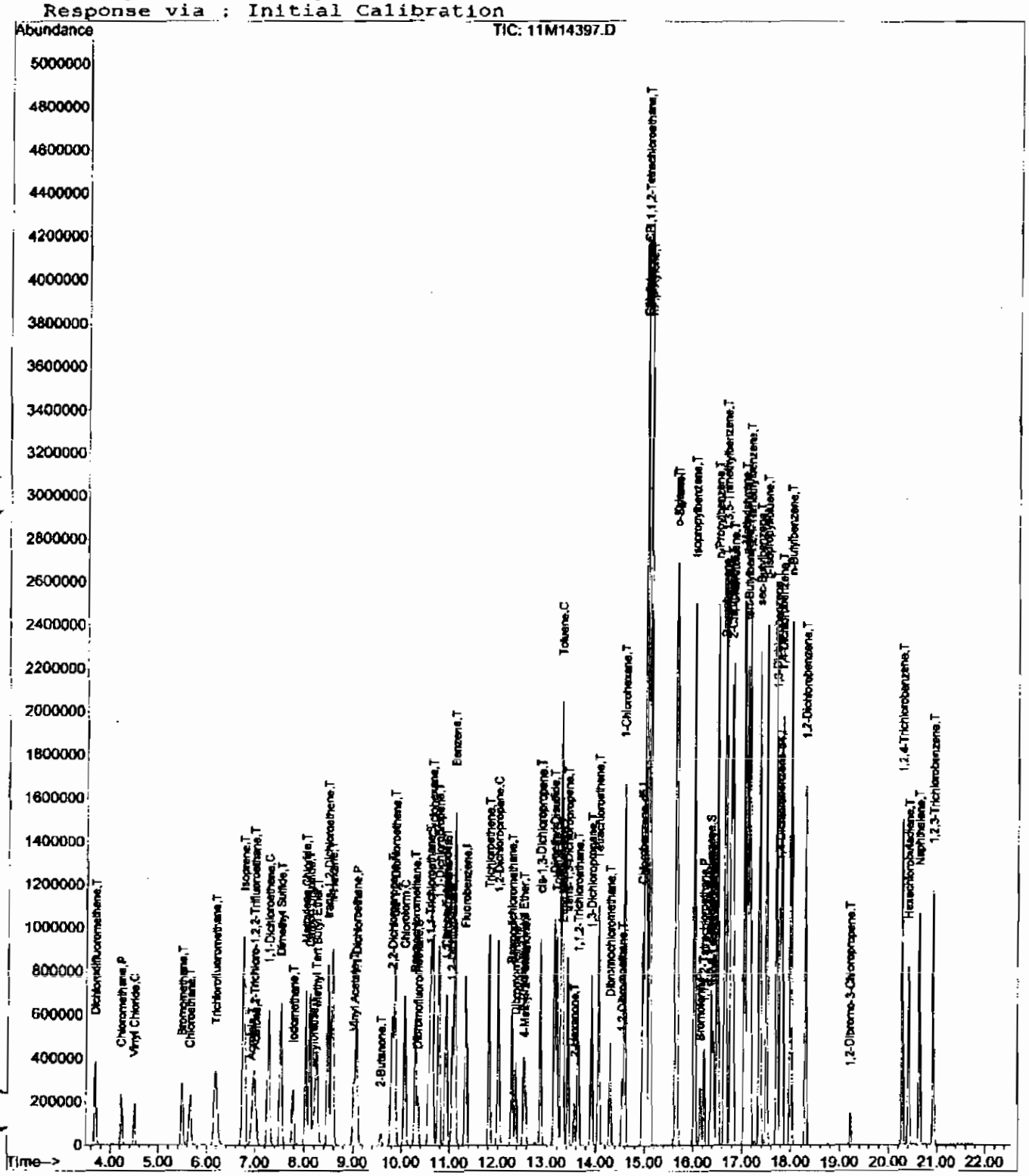
Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
43) Dimethyl Disulfide	13.14	79	135080	19.9300 ug/L		100
46) Toluene	13.29	91	778815	22.3942 ug/L		94
47) Ethyl Methacrylate	13.33	69	138902	20.5008 ug/L	#	100
48) trans-1,3-Dichloropropene	13.43	75	210836	21.7003 ug/L	#	50
49) 1,1,2-Trichloroethane	13.64	97	111425	21.5316 ug/L		87
50) 2-Hexanone	13.55	43	65980	20.0415 ug/L	#	1
51) 1,3-Dichloropropane	13.92	76	210224	21.2260 ug/L		94
52) Tetrachloroethene	14.07	164	141067	23.6399 ug/L		91
53) Dibromochloromethane	14.30	129	118199	21.3363 ug/L		83
54) 1,2-Dibromoethane	14.55	107	106436	21.5114 ug/L		92
55) 1-Chlorohexane	14.60	91	265770	22.0673 ug/L		89
56) Chlorobenzene	15.02	112	515730	22.9964 ug/L		98
57) 1,1,1,2-Tetrachloroethane	15.04	131	149813	23.5481 ug/L		93
58) Ethylbenzene	15.03	106	292518	24.0306 ug/L		76
59) m-,p-Xylene	15.12	106	728630	47.6431 ug/L		83
60) o-Xylene	15.65	106	357238	23.2353 ug/L		80
61) Styrene	15.67	104	573644	23.1793 ug/L		85
62) Bromoform	16.15	173	54840	19.4049 ug/L		80
63) Isopropylbenzene	16.03	105	905495	23.1052 ug/L		95
65) 1,1,2,2-Tetrachloroethane	16.22	83	119540	21.5731 ug/L		87
67) 1,2,3-Trichloropropane	16.40	110	34202	21.2768 ug/L		78
68) trans-1,4-Dichloro-2-Buten	16.42	53	41579	20.3111 ug/L	#	65
69) n-Propylbenzene	16.50	91	1095098	23.5285 ug/L		90
70) Bromobenzene	16.65	156	188801	22.9645 ug/L		73
71) 1,3,5-Trimethylbenzene	16.67	105	756946	23.5564 ug/L		92
72) 2-Chlorotoluene	16.78	91	692407	23.3061 ug/L		94
73) 4-Chlorotoluene	16.81	91	661601	23.4633 ug/L		94
74) a-Methylstyrene	17.05	118	430660	21.9728 ug/L		80
75) tert-Butylbenzene	17.11	119	608937	20.2434 ug/L	#	84
76) 1,2,4-Trimethylbenzene	17.17	105	795220	23.3497 ug/L		92
77) sec-Butylbenzene	17.36	105	969237	22.6912 ug/L		93
78) p-Isopropyltoluene	17.50	119	807099	22.5963 ug/L		100
79) 1,3-Dichlorobenzene	17.71	146	409978	22.3784 ug/L		90
80) 1,4-Dichlorobenzene	17.83	146	410696	22.2915 ug/L		79
81) n-Butylbenzene	17.99	91	746501	22.4693 ug/L	#	97
82) 1,2-Dichlorobenzene	18.30	146	354991	21.8652 ug/L		91
83) 1,2-Dibromo-3-Chloropropan	19.21	157	17424	18.9526 ug/L		83
84) 1,2,4-Trichlorobenzene	20.28	180	230843	22.1926 ug/L		91
85) Hexachlorobutadiene	20.42	225	83942	21.6125 ug/L	#	73
86) Naphthalene	20.64	128	423745	21.2076 ug/L	#	82
87) 1,2,3-Trichlorobenzene	20.93	180	184560	21.6545 ug/L	#	62

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

Data File : C:\MSDCHEM\1\DATA\041703\11M14397.D Vial: 10
Acq On : 17 Apr 2003 11:14 Operator: CMS
Sample : WG138555-06 50 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10829 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 15:27 2003 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\041703\11M14397.D Vial: 10
Acq On : 17 Apr 2003 11:14 Operator: CMS
Sample : WG138555-06 50 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10829 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 15:27:07 2003 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.33	96	949383	25.00 ug/L	0.00
44) Chlorobenzene-d5	14.97	117	699057	25.00 ug/L	0.00
64) 1,4-Dichlorobenzene-d4	17.79	152	351588	25.00 ug/L	0.00
System Monitoring Compounds					
28) Dibromofluoromethane	10.34	111	202415	25.8352 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 103.36%		
33) 1,2-Dichloroethane-d4	10.94	65	219815	26.6143 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 106.44%		
45) Toluene-d8	13.19	98	830184	26.0924 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 104.36%		
66) p-Bromofluorobenzene	16.36	95	336773	25.8963 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 103.60%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.68	85	539977	52.7191 ug/L	91
3) Chloromethane	4.23	50	341322	50.1728 ug/L	89
4) Vinyl Chloride	4.50	62	229098	53.0574 ug/L #	56
5) Bromomethane	5.48	94	316237	54.4462 ug/L	92
6) Chloroethane	5.66	64	365591	51.3207 ug/L	95
7) Trichlorofluoromethane	6.17	101	710538	52.8884 ug/L	96
8) Isoprene	6.75	67	758814	52.2146 ug/L	100
9) Acrolein	6.92	56	64136	105.0764 ug/L	83
10) 1,1,2-Trichloro-1,2,2-Trif	6.97	101	400487	50.6128 ug/L	85
11) Acetone	7.01	43	75251	53.2188 ug/L #	34
12) 1,1-Dichloroethene	7.28	96	385117	53.4556 ug/L	64
13) Dimethyl Sulfide	7.53	62	546624	51.5609 ug/L	84
14) Iodomethane	7.78	142	460751	53.7851 ug/L	90
15) Methylene Chloride	8.02	84	398458	52.1760 ug/L	98
16) Carbon Disulfide	8.11	76	1382018	53.1803 ug/L #	88
17) Acrylonitrile	8.18	53	110225	52.6976 ug/L #	1
18) Methyl Tert Butyl Ether	8.25	73	854274	52.0443 ug/L #	68
19) trans-1,2-Dichloroethene	8.48	96	438995	55.0927 ug/L	87
20) n-Hexane	8.57	57	785476	52.4527 ug/L #	92
21) Vinyl Acetate	9.01	43	648218	51.7606 ug/L	94
22) 1,1-Dichloroethane	9.07	63	908928	54.0971 ug/L #	77
23) 2-Butanone	9.57	43	106894	51.6302 ug/L #	100
24) 2,2-Dichloropropane	9.81	77	655054	52.1872 ug/L #	59
25) cis-1,2-Dichloroethene	9.87	96	465700	54.2343 ug/L	80
26) Chloroform	10.07	83	745542	53.8821 ug/L	91
27) Bromochloromethane	10.29	128	182112	54.0552 ug/L	64
29) 1,1,1-Trichloroethane	10.58	97	660735	56.9533 ug/L #	87
30) Cyclohexane	10.64	56	1033176	51.8617 ug/L #	96
31) 1,1-Dichloropropene	10.77	75	606699	54.2351 ug/L #	19
32) Carbon Tetrachloride	10.92	117	551346	55.0701 ug/L #	92
34) 1,2-Dichloroethane	11.05	62	566649	53.0816 ug/L #	72
35) Benzene	11.11	78	1785659	53.1777 ug/L	90
36) Trichloroethene	11.82	130	427688	54.7567 ug/L	87
37) 1,2-Dichloropropane	12.01	63	490510	52.7734 ug/L	83
38) Bromodichloromethane	12.29	83	530369	54.8026 ug/L #	87
39) Dibromomethane	12.37	93	193059	54.0816 ug/L	86
40) 2-Chloroethyl Vinyl Ether	12.53	63	200430	54.2239 ug/L #	100
41) 4-Methyl-2-Pentanone	12.57	58	100396	52.7197 ug/L #	100
42) cis-1,3-Dichloropropene	12.87	75	657699	54.8135 ug/L #	87

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

Data File : C:\MSDCHEM\1\DATA\041703\11M14397.D Vial: 10
Acq On : 17 Apr 2003 11:14 Operator: CMS
Sample : WG138555-06 50 PPB STD 8260 Inst : HPMS11
isc : 1,1 SV10829 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 15:27:07 2003 Quant Results File: 8260WT.RES

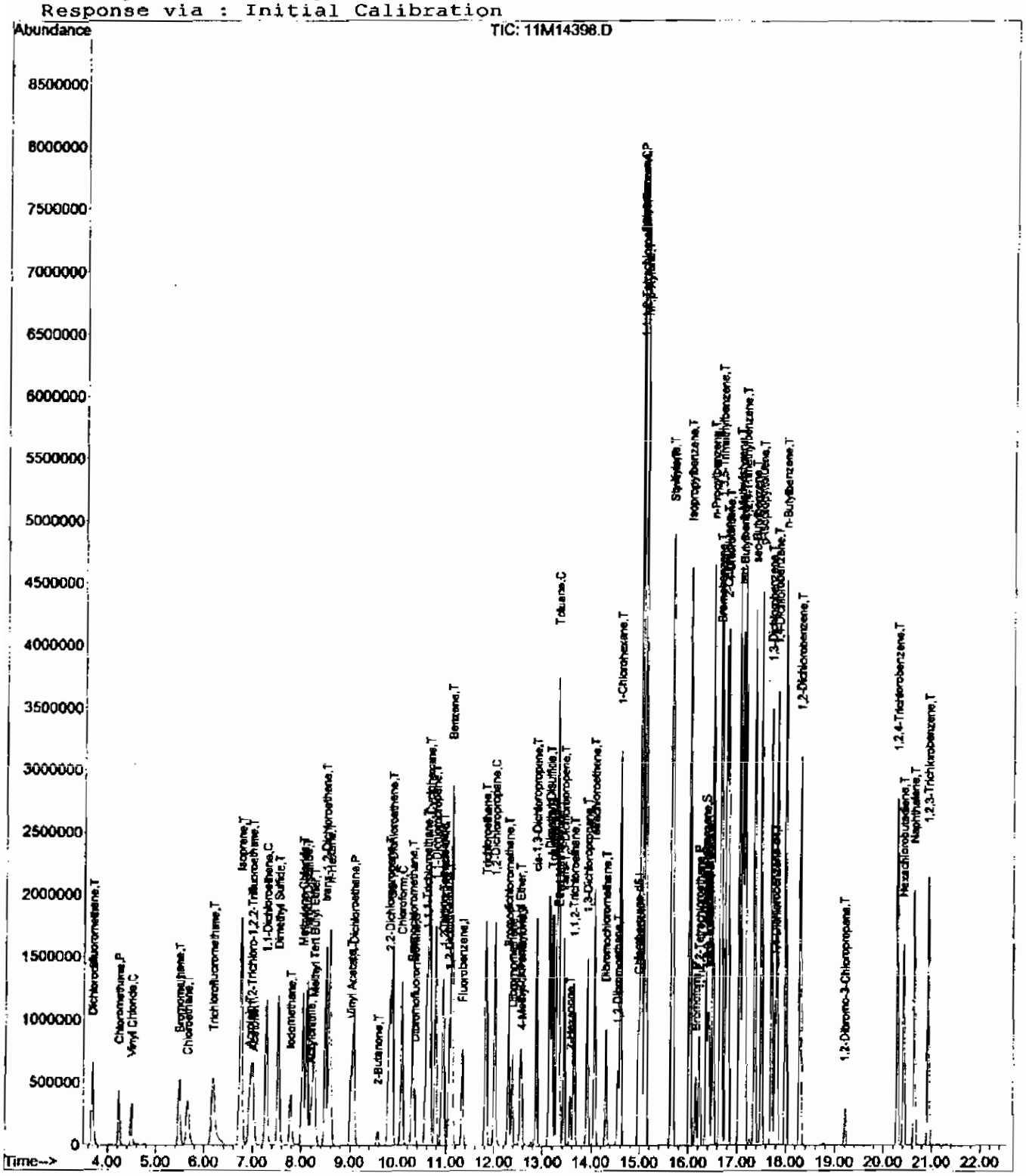
Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
43)	Dimethyl Disulfide	13.14	79	367236	53.3026 ug/L		98
46)	Toluene	13.29	91	1916639	53.8946 ug/L		94
47)	Ethyl Methacrylate	13.33	69	369357	53.3105 ug/L	#	100
48)	trans-1,3-Dichloropropene	13.43	75	550682	55.4275 ug/L	#	50
49)	1,1,2-Trichloroethane	13.64	97	284045	53.6766 ug/L		85
50)	2-Hexanone	13.55	43	177930	52.8532 ug/L	#	1
51)	1,3-Dichloropropane	13.92	76	534183	52.7448 ug/L		94
52)	Tetrachloroethene	14.07	164	342124	56.0669 ug/L		90
53)	Dibromochloromethane	14.30	129	327104	57.7424 ug/L		84
54)	1,2-Dibromoethane	14.55	107	273851	54.1250 ug/L		92
55)	1-Chlorohexane	14.60	91	662135	53.7642 ug/L		89
56)	Chlorobenzene	15.02	112	1210682	52.7925 ug/L		98
57)	1,1,1,2-Tetrachloroethane	15.04	131	367282	56.4560 ug/L		92
58)	Ethylbenzene	15.03	106	682669	54.8436 ug/L		79
59)	m-,p-Xylene	15.12	106	1727635	110.4711 ug/L		84
60)	o-Xylene	15.65	106	868078	55.2145 ug/L		81
61)	Styrene	15.67	104	1422996	56.2295 ug/L		84
62)	Bromoform	16.15	173	161598	55.9183 ug/L		79
63)	Isopropylbenzene	16.03	105	2224118	55.4989 ug/L		95
65)	1,1,2,2-Tetrachloroethane	16.22	83	307613	53.1624 ug/L		85
67)	1,2,3-Trichloropropane	16.40	110	89998	53.6152 ug/L		77
68)	trans-1,4-Dichloro-2-Buten	16.42	53	111948	52.3692 ug/L	#	61
69)	n-Propylbenzene	16.50	91	2721632	55.9977 ug/L		91
70)	Bromobenzene	16.65	156	465225	54.1895 ug/L		76
71)	1,3,5-Trimethylbenzene	16.67	105	1870468	55.7435 ug/L		93
72)	2-Chlorotoluene	16.78	91	1698494	54.7485 ug/L		95
73)	4-Chlorotoluene	16.81	91	1631580	55.4116 ug/L		94
74)	a-Methylstyrene	17.05	118	1084954	53.0105 ug/L		80
75)	tert-Butylbenzene	17.11	119	1827204	58.1698 ug/L	#	73
76)	1,2,4-Trimethylbenzene	17.16	105	1960224	55.1187 ug/L		91
77)	sec-Butylbenzene	17.36	105	2391293	53.6118 ug/L		92
78)	p-Isopropyltoluene	17.51	119	2010174	53.8945 ug/L		99
79)	1,3-Dichlorobenzene	17.71	146	1018141	53.2201 ug/L		90
80)	1,4-Dichlorobenzene	17.83	146	1021682	53.1049 ug/L		78
81)	n-Butylbenzene	17.99	91	1851714	53.3744 ug/L	#	97
82)	1,2-Dichlorobenzene	18.30	146	890511	52.5262 ug/L		90
83)	1,2-Dibromo-3-Chloropropan	19.21	157	50688	52.7991 ug/L		90
84)	1,2,4-Trichlorobenzene	20.28	180	576507	53.0758 ug/L		90
85)	Hexachlorobutadiene	20.42	225	210895	51.9987 ug/L	#	74
86)	Naphthalene	20.64	128	1102280	52.8299 ug/L	#	83
87)	1,2,3-Trichlorobenzene	20.93	180	468470	52.6371 ug/L	#	61

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

Data File : C:\MSDCHEM\1\DATA\041703\11M14398.D Vial: 11
Acq On : 17 Apr 2003 11:44 Operator: CMS
Sample : WG138555-07 100 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10829 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 15:27 2003 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\041703\11M14398.D Vial: 11
Acq On : 17 Apr 2003 11:44 Operator: CMS
Sample : WG138555-07 100 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10829 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 15:27:27 2003 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.33	96	938030	25.00 ug/L	0.00
44) Chlorobenzene-d5	14.97	117	708542	25.00 ug/L	0.00
64) 1,4-Dichlorobenzene-d4	17.79	152	358525	25.00 ug/L	0.00

System Monitoring Compounds					
28) Dibromofluoromethane	10.34	111	394864	51.0084 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 204.04%#		
33) 1,2-Dichloroethane-d4	10.94	65	412066	50.4952 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 202.00%#		
45) Toluene-d8	13.19	98	1604458	49.7525 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 199.00%#		
66) p-Bromofluorobenzene	16.36	95	662535	49.9601 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 199.84%#		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.68	85	1059728	104.7157 ug/L	92
3) Chloromethane	4.23	50	622221	92.5706 ug/L	90
4) Vinyl Chloride	4.49	62	425698	99.7817 ug/L #	55
5) Bromomethane	5.48	94	627205	109.2922 ug/L	92
6) Chloroethane	5.65	64	725419	103.0649 ug/L	95
7) Trichlorofluoromethane	6.18	101	1413778	106.5073 ug/L	96
8) Isoprene	6.75	67	1455008	101.3320 ug/L	100
9) Acrolein	6.92	56	127478	211.3797 ug/L	84
10) 1,1,2-Trichloro-1,2,2-Trif	6.96	101	782222	100.0523 ug/L	86
11) Acetone	7.02	43	140187	100.3426 ug/L #	32
12) 1,1-Dichloroethene	7.28	96	738699	103.7751 ug/L	64
13) Dimethyl Sulfide	7.52	62	1040036	99.2898 ug/L	84
14) Iodomethane	7.79	142	779548	92.1009 ug/L	90
15) Methylene Chloride	8.02	84	767054	101.6573 ug/L	99
16) Carbon Disulfide	8.11	76	2632815	102.5374 ug/L #	88
17) Acrylonitrile	8.18	53	214708	103.8923 ug/L #	1
18) Methyl Tert Butyl Ether	8.24	73	1639898	101.1155 ug/L #	67
19) trans-1,2-Dichloroethene	8.48	96	835987	106.1839 ug/L	87
20) n-Hexane	8.57	57	1545441	104.4509 ug/L #	92
21) Vinyl Acetate	9.01	43	1345164	108.7122 ug/L	93
22) 1,1-Dichloroethane	9.07	63	1751757	105.5219 ug/L #	77
23) 2-Butanone	9.57	43	211570	103.4258 ug/L #	100
24) 2,2-Dichloropropane	9.81	77	1319943	106.4306 ug/L #	60
25) cis-1,2-Dichloroethene	9.87	96	878299	103.5226 ug/L	78
26) Chloroform	10.07	83	1432947	104.8159 ug/L	92
27) Bromochloromethane	10.29	128	346518	104.0997 ug/L	63
29) 1,1,1-Trichloroethane	10.58	97	1275927	111.3120 ug/L #	87
30) Cyclohexane	10.64	56	1980544	100.6194 ug/L #	97
31) 1,1-Dichloropropene	10.77	75	1163911	105.3057 ug/L #	19
32) Carbon Tetrachloride	10.92	117	1091721	110.3641 ug/L #	91
34) 1,2-Dichloroethane	11.05	62	1086981	103.0568 ug/L #	73
35) Benzene	11.11	78	3393683	102.2885 ug/L	91
36) Trichloroethene	11.82	130	813830	105.4553 ug/L	87
37) 1,2-Dichloropropane	12.01	63	936167	101.9402 ug/L	84
38) Bromodichloromethane	12.29	83	1038611	108.6177 ug/L #	87
39) Dibromomethane	12.37	93	368442	104.4608 ug/L	86
40) 2-Chloroethyl Vinyl Ether	12.53	63	385203	105.4732 ug/L #	100
41) 4-Methyl-2-Pentanone	12.57	58	196894	104.6438 ug/L #	100
42) cis-1,3-Dichloropropene	12.87	75	1285351	108.4193 ug/L #	87

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

Data File : C:\MSDCHEM\1\DATA\041703\11M14398.D Vial: 11
Acq On : 17 Apr 2003 11:44 Operator: CMS
Sample : WG138555-07 100 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10829 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 15:27:27 2003 Quant Results File: 8260WT.RES

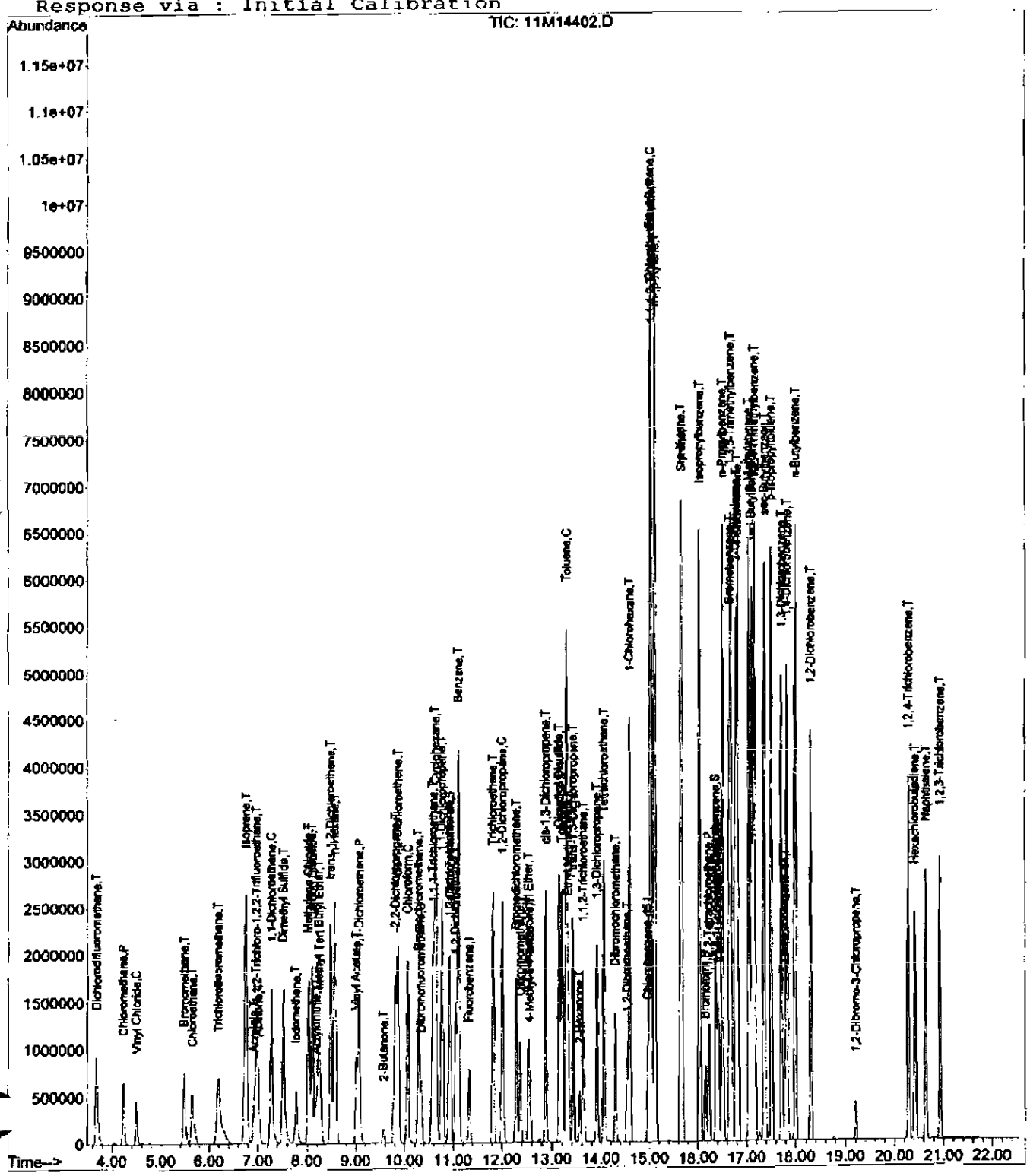
Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
43)	Dimethyl Disulfide	13.14	79	726265	106.6898 ug/L		97
46)	Toluene	13.29	91	3638669	100.9472 ug/L		94
47)	Ethyl Methacrylate	13.33	69	716295	102.0011 ug/L	#	100
48)	trans-1,3-Dichloropropene	13.43	75	1079255	107.1756 ug/L	#	50
49)	1,1,2-Trichloroethane	13.64	97	548514	102.2663 ug/L		86
50)	2-Hexanone	13.55	43	349310	102.3717 ug/L	#	1
51)	1,3-Dichloropropane	13.92	76	1028927	100.2355 ug/L		93
52)	Tetrachloroethene	14.07	164	653980	105.7388 ug/L		90
53)	Dibromochloromethane	14.30	129	654789	114.0400 ug/L		84
54)	1,2-Dibromoethane	14.55	107	528608	103.0776 ug/L		93
55)	1-Chlorohexane	14.60	91	1279398	102.4941 ug/L		89
56)	Chlorobenzene	15.02	112	2138672	92.0095 ug/L		99
57)	1,1,1,2-Tetrachloroethane	15.04	131	671700	101.8668 ug/L		91
58)	Ethylbenzene	15.03	106	1192935	94.5540 ug/L		81
59)	m-,p-Xylene	15.12	106	3076565	194.0930 ug/L		87
60)	o-Xylene	15.65	106	1614168	101.2954 ug/L		82
61)	Styrene	15.68	104	2643085	103.0431 ug/L		85
62)	Bromoform	16.15	173	336685	114.9447 ug/L		80
63)	Isopropylbenzene	16.03	105	4242257	104.4408 ug/L		96
65)	1,1,2,2-Tetrachloroethane	16.22	83	609231	103.2516 ug/L		85
67)	1,2,3-Trichloropropane	16.40	110	178793	104.4527 ug/L		78
68)	trans-1,4-Dichloro-2-Buten	16.42	53	227826	104.5146 ug/L	#	59
69)	n-Propylbenzene	16.50	91	5219627	105.3161 ug/L		91
70)	Bromobenzene	16.65	156	872519	99.6648 ug/L		77
71)	1,3,5-Trimethylbenzene	16.68	105	3551754	103.8010 ug/L		94
72)	2-Chlorotoluene	16.78	91	3230883	102.1278 ug/L		96
73)	4-Chlorotoluene	16.81	91	3156088	105.1129 ug/L		86
74)	a-Methylstyrene	17.05	118	2073158	99.3339 ug/L		79
75)	tert-Butylbenzene	17.11	119	3495291	109.1211 ug/L	#	74
76)	1,2,4-Trimethylbenzene	17.17	105	3751037	103.4330 ug/L		92
77)	sec-Butylbenzene	17.36	105	4637278	101.9542 ug/L		93
78)	p-Isopropyltoluene	17.51	119	3857358	101.4180 ug/L		99
79)	1,3-Dichlorobenzene	17.71	146	1949377	99.9259 ug/L		90
80)	1,4-Dichlorobenzene	17.83	146	1945950	99.1894 ug/L		78
81)	n-Butylbenzene	17.99	91	3618761	102.2900 ug/L	#	97
82)	1,2-Dichlorobenzene	18.30	146	1705190	98.6334 ug/L		91
83)	1,2-Dibromo-3-Chloropropan	19.21	157	104444	106.6889 ug/L		91
84)	1,2,4-Trichlorobenzene	20.28	180	1096417	98.9879 ug/L		90
85)	Hexachlorobutadiene	20.42	225	421207	101.8442 ug/L	#	73
86)	Naphthalene	20.64	128	2143357	100.7388 ug/L	#	82
87)	1,2,3-Trichlorobenzene	20.93	180	895357	98.6555 ug/L	#	61

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

Data File : C:\MSDCHEM\1\DATA\041703\11M14402.D Vial: 15
Acq On : 17 Apr 2003 14:20 Operator: CMS
Sample : WG138555-08 150 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10829 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 15:28 2003 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\041703\11M14402.D Vial: 15
Acq On : 17 Apr 2003 14:20 Operator: CMS
Sample : WG138555-08 150 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10829 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 15:28:02 2003 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.33	96	948767	25.00 ug/L	0.00
44) Chlorobenzene-d5	14.97	117	697196	25.00 ug/L	0.00
64) 1,4-Dichlorobenzene-d4	17.79	152	353286	25.00 ug/L	0.00
System Monitoring Compounds					
28) Dibromofluoromethane	10.34	111	587287	75.0069 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 300.04%#		
33) 1,2-Dichloroethane-d4	10.94	65	580279	70.3035 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 281.20%#		
45) Toluene-d8	13.19	98	2386724	75.2141 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 300.84%#		
66) p-Bromofluorobenzene	16.36	95	963434	73.7275 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 294.92%#		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.68	85	1584904	154.8380 ug/L	92
3) Chloromethane	4.23	50	935805	137.6484 ug/L	89
4) Vinyl Chloride	4.49	62	633994	146.9236 ug/L #	56
5) Bromomethane	5.48	94	940067	161.9554 ug/L	91
6) Chloroethane	5.65	64	1085194	152.4355 ug/L	95
7) Trichlorofluoromethane	6.19	101	2168043	161.4816 ug/L	96
8) Isoprene	6.75	67	2151806	148.1636 ug/L	99
9) Acrolein	6.91	56	181994	298.3612 ug/L	86
10) 1,1,2-Trichloro-1,2,2-Trif	6.96	101	1191250	150.6458 ug/L	87
11) Acetone	7.01	43	197601	139.8375 ug/L #	30
12) 1,1-Dichloroethene	7.28	96	1132864	157.3477 ug/L	64
13) Dimethyl Sulfide	7.52	62	1531878	144.5897 ug/L	84
14) Iodomethane	7.78	142	1206101	140.8840 ug/L	92
15) Methylene Chloride	8.02	84	1165435	152.7067 ug/L	99
16) Carbon Disulfide	8.10	76	3942811	151.8187 ug/L #	87
17) Acrylonitrile	8.18	53	306056	146.4176 ug/L #	1
18) Methyl Tert Butyl Ether	8.24	73	2323493	141.6444 ug/L #	67
19) trans-1,2-Dichloroethene	8.48	96	1250197	156.9983 ug/L	87
20) n-Hexane	8.56	57	2319753	155.0097 ug/L #	92
21) Vinyl Acetate	9.01	43	1942803	155.2347 ug/L	93
22) 1,1-Dichloroethane	9.06	63	2641047	157.2904 ug/L #	77
23) 2-Butanone	9.57	43	296861	143.4780 ug/L #	100
24) 2,2-Dichloropropane	9.81	77	2015447	160.6719 ug/L #	60
25) cis-1,2-Dichloroethene	9.87	96	1306774	152.2827 ug/L	78
26) Chloroform	10.07	83	2152315	155.6539 ug/L	91
27) Bromochloromethane	10.29	128	505843	150.2438 ug/L	63
29) 1,1,1-Trichloroethane	10.58	97	1935701	166.9597 ug/L #	88
30) Cyclohexane	10.64	56	2932809	147.3120 ug/L #	96
31) 1,1-Dichloropropene	10.77	75	1752080	156.7267 ug/L #	20
32) Carbon Tetrachloride	10.92	117	1663658	166.2790 ug/L #	91
34) 1,2-Dichloroethane	11.05	62	1575800	147.7110 ug/L #	72
35) Benzene	11.11	78	5028614	149.8514 ug/L	91
36) Trichloroethene	11.81	130	1211453	155.2025 ug/L	87
37) 1,2-Dichloropropane	12.01	63	1382929	148.8844 ug/L	83
38) Bromodichloromethane	12.29	83	1540792	159.3122 ug/L #	87
39) Dibromomethane	12.37	93	531158	148.8898 ug/L	86
40) 2-Chloroethyl Vinyl Ether	12.53	63	557585	150.9457 ug/L #	100
41) 4-Methyl-2-Pentanone	12.57	58	274970	144.4853 ug/L #	100
42) cis-1,3-Dichloropropene	12.87	75	1895627	158.0866 ug/L #	87

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

Data File : C:\MSDCHEM\1\DATA\041703\11M14402.D Vial: 15
Acq On : 17 Apr 2003 14:20 Operator: CMS
Sample : WG138555-08 150 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10829 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 15:28:02 2003 Quant Results File: 8260WT.RES

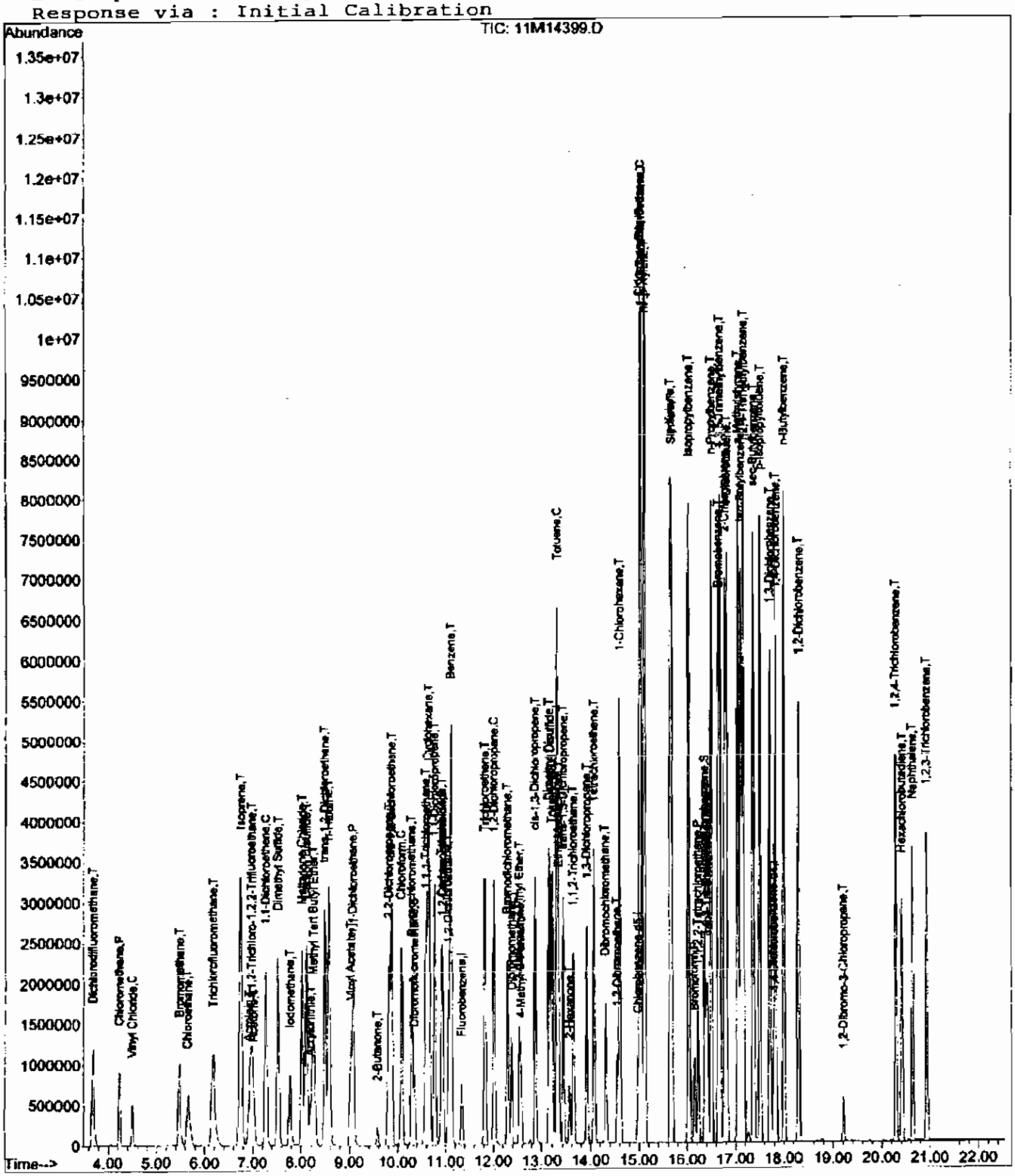
Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
43) Dimethyl Disulfide	13.14	79	1043597	151.5716 ug/L		97
46) Toluene	13.29	91	5351499	150.8821 ug/L		95
47) Ethyl Methacrylate	13.33	69	991307	143.4604 ug/L	#	100
48) trans-1,3-Dichloropropene	13.43	75	1576445	159.0967 ug/L	#	50
49) 1,1,2-Trichloroethane	13.64	97	787700	149.2507 ug/L		86
50) 2-Hexanone	13.55	43	486026	144.7568 ug/L	#	1
51) 1,3-Dichloropropane	13.92	76	1480275	146.5514 ug/L		93
52) Tetrachloroethene	14.07	164	963239	158.2759 ug/L		89
53) Dibromochloromethane	14.30	129	969591	171.6149 ug/L		85
54) 1,2-Dibromoethane	14.54	107	775799	153.7413 ug/L		91
55) 1-Chlorohexane	14.60	91	1870128	152.2563 ug/L		89
56) Chlorobenzene	15.01	112	2941043	128.5881 ug/L		98
57) 1,1,1,2-Tetrachloroethane	15.04	131	926153	142.7416 ug/L		92
58) Ethylbenzene	15.03	106	1667196	134.2952 ug/L		81
59) m-,p-Xylene	15.12	106	4268000	273.6396 ug/L		89
60) o-Xylene	15.65	106	2283038	145.6012 ug/L		85
61) Styrene	15.68	104	3747782	148.4885 ug/L		85
62) Bromoform	16.15	173	492296	170.8056 ug/L		80
63) Isopropylbenzene	16.03	105	6204361	155.2320 ug/L		97
65) 1,1,2,2-Tetrachloroethane	16.22	83	863417	148.5007 ug/L		85
67) 1,2,3-Trichloropropane	16.40	110	251340	149.0129 ug/L		77
68) trans-1,4-Dichloro-2-Buten	16.43	53	314690	146.5041 ug/L	#	62
69) n-Propylbenzene	16.50	91	7688828	157.4376 ug/L		92
70) Bromobenzene	16.65	156	1234172	143.0657 ug/L		76
71) 1,3,5-Trimethylbenzene	16.68	105	5124536	151.9869 ug/L		95
72) 2-Chlorotoluene	16.78	91	4653365	149.2736 ug/L		97
73) 4-Chlorotoluene	16.82	91	4023799	135.9992 ug/L		92
74) a-Methylstyrene	17.05	118	2929190	142.4314 ug/L		78
75) tert-Butylbenzene	17.11	119	5078310	160.8932 ug/L	#	74
76) 1,2,4-Trimethylbenzene	17.17	105	5430563	151.9658 ug/L		92
77) sec-Butylbenzene	17.37	105	6847311	152.7760 ug/L		93
78) p-Isopropyltoluene	17.51	119	5668884	151.2571 ug/L		98
79) 1,3-Dichlorobenzene	17.71	146	2815825	146.4808 ug/L		89
80) 1,4-Dichlorobenzene	17.83	146	2776960	143.6469 ug/L		79
81) n-Butylbenzene	17.99	91	5340516	153.1968 ug/L	#	96
82) 1,2-Dichlorobenzene	18.30	146	2451712	143.9176 ug/L		91
83) 1,2-Dibromo-3-Chloropropan	19.21	157	153492	159.1163 ug/L		95
84) 1,2,4-Trichlorobenzene	20.28	180	1565054	143.3933 ug/L		90
85) Hexachlorobutadiene	20.42	225	642897	157.7522 ug/L	#	74
86) Naphthalene	20.64	128	3028151	144.4351 ug/L	#	83
87) 1,2,3-Trichlorobenzene	20.93	180	1263982	141.3380 ug/L	#	60

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

Data File : C:\MSDCHEM\1\DATA\041703\11M14399.D Vial: 12
Acq On : 17 Apr 2003 12:15 Operator: CMS
Sample : WG138555-09 200 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10829 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 15:28 2003 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\041703\11M14399.D Vial: 12
Acq On : 17 Apr 2003 12:15 Operator: CMS
Sample : WG138555-09 200 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10829 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 15:28:21 2003 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.33	96	928210	25.00 ug/L	0.00
44) Chlorobenzene-d5	14.97	117	683966	25.00 ug/L	0.00
64) 1,4-Dichlorobenzene-d4	17.79	152	360525	25.00 ug/L	0.00
System Monitoring Compounds					
28) Dibromofluoromethane	10.34	111	762876	99.5906 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 398.36%#		
33) 1,2-Dichloroethane-d4	10.94	65	751634	93.0808 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 372.32%#		
45) Toluene-d8	13.19	98	3024588	97.1591 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 388.64%#		
66) p-Bromofluorobenzene	16.36	95	1255915	94.1800 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 376.72%#		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.68	85	2020230	201.7385 ug/L	92
3) Chloromethane	4.23	50	1299938	195.4437 ug/L	89
4) Vinyl Chloride	4.49	62	688840	163.1692 ug/L #	55
5) Bromomethane	5.47	94	1238019	218.0104 ug/L	92
6) Chloroethane	5.64	64	1422217	204.2011 ug/L	95
7) Trichlorofluoromethane	6.17	101	2694559	205.1428 ug/L	96
8) Isoprene	6.75	67	2757322	194.0614 ug/L	100
9) Acrolein	6.92	56	241206	404.1911 ug/L	85
10) 1,1,2-Trichloro-1,2,2-Trif	6.96	101	1505338	194.5815 ug/L	87
11) Acetone	7.02	43	255474	184.7969 ug/L #	29
12) 1,1-Dichloroethene	7.27	96	1403463	199.2494 ug/L	64
13) Dimethyl Sulfide	7.52	62	1998789	192.8384 ug/L	84
14) Iodomethane	7.78	142	1682072	200.8334 ug/L	91
15) Methylene Chloride	8.02	84	1448331	193.9774 ug/L	100
16) Carbon Disulfide	8.10	76	5038666	198.3116 ug/L #	88
17) Acrylonitrile	8.18	53	406071	198.5673 ug/L #	1
18) Methyl Tert Butyl Ether	8.24	73	3109866	193.7818 ug/L #	67
19) trans-1,2-Dichloroethene	8.48	96	1581406	202.9893 ug/L	87
20) n-Hexane	8.56	57	2919720	199.4213 ug/L #	93
21) Vinyl Acetate	9.01	43	2541507	207.5701 ug/L	93
22) 1,1-Dichloroethane	9.06	63	3360588	204.5760 ug/L #	77
23) 2-Butanone	9.57	43	392203	193.7565 ug/L #	100
24) 2,2-Dichloropropane	9.81	77	2540029	206.9763 ug/L #	60
25) cis-1,2-Dichloroethene	9.87	96	1640942	195.4594 ug/L	77
26) Chloroform	10.07	83	2720639	201.1121 ug/L	91
27) Bromochloromethane	10.29	128	647386	196.5430 ug/L	63
29) 1,1,1-Trichloroethane	10.58	97	2444149	215.4837 ug/L #	89
30) Cyclohexane	10.64	56	3686117	189.2504 ug/L #	97
31) 1,1-Dichloropropene	10.77	75	2186577	199.9251 ug/L #	19
32) Carbon Tetrachloride	10.92	117	2083427	212.8457 ug/L #	91
34) 1,2-Dichloroethane	11.05	62	2015609	193.1219 ug/L #	72
35) Benzene	11.11	78	6303532	192.0038 ug/L	91
36) Trichloroethene	11.82	130	1515589	198.4663 ug/L	87
37) 1,2-Dichloropropane	12.01	63	1754220	193.0397 ug/L	83
38) Bromodichloromethane	12.29	83	1972101	208.4239 ug/L #	87
39) Dibromomethane	12.37	93	681059	195.1369 ug/L	86
40) 2-Chloroethyl Vinyl Ether	12.53	63	724853	200.5732 ug/L #	100
41) 4-Methyl-2-Pentanone	12.57	58	357376	191.9451 ug/L #	100
42) cis-1,3-Dichloropropene	12.87	75	2399833	204.5674 ug/L #	86

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

Data File : C:\MSDCHEM\1\DATA\041703\11M14399.D Vial: 12
Acq On : 17 Apr 2003 12:15 Operator: CMS
Sample : WG138555-09 200 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10829 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 15:28:21 2003 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
43) Dimethyl Disulfide	13.14	79	1361460	202.1172 ug/L		97
46) Toluene	13.29	91	6574115	188.9383 ug/L		95
47) Ethyl Methacrylate	13.33	69	1294200	190.9174 ug/L	#	100
48) trans-1,3-Dichloropropene	13.43	75	2010358	206.8122 ug/L	#	50
49) 1,1,2-Trichloroethane	13.64	97	1006343	194.3667 ug/L		87
50) 2-Hexanone	13.55	43	642350	195.0166 ug/L	#	1
51) 1,3-Dichloropropane	13.92	76	1895899	191.3301 ug/L		92
52) Tetrachloroethene	14.07	164	1182938	198.1358 ug/L		90
53) Dibromochloromethane	14.30	129	1245815	224.7711 ug/L		84
54) 1,2-Dibromoethane	14.54	107	995165	201.0282 ug/L		91
55) 1-Chlorohexane	14.60	91	2330600	193.4159 ug/L		90
56) Chlorobenzene	15.01	112	3521483	156.9442 ug/L		98
57) 1,1,1,2-Tetrachloroethane	15.04	131	1114628	175.1130 ug/L		93
58) Ethylbenzene	15.03	106	1962335	161.1266 ug/L		81
59) m-,p-Xylene	15.12	106	5114345	334.2450 ug/L		89
60) o-Xylene	15.65	106	2789379	181.3342 ug/L		86
61) Styrene	15.68	104	4622646	186.6937 ug/L		86
62) Bromoform	16.15	173	656308	232.1153 ug/L		80
63) Isopropylbenzene	16.03	105	7666466	195.5238 ug/L		97
65) 1,1,2,2-Tetrachloroethane	16.22	83	1139974	192.1294 ug/L		85
67) 1,2,3-Trichloropropane	16.41	110	326457	189.6616 ug/L		73
68) trans-1,4-Dichloro-2-Buten	16.42	53	434710	198.3159 ug/L	#	59
69) n-Propylbenzene	16.51	91	9573686	192.0961 ug/L		92
70) Bromobenzene	16.65	156	1520935	172.7673 ug/L		75
71) 1,3,5-Trimethylbenzene	16.68	105	6351947	184.6076 ug/L		96
72) 2-Chlorotoluene	16.78	91	5751400	180.7925 ug/L		97
73) 4-Chlorotoluene	16.82	91	5176874	171.4583 ug/L		91
74) a-Methylstyrene	17.05	118	3746560	178.5180 ug/L		78
75) tert-Butylbenzene	17.11	119	6340819	196.8588 ug/L	#	73
76) 1,2,4-Trimethylbenzene	17.17	105	6821731	187.0624 ug/L		95
77) sec-Butylbenzene	17.37	105	8558448	187.1204 ug/L		94
78) p-Isopropyltoluene	17.51	119	7127606	186.3601 ug/L		97
79) 1,3-Dichlorobenzene	17.71	146	3552421	181.0884 ug/L		89
80) 1,4-Dichlorobenzene	17.83	146	3495639	177.1921 ug/L		79
81) n-Butylbenzene	17.99	91	6696771	188.2447 ug/L	#	96
82) 1,2-Dichlorobenzene	18.30	146	3121141	179.5349 ug/L		90
83) 1,2-Dibromo-3-Chloropropan	19.21	157	203505	206.7260 ug/L		95
84) 1,2,4-Trichlorobenzene	20.28	180	1957522	175.7508 ug/L		90
85) Hexachlorobutadiene	20.42	225	802948	193.0689 ug/L	#	73
86) Naphthalene	20.64	128	3892769	181.9470 ug/L	#	83
87) 1,2,3-Trichlorobenzene	20.93	180	1596367	174.9209 ug/L	#	60

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

Data File : C:\MSDCHEM\1\DATA\042103\11M14410.D Vial: 5
Acq On : 21 Apr 2003 8:40 Operator: CMS
Sample : WG138555-12 20PPB ALT SOURCE STD 8260 Inst : HPMS11
Misc : 1,1 SV10847 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
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 : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.000	1.000	0.0	102	0.00
2	T	Dichlorodifluoromethane	0.270	0.244	9.6	86	0.01
3	P	Chloromethane	0.179	0.152	15.1	83	0.00
4	C	Vinyl Chloride	0.114	0.121	-6.1	100	0.00
5	T	Bromomethane	0.153	0.152	0.7	102	0.01
6	T	Chloroethane	0.188	0.183	2.7	97	0.01
7	T	Trichlorofluoromethane	0.354	0.320	9.6	87	0.00
8	T	Isoprene	0.383	0.000	~~100.0~~#	0#	-6.75#
9	T	Acrolein	0.016	0.000	~~100.0~~#	0#	-6.92#
10	T	1,1,2-Trichloro-1,2,2-Trifl	0.208	0.000	~~100.0~~#	0#	-6.96#
11	T	Acetone	0.037	0.031	16.2	86	0.00
12	C	1,1-Dichloroethene	0.190	0.208	-9.5	103	0.00
13	T	Dimethyl Sulfide	0.279	0.000	~~100.0~~#	0#	-7.52#
14	T	Iodomethane	0.226	0.237	-4.9	99	0.00
15	T	Methylene Chloride	0.201	0.215	-7.0	103	0.00
16	T	Carbon Disulfide	0.684	0.540	21.1	75	0.00
17	T	Acrylonitrile	0.055	0.004	~~92.7~~#	8#	0.08
18	T	Methyl Tert Butyl Ether	0.432	0.450	-4.2	106	0.00
	T	trans-1,2-Dichloroethene	0.210	0.242	-15.2	105	0.00
	T	n-Hexane	0.394	0.425	-7.9	104	0.00
21	T	Vinyl Acetate	0.330	0.311	5.8	105	0.00
22	P	1,1-Dichloroethane	0.442	0.479	-8.4	101	0.00
23	T	2-Butanone	0.055	0.051	7.3	96	0.00
24	T	2,2-Dichloropropane	0.331	0.371	-12.1	108	0.00
25	T	cis-1,2-Dichloroethene	0.226	0.249	-10.2	102	0.00
26	C	Chloroform	0.364	0.400	-9.9	104	0.00
27	T	Bromochloromethane	0.089	0.098	-10.1	103	0.00
28	S	Dibromofluoromethane	0.206	0.503	~~-144.2~~#	238#	0.00
29	T	1,1,1-Trichloroethane	0.305	0.359	-17.7	106	0.00
30	T	Cyclohexane	0.525	0.001	~~99.8~~#	0#	-0.07
31	T	1,1-Dichloropropene	0.295	0.331	-12.2	105	0.00
32	T	Carbon Tetrachloride	0.264	0.292	-10.6	106	0.00
33	S	1,2-Dichloroethane-d4	0.217	0.529	~~-143.8~~#	233#	0.00
34	T	1,2-Dichloroethane	0.281	0.295	-5.0	100	0.00
35	T	Benzene	0.884	0.964	-9.0	102	0.00
36	T	Trichloroethene	0.206	0.250	-21.4	109	0.00
37	C	1,2-Dichloropropane	0.245	0.256	-4.5	100	0.00
38	T	Bromodichloromethane	0.255	0.278	-9.0	103	0.00
39	T	Dibromomethane	0.094	0.104	-10.6	105	0.00
40	T	2-Chloroethyl Vinyl Ether	0.097	0.106	-9.3	109	0.00
41	T	4-Methyl-2-Pentanone	0.050	0.053	-6.0	110	0.00
42	T	cis-1,3-Dichloropropene	0.316	0.362	-14.6	109	0.00
43	T	Dimethyl Disulfide	0.181	0.000	~~100.0~~#	0#	-13.14#
44	I	Chlorobenzene-d5	1.000	1.000	0.0	104	0.00
45	S	Toluene-d8	1.138	2.862	~~-151.5~~#	239#	0.00
46	C	Toluene	1.272	1.394	-9.6	102	0.00
47	T	Ethyl Methacrylate	0.248	0.000	~~100.0~~#	0#	-13.33#
48	T	trans-1,3-Dichloropropene	0.355	0.400	-12.7	108	0.00
49	T	1,1,2-Trichloroethane	0.189	0.200	-5.8	102	0.00
	T	2-Hexanone	0.120	0.118	1.7	101	0.00
	T	1,3-Dichloropropane	0.362	0.376	-3.9	102	0.00
52	T	Tetrachloroethene	0.218	0.250	-14.7	101	0.00

(#) = Out of Range

Data File : C:\MSDCHEM\1\DATA\042103\11M14410.D Vial: 5
Acq On : 21 Apr 2003 8:40 Operator: CMS
Sample : WG138555-12 20PPB ALT SOURCE STD 8260 Inst : HPMS11
Misc : 1,1 SV10847 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
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 : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
53	T	Dibromochloromethane	0.203	0.222	-9.4	107	0.00
54	T	1,2-Dibromoethane	0.181	0.193	-6.6	103	0.00
55	T	1-Chlorohexane	0.440	0.487	-10.7	104	0.00
56	P	Chlorobenzene	0.820	0.914	-11.5	101	0.00
57	T	1,1,1,2-Tetrachloroethane	0.233	0.281	-20.6	106	0.00
58	C	Ethylbenzene	0.445	0.525	-18.0	102	0.00
59	T	m-,p-Xylene	0.559	0.647	-15.7	101	0.00
60	T	o-Xylene	0.562	0.643	-14.4	102	0.00
61	T	Styrene	0.905	1.065	-17.7	106	0.00
62	P	Bromoform	0.103	0.103	0.0	107	0.00
63	T	Isopropylbenzene	1.433	1.566	-9.3	98	0.00
64	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	107	0.00
65	P	1,1,2,2-Tetrachloroethane	0.411	0.424	-3.2	102	0.00
66	S	p-Bromofluorobenzene	0.925	2.286	~~-147.1#~~	243#	0.00
67	T	1,2,3-Trichloropropane	0.119	0.129	-8.4	109	0.00
68	T	trans-1,4-Dichloro-2-Butene	0.152	0.021	~~86.2#~~	15#	0.08
69	T	n-Propylbenzene	3.456	3.887	-12.5	102	0.00
70	T	Bromobenzene	0.610	0.677	-11.0	103	0.00
71	T	1,3,5-Trimethylbenzene	2.386	2.690	-12.7	103	0.00
72	T	2-Chlorotoluene	2.206	2.335	-5.8	97	0.00
73	T	4-Chlorotoluene	2.094	2.416	-15.4	105	0.00
74	T	a-Methylstyrene	1.455	0.000	~~100.0#~~	0#	0.00
75	T	tert-Butylbenzene	2.234	2.377	-6.4	113	0.00
76	T	1,2,4-Trimethylbenzene	2.529	2.773	-9.6	101	0.00
77	T	sec-Butylbenzene	3.172	3.438	-8.4	102	0.00
78	T	p-Isopropyltoluene	2.652	2.821	-6.4	101	0.00
79	T	1,3-Dichlorobenzene	1.360	1.444	-6.2	102	0.00
80	T	1,4-Dichlorobenzene	1.368	1.436	-5.0	101	0.00
81	T	n-Butylbenzene	2.467	2.672	-8.3	103	0.00
82	T	1,2-Dichlorobenzene	1.206	1.284	-6.5	104	0.00
83	T	1,2-Dibromo-3-Chloropropane	0.068	0.068	0.0	112	0.00
84	T	1,2,4-Trichlorobenzene	0.772	0.852	-10.4	106	0.00
85	T	Hexachlorobutadiene	0.288	0.307	-6.6	106	0.00
86	T	Naphthalene	1.484	1.562	-5.3	106	0.00
87	T	1,2,3-Trichlorobenzene	0.633	0.682	-7.7	107	0.00

Data File : C:\MSDCHEM\1\DATA\042103\11M14410.D Vial: 5
Acq On : 21 Apr 2003 8:40 Operator: CMS
Sample : WG138555-12 20PPB ALT SOURCE STD 8260 Inst : HPMS11
Misc : 1,1 SV10847 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
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 : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.000	25.000	0.0	102	0.00
2	T	Dichlorodifluoromethane	20.000	18.070	9.6	86	0.01
3	P	Chloromethane	20.000	16.987	15.1	83	0.00
4	C	Vinyl Chloride	20.000	21.224	-6.1	100	0.00
5	T	Bromomethane	20.000	19.850	0.7	102	0.01
6	T	Chloroethane	20.000	19.521	2.4	97	0.01
7	T	Trichlorofluoromethane	20.000	18.114	9.4	87	0.00
8	T	Isoprene	20.000	0.000	~~100.0#~~	0	-6.75#
9	T	Acrolein	40.000	0.000	~~100.0#~~	0	-6.92#
10	T	1,1,2-Trichloro-1,2,2-Trifl	20.000	0.000	~~100.0#~~	0	-6.96#
11	T	Acetone	20.000	16.858	15.7	86	0.00
12	C	1,1-Dichloroethene	20.000	21.952	-9.8	103	0.00
13	T	Dimethyl Sulfide	20.000	0.000	~~100.0#~~	0	-7.52#
14	T	Iodomethane	20.000	20.973	-4.9	99	0.00
15	T	Methylene Chloride	20.000	21.413	-7.1	103	0.00
16	T	Carbon Disulfide	20.000	15.785	21.1	75	0.00
17	T	Acrylonitrile	20.000	1.566	~~92.2#~~	8	0.08
18	T	Methyl Tert Butyl Ether	20.000	20.812	-4.1	106	0.00
19	T	trans-1,2-Dichloroethene	20.000	23.055	-15.3	105	0.00
	T	n-Hexane	20.000	21.573	-7.9	104	0.00
	T	Vinyl Acetate	20.000	18.876	5.6	105	0.00
22	P	1,1-Dichloroethane	20.000	21.657	-8.3	101	0.00
23	T	2-Butanone	20.000	18.822	5.9	96	0.00
24	T	2,2-Dichloropropane	20.000	22.430	-12.1	108	0.00
25	T	cis-1,2-Dichloroethene	20.000	21.989	-9.9	102	0.00
26	C	Chloroform	20.000	21.938	-9.7	104	0.00
27	T	Bromochloromethane	20.000	22.125	-10.6	103	0.00
28	S	Dibromofluoromethane	10.000	24.378	-143.8#	238	0.00
29	T	1,1,1-Trichloroethane	20.000	23.498	-17.5	106	0.00
30	T	Cyclohexane	20.000	0.020	~~99.9#~~	0	-0.07
31	T	1,1-Dichloropropene	20.000	22.467	-12.3	105	0.00
32	T	Carbon Tetrachloride	20.000	22.152	-10.8	106	0.00
33	S	1,2-Dichloroethane-d4	10.000	24.341	~~-143.4#~~	233	0.00
34	T	1,2-Dichloroethane	20.000	20.983	-4.9	100	0.00
35	T	Benzene	20.000	21.795	-9.0	102	0.00
36	T	Trichloroethene	20.000	24.318	-21.6	109	0.00
37	C	1,2-Dichloropropane	20.000	20.931	-4.7	100	0.00
38	T	Bromodichloromethane	20.000	21.795	-9.0	103	0.00
39	T	Dibromomethane	20.000	22.045	-10.2	105	0.00
40	T	2-Chloroethyl Vinyl Ether	20.000	21.831	-9.2	109	0.00
41	T	4-Methyl-2-Pentanone	20.000	21.160	-5.8	110	0.00
42	T	cis-1,3-Dichloropropene	20.000	22.886	-14.4	109	0.00
43	T	Dimethyl Disulfide	20.000	0.000	~~100.0#~~	0	-13.14#
44	I	Chlorobenzene-d5	25.000	25.000	0.0	104	0.00
45	S	Toluene-d8	10.000	25.149	~~-151.5#~~	239	0.00
46	C	Toluene	20.000	21.923	-9.6	102	0.00
47	T	Ethyl Methacrylate	20.000	0.000	100.0#	0	-13.33#
48	T	trans-1,3-Dichloropropene	20.000	22.530	-12.7	108	0.00
49	T	1,1,2-Trichloroethane	20.000	21.189	-5.9	102	0.00
	T	2-Hexanone	20.000	19.565	2.2	101	0.00
	T	1,3-Dichloropropane	20.000	20.771	-3.9	102	0.00
52	T	Tetrachloroethene	20.000	22.873	-14.4	101	0.00

(#) = Out of Range

Data File : C:\MSDCHEM\1\DATA\042103\11M14410.D Vial: 5
Acq On : 21 Apr 2003 8:40 Operator: CMS
Sample : WG138555-12 20PPB ALT SOURCE STD 8260 Inst : HPMS11
Misc : 1,1 SV10847 Multiplr: 1.00
MS Integration Params: rteint.p

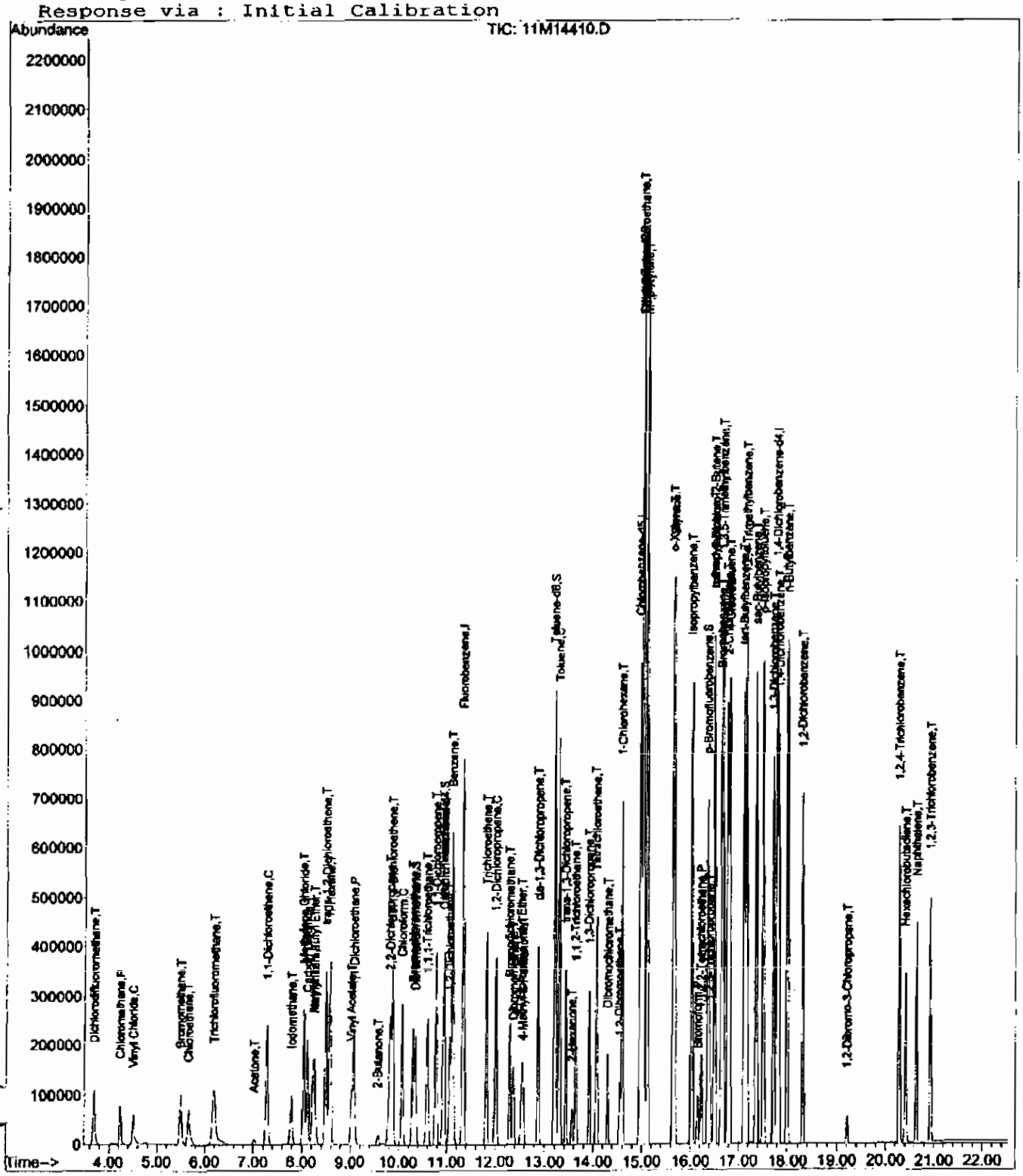
Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
53	T	Dibromochloromethane	20.000	21.940	-9.7	107	0.00
54	T	1,2-Dibromoethane	20.000	21.353	-6.8	103	0.00
55	T	1-Chlorohexane	20.000	22.094	-10.5	104	0.00
56	P	Chlorobenzene	20.000	22.300	-11.5	101	0.00
57	T	1,1,1,2-Tetrachloroethane	20.000	24.114	-20.6	106	0.00
58	C	Ethylbenzene	20.000	23.610	-18.0	102	0.00
59	T	m-,p-Xylene	40.000	46.273	-15.7	101	0.00
60	T	o-Xylene	20.000	22.883	-14.4	102	0.00
61	T	Styrene	20.000	23.544	-17.7	106	0.00
62	P	Bromoform	20.000	19.930	0.4	107	0.00
63	T	Isopropylbenzene	20.000	21.848	-9.2	98	0.00
64	I	1,4-Dichlorobenzene-d4	25.000	25.000	0.0	107	0.00
65	P	1,1,2,2-Tetrachloroethane	20.000	20.631	-3.2	102	0.00
66	S	p-Bromofluorobenzene	10.000	24.726	~~-147.3#~~	243	0.00
67	T	1,2,3-Trichloropropane	20.000	21.600	-8.0	109	0.00
68	T	trans-1,4-Dichloro-2-Butene	20.000	2.771	~~86.1#~~	15	0.08
69	T	n-Propylbenzene	20.000	22.495	-12.5	102	0.00
70	T	Bromobenzene	20.000	22.171	-10.9	103	0.00
71	T	1,3,5-Trimethylbenzene	20.000	22.546	-12.7	103	0.00
72	T	2-Chlorotoluene	20.000	21.167	-5.8	97	0.00
73	T	4-Chlorotoluene	20.000	23.082	-15.4	105	0.00
74	T	a-Methylstyrene	20.000	0.006	~~100.0#~~	0	0.00
75	T	tert-Butylbenzene	20.000	21.282	-6.4	113	0.00
76	T	1,2,4-Trimethylbenzene	20.000	21.932	-9.7	101	0.00
77	T	sec-Butylbenzene	20.000	21.677	-8.4	102	0.00
78	T	p-Isopropyltoluene	20.000	21.273	-6.4	101	0.00
79	T	1,3-Dichlorobenzene	20.000	21.225	-6.1	102	0.00
80	T	1,4-Dichlorobenzene	20.000	20.994	-5.0	101	0.00
81	T	n-Butylbenzene	20.000	21.663	-8.3	103	0.00
82	T	1,2-Dichlorobenzene	20.000	21.300	-6.5	104	0.00
83	T	1,2-Dibromo-3-Chloropropane	20.000	19.786	1.1	112	0.00
84	T	1,2,4-Trichlorobenzene	20.000	22.059	-10.3	106	0.00
85	T	Hexachlorobutadiene	20.000	21.309	-6.5	106	0.00
86	T	Naphthalene	20.000	21.052	-5.3	106	0.00
87	T	1,2,3-Trichlorobenzene	20.000	21.549	-7.7	107	0.00

Data File : C:\MSDchem\1\DATA\042103\11M14410.D Vial: 5
Acq On : 21 Apr 2003 8:40 Operator: CMS
Sample : WG138555-12 20PPB ALT SOURCE STD 8260 Inst : HPMS11
Misc : 1,1 SV10847 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 21 9:02 2003 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration



Data File : C:\MSDchem\1\DATA\042103\11M14410.D Vial: 5
Acq On : 21 Apr 2003 8:40 Operator: CMS
Sample : WG138555-12 20PPB ALT SOURCE STD 8260 Inst : HPMS11
Misc : 1,1 SV10847 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 21 09:02:44 2003 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.33	96	953160	25.00 ug/L	0.00
44) Chlorobenzene-d5	14.98	117	710331	25.00 ug/L	0.00
64) 1,4-Dichlorobenzene-d4	17.79	152	360594	25.00 ug/L	0.00
System Monitoring Compounds					
28) Dibromofluoromethane	10.34	111	191755	24.3776 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 97.52%		
33) 1,2-Dichloroethane-d4	10.94	65	201837	24.3408 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 97.36%		
45) Toluene-d8	13.19	98	813058	25.1485 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 100.60%		
66) p-Bromofluorobenzene	16.36	95	329796	24.7264 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 98.92%		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.69	85	185824	18.0705 ug/L	91
3) Chloromethane	4.23	50	116021	16.9870 ug/L	91
4) Vinyl Chloride	4.50	62	92007	21.2237 ug/L #	55
5) Bromomethane	5.49	94	115752	19.8499 ug/L	91
6) Chloroethane	5.66	64	139614	19.5210 ug/L	95
7) Trichlorofluoromethane	6.18	101	244328	18.1143 ug/L	86
11) Acetone	7.02	43	23932	16.8581 ug/L #	34
12) 1,1-Dichloroethene	7.28	96	158778	21.9516 ug/L	65
14) Iodomethane	7.79	142	180380	20.9730 ug/L	92
15) Methylene Chloride	8.02	84	164177	21.4129 ug/L	98
16) Carbon Disulfide	8.11	76	411833	15.7846 ug/L #	88
17) Acrylonitrile	8.25	53	3289	1.5662 ug/L #	64
18) Methyl Tert Butyl Ether	8.25	73	342971	20.8118 ug/L #	67
19) trans-1,2-Dichloroethene	8.49	96	184440	23.0550 ug/L	86
20) n-Hexane	8.57	57	324338	21.5729 ug/L #	91
21) Vinyl Acetate	9.02	43	237327	18.8756 ug/L	93
22) 1,1-Dichloroethane	9.07	63	365331	21.6574 ug/L #	77
23) 2-Butanone	9.57	43	39123	18.8217 ug/L #	100
24) 2,2-Dichloropropane	9.82	77	282667	22.4304 ug/L #	59
25) cis-1,2-Dichloroethene	9.87	96	189563	21.9886 ug/L	78
26) Chloroform	10.07	83	304749	21.9377 ug/L	91
27) Bromochloromethane	10.29	128	74834	22.1245 ug/L	63
29) 1,1,1-Trichloroethane	10.59	97	273697	23.4983 ug/L #	88
31) 1,1-Dichloropropene	10.77	75	252327	22.4671 ug/L #	18
32) Carbon Tetrachloride	10.93	117	222657	22.1515 ug/L #	92
34) 1,2-Dichloroethane	11.05	62	224885	20.9829 ug/L #	71
35) Benzene	11.11	78	734778	21.7953 ug/L	90
36) Trichloroethene	11.82	130	190694	24.3177 ug/L	87
37) 1,2-Dichloropropane	12.01	63	195320	20.9310 ug/L	84
38) Bromodichloromethane	12.29	83	211770	21.7953 ug/L #	86
39) Dibromomethane	12.37	93	79009	22.0451 ug/L	86
40) 2-Chloroethyl Vinyl Ether	12.54	63	81015	21.8308 ug/L #	100
41) 4-Methyl-2-Pentanone	12.57	58	40457	21.1605 ug/L #	100
42) cis-1,3-Dichloropropene	12.88	75	275701	22.8862 ug/L	87
46) Toluene	13.29	91	792222	21.9232 ug/L	94
48) trans-1,3-Dichloropropene	13.43	75	227446	22.5297 ug/L #	51
49) 1,1,2-Trichloroethane	13.64	97	113937	21.1892 ug/L	85
50) 2-Hexanone	13.56	43	66927	19.5648 ug/L #	1
51) 1,3-Dichloropropane	13.92	76	213750	20.7705 ug/L	93

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

Data File : C:\MSDchem\1\DATA\042103\11M14410.D Vial: 5
Acq On : 21 Apr 2003 8:40 Operator: CMS
Sample : WG138555-12 20PPB ALT SOURCE STD 8260 Inst : HPMS11
Misc : 1,1 SV10847 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 21 09:02:44 2003 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
52)	Tetrachloroethene	14.07	164	141823	22.8729 ug/L		90
53)	Dibromochloromethane	14.31	129	126293	21.9402 ug/L		84
54)	1,2-Dibromoethane	14.54	107	109780	21.3530 ug/L		93
55)	1-Chlorohexane	14.60	91	276490	22.0942 ug/L		87
56)	Chlorobenzene	15.02	112	519655	22.3002 ug/L		98
57)	1,1,1,2-Tetrachloroethane	15.04	131	159404	24.1136 ug/L		92
58)	Ethylbenzene	15.03	106	298623	23.6097 ug/L		76
59)	m-,p-Xylene	15.12	106	735322	46.2728 ug/L		83
60)	o-Xylene	15.65	106	365560	22.8826 ug/L		79
61)	Styrene	15.68	104	605434	23.5440 ug/L		85
62)	Bromoform	16.15	173	58524	19.9298 ug/L		79
63)	Isopropylbenzene	16.04	105	889698	21.8485 ug/L		95
65)	1,1,2,2-Tetrachloroethane	16.22	83	122435	20.6310 ug/L		83
67)	1,2,3-Trichloropropane	16.41	110	37187	21.6004 ug/L		83
68)	trans-1,4-Dichloro-2-Buten	16.51	53	6076	2.7714 ug/L	#	1
69)	n-Propylbenzene	16.50	91	1121344	22.4955 ug/L		90
70)	Bromobenzene	16.65	156	195221	22.1715 ug/L		76
71)	1,3,5-Trimethylbenzene	16.68	105	775896	22.5457 ug/L		92
72)	2-Chlorotoluene	16.78	91	673494	21.1669 ug/L		94
73)	4-Chlorotoluene	16.82	91	697053	23.0820 ug/L		88
75)	tert-Butylbenzene	17.11	119	685620	21.2819 ug/L	#	93
76)	1,2,4-Trimethylbenzene	17.17	105	799980	21.9325 ug/L		91
77)	sec-Butylbenzene	17.37	105	991648	21.6771 ug/L		92
78)	p-Isopropyltoluene	17.51	119	813777	21.2731 ug/L		99
79)	1,3-Dichlorobenzene	17.71	146	416443	21.2246 ug/L		90
80)	1,4-Dichlorobenzene	17.83	146	414251	20.9941 ug/L		80
81)	n-Butylbenzene	17.99	91	770802	21.6629 ug/L	#	98
82)	1,2-Dichlorobenzene	18.30	146	370366	21.3002 ug/L		90
83)	1,2-Dibromo-3-Chloropropan	19.22	157	19481	19.7855 ug/L		91
84)	1,2,4-Trichlorobenzene	20.28	180	245739	22.0588 ug/L		91
85)	Hexachlorobutadiene	20.42	225	88639	21.3092 ug/L	#	74
86)	Naphthalene	20.64	128	450490	21.0518 ug/L	#	83
87)	1,2,3-Trichlorobenzene	20.93	180	196699	21.5490 ug/L	#	62

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

Ical Date: 17-Apr-03 Ical Filename: 11M14397.D Instrument: HPMS 11
CCV Date: 4/30/2003 CCV Filename: 11M14654.D

	Fluorbenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
	Ret. Time	Response	Ret. Time	Response	Ret. Time	Response
Ical	11.33	949383	14.97	699057	17.79	351588
CCV	11.33	933013	14.97	696661	17.79	349058
	Pass	Pass	Pass	Pass	Pass	Pass

Data File : C:\MSDCHEM\1\DATA\043003\11M14654.D Vial: 3
Acq On : 30 Apr 2003 18:01 Operator: CMS
Sample : WG139441-02 50 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10906 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
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 : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.000	1.000	0.0	98	0.00
2	T	Dichlorodifluoromethane	0.270	0.306	-13.3	106	0.01
3	P	Chloromethane	0.179	0.212✓	-18.4	116	0.00
4	C	Vinyl Chloride	0.114	0.126	-10.5✓	103	0.00
5	T	Bromomethane	0.153	0.150	2.0	89	0.00
6	T	Chloroethane	0.188	0.194	-3.2	99	0.00
7	T	Trichlorofluoromethane	0.354	0.408	-15.3	107	0.00
8	T	Isoprene	0.383	0.396	-3.4	97	0.00
9	T	Acrolein	0.016	0.017	-6.3	100	0.00
10	T	1,1,2-Trichloro-1,2,2-Trifl	0.208	0.213	-2.4	99	0.01
11	T	Acetone	0.037	0.039	-5.4	97	0.00
12	C	1,1-Dichloroethene	0.190	0.207	-8.9✓	100	0.00
13	T	Dimethyl Sulfide	0.279	0.278	0.4	95	0.00
14	T	Iodomethane	0.226	0.246	-8.8	99	0.00
15	T	Methylene Chloride	0.201	0.210	-4.5	98	0.00
16	T	Carbon Disulfide	0.684	0.728	-6.4	98	0.00
17	T	Acrylonitrile	0.055	0.057	-3.6	97	0.00
18	T	Methyl Tert Butyl Ether	0.432	0.423	2.1	92	0.00
19	T	trans-1,2-Dichloroethene	0.210	0.234	-11.4	99	0.00
	T	n-Hexane	0.394	0.392	0.5	93	0.00
21	T	Vinyl Acetate	0.330	0.346	-4.8	100	0.00
22	P	1,1-Dichloroethane	0.442	0.491✓	-11.1	101	0.00
23	T	2-Butanone	0.055	0.054	1.8	94	0.00
24	T	2,2-Dichloropropane	0.331	0.372	-12.4	106	0.00
25	T	cis-1,2-Dichloroethene	0.226	0.244	-8.0	98	0.00
26	C	Chloroform	0.364	0.410	-12.6✓	103	0.00
27	T	Bromochloromethane	0.089	0.095	-6.7	97	0.00
28	S	Dibromofluoromethane	0.206	0.209	-1.5	96	0.00
29	T	1,1,1-Trichloroethane	0.305	0.371	-21.6	105	0.00
30	T	Cyclohexane	0.525	0.535	-1.9	97	0.00
31	T	1,1-Dichloropropene	0.295	0.328	-11.2	101	0.00
32	T	Carbon Tetrachloride	0.264	0.314	-18.9	106	0.00
33	S	1,2-Dichloroethane-d4	0.217	0.224	-3.2	95	0.00
34	T	1,2-Dichloroethane	0.281	0.315	-12.1	104	0.00
35	T	Benzene	0.884	0.942	-6.6	98	0.00
36	T	Trichloroethene	0.206	0.224	-8.7	98	0.00
37	C	1,2-Dichloropropane	0.245	0.256	-4.5✓	97	0.00
38	T	Bromodichloromethane	0.255	0.286	-12.2	100	0.00
39	T	Dibromomethane	0.094	0.102	-8.5	98	0.00
40	T	2-Chloroethyl Vinyl Ether	0.097	0.100	-3.1	93	0.00
41	T	4-Methyl-2-Pentanone	0.050	0.048	4.0	90	0.00
42	T	cis-1,3-Dichloropropene	0.316	0.343	-8.5	97	0.00
43	T	Dimethyl Disulfide	0.181	0.183	-1.1	93	0.00
44	I	Chlorobenzene-d5	1.000	1.000	0.0	100	0.00
45	S	Toluene-d8	1.138	1.145	-0.6	96	0.00
46	C	Toluene	1.272	1.350	-6.1✓	98	0.00
47	T	Ethyl Methacrylate	0.248	0.244	1.6	92	0.00
48	T	trans-1,3-Dichloropropene	0.355	0.390	-9.9	99	0.00
49	T	1,1,2-Trichloroethane	0.189	0.194	-2.6	95	0.00
	T	2-Hexanone	0.120	0.120	0.0	94	0.00
	T	1,3-Dichloropropane	0.362	0.367	-1.4	96	0.00
52	T	Tetrachloroethene	0.218	0.242	-11.0	98	0.00

(#) = Out of Range

Data File : C:\MSDCHEM\1\DATA\043003\11M14654.D Vial: 3
Acq On : 30 Apr 2003 18:01 Operator: CMS
Sample : WG139441-02 50 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10906 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
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 : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
53	T	Dibromochloromethane	0.203	0.230	-13.3	98	0.00
54	T	1,2-Dibromoethane	0.181	0.189	-4.4	96	0.00
55	T	1-Chlorohexane	0.440	0.453	-3.0	95	0.00
56	P	Chlorobenzene	0.820	0.851✓	-3.8	98	0.00
57	T	1,1,1,2-Tetrachloroethane	0.233	0.265	-13.7	101	0.00
58	C	Ethylbenzene	0.445	0.480	-7.9✓	98	0.00
59	T	m-,p-Xylene	0.559	0.606	-8.4	98	0.00
60	T	o-Xylene	0.562	0.604	-7.5	97	0.00
61	T	Styrene	0.905	0.974	-7.6	95	0.00
62	P	Bromoform	0.103	0.110✓	-6.8	94	0.00
63	T	Isopropylbenzene	1.433	1.557	-8.7	98	0.00
64	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	99	0.00
65	P	1,1,2,2-Tetrachloroethane	0.411	0.418✓	-1.7	95	0.00
66	S	p-Bromofluorobenzene	0.925	0.914	1.2	95	0.00
67	T	1,2,3-Trichloropropane	0.119	0.126	-5.9	97	0.00
68	T	trans-1,4-Dichloro-2-Butene	0.152	0.160	-5.3	100	0.00
69	T	n-Propylbenzene	3.456	3.735	-8.1	96	0.00
70	T	Bromobenzene	0.610	0.646	-5.9	97	0.00
71	T	1,3,5-Trimethylbenzene	2.386	2.582	-8.2	96	0.00
72	T	2-Chlorotoluene	2.206	2.367	-7.3	97	0.00
73	T	4-Chlorotoluene	2.094	2.315	-10.6	99	0.00
74	T	a-Methylstyrene	1.455	1.482	-1.9	95	0.00
75	T	tert-Butylbenzene	2.234	2.484	-11.2	95	0.00
76	T	1,2,4-Trimethylbenzene	2.529	2.723	-7.7	97	0.00
77	T	sec-Butylbenzene	3.172	3.172	0.0	93	0.00
78	T	p-Isopropyltoluene	2.652	2.691	-1.5	93	0.00
79	T	1,3-Dichlorobenzene	1.360	1.397	-2.7	96	0.00
80	T	1,4-Dichlorobenzene	1.368	1.401	-2.4	96	0.00
81	T	n-Butylbenzene	2.467	2.424	1.7	91	0.00
82	T	1,2-Dichlorobenzene	1.206	1.217	-0.9	95	0.00
83	T	1,2-Dibromo-3-Chloropropane	0.068	0.065	4.4	89	0.00
84	T	1,2,4-Trichlorobenzene	0.772	0.753	2.5	91	0.00
85	T	Hexachlorobutadiene	0.288	0.255	11.5	84	0.00
86	T	Naphthalene	1.484	1.474	0.7	93	0.00
87	T	1,2,3-Trichlorobenzene	0.633	0.620	2.1	92	0.00

Data File : C:\MSDCHEM\1\DATA\043003\11M14654.D Vial: 3
Acq On : 30 Apr 2003 18:01 Operator: CMS
Sample : WG139441-02 50 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10906 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
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 : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.000	25.000	0.0	98	0.00
2	T	Dichlorodifluoromethane	50.000	56.806	-13.6	106	0.01
3	P	Chloromethane	50.000	59.218	-18.4	116	0.00
4	C	Vinyl Chloride	50.000	55.414	-10.8	103	0.00
5	T	Bromomethane	50.000	49.103	1.8	89	0.00
6	T	Chloroethane	50.000	51.798	-3.6	99	0.00
7	T	Trichlorofluoromethane	50.000	57.695	-15.4	107	0.00
8	T	Isoprene	50.000	51.696	-3.4	97	0.00
9	T	Acrolein	100.000	107.330	-7.3	100	0.00
10	T	1,1,2-Trichloro-1,2,2-Trifl	50.000	51.021	-2.0	99	0.01
11	T	Acetone	50.000	52.531	-5.1	97	0.00
12	C	1,1-Dichloroethene	50.000	54.483	-9.0	100	0.00
13	T	Dimethyl Sulfide	50.000	49.815	0.4	95	0.00
14	T	Iodomethane	50.000	54.430	-8.9	99	0.00
15	T	Methylene Chloride	50.000	52.174	-4.3	98	0.00
16	T	Carbon Disulfide	50.000	53.184	-6.4	98	0.00
17	T	Acrylonitrile	50.000	52.153	-4.3	97	0.00
18	T	Methyl Tert Butyl Ether	50.000	48.951	2.1	92	0.00
[illegible]	T	trans-1,2-Dichloroethene	50.000	55.729	-11.5	99	0.00
[illegible]	T	n-Hexane	50.000	49.717	0.6	93	0.00
21	T	Vinyl Acetate	50.000	52.428	-4.9	100	0.00
22	P	1,1-Dichloroethane	50.000	55.496	-11.0	101	0.00
23	T	2-Butanone	50.000	49.476	1.0	94	0.00
24	T	2,2-Dichloropropane	50.000	56.239	-12.5	106	0.00
25	T	cis-1,2-Dichloroethene	50.000	54.048	-8.1	98	0.00
26	C	Chloroform	50.000	56.203	-12.4	103	0.00
27	T	Bromochloromethane	50.000	53.458	-6.9	97	0.00
28	S	Dibromofluoromethane	25.000	25.308	-1.2	96	0.00
29	T	1,1,1-Trichloroethane	50.000	60.757	-21.5	105	0.00
30	T	Cyclohexane	50.000	51.006	-2.0	97	0.00
31	T	1,1-Dichloropropene	50.000	55.757	-11.5	101	0.00
32	T	Carbon Tetrachloride	50.000	59.582	-19.2	106	0.00
33	S	1,2-Dichloroethane-d4	25.000	25.737	-2.9	95	0.00
34	T	1,2-Dichloroethane	50.000	56.105	-12.2	104	0.00
35	T	Benzene	50.000	53.275	-6.5	98	0.00
36	T	Trichloroethene	50.000	54.459	-8.9	98	0.00
37	C	1,2-Dichloropropane	50.000	52.315	-4.6	97	0.00
38	T	Bromodichloromethane	50.000	56.018	-12.0	100	0.00
39	T	Dibromomethane	50.000	54.159	-8.3	98	0.00
40	T	2-Chloroethyl Vinyl Ether	50.000	51.118	-2.2	93	0.00
41	T	4-Methyl-2-Pentanone	50.000	48.025	4.0	90	0.00
42	T	cis-1,3-Dichloropropene	50.000	54.235	-8.5	97	0.00
43	T	Dimethyl Disulfide	50.000	50.500	-1.0	93	0.00
44	I	Chlorobenzene-d5	25.000	25.000	0.0	100	0.00
45	S	Toluene-d8	25.000	25.157	-0.6	96	0.00
46	C	Toluene	50.000	53.054	-6.1	98	0.00
47	T	Ethyl Methacrylate	50.000	49.225	1.5	92	0.00
48	T	trans-1,3-Dichloropropene	50.000	54.826	-9.7	99	0.00
49	T	1,1,2-Trichloroethane	50.000	51.302	-2.6	95	0.00
	T	2-Hexanone	50.000	49.714	0.6	94	0.00
	T	1,3-Dichloropropane	50.000	50.721	-1.4	96	0.00
52	T	Tetrachloroethene	50.000	55.343	-10.7	98	0.00

(#) = Out of Range

Data File : C:\MSDCHEM\1\DATA\043003\11M14654.D Vial: 3
Acq On : 30 Apr 2003 18:01 Operator: CMS
Sample : WG139441-02 50 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10906 Multiplr: 1.00
MS Integration Params: rteint.p

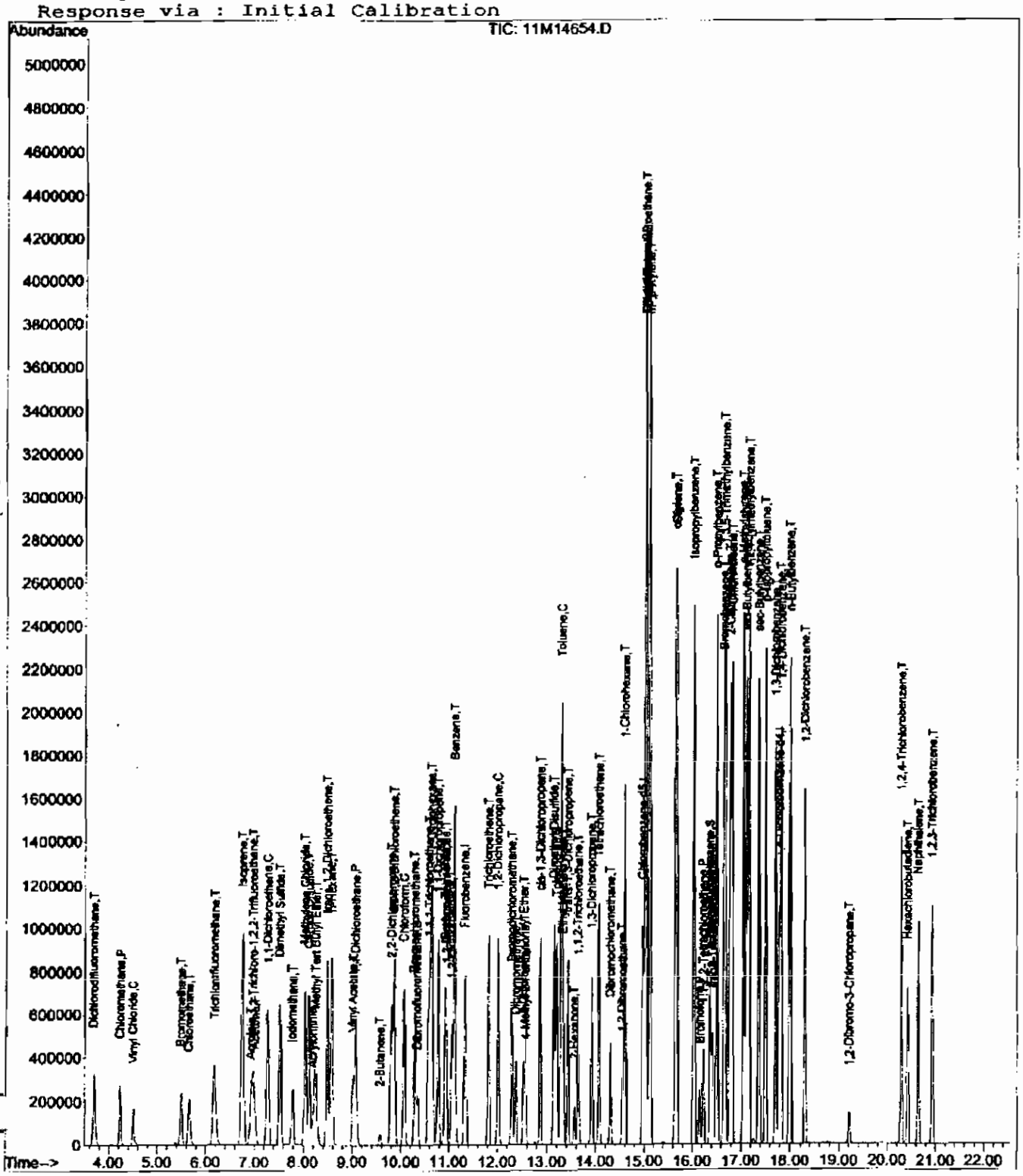
Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
53	T	Dibromochloromethane	50.000	56.702	-13.4	98	0.00
54	T	1,2-Dibromoethane	50.000	52.298	-4.6	96	0.00
55	T	1-Chlorohexane	50.000	51.414	-2.8	95	0.00
56	P	Chlorobenzene	50.000	51.855	-3.7	98	0.00
57	T	1,1,1,2-Tetrachloroethane	50.000	57.004	-14.0	101	0.00
58	C	Ethylbenzene	50.000	53.907	-7.8	98	0.00
59	T	m-,p-Xylene	100.000	108.314	-8.3	98	0.00
60	T	o-Xylene	50.000	53.674	-7.3	97	0.00
61	T	Styrene	50.000	53.793	-7.6	95	0.00
62	P	Bromoform	50.000	53.006	-6.0	94	0.00
63	T	Isopropylbenzene	50.000	54.311	-8.6	98	0.00
64	I	1,4-Dichlorobenzene-d4	25.000	25.000	0.0	99	0.00
65	P	1,1,2,2-Tetrachloroethane	50.000	50.778	-1.6	95	0.00
66	S	p-Bromofluorobenzene	25.000	24.712	1.2	95	0.00
67	T	1,2,3-Trichloropropane	50.000	52.604	-5.2	97	0.00
68	T	trans-1,4-Dichloro-2-Butene	50.000	52.643	-5.3	100	0.00
69	T	n-Propylbenzene	50.000	54.034	-8.1	96	0.00
70	T	Bromobenzene	50.000	52.934	-5.9	97	0.00
71	T	1,3,5-Trimethylbenzene	50.000	54.108	-8.2	96	0.00
72	T	2-Chlorotoluene	50.000	53.660	-7.3	97	0.00
73	T	4-Chlorotoluene	50.000	55.296	-10.6	99	0.00
74	T	a-Methylstyrene	50.000	50.920	-1.8	95	0.00
75	T	tert-Butylbenzene	50.000	55.598	-11.2	95	0.00
76	T	1,2,4-Trimethylbenzene	50.000	53.849	-7.7	97	0.00
77	T	sec-Butylbenzene	50.000	50.014	-0.0	93	0.00
78	T	p-Isopropyltoluene	50.000	50.729	-1.5	93	0.00
79	T	1,3-Dichlorobenzene	50.000	51.346	-2.7	96	0.00
80	T	1,4-Dichlorobenzene	50.000	51.222	-2.4	96	0.00
81	T	n-Butylbenzene	50.000	49.128	1.7	91	0.00
82	T	1,2-Dichlorobenzene	50.000	50.477	-1.0	95	0.00
83	T	1,2-Dibromo-3-Chloropropane	50.000	47.458	5.1	89	0.00
84	T	1,2,4-Trichlorobenzene	50.000	48.759	2.5	91	0.00
85	T	Hexachlorobutadiene	50.000	44.214	11.6	84	0.00
86	T	Naphthalene	50.000	49.670	0.7	93	0.00
87	T	1,2,3-Trichlorobenzene	50.000	49.013	2.0	92	0.00

Data File : C:\MSDchem\1\DATA\043003\11M14654.D Vial: 3
Acq On : 30 Apr 2003 18:01 Operator: CMS
Sample : WG139441-02 50 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10906 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 30 18:24 2003 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration



Data File : C:\MSDchem\1\DATA\043003\11M14654.D Vial: 3
Acq On : 30 Apr 2003 18:01 Operator: CMS
Sample : WG139441-02 50 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10906 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 30 18:24:22 2003 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.33	96	933013	25.00 ug/L	0.00
44) Chlorobenzene-d5	14.97	117	696661	25.00 ug/L	0.00
64) 1,4-Dichlorobenzene-d4	17.79	152	349058	25.00 ug/L	0.00
System Monitoring Compounds					
28) Dibromofluoromethane	10.34	111	194868	25.3083 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 101.24%		
33) 1,2-Dichloroethane-d4	10.94	65	208902	25.7368 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 102.96%		
45) Toluene-d8	13.19	98	797670	25.1567 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 100.64%		
66) p-Bromofluorobenzene	16.36	95	319057	24.7118 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 98.84%		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.69	85	571808	56.8063 ug/L	90
3) Chloromethane	4.23	50	395910	59.2180 ug/L	90
4) Vinyl Chloride	4.50	62	235148	55.4140 ug/L #	55
5) Bromomethane	5.49	94	280286	49.1032 ug/L	91
6) Chloroethane	5.65	64	362627	51.7977 ug/L	95
7) Trichlorofluoromethane	6.18	101	761745	57.6948 ug/L	96
8) Isoprene	6.75	67	738318	51.6956 ug/L	96
9) Acrolein	6.92	56	64382	107.3301 ug/L	87
10) 1,1,2-Trichloro-1,2,2-Trif	6.98	101	396759	51.0214 ug/L	86
11) Acetone	7.01	43	72997	52.5305 ug/L #	41
12) 1,1-Dichloroethene	7.27	96	385747	54.4825 ug/L	67
13) Dimethyl Sulfide	7.52	62	519008	49.8149 ug/L	77
14) Iodomethane	7.78	142	458232	54.4296 ug/L	86
15) Methylene Chloride	8.02	84	391576	52.1745 ug/L	93
16) Carbon Disulfide	8.11	76	1358280	53.1839 ug/L #	88
17) Acrylonitrile	8.18	53	107204	52.1525 ug/L #	1
18) Methyl Tert Butyl Ether	8.24	73	789640	48.9507 ug/L #	67
19) trans-1,2-Dichloroethene	8.48	96	436412	55.7295 ug/L	89
20) n-Hexane	8.56	57	731664	49.7165 ug/L #	92
21) Vinyl Acetate	9.01	43	645260	52.4284 ug/L	95
22) 1,1-Dichloroethane	9.06	63	916355	55.4960 ug/L #	76
23) 2-Butanone	9.57	43	100667	49.4756 ug/L #	100
24) 2,2-Dichloropropane	9.81	77	693741	56.2390 ug/L #	61
25) cis-1,2-Dichloroethene	9.87	96	456100	54.0483 ug/L	75
26) Chloroform	10.07	83	764250	56.2032 ug/L	91
27) Bromochloromethane	10.29	128	176996	53.4584 ug/L	67
29) 1,1,1-Trichloroethane	10.58	97	692709	60.7570 ug/L #	85
30) Cyclohexane	10.64	56	998606	51.0059 ug/L #	96
31) 1,1-Dichloropropene	10.77	75	612967	55.7568 ug/L #	22
32) Carbon Tetrachloride	10.92	117	586231	59.5819 ug/L #	92
34) 1,2-Dichloroethane	11.05	62	588599	56.1052 ug/L #	73
35) Benzene	11.11	78	1758077	53.2749 ug/L	90
36) Trichloroethene	11.82	130	418026	54.4587 ug/L	88
37) 1,2-Dichloropropane	12.01	63	477866	52.3151 ug/L	87
38) Bromodichloromethane	12.29	83	532784	56.0181 ug/L #	87
39) Dibromomethane	12.37	93	190002	54.1591 ug/L	85
40) 2-Chloroethyl Vinyl Ether	12.53	63	185691	51.1178 ug/L #	100
41) 4-Methyl-2-Pentanone	12.57	58	89878	48.0246 ug/L #	100
42) cis-1,3-Dichloropropene	12.87	75	639536	54.2349 ug/L #	87

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

Data File : C:\MSDchem\1\DATA\043003\11M14654.D Vial: 3
Acq On : 30 Apr 2003 18:01 Operator: CMS
Sample : WG139441-02 50 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10906 Multiplr: 1.00
IS Integration Params: rteint.p
Quant Time: Apr 30 18:24:22 2003 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
43)	Dimethyl Disulfide	13.14	79	341931	50.5005 ug/L		96
46)	Toluene	13.29	91	1880296	53.0545 ug/L		95
47)	Ethyl Methacrylate	13.33	69	339883	49.2251 ug/L	#	100
48)	trans-1,3-Dichloropropene	13.43	75	542842	54.8263 ug/L	#	52
49)	1,1,2-Trichloroethane	13.64	97	270547	51.3017 ug/L		85
50)	2-Hexanone	13.55	43	166788	49.7139 ug/L	#	1
51)	1,3-Dichloropropane	13.92	76	511929	50.7213 ug/L		99
52)	Tetrachloroethene	14.07	164	336551	55.3433 ug/L		89
53)	Dibromochloromethane	14.30	129	320109	56.7019 ug/L		84
54)	1,2-Dibromoethane	14.55	107	263700	52.2980 ug/L		92
55)	1-Chlorohexane	14.60	91	631022	51.4141 ug/L		92
56)	Chlorobenzene	15.02	112	1185112	51.8552 ug/L		98
57)	1,1,1,2-Tetrachloroethane	15.04	131	369575	57.0038 ug/L		93
58)	Ethylbenzene	15.03	106	668705	53.9066 ug/L		80
59)	m-,p-Xylene	15.12	106	1688095	108.3141 ug/L		86
60)	o-Xylene	15.65	106	840965	53.6739 ug/L		83
61)	Styrene	15.67	104	1356681	53.7935 ug/L		88
62)	Bromoform	16.15	173	152658	53.0064 ug/L		80
63)	Isopropylbenzene	16.03	105	2169037	54.3106 ug/L		96
65)	1,1,2,2-Tetrachloroethane	16.22	83	291701	50.7779 ug/L		85
67)	1,2,3-Trichloropropane	16.40	110	87665	52.6038 ug/L		80
68)	trans-1,4-Dichloro-2-Buten	16.42	53	111724	52.6432 ug/L	#	55
69)	n-Propylbenzene	16.50	91	2607310	54.0343 ug/L		91
70)	Bromobenzene	16.65	156	451172	52.9335 ug/L		72
71)	1,3,5-Trimethylbenzene	16.67	105	1802510	54.1076 ug/L		94
72)	2-Chlorotoluene	16.78	91	1652757	53.6604 ug/L		95
73)	4-Chlorotoluene	16.81	91	1616470	55.2963 ug/L		93
74)	a-Methylstyrene	17.05	118	1034667	50.9199 ug/L		79
75)	tert-Butylbenzene	17.11	119	1733844	55.5977 ug/L	#	75
76)	1,2,4-Trimethylbenzene	17.17	105	1901302	53.8494 ug/L		93
77)	sec-Butylbenzene	17.37	105	2214773	50.0142 ug/L		93
78)	p-Isopropyltoluene	17.50	119	1878475	50.7286 ug/L		99
79)	1,3-Dichlorobenzene	17.71	146	975229	51.3465 ug/L		89
80)	1,4-Dichlorobenzene	17.83	146	978367	51.2221 ug/L		79
81)	n-Butylbenzene	17.99	91	1692144	49.1284 ug/L	#	97
82)	1,2-Dichlorobenzene	18.30	146	849614	50.4772 ug/L		89
83)	1,2-Dibromo-3-Chloropropan	19.21	157	45233	47.4584 ug/L		83
84)	1,2,4-Trichlorobenzene	20.28	180	525808	48.7591 ug/L		90
85)	Hexachlorobutadiene	20.42	225	178031	44.2139 ug/L	#	70
86)	Naphthalene	20.64	128	1028883	49.6695 ug/L	#	82
87)	1,2,3-Trichlorobenzene	20.93	180	433077	49.0131 ug/L	#	60

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

Ical Date: 17-Apr-03 Ical Filename: 11M14397.D Instrument: HPMS 11
CCV Date: 1 May 2003 6:10 CCV Filename: 11M14677.D

	Fluorbenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
	Ret. Time	Response	Ret. Time	Response	Ret. Time	Response
Ical	11.33	949383	14.97	699057	17.79	351588
CCV	11.33	946564	14.97	705727	17.79	354783
	Pass	Pass	Pass	Pass	Pass	Pass

Data File : C:\MSDCHEM\1\DATA\050103\11M14677.D Vial: 2
Acq On : 1 May 2003 6:10 Operator: CMS
Sample : WG139455-02 50 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10906 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
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 : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.000	1.000	0.0	100	0.00
2	T	Dichlorodifluoromethane	0.270	0.297	-10.0	104	0.00
3	P	Chloromethane	0.179	0.193✓	-7.8	107	0.00
4	C	Vinyl Chloride	0.114	0.124	-8.8✓	103	0.00
5	T	Bromomethane	0.153	0.157	-2.6	94	0.00
6	T	Chloroethane	0.188	0.197	-4.8	102	0.00
7	T	Trichlorofluoromethane	0.354	0.406	-14.7	108	0.00
8	T	Isoprene	0.383	0.385	-0.5	96	0.00
9	T	Acrolein	0.016	0.018	-12.5	104	0.00
10	T	1,1,2-Trichloro-1,2,2-Trifl	0.208	0.206	1.0	98	0.00
11	T	Acetone	0.037	0.042	-13.5	106	0.00
12	C	1,1-Dichloroethene	0.190	0.205	-7.9✓	101	0.00
13	T	Dimethyl Sulfide	0.279	0.279	0.0	97	0.00
14	T	Iodomethane	0.226	0.212	6.2	87	0.00
15	T	Methylene Chloride	0.201	0.214	-6.5	102	0.00
16	T	Carbon Disulfide	0.684	0.718	-5.0	98	0.00
17	T	Acrylonitrile	0.055	0.060	-9.1	103	0.00
18	T	Methyl Tert Butyl Ether	0.432	0.435	-0.7	96	0.00
19	T	trans-1,2-Dichloroethene	0.210	0.234	-11.4	101	0.00
	T	n-Hexane	0.394	0.364	7.6	88	0.00
21	T	Vinyl Acetate	0.330	0.355	-7.6	104	0.00
22	P	1,1-Dichloroethane	0.442	0.491✓	-11.1	102	0.00
23	T	2-Butanone	0.055	0.060	-9.1	107	0.00
24	T	2,2-Dichloropropane	0.331	0.370	-11.8	107	0.00
25	T	cis-1,2-Dichloroethene	0.226	0.242	-7.1	98	0.00
26	C	Chloroform	0.364	0.409	-12.4✓	104	0.00
27	T	Bromochloromethane	0.089	0.097	-9.0	100	0.00
28	S	Dibromofluoromethane	0.206	0.213	-3.4	100	0.00
29	T	1,1,1-Trichloroethane	0.305	0.363	-19.0	104	0.00
30	T	Cyclohexane	0.525	0.515	1.9	94	0.00
31	T	1,1-Dichloropropene	0.295	0.323	-9.5	101	0.00
32	T	Carbon Tetrachloride	0.264	0.308	-16.7	106	0.00
33	S	1,2-Dichloroethane-d4	0.217	0.228	-5.1	98	0.00
34	T	1,2-Dichloroethane	0.281	0.317	-12.8	106	0.00
35	T	Benzene	0.884	0.942	-6.6	100	0.00
36	T	Trichloroethene	0.206	0.224	-8.7	99	0.00
37	C	1,2-Dichloropropane	0.245	0.257	-4.9✓	99	0.00
38	T	Bromodichloromethane	0.255	0.288	-12.9	103	0.00
39	T	Dibromomethane	0.094	0.103	-9.6	101	0.00
40	T	2-Chloroethyl Vinyl Ether	0.097	0.104	-7.2	99	0.00
41	T	4-Methyl-2-Pentanone	0.050	0.051	-2.0	97	0.00
42	T	cis-1,3-Dichloropropene	0.316	0.348	-10.1	100	0.00
43	T	Dimethyl Disulfide	0.181	0.183	-1.1	95	0.00
44	I	Chlorobenzene-d5	1.000	1.000	0.0	101	0.00
45	S	Toluene-d8	1.138	1.148	-0.9	98	0.00
46	C	Toluene	1.272	1.339	-5.3✓	99	0.00
47	T	Ethyl Methacrylate	0.248	0.256	-3.2	98	0.00
48	T	trans-1,3-Dichloropropene	0.355	0.396	-11.5	102	0.00
49	T	1,1,2-Trichloroethane	0.189	0.198	-4.8	98	0.00
	T	2-Hexanone	0.120	0.130	-8.3	103	0.00
	T	1,3-Dichloropropane	0.362	0.380	-5.0	100	0.00
52	T	Tetrachloroethene	0.218	0.236	-8.3	97	0.00

(#) = Out of Range

Data File : C:\MSDCHEM\1\DATA\050103\11M14677.D Vial: 2
Acq On : 1 May 2003 6:10 Operator: CMS
Sample : WG139455-02 50 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10906 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
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 : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
53	T	Dibromochloromethane	0.203	0.233	-14.8	100	0.00
54	T	1,2-Dibromoethane	0.181	0.197	-8.8	101	0.00
55	T	1-Chlorohexane	0.440	0.433	1.6	92	0.00
56	P	Chlorobenzene	0.820	0.844✓	-2.9	98	0.00
57	T	1,1,1,2-Tetrachloroethane	0.233	0.268	-15.0	103	0.00
58	C	Ethylbenzene	0.445	0.477	-7.2✓	99	0.00
59	T	m-,p-Xylene	0.559	0.595	-6.4	97	0.00
60	T	o-Xylene	0.562	0.600	-6.8	98	0.00
61	T	Styrene	0.905	0.970	-7.2	96	0.00
62	P	Bromoform	0.103	0.113✓	-9.7	99	0.00
63	T	Isopropylbenzene	1.433	1.500	-4.7	95	0.00
64	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	101	0.00
65	P	1,1,2,2-Tetrachloroethane	0.411	0.440✓	-7.1	102	0.00
66	S	p-Bromofluorobenzene	0.925	0.936	-1.2	99	0.00
67	T	1,2,3-Trichloropropane	0.119	0.132	-10.9	104	0.00
68	T	trans-1,4-Dichloro-2-Butene	0.152	0.169	-11.2	107	0.00
69	T	n-Propylbenzene	3.456	3.594	-4.0	94	0.00
70	T	Bromobenzene	0.610	0.642	-5.2	98	0.00
71	T	1,3,5-Trimethylbenzene	2.386	2.482	-4.0	94	0.00
72	T	2-Chlorotoluene	2.206	2.242	-1.6	94	0.00
73	T	4-Chlorotoluene	2.094	2.048	2.2	89	0.00
74	T	a-Methylstyrene	1.455	1.432	1.6	94	0.00
75	T	tert-Butylbenzene	2.234	1.915	14.3	74	0.00
76	T	1,2,4-Trimethylbenzene	2.529	2.626	-3.8	95	0.00
77	T	sec-Butylbenzene	3.172	2.905	8.4	86	0.00
78	T	p-Isopropyltoluene	2.652	2.461	7.2	87	0.00
79	T	1,3-Dichlorobenzene	1.360	1.386	-1.9	97	0.00
80	T	1,4-Dichlorobenzene	1.368	1.379	-0.8	96	0.00
81	T	n-Butylbenzene	2.467	2.164	12.3	83	0.00
82	T	1,2-Dichlorobenzene	1.206	1.213	-0.6	97	0.00
83	T	1,2-Dibromo-3-Chloropropane	0.068	0.073	-7.4	102	0.00
84	T	1,2,4-Trichlorobenzene	0.772	0.716	7.3	88	0.00
85	T	Hexachlorobutadiene	0.288	0.235	18.4	79	0.00
86	T	Naphthalene	1.484	1.545	-4.1	99	0.00
87	T	1,2,3-Trichlorobenzene	0.633	0.604	4.6	92	0.00

Data File : C:\MSDCHEM\1\DATA\050103\11M14677.D Vial: 2
Acq On : 1 May 2003 6:10 Operator: CMS
Sample : WG139455-02 50 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10906 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
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 : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.000	25.000	0.0	100	0.00
2	T	Dichlorodifluoromethane	50.000	55.067	-10.1	104	0.00
3	P	Chloromethane	50.000	53.992	-8.0	107	0.00
4	C	Vinyl Chloride	50.000	54.592	-9.2	103	0.00
5	T	Bromomethane	50.000	51.234	-2.5	94	0.00
6	T	Chloroethane	50.000	52.534	-5.1	102	0.00
7	T	Trichlorofluoromethane	50.000	57.323	-14.6	108	0.00
8	T	Isoprene	50.000	50.341	-0.7	96	0.00
9	T	Acrolein	100.000	109.381	-9.4	104	0.00
10	T	1,1,2-Trichloro-1,2,2-Trifl	50.000	49.543	0.9	98	0.00
11	T	Acetone	50.000	56.759	-13.5	106	0.00
12	C	1,1-Dichloroethene	50.000	54.077	-8.2	101	0.00
13	T	Dimethyl Sulfide	50.000	49.940	0.1	97	0.00
14	T	Iodomethane	50.000	47.038	5.9	87	0.00
15	T	Methylene Chloride	50.000	53.327	-6.7	102	0.00
16	T	Carbon Disulfide	50.000	52.444	-4.9	98	0.00
17	T	Acrylonitrile	50.000	54.507	-9.0	103	0.00
18	T	Methyl Tert Butyl Ether	50.000	50.318	-0.6	96	0.00
[illegible]	T	trans-1,2-Dichloroethene	50.000	55.655	-11.3	101	0.00
	T	n-Hexane	50.000	46.178	7.6	88	0.00
21	T	Vinyl Acetate	50.000	53.761	-7.5	104	0.00
22	P	1,1-Dichloroethane	50.000	55.447	-10.9	102	0.00
23	T	2-Butanone	50.000	55.183	-10.4	107	0.00
24	T	2,2-Dichloropropane	50.000	56.006	-12.0	107	0.00
25	T	cis-1,2-Dichloroethene	50.000	53.467	-6.9	98	0.00
26	C	Chloroform	50.000	56.091	-12.2	104	0.00
27	T	Bromochloromethane	50.000	54.405	-8.8	100	0.00
28	S	Dibromofluoromethane	25.000	25.854	-3.4	100	0.00
29	T	1,1,1-Trichloroethane	50.000	59.460	-18.9	104	0.00
30	T	Cyclohexane	50.000	49.039	1.9	94	0.00
31	T	1,1-Dichloropropene	50.000	54.904	-9.8	101	0.00
32	T	Carbon Tetrachloride	50.000	58.401	-16.8	106	0.00
33	S	1,2-Dichloroethane-d4	25.000	26.202	-4.8	98	0.00
34	T	1,2-Dichloroethane	50.000	56.350	-12.7	106	0.00
35	T	Benzene	50.000	53.288	-6.6	100	0.00
36	T	Trichloroethene	50.000	54.393	-8.8	99	0.00
37	C	1,2-Dichloropropane	50.000	52.415	-4.8	99	0.00
38	T	Bromodichloromethane	50.000	56.494	-13.0	103	0.00
39	T	Dibromomethane	50.000	54.839	-9.7	101	0.00
40	T	2-Chloroethyl Vinyl Ether	50.000	53.665	-7.3	99	0.00
41	T	4-Methyl-2-Pentanone	50.000	51.299	-2.6	97	0.00
42	T	cis-1,3-Dichloropropene	50.000	55.093	-10.2	100	0.00
43	T	Dimethyl Disulfide	50.000	50.555	-1.1	95	0.00
44	I	Chlorobenzene-d5	25.000	25.000	0.0	101	0.00
45	S	Toluene-d8	25.000	25.233	-0.9	98	0.00
46	C	Toluene	50.000	52.661	-5.3	99	0.00
47	T	Ethyl Methacrylate	50.000	51.726	-3.5	98	0.00
48	T	trans-1,3-Dichloropropene	50.000	55.787	-11.6	102	0.00
49	T	1,1,2-Trichloroethane	50.000	52.184	-4.4	98	0.00
	T	2-Hexanone	50.000	53.827	-7.7	103	0.00
	T	1,3-Dichloropropane	50.000	52.400	-4.8	100	0.00
52	T	Tetrachloroethene	50.000	54.070	-8.1	97	0.00

(#) = Out of Range

Data File : C:\MSDCHEM\1\DATA\050103\11M14677.D Vial: 2
Acq On : 1 May 2003 6:10 Operator: CMS
Sample : WG139455-02 50 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10906 Multiplr: 1.00
MS Integration Params: rteint.p

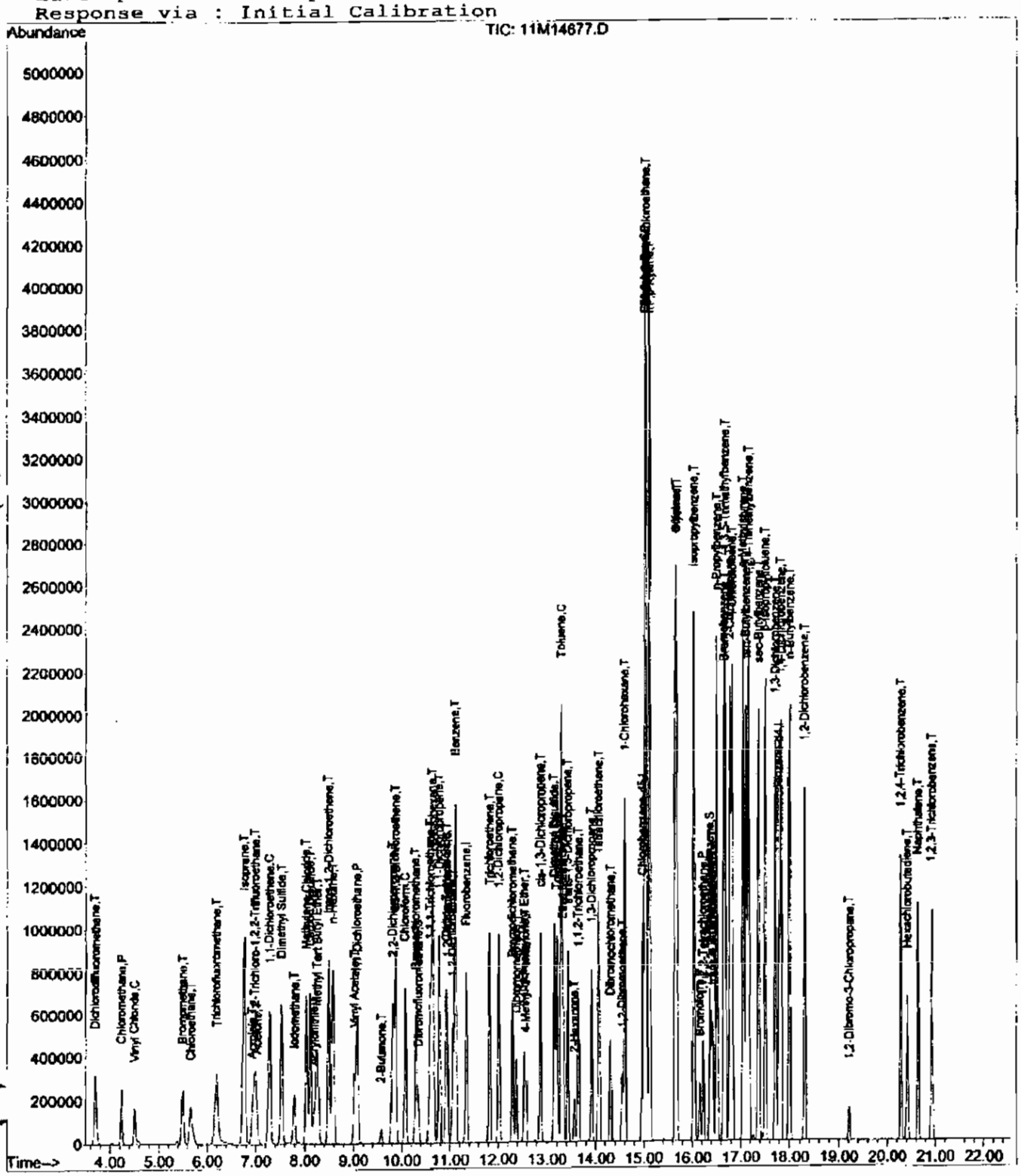
Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
53	T	Dibromochloromethane	50.000	57.477	-15.0	100	0.00
54	T	1,2-Dibromoethane	50.000	54.345	-8.7	101	0.00
55	T	1-Chlorohexane	50.000	49.195	1.6	92	0.00
56	P	Chlorobenzene	50.000	51.438	-2.9	98	0.00
57	T	1,1,1,2-Tetrachloroethane	50.000	57.542	-15.1	103	0.00
58	C	Ethylbenzene	50.000	53.573	-7.1	99	0.00
59	T	m-,p-Xylene	100.000	106.384	-6.4	97	0.00
60	T	o-Xylene	50.000	53.332	-6.7	98	0.00
61	T	Styrene	50.000	53.608	-7.2	96	0.00
62	P	Bromoform	50.000	54.826	-9.7	99	0.00
63	T	Isopropylbenzene	50.000	52.332	-4.7	95	0.00
64	I	1,4-Dichlorobenzene-d4	25.000	25.000	0.0	101	0.00
65	P	1,1,2,2-Tetrachloroethane	50.000	53.500	-7.0	102	0.00
66	S	p-Bromofluorobenzene	25.000	25.292	-1.2	99	0.00
67	T	1,2,3-Trichloropropane	50.000	55.268	-10.5	104	0.00
68	T	trans-1,4-Dichloro-2-Butene	50.000	55.515	-11.0	107	0.00
69	T	n-Propylbenzene	50.000	52.000	-4.0	94	0.00
70	T	Bromobenzene	50.000	52.610	-5.2	98	0.00
71	T	1,3,5-Trimethylbenzene	50.000	52.006	-4.0	94	0.00
72	T	2-Chlorotoluene	50.000	50.817	-1.6	94	0.00
73	T	4-Chlorotoluene	50.000	48.911	2.2	89	0.00
74	T	a-Methylstyrene	50.000	49.213	1.6	94	0.00
75	T	tert-Butylbenzene	50.000	42.861	14.3	74	0.00
76	T	1,2,4-Trimethylbenzene	50.000	51.914	-3.8	95	0.00
77	T	sec-Butylbenzene	50.000	45.796	8.4	86	0.00
78	T	p-Isopropyltoluene	50.000	46.388	7.2	87	0.00
79	T	1,3-Dichlorobenzene	50.000	50.936	-1.9	97	0.00
80	T	1,4-Dichlorobenzene	50.000	50.388	-0.8	96	0.00
81	T	n-Butylbenzene	50.000	43.870	12.3	83	0.00
82	T	1,2-Dichlorobenzene	50.000	50.303	-0.6	97	0.00
83	T	1,2-Dibromo-3-Chloropropane	50.000	53.398	-6.8	102	0.00
84	T	1,2,4-Trichlorobenzene	50.000	46.342	7.3	88	0.00
85	T	Hexachlorobutadiene	50.000	40.689	18.6	79	0.00
86	T	Naphthalene	50.000	52.054	-4.1	99	0.00
87	T	1,2,3-Trichlorobenzene	50.000	47.742	4.5	92	0.00

Data File : C:\MSDchem\1\DATA\050103\11M14677.D Vial: 2
Acq On : 1 May 2003 6:10 Operator: CMS
Sample : WG139455-02 50 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10906 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 1 6:32 2003 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration



Data File : C:\MSDchem\1\DATA\050103\11M14677.D Vial: 2
Acq On : 1 May 2003 6:10 Operator: CMS
Sample : WG139455-02 50 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10906 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 01 06:32:42 2003 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.33	96	946564	25.00 ug/L	0.00
44) Chlorobenzene-d5	14.97	117	705727	25.00 ug/L	0.00
64) 1,4-Dichlorobenzene-d4	17.79	152	354783	25.00 ug/L	0.00
System Monitoring Compounds					
28) Dibromofluoromethane	10.34	111	201963	25.8543 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 103.40%		
33) 1,2-Dichloroethane-d4	10.94	65	215769	26.2023 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 104.80%		
45) Toluene-d8	13.19	98	810494	25.2328 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 100.92%		
66) p-Bromofluorobenzene	16.36	95	331909	25.2924 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 101.16%		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.68	85	562349	55.0668 ug/L	90
3) Chloromethane	4.23	50	366216	53.9924 ug/L	88
4) Vinyl Chloride	4.49	62	235023	54.5917 ug/L #	55
5) Bromomethane	5.49	94	296695	51.2338 ug/L	91
6) Chloroethane	5.66	64	373124	52.5341 ug/L	95
7) Trichlorofluoromethane	6.18	101	767833	57.3234 ug/L	99
8) Isoprene	6.75	67	729417	50.3412 ug/L	95
9) Acrolein	6.92	56	66565	109.3807 ug/L	84
10) 1,1,2-Trichloro-1,2,2-Trif	6.97	101	390856	49.5428 ug/L	87
11) Acetone	7.02	43	80018	56.7586 ug/L #	37
12) 1,1-Dichloroethene	7.28	96	388434	54.0766 ug/L	66
13) Dimethyl Sulfide	7.52	62	527869	49.9401 ug/L	77
14) Iodomethane	7.78	142	401753	47.0378 ug/L	86
15) Methylene Chloride	8.02	84	406041	53.3273 ug/L	93
16) Carbon Disulfide	8.11	76	1358827	52.4437 ug/L #	88
17) Acrylonitrile	8.18	53	113672	54.5074 ug/L #	1
18) Methyl Tert Butyl Ether	8.25	73	823480	50.3177 ug/L #	67
19) trans-1,2-Dichloroethene	8.48	96	442160	55.6552 ug/L	88
20) n-Hexane	8.57	57	689457	46.1779 ug/L #	92
21) Vinyl Acetate	9.01	43	671268	53.7608 ug/L	95
22) 1,1-Dichloroethane	9.06	63	928837	55.4466 ug/L #	77
23) 2-Butanone	9.57	43	113911	55.1833 ug/L #	100
24) 2,2-Dichloropropane	9.81	77	700899	56.0059 ug/L #	62
25) cis-1,2-Dichloroethene	9.87	96	457747	53.4669 ug/L	74
26) Chloroform	10.07	83	773795	56.0905 ug/L	91
27) Bromochloromethane	10.29	128	182746	54.4050 ug/L	66
29) 1,1,1-Trichloroethane	10.58	97	687771	59.4603 ug/L #	85
30) Cyclohexane	10.64	56	974047	49.0393 ug/L #	96
31) 1,1-Dichloropropene	10.77	75	612359	54.9041 ug/L #	23
32) Carbon Tetrachloride	10.92	117	582955	58.4007 ug/L #	91
34) 1,2-Dichloroethane	11.05	62	599749	56.3496 ug/L #	72
35) Benzene	11.11	78	1784048	53.2879 ug/L	90
36) Trichloroethene	11.82	130	423586	54.3930 ug/L	88
37) 1,2-Dichloropropane	12.01	63	485731	52.4149 ug/L	86
38) Bromodichloromethane	12.29	83	545110	56.4935 ug/L #	86
39) Dibromomethane	12.37	93	195180	54.8386 ug/L	85
40) 2-Chloroethyl Vinyl Ether	12.54	63	197776	53.6652 ug/L #	100
41) 4-Methyl-2-Pentanone	12.57	58	97400	51.2987 ug/L #	100
42) cis-1,3-Dichloropropene	12.87	75	659086	55.0927 ug/L #	87

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

Data File : C:\MSDchem\1\DATA\050103\11M14677.D Vial: 2
Acq On : 1 May 2003 6:10 Operator: CMS
Sample : WG139455-02 50 PPB STD 8260 Inst : HPMS11
Misc : 1,1 SV10906 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 01 06:32:42 2003 Quant Results File: 8260WT.RES

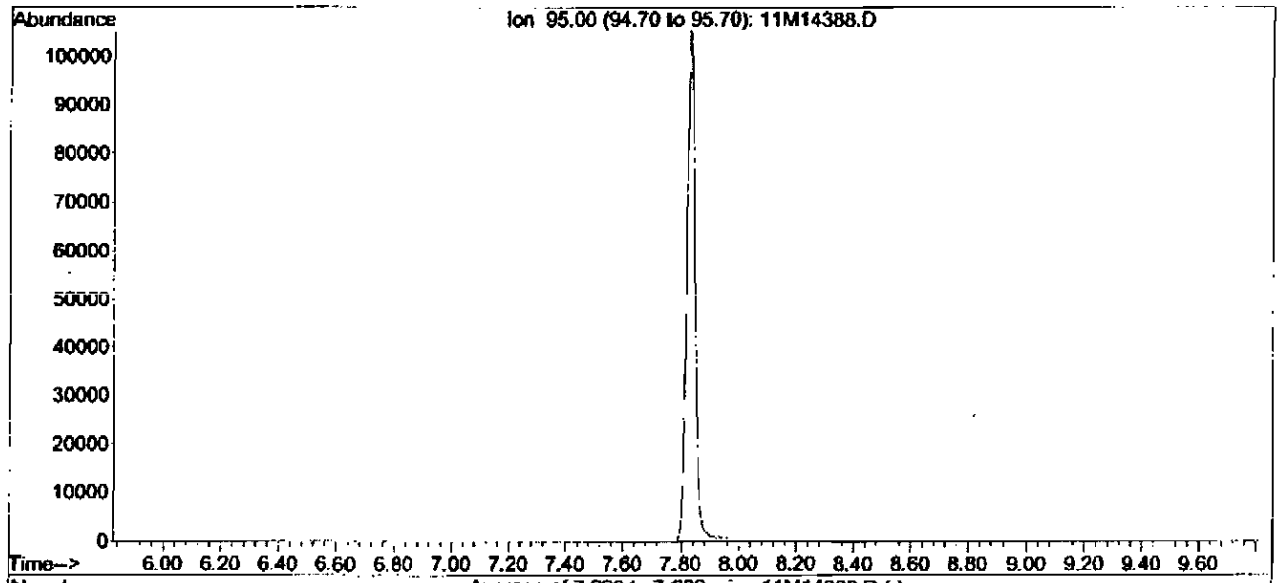
Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

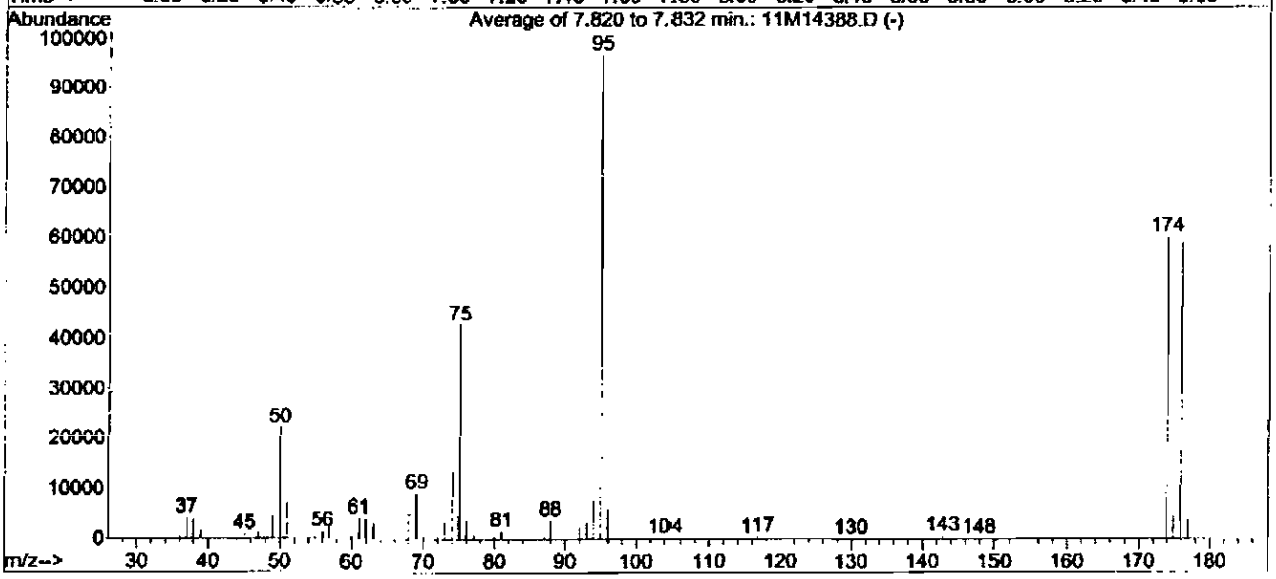
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43) Dimethyl Disulfide	13.14	79	347269	50.5546 ug/L	96
46) Toluene	13.29	91	1890623	52.6606 ug/L	95
47) Ethyl Methacrylate	13.33	69	361796	51.7256 ug/L #	100
48) trans-1,3-Dichloropropene	13.43	75	559537	55.7865 ug/L #	53
49) 1,1,2-Trichloroethane	13.64	97	278782	52.1841 ug/L	84
50) 2-Hexanone	13.56	43	182937	53.8269 ug/L #	1
51) 1,3-Dichloropropane	13.92	76	535754	52.4000 ug/L	97
52) Tetrachloroethene	14.07	164	333089	54.0703 ug/L	88
53) Dibromochloromethane	14.31	129	328709	57.4773 ug/L	86
54) 1,2-Dibromoethane	14.55	107	277586	54.3447 ug/L	90
55) 1-Chlorohexane	14.60	91	611642	49.1948 ug/L	92
56) Chlorobenzene	15.02	112	1190868	51.4377 ug/L	98
57) 1,1,1,2-Tetrachloroethane	15.04	131	377918	57.5418 ug/L	92
58) Ethylbenzene	15.03	106	673213	53.5728 ug/L	77
59) m-,p-Xylene	15.12	106	1679590	106.3839 ug/L	86
60) o-Xylene	15.65	106	846487	53.3323 ug/L	82
61) Styrene	15.68	104	1369609	53.6085 ug/L	87
62) Bromoform	16.15	173	159954	54.8263 ug/L	81
63) Isopropylbenzene	16.04	105	2117214	52.3320 ug/L	96
65) 1,1,2,2-Tetrachloroethane	16.22	83	312378	53.4998 ug/L	85
67) 1,2,3-Trichloropropane	16.40	110	93616	55.2683 ug/L	82
68) trans-1,4-Dichloro-2-Buten	16.43	53	119752	55.5154 ug/L #	48
69) n-Propylbenzene	16.50	91	2550277	51.9995 ug/L	91
70) Bromobenzene	16.65	156	455772	52.6103 ug/L	73
71) 1,3,5-Trimethylbenzene	16.68	105	1760921	52.0062 ug/L	94
72) 2-Chlorotoluene	16.78	91	1590867	50.8175 ug/L	95
73) 4-Chlorotoluene	16.82	91	1453248	48.9106 ug/L	93
74) a-Methylstyrene	17.05	118	1016376	49.2126 ug/L	78
75) tert-Butylbenzene	17.11	119	1358559	42.8608 ug/L #	85
76) 1,2,4-Trimethylbenzene	17.17	105	1863035	51.9141 ug/L	93
77) sec-Butylbenzene	17.37	105	2061243	45.7960 ug/L	92
78) p-Isopropyltoluene	17.51	119	1745931	46.3884 ug/L	100
79) 1,3-Dichlorobenzene	17.71	146	983303	50.9362 ug/L	89
80) 1,4-Dichlorobenzene	17.83	146	978221	50.3880 ug/L	79
81) n-Butylbenzene	17.99	91	1535803	43.8698 ug/L #	97
82) 1,2-Dichlorobenzene	18.30	146	860568	50.3029 ug/L	90
83) 1,2-Dibromo-3-Chloropropan	19.21	157	51729	53.3982 ug/L	88
84) 1,2,4-Trichlorobenzene	20.29	180	507934	46.3415 ug/L	91
85) Hexachlorobutadiene	20.42	225	166523	40.6885 ug/L #	71
86) Naphthalene	20.64	128	1095959	52.0539 ug/L #	82
87) 1,2,3-Trichlorobenzene	20.93	180	428761	47.7416 ug/L #	60

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

2.1.1.4 Raw QC Data

Data File : C:\MSDCHEM\1\DATA\041703\11M14388.D Vial: 1
Acq On : 17 Apr 2003 6:32 Operator: CMS
Sample : WG138555-01 BFB 50NG STD 8260 Inst : HPMS11
Misc : 1,1 SV10835 Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11

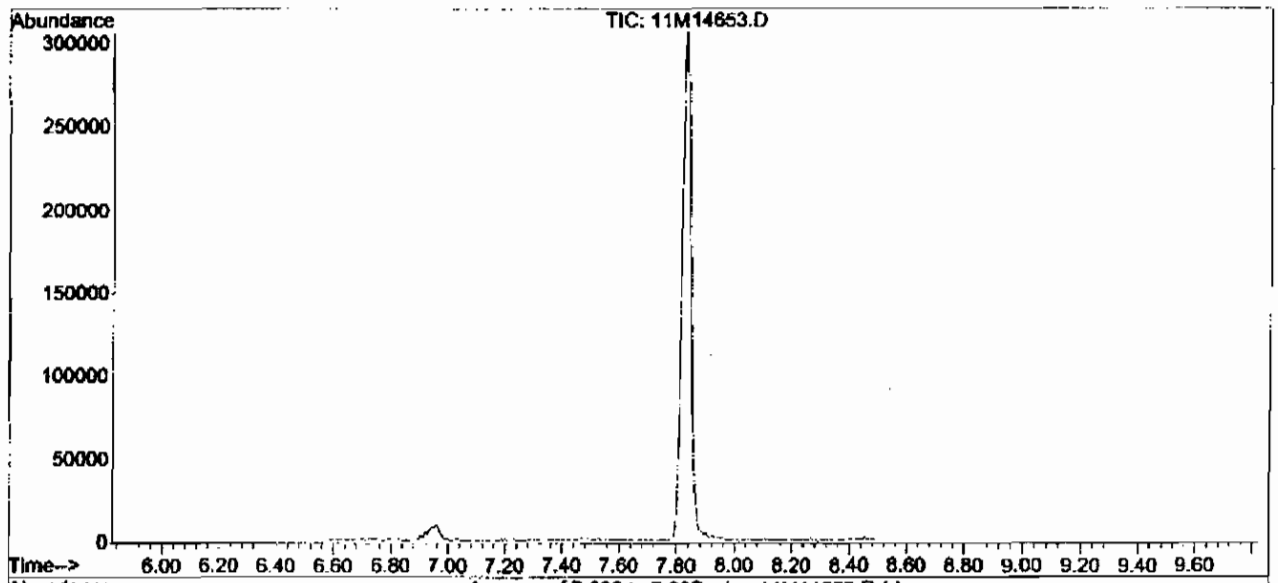


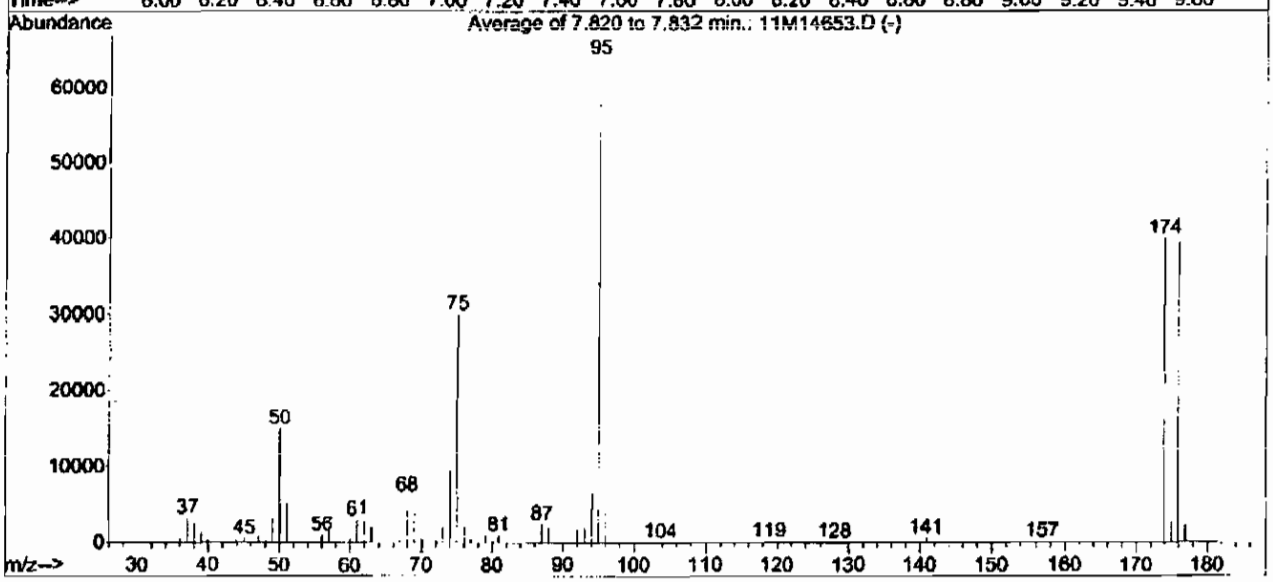


AutoFind: Scans 204, 205, 206; Background Corrected with Scan 196

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.0	22250	PASS
75	95	30	60	44.4	42925	PASS
95	95	100	100	100.0	96738	PASS
96	95	5	9	6.2	6007	PASS
173	174	0.00	2	0.8	484	PASS
174	95	50	100	62.3	60274	PASS
175	174	5	9	7.6	4582	PASS
176	174	95	101	97.9	59024	PASS
177	176	5	9	6.4	3764	PASS

Data File : C:\MSDCHEM\1\DATA\043003\11M14653.D Vial: 2
Acq On : 30 Apr 2003 17:32 Operator: CMS
Sample : WG139441-01 BFB 50NG STD 8260 Inst : HPMS11
Misc : 1,1 SV10835 Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11

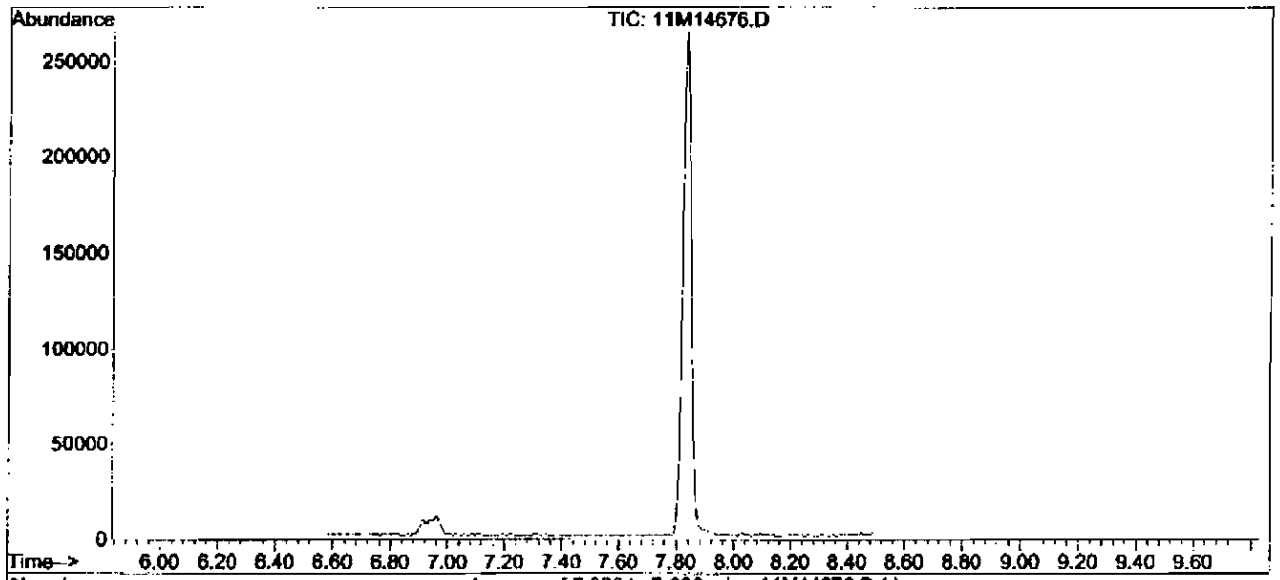


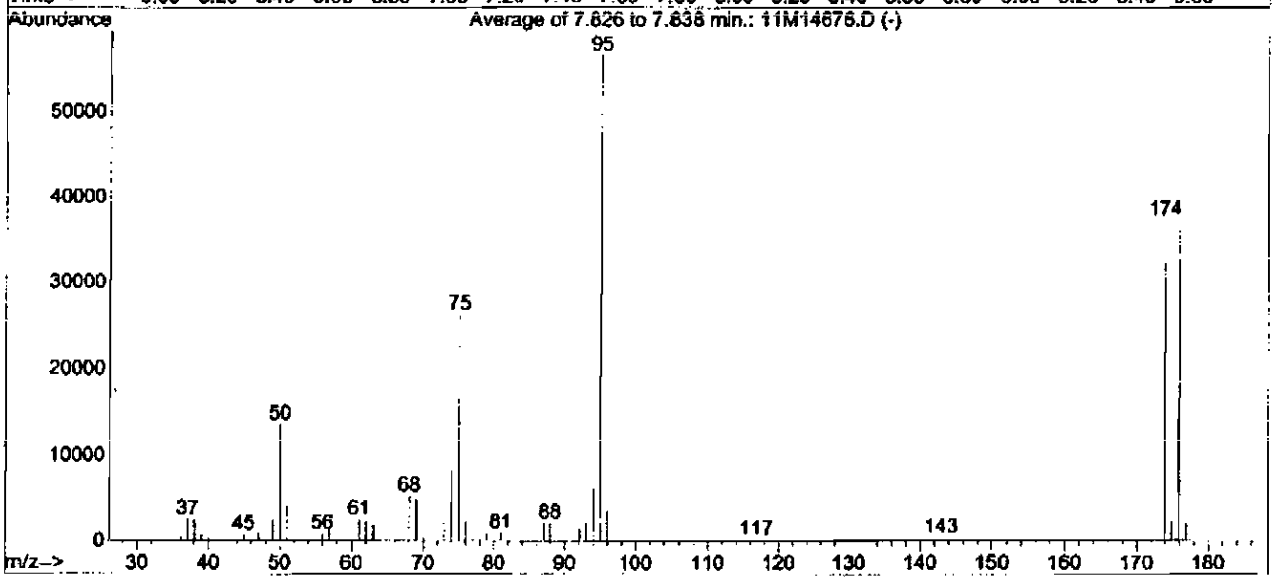


AutoFind: Scans 204, 205, 206; Background Corrected with Scan 196

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.5	15023	PASS
75	95	30	60	46.9	30010	PASS
95	95	100	100	100.0	63930	PASS
96	95	5	9	7.0	4496	PASS
173	174	0.00	2	0.6	254	PASS
174	95	50	100	62.6	40026	PASS
175	174	5	9	7.3	2922	PASS
176	174	95	101	98.6	39464	PASS
177	176	5	9	5.8	2286	PASS

Data File : C:\MSDCHEM\1\DATA\050103\11M14676.D Vial: 1
Acq On : 1 May 2003 5:40 Operator: CMS
Sample : WG139455-01 BFB 50NG STD 8260 Inst : HPMS11
Misc : 1,1 SV10835 Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11



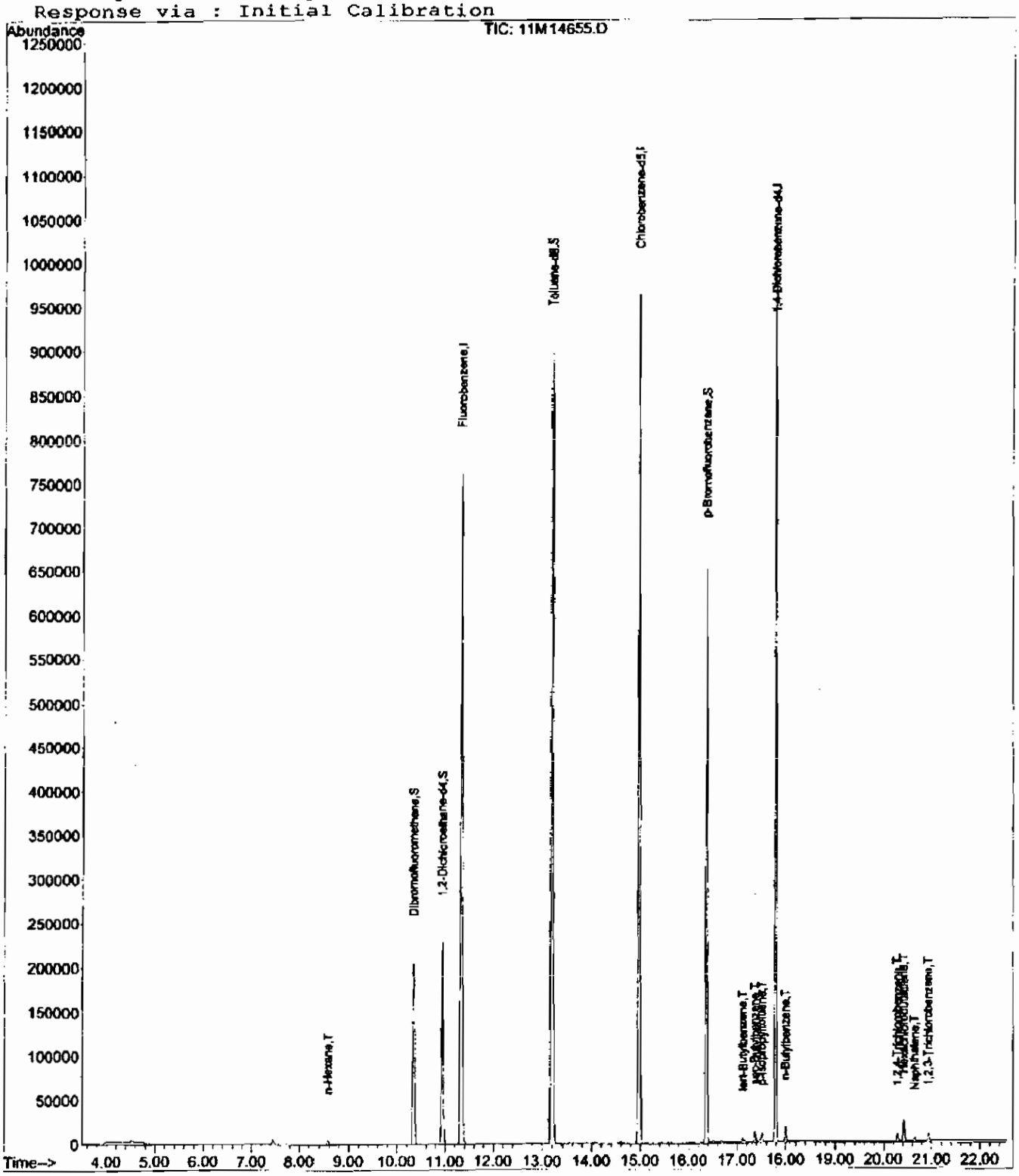


AutoFind: Scans 205, 206, 207; Background Corrected with Scan 196

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.0	13529	PASS
75	95	30	60	46.5	26250	PASS
95	95	100	100	100.0	56461	PASS
96	95	5	9	6.4	3591	PASS
173	174	0.00	2	1.0	379	PASS
174	95	50	100	66.0	37277	PASS
175	174	5	9	6.2	2302	PASS
176	174	95	101	96.8	36077	PASS
177	176	5	9	5.7	2074	PASS

Data File : C:\MSDchem\1\DATA\043003\11M14655.D Vial: 4
Acq On : 30 Apr 2003 18:36 Operator: CMS
Sample : WG139442-01 VBLK0430 BLANK 8260 Inst : HPMS11
Misc : 1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 30 18:59 2003 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration



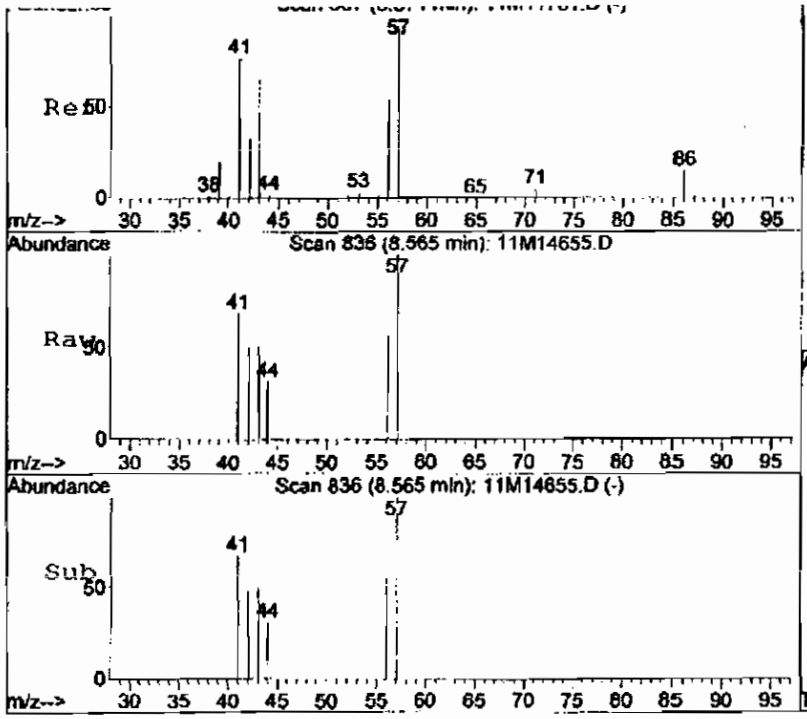
Data File : C:\MSDchem\1\DATA\043003\11M14655.D Vial: 4
Acq On : 30 Apr 2003 18:36 Operator: CMS
Sample : WG139442-01 VBLK0430 BLANK 8260 Inst : HPMS11
Misc : 1,1 Multiplr: 1.00
S Integration Params: rteint.p
Quant Time: Apr 30 18:59:31 2003 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.33	96	909632	25.00 ug/L	0.00
44) Chlorobenzene-d5	14.97	117	663104	25.00 ug/L	0.00
64) 1,4-Dichlorobenzene-d4	17.79	152	332688	25.00 ug/L	0.00
System Monitoring Compounds					
28) Dibromofluoromethane	10.34	111	183921	24.5006 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 98.00%		
33) 1,2-Dichloroethane-d4	10.94	65	205279	25.9405 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 103.76%		
45) Toluene-d8	13.19	98	766896	25.4101 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 101.64%		
66) p-Bromofluorobenzene	16.36	95	307429	24.9828 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 99.92%		

Target Compounds					Qvalue
20) n-Hexane	8.56	57	3431	~~0.2391 ug/L~~ #	71
75) tert-Butylbenzene	17.11	119	5275	~~0.1775 ug/L~~ #	91
77) sec-Butylbenzene	17.36	105	12999	0.3080 ug/L F	97
78) p-Isopropyltoluene	17.50	119	10012	0.2837 ug/L F	98
81) n-Butylbenzene	17.99	91	15923	0.4850 ug/L F#	96
84) 1,2,4-Trichlorobenzene	20.28	180	4483	0.4362 ug/L F	96
85) Hexachlorobutadiene	20.41	225	6611	1.7226 ug/L F#	73
86) Naphthalene	20.64	128	4695	0.2378 ug/L F#	96
87) 1,2,3-Trichlorobenzene	20.93	180	4250	0.5047 ug/L F#	74

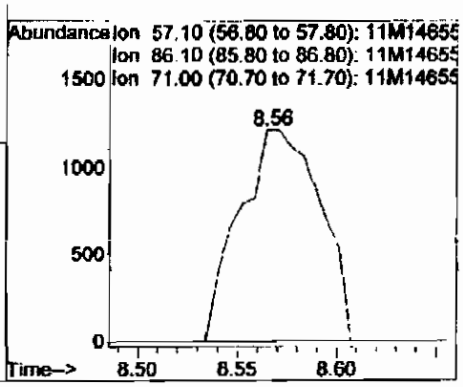
(#) = qualifier out of range (m) = manual integration

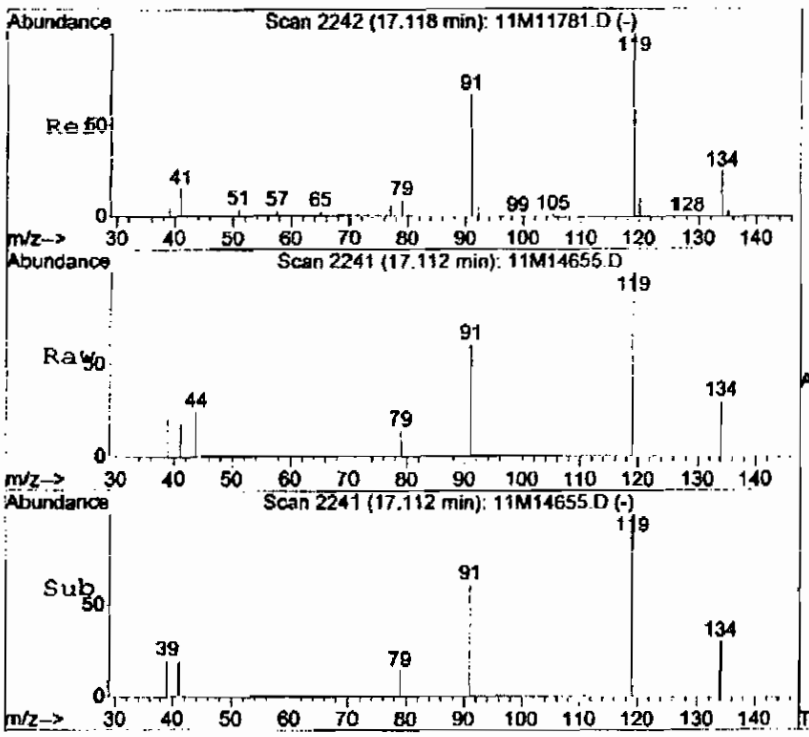


#20
n-Hexane
Concen: 0.24 ug/L
RT: 8.56 min Scan# 836
Delta R.T. -0.01 min
Lab File: 11M14655.D
Acq: 30 Apr 2003 18:36

Tgt Ion: 57 Resp: 3431

Ion	Ratio	Lower	Upper
57	100		
86	0.0	6.7	15.5#
71	0.0	0.0	0.0

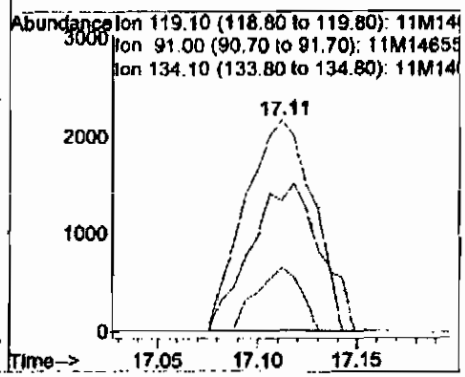


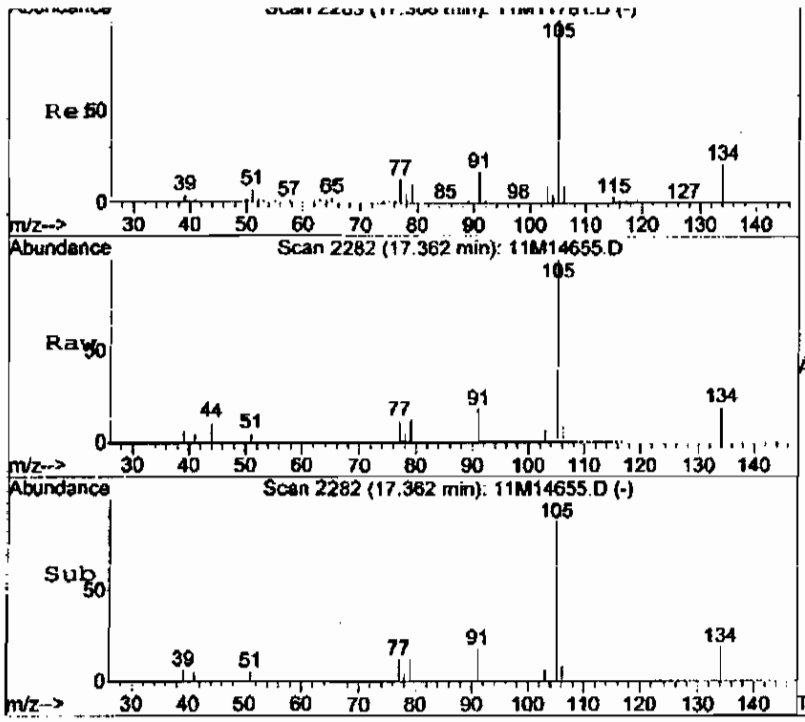


#75
tert-Butylbenzene
Concen: 0.18 ug/L
RT: 17.11 min Scan# 2241
Delta R.T. -0.01 min
Lab File: 11M14655.D
Acq: 30 Apr 2003 18:36

Tgt Ion:119 Resp: 5275

Ion	Ratio	Lower	Upper
119	100		
91	65.3	42.4	98.8
134	19.1	4.7	10.9#

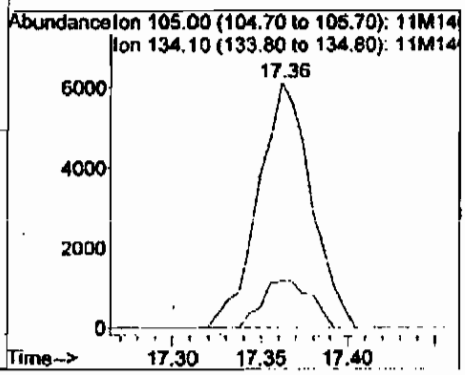


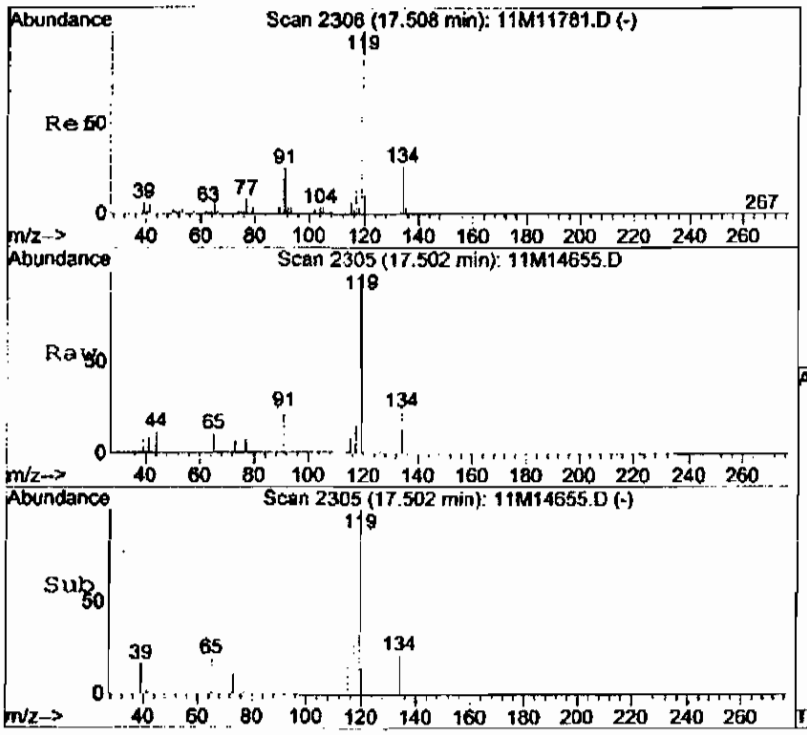


#77
sec-Butylbenzene
Concen: 0.31 ug/L
RT: 17.36 min Scan# 2282
Delta R.T. -0.01 min
Lab File: 11M14655.D
Acq: 30 Apr 2003 18:36

Tgt Ion:105 Resp: 12999

Ion	Ratio	Lower	Upper
105	100		
134	18.0	10.0	23.2

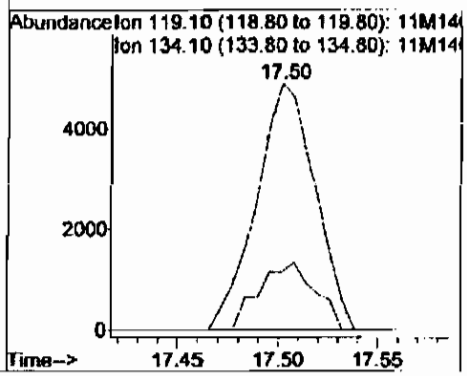


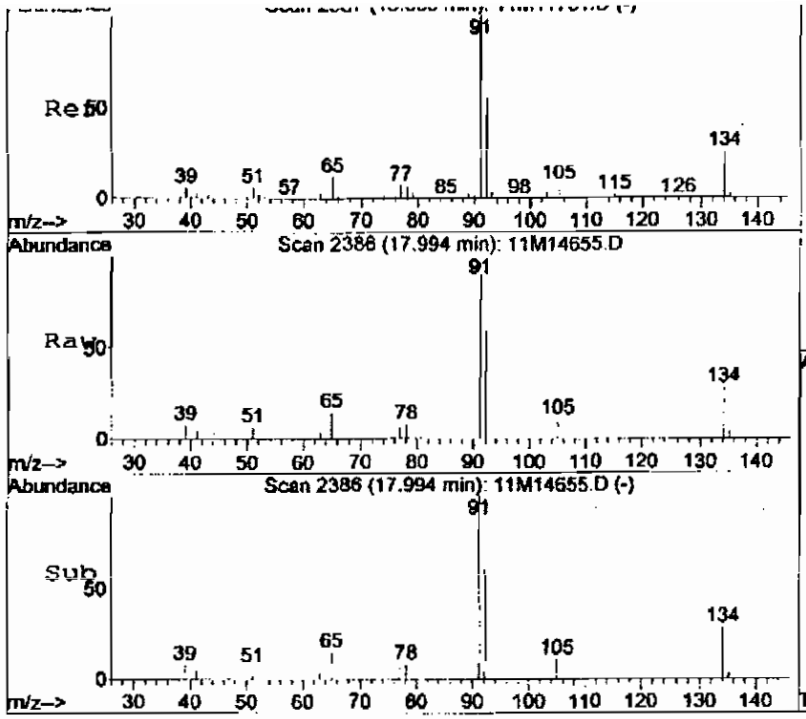


#78
p-Isopropyltoluene
Concen: 0.28 ug/L
RT: 17.50 min Scan# 2305
Delta R.T. -0.01 min
Lab File: 11M14655.D
Acq: 30 Apr 2003 18:36

Tgt Ion:119 Resp: 10012

Ion	Ratio	Lower	Upper
119	100		
134	25.9	16.0	37.4

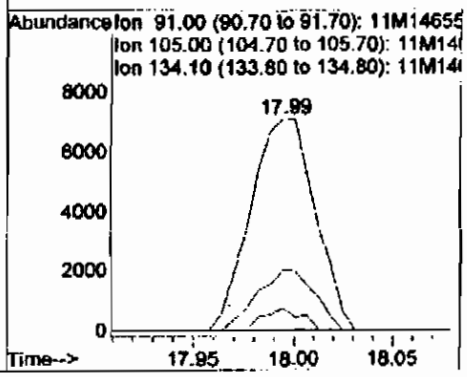


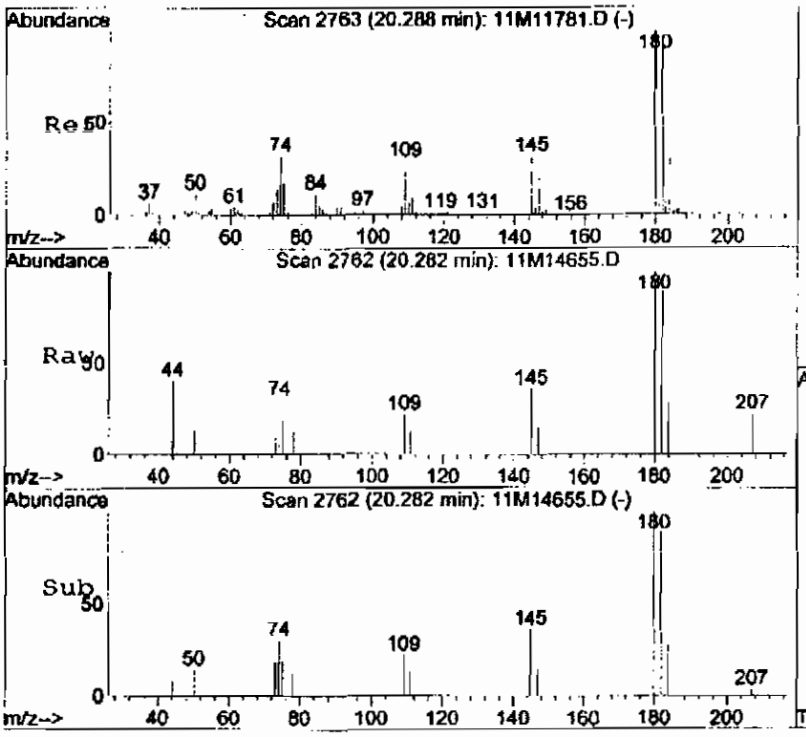


#61
n-Butylbenzene
Concen: 0.49 ug/L
RT: 17.99 min Scan# 2386
Delta R.T. -0.01 min
Lab File: 11M14655.D
Acq: 30 Apr 2003 18:36

Tgt Ion: 91 Resp: 15923

Ion	Ratio	Lower	Upper
91	100		
105	6.0	2.2	5.2#
134	25.0	16.2	37.8

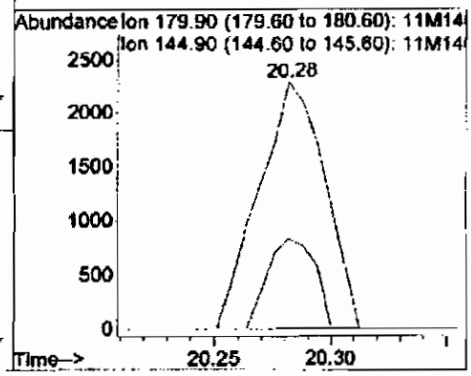


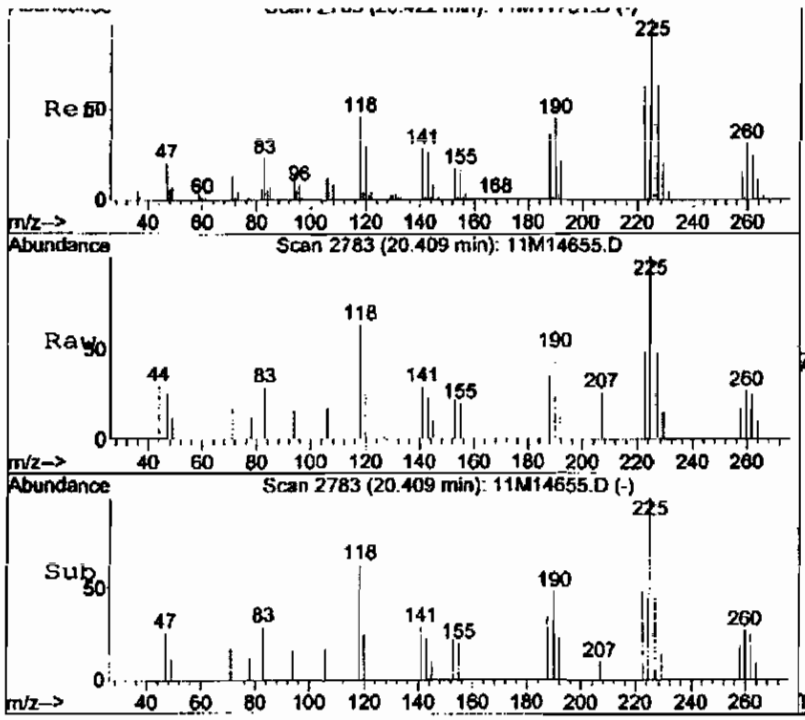


#84
1,2,4-Trichlorobenzene
Concen: 0.44 ug/L
RT: 20.28 min Scan# 2762
Delta R.T. -0.01 min
Lab File: 11M14655.D
Acq: 30 Apr 2003 18:36

Tgt Ion:180 Resp: 4483

Ion	Ratio	Lower	Upper
180	100		
145	26.1	16.8	39.2

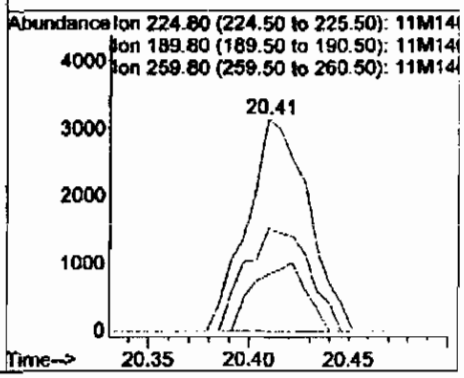


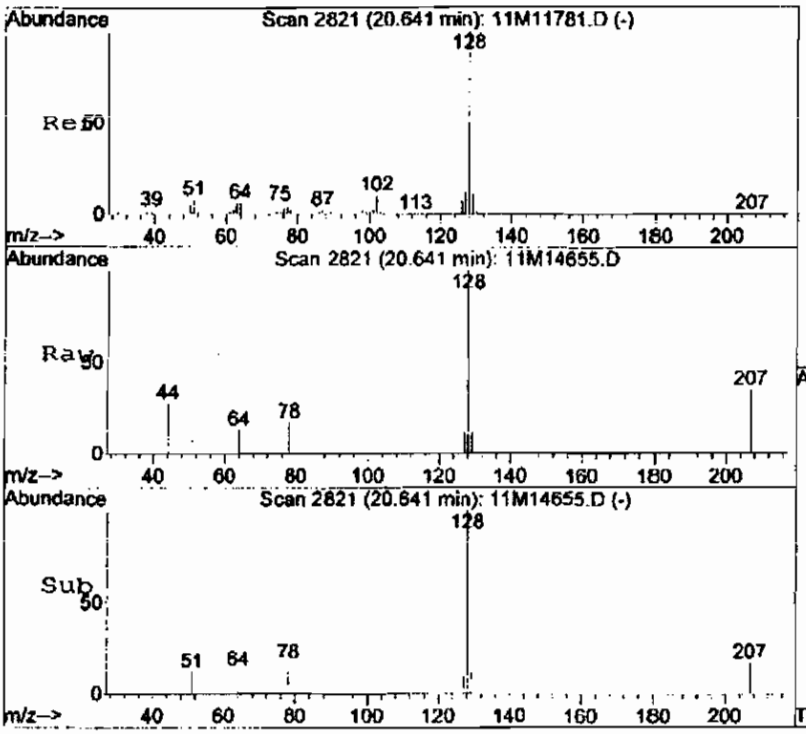


#65
Hexachlorobutadiene
Concen: 1.72 ug/L
RT: 20.41 min Scan# 2783
Delta R.T. -0.01 min
Lab File: 11M14655.D
Acq: 30 Apr 2003 18:36

Tgt Ion:225 Resp: 6611

Ion	Ratio	Lower	Upper
225	100		
190	50.4	22.7	52.9
260	27.1	4.4	10.2#

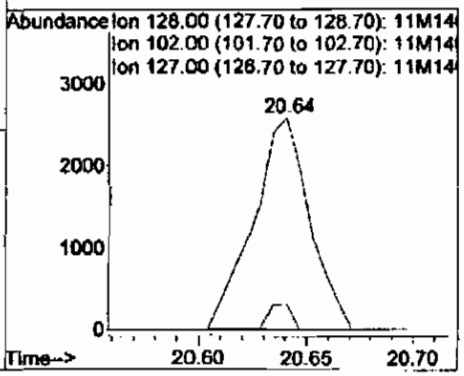


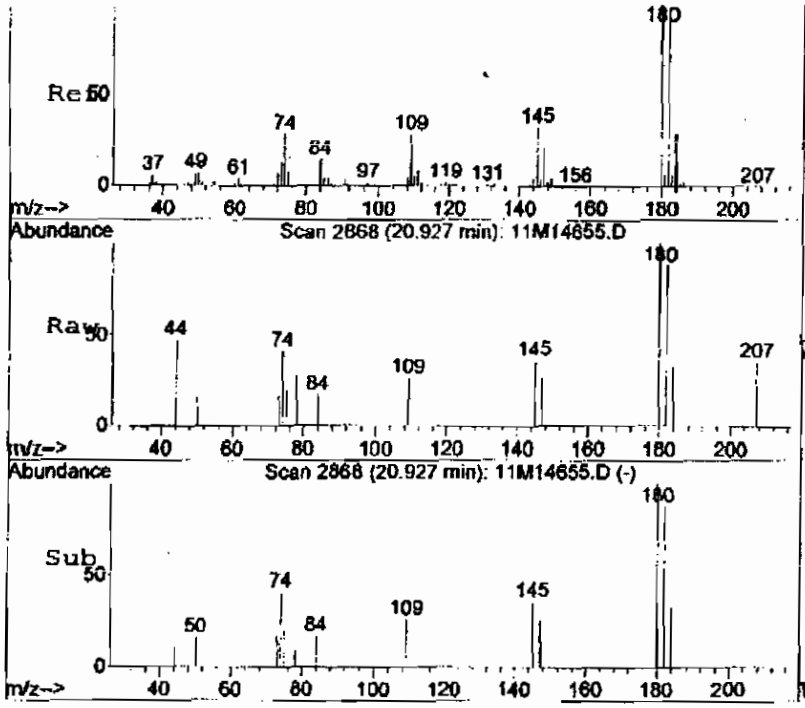


#86
Naphthalene
Concen: 0.24 ug/L
RT: 20.64 min Scan# 2821
Delta R.T. 0.00 min
Lab File: 11M14655.D
Acq: 30 Apr 2003 18:36

Tgt Ion:128 Resp: 4695

Ion	Ratio	Lower	Upper
128	100		
102	0.0	0.0	0.0
127	4.9	5.6	6.8#

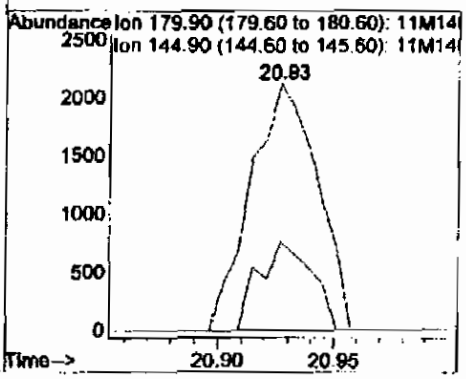




1,2,3-Trichlorobenzene
Concen: 0.50 ug/L
RT: 20.93 min Scan# 2868
Delta R.T. -0.01 min
Lab File: 11M14655.D
Acq: 30 Apr 2003 18:36

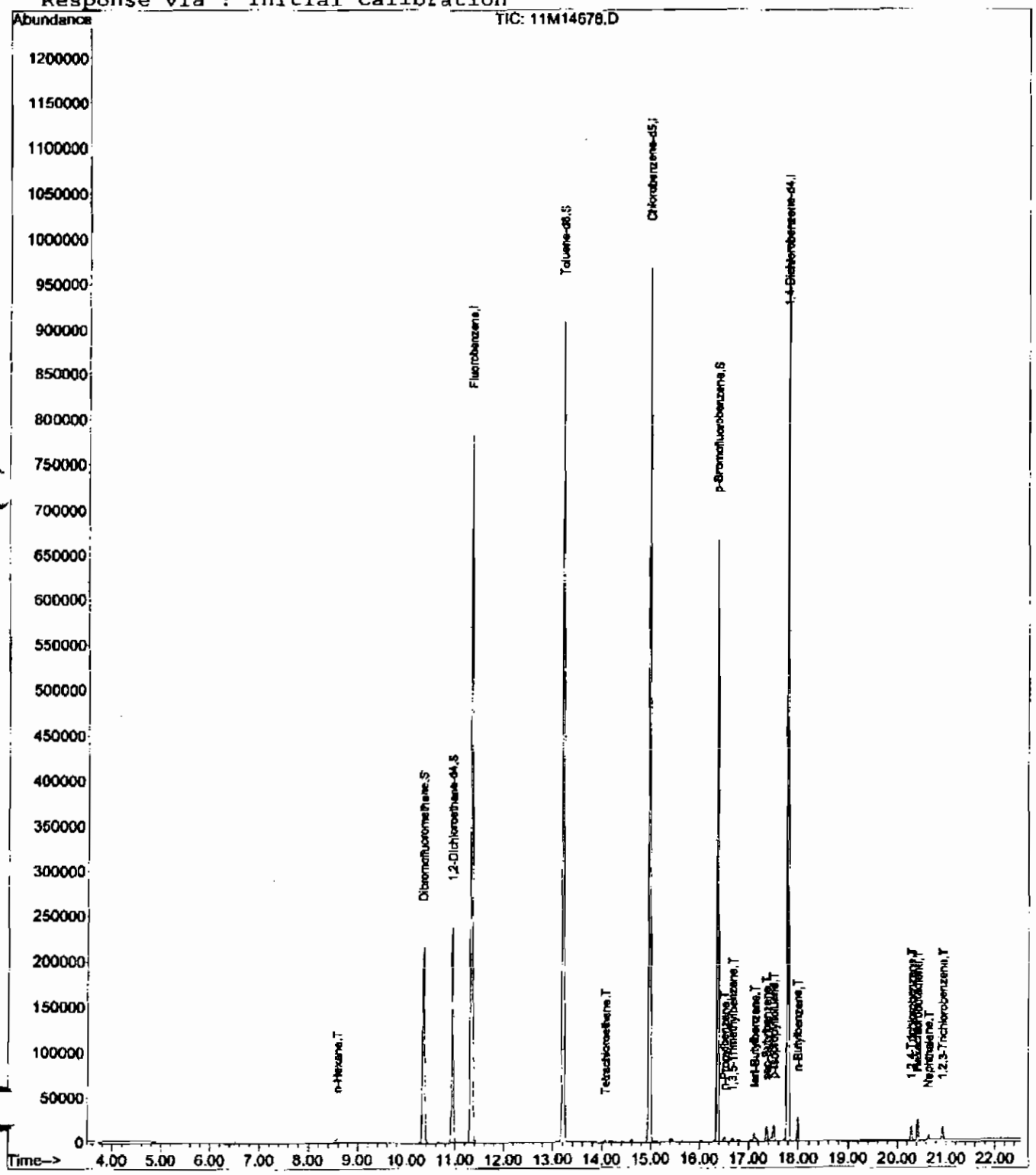
Tgt Ion:180 Resp: 4250

Ion	Ratio	Lower	Upper
180	100		
145	28.8	10.5	24.5#



Data File : C:\MSDchem\1\DATA\050103\11M14678.D Vial: 3
Acq On : 1 May 2003 6:45 Operator: CMS
Sample : WG139456-01 VBLK0501 BLANK 8260 Inst : HPMS11
Misc : 1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 1 7:07 2003 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration



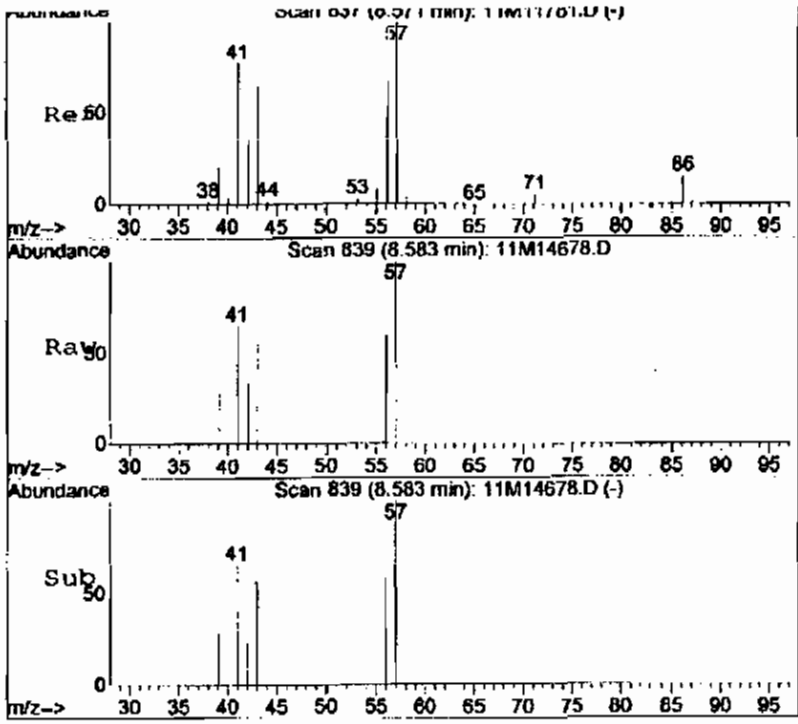
Data File : C:\MSDchem\1\DATA\050103\11M14678.D Vial: 3
Acq On : 1 May 2003 6:45 Operator: CMS
Sample : WG139456-01 VBLK0501 BLANK 8260 Inst : HPMS11
Misc : 1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 01 07:07:58 2003 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.33	96	918979	25.00 ug/L	0.00
44) Chlorobenzene-d5	14.97	117	672361	25.00 ug/L	0.00
64) 1,4-Dichlorobenzene-d4	17.79	152	336764	25.00 ug/L	0.00
System Monitoring Compounds					
28) Dibromofluoromethane	10.34	111	190429	25.1095 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 100.44%		
33) 1,2-Dichloroethane-d4	10.94	65	212644	26.5979 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 106.40%		
45) Toluene-d8	13.19	98	779010	25.4561 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 101.84%		
66) p-Bromofluorobenzene	16.36	95	309529	24.8490 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 99.40%		

Target Compounds					Qvalue
20) n-Hexane	8.58	57	3871	0.2671 ug/L #	71
52) Tetrachloroethene	14.08	164	729	0.1242 ug/L	67
69) n-Propylbenzene	16.51	91	6150	0.1321 ug/L F	96
71) 1,3,5-Trimethylbenzene	16.68	105	4303	0.1339 ug/L	99
75) tert-Butylbenzene	17.11	119	7424	0.2467 ug/L #	95
77) sec-Butylbenzene	17.36	105	18330	0.4290 ug/L F	94
78) p-Isopropyltoluene	17.51	119	14515	0.4063 ug/L F	95
81) n-Butylbenzene	17.99	91	20674	0.6221 ug/L F#	95
84) 1,2,4-Trichlorobenzene	20.29	180	7257	0.6975 ug/L F	95
85) Hexachlorobutadiene	20.42	225	6695	1.7234 ug/L F#	71
86) Naphthalene	20.64	128	6312	0.3158 ug/L F#	90
87) 1,2,3-Trichlorobenzene	20.93	180	6519	0.7647 ug/L F#	57

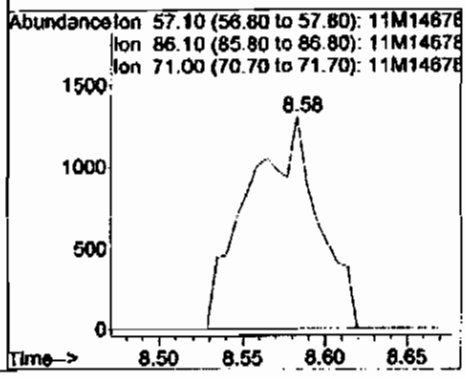
(#) = qualifier out of range (m) = manual integration

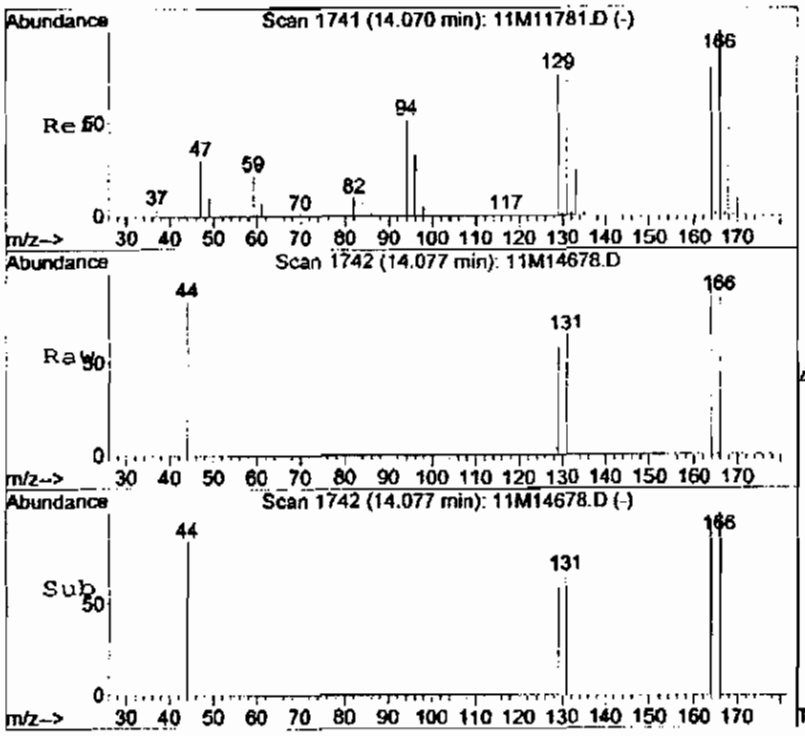


#20
n-Hexane
Concen: 0.27 ug/L
RT: 8.58 min Scan# 839
Delta R.T. 0.01 min
Lab File: 11M14678.D
Acq: 1 May 2003 6:45

Tgt Ion: 57 Resp: 3871

Ion	Ratio	Lower	Upper
57	100		
86	0.0	6.7	15.5#
71	0.0	0.0	0.0

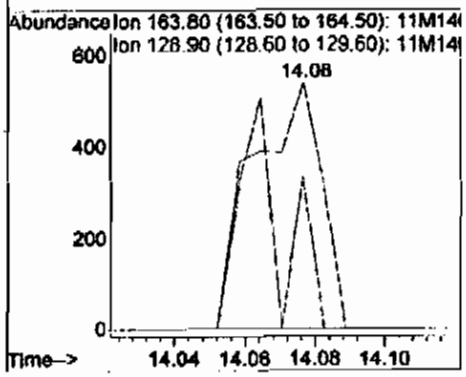


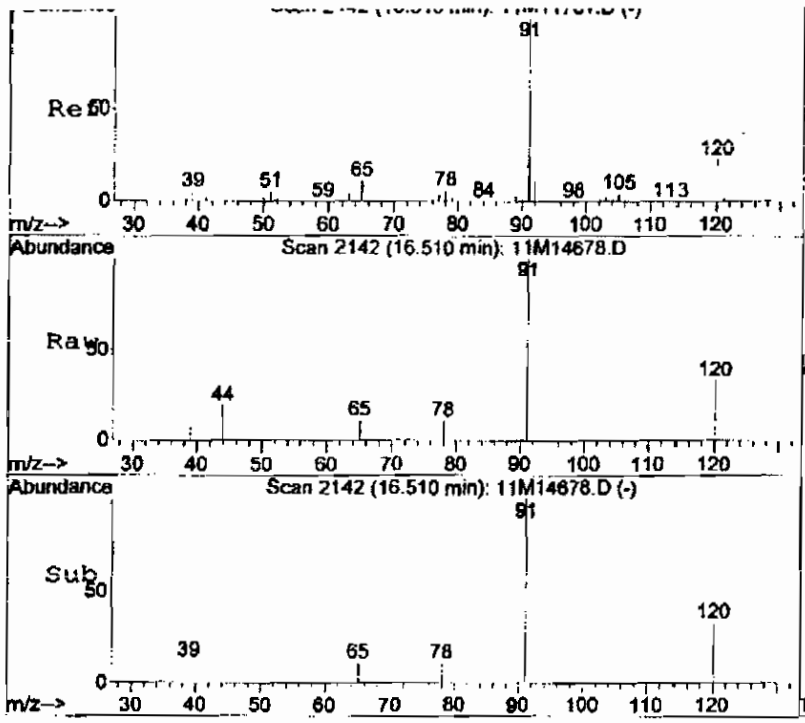


#52
Tetrachloroethene
Concen: 0.12 ug/L
RT: 14.08 min Scan# 1742
Delta R.T. 0.01 min
Lab File: 11M14678.D
Acq: 1 May 2003 6:45

Tgt Ion:164 Resp: 729

Ion	Ratio	Lower	Upper
164	100		
129	58.3	53.8	125.4

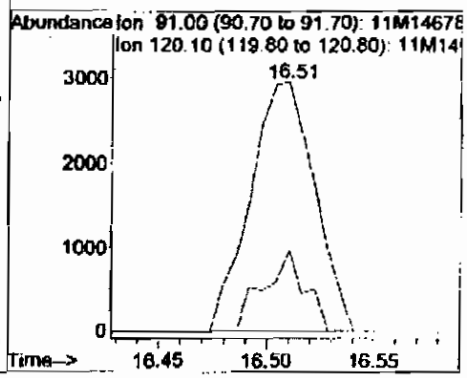


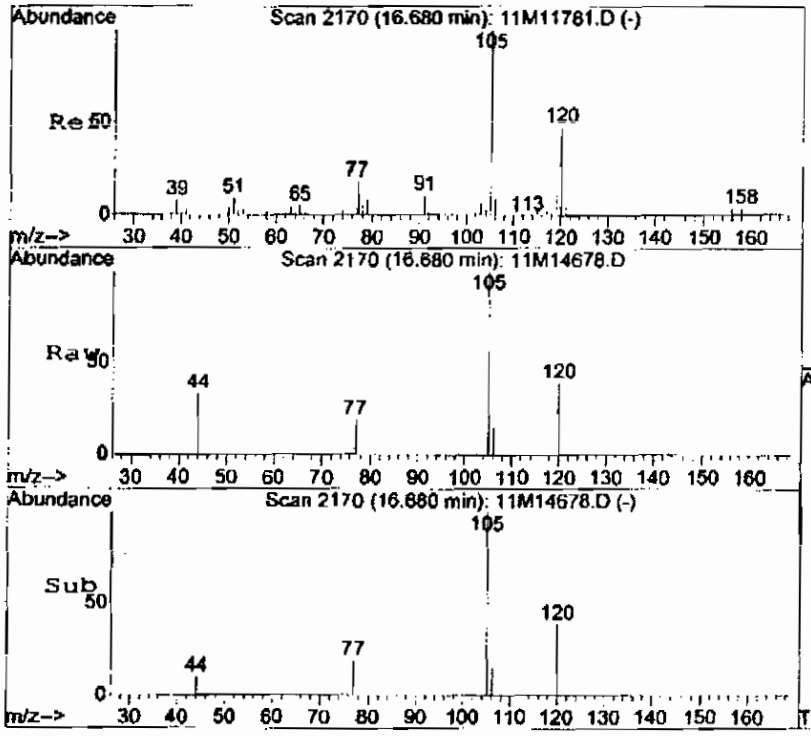


#69
n-Propylbenzene
Concen: 0.13 ug/L
RT: 16.51 min Scan# 2142
Delta R.T. -0.00 min
Lab File: 11M14678.D
Acq: 1 May 2003 6:45

Tgt Ion: 91 Resp: 6150

Ion	Ratio	Lower	Upper
91	100		
120	21.2	11.6	27.0

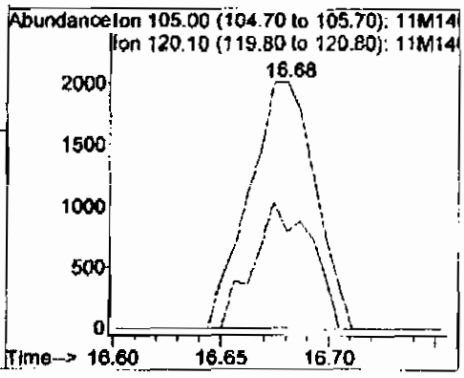


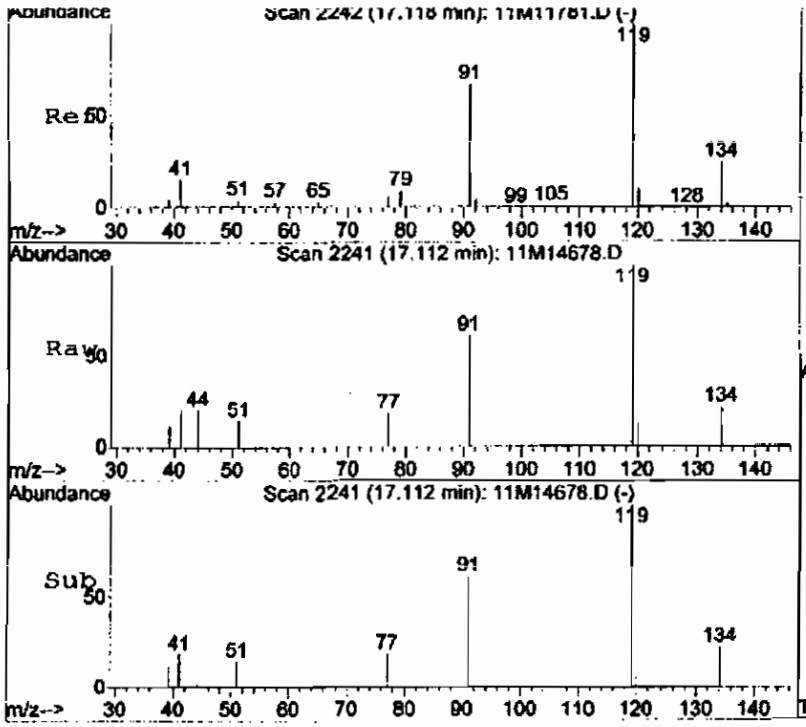


#71
1,3,5-Trimethylbenzene
Concen: 0.13 ug/L
RT: 16.68 min Scan# 2170
Delta R.T. 0.00 min
Lab File: 11M14678.D
Acq: 1 May 2003 6:45

Tgt Ion:105 Resp: 4303

Ion	Ratio	Lower	Upper
105	100		
120	44.7	27.4	63.8

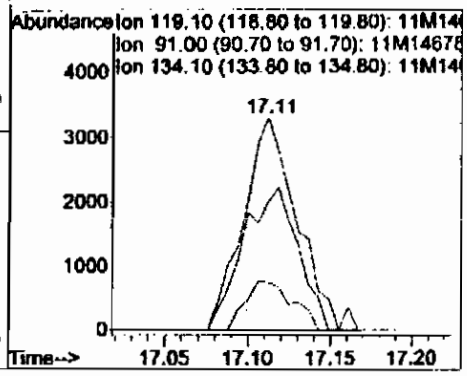


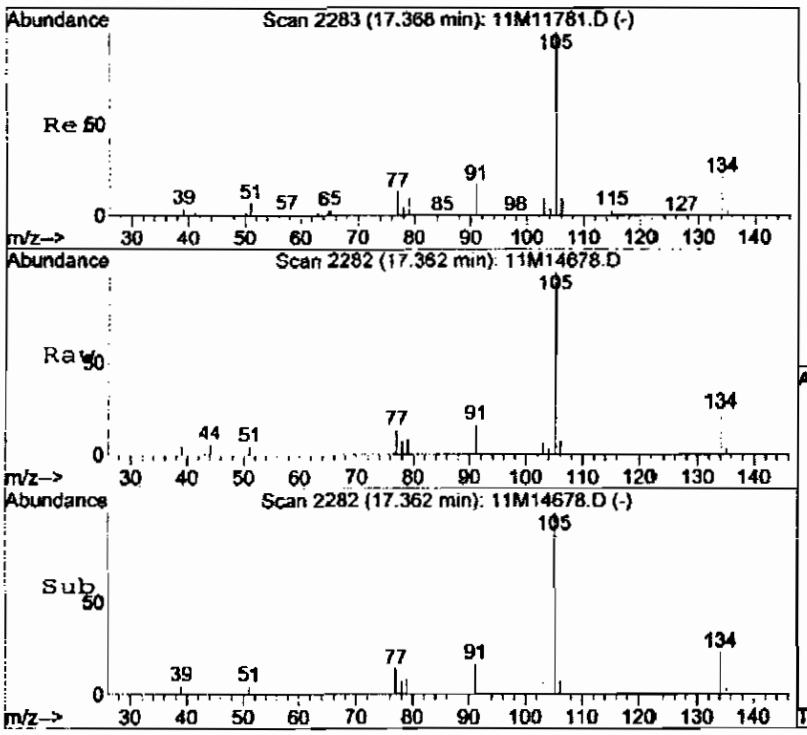


#75
tert-Butylbenzene
Concen: 0.25 ug/L
RT: 17.11 min Scan# 2241
Delta R.T. -0.01 min
Lab File: 11M14678.D
Acq: 1 May 2003 6:45

Tgt Ion:119 Resp: 7424

Ion	Ratio	Lower	Upper
119	100		
91	69.0	42.4	98.8
134	20.0	4.7	10.9#

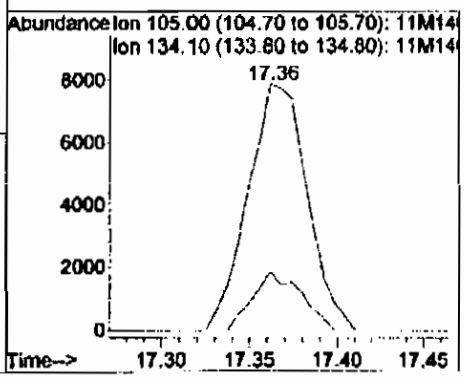


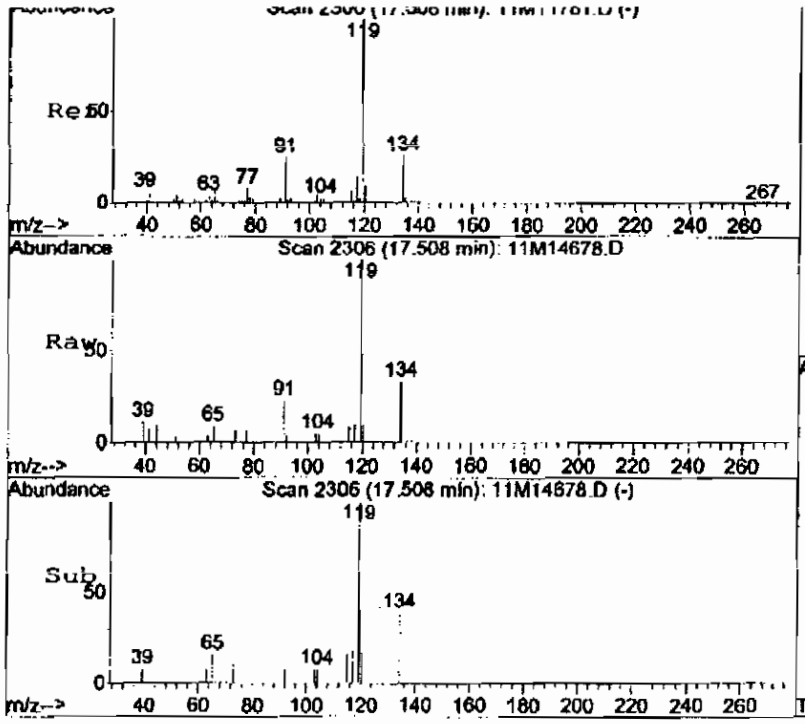


#77
sec-Butylbenzene
Concen: 0.43 ug/L
RT: 17.36 min Scan# 2282
Delta R.T. -0.01 min
Lab File: 11M14678.D
Acq: 1 May 2003 6:45

Tgt Ion:105 Resp: 18330

Ion	Ratio	Lower	Upper
105	100		
134	19.2	10.0	23.2

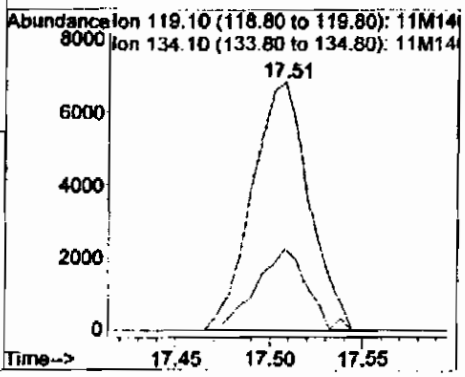


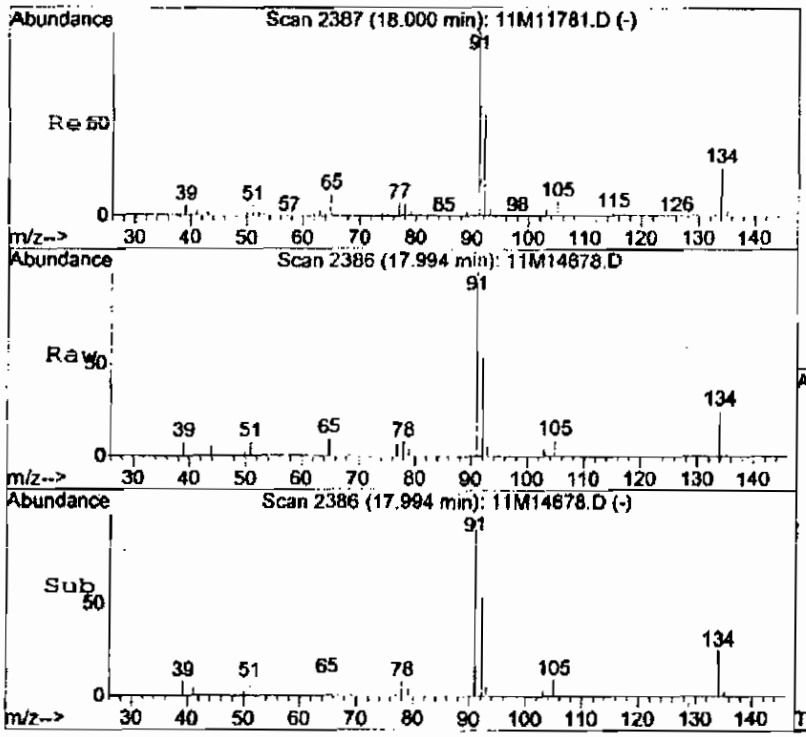


#78
p-Isopropyltoluene
Concen: 0.41 ug/L
RT: 17.51 min Scan# 2306
Delta R.T. 0.00 min
Lab File: 11M14678.D
Acq: 1 May 2003 6:45

Tgt Ion:119 Resp: 14515

Ion	Ratio	Lower	Upper
119	100		
134	29.1	16.0	37.4

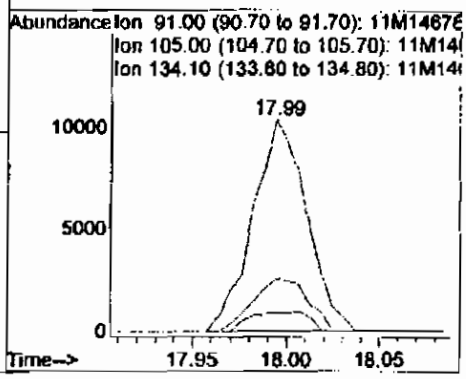


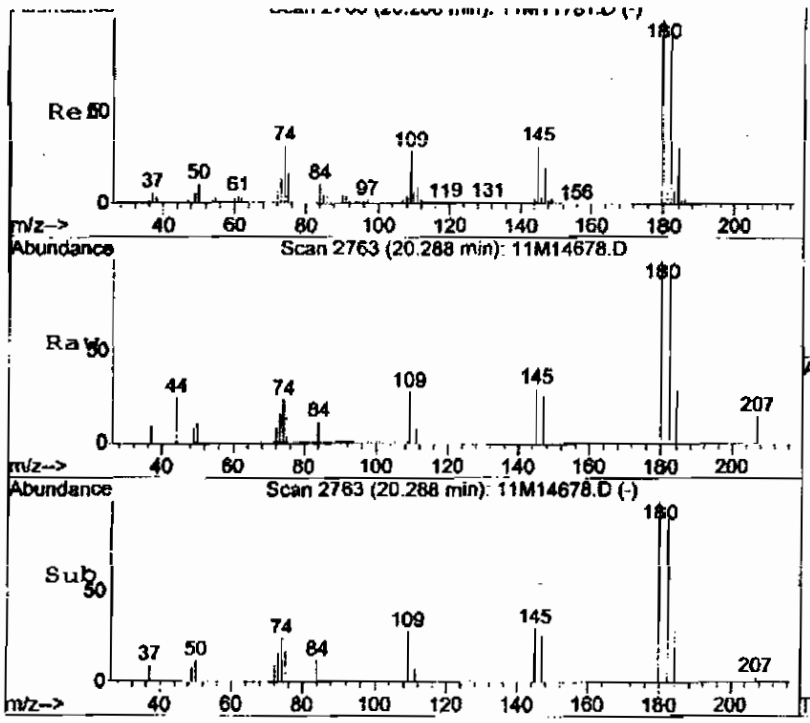


#81
n-Butylbenzene
Concen: 0.62 ug/L
RT: 17.99 min Scan# 2386
Delta R.T. -0.01 min
Lab File: 11M14678.D
Acq: 1 May 2003 6:45

Tgt Ion: 91 Resp: 20674

Ion	Ratio	Lower	Upper
91	100		
105	9.6	2.2	5.2#
134	25.1	16.2	37.8

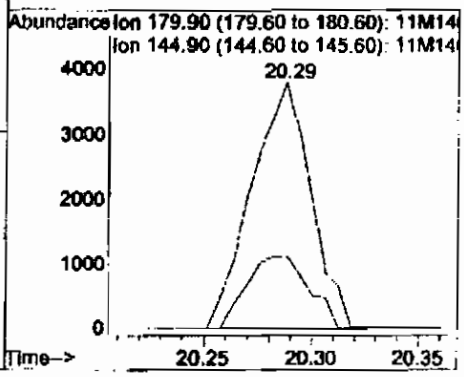


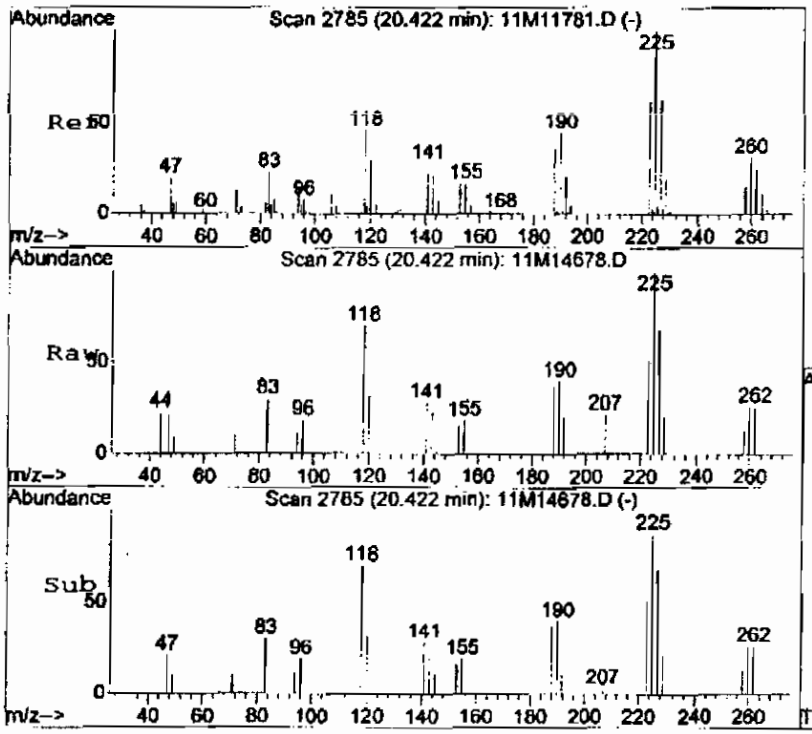


#84
1,2,4-Trichlorobenzene
Concen: 0.70 ug/L
RT: 20.29 min Scan# 2763
Delta R.T. 0.00 min
Lab File: 11M14678.D
Acq: 1 May 2003 6:45

Tgt Ion:180 Resp: 7257

Ion	Ratio	Lower	Upper
180	100		
145	30.8	16.8	39.2

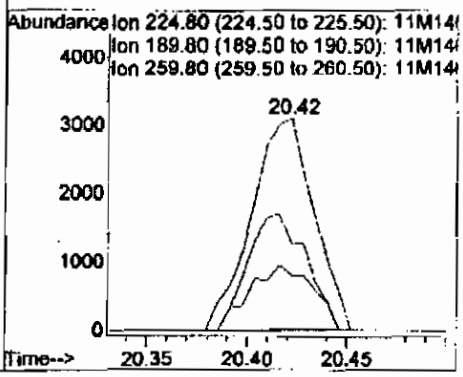


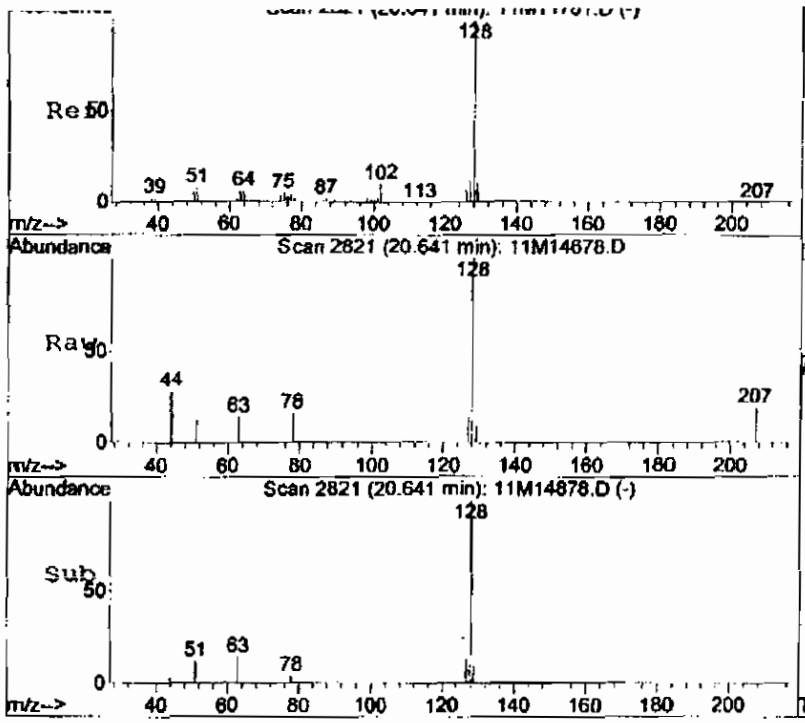


#85
Hexachlorobutadiene
Concen: 1.72 ug/L
RT: 20.42 min Scan# 2785
Delta R.T. 0.00 min
Lab File: 11M14678.D
Acq: 1 May 2003 6:45

Tgt Ion:225 Resp: 6695

Ion	Ratio	Lower	Upper
225	100		
190	50.9	22.7	52.9
260	30.5	4.4	10.2#

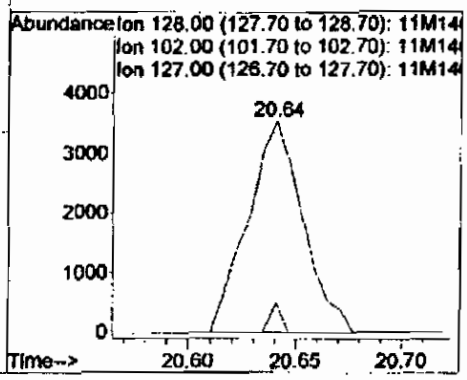


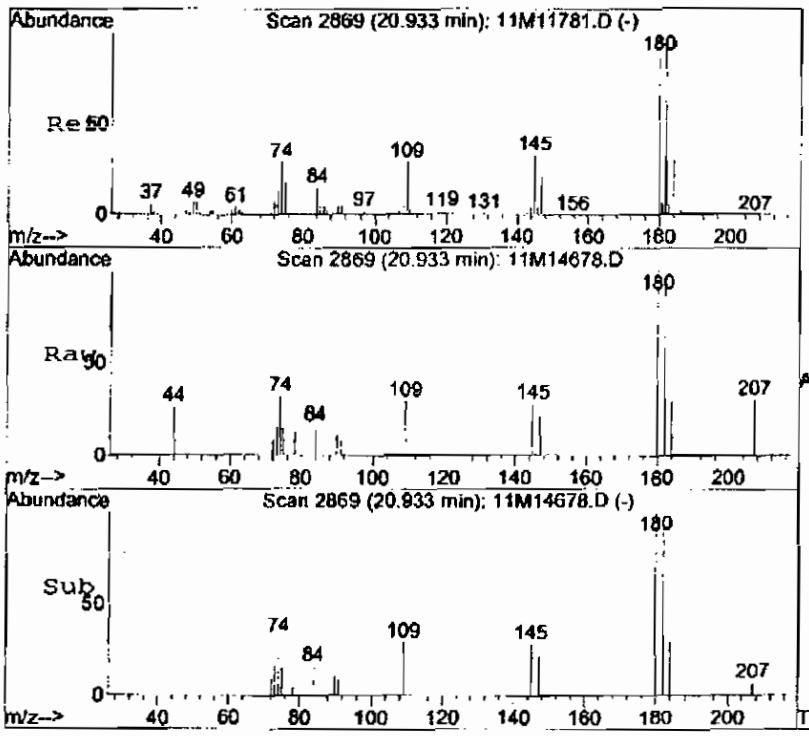


#86
Naphthalene
Concen: 0.32 ug/L
RT: 20.64 min Scan# 2821
Delta R.T. 0.00 min
Lab File: 11M14678.D
Acq: 1 May 2003 6:45

Tgt Ion:128 Resp: 6312

Ion	Ratio	Lower	Upper
128	100		
102	0.0	0.0	0.0
127	2.9	5.6	6.8#

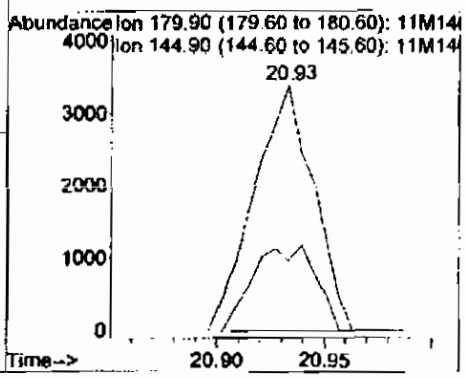




#87
1,2,3-Trichlorobenzene
Concen: 0.76 ug/L
RT: 20.93 min Scan# 2869
Delta R.T. 0.00 min
Lab File: 11M14678.D
Acq: 1 May 2003 6:45

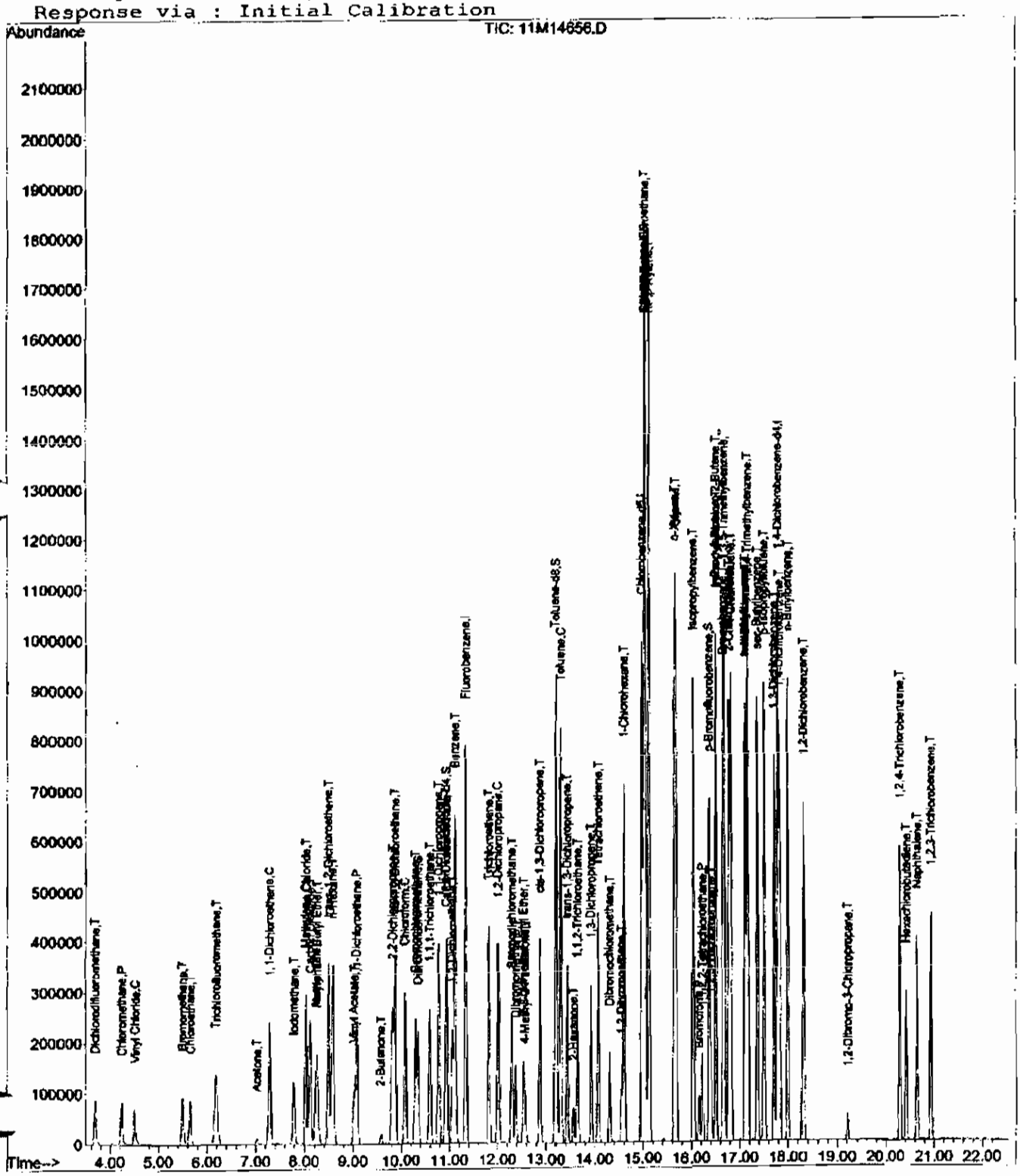
Tgt Ion:180 Resp: 6519

Ion	Ratio	Lower	Upper
180	100		
145	36.2	10.5	24.5#



Data File : C:\MSDchem\1\DATA\043003\11M14656.D Vial: 5
Acq On : 30 Apr 2003 19:07 Operator: CMS
Sample : WG139442-02 20 PPB LCS STD 8260 Inst : HPMS11
Misc : 1,1 SV10847 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 30 19:30 2003 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration



Data File : C:\MSDchem\1\DATA\043003\11M14656.D Vial: 5
Acq On : 30 Apr 2003 19:07 Operator: CMS
Sample : WG139442-02 20 PPB LCS STD 8260 Inst : HPMS11
Misc : 1,1 SV10847 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 30 19:30:02 2003 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.33	96	927299	25.00 ug/L	0.00
44) Chlorobenzene-d5	14.97	117	690771	25.00 ug/L	0.00
64) 1,4-Dichlorobenzene-d4	17.79	152	341744	25.00 ug/L	0.00
System Monitoring Compounds					
28) Dibromofluoromethane	10.34	111	192502	25.1551 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 100.64%		
33) 1,2-Dichloroethane-d4	10.94	65	211379	26.2024 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 104.80%		
45) Toluene-d8	13.19	98	787256	25.0400 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 100.16%		
66) p-Bromofluorobenzene	16.36	95	318687	25.2114 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 100.84%		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.68	85	147735	14.7672 ug/L	90
3) Chloromethane	4.23	50	119297	17.9537 ug/L	89
4) Vinyl Chloride	4.50	62	86772	20.5743 ug/L #	55
5) Bromomethane	5.49	94	106617	18.7933 ug/L	92
6) Chloroethane	5.65	64	132870	19.0961 ug/L	95
7) Trichlorofluoromethane	6.18	101	280857	21.4033 ug/L	96
11) Acetone	7.02	43	25539	18.4918 ug/L #	39
12) 1,1-Dichloroethene	7.28	96	154018	21.8874 ug/L	68
14) Iodomethane	7.79	142	216641	25.8916 ug/L	87
15) Methylene Chloride	8.02	84	160493	21.5162 ug/L	92
16) Carbon Disulfide	8.11	76	471150	18.5617 ug/L #	87
17) Acrylonitrile	8.25	53	3587	1.7558 ug/L #	64
18) Methyl Tert Butyl Ether	8.24	73	327515	20.4281 ug/L #	68
19) trans-1,2-Dichloroethene	8.48	96	182660	23.4693 ug/L	88
20) n-Hexane	8.57	57	291294	19.9154 ug/L #	93
21) Vinyl Acetate	9.02	43	220758	18.0475 ug/L	96
22) 1,1-Dichloroethane	9.06	63	367117	22.3702 ug/L #	76
23) 2-Butanone	9.57	43	40492	20.0235 ug/L #	100
24) 2,2-Dichloropropane	9.81	77	284485	23.2043 ug/L #	62
25) cis-1,2-Dichloroethene	9.87	96	188067	22.4234 ug/L	75
26) Chloroform	10.07	83	313019	23.1614 ug/L	90
27) Bromochloromethane	10.29	128	73097	22.2137 ug/L	67
29) 1,1,1-Trichloroethane	10.58	97	279849	24.6966 ug/L #	86
31) 1,1-Dichloropropene	10.77	75	251684	23.0348 ug/L #	22
32) Carbon Tetrachloride	10.92	117	230741	23.5960 ug/L #	91
34) 1,2-Dichloroethane	11.05	62	238915	22.9137 ug/L #	73
35) Benzene	11.11	78	722736	22.0360 ug/L	90
36) Trichloroethene	11.82	130	185092	24.2616 ug/L	87
37) 1,2-Dichloropropane	12.01	63	189628	20.8877 ug/L	88
38) Bromodichloromethane	12.29	83	212092	22.4372 ug/L #	87
39) Dibromomethane	12.37	93	77676	22.2776 ug/L	84
40) 2-Chloroethyl Vinyl Ether	12.53	63	75967	21.0414 ug/L #	100
41) 4-Methyl-2-Pentanone	12.57	58	36666	19.7125 ug/L #	100
42) cis-1,3-Dichloropropene	12.87	75	269624	23.0060 ug/L #	86
46) Toluene	13.29	91	770809	21.9346 ug/L	94
48) trans-1,3-Dichloropropene	13.43	75	218608	22.2674 ug/L #	53
49) 1,1,2-Trichloroethane	13.64	97	109248	20.8925 ug/L	83
50) 2-Hexanone	13.55	43	65698	19.7493 ug/L #	1
51) 1,3-Dichloropropane	13.92	76	207574	20.7416 ug/L	97

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

Data File : C:\MSDchem\1\DATA\043003\11M14656.D Vial: 5
Acq On : 30 Apr 2003 19:07 Operator: CMS
Sample : WG139442-02 20 PPB LCS STD 8260 Inst ; HPMS11
Misc : 1,1 SV10847 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 30 19:30:02 2003 Quant Results File: 8260WT.RES

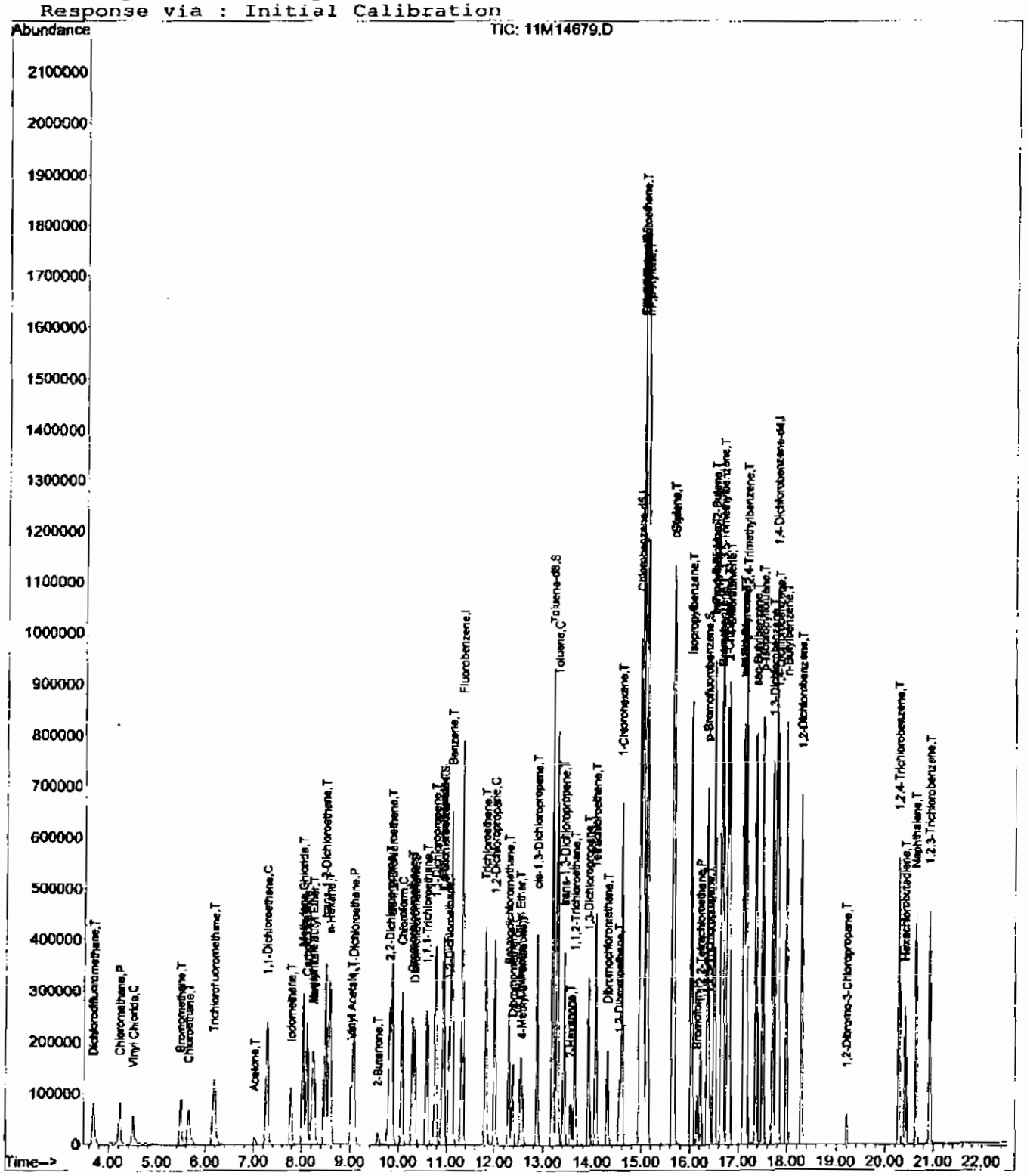
Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
52)	Tetrachloroethene	14.07	164	137176	22.7499	ug/L		89
53)	Dibromochloromethane	14.30	129	119977	21.4331	ug/L		84
54)	1,2-Dibromoethane	14.55	107	103901	20.7817	ug/L		93
55)	1-Chlorohexane	14.60	91	265674	21.8310	ug/L		93
56)	Chlorobenzene	15.02	112	502123	22.1580	ug/L		98
57)	1,1,1,2-Tetrachloroethane	15.04	131	154371	24.0134	ug/L		93
58)	Ethylbenzene	15.03	106	285641	23.2228	ug/L		79
59)	m-,p-Xylene	15.12	106	707689	45.7950	ug/L		84
60)	o-Xylene	15.65	106	350132	22.5374	ug/L		81
61)	Styrene	15.67	104	574783	22.9849	ug/L		86
62)	Bromoform	16.15	173	53706	18.8070	ug/L		81
63)	Isopropylbenzene	16.03	105	848570	21.4285	ug/L		95
65)	1,1,2,2-Tetrachloroethane	16.22	83	116085	20.6400	ug/L		85
67)	1,2,3-Trichloropropane	16.40	110	35045	21.4790	ug/L		84
68)	trans-1,4-Dichloro-2-Buten	16.50	53	6251	3.0084	ug/L	#	1
69)	n-Propylbenzene	16.50	91	1066511	22.5756	ug/L		90
70)	Bromobenzene	16.65	156	184011	22.0510	ug/L		71
71)	1,3,5-Trimethylbenzene	16.67	105	732046	22.4448	ug/L		93
72)	2-Chlorotoluene	16.78	91	681239	22.5913	ug/L		95
73)	4-Chlorotoluene	16.81	91	650253	22.7200	ug/L		94
74)	a-Methylstyrene	17.11	118	9173	0.4611	ug/L	#	1
75)	tert-Butylbenzene	17.11	119	632395	20.7125	ug/L	#	93
76)	1,2,4-Trimethylbenzene	17.17	105	757790	21.9218	ug/L		91
77)	sec-Butylbenzene	17.36	105	891703	20.5675	ug/L		93
78)	p-Isopropyltoluene	17.50	119	731244	20.1700	ug/L		99
79)	1,3-Dichlorobenzene	17.71	146	393586	21.1661	ug/L		88
80)	1,4-Dichlorobenzene	17.83	146	397117	21.2359	ug/L		79
81)	n-Butylbenzene	17.99	91	678198	20.1117	ug/L	#	97
82)	1,2-Dichlorobenzene	18.30	146	349641	21.2174	ug/L		90
83)	1,2-Dibromo-3-Chloropropan	19.21	157	16690	17.8859	ug/L		84
84)	1,2,4-Trichlorobenzene	20.28	180	215727	20.4329	ug/L		90
85)	Hexachlorobutadiene	20.42	225	71293	18.0845	ug/L	#	70
86)	Naphthalene	20.64	128	409454	20.1895	ug/L	#	83
87)	1,2,3-Trichlorobenzene	20.93	180	175624	20.3015	ug/L	#	61

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

Data File : C:\MSDchem\1\DATA\050103\11M14679.D Vial: 4
Acq On : 1 May 2003 7:16 Operator: CMS
Sample : WG139456-02 20 PPB LCS STD 8260 Inst : HPMS11
Misc : 1,1 SV10847 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 1 7:39 2003 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration



Data File : C:\MSDchem\1\DATA\050103\11M14679.D Vial: 4
Acq On : 1 May 2003 7:16 Operator: CMS
Sample : WG139456-02 20 PPB LCS STD 8260 Inst : HPMS11
Misc : 1,1 SV10847 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 01 07:39:18 2003 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.33	96	935722	25.00 ug/L	0.00
44) Chlorobenzene-d5	14.97	117	693057	25.00 ug/L	0.00
64) 1,4-Dichlorobenzene-d4	17.79	152	344355	25.00 ug/L	0.00
System Monitoring Compounds					
28) Dibromofluoromethane	10.34	111	198524	25.7085 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 102.84%		
33) 1,2-Dichloroethane-d4	10.94	65	219348	26.9455 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 107.80%		
45) Toluene-d8	13.19	98	799376	25.3416 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 101.36%		
66) p-Bromofluorobenzene	16.36	95	323381	25.3888 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 101.56%		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.68	85	144013	14.2656 ug/L	89
3) Chloromethane	4.23	50	118417	17.6609 ug/L	89
4) Vinyl Chloride	4.50	62	82516	19.3891 ug/L #	55
5) Bromomethane	5.49	94	103015	17.9949 ug/L	91
6) Chloroethane	5.65	64	135123	19.2451 ug/L	94
7) Trichlorofluoromethane	6.18	101	275322	20.7926 ug/L	97
11) Acetone	7.02	43	28846	20.6982 ug/L #	39
12) 1,1-Dichloroethene	7.28	96	152160	21.4287 ug/L	68
14) Iodomethane	7.78	142	198532	23.5137 ug/L	87
15) Methylene Chloride	8.02	84	165158	21.9423 ug/L	94
16) Carbon Disulfide	8.11	76	451433	17.6248 ug/L #	87
17) Acrylonitrile	8.25	53	4194	2.0344 ug/L #	57
18) Methyl Tert Butyl Ether	8.25	73	353679	21.8615 ug/L #	68
19) trans-1,2-Dichloroethene	8.49	96	180453	22.9770 ug/L	89
20) n-Hexane	8.57	57	270650	18.3374 ug/L #	93
21) Vinyl Acetate	9.01	43	237155	19.2134 ug/L	96
22) 1,1-Dichloroethane	9.07	63	370343	22.3637 ug/L #	77
23) 2-Butanone	9.58	43	46476	22.7758 ug/L #	100
24) 2,2-Dichloropropane	9.82	77	282294	22.8183 ug/L #	59
25) cis-1,2-Dichloroethene	9.87	96	191603	22.6394 ug/L	77
26) Chloroform	10.07	83	315739	23.1523 ug/L	90
27) Bromochloromethane	10.29	128	76116	22.9229 ug/L	66
29) 1,1,1-Trichloroethane	10.59	97	276108	24.1471 ug/L #	84
31) 1,1-Dichloropropene	10.77	75	250198	22.6927 ug/L #	23
32) Carbon Tetrachloride	10.93	117	225911	22.8941 ug/L #	92
34) 1,2-Dichloroethane	11.05	62	248319	23.6012 ug/L #	73
35) Benzene	11.11	78	723889	21.8724 ug/L	90
36) Trichloroethene	11.82	130	183857	23.8828 ug/L	89
37) 1,2-Dichloropropane	12.01	63	197003	21.5048 ug/L	86
38) Bromodichloromethane	12.29	83	217457	22.7977 ug/L #	87
39) Dibromomethane	12.38	93	81710	23.2236 ug/L	84
40) 2-Chloroethyl Vinyl Ether	12.54	63	82114	22.5393 ug/L #	100
41) 4-Methyl-2-Pentanone	12.57	58	40044	21.3348 ug/L #	100
42) cis-1,3-Dichloropropene	12.88	75	274206	23.1863 ug/L #	87
46) Toluene	13.29	91	762840	21.6362 ug/L	94
48) trans-1,3-Dichloropropene	13.43	75	229455	23.2952 ug/L #	53
49) 1,1,2-Trichloroethane	13.64	97	115148	21.9481 ug/L	82
50) 2-Hexanone	13.56	43	73575	22.0443 ug/L #	1
51) 1,3-Dichloropropane	13.92	76	219754	21.8862 ug/L	97

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

Data File : C:\MSDchem\1\DATA\050103\11M14679.D Vial: 4
Acq On : 1 May 2003 7:16 Operator: CMS
Sample : WG139456-02 20 PPB LCS STD 8260 Inst : HPMS11
Misc : 1,1 SV10847 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 01 07:39:18 2003 Quant Results File: 8260WT.RES

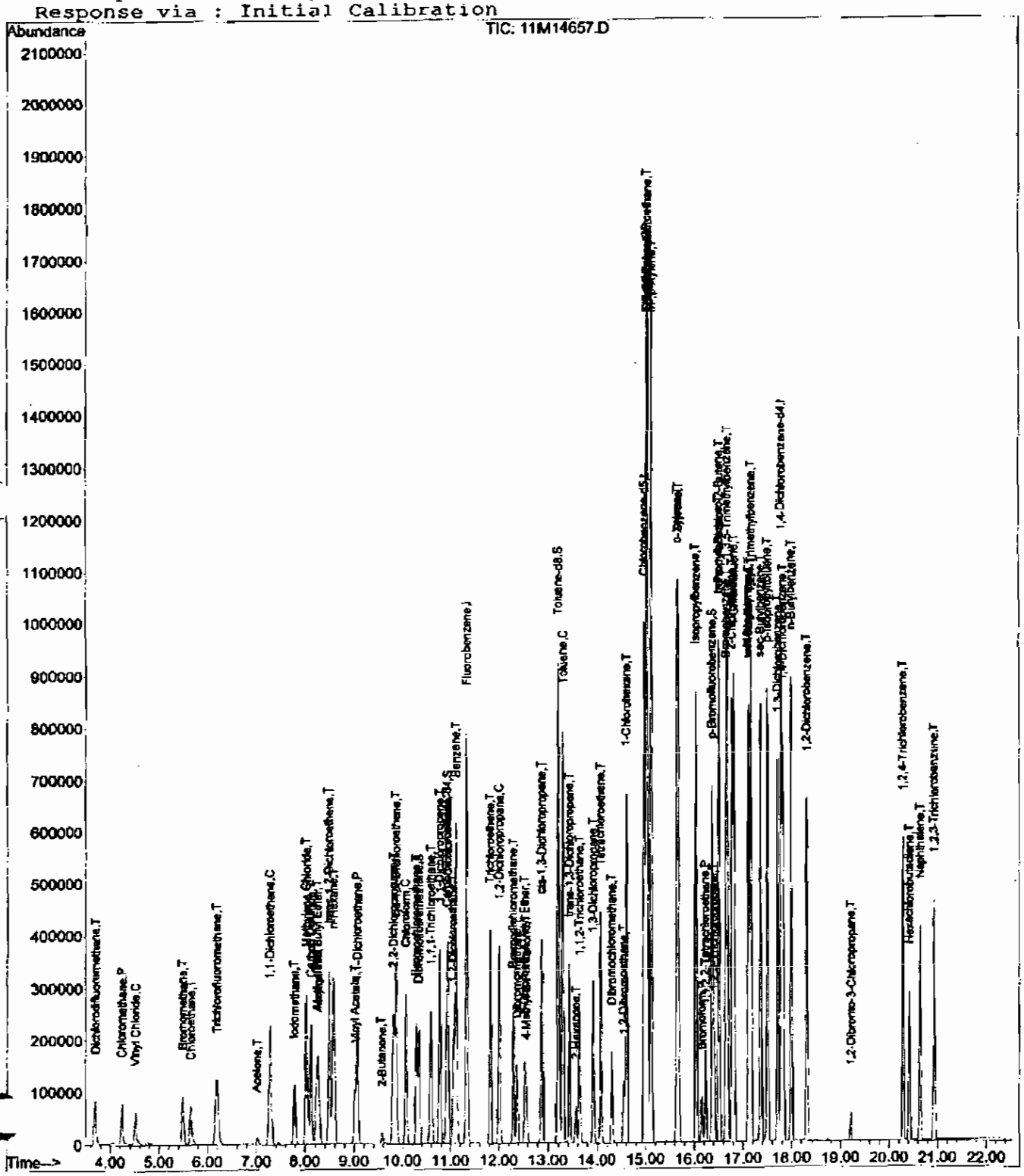
Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
52)	Tetrachloroethene	14.07	164	131942	21.8097 ug/L		86
53)	Dibromochloromethane	14.31	129	126749	22.5682 ug/L		84
54)	1,2-Dibromoethane	14.55	107	112572	22.4418 ug/L		93
55)	1-Chlorohexane	14.60	91	251969	20.6365 ug/L		91
56)	Chlorobenzene	15.02	112	507826	22.3357 ug/L		99
57)	1,1,1,2-Tetrachloroethane	15.04	131	157089	24.3556 ug/L		92
58)	Ethylbenzene	15.03	106	284098	23.0212 ug/L		76
59)	m-,p-Xylene	15.12	106	697091	44.9604 ug/L		84
60)	o-Xylene	15.65	106	346599	22.2364 ug/L		81
61)	Styrene	15.68	104	569353	22.6927 ug/L		87
62)	Bromoform	16.15	173	57481	20.0625 ug/L		80
63)	Isopropylbenzene	16.04	105	809067	20.3636 ug/L		96
65)	1,1,2,2-Tetrachloroethane	16.22	83	125733	22.1859 ug/L		85
67)	1,2,3-Trichloropropane	16.41	110	38235	23.2565 ug/L		82
68)	trans-1,4-Dichloro-2-Buten	16.51	53	6294	3.0062 ug/L	#	1
69)	n-Propylbenzene	16.51	91	1011491	21.2486 ug/L		90
70)	Bromobenzene	16.65	156	187096	22.2507 ug/L		73
71)	1,3,5-Trimethylbenzene	16.67	105	701868	21.3564 ug/L		94
72)	2-Chlorotoluene	16.78	91	642669	21.1506 ug/L		94
73)	4-Chlorotoluene	16.81	91	662128	22.9595 ug/L		87
74)	a-Methylstyrene	17.11	118	9277	0.4628 ug/L	#	1
75)	tert-Butylbenzene	17.11	119	589046	19.1464 ug/L	#	95
76)	1,2,4-Trimethylbenzene	17.17	105	734941	21.0996 ug/L		92
77)	sec-Butylbenzene	17.37	105	807273	18.4789 ug/L		91
78)	p-Isopropyltoluene	17.51	119	666868	18.2548 ug/L		100
79)	1,3-Dichlorobenzene	17.71	146	393250	20.9877 ug/L		89
80)	1,4-Dichlorobenzene	17.83	146	393907	20.9045 ug/L		80
81)	n-Butylbenzene	17.99	91	607891	17.8901 ug/L	#	97
82)	1,2-Dichlorobenzene	18.30	146	352209	21.2112 ug/L		89
83)	1,2-Dibromo-3-Chloropropan	19.21	157	18609	19.7912 ug/L		81
84)	1,2,4-Trichlorobenzene	20.29	180	208983	19.6440 ug/L		90
85)	Hexachlorobutadiene	20.42	225	65656	16.5283 ug/L	#	73
86)	Naphthalene	20.64	128	445577	21.8041 ug/L	#	83
87)	1,2,3-Trichlorobenzene	20.93	180	178963	20.5306 ug/L	#	60

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

Data File : C:\MSDchem\1\DATA\043003\11M14657.D Vial: 6
Acq On : 30 Apr 2003 19:37 Operator: CMS
Sample : WG139442-03 20 PPB LCS DUP STD 8260 Inst : HPMS11
Misc : 1,1 SV10847 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 30 20:00 2003 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration



Data File : C:\MSDchem\1\DATA\043003\11M14657.D Vial: 6
Acq On : 30 Apr 2003 19:37 Operator: CMS
Sample : WG139442-03 20 PPB LCS DUP STD 8260 Inst : HPMS11
Misc : 1,1 SV10847 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 30 20:00:16 2003 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.33	96	933643	25.00 ug/L	0.00
44) Chlorobenzene-d5	14.97	117	692784	25.00 ug/L	0.00
64) 1,4-Dichlorobenzene-d4	17.79	152	343275	25.00 ug/L	0.00
System Monitoring Compounds					
28) Dibromofluoromethane	10.34	111	192602	24.9972 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 100.00%		
33) 1,2-Dichloroethane-d4	10.94	65	212698	26.1868 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 104.76%		
45) Toluene-d8	13.19	98	795406	25.2257 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 100.92%		
66) p-Bromofluorobenzene	16.36	95	321750	25.3402 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 101.36%		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.69	85	137077	13.6087 ug/L	90
3) Chloromethane	4.23	50	113851	17.0177 ug/L	88
4) Vinyl Chloride	4.50	62	79762	18.7837 ug/L #	56
5) Bromomethane	5.49	94	102508	17.9462 ug/L	92
6) Chloroethane	5.66	64	127909	18.2582 ug/L	94
7) Trichlorofluoromethane	6.18	101	263012	19.9072 ug/L	98
11) Acetone	7.01	43	25008	17.9843 ug/L #	35
12) 1,1-Dichloroethene	7.28	96	144920	20.4545 ug/L	67
14) Iodomethane	7.79	142	200471	23.7962 ug/L	87
15) Methylene Chloride	8.02	84	156133	20.7895 ug/L	94
16) Carbon Disulfide	8.11	76	440278	17.2276 ug/L #	87
17) Acrylonitrile	8.25	53	3937	1.9140 ug/L #	57
18) Methyl Tert Butyl Ether	8.24	73	326951	20.2544 ug/L #	68
19) trans-1,2-Dichloroethene	8.48	96	170413	21.7469 ug/L	90
20) n-Hexane	8.57	57	272113	18.4776 ug/L #	92
21) Vinyl Acetate	9.02	43	220731	17.9226 ug/L	97
22) 1,1-Dichloroethane	9.07	63	352439	21.3299 ug/L #	77
23) 2-Butanone	9.57	43	40291	19.7888 ug/L #	100
24) 2,2-Dichloropropane	9.81	77	264740	21.4470 ug/L #	61
25) cis-1,2-Dichloroethene	9.87	96	180574	21.3838 ug/L	76
26) Chloroform	10.07	83	303001	22.2678 ug/L	92
27) Bromochloromethane	10.29	128	70415	21.2532 ug/L	69
29) 1,1,1-Trichloroethane	10.59	97	266268	23.3384 ug/L #	86
31) 1,1-Dichloropropene	10.77	75	237777	21.6141 ug/L #	23
32) Carbon Tetrachloride	10.92	117	218016	22.1432 ug/L #	91
34) 1,2-Dichloroethane	11.05	62	233235	22.2169 ug/L #	73
35) Benzene	11.11	78	693850	21.0115 ug/L	90
36) Trichloroethene	11.82	130	175592	22.8600 ug/L	89
37) 1,2-Dichloropropane	12.01	63	186969	20.4549 ug/L	87
38) Bromodichloromethane	12.29	83	207195	21.7702 ug/L #	87
39) Dibromomethane	12.38	93	75258	21.4374 ug/L	86
40) 2-Chloroethyl Vinyl Ether	12.54	63	75161	20.6767 ug/L #	100
41) 4-Methyl-2-Pentanone	12.57	58	37428	19.9854 ug/L #	100
42) cis-1,3-Dichloropropene	12.88	75	258598	21.9152 ug/L #	87
46) Toluene	13.29	91	740056	20.9983 ug/L	95
48) trans-1,3-Dichloropropene	13.43	75	214870	21.8230 ug/L #	51
49) 1,1,2-Trichloroethane	13.64	97	108962	20.7772 ug/L	83
50) 2-Hexanone	13.56	43	65728	19.7009 ug/L #	1
51) 1,3-Dichloropropane	13.92	76	202664	20.1921 ug/L	98

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

Data File : C:\MSDchem\1\DATA\043003\11M14657.D Vial: 6
Acq On : 30 Apr 2003 19:37 Operator: CMS
Sample : WG139442-03 20 PPB LCS DUP STD 8260 Inst : HPMS11
Misc : 1,1 SV10847 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 30 20:00:16 2003 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B Water Analysis 04/17/03 HPMS 11
Last Update : Thu Apr 17 15:15:50 2003
Response via : Initial Calibration
DataAcq Meth : 8260WT

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
52)	Tetrachloroethene	14.07	164	131367	21.7232 ug/L		89
53)	Dibromochloromethane	14.30	129	119166	21.2264 ug/L		83
54)	1,2-Dibromoethane	14.54	107	105909	21.1218 ug/L		92
55)	1-Chlorohexane	14.60	91	250585	20.5313 ug/L		92
56)	Chlorobenzene	15.02	112	491658	21.6331 ug/L		98
57)	1,1,1,2-Tetrachloroethane	15.04	131	151308	23.4686 ug/L		92
58)	Ethylbenzene	15.03	106	277790	22.5189 ug/L		76
59)	m-,p-Xylene	15.12	106	682557	44.0403 ug/L		84
60)	o-Xylene	15.65	106	338809	21.7452 ug/L		81
61)	Styrene	15.67	104	557982	22.2482 ug/L		86
62)	Bromoform	16.15	173	54128	18.8997 ug/L		78
63)	Isopropylbenzene	16.03	105	808323	20.3529 ug/L		96
65)	1,1,2,2-Tetrachloroethane	16.22	83	117548	20.8069 ug/L		86
67)	1,2,3-Trichloropropane	16.40	110	35043	21.3820 ug/L		86
68)	trans-1,4-Dichloro-2-Buten	16.51	53	5717	2.7392 ug/L	#	1
69)	n-Propylbenzene	16.50	91	1020334	21.5018 ug/L		90
70)	Bromobenzene	16.65	156	181878	21.6982 ug/L		73
71)	1,3,5-Trimethylbenzene	16.67	105	702060	21.4294 ug/L		93
72)	2-Chlorotoluene	16.78	91	654680	21.6137 ug/L		95
73)	4-Chlorotoluene	16.81	91	640408	22.2762 ug/L		94
74)	a-Methylstyrene	17.12	118	9880	0.4944 ug/L	#	1
75)	tert-Butylbenzene	17.11	119	667914	21.7783 ug/L	#	87
76)	1,2,4-Trimethylbenzene	17.17	105	732992	21.1098 ug/L		92
77)	sec-Butylbenzene	17.36	105	856846	19.6753 ug/L		93
78)	p-Isopropyltoluene	17.51	119	702186	19.2821 ug/L		99
79)	1,3-Dichlorobenzene	17.71	146	387046	20.7215 ug/L		89
80)	1,4-Dichlorobenzene	17.82	146	387748	20.6424 ug/L		80
81)	n-Butylbenzene	17.99	91	655231	19.3439 ug/L	#	97
82)	1,2-Dichlorobenzene	18.30	146	345532	20.8745 ug/L		91
83)	1,2-Dibromo-3-Chloropropan	19.21	157	17754	18.9413 ug/L		88
84)	1,2,4-Trichlorobenzene	20.28	180	214430	20.2194 ug/L		91
85)	Hexachlorobutadiene	20.42	225	70310	17.7556 ug/L	#	72
86)	Naphthalene	20.64	128	414374	20.3410 ug/L	#	82
87)	1,2,3-Trichlorobenzene	20.93	180	175845	20.2364 ug/L	#	61

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

Directory: C:\MSDCHEM\1\DATA\041703

IS: SV10842
SS: SV10843

Analyst: CMS

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	11M14388.D	1.	✓ WG138555-01 BFB 50NG STD 8260	1,1 SV10835	17 Apr 2003 06:32
2	2	11M14389.D	1.	DNR WG138555 0.30 PPB STD 8260	1,1 SV10829	17 Apr 2003 07:07
3	3	11M14390.D	1.	✓ WG138555-02 0.40 PPB STD 8260	1,1 SV10829	17 Apr 2003 07:38
4	4	11M14391.D	1.	✓ WG138555-03 1 PPB STD 8260	1,1 SV10829	17 Apr 2003 08:09
5	5	11M14392.D	1.	DNR WG138555 2 PPB STD 8260	1,1 SV10829	17 Apr 2003 08:41
6	6	11M14393.D	1.	✓ WG138555 5 PPB STD 8260	1,1 SV10829	17 Apr 2003 09:11
7	7	11M14394.D	1.	DNR WG138555 2 PPB STD 8260	1,1 SV10829	17 Apr 2003 09:43
8	8	11M14395.D	1.	✓ WG138555-04 5 PPB STD 8260	1,1 SV10829	17 Apr 2003 10:13
9	9	11M14396.D	1.	✓ WG138555-05 20 PPB STD 8260	1,1 SV10829	17 Apr 2003 10:43
10	10	11M14397.D	1.	✓ WG138555-06 50 PPB STD 8260	1,1 SV10829	17 Apr 2003 11:14
11	11	11M14398.D	1.	✓ WG138555-07 100 PPB STD 8260	1,1 SV10829	17 Apr 2003 11:44
12	12	11M14399.D	1.	✓ WG138555-09 200 PPB STD 8260	1,1 SV10829	17 Apr 2003 12:15
13	13	11M14400.D	1.	✓ SYSTEM BLANK	1,1	17 Apr 2003 12:46
14	14	11M14401.D	1.	✓ SYSTEM BLANK	1,1	17 Apr 2003 13:16
15	15	11M14402.D	1.	✓ WG138555-08 150 PPB STD 8260	1,1 SV10829	17 Apr 2003 14:20
16	16	11M14403.D	1.	✓ SYSTEM BLANK	1,1	17 Apr 2003 14:50
17	17	11M14404.D	1.	✓ SYSTEM BLANK	1,1	17 Apr 2003 15:20
18	18	11M14405.D	1.	RR WG138555-12 20 PPB ALT SOURCE STD 8260	1,1 SV10847	17 Apr 2003 15:51

WG138555

reanalyze alternate source (TCE 4)

Directory: C:\MSDCHEM\DATA\042103

Analyst: CMS

IS: SV10842
SS: SV10843

	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	11M14406.D	1.	✓WG138731-01 BFB 50NG STD 8260	1,1 SV10835	21 Apr 2003 06:19
2	2	11M14407.D	1.	✓WG138731-02 50 PPB STD 8260	1,1 SV10829	21 Apr 2003 06:52
3	3	11M14408.D	1.	✓WG138732-01 VBLK0421 BLANK 8260	1,1	21 Apr 2003 07:38
4	4	11M14409.D	1.	✓WG138732-01 VBLK0421 BLANK 8260	1,1	21 Apr 2003 08:09
5	5	11M14410.D	1.	✓WG138555-10 20PPB ALT SOURCE STD 8260	1,1 SV10847	21 Apr 2003 08:40
6		11M14411.D	1.			

WG138555

No reanalyses / R-flags

Directory: C:\MSDCHEM\1\DATA\043003

Analyst: CMS

IS: SV10842
SS: SV10843

Pg 1 of 2

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	11M14630.D	1.	✓WG139364-01 BFB 50NG STD 8260	1,1 SV10835	30 Apr 2003 04:43
2	2	11M14631.D	1.	✓WG139364-02 50 PPB STD 8260	1,1 SV10906	30 Apr 2003 05:12
3	3	11M14632.D	1.	✓WG139365-01 VBLK0430 BLANK 8260	1,1	30 Apr 2003 05:49
4	4	11M14633.D	1.	✓WG139365-02 20 PPB LCS STD 8260	1,1 SV10847	30 Apr 2003 06:20
5	5	11M14634.D	1.	✓WG139365-03 20 PPB LCS DUP STD 8260	1,1 SV10847	30 Apr 2003 06:51
6	6	11M14635.D	1.	✓L0304497-11 B 00 8260	1,1 pH=7	30 Apr 2003 08:23
7	7	11M14636.D	1. RR5x -	L0304508-01 A 50X D1 8260 - DNR	1,50	30 Apr 2003 08:54
8	8	11M14637.D	1. RR5x -	L0304508-03 A 50X D1 8260 - DNR	1,50	30 Apr 2003 09:26
9	9	11M14638.D	1.	✓L0304508-06 B 10X D2 8260	1,10	30 Apr 2003 09:57
10	10	11M14639.D	1.	✓L0304497-07 B 1000X D1 8260	1,1000	30 Apr 2003 10:28
11	11	11M14640.D	1.	✓L0304497-09 B 1000X D1 8260	1,1000	30 Apr 2003 10:59
12	12	11M14641.D	1.	✓L0304497-10 B 10X 00 8260	1,10	30 Apr 2003 11:29
13	13	11M14642.D	1.	✓L0304501-03 B 100X D1 826-TC	17,100 (4/28@1500)	30 Apr 2003 11:59
14	14	11M14643.D	1. RR10x	L0304529-02 B 00 8260	1,1 pH<2	30 Apr 2003 12:30
15	15	11M14644.D	1.	✓L0304529-04 A 00 8260	1,1 L	30 Apr 2003 13:00
16	16	11M14645.D	1. RR 5x	L0304529-03 A 50X 00 8260 D1	1,50	30 Apr 2003 13:30
17	17	11M14646.D	1. RR 5x	L0304529-08 A 100X 00 8260 - DNR	1,100	30 Apr 2003 14:01
18	18	11M14647.D	1. RR 5x.	L0304529-07 A 100X 00 8260 - DNR	1,100	30 Apr 2003 14:31
19	19	11M14648.D	1. RR 5x.	L0304529-06 A 500X 00 8260 - DNR	1,500	30 Apr 2003 15:01
20	20	11M14649.D	1. RR 5x.	L0304529-10 A 100X 00 8260 D1	1,100	30 Apr 2003 15:31
21	21	11M14650.D	1. RR 50x	L0304529-09 A 100X 00 8260 - DNR	1,100	30 Apr 2003 16:02
22	22	11M14651.D	1. RR 5x	L0304529-05 A 100X 00 8260 - DNR	1,100	30 Apr 2003 16:32
23	1	11M14652.D	1. RR	WG139441-01 BFB 50NG STD 8260	1,1 SV10835	30 Apr 2003 17:03
24	2	11M14653.D	1.	✓WG139441-01 BFB 50NG STD 8260	1,1 SV10835	30 Apr 2003 17:32
25	3	11M14654.D	1.	✓WG139441-02 50 PPB STD 8260	1,1 SV10906	30 Apr 2003 18:01
26	4	11M14655.D	1.	✓WG139442-01 VBLK0430 BLANK 8260	1,1	30 Apr 2003 18:36
27	5	11M14656.D	1.	✓WG139442-02 20 PPB LCS STD 8260	1,1 SV10847	30 Apr 2003 19:07
28	6	11M14657.D	1.	✓WG139442-03 20 PPB LCS DUP STD 8260	1,1 SV10847	30 Apr 2003 19:37
29	7	11M14658.D	1.	✓L0304508-01 B 5X D2 8260	1,5	30 Apr 2003 20:08
30	8	11M14659.D	1.	✓L0304508-03 B 5X D2 8260	1,5	30 Apr 2003 20:38
31	9	11M14660.D	1.	✓L0304501-05 B 50X 00 826-TC	17,50 (4/28@1500)	30 Apr 2003 21:09
32	10	11M14661.D	1. RR10x	L0304529-07 B 00 8260	1,1 pH<2	30 Apr 2003 21:40
33	11	11M14662.D	1. RR50x	L0304529-06 B 00 8260	1,1 L	30 Apr 2003 22:11
34	12	11M14663.D	1. RR100x	L0304529-10 B 00 8260	1,1 pH=12	30 Apr 2003 22:42
35	13	11M14664.D	1.	✓L0304529-01 B 50X D1 8260 00	1,50	30 Apr 2003 23:14
36	14	11M14665.D	1.	✓L0304529-02 B 10X D1 8260	1,10	30 Apr 2003 23:45
37	15	11M14666.D	1. RR50x	L0304529-03 B 5X 00 8260	1,5	1 May 2003 00:16
38	16	11M14667.D	1. RR50x	L0304529-05 B 5X 00 8260	1,5	1 May 2003 00:47
39	17	11M14668.D	1.	✓L0304529-08 B 5X 00 8260	1,5	1 May 2003 01:19
40	18	11M14669.D	1.	✓L0304529-09 B 50X 00 8260	1,50	1 May 2003 01:50
41	19	11M14670.D	1.	✓L0304554-01 10X 00 826-TC	17,10 (4/28@1500)	1 May 2003 02:22
42	20	11M14671.D	1.	✓L0304594-03 A 10X 00 826-TC	17,10 (4/28@1500)	1 May 2003 02:53
43	21	11M14672.D	1.	✓L0304649-01 A 00 826-SPE-VO-S	2,1 pH=7	1 May 2003 03:24
44	22	11M14673.D	1.	✓L0304649-02 A 00 826-SPE-VO-S	2,1 pH=10	1 May 2003 03:56
45	23	11M14674.D	1.	✓L0304~~469~~-03 A 00 826-SPE-VO-S 649 ~~469~~ 5/1/03	2,1 pH=7	1 May 2003 04:27
46	24	11M14675.D	1.	✓L0304516-02 A 00 826-BETX	1,1 pH<2	1 May 2003 04:58

01 May 2003 05:31

WG139365 reanalyses

L0304508-01 @ 5x (D2) - 2-Butanone - 11M14658
-03 @ 5x (D2) ⊥ ⊥ 659

L0304529-02 @ 10x : Acetone - 11M14665
-03 @ 5x : (00) - 11M14666
-10 @ 8tr. : (00) - 11M14649 663

WG139442 reanalyses

L0304529-07 @ 10x : Acetone
-06 @ 50x : Acetone, 2-Butanone
-10 @ 100x : PCE : 11M14649
-03 @ 50x : Carbon tet. - 11M14645
-05 @ 50x : Acetone

Directory: C:\MSDchem\1\DATA\050103

TS: SV10874
SS: SV10843

Analyst: CMS

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	11M14676.D	1.	✓WG139455-01 BFB 50NG STD 8260	1,1 SV10835	1 May 2003 05:40
2	2	11M14677.D	1.	✓WG139455-02 50 PPB STD 8260	1,1 SV10906	1 May 2003 06:10
3	3	11M14678.D	1.	✓WG139456-01 VBLK0501 BLANK 8260	1,1	1 May 2003 06:45
4	4	11M14679.D	1.	✓WG139456-02 20 PPB LCS STD 8260	1,1 SV10847	1 May 2003 07:16
5	5	11M14680.D	1.	✓L0304529-05 A 50X D1 8260	1,50	1 May 2003 07:48
6	6	11M14681.D	1.	✓L0304529-06 A 50X D1 8260	1,50	1 May 2003 08:19
7	7	11M14682.D	1.	✓L0304529-07 A 50X D1 8260	1,50	1 May 2003 08:50
8	8	11M14683.D	1.	✓L0304594-04 A 00 826-TCL	1,1	1 May 2003 09:21
9	9	11M14684.D	1.	✓L0304587-01 A 00 8260	1,1	1 May 2003 09:52
10	10	11M14685.D	1.	✓L0304587-02 A 00 8260	1,1	1 May 2003 10:23
11	11	11M14686.D	1. DNR	✓L0304532-06 A 00 8260 syringe screw fell out	1,1	1 May 2003 10:53
12	12	11M14687.D	1. 1	✓L0304532-07 A 00 8260 1	1,1	1 May 2003 11:23
13	13	11M14688.D	1.	✓L0304532-06 B 00 8260	1,1	1 May 2003 11:56
14	14	11M14689.D	1.	✓L0304532-07 A 00 8260	1,1	1 May 2003 12:26
15	15	11M14690.D	1.	✓L0304532-01 A 00 8260	1,1	1 May 2003 12:57
16	16	11M14691.D	1.	✓L0304532-02 MS A 00 8260	1,1 SV10847	1 May 2003 13:27
17	17	11M14692.D	1.	✓L0304532-03 MSD A 00 8260	1,1 SV10847	1 May 2003 13:57
18	18	11M14693.D	1. RR 10X	L0304516-01 A 00 826-BETX	1,1	1 May 2003 14:27
19	19	11M14694.D	1.	✓L0304532-04 A 00 8260	1,1	1 May 2003 14:57
20	20	11M14695.D	1.	✓L0304532-05 A 00 8260	1,1	1 May 2003 15:28
21	21	11M14696.D	1.	✓L0304594-01 A 00 826-TCL	1,1	1 May 2003 15:58
22	22	11M14697.D	1.	✓L0304594-02 A 00 826-TCL	1,1	1 May 2003 16:28
23	23	11M14698.D	1.	RR WG139551-01 BFB 50NG STD 8260	1,1 SV10835	1 May 2003 17:05
24	24	11M14699.D	1.	RR WG139551-01 BFB 50NG STD 8260	1,1 SV10835	1 May 2003 17:34
25	25	11M14700.D	1.	✓ WG139551-01 BFB 50NG STD 8260	1,1 SV10835	1 May 2003 18:03
26	26	11M14701.D	1.	✓ WG139551-02 50 PPB STD 8260	1,1 SV10906	1 May 2003 18:35
27	27	11M14702.D	1.	RR WG139552-01 VBLK0501 BLANK 8260	1,1	1 May 2003 19:11
28	28	11M14703.D	1.	✓WG139552-01 VBLK0501 BLANK 8260	1,1	1 May 2003 19:41
29	29	11M14704.D	1.	✓WG139552-02 20 PPB LCS STD 8260	1,1 SV10847	1 May 2003 20:11
30	30	11M14705.D	1.	✓L0304516-01 B 10X D1 826-BETX	1,10	1 May 2003 20:47
31	31	11M14706.D	1.	✓L0304586-05 A 00 8260	1,1	1 May 2003 21:18
32	32	11M14707.D	1.	✓L0304588-03 A 00 826-LOW	1,1	1 May 2003 21:48
33	33	11M14708.D	1.	✓L0304625-04 A 00 826-LOW	1,1	1 May 2003 22:18
34	34	11M14709.D	1.	✓L0304608-01 A 00 826-LOW	1,1	1 May 2003 22:49
35	35	11M14710.D	1.	✓L0304608-02 A 00 826-LOW	1,1	1 May 2003 23:20
36	36	11M14711.D	1.	✓L0304586-01 A 00 8260	1,1	1 May 2003 23:51
37	37	11M14712.D	1.	✓L0304586-02 MS A 00 8260	1,1 SV10924	2 May 2003 00:22
38	38	11M14713.D	1.	✓L0304586-03 MSD A 00 8260	1,1 SV10924	2 May 2003 00:53
39	39	11M14714.D	1.	✓SYSTEM BLANK	1,1	2 May 2003 01:24
40	40	11M14715.D	1.	✓L0304586-04 A 00 8260	1,1	2 May 2003 01:55
41	41	11M14716.D	1. RR 10X	L0304588-01 A 00 826-LOW	1,1	2 May 2003 02:26
42	42	11M14717.D	1. RR C/O	L0304588-02 A 00 826-LOW	1,1	2 May 2003 02:57
43	43	11M14718.D	1. RR C/O	L0304625-01 A 00 826-LOW	1,1	2 May 2003 03:29
44	44	11M14719.D	1.	✓L0304625-02 A 00 826-LOW	1,1	2 May 2003 04:00
45	45	11M14720.D	1.	✓L0304625-03 A 00 826-LOW	1,1	2 May 2003 04:31
46	46	11M14721.D	1.	✓L0304608-03 A 00 826-LOW	1,1	2 May 2003 05:02
47	47	11M14722.D	1.	✓L0304608-04 A 00 826-LOW	1,1	2 May 2003 05:34
48	48	11M14723.D	1.	✓L0304608-05 A 00 826-LOW	1,1	2 May 2003 06:05

WG139456 reanalyses

L0304516-01 @ 10X: Benzene, Toluene

WG139552 reanalyses

L0304588-01 @ 10X: PCE

02 May 2003 07:06

VOA - GC/MS

Date: 4-17-03 **Analyst:** CMS **Method:** (8260) 624

Instrument: HPMS11 **Work Group:** WG 138555

	Analyst
System Performance Check	✓
BFB	✓
Initial Calibration	✓
Average RF	✓
Linear Reg or Higher Order Curve 4/21/03	✓ NA
Second Source standard % Difference	✓
Continuing Calibration / Check Standards	NA
Project / Client Specific Requirements	✓
Special Standards	✓
Blanks	✓
TCL's	✓
Surrogates	✓
LCS (Laboratory Control Sample)	✓
Recoveries	✓
Surrogates	✓
MS / MSD / Duplicates	✓
Samples	✓
TCL Hits	✓
Spectra of TCL Hits	✓
Surrogates	✓
Internal Standards Criteria	✓
Calculations & Correct Factors	✓
Dilutions Run	✓
Reruns	✓
Manual Integrations	✓
Excel Spreadsheets	✓
Case Narrative	NA
Narrative Summary	✓
Results Reporting / Data Qualifiers	✓
Client Data Package Assembly	✓
Check for Completeness	✓

Primary Reviewers Initials & Date Checked: CMS 4-21-03

Secondary Reviewers Initials & Date Checked: MG 4-21-03

✓ • Check for compliance with Method and project-specific requirements
✓ • Check the completeness of the reported information
✓ • Check the information for the report narrative
✓ • Check the reasonableness of results

Supervisory Review Initials & Date Checked: 4/21/03

Comments:

✓ = Checked & OK
NA = Not Applicable

VOA - GC/MS

Date: 4-30-03 **Analyst:** CMS **Method:** 8260 624

Instrument: HPMS11 **Work Group:** WG 139442

	Analyst
System Performance Check	✓
BFB	✓
Initial Calibration	✓
Average RF	✓
Linear Reg or Higher Order Curve	✓
Second Source standard % Difference	✓
Continuing Calibration / Check Standards	✓
Project / Client Specific Requirements	✓
Special Standards	NA
Blanks	✓
TCL's	✓
Surrogates	✓
LCS (Laboratory Control Sample)	✓
Recoveries	✓
Surrogates	✓
MS / MSD / Duplicates	✓
Samples	✓
TCL Hits	✓
Spectra of TCL Hits	✓
Surrogates	✓
Internal Standards Criteria	✓
Calculations & Correct Factors	✓
Dilutions Run	✓
Reruns	✓
Manual Integrations	
Excel Spreadsheets	✓
Case Narrative	
Narrative Summary	✓
Results Reporting / Data Qualifiers	✓
Client Data Package Assembly	
Check for Completeness	✓

Primary Reviewers Initials & Date Checked: 04-30-05 5/03 CMS | 5-2-03 CMS

Secondary Reviewers Initials & Date Checked: _____

- _____ • Check for compliance with Method and project-specific requirements
- _____ • Check the completeness of the reported information
- _____ • Check the information for the report narrative
- _____ • Check the reasonableness of results

Supervisory Review Initials & Date Checked: _____

Comments: _____

✓ = Checked & OK
NA = Not Applicable

VOA - GC/MS

Date: 5-1-03 Analyst: CMS Method: 8260 624

Instrument: HPMS11 Work Group: WG 139456

	Analyst
System Performance Check	✓
BFB	✓
Initial Calibration	✓
Average RF	✓
Linear Reg or Higher Order Curve	✓
Second Source standard % Difference	✓
Continuing Calibration / Check Standards	✓
Project / Client Specific Requirements	✓
Special Standards	NA
Blanks	✓
TCL's	✓
Surrogates	✓
LCS (Laboratory Control Sample)	✓
Recoveries	✓
Surrogates	✓
MS / MSD / Duplicates	✓
Samples	✓
TCL Hits	✓
Spectra of TCL Hits	✓
Surrogates	✓
Internal Standards Criteria	✓
Calculations & Correct Factors	✓
Dilutions Run	✓
Reruns	NA
Manual Integrations	I
Excel Spreadsheets	✓
Case Narrative	
Narrative Summary	✓
Results Reporting / Data Qualifiers	✓
Client Data Package Assembly	
Check for Completeness	✓

Primary Reviewers Initials & Date Checked: CMS 5-2-03

Secondary Reviewers Initials & Date Checked: _____

_____ • Check for compliance with Method and project-specific requirements
_____ • Check the completeness of the reported information
_____ • Check the information for the report narrative
_____ • Check the reasonableness of results

Supervisory Review Initials & Date Checked: _____

Comments: _____

✓ = Checked & OK
NA = Not Applicable

8260B Example Calculations:

1). Calculate relative response factor (RRF) for each target and surrogate in initial calibration (ICAL):

$$RRF = \frac{(A_s)(C_{is})}{(A_{is})(C_s)}$$

Example: $$RRF = \frac{(25{,}000)(25)}{(10{,}000)(50)} = 1.25$$

where:

A_s = peak area of the analyte or surrogate
A_{is} = peak area of the internal standard
C_s = concentration of the analyte or surrogate (ug/L)
C_{is} = concentration of the internal standard (ug/L)

2). Calculate mean RRF $\left(\overline{RRF}\right)$ for each target and surrogate:

$$\overline{RRF} = \frac{\sum_{1}^{n} RRF}{n}$$

where:

$\overline{RRF}$ = 1.25

3). Calculate concentration (C_x) of target or surrogate from internal standard calibration: ug/L, ug/Kg:

$$C_x = \frac{(A_x)(C_{is})(D)}{(A_{is})\left(\overline{RRF}\right)(V_f)}$$

Example: $$C_x = \frac{(25{,}000)(250)(1)}{(20{,}000)(1.25)(10)} = 25$$

where:

A_x = peak area for the analyte or surrogate
C_{is} = concentration of the internal standard (ng)
D = dilution factor for the sample (1/10 = 10)
A_{is} = peak area of the internal standard
$\overline{RRF}$ = average RRF for the analyte or surrogate
V_f = purge volume of water sample (mL); for soils enter sample weight (g)

4). Correction of soils results to dry weight (C_d): ug/Kg:

$$C_d = \frac{(C_x)(100)}{(\%\ solids)}$$

Example: $$C_d = \frac{(25)(100)}{(50)} = 50$$

where:

C_x = uncorrected wet weight concentration (ug/Kg)
% solids = percent solids content of the sample

2.2 Semivolatiles

2.2.1 Semivolatiles GC MS Data (8270)

REPORT NARRATIVE
GC/MS SEMIVOLATILE ORGANICS

KEMRON Report No.: L0304594

METHOD

Preparation: SW- 846 3550B(Soils) 3510C(Waters)
Analysis: SW-846 8270C

HOLDING TIMES

Sample Preparation: All holding times were met.
Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial calibrations: For all compounds which yielded a %RSD greater than 15%, linear or higher order equations were applied or if the mean % RSD for all analytes was less than 15%, the average response factors were used. All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Continuing Calibration and Tune: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.
oratory Control Samples: All acceptance criteria were met.
trix Spikes: The MS/MSD were not associated with these samples.

SAMPLES

Internal Standards: All acceptance criteria were met.
Surrogates: Samples 01, and 02 yielded a % recovery for 2-fluorobiphenyl that was below the lower advisory limit. All other acceptance criteria were met.
Samples: Sample 01 was analyzed at a 5x dilution due to viscosity. All acceptance criteria were met.

ertify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON vironmental Services, both technically and for completeness, except for the conditions noted above. Release of data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated son, as verified by the following signature.

a: AUT REVIEWED: _____ DATE: 4/6/03

0

GC/MS DATA B 8270

Login Number L0304594

A. QC Summary

- ✓ Method Blank Summary
- ✓ Method Blank Results
- ✓ Laboratory Control Sample (LCS)
- ___ Matrix Spike/Matrix Spike Duplicate (MS/MSD)
- ✓ Holding Time Summary
- ✓ Surrogate Recovery Summary
- ✓ Instrument Tune Summary
- ✓ Initial Calibration Summary
- ✓ Initial Calibration Verification (ICV) Form (Second Source)
- ✓ Continuing Calibration Verification (CCV)
- ✓ Internal Standard Area Summary
- ✓ Instrument Run Log
- ✓ Extraction Bench Sheet

B. Sample Data

- ___ Target compound and surrogate results summary (See Summary Report)
- ___ Tentatively Identified Compounds (TIC) (if requested B See Summary Report)
- ✓ Chromatograms (RIC) and quantitation report
- ✓ Raw and background corrected mass spectra of identified target compounds
- ___ Mass spectra for all reported TICs with three best matches

C. Standards Data

- ✓ Initial calibration (ICAL) summary form
- ✓ Chromatograms and quantitation report for ICAL standards
- ___ Initial calibration verification (ICV/second source) summary forms
- ✓ Initial calibration verification (ICV/second source) quantitation reports and chromatograms
- ✓ Continuing Calibration Verification (CCV) summary forms
- ✓ Continuing Calibration Verification (CCV) quantitation reports and chromatograms

D. Raw QC Data

- ✓ GC/MS instrument performance check DFTPP
- ✓ Method blank chromatogram and quantitation report
- ✓ LCS chromatogram and quantitation report
- ___ MS/MSD chromatogram and quantitation report
- ✓ Instrument Run Log
- ✓ Extraction Bench Sheet
- ✓ Daily Checklist
- ✓ Example Calculations

Checked By: AK J Date: 5/5/03

2.2.1.1 QC Summary

KEMRON ENVIRONMENTAL SERVICES
METHOD BLANK SUMMARY

Login Number: L0304594
Blank File ID: 4M18457
Date Analyzed: 04/30/03
Time Analyzed: 08:57
Analyst: MDC

Work Group: WG139481
Blank Sample ID: WG139340-02
Instrument ID: HPMS4
Method: 8270C

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG139340-03	4M18458	04/30/03 09:33	01
05-177511-SP2-042503	L0304594-03	4M18466	04/30/03 14:13	01

KEMRON ENVIRONMENTAL SERVICES
METHOD BLANK SUMMARY

Login Number: L0304594
Blank File ID: 5M26146
Date Analyzed: 05/02/03
Time Analyzed: 15:04
Analyst: ALT

Work Group: WG139687
Blank Sample ID: WG139371-03
Instrument ID: HPMS5
Method: 8270C

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG139371-04	5M26147	05/02/03 15:34	01
05-177511-DW3-042503	L0304594-02	5M26164	05/03/03 00:02	01
05-177511-DW2-042503	L0304594-01	5M26165	05/03/03 00:32	01

KEMRON FORMS - Modified 03/21/2003
version 1.2
Report generated 05/05/2003 15:18

KEMRON ENVIRONMENTAL SERVICES
BLANK REPORT

Login Number: L0304594 Run Date: 04/30/2003 Sample ID: WG139340-02
Instrument ID: HPMS4 Run Time: 08:57 Prep Method: 3510C
File ID: 4M18457 Analyst: MDC Method: 8270C
Workgroup (AAB#): WG139481 Matrix: Water Units: ug/L
Contract #: Cal ID: HPMS4-29-APR-03

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Pyridine	25.0	50.0	25.0	1	U
1,4-Dichlorobenzene	2.50	5.00	2.50	1	U
o-Cresol	2.50	5.00	2.50	1	U
m-,p-Cresol	5.00	5.00	5.00	1	U
Hexachloroethane	2.50	5.00	2.50	1	U
Nitrobenzene	2.50	5.00	2.50	1	U
Hexachlorobutadiene	2.50	5.00	2.50	1	U
2,4,6-Trichlorophenol	2.50	5.00	2.50	1	U
2,4,5-Trichlorophenol	2.50	25.0	2.50	1	U
2,4-Dinitrotoluene	2.50	5.00	2.50	1	U
Hexachlorobenzene	2.50	5.00	2.50	1	U
Pentachlorophenol	2.50	25.0	2.50	1	U

Surrogates	% Recovery	Surrogate Limits	Qualifier
2-Fluorophenol	36.5	21 - 100	PASS
Phenol-d5	25.1	10 - 94	PASS
Nitrobenzene-d5	58.5	35 - 114	PASS
2-Fluorobiphenyl	52.8	43 - 116	PASS
2,4,6-Tribromophenol	75.8	10 - 123	PASS
p-Terphenyl-d14	82.3	33 - 141	PASS

* Analyte detected above RDL
ND Analyte Not detected at or above reporting limit

KEMRON ENVIRONMENTAL SERVICES
BLANK REPORT

Login Number: L0304594 Run Date: 05/02/2003 Sample ID: WG139371-03
Instrument ID: HPMS5 Run Time: 15:04 Prep Method: 3510C
File ID: 5M26146 Analyst: ALT Method: 8270C
Workgroup (AAB#): WG139687 Matrix: Water Units: ug/L
Contract #: Cal ID: HPMS5-01-MAY-03

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Phenol	2.50	5.00	2.50	1	U
Bis(2-Chloroethyl)ether	2.50	5.00	2.50	1	U
2-Chlorophenol	2.50	5.00	2.50	1	U
1,3-Dichlorobenzene	2.50	5.00	2.50	1	U
1,4-Dichlorobenzene	2.50	5.00	2.50	1	U
1,2-Dichlorobenzene	2.50	5.00	2.50	1	U
2-Methylphenol	2.50	5.00	2.50	1	U
bis(2-Chloroisopropyl)ether	2.50	5.00	2.50	1	U
3-,4-Methylphenol	2.50	5.00	2.50	1	U
N-Nitroso-di-n-propylamine	2.50	5.00	2.50	1	U
Hexachloroethane	2.50	5.00	2.50	1	U
Nitrobenzene	2.50	5.00	2.50	1	U
Isophorone	2.50	5.00	2.50	1	U
2-Nitrophenol	2.50	5.00	2.50	1	U
2,4-Dimethylphenol	2.50	5.00	2.50	1	U
Bis(2-Chloroethoxy)Methane	2.50	5.00	2.50	1	U
2,4-Dichlorophenol	2.50	5.00	2.50	1	U
1,2,4-Trichlorobenzene	2.50	5.00	2.50	1	U
Naphthalene	2.50	5.00	2.50	1	U
4-Chloroaniline	2.50	5.00	2.50	1	U
Hexachlorobutadiene	2.50	5.00	2.50	1	U
4-Chloro-3-methylphenol	2.50	5.00	2.50	1	U
2-Methylnaphthalene	2.50	5.00	2.50	1	U
Hexachlorocyclopentadiene	2.50	5.00	2.50	1	U
2,4,6-Trichlorophenol	2.50	5.00	2.50	1	U
2,4,5-Trichlorophenol	2.50	5.00	2.50	1	U
2-Chloronaphthalene	2.50	5.00	2.50	1	U
2-Nitroaniline	12.5	25.0	12.5	1	U
Dimethylphthalate	2.50	5.00	2.50	1	U
Acenaphthylene	2.50	5.00	2.50	1	U
2,6-Dinitrotoluene	2.50	5.00	2.50	1	U
3-Nitroaniline	12.5	25.0	12.5	1	U
Acenaphthene	2.50	5.00	2.50	1	U
2,4-Dinitrophenol	12.5	25.0	12.5	1	U
4-Nitrophenol	12.5	25.0	12.5	1	U
Dibenzofuran	2.50	5.00	2.50	1	U
2,4-Dinitrotoluene	2.50	5.00	2.50	1	U
Diethylphthalate	2.50	5.00	2.50	1	U
Fluorene	2.50	5.00	2.50	1	U
4-Chlorophenyl-phenyl ether	2.50	5.00	2.50	1	U
4-Nitroaniline	12.5	25.0	12.5	1	U
4,6-Dinitro-2-methylphenol	12.5	25.0	12.5	1	U

KEMRON FORMS - Modified 05/02/2003
Version 1.3
Report generated 05/05/2003 15:18

KEMRON ENVIRONMENTAL SERVICES
BLANK REPORT

Login Number: L0304594 Run Date: 05/02/2003 Sample ID: WG139371-03
Instrument ID: HPMS5 Run Time: 15:04 Prep Method: 3510C
File ID: 5M26146 Analyst: ALT Method: 8270C
Workgroup (AAB#): WG139687 Matrix: Water Units: ug/L
Contract #: Cal ID: HPMS5-01-MAY-03

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
N-Nitrosodiphenylamine	2.50	5.00	2.50	1	U
4-Bromophenyl-phenylether	2.50	5.00	2.50	1	U
Hexachlorobenzene	2.50	5.00	2.50	1	U
Pentachlorophenol	12.5	25.0	12.5	1	U
Phenanthrene	2.50	5.00	2.50	1	U
Anthracene	2.50	5.00	2.50	1	U
Carbazole	2.50	5.00	2.50	1	U
Di-N-Butylphthalate	2.50	5.00	2.50	1	U
Fluoranthene	2.50	5.00	2.50	1	U
Pyrene	2.50	5.00	2.50	1	U
Butylbenzylphthalate	2.50	5.00	2.50	1	U
Benzo(a)anthracene	2.50	5.00	2.50	1	U
3,3'-Dichlorobenzidine	2.50	10.0	2.50	1	U
Chrysene	2.50	5.00	2.50	1	U
bis(2-Ethylhexyl)phthalate	2.50	5.00	2.50	1	U
Di-n-octylphthalate	2.50	5.00	2.50	1	U
Benzo(b)fluoranthene	2.50	5.00	2.50	1	U
Benzo(k)fluoranthene	2.50	5.00	2.50	1	U
Benzo(a)pyrene	2.50	5.00	2.50	1	U
Indeno(1,2,3-cd)pyrene	2.50	5.00	2.50	1	U
Dibenzo(a,h)Anthracene	2.50	5.00	2.50	1	U
Benzo(g,h,i)Perylene	2.50	5.00	2.50	1	U

Surrogates	% Recovery	Surrogate Limits	Qualifier
2-Fluorophenol	28.4	21 - 100	PASS
Phenol-d5	17.7	10 - 94	PASS
Nitrobenzene-d5	48.2	35 - 114	PASS
2-Fluorobiphenyl	50.0	43 - 116	PASS
2,4,6-Tribromophenol	68.8	10 - 123	PASS
p-Terphenyl-d14	63.3	33 - 141	PASS

* Analyte detected above RDL
ND Analyte Not detected at or above reporting limit

KEMRON FORMS - Modified 05/02/2003
Version 1.3
Report generated 05/05/2003 15:18

KEMRON ENVIRONMENTAL SERVICES
LABORATORY CONTROL SAMPLE

Login Number: L0304594 Run Date: 04/30/2003 Sample ID: WG139340-03
Instrument ID: HPMS4 Run Time: 09:33 Prep Method: 3510C
File ID: 4M18458 Analyst: MDC Method: 8270C
Workgroup (AAB#): WG139481 Matrix: Water Units: ug/L
Contract #: Cal ID: HPMS4-29-APR-2003 21:00

Analytes	Expected	Found	% Rec	LCS Limits	Q
1,4-Dichlorobenzene	50.0	19.1	38.2	24 - 62	
2,4,5-Trichlorophenol	50.0	37.8	75.6	20 - 116	
2,4,6-Trichlorophenol	50.0	33.6	67.1	20 - 103	
2,4-Dinitrotoluene	50.0	41.8	83.6	36 - 126	
o-Cresol	50.0	26.3	52.6	15 - 86	
m-,p-Cresol	50.0	24.8	49.6	10 - 90	
Hexachlorobenzene	50.0	40.9	81.8	50 - 121	
Hexachlorobutadiene	50.0	19.2	38.4	27 - 76	
Hexachloroethane	50.0	17.6	35.2	21 - 90	
Nitrobenzene	50.0	27.8	55.5	20 - 78	
Pentachlorophenol	50.0	44.2	88.4	30 - 124	
Pyridine	50.0	6.99	14.0	5 - 100	

Surrogates	% Recovery	Surrogate Limits	Qualifier
2,4,6-Tribromophenol	93.3	10 - 123	PASS
2-Fluorobiphenyl	53.1	43 - 116	PASS
2-Fluorophenol	36.3	21 - 100	PASS
Nitrobenzene-d5	57.0	35 - 114	PASS
p-Terphenyl-d14	83.8	33 - 141	PASS
Phenol-d5	25.6	10 - 94	PASS

* Analyte outside control limits

NS Analyte not spiked

KEMRON ENVIRONMENTAL SERVICES
LABORATORY CONTROL SAMPLE

Login Number: L0304594 Run Date: 05/02/2003 Sample ID: WG139371-04
Instrument ID: HPMS5 Run Time: 15:34 Prep Method: 3510C
File ID: 5M26147 Analyst: ALT Method: 8270C
Workgroup (AAB#): WG139687 Matrix: Water Units: ug/L
Contract #: Cal ID: HPMS5-01-MAY-2003 16:03

Analytes	Expected	Found	% Rec	LCS Limits	Q
1,2,4-Trichlorobenzene	50.0	18.2	36.3	26 - 72	
1,2-Dichlorobenzene	50.0	17.7	35.4	25 - 66	
1,3-Dichlorobenzene	50.0	15.7	31.4	24 - 62	
1,4-Dichlorobenzene	50.0	16.2	32.5	24 - 62	
2,4,5-Trichlorophenol	50.0	27.6	55.2	20 - 116	
2,4,6-Trichlorophenol	50.0	25.5	51.0	20 - 103	
2,4-Dichlorophenol	50.0	23.5	46.9	15 - 90	
2,4-Dimethylphenol	50.0	25.7	51.4	20 - 93	
2,4-Dinitrophenol	50.0	22.5	45.0	20 - 118	
2,4-Dinitrotoluene	50.0	29.3	58.6	36 - 126	
2,6-Dinitrotoluene	50.0	29.3	58.6	28 - 112	
2-Chloronaphthalene	50.0	22.6	45.3	34 - 95	
2-Chlorophenol	50.0	22.0	44.0	15 - 78	
2-Methylnaphthalene	50.0	22.4	44.9	27 - 77	
2-Methylphenol	50.0	20.8	41.6	15 - 86	
2-Nitroaniline	50.0	29.6	59.2	21 - 101	
2-Nitrophenol	50.0	24.4	48.7	19 - 86	
3,3'-Dichlorobenzidine	50.0	37.6	75.3	15 - 142	
3-,4-Methylphenol	50.0	19.3	38.7	10 - 90	
3-Nitroaniline	50.0	32.9	65.7	10 - 121	
4,6-Dinitro-2-methylphenol	50.0	31.1	62.2	30 - 125	
4-Bromophenyl-phenylether	50.0	30.8	61.6	42 - 101	
4-Chloro-3-methylphenol	50.0	27.7	55.3	20 - 113	
4-Chloroaniline	50.0	28.0	56.0	20 - 85	
4-Chlorophenyl-phenyl ether	50.0	28.5	57.1	38 - 101	
4-Nitroaniline	50.0	32.2	64.4	40 - 136	
4-Nitrophenol	50.0	9.44	18.9	10 - 139	
Acenaphthene	50.0	25.1	50.1	30 - 92	
Acenaphthylene	50.0	26.3	52.5	31 - 96	
Anthracene	50.0	35.7	71.4	59 - 118	
Benzo(a)anthracene	50.0	34.4	68.7	54 - 124	
Benzo(a)pyrene	50.0	38.4	76.7	63 - 124	
Benzo(b)fluoranthene	50.0	39.2	78.5	63 - 123	
Benzo(g,h,i)Perylene	50.0	36.1	72.2	59 - 124	
Benzo(k)fluoranthene	50.0	37.7	75.3	62 - 124	
Bis(2-Chloroethoxy)Methane	50.0	23.9	47.8	30 - 79	
Bis(2-Chloroethyl)ether	50.0	24.0	47.9	30 - 77	
bis(2-Chloroisopropyl)ether	50.0	24.2	48.5	24 - 80	
bis(2-Ethylhexyl)phthalate	50.0	32.9	65.7	54 - 140	
Butylbenzylphthalate	50.0	33.0	66.0	51 - 147	
Carbazole	50.0	36.7	73.4	51 - 136	

KEMRON FORMS - Modified 05/01/2003
Version 1.3
Report generated 05/05/2003 15:18

KEMRON ENVIRONMENTAL SERVICES
LABORATORY CONTROL SAMPLE

Login Number: L0304594 Run Date: 05/02/2003 Sample ID: WG139371-04
Instrument ID: HPMS5 Run Time: 15:34 Prep Method: 3510C
File ID: 5M26147 Analyst: ALT Method: 8270C
Workgroup (AAB#): WG139687 Matrix: Water Units: ug/L
Contract #: Cal ID: HPMS5-01-MAY-2003 16:03

Analytes	Expected	Found	% Rec	LCS Limits	Q
Chrysene	50.0	33.4	66.7	55 - 124	
Di-N-Butylphthalate	50.0	35.7	71.4	65 - 133	
Di-n-octylphthalate	50.0	40.9	81.7	66 - 138	
Dibenzo(a,h)Anthracene	50.0	38.3	76.5	55 - 130	
Dibenzofuran	50.0	28.6	57.1	33 - 94	
Diethylphthalate	50.0	33.5	67.1	35 - 125	
Dimethylphthalate	50.0	31.3	62.5	27 - 107	
Fluoranthene	50.0	36.8	73.7	63 - 128	
Fluorene	50.0	29.6	59.3	40 - 104	
Hexachlorobenzene	50.0	32.1	64.2	50 - 121	
Hexachlorobutadiene	50.0	15.3	30.7	27 - 76	
Hexachlorocyclopentadiene	50.0	13.6	27.2	10 - 78	
Hexachloroethane	50.0	14.4	28.8	21 - 90	
Indeno(1,2,3-cd)pyrene	50.0	38.2	76.3	58 - 123	
Isophorone	50.0	25.5	50.9	20 - 99	
N-Nitrosodiphenylamine	50.0	33.2	66.5	43 - 122	
N-Nitroso-di-n-propylamine	50.0	24.8	49.7	34 - 86	
Naphthalene	50.0	22.4	44.7	25 - 76	
Nitrobenzene	50.0	23.7	47.3	20 - 78	
Pentachlorophenol	50.0	26.3	52.5	30 - 124	
Phenanthrene	50.0	34.8	69.7	58 - 120	
Phenol	50.0	8.76	17.5	10 - 84	
Pyrene	50.0	32.5	65.1	54 - 130	

Surrogates	% Recovery	Surrogate Limits	Qualifier
2,4,6-Tribromophenol	73.0	10 - 123	PASS
2-Fluorobiphenyl	49.7	43 - 116	PASS
2-Fluorophenol	26.4	21 - 100	PASS
Nitrobenzene-d5	47.5	35 - 114	PASS
p-Terphenyl-d14	50.9	33 - 141	PASS
Phenol-d5	17.9	10 - 94	PASS

* Analyte outside control limits

NS Analyte not spiked

KEMRON ENVIRONMENTAL SERVICES
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 8270C

AAB#: WG139481

Login Number: L0304594

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
05-177511-SP2-042503	04/25/03	04/26/03	04/29/03	10.1	4.14	04/30/03	40	0.884	

* EXT = MISSED EXTRACTION HOLD TIME
*ANAL = MISSED ANALYTICAL HOLD TIME

KEMRON FORMS - Modified 12/06/2002
Version 1.2
Report generated 05/05/2003 15:02

KEMRON ENVIRONMENTAL SERVICES
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 8270C

AAB#: WG139687

Login Number: L0304594

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
05-177511-DW2-042503	04/25/03	04/26/03	04/30/03	7	4.95	05/03/03	40	2.63	
05-177511-DW3-042503	04/25/03	04/26/03	04/30/03	7	4.92	05/03/03	40	2.61	

* EXT = MISSED EXTRACTION HOLD TIME
*ANAL = MISSED ANALYTICAL HOLD TIME

KEMRON FORMS - Modified 12/06/2002
Version 1.2
Report generated 05/05/2003 15:18

KEMRON ENVIRONMENTAL SERVICES
SURROGATE STANDARDS

Login Number: L0304594
Instrument Id: HPMS4
Workgroup (AAB#): WG139481

Method: 8270
CAL ID: HPMS4-29-APR-03
Matrix: WATER

Sample Number	Dilution	Tag	1	2	3	4	5	6
L0304594-03	1.00	01	78.4	56.2	34.5	58.8	86.4	23.8
WG139340-02	1.00	01	75.8	52.8	36.5	58.5	82.3	25.1
WG139340-03	1.00	01	93.3	53.1	36.3	57.0	83.8	25.6

Surrogates	Surrogate Limits		
1 - 2,4,6-Tribromophenol	10	-	123
2 - 2-Fluorobiphenyl	43	-	116
3 - 2-Fluorophenol	21	-	100
4 - Nitrobenzene-d5	35	-	114
5 - p-Terphenyl-d14	33	-	141
6 - Phenol-d5	10	-	94

Underline = Result out of surrogate limits

DL = surrogate diluted out

ND = surrogate not detected

KEMRON ENVIRONMENTAL SERVICES
SURROGATE STANDARDS

Login Number: L0304594
Instrument Id: HPMS5
Workgroup (AAB#): WG139687

Method: 8270
CAL ID: HPMS5-01-MAY-03
Matrix: WATER

Sample Number	Dilution	Tag	1	2	3	4	5	6
L0304594-01	5.00	01	75.5	39.9	25.0	39.4	54.9	17.3
L0304594-02	1.00	01	61.8	41.8	28.8	44.4	40.2	18.5
WG139371-03	1.00	01	68.8	50.0	28.4	48.2	63.3	17.7
WG139371-04	1.00	01	73.0	49.7	26.4	47.5	50.9	17.9

Surrogates	Surrogate Limits		
1 - 2,4,6-Tribromophenol	10	-	123
2 - 2-Fluorobiphenyl	43	-	116
3 - 2-Fluorophenol	21	-	100
4 - Nitrobenzene-d5	35	-	114
5 - p-Terphenyl-d14	33	-	141
6 - Phenol-d5	10	-	94

Underline = Result out of surrogate limits

DL = surrogate diluted out
ND = surrogate not detected

KEMRON FORMS - Modified 01/22/2003
Version 1.2
Report generated 05/05/2003 15:18

KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK
DFTPP

Login Number: L0304594
Instrument: HPMS4
Analyst: CLK
Workgroup: WG139334

Tune ID: WG139334-01
Run Date: 04/29/2003
Run Time: 16:52
File ID: 4M18446
Cal ID: HPMS4-29-APR-03

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51.0	198	30.0	60.0	37.5	135568	PASS
68.0	69.0	0	2.00	0	0	PASS
69.0	198	0	100	38.7	139685	PASS
70.0	69.0	0	2.00	0.643	898	PASS
127	198	40.0	60.0	47.2	170432	PASS
197	198	0	1.00	0	0	PASS
198	198	100	100	100	361323	PASS
199	198	5.00	9.00	6.75	24379	PASS
275	198	10.0	30.0	27.7	100051	PASS
365	198	1.00	100	3.20	11551	PASS
441	443	0.0100	100	49.3	32235	PASS
442	198	40.0	100	92.1	332949	PASS
443	442	17.0	23.0	19.6	65365	PASS

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

Lab ID	Client ID	Tag	Date Analyzed	Q
WG139334-02	CCV	01	04/29/2003 17:10	
WG139334-03	STD	01	04/29/2003 18:04	
WG139334-04	STD	01	04/29/2003 18:38	
WG139334-05	STD	01	04/29/2003 19:13	
WG139334-06	STD	01	04/29/2003 19:47	
WG139334-07	STD	01	04/29/2003 20:24	
WG139334-08	STD	01	04/29/2003 21:00	
WG139334-09	SSCV	01	04/29/2003 21:36	

* Sample past 12 hour tune limit

KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK
DFTPP

Login Number: L0304594
Instrument: HPMS5
Analyst: ALT
Workgroup: WG139485

Tune ID: WG139485-01
Run Date: 05/01/2003
Run Time: 12:37
File ID: 5M26106
Cal ID: HPMS5-01-MAY-03

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51.0	198	30.0	60.0	45.2	84519	PASS
68.0	69.0	0	2.00	0.955	630	PASS
69.0	198	0	100	35.3	65966	PASS
70.0	69.0	0	2.00	0	0	PASS
127	198	40.0	60.0	47.7	89076	PASS
197	198	0	1.00	0	0	PASS
198	198	100	100	100	186865	PASS
199	198	5.00	9.00	6.96	13011	PASS
275	198	10.0	30.0	18.9	35301	PASS
365	198	1.00	100	1.51	2818	PASS
441	443	0.0100	100	75.9	13393	PASS
442	198	40.0	100	48.8	91264	PASS
443	442	17.0	23.0	19.3	17644	PASS

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

Lab ID	Client ID	Tag	Date Analyzed	Q
WG139485-02	CCV	01	05/01/2003 12:55	
WG139485-03	STD	01	05/01/2003 13:28	
WG139485-04	STD	01	05/01/2003 14:00	
WG139485-05	STD	01	05/01/2003 14:33	
WG139485-06	STD	01	05/01/2003 15:03	
WG139485-07	STD	01	05/01/2003 15:33	
WG139485-08	STD	01	05/01/2003 16:03	
WG139485-09	SSCV	01	05/01/2003 16:33	

* Sample past 12 hour tune limit

KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L0304594
Instrument HPMS4
Analyst MDC
Workgroup: WG139370

Tune ID: WG139370-01
Run Date: 04/30/2003
Run Time: 08:03
File ID: 4M18455
Cal ID: HPMS4-29-APR-03

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51.0	198	30.0	60.0	36.7	129952	PASS
68.0	69.0	0	2.00	0	0	PASS
69.0	198	0	100	38.0	134411	PASS
70.0	69.0	0	2.00	0.654	879	PASS
127	198	40.0	60.0	47.0	166125	PASS
197	198	0	1.00	0	0	PASS
198	198	100	100	100	353685	PASS
199	198	5.00	9.00	6.53	23112	PASS
275	198	10.0	30.0	27.9	98549	PASS
365	198	1.00	100	3.41	12058	PASS
441	443	0.0100	100	79.6	54488	PASS
442	198	40.0	100	99.1	350571	PASS
443	442	17.0	23.0	19.5	68453	PASS

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

Lab ID	Client ID	Tag	Date Analyzed	Q
WG139340-02	BLANK	01	04/30/2003 08:57	
WG139340-03	LCS	01	04/30/2003 09:33	
L0304594-03	05-177511-8P2-042503	01	04/30/2003 14:13	

* Sample past 12 hour tune limit

KEMRON FORMS - Modified 11/19/2002
Version 1.2
Report generated 05/05/2003 15:15

KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK
DFTPP

Login Number: L0304594
Instrument HPMS5
Analyst ALT
Workgroup: WG139599

Tune ID: WG139599-03
Run Date: 05/02/2003
Run Time: 13:45
File ID: 5M26143
Cal ID: HPMS5-01-MAY-03

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51.0	198	30.0	60.0	32.6	108324	PASS
68.0	69.0	0	2.00	0	0	PASS
69.0	198	0	100	28.5	94755	PASS
70.0	69.0	0	2.00	0.548	519	PASS
127	198	40.0	60.0	42.7	141851	PASS
197	198	0	1.00	0	0	PASS
198	198	100	100	100	332437	PASS
199	198	5.00	9.00	6.89	22904	PASS
275	198	10.0	30.0	21.1	70088	PASS
365	198	1.00	100	1.69	5613	PASS
441	443	0.0100	100	75.2	28906	PASS
442	198	40.0	100	59.7	198584	PASS
443	442	17.0	23.0	19.4	38459	PASS

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

Lab ID	Client ID	Tag	Date Analyzed	Q
WG139371-03	BLANK	01	05/02/2003 15:04	
WG139371-04	LCS	01	05/02/2003 15:34	
L0304594-02	05-177511-DW3-042503	01	05/03/2003 00:02	
L0304594-01	05-177511-DW2-042503	01	05/03/2003 00:32	

* Sample past 12 hour tune limit

Calibration Table Report

Method: BNA.M

Title: M8270/825/initial cal. 04/29/03

Last Calibration: Thu May 01 08:32:02 2003

HPMS4

Calibration Files

Avg. %RSD 8.4

	Compound	3	10	20	50	80	100	120	Avg	%RSD	R^2 value
		4M18448.D	4M18449.D	4M18450.D	4M18447.D	4M18451.D	4M18452.D	4M18453.D			
I	1,4-Dichlorobenzene-d4	ISTD									
	Pyridine		1.424	1.378	1.341	1.383	1.351	1.429	1.384	2.6	
	n-Nitrosodimethylamine	0.813	0.748	0.745	0.763	0.741	0.723	0.761	0.756	3.7	
S	2-Fluorophenol	1.504	1.385	1.361	1.395	1.362	1.333	1.410	1.393	4.0	
	Aniline	0.607	0.566	0.548	0.511	0.506	0.497	0.524	0.537	7.3	
S	Phenol-d5	1.666	1.551	1.543	1.613	1.593	1.567	1.655	1.601	3.4	
C	Phenol	1.907	1.718	1.692	1.796	1.751	1.711	1.805	1.768	4.2	
	bis(2-Chloroethyl)ether	1.014	0.908	0.888	0.914	0.806	0.874	0.911	0.915	5.0	
	2-Chlorophenol	1.603	1.452	1.432	1.517	1.471	1.437	1.505	1.488	4.0	
	1,3-Dichlorobenzene	1.891	1.721	1.686	1.630	1.687	1.845	1.724	1.712	5.0	
C	1,4-Dichlorobenzene	1.976	1.769	1.721	1.739	1.747	1.692	1.776	1.774	5.3	
	Benzyl Alcohol	0.933	0.911	0.907	0.970	0.965	0.948	1.002	0.948	3.6	
	1,2-Dichlorobenzene	1.839	1.651	1.624	1.554	1.628	1.591	1.687	1.651	5.5	
	2-Methylphenol	1.232	1.110	1.114	1.176	1.152	1.128	1.167	1.157	3.8	
	bis(2-Chloroisopropyl)ether	2.048	1.805	1.758	1.723	1.749	1.698	1.791	1.798	6.5	
	3-,4-Methylphenol	1.754	1.627	1.612	1.718	1.693	1.685	1.750	1.688	3.3	
P	n-Nitrosodipropylamine	0.969	0.918	0.917	0.907	0.854	0.936	0.980	0.940	3.0	
	Hexachloroethane	0.630	0.584	0.597	0.606	0.618	0.602	0.632	0.610	2.9	
I	Naphthalene-d8	ISTD									
S	Nitrobenzene-d5	0.408	0.375	0.376	0.381	0.384	0.377	0.388	0.384	3.0	
	Nitrobenzene	0.407	0.373	0.370	0.383	0.375	0.366	0.377	0.379	3.6	
	Isophorone	0.685	0.655	0.656	0.609	0.667	0.653	0.668	0.656	3.6	
C	2-Nitrophenol	0.195	0.206	0.209	0.234	0.236	0.235	0.242	0.222	8.3	
	2,4-Dimethylphenol	0.378	0.359	0.363	0.352	0.385	0.386	0.401	0.375	4.7	
	bis(2-Chloroethoxy)methane	0.447	0.410	0.404	0.415	0.418	0.417	0.436	0.421	3.6	
	Benzoic Acid			0.103	0.156	0.167	0.177	0.199	0.161	22.4	
C	2,4-Dichlorophenol	0.345	0.321	0.324	0.343	0.338	0.335	0.347	0.338	3.1	
	1,2,4-Trichlorobenzene	0.446	0.395	0.385	0.378	0.392	0.385	0.395	0.396	5.7	
	Naphthalene	1.268	1.147	1.126	1.114	1.136	1.114	1.142	1.150	4.7	
	4-Chloroaniline	0.426	0.412	0.407	0.415	0.385	0.381	0.400	0.404	4.1	
C	Hexachlorobutadiene	0.283	0.253	0.250	0.217	0.249	0.246	0.251	0.250	7.7	
C	4-Chloro-3-Methylphenol	0.328	0.317	0.322	0.344	0.339	0.334	0.350	0.333	3.6	
	2-Methylnaphthalene	0.877	0.798	0.790	0.800	0.807	0.799	0.818	0.813	3.6	
I	Acenaphthene-d10	ISTD									
P	Hexachlorocyclopentadiene	0.299	0.332	0.369	0.359	0.420	0.416	0.423	0.374	12.9	
C	2,4,6-Trichlorophenol	0.398	0.407	0.419	0.449	0.446	0.443	0.454	0.431	5.2	
	2,4,5-Trichlorophenol	0.436	0.432	0.442	0.479	0.478	0.474	0.489	0.461	5.2	
S	2-Fluorobiphenyl	1.763	1.583	1.561	1.475	1.563	1.507	1.536	1.570	5.9	
	2-Chloronaphthalene	1.438	1.309	1.288	1.239	1.314	1.280	1.308	1.311	4.7	
	2-Nitroaniline			0.332	0.353	0.350	0.339	0.347	0.344	2.5	
	Dimethylphthalate	1.540	1.445	1.436	1.441	1.443	1.398	1.430	1.448	3.0	
	Acenaphthylene	2.258	2.119	2.108	2.051	2.134	2.078	2.088	2.119	3.2	
	2,6-Dinitrotoluene	0.307	0.317	0.330	0.343	0.350	0.348	0.362	0.337	5.8	
	3-Nitroaniline	0.318	0.296	0.277	0.277	0.166	0.146		0.246	29.1	
C	Acenaphthene	1.373	1.231	1.261	1.300	1.334	1.308	1.337	1.306	3.7	
P	2,4-Dinitrophenol			0.097	0.170	0.209	0.216	0.235	0.185	29.5	
P	4-Nitrophenol			0.222	0.249	0.249	0.259	0.265	0.249	8.5	
	Dibenzofuran	2.130	1.912	1.885	1.897	1.908	1.862	1.885	1.928	4.8	
	2,4-Dinitrotoluene	0.405	0.427	0.435	0.434	0.473	0.463	0.479	0.445	6.1	
	Diethylphthalate	1.508	1.410	1.403	1.421	1.420	1.382	1.400	1.420	2.8	
	Fluorene	1.595	1.459	1.444	1.448	1.492	1.454	1.484	1.482	3.6	
	4-Chlorophenyl Phenyl Ether	0.852	0.780	0.763	0.792	0.798	0.779	0.792	0.794	3.5	
	4-Nitroaniline		0.227	0.230	0.286	0.253	0.216	0.209	0.237	12.3	
	1,2-Diphenylhydrazine	1.368	1.284	1.284	1.325	1.302	1.270	1.300	1.305	2.5	
S	2,4,6-Tribromophenol	0.153	0.171	0.183	0.209	0.216	0.214	0.225	0.198	13.8	
I	Phenanthrene-d10	ISTD									
	4,6-Dinitro-2-Methylphenol			0.120	0.158	0.170	0.173	0.185	0.161	15.5	
C	n-Nitrosodiphenylamine	0.681	0.627	0.606	0.608	0.597	0.583	0.602	0.615	5.2	
	4-Bromophenyl Phenyl Ether	0.249	0.228	0.221	0.280	0.227	0.225	0.232	0.237	8.8	
	Hexachlorobenzene	0.305	0.284	0.276	0.274	0.275	0.271	0.277	0.280	4.1	
	Pentachlorophenol			0.075	0.126	0.152	0.159	0.174	0.137	28.5	
	Phenanthrene	1.405	1.255	1.236	1.245	1.227	1.190	1.221	1.254	5.8	
	Anthracene	1.302	1.213	1.208	1.258	1.221	1.186	1.219	1.231	3.0	

Calibration Table Report
Method: BNA.M
Title: M8270/625/Initial cal. 04/29/03
Last Calibration: Thu May 01 08:32:02 2003
HPMS4
Calibration Files

Avg. %RSD
8.4

	Compound	3	10	20	50	80	100	120	Avg	%RSD	R^2 value
		4M18448.D	4M18449.D	4M18450.D	4M18447.D	4M18451.D	4M18452.D	4M18453.D			
	Carbazole	1.161	0.978	0.838	0.858	0.510	0.545		0.815	30.8	
	Di-n-Butyl Phthalate	1.432	1.358	1.363	1.463	1.366	1.327	1.349	1.380	3.5	
C	Fluoranthene	1.579	1.459	1.428	1.465	1.406	1.373	1.390	1.443	4.8	
I	Chrysene-d12	ISTD									
	Benzidine	0.016	0.013	0.014	0.128	0.021	0.020	0.024	0.034	123.7	
	Pyrene	1.644	1.500	1.471	1.273	1.407	1.367	1.382	1.432	8.4	
S	p-Terphenyl-d14	1.137	1.047	1.032	0.856	0.986	0.963	0.971	0.999	8.7	
	Butyl Benzyl Phthalate	0.667	0.640	0.632	0.533	0.632	0.619	0.626	0.621	6.7	
	Benzo(a)anthracene	1.619	1.450	1.424	1.245	1.386	1.351	1.364	1.405	8.2	
	3,3'-Dichlorobenzidine	0.439	0.353	0.319	0.264	0.280	0.275	0.290	0.317	19.5	
	Chrysene	1.527	1.382	1.366	1.198	1.330	1.301	1.309	1.345	7.4	
	bis(2-Ethylhexyl)phthalate	0.952	0.854	0.865	0.780	0.860	0.844	0.856	0.859	5.6	
I	Perylene-d12	ISTD									
C	Di-n-Octyl Phthalate	1.832	1.751	1.811	1.906	1.889	1.856	1.908	1.852	2.9	
	Benzo(b)fluoranthene	1.936	1.872	1.786	1.843	1.815	1.776	1.835	1.838	3.0	
	Benzo(k)fluoranthene	1.978	1.652	1.765	1.502	1.742	1.714	1.752	1.729	8.2	
C	Benzo(a)pyrene	1.793	1.633	1.637	1.824	1.858	1.636	1.679	1.668	3.6	
	Indeno(1,2,3-cd)pyrene	2.085	1.938	1.942	2.029	1.953	1.891	1.913	1.964	3.5	
	Dibenz(ah)anthracene	1.796	1.647	1.678	1.700	1.683	1.630	1.652	1.684	3.3	
	Benzo(ghi)perylene	1.787	1.601	1.602	1.652	1.585	1.518	1.517	1.606	5.3	

Thu May 01 08:34:05 2003

Calibration Table Report
Method: BNA.M
Title: M8270/825 WATER/INITIAL CALIBRATION 05/01/03
Last Calibration: Fri May 02 08:01:30 2003
HPM$5
Calibration Files

Avg %RSD 9.6

	Compound	3 5M26108.	10 5M26109.	20 5M26110.	50 5M26107.	80 5M26111.	100 5M26112.	120 5M26113.D	Avg	%RSD	R^2 value
I	1,4-Dichlorobenzene-d4	ISTD									
	Pyridine	1.567	1.530	1.335	1.418	1.509	1.499	1.482	1.474	5.3	
	n-Nitrosodimethylamine	0.990	0.900	0.868	0.905	0.855	0.857	0.840	0.888	5.7	
S	2-Fluorophenol	1.339	1.275	1.331	1.387	1.393	1.370	1.392	1.355	3.2	
	Aniline	0.666	0.583	0.559	0.483	0.557	0.542	0.547	0.582	9.8	
S	Phenol-d5	1.687	1.540	1.542	1.665	1.666	1.622	1.654	1.625	3.7	
C	Phenol	1.783	1.625	1.605	1.801	1.766	1.721	1.778	1.725	4.6	
	bis(2-Chloroethyl)ether	1.274	1.152	1.133	1.127	1.126	1.101	1.094	1.144	5.3	
	2-Chlorophenol	1.543	1.398	1.397	1.521	1.506	1.481	1.515	1.480	4.0	
	1,3-Dichlorobenzene	1.916	1.702	1.680	1.677	1.810	1.784	1.837	1.772	5.1	
C	1,4-Dichlorobenzene	2.008	1.752	1.727	1.803	1.887	1.852	1.884	1.845	5.2	
	Benzyl Alcohol	0.907	0.840	0.883	0.969	0.953	0.937	0.969	0.920	5.6	
	1,2-Dichlorobenzene	1.879	1.641	1.802	1.804	1.748	1.724	1.772	1.710	5.9	
	2-Methylphenol	1.178	1.033	1.012	1.121	1.126	1.106	1.138	1.102	5.4	
	bis(2-Chloroisopropyl)ether	3.517	3.027	2.894	2.611	2.544	2.421	2.362	2.788	14.8	
	3-,4-Methylphenol	1.645	1.518	1.503	1.673	1.654	1.634	1.682	1.618	4.6	
P	n-Nitrosodipropylamine	1.044	0.935	0.927	0.946	0.995	0.974	0.991	0.973	4.2	
	Hexachloroethane	0.760	0.680	0.676	0.684	0.714	0.695	0.712	0.703	4.1	
I	Naphthalene-d8	ISTD									
S	Nitrobenzene-d5	0.388	0.370	0.380	0.399	0.398	0.398	0.408	0.391	3.2	
	Nitrobenzene	0.378	0.368	0.368	0.392	0.381	0.375	0.386	0.378	2.4	
	Isophorone	0.720	0.671	0.670	0.662	0.707	0.684	0.706	0.690	3.3	
C	2-Nitrophenol	0.176	0.176	0.190	0.227	0.224	0.225	0.228	0.207	12.1	
	2,4-Dimethylphenol	0.369	0.347	0.359	0.363	0.395	0.391	0.396	0.374	5.3	
	bis(2-Chloroethoxy)methane	0.450	0.426	0.435	0.447	0.458	0.449	0.456	0.446	2.6	
	Benzoic Acid		0.114	0.137	0.231	0.217	0.222	0.232	0.192	27.2	
	2,4-Dichlorophenol	0.310	0.311	0.320	0.356	0.357	0.362	0.382	0.342	8.3	
	1,2,4-Trichlorobenzene	0.413	0.380	0.381	0.387	0.423	0.428	0.441	0.408	6.1	
	Naphthalene	1.215	1.079	1.086	1.113	1.148	1.142	1.160	1.135	4.1	
	4-Chloroaniline	0.386	0.382	0.395	0.423	0.413	0.418	0.433	0.407	4.8	
C	Hexachlorobutadiene	0.279	0.247	0.251	0.231	0.264	0.288	0.295	0.268	9.2	
C	4-Chloro-3-Methylphenol	0.292	0.288	0.298	0.335	0.325	0.327	0.336	0.314	6.8	
	2-Methylnaphthalene	0.829	0.753	0.774	0.821	0.828	0.832	0.841	0.811	4.2	
I	Acenaphthene-d10	ISTD									
P	Hexachlorocyclopentadiene	0.014	0.067	0.126	0.222	0.280	0.305	0.347	0.194	65.5	
C	2,4,6-Trichlorophenol	0.394	0.374	0.390	0.450	0.456	0.457	0.484	0.429	9.9	
	2,4,5-Trichlorophenol	0.402	0.402	0.414	0.474	0.472	0.477	0.514	0.451	9.8	
S	2-Fluorobiphenyl	1.552	1.411	1.393	1.381	1.515	1.485	1.530	1.466	4.8	
	2-Chloronaphthalene	1.333	1.233	1.224	1.220	1.318	1.290	1.330	1.278	4.0	
	2-Nitroaniline			0.324	0.371	0.346	0.336	0.353	0.346	5.0	
	Dimethylphthalate	1.470	1.349	1.333	1.388	1.437	1.398	1.449	1.404	3.7	
	Acenaphthylene	2.045	1.906	1.914	1.939	2.051	1.966	2.023	1.981	3.1	
	2,6-Dinitrotoluene	0.248	0.258	0.268	0.305	0.313	0.317	0.341	0.293	11.9	
	3-Nitroaniline			0.272	0.310	0.294	0.296	0.317	0.298	5.9	
C	Acenaphthene	1.252	1.133	1.107	1.195	1.202	1.182	1.224	1.189	4.5	
P	2,4-Dinitrophenol			0.075	0.142	0.144	0.153	0.171	0.137	28.7	
P	4-Nitrophenol			0.179	0.233	0.223	0.220	0.232	0.217	10.2	
	Dibenzofuran	1.801	1.730	1.691	1.798	1.843	1.779	1.805	1.792	3.9	
	2,4-Dinitrotoluene	0.248	0.258	0.268	0.305	0.313	0.317	0.341	0.293	11.9	
	Diethylphthalate	1.492	1.358	1.344	1.395	1.429	1.383	1.416	1.402	3.6	
	Fluorene	1.485	1.354	1.353	1.453	1.524	1.467	1.508	1.449	4.8	
	4-Chlorophenyl Phenyl Ether	0.722	0.665	0.660	0.715	0.761	0.750	0.789	0.723	6.7	
	4-Nitroaniline			0.270	0.327	0.293	0.287	0.318	0.299	7.7	
	1,2-Diphenylhydrazine	1.449	1.358	1.348	1.364	1.318	1.254	1.273	1.338	4.9	
S	2,4,6-Tribromophenol	0.099	0.103	0.113	0.137	0.135	0.138	0.152	0.125	16.2	
I	Phenanthrene-d10	ISTD									
	4,6-Dinitro-2-Methylphenol		0.080	0.104	0.153	0.154	0.166	0.181	0.140	27.9	
C	n-Nitrosodiphenylamine	0.659	0.601	0.595	0.624	0.641	0.637	0.656	0.630	4.0	
	4-Bromophenyl Phenyl Ether	0.219	0.203	0.205	0.266	0.233	0.239	0.252	0.231	10.1	
	Hexachlorobenzene	0.246	0.214	0.210	0.224	0.241	0.247	0.264	0.235	8.4	
	antachlorophenol		0.087	0.104	0.165	0.147	0.155	0.167	0.138	24.6	
	Phenanthrene	1.434	1.254	1.247	1.316	1.348	1.325	1.337	1.323	4.8	
	Anthracene	1.329	1.202	1.215	1.333	1.343	1.308	1.321	1.293	4.6	

Calibration Table Report
Method: BNA.M
Title: M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Calibration: Fri May 02 08:01:30 2003
HPMS5 Avg. %RSD 9.8
Calibration Files

	Compound	3 5M26108.	10 5M26109.	20 5M26110.	50 5M26107.	80 5M26111.	100 5M26112.	120 5M26113.D	Avg	%RSD	R^2 value
	Carbazole	1.203	1.088	1.091	1.230	1.094	1.068	1.090	1.123	5.7	
	Di-n-Butyl Phthalate	1.585	1.428	1.450	1.566	1.497	1.452	1.443	1.493	4.7	
C	Fluoranthene	1.456	1.327	1.342	1.469	1.481	1.458	1.480	1.431	4.7	
I	Chrysene-d12	ISTD									
	Benzidine	0.057	0.015	0.016	0.177	0.030	0.032	0.038	0.052	109.1	
	Pyrene	1.765	1.578	1.541	1.413	1.582	1.532	1.513	1.560	6.8	
S	p-Terphenyl-d14	1.096	0.987	0.988	0.889	1.070	1.051	1.052	1.019	6.9	
	Butyl Benzyl Phthalate	0.840	0.726	0.730	0.643	0.737	0.712	0.703	0.727	8.1	
	Benzo[a]anthracene	1.662	1.483	1.489	1.400	1.569	1.529	1.511	1.520	5.3	
	3,3'-Dichlorobenzidine	0.431	0.404	0.379	0.392	0.268	0.276	0.314	0.352	18.6	
	Chrysene	1.603	1.435	1.413	1.319	1.496	1.458	1.462	1.455	5.9	
	bis(2-Ethylhexyl)phthalate	1.075	0.964	0.962	0.935	0.989	0.951	0.935	0.973	5.0	
I	Perylene-d12	ISTD									
C	Di-n-Octyl Phthalate	2.331	2.406	2.439	2.677	2.731	2.714	2.766	2.578	6.9	
	Benzo[b]fluoranthene	1.997	1.856	1.900	1.877	2.035	2.150	2.164	1.997	6.4	
	Benzo[k]fluoranthene	1.980	1.806	1.808	1.702	2.044	2.034	2.232	1.944	9.4	
C	Benzo[a]pyrene	1.658	1.532	1.657	1.694	1.826	1.849	1.943	1.737	8.1	
	Indeno[1,2,3-cd]pyrene	1.484	1.530	1.644	1.788	1.803	1.763	1.825	1.691	8.2	
	Dibenz[ah]anthracene	1.182	1.214	1.301	1.401	1.445	1.430	1.494	1.352	9.0	
	Benzo[ghi]perylene	1.343	1.234	1.206	1.384	1.339	1.280	1.310	1.299	4.9	

Fri May 02 08:02:45 2003

KEMRON ENVIRONMENTAL SERVICES
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L0304594
File ID: 4M18454
ALT ID: WG139334-09
Units: ug/mL

Instrument ID: HPMS4
Run Date: 04/29/2003
Run Time: 21:36
Analyst: CLK
Cal ID: HPMS4 - 29-APR-03

Analyte		Expected	Found	RF	%D	Q
Benzo[a]pyrene	CCC	50	50.9	1.69	1.8	
Di-n-Octyl Phthalate	CCC	50	52.4	1.94	4.8	
Fluoranthene	CCC	50	50.6	1.46	1.2	
Pentachlorophenol	CCC	50	56.3	0.154	12.6	
n-Nitrosodiphenylamine	CCC	50	50.6	0.623	1.2	
Acenaphthene	CCC	50	51.8	1.35	3.6	
2,4,6-Trichlorophenol	CCC	50	52.8	0.455	5.6	
4-Chloro-3-Methylphenol	CCC	50	50.7	0.338	1.4	
Hexachlorobutadiene	CCC	50	50.5	0.252	1.0	
2,4-Dichlorophenol	CCC	50	50.7	0.341	1.4	
2-Nitrophenol	CCC	50	55.5	0.247	11.0	
1,4-Dichlorobenzene	CCC	50	50.1	1.78	0.2	
Phenol	CCC	50	50.2	1.78	0.4	
4-Nitrophenol	SPCC	50	52.8	0.263	5.6	
2,4-Dinitrophenol	SPCC	50	54.3	0.201	8.6	
Hexachlorocyclopentadiene	SPCC	50	54.8	0.410	9.6	
n-Nitrosodipropylamine	SPCC	50	51.4	0.968	2.8	
Benzo[ghi]perylene		50	45.4	1.46	9.2	
Dibenz[ah]anthracene		50	48.2	1.62	3.6	
Indeno[1,2,3-cd]pyrene		50	47.5	1.87	5.0	
Benzo[k]fluoranthene		50	51.8	1.79	3.6	
Benzo[b]fluoranthene		50	50.3	1.85	0.6	
bis(2-Ethylhexyl)phthalate		50	51.2	0.880	2.4	
Chrysene		50	50.9	1.37	1.8	
3,3'-Dichlorobenzidine		50	45.5	0.289	9.0	
Benzo[a]anthracene		50	50.6	1.42	1.2	
Butyl Benzyl Phthalate		50	51.9	0.645	3.8	
Pyrene		50	50.9	1.46	1.8	
Benzidine		50	26.5	0.0179	47.0	*
Di-n-Butyl Phthalate		50	50.8	1.40	1.6	
Carbazole		50	43.5	0.708	13.0	
Anthracene		50	50.9	1.25	1.8	
Phenanthrene		50	50.2	1.26	0.4	
Hexachlorobenzene		50	50.0	0.281	0.0	
4-Bromophenyl Phenyl Ether		50	49.0	0.233	2.0	
4,6-Dinitro-2-Methylphenol		50	52.9	0.170	5.8	
1,2-Diphenylhydrazine		50	50.3	1.31	0.6	
4-Nitroaniline		50	53.9	0.256	7.8	
4-Chlorophenyl Phenyl Ether		50	50.7	0.805	1.4	
Fluorene		50	50.9	1.51	1.8	
Diethylphthalate		50	50.9	1.45	1.8	
2,4-Dinitrotoluene		50	53.3	0.474	6.6	
Dibenzofuran		50	50.4	1.94	0.8	
3-Nitroaniline		50	44.3	0.218	11.4	

KEMRON ENVIRONMENTAL SERVICES
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L0304594
File ID: 4M18454
ALT ID: WG139334-09
Units: ug/mL

Instrument ID: HPMS4
Run Date: 04/29/2003
Run Time: 21:36
Analyst: CLK
Cal ID: HPMS4 29-APR-03

Analyte	Expected	Found	RF	%D	Q
2,6-Dinitrotoluene	50	53.0	0.357	6.0	
Acenaphthylene	50	51.5	2.18	3.0	
Dimethylphthalate	50	50.7	1.47	1.4	
2-Nitroaniline	50	51.3	0.353	2.6	
2-Chloronaphthalene	50	50.8	1.33	1.6	
2,4,5-Trichlorophenol	50	52.9	0.488	5.8	
2-Methylnaphthalene	50	50.5	0.821	1.0	
4-Chloroaniline	50	50.0	0.403	0.0	
Naphthalene	50	50.0	1.15	0.0	
1,2,4-Trichlorobenzene	50	49.5	0.393	1.0	
Benzoic Acid	50	56.2	0.164	12.4	
bis(2-Chloroethoxy)methane	50	50.1	0.421	0.2	
2,4-Dimethylphenol	50	51.6	0.387	3.2	
Isophorone	50	51.9	0.681	3.8	
Nitrobenzene	50	49.7	0.377	0.6	
Hexachloroethane	50	50.9	0.621	1.8	
3-,4-Methylphenol	50	51.0	1.72	2.0	
bis(2-Chloroisopropyl)ether	50	49.7	1.79	0.6	
2-Methylphenol	50	50.5	1.17	1.0	
1,2-Dichlorobenzene	50	50.0	1.65	0.0	
Benzyl Alcohol	50	51.9	0.983	3.8	
1,3-Dichlorobenzene	50	50.0	1.71	0.0	
2-Chlorophenol	50	50.0	1.49	0.0	
bis(2-Chloroethyl)ether	50	49.4	0.904	1.2	
Aniline	50	51.6	0.554	3.2	
n-Nitrosodimethylamine	50	50.8	0.768	1.6	
Pyridine	50	51.7	1.43	3.4	

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

KEMRON ENVIRONMENTAL SERVICES
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L0304594
File ID: 5M26114
ALT ID: WG139485-09
Units: ug/mL

Instrument ID: HPMS5
Run Date: 05/01/2003
Run Time: 16:33
Analyst: ALT
Cal ID: HPMS5 - 01-MAY-03

Analyte		Expected	Found	RF	%D	Q
Benzo[a]pyrene	CCC	50	50.7	1.76	1.4	
Di-n-Octyl Phthalate	CCC	50	52.7	2.71	5.4	
Fluoranthene	CCC	50	52.4	1.50	4.8	
Pentachlorophenol	CCC	50	48.8	0.134	2.4	
n-Nitrosodiphenylamine	CCC	50	50.0	0.630	0.0	
Acenaphthene	CCC	50	51.6	1.23	3.2	
2,4,6-Trichlorophenol	CCC	50	51.8	0.445	3.6	
4-Chloro-3-Methylphenol	CCC	50	51.8	0.326	3.6	
Hexachlorobutadiene	CCC	50	53.6	0.287	7.2	
2,4-Dichlorophenol	CCC	50	52.0	0.356	4.0	
2-Nitrophenol	CCC	50	55.6	0.230	11.2	
1,4-Dichlorobenzene	CCC	50	49.5	1.83	1.0	
Phenol	CCC	50	49.5	1.71	1.0	
4-Nitrophenol	SPCC	50	49.3	0.215	1.4	
2,4-Dinitrophenol	SPCC	50	48.4	0.133	3.2	
Hexachlorocyclopentadiene	SPCC	50	66.3	0.258	32.6	
n-Nitrosodipropylamine	SPCC	50	49.8	0.969	0.4	
Benzo[ghi]perylene		50	50.0	1.30	0.0	
Dibenz[ah]anthracene		50	51.5	1.39	3.0	
Indeno[1,2,3-cd]pyrene		50	51.1	1.73	2.2	
Benzo[k]fluoranthene		50	50.0	1.94	0.0	
Benzo[b]fluoranthene		50	52.6	2.10	5.2	
bis(2-Ethylhexyl)phthalate		50	51.1	0.994	2.2	
Chrysene		50	51.7	1.50	3.4	
3,3'-Dichlorobenzidine		50	39.0	0.274	22.0	
Benzo[a]anthracene		50	52.7	1.60	5.4	
Butyl Benzyl Phthalate		50	50.6	0.735	1.2	
Pyrene		50	52.2	1.63	4.4	
Benzidine		50	19.1	0.0199	61.8	*
Di-n-Butyl Phthalate		50	50.1	1.50	0.2	
Carbazole		50	47.5	1.07	5.0	
Anthracene		50	51.8	1.34	3.6	
Phenanthrene		50	51.4	1.36	2.8	
Hexachlorobenzene		50	51.0	0.240	2.0	
4-Bromophenyl Phenyl Ether		50	48.6	0.224	2.8	
4,6-Dinitro-2-Methylphenol		50	52.3	0.146	4.6	
1,2-Diphenylhydrazine		50	49.5	1.32	1.0	
4-Nitroaniline		50	48.2	0.288	3.6	
4-Chlorophenyl Phenyl Ether		50	51.5	0.744	3.0	
Fluorene		50	52.6	1.53	5.2	
Diethylphthalate		50	51.0	1.43	2.0	
2,4-Dinitrotoluene		50	53.4	0.313	6.8	
Dibenzofuran		50	52.2	1.87	4.4	
3-Nitroaniline		50	49.0	0.292	2.0	

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KEMRON ENVIRONMENTAL SERVICES

ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L0304594
File ID: 5M26114
ALT ID: WG139485-09
Units: ug/mL

Instrument ID: HPMS5
Run Date: 05/01/2003
Run Time: 16:33
Analyst: ALT
Cal ID: HPMS5 01-MAY-03

Analyte	Expected	Found	RF	%D	Q
2,6-Dinitrotoluene	50	53.4	0.313	6.8	
Acenaphthylene	50	51.7	2.05	3.4	
Dimethylphthalate	50	50.7	1.42	1.4	
2-Nitroaniline	50	50.4	0.350	0.8	
2-Chloronaphthalene	50	51.3	1.31	2.6	
2,4,5-Trichlorophenol	50	50.8	0.458	1.6	
2-Methylnaphthalene	50	52.4	0.849	4.8	
4-Chloroaniline	50	50.4	0.410	0.8	
Naphthalene	50	51.3	1.16	2.6	
1,2,4-Trichlorobenzene	50	52.1	0.424	4.2	
Benzoic Acid	50	54.3	0.209	8.6	
bis(2-Chloroethoxy)methane	50	51.1	0.456	2.2	
2,4-Dimethylphenol	50	53.2	0.398	6.4	
Isophorone	50	51.8	0.715	3.6	
Nitrobenzene	50	50.0	0.378	0.0	
Hexachloroethane	50	50.1	0.704	0.2	
3-,4-Methylphenol	50	50.0	1.62	0.0	
bis(2-Chloroisopropyl)ether	50	45.3	2.51	9.4	
2-Methylphenol	50	49.5	1.09	1.0	
1,2-Dichlorobenzene	50	49.7	1.70	0.6	
Benzyl Alcohol	50	49.7	0.914	0.6	
1,3-Dichlorobenzene	50	49.7	1.76	0.6	
2-Chlorophenol	50	49.6	1.47	0.8	
bis(2-Chloroethyl)ether	50	47.9	1.10	4.2	
Aniline	50	47.8	0.538	4.4	
n-Nitrosodimethylamine	50	46.0	0.817	8.0	
Pyridine	50	47.6	1.40	4.8	

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CONTINUING CALIBRATION REPORT

Login Number: L0304594
File ID: 4M18456
CCV ID: WG139370-02
Units: ug/mL

Instrument ID: HPMS4
Run Date: 04/30/2003
Run Time: 08:22
Analyst: MDC
Cal ID: HPMS4 - 29-APR-03

Analyte		Expected	Found	RF	%D	Q
Benzo[a]pyrene	CCC	50	49.1	1.64	1.8	
Di-n-Octyl Phthalate	CCC	50	51.2	1.90	2.4	
Fluoranthene	CCC	50	51.2	1.48	2.4	
Pentachlorophenol	CCC	50	57.2	0.157	14.4	
n-Nitrosodiphenylamine	CCC	50	50.8	0.625	1.6	
Acenaphthene	CCC	50	49.1	1.28	1.8	
2,4,6-Trichlorophenol	CCC	50	51.4	0.443	2.8	
4-Chloro-3-Methylphenol	CCC	50	52.2	0.348	4.4	
Hexachlorobutadiene	CCC	50	44.0	0.220	12.0	
2,4-Dichlorophenol	CCC	50	51.2	0.344	2.4	
2-Nitrophenol	CCC	50	53.3	0.237	6.6	
1,4-Dichlorobenzene	CCC	50	48.5	1.72	3.0	
Phenol	CCC	50	50.0	1.77	0.0	
4-Nitrophenol	SPCC	50	50.8	0.253	1.6	
2,4-Dinitrophenol	SPCC	50	47.0	0.174	6.0	
Hexachlorocyclopentadiene	SPCC	50	47.9	0.358	4.2	
n-Nitrosodipropylamine	SPCC	50	47.4	0.892	5.2	
Benzo[ghi]perylene		50	46.2	1.48	7.6	
Dibenz[ah]anthracene		50	48.0	1.62	4.0	
Indeno[1,2,3-cd]pyrene		50	48.5	1.90	3.0	
Benzo[k]fluoranthene		50	44.3	1.53	11.4	
Benzo[b]fluoranthene		50	49.9	1.84	0.2	
bis(2-Ethylhexyl)phthalate		50	45.1	0.774	9.8	
Chrysene		50	44.0	1.18	12.0	
3,3'-Dichlorobenzidine		50	45.0	0.285	10.0	
Benzo[a]anthracene		50	44.4	1.25	11.2	
Butyl Benzyl Phthalate		50	42.3	0.525	15.4	
Pyrene		50	44.1	1.26	11.8	
Benzidine		50	218	0.147	336.0	*
Di-n-Butyl Phthalate		50	53.2	1.47	6.4	
Carbazole		50	54.9	0.895	9.8	
Anthracene		50	51.2	1.26	2.4	
Phenanthrene		50	50.0	1.26	0.0	
Hexachlorobenzene		50	49.7	0.279	0.6	
4-Bromophenyl Phenyl Ether		50	58.9	0.280	17.8	
4,6-Dinitro-2-Methylphenol		50	50.0	0.161	0.0	
1,2-Diphenylhydrazine		50	50.0	1.30	0.0	
4-Nitroaniline		50	57.8	0.274	15.6	
4-Chlorophenyl Phenyl Ether		50	49.7	0.789	0.6	
Fluorene		50	48.1	1.42	3.8	
Diethylphthalate		50	49.2	1.40	1.6	
2,4-Dinitrotoluene		50	48.2	0.429	3.6	

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KEMRON ENVIRONMENTAL SERVICES
CONTINUING CALIBRATION REPORT

Login Number: L0304594
File ID: 4M18456
CCV ID: WG139370-02
Units: ug/mL

Instrument ID: HPMS4
Run Date: 04/30/2003
Run Time: 08:22
Analyst: MDC
Cal ID: HPMS4 29-APR-03

Analyte	Expected	Found	RF	%D	Q
Dibenzofuran	50	48.7	1.88	2.6	
3-Nitroaniline	50	60.0	0.295	20.0	
2,6-Dinitrotoluene	50	49.8	0.335	0.4	
Acenaphthylene	50	48.1	2.04	3.8	
Dimethylphthalate	50	49.0	1.42	2.0	
2-Nitroaniline	50	50.8	0.350	1.6	
2-Chloronaphthalene	50	47.3	1.24	5.4	
2,4,5-Trichlorophenol	50	51.8	0.478	3.6	
2-Methylnaphthalene	50	49.9	0.812	0.2	
4-Chloroaniline	50	51.7	0.418	3.4	
Naphthalene	50	48.6	1.12	2.8	
1,2,4-Trichlorobenzene	50	47.4	0.376	5.2	
Benzoic Acid	50	50.3	0.162	0.6	
bis(2-Chloroethoxy)methane	50	49.5	0.417	1.0	
2,4-Dimethylphenol	50	47.5	0.356	5.0	
Isophorone	50	46.2	0.606	7.6	
Nitrobenzene	50	50.5	0.383	1.0	
Hexachloroethane	50	48.8	0.595	2.4	
3-,4-Methylphenol	50	49.8	1.68	0.4	
bis(2-Chloroisopropyl)ether	50	47.3	1.70	5.4	
2-Methylphenol	50	49.6	1.15	0.8	
1,2-Dichlorobenzene	50	46.3	1.53	7.4	
Benzyl Alcohol	50	50.0	0.948	0.0	
1,3-Dichlorobenzene	50	47.3	1.62	5.4	
2-Chlorophenol	50	49.9	1.49	0.2	
bis(2-Chloroethyl)ether	50	49.2	0.901	1.6	
Aniline	50	47.2	0.507	5.6	
n-Nitrosodimethylamine	50	50.3	0.761	0.6	
Pyridine	50	48.5	1.34	3.0	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

KEMRON ENVIRONMENTAL SERVICES
CONTINUING CALIBRATION REPORT

Login Number: L0304594
File ID: 5M26144
CCV ID: WG139599-04
Units: ug/mL

Instrument ID: HPMS5
Run Date: 05/02/2003
Run Time: 14:04
Analyst: ALT
Cal ID: HPMS5 - 01-MAY-03

Analyte		Expected	Found	RF	%D	Q
Benzo[a]pyrene	CCC	50	51.2	1.78	2.4	
Di-n-Octyl Phthalate	CCC	50	56.3	2.90	12.6	
Fluoranthene	CCC	50	53.1	1.52	6.2	
Pentachlorophenol	CCC	50	48.7	0.134	2.6	
n-Nitrosodiphenylamine	CCC	50	48.8	0.616	2.4	
Acenaphthene	CCC	50	51.1	1.22	2.2	
2,4,6-Trichlorophenol	CCC	50	51.9	0.445	3.8	
4-Chloro-3-Methylphenol	CCC	50	51.0	0.321	2.0	
Hexachlorobutadiene	CCC	50	46.9	0.251	6.2	
2,4-Dichlorophenol	CCC	50	50.4	0.345	0.8	
2-Nitrophenol	CCC	50	56.9	0.235	13.8	
1,4-Dichlorobenzene	CCC	50	49.9	1.84	0.2	
Phenol	CCC	50	47.6	1.64	4.8	
4-Nitrophenol	SPCC	50	45.8	0.199	8.4	
2,4-Dinitrophenol	SPCC	50	43.9	0.120	12.2	
Hexachlorocyclopentadiene	SPCC	50	58.6	0.228	17.2	
n-Nitrosodipropylamine	SPCC	50	45.1	0.878	9.8	
Benzo[ghi]perylene		50	48.8	1.27	2.4	
Dibenz[ah]anthracene		50	55.2	1.49	10.4	
Indeno[1,2,3-cd]pyrene		50	55.4	1.87	10.8	
Benzo[k]fluoranthene		50	49.1	1.91	1.8	
Benzo[b]fluoranthene		50	53.1	2.12	6.2	
bis(2-Ethylhexyl)phthalate		50	44.0	0.856	12.0	
Chrysene		50	45.1	1.31	9.8	
3,3'-Dichlorobenzidine		50	54.4	0.383	8.8	
Benzo[a]anthracene		50	46.1	1.40	7.8	
Butyl Benzyl Phthalate		50	39.7	0.577	20.6	
Pyrene		50	45.0	1.40	10.0	
Benzidine		50	146	0.152	192.0	*
Di-n-Butyl Phthalate		50	51.9	1.55	3.8	
Carbazole		50	53.6	1.20	7.2	
Anthracene		50	52.3	1.35	4.6	
Phenanthrene		50	51.3	1.36	2.6	
Hexachlorobenzene		50	49.5	0.233	1.0	
4-Bromophenyl Phenyl Ether		50	59.6	0.275	19.2	
4,6-Dinitro-2-Methylphenol		50	51.7	0.145	3.4	
1,2-Diphenylhydrazine		50	49.8	1.33	0.4	
4-Nitroaniline		50	50.3	0.301	0.6	
4-Chlorophenyl Phenyl Ether		50	52.7	0.762	5.4	
Fluorene		50	51.7	1.50	3.4	
Diethylphthalate		50	51.1	1.43	2.2	
2,4-Dinitrotoluene		50	51.2	0.300	2.4	

CONTINUING CALIBRATION REPORT

Login Number: L0304594
File ID: 5M26144
CCV ID: WG139599-04
Units: ug/mL

Instrument ID: HPMS5
Run Date: 05/02/2003
Run Time: 14:04
Analyst: ALT
Cal ID: HPMS5 01-MAY-03

Analyte	Expected	Found	RF	%D	Q
Dibenzofuran	50	54.3	1.95	8.6	
3-Nitroaniline	50	50.4	0.300	0.8	
2,6-Dinitrotoluene	50	51.2	0.300	2.4	
Acenaphthylene	50	49.7	1.97	0.6	
Dimethylphthalate	50	50.5	1.42	1.0	
2-Nitroaniline	50	49.2	0.341	1.6	
2-Chloronaphthalene	50	48.9	1.25	2.2	
2,4,5-Trichlorophenol	50	52.3	0.472	4.6	
2-Methylnaphthalene	50	52.5	0.852	5.0	
4-Chloroaniline	50	49.1	0.400	1.8	
Naphthalene	50	49.8	1.13	0.4	
1,2,4-Trichlorobenzene	50	50.0	0.407	0.0	
Benzoic Acid	50	49.2	0.189	1.6	
bis(2-Chloroethoxy)methane	50	48.6	0.434	2.8	
2,4-Dimethylphenol	50	48.5	0.363	3.0	
Isophorone	50	43.7	0.603	12.6	
Nitrobenzene	50	48.6	0.368	2.8	
Hexachloroethane	50	47.9	0.674	4.2	
3-,4-Methylphenol	50	48.3	1.56	3.4	
bis(2-Chloroisopropyl)ether	50	41.9	2.32	16.2	
2-Methylphenol	50	47.9	1.06	4.2	
1,2-Dichlorobenzene	50	46.4	1.59	7.2	
Benzyl Alcohol	50	46.5	0.856	7.0	
1,3-Dichlorobenzene	50	47.6	1.69	4.8	
2-Chlorophenol	50	48.8	1.45	2.4	
bis(2-Chloroethyl)ether	50	45.9	1.05	8.2	
Aniline	50	39.0	0.439	22.0	
n-Nitrosodimethylamine	50	44.5	0.791	11.0	
Pyridine	50	45.7	1.35	8.6	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

KEMRON ENVIRONMENTAL SERVICES
INTERNAL STANDARD AREA SUMMARY

Login Number: L0304594
Instrument ID: HPMS4
Workgroup (AAB#): WG139481

CCV Number: WG139370-02
CAL ID: HPMS4-29-APR-03
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3	IS-4	IS-5	IS-6
WG139370-02	NA	NA	282724	634067	1309498	1060492	905897	1057278
Upper Limit	NA	NA	565448	1268134	2618996	2120984	1811794	2114556
Lower Limit	NA	NA	141362	317034	654749	530246	452949	528639
L0304594-03	1.00	01	282148	624960	1202971	1045268	842838	1048699

IS-1 - 1,4-Dichlorobenzene-d4
IS-2 - Acenaphthene-d10
IS-3 - Chrysene-d12
IS-4 - Naphthalene-d8
IS-5 - Perylene-d12
IS-6 - Phenanthrene-d10

Underline = Response outside limits

KEMRON FORMS - Modified 12/13/2002
Version 1.2
Report generated 05/05/2003 15:02

KEMRON ENVIRONMENTAL SERVICES
INTERNAL STANDARD AREA SUMMARY

Login Number: L0304594
Instrument ID: HPMS5
Workgroup (AAB#): WG139687

CCV Number: WG139599-04
CAL ID: HPMS5-01-MAY-03
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3	IS-4	IS-5	IS-6
WG139599-04	NA	NA	275079	673659	1264491	1046214	600573	1096542
Upper Limit	NA	NA	550158	1347318	2528982	2092428	1201146	2193084
Lower Limit	NA	NA	137540	336830	632246	523107	300287	548271
L0304594-01	5.00	01	175892	445916	711468	680091	346125	712141
L0304594-02	1.00	01	173057	441996	708178	676365	346972	688535

IS-1 - 1,4-Dichlorobenzene-d4
IS-2 - Acenaphthene-d10
IS-3 - Chrysene-d12
IS-4 - Naphthalene-d8
IS-5 - Perylene-d12
IS-6 - Phenanthrene-d10

Underline = Response outside limits

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	4M18443.D	1.	✓ WG139334-01 50PPM DFTPP	1,1 SOS64-3	29 Apr 2003 15:20
2	2	4M18444.D	1.	cL WG139334-02 50PPM BNA STD	1,1 SOS63-38-4	29 Apr 2003 15:39
3	1	4M18445.D	1.	RZ WG139334-01 50PPM DFTPP	1,1 SOS64-3	29 Apr 2003 16:37
4	1	4M18446.D	1.	/ WG139334-01 50PPM DFTPP	1,1 SOS64-3	29 Apr 2003 16:52
5	2	4M18447.D	1.	cL/✓ WG139334-02 50PPM BNA STD	1,1 SOS63-38-4	29 Apr 2003 17:10
6	3	4M18448.D	1.	✓ WG139334-03 3PPM BNA STD	1,1 SOS63-38-1	29 Apr 2003 18:04
7	4	4M18449.D	1.	WG139334-04 10PPM BNA STD	1,1 SOS63-38-2	29 Apr 2003 18:38
8	5	4M18450.D	1.	WG139334-05 20PPM BNA STD	1,1 SOS63-38-3	29 Apr 2003 19:13
9	6	4M18451.D	1.	WG139334-06 80PPM BNA STD	1,1 SOS63-38-5	29 Apr 2003 19:47
10	7	4M18452.D	1.	WG139334-07 100PPM BNA STD	1,1 SOS63-38-6	29 Apr 2003 20:24
11	8	4M18453.D	1.	WG139334-08 120PPM BNA STD	1,1 SOS63-38-7	29 Apr 2003 21:00
12	9	4M18454.D	1.	WG139334-09 50PPM Alt Source BNA STD	1,1 SOS64-19-4	29 Apr 2003 21:36

CK
5/1/03
[illegible] 5/1/03

KEMRON ENVIRONMENTAL SERVICES
Semivolatile GC/MS Laboratory Maintenance / Runlog

Analysis Date/Time 4/29/03 Instrument ID HP-54 Column ID RTX-5MS SOP # MSS01 Rev. # 9 8270C ✓
Analyst Initials CLK Data Subdirectory 042903 SOP # MSS02 Rev. # ___ 625 ___
ISTD # B2106144 SOP # MSS03 Rev. # ___ PAH 8270C ___

Analysis Date/Time _____ Instrument ID _____ Column ID _____ Data Subdirectory _____

Preventative Maintenance

- ☐ Change o-ring
- ☒ Change liner
- ☐ Change septum
- ☐ Clip column (___ cm)
- ☐ Injection port seal (goldseal)
- ☐ Change gases _____

Additional Maintenance

Problem: _____

Action Taken: _____

Returned To Control?

Yes ___ No ___

Comments

Reviewed By: [illegible]

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
	1	4M18455.D	1.	WG139370-01 50PPM DFTPP	1,1 SOS64-3	30 Apr 2003 08:03
	2	4M18456.D	1.	WG139370-02 50PPM BNA STD	1,1 SOS63-38-4	30 Apr 2003 08:22
3	3	4M18457.D	1.	WG139340-02 BLK 4/29 V201P101	1,1	30 Apr 2003 08:57
4	4	4M18458.D	1.	WG139340-03 LCS 4/29 V201P101	1,1	30 Apr 2003 09:33
5	5	4M18459.D	1.	WG139289-01 TBLK 4/28 V201P101	17,1	30 Apr 2003 10:08
6	6	4M18460.D	1.	WG139272-01 BLK 4/29 V202P65	7,1 SOIL	30 Apr 2003 10:43
7	7	4M18461.D	1.	WG139272-02 LCS 4/29 V202P65	7,1 SOIL	30 Apr 2003 11:18
8	8	4M18462.D	1.	WG139272-03 LCS DUP 4/29 V202P65	7,1 SOIL	30 Apr 2003 11:53
9	9	4M18463.D	1.	L0304439-01 SOIL	7,1 SOIL	30 Apr 2003 12:28
10	10	4M18464.D	1.	L0304501-05 TCLP	17,1	30 Apr 2003 13:03
11	11	4M18465.D	1.	L0304554-01 TCLP	17,1	30 Apr 2003 13:38
12	12	4M18466.D	1.	L0304594-03 TCLP	17,1	30 Apr 2003 14:13
13	13	4M18467.D	1.	L0304543-04 TCLP	17,1	30 Apr 2003 14:48
14	14	4M18468.D	1.	L0304543-05 TCLP	17,1	30 Apr 2003 15:23
15	15	4M18469.D	1.	L0304543-07 TCLP	17,1	30 Apr 2003 15:58
16	16	4M18470.D	1.	L0304420-01	1,1	30 Apr 2003 17:14
17	17	4M18471.D	1.	L0304420-02	1,1	30 Apr 2003 17:50
18	18	4M18472.D	1.	WG139243-01 BLK 4/28 V201P91 RR	2,1	30 Apr 2003 18:25
19	19	4M18473.D	1.	L0304581-01	2,1	30 Apr 2003 19:01
20	20	4M18474.D	1.	L0304581-02	2,1	30 Apr 2003 19:37
21	21	4M18475.D	1.	L0304581-03	2,1	30 Apr 2003 20:12
22	22	4M18476.D	1.	L0304581-04	2,1	30 Apr 2003 20:47
23	23	4M18477.D	1.	L0304581-05	2,1	30 Apr 2003 21:23
24	24	4M18478.D	1.	L0304581-06	2,1	30 Apr 2003 21:58
25	25	4M18479.D	1.	L0304581-07	2,1	30 Apr 2003 22:34
26	26	4M18480.D	1.	L0304581-08	2,1	30 Apr 2003 23:10
27	27	4M18481.D	1.	L0304581-09	2,1	30 Apr 2003 23:46
28	28	4M18482.D	1.	L0304574-06	2,1	1 May 2003 00:22
29	29	4M18483.D	1.	L0304582-09	2,1	1 May 2003 00:58
30	30	4M18484.D	1.	WG139340-01 L0304582-03	2,1	1 May 2003 01:34
	31	4M18485.D	1.	WG139340-04 L0304582-05 MS	2,1	1 May 2003 02:09
	32	4M18486.D	1.	WG139340-05 L0304582-07 MSD	2,1	1 May 2003 02:45
33	33	4M18487.D	1.	L0304582-16	2,1	1 May 2003 03:21
34	34	4M18488.D	1.	L0304582-01	2,1	1 May 2003 03:56
35	35	4M18489.D	1.	L0304582-14	2,1	1 May 2003 04:32
36	36	4M18490.D	10.	L0304574-03 10X	2,10	1 May 2003 05:08
37	37	4M18491.D	10.	L0304574-04 10X	2,10	1 May 2003 05:44
38	38	4M18492.D	10.	L0304574-05 10X	2,10	1 May 2003 06:20
39	39	4M18493.D	10.	L0304574-01 10X	2,10	1 May 2003 06:56
40	40	4M18494.D	10.	L0304574-02 10X	2,10	1 May 2003 07:32
41		4M18495.D	1.			

CLK 5/1/03

KEMRON ENVIRONMENTAL SERVICES

Semivolatile GC/MS Laboratory Maintenance / Runlog

Analysis Date/Time 4/30/03 Instrument ID #1454 Column ID RTx-5MS SOP # MSS01 Rev. # 9 8270C ✓
Analyst Initials CH Data Subdirectory 043003 SOP # MSS02 Rev. # 3 625 ✓
ISTD # 82100144 SOP # MSS03 Rev. # ___ PAH 8270C ___

Analysis Date/Time _____ Instrument ID _____ Column ID _____ Data Subdirectory _____

Preventative Maintenance

- ☐ Change o-ring
- ☒ Change liner
- ☐ Change septum
- ☐ Clip column (___ cm)
- ☐ Injection port seal (goldseal)
- ☐ Change gases _____

Additional Maintenance

Problem: _____

Action Taken: _____

Returned To Control?

Yes ___ No ___

Comments

L0304501-05 TCLP, SS1 c/10% SMI, SS2 base SMI

L0304581-04, SS4 low Needs 10X #10, 11, 13, 22
-05, Needs 10X #10, 11, 13, possibly 100X
-09, Needs 10X #11, 13

L0304582-14, Needs 5X #75

L0304574-03 10X, Needs RR @ 5X
-04
-05
-01
-02

Reviewed By: [illegible]

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
	1	5m26103.d	1.	WG139485-01 50PPM DFTPP	1,1 SOS64-3	1 May 03 09:25
2	1	5m26104.d	1.	WG139485-01 50PPM DFTPP	1,1 SOS64-3	1 May 03 10:27
3	2	5m26105.d	1.	WG139485-02 50PPM BNA STD	1,1 SOS63-38-4	1 May 03 10:46
4	1	5m26106.d	1.	WG139485-01 50PPM DFTPP	1,1 SOS64-3	1 May 03 12:37
5	2	5m26107.d	1.	WG139485-02 50PPM BNA STD	1,1 SOS63-38-4	1 May 03 12:55
6	3	5m26108.d	1.	WG139485-03 3PPM BNA STD	1,1 SOS63-38-1	1 May 03 13:28
7	4	5m26109.d	1.	WG139485-04 10PPM BNA STD	1,1 SOS63-38-2	1 May 03 14:00
8	5	5m26110.d	1.	WG139485-05 20PPM BNA STD	1,1 SOS63-38-3	1 May 03 14:33
9	6	5m26111.d	1.	WG139485-06 80PPM BNA STD	1,1 SOS63-38-5	1 May 03 15:03
10	7	5m26112.d	1.	WG139485-07 100PPM BNA STD	1,1 SOS63-38-6	1 May 03 15:33
11	8	5m26113.d	1.	WG139485-08 120PPM BNA STD	1,1 SOS63-38-7	1 May 03 16:03
12	9	5m26114.d	1.	*WG139485-09 50PPM Alt Source BNA STD	1,1 SOS64-19	1 May 03 16:33
13	1	5m26115.d	1.	WG139485-10 50PPM DFTPP	1,1 SOS64-3	1 May 03 16:58
14	2	5m26116.d	1.	WG139485-11 50PPM BNA STD	1,1 SOS63-38-4	1 May 03 17:17
15	3	5m26117.d	1.	WG139352-01 BLK 4/29 V202P69	7,1 SOIL	1 May 03 17:47
16	4	5m26118.d	1.	*WG139352-02 LCS 4/29 V202P69	7,1 SOIL	1 May 03 18:17
17	5	5m26119.d	1.	*WG139352-03 LCSDUP 4/29 V202P69	7,1 SOIL	1 May 03 18:47
18	6	5m26120.d	1. RE	2 RL0304609-01	7,1 SOIL	1 May 03 19:17
19	7	5m26121.d	1.	L0304609-02	7,1 SOIL	1 May 03 19:46
20	8	5m26122.d	1.	L0304609-03	7,1 SOIL	1 May 03 20:16
21	9	5m26123.d	1.	L0304609-04	7,1 SOIL	1 May 03 20:45
22	10	5m26124.d	1.	L0304609-05	7,1 SOIL	1 May 03 21:15
23	11	5m26125.d	1.	L0304609-06	7,1 SOIL	1 May 03 21:45
24	12	5m26126.d	1.	L0304609-07	7,1 SOIL	1 May 03 22:15
25	13	5m26127.d	1.	L0304609-08	7,1 SOIL	1 May 03 22:45
26	14	5m26128.d	1.	L0304609-09	7,1 SOIL	1 May 03 23:14
27	15	5m26129.d	1.	L0304609-10	7,1 SOIL	1 May 03 23:44
28	16	5m26130.d	1.	L0304609-11	7,1 SOIL	2 May 03 00:13
29	17	5m26131.d	1.	L0304609-12	7,1 SOIL	2 May 03 00:43
[illegible]	18	5m26132.d	2.	*L0304519-04 2X	1,2	2 May 03 01:13
[illegible]	19	5m26133.d	120.	*L0304544-01 10X RR	12,10 RR	2 May 03 01:43
32	20	5m26134.d	1.	BNA SPIKE 2X	ESS0044-22 RR	2 May 03 02:13

*See Comments

AJ 5/2/03

ECL 5/2/03

KEMRON ENVIRONMENTAL SERVICES
Semivolatile GC/MS Laboratory Maintenance / Runlog

Analysis Date/Time 5/1/03 Instrument ID HPmsS Column ID Rtx-5s.1-rms SOP # MSS01 Rev. # 9 8270C ✓
Analyst Initials ALI Data Subdirectory 050103 SOP # MSS02 Rev. # ___ 625 ___
ISTD # B3100144 SOP # MSS03 Rev. # ___ PAH 8270C ___

Analysis Date/Time _____ Instrument ID _____ Column ID _____ Data Subdirectory _____

Preventative Maintenance

- ☑ Change o-ring
- ☑ Change liner
- ☐ Change septum
- ☑ Clip column (1.2 cm)
- ☑ Injection port seal (goldseal)
- ☐ Change gases _____

Additional Maintenance

Problem: CCV bad low phenols

Action Taken: Clipped Column, Changed Gold Seal - Still low - Changed Column.

Returned To Control?

Yes ✓ No ___

Comments

ICal - Average responses - #35 > 30% AVE
ICV - #35 > ±25% DEV
CCV - Passes.

~~WG139352~~ WG139352-02 LCS #73 low #79 - High
-03 LCSD #73 - missing.

L0304609-01 IS6 low ~~Remix~~ RR - ALI 5/2/03 RE Per Client Request
-02 IS 5+6 low
-03 ↓
-04 IS 4-6 low
-05 IS 1-6 low
-06 - 12
L0304544-01 @10x RR EFV SSDL
(8270)
L0304519-04 @2x - SS6 low

Reviewed By: EC 5/2/03

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
	1	5m26135.d	1.	WG139599-01 50PPM DFTPP	1,1 SOS64-3	2 May 03 09:59
2	2	5m26136.d	1.	* WG139599-02 50PPM BNA STD	1,1 SOS63-38-4	2 May 03 10:18
3	3	5m26137.d	1.	50PPM Appendix IX STD	1,1 SOS64-13-3	2 May 03 10:51
4	4	5m26138.d	1.	3PPM Appendix IX STD	1,1 SOS64-13-1	2 May 03 11:21
5	5	5m26139.d	1.	20PPM Appendix IX STD	1,1 SOS64-13-2	2 May 03 11:50
6	6	5m26140.d	1.	80PPM Appendix IX STD	1,1 SOS64-13-4	2 May 03 12:20
7	7	5m26141.d	1.	100PPM Appendix IX STD	1,1 SOS64-13-5	2 May 03 12:50
8	8	5m26142.d	1.	120PPM Appendix IX STD	1,1 SOS64-13-6	2 May 03 13:20
9	1	5m26143.d	1.	WG139599-03 50PPM DFTPP	1,1 SOS64-3	2 May 03 13:45
10	2	5m26144.d	1.	* WG139599-04 50PPM BNA STD	1,1 SOS63-38-4	2 May 03 14:04
11	3	5m26145.d	1.	50PPM Appendix IX STD	1,1 SOS64-13-3	2 May 03 14:34
12	4	5m26146.d	1.	WG139371-03 BLK 4/30 V201P103	1,1	2 May 03 15:04
13	5	5m26147.d	1.	WG139371-04 LCS 4/30 V201P103	1,1	2 May 03 15:34
14	6	5m26148.d	1.	* L0304585-08	1,1	2 May 03 16:03
15	7	5m26149.d	1.	L0304585-02	1,1	2 May 03 16:33
16	8	5m26150.d	1.	WG139371-01 L0304585-04	1,1	2 May 03 17:03
17	9	5m26151.d	1.	WG139371-05 L0304585-05 MS	1,1	2 May 03 17:32
18	10	5m26152.d	1.	WG139371-06 L0304585-06 MSD	1,1	2 May 03 18:02
19	11	5m26153.d	1.	L0304585-07	1,1	2 May 03 18:32
20	12	5m26154.d	1.	* L0304585-10	1,1	2 May 03 19:01
21	13	5m26155.d	1.	L0304585-01	1,1	2 May 03 19:31
22	14	5m26156.d	1.	L0304585-03	1,1	2 May 03 20:01
23	15	5m26157.d	1.	* L0304585-09	1,1	2 May 03 20:31
24	16	5m26158.d	100.	L0304508-01 100X	1,100	2 May 03 21:01
25	17	5m26159.d	100.	L0304508-03 100X	1,100	2 May 03 21:31
26	18	5m26160.d	100.	L0304508-06 100X	1,100	2 May 03 22:01
27	19	5m26161.d	1.	L0304508-01	1,1	2 May 03 22:32
28	20	5m26162.d	1.	L0304508-03	1,1	2 May 03 23:02
29	21	5m26163.d	1.	L0304508-06	1,1	2 May 03 23:32
30	22	5m26164.d	1.	* L0304594-02	1,1	3 May 03 00:02
	23	5m26165.d	5.	L0304594-01 5X	1,5	3 May 03 00:32
	24	5m26166.d	1.	L0304593-01	1,1	3 May 03 01:02
33	25	5m26167.d	1.	L0304593-02	1,1	3 May 03 01:32
34	26	5m26168.d	1.	RR L0304593-03	1,1	3 May 03 02:02

* See Comments

AKJ/5/3/03

see Slots

03 May 03 08:56

KEMRON ENVIRONMENTAL SERVICES
Semivolatile GC/MS Laboratory Maintenance / Runlog

Analysis Date/Time 5/2/03 Instrument ID HPMS5 Column ID RTX-5sil-MS SOP # MS501 Rev. # 9 8270C ✓
Analyst Initials ALT Data Subdirectory 050203 SOP # MSS02 Rev. # ___ 625 ___
ISTD # B32100144 SOP # MSS03 Rev. # ___ PAH 8270C ___

Analysis Date/Time _____ Instrument ID _____ Column ID _____ Data Subdirectory _____

Preventative Maintenance

- ☑ Change o-ring
- ☑ Change liner
- ☐ Change septum
- ☐ Clip column (___ cm)
- ☐ Injection port seal (goldseal)
- ☐ Change gases _____

Additional Maintenance

Problem: _____

Action Taken: _____

Returned To Control?

Yes ___ No ___

Comments

5M26136 CCV #5 7 ≥20% DEV - low
AQ curve for Acetophenone only - Passes Linearity.

5M26144 CCV #5 + #71 7 ≥20% DEV - low

L0304585-08 SS4 low
-10
-01
-09

L0304508-01, 030606 @100x SS DL

L0304594-02 SS4 low
-01 @5x
L0304593-01
-03 - MT RR.

Reviewed By: [illegible]

Parameter: BNA H_2O SOP #: EXBOX Revision #: 10
Extraction Analyst(s): DP, PAS, CAF TV/KD Analyst(s): DP
Date/Time Extracted: 4-29-03 @ 17:00 Date TV/KD: 04/29/03
Spike/Surrogate Analyst: DP Witness: CAF
Surrogate #: ESS00 43-50 #25 Earliest Hold Date: 5-01-03
Spike #: A = ESSM 44-01 #2 Spike #: B = —

Extraction Work Group WG 139340
Analytical Work Group WG 159481

Extract Relinquished By: CEB
Extract Received By & Date: [illegible] 4/30/03

		Sample ID	Test Code	pH: <2	pH: N	pH: >12	Initial Vol / Wt	Amount Surrogate	Amount Spike	Final Volume	Extract Color	Emulsions: A	Emulsions: BN	Emulsions: N	Comments
	1	Blank		✓		✓	1000 mL	500 µL		1 mL	T				WG 139340-02
	2	LCS		✓		✓	↓		500 µL		C				WG ↓ -03
S/S	3	04-574-01	625 AB	✓		✓	970 mL				C	✓	✓		
	4	-02		✓		✓	950				C	✓	✓		
	5	-03		✓		✓	900				C	✓	✓		
	6	-04		✓		✓	950				C	✓	✓		
	7	-05		✓		✓	930				C	✓	✓		
	8	-06	↓	✓		✓	890				T				
S/S	9	04-575-08	827.5 PE	✓		✓	↓				T				
S/S	10	04-582-01	625-AB	✓		✓	930				C	✓	✓		
	11	-03		✓		✓	900				C				WG139340-01
	12	-05 MS		✓		✓	940		500 µL		C			*	WG -04
	13	-07 MSD		✓		✓			↓		C			*	WG ↓ -05
	14	-09		✓		✓	↓				T				
	15	-12		✓		✓	930				C		✓		*
	16	-14		✓		✓					C				
	17	-16	↓	✓		✓	↓				C				
	18	TBLK 4/28	827-TC	✓		✓	100 mL				T				WG139289-01
S/S	19	04-501-05		✓		✓					C	✓			
S/S	20	04-543-04		✓		✓					T				
	21	-05		✓		✓					C				
	22	-07		✓		✓					T				
S/S	23	04-554-01		✓		✓					T				
S/S	24	04-594-23	↓	✓		✓	↓	↓		↓	T				

DP 04/29/03

Methylene Chloride Lot #: 43016
Hexane Lot #: —
Ether Lot #: —
Methanol Lot #: —
Solvent: — Lot #: —
Reagent: Fortified Lot #: ER 2405
Reagent: 10 N NaOH Lot #: ER 0005-13
Reagent: — Lot #: —
Acid: 1:1 H_2SO_4 Lot #: ER 0005-02
Florisil Lot #: —
Silica Gel Lot #: —
IR Analyst / Date / Time: —
Dried Na_2SO_4 Lot #: ER 0005-25

Color Code
T = Transparent
C = Colored
O = Opaque

SW-846 Method			On	Off	On	Off
Continuous	3520C					
Soxhlet	3540C					
ASE*	3545					
Sep Funnel	3510C	✓				
Sonication	3550B					
Waste	3580A					

* Accelerated Solvent Extractor (ASE)

Clean-ups			
Florisil 3620B		GPC 3640A	
Silica Gel 3630C		Other	
Acid 3665A		N/A	✓
Sulfur 3660B			

Peer Reviewed By: [signature] Date: [illegible]

Extraction Notes For Volume # 201 Page # 101

General Comments: MS, MSD of 04-582-03

Extraction Anomalies: # Sample required 2X the normal amount (15mL) of base (10N NaOH) to achieve the desired pH (>12). Due to extremely thick emulsions on the base side sample was gently shaken by hand for the 2nd and 3rd base side shakes rather than being returned to the automatic shaker

Concentration Anomalies: None

Clean-Up Anomalies: N/A

Supervisor Review: [signature] Date: 4/30/03

Parameter: BNA H_2O SOP #: EX808 Revision #: 10
Extraction Analyst(s): CAF, PAS, DR, CEB TV/KD Analyst(s): CAF
Date/Time Extracted: 4-30-03 0919 Date TV/KD: 4-30-03
Spike/Surrogate Analyst: CAF Witness: PAS
Surrogate #: ES50043-50 Earliest Hold Date: 5-2-03
Spike #: A = ES50044-01 Spike #: B = –

Extraction Work Group WG 139371
Analytical Work Group WG 139687
Extract Relinquished By: CAF
Extract Received By & Date: EQ 4/30/03

	Sample ID	Test Code	pH <2	pH N	pH >12	Initial Vol / Wt	Amount Surrogate	Amount Spike	Final Volume	Extract Color	Emulsions A	Emulsions BN	Emulsions N	Comments
1	Blank		✓		✓	1000mL	500µl		1mL	T				WG 139371-03
2	LCS		✓		✓	↓		500µl		C				WG 139371-04
3	04-585-01	8270	✓		✓	1000mL				C	✓			
4	-02		✓		✓	↓				C				
5	-03		✓		✓	960mL				C	✓			
6	-04		✓		✓	1000mL				C	✓			WG139371-01
7	-05MS		✓		✓			500µl		C	✓			↓ -05
8	-06MSD		✓		✓			↓		C	✓			↓ -06
9	-07		✓		✓					C				
10	-08		✓		✓					T				
11	-09		✓		✓					C				
12	-10		✓		✓	↓				C				
13	04-586-01		✓		✓	970mL				T				WG139371-02
14	-01MS		✓		✓	940mL		500µl		C				↓ -07
15	-02MSD		✓		✓	1000mL		↓		C				↓ -08
16	-04		✓		✓	970mL				T				
17	04-597-01		✓		✓	860mL				T				
18	-02		✓		✓	890mL				T				
19	-03		✓		✓	860mL				T				
20	04-594-01	827-TCL	✓		✓	900mL				C	✓			
21	-02	↓	✓		✓	920mL				C	✓			
22	04-671-01	8270	✓		✓	500mL				C				↓
23	-02	↓	✓		✓	↓	↓		↓	C				↓
24						CAF 4-30-03								

Methylene Chloride Lot #: 43010
Hexane Lot #: –
Ether Lot #: –
Methanol Lot #: ✓
Solvent: – Lot #: –
Reagent: Fortified Lot #: ER0005-15
Reagent: 10N NaOH Lot #: ER0005-B
Reagent: – Lot #: –
Acid: 1:1 H_2SO_4 Lot #: ER0005-2
Florisil Lot #: –
Silica Gel Lot #: –
IR Analyst / Date / Time: –
Dried Na_2SO_4 Lot #: ER0005-25

Color Code
T = Transparent
C = Colored
O = Opaque

SW-846 Method			On	Off	On	Off
Continuous	3520C					
Soxhlet	3540C					
ASE*	3545					
Sep Funnel	3510C	✓				
Sonication	3550B					
Waste	3580A					

* Accelerated Solvent Extractor (ASE)

Clean-ups			
Florisil 3620B		GPC 3640A	
Silica Gel 3630C		Other	
Acid 3665A		N/A	✓
Sulfur 3660B			

Peer Reviewed By: [signature] Date: 04/30/03

Extraction Notes For Volume # 201 Page # 103

General Comments: * checked the pH after each acid shake

Extraction Anomalies: NONE

Concentration Anomalies: NONE

Clean-Up Anomalies: N/A

Supervisor Review: _____ Date: _____

2.2.1.2 Sample Data

Data File : C:\HPCHEM\1\DATA\050203\5M26165.D Vial: 23
Acq On : 3 May 2003 00:32 Operator: ALT
Sample : L0304594-01 5X Inst : HPMS5
Misc : 1,5 Multiplr: 5.00
MS Integration Params: RTEINT.P
Quant Time: May 3 8:17 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.79	152	175892	40.00 ug/mL	0.00
19) Naphthalene-d8	9.20	136	680091	40.00 ug/mL	0.00
34) Acenaphthene-d10	11.05	164	445916	40.00 ug/mL	0.00
56) Phenanthrene-d10	12.59	188	712141	40.00 ug/mL	0.00
67) Chrysene-d12	15.31	240	711468	40.00 ug/mL	0.00
76) Perylene-d12	17.35	264	346125	40.00 ug/mL	0.00

System Monitoring Compounds					
4) 2-Fluorophenol	6.29	112	29837	25.0336 ug/mL	0.01
Spiked Amount 100.000	Range 21 - 100		Recovery = 25.03%		
6) Phenol-d5	7.36	99	24706	17.2854 ug/mL	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 17.29%		
20) Nitrobenzene-d5	8.44	82	26179	19.6851 ug/mL	0.01
Spiked Amount 50.000	Range 35 - 114		Recovery = 39.38%		
38) 2-Fluorobiphenyl	10.32	172	65149	19.9256 ug/mL	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 39.86%#		
55) 2,4,6-Tribromophenol	11.87	330	21064	75.4553 ug/mL	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 75.46%		
70) p-Terphenyl-d14	14.17	244	99410	27.4284 ug/mL	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 54.86%		

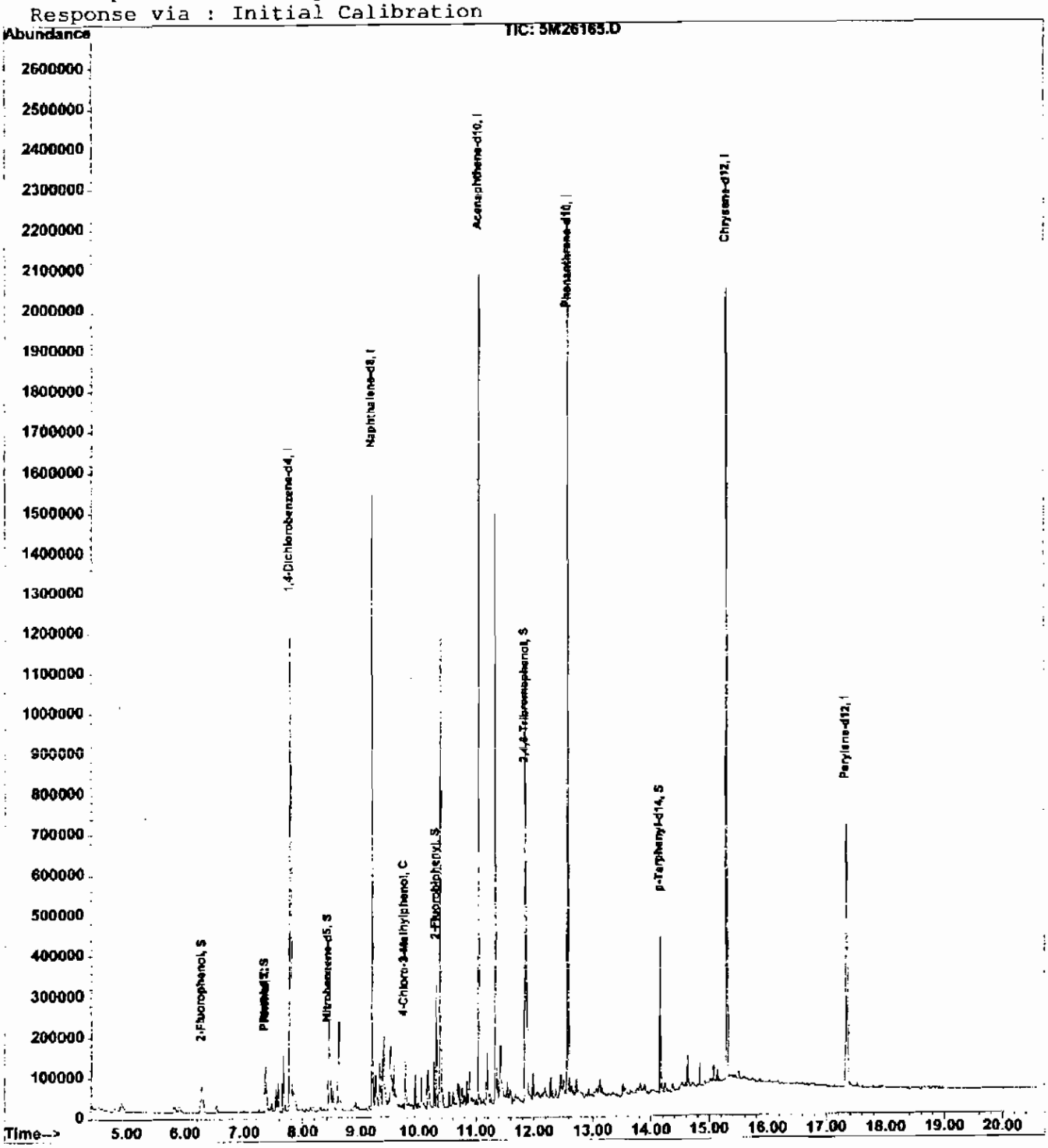
Target Compounds					Qvalue
5) Aniline	7.38	66	18735	7.5750 ug/mL#	1
7) Phenol	7.38	94	35701	4.7053 ug/mL	92
32) 4-Chloro-3-Methylphenol	9.77	107	19822	3.7081 ug/mL#	51

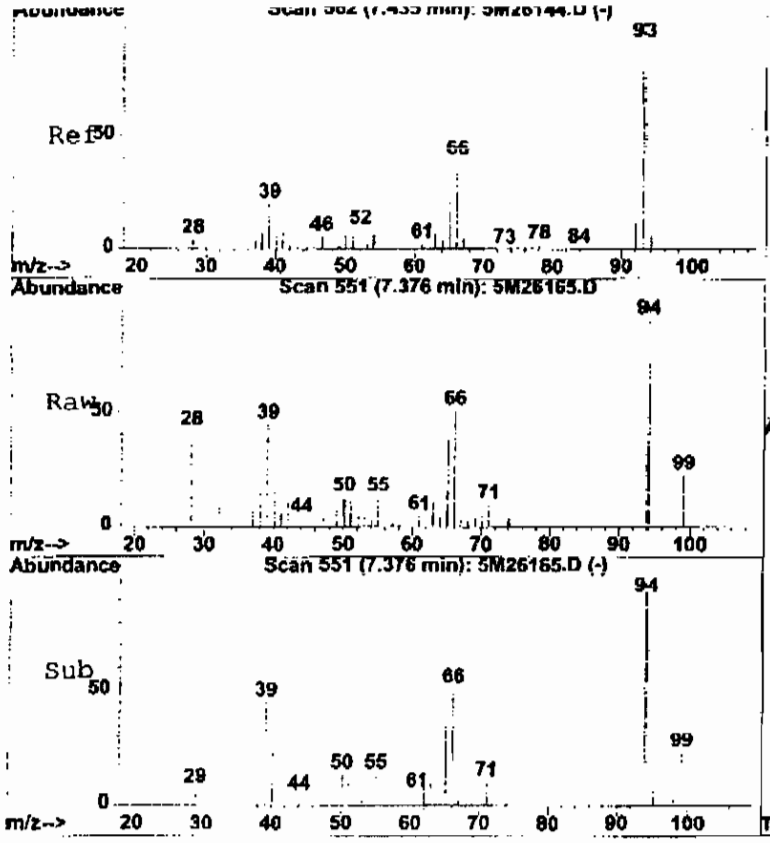
(#) = qualifier out of range (m) = manual integration

Data File : C:\HPCHEM\1\DATA\050203\5M26165.D
Acq On : 3 May 2003 00:32
Sample : L0304594-01 5X
Misc : 1,5
MS Integration Params: RTEINT.P
Quant Time: May 3 8:17 2003

Vial: 23
Operator: ALT
Inst : HPMS5
Multiplr: 5.00
Quant Results File: BNA.RES

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Initial Calibration

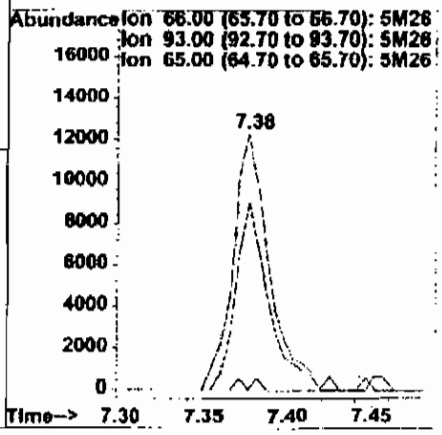


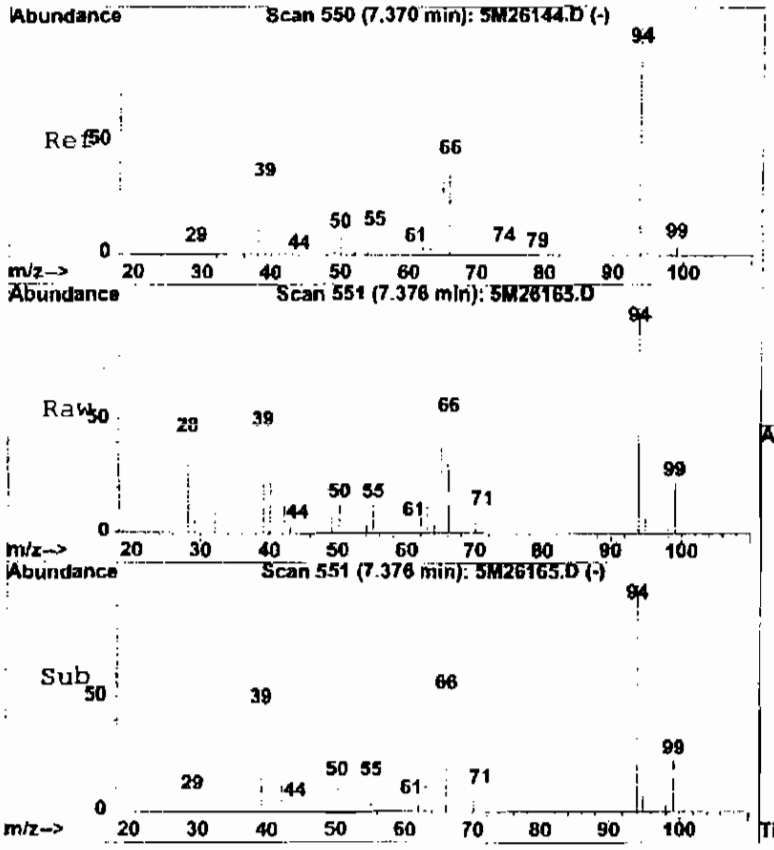


#5
Aniline
Concen: 7.57 ug/mL
RT: 7.38 min Scan# 551
Delta R.T. -0.06 min
Lab File: 5M26165.D
Acq: 3 May 2003 00:32

Tgt Ion: 66 Resp: 18735

Ion	Ratio	Lower	Upper
66	100		
93	1.8	212.4	318.6#
65	65.3	45.3	67.9

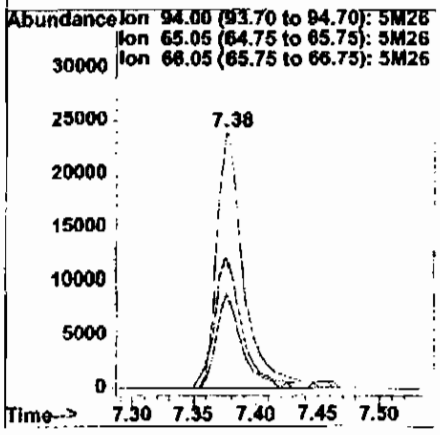


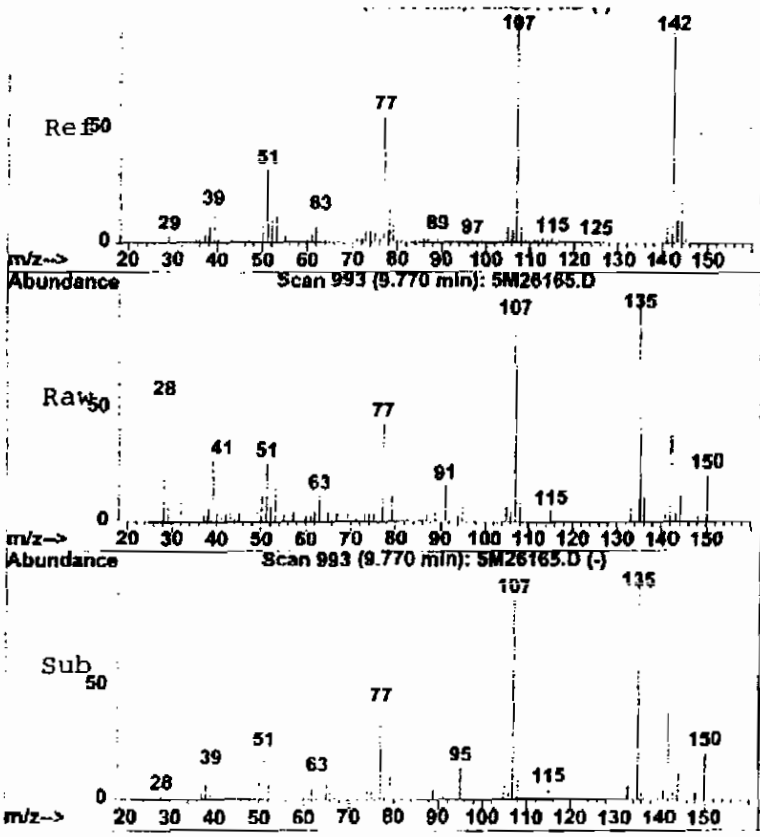


#7
Phenol
Concen: 4.71 ug/mL
RT: 7.38 min Scan# 551
Delta R.T. 0.01 min
Lab File: 5M26165.D
Acq: 3 May 2003 00:32

Tgt Ion: 94 Resp: 35701

Ion	Ratio	Lower	Upper
94	100		
65	34.3	25.8	38.8
66	52.5	36.1	54.1

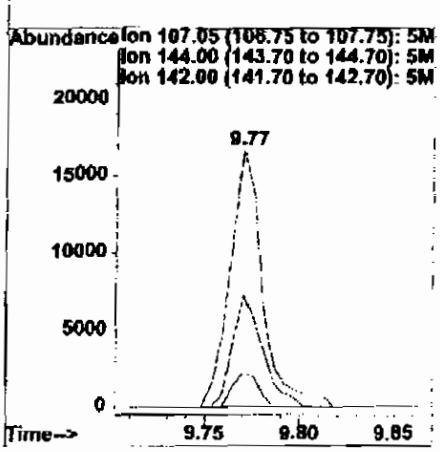




#32
4-Chloro-3-Methylphenol
Concen: 3.71 ug/mL
RT: 9.77 min Scan# 993
Delta R.T. 0.01 min
Lab File: 5M26165.D
Acq: 3 May 2003 00:32

Tgt Ion:107 Resp: 19822

Ion	Ratio	Lower	Upper
107	100		
144	10.3	23.4	35.2#
142	40.0	72.6	109.0#



Data File : C:\HPCHEM\1\DATA\050203\5M26164.D Vial: 22
Acq On : 3 May 2003 00:02 Operator: ALT
Sample : L0304594-02 Inst : HPMS5
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 3 8:16 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.79	152	173057	40.00 ug/mL	0.00
19) Naphthalene-d8	9.20	136	676365	40.00 ug/mL	0.00
34) Acenaphthene-d10	11.05	164	441996	40.00 ug/mL	0.00
56) Phenanthrene-d10	12.59	188	688535	40.00 ug/mL	0.00
67) Chrysene-d12	15.32	240	708178	40.00 ug/mL	0.00
76) Perylene-d12	17.36	264	346972	40.00 ug/mL	0.00

System Monitoring Compounds

4) 2-Fluorophenol	6.28	112	169062	28.8338 ug/mL	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 28.83%		
6) Phenol-d5	7.36	99	130049	18.4957 ug/mL	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 18.50%		
20) Nitrobenzene-d5	8.43	82	146650	22.1760 ug/mL	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 44.36%		
38) 2-Fluorobiphenyl	10.32	172	338956	20.9176 ug/mL	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 41.84%#		
55) 2,4,6-Tribromophenol	11.88	330	85554	61.8378 ug/mL	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 61.84%		
70) p-Terphenyl-d14	14.17	244	362353	20.0884 ug/mL	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 40.18%		

Target Compounds

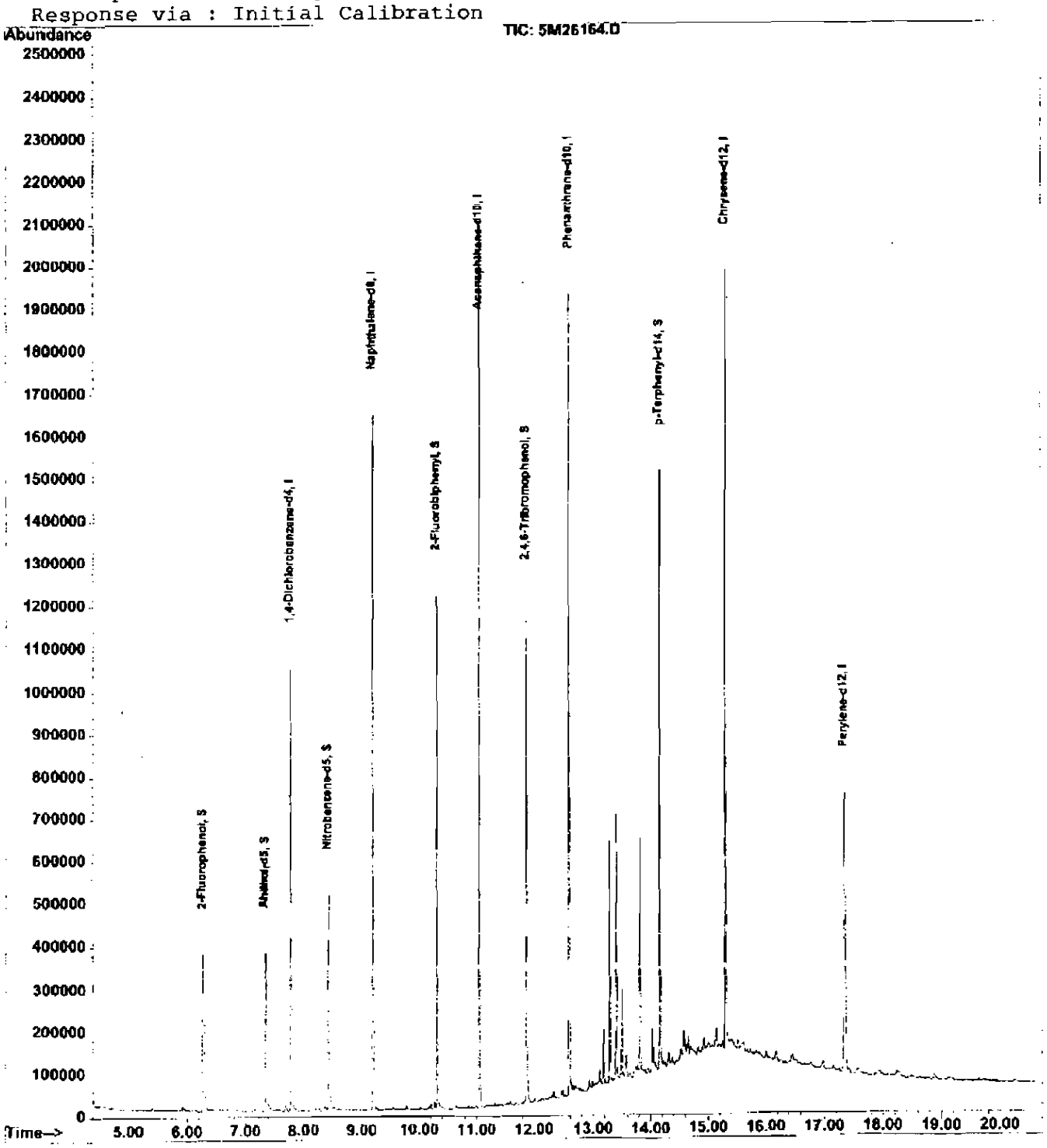
					Qvalue
5) Aniline	7.36	66	11656	4.7900 ug/mL#	1

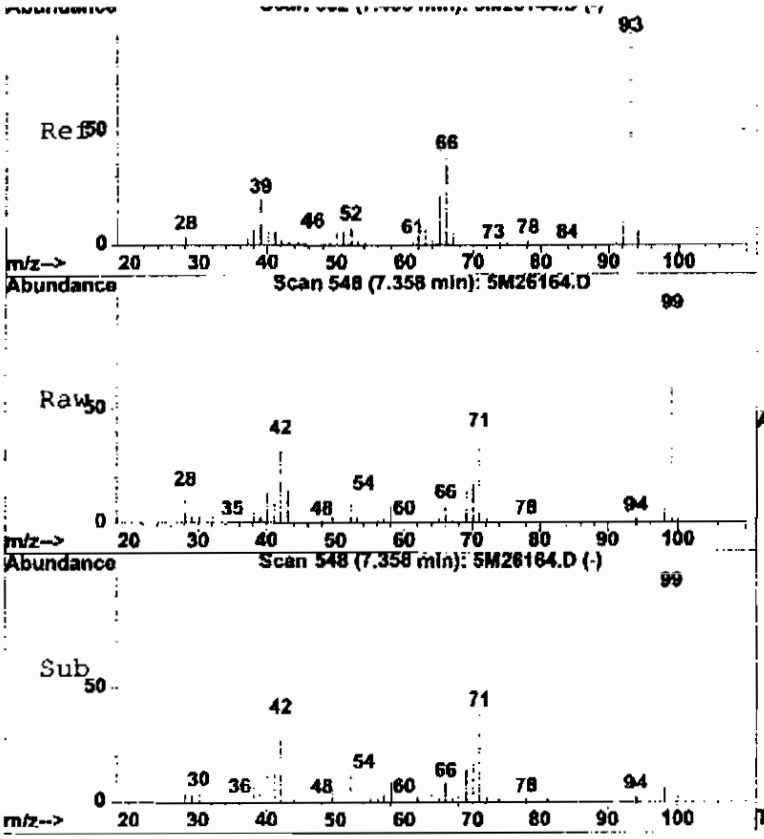
(#) = qualifier out of range (m) = manual integration
5M26164.D BNA.M Sat May 03 08:16:57 2003 HPMS5 Page 1

Data File : C:\HPCHEM\1\DATA\050203\5M26164.D
Acq On : 3 May 2003 00:02
Sample : L0304594-02
Misc : 1,1
MS Integration Params: RTEINT.P
Quant Time: May 3 8:16 2003

Vial: 22
Operator: ALT
Inst : HPMS5
Multiplr: 1.00
Quant Results File: BNA.RES

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Initial Calibration

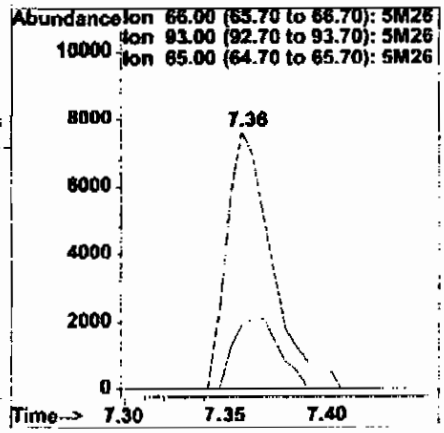




#5
Aniline
Concen: 4.79 ug/mL
RT: 7.36 min Scan# 548
Delta R.T. -0.08 min
Lab File: 5M26164.D
Acq: 3 May 2003 00:02

Tgt Ion: 66 Resp: 11656

Ion	Ratio	Lower	Upper
66	100		
93	0.0	212.4	318.6#
65	27.8	45.3	67.9#



Data File : C:\HPCHEM\1\DATA\043003\4M18466.D Vial: 12
Acq On : 30 Apr 2003 14:13 Operator: mdc
Sample : L0304594-03 TCLP Inst : HPMS4
Misc : 17,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 9:09 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:54:47 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.22	152	282148	40.00 ug/ml	0.00
19) Naphthalene-d8	11.86	136	1045268	40.00 ug/ml	0.00
34) Acenaphthene-d10	13.98	164	624960	40.00 ug/ml	0.00
56) Phenanthrene-d10	15.61	188	1048699	40.00 ug/ml	0.00
67) Chrysene-d12	18.48	240	1202971	40.00 ug/ml	-0.01
76) Perylene-d12	20.98	264	842838	40.00 ug/ml	-0.01

System Monitoring Compounds

4) 2-Fluorophenol	8.50	112	339314	34.5359 ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 34.54%		
6) Phenol-d5	9.70	99	269332	23.8487 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 23.85%		
20) Nitrobenzene-d5	10.94	82	295006	29.3950 ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 58.80%		
38) 2-Fluorobiphenyl	13.16	172	689515	28.1135 ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 56.22%		
55) 2,4,6-Tribromophenol	14.85	330	239937	78.3543 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 78.35%		
70) p-Terphenyl-d14	17.23	244	1297435	43.1882 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 86.38%		

Target Compounds

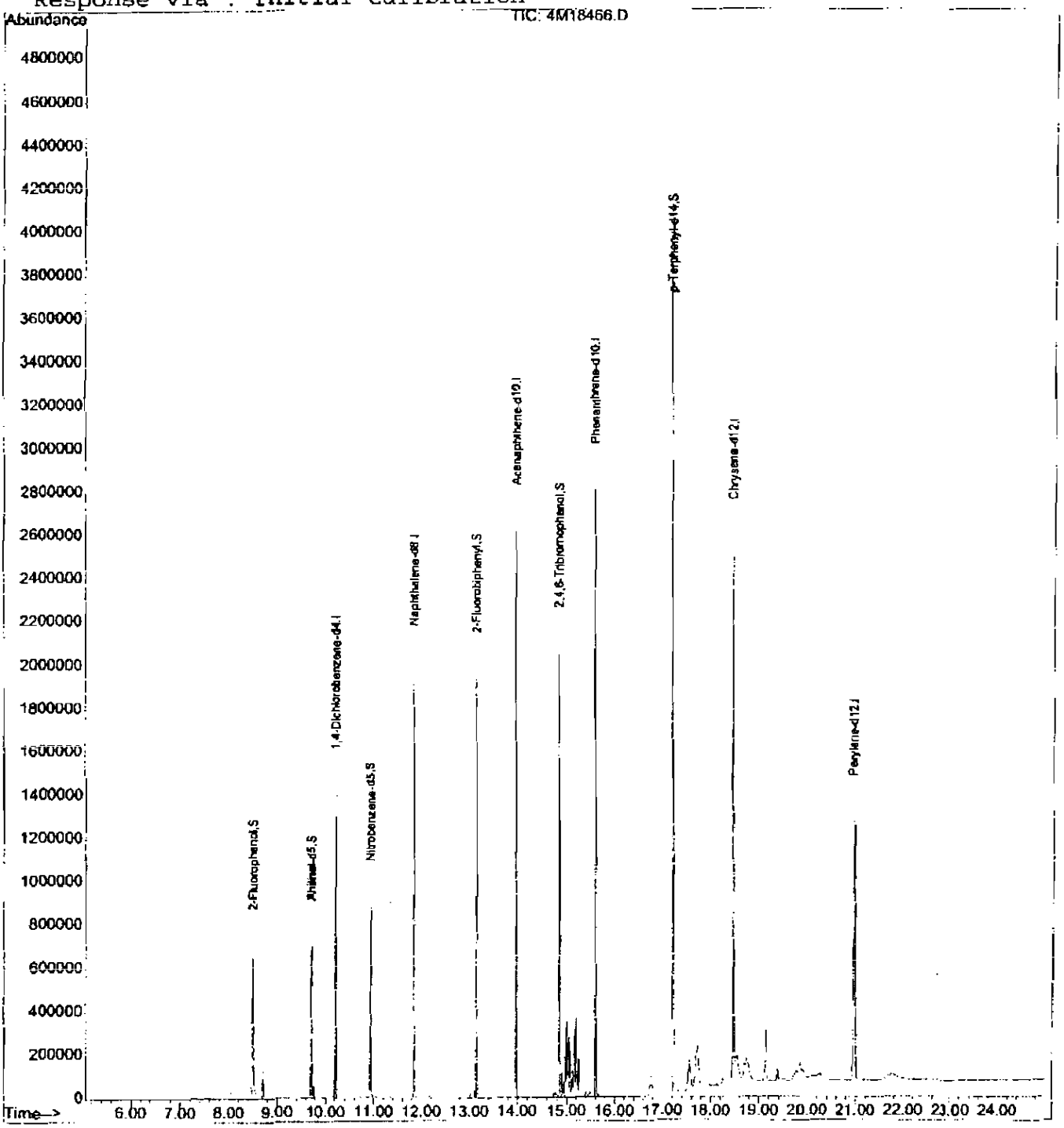
					Qvalue
5) Aniline	9.70	66	14637	3.8663 ug/ml#	1

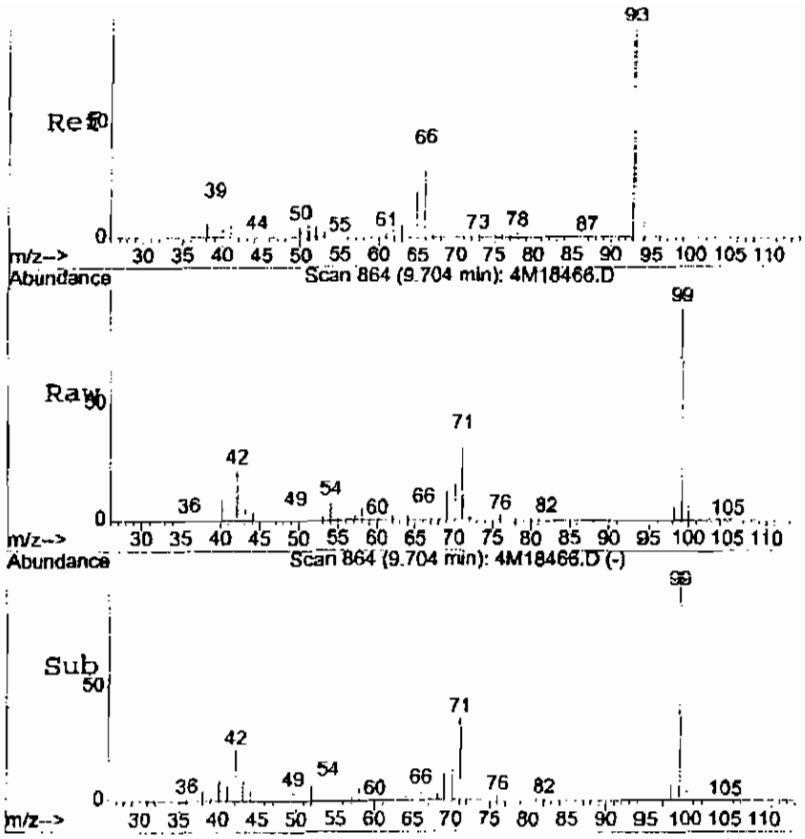
(#) = qualifier out of range (m) = manual integration
4M18466.D BNA.M Thu May 01 09:09:52 2003 HPMS4 Page 1

Data File : C:\HPCHEM\1\DATA\043003\4M18466.D
Acq On : 30 Apr 2003 14:13
Sample : L0304594-03 TCLP
Misc : 17,1
MS Integration Params: RTEINT.P
Quant Time: May 1 9:09 2003

Vial: 12
Operator: mdc
Inst : HPMS4
Multiplr: 1.00
Quant Results File: BNA.RES

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:54:47 2003
Response via : Initial Calibration

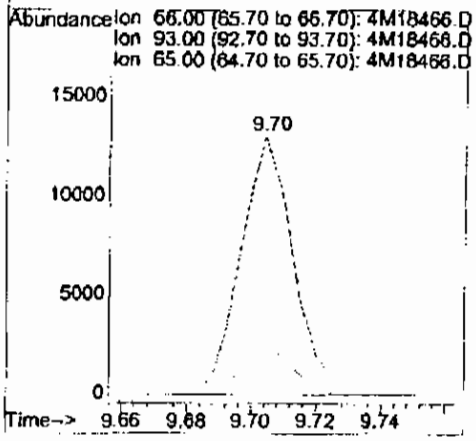




Aniline
Concen: 3.87 ug/ml
RT: 9.70 min Scan# 864
Delta R.T. -0.11 min
Lab File: 4M18466.D
Acq: 30 Apr 2003 14:13

Tgt Ion: 66 Resp: 14637

Ion	Ratio	Lower	Upper
66	100		
93	0.0	206.0	309.0#
65	18.3	40.1	60.1#



2.2.1.3 Standards Data

Calibration Table Report
Method: BNA.M
Title: M8270/625/Initial cal. 04/29/03
Last Calibration: Thu May 01 08:32:02 2003
HPMS4
Calibration Files

Avg. %RSD
8.4

	Compound	3 4M18448.D	10 4M18449.D	20 4M18450.D	50 4M18447.D	80 4M18451.D	100 4M18452.D	120 4M18453.D	Avg	%RSD	R^2 value
I	1,4-Dichlorobenzene-d4	ISTD									
	Pyridine		1.424	1.376	1.341	1.383	1.351	1.429	1.384	2.6	
	n-Nitrosodimethylamine	0.813	0.748	0.745	0.763	0.741	0.723	0.761	0.756	3.7	
S	2-Fluorophenol	1.504	1.385	1.361	1.395	1.362	1.333	1.410	1.393	4.0	
	Aniline	0.607	0.566	0.548	0.511	0.506	0.497	0.524	0.537	7.3	
S	Phenol-d5	1.686	1.551	1.543	1.613	1.593	1.567	1.655	1.601	3.4	
C	Phenol	1.907	1.716	1.892	1.796	1.751	1.711	1.805	1.768	4.2	
	bis(2-Chloroethyl)ether	1.014	0.908	0.888	0.914	0.896	0.874	0.911	0.915	5.0	
	2-Chlorophenol	1.603	1.452	1.432	1.517	1.471	1.437	1.505	1.488	4.0	
	1,3-Dichlorobenzene	1.891	1.721	1.686	1.830	1.687	1.645	1.724	1.712	5.0	
C	1,4-Dichlorobenzene	1.976	1.768	1.721	1.739	1.747	1.892	1.776	1.774	5.3	
	Benzyl Alcohol	0.933	0.911	0.907	0.970	0.965	0.948	1.002	0.948	3.6	
	1,2-Dichlorobenzene	1.839	1.651	1.624	1.554	1.628	1.591	1.667	1.651	5.5	
	2-Methylphenol	1.232	1.110	1.114	1.178	1.152	1.128	1.187	1.157	3.8	
	bis(2-Chloroisopropyl)ether	2.048	1.805	1.758	1.723	1.749	1.698	1.791	1.796	8.5	
	3-,4-Methylphenol	1.754	1.627	1.612	1.718	1.693	1.665	1.750	1.688	3.3	
P	n-Nitrosodipropylamine	0.969	0.918	0.917	0.907	0.954	0.936	0.980	0.940	3.0	
	Hexachloroethane	0.630	0.584	0.597	0.606	0.618	0.602	0.632	0.610	2.9	
I	Naphthalene-d8	ISTD									
S	Nitrobenzene-d5	0.408	0.375	0.376	0.381	0.384	0.377	0.368	0.384	3.0	
	Nitrobenzene	0.407	0.373	0.370	0.383	0.375	0.366	0.377	0.379	3.8	
	Isophorone	0.685	0.655	0.686	0.609	0.667	0.653	0.668	0.656	3.6	
C	2-Nitrophenol	0.195	0.206	0.209	0.234	0.236	0.235	0.242	0.222	8.3	
	2,4-Dimethylphenol	0.378	0.359	0.363	0.352	0.385	0.386	0.401	0.375	4.7	
	bis(2-Chloroethoxy)methane	0.447	0.410	0.404	0.415	0.418	0.417	0.438	0.421	3.6	
	Benzoic Acid			0.103	0.156	0.167	0.177	0.199	0.161	22.4	
C	2,4-Dichlorophenol	0.346	0.321	0.324	0.343	0.338	0.335	0.347	0.338	3.1	
	1,2,4-Trichlorobenzene	0.446	0.395	0.385	0.378	0.392	0.385	0.395	0.396	5.7	
	Naphthalene	1.268	1.147	1.126	1.114	1.136	1.114	1.142	1.150	4.7	
	4-Chloroaniline	0.428	0.412	0.407	0.415	0.385	0.381	0.400	0.404	4.1	
C	Hexachlorobutadiene	0.283	0.253	0.250	0.217	0.249	0.246	0.251	0.250	7.7	
C	4-Chloro-3-Methylphenol	0.326	0.317	0.322	0.344	0.339	0.334	0.350	0.333	3.6	
	2-Methylnaphthalene	0.877	0.798	0.790	0.800	0.807	0.799	0.818	0.813	3.6	
I	Acenaphthene-d10	ISTD									
P	Hexachlorocyclopentadiene	0.299	0.332	0.369	0.359	0.420	0.416	0.423	0.374	12.9	
C	2,4,6-Trichlorophenol	0.398	0.407	0.419	0.449	0.446	0.443	0.454	0.431	5.2	
	2,4,5-Trichlorophenol	0.436	0.432	0.442	0.479	0.478	0.474	0.489	0.461	5.2	
S	2-Fluorobiphenyl	1.763	1.583	1.561	1.475	1.583	1.507	1.536	1.570	5.9	
	2-Chloronaphthalene	1.438	1.309	1.288	1.239	1.314	1.280	1.308	1.311	4.7	
	2-Nitroaniline			0.332	0.353	0.350	0.339	0.347	0.344	2.5	
	Dimethylphthalate	1.540	1.445	1.436	1.441	1.443	1.398	1.430	1.448	3.0	
	Acenaphthylene	2.258	2.119	2.108	2.051	2.134	2.078	2.088	2.119	3.2	
	2,6-Dinitrotoluene	0.307	0.317	0.330	0.343	0.350	0.348	0.362	0.337	5.8	
	3-Nitroaniline	0.316	0.296	0.277	0.277	0.166	0.146		0.246	29.1	
C	Acenaphthene	1.373	1.231	1.261	1.300	1.334	1.308	1.337	1.306	3.7	
P	2,4-Dinitrophenol			0.097	0.170	0.208	0.216	0.235	0.185	29.5	
P	4-Nitrophenol			0.222	0.249	0.249	0.259	0.265	0.249	6.5	
	Dibenzofuran	2.130	1.912	1.885	1.897	1.908	1.862	1.885	1.926	4.8	
	2,4-Dinitrotoluene	0.405	0.427	0.435	0.434	0.473	0.463	0.479	0.445	6.1	
	Diethylphthalate	1.506	1.410	1.403	1.421	1.420	1.382	1.400	1.420	2.8	
	Fluorene	1.595	1.459	1.444	1.448	1.492	1.454	1.484	1.482	3.6	
	4-Chlorophenyl Phenyl Ether	0.852	0.780	0.763	0.792	0.798	0.779	0.792	0.794	3.5	
	4-Nitroaniline		0.227	0.230	0.288	0.253	0.216	0.209	0.237	12.3	
	1,2-Diphenylhydrazine	1.368	1.284	1.284	1.325	1.302	1.270	1.300	1.305	2.5	
S	2,4,6-Tribromophenol	0.153	0.171	0.183	0.209	0.216	0.214	0.225	0.196	13.8	
I	Phenanthrene-d10	ISTD									
	4,6-Dinitro-2-Methylphenol			0.120	0.158	0.170	0.173	0.185	0.161	15.5	
C	n-Nitrosodiphenylamine	0.881	0.627	0.806	0.808	0.597	0.583	0.602	0.615	5.2	
	4-Bromophenyl Phenyl Ether	0.249	0.228	0.221	0.280	0.227	0.225	0.232	0.237	8.8	
	Hexachlorobenzene	0.305	0.284	0.278	0.274	0.275	0.271	0.277	0.280	4.1	
	Pentachlorophenol			0.075	0.126	0.152	0.159	0.174	0.137	28.5	
	Phenanthrene	1.405	1.255	1.236	1.245	1.227	1.190	1.221	1.254	5.6	
	Anthracene	1.302	1.213	1.208	1.258	1.221	1.196	1.219	1.231	3.0	

Calibration Table Report
Method: BNA.M
Title: M8270/625/Initial cal. 04/29/03
Last Calibration: Thu May 01 08:32:02 2003
HPMS4
Calibration Files

Avg. %RSD
8.4

	Compound	3 4M18448.D	10 4M18449.D	20 4M18450.D	50 4M18447.D	80 4M18451.D	100 4M18452.D	120 4M18453.D	Avg	%RSD	R^2 value
	Carbazole	1.161	0.978	0.838	0.858	0.510	0.545		0.815	30.8	
	Di-n-Butyl Phthalate	1.432	1.358	1.363	1.463	1.366	1.327	1.349	1.380	3.5	
C	Fluoranthene	1.579	1.459	1.428	1.465	1.408	1.373	1.390	1.443	4.8	
I	Chrysene-d12	ISTD									
	Benzidine	0.016	0.013	0.014	0.128	0.021	0.020	0.024	0.034	123.7	
	Pyrene	1.644	1.500	1.471	1.273	1.407	1.367	1.362	1.432	8.4	
S	p-Terphenyl-d14	1.137	1.047	1.032	0.856	0.986	0.963	0.971	0.999	8.7	
	Butyl Benzyl Phthalate	0.667	0.640	0.632	0.533	0.632	0.619	0.626	0.621	6.7	
	Benzo[a]anthracene	1.819	1.450	1.424	1.245	1.386	1.351	1.364	1.405	8.2	
	3,3'-Dichlorobenzidine	0.439	0.353	0.319	0.284	0.280	0.275	0.290	0.317	19.5	
	Chrysene	1.527	1.382	1.368	1.198	1.330	1.301	1.309	1.345	7.4	
	bis(2-Ethylhexyl)phthalate	0.952	0.854	0.865	0.780	0.860	0.844	0.856	0.859	5.8	
I	Perylene-d12	ISTD									
C	Di-n-Octyl Phthalate	1.832	1.761	1.811	1.908	1.889	1.856	1.908	1.852	2.9	
	Benzo[b]fluoranthene	1.936	1.872	1.786	1.843	1.815	1.776	1.835	1.838	3.0	
	Benzo[k]fluoranthene	1.978	1.652	1.765	1.502	1.742	1.714	1.752	1.729	8.2	
C	Benzo[a]pyrene	1.793	1.633	1.637	1.624	1.658	1.636	1.679	1.666	3.6	
	Indeno[1,2,3-cd]pyrene	2.085	1.938	1.942	2.029	1.953	1.891	1.913	1.964	3.5	
	Dibenz[ah]anthracene	1.796	1.647	1.678	1.700	1.683	1.630	1.652	1.684	3.3	
	Benzo[ghi]perylene	1.767	1.601	1.602	1.652	1.585	1.518	1.517	1.606	5.3	

Thu May 01 08:34:05 2003

Calibration Table Report
Method: BNA.M
Title: M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Calibration: Fri May 02 08:01:30 2003
HPMS5
Calibration Files

Avg. %RSD 9.6

	Compound	3 5M26108.	10 5M26109.	20 5M26110.	50 5M26107.	80 5M26111.	100 5M26112.	120 5M26113.D	Avg	%RSD	R^2 value
I	1,4-Dichlorobenzene-d4	ISTD									
	Pyridine	1.567	1.530	1.335	1.416	1.509	1.499	1.482	1.474	5.3	
	n-Nitrosodimethylamine	0.990	0.900	0.868	0.905	0.855	0.857	0.840	0.888	5.7	
S	2-Fluorophenol	1.339	1.275	1.331	1.387	1.393	1.370	1.392	1.355	3.2	
	Aniline	0.666	0.583	0.559	0.483	0.557	0.542	0.547	0.562	9.8	
S	Phenol-d5	1.687	1.540	1.542	1.665	1.666	1.622	1.654	1.625	3.7	
C	Phenol	1.783	1.625	1.605	1.801	1.766	1.721	1.778	1.725	4.6	
	bis(2-Chloroethyl)ether	1.274	1.152	1.133	1.127	1.128	1.101	1.094	1.144	5.3	
	2-Chlorophenol	1.543	1.398	1.397	1.521	1.506	1.481	1.515	1.480	4.0	
	1,3-Dichlorobenzene	1.916	1.702	1.680	1.677	1.810	1.784	1.837	1.772	5.1	
C	1,4-Dichlorobenzene	2.008	1.752	1.727	1.803	1.887	1.852	1.884	1.845	5.2	
	Benzyl Alcohol	0.907	0.840	0.863	0.969	0.953	0.937	0.969	0.920	5.6	
	1,2-Dichlorobenzene	1.879	1.841	1.602	1.604	1.748	1.724	1.772	1.710	5.9	
	2-Methylphenol	1.178	1.033	1.012	1.121	1.126	1.106	1.138	1.102	5.4	
	bis(2-Chloroisopropyl)ether	3.517	3.027	2.894	2.611	2.544	2.421	2.362	2.788	14.8	
	3-,4-Methylphenol	1.645	1.518	1.503	1.673	1.654	1.634	1.682	1.616	4.6	
P	n-Nitrosodipropylamine	1.044	0.935	0.927	0.948	0.995	0.974	0.991	0.973	4.2	
	Hexachloroethane	0.760	0.680	0.676	0.684	0.714	0.695	0.712	0.703	4.1	
I	Naphthalene-d8	ISTD									
S	Nitrobenzene-d5	0.388	0.370	0.380	0.399	0.398	0.396	0.406	0.391	3.2	
	Nitrobenzene	0.378	0.368	0.388	0.392	0.381	0.375	0.386	0.378	2.4	
	Isophorone	0.720	0.671	0.670	0.662	0.707	0.694	0.706	0.690	3.3	
C	2-Nitrophenol	0.176	0.176	0.190	0.227	0.224	0.225	0.228	0.207	12.1	
	2,4-Dimethylphenol	0.369	0.347	0.359	0.363	0.395	0.391	0.396	0.374	5.3	
	bis(2-Chloroethoxy)methane	0.450	0.426	0.435	0.447	0.458	0.449	0.456	0.446	2.6	
	Benzoic Acid		0.114	0.137	0.231	0.217	0.222	0.232	0.192	27.2	
	2,4-Dichlorophenol	0.310	0.311	0.320	0.356	0.357	0.362	0.362	0.342	8.3	
	1,2,4-Trichlorobenzene	0.413	0.380	0.381	0.387	0.423	0.428	0.441	0.408	6.1	
	Naphthalene	1.215	1.079	1.086	1.113	1.148	1.142	1.160	1.135	4.1	
	4-Chloroaniline	0.386	0.382	0.395	0.423	0.413	0.416	0.433	0.407	4.8	
C	Hexachlorobutadiene	0.279	0.247	0.251	0.231	0.284	0.288	0.295	0.266	9.2	
C	4-Chloro-3-Methylphenol	0.292	0.288	0.298	0.335	0.325	0.327	0.336	0.314	6.6	
	2-Methylnaphthalene	0.829	0.753	0.774	0.821	0.828	0.832	0.841	0.811	4.2	
I	Acenaphthene-d10	ISTD									
P	Hexachlorocyclopentadiene	0.014	0.067	0.126	0.222	0.280	0.305	0.347	0.194	65.5	
C	2,4,6-Trichlorophenol	0.394	0.374	0.390	0.450	0.458	0.457	0.484	0.429	9.9	
	2,4,5-Trichlorophenol	0.402	0.402	0.414	0.474	0.472	0.477	0.514	0.451	9.8	
S	2-Fluorobiphenyl	1.552	1.411	1.393	1.381	1.515	1.485	1.530	1.466	4.8	
	2-Chloronaphthalene	1.333	1.233	1.224	1.220	1.318	1.290	1.330	1.278	4.0	
	2-Nitroaniline			0.324	0.371	0.348	0.336	0.353	0.346	5.0	
	Dimethylphthalate	1.470	1.349	1.333	1.388	1.437	1.398	1.449	1.404	3.7	
	Acenaphthylene	2.045	1.906	1.914	1.939	2.051	1.986	2.023	1.981	3.1	
	2,6-Dinitrotoluene	0.248	0.258	0.268	0.305	0.313	0.317	0.341	0.293	11.9	
	3-Nitroaniline			0.272	0.310	0.294	0.298	0.317	0.298	5.9	
C	Acenaphthene	1.252	1.133	1.107	1.195	1.232	1.182	1.224	1.189	4.5	
P	2,4-Dinitrophenol			0.075	0.142	0.144	0.153	0.171	0.137	26.7	
P	4-Nitrophenol			0.179	0.233	0.223	0.220	0.232	0.217	10.2	
	Dibenzofuran	1.901	1.730	1.691	1.798	1.843	1.779	1.805	1.792	3.9	
	2,4-Dinitrotoluene	0.248	0.258	0.268	0.305	0.313	0.317	0.341	0.293	11.9	
	Diethylphthalate	1.492	1.356	1.344	1.385	1.429	1.383	1.418	1.402	3.6	
	Fluorene	1.485	1.354	1.353	1.453	1.524	1.467	1.508	1.449	4.8	
	4-Chlorophenyl Phenyl Ether	0.722	0.685	0.680	0.715	0.781	0.750	0.789	0.723	6.7	
	4-Nitroaniline			0.270	0.327	0.293	0.287	0.316	0.299	7.7	
	1,2-Diphenylhydrazine	1.449	1.358	1.346	1.364	1.318	1.254	1.273	1.336	4.9	
S	2,4,6-Tribromophenol	0.099	0.103	0.113	0.137	0.135	0.138	0.152	0.125	16.2	
I	Phenanthrene-d10	ISTD									
	4,6-Dinitro-2-Methylphenol		0.080	0.104	0.153	0.154	0.156	0.181	0.140	27.9	
C	n-Nitrosodiphenylamine	0.659	0.601	0.595	0.624	0.641	0.637	0.656	0.630	4.0	
	4-Bromophenyl Phenyl Ether	0.219	0.203	0.205	0.266	0.233	0.238	0.252	0.231	10.1	
	Hexachlorobenzene	0.246	0.214	0.210	0.224	0.241	0.247	0.264	0.235	8.4	
	Pentachlorophenol		0.087	0.104	0.165	0.147	0.155	0.167	0.138	24.6	
	Phenanthrene	1.434	1.254	1.247	1.316	1.348	1.325	1.337	1.323	4.8	
	Anthracene	1.329	1.202	1.215	1.333	1.343	1.308	1.321	1.293	4.6	

Calibration Table Report
Method: BNA.M
Title: M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Calibration: Fri May 02 08:01:30 2003
HPMS5 Avg. %RSD 9.8
Calibration Files

	Compound	3 5M26108.	10 5M26109.	20 5M26110.	50 5M26107.	80 5M26111.	100 5M26112.	120 5M26113.D	Avg	%RSD	R^2 value
	Carbazole	1.203	1.088	1.091	1.230	1.094	1.068	1.090	1.123	5.7	
	Di-n-Butyl Phthalate	1.585	1.428	1.450	1.598	1.497	1.452	1.443	1.493	4.7	
C	Fluoranthene	1.456	1.327	1.342	1.469	1.461	1.458	1.480	1.431	4.7	
I	Chrysene-d12	ISTD									
	Benzidine	0.057	0.015	0.016	0.177	0.030	0.032	0.038	0.052	109.1	
	Pyrene	1.765	1.578	1.541	1.413	1.582	1.532	1.513	1.560	6.8	
S	p-Terphenyl-d14	1.096	0.987	0.988	0.889	1.070	1.061	1.052	1.019	6.9	
	Butyl Benzyl Phthalate	0.840	0.726	0.730	0.643	0.737	0.712	0.703	0.727	8.1	
	Benzo[a]anthracene	1.662	1.483	1.489	1.400	1.569	1.529	1.511	1.520	5.3	
	3,3'-Dichlorobenzidine	0.431	0.404	0.379	0.392	0.268	0.276	0.314	0.352	18.6	
	Chrysene	1.603	1.435	1.413	1.319	1.496	1.458	1.462	1.455	5.9	
	bis(2-Ethylhexyl)phthalate	1.075	0.964	0.962	0.935	0.989	0.951	0.935	0.973	5.0	
I	Perylene-d12	ISTD									
C	Di-n-Octyl Phthalate	2.331	2.408	2.439	2.677	2.711	2.714	2.766	2.578	6.9	
	Benzo[b]fluoranthene	1.997	1.856	1.900	1.877	2.035	2.150	2.164	1.997	8.4	
	Benzo[k]fluoranthene	1.980	1.806	1.808	1.702	2.044	2.034	2.232	1.944	9.4	
C	Benzo[a]pyrene	1.658	1.532	1.657	1.694	1.826	1.849	1.943	1.737	8.1	
	Indeno[1,2,3-cd]pyrene	1.484	1.530	1.644	1.788	1.803	1.763	1.825	1.691	8.2	
	Dibenz[ah]anthracene	1.182	1.214	1.301	1.401	1.445	1.430	1.494	1.352	9.0	
	Benzo[ghi]perylene	1.343	1.234	1.206	1.384	1.339	1.280	1.310	1.299	4.9	

Fri May 02 08:02:45 2003

Data File : C:\HPCHEM\1\DATA\042903\4M18447.D Vial: 2
Acq On : 29 Apr 2003 17:10 Operator: CLK
Sample : WG139334-02 50PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-4 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 30 7:35 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Wed Apr 30 07:35:13 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.22	152	299573	40.00 ug/ml	0.00
19) Naphthalene-d8	11.86	136	1145696	40.00 ug/ml	0.00
34) Acenaphthene-d10	13.98	164	675579	40.00 ug/ml	0.00
56) Phenanthrene-d10	15.61	188	1143794	40.00 ug/ml	0.00
67) Chrysene-d12	18.49	240	1386552	40.00 ug/ml	0.00
76) Perylene-d12	20.99	264	966761	40.00 ug/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol	8.50	112	522709	50.0888 ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 50.09%		
6) Phenol-d5	9.71	99	604073	50.0520 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 50.05%		
20) Nitrobenzene-d5	10.95	82	545816	49.4147 ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 98.82%		
38) 2-Fluorobiphenyl	13.15	172	1245843	47.3122 ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 94.62%		
55) 2,4,6-Tribromophenol	14.86	330	176883	52.9521 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 52.95%		
70) p-Terphenyl-d14	17.24	244	1483878	42.6077 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 85.22%		
Target Compounds					Qvalue
2) Pyridine	6.22	79	502066	47.2080 ug/ml	100
3) n-Nitrosodimethylamine	6.23	74	285583	49.9090 ug/ml	100
5) Aniline	9.82	66	191285	47.0300 ug/ml	100
7) Phenol	9.72	94	672537	50.8625 ug/ml	100
8) bis(2-Chloroethyl)ether	9.87	63	342265	48.5222 ug/ml	100
9) 2-Chlorophenol	9.96	128	568118	51.2324 ug/ml	100
10) 1,3-Dichlorobenzene	10.16	146	610404	47.3063 ug/ml	100
11) 1,4-Dichlorobenzene	10.24	146	651065	48.9849 ug/ml	100
12) Benzyl Alcohol	10.38	108	363260	51.0391 ug/ml	100
13) 1,2-Dichlorobenzene	10.46	146	581762	46.8909 ug/ml	100
14) 2-Methylphenol	10.49	107	440275	50.7687 ug/ml	100
15) bis(2-Chloroisopropyl)ethe	10.54	45	645234	46.3294 ug/ml	100
16) 3-,4-Methylphenol	10.68	107	643377	50.7048 ug/ml	100
17) n-Nitrosodipropylamine	10.72	70	339670	47.6932 ug/ml	100
18) Hexachloroethane	10.87	117	226853	49.6655 ug/ml	100
21) Nitrobenzene	10.97	77	549034	50.2869 ug/ml	100
22) Isophorone	11.25	82	872624	45.9813 ug/ml	100
23) 2-Nitrophenol	11.37	139	334545	53.0775 ug/ml	100
24) 2,4-Dimethylphenol	11.36	122	504814	46.3001 ug/ml	100
25) bis(2-Chloroethoxy)methane	11.49	93	593631	48.5434 ug/ml	100

(#) = qualifier out of range (m) = manual integration
4M18447.D BNA.M Wed Apr 30 07:35:40 2003 HPMS4 Page 1

Data File : C:\HPCHEM\1\DATA\042903\4M18447.D Vial: 2
Acq On : 29 Apr 2003 17:10 Operator: CLK
Sample : WG139334-02 50PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-4 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 30 7:35 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Wed Apr 30 07:35:13 2003
Response via : Initial Calibration
DataAcq Meth : BNA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
26)	Benzoic Acid	11.45	122	223716	38.7562 ug/ml	100
27)	2,4-Dichlorophenol	11.65	162	490897	52.4698 ug/ml	100
28)	1,2,4-Trichlorobenzene	11.78	180	540939	48.6170 ug/ml	100
29)	Naphthalene	11.89	128	1595916	48.4892 ug/ml	100
30)	4-Chloroaniline	11.94	127	594718	53.5751 ug/ml	100
31)	Hexachlorobutadiene	12.02	225	310724	44.8523 ug/ml	100
32)	4-Chloro-3-Methylphenol	12.49	107	493265	52.7117 ug/ml	100
33)	2-Methylnaphthalene	12.74	142	1145203	49.8010 ug/ml	100
35)	Hexachlorocyclopentadiene	12.92	237	302921	47.5594 ug/ml	100
36)	2,4,6-Trichlorophenol	13.06	196	378761	52.4284 ug/ml	100
37)	2,4,5-Trichlorophenol	13.11	196	404816	51.8606 ug/ml	100
39)	2-Chloronaphthalene	13.33	162	1046019	47.3379 ug/ml	100
40)	2 Nitroaniline	13.45	65	298341	50.9014 ug/ml	100
41)	Dimethylphthalate	13.61	163	1217165	49.9335 ug/ml	100
42)	Acenaphthylene	13.82	152	1732079	48.3053 ug/ml	100
43)	2,6-Dinitrotoluene	13.72	165	289426	51.4302 ug/ml	100
44)	3-Nitroaniline	13.92	138	233858	59.5183 ug/ml	100
45)	Acenaphthene	14.02	154	1097746	49.8375 ug/ml	100
46)	2,4-Dinitrophenol	14.03	184	143181	43.8017 ug/ml	100
47)	4-Nitrophenol	14.05	65	210417	47.9929 ug/ml	100
48)	Dibenzofuran	14.20	168	1602344	49.5232 ug/ml	100
49)	2,4-Dinitrotoluene	14.17	165	366906	50.0755 ug/ml	100
50)	Diethylphthalate	14.39	149	1200338	50.2636 ug/ml	100
51)	Fluorene	14.59	166	1222572	49.1567 ug/ml	100
52)	4-Chlorophenyl Phenyl Ethe	14.54	204	668968	50.6545 ug/ml	100
53)	4-Nitroaniline	14.61	138	243427	60.7797 ug/ml	100
54)	1,2-Diphenylhydrazine	14.72	77	1118544	50.2548 ug/ml	100
57)	4,6-Dinitro-2-Methylphenol	14.63	198	225862	47.7636 ug/ml	100
58)	n-Nitrosodiphenylamine	14.68	169	869820	49.8970 ug/ml	100
59)	4-Bromophenyl Phenyl Ether	15.08	248	401007	60.1286 ug/ml	100
60)	Hexachlorobenzene	15.21	284	391068	49.3678 ug/ml	100
61)	Pentachlorophenol	15.40	266	179833	36.7476 ug/ml	100
62)	Phenanthrene	15.64	178	1780494	49.7605 ug/ml	100
63)	Anthracene	15.69	178	1798254	51.1410 ug/ml	100
64)	Carbazole	15.85	167	1226511	52.4083 ug/ml	100
65)	Di-n-Butyl Phthalate	16.11	149	2092125	53.9133 ug/ml	100
66)	Fluoranthene	16.90	202	2094680	51.5003 ug/ml	100
68)	Benzidine	17.00	184	222030	155.9696 ug/ml	100
69)	Pyrene	17.16	202	2205706	43.8034 ug/ml	100
71)	Butyl Benzyl Phthalate	17.68	149	924342	43.4337 ug/ml	100
72)	Benzo[a]anthracene	18.47	228	2157780	44.3808 ug/ml	100

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

Data File : C:\HPCHEM\1\DATA\042903\4M18447.D Vial: 2
Acq On : 29 Apr 2003 17:10 Operator: CLK
Sample : WG139334-02 50PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-4 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 30 7:35 2003 Quant Results File: BNA.RES

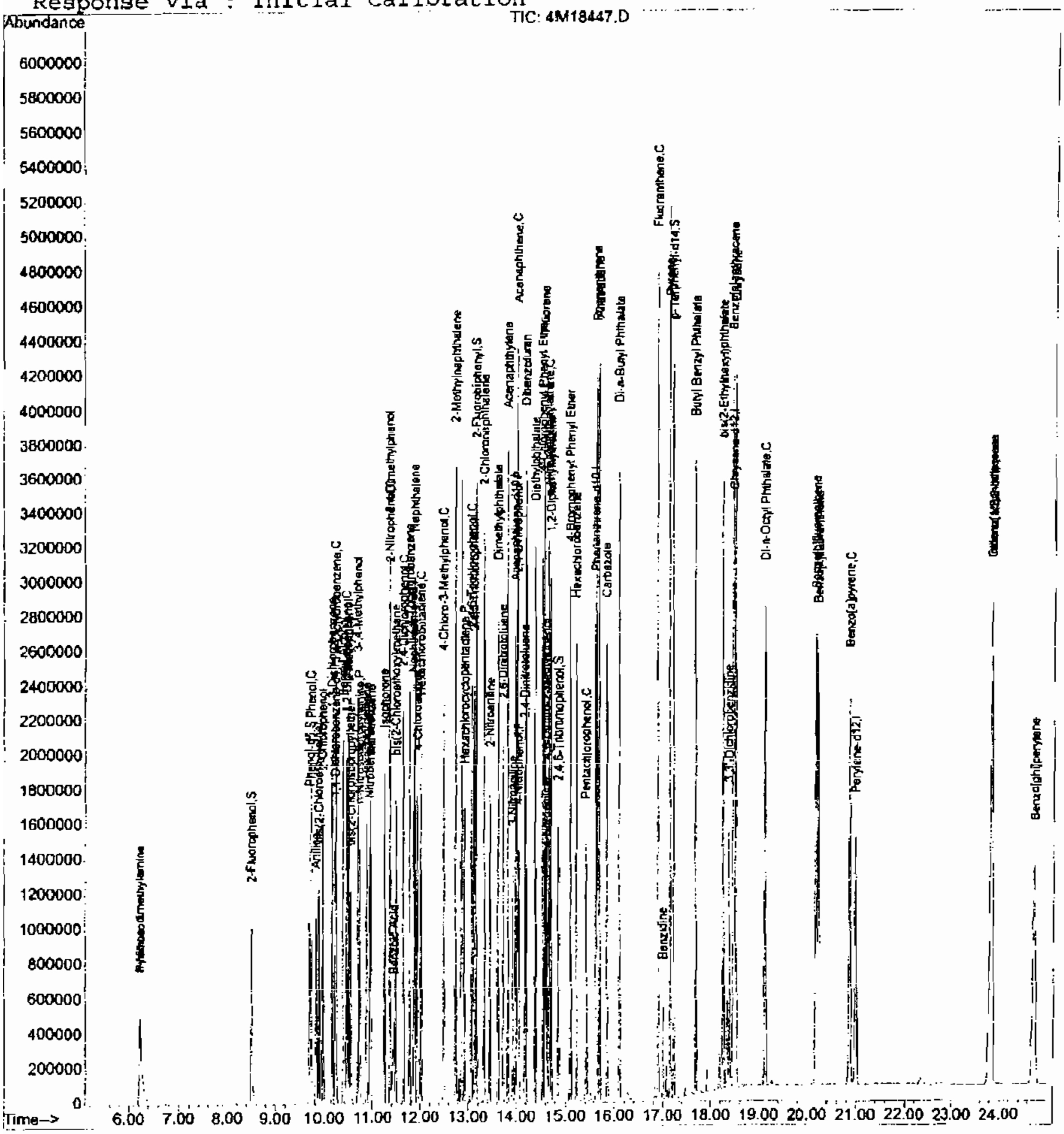
Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Wed Apr 30 07:35:13 2003
Response via : Initial Calibration
DataAcq Meth : BNA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
73)	3,3'-Dichlorobenzidine	18.38	252	456925	42.2513 ug/ml	100
74)	Chrysene	18.53	228	2076502	44.2286 ug/ml	100
75)	bis(2-Ethylhexyl)phthalate	18.26	149	1352365	46.7342 ug/ml	100
77)	Di-n-Octyl Phthalate	19.13	149	2302731	51.5095 ug/ml	100
78)	Benzo[b]fluoranthene	20.18	252	2227059	49.3755 ug/ml	100
79)	Benzo[k]fluoranthene	20.23	252	1816001	42.9944 ug/ml	100
80)	Benzo[a]pyrene	20.87	252	1962639	49.2170 ug/ml	100
81)	Indeno[1,2,3-cd]pyrene	23.84	276	2451636	57.6415 ug/ml	100
82)	Dibenz[ah]anthracene	23.84	278	2054409	56.4698 ug/ml	100
83)	Benzo[ghi]perylene	24.74	276	1996858	58.5058 ug/ml	100

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

Data File : C:\HPCHEM\1\DATA\042903\4M18447.D Vial: 2
Acq On : 29 Apr 2003 17:10 Operator: CLK
Sample : WG139334-02 50PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-4 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 30 7:35 2003 Quant Results File: BNA.RES

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Wed Apr 30 07:35:13 2003
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\042903\4M18448.D Vial: 3
Acq On : 29 Apr 2003 18:04 Operator: CLK
Sample : WG139334-03 3PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 30 7:35 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Wed Apr 30 07:35:13 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.22	152	288241	40.00 ug/ml	0.00
19) Naphthalene-d8	11.86	136	1069296	40.00 ug/ml	0.00
34) Acenaphthene-d10	13.98	164	614567	40.00 ug/ml	0.00
56) Phenanthrene-d10	15.61	188	1062036	40.00 ug/ml	0.00
67) Chrysene-d12	18.49	240	1068025	40.00 ug/ml	0.00
76) Perylene-d12	20.99	264	861821	40.00 ug/ml	0.00

System Monitoring Compounds					
4) 2-Fluorophenol	8.50	112	32523	3.2391 ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery =	3.24%#	
6) Phenol-d5	9.70	99	36444	3.1384 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery =	3.14%#	
20) Nitrobenzene-d5	10.94	82	32681	3.1701 ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery =	6.34%#	
38) 2-Fluorobiphenyl	13.15	172	81261	3.3923 ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery =	6.78%#	
55) 2,4,6-Tribromophenol	14.86	330	7056	2.3220 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery =	2.32%#	
70) p-Terphenyl-d14	17.23	244	91098	3.3959 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery =	6.80%#	

Target Compounds					Qvalue
2) Pyridine	6.24	79	31160	3.0451 ug/ml	97
3) n-Nitrosodimethylamine	6.23	74	17576	3.1924 ug/ml#	97
5) Aniline	9.81	66	13117	3.3518 ug/ml	93
7) Phenol	9.72	94	41225	3.2403 ug/ml	100
8) bis(2-Chloroethyl)ether	9.87	63	21917	3.2293 ug/ml	98
9) 2-Chlorophenol	9.96	128	34650	3.2476 ug/ml	98
10) 1,3-Dichlorobenzene	10.16	146	40872	3.2921 ug/ml	98
11) 1,4-Dichlorobenzene	10.24	146	42707	3.3395 ug/ml	94
12) Benzyl Alcohol	10.38	108	20180	2.9468 ug/ml	97
13) 1,2-Dichlorobenzene	10.46	146	39766	3.3312 ug/ml	98
14) 2-Methylphenol	10.49	107	26636	3.1922 ug/ml	98
15) bis(2-Chloroisopropyl)ethe	10.54	45	44277	3.3042 ug/ml	98
16) 3-,4-Methylphenol	10.68	107	37913	3.1054 ug/ml	98
17) n-Nitrosodipropylamine	10.71	70	20950	3.0572 ug/ml	99
18) Hexachloroethane	10.87	117	13623	3.0998 ug/ml	98
21) Nitrobenzene	10.97	77	32645	3.2036 ug/ml	99
22) Isophorone	11.24	82	54957	3.1028 ug/ml	99
23) 2-Nitrophenol	11.37	139	15677	2.6650 ug/ml#	87
24) 2,4-Dimethylphenol	11.35	122	30336	2.9811 ug/ml	97
25) bis(2-Chloroethoxy)methane	11.48	93	35853	3.1413 ug/ml	100

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

Data File : C:\HPCHEM\1\DATA\042903\4M18448.D Vial: 3
Acq On : 29 Apr 2003 18:04 Operator: CLK
Sample : WG139334-03 3PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 30 7:35 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Wed Apr 30 07:35:13 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
26) Benzoic Acid	11.39	122	3630	0.6738 ug/ml	92
27) 2,4-Dichlorophenol	11.65	162	27780	3.1814 ug/ml	98
28) 1,2,4-Trichlorobenzene	11.77	180	35754	3.4430 ug/ml	98
29) Naphthalene	11.88	128	101673	3.3099 ug/ml	100
30) 4-Chloroaniline	11.94	127	34185	3.2996 ug/ml	99
31) Hexachlorobutadiene	12.02	225	22694	3.5099 ug/ml	98
32) 4-Chloro-3-Methylphenol	12.49	107	26282	3.0092 ug/ml	98
33) 2-Methylnaphthalene	12.73	142	70302	3.2756 ug/ml	100
35) Hexachlorocyclopentadiene	12.92	237	13803	2.3822 ug/ml#	95
36) 2,4,6-Trichlorophenol	13.06	196	18362	2.7940 ug/ml	99
37) 2,4,5-Trichlorophenol	13.11	196	20084	2.8284 ug/ml	99
39) 2-Chloronaphthalene	13.33	162	66263	3.2965 ug/ml	99
40) 2-Nitroaniline	13.45	65	14558	2.7304 ug/ml	95
41) Dimethylphthalate	13.61	163	70986	3.2013 ug/ml	99
42) Acenaphthylene	13.82	152	104062	3.1903 ug/ml	100
43) 2,6-Dinitrotoluene	13.72	165	14155	2.7650 ug/ml	97
44) 3-Nitroaniline	13.91	138	14549	4.0704 ug/ml	98
45) Acenaphthene	14.01	154	63290	3.1586 ug/ml	94
47) 4-Nitrophenol	14.04	65	7880	1.9757 ug/ml	92
48) Dibenzofuran	14.20	168	98165	3.3352 ug/ml	99
49) 2,4-Dinitrotoluene	14.17	165	18658	2.7993 ug/ml	97
50) Diethylphthalate	14.38	149	69414	3.1952 ug/ml	99
51) Fluorene	14.58	166	73508	3.2490 ug/ml	98
52) 4-Chlorophenyl Phenyl Ethe	14.54	204	39257	3.2677 ug/ml	99
53) 4-Nitroaniline	14.60	138	12250	3.3623 ug/ml	98
54) 1,2-Diphenylhydrazine	14.72	77	63058	3.1144 ug/ml	98
57) 4,6-Dinitro-2-Methylphenol	14.62	198	2572	0.5858 ug/ml	94
58) n-Nitrosodiphenylamine	14.68	169	54264	3.3525 ug/ml	99
59) 4-Bromophenyl Phenyl Ether	15.08	248	19811	3.1992 ug/ml	97
60) Hexachlorobenzene	15.21	284	24310	3.3051 ug/ml	99
62) Phenanthrene	15.64	178	111898	3.3680 ug/ml	98
63) Anthracene	15.69	178	103672	3.1753 ug/ml	100
64) Carbazole	15.85	167	92441	4.2540 ug/ml	98
65) Di-n-Butyl Phthalate	16.10	149	114057	3.1655 ug/ml	99
66) Fluoranthene	16.90	202	125735	3.3293 ug/ml	98
68) Benzidine	17.00	184	1315	1.1992 ug/ml	100
69) Pyrene	17.16	202	131678	3.3949 ug/ml	99
71) Butyl Benzyl Phthalate	17.68	149	53402	3.2577 ug/ml	98
72) Benzo[a]anthracene	18.46	228	129684	3.4628 ug/ml	99
73) 3,3'-Dichlorobenzidine	18.38	252	35138	4.2182 ug/ml	96
74) Chrysene	18.52	228	122296	3.3817 ug/ml	100

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

Data File : C:\HPCHEM\1\DATA\042903\4M18448.D Vial: 3
Acq On : 29 Apr 2003 18:04 Operator: CLK
Sample : WG139334-03 3PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 30 7:35 2003 Quant Results File: BNA.RES

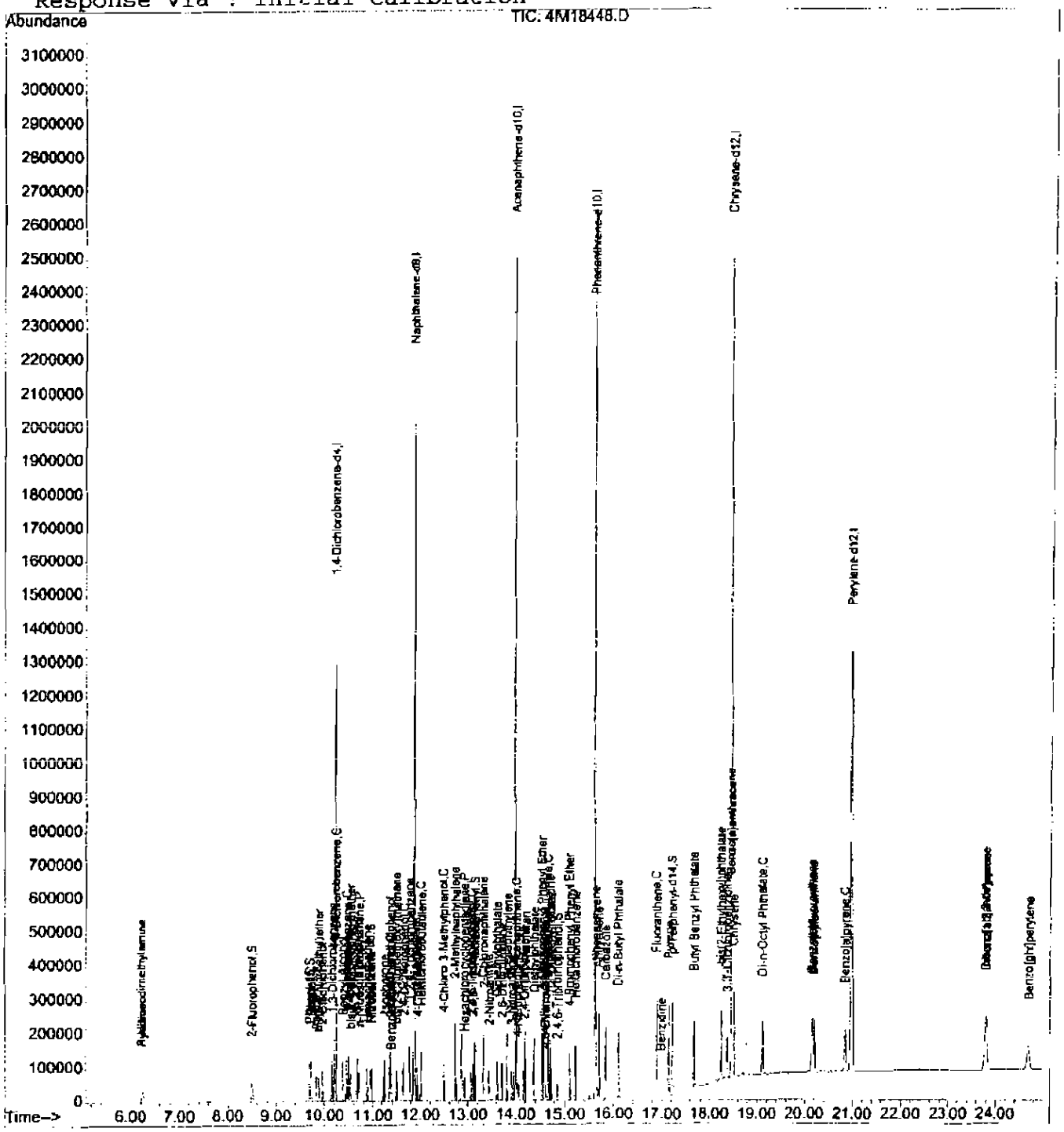
Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Wed Apr 30 07:35:13 2003
Response via : Initial Calibration
DataAcq Meth : BNA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
75)	bis(2-Ethylhexyl)phthalate	18.26	149	76243	3.4205 ug/ml	97
77)	Di-n-Octyl Phthalate	19.13	149	118429	2.9717 ug/ml#	95
78)	Benzo[b]fluoranthene	20.17	252	125160	3.1128 ug/ml	98
79)	Benzo[k]fluoranthene	20.22	252	127840	3.3952 ug/ml	96
80)	Benzo[a]pyrene	20.86	252	115925	3.2610 ug/ml	99
81)	Indeno[1,2,3-cd]pyrene	23.80	276	134749	3.5539 ug/ml#	98
82)	Dibenz[ah]anthracene	23.80	278	116085	3.5794 ug/ml	99
83)	Benzo[ghi]perylene	24.70	276	114225	3.7542 ug/ml	98

(#) = qualifier out of range (m) = manual integration
4M18448.D BNA.M Wed Apr 30 07:35:49 2003 HPMS4 Page 3

Data File : C:\HPCHEM\1\DATA\042903\4M18448.D Vial: 3
Acq On : 29 Apr 2003 18:04 Operator: CLK
Sample : WG139334-03 3PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 30 7:35 2003 Quant Results File: BNA.RES

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Wed Apr 30 07:35:13 2003
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\042903\4M18449.D Vial: 4
Acq On : 29 Apr 2003 18:38 Operator: CLK
Sample : WG139334-04 10PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 30 7:35 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Wed Apr 30 07:35:13 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.22	152	279120	40.00 ug/ml	0.00
19) Naphthalene-d8	11.86	136	1035377	40.00 ug/ml	0.00
34) Acenaphthene-d10	13.98	164	608339	40.00 ug/ml	0.00
56) Phenanthrene-d10	15.61	188	1051996	40.00 ug/ml	0.00
67) Chrysene-d12	18.49	240	1065902	40.00 ug/ml	0.00
76) Perylene-d12	20.99	264	855034	40.00 ug/ml	0.00

System Monitoring Compounds					
4) 2-Fluorophenol	8.50	112	96643	9.9395 ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 9.94%#		
6) Phenol-d5	9.70	99	108242	9.6259 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 9.63%#		
20) Nitrobenzene-d5	10.94	82	97046	9.7221 ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 19.44%#		
38) 2-Fluorobiphenyl	13.15	172	240814	10.1560 ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 20.32%#		
55) 2,4,6-Tribromophenol	14.85	330	26027	8.6527 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 8.65%#		
70) p-Terphenyl-d14	17.23	244	279107	10.4251 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 20.86%#		

Target Compounds					Qvalue
2) Pyridine	6.23	79	99335	10.0246 ug/ml	93
3) n-Nitrosodimethylamine	6.22	74	52189	9.7890 ug/ml#	96
5) Aniline	9.81	66	39479	10.4177 ug/ml	99
7) Phenol	9.72	94	119733	9.7187 ug/ml	98
8) bis(2-Chloroethyl)ether	9.87	63	63380	9.6437 ug/ml	99
9) 2-Chlorophenol	9.95	128	101321	9.8066 ug/ml	100
10) 1,3-Dichlorobenzene	10.16	146	120123	9.9917 ug/ml	98
11) 1,4-Dichlorobenzene	10.24	146	123442	9.9681 ug/ml	99
12) Benzyl Alcohol	10.38	108	63545	9.5825 ug/ml	99
13) 1,2-Dichlorobenzene	10.45	146	115235	9.9687 ug/ml	100
14) 2-Methylphenol	10.49	107	77462	9.5868 ug/ml	98
15) bis(2-Chloroisopropyl)ethe	10.54	45	125961	9.7070 ug/ml	99
16) 3-,4-Methylphenol	10.68	107	113558	9.6053 ug/ml	99
17) n-Nitrosodipropylamine	10.71	70	64076	9.6562 ug/ml	99
18) Hexachloroethane	10.87	117	40776	9.5814 ug/ml	98
21) Nitrobenzene	10.97	77	96629	9.7934 ug/ml	99
22) Isophorone	11.24	82	169474	9.8816 ug/ml	99
23) 2-Nitrophenol	11.37	139	53223	9.3439 ug/ml	94
24) 2,4-Dimethylphenol	11.35	122	93047	9.4433 ug/ml	98
25) bis(2-Chloroethoxy)methane	11.48	93	106093	9.6000 ug/ml	100

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

Data File : C:\HPCHEM\1\DATA\042903\4M18449.D Vial: 4
Acq On : 29 Apr 2003 18:38 Operator: CLK
Sample : WG139334-04 10PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 30 7:35 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Wed Apr 30 07:35:13 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
26) Benzoic Acid	11.40	122	19073	3.6562	ug/ml	96
27) 2,4-Dichlorophenol	11.65	162	83120	9.8310	ug/ml	100
28) 1,2,4-Trichlorobenzene	11.77	180	102233	10.1672	ug/ml	98
29) Naphthalene	11.88	128	296867	9.9809	ug/ml	99
30) 4-Chloroaniline	11.94	127	106586	10.6249	ug/ml	100
31) Hexachlorobutadiene	12.01	225	65405	10.4470	ug/ml	100
32) 4-Chloro-3-Methylphenol	12.49	107	82110	9.7094	ug/ml	100
33) 2-Methylnaphthalene	12.73	142	206571	9.9402	ug/ml	100
35) Hexachlorocyclopentadiene	12.93	237	50495	8.8041	ug/ml	99
36) 2,4,6-Trichlorophenol	13.06	196	61878	9.5119	ug/ml	100
37) 2,4,5-Trichlorophenol	13.11	196	65700	9.3471	ug/ml	99
39) 2-Chloronaphthalene	13.33	162	199135	10.0080	ug/ml	99
40) 2-Nitroaniline	13.44	65	48950	9.2747	ug/ml	99
41) Dimethylphthalate	13.61	163	219794	10.0136	ug/ml	100
42) Acenaphthylene	13.82	152	322298	9.9819	ug/ml	99
43) 2,6-Dinitrotoluene	13.72	165	48158	9.5034	ug/ml	95
44) 3-Nitroaniline	13.91	138	44976	12.7119	ug/ml	95
45) Acenaphthene	14.01	154	187184	9.4374	ug/ml	95
46) 2,4-Dinitrophenol	14.03	184	5633	1.9137	ug/ml#	1
47) 4-Nitrophenol	14.04	65	30765	7.7926	ug/ml	98
48) Dibenzofuran	14.20	168	290818	9.9817	ug/ml	100
49) 2,4-Dinitrotoluene	14.17	165	64916	9.8390	ug/ml	99
50) Diethylphthalate	14.38	149	214369	9.9688	ug/ml	100
51) Fluorene	14.58	166	221865	9.9067	ug/ml	99
52) 4-Chlorophenyl Phenyl Ethe	14.54	204	118578	9.9712	ug/ml	99
53) 4-Nitroaniline	14.60	138	34588	9.5906	ug/ml	99
54) 1,2-Diphenylhydrazine	14.72	77	195237	9.7413	ug/ml	100
57) 4,6-Dinitro-2-Methylphenol	14.62	198	22114	5.0846	ug/ml	95
58) n-Nitrosodiphenylamine	14.67	169	165025	10.2927	ug/ml	99
59) 4-Bromophenyl Phenyl Ether	15.08	248	59951	9.7737	ug/ml	98
60) Hexachlorobenzene	15.21	284	74677	10.2497	ug/ml	100
61) Pentachlorophenol	15.40	266	8376	1.8609	ug/ml	99
62) Phenanthrene	15.64	178	330055	10.0292	ug/ml	100
63) Anthracene	15.69	178	319141	9.8681	ug/ml	100
64) Carbazole	15.85	167	257165	11.9474	ug/ml	99
65) Di-n-Butyl Phthalate	16.10	149	357226	10.0089	ug/ml	100
66) Fluoranthene	16.90	202	383642	10.2554	ug/ml	98
68) Benzidine	17.00	184	3427	3.1316	ug/ml	100
69) Pyrene	17.15	202	399658	10.3245	ug/ml	99
71) Butyl Benzyl Phthalate	17.68	149	170423	10.4170	ug/ml	99
72) Benzo[a]anthracene	18.46	228	386379	10.3376	ug/ml	99

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

Data File : C:\HPCHEM\1\DATA\042903\4M18449.D Vial: 4
Acq On : 29 Apr 2003 18:38 Operator: CLK
Sample : WG139334-04 10PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 30 7:35 2003 Quant Results File: BNA.RES

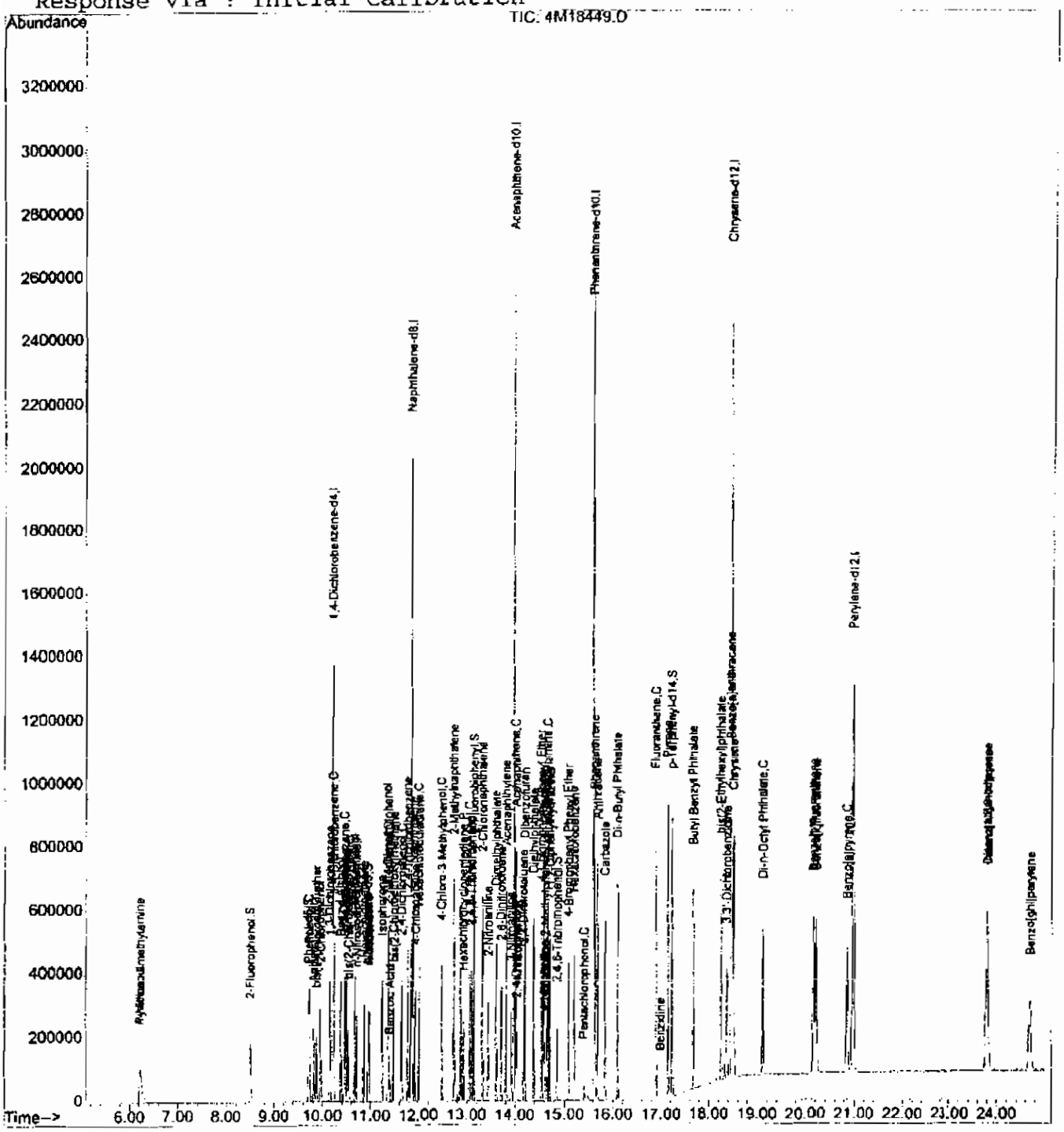
Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Wed Apr 30 07:35:13 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
73) 3,3'-Dichlorobenzidine	18.38	252	94082	11.3167 ug/ml	99
74) Chrysene	18.52	228	368373	10.2065 ug/ml	100
75) bis(2-Ethylhexyl)phthalate	18.26	149	227682	10.2350 ug/ml	100
77) Di-n-Octyl Phthalate	19.13	149	376392	9.5196 ug/ml	98
78) Benzo[b]fluoranthene	20.17	252	400231	10.0329 ug/ml	99
79) Benzo[k]fluoranthene	20.22	252	353099	9.4521 ug/ml	99
80) Benzo[a]pyrene	20.86	252	348970	9.8946 ug/ml	99
81) Indeno[1,2,3-cd]pyrene	23.80	276	414244	11.0121 ug/ml#	97
82) Dibenz[ah]anthracene	23.80	278	352072	10.9420 ug/ml	99
83) Benzo[ghi]perylene	24.70	276	342160	11.3349 ug/ml	99

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

Data File : C:\HPCHEM\1\DATA\042903\4M18449.D Vial: 4
Acq On : 29 Apr 2003 18:38 Operator: CLK
Sample : WG139334-04 10PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 30 7:35 2003 Quant Results File: BNA.RES

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Wed Apr 30 07:35:13 2003
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\042903\4M18450.D Vial: 5
Acq On : 29 Apr 2003 19:13 Operator: CLK
Sample : WG139334-05 20PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-3 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 30 7:36 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Wed Apr 30 07:35:13 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.22	152	291154	40.00 ug/ml	0.00
19) Naphthalene-d8	11.86	136	1085268	40.00 ug/ml	0.00
34) Acenaphthene-d10	13.98	164	634145	40.00 ug/ml	0.00
56) Phenanthrene-d10	15.61	188	1109782	40.00 ug/ml	0.00
67) Chrysene-d12	18.49	240	1120507	40.00 ug/ml	0.00
76) Perylene-d12	20.99	264	889131	40.00 ug/ml	0.00

System Monitoring Compounds

4) 2-Fluorophenol	8.50	112	198103	19.5322 ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 19.53%#		
6) Phenol-d5	9.70	99	224606	19.1484 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 19.15%		
20) Nitrobenzene-d5	10.94	82	204082	19.5050 ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 39.02%		
38) 2-Fluorobiphenyl	13.15	172	494883	20.0216 ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 40.04%#		
55) 2,4,6-Tribromophenol	14.86	330	58103	18.5303 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 18.53%		
70) p-Terphenyl-d14	17.23	244	578210	20.5446 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 41.08%		

Target Compounds

					Qvalue
2) Pyridine	6.23	79	200642	19.4114 ug/ml	99
3) n-Nitrosodimethylamine	6.23	74	108526	19.5146 ug/ml	99
5) Aniline	9.82	66	79732	20.1700 ug/ml	99
7) Phenol	9.72	94	246260	19.1627 ug/ml	99
8) bis(2-Chloroethyl)ether	9.87	63	129310	18.8621 ug/ml	99
9) 2-Chlorophenol	9.96	128	208511	19.3470 ug/ml	100
10) 1,3-Dichlorobenzene	10.16	146	245371	19.5661 ug/ml	100
11) 1,4-Dichlorobenzene	10.24	146	250581	19.3984 ug/ml	99
12) Benzyl Alcohol	10.38	108	132062	19.0917 ug/ml	99
13) 1,2-Dichlorobenzene	10.46	146	236486	19.6123 ug/ml	100
14) 2-Methylphenol	10.49	107	162217	19.2463 ug/ml	100
15) bis(2-Chloroisopropyl)ethe	10.54	45	255912	18.9064 ug/ml	99
16) 3-,4-Methylphenol	10.68	107	234647	19.0274 ug/ml	99
17) n-Nitrosodipropylamine	10.71	70	133456	19.2804 ug/ml	99
18) Hexachloroethane	10.87	117	86912	19.5781 ug/ml	98
21) Nitrobenzene	10.97	77	201045	19.4393 ug/ml	99
22) Isophorone	11.24	82	356119	19.8099 ug/ml	100
23) 2-Nitrophenol	11.37	139	113501	19.0103 ug/ml	95
24) 2,4-Dimethylphenol	11.35	122	196766	19.0516 ug/ml	99
25) bis(2-Chloroethoxy)methane	11.49	93	219070	18.9116 ug/ml	100

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

Data File : C:\HPCHEM\1\DATA\042903\4M18450.D
Acq On : 29 Apr 2003 19:13
Sample : WG139334-05 20PPM BNA STD
Misc : 1,1 SOS63-38-3
MS Integration Params: RTEINT.P
Quant Time: Apr 30 7:36 2003

Vial: 5
Operator: CLK
Inst : HPMS4
Multiplr: 1.00
Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Wed Apr 30 07:35:13 2003
Response via : Initial Calibration
DataAcq Meth : BNA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
26)	Benzoic Acid	11.42	122	55757	10.1971 ug/ml	96
27)	2,4-Dichlorophenol	11.65	162	175811	19.8380 ug/ml	100
28)	1,2,4-Trichlorobenzene	11.77	180	208884	19.8188 ug/ml	98
29)	Naphthalene	11.88	128	611064	19.5999 ug/ml	100
30)	4-Chloroaniline	11.94	127	221068	21.0238 ug/ml	100
31)	Hexachlorobutadiene	12.02	225	135403	20.6334 ug/ml	100
32)	4-Chloro-3-Methylphenol	12.49	107	174509	19.6869 ug/ml	98
33)	2-Methylnaphthalene	12.74	142	428692	19.6804 ug/ml	99
35)	Hexachlorocyclopentadiene	12.92	237	117066	19.5806 ug/ml	99
36)	2,4,6-Trichlorophenol	13.06	196	132893	19.5971 ug/ml	99
37)	2,4,5-Trichlorophenol	13.11	196	140021	19.1100 ug/ml	99
39)	2-Chloronaphthalene	13.33	162	408465	19.6930 ug/ml	100
40)	2-Nitroaniline	13.45	65	105256	19.1316 ug/ml	99
41)	Dimethylphthalate	13.61	163	455448	19.9053 ug/ml	100
42)	Acenaphthylene	13.82	152	668406	19.8589 ug/ml	100
43)	2,6-Dinitrotoluene	13.71	165	104657	19.8124 ug/ml	98
44)	3-Nitroaniline	13.92	138	87852	23.8198 ug/ml	99
45)	Acenaphthene	14.01	154	399932	19.3432 ug/ml	98
46)	2,4-Dinitrophenol	14.03	184	30810	10.0412 ug/ml#	1
47)	4-Nitrophenol	14.04	65	70445	17.1172 ug/ml	98
48)	Dibenzofuran	14.20	168	597646	19.6782 ug/ml	99
49)	2,4-Dinitrotoluene	14.17	165	137988	20.0632 ug/ml	98
50)	Diethylphthalate	14.38	149	444697	19.8382 ug/ml	100
51)	Fluorene	14.59	166	457923	19.6150 ug/ml	99
52)	4-Chlorophenyl Phenyl Ethe	14.54	204	242074	19.5276 ug/ml	99
53)	4-Nitroaniline	14.61	138	73001	19.4181 ug/ml	98
54)	1,2-Diphenylhydrazine	14.72	77	407129	19.4870 ug/ml	99
57)	4,6-Dinitro-2-Methylphenol	14.62	198	66482	14.4900 ug/ml	99
58)	n-Nitrosodiphenylamine	14.68	169	336212	19.8778 ug/ml	99
59)	4-Bromophenyl Phenyl Ether	15.08	248	122384	18.9131 ug/ml	97
60)	Hexachlorobenzene	15.21	284	153983	20.0343 ug/ml	99
61)	Pentachlorophenol	15.40	266	41431	8.7256 ug/ml	97
62)	Phenanthrene	15.64	178	686026	19.7604 ug/ml	100
63)	Anthracene	15.69	178	670572	19.6550 ug/ml	100
64)	Carbazole	15.85	167	464890	20.4734 ug/ml	99
65)	Di-n-Butyl Phthalate	16.11	149	756140	20.0826 ug/ml	100
66)	Fluoranthene	16.90	202	792545	20.0829 ug/ml	99
68)	Benzidine	16.99	184	7692	6.6863 ug/ml	100
69)	Pyrene	17.16	202	824289	20.2563 ug/ml	100
71)	Butyl Benzyl Phthalate	17.68	149	353989	20.5828 ug/ml	99
72)	Benzo[a]anthracene	18.46	228	797547	20.2986 ug/ml	99

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

Data File : C:\HPCHEM\1\DATA\042903\4M18450.D Vial: 5
Acq On : 29 Apr 2003 19:13 Operator: CLK
Sample : WG139334-05 20PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-3 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 30 7:36 2003 Quant Results File: BNA.RES

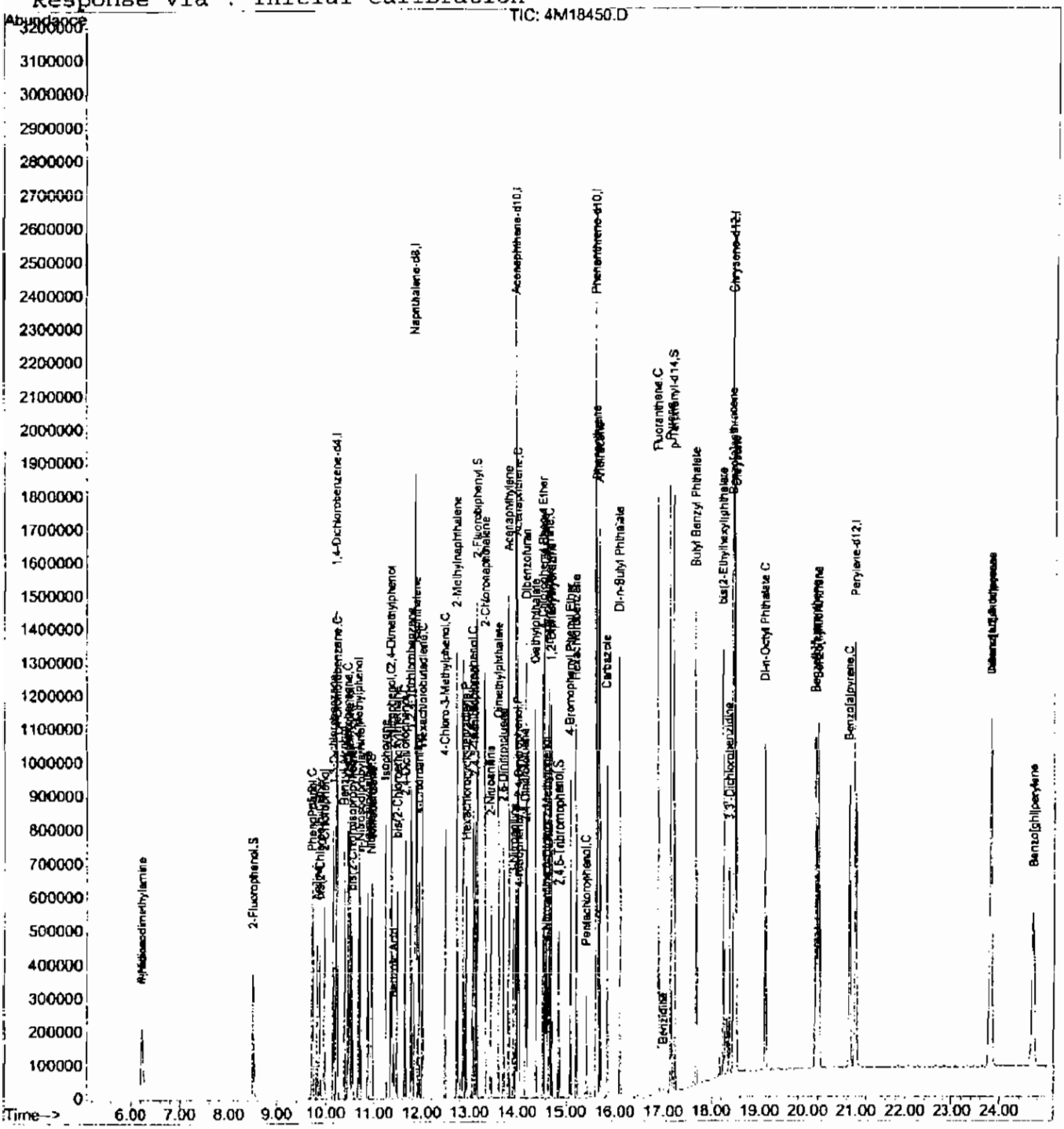
Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Wed Apr 30 07:35:13 2003
Response via : Initial Calibration
DataAcq Meth : BNA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
73)	3,3'-Dichlorobenzidine	18.38	252	178872	20.4673 ug/ml	99
74)	Chrysene	18.52	228	765453	20.1749 ug/ml	100
75)	bis(2-Ethylhexyl)phthalate	18.26	149	484386	20.7135 ug/ml	99
77)	Di-n-Octyl Phthalate	19.13	149	805286	19.5861 ug/ml	99
78)	Benzo[b]fluoranthene	20.17	252	793972	19.1398 ug/ml	99
79)	Benzo[k]fluoranthene	20.22	252	784669	20.1993 ug/ml	97
80)	Benzo[a]pyrene	20.86	252	727956	19.8488 ug/ml	99
81)	Indeno[1,2,3-cd]pyrene	23.81	276	863280	22.0691 ug/ml#	97
82)	Dibenz[ah]anthracene	23.81	278	745982	22.2952 ug/ml	99
83)	Benzo[ghi]perylene	24.71	276	712194	22.6884 ug/ml	99

(#) = qualifier out of range (m) = manual integration
4M18450.D BNA.M Wed Apr 30 07:36:02 2003 HPMS4 Page 3

Data File : C:\HPCHEM\1\DATA\042903\4M18450.D Vial: 5
Acq On : 29 Apr 2003 19:13 Operator: CLK
Sample : WG139334-05 20PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-3 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 30 7:36 2003 Quant Results File: BNA.RES

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Wed Apr 30 07:35:13 2003
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\042903\4M18451.D Vial: 6
Acq On : 29 Apr 2003 19:47 Operator: CLK
Sample : WG139334-06 80PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-5 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 30 7:36 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Wed Apr 30 07:35:13 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.22	152	310538	40.00 ug/ml	0.00
19) Naphthalene-d8	11.86	136	1173277	40.00 ug/ml	0.00
34) Acenaphthene-d10	13.98	164	693896	40.00 ug/ml	0.00
56) Phenanthrene-d10	15.62	188	1236529	40.00 ug/ml	0.00
67) Chrysene-d12	18.49	240	1284376	40.00 ug/ml	0.00
76) Perylene-d12	20.99	264	995556	40.00 ug/ml	0.00

System Monitoring Compounds					
4) 2-Fluorophenol	8.50	112	845808	78.1880 ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 78.19%		
6) Phenol-d5	9.71	99	989263	79.0736 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 79.07%		
20) Nitrobenzene-d5	10.95	82	901672	79.7126 ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 159.42%#		
38) 2-Fluorobiphenyl	13.16	172	2168809	80.1886 ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 160.38%#		
55) 2,4,6-Tribromophenol	14.86	330	299398	87.2626 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 87.26%		
70) p-Terphenyl-d14	17.23	244	2532180	78.4925 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 156.98%#		

Target Compounds					Qvalue
2) Pyridine	6.22	79	859225	77.9381 ug/ml	98
3) n-Nitrosodimethylamine	6.23	74	460337	77.6086 ug/ml	98
5) Aniline	9.82	66	314153	74.5114 ug/ml	97
7) Phenol	9.73	94	1087628	79.3506 ug/ml	99
8) bis(2-Chloroethyl)ether	9.87	63	556192	76.0660 ug/ml	97
9) 2-Chlorophenol	9.96	128	913470	79.4672 ug/ml	100
10) 1,3-Dichlorobenzene	10.16	146	1047678	78.3280 ug/ml	100
11) 1,4-Dichlorobenzene	10.25	146	1084957	78.7478 ug/ml	99
12) Benzyl Alcohol	10.39	108	599347	81.2366 ug/ml	99
13) 1,2-Dichlorobenzene	10.45	146	1011398	78.6417 ug/ml	100
14) 2-Methylphenol	10.50	107	715532	79.5955 ug/ml	100
15) bis(2-Chloroisopropyl)ethe	10.54	45	1086119	75.2323 ug/ml	99
16) 3-,4-Methylphenol	10.68	107	1051215	79.9214 ug/ml	100
17) n-Nitrosodipropylamine	10.72	70	592640	80.2745 ug/ml	99
18) Hexachloroethane	10.88	117	383568	81.0104 ug/ml	100
21) Nitrobenzene	10.97	77	880113	78.7160 ug/ml	100
22) Isophorone	11.25	82	1564166	80.4833 ug/ml	99
23) 2-Nitrophenol	11.37	139	554011	85.8308 ug/ml	98
24) 2,4-Dimethylphenol	11.36	122	904524	81.0101 ug/ml	99
25) bis(2-Chloroethoxy)methane	11.49	93	980941	78.3295 ug/ml#	98

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

Data File : C:\HPCHEM\1\DATA\042903\4M18451.D
Acq On : 29 Apr 2003 19:47
Sample : WG139334-06 80PPM BNA STD
Misc : 1,1 SOS63-38-5
MS Integration Params: RTEINT.P
Quant Time: Apr 30 7:36 2003

Vial: 6
Operator: CLK
Inst : HPMS4
Multiplr: 1.00
Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Wed Apr 30 07:35:13 2003
Response via : Initial Calibration
DataAcq Meth : BNA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
26)	Benzoic Acid	11.48	122	392559	66.4077 ug/ml	99
27)	2,4-Dichlorophenol	11.66	162	793484	82.8183 ug/ml	100
28)	1,2,4-Trichlorobenzene	11.77	180	920023	80.7435 ug/ml	99
29)	Naphthalene	11.89	128	2666296	79.1065 ug/ml	100
30)	4-Chloroaniline	11.94	127	902700	79.4080 ug/ml	100
31)	Hexachlorobutadiene	12.01	225	583605	82.2618 ug/ml	99
32)	4-Chloro-3-Methylphenol	12.49	107	796493	83.1146 ug/ml	99
33)	2-Methylnaphthalene	12.74	142	1893583	80.4097 ug/ml	100
35)	Hexachlorocyclopentadiene	12.93	237	583271	89.1577 ug/ml	99
36)	2,4,6-Trichlorophenol	13.07	196	619383	83.4723 ug/ml	99
37)	2,4,5-Trichlorophenol	13.12	196	663599	82.7689 ug/ml	100
39)	2-Chloronaphthalene	13.33	162	1823997	80.3666 ug/ml	100
40)	2-Nitroaniline	13.45	65	485562	80.6572 ug/ml	98
41)	Dimethylphthalate	13.62	163	2002811	79.9952 ug/ml	99
42)	Acenaphthylene	13.83	152	2962148	80.4295 ug/ml	99
43)	2,6-Dinitrotoluene	13.72	165	486384	84.1476 ug/ml	99
44)	3-Nitroaniline	13.93	138	230402	57.0908 ug/ml	99
45)	Acenaphthene	14.02	154	1851865	81.8551 ug/ml	99
46)	2,4-Dinitrophenol	14.03	184	289539	86.2372 ug/ml	69
47)	4-Nitrophenol	14.05	65	346187	76.8756 ug/ml	99
48)	Dibenzofuran	14.20	168	2648158	79.6854 ug/ml	99
49)	2,4-Dinitrotoluene	14.18	165	656224	87.1975 ug/ml	98
50)	Diethylphthalate	14.39	149	1970326	80.3285 ug/ml	99
51)	Fluorene	14.59	166	2070218	81.0413 ug/ml	99
52)	4-Chlorophenyl Phenyl Ethe	14.55	204	1107344	81.6350 ug/ml	99
53)	4-Nitroaniline	14.62	138	351307	85.4002 ug/ml	95
54)	1,2-Diphenylhydrazine	14.72	77	1806435	79.0185 ug/ml	98
57)	4,6-Dinitro-2-Methylphenol	14.63	198	420029	82.1630 ug/ml	96
58)	n-Nitrosodiphenylamine	14.68	169	1477086	78.3780 ug/ml	99
59)	4-Bromophenyl Phenyl Ether	15.09	248	561600	77.8932 ug/ml	99
60)	Hexachlorobenzene	15.21	284	679288	79.3211 ug/ml	99
61)	Pentachlorophenol	15.41	266	375827	71.0381 ug/ml	99
62)	Phenanthrene	15.64	178	3033235	78.4140 ug/ml	100
63)	Anthracene	15.70	178	3018889	79.4162 ug/ml	99
64)	Carbazole	15.85	167	1260053	49.8037 ug/ml	99
65)	Di-n-Butyl Phthalate	16.11	149	3378723	80.5387 ug/ml	100
66)	Fluoranthene	16.91	202	3477570	79.0882 ug/ml	99
68)	Benzidine	17.00	184	54965	41.6829 ug/ml	100
69)	Pyrene	17.16	202	3614053	77.4815 ug/ml	99
71)	Butyl Benzyl Phthalate	17.69	149	1624070	82.3839 ug/ml	100
72)	Benzo[a]anthracene	18.47	228	3559622	79.0380 ug/ml	100

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

Data File : C:\HPCHEM\1\DATA\042903\4M18451.D Vial: 6
Acq On : 29 Apr 2003 19:47 Operator: CLK
Sample : WG139334-06 80PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-5 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 30 7:36 2003 Quant Results File: BNA.RES

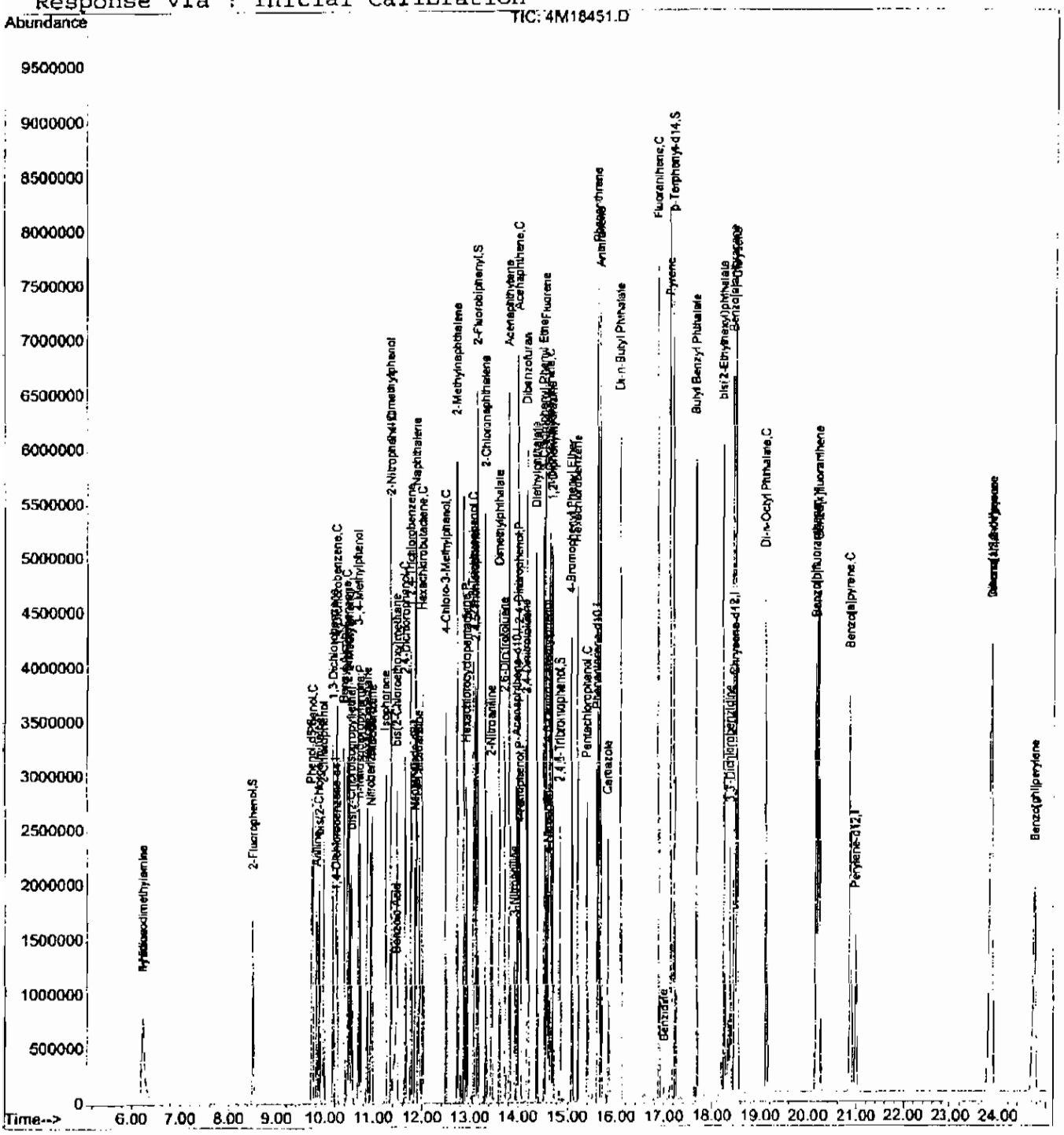
Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Wed Apr 30 07:35:13 2003
Response via : Initial Calibration
DataAcq Meth : BNA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
73)	3,3'-Dichlorobenzidine	18.39	252	718284	71.7027 ug/ml	99
74)	Chrysene	18.53	228	3416528	78.5596 ug/ml	99
75)	bis(2-Ethylhexyl)phthalate	18.26	149	2209720	82.4370 ug/ml	100
77)	Di-n-Octyl Phthalate	19.13	149	3760525	81.6857 ug/ml	100
78)	Benzo[b]fluoranthene	20.19	252	3613456	77.7957 ug/ml	98
79)	Benzo[k]fluoranthene	20.24	252	3469425	79.7639 ug/ml	98
80)	Benzo[a]pyrene	20.88	252	3300563	80.3742 ug/ml	100
81)	Indeno[1,2,3-cd]pyrene	23.86	276	3888542	88.7809 ug/ml	99
82)	Dibenz[ah]anthracene	23.86	278	3350620	89.4351 ug/ml	99
83)	Benzo[ghi]perylene	24.76	276	3155611	89.7818 ug/ml	100

(#) = qualifier out of range (m) = manual integration
4M18451.D BNA.M Wed Apr 30 07:36:10 2003 HPMS4 Page 3

Data File : C:\HPCHEM\1\DATA\042903\4M18451.D Vial: 6
Acq On : 29 Apr 2003 19:47 Operator: CLK
Sample : WG139334-06 80PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-5 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 30 7:36 2003 Quant Results File: BNA.RES

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Wed Apr 30 07:35:13 2003
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\042903\4M18452.D Vial: 7
Acq On : 29 Apr 2003 20:24 Operator: CLK
Sample : WG139334-07 100PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-6 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 30 7:36 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Wed Apr 30 07:35:13 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.22	152	306947	40.00 ug/ml	0.00
19) Naphthalene-d8	11.86	136	1153618	40.00 ug/ml	0.00
34) Acenaphthene-d10	13.98	164	687313	40.00 ug/ml	0.00
56) Phenanthrene-d10	15.62	188	1216656	40.00 ug/ml	0.00
67) Chrysene-d12	18.49	240	1268468	40.00 ug/ml	0.00
76) Perylene-d12	20.99	264	977567	40.00 ug/ml	0.00

System Monitoring Compounds					
4) 2-Fluorophenol	8.51	112	1023031	95.6772 ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 95.68%		
6) Phenol-d5	9.71	99	1202363	97.2314 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 97.23%#		
20) Nitrobenzene-d5	10.95	82	1086330	97.6740 ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 195.34%#		
38) 2-Fluorobiphenyl	13.16	172	2588954	96.6397 ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 193.28%#		
55) 2,4,6-Tribromophenol	14.86	330	368172	108.3352 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 108.34%		
70) p-Terphenyl-d14	17.24	244	3054182	95.8608 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 191.72%#		

Target Compounds					Qvalue
2) Pyridine	6.23	79	1036933	95.1579 ug/ml	97
3) n-Nitrosodimethylamine	6.24	74	555099	94.6795 ug/ml	97
5) Aniline	9.82	66	381024	91.4293 ug/ml	98
7) Phenol	9.74	94	1312907	96.9070 ug/ml	99
8) bis(2-Chloroethyl)ether	9.87	63	670872	92.8233 ug/ml	97
9) 2-Chlorophenol	9.97	128	1102674	97.0492 ug/ml	100
10) 1,3-Dichlorobenzene	10.16	146	1262056	95.4595 ug/ml	100
11) 1,4-Dichlorobenzene	10.25	146	1298523	95.3513 ug/ml	99
12) Benzyl Alcohol	10.39	108	727231	99.7235 ug/ml	99
13) 1,2-Dichlorobenzene	10.46	146	1221156	96.0624 ug/ml	100
14) 2-Methylphenol	10.50	107	865775	97.4352 ug/ml	99
15) bis(2-Chloroisopropyl)ethe	10.54	45	1301416	91.2000 ug/ml	98
16) 3-,4-Methylphenol	10.69	107	1277716	98.2782 ug/ml	99
17) n-Nitrosodipropylamine	10.72	70	718628	98.4787 ug/ml	99
18) Hexachloroethane	10.87	117	462101	98.7386 ug/ml	99
21) Nitrobenzene	10.98	77	1055992	96.0558 ug/ml	98
22) Isophorone	11.25	82	1884202	98.6027 ug/ml	99
23) 2-Nitrophenol	11.37	139	678902	106.9721 ug/ml	97
24) 2,4-Dimethylphenol	11.37	122	1113348	101.4118 ug/ml	98
25) bis(2-Chloroethoxy)methane	11.49	93	1202320	97.6429 ug/ml#	97

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

Data File : C:\HPCHEM\1\DATA\042903\4M18452.D Vial: 7
Acq On : 29 Apr 2003 20:24 Operator: CLK
Sample : WG139334-07 100PPM BNA STD Inst : HPMS4
Misc : 1,1 $OS63-38-6 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 30 7:36 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Wed Apr 30 07:35:13 2003
Response via : Initial Calibration
DataAcq Meth : BNA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
26)	Benzoic Acid	11.48	122	511117	87.9371 ug/ml	99
27)	2,4-Dichlorophenol	11.66	162	965962	102.5384 ug/ml	100
28)	1,2,4-Trichlorobenzene	11.78	180	1109197	99.0048 ug/ml	99
29)	Naphthalene	11.89	128	3214041	96.9826 ug/ml	100
30)	4-Chloroaniline	11.94	127	1097539	98.1928 ug/ml	100
31)	Hexachlorobutadiene	12.02	225	708729	101.6009 ug/ml	99
32)	4-Chloro-3-Methylphenol	12.49	107	963825	102.2897 ug/ml	99
33)	2-Methylnaphthalene	12.74	142	2304792	99.5392 ug/ml	100
35)	Hexachlorocyclopentadiene	12.93	237	715327	110.3908 ug/ml	99
36)	2,4,6-Trichlorophenol	13.07	196	761022	103.5428 ug/ml	99
37)	2,4,5-Trichlorophenol	13.11	196	814453	102.5575 ug/ml	99
39)	2-Chloronaphthalene	13.33	162	2198863	97.8114 ug/ml	100
40)	2-Nitroaniline	13.45	65	582605	97.7040 ug/ml	96
41)	Dimethylphthalate	13.62	163	2401650	96.8442 ug/ml	99
42)	Acenaphthylene	13.83	152	3570590	97.8788 ug/ml	99
43)	2,6-Dinitrotoluene	13.73	165	598693	104.5698 ug/ml	97
44)	3-Nitroaniline	13.93	138	250408	62.6424 ug/ml	96
45)	Acenaphthene	14.02	154	2247682	100.3023 ug/ml	98
46)	2,4-Dinitrophenol	14.04	184	371692	111.7663 ug/ml#	56
47)	4-Nitrophenol	14.06	65	444967	99.7575 ug/ml	98
48)	Dibenzofuran	14.21	168	3199385	97.1944 ug/ml	99
49)	2,4-Dinitrotoluene	14.18	165	795355	106.6972 ug/ml	99
50)	Diethylphthalate	14.39	149	2374206	97.7214 ug/ml	99
51)	Fluorene	14.59	166	2498717	98.7523 ug/ml	100
52)	4-Chlorophenyl Phenyl Ethe	14.55	204	1338819	99.6450 ug/ml	99
53)	4-Nitroaniline	14.62	138	370684	90.9736 ug/ml	97
54)	1,2-Diphenylhydrazine	14.73	77	2182066	96.3639 ug/ml	97
57)	4,6-Dinitro-2-Methylphenol	14.63	198	525158	104.4056 ug/ml	95
58)	n-Nitrosodiphenylamine	14.68	169	1773631	95.6507 ug/ml	99
59)	4-Bromophenyl Phenyl Ether	15.09	248	684350	96.4688 ug/ml	99
60)	Hexachlorobenzene	15.21	284	824920	97.9001 ug/ml	99
61)	Pentachlorophenol	15.40	266	485075	93.1856 ug/ml	99
62)	Phenanthrene	15.64	178	3618527	95.0727 ug/ml	99
63)	Anthracene	15.70	178	3636310	97.2208 ug/ml	99
64)	Carbazole	15.85	167	1658385	66.6184 ug/ml	100
65)	Di-n-Butyl Phthalate	16.11	149	4036974	97.8012 ug/ml	99
66)	Fluoranthene	16.90	202	4174847	96.4968 ug/ml	99
68)	Benzidine	17.00	184	64773	49.7369 ug/ml	100
69)	Pyrene	17.16	202	4336334	94.1324 ug/ml	99
71)	Butyl Benzyl Phthalate	17.68	149	1962479	100.7988 ug/ml	99
72)	Benzo[a]anthracene	18.48	228	4283173	96.2965 ug/ml	100

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

Data File : C:\HPCHEM\1\DATA\042903\4M18452.D Vial: 7
Acq On : 29 Apr 2003 20:24 Operator: CLK
Sample : WG139334-07 100PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-6 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 30 7:36 2003 Quant Results File: BNA.RES

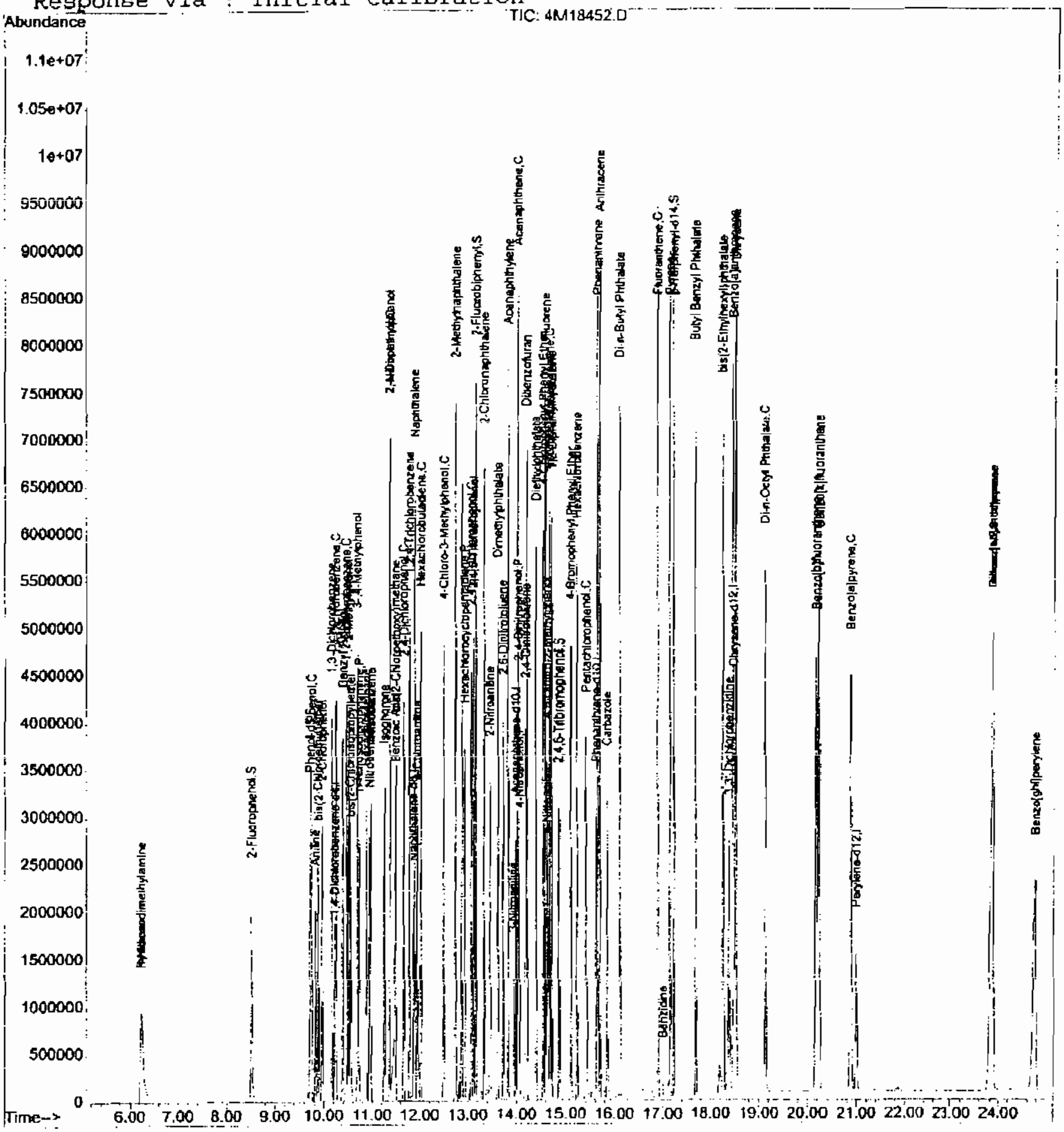
Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Wed Apr 30 07:35:13 2003
Response via : Initial Calibration
DataAcq Meth : BNA

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
73)	3,3'-Dichlorobenzidine	18.39	252	871272	88.0655	ug/ml	99
74)	Chrysene	18.53	228	4124445	96.0268	ug/ml	99
75)	bis(2-Ethylhexyl)phthalate	18.26	149	2677888	101.1556	ug/ml	99
77)	Di-n-Octyl Phthalate	19.13	149	4535668	100.3363	ug/ml	99
78)	Benzo[b]fluoranthene	20.19	252	4339316	95.1422	ug/ml	98
79)	Benzo[k]fluoranthene	20.24	252	4189150	98.0831	ug/ml	99
80)	Benzo[a]pyrene	20.88	252	3998500	99.1619	ug/ml	100
81)	Indeno[1,2,3-cd]pyrene	23.87	276	4621551	107.4582	ug/ml#	98
82)	Dibenz[ah]anthracene	23.86	278	3982391	108.2545	ug/ml	99
83)	Benzo[ghi]perylene	24.76	276	3710329	107.5069	ug/ml	100

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

Data File : C:\HPCHEM\1\DATA\042903\4M18452.D   Vial: 7
Acq On   : 29 Apr 2003 20:24   Operator: CLK
Sample   : WG139334-07 100PPM BNA STD   Inst   : HPMS4
Misc   : 1,1 SOS63-38-6   Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 30 7:36 2003   Quant Results File: BNA.RES

Method   : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title   : M8270/625/Initial cal. 04/29/03
Last Update   : Wed Apr 30 07:35:13 2003
Response via   : Initial Calibration



Data File : C:\HPCHEM\1\DATA\042903\4M18453.D Vial: 8
Acq On : 29 Apr 2003 21:00 Operator: CLK
Sample : WG139334-08 120PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-7 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 30 7:36 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Wed Apr 30 07:35:13 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.22	152	298179	40.00 ug/ml	0.00
19) Naphthalene-d8	11.86	136	1137583	40.00 ug/ml	0.00
34) Acenaphthene-d10	13.98	164	685106	40.00 ug/ml	0.00
56) Phenanthrene-d10	15.62	188	1207044	40.00 ug/ml	0.00
67) Chrysene-d12	18.50	240	1276409	40.00 ug/ml	0.00
76) Perylene-d12	21.00	264	970867	40.00 ug/ml	0.00

System Monitoring Compounds

4) 2-Fluorophenol	8.51	112	1261231	121.4229 ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 121.42%#		
6) Phenol-d5	9.72	99	1480155	123.2153 ug/ml	0.01
Spiked Amount 100.000	Range 10 - 94		Recovery = 123.22%#		
20) Nitrobenzene-d5	10.95	82	1323424	120.6688 ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 241.34%#		
38) 2-Fluorobiphenyl	13.16	172	3157866	118.2556 ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 236.52%#		
55) 2,4,6-Tribromophenol	14.86	330	462499	136.5295 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 136.53%#		
70) p-Terphenyl-d14	17.24	244	3716612	115.9266 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 231.86%#		

Target Compounds

					Qvalue
2) Pyridine	6.23	79	1278038	120.7325 ug/ml	97
3) n-Nitrosodimethylamine	6.24	74	680591	119.4973 ug/ml	98
5) Aniline	9.82	66	468319	115.6807 ug/ml	98
7) Phenol	9.74	94	1614326	122.6588 ug/ml	98
8) bis(2-Chloroethyl)ether	9.87	63	815182	116.1069 ug/ml	96
9) 2-Chlorophenol	9.97	128	1346464	121.9905 ug/ml	99
10) 1,3-Dichlorobenzene	10.16	146	1541882	120.0544 ug/ml	100
11) 1,4-Dichlorobenzene	10.25	146	1588734	120.0921 ug/ml	99
12) Benzyl Alcohol	10.39	108	896104	126.4940 ug/ml	98
13) 1,2-Dichlorobenzene	10.46	146	1490981	120.7371 ug/ml	100
14) 2-Methylphenol	10.50	107	1061859	123.0167 ug/ml	99
15) bis(2-Chloroisopropyl)ethe	10.54	45	1602282	115.5856 ug/ml	98
16) 3-,4-Methylphenol	10.69	107	1565608	123.9631 ug/ml	99
17) n-Nitrosodipropylamine	10.73	70	876830	123.6915 ug/ml	98
18) Hexachloroethane	10.87	117	565228	124.3254 ug/ml	99
21) Nitrobenzene	10.98	77	1286665	118.6882 ug/ml	98
22) Isophorone	11.26	82	2281170	121.0592 ug/ml	99
23) 2-Nitrophenol	11.38	139	825087	131.8384 ug/ml	96
24) 2,4-Dimethylphenol	11.36	122	1369958	126.5446 ug/ml	97
25) bis(2-Chloroethoxy)methane	11.49	93	1487063	122.4698 ug/ml#	97

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

Data File : C:\HPCHEM\1\DATA\042903\4M18453.D Vial: 8
Acq On : 29 Apr 2003 21:00 Operator: CLK
Sample : WG139334-08 120PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-7 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 30 7:36 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Wed Apr 30 07:35:13 2003
Response via : Initial Calibration
DataAcq Meth : BNA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
26)	Benzoic Acid	11.49	122	680801	118.7821 ug/ml	98
27)	2,4-Dichlorophenol	11.66	162	1183111	127.3594 ug/ml	100
28)	1,2,4-Trichlorobenzene	11.78	180	1347401	121.9617 ug/ml	99
29)	Naphthalene	11.89	128	3898874	119.3055 ug/ml	99
30)	4-Chloroaniline	11.94	127	1364329	123.7820 ug/ml	100
31)	Hexachlorobutadiene	12.02	225	857985	124.7315 ug/ml	99
32)	4-Chloro-3-Methylphenol	12.49	107	1193968	128.5007 ug/ml	99
33)	2-Methylnaphthalene	12.74	142	2792339	122.2953 ug/ml	100
35)	Hexachlorocyclopentadiene	12.92	237	869451	134.6078 ug/ml	99
36)	2,4,6-Trichlorophenol	13.07	196	933180	127.3752 ug/ml	99
37)	2,4,5-Trichlorophenol	13.12	196	1005313	126.9987 ug/ml	99
39)	2-Chloronaphthalene	13.34	162	2684617	119.8038 ug/ml	100
40)	2-Nitroaniline	13.46	65	713409	120.0255 ug/ml	96
41)	Dimethylphthalate	13.62	163	2939514	118.9149 ug/ml	99
42)	Acenaphthylene	13.83	152	4291316	118.0147 ug/ml	99
43)	2,6-Dinitrotoluene	13.73	165	743258	130.2382 ug/ml	96
44)	3-Nitroaniline	13.93	138	346243	86.8956 ug/ml	96
45)	Acenaphthene	14.02	154	2748602	123.0509 ug/ml	98
46)	2,4-Dinitrophenol	14.04	184	482293	145.4907 ug/ml#	52
47)	4-Nitrophenol	14.06	65	543715	122.2886 ug/ml	97
48)	Dibenzofuran	14.21	168	3875086	118.1008 ug/ml	100
49)	2,4-Dinitrotoluene	14.19	165	983883	132.4135 ug/ml	94
50)	Diethylphthalate	14.39	149	2878080	118.8423 ug/ml	98
51)	Fluorene	14.59	166	3049777	120.9191 ug/ml	100
52)	4-Chlorophenyl Phenyl Ethe	14.55	204	1627704	121.5363 ug/ml	99
53)	4-Nitroaniline	14.62	138	430295	105.9436 ug/ml	94
54)	1,2-Diphenylhydrazine	14.73	77	2671103	118.3406 ug/ml	97
57)	4,6-Dinitro-2-Methylphenol	14.63	198	668544	133.9702 ug/ml	94
58)	n-Nitrosodiphenylamine	14.68	169	2178380	118.4141 ug/ml	99
59)	4-Bromophenyl Phenyl Ether	15.09	248	841237	119.5286 ug/ml	99
60)	Hexachlorobenzene	15.21	284	1003602	120.0543 ug/ml	99
61)	Pentachlorophenol	15.40	266	631126	122.2083 ug/ml	98
62)	Phenanthrene	15.64	178	4423095	117.1373 ug/ml	99
63)	Anthracene	15.70	178	4415869	119.0033 ug/ml	99
64)	Carbazole	15.85	167	2130910	86.2817 ug/ml	100
65)	Di-n-Butyl Phthalate	16.11	149	4884609	119.2787 ug/ml	99
66)	Fluoranthene	16.91	202	5032391	117.2442 ug/ml	98
68)	Benzidine	17.00	184	90322	68.9236 ug/ml	100
69)	Pyrene	17.16	202	5213512	112.4699 ug/ml	99
71)	Butyl Benzyl Phthalate	17.69	149	2396161	122.3083 ug/ml	99
72)	Benzo[a]anthracene	18.48	228	5224396	116.7268 ug/ml	99

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

Data File : C:\HPCHEM\1\DATA\042903\4M18453.D Vial: 8
Acq On : 29 Apr 2003 21:00 Operator: CLK
Sample : WG139334-08 120PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-7 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 30 7:36 2003 Quant Results File: BNA.RES

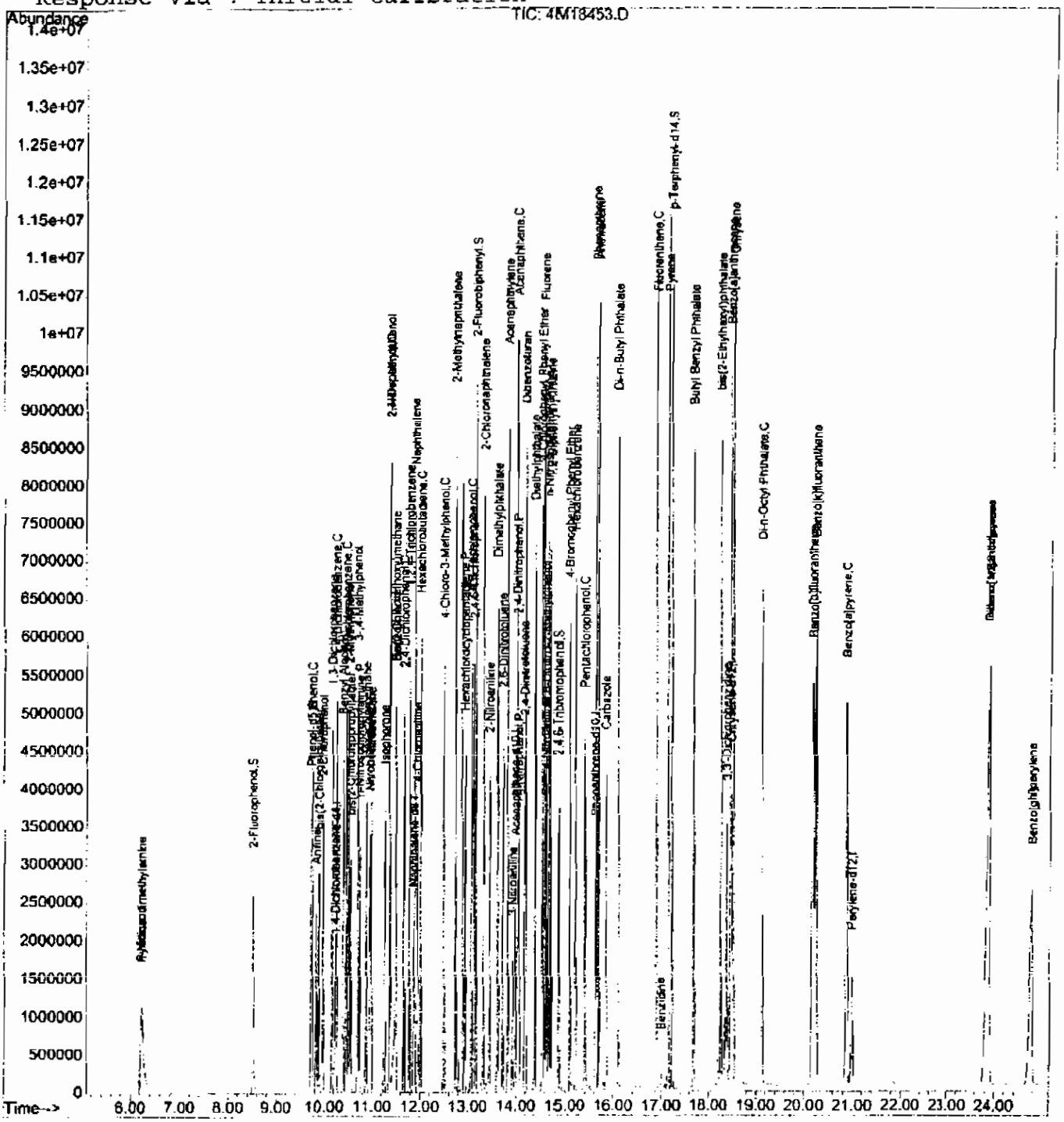
Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Wed Apr 30 07:35:13 2003
Response via : Initial Calibration
DataAcq Meth : BNA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
73)	3,3'-Dichlorobenzidine	18.39	252	1108773	111.3742 ug/ml	100
74)	Chrysene	18.53	228	5014223	116.0167 ug/ml	98
75)	bis(2-Ethylhexyl)phthalate	18.26	149	3278747	123.0822 ug/ml	99
77)	Di-n-Octyl Phthalate	19.13	149	5558409	123.8095 ug/ml	100
78)	Benzo[b]fluoranthene	20.19	252	5344594	117.9923 ug/ml	97
79)	Benzo[k]fluoranthene	20.24	252	5103226	120.3095 ug/ml	98
80)	Benzo[a]pyrene	20.88	252	4891184	122.1373 ug/ml	99
81)	Indeno[1,2,3-cd]pyrene	23.88	276	5572875	130.4722 ug/ml	98
82)	Dibenz[ah]anthracene	23.88	278	4811783	131.7027 ug/ml	99
83)	Benzo[ghi]perylene	24.77	276	4419802	128.9477 ug/ml	99

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

Data File : C:\HPCHEM\1\DATA\042903\4M18453.D Vial: 8
Acq On : 29 Apr 2003 21:00 Operator: CLK
Sample : WG139334-08 120PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-7 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 30 7:36 2003 Quant Results File: BNA.RES

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Wed Apr 30 07:35:13 2003
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\042903\4M18454.D Vial: 9
Acq On : 29 Apr 2003 21:36 Operator: CLK
Sample : WG139334-09 50PPM Alt Source BNA STD Inst : HPMS4
Misc : 1,1 SOS64-19-4 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:32:02 2003
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	123	0.00
2		Pyridine	50.000	51.677	-3.4	131	0.00
3		n-Nitrosodimethylamine	50.000	50.776	-1.6	124	0.00
4	S	2-Fluorophenol	50.000	50.255	-0.5	123	0.00
5		Aniline	50.000	51.614	-3.2	133	0.00
6	S	Phenol-d5	50.000	51.094	-2.2	124	0.00
7	C	Phenol	50.000	50.238	-0.5	121	0.00
8		bis(2-Chloroethyl)ether	50.000	49.373	1.3	121	0.00
9		2-Chlorophenol	50.000	49.960	0.1	120	0.00
10		1,3-Dichlorobenzene	50.000	49.974	0.1	129	0.00
11	C	1,4-Dichlorobenzene	50.000	50.060	-0.1	125	0.00
12		Benzyl Alcohol	50.000	51.868	-3.7	124	0.00
13	C	1,2-Dichlorobenzene	50.000	49.975	0.0	130	0.00
14		2-Methylphenol	50.000	50.468	-0.9	122	0.00
5		bis(2-Chloroisopropyl)ether	50.000	49.733	0.5	127	0.00
16		3-,4-Methylphenol	50.000	50.956	-1.9	123	0.00
17	P	n-Nitrosodipropylamine	50.000	51.445	-2.9	131	0.00
18		Hexachloroethane	50.000	50.922	-1.8	126	0.00
19	I	Naphthalene-d8	40.000	40.000	0.0	122	0.00
20	S	Nitrobenzene-d5	50.000	50.834	-1.7	125	0.00
21		Nitrobenzene	50.000	49.676	0.6	120	0.00
22		Isophorone	50.000	51.853	-3.7	137	0.00
23	C	2-Nitrophenol	50.000	55.536	-11.1	129	0.00
24		2,4-Dimethylphenol	50.000	51.567	-3.1	134	0.00
25		bis(2-Chloroethoxy)methane	50.000	50.055	-0.1	124	0.00
26		Benzoic Acid	50.000	51.135	-2.3	128	0.01
27	C	2,4-Dichlorophenol	50.000	50.704	-1.4	122	0.00
28		1,2,4-Trichlorobenzene	50.000	49.534	0.9	127	0.00
29		Naphthalene	50.000	50.018	-0.0	126	0.00
30		4-Chloroaniline	50.000	49.955	0.1	119	0.00
31	C	Hexachlorobutadiene	50.000	50.539	-1.1	142	0.00
32	C	4-Chloro-3-Methylphenol	50.000	50.675	-1.3	120	0.00
33		2-Methylnaphthalene	50.000	50.498	-1.0	125	0.00
34	I	Acenaphthene-d10	40.000	40.000	0.0	122	0.00
35	P	Hexachlorocyclopentadiene	50.000	54.754	-9.5	139	0.00
36	C	2,4,6-Trichlorophenol	50.000	52.757	-5.5	124	0.00
37		2,4,5-Trichlorophenol	50.000	52.851	-5.7	124	0.00
38	S	2-Fluorobiphenyl	50.000	50.436	-0.9	131	0.00
39		2-Chloronaphthalene	50.000	50.760	-1.5	131	0.00

(#) =Out of Range

Data File : C:\HPCHEM\1\DATA\042903\4M18454.D Vial: 9
Acq On : 29 Apr 2003 21:36 Operator: CLK
Sample : WG139334-09 50PPM Alt Source BNA STD Inst : HPMS4
Misc : 1,1 SOS64-19-4 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:32:02 2003
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
40		2-Nitroaniline	50.000	51.322	-2.6	122	0.00
41		Dimethylphthalate	50.000	50.724	-1.4	124	0.00
42		Acenaphthylene	50.000	51.499	-3.0	130	0.00
43		2,6-Dinitrotoluene	50.000	52.996	-6.0	127	0.00
44		3-Nitroaniline	50.000	44.295	11.4	96	0.00
45	C	Acenaphthene	50.000	51.767	-3.5	127	0.00
46	P	2,4-Dinitrophenol	50.000	54.254	-8.5	145	0.00
47	P	4-Nitrophenol	50.000	52.822	-5.6	129	0.00
48		Dibenzofuran	50.000	50.357	-0.7	125	0.00
49		2,4-Dinitrotoluene	50.000	53.277	-6.6	133	0.00
50		Diethylphthalate	50.000	50.884	-1.8	124	0.00
51		Fluorene	50.000	50.882	-1.8	127	0.00
52		4-Chlorophenyl Phenyl Ether	50.000	50.691	-1.4	124	0.00
53		4-Nitroaniline	50.000	53.922	-7.8	108	0.00
54		1,2-Diphenylhydrazine	50.000	50.288	-0.6	121	0.00
55	S	2,4,6-Tribromophenol	50.000	55.007	-10.0	126	0.00
56	I	Phenanthrene-d10	40.000	40.000	0.0	127	0.00
57		4,6-Dinitro-2-Methylphenol	50.000	52.933	-5.9	137	0.00
58	C	n-Nitrosodiphenylamine	50.000	50.621	-1.2	130	0.00
59		4-Bromophenyl Phenyl Ether	50.000	49.028	1.9	105	0.00
60		Hexachlorobenzene	50.000	50.019	-0.0	130	0.00
61	C	Pentachlorophenol	50.000	56.255	-12.5	155	0.00
62		Phenanthrene	50.000	50.230	-0.5	128	0.00
63		Anthracene	50.000	50.876	-1.8	126	0.00
64		Carbazole	50.000	43.451	13.1	105	0.00
65		Di-n-Butyl Phthalate	50.000	50.817	-1.6	121	0.00
66	C	Fluoranthene	50.000	50.633	-1.3	126	0.00
67	I	Chrysene-d12	40.000	40.000	0.0	108	0.00
68		Benzidine	50.000	26.532	46.9#	15	0.00
69		Pyrene	50.000	50.893	-1.8	124	0.00
70	S	p-Terphenyl-d14	50.000	51.054	-2.1	129	0.00
71		Butyl Benzyl Phthalate	50.000	51.910	-3.8	131	0.00
72		Benzo[a]anthracene	50.000	50.615	-1.2	124	0.00
73		3,3'-Dichlorobenzidine	50.000	45.540	8.9	119	0.00
74		Chrysene	50.000	50.934	-1.9	124	0.00
75		bis(2-Ethylhexyl)phthalate	50.000	51.203	-2.4	122	0.00
76	I	Perylene-d12	40.000	40.000	0.0	120	0.00
77	C	Di-n-Octyl Phthalate	50.000	52.391	-4.8	122	0.00

(#)=Out of Range

Data File : C:\HPCHEM\1\DATA\042903\4M18454.D Vial: 9
Acq On : 29 Apr 2003 21:36 Operator: CLK
Sample : WG139334-09 50PPM Alt Source BNA STD Inst : HPMS4
Misc : 1,1 SOS64-19-4 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:32:02 2003
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
78		Benzo[b]fluoranthene	50.000	50.340	-0.7	120	0.00
79		Benzo[k]fluoranthene	50.000	51.796	-3.6	143	0.00
80	C	Benzo[a]pyrene	50.000	50.851	-1.7	125	0.00
81		Indeno[1,2,3-cd]pyrene	50.000	47.544	4.9	110	0.00
82		Dibenz[ah]anthracene	50.000	48.179	3.6	114	0.00
83		Benzo[ghi]perylene	50.000	45.352	9.3	105	0.00

Data File : C:\HPCHEM\1\DATA\042903\4M18454.D Vial: 9
Acq On : 29 Apr 2003 21:36 Operator: CLK
Sample : WG139334-09 50PPM Alt Source BNA STD Inst : HPMS4
Misc : 1,1 SOS64-19-4 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:32:02 2003
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	123	0.00
2		Pyridine	1.384	1.431	-3.4	131	0.00
3		n-Nitrosodimethylamine	0.756	0.768	-1.6	124	0.00
4	S	2-Fluorophenol	1.393	1.400	-0.5	123	0.00
5		Aniline	0.537	0.554	-3.2	133	0.00
6	S	Phenol-d5	1.601	1.636	-2.2	124	0.00
7	C	Phenol	1.768	1.777	-0.5	121	0.00
8		bis(2-Chloroethyl)ether	0.915	0.904	1.2	121	0.00
9		2-Chlorophenol	1.488	1.487	0.1	120	0.00
10		1,3-Dichlorobenzene	1.712	1.711	0.1	129	0.00
11	C	1,4-Dichlorobenzene	1.774	1.776	-0.1	125	0.00
12		Benzyl Alcohol	0.948	0.983	-3.7	124	0.00
13	C	1,2-Dichlorobenzene	1.651	1.650	0.1	130	0.00
14		2-Methylphenol	1.157	1.168	-1.0	122	0.00
15		bis(2-Chloroisopropyl)ether	1.796	1.786	0.6	127	0.00
16		3-,4-Methylphenol	1.688	1.721	-2.0	123	0.00
17	P	n-Nitrosodipropylamine	0.940	0.967	-2.9	131	0.00
18		Hexachloroethane	0.610	0.621	-1.8	126	0.00
19	I	Naphthalene-d8	1.000	1.000	0.0	122	0.00
20	S	Nitrobenzene-d5	0.384	0.390	-1.6	125	0.00
21		Nitrobenzene	0.379	0.376	0.8	120	0.00
22		Isophorone	0.656	0.681	-3.8	137	0.00
23	C	2-Nitrophenol	0.222	0.247	-11.3	129	0.00
24		2,4-Dimethylphenol	0.375	0.387	-3.2	134	0.00
25		bis(2-Chloroethoxy)methane	0.421	0.421	0.0	124	0.00
26		Benzoic Acid	0.161	0.164	-1.9	128	0.01
27	C	2,4-Dichlorophenol	0.336	0.341	-1.5	122	0.00
28		1,2,4-Trichlorobenzene	0.396	0.393	0.8	127	0.00
29		Naphthalene	1.150	1.150	0.0	126	0.00
30		4-Chloroaniline	0.404	0.403	0.2	119	0.00
31	C	Hexachlorobutadiene	0.250	0.252	-0.8	142	0.00
32	C	4-Chloro-3-Methylphenol	0.333	0.338	-1.5	120	0.00
33		2-Methylnaphthalene	0.813	0.821	-1.0	125	0.00
34	I	Acenaphthene-d10	1.000	1.000	0.0	122	0.00
35	P	Hexachlorocyclopentadiene	0.374	0.410	-9.6	139	0.00
36	C	2,4,6-Trichlorophenol	0.431	0.455	-5.6	124	0.00
37		2,4,5-Trichlorophenol	0.461	0.488	-5.9	124	0.00
38	S	2-Fluorobiphenyl	1.570	1.583	-0.8	131	0.00
39		2-Chloronaphthalene	1.311	1.330	-1.4	131	0.00

(#)=Out of Range

Data File : C:\HPCHEM\1\DATA\042903\4M18454.D Vial: 9
Acq On : 29 Apr 2003 21:36 Operator: CLK
Sample : WG139334-09 50PPM Alt Source BNA STD Inst : HPMS4
Misc : 1,1 SOS64-19-4 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:32:02 2003
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40		2-Nitroaniline	0.344	0.353	-2.6	122	0.00
41		Dimethylphthalate	1.448	1.469	-1.5	124	0.00
42		Acenaphthylene	2.119	2.183	-3.0	130	0.00
43		2,6-Dinitrotoluene	0.337	0.357	-5.9	127	0.00
44		3-Nitroaniline	0.246	0.218	11.4	96	0.00
45	C	Acenaphthene	1.306	1.353	-3.6	127	0.00
46	P	2,4-Dinitrophenol	0.185	0.201	-8.6	145	0.00
47	P	4-Nitrophenol	0.249	0.263	-5.6	129	0.00
48		Dibenzofuran	1.926	1.939	-0.7	125	0.00
49		2,4-Dinitrotoluene	0.445	0.474	-6.5	133	0.00
50		Diethylphthalate	1.420	1.445	-1.8	124	0.00
51		Fluorene	1.482	1.508	-1.8	127	0.00
52		4-Chlorophenyl Phenyl Ether	0.794	0.805	-1.4	124	0.00
53		4-Nitroaniline	0.237	0.256	-8.0	108	0.00
4		1,2-Diphenylhydrazine	1.305	1.312	-0.5	121	0.00
5	S	2,4,6-Tribromophenol	0.196	0.216	-10.2	126	0.00
56	I	Phenanthrene-d10	1.000	1.000	0.0	127	0.00
57		4,6-Dinitro-2-Methylphenol	0.161	0.170	-5.6	137	0.00
58	C	n-Nitrosodiphenylamine	0.615	0.623	-1.3	130	0.00
59		4-Bromophenyl Phenyl Ether	0.237	0.233	1.7	105	0.00
60		Hexachlorobenzene	0.280	0.281	-0.4	130	0.00
61	C	Pentachlorophenol	0.137	0.154	-12.4	155	0.00
62		Phenanthrene	1.254	1.260	-0.5	128	0.00
63		Anthracene	1.231	1.253	-1.8	126	0.00
64		Carbazole	0.815	0.708	13.1	105	0.00
65		Di-n-Butyl Phthalate	1.380	1.402	-1.6	121	0.00
66	C	Fluoranthene	1.443	1.461	-1.2	126	0.00
67	I	Chrysene-d12	1.000	1.000	0.0	108	0.00
68		Benzidine	0.034	0.018#	47.1#	15#	0.00
69		Pyrene	1.432	1.457	-1.7	124	0.00
70	S	p-Terphenyl-d14	0.999	1.020	-2.1	129	0.00
71		Butyl Benzyl Phthalate	0.621	0.645	-3.9	131	0.00
72		Benzo[a]anthracene	1.405	1.423	-1.3	124	0.00
73		3,3'-Dichlorobenzidine	0.317	0.289	8.8	119	0.00
74		Chrysene	1.345	1.370	-1.9	124	0.00
75		bis(2-Ethylhexyl)phthalate	0.859	0.880	-2.4	122	0.00
76	I	Perylene-d12	1.000	1.000	0.0	120	0.00
77	C	Di-n-Octyl Phthalate	1.852	1.940	-4.8	122	0.00

(#)=Out of Range

Data File : C:\HPCHEM\1\DATA\042903\4M18454.D Vial: 9
Acq On : 29 Apr 2003 21:36 Operator: CLK
Sample : WG139334-09 50PPM Alt Source BNA STD Inst : HPMS4
Misc : 1,1 SOS64-19-4 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:32:02 2003
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
78		Benzo[b]fluoranthene	1.838	1.850	-0.7	120	0.00
79		Benzo[k]fluoranthene	1.729	1.792	-3.6	143	0.00
80	C	Benzo[a]pyrene	1.666	1.694	-1.7	125	0.00
81		Indeno[1,2,3-cd]pyrene	1.964	1.868	4.9	110	0.00
82		Dibenz[ah]anthracene	1.684	1.622	3.7	114	0.00
83		Benzo[ghi]perylene	1.606	1.457	9.3	105	0.00

Data File : C:\HPCHEM\1\DATA\042903\4M18454.D Vial: 9
Acq On : 29 Apr 2003 21:36 Operator: CLK
Sample : WG139334-09 50PPM Alt Source BNA STD Inst : HPMS4
Misc : 1,1 SOS64-19-4 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 8:32 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:32:02 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.22	152	367548	40.00 ug/ml	0.00
19) Naphthalene-d8	11.86	136	1400186	40.00 ug/ml	0.00
34) Acenaphthene-d10	13.98	164	824459	40.00 ug/ml	0.00
56) Phenanthrene-d10	15.62	188	1448144	40.00 ug/ml	0.00
67) Chrysene-d12	18.49	240	1502642	40.00 ug/ml	0.00
76) Perylene-d12	20.99	264	1156760	40.00 ug/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol	8.50	112	643204	50.2552 ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 50.26%		
6) Phenol-d5	9.71	99	751677	51.0942 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 51.09%		
20) Nitrobenzene-d5	10.95	82	683386	50.8336 ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 101.66%		
38) 2-Fluorobiphenyl	13.16	172	1631868	50.4358 ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 100.88%		
55) 2,4,6-Tribromophenol	14.86	330	222211	55.0065 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 55.01%		
70) p-Terphenyl-d14	17.24	244	1915791	51.0538 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 102.10%		
Target Compounds					Qvalue
2) Pyridine	6.23	79	657346	51.6773 ug/ml	99
3) n-Nitrosodimethylamine	6.23	74	352889	50.7762 ug/ml	98
5) Aniline	9.82	66	254541	51.6142 ug/ml	96
7) Phenol	9.73	94	816224	50.2378 ug/ml	100
8) bis(2-Chloroethyl)ether	9.87	63	415138	49.3727 ug/ml	96
9) 2-Chlorophenol	9.96	128	683167	49.9596 ug/ml	100
10) 1,3-Dichlorobenzene	10.16	146	786062	49.9736 ug/ml	100
11) 1,4-Dichlorobenzene	10.24	146	816115	50.0596 ug/ml	99
12) Benzyl Alcohol	10.38	108	451803	51.8678 ug/ml	99
13) 1,2-Dichlorobenzene	10.46	146	758052	49.9751 ug/ml	100
14) 2-Methylphenol	10.50	107	536580	50.4677 ug/ml	99
15) bis(2-Chloroisopropyl)ethe	10.54	45	820618	49.7330 ug/ml	99
16) 3-,4-Methylphenol	10.68	107	790554	50.9563 ug/ml	99
17) n-Nitrosodipropylamine	10.72	70	444489	51.4449 ug/ml	99
18) Hexachloroethane	10.87	117	285356	50.9221 ug/ml	98
21) Nitrobenzene	10.97	77	658913	49.6763 ug/ml	99
22) Isophorone	11.25	82	1191205	51.8530 ug/ml	100
23) 2-Nitrophenol	11.37	139	432439	55.5358 ug/ml	96
24) 2,4-Dimethylphenol	11.36	122	677101	51.5666 ug/ml	99
25) bis(2-Chloroethoxy)methane	11.49	93	737363	50.0550 ug/ml	100

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

Data File : C:\HPCHEM\1\DATA\042903\4M18454.D Vial: 9
Acq On : 29 Apr 2003 21:36 Operator: CLK
Sample : WG139334-09 50PPM Alt Source BNA STD Inst : HPMS4
Misc : 1,1 SOS64-19-4 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 8:32 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:32:02 2003
Response via : Initial Calibration
DataAcq Meth : BNA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
26)	Benzoic Acid	11.46	122	287454	51.1346 ug/ml	99
27)	2,4-Dichlorophenol	11.65	162	596877	50.7041 ug/ml	99
28)	1,2,4-Trichlorobenzene	11.78	180	687360	49.5340 ug/ml	99
29)	Naphthalene	11.89	128	2013077	50.0183 ug/ml	100
30)	4-Chloroaniline	11.94	127	705893	49.9552 ug/ml	100
31)	Hexachlorobutadiene	12.02	225	441769	50.5387 ug/ml	99
32)	4-Chloro-3-Methylphenol	12.49	107	591571	50.6753 ug/ml	99
33)	2-Methylnaphthalene	12.74	142	1436508	50.4975 ug/ml	100
35)	Hexachlorocyclopentadiene	12.92	237	422244	54.7538 ug/ml	98
36)	2,4,6-Trichlorophenol	13.06	196	468531	52.7569 ug/ml	99
37)	2,4,5-Trichlorophenol	13.11	196	502655	52.8515 ug/ml	99
39)	2-Chloronaphthalene	13.33	162	1371176	50.7599 ug/ml	100
40)	2-Nitroaniline	13.45	65	364163	51.3217 ug/ml	99
41)	Dimethylphthalate	13.61	163	1513602	50.7243 ug/ml	100
42)	Acenaphthylene	13.82	152	2249749	51.4987 ug/ml	100
43)	2,6-Dinitrotoluene	13.72	165	367813	52.9958 ug/ml	99
44)	3-Nitroaniline	13.92	138	224765	44.2948 ug/ml	98
45)	Acenaphthene	14.02	154	1393953	51.7674 ug/ml	99
46)	2,4-Dinitrophenol	14.03	184	207173	54.2538 ug/ml	76
47)	4-Nitrophenol	14.05	65	270943	52.8221 ug/ml	98
48)	Dibenzofuran	14.20	168	1998754	50.3575 ug/ml	100
49)	2,4-Dinitrotoluene	14.17	165	488778	53.2769 ug/ml	98
50)	Diethylphthalate	14.39	149	1489467	50.8839 ug/ml	99
51)	Fluorene	14.59	166	1554458	50.8821 ug/ml	100
52)	4-Chlorophenyl Phenyl Ethe	14.54	204	829288	50.6907 ug/ml	99
53)	4-Nitroaniline	14.62	138	263786	53.9221 ug/ml	98
54)	1,2-Diphenylhydrazine	14.72	77	1352136	50.2880 ug/ml	99
57)	4,6-Dinitro-2-Methylphenol	14.63	198	308500	52.9332 ug/ml	96
58)	n-Nitrosodiphenylamine	14.68	169	1127090	50.6214 ug/ml	99
59)	4-Bromophenyl Phenyl Ether	15.08	248	421461	49.0285 ug/ml	99
60)	Hexachlorobenzene	15.21	284	507871	50.0189 ug/ml	99
61)	Pentachlorophenol	15.40	266	279499	56.2548 ug/ml	99
62)	Phenanthrene	15.64	178	2280705	50.2304 ug/ml	100
63)	Anthracene	15.70	178	2267347	50.8758 ug/ml	100
64)	Carbazole	15.85	167	1281731	43.4507 ug/ml	100
65)	Di-n-Butyl Phthalate	16.11	149	2538484	50.8170 ug/ml	100
66)	Fluoranthene	16.90	202	2644686	50.6335 ug/ml	100
68)	Benzidine	17.00	184	33678	26.5324 ug/ml	100
69)	Pyrene	17.16	202	2737614	50.8930 ug/ml	100
71)	Butyl Benzyl Phthalate	17.68	149	1211320	51.9098 ug/ml	99
72)	Benzo[a]anthracene	18.47	228	2672373	50.6154 ug/ml	100

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

Data File : C:\HPCHEM\1\DATA\042903\4M18454.D Vial: 9
Acq On : 29 Apr 2003 21:36 Operator: CLK
Sample : WG139334-09 50PPM Alt Source BNA STD Inst : HPMS4
Misc : 1,1 SOS64-19-4 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 8:32 2003 Quant Results File: BNA.RES

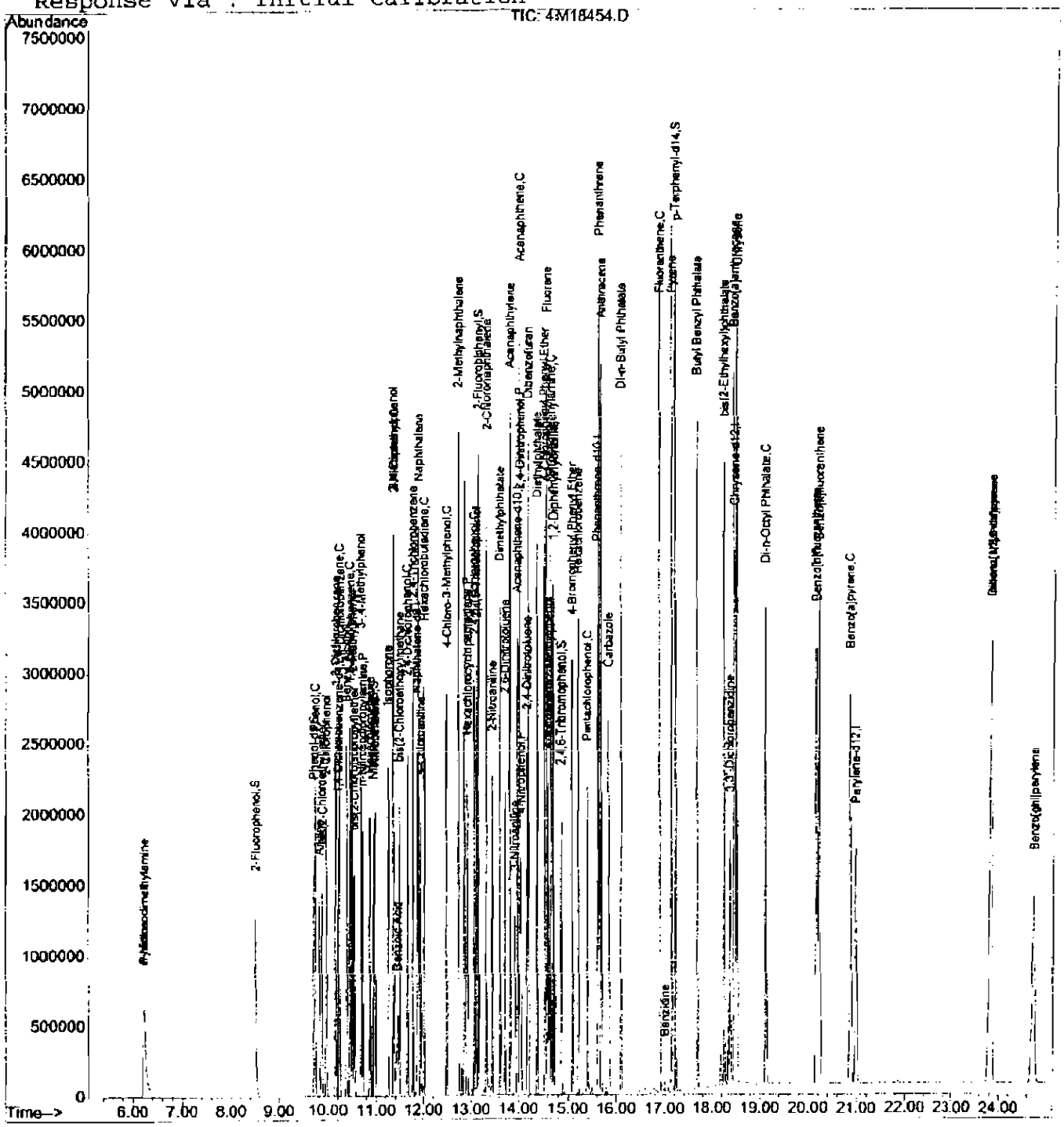
Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:32:02 2003
Response via : Initial Calibration
DataAcq Meth : BNA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
73)	3,3'-Dichlorobenzidine	18.38	252	542196	45.5395 ug/ml	100
74)	Chrysene	18.53	228	2573108	50.9337 ug/ml	99
75)	bis(2-Ethylhexyl)phthalate	18.26	149	1652002	51.2026 ug/ml	99
77)	Di-n-Octyl Phthalate	19.13	149	2805724	52.3910 ug/ml	100
78)	Benzo[b]fluoranthene	20.18	252	2675087	50.3400 ug/ml	98
79)	Benzo[k]fluoranthene	20.23	252	2590454	51.7957 ug/ml	98
80)	Benzo[a]pyrene	20.87	252	2449655	50.8507 ug/ml	100
81)	Indeno[1,2,3-cd]pyrene	23.84	276	2700854	47.5439 ug/ml	100
82)	Dibenz[ah]anthracene	23.84	278	2345807	48.1795 ug/ml	99
83)	Benzo[ghi]perylene	24.74	276	2106470	45.3519 ug/ml	100

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

Data File : C:\HPCHEM\1\DATA\042903\4M18454.D Vial: 9
Acq On : 29 Apr 2003 21:36 Operator: CLK
Sample : WG139334-09 50PPM Alt Source BNA STD Inst : HPMS4
Misc : 1,1 SOS64-19-4 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 8:32 2003 Quant Results File: BNA.RES

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:32:02 2003
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\050103\5M26107.D Vial: 2
Acq On : 1 May 2003 12:55 Operator: ALT
Sample : WG139485-02 50PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-4 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 8:04 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.79	152	315053	40.00 ug/mL	0.00
19) Naphthalene-d8	9.20	136	1180174	40.00 ug/mL	0.00
34) Acenaphthene-d10	11.05	164	737836	40.00 ug/mL	0.00
56) Phenanthrene-d10	12.59	188	1151212	40.00 ug/mL	0.00
67) Chrysene-d12	15.31	240	1267677	40.00 ug/mL	0.00
76) Perylene-d12	17.36	264	741336	40.00 ug/mL	0.00

System Monitoring Compounds

4) 2-Fluorophenol	6.27	112	546366	51.1852 ug/mL	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 51.19%		
6) Phenol-d5	7.35	99	655648	51.2200 ug/mL	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 51.22%		
20) Nitrobenzene-d5	8.42	82	588916	51.0374 ug/mL	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 102.08%		
38) 2-Fluorobiphenyl	10.32	172	1273589	47.0821 ug/mL	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 94.16%		
55) 2,4,6-Tribromophenol	11.88	330	125965	54.5408 ug/mL	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 54.54%		
70) p-Terphenyl-d14	14.17	244	1408622	43.6255 ug/mL	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 87.26%		

Target Compounds					Qvalue
2) Pyridine	4.61	79	557578	48.0275 ug/mL	100
3) n-Nitrosodimethylamine	4.56	74	356566	50.9862 ug/mL	100
5) Aniline	7.43	66	190295	42.9553 ug/mL	100
7) Phenol	7.37	94	709288	52.1905 ug/mL	100
8) bis(2-Chloroethyl)ether	7.48	63	443911	49.2517 ug/mL	100
9) 2-Chlorophenol	7.56	128	599141	51.3878 ug/mL	100
10) 1,3-Dichlorobenzene	7.73	146	660432	47.3129 ug/mL	100
11) 1,4-Dichlorobenzene	7.81	146	710072	48.8720 ug/mL	100
12) Benzyl Alcohol	7.94	108	381764	52.7061 ug/mL	100
13) 1,2-Dichlorobenzene	7.99	146	631626	46.8946 ug/mL	100
14) 2-Methylphenol	8.05	107	441572	50.8662 ug/mL	100
15) bis(2-Chloroisopropyl)ethe	8.07	45	1028126	47.1593 ug/mL	100
16) 3-,4-Methylphenol	8.21	107	658750	51.7714 ug/mL	100
17) n-Nitrosodipropylamine	8.23	70	372671	48.6153 ug/mL	100
18) Hexachloroethane	8.35	117	269483	48.6768 ug/mL	100
21) Nitrobenzene	8.45	77	578539	51.8177 ug/mL	100
22) Isophorone	8.69	82	976263	47.9557 ug/mL	100
23) 2-Nitrophenol	8.79	139	335354	55.0356 ug/mL	100
24) 2,4-Dimethylphenol	8.79	122	535690	48.5082 ug/mL	100
25) bis(2-Chloroethoxy)methane	8.90	93	659547	50.1375 ug/mL	100
26) Benzoic Acid	8.90	122	340228	60.0283 ug/mL	100

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

Data File : C:\HPCHEM\1\DATA\050103\5M26107.D Vial: 2
Acq On : 1 May 2003 12:55 Operator: ALT
Sample : WG139485-02 50PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-4 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 8:04 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
27) 2,4-Dichlorophenol	9.04	162	524936	51.9498 ug/mL	100
28) 1,2,4-Trichlorobenzene	9.13	180	570265	47.4296 ug/mL	100
29) Naphthalene	9.22	128	1641884	49.0366 ug/mL	100
30) 4-Chloroaniline	9.28	127	624429	51.9993 ug/mL	100
31) Hexachlorobutadiene	9.33	225	340551	43.0688 ug/mL	100
32) 4-Chloro-3-Methylphenol	9.76	107	494210	53.2772 ug/mL	100
33) 2-Methylnaphthalene	9.95	142	1210572	50.5974 ug/mL	100
35) Hexachlorocyclopentadiene	10.11	237	204484	57.0755 ug/mL	100
36) 2,4,6-Trichlorophenol	10.24	196	414629	52.3896 ug/mL	100
37) 2,4,5-Trichlorophenol	10.29	196	436809	52.5438 ug/mL	100
39) 2-Chloronaphthalene	10.47	162	1124904	47.7098 ug/mL	100
40) 2-Nitroaniline	10.59	65	342096	53.5420 ug/mL	100
41) Dimethylphthalate	10.73	163	1280514	49.4571 ug/mL	100
42) Acenaphthylene	10.91	152	1788272	48.9464 ug/mL	100
43) 2,6-Dinitrotoluene	10.83	165	280927	51.9777 ug/mL	100
44) 3-Nitroaniline	11.02	138	285670	52.0402 ug/mL	100
45) Acenaphthene	11.09	154	1102123	50.2409 ug/mL	100
46) 2,4-Dinitrophenol	11.12	184	130629	51.7356 ug/mL	100
47) 4-Nitrophenol	11.16	65	215273	53.6595 ug/mL	100
48) Dibenzofuran	11.26	168	1658540	50.1632 ug/mL	100
49) 2,4-Dinitrotoluene	10.83	165	280927	51.9777 ug/mL	100
50) Diethylphthalate	11.44	149	1286196	49.7232 ug/mL	100
51) Fluorene	11.62	166	1340297	50.1322 ug/mL	100
52) 4-Chlorophenyl Phenyl Ethe	11.58	204	659365	49.4266 ug/mL	100
53) 4-Nitroaniline	11.65	138	301651	54.7570 ug/mL	100
54) 1,2-Diphenylhydrazine	11.75	77	1257985	50.9787 ug/mL	100
57) 4,6-Dinitro-2-Methylphenol	11.67	198	220530	54.7723 ug/mL	100
58) n-Nitrosodiphenylamine	11.71	169	897292	49.4537 ug/mL	100
59) 4-Bromophenyl Phenyl Ether	12.09	248	382641	57.5486 ug/mL	100
60) Hexachlorobenzene	12.20	284	322494	47.6539 ug/mL	100
61) Pentachlorophenol	12.40	266	237741	60.0740 ug/mL	100
62) Phenanthrene	12.61	178	1893909	49.7381 ug/mL	100
63) Anthracene	12.67	178	1918258	51.5490 ug/mL	100
64) Carbazole	12.82	167	1769274	54.7274 ug/mL	100
65) Di-n-Butyl Phthalate	13.08	149	2299126	53.4896 ug/mL	100
66) Fluoranthene	13.84	202	2113442	51.3332 ug/mL	100
68) Benzidine	13.95	184	279983	169.8543 ug/mL	100
69) Pyrene	14.09	202	2239282	45.2818 ug/mL	100
71) Butyl Benzyl Phthalate	14.63	149	1019605	44.2413 ug/mL	100
72) Benzo[a]anthracene	15.30	228	2218248	46.0365 ug/mL	100
73) 3,3'-Dichlorobenzidine	15.24	252	621607	55.7083 ug/mL	100
74) Chrysene	15.35	228	2090590	45.3321 ug/mL	100

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

Data File : C:\HPCHEM\1\DATA\050103\5M26107.D Vial: 2
Acq On : 1 May 2003 12:55 Operator: ALT
Sample : WG139485-02 50PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-4 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 8:04 2003 Quant Results File: BNA.RES

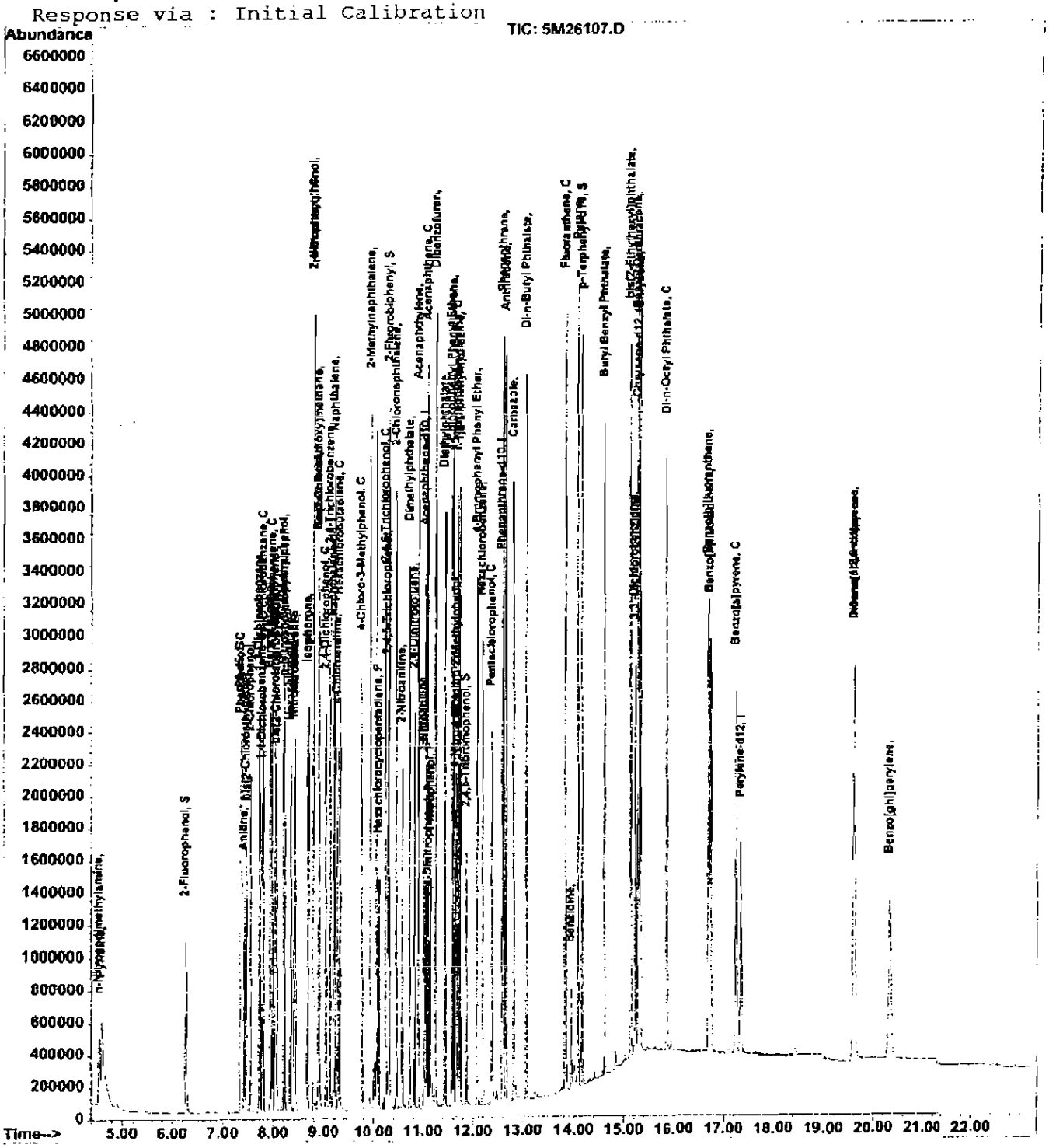
Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Initial Calibration
DataAcq Meth : BNA

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
75)	bis(2-Ethylhexyl)phthalate	15.15	149	1481182	48.0274	ug/mL	100
77)	Di-n-Octyl Phthalate	15.87	149	2480772	51.9293	ug/mL	100
78)	Benzo[b]fluoranthene	16.71	252	1739108	46.9929	ug/mL	100
79)	Benzo[k]fluoranthene	16.74	252	1577409	43.7864	ug/mL	100
80)	Benzo[a]pyrene	17.26	252	1569395	48.7533	ug/mL	100
81)	Indeno[1,2,3-cd]pyrene	19.63	276	1657333	52.8859	ug/mL	100
82)	Dibenz[ah]anthracene	19.63	278	1297984	51.7884	ug/mL	100
83)	Benzo[ghi]perylene	20.35	276	1282521	53.2589	ug/mL	100

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

Data File : C:\HPCHEM\1\DATA\050103\5M26107.D Vial: 2
Acq On : 1 May 2003 12:55 Operator: ALT
Sample : WG139485-02 50PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-4 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 8:04 2003 Quant Results File: BNA.RES

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\050103\5M26108.D Vial: 3
Acq On : 1 May 2003 13:28 Operator: ALT
Sample : WG139485-03 3PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 15:18 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Thu May 01 14:22:45 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.79	152	273109	40.00	ug/mL	0.00
19) Naphthalene-d8	9.20	136	1040791	40.00	ug/mL	0.00
34) Acenaphthene-d10	11.05	164	630782	40.00	ug/mL	0.00
56) Phenanthrene-d10	12.59	188	972858	40.00	ug/mL	0.00
67) Chrysene-d12	15.32	240	853625	40.00	ug/mL	0.00
76) Perylene-d12	17.36	264	551378	40.00	ug/mL	0.00

System Monitoring Compounds						
4) 2-Fluorophenol	6.30	112	27417	2.8270	ug/mL	0.02
Spiked Amount 100.000	Range 21 - 100		Recovery	=	2.83%#	
6) Phenol-d5	7.36	99	34565	3.0975	ug/mL	0.01
Spiked Amount 100.000	Range 10 - 94		Recovery	=	3.10%#	
20) Nitrobenzene-d5	8.43	82	30324	3.0713	ug/mL	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery	=	6.14%#	
38) 2-Fluorobiphenyl	10.32	172	73422	3.2444	ug/mL	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery	=	6.48%#	
55) 2,4,6-Tribromophenol	11.88	330	4664	4.6807	ug/mL	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery	=	4.68%#	
70) p-Terphenyl-d14	14.17	244	70158	3.1919	ug/mL	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery	=	6.38%#	

Target Compounds						Qvalue
2) Pyridine	4.83	79	32097m	2.9334	ug/mL	
3) n-Nitrosodimethylamine	4.59	74	20270	3.3755	ug/mL	96
5) Aniline	7.44	66	13640	3.2243	ug/mL	79
7) Phenol	7.38	94	36525	3.0166	ug/mL	94
8) bis(2-Chloroethyl)ether	7.48	63	26094	3.0881	ug/mL	95
9) 2-Chlorophenol	7.57	128	31609	3.1989	ug/mL	99
10) 1,3-Dichlorobenzene	7.73	146	39250	3.3276	ug/mL	100
11) 1,4-Dichlorobenzene	7.81	146	41134	3.3958	ug/mL#	94
12) Benzyl Alcohol	7.95	108	18570	2.9421	ug/mL	97
13) 1,2-Dichlorobenzene	7.99	146	38493	3.4372	ug/mL	99
14) 2-Methylphenol	8.06	107	24137	3.2047	ug/mL	92
15) bis(2-Chloroisopropyl)ethe	8.07	45	72045	3.3285	ug/mL	96
16) 3-,4-Methylphenol	8.22	107	33700	3.0878	ug/mL	98
17) n-Nitrosodipropylamine	8.24	70	21392	3.2269	ug/mL	86
18) Hexachloroethane	8.36	117	15559	3.3651	ug/mL	97
21) Nitrobenzene	8.45	77	29539	3.0012	ug/mL	96
22) Isophorone	8.70	82	56239	3.2374	ug/mL	96
23) 2-Nitrophenol	8.80	139	13705	2.7559	ug/mL#	85
24) 2,4-Dimethylphenol	8.80	122	28779	3.0155	ug/mL	96
25) bis(2-Chloroethoxy)methane	8.90	93	35126	2.9961	ug/mL#	95
26) Benzoic Acid	8.89	122	5377	8.0694	ug/mL#	91

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

Data File : C:\HPCHEM\1\DATA\050103\5M26108.D
Acq On : 1 May 2003 13:28
Sample : WG139485-03 3PPM BNA STD
Misc : 1,1 SOS63-38-1
MS Integration Params: RTEINT.P
Quant Time: May 1 15:18 2003

Vial: 3
Operator: ALT
Inst : HPMS5
Multiplr: 1.00

Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Thu May 01 14:22:45 2003
Response via : Initial Calibration
DataAcq Meth : BNA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
27)	2,4-Dichlorophenol	9.06	162	24234	2.9300 ug/mL	98
28)	1,2,4-Trichlorobenzene	9.13	180	32207	3.2577 ug/mL	99
29)	Naphthalene	9.22	128	94858	3.2773 ug/mL	100
30)	4-Chloroaniline	9.29	127	30142	2.8629 ug/mL	98
31)	Hexachlorobutadiene	9.33	225	21804	3.5376 ug/mL	98
32)	4-Chloro-3-Methylphenol	9.77	107	22772	2.8843 ug/mL	98
33)	2-Methylnaphthalene	9.95	142	64682	3.2182 ug/mL	99
35)	Hexachlorocyclopentadiene	10.11	237	653	6.5847 ug/mL#	27
36)	2,4,6-Trichlorophenol	10.25	196	18625	2.9444 ug/mL	99
37)	2,4,5-Trichlorophenol	10.31	196	19031	2.8320 ug/mL	99
39)	2-Chloronaphthalene	10.47	162	63073	3.2005 ug/mL	99
40)	2-Nitroaniline	10.59	65	14155	2.4641 ug/mL	95
41)	Dimethylphthalate	10.73	163	69565	3.2315 ug/mL	99
42)	Acenaphthylene	10.91	152	96730	3.1774 ug/mL	99
43)	2,6-Dinitrotoluene	10.83	165	11741	5.0522 ug/mL	93
44)	3-Nitroaniline	11.03	138	10901	2.2446 ug/mL#	86
45)	Acenaphthene	11.09	154	59216	3.1399 ug/mL	99
46)	2,4-Dinitrophenol	11.15	184	621	9.7064 ug/mL#	49
47)	4-Nitrophenol	11.20	65	4986	1.3826 ug/mL#	82
48)	Dibenzofuran	11.26	168	89935	3.2454 ug/mL	95
49)	2,4-Dinitrotoluene	10.83	165	11741	6.7292 ug/mL	93
50)	Diethylphthalate	11.44	149	70578	3.2966 ug/mL	98
51)	Fluorene	11.61	166	70268	3.1154 ug/mL	100
52)	4-Chlorophenyl Phenyl Ethe	11.58	204	34164	3.1692 ug/mL	98
53)	4-Nitroaniline	11.66	138	9661	1.9577 ug/mL	92
54)	1,2-Diphenylhydrazine	11.75	77	68566	3.1183 ug/mL	96
57)	4,6-Dinitro-2-Methylphenol	11.68	198	3745	8.1742 ug/mL#	60
58)	n-Nitrosodiphenylamine	11.71	169	48082	3.2447 ug/mL	100
59)	4-Bromophenyl Phenyl Ether	12.09	248	16003	3.1180 ug/mL	93
60)	Hexachlorobenzene	12.20	284	17924	3.5178 ug/mL	98
61)	Pentachlorophenol	12.40	266	5308	6.9184 ug/mL	95
62)	Phenanthrene	12.61	178	104661	3.2870 ug/mL	99
63)	Anthracene	12.67	178	96969	3.1584 ug/mL	100
64)	Carbazole	12.82	167	87758	3.3103 ug/mL	100
65)	Di-n-Butyl Phthalate	13.08	149	115666	3.3995 ug/mL	99
66)	Fluoranthene	13.84	202	106269	3.1974 ug/mL	98
68)	Benzidine	13.97	184	3636	3.3136 ug/mL	100
69)	Pyrene	14.08	202	112977	3.3535 ug/mL	99
71)	Butyl Benzyl Phthalate	14.63	149	53763	6.3805 ug/mL	99
72)	Benzo[a]anthracene	15.30	228	106391	3.3287 ug/mL	99
73)	3,3'-Dichlorobenzidine	15.24	252	27597	3.9382 ug/mL	96
74)	Chrysene	15.34	228	102597	3.3419 ug/mL	98

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

Data File : C:\HPCHEM\1\DATA\050103\5M26108.D Vial: 3
Acq On : 1 May 2003 13:28 Operator: ALT
Sample : WG139485-03 3PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 15:18 2003 Quant Results File: BNA.RES

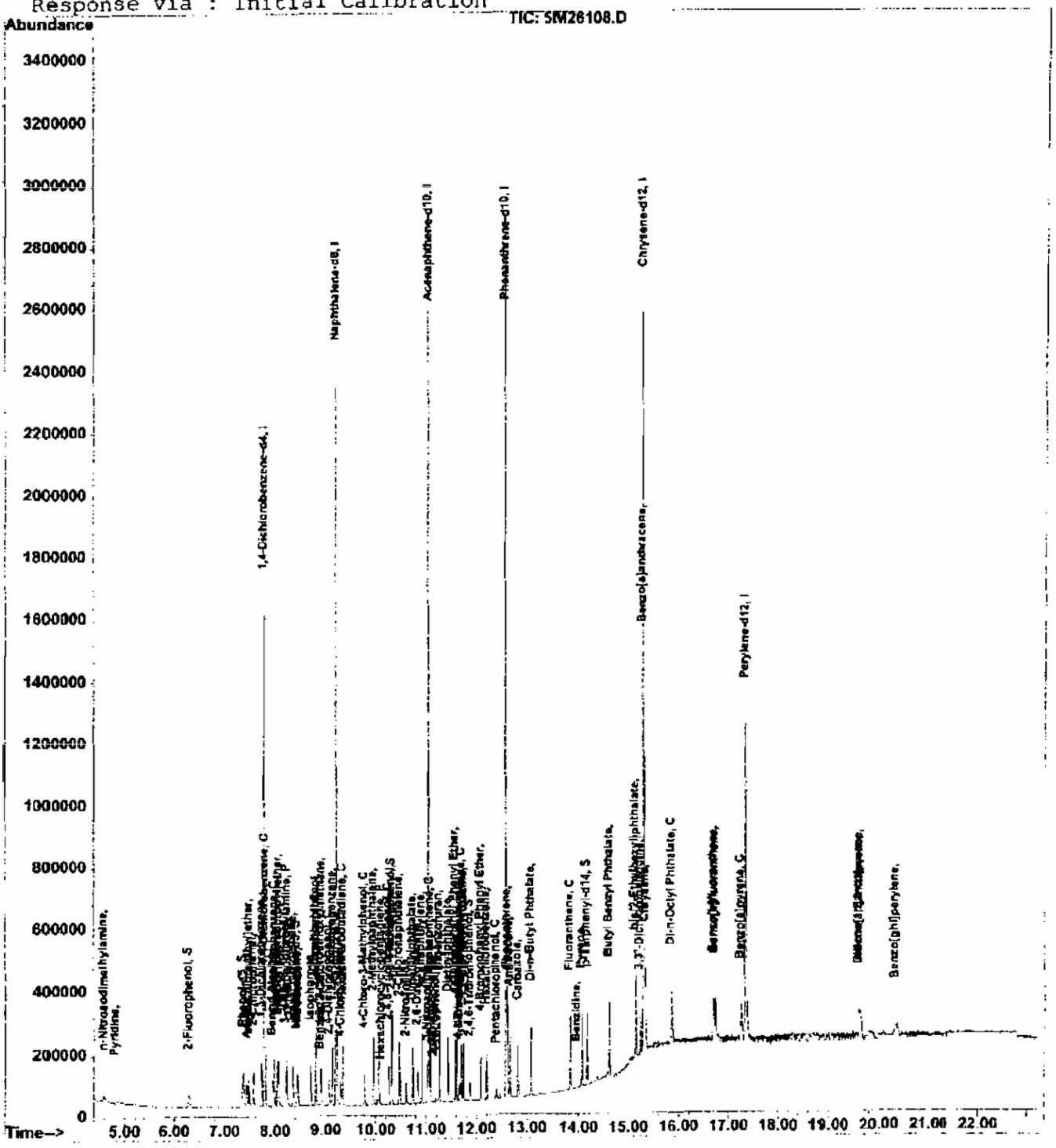
Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Thu May 01 14:22:45 2003
Response via : Initial Calibration
DataAcq Meth : BNA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
75)	bis(2-Ethylhexyl)phthalate	15.15	149	68832	6.1709 ug/mL	97
77)	Di-n-Octyl Phthalate	15.87	149	96415	6.9027 ug/mL#	89
78)	Benzo[b]fluoranthene	16.70	252	82576	3.0056 ug/mL	99
79)	Benzo[k]fluoranthene	16.75	252	81885	3.0679 ug/mL	98
80)	Benzo[a]pyrene	17.26	252	68546	2.9586 ug/mL	97
81)	Indeno[1,2,3-cd]pyrene	19.62	276	61349	2.8584 ug/mL	98
82)	Dibenz[ah]anthracene	19.62	278	48882	2.8124 ug/mL	98
83)	Benzo[ghi]perylene	20.34	276	55527	3.3184 ug/mL	98

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

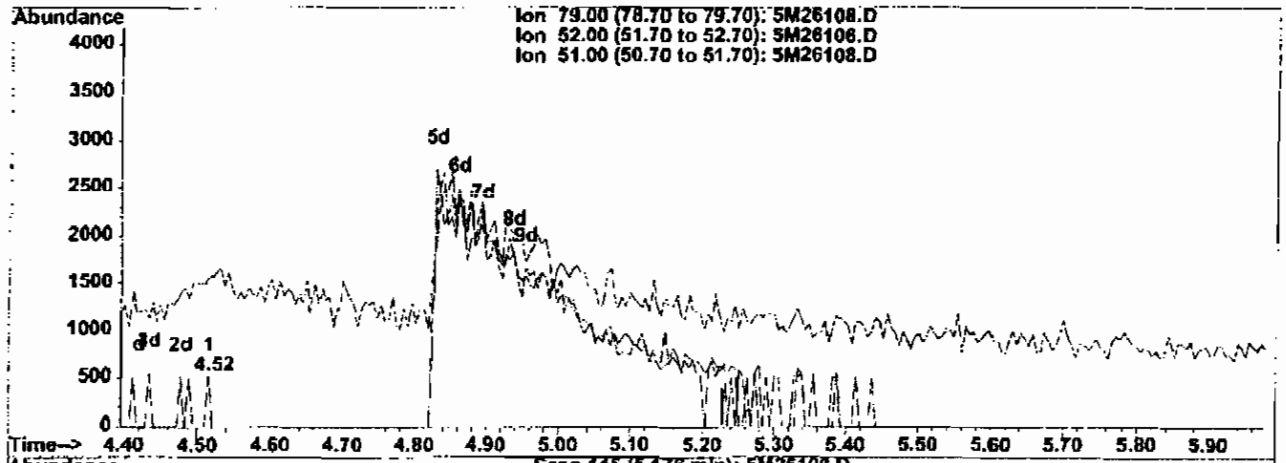
Data File : C:\HPCHEM\1\DATA\050103\5M26108.D Vial: 3
Acq On : 1 May 2003 13:28 Operator: ALT
Sample : WG139485-03 3PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 15:18 2003 Quant Results File: BNA.RES

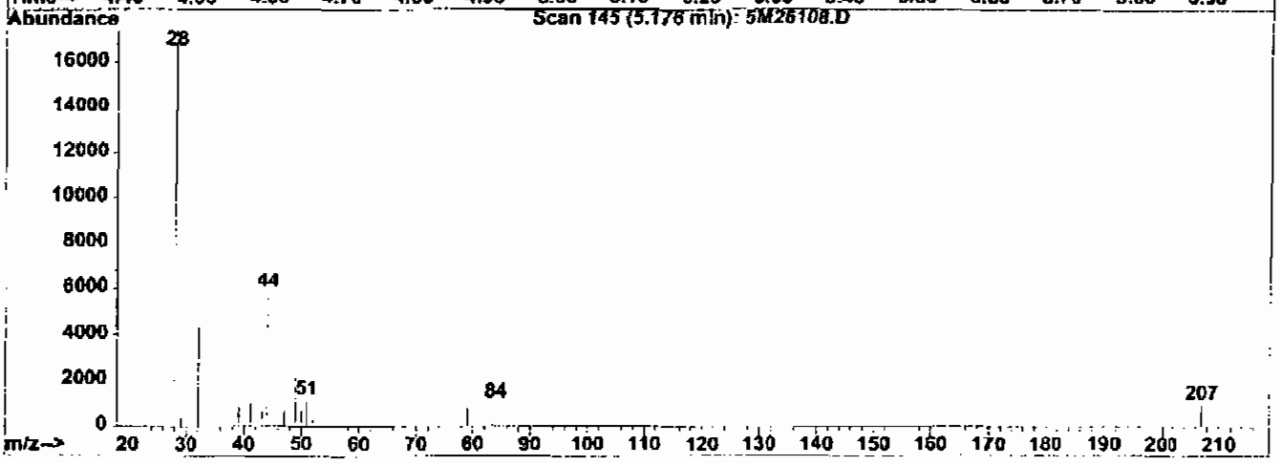
Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Initial Calibration

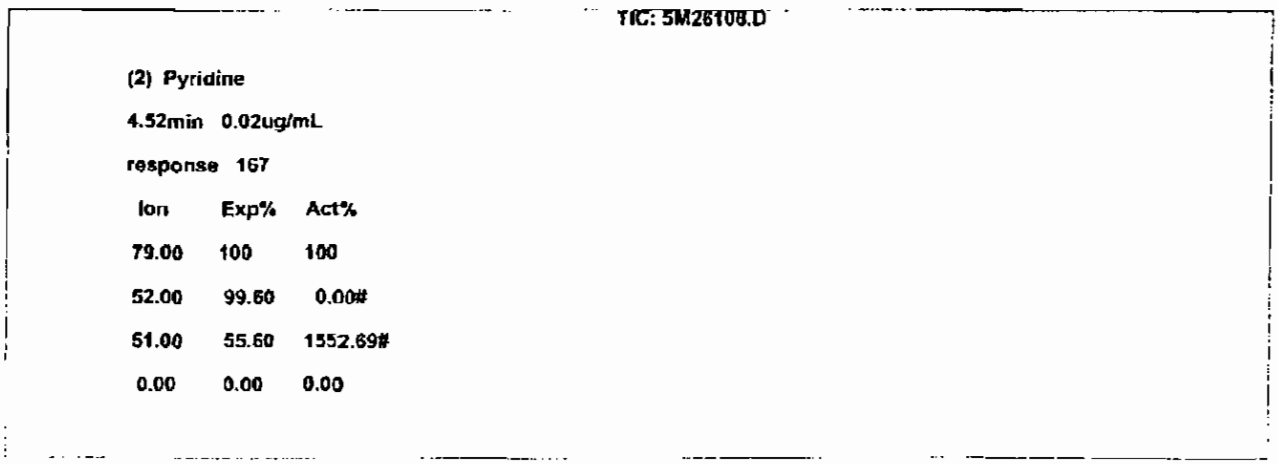


Data File : C:\HPCHEM\1\DATA\050103\5M26108.D Vial: 3
Acq On : 1 May 2003 13:28 Operator: ALT
Sample : WG139485-03 3PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-1 Multiplr: 1.00
Quant Time: May 1 15:17 2003 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Thu May 01 14:23:46 2003
Response via : Multiple Level Calibration

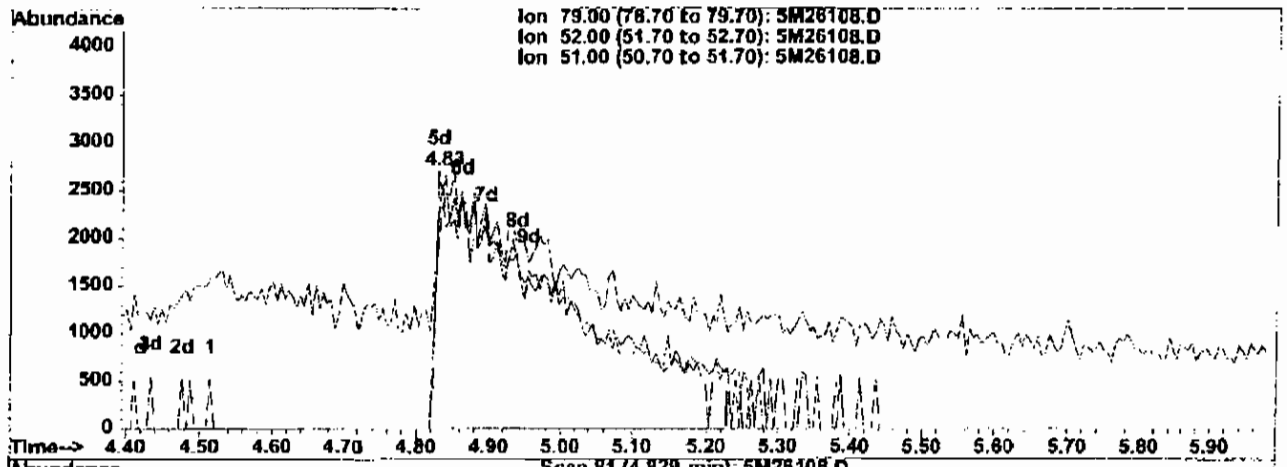


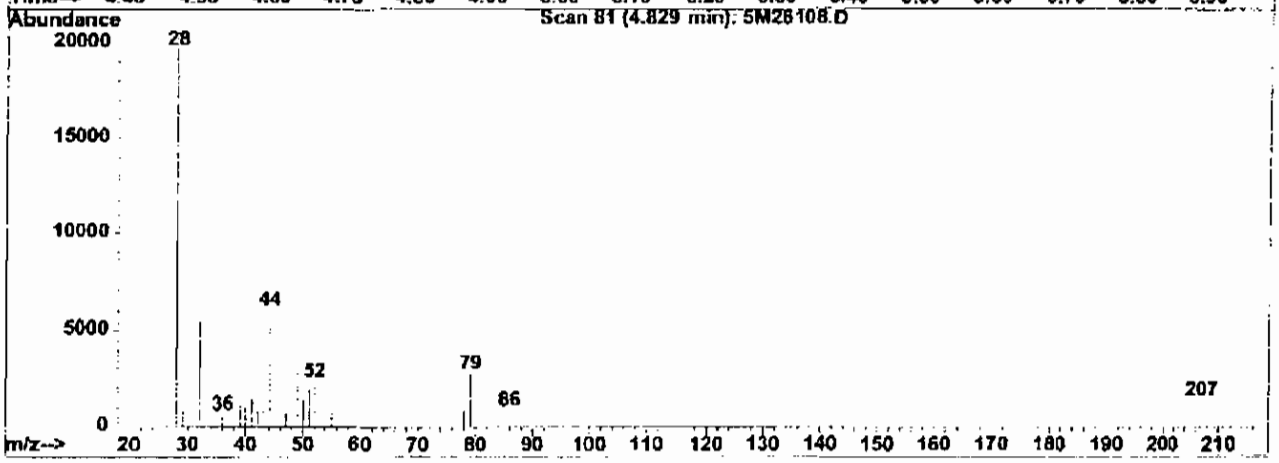




Data File : C:\HPCHEM\1\DATA\050103\5M26108.D Vial: 3
Acq On : 1 May 2003 13:28 Operator: ALT
Sample : WG139485-03 3PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-1 Multiplr: 1.00
Quant Time: May 1 15:18 2003 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Thu May 01 14:23:46 2003
Response via : Multiple Level Calibration





TIC: 5M26108.D

(2) Pyridine

4.83min 2.93ug/mL m

response 32097

Ion	Exp%	Act%
79.00	100	100
52.00	99.60	0.00#
51.00	55.60	8.08#
0.00	0.00	0.00

GAT 5/5/2/03
#2
mk 5/2/03

Data File : C:\HPCHEM\1\DATA\050103\5M26109.D Vial: 4
Acq On : 1 May 2003 14:00 Operator: ALT
Sample : WG139485-04 10PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 15:37 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Thu May 01 14:22:45 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.79	152	269834	40.00 ug/mL	0.00
19) Naphthalene-d8	9.20	136	1021194	40.00 ug/mL	0.00
34) Acenaphthene-d10	11.05	164	611355	40.00 ug/mL	0.00
56) Phenanthrene-d10	12.59	188	964863	40.00 ug/mL	0.00
67) Chrysene-d12	15.31	240	854772	40.00 ug/mL	0.00
76) Perylene-d12	17.36	264	548201	40.00 ug/mL	0.00

System Monitoring Compounds

4) 2-Fluorophenol	6.29	112	85983	9.0441 ug/mL	0.01
Spiked Amount 100.000	Range 21 - 100		Recovery = 9.04%#		
6) Phenol-d5	7.36	99	103877	9.3455 ug/mL	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 9.35%#		
20) Nitrobenzene-d5	8.43	82	94398	9.5700 ug/mL	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 19.14%#		
38) 2-Fluorobiphenyl	10.32	172	215660	9.8664 ug/mL	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 19.74%#		
55) 2,4,6-Tribromophenol	11.88	330	15717	10.1946 ug/mL	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 10.19%		
70) p-Terphenyl-d14	14.17	244	210876	9.5307 ug/mL	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 19.06%#		

Target Compounds

					Qvalue
2) Pyridine	4.69	79	103198m	9.6426 ug/mL	
3) n-Nitrosodimethylamine	4.57	74	60716	10.0984 ug/mL	85
5) Aniline	7.44	66	39329	9.3336 ug/mL	84
7) Phenol	7.37	94	109618	9.1865 ug/mL	95
8) bis(2-Chloroethyl)ether	7.48	63	77723	9.4467 ug/mL	98
9) 2-Chlorophenol	7.56	128	94289	9.5680 ug/mL	99
10) 1,3-Dichlorobenzene	7.73	146	114796	9.8054 ug/mL	99
11) 1,4-Dichlorobenzene	7.81	146	118155	9.7766 ug/mL	98
12) Benzyl Alcohol	7.95	108	56656	8.9396 ug/mL	98
13) 1,2-Dichlorobenzene	8.00	146	110728	9.9172 ug/mL	99
14) 2-Methylphenol	8.05	107	69683	9.2664 ug/mL	93
15) bis(2-Chloroisopropyl)ethe	8.07	45	204176	9.6655 ug/mL	95
16) 3-,4-Methylphenol	8.22	107	102422	9.3721 ug/mL	98
17) n-Nitrosodipropylamine	8.24	70	63100	9.4111 ug/mL	91
18) Hexachloroethane	8.35	117	45863	9.8629 ug/mL	99
21) Nitrobenzene	8.45	77	94014	9.6699 ug/mL	96
22) Isophorone	8.70	82	171244	9.7732 ug/mL	99
23) 2-Nitrophenol	8.80	139	44915	9.0125 ug/mL	86
24) 2,4-Dimethylphenol	8.80	122	88554	9.5242 ug/mL	96
25) bis(2-Chloroethoxy)methane	8.90	93	108634	9.5257 ug/mL#	95
26) Benzoic Acid	8.87	122	29110	12.0335 ug/mL	94

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

Data File : C:\HPCHEM\1\DATA\050103\5M26109.D
Acq On : 1 May 2003 14:00
Sample : WG139485-04 10PPM BNA STD
Misc : 1,1 SOS63-38-2
MS Integration Params: RTEINT.P
Quant Time: May 1 15:37 2003

Vial: 4
Operator: ALT
Inst : HPMS5
Multiplr: 1.00

Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Thu May 01 14:22:45 2003
Response via : Initial Calibration
DataAcq Meth : BNA

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
27)	2,4-Dichlorophenol	9.05	162	79322	9.6828	ug/mL	99
28)	1,2,4-Trichlorobenzene	9.13	180	96940	9.9674	ug/mL	99
29)	Naphthalene	9.22	128	275372	9.7255	ug/mL	99
30)	4-Chloroaniline	9.29	127	97558	9.4643	ug/mL	98
31)	Hexachlorobutadiene	9.33	225	63147	10.2508	ug/mL	100
32)	4-Chloro-3-Methylphenol	9.77	107	73595	9.3661	ug/mL	98
33)	2-Methylnaphthalene	9.95	142	192133	9.6977	ug/mL	100
35)	Hexachlorocyclopentadiene	10.11	237	10199	8.6238	ug/mL	98
36)	2,4,6-Trichlorophenol	10.25	196	57142	9.1290	ug/mL	98
37)	2,4,5-Trichlorophenol	10.30	196	61456	9.2850	ug/mL	99
39)	2-Chloronaphthalene	10.47	162	188450	9.8861	ug/mL	99
40)	2-Nitroaniline	10.59	65	48054	8.6312	ug/mL	95
41)	Dimethylphthalate	10.73	163	206211	9.7862	ug/mL	99
42)	Acenaphthylene	10.91	152	291386	9.7629	ug/mL	99
43)	2,6-Dinitrotoluene	10.83	165	39449	10.6528	ug/mL	94
44)	3-Nitroaniline	11.02	138	38999	8.2854	ug/mL	93
45)	Acenaphthene	11.09	154	173154	9.5084	ug/mL	99
46)	2,4-Dinitrophenol	11.13	184	7827	12.1748	ug/mL#	67
47)	4-Nitrophenol	11.18	65	22866	6.5422	ug/mL	93
48)	Dibenzofuran	11.26	168	264348	9.8610	ug/mL	97
49)	2,4-Dinitrotoluene	10.83	165	39449	11.0068	ug/mL	94
50)	Diethylphthalate	11.44	149	207277	9.7954	ug/mL	99
51)	Fluorene	11.62	166	206997	9.4560	ug/mL	99
52)	4-Chlorophenyl Phenyl Ethe	11.58	204	101713	9.6915	ug/mL	98
53)	4-Nitroaniline	11.66	138	37010	7.7380	ug/mL	95
54)	1,2-Diphenylhydrazine	11.75	77	207609	9.7153	ug/mL	96
57)	4,6-Dinitro-2-Methylphenol	11.67	198	19322	11.9288	ug/mL#	78
58)	n-Nitrosodiphenylamine	11.71	169	144856	9.7093	ug/mL	99
59)	4-Bromophenyl Phenyl Ether	12.09	248	49077	9.4865	ug/mL	96
60)	Hexachlorobenzene	12.20	284	51587	9.9716	ug/mL	96
61)	Pentachlorophenol	12.40	266	21044	10.7622	ug/mL	99
62)	Phenanthrene	12.61	178	302481	9.5547	ug/mL	100
63)	Anthracene	12.67	178	289947	9.4325	ug/mL	99
64)	Carbazole	12.83	167	262451	9.8245	ug/mL	100
65)	Di-n-Butyl Phthalate	13.08	149	344542	9.7640	ug/mL	99
66)	Fluoranthene	13.84	202	320032	9.5800	ug/mL	99
68)	Benzidine	13.97	184	3218	2.6785	ug/mL	100
69)	Pyrene	14.09	202	337227	9.8731	ug/mL	99
71)	Butyl Benzyl Phthalate	14.63	149	155098	11.8211	ug/mL	95
72)	Benzo[a]anthracene	15.30	228	316892	9.7648	ug/mL	100
73)	3,3'-Dichlorobenzidine	15.24	252	86416	11.4153	ug/mL	98
74)	Chrysene	15.34	228	306683	9.8601	ug/mL	99

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

Data File : C:\HPCHEM\1\DATA\050103\5M26109.D Vial: 4
Acq On : 1 May 2003 14:00 Operator: ALT
Sample : WG139485-04 10PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 15:37 2003 Quant Results File: BNA.RES

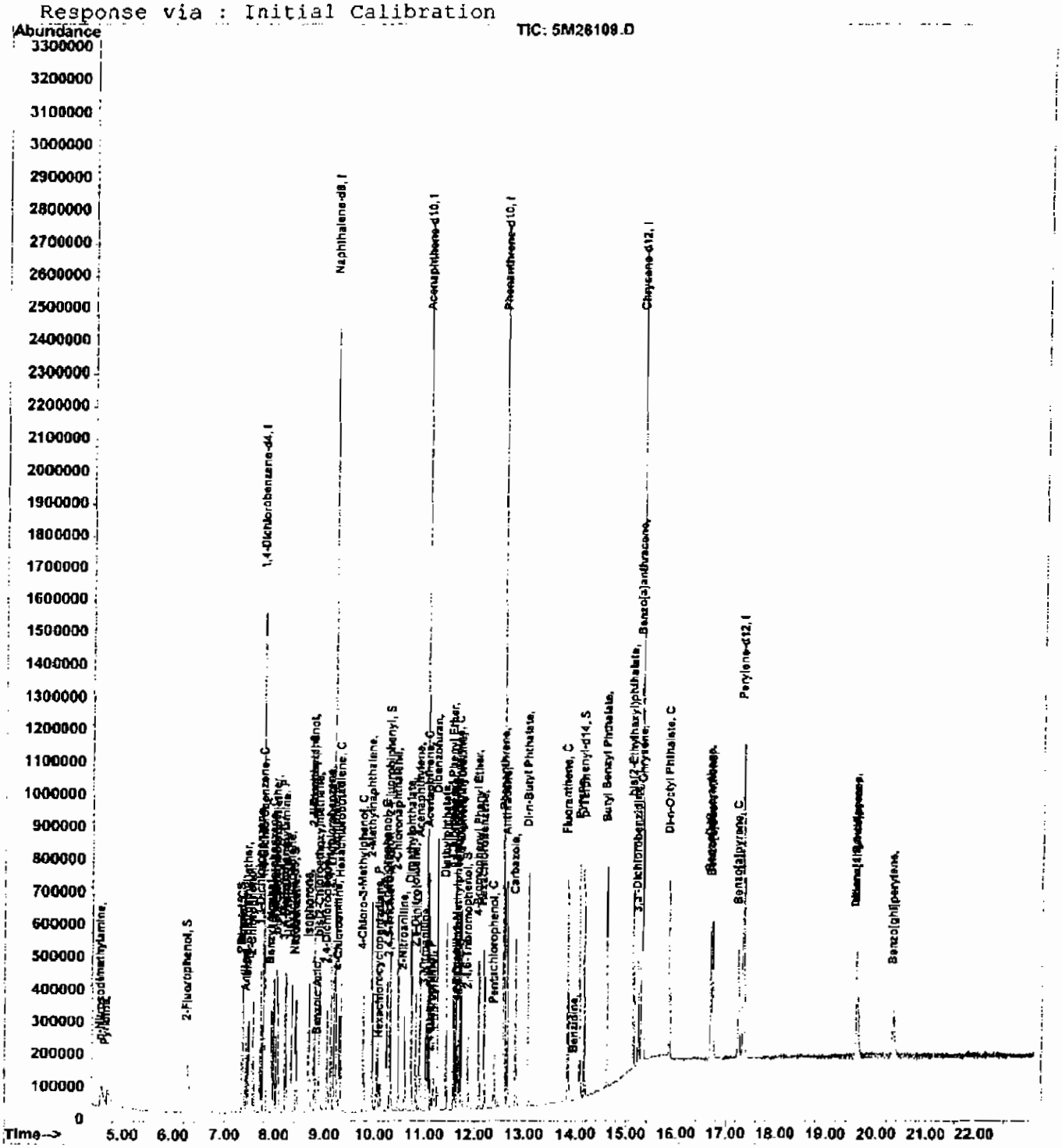
Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Thu May 01 14:22:45 2003
Response via : Initial Calibration
DataAcq Meth : BNA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
75)	bis(2-Ethylhexyl)phthalate	15.15	149	206048	11.5451 ug/mL	99
77)	Di-n-Octyl Phthalate	15.87	149	329682	11.7584 ug/mL#	94
78)	Benzo[b]fluoranthene	16.70	252	254348	9.2537 ug/mL	98
79)	Benzo[k]fluoranthene	16.74	252	247581	9.2497 ug/mL	98
80)	Benzo[a]pyrene	17.26	252	209905	8.9148 ug/mL	100
81)	Indeno[1,2,3-cd]pyrene	19.62	276	209644	9.6946 ug/mL	97
82)	Dibenz[ah]anthracene	19.62	278	166331	9.5121 ug/mL	99
83)	Benzo[ghi]perylene	20.35	276	169070	9.9179 ug/mL	99

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

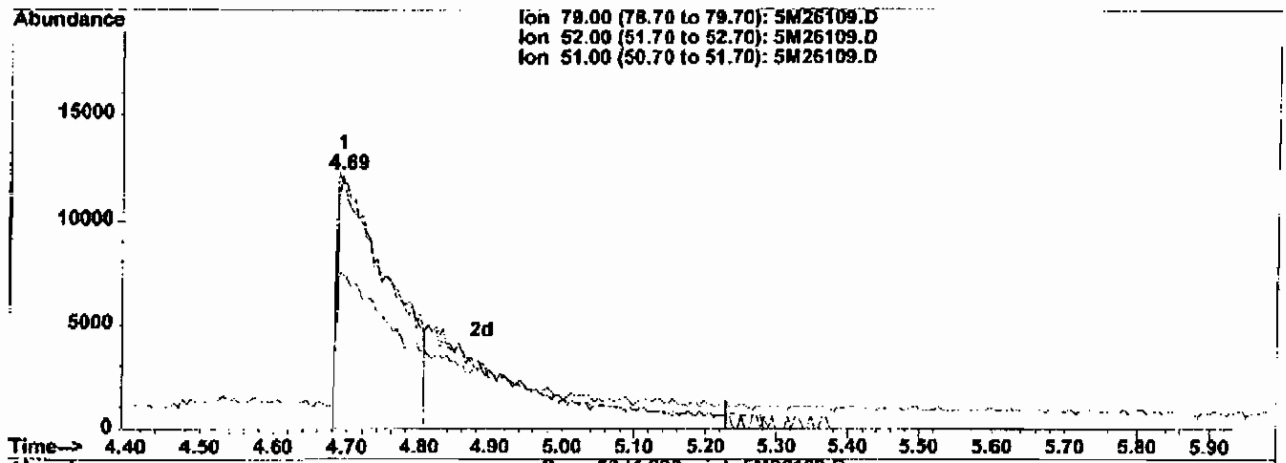
Data File : C:\HPCHEM\1\DATA\050103\5M26109.D Vial: 4
Acq On : 1 May 2003 14:00 Operator: ALT
Sample : WG139485-04 10PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 15:37 2003 Quant Results File: BNA.RES

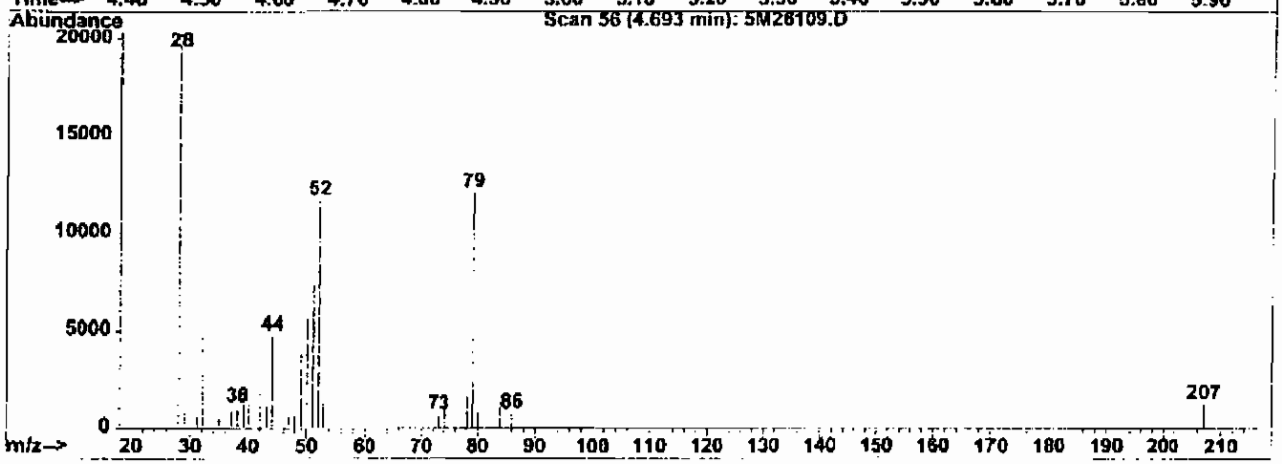
Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\050103\5M26109.D Vial: 4
Acq On : 1 May 2003 14:00 Operator: ALT
Sample : WG139485-04 10PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-2 Multiplr: 1.00
Quant Time: May 1 15:20 2003 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Thu May 01 15:37:03 2003
Response via : Multiple Level Calibration





TIC: 5M26109.D

(2) Pyridine

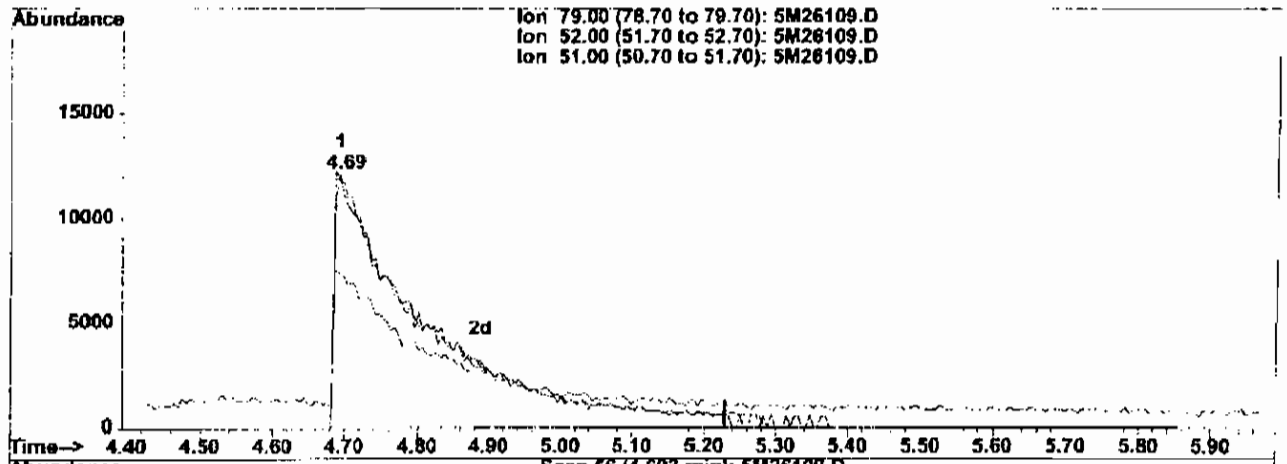
4.69min 5.51ug/mL

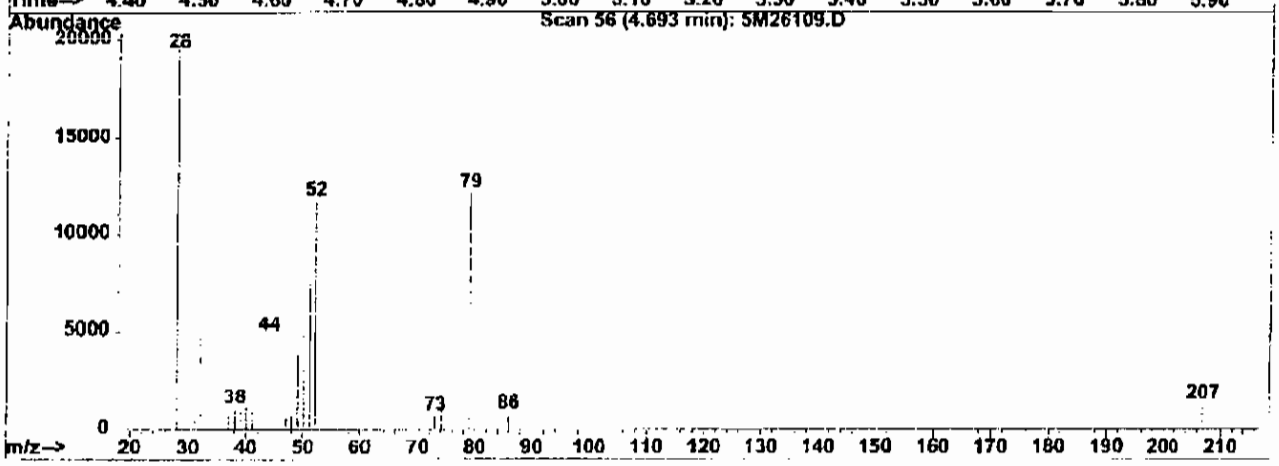
response 58980

Ion	Exp%	Act%
79.00	100	100
52.00	99.60	141.19#
51.00	55.60	50.10
0.00	0.00	0.00

Data File : C:\HPCHEM\1\DATA\050103\5M26109.D Vial: 4
Acq On : 1 May 2003 14:00 Operator: ALT
Sample : WG139485-04 10PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-2 Multiplr: 1.00
Quant Time: May 1 15:37 2003 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Thu May 01 15:37:03 2003
Response via : Multiple Level Calibration





TIC: 5M26109.D

(2) Pyridine

4.69min 9.64ug/mL m

response 103198

Ion	Exp%	Act%
79.00	100	100
52.00	99.60	80.69
51.00	55.60	28.63#
0.00	0.00	0.00

ALT 5/2/03
#2
[illegible]

Data File : C:\HPCHEM\1\DATA\050103\5M26110.D Vial: 5
Acq On : 1 May 2003 14:33 Operator: ALT
Sample : WG139485-05 20PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-3 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 15:21 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Thu May 01 14:22:45 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.79	152	268240	40.00 ug/mL	0.00
19) Naphthalene-d8	9.20	136	1002257	40.00 ug/mL	0.00
34) Acenaphthene-d10	11.05	164	607315	40.00 ug/mL	0.00
56) Phenanthrene-d10	12.59	188	963773	40.00 ug/mL	0.00
67) Chrysene-d12	15.32	240	880202	40.00 ug/mL	0.00
76) Perylene-d12	17.36	264	574258	40.00 ug/mL	0.00

System Monitoring Compounds

4) 2-Fluorophenol	6.28	112	178452	19.0741 ug/mL	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 19.07%#		
6) Phenol-d5	7.35	99	206849	18.8272 ug/mL	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 18.83%		
20) Nitrobenzene-d5	8.43	82	190392	19.5137 ug/mL	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 39.02%		
38) 2-Fluorobiphenyl	10.32	172	422887	19.4414 ug/mL	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 38.88%#		
55) 2,4,6-Tribromophenol	11.88	330	34417	19.4870 ug/mL	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 19.49%		
70) p-Terphenyl-d14	14.17	244	434786	19.0778 ug/mL	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 38.16%		

Target Compounds

					Qvalue
2) Pyridine	4.65	79	179091	17.9974 ug/mL	93
3) n-Nitrosodimethylamine	4.57	74	116359	19.3273 ug/mL	92
5) Aniline	7.44	66	74959	18.0725 ug/mL	90
7) Phenol	7.37	94	215218	18.3513 ug/mL	95
8) bis(2-Chloroethyl)ether	7.48	63	151960	18.8701 ug/mL	98
9) 2-Chlorophenol	7.56	128	187393	19.0947 ug/mL	99
10) 1,3-Dichlorobenzene	7.73	146	225294	19.3948 ug/mL	99
11) 1,4-Dichlorobenzene	7.81	146	231613	19.2992 ug/mL	98
12) Benzyl Alcohol	7.95	108	115763	18.4389 ug/mL	99
13) 1,2-Dichlorobenzene	7.99	146	214833	19.4182 ug/mL	99
14) 2-Methylphenol	8.05	107	135769	18.3187 ug/mL	94
15) bis(2-Chloroisopropyl)ethe	8.07	45	388077	18.8273 ug/mL	95
16) 3-,4-Methylphenol	8.21	107	201535	18.5600 ug/mL	98
17) n-Nitrosodipropylamine	8.23	70	124343	18.6495 ug/mL	93
18) Hexachloroethane	8.36	117	90713	19.5153 ug/mL	100
21) Nitrobenzene	8.45	77	184294	19.3056 ug/mL	98
22) Isophorone	8.69	82	335771	19.3798 ug/mL	99
23) 2-Nitrophenol	8.79	139	95096	19.3576 ug/mL	90
24) 2,4-Dimethylphenol	8.79	122	180013	19.8595 ug/mL	97
25) bis(2-Chloroethoxy)methane	8.90	93	218112	19.6893 ug/mL	97
26) Benzoic Acid	8.88	122	68750	18.0188 ug/mL	96

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

Data File : C:\HPCHEM\1\DATA\050103\5M26110.D Vial: 5
Acq On : 1 May 2003 14:33 Operator: ALT
Sample : WG139485-05 20PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-3 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 15:21 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Thu May 01 14:22:45 2003
Response via : Initial Calibration
DataAcq Meth : BNA

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
27)	2,4-Dichlorophenol	9.05	162	160432	19.8611	ug/mL	99
28)	1,2,4-Trichlorobenzene	9.13	180	191118	19.9728	ug/mL	100
29)	Naphthalene	9.22	128	545055	19.7599	ug/mL	100
30)	4-Chloroaniline	9.29	127	198046	19.5810	ug/mL	99
31)	Hexachlorobutadiene	9.33	225	125849	20.5132	ug/mL	100
32)	4-Chloro-3-Methylphenol	9.76	107	149329	19.2933	ug/mL	99
33)	2-Methylnaphthalene	9.95	142	387714	19.9288	ug/mL	98
35)	Hexachlorocyclopentadiene	10.11	237	38133	14.4265	ug/mL	99
36)	2,4,6-Trichlorophenol	10.25	196	118286	18.9078	ug/mL	99
37)	2,4,5-Trichlorophenol	10.30	196	125678	18.9439	ug/mL	100
39)	2-Chloronaphthalene	10.47	162	371758	19.5980	ug/mL	99
40)	2-Nitroaniline	10.59	65	98498	17.8094	ug/mL	97
41)	Dimethylphthalate	10.73	163	404883	19.3024	ug/mL	99
42)	Acenaphthylene	10.91	152	581070	19.5555	ug/mL	99
43)	2,6-Dinitrotoluene	10.83	165	81461	19.1059	ug/mL	93
44)	3-Nitroaniline	11.02	138	82486	17.6410	ug/mL	97
45)	Acenaphthene	11.09	154	336269	18.7172	ug/mL	99
46)	2,4-Dinitrophenol	11.13	184	22730	17.5826	ug/mL	98
47)	4-Nitrophenol	11.17	65	54382	15.6627	ug/mL	96
48)	Dibenzofuran	11.26	168	513464	19.3032	ug/mL	97
49)	2,4-Dinitrotoluene	10.83	165	81461	17.7159	ug/mL	93
50)	Diethylphthalate	11.44	149	407985	19.2509	ug/mL	99
51)	Fluorene	11.62	166	410731	18.9266	ug/mL	99
52)	4-Chlorophenyl Phenyl Ethe	11.58	204	200367	19.0805	ug/mL	99
53)	4-Nitroaniline	11.65	138	81904	17.2382	ug/mL	96
54)	1,2-Diphenylhydrazine	11.75	77	409361	19.3612	ug/mL	97
57)	4,6-Dinitro-2-Methylphenol	11.67	198	50309	19.3123	ug/mL	89
58)	n-Nitrosodiphenylamine	11.71	169	286652	19.1416	ug/mL	100
59)	4-Bromophenyl Phenyl Ether	12.09	248	98650	18.8500	ug/mL	97
60)	Hexachlorobenzene	12.20	284	101176	19.2710	ug/mL	96
61)	Pentachlorophenol	12.40	266	50018	17.8243	ug/mL	100
62)	Phenanthrene	12.61	178	600877	19.0780	ug/mL	100
63)	Anthracene	12.67	178	585299	19.0490	ug/mL	100
64)	Carbazole	12.82	167	525772	19.6585	ug/mL	100
65)	Di-n-Butyl Phthalate	13.08	149	698715	19.5126	ug/mL	99
66)	Fluoranthene	13.84	202	646672	19.2514	ug/mL	99
68)	Benzidine	13.96	184	7100	5.7055	ug/mL	100
69)	Pyrene	14.08	202	678058	19.2217	ug/mL	100
71)	Butyl Benzyl Phthalate	14.63	149	321257	20.4873	ug/mL	97
72)	Benzo[a]anthracene	15.30	228	655253	19.4575	ug/mL	99
73)	3,3'-Dichlorobenzidine	15.24	252	166732	20.4033	ug/mL	98
74)	Chrysene	15.34	228	621864	19.2931	ug/mL	99

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

Data File : C:\HPCHEM\1\DATA\050103\5M26110.D Vial: 5
Acq On : 1 May 2003 14:33 Operator: ALT
Sample : WG139485-05 20PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-3 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 15:21 2003 Quant Results File: BNA.RES

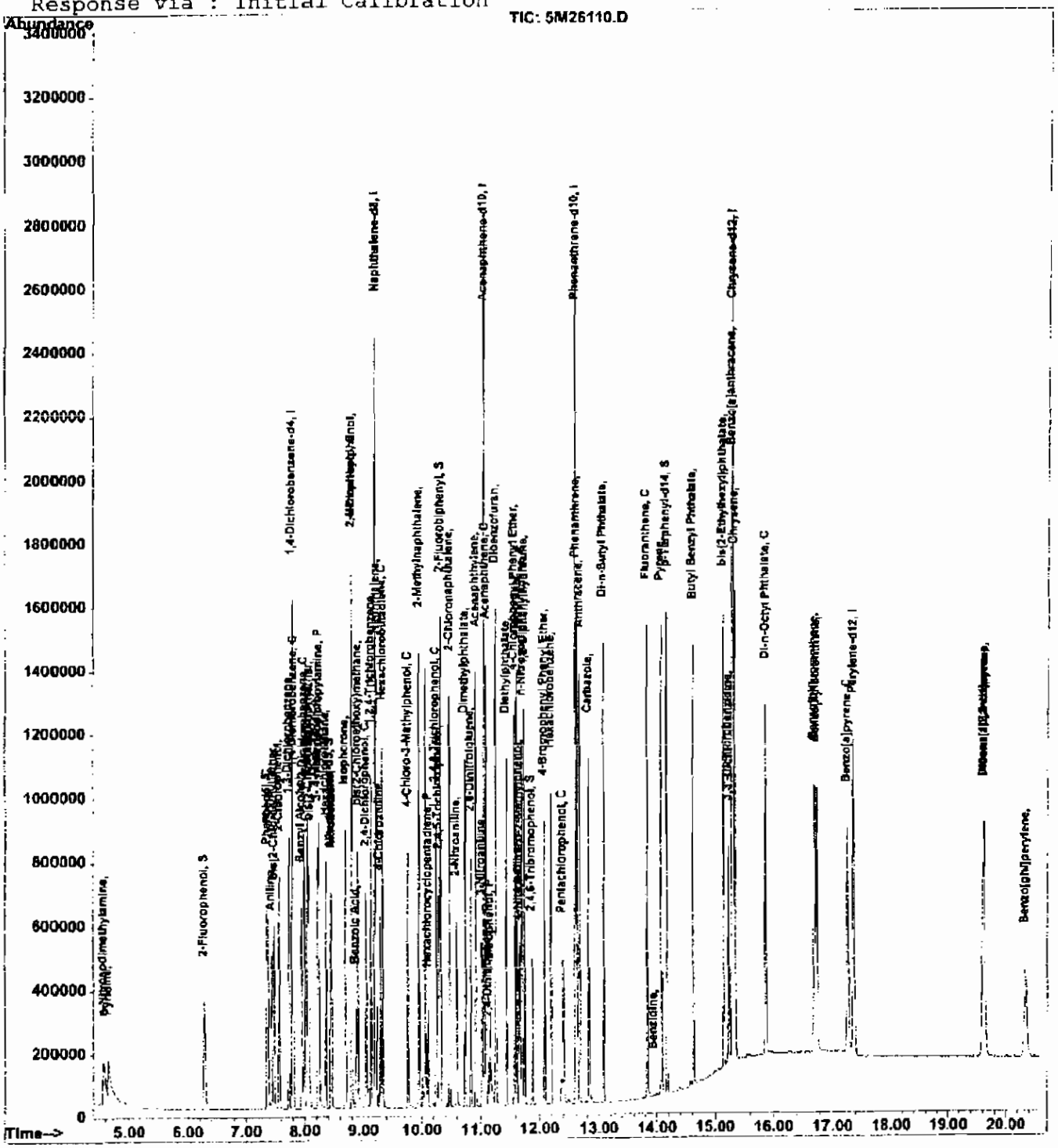
Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Thu May 01 14:22:45 2003
Response via : Initial Calibration
DataAcq Meth : BNA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
75)	bis(2-Ethylhexyl)phthalate	15.15	149	423394	19.7376 ug/mL	99
77)	Di-n-Octyl Phthalate	15.87	149	700232	18.7999 ug/mL	95
78)	Benzo[b]fluoranthene	16.70	252	545494	18.9969 ug/mL	99
79)	Benzo[k]fluoranthene	16.75	252	519016	18.4995 ug/mL	99
80)	Benzo[a]pyrene	17.26	252	475897	19.2570 ug/mL	100
81)	Indeno[1,2,3-cd]pyrene	19.62	276	472181	20.6366 ug/mL	98
82)	Dibenz[ah]anthracene	19.62	278	373456	20.2261 ug/mL	99
83)	Benzo[ghi]perylene	20.34	276	346347	19.2356 ug/mL	100

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

Data File : C:\HPCHEM\1\DATA\050103\5M26110.D Vial: 5
Acq On : 1 May 2003 14:33 Operator: ALT
Sample : WG139485-05 20PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-3 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 15:21 2003 Quant Results File: BNA.RES

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\050103\5M26111.D Vial: 6
Acq On : 1 May 2003 15:03 Operator: ALT
Sample : WG139485-06 80PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-5 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 15:36 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Thu May 01 15:23:09 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.79	152	290068	40.00 ug/mL	0.00
19) Naphthalene-d8	9.20	136	1086657	40.00 ug/mL	0.00
34) Acenaphthene-d10	11.05	164	676598	40.00 ug/mL	0.00
56) Phenanthrene-d10	12.59	188	1094543	40.00 ug/mL	0.00
67) Chrysene-d12	15.32	240	1062029	40.00 ug/mL	0.00
76) Perylene-d12	17.36	264	644371	40.00 ug/mL	0.00

System Monitoring Compounds

4) 2-Fluorophenol	6.28	112	808326	80.4181 ug/mL	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 80.42%		
6) Phenol-d5	7.35	99	966582	81.7432 ug/mL	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 81.74%		
20) Nitrobenzene-d5	8.43	82	864928	81.7122 ug/mL	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 163.42%#		
38) 2-Fluorobiphenyl	10.32	172	2049622	85.0754 ug/mL	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 170.16%#		
55) 2,4,6-Tribromophenol	11.88	330	182213	91.6646 ug/mL	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 91.66%		
70) p-Terphenyl-d14	14.17	244	2271774	83.3622 ug/mL	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 166.72%#		

Target Compounds

					Qvalue
2) Pyridine	4.59	79	875418	83.1844 ug/mL	97
3) n-Nitrosodimethylamine	4.55	74	496252	75.9112 ug/mL	97
5) Aniline	7.43	66	323054	73.4229 ug/mL	99
7) Phenol	7.37	94	1024236	81.7815 ug/mL	99
8) bis(2-Chloroethyl)ether	7.48	63	654581	76.2617 ug/mL	98
9) 2-Chlorophenol	7.56	128	873779	82.3457 ug/mL	99
10) 1,3-Dichlorobenzene	7.73	146	1049945	83.7708 ug/mL	99
11) 1,4-Dichlorobenzene	7.81	146	1094979	84.5131 ug/mL	100
12) Benzyl Alcohol	7.94	108	552785	81.8661 ug/mL	99
13) 1,2-Dichlorobenzene	7.99	146	1014352	85.2340 ug/mL	100
14) 2-Methylphenol	8.05	107	653157	83.0395 ug/mL	98
15) bis(2-Chloroisopropyl)ethe	8.07	45	1475998	67.5190 ug/mL	97
16) 3-,4-Methylphenol	8.21	107	959563	82.3257 ug/mL	100
17) n-Nitrosodipropylamine	8.24	70	577153	80.3887 ug/mL	97
18) Hexachloroethane	8.36	117	413992	82.1699 ug/mL	96
21) Nitrobenzene	8.45	77	828872	80.4564 ug/mL	100
22) Isophorone	8.69	82	1535616	81.9578 ug/mL	99
23) 2-Nitrophenol	8.79	139	486244	90.9669 ug/mL	97
24) 2,4-Dimethylphenol	8.79	122	859511	87.6601 ug/mL	100
25) bis(2-Chloroethoxy)methane	8.90	93	995188	83.4157 ug/mL	99
26) Benzoic Acid	8.91	122	470882	92.4176 ug/mL	100

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

Data File : C:\HPCHEM\1\DATA\050103\5M26111.D
Acq On : 1 May 2003 15:03
Sample : WG139485-06 80PPM BNA STD
Misc : 1,1 SOS63-38-5
MS Integration Params: RTEINT.P
Quant Time: May 1 15:36 2003

Vial: 6
Operator: ALT
Inst : HPMS5
Multiplr: 1.00

Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Thu May 01 15:23:09 2003
Response via : Initial Calibration
DataAcq Meth : BNA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
27)	2,4-Dichlorophenol	9.04	162	775684	87.9798 ug/mL	99
28)	1,2,4-Trichlorobenzene	9.13	180	919749	88.3875 ug/mL	100
29)	Naphthalene	9.22	128	2493963	83.8857 ug/mL	100
30)	4-Chloroaniline	9.28	127	897776	81.9001 ug/mL	99
31)	Hexachlorobutadiene	9.33	225	617670	91.4183 ug/mL	100
32)	4-Chloro-3-Methylphenol	9.76	107	707224	84.2064 ug/mL	98
33)	2-Methylnaphthalene	9.95	142	1799311	85.3641 ug/mL	99
35)	Hexachlorocyclopentadiene	10.11	237	378620	95.1394 ug/mL	100
36)	2,4,6-Trichlorophenol	10.25	196	616896	88.0929 ug/mL	99
37)	2,4,5-Trichlorophenol	10.29	196	638963	86.1066 ug/mL	100
39)	2-Chloronaphthalene	10.47	162	1783249	84.5178 ug/mL	99
40)	2-Nitroaniline	10.59	65	468541	76.0180 ug/mL	97
41)	Dimethylphthalate	10.74	163	1944912	83.2430 ug/mL	100
42)	Acenaphthylene	10.91	152	2776080	83.9745 ug/mL	100
43)	2,6-Dinitrotoluene	10.84	165	423870	87.6421 ug/mL	98
44)	3-Nitroaniline	11.02	138	397846	76.4336 ug/mL	97
45)	Acenaphthene	11.09	154	1666944	84.5168 ug/mL	100
46)	2,4-Dinitrophenol	11.12	184	195124	87.9381 ug/mL	99
47)	4-Nitrophenol	11.16	65	301809	83.2035 ug/mL	99
48)	Dibenzofuran	11.26	168	2493841	84.1172 ug/mL	99
49)	2,4-Dinitrotoluene	10.84	165	423870	76.3546 ug/mL	98
50)	Diethylphthalate	11.44	149	1933666	81.7579 ug/mL	99
51)	Fluorene	11.62	166	2062761	85.7624 ug/mL	100
52)	4-Chlorophenyl Phenyl Ethe	11.58	204	1029850	87.6697 ug/mL	98
53)	4-Nitroaniline	11.66	138	396802	74.9906 ug/mL	97
54)	1,2-Diphenylhydrazine	11.75	77	1783064	76.4694 ug/mL	97
57)	4,6-Dinitro-2-Methylphenol	11.68	198	337698	91.4273 ug/mL	96
58)	n-Nitrosodiphenylamine	11.71	169	1404062	82.5895 ug/mL	100
59)	4-Bromophenyl Phenyl Ether	12.09	248	509952	84.9723 ug/mL	98
60)	Hexachlorobenzene	12.21	284	527137	87.5419 ug/mL	97
61)	Pentachlorophenol	12.40	266	321296	84.9565 ug/mL	99
62)	Phenanthrene	12.62	178	2950727	82.9734 ug/mL	99
63)	Anthracene	12.67	178	2939534	84.3811 ug/mL	99
64)	Carbazole	12.83	167	2393866	78.7667 ug/mL	100
65)	Di-n-Butyl Phthalate	13.08	149	3278079	79.9618 ug/mL	100
66)	Fluoranthene	13.84	202	3242430	84.5503 ug/mL	99
68)	Benzidine	13.96	184	63075	41.7230 ug/mL	100
69)	Pyrene	14.09	202	3359694	79.4806 ug/mL	99
71)	Butyl Benzyl Phthalate	14.63	149	1565335	77.2044 ug/mL	98
72)	Benzo[a]anthracene	15.30	228	3332006	81.8791 ug/mL	100
73)	3,3'-Dichlorobenzidine	15.25	252	569284	56.4702 ug/mL	98
74)	Chrysene	15.35	228	3176872	81.6193 ug/mL	99

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

Data File : C:\HPCHEM\1\DATA\050103\5M26111.D Vial: 6
Acq On : 1 May 2003 15:03 Operator: ALT
Sample : WG139485-06 80PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-5 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 15:36 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Thu May 01 15:23:09 2003
Response via : Initial Calibration
DataAcq Meth : BNA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
75)	bis(2-Ethylhexyl)phthalate	15.15	149	2101522	76.9074 ug/mL	99
77)	Di-n-Octyl Phthalate	15.87	149	3493367	78.0629 ug/mL	98
78)	Benzo[b]fluoranthene	16.71	252	2622154	81.5934 ug/mL	99
79)	Benzo[k]fluoranthene	16.75	252	2633600	84.3079 ug/mL	100
80)	Benzo[a]pyrene	17.27	252	2353678	84.5263 ug/mL	100
81)	Indeno[1,2,3-cd]pyrene	19.64	276	2323349	89.4778 ug/mL	100
82)	Dibenz[ah]anthracene	19.64	278	1862531	89.1853 ug/mL	100
83)	Benzo[ghi]perylene	20.35	276	1725922	85.5009 ug/mL	99

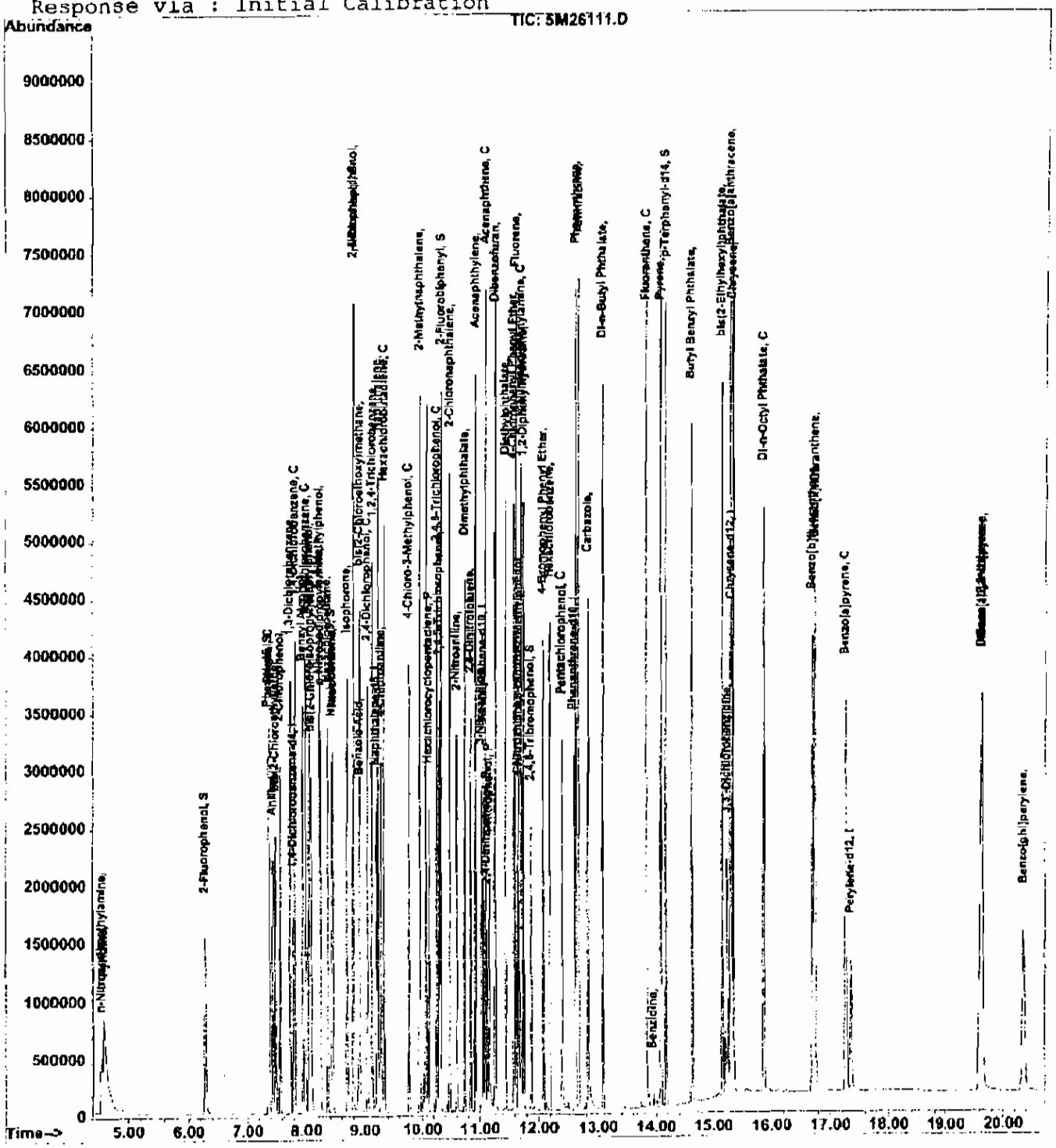
(#) = qualifier out of range (m) = manual integration

Data File : C:\HPCHEM\1\DATA\050103\5M26111.D
Acq On : 1 May 2003 15:03
Sample : WG139485-06 80PPM BNA STD
Misc : 1,1 SOS63-38-5
MS Integration Params: RTEINT.P
Quant Time: May 1 15:36 2003

Vial: 6
Operator: ALT
Inst : HPMS5
Multiplr: 1.00

Quant Results File: BNA.RES

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\050103\5M26112.D Vial: 7
Acq On : 1 May 2003 15:33 Operator: ALT
Sample : WG139485-07 100PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-6 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 15:56 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Thu May 01 15:23:09 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.79	152	283661	40.00 ug/mL	0.00
19) Naphthalene-d8	9.20	136	1053000	40.00 ug/mL	0.00
34) Acenaphthene-d10	11.06	164	672115	40.00 ug/mL	0.00
56) Phenanthrene-d10	12.59	188	1069803	40.00 ug/mL	0.00
67) Chrysene-d12	15.32	240	1057555	40.00 ug/mL	0.00
76) Perylene-d12	17.36	264	616260	40.00 ug/mL	0.00

System Monitoring Compounds

4) 2-Fluorophenol	6.28	112	971759	99.9667 ug/mL	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 99.97%		
6) Phenol-d5	7.36	99	1150288	99.8027 ug/mL	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 99.80%#		
20) Nitrobenzene-d5	8.43	82	1042198	101.7452 ug/mL	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 203.50%#		
38) 2-Fluorobiphenyl	10.32	172	2494471	103.2368 ug/mL	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 206.48%#		
55) 2,4,6-Tribromophenol	11.88	330	232178	115.6817 ug/mL	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 115.68%		
70) p-Terphenyl-d14	14.18	244	2777426	102.4764 ug/mL	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 204.96%#		

Target Compounds

					Qvalue
2) Pyridine	4.58	79	1063215	98.4508 ug/mL	97
3) n-Nitrosodimethylamine	4.55	74	608060	95.9128 ug/mL	100
5) Aniline	7.43	66	384395	91.9770 ug/mL	99
7) Phenol	7.37	94	1220483	100.1440 ug/mL	99
8) bis(2-Chloroethyl)ether	7.48	63	780997	94.5859 ug/mL	98
9) 2-Chlorophenol	7.56	128	1050589	101.0654 ug/mL	98
10) 1,3-Dichlorobenzene	7.73	146	1265086	102.5672 ug/mL	99
11) 1,4-Dichlorobenzene	7.81	146	1313095	102.6610 ug/mL	99
12) Benzyl Alcohol	7.95	108	664437	101.3005 ug/mL	100
13) 1,2-Dichlorobenzene	8.00	146	1222607	103.8286 ug/mL	99
14) 2-Methylphenol	8.05	107	784501	101.8671 ug/mL	99
15) bis(2-Chloroisopropyl)ethe	8.07	45	1717064	83.0881 ug/mL	95
16) 3-,4-Methylphenol	8.21	107	1158640	101.7049 ug/mL	100
17) n-Nitrosodipropylamine	8.23	70	690598	99.1573 ug/mL	95
18) Hexachloroethane	8.35	117	492737	99.7846 ug/mL	93
21) Nitrobenzene	8.45	77	987605	99.2955 ug/mL	98
22) Isophorone	8.69	82	1826712	100.6790 ug/mL	98
23) 2-Nitrophenol	8.79	139	592080	112.3709 ug/mL	94
24) 2,4-Dimethylphenol	8.80	122	1029746	106.9774 ug/mL	99
25) bis(2-Chloroethoxy)methane	8.90	93	1182147	101.8743 ug/mL	100
26) Benzoic Acid	8.92	122	583397	116.7476 ug/mL	99

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

Data File : C:\HPCHEM\1\DATA\050103\5M26112.D Vial: 7
Acq On : 1 May 2003 15:33 Operator: ALT
Sample : WG139485-07 100PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-6 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 15:56 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Thu May 01 15:23:09 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
27) 2,4-Dichlorophenol	9.04	162	951706	109.7438	ug/mL	99
28) 1,2,4-Trichlorobenzene	9.13	180	1126553	109.6334	ug/mL	100
29) Naphthalene	9.23	128	3005669	103.3575	ug/mL	99
30) 4-Chloroaniline	9.29	127	1094367	103.0948	ug/mL	99
31) Hexachlorobutadiene	9.33	225	757241	112.9038	ug/mL	100
32) 4-Chloro-3-Methylphenol	9.76	107	859940	105.3723	ug/mL	97
33) 2-Methylnaphthalene	9.95	142	2190531	105.9494	ug/mL	100
35) Hexachlorocyclopentadiene	10.11	237	511885	139.7142	ug/mL	99
36) 2,4,6-Trichlorophenol	10.25	196	767950	109.3266	ug/mL	99
37) 2,4,5-Trichlorophenol	10.29	196	801253	108.2449	ug/mL	100
39) 2-Chloronaphthalene	10.47	162	2167695	102.7776	ug/mL	99
40) 2-Nitroaniline	10.59	65	567682	94.7300	ug/mL	96
41) Dimethylphthalate	10.74	163	2348493	100.6416	ug/mL	99
42) Acenaphthylene	10.92	152	3337293	101.2617	ug/mL	99
43) 2,6-Dinitrotoluene	10.83	165	533009	110.4985	ug/mL	94
44) 3-Nitroaniline	11.02	138	496749	97.6689	ug/mL	96
45) Acenaphthene	11.09	154	1985374	100.9542	ug/mL	99
46) 2,4-Dinitrophenol	11.13	184	256322	119.7579	ug/mL	98
47) 4-Nitrophenol	11.16	65	369646	103.4439	ug/mL	99
48) Dibenzofuran	11.26	168	2989758	100.7179	ug/mL	98
49) 2,4-Dinitrotoluene	10.83	165	533009	100.5145	ug/mL	94
50) Diethylphthalate	11.45	149	2323467	98.8585	ug/mL	98
51) Fluorene	11.62	166	2465599	102.5172	ug/mL	100
52) 4-Chlorophenyl Phenyl Ethe	11.58	204	1260200	106.5333	ug/mL	97
53) 4-Nitroaniline	11.66	138	481853	92.9108	ug/mL	98
54) 1,2-Diphenylhydrazine	11.75	77	2106641	92.1145	ug/mL	95
57) 4,6-Dinitro-2-Methylphenol	11.67	198	445146	122.5332	ug/mL	90
58) n-Nitrosodiphenylamine	11.71	169	1704688	102.2083	ug/mL	99
59) 4-Bromophenyl Phenyl Ether	12.09	248	639924	107.4772	ug/mL	96
60) Hexachlorobenzene	12.20	284	661517	110.1853	ug/mL	95
61) Pentachlorophenol	12.40	266	413332	112.2750	ug/mL	99
62) Phenanthrene	12.62	178	3543191	101.3584	ug/mL	99
63) Anthracene	12.67	178	3499381	102.1824	ug/mL	99
64) Carbazole	12.83	167	2855552	95.5926	ug/mL	99
65) Di-n-Butyl Phthalate	13.09	149	3884101	97.0609	ug/mL	99
66) Fluoranthene	13.84	202	3900473	103.3168	ug/mL	99
68) Benzidine	13.95	184	85075	57.9143	ug/mL	100
69) Pyrene	14.08	202	4050375	96.6888	ug/mL	99
71) Butyl Benzyl Phthalate	14.63	149	1882272	94.6377	ug/mL	97
72) Benzo[a]anthracene	15.30	228	4043383	99.7897	ug/mL	99
73) 3,3'-Dichlorobenzidine	15.24	252	728587	74.5205	ug/mL	98
74) Chrysene	15.35	228	3855048	99.4591	ug/mL	99

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

Data File : C:\HPCHEM\1\DATA\050103\5M26112.D Vial: 7
Acq On : 1 May 2003 15:33 Operator: ALT
Sample : WG139485-07 100PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-6 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 15:56 2003 Quant Results File: BNA.RES

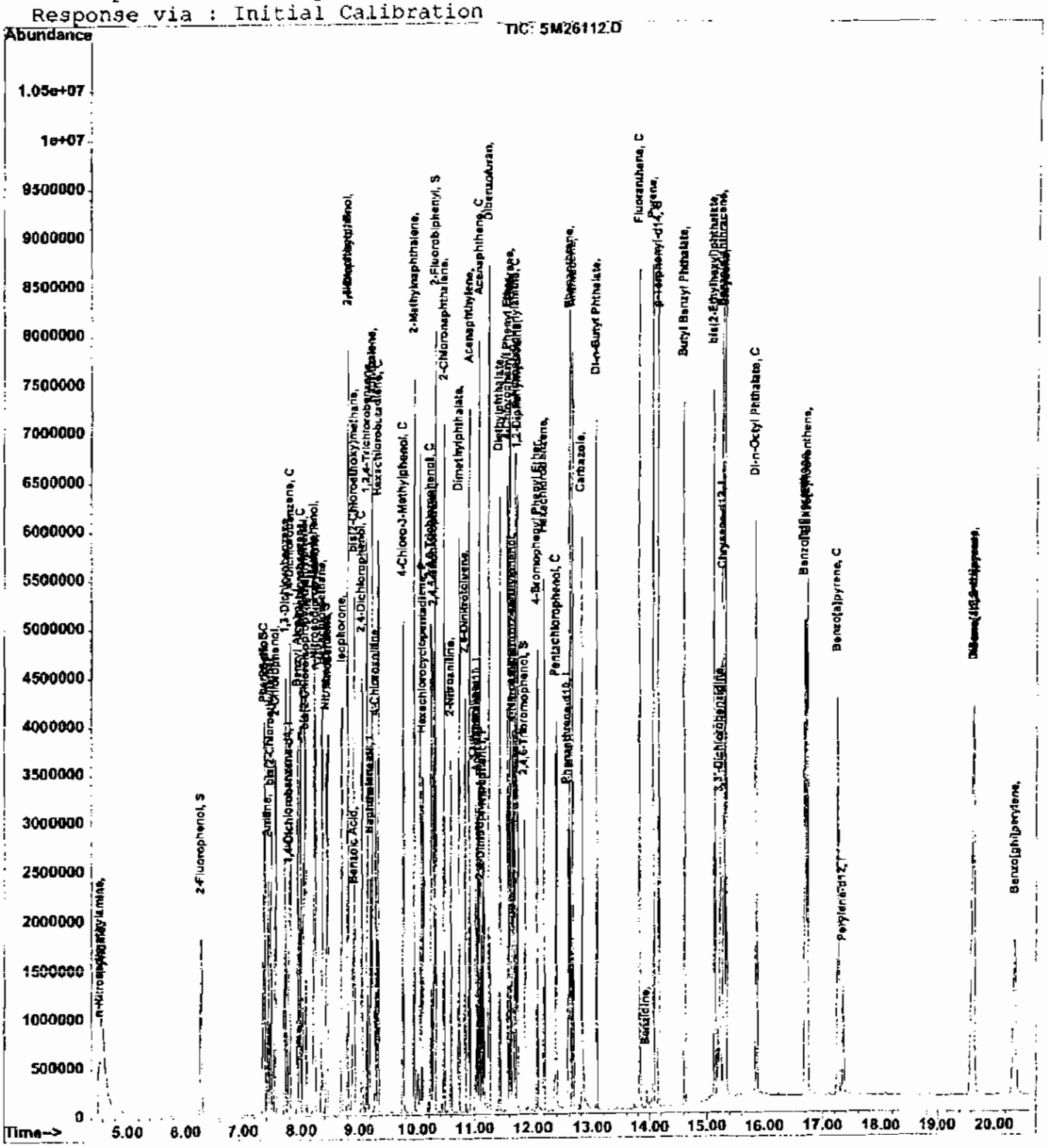
Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Thu May 01 15:23:09 2003
Response via : Initial Calibration
DataAcq Meth : BNA

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
75)	bis(2-Ethylhexyl)phthalate	15.15	149	2514268	93.9592	ug/mL	98
77)	Di-n-Octyl Phthalate	15.88	149	4180682	99.9846	ug/mL	97
78)	Benzo[b]fluoranthene	16.71	252	3311940	108.1921	ug/mL	99
79)	Benzo[k]fluoranthene	16.75	252	3134175	105.4788	ug/mL	100
80)	Benzo[a]pyrene	17.27	252	2848205	107.2426	ug/mL	100
81)	Indeno[1,2,3-cd]pyrene	19.64	276	2715730	108.3852	ug/mL	100
82)	Dibenz[ah]anthracene	19.64	278	2203765	109.6574	ug/mL	100
83)	Benzo[ghi]perylene	20.36	276	1971320	101.3826	ug/mL	99

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

Data File : C:\HPCHEM\1\DATA\050103\5M26112.D Vial: 7
Acq On : 1 May 2003 15:33 Operator: ALT
Sample : WG139485-07 100PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-6 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 15:56 2003 Quant Results File: BNA.RES

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\050103\5M26113.D Vial: 8
Acq On : 1 May 2003 16:03 Operator: ALT
Sample : WG139485-08 120PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-7 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 16:47 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Thu May 01 15:23:09 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.79	152	283959	40.00 ug/mL	0.00
19) Naphthalene-d8	9.20	136	1043254	40.00 ug/mL	0.00
34) Acenaphthene-d10	11.06	164	657936	40.00 ug/mL	0.00
56) Phenanthrene-d10	12.59	188	1071086	40.00 ug/mL	0.00
67) Chrysene-d12	15.32	240	1089300	40.00 ug/mL	0.00
76) Perylene-d12	17.36	264	613864	40.00 ug/mL	0.00

System Monitoring Compounds					
4) 2-Fluorophenol	6.28	112	1185810	122.6752 ug/mL	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 122.68%#		
6) Phenol-d5	7.36	99	1408793	122.2811 ug/mL	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 122.28%#		
20) Nitrobenzene-d5	8.43	82	1271953	125.1174 ug/mL	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 250.24%#		
38) 2-Fluorobiphenyl	10.32	172	3019054	126.4861 ug/mL	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 252.98%#		
55) 2,4,6-Tribromophenol	11.88	330	300566	150.1320 ug/mL	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 150.13%#		
70) p-Terphenyl-d14	14.18	244	3438743	123.4473 ug/mL	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 246.90%#		

Target Compounds					Qvalue
2) Pyridine	4.58	79	1245174	116.5535 ug/mL	97
3) n-Nitrosodimethylamine	4.55	74	715421	112.5561 ug/mL	100
5) Aniline	7.43	66	466187	114.2029 ug/mL	99
7) Phenol	7.37	94	1514530	124.1824 ug/mL	98
8) bis(2-Chloroethyl)ether	7.48	63	932263	113.8162 ug/mL	96
9) 2-Chlorophenol	7.56	128	1290503	123.5271 ug/mL	97
10) 1,3-Dichlorobenzene	7.73	146	1565103	125.7361 ug/mL	99
11) 1,4-Dichlorobenzene	7.81	146	1604884	124.0080 ug/mL	99
12) Benzyl Alcohol	7.95	108	825109	126.1332 ug/mL	98
13) 1,2-Dichlorobenzene	7.99	146	1509214	126.3055 ug/mL	99
14) 2-Methylphenol	8.05	107	969568	125.1042 ug/mL	99
15) bis(2-Chloroisopropyl)ethe	8.07	45	2012012	99.8732 ug/mL	93
16) 3-,4-Methylphenol	8.21	107	1432609	125.5020 ug/mL	99
17) n-Nitrosodipropylamine	8.24	70	844173	121.6722 ug/mL	94
18) Hexachloroethane	8.35	117	606249	122.2082 ug/mL	92
21) Nitrobenzene	8.45	77	1207350	122.5347 ug/mL	97
22) Isophorone	8.70	82	2210835	122.9407 ug/mL	98
23) 2-Nitrophenol	8.79	139	714965	134.6942 ug/mL	92
24) 2,4-Dimethylphenol	8.80	122	1237878	128.1539 ug/mL	98
25) bis(2-Chloroethoxy)methane	8.90	93	1427814	123.5845 ug/mL	99
26) Benzoic Acid	8.93	122	727605	146.4028 ug/mL	99

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

Data File : C:\HPCHEM\1\DATA\050103\5M26113.D Vial: 8
Acq On : 1 May 2003 16:03 Operator: ALT
Sample : WG139485-08 120PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-7 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 16:47 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Thu May 01 15:23:09 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
27) 2,4-Dichlorophenol	9.04	162	1194924	136.5210 ug/mL	99
28) 1,2,4-Trichlorobenzene	9.13	180	1380859	132.7415 ug/mL	99
29) Naphthalene	9.23	128	3631001	124.4293 ug/mL	99
30) 4-Chloroaniline	9.29	127	1356667	128.6043 ug/mL	98
31) Hexachlorobutadiene	9.33	225	924799	135.7131 ug/mL	100
32) 4-Chloro-3-Methylphenol	9.76	107	1050795	129.1836 ug/mL	96
33) 2-Methylnaphthalene	9.95	142	2631809	126.3599 ug/mL	100
35) Hexachlorocyclopentadiene	10.11	237	685554	203.8923 ug/mL	99
36) 2,4,6-Trichlorophenol	10.25	196	954962	137.2684 ug/mL	99
37) 2,4,5-Trichlorophenol	10.29	196	1014278	138.7463 ug/mL	100
39) 2-Chloronaphthalene	10.47	162	2624266	126.0869 ug/mL	99
40) 2-Nitroaniline	10.60	65	695801	120.5614 ug/mL	93
41) Dimethylphthalate	10.74	163	2860299	124.6869 ug/mL	99
42) Acenaphthylene	10.92	152	3993809	123.2265 ug/mL	99
43) 2,6-Dinitrotoluene	10.84	165	673947	141.6826 ug/mL	91
44) 3-Nitroaniline	11.02	138	625614	126.9453 ug/mL	95
45) Acenaphthene	11.10	154	2416586	124.8728 ug/mL	99
46) 2,4-Dinitrophenol	11.13	184	337887	165.6835 ug/mL	96
47) 4-Nitrophenol	11.16	65	457796	130.2167 ug/mL	97
48) Dibenzofuran	11.26	168	3562549	121.6340 ug/mL	98
49) 2,4-Dinitrotoluene	10.84	165	673947	134.7757 ug/mL	91
50) Diethylphthalate	11.45	149	2799545	121.6434 ug/mL	98
51) Fluorene	11.62	166	2977472	125.7435 ug/mL	99
52) 4-Chlorophenyl Phenyl Ethe	11.58	204	1557392	132.8080 ug/mL	96
53) 4-Nitroaniline	11.67	138	624645	125.6913 ug/mL	99
54) 1,2-Diphenylhydrazine	11.75	77	2513327	113.4610 ug/mL	93
57) 4,6-Dinitro-2-Methylphenol	11.68	198	581375	157.8696 ug/mL#	86
58) n-Nitrosodiphenylamine	11.71	169	2109064	125.7070 ug/mL	99
59) 4-Bromophenyl Phenyl Ether	12.09	248	808329	133.2354 ug/mL	95
60) Hexachlorobenzene	12.21	284	849128	138.2164 ug/mL	92
61) Pentachlorophenol	12.40	266	538129	146.2868 ug/mL	99
62) Phenanthrene	12.62	178	4296613	122.0307 ug/mL	99
63) Anthracene	12.67	178	4244602	123.2112 ug/mL	98
64) Carbazole	12.83	167	3504004	116.8089 ug/mL	99
65) Di-n-Butyl Phthalate	13.09	149	4637821	115.9516 ug/mL	99
66) Fluoranthene	13.85	202	4756631	125.0571 ug/mL	99
68) Benzidine	13.96	184	122670	83.6986 ug/mL	100
69) Pyrene	14.09	202	4942727	115.2298 ug/mL	98
71) Butyl Benzyl Phthalate	14.63	149	2295901	113.7661 ug/mL	95
72) Benzo[a]anthracene	15.30	228	4938835	118.4755 ug/mL	98
73) 3,3'-Dichlorobenzidine	15.24	252	1027511	104.9369 ug/mL	98
74) Chrysene	15.35	228	4779114	119.9939 ug/mL	99

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

Data File : C:\HPCHEM\1\DATA\050103\5M26113.D Vial: 8
Acq On : 1 May 2003 16:03 Operator: ALT
Sample : WG139485-08 120PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-7 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 16:47 2003 Quant Results File: BNA.RES

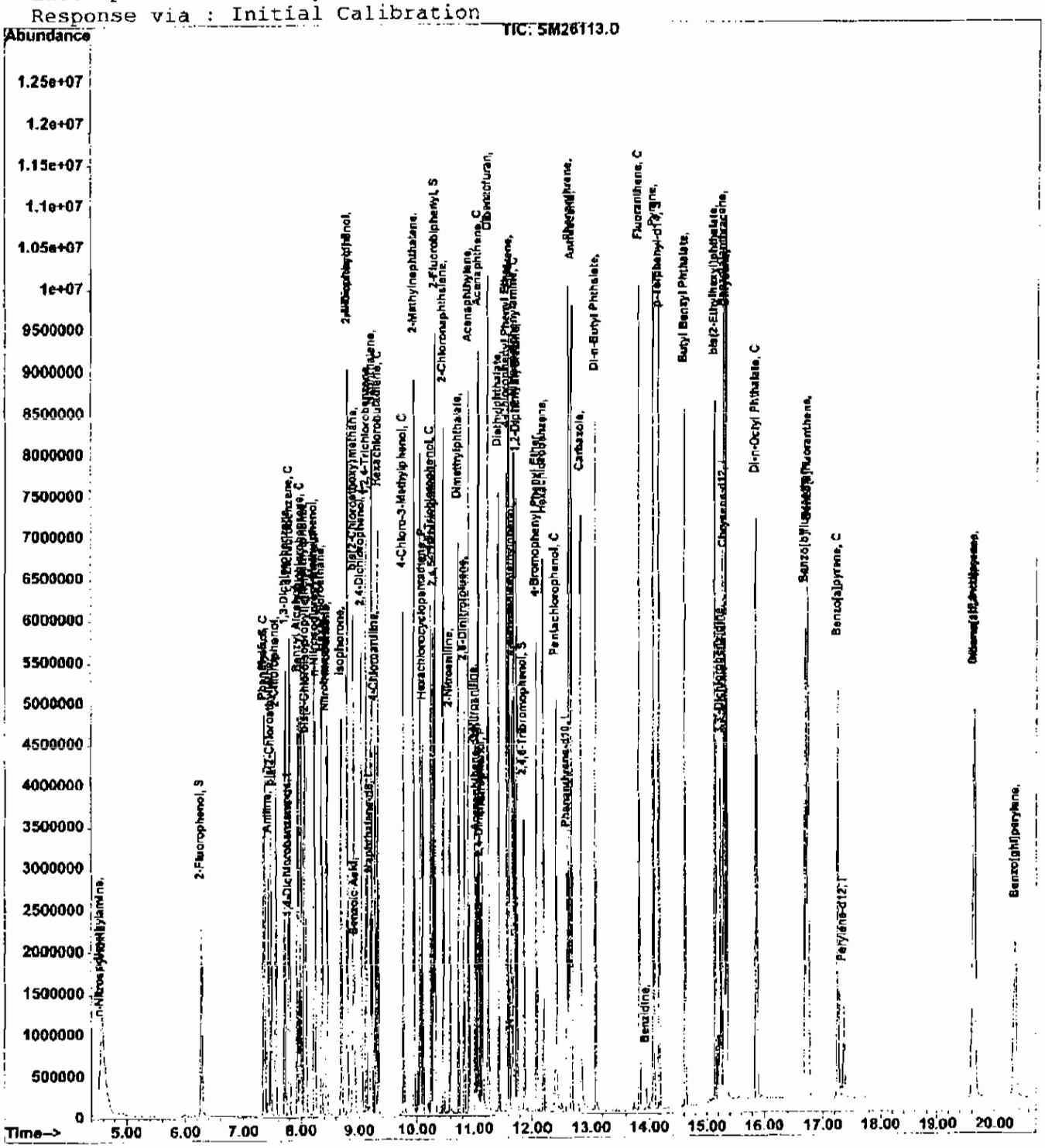
Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Thu May 01 15:23:09 2003
Response via : Initial Calibration
DataAcq Meth : BNA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
75)	bis(2-Ethylhexyl)phthalate	15.15	149	3056808	112.9016 ug/mL	97
77)	Di-n-Octyl Phthalate	15.88	149	5094241	125.4933 ug/mL	97
78)	Benzo[b]fluoranthene	16.72	252	3985408	130.5861 ug/mL	99
79)	Benzo[k]fluoranthene	16.76	252	4110850	139.0488 ug/mL	99
80)	Benzo[a]pyrene	17.28	252	3578266	135.3240 ug/mL	100
81)	Indeno[1,2,3-cd]pyrene	19.65	276	3359989	132.9737 ug/mL	99
82)	Dibenz[ah]anthracene	19.65	278	2750587	135.9793 ug/mL	100
83)	Benzo[ghi]perylene	20.36	276	2412238	123.7101 ug/mL	99

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

Data File : C:\HPCHEM\1\DATA\050103\5M26113.D Vial: 8
Acq On : 1 May 2003 16:03 Operator: ALT
Sample : WG139485-08 120PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-7 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 16:47 2003 Quant Results File: BNA.RES

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\050103\5M26114.D Vial: 9
Acq On : 1 May 2003 16:33 Operator: ALT
Sample : WG139485-09 50PPM Alt Source BNA STD Inst : HPMS5
Misc : 1,1 SOS64-19 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	111	0.00
2		Pyridine	50.000	47.594	4.8	110	-0.02
3		n-Nitrosodimethylamine	50.000	45.988	8.0	100	0.00
4	S	2-Fluorophenol	50.000	51.098	-2.2	111	0.00
5		Aniline	50.000	47.831	4.3	124	0.00
6	S	Phenol-d5	50.000	49.984	0.0	108	0.00
7	C	Phenol	50.000	49.530	0.9	105	0.00
8		bis(2-Chloroethyl)ether	50.000	47.882	4.2	108	0.00
9		2-Chlorophenol	50.000	49.571	0.9	107	0.00
10		1,3-Dichlorobenzene	50.000	49.711	0.6	117	0.00
11	C	1,4-Dichlorobenzene	50.000	49.549	0.9	113	0.00
12		Benzyl Alcohol	50.000	49.713	0.6	105	0.00
13	C	1,2-Dichlorobenzene	50.000	49.747	0.5	118	0.00
14		2-Methylphenol	50.000	49.487	1.0	108	0.00
5		bis(2-Chloroisopropyl)ether	50.000	45.288	9.4	107	0.00
16		3-,4-Methylphenol	50.000	50.037	-0.1	107	0.00
17	P	n-Nitrosodipropylamine	50.000	49.773	0.5	114	0.00
18		Hexachloroethane	50.000	50.068	-0.1	114	0.00
19	I	Naphthalene-d8	40.000	40.000	0.0	110	0.00
20	S	Nitrobenzene-d5	50.000	50.913	-1.8	110	0.00
21		Nitrobenzene	50.000	49.963	0.1	106	0.00
22		Isophorone	50.000	51.790	-3.6	119	0.00
23	C	2-Nitrophenol	50.000	55.627	-11.3	111	0.00
24		2,4-Dimethylphenol	50.000	53.217	-6.4	121	0.00
25		bis(2-Chloroethoxy)methane	50.000	51.085	-2.2	112	0.00
26		Benzoic Acid	50.000	54.324	-8.6	100	0.00
27	C	2,4-Dichlorophenol	50.000	52.017	-4.0	110	0.00
28		1,2,4-Trichlorobenzene	50.000	52.067	-4.1	121	0.00
29		Naphthalene	50.000	51.303	-2.6	115	0.00
30		4-Chloroaniline	50.000	50.387	-0.8	107	0.00
31	C	Hexachlorobutadiene	50.000	53.613	-7.2	137	0.00
32	C	4-Chloro-3-Methylphenol	50.000	51.818	-3.6	107	0.00
33		2-Methylnaphthalene	50.000	52.366	-4.7	114	0.00
34	I	Acenaphthene-d10	40.000	40.000	0.0	112	0.00
35	P	Hexachlorocyclopentadiene	50.000	66.325	-32.7	130	0.00
36	C	2,4,6-Trichlorophenol	50.000	51.805	-3.6	111	0.00
37		2,4,5-Trichlorophenol	50.000	50.806	-1.6	108	0.00
38	S	2-Fluorobiphenyl	50.000	51.701	-3.4	123	0.00
39		2-Chloronaphthalene	50.000	51.310	-2.6	120	0.00
)		2-Nitroaniline	50.000	50.445	-0.9	106	0.00

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA\050103\5M26114.D
Acq On : 1 May 2003 16:33
Sample : WG139485-09 50PPM Alt Source BNA STD
Misc : 1,1 SOS64-19
MS Integration Params: RTEINT.P

Vial: 9
Operator: ALT
Inst : HPMS5
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
41		Dimethylphthalate	50.000	50.652	-1.3	115	0.00
42		Acenaphthylene	50.000	51.674	-3.3	118	0.00
43		2,6-Dinitrotoluene	50.000	53.398	-6.8	115	0.00
44		3-Nitroaniline	50.000	49.024	2.0	106	0.00
45	C	Acenaphthene	50.000	51.632	-3.3	115	0.00
46	P	2,4-Dinitrophenol	50.000	48.449	3.1	105	0.00
47	P	4-Nitrophenol	50.000	49.315	1.4	103	0.00
48		Dibenzofuran	50.000	52.213	-4.4	117	0.00
49		2,4-Dinitrotoluene	50.000	53.398	-6.8	115	0.00
50		Diethylphthalate	50.000	51.038	-2.1	115	0.00
51		Fluorene	50.000	52.622	-5.2	118	0.00
52		4-Chlorophenyl Phenyl Ether	50.000	51.459	-2.9	117	0.00
53		4-Nitroaniline	50.000	48.172	3.7	99	0.00
54		1,2-Diphenylhydrazine	50.000	49.487	1.0	109	0.00
55	S	2,4,6-Tribromophenol	50.000	51.749	-3.5	106	0.00
56	I	Phenanthrene-d10	40.000	40.000	0.0	117	0.00
57		4,6-Dinitro-2-Methylphenol	50.000	52.341	-4.7	111	0.00
58	C	n-Nitrosodiphenylamine	50.000	49.981	0.0	118	0.00
59		4-Bromophenyl Phenyl Ether	50.000	48.558	2.9	98	0.00
60		Hexachlorobenzene	50.000	51.019	-2.0	125	0.00
61	C	Pentachlorophenol	50.000	48.765	2.5	95	0.00
62		Phenanthrene	50.000	51.400	-2.8	120	0.00
63		Anthracene	50.000	51.780	-3.6	117	0.00
64		Carbazole	50.000	47.533	4.9	101	0.00
65		Di-n-Butyl Phthalate	50.000	50.086	-0.2	109	0.00
66	C	Fluoranthene	50.000	52.387	-4.8	119	0.00
67	I	Chrysene-d12	40.000	40.000	0.0	102	0.00
68		Benzidine	50.000	19.094	61.8#	11	0.00
69		Pyrene	50.000	52.167	-4.3	117	0.00
70	S	p-Terphenyl-d14	50.000	52.774	-5.5	123	0.00
71		Butyl Benzyl Phthalate	50.000	50.564	-1.1	116	0.00
72		Benzo[a]anthracene	50.000	52.709	-5.4	117	0.00
73		3,3'-Dichlorobenzidine	50.000	38.967	22.1	71	0.00
74		Chrysene	50.000	51.653	-3.3	116	0.00
75		bis(2-Ethylhexyl)phthalate	50.000	51.059	-2.1	108	0.00
76	I	Perylene-d12	40.000	40.000	0.0	104	0.00
77	C	Di-n-Octyl Phthalate	50.000	52.657	-5.3	105	0.00
78		Benzo[b]fluoranthene	50.000	52.649	-5.3	116	0.00
79		Benzo[k]fluoranthene	50.000	50.022	-0.0	118	0.00

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA\050103\5M26114.D Vial: 9
Acq On : 1 May 2003 16:33 Operator: ALT
Sample : WG139485-09 50PPM Alt Source BNA STD Inst : HPMS5
Misc : 1,1 SOS64-19 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
80	C	Benzo[a]pyrene	50.000	50.744	-1.5	108	0.00
81		Indeno[1,2,3-cd]pyrene	50.000	51.057	-2.1	100	0.00
82		Dibenz[ah]anthracene	50.000	51.460	-2.9	103	0.00
83		Benzo[ghi]perylene	50.000	49.985	0.0	97	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data File : C:\HPCHEM\1\DATA\050103\5M26114.D
Acq On : 1 May 2003 16:33
Sample : WG139485-09 50PPM Alt Source BNA STD
Misc : 1,1 SOS64-19
MS Integration Params: RTEINT.P

Vial: 9
Operator: ALT
Inst : HPMS5
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	111	0.00
2		Pyridine	1.474	1.403	4.8	110	-0.02
3		n-Nitrosodimethylamine	0.888	0.817	8.0	100	0.00
4	S	2-Fluorophenol	1.355	1.385	-2.2	111	0.00
5		Aniline	0.562	0.538	4.3	124	0.00
6	S	Phenol-d5	1.625	1.625	0.0	108	0.00
7	C	Phenol	1.725	1.709	0.9	105	0.00
8		bis(2-Chloroethyl)ether	1.144	1.096	4.2	108	0.00
9		2-Chlorophenol	1.480	1.468	0.8	107	0.00
10		1,3-Dichlorobenzene	1.772	1.762	0.6	117	0.00
11	C	1,4-Dichlorobenzene	1.845	1.828	0.9	113	0.00
12		Benzyl Alcohol	0.920	0.914	0.7	105	0.00
13	C	1,2-Dichlorobenzene	1.710	1.701	0.5	118	0.00
14		2-Methylphenol	1.102	1.091	1.0	108	0.00
15		bis(2-Chloroisopropyl)ether	2.768	2.507	9.4	107	0.00
16		3-,4-Methylphenol	1.616	1.617	-0.1	107	0.00
17	P	n-Nitrosodipropylamine	0.973	0.969	0.4	114	0.00
18		Hexachloroethane	0.703	0.704	-0.1	114	0.00
19	I	Naphthalene-d8	1.000	1.000	0.0	110	0.00
20	S	Nitrobenzene-d5	0.391	0.398	-1.8	110	0.00
21		Nitrobenzene	0.378	0.378	0.0	106	0.00
22		Isophorone	0.690	0.715	-3.6	119	0.00
23	C	2-Nitrophenol	0.207	0.230	-11.1	111	0.00
24		2,4-Dimethylphenol	0.374	0.398	-6.4	121	0.00
25		bis(2-Chloroethoxy)methane	0.446	0.456	-2.2	112	0.00
26		Benzoic Acid	0.192	0.209	-8.9	100	0.00
27	C	2,4-Dichlorophenol	0.342	0.356	-4.1	110	0.00
28		1,2,4-Trichlorobenzene	0.408	0.424	-3.9	121	0.00
29		Naphthalene	1.135	1.164	-2.6	115	0.00
30		4-Chloroaniline	0.407	0.410	-0.7	107	0.00
31	C	Hexachlorobutadiene	0.268	0.287	-7.1	137	0.00
32	C	4-Chloro-3-Methylphenol	0.314	0.326	-3.8	107	0.00
33		2-Methylnaphthalene	0.811	0.849	-4.7	114	0.00
34	I	Acenaphthene-d10	1.000	1.000	0.0	112	0.00
35	P	Hexachlorocyclopentadiene	0.194	0.258	-33.0	130	0.00
36	C	2,4,6-Trichlorophenol	0.429	0.445	-3.7	111	0.00
37		2,4,5-Trichlorophenol	0.451	0.458	-1.6	108	0.00
38	S	2-Fluorobiphenyl	1.466	1.516	-3.4	123	0.00
39		2-Chloronaphthalene	1.278	1.312	-2.7	120	0.00
40		2-Nitroaniline	0.346	0.349	-0.9	106	0.00

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA\050103\5M26114.D
Acq On : 1 May 2003 16:33
Sample : WG139485-09 50PPM Alt Source BNA STD
Misc : 1,1 SOS64-19
MS Integration Params: RTEINT.P

Vial: 9
Operator: ALT
Inst : HPMS5
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41		Dimethylphthalate	1.404	1.422	-1.3	115	0.00
42		Acenaphthylene	1.981	2.047	-3.3	118	0.00
43		2,6-Dinitrotoluene	0.293	0.313	-6.8	115	0.00
44		3-Nitroaniline	0.298	0.292	2.0	106	0.00
45	C	Acenaphthene	1.189	1.228	-3.3	115	0.00
46	P	2,4-Dinitrophenol	0.137	0.133	2.9	105	0.00
47	P	4-Nitrophenol	0.217	0.215	0.9	103	0.00
48		Dibenzofuran	1.792	1.872	-4.5	117	0.00
49		2,4-Dinitrotoluene	0.293	0.313	-6.8	115	0.00
50		Diethylphthalate	1.402	1.431	-2.1	115	0.00
51		Fluorene	1.449	1.525	-5.2	118	0.00
52		4-Chlorophenyl Phenyl Ether	0.723	0.744	-2.9	117	0.00
53		4-Nitroaniline	0.299	0.288	3.7	99	0.00
54		1,2-Diphenylhydrazine	1.338	1.324	1.0	109	0.00
55	S	2,4,6-Tribromophenol	0.125	0.130	-4.0	106	0.00
56	I	Phenanthrene-d10	1.000	1.000	0.0	117	0.00
57		4,6-Dinitro-2-Methylphenol	0.140	0.146	-4.3	111	0.00
58	C	n-Nitrosodiphenylamine	0.630	0.630	0.0	118	0.00
59		4-Bromophenyl Phenyl Ether	0.231	0.224	3.0	98	0.00
60		Hexachlorobenzene	0.235	0.240	-2.1	125	0.00
61	C	Pentachlorophenol	0.138	0.134	2.9	95	0.00
62		Phenanthrene	1.323	1.360	-2.8	120	0.00
63		Anthracene	1.293	1.339	-3.6	117	0.00
64		Carbazole	1.123	1.068	4.9	101	0.00
65		Di-n-Butyl Phthalate	1.493	1.496	-0.2	109	0.00
66	C	Fluoranthene	1.431	1.499	-4.8	119	0.00
67	I	Chrysene-d12	1.000	1.000	0.0	102	0.00
68		Benzidine	0.052	0.020	61.5#	11#	0.00
69		Pyrene	1.560	1.628	-4.4	117	0.00
70	S	p-Terphenyl-d14	1.019	1.075	-5.5	123	0.00
71		Butyl Benzyl Phthalate	0.727	0.735	-1.1	116	0.00
72		Benzo[a]anthracene	1.520	1.603	-5.5	117	0.00
73		3,3'-Dichlorobenzidine	0.352	0.274	22.2	71	0.00
74		Chrysene	1.455	1.503	-3.3	116	0.00
75		bis(2-Ethylhexyl)phthalate	0.973	0.994	-2.2	108	0.00
76	I	Perylene-d12	1.000	1.000	0.0	104	0.00
77	C	Di-n-Octyl Phthalate	2.578	2.715	-5.3	105	0.00
78		Benzo[b]fluoranthene	1.997	2.103	-5.3	116	0.00
[illegible]		Benzo[k]fluoranthene	1.944	1.945	-0.1	118	0.00

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA\050103\5M26114.D Vial: 9
Acq On : 1 May 2003 16:33 Operator: ALT
Sample : WG139485-09 50PPM Alt Source BNA STD Inst : HPMS5
Misc : 1,1 SOS64-19 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
80	C	Benzo[a]pyrene	1.737	1.763	-1.5	108	0.00
81		Indeno[1,2,3-cd]pyrene	1.691	1.727	-2.1	100	0.00
82		Dibenz[ah]anthracene	1.352	1.392	-3.0	103	0.00
83		Benzo[ghi]perylene	1.299	1.299	0.0	97	0.00

Data File : C:\HPCHEM\1\DATA\050103\5M26114.D Vial: 9
Acq On : 1 May 2003 16:33 Operator: ALT
Sample : WG139485-09 50PPM Alt Source BNA STD Inst : HPMS5
Misc : 1,1 SOS64-19 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 8:04 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.79	152	349607	40.00 ug/mL	0.00
19) Naphthalene-d8	9.20	136	1300441	40.00 ug/mL	0.00
34) Acenaphthene-d10	11.05	164	826677	40.00 ug/mL	0.00
56) Phenanthrene-d10	12.59	188	1341214	40.00 ug/mL	0.00
67) Chrysene-d12	15.32	240	1291299	40.00 ug/mL	0.00
76) Perylene-d12	17.36	264	768764	40.00 ug/mL	0.00

System Monitoring Compounds					
4) 2-Fluorophenol	6.28	112	605260	51.0983 ug/mL	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 51.10%		
6) Phenol-d5	7.35	99	709995	49.9836 ug/mL	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 49.98%		
20) Nitrobenzene-d5	8.43	82	647344	50.9127 ug/mL	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 101.82%		
38) 2-Fluorobiphenyl	10.32	172	1566928	51.7011 ug/mL	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 103.40%		
55) 2,4,6-Tribromophenol	11.88	330	133908	51.7490 ug/mL	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 51.75%		
70) p-Terphenyl-d14	14.17	244	1735785	52.7745 ug/mL	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 105.54%		

Target Compounds					Qvalue
2) Pyridine	4.59	79	613152	47.5944 ug/mL	99
3) n-Nitrosodimethylamine	4.55	74	356884	45.9878 ug/mL	97
5) Aniline	7.43	66	235133	47.8306 ug/mL	98
7) Phenol	7.37	94	746963	49.5303 ug/mL	98
8) bis(2-Chloroethyl)ether	7.48	63	478903	47.8825 ug/mL	99
9) 2-Chlorophenol	7.56	128	641354	49.5715 ug/mL	98
10) 1,3-Dichlorobenzene	7.73	146	770009	49.7108 ug/mL	99
11) 1,4-Dichlorobenzene	7.81	146	798860	49.5486 ug/mL	100
12) Benzyl Alcohol	7.94	108	399574	49.7127 ug/mL	97
13) 1,2-Dichlorobenzene	7.99	146	743526	49.7465 ug/mL	99
14) 2-Methylphenol	8.05	107	476716	49.4870 ug/mL	98
15) bis(2-Chloroisopropyl)ethe	8.07	45	1095605	45.2875 ug/mL	97
16) 3-,4-Methylphenol	8.21	107	706504	50.0365 ug/mL	99
17) n-Nitrosodipropylamine	8.23	70	423396	49.7735 ug/mL	99
18) Hexachloroethane	8.35	117	307584	50.0677 ug/mL	96
21) Nitrobenzene	8.45	77	614677	49.9629 ug/mL	100
22) Isophorone	8.69	82	1161757	51.7898 ug/mL	99
23) 2-Nitrophenol	8.79	139	373497	55.6267 ug/mL	98
24) 2,4-Dimethylphenol	8.79	122	647582	53.2171 ug/mL	99
25) bis(2-Chloroethoxy)methane	8.90	93	740494	51.0850 ug/mL	99
26) Benzoic Acid	8.90	122	339271	54.3236 ug/mL	99

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

Data File : C:\HPCHEM\1\DATA\050103\5M26114.D Vial: 9
Acq On : 1 May 2003 16:33 Operator: ALT
Sample : WG139485-09 50PPM Alt Source BNA STD Inst : HPMS5
Misc : 1,1 SOS64-19 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 8:04 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
27) 2,4-Dichlorophenol	9.04	162	579181	52.0173 ug/mL	99
28) 1,2,4-Trichlorobenzene	9.13	180	689812	52.0665 ug/mL	100
29) Naphthalene	9.22	128	1892819	51.3029 ug/mL	100
30) 4-Chloroaniline	9.28	127	666723	50.3866 ug/mL	99
31) Hexachlorobutadiene	9.33	225	467123	53.6126 ug/mL	99
32) 4-Chloro-3-Methylphenol	9.76	107	529662	51.8184 ug/mL	99
33) 2-Methylnaphthalene	9.95	142	1380573	52.3664 ug/mL	99
35) Hexachlorocyclopentadiene	10.11	237	266232	66.3247 ug/mL	100
36) 2,4,6-Trichlorophenol	10.25	196	459370	51.8051 ug/mL	100
37) 2,4,5-Trichlorophenol	10.30	196	473219	50.8061 ug/mL	100
39) 2-Chloronaphthalene	10.47	162	1355446	51.3095 ug/mL	100
40) 2-Nitroaniline	10.59	65	361116	50.4449 ug/mL	99
41) Dimethylphthalate	10.73	163	1469348	50.6516 ug/mL	100
42) Acenaphthylene	10.91	152	2115246	51.6740 ug/mL	100
43) 2,6-Dinitrotoluene	10.83	165	323351	53.3976 ug/mL	97
44) 3-Nitroaniline	11.02	138	301516	49.0240 ug/mL	98
45) Acenaphthene	11.09	154	1269008	51.6316 ug/mL	99
46) 2,4-Dinitrophenol	11.12	184	137061	48.4494 ug/mL	97
47) 4-Nitrophenol	11.16	65	221665	49.3149 ug/mL	99
48) Dibenzofuran	11.26	168	1934180	52.2132 ug/mL	100
49) 2,4-Dinitrotoluene	10.83	165	323351	53.3976 ug/mL	97
50) Diethylphthalate	11.44	149	1479159	51.0377 ug/mL	100
51) Fluorene	11.62	166	1576269	52.6223 ug/mL	100
52) 4-Chlorophenyl Phenyl Ethe	11.58	204	769139	51.4593 ug/mL	99
53) 4-Nitroaniline	11.66	138	297328	48.1720 ug/mL	97
54) 1,2-Diphenylhydrazine	11.75	77	1368217	49.4871 ug/mL	99
57) 4,6-Dinitro-2-Methylphenol	11.67	198	245525	52.3415 ug/mL	97
58) n-Nitrosodiphenylamine	11.71	169	1056539	49.9813 ug/mL	100
59) 4-Bromophenyl Phenyl Ether	12.09	248	376147	48.5577 ug/mL	99
60) Hexachlorobenzene	12.20	284	402253	51.0192 ug/mL	98
61) Pentachlorophenol	12.40	266	224838	48.7651 ug/mL	99
62) Phenanthrene	12.62	178	2280237	51.4005 ug/mL	100
63) Anthracene	12.67	178	2244885	51.7803 ug/mL	100
64) Carbazole	12.83	167	1790293	47.5326 ug/mL	99
65) Di-n-Butyl Phthalate	13.08	149	2508144	50.0860 ug/mL	100
66) Fluoranthene	13.84	202	2512784	52.3866 ug/mL	99
68) Benzidine	13.96	184	32060	19.0937 ug/mL	100
69) Pyrene	14.09	202	2627829	52.1667 ug/mL	100
71) Butyl Benzyl Phthalate	14.63	149	1187032	50.5639 ug/mL	99
72) Benzo[a]anthracene	15.30	228	2587065	52.7086 ug/mL	100
73) 3,3'-Dichlorobenzidine	15.24	252	442910	38.9674 ug/mL	99
74) Chrysene	15.35	228	2426505	51.6535 ug/mL	100

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

Data File : C:\HPCHEM\1\DATA\050103\5M26114.D Vial: 9
Acq On : 1 May 2003 16:33 Operator: ALT
Sample : WG139485-09 50PPM Alt Source BNA STD Inst : HPMS5
Misc : 1,1 SOS64-19 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 8:04 2003 Quant Results File: BNA.RES

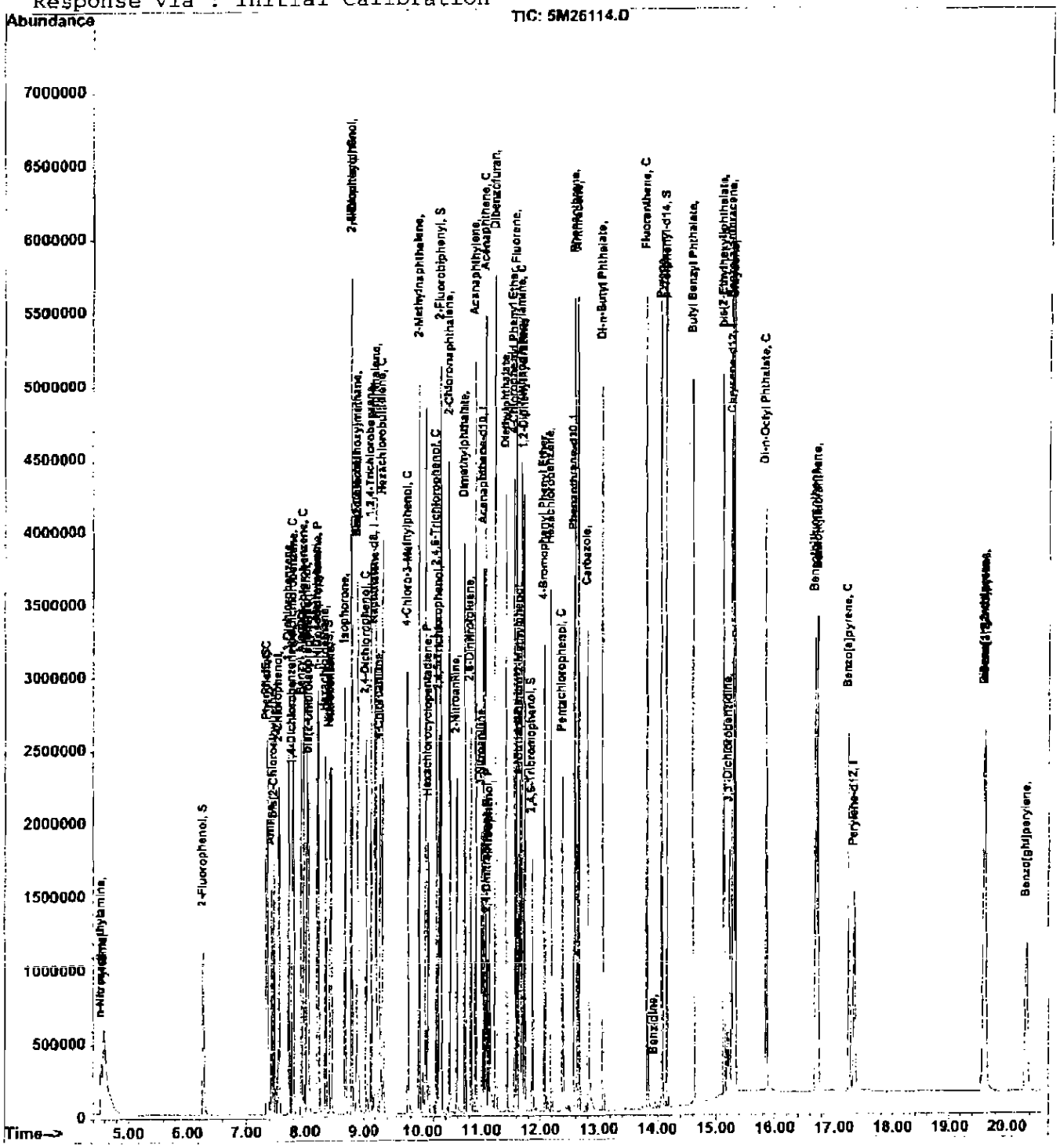
Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Initial Calibration
DataAcq Meth : BNA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
75)	bis(2-Ethylhexyl)phthalate	15.15	149	1604015	51.0589 ug/mL	100
77)	Di-n-Octyl Phthalate	15.87	149	2608616	52.6572 ug/mL	99
78)	Benzo[b]fluoranthene	16.71	252	2020530	52.6494 ug/mL	99
79)	Benzo[k]fluoranthene	16.75	252	1868731	50.0223 ug/mL	99
80)	Benzo[a]pyrene	17.27	252	1693906	50.7438 ug/mL	99
81)	Indeno[1,2,3-cd]pyrene	19.63	276	1659220	51.0571 ug/mL	99
82)	Dibenz[ah]anthracene	19.63	278	1337480	51.4603 ug/mL	99
83)	Benzo[ghi]perylene	20.35	276	1248210	49.9847 ug/mL	100

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

Data File : C:\HPCHEM\1\DATA\050103\5M26114.D Vial: 9
Acq On : 1 May 2003 16:33 Operator: ALT
Sample : WG139485-09 50PPM Alt Source BNA STD Inst : HPMS5
Misc : 1,1 SOS64-19 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 8:04 2003 Quant Results File: BNA.RES

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Initial Calibration



Continuing calibration Area and RT check

Instrument: HPMS4
Initial cal date: 29 Apr 2003 17:10
CCV date: 30 Apr 2003 8:22
CCV filename: 4M18456.D

	1,4-Dichlorobenzene-d4		Naphthalene-d8		Acenaphthene-d10	
	Amount	RT	Amount	RT	Amount	RT
InitCal	299573	10.22	1145696	11.86	675579	13.98
CCV	282724	10.22	1060492	11.85	634067	13.98

	Phenanthrene-d10		Chrysene-d12		Perylene-d12	
	Amount	RT	Amount	RT	Amount	RT
InitCal	1143794	15.61	1386552	18.49	966761	20.99
CCV	1057278	15.62	1309498	18.49	905897	20.99

Data File : C:\HPCHEM\1\DATA\043003\4M18456.D Vial: 2
Acq On : 30 Apr 2003 8:22 Operator: mdc
Sample : WG139370-02 50PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-4 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:32:02 2003
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	94	0.00
2		Pyridine	50.000	48.528	2.9	95	0.00
3		n-Nitrosodimethylamine	50.000	50.333	-0.7	94	0.00
4	S	2-Fluorophenol	50.000	49.522	1.0	93	0.00
5		Aniline	50.000	47.198	5.6	94	0.00
6	S	Phenol-d5	50.000	49.732	0.5	93	0.00
7	C	Phenol	50.000	50.041	-0.1	93	0.00
8		bis(2-Chloroethyl)ether	50.000	49.235	1.5	93	0.00
9		2-Chlorophenol	50.000	49.904	0.2	92	0.00
10		1,3-Dichlorobenzene	50.000	47.284	5.4	94	0.00
11	C	1,4-Dichlorobenzene	50.000	48.531	2.9	93	0.00
12		Benzyl Alcohol	50.000	49.997	0.0	92	0.00
13	C	1,2-Dichlorobenzene	50.000	46.291	7.4	93	0.00
14		2-Methylphenol	50.000	49.572	0.9	92	0.00
15		bis(2-Chloroisopropyl)ether	50.000	47.326	5.3	93	0.00
16		3-,4-Methylphenol	50.000	49.779	0.4	92	0.00
17	P	n-Nitrosodipropylamine	50.000	47.414	5.2	93	0.00
18		Hexachloroethane	50.000	48.781	2.4	93	0.00
19	I	Naphthalene-d8	40.000	40.000	0.0	93	0.00
20	S	Nitrobenzene-d5	50.000	49.761	0.5	93	0.00
21		Nitrobenzene	50.000	50.542	-1.1	92	0.00
22		Isophorone	50.000	46.199	7.6	92	0.00
23	C	2-Nitrophenol	50.000	53.252	-6.5	94	0.00
24		2,4-Dimethylphenol	50.000	47.497	5.0	94	0.00
25		bis(2-Chloroethoxy)methane	50.000	49.503	1.0	93	0.00
26		Benzoic Acid	50.000	50.330	-0.7	96	0.00
27	C	2,4-Dichlorophenol	50.000	51.201	-2.4	93	0.00
28		1,2,4-Trichlorobenzene	50.000	47.422	5.2	92	0.00
29		Naphthalene	50.000	48.619	2.8	93	0.00
30		4-Chloroaniline	50.000	51.746	-3.5	93	0.00
31	C	Hexachlorobutadiene	50.000	44.030	11.9	94	0.00
32	C	4-Chloro-3-Methylphenol	50.000	52.159	-4.3	93	0.00
33		2-Methylnaphthalene	50.000	49.931	0.1	94	0.00
34	I	Acenaphthene-d10	40.000	40.000	0.0	94	0.00
35	P	Hexachlorocyclopentadiene	50.000	47.861	4.3	94	0.00
36	C	2,4,6-Trichlorophenol	50.000	51.413	-2.8	93	0.00
37		2,4,5-Trichlorophenol	50.000	51.814	-3.6	94	0.00
38	S	2-Fluorobiphenyl	50.000	46.798	6.4	93	0.00
39		2-Chloronaphthalene	50.000	47.291	5.4	94	0.00

(#)=Out of Range
4M18456.D BNA.M Thu May 01 08:47:59 2003 HPMS4 Page 1

Data File : C:\HPCHEM\1\DATA\043003\4M18456.D Vial: 2
Acq On : 30 Apr 2003 8:22 Operator: mdc
Sample : WG139370-02 50PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-4 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:32:02 2003
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
40		2-Nitroaniline	50.000	50.829	-1.7	93	0.00
41		Dimethylphthalate	50.000	49.022	2.0	92	0.00
42		Acenaphthylene	50.000	48.078	3.8	93	0.00
43		2,6-Dinitrotoluene	50.000	49.786	0.4	92	0.00
44		3-Nitroaniline	50.000	59.954	-19.9	100	0.00
45	C	Acenaphthene	50.000	49.113	1.8	93	0.00
46	P	2,4-Dinitrophenol	50.000	47.050	5.9	97	0.00
47	P	4-Nitrophenol	50.000	50.819	-1.6	95	0.00
48		Dibenzofuran	50.000	48.746	2.5	93	0.00
49		2,4-Dinitrotoluene	50.000	48.217	3.6	93	0.00
50		Diethylphthalate	50.000	49.216	1.6	92	0.00
51		Fluorene	50.000	48.066	3.9	92	0.00
52		4-Chlorophenyl Phenyl Ether	50.000	49.687	0.6	93	0.00
53		4-Nitroaniline	50.000	57.763	-15.5	89	0.00
4		1,2-Diphenylhydrazine	50.000	49.968	0.1	92	0.00
55	S	2,4,6-Tribromophenol	50.000	54.330	-8.7	95	0.00
56	I	Phenanthrene-d10	40.000	40.000	0.0	92	0.00
57		4,6-Dinitro-2-Methylphenol	50.000	50.046	-0.1	94	0.00
58	C	n-Nitrosodiphenylamine	50.000	50.797	-1.6	95	0.00
59		4-Bromophenyl Phenyl Ether	50.000	58.883	-17.8	92	0.00
60		Hexachlorobenzene	50.000	49.705	0.6	94	0.00
61	C	Pentachlorophenol	50.000	57.195	-14.4	115	0.00
62		Phenanthrene	50.000	50.033	-0.1	93	0.00
63		Anthracene	50.000	51.160	-2.3	93	0.00
64		Carbazole	50.000	54.899	-9.8	96	0.00
65		Di-n-Butyl Phthalate	50.000	53.155	-6.3	93	0.00
66	C	Fluoranthene	50.000	51.196	-2.4	93	0.00
67	I	Chrysene-d12	40.000	40.000	0.0	94	0.00
68		Benzidine	50.000	217.909	-335.8#	109	0.00
69		Pyrene	50.000	44.095	11.8	94	0.00
70	S	p-Terphenyl-d14	50.000	42.899	14.2	95	0.00
71		Butyl Benzyl Phthalate	50.000	42.256	15.5	93	0.00
72		Benzo[a]anthracene	50.000	44.396	11.2	95	0.00
73		3,3'-Dichlorobenzidine	50.000	45.021	10.0	102	0.00
74		Chrysene	50.000	43.964	12.1	93	0.00
75		bis(2-Ethylhexyl)phthalate	50.000	45.066	9.9	94	0.00
76	I	Perylene-d12	40.000	40.000	0.0	94	0.00
77	C	Di-n-Octyl Phthalate	50.000	51.172	-2.3	93	0.00

(#)=Out of Range

Data File : C:\HPCHEM\1\DATA\043003\4M18456.D Vial: 2
Acq On : 30 Apr 2003 8:22 Operator: mdc
Sample : WG139370-02 50PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-4 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:32:02 2003
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
78		Benzo[b]fluoranthene	50.000	49.947	0.1	93	0.00
79		Benzo[k]fluoranthene	50.000	44.345	11.3	96	0.00
80	C	Benzo[a]pyrene	50.000	49.098	1.8	94	0.00
81		Indeno[1,2,3-cd]pyrene	50.000	48.475	3.0	88	0.00
82		Dibenz[ah]anthracene	50.000	47.999	4.0	89	0.00
83		Benzo[ghi]perylene	50.000	46.213	7.6	84	0.00

Data File : C:\HPCHEM\1\DATA\043003\4M18456.D
Acq On : 30 Apr 2003 8:22
Sample : WG139370-02 50PPM BNA STD
Misc : 1,1 SOS63-38-4
MS Integration Params: RTEINT.P

Vial: 2
Operator: mdc
Inst : HPMS4
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:32:02 2003
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	94	0.00
2		Pyridine	1.384	1.344	2.9	95	0.00
3		n-Nitrosodimethylamine	0.756	0.761	-0.7	94	0.00
4	S	2-Fluorophenol	1.393	1.380	0.9	93	0.00
5		Aniline	0.537	0.507	5.6	94	0.00
6	S	Phenol-d5	1.601	1.592	0.6	93	0.00
7	C	Phenol	1.768	1.770	-0.1	93	0.00
8		bis(2-Chloroethyl)ether	0.915	0.901	1.5	93	0.00
9		2-Chlorophenol	1.488	1.485	0.2	92	0.00
10		1,3-Dichlorobenzene	1.712	1.619	5.4	94	0.00
11	C	1,4-Dichlorobenzene	1.774	1.722	2.9	93	0.00
12		Benzyl Alcohol	0.948	0.948	0.0	92	0.00
13	C	1,2-Dichlorobenzene	1.651	1.528	7.5	93	0.00
14		2-Methylphenol	1.157	1.147	0.9	92	0.00
15		bis(2-Chloroisopropyl)ether	1.796	1.700	5.3	93	0.00
16		3-,4-Methylphenol	1.688	1.681	0.4	92	0.00
17	P	n-Nitrosodipropylamine	0.940	0.892	5.1	93	0.00
18		Hexachloroethane	0.610	0.595	2.5	93	0.00
19	I	Naphthalene-d8	1.000	1.000	0.0	93	0.00
20	S	Nitrobenzene-d5	0.384	0.382	0.5	93	0.00
21		Nitrobenzene	0.379	0.383	-1.1	92	0.00
22		Isophorone	0.656	0.606	7.6	92	0.00
23	C	2-Nitrophenol	0.222	0.237	-6.8	94	0.00
24		2,4-Dimethylphenol	0.375	0.356	5.1	94	0.00
25		bis(2-Chloroethoxy)methane	0.421	0.417	1.0	93	0.00
26		Benzoic Acid	0.161	0.162	-0.6	96	0.00
27	C	2,4-Dichlorophenol	0.336	0.344	-2.4	93	0.00
28		1,2,4-Trichlorobenzene	0.396	0.376	5.1	92	0.00
29		Naphthalene	1.150	1.118	2.8	93	0.00
30		4-Chloroaniline	0.404	0.418	-3.5	93	0.00
31	C	Hexachlorobutadiene	0.250	0.220	12.0	94	0.00
32	C	4-Chloro-3-Methylphenol	0.333	0.348	-4.5	93	0.00
33		2-Methylnaphthalene	0.813	0.812	0.1	94	0.00
34	I	Acenaphthene-d10	1.000	1.000	0.0	94	0.00
35	P	Hexachlorocyclopentadiene	0.374	0.358	4.3	94	0.00
36	C	2,4,6-Trichlorophenol	0.431	0.443	-2.8	93	0.00
37		2,4,5-Trichlorophenol	0.461	0.478	-3.7	94	0.00
38	S	2-Fluorobiphenyl	1.570	1.469	6.4	93	0.00
39		2-Chloronaphthalene	1.311	1.240	5.4	94	0.00

(#)=Out of Range

Data File : C:\HPCHEM\1\DATA\043003\4M18456.D Vial: 2
Acq On : 30 Apr 2003 8:22 Operator: mdc
Sample : WG139370-02 50PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-4 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:32:02 2003
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40		2-Nitroaniline	0.344	0.350	-1.7	93	0.00
41		Dimethylphthalate	1.448	1.419	2.0	92	0.00
42		Acenaphthylene	2.119	2.038	3.8	93	0.00
43		2,6-Dinitrotoluene	0.337	0.335	0.6	92	0.00
44		3-Nitroaniline	0.246	0.295	-19.9	100	0.00
45	C	Acenaphthene	1.306	1.283	1.8	93	0.00
46	P	2,4-Dinitrophenol	0.185	0.174	5.9	97	0.00
47	P	4-Nitrophenol	0.249	0.253	-1.6	95	0.00
48		Dibenzofuran	1.926	1.877	2.5	93	0.00
49		2,4-Dinitrotoluene	0.445	0.429	3.6	93	0.00
50		Diethylphthalate	1.420	1.398	1.5	92	0.00
51		Fluorene	1.482	1.425	3.8	92	0.00
52		4-Chlorophenyl Phenyl Ether	0.794	0.789	0.6	93	0.00
53		4-Nitroaniline	0.237	0.274	-15.6	89	0.00
54		1,2-Diphenylhydrazine	1.305	1.304	0.1	92	0.00
55	S	2,4,6-Tribromophenol	0.196	0.213	-8.7	95	0.00
56	I	Phenanthrene-d10	1.000	1.000	0.0	92	0.00
57		4,6-Dinitro-2-Methylphenol	0.161	0.161	0.0	94	0.00
58	C	n-Nitrosodiphenylamine	0.615	0.625	-1.6	95	0.00
59		4-Bromophenyl Phenyl Ether	0.237	0.280	-18.1	92	0.00
60		Hexachlorobenzene	0.280	0.279	0.4	94	0.00
61	C	Pentachlorophenol	0.137	0.157	-14.6	115	0.00
62		Phenanthrene	1.254	1.255	-0.1	93	0.00
63		Anthracene	1.231	1.260	-2.4	93	0.00
64		Carbazole	0.815	0.895	-9.8	96	0.00
65		Di-n-Butyl Phthalate	1.380	1.467	-6.3	93	0.00
66	C	Fluoranthene	1.443	1.477	-2.4	93	0.00
67	I	Chrysene-d12	1.000	1.000	0.0	94	0.00
68		Benzidine	0.034	0.147	-332.4#	109	0.00
69		Pyrene	1.432	1.263	11.8	94	0.00
70	S	p-Terphenyl-d14	0.999	0.857	14.2	95	0.00
71		Butyl Benzyl Phthalate	0.621	0.525	15.5	93	0.00
72		Benzo[a]anthracene	1.405	1.248	11.2	95	0.00
73		3,3'-Dichlorobenzidine	0.317	0.285	10.1	102	0.00
74		Chrysene	1.345	1.182	12.1	93	0.00
75		bis(2-Ethylhexyl)phthalate	0.859	0.774	9.9	94	0.00
76	I	Perylene-d12	1.000	1.000	0.0	94	0.00
77	C	Di-n-Octyl Phthalate	1.852	1.895	-2.3	93	0.00

(#)=Out of Range

Data File : C:\HPCHEM\1\DATA\043003\4M18456.D Vial: 2
Acq On : 30 Apr 2003 8:22 Operator: mdc
Sample : WG139370-02 50PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-4 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:32:02 2003
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
78		Benzo[b]fluoranthene	1.838	1.836	0.1	93	0.00
79		Benzo[k]fluoranthene	1.729	1.534	11.3	96	0.00
80	C	Benzo[a]pyrene	1.666	1.636	1.8	94	0.00
81		Indeno[1,2,3-cd]pyrene	1.964	1.904	3.1	88	0.00
82		Dibenz[ah]anthracene	1.684	1.616	4.0	89	0.00
83		Benzo[ghi]perylene	1.606	1.484	7.6	84	0.00

(#)=Out of Range I=ISTD S=SURR P=SPCC(0 out) C=CCC(0 out)
4M18456.D BNA.M Thu May 01 08:48:09 2003 HPMS4 Page 3

Data File : C:\HPCHEM\1\DATA\043003\4M18456.D Vial: 2
Acq On : 30 Apr 2003 8:22 Operator: mdc
Sample : WG139370-02 50PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-4 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 8:47 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:32:02 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.22	152	282724	40.00 ug/ml	0.00
19) Naphthalene-d8	11.85	136	1060492	40.00 ug/ml	0.00
34) Acenaphthene-d10	13.98	164	634067	40.00 ug/ml	0.00
56) Phenanthrene-d10	15.62	188	1057278	40.00 ug/ml	0.00
67) Chrysene-d12	18.49	240	1309498	40.00 ug/ml	0.00
76) Perylene-d12	20.99	264	905897	40.00 ug/ml	0.00

System Monitoring Compounds					
4) 2-Fluorophenol	8.49	112	487546	49.5221 ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 49.52%		
6) Phenol-d5	9.71	99	562792	49.7324 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 49.73%		
20) Nitrobenzene-d5	10.95	82	506672	49.7611 ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 99.52%		
38) 2-Fluorobiphenyl	13.16	172	1164510	46.7984 ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 93.60%		
55) 2,4,6-Tribromophenol	14.86	330	168794	54.3300 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 54.33%		
70) p-Terphenyl-d14	17.23	244	1402879	42.8993 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 85.80%		

Target Compounds					Qvalue
2) Pyridine	6.22	79	474824	48.5277 ug/ml	99
3) n-Nitrosodimethylamine	6.22	74	269077	50.3327 ug/ml	100
5) Aniline	9.81	66	179044	47.1979 ug/ml	99
7) Phenol	9.72	94	625394	50.0410 ug/ml	100
8) bis(2-Chloroethyl)ether	9.87	63	318440	49.2350 ug/ml	99
9) 2-Chlorophenol	9.96	128	524924	49.9045 ug/ml	100
10) 1,3-Dichlorobenzene	10.16	146	572110	47.2840 ug/ml	100
11) 1,4-Dichlorobenzene	10.24	146	608597	48.5308 ug/ml	99
12) Benzyl Alcohol	10.38	108	334997	49.9967 ug/ml	99
13) 1,2-Dichlorobenzene	10.46	146	540117	46.2907 ug/ml	99
14) 2-Methylphenol	10.49	107	405423	49.5723 ug/ml	99
15) bis(2-Chloroisopropyl)ethe	10.54	45	600682	47.3259 ug/ml	100
16) 3-,4-Methylphenol	10.68	107	594055	49.7788 ug/ml	100
17) n-Nitrosodipropylamine	10.72	70	315119	47.4141 ug/ml	100
18) Hexachloroethane	10.87	117	210270	48.7807 ug/ml	100
21) Nitrobenzene	10.97	77	507751	50.5418 ug/ml	99
22) Isophorone	11.25	82	803840	46.1993 ug/ml	100
23) 2-Nitrophenol	11.37	139	314059	53.2522 ug/ml	100
24) 2,4-Dimethylphenol	11.36	122	472363	47.4973 ug/ml	100
25) bis(2-Chloroethoxy)methane	11.49	93	552311	49.5026 ug/ml	100

(#) = qualifier out of range (m) = manual integration
4M18456.D BNA.M Thu May 01 08:47:53 2003 HPMS4 Page 1

Data File : C:\HPCHEM\1\DATA\043003\4M18456.D
Acq On : 30 Apr 2003 8:22
Sample : WG139370-02 50PPM BNA STD
Misc : 1,1 SOS63-38-4
MS Integration Params: RTEINT.P
Quant Time: May 1 8:47 2003

Vial: 2
Operator: mdc
Inst : HPMS4
Multiplr: 1.00

Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:32:02 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
26) Benzoic Acid	11.45	122	214288	50.3295	ug/ml	99
27) 2,4-Dichlorophenol	11.65	162	456504	51.2013	ug/ml	100
28) 1,2,4-Trichlorobenzene	11.77	180	498408	47.4223	ug/ml	98
29) Naphthalene	11.89	128	1482031	48.6188	ug/ml	100
30) 4-Chloroaniline	11.94	127	553807	51.7462	ug/ml	99
31) Hexachlorobutadiene	12.02	225	291501	44.0298	ug/ml	100
32) 4-Chloro-3-Methylphenol	12.49	107	461169	52.1589	ug/ml	99
33) 2-Methylnaphthalene	12.74	142	1075788	49.9306	ug/ml	100
35) Hexachlorocyclopentadiene	12.92	237	283855	47.8609	ug/ml	99
36) 2,4,6-Trichlorophenol	13.06	196	351156	51.4132	ug/ml	99
37) 2,4,5-Trichlorophenol	13.11	196	378987	51.8138	ug/ml	99
39) 2-Chloronaphthalene	13.33	162	982457	47.2906	ug/ml	99
40) 2-Nitroaniline	13.45	65	277378	50.8290	ug/ml	99
41) Dimethylphthalate	13.61	163	1125011	49.0224	ug/ml	100
42) Acenaphthylene	13.82	152	1615305	48.0785	ug/ml	100
43) 2,6-Dinitrotoluene	13.72	165	265742	49.7862	ug/ml	98
44) 3-Nitroaniline	13.92	138	233969	59.9537	ug/ml	99
45) Acenaphthene	14.02	154	1017079	49.1130	ug/ml	99
46) 2,4-Dinitrophenol	14.03	184	138174	47.0498	ug/ml	93
47) 4-Nitrophenol	14.05	65	200474	50.8194	ug/ml	98
48) Dibenzofuran	14.20	168	1487987	48.7459	ug/ml	100
49) 2,4-Dinitrotoluene	14.17	165	340204	48.2171	ug/ml	100
50) Diethylphthalate	14.39	149	1107953	49.2158	ug/ml	99
51) Fluorene	14.58	166	1129321	48.0660	ug/ml	100
52) 4-Chlorophenyl Phenyl Ethe	14.54	204	625147	49.6866	ug/ml	99
53) 4-Nitroaniline	14.61	138	217321	57.7632	ug/ml	98
54) 1,2-Diphenylhydrazine	14.72	77	1033281	49.9685	ug/ml	100
57) 4,6-Dinitro-2-Methylphenol	14.63	198	212948	50.0460	ug/ml	99
58) n-Nitrosodiphenylamine	14.68	169	825735	50.7971	ug/ml	99
59) 4-Bromophenyl Phenyl Ether	15.09	248	369554	58.8832	ug/ml	99
60) Hexachlorobenzene	15.21	284	368464	49.7048	ug/ml	99
61) Pentachlorophenol	15.40	266	207469	57.1946	ug/ml	98
62) Phenanthrene	15.64	178	1658597	50.0335	ug/ml	99
63) Anthracene	15.70	178	1664607	51.1597	ug/ml	100
64) Carbazole	15.85	167	1182328	54.8985	ug/ml	99
65) Di-n-Butyl Phthalate	16.11	149	1938596	53.1550	ug/ml	100
66) Fluoranthene	16.90	202	1952296	51.1955	ug/ml	100
68) Benzidine	17.00	184	241043	217.9095	ug/ml	100
69) Pyrene	17.15	202	2067038	44.0945	ug/ml	100
71) Butyl Benzyl Phthalate	17.68	149	859296	42.2556	ug/ml	99
72) Benzo[a]anthracene	18.47	228	2042735	44.3965	ug/ml	100

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

Data File : C:\HPCHEM\1\DATA\043003\4M18456.D Vial: 2
Acq On : 30 Apr 2003 8:22 Operator: mdc
Sample : WG139370-02 50PPM BNA STD Inst : HPMS4
Misc : 1,1 SOS63-38-4 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 8:47 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:32:02 2003
Response via : Initial Calibration
DataAcq Meth : BNA

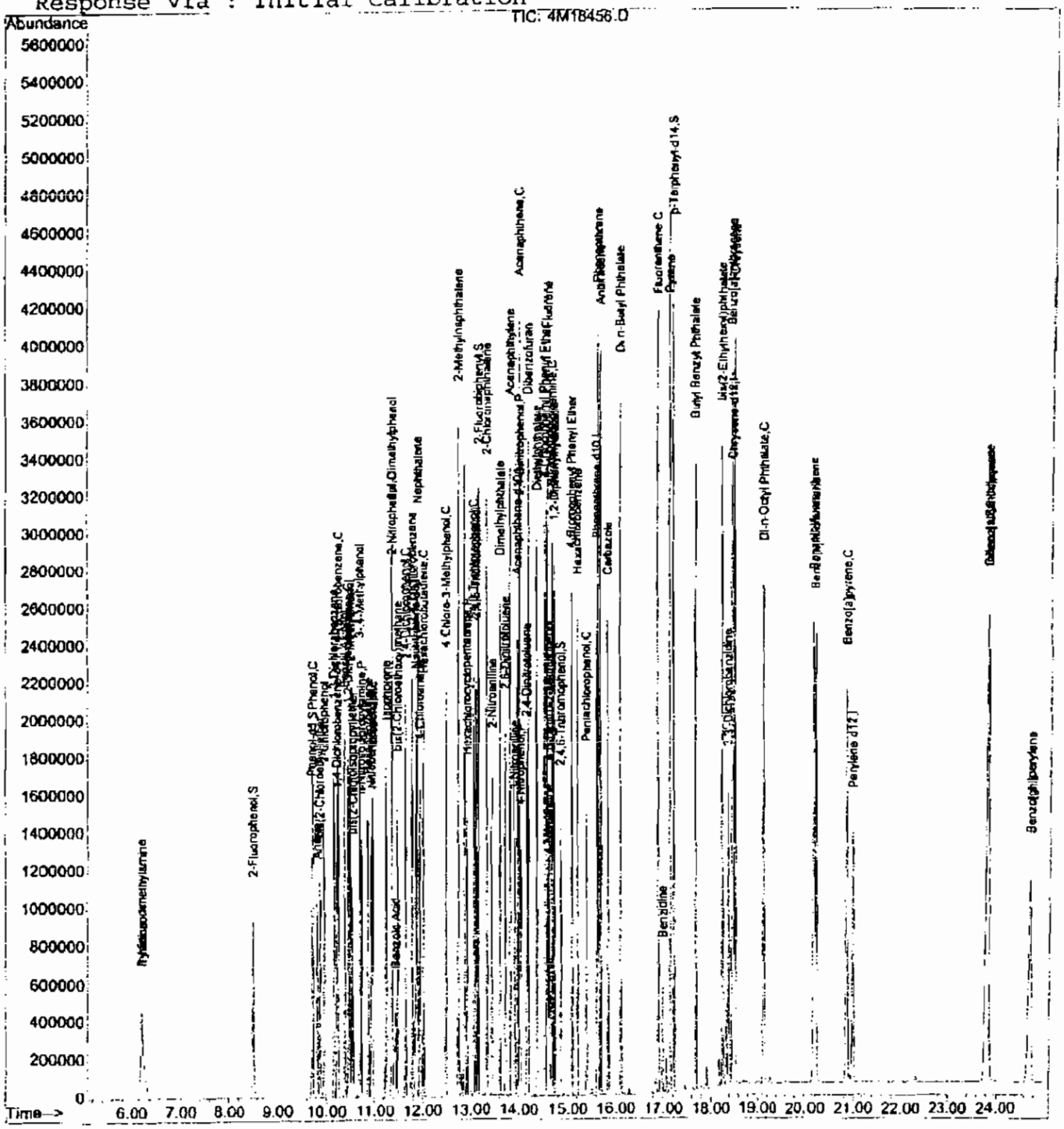
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
73)	3,3'-Dichlorobenzidine	18.38	252	467129	45.0215 ug/ml	99
74)	Chrysene	18.53	228	1935533	43.9641 ug/ml	99
75)	bis(2-Ethylhexyl)phthalate	18.26	149	1267108	45.0657 ug/ml	100
77)	Di-n-Octyl Phthalate	19.13	149	2146141	51.1722 ug/ml	100
78)	Benzo[b]fluoranthene	20.18	252	2078582	49.9467 ug/ml	98
79)	Benzo[k]fluoranthene	20.23	252	1736865	44.3454 ug/ml	98
80)	Benzo[a]pyrene	20.87	252	1852300	49.0984 ug/ml	100
81)	Indeno[1,2,3-cd]pyrene	23.83	276	2156558	48.4752 ug/ml	100
82)	Dibenz[ah]anthracene	23.83	278	1830202	47.9991 ug/ml	100
83)	Benzo[ghi]perylene	24.73	276	1680954	46.2126 ug/ml	100

(#) = qualifier out of range (m) = manual integration
4M18456.D BNA.M Thu May 01 08:47:54 2003 HPMS4 Page 3

Data File : C:\HPCHEM\1\DATA\043003\4M18456.D
Acq On : 30 Apr 2003 8:22
Sample : WG139370-02 50PPM BNA STD
Misc : 1,1 SOS63-38-4
MS Integration Params: RTEINT.P
Quant Time: May 1 8:47 2003

Vial: 2
Operator: mdc
Inst : HPMS4
Multiplr: 1.00
Quant Results File: BNA.RES

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:32:02 2003
Response via : Initial Calibration



Continuing calibration Area and RT check

Instrument: HPMS5
Initial cal date: 1 May 2003 12:55
CCV date: 2 May 2003 14:04
CCV filename: 5M26144.D

	1,4-Dichlorobenzene-d4		Naphthalene-d8		Acenaphthene-d10	
	Amount	RT	Amount	RT	Amount	RT
InitCal	315053	7.79	1180174	9.20	737836	11.05
CCV	275079	7.79	1046214	9.20	673659	11.05

	Phenanthrene-d10		Chrysene-d12		Perylene-d12	
	Amount	RT	Amount	RT	Amount	RT
InitCal	1151212	12.59	1267677	15.31	741336	17.36
CCV	1096542	12.59	1264491	15.32	600573	17.36

Data File : C:\HPCHEM\1\DATA\050203\5M26144.D Vial: 2
Acq On : 2 May 2003 14:04 Operator: ALT
Sample : WG139599-04 50PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-4 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:24:19 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	87	0.00
2		Pyridine	50.000	45.691	8.6	83	-0.03
3		n-Nitrosodimethylamine	50.000	44.522	11.0	76	0.00
4	S	2-Fluorophenol	50.000	46.693	6.6	80	0.00
5		Aniline	50.000	38.996	22.0	79	0.00
6	S	Phenol-d5	50.000	47.804	4.4	81	0.00
7	C	Phenol	50.000	47.649	4.7	80	0.00
8		bis(2-Chloroethyl)ether	50.000	45.876	8.2	81	0.00
9		2-Chlorophenol	50.000	48.829	2.3	83	0.00
10		1,3-Dichlorobenzene	50.000	47.590	4.8	88	0.00
11	C	1,4-Dichlorobenzene	50.000	49.850	0.3	89	0.00
12		Benzyl Alcohol	50.000	46.512	7.0	77	0.00
13	C	1,2-Dichlorobenzene	50.000	46.402	7.2	86	0.00
14		2-Methylphenol	50.000	47.907	4.2	82	0.00
		bis(2-Chloroisopropyl)ether	50.000	41.906	16.2	78	0.00
16		3-,4-Methylphenol	50.000	48.263	3.5	81	0.00
17	P	n-Nitrosodipropylamine	50.000	45.126	9.7	81	0.00
18		Hexachloroethane	50.000	47.937	4.1	86	0.00
19	I	Naphthalene-d8	40.000	40.000	0.0	89	0.00
20	S	Nitrobenzene-d5	50.000	47.472	5.1	82	0.00
21		Nitrobenzene	50.000	48.579	2.8	83	0.00
22		Isophorone	50.000	43.663	12.7	81	0.00
23	C	2-Nitrophenol	50.000	56.869	-13.7	92	0.00
24		2,4-Dimethylphenol	50.000	48.502	3.0	89	0.00
25		bis(2-Chloroethoxy)methane	50.000	48.628	2.7	86	0.00
26		Benzoic Acid	50.000	49.160	1.7	73	0.00
27	C	2,4-Dichlorophenol	50.000	50.373	-0.7	86	0.00
28		1,2,4-Trichlorobenzene	50.000	49.978	0.0	93	0.00
29		Naphthalene	50.000	49.815	0.4	90	0.00
30		4-Chloroaniline	50.000	49.094	1.8	84	0.00
31	C	Hexachlorobutadiene	50.000	46.905	6.2	97	0.00
32	C	4-Chloro-3-Methylphenol	50.000	51.009	-2.0	85	0.00
33		2-Methylnaphthalene	50.000	52.541	-5.1	92	0.00
34	I	Acenaphthene-d10	40.000	40.000	0.0	91	0.00
35	P	Hexachlorocyclopentadiene	50.000	58.573	-17.1	94	0.00
36	C	2,4,6-Trichlorophenol	50.000	51.893	-3.8	90	0.00
37		2,4,5-Trichlorophenol	50.000	52.346	-4.7	91	0.00
38	S	2-Fluorobiphenyl	50.000	49.848	0.3	97	0.00
39		2-Chloronaphthalene	50.000	48.927	2.1	94	0.00
		2-Nitroaniline	50.000	49.183	1.6	84	0.00

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA\050203\5M26144.D Vial: 2
Acq On : 2 May 2003 14:04 Operator: ALT
Sample : WG139599-04 50PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-4 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:24:19 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
41		Dimethylphthalate	50.000	50.461	-0.9	93	0.00
42		Acenaphthylene	50.000	49.673	0.7	93	0.00
43		2,6-Dinitrotoluene	50.000	51.151	-2.3	90	0.00
44		3-Nitroaniline	50.000	50.439	-0.9	88	0.00
45	C	Acenaphthene	50.000	51.081	-2.2	93	0.00
46	P	2,4-Dinitrophenol	50.000	43.942	12.1	78	0.00
47	P	4-Nitrophenol	50.000	45.787	8.4	78	0.00
48		Dibenzofuran	50.000	54.282	-8.6	99	0.00
49		2,4-Dinitrotoluene	50.000	51.151	-2.3	90	0.00
50		Diethylphthalate	50.000	51.113	-2.2	94	0.00
51		Fluorene	50.000	51.651	-3.3	94	0.00
52		4-Chlorophenyl Phenyl Ether	50.000	52.683	-5.4	97	0.00
53		4-Nitroaniline	50.000	50.313	-0.6	84	0.00
54		1,2-Diphenylhydrazine	50.000	49.779	0.4	89	0.00
55	S	2,4,6-Tribromophenol	50.000	54.678	-9.4	92	0.00
56	I	Phenanthrene-d10	40.000	40.000	0.0	95	0.00
57		4,6-Dinitro-2-Methylphenol	50.000	51.688	-3.4	90	0.00
58	C	n-Nitrosodiphenylamine	50.000	48.823	2.4	94	0.00
59		4-Bromophenyl Phenyl Ether	50.000	59.602	-19.2	99	0.00
60		Hexachlorobenzene	50.000	49.497	1.0	99	0.00
61	C	Pentachlorophenol	50.000	48.652	2.7	77	0.00
62		Phenanthrene	50.000	51.331	-2.7	98	0.00
63		Anthracene	50.000	52.250	-4.5	97	0.00
64		Carbazole	50.000	53.633	-7.3	93	0.00
65		Di-n-Butyl Phthalate	50.000	51.863	-3.7	92	0.00
66	C	Fluoranthene	50.000	53.075	-6.2	98	0.00
67	I	Chrysene-d12	40.000	40.000	0.0	100	0.00
68		Benzidine	50.000	146.095	-192.2#	86	0.00
69		Pyrene	50.000	45.000	10.0	99	0.00
70	S	p-Terphenyl-d14	50.000	44.385	11.2	101	0.00
71		Butyl Benzyl Phthalate	50.000	39.682	20.6	89	0.00
72		Benzo[a]anthracene	50.000	46.147	7.7	100	0.00
73		3,3'-Dichlorobenzidine	50.000	54.351	-8.7	97	0.00
74		Chrysene	50.000	45.057	9.9	99	0.00
75		bis(2-Ethylhexyl)phthalate	50.000	44.000	12.0	91	0.00
76	I	Perylene-d12	40.000	40.000	0.0	81	0.00
77	C	Di-n-Octyl Phthalate	50.000	56.278	-12.6	88	0.00
78		Benzo[b]fluoranthene	50.000	53.106	-6.2	92	0.00
79		Benzo[k]fluoranthene	50.000	49.099	1.8	91	0.00

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA\050203\5M26144.D Vial: 2
Acq On : 2 May 2003 14:04 Operator: ALT
Sample : WG139599-04 50PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-4 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:24:19 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
80	C	Benzo[a]pyrene	50.000	51.216	-2.4	85	0.00
81		Indeno[1,2,3-cd]pyrene	50.000	55.430	-10.9	85	0.00
82		Dibenz[ah]anthracene	50.000	55.215	-10.4	86	0.00
83		Benzo[ghi]perylene	50.000	48.822	2.4	74	0.00

Data File : C:\HPCHEM\1\DATA\050203\5M26144.D
Acq On : 2 May 2003 14:04
Sample : WG139599-04 50PPM BNA STD
Misc : 1,1 SOS63-38-4
MS Integration Params: RTEINT.P

Vial: 2
Operator: ALT
Inst : HPMS5
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:24:19 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	87	0.00
2		Pyridine	1.474	1.347	8.6	83	-0.03
3		n-Nitrosodimethylamine	0.888	0.791	10.9	76	0.00
4	S	2-Fluorophenol	1.355	1.266	6.6	80	0.00
5		Aniline	0.562	0.439	21.9	79	0.00
6	S	Phenol-d5	1.625	1.554	4.4	81	0.00
7	C	Phenol	1.725	1.644	4.7	80	0.00
8		bis(2-Chloroethyl)ether	1.144	1.050	8.2	81	0.00
9		2-Chlorophenol	1.480	1.446	2.3	83	0.00
10		1,3-Dichlorobenzene	1.772	1.687	4.8	88	0.00
11	C	1,4-Dichlorobenzene	1.845	1.839	0.3	89	0.00
12		Benzyl Alcohol	0.920	0.855	7.1	77	0.00
13	C	1,2-Dichlorobenzene	1.710	1.587	7.2	86	0.00
14		2-Methylphenol	1.102	1.056	4.2	82	0.00
15		bis(2-Chloroisopropyl)ether	2.768	2.320	16.2	78	0.00
16		3-,4-Methylphenol	1.616	1.559	3.5	81	0.00
17	P	n-Nitrosodipropylamine	0.973	0.878	9.8	81	0.00
18		Hexachloroethane	0.703	0.674	4.1	86	0.00
19	I	Naphthalene-d8	1.000	1.000	0.0	89	0.00
20	S	Nitrobenzene-d5	0.391	0.371	5.1	82	0.00
21		Nitrobenzene	0.378	0.368	2.6	83	0.00
22		Isophorone	0.690	0.603	12.6	81	0.00
23	C	2-Nitrophenol	0.207	0.235	-13.5	92	0.00
24		2,4-Dimethylphenol	0.374	0.363	2.9	89	0.00
25		bis(2-Chloroethoxy)methane	0.446	0.434	2.7	86	0.00
26		Benzoic Acid	0.192	0.189	1.6	73	0.00
27	C	2,4-Dichlorophenol	0.342	0.345	-0.9	86	0.00
28		1,2,4-Trichlorobenzene	0.408	0.407	0.2	93	0.00
29		Naphthalene	1.135	1.131	0.4	90	0.00
30		4-Chloroaniline	0.407	0.400	1.7	84	0.00
31	C	Hexachlorobutadiene	0.268	0.251	6.3	97	0.00
32	C	4-Chloro-3-Methylphenol	0.314	0.321	-2.2	85	0.00
33		2-Methylnaphthalene	0.811	0.852	-5.1	92	0.00
34	I	Acenaphthene-d10	1.000	1.000	0.0	91	0.00
35	P	Hexachlorocyclopentadiene	0.194	0.228	-17.5	94	0.00
36	C	2,4,6-Trichlorophenol	0.429	0.445	-3.7	90	0.00
37		2,4,5-Trichlorophenol	0.451	0.472	-4.7	91	0.00
38	S	2-Fluorobiphenyl	1.466	1.462	0.3	97	0.00
39		2-Chloronaphthalene	1.278	1.251	2.1	94	0.00
40		2-Nitroaniline	0.346	0.341	1.4	84	0.00

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA\050203\5M26144.D Vial: 2
Acq On : 2 May 2003 14:04 Operator: ALT
Sample : WG139599-04 50PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-4 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:24:19 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41		Dimethylphthalate	1.404	1.417	-0.9	93	0.00
42		Acenaphthylene	1.981	1.968	0.7	93	0.00
43		2,6-Dinitrotoluene	0.293	0.300	-2.4	90	0.00
44		3-Nitroaniline	0.298	0.300	-0.7	88	0.00
45	C	Acenaphthene	1.189	1.215	-2.2	93	0.00
46	P	2,4-Dinitrophenol	0.137	0.120	12.4	78	0.00
47	P	4-Nitrophenol	0.217	0.199	8.3	78	0.00
48		Dibenzofuran	1.792	1.946	-8.6	99	0.00
49		2,4-Dinitrotoluene	0.293	0.300	-2.4	90	0.00
50		Diethylphthalate	1.402	1.434	-2.3	94	0.00
51		Fluorene	1.449	1.497	-3.3	94	0.00
52		4-Chlorophenyl Phenyl Ether	0.723	0.762	-5.4	97	0.00
53		4-Nitroaniline	0.299	0.301	-0.7	84	0.00
54		1,2-Diphenylhydrazine	1.338	1.332	0.4	89	0.00
	S	2,4,6-Tribromophenol	0.125	0.137	-9.6	92	0.00
56	I	Phenanthrene-d10	1.000	1.000	0.0	95	0.00
57		4,6-Dinitro-2-Methylphenol	0.140	0.145	-3.6	90	0.00
58	C	n-Nitrosodiphenylamine	0.630	0.616	2.2	94	0.00
59		4-Bromophenyl Phenyl Ether	0.231	0.275	-19.0	99	0.00
60		Hexachlorobenzene	0.235	0.233	0.9	99	0.00
61	C	Pentachlorophenol	0.138	0.134	2.9	77	0.00
62		Phenanthrene	1.323	1.358	-2.6	98	0.00
63		Anthracene	1.293	1.351	-4.5	97	0.00
64		Carbazole	1.123	1.205	-7.3	93	0.00
65		Di-n-Butyl Phthalate	1.493	1.549	-3.8	92	0.00
66	C	Fluoranthene	1.431	1.518	-6.1	98	0.00
67	I	Chrysene-d12	1.000	1.000	0.0	100	0.00
68		Benzidine	0.052	0.152	-192.3#	86	0.00
69		Pyrene	1.560	1.404	10.0	99	0.00
70	S	p-Terphenyl-d14	1.019	0.904	11.3	101	0.00
71		Butyl Benzyl Phthalate	0.727	0.577	20.6	89	0.00
72		Benzo[a]anthracene	1.520	1.403	7.7	100	0.00
73		3,3'-Dichlorobenzidine	0.352	0.383	-8.8	97	0.00
74		Chrysene	1.455	1.311	9.9	99	0.00
75		bis(2-Ethylhexyl)phthalate	0.973	0.856	12.0	91	0.00
76	I	Perylene-d12	1.000	1.000	0.0	81	0.00
77	C	Di-n-Octyl Phthalate	2.578	2.901	-12.5	88	0.00
78		Benzo[b]fluoranthene	1.997	2.121	-6.2	92	0.00
		Benzo[k]fluoranthene	1.944	1.909	1.8	91	0.00

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA\050203\5M26144.D Vial: 2
Acq On : 2 May 2003 14:04 Operator: ALT
Sample : WG139599-04 50PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-4 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:24:19 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
80	C	Benzo[a]pyrene	1.737	1.779	-2.4	85	0.00
81		Indeno[1,2,3-cd]pyrene	1.691	1.875	-10.9	85	0.00
82		Dibenz[ah]anthracene	1.352	1.493	-10.4	86	0.00
83		Benzo[ghi]perylene	1.299	1.269	2.3	74	0.00

Data File : C:\HPCHEM\1\DATA\050203\5M26144.D Vial: 2
Acq On : 2 May 2003 14:04 Operator: ALT
Sample : WG139599-04 50PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-4 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 14:25 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:24:19 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.79	152	275079	40.00 ug/mL	0.00
19) Naphthalene-d8	9.20	136	1046214	40.00 ug/mL	0.00
34) Acenaphthene-d10	11.05	164	673659	40.00 ug/mL	0.00
56) Phenanthrene-d10	12.59	188	1096542	40.00 ug/mL	0.00
67) Chrysene-d12	15.32	240	1264491	40.00 ug/mL	0.00
76) Perylene-d12	17.36	264	600573	40.00 ug/mL	0.00
System Monitoring Compounds					
4) 2-Fluorophenol	6.28	112	435172	46.6926 ug/mL	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 46.69%		
6) Phenol-d5	7.35	99	534281	47.8041 ug/mL	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 47.80%		
20) Nitrobenzene-d5	8.43	82	485597	47.4719 ug/mL	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 94.94%		
38) 2-Fluorobiphenyl	10.32	172	1231133	49.8484 ug/mL	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 99.70%		
55) 2,4,6-Tribromophenol	11.88	330	115298	54.6781 ug/mL	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 54.68%		
70) p-Terphenyl-d14	14.17	244	1429528	44.3846 ug/mL	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 88.76%		
Target Compounds					Qvalue
2) Pyridine	4.58	79	463144	45.6905 ug/mL	100
3) n-Nitrosodimethylamine	4.55	74	271852	44.5216 ug/mL#	90
5) Aniline	7.43	66	150836	38.9960 ug/mL	96
7) Phenol	7.37	94	565404	47.6490 ug/mL	96
8) bis(2-Chloroethyl)ether	7.48	63	361024	45.8763 ug/mL	99
9) 2-Chlorophenol	7.56	128	497074	48.8290 ug/mL	98
10) 1,3-Dichlorobenzene	7.73	146	580008	47.5896 ug/mL	99
11) 1,4-Dichlorobenzene	7.81	146	632387	49.8502 ug/mL	99
12) Benzyl Alcohol	7.94	108	294155	46.5124 ug/mL	97
13) 1,2-Dichlorobenzene	7.99	146	545692	46.4020 ug/mL	100
14) 2-Methylphenol	8.05	107	363117	47.9072 ug/mL	98
15) bis(2-Chloroisopropyl)ethe	8.07	45	797683	41.9061 ug/mL	96
16) 3-,4-Methylphenol	8.21	107	536187	48.2627 ug/mL	98
17) n-Nitrosodipropylamine	8.23	70	302032	45.1260 ug/mL	99
18) Hexachloroethane	8.36	117	231715	47.9370 ug/mL	95
21) Nitrobenzene	8.45	77	480817	48.5792 ug/mL	100
22) Isophorone	8.69	82	787979	43.6630 ug/mL	99
23) 2-Nitrophenol	8.79	139	307190	56.8687 ug/mL	97
24) 2,4-Dimethylphenol	8.79	122	474822	48.5018 ug/mL	99
25) bis(2-Chloroethoxy)methane	8.90	93	567081	48.6281 ug/mL	99
26) Benzoic Acid	8.90	122	247000	49.1596 ug/mL	100

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

Data File : C:\HPCHEM\1\DATA\050203\5M26144.D Vial: 2
Acq On : 2 May 2003 14:04 Operator: ALT
Sample : WG139599-04 50PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-4 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 14:25 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:24:19 2003
Response via : Initial Calibration
DataAcq Meth : BNA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
27)	2,4-Dichlorophenol	9.04	162	451229	50.3733 ug/mL	99
28)	1,2,4-Trichlorobenzene	9.13	180	532695	49.9777 ug/mL	100
29)	Naphthalene	9.22	128	1478633	49.8154 ug/mL	100
30)	4-Chloroaniline	9.28	127	522628	49.0945 ug/mL	100
31)	Hexachlorobutadiene	9.33	225	328788	46.9053 ug/mL	100
32)	4-Chloro-3-Methylphenol	9.76	107	419465	51.0095 ug/mL	99
33)	2-Methylnaphthalene	9.95	142	1114381	52.5408 ug/mL	100
35)	Hexachlorocyclopentadiene	10.11	237	191597	58.5732 ug/mL	99
36)	2,4,6-Trichlorophenol	10.25	196	374976	51.8930 ug/mL	99
37)	2,4,5-Trichlorophenol	10.29	196	397313	52.3459 ug/mL	100
39)	2-Chloronaphthalene	10.47	162	1053258	48.9268 ug/mL	100
40)	2-Nitroaniline	10.59	65	286910	49.1827 ug/mL	99
41)	Dimethylphthalate	10.73	163	1192864	50.4609 ug/mL	100
42)	Acenaphthylene	10.91	152	1656979	49.6734 ug/mL	100
43)	2,6-Dinitrotoluene	10.83	165	252411	51.1507 ug/mL	99
44)	3-Nitroaniline	11.02	138	252799	50.4393 ug/mL	97
45)	Acenaphthene	11.09	154	1023080	51.0807 ug/mL	99
46)	2,4-Dinitrophenol	11.12	184	101299	43.9415 ug/mL	97
47)	4-Nitrophenol	11.16	65	167712	45.7869 ug/mL	93
48)	Dibenzofuran	11.26	168	1638617	54.2821 ug/mL	100
49)	2,4-Dinitrotoluene	10.83	165	252411	51.1507 ug/mL	99
50)	Diethylphthalate	11.44	149	1207146	51.1130 ug/mL	100
51)	Fluorene	11.62	166	1260797	51.6512 ug/mL	100
52)	4-Chlorophenyl Phenyl Ethe	11.58	204	641676	52.6830 ug/mL	99
53)	4-Nitroaniline	11.65	138	253062	50.3132 ug/mL	91
54)	1,2-Diphenylhydrazine	11.75	77	1121527	49.7786 ug/mL	99
57)	4,6-Dinitro-2-Methylphenol	11.67	198	198230	51.6883 ug/mL	99
58)	n-Nitrosodiphenylamine	11.71	169	843780	48.8229 ug/mL	100
59)	4-Bromophenyl Phenyl Ether	12.09	248	377477	59.6024 ug/mL	99
60)	Hexachlorobenzene	12.20	284	319058	49.4968 ug/mL	99
61)	Pentachlorophenol	12.40	266	183396	48.6522 ug/mL	99
62)	Phenanthrene	12.61	178	1861735	51.3308 ug/mL	100
63)	Anthracene	12.67	178	1852023	52.2504 ug/mL	100
64)	Carbazole	12.82	167	1651544	53.6328 ug/mL	99
65)	Di-n-Butyl Phthalate	13.08	149	2123334	51.8627 ug/mL	100
66)	Fluoranthene	13.84	202	2081368	53.0746 ug/mL	99
68)	Benzidine	13.95	184	240213	146.0946 ug/mL	100
69)	Pyrene	14.08	202	2219778	45.0005 ug/mL	100
71)	Butyl Benzyl Phthalate	14.63	149	912227	39.6818 ug/mL	100
72)	Benzo[a]anthracene	15.30	228	2217967	46.1467 ug/mL	100
73)	3,3'-Dichlorobenzidine	15.24	252	604943	54.3514 ug/mL	98
74)	Chrysene	15.35	228	2072661	45.0565 ug/mL	100

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

Data File : C:\HPCHEM\1\DATA\050203\5M26144.D Vial: 2
Acq On : 2 May 2003 14:04 Operator: ALT
Sample : WG139599-04 50PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-4 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 14:25 2003 Quant Results File: BNA.RES

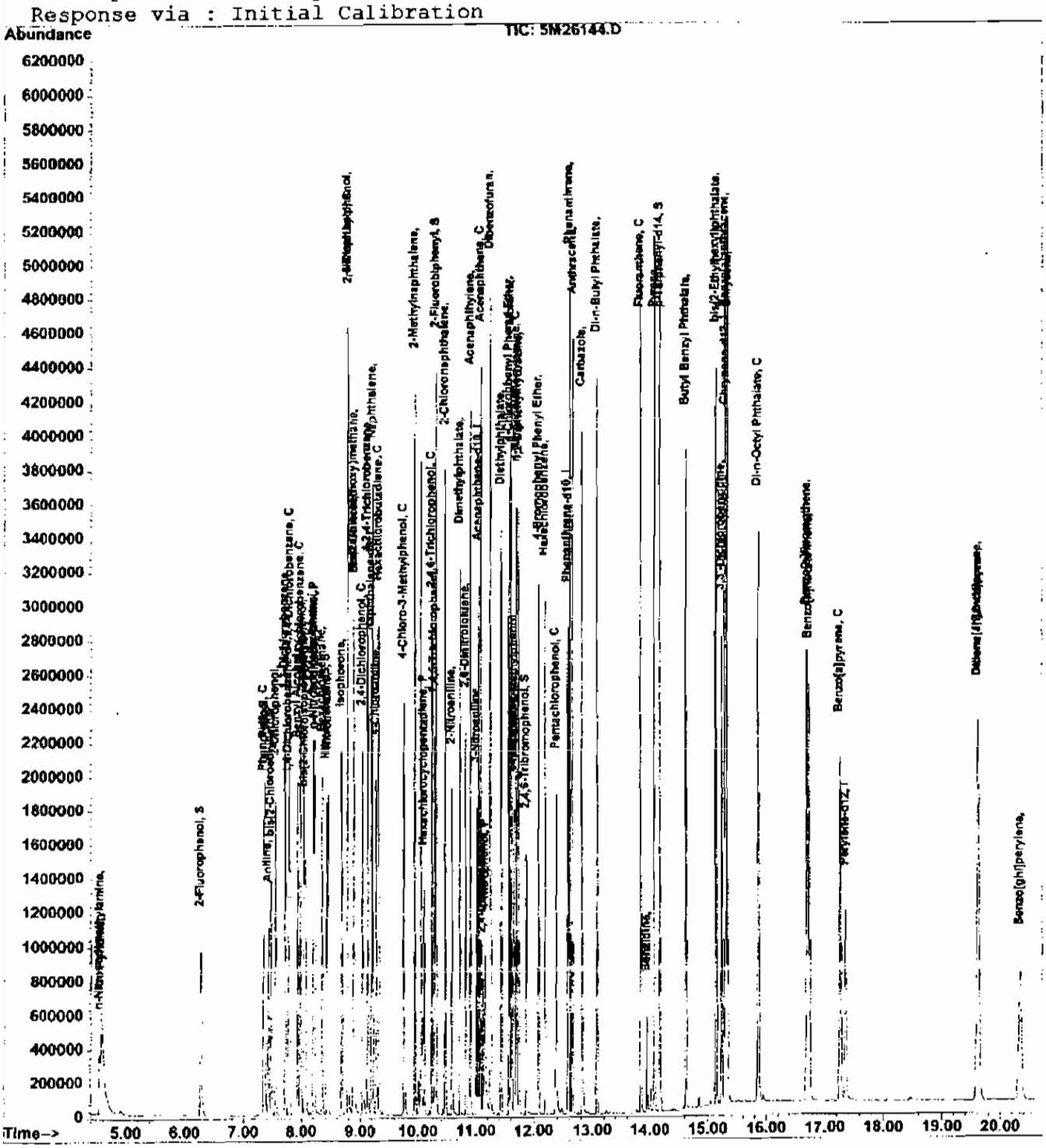
Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:24:19 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
75) bis(2-Ethylhexyl)phthalate	15.15	149	1353566	44.0001 ug/mL	99
77) Di-n-Octyl Phthalate	15.87	149	2178009	56.2775 ug/mL	99
78) Benzo[b]fluoranthene	16.71	252	1592157	53.1057 ug/mL	99
79) Benzo[k]fluoranthene	16.75	252	1432947	49.0992 ug/mL	99
80) Benzo[a]pyrene	17.27	252	1335615	51.2156 ug/mL	99
81) Indeno[1,2,3-cd]pyrene	19.63	276	1407232	55.4300 ug/mL	98
82) Dibenz[ah]anthracene	19.63	278	1121100	55.2149 ug/mL	98
83) Benzo[ghi]perylene	20.35	276	952435	48.8216 ug/mL	99

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

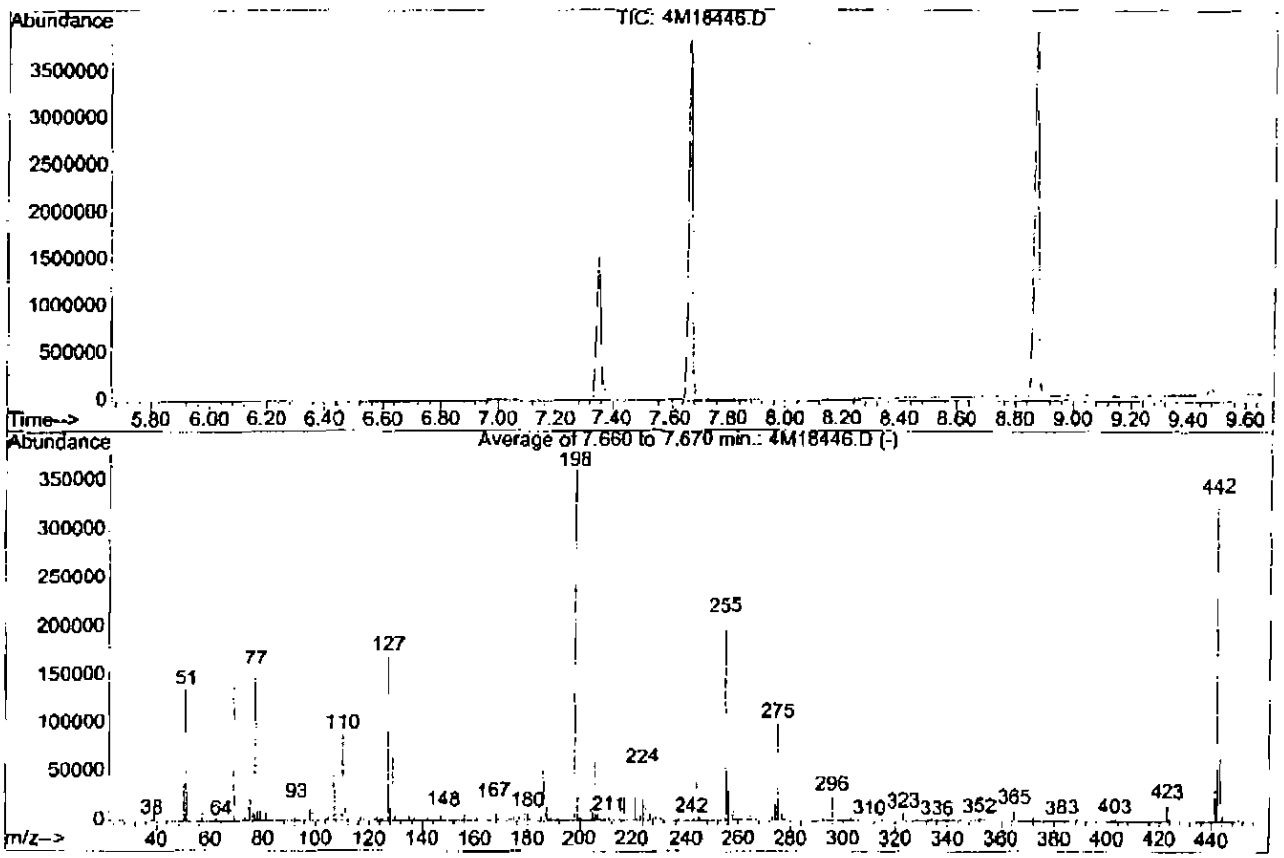
Data File : C:\HPCHEM\1\DATA\050203\5M26144.D Vial: 2
Acq On : 2 May 2003 14:04 Operator: ALT
Sample : WG139599-04 50PPM BNA STD Inst : HPMS5
Misc : 1,1 SOS63-38-4 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 14:25 2003 Quant Results File: BNA.RES

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:24:19 2003
Response via : Initial Calibration



2.2.1.4 Raw QC Data

Data File : C:\HPCHEM\1\DATA\042903\4M18446.D Vial: 1
Acq On : 29 Apr 2003 16:52 Operator: CLK
Sample : WG139334-01 50PPM DFTPP Inst : HPMS4
Misc : 1,1 SOS64-3 Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP



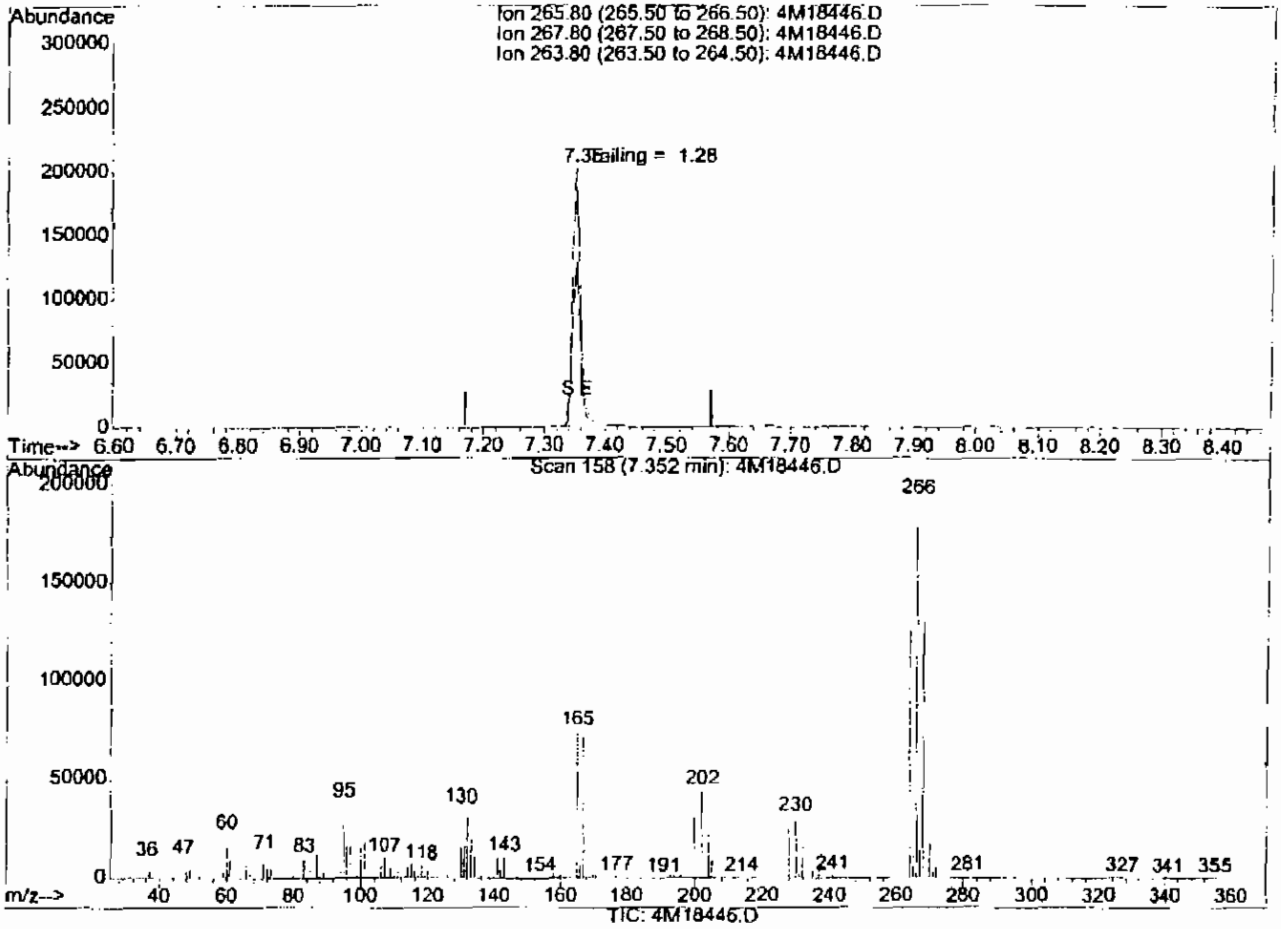
AutoFind: Scans 222, 223, 224; Background Corrected with Scan 215

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.5	135568	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	38.7	139685	PASS
70	69	0.00	2	0.6	898	PASS
127	198	40	60	47.2	170432	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	361323	PASS
199	198	5	9	6.7	24379	PASS
275	198	10	30	27.7	100051	PASS
365	198	1	100	3.2	11551	PASS
441	443	0.01	100	49.3	32235	PASS
442	198	40	100	92.1	332949	PASS
443	442	17	23	19.6	65365	PASS

4M18446.D DFTPP.M Thu May 01 08:10:35 2003 HPMS4

Data File : C:\HPCHEM\1\DATA\042903\4M18446.D Vial: 1
Acq On : 29 Apr 2003 16:52 Operator: CLK
Sample : WG139334-01 50PPM DFTPP Inst : HPMS4
Misc : 1,1 SOS64-3 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 1 8:10 2003 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Wed Apr 09 19:58:29 2003
Response via : Single Level Calibration



(1) PENTACHLOROPHENOL

7.35min 0.00

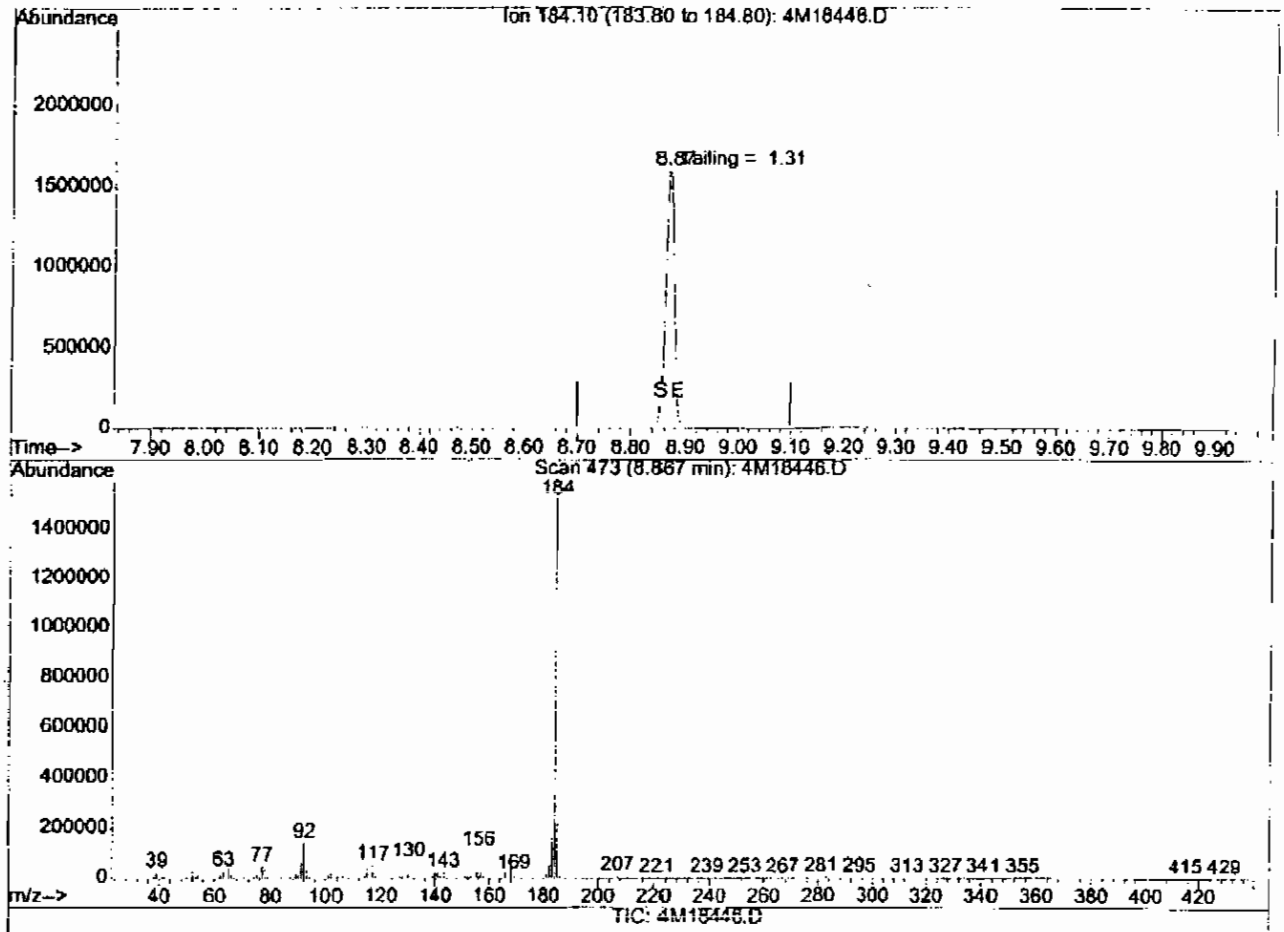
response 194618

Ion	Exp%	Act%
265.80	100	100
267.80	64.50	63.96
263.80	62.90	62.96
0.00	0.00	0.00

4M18446.D DFTPP.M Thu May 01 08:10:45 2003 HPMS4

Data File : C:\HPCHEM\1\DATA\042903\4M18446.D Vial: 1
Acq On : 29 Apr 2003 16:52 Operator: CLK
Sample : WG139334-01 50PPM DFTPP Inst : HPMS4
Misc : 1,1 SOS64-3 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 1 8:10 2003 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Wed Apr 09 19:58:29 2003
Response via : Single Level Calibration



(2) BENZIDINE

8.87min 0.00

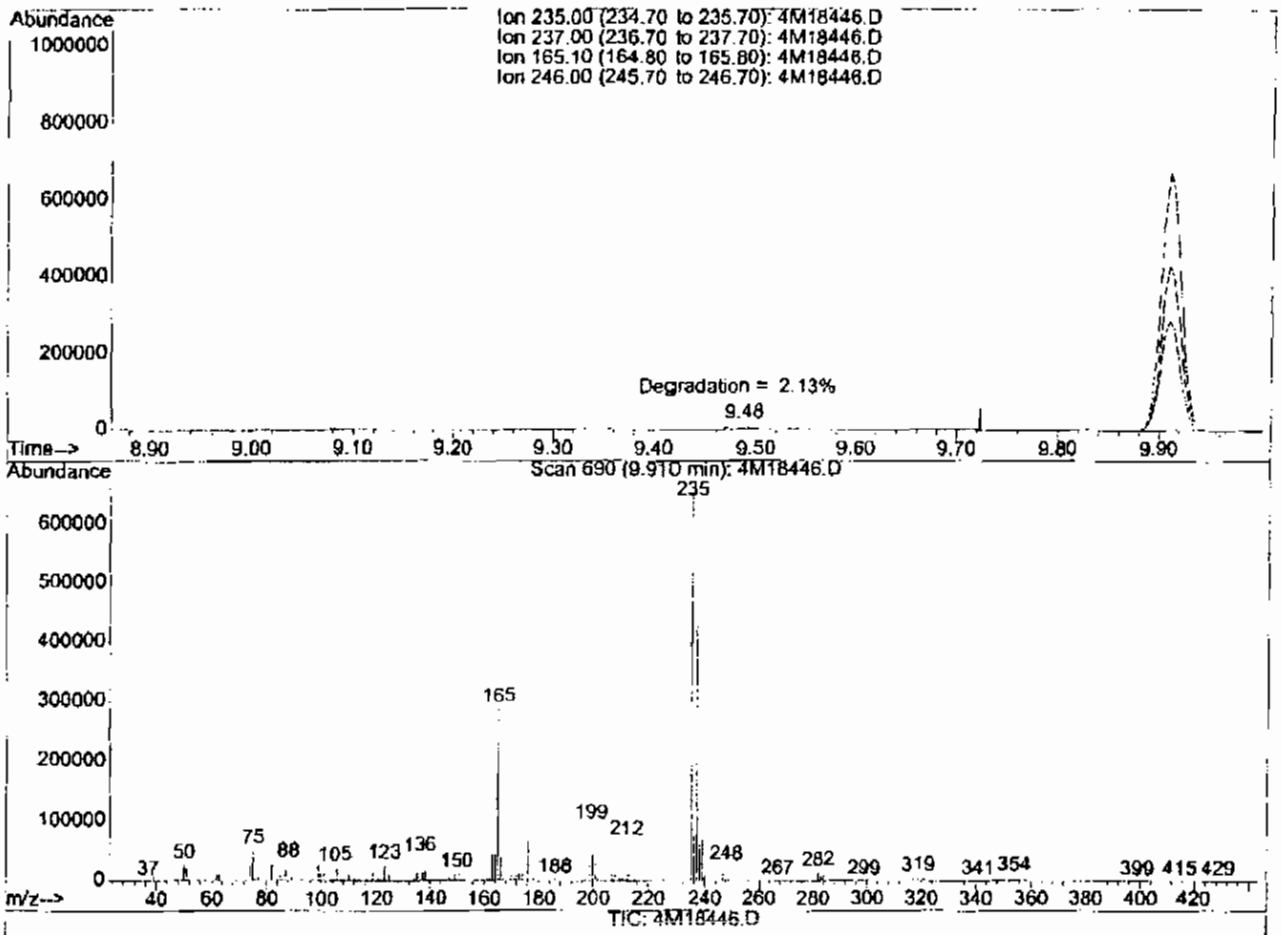
response 1695904

Ion	Exp%	Act%
184.10	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

4M18446.D DFTPP.M Thu May 01 08:10:53 2003 HPMS4

Data File : C:\HPCHEM\1\DATA\042903\4M18446.D Vial: 1
Acq On : 29 Apr 2003 16:52 Operator: CLK
Sample : WG139334-01 50PPM DFTPP Inst : HPMS4
Misc : 1,1 SOS64-3 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 1 8:10 2003 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Wed Apr 09 19:58:29 2003
Response via : Single Level Calibration



(3) 4,4'-DDT

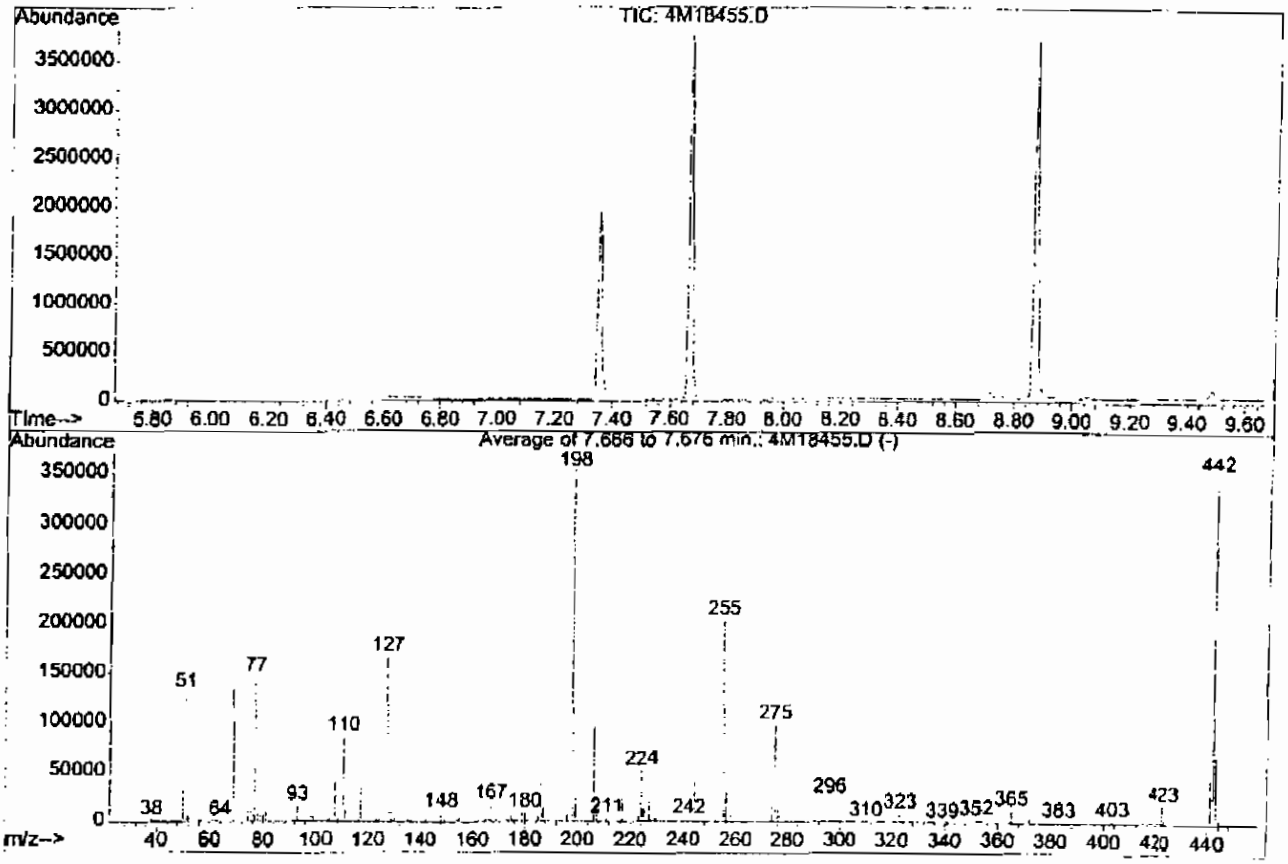
9.91min 0.00

response 927330

Ion	Exp%	Act%
235.00	100	100
237.00	64.70	64.00
165.10	43.90	43.72
246.00	5.70	5.68

4M18446.D DFTPP.M Thu May 01 08:11:02 2003 HPMS4

Data File : C:\HPCHEM\1\DATA\043003\4M18455.D Vial: 1
Acq On : 30 Apr 2003 8:03 Operator: mdc
Sample : WG139370-01 50PPM DFTPP Inst : HPMS4
Misc : 1,1 SOS64-3 Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP



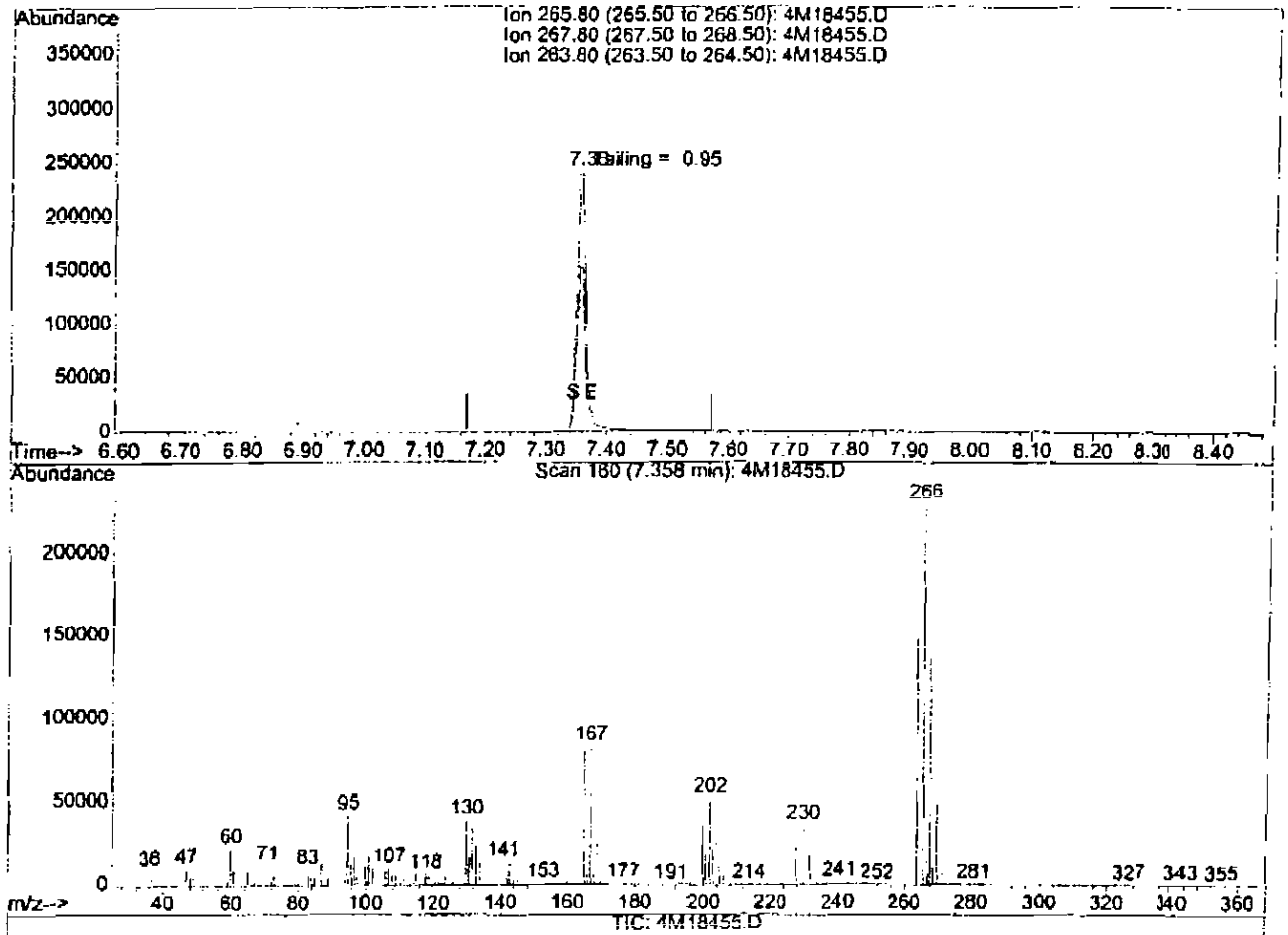
AutoFind: Scans 224, 225, 226; Background Corrected with Scan 217

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.7	129952	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	38.0	134411	PASS
70	69	0.00	2	0.7	879	PASS
127	198	40	60	47.0	166125	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	353685	PASS
199	198	5	9	6.5	23112	PASS
275	198	10	30	27.9	98549	PASS
365	198	1	100	3.4	12058	PASS
441	443	0.01	100	79.6	54488	PASS
442	198	40	100	99.1	350571	PASS
443	442	17	23	19.5	68453	PASS

4M18455.D DFTPP.M Thu May 01 08:46:45 2003 HPMS4

Data File : C:\HPCHEM\1\DATA\043003\4M18455.D Vial: 1
Acq On : 30 Apr 2003 8:03 Operator: mdc
Sample : WG139370-01 50PPM DFTPP Inst : HPMS4
Misc : 1,1 SOS64-3 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 1 8:46 2003 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Wed Apr 09 19:58:29 2003
Response via : Single Level Calibration



(1) PENTACHLOROPHENOL

7.36min 0.00

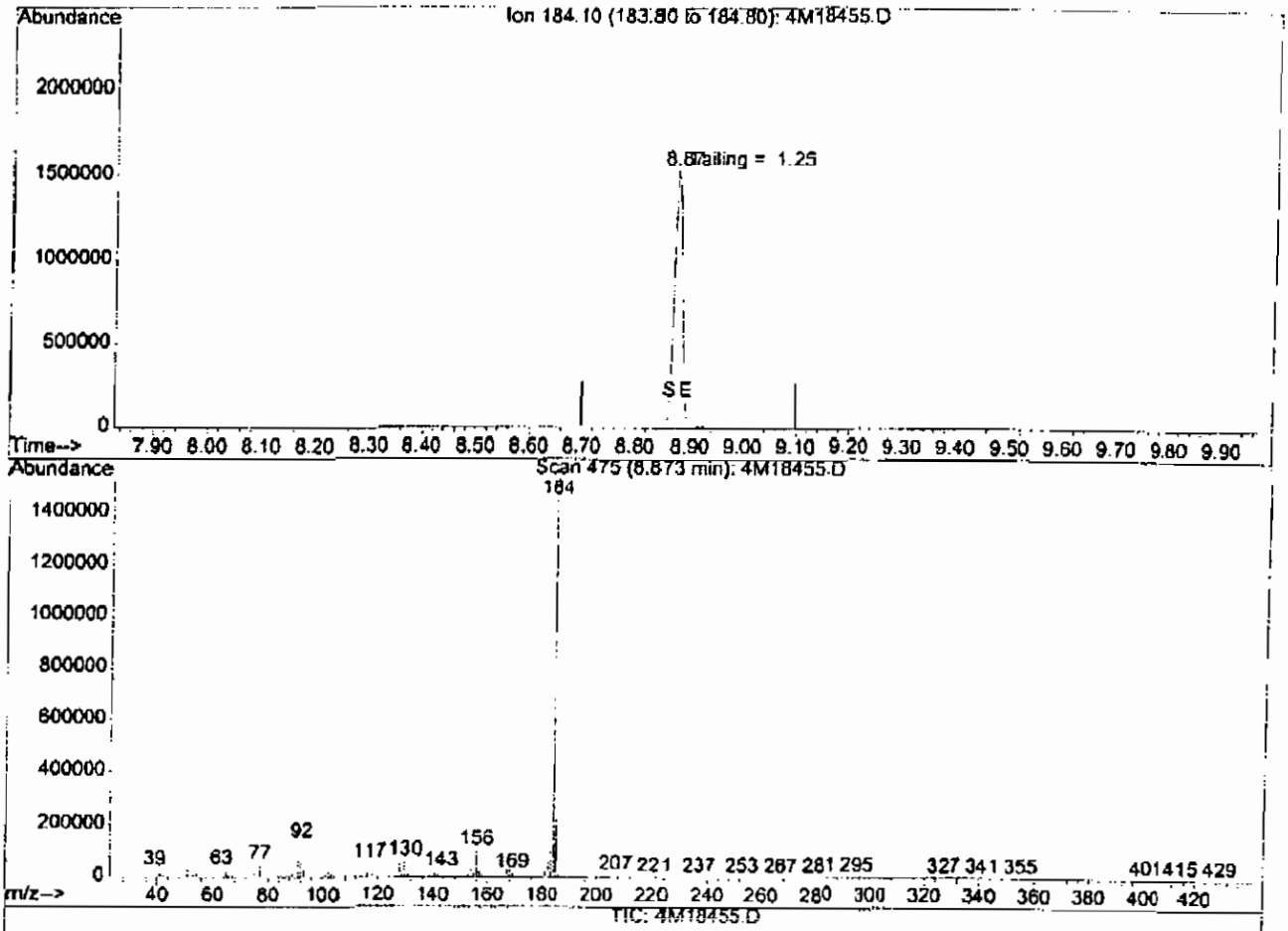
response 258933

Ion	Exp%	Act%
265.80	100	100
267.80	64.50	61.94
263.80	62.90	62.57
0.00	0.00	0.00

4M18455.D DFTPP.M Thu May 01 08:46:56 2003 HPMS4

Data File : C:\HPCHEM\1\DATA\043003\4M18455.D Vial: 1
Acq On : 30 Apr 2003 8:03 Operator: mdc
Sample : WG139370-01 50PPM DFTPP Inst : HPMS4
Misc : 1,1 SOS64-3 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 1 8:46 2003 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Wed Apr 09 19:58:29 2003
Response via : Single Level Calibration



(2) BENZIDINE

8.87min 0.00

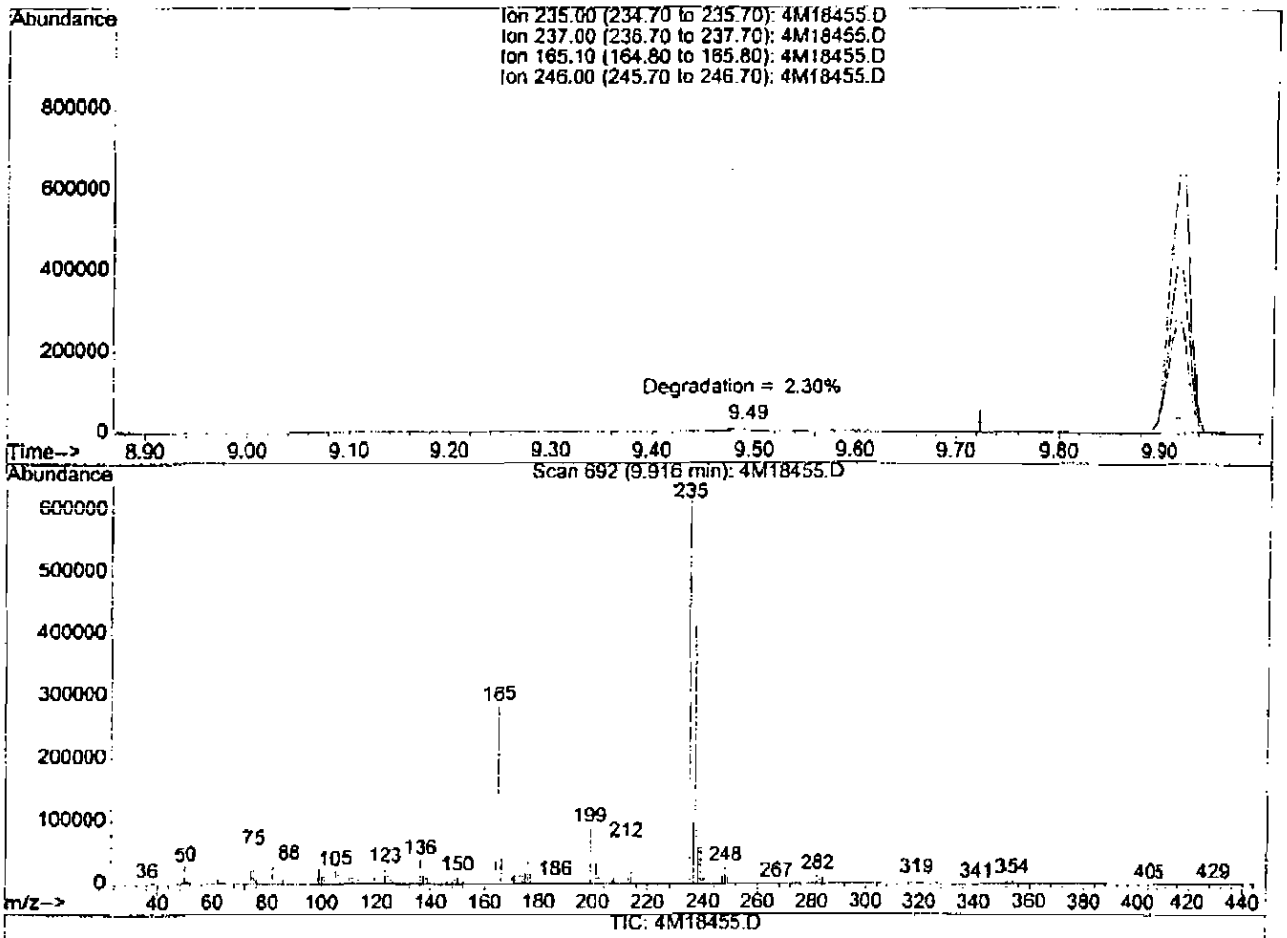
response 1590915

Ion	Exp%	Act%
184.10	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

4M18455.D DFTPP.M Thu May 01 08:47:02 2003 HPMS4

Data File : C:\HPCHEM\1\DATA\043003\4M18455.D Vial: 1
Acq On : 30 Apr 2003 8:03 Operator: mdc
Sample : WG139370-01 50PPM DFTPP Inst : HPMS4
Misc : 1,1 SOS64-3 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 1 8:46 2003 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Wed Apr 09 19:58:29 2003
Response via : Single Level Calibration



(3) 4,4'-DDT

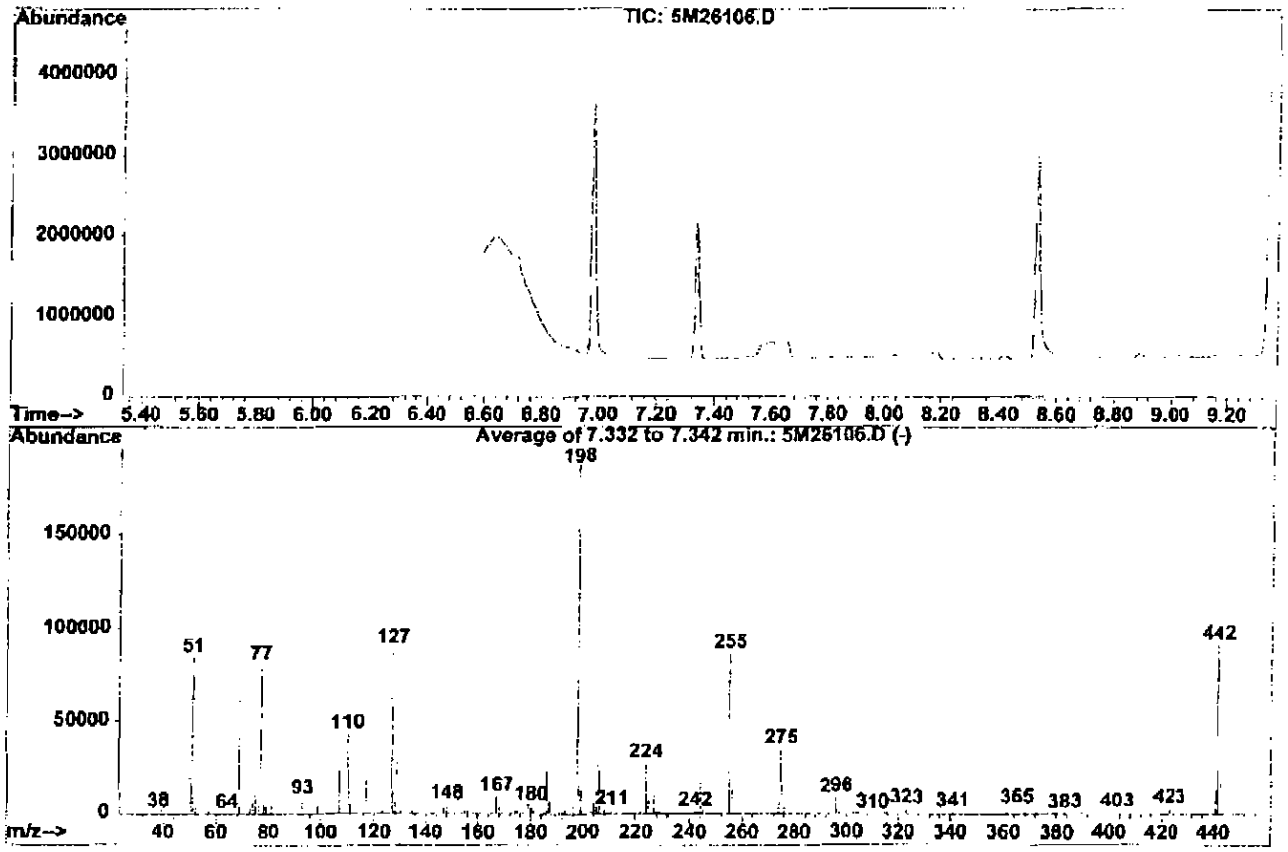
9.92min 0.00

response 904122

Ion	Exp%	Act%
235.00	100	100
237.00	64.70	63.87
165.10	43.90	43.94
246.00	5.70	5.79

4M18455.D DFTPP.M Thu May 01 08:47:11 2003 HPMS4

Data File : C:\HPCHEM\1\DATA\050103\5M26106.D Vial: 1
Acq On : 1 May 2003 12:37 Operator: ALT
Sample : WG139485-01 50PPM DFTPP Inst : HPMS5
Misc : 1,1 SOS64-3 Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP



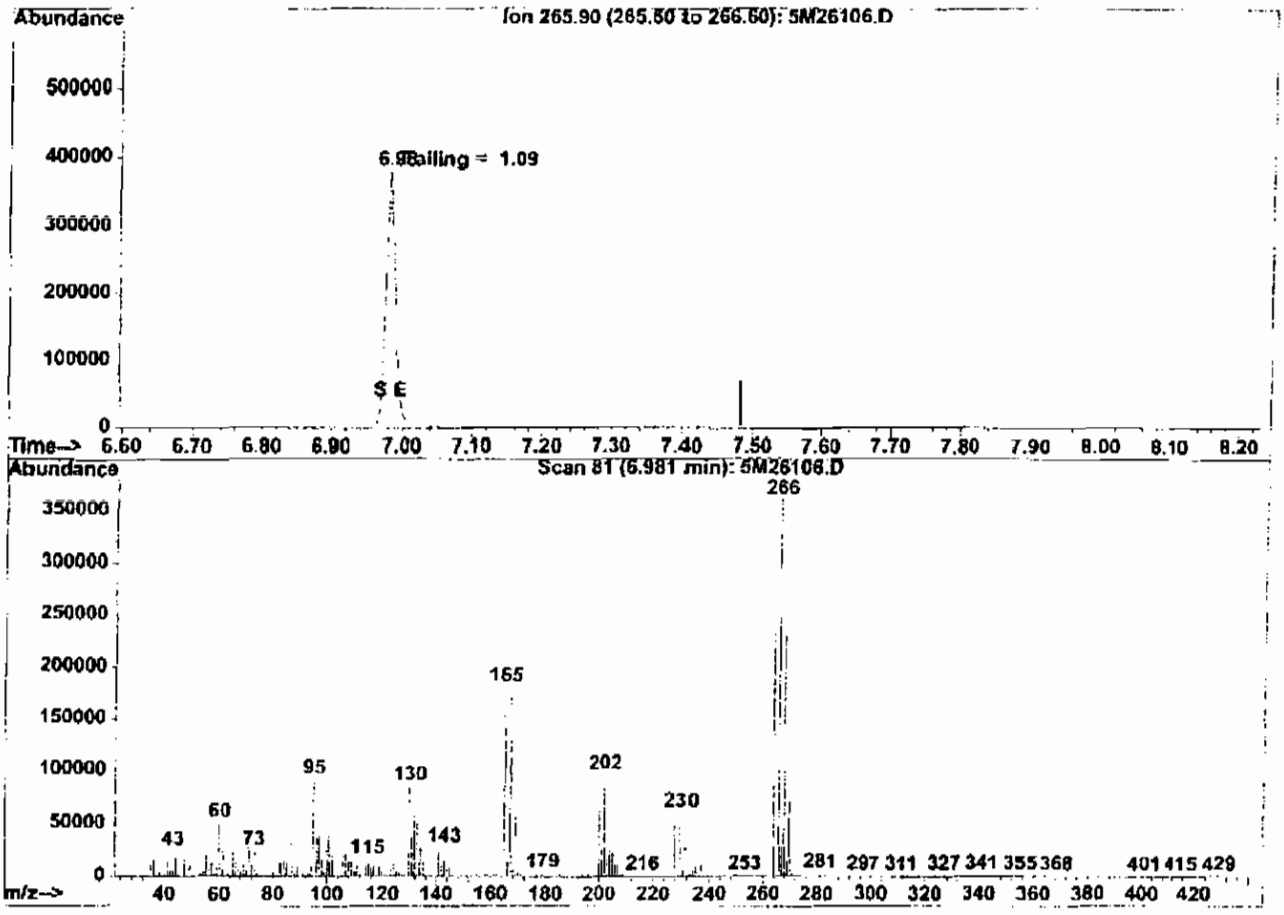
AutoFind: Scans 154, 155, 156; Background Corrected with Scan 143

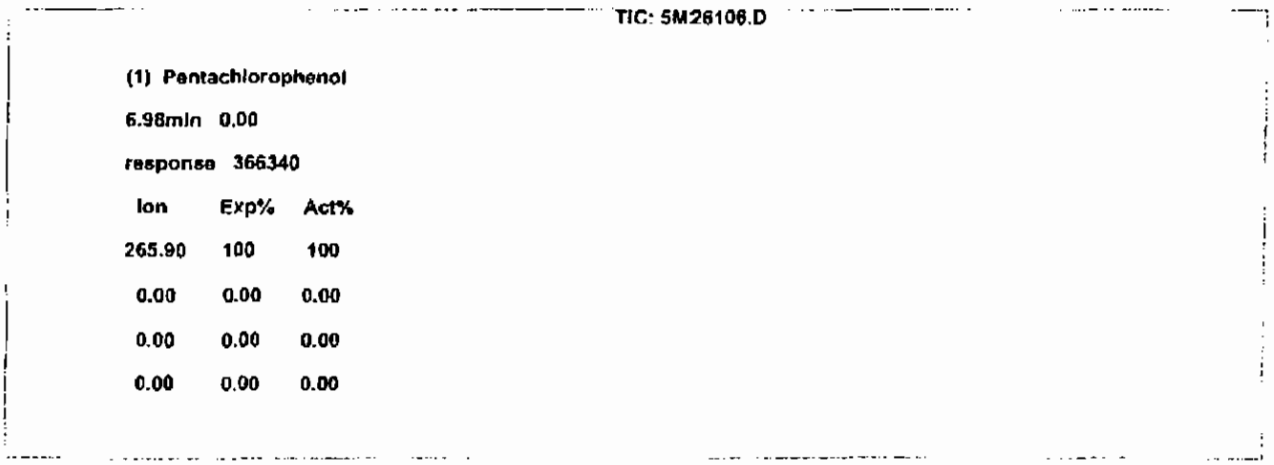
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	45.2	84519	PASS
68	69	0.00	2	1.0	630	PASS
69	198	0.00	100	35.3	65966	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	47.7	89076	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	186865	PASS
199	198	5	9	7.0	13011	PASS
275	198	10	30	18.9	35301	PASS
365	198	1	100	1.5	2818	PASS
441	443	0.01	100	75.9	13393	PASS
442	198	40	100	48.8	91264	PASS
443	442	17	23	19.3	17644	PASS

5M26106.D DFTPP.M Fri May 02 08:10:15 2003 HPMS5

Data File : C:\HPCHEM\1\DATA\050103\5M26106.D Vial: 1
Acq On : 1 May 2003 12:37 Operator: ALT
Sample : WG139485-01 50PPM DFTPP Inst : HPMS5
Misc : 1,1 SOS64-3 Multiplr: 1.00
Quant Time: May 2 8:10 2003 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri May 02 08:09:45 2003
Response via : Single Level Calibration





(1) Pentachlorophenol

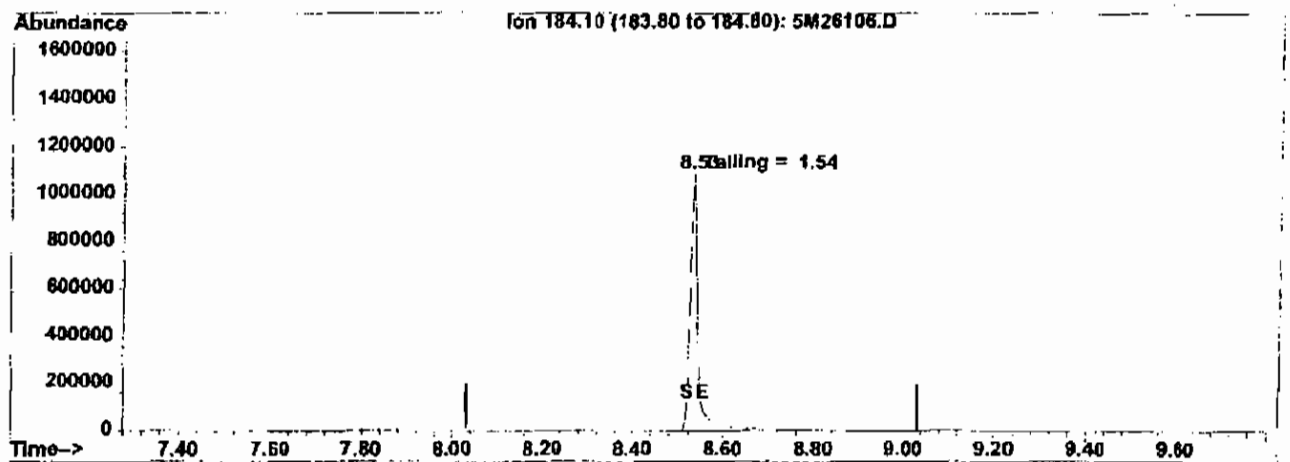
6.98min 0.00

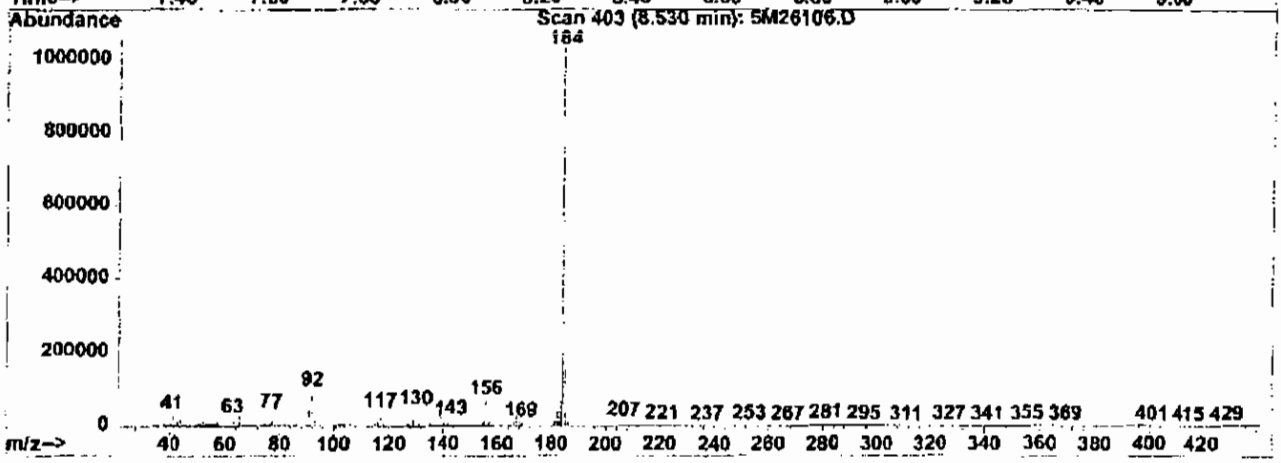
response 366340

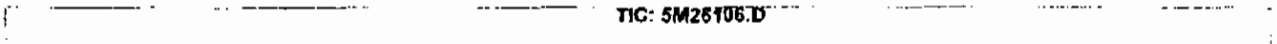
Ion	Exp%	Act%
265.90	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Data File : C:\HPCHEM\1\DATA\050103\5M26106.D Vial: 1
Acq On : 1 May 2003 12:37 Operator: ALT
Sample : WG139485-01 50PPM DFTPP Inst : HPMS5
Misc : 1,1 SOS64-3 Multiplr: 1.00
Quant Time: May 2 8:10 2003 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri May 02 08:09:45 2003
Response via : Single Level Calibration







(2) Benzidine

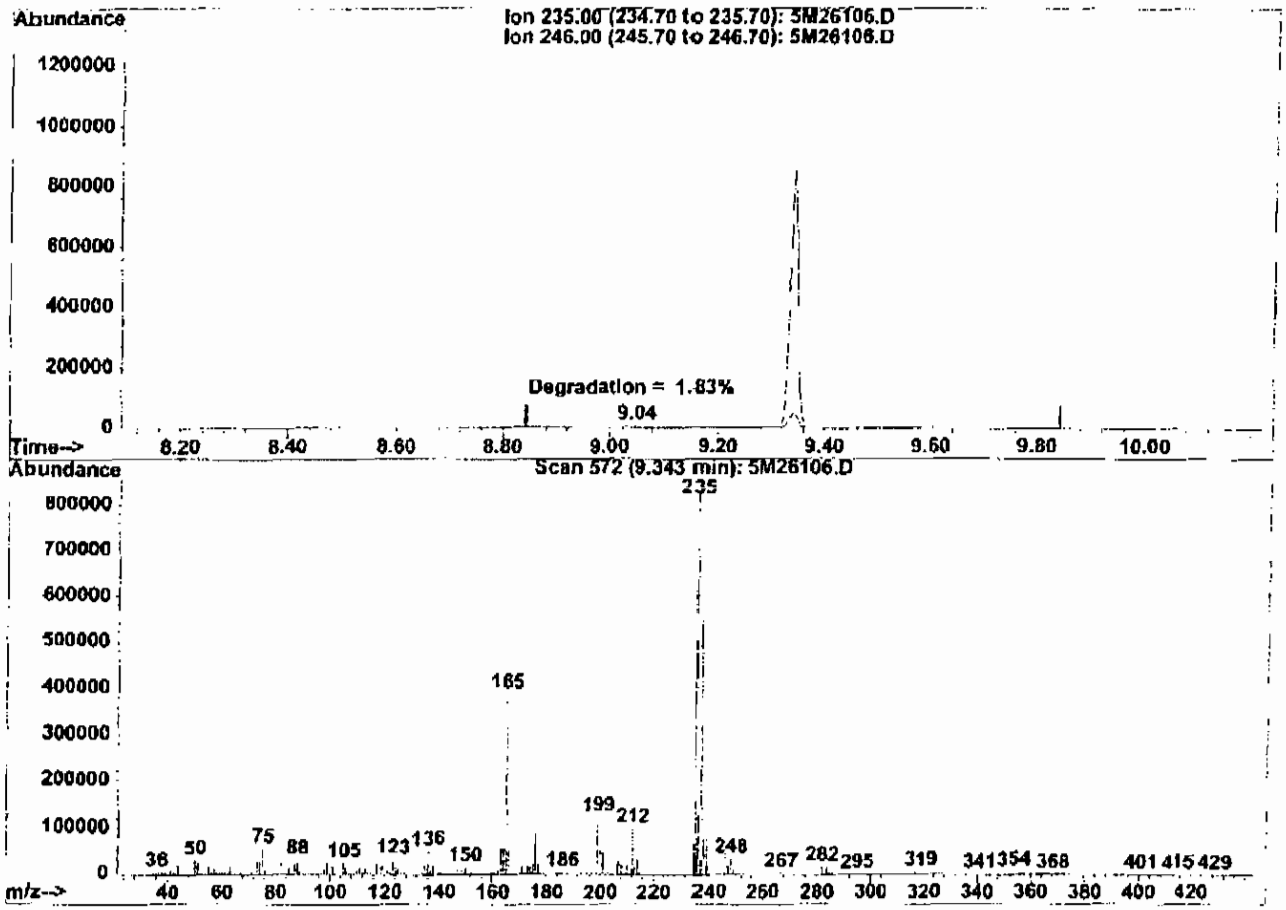
8.53min 0.00

response 1288660

Ion	Exp%	Act%
184.10	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Data File : C:\HPCHEM\1\DATA\050103\5M26106.D Vial: 1
Acq On : 1 May 2003 12:37 Operator: ALT
Sample : WG139485-01 50PPM DFTPP Inst : HPMS5
Misc : 1,1 SOS64-3 Multiplr: 1.00
Quant Time: May 2 8:10 2003 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri May 02 08:09:45 2003
Response via : Single Level Calibration



TIC: 5M26106.D

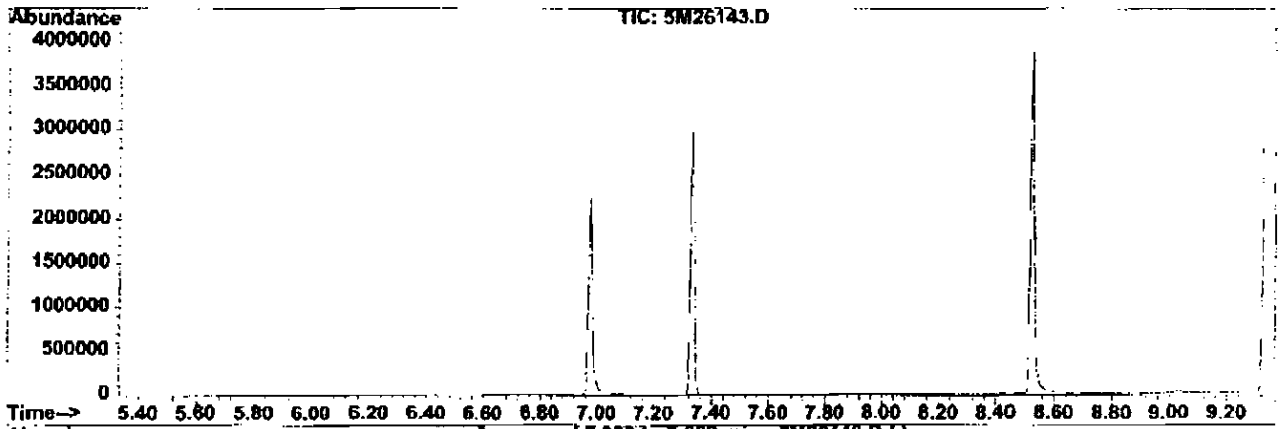
(3) DDT

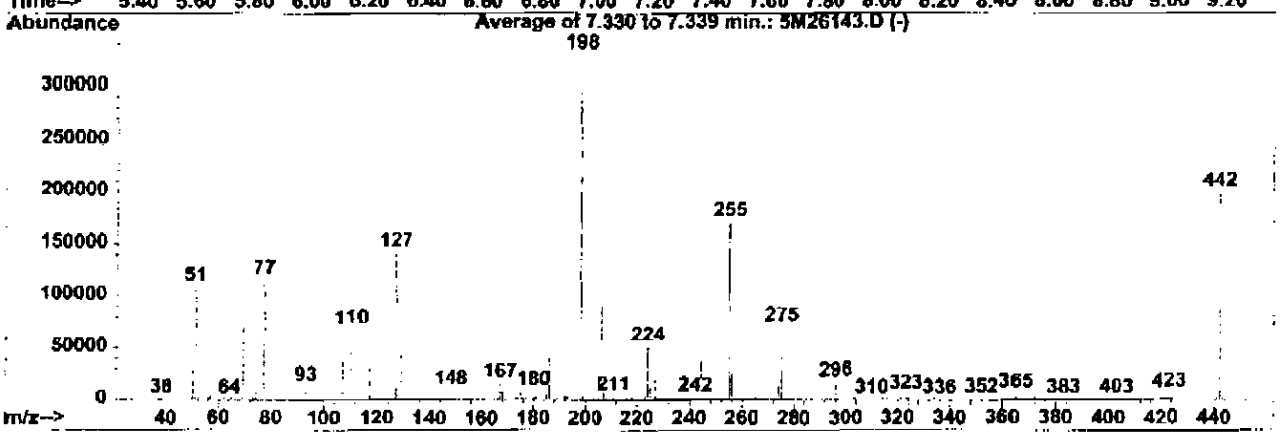
9.34min 0.00

response 868100

Ion	Exp%	Act%
235.00	100	100
246.00	5.80	6.17
0.00	0.00	0.00
0.00	0.00	0.00

Data File : C:\HPCHEM\1\DATA\050203\5M26143.D Vial: 1
Acq On : 2 May 2003 13:45 Operator: ALT
Sample : WG139599-03 50PPM DFTPP Inst : HPMS5
Misc : 1,1 SOS64-3 Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP





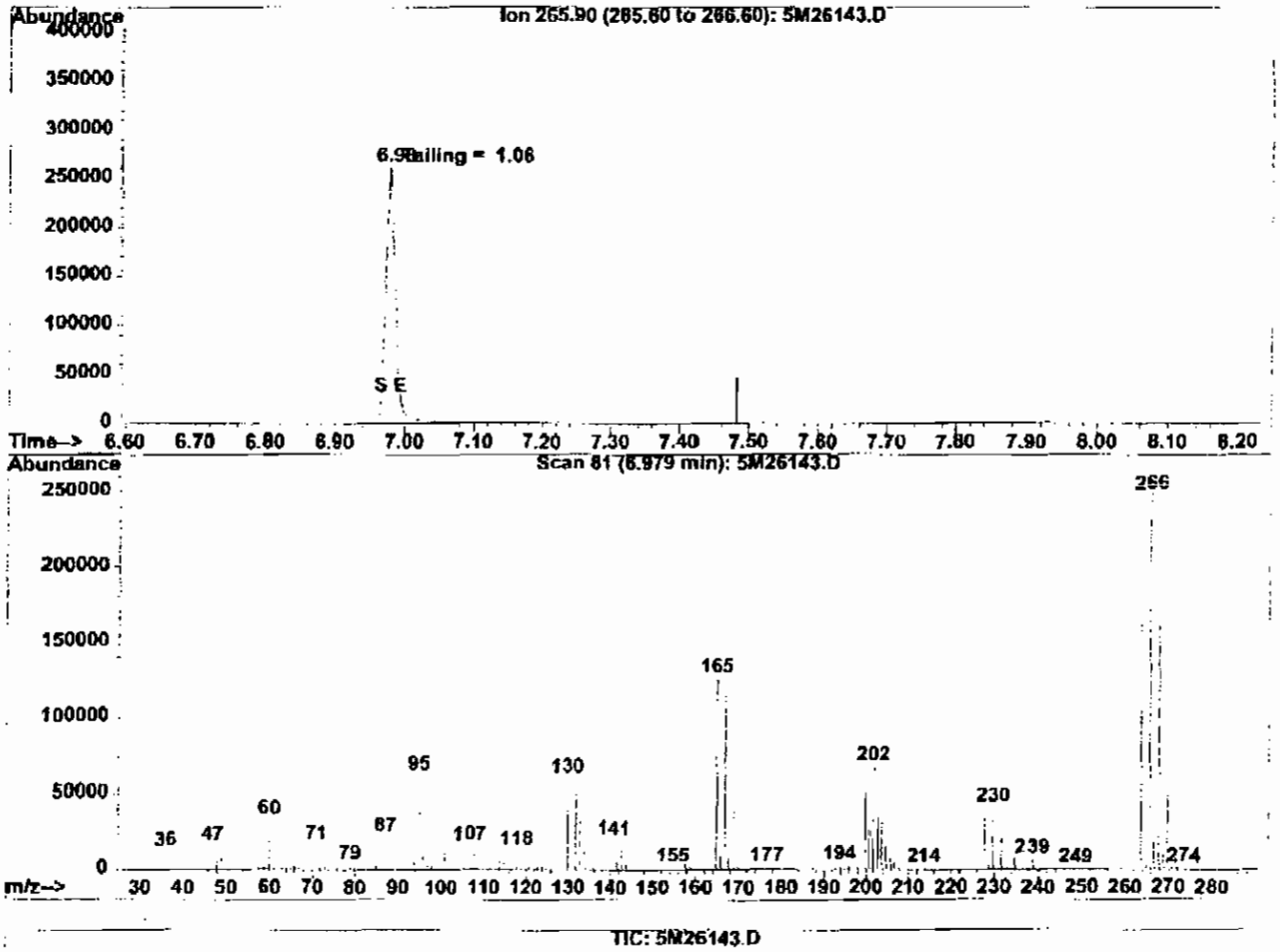
AutoFind: Scans 154, 155, 156; Background Corrected with Scan 147

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	32.6	108324	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	28.5	94755	PASS
70	69	0.00	2	0.5	519	PASS
127	198	40	60	42.7	141851	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	332437	PASS
199	198	5	9	6.9	22904	PASS
275	198	10	30	21.1	70088	PASS
365	198	1	100	1.7	5613	PASS
441	443	0.01	100	75.2	28906	PASS
442	198	40	100	59.7	198584	PASS
443	442	17	23	19.4	38459	PASS

5M26143.D DFTPP.M Sat May 03 07:38:06 2003 HPMS5

Data File : C:\HPCHEM\1\DATA\050203\5M26143.D Vial: 1
Acq On : 2 May 2003 13:45 Operator: ALT
Sample : WG139599-03 50PPM DFTPP Inst : HPMS5
Misc : 1,1 SOS64-3 Multiplr: 1.00
Quant Time: May 2 13:57 2003 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri May 02 08:09:45 2003
Response via : Single Level Calibration



(1) Pentachlorophenol

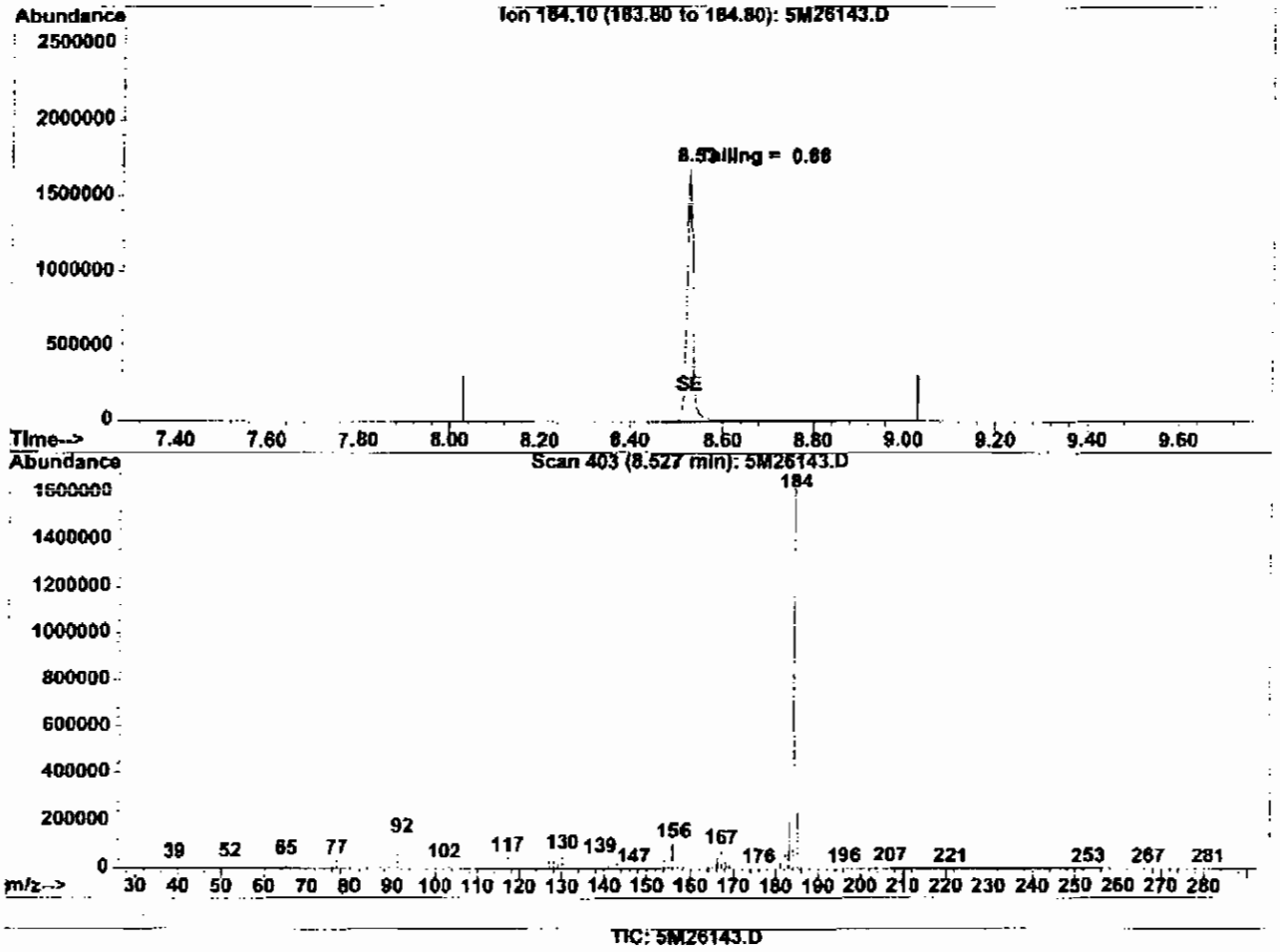
6.98min 0.00

response 254415

Ion	Exp%	Act%
265.90	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Data File : C:\HPCHEM\1\DATA\050203\5M26143.D Vial: 1
Acq On : 2 May 2003 13:45 Operator: ALT
Sample : WG139599-03 50PPM DFTPP Inst : HPMS5
Misc : 1,1 SOS64-3 Multiplr: 1.00
Quant Time: May 2 13:57 2003 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri May 02 08:09:45 2003
Response via : Single Level Calibration



(2) Benzidine

8.53min 0.00

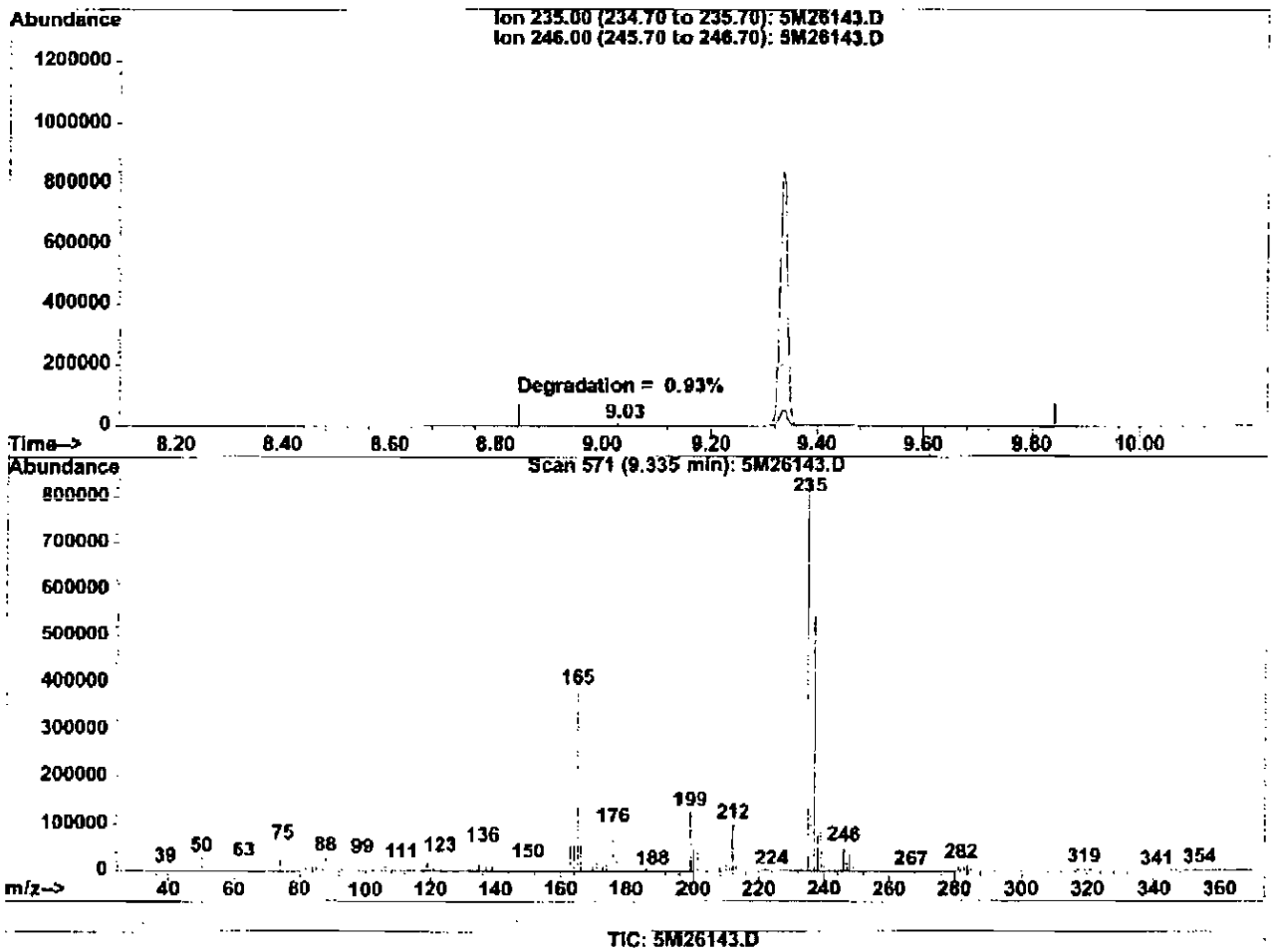
response 1644691

Ion	Exp%	Act%
184.10	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

5M26143.D DFTPP.M Sat May 03 07:38:40 2003 HPMS5

Data File : C:\HPCHEM\1\DATA\050203\5M26143.D Vial: 1
Acq On : 2 May 2003 13:45 Operator: ALT
Sample : WG139599-03 50PPM DFTPP Inst : HPMS5
Misc : 1,1 SOS64-3 Multiplr: 1.00
Quant Time: May 2 13:57 2003 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri May 02 08:09:45 2003
Response via : Single Level Calibration



TIC: 5M26143.D

(3) DDT

9.34min 0.00

response 834590

Ion	Exp%	Act%
235.00	100	100
246.00	5.80	6.40
0.00	0.00	0.00
0.00	0.00	0.00

Data File : C:\HPCHEM\1\DATA\043003\4M18457.D Vial: 3
Acq On : 30 Apr 2003 8:57 Operator: mdc
Sample : WG139340-02 BLK 4/29 V201P101 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 8:55 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:54:47 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.22	152	279347	40.00 ug/ml	0.00
19) Naphthalene-d8	11.86	136	1034034	40.00 ug/ml	0.00
34) Acenaphthene-d10	13.98	164	615171	40.00 ug/ml	0.00
56) Phenanthrene-d10	15.61	188	1035305	40.00 ug/ml	0.00
67) Chrysene-d12	18.48	240	1176683	40.00 ug/ml	0.00
76) Perylene-d12	20.98	264	833805	40.00 ug/ml	0.00

System Monitoring Compounds

4) 2-Fluorophenol	8.49	112	354626	36.4563 ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 36.46%		
6) Phenol-d5	9.70	99	280186	25.0586 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 25.06%		
20) Nitrobenzene-d5	10.94	82	290575	29.2681 ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 58.54%		
38) 2-Fluorobiphenyl	13.15	172	637281	26.3972 ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 52.80%		
55) 2,4,6-Tribromophenol	14.86	330	228537	75.8191 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 75.82%		
70) p-Terphenyl-d14	17.23	244	1208847	41.1384 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 82.28%		

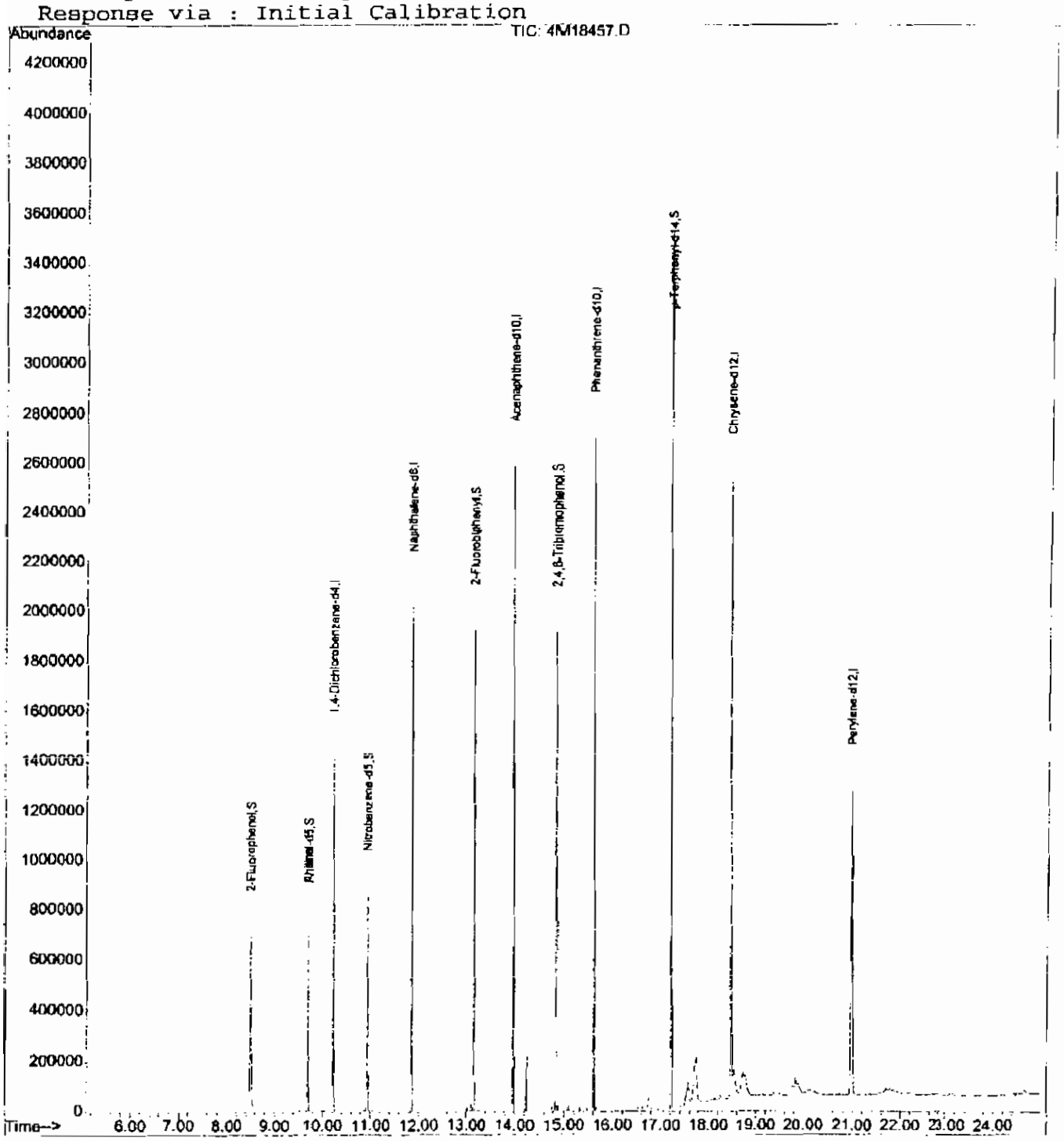
Target Compounds

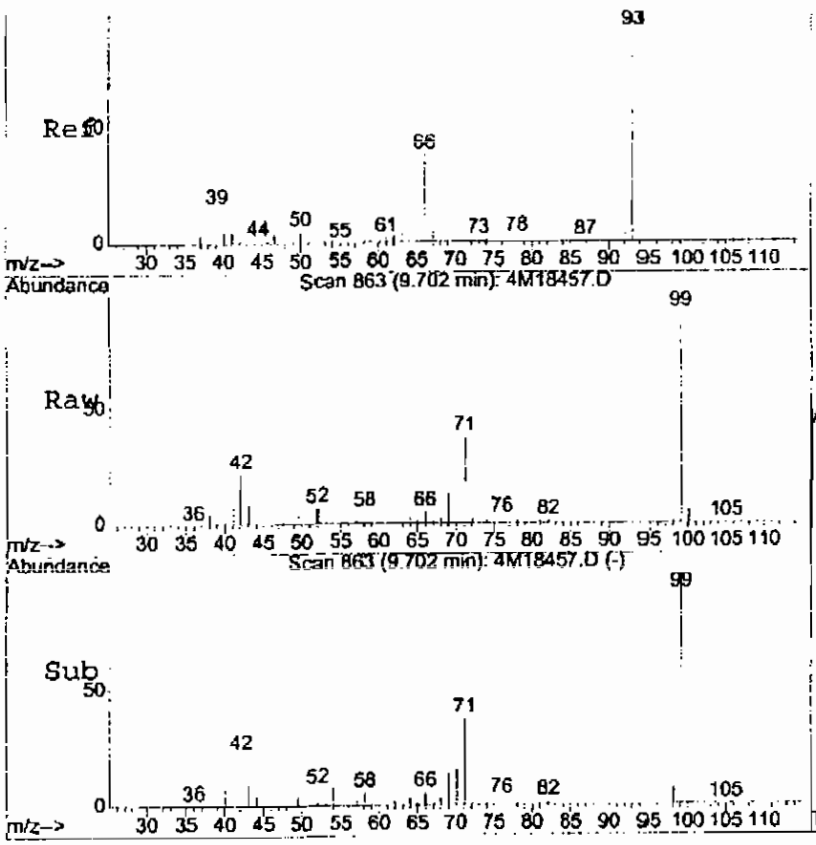
					Qvalue
5) Aniline	9.70	66	15007	4.0038 ug/ml#	1

(#) = qualifier out of range (m) = manual integration
4M18457.D BNA.M Thu May 01 08:55:07 2003 HPMS4 Page 1

Data File : C:\HPCHEM\1\DATA\043003\4M18457.D Vial: 3
Acq On : 30 Apr 2003 8:57 Operator: mdc
Sample : WG139340-02 BLK 4/29 V201P101 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 8:55 2003 Quant Results File: BNA.RES

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:54:47 2003
Response via : Initial Calibration

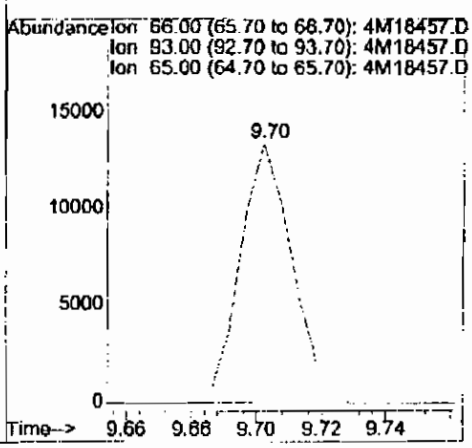




Aniline
Concen: 4.00 ug/ml
RT: 9.70 min Scan# 863
Delta R.T. -0.11 min
Lab File: 4M18457.D
Acq: 30 Apr 2003 8:57

Tgt Ion: 66 Resp: 15007

Ion	Ratio	Lower	Upper
66	100		
93	0.0	206.0	309.0#
65	20.6	40.1	60.1#



Data File : C:\HPCHEM\1\DATA\050203\5M26146.D Vial: 4
Acq On : 2 May 2003 15:04 Operator: ALT
Sample : WG139371-03 BLK 4/30 V201P103 Inst : HPMS5
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 3 8:14 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.79	152	203093	40.00 ug/mL	0.00
19) Naphthalene-d8	9.20	136	796441	40.00 ug/mL	0.00
34) Acenaphthene-d10	11.05	164	505941	40.00 ug/mL	0.00
56) Phenanthrene-d10	12.58	188	803321	40.00 ug/mL	0.00
67) Chrysene-d12	15.31	240	817693	40.00 ug/mL	0.00
76) Perylene-d12	17.36	264	423290	40.00 ug/mL	0.00

System Monitoring Compounds

4) 2-Fluorophenol	6.28	112	195309	28.3839 ug/mL	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 28.38%		
6) Phenol-d5	7.36	99	146361	17.7371 ug/mL	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 17.74%		
20) Nitrobenzene-d5	8.43	82	187683	24.1020 ug/mL	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 48.20%		
38) 2-Fluorobiphenyl	10.32	172	463310	24.9780 ug/mL	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 49.96%		
55) 2,4,6-Tribromophenol	11.88	330	109011	68.8339 ug/mL	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 68.83%		
70) p-Terphenyl-d14	14.17	244	659023	31.6421 ug/mL	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 63.28%		

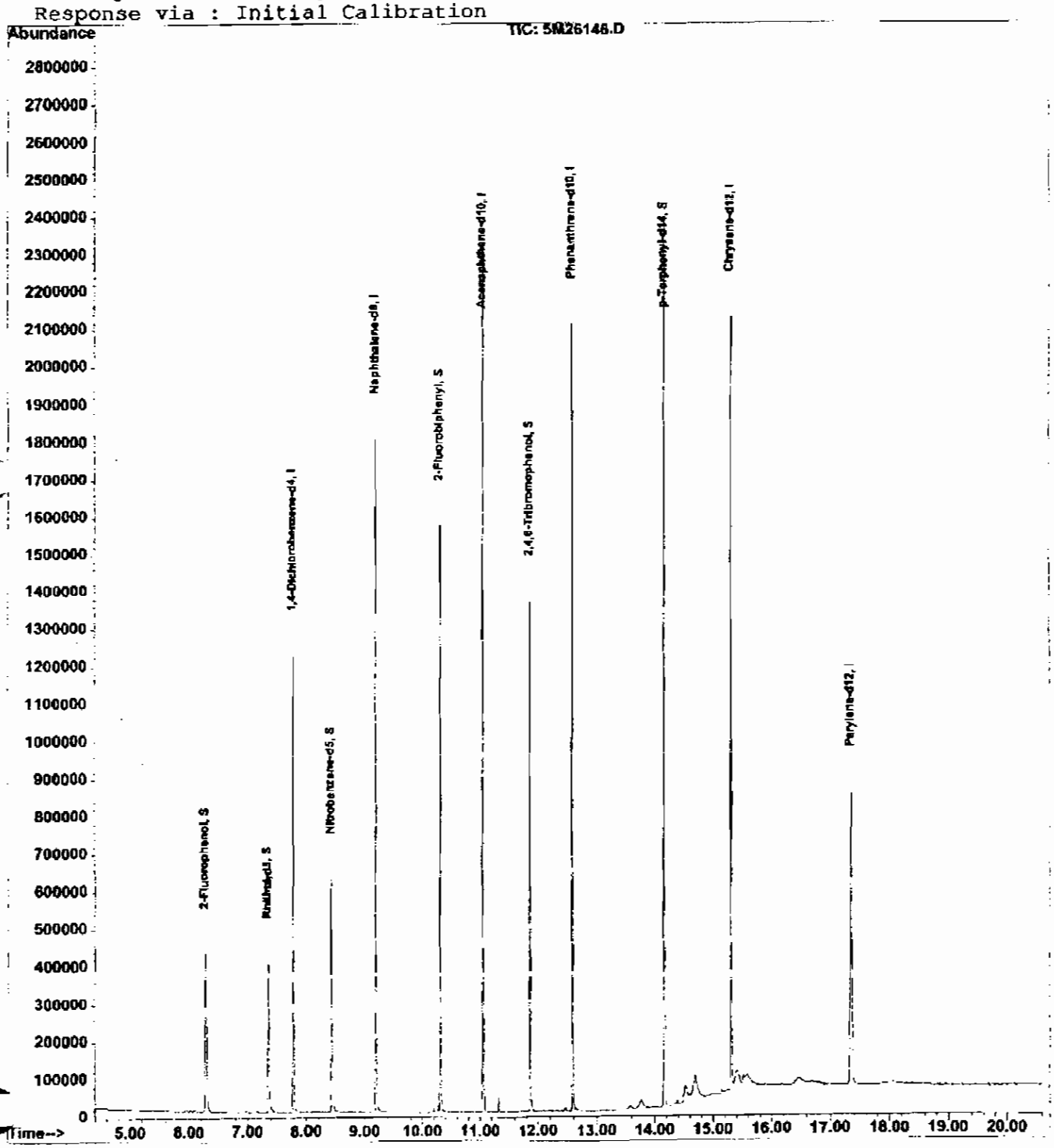
Target Compounds

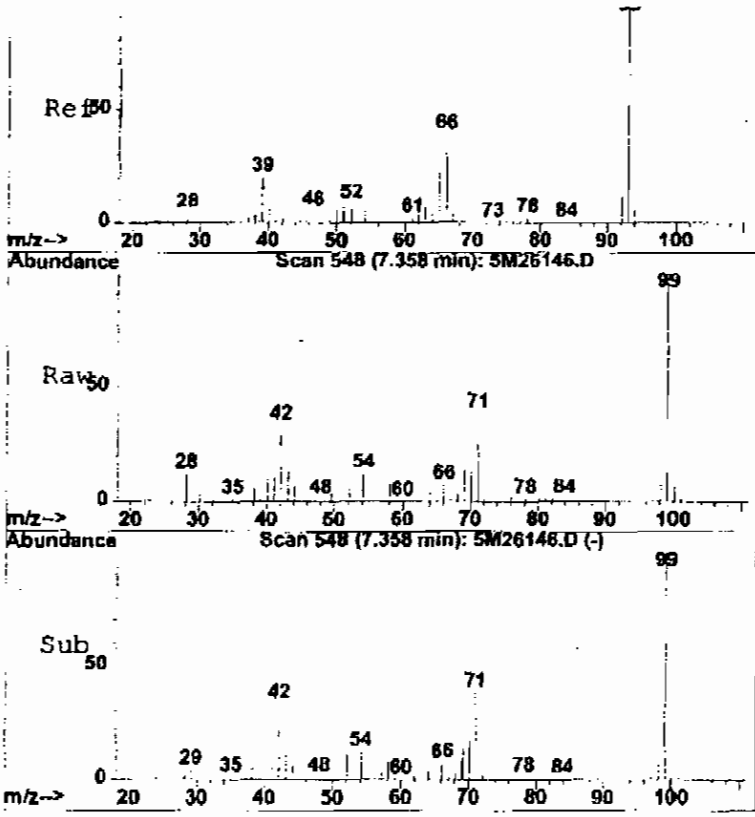
					Qvalue
5) Aniline	7.36	66	9819	3.4383 ug/mL#	1

(#) = qualifier out of range (m) = manual integration
5M26146.D BNA.M Sat May 03 08:14:59 2003 HPMS5 Page 1

Data File : C:\HPCHEM\1\DATA\050203\5M26146.D Vial: 4
Acq On : 2 May 2003 15:04 Operator: ALT
Sample : WG139371-03 BLK 4/30 V201P103 Inst : HPMS5
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 3 8:14 2003 Quant Results File: BNA.RES

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Initial Calibration

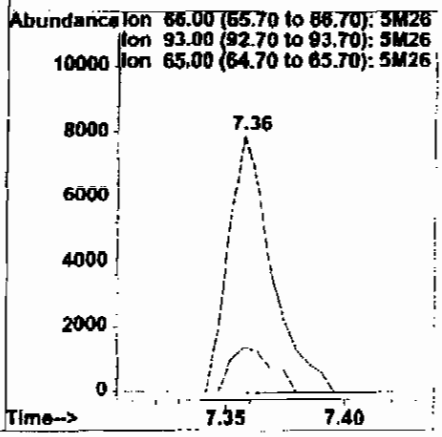




Aniline
Concen: 3.44 ug/mL
RT: 7.36 min Scan# 548
Delta R.T. -0.08 min
Lab File: 5M26146.D
Acq: 2 May 2003 15:04

Tgt Ion: 66 Resp: 9819

Ion	Ratio	Lower	Upper
66	100		
93	0.0	212.4	318.6#
65	16.5	45.3	67.9#



Data File : C:\HPCHEM\1\DATA\043003\4M18459.D Vial: 5
Acq On : 30 Apr 2003 10:08 Operator: mdc
Sample : WG139289-01 TBLK 4/28 V201P101 Inst : HPMS4
Misc : 17,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 8:55 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:54:47 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.22	152	293892	40.00 ug/ml	0.00
19) Naphthalene-d8	11.85	136	1088333	40.00 ug/ml	0.00
34) Acenaphthene-d10	13.98	164	642038	40.00 ug/ml	0.00
56) Phenanthrene-d10	15.61	188	1078596	40.00 ug/ml	0.00
67) Chrysene-d12	18.48	240	1230853	40.00 ug/ml	0.00
76) Perylene-d12	20.98	264	869475	40.00 ug/ml	0.00

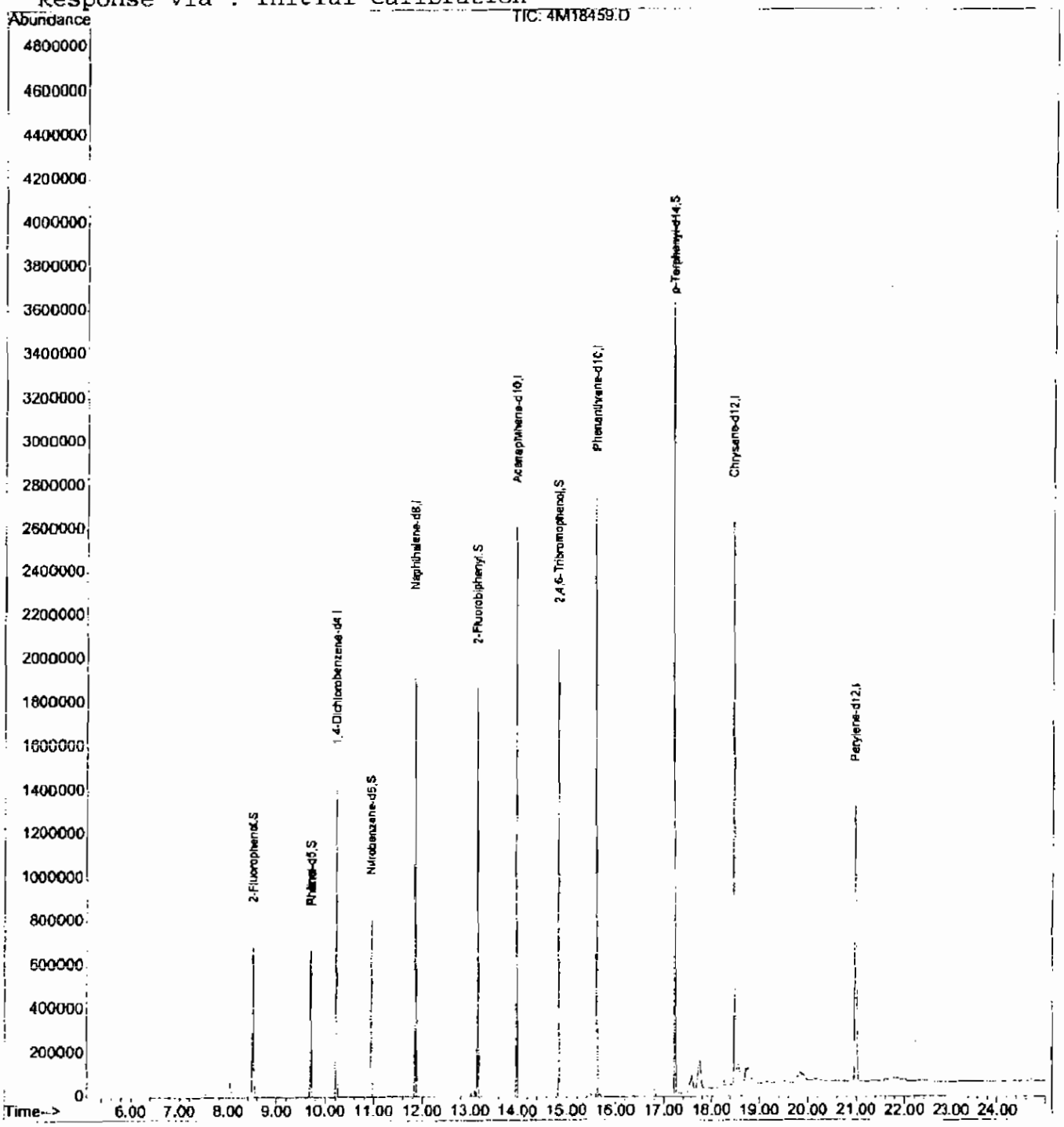
System Monitoring Compounds					
4) 2-Fluorophenol	8.50	112	347729	33.9781 ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 33.98%		
6) Phenol-d5	9.71	99	274728	23.3544 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 23.35%		
20) Nitrobenzene-d5	10.94	82	293341	28.0725 ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 56.14%		
38) 2-Fluorobiphenyl	13.15	172	636814	25.2740 ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 50.54%		
55) 2,4,6-Tribromophenol	14.86	330	233831	74.3292 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 74.33%		
70) p-Terphenyl-d14	17.23	244	1285771	41.8305 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 83.66%		

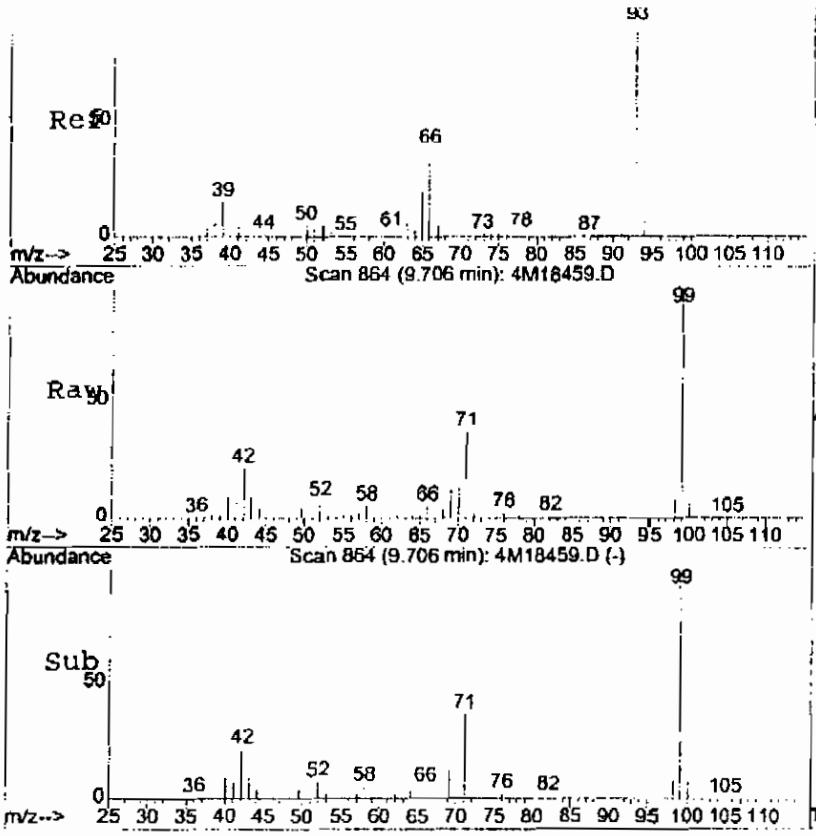
Target Compounds					Qvalue
5) Aniline	9.71	66	14847	3.7651 ug/ml#	1

(#) = qualifier out of range (m) = manual integration
4M18459.D BNA.M Thu May 01 08:55:45 2003 HPMS4 Page 1

Data File : C:\HPCHEM\1\DATA\043003\4M18459.D Vial: 5
Acq On : 30 Apr 2003 10:08 Operator: mdc
Sample : WG139289-01 TBLK 4/28 V201P101 Inst : HPMS4
Misc : 17,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 8:55 2003 Quant Results File: BNA.RES

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:54:47 2003
Response via : Initial Calibration

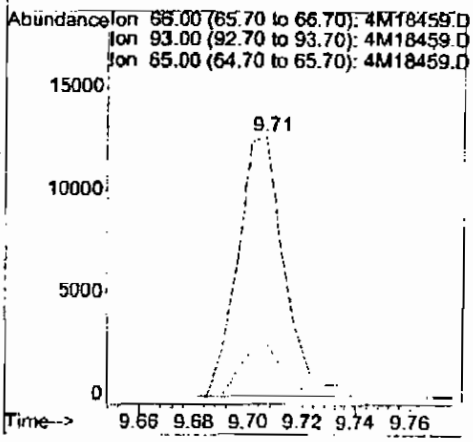




Aniline
Concen: 3.77 ug/ml
RT: 9.71 min Scan# 864
Delta R.T. -0.11 min
Lab File: 4M18459.D
Acq: 30 Apr 2003 10:08

Tgt Ion: 66 Resp: 14847

Ion	Ratio	Lower	Upper
66	100		
93	0.0	206.0	309.0#
65	17.7	40.1	60.1#



Data File : C:\HPCHEM\1\DATA\043003\4M18458.D Vial: 4
Acq On : 30 Apr 2003 9:33 Operator: mdc
Sample : WG139340-03 LCS 4/29 V201P101 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 8:55 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:54:47 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.22	152	279419	40.00 ug/ml	0.00
19) Naphthalene-d8	11.86	136	1049663	40.00 ug/ml	0.00
34) Acenaphthene-d10	13.98	164	622729	40.00 ug/ml	0.00
56) Phenanthrene-d10	15.61	188	1055220	40.00 ug/ml	0.00
67) Chrysene-d12	18.49	240	1263001	40.00 ug/ml	0.00
76) Perylene-d12	20.99	264	886243	40.00 ug/ml	0.00

System Monitoring Compounds					
4) 2-Fluorophenol	8.50	112	352746	36.2537 ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 36.25%		
6) Phenol-d5	9.71	99	286170	25.5872 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 25.59%		
20) Nitrobenzene-d5	10.95	82	286985	28.4761 ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 56.96%		
38) 2-Fluorobiphenyl	13.16	172	648922	26.5532 ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 53.10%		
55) 2,4,6-Tribromophenol	14.86	330	284754	93.3230 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 93.32%		
70) p-Terphenyl-d14	17.23	244	1321298	41.8921 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 83.78%		

Target Compounds					Qvalue
2) Pyridine	6.23	79	67633	6.9939 ug/ml	97
3) n-Nitrosodimethylamine	6.23	74	110602	20.9336 ug/ml	97
5) Aniline	9.81	66	94090	25.0965 ug/ml	100
7) Phenol	9.72	94	149525	12.1058 ug/ml	91
8) bis(2-Chloroethyl)ether	9.87	63	177096	27.7052 ug/ml	98
9) 2-Chlorophenol	9.96	128	279823	26.9174 ug/ml	99
10) 1,3-Dichlorobenzene	10.15	146	224609	18.7832 ug/ml	99
11) 1,4-Dichlorobenzene	10.25	146	236516	19.0834 ug/ml	99
12) Benzyl Alcohol	10.38	108	179409	27.0926 ug/ml	100
13) 1,2-Dichlorobenzene	10.45	146	230905	20.0238 ug/ml	100
14) 2-Methylphenol	10.50	107	212628	26.3062 ug/ml	98
15) bis(2-Chloroisopropyl)ethe	10.54	45	344169	27.4368 ug/ml	99
16) 3-,4-Methylphenol	10.68	107	292485	24.7986 ug/ml	99
17) n-Nitrosodipropylamine	10.71	70	195758	29.8029 ug/ml	99
18) Hexachloroethane	10.88	117	75054	17.6178 ug/ml	99
21) Nitrobenzene	10.97	77	276163	27.7730 ug/ml	99
22) Isophorone	11.24	82	546728	31.7464 ug/ml	100
23) 2-Nitrophenol	11.37	139	163063	27.9344 ug/ml	93
24) 2,4-Dimethylphenol	11.36	122	306343	31.1214 ug/ml	100
25) bis(2-Chloroethoxy)methane	11.48	93	320500	29.0222 ug/ml	100

(#) = qualifier out of range (m) = manual integration
4M18458.D BNA.M Thu May 01 08:55:25 2003 HPMS4 Page 1

Data File : C:\HPCHEM\1\DATA\043003\4M18458.D Vial: 4
Acq On : 30 Apr 2003 9:33 Operator: mdc
Sample : WG139340-03 LCS 4/29 V201P101 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 8:55 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:54:47 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
26) Benzoic Acid	11.40	122	12600	2.9899 ug/ml	90
27) 2,4-Dichlorophenol	11.65	162	262569	29.7534 ug/ml	100
28) 1,2,4-Trichlorobenzene	11.77	180	217034	20.8633 ug/ml	99
29) Naphthalene	11.89	128	755478	25.0395 ug/ml	100
30) 4-Chloroaniline	11.94	127	369789	34.9085 ug/ml	100
31) Hexachlorobutadiene	12.01	225	125836	19.2030 ug/ml	99
32) 4-Chloro-3-Methylphenol	12.49	107	312556	35.7152 ug/ml	100
33) 2-Methylnaphthalene	12.73	142	528794	24.7961 ug/ml	100
35) Hexachlorocyclopentadiene	12.92	237	120684	20.7191 ug/ml	99
36) 2,4,6-Trichlorophenol	13.07	196	225078	33.5540 ug/ml	100
37) 2,4,5-Trichlorophenol	13.11	196	271695	37.8215 ug/ml	99
39) 2-Chloronaphthalene	13.33	162	534389	26.1912 ug/ml	99
40) 2-Nitroaniline	13.45	65	195768	36.5273 ug/ml	99
41) Dimethylphthalate	13.61	163	869089	38.5601 ug/ml	100
42) Acenaphthylene	13.82	152	1015224	30.7676 ug/ml	100
43) 2,6-Dinitrotoluene	13.72	165	198388	37.8443 ug/ml	99
44) 3-Nitroaniline	13.92	138	219442	57.2550 ug/ml	99
45) Acenaphthene	14.02	154	618316	30.4010 ug/ml	100
46) 2,4-Dinitrophenol	14.03	184	93204	32.3148 ug/ml	73
47) 4-Nitrophenol	14.04	65	74544	19.2407 ug/ml	96
48) Dibenzofuran	14.20	168	933388	31.1341 ug/ml	100
49) 2,4-Dinitrotoluene	14.17	165	289514	41.7799 ug/ml	98
50) Diethylphthalate	14.39	149	931540	42.1329 ug/ml	100
51) Fluorene	14.58	166	805181	34.8939 ug/ml	99
52) 4-Chlorophenyl Phenyl Ethe	14.54	204	420035	33.9921 ug/ml	100
53) 4-Nitroaniline	14.61	138	194680	52.6874 ug/ml	97
54) 1,2-Diphenylhydrazine	14.72	77	753225	37.0884 ug/ml	99
57) 4,6-Dinitro-2-Methylphenol	14.63	198	169247	39.8532 ug/ml	99
58) n-Nitrosodiphenylamine	14.67	169	695697	42.8810 ug/ml	99
59) 4-Bromophenyl Phenyl Ether	15.09	248	240453	38.3875 ug/ml	100
60) Hexachlorobenzene	15.21	284	302769	40.9224 ug/ml	100
61) Pentachlorophenol	15.40	266	160015	44.1986 ug/ml	98
62) Phenanthrene	15.64	178	1436956	43.4319 ug/ml	100
63) Anthracene	15.69	178	1466544	45.1604 ug/ml	100
64) Carbazole	15.85	167	1309067	60.9019 ug/ml	100
65) Di-n-Butyl Phthalate	16.11	149	1722638	47.3257 ug/ml	100
66) Fluoranthene	16.90	202	1784172	46.8780 ug/ml	99
68) Benzidine	16.99	184	6060	5.6801 ug/ml	100
69) Pyrene	17.15	202	1857775	41.0895 ug/ml	100
71) Butyl Benzyl Phthalate	17.68	149	853081	43.4943 ug/ml	100
72) Benzo[a]anthracene	18.47	228	1845025	41.5758 ug/ml	100

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

Data File : C:\HPCHEM\1\DATA\043003\4M18458.D Vial: 4
Acq On : 30 Apr 2003 9:33 Operator: mdc
Sample : WG139340-03 LCS 4/29 V201P101 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 8:55 2003 Quant Results File: BNA.RES

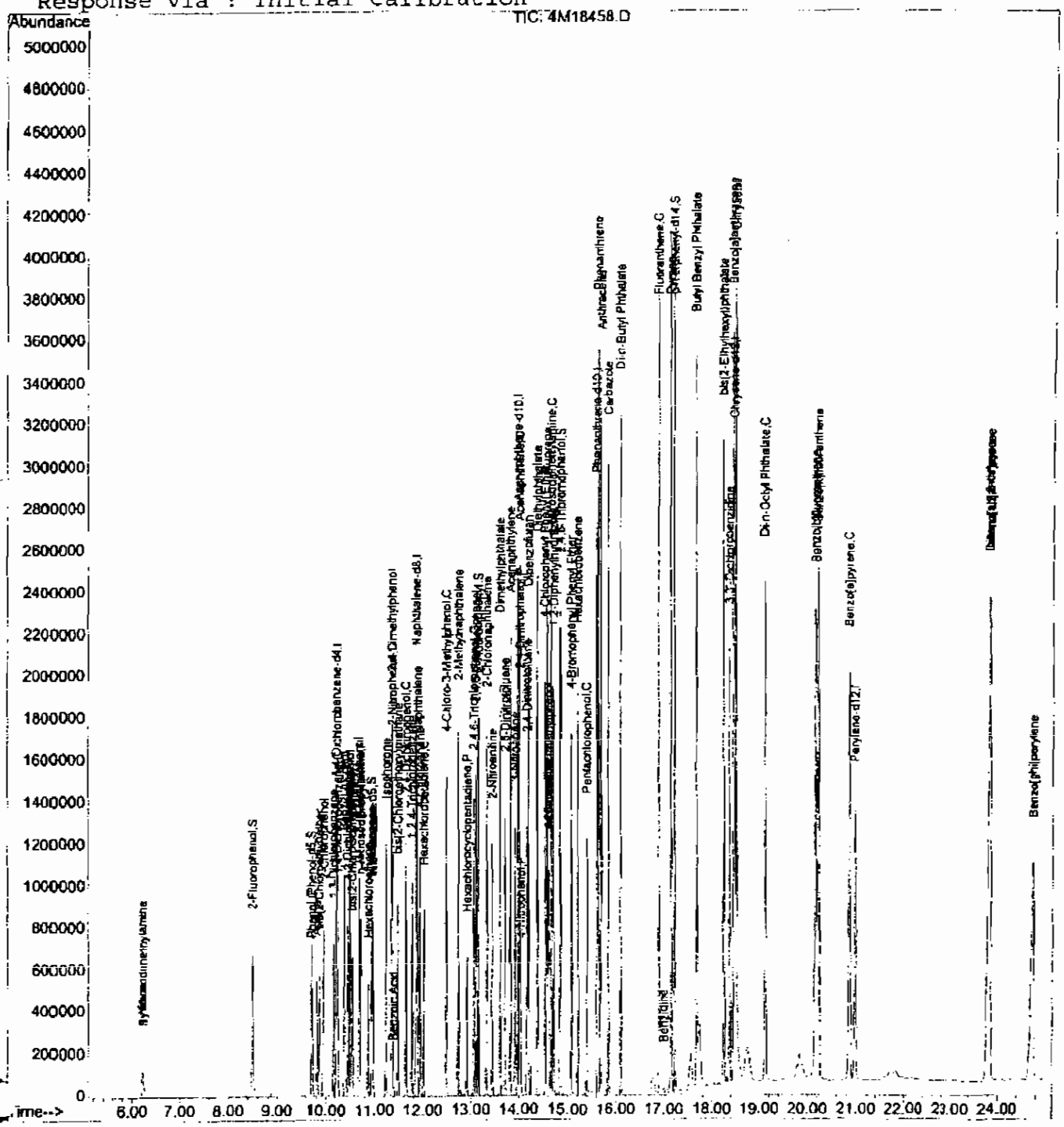
Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:54:47 2003
Response via : Initial Calibration
DataAcq Meth : BNA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
73)	3,3'-Dichlorobenzidine	18.38	252	582490	58.2066 ug/ml	99
74)	Chrysene	18.53	228	1776318	41.8331 ug/ml	99
75)	bis(2-Ethylhexyl)phthalate	18.26	149	1149863	42.4013 ug/ml	100
77)	Di-n-Octyl Phthalate	19.12	149	1970194	48.0187 ug/ml	100
78)	Benzo[b]fluoranthene	20.18	252	1803404	44.2954 ug/ml	98
79)	Benzo[k]fluoranthene	20.22	252	1850636	48.2981 ug/ml	98
80)	Benzo[a]pyrene	20.87	252	1756183	47.5830 ug/ml	99
81)	Indeno[1,2,3-cd]pyrene	23.83	276	1995231	45.8435 ug/ml	99
82)	Dibenz[ah]anthracene	23.83	278	1720359	46.1190 ug/ml	100
83)	Benzo[ghi]perylene	24.72	276	1644574	46.2151 ug/ml	99

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

Data File : C:\HPCHEM\1\DATA\043003\4M18458.D Vial: 4
Acq On : 30 Apr 2003 9:33 Operator: mdc
Sample : WG139340-03 LCS 4/29 V201P101 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 8:55 2003 Quant Results File: BNA.RES

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625/Initial cal. 04/29/03
Last Update : Thu May 01 08:54:47 2003
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\050203\5M26147.D Vial: 5
Acq On : 2 May 2003 15:34 Operator: ALT
Sample : WG139371-04 LCS 4/30 V201P103 Inst : HPMS5
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 3 8:21 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.79	152	208380	40.00	ug/mL	0.00
19) Naphthalene-d8	9.20	136	787931	40.00	ug/mL	0.00
34) Acenaphthene-d10	11.05	164	506763	40.00	ug/mL	0.00
56) Phenanthrene-d10	12.59	188	810695	40.00	ug/mL	0.00
67) Chrysene-d12	15.31	240	891957	40.00	ug/mL	0.00
76) Perylene-d12	17.36	264	441047	40.00	ug/mL	0.00

System Monitoring Compounds						
4) 2-Fluorophenol	6.28	112	186095	26.3586	ug/mL	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 26.36%			
6) Phenol-d5	7.36	99	151508	17.8950	ug/mL	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 17.90%			
20) Nitrobenzene-d5	8.43	82	182802	23.7287	ug/mL	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 47.46%			
38) 2-Fluorobiphenyl	10.31	172	461536	24.8420	ug/mL	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 49.68%			
55) 2,4,6-Tribromophenol	11.87	330	115828	73.0198	ug/mL	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 73.02%			
70) p-Terphenyl-d14	14.17	244	578682	25.4713	ug/mL	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 50.94%			

Target Compounds						Qvalue
2) Pyridine	4.67	79	38779	5.0502	ug/mL	94
3) n-Nitrosodimethylamine	4.57	74	67845	14.6676	ug/mL#	79
5) Aniline	7.43	66	67074	22.8913	ug/mL	95
7) Phenol	7.37	94	78766	8.7626	ug/mL#	84
8) bis(2-Chloroethyl)ether	7.48	63	142790	23.9525	ug/mL	97
9) 2-Chlorophenol	7.56	128	169762	22.0140	ug/mL	100
10) 1,3-Dichlorobenzene	7.73	146	144786	15.6822	ug/mL	98
11) 1,4-Dichlorobenzene	7.81	146	155989	16.2323	ug/mL	97
12) Benzyl Alcohol	7.94	108	93633	19.5444	ug/mL	92
13) 1,2-Dichlorobenzene	8.00	146	157898	17.7242	ug/mL	99
14) 2-Methylphenol	8.05	107	119337	20.7841	ug/mL	92
15) bis(2-Chloroisopropyl)ethe	8.07	45	349667	24.2495	ug/mL	96
16) 3-,4-Methylphenol	8.21	107	162669	19.3286	ug/mL	98
17) n-Nitrosodipropylamine	8.23	70	125923	24.8359	ug/mL	92
18) Hexachloroethane	8.35	117	52718	14.3972	ug/mL	99
21) Nitrobenzene	8.45	77	176408	23.6658	ug/mL	97
22) Isophorone	8.68	82	345966	25.4545	ug/mL	99
23) 2-Nitrophenol	8.79	139	99075	24.3536	ug/mL	87
24) 2,4-Dimethylphenol	8.79	122	189547	25.7085	ug/mL	97
25) bis(2-Chloroethoxy)methane	8.90	93	210019	23.9129	ug/mL#	96
26) Benzoic Acid	8.87	122	18168	4.8012	ug/mL	92

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

Data File : C:\HPCHEM\1\DATA\050203\5M26147.D Vial: 5
Acq On : 2 May 2003 15:34 Operator: ALT
Sample : WG139371-04 LCS 4/30 V201P103 Inst : HPMS5
isc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 3 8:21 2003 Quant Results File: BNA.RES

Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Initial Calibration
DataAcq Meth : BNA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
27) 2,4-Dichlorophenol	9.04	162	158206	23.4508 ug/mL	100
28) 1,2,4-Trichlorobenzene	9.13	180	145701	18.1507 ug/mL	100
29) Naphthalene	9.22	128	499731	22.3549 ug/mL	99
30) 4-Chloroaniline	9.28	127	224560	28.0095 ug/mL	99
31) Hexachlorobutadiene	9.33	225	80923	15.3289 ug/mL	100
32) 4-Chloro-3-Methylphenol	9.76	107	171242	27.6502 ug/mL	98
33) 2-Methylnaphthalene	9.95	142	358234	22.4266 ug/mL	99
35) Hexachlorocyclopentadiene	10.11	237	33424	13.5833 ug/mL	98
36) 2,4,6-Trichlorophenol	10.24	196	138669	25.5106 ug/mL	99
37) 2,4,5-Trichlorophenol	10.29	196	157711	27.6215 ug/mL	99
39) 2-Chloronaphthalene	10.47	162	366720	22.6455 ug/mL	98
40) 2-Nitroaniline	10.59	65	129939	29.6102 ug/mL	95
41) Dimethylphthalate	10.73	163	555835	31.2568 ug/mL	99
42) Acenaphthylene	10.91	152	659035	26.2634 ug/mL	100
43) 2,6-Dinitrotoluene	10.83	165	108781	29.3043 ug/mL	91
44) 3-Nitroaniline	11.01	138	123853	32.8500 ug/mL	99
45) Acenaphthene	11.09	154	377606	25.0623 ug/mL	99
46) 2,4-Dinitrophenol	11.12	184	39058	22.5224 ug/mL	89
47) 4-Nitrophenol	11.17	65	26010	9.4396 ug/mL	90
48) Dibenzofuran	11.26	168	648808	28.5713 ug/mL	98
49) 2,4-Dinitrotoluene	10.83	165	108781	29.3043 ug/mL	91
50) Diethylphthalate	11.44	149	595924	33.5427 ug/mL	99
51) Fluorene	11.61	166	544209	29.6371 ug/mL	100
52) 4-Chlorophenyl Phenyl Ethe	11.58	204	261437	28.5336 ug/mL	98
53) 4-Nitroaniline	11.65	138	121743	32.1761 ug/mL#	84
54) 1,2-Diphenylhydrazine	11.74	77	534136	31.5152 ug/mL	97
57) 4,6-Dinitro-2-Methylphenol	11.67	198	88124	31.0803 ug/mL	93
58) n-Nitrosodiphenylamine	11.71	169	424564	33.2281 ug/mL	99
59) 4-Bromophenyl Phenyl Ether	12.09	248	144161	30.7885 ug/mL	99
60) Hexachlorobenzene	12.20	284	153096	32.1247 ug/mL	96
61) Pentachlorophenol	12.39	266	73190	26.2623 ug/mL	99
62) Phenanthrene	12.61	178	934451	34.8485 ug/mL	100
63) Anthracene	12.67	178	935122	35.6845 ug/mL	100
64) Carbazole	12.82	167	835622	36.7044 ug/mL	99
65) Di-n-Butyl Phthalate	13.08	149	1081181	35.7193 ug/mL	99
66) Fluoranthene	13.84	202	1068210	36.8436 ug/mL	98
68) Benzidine	13.96	184	4476	3.8592 ug/mL	100
69) Pyrene	14.08	202	1132103	32.5361 ug/mL	99
71) Butyl Benzyl Phthalate	14.63	149	534804	32.9804 ug/mL	98
72) Benzo[a]anthracene	15.30	228	1164714	34.3539 ug/mL	99
73) 3,3'-Dichlorobenzidine	15.24	252	295569	37.6467 ug/mL	98
74) Chrysene	15.34	228	1082499	33.3602 ug/mL	100

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

Data File : C:\HPCHEM\1\DATA\050203\5M26147.D Vial: 5
Acq On : 2 May 2003 15:34 Operator: ALT
Sample : WG139371-04 LCS 4/30 V201P103 Inst : HPMS5
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 3 8:21 2003 Quant Results File: BNA.RES

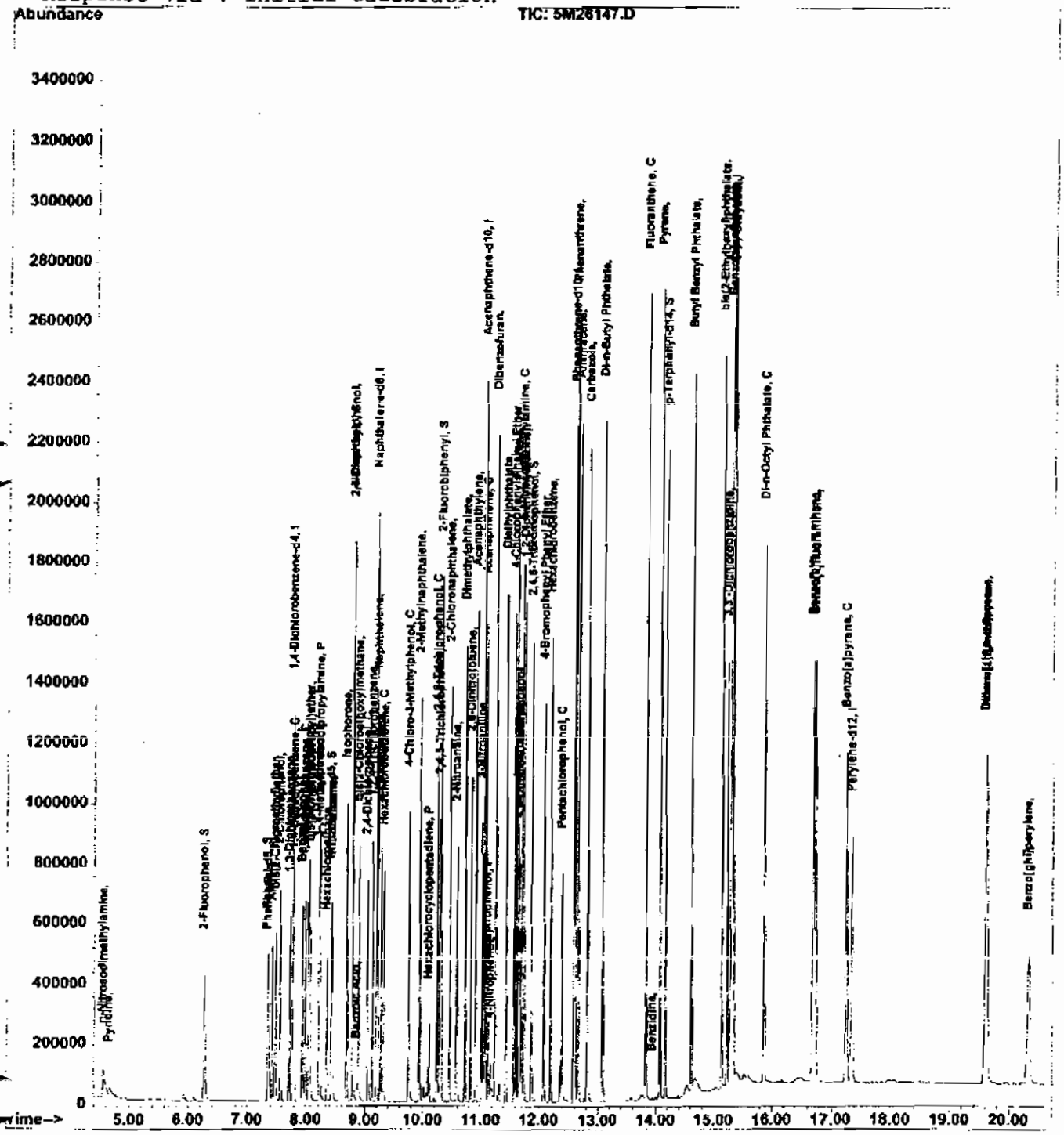
Quant Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Initial Calibration
DataAcq Meth : BNA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
75)	bis(2-Ethylhexyl)phthalate	15.15	149	713305	32.8716 ug/mL	98
77)	Di-n-Octyl Phthalate	15.87	149	1161395	40.8635 ug/mL	97
78)	Benzo[b]fluoranthene	16.70	252	863978	39.2409 ug/mL	99
79)	Benzo[k]fluoranthene	16.74	252	807061	37.6557 ug/mL	99
80)	Benzo[a]pyrene	17.26	252	734582	38.3568 ug/mL	99
81)	Indeno[1,2,3-cd]pyrene	19.62	276	711513	38.1631 ug/mL	97
82)	Dibenz[ah]anthracene	19.62	278	570513	38.2612 ug/mL	97
83)	Benzo[ghi]perylene	20.34	276	517240	36.1035 ug/mL	99

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

Data File : C:\HPCHEM\1\DATA\050203\5M26147.D Vial: 5
Acq On : 2 May 2003 15:34 Operator: ALT
Sample : WG139371-04 LCS 4/30 V201P103 Inst : HPMS5
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 3 8:21 2003 Quant Results File: BNA.RES

Method : C:\HPCHEM\1\METHODS\BNA.M (RTE Integrator)
Title : M8270/625 WATER/INITIAL CALIBRATION 05/01/03
Last Update : Fri May 02 08:01:18 2003
Response via : Initial Calibration



Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	4M18443.D	1.	WG139334-01 50PPM DFTPP	1,1 SOS64-3	29 Apr 2003 15:20
2	2	4M18444.D	1.	WG139334-02 50PPM BNA STD	1,1 SOS63-38-4	29 Apr 2003 15:39
3	1	4M18445.D	1.	WG139334-01 50PPM DFTPP	1,1 SOS64-3	29 Apr 2003 16:37
4	1	4M18446.D	1.	WG139334-01 50PPM DFTPP	1,1 SOS64-3	29 Apr 2003 16:52
5	2	4M18447.D	1.	WG139334-02 50PPM BNA STD	1,1 SOS63-38-4	29 Apr 2003 17:10
6	3	4M18448.D	1.	WG139334-03 3PPM BNA STD	1,1 SOS63-38-1	29 Apr 2003 18:04
7	4	4M18449.D	1.	WG139334-04 10PPM BNA STD	1,1 SOS63-38-2	29 Apr 2003 18:38
8	5	4M18450.D	1.	WG139334-05 20PPM BNA STD	1,1 SOS63-38-3	29 Apr 2003 19:13
9	6	4M18451.D	1.	WG139334-06 80PPM BNA STD	1,1 SOS63-38-5	29 Apr 2003 19:47
10	7	4M18452.D	1.	WG139334-07 100PPM BNA STD	1,1 SOS63-38-6	29 Apr 2003 20:24
11	8	4M18453.D	1.	WG139334-08 120PPM BNA STD	1,1 SOS63-38-7	29 Apr 2003 21:00
12	9	4M18454.D	1.	WG139334-09 50PPM Alt Source BNA STD	1,1 SOS64-19-4	29 Apr 2003 21:36

CK
5/1/03
wk 5/1/03

KEMRON ENVIRONMENTAL SERVICES

Semivolatile GC/MS Laboratory Maintenance / Runlog

Analysis Date/Time 4/29/03 Instrument ID HP5454 Column ID RTX-5MS SOP # MSS01 Rev. # 9 8270C ✓

Analyst Initials CLL Data Subdirectory 042903 SOP # MSS02 Rev. # ___ 625 ___

ISTD # B2160144 SOP # MSS03 Rev. # ___ PAH 8270C ___

Analysis Date/Time _____ Instrument ID _____ Column ID _____ Data Subdirectory _____

Preventative Maintenance

- ☐ Change o-ring
- ☒ Change liner
- ☐ Change septum
- ☐ Clip column (___ cm)
- ☐ Injection port seal (goldseal)
- ☐ Change gases _____

Additional Maintenance

Problem: _____

Action Taken: _____

Returned To Control?

Yes ___ No ___

Comments

Reviewed By: CLL 5/1/03

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	4M18455.D	1.	✓WG139370-01 50PPM DFTPP	1,1 SOS64-3	30 Apr 2003 08:03
2	2	4M18456.D	1.	WG139370-02 50PPM BNA STD	1,1 SOS63-38-4	30 Apr 2003 08:22
3	3	4M18457.D	1.	WG139340-02 BLK 4/29 V201P101	1,1	30 Apr 2003 08:57
4	4	4M18458.D	1.	WG139340-03 LCS 4/29 V201P101	1,1	30 Apr 2003 09:33
5	5	4M18459.D	1.	WG139289-01 TBLK 4/28 V201P101	17,1	30 Apr 2003 10:08
6	6	4M18460.D	1.	WG139272-01 BLK 4/29 V202P65	7,1 SOIL	30 Apr 2003 10:43
7	7	4M18461.D	1.	WG139272-02 LCS 4/29 V202P65	7,1 SOIL	30 Apr 2003 11:18
8	8	4M18462.D	1.	WG139272-03 LCS DUP 4/29 V202P65	7,1 SOIL	30 Apr 2003 11:53
9	9	4M18463.D	1.	L0304439-01 SOIL	7,1 SOIL	30 Apr 2003 12:28
10	10	4M18464.D	1.	L0304501-05 TCLP	17,1	30 Apr 2003 13:03
11	11	4M18465.D	1.	L0304554-01 TCLP	17,1	30 Apr 2003 13:38
12	12	4M18466.D	1.	L0304594-03 TCLP	17,1	30 Apr 2003 14:13
13	13	4M18467.D	1.	L0304543-04 TCLP	17,1	30 Apr 2003 14:48
14	14	4M18468.D	1.	L0304543-05 TCLP	17,1	30 Apr 2003 15:23
15	15	4M18469.D	1.	L0304543-07 TCLP	17,1	30 Apr 2003 15:58
16	16	4M18470.D	1.	L0304420-01	1,1	30 Apr 2003 17:14
17	17	4M18471.D	1.	L0304420-02	1,1	30 Apr 2003 17:50
18	18	4M18472.D	1.	WG139243-01 BLK 4/28 V201P91 RR	2,1	30 Apr 2003 18:25
19	19	4M18473.D	1.	L0304581-01	2,1	30 Apr 2003 19:01
20	20	4M18474.D	1.	L0304581-02	2,1	30 Apr 2003 19:37
21	21	4M18475.D	1.	L0304581-03	2,1	30 Apr 2003 20:12
22	22	4M18476.D	1.	RR10 L0304581-04	2,1	30 Apr 2003 20:47
23	23	4M18477.D	1.	RR10 L0304581-05	2,1	30 Apr 2003 21:23
24	24	4M18478.D	1.	✓L0304581-06	2,1	30 Apr 2003 21:58
25	25	4M18479.D	1.	✓L0304581-07	2,1	30 Apr 2003 22:34
26	26	4M18480.D	1.	✓L0304581-08	2,1	30 Apr 2003 23:10
27	27	4M18481.D	1.	RR10 L0304581-09	2,1	30 Apr 2003 23:46
28	28	4M18482.D	1.	✓L0304574-06	2,1	1 May 2003 00:22
29	29	4M18483.D	1.	✓L0304582-09	2,1	1 May 2003 00:58
30	30	4M18484.D	1.	✓WG139340-01 L0304582-03	2,1	1 May 2003 01:34
31	31	4M18485.D	1.	WG139340-04 L0304582-05 MS	2,1	1 May 2003 02:09
32	32	4M18486.D	1.	WG139340-05 L0304582-07 MSD	2,1	1 May 2003 02:45
33	33	4M18487.D	1.	L0304582-16	2,1	1 May 2003 03:21
34	34	4M18488.D	1.	L0304582-01	2,1	1 May 2003 03:56
35	35	4M18489.D	1.	RR5 L0304582-14	2,1	1 May 2003 04:32
36	36	4M18490.D	10.	L0304574-03 10X	2,10	1 May 2003 05:08
37	37	4M18491.D	10.	L0304574-04 10X	2,10	1 May 2003 05:44
38	38	4M18492.D	10.	L0304574-05 10X	2,10	1 May 2003 06:20
39	39	4M18493.D	10.	L0304574-01 10X	2,10	1 May 2003 06:56
40	40	4M18494.D	10.	L0304574-02 10X	2,10	1 May 2003 07:32
41		4M18495.D	1.			

CK 5/1/03
[illegible]

KEMRON ENVIRONMENTAL SERVICES

Semivolatile GC/MS Laboratory Maintenance / Runlog

Analysis Date/Time 4/30/03 Instrument ID #1054 Column ID RTX-5MS SOP # MSS01 Rev. # 9 8270C ✓

Analyst Initials CLE Data Subdirectory C43003 SOP # MSS02 Rev. # 3 625 ✓

ISTD # B2100144 SOP # MSS03 Rev. # ___ PAH 8270C ___

Analysis Date/Time _____ Instrument ID _____ Column ID _____ Data Subdirectory _____

Preventative Maintenance

- ☐ Change o-ring
- ☒ Change liner
- ☐ Change septum
- ☐ Clip column (___ cm)
- ☐ Injection port seal (goldseal)
- ☐ Change gases _____

Additional Maintenance

Problem: _____

Action Taken: _____

Returned To Control?

Yes ___ No ___

Comments

L0304501-05 TCLP, SS1 c/10%, SS2 bone SMI

L0304581-04, SS4 low, Needs 10X # 10, 11, 13, 28

-05, Needs 10X # 10, 11, 13, possibly 100X

-09, Needs 10X # 11, 13

L0304582-14, Needs 5X #75

L0304574-03 10X Needs RR @ 5X

-04

-05

-01

-02

Reviewed By: [illegible]

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	5m26103.d	1.	WG139485-01 50PPM DFTPP	1,1 SOS64-3	1 May 03 09:25
2	1	5m26104.d	1.	WG139485-01 50PPM DFTPP	1,1 SOS64-3	1 May 03 10:27
3	2	5m26105.d	1.	WG139485-02 50PPM BNA STD	1,1 SOS63-38-4	1 May 03 10:46
4	1	5m26106.d	1.	WG139485-01 50PPM DFTPP	1,1 SOS64-3	1 May 03 12:37
5	2	5m26107.d	1.	WG139485-02 50PPM BNA STD	1,1 SOS63-38-4	1 May 03 12:55
6	3	5m26108.d	1.	WG139485-03 3PPM BNA STD	1,1 SOS63-38-1	1 May 03 13:28
7	4	5m26109.d	1.	WG139485-04 10PPM BNA STD	1,1 SOS63-38-2	1 May 03 14:00
8	5	5m26110.d	1.	WG139485-05 20PPM BNA STD	1,1 SOS63-38-3	1 May 03 14:33
9	6	5m26111.d	1.	WG139485-06 80PPM BNA STD	1,1 SOS63-38-5	1 May 03 15:03
10	7	5m26112.d	1.	WG139485-07 100PPM BNA STD	1,1 SOS63-38-6	1 May 03 15:33
11	8	5m26113.d	1.	WG139485-08 120PPM BNA STD	1,1 SOS63-38-7	1 May 03 16:03
12	9	5m26114.d	1.	*WG139485-09 50PPM Alt Source BNA STD	1,1 SOS64-19	1 May 03 16:33
13	1	5m26115.d	1.	WG139485-10 50PPM DFTPP	1,1 SOS64-3	1 May 03 16:58
14	2	5m26116.d	1.	WG139485-11 50PPM BNA STD	1,1 SOS63-38-4	1 May 03 17:17
15	3	5m26117.d	1.	WG139352-01 BLK 4/29 V202P69	7,1 SOIL	1 May 03 17:47
16	4	5m26118.d	1.	*WG139352-02 LCS 4/29 V202P69	7,1 SOIL	1 May 03 18:17
17	5	5m26119.d	1.	*WG139352-03 LCSDUP 4/29 V202P69	7,1 SOIL	1 May 03 18:47
18	6	5m26120.d	1. RE 2R	L0304609-01	7,1 SOIL	1 May 03 19:17
19	7	5m26121.d	1.	L0304609-02	7,1 SOIL	1 May 03 19:46
20	8	5m26122.d	1.	L0304609-03	7,1 SOIL	1 May 03 20:16
21	9	5m26123.d	1.	L0304609-04	7,1 SOIL	1 May 03 20:45
22	10	5m26124.d	1.	L0304609-05	7,1 SOIL	1 May 03 21:15
23	11	5m26125.d	1.	L0304609-06	7,1 SOIL	1 May 03 21:45
24	12	5m26126.d	1.	L0304609-07	7,1 SOIL	1 May 03 22:15
25	13	5m26127.d	1.	L0304609-08	7,1 SOIL	1 May 03 22:45
26	14	5m26128.d	1.	L0304609-09	7,1 SOIL	1 May 03 23:14
27	15	5m26129.d	1.	L0304609-10	7,1 SOIL	1 May 03 23:44
28	16	5m26130.d	1.	L0304609-11	7,1 SOIL	2 May 03 00:13
29	17	5m26131.d	1.	L0304609-12	7,1 SOIL	2 May 03 00:43
30	18	5m26132.d	2.	*L0304519-04 2X	1,2	2 May 03 01:13
31	19	5m26133.d	120.	*L0304544-01 10X RR	12,10 RR	2 May 03 01:43
32	20	5m26134.d	1.	BNA SPIKE 2X	ESS0044-22 RR	2 May 03 02:13

*See Comments

AJ 5/2/03

EC 5/2/03

KEMRON ENVIRONMENTAL SERVICES
Semivolatile GC/MS Laboratory Maintenance / Runlog

Analysis Date/Time 5/1/03 Instrument ID HPms5 Column ID Rtx-5sil-ms SOP # MSS01 Rev. # 9 8270C ✓
Analyst Initials AU Data Subdirectory 050103 SOP # MSS02 Rev. # ___ 625 ___
ISTD # B3100144 SOP # MSS03 Rev. # ___ PAH 8270C ___

Analysis Date/Time _____ Instrument ID _____ Column ID _____ Data Subdirectory _____

Preventative Maintenance

- ☑ Change o-ring
- ☑ Change liner
- ☐ Change septum
- ☑ Clip column (1½ cm)
- ☑ Injection port seal (goldseal)
- ☐ Change gases _____

Additional Maintenance
Problem: CCV had low phenols

Action Taken: Clipped Column, changed Gold Seal - Still low - Changed Column.

Returned To Control?
Yes ✓ No ___

Comments

ICal - Average responses - #35 7 30% AVE
ICV - #35 7 ±25% DEV
CCV - Passes

~~WC-139352~~ WC-139352-02 LCS #73 low #79 - High
-03 LCSDup #73 - missing

L0304609-01 IS 6 low ~~Remix & RR~~ AUT 5/2/03 RE Per Client Request
-02 IS 5+6 low
-03 "
-04 IS 4-6 low
-05 IS 1-6 low
-06 - 12
L0304544-01 C10x RR EFV SS DL
(8270)
L0304519-04 C2x - SS 6 low

Reviewed By: EC 5/2/03

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	5m26135.d	1.	WG139599-01 50PPM DFTPP	1,1 SOS64-3	2 May 03 09:59
2	2	5m26136.d	1.	* WG139599-02 50PPM BNA STD	1,1 SOS63-38-4	2 May 03 10:18
3	3	5m26137.d	1.	50PPM Appendix IX STD	1,1 SOS64-13-3	2 May 03 10:51
4	4	5m26138.d	1.	3PPM Appendix IX STD	1,1 SOS64-13-1	2 May 03 11:21
5	5	5m26139.d	1.	20PPM Appendix IX STD	1,1 SOS64-13-2	2 May 03 11:50
6	6	5m26140.d	1.	80PPM Appendix IX STD	1,1 SOS64-13-4	2 May 03 12:20
7	7	5m26141.d	1.	100PPM Appendix IX STD	1,1 SOS64-13-5	2 May 03 12:50
8	8	5m26142.d	1.	120PPM Appendix IX STD	1,1 SOS64-13-6	2 May 03 13:20
9	1	5m26143.d	1.	WG139599-03 50PPM DFTPP	1,1 SOS64-3	2 May 03 13:45
10	2	5m26144.d	1.	* WG139599-04 50PPM BNA STD	1,1 SOS63-38-4	2 May 03 14:04
11	3	5m26145.d	1.	50PPM Appendix IX STD	1,1 SOS64-13-3	2 May 03 14:34
12	4	5m26146.d	1.	WG139371-03 BLK 4/30 V201P103	1,1	2 May 03 15:04
13	5	5m26147.d	1.	WG139371-04 LCS 4/30 V201P103	1,1	2 May 03 15:34
14	6	5m26148.d	1.	* L0304585-08	1,1	2 May 03 16:03
15	7	5m26149.d	1.	L0304585-02	1,1	2 May 03 16:33
16	8	5m26150.d	1.	WG139371-01 L0304585-04	1,1	2 May 03 17:03
17	9	5m26151.d	1.	WG139371-05 L0304585-05 MS	1,1	2 May 03 17:32
18	10	5m26152.d	1.	WG139371-06 L0304585-06 MSD	1,1	2 May 03 18:02
19	11	5m26153.d	1.	L0304585-07	1,1	2 May 03 18:32
20	12	5m26154.d	1.	* L0304585-10	1,1	2 May 03 19:01
21	13	5m26155.d	1.	L0304585-01	1,1	2 May 03 19:31
22	14	5m26156.d	1.	L0304585-03	1,1	2 May 03 20:01
23	15	5m26157.d	1.	* L0304585-09	1,1	2 May 03 20:31
24	16	5m26158.d	100.	L0304508-01 100X	1,100	2 May 03 21:01
25	17	5m26159.d	100.	L0304508-03 100X	1,100	2 May 03 21:31
26	18	5m26160.d	100.	L0304508-06 100X	1,100	2 May 03 22:01
27	19	5m26161.d	1.	L0304508-01	1,1	2 May 03 22:32
28	20	5m26162.d	1.	L0304508-03	1,1	2 May 03 23:02
29	21	5m26163.d	1.	L0304508-06	1,1	2 May 03 23:32
30	22	5m26164.d	1.	* L0304594-02	1,1	3 May 03 00:02
31	23	5m26165.d	5.	L0304594-01 5X	1,5	3 May 03 00:32
32	24	5m26166.d	1.	L0304593-01	1,1	3 May 03 01:02
33	25	5m26167.d	1.	L0304593-02	1,1	3 May 03 01:32
34	26	5m26168.d	1.	RR L0304593-03	1,1	3 May 03 02:02

* See Comments

WLS/5/3/03
see Stats

03 May 03 08:56

KEMRON ENVIRONMENTAL SERVICES

Semivolatile GC/MS Laboratory Maintenance / Runlog

Analysis Date/Time 5/2/03 Instrument ID HPMS5 Column ID RTX-5ssl-MS SOP # MSS01 Rev. # 9 8270C ✓
Analyst Initials ALL Data Subdirectory 050203 SOP # MSS02 Rev. # ___ 625 ___
ISTD # B2100144 SOP # MSS03 Rev. # ___ PAH 8270C ___

Analysis Date/Time _____ Instrument ID _____ Column ID _____ Data Subdirectory _____

Preventative Maintenance

- ☑ Change o-ring
- ☑ Change liner
- ☐ Change septum
- ☐ Clip column (___ cm)
- ☐ Injection port seal (goldseal)
- ☐ Change gases _____

Additional Maintenance

Problem: _____

Action Taken: _____

Returned To Control?

Yes ___ No ___

Comments

5M26136 CCV #5 7=20% DEV - low
AQ curve for Acetophenone only - Passes Linearity.

5M26144 CCV #5 + #71 7=20% DEV - low

L0304585-08 SS4 low
-10
-01
-09

L0304508-01 03006 @100x SS DL

L0304594-02 SS4 low
-01 @5x
L0304593-01
-03 - MT RR.

Reviewed By: [signature]

Parameter: BNA H_2O SOP #: EX808 Revision #: 10
Extraction Analyst(s): DP, PAS, CAF TV/KD Analyst(s): DP
Date/Time Extracted: 4-29-03 @ 17:00 Date TV/KD: 04/29/03
Spike/Surrogate Analyst: DP Witness: CAF
Surrogate #: ES5000 43-50 DB Earliest Hold Date: 5-01-03
Spike #: A = ES5000 44-01 #2 Spike #: B = —

Extraction Work Group WG 139340
Analytical Work Group WG 139481

Extract Relinquished By: CEB
Extract Received By & Date: 4/30/03

	Sample ID	Test Code	pH / <2	N	>12	Initial Vol / Wt	Amount Surrogate	Amount Spike	Final Volume	Extract Color	Emulsions / A	BN	N	Comments
1	Blank		✓		✓	1000mL	500ml		1mL	T				WG 139340-02
2	LCS		✓		✓	⊥		500ml		C				WG ⊥ -03
3	04-574-01	625 AB	✓		✓	970 mL				C	✓	✓		
4	-02		✓		✓	950				C	✓	✓		
5	-03		✓		✓	900				C	✓	✓		
6	-04		✓		✓	950				C	✓	✓		
7	-05		✓		✓	930				C	✓	✓		
8	-06	⊥	✓		✓	890				T				
9	04-575-08	827-SPE	✓		✓	⊥				T				
10	04-582-01	625-AB	✓		✓	930				C	✓	✓		
11	-03		✓		✓	900				C				WG139340-01
12	-05MS		✓		✓	940		500ml		C			*	WG -04
13	-07MSD		✓		✓			⊥		C			*	WG ⊥ -05
14	-09		✓		✓	⊥				T				
15	-12		✓		✓	930				C		✓		*
16	-14		✓		✓					C				
17	-16	⊥	✓		✓	⊥				C				
18	TBLK 4/28	827-TC	✓		✓	100mL				T				WG139289-01
19	04-501-05		✓		✓					C	✓			
20	04-543-04		✓		✓					T				
21	-05		✓		✓					C				
22	-07		✓		✓					T				
23	04-554-01		✓		✓					T				
24	04-594-23	⊥	✓		✓	⊥	⊥ DP 04/29/03		⊥	T				

Methylene Chloride Lot #: 43016
Hexane Lot #: —
Ether Lot #: —
Methanol Lot #: —
Solvent: — Lot #: —
Reagent: Fortified Lot #: ER 2405
Reagent: 10N NaOH Lot #: ER 0005-13
Reagent: — Lot #: —
Acid: 1:1 H_2SO_4 Lot #: ER 0005-02
Florisil Lot #: —
Silica Gel Lot #: —
IR Analyst / Date / Time: —
Dried Na_2SO_4 Lot #: ER 0005-25

Color Code
T = Transparent
C = Colored
O = Opaque

SW-846 Method			On	Off	On	Off
Continuous	3520C					
Soxhlet	3540C					
ASE*	3545					
Sep Funnel	3510C	✓				
Sonication	3550B					
Waste	3580A					

* Accelerated Solvent Extractor (ASE)

Clean-ups			
Florisil 3620B		GPC 3640A	
Silica Gel 3630C		Other	
Acid 3665A		N/A	✓
Sulfur 3660B			

Peer Reviewed By: [signature] Date: 05/5/03

Extraction Notes For Volume # 201 Page # 101

General Comments: MS, MSD of 04-582-23

Extraction Anomalies: ~~#~~ Sample required 2X the normal amount (15mL) of base (10N NaOH) to achieve the desired pH (>12). Due to extremely thick emulsions on the base side sample was gently shaken by hand for the 2nd and 3rd base side shakes rather than being returned to the automatic shaker.

Concentration Anomalies: None

Clean-Up Anomalies: N/A

Supervisor Review: [signature] Date: 4/30/03

Parameter: BNA H_2O SOP #: EXB08 Revision #: 10
Extraction Analyst(s): CAF TAS DRCB TV/KD Analyst(s): CAF
Date/Time Extracted: 4-30-03 0919 Date TV/KD: 4-30-03
Spike/Surrogate Analyst: CAF Witness: PAS
Surrogate #: ES0043-50 Earliest Hold Date: 5-2-03
Spike #: A = ES0044-01 Spike #: B = —

Extraction Work Group WG 139371
Analytical Work Group WG 139687
Extract Relinquished By: CAF
Extract Received By & Date: EC 4/30/03

	Sample ID	Test Code	pH / <2	N	>12	Initial Vol / Wt	Amount Surrogate	Amount Spike	Final Volume	Extract Color	Emulsions / A	BN	N	Comments
1	Blank		✓		✓	1000mL	500ul		1mL	T				WG 139371-03
2	LCS		✓		✓	↓		500ul		C				WG 139371-04
3	04-4585-01	8270	✓		✓	1000mL				C	✓			
4	-02		✓		✓	↓				C				
5	-03		✓		✓	960mL				C	✓			
6	-04		✓		✓	1000mL				C	✓			WG139371-01
7	-05MS		✓		✓			500ul		C	✓			↓ -05
8	-06MSD		✓		✓			↓		C	✓			↓ -06
9	-07		✓		✓					C				
10	-08		✓		✓					T				
11	-09		✓		✓					C				
12	-10		✓		✓	↓				C				
13	04-586-01		✓		✓	970mL				T				WG139371-02
14	-02MS		✓		✓	940mL		500ul		C				↓ -07
15	-03MSD		✓		✓	1000mL		↓		C				↓ -08
16	-04		✓		✓	970mL				T				
17	04-593-01		✓		✓	860mL				T				
18	-02		✓		✓	890mL				T				
19	-03	↓	✓		✓	860mL				T				
20	04-594-01	827-TCL	✓		✓	910mL				C	✓			
21	-02	↓	✓		✓	920mL				C	✓			
22	04-631-01	8270	✓		✓	500mL				C				*
23	-02	↓	✓		✓	↓	↓		↓	C				*
24						CAF 4-30-03								

Methylene Chloride Lot #: 43010
Hexane Lot #: —
Ether Lot #: —
Methanol Lot #: —
Solvent: — Lot #: —
Reagent: Fortified Lot #: ER0005-15
Reagent: 10N NaOH Lot #: ER0005-B
Reagent: — Lot #: —
Acid: 1:1 H_2SO_4 Lot #: ER0005-2
Florisil Lot #: —
Silica Gel Lot #: —
IR Analyst / Date / Time: —
Dried Na_2SO_4 Lot #: ER0005-25

Color Code
T = Transparent
C = Colored
O = Opaque

SW-846 Method			On	Off	On	Off
Continuous	3520C					
Soxhlet	3540C					
ASE*	3545					
Sep Funnel	3510C	✓				
Sonication	3550B					
Waste	3580A					

* Accelerated Solvent Extractor (ASE)

Clean-ups			
Florisil 3620B		GPC 3640A	
Silica Gel 3630C		Other	
Acid 3665A		N/A	✓
Sulfur 3660B			

Peer Reviewed By: [signature] Date: 04/30/03

Extraction Notes For Volume # 201 Page # 103

General Comments: * checked the pH after each acid shake

Extraction Anomalies: NONE

Concentration Anomalies: NONE

Clean-Up Anomalies: N/A

Supervisor Review: _____ Date: _____

Run Date: 4/29/03

Analyst: CK

Instrument: HPMS4

Workorders: Due Date: Priority:

Curve Only

		Analyst
System Performance Check:	DFTPP	✓
	Tailing	✓
	DDT Breakdown	✓
Initial Calibration:	ICAL summary	✓
	Average RF	✓
	Linear or quadriatic regression	
	Alt Source Check	✓
Continuing Calibration:	Continuing Calibration	
	Client Specific Requirements	
	Special Standards	
Blanks:	Quant Report/Chromatogram	
	Surrogates	
	Library search	
LCS/LCS DUP:	Quant Report/Chromatogram	
	Surrogates	
	Spike Compounds	
	MS/MSD	
	QC forms	
Samples:	Quant Reports/Chromatograms	
	Spectra of TCL Hits	
	Surrogates	
	Internal Standards	
	Correct Factors	
	Library searches	
Data Package:	Manual integrations	
	Run logs	
	Bench sheets	
	Upload results	
	R-flag reports	
	Seedpak workgroups	
	Level 2	
	Level 4 copies	
	Level x	
	Case narratives	

	Supervisor
Corrective Action:	
Results Reporting/Data Qualifiers:	
Client Data Package Assembly:	
Check for Completeness:	
Check for compliance with method and project requirements:	
Check the reasonableness of results:	

√ = Checked & OK

NA = Not Applicable

Comments:

Primary Reviewer: CK 5/1/03

Secondary Reviewer: [illegible] 5/1/03

Supervisor Review: [illegible] 5/1/03

Semi-Volatile GCMS Checklist

Run Date: 4/30/03

Analyst: CK

Instrument: HPMS4

Workorders:	Due Date:	Priority:
04-439	5/1	—
04-501	5/1	A1
04-554	5/7	P1
04-544	5/5	P1
04-543	5/7	A1
04-420	5/7	—
04-581	5/5	—
04-574	5/5	—
04-582	5/8	—

√ = Checked & OK

NA = Not Applicable

		Analyst
System Performance Check:	DFTPP	✓
	Tailing	✓
	DDT Breakdown	✓
Initial Calibration:	ICAL summary	
	Average RF	
	Linear or quadratic regression	
	Alt Source Check	
Continuing Calibration:	Continuing Calibration	✓
	Client Specific Requirements	✓
	Special Standards	
Blanks:	Quant Report/Chromatogram	✓
	Surrogates	✓
	Library search	
LCS/LCS DUP:	Quant Report/Chromatogram	✓
	Surrogates	✓
	Spike Compounds	✓
	MS/MSD	
	QC forms	✓
Samples:	Quant Reports/Chromatograms	✓
	Spectra of TCL Hits	✓
	Surrogates	✓
	Internal Standards	✓
	Correct Factors	✓
	Library searches	
Data Package:	Manual integrations	
	Run logs	✓
	Bench sheets	✓
	Upload results	✓
	R-flag reports	
	Seedpak workgroups	✓
	Level 2	
	Level 4 copies	✓
	Level x	✓
	Case narratives	✓

	Supervisor
Corrective Action:	
Results Reporting/Data Qualifiers:	
Client Data Package Assembly:	
Check for Completeness:	
Check for compliance with method and project requirements:	
Check the reasonableness of results:	

Comments:

04-581-04 Needs 10X
-05
-09

04-582-14 Needs 5X

04-574-03 10X Need RRF 5X
-04
-05
-01
-02

Primary Reviewer: CK 5/1/03

Secondary Reviewer: [illegible] 5/1/03

Supervisor Review: [illegible] 5/1/03

Semi-Volatile GCMS Checklist

Run Date: 5/1/03

Analyst: ALT

Instrument: HPMS5

Workorders:	Due Date:	Priority:
04609	5/2	PIT
04519	5/1	PI
04544	5/1	AI

		Analyst
System Performance Check:	DFTPP	✓
	Tailing	✓
	DDT Breakdown	✓
Initial Calibration:	ICAL summary	✓
	Average RF	✓
	Linear or quadratic regression	✓
	Alt Source Check	✓
Continuing Calibration:	Continuing Calibration	✓
	Client Specific Requirements	✓
	Special Standards	
Blanks:	Quant Report/Chromatogram	✓
	Surrogates	✓
	Library search	
LCS/LCS DUP:	Quant Report/Chromatogram	✓
	Surrogates	✓
	Spike Compounds	✓
	MS/MSD	
	QC forms	✓
Samples:	Quant Reports/Chromatograms	✓
	Spectra of TCL Hits	✓
	Surrogates	✓
	Internal Standards	✓
	Correct Factors	✓
	Library searches	
Data Package:	Manual integrations	✓
	Run logs	✓
	Bench sheets	✓
	Upload results	✓
	R-flag reports	
	Seedpak workgroups	✓
	Level 2 519 544	✓
	Level 4 copies	
	Level x	
	Case narratives	

	Supervisor
Corrective Action:	
Results Reporting/Data Qualifiers:	
Client Data Package Assembly:	
Check for Completeness:	
Check for compliance with method and project requirements:	
Check the reasonableness of results:	

√ = Checked & OK

NA = Not Applicable

Comments:

~~04609-01-05 Need RR~~
04609 01-12 Are Being R.E.

Primary Reviewer: ALT 5/2/03

Secondary Reviewer: [illegible] 5/2/03

Supervisor Review: [illegible] 5/2/03

Semi-Volatile GCMS Checklist

Run Date: 5/2/03

Analyst: ALT

Instrument: HPMS5

Workorders:	Due Date:	Priority:
04585	5/5	F1
04508	5/6	
04594	5/13	P1
04593	5/12	

		Analyst
System Performance Check:	DFTPP	✓
	Tailing	✓
	DDT Breakdown	✓
Initial Calibration: A9 Curve	ICAL summary	.
	Average RF	✓
	Linear or quadriatic regression	✓
	Alt Source Check	
Continuing Calibration:	Continuing Calibration	✓
	Client Specific Requirements	✓
	Special Standards	✓
Blanks:	Quant Report/Chromatogram	✓
	Surrogates	✓
	Library search	
LCS/LCS DUP:	Quant Report/Chromatogram	✓
	Surrogates	✓
	Spike Compounds	✓
	MS/MSD	✓
	QC forms	✓
Samples:	Quant Reports/Chromatograms	✓
	Spectra of TCL Hits	✓
	Surrogates	✓
	Internal Standards	✓
	Correct Factors	✓
	Library searches	
Data Package:	Manual integrations	
	Run logs	✓
	Bench sheets	✓
	Upload results	✓
	R-flag reports	
	Seedpak workgroups	✓
	Level 2 508	✓
	Level 4 copies	
	Level x	
	Case narratives	

	Supervisor
Corrective Action:	
Results Reporting/Data Qualifiers:	
Client Data Package Assembly:	
Check for Completeness:	
Check for compliance with method and project requirements:	
Check the reasonableness of results:	

√ = Checked & OK

NA = Not Applicable

Comments: L0304593-03 - Need RR

Primary Reviewer: ALT 5/5/03

Secondary Reviewer: [illegible] 5/5/03

Supervisor Review: [illegible] 5/5/03

Example 8270 Calculations

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

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

		Example:
Where:	Ax = Area of the characteristic ion for the compound being measured	10000
	Cis = Concentration of the specific internal standard (ng/ml).	100
	Ais = Area of the characteristic ion for the specific internal standard.	5000
	Cx = Concentration of the compound being measured (ng/ml).	100
	RF	**2**

2.0 Calculating the concentration (C) of a compound in water using data from prep log and quantitation report:*

C = [(Ax)(Cis)(Vf)(D)] / [(Ais)(RF)(Vi)]

		Example:
Where:	Ax = Area of the characteristic ion for for the compound being measured	10000
	Cis = Concentration of the specific internal standard in ng/ml (ug/L).	4000
	Vf = Final volume of sample extract (mL). (prep log)	1
	D = Dilution factor for sample as a multiplier (10X = 10).	1
	Ais = Area of the characteristic ion for for the specific internal standard.	5000
	RF = Response factor from ICAL calculated above.	2
	Vi = Initial volume of sample (mL). (prep log)	1000
	C (ug/L)	**4**

3.0 Calculating the concentration (C) of a compound in soil using data from prep log and quantitation report:*

C = [(Ax)(Cis)(Vf)(D)] / [(Ais)(RF)(Wi)]

		Example:
Where:	Ax = Area of the characteristic ion for for the compound being measured	10000
	Cis = Concentration of the specific internal standard in ng/ml (ug/L).	4000
	Vf = Final volume of sample extract (mL).	1
	D = Dilution factor for sample as a multiplier (10X = 10).	1
	Ais = Area of the characteristic ion for for the specific internal standard.	5000
	RF = Response factor from ICAL calculated above.	2
	Wi = Initial weight of sample (g)	30
	C (ug/kg)	**133.3333**

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

2.2.2 Pesticide GC Data (8081)

REPORT NARRATIVE
GC PESTICIDES

KEMRON Report No.: L0304594

METHOD

Preparation: SW- 846 3550B(Soils) 3510C(Waters)
Analysis: SW-846 8081

HOLDING TIMES

Sample Preparation: All holding times were met.
Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial calibrations: For all compounds which yielded a %RSD greater than 20 %, linear or higher order equations were applied. All acceptance criteria were met.
Alternate Source Standards: All acceptance criteria were met.
Continuing Calibration : All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.
Laboratory Control Samples: The LCS duplicate associated with samples 01 and 02 yielded % recoveries for 4 compounds that were above the acceptance limit. The LCS associated with sample 03 yielded % recoveries for 4 compounds that were above the acceptance limit. Sample 03 was re-extracted within hold with an acceptable LCS. All other acceptance criteria were met.
Matrix Spikes: There were no MS/MSD results associated with this sample delivery group.

SAMPLES

Surrogates: All acceptance criteria were met.
Endrin/ DDT Breakdown : All acceptance criteria were met.
Samples: For all samples which yielded results with an RPD of greater than 40% between the primary and confirmation column the appropriate flag was applied. All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: ECL REVIEWED: [signature] DATE: 5/16/03

Rev. 7/14/00

PESTICIDES B GC DATA (8081)

Login Number 04-594

A. QC Summary

✓ Method Blank Summary
✓ Method Blank Results
✓ Laboratory Control Sample (LCS)
NA Matrix Spike/Matrix Spike Duplicate (MS/MSD)
✓ Holding Time Summary
✓ Surrogate Recovery Summary
✓ Initial Calibration Summary
✓ Initial Calibration Verification (ICV) Form (Second Source)
✓ Continuing Calibration Verification (CCV)
✓ Instrument Run Log
✓ Extraction Bench Sheet

B. Sample Data

✓ Target compound and surrogate results summary (See Summary Report)
✓ Chromatograms and quantitation report

C. Standards Data

✓ Initial calibration (ICAL) summary form
✓ Chromatograms and quantitation report for ICAL standards
✓ Initial calibration verification (ICV/second source) summary forms
✓ Initial calibration verification (ICV/second source) quantitation reports and chromatograms
✓ Continuing Calibration Verification (CCV) summary forms
✓ Continuing Calibration Verification (CCV) quantitation reports and chromatograms
✓ Retention Time Window Summary

D. Raw QC Data

✓ Endrin/DDT Breakdown chromatogram and quantitation report
✓ Method blank chromatogram and quantitation report
✓ LCS chromatogram and quantitation report
NA MS/MSD chromatogram and quantitation report
✓ Instrument Run Log
✓ Extraction Bench Sheet
✓ Daily Checklist
✓ Example Calculations

Checked By: EQ Date: 5/5/03

2.2.2.1 QC Summary

KEMRON ENVIRONMENTAL SERVICES
METHOD BLANK SUMMARY

Login Number: L0304594
Blank File ID: 9G23077.R
Date Analyzed: 05/01/03
Time Analyzed: 03:17
Analyst: ECL

Work Group: WG139389
Blank Sample ID: WG139269-01
Instrument ID: HP9
Method: 8081A

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG139269-02	9G23078.R	05/01/03 03:41	01
LCS2	WG139269-03	9G23079.R	05/01/03 04:06	01
05-177511-DW2-042503	L0304594-01	9G23097.R	05/01/03 11:23	01
05-177511-DW3-042503	L0304594-02	9G23098.R	05/01/03 11:47	01

KEMRON FORMS - Modified 03/21/2003
Version 1.2
Report generated 05/05/2003 15:21

KEMRON ENVIRONMENTAL SERVICES
METHOD BLANK SUMMARY

Login Number: L0304594
Blank File ID: 9G23077.F
Date Analyzed: 05/01/03
Time Analyzed: 02:53
Analyst: ECL

Work Group: WG139389
Blank Sample ID: WG139269-01
Instrument ID: HP9
Method: 8081A

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
05-177511-DW2-042503	L0304594-01	9G23097.F	05/01/03 10:59	CF1

KEMRON FORMS - Modified 03/21/2003
Version 1.2
Report generated 05/05/2003 15:21

KEMRON ENVIRONMENTAL SERVICES
METHOD BLANK SUMMARY

Login Number: L0304594
Blank File ID: 9G23051.R
Date Analyzed: 04/30/03
Time Analyzed: 16:46
Analyst: ECL

Work Group: WG139387
Blank Sample ID: WG139296-02
Instrument ID: HP9
Method: 8081A

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG139296-03	9G23052.R	04/30/03 17:10	01
05-177511-SP2-042503	L0304594-03	9G23055.R	04/30/03 18:23	01

KEMRON FORMS - Modified 03/21/2003
Version 1.2
Report generated 05/05/2003 15:24

KEMRON ENVIRONMENTAL SERVICES
METHOD BLANK SUMMARY

Login Number: L0304594
Blank File ID: 9G23243.R
Date Analyzed: 05/13/03
Time Analyzed: 12:08
Analyst: HV

Work Group: WG140458
Blank Sample ID: WG140378-01
Instrument ID: HP9
Method: 8081A

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG140378-02	9G23244.R	05/13/03 12:32	
LCS2	WG140378-03	9G23245.R	05/13/03 12:56	
LCS	WG140378-04	9G23246.R	05/13/03 13:21	
05-177511-SP2-042503	L0304594-03	9G23252.R	05/13/03 15:46	RE1

KEMRON FORMS - Modified 03/21/2003
Version 1.2
Report generated 05/19/2003 08:57

KEMRON ENVIRONMENTAL SERVICES
METHOD BLANK SUMMARY

Login Number: L0304594
Blank File ID: 9G23243.R
Date Analyzed: 05/13/03
Time Analyzed: 12:08
Analyst: HV

Work Group: WG140458
Blank Sample ID: WG140378-01
Instrument ID: HP9
Method: 8081B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG140378-02	9G23244.R	05/13/03 12:32	
LCS2	WG140378-03	9G23245.R	05/13/03 12:56	
LCS	WG140378-04	9G23246.R	05/13/03 13:21	
05-177511-SP2-042503	L0304594-03	9G23252.R	05/13/03 15:46	RE1

KEMRON FORMS - Modified 03/21/2003
Version 1.2
Report generated 05/19/2003 08:57

KEMRON ENVIRONMENTAL SERVICES
BLANK REPORT

Login Number: L0304594
Instrument ID: HP9
File ID: 9G23077.R
Workgroup (AAB#): WG139389
Contract #:

Run Date: 05/01/2003
Run Time: 03:17
Analyst: ECL
Matrix: Water
Cal ID: HP9-30-APR-03

Sample ID: WG139269-01
Prep Method: 3510C
Method: 8081A
Units: ug/L

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
4,4'-DDD	0.0250	0.100	0.0250	1	U
4,4'-DDE	0.0250	0.100	0.0250	1	U
4,4'-DDT	0.0250	0.100	0.0250	1	U
Aldrin	0.0100	0.0500	0.0100	1	U
alpha-BHC	0.0100	0.0500	0.0100	1	U
alpha Chlordane	0.0100	0.0500	0.0100	1	U
beta-BHC	0.0100	0.0500	0.0100	1	U
delta-BHC	0.0100	0.0500	0.0100	1	U
Dieldrin	0.0250	0.100	0.0250	1	U
Endosulfan I	0.0100	0.0500	0.0100	1	U
Endosulfan II	0.0250	0.100	0.0250	1	U
Endosulfan sulfate	0.0250	0.100	0.0250	1	U
Endrin	0.0250	0.100	0.0250	1	U
Endrin aldehyde	0.0250	0.100	0.0250	1	U
Endrin ketone	0.0250	0.100	0.0250	1	U
gamma-BHC (Lindane)	0.0100	0.0500	0.0100	1	U
gamma Chlordane	0.0100	0.0500	0.0100	1	U
Heptachlor	0.0100	0.0500	0.0100	1	U
Heptachlor epoxide	0.0100	0.0500	0.0100	1	U
Methoxychlor	0.0250	0.500	0.0250	1	U
Toxaphene	0.500	1.00	0.500	1	U

Surrogates	% Recovery	Surrogate Limits			Qualifier
Decachlorobiphenyl	110	25	-	140	PASS
2,4,5,6-Tetrachloro-m-xylene	56.7	20	-	180	PASS

* Analyte detected above RDL
ND Analyte Not detected at or above reporting limit

KEMRON FORMS - Modified 05/02/2003
Version 1.3
Report generated 05/05/2003 15:21

KEMRON ENVIRONMENTAL SERVICES
BLANK REPORT

Login Number: L0304594
Instrument ID: HP9
File ID: 9G23051.R
Workgroup (AAB#): WG139387
Contract #:

Run Date: 04/30/2003
Run Time: 16:46
Analyst: ECL
Matrix: Water
Cal ID: HP9-30-APR-03

Sample ID: WG139296-02
Prep Method: 3510C
Method: 8081A
Units: ug/L

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Chlordane	0.0100	0.500	0.0100	1	U
Endrin	0.0250	0.100	0.0250	1	U
Lindane	0.0100	0.0500	0.0100	1	U
Heptachlor	0.0100	0.0500	0.0100	1	U
Heptachlor Epoxide	0.0100	0.0500	0.0100	1	U
Methoxychlor	0.0250	0.500	0.0250	1	U
Toxaphene	0.500	1.00	0.500	1	U

Surrogates	% Recovery	Surrogate Limits			Qualifier
Decachlorobiphenyl	81.8	25	-	140	PASS
2,4,5,6-Tetrachloro-m-xylene	58.4	20	-	180	PASS

* Analyte detected above RDL
ND Analyte Not detected at or above reporting limit

KEMRON FORMS - Modified 05/02/2003
Version 1.3
Report generated 05/05/2003 15:24

KEMRON ENVIRONMENTAL SERVICES
BLANK REPORT

Login Number: L0304594 Run Date: 05/13/2003 Sample ID: WG140378-01
Instrument ID: HP9 Run Time: 12:08 Prep Method: 3510C
File ID: 9G23243.R Analyst: HV Method: 8081A
Workgroup (AAB#): WG140458 Matrix: Water Units: ug/L
Contract #: Cal ID: HP9-09-MAY-03

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Endrin	0.0250	0.100	0.0250	1	U
Lindane	0.0100	0.0500	0.0100	1	U
Methoxychlor	0.0250	0.500	0.0250	1	U
Toxaphene	0.500	1.00	0.500	1	U
Chlordane	0.0100	0.500	0.0100	1	U
Heptachlor	0.0100	0.0500	0.0100	1	U
Heptachlor Epoxide	0.0100	0.0500	0.0100	1	U

Surrogates	% Recovery	Surrogate Limits	Qualifier
2,4,5,6-Tetrachloro-m-xylene	45.4	20 - 180	PASS
Decachlorobiphenyl	58.4	25 - 140	PASS

* Analyte detected above RDL
ND Analyte Not detected at or above reporting limit

KEMRON FORMS - Modified 05/08/2003
Version 1.3
Report generated 05/19/2003 08:58

KEMRON ENVIRONMENTAL SERVICES
LABORATORY CONTROL SAMPLE

Login Number: L0304594
Instrument ID: HP9
File ID: 9G23078.R
Workgroup (AAB#): WG139389
Contract #:

Run Date: 05/01/2003
Run Time: 03:41
Analyst: ECL
Matrix: Water

Sample ID: WG139269-02
Prep Method: 3510C
Method: 8081A
Units: ug/L
Cal ID: HP9-30-APR-2003 15:33

Analytes	Expected	Found	% Rec	LCS Limits	Q
4,4'-DDD	0.500	0.662	132	50 - 145	
4,4'-DDE	0.500	0.630	126	50 - 145	
4,4'-DDT	0.500	0.671	134	45 - 140	
Aldrin	0.500	0.475	95.1	38 - 130	
alpha-BHC	0.500	0.480	96.0	37 - 130	
alpha Chlordane	0.500	0.611	122	60 - 135	
beta-BHC	0.500	0.572	114	61 - 131	
delta-BHC	0.500	0.653	131	47 - 140	
Dieldrin	0.500	0.640	128	60 - 150	
Endosulfan I	0.500	0.493	98.7	50 - 130	
Endosulfan II	0.500	0.528	106	30 - 130	
Endosulfan sulfate	0.500	0.524	105	30 - 130	
Endrin	0.500	0.646	129	50 - 150	
Endrin aldehyde	0.500	0.484	96.7	30 - 130	
Endrin ketone	0.500	0.532	106	31 - 141	
gamma-BHC (Lindane)	0.500	0.520	104	43 - 122	
gamma Chlordane	0.500	0.608	122	60 - 135	
Heptachlor	0.500	0.485	97.0	40 - 130	
Heptachlor epoxide	0.500	0.608	122	60 - 132	
Methoxychlor	0.500	0.699	140	60 - 150	

Surrogates	% Recovery	Surrogate Limits	Qualifier
2,4,5,6-Tetrachloro-m-xylene	70.0	20 - 180	PASS
Decachlorobiphenyl	106	25 - 140	PASS

* Analyte outside control limits

NS Analyte not spiked

KEMRON FORMS - Modified 05/01/2003
Version 1.3
Report generated 05/05/2003 15:21

KEMRON ENVIRONMENTAL SERVICES
LABORATORY CONTROL SAMPLE

Login Number: L0304594
Instrument ID: HP9
File ID: 9G23052.R
Workgroup (AAB#): WG139387
Contract #:

Run Date: 04/30/2003
Run Time: 17:10
Analyst: ECL
Matrix: Water

Sample ID: WG139296-03
Prep Method: 3510C
Method: 8081A
Units: ug/L
Cal ID: HP9-30-APR-2003 15:33

Analytes	Expected	Found	% Rec	LCS Limits	Q
Endrin	0.500	0.768	154	50 - 150	*
Lindane	0.500	0.667	133	43 - 122	*
Heptachlor	0.500	0.574	115	40 - 130	
Heptachlor Epoxide	0.500	0.724	145	60 - 132	*
Methoxychlor	0.500	0.770	154	60 - 150	*

Surrogates	% Recovery	Surrogate Limits	Qualifier
2,4,5,6-Tetrachloro-m-xylene	66.5	20 - 180	PASS
Decachlorobiphenyl	129	25 - 140	PASS

* Analyte outside control limits

NS Analyte not spiked

KEMRON FORMS - Modified 05/01/2003
Version 1.3
Report generated 05/05/2003 15:25

KEMRON ENVIRONMENTAL SERVICES
LABORATORY CONTROL SAMPLES

Loginnum: L0304594 | Worknum: WG139389 | Method: 8081A
Instrument ID: HP9 | Cal ID: HP9-30-APR-2003 15:33 | Matrix: Water
Analyst: ECL | Contract #: | Units: ug/L
Sample ID: WG139269-02 LCS File ID: 9G23078.R Run Date: 05/01/2003 03:41
Sample ID: WG139269-03 LCS2 File ID: 9G23079.R Run Date: 05/01/2003 04:06

Analytes	LCS Known	LCS Found	LCS % REC	LCS2 Known	LCS2 Found	LCS2 % REC	%RPD	%Rec Limits	RPD Limit	Q
4,4'-DDD	0.500	0.662	132	0.500	0.728	146	9.49	50 - 145	40	*
4,4'-DDE	0.500	0.630	126	0.500	0.697	139	10	50 - 145	40	
4,4'-DDT	0.500	0.671	134	0.500	0.742	148	10	45 - 140	40	*
Aldrin	0.500	0.475	95.1	0.500	0.522	104	9.38	38 - 130	40	
alpha-BHC	0.500	0.480	96.0	0.500	0.519	104	7.71	37 - 130	40	
alpha Chlordane	0.500	0.611	122	0.500	0.668	134	8.85	60 - 135	40	
beta-BHC	0.500	0.572	114	0.500	0.624	125	8.62	61 - 131	40	
delta-BHC	0.500	0.653	131	0.500	0.708	142	8.1	47 - 140	40	*
Dieldrin	0.500	0.640	128	0.500	0.703	141	9.32	60 - 150	40	
Endosulfan I	0.500	0.493	98.7	0.500	0.543	109	9.48	50 - 130	40	
Endosulfan II	0.500	0.528	106	0.500	0.592	118	11.5	30 - 130	40	
Endosulfan sulfate	0.500	0.524	105	0.500	0.613	123	15.7	30 - 130	40	
Endrin	0.500	0.646	129	0.500	0.705	141	8.69	50 - 150	40	
Endrin aldehyde	0.500	0.484	96.7	0.500	0.526	105	8.42	30 - 130	40	
Endrin ketone	0.500	0.532	106	0.500	0.627	125	16.5	31 - 141	40	
gamma-BHC (Lindane)	0.500	0.520	104	0.500	0.563	113	7.8	43 - 122	40	
gamma Chlordane	0.500	0.608	122	0.500	0.668	134	9.4	60 - 135	40	
Heptachlor	0.500	0.485	97.0	0.500	0.534	107	9.67	40 - 130	40	
Heptachlor epoxide	0.500	0.608	122	0.500	0.669	134	9.62	60 - 132	40	*
Methoxychlor	0.500	0.699	140	0.500	0.746	149	6.5	60 - 150	40	

Surogates	LCS % Recovery	LCS2 % Recovery	Surrogate Limits	Qualifier
Decachlorobiphenyl	106	130	25 - 140	PASS
2,4,5,6-Tetrachloro-m-xylene	70.0	71.6	20 - 180	PASS

* FAILS %REC LIMIT

\# FAILS RPD LIMIT

KEMRON FORMS - Modified 05/01/2003
Version 1.2
Report generated 05/05/2003 15:21

KEMRON ENVIRONMENTAL SERVICES
LABORATORY CONTROL SAMPLES

Loginnum:L0304594 Worknum:WG140458 Method:8081A
Instrument ID:HP9 Cal ID: HP9 - 09-MAY-2003 19:51 Matrix:Water
Analyst:HV Contract #: Units:ug/L
Sample ID:WG140378-02 LCS File ID:9G23244.R Run Date:05/13/2003 12:32
Sample ID:WG140378-03 LCS2 File ID:9G23245.R Run Date:05/13/2003 12:56
Sample ID:WG140378-04 LCS File ID:9G23246.R Run Date:05/13/2003 13:21

Analytes	LCS			LCS2			LCS		
	Known	Found	% REC	Known	Found	% REC	Known	Found	% REC
Endrin	0.500	0.566	113	0.500	0.577	115			
Lindane	0.500	0.416	83.2	0.500	0.376	75.2			
Heptachlor	0.500	0.368	73.7	0.500	0.332	66.3			
Heptachlor Epoxide	0.500	0.519	104	0.500	0.496	99.2			
Methoxychlor	0.500	0.560	112	0.500	0.573	115			
Toxaphene							2.00	2.74	137

* FAILS %REC LIMIT

FAILS RPD LIMIT

KEMRON FORMS - Modified 05/01/2003
Version 1.2
Report generated 05/19/2003 08:59

KEMRON ENVIRONMENTAL SERVICES
LABORATORY CONTROL SAMPLES

Loginnum:L0304594 Worknum:WG140458 Method:8081A
Instrument ID:HP9 Cal ID: HP9 09-MAY-2003 19:51 Matrix:Water
Analyst:HV Contract #: Units:ug/L
Sample ID:WG140378-02 LCS File ID:9G23244.R Run Date:05/13/2003 12:32
Sample ID:WG140378-03 LCS2 File ID:9G23245.R Run Date:05/13/2003 12:56
Sample ID:WG140378-04 LCS File ID:9G23246.R Run Date:05/13/2003 13:21

Analytes	%RPD	%Rec Limits	RPD Limit	Q
Endrin	2.01	50 - 150	40	
Lindane	10.2	43 - 122	40	
Heptachlor	10.5	40 - 130	40	
Heptachlor Epoxide	4.48	60 - 132	40	
Methoxychlor	2.32	60 - 150	40	
Toxaphene	0	41 - 126	40	*

Surogates	LCS % Recovery	LCS2 % Recovery	LCS % Recovery	Surrogate Limits	Qualifier
Decachlorobiphenyl	75.8	49.6	70.3	25 - 140	PASS
2,4,5,6-Tetrachloro-m-xylene	50.4	47.9	50.7	20 - 180	PASS

* FAILS %REC LIMIT

FAILS RPD LIMIT

KEMRON FORMS - Modified 05/01/2003
Version 1.2
Report generated 05/19/2003 08:59

KEMRON ENVIRONMENTAL SERVICES
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method:8081A AAB#:WG139389
Login Number:L0304594

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
05-177511-DW2-042503	04/25/03	04/26/03	04/29/03	7	3.94	05/01/03	40	2.08	
05-177511-DW2-042503	04/25/03	04/26/03	04/29/03	7	3.94	05/01/03	40	2.10	
05-177511-DW3-042503	04/25/03	04/26/03	04/29/03	7	3.91	05/01/03	40	2.10	
05-177511-DW3-042503	04/25/03	04/26/03	04/29/03	7	3.91	05/01/03	40	2.12	

* EXT = MISSED EXTRACTION HOLD TIME
*ANAL = MISSED ANALYTICAL HOLD TIME

KEMRON FORMS - Modified 12/06/2002
Version 1.2
Report generated 05/05/2003 15:21

KEMRON ENVIRONMENTAL SERVICES
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method:8081A

AAB#:WG139387

Login Number:L0304594

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
05-177511-SP2-042503	04/25/03	04/26/03	04/29/03	10.1	4.03	04/30/03	40	1.15	
05-177511-SP2-042503	04/25/03	04/26/03	04/29/03	10.1	4.03	04/30/03	40	1.17	

* EXT = MISSED EXTRACTION HOLD TIME
*ANAL = MISSED ANALYTICAL HOLD TIME

KEMRON FORMS - Modified 12/06/2002
Version 1.2
Report generated 05/05/2003 15:24

KEMRON ENVIRONMENTAL SERVICES
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 8081B

AAB#: WG140458

Login Number: L0304594

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
05-177511-SP2-042503	04/25/03	04/26/03	05/12/03	20.1	16.8	05/13/03	40	1.32	

* EXT = MISSED EXTRACTION HOLD TIME
*ANAL = MISSED ANALYTICAL HOLD TIME

KEMRON FORMS - Modified 05/07/2003
Version 1.2
Report generated 05/19/2003 08:56

KEMRON ENVIRONMENTAL SERVICES
SURROGATE STANDARDS

Login Number: L0304594
Instrument Id: HP9
Workgroup (AAB#): WG139389

Method: 8081
CAL ID: HP9-30-APR-03
Matrix: WATER

Sample Number	Dilution	Tag	1	2
L0304594-01	1.00	01	83.7	48.9
L0304594-01	1.00	CF1	90.8	40.6
L0304594-02	1.00	01	48.7	61.8
WG139269-01	1.00	01	56.7	110
WG139269-02	1.00	01	70.0	106
WG139269-03	1.00	01	71.6	130

Surrogates	Surrogate Limits		
1 - 2,4,5,6-Tetrachloro-m-xylene	20	-	180
2 - Decachlorobiphenyl	25	-	140

Underline = Result out of surrogate limits

DL = surrogate diluted out

ND = surrogate not detected

KEMRON FORMS - Modified 01/22/2003
Version 1.2
Report generated 05/05/2003 15:21

KEMRON ENVIRONMENTAL SERVICES
SURROGATE STANDARDS

Login Number: L0304594
Instrument Id: HP9
Workgroup (AAB#): WG139387

Method: 8081
CAL ID: HP9-30-APR-03
Matrix: WATER

Sample Number	Dilution	Tag	1	2
L0304594-03	1.00	01	60.9	99.3
WG139296-02	1.00	01	58.4	81.8
WG139296-03	1.00	01	66.5	129

Surrogates	Surrogate Limits		
1 - 2,4,5,6-Tetrachloro-m-xylene	20	-	180
2 - Decachlorobiphenyl	25	-	140

Underline = Result out of surrogate limits

DL = surrogate diluted out

ND = surrogate not detected

KEMRON FORMS - Modified 01/22/2003
Version 1.2
Report generated 05/05/2003 15:24

KEMRON ENVIRONMENTAL SERVICES
SURROGATE STANDARDS

Login Number: L0304594
Instrument Id: HP9
Workgroup (AAB#): WG140458

Method: 8081
CAL ID: HP9-09-MAY-03
Matrix: WATER

Sample Number	Dilution	Tag	1	2
L0304594-03	1.00	RE1	58.8	112
WG140378-01	1.00		45.4	58.4
WG140378-02	1.00		50.4	75.8
WG140378-03	1.00		47.9	49.6
WG140378-04	1.00		50.7	70.3

Surrogates	Surrogate Limits		
1 - 2,4,5,6-Tetrachloro-m-xylene	20	-	180
2 - Decachlorobiphenyl	25	-	140

Underline = Result out of surrogate limits

DL = surrogate diluted out

ND = surrogate not detected

KEMRON FORMS - Modified 01/22/2003
Version 1.2
Report generated 05/19/2003 08:57

Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003
Last Update : Wed Apr 30 16:29:00 2003

Calibration Files
2000 =9G23038.D 1000 =9G23039.D 500 =9G23040.D
250 =9G23041.D 100 =9G23042.D

	Compound	2000	1000	500	250	100	Avg		%RSD
1) L1	Toxaphene-1	8.883	8.889	8.886	8.756	8.911	8.865	E5	0.70
2) L1	Toxaphene-2	1.620	1.612	1.597	1.642	1.692	1.633	E6	2.26
3) L1	Toxaphene-3	1.148	1.128	1.083	1.055	1.033	1.089	E6	4.43
4) L1	Toxaphene-4	1.436	1.431	1.419	1.403	1.387	1.415	E6	1.45
5) L1	Toxaphene-5	7.258	7.129	6.883	6.675	6.537	6.897	E5	4.37

Signal #2 Calibration Files
2000 =9G23038.D 1000 =9G23039.D 500 =9G23040.D
250 =9G23041.D 100 =9G23042.D

	Compound	2000	1000	500	250	100	Avg		%RSD
1) L1	Toxaphene-1	5.392	5.284	5.107	4.910	5.063	5.151	E5	3.68
2) L1	Toxaphene-2	1.492	1.458	1.404	1.316	1.384	1.411	E6	4.83
3) L1	Toxaphene-3	1.056	1.010	0.946	0.813	0.771	0.919	E6	13.42
4) L1	Toxaphene-4	7.813	7.495	6.996	6.167	5.770	6.848	E5	12.64
5) L1	Toxaphene-5	7.230	6.956	6.587	6.010	5.887	6.534	E5	8.92

(#) = Out of Range

Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Wed Apr 30 16:35:45 2003

Calibration Files
4 =9G23049.D 10 =9G23048.D 20 =9G23047.D
50 =9G23046.D 100 =9G23045.D 200 =9G23044.D

		Compound	4	10	20	50	100	200	Avg		%RSD
1)	S	2,4,5,6-Tetrachloro	8.512	8.600	8.708	8.528	8.522	8.305	8.529	E7	1.55
2)		alpha-BHC	1.124	1.200	1.242	1.257	1.270	1.241	1.222	E8	4.39
3)		gamma-BHC	1.064	1.057	1.105	1.101	1.114	1.052	1.082	E8	2.51
4)		beta-BHC	4.459	4.738	4.856	4.710	4.639	4.804	4.701	E7	2.98
5)		Heptachlor	1.116	1.137	1.144	1.111	1.085	1.019	1.102	E8	4.16
6)		delta-BHC	0.969	1.060	1.141	1.161	1.163	1.146	1.107	E8	7.01
7)		Aldrin	1.001	1.061	1.063	1.046	1.030	0.982	1.030	E8	3.22
8)		Heptachlor Epoxide	7.806	8.124	8.661	8.330	8.285	7.474	8.113	E7	5.17
9)		gamma-Chlordane	9.176	9.368	9.484	9.413	9.347	9.127	9.319	E7	1.49
10)		alpha-Chlordane	9.775	9.272	9.108	8.873	8.788	8.529	9.057	E7	4.81
11)		Endosulfan I	9.750	9.358	9.221	8.867	8.587	8.065	8.975	E7	6.68
12)		4,4'-DDE	9.070	8.575	8.568	8.552	8.530	8.329	8.604	E7	2.86
13)		Dieldrin	9.106	9.383	9.372	9.226	9.114	8.736	9.156	E7	2.60
14)		Endrin	8.346	8.629	8.758	8.671	8.556	8.181	8.523	E7	2.56
15)		4,4'-DDD	6.121	6.617	6.872	7.147	7.143	7.016	6.819	E7	5.80
16)		Endosulfan II	7.119	7.371	7.549	7.432	7.319	7.136	7.321	E7	2.30
17)		4,4'-DDT	7.837	7.456	7.563	7.436	7.428	7.292	7.502	E7	2.47
18)		Endrin Aldehyde	6.331	5.737	5.646	5.407	5.351	5.373	5.641	E7	6.61
19)		Endosulfan Sulfate	4.466	4.773	4.938	4.844	4.921	4.799	4.790	E7	3.58
20)		Methoxychlor	3.453	3.432	3.520	3.352	3.337	3.285	3.396	E7	2.56
21)		Endrin Ketone	6.630	6.697	6.715	6.639	6.652	6.634	6.661	E7	0.54
22)	S	Decachlorobiphenyl	5.665	5.493	5.319	5.065	5.011	4.942	5.249	E7	5.54

Signal #2 Calibration Files
4 =9G23049.D 10 =9G23048.D 20 =9G23047.D
50 =9G23046.D 100 =9G23045.D 200 =9G23044.D

		Compound	4	10	20	50	100	200	Avg		%RSD
1)	S	2,4,5,6-Tetrachloro	5.335	5.565	5.548	5.907	5.847	5.713	5.653	E7	3.76
2)		alpha-BHC	6.905	7.755	8.226	8.962	8.969	8.720	8.256	E7	9.84
3)		gamma-BHC	6.384	7.006	7.302	7.910	7.913	7.684	7.366	E7	8.13
4)		beta-BHC	3.267	3.282	3.241	3.382	3.343	3.277	3.299	E7	1.60
5)		Heptachlor	5.505	6.133	6.330	6.692	6.677	6.396	6.289	E7	6.99
6)		delta-BHC	5.922	6.585	7.042	7.723	7.784	7.652	7.118	E7	10.54
7)		Aldrin	5.517	6.081	6.341	6.893	6.893	6.683	6.401	E7	8.42
8)		Heptachlor Epoxide	5.484	5.602	5.791	6.176	6.149	5.990	5.865	E7	4.90
9)		gamma-Chlordane	5.288	5.544	5.657	6.104	6.111	5.990	5.782	E7	5.84
10)		alpha-Chlordane	5.081	5.187	5.283	5.641	5.634	5.526	5.392	E7	4.46
11)		Endosulfan I	4.917	5.072	5.191	5.555	5.551	5.429	5.286	E7	5.03
12)		4,4'-DDE	4.392	4.736	4.980	5.494	5.561	5.510	5.112	E7	9.52
13)		Dieldrin	4.800	5.143	5.398	5.911	5.989	5.921	5.525	E7	8.91
14)		Endrin	4.023	4.223	4.498	4.891	5.089	5.136	4.643	E7	10.03
15)		4,4'-DDD	3.509	3.788	4.007	4.408	4.492	4.559	4.127	E7	10.33
16)		Endosulfan II	3.937	4.236	4.305	4.744	4.806	4.892	4.487	E7	8.52
17)		4,4'-DDT	3.393	3.608	3.859	4.267	4.453	4.527	4.018	E7	11.65
18)		Endrin Aldehyde	3.085	3.324	3.301	3.448	3.505	3.565	3.371	E7	5.14
19)		Endosulfan Sulfate	3.336	3.450	3.594	3.852	3.975	4.062	3.712	E7	7.95
20)		Methoxychlor	2.037	1.923	1.941	2.061	2.146	2.221	2.055	E7	5.61
21)		Endrin Ketone	4.167	4.278	4.432	4.733	4.828	4.900	4.556	E7	6.71
22)	S	Decachlorobiphenyl	4.317	4.051	3.969	3.900	3.915	3.910	4.010	E7	4.00

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA\043003\9G23043.D\ECD1A.CH Vial: 9
Acq On : 30 Apr 2003 13:08 Operator: ECL
Sample : TOX ALT ICV 500 PPB Inst : HP9
Misc : SOS63-05 Multiplr: 1.00
IntFile : .E

Data File : C:\HPCHEM\1\DATA\043003\9G23043.D\ECD2B.CH Vial: 9
Acq On : 30 Apr 2003 13:32 Operator: ECL
Sample : TOX ALT ICV 500 PPB Inst : HP9
Misc : SOS63-05 Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003
Last Update : Wed Apr 30 16:29:00 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	L1	Toxaphene-1	500.000	504.769	-1.0	101	0.00
2	L1	Toxaphene-2	500.000	452.612	9.5	93	0.00
3	L1	Toxaphene-3	500.000	496.209	0.8	100	0.00
4	L1	Toxaphene-4	500.000	492.361	1.5	98	0.00
5	L1	Toxaphene-5	500.000	530.972	-6.2	106	0.00
		Signal #2					
1	L1	Toxaphene-1	500.000	443.844	11.2	90	0.00
2	L1	Toxaphene-2	500.000	494.089	1.2	99	0.00
3	L1	Toxaphene-3	500.000	476.207	4.8	93	0.00
4	L1	Toxaphene-4	500.000	469.622	6.1	92	0.00
5	L1	Toxaphene-5	500.000	488.513	2.3	97	0.00

Data File : C:\HPCHEM\1\DATA\043003\9G23050.D\ECD1A.CH Vial: 16
Acq On : 30 Apr 2003 15:57 Operator: ECL
Sample : WG139380-07 PEST ALT ICV 20 PPB Inst : HP9
Misc : 1,1 SOS62-49 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23050.D\ECD2B.CH Vial: 16
Acq On : 30 Apr 2003 16:22 Operator: ECL
Sample : WG139380-07 PEST ALT ICV 20 PPB Inst : HP9
Misc : 1,1 SOS62-49 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Wed Apr 30 16:35:45 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
2	alpha-BHC	20.000	19.355	3.2	95	0.00
3	gamma-BHC	20.000	19.371	3.1	95	0.00
4	beta-BHC	20.000	18.796	6.0	91	0.00
5	Heptachlor	20.000	19.633	1.8	95	0.00
6	delta-BHC	20.000	18.899	5.5	92	0.00
7	Aldrin	20.000	19.424	2.9	94	0.00
8	Heptachlor Epoxide	20.000	19.649	1.8	92	0.00
9	gamma-Chlordane	20.000	19.497	2.5	96	0.00
10	alpha-Chlordane	20.000	19.375	3.1	96	0.00
11	Endosulfan I	20.000	19.116	4.4	93	0.00
12	4,4'-DDE	20.000	19.396	3.0	97	0.00
13	Dieldrin	20.000	19.302	3.5	94	0.00
14	Endrin	20.000	18.703	6.5	91	0.00
15	4,4'-DDD	20.000	19.084	4.6	95	0.00
16	Endosulfan II	20.000	18.658	6.7	90	0.00
17	4,4'-DDT	20.000	18.442	7.8	91	0.00
18	Endrin Aldehyde	20.000	17.443	12.8	87	0.00
19	Endosulfan Sulfate	20.000	19.275	3.6	93	0.00
20	Methoxychlor	20.000	19.035	4.8	92	0.00
21	Endrin Ketone	20.000	18.935	5.3	94	0.00

Signal #2

2	alpha-BHC	20.000	19.397	3.0	97	0.00
3	gamma-BHC	20.000	19.276	3.6	97	0.00
4	beta-BHC	20.000	18.464	7.7	94	0.00
5	Heptachlor	20.000	19.267	3.7	96	0.00
6	delta-BHC	20.000	18.448	7.8	93	0.00
7	Aldrin	20.000	19.048	4.8	96	0.00
8	Heptachlor Epoxide	20.000	19.213	3.9	97	0.00
9	gamma-Chlordane	20.000	19.014	4.9	97	0.00
10	alpha-Chlordane	20.000	19.280	3.6	98	0.00
11	Endosulfan I	20.000	18.540	7.3	94	0.00
12	4,4'-DDE	20.000	19.264	3.7	99	0.00
13	Dieldrin	20.000	18.742	6.3	96	0.00
14	Endrin	20.000	17.935	10.3	93	0.00
15	4,4'-DDD	20.000	18.670	6.6	96	0.00
16	Endosulfan II	20.000	18.002	10.0	94	0.00
17	4,4'-DDT	20.000	18.396	8.0	96	0.00
18	Endrin Aldehyde	20.000	17.209	14.0	88	0.00
19	Endosulfan Sulfate	20.000	18.211	8.9	94	0.00
20	Methoxychlor	20.000	17.996	10.0	95	0.00
21	Endrin Ketone	20.000	18.367	8.2	94	0.00

Data File : C:\HPCHEM\1\DATA\043003\9G23062.D\ECD1A.CH Vial: 28
Acq On : 30 Apr 2003 20:48 Operator: ECL
Sample : WG139380-08 PEST CCV 20 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23062.D\ECD2B.CH Vial: 28
Acq On : 30 Apr 2003 21:13 Operator: ECL
Sample : WG139380-08 PEST CCV 20 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Thu May 01 08:17:59 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	S	2,4,5,6-Tetrachloro-M-Xylen	20.000	21.353	-6.8	105	0.00
2		alpha-BHC	20.000	21.425	-7.1	105	0.00
3		gamma-BHC	20.000	20.780	-3.9	102	0.00
4		beta-BHC	20.000	21.933	-9.7	106	0.00
5		Heptachlor	20.000	22.030	-10.2	106	0.00
6		delta-BHC	20.000	22.004	-10.0	107	0.00
7		Aldrin	20.000	21.943	-9.7	106	0.00
8		Heptachlor Epoxide	20.000	20.353	-1.8	95	0.00
9		gamma-Chlordane	20.000	21.498	-7.5	106	0.01#
10		alpha-Chlordane	20.000	21.436	-7.2	107	0.01#
11		Endosulfan I	20.000	21.926	-9.6	107	0.01#
12		4,4'-DDE	20.000	21.610	-8.0	109	0.00
13		Dieldrin	20.000	21.825	-9.1	107	0.01#
14		Endrin	20.000	22.081	-10.4	107	0.01#
15		4,4'-DDD	20.000	22.032	-10.2	109	0.00
16		Endosulfan II	20.000	22.698	-13.5	110	0.01#
17		4,4'-DDT	20.000	22.125	-10.6	110	0.01#
18		Endrin Aldehyde	20.000	21.024	-5.1	105	0.01#
19		Endosulfan Sulfate	20.000	22.828	-14.1	111	0.00
20		Methoxychlor	20.000	21.528	-7.6	104	0.00
21		Endrin Ketone	20.000	21.379	-6.9	106	0.00
22	S	Decachlorobiphenyl	20.000	20.875	-4.4	103	0.00

Signal #2

1	S	2,4,5,6-Tetrachloro-M-Xyl	20.000	19.394	3.0	99	0.00
2		alpha-BHC	20.000	19.552	2.2	98	0.00
3		gamma-BHC	20.000	19.456	2.7	98	0.00
4		beta-BHC	20.000	19.254	3.7	98	0.00
5		Heptachlor	20.000	19.444	2.8	97	0.00
6		delta-BHC	20.000	19.485	2.6	98	0.00
7		Aldrin	20.000	19.345	3.3	98	0.00
8		Heptachlor Epoxide	20.000	19.601	2.0	99	0.00
9		gamma-Chlordane	20.000	19.156	4.2	98	0.00
10		alpha-Chlordane	20.000	19.217	3.9	98	0.00
11		Endosulfan I	20.000	19.275	3.6	98	0.00
12		4,4'-DDE	20.000	19.157	4.2	98	0.00
13		Dieldrin	20.000	19.147	4.3	98	0.00
14		Endrin	20.000	19.783	1.1	102	0.00
15		4,4'-DDD	20.000	19.039	4.8	98	0.00
16		Endosulfan II	20.000	19.026	4.9	99	0.00
17		4,4'-DDT	20.000	19.149	4.3	100	0.00
18		Endrin Aldehyde	20.000	19.402	3.0	99	0.00
19		Endosulfan Sulfate	20.000	19.525	2.4	101	0.00
20		Methoxychlor	20.000	19.349	3.3	102	0.00
21		Endrin Ketone	20.000	19.218	3.9	99	0.00
22	S	Decachlorobiphenyl	20.000	19.467	2.7	98	-0.01#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data File : C:\HPCHEM\1\DATA\043003\9G23063.D\ECD1A.CH Vial: 29
Acq On : 30 Apr 2003 21:13 Operator: ECL
Sample : TOX CCV 500 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : .E

Data File : C:\HPCHEM\1\DATA\043003\9G23063.D\ECD2B.CH Vial: 29
Acq On : 30 Apr 2003 21:37 Operator: ECL
Sample : TOX CCV 500 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003
Last Update : Wed Apr 30 16:29:00 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	L1	Toxaphene-1	500.000	508.710	-1.7	102	0.00
2	L1	Toxaphene-2	500.000	491.897	1.6	101	0.00
3	L1	Toxaphene-3	500.000	502.821	-0.6	101	0.00
4	L1	Toxaphene-4	500.000	498.953	0.2	100	0.00
5	L1	Toxaphene-5	500.000	500.738	-0.1	100	0.00
		Signal #2					
1	L1	Toxaphene-1	500.000	472.739	5.5	95	0.00
2	L1	Toxaphene-2	500.000	470.251	5.9	95	0.00
3	L1	Toxaphene-3	500.000	483.885	3.2	94	0.00
4	L1	Toxaphene-4	500.000	479.445	4.1	94	0.00
5	L1	Toxaphene-5	500.000	477.200	4.6	95	0.00

Data File : C:\HPCHEM\1\DATA\043003\9G23074.D\ECD1A.CH Vial: 40
Acq On : 1 May 2003 1:40 Operator: ECL
Sample : WG139380-09 PEST CCV 50 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23074.D\ECD2B.CH Vial: 40
Acq On : 1 May 2003 2:04 Operator: ECL
Sample : WG139380-09 PEST CCV 50 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Thu May 01 08:20:11 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	S	2,4,5,6-Tetrachloro-M-Xylen	50.000	53.831	-7.7	108	0.00
2		alpha-BHC	50.000	55.602	-11.2	108	0.00
3		gamma-BHC	50.000	53.344	-6.7	105	0.00
4		beta-BHC	50.000	55.444	-10.9	111	0.00
5		Heptachlor	50.000	54.507	-9.0	108	0.00
6		delta-BHC	50.000	57.226	-14.5	109	0.00
7		Aldrin	50.000	54.674	-9.3	108	0.01#
8		Heptachlor Epoxide	50.000	50.287	-0.6	98	0.01#
9		gamma-Chlordane	50.000	53.630	-7.3	106	0.01#
10		alpha-Chlordane	50.000	52.244	-4.5	107	0.01#
11		Endosulfan I	50.000	53.014	-6.0	107	0.01#
12		4,4'-DDE	50.000	53.792	-7.6	108	0.00
13		Dieldrin	50.000	54.239	-8.5	108	0.01#
14		Endrin	50.000	54.793	-9.6	108	0.01#
15		4,4'-DDD	50.000	57.372	-14.7	109	0.00
16		Endosulfan II	50.000	55.992	-12.0	110	0.01#
17		4,4'-DDT	50.000	54.010	-8.0	109	0.01#
18		Endrin Aldehyde	50.000	51.829	-3.7	108	0.01#
19		Endosulfan Sulfate	50.000	57.237	-14.5	113	0.00
20		Methoxychlor	50.000	53.105	-6.2	108	0.00
21		Endrin Ketone	50.000	53.512	-7.0	107	0.00
22	S	Decachlorobiphenyl	50.000	50.403	-0.8	104	0.00

Signal #2

1	S	2,4,5,6-Tetrachloro-M-Xyl	50.000	49.829	0.3	95	0.00
2		alpha-BHC	50.000	52.075	-4.2	96	0.00
3		gamma-BHC	50.000	51.562	-3.1	96	0.00
4		beta-BHC	50.000	49.038	1.9	96	0.00
5		Heptachlor	50.000	50.095	-0.2	94	0.00
6		delta-BHC	50.000	52.425	-4.8	97	0.00
7		Aldrin	50.000	51.910	-3.8	96	0.00
8		Heptachlor Epoxide	50.000	50.797	-1.6	96	0.00
9		gamma-Chlordane	50.000	50.428	-0.9	96	0.00
10		alpha-Chlordane	50.000	50.132	-0.3	96	0.00
11		Endosulfan I	50.000	50.573	-1.1	96	0.00
12		4,4'-DDE	50.000	51.827	-3.7	96	0.00
13		Dieldrin	50.000	51.409	-2.8	96	0.00
14		Endrin	50.000	52.172	-4.3	99	0.00
15		4,4'-DDD	50.000	51.373	-2.7	96	0.00
16		Endosulfan II	50.000	51.263	-2.5	97	0.00
17		4,4'-DDT	50.000	52.173	-4.3	98	0.00
18		Endrin Aldehyde	50.000	50.056	-0.1	98	0.00
19		Endosulfan Sulfate	50.000	51.351	-2.7	99	0.00
20		Methoxychlor	50.000	49.840	0.3	99	0.00
21		Endrin Ketone	50.000	48.595	2.8	94	0.00
22	S	Decachlorobiphenyl	50.000	47.419	5.2	98	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data File : C:\HPCHEM\1\DATA\043003\9G23075.D\ECD1A.CH Vial: 41
Acq On : 1 May 2003 2:04 Operator: ECL
Sample : TOX CCV 250 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : .E

Data File : C:\HPCHEM\1\DATA\043003\9G23075.D\ECD2B.CH Vial: 41
Acq On : 1 May 2003 2:28 Operator: ECL
Sample : TOX CCV 250 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003
Last Update : Wed Apr 30 16:29:00 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	L1	Toxaphene-1	250.000	259.618	-3.8	105	0.02
2	L1	Toxaphene-2	250.000	275.050	-10.0	109	0.01
3	L1	Toxaphene-3	250.000	250.714	-0.3	104	0.00
4	L1	Toxaphene-4	250.000	266.243	-6.5	107	0.01
5	L1	Toxaphene-5	250.000	263.483	-5.4	109	0.01
		Signal #2					
1	L1	Toxaphene-1	250.000	240.533	3.8	101	0.00
2	L1	Toxaphene-2	250.000	237.249	5.1	102	0.00
3	L1	Toxaphene-3	250.000	227.856	8.9	103	0.00
4	L1	Toxaphene-4	250.000	230.693	7.7	102	0.00
5	L1	Toxaphene-5	250.000	232.771	6.9	101	0.00

Data File : C:\HPCHEM\1\DATA\043003\9G23087.D\ECD1A.CH Vial: 53
Acq On : 1 May 2003 6:56 Operator: ECL
Sample : WG139380-10 PEST CCV 20 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23087.D\ECD2B.CH Vial: 53
Acq On : 1 May 2003 7:20 Operator: ECL
Sample : WG139380-10 PEST CCV 20 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Thu May 01 08:20:11 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	S	2,4,5,6-Tetrachloro-M-Xylen	20.000	21.265	-6.3	104	0.00
2		alpha-BHC	20.000	21.377	-6.9	105	0.00
3		gamma-BHC	20.000	20.571	-2.9	101	0.00
4		beta-BHC	20.000	21.205	-6.0	103	0.00
5		Heptachlor	20.000	21.333	-6.7	103	0.00
6		delta-BHC	20.000	21.823	-9.1	106	0.00
7		Aldrin	20.000	21.393	-7.0	104	0.01#
8		Heptachlor Epoxide	20.000	19.834	0.8	93	0.01#
9		gamma-Chlordane	20.000	21.191	-6.0	104	0.01#
10		alpha-Chlordane	20.000	21.306	-6.5	106	0.01#
11		Endosulfan I	20.000	21.675	-8.4	105	0.01#
12		4,4'-DDE	20.000	21.642	-8.2	109	0.00
13		Dieldrin	20.000	21.580	-7.9	105	0.01#
14		Endrin	20.000	21.510	-7.6	105	0.01#
15		4,4'-DDD	20.000	21.795	-9.0	108	0.00
16		Endosulfan II	20.000	22.672	-13.4	110	0.01#
17		4,4'-DDT	20.000	22.680	-13.4	112	0.01#
18		Endrin Aldehyde	20.000	22.147	-10.7	111	0.00
19		Endosulfan Sulfate	20.000	22.292	-11.5	108	0.00
20		Methoxychlor	20.000	20.659	-3.3	100	0.00
21		Endrin Ketone	20.000	21.240	-6.2	105	0.00
22	S	Decachlorobiphenyl	20.000	20.600	-3.0	102	0.00

Signal #2

1	S	2,4,5,6-Tetrachloro-M-Xyl	20.000	19.640	1.8	100	0.00
2		alpha-BHC	20.000	19.826	0.9	99	0.00
3		gamma-BHC	20.000	19.710	1.4	99	0.00
4		beta-BHC	20.000	19.474	2.6	99	0.00
5		Heptachlor	20.000	20.341	-1.7	101	0.00
6		delta-BHC	20.000	19.670	1.6	99	0.00
7		Aldrin	20.000	19.690	1.5	99	0.00
8		Heptachlor Epoxide	20.000	19.906	0.5	101	0.00
9		gamma-Chlordane	20.000	19.381	3.1	99	0.00
10		alpha-Chlordane	20.000	19.403	3.0	99	0.00
11		Endosulfan I	20.000	19.529	2.4	99	0.00
12		4,4'-DDE	20.000	19.425	2.9	100	0.00
13		Dieldrin	20.000	19.350	3.2	99	0.00
14		Endrin	20.000	19.847	0.8	102	0.00
15		4,4'-DDD	20.000	19.197	4.0	99	0.00
16		Endosulfan II	20.000	19.077	4.6	99	0.00
17		4,4'-DDT	20.000	19.400	3.0	101	0.00
18		Endrin Aldehyde	20.000	19.648	1.8	100	0.00
19		Endsulfan Sulfate	20.000	19.627	1.9	101	0.00
20		Methoxychlor	20.000	19.106	4.5	101	0.00
21		Endrin Ketone	20.000	19.298	3.5	99	0.00
22	S	Decachlorobiphenyl	20.000	19.520	2.4	99	0.00

(#) = Out of Range SFCC's out = 0 CCC's out = 0

Data File : C:\HPCHEM\1\DATA\043003\9G23088.D\ECD1A.CH Vial: 54
Acq On : 1 May 2003 7:20 Operator: ECL
Sample : TOX CCV 500 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : .E

Data File : C:\HPCHEM\1\DATA\043003\9G23088.D\ECD2B.CH Vial: 54
Acq On : 1 May 2003 7:44 Operator: ECL
Sample : TOX CCV 500 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003
Last Update : Wed Apr 30 16:29:00 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	L1	Toxaphene-1	500.000	545.747	-9.1	109	0.02
2	L1	Toxaphene-2	500.000	527.024	-5.4	108	0.02
3	L1	Toxaphene-3	500.000	535.611	-7.1	108	0.00
4	L1	Toxaphene-4	500.000	532.038	-6.4	106	0.01
5	L1	Toxaphene-5	500.000	533.734	-6.7	107	0.01
		Signal #2					
1	L1	Toxaphene-1	500.000	462.090	7.6	93	0.00
2	L1	Toxaphene-2	500.000	463.706	7.3	93	0.00
3	L1	Toxaphene-3	500.000	474.796	5.0	92	0.00
4	L1	Toxaphene-4	500.000	481.424	3.7	94	0.00
5	L1	Toxaphene-5	500.000	469.129	6.2	93	0.00

Data File : C:\HPCHEM\1\DATA\043003\9G23100.D\ECD1A.CH Vial: 66
Acq On : 1 May 2003 12:12 Operator: ECL
Sample : WG139380-11 PEST CCV 50 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23100.D\ECD2B.CH Vial: 66
Acq On : 1 May 2003 12:36 Operator: ECL
Sample : WG139380-11 PEST CCV 50 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Thu May 01 08:24:58 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	S	2,4,5,6-Tetrachloro-M-Xylen	50.000	54.776	-9.6	110	-0.01#
2		alpha-BHC	50.000	56.721	-13.4	110	0.00
3		gamma-BHC	50.000	53.743	-7.5	106	0.00
4		beta-BHC	50.000	56.480	-13.0	113	-0.01#
5		Heptachlor	50.000	54.439	-8.9	108	0.00
6		delta-BHC	50.000	57.081	-14.2	109	-0.01#
7		Aldrin	50.000	55.321	-10.6	109	0.00
8		Heptachlor Epoxide	50.000	50.376	-0.8	98	0.00
9		gamma-Chlordane	50.000	55.205	-10.4	109	0.00
10		alpha-Chlordane	50.000	53.704	-7.4	110	0.00
11		Endosulfan I	50.000	53.660	-7.3	109	0.00
12		4,4'-DDE	50.000	55.540	-11.1	112	0.00
13		Dieldrin	50.000	55.235	-10.5	110	0.00
14		Endrin	50.000	54.672	-9.3	107	0.00
15		4,4'-DDD	50.000	56.471	-12.9	108	0.00
16		Endosulfan II	50.000	56.425	-12.8	111	0.00
17		4,4'-DDT	50.000	54.615	-9.2	110	0.00
18		Endrin Aldehyde	50.000	53.037	-6.1	111	0.00
19		Endosulfan Sulfate	50.000	57.795	-15.6#	114	0.00
20		Methoxychlor	50.000	52.445	-4.9	106	0.00
21		Endrin Ketone	50.000	52.882	-5.8	106	0.00
22	S	Decachlorobiphenyl	50.000	50.643	-1.3	105	0.00

Signal #2

1	S	2,4,5,6-Tetrachloro-M-Xyl	50.000	50.688	-1.4	97	0.00
2		alpha-BHC	50.000	52.852	-5.7	97	0.00
3		gamma-BHC	50.000	52.170	-4.3	97	0.00
4		beta-BHC	50.000	49.524	1.0	97	0.00
5		Heptachlor	50.000	51.300	-2.6	96	0.00
6		delta-BHC	50.000	53.062	-6.1	98	0.00
7		Aldrin	50.000	51.975	-4.0	97	0.00
8		Heptachlor Epoxide	50.000	51.854	-3.7	98	0.00
9		gamma-Chlordane	50.000	51.013	-2.0	97	0.00
10		alpha-Chlordane	50.000	50.538	-1.1	97	0.00
11		Endosulfan I	50.000	51.135	-2.3	97	0.00
12		4,4'-DDE	50.000	52.378	-4.8	97	0.00
13		Dieldrin	50.000	52.001	-4.0	97	0.00
14		Endrin	50.000	51.699	-3.4	98	0.00
15		4,4'-DDD	50.000	51.941	-3.9	97	0.00
16		Endosulfan II	50.000	51.752	-3.5	98	0.00
17		4,4'-DDT	50.000	52.353	-4.7	99	0.00
18		Endrin Aldehyde	50.000	50.805	-1.6	99	0.00
19		Endosulfan Sulfate	50.000	52.177	-4.4	101	0.00
20		Methoxychlor	50.000	49.869	0.3	99	0.00
21		Endrin Ketone	50.000	51.205	-2.4	99	0.00
22	S	Decachlorobiphenyl	50.000	47.573	4.9	98	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Acq On : 1 May 2003 12:36 Operator: ECL
Sample : TOX CCV 500 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : .E

Data File : C:\HPCHEM\1\DATA\043003\9G23101.D\ECD2B.CH Vial: 67
Acq On : 1 May 2003 13:00 Operator: ECL
Sample : TOX CCV 500 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003
Last Update : Wed Apr 30 16:29:00 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	L1	Toxaphene-1	250.000	268.821	-7.5	109	0.00
2	L1	Toxaphene-2	250.000	266.872	-6.7	106	0.00
3	L1	Toxaphene-3	250.000	253.396	-1.4	105	0.00
4	L1	Toxaphene-4	250.000	250.290	-0.1	101	0.00
5	L1	Toxaphene-5	250.000	258.488	-3.4	107	0.00
		Signal #2					
1	L1	Toxaphene-1	250.000	237.593	5.0	100	0.00
2	L1	Toxaphene-2	250.000	233.526	6.6	100	0.00
3	L1	Toxaphene-3	250.000	223.439	10.6	101	0.00
4	L1	Toxaphene-4	250.000	226.606	9.4	101	0.00
5	L1	Toxaphene-5	250.000	227.185	9.1	99	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
9G23101.D TOX.M Thu May 01 14:05:34 2003 Page 1

CONTINUING CALIBRATION REPORT

Login Number: L0304594
File ID: 9G23241.F
CCV ID: WG140524-01
Units: ug/L

Instrument ID: HP9
Run Date: 05/13/2003
Run Time: 10:21
Analyst: HV
Cal ID: HP9 - 09-MAY-03

Analyte		Expected	Found	RF	%D	Q
Endrin Ketone		20	20.8	72200000	4.0	
Methoxychlor		20	19.9	34000000	0.5	
Endosulfan Sulfate		20	20.7	57400000	3.5	
Endrin Aldehyde		20	20.6	58500000	3.0	
4,4'-DDT		20	19.6	74900000	2.0	
Endosulfan II		20	20.1	78400000	0.5	
4,4'-DDD		20	20.0	71300000	0.0	
Endrin		20	19.5	82000000	2.5	
Dieldrin		20	20.9	94000000	4.5	
4,4'-DDE		20	19.8	91300000	1.0	
Endosulfan I		20	20.3	97500000	1.5	
alpha-Chlordane		20	21.1	93500000	5.5	
gamma-Chlordane		20	19.9	103000000	0.5	
Heptachlor Epoxide		20	20.3	103000000	1.5	
Aldrin		20	19.9	113000000	0.5	
delta-BHC		20	19.4	119000000	3.0	
Heptachlor		20	19.9	122000000	0.5	
beta-BHC		20	19.5	53900000	2.5	
gamma-BHC		20	19.5	124000000	2.5	
alpha-BHC		20	19.6	132000000	2.0	

* Exceeds %D Limit

CONTINUING CALIBRATION REPORT

Login Number: L0304594
File ID: 9G23241.R
CCV ID: WG140524-01
Units: ug/L

Instrument ID: HP9
Run Date: 05/13/2003
Run Time: 10:46
Analyst: HV
Cal ID: HP9 - 09-MAY-03

Analyte		Expected	Found	RF	%D	Q
Endrin Ketone		20	19.7	45400000	1.5	
Methoxychlor		20	17.6	17200000	12.0	
Endosulfan Sulfate		20	18.8	35100000	6.0	
Endrin Aldehyde		20	19.6	34600000	2.0	
4,4'-DDT		20	18.1	36000000	9.5	
Endosulfan II		20	19.6	44300000	2.0	
4,4'-DDD		20	19.7	40300000	1.5	
Endrin		20	17.9	38500000	10.5	
Dieldrin		20	19.5	54600000	2.5	
4,4'-DDE		20	19.6	50500000	2.0	
Endosulfan I		20	19.7	51900000	1.5	
alpha-Chlordane		20	19.7	52700000	1.5	
gamma-Chlordane		20	19.6	57800000	2.0	
Heptachlor Epoxide		20	19.8	59200000	1.0	
Aldrin		20	19.8	64700000	1.0	
delta-BHC		20	19.6	70600000	2.0	
Heptachlor		20	20.3	62800000	1.5	
beta-BHC		20	19.6	32700000	2.0	
gamma-BHC		20	19.9	74300000	0.5	
alpha-BHC		20	20.0	84200000	0.0	

* Exceeds %D Limit

KENRON FORMS - Modified 05/012/2003
Version 1.2
Report generated 05/19/2003 09:03

CONTINUING CALIBRATION REPORT

Login Number: L0304594
File ID: 9G23254.F
CCV ID: WG140524-02
Units: ug/L

Instrument ID: HP9
Run Date: 05/13/2003
Run Time: 16:11
Analyst: HV
Cal ID: HP9 - 09-MAY-03

Analyte	Expected	Found	RF	%D	Q
Endrin Ketone	50	49.6	69000000	0.8	
Methoxychlor	50	47.8	32600000	4.4	
Endosulfan Sulfate	50	50.6	56200000	1.2	
Endrin Aldehyde	50	49.7	56400000	0.6	
4,4'-DDT	50	48.4	74200000	3.2	
Endosulfan II	50	47.9	74700000	4.2	
4,4'-DDD	50	49.4	70500000	1.2	
Endrin	50	47.8	80200000	4.4	
Dieldrin	50	51.5	92900000	3.0	
4,4'-DDE	50	50.1	92400000	0.2	
Endosulfan I	50	48.8	93800000	2.4	
alpha-Chlordane	50	52.8	93600000	5.6	
gamma-Chlordane	50	49.3	102000000	1.4	
Heptachlor Epoxide	50	49.2	100000000	1.6	
Aldrin	50	49.9	113000000	0.2	
delta-BHC	50	52.4	128000000	4.8	
Heptachlor	50	49.7	121000000	0.6	
beta-BHC	50	49.3	54400000	1.4	
gamma-BHC	50	49.7	127000000	0.6	
alpha-BHC	50	51.2	138000000	2.4	

* Exceeds %D Limit

KEMRON FORMS - Modified 05/012/2003
Version 1.2
Report generated 05/19/2003 09:03

CONTINUING CALIBRATION REPORT

Login Number: L0304594
File ID: 9G23254.F
CCV ID: WG140524-02
Units: ug/L

Instrument ID: HP9
Run Date: 05/13/2003
Run Time: 16:11
Analyst: HV
Cal ID: HP9 - 09-MAY-03

Analyte		Expected	Found	RF	%D	Q
Endrin Ketone		50	49.6	69000000	0.8	
Methoxychlor		50	47.8	32600000	4.4	
Endosulfan Sulfate		50	50.6	56200000	1.2	
Endrin Aldehyde		50	49.7	56400000	0.6	
4,4'-DDT		50	48.4	74200000	3.2	
Endosulfan II		50	47.9	74700000	4.2	
4,4'-DDD		50	49.4	70500000	1.2	
Endrin		50	47.8	80200000	4.4	
Dieldrin		50	51.5	92900000	3.0	
4,4'-DDE		50	50.1	92400000	0.2	
Endosulfan I		50	48.8	93800000	2.4	
alpha-Chlordane		50	52.8	93600000	5.6	
gamma-Chlordane		50	49.3	102000000	1.4	
Heptachlor Epoxide		50	49.2	100000000	1.6	
Aldrin		50	49.9	113000000	0.2	
delta-BHC		50	52.4	128000000	4.8	
Heptachlor		50	49.7	121000000	0.6	
beta-BHC		50	49.3	54400000	1.4	
gamma-BHC		50	49.7	127000000	0.6	
alpha-BHC		50	51.2	138000000	2.4	

* Exceeds %D Limit

KEMRON FORMS - Modified 05/012/2003
Version 1.2
Report generated 05/19/2003 09:03

CONTINUING CALIBRATION REPORT

Login Number: L0304594
File ID: 9G23254.R
CCV ID: NG140524-02
Units: ug/L

Instrument ID: HP9
Run Date: 05/13/2003
Run Time: 16:35
Analyst: HV
Cal ID: HP9 - 09-MAY-03

Analyte		Expected	Found	RF	%D	Q
Endrin Ketone		50	51.2	47200000	2.4	
Methoxychlor		50	48.7	19100000	2.6	
Endosulfan Sulfate		50	50.4	37500000	0.8	
Endrin Aldehyde		50	51.1	36200000	2.2	
4,4'-DDT		50	52.0	41400000	4.0	
Endosulfan II		50	51.4	46300000	2.8	
4,4'-DDD		50	52.2	42600000	4.4	
Endrin		50	49.3	42500000	1.4	
Dieldrin		50	52.2	58300000	4.4	
4,4'-DDE		50	52.4	54100000	4.8	
Endosulfan I		50	51.3	53900000	2.6	
alpha-Chlordane		50	51.1	54800000	2.2	
gamma-Chlordane		50	51.4	60400000	2.8	
Heptachlor Epoxide		50	51.5	61500000	3.0	
Aldrin		50	52.6	68600000	5.2	
delta-BHC		50	53.2	76600000	6.4	
Heptachlor		50	52.2	64600000	4.4	
beta-BHC		50	50.0	33300000	0.0	
gamma-BHC		50	52.6	78700000	5.2	
alpha-BHC		50	53.3	89700000	6.6	

* Exceeds %D Limit

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	9g23035.d	1.	ENDRIN/DDT	SOS64-06	30 Apr 2003 09:11
2	2	9g23036.d	1.	CC PEST CCV 20 PPB	1,1 SOS63-32	30 Apr 2003 09:35
3	3	9g23037.d	1.	CC TOX CCV 500 PPB	SOS62-45	30 Apr 2003 10:00
4	4	9g23038.d	1.	TOX ICAL 2000 PPB	SOS62-45	30 Apr 2003 11:06
5	5	9g23039.d	1.	TOX ICAL 1000 PPB	SOS62-45	30 Apr 2003 11:31
6	6	9g23040.d	1.	TOX ICAL 500 PPB	SOS62-45	30 Apr 2003 11:55
7	7	9g23041.d	1.	TOX ICAL 250 PPB	SOS62-45	30 Apr 2003 12:19
8	8	9g23042.d	1.	TOX ICAL 100 PPB	SOS62-45	30 Apr 2003 12:43
9	9	9g23043.d	1.	TOX ALT ICV 500 PPB	SOS63-05	30 Apr 2003 13:08
10	10	9g23044.d	1.	WG139380-01 PEST ICAL 200 PPB	1,1 SOS63-32	30 Apr 2003 13:32
11	11	9g23045.d	1.	WG139380-02 PEST ICAL 100 PPB	1,1 SOS63-32	30 Apr 2003 13:56
12	12	9g23046.d	1.	WG139380-03 PEST ICAL 50 PPB	1,1 SOS63-32	30 Apr 2003 14:20
13	13	9g23047.d	1.	WG139380-04 PEST ICAL 20 PPB	1,1 SOS63-32	30 Apr 2003 14:45
14	14	9g23048.d	1.	WG139380-05 PEST ICAL 10 PPB	1,1 SOS63-32	30 Apr 2003 15:09
15	15	9g23049.d	1.	WG139380-06 PEST ICAL 4 PPB	1,1 SOS63-32	30 Apr 2003 15:33
16	16	9g23050.d	1.	WG139380-07 PEST ALT ICV 20...	1,1 SOS62-49	30 Apr 2003 15:57
17	17	9g23051.d	1.	WG139296-02 BLANK V201 P99	1,1 WATER	30 Apr 2003 16:22
18	18	9g23052.d	1.	WG139296-03 LCS V201 P99 — *	1,1 WATER	30 Apr 2003 16:46
19	19	9g23053.d	1.	WG139290-01 TCLP BLANK 4/28	17,1 WATER	30 Apr 2003 17:10
20	20	9g23054.d	1.	L0304554-01	17,1 WATER	30 Apr 2003 17:35
21	21	9g23055.d	1.	L0304594-03	17,1 WATER	30 Apr 2003 17:59
22	22	9g23056.d	1.	WG139296-01 L0304585-04	1,1 WATER	30 Apr 2003 18:23
23	23	9g23057.d	1.	WG139296-04 L0304585-05 MS	1,1 WATER	30 Apr 2003 18:47
24	24	9g23058.d	1.	WG139296-05 L0304585-06 MSD	1,1 WATER	30 Apr 2003 19:11
25	25	9g23059.d	1.	L0304585-10	1,1 WATER	30 Apr 2003 19:35
26	26	9g23060.d	1.	L0304585-01	1,1 WATER	30 Apr 2003 20:00
	27	9g23061.d	1.	ENDRIN/DDT	SOS64-06	30 Apr 2003 20:24
	28	9g23062.d	1.	WG139380-08 PEST CCV 20 PPB	1,1 SOS63-32	30 Apr 2003 20:48
29	29	9g23063.d	1.	TOX CCV 500 PPB	SOS62-45	30 Apr 2003 21:13
30	30	9g23064.d	1.	L0304585-02	1,1 WATER	30 Apr 2003 21:37
31	31	9g23065.d	1.	L0304585-03	1,1 WATER	30 Apr 2003 22:01
32	32	9g23066.d	1.	RE L0304581-01	2,1 WATER	30 Apr 2003 22:26
33	33	9g23067.d	1.	RE L0304581-02	2,1 WATER	30 Apr 2003 22:50
34	34	9g23068.d	1.	RE L0304581-03	2,1 WATER	30 Apr 2003 23:14
35	35	9g23069.d	1.	RE L0304581-04 — *	2,1 WATER	30 Apr 2003 23:38
36	36	9g23070.d	1.	RE L0304581-05 — 10X	2,1 WATER	01 May 2003 00:03
37	37	9g23071.d	1.	L0304581-06	2,1 WATER	01 May 2003 00:27
38	38	9g23072.d	1.	L0304581-07	2,1 WATER	01 May 2003 00:51
39	39	9g23073.d	1.	RE L0304581-08	2,1 WATER	01 May 2003 01:16
40	40	9g23074.d	1.	WG139380-09 PEST CCV 50 PPB	1,1 SOS63-32	01 May 2003 01:40
41	41	9g23075.d	1.	TOX CCV 250 PPB	SOS62-45	01 May 2003 02:04
42	42	9g23076.d	1.	L0304581-09	2,1 WATER	01 May 2003 02:28
43	43	9g23077.d	1.	WG139269-01 BLANK V201 P93	1,1 WATER	01 May 2003 02:53
44	44	9g23078.d	1.	WG139269-02 LCS V201 P93	1,1 WATER	01 May 2003 03:17
45	45	9g23079.d	1.	WG139269-03 LCS DUP V201 P93	1,1 WATER	01 May 2003 03:41
46	46	9g23080.d	1.	L0304558-01	1,1 WATER	01 May 2003 04:06
47	47	9g23081.d	1.	L0304558-02	1,1 WATER	01 May 2003 04:30
48	48	9g23082.d	1.	L0304558-03	1,1 WATER	01 May 2003 04:54
49	49	9g23083.d	1.	L0304558-04	1,1 WATER	01 May 2003 05:18
50	50	9g23084.d	1.	L0304576-01	1,1 WATER	01 May 2003 05:43
51	51	9g23085.d	1.	L0304576-02	1,1 WATER	01 May 2003 06:07
52	52	9g23086.d	1.	ENDRIN/DDT	SOS64-06	01 May 2003 06:31
53	53	9g23087.d	1.	WG139380-10 PEST CCV 20 PPB	1,1 SOS63-32	01 May 2003 06:56
	54	9g23088.d	1.	TOX CCV 500 PPB	SOS62-45	01 May 2003 07:20
	55	9g23089.d	1.	L0304576-03	1,1 WATER	01 May 2003 07:44

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
56	56	9g23090.d	1.	L0304576-04	1,1 WATER	01 May 2003 08:0
57	57	9g23091.d	1.	L0304576-05	1,1 WATER	01 May 2003 08:33
58	58	9g23092.d	1.	L0304576-06	1,1 WATER	01 May 2003 08:57
59	59	9g23093.d	1.	L0304587-02	1,1 WATER	01 May 2003 09:22
60	60	9g23094.d	1.	L0304593-01	1,1 WATER	01 May 2003 09:46
61	61	9g23095.d	1.	L0304593-02	1,1 WATER	01 May 2003 10:10
62	62	9g23096.d	1.	L0304593-03	1,1 WATER	01 May 2003 10:35
63	63	9g23097.d	1.	L0304594-01	1,1 WATER	01 May 2003 10:59
64	64	9g23098.d	1.	L0304594-02	1,1 WATER	01 May 2003 11:23
65	65	9g23099.d	1.	ENDRIN/DDT	SOS64-06	01 May 2003 11:47
66	66	9g23100.d	1.	WG139380-11 PEST CCV 50 PPB -A	1,1 SOS63-32	01 May 2003 12:12
67	67	9g23101.d	1.	TOX CCV 500 PPB	SOS62-45	01 May 2003 12:35

ECL 5/1/03

rdc 5/1/03

KEMRON ENVIRONMENTAL SERVICES
Semivolatile GC Laboratory Maintenance Log

Analysis Date/Time 4/30/03 Instrument ID HP9 Column ID RTX-CLP Front Data Subdirectory 043003
Analyst Initials ECC

SOP # GCS09 Rev. # 2 8081A ✓
SOP # GCS04 Rev. # ___ 8151A ___
SOP # GCS03 Rev. # ___ PRO ___
SOP # GCS02 Rev. # ___ 8015B Mod (Alcohol) ___

SOP # GCS10 Rev. # ___ 8082 ___
SOP # GCS01 Rev. # ___ 8100 ___
SOP # GCS02 Rev. # ___ 8015B Mod (DRO) ___
SOP # GCS07 Rev. # ___ 8011 ___

Analysis Date/Time 4/30/03 Instrument ID HP9 Column ID RTX-CLP II Rear Data Subdirectory 043003

Daily Check
☑ Gases >500 psi

Preventative Maintenance
☐ Change o-ring
☐ Change liner
☐ Change septum
☐ Clip column (___cm)
☐ Injection port seal (goldseal)
☐ Change gases _____

Returned To Control?
Yes ___ No ___

Additional Maintenance
Problem: _____

Action Taken: _____

Comments

A - Endosulfan sulfate failed high on ~~rear~~ Front column ES 5/1/03
~~Front~~ Rear column good.

* - LCS failed 12 compounds high

RE - need reextracted due to high LCS recovery + samples had hits of these compounds.

☆ - T-M-X surrogate failed high due to SMI.

Reviewed By: [illegible]

Parameter: Post H_2O SOP #: EXP01 Revision #: 10
Extraction Analyst(s): CAF PAK TV/KD Analyst(s): [illegible]
Date/Time Extracted: 4-29-03 @ 0900 Date TV/KD: 04-29-03
Spike/Surrogate Analyst: ECA [illegible] Witness: PAS
Surrogate #: ES50044-10 Earliest Hold Date: 4-30-03
Spike #: A = ES50044-11 Spike #: B = —

Extraction Work Group WG 139269
Analytical Work Group WG 139389

Extract Relinquished By: [illegible]
Extract Received By & Date: [illegible] 4/30/03

	Sample ID	Test Code	pH / <2	N	>12	Initial Vol / Wt	Amount Surrogate	Amount Spike	Final Volume	Extract Color	Emulsions / A	BN	N	Comments
1	Blank			✓		1000 mL	200 µl		10 mL	T				WG 139269-01
2	LCS			✓				250 µl						WG -02
3	LCS Dup			✓										WG -03
4	04-558-01	8081		✓		910 mL								
5	-02			✓		890 mL								
6	-03			✓		910 mL								
7	-04			✓		900 mL								
8	04-576-01			✓		900 mL								
9	-02			✓		890 mL								
10	-03			✓		910 mL								
11	-04			✓		910 mL								
12	-05			✓		910 mL								
13	-06			✓		910 mL								
14	04-587-02			✓		930 mL								
15	04-593-01			✓		910 mL								
16	-02			✓		900 mL								
17	-03			✓		960 mL								
18	04-594-01			✓		890 mL								
19	-02			✓		920 mL								
20														
21														
22							[illegible] 04-29-03							
23														
24														

Methylene Chloride Lot #: 43010
Hexane Lot #: 43057
Ether Lot #: —
Methanol Lot #: —
Solvent: — Lot #: —
Reagent: 94:6 Lot #: ER 0005-6
Reagent: 50:50 Lot #: ER-2384
Reagent: — Lot #: —
Acid: — Lot #: —
Florisil Lot #: Y01559
Silica Gel Lot #: —
IR Analyst / Date / Time: —
Dried Na_2SO_4 Lot #: ER 0005-25

Color Code
T = Transparent
C = Colored
O = Opaque

SW-846 Method			On	Off	On	Off
Continuous	3520C					
Soxhlet	3540C					
ASE*	3545					
Sep Funnel	3510C					
Sonication	3550B	✓				
Waste	3580A					

* Accelerated Solvent Extractor (ASE)

Clean-ups			
Florisil 3620B	✓	GPC 3640A	
Silica Gel 3630C		Other	
Acid 3665A		N/A	
Sulfur 3660B			

Peer Reviewed By: [illegible] Date: 04-29-03

Extraction Notes For Volume # 201 Page # 93

General Comments: None

Extraction Anomalies: None

Concentration Anomalies: None

Clean-Up Anomalies: None

Supervisor Review: _____ Date: _____

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	9g23240.d	1.	ENDRIN/DDT	SOS64-06	13 May 2003 09:57
2	2	9g23241.d	1.	WG140524-01 PEST CCV 20 PPB	1,1 SOS63-32	13 May 2003 10:21
3	3	9g23242.d	1.	TOX CCV 500 PPB	SOS62-45	13 May 2003 10:46
4	4	9g23243.d	1.	WG140378-01 BLK V201-P175	1,1 water	13 May 2003 11:43
5	5	9g23244.d	1.	WG140378-02 LCS V201-P175	1,1 water	13 May 2003 12:08
6	6	9g23245.d	1.	WG140378-03 LCS DUP V201-P175	1,1 water	13 May 2003 12:32
7	7	9g23246.d	1.	WG140378-04 LCS TOX V201-P175	1,1 water	13 May 2003 12:56
8	8	9g23247.d	1.	WG140252-01 SPLP BLK 05/08 ...	1,1 water	13 May 2003 13:21
9	9	9g23248.d	1.	L0305190-03	17,1 water	13 May 2003 13:45
10	10	9g23249.d	1.	L0305190-10	17,1 water	13 May 2003 14:09
11	11	9g23250.d	1.	L0305190-11	17,1 water	13 May 2003 14:34
12	12	9g23251.d	1.	L0305190-15	17,1 water	13 May 2003 14:58
13	13	9g23252.d	1.	L0304594-03 RE	1,1 water	13 May 2003 15:22
14	14	9g23253.d	1.	ENDRIN/DDT	SOS64-06	13 May 2003 15:46
15	15	9g23254.d	1.	WG140524-02 PEST CCV 50 PPB	1,1 SOS63-32	13 May 2003 16:11
16	16	9g23255.d	1.	TOX CCV 250 PPB	SOS62-45	13 May 2003 16:35
17	17	9g23256.d	1.	L0305221-01 608	2,1 water	13 May 2003 16:59
18	18	9g23257.d	1.	L0305242-04	1,1 water	13 May 2003 17:23
19	19	9g23258.d	1.	L0305242-05	1,1 water	13 May 2003 17:48
20	20	9g23259.d	1.	L0305242-06	1,1 water	13 May 2003 18:12
21	21	9g23260.d	1.	L0305242-08	1,1 water	13 May 2003 18:36
22	22	9g23261.d	1.	L0305242-06	1,1 water	13 May 2003 19:00
23	23	9g23262.d	1.	L0305242-10	1,1 water	13 May 2003 19:25
24	24	9g23263.d	1.	L0305242-11	1,1 water	13 May 2003 19:49
25	25	9g23264.d	1.	WG140251-01 T BLK 05/08	17,1 water	13 May 2003 20:13
26	26	9g23265.d	1.	L0305090-01 RE	1,1 water	13 May 2003 20:38
27	1	9g23266.d	1.	ENDRIN/DDT	SOS64-06	13 May 2003 21:02
28	2	9g23267.d	1.	WG140524-03 PEST CCV 20 PPB	1,1 SOS63-32	13 May 2003 21:26
29	3	9g23268.d	1.	TOX CCV 500 PPB	SOS62-45	13 May 2003 21:50

HV 5/14/03
all slides

KEMRON ENVIRONMENTAL SERVICES
Semivolatile GC Laboratory Maintenance Log

Analysis Date/Time 5-13-03 Instrument ID HP7 Column ID RTX-CLP Front Data Subdirectory 0513 03
Analyst Initials HV

SOP # GCS09 Rev. # 2 8081A ✓
SOP # GCS04 Rev. # ___ 8151A ___
SOP # GCS03 Rev. # ___ PRO ___
SOP # GCS02 Rev. # ___ 8015B Mod (Alcohol) ___
SOP # GCS10 Rev. # ___ 8082 ___
SOP # GCS01 Rev. # ___ 8100 ___
SOP # GCS02 Rev. # ___ 8015B Mod (DRO) ___
SOP # GCS07 Rev. # ___ 8011 ___

Analysis Date/Time ___ Instrument ID HP 9 Column ID RTX-CLP II Rear Data Subdirectory ___

Daily Check
☑ Gases >500 psi

Preventative Maintenance
☐ Change o-ring
☐ Change liner
☐ Change septum
☐ Clip column (___cm)
☐ Injection port seal (goldseal)
☐ Change gases ___

Returned To Control?
Yes ___ No ___

Additional Maintenance
Problem: ___

Action Taken: ___

Comments

Reviewed By: [illegible]

Parameter: Pest H_2O SOP #: EXP01 Revision #: 10
Extraction Analyst(s): CAF PAS TV/KD Analyst(s): CAF
Date/Time Extracted: 4-29-03 @ 1420 Date TV/KD: 04-29-03
Spike/Surrogate Analyst: CAF Witness: CEB
Surrogate #: ES500 44-10 Earliest Hold Date: 5-01-03
Spike #: A = ES500 44-11 Spike #: B = —

Extraction Work Group WG 139296
Analytical Work Group WG 139387

Extract Relinquished By: CB
Extract Received By & Date: [illegible] 4/30/03

	Sample ID	Test Code	pH / <2	pH / N	pH / >12	Initial Vol / Wt	Amount Surrogate	Amount Spike	Final Volume	Extract Color	Emulsions / A	Emulsions / BN	Emulsions / N	Comments
1	Blank			—		1000 mL	200 mL		10 mL	T				WG 139296-02
2	LCS			✓		⊥		250 mL						WG ⊥ -03
3	04-585-01	8081		✓		1000 mL		⊥ CAF 4-29-03						
4	-02			✓										
5	-03			✓										
6	-04			✓										WG 139296-01
7	-05 MS			✓				250 mL						WG ⊥ -04
8	-06 MSD			✓				⊥						WG ⊥ -05
9	⊥ -10	⊥		✓		⊥								
10	04-581-01	608		✓		940 mL								
11	-02			✓		940 mL								
12	-03			✓		930 mL								
13	-04			✓		950 mL								
14	-05			✓		970 mL								
15	-06			✓		970 mL								
16	-07			✓		930 mL								
17	-08			✓		910 mL								
18	⊥ -09	⊥		✓		940 mL								
19	TALK 4/28	8081-TC		✓		100 mL								WG 139290-01
20	04-554-01	⊥		✓		⊥	⊥		⊥	⊥				
21	04-594-03			✓										
22														
23							04-29-03							
24														

Methylene Chloride Lot #: 43010
Hexane Lot #: 43057
Ether Lot #: —
Methanol Lot #: —
Solvent: — Lot #: —
Reagent: 94:6 Lot #: ER 0005-27
Reagent: 50:50 Lot #: ER 2314
Reagent: — Lot #: —
Acid: — Lot #: —
Florisil Lot #: Y01559
Silica Gel Lot #: —
IR Analyst / Date / Time: —
Dried Na_2SO_4 Lot #: ER 0005-25

Color Code
T = Transparent
C = Colored
O = Opaque

SW-846 Method			On	Off	On	Off
Continuous	3520C					
Soxhlet	3540C					
ASE*	3545					
Sep Funnel	3510C	✓				
Sonication	3550B					
Waste	3580A					

* Accelerated Solvent Extractor (ASE)

Clean-ups			
Florisil 3620B	✓	GPC 3640A	
Silica Gel 3630C		Other	
Acid 3665A		N/A	
Sulfur 3660B			

Peer Reviewed By: [signature] Date: 04/30/03

Extraction Notes For Volume # 201 Page # 99

General Comments: None

Extraction Anomalies: None

Concentration Anomalies: None

Clean-Up Anomalies: None

Supervisor Review: [signature] Date: 4/30/03

Volume 201
Page 175

Parameter: Pest-H_2O SOP #: CX001 Revision #: 10
Extraction Analyst(s): DP TV/KD Analyst(s): CAF / PAS
Date/Time Extracted: 05/12/03 0800 Date TV/KD: 05/12/03
Spike/Surrogate Analyst: DP Witness: CAF
Surrogate #: CS500044-10 Earliest Hold Date: 05/14/03
Spike #: A = CS500044-11 Spike #: B = CS500044-24

Extraction Work Group WG 140378
Analytical Work Group WG 140458
Extract Relinquished By: PAS
Extract Received By & Date: [illegible] 5/12/03

	Sample ID	Test Code	pH / <2	N	>12	Initial Vol / Wt	Amount Surrogate	Amount Spike	Final Volume	Extract Color	Emulsions / A	BN	N	Comments
1	Blank			✓		1000 mL	200 µL		10 mL	T				WG 140378-01
2	LCS			✓				200 µL A						WG -02
3	LCS DUP			✓										WG -03
4	LCS TOX			✓				100 µL B						WG -04
5	SPLP BLK 5/8	8081-SPLP		✓		950 mL								WG 140252-01
6	05-170-03			✓		970 mL								
7	-11			✓		960 mL								
8	-15			✓		950 mL								
9	05-221-01	608		✓		930 mL							✓	
10	05-242-04	8081		✓		980 mL								
11	-05			✓		920 mL								
12	-06			✓		1000 mL								
13	-08			✓		950 mL								
14	-09			✓		1000 mL								
15	-10			✓		980 mL								
16	-11			✓		970 mL								
17	TBLK 5/8	8081-TC		✓		100 mL								WG 140351-01
18	05-170-10			✓										
19	04-594-03			✓										Re-ext. in hold
20	~~05-AC[illegible]-06~~	~~[illegible] 05/12~~												
21	05-090-01	8081-TC		✓		100 mL	200 mL		10 mL	T				PEEXT IN HOLD
22														
23						CAF 5-12-03								
24														

Methylene Chloride Lot #: 43010
Hexane Lot #: 43057
Ether Lot #: —
Methanol Lot #: —
Solvent: — Lot #: —
Reagent: 94:6 Lot #: ER0005-45
Reagent: 50:50 Lot #: ER0005-28
Reagent: — Lot #: —
Acid: — Lot #: —
Florisil Lot #: Y05556
Silica Gel Lot #: —
IR Analyst / Date / Time: —
Dried Na_2SO_4 Lot #: CR0005-47

Color Code
T = Transparent
C = Colored
O = Opaque

SW-846 Method			On	Off	On	Off
Continuous	3520C					
Soxhlet	3540C					
ASE*	3545					
Sep Funnel	3510C	—				
Sonication	3550B					
Waste	3580A					

* Accelerated Solvent Extractor (ASE)

Clean-ups			
Florisil 3620B	—	GPC 3640A	
Silica Gel 3630C		Other	
Acid 3665A		N/A	
Sulfur 3660B			

Peer Reviewed By: [illegible] Date: 5-12-03

Extraction Notes For Volume # 201 Page # 175

General Comments: NONE

Extraction Anomalies: NONE

Concentration Anomalies: NONE

Clean-Up Anomalies: NONE

Supervisor Review: _____ Date: _____

2.2.2.2 Sample Data

Data File : C:\HPCHEM\1\DATA\043003\9G23097.D\ECD1A.CH Vial: 63
Acq On : 1 May 2003 10:59 Operator: ECL
Sample : L0304594-01 Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23097.D\ECD2B.CH Vial: 63
Acq On : 1 May 2003 11:23 Operator: ECL
Sample : L0304594-01 Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 1 14:13 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Wed Apr 30 16:35:45 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L	
	System Monitoring Compounds							
1)	S 2,4,5,6-Tetrachl	7.20	8.35	1548.0E6	946.1E6	18.150	16.737	
	Spiked Amount 20.000 Range 30 - 132 Recovery =					90.75%	83.68%	
22)	S Decachlorobiphen	14.85	16.29	426.2E6	392.6E6	8.118	9.789	
	Spiked Amount 20.000 Range 36 - 144 Recovery =					40.59%	48.95%	
	Target Compounds							
2)	alpha-BHC	0.00	9.46f	0	117.3E6	N.D.	1.421	#
3)	gamma-BHC	8.75	10.11	1767.5E6	437.4E6	16.332	-5.938	#
4)	beta-BHC	8.89	10.24	316.3E6	606.2E6	6.729	-18.377	#
5)	Heptachlor	9.54	0.00	512.3E6	0	4.649	N.D.	#
6)	delta-BHC	0.00	10.75f	0	972.0E6	N.D.	13.655	#
7)	Aldrin	0.00	0.00	0	0	N.D.	N.D.	
8)	Heptachlor Epoxi	0.00	0.00	0	0	N.D.	N.D.	
9)	gamma-Chlordane	11.10	12.53	123.4E6	97183240	1.325	1.681	#
10)	alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.	
11)	Endosulfan I	11.50f	12.79f	239.6E6	78036011	2.670	1.476	#
12)	4,4'-DDE	0.00	0.00	0	0	N.D.	N.D.	
13)	Dieldrin	0.00	0.00	0	0	N.D.	N.D.	
14)	Endrin	0.00	0.00	0	0	N.D.	N.D.	
15)	4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.	
16)	Endosulfan II	0.00	0.00	0	0	N.D.	N.D.	
17)	4,4'-DDT	0.00	0.00	0	0	N.D.	N.D.	
18)	Endrin Aldehyde	12.95f	0.00	183.1E6	0	3.247	N.D.	#
19)	Endosulfan Sulfa	0.00	0.00	0	0	N.D.	N.D.	
20)	Methoxychlor	13.27f	0.00	228.0E6	0	6.712	N.D.	#
21)	Endrin Ketone	13.78f	0.00	66380593	0	0.997	N.D.	#

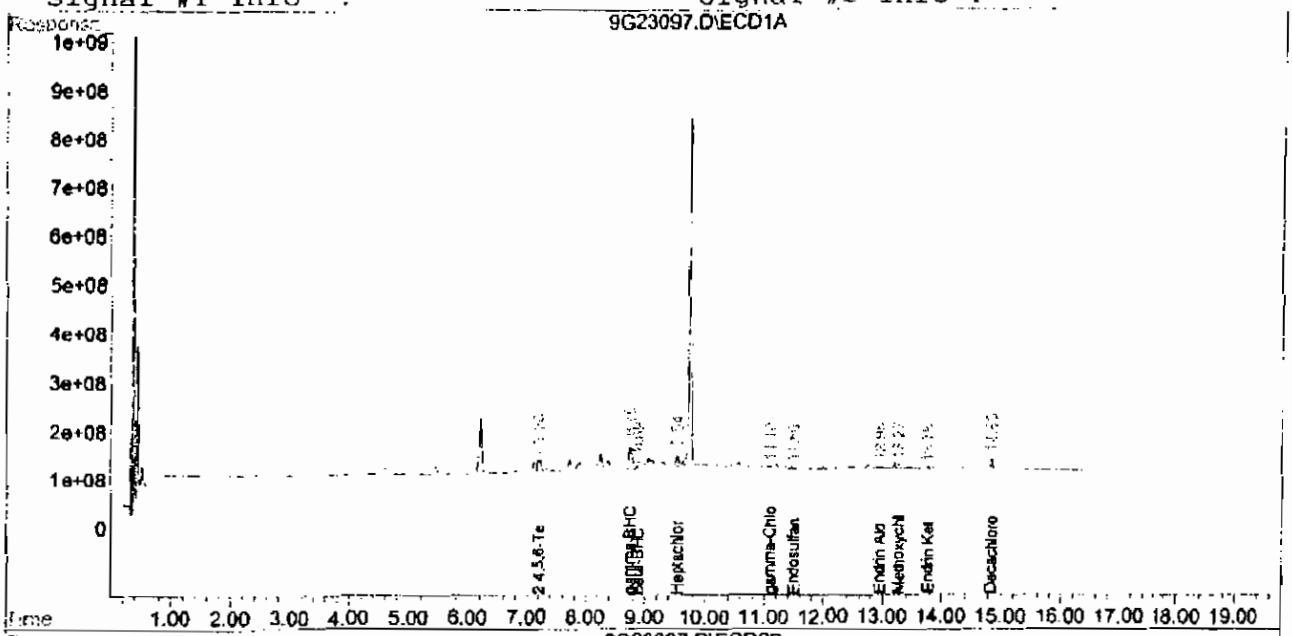
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

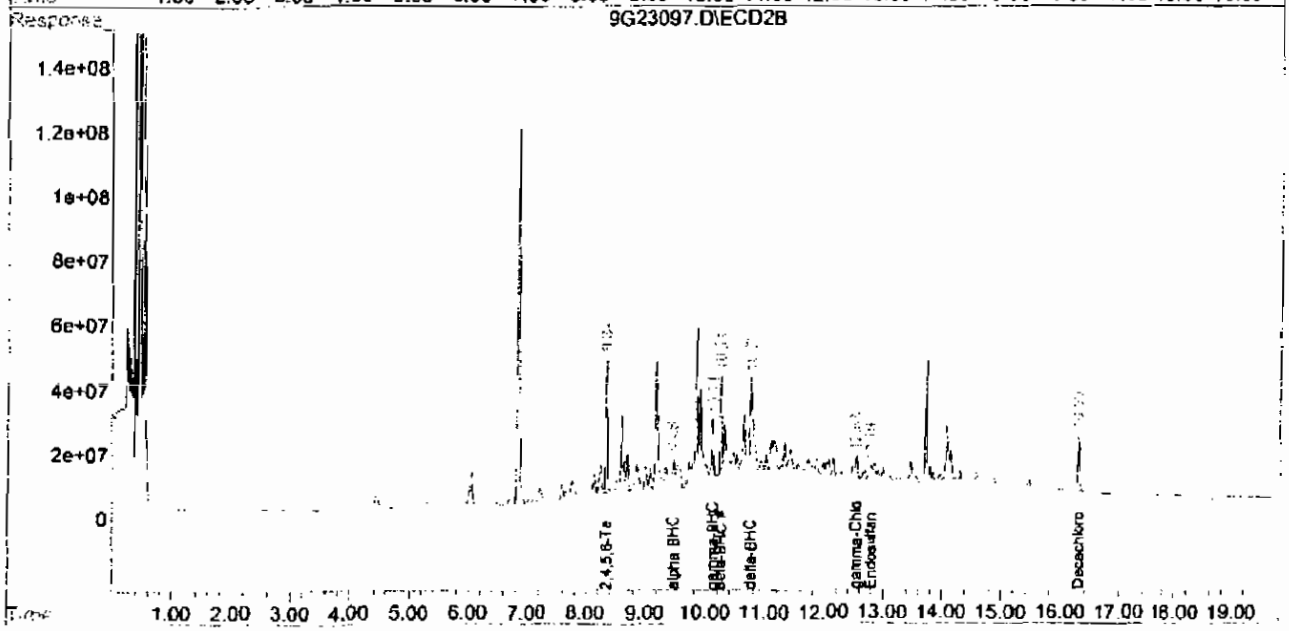
```
Data File : C:\HPCHEM\1\DATA\043003\9G23097.D\ECD1A.CH    Vial: 63
Acq On    :  1 May 2003  10:59                            Operator: ECL
Sample    : L0304594-01                                   Inst    : HP9
Misc      : 1,1 WATER                                     Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23097.D\ECD2B.CH    Vial: 63
Acq On    :  1 May 2003  11:23                            Operator: ECL
Sample    : L0304594-01                                   Inst    : HP9
Misc      : 1,1 WATER                                     Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May  1 14:13 2003  Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title        : CALIBRATION April 30, 2003 @ 1557
Last Update  : Wed Apr 30 16:35:45 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj.      :
Signal #1 Phase :                          Signal #2 Phase:
Signal #1 Info  :                          Signal #2 Info :
```

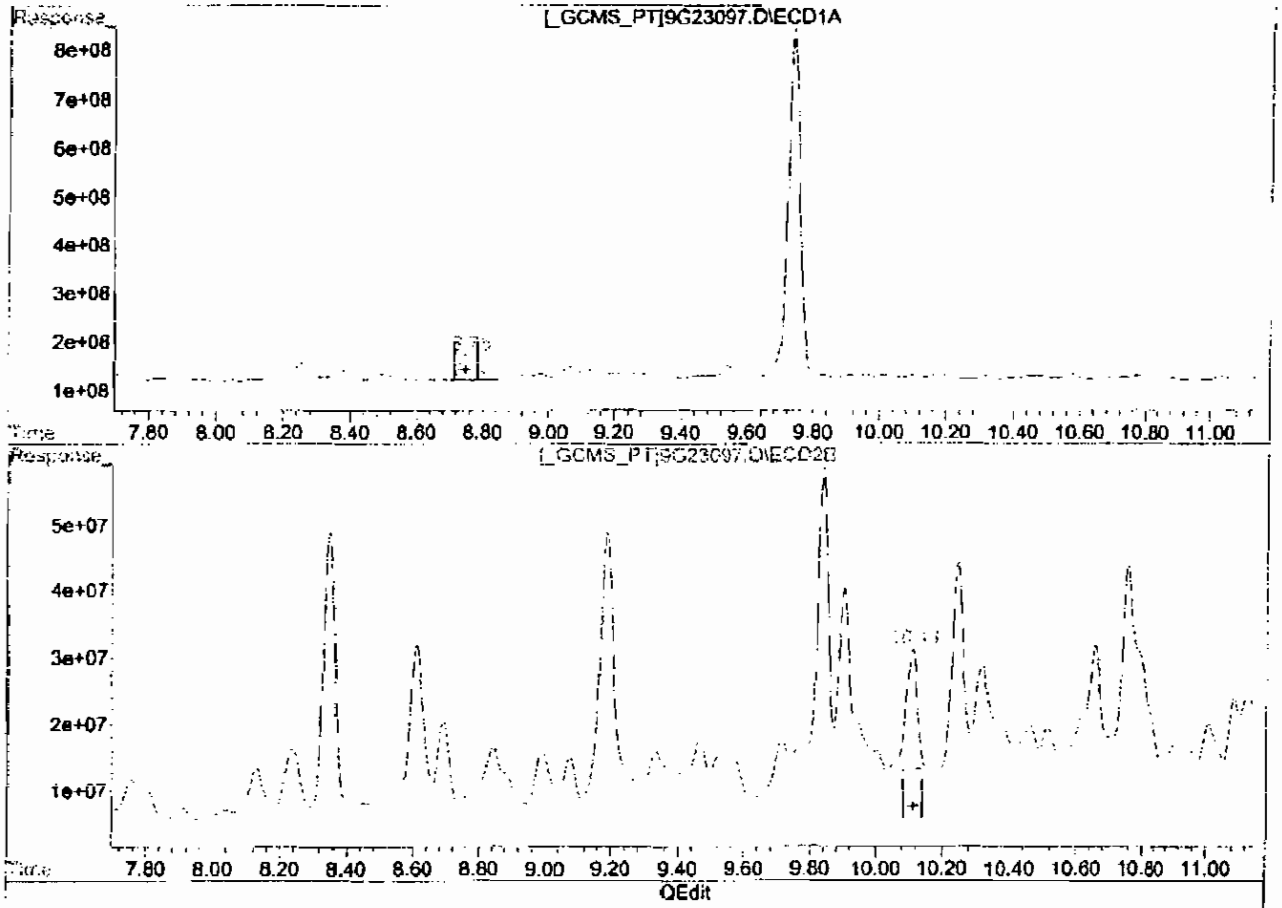




```
Data File : C:\HPCHEM\1\DATA\043003\9G23097.D\ECD1A.CH    Vial: 63
Acq On    :  1 May 2003  10:59                            Operator: ECL
Sample    : L0304594-01                                   Inst    : HP9
Misc      : 1,1 WATER                                     Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23097.D\ECD2B.CH    Vial: 63
Acq On    :  1 May 2003  11:23                            Operator: ECL
Sample    : L0304594-01                                   Inst    : HP9
Misc      : 1,1 WATER                                     Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May  1 14:13 2003  Quant Results File: 8081.RES


Method        : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title         : CALIBRATION April 30, 2003 @ 1557
Last Update   : Wed Apr 30 16:35:45 2003
Response via  : Multiple Level Calibration
```



(3) gamma-BHC

8.75min 16.332UG/L SMI.

response 1767498099

(3) gamma-BHC #2

10.11min 5.938UG/L ✓ P

response 437440448

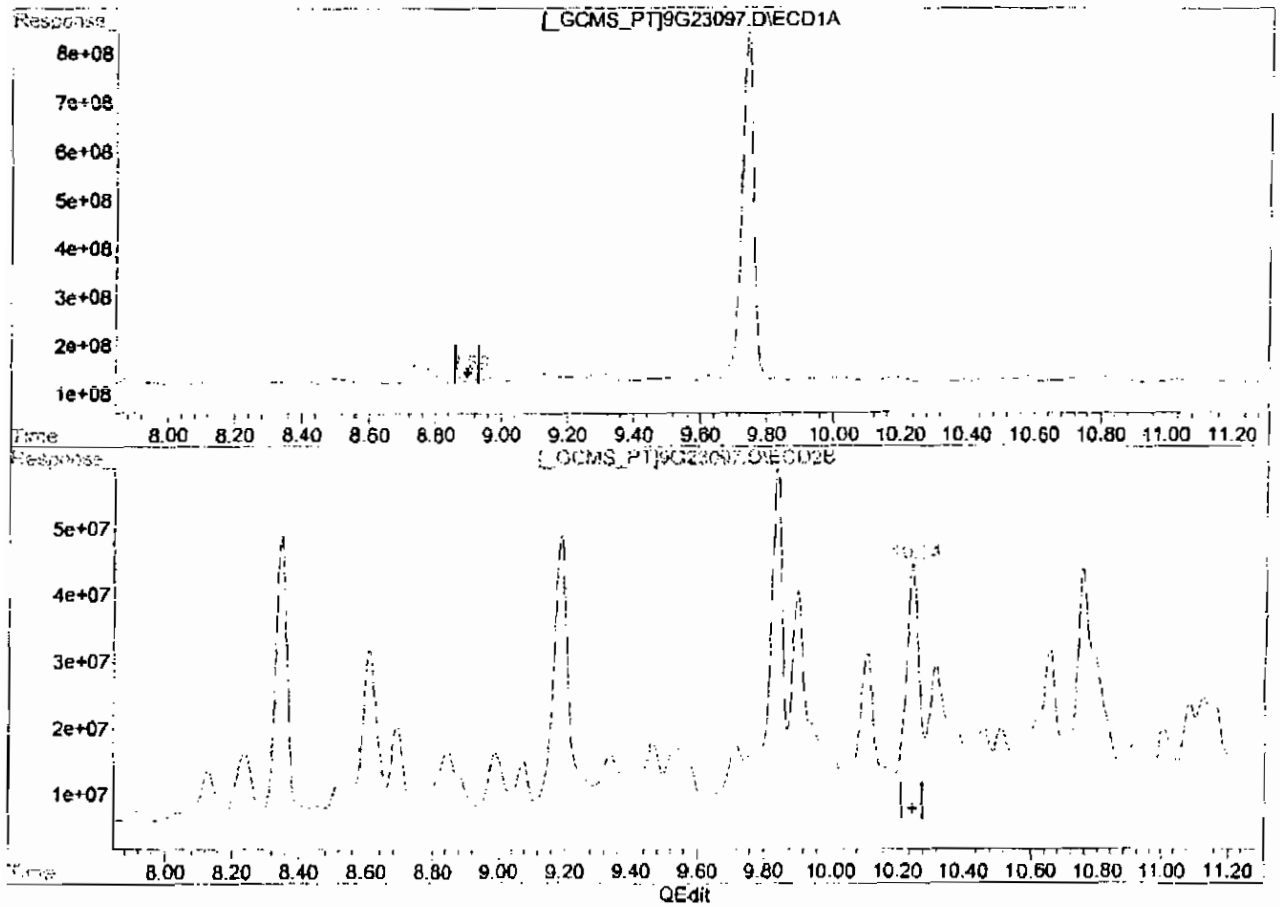
(+) = Expected Retention Time

9G23097.D 8081.M Thu May 01 14:18:50 2003

Data File : C:\HPCHEM\1\DATA\043003\9G23097.D\ECD1A.CH Vial: 63
Acq On : 1 May 2003 10:59 Operator: ECL
Sample : L0304594-01 Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23097.D\ECD2B.CH Vial: 63
Acq On : 1 May 2003 11:23 Operator: ECL
Sample : L0304594-01 Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 1 14:13 2003 Quant Results File: 8081.RES

Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Wed Apr 30 16:35:45 2003
Response via : Multiple Level Calibration



(4) beta-BHC

8.89min 6.729UG/L

response 316310693

(4) beta-BHC #2

10.24min 18.377UG/L

response 606185485

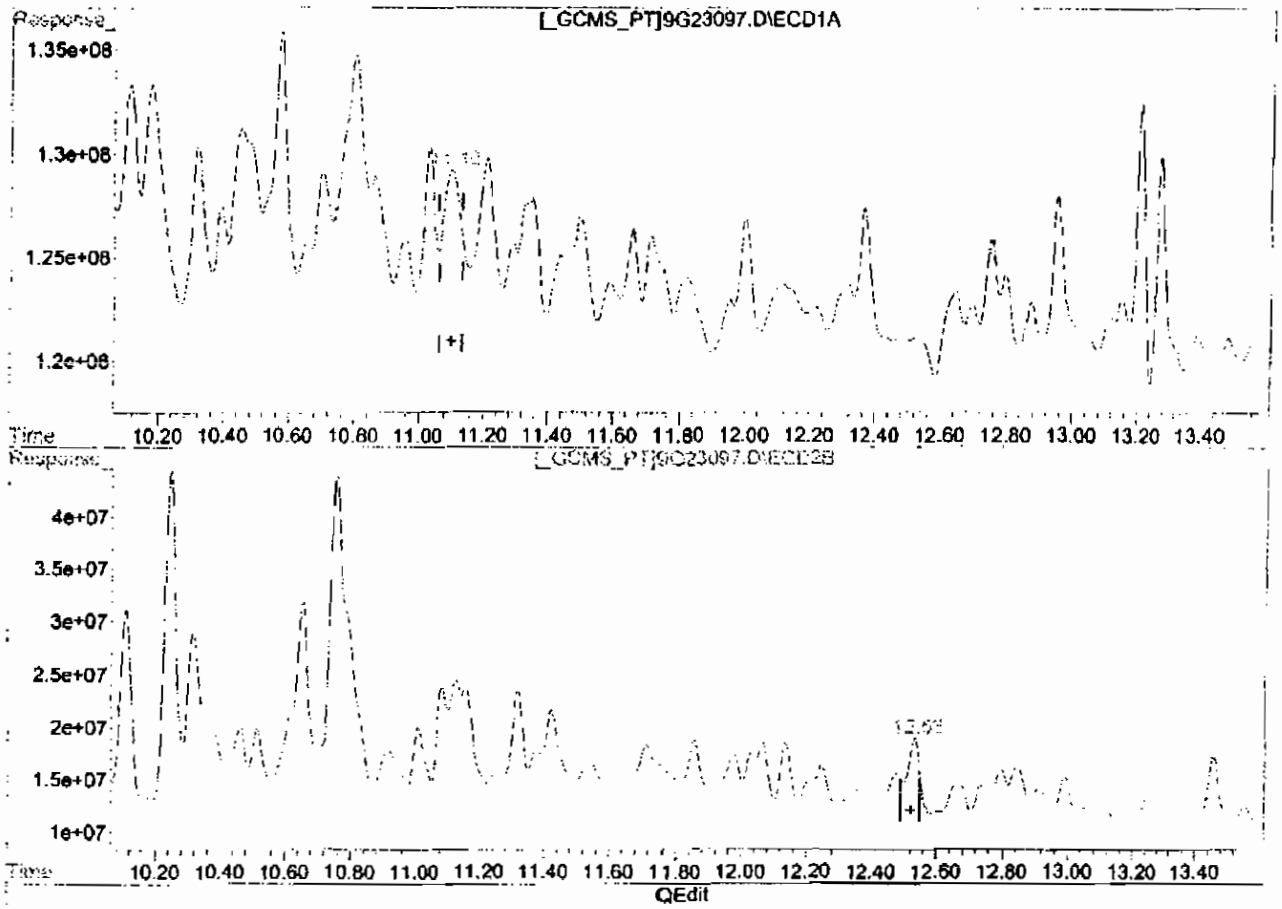
(+) = Expected Retention Time

9G23097.D 8081.M Thu May 01 14:19:03 2003

```
Data File : C:\HPCHEM\1\DATA\043003\9G23097.D\ECD1A.CH   Vial: 63
Acq On    :  1 May 2003  10:59                           Operator: ECL
Sample    : L0304594-01                                  Inst    : HP9
Misc      : 1,1 WATER                                    Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23097.D\ECD2B.CH   Vial: 63
Acq On    :  1 May 2003  11:23                           Operator: ECL
Sample    : L0304594-01                                  Inst    : HP9
Misc      : 1,1 WATER                                    Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May  1 14:13 2003  Quant Results File: 8081.RES

Method        : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title         : CALIBRATION April 30, 2003 @ 1557
Last Update   : Wed Apr 30 16:35:45 2003
Response via  : Multiple Level Calibration
```



(9) gamma-Chlordane

11.10min 1.325UG/L

response 123438118

peak shape

(9) gamma-Chlordane #2

12.53min 1.681UG/L

response 97183240

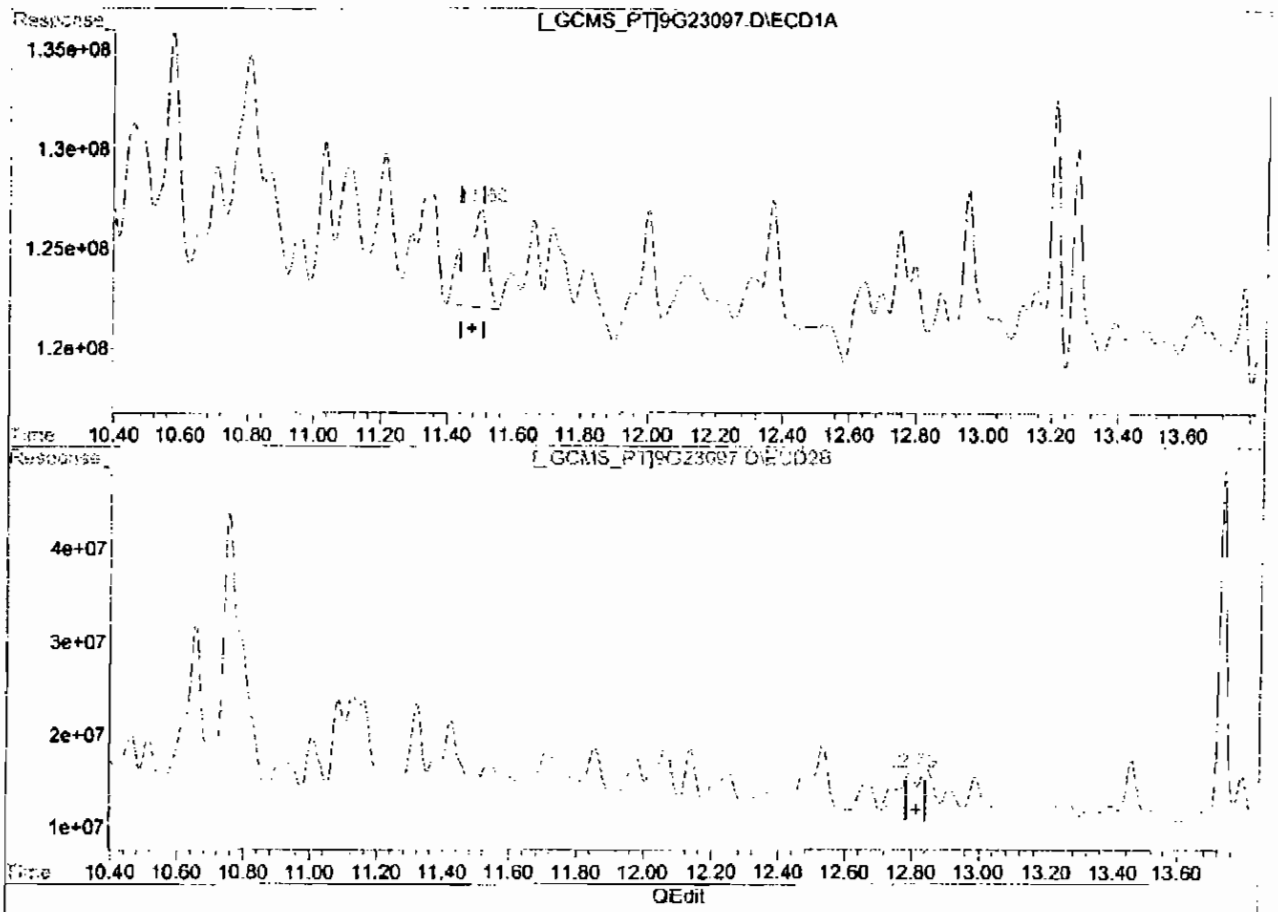
(+) = Expected Retention Time

9G23097.D 8081.M Thu May 01 14:19:20 2003

```
Data File : C:\HPCHEM\1\DATA\043003\9G23097.D\ECD1A.CH    Vial: 63
Acq On    :  1 May 2003  10:59                            Operator: ECL
Sample    : L0304594-01                                   Inst    : HP9
Misc      : 1,1 WATER                                     Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23097.D\ECD2B.CH    Vial: 63
Acq On    :  1 May 2003  11:23                            Operator: ECL
Sample    : L0304594-01                                   Inst    : HP9
Misc      : 1,1 WATER                                     Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May  1 14:13 2003  Quant Results File: 8081.RES


Method        : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title         : CALIBRATION April 30, 2003 @ 1557
Last Update   : Wed Apr 30 16:35:45 2003
Response via  : Multiple Level Calibration
```



(11) Endosulfan I

11.50min 2.670UG/L

response 239605985

(11) Endosulfan I #2

12.78min 1.476UG/L

response 78036011

reintegration will yield a value <MDL

```
(+) = Expected Retention Time
9G23097.D  8081.M       Thu May 01 14:19:29 2003
```

Data File : C:\HPCHEM\1\DATA\043003\9G23098.D\ECD1A.CH Vial: 64
Acq On : 1 May 2003 11:23 Operator: ECL
Sample : L0304594-02 Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23098.D\ECD2B.CH Vial: 64
Acq On : 1 May 2003 11:47 Operator: ECL
Sample : L0304594-02 Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 1 14:13 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Wed Apr 30 16:35:45 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L	
	System Monitoring Compounds							
1) S	2,4,5,6-Tetrachl	7.20	8.35	887.1E6	550.3E6	10.401	9.736	
	Spiked Amount 20.000 Range 30 - 132 Recovery =					52.01%	48.68%	
22) S	Decachlorobiphen	14.85	16.29	632.7E6	496.0E6	12.053	12.367	
	Spiked Amount 20.000 Range 36 - 144 Recovery =					60.27%	61.84%	
	Target Compounds							
2)	alpha-BHC	0.00	0.00	0	0	N.D.	N.D.	
3)	gamma-BHC	0.00	0.00	0	0	N.D.	N.D.	
	beta-BHC	0.00	0.00	0	0	N.D.	N.D.	
5)	Heptachlor	0.00	0.00	0	0	N.D.	N.D.	
6)	delta-BHC	0.00	0.00	0	0	N.D.	N.D.	
7)	Aldrin	0.00	0.00	0	0	N.D.	N.D.	
8)	Heptachlor Epoxi	0.00	0.00	0	0	N.D.	N.D.	
9)	gamma-Chlordane	0.00	0.00	0	0	N.D.	N.D.	
10)	alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.	
11)	Endosulfan I	0.00	0.00	0	0	N.D.	N.D.	
12)	4,4'-DDE	0.00	0.00	0	0	N.D.	N.D.	
13)	Dieldrin	0.00	0.00	0	0	N.D.	N.D.	
14)	Endrin	0.00	0.00	0	0	N.D.	N.D.	
15)	4,4'-DDD	12.26	0.00	103.7E6	0	1.521	N.D.	#
16)	Endosulfan II	0.00	0.00	0	0	N.D.	N.D.	
17)	4,4'-DDT	0.00	0.00	0	0	N.D.	N.D.	
18)	Endrin Aldehyde	12.96f	0.00	76288702	0	1.352	N.D.	#
19)	Endosulfan Sulfa	0.00	0.00	0	0	N.D.	N.D.	
20)	Methoxychlor	0.00	0.00	0	0	N.D.	N.D.	
21)	Endrin Ketone	0.00	0.00	0	0	N.D.	N.D.	

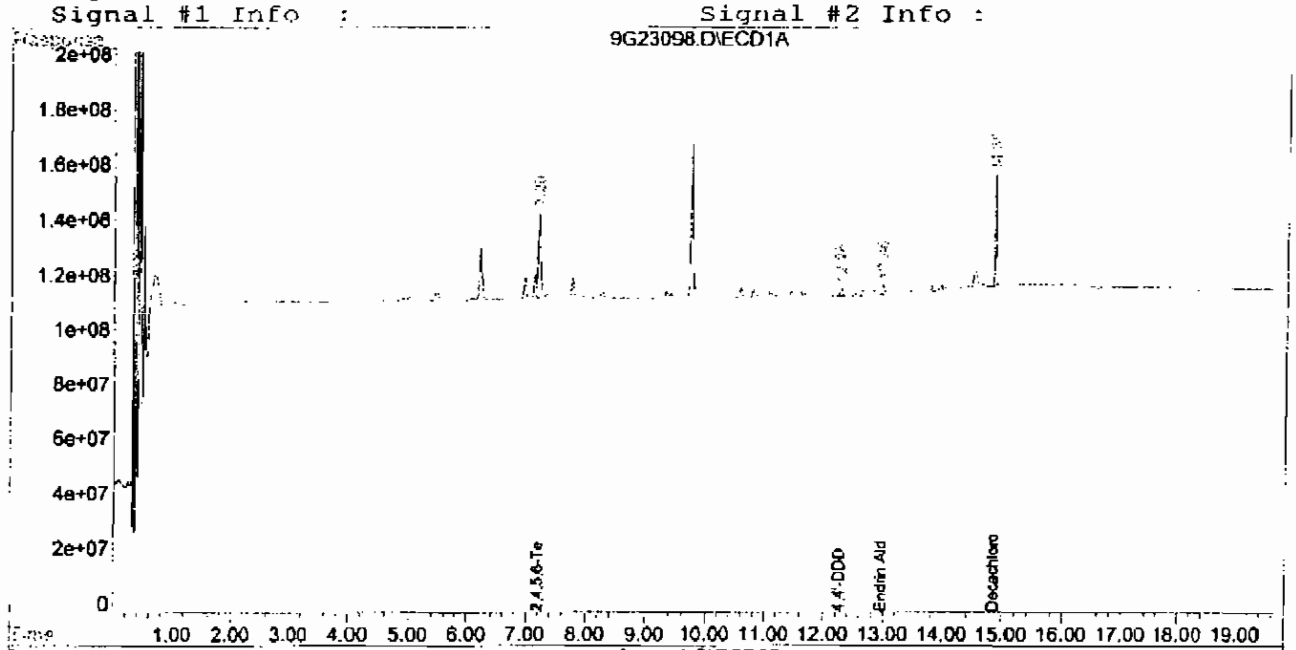
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

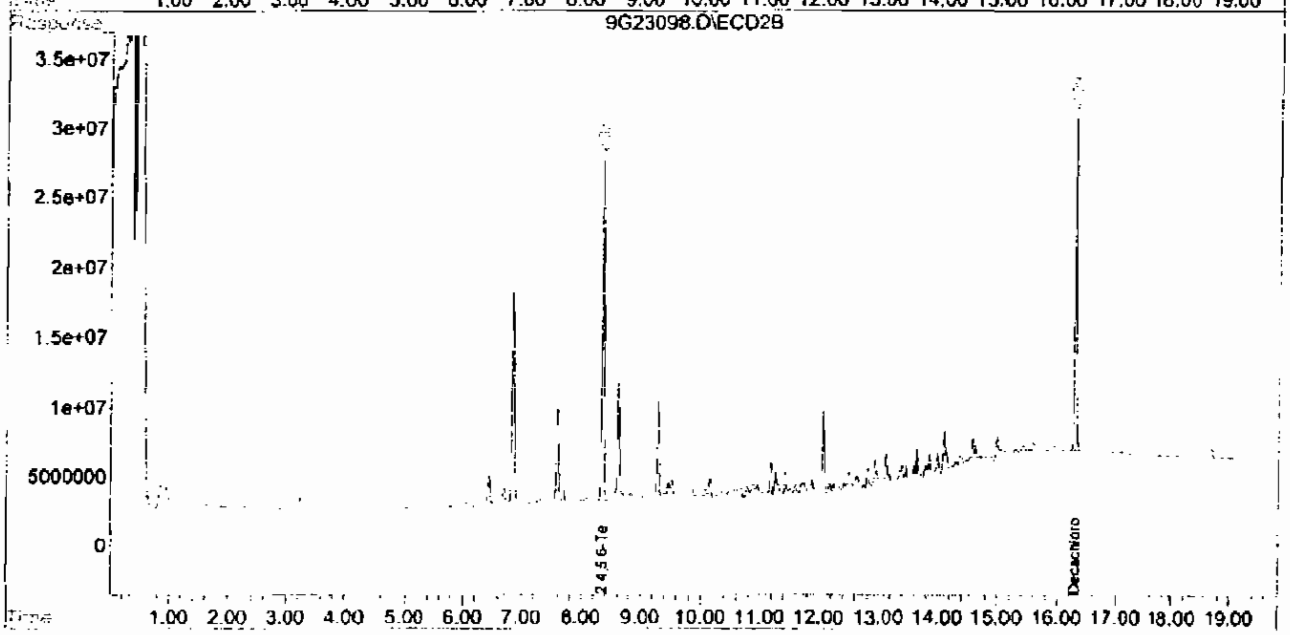
```
Data File : C:\HPCHEM\1\DATA\043003\9G23098.D\ECD1A.CH   Vial: 64
Acq On    :  1 May 2003  11:23                           Operator: ECL
Sample    : L0304594-02                                  Inst    : HP9
Misc      : 1,1 WATER                                    Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23098.D\ECD2B.CH   Vial: 64
Acq On    :  1 May 2003  11:47                           Operator: ECL
Sample    : L0304594-02                                  Inst    : HP9
Misc      : 1,1 WATER                                    Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May  1 14:13 2003  Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title        : CALIBRATION April 30, 2003 @ 1557
Last Update  : Wed Apr 30 16:35:45 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj.      :
Signal #1 Phase  :                    Signal #2 Phase:
Signal #1 Info   :                    Signal #2 Info :
```





Data File : C:\HPCHEM\1\DATA\043003\9G23055.D\ECD1A.CH Vial: 21
Acq On : 30 Apr 2003 17:59 Operator: ECL
Sample : L0304594-03 Inst : HP9
Misc : 17,1 WATER Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23055.D\ECD2B.CH Vial: 21
Acq On : 30 Apr 2003 18:23 Operator: ECL
Sample : L0304594-03 Inst : HP9
Misc : 17,1 WATER Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 1 8:25 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Thu May 01 08:24:58 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L	
System Monitoring Compounds							
1) S 2,4,5,6-Tetrachl	7.21	8.35	1131.4E6	688.9E6	13.265	12.186	
Spiked Amount 20.000 Range 30 - 132 Recovery =					66.33%	60.93%	
22) S Decachlorobiphen	14.86	16.30	934.5E6	796.6E6	17.803	19.863	
Spiked Amount 20.000 Range 36 - 144 Recovery =					89.02%	99.31%	
Target Compounds							
2) alpha-BHC	0.00	0.00	0	0	N.D.	N.D.	
3) gamma-BHC	0.00	0.00	0	0	N.D.	N.D.	
4) beta-BHC	0.00	0.00	0	0	N.D.	N.D.	
5) Heptachlor	0.00	0.00	0	0	N.D.	N.D.	
6) delta-BHC	0.00	0.00	0	0	N.D.	N.D.	
7) Aldrin	0.00	0.00	0	0	N.D.	N.D.	
8) Heptachlor Epoxi	0.00	0.00	0	0	N.D.	N.D.	
9) gamma-Chlordane	0.00	0.00	0	0	N.D.	N.D.	
10) alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.	
11) Endosulfan I	0.00	0.00	0	0	N.D.	N.D.	
12) 4,4'-DDE	0.00	0.00	0	0	N.D.	N.D.	
13) Dieldrin	0.00	0.00	0	0	N.D.	N.D.	
14) Endrin	0.00	0.00	0	0	N.D.	N.D.	
15) 4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.	
16) Endosulfan II	0.00	0.00	0	0	N.D.	N.D.	
17) 4,4'-DDT	0.00	0.00	0	0	N.D.	N.D.	
18) Endrin Aldehyde	12.97f	0.00	153.3E6	0	2.717	N.D.	#
19) Endosulfan Sulfa	0.00	0.00	0	0	N.D.	N.D.	
20) Methoxychlor	0.00	0.00	0	0	N.D.	N.D.	
21) Endrin Ketone	0.00	0.00	0	0	N.D.	N.D.	

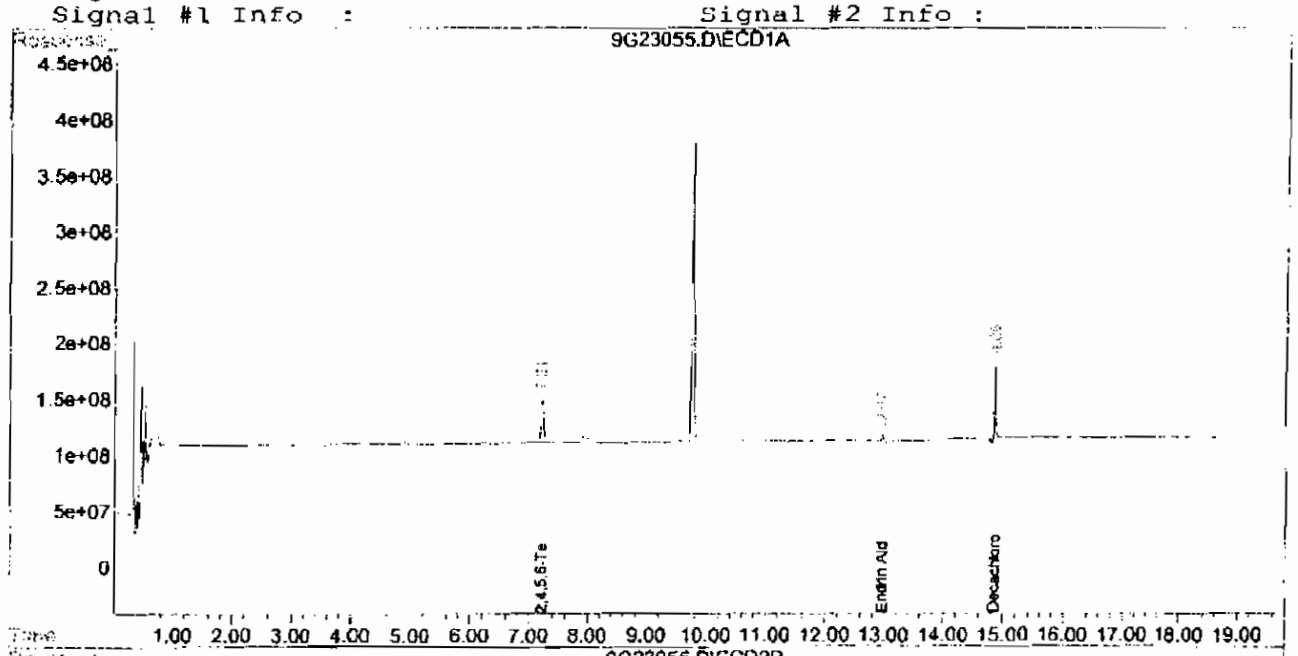
(f)=RT Delta > 1/2 Window (#) Amounts differ by > 25% (m)=manual int.

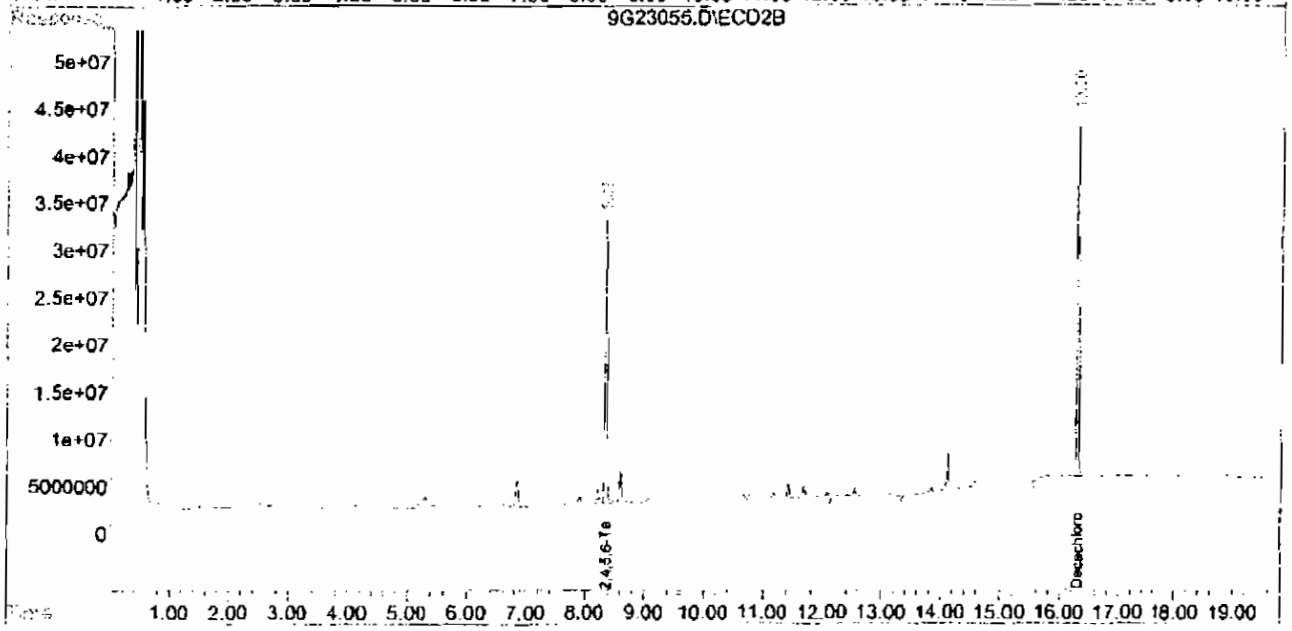
```
Data File : C:\HPCHEM\1\DATA\043003\9G23055.D\ECD1A.CH   Vial: 21
Acq On    : 30 Apr 2003  17:59                           Operator: ECL
Sample    : L0304594-03                                  Inst    : HP9
Misc      : 17,1 WATER                                   Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23055.D\ECD2B.CH   Vial: 21
Acq On    : 30 Apr 2003  18:23                           Operator: ECL
Sample    : L0304594-03                                  Inst    : HP9
Misc      : 17,1 WATER                                   Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May  1  8:25 2003  Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title        : CALIBRATION April 30, 2003 @ 1557
Last Update  : Thu May 01 08:24:58 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj.      :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```





Data File : C:\HPCHEM\1\DATA\051303\9G23252.D\ECD1A.CH Vial: 13
Acq On : 13 May 2003 15:22 Operator: HV
Sample : L0304594-03 RE Inst : HP9
Misc : 1,1 water Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\051303\9G23252.D\ECD2B.CH Vial: 13
Acq On : 13 May 2003 15:46 Operator: HV
Sample : L0304594-03 RE Inst : HP9
Misc : 1,1 water Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 14 11:31 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION May 9, 2003 @ 2015
Last Update : Sat May 10 14:30:20 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	8.09	8.35	1087.0E6	675.9E6	11.610	11.757
Spiked Amount	20.000 Range	30 - 132	Recovery	=		58.05%	58.78%
22) S	Decachlorobiphen	15.59	16.29	1226.4E6	917.0E6	21.706	22.442
Spiked Amount	20.000 Range	36 - 144	Recovery	=		108.53%	112.21%
	Target Compounds						
2)	alpha-BHC	0.00	0.00	0	0	N.D.	N.D.
)	gamma-BHC	0.00	0.00	0	0	N.D.	N.D.
)	beta-BHC	0.00	0.00	0	0	N.D.	N.D.
5)	Heptachlor	0.00	0.00	0	0	N.D.	N.D.
6)	delta-BHC	0.00	0.00	0	0	N.D.	N.D.
7)	Aldrin	0.00	0.00	0	0	N.D.	N.D.
8)	Heptachlor Epoxi	0.00	0.00	0	0	N.D.	N.D.
9)	gamma-Chlordane	0.00	0.00	0	0	N.D.	N.D.
10)	alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.
11)	Endosulfan I	0.00	0.00	0	0	N.D.	N.D.
12)	4,4'-DDE	0.00	0.00	0	0	N.D.	N.D.
13)	Dieldrin	0.00	0.00	0	0	N.D.	N.D.
14)	Endrin	0.00	0.00	0	0	N.D.	N.D.
15)	4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.
16)	Endosulfan II	0.00	0.00	0	0	N.D.	N.D.
17)	4,4'-DDT	0.00	0.00	0	0	N.D.	N.D.
18)	Endrin Aldehyde	0.00	0.00	0	0	N.D.	N.D.
19)	Endosulfan Sulfa	0.00	0.00	0	0	N.D.	N.D.
20)	Methoxychlor	0.00	0.00	0	0	N.D.	N.D.
21)	Endrin Ketone	0.00	0.00	0	0	N.D.	N.D.

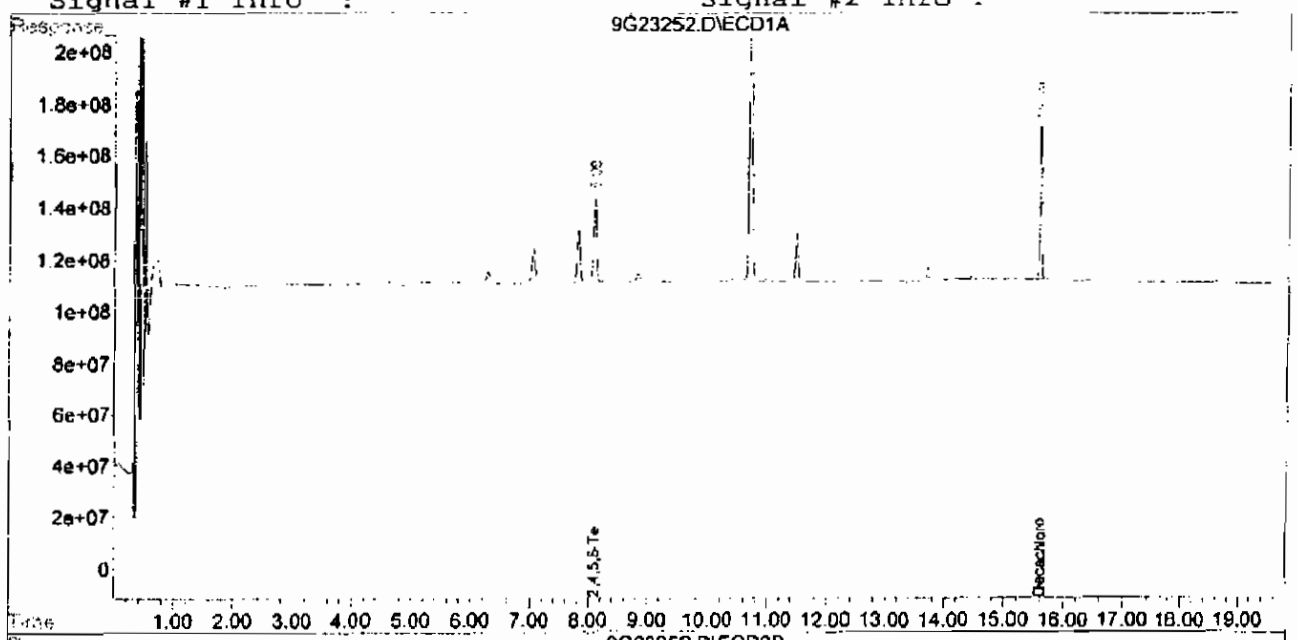
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

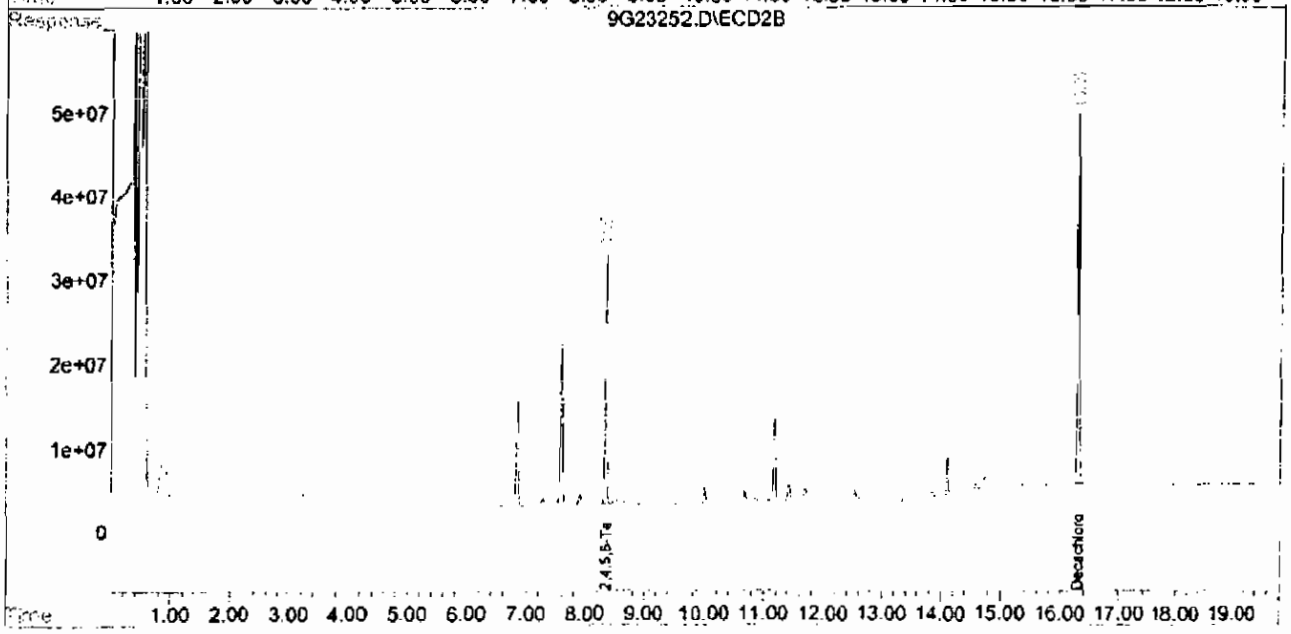
```
Data File : C:\HPCHEM\1\DATA\051303\9G23252.D\ECD1A.CH   Vial: 13
Acq On    : 13 May 2003  15:22                           Operator: HV
Sample    : L0304594-03 RE                               Inst    : HP9
Misc      : 1,1 water                                    Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\051303\9G23252.D\ECD2B.CH   Vial: 13
Acq On    : 13 May 2003  15:46                           Operator: HV
Sample    : L0304594-03 RE                               Inst    : HP9
Misc      : 1,1 water                                    Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 14 11:31 2003  Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title        : CALIBRATION May 9, 2003  @ 2015
Last Update  : Sat May 10 14:30:20 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj.      :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```





4,4'-DDT / ENDRIN BREAKDOWN

INSTRUMENT: HP 9

COLUMN: RTx-CLP (FRONT)

Data File Name: 9G23253.D

ENDRIN	ENDRIN KETONE	ENDRIN ALDEHYDE	ENDRIN BREAKDOWN
3967764511	0	0	0.00

4,4'-DDT	4,4'-DDE	4,4'-DDD	4,4'-DDT BREAKDOWN
3524822237	0	0	0.00

COLUMN: RTx-CLP II (REAR)

Data File Name: 9G23253.D

ENDRIN #2	ENDRIN KETONE #2	ENDRIN ALDEHYDE #2	ENDRIN #2 BREAKDOWN
2265682508	81740630	56545280	5.75

4,4'-DDT #2	4,4'-DDE #2	4,4'-DDD #2	4,4'-DDT #2 BREAKDOWN
2029652300	0	0	0.00

2.2.2.3 Standards Data

Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003
Last Update : Wed Apr 30 16:29:00 2003

Calibration Files
2000 =9G23038.D 1000 =9G23039.D 500 =9G23040.D
250 =9G23041.D 100 =9G23042.D

		Compound	2000	1000	500	250	100	Avg		%RSD
1)	L1	Toxaphene-1	8.883	8.889	8.886	8.756	8.911	8.865	E5	0.70
2)	L1	Toxaphene-2	1.620	1.612	1.597	1.642	1.692	1.633	E6	2.26
3)	L1	Toxaphene-3	1.148	1.128	1.083	1.055	1.033	1.089	E6	4.43
4)	L1	Toxaphene-4	1.436	1.431	1.419	1.403	1.387	1.415	E6	1.45
5)	L1	Toxaphene-5	7.258	7.129	6.883	6.675	6.537	6.897	E5	4.37

Signal #2 Calibration Files
2000 =9G23038.D 1000 =9G23039.D 500 =9G23040.D
250 =9G23041.D 100 =9G23042.D

		Compound	2000	1000	500	250	100	Avg		%RSD
1)	L1	Toxaphene-1	5.392	5.284	5.107	4.910	5.063	5.151	E5	3.68
2)	L1	Toxaphene-2	1.492	1.458	1.404	1.316	1.384	1.411	E6	4.83
3)	L1	Toxaphene-3	1.056	1.010	0.946	0.813	0.771	0.919	E6	13.42
4)	L1	Toxaphene-4	7.813	7.495	6.996	6.167	5.770	6.848	E5	12.64
5)	L1	Toxaphene-5	7.230	6.956	6.587	6.010	5.887	6.534	E5	8.92

(#) = Out of Range

```
Data File : C:\HPCHEM\1\DATA\043003\9G23038.D\ECD1A.CH    Vial: 4
Acq On    : 30 Apr 2003  11:06                            Operator: ECL
Sample    : TOX ICAL 2000 PPB                             Inst    : HP9
Misc      : SOS62-45                                      Multiplr: 1.00
IntFile   : .E

Data File : C:\HPCHEM\1\DATA\043003\9G23038.D\ECD2B.CH    Vial: 4
Acq On    : 30 Apr 2003  11:31                            Operator: ECL
Sample    : TOX ICAL 2000 PPB                             Inst    : HP9
Misc      : SOS62-45                                      Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 30 16:30 2003  Quant Results File: TOX.RES

Quant Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title        : CALIBRATION April 30, 2003
Last Update  : Wed Apr 30 16:29:00 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj.      :
Signal #1 Phase  :                    Signal #2 Phase:
Signal #1 Info   :                    Signal #2 Info :
```

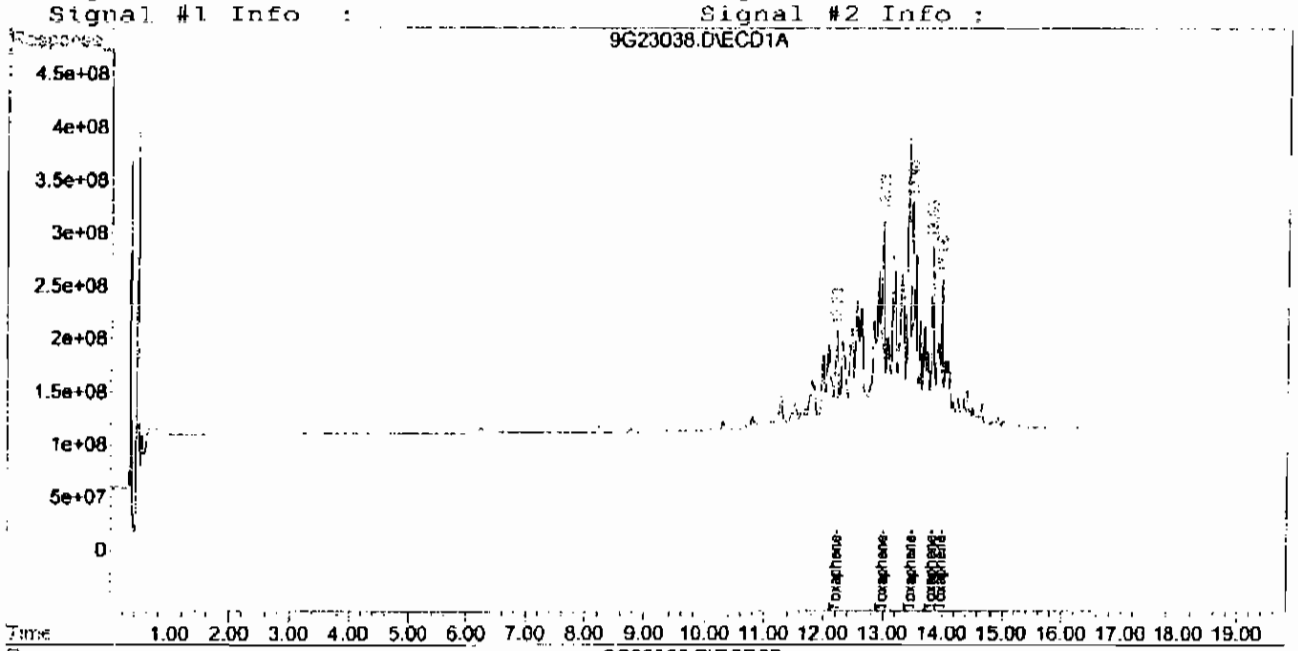
Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
Target Compounds						
1) L1 Toxaphene-1	12.20	13.13	1776.7E6	1078.5E6	2004.082	2093.679
2) L1 Toxaphene-2	12.97	13.87	3240.7E6	2983.2E6	1984.989	2114.845
3) L1 Toxaphene-3	13.46	14.15	2295.1E6	2111.7E6	2106.805	2297.575
4) L1 Toxaphene-4	13.80	14.73	2872.3E6	1562.6E6	2029.497	2281.791
5) L1 Toxaphene-5	13.96	15.08	1451.7E6	1446.0E6	2104.926	2213.098
Sum Toxaphene-1			11636.4E6	9182.0E6	10230.299	11000.988
Average Toxaphene-1					2046.060	2200.198

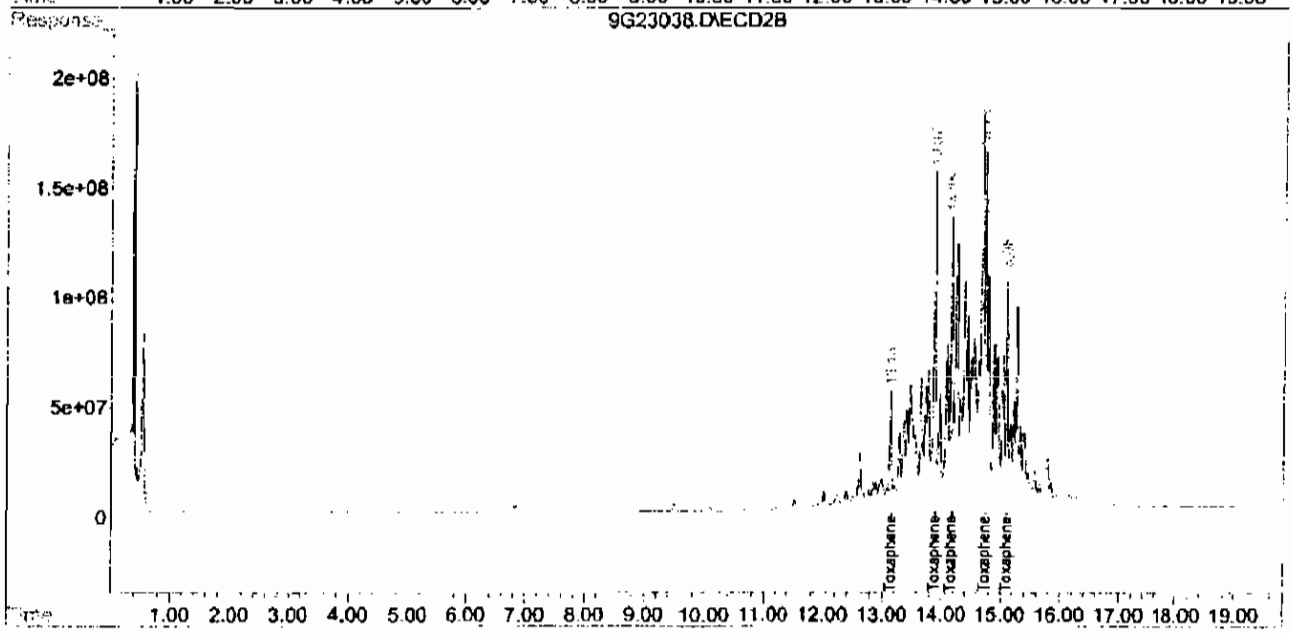
```
Data File : C:\HPCHEM\1\DATA\043003\9G23038.D\ECD1A.CH   Vial: 4
Acq On    : 30 Apr 2003  11:06                           Operator: ECL
Sample    : TOX ICAL 2000 PPB                            Inst    : HP9
Misc      : SOS62-45                                     Multiplr: 1.00
IntFile   : .E

Data File : C:\HPCHEM\1\DATA\043003\9G23038.D\ECD2B.CH   Vial: 4
Acq On    : 30 Apr 2003  11:31                           Operator: ECL
Sample    : TOX ICAL 2000 PPB                            Inst    : HP9
Misc      : SOS62-45                                     Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 30 16:30 2003  Quant Results File: TOX.RES

Quant Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title        : CALIBRATION April 30, 2003
Last Update  : Wed Apr 30 16:29:00 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj.      :
Signal #1 Phase  :                    Signal #2 Phase:
Signal #1 Info   :                    Signal #2 Info :
```





Data File : C:\HPCHEM\1\DATA\043003\9G23039.D\ECD1A.CH Vial: 5
Acq On : 30 Apr 2003 11:31 Operator: ECL
Sample : TOX ICAL 1000 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : .E

Data File : C:\HPCHEM\1\DATA\043003\9G23039.D\ECD2B.CH Vial: 5
Acq On : 30 Apr 2003 11:55 Operator: ECL
Sample : TOX ICAL 1000 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 30 16:28 2003 Quant Results File: TOX.RES

Quant Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003
Last Update : Wed Apr 30 16:28:55 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
Target Compounds						
1) L1 Toxaphene-1	12.19	13.15	888.9E6	528.4E6	1000.662	979.808
2) L1 Toxaphene-2	12.97	13.88	1611.7E6	1458.1E6	994.674	977.570
3) L1 Toxaphene-3	13.45	14.16	1128.5E6	1009.6E6	983.386	956.180
4) L1 Toxaphene-4	13.80	14.74	1431.5E6	749.5E6	996.720	959.267
5) L1 Toxaphene-5	13.96	15.09	712.9E6	695.6E6	982.215	962.096
Sum Toxaphene-1			5773.5E6	4441.2E6	4957.656	4834.921
Average Toxaphene-1					991.531	966.984

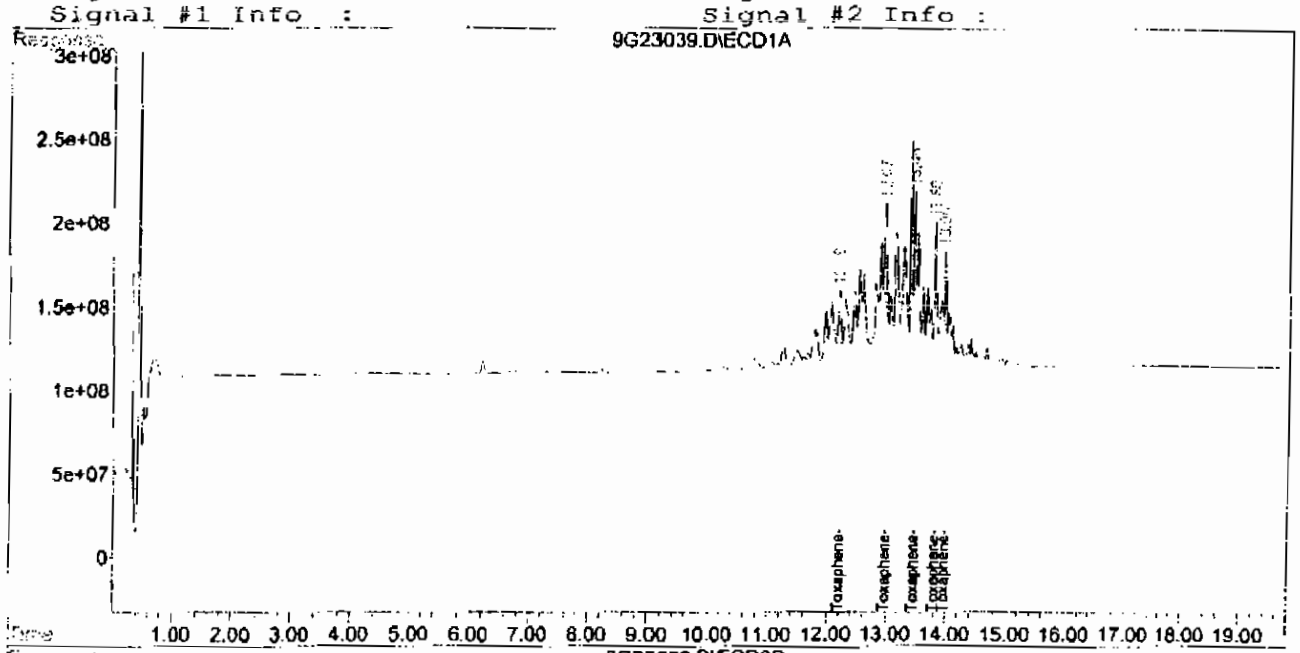
(f)=RT Delta > 1/2 Window (#) Amounts differ by > 25% (m)=manual int.

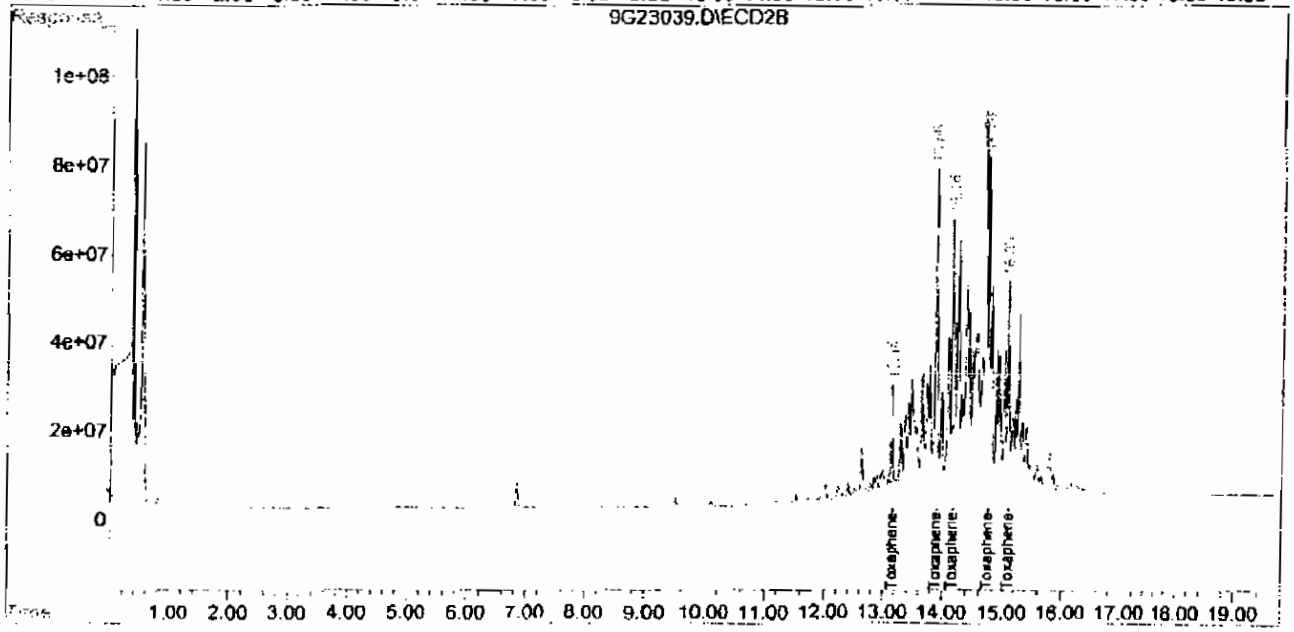
```
Data File : C:\HPCHEM\1\DATA\043003\9G23039.D\ECD1A.CH    Vial: 5
Acq On    : 30 Apr 2003  11:31                            Operator: ECL
Sample    : TOX ICAL 1000 PPB                             Inst    : HP9
Misc      : SOS62-45                                      Multiplr: 1.00
IntFile   : .E

Data File : C:\HPCHEM\1\DATA\043003\9G23039.D\ECD2B.CH    Vial: 5
Acq On    : 30 Apr 2003  11:55                            Operator: ECL
Sample    : TOX ICAL 1000 PPB                             Inst    : HP9
Misc      : SOS62-45                                      Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 30 16:28 2003  Quant Results File: TOX.RES

Quant Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title        : CALIBRATION April 30, 2003
Last Update  : Wed Apr 30 16:28:55 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj.      :
Signal #1 Phase  :                    Signal #2 Phase:
Signal #1 Info   :                    Signal #2 Info :
```





Data File : C:\HPCHEM\1\DATA\043003\9G23040.D\ECD1A.CH Vial: 6
Acq On : 30 Apr 2003 11:55 Operator: ECL
Sample : TOX ICAL 500 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : .E

Data File : C:\HPCHEM\1\DATA\043003\9G23040.D\ECD2B.CH Vial: 6
Acq On : 30 Apr 2003 12:19 Operator: ECL
Sample : TOX ICAL 500 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 30 16:28 2003 Quant Results File: TOX.RES

Quant Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003
Last Update : Wed Apr 30 16:28:56 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

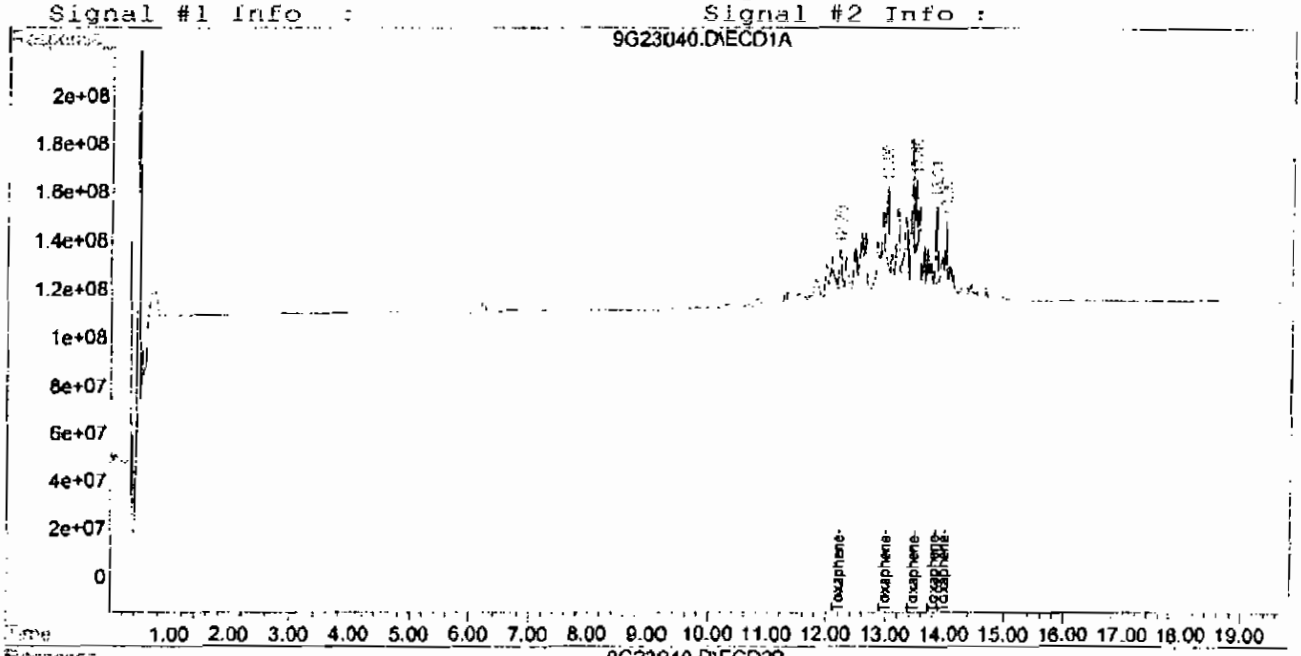
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	Target Compounds						
1)	L1 Toxaphene-1	12.20	13.14	444.3E6	255.3E6	499.970	478.331
2)	L1 Toxaphene-2	12.98	13.87	798.7E6	701.8E6	494.231	475.853
3)	L1 Toxaphene-3	13.46	14.15	541.6E6	473.0E6	475.907	458.038
4)	L1 Toxaphene-4	13.81	14.73	709.7E6	349.8E6	494.943	457.036
5)	L1 Toxaphene-5	13.97	15.08	344.2E6	329.3E6	478.412	464.319
	Sum Toxaphene-1			2838.4E6	2109.3E6	2443.463	2333.576
	Average Toxaphene-1					488.693	466.715

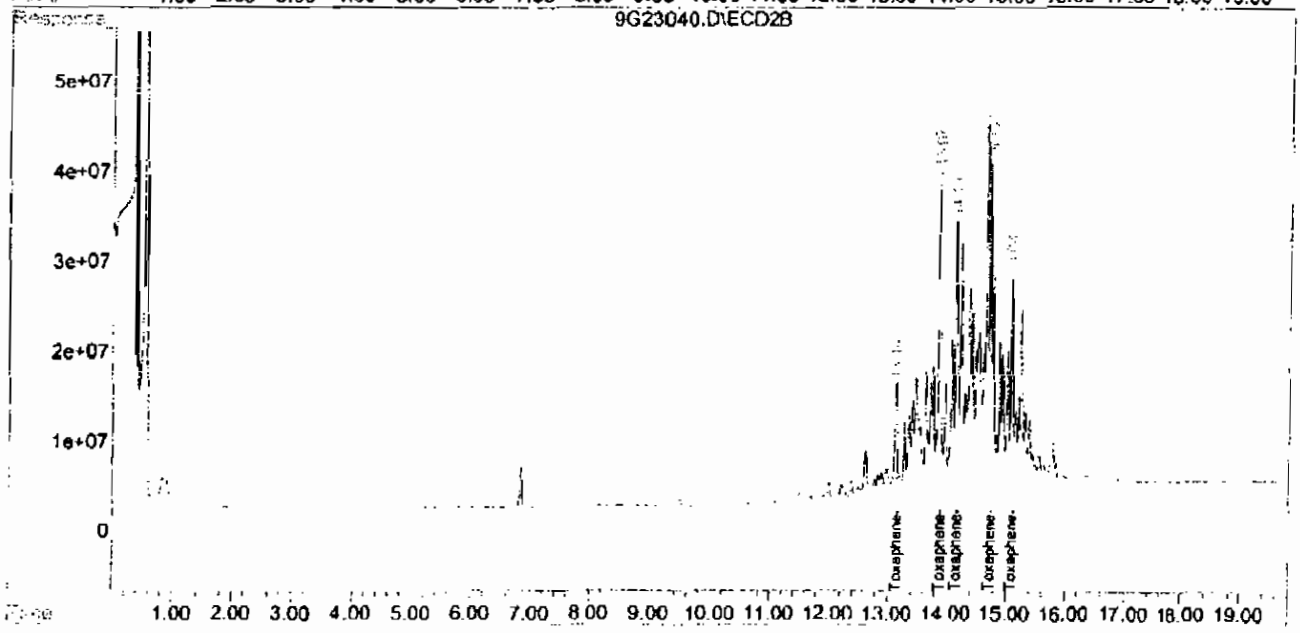
Data File : C:\HPCHEM\1\DATA\043003\9G23040.D\ECD1A.CH Vial: 6
Acq On : 30 Apr 2003 11:55 Operator: ECL
Sample : TOX ICAL 500 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : .E

Data File : C:\HPCHEM\1\DATA\043003\9G23040.D\ECD2B.CH Vial: 6
Acq On : 30 Apr 2003 12:19 Operator: ECL
Sample : TOX ICAL 500 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 30 16:28 2003 Quant Results File: TOX.RES

Quant Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003
Last Update : Wed Apr 30 16:28:56 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data File : C:\HPCHEM\1\DATA\043003\9G23041.D\ECD1A.CH Vial: 7
Acq On : 30 Apr 2003 12:19 Operator: ECL
Sample : TOX ICAL 250 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : .E

Data File : C:\HPCHEM\1\DATA\043003\9G23041.D\ECD2B.CH Vial: 7
Acq On : 30 Apr 2003 12:43 Operator: ECL
Sample : TOX ICAL 250 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 30 16:28 2003 Quant Results File: TOX.RES

Quant Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003
Last Update : Wed Apr 30 16:28:58 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
Target Compounds						
1) L1 Toxaphene-1	12.19	13.14	218.9E6	122.7E6	246.355	233.311
2) L1 Toxaphene-2	12.97	13.87	410.4E6	329.0E6	254.928	226.692
3) L1 Toxaphene-3	13.45	14.15	263.6E6	203.3E6	235.448	202.520
4) L1 Toxaphene-4	13.80	14.73	350.7E6	154.2E6	245.416	207.359
5) L1 Toxaphene-5	13.96	15.09	166.9E6	150.2E6	235.363	216.969
Sum Toxaphene-1			1410.5E6	959.4E6	1217.509	1086.851
Average Toxaphene-1					243.502	217.370

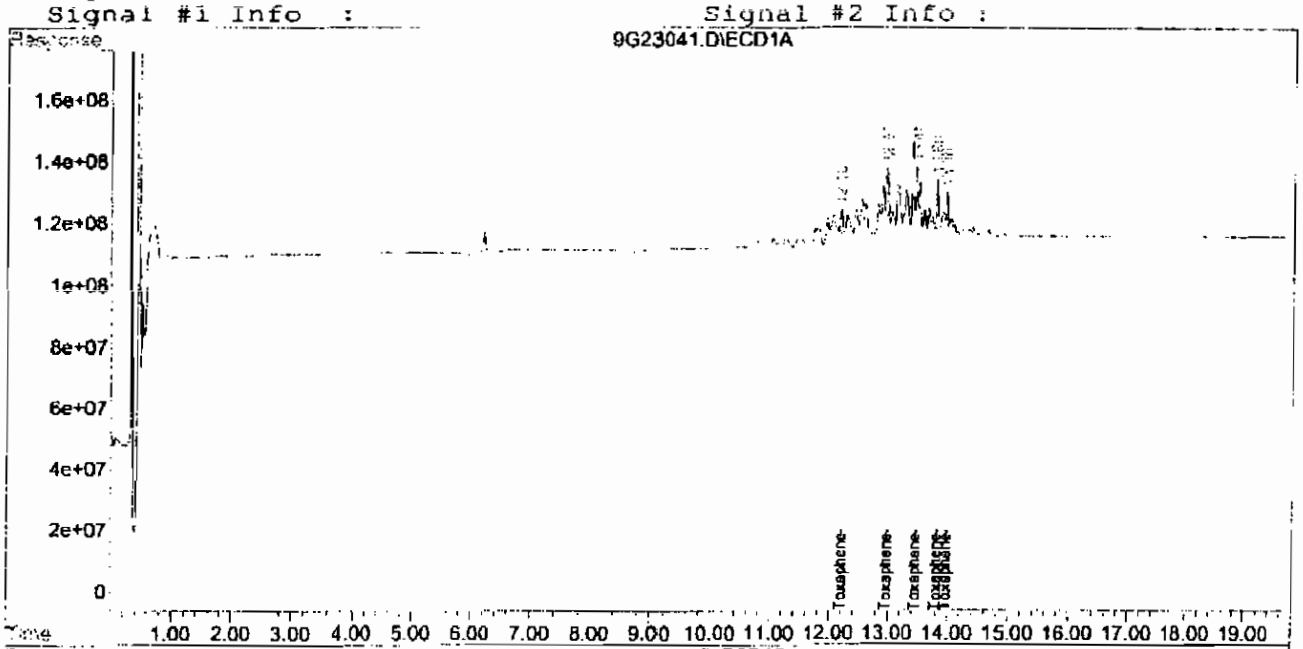
(f)-RT Delta > 1/2 Window (#) Amounts differ by > 25% (m)=manual int.

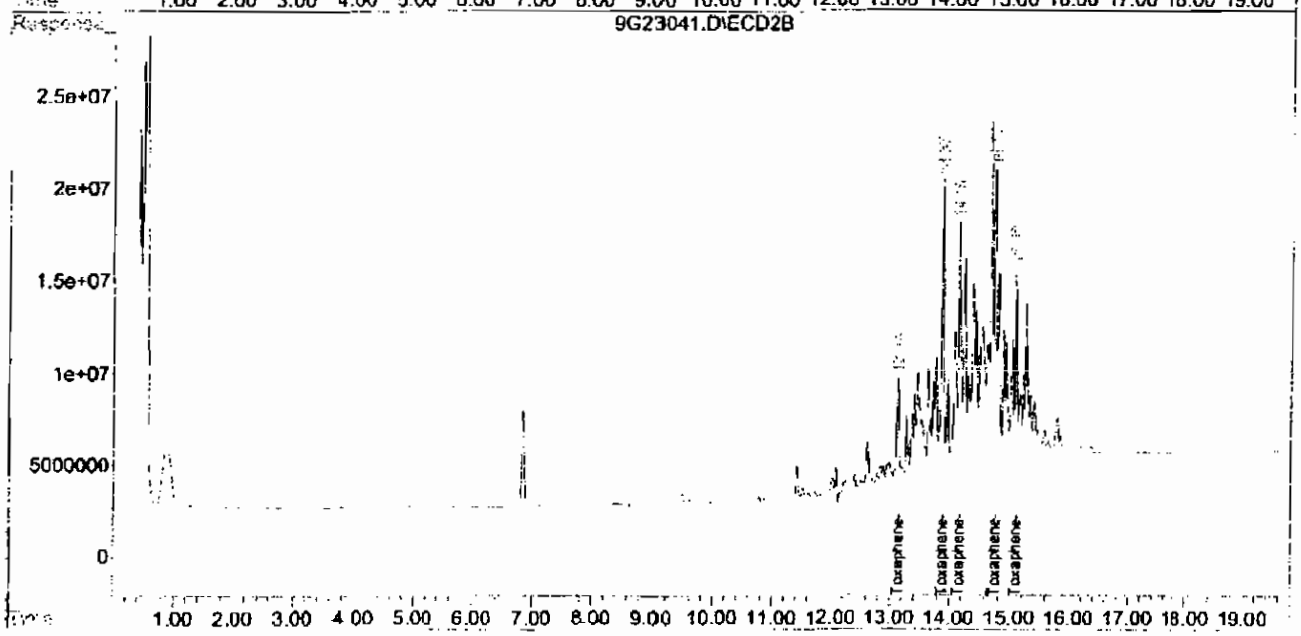
```
Data File : C:\HPCHEM\1\DATA\043003\9G23041.D\ECD1A.CH   Vial: 7
Acq On    : 30 Apr 2003  12:19                           Operator: ECL
Sample    : TOX ICAL 250 PPB                             Inst    : HP9
Misc      : SOS62-45                                     Multiplr: 1.00
IntFile   : .E

Data File : C:\HPCHEM\1\DATA\043003\9G23041.D\ECD2B.CH   Vial: 7
Acq On    : 30 Apr 2003  12:43                           Operator: ECL
Sample    : TOX ICAL 250 PPB                             Inst    : HP9
Misc      : SOS62-45                                     Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 30 16:28 2003  Quant Results File: TOX.RES

Quant Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title        : CALIBRATION April 30, 2003
Last Update  : Wed Apr 30 16:28:58 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj.      :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```





Data File : C:\HPCHEM\1\DATA\043003\9G23042.D\ECD1A.CH Vial: 8
Acq On : 30 Apr 2003 12:43 Operator: ECL
Sample : TOX ICAL 100 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : .E

Data File : C:\HPCHEM\1\DATA\043003\9G23042.D\ECD2B.CH Vial: 8
Acq On : 30 Apr 2003 13:08 Operator: ECL
Sample : TOX ICAL 100 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 30 16:29 2003 Quant Results File: TOX.RES

Quant Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003
Last Update : Wed Apr 30 16:28:59 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	Target Compounds						
1)	L1 Toxaphene-1	12.20	13.14	89113369	50634903	100.652	97.881
2)	L1 Toxaphene-2	12.97	13.88	169.2E6	138.4E6	104.590	97.634
3)	L1 Toxaphene-3	13.46	14.16	103.3E6	77082918	93.625	80.617
4)	L1 Toxaphene-4	13.80	14.74	138.7E6	57702509	97.492	81.068
5)	L1 Toxaphene-5	13.97	15.09	65368153	58871565	93.562	87.924
	Sum Toxaphene-1			565.7E6	382.7E6	489.921	445.125
	Average Toxaphene-1					97.984	89.025

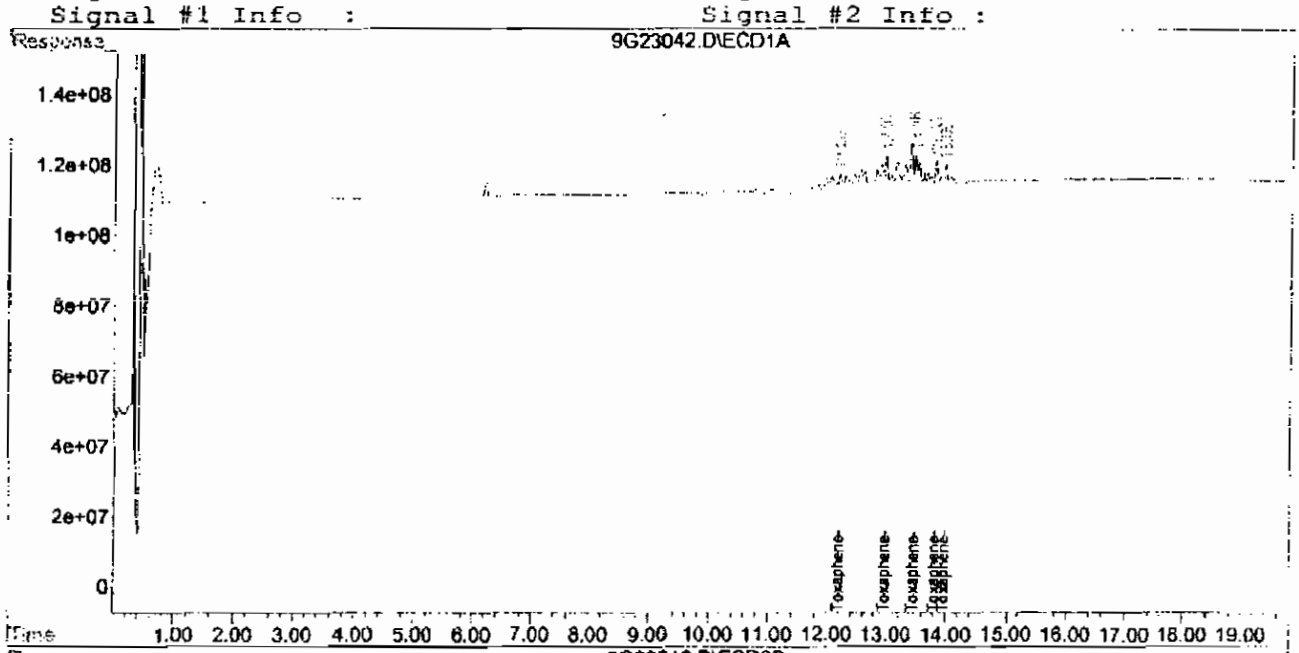
(f) RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

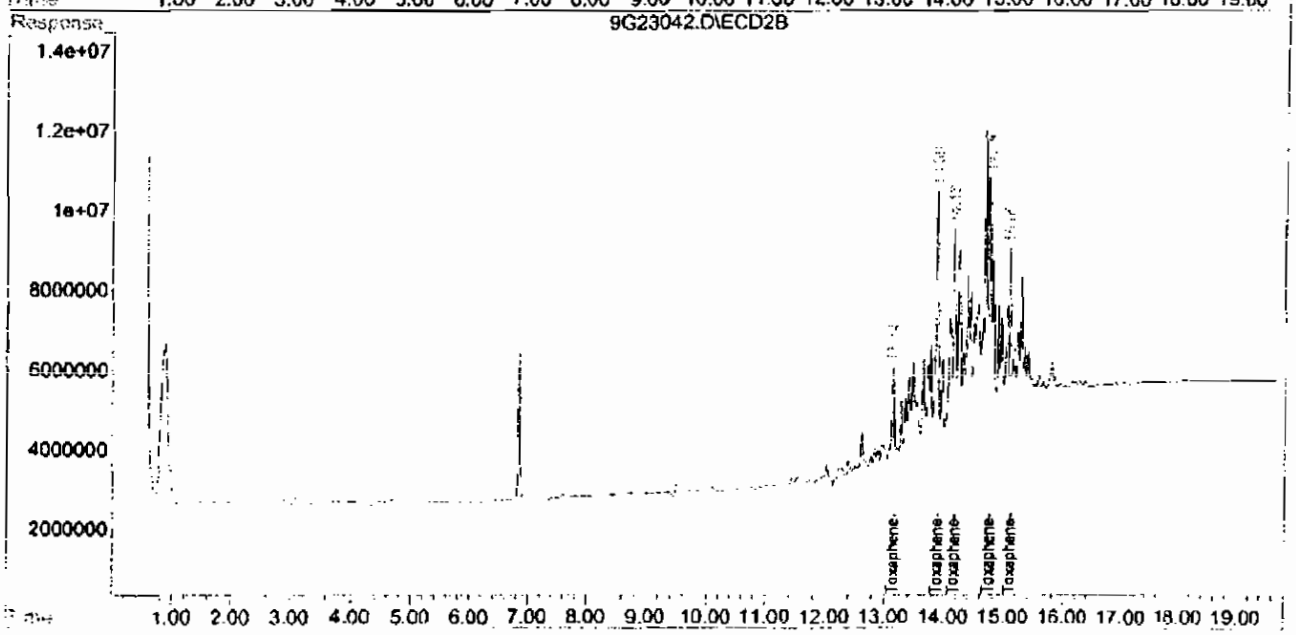
Data File : C:\HPCHEM\1\DATA\043003\9G23042.D\ECD1A.CH Vial: 8
Acq On : 30 Apr 2003 12:43 Operator: ECL
Sample : TOX ICAL 100 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : .E

Data File : C:\HPCHEM\1\DATA\043003\9G23042.D\ECD2B.CH Vial: 8
Acq On : 30 Apr 2003 13:08 Operator: ECL
Sample : TOX ICAL 100 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 30 16:29 2003 Quant Results File: TOX.RES

Quant Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003
Last Update : Wed Apr 30 16:28:59 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data File : C:\HPCHEM\1\DATA\043003\9G23043.D\ECD1A.CH Vial: 9
Acq On : 30 Apr 2003 13:08 Operator: ECL
Sample : TOX ALT TCV 500 PPB Inst : HP9
Misc : SOS63-05 Multiplr: 1.00
IntFile : .E

Data File : C:\HPCHEM\1\DATA\043003\9G23043.D\ECD2B.CH Vial: 9
Acq On : 30 Apr 2003 13:32 Operator: ECL
Sample : TOX ALT TCV 500 PPB Inst : HP9
Misc : SOS63-05 Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003
Last Update : Wed Apr 30 16:29:00 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	L1	Toxaphene-1	500.000	504.769	-1.0	101	0.00
2	L1	Toxaphene-2	500.000	452.612	9.5	93	0.00
3	L1	Toxaphene-3	500.000	496.209	0.8	100	0.00
4	L1	Toxaphene-4	500.000	492.361	1.5	98	0.00
5	L1	Toxaphene-5	500.000	530.972	-6.2	106	0.00
		Signal #2					
1	L1	Toxaphene-1	500.000	443.844	11.2	90	0.00
2	L1	Toxaphene-2	500.000	494.089	1.2	99	0.00
3	L1	Toxaphene-3	500.000	476.207	4.8	93	0.00
4	L1	Toxaphene-4	500.000	469.622	6.1	92	0.00
5	L1	Toxaphene-5	500.000	488.513	2.3	97	0.00

Data File : C:\HPCHEM\1\DATA\043003\9G23043.D\ECD1A.CH Vial: 9
Acq On : 30 Apr 2003 13:08 Operator: ECL
Sample : TOX ALT ICV 500 PPB Inst : HP9
Misc : SOS63-05 Multiplr: 1.00
IntFile : .E

Data File : C:\HPCHEM\1\DATA\043003\9G23043.D\ECD2B.CH Vial: 9
Acq On : 30 Apr 2003 13:32 Operator: ECL
Sample : TOX ALT ICV 500 PPB Inst : HP9
Misc : SOS63-05 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 30 16:30 2003 Quant Results File: TOX.RES

Quant Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003
Last Update : Wed Apr 30 16:29:00 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
Target Compounds						
1) L1 Toxaphene-1	12.21	13.14	447.5E6	228.6E6	504.769	443.844
2) L1 Toxaphene-2	12.98	13.88	738.9E6	697.0E6	452.612	494.089
3) L1 Toxaphene-3	13.46	14.15	540.6E6	437.7E6	496.209	476.207
4) L1 Toxaphene-4	13.81	14.73	696.8E6	321.6E6	492.361	469.622
5) L1 Toxaphene-5	13.97	15.08	366.2E6	319.2E6	530.972	488.513
Sum Toxaphene-1			2790.0E6	2004.1E6	2476.924	2372.275
Average Toxaphene-1					495.385	474.455

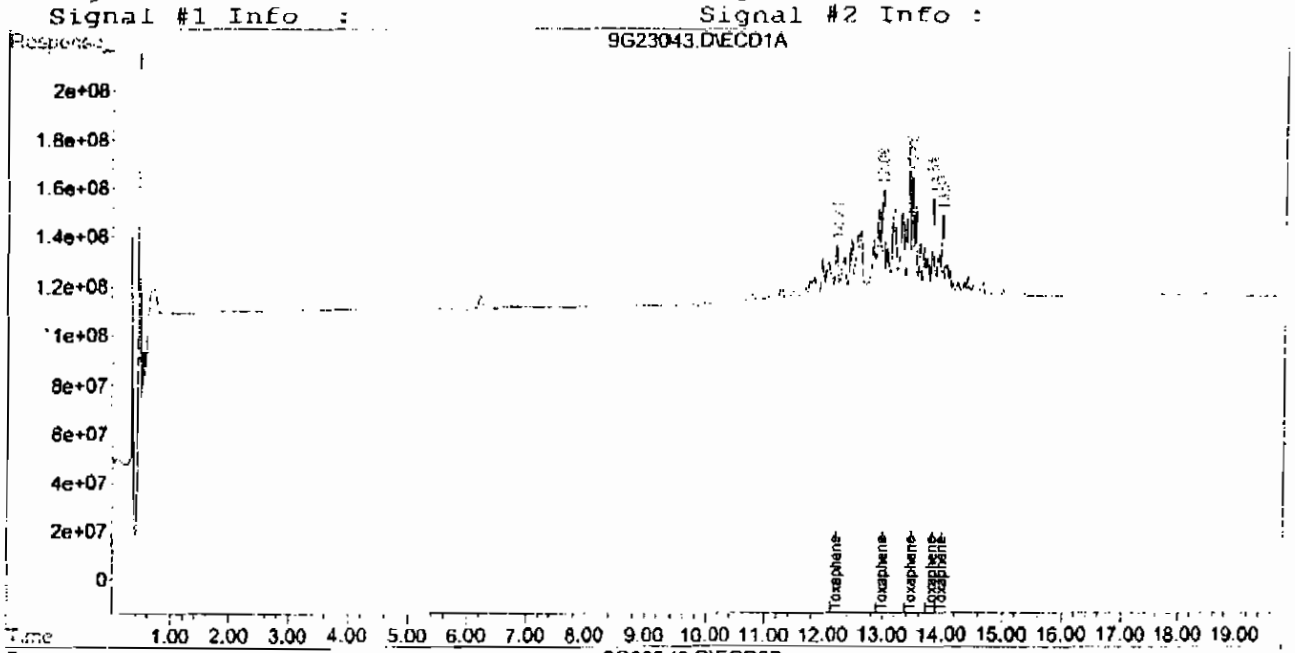
(f)=RT Delta > 1/2 Window (#) Amounts differ by > 25% (m)=manual int.

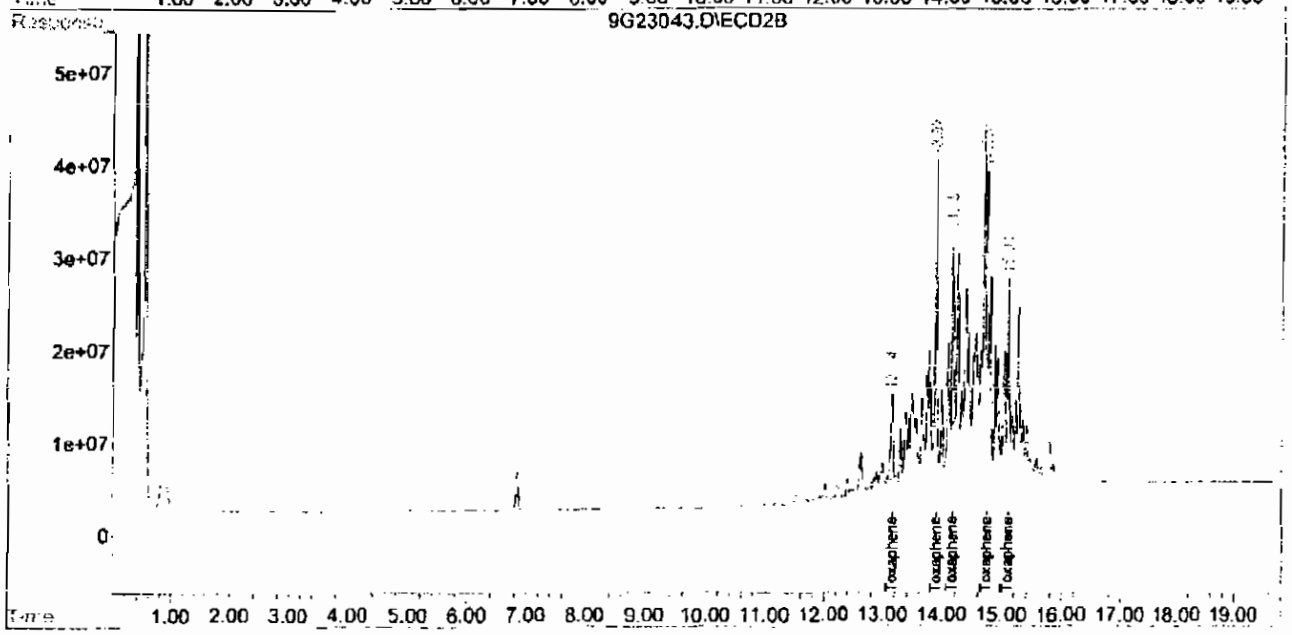
Data File : C:\HPCHEM\1\DATA\043003\9G23043.D\ECD1A.CH Vial: 9
Acq On : 30 Apr 2003 13:08 Operator: ECL
Sample : TOX ALT ICV 500 PPB Inst : HP9
Misc : SOS63-05 Multiplr: 1.00
IntFile : .E

Data File : C:\HPCHEM\1\DATA\043003\9G23043.D\ECD2B.CH Vial: 9
Acq On : 30 Apr 2003 13:32 Operator: ECL
Sample : TOX ALT ICV 500 PPB Inst : HP9
Misc : SOS63-05 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 30 16:30 2003 Quant Results File: TOX.RES

Quant Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003
Last Update : Wed Apr 30 16:29:00 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Wed Apr 30 16:35:45 2003

Calibration Files
4 =9G23049.D 10 =9G23048.D 20 =9G23047.D
50 =9G23046.D 100 =9G23045.D 200 =9G23044.D

		Compound	4	10	20	50	100	200	Avg		%RSD
1)	S	2,4,5,6-Tetrachloro	8.512	8.600	8.708	8.528	8.522	8.305	8.529	E7	1.55
2)		alpha-BHC	1.124	1.200	1.242	1.257	1.270	1.241	1.222	E8	4.39
3)		gamma-BHC	1.064	1.057	1.105	1.101	1.114	1.052	1.082	E8	2.51
4)		beta-BHC	4.459	4.738	4.856	4.710	4.639	4.804	4.701	E7	2.98
5)		Heptachlor	1.116	1.137	1.144	1.111	1.085	1.019	1.102	E8	4.16
6)		delta-BHC	0.969	1.060	1.141	1.161	1.163	1.146	1.107	E8	7.01
7)		Aldrin	1.001	1.061	1.063	1.046	1.030	0.982	1.030	E8	3.22
8)		Heptachlor Epoxide	7.806	8.124	8.661	8.330	8.285	7.474	8.113	E7	5.17
9)		gamma-Chlordane	9.176	9.368	9.484	9.413	9.347	9.127	9.319	E7	1.49
10)		alpha-Chlordane	9.775	9.272	9.108	8.873	8.788	8.529	9.057	E7	4.81
11)		Endosulfan I	9.750	9.358	9.221	8.867	8.587	8.065	8.975	E7	6.68
12)		4,4'-DDE	9.070	8.575	8.568	8.552	8.530	8.329	8.604	E7	2.86
13)		Dieldrin	9.106	9.383	9.372	9.226	9.114	8.736	9.156	E7	2.60
14)		Endrin	8.346	8.629	8.758	8.671	8.556	8.181	8.523	E7	2.56
15)		4,4'-DDD	6.121	6.617	6.872	7.147	7.143	7.016	6.819	E7	5.80
16)		Endosulfan II	7.119	7.371	7.549	7.432	7.319	7.136	7.321	E7	2.30
17)		4,4'-DDT	7.837	7.456	7.563	7.436	7.428	7.292	7.502	E7	2.47
18)		Endrin Aldehyde	6.331	5.737	5.646	5.407	5.351	5.373	5.641	E7	6.61
19)		Endosulfan Sulfate	4.466	4.773	4.938	4.844	4.921	4.799	4.790	E7	3.58
20)		Methoxychlor	3.453	3.432	3.520	3.352	3.337	3.285	3.396	E7	2.56
21)		Endrin Ketone	6.630	6.697	6.715	6.639	6.652	6.634	6.661	E7	0.54
22)	S	Decachlorobiphenyl	5.665	5.493	5.319	5.065	5.011	4.942	5.249	E7	5.54

Signal #2 Calibration Files
4 =9G23049.D 10 =9G23048.D 20 =9G23047.D
50 =9G23046.D 100 =9G23045.D 200 =9G23044.D

		Compound	4	10	20	50	100	200	Avg		%RSD
1)	S	2,4,5,6-Tetrachloro	5.335	5.565	5.548	5.907	5.847	5.713	5.653	E7	3.76
2)		alpha-BHC	6.905	7.755	8.226	8.962	8.969	8.720	8.256	E7	9.84
3)		gamma-BHC	6.384	7.006	7.302	7.910	7.913	7.684	7.366	E7	8.13
4)		beta-BHC	3.267	3.282	3.241	3.382	3.343	3.277	3.299	E7	1.60
5)		Heptachlor	5.505	6.133	6.330	6.692	6.677	6.396	6.289	E7	6.99
6)		delta-BHC	5.922	6.585	7.042	7.723	7.784	7.652	7.118	E7	10.54
7)		Aldrin	5.517	6.081	6.341	6.893	6.893	6.683	6.401	E7	8.42
8)		Heptachlor Epoxide	5.484	5.602	5.791	6.176	6.149	5.990	5.865	E7	4.90
9)		gamma-Chlordane	5.288	5.544	5.657	6.104	6.111	5.990	5.782	E7	5.84
10)		alpha-Chlordane	5.081	5.187	5.283	5.641	5.634	5.526	5.392	E7	4.46
11)		Endosulfan I	4.917	5.072	5.191	5.555	5.551	5.429	5.286	E7	5.03
12)		4,4'-DDE	4.392	4.736	4.980	5.494	5.561	5.510	5.112	E7	9.52
13)		Dieldrin	4.800	5.143	5.388	5.911	5.989	5.921	5.525	E7	8.91
14)		Endrin	4.023	4.223	4.498	4.891	5.089	5.136	4.643	E7	10.03
15)		4,4'-DDD	3.509	3.788	4.007	4.408	4.492	4.559	4.127	E7	10.33
16)		Endosulfan II	3.937	4.236	4.305	4.744	4.806	4.892	4.487	E7	8.52
17)		4,4'-DDT	3.393	3.608	3.859	4.267	4.453	4.527	4.018	E7	11.65
18)		Endrin Aldehyde	3.085	3.324	3.301	3.448	3.505	3.565	3.371	E7	5.14
19)		Endosulfan Sulfate	3.336	3.450	3.594	3.852	3.975	4.062	3.712	E7	7.95
20)		Methoxychlor	2.037	1.923	1.941	2.061	2.146	2.221	2.055	E7	5.61
21)		Endrin Ketone	4.167	4.278	4.432	4.733	4.828	4.900	4.556	E7	6.71
22)	S	Decachlorobiphenyl	4.317	4.051	3.969	3.900	3.915	3.910	4.010	E7	4.00

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA\043003\9G23044.D\ECD1A.CH Vial: 10
Acq On : 30 Apr 2003 13:32 Operator: ECL
Sample : WG139380-01 PEST ICAL 200 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23044.D\ECD2B.CH Vial: 10
Acq On : 30 Apr 2003 13:56 Operator: ECL
Sample : WG139380-01 PEST ICAL 200 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Apr 30 16:32 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Wed Apr 30 16:32:54 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	7.20	8.35	16610.3E6	11426.5E6	226.240	201.608
	Spiked Amount 20.000 Range 30 - 132 Recovery = 1131.20%#						1008.04%#
22) S	Decachlorobiphen	14.85	16.29	9884.2E6	7820.9E6	197.873	194.460
	Spiked Amount 20.000 Range 36 - 144 Recovery = 989.36%#						972.30%#
	Target Compounds						
2)	alpha-BHC	8.21	9.49	24813.5E6	17439.3E6	238.753	211.955
3)	gamma-BHC	8.75	10.11	21045.5E6	15367.0E6	228.641	209.488
4)	beta-BHC	8.89	10.24	9607.2E6	6554.5E6	240.753	200.204
5)	Heptachlor	9.55	10.85	20373.4E6	12791.0E6	218.270	211.108
6)	delta-BHC	9.18	10.73	22910.7E6	15304.8E6	243.942	214.603
7)	Aldrin	10.02	11.37	19630.6E6	13365.7E6	226.126	208.314
8)	Heptachlor Epoxi	10.91	12.24	14948.3E6	11979.4E6	208.859	201.126
9)	gamma-Chlordane	11.10	12.52	18253.4E6	11980.0E6	229.835	208.617
10)	alpha-Chlordane	11.30	12.72	17058.2E6	11052.3E6	222.351	206.081
11)	Endosulfan I	11.48	12.81	16130.1E6	10857.5E6	218.249	206.136
12)	4,4'-DDE	11.44	12.92	16658.5E6	11019.1E6	221.914	216.304
13)	Dieldrin	11.83	13.17	17472.0E6	11841.0E6	224.453	214.862
14)	Endrin	12.15	13.54	16361.6E6	10271.3E6	220.462	219.457
15)	4,4'-DDD	12.27	13.63	14031.8E6	9117.5E6	237.152	219.403
16)	Endosulfan II	12.45	13.78	14272.3E6	9783.3E6	254.850	218.020
17)	4,4'-DDT	12.65	13.98	14583.2E6	9053.7E6	226.191	227.946
18)	Endrin Aldehyde	12.98	14.14	10745.5E6	7129.6E6	224.098	211.070
19)	Endosulfan Sulfa	13.49	14.43	9597.7E6	8124.2E6	216.781	215.203
20)	Methoxychlor	13.26	14.66	6570.2E6	4441.8E6	221.498	218.550
21)	Endrin Ketone	13.80	14.98	13268.6E6	9800.0E6	228.566	211.363

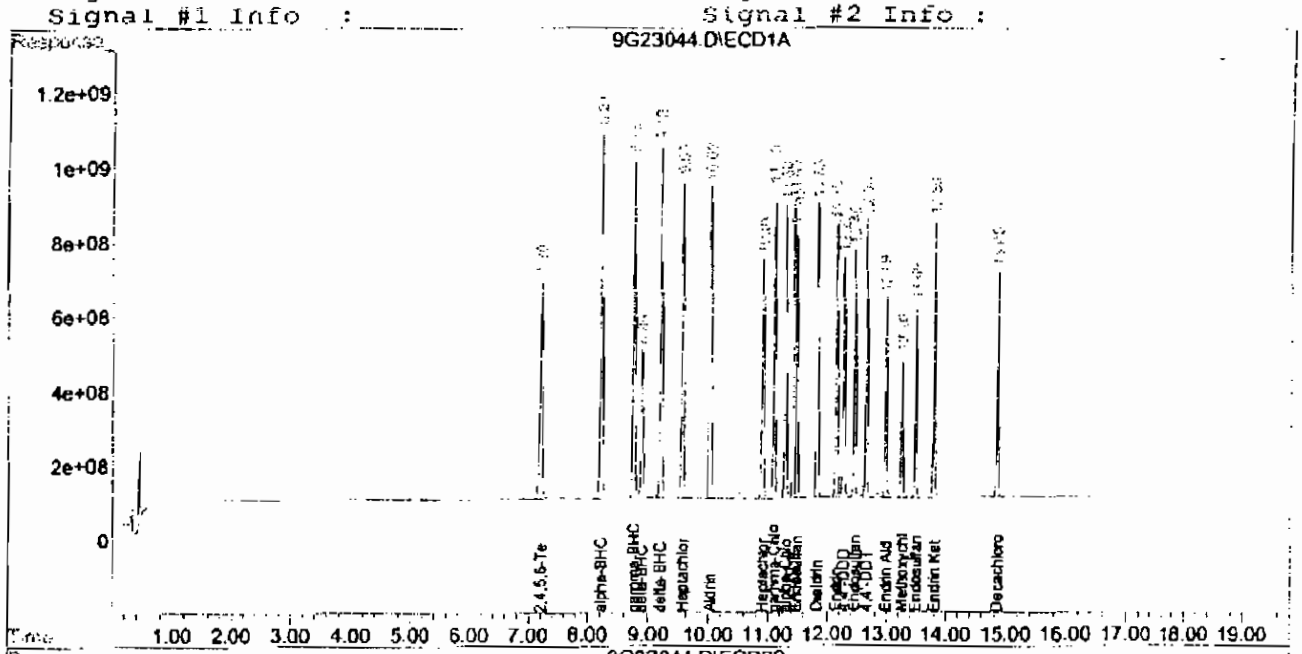
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

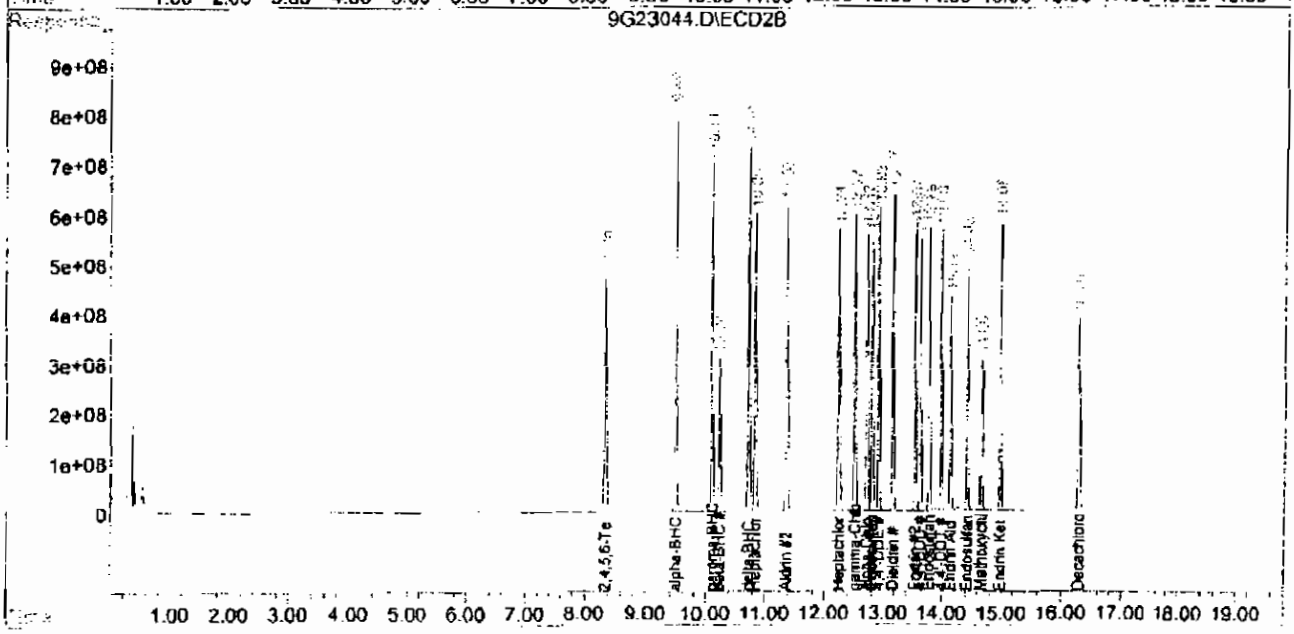
Data File : C:\HPCHEM\1\DATA\043003\9G23044.D\ECD1A.CH Vial: 10
Acq On : 30 Apr 2003 13:32 Operator: ECL
Sample : WG139380-01 PEST ICAL 200 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23044.D\ECD2B.CH Vial: 10
Acq On : 30 Apr 2003 13:56 Operator: ECL
Sample : WG139380-01 PEST ICAL 200 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Apr 30 16:32 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Wed Apr 30 16:32:54 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data File : C:\HPCHEM\1\DATA\043003\9G23045.D\ECD1A.CH Vial: 11
Acq On : 30 Apr 2003 13:56 Operator: ECL
Sample : WG139380-02 PEST ICAL 100 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23045.D\ECD2B.CH Vial: 11
Acq On : 30 Apr 2003 14:20 Operator: ECL
Sample : WG139380-02 PEST ICAL 100 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Apr 30 16:33 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Wed Apr 30 16:33:15 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
System Monitoring Compounds						
1) S 2,4,5,6-Tetrachl	7.20	8.35	8522.3E6	5847.2E6	112.658	103.392
Spiked Amount 20.000 Range 30 - 132 Recovery =					563.29%#	516.96%#
22) S Decachlorobiphen	14.84	16.29	5011.2E6	3915.3E6	99.412	97.396
Spiked Amount 20.000 Range 36 - 144 Recovery =					497.06%#	486.98%#
Target Compounds						
2) alpha-BHC	8.21	9.49	12699.3E6	8969.4E6	118.176	109.085
3) gamma-BHC	8.75	10.11	11138.1E6	7913.1E6	117.231	107.965
4) beta-BHC	8.89	10.24	4638.7E6	3343.1E6	112.940	102.180
5) Heptachlor	9.55	10.84	10849.0E6	6676.8E6	112.913	109.652
6) delta-BHC	9.18	10.73	11628.0E6	7784.1E6	119.717	109.342
7) Aldrin	10.01	11.37	10295.2E6	6893.2E6	115.001	107.504
8) Heptachlor Epoxi	10.91	12.24	8285.0E6	6149.4E6	113.301	103.473
9) gamma-Chlordane	11.10	12.52	9346.6E6	6111.0E6	114.194	106.477
10) alpha-Chlordane	11.30	12.72	8787.6E6	5634.0E6	111.109	105.134
11) Endosulfan I	11.48	12.81	8587.3E6	5551.3E6	112.462	105.540
12) 4,4'-DDE	11.43	12.92	8529.9E6	5561.5E6	110.719	109.259
13) Dieldrin	11.82	13.17	9113.7E6	5988.8E6	113.884	108.798
14) Endrin	12.15	13.54	8556.1E6	5088.8E6	112.622	108.487
15) 4,4'-DDD	12.26	13.63	7142.9E6	4492.2E6	117.115	108.407
16) Endosulfan II	12.45	13.78	7318.5E6	4806.3E6	123.725	107.368
17) 4,4'-DDT	12.65	13.98	7427.7E6	4453.0E6	112.240	112.003
18) Endrin Aldehyde	12.98	14.15	5350.7E6	3505.3E6	108.653	104.002
19) Endosulfan Sulfa	13.48	14.43	4920.7E6	3975.2E6	109.418	105.769
20) Methoxychlor	13.25	14.66	3336.7E6	2145.7E6	109.836	105.273
21) Endrin Ketone	13.80	14.98	6652.3E6	4828.0E6	111.534	104.589

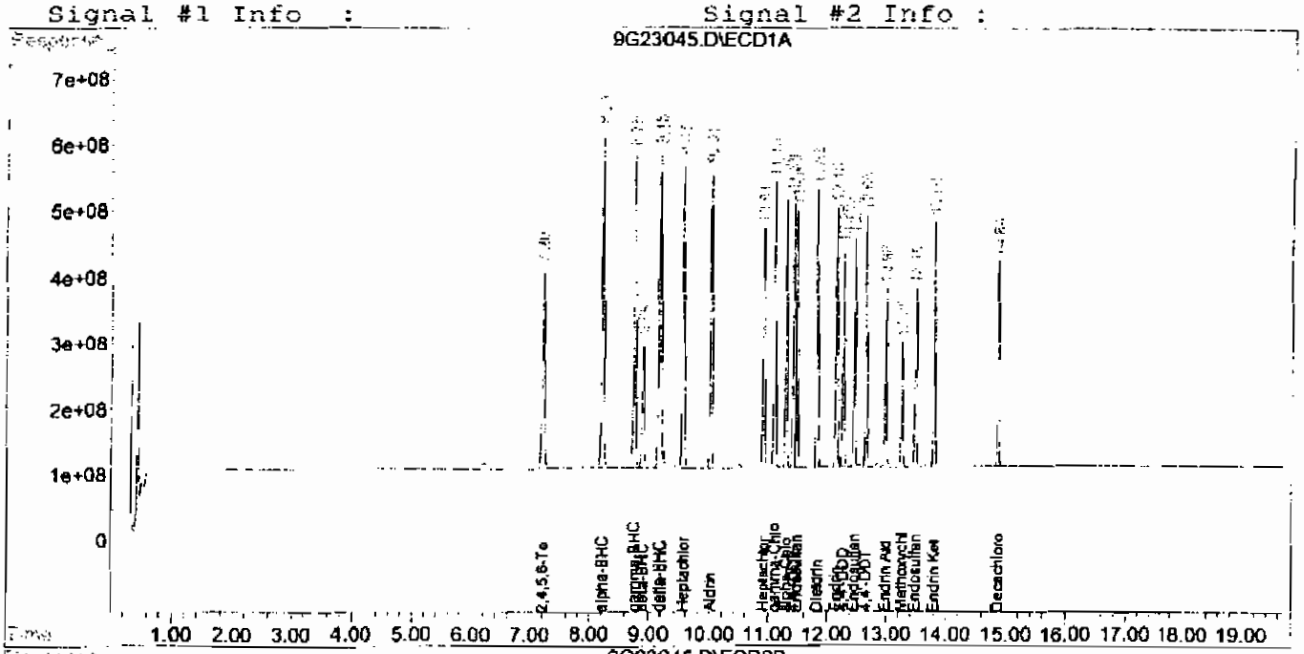
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

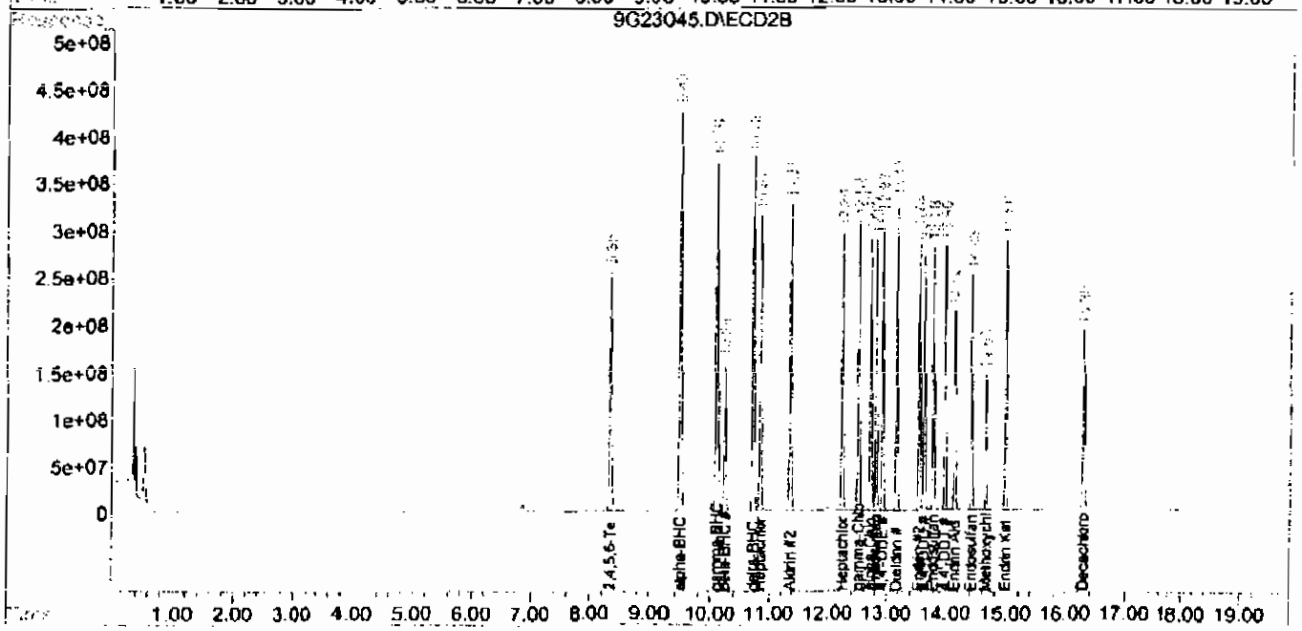
Data File : C:\HPCHEM\1\DATA\043003\9G23045.D\ECD1A.CH Vial: 11
Acq On : 30 Apr 2003 13:56 Operator: ECL
Sample : WG139380-02 PEST ICAL 100 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23045.D\ECD2B.CH Vial: 11
Acq On : 30 Apr 2003 14:20 Operator: ECL
Sample : WG139380-02 PEST ICAL 100 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Apr 30 16:33 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Wed Apr 30 16:33:15 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data File : C:\HPCHEM\1\DATA\043003\9G23046.D\ECD1A.CH Vial: 12
Acq On : 30 Apr 2003 14:20 Operator: ECL
Sample : WG139380-03 PEST ICAL 50 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23046.D\ECD2B.CH Vial: 12
Acq On : 30 Apr 2003 14:45 Operator: ECL
Sample : WG139380-03 PEST ICAL 50 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Apr 30 16:33 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Wed Apr 30 16:33:35 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	7.20	8.35	4263.8E6	2953.6E6	54.879	52.186
Spiked Amount	20.000 Range	30 - 132	Recovery	=		274.39%#	260.93%#
22) S	Decachlorobiphen	14.85	16.30	2532.6E6	1950.2E6	49.908	48.585
Spiked Amount	20.000 Range	36 - 144	Recovery	=		249.54%#	242.93%#
	Target Compounds						
2)	alpha-BHC	8.21	9.49	6282.9E6	4480.8E6	56.733	54.382
3)	gamma-BHC	8.75	10.11	5505.0E6	3955.2E6	56.295	53.868
4)	beta-BHC	8.89	10.24	2354.8E6	1690.8E6	55.726	51.541
5)	Heptachlor	9.54	10.85	5556.7E6	3346.2E6	56.171	54.473
6)	delta-BHC	9.18	10.73	5806.7E6	3861.4E6	57.712	54.203
7)	Aldrin	10.01	11.37	5228.1E6	3446.7E6	56.668	53.693
8)	Heptachlor Epoxi	10.91	12.24	4164.8E6	3087.9E6	55.670	51.956
9)	gamma-Chlordane	11.10	12.52	4706.4E6	3051.8E6	55.814	53.019
10)	alpha-Chlordane	11.30	12.72	4436.5E6	2820.3E6	54.459	52.504
11)	Endosulfan I	11.48	12.81	4433.5E6	2777.3E6	56.128	52.701
12)	4,4'-DDE	11.43	12.92	4275.9E6	2747.2E6	54.129	53.850
13)	Dieldrin	11.82	13.17	4613.1E6	2955.7E6	56.040	53.596
14)	Endrin	12.15	13.55	4335.7E6	2445.3E6	55.700	52.086
15)	4,4'-DDD	12.26	13.63	3573.7E6	2204.2E6	56.881	53.165
16)	Endosulfan II	12.45	13.78	3716.2E6	2372.1E6	59.485	52.930
17)	4,4'-DDT	12.65	13.99	3717.9E6	2133.5E6	54.822	53.527
18)	Endrin Aldehyde	12.98	14.15	2703.3E6	1724.2E6	53.401	51.051
19)	Endosulfan Sulfa	13.48	14.43	2422.1E6	1926.2E6	53.117	51.384
20)	Methoxychlor	13.25	14.66	1676.0E6	1030.7E6	53.896	50.418
21)	Endrin Ketone	13.80	14.98	3319.5E6	2366.7E6	54.217	51.382

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

```
Data File : C:\HPCHEM\1\DATA\043003\9G23046.D\ECD1A.CH   Vial: 12
Acq On    : 30 Apr 2003  14:20                           Operator: ECL
Sample    : WG139380-03 PEST ICAL 50 PPB                 Inst    : HP9
Misc      : 1,1 SOS63-32                                 Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23046.D\ECD2B.CH   Vial: 12
Acq On    : 30 Apr 2003  14:45                           Operator: ECL
Sample    : WG139380-03 PEST ICAL 50 PPB                 Inst    : HP9
Misc      : 1,1 SOS63-32                                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Apr 30 16:33 2003  Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title        : CALIBRATION April 30, 2003 @ 1557
Last Update  : Wed Apr 30 16:33:35 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj.      :
Signal #1 Phase  :                    Signal #2 Phase:
Signal #1 Info   :                    Signal #2 Info :
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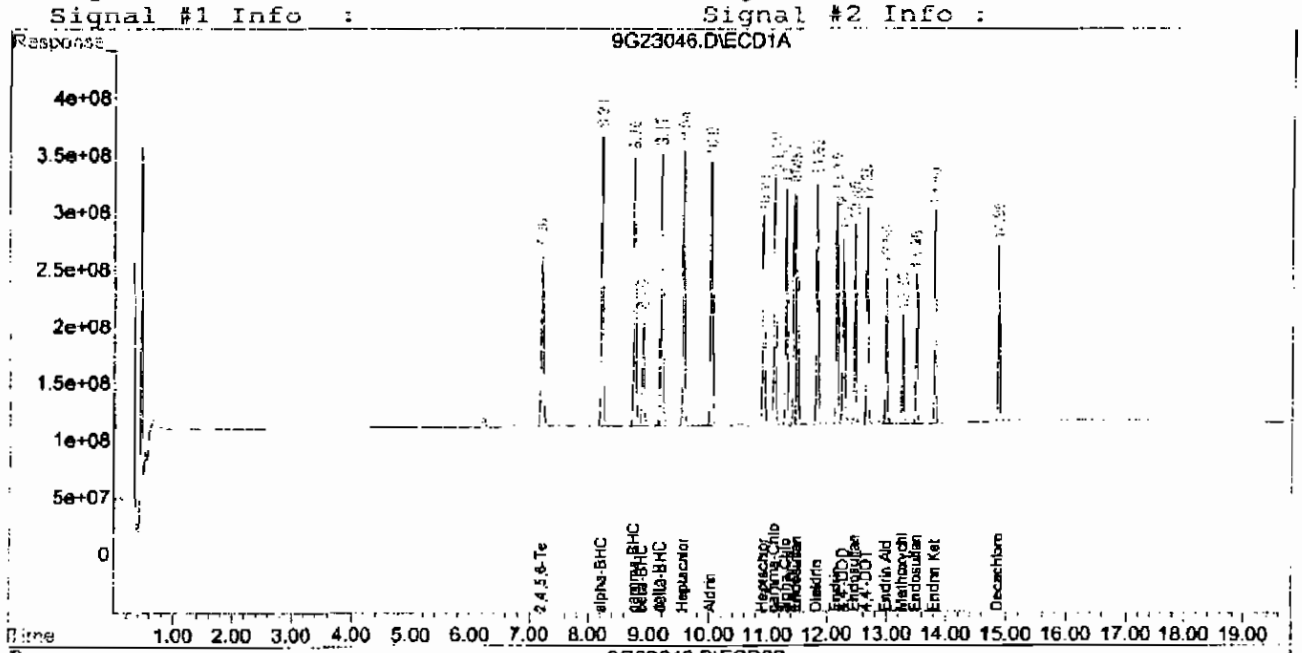
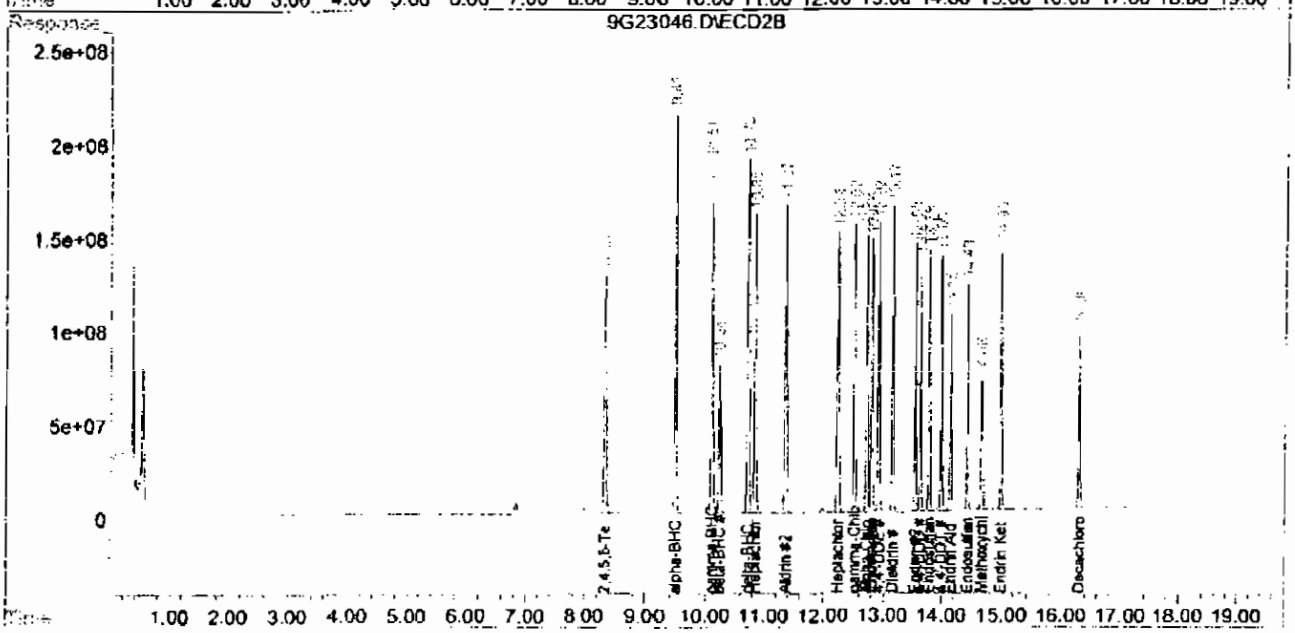




Data File : C:\HPCHEM\1\DATA\043003\9G23047.D\ECD1A.CH Vial: 13
Acq On : 30 Apr 2003 14:45 Operator: ECL
Sample : WG139380-04 PEST ICAL 20 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23047.D\ECD2B.CH Vial: 13
Acq On : 30 Apr 2003 15:09 Operator: ECL
Sample : WG139380-04 PEST ICAL 20 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Apr 30 16:33 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Wed Apr 30 16:33:55 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1)	S 2,4,5,6-Tetrachl	7.20	8.35	1741.6E6	1109.6E6	21.654	19.666
	Spiked Amount 20.000 Range 30 - 132 Recovery =					108.27%	98.33%
22)	S Decachlorobiphen	14.85	16.29	1063.9E6	793.7E6	20.739	19.781
	Spiked Amount 20.000 Range 36 - 144 Recovery =					103.70%	98.91%
	Target Compounds						
2)	alpha-BHC	8.21	9.49	2483.9E6	1645.2E6	21.651	19.948
3)	gamma-BHC	8.75	10.10	2209.5E6	1460.4E6	21.806	19.882
4)	beta-BHC	8.89	10.24	971.1E6	648.1E6	22.151	19.741
5)	Heptachlor	9.54	10.84	2287.7E6	1266.0E6	22.282	20.434
6)	delta-BHC	9.18	10.73	2282.1E6	1408.4E6	21.802	19.778
7)	Aldrin	10.01	11.37	2126.8E6	1268.1E6	22.210	19.804
8)	Heptachlor Epoxi	10.91	12.24	1732.2E6	1158.2E6	22.413	19.558
9)	gamma-Chlordane	11.10	12.52	1896.8E6	1131.3E6	21.722	19.635
10)	alpha-Chlordane	11.30	12.72	1821.6E6	1056.7E6	21.600	19.665
11)	Endosulfan I	11.48	12.81	1844.3E6	1038.2E6	22.400	19.692
12)	4,4'-DDE	11.43	12.92	1713.5E6	996.1E6	21.099	19.518
13)	Dieldrin	11.82	13.17	1874.3E6	1077.5E6	21.973	19.534
14)	Endrin	12.15	13.54	1751.6E6	899.7E6	21.814	19.153
15)	4,4'-DDD	12.27	13.63	1374.3E6	801.4E6	21.218	19.359
16)	Endosulfan II	12.45	13.78	1509.8E6	861.0E6	22.880	19.234
17)	4,4'-DDT	12.65	13.98	1512.6E6	771.7E6	21.674	19.318
18)	Endrin Aldehyde	12.98	14.14	1129.2E6	660.1E6	21.548	19.552
19)	Endosulfan Sulfa	13.49	14.43	987.7E6	718.7E6	21.235	19.227
20)	Methoxychlor	13.26	14.66	704.0E6	388.2E6	21.905	18.958
21)	Endrin Ketone	13.80	14.98	1343.0E6	886.5E6	21.293	19.293

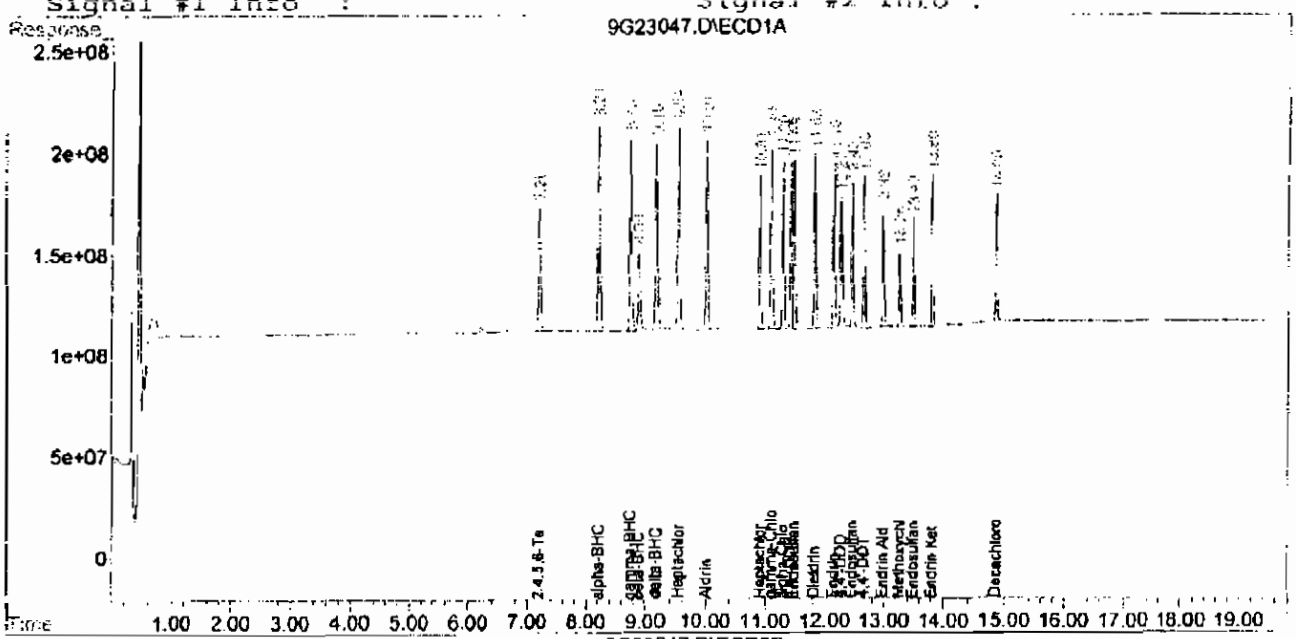
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

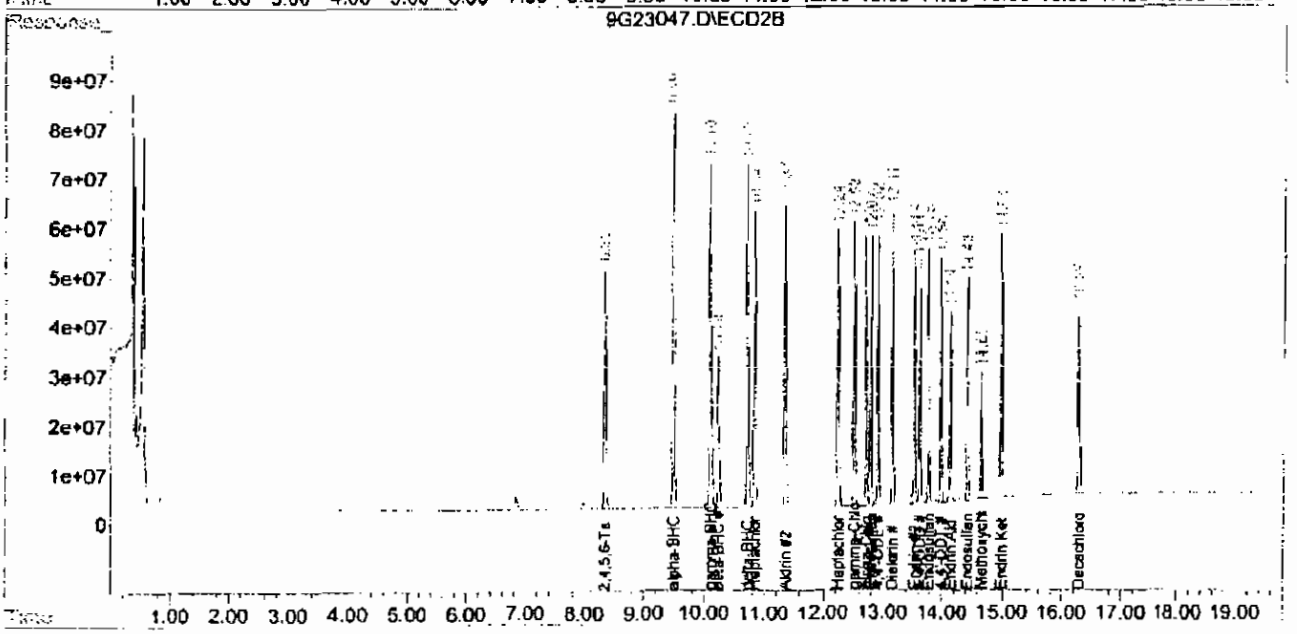
```
Data File : C:\HPCHEM\1\DATA\043003\9G23047.D\ECD1A.CH   Vial: 13
Acq On    : 30 Apr 2003  14:45                           Operator: ECL
Sample    : WG139380-04 PEST ICAL 20 PPB                 Inst    : HP9
Misc      : 1,1 SOS63-32                                 Multiplr: 1.00
IntFile   : autointl.e

Data File : C:\HPCHEM\1\DATA\043003\9G23047.D\ECD2B.CH   Vial: 13
Acq On    : 30 Apr 2003  15:09                           Operator: ECL
Sample    : WG139380-04 PEST ICAL 20 PPB                 Inst    : HP9
Misc      : 1,1 SOS63-32                                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Apr 30 16:33 2003  Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title        : CALIBRATION April 30, 2003 @ 1557
Last Update  : Wed Apr 30 16:33:55 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj.      :
Signal #1 Phase  :                    Signal #2 Phase:
Signal #1 Info   :                    Signal #2 Info :
```





Data File : C:\HPCHEM\1\DATA\043003\9G23048.D\ECD1A.CH Vial: 14
Acq On : 30 Apr 2003 15:09 Operator: ECL
Sample : WG139380-05 PEST ICAL 10 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23048.D\ECD2B.CH Vial: 14
Acq On : 30 Apr 2003 15:33 Operator: ECL
Sample : WG139380-05 PEST ICAL 10 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Apr 30 16:34 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Wed Apr 30 16:34:16 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1)	S 2,4,5,6-Tetrachl	7.20	8.35	860.0E6	556.5E6	10.332	9.838
	Spiked Amount 20.000 Range 30 - 132 Recovery =					51.66%	49.19%
22)	S Decachlorobiphen	14.85	16.29	549.3E6	405.1E6	10.545	10.111
	Spiked Amount 20.000 Range 36 - 144 Recovery =					52.73%	50.56%
	Target Compounds						
2)	alpha-BHC	8.21	9.49	1199.5E6	775.5E6	10.087	9.391
3)	gamma-BHC	8.75	10.11	1057.5E6	700.6E6	10.078	9.516
4)	beta-BHC	8.89	10.24	473.8E6	328.2E6	10.402	9.954
5)	Heptachlor	9.54	10.84	1137.2E6	613.3E6	10.654	9.766
6)	delta-BHC	9.18	10.73	1059.9E6	658.5E6	9.791	9.250
7)	Aldrin	10.01	11.37	1060.8E6	608.1E6	10.618	9.508
8)	Heptachlor Epoxi	10.91	12.24	812.4E6	560.2E6	10.230	9.562
9)	gamma-Chlordane	11.10	12.52	936.8E6	554.4E6	10.345	9.598
10)	alpha-Chlordane	11.30	12.72	927.2E6	518.7E6	10.601	9.644
11)	Endosulfan I	11.48	12.81	935.8E6	507.2E6	10.863	9.612
12)	4,4'-DDE	11.43	12.92	857.5E6	473.6E6	10.255	9.278
13)	Dieldrin	11.82	13.17	938.3E6	514.3E6	10.571	9.316
14)	Endrin	12.15	13.54	862.9E6	422.3E6	10.394	9.109
15)	4,4'-DDD	12.26	13.63	661.7E6	378.8E6	9.901	9.170
16)	Endosulfan II	12.45	13.78	737.1E6	423.6E6	10.539	9.437
17)	4,4'-DDT	12.65	13.98	745.6E6	360.8E6	10.235	9.011
18)	Endrin Aldehyde	12.98	14.14	573.7E6	332.4E6	10.545	9.831
19)	Endosulfan Sulfa	13.48	14.43	477.3E6	345.0E6	10.065	9.263
20)	Methoxychlor	13.26	14.66	343.2E6	192.3E6	10.356	9.374
21)	Endrin Ketone	13.80	14.98	669.7E6	427.8E6	10.296	9.348

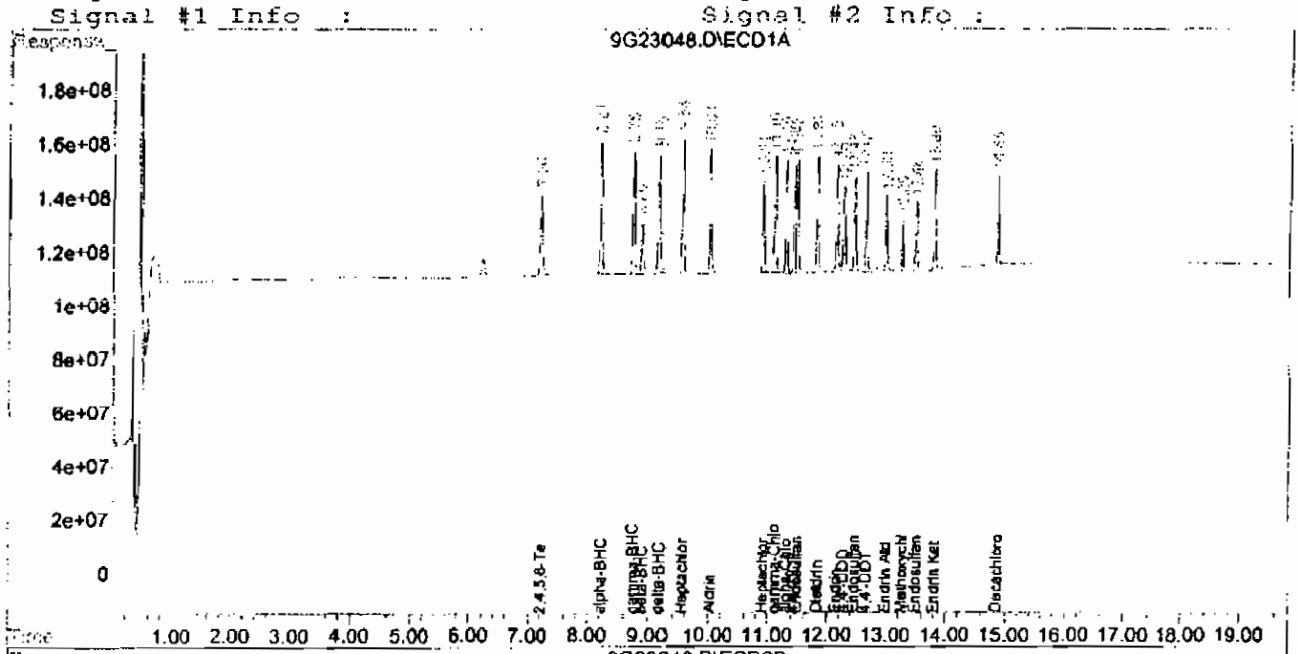
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

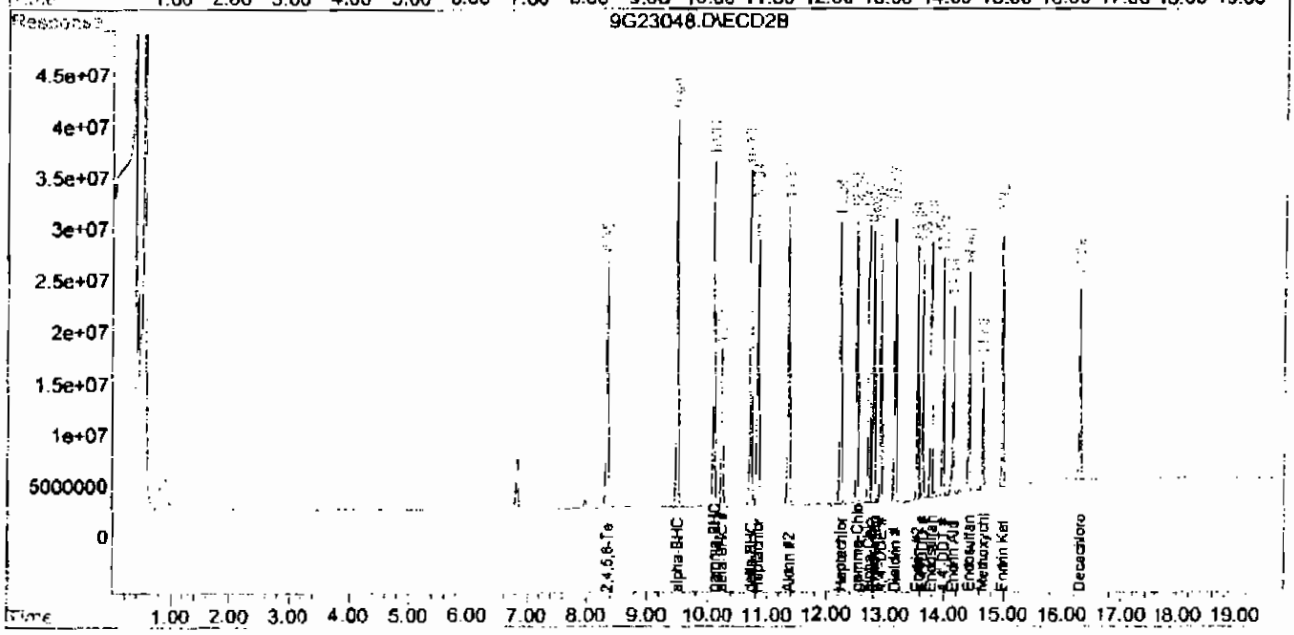
```
Data File : C:\HPCHEM\1\DATA\043003\9G23048.D\ECD1A.CH    Vial: 14
Acq On    : 30 Apr 2003  15:09                            Operator: ECL
Sample    : WG139380-05 PEST ICAL 10 PPB                  Inst    : HP9
Misc      : 1,1 SOS63-32                                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23048.D\ECD2B.CH    Vial: 14
Acq On    : 30 Apr 2003  15:33                            Operator: ECL
Sample    : WG139380-05 PEST ICAL 10 PPB                  Inst    : HP9
Misc      : 1,1 SOS63-32                                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Apr 30 16:34 2003  Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title        : CALIBRATION April 30, 2003 @ 1557
Last Update  : Wed Apr 30 16:34:16 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj.      :
Signal #1 Phase  :                    Signal #2 Phase:
Signal #1 Info   :                    Signal #2 Info :
```





Data File : C:\HPCHEM\1\DATA\043003\9G23049.D\ECD1A.CH Vial: 15
Acq On : 30 Apr 2003 15:33 Operator: ECL
Sample : WG139380-06 PEST ICAL 4 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23049.D\ECD2B.CH Vial: 15
Acq On : 30 Apr 2003 15:57 Operator: ECL
Sample : WG139380-06 PEST ICAL 4 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Apr 30 16:35 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Wed Apr 30 16:35:45 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	7.20	8.35	340.5E6	213.4E6	3.992	3.775
Spiked Amount	20.000 Range	30 - 132	Recovery	=		19.96%#	18.88%#
22) S	Decachlorobiphen	14.84	16.29	226.6E6	172.7E6	4.317	4.306
Spiked Amount	20.000 Range	36 - 144	Recovery	=		21.59%#	21.53%#
	Target Compounds						
2)	alpha-BHC	8.21	9.49	449.5E6	276.2E6	3.678	3.345
3)	gamma-BHC	8.75	10.11	425.6E6	255.4E6	3.933	3.466
4)	beta-BHC	8.90	10.24	178.4E6	130.7E6	3.794	3.962
5)	Heptachlor	9.55	10.85	446.2E6	220.2E6	4.050	3.501
6)	delta-BHC	9.18	10.73	387.4E6	236.9E6	3.501	3.328
7)	Aldrin	10.01	11.37	400.5E6	220.7E6	3.887	3.448
8)	Heptachlor Epoxi	10.91	12.24	312.2E6	219.4E6	3.848	3.740
9)	gamma-Chlordane	11.10	12.52	367.0E6	211.5E6	3.939	3.658
10)	alpha-Chlordane	11.30	12.73	391.0E6	203.2E6	4.317	3.769
11)	Endosulfan I	11.48	12.81	390.0E6	196.7E6	4.345	3.721
12)	4,4'-DDE	11.43	12.93	362.8E6	175.7E6	4.217	3.436
13)	Dieldrin	11.82	13.17	364.2E6	192.0E6	3.978	3.475
14)	Endrin	12.15	13.55	333.8E6	160.9E6	3.917	3.466
15)	4,4'-DDD	12.26	13.63	244.9E6	140.4E6	3.591	3.401
16)	Endosulfan II	12.45	13.78	284.8E6	157.5E6	3.890	3.510
17)	4,4'-DDT	12.65	13.99	313.5E6	135.7E6	4.179	3.378
18)	Endrin Aldehyde	12.98	14.15	253.2E6	123.4E6	4.489	3.660
19)	Endosulfan Sulfa	13.48	14.43	178.7E6	133.4E6	3.729	3.595
20)	Methoxychlor	13.26	14.66	138.1E6	81482248	4.067	3.965
21)	Endrin Ketone	13.80	14.98	265.2E6	166.7E6	3.981	3.658

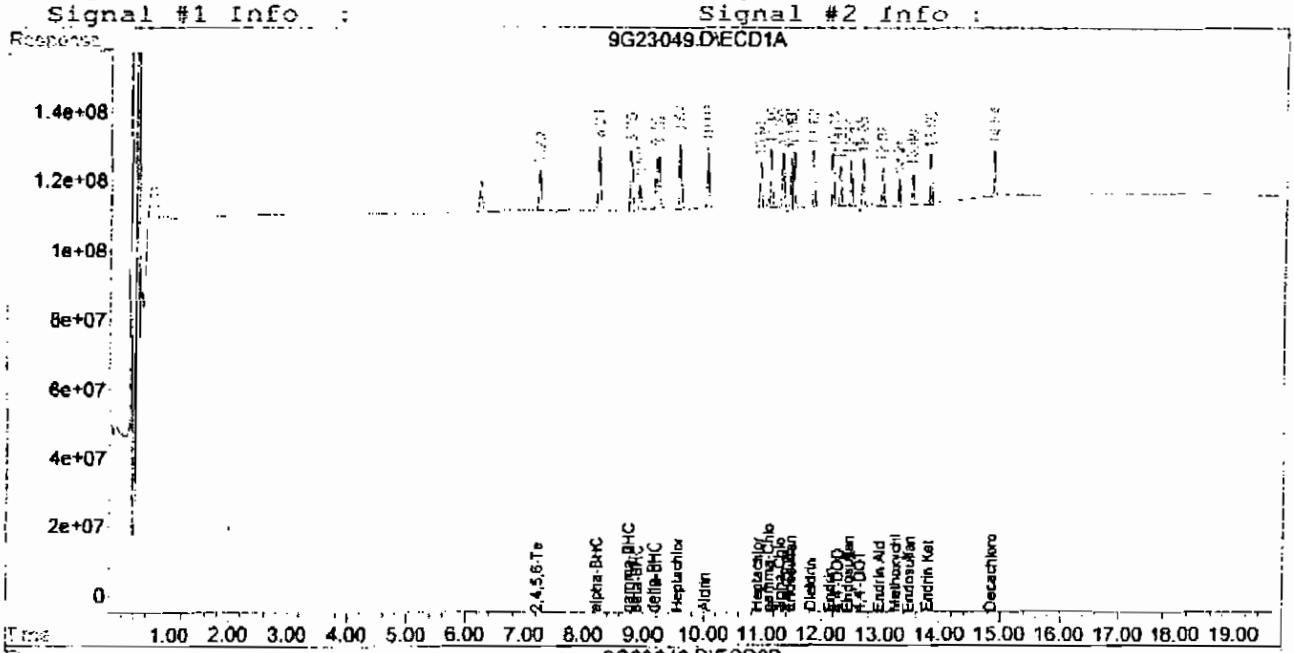
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

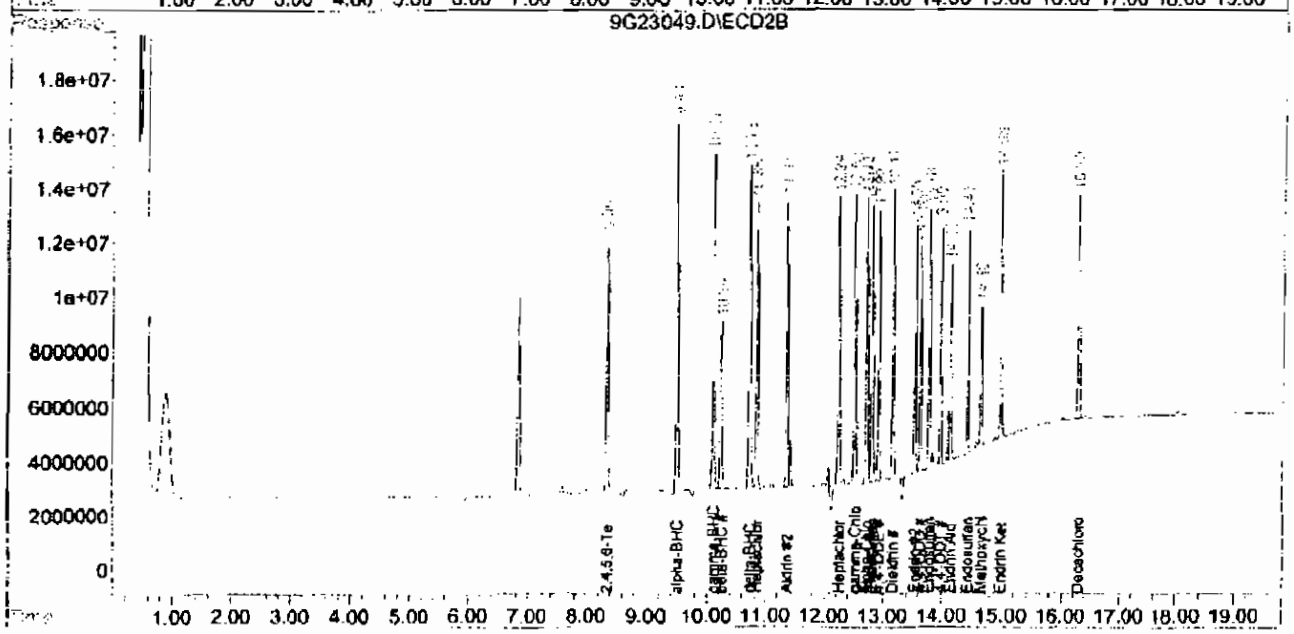
Data File : C:\HPCHEM\1\DATA\043003\9G23049.D\ECD1A.CH Vial: 15
Acq On : 30 Apr 2003 15:33 Operator: ECL
Sample : WG139380-06 PEST ICAL 4 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23049.D\ECD2B.CH Vial: 15
Acq On : 30 Apr 2003 15:57 Operator: ECL
Sample : WG139380-06 PEST ICAL 4 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Apr 30 16:35 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Wed Apr 30 16:35:45 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data File : C:\HPCHEM\1\DATA\043003\9G23050.D\ECD1A.CH Vial: 16
Acq On : 30 Apr 2003 15:57 Operator: ECL
Sample : WG139380-07 PEST ALT ICV 20 PPB Inst : HP9
Misc : 1,1 SOS62-49 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23050.D\ECD2B.CH Vial: 16
Acq On : 30 Apr 2003 16:22 Operator: ECL
Sample : WG139380-07 PEST ALT ICV 20 PPB Inst : HP9
Misc : 1,1 SOS62-49 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Wed Apr 30 16:35:45 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
2	alpha-BHC	20.000	19.355	3.2	95	0.00
3	gamma-BHC	20.000	19.371	3.1	95	0.00
4	beta-BHC	20.000	18.796	6.0	91	0.00
5	Heptachlor	20.000	19.633	1.8	95	0.00
6	delta-BHC	20.000	18.899	5.5	92	0.00
7	Aldrin	20.000	19.424	2.9	94	0.00
8	Heptachlor Epoxide	20.000	19.649	1.8	92	0.00
9	gamma-Chlordane	20.000	19.497	2.5	96	0.00
10	alpha-Chlordane	20.000	19.375	3.1	96	0.00
11	Endosulfan I	20.000	19.116	4.4	93	0.00
12	4,4'-DDE	20.000	19.396	3.0	97	0.00
13	Dieldrin	20.000	19.302	3.5	94	0.00
14	Endrin	20.000	18.703	6.5	91	0.00
15	4,4'-DDD	20.000	19.084	4.6	95	0.00
16	Endosulfan II	20.000	18.658	6.7	90	0.00
17	4,4'-DDT	20.000	18.442	7.8	91	0.00
18	Endrin Aldehyde	20.000	17.443	12.8	87	0.00
19	Endosulfan Sulfate	20.000	19.275	3.6	93	0.00
20	Methoxychlor	20.000	19.035	4.8	92	0.00
21	Endrin Ketone	20.000	18.935	5.3	94	0.00

Signal #2

2	alpha-BHC	20.000	19.397	3.0	97	0.00
3	gamma-BHC	20.000	19.276	3.6	97	0.00
4	beta-BHC	20.000	18.464	7.7	94	0.00
5	Heptachlor	20.000	19.267	3.7	96	0.00
6	delta-BHC	20.000	18.448	7.8	93	0.00
7	Aldrin	20.000	19.048	4.8	96	0.00
8	Heptachlor Epoxide	20.000	19.213	3.9	97	0.00
9	gamma-Chlordane	20.000	19.014	4.9	97	0.00
10	alpha-Chlordane	20.000	19.280	3.6	98	0.00
11	Endosulfan I	20.000	18.540	7.3	94	0.00
12	4,4'-DDE	20.000	19.264	3.7	99	0.00
13	Dieldrin	20.000	18.742	6.3	96	0.00
14	Endrin	20.000	17.935	10.3	93	0.00
15	4,4'-DDD	20.000	18.670	6.6	96	0.00
16	Endosulfan II	20.000	18.002	10.0	94	0.00
17	4,4'-DDT	20.000	18.396	8.0	96	0.00
18	Endrin Aldehyde	20.000	17.209	14.0	88	0.00
19	Endosulfan Sulfate	20.000	18.211	8.9	94	0.00
20	Methoxychlor	20.000	17.996	10.0	95	0.00
21	Endrin Ketone	20.000	18.367	8.2	94	0.00

Data File : C:\HPCHEM\1\DATA\043003\9G23050.D\ECD1A.CH Vial: 16
Acq On : 30 Apr 2003 15:57 Operator: ECL
Sample : WG139380-07 PEST ALT ICV 20 PPB Inst : HP9
Misc : 1,1 SOS62-49 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23050.D\ECD2B.CH Vial: 16
Acq On : 30 Apr 2003 16:22 Operator: ECL
Sample : WG139380-07 PEST ALT ICV 20 PPB Inst : HP9
Misc : 1,1 SOS62-49 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Apr 30 16:57 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Wed Apr 30 16:35:45 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	0.00	0.00	0	0	N.D.	N.D.
	Spiked Amount 20.000	Range	30 - 132	Recovery	=	0.00%#	0.00%#
22) S	Decachlorobiphen	0.00	0.00	0	0	N.D.	N.D.
	Spiked Amount 20.000	Range	36 - 144	Recovery	=	0.00%#	0.00%#
	Target Compounds						
2)	alpha-BHC	8.21	9.49	2365.2E6	1601.4E6	19.355	19.397
3)	gamma-BHC	8.76	10.10	2096.4E6	1420.0E6	19.371	19.276
4)	beta-BHC	8.90	10.24	883.6E6	609.1E6	18.796	18.464
5)	Heptachlor	9.55	10.84	2163.4E6	1211.6E6	19.633	19.267
6)	delta-BHC	9.18	10.73	2091.2E6	1313.2E6	18.899	18.448
7)	Aldrin	10.02	11.37	2001.3E6	1219.3E6	19.424	19.048
8)	Heptachlor Epoxi	10.92	12.24	1594.2E6	1126.9E6	19.649	19.213
9)	gamma-Chlordane	11.11	12.52	1817.0E6	1099.5E6	19.497	19.014
10)	alpha-Chlordane	11.30	12.72	1754.9E6	1039.6E6	19.375	19.280
11)	Endosulfan I	11.48	12.81	1715.6E6	980.0E6	19.116	18.540
12)	4,4'-DDE	11.44	12.92	1668.8E6	984.8E6	19.396	19.264
13)	Dieldrin	11.83	13.16	1767.3E6	1035.5E6	19.302	18.742
14)	Endrin	12.15	13.54	1594.1E6	832.8E6	18.703	17.935
15)	4,4'-DDD	12.27	13.63	1301.4E6	770.6E6	19.084	18.670
16)	Endosulfan II	12.45	13.78	1366.0E6	807.7E6	18.658	18.002
17)	4,4'-DDT	12.65	13.98	1383.5E6	739.1E6	18.442	18.396
18)	Endrin Aldehyde	12.98	14.14	983.9E6	580.2E6	17.443	17.209
19)	Endosulfan Sulfa	13.49	14.43	923.3E6	675.9E6	19.275	18.211
20)	Methoxychlor	13.26	14.66	646.5E6	369.8E6	19.035	17.996
21)	Endrin Ketone	13.80	14.98	1261.3E6	836.9E6	18.935	18.367

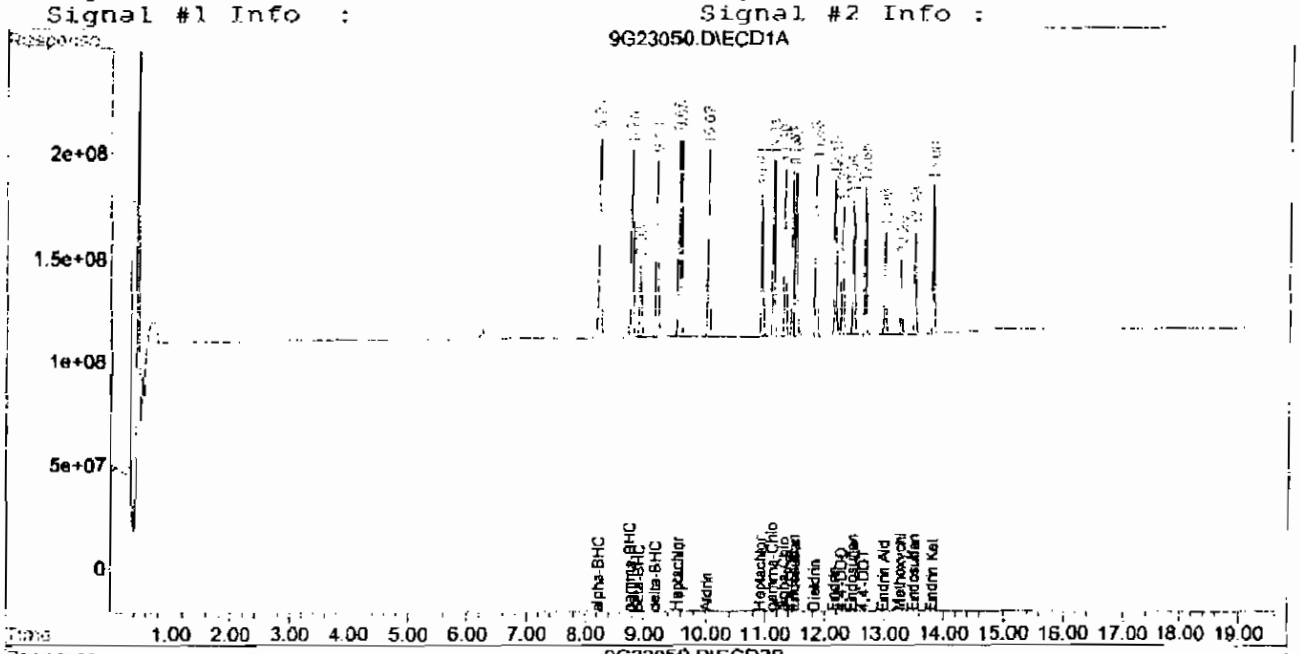
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

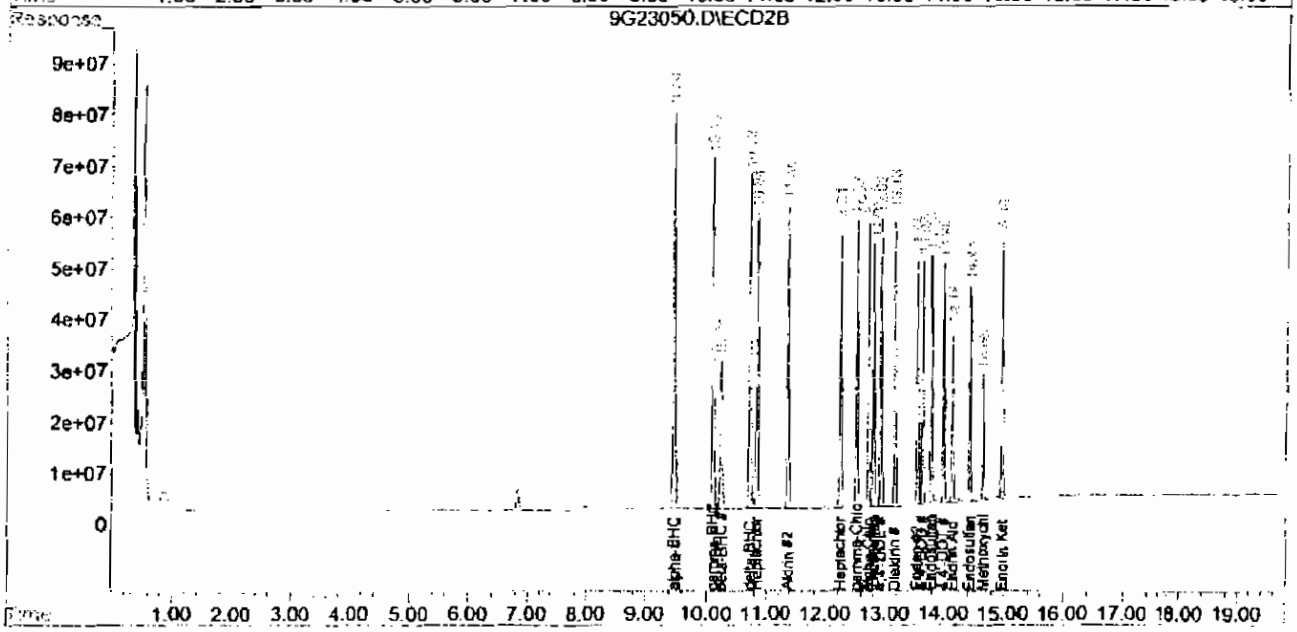
Data File : C:\HPCHEM\1\DATA\043003\9G23050.D\ECD1A.CH Vial: 16
Acq On : 30 Apr 2003 15:57 Operator: ECL
Sample : WG139380-07 PEST ALT ICV 20 PPB Inst : HP9
Misc : 1,1 SOS62-49 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23050.D\ECD2B.CH Vial: 16
Acq On : 30 Apr 2003 16:22 Operator: ECL
Sample : WG139380-07 PEST ALT ICV 20 PPB Inst : HP9
Misc : 1,1 SOS62-49 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Apr 30 16:57 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Wed Apr 30 16:35:45 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data File : C:\HPCHEM\1\DATA\043003\9G23062.D\ECD1A.CH Vial: 28
Acq On : 30 Apr 2003 20:48 Operator: ECL
Sample : WG139380-08 PEST CCV 20 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23062.D\ECD2B.CH Vial: 28
Acq On : 30 Apr 2003 21:13 Operator: ECL
Sample : WG139380-08 PEST CCV 20 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Thu May 01 08:17:59 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	S	2,4,5,6-Tetrachloro-M-Xylen	20.000	21.353	-6.8	105	0.00
2		alpha-BHC	20.000	21.425	-7.1	105	0.00
3		gamma-BHC	20.000	20.780	-3.9	102	0.00
4		beta-BHC	20.000	21.933	-9.7	106	0.00
5		Heptachlor	20.000	22.030	-10.2	106	0.00
6		delta-BHC	20.000	22.004	-10.0	107	0.00
7		Aldrin	20.000	21.943	-9.7	106	0.00
8		Heptachlor Epoxide	20.000	20.353	-1.8	95	0.00
9		gamma-Chlordane	20.000	21.498	-7.5	106	0.01#
10		alpha-Chlordane	20.000	21.436	-7.2	107	0.01#
11		Endosulfan I	20.000	21.926	-9.6	107	0.01#
12		4,4'-DDE	20.000	21.610	-8.0	109	0.00
13		Dieldrin	20.000	21.825	-9.1	107	0.01#
14		Endrin	20.000	22.081	-10.4	107	0.01#
15		4,4'-DDD	20.000	22.032	-10.2	109	0.00
16		Endosulfan II	20.000	22.698	-13.5	110	0.01#
17		4,4'-DDT	20.000	22.125	-10.6	110	0.01#
18		Endrin Aldehyde	20.000	21.024	-5.1	105	0.01#
19		Endosulfan Sulfate	20.000	22.828	-14.1	111	0.00
20		Methoxychlor	20.000	21.528	-7.6	104	0.00
21		Endrin Ketone	20.000	21.379	-6.9	106	0.00
22	S	Decachlorobiphenyl	20.000	20.875	-4.4	103	0.00

Signal #2

1	S	2,4,5,6-Tetrachloro-M-Xyl	20.000	19.394	3.0	99	0.00
2		alpha-BHC	20.000	19.552	2.2	98	0.00
3		gamma-BHC	20.000	19.456	2.7	98	0.00
4		beta-BHC	20.000	19.254	3.7	98	0.00
5		Heptachlor	20.000	19.444	2.8	97	0.00
6		delta-BHC	20.000	19.485	2.6	98	0.00
7		Aldrin	20.000	19.345	3.3	98	0.00
8		Heptachlor Epoxide	20.000	19.601	2.0	99	0.00
9		gamma-Chlordane	20.000	19.156	4.2	98	0.00
10		alpha-Chlordane	20.000	19.217	3.9	98	0.00
11		Endosulfan I	20.000	19.275	3.6	98	0.00
12		4,4'-DDE	20.000	19.157	4.2	98	0.00
13		Dieldrin	20.000	19.147	4.3	98	0.00
14		Endrin	20.000	19.783	1.1	102	0.00
15		4,4'-DDD	20.000	19.039	4.8	98	0.00
16		Endosulfan II	20.000	19.026	4.9	99	0.00
17		4,4'-DDT	20.000	19.149	4.3	100	0.00
18		Endrin Aldehyde	20.000	19.402	3.0	99	0.00
19		Endosulfan Sulfate	20.000	19.525	2.4	101	0.00
		Methoxychlor	20.000	19.349	3.3	102	0.00
		Endrin Ketone	20.000	19.218	3.9	99	0.00
22	S	Decachlorobiphenyl	20.000	19.467	2.7	98	-0.01#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data File : C:\HPCHEM\1\DATA\043003\9G23062.D\ECD1A.CH Vial: 28
Acq On : 30 Apr 2003 20:48 Operator: ECL
Sample : WG139380-08 PEST CCV 20 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23062.D\ECD2B.CH Vial: 28
Acq On : 30 Apr 2003 21:13 Operator: ECL
Sample : WG139380-08 PEST CCV 20 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 1 8:18 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Thu May 01 08:17:59 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	7.21	8.35	1821.2E6	1096.3E6	21.353	19.394
	Spiked Amount 20.000	Range	30 - 132		Recovery =	106.77%	96.97%
22) S	Decachlorobiphen	14.85	16.28	1095.8E6	780.7E6	20.875	19.467
	Spiked Amount 20.000	Range	36 - 144		Recovery =	104.38%	97.33%
	Target Compounds						
2)	alpha-BHC	8.22	9.49	2618.3E6	1614.2E6	21.425	19.552
3)	gamma-BHC	8.76	10.11	2248.9E6	1433.2E6	20.780	19.456
4)	beta-BHC	8.90	10.24	1031.0E6	635.1E6	21.933	19.254
5)	Heptachlor	9.55	10.85	2427.5E6	1222.8E6	22.030	19.444
6)	delta-BHC	9.19	10.73	2434.8E6	1387.0E6	22.004	19.485
7)	Aldrin	10.02	11.37	2260.9E6	1238.3E6	21.943	19.345
8)	Heptachlor Epoxi	10.92	12.24	1651.3E6	1149.7E6	20.353	19.601
9)	gamma-Chlordane	11.11	12.52	2003.4E6	1107.7E6	21.498	19.156
10)	alpha-Chlordane	11.31	12.72	1941.6E6	1036.2E6	21.436	19.217
11)	Endosulfan I	11.49	12.81	1967.8E6	1018.8E6	21.926	19.275
12)	4,4'-DDE	11.44	12.92	1859.3E6	979.4E6	21.610	19.157
13)	Dieldrin	11.83	13.16	1998.3E6	1057.9E6	21.825	19.147
14)	Endrin	12.16	13.54	1882.0E6	918.6E6	22.081	19.783
15)	4,4'-DDD	12.27	13.63	1502.4E6	785.8E6	22.032	19.039
16)	Endosulfan II	12.46	13.78	1661.7E6	853.6E6	22.698	19.026
17)	4,4'-DDT	12.66	13.98	1659.8E6	769.4E6	22.125	19.149
18)	Endrin Aldehyde	12.99	14.14	1185.9E6	654.1E6	21.024	19.402
19)	Endosulfan Sulfa	13.49	14.43	1093.5E6	724.7E6	22.828	19.525
20)	Methoxychlor	13.26	14.66	731.2E6	397.6E6	21.528	19.349
21)	Endrin Ketone	13.81	14.97	1424.1E6	875.6E6	21.379	19.218

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

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Data File : C:\HPCHEM\1\DATA\043003\9G23062.D\ECD1A.CH    Vial: 28
Acq On    : 30 Apr 2003  20:48                            Operator: ECL
Sample    : WG139380-09 PEST CCV 20 PPB                   Inst    : HP9
Misc      : 1,1 SOS63-32                                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23062.D\ECD2B.CH    Vial: 28
Acq On    : 30 Apr 2003  21:13                            Operator: ECL
Sample    : WG139380-08 PEST CCV 20 PPB                   Inst    : HP9
Misc      : 1,1 SOS63-32                                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May  1  8:18 2003  Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title        : CALIBRATION April 30, 2003 @ 1557
Last Update  : Thu May 01 08:17:59 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj.      :
Signal #1 Phase  :                    Signal #2 Phase:
Signal #1 Info   :                    Signal #2 Info :
```
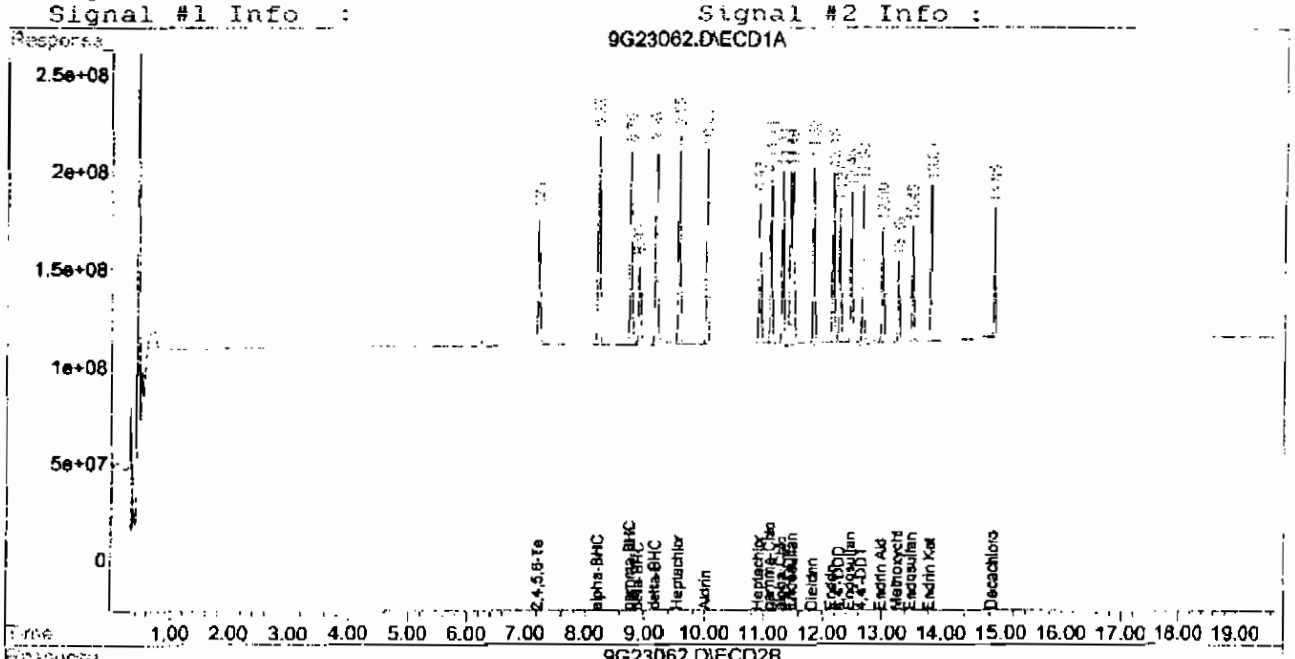
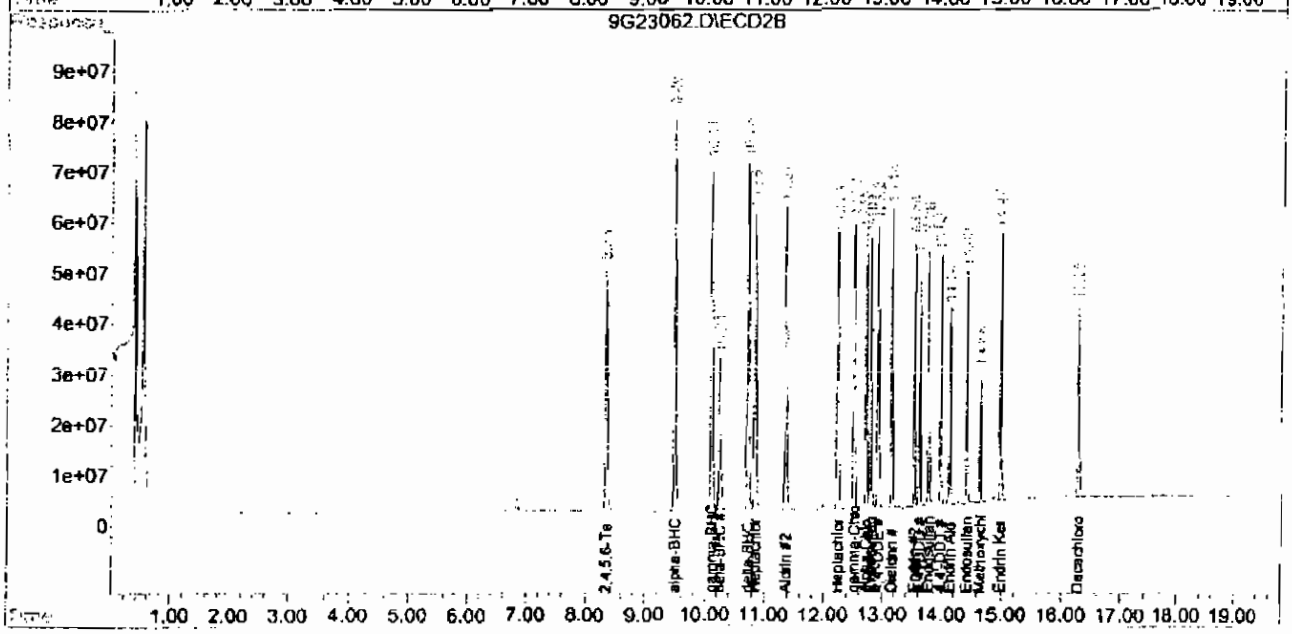





Data File : C:\HPCHEM\1\DATA\043003\9G23063.D\ECD1A.CH Vial: 29
Acq On : 30 Apr 2003 21:13 Operator: ECL
Sample : TOX CCV 500 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : .E

Data File : C:\HPCHEM\1\DATA\043003\9G23063.D\ECD2B.CH Vial: 29
Acq On : 30 Apr 2003 21:37 Operator: ECL
Sample : TOX CCV 500 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003
Last Update : Wed Apr 30 16:29:00 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	L1	Toxaphene-1	500.000	508.710	-1.7	102	0.00
2	L1	Toxaphene-2	500.000	491.897	1.6	101	0.00
3	L1	Toxaphene-3	500.000	502.821	-0.6	101	0.00
4	L1	Toxaphene-4	500.000	498.953	0.2	100	0.00
5	L1	Toxaphene-5	500.000	500.738	-0.1	100	0.00
		Signal #2					
1	L1	Toxaphene-1	500.000	472.739	5.5	95	0.00
2	L1	Toxaphene-2	500.000	470.251	5.9	95	0.00
3	L1	Toxaphene-3	500.000	483.885	3.2	94	0.00
4	L1	Toxaphene-4	500.000	479.445	4.1	94	0.00
5	L1	Toxaphene-5	500.000	477.200	4.6	95	0.00

Data File : C:\HPCHEM\1\DATA\043003\9G23063.D\ECD1A.CH Vial: 29
Acq On : 30 Apr 2003 21:13 Operator: ECL
Sample : TOX CCV 500 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : .E

Data File : C:\HPCHEM\1\DATA\043003\9G23063.D\ECD2B.CH Vial: 29
Acq On : 30 Apr 2003 21:37 Operator: ECL
Sample : TOX CCV 500 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 1 8:23 2003 Quant Results File: TOX.RES

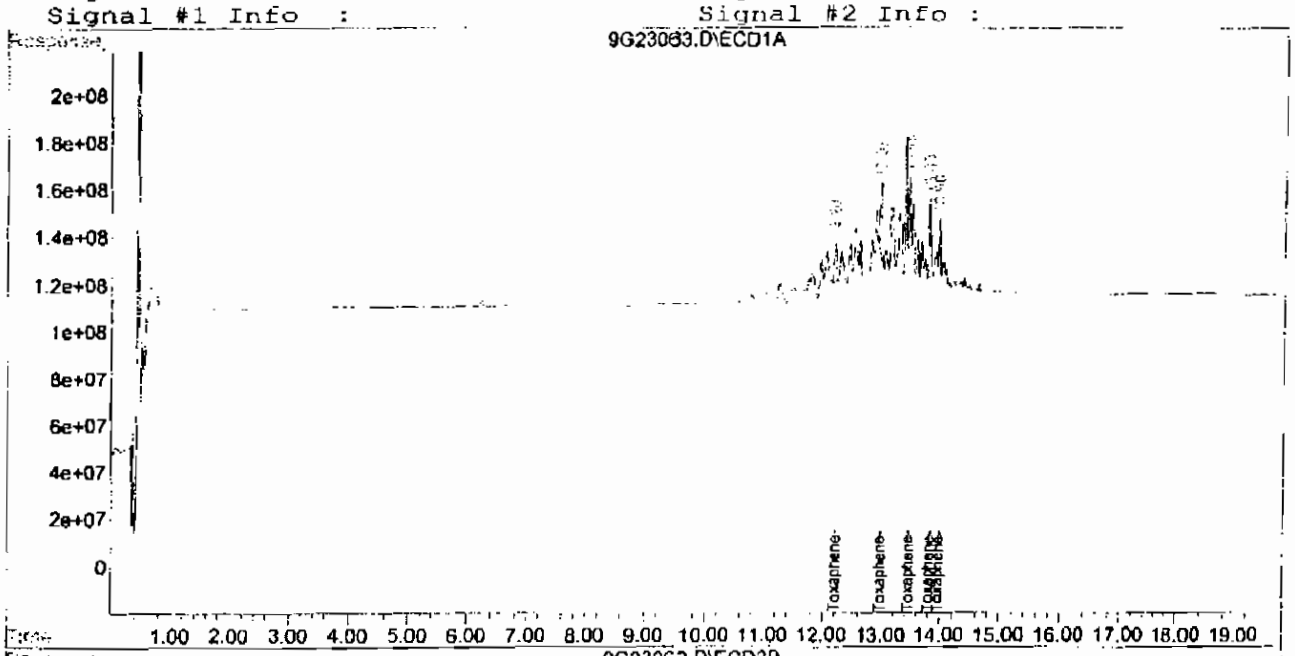
Quant Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003
Last Update : Wed Apr 30 16:29:00 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

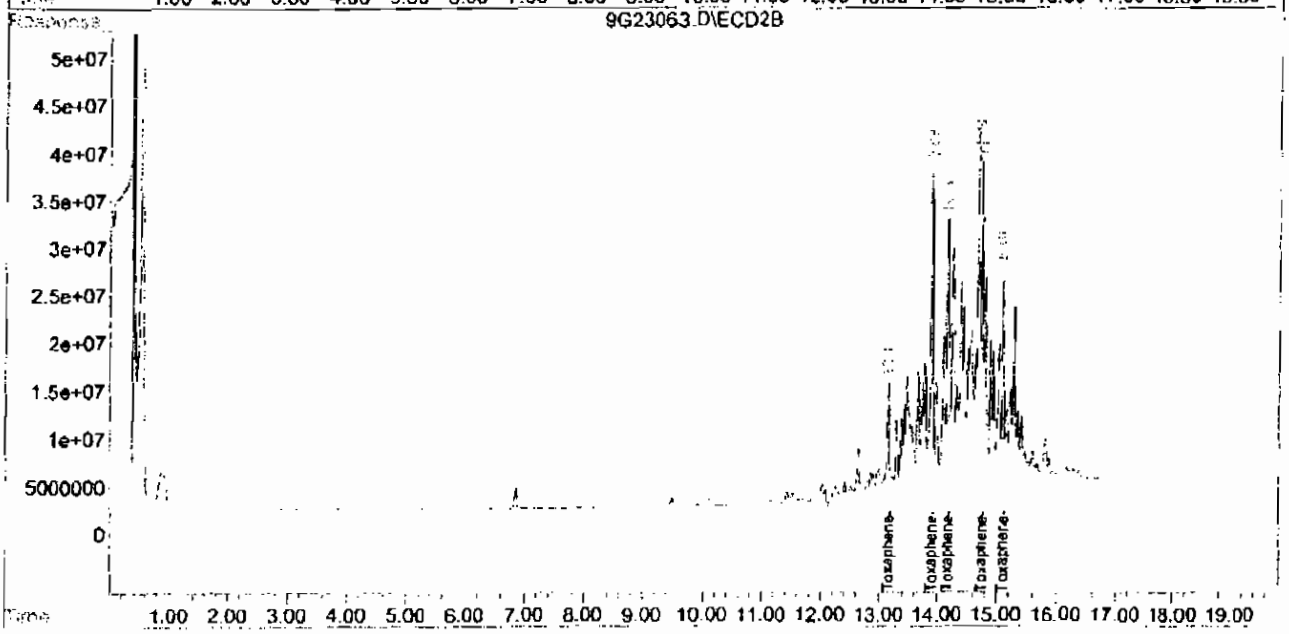
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	Target Compounds						
1)	L1 Toxaphene-1	12.20	13.15	451.0E6	243.5E6	508.710	472.739
2)	L1 Toxaphene-2	12.97	13.89	803.1E6	663.3E6	491.897	470.251
3)	L1 Toxaphene-3	13.46	14.16	547.8E6	444.7E6	502.821	483.885
4)	L1 Toxaphene-4	13.80	14.74	706.2E6	328.3E6	498.953	479.449
5)	L1 Toxaphene-5	13.96	15.10	345.3E6	311.8E6	500.738	477.200
	Sum Toxaphene-1			2853.3E6	1991.7E6	2503.118	2383.521
	Average Toxaphene-1					500.624	476.704

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

```
Data File : C:\HPCHEM\1\DATA\043003\9G23063.D\ECD1A.CH   Vial: 29
Acq On    : 30 Apr 2003  21:13                           Operator: ECL
Sample    : TOX CCV 500 PPB                              Inst    : HP9
Misc      : SOS62-45                                     Multiplr: 1.00
IntFile   : .E

Data File : C:\HPCHEM\1\DATA\043003\9G23063.D\ECD2B.CH   Vial: 29
Acq On    : 30 Apr 2003  21:37                           Operator: ECL
Sample    : TOX CCV 500 PPB                              Inst    : HP9
Misc      : SOS62-45                                     Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: May  1  8:23 2003  Quant Results File: TOX.RES

Quant Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title        : CALIBRATION April 30, 2003
Last Update  : Wed Apr 30 16:29:00 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj.      :
Signal #1 Phase  :                    Signal #2 Phase:
Signal #1 Info   :                    Signal #2 Info :
```





Data File : C:\HPCHEM\1\DATA\043003\9G23074.D\ECD1A.CH Vial: 40
Acq On : 1 May 2003 1:40 Operator: ECL
Sample : WG139380-09 PEST CCV 50 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23074.D\ECD2B.CH Vial: 40
Acq On : 1 May 2003 2:04 Operator: ECL
Sample : WG139380-09 PEST CCV 50 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Thu May 01 08:20:11 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	S	2,4,5,6-Tetrachloro-M-Xylen	50.000	53.831	-7.7	108	0.00
2		alpha-BHC	50.000	55.602	-11.2	108	0.00
3		gamma-BHC	50.000	53.344	-6.7	105	0.00
4		beta-BHC	50.000	55.444	-10.9	111	0.00
5		Heptachlor	50.000	54.507	-9.0	108	0.00
6		delta-BHC	50.000	57.226	-14.5	109	0.00
7		Aldrin	50.000	54.674	-9.3	108	0.01#
8		Heptachlor Epoxide	50.000	50.287	-0.6	98	0.01#
9		gamma-Chlordane	50.000	53.630	-7.3	106	0.01#
10		alpha-Chlordane	50.000	52.244	-4.5	107	0.01#
11		Endosulfan I	50.000	53.014	-6.0	107	0.01#
12		4,4'-DDE	50.000	53.792	-7.6	108	0.00
13		Dieldrin	50.000	54.239	-8.5	108	0.01#
1		Endrin	50.000	54.793	-9.6	108	0.01#
3		4,4'-DDD	50.000	57.372	-14.7	109	0.00
16		Endosulfan II	50.000	55.992	-12.0	110	0.01#
17		4,4'-DDT	50.000	54.010	-8.0	109	0.01#
18		Endrin Aldehyde	50.000	51.829	-3.7	108	0.01#
19		Endosulfan Sulfate	50.000	57.237	-14.5	113	0.00
20		Methoxychlor	50.000	53.105	-6.2	108	0.00
21		Endrin Ketone	50.000	53.512	-7.0	107	0.00
22	S	Decachlorobiphenyl	50.000	50.403	-0.8	104	0.00
		Signal #2					
1	S	2,4,5,6-Tetrachloro-M-Xyl	50.000	49.829	0.3	95	0.00
2		alpha-BHC	50.000	52.075	-4.2	96	0.00
3		gamma-BHC	50.000	51.562	-3.1	96	0.00
4		beta-BHC	50.000	49.038	1.9	96	0.00
5		Heptachlor	50.000	50.095	-0.2	94	0.00
6		delta-BHC	50.000	52.425	-4.8	97	0.00
7		Aldrin	50.000	51.910	-3.8	96	0.00
8		Heptachlor Epoxide	50.000	50.797	-1.6	96	0.00
9		gamma-Chlordane	50.000	50.428	-0.9	96	0.00
10		alpha-Chlordane	50.000	50.132	-0.3	96	0.00
11		Endosulfan I	50.000	50.573	-1.1	96	0.00
12		4,4'-DDE	50.000	51.827	-3.7	96	0.00
13		Dieldrin	50.000	51.409	-2.8	96	0.00
14		Endrin	50.000	52.172	-4.3	99	0.00
15		4,4'-DDD	50.000	51.373	-2.7	96	0.00
16		Endosulfan II	50.000	51.263	-2.5	97	0.00
17		4,4'-DDT	50.000	52.173	-4.3	98	0.00
18		Endrin Aldehyde	50.000	50.056	-0.1	98	0.00
19		Endosulfan Sulfate	50.000	51.351	-2.7	99	0.00
		Methoxychlor	50.000	49.840	0.3	99	0.00
		Endrin Ketone	50.000	48.595	2.8	94	0.00
2	S	Decachlorobiphenyl	50.000	47.419	5.2	98	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data File : C:\HPCHEM\1\DATA\043003\9G23074.D\ECD1A.CH Vial: 40
Acq On : 1 May 2003 1:40 Operator: ECL
Sample : WG139380-09 PEST CCV 50 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23074.D\ECD2B.CH Vial: 40
Acq On : 1 May 2003 2:04 Operator: ECL
Sample : WG139380-09 PEST CCV 50 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 1 8:20 2003 Quant Results File: 8081.RES

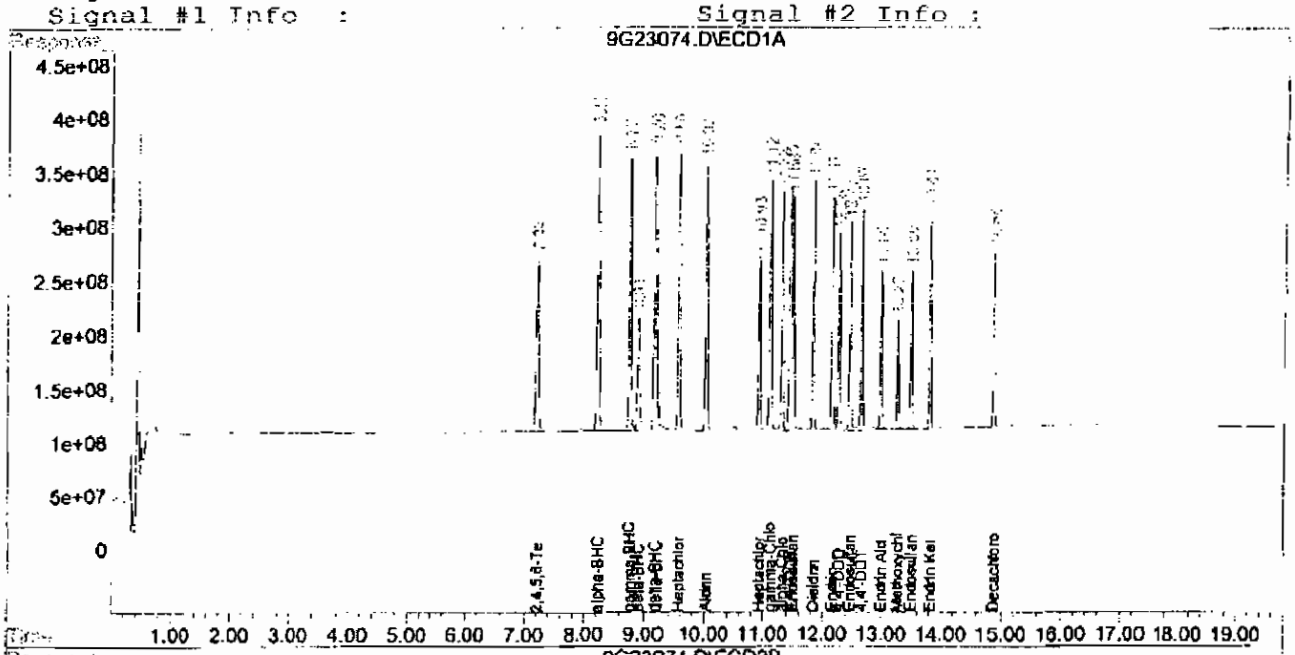
Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Thu May 01 08:20:11 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

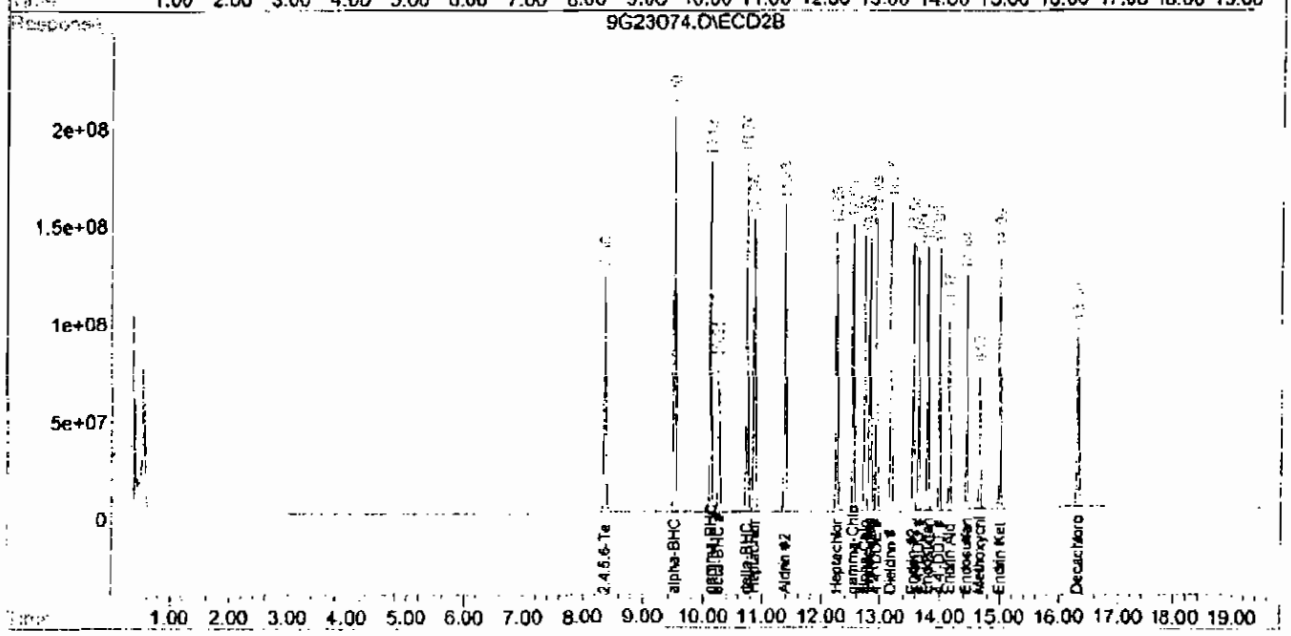
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
System Monitoring Compounds						
1) S 2,4,5,6-Tetrachl	7.22	8.36	4591.3E6	2816.7E6	53.831	49.829
Spiked Amount 20.000 Range 30 - 132 Recovery =					269.16%#	249.14%#
22) S Decachlorobiphen	14.86	16.30	2645.8E6	1901.7E6	50.403	47.419
Spiked Amount 20.000 Range 36 - 144 Recovery =					252.02%#	237.09%#
Target Compounds						
2) alpha-BHC	8.23	9.50	6794.8E6	4299.3E6	55.602	52.075
3) gamma-BHC	8.77	10.12	5773.1E6	3798.3E6	53.344	51.562
4) beta-BHC	8.91	10.25	2606.3E6	1617.6E6	55.444	49.038
5) Heptachlor	9.56	10.86	6006.3E6	3150.4E6	54.507	50.095
6) delta-BHC	9.20	10.74	6332.3E6	3731.7E6	57.226	52.425
7) Aldrin	10.03	11.38	5633.3E6	3322.9E6	54.674	51.910
8) Heptachlor Epoxi	10.93	12.25	4080.0E6	2979.4E6	50.287	50.797
9) gamma-Chlordane	11.12	12.53	4997.8E6	2915.9E6	53.630	50.428
10) alpha-Chlordane	11.32	12.73	4732.0E6	2703.1E6	52.244	50.132
11) Endosulfan I	11.50	12.82	4757.9E6	2673.2E6	53.014	50.573
12) 4,4'-DDE	11.45	12.93	4628.2E6	2649.6E6	53.792	51.827
13) Dieldrin	11.84	13.18	4966.2E6	2840.4E6	54.239	51.409
14) Endrin	12.17	13.55	4670.2E6	2422.5E6	54.793	52.172
15) 4,4'-DDD	12.28	13.64	3912.4E6	2120.3E6	57.372	51.373
16) Endosulfan II	12.47	13.79	4099.2E6	2300.0E6	55.992	51.263
17) 4,4'-DDT	12.67	13.99	4051.8E6	2096.2E6	54.010	52.173
18) Endrin Aldehyde	13.00	14.15	2923.5E6	1687.6E6	51.829	50.056
19) Endosulfan Sulfa	13.50	14.44	2741.8E6	1905.9E6	57.237	51.351
20) Methoxychlor	13.27	14.67	1803.7E6	1024.2E6	53.105	49.840
21) Endrin Ketone	13.81	14.99	3564.5E6	2214.1E6	53.512	48.595

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

```
Data File : C:\HPCHEM\1\DATA\043003\9G23074.D\ECD1A.CH   Vial: 40
Acq On    :  1 May 2003   1:40                           Operator: ECL
Sample    : WG139380-09 PEST CCV 50 PPB                  Inst    : HP9
Misc      : 1,1 SOS63-32                                 Multiplr: 1.00
IntFile   : autointl.e

Data File : C:\HPCHEM\1\DATA\043003\9G23074.D\ECD2B.CH   Vial: 40
Acq On    :  1 May 2003   2:04                           Operator: ECL
Sample    : WG139380-09 PEST CCV 50 PPB                  Inst    : HP9
Misc      : 1,1 SOS63-32                                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May  1  8:20 2003  Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title        : CALIBRATION April 30, 2003 @ 1557
Last Update  : Thu May 01 08:20:11 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj.      :
Signal #1 Phase  :                    Signal #2 Phase:
Signal #1 Info   :                    Signal #2 Info :
```





Data File : C:\HPCHEM\1\DATA\043003\9G23075.D\ECD1A.CH Vial: 41
Acq On : 1 May 2003 2:04 Operator: ECL
Sample : TOX CCV 250 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : .E

Data File : C:\HPCHEM\1\DATA\043003\9G23075.D\ECD2B.CH Vial: 41
Acq On : 1 May 2003 2:28 Operator: ECL
Sample : TOX CCV 250 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003
Last Update : Wed Apr 30 16:29:00 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	L1	Toxaphene-1	250.000	259.618	-3.8	105	0.02
2	L1	Toxaphene-2	250.000	275.050	-10.0	109	0.01
3	L1	Toxaphene-3	250.000	250.714	-0.3	104	0.00
4	L1	Toxaphene-4	250.000	266.243	-6.5	107	0.01
5	L1	Toxaphene-5	250.000	263.483	-5.4	109	0.01
		Signal #2					
1	L1	Toxaphene-1	250.000	240.533	3.8	101	0.00
2	L1	Toxaphene-2	250.000	237.249	5.1	102	0.00
3	L1	Toxaphene-3	250.000	227.856	8.9	103	0.00
4	L1	Toxaphene-4	250.000	230.693	7.7	102	0.00
5	L1	Toxaphene-5	250.000	232.771	6.9	101	0.00

Data File : C:\HPCHEM\1\DATA\043003\9G23075.D\ECD1A.CH Vial: 41
Acq On : 1 May 2003 2:04 Operator: ECL
Sample : TOX CCV 250 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : .E

Data File : C:\HPCHEM\1\DATA\043003\9G23075.D\ECD2B.CH Vial: 41
Acq On : 1 May 2003 2:28 Operator: ECL
Sample : TOX CCV 250 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 1 8:22 2003 Quant Results File: TOX.RES

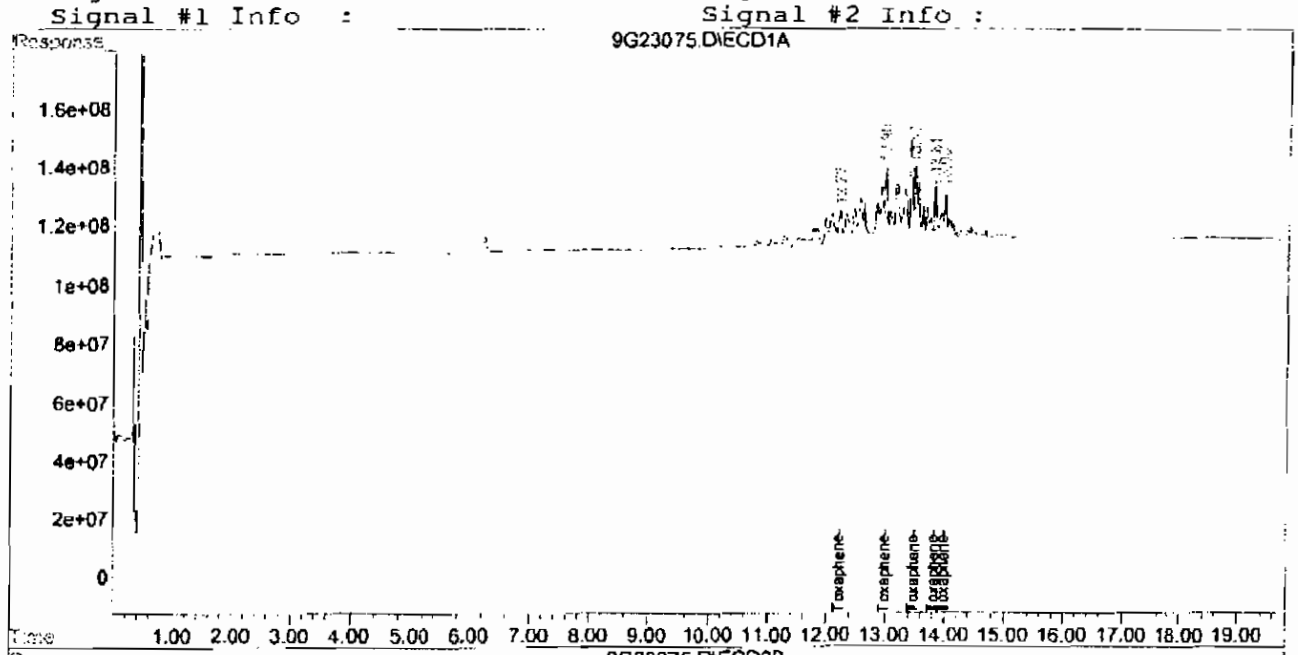
Quant Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003
Last Update : Wed Apr 30 16:29:00 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

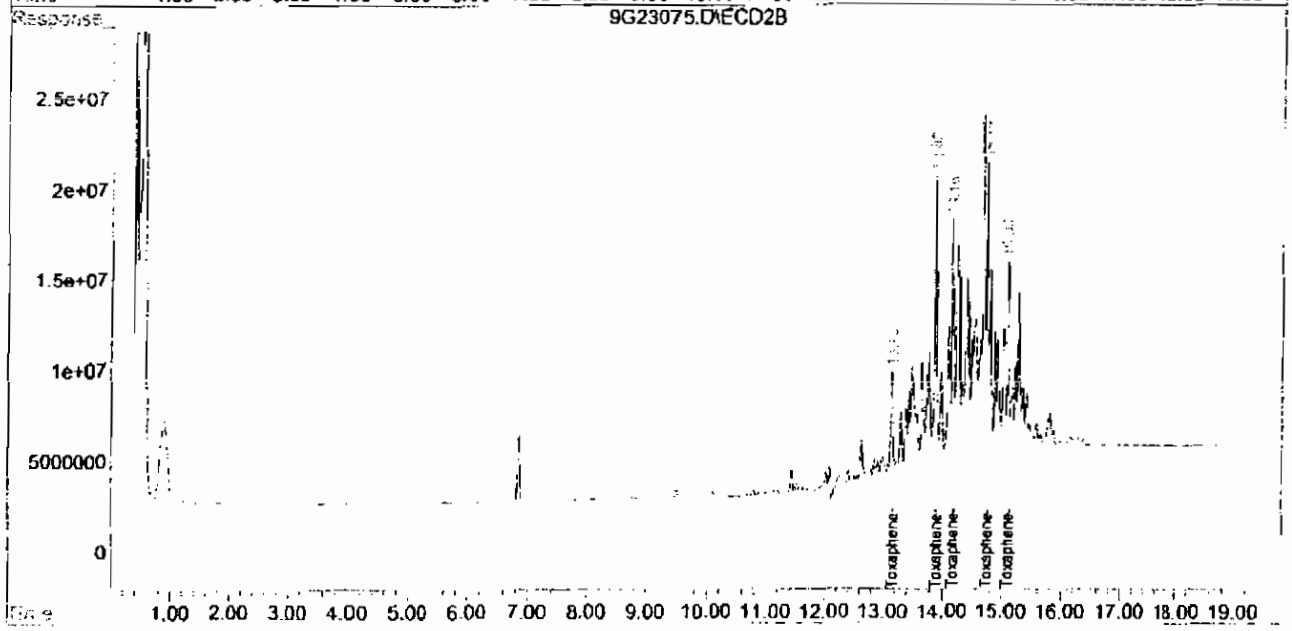
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
Target Compounds						
1) L1 Toxaphene-1	12.21	13.15	230.2E6	123.9E6	259.618	240.533
2) L1 Toxaphene-2	12.99	13.88	449.0E6	334.7E6	275.050	237.249
3) L1 Toxaphene-3	13.47	14.16	273.1E6	209.4E6	250.714	227.856
4) L1 Toxaphene-4	13.82	14.74	376.8E6	158.0E6	266.243	230.693
5) L1 Toxaphene-5	13.98	15.09	181.7E6	152.1E6	263.483	232.771
Sum Toxaphene-1			1510.8E6	978.1E6	1315.108	1169.103
Average Toxaphene-1					263.022	233.821

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

```
Data File : C:\HPCHEM\1\DATA\043003\9G23075.D\ECD1A.CH    Vial: 41
Acq On    :  1 May 2003   2:04                            Operator: ECL
Sample    : TOX CCV 250 PPB                               Inst    : HP9
Misc      : SOS62-45                                      Multiplr: 1.00
IntFile   : .E

Data File : C:\HPCHEM\1\DATA\043003\9G23075.D\ECD2B.CH    Vial: 41
Acq On    :  1 May 2003   2:28                            Operator: ECL
Sample    : TOX CCV 250 PPB                               Inst    : HP9
Misc      : SOS62-45                                      Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: May  1  8:22 2003  Quant Results File: TOX.RES

Quant Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title        : CALIBRATION April 30, 2003
Last Update  : Wed Apr 30 16:29:00 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj.      :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```





Data File : C:\HPCHEM\1\DATA\043003\9G23087.D\ECD1A.CH Vial: 53
Acq On : 1 May 2003 6:56 Operator: ECL
Sample : WG139380-10 PEST CCV 20 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23087.D\ECD2B.CH Vial: 53
Acq On : 1 May 2003 7:20 Operator: ECL
Sample : WG139380-10 PEST CCV 20 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Thu May 01 08:20:11 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	S	2,4,5,6-Tetrachloro-M-Xylen	20.000	21.265	-6.3	104	0.00
2		alpha-BHC	20.000	21.377	-6.9	105	0.00
3		gamma-BHC	20.000	20.571	-2.9	101	0.00
4		beta-BHC	20.000	21.205	-6.0	103	0.00
5		Heptachlor	20.000	21.333	-6.7	103	0.00
6		delta-BHC	20.000	21.823	-9.1	106	0.00
7		Aldrin	20.000	21.393	-7.0	104	0.01#
8		Heptachlor Epoxide	20.000	19.834	0.8	93	0.01#
9		gamma-Chlordane	20.000	21.191	-6.0	104	0.01#
10		alpha-Chlordane	20.000	21.306	-6.5	106	0.01#
11		Endosulfan I	20.000	21.675	-8.4	105	0.01#
12		4,4'-DDE	20.000	21.642	-8.2	109	0.00
3		Dieldrin	20.000	21.580	-7.9	105	0.01#
4		Endrin	20.000	21.510	-7.6	105	0.01#
15		4,4'-DDD	20.000	21.795	-9.0	108	0.00
16		Endosulfan II	20.000	22.672	-13.4	110	0.01#
17		4,4'-DDT	20.000	22.680	-13.4	112	0.01#
18		Endrin Aldehyde	20.000	22.147	-10.7	111	0.00
19		Endosulfan Sulfate	20.000	22.292	-11.5	108	0.00
20		Methoxychlor	20.000	20.659	-3.3	100	0.00
21		Endrin Ketone	20.000	21.240	-6.2	105	0.00
22	S	Decachlorobiphenyl	20.000	20.600	-3.0	102	0.00

Signal #2

1	S	2,4,5,6-Tetrachloro-M-Xyl	20.000	19.640	1.8	100	0.00
2		alpha-BHC	20.000	19.826	0.9	99	0.00
3		gamma-BHC	20.000	19.710	1.4	99	0.00
4		beta-BHC	20.000	19.474	2.6	99	0.00
5		Heptachlor	20.000	20.341	-1.7	101	0.00
6		delta-BHC	20.000	19.670	1.6	99	0.00
7		Aldrin	20.000	19.690	1.5	99	0.00
8		Heptachlor Epoxide	20.000	19.906	0.5	101	0.00
9		gamma-Chlordane	20.000	19.381	3.1	99	0.00
10		alpha-Chlordane	20.000	19.403	3.0	99	0.00
11		Endosulfan I	20.000	19.529	2.4	99	0.00
12		4,4'-DDE	20.000	19.425	2.9	100	0.00
13		Dieldrin	20.000	19.350	3.2	99	0.00
14		Endrin	20.000	19.847	0.8	102	0.00
15		4,4'-DDD	20.000	19.197	4.0	99	0.00
16		Endosulfan II	20.000	19.077	4.6	99	0.00
17		4,4'-DDT	20.000	19.400	3.0	101	0.00
18		Endrin Aldehyde	20.000	19.648	1.8	100	0.00
19		Endosulfan Sulfate	20.000	19.627	1.9	101	0.00
0		Methoxychlor	20.000	19.106	4.5	101	0.00
1		Endrin Ketone	20.000	19.298	3.5	99	0.00
22	S	Decachlorobiphenyl	20.000	19.520	2.4	99	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data File : C:\HPCHEM\1\DATA\043003\9G23087.D\ECD1A.CH Vial: 53
Acq On : 1 May 2003 6:56 Operator: ECL
Sample : WG139380-10 PEST CCV 20 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23087.D\ECD2B.CH Vial: 53
Acq On : 1 May 2003 7:20 Operator: ECL
Sample : WG139380-10 PEST CCV 20 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 1 8:21 2003 Quant Results File: 8081.RES

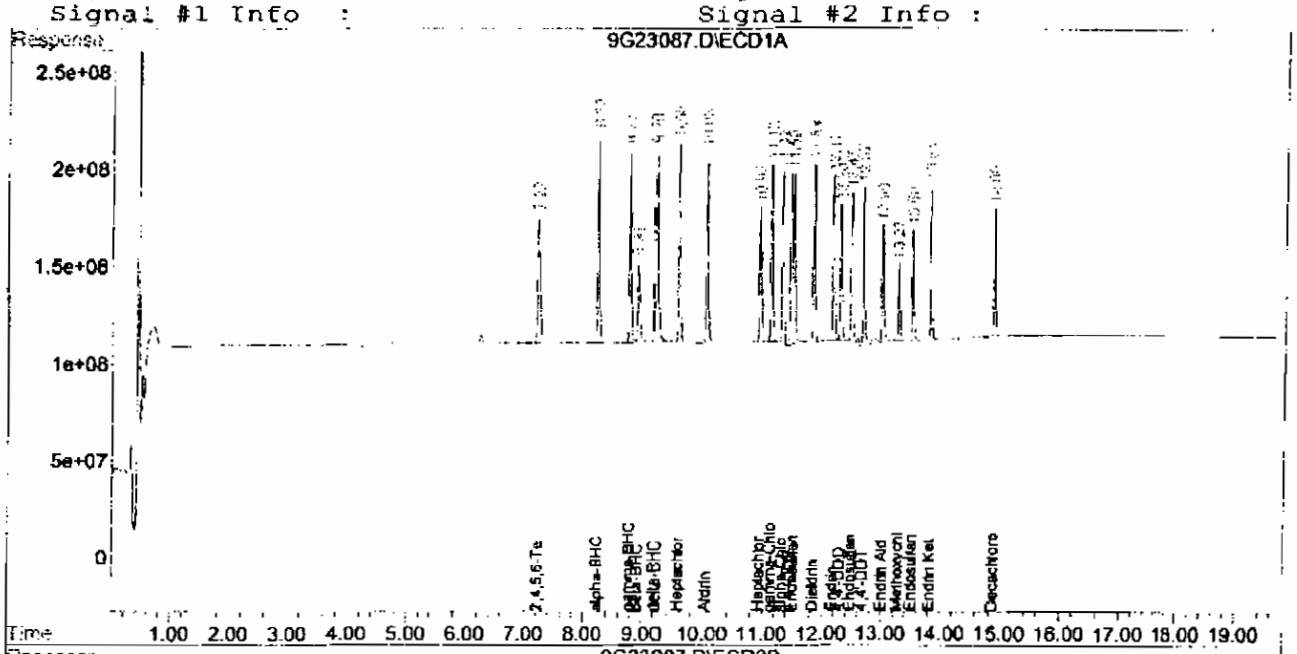
Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Thu May 01 08:20:11 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

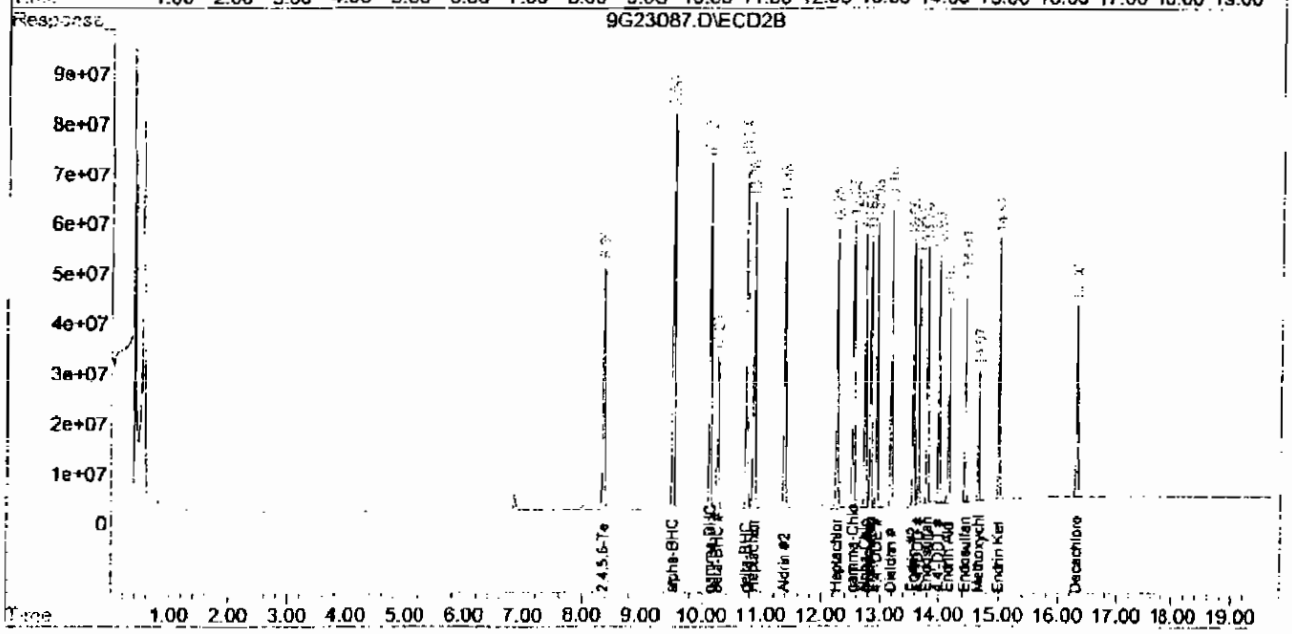
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1)	S 2,4,5,6-Tetrachl	7.22	8.36	1813.8E6	1110.2E6	21.265	19.640
	Spiked Amount 20.000 Range 30 - 132 Recovery =					106.33%	98.20%
22)	S Decachlorobiphen	14.86	16.30	1081.4E6	782.9E6	20.600	19.520
	Spiked Amount 20.000 Range 36 - 144 Recovery =					103.00%	97.60%
	Target Compounds						
2)	alpha-BHC	8.23	9.50	2612.3E6	1636.8E6	21.377	19.826
3)	gamma-BHC	8.77	10.12	2226.2E6	1451.9E6	20.571	19.710
4)	beta-BHC	8.91	10.25	996.8E6	642.4E6	21.205	19.474
5)	Heptachlor	9.56	10.86	2350.8E6	1279.2E6	21.333	20.341
6)	delta-BHC	9.20	10.74	2414.7E6	1400.2E6	21.823	19.670
7)	Aldrin	10.03	11.38	2204.3E6	1260.4E6	21.393	19.690
8)	Heptachlor Epoxi	10.93	12.25	1609.2E6	1167.5E6	19.834	19.906
9)	gamma-Chlordane	11.12	12.53	1974.8E6	1120.7E6	21.191	19.381
10)	alpha-Chlordane	11.32	12.73	1929.7E6	1046.2E6	21.306	19.403
11)	Endosulfan I	11.50	12.82	1945.3E6	1032.2E6	21.675	19.529
12)	4,4'-DDE	11.45	12.93	1862.1E6	993.1E6	21.642	19.425
13)	Dieldrin	11.84	13.18	1975.9E6	1069.1E6	21.580	19.350
14)	Endrin	12.17	13.55	1833.4E6	921.5E6	21.510	19.847
15)	4,4'-DDD	12.28	13.64	1486.3E6	792.3E6	21.795	19.197
16)	Endosulfan II	12.47	13.79	1659.8E6	855.9E6	22.672	19.077
17)	4,4'-DDT	12.67	13.99	1701.4E6	779.4E6	22.680	19.400
18)	Endrin Aldehyde	13.00	14.15	1249.2E6	662.4E6	22.147	19.648
19)	Endosulfan Sulfa	13.50	14.44	1067.8E6	728.5E6	22.292	19.627
20)	Methoxychlor	13.27	14.67	701.7E6	392.6E6	20.659	19.106
21)	Endrin Ketone	13.81	14.99	1414.8E6	879.3E6	21.240	19.298

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

```
Data File : C:\HPCHEM\1\DATA\043003\9G23087.D\ECD1A.CH   Vial: 53
Acq On    :  1 May 2003   6:56                           Operator: ECL
Sample    : WG139380-10 PEST CCV 20 PPB                  Inst    : HP9
Misc      : 1,1 SOS63-32                                 Multiplr: 1.00
IntFile   : autointl.e

Data File : C:\HPCHEM\1\DATA\043003\9G23087.D\ECD2B.CH   Vial: 53
Acq On    :  1 May 2003   7:20                           Operator: ECL
Sample    : WG139380-10 PEST CCV 20 PPB                  Inst    : HP9
Misc      : 1,1 SOS63-32                                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May  1  8:21 2003  Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title        : CALIBRATION April 30, 2003 @ 1557
Last Update  : Thu May 01 08:20:11 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj.      :
Signal #1 Phase  :                    Signal #2 Phase:
Signal #1 Info   :                    Signal #2 Info :
```





Data File : C:\HPCHEM\1\DATA\043003\9G23088.D\ECD1A.CH Vial: 54
Acq On : 1 May 2003 7:20 Operator: ECL
Sample : TOX CCV 500 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : .E

Data File : C:\HPCHEM\1\DATA\043003\9G23088.D\ECD2B.CH Vial: 54
Acq On : 1 May 2003 7:44 Operator: ECL
Sample : TOX CCV 500 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003
Last Update : Wed Apr 30 16:29:00 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 L1	Toxaphene-1	500.000	545.747	-9.1	109	0.02
2 L1	Toxaphene-2	500.000	527.024	-5.4	108	0.02
3 L1	Toxaphene-3	500.000	535.611	-7.1	108	0.00
4 L1	Toxaphene-4	500.000	532.038	-6.4	106	0.01
5 L1	Toxaphene-5	500.000	533.734	-6.7	107	0.01
Signal #2						
1 L1	Toxaphene-1	500.000	462.090	7.6	93	0.00
2 L1	Toxaphene-2	500.000	463.706	7.3	93	0.00
3 L1	Toxaphene-3	500.000	474.796	5.0	92	0.00
4 L1	Toxaphene-4	500.000	481.424	3.7	94	0.00
5 L1	Toxaphene-5	500.000	469.129	6.2	93	0.00

Data File : C:\HPCHEM\1\DATA\043003\9G23088.D\ECD1A.CH Vial: 54
Acq On : 1 May 2003 7:20 Operator: ECL
Sample : TOX CCV 500 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : .E

Data File : C:\HPCHEM\1\DATA\043003\9G23088.D\ECD2B.CH Vial: 54
Acq On : 1 May 2003 7:44 Operator: ECL
Sample : TOX CCV 500 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 1 8:22 2003 Quant Results File: TOX.RES

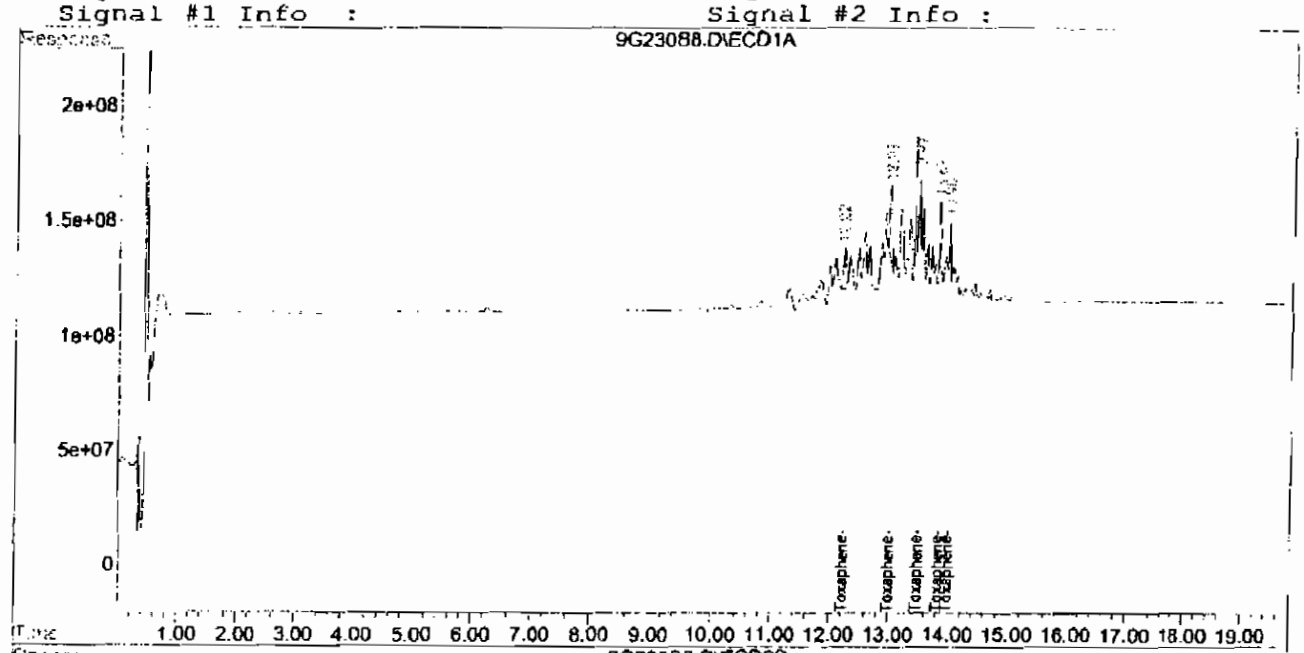
Quant Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003
Last Update : Wed Apr 30 16:29:00 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

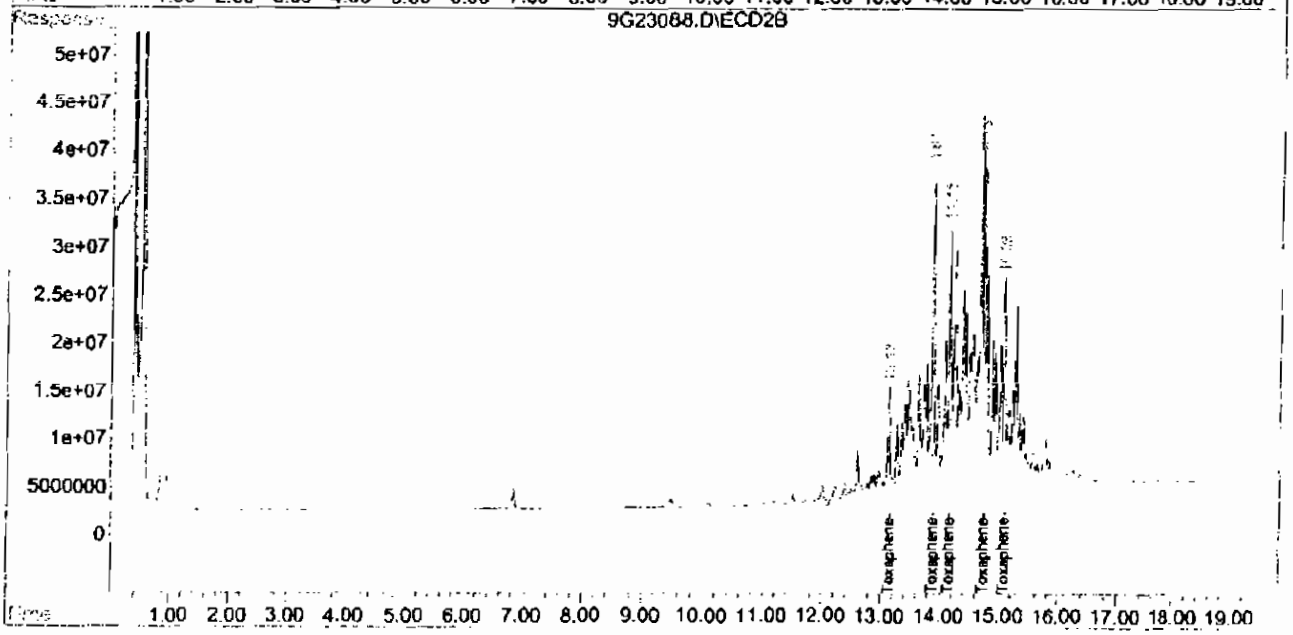
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
Target Compounds						
1) L1 Toxaphene-1	12.22	13.13	483.8E6	238.0E6	545.747	462.090
2) L1 Toxaphene-2	12.99	13.87	860.4E6	654.1E6	527.024	463.706
3) L1 Toxaphene-3	13.47	14.15	583.5E6	436.4E6	535.611	474.796
4) L1 Toxaphene-4	13.82	14.73	753.0E6	329.7E6	532.038	481.424
5) L1 Toxaphene-5	13.98	15.08	368.1E6	306.5E6	533.734	469.129
Sum Toxaphene-1			3048.8E6	1964.7E6	2674.154	2351.147
Average Toxaphene-1					534.831	470.229

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

```
Data File : C:\HPCHEM\1\DATA\043003\9G23088.D\ECD1A.CH   Vial: 54
Acq On    :  1 May 2003   7:20                           Operator: ECL
Sample    : TOX CCV 500 PPB                              Inst    : HP9
Misc      : SOS62-45                                     Multiplr: 1.00
IntFile   : .E

Data File : C:\HPCHEM\1\DATA\043003\9G23088.D\ECD2B.CH   Vial: 54
Acq On    :  1 May 2003   7:44                           Operator: ECL
Sample    : TOX CCV 500 PPB                              Inst    : HP9
Misc      : SOS62-45                                     Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: May  1  8:22 2003  Quant Results File: TOX.RES

Quant Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title        : CALIBRATION April 30, 2003
Last Update  : Wed Apr 30 16:29:00 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj.      :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```





Data File : C:\HPCHEM\1\DATA\043003\9G23100.D\ECD1A.CH Vial: 66
Acq On : 1 May 2003 12:12 Operator: ECL
Sample : WG139380-11 PEST CCV 50 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23100.D\ECD2B.CH Vial: 66
Acq On : 1 May 2003 12:36 Operator: ECL
Sample : WG139380-11 PEST CCV 50 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Thu May 01 08:24:58 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	S	2,4,5,6-Tetrachloro-M-Xylen	50.000	54.776	-9.6	110	-0.01#
2		alpha-BHC	50.000	56.721	-13.4	110	0.00
3		gamma-BHC	50.000	53.743	-7.5	106	0.00
4		beta-BHC	50.000	56.480	-13.0	113	-0.01#
5		Heptachlor	50.000	54.439	-8.9	108	0.00
6		delta-BHC	50.000	57.081	-14.2	109	-0.01#
7		Aldrin	50.000	55.321	-10.6	109	0.00
8		Heptachlor Epoxide	50.000	50.376	-0.8	98	0.00
9		gamma-Chlordane	50.000	55.205	-10.4	109	0.00
10		alpha-Chlordane	50.000	53.704	-7.4	110	0.00
11		Endosulfan I	50.000	53.660	-7.3	109	0.00
12		4,4'-DDE	50.000	55.540	-11.1	112	0.00
13		Dieldrin	50.000	55.235	-10.5	110	0.00
14		Endrin	50.000	54.672	-9.3	107	0.00
15		4,4'-DDD	50.000	56.471	-12.9	108	0.00
16		Endosulfan II	50.000	56.425	-12.8	111	0.00
17		4,4'-DDT	50.000	54.615	-9.2	110	0.00
18		Endrin Aldehyde	50.000	53.037	-6.1	111	0.00
19		Endosulfan Sulfate	50.000	57.795	-15.6#	114	0.00
20		Methoxychlor	50.000	52.445	-4.9	106	0.00
21		Endrin Ketone	50.000	52.882	-5.8	106	0.00
22	S	Decachlorobiphenyl	50.000	50.643	-1.3	105	0.00

Signal #2

1	S	2,4,5,6-Tetrachloro-M-Xyl	50.000	50.688	-1.4	97	0.00
2		alpha-BHC	50.000	52.852	-5.7	97	0.00
3		gamma-BHC	50.000	52.170	-4.3	97	0.00
4		beta-BHC	50.000	49.524	1.0	97	0.00
5		Heptachlor	50.000	51.300	-2.6	96	0.00
6		delta-BHC	50.000	53.062	-6.1	98	0.00
7		Aldrin	50.000	51.975	-4.0	97	0.00
8		Heptachlor Epoxide	50.000	51.854	-3.7	98	0.00
9		gamma-Chlordane	50.000	51.013	-2.0	97	0.00
10		alpha-Chlordane	50.000	50.538	-1.1	97	0.00
11		Endosulfan I	50.000	51.135	-2.3	97	0.00
12		4,4'-DDE	50.000	52.378	-4.8	97	0.00
13		Dieldrin	50.000	52.001	-4.0	97	0.00
14		Endrin	50.000	51.699	-3.4	98	0.00
15		4,4'-DDD	50.000	51.941	-3.9	97	0.00
16		Endosulfan II	50.000	51.752	-3.5	98	0.00
17		4,4'-DDT	50.000	52.353	-4.7	99	0.00
18		Endrin Aldehyde	50.000	50.805	-1.6	99	0.00
19		Endosulfan Sulfate	50.000	52.177	-4.4	101	0.00
[illegible]		Methoxychlor	50.000	49.869	0.3	99	0.00
[illegible]		Endrin Ketone	50.000	51.205	-2.4	99	0.00
22	S	Decachlorobiphenyl	50.000	47.573	4.9	98	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data File : C:\HPCHEM\1\DATA\043003\9G23100.D\ECD1A.CH Vial: 66
Acq On : 1 May 2003 12:12 Operator: ECL
Sample : WG139380-11 PEST CCV 50 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23100.D\ECD2B.CH Vial: 66
Acq On : 1 May 2003 12:36 Operator: ECL
Sample : WG139380-11 PEST CCV 50 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 1 14:02 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Thu May 01 08:24:58 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
System Monitoring Compounds						
1) S 2,4,5,6-Tetrachl	7.20	8.36	4671.9E6	2865.3E6	54.776	50.688
Spiked Amount 20.000 Range 30 - 132 Recovery =					273.88%#	253.44%#
22) S Decachlorobiphen	14.85	16.30	2658.4E6	1907.9E6	50.643	47.573
Spiked Amount 20.000 Range 36 - 144 Recovery =					253.22%#	237.86%#
Target Compounds						
2) alpha-BHC	8.21	9.50	6931.6E6	4363.5E6	56.721	52.852
3) gamma-BHC	8.75	10.12	5816.2E6	3843.1E6	53.743	52.170
4) beta-BHC	8.89	10.25	2655.0E6	1633.6E6	56.480	49.524
5) Heptachlor	9.54	10.86	5998.8E6	3226.1E6	54.439	51.300
6) delta-BHC	9.17	10.74	6316.2E6	3777.0E6	57.081	53.062
7) Aldrin	10.01	11.38	5700.0E6	3327.1E6	55.321	51.975
8) Heptachlor Epoxi	10.91	12.25	4087.2E6	3041.4E6	50.376	51.854
9) gamma-Chlordane	11.10	12.53	5144.5E6	2949.7E6	55.205	51.013
10) alpha-Chlordane	11.30	12.73	4864.2E6	2725.0E6	53.704	50.538
11) Endosulfan I	11.48	12.82	4815.8E6	2702.9E6	53.660	51.135
12) 4,4'-DDE	11.43	12.93	4778.6E6	2677.7E6	55.540	52.378
13) Dieldrin	11.82	13.17	5057.4E6	2873.1E6	55.235	52.001
14) Endrin	12.15	13.55	4660.0E6	2400.5E6	54.672	51.699
15) 4,4'-DDD	12.26	13.64	3850.9E6	2143.8E6	56.471	51.941
16) Endosulfan II	12.45	13.79	4130.9E6	2321.9E6	56.425	51.752
17) 4,4'-DDT	12.65	13.99	4097.2E6	2103.4E6	54.615	52.353
18) Endrin Aldehyde	12.98	14.15	2991.6E6	1712.9E6	53.037	50.805
19) Endosulfan Sulfa	13.48	14.44	2768.5E6	1936.6E6	57.795	52.177
20) Methoxychlor	13.25	14.67	1781.3E6	1024.8E6	52.445	49.869
21) Endrin Ketone	13.80	14.99	3522.6E6	2333.1E6	52.882	51.205

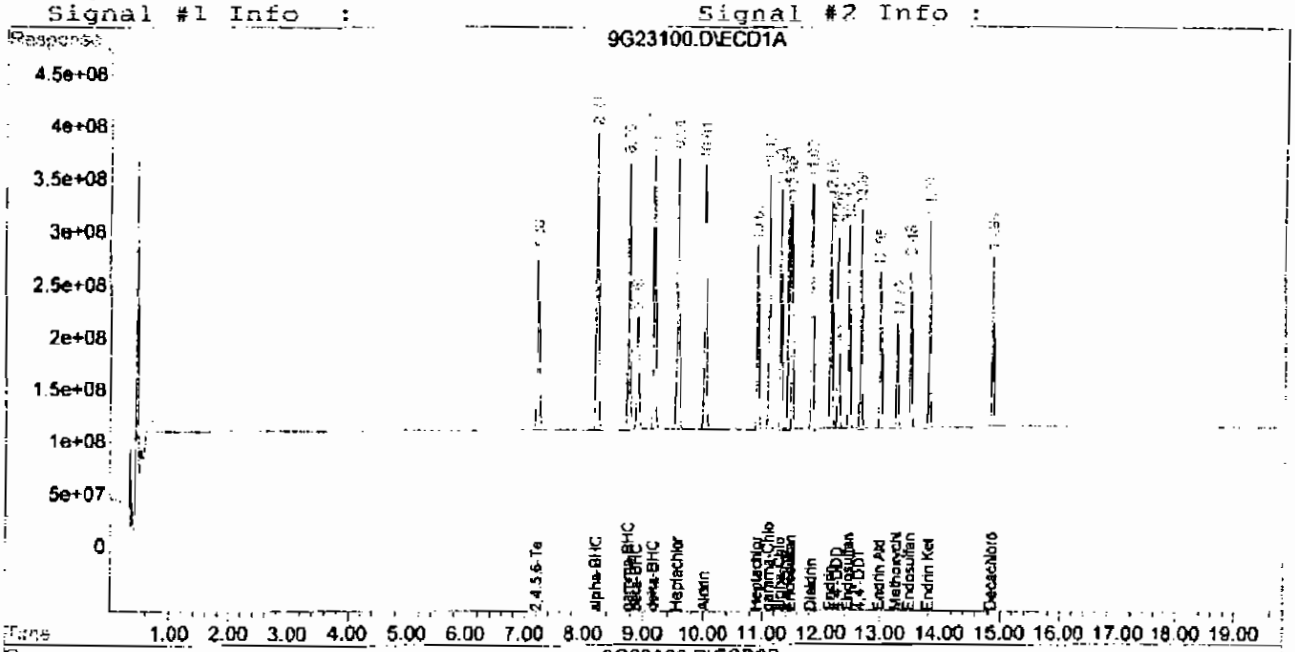
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

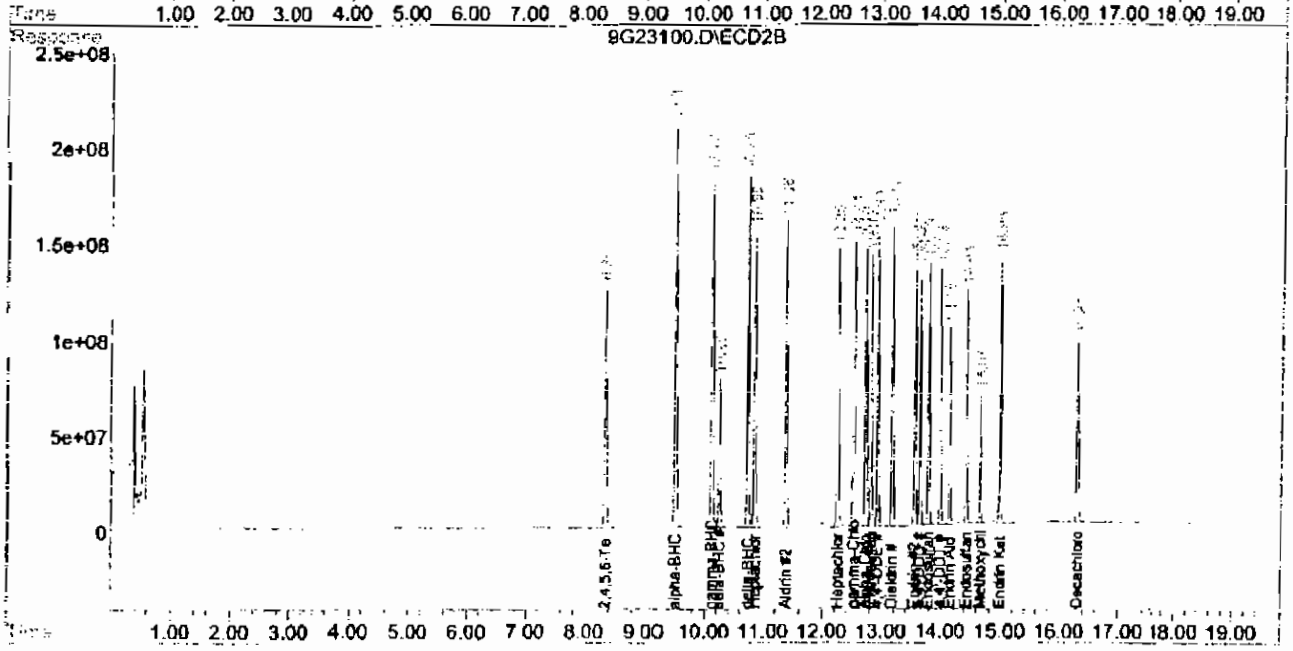
Data File : C:\HPCHEM\1\DATA\043003\9G23100.D\ECD1A.CH Vial: 66
Acq On : 1 May 2003 12:12 Operator: ECL
Sample : WG139380-11 PEST CCV 50 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23100.D\ECD2B.CH Vial: 66
Acq On : 1 May 2003 12:36 Operator: ECL
Sample : WG139380-11 PEST CCV 50 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 1 14:02 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Thu May 01 08:24:58 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data File : C:\HPCHEM\1\DATA\043003\9G23101.D\ECD1A.CH Vial: 67
Acq On : 1 May 2003 12:36 Operator: ECL
Sample : TOX CCV 500 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : .E

Data File : C:\HPCHEM\1\DATA\043003\9G23101.D\ECD2B.CH Vial: 67
Acq On : 1 May 2003 13:00 Operator: ECL
Sample : TOX CCV 500 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003
Last Update : Wed Apr 30 16:29:00 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	L1	Toxaphene-1	250.000	268.821	-7.5	109	0.00
2	L1	Toxaphene-2	250.000	266.872	-6.7	106	0.00
3	L1	Toxaphene-3	250.000	253.396	-1.4	105	0.00
4	L1	Toxaphene-4	250.000	250.290	-0.1	101	0.00
5	L1	Toxaphene-5	250.000	258.488	-3.4	107	0.00
		Signal #2					
1	L1	Toxaphene-1	250.000	237.593	5.0	100	0.00
2	L1	Toxaphene-2	250.000	233.526	6.6	100	0.00
3	L1	Toxaphene-3	250.000	223.439	10.6	101	0.00
4	L1	Toxaphene-4	250.000	226.606	9.4	101	0.00
5	L1	Toxaphene-5	250.000	227.185	9.1	99	0.00

Data File : C:\HPCHEM\1\DATA\043003\9G23101.D\ECD1A.CH Vial: 67
Acq On : 1 May 2003 12:36 Operator: ECL
Sample : TOX CCV 500 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23101.D\ECD2B.CH Vial: 67
Acq On : 1 May 2003 13:00 Operator: ECL
Sample : TOX CCV 500 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 1 13:20 2003 Quant Results File: 8081.RES

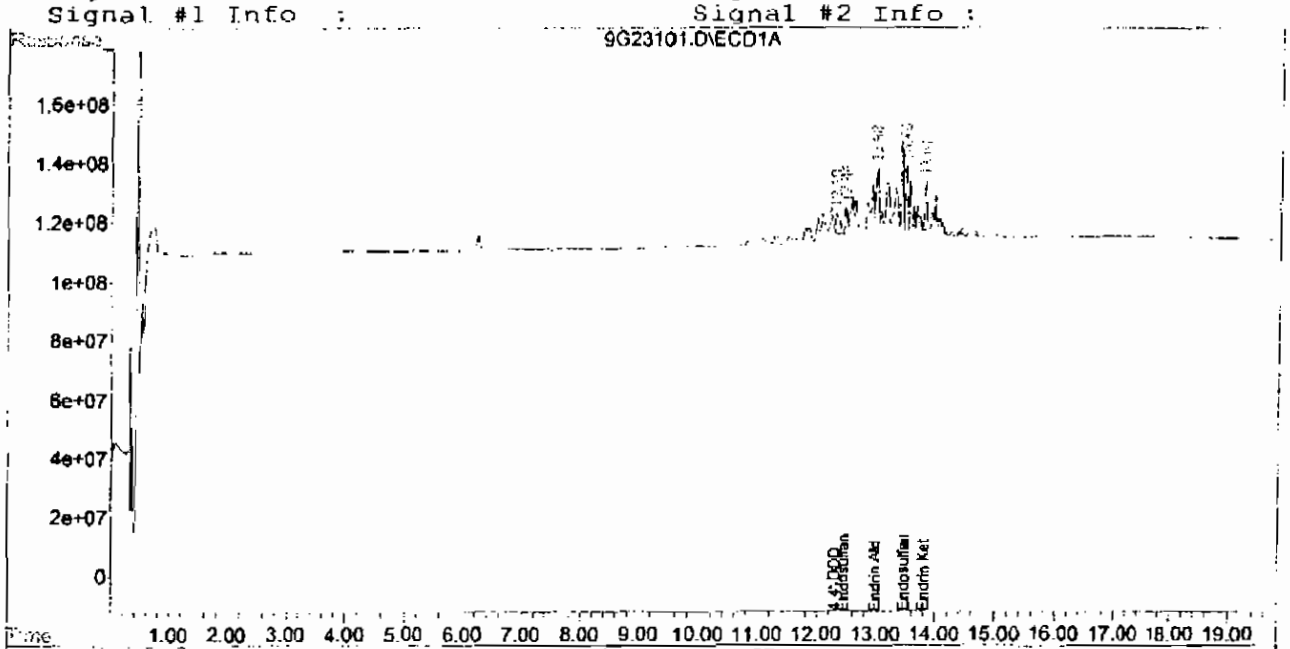
Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Wed Apr 30 16:35:45 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

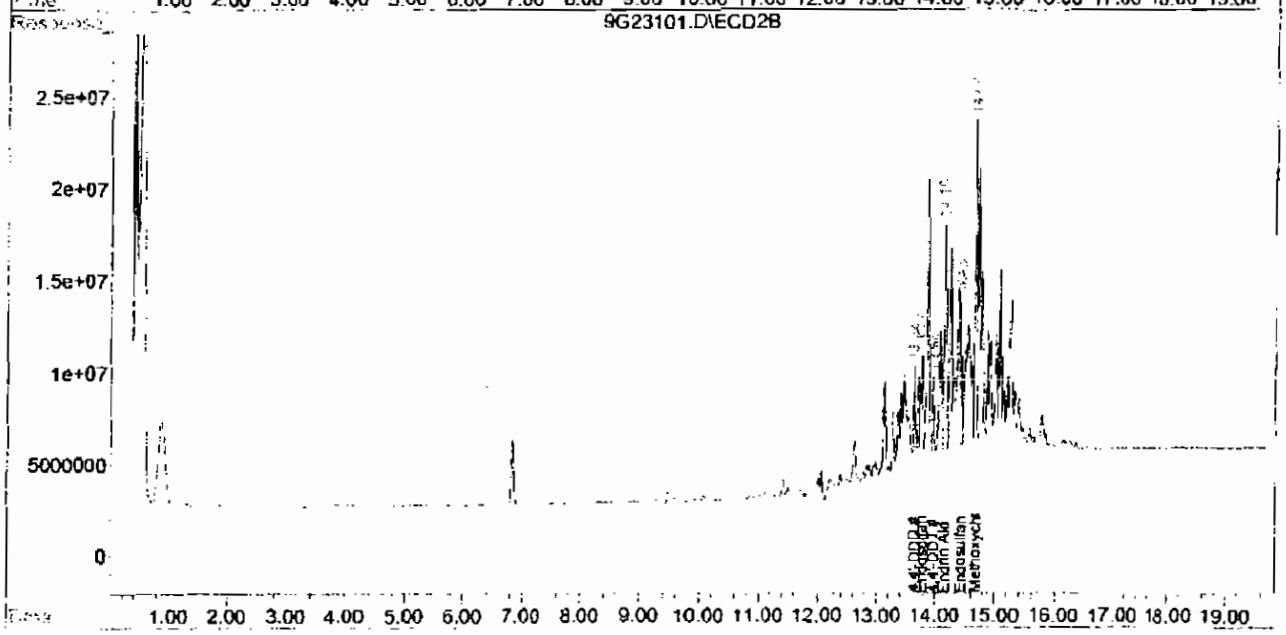
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L	
	System Monitoring Compounds							
1) S	2,4,5,6-Tetrachl	0.00	0.00	0	0	N.D.	N.D.	
	Spiked Amount 20.000 Range 30 - 132 Recovery =					0.00%#	0.00%#	
22) S	Decachlorobiphen	0.00	0.00	0	0	N.D.	N.D.	
	Spiked Amount 20.000 Range 36 - 144 Recovery =					0.00%#	0.00%#	
	Target Compounds							
2)	alpha-BHC	0.00	0.00	0	0	N.D.	N.D.	
3)	gamma-BHC	0.00	0.00	0	0	N.D.	N.D.	
4)	beta-BHC	0.00	0.00	0	0	N.D.	N.D.	
5)	Heptachlor	0.00	0.00	0	0	N.D.	N.D.	
6)	delta-BHC	0.00	0.00	0	0	N.D.	N.D.	
7)	Aldrin	0.00	0.00	0	0	N.D.	N.D.	
8)	Heptachlor Epoxi	0.00	0.00	0	0	N.D.	N.D.	
9)	gamma-Chlordane	0.00	0.00	0	0	N.D.	N.D.	
10)	alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.	
11)	Endosulfan I	0.00	0.00	0	0	N.D.	N.D.	
12)	4,4'-DDE	0.00	0.00	0	0	N.D.	N.D.	
13)	Dieldrin	0.00	0.00	0	0	N.D.	N.D.	
14)	Endrin	0.00	0.00	0	0	N.D.	N.D.	
15)	4,4'-DDD	12.30f	13.64	243.2E6	84590524	3.567	2.050	#
16)	Endosulfan II	12.44	13.77f	278.9E6	101.1E6	3.810	2.252	#
17)	4,4'-DDT	0.00	13.96f	0	87096084	N.D.	2.168	#
18)	Endrin Aldehyde	12.98	14.15	776.6E6	320.8E6	13.768	9.516	#
19)	Endosulfan Sulfa	13.46f	14.43	573.6E6	146.6E6	11.975	3.950	#
20)	Methoxychlor	0.00	14.68f	0	399.7E6	N.D.	19.453	#
21)	Endrin Ketone	13.81	0.00	366.4E6	0	5.500	N.D.	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

```
Data File : C:\HPCHEM\1\DATA\043003\9G23101.D\ECD1A.CH   Vial: 67
Acq On    :  1 May 2003  12:36                           Operator: ECL
Sample    : TOX CCV 500 PPB                               Inst    : HP9
Misc      : SOS62-45                                      Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23101.D\ECD2B.CH   Vial: 67
Acq On    :  1 May 2003  13:00                           Operator: ECL
Sample    : TOX CCV 500 PPB                               Inst    : HP9
Misc      : SOS62-45                                      Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May  1 13:20 2003  Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title        : CALIBRATION April 30, 2003 @ 1557
Last Update  : Wed Apr 30 16:35:45 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj.      :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```





RETENTION TIME WINDOWS

Lab Name: Kemron Environmental Services

Instrument ID: HP 9

GC Column: RTx-CLP (Front)

	STANDARD #1	STANDARD #2	STANDARD #3
Date Run	7/3/02	7/4/02	7/8/02
File #	9G20336	9G20361	9G20364

COMPOUND	STD #1 RT	STD #2 RT	STD #3 RT	RT WIN
alpha-BHC	9.08	9.06	9.06	0.035
gamma-BHC	9.62	9.61	9.60	0.030
beta-BHC	9.76	9.75	9.74	0.030
Heptachlor	10.41	10.40	10.39	0.030
delta-BHC	10.05	10.04	10.04	0.017
Aldrin	10.89	10.87	10.87	0.035
Heptachlor Epoxide	11.80	11.78	11.78	0.035
gamma-Chlordane	11.98	11.97	11.96	0.030
alpha-Chlordane	12.18	12.16	12.16	0.035
Endosulfan I	12.37	12.36	12.36	0.017
4,4'-DDE	12.28	12.27	12.27	0.017
Dieldrin	12.70	12.69	12.69	0.017
Endrin	13.00	12.99	12.99	0.017
4,4'-DDD	13.07	13.06	13.06	0.017
Endosulfan II	13.27	13.26	13.26	0.017
4,4'-DDT	13.41	13.4	13.4	0.017
Endrin Aldehyde	13.76	13.75	13.75	0.017
Endosulfan Sulfate	14.23	14.22	14.22	0.017
Methoxychlor	13.95	13.94	13.94	0.017
Endrin Ketone	14.52	14.52	14.51	0.017

RETENTION TIME WINDOWS

Lab Name: Kemron Environmental Services

Instrument ID: HP 9
GC Column: RTx-CLP II (Rear)

	STANDARD #1	STANDARD #2	STANDARD #3
Date Run	7/3/02	7/4/02	7/8/02
File #	9G20336	9G20361	9G20364

COMPOUND	STD #1 RT	STD #2 RT	STD #3 RT	RT WIN
alpha-BHC	9.18	9.17	9.17	0.017
gamma-BHC	9.8	9.79	9.79	0.017
beta-BHC	9.95	9.94	9.95	0.017
Heptachlor	10.51	10.51	10.51	0.000
delta-BHC	10.44	10.43	10.43	0.017
Aldrin	11.03	11.02	11.02	0.017
Heptachlor Epoxide	11.92	11.91	11.91	0.017
gamma-Chlordane	12.2	12.19	12.19	0.017
alpha-Chlordane	12.41	12.40	12.40	0.017
Endosulfan I	12.51	12.49	12.50	0.030
4,4'-DDE	12.63	12.62	12.62	0.017
Dieldrin	12.88	12.87	12.87	0.017
Endrin	13.27	13.26	13.26	0.017
4,4'-DDD	13.37	13.36	13.36	0.017
Endosulfan II	13.52	13.51	13.52	0.017
4,4'-DDT	13.73	13.72	13.72	0.017
Endrin Aldehyde	13.9	13.89	13.9	0.017
Endosulfan Sulfate	14.19	14.18	14.19	0.017
Methoxychlor	14.43	14.42	14.43	0.017
Endrin Ketone	14.74	14.73	14.73	0.017

Data File : C:\HPCHEM\1\DATA\051303\9G23241.D\ECD1A.CH Vial: 2
Acq On : 13 May 2003 10:21 Operator: HV
Sample : WG140524-01 PEST CCV 20 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\051303\9G23241.D\ECD2B.CH Vial: 2
Acq On : 13 May 2003 10:46 Operator: HV
Sample : WG140524-01 PEST CCV 20 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION May 9, 2003 @ 2015
Last Update : Sat May 10 14:30:20 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	S	2,4,5,6-Tetrachloro-M-Xylen	20.000	19.568	2.2	102	0.02#
2		alpha-BHC	20.000	19.611	1.9	102	0.03#
3		gamma-BHC	20.000	19.489	2.6	102	0.03#
4		beta-BHC	20.000	19.536	2.3	102	0.03#
5		Heptachlor	20.000	19.921	0.4	101	0.03#
6		delta-BHC	20.000	19.388	3.1	102	0.03#
7		Aldrin	20.000	19.895	0.5	101	0.03#
8		Heptachlor Epoxide	20.000	20.303	-1.5	103	0.03#
9		gamma-Chlordane	20.000	19.886	0.6	103	0.03#
10		alpha-Chlordane	20.000	21.077	-5.4	105	0.03#
11		Endosulfan I	20.000	20.299	-1.5	103	0.03#
12		4,4'-DDE	20.000	19.807	1.0	103	0.03#
13		Dieldrin	20.000	20.852	-4.3	107	0.03#
14		Endrin	20.000	19.532	2.3	101	0.03#
15		4,4'-DDD	20.000	19.968	0.2	105	0.02#
16		Endosulfan II	20.000	20.083	-0.4	105	0.03#
17		4,4'-DDT	20.000	19.563	2.2	105	0.02#
18		Endrin Aldehyde	20.000	20.636	-3.2	106	0.02#
19		Endosulfan Sulfate	20.000	20.663	-3.3	109	0.02#
20		Methoxychlor	20.000	19.899	0.5	103	0.02#
21		Endrin Ketone	20.000	20.763	-3.8	107	0.02#
22	S	Decachlorobiphenyl	20.000	20.542	-2.7	105	0.02#

Signal #2

1	S	2,4,5,6-Tetrachloro-M-Xyl	20.000	19.574	2.1	101	0.00
2		alpha-BHC	20.000	20.032	-0.2	102	0.00
3		gamma-BHC	20.000	19.856	0.7	101	0.00
4		beta-BHC	20.000	19.628	1.9	101	0.00
5		Heptachlor	20.000	20.295	-1.5	104	0.00
6		delta-BHC	20.000	19.603	2.0	101	0.00
7		Aldrin	20.000	19.843	0.8	101	0.00
8		Heptachlor Epoxide	20.000	19.844	0.8	101	0.00
9		gamma-Chlordane	20.000	19.648	1.8	102	0.00
10		alpha-Chlordane	20.000	19.664	1.7	101	0.00
11		Endosulfan I	20.000	19.722	1.4	101	0.00
12		4,4'-DDE	20.000	19.572	2.1	101	0.00
13		Dieldrin	20.000	19.542	2.3	101	0.00
14		Endrin	20.000	17.879	10.6	95	0.00
15		4,4'-DDD	20.000	19.748	1.3	103	0.00
16		Endosulfan II	20.000	19.650	1.8	101	0.00
17		4,4'-DDT	20.000	18.117	9.4	96	0.00
18		Endrin Aldehyde	20.000	19.559	2.2	102	0.00
19		Endosulfan Sulfate	20.000	18.843	5.8	99	0.00
20		Methoxychlor	20.000	17.627	11.9	94	0.00
21		Endrin Ketone	20.000	19.669	1.7	102	0.00
22	S	Decachlorobiphenyl	20.000	19.693	1.5	101	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data File : C:\HPCHEM\1\DATA\051303\9G23241.D\ECD1A.CH Vial: 2
Acq On : 13 May 2003 10:21 Operator: HV
Sample : WG140524-01 PEST CCV 20 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\051303\9G23241.D\ECD2B.CH Vial: 2
Acq On : 13 May 2003 10:46 Operator: HV
Sample : WG140524-01 PEST CCV 20 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 13 11:31 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION May 9, 2003 @ 2015
Last Update : Sat May 10 14:30:20 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
System Monitoring Compounds						
1) S 2,4,5,6-Tetrachl	8.11f	8.36	1832.1E6	1125.2E6	19.568	19.574
Spiked Amount 20.000 Range 30 - 132 Recovery =					97.84%	97.87%
22) S Decachlorobiphen	15.60f	16.30	1160.7E6	804.7E6	20.542	19.693
Spiked Amount 20.000 Range 36 - 144 Recovery =					102.71%	98.47%
Target Compounds						
2) alpha-BHC	9.14f	9.50	2645.4E6	1684.7E6	19.611	20.032
3) gamma-BHC	9.69f	10.12	2481.7E6	1485.4E6	19.489	19.856
4) beta-BHC	9.82f	10.25	1077.6E6	653.2E6	19.536	19.628
5) Heptachlor	10.49f	10.86	2436.2E6	1256.2E6	19.921	20.295
6) delta-BHC	10.12f	10.74	2374.5E6	1412.6E6	19.388	19.603
7) Aldrin	10.96f	11.38	2262.5E6	1293.2E6	19.895	19.843
8) Heptachlor Epoxi	11.86f	12.25	2064.9E6	1183.9E6	20.303	19.844
9) gamma-Chlordane	12.05f	12.53	2052.1E6	1155.3E6	19.886	19.648
10) alpha-Chlordane	12.24f	12.73	1870.8E6	1054.2E6	21.077	19.664
11) Endosulfan I	12.42f	12.82	1949.5E6	1037.6E6	20.299	19.722
12) 4,4'-DDE	12.35f	12.93	1826.0E6	1010.0E6	19.807	19.572
13) Dieldrin	12.75f	13.18	1880.4E6	1091.9E6	20.852	19.542
14) Endrin	13.04f	13.55	1639.4E6	769.1E6	19.532	17.879
15) 4,4'-DDD	13.12f	13.64	1425.2E6	806.8E6	19.968	19.748
16) Endosulfan II	13.31f	13.79	1567.2E6	885.6E6	20.083	19.650
17) 4,4'-DDT	13.46f	13.99	1498.5E6	720.9E6	19.563	18.117
18) Endrin Aldehyde	13.78f	14.15	1170.2E6	692.8E6	20.636	19.559
19) Endosulfan Sulfa	14.24f	14.44	1147.5E6	701.3E6	20.663	18.843
20) Methoxychlor	14.00f	14.67	679.8E6	344.8E6	19.899	17.627
21) Endrin Ketone	14.54f	14.99	1444.3E6	907.8E6	20.763	19.669

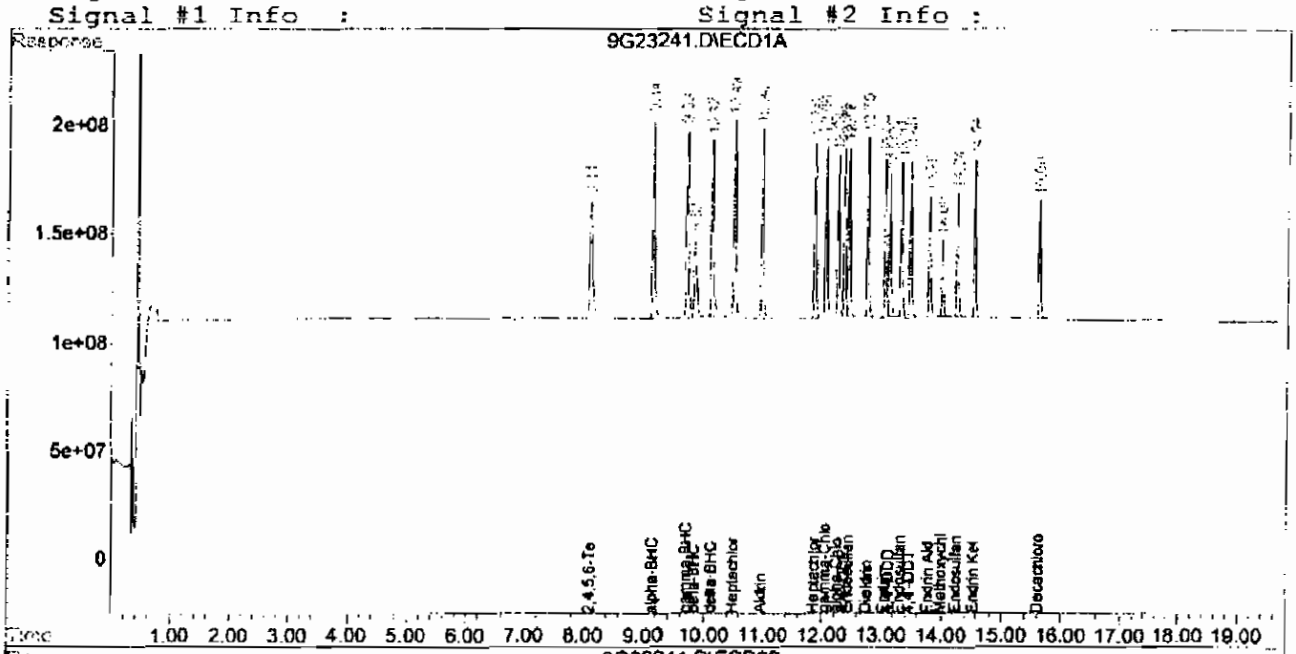
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

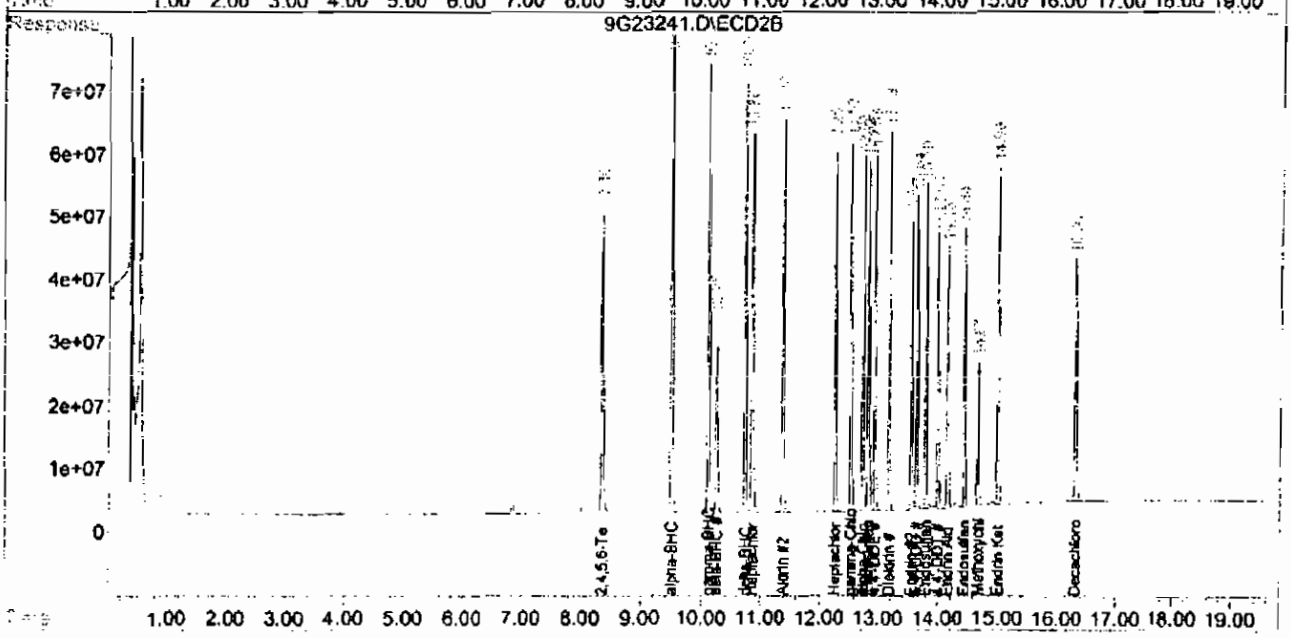
Data File : C:\HPCHEM\1\DATA\051303\9G23241.D\ECD1A.CH Vial: 2
Acq On : 13 May 2003 10:21 Operator: HV
Sample : WG140524-01 PEST CCV 20 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\051303\9G23241.D\ECD2B.CH Vial: 2
Acq On : 13 May 2003 10:46 Operator: HV
Sample : WG140524-01 PEST CCV 20 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 13 11:31 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION May 9, 2003 @ 2015
Last Update : Sat May 10 14:30:20 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data File : C:\HPCHEM\1\DATA\051303\9G23242.D\ECD1A.CH Vial: 3
Acq On : 13 May 2003 10:46 Operator: HV
Sample : TOX CCV 500 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : .E

Data File : C:\HPCHEM\1\DATA\051303\9G23242.D\ECD2B.CH Vial: 3
Acq On : 13 May 2003 11:10 Operator: HV
Sample : TOX CCV 500 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title : CALIBRATION May 9, 2003
Last Update : Sat May 10 14:41:27 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	L1	Toxaphene-1	500.000	491.152	1.8	97	0.01
2	L1	Toxaphene-2	500.000	498.745	0.3	96	0.02
3	L1	Toxaphene-3	500.000	482.811	3.4	96	0.01
4	L1	Toxaphene-4	500.000	493.271	1.3	98	0.01
5	L1	Toxaphene-5	500.000	486.703	2.7	96	0.01
		Signal #2					
1	L1	Toxaphene-1	500.000	476.025	4.8	94	0.02
2	L1	Toxaphene-2	500.000	469.990	6.0	94	0.01
3	L1	Toxaphene-3	500.000	479.064	4.2	93	0.01
4	L1	Toxaphene-4	500.000	471.907	5.6	92	0.01
5	L1	Toxaphene-5	500.000	476.191	4.8	93	0.02

```
Data File : C:\HPCHEM\1\DATA\051303\9G23242.D\ECD1A.CH   Vial: 3
Acq On    : 13 May 2003  10:46                          Operator: HV
Sample    : TOX CCV 500 PPB                             Inst    : HP9
Misc      : SOS62-45                                    Multiplr: 1.00
IntFile   : .E

Data File : C:\HPCHEM\1\DATA\051303\9G23242.D\ECD2B.CH   Vial: 3
Acq On    : 13 May 2003  11:10                          Operator: HV
Sample    : TOX CCV 500 PPB                             Inst    : HP9
Misc      : SOS62-45                                    Multiplr: 1.00
IntFile   : EVENTS.E

Method        : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title         : CALIBRATION May 9, 2003
Last Update   : Sat May 10 14:41:27 2003
Response via  : Multiple Level Calibration

Min. RRF      :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev  :  15%     Max. Rel. Area : 150%

    Compound                          Amount  Calc.      %Dev  Area% Dev(min)
-----------------------------------------------------------------------------


Signal #2
```

Data File : C:\HPCHEM\1\DATA\051303\9G23242.D\ECD1A.CH Vial: 3
Acq On : 13 May 2003 10:46 Operator: HV
Sample : TOX CCV 500 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : .E

Data File : C:\HPCHEM\1\DATA\051303\9G23242.D\ECD2B.CH Vial: 3
Acq On : 13 May 2003 11:10 Operator: HV
Sample : TOX CCV 500 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 13 11:32 2003 Quant Results File: TOX.RES

Quant Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title : CALIBRATION May 9, 2003
Last Update : Sat May 10 14:41:27 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	Target Compounds						
1)	L1 Toxaphene-1	13.77	13.15	733.7E6	242.4E6	491.152	476.025
2)	L1 Toxaphene-2	14.16	13.89	744.3E6	652.3E6	498.745	469.990
3)	L1 Toxaphene-3	14.22	14.16	374.4E6	442.0E6	482.811	479.064
4)	L1 Toxaphene-4	14.54	14.74	628.4E6	313.2E6	493.271	471.907
5)	L1 Toxaphene-5	14.69	15.09	267.9E6	302.3E6	486.703	476.191
	Sum Toxaphene-1			2748.6E6	1952.3E6	2452.682	2373.176
	Average Toxaphene-1					490.536	474.635

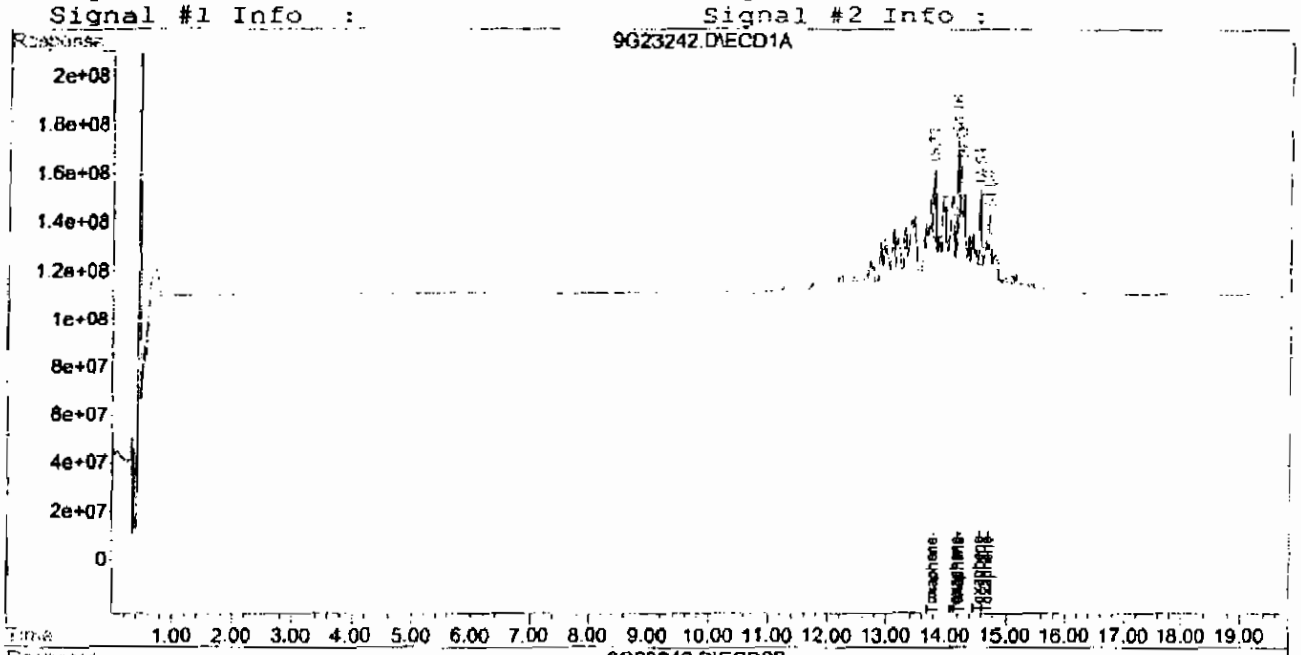
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

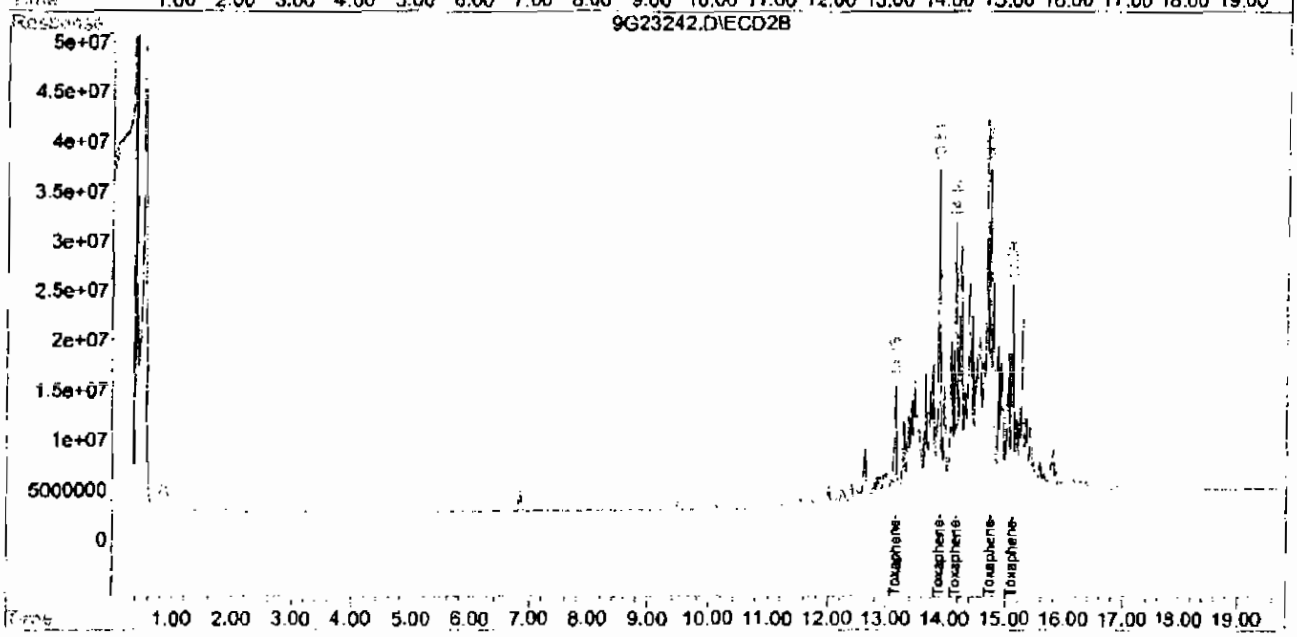
Data File : C:\HPCHEM\1\DATA\051303\9G23242.D\ECD1A.CH Vial: 3
Acq On : 13 May 2003 10:46 Operator: HV
Sample : TOX CCV 500 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : .E

Data File : C:\HPCHEM\1\DATA\051303\9G23242.D\ECD2B.CH Vial: 3
Acq On : 13 May 2003 11:10 Operator: HV
Sample : TOX CCV 500 PPB Inst : HP9
Misc : SOS62-45 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 13 11:32 2003 Quant Results File: TOX.RES

Quant Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title : CALIBRATION May 9, 2003
Last Update : Sat May 10 14:41:27 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data File : C:\HPCHEM\1\DATA\051303\9G23254.D\ECD1A.CH Vial: 15
Acq On : 13 May 2003 16:11 Operator: HV
Sample : WG140524-02 PEST CCV 50 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autointl.e

Data File : C:\HPCHEM\1\DATA\051303\9G23254.D\ECD2B.CH Vial: 15
Acq On : 13 May 2003 16:35 Operator: HV
Sample : WG140524-02 PEST CCV 50 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION May 9, 2003 @ 2015
Last Update : Sat May 10 14:30:20 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	S	2,4,5,6-Tetrachloro-M-Xylen	50.000	49.834	0.3	97	0.00
2		alpha-BHC	50.000	51.161	-2.3	97	0.00
3		gamma-BHC	50.000	49.722	0.6	98	0.00
4		beta-BHC	50.000	49.276	1.4	98	0.00
5		Heptachlor	50.000	49.664	0.7	97	0.00
6		delta-BHC	50.000	52.411	-4.8	97	0.00
7		Aldrin	50.000	49.864	0.3	97	0.00
8		Heptachlor Epoxide	50.000	49.164	1.7	97	0.00
9		gamma-Chlordane	50.000	49.339	1.3	97	0.00
10		alpha-Chlordane	50.000	52.752	-5.5	102	0.00
11		Endosulfan I	50.000	48.835	2.3	96	0.00
12		4,4'-DDE	50.000	50.136	-0.3	97	0.00
13		Dieldrin	50.000	51.519	-3.0	99	0.00
14		Endrin	50.000	47.754	4.5	93	0.00
15		4,4'-DDD	50.000	49.399	1.2	95	0.00
16		Endosulfan II	50.000	47.895	4.2	96	0.00
17		4,4'-DDT	50.000	48.430	3.1	96	0.00
18		Endrin Aldehyde	50.000	49.700	0.6	99	0.00
19		Endosulfan Sulfate	50.000	50.605	-1.2	101	0.00
20		Methoxychlor	50.000	47.771	4.5	96	0.00
21		Endrin Ketone	50.000	49.616	0.8	99	0.00
22	S	Decachlorobiphenyl	50.000	47.117	5.8	97	0.00

Signal #2

1	S	2,4,5,6-Tetrachloro-M-Xyl	50.000	51.214	-2.4	102	0.00
2		alpha-BHC	50.000	53.348	-6.7	103	0.00
3		gamma-BHC	50.000	52.580	-5.2	102	0.00
4		beta-BHC	50.000	49.981	0.0	102	0.00
5		Heptachlor	50.000	52.198	-4.4	102	0.00
6		delta-BHC	50.000	53.176	-6.4	102	0.00
7		Aldrin	50.000	52.624	-5.2	102	0.00
8		Heptachlor Epoxide	50.000	51.510	-3.0	102	0.00
9		gamma-Chlordane	50.000	51.364	-2.7	102	0.00
10		alpha-Chlordane	50.000	51.136	-2.3	102	0.00
11		Endosulfan I	50.000	51.258	-2.5	102	0.00
12		4,4'-DDE	50.000	52.432	-4.9	102	0.00
13		Dieldrin	50.000	52.171	-4.3	101	0.00
14		Endrin	50.000	49.349	1.3	95	0.00
15		4,4'-DDD	50.000	52.162	-4.3	101	0.00
16		Endosulfan II	50.000	51.385	-2.8	100	0.00
17		4,4'-DDT	50.000	52.042	-4.1	100	0.00
18		Endrin Aldehyde	50.000	51.074	-2.1	103	0.00
19		Endosulfan Sulfate	50.000	50.362	-0.7	100	0.00
20		Methoxychlor	50.000	48.734	2.5	98	0.00
21		Endrin Ketone	50.000	51.180	-2.4	101	0.00
22	S	Decachlorobiphenyl	50.000	47.407	5.2	99	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data File : C:\HPCHEM\1\DATA\051303\9G23254.D\ECD1A.CH Vial: 15
Acq On : 13 May 2003 16:11 Operator: HV
Sample : WG140524-02 PEST CCV 50 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\051303\9G23254.D\ECD2B.CH Vial: 15
Acq On : 13 May 2003 16:35 Operator: HV
Sample : WG140524-02 PEST CCV 50 PPB Inst : HP9
Misc : 1,1 SOS63-32 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 13 17:44 2003 Quant Results File: 8081.RES

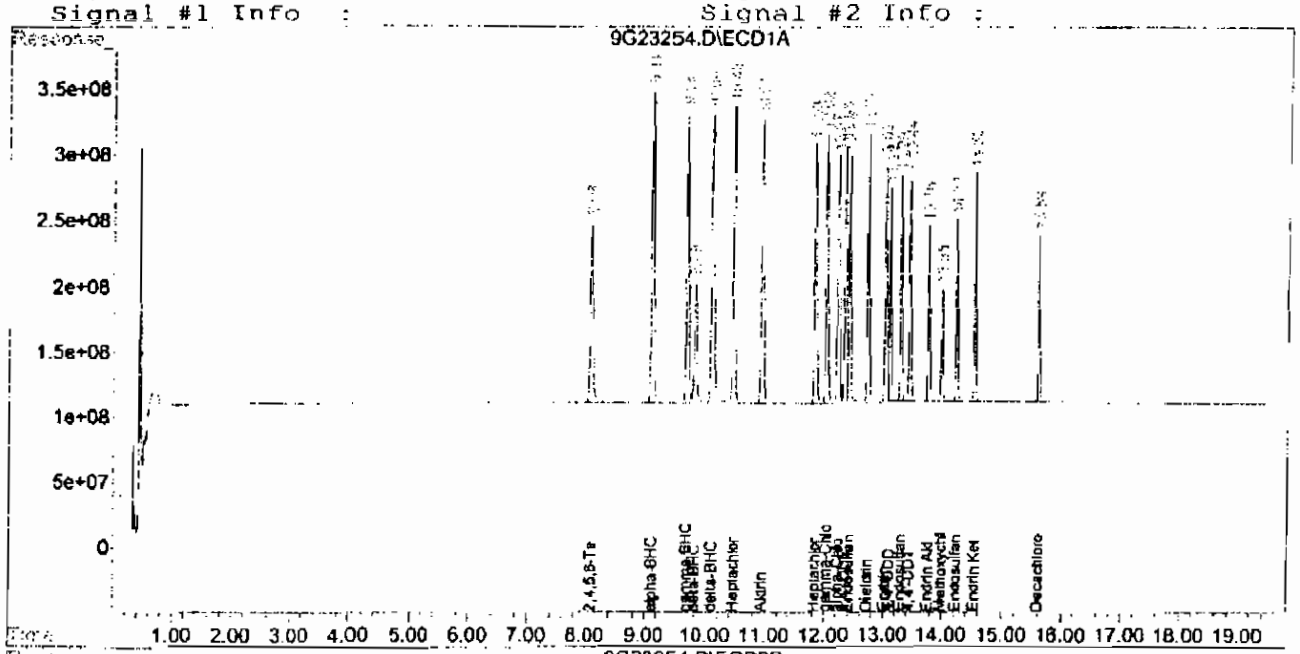
Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION May 9, 2003 @ 2015
Last Update : Sat May 10 14:30:20 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

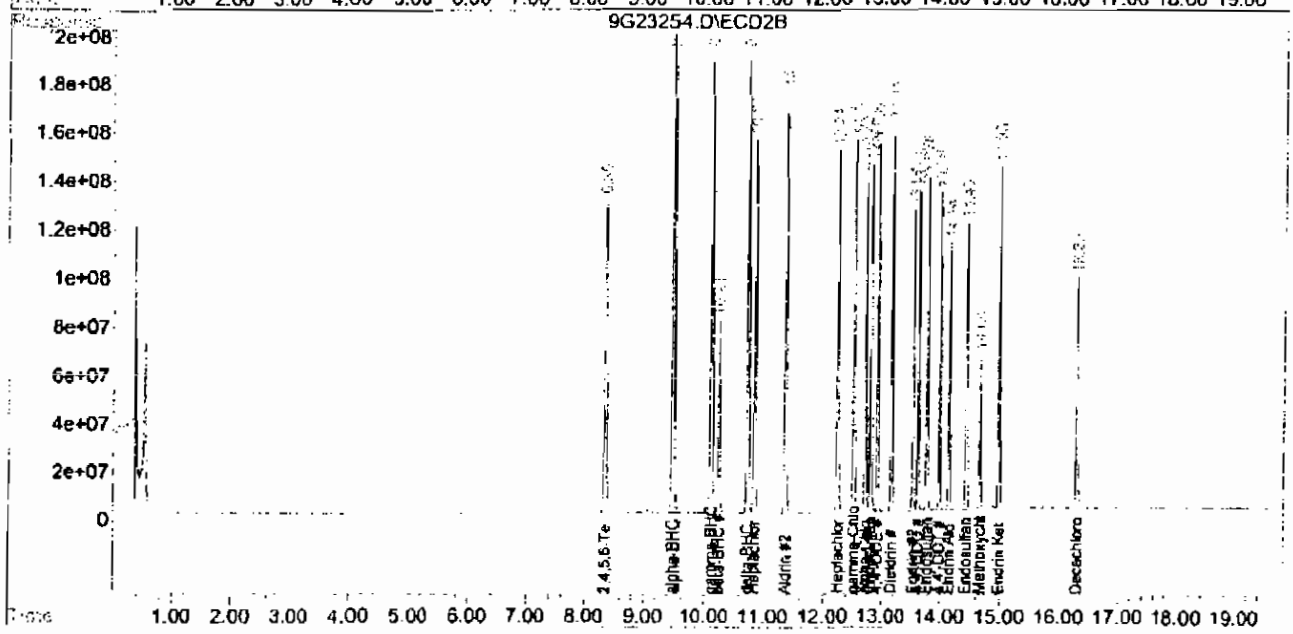
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
System Monitoring Compounds						
1) S 2,4,5,6-Tetrachl	8.08	8.35	4665.8E6	2944.1E6	49.834	51.214
Spiked Amount 20.000 Range 30 - 132 Recovery =					249.17%#	256.07%#
22) S Decachlorobiphen	15.59	16.29	2662.2E6	1937.1E6	47.117	47.407
Spiked Amount 20.000 Range 36 - 144 Recovery =					235.58%#	237.03%#
Target Compounds						
2) alpha-BHC	9.11	9.49	6901.2E6	4486.6E6	51.161	53.348
3) gamma-BHC	9.66	10.10	6331.5E6	3933.4E6	49.722	52.580
4) beta-BHC	9.80	10.24	2718.0E6	1663.3E6	49.276	49.981
5) Heptachlor	10.46	10.84	6073.6E6	3231.0E6	49.664	52.198
6) delta-BHC	10.09	10.73	6419.0E6	3831.8E6	52.411	53.176
7) Aldrin	10.94	11.36	5670.4E6	3429.5E6	49.864	52.624
8) Heptachlor Epoxi	11.83	12.24	5000.1E6	3073.1E6	49.164	51.510
9) gamma-Chlordane	12.02	12.52	5091.4E6	3020.3E6	49.339	51.364
10) alpha-Chlordane	12.21	12.72	4682.4E6	2741.5E6	52.752	51.136
11) Endosulfan I	12.40	12.81	4690.2E6	2696.8E6	48.835	51.258
12) 4,4'-DDE	12.33	12.92	4622.0E6	2705.7E6	50.136	52.432
13) Dieldrin	12.72	13.17	4645.8E6	2915.1E6	51.519	52.171
14) Endrin	13.02	13.54	4008.1E6	2122.9E6	47.754	49.349
15) 4,4'-DDD	13.10	13.63	3526.0E6	2131.2E6	49.399	52.162
16) Endosulfan II	13.29	13.78	3737.5E6	2315.8E6	47.895	51.385
17) 4,4'-DDT	13.44	13.98	3709.8E6	2070.8E6	48.430	52.042
18) Endrin Aldehyde	13.76	14.14	2818.2E6	1809.2E6	49.700	51.074
19) Endosulfan Sulfa	14.23	14.43	2810.3E6	1874.3E6	50.605	50.362
20) Methoxychlor	13.98	14.66	1631.9E6	953.2E6	47.771	48.734
21) Endrin Ketone	14.53	14.98	3451.3E6	2362.2E6	49.616	51.180

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

```
Data File : C:\HPCHEM\1\DATA\051303\9G23254.D\ECD1A.CH   Vial: 15
Acq On    : 13 May 2003  16:11                           Operator: HV
Sample    : WG140524-02 PEST CCV 50 PPB                  Inst    : HP9
Misc      : 1,1 SOS63-32                                 Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\051303\9G23254.D\ECD2B.CH   Vial: 15
Acq On    : 13 May 2003  16:35                           Operator: HV
Sample    : WG140524-02 PEST CCV 50 PPB                  Inst    : HP9
Misc      : 1,1 SOS63-32                                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 13 17:44 2003  Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title        : CALIBRATION May 9, 2003  @ 2015
Last Update  : Sat May 10 14:30:20 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj.      :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```





2.2.2.4 Raw QC Data

4,4'-DDT / ENDRIN BREAKDOWN

INSTRUMENT: HP 9

COLUMN: RTx-CLP (FRONT)

Data File Name: 9G23035.D

ENDRIN	ENDRIN KETONE	ENDRIN ALDEHYDE	ENDRIN BREAKDOWN
4633152424	0	0	0.00

4,4'-DDT	4,4'-DDE	4,4'-DDD	4,4'-DDT BREAKDOWN
3936465904	0	0	0.00

COLUMN: RTx-CLP II (REAR)

Data File Name: 9G23035.D

ENDRIN #2	ENDRIN KETONE #2	ENDRIN ALDEHYDE #2	ENDRIN #2 BREAKDOWN
2338990890	61562938	35972394	4.00

4,4'-DDT #2	4,4'-DDE #2	4,4'-DDD #2	4,4'-DDT #2 BREAKDOWN
1908584116	0	85122406	4.27

Data File : C:\HPCHEM\1\DATA\043003\9G23035.D\ECD1A.CH Vial: 1
Acq On : 30 Apr 2003 9:11 Operator: ECL
Sample : ENDRIN/DDT Inst : HP9
Misc : SOS64-06 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23035.D\ECD2B.CH Vial: 1
Acq On : 30 Apr 2003 9:36 Operator: ECL
Sample : ENDRIN/DDT Inst : HP9
Misc : SOS64-06 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Apr 30 10:06 2003 Quant Results File: 8081.RES

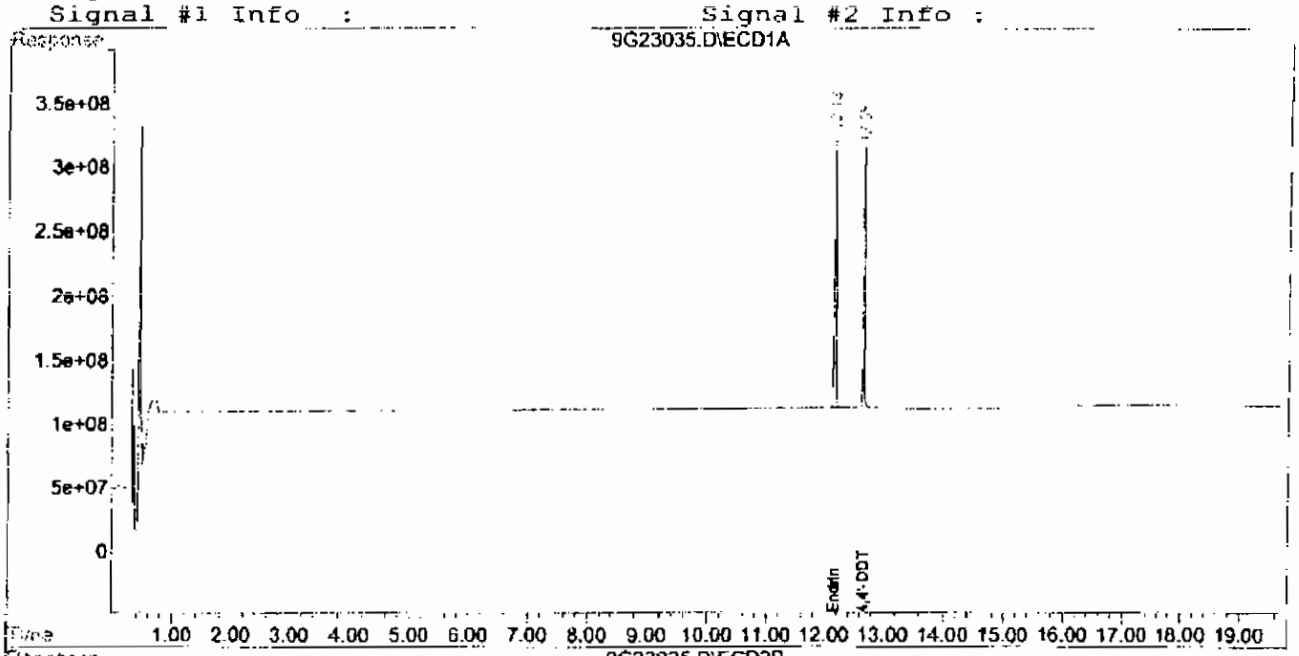
Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 24, 2003 @ 2101
Last Update : Wed Apr 30 10:06:43 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

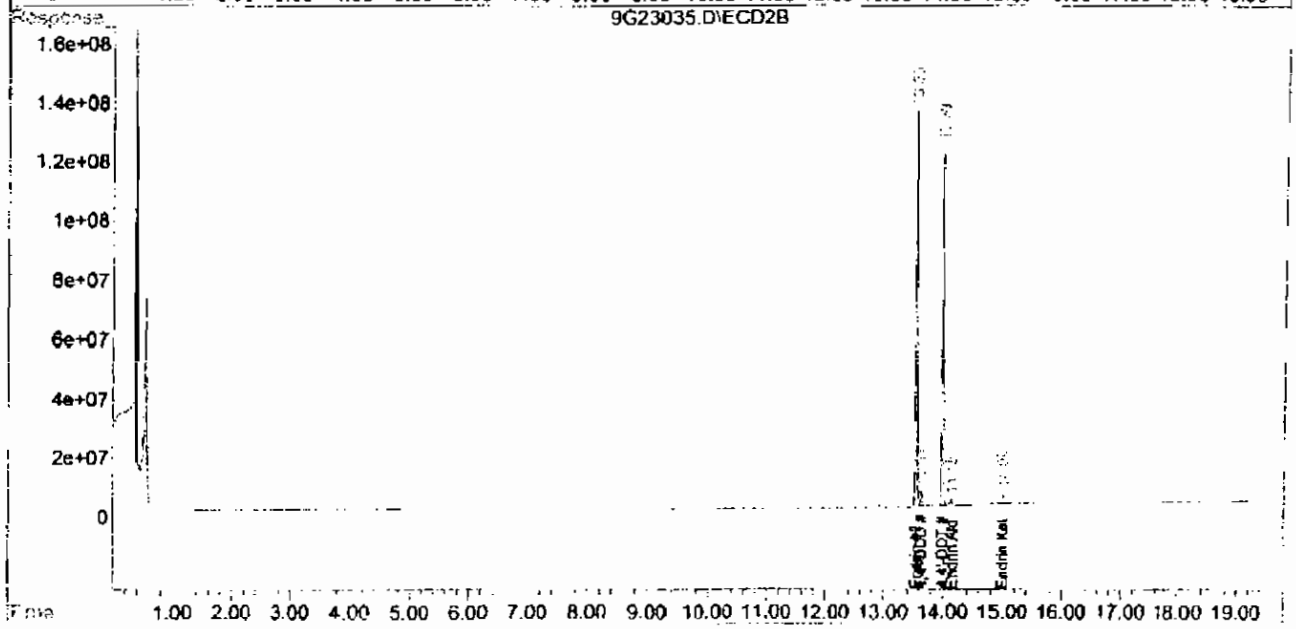
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	0.00	0.00	0	0	N.D.	N.D.
Spiked Amount	20.000	Range	30 - 132	Recovery	=	0.00%#	0.00%#
22) S	Decachlorobiphen	0.00	0.00	0	0	N.D.	N.D.
Spiked Amount	20.000	Range	36 - 144	Recovery	=	0.00%#	0.00%#
	Target Compounds						
2)	alpha-BHC	0.00	0.00	0	0	N.D.	N.D.
3)	gamma-BHC	0.00	0.00	0	0	N.D.	N.D.
4)	beta-BHC	0.00	0.00	0	0	N.D.	N.D.
5)	Heptachlor	0.00	0.00	0	0	N.D.	N.D.
6)	delta-BHC	0.00	0.00	0	0	N.D.	N.D.
7)	Aldrin	0.00	0.00	0	0	N.D.	N.D.
8)	Heptachlor Epoxi	0.00	0.00	0	0	N.D.	N.D.
9)	gamma-Chlordane	0.00	0.00	0	0	N.D.	N.D.
10)	alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.
11)	Endosulfan I	0.00	0.00	0	0	N.D.	N.D.
12)	4,4'-DDE	0.00	0.00	0	0	N.D.	N.D.
13)	Dieldrin	0.00	0.00	0	0	N.D.	N.D.
14)	Endrin	12.16	13.55	4633.2E6	2339.0E6	63.582	49.881
15)	4,4'-DDD	0.00	13.64	0	85122406	N.D.	2.038 #
16)	Endosulfan II	0.00	0.00	0	0	N.D.	N.D.
17)	4,4'-DDT	12.66	13.99	3936.5E6	1908.6E6	62.573	47.915
18)	Endrin Aldehyde	0.00	14.15	0	35972394	N.D.	1.061 #
19)	Endosulfan Sulfa	0.00	0.00	0	0	N.D.	N.D.
20)	Methoxychlor	0.00	0.00	0	0	N.D.	N.D.
21)	Endrin Ketone	0.00	14.98	0	61562938	N.D.	1.320 #

(f)=RT Delta > 1/2 Window (#)-Amounts differ by > 25% (m)=manual int.

```
Data File : C:\HPCHEM\1\DATA\043003\9G23035.D\ECD1A.CH   Vial: 1
Acq On    : 30 Apr 2003   9:11                           Operator: ECL
Sample    : ENDRIN/DDT                                   Inst    : HP9
Misc      : SOS64-06                                     Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23035.D\ECD2B.CH   Vial: 1
Acq On    : 30 Apr 2003   9:36                           Operator: ECL
Sample    : ENDRIN/DDT                                   Inst    : HP9
Misc      : SOS64-06                                     Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Apr 30 10:06 2003  Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title        : CALIBRATION April 24, 2003 @ 2101
Last Update  : Wed Apr 30 10:06:43 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj.      :
Signal #1 Phase  :                    Signal #2 Phase:
Signal #1 Info   :                    Signal #2 Info :
```





4,4'-DDT / ENDRIN BREAKDOWN

INSTRUMENT: HP 9

COLUMN: RTx-CLP (FRONT)

Data File Name: 9G23061.D

ENDRIN	ENDRIN KETONE	ENDRIN ALDEHYDE	ENDRIN BREAKDOWN
4336103356	0	0	0.00

4,4'-DDT	4,4'-DDE	4,4'-DDD	4,4'-DDT BREAKDOWN
3650449596	0	0	0.00

COLUMN: RTx-CLP II (REAR)

Data File Name: 9G23061.D

ENDRIN #2	ENDRIN KETONE #2	ENDRIN ALDEHYDE #2	ENDRIN #2 BREAKDOWN
2325868348	26663016	0	1.13

4,4'-DDT #2	4,4'-DDE #2	4,4'-DDD #2	4,4'-DDT #2 BREAKDOWN
1944716614	0	49098821	2.46

Data File : C:\HPCHEM\1\DATA\043003\9G23061.D\ECD1A.CH Vial: 27
Acq On : 30 Apr 2003 20:24 Operator: ECL
Sample : ENDRIN/DDT Inst : HP9
Misc : SOS64-06 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23061.D\ECD2B.CH Vial: 27
Acq On : 30 Apr 2003 20:48 Operator: ECL
Sample : ENDRIN/DDT Inst : HP9
Misc : SOS64-06 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 1 8:15 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Thu May 01 08:15:35 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1)	S 2,4,5,6-Tetrachl	0.00	0.00	0	0	N.D.	N.D.
	Spiked Amount 20.000 Range 30 - 132 Recovery =					0.00%#	0.00%#
22)	S Decachlorobiphen	0.00	0.00	0	0	N.D.	N.D.
	Spiked Amount 20.000 Range 36 - 144 Recovery =					0.00%#	0.00%#
	Target Compounds						
2)	alpha-BHC	0.00	0.00	0	0	N.D.	N.D.
3)	gamma-BHC	0.00	0.00	0	0	N.D.	N.D.
4)	beta-BHC	0.00	0.00	0	0	N.D.	N.D.
5)	Heptachlor	0.00	0.00	0	0	N.D.	N.D.
6)	delta-BHC	0.00	0.00	0	0	N.D.	N.D.
7)	Aldrin	0.00	0.00	0	0	N.D.	N.D.
8)	Heptachlor Epoxi	0.00	0.00	0	0	N.D.	N.D.
9)	gamma-Chlordane	0.00	0.00	0	0	N.D.	N.D.
10)	alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.
11)	Endosulfan I	0.00	0.00	0	0	N.D.	N.D.
12)	4,4'-DDE	0.00	0.00	0	0	N.D.	N.D.
13)	Dieldrin	0.00	0.00	0	0	N.D.	N.D.
14)	Endrin	12.17	13.55	4336.1E6	2325.9E6	50.872	50.091
15)	4,4'-DDD	0.00	13.63	0	49098821	N.D.	1.190 #
16)	Endosulfan II	0.00	0.00	0	0	N.D.	N.D.
17)	4,4'-DDT	12.67	13.99	3650.4E6	1944.7E6	48.660	48.403
18)	Endrin Aldehyde	0.00	0.00	0	0	N.D.	N.D.
19)	Endosulfan Sulfa	0.00	0.00	0	0	N.D.	N.D.
20)	Methoxychlor	0.00	0.00	0	0	N.D.	N.D.
21)	Endrin Ketone	0.00	14.98	0	26663016	N.D.	0.585 #

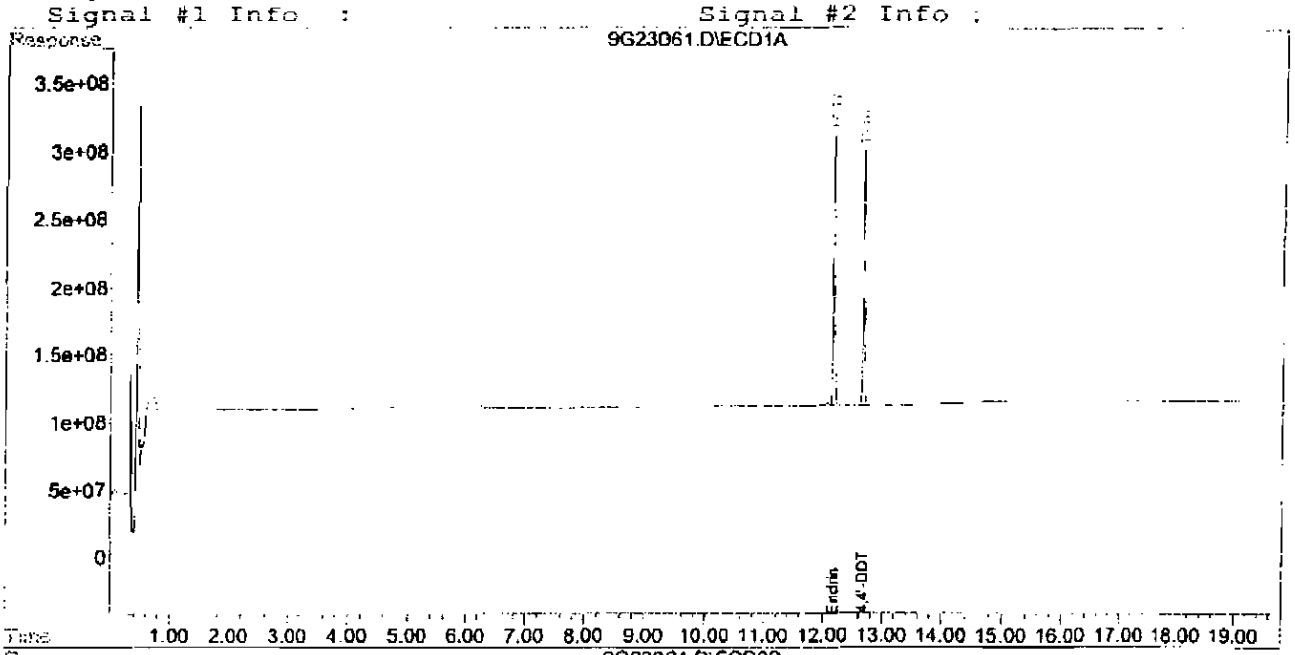
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

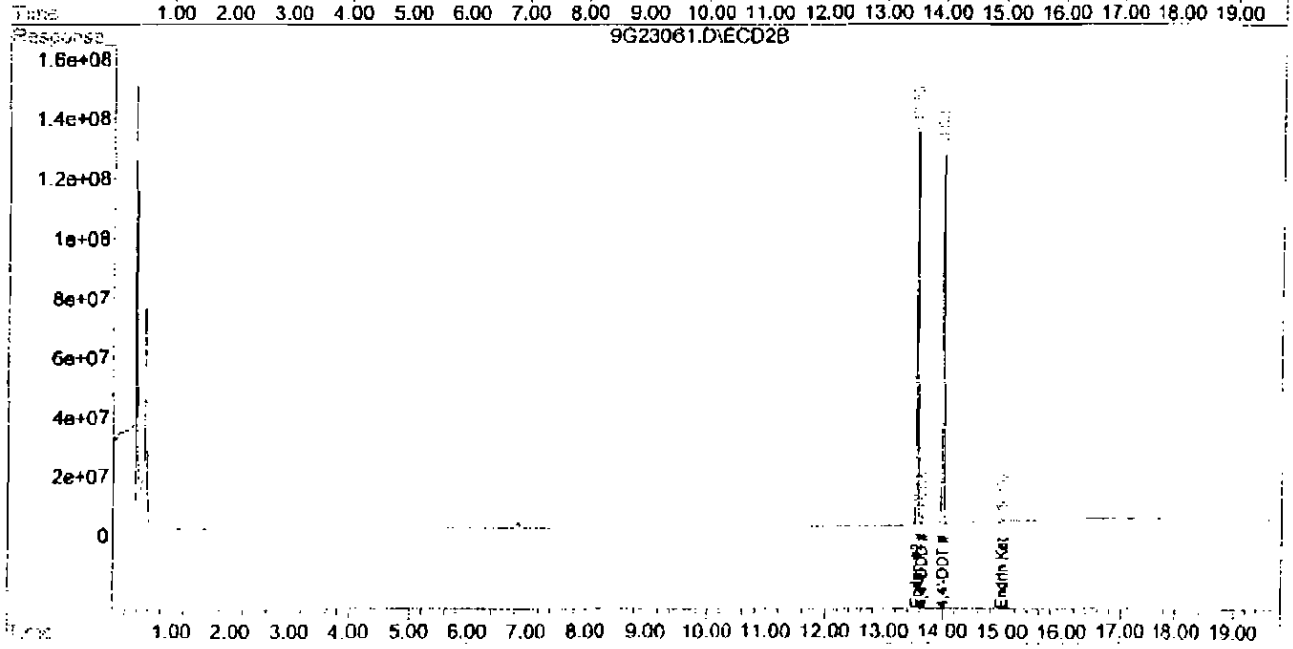
Data File : C:\HPCHEM\1\DATA\043003\9G23061.D\ECD1A.CH Vial: 27
Acq On : 30 Apr 2003 20:24 Operator: ECL
Sample : ENDRIN/DDT Inst : HP9
Misc : SOS64-06 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23061.D\ECD2B.CH Vial: 27
Acq On : 30 Apr 2003 20:48 Operator: ECL
Sample : ENDRIN/DDT Inst : HP9
Misc : SOS64-06 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 1 8:15 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Thu May 01 08:15:35 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





4,4'-DDT / ENDRIN BREAKDOWN

INSTRUMENT: HP 9

COLUMN: RTx-CLP (FRONT)

Data File Name: 9G23086.D

ENDRIN	ENDRIN KETONE	ENDRIN ALDEHYDE	ENDRIN BREAKDOWN
4423317768	0	0	0.00

4,4'-DDT	4,4'-DDE	4,4'-DDD	4,4'-DDT BREAKDOWN
3736655651	0	0	0.00

COLUMN: RTx-CLP II (REAR)

Data File Name: 9G23086.D

ENDRIN #2	ENDRIN KETONE #2	ENDRIN ALDEHYDE #2	ENDRIN #2 BREAKDOWN
2276985835	32307102	0	1.40

4,4'-DDT #2	4,4'-DDE #2	4,4'-DDD #2	4,4'-DDT #2 BREAKDOWN
1943387993	0	44069355	2.22

Data File : C:\HPCHEM\1\DATA\043003\9G23086.D\ECD1A.CH Vial: 52
Acq On : 1 May 2003 6:31 Operator: ECL
Sample : ENDRIN/DDT Inst : HP9
Misc : SOS64-06 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23086.D\ECD2B.CH Vial: 52
Acq On : 1 May 2003 6:56 Operator: ECL
Sample : ENDRIN/DDT Inst : HP9
Misc : SOS64-06 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 1 8:20 2003 Quant Results File: 8081.RES

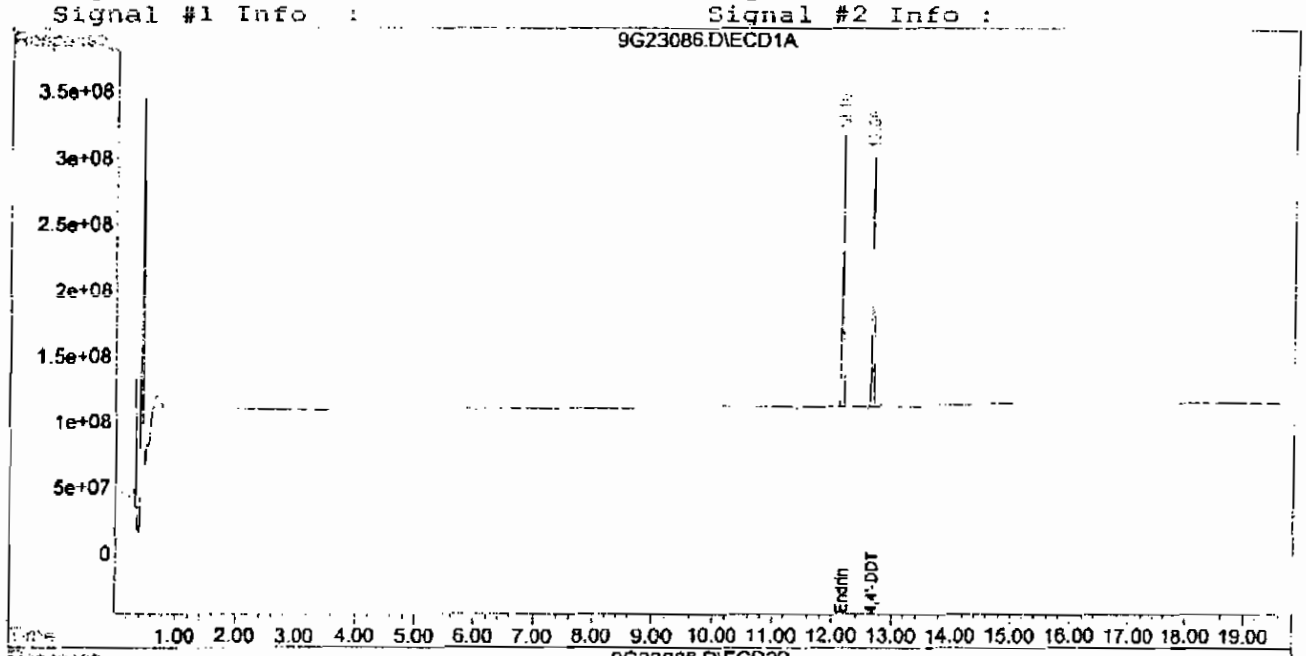
Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Thu May 01 08:20:11 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

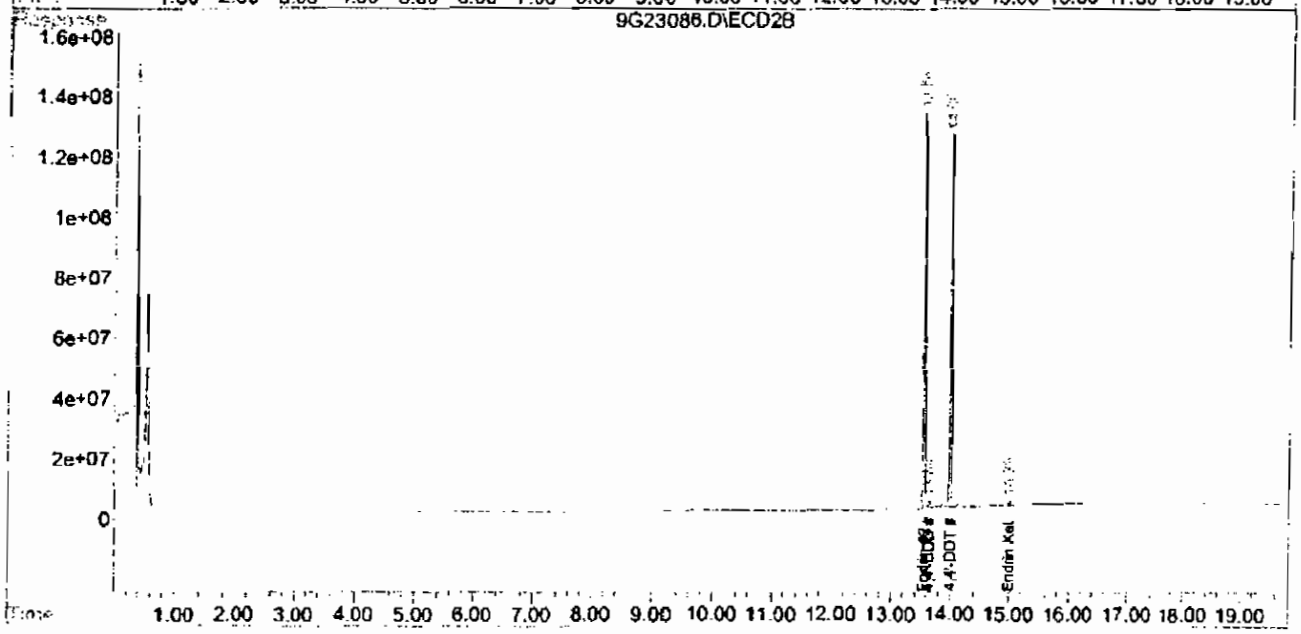
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1)	S 2,4,5,6-Tetrachl	0.00	0.00	0	0	N.D.	N.D.
	Spiked Amount 20.000	Range	30 - 132	Recovery	=	0.00%#	0.00%#
22)	S Decachlorobiphen	0.00	0.00	0	0	N.D.	N.D.
	Spiked Amount 20.000	Range	36 - 144	Recovery	=	0.00%#	0.00%#
	Target Compounds						
2)	alpha-BHC	0.00	0.00	0	0	N.D.	N.D.
3)	gamma-BHC	0.00	0.00	0	0	N.D.	N.D.
4)	beta-BHC	0.00	0.00	0	0	N.D.	N.D.
5)	Heptachlor	0.00	0.00	0	0	N.D.	N.D.
6)	delta-BHC	0.00	0.00	0	0	N.D.	N.D.
7)	Aldrin	0.00	0.00	0	0	N.D.	N.D.
8)	Heptachlor Epoxi	0.00	0.00	0	0	N.D.	N.D.
9)	gamma-Chlordane	0.00	0.00	0	0	N.D.	N.D.
10)	alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.
11)	Endosulfan I	0.00	0.00	0	0	N.D.	N.D.
12)	4,4'-DDE	0.00	0.00	0	0	N.D.	N.D.
13)	Dieldrin	0.00	0.00	0	0	N.D.	N.D.
14)	Endrin	12.16	13.56	4423.3E6	2277.0E6	51.896	49.038
15)	4,4'-DDD	0.00	13.64	0	44069355	N.D.	1.068 #
16)	Endosulfan II	0.00	0.00	0	0	N.D.	N.D.
17)	4,4'-DDT	12.66	14.00	3736.7E6	1943.4E6	49.810	48.370
18)	Endrin Aldehyde	0.00	0.00	0	0	N.D.	N.D.
19)	Endosulfan Sulfa	0.00	0.00	0	0	N.D.	N.D.
20)	Methoxychlor	0.00	0.00	0	0	N.D.	N.D.
21)	Endrin Ketone	0.00	14.99	0	32307102	N.D.	0.709 #

(F)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

```
Data File : C:\HPCHEM\1\DATA\043003\9G23086.D\ECD1A.CH    Vial: 52
Acq On    :  1 May 2003    6:31                           Operator: ECL
Sample    : ENDRIN/DDT                                    Inst    : HP9
Misc      : SOS64-06                                      Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23086.D\ECD2B.CH    Vial: 52
Acq On    :  1 May 2003    6:56                           Operator: ECL
Sample    : ENDRIN/DDT                                    Inst    : HP9
Misc      : SOS64-06                                      Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May  1  8:20 2003  Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title        : CALIBRATION April 30, 2003 @ 1557
Last Update  : Thu May 01 08:20:11 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj.      :
Signal #1 Phase  :                    Signal #2 Phase:
Signal #1 Info   :                    Signal #2 Info :
```





4,4'-DDT / ENDRIN BREAKDOWN

INSTRUMENT: HP 9

COLUMN: RTx-CLP (FRONT)

Data File Name: 9G23099.D

ENDRIN	ENDRIN KETONE	ENDRIN ALDEHYDE	ENDRIN BREAKDOWN
4255593656	0	0	0.00

4,4'-DDT	4,4'-DDE	4,4'-DDD	4,4'-DDT BREAKDOWN
3631386153	0	0	0.00

COLUMN: RTx-CLP II (REAR)

Data File Name: 9G23099.D

ENDRIN #2	ENDRIN KETONE #2	ENDRIN ALDEHYDE #2	ENDRIN #2 BREAKDOWN
2260471768	0	0	0.00

4,4'-DDT #2	4,4'-DDE #2	4,4'-DDD #2	4,4'-DDT #2 BREAKDOWN
1940178988	0	0	0.00

Data File : C:\HPCHEM\1\DATA\043003\9G23099.D\ECD1A.CH Vial: 65
Acq On : 1 May 2003 11:47 Operator: ECL
Sample : ENDRIN/DDT Inst : HP9
Misc : SOS64-06 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23099.D\ECD2B.CH Vial: 65
Acq On : 1 May 2003 12:12 Operator: ECL
Sample : ENDRIN/DDT Inst : HP9
Misc : SOS64-06 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 1 14:02 2003 Quant Results File: 8081.RES

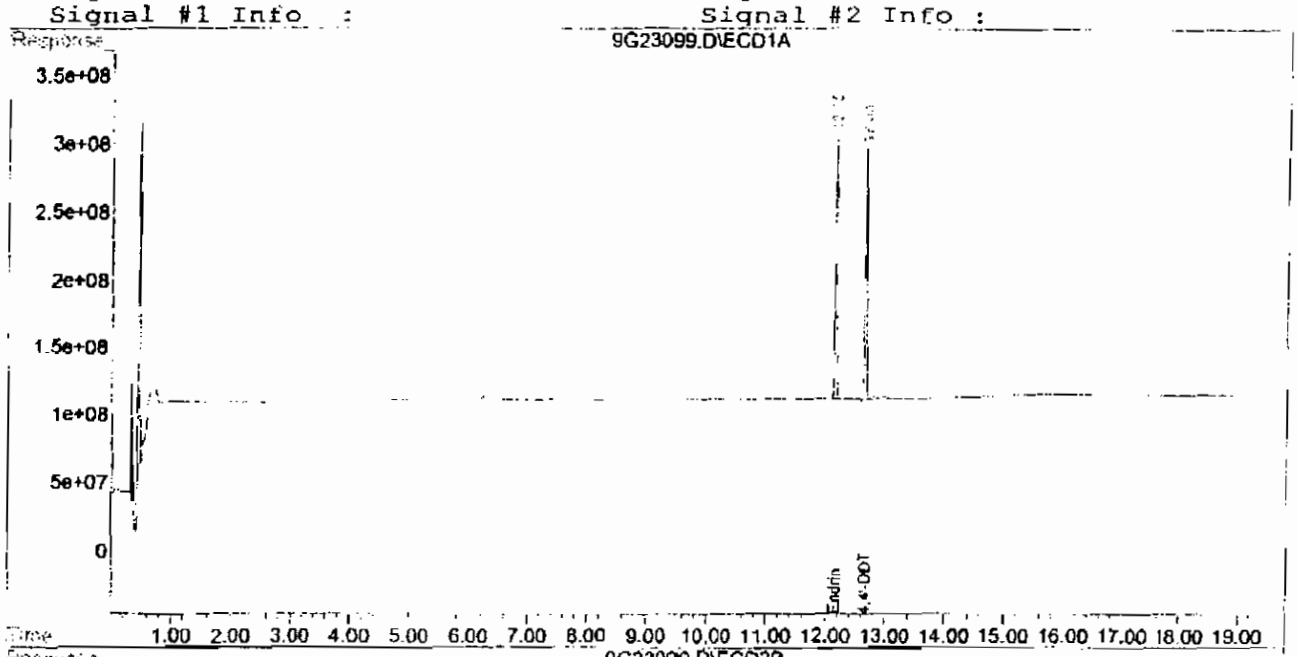
Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Thu May 01 08:24:58 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

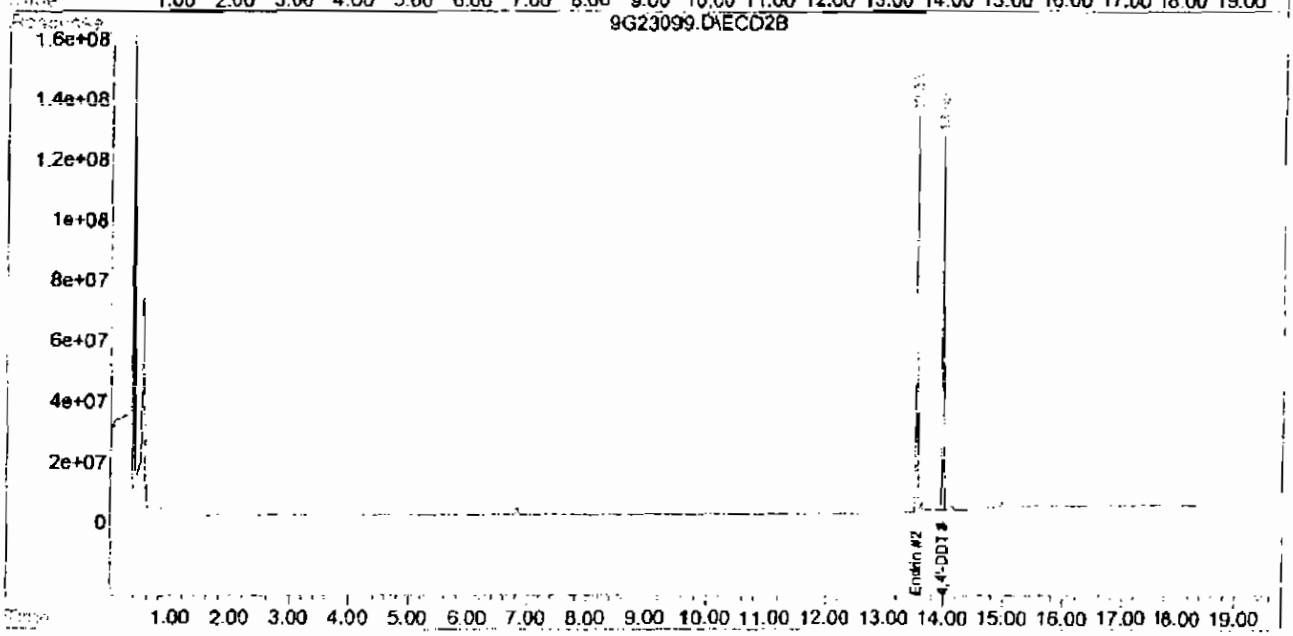
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
System Monitoring Compounds						
1) S 2,4,5,6-Tetrachl	0.00	0.00	0	0	N.D.	N.D.
Spiked Amount 20.000 Range 30 - 132 Recovery =					0.00%#	0.00%#
22) S Decachlorobiphen	0.00	0.00	0	0	N.D.	N.D.
Spiked Amount 20.000 Range 36 - 144 Recovery =					0.00%#	0.00%#
Target Compounds						
2) alpha-BHC	0.00	0.00	0	0	N.D.	N.D.
3) gamma-BHC	0.00	0.00	0	0	N.D.	N.D.
4) beta-BHC	0.00	0.00	0	0	N.D.	N.D.
5) Heptachlor	0.00	0.00	0	0	N.D.	N.D.
6) delta-BHC	0.00	0.00	0	0	N.D.	N.D.
7) Aldrin	0.00	0.00	0	0	N.D.	N.D.
8) Heptachlor Epoxi	0.00	0.00	0	0	N.D.	N.D.
9) gamma-Chlordane	0.00	0.00	0	0	N.D.	N.D.
10) alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.
11) Endosulfan I	0.00	0.00	0	0	N.D.	N.D.
12) 4,4'-DDE	0.00	0.00	0	0	N.D.	N.D.
13) Dieldrin	0.00	0.00	0	0	N.D.	N.D.
14) Endrin	12.15	13.55	4255.6E6	2260.5E6	49.928	48.683
15) 4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.
16) Endosulfan II	0.00	0.00	0	0	N.D.	N.D.
17) 4,4'-DDT	12.65	13.99	3631.4E6	1940.2E6	48.406	48.290
18) Endrin Aldehyde	0.00	0.00	0	0	N.D.	N.D.
19) Endosulfan Sulfa	0.00	0.00	0	0	N.D.	N.D.
20) Methoxychlor	0.00	0.00	0	0	N.D.	N.D.
21) Endrin Ketone	0.00	0.00	0	0	N.D.	N.D.

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

```
Data File : C:\HPCHEM\1\DATA\043003\9G23099.D\ECD1A.CH   Vial: 65
Acq On    :  1 May 2003  11:47                           Operator: ECL
Sample    : ENDRIN/DDT                                   Inst    : HP9
Misc      : SOS64-06                                     Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23099.D\ECD2B.CH   Vial: 65
Acq On    :  1 May 2003  12:12                           Operator: ECL
Sample    : ENDRIN/DDT                                   Inst    : HP9
Misc      : SOS64-06                                     Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May  1 14:02 2003  Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title        : CALIBRATION April 30, 2003 @ 1557
Last Update  : Thu May 01 08:24:58 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```





4,4'-DDT / ENDRIN BREAKDOWN

INSTRUMENT: HP 9

COLUMN: RTx-CLP (FRONT)

Data File Name: 9G23240.D

ENDRIN	ENDRIN KETONE	ENDRIN ALDEHYDE	ENDRIN BREAKDOWN
4539890304	0	0	0.00

4,4'-DDT	4,4'-DDE	4,4'-DDD	4,4'-DDT BREAKDOWN
4104815767	0	0	0.00

COLUMN: RTx-CLP II (REAR)

Data File Name: 9G23240.D

ENDRIN #2	ENDRIN KETONE #2	ENDRIN ALDEHYDE #2	ENDRIN #2 BREAKDOWN
2130379729	132676710	123683051	10.74

4,4'-DDT #2	4,4'-DDE #2	4,4'-DDD #2	4,4'-DDT #2 BREAKDOWN
1859151271	0	87547560	4.50

Data File : C:\HPCHEM\1\DATA\051303\9G23240.D\ECD1A.CH Vial: 1
Acq On : 13 May 2003 9:57 Operator: HV
Sample : ENDRIN/DDT Inst : HP9
Misc : SOS64-06 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\051303\9G23240.D\ECD2B.CH Vial: 1
Acq On : 13 May 2003 10:21 Operator: HV
Sample : ENDRIN/DDT Inst : HP9
Misc : SOS64-06 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 13 10:49 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION May 9, 2003 @ 2015
Last Update : Sat May 10 14:30:20 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L	
	System Monitoring Compounds							
1)	S 2,4,5,6-Tetrachl	0.00	0.00	0	0	N.D.	N.D.	
	Spiked Amount 20.000 Range 30 - 132 Recovery =					0.00%#	0.00%#	
22)	S Decachlorobiphen	0.00	0.00	0	0	N.D.	N.D.	
	Spiked Amount 20.000 Range 36 - 144 Recovery =					0.00%#	0.00%#	
	Target Compounds							
2)	alpha-BHC	0.00	0.00	0	0	N.D.	N.D.	
3)	gamma-BHC	0.00	0.00	0	0	N.D.	N.D.	
4)	beta-BHC	0.00	0.00	0	0	N.D.	N.D.	
5)	Heptachlor	0.00	0.00	0	0	N.D.	N.D.	
6)	delta-BHC	0.00	0.00	0	0	N.D.	N.D.	
7)	Aldrin	0.00	0.00	0	0	N.D.	N.D.	
8)	Heptachlor Epoxi	0.00	0.00	0	0	N.D.	N.D.	
9)	gamma-Chlordane	0.00	0.00	0	0	N.D.	N.D.	
10)	alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.	
11)	Endosulfan I	0.00	0.00	0	0	N.D.	N.D.	
12)	4,4'-DDE	0.00	0.00	0	0	N.D.	N.D.	
13)	Dieldrin	0.00	0.00	0	0	N.D.	N.D.	
14)	Endrin	13.04f	13.55	4539.9E6	2130.4E6	54.089	49.523	
15)	4,4'-DDD	0.00	13.64	0	87547560	N.D.	2.143	#
16)	Endosulfan II	0.00	0.00	0	0	N.D.	N.D.	
17)	4,4'-DDT	13.46f	13.99	4104.8E6	1859.2E6	53.588	46.722	
18)	Endrin Aldehyde	0.00	14.15	0	123.7E6	N.D.	3.492	#
19)	Endosulfan Sulfa	0.00	0.00	0	0	N.D.	N.D.	
20)	Methoxychlor	0.00	0.00	0	0	N.D.	N.D.	
21)	Endrin Ketone	0.00	14.99	0	132.7E6	N.D.	2.875	#

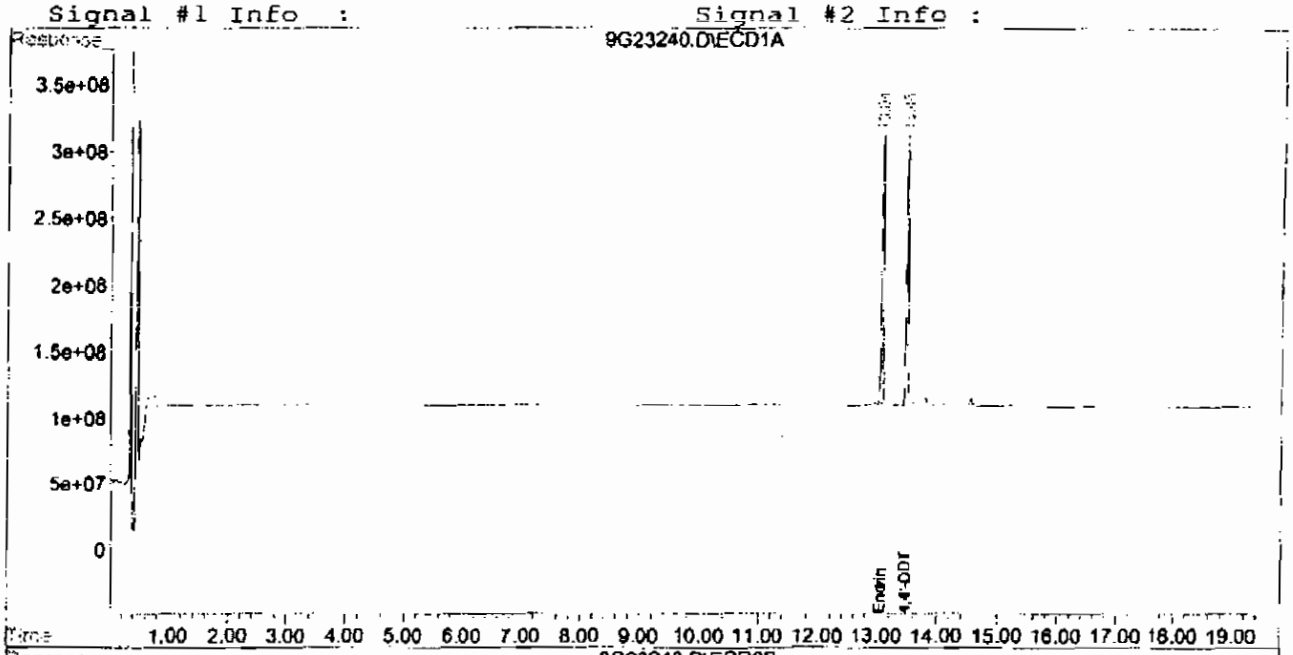
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

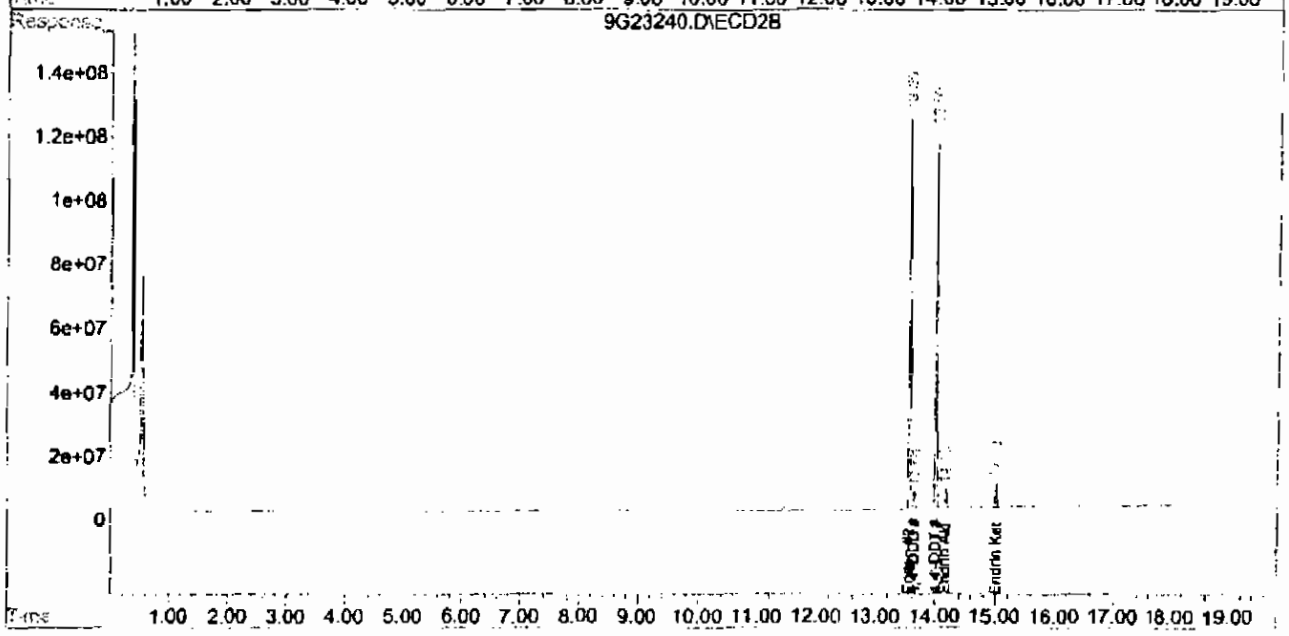
Data File : C:\HPCHEM\1\DATA\051303\9G23240.D\ECD1A.CH Vial: 1
Acq On : 13 May 2003 9:57 Operator: HV
Sample : ENDRIN/DDT Inst : HP9
Misc : SOS64-06 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\051303\9G23240.D\ECD2B.CH Vial: 1
Acq On : 13 May 2003 10:21 Operator: HV
Sample : ENDRIN/DDT Inst : HP9
Misc : SOS64-06 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 13 10:49 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION May 9, 2003 @ 2015
Last Update : Sat May 10 14:30:20 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data File : C:\HPCHEM\1\DATA\051303\9G23253.D\ECD1A.CH Vial: 14
Acq On : 13 May 2003 15:46 Operator: HV
Sample : ENDRIN/DDT Inst : HP9
Misc : SOS64-06 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\051303\9G23253.D\ECD2B.CH Vial: 14
Acq On : 13 May 2003 16:11 Operator: HV
Sample : ENDRIN/DDT Inst : HP9
Misc : SOS64-06 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 13 17:43 2003 Quant Results File: 8081.RES

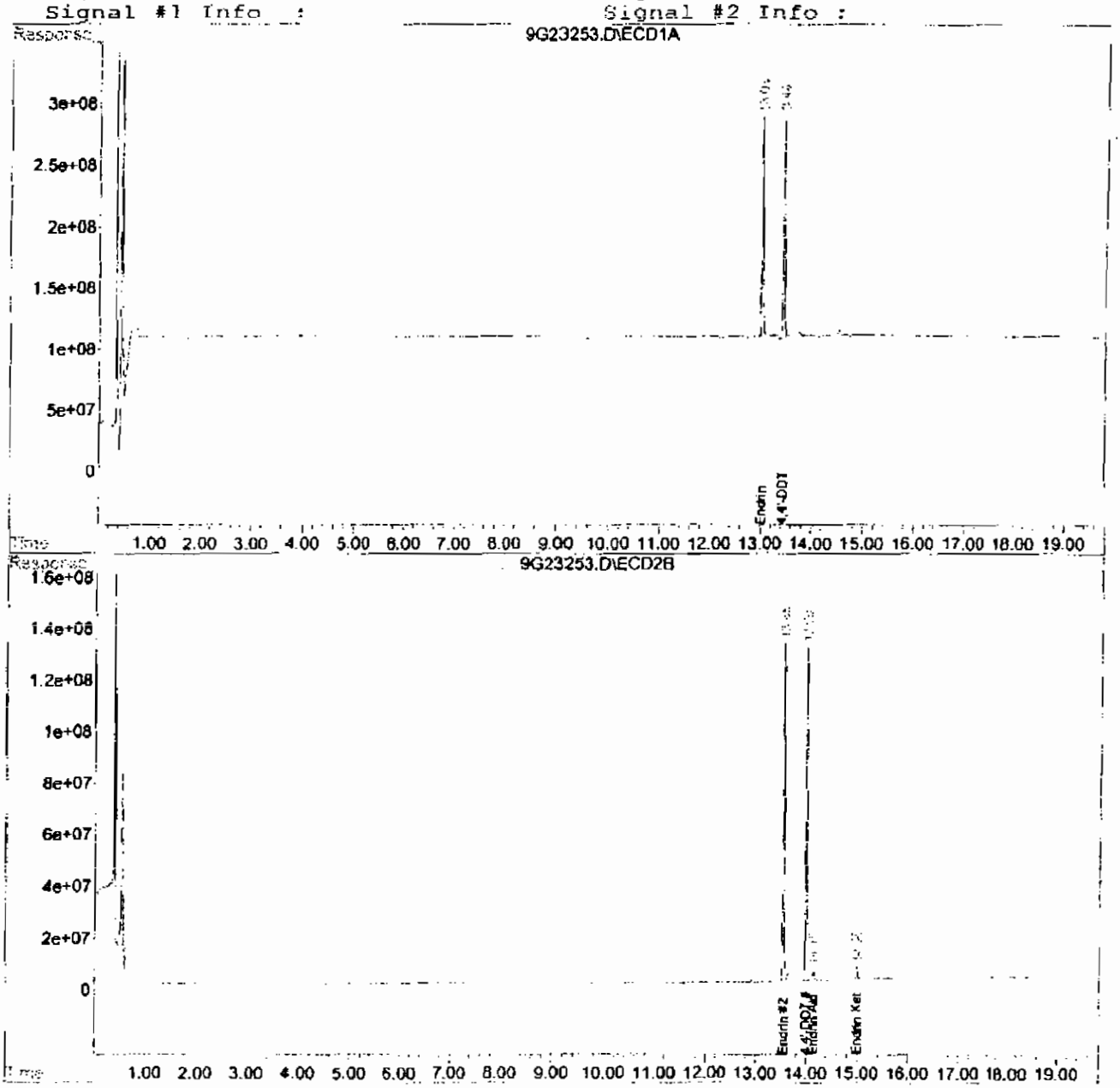
Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION May 9, 2003 @ 2015
Last Update : Sat May 10 14:30:20 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	0.00	0.00	0	0	N.D.	N.D.
Spiked Amount	20.000 Range	30 - 132		Recovery	=	0.00%#	0.00%#
22) S	Decachlorobiphen	0.00	0.00	0	0	N.D.	N.D.
Spiked Amount	20.000 Range	36 - 144		Recovery	=	0.00%#	0.00%#
	Target Compounds						
2)	alpha-BHC	0.00	0.00	0	0	N.D.	N.D.
3)	gamma-BHC	0.00	0.00	0	0	N.D.	N.D.
4)	beta-BHC	0.00	0.00	0	0	N.D.	N.D.
5)	Heptachlor	0.00	0.00	0	0	N.D.	N.D.
6)	delta-BHC	0.00	0.00	0	0	N.D.	N.D.
7)	Aldrin	0.00	0.00	0	0	N.D.	N.D.
8)	Heptachlor Epoxi	0.00	0.00	0	0	N.D.	N.D.
9)	gamma-Chlordane	0.00	0.00	0	0	N.D.	N.D.
10)	alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.
11)	Endosulfan I	0.00	0.00	0	0	N.D.	N.D.
12)	4,4'-DDE	0.00	0.00	0	0	N.D.	N.D.
13)	Dieldrin	0.00	0.00	0	0	N.D.	N.D.
14)	Endrin	13.02	13.55	3967.8E6	2265.7E6	47.273	52.668
15)	4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.
16)	Endosulfan II	0.00	0.00	0	0	N.D.	N.D.
17)	4,4'-DDT	13.44	13.99	3524.8E6	2029.7E6	46.016	51.007
18)	Endrin Aldehyde	0.00	14.15	0	56545280	N.D.	1.596 #
19)	Endosulfan Sulfa	0.00	0.00	0	0	N.D.	N.D.
20)	Methoxychlor	0.00	0.00	0	0	N.D.	N.D.
21)	Endrin Ketone	0.00	14.98	0	81740630	N.D.	1.771 #

(f)=RT Delta > 1/2 Window (#) Amounts differ by > 25% (m)=manual int.

```
Data File : C:\HPCHEM\1\DATA\051303\9G23253.D\ECD1A.CH   Vial: 14
Acq On    : 13 May 2003  15:46                           Operator: HV
Sample    : ENDRIN/DDT                                   Inst    : HP9
Misc      : SOS64-06                                     Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\051303\9G23253.D\ECD2B.CH   Vial: 14
Acq On    : 13 May 2003  16:11                           Operator: HV
Sample    : ENDRIN/DDT                                   Inst    : HP9
Misc      : SOS64-06                                     Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 13 17:43 2003  Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title        : CALIBRATION May 9, 2003  @ 2015
Last Update  : Sat May 10 14:30:20 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj.      :
Signal #1 Phase  :                    Signal #2 Phase:
Signal #1 Info   :                    Signal #2 Info :
```



Data File : C:\HPCHEM\1\DATA\043003\9G23051.D\ECD1A.CH Vial: 17
Acq On : 30 Apr 2003 16:22 Operator: ECL
Sample : WG139296-02 BLANK V201 P99 Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23051.D\ECD2B.CH Vial: 17
Acq On : 30 Apr 2003 16:46 Operator: ECL
Sample : WG139296-02 BLANK V201 P99 Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 1 8:24 2003 Quant Results File: 8081.RES

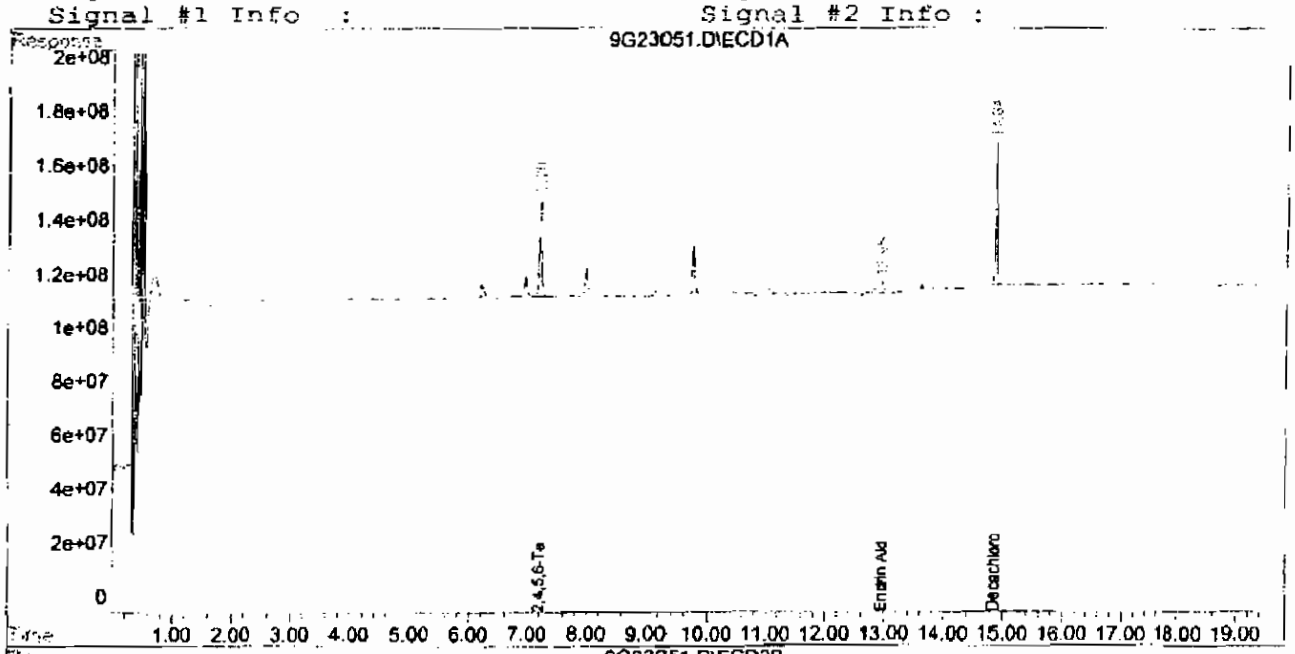
Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Wed Apr 30 16:35:45 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

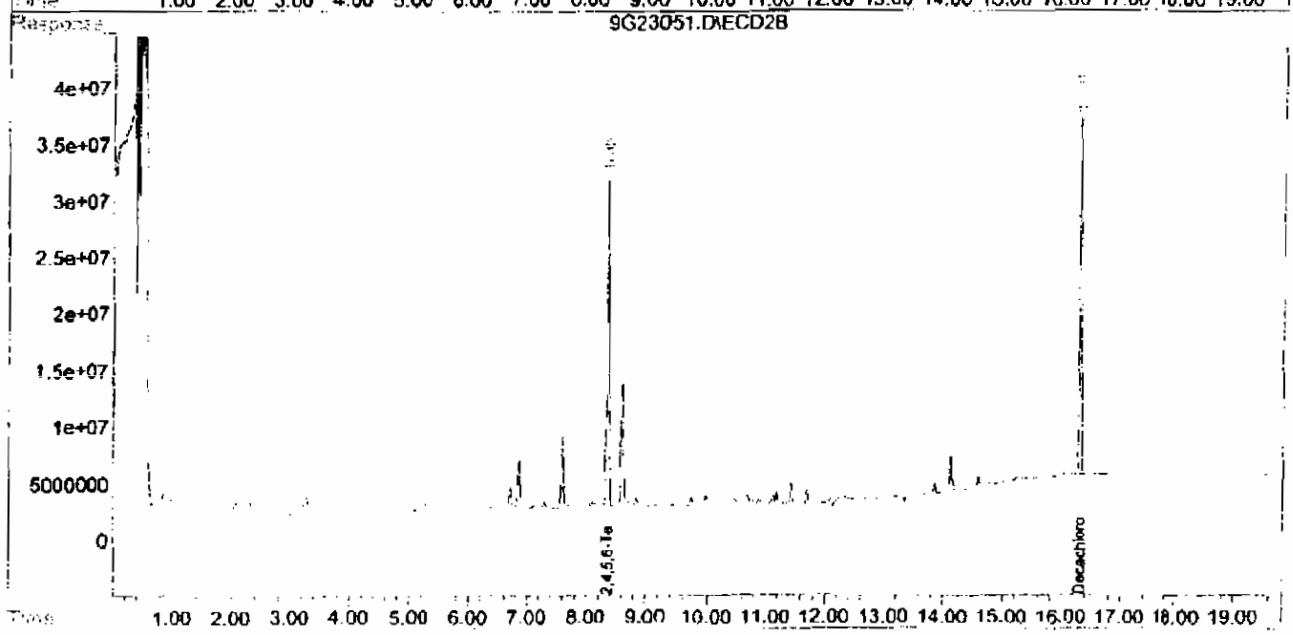
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L	
	System Monitoring Compounds							
1)	S 2,4,5,6-Tetrachl	7.20	8.36	1049.6E6	660.2E6	12.306	11.679	
	Spiked Amount 20.000 Range 30 - 132 Recovery =					61.53%	58.39%	
22)	S Decachlorobiphen	14.85	16.30	854.6E6	656.2E6	16.280	16.363	
	Spiked Amount 20.000 Range 36 - 144 Recovery =					81.40%	81.81%	
	Target Compounds							
2)	alpha-BHC	0.00	0.00	0	0	N.D.	N.D.	
3)	gamma-BHC	0.00	0.00	0	0	N.D.	N.D.	
4)	beta-BHC	0.00	0.00	0	0	N.D.	N.D.	
5)	Heptachlor	0.00	0.00	0	0	N.D.	N.D.	
6)	delta-BHC	0.00	0.00	0	0	N.D.	N.D.	
7)	Aldrin	0.00	0.00	0	0	N.D.	N.D.	
8)	Heptachlor Epoxi	0.00	0.00	0	0	N.D.	N.D.	
9)	gamma-Chlordane	0.00	0.00	0	0	N.D.	N.D.	
10)	alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.	
11)	Endosulfan I	0.00	0.00	0	0	N.D.	N.D.	
12)	4,4'-DDE	0.00	0.00	0	0	N.D.	N.D.	
13)	Dieldrin	0.00	0.00	0	0	N.D.	N.D.	
14)	Endrin	0.00	0.00	0	0	N.D.	N.D.	
15)	4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.	
16)	Endosulfan II	0.00	0.00	0	0	N.D.	N.D.	
17)	4,4'-DDT	0.00	0.00	0	0	N.D.	N.D.	
18)	Endrin Aldehyde	12.95f	0.00	78224236	0	1.387	N.D.	#
19)	Endosulfan Sulfa	0.00	0.00	0	0	N.D.	N.D.	
20)	Methoxychlor	0.00	0.00	0	0	N.D.	N.D.	
21)	Endrin Ketone	0.00	0.00	0	0	N.D.	N.D.	

(f)=RT Delta > 1/2 Window (#) Amounts differ by > 25% (m)=manual int.

```
Data File : C:\HPCHEM\1\DATA\043003\9G23051.D\ECD1A.CH   Vial: 17
Acq On    : 30 Apr 2003  16:22                           Operator: ECL
Sample    : WG139296-02 BLANK V201 P99                   Inst    : HP9
Misc      : 1,1 WATER                                    Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23051.D\ECD2B.CH   Vial: 17
Acq On    : 30 Apr 2003  16:46                           Operator: ECL
Sample    : WG139296-02 BLANK V201 P99                   Inst    : HP9
Misc      : 1,1 WATER                                    Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May  1  8:24 2003  Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title        : CALIBRATION April 30, 2003 @ 1557
Last Update  : Wed Apr 30 16:35:45 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj.      :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```





Data File : C:\HPCHEM\1\DATA\043003\9G23077.D\ECD1A.CH Vial: 43
Acq On : 1 May 2003 2:53 Operator: ECL
Sample : WG139269-01 BLANK V201 P93 Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23077.D\ECD2B.CH Vial: 43
Acq On : 1 May 2003 3:17 Operator: ECL
Sample : WG139269-01 BLANK V201 P93 Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 1 9:55 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Thu May 01 08:24:58 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L	
	System Monitoring Compounds							
1) S	2,4,5,6-Tetrachl	7.21	8.36	1046.8E6	641.5E6	12.273	11.348	
	Spiked Amount 20.000 Range 30 - 132 Recovery =					61.37%	56.74%	
22) S	Decachlorobiphen	14.84	16.31	1212.6E6	882.4E6	23.100	22.002	
	Spiked Amount 20.000 Range 36 - 144 Recovery =					115.50%	110.01%	
	Target Compounds							
2)	alpha-BHC	0.00	0.00	0	0	N.D.	N.D.	
3)	gamma-BHC	0.00	0.00	0	0	N.D.	N.D.	
4)	beta-BHC	0.00	0.00	0	0	N.D.	N.D.	
5)	Heptachlor	0.00	0.00	0	0	N.D.	N.D.	
6)	delta-BHC	0.00	0.00	0	0	N.D.	N.D.	
7)	Aldrin	0.00	0.00	0	0	N.D.	N.D.	
8)	Heptachlor Epoxi	0.00	0.00	0	0	N.D.	N.D.	
9)	gamma-Chlordane	0.00	0.00	0	0	N.D.	N.D.	
10)	alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.	
11)	Endosulfan I	0.00	0.00	0	0	N.D.	N.D.	
12)	4,4'-DDE	0.00	0.00	0	0	N.D.	N.D.	
13)	Dieldrin	0.00	0.00	0	0	N.D.	N.D.	
14)	Endrin	0.00	0.00	0	0	N.D.	N.D.	
15)	4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.	
16)	Endosulfan II	0.00	0.00	0	0	N.D.	N.D.	
17)	4,4'-DDT	0.00	0.00	0	0	N.D.	N.D.	
18)	Endrin Aldehyde	12.96f	0.00	200.1E6	0	3.707	N.D.	#
19)	Endosulfan Sulfa	0.00	0.00	0	0	N.D.	N.D.	
20)	Methoxychlor	0.00	0.00	0	0	N.D.	N.D.	
21)	Endrin Ketone	0.00	0.00	0	0	N.D.	N.D.	

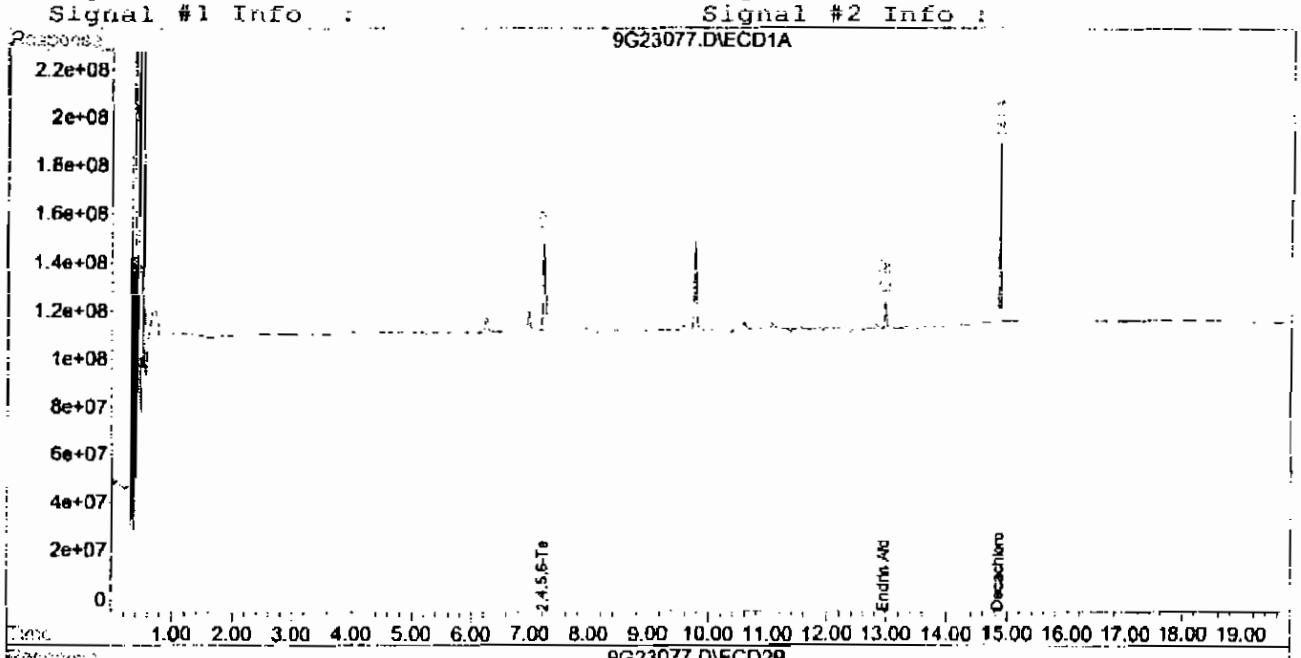
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

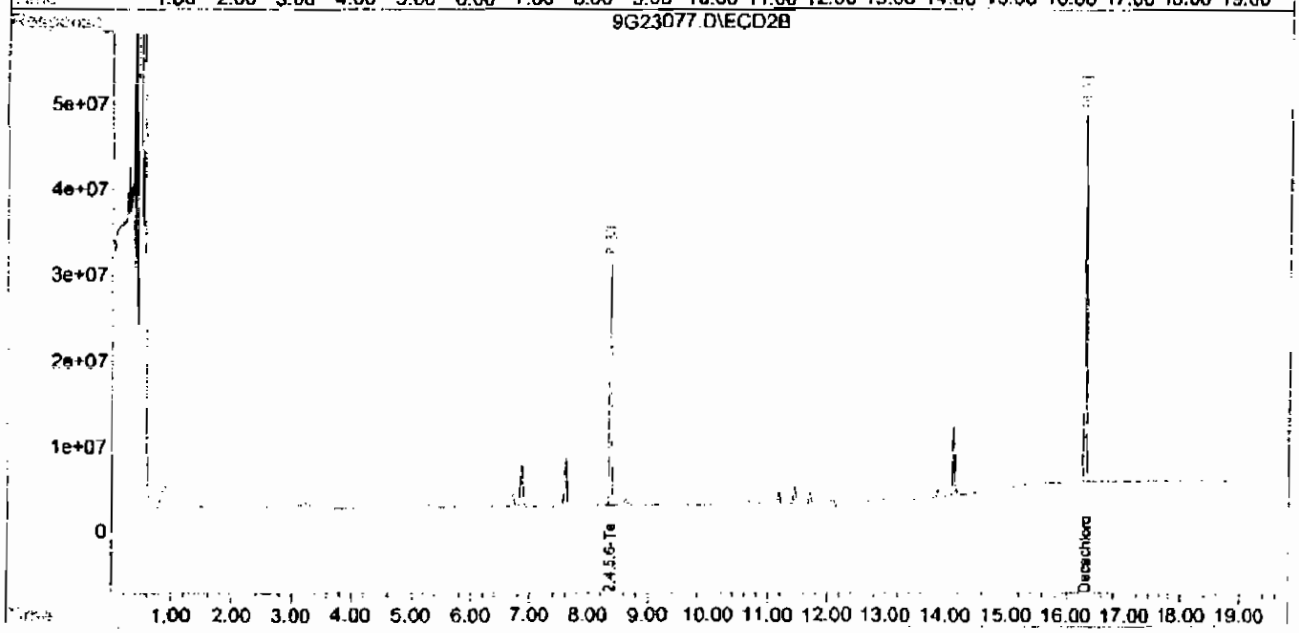
Data File : C:\HPCHEM\1\DATA\043003\9G23077.D\ECD1A.CH Vial: 43
Acq On : 1 May 2003 2:53 Operator: ECL
Sample : WG139269-01 BLANK V201 P93 Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23077.D\ECD2B.CH Vial: 43
Acq On : 1 May 2003 3:17 Operator: ECL
Sample : WG139269-01 BLANK V201 P93 Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 1 9:55 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Thu May 01 08:24:58 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data File : C:\HPCHEM\1\DATA\051303\9G23243.D\ECD1A.CH Vial: 4
Acq On : 13 May 2003 11:43 Operator: HV
Sample : WG140378-01 BLK V201-P175 Inst : HP9
Misc : 1,1 water Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\051303\9G23243.D\ECD2B.CH Vial: 4
Acq On : 13 May 2003 12:08 Operator: HV
Sample : WG140378-01 BLK V201-P175 Inst : HP9
Misc : 1,1 water Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 14 11:29 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION May 9, 2003 @ 2015
Last Update : Sat May 10 14:30:20 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
System Monitoring Compounds						
1) S 2,4,5,6-Tetrachl	8.10	8.35	836.4E6	522.3E6	8.933	9.085
Spiked Amount 20.000 Range 30 - 132 Recovery =					44.66%	45.43%
22) S Decachlorobiphen	15.58	16.28	649.0E6	477.1E6	11.487	11.676
Spiked Amount 20.000 Range 36 - 144 Recovery =					57.44%	58.38%
Target Compounds						
2) alpha-BHC	0.00	0.00	0	0	N.D.	N.D.
3) gamma-BHC	0.00	0.00	0	0	N.D.	N.D.
4) beta-BHC	0.00	0.00	0	0	N.D.	N.D.
5) Heptachlor	0.00	0.00	0	0	N.D.	N.D.
6) delta-BHC	0.00	0.00	0	0	N.D.	N.D.
7) Aldrin	0.00	0.00	0	0	N.D.	N.D.
8) Heptachlor Epoxi	0.00	0.00	0	0	N.D.	N.D.
9) gamma-Chlordane	0.00	0.00	0	0	N.D.	N.D.
10) alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.
11) Endosulfan I	0.00	0.00	0	0	N.D.	N.D.
12) 4,4'-DDE	0.00	0.00	0	0	N.D.	N.D.
13) Dieldrin	0.00	0.00	0	0	N.D.	N.D.
14) Endrin	0.00	0.00	0	0	N.D.	N.D.
15) 4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.
16) Endosulfan II	0.00	0.00	0	0	N.D.	N.D.
17) 4,4'-DDT	0.00	0.00	0	0	N.D.	N.D.
18) Endrin Aldehyde	0.00	0.00	0	0	N.D.	N.D.
19) Endosulfan Sulfa	0.00	0.00	0	0	N.D.	N.D.
20) Methoxychlor	0.00	0.00	0	0	N.D.	N.D.
21) Endrin Ketone	0.00	0.00	0	0	N.D.	N.D.

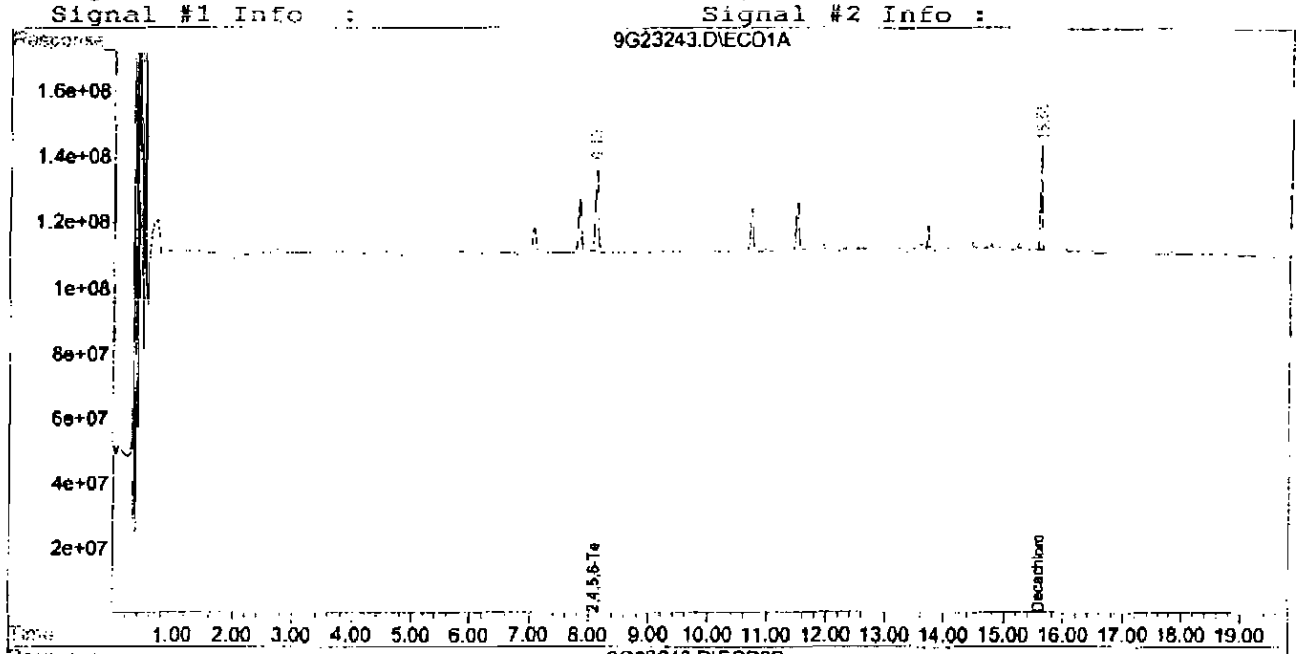
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

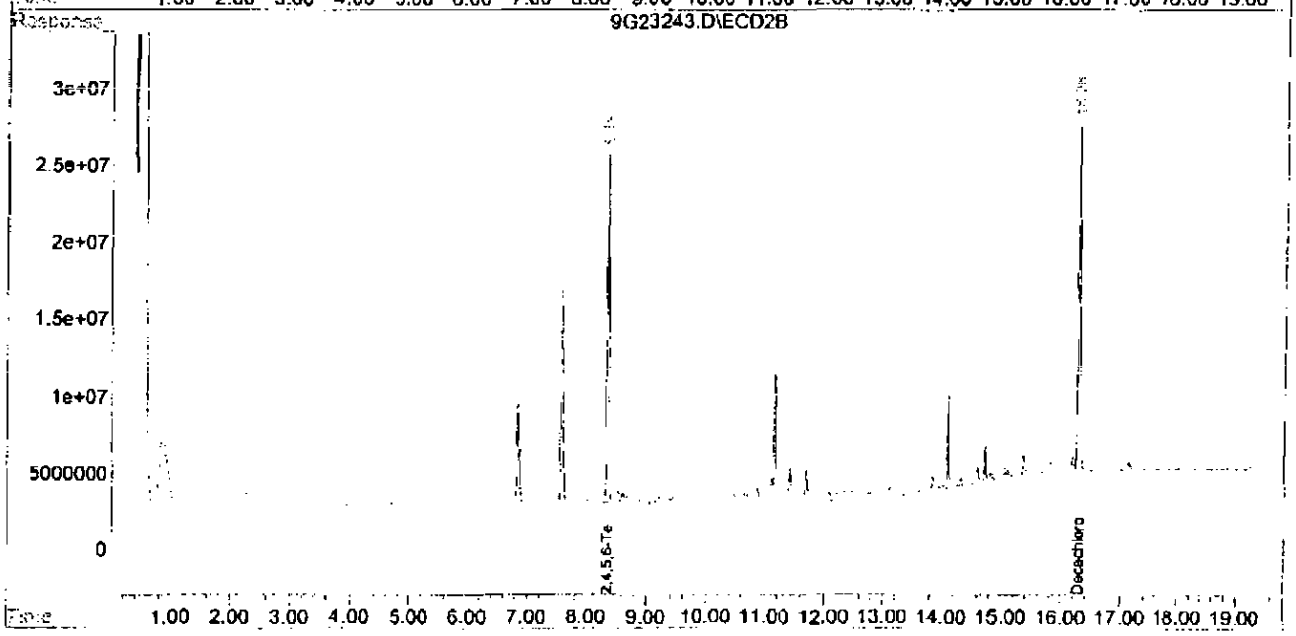
Data File : C:\HPCHEM\1\DATA\051303\9G23243.D\ECD1A.CH Vial: 4
Acq On : 13 May 2003 11:43 Operator: HV
Sample : WG140378-01 BLK V201-P175 Inst : HP9
Misc : 1,1 water Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\051303\9G23243.D\ECD2B.CH Vial: 4
Acq On : 13 May 2003 12:08 Operator: HV
Sample : WG140378-01 BLK V201-P175 Inst : HP9
Misc : 1,1 water Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 14 11:29 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION May 9, 2003 @ 2015
Last Update : Sat May 10 14:30:20 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data File : C:\HPCHEM\1\DATA\043003\9G23052.D\ECD1A.CH Vial: 18
Acq On : 30 Apr 2003 16:46 Operator: ECL
Sample : WG139296-03 LCS V201 P99 Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23052.D\ECD2B.CH Vial: 18
Acq On : 30 Apr 2003 17:10 Operator: ECL
Sample : WG139296-03 LCS V201 P99 Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 1 8:25 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Thu May 01 08:24:58 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	7.21	8.36	1217.7E6	751.8E6	14.277	13.300
	Spiked Amount 20.000 Range 30 - 132 Recovery =					71.39%	66.50%
22) S	Decachlorobiphen	14.86	16.30	1370.9E6	1035.8E6	26.115	25.828
	Spiked Amount 20.000 Range 36 - 144 Recovery =					130.57%	129.14%
	Target Compounds						
2)	alpha-BHC	8.22	9.50	7117.9E6	5056.4E6	58.245	61.245
3)	gamma-BHC	8.76	10.12	7087.0E6	4915.6E6	65.485	66.730
4)	beta-BHC	8.90	10.25	3042.6E6	2229.2E6	64.725	67.581
5)	Heptachlor	9.56	10.86	6164.5E6	3612.6E6	55.942	57.445
6)	delta-BHC	9.19	10.74	7935.3E6	5414.3E6	71.713	76.064
7)	Aldrin	10.03	11.38	5091.4E6	3306.4E6	49.414	51.652
8)	Heptachlor Epoxi	10.93	12.26	5977.7E6	4246.8E6	73.677	72.404
9)	gamma-Chlordane	11.12	12.53	6615.9E6	4177.5E6	70.995	72.245
10)	alpha-Chlordane	11.31	12.74	6207.6E6	3867.7E6	68.537	71.731
11)	Endosulfan I	11.49	12.82	5053.6E6	3070.0E6	56.309	58.080
12)	4,4'-DDE	11.45	12.94	6263.0E6	3825.7E6	72.793	74.832
13)	Dieldrin	11.84	13.18	6550.5E6	4162.1E6	71.543	75.331
14)	Endrin	12.16	13.56	6243.9E6	3566.6E6	73.256	76.812
15)	4,4'-DDD	12.28	13.64	5170.3E6	3190.7E6	75.818	77.306
16)	Endosulfan II	12.47	13.79	4270.9E6	2660.7E6	58.337	59.302
17)	4,4'-DDT	12.66	14.00	5443.1E6	3158.7E6	72.556	78.618
18)	Endrin Aldehyde	12.99	14.16	3126.9E6	1982.0E6	55.435	58.787
19)	Endosulfan Sulfa	13.50	14.44	2964.3E6	2105.2E6	61.882	56.721
20)	Methoxychlor	13.27	14.67	2478.5E6	1582.4E6	72.973	77.006
21)	Endrin Ketone	13.81	14.99	4204.4E6	2810.0E6	63.118	61.672

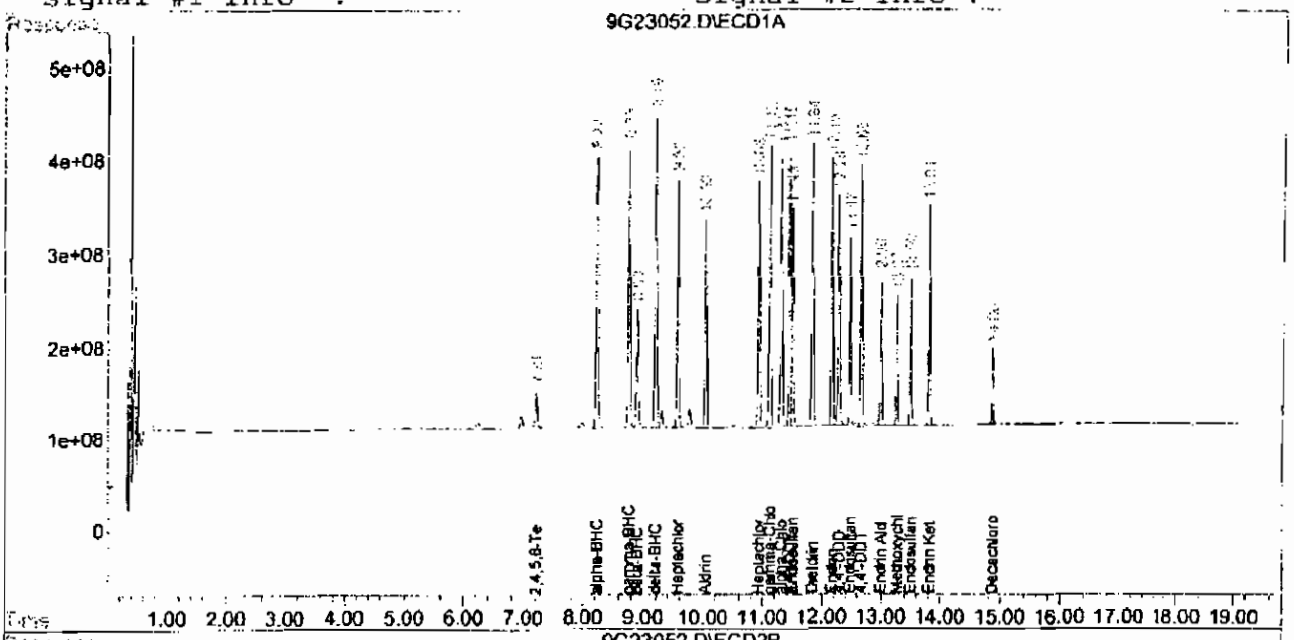
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

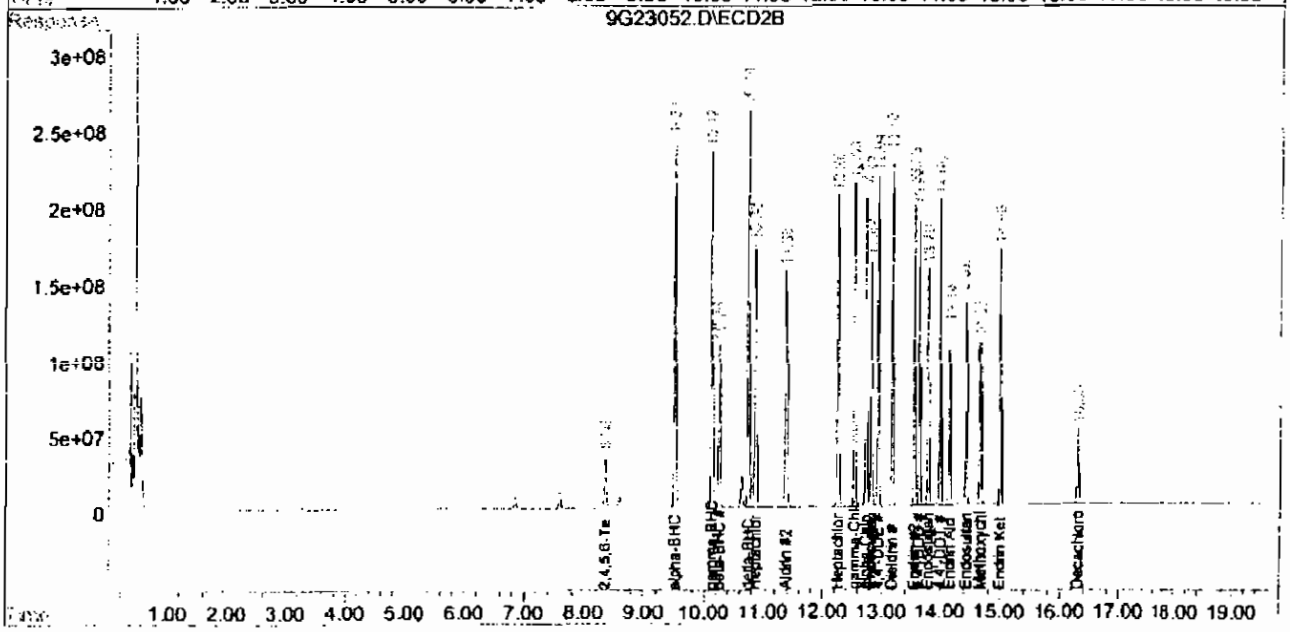
Data File : C:\HPCHEM\1\DATA\043003\9G23052.D\ECD1A.CH Vial: 18
Acq On : 30 Apr 2003 16:46 Operator: ECL
Sample : WG139296-03 LCS V201 P99 Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23052.D\ECD2B.CH Vial: 18
Acq On : 30 Apr 2003 17:10 Operator: ECL
Sample : WG139296-03 LCS V201 P99 Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 1 8:25 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Thu May 01 08:24:58 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data File : C:\HPCHEM\1\DATA\043003\9G23078.D\ECD1A.CH Vial: 44
Acq On : 1 May 2003 3:17 Operator: ECL
Sample : WG139269-02 LCS V201 P93 Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23078.D\ECD2B.CH Vial: 44
Acq On : 1 May 2003 3:41 Operator: ECL
Sample : WG139269-02 LCS V201 P93 Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 1 9:55 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Thu May 01 08:24:58 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	7.22	8.36	1253.4E6	791.3E6	14.696	13.999
	Spiked Amount 20.000 Range 30 - 132 Recovery =					73.48%	70.00%
22) S	Decachlorobiphen	14.86	16.29	1169.0E6	847.9E6	22.270	21.143
	Spiked Amount 20.000 Range 36 - 144 Recovery =					111.35%	105.72%
	Target Compounds						
2)	alpha-BHC	8.23	9.50	5820.8E6	3963.4E6	47.631	48.006
3)	gamma-BHC	8.77	10.11	5750.8E6	3833.5E6	53.138	52.040
4)	beta-BHC	8.91	10.25	2799.3E6	1887.4E6	59.548	57.219
5)	Heptachlor	9.57	10.85	5413.1E6	3050.0E6	49.124	48.499
6)	delta-BHC	9.20	10.73	7055.6E6	4649.0E6	63.763	65.312
7)	Aldrin	10.03	11.37	4874.0E6	3043.6E6	47.304	47.546
8)	Heptachlor Epoxi	10.93	12.24	5067.8E6	3564.0E6	62.462	60.763
9)	gamma-Chlordane	11.12	12.52	5798.6E6	3518.3E6	62.224	60.846
10)	alpha-Chlordane	11.32	12.73	5512.4E6	3294.2E6	60.860	61.095
11)	Endosulfan I	11.50	12.81	4545.9E6	2608.4E6	50.653	49.347
12)	4,4'-DDE	11.45	12.93	5552.1E6	3222.0E6	64.530	63.023
13)	Dieldrin	11.84	13.17	5887.0E6	3535.8E6	64.296	63.996
14)	Endrin	12.17	13.54	5492.3E6	3001.5E6	64.437	64.642
15)	4,4'-DDD	12.28	13.63	4493.5E6	2734.0E6	65.893	66.242
16)	Endosulfan II	12.47	13.78	3514.0E6	2369.1E6	47.998	52.804
17)	4,4'-DDT	12.67	13.98	4798.1E6	2697.2E6	63.959	67.133
18)	Endrin Aldehyde	13.00	14.14	2707.9E6	1630.8E6	48.007	48.370
19)	Endosulfan Sulfa	13.50	14.43	2883.1E6	1944.8E6	60.187	52.398
20)	Methoxychlor	13.27	14.66	2205.8E6	1436.2E6	64.943	69.889
21)	Endrin Ketone	13.81	14.98	3829.6E6	2422.9E6	57.492	53.176

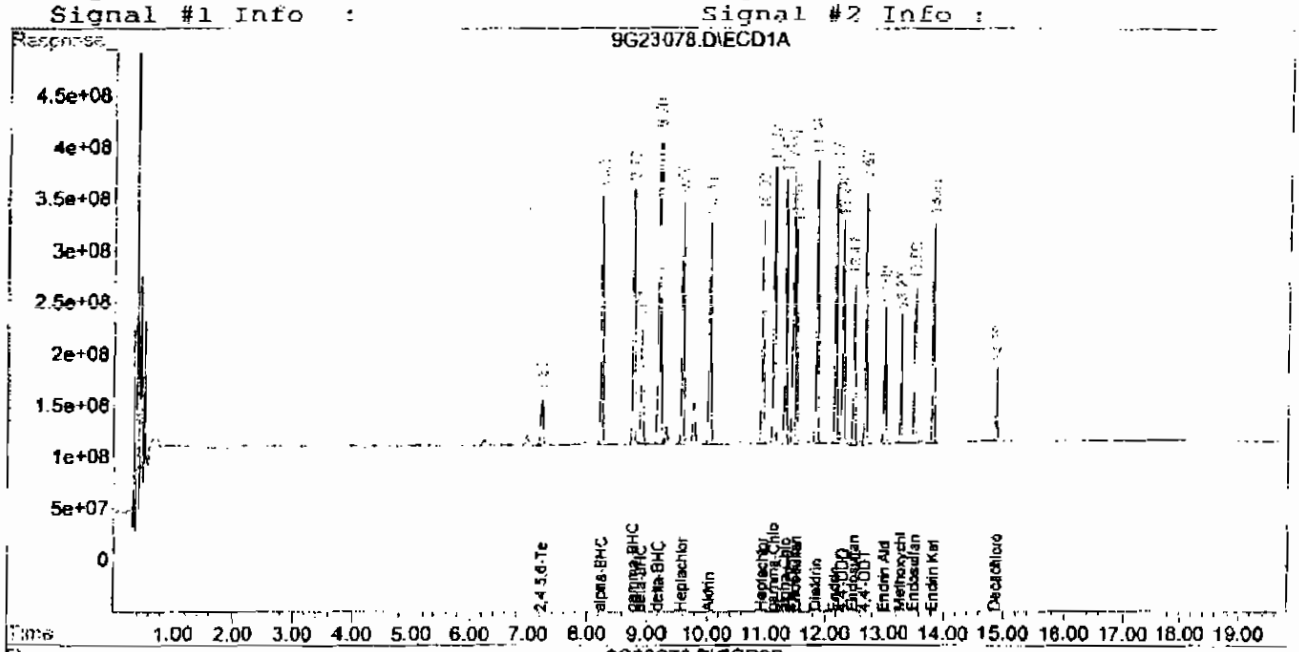
(f)=RT Delta > 1/2 Window (#) Amounts differ by > 25% (m)=manual int.

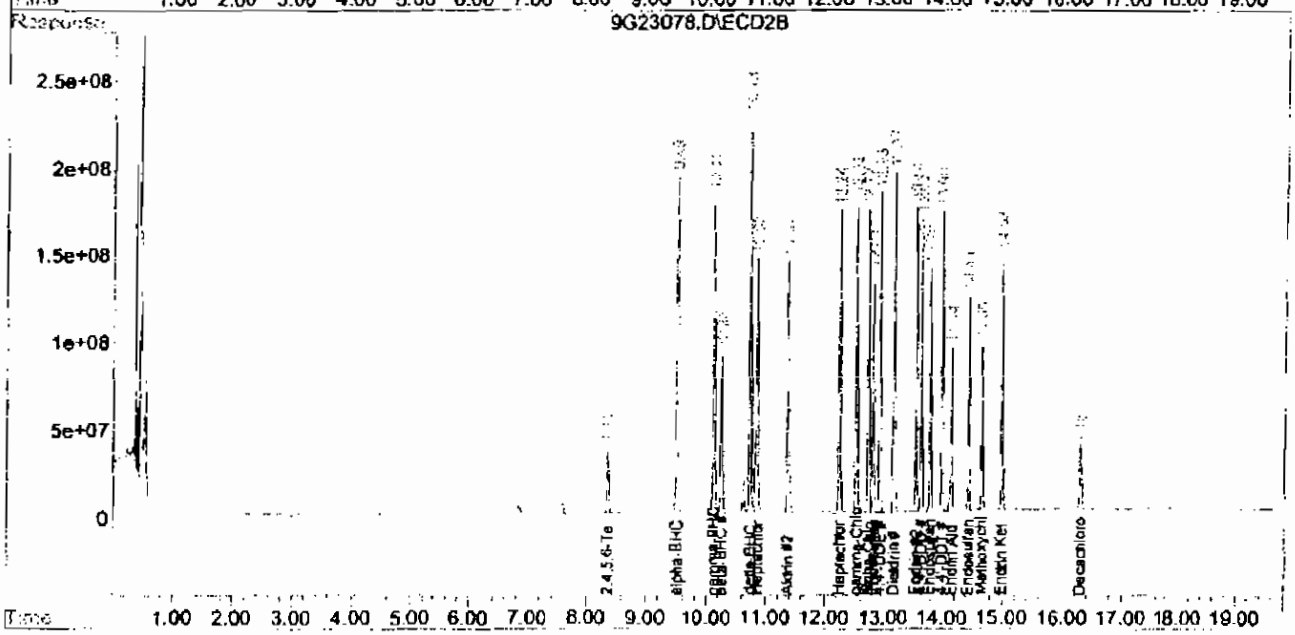
Data File : C:\HPCHEM\1\DATA\043003\9G23078.D\ECD1A.CH Vial: 44
Acq On : 1 May 2003 3:17 Operator: ECL
Sample : WG139269-02 LCS V201 P93 Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23078.D\ECD2B.CH Vial: 44
Acq On : 1 May 2003 3:41 Operator: ECL
Sample : WG139269-02 LCS V201 P93 Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 1 9:55 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Thu May 01 08:24:58 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data File : C:\HPCHEM\1\DATA\043003\9G23079.D\ECD1A.CH Vial: 45
Acq On : 1 May 2003 3:41 Operator: ECL
Sample : WG139269-03 LCS DUP V201 P93 Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23079.D\ECD2B.CH Vial: 45
Acq On : 1 May 2003 4:06 Operator: ECL
Sample : WG139269-03 LCS DUP V201 P93 Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 1 9:55 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Thu May 01 08:24:58 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1)	S 2,4,5,6-Tetrachl	7.21	8.36	1228.1E6	810.0E6	14.398	14.329
	Spiked Amount 20.000 Range 30 - 132 Recovery =					71.99%	71.65%
22)	S Decachlorobiphen	14.85	16.31	1416.6E6	1043.1E6	26.985	26.010
	Spiked Amount 20.000 Range 36 - 144 Recovery =					134.93%	130.05%
	Target Compounds						
2)	alpha-BHC	8.23	9.50	6012.3E6	4281.4E6	49.198	51.858
3)	gamma-BHC	8.77	10.12	5933.9E6	4144.8E6	54.830	56.266
4)	beta-BHC	8.91	10.26	2904.7E6	2057.4E6	61.791	62.372
5)	Heptachlor	9.56	10.86	5729.8E6	3360.0E6	51.998	53.428
6)	delta-BHC	9.19	10.74	7531.5E6	5041.3E6	68.064	70.823
7)	Aldrin	10.03	11.38	5150.7E6	3343.1E6	49.990	52.225
8)	Heptachlor Epoxi	10.92	12.26	5200.9E6	3924.2E6	64.103	66.905
9)	gamma-Chlordane	11.11	12.54	6075.3E6	3865.4E6	65.193	66.849
10)	alpha-Chlordane	11.31	12.74	5803.7E6	3599.2E6	64.076	66.752
11)	Endosulfan I	11.49	12.83	4788.7E6	2868.1E6	53.357	54.260
12)	4,4'-DDE	11.44	12.94	5888.8E6	3562.4E6	68.444	69.682
13)	Dieldrin	11.83	13.18	6226.7E6	3881.6E6	68.006	70.254
14)	Endrin	12.16	13.56	5828.0E6	3274.1E6	68.376	70.513
15)	4,4'-DDD	12.27	13.65	4775.6E6	3006.6E6	70.031	72.845
16)	Endosulfan II	12.46	13.80	3805.2E6	2658.1E6	51.976	59.244
17)	4,4'-DDT	12.65	14.00	5143.3E6	2981.2E6	68.561	74.202
18)	Endrin Aldehyde	12.98	14.16	2880.6E6	1774.2E6	51.068	52.624
19)	Endosulfan Sulfa	13.49	14.44	3263.1E6	2275.2E6	68.120	61.301
20)	Methoxychlor	13.26	14.68	2366.4E6	1532.6E6	69.672	74.584
21)	Endrin Ketone	13.80	14.99	4257.0E6	2858.0E6	63.908	62.725

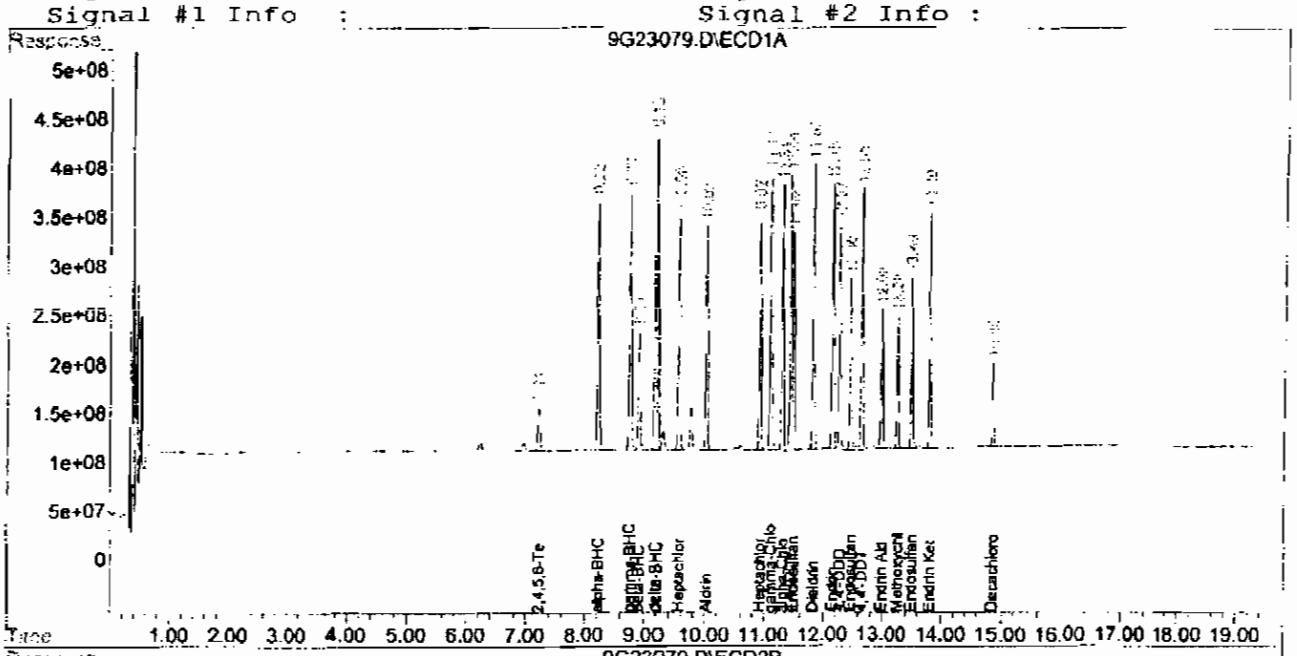
(f)=RT Delta > 1/2 Window (#) Amounts differ by > 25% (m)=manual int.

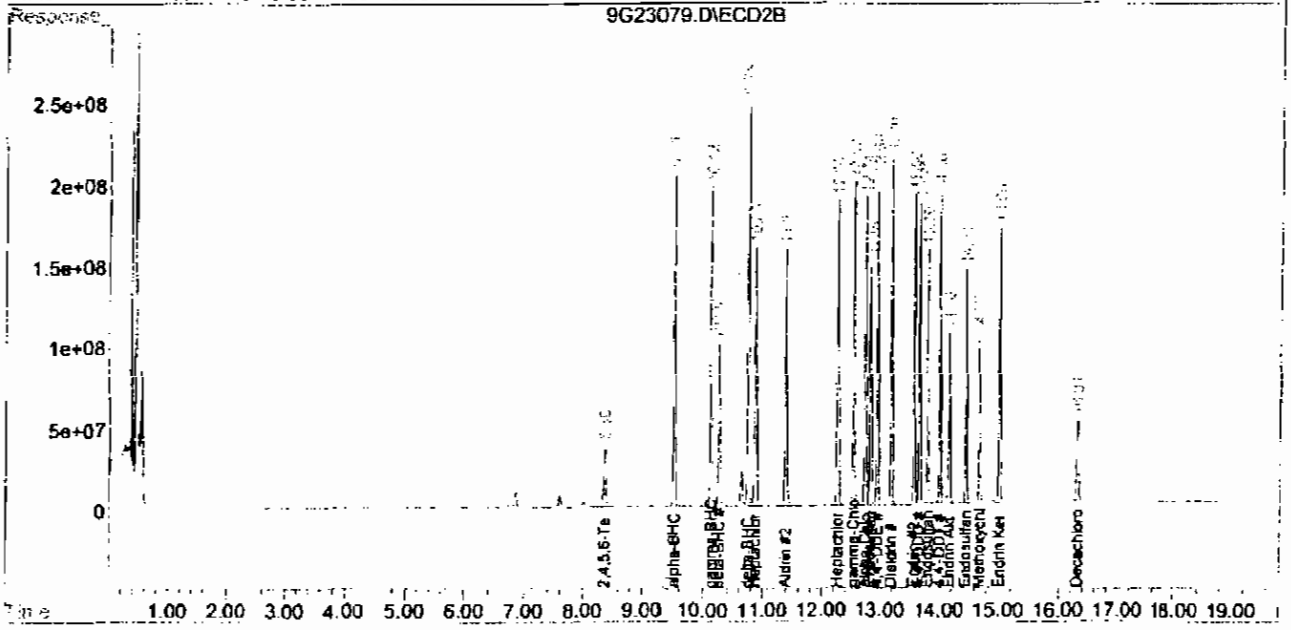
Data File : C:\HPCHEM\1\DATA\043003\9G23079.D\ECD1A.CH Vial: 45
Acq On : 1 May 2003 3:41 Operator: ECL
Sample : WG139269-03 LCS DUP V201 P93 Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23079.D\ECD2B.CH Vial: 45
Acq On : 1 May 2003 4:06 Operator: ECL
Sample : WG139269-03 LCS DUP V201 P93 Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 1 9:55 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Thu May 01 08:24:58 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data File : C:\HPCHEM\1\DATA\043003\9G23053.D\ECD1A.CH Vial: 19
Acq On : 30 Apr 2003 17:10 Operator: ECL
Sample : WG139290-01 TCLP BLANK 4/28 Inst : HP9
Misc : 17,1 WATER Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23053.D\ECD2B.CH Vial: 19
Acq On : 30 Apr 2003 17:35 Operator: ECL
Sample : WG139290-01 TCLP BLANK 4/28 Inst : HP9
Misc : 17,1 WATER Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 1 8:25 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION April 30, 2003 @ 1557
Last Update : Thu May 01 08:24:58 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L	
	System Monitoring Compounds							
1) S	2,4,5,6-Tetrachl	7.21	8.36	913.5E6	591.9E6	10.710	10.470	
	Spiked Amount 20.000 Range 30 - 132 Recovery =					53.55%	52.35%	
22) S	Decachlorobiphen	14.86	16.30	1073.8E6	846.3E6	20.456	21.102	
	Spiked Amount 20.000 Range 36 - 144 Recovery =					102.28%	105.51%	
	Target Compounds							
2)	alpha-BHC	0.00	0.00	0	0	N.D.	N.D.	
3)	gamma-BHC	0.00	0.00	0	0	N.D.	N.D.	
4)	beta-BHC	0.00	0.00	0	0	N.D.	N.D.	
5)	Heptachlor	0.00	0.00	0	0	N.D.	N.D.	
6)	delta-BHC	0.00	0.00	0	0	N.D.	N.D.	
7)	Aldrin	0.00	0.00	0	0	N.D.	N.D.	
8)	Heptachlor Epoxi	0.00	0.00	0	0	N.D.	N.D.	
9)	gamma-Chlordane	0.00	0.00	0	0	N.D.	N.D.	
10)	alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.	
11)	Endosulfan I	0.00	0.00	0	0	N.D.	N.D.	
12)	4,4'-DDE	0.00	0.00	0	0	N.D.	N.D.	
13)	Dieldrin	0.00	0.00	0	0	N.D.	N.D.	
14)	Endrin	0.00	0.00	0	0	N.D.	N.D.	
15)	4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.	
16)	Endosulfan II	0.00	0.00	0	0	N.D.	N.D.	
17)	4,4'-DDT	0.00	0.00	0	0	N.D.	N.D.	
18)	Endrin Aldehyde	12.97	0.00	150.6E6	0	2.670	N.D.	#
19)	Endosulfan Sulfa	0.00	0.00	0	0	N.D.	N.D.	
20)	Methoxychlor	0.00	0.00	0	0	N.D.	N.D.	
21)	Endrin Ketone	0.00	0.00	0	0	N.D.	N.D.	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

```
Data File : C:\HPCHEM\1\DATA\043003\9G23053.D\ECD1A.CH   Vial: 19
Acq On    : 30 Apr 2003  17:10                           Operator: ECL
Sample    : WG139290-01 TCLP BLANK 4/28                  Inst    : HP9
Misc      : 17,1 WATER                                   Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\043003\9G23053.D\ECD2B.CH   Vial: 19
Acq On    : 30 Apr 2003  17:35                           Operator: ECL
Sample    : WG139290-01 TCLP BLANK 4/28                  Inst    : HP9
Misc      : 17,1 WATER                                   Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May  1  8:25 2003  Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title        : CALIBRATION April 30, 2003 @ 1557
Last Update  : Thu May 01 08:24:58 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj.      :
Signal #1 Phase  :                    Signal #2 Phase:
Signal #1 Info   :                    Signal #2 Info :
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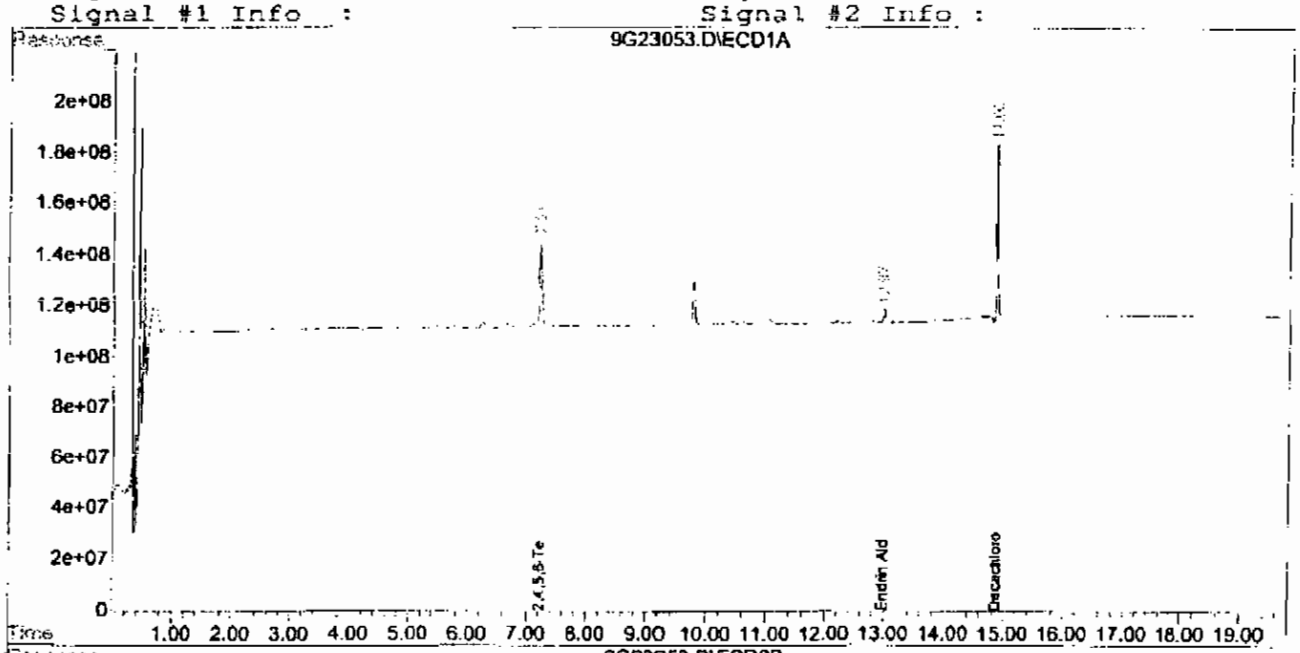
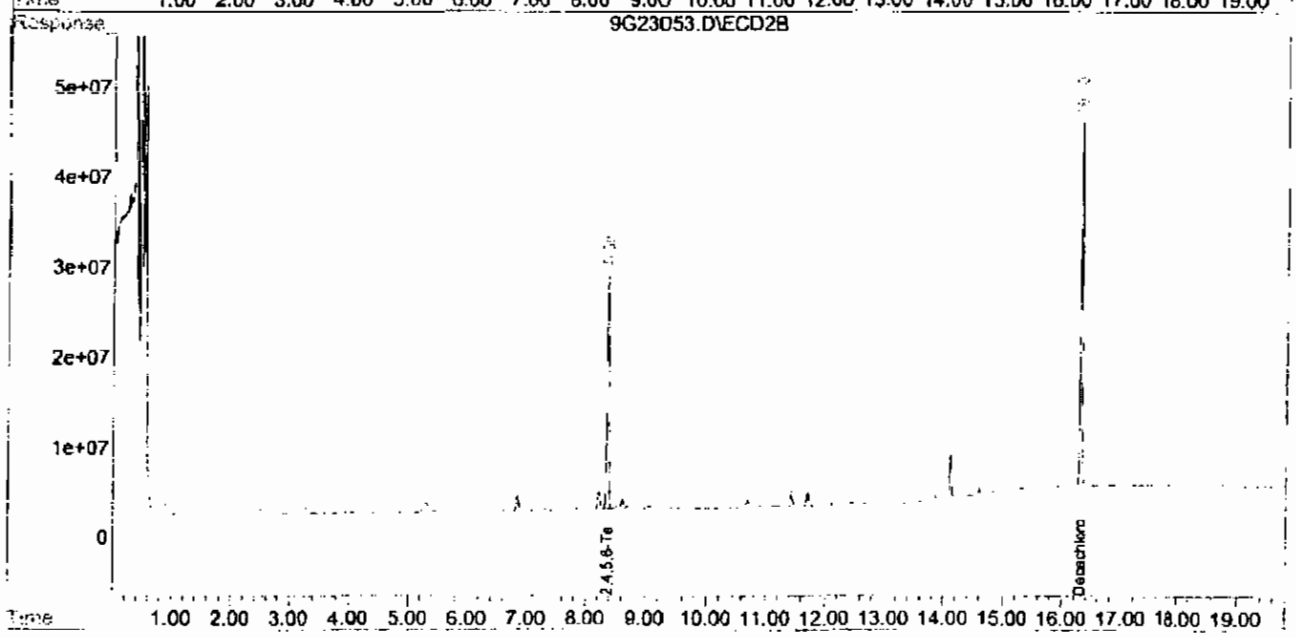




Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	9g23035.d	1.	✓ENDRIN/DDT	SOS64-06	30 Apr 2003 09:11
2	2	9g23036.d	1.	CC PEST CCV 20 PPB	1,1 SOS63-32	30 Apr 2003 09:33
3	3	9g23037.d	1.	CC TOX CCV 500 PPB	SOS62-45	30 Apr 2003 10:00
4	4	9g23038.d	1.	✓TOX ICAL 2000 PPB	SOS62-45	30 Apr 2003 11:06
5	5	9g23039.d	1.	TOX ICAL 1000 PPB	SOS62-45	30 Apr 2003 11:31
6	6	9g23040.d	1.	TOX ICAL 500 PPB	SOS62-45	30 Apr 2003 11:55
7	7	9g23041.d	1.	TOX ICAL 250 PPB	SOS62-45	30 Apr 2003 12:19
8	8	9g23042.d	1.	TOX ICAL 100 PPB	SOS62-45	30 Apr 2003 12:43
9	9	9g23043.d	1.	✓TOX ALT ICV 500 PPB	SOS63-05	30 Apr 2003 13:08
10	10	9g23044.d	1.	WG139380-01 PEST ICAL 200 PPB	1,1 SOS63-32	30 Apr 2003 13:32
11	11	9g23045.d	1.	WG139380-02 PEST ICAL 100 PPB	1,1 SOS63-32	30 Apr 2003 13:56
12	12	9g23046.d	1.	WG139380-03 PEST ICAL 50 PPB	1,1 SOS63-32	30 Apr 2003 14:20
13	13	9g23047.d	1.	WG139380-04 PEST ICAL 20 PPB	1,1 SOS63-32	30 Apr 2003 14:45
14	14	9g23048.d	1.	WG139380-05 PEST ICAL 10 PPB	1,1 SOS63-32	30 Apr 2003 15:09
15	15	9g23049.d	1.	WG139380-06 PEST ICAL 4 PPB	1,1 SOS63-32	30 Apr 2003 15:33
16	16	9g23050.d	1.	✓WG139380-07 PEST ALT ICV 20...	1,1 SOS62-49	30 Apr 2003 15:57
17	17	9g23051.d	1.	WG139296-02 BLANK V201 P99	1,1 WATER	30 Apr 2003 16:22
18	18	9g23052.d	1.	WG139296-03 LCS V201 P99 —*	1,1 WATER	30 Apr 2003 16:46
19	19	9g23053.d	1.	WG139290-01 TCLP BLANK 4/28	17,1 WATER	30 Apr 2003 17:10
20	20	9g23054.d	1.	L0304554-01	17,1 WATER	30 Apr 2003 17:35
21	21	9g23055.d	1.	L0304594-03	17,1 WATER	30 Apr 2003 17:59
22	22	9g23056.d	1.	WG139296-01 L0304585-04	1,1 WATER	30 Apr 2003 18:23
23	23	9g23057.d	1.	WG139296-04 L0304585-05 MS	1,1 WATER	30 Apr 2003 18:47
24	24	9g23058.d	1.	WG139296-05 L0304585-06 MSD	1,1 WATER	30 Apr 2003 19:11
25	25	9g23059.d	1.	L0304585-10	1,1 WATER	30 Apr 2003 19:35
26	26	9g23060.d	1.	L0304585-01	1,1 WATER	30 Apr 2003 20:00
27	27	9g23061.d	1.	✓ENDRIN/DDT	SOS64-06	30 Apr 2003 20:24
28	28	9g23062.d	1.	✓WG139380-08 PEST CCV 20 PPB	1,1 SOS63-32	30 Apr 2003 20:48
29	29	9g23063.d	1.	✓TOX CCV 500 PPB	SOS62-45	30 Apr 2003 21:13
30	30	9g23064.d	1.	✓L0304585-02	1,1 WATER	30 Apr 2003 21:37
31	31	9g23065.d	1.	✓L0304585-03	1,1 WATER	30 Apr 2003 22:01
32	32	9g23066.d	1.	RE L0304581-01	2,1 WATER	30 Apr 2003 22:26
33	33	9g23067.d	1.	RE L0304581-02	2,1 WATER	30 Apr 2003 22:50
34	34	9g23068.d	1.	RE L0304581-03	2,1 WATER	30 Apr 2003 23:14
35	35	9g23069.d	1.	RE L0304581-04 —*	2,1 WATER	30 Apr 2003 23:38
36	36	9g23070.d	1.	RE L0304581-05 — 10X	2,1 WATER	01 May 2003 00:03
37	37	9g23071.d	1.	✓L0304581-06	2,1 WATER	01 May 2003 00:27
38	38	9g23072.d	1.	✓L0304581-07	2,1 WATER	01 May 2003 00:51
39	39	9g23073.d	1.	RE L0304581-08	2,1 WATER	01 May 2003 01:16
40	40	9g23074.d	1.	✓WG139380-09 PEST CCV 50 PPB	1,1 SOS63-32	01 May 2003 01:40
41	41	9g23075.d	1.	✓TOX CCV 250 PPB	SOS62-45	01 May 2003 02:04
42	42	9g23076.d	1.	L0304581-09	2,1 WATER	01 May 2003 02:28
43	43	9g23077.d	1.	WG139269-01 BLANK V201 P93	1,1 WATER	01 May 2003 02:53
44	44	9g23078.d	1.	WG139269-02 LCS V201 P93	1,1 WATER	01 May 2003 03:17
45	45	9g23079.d	1.	WG139269-03 LCS DUP V201 P93	1,1 WATER	01 May 2003 03:41
46	46	9g23080.d	1.	L0304558-01	1,1 WATER	01 May 2003 04:06
47	47	9g23081.d	1.	L0304558-02	1,1 WATER	01 May 2003 04:30
48	48	9g23082.d	1.	L0304558-03	1,1 WATER	01 May 2003 04:54
49	49	9g23083.d	1.	L0304558-04	1,1 WATER	01 May 2003 05:18
50	50	9g23084.d	1.	L0304576-01	1,1 WATER	01 May 2003 05:43
51	51	9g23085.d	1.	✓L0304576-02	1,1 WATER	01 May 2003 06:07
52	52	9g23086.d	1.	✓ENDRIN/DDT	SOS64-06	01 May 2003 06:31
53	53	9g23087.d	1.	✓WG139380-10 PEST CCV 20 PPB	1,1 SOS63-32	01 May 2003 06:56
54	54	9g23088.d	1.	✓TOX CCV 500 PPB	SOS62-45	01 May 2003 07:20
55	55	9g23089.d	1.	✓L0304576-03	1,1 WATER	01 May 2003 07:44

Data File : C:\HPCHEM\1\DATA\051303\9G23244.D\ECD1A.CH Vial: 5
Acq On : 13 May 2003 12:08 Operator: HV
Sample : WG140378-02 LCS V201-P175 Inst : HP9
Misc : 1,1 water Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\051303\9G23244.D\ECD2B.CH Vial: 5
Acq On : 13 May 2003 12:32 Operator: HV
Sample : WG140378-02 LCS V201-P175 Inst : HP9
Misc : 1,1 water Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 14 11:29 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION May 9, 2003 @ 2015
Last Update : Sat May 10 14:30:20 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	8.08	8.35	916.1E6	579.3E6	9.785	10.077
	Spiked Amount 20.000 Range 30 - 132 Recovery =					48.93%	50.39%
22) S	Decachlorobiphen	15.57	16.29	838.8E6	619.2E6	14.846	15.155
	Spiked Amount 20.000 Range 36 - 144 Recovery =					74.23%	75.77%
	Target Compounds						
2)	alpha-BHC	9.11	9.49	4565.8E6	3081.6E6	33.848	36.643
3)	gamma-BHC	9.66	10.11	4815.5E6	3112.4E6	37.816	41.605
4)	beta-BHC	9.79	10.24	2530.5E6	1644.5E6	45.876	49.416
5)	Heptachlor	10.46	10.85	4118.9E6	2280.6E6	33.680	36.844
6)	delta-BHC	10.08	10.73	6080.2E6	3886.8E6	49.645	53.941
7)	Aldrin	10.93	11.37	3662.6E6	2265.6E6	32.208	34.764
8)	Heptachlor Epoxi	11.82	12.25	4775.4E6	3094.8E6	46.954	51.874
9)	gamma-Chlordane	12.01	12.52	4926.8E6	2990.4E6	47.745	50.856
10)	alpha-Chlordane	12.21	12.73	4444.5E6	2739.4E6	50.073	51.097
11)	Endosulfan I	12.39	12.81	3558.0E6	2040.0E6	37.047	38.774
12)	4,4'-DDE	12.32	12.93	4663.4E6	2754.8E6	50.585	53.383
13)	Dieldrin	12.72	13.17	4886.2E6	3069.4E6	54.185	54.933
14)	Endrin	13.01	13.55	4429.5E6	2434.5E6	52.774	56.594
15)	4,4'-DDD	13.09	13.64	3832.3E6	2338.0E6	53.691	57.225
16)	Endosulfan II	13.28	13.79	2965.3E6	1790.1E6	38.000	39.720
17)	4,4'-DDT	13.43	13.99	3995.3E6	2278.6E6	52.158	57.262
18)	Endrin Aldehyde	13.75	14.15	1521.7E6	1042.4E6	26.836	29.427
19)	Endosulfan Sulfa	14.21	14.43	2241.3E6	1427.9E6	40.359	38.367
20)	Methoxychlor	13.97	14.67	1783.6E6	1094.8E6	52.214	55.971
21)	Endrin Ketone	14.51	14.98	2958.0E6	1974.4E6	42.524	42.778

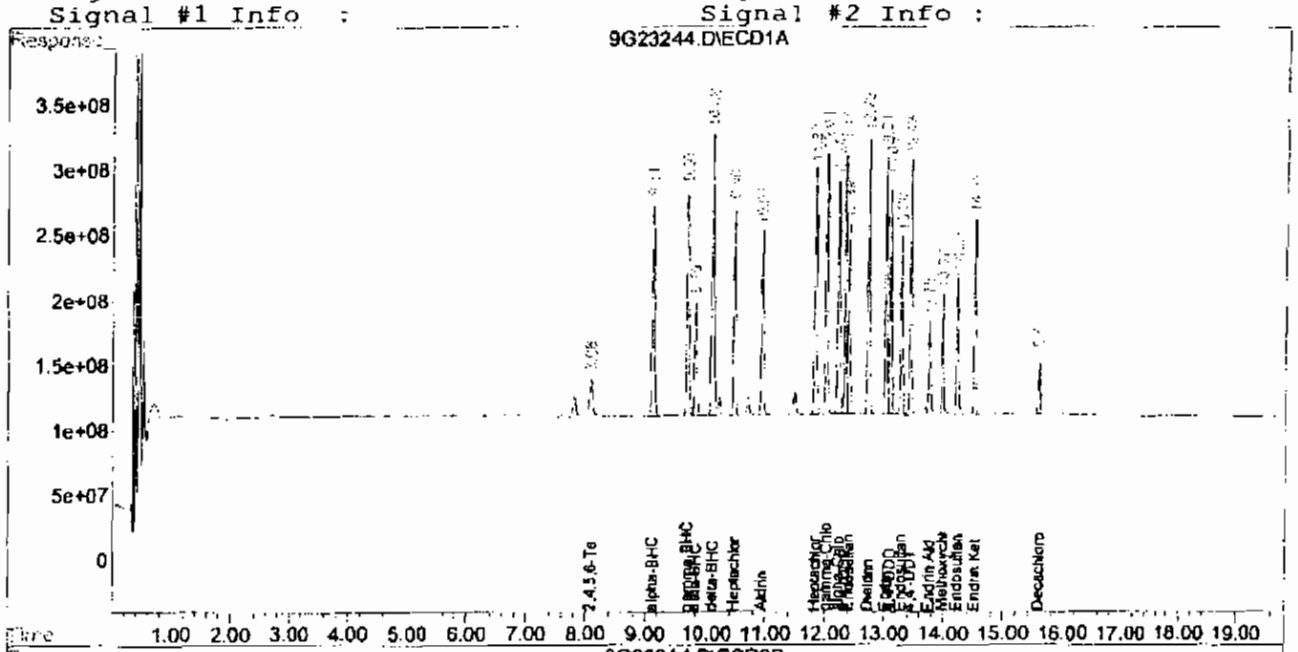
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

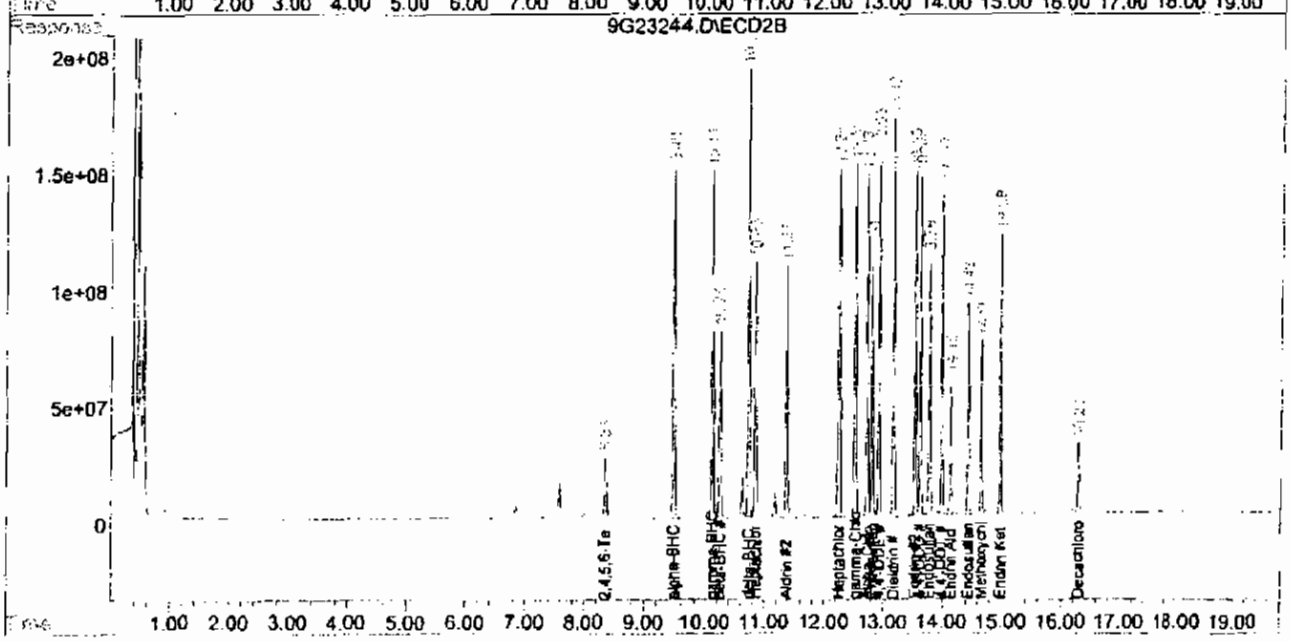
Data File : C:\HPCHEM\1\DATA\051303\9G23244.D\ECD1A.CH Vial: 5
Acq On : 13 May 2003 12:08 Operator: HV
Sample : WG140378-02 LCS V201-P175 Inst : HP9
Misc : 1,1 water Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\051303\9G23244.D\ECD2B.CH Vial: 5
Acq On : 13 May 2003 12:32 Operator: HV
Sample : WG140378-02 LCS V201-P175 Inst : HP9
Misc : 1,1 water Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 14 11:29 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION May 9, 2003 @ 2015
Last Update : Sat May 10 14:30:20 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data File : C:\HPCHEM\1\DATA\051303\9G23245.D\ECD1A.CH Vial: 6
Acq On : 13 May 2003 12:32 Operator: HV
Sample : WG140378-03 LCS DUP V201-P175 Inst : HP9
Misc : 1,1 water Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\051303\9G23245.D\ECD2B.CH Vial: 6
Acq On : 13 May 2003 12:56 Operator: HV
Sample : WG140378-03 LCS DUP V201-P175 Inst : HP9
Misc : 1,1 water Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 14 11:29 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION May 9, 2003 @ 2015
Last Update : Sat May 10 14:30:20 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	8.08	8.34	817.9E6	550.6E6	8.736	9.577
	Spiked Amount 20.000 Range 30 - 132 Recovery =					43.68%	47.88%
22) S	Decachlorobiphen	15.58	16.29	539.7E6	405.6E6	9.551	9.926
	Spiked Amount 20.000 Range 36 - 144 Recovery =					47.76%	49.63%
	Target Compounds						
2)	alpha-BHC	9.12	9.48	3973.8E6	2803.6E6	29.459	33.336
3)	gamma-BHC	9.66	10.10	4167.6E6	2811.0E6	32.728	37.576
[illegible])	beta-BHC	9.80	10.24	2433.7E6	1660.2E6	44.122	49.890
[illegible])	Heptachlor	10.47	10.84	3585.4E6	2052.7E6	29.318	33.162
6)	delta-BHC	10.09	10.73	5913.2E6	3944.1E6	48.282	54.736
7)	Aldrin	10.94	11.37	3146.0E6	2026.3E6	27.665	31.092
8)	Heptachlor Epoxi	11.83	12.24	4526.7E6	2959.1E6	44.508	49.599
9)	gamma-Chlordane	12.02	12.52	4757.0E6	2977.3E6	46.099	50.632
10)	alpha-Chlordane	12.22	12.72	4386.2E6	2762.3E6	49.416	51.525
11)	Endosulfan I	12.40	12.81	3362.1E6	1986.2E6	35.006	37.752
12)	4,4'-DDE	12.33	12.92	4534.9E6	2769.1E6	49.192	53.659
13)	Dieldrin	12.73	13.17	4755.0E6	3093.7E6	52.730	55.367
14)	Endrin	13.02	13.54	4324.7E6	2484.0E6	51.526	57.743
15)	4,4'-DDD	13.10	13.63	3821.1E6	2401.4E6	53.533	58.776
16)	Endosulfan II	13.29	13.78	3053.1E6	1950.6E6	39.125	43.282
17)	4,4'-DDT	13.44	13.98	3906.8E6	2312.6E6	51.002	58.118
18)	Endrin Aldehyde	13.76	14.14	1591.7E6	1119.8E6	28.070	31.613
19)	Endosulfan Sulfa	14.22	14.43	2411.0E6	1572.9E6	43.416	42.263
20)	Methoxychlor	13.98	14.66	1780.4E6	1120.5E6	52.118	57.285
21)	Endrin Ketone	14.52	14.98	3126.0E6	2130.8E6	44.939	46.165

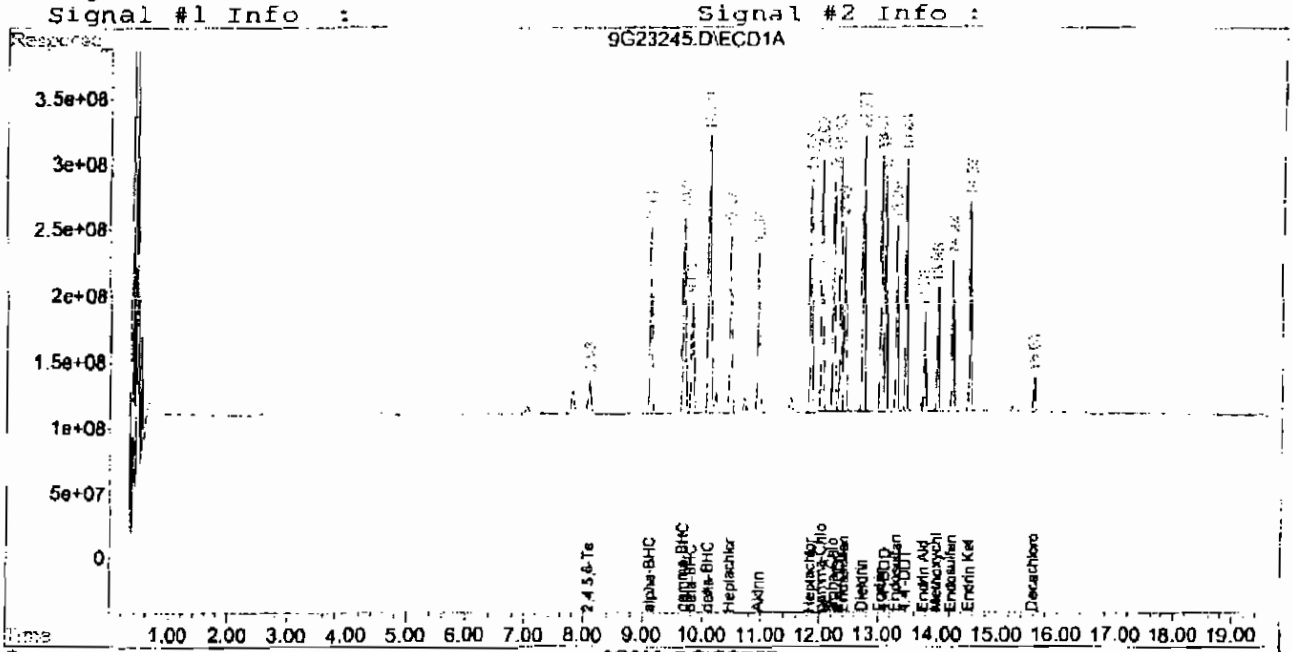
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

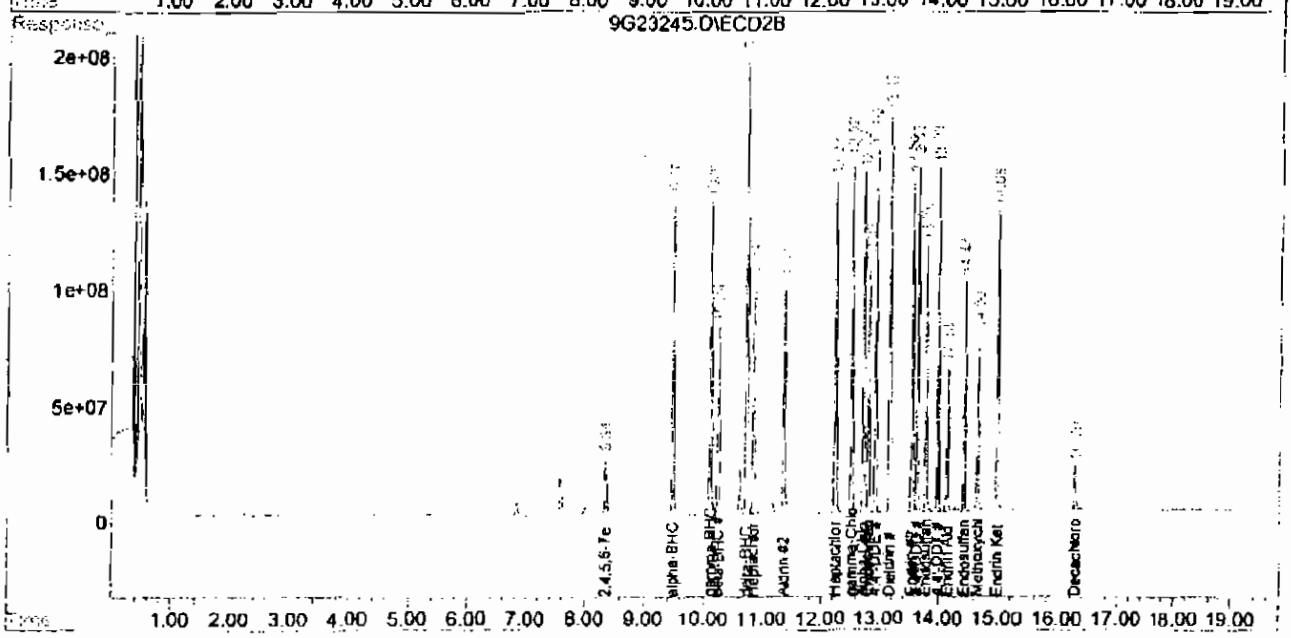
Data File : C:\HPCHEM\1\DATA\051303\9G23245.D\ECD1A.CH Vial: 6
Acq On : 13 May 2003 12:32 Operator: HV
Sample : WG140378-03 LCS DUP V201-P175 Inst : HP9
Misc : 1,1 water Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\051303\9G23245.D\ECD2B.CH Vial: 6
Acq On : 13 May 2003 12:56 Operator: HV
Sample : WG140378-03 LCS DUP V201-P175 Inst : HP9
Misc : 1,1 water Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 14 11:29 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION May 9, 2003 @ 2015
Last Update : Sat May 10 14:30:20 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data File : C:\HPCHEM\1\DATA\051303\9G23246.D\ECD1A.CH Vial: 7
Acq On : 13 May 2003 12:56 Operator: HV
Sample : WG140378-04 LCS TOX V201-P175 Inst : HP9
Misc : 1,l water Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\051303\9G23246.D\ECD2B.CH Vial: 7
Acq On : 13 May 2003 13:21 Operator: HV
Sample : WG140378-04 LCS TOX V201-P175 Inst : HP9
Misc : 1,l water Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 13 13:40 2003 Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title : CALIBRATION May 9, 2003 @ 2015
Last Update : Sat May 10 14:30:20 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L	
	System Monitoring Compounds							
1)	S 2,4,5,6-Tetrachl	8.07	8.35	940.0E6	583.4E6	10.040	10.149	
	Spiked Amount 20.000 Range 30 - 132 Recovery =					50.20%	50.74%	
22)	S Decachlorobiphen	15.58	16.29	806.2E6	574.4E6	14.269	14.057	
	Spiked Amount 20.000 Range 36 - 144 Recovery =					71.34%	70.28%	
	Target Compounds							
2)	alpha-BHC	0.00	0.00	0	0	N.D.	N.D.	
3)	gamma-BHC	0.00	0.00	0	0	N.D.	N.D.	
	beta-BHC	0.00	0.00	0	0	N.D.	N.D.	
	Heptachlor	0.00	0.00	0	0	N.D.	N.D.	
6)	delta-BHC	0.00	0.00	0	0	N.D.	N.D.	
7)	Aldrin	0.00	0.00	0	0	N.D.	N.D.	
8)	Heptachlor Epoxi	0.00	0.00	0	0	N.D.	N.D.	
9)	gamma-Chlordane	0.00	0.00	0	0	N.D.	N.D.	
10)	alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.	
11)	Endosulfan I	0.00	0.00	0	0	N.D.	N.D.	
12)	4,4'-DDE	0.00	0.00	0	0	N.D.	N.D.	
13)	Dieldrin	0.00	0.00	0	0	N.D.	N.D.	
14)	Endrin	0.00	0.00	0	0	N.D.	N.D.	
15)	4,4'-DDD	0.00	13.64	0	90496452	N.D.	2.215	#
16)	Endosulfan II	13.26f	0.00	254.0E6	0	3.255	N.D.	#
17)	4,4'-DDT	13.43	13.96f	261.9E6	85784742	3.419	2.156	#
18)	Endrin Aldehyde	13.75	14.15	707.9E6	176.2E6	12.484	4.975	#
19)	Endosulfan Sulfa	14.21	14.43	874.7E6	124.6E6	15.751	3.348	#
20)	Methoxychlor	14.00f	14.68f	264.3E6	223.3E6	7.737	11.414	#
21)	Endrin Ketone	14.52	0.00	532.0E6	0	7.648	N.D.	#

TOX

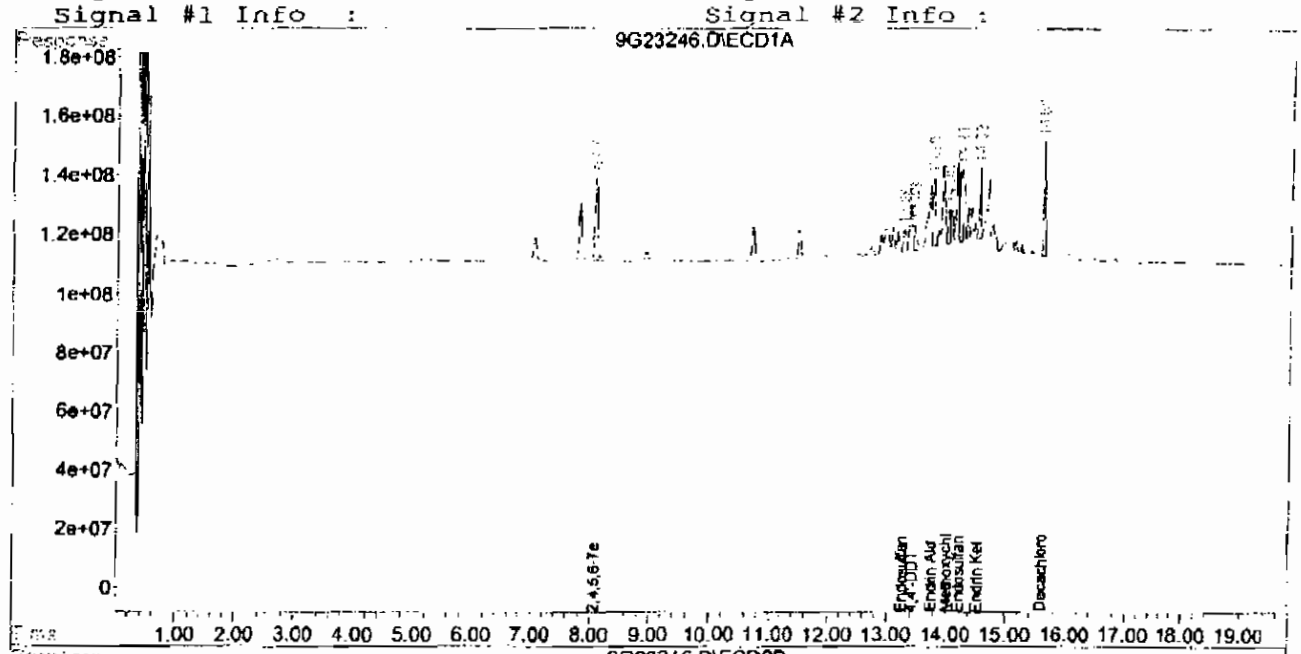
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

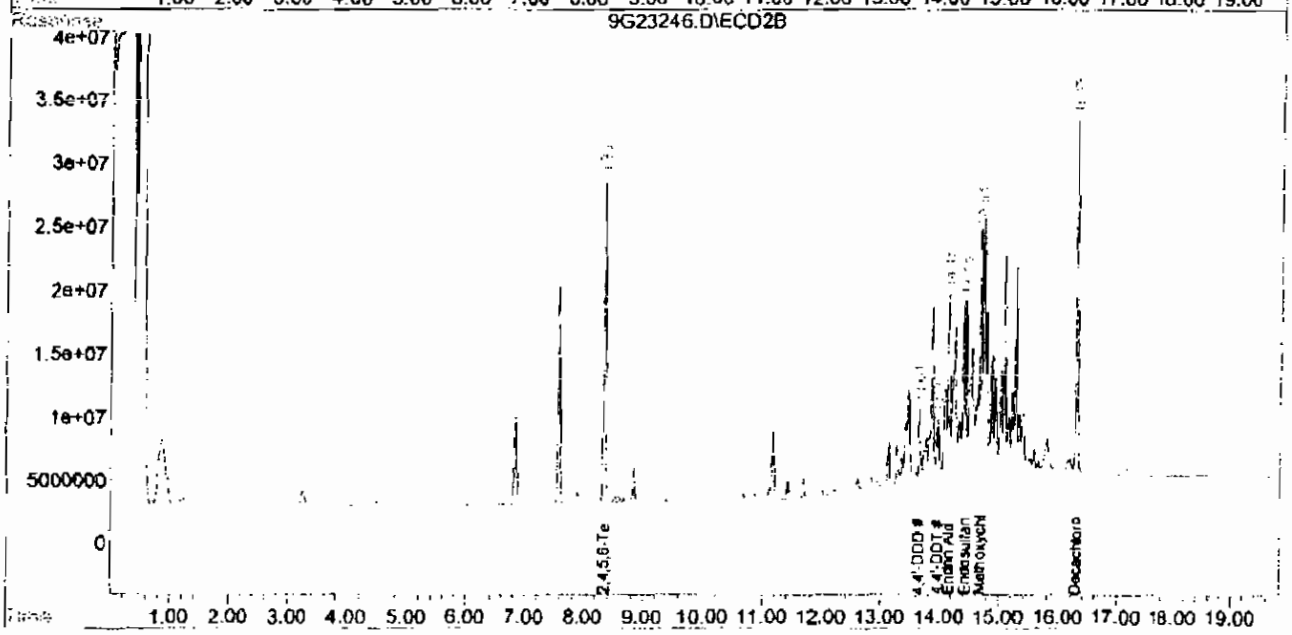
```
Data File : C:\HPCHEM\1\DATA\051303\9G23246.D\ECD1A.CH   Vial: 7
Acq On    : 13 May 2003  12:56                           Operator: HV
Sample    : WG140378-04 LCS TOX  V201-P175               Inst    : HP9
Misc      : 1,1 water                                    Multiplr: 1.00
IntFile   : autointl.e

Data File : C:\HPCHEM\1\DATA\051303\9G23246.D\ECD2B.CH   Vial: 7
Acq On    : 13 May 2003  13:21                           Operator: HV
Sample    : WG140378-04 LCS TOX  V201-P175               Inst    : HP9
Misc      : 1,1 water                                    Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 13 13:40 2003  Quant Results File: 8081.RES

Quant Method : C:\HPCHEM\1\METHODS\8081.M (Chemstation Integrator)
Title        : CALIBRATION May 9, 2003  @ 2015
Last Update  : Sat May 10 14:30:20 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj.      :
Signal #1 Phase  :                    Signal #2 Phase:
Signal #1 Info   :                    Signal #2 Info :
```





Data File : C:\HPCHEM\1\DATA\051303\9G23246.D\ECD1A.CH Vial: 7
Acq On : 13 May 2003 12:56 Operator: HV
Sample : WG140378-04 LCS TOX V201-P175 Inst : HP9
Misc : 1,1 water Multiplr: 1.00
IntFile : .E

Data File : C:\HPCHEM\1\DATA\051303\9G23246.D\ECD2B.CH Vial: 7
Acq On : 13 May 2003 13:21 Operator: HV
Sample : WG140378-04 LCS TOX V201-P175 Inst : HP9
Misc : 1,1 water Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 14 11:30 2003 Quant Results File: TOX.RES

Quant Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title : CALIBRATION May 9, 2003
Last Update : Sat May 10 14:41:27 2003
Response via : Initial Calibration
DataAcq Meth : 8081.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L	
	Target Compounds							
1)	L1 Toxaphene-1	13.75	13.14	352.0E6	81737441	235.656	160.494	#
2)	L1 Toxaphene-2	14.14	13.87	425.1E6	220.0E6	284.853	158.470	#
3)	L1 Toxaphene-3	14.21	14.15	248.7E6	238.7E6	320.788	258.766	
4)	L1 Toxaphene-4	14.52	14.73	474.7E6	256.5E6	372.580	386.423	
5)	L1 Toxaphene-5	14.67	15.08	238.7E6	257.0E6	433.685	404.782	
	Sum Toxaphene-1			1739.2E6	1053.9E6	1647.562	1368.935	
	Average Toxaphene-1					329.512	273.787	

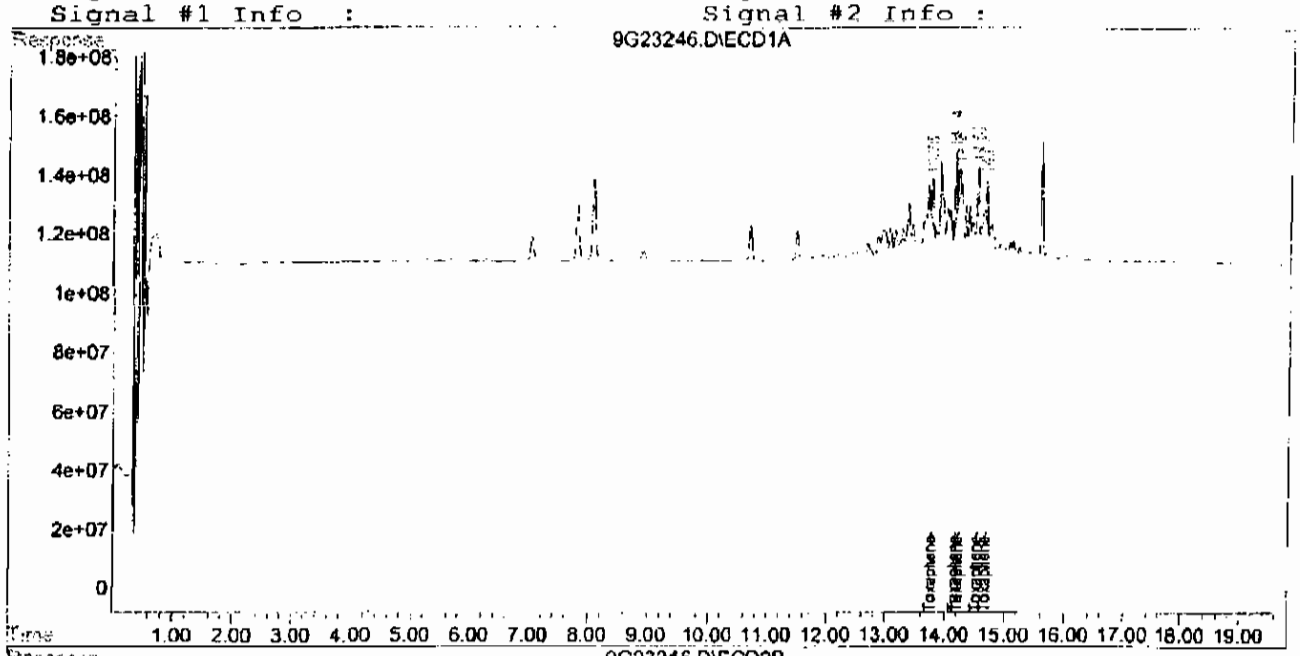
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

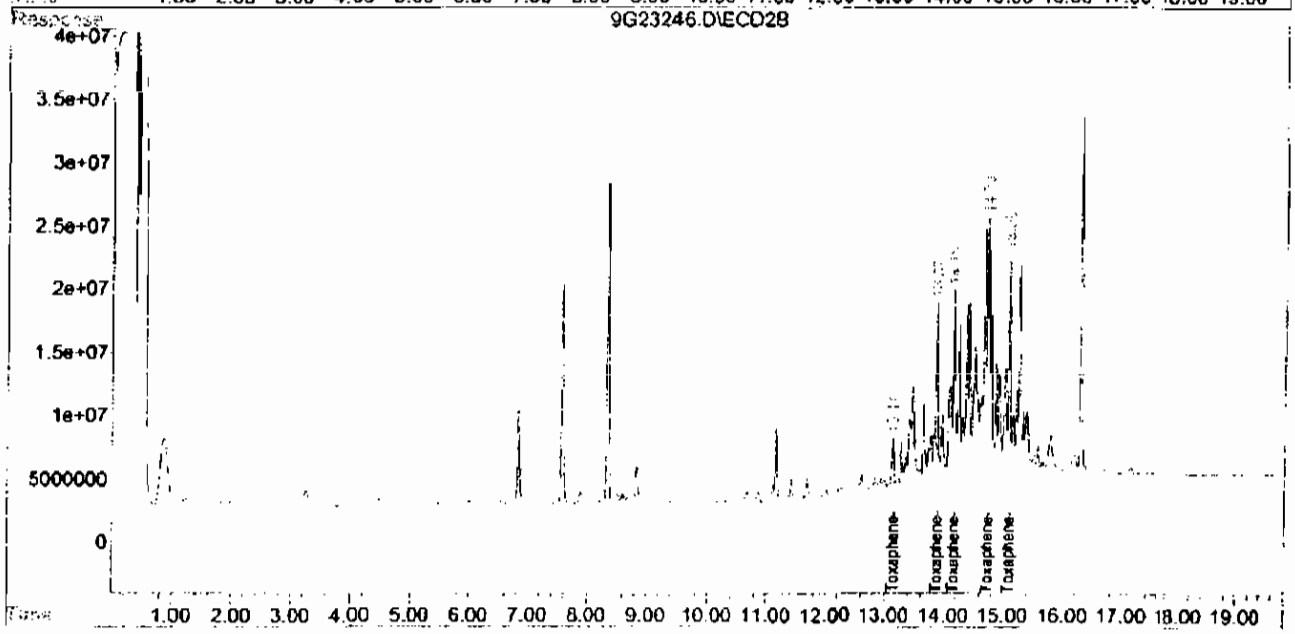
```
Data File : C:\HPCHEM\1\DATA\051303\9G23246.D\ECD1A.CH    Vial: 7
Acq On    : 13 May 2003  12:56                            Operator: HV
Sample    : WG140378-04 LCS TOX  V201-P175                Inst    : HP9
Misc      : 1,1 water                                     Multiplr: 1.00
IntFile   : .E

Data File : C:\HPCHEM\1\DATA\051303\9G23246.D\ECD2B.CH    Vial: 7
Acq On    : 13 May 2003  13:21                            Operator: HV
Sample    : WG140378-04 LCS TOX  V201-P175                Inst    : HP9
Misc      : 1,1 water                                     Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: May 14 11:30 2003  Quant Results File: TOX.RES

Quant Method : C:\HPCHEM\1\METHODS\TOX.M (Chemstation Integrator)
Title        : CALIBRATION May 9, 2003
Last Update  : Sat May 10 14:41:27 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8081.M

Volume Inj.      :
Signal #1 Phase  :                    Signal #2 Phase:
Signal #1 Info   :                    Signal #2 Info :
```





Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
56	56	9g23090.d	1.	L0304576-04	1,1 WATER	01 May 2003 08:09
57	57	9g23091.d	1.	L0304576-05	1,1 WATER	01 May 2003 08:33
58	58	9g23092.d	1.	L0304576-06	1,1 WATER	01 May 2003 08:57
59	59	9g23093.d	1.	L0304587-02	1,1 WATER	01 May 2003 09:22
60	60	9g23094.d	1.	L0304593-01	1,1 WATER	01 May 2003 09:46
61	61	9g23095.d	1.	L0304593-02	1,1 WATER	01 May 2003 10:10
62	62	9g23096.d	1.	L0304593-03	1,1 WATER	01 May 2003 10:35
63	63	9g23097.d	1.	L0304594-01	1,1 WATER	01 May 2003 10:59
64	64	9g23098.d	1.	L0304594-02	1,1 WATER	01 May 2003 11:23
65	65	9g23099.d	1.	ENDRIN/DDT	SOS64-06	01 May 2003 11:47
66	66	9g23100.d	1.	WG139380-11 PEST CCV 50 PPB ~A	1,1 SOS63-32	01 May 2003 12:12
67	67	9g23101.d	1.	TOX CCV 500 PPB	SOS62-45	01 May 2003 12:35

ECZ 5/1/03

mdc 5/1/03

KEMRON ENVIRONMENTAL SERVICES
Semivolatile GC Laboratory Maintenance Log

Analysis Date/Time 4/30/03 Instrument ID HP9 Column ID RTx-CLP Front Data Subdirectory 043003
Analyst Initials EQ

SOP # GCS09 Rev. # 2 8081A ✓
SOP # GCS04 Rev. # ___ 8151A ___
SOP # GCS03 Rev. # ___ PRO ___
SOP # GCS02 Rev. # ___ 8015B Mod (Alcohol) ___

SOP # GCS10 Rev. # ___ 8082 ___
SOP # GCS01 Rev. # ___ 8100 ___
SOP # GCS02 Rev. # ___ 8015B Mod (DRO) ___
SOP # GCS07 Rev. # ___ 8011 ___

Analysis Date/Time 4/30/03 Instrument ID HP 9 Column ID RTx-CLP II Rear Data Subdirectory 043003

Daily Check
☑ Gases >500 psi

Preventative Maintenance
☐ Change o-ring
☐ Change liner
☐ Change septum
☐ Clip column (___cm)
☐ Injection port seal (goldseal)
☐ Change gases _____

Returned To Control?
Yes ___ No ___

Additional Maintenance
Problem: _____

Action Taken: _____

Comments

A - Endosulfan sulfate failed high on ~~rear~~ Front column es 5/1/03
~~Front~~ Rear column good.

* - LCS failed 12 compounds high.

RE - need reextracted due to high LCS recovery & samples had hits of these compounds.

☆ - T-N-X surrogate failed high due to SMI.

Reviewed By: [illegible]

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	9g23240.d	1.	ENDRIN/DDT	SOS64-06	13 May 2003 09:57
2	2	9g23241.d	1.	WG140524-01 PEST CCV 20 PPB	1,1 SOS63-32	13 May 2003 10:21
3	3	9g23242.d	1.	TOX CCV 500 PPB	SOS62-45	13 May 2003 10:46
4	4	9g23243.d	1.	WG140378-01 BLK V201-P175	1,1 water	13 May 2003 11:43
5	5	9g23244.d	1.	WG140378-02 LCS V201-P175	1,1 water	13 May 2003 12:08
6	6	9g23245.d	1.	WG140378-03 LCS DUP V201-P175	1,1 water	13 May 2003 12:32
7	7	9g23246.d	1.	WG140378-04 LCS TOX V201-P175	1,1 water	13 May 2003 12:56
8	8	9g23247.d	1.	WG140252-01 SPLP BLK 05/08 ...	1,1 water	13 May 2003 13:21
9	9	9g23248.d	1.	L0305190-03	17,1 water	13 May 2003 13:45
10	10	9g23249.d	1.	L0305190-10	17,1 water	13 May 2003 14:09
11	11	9g23250.d	1.	L0305190-11	17,1 water	13 May 2003 14:34
12	12	9g23251.d	1.	L0305190-15	17,1 water	13 May 2003 14:58
13	13	9g23252.d	1.	L0304594-03 RE	1,1 water	13 May 2003 15:22
14	14	9g23253.d	1.	ENDRIN/DDT	SOS64-06	13 May 2003 15:46
15	15	9g23254.d	1.	WG140524-02 PEST CCV 50 PPB	1,1 SOS63-32	13 May 2003 16:11
16	16	9g23255.d	1.	TOX CCV 250 PPB	SOS62-45	13 May 2003 16:35
17	17	9g23256.d	1.	L0305221-01 608	2,1 water	13 May 2003 16:59
18	18	9g23257.d	1.	L0305242-04	1,1 water	13 May 2003 17:23
19	19	9g23258.d	1.	L0305242-05	1,1 water	13 May 2003 17:48
20	20	9g23259.d	1.	L0305242-06	1,1 water	13 May 2003 18:12
21	21	9g23260.d	1.	L0305242-08	1,1 water	13 May 2003 18:36
22	22	9g23261.d	1.	L0305242-06	1,1 water	13 May 2003 19:00
23	23	9g23262.d	1.	L0305242-10	1,1 water	13 May 2003 19:25
24	24	9g23263.d	1.	L0305242-11	1,1 water	13 May 2003 19:49
25	25	9g23264.d	1.	WG140251-01 I BLK 05/08	17,1 water	13 May 2003 20:13
26	26	9g23265.d	1.	L0305090-01 RE	1,1 water	13 May 2003 20:38
1	1	9g23266.d	1.	ENDRIN/DDT	SOS64-06	13 May 2003 21:02
2	2	9g23267.d	1.	WG140524-03 PEST CCV 20 PPB	1,1 SOS63-32	13 May 2003 21:26
29	3	9g23268.d	1.	TOX CCV 500 PPB	SOS62-45	13 May 2003 21:50

HV 5/14/03
all slides

KEMRON ENVIRONMENTAL SERVICES
Semivolatile GC Laboratory Maintenance Log

Analysis Date/Time 5-13-03 Instrument ID HP 9 Column ID RTX-CLP Data Subdirectory 051303
Analyst Initials HV

SOP # GCS09 Rev. # 2 8081A ✓
SOP # GCS04 Rev. # ___ 8151A ___
SOP # GCS03 Rev. # ___ PRO ___
SOP # GCS02 Rev. # ___ 8015B Mod (Alcohol) ___

Front
SOP # GCS10 Rev. # ___ 8082 ___
SOP # GCS01 Rev. # ___ 8100 ___
SOP # GCS02 Rev. # ___ 8015B Mod (DRO) ___
SOP # GCS07 Rev. # ___ 8011 ___

Analysis Date/Time ___ Instrument ID HP 9 Column ID RTX-CLP II Data Subdirectory ___
Rear

Daily Check
☑ Gases >500 psi

Preventative Maintenance
- ☐ Change o-ring
- ☐ Change liner
- ☐ Change septum
- ☐ Clip column (___cm)
- ☐ Injection port seal (goldseal)
- ☐ Change gases ___

Returned To Control?
Yes ___ No ___

Additional Maintenance
Problem: ___

Action Taken: ___

Comments

Reviewed By: [illegible]

Parameter: Pest H_2O SOP #: EXP01 Revision #: 10
Extraction Analyst(s): CAF PAS TV/KD Analyst(s): #
Date/Time Extracted: 4-29-03 @ 0900 Date TV/KD: 04-29-03
Spike/Surrogate Analyst: ECA Witness: PAS
Surrogate #: ES50044-10 Earliest Hold Date: 4-30-03
Spike #: A = ES50044-11 Spike #: B = —

Extraction Work Group WG 139269
Analytical Work Group WG 139389

Extract Relinquished By: #
Extract Received By & Date: CMC 4/30/03

	Sample ID	Test Code	pH ✓ <2	N	>12	Initial Vol / Wt	Amount Surrogate	Amount Spike	Final Volume	Extract Color	Emulsions ✓ A	BN	N	Comments
1	Blank			✓		1000 mL	200 uL		10 mL	T				WG 139269-01
2	LCS			✓				250 uL						WG -02
3	LCS Dup			✓										WG -03
4	04-558-01	8081		✓		910 mL								
5	-02			✓		890 mL								
6	-03			✓		910 mL								
7	-04			✓		900 mL								
8	04-576-01			✓		900 mL								
9	-02			✓		990 mL								
10	-03			✓		910 mL								
11	-04			✓		910 mL								
12	-05			✓		900 mL								
13	-06			✓		910 mL								
14	04-587-02			✓		930 mL								
15	04-593-01			✓		860 mL								
16	-02			✓		900 mL								
17	-03			✓		860 mL								
18	04-594-01			✓		890 mL								
19	-02			✓		920 mL								
20														
21														
22							# 04-29-03							
23														
24														

Methylene Chloride Lot #: 43010
Hexane Lot #: 43057
Ether Lot #: —
Methanol Lot #: —
Solvent: — Lot #: —
Reagent: 99:1 Lot #: ER0005-6
Reagent: 50:50 Lot #: ER-2284
Reagent: — Lot #: —
Acid: — Lot #: —
Florisil Lot #: Y01559
Silica Gel Lot #: —
IR Analyst / Date / Time: —
Dried Na_2SO_4 Lot #: ER0005-25

Color Code
T = Transparent
C = Colored
O = Opaque

SW-846 Method			On	Off	On	Off
Continuous	3520C					
Soxhlet	3540C					
ASE*	3545					
Sep Funnel	3510C					
Sonication	3550B	✓				
Waste	3580A					

* Accelerated Solvent Extractor (ASE)

Clean-ups			
Florisil 3620B	✓	GPC 3640A	
Silica Gel 3630C		Other	
Acid 3665A		N/A	
Sulfur 3660B			

Peer Reviewed By: [signature] Date: 04-29-03

Extraction Notes For Volume # 201 Page # 93

General Comments: None

Extraction Anomalies: None

Concentration Anomalies: None

Clean-Up Anomalies: None

Supervisor Review: _____ Date: _____

Parameter: Pest H2O SOP #: EXP01 Revision #: 10
Extraction Analyst(s): CAF PAS TV/KD Analyst(s): CAF
Date/Time Extracted: 4-24-03 @ 1420 Date TV/KD: 04-24-03
Spike/Surrogate Analyst: CAF Witness: CEB
Surrogate #: ES5004 4-10 Earliest Hold Date: 5-01-03
Spike #: A = ES5004 4-11 Spike #: B = —

Extraction Work Group WG 139296
Analytical Work Group WG 139387
Extract Relinquished By: CB
Extract Received By & Date: [illegible] 4/30/03

	Sample ID	Test Code	pH / <2	N	>12	Initial Vol / Wt	Amount Surrogate	Amount Spike	Final Volume	Extract Color	Emulsions / A	BN	N	Comments
1	Blank			—		1000 mL	200 mL		10 mL	T				WG 139296-02
2	LCS			✓		⊥		250 mL						WG ⊥ -03
3	04-585-01	8081		✓		1000 mL		⊥ CAF 4-24-03						
4	-02			✓										
5	-03			✓										
6	-04			✓										WG 139296-01
7	-05MS			✓				250 mL						WG ⊥ -04
8	-06MSD			✓				⊥						WG ⊥ -05
9	⊥ -10	⊥		✓		⊥								
10	04-581-01	608		✓		940 mL								
11	-02			✓		940 mL								
12	-03			✓		930 mL								
13	-04			✓		950 mL								
14	-05			✓		970 mL								
15	-06			✓		970 mL								
16	-07			✓		930 mL								
17	-08			✓		910 mL								
18	⊥ -09	⊥		✓		940 mL								
19	TALK 4/28	8081-TC		✓		100 mL								WG 139290-01
20	04-554-01			✓										
21	04-594-03	⊥		✓		⊥	⊥		⊥	⊥				
22														
23							04-24-03							
24														

Methylene Chloride Lot #: 43010
Hexane Lot #: 43057
Ether Lot #: —
Methanol Lot #: —
Solvent: — Lot #: —
Reagent: 94:6 Lot #: ER 0005-27
Reagent: 50:50 Lot #: ER 2384
Reagent: — Lot #: —
Acid: — Lot #: —
Florisil Lot #: Y01559
Silica Gel Lot #: —
IR Analyst / Date / Time: —
Dried Na_2SO_4 Lot #: ER 0005-25

Color Code
T = Transparent
C = Colored
O = Opaque

SW-846 Method			On	Off	On	Off
Continuous	3520C					
Soxhlet	3540C					
ASE*	3545					
Sep Funnel	3510C	✓				
Sonication	3550B					
Waste	3580A					

* Accelerated Solvent Extractor (ASE)

Clean-ups			
Florisil 3620B	✓	GPC 3640A	
Silica Gel 3630C		Other	
Acid 3665A		N/A	
Sulfur 3660B			

Peer Reviewed By: [signature] Date: 04/30/03

Extraction Notes For Volume # 201 Page # 99

General Comments: None

Extraction Anomalies: None

Concentration Anomalies: None

Clean-Up Anomalies: None

Supervisor Review: [signature] Date: 4/30/03

Sample Extract Log Sheet

Volume 201
Page 175

Parameter: Test-H2O SOP #: EXP01 Revision #: 10
Extraction Analyst(s): DP TV/KD Analyst(s): CAF / PAS
Date/Time Extracted: 05/12/03 0800 Date TV/KD: 05/12/03
Spike/Surrogate Analyst: DP Witness: CAF
Surrogate #: ES500044-10 Earliest Hold Date: 05/14/03
Spike #: A = ES500044-11 Spike #: B = ES500044-24

Extraction Work Group WG 140378
Analytical Work Group WG 140458
Extract Relinquished By: PAS
Extract Received By & Date: [illegible] 5/12/03

	Sample ID	Test Code	pH / <2	N	>12	Initial Vol / Wt	Amount Surrogate	Amount Spike	Final Volume	Extract Color	Emulsions / A	BN	N	Comments
1	Blank			✓		1000 mL	200 uL		10 mL	T				WG 140378-01
2	LCS			✓				250 uL A						WG -02
3	LCS DUP			✓										WG -03
4	LCS TOX			✓				100 uL B						WG -04
5	SPLP BLK 5/8	8081-SPLP		✓		950 mL								WG 140252-01
6	05-190-03			✓		970 mL								
7	-11			✓		960 mL								
8	-15			✓		950 mL								
9	05-221-01	608		✓		930 mL							✓	
10	05-242-04	8081		✓		980 mL								
11	-05			✓		920 mL								
12	-06			✓		1000 mL								
13	-08			✓		950 mL								
14	-09			✓		1000 mL								
15	-10			✓		980 mL								
16	-11			✓		970 mL								
17	TBLK 5/8	8081-TC		✓		100 mL								WG 140351-01
18	05-190-10			✓										
19	04-594-03			✓										Re-extr. in hold
20	~~05-064-06~~	per 05/16												
21	05-090-01	8081-TC		✓		100 mL	200 mL		10 mL	T				PEEXT IN HOLD
22														
23						CAF 5-12-03								
24														

5/14
5/14
5/16
5/16

Methylene Chloride Lot #: 43010
Hexane Lot #: 43057
Ether Lot #: —
Methanol Lot #: —
Solvent: — Lot #: —
Reagent: 2N: 6 Lot #: ER 0005-45
Reagent: 50:50 Lot #: ER 0005-28
Reagent: — Lot #: —
Acid: — Lot #: —
Florisil Lot #: Y05556
Silica Gel Lot #: —
IR Analyst / Date / Time: —
Dried Na_2SO_4 Lot #: ER0005-47

Color Code
T = Transparent
C = Colored
O = Opaque

SW-846 Method			On	Off	On	Off
Continuous	3520C					
Soxhlet	3540C					
ASE*	3545					
Sep Funnel	3510C	✓				
Sonication	3550B					
Waste	3580A					

* Accelerated Solvent Extractor (ASE)

Clean-ups			
Florisil 3620B	✓	GPC 3640A	
Silica Gel 3630C		Other	
Acid 3665A		N/A	
Sulfur 3660B			

Peer Reviewed By: Cheryl Blume Date: 5-12-03

Extraction Notes For Volume # 201 Page # 175

General Comments: NONE

Extraction Anomalies: NONE

Concentration Anomalies: NONE

Clean-Up Anomalies: NONE

Supervisor Review: _____ Date: _____

Semi-Volatile GC Checklist

Run Date: 4/30/03

Analyst: ECL

Instrument: HP 9

Method: 8081

Workorders:	Due Date:	Priority:
04-554	5/2	P1
04-581	5/5	—
04-585	5/5	F1
04-594	5/5	P1
04-558	5/8	—
04-576	5/9	—
04-587	5/7	F1
04-593	5/12	—

		Analyst
System Performance Check:	Endrin/DDT Breakdown	✓
Initial Calibration:	Average RF	✓
	Linear or quadratic regression	
	Alt Source Check	
Continuing Calibration:	Continuing Calibration	✓
	Client Specific Requirements	✓
	Ending Standards	✓
	Special Standards	NA
Blanks:	Quant Report/Chromatogram	✓
	Surrogates	✓
LCS/LCS DUP:	Quant Report/Chromatogram	✓
	Surrogates	✓
	Spike Compounds	✓
	MS/MSD	✓
Samples:	Quant Reports/Chromatograms	✓
	Surrogates	✓
	Dilution runs	
	Check Sample Histories	
Data Package:	Manual Integrations	✓
	Run logs	✓
	Bench sheets	✓
	QC sheets	✓
	Upload results	✓
	Seedpak workgroups	✓
	Level 2	✓
	Level 3	
	Level 4 copies	✓
	Level x	
	Case narratives	✓

	Supervisor
Corrective Action:	
Results Reporting/Data Qualifiers:	
Client Data Package Assembly:	
Check for Completeness:	
Check for compliance with method and project requirements:	
Check the reasonableness of results:	

√ = Checked & OK

NA = Not Applicable

Comments:

Primary Reviewer: ECL 5/1/03

Secondary Reviewer: [illegible] 5/2/03

Supervisor Review: [illegible] 5/2/03

Semi-Volatile GC Checklist

Run Date: 5-13-03

Analyst: HV

Instrument: HP9

Method: 8081

water

Workorders:	Due Date:	Priority:
L0305190	5/14	
L0305221	5/19	
L0305242	5/16	+1
~~HSC~~		

		Analyst
System Performance Check:	Endrin/DDT Breakdown	
Initial Calibration:	Average RF	
	Linear or quadratic regression	
	Alt Source Check	
Continuing Calibration:	Continuing Calibration	✓
	Client Specific Requirements	
	Ending Standards	✓
	Special Standards	
Blanks:	Quant Report/Chromatogram	✓
	Surrogates	✓
LCS/LCS DUP:	Quant Report/Chromatogram	✓
	Surrogates	✓
	Spike Compounds	✓
	MS/MSD	
Samples:	Quant Reports/Chromatograms	✓
	Surrogates	✓
	Dilution runs	
	Check Sample Histories	
Data Package:	Manual Integrations	✓
	Run logs	✓
	Bench sheets	✓
	QC sheets	✓
	Upload results	✓
	Seedpak workgroups	
	Level 2	
	Level 3	
	Level 4 copies	
	Level x	
	Case narratives	

	Supervisor
Corrective Action:	
Results Reporting/Data Qualifiers:	
Client Data Package Assembly:	
Check for Completeness:	
Check for compliance with method and project requirements:	
Check the reasonableness of results:	

√ = Checked & OK

NA = Not Applicable

Comments:

WG140458

L0305190 – level 4

L0305221 – level 2

L0305242 – "

~~L0305~~ sample

L0304594 > contd 4 replic
L0305090

L0304594 – level 1

L0305090 – level 1

Primary Reviewer: HV, 5/14/03

Secondary Reviewer: [illegible] 5/14/03

Supervisor Review: [illegible] 5/14/03

Example 8081 Calculations

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

		Example:
	RF = As/ Cs	
Where:	As = Area of the compound being measured in the standard	10000
	Cs = Concentration of the compound being measured (ng/ml).	100
	RF	**100**

2.0 Calculating the concentration (C) of a compound in water using data from prep log and quantitation report:*

		Example:
	C = [(Ax)(Vf)(D)] / [(RF)(Vi)]	
Where:	Ax = Area of the compound being measured	10000
	Vf = Final volume of sample extract (mL). (prep log)	1
	D = Dilution factor for sample as a multiplier (10X = 10).	1
	RF = Response factor from ICAL calculated above.	100
	Vi = Initial volume of sample (mL). (prep log)	1000
	C (ug/L) =	**0.1**

3.0 Calculating the concentration (C) of a compound in soil using data from prep log and quantitation report:*

		Example:
	C = [(Ax)(Vf)(D)] / [(RF)(Vi)]	
Where:	Ax = Area of the compound being measured	10000
	Vf = Final volume of sample extract (mL).	1
	D = Dilution factor for sample as a multiplier (10X = 10).	1
	RF = Response factor from ICAL calculated above.	100
	Wi = Initial weight of sample (g).	30
	C (ug/kg)	**3.333333**

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

2.2.3 PCB GC Data (8082)

REPORT NARRATIVE
GC PCB

KEMRON Report No.: L0304594

METHOD

Preparation: SW- 846 3550B(Soils) 3510C(Waters)
Analysis: SW-846 8082

HOLDING TIMES

Sample Preparation: All holding times were met.
Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial calibrations: For all compounds which yielded a %RSD greater than 20 %, linear or higher order equations were applied. All acceptance criteria were met.
Alternate Source Standards: All acceptance criteria were met.
Continuing Calibration: All acceptance criteria were met.

BATCH QA/QC

Method Blank: The blank associated with WG139386 yielded a % recovery for decachlorobiphenyl that was above the acceptance limit. All other acceptance criteria were met.
Laboratory Control Samples: All acceptance criteria were met.
Matrix Spikes: There were no MS/MSD results associated with this sample delivery group.

SAMPLES

Surrogates: Sample fraction -03 yielded a % recovery for decachlorobiphenyl that was above the acceptance limit. This was due to sample matrix interference. All other acceptance criteria were met.
Samples: For all samples which yielded results with an RPD of greater than 40% between the primary and confirmation column the appropriate flag was applied. All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: ECL REVIEWED: _____ DATE: 5/6/9

Rev. 7/14/00

PCB B GC DATA (8082)

Login Number 04-594

A. QC Summary

- ✓ Method Blank Summary
- ✓ Method Blank Results
- ✓ Laboratory Control Sample (LCS)
- NA Matrix Spike/Matrix Spike Duplicate (MS/MSD)
- ✓ Holding Time Summary
- ✓ Surrogate Recovery Summary
- ✓ Initial Calibration Summary
- ✓ Initial Calibration Verification (ICV) Form (Second Source)
- ✓ Continuing Calibration Verification (CCV)
- ✓ Instrument Run Log
- ✓ Extraction Bench Sheet

B. Sample Data

- ✓ Target compound and surrogate results summary (See Summary Report)
- ✓ Chromatograms and quantitation report

C. Standards Data

- ✓ Initial calibration (ICAL) summary form
- ✓ Chromatograms and quantitation report for ICAL standards
- ✓ Initial calibration verification (ICV/second source) summary forms
- ✓ Initial calibration verification (ICV/second source) quantitation reports and chromatograms
- ✓ Continuing Calibration Verification (CCV) summary forms
- ✓ Continuing Calibration Verification (CCV) quantitation reports and chromatograms
- ✓ Retention Time Window Summary

D. Raw QC Data

- ✓ Method blank chromatogram and quantitation report
- ✓ LCS chromatogram and quantitation report
- NA MS/MSD chromatogram and quantitation report
- ✓ Instrument Run Log
- ✓ Extraction Bench Sheet
- ✓ Daily Checklist
- ✓ Example Calculations

Checked By: ECZ Date: 5/7/03

2.2.3.1 QC Summary

KEMRON ENVIRONMENTAL SERVICES
METHOD BLANK SUMMARY

Login Number: L0304594
Blank File ID: 4GR17891
Date Analyzed: 04/30/03
Time Analyzed: 09:39
Analyst: ECL

Work Group: WG139386
Blank Sample ID: WG139270-01
Instrument ID: HP4
Method: 8082

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG139270-02	4GR17892	04/30/03 09:57	01
LCS2	WG139270-03	4GR17893	04/30/03 10:14	01
05-177511-DW2-042503	L0304594-01	4GR17910	04/30/03 17:46	01
05-177511-DW3-042503	L0304594-02	4GR17911	04/30/03 18:03	01

KEMRON FORMS - Modified 03/21/2003
Version 1.2
Report generated 05/07/2003 17:12

KEMRON ENVIRONMENTAL SERVICES
METHOD BLANK SUMMARY

Login Number: L0304594
Blank File ID: 4GR17931
Date Analyzed: 05/01/03
Time Analyzed: 15:18
Analyst: ECL

Work Group: WG139446
Blank Sample ID: WG139368-01
Instrument ID: HP4
Method: 8082

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG139368-02	4GR17932	05/01/03 15:35	01
LCS2	WG139368-03	4GR17933	05/01/03 15:53	01
05-177511-SP2-042503	L0304594-03	4GR17935	05/01/03 16:29	01

KEMRON FORMS - Modified 03/21/2003
Version 1.2
Report generated 05/07/2003 17:12

KEMRON ENVIRONMENTAL SERVICES
BLANK REPORT

Login Number: L0304594
Instrument ID: HP4
File ID: 4GR17891
Workgroup (AAB#): WG139386
Contract #:

Run Date: 04/30/2003
Run Time: 09:39
Analyst: ECL
Matrix: Water
Cal ID: HP4-17-MAR-03

Sample ID: WG139270-01
Prep Method: 3510C
Method: 8082
Units: ug/L

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aroclor-1016	0.250	0.500	0.250	1	U
Aroclor-1221	0.250	0.500	0.250	1	U
Aroclor-1232	0.250	0.500	0.250	1	U
Aroclor-1242	0.250	0.500	0.250	1	U
Aroclor-1248	0.250	0.500	0.250	1	U
Aroclor-1254	0.250	0.500	0.250	1	U
Aroclor-1260	0.250	0.500	0.250	1	U

Surrogates	% Recovery	Surrogate Limits	Qualifier
2,4,5,6-Tetrachloro-m-xylene	92.9	30 - 132	PASS
Decachlorobiphenyl	177	36 - 144	FAIL

* Analyte detected above RDL
ND Analyte Not detected at or above reporting limit

KEMRON FORMS - Modified 05/02/2003
Version 1.3
Report generated 05/07/2003 17:12

KEMRON ENVIRONMENTAL SERVICES
BLANK REPORT

Login Number: L0304594
Instrument ID: HP4
File ID: 4GR17931
Workgroup (AAB#): WG139446
Contract #:

Run Date: 05/01/2003
Run Time: 15:18
Analyst: ECL
Matrix: Solid
Cal ID: HP4-17-MAR-03

Sample ID: WG139368-01
Prep Method: 3550B
Method: 8082
Units: ug/kg

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aroclor-1016	8.25	16.5	8.25	1	U
Aroclor-1221	8.25	16.5	8.25	1	U
Aroclor-1232	8.25	16.5	8.25	1	U
Aroclor-1242	8.25	16.5	8.25	1	U
Aroclor-1248	8.25	16.5	8.25	1	U
Aroclor-1254	8.25	16.5	8.25	1	U
Aroclor-1260	8.25	16.5	8.25	1	U

Surrogates	% Recovery	Surrogate Limits	Qualifier
2,4,5,6-Tetrachloro-M-Xylene	94.0	29 - 133	PASS
Decachlorobiphenyl	114	30 - 173	PASS

* Analyte detected above RDL
ND Analyte Not detected At or above reporting limit

KEMRON FORMS - Modified 05/02/2003
Version 1.3
Report generated 05/07/2003 17:12

KEMRON ENVIRONMENTAL SERVICES
LABORATORY CONTROL SAMPLE

Login Number: L0304594
Instrument ID: HP4
File ID: 4GR17892
Workgroup (AAB#): WG139386
Contract #:

Run Date: 04/30/2003
Run Time: 09:57
Analyst: ECL
Matrix: Water

Sample ID: WG139270-02
Prep Method: 3510C
Method: 8082
Units: ug/L
Cal ID: HP4-17-MAR-2003

Analytes	Expected	Found	% Rec	LCS Limits	Q
Aroclor-1016	2.50	2.28	91.1	32 - 137	
Aroclor-1260	2.50	3.35	134	37 - 149	

Surrogates	% Recovery	Surrogate Limits	Qualifier
2,4,5,6-Tetrachloro-m-xylene	65.4	30 - 132	PASS
Decachlorobiphenyl	119	36 - 144	PASS

* Analyte outside control limits

NS Analyte not spiked

KEMRON FORMS - Modified 05/01/2003
Version 1.3
Report generated 05/07/2003 17:12

KEMRON ENVIRONMENTAL SERVICES
LABORATORY CONTROL SAMPLE

Login Number: L0304594
Instrument ID: HP4
File ID: 4GR17932
Workgroup (AAB#): WG139446
Contract #:

Run Date: 05/01/2003
Run Time: 15:35
Analyst: ECL
Matrix: Solid

Sample ID: WG139368-02
Prep Method: 3550B
Method: 8082
Units: ug/kg
Cal ID: HP4-17-MAR-2003

Analytes	Expected	Found	% Rec	LCS Limits	Q
Aroclor-1016	83.3	92.8	111	64 - 136	
Aroclor-1260	83.3	106	127	63 - 137	

Surrogates	% Recovery	Surrogate Limits	Qualifier
2,4,5,6-Tetrachloro-M-Xylene	105	29 - 133	PASS
Decachlorobiphenyl	124	30 - 173	PASS

* Analyte outside control limits

NS Analyte not spiked

KEMRON FORMS - Modified 05/01/2003
Version 1.3
Report generated 05/07/2003 17:12

KEMRON ENVIRONMENTAL SERVICES
LABORATORY CONTROL SAMPLES

Loginnum: L0304594 Worknum: WG139386 Method: 8082
Instrument ID: HP4 Cal ID: HP4-17-MAR-2003 Matrix: Water
Analyst: ECL Contract #: Units: ug/L
Sample ID: WG139270-02 LCS File ID: 4GR17892 Run Date: 04/30/2003 09:57
Sample ID: WG139270-03 LCS2 File ID: 4GR17893 Run Date: 04/30/2003 10:14

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Limit	Q
	Known	Found	% REC	Known	Found	% REC				
Aroclor-1016	2.50	2.28	91.1	2.50	2.63	105	14.2	32 - 137	40	
Aroclor-1260	2.50	3.35	134	2.50	2.98	119	11.6	37 - 149	40	

Surogates	LCS % Recovery	LCS2 % Recovery	Surrogate Limits	Qualifier
2,4,5,6-Tetrachloro-m-xylene	65.4	71.0	30 - 132	PASS
Decachlorobiphenyl	119	76.4	36 - 144	PASS

* FAILS %REC LIMIT

FAILS RPD LIMIT

KEMRON FORMS - Modified 05/01/2003
Version 1.2
Report generated 05/07/2003 17:12

KEMRON ENVIRONMENTAL SERVICES
LABORATORY CONTROL SAMPLES

Loginnum: L0304594 Worknum: WG139446 Method: 8082
Instrument ID: HP4 Cal ID: HP4-17-MAR-2003 Matrix: Solid
Analyst: ECL Contract #: Units: ug/kg
Sample ID: WG139368-02 LCS File ID: 4GR17932 Run Date: 05/01/2003 15:35
Sample ID: WG139368-03 LCS2 File ID: 4GR17933 Run Date: 05/01/2003 15:53

Analytes	LCS Known	LCS Found	LCS % REC	LCS2 Known	LCS2 Found	LCS2 % REC	%RPD	%Rec Limits	RPD Limit	Q
Aroclor-1016	83.3	92.8	111	83.3	95.1	114	2.49	64 - 136	40	
Aroclor-1260	83.3	106	127	83.3	101	121	4.9	63 - 137	40	

Surogates	LCS % Recovery	LCS2 % Recovery	Surrogate Limits	Qualifier
2,4,5,6-Tetrachloro-M-Xylene	105	99.0	29 - 133	PASS
Decachlorobiphenyl	124	115	30 - 173	PASS

* FAILS %REC LIMIT

FAILS RPD LIMIT

KEMRON FORMS - Modified 05/01/2003
Version 1.2
Report generated 05/07/2003 17:12

KEMRON ENVIRONMENTAL SERVICES
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method:8082

AAB#:WG139386

Login Number:L0304594

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
05-177511-DW2-042503	04/25/03	04/26/03	04/29/03	7	3.94	04/30/03	40	1.37	
05-177511-DW3-042503	04/25/03	04/26/03	04/29/03	7	3.91	04/30/03	40	1.38	

* EXT = MISSED EXTRACTION HOLD TIME
*ANAL = MISSED ANALYTICAL HOLD TIME

KEMRON FORMS - Modified 05/07/2003
Version 1.2
Report generated 05/07/2003 17:12

KEMRON ENVIRONMENTAL SERVICES
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method:8082

AAB#:WG139446

Login Number:L0304594

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
05-177511-SP2-042503	04/25/03	04/26/03	04/30/03	14	4.80	05/01/03	40	1.32	

* EXT = MISSED EXTRACTION HOLD TIME
*ANAL = MISSED ANALYTICAL HOLD TIME

KEMRON FORMS - Modified 05/07/2003
Version 1.2
Report generated 05/07/2003 17:12

KEMRON ENVIRONMENTAL SERVICES
SURROGATE STANDARDS

Login Number: L0304594
Instrument Id: HP4
Workgroup (AAB#): WG139446

Method: 8082
CAL ID: HP4-17-MAR-03
Matrix: SOLID

Sample Number	Dilution	Tag	1	2
L0304594-03	1.00	01	80.8	893
WG139368-01	1.00	01	94.0	114
WG139368-02	1.00	01	105	124
WG139368-03	1.00	01	99.0	115

Surrogates	Surrogate Limits		
1 - 2,4,5,6-Tetrachloro-M-Xylene	29	-	133
2 - Decachlorobiphenyl	30	-	173

Underline = Result out of surrogate limits

DL = surrogate diluted out

ND = surrogate not detected

KEMRON ENVIRONMENTAL SERVICES
SURROGATE STANDARDS

Login Number: L0304594
Instrument Id: HP4
Workgroup (AAB#): WG139386

Method: 8082
CAL ID: HP4-17-MAR-03
Matrix: WATER

Sample Number	Dilution	Tag	1	2
L0304594-01	1.00	01	105	84.7
L0304594-02	1.00	01	74.1	86.0
WG139270-01	1.00	01	92.9	177
WG139270-02	1.00	01	65.4	119
WG139270-03	1.00	01	71.0	76.4

Surrogates	Surrogate Limits		
1 - 2,4,5,6-Tetrachloro-m-xylene	30	-	132
2 - Decachlorobiphenyl	36	-	144

Underline = Result out of surrogate limits

DL = surrogate diluted out
ND = surrogate not detected

KEMRON FORMS - Modified 01/22/2003
Version 1.2
Report generated 05/07/2003 17:12

Method : C:\HPCHEM\2\METHODS\1660F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1459
Last Update : Fri May 02 15:05:39 2003

Calibration Files
2000 =4GF17523.D 1000 =4GF17524.D 500 =4GF17525.D
250 =4GF17526.D 100 =4GF17527.D 50 =4GF17528.D

		Compound	2000	1000	500	250	100	50	Avg	%RSD
1)	S	2,4,5,6-Tetrachloro	7.673	8.186	7.756	7.818	7.325	7.176	7.656#E3	4.74
2)	L1	Aroclor-1016-1	1.599	1.852	1.832	1.897	1.880	1.725	1.797#E2	6.37
3)	L1	Aroclor-1016-2	2.885	3.399	3.526	3.873	4.074	3.635	3.565#E2	11.56
4)	L1	Aroclor-1016-3	6.255	7.248	7.473	7.691	8.208	7.767	7.440#E2	8.92
5)	L1	Aroclor-1016-4	2.795	3.215	3.184	3.124	3.614	3.026	3.160#E2	8.52
6)	L1	Aroclor-1016-5	2.182	2.451	2.457	2.341	2.664	1.937	2.339#E2	10.79
7)	L2	Aroclor-1260-1	5.021	5.633	5.806	6.063	6.099	6.160	5.797#E2	7.41
8)	L2	Aroclor-1260-2	4.293	4.732	4.833	4.933	4.897	4.810	4.750#E2	4.93
9)	L2	Aroclor-1260-3	9.208	9.768	9.804	9.734	9.067	8.855	9.406#E2	4.40
10)	L2	Aroclor-1260-4	8.913	9.178	8.984	9.041	8.658	8.394	8.862#E2	3.23
11)	L2	Aroclor-1260-5	2.504	2.515	2.382	2.322	2.231	2.178	2.355#E2	5.89
12)	S	Decachlorobiphenyl	7.477	7.837	7.756	7.636	7.421	6.754	7.480#E3	5.21

(#) = Out of Range

Vial: 7
Acq On : 2 May 2003 15:00 Operator: ECL
Sample : WG139612-07 1660 ALT ICV 500 PPB Inst : HP4
Misc : 1,1 SOS63-14 Multiplr: 1.00
IntFile : events.e

Method : C:\HPCHEM\2\METHODS\1660F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1459
Last Update : Fri May 02 15:05:39 2003
Response via : Multiple Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	S	2,4,5,6-Tetrachloro-M-Xylen	25.000	26.121	-4.5	103	0.00
2	L1	Aroclor-1016-1	500.000	506.617	-1.3	99	0.00
3	L1	Aroclor-1016-2	500.000	482.699	3.5	98	0.00
4	L1	Aroclor-1016-3	500.000	481.367	3.7	96	0.00
5	L1	Aroclor-1016-4	500.000	498.211	0.4	99	0.00
6	L1	Aroclor-1016-5	500.000	497.797	0.4	95	0.00
7	L2	Aroclor-1260-1	500.000	495.502	0.9	99	0.00
8	L2	Aroclor-1260-2	500.000	503.186	-0.6	99	0.00
9	L2	Aroclor-1260-3	500.000	460.271	7.9	88	0.00
10	L2	Aroclor-1260-4	500.000	441.180	11.8	87	0.00
11	L2	Aroclor-1260-5	500.000	400.165	20.0#	79	0.00
12	S	Decachlorobiphenyl	25.000	25.750	-3.0	99	0.00

CONTINUING CALIBRATION REPORT

Login Number: L0304594
File ID: 4GR17890
CCV ID: WG139378-01
Units: ug/L

Instrument ID: HP4
Run Date: 04/30/2003
Run Time: 09:14
Analyst: ECL
Cal ID: HP4 - 17-MAR-03

Analyte	Expected	Found	RF	%D	Q
Aroclor-1260-5	500	564	426	12.8	
Aroclor-1260-4	500	551	1200	10.2	
Aroclor-1260-3	500	481	288	3.8	
Aroclor-1260-2	500	486	809	2.8	
Aroclor-1260-1	500	484	552	3.2	
Aroclor-1016-5	500	463	279	7.4	
Aroclor-1016-4	500	445	733	11.0	
Aroclor-1016-3	500	468	311	6.4	
Aroclor-1016-2	500	469	515	6.2	
Aroclor-1016-1	500	477	200	4.6	

* Exceeds %D Limit

KEMRON FORMS - Modified 12/05/2002
Version 1.2
Report generated 05/07/2003 17:12

CONTINUING CALIBRATION REPORT

Login Number: L0304594
File ID: 4GR17901
CCV ID: WG139378-02
Units: ug/L

Instrument ID: HP4
Run Date: 04/30/2003
Run Time: 15:07
Analyst: ECL
Cal ID: HP4 - 17-MAR-03

Analyte	Expected	Found	RF	%D	Q
Aroclor-1260-5	250	270	409	8.0	
Aroclor-1260-4	250	280	1220	12.0	
Aroclor-1260-3	250	229	274	8.4	
Aroclor-1260-2	250	230	767	8.0	
Aroclor-1260-1	250	244	556	2.4	
Aroclor-1016-5	250	215	259	14.0	
Aroclor-1016-4	250	264	869	5.6	
Aroclor-1016-3	250	245	325	2.0	
Aroclor-1016-2	250	244	537	2.4	
Aroclor-1016-1	250	243	204	2.8	

* Exceeds %D Limit

KEMRON FORMS - Modified 12/05/2002
Version 1.2
Report generated 05/07/2003 17:12

CONTINUING CALIBRATION REPORT

Login Number: L0304594
File ID: 4GR17912
CCV ID: WG139378-03
Units: ug/L

Instrument ID: HP4
Run Date: 05/01/2003
Run Time: 08:15
Analyst: ECL
Cal ID: HP4 - 17-MAR-03

Analyte	Expected	Found	RF	%D	Q
Aroclor-1260-5	500	494	374	1.2	
Aroclor-1260-4	500	505	1100	1.0	
Aroclor-1260-3	500	496	297	0.8	
Aroclor-1260-2	500	464	773	7.2	
Aroclor-1260-1	500	444	507	11.2	
Aroclor-1016-5	500	471	284	5.8	
Aroclor-1016-4	500	499	822	0.2	
Aroclor-1016-3	500	453	301	9.4	
Aroclor-1016-2	500	454	500	9.2	
Aroclor-1016-1	500	471	198	5.8	

* Exceeds %D Limit

KEMRON FORMS - Modified 12/05/2002
Version 1.2
Report generated 05/07/2003 17:12

CONTINUING CALIBRATION REPORT

Login Number: L0304594
File ID: 4GR17926
CCV ID: WG139378-07
Units: ug/L

Instrument ID: HP4
Run Date: 05/01/2003
Run Time: 13:49
Analyst: ECL
Cal ID: HP4 - 17-MAR-03

Analyte	Expected	Found	RF	%D	Q
Aroclor-1260-5	500	562	425	12.4	
Aroclor-1260-4	500	545	1190	9.0	
Aroclor-1260-3	500	457	273	8.6	
Aroclor-1260-2	500	462	770	7.6	
Aroclor-1260-1	500	467	532	6.6	
Aroclor-1016-5	500	435	262	13.0	
Aroclor-1016-4	500	518	853	3.6	
Aroclor-1016-3	500	465	309	7.0	
Aroclor-1016-2	500	465	512	7.0	
Aroclor-1016-1	500	464	195	7.2	

* Exceeds %D Limit

KEMRON FORMS - Modified 12/05/2002
Version 1.2
Report generated 05/07/2003 17:12

CONTINUING CALIBRATION REPORT

Login Number: L0304594
File ID: 4GR17936
CCV ID: WG139378-08
Units: ug/L

Instrument ID: HP4
Run Date: 05/01/2003
Run Time: 16:47
Analyst: ECL
Cal ID: HP4 - 17-MAR-03

Analyte	Expected	Found	RF	%D	Q
Aroclor-1260-5	250	259	392	3.6	
Aroclor-1260-4	250	271	1180	8.4	
Aroclor-1260-3	250	224	269	10.4	
Aroclor-1260-2	250	231	769	7.6	
Aroclor-1260-1	250	237	541	5.2	
Aroclor-1016-5	250	221	266	11.6	
Aroclor-1016-4	250	269	887	7.6	
Aroclor-1016-3	250	242	321	3.2	
Aroclor-1016-2	250	244	536	2.4	
Aroclor-1016-1	250	240	202	4.0	

* Exceeds %D Limit

KEMRON FORMB - Modified 12/05/2002
Version 1.2
Report generated 05/07/2003 17:12

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	100	4gr16956.d	1.	HEXANE		17 Mar 2003 15:14
2	1	4gr16957.d	1.	WG136402-01 1660 ICAL 2000 PPB	1,1 SOS63-02	17 Mar 2003 15:32
3	2	4gr16958.d	1.	WG136402-02 1660 ICAL 1000 PPB	1,1 SOS63-02	17 Mar 2003 15:51
4	3	4gr16959.d	1.	WG136402-03 1660 ICAL 500 PPB	1,1 SOS63-02	17 Mar 2003 16:10
5	4	4gr16960.d	1.	WG136402-04 1660 ICAL 250 PPB	1,1 SOS63-02	17 Mar 2003 16:28
6	5	4gr16961.d	1.	WG136402-05 1660 ICAL 100 PPB	1,1 SOS63-02	17 Mar 2003 16:47
7	6	4gr16962.d	1.	WG136402-06 1660 ICAL 50 PPB	1,1 SOS63-02	17 Mar 2003 17:05
8	7	4gr16963.d	1.	WG136402-07 1660 ALT ICV 50...	1,1 SOS63-14	17 Mar 2003 17:24
9	8	4gr16964.d	1.	1254 ICAL 2000 PPB	SOS63-41	17 Mar 2003 17:42
10	9	4gr16965.d	1.	1254 ICAL 1000 PPB	SOS63-41	17 Mar 2003 18:01
11	10	4gr16966.d	1.	1254 ICAL 500 PPB	SOS63-41	17 Mar 2003 18:19
12	11	4gr16967.d	1.	1254 ICAL 250 PPB	SOS63-41	17 Mar 2003 18:38
13	12	4gr16968.d	1.	1254 ICAL 100 PPB	SOS63-41	17 Mar 2003 18:56
14	13	4gr16969.d	1.	1254 ICAL 50 PPB	SOS63-41	17 Mar 2003 19:14
15	14	4gr16970.d	1.	1254 ALT ICV 500 PPB	SOS63-08	17 Mar 2003 19:32
16	15	4gr16971.d	1.	1248 500 PPB	SOS61-40	17 Mar 2003 19:51
17	16	4gr16972.d	1.	1248 ALT 500 PPB - *	SOS64-08	17 Mar 2003 20:09
18	17	4gr16973.d	1.	1242 500 PPB	SOS61-41	17 Mar 2003 20:27
19	18	4gr16974.d	1.	1242 ALT 500 PPB	SOS63-09	17 Mar 2003 20:45
20	19	4gr16975.d	1.	1232 500 PPB	SOS64-09	17 Mar 2003 21:04
21	20	4gr16976.d	1.	1232 ALT 500 PPB	SOS64-10	17 Mar 2003 21:22
22	21	4gr16977.d	1.	1221 500 PPB	SOS64-07	17 Mar 2003 21:40
23	22	4gr16978.d	1.	1221 ALT 500 PPB	SOS61-43	17 Mar 2003 21:58
24	23	4gr16979.d	1.	WG136402-08 1660 CCV 500 PPB	1,1 SOS63-02	17 Mar 2003 22:16
25	51	4gr16980.d	1.	WG136402-09 INST. BLANK	1,1 SOS62-07	17 Mar 2003 22:34
26	52	4gr16981.d	1.	WG136354-01 BLANK V200 P79	1,1 WATER	17 Mar 2003 22:53
27	53	4gr16982.d	1.	WG136354-02 LCS V200 P79	1,1 WATER	17 Mar 2003 23:11
28	54	4gr16983.d	1.	WG136354-03 LCS DUP V200 P79	1,1 WATER	17 Mar 2003 23:29
29	55	4gr16984.d	1.	L0303318-01	1,1 WATER	17 Mar 2003 23:47
30	56	4gr16985.d	1.	L0303318-02	1,1 WATER	18 Mar 2003 00:05
31	57	4gr16986.d	1.	L0303318-03	1,1 WATER	18 Mar 2003 00:23
32	58	4gr16987.d	1.	L0303318-04	1,1 WATER	18 Mar 2003 00:42
33	59	4gr16988.d	1.	L0303318-05	1,1 WATER	18 Mar 2003 01:00
34	60	4gr16989.d	1.	L0303318-06 - **	1,1 WATER	18 Mar 2003 01:18
35	61	4gr16990.d	1.	L0303318-07	1,1 WATER	18 Mar 2003 01:36
36	62	4gr16991.d	1.	1254 CCV 500 PPB	SOS63-41	18 Mar 2003 01:54
37	63	4gr16992.d	1.	WG136402-10 INST. BLANK	1,1 SOS62-07	18 Mar 2003 02:12
38	64	4gr16993.d	1.	L0303318-08 - ** - A	1,1 WATER	18 Mar 2003 02:31
39	65	4gr16994.d	1.	L0303318-09	1,1 WATER	18 Mar 2003 02:49
40	66	4gr16995.d	1.	L0303318-10 -	1,1 WATER	18 Mar 2003 03:07
41	67	4gr16996.d	1.	L0303318-11	1,1 WATER	18 Mar 2003 03:25
42	68	4gr16997.d	1.	L0303318-12	1,1 WATER	18 Mar 2003 03:44
43	69	4gr16998.d	1.	WG136402-11 1660 CCV 500 PPB	1,1 SOS63-02	18 Mar 2003 04:02
44	70	4gr16999.d	1.	WG136402-12 INST. BLANK	1,1 SOS62-07	18 Mar 2003 04:20

ECL 3/18/03

KEMRON ENVIRONMENTAL SERVICES
Semivolatile GC Laboratory Maintenance Log

Analysis Date/Time 3/17/03 Instrument ID HP4 Column ID RTX-CLP Rear Data Subdirectory 031703. SEC
Analyst Initials ECL

SOP # GCS09 Rev. # ___ 8081A ___
SOP # GCS04 Rev. # ___ 8151A ___
SOP # GCS03 Rev. # ___ PRO ___
SOP # GCS02 Rev. # ___ 8015B Mod (Alcohol) ___

SOP # GCS10 Rev. # 3 8082 ✓
SOP # GCS01 Rev. # ___ 8100 ___
SOP # GCS02 Rev. # ___ 8015B Mod (DRO) ___
SOP # GCS07 Rev. # ___ 8011 ___

Analysis Date/Time ___ Instrument ID ___ Column ID ___ Data Subdirectory ___

Daily Check
☑ Gases >500 psi

Preventative Maintenance
☐ Change o-ring
☑ Change liner
☐ Change septum
☐ Clip column (___cm)
☐ Injection port seal (goldseal)
☐ Change gases ___

Returned To Control?
Yes ___ No ___

Additional Maintenance
Problem: ___

Action Taken: ___

Comments

* - 3 peaks failed but the average was within 15% = good
** - need rerun for Ar 1232 and confirmed
A - sample failed T-A-X surrogate high. PCB was good

Reviewed By: [illegible]

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	4gr17890.d	1.	WG139378-01 1660 CCV 500 PPB	1,1 SOS63-02	30 Apr 2003 09:14
2	2	4gr17891.d	1.	WG139270-01 BLANK V201 P95 - *	1,1 WATER	30 Apr 2003 09:39
3	3	4gr17892.d	1.	WG139270-02 LCS V201 P95	1,1 WATER	30 Apr 2003 09:57
4	4	4gr17893.d	1.	WG139270-03 LCS DUP V201 P95	1,1 WATER	30 Apr 2003 10:14
5	5	4gr17894.d	1.	L0304607-01	2,1 WATER	30 Apr 2003 10:32
6	6	4gr17895.d	1.	L0304558-01	1,1 WATER	30 Apr 2003 10:50
7	7	4gr17896.d	1.	L0304558-02 - *	1,1 WATER	30 Apr 2003 11:08
8	8	4gr17897.d	1.	L0304558-03	1,1 WATER	30 Apr 2003 11:25
9	9	4gr17898.d	1.	L0304558-04	1,1 WATER	30 Apr 2003 11:43
10	10	4gr17899.d	1.	L0304576-01 - *	1,1 WATER	30 Apr 2003 12:01
11	11	4gr17900.d	1.	L0304576-02	1,1 WATER	30 Apr 2003 12:18
12	12	4gr17901.d	1.	WG139378-02 1660 CCV 250 PPB	1,1 SOS63-02	30 Apr 2003 15:07
13	13	4gr17902.d	1.	L0304576-03 - *	1,1 SOS63-02	30 Apr 2003 15:24
14	14	4gr17903.d	1.	L0304576-04 - *	1,1 WATER	30 Apr 2003 15:42
15	15	4gr17904.d	1.	L0304576-05	1,1 WATER	30 Apr 2003 16:00
16	16	4gr17905.d	1.	L0304576-06	1,1 WATER	30 Apr 2003 16:18
17	17	4gr17906.d	1.	L0304587-02 - *	1,1 WATER	30 Apr 2003 16:36
18	18	4gr17907.d	1.	L0304593-01	1,1 WATER	30 Apr 2003 16:53
19	19	4gr17908.d	1.	L0304593-02 - *	1,1 WATER	30 Apr 2003 17:11
20	20	4gr17909.d	1.	L0304593-03	1,1 WATER	30 Apr 2003 17:28
21	21	4gr17910.d	1.	L0304594-01	1,1 WATER	30 Apr 2003 17:46
22	22	4gr17911.d	1.	L0304594-02 -	1,1 WATER	30 Apr 2003 18:03
23	23	4gr17912.d	1.	WG139378-03 1660 CCV 500 PPB — A	1,1 SOS63-02	1 May 2003 08:15

ECQ 5/1/03

RPC 5/1/03

KEMRON ENVIRONMENTAL SERVICES
Semivolatile GC Laboratory Maintenance Log

Analysis Date/Time 4/30/03 Instrument ID HP4 Column ID RTX-CLP Rear Data Subdirectory 043003
Analyst Initials ECL

SOP # GCS09 Rev. # ___ 8081A ___
SOP # GCS04 Rev. # ___ 8151A ___
SOP # GCS03 Rev. # ___ PRO ___
SOP # GCS02 Rev. # ___ 8015B Mod (Alcohol) ___

SOP # GCS10 Rev. # 3.2 8082 ✓
SOP # GCS01 Rev. # ___ 8100 ___
SOP # GCS02 Rev. # ___ 8015B Mod (DRO) ___
SOP # GCS07 Rev. # ___ 8011 ___

Analysis Date/Time ___ Instrument ID ___ Column ID ___ Data Subdirectory ___

Daily Check
- ☐ Gases >500 psi

Preventative Maintenance
- ☐ Change o-ring
- ☐ Change liner
- ☐ Change septum
- ☐ Clip column (___cm)
- ☐ Injection port seal (goldseal)
- ☑ Change gases Argon Methane

Returned To Control?
Yes ___ No ___

Additional Maintenance
Problem: ___

Action Taken: ___

Comments

A - Power outage caused final CCV to not inject. This is cause for time differential.

* - OCB surrogate failed high.

Reviewed By: RWC 5/1/03

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	4gr17913.d	1.	WG139378-04 1660 CCV 500 PPB	1,1 SOS63-02	1 May 2003 09:[illegible]
2	2	4gr17914.d	1.	WG139378-05 INST. BLANK	1,1 SOS64-38	1 May 2003 10:15
3	3	4gr17915.d	1.	WG139410-01 BLANK V202 P75	7,1 SOIL	1 May 2003 10:33
4	4	4gr17916.d	1.	WG139410-02 LCS V202 P75	7,1 SOIL	1 May 2003 10:51
5	5	4gr17917.d	1.	WG139410-03 LCS DUP V202 P75	7,1 SOIL	1 May 2003 11:08
6	6	4gr17918.d	1.	L0304596-05 - CF	7,1,RE SOIL	1 May 2003 11:26
7	7	4gr17919.d	1.	L0304596-07 - CF	7,1,RE SOIL	1 May 2003 11:44
8	8	4gr17920.d	1.	L0304651-01	7,1 SOIL	1 May 2003 12:02
9	9	4gr17921.d	1.	L0304651-02 - CF	7,1 SOIL	1 May 2003 12:20
10	10	4gr17922.d	1.	L0304651-03	7,1 SOIL	1 May 2003 12:38
11	11	4gr17923.d	1.	L0304651-04	7,1 SOIL	1 May 2003 12:56
12	12	4gr17924.d	1.	1254 CCV 500 PPB	SOS63-41	1 May 2003 13:13
13	13	4gr17925.d	1.	WG139378-06 INST. BLANK	1,1 SOS64-38	1 May 2003 13:31
14	14	4gr17926.d	1.	WG139378-07 1660 CCV 500 PPB	1,1 SOS63-02	1 May 2003 13:49
15	15	4gr17927.d	1.	WG139432-01 BLANK V201 P107	2,1 WATER	1 May 2003 14:07
16	16	4gr17928.d	1.	WG139432-02 LCS V201 P107	2,1 WATER	1 May 2003 14:24
17	17	4gr17929.d	1.	WG139432-03 LCS DUP V201 P107	2,1 WATER	1 May 2003 14:42
18	18	4gr17930.d	1.	L0304672-01	2,1 WATER	1 May 2003 15:00
19	19	4gr17931.d	1.	WG139368-01 BLANK V202 P73	7,1 SOIL	1 May 2003 15:18
20	20	4gr17932.d	1.	WG139368-02 LCS V202 P73	7,1 SOIL	1 May 2003 15:35
21	21	4gr17933.d	1.	WG139368-03 LCS DUP V202 P73	7,1 SOIL	1 May 2003 15:53
22	22	4gr17934.d	1.	L0304554-01 - CF - *	7,1 SOIL	1 May 2003 16:11
23	23	4gr17935.d	1.	L0304594-03 - CF - *	7,1 SOIL	1 May 2003 16:29
24	24	4gr17936.d	1.	WG139378-08 1660 CCV 250 PPB	1,1 SOS63-02	1 May 2003 16:47
25	25	4gr17937.d	1.	RE WG139367-01 BLANK V202 P71	11,1 OIL	1 May 2003 17:05
26	26	4gr17938.d	1.	WG139367-02 LCS V202 P71	11,1 OIL	1 May 2003 17:23
27	27	4gr17939.d	1.	WG139367-03 LCS DUP V202 P71	11,1 OIL	1 May 2003 17:41
28	28	4gr17940.d	1.	L0304419-01 5x - 20X	11,5 OIL	1 May 2003 17:59
29	29	4gr17941.d	1.	L0304419-02 5x - 20X	11,5 OIL	1 May 2003 18:16
30	30	4gr17942.d	1.	L0304543-06 5x - 20X	12,5 OIL	1 May 2003 18:34
31	31	4gr17943.d	1.	L0304619-01 5x - 20X	11,5 OIL	1 May 2003 18:52
32	32	4gr17944.d	1.	CC WG139378-09 1660 CCV 500 PPB	1,1 SOS63-02	1 May 2003 19:09

ECL 5/2/03
mde 5/2/03

02 May 2003 08:06

KEMRON ENVIRONMENTAL SERVICES
Semivolatile GC Laboratory Maintenance Log

Analysis Date/Time 5/1/03 Instrument ID HP4 Column ID RTX-CLP Rear Data Subdirectory 050103
Analyst Initials EGL

SOP # GCS09 Rev. # ___ 8081A ___
SOP # GCS04 Rev. # ___ 8151A ___
SOP # GCS03 Rev. # ___ PRO ___
SOP # GCS02 Rev. # ___ 8015B Mod (Alcohol) ___
SOP # GCS10 Rev. # 3 8082 ✓
SOP # GCS01 Rev. # ___ 8100 ___
SOP # GCS02 Rev. # ___ 8015B Mod (DRO) ___
SOP # GCS07 Rev. # ___ 8011 ___

Analysis Date/Time ___ Instrument ID ___ Column ID ___ Data Subdirectory ___

Daily Check
- ☐ Gases >500 psi

Preventative Maintenance
- ☐ Change o-ring
- ☐ Change liner
- ☐ Change septum
- ☐ Clip column (___cm)
- ☐ Injection port seal (goldseal)
- ☐ Change gases ___

Returned To Control?
Yes ___ No ___

Additional Maintenance
Problem: ___

Action Taken: ___

Comments

CF - need confirmed

CC - standard failed low.

RR - need rerun.

* - DCB surrogate failed high due to SMI.

Reviewed By: EGL 5/2/03

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	4gf17523.d	1.	WG139612-01 1660 ICAL 2000 PPB	1,1 SOS63-02	2 May 2003 13:[illegible]
2	2	4gf17524.d	1.	WG139612-02 1660 ICAL 1000 PPB	1,1 SOS63-02	2 May 2003 13:27
3	3	4gf17525.d	1.	WG139612-03 1660 ICAL 500 PPB	1,1 SOS63-02	2 May 2003 13:46
4	4	4gf17526.d	1.	WG139612-04 1660 ICAL 250 PPB	1,1 SOS63-02	2 May 2003 14:04
5	5	4gf17527.d	1.	WG139612-05 1660 ICAL 100 PPB	1,1 SOS63-02	2 May 2003 14:23
6	6	4gf17528.d	1.	WG139612-06 1660 ICAL 50 PPB	1,1 SOS63-02	2 May 2003 14:41
7	7	4gf17529.d	1.	WG139612-07 1660 ALT ICV 50...	1,1 SOS63-14	2 May 2003 15:00
8	8	4gf17530.d	1.	1254 ICAL 2000 PPB	SOS63-41	2 May 2003 15:18
9	9	4gf17531.d	1.	1254 ICAL 1000 PPB	SOS63-41	2 May 2003 15:37
10	10	4gf17532.d	1.	1254 ICAL 500 PPB	SOS63-41	2 May 2003 15:55
11	11	4gf17533.d	1.	1254 ICAL 250 PPB	SOS63-41	2 May 2003 16:13
12	12	4gf17534.d	1.	1254 ICAL 100 PPB	SOS63-41	2 May 2003 16:32
13	13	4gf17535.d	1.	1254 ICAL 50 PPB	SOS63-41	2 May 2003 16:50
14	14	4gf17536.d	1.	1254 ALT ICV 500 PPB	SOS63-08	2 May 2003 17:09
15	15	4gf17537.d	1.	1248 500 PPB	SOS64-45	2 May 2003 17:27
16	16	4gf17538.d	1.	1248 ALT 500 PPB	SOS64-08	2 May 2003 17:45
17	17	4gf17539.d	1.	1242 500 PPB	SOS64-44	2 May 2003 18:04
18	18	4gf17540.d	1.	1242 ALT 500 PPB	SOS63-09	2 May 2003 18:23
19	19	4gf17541.d	1.	1232 500 PPB	SOS64-09	2 May 2003 18:41
20	20	4gf17542.d	1.	1232 ALT 500 PPB	SOS64-10	2 May 2003 18:59
21	21	4gf17543.d	1.	1221 500 PPB	SOS64-07	2 May 2003 19:[illegible]
22	22	4gf17544.d	1.	1221 ALT 500 PPB	SOS64-43	2 May 2003 19:36
23	23	4gf17545.d	1.	WG139612-08 1660 CCV 500 PPB	1,1 SOS63-02	2 May 2003 19:54
24	24	4gf17546.d	1.	L0304426-17 CF	1,1 WATER CF	2 May 2003 20:13
25	25	4gf17547.d	1.	L0304447-01 CF	1,1 WATER CF	2 May 2003 20:31
26	26	4gf17548.d	1.	L0304554-01 CF	7,1 SOIL CF	2 May 2003 20:49
27	27	4gf17549.d	1.	L0304594-03 CF	7,1 SOIL CF	2 May 2003 21:07
28	28	4gf17550.d	1.	WG139612-09 1660 CCV 500 PPB	1,1 SOS63-02	2 May 2003 21:26
29	29	4gf17551.d	1.	INST. BLANK	SOS64-38	2 May 2003 21:44
30	30	4gf17552.d	1.	L0304441-01 CF	1,1 WATER CF	2 May 2003 22:02
31	31	4gf17553.d	100.	L0304441-03 CF 100x	1,100 WATER CF	2 May 2003 22:20
32	32	4gf17554.d	1.	L0304509-01 CF	7,1 SOIL CF	2 May 2003 22:38
33	33	4gf17555.d	1.	L0304509-02 CF	7,1 SOIL CF	2 May 2003 22:57
34	34	4gf17556.d	1.	L0304509-03 CF	7,1 SOIL CF	2 May 2003 23:15
35	35	4gf17557.d	1.	L0304509-04 CF	7,1 SOIL CF	2 May 2003 23:33
36	36	4gf17558.d	1.	L0304509-09 CF	7,1 SOIL CF	2 May 2003 23:51
37	37	4gf17559.d	1.	L0304509-10 CF	7,1 SOIL CF	3 May 2003 00:09
38	38	4gf17560.d	1.	L0304509-11 CF	7,1 SOIL CF	3 May 2003 00:28
39	39	4gf17561.d	1.	L0304547-01 CF	13,1 WIPE	3 May 2003 00:46
40	40	4gf17562.d	1.	1254 CCV 500 PPB	SOS63-41	3 May 2003 01:04
41	41	4gf17563.d	1.	INST. BLANK	SOS64-38	3 May 2003 01:22
42	42	4gf17564.d	20.	L0304548-01 CF 20x	7,20 SOIL CF	3 May 2003 01:40
43	43	4gf17565.d	1.	L0304596-05 CF	7,1,RE SOIL CF	3 May 2003 01:59
44	44	4gf17566.d	1.	L0304596-07 CF	7,1,RE SOIL CF	3 May 2003 02:[illegible]
45	45	4gf17567.d	1.	L0304651-02 CF	7,1 SOIL CF	3 May 2003 02:35
46	46	4gf17568.d	1.	1660 CCV 500 PPB	SOS63-02	3 May 2003 02:53
47	47	4gf17569.d	1.	INST. BLANK	SOS63-48	3 May 2003 03:11

ECQ 5/4/03
rlc 5/5/03

KEMRON ENVIRONMENTAL SERVICES
Semivolatile GC Laboratory Maintenance Log

Analysis Date/Time 5/2/03 Instrument ID HP 4 Column ID Rtx-CLP II Frm 4 Data Subdirectory 050203
Analyst Initials ECL

SOP # GCS09 Rev. # ___ 8081A ___
SOP # GCS04 Rev. # ___ 8151A ___
SOP # GCS03 Rev. # ___ PRO ___
SOP # GCS02 Rev. # ___ 8015B Mod (Alcohol) ___
SOP # GCS10 Rev. # 5 8082 ✓
SOP # GCS01 Rev. # ___ 8100 ___
SOP # GCS02 Rev. # ___ 8015B Mod (DRO) ___
SOP # GCS07 Rev. # ___ 8011 ___

Analysis Date/Time ___ Instrument ID ___ Column ID ___ Data Subdirectory ___

Daily Check
- ☑ Gases >500 psi

Preventative Maintenance
- ☐ Change o-ring
- ☐ Change liner
- ☐ Change septum
- ☐ Clip column (___cm)
- ☐ Injection port seal (goldseal)
- ☐ Change gases ___

Returned To Control?
Yes ___ No ___

Additional Maintenance
Problem: ___

Action Taken: ___

Comments

Reviewed By: [illegible]

Parameter: PCB-S SOP #: EXT02 Revision #: 11
Extraction Analyst(s): PAS, CAF TV/KD Analyst(s): CAF
Date/Time Extracted: 04-30-03 3:50 Date TV/KD: 4-30-03
Spike/Surrogate Analyst: CAF Witness: PAS
Surrogate #: ESSC0449-10 Earliest Hold Date: 5-08-03
Spike #: A = ~~ESSC0449-7~~ CAF 4-30-03 43-03 #2 Spike #: B = —

Extraction Work Group WG 139368
Analytical Work Group WG 139446

Extract Relinquished By: CAF
Extract Received By & Date: EQ 4/30/03

	Sample ID	Test Code	pH / <2	N	>12	Initial Vol / Wt	Amount Surrogate	Amount Spike	Final Volume	Extract Color	Emulsions / A	BN	N	Comments
1	Blank				*	30.00 g	200 uL		10 mL	T				WG 139365 c
2	LCS				*	30.00 g		100 uL						WG 139365 c
3	LCS DUP				*	30.00 g								WG 139365 c
4	CH-55401	8082			*	30.00 g								
5	CH-55403				*	30.00 g								
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														

CAF 4-30-03

Methylene Chloride Lot #: —
Hexane Lot #: 43057
Ether Lot #: —
Methanol Lot #: —
Solvent: — Lot #: —
Reagent: 94% Lot #: ER0005-27
Reagent: LAB SAND Lot #: → X35635
Reagent: ~~pecon~~ Na_2SO_4 Lot #: → X33157
Acid: Conc H_2SO_4 Lot #: X43027
Florisil Lot #: Y01559
Silica Gel Lot #: —
IR Analyst / Date / Time: —
Dried Na_2SO_4 Lot #: ER0005-19

Color Code
T = Transparent
C = Colored
O = Opaque

SW-846 Method			On	Off	On	Off
Continuous	3520C					
Soxhlet	3540C					
ASE*	3545					
Sep Funnel	3510C					
Sonication	3550B	✓				
Waste	3580A					

* Accelerated Solvent Extractor (ASE)

Clean-ups			
Florisil 3620B	✓	GPC 3640A	
Silica Gel 3630C		Other	
Acid 3665A	✓	N/A	
Sulfur 3660B			

Peer Reviewed By: [signature] Date: 04/30/03

Extraction Notes For Volume # 202 Page # 73

General Comments: * all wts. are 30 ± .10 g.

Extraction Anomalies: NONE

Concentration Anomalies: NONE

Clean-Up Anomalies: NONE

Supervisor Review: _____ Date: _____

Parameter: PCB H_2O SOP #: EXP01 Revision #: 10
Extraction Analyst(s): CAF, PAS TV/KD Analyst(s): —
Date/Time Extracted: 4-29-03 @ 0900 Date TV/KD: 04-29-03
Spike/Surrogate Analyst: CAF Witness: MS
Surrogate #: ESS0044-10 Earliest Hold Date: 4-30-03
Spike #: A = ESS0043-03-H2 Spike #: B = —

Extraction Work Group WG 139270
Analytical Work Group WG 139386

Extract Relinquished By: —
Extract Received By & Date: [illegible] 4/30/03

	Sample ID	Test Code	pH i <2	pH i N	pH i >12	Initial Vol / Wt	Amount Surrogate	Amount Spike	Final Volume	Extract Color	Emulsions i A	Emulsions i BN	Emulsions i N	Comments
1	Blank			✓		1000 mL	200 uL		10 mL	T				WG 139270-01
2	LCS			✓				100 uL						WG -02
3	LCS Dup			✓										WG -03
4	04-558-01	8082		✓		910 mL								
5	-02			✓		940 mL								
6	-03			✓		910 mL								
7	-04			✓		900 mL								
8	04-576-01			✓		900 mL								
9	-02			✓		890 mL								
10	-03			✓		910 mL								
11	-04			✓		910 mL								
12	-05			✓		900 mL								
13	-06			✓		910 mL								
14	04-587-02			✓		950 mL								
15	04-593-01			✓		860 mL								
16	-02			✓		900 mL								
17	-03			✓		860 mL								
18	04-594-01			✓		870 mL								
19	-02			✓		920 mL								
20	04-607-01			✓		480 mL								
21														
22														
23														
24														

04-29-03

Methylene Chloride Lot #: 43010
Hexane Lot #: 43057
Ether Lot #: —
Methanol Lot #: —
Solvent: — Lot #: —
Reagent: 94% Lot #: ER0005-27
Reagent: Lot #:
Reagent: Lot #:
Acid: Conc H_2SO_4 Lot #: [illegible]
Florisil Lot #: Y61559
Silica Gel Lot #: —
IR Analyst / Date / Time: —
Dried Na_2SO_4 Lot #: ER0005-25

Color Code
T = Transparent
C = Colored
O = Opaque

SW-846 Method			On	Off	On	Off
Continuous	3520C					
Soxhlet	3540C					
ASE*	3545					
Sep Funnel	3510C	✓				
Sonication	3550B					
Waste	3580A					

* Accelerated Solvent Extractor (ASE)

Clean-ups			
Florisil 3620B	✓	GPC 3640A	
Silica Gel 3630C		Other	
Acid 3665A	✓	N/A	
Sulfur 3660B			

Peer Reviewed By: [signature] Date: 04-29-03

Extraction Notes For Volume # 201 Page # 95

General Comments: none

Extraction Anomalies: none

Concentration Anomalies: none

Clean-Up Anomalies: none

Supervisor Review: _____ Date: _____

2.2.3.2 Sample Data

Data File : C:\HPCHEM\2\DATA\043003\4GR17910.D Vial: 21
Acq On : 30 Apr 2003 17:46 Operator: ECL
Sample : L0304594-01 Inst : HP4
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events.e
Quant Time: May 1 8:37 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Thu May 01 08:37:18 2003
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

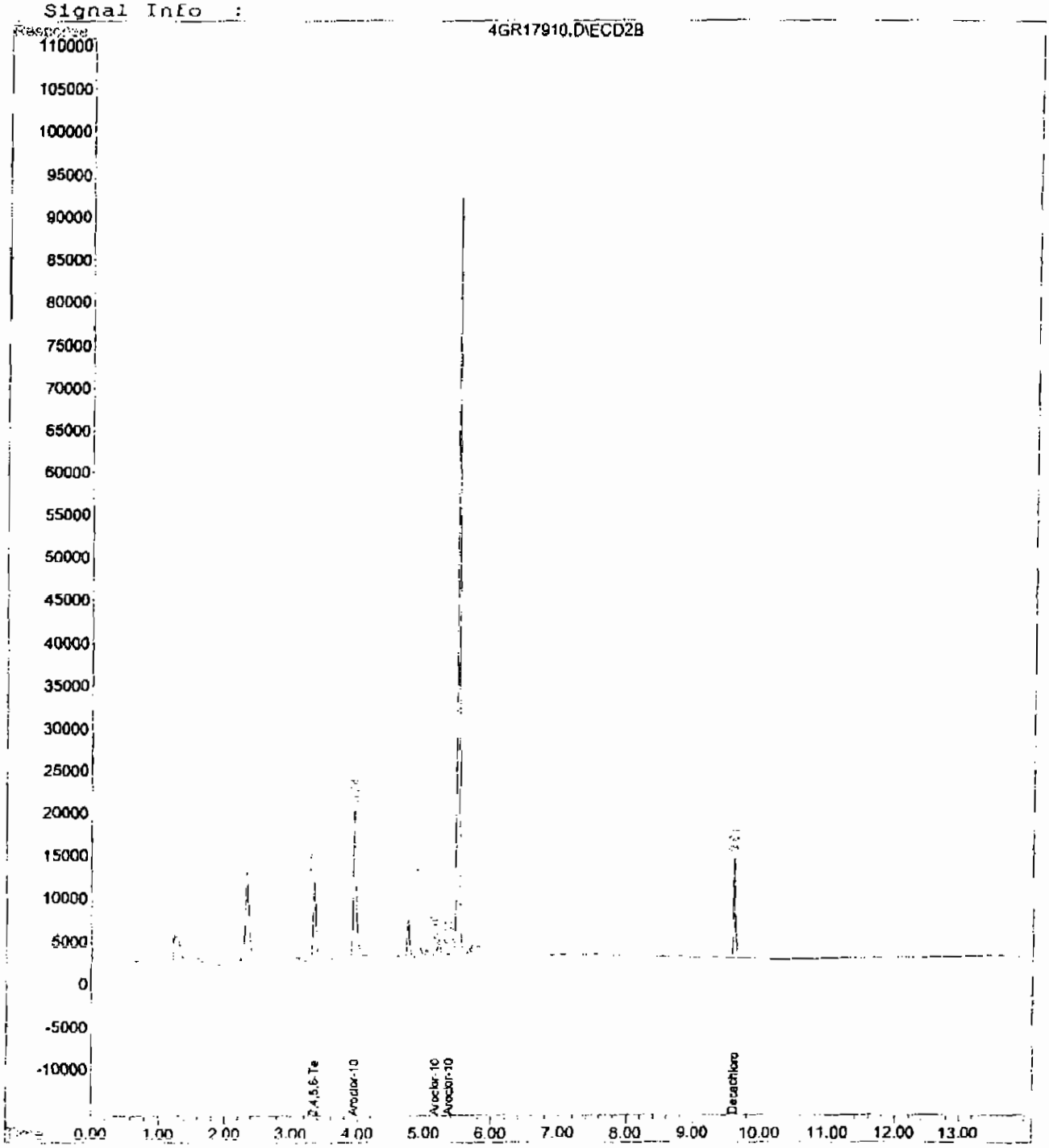
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	3.34	272564	20.925 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	104.63%
12) S Decachlorobiphenyl	9.61	216713	16.943 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	84.72%
Target Compounds			
2) L1 Aroclor-1016-1	3.94f	542873	2583.159 UG/L
3) L1 Aroclor-1016-2	0.00	0	N.D. UG/L
4) L1 Aroclor-1016-3	0.00	0	N.D. UG/L
5) L1 Aroclor-1016-4	5.16	12990	15.760 UG/L
6) L1 Aroclor-1016-5	5.37	6673	22.140 UG/L no PCB
Sum Aroclor-1016-1		562536	2621.060 UG/L
Average Aroclor-1016-1			873.687 UG/L pattern
7) L2 Aroclor-1260-1	0.00	0	N.D. UG/L
8) L2 Aroclor-1260-2	0.00	0	N.D. UG/L
9) L2 Aroclor-1260-3	0.00	0	N.D. UG/L
10) L2 Aroclor-1260-4	0.00	0	N.D. UG/L
11) L2 Aroclor-1260-5	0.00	0	N.D. UG/L
Sum Aroclor-1260-1		0	N.D. UG/L
Average Aroclor-1260-1			0.000 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\043003\4GR17910.D Vial: 21
Acq On : 30 Apr 2003 17:46 Operator: ECL
Sample : L0304594-01 Inst : HP4
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events.e
Quant Time: May 1 8:37 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Thu May 01 08:37:18 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\043003\4GR17911.D Vial: 22
Acq On : 30 Apr 2003 18:03 Operator: ECL
Sample : L0304594-02 Inst : HP4
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events.e
Quant Time: May 1 8:38 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Thu May 01 08:37:18 2003
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

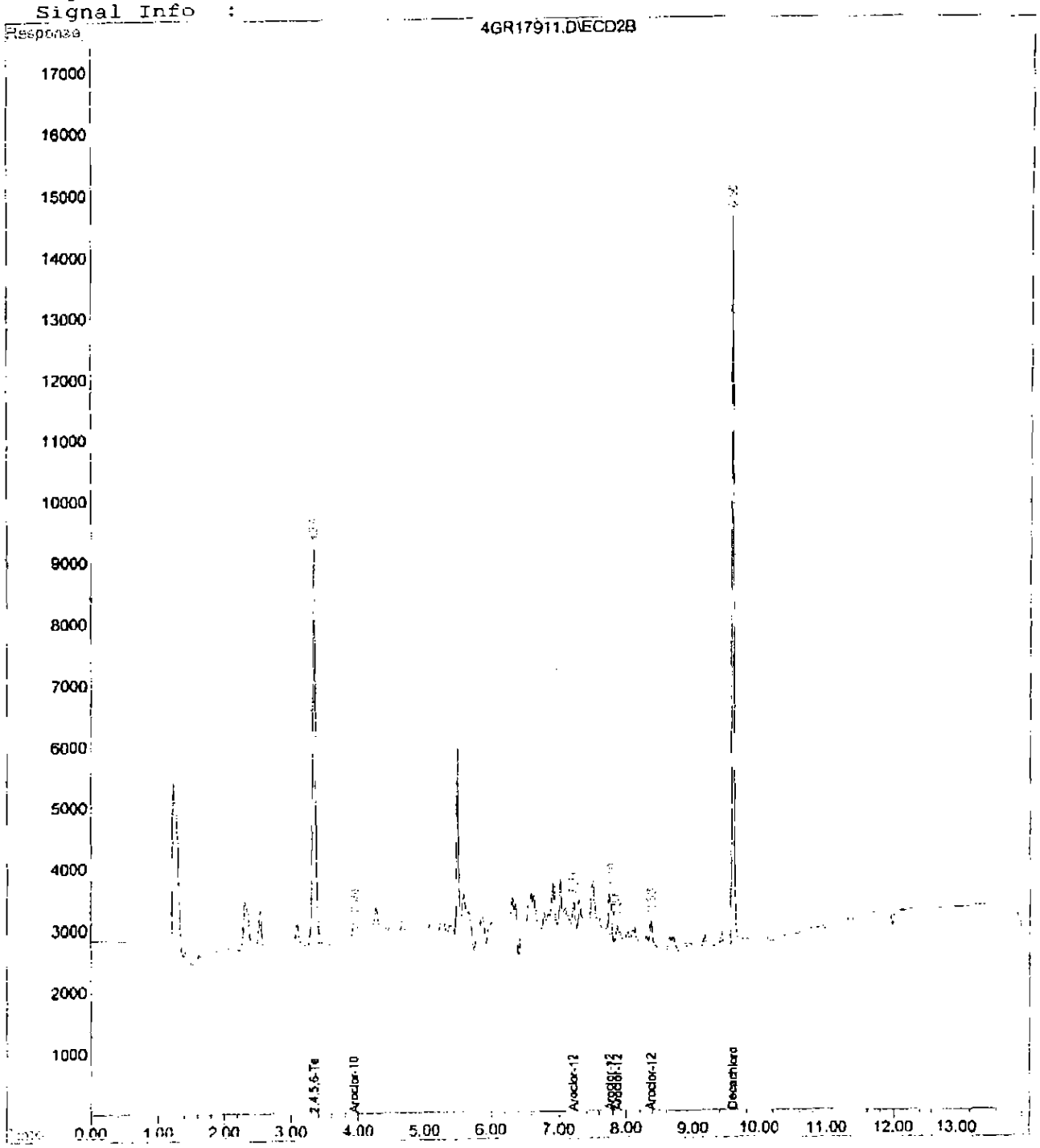
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	3.34	192981	14.815 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	74.08%
12) S Decachlorobiphenyl	9.60	219949	17.196 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	85.98%
Target Compounds			
2) L1 Aroclor-1016-1	3.94f	12354	58.786 UG/L
3) L1 Aroclor-1016-2	0.00	0	N.D. UG/L
4) L1 Aroclor-1016-3	0.00	0	N.D. UG/L
5) L1 Aroclor-1016-4	0.00	0	N.D. UG/L
6) L1 Aroclor-1016-5	0.00	0	N.D. UG/L
Sum Aroclor-1016-1		12354	58.786 UG/L
Average Aroclor-1016-1			58.786 UG/L
7) L2 Aroclor-1260-1	7.21	8636	15.152 UG/L 1254?
8) L2 Aroclor-1260-2	7.76	18183	21.829 UG/L
9) L2 Aroclor-1260-3	7.87	3427	11.452 UG/L
10) L2 Aroclor-1260-4	8.38	7912	7.268 UG/L
11) L2 Aroclor-1260-5	0.00	0	N.D. UG/L
Sum Aroclor-1260-1		38157	55.701 UG/L
Average Aroclor-1260-1			13.925 ~~UG/L~~ CMDL

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\043003\4GR17911.D Vial: 22
Acq On : 30 Apr 2003 18:03 Operator: ECL
Sample : L0304594-02 Inst : HP4
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events.e
Quant Time: May 1 8:38 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Thu May 01 08:37:18 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\043003\4GR17911.D Vial: 22
Acq On : 30 Apr 2003 18:03 Operator: ECL
Sample : L0304594-02 Inst : HP4
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events.e
Quant Time: May 1 8:48 2003 Quant Results File: 1254R.RES

Quant Method : C:\HPCHEM\2\METHODS\1254R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1914
Last Update : Thu May 01 08:47:27 2003
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M Xyle	3.34	192981	15.338 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	76.69%
7) S Decachlorobiphenyl	9.60	219949	18.108 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	90.54%
Target Compounds			
2) L1 Aroclor-1254-1	5.59	8203	21.164 UG/L
3) L1 Aroclor-1254-2	6.31	4800	20.322 UG/L
4) L1 Aroclor-1254-3	7.31	12228	24.797 UG/L
5) L1 Aroclor-1254-4	7.49	1683	3.532 UG/L
6) L1 Aroclor-1254-5	7.76	18183	27.067 UG/L
Sum Aroclor-1254-1		45097	96.883 UG/L
Average Aroclor-1254-1			19.377 UG/L

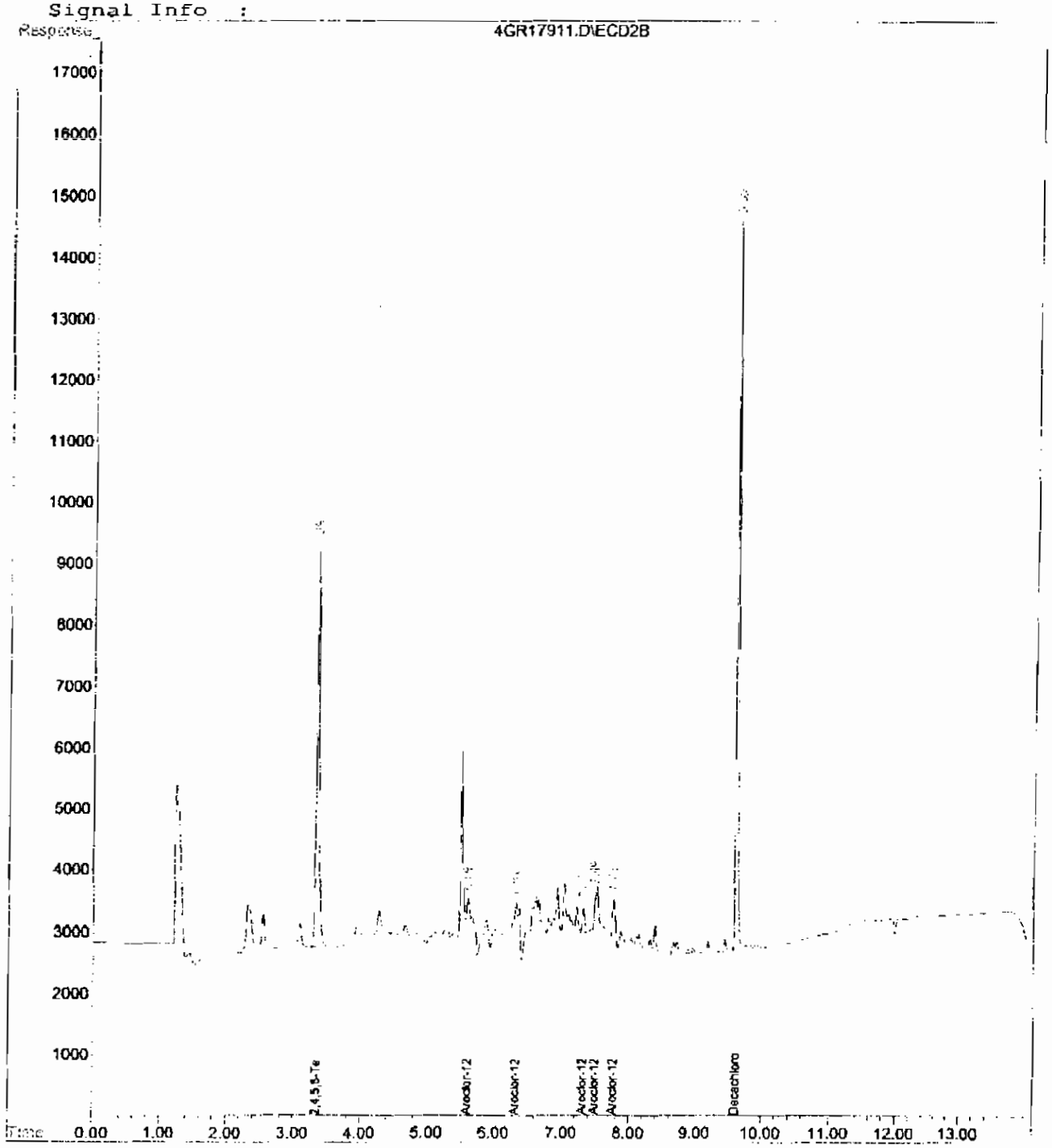
CMDL

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\043003\4GR17911.D Vial: 22
Acq On : 30 Apr 2003 18:03 Operator: ECL
Sample : L0304594-02 Inst : HP4
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events.e
Quant Time: May 1 8:48 2003 Quant Results File: 1254R.RES

Quant Method : C:\HPCHEM\2\METHODS\1254R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1914
Last Update : Thu May 01 08:47:27 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\050103\4GR17935.D Vial: 23
Acq On : 1 May 2003 16:29 Operator: ECL
Sample : L0304594-03 Inst : HP4
Misc : 7,1 SOIL Multiplr: 1.00
IntFile : events.e
Quant Time: May 2 8:19 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Fri May 02 08:18:10 2003
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

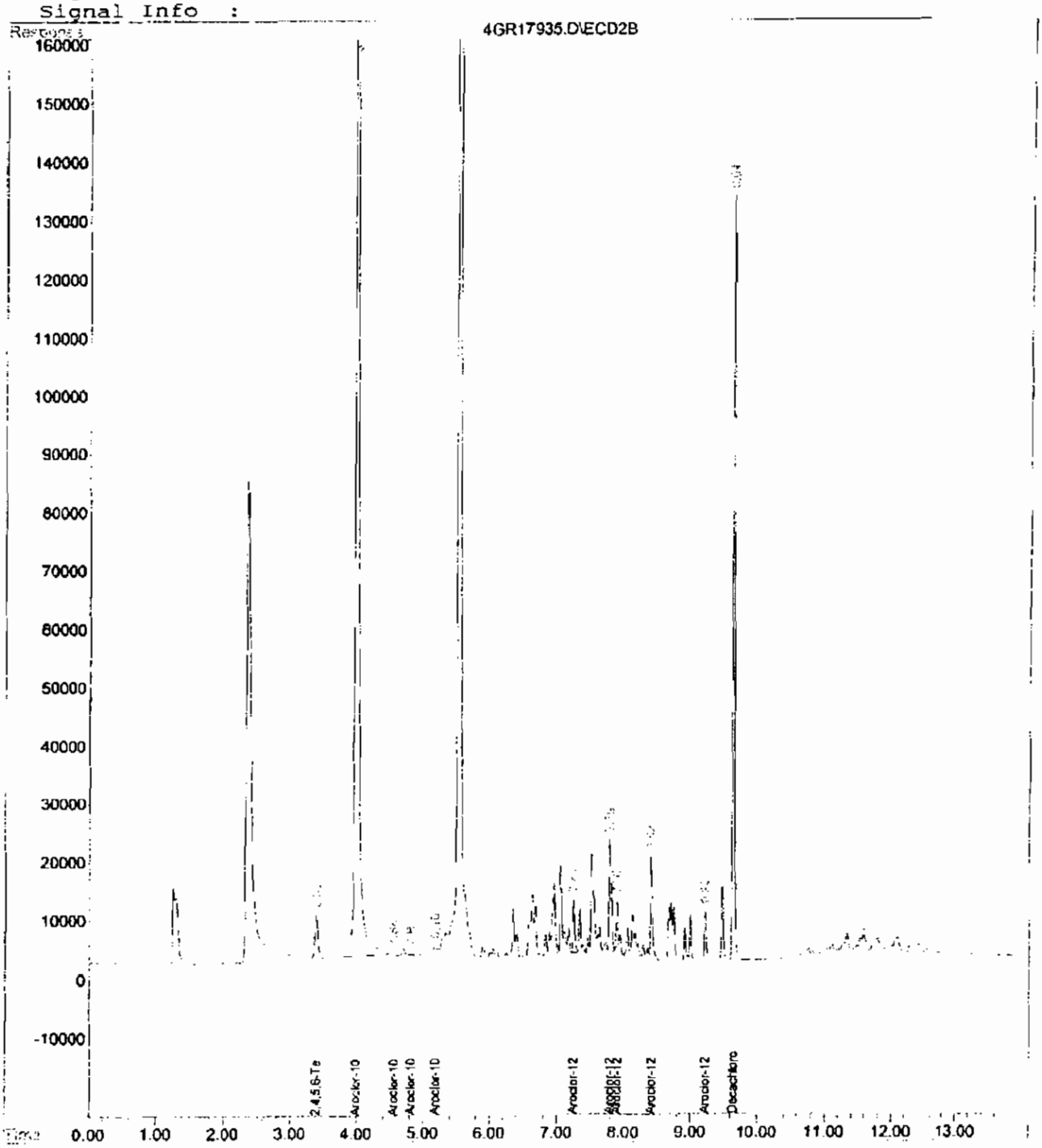
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	3.39	210379	16.151 UG/L
Spiked Amount 20.000 Range 29 - 133		Recovery =	80.75%
12) S Decachlorobiphenyl	9.64	2283655	178.544 UG/L
Spiked Amount 20.000 Range 30 - 173		Recovery =	892.72%#
Target Compounds			
2) L1 Aroclor-1016-1	3.99f	8261057	39308.671 UG/L
3) L1 Aroclor-1016-2	4.56	12266	22.307 UG/L
4) L1 Aroclor-1016-3	4.82f	14662	44.129 UG/L
5) L1 Aroclor-1016-4	5.18f	18524	22.475 UG/L
6) L1 Aroclor-1016-5	0.00	0	N.D. UG/L
Sum Aroclor-1016-1		8306509	39397.582 UG/L
Average Aroclor-1016-1			9849.396 UG/L
7) L2 Aroclor-1260-1	7.25	169763	297.859 UG/L
8) L2 Aroclor-1260-2	7.79	432232	518.907 UG/L
9) L2 Aroclor-1260-3	7.90	118121	394.719 UG/L
10) L2 Aroclor-1260-4	8.42	310279	285.032 UG/L
11) L2 Aroclor-1260-5	9.23	162518	430.044 UG/L
Sum Aroclor-1260-1		1192913	1926.562 UG/L
Average Aroclor-1260-1			385.312 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\050103\4GR17935.D Vial: 23
Acq On : 1 May 2003 16:29 Operator: ECL
Sample : L0304594-03 Inst : HP4
Misc : 7,1 SOIL Multiplr: 1.00
IntFile : events.e
Quant Time: May 2 8:19 2003 Quant Results File: 1660R.RES

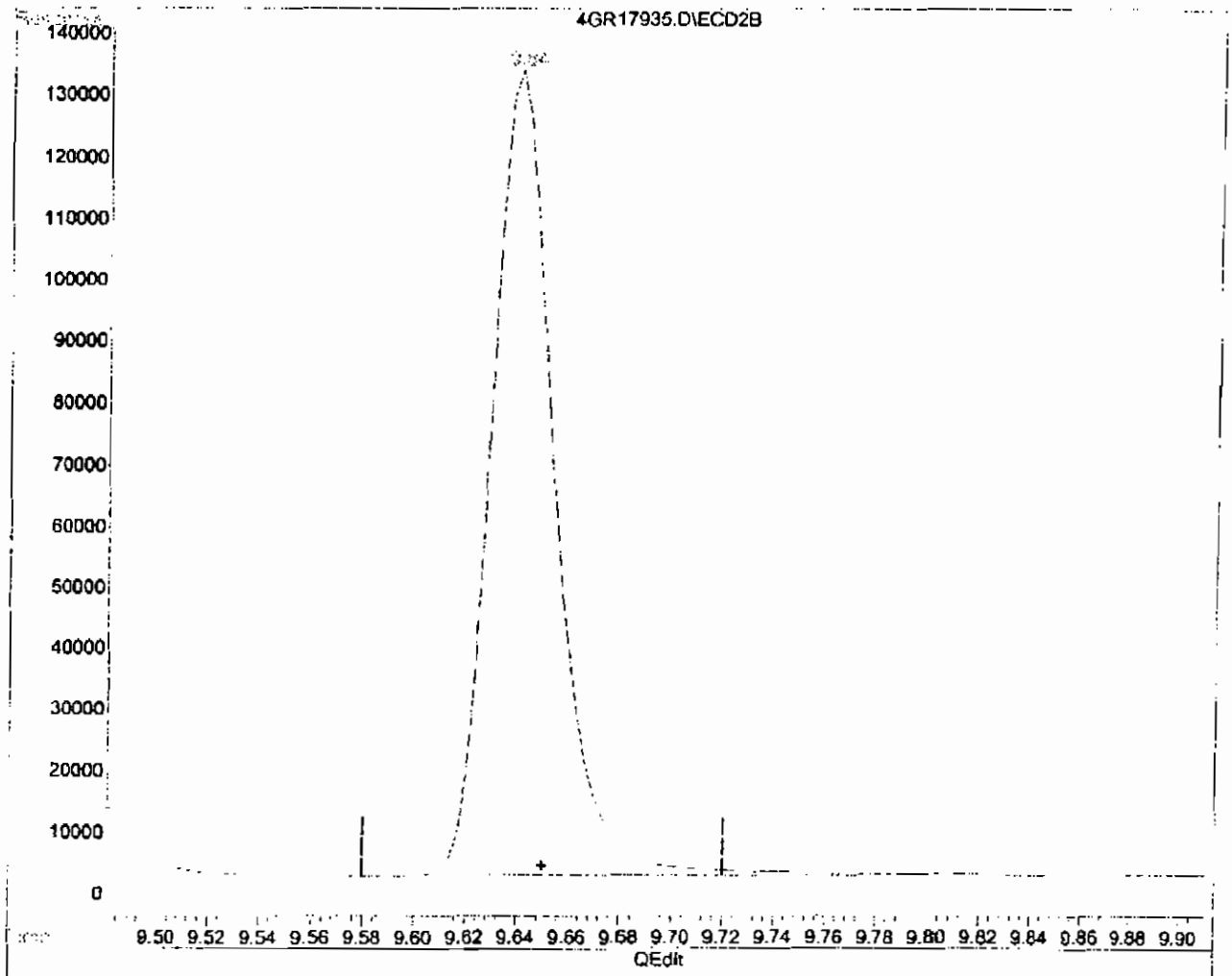
Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Fri May 02 08:18:10 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\050103\4GR17935.D Vial: 23
Acq On : 1 May 2003 16:29 Operator: ECL
Sample : L0304594-03 Inst : HP4
Misc : 7,1 SOIL Multiplr: 1.00
IntFile : events.e
Quant Time: May 2 8:19 2003 Quant Results File: 1660R.RES

Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Fri May 02 08:21:43 2003
Response via : Multiple Level Calibration



(12) Decachlorobiphenyl (S)

9.64min 178.544UG/L

response 2283655

SMI.

(+) = Expected Retention Time

Data File : C:\HPCHEM\2\DATA\050203\4GF17549.D Vial: 27
Acq On : 2 May 2003 21:07 Operator: ECL
Sample : L0304594-03 CF Inst : HP4
Misc : 7,1 SOIL CF Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:52 2003 Quant Results File: 1660F.RES

Quant Method : C:\HPCHEM\2\METHODS\1660F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1459
Last Update : Sun May 04 12:49:42 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

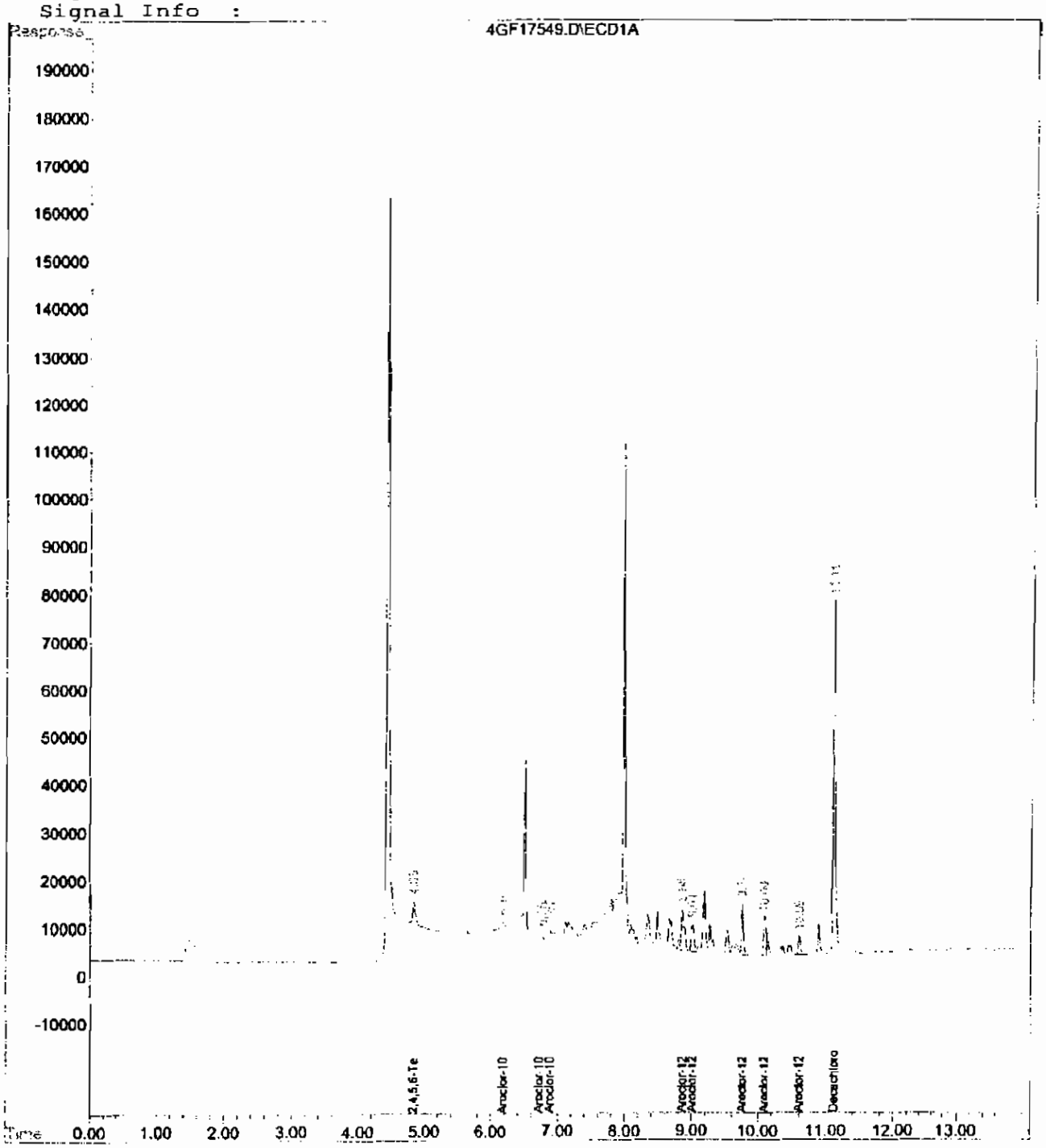
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.83	136907	17.883 UG/L
Spiked Amount 20.000 Range 29 - 133		Recovery =	89.42%
12) S Decachlorobiphenyl	11.12	1718695	229.763 UG/L
Spiked Amount 20.000 Range 30 - 173		Recovery =	1148.82%#
Target Compounds			
2) L1 Aroclor-1016-1	0.00	0	N.D. UG/L
3) L1 Aroclor-1016-2	6.18	22140	62.097 UG/L
4) L1 Aroclor-1016-3	6.71	24049	32.322 UG/L
5) L1 Aroclor-1016-4	6.87	28488	90.156 UG/L
6) L1 Aroclor-1016-5	0.00	0	N.D. UG/L
Sum Aroclor-1016-1		74677	184.575 UG/L
Average Aroclor-1016-1			61.525 UG/L
7) L2 Aroclor-1260-1	8.86	252758	436.033 UG/L
8) L2 Aroclor-1260-2	9.01	167354	352.348 UG/L
9) L2 Aroclor-1260-3	9.76	227619	241.997 UG/L
10) L2 Aroclor-1260-4	10.09	184767	208.502 UG/L
11) L2 Aroclor-1260-5	10.60	84556	359.015 UG/L
Sum Aroclor-1260-1		917053	1597.894 UG/L
Average Aroclor-1260-1			319.579 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\050203\4GF17549.D Vial: 27
Acq On : 2 May 2003 21:07 Operator: ECL
Sample : L0304594-03 CF Inst : HP4
Misc : 7,1 SOIL CF Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:52 2003 Quant Results File: 1660F.RES

Quant Method : C:\HPCHEM\2\METHODS\1660F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1459
Last Update : Sun May 04 12:49:42 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



2.2.3.3 Standards Data

Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Tue Mar 18 08:14:02 2003

Calibration Files
2000 =4GR16957.D 1000 =4GR16958.D 500 =4GR16959.D
250 =4GR16960.D 100 =4GR16961.D 50 =4GR16962.D

		Compound	2000	1000	500	250	100	50	Avg	%RSD
1)	S	2,4,5,6-Tetrachloro	1.150	1.244	1.317	1.354	1.387	1.363	1.303#E4	6.88
2)	L1	Aroclor-1016-1	1.579	1.799	2.028	2.182	2.516	2.506	2.102#E2	17.95
3)	L1	Aroclor-1016-2	4.067	4.636	5.253	5.801	6.548	6.687	5.499#E2	19.00
4)	L1	Aroclor-1016-3	2.628	2.915	3.249	3.534	3.838	3.771	3.323#E2	14.54
5)	L1	Aroclor-1016-4	6.873	7.474	8.136	8.679	9.137	9.153	8.242#E2	11.25
6)	L1	Aroclor-1016-5	2.484	2.700	2.941	3.150	3.423	3.386	3.014#E2	12.50
7)	L2	Aroclor-1260-1	4.256	4.740	5.328	5.968	6.727	7.178	5.699#E2	19.94
8)	L2	Aroclor-1260-2	6.644	7.272	8.027	8.770	9.530	9.734	8.330#E2	14.86
9)	L2	Aroclor-1260-3	2.526	2.694	2.859	3.030	3.243	3.600	2.993#E2	12.99
10)	L2	Aroclor-1260-4	0.857	0.938	1.038	1.136	1.242	1.320	1.089#E3	16.34
11)	L2	Aroclor-1260-5	3.061	3.368	3.694	4.015	4.212	4.325	3.779#E2	13.14
12)	S	Decachlorobiphenyl	0.943	1.068	1.212	1.361	1.496	1.594	1.279#E4	19.63

(#) = Out of Range

Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16957.D Vial: 1
Acq On : 17 Mar 2003 15:32 Operator: ECL
Sample : WG136402-01 1660 ICAL 2000 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 8:13 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Tue Mar 18 08:13:38 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

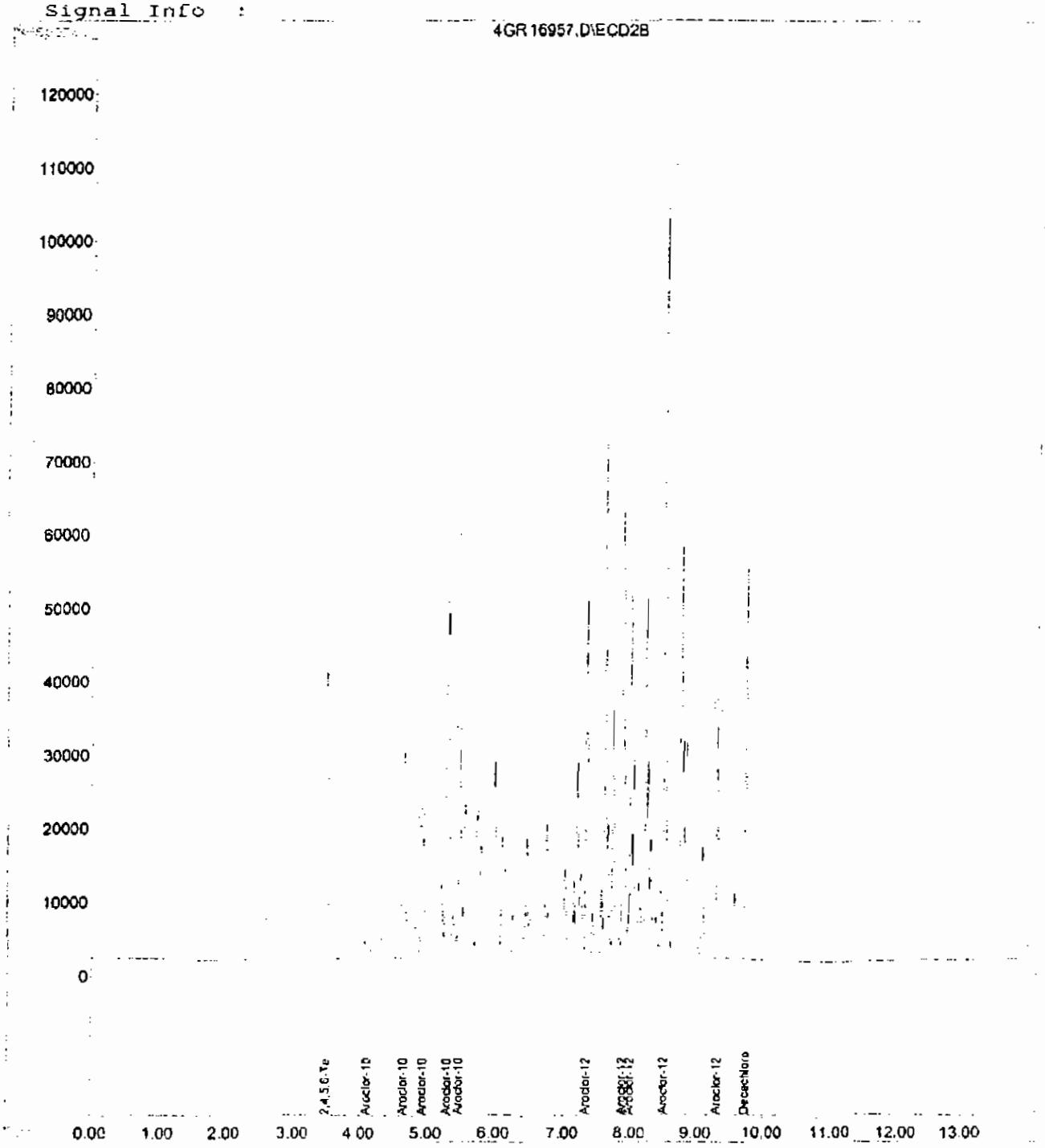
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	3.48	1150307	88.308 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	441.54%#
12) S Decachlorobiphenyl	9.73	943167	73.740 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	368.70%#
Target Compounds			
2) L1 Aroclor-1016-1	4.10	315754	1502.457 UG/L
3) L1 Aroclor-1016-2	4.65	813465	1479.374 UG/L
4) L1 Aroclor-1016-3	4.94	525513	1581.641 UG/L
5) L1 Aroclor-1016-4	5.30	1374501	1667.692 UG/L
6) L1 Aroclor-1016-5	5.47	496701	1648.092 UG/L
Sum Aroclor-1016-1		3525935	7879.256 UG/L
Average Aroclor-1016-1			1575.851 UG/L
7) L2 Aroclor-1260-1	7.33	851102	1494.064 UG/L
8) L2 Aroclor-1260-2	7.88	1328861	1595.336 UG/L
9) L2 Aroclor-1260-3	7.99	505697	1689.867 UG/L
10) L2 Aroclor-1260-4	8.50	1713799	1574.348 UG/L
11) L2 Aroclor-1260-5	9.31	612119	1619.748 UG/L
Sum Aroclor-1260-1		5011578	7973.364 UG/L
Average Aroclor-1260-1			1594.673 UG/L

(f) RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16957.D Vial: 1
Acq On : 17 Mar 2003 15:32 Operator: ECL
Sample : WG136402-01 1660 ICAL 2000 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 8:13 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Tue Mar 18 08:13:38 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16958.D Vial: 2
Acq On : 17 Mar 2003 15:51 Operator: ECL
Sample : WG136402-02 1660 ICAL 1000 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 8:09 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Tue Mar 18 08:09:09 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

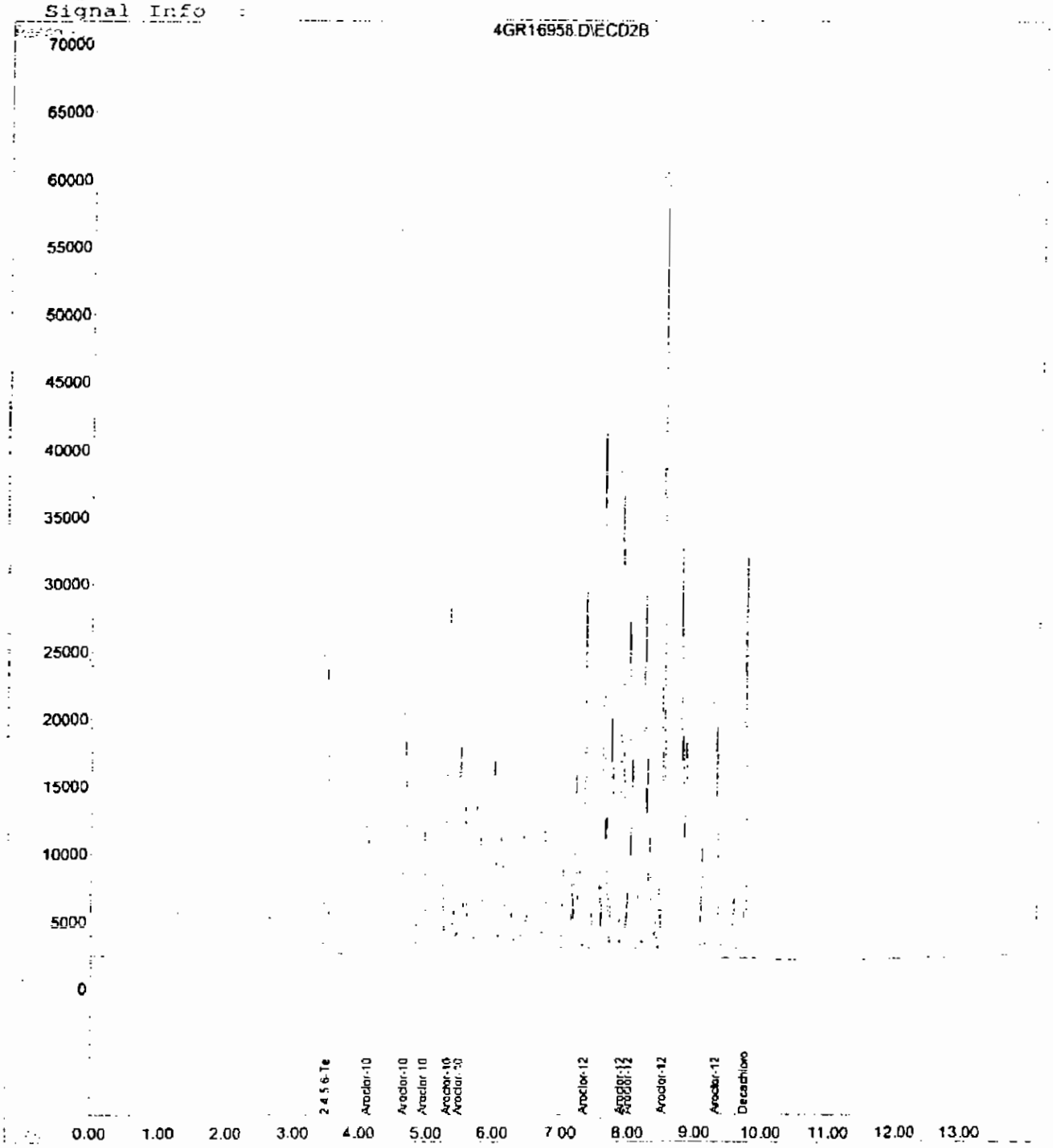
Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	3.49	622137	54.084 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	270.42%#
12) S Decachlorobiphenyl	9.73	533971	56.615 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	283.07%#
Target Compounds			
2) L1 Aroclor-1016-1	4.11	179905	1139.528 UG/L
3) L1 Aroclor-1016-2	4.65	463563	1315.243 UG/L
4) L1 Aroclor-1016-3	4.94	291530	1109.506 UG/L
5) L1 Aroclor-1016-4	5.30	747439	1087.578 UG/L
6) L1 Aroclor-1016-5	5.48	269973	1087.064 UG/L
Sum Aroclor-1016-1		1952411	5738.920 UG/L
Average Aroclor-1016-1			1147.784 UG/L
7) L2 Aroclor-1260-1	7.34	473996	1118.380 UG/L
8) L2 Aroclor-1260-2	7.88	727195	1094.463 UG/L
9) L2 Aroclor-1260-3	7.99	269444	1065.636 UG/L
10) L2 Aroclor-1260-4	8.50	938453	1095.173 UG/L
11) L2 Aroclor-1260-5	9.31	336847	1100.592 UG/L
Sum Aroclor-1260-1		2745935	5474.244 UG/L
Average Aroclor-1260-1			1094.849 UG/L

Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16958.D Vial: 2
Acq On : 17 Mar 2003 15:51 Operator: ECL
Sample : WG136402-02 1660 ICAL 1000 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 8:09 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Tue Mar 18 08:09:09 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16959.D Vial: 3
Acq On : 17 Mar 2003 16:10 Operator: ECL
Sample : WG136402-03 1660 ICAL 500 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 8:09 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Tue Mar 18 08:09:09 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

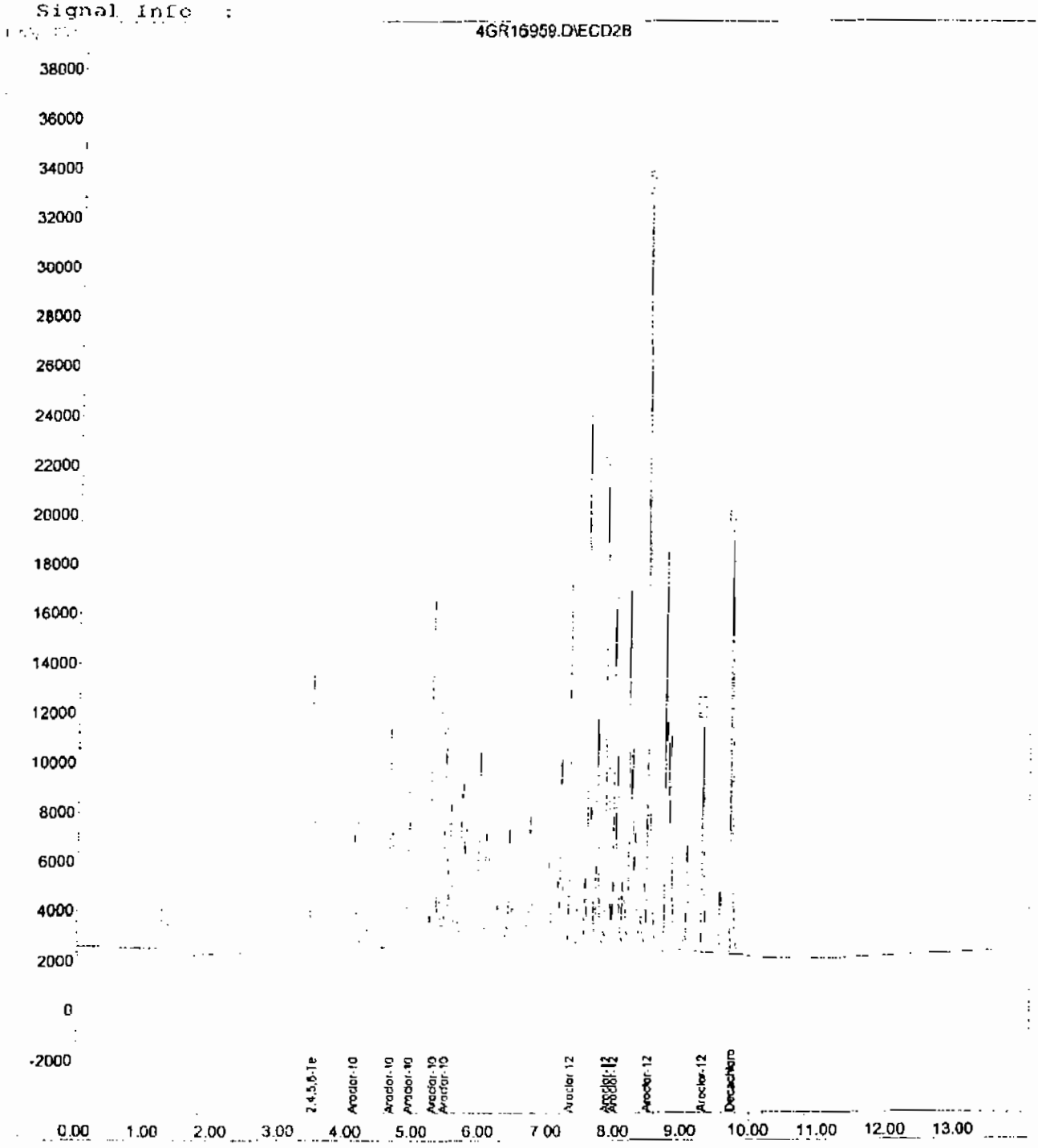
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	3.49	329342	27.507 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	137.54%#
12) S Decachlorobiphenyl	9.73	302949	30.128 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	150.64%#
Target Compounds			
2) L1 Aroclor-1016-1	4.11	101393	600.343 UG/L
3) L1 Aroclor-1016-2	4.65	262642	643.717 UG/L
4) L1 Aroclor-1016-3	4.94	162444	586.138 UG/L
5) L1 Aroclor-1016-4	5.31	406781	567.065 UG/L
6) L1 Aroclor-1016-5	5.48	147029	567.324 UG/L
Sum Aroclor-1016-1		1080289	2964.586 UG/L
Average Aroclor-1016-1			592.917 UG/L
7) L2 Aroclor-1260-1	7.34	266391	593.417 UG/L
8) L2 Aroclor-1260-2	7.88	401368	576.834 UG/L
9) L2 Aroclor-1260-3	7.99	142934	547.333 UG/L
10) L2 Aroclor-1260-4	8.51	518980	578.138 UG/L
11) L2 Aroclor-1260-5	9.32	184694	574.560 UG/L
Sum Aroclor-1260-1		1514368	2870.281 UG/L
Average Aroclor-1260-1			574.056 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16959.D Vial: 3
Acq On : 17 Mar 2003 16:10 Operator: ECL
Sample : WG136402-03 1660 ICAL 500 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 8:09 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Tue Mar 18 08:09:09 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16960.D Vial: 4
Acq On : 17 Mar 2003 16:28 Operator: ECL
Sample : WG136402-04 1660 ICAL 250 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 8:09 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Tue Mar 18 08:09:09 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

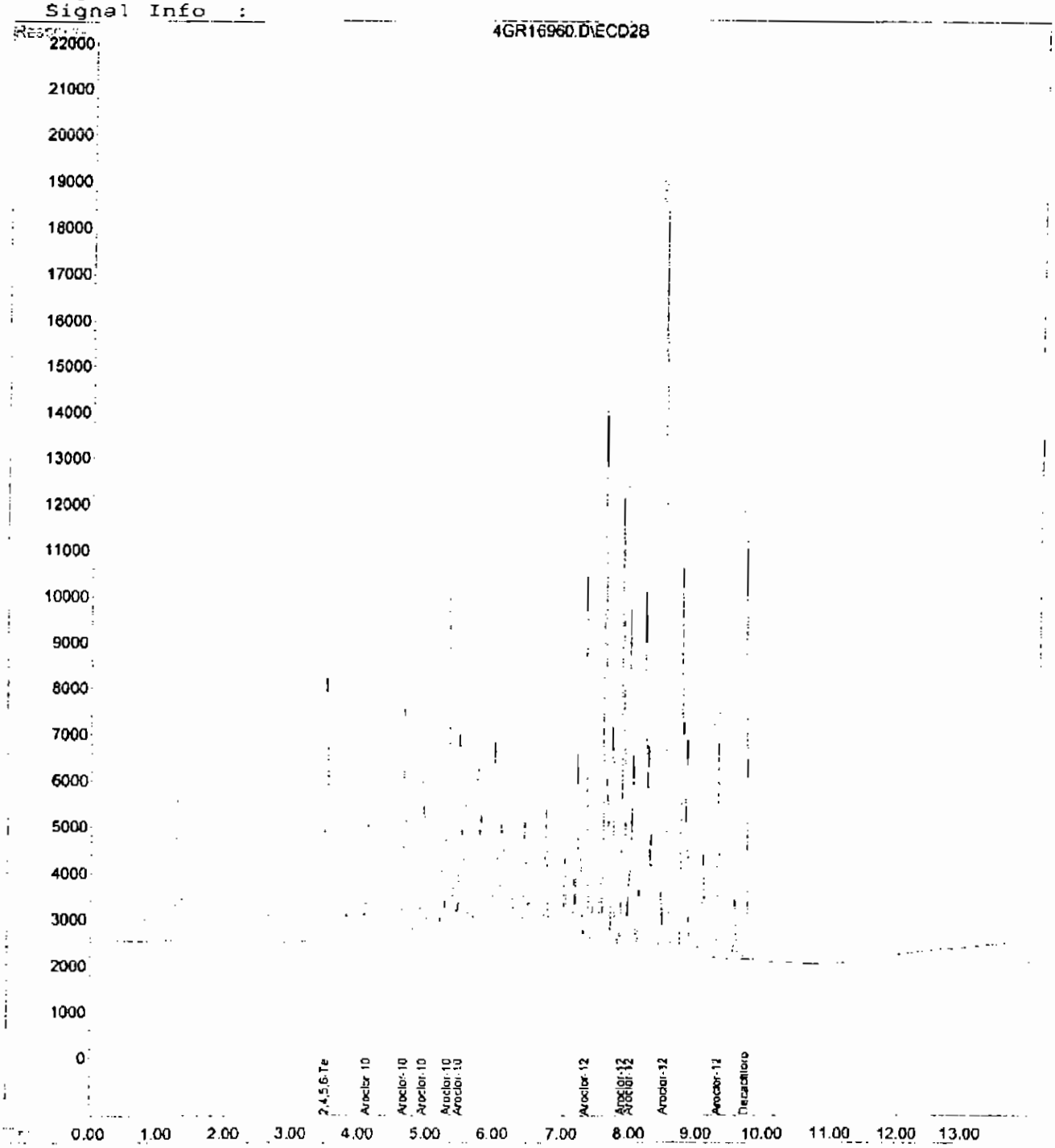
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	3.49	169215	13.676 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	68.38%
12) S Decachlorobiphenyl	9.73	170100	15.834 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	79.17%
Target Compounds			
2) L1 Aroclor-1016-1	4.11	54551	302.740 UG/L
3) L1 Aroclor-1016-2	4.65	145025	324.368 UG/L
4) L1 Aroclor-1016-3	4.94	88355	301.492 UG/L
5) L1 Aroclor-1016-4	5.31	216969	289.517 UG/L
6) L1 Aroclor-1016-5	5.48	78755	290.829 UG/L
Sum Aroclor-1016-1		583654	1508.947 UG/L
Average Aroclor-1016-1			301.789 UG/L
7) L2 Aroclor-1260-1	7.34	149206	312.888 UG/L
8) L2 Aroclor-1260-2	7.88	219254	299.751 UG/L
9) L2 Aroclor-1260-3	7.99	75752	281.202 UG/L
10) L2 Aroclor-1260-4	8.50	284098	300.811 UG/L
11) L2 Aroclor-1260-5	9.31	100364	297.435 UG/L
Sum Aroclor-1260-1		828674	1492.088 UG/L
Average Aroclor-1260-1			298.418 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16960.D Vial: 4
Acq On : 17 Mar 2003 16:28 Operator: ECL
Sample : WG136402-04 1660 ICAL 250 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 8:09 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Tue Mar 18 08:09:09 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16961.D Vial: 5
Acq On : 17 Mar 2003 16:47 Operator: ECL
Sample : WG136402-05 1660 ICAL 100 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 8:09 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Tue Mar 18 08:09:10 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

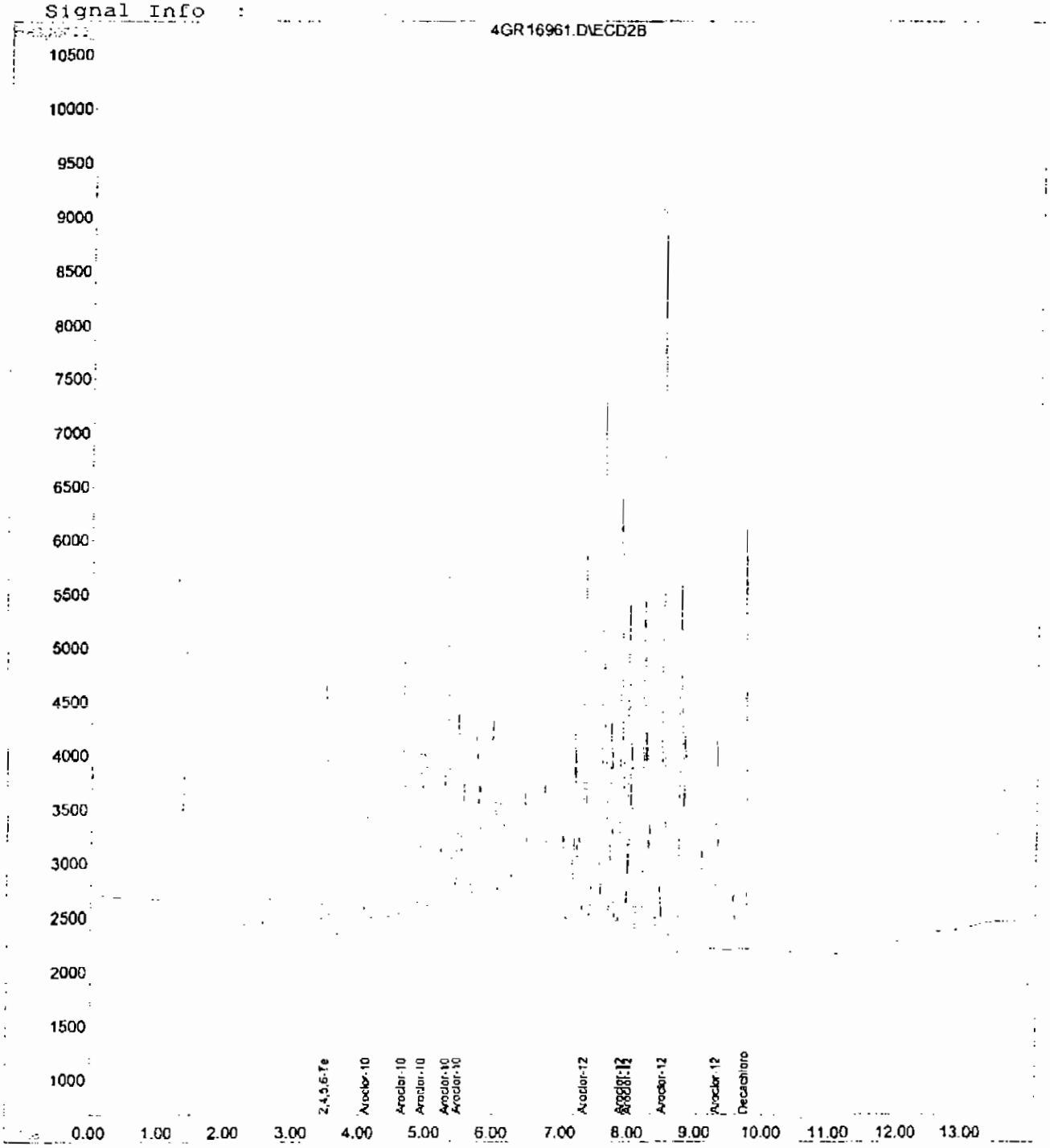
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	3.49	69335	5.475 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	27.38%#
12) S Decachlorobiphenyl	9.73	74825	6.530 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	32.65%#
Target Compounds			
2) L1 Aroclor-1016-1	4.11	25159	132.630 UG/L
3) L1 Aroclor-1016-2	4.65	65462	136.321 UG/L
4) L1 Aroclor-1016-3	4.94	38383	124.561 UG/L
5) L1 Aroclor-1016-4	5.30	91371	117.288 UG/L
6) L1 Aroclor-1016-5	5.48	34229	121.444 UG/L
Sum Aroclor-1016-1		254624	632.244 UG/L
Average Aroclor-1016-1			126.449 UG/L
7) L2 Aroclor-1260-1	7.34	67268	132.717 UG/L
8) L2 Aroclor-1260-2	7.88	95303	124.117 UG/L
9) L2 Aroclor-1260-3	7.99	32430	116.743 UG/L
10) L2 Aroclor-1260-4	8.51	124152	125.100 UG/L
11) L2 Aroclor-1260-5	9.32	42117	119.164 UG/L
Sum Aroclor-1260-1		361270	617.840 UG/L
Average Aroclor-1260-1			123.568 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16961.D Vial: 5
Acq On : 17 Mar 2003 16:47 Operator: ECL
Sample : WG136402-05 1660 ICAL 100 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 8:09 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Tue Mar 18 08:09:10 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16962.D Vial: 6
Acq On : 17 Mar 2003 17:05 Operator: ECL
Sample : WG136402-06 1660 ICAL 50 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 8:09 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Tue Mar 18 08:09:10 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

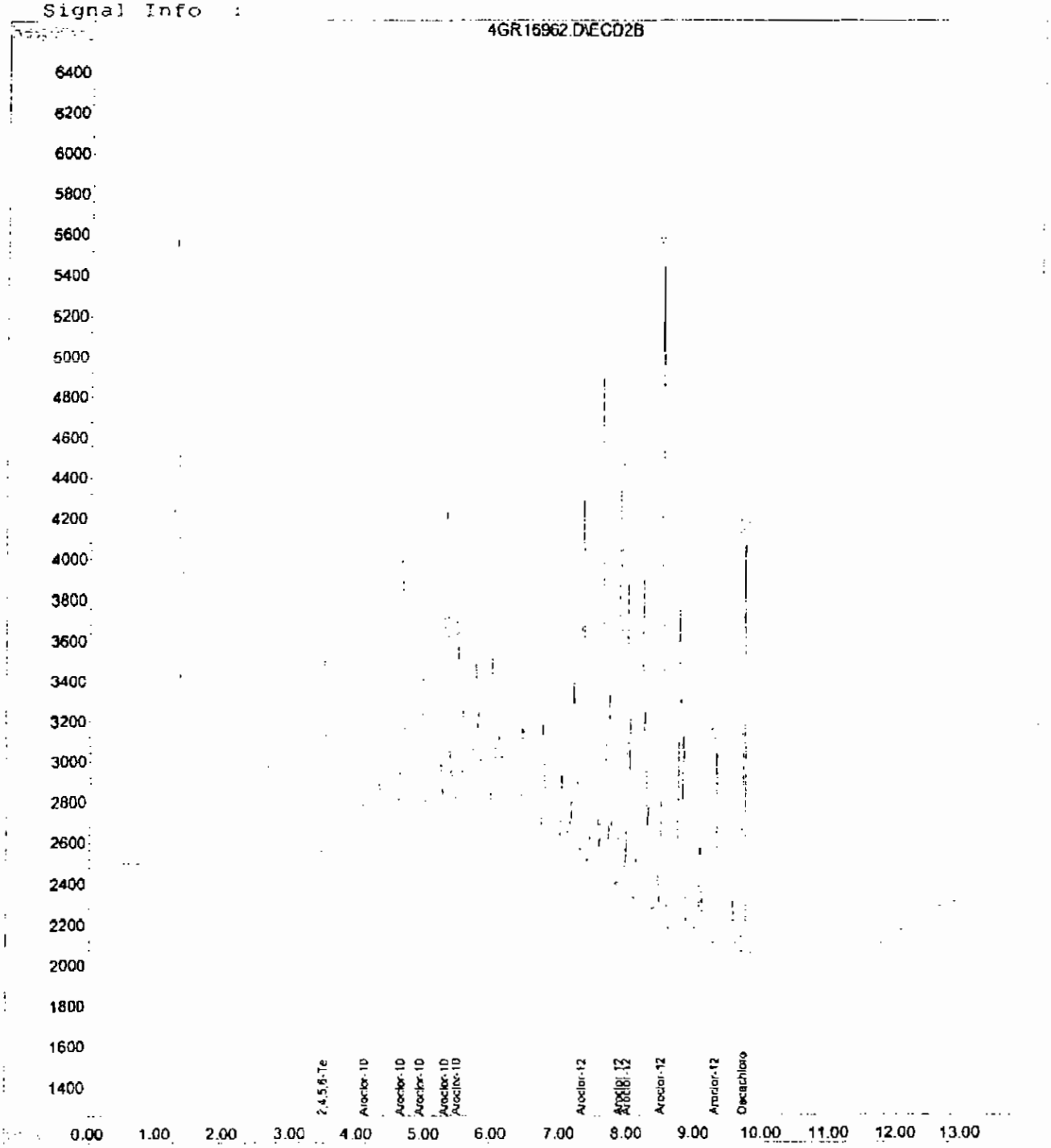
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	3.49	34081	2.641 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	13.21%#
12) S Decachlorobiphenyl	9.73	39851	3.277 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	16.38%#
Target Compounds			
2) L1 Aroclor-1016-1	4.11	12530	62.006 UG/L
3) L1 Aroclor-1016-2	4.65	33436	64.894 UG/L
4) L1 Aroclor-1016-3	4.94	18856	58.326 UG/L
5) L1 Aroclor-1016-4	5.31	45766	56.784 UG/L
6) L1 Aroclor-1016-5	5.48	16929	57.595 UG/L
Sum Aroclor-1016-1		127518	299.606 UG/L
Average Aroclor-1016-1			59.921 UG/L
7) L2 Aroclor-1260-1	7.34	35891	66.463 UG/L
8) L2 Aroclor-1260-2	7.88	48670	60.468 UG/L
9) L2 Aroclor-1260-3	7.99	18002	62.704 UG/L
10) L2 Aroclor-1260-4	8.50	66012	63.336 UG/L
11) L2 Aroclor-1260-5	9.31	21627	58.932 UG/L
Sum Aroclor-1260-1		190202	311.903 UG/L
Average Aroclor-1260-1			62.381 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16962.D Vial: 6
Acq On : 17 Mar 2003 17:05 Operator: ECL
Sample : WG136402-06 1660 ICAL 50 PPB Inst : HP4
Misc : 1,1 SCS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 8:09 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Tue Mar 18 08:09:10 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16963.D Vial: 7
Acq On : 17 Mar 2003 17:24 Operator: ECL
Sample : WG136402-07 1660 ALT ICV 500 PPB Inst : HP4
Misc : 1,1 SOS63-14 Multiplr: 1.00
IntFile : events.e

Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Tue Mar 18 08:14:02 2003
Response via : Multiple Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	S	2,4,5,6-Tetrachloro-M-Xylen	25.000	26.016	-4.1	103	0.00
2	L1	Aroclor-1016-1	500.000	472.121	5.6	98	0.00
3	L1	Aroclor-1016-2	500.000	466.929	6.6	98	0.00
4	L1	Aroclor-1016-3	500.000	478.649	4.3	98	0.00
5	L1	Aroclor-1016-4	500.000	483.626	3.3	98	0.00
6	L1	Aroclor-1016-5	500.000	479.648	4.1	98	0.00
7	L2	Aroclor-1260-1	500.000	474.638	5.1	102	0.00
8	L2	Aroclor-1260-2	500.000	522.853	-4.6	109	0.00
9	L2	Aroclor-1260-3	500.000	440.956	11.8	92	0.00
10	L2	Aroclor-1260-4	500.000	435.398	12.9	91	0.00
11	L2	Aroclor-1260-5	500.000	409.741	18.1#	84	0.00
12	S	Decachlorobiphenyl	25.000	24.156	3.4	102	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16963.D Vial: 7
Acq On : 17 Mar 2003 17:24 Operator: ECL
Sample : WG136402-07 1660 ALT ICV 500 PPB Inst : HP4
Misc : 1,1 SOS63-14 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 8:16 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Tue Mar 18 08:14:02 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

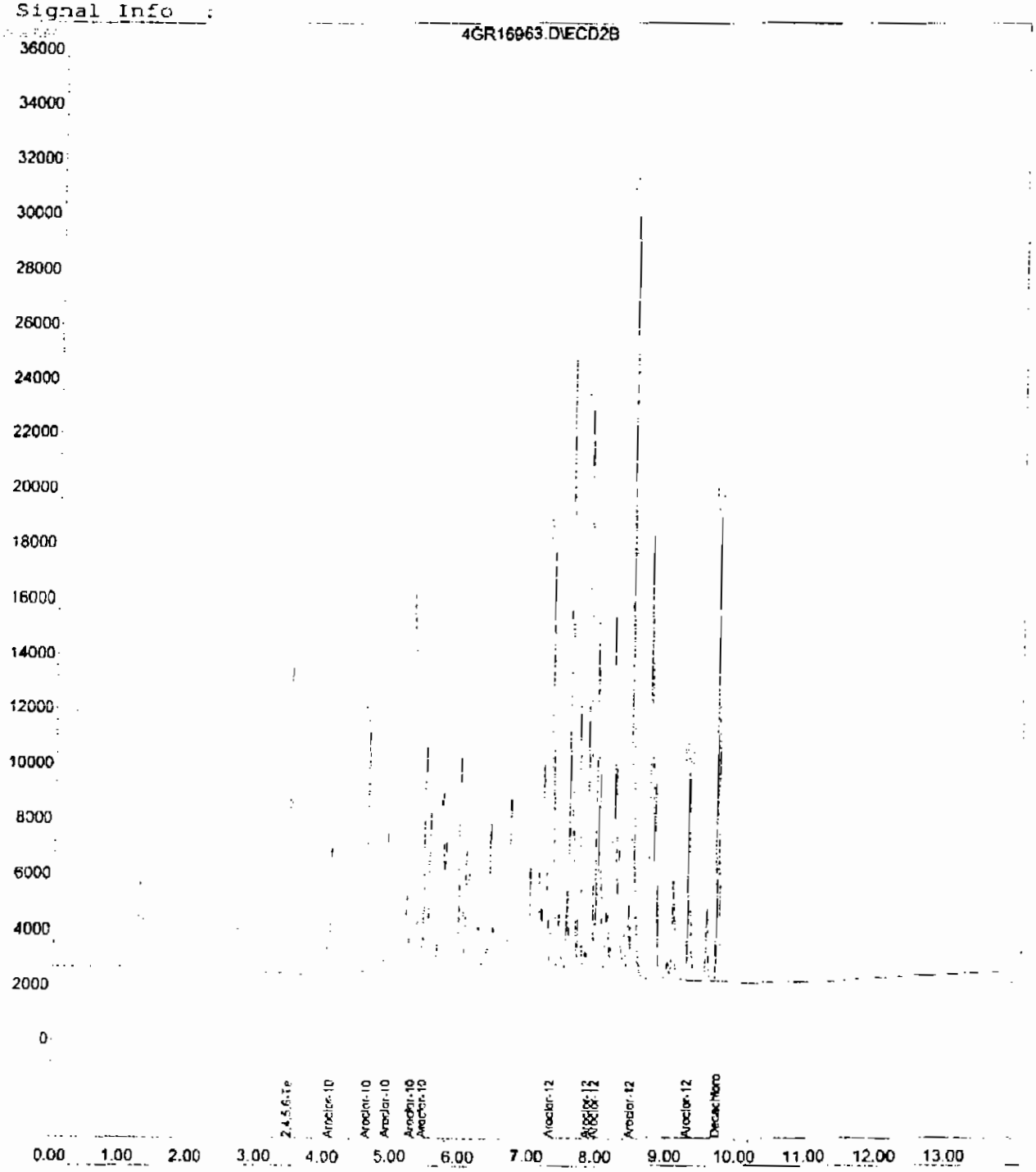
Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	3.48	338886	26.016 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery = 130.08%	
12) S Decachlorobiphenyl	9.73	308966	24.156 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery = 120.78%	
Target Compounds			
2) L1 Aroclor-1016-1	4.10	99220	472.121 UG/L
3) L1 Aroclor-1016-2	4.64	256751	466.929 UG/L
4) L1 Aroclor-1016-3	4.93	159035	478.649 UG/L
5) L1 Aroclor-1016-4	5.30	398602	483.626 UG/L
6) L1 Aroclor-1016-5	5.47	144556	479.648 UG/L
Sum Aroclor-1016-1		1058164	2380.973 UG/L
Average Aroclor-1016-1			476.195 UG/L
7) L2 Aroclor-1260-1	7.33	270517	474.638 UG/L
8) L2 Aroclor-1260-2	7.88	435519	522.853 UG/L
9) L2 Aroclor-1260-3	7.99	131957	440.956 UG/L
10) L2 Aroclor-1260-4	8.50	473964	435.398 UG/L
11) L2 Aroclor-1260-5	9.31	154845	409.741 UG/L
Sum Aroclor-1260-1		1466802	2283.586 UG/L
Average Aroclor-1260-1			456.717 UG/L

Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16963.D Vial: 7
Acq On : 17 Mar 2003 17:24 Operator: ECL
Sample : WG136402-07 1660 ALT TCV 500 PPB Inst : HP4
Misc : 1,1 SOS63-14 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 8:16 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Tue Mar 18 08:14:02 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Method : C:\HPCHEM\2\METHODS\1254R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1914
Last Update : Tue Mar 18 08:23:36 2003

Calibration Files
2000 =4GR16964.D 1000 =4GR16965.D 500 =4GR16966.D
250 =4GR16967.D 100 =4GR16968.D 50 =4GR16969.D

		Compound	2000	1000	500	250	100	50	Avg		%RSD
1)	S	2,4,5,6-Tetrachloro	1.104	1.176	1.269	1.313	1.340	1.347	1.258	E4	7.82
2)	L1	Aroclor-1254-1	2.925	3.316	3.722	4.133	4.497	4.661	3.876	E2	17.53
3)	L1	Aroclor-1254-2	1.843	2.039	2.293	2.506	2.675	2.818	2.362	E2	15.89
4)	L1	Aroclor-1254-3	3.457	4.373	4.898	5.209	5.727	5.923	4.931	E2	18.54
5)	L1	Aroclor-1254-4	3.536	3.957	4.517	4.979	5.604	5.995	4.765	E2	19.89
6)	L1	Aroclor-1254-5	5.336	5.850	6.577	7.013	7.640	7.890	6.718	E2	14.88
7)	S	Decachlorobiphenyl	0.888	1.004	1.168	1.289	1.424	1.515	1.215	E4	19.92

(#) = Out of Range

Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16966.D Vial: 10
Acq On : 17 Mar 2003 18:19 Operator: ECL
Sample : 1254 ICAL 500 PPB Inst : HP4
Misc : SOS63-41 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 8:22 2003 Quant Results File: 1254R.RES

Quant Method : C:\HPCHEM\2\METHODS\1254R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1914
Last Update : Tue Mar 18 08:22:52 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

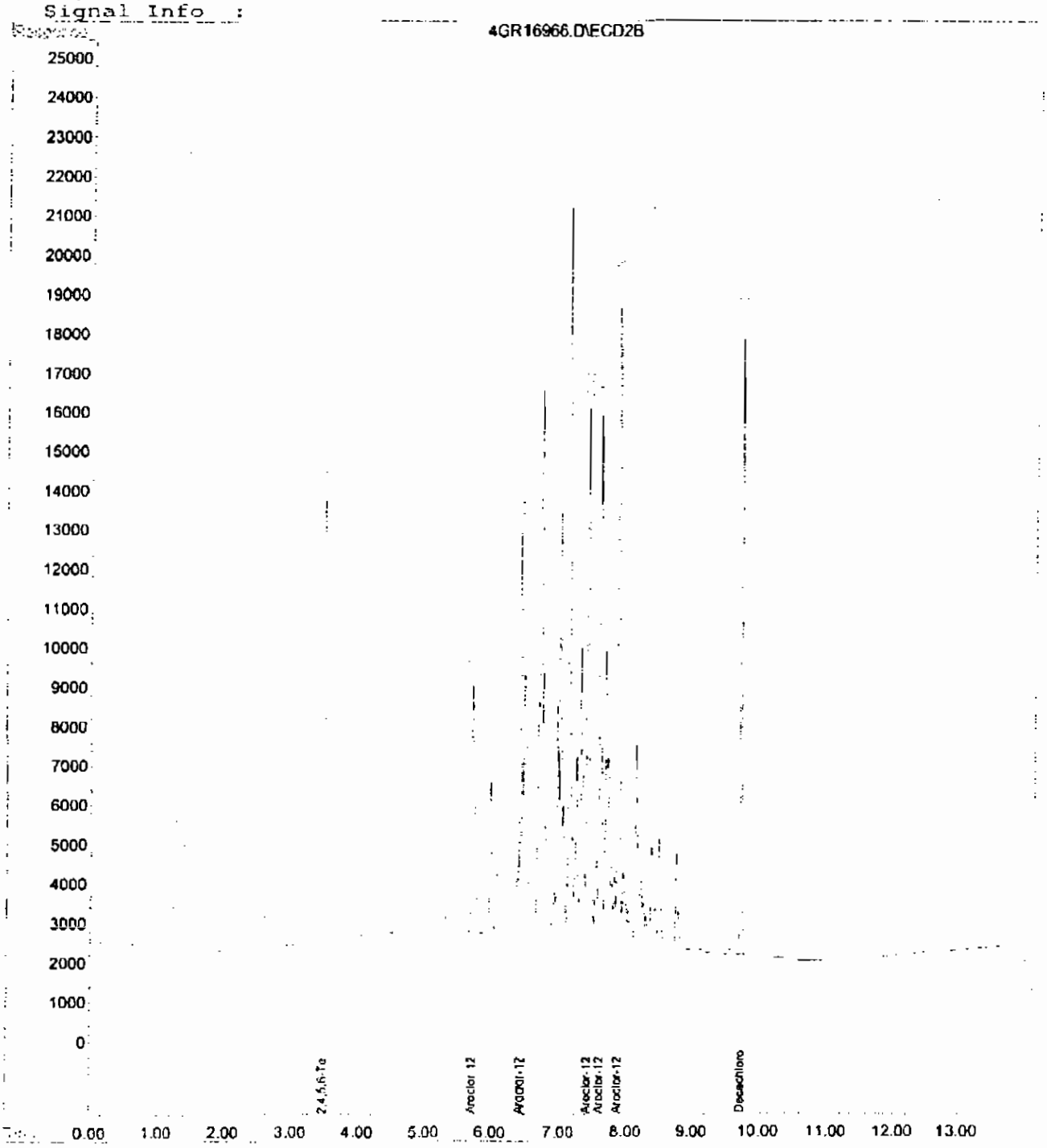
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	3.47	317330	25.221 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery = 126.11%	
7) S Decachlorobiphenyl	9.72	292096	24.048 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery = 120.24%	
Target Compounds			
2) L1 Aroclor-1254-1	5.71	186107	480.182 UG/L
3) L1 Aroclor-1254-2	6.43	114635	485.294 UG/L
4) L1 Aroclor-1254-3	7.42	244882	496.602 UG/L
5) L1 Aroclor-1254-4	7.60	225850	473.991 UG/L
6) L1 Aroclor-1254-5	7.87	328872	489.565 UG/L
Sum Aroclor-1254-1		1100345	2425.634 UG/L
Average Aroclor-1254-1			485.127 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16966.D Vial: 10
Acq On : 17 Mar 2003 18:19 Operator: ECL
Sample : 1254 ICAL 500 PPB Inst : HP4
Misc : SOS63-41 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 8:22 2003 Quant Results File: 1254R.RES

Quant Method : C:\HPCHEM\2\METHODS\1254R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1914
Last Update : Tue Mar 18 08:22:52 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16970.D Vial: 14
Acq On : 17 Mar 2003 19:32 Operator: ECL
Sample : 1254 ALT ICV 500 PPB Inst : HP4
Misc : SOS63-08 Multiplr: 1.00
IntFile : events.e

Method : C:\HPCHEM\2\METHODS\1254R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1914
Last Update : Tue Mar 18 08:23:36 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
2	L1	Aroclor-1254-1	500.000	476.190	4.4	100	-0.01
3	L1	Aroclor-1254-2	500.000	511.405	-2.3	105	-0.01
4	L1	Aroclor-1254-3	500.000	501.858	-0.4	101	-0.02
5	L1	Aroclor-1254-4	500.000	469.770	6.0	99	-0.01
6	L1	Aroclor-1254-5	500.000	479.321	4.1	98	-0.01

Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16970.D Vial: 14
Acq On : 17 Mar 2003 19:32 Operator: ECL
Sample : 1254 ALT ICV 500 PPB Inst : HP4
Misc : SOS63-08 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 8:24 2003 Quant Results File: 1254R.RES

Quant Method : C:\HPCHEM\2\METHODS\1254R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1914
Last Update : Tue Mar 18 08:23:36 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

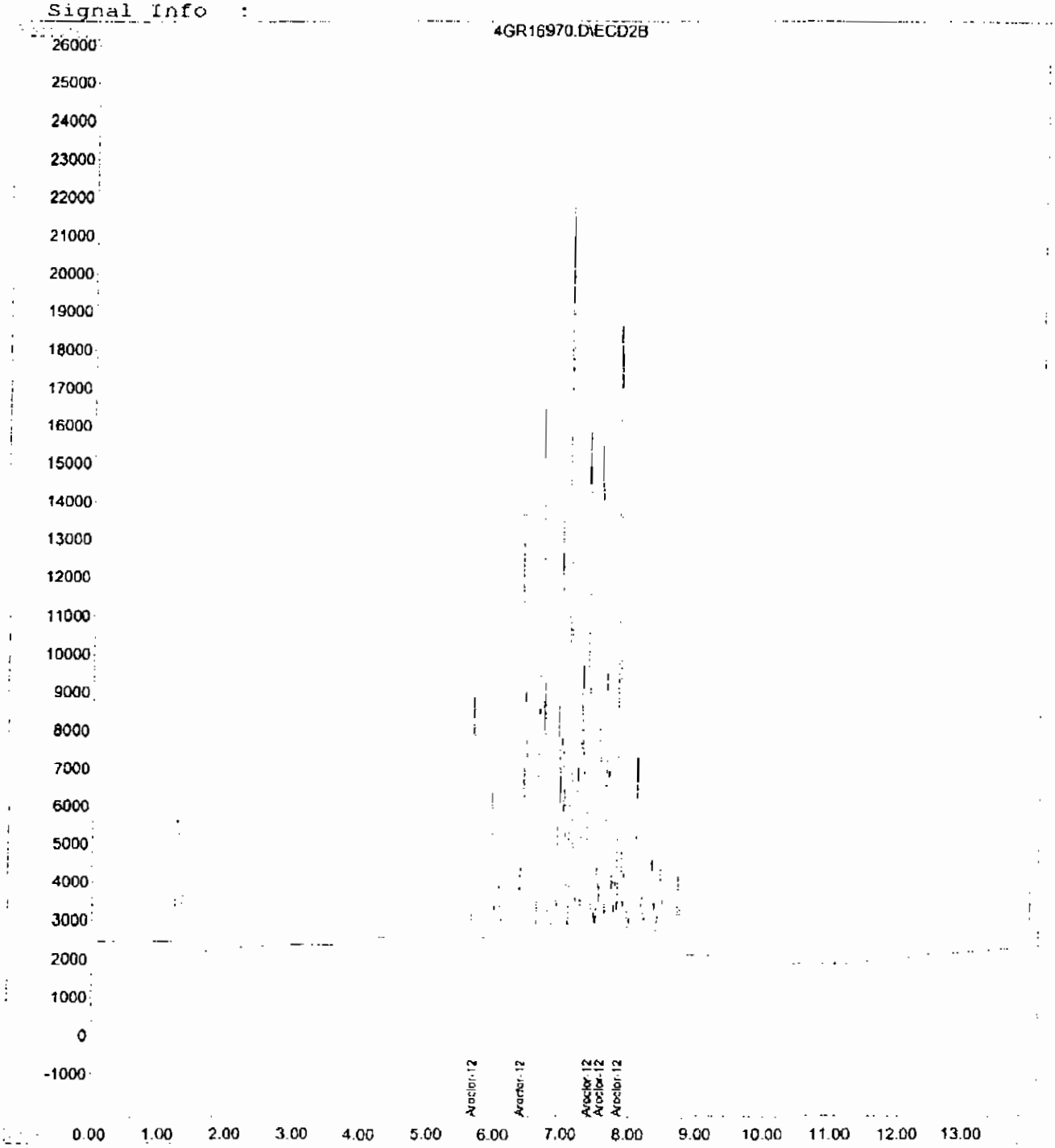
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	0.00	0	N.D. UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	0.00%#
7) S Decachlorobiphenyl	0.00	0	N.D. UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	0.00%#
Target Compounds			
2) L1 Aroclor-1254-1	5.68	185335	478.190 UG/L
3) L1 Aroclor-1254-2	6.40	120803	511.405 UG/L
4) L1 Aroclor-1254-3	7.39	247473	501.858 UG/L
5) L1 Aroclor-1254-4	7.57	223839	469.770 UG/L
6) L1 Aroclor-1254-5	7.84	321990	479.321 UG/L
Sum Aroclor-1254-1		1099440	2440.544 UG/L
Average Aroclor-1254-1			488.109 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16970.D Vial: 14
Acq On : 17 Mar 2003 19:32 Operator: ECL
Sample : 1254 ALT ICV 500 PPB Inst : HP4
Misc : SOS63-08 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 8:24 2003 Quant Results File: 1254R.RES

Quant Method : C:\HPCHEM\2\METHODS\1254R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1914
Last Update : Tue Mar 18 08:23:36 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Method : C:\HPCHEM\2\METHODS\1248SR.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003
Last Update : Tue Mar 18 06:52:45 2003

Calibration Files
500 =4GR16971.D = =
= =

		Compound	500	Avg	%RSD
1)	S	2,4,5,6-Tetrachloro-M	1.252	1.252#E4	0.00
2)	L1	Aroclor-1248-1	2.237	2.237#E2	0.00
3)	L1	Aroclor-1248-2	5.421	5.421#E2	0.00
4)	L1	Aroclor-1248-3	4.679	4.679#E2	0.00
5)	L1	Aroclor-1248-4	1.726	1.726#E2	0.00
6)	L1	Aroclor-1248-5	1.968	1.968#E2	0.00
7)	S	Decachlorobiphenyl	1.174	1.174#E4	0.00

(#) = Out of Range

Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16971.D Vial: 25
Acq On : 17 Mar 2003 19:51 Operator: ECL
Sample : 1248 500 PPB Inst : HP4
Misc : SOS61-40 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 8:52 2003 Quant Results File: 1248SR.RES

Quant Method : C:\HPCHEM\2\METHODS\1248SR.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003
Last Update : Tue Mar 18 08:52:45 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

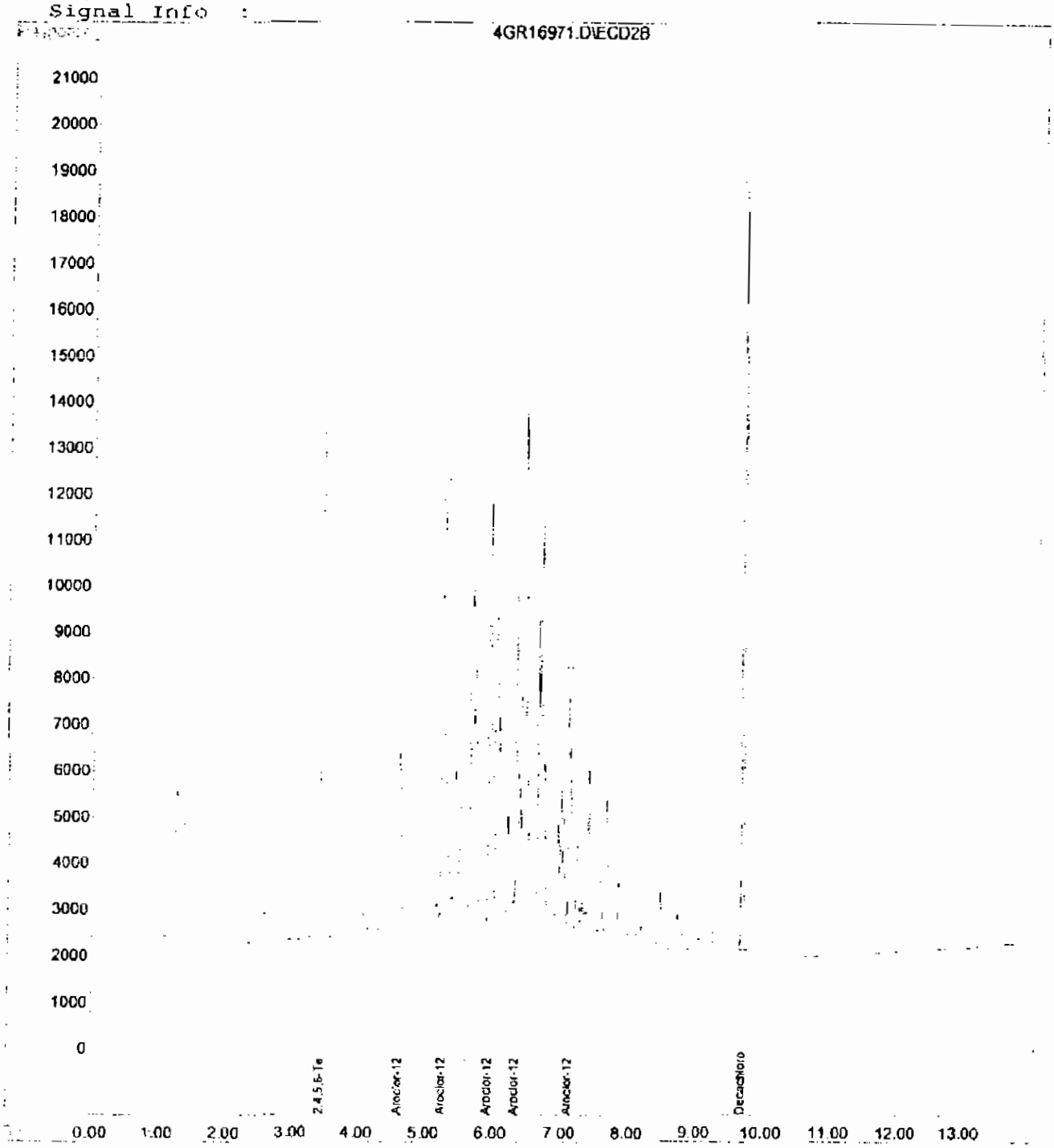
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xylo	3.42	312924	25.000 UG/L
Spiked Amount 20.000		Recovery =	125.00%
7) S Decachlorobiphenyl	9.68	293428	25.000 UG/L
Spiked Amount 20.000		Recovery =	125.00%
Target Compounds			
2) L1 Aroclor-1248-1	4.59	111857	500.000 UG/L
3) L1 Aroclor-1248-2	5.25	271071	500.000 UG/L
4) L1 Aroclor-1248-3	5.94	233968	500.000 UG/L
5) L1 Aroclor-1248-4	6.34	86299	500.000 UG/L
6) L1 Aroclor-1248-5	7.10	98421	500.000 UG/L
Sum Aroclor-1248-1		801616	2500.000 UG/L
Average Aroclor-1248-1			500.000 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16971.D Vial: 15
Acq On : 17 Mar 2003 19:51 Operator: ECL
Sample : 1248 500 PPB Inst : HP4
Misc : SOS61-40 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 8:52 2003 Quant Results File: 1248SR.RES

Quant Method : C:\HPCHEM\2\METHODS\1248SR.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003
Last Update : Tue Mar 18 08:52:45 2003
Response via : Single Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16972.D Vial: 16
Acq On : 17 Mar 2003 20:09 Operator: ECL
Sample : 1248 ALT 500 PPB Inst : HP4
Misc : SOS64-08 Multiplr: 1.00
IntFile : events.e

Method : C:\HPCHEM\2\METHODS\1248SR.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003
Last Update : Tue Mar 18 08:52:45 2003
Response via : Single Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
2	L1	Aroclor-1248-1	500.000	486.125	2.8	97	0.00
3	L1	Aroclor-1248-2	500.000	403.958	19.2#	81	0.00
4	L1	Aroclor-1248-3	500.000	535.663	-7.1	107	0.00
5	L1	Aroclor-1248-4	500.000	377.595	24.5#	76	0.00
6	L1	Aroclor-1248-5	500.000	634.562	-26.9#	127	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4GR16972.D 1248SR.M Tue Mar 18 08:54:38 2003 Page 1

Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16972.D Vial: 16
Acq On : 17 Mar 2003 20:09 Operator: ECL
Sample : 1248 ALT 500 PPB Inst : HP4
Misc : SOS64-08 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 8:54 2003 Quant Results File: 1248SR.RES

Quant Method : C:\HPCHEM\2\METHODS\1248SR.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003
Last Update : Tue Mar 18 08:52:45 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

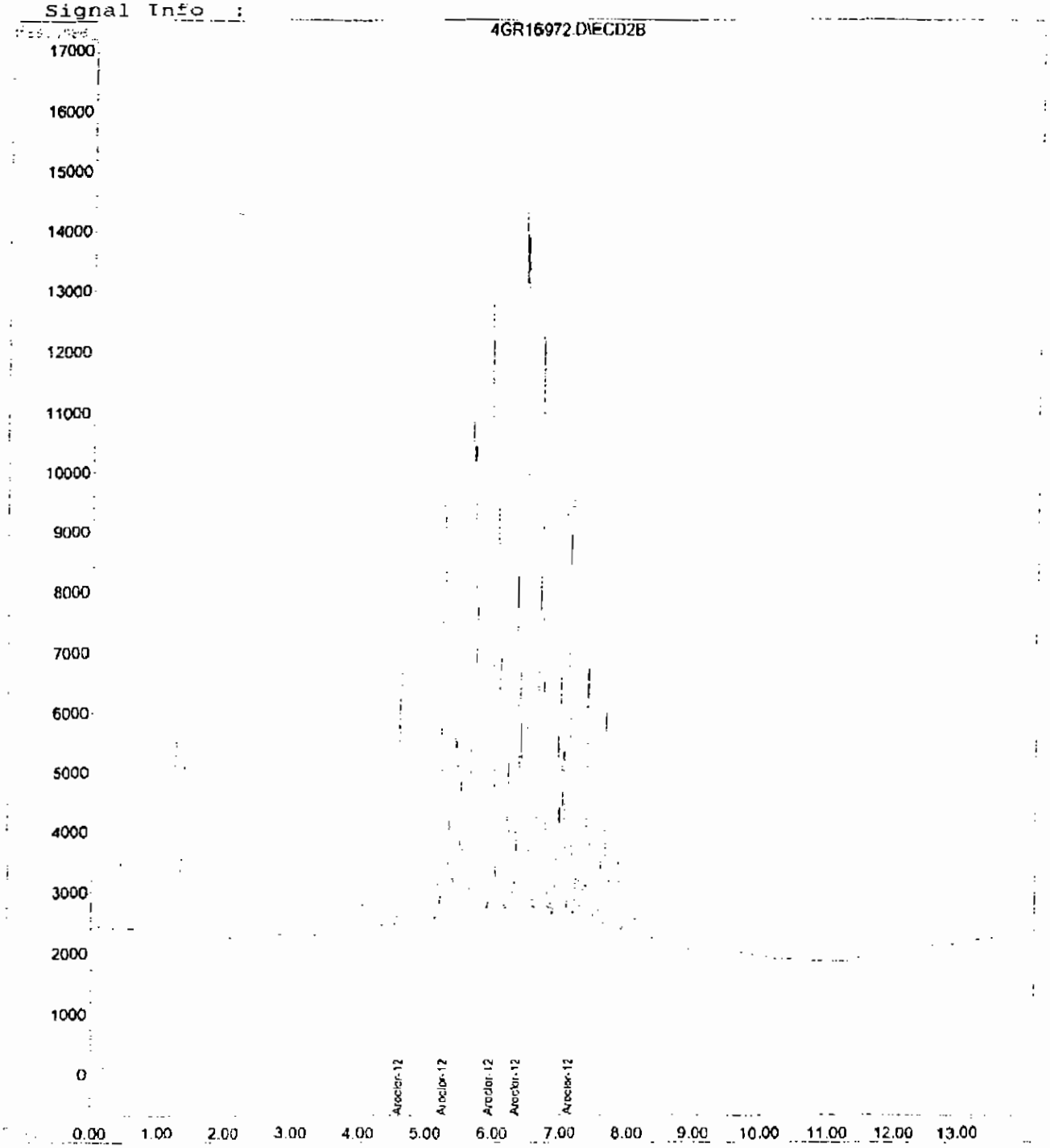
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	0.00	0	N.D. UG/L
Spiked Amount 20.000	Recovery	=	0.00%
7) S Decachlorobiphenyl	0.00	0	N.D. UG/L
Spiked Amount 20.000	Recovery	=	0.00%
Target Compounds			
2) L1 Aroclor-1248-1	4.60	108753	486.125 UG/L
3) L1 Aroclor-1248-2	5.25	219003	403.958 UG/L
4) L1 Aroclor-1248-3	5.94	250656	535.663 UG/L
5) L1 Aroclor-1248-4	6.34	65172	377.595 UG/L
6) L1 Aroclor-1248-5	7.10	124908	634.562 UG/L
Sum Aroclor-1248-1		768492	2437.903 UG/L
Average Aroclor-1248-1			487.581 UG/L

(f)=RT Delta > 1/2 window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16972.D Vial: 16
Acq On : 17 Mar 2003 20:09 Operator: ECL
Sample : 1248 ALT 500 PPB Inst : HP4
Misc : SOS64-08 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 8:54 2003 Quant Results File: 1248SR.RES

Quant Method : C:\HPCHEM\2\METHODS\1248SR.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003
Last Update : Tue Mar 18 08:52:45 2003
Response via : Single Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Method : C:\HPCHEM\2\METHODS\1242SR.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003
Last Update : Tue Mar 18 08:57:03 2003

Calibration Files
500 =4GR16973.D = =
= =

		Compound	500	Avg	%RSD
1)	S	2,4,5,6-Tetrachloro-M	1.300	1.300#E4	0.00
2)	L1	Aroclor-1242-1	1.714	1.714#E2	0.00
3)	L1	Aroclor-1242-2	4.142	4.142#E2	0.00
4)	L1	Aroclor-1242-3	2.576	2.576#E2	0.00
5)	L1	Aroclor-1242-4	6.442	6.442#E2	0.00
6)	L1	Aroclor-1242-5	3.380	3.380#E2	0.00
7)	S	Decachlorobiphenyl	1.194	1.194#E4	0.00

(#) = Out of Range

Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16973.D Vial: 17
Acq On : 17 Mar 2003 20:27 Operator: ECL
Sample : 1242 500 PPB Inst : HP4
Misc : SOS61-41 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 8:57 2003 Quant Results File: 1242SR.RES

Quant Method : C:\HPCHEM\2\METHODS\1242SR.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003
Last Update : Tue Mar 18 08:57:03 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

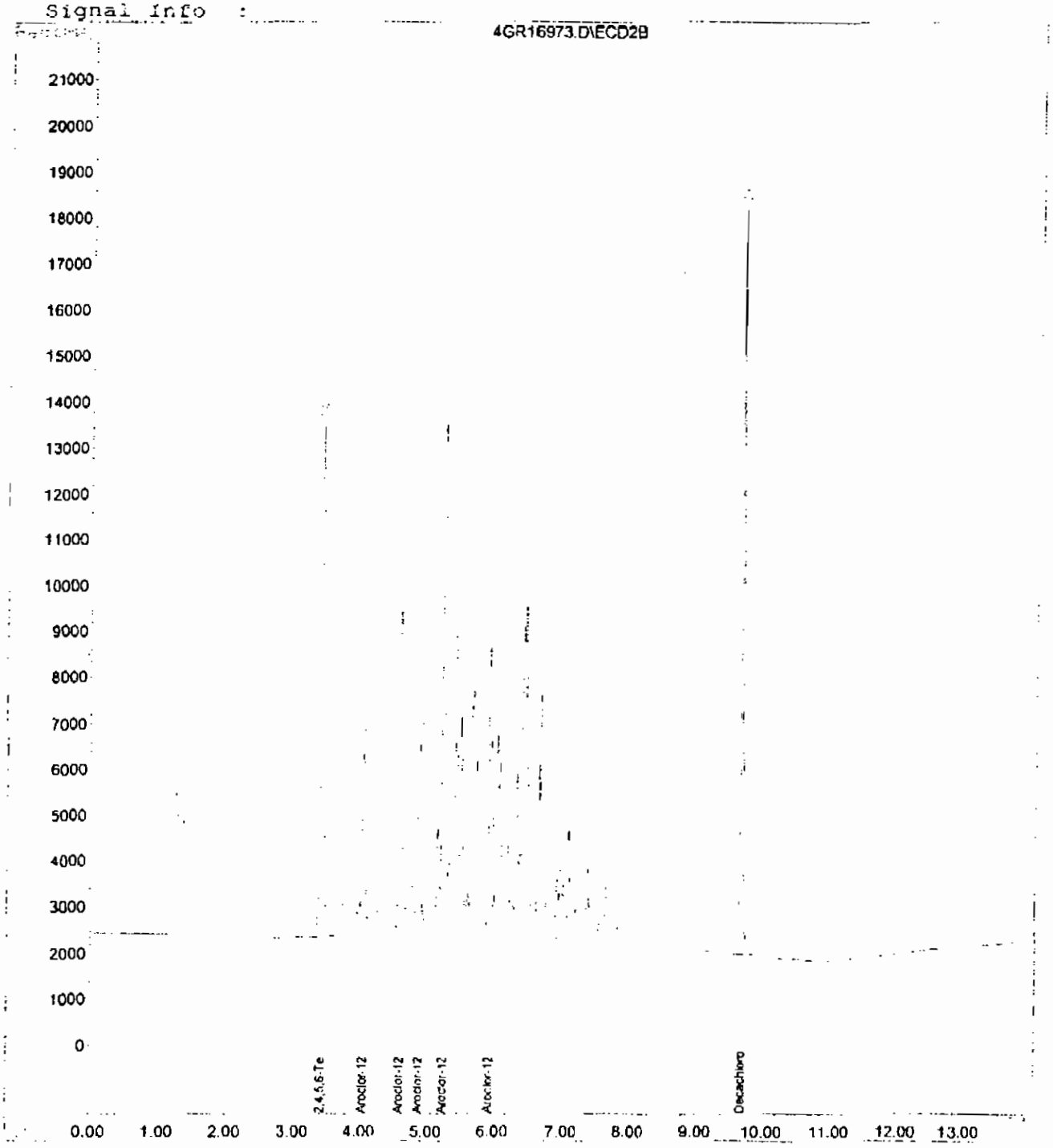
Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xylene	3.42	325113	25.000 UG/L
Spiked Amount 20.000		Recovery =	125.00%
7) S Decachlorobiphenyl	9.68	298453	25.000 UG/L
Spiked Amount 20.000		Recovery =	125.00%
Target Compounds			
2) L1 Aroclor-1242-1	4.04	85722	500.000 UG/L
3) L1 Aroclor-1242-2	4.59	207115	500.000 UG/L
4) L1 Aroclor-1242-3	4.88	128802	500.000 UG/L
5) L1 Aroclor-1242-4	5.24	322085	500.000 UG/L
6) L1 Aroclor-1242-5	5.94	169021	500.000 UG/L
Sum Aroclor-1242-1		912746	2500.000 UG/L
Average Aroclor-1242-1			500.000 UG/L

Data File : C:\HPCHEM\2\DATA\031703.SEQ\4GR16973.D Vial: 17
Acq On : 17 Mar 2003 20:27 Operator: ECL
Sample : 1242 500 PPB Inst : HP4
Misc : SOS61-41 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 8:57 2003 Quant Results File: 1242SR.RES

Quant Method : C:\HPCHEM\2\METHODS\1242SR.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003
Last Update : Tue Mar 18 08:57:03 2003
Response via : Single Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16974.D Vial: 18
Acq On : 17 Mar 2003 20:45 Operator: ECL
Sample : 1242 AMT 500 PPB Inst : HP4
Misc : SOS63-09 Multiplr: 1.00
IntFile : events.e

Method : C:\HPCHEM\2\METHODS\1242SR.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003
Last Update : Tue Mar 18 08:57:03 2003
Response via : Single Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
2	L1	Aroclor-1242-1	500.000	483.467	3.3	97	0.00
3	L1	Aroclor-1242-2	500.000	509.497	-1.9	102	0.00
4	L1	Aroclor-1242-3	500.000	501.019	-0.2	100	0.00
5	L1	Aroclor-1242-4	500.000	500.572	-0.1	100	0.00
6	L1	Aroclor-1242-5	500.000	492.967	1.4	99	0.00

Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16974.D Vial: 18
Acq On : 17 Mar 2003 20:45 Operator: ECL
Sample : 1242 ALT 500 PPB Inst : HP4
Misc : SOS63-09 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 8:57 2003 Quant Results File: 1242SR.RES

Quant Method : C:\HPCHEM\2\METHODS\1242SR.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003
Last Update : Tue Mar 18 08:57:03 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

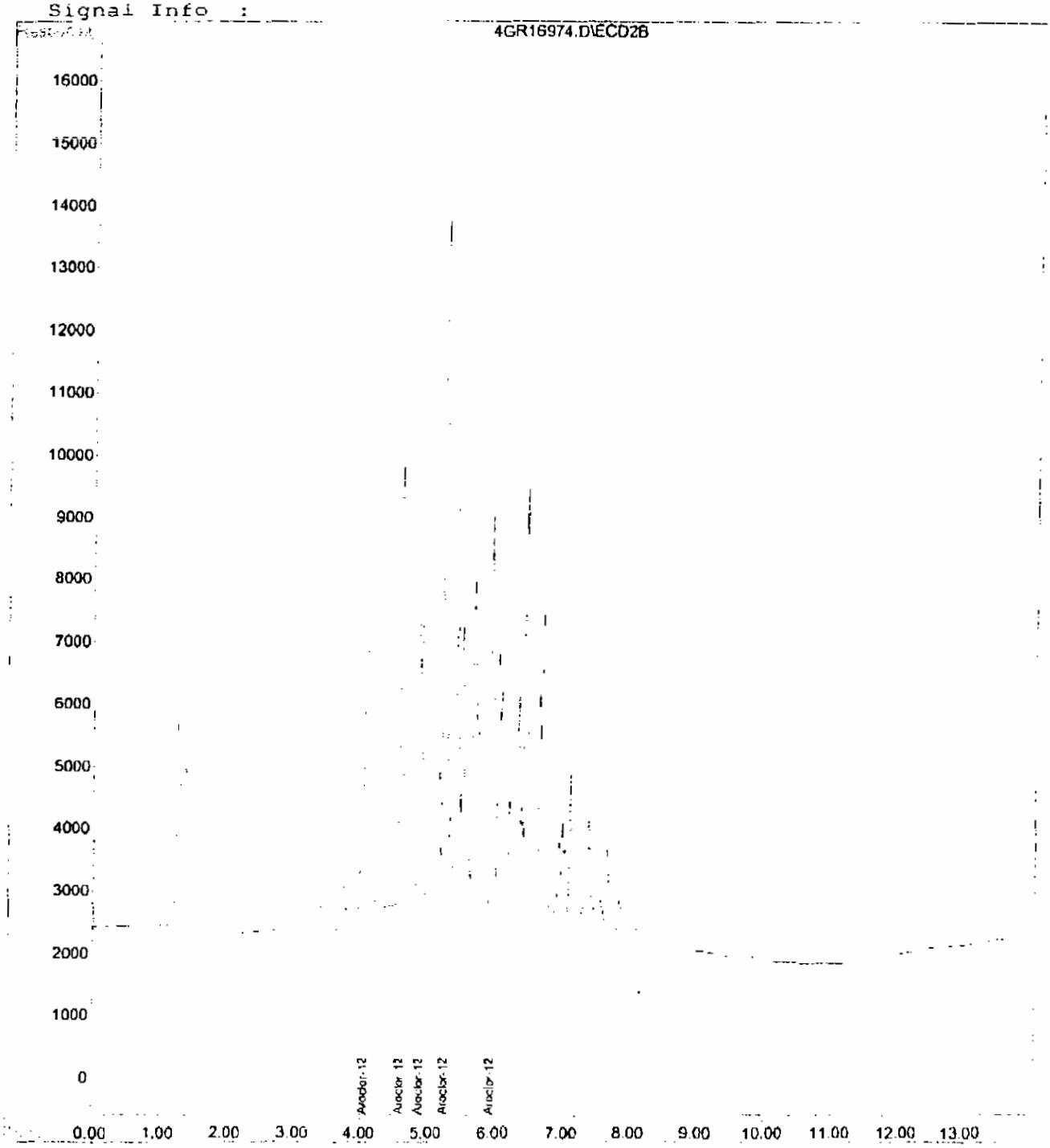
Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
1) S 2,4,5,6-Tetrachloro-M-Xyle	0.00	0	N.D.	UG/L
Spiked Amount 20.000	Recovery	=	0.00%	
7) S Decachlorobiphenyl	0.00	0	N.D.	UG/L
Spiked Amount 20.000	Recovery	=	0.00%	
Target Compounds				
2) L1 Aroclor-1242-1	4.04	82887	483.467	UG/L
3) L1 Aroclor-1242-2	4.59	211049	509.497	UG/L
4) L1 Aroclor-1242-3	4.88	129064	501.019	UG/L
5) L1 Aroclor-1242-4	5.24	322454	500.572	UG/L
6) L1 Aroclor-1242-5	5.94	166644	492.967	UG/L
Sum Aroclor-1242-1		912099	2487.522	UG/L
Average Aroclor-1242-1			497.504	UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.
4GR16974.D 1242SR.M Tue Mar 18 08:59:33 2003 Page 1

Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16974.D Vial: 18
Acq On : 17 Mar 2003 20:45 Operator: ECL
Sample : 1242 ALT 500 PPB Inst : HP4
Misc : SOS63-09 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 8:57 2003 Quant Results File: 1242SR.RES

Quant Method : C:\HPCHEM\2\METHODS\1242SR.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003
Last Update : Tue Mar 18 08:57:03 2003
Response via : Single Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Response Factor Report RT

Method : C:\HPCHEM\2\METHODS\1232SR.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003
Last Update : Tue Mar 18 09:01:00 2003

Calibration Files
500 =4GR16975.D = =
= =

		Compound	500	Avg	%RSD
1)	S	2,4,5,6-Tetrachloro-M	1.315	1.315#E4	0.00
2)	L1	Aroclor-1232-1	8.123	8.123#E1	0.00
3)	L1	Aroclor-1232-2	1.820	1.820#E2	0.00
4)	L1	Aroclor-1232-3	2.041	2.041#E2	0.00
5)	L1	Aroclor-1232-4	3.395	3.395#E2	0.00
6)	L1	Aroclor-1232-5	1.233	1.233#E2	0.00
7)	S	Decachlorobiphenyl	1.138	1.138#E4	0.00

(#) = Out of Range

Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16975.D Vial: 19
Acq On : 17 Mar 2003 21:04 Operator: ECL
Sample : 1232 500 PPB Inst : HP4
Misc : SOS64-09 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 9:01 2003 Quant Results File: 1232SR.RES

Quant Method : C:\HPCHEM\2\METHODS\1232SR.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003
Last Update : Tue Mar 18 09:01:00 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

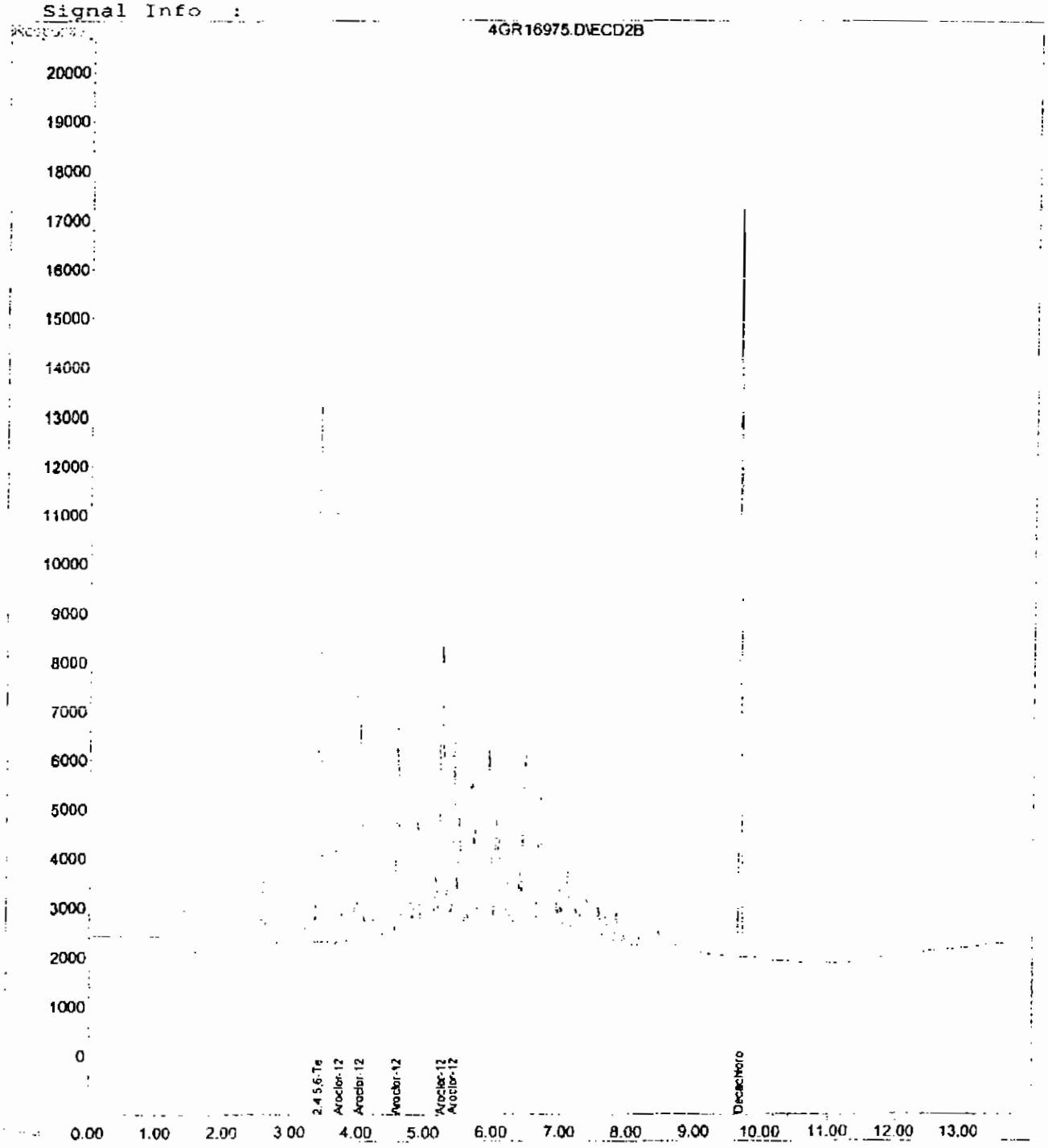
Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	3.42	328673	25.000 UG/L
Spiked Amount 20.000		Recovery =	125.00%
7) S Decachlorobiphenyl	9.68	284621	25.000 UG/L
Spiked Amount 20.000		Recovery =	125.00%
Target Compounds			
2) L1 Aroclor-1232-1	3.74	40613	500.000 UG/L
3) L1 Aroclor-1232-2	4.04	90984	500.000 UG/L
4) L1 Aroclor-1232-3	4.59	102039	500.000 UG/L
5) L1 Aroclor-1232-4	5.25	169775	500.000 UG/L
6) L1 Aroclor-1232-5	5.42	61659	500.000 UG/L
Sum Aroclor-1232-1		465070	2500.000 UG/L
Average Aroclor-1232-1			500.000 UG/L

Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16975.D Vial: 19
Acq On : 17 Mar 2003 21:04 Operator: ECL
Sample : 1232 500 PPB Inst : HP4
Misc : SOS64-09 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 9:01 2003 Quant Results File: 1232SR.RES

Quant Method : C:\HPCHEM\2\METHODS\1232SR.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003
Last Update : Tue Mar 18 09:01:00 2003
Response via : Single Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16976.D Vial: 20
Acq On : 17 Mar 2003 21:22 Operator: ECL
Sample : 1232 ALT 500 PPB Inst : HP4
Misc : SOS64-10 Multiplr: 1.00
IntFile : events.e

Method : C:\HPCHEM\2\METHODS\1232SR.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003
Last Update : Tue Mar 18 09:01:00 2003
Response via : Single Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
2	L1	Aroclor-1232-1	500.000	643.547	-28.7#	129	0.00
3	L1	Aroclor-1232-2	500.000	588.916	-17.8#	118	0.00
4	L1	Aroclor-1232-3	500.000	522.533	-4.5	105	0.00
5	L1	Aroclor-1232-4	500.000	538.550	-7.7	108	0.00
6	L1	Aroclor-1232-5	500.000	547.206	-9.4	109	0.00

(#) = Out of Range SPCC's out = 0 CCC's out 0
4GR16976.D 1232SR.M Tue Mar 18 09:01:38 2003 Page 1

Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16976.D Vial: 20
Acq On : 17 Mar 2003 21:22 Operator: ECL
Sample : 1232 ALT 500 PPB Inst : HP4
Misc : SOS64-10 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 9:01 2003 Quant Results File: 1232SR.RES

Quant Method : C:\HPCHEM\2\METHODS\1232SR.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003
Last Update : Tue Mar 18 09:01:00 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

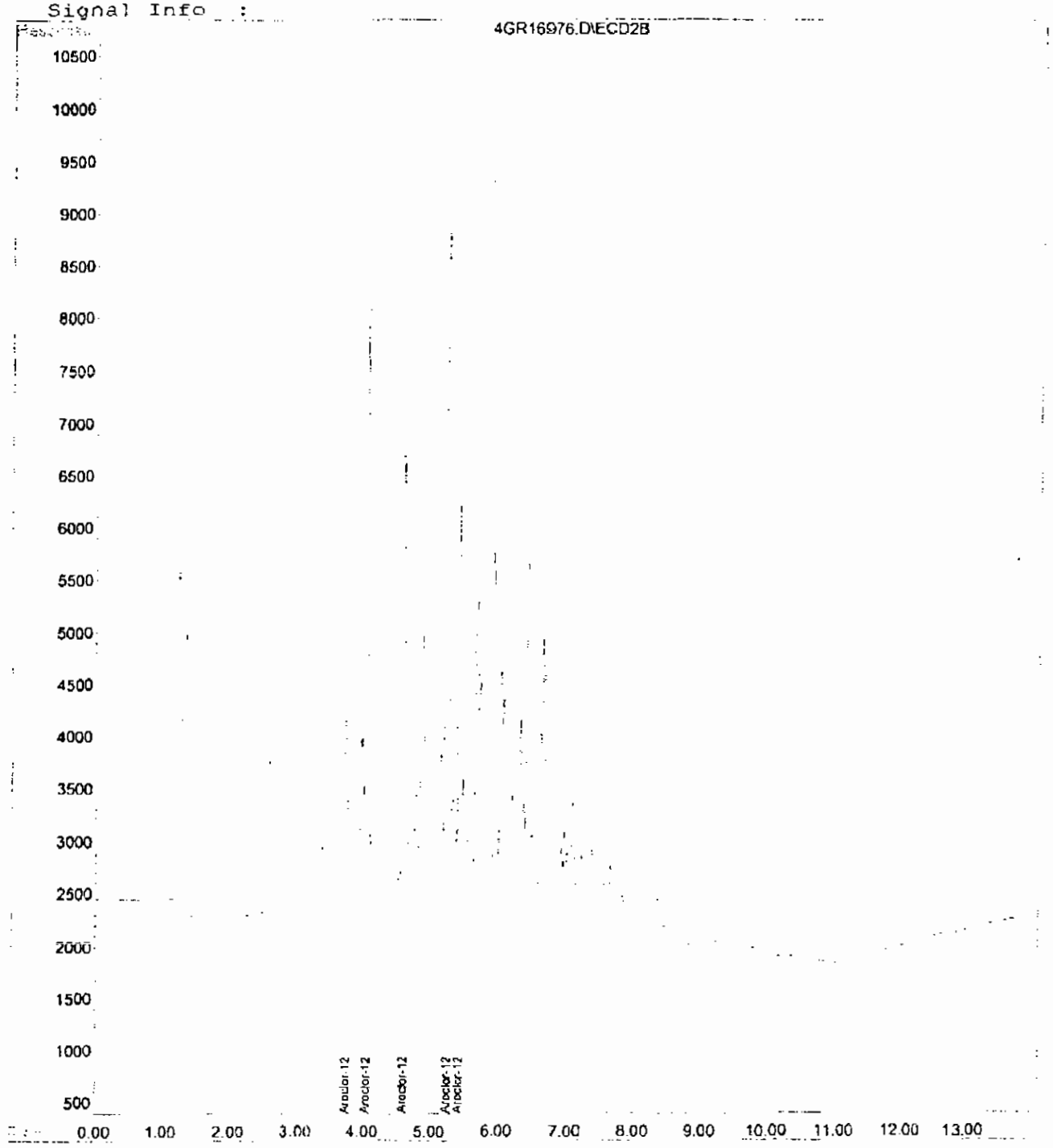
Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
1) S 2,4,5,6-Tetrachloro-M-Xyle	0.00	0	N.D.	UG/L
Spiked Amount 20.000	Recovery	=	0.00%	
7) S Decachlorobiphenyl	0.00	0	N.D.	UG/L
Spiked Amount 20.000	Recovery	=	0.00%	
Target Compounds				
2) L1 Aroclor-1232-1	3.73	52272	643.547	UG/L
3) L1 Aroclor-1232-2	4.04	107164	588.916	UG/L
4) L1 Aroclor-1232-3	4.59	106638	522.533	UG/L
5) L1 Aroclor-1232-4	5.24	182864	538.550	UG/L
6) L1 Aroclor-1232-5	5.42	67481	547.206	UG/L
Sum Aroclor-1232-1		516419	2840.751	UG/L
Average Aroclor-1232-1			568.150	UG/L

Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16976.D Vial: 20
Acq On : 17 Mar 2003 21:22 Operator: ECL
Sample : 1232 ALT 500 PPB Inst : HP4
Misc : SOS64-10 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 9:01 2003 Quant Results File: 1232SR.RES

Quant Method : C:\HPCHEM\2\METHODS\1232SR.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003
Last Update : Tue Mar 18 09:01:00 2003
Response via : Single Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Response Factor Report

Method : C:\HPCHEM\2\METHODS\1221SR.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003
Last Update : Tue Mar 18 09:04:15 2003

Calibration Files
500 =4GR16977.D =
= =

		Compound	500	Avg	%RSD
1)	S	2,4,5,6-Tetrachloro-M	1.355	1.355#E4	0.00
2)	L1	Aroclor-1221-1	1.408	1.408#E2	0.00
3)	L1	Aroclor-1221-2	1.479	1.479#E2	0.00
4)	L1	Aroclor-1221-3	2.399	2.399#E2	0.00
5)	L1	Aroclor-1221-4	3.052	3.052#E1	0.00
6)	L1	Aroclor-1221-5	5.704	5.704#E1	0.00
7)	S	Decachlorobiphenyl	1.134	1.134#E4	0.00

(#) = Out of Range

Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16977.D Vial: 21
Acq On : 17 Mar 2003 21:40 Operator: ECL
Sample : 1221 500 PPB Inst : HP4
Misc : SOS64-07 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 9:04 2003 Quant Results File: 1221SR.RES

Quant Method : C:\HPCHEM\2\METHODS\1221SR.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003
Last Update : Tue Mar 18 09:04:15 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

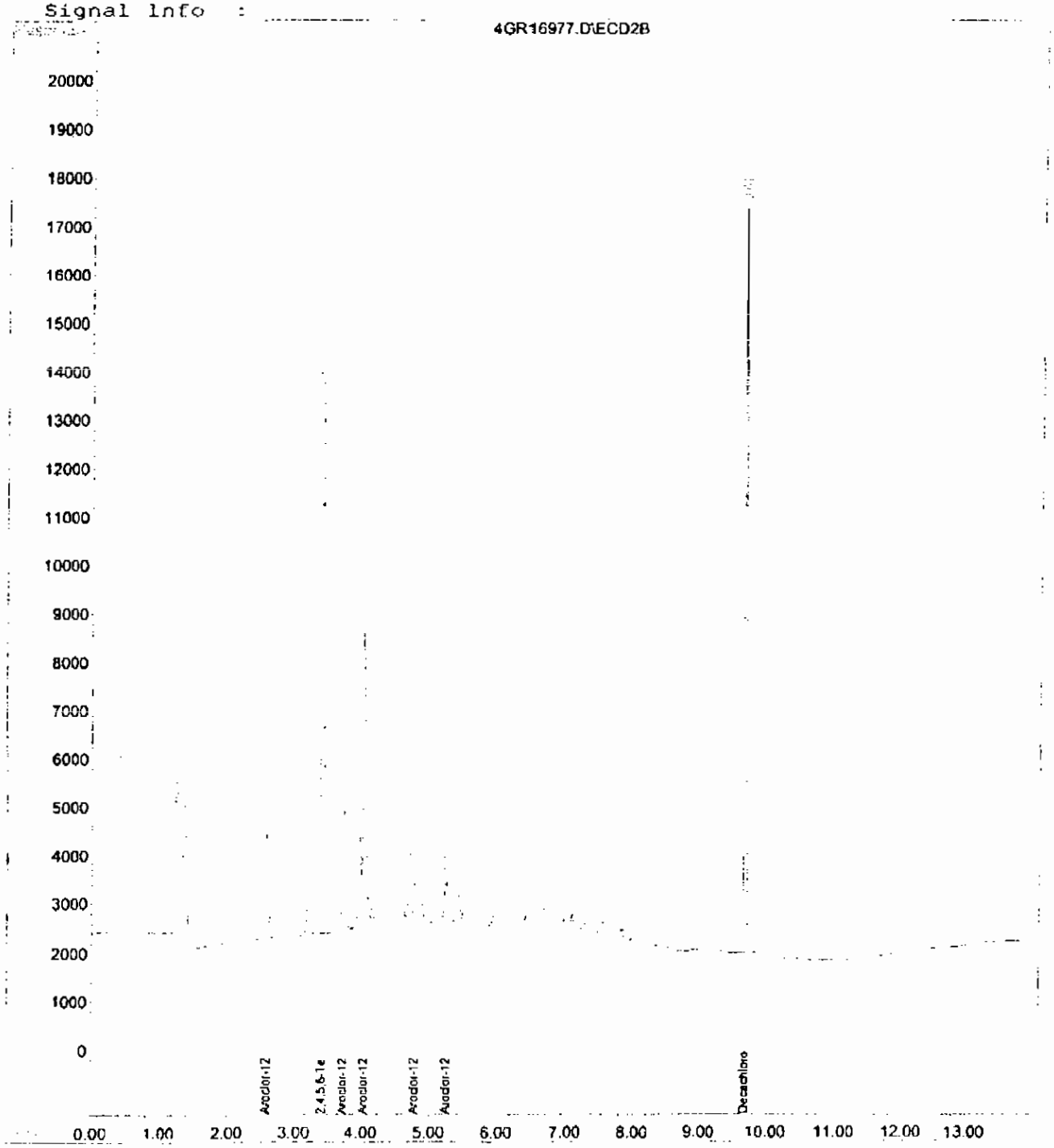
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	3.41	338873	25.000 UG/L
Spiked Amount 20.000		Recovery =	125.00%
7) S Decachlorobiphenyl	9.67	283596	25.000 UG/L
Spiked Amount 20.000		Recovery =	125.00%
Target Compounds			
2) L1 Aroclor-1221-1	2.58	70419	500.000 UG/L
3) L1 Aroclor-1221-2	3.72	73932	500.000 UG/L
4) L1 Aroclor-1221-3	4.03	119937	500.000 UG/L
5) L1 Aroclor-1221-4	4.77	15259	500.000 UG/L
6) L1 Aroclor-1221-5	5.24	28518	500.000 UG/L
Sum Aroclor-1221-1		308065	2500.000 UG/L
Average Aroclor-1221-1			500.000 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16977.D Vial: 21
Acq On : 17 Mar 2003 21:40 Operator: ECL
Sample : 1221 500 PPB Inst : HP4
Misc : SOS64-07 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 9:04 2003 Quant Results File: 1221SR.RES

Quant Method : C:\HPCHEM\2\METHODS\1221SR.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003
Last Update : Tue Mar 18 09:04:15 2003
Response via : Single Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16978.D Vial: 22
Acq On : 17 Mar 2003 21:58 Operator: ECL
Sample : 1221 ALT 500 PPB Inst : HP4
Misc : SOS61-43 Multiplr: 1.00
IntFile : events.e

Method : C:\HPCHEM\2\METHODS\1221SR.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003
Last Update : Tue Mar 18 09:04:15 2003
Response via : Single Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
2	L1	Aroclor-1221-1	500.000	496.425	0.7	99	0.00
3	L1	Aroclor-1221-2	500.000	493.314	1.3	99	0.00
4	L1	Aroclor-1221-3	500.000	480.300	3.9	96	0.00
5	L1	Aroclor-1221-4	500.000	509.844	-2.0	102	0.00
6	L1	Aroclor-1221-5	500.000	492.570	1.5	99	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4GR16978.D 1221SR.M Tue Mar 18 09:04:41 2003 Page 1

Data File : C:\HPCHEM\2\DATA\031703.SEC\4GR16978.D Vial: 22
Acq On : 17 Mar 2003 21:58 Operator: ECL
Sample : 1221 ALT 500 PPB Inst : HP4
Misc : SOS61-43 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 9:04 2003 Quant Results File: 1221SR.RES

Quant Method : C:\HPCHEM\2\METHODS\1221SR.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003
Last Update : Tue Mar 18 09:04:15 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	0.00	0	N.D. UG/L
Spiked Amount 20.000	Recovery	=	0.00%
7) S Decachlorobiphenyl	0.00	0	N.D. UG/L
Spiked Amount 20.000	Recovery	=	0.00%
Target Compounds			
2) L1 Aroclor-1221-1	2.58	69915	496.425 UG/L
3) L1 Aroclor-1221-2	3.72	72943	493.314 UG/L
4) L1 Aroclor-1221-3	4.03	115211	480.300 UG/L
5) L1 Aroclor-1221-4	4.77	15560	509.844 UG/L
6) L1 Aroclor-1221-5	5.24	28094	492.570 UG/L
Sum Aroclor-1221-1		301724	2472.454 UG/L
Average Aroclor-1221-1			494.491 UG/L

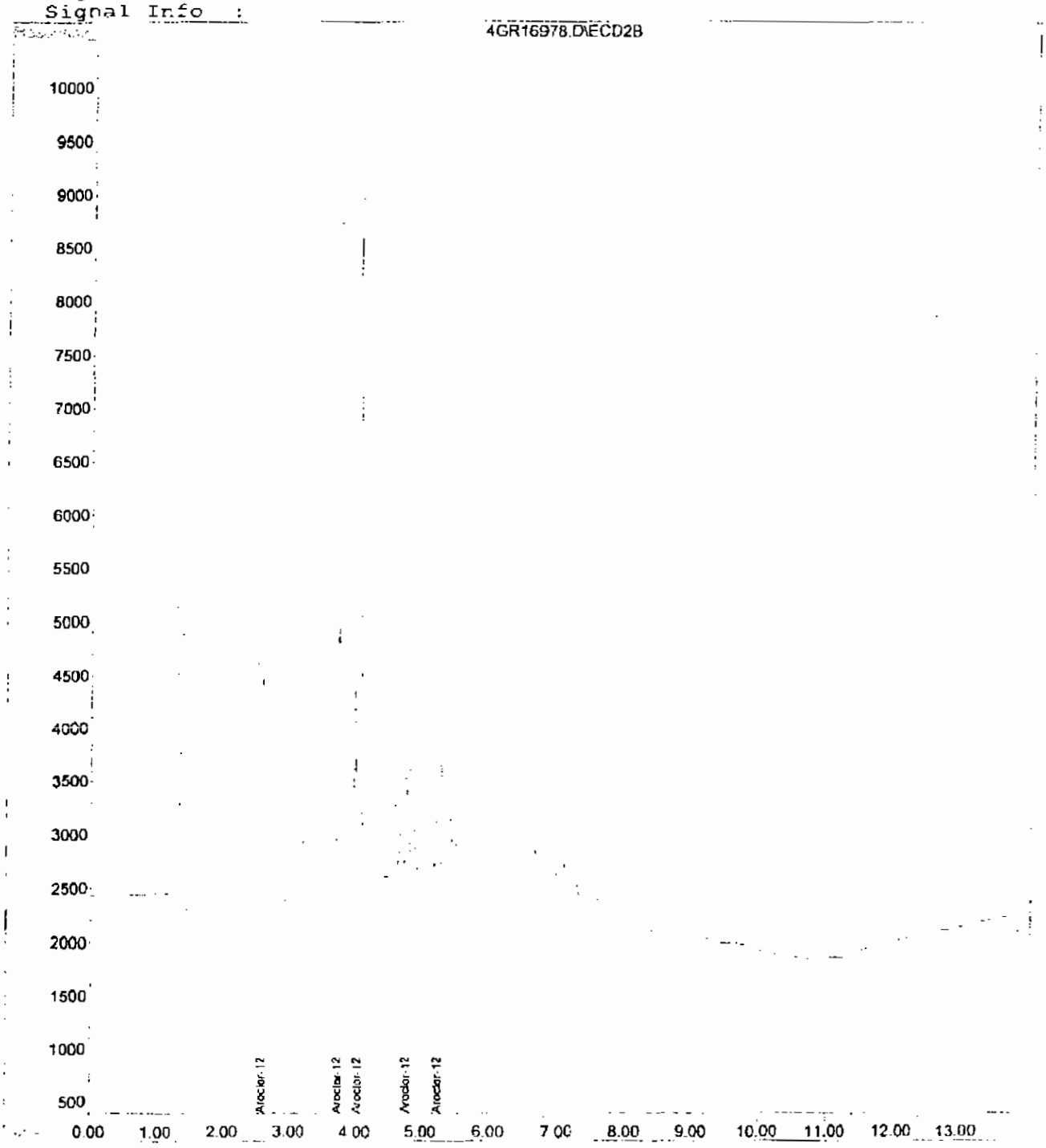
(f)=RT Delta > 1/2 Window (m)=manual int.
4GR16978.D 1221SR.M Tue Mar 18 09:04:45 2003 Page 1

Data File : C:\HPCHEM\2\DATA\[illegible]

Acq On : 17 Mar 2003 21:58 Operator: ECL
Sample : 1221 ALT 500 PPB Inst : HP4
Misc : SOS61-43 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 18 9:04 2003 Quant Results File: 1221SR.RES

Quant Method : C:\HPCHEM\2\METHODS\1221SR.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003
Last Update : Tue Mar 18 09:04:15 2003
Response via : Single Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Method : C:\HPCHEM\2\METHODS\1660F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1459
Last Update : Fri May 02 15:05:39 2003

Calibration Files
2000 =4GF17523.D 1000 =4GF17524.D 500 =4GF17525.D
250 =4GF17526.D 100 =4GF17527.D 50 =4GF17528.D

		Compound	2000	1000	500	250	100	50	Avg	%RSD
1)	S	2,4,5,6-Tetrachloro	7.673	8.186	7.756	7.818	7.325	7.176	7.656#E3	4.74
2)	L1	Aroclor-1016-1	1.599	1.852	1.832	1.897	1.880	1.725	1.797#E2	6.37
3)	L1	Aroclor-1016-2	2.885	3.399	3.526	3.873	4.074	3.635	3.565#E2	11.56
4)	L1	Aroclor-1016-3	6.255	7.248	7.473	7.691	8.208	7.767	7.440#E2	8.92
5)	L1	Aroclor-1016-4	2.795	3.215	3.184	3.124	3.614	3.026	3.160#E2	8.52
6)	L1	Aroclor-1016-5	2.182	2.451	2.457	2.341	2.664	1.937	2.339#E2	10.79
7)	L2	Aroclor-1260-1	5.021	5.633	5.806	6.063	6.099	6.160	5.797#E2	7.41
8)	L2	Aroclor-1260-2	4.293	4.732	4.833	4.933	4.897	4.810	4.750#E2	4.93
9)	L2	Aroclor-1260-3	9.208	9.768	9.804	9.734	9.067	8.855	9.406#E2	4.40
10)	L2	Aroclor-1260-4	8.913	9.178	8.984	9.041	8.658	8.394	8.862#E2	3.23
11)	L2	Aroclor-1260-5	2.504	2.515	2.382	2.322	2.231	2.178	2.355#E2	5.89
12)	S	Decachlorobiphenyl	7.477	7.837	7.756	7.636	7.421	6.754	7.480#E3	5.21

(#) = Out of Range

Data File : C:\HPCHEM\2\DATA\050203\4GF17523.D Vial: 1
Acq On : 2 May 2003 13:09 Operator: ECL
Sample : WG139612-01 1660 ICAL 2000 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: May 2 15:04 2003 Quant Results File: 1660F.RES

Quant Method : C:\HPCHEM\2\METHODS\1660F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1459
Last Update : Fri May 02 15:04:15 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

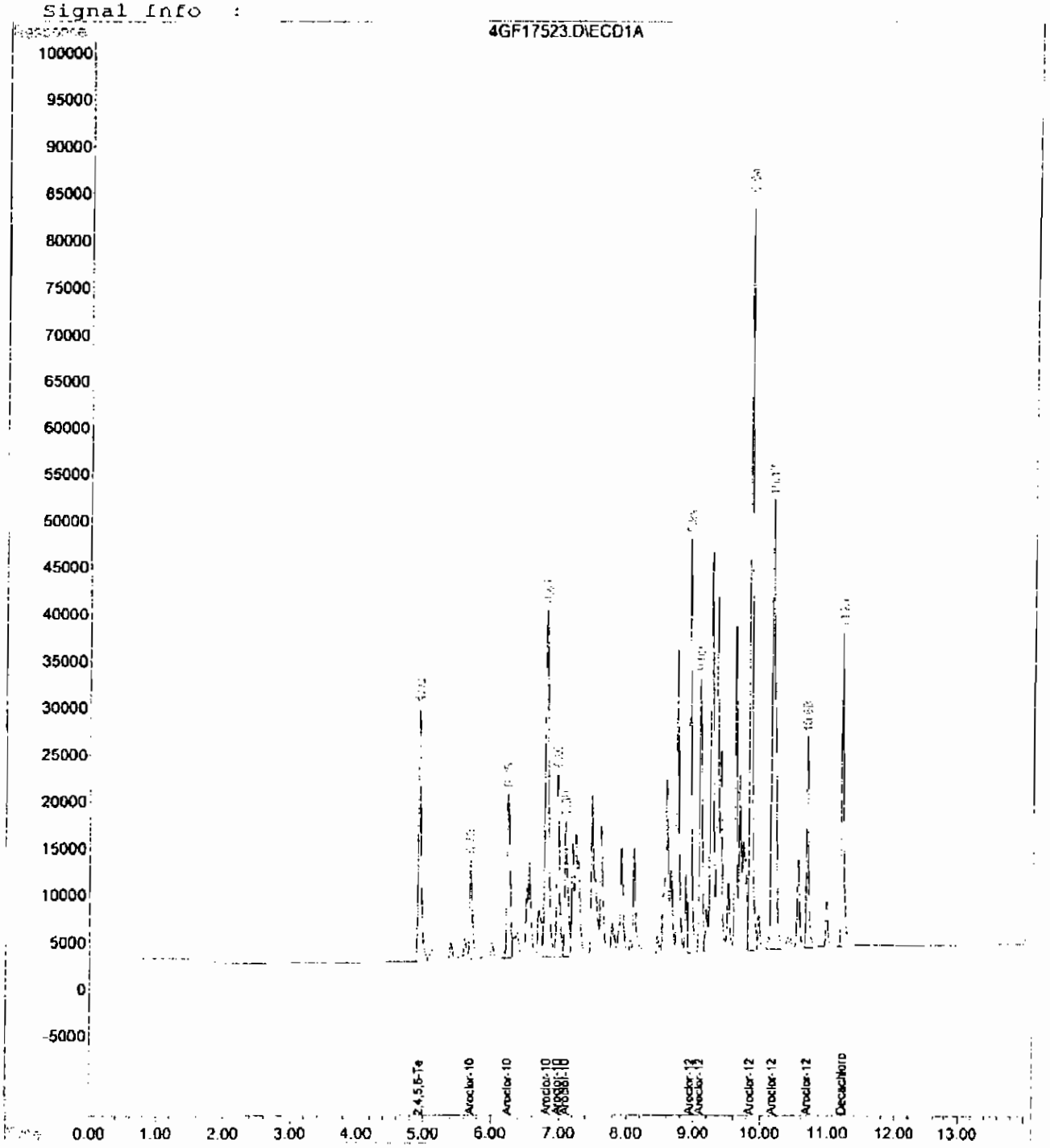
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.93	767322	117.633 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	588.16%#
12) S Decachlorobiphenyl	11.21	747695	102.628 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	513.14%#
Target Compounds			
2) L1 Aroclor-1016-1	5.70	319732	2104.759 UG/L
3) L1 Aroclor-1016-2	6.25	577072	1848.066 UG/L
4) L1 Aroclor-1016-3	6.81	1251000	2078.191 UG/L
5) L1 Aroclor-1016-4	6.97	559043	2215.338 UG/L
6) L1 Aroclor-1016-5	7.09	436343	2834.150 UG/L
Sum Aroclor-1016-1		3143189	11080.505 UG/L
Average Aroclor-1016-1			2216.101 UG/L
7) L2 Aroclor-1260-1	8.94	1004166	2391.222 UG/L
8) L2 Aroclor-1260-2	9.09	858659	2246.130 UG/L
9) L2 Aroclor-1260-3	9.84	1841554	2799.113 UG/L
10) L2 Aroclor-1260-4	10.18	1782642	2432.885 UG/L
11) L2 Aroclor-1260-5	10.68	500736	2367.158 UG/L
Sum Aroclor-1260-1		5987757	12236.509 UG/L
Average Aroclor-1260-1			2447.302 UG/L

(F)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\050203\4GF17523.D Vial: 1
Acq On : 2 May 2003 13:09 Operator: ECL
Sample : WG139612-01 1660 ICAL 2000 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: May 2 15:04 2003 Quant Results File: 1660F.RES

Quant Method : C:\HPCHEM\2\METHODS\1660F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1459
Last Update : Fri May 02 15:04:15 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



```
Data File : C:\HPCHEM\2\DATA\050203\4GF17524.D            Vial: 2
Acq On    :  2 May 2003  13:27                          Operator: ECL
Sample    : WG139612-02 1660 ICAL 1000 PPB              Inst    : HP4
Misc      : 1,1 SOS63-02                                Multiplr: 1.00
IntFile   : events.e
Quant Time: May  2 15:04 2003  Quant Results File: 1660F.RES

Quant Method : C:\HPCHEM\2\METHODS\1660F.M (Chemstation Integrator)
Title        : CALIBRATION May 2, 2003  @  1459
Last Update  : Fri May 02 15:04:29 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj.  :
Signal Phase :
Signal Info  :

     Compound                          R.T.       Response    Conc Units
  ----------------------------------------------------------------------------

  System Monitoring Compounds
 1) S   2,4,5,6-Tetrachloro-M-Xyle    4.93          409314    60.779 UG/L
Spiked Amount      20.000   Range  30 - 132    Recovery    =  303.90%#
12) S   Decachlorobiphenyl           11.20          391845    52.902 UG/L
Spiked Amount      20.000   Range  36 - 144    Recovery    =  264.51%#

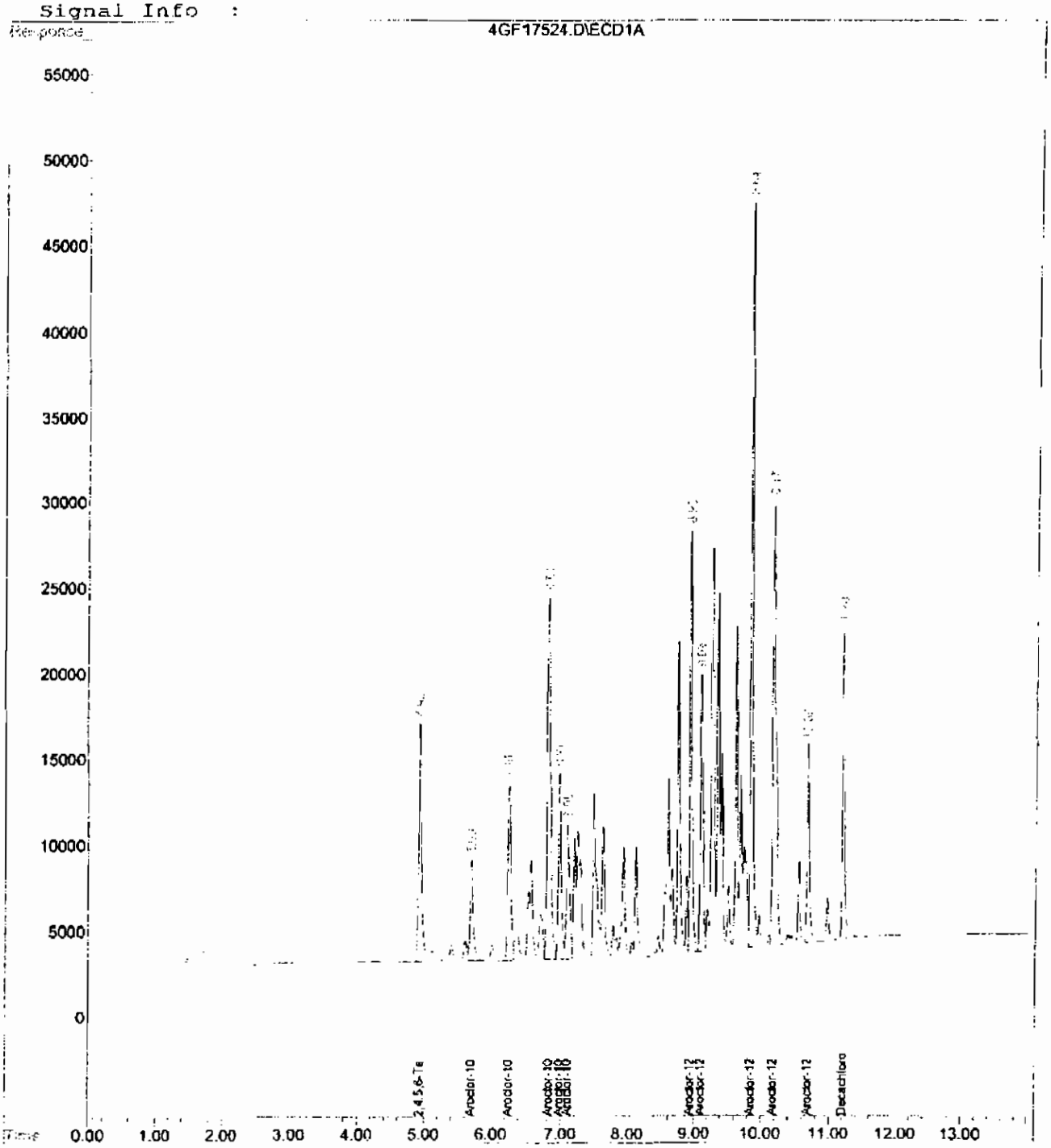
  Target Compounds
 2) L1  Aroclor-1016-1                5.70          185165  1170.990 UG/L
 3) L1  Aroclor-1016-2                6.25          339948  1062.803 UG/L
 4) L1  Aroclor-1016-3                6.81          724826  1164.761 UG/L
 5) L1  Aroclor-1016-4                6.97          321509  1222.024 UG/L
 6) L1  Aroclor-1016-5                7.09          245076  1467.761 UG/L
    Sum Aroclor-1016-1                        1816526 6088.339 UG/L
Average Aroclor-1016-1                                    1217.668 UG/L

 7) L2  Aroclor-1260-1                8.94          563261  1250.844 UG/L
 8) L2  Aroclor-1260-2                9.09          473200  1183.714 UG/L
 9) L2  Aroclor-1260-3                9.84          976777  1351.091 UG/L
10) L2  Aroclor-1260-4               10.17          917844  1184.974 UG/L
11) L2  Aroclor-1260-5               10.68          251479  1141.410 UG/L
    Sum Aroclor-1260-1                        3182561 6112.032 UG/L
Average Aroclor-1260-1                                    1222.406 UG/L
```

Data File : C:\HPCHEM\2\DATA\050203\4GF17524.D Vial: 2
Acq On : 2 May 2003 13:27 Operator: ECL
Sample : WG139612-02 1660 ICAL 1000 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: May 2 15:04 2003 Quant Results File: 1660F.RES

Quant Method : C:\HPCHEM\2\METHODS\1660F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1459
Last Update : Fri May 02 15:04:29 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\050203\4GF17525.D Vial: 3
Acq On : 2 May 2003 13:46 Operator: ECL
Sample : WG139612-03 1660 ICAL 500 PPB Inst : HP4
Misc : 1,1 SO363-02 Multiplr: 1.00
IntFile : events.e
Quant Time: May 2 15:04 2003 Quant Results File: 1660F.RES

Quant Method : C:\HPCHEM\2\METHODS\1660F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1459
Last Update : Fri May 02 15:04:44 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

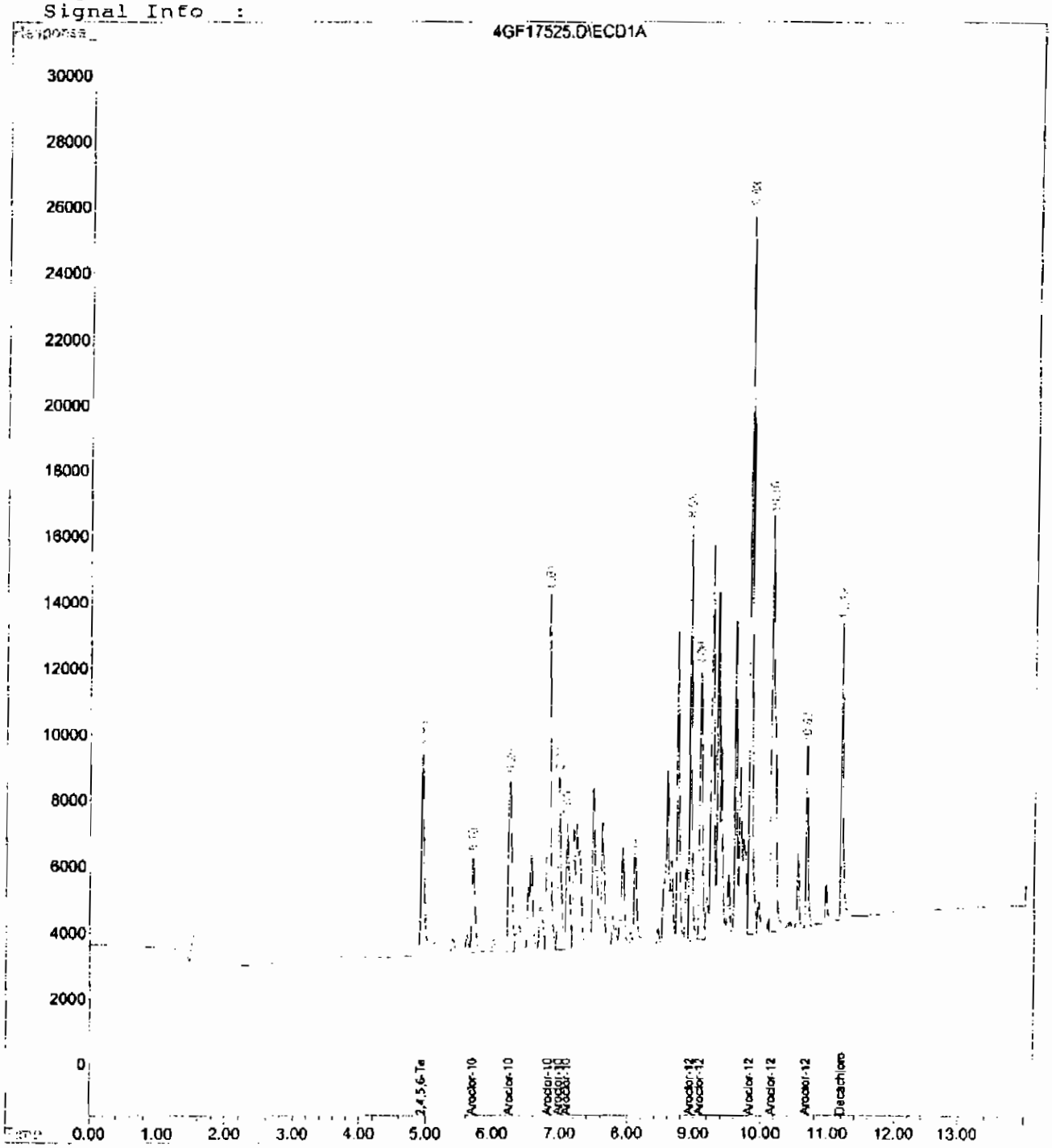
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.93	193893	27.621 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	138.10%#
12) S Decachlorobiphenyl	11.19	193911	25.809 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	129.05%
Target Compounds			
2) L1 Aroclor-1016-1	5.70	91588	551.314 UG/L
3) L1 Aroclor-1016-2	6.25	176292	533.003 UG/L
4) L1 Aroclor-1016-3	6.81	373647	572.411 UG/L
5) L1 Aroclor-1016-4	6.97	159216	572.459 UG/L
6) L1 Aroclor-1016-5	7.09	122827	668.235 UG/L
Sum Aroclor-1016-1		923569	2897.422 UG/L
Average Aroclor-1016-1			579.484 UG/L
7) L2 Aroclor-1260-1	8.93	290280	597.864 UG/L
8) L2 Aroclor-1260-2	9.09	241654	574.346 UG/L
9) L2 Aroclor-1260-3	9.83	490182	619.486 UG/L
10) L2 Aroclor-1260-4	10.16	449215	551.357 UG/L
11) L2 Aroclor-1260-5	10.67	119101	522.696 UG/L
Sum Aroclor-1260-1		1590432	2865.748 UG/L
Average Aroclor-1260-1			573.150 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\050203\4GF17525.D Vial: 3
Acq On : 2 May 2003 13:46 Operator: ECL
Sample : WG139612-03 1660 ICAL 500 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: May 2 15:04 2003 Quant Results File: 1660F.RES

Quant Method : C:\HPCHEM\2\METHODS\1660F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1459
Last Update : Fri May 02 15:04:44 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\050203\4GF17526.D Vial: 4
Acq On : 2 May 2003 14:04 Operator: ECL
Sample : WG139612-04 1660 ICAL 250 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: May 2 15:05 2003 Quant Results File: 1660F.RES

Quant Method : C:\HPCHEM\2\METHODS\1660F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1459
Last Update : Fri May 02 15:04:57 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

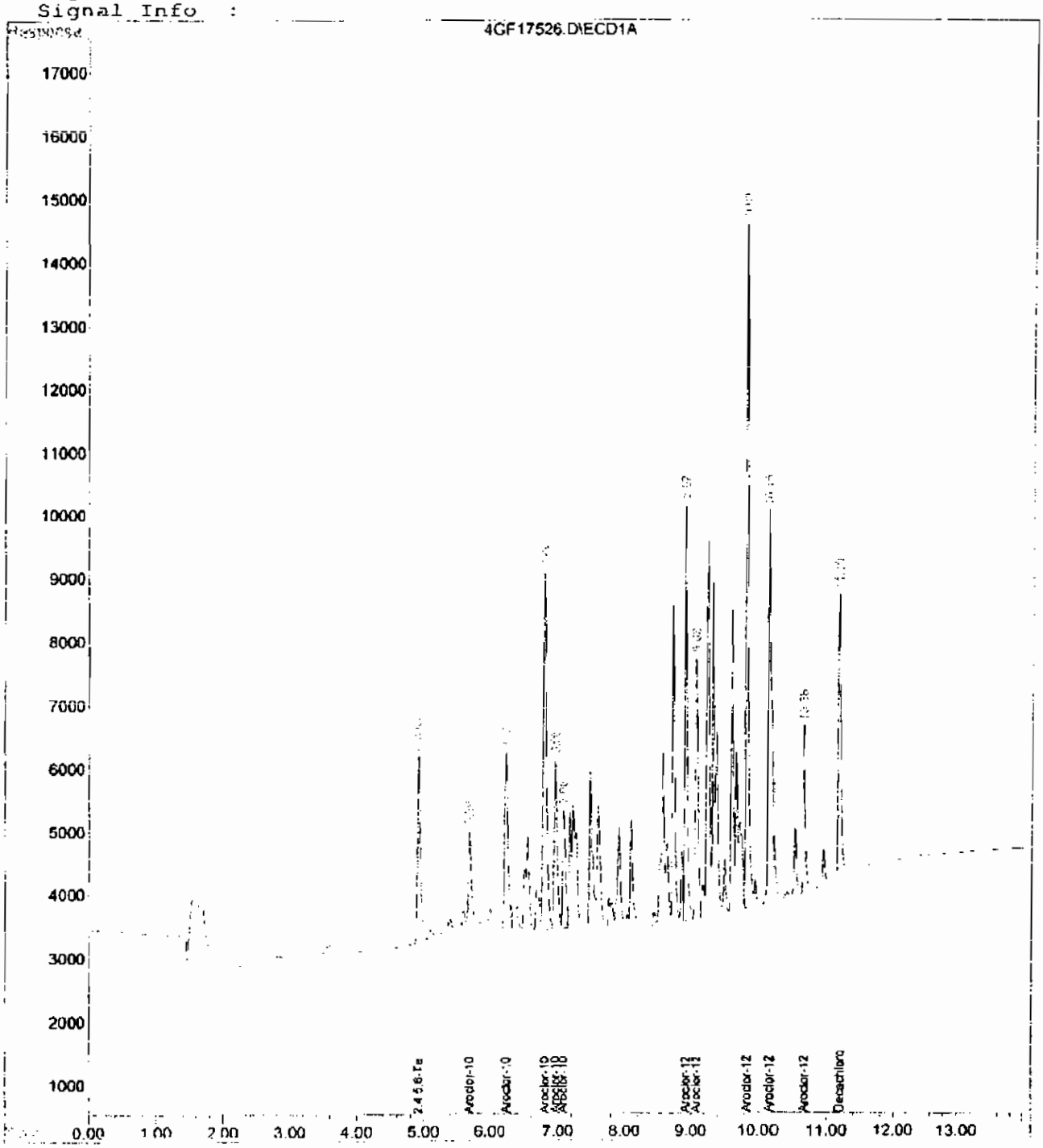
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.92	97723	13.463 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	67.31%
12) S Decachlorobiphenyl	11.19	95450	12.611 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	63.06%
Target Compounds			
2) L1 Aroclor-1016-1	5.69	47414	275.604 UG/L
3) L1 Aroclor-1016-2	6.24	96817	284.908 UG/L
4) L1 Aroclor-1016-3	6.80	192280	281.751 UG/L
5) L1 Aroclor-1016-4	6.96	78107	268.769 UG/L
6) L1 Aroclor-1016-5	7.08	58536	292.202 UG/L
Sum Aroclor-1016-1		473154	1403.234 UG/L
Average Aroclor-1016-1			280.647 UG/L
7) L2 Aroclor-1260-1	8.92	151569	292.054 UG/L
8) L2 Aroclor-1260-2	9.08	123325	279.849 UG/L
9) L2 Aroclor-1260-3	9.83	243356	283.570 UG/L
10) L2 Aroclor-1260-4	10.16	226033	266.571 UG/L
11) L2 Aroclor-1260-5	10.66	58056	250.066 UG/L
Sum Aroclor-1260-1		802339	1372.110 UG/L
Average Aroclor-1260-1			274.422 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\050203\4GF17526.D Vial: 4
Acq On : 2 May 2003 14:04 Operator: ECL
Sample : WG139612-04 1660 ICAL 250 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.c
Quant Time: May 2 15:05 2003 Quant Results File: 1660F.RES

Quant Method : C:\HPCHEM\2\METHODS\1660F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1459
Last Update : Fri May 02 15:04:57 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\050203\4GF17527.D Vial: 5
Acq On : 2 May 2003 14:23 Operator: ECL
Sample : WG139612-05 1660 ICAL 100 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: May 2 15:05 2003 Quant Results File: 1660F.RES

Quant Method : C:\HPCHEM\2\METHODS\1660F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1459
Last Update : Fri May 02 15:05:11 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

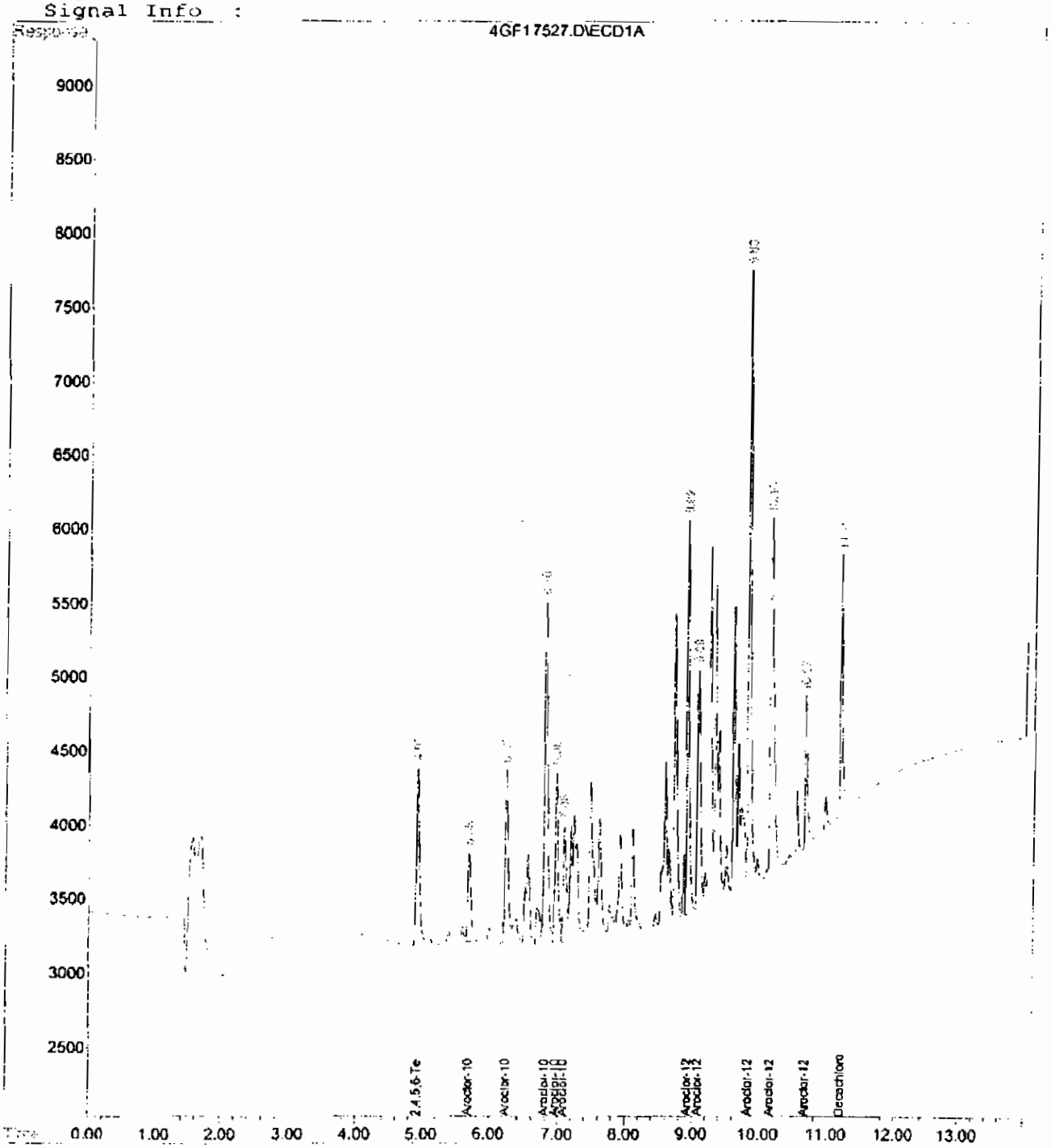
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xylo	4.91	36624	4.889 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	24.45%#
12) S Decachlorobiphenyl	11.19	37106	4.912 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	24.56%#
Target Compounds			
2) L1 Aroclor-1016-1	5.68	18805	106.370 UG/L
3) L1 Aroclor-1016-2	6.24	40741	116.980 UG/L
4) L1 Aroclor-1016-3	6.80	82082	115.489 UG/L
5) L1 Aroclor-1016-4	6.96	36143	120.583 UG/L
6) L1 Aroclor-1016-5	7.08	26640	124.300 UG/L
Sum Aroclor-1016-1		204410	583.722 UG/L
Average Aroclor-1016-1			116.744 UG/L
7) L2 Aroclor-1260-1	8.92	60992	110.547 UG/L
8) L2 Aroclor-1260-2	9.08	48965	106.583 UG/L
9) L2 Aroclor-1260-3	9.83	90671	99.965 UG/L
10) L2 Aroclor-1260-4	10.16	86584	99.276 UG/L
11) L2 Aroclor-1260-5	10.67	22305	94.970 UG/L
Sum Aroclor-1260-1		309517	511.341 UG/L
Average Aroclor-1260-1			102.268 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\050203\4GF17527.D Vial: 5
Acq On : 2 May 2003 14:23 Operator: ECL
Sample : WG139612-05 1660 ICAL 100 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: May 2 15:05 2003 Quant Results File: 1660F.RES

Quant Method : C:\HPCHEM\2\METHODS\1660F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1459
Last Update : Fri May 02 15:05:11 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\050203\4GF17528.D Vial: 6
Acq On : 2 May 2003 14:41 Operator: ECL
Sample : WG139612-06 1660 ICAL 50 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: May 2 15:05 2003 Quant Results File: 1660F.RES

Quant Method : C:\HPCHEM\2\METHODS\1660F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1459
Last Update : Fri May 02 15:05:27 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

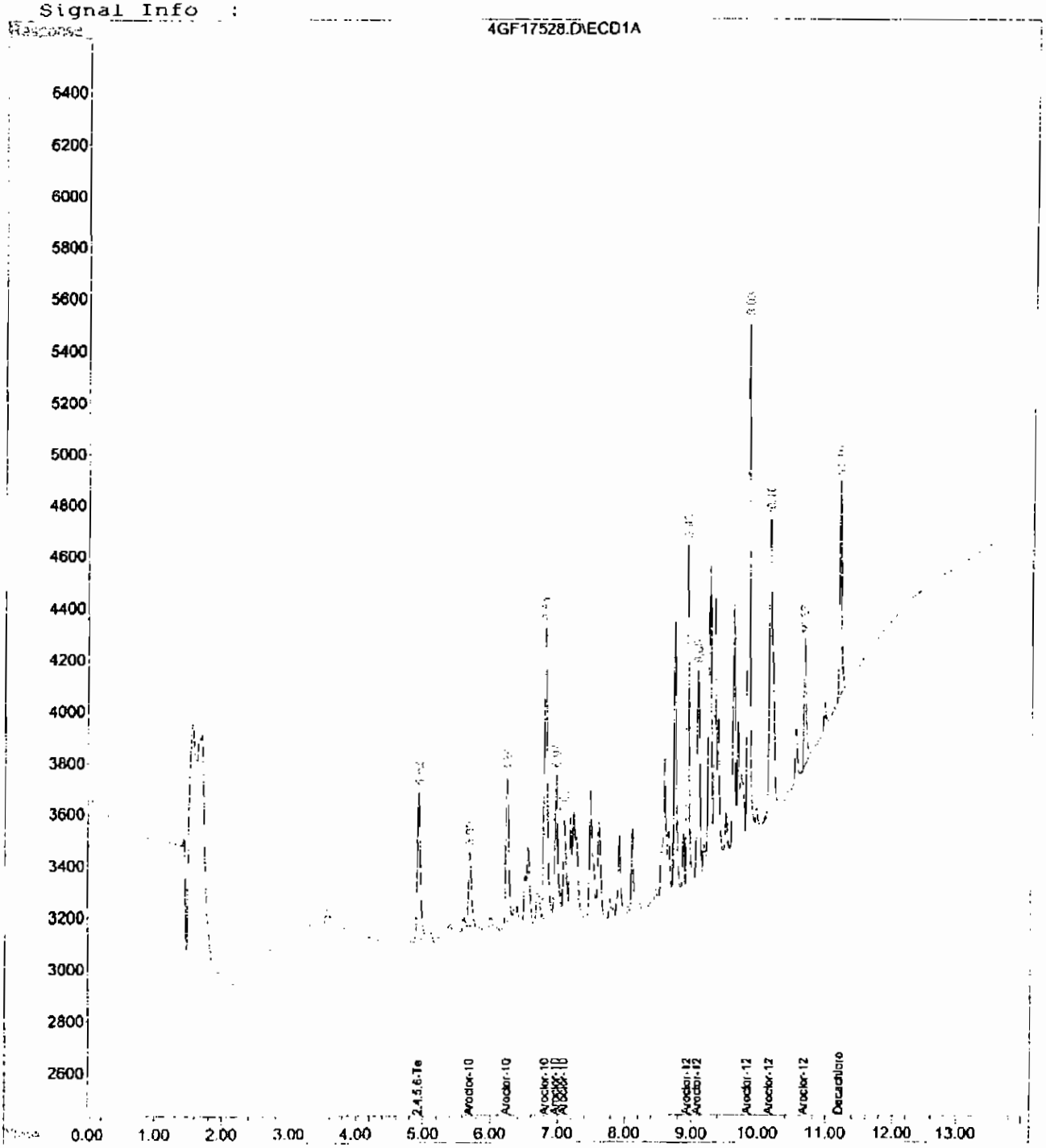
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.92	17940	2.343 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	11.72%#
12) S Decachlorobiphenyl	11.19	16886	2.257 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	11.29%#
Target Compounds			
2) L1 Aroclor-1016-1	5.69	8627	47.998 UG/L
3) L1 Aroclor-1016-2	6.24	18177	50.980 UG/L
4) L1 Aroclor-1016-3	6.81	38836	52.195 UG/L
5) L1 Aroclor-1016-4	6.97	15129	47.880 UG/L
6) L1 Aroclor-1016-5	7.09	9684	41.411 UG/L
Sum Aroclor-1016-1		90453	240.464 UG/L
Average Aroclor-1016-1			48.093 UG/L
7) L2 Aroclor-1260-1	8.93	30798	53.129 UG/L
8) L2 Aroclor-1260-2	9.09	24051	50.637 UG/L
9) L2 Aroclor-1260-3	9.84	44273	47.070 UG/L
10) L2 Aroclor-1260-4	10.17	41971	47.362 UG/L
11) L2 Aroclor-1260-5	10.67	10890	46.238 UG/L
Sum Aroclor-1260-1		151983	244.437 UG/L
Average Aroclor-1260-1			48.887 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\050203\4GF17528.D Vial: 6
Acq On : 2 May 2003 14:41 Operator: ECL
Sample : WG139612-06 1660 ICAL 50 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: May 2 15:05 2003 Quant Results File: 1660F.RES

Quant Method : C:\HPCHEM\2\METHODS\1660F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1459
Last Update : Fri May 02 15:05:27 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\050203\4GF17529.D Vial: 7
Acq On : 2 May 2003 15:00 Operator: ECL
Sample : WG139612-07 1660 ALT ICV 500 PPB Inst : HP4
Misc : 1,1 SOS63-14 Multiplr: 1.00
IntFile : events.e

Method : C:\HPCHEM\2\METHODS\1660F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1459
Last Update : Fri May 02 15:05:39 2003
Response via : Multiple Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	S	2,4,5,6-Tetrachloro-M-Xylen	25.000	26.121	-4.5	103	0.00
2	L1	Aroclor-1016-1	500.000	506.617	-1.3	99	0.00
3	L1	Aroclor-1016-2	500.000	482.699	3.5	98	0.00
4	L1	Aroclor-1016-3	500.000	481.367	3.7	96	0.00
5	L1	Aroclor-1016-4	500.000	498.211	0.4	99	0.00
6	L1	Aroclor-1016-5	500.000	497.797	0.4	95	0.00
7	L2	Aroclor-1260-1	500.000	495.502	0.9	99	0.00
8	L2	Aroclor-1260-2	500.000	503.186	-0.6	99	0.00
9	L2	Aroclor-1260-3	500.000	460.271	7.9	88	0.00
10	L2	Aroclor-1260-4	500.000	441.180	11.8	87	0.00
11	L2	Aroclor-1260-5	500.000	400.165	20.0#	79	0.00
12	S	Decachlorobiphenyl	25.000	25.750	-3.0	99	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data File : C:\HPCHEM\2\DATA\050203\4GF17529.D Vial: 7
Acq On : 2 May 2003 15:00 Operator: ECL
Sample : WG139612-07 1660 ALT ICV 500 PPB Inst : HP4
Misc : 1,1 SOS63-14 Multiplr: 1.00
IntFile : events.e
Quant Time: May 2 15:17 2003 Quant Results File: 1660F.RES

Quant Method : C:\HPCHEM\2\METHODS\1660F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1459
Last Update : Fri May 02 15:05:39 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

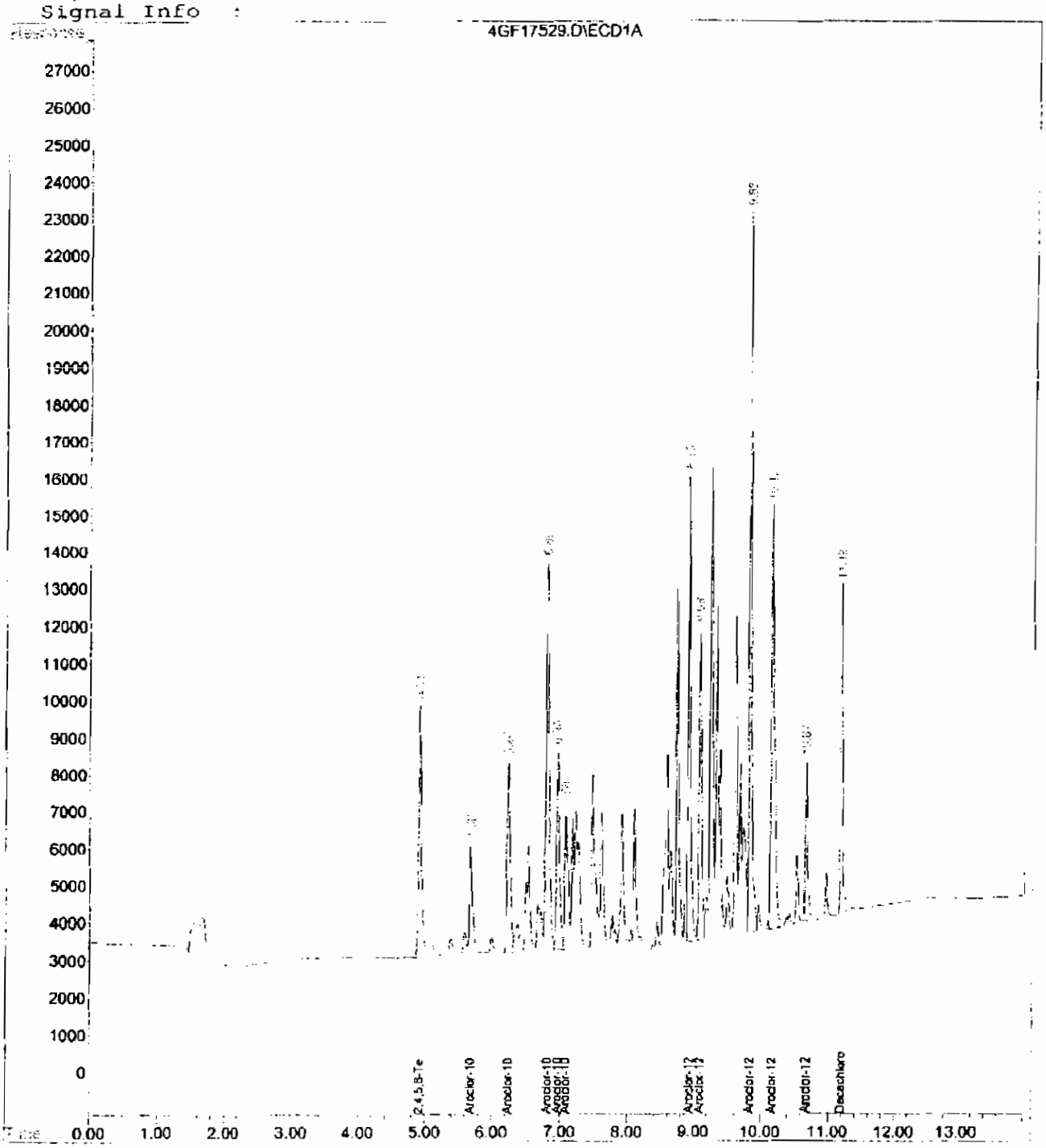
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.92	199969	26.121 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	130.60%
12) S Decachlorobiphenyl	11.19	192618	25.750 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	128.75%
Target Compounds			
2) L1 Aroclor-1016-1	5.69	91060	506.617 UG/L
3) L1 Aroclor-1016-2	6.24	172104	482.699 UG/L
4) L1 Aroclor-1016-3	6.81	358158	481.367 UG/L
5) L1 Aroclor-1016-4	6.97	157427	498.211 UG/L
6) L1 Aroclor-1016-5	7.09	116412	497.797 UG/L
Sum Aroclor-1016-1		895162	2466.690 UG/L
Average Aroclor-1016-1			493.338 UG/L
7) L2 Aroclor-1260-1	8.93	287231	495.502 UG/L
8) L2 Aroclor-1260-2	9.09	238997	503.186 UG/L
9) L2 Aroclor-1260-3	9.84	432924	460.271 UG/L
10) L2 Aroclor-1260-4	10.17	390958	441.180 UG/L
11) L2 Aroclor-1260-5	10.67	94247	400.165 UG/L
Sum Aroclor-1260-1		1444357	2300.304 UG/L
Average Aroclor-1260-1			460.061 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\050203\4GF17529.D Vial: 7
Acq On : 2 May 2003 15:00 Operator: ECL
Sample : WG139612-07 1660 ALT ICV 500 PPB Inst : HP4
Misc : 1,1 SOS63-14 Multiplr: 1.00
IntFile : events.e
Quant Time: May 2 15:17 2003 Quant Results File: 1660F.RES

Quant Method : C:\HPCHEM\2\METHODS\1660F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1459
Last Update : Fri May 02 15:05:39 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Method : C:\HPCHEM\2\METHODS\1254F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1709
Last Update : Sun May 04 12:35:25 2003

Calibration Files
2000 =4GF17530.D 1000 =4GF17531.D 500 =4GF17532.D
250 =4GF17533.D 100 =4GF17534.D 50 =4GF17535.D

		Compound	2000	1000	500	250	100	50	Avg		%RSD
1)	S	2,4,5,6-Tetrachloro	8.043	8.200	8.169	7.881	7.656	7.169	7.853	E3	4.98
2)	L1	Aroclor-1254-1	1.160	1.207	1.196	1.252	1.153	1.172	1.190	E2	3.08
3)	L1	Aroclor-1254-2	3.242	3.605	3.789	4.007	4.189	4.139	3.829	E2	9.44
4)	L1	Aroclor-1254-3	5.474	5.918	6.016	6.168	6.470	6.515	6.093	E2	6.34
5)	L1	Aroclor-1254-4	2.923	3.149	3.154	3.136	3.633	3.136	3.189	E2	7.38
6)	L1	Aroclor-1254-5	5.284	5.936	5.544	5.579	6.608	4.813	5.628	E2	10.80
7)	S	Decachlorobiphenyl	7.063	7.335	7.146	7.102	6.888	6.654	7.031	E3	3.33

(#) = Out of Range

Data File : C:\HPCHEM\2\DATA\050203\4GF17531.D Vial: 9
Acq On : 2 May 2003 15:37 Operator: ECL
Sample : 1254 ICAL 1000 PPB Inst : HP4
Misc : SOS63-41 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:35 2003 Quant Results File: 1254F.RES

Quant Method : C:\HPCHEM\2\METHODS\1254F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1709
Last Update : Sun May 04 12:35:23 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

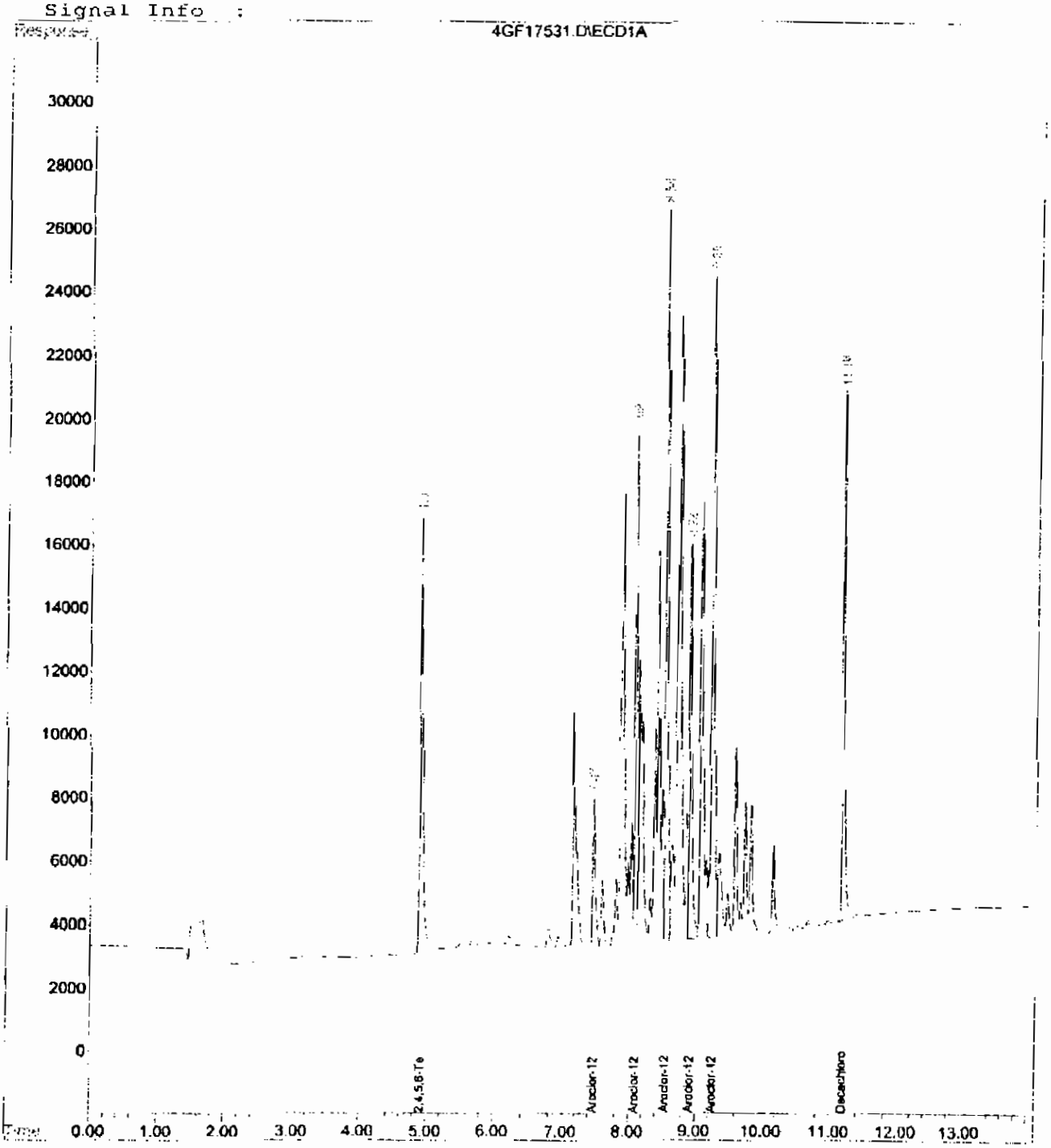
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.91	410001	50.977 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	254.88%#
7) S Decachlorobiphenyl	11.19	366757	51.929 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	259.64%#
Target Compounds			
2) L1 Aroclor-1254-1	7.47	120673	1040.030 UG/L
3) L1 Aroclor-1254-2	8.09	360514	1111.853 UG/L
4) L1 Aroclor-1254-3	8.55	591791	1081.118 UG/L
5) L1 Aroclor-1254-4	8.92	314865	1077.202 UG/L
6) L1 Aroclor-1254-5	9.25	593601	1123.462 UG/L
Sum Aroclor-1254-1		1981444	5433.665 UG/L
Average Aroclor-1254-1			1086.733 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\050203\4GF17531.D Vial: 9
Acq On : 2 May 2003 15:37 Operator: ECL
Sample : 1254 ICAL 1000 PPB Inst : HP4
Misc : SOS63-41 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:35 2003 Quant Results File: 1254F.RES

Quant Method : C:\HPCHEM\2\METHODS\1254F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1709
Last Update : Sun May 04 12:35:23 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\050203\4GF17532.D Vial: 10
Acq On : 2 May 2003 15:55 Operator: ECL
Sample : 1254 ICAL 500 PPB Inst : HP4
Misc : SOS63-41 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:35 2003 Quant Results File: 1254F.RES

Quant Method : C:\HPCHEM\2\METHODS\1254F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1709
Last Update : Sun May 04 12:35:24 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

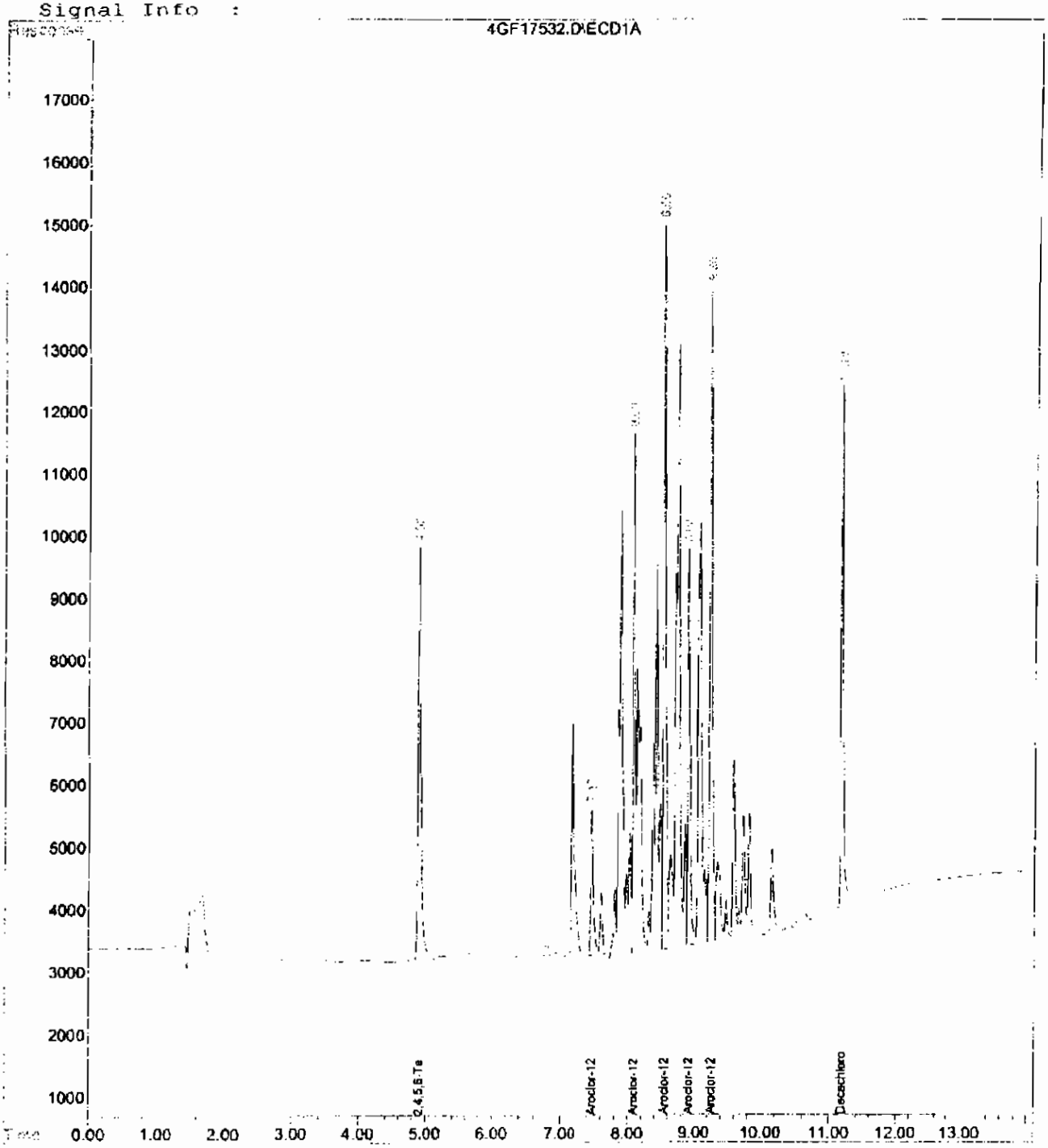
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.90	204233	25.147 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery = 125.74%	
7) S Decachlorobiphenyl	11.18	178650	24.816 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery = 124.08%	
Target Compounds			
2) L1 Aroclor-1254-1	7.47	59795	505.231 UG/L
3) L1 Aroclor-1254-2	8.09	189438	553.297 UG/L
4) L1 Aroclor-1254-3	8.55	300815	528.125 UG/L
5) L1 Aroclor-1254-4	8.92	157720	519.531 UG/L
6) L1 Aroclor-1254-5	9.25	277220	494.168 UG/L
Sum Aroclor-1254-1		984987	2600.351 UG/L
Average Aroclor-1254-1			520.070 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\050203\4GF17532.D Vial: 10
Acq On : 2 May 2003 15:55 Operator: ECL
Sample : 1254 ICAL 500 PPB Inst : HP4
Misc : SOS63-41 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:35 2003 Quant Results File: 1254F.RES

Quant Method : C:\HPCHEM\2\METHODS\1254F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1709
Last Update : Sun May 04 12:35:24 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\050203\4GF17533.D Vial: 11
Acq On : 2 May 2003 16:13 Operator: ECL
Sample : 1254 ICAL 250 PPB Inst : HP4
Misc : SOS63-41 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:35 2003 Quant Results File: 1254F.RES

Quant Method : C:\HPCHEM\2\METHODS\1254F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1709
Last Update : Sun May 04 12:35:24 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

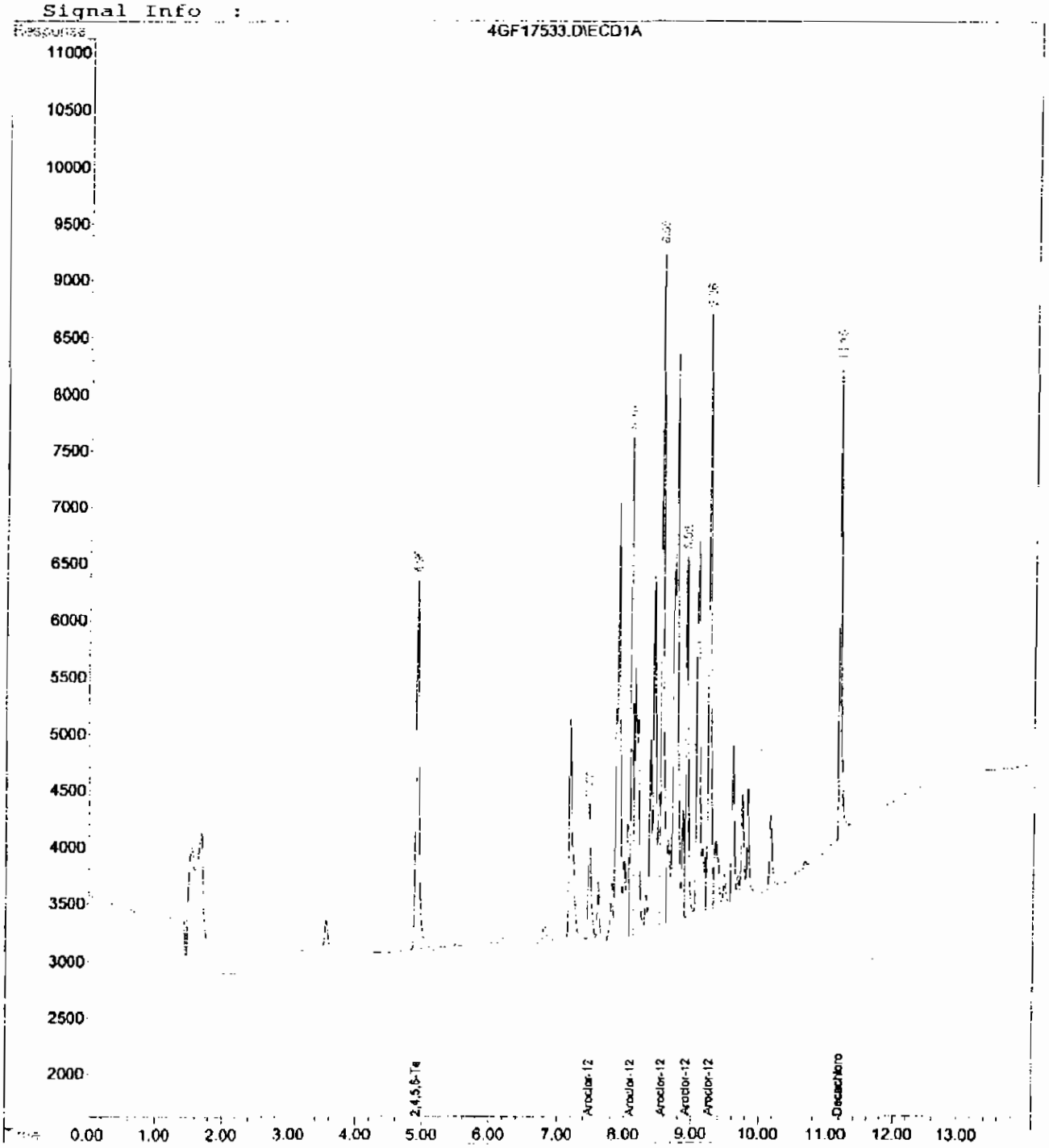
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.91	98506	12.105 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	60.53%
7) S Decachlorobiphenyl	11.18	88771	12.361 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	61.81%
Target Compounds			
2) L1 Aroclor-1254-1	7.47	31289	263.459 UG/L
3) L1 Aroclor-1254-2	8.10	100174	282.541 UG/L
4) L1 Aroclor-1254-3	8.55	154199	265.737 UG/L
5) L1 Aroclor-1254-4	8.92	78399	254.927 UG/L
6) L1 Aroclor-1254-5	9.26	139487	249.618 UG/L
Sum Aroclor-1254-1		503548	1316.282 UG/L
Average Aroclor-1254-1			263.256 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\050203\4GF17533.D Vial: 11
Acq On : 2 May 2003 16:13 Operator: ECL
Sample : 1254 ICAL 250 PPB Inst : HP4
Misc : SOS63-41 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:35 2003 Quant Results File: 1254F.RES

Quant Method : C:\HPCHEM\2\METHODS\1254F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1709
Last Update : Sun May 04 12:35:24 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\050203\4GF17534.D Vial: 12
Acq On : 2 May 2003 16:32 Operator: ECL
Sample : 1254 ICAL 100 PPB Inst : HP4
Misc : SO363-41 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:35 2003 Quant Results File: 1254F.RES

Quant Method : C:\HPCHEM\2\METHODS\1254F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1709
Last Update : Sun May 04 12:35:24 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

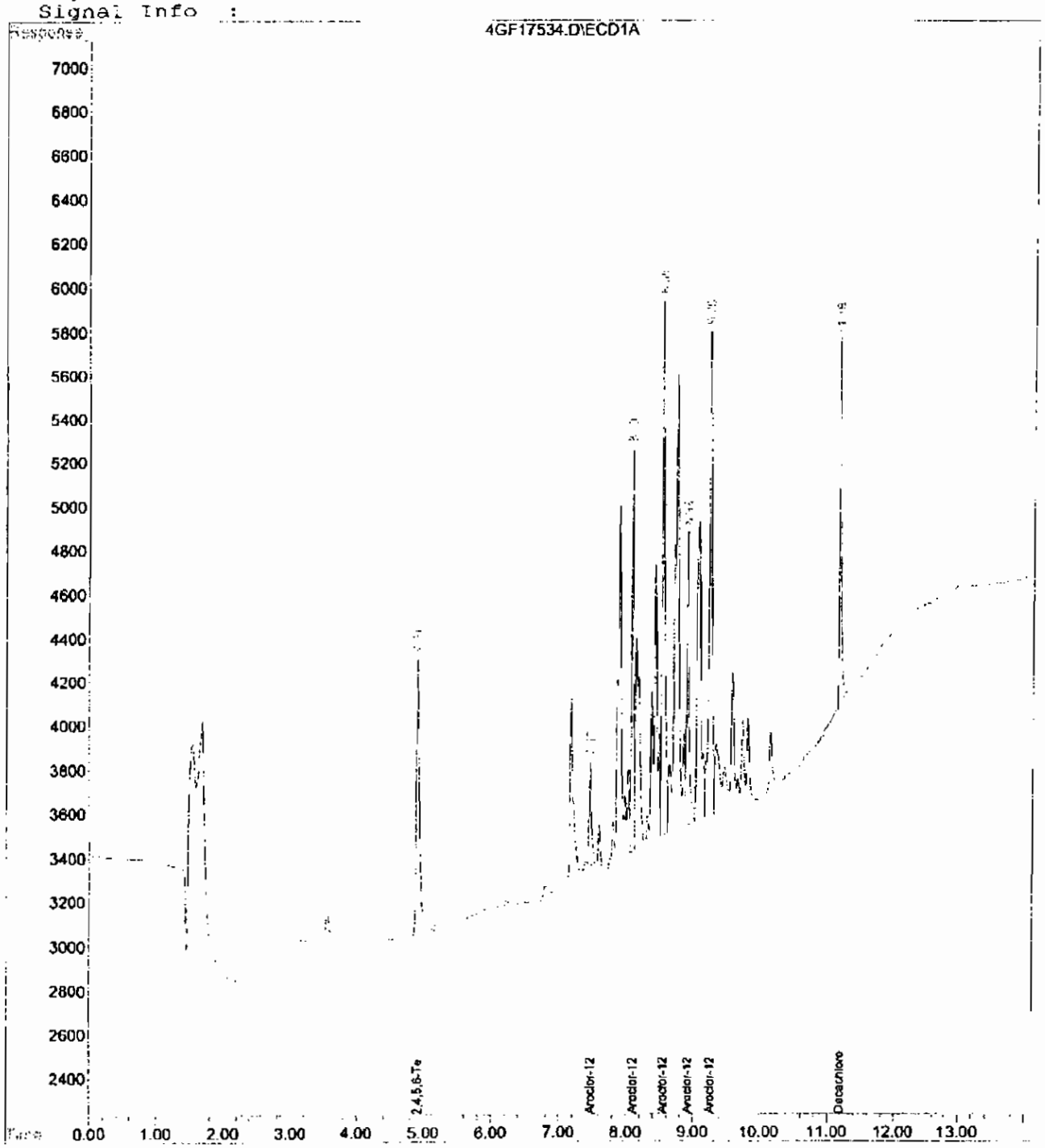
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.91	38280	4.742 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	23.71%#
7) S Decachlorobiphenyl	11.18	34442	4.809 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	24.04%#
Target Compounds			
2) L1 Aroclor-1254-1	7.47	11526	95.757 UG/L
3) L1 Aroclor-1254-2	8.10	41893	114.435 UG/L
4) L1 Aroclor-1254-3	8.55	64697	109.768 UG/L
5) L1 Aroclor-1254-4	8.92	36334	117.567 UG/L
6) L1 Aroclor-1254-5	9.26	66085	118.306 UG/L
Sum Aroclor-1254-1		220534	555.833 UG/L
Average Aroclor-1254-1			111.167 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.
4GF17534.D 1254F.M Sun May 04 12:36:01 2003 Page 1

Data File : C:\HPCHEM\2\DATA\050203\4GF17534.D Vial: 12
Acq On : 2 May 2003 16:32 Operator: ECL
Sample : 1254 ICAL 100 PPB Inst : HP4
Misc : SOS63-41 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:35 2003 Quant Results File: 1254F.RES

Quant Method : C:\HPCHEM\2\METHODS\1254F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1709
Last Update : Sun May 04 12:35:24 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\050203\4GF17535.D Vial: 13
Acq On : 2 May 2003 16:50 Operator: ECL
Sample : 1254 ICAL 50 PPB Inst : HP4
Misc : S0863-41 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:35 2003 Quant Results File: 1254F.RES

Quant Method : C:\HPCHEM\2\METHODS\1254F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1709
Last Update : Sun May 04 12:35:25 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

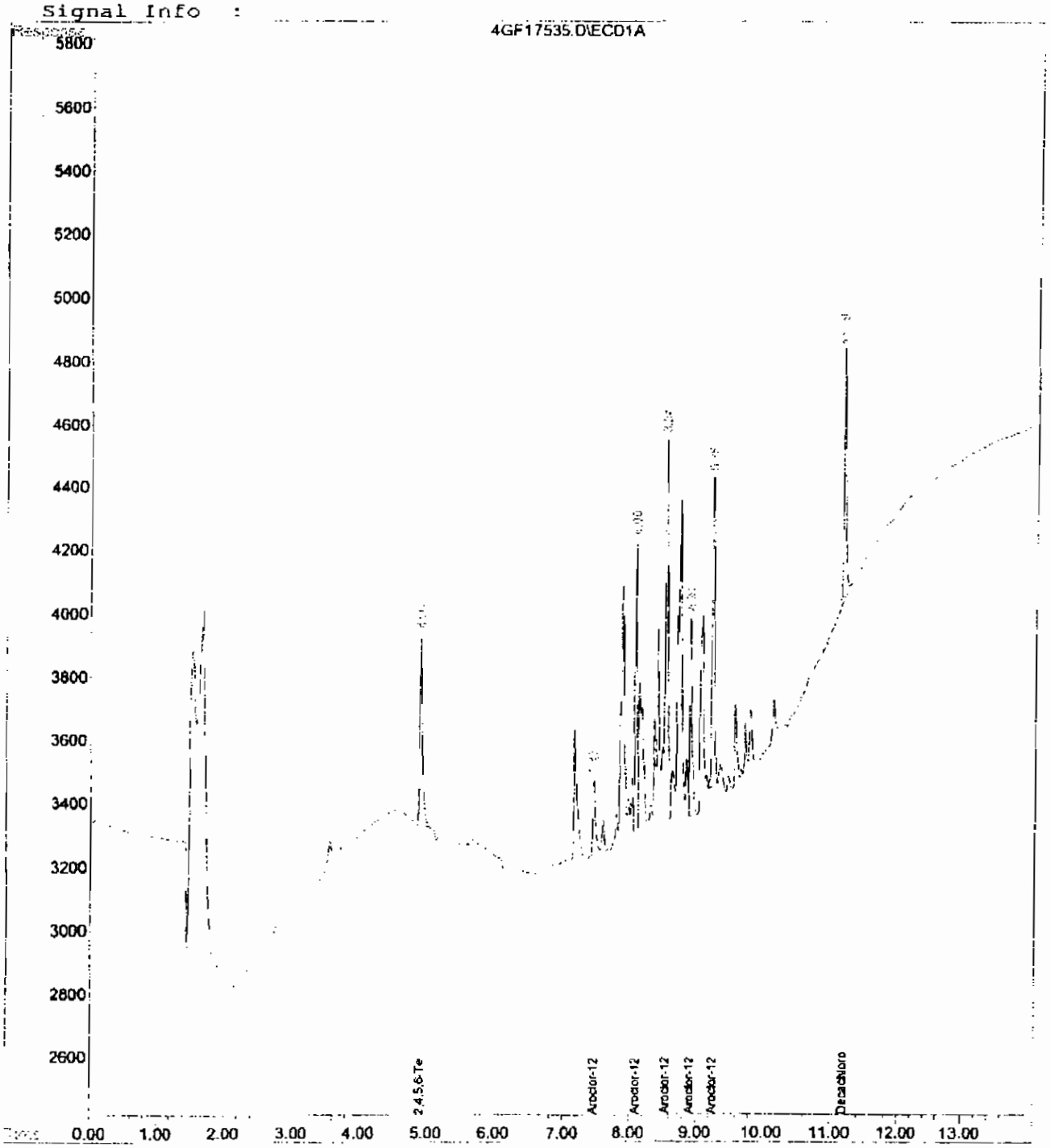
Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.90	17922	2.243 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	11.22%#
7) S Decachlorobiphenyl	11.18	16635	2.341 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	11.71%#
Target Compounds			
2) L1 Aroclor-1254-1	7.47	5858	49.087 UG/L
3) L1 Aroclor-1254-2	8.09	20696	54.947 UG/L
4) L1 Aroclor-1254-3	8.55	32575	54.209 UG/L
5) L1 Aroclor-1254-4	8.92	15679	49.012 UG/L
6) L1 Aroclor-1254-5	9.25	24065	41.560 UG/L
Sum Aroclor-1254-1		98873	248.815 UG/L
Average Aroclor-1254-1			49.763 UG/L

Data File : C:\HPCHEM\2\DATA\050203\4GF17535.D Vial: 15
Acq On : 2 May 2003 16:50 Operator: ECL
Sample : 1254 ICAL 50 PPB Inst : HP4
Misc : SOS63-41 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:35 2003 Quant Results File: 1254F.RES

Quant Method : C:\HPCHEM\2\METHODS\1254F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1709
Last Update : Sun May 04 12:35:25 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\050203\4GF17536.D Vial: 14
Acq On : 2 May 2003 17:09 Operator: ECL
Sample : 1254 ALT ICV 500 PPB Inst : HP4
Misc : SOS63-08 Multiplr: 1.00
IntFile : events.e

Method : C:\HPCHEM\2\METHODS\1254F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1709
Last Update : Sun May 04 12:35:25 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
2	L1	Aroclor-1254-1	500.000	507.021	-1.4	101	0.00
3	L1	Aroclor-1254-2	500.000	505.479	-1.1	102	0.00
4	L1	Aroclor-1254-3	500.000	503.327	-0.7	102	0.00
5	L1	Aroclor-1254-4	500.000	484.486	3.1	98	0.00
6	L1	Aroclor-1254-5	500.000	486.715	2.7	99	0.00

Data File : C:\HPCHEM\2\DATA\050203\4GF17536.D Vial: 14
Acq On : 2 May 2003 17:09 Operator: ECL
Sample : 1254 ALT ICV 500 PPB Inst : HP4
Misc : SOS63-08 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:36 2003 Quant Results File: 1254F.RES

Quant Method : C:\HPCHEM\2\METHODS\1254F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1709
Last Update : Sun May 04 12:35:25 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

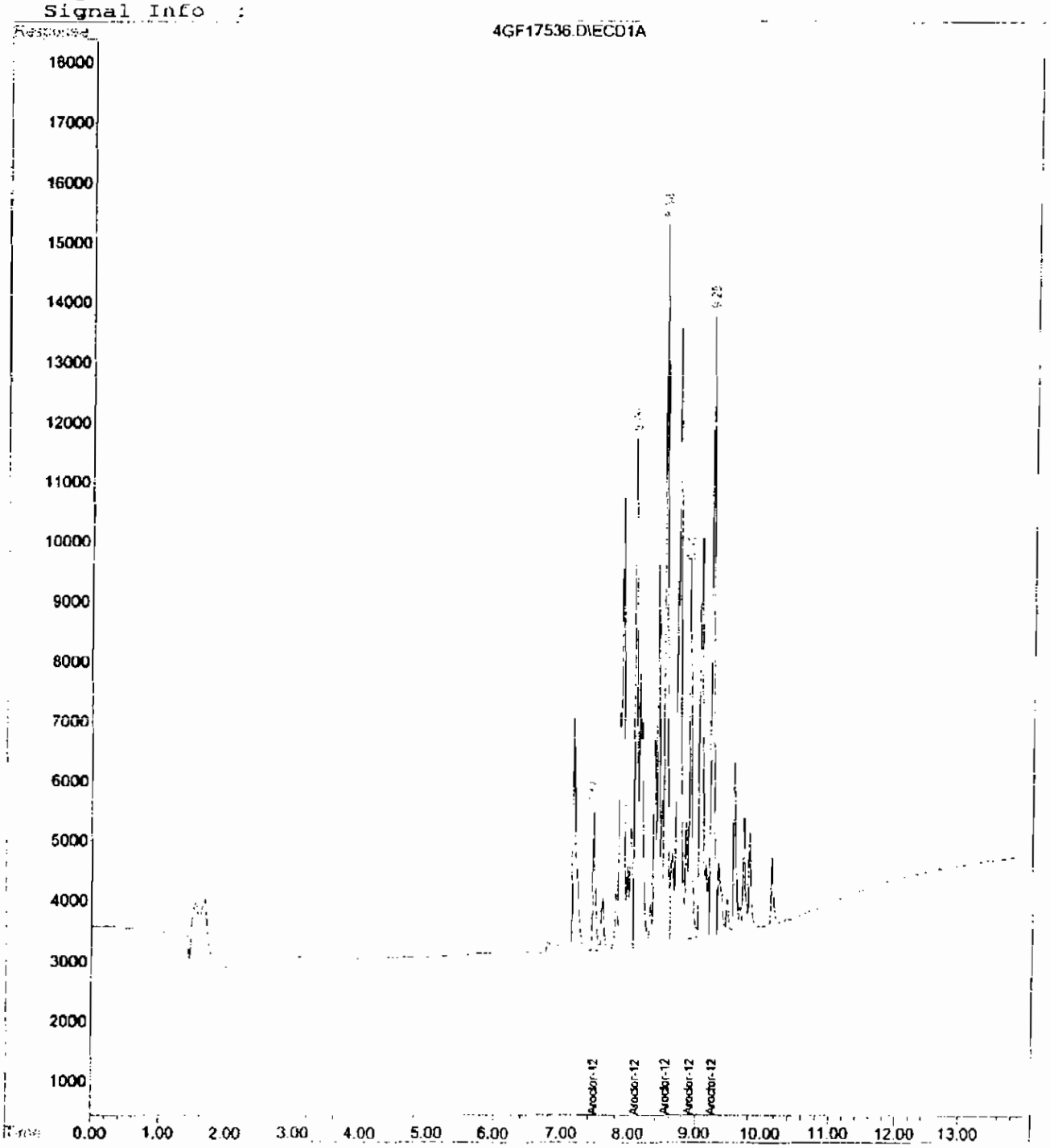
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	0.00	0	N.D. UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	0.00%#
7) S Decachlorobiphenyl	0.00	0	N.D. UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	0.00%#
Target Compounds			
2) L1 Aroclor-1254-1	7.47	60324	507.021 UG/L
3) L1 Aroclor-1254-2	8.09	193529	505.479 UG/L
4) L1 Aroclor-1254-3	8.54	306701	503.327 UG/L
5) L1 Aroclor-1254-4	8.92	154480	484.486 UG/L
6) L1 Aroclor-1254-5	9.25	273900	486.715 UG/L
Sum Aroclor-1254-1		988933	2487.028 UG/L
Average Aroclor-1254-1			497.406 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\050203\4GF17536.D Vial: 14
Acq On : 2 May 2003 17:09 Operator: ECL
Sample : 1254 ALT ICV 500 PPB Inst : HP4
Misc : SOS63-08 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:36 2003 Quant Results File: 1254F.RES

Quant Method : C:\HPCHEM\2\METHODS\1254F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1709
Last Update : Sun May 04 12:35:25 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Method : C:\HPCHEM\2\METHODS\1248SF.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003
Last Update : Sun May 04 12:38:51 2003

Calibration Files
500 =4GF17537.D = =
= =

		Compound	500	Avg	%RSD
1)	S	2,4,5,6-Tetrachloro-M	7.732	7.732#E3	0.00
2)	L1	Aroclor-1248-1	1.414	1.414#E2	0.00
3)	L1	Aroclor-1248-2	4.865	4.865#E2	0.00
4)	L1	Aroclor-1248-3	3.499	3.499#E2	0.00
5)	L1	Aroclor-1248-4	4.782	4.782#E2	0.00
6)	L1	Aroclor-1248-5	1.935	1.935#E2	0.00
7)	S	Decachlorobiphenyl	6.561	6.561#E3	0.00

(#) = Out of Range

Data File : C:\HPCHEM\2\DATA\050203\4GF17537.D Vial: 15
Acq On : 2 May 2003 17:27 Operator: ECL
Sample : 1248 500 PPB Inst : HP4
Misc : SO564-45 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:38 2003 Quant Results File: 1248SF.RES

Quant Method : C:\HPCHEM\2\METHODS\1248SF.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003
Last Update : Sun May 04 12:38:51 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

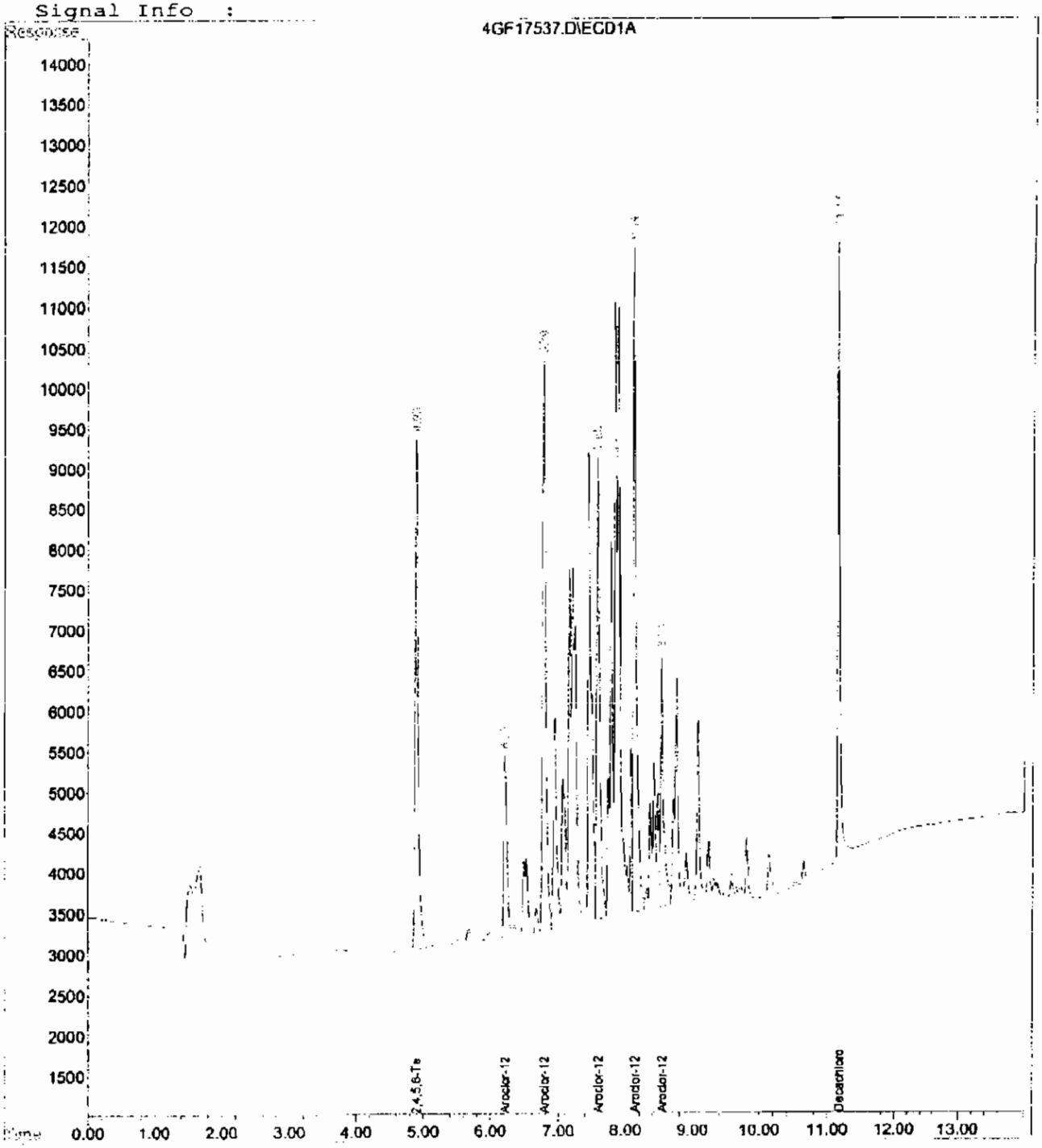
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.90	193307	25.000 UG/L
Spiked Amount 20.000		Recovery =	125.00%
7) S Decachlorobiphenyl	11.17	164015	25.000 UG/L
Spiked Amount 20.000		Recovery =	125.00%
Target Compounds			
2) L1 Aroclor-1248-1	6.22	70721	500.000 UG/L
3) L1 Aroclor-1248-2	6.79	243272	500.000 UG/L
4) L1 Aroclor-1248-3	7.60	174975	500.000 UG/L
5) L1 Aroclor-1248-4	8.14	239096	500.000 UG/L
6) L1 Aroclor-1248-5	8.54	96748	500.000 UG/L
Sum Aroclor-1248-1		824812	2500.000 UG/L
Average Aroclor-1248-1			500.000 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\050203\4GF17537.D Vial: 15
Acq On : 2 May 2003 17:27 Operator: ECL
Sample : 1248 500 PPB Inst : HP4
Misc : SOS64-45 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:38 2003 Quant Results File: 1248SF.RES

Quant Method : C:\HPCHEM\2\METHODS\1248SF.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003
Last Update : Sun May 04 12:38:51 2003
Response via : Single Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\050203\4GF17538.D Vial: 16
Acq On : 2 May 2003 17:45 Operator: ECL
Sample : 1248 ALT 500 PPB Inst : HP4
Misc : SOS64-08 Multiplr: 1.00
IntFile : events.e

Method : C:\HPCHEM\2\METHODS\1248SF.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003
Last Update : Sun May 04 12:38:51 2003
Response via : Single Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
2	L1	Aroclor-1248-1	500.000	471.421	5.7	94	0.00
3	L1	Aroclor-1248-2	500.000	385.846	22.8#	77	0.00
4	L1	Aroclor-1248-3	500.000	483.403	3.3	97	0.00
5	L1	Aroclor-1248-4	500.000	499.149	0.2	100	0.00
6	L1	Aroclor-1248-5	500.000	558.861	-11.8	112	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4GF17538.D 1248SF.M Sun May 04 12:39:18 2003 Page 1

Data File : C:\HPCHEM\2\DATA\050203\4GF17538.D Vial: 16
Acq On : 2 May 2003 17:45 Operator: ECL
Sample : 1248 ALT 500 PPB Inst : HP4
Misc : SOS64-08 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:39 2003 Quant Results File: 1248SF.RES

Quant Method : C:\HPCHEM\2\METHODS\1248SF.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003
Last Update : Sun May 04 12:38:51 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

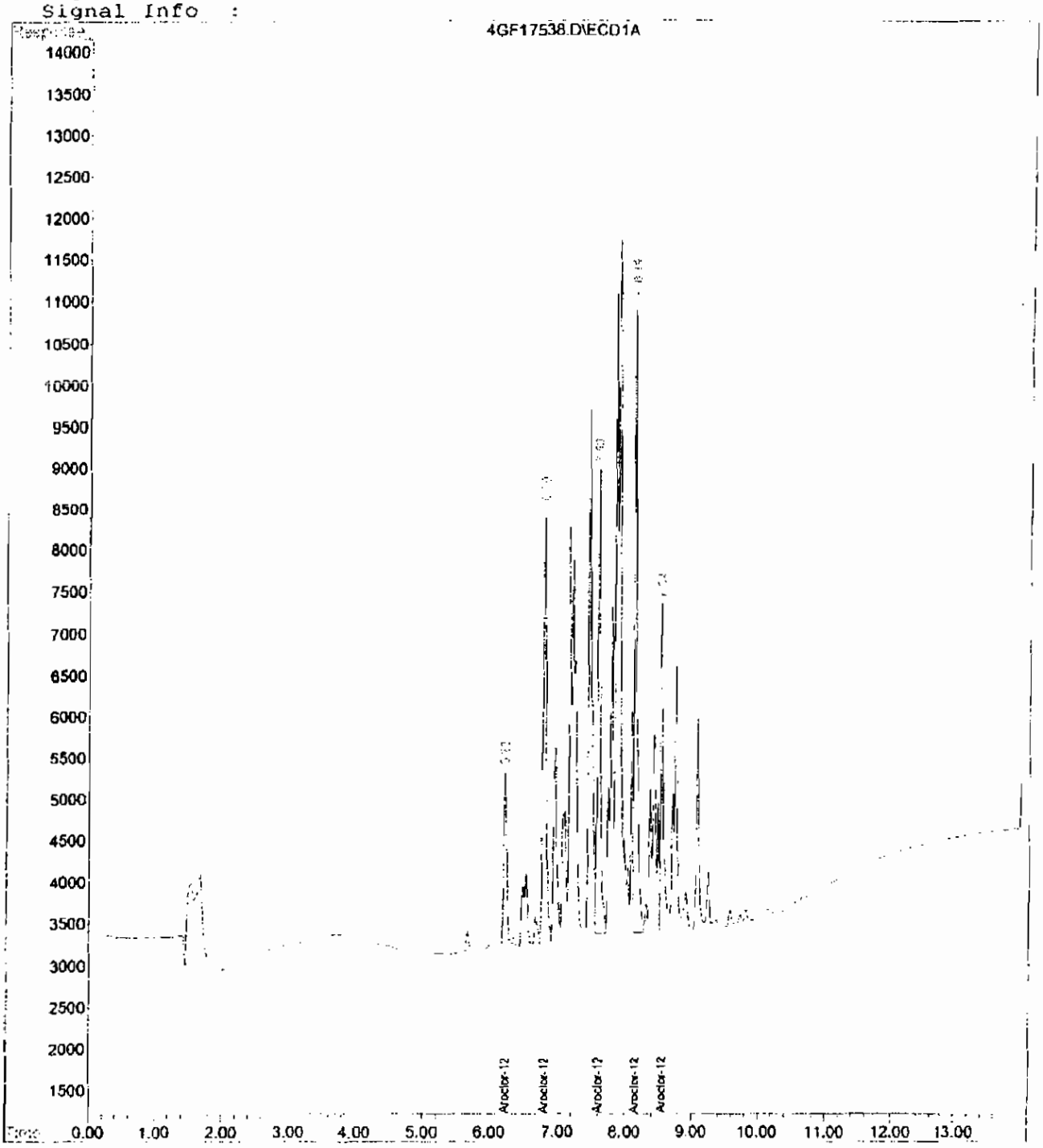
Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
1) S 2,4,5,6-Tetrachloro-M-Xyle	0.00	0	N.D.	UG/L
Spiked Amount 20.000	Recovery	=	0.00%	
7) S Decachlorobiphenyl	0.00	0	N.D.	UG/L
Spiked Amount 20.000	Recovery	=	0.00%	
Target Compounds				
2) L1 Aroclor-1248-1	6.22	66679	471.421	UG/L
3) L1 Aroclor-1248-2	6.79	187731	385.846	UG/L
4) L1 Aroclor-1248-3	7.59	169166	483.403	UG/L
5) L1 Aroclor-1248-4	8.14	238690	499.149	UG/L
6) L1 Aroclor-1248-5	8.54	108137	558.861	UG/L
Sum Aroclor-1248-1		770403	2398.679	UG/L
Average Aroclor-1248-1			479.736	UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\050203\4GF17538.D Vial: 16
Acq On : 2 May 2003 17:45 Operator: ECL
Sample : 1248 ALT 500 PPB Inst : HP4
Misc : SOS64-08 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:39 2003 Quant Results File: 1248SF.RES

Quant Method : C:\HPCHEM\2\METHODS\1248SF.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003
Last Update : Sun May 04 12:38:51 2003
Response via : Single Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Method : C:\HPCHEM\2\METHODS\1242SF.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003
Last Update : Sun May 04 12:40:07 2003

Calibration Files
500 =4GF17539.D = =
= =

		Compound	500	Avg	%RSD
1)	S	2,4,5,6-Tetrachloro-M	7.602	7.602#E3	0.00
2)	L1	Aroclor-1242-1	1.541	1.541#E2	0.00
3)	L1	Aroclor-1242-2	2.734	2.734#E2	0.00
4)	L1	Aroclor-1242-3	5.757	5.757#E2	0.00
5)	L1	Aroclor-1242-4	2.520	2.520#E2	0.00
6)	L1	Aroclor-1242-5	2.680	2.680#E2	0.00
7)	S	Decachlorobiphenyl	6.613	6.613#E3	0.00

(#) = Out of Range

Data File : C:\HPCHEM\2\DATA\050203\4GF17539.D Vial: 17
Acq On : 2 May 2003 18:04 Operator: ECL
Sample : 1242 500 PPB Inst : HP4
Misc : SOS64-44 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:40 2003 Quant Results File: 1242SF.RES

Quant Method : C:\HPCHEM\2\METHODS\1242SF.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003
Last Update : Sun May 04 12:40:07 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

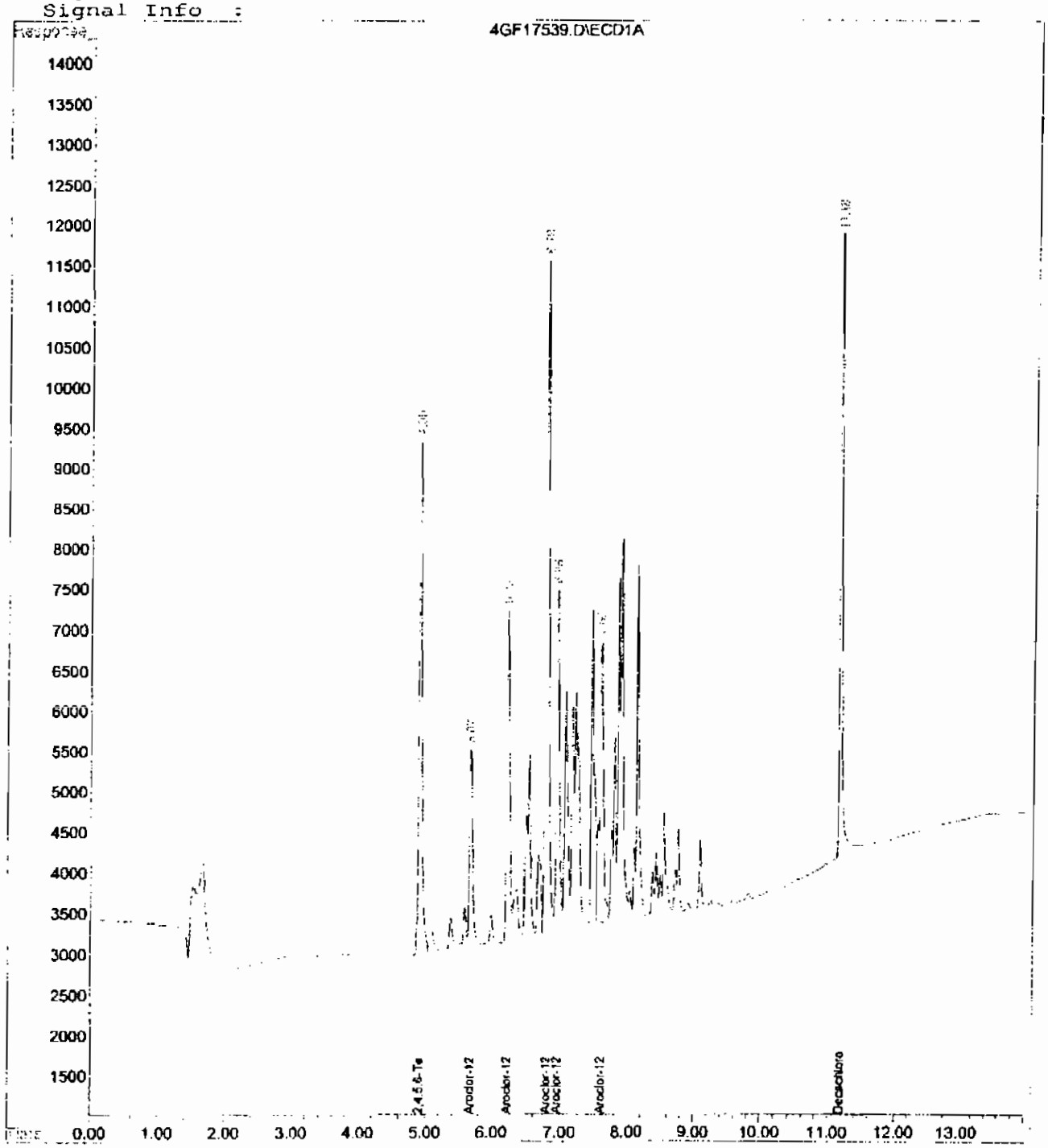
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.90	190048	25.000 UG/L
Spiked Amount 20.000		Recovery =	125.00%
7) S Decachlorobiphenyl	11.78	165337	25.000 UG/L
Spiked Amount 20.000		Recovery =	125.00%
Target Compounds			
2) L1 Aroclor-1242-1	5.67	77043	500.000 UG/L
3) L1 Aroclor-1242-2	6.23	136678	500.000 UG/L
4) L1 Aroclor-1242-3	6.79	287874	500.000 UG/L
5) L1 Aroclor-1242-4	6.95	126006	500.000 UG/L
6) L1 Aroclor-1242-5	7.60	133978	500.000 UG/L
Sum Aroclor-1242-1		761579	2500.000 UG/L
Average Aroclor-1242-1			500.000 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\050203\4GF17539.D Vial: 17
Acq On : 2 May 2003 18:04 Operator: ECL
Sample : 1242 500 PPB Inst : HP4
Misc : SOS64-44 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:40 2003 Quant Results File: 1242SF.RES

Quant Method : C:\HPCHEM\2\METHODS\1242SF.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003
Last Update : Sun May 04 12:40:07 2003
Response via : Single Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\050203\4GF17540.D Vial: 18
Acq On : 2 May 2003 18:23 Operator: ECL
Sample : 1242 ALT 500 PPB Inst : HP4
Misc : SOS63-09 Multiplr: 1.00
IntFile : events.e

Method : C:\HPCHEM\2\METHODS\1242SF.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003
Last Update : Sun May 04 12:40:07 2003
Response via : Single Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
2	L1	Aroclor-1242-1	500.000	504.638	-0.9	101	0.00
3	L1	Aroclor-1242-2	500.000	515.438	-3.1	103	0.00
4	L1	Aroclor-1242-3	500.000	502.713	-0.5	101	0.00
5	L1	Aroclor-1242-4	500.000	504.325	-0.9	101	0.00
6	L1	Aroclor-1242-5	500.000	441.749	11.7	88	0.00

Data File : C:\HPCHEM\2\DATA\050203\4GF17540.D Vial: 18
Acq On : 2 May 2003 18:23 Operator: ECL
Sample : 1242 ALT 500 PPB Inst : HP4
Misc : SOS63-09 Multiplr: 1.00
IntFile : cvents.e
Quant Time: May 4 12:40 2003 Quant Results File: 1242SF.RES

Quant Method : C:\HPCHEM\2\METHODS\1242SF.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003
Last Update : Sun May 04 12:40:07 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

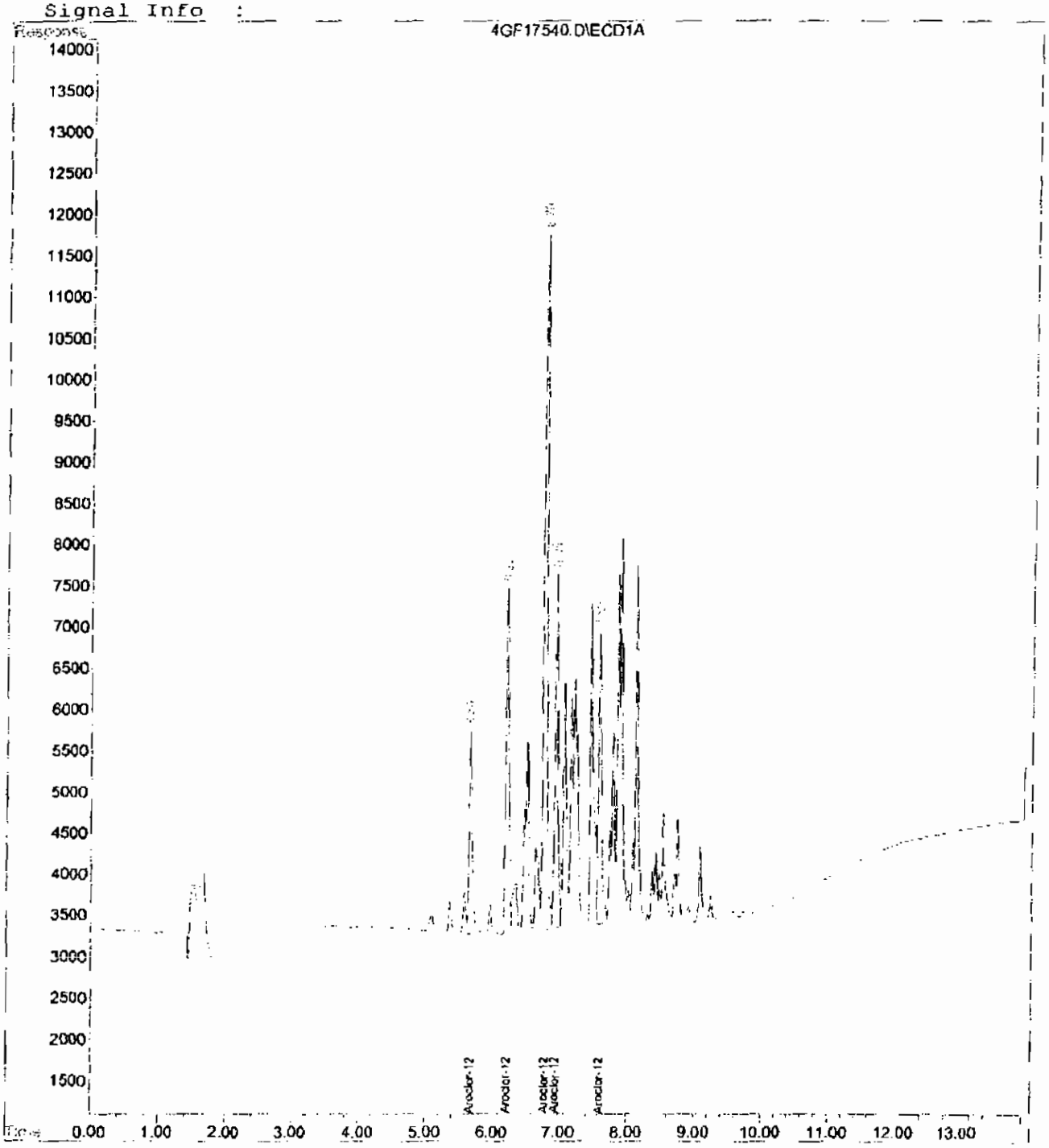
Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
1) S 2,4,5,6-Tetrachloro-M-Xyle	0.00	0	N.D.	UG/L
Spiked Amount 20.000	Recovery	=	0.00%	
7) S Decachlorobiphenyl	0.00	0	N.D.	UG/L
Spiked Amount 20.000	Recovery	=	0.00%	
Target Compounds				
2) L1 Aroclor-1242-1	5.67	77758	504.638	UG/L
3) L1 Aroclor-1242-2	6.22	140898	515.438	UG/L
4) L1 Aroclor-1242-3	6.79	289436	502.713	UG/L
5) L1 Aroclor-1242-4	6.95	127096	504.325	UG/L
6) L1 Aroclor-1242-5	7.59	118369	441.749	UG/L
Sum Aroclor-1242-1		753557	2468.863	UG/L
Average Aroclor-1242-1			493.773	UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\050203\4GF17540.D Vial: 18
Acq On : 2 May 2003 18:23 Operator: ECL
Sample : 1242 ALT 500 PPB Inst : HP4
Misc : SOS63-09 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:40 2003 Quant Results File: 1242SF.RES

Quant Method : C:\HPCHEM\2\METHODS\1242SF.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003
Last Update : Sun May 04 12:40:07 2003
Response via : Single Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Method : C:\HPCHEM\2\METHODS\1232SF.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003
Last Update : Sun May 04 12:41:19 2003

Calibration Files
500 =4GF17541.D

		Compound	500	Avg	%RSD
1)	S	2,4,5,6-Tetrachloro-M	7.477	7.477#E3	0.00
2)	L1	Aroclor-1232-1	4.390	4.390#E1	0.00
3)	L1	Aroclor-1232-2	1.728	1.728#E2	0.00
4)	L1	Aroclor-1232-3	1.514	1.514#E2	0.00
5)	L1	Aroclor-1232-4	2.970	2.970#E2	0.00
6)	L1	Aroclor-1232-5	1.360	1.360#E2	0.00
7)	S	Decachlorobiphenyl	6.558	6.558#E3	0.00

(#) = Out of Range

: C:\HPCHEM\2\DATA\050203\4GF17541.D Vial: 19
Acq On : 2 May 2003 18:41 Operator: ECL
Sample : 1232 500 PPB Inst : HP4
Misc : SOS64-09 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:41 2003 Quant Results File: 1232SF.RES

Quant Method : C:\HPCHEM\2\METHODS\1232SF.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003
Last Update : Sun May 04 12:41:19 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

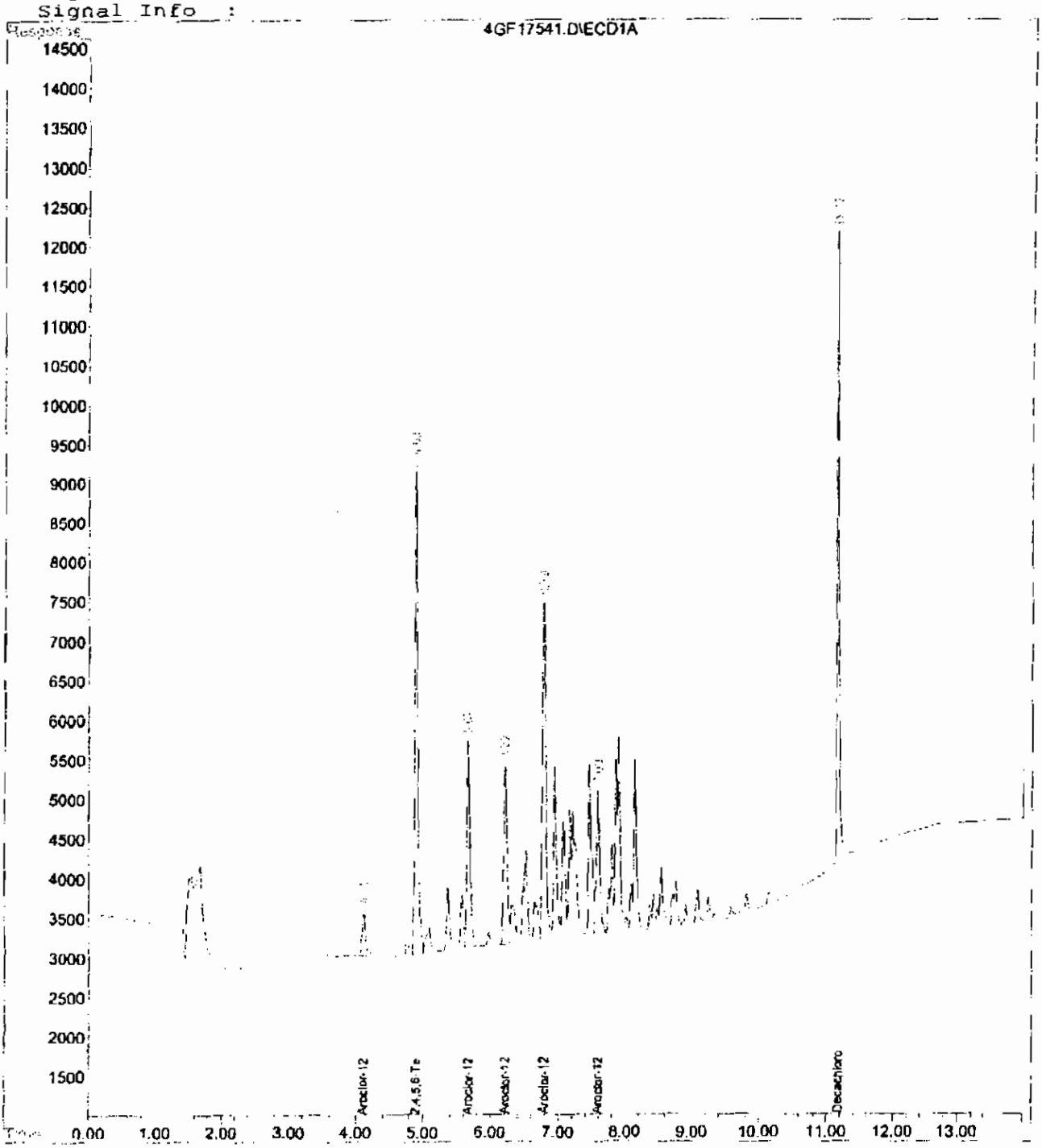
Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.90	186919	25.000	UG/L
Spiked Amount 20.000		Recovery =	125.00%	
7) S Decachlorobiphenyl	11.18	163956	25.000	UG/L
Spiked Amount 20.000		Recovery =	125.00%	
Target Compounds				
2) L1 Aroclor-1232-1	4.11	21949	500.000	UG/L
3) L1 Aroclor-1232-2	5.67	86401	500.000	UG/L
4) L1 Aroclor-1232-3	6.23	75715	500.000	UG/L
5) L1 Aroclor-1232-4	6.79	148498	500.000	UG/L
6) L1 Aroclor-1232-5	7.60	68001	500.000	UG/L
Sum Aroclor-1232-1		400563	2500.000	UG/L
Average Aroclor-1232-1			500.000	UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.
4GF17541.D 1232SF.M Sun May 04 12:41:55 2003 Page 1

Data File : C:\HPCHEM\2\DATA\050203\4GF17541.D Vial: 19
Acq On : 2 May 2003 18:41 Operator: ECL
Sample : 1232 500 PPB Inst : HP4
Misc : SOS64-09 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:41 2003 Quant Results File: 1232SF.RES

Quant Method : C:\HPCHEM\2\METHODS\1232SF.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003
Last Update : Sun May 04 12:41:19 2003
Response via : Single Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\050203\4GF17542.D Vial: 20
Acq On : 2 May 2003 18:59 Operator: ECL
Sample : 1232 ALT 500 PPB Inst : HP4
Misc : SOS64-10 Multiplr: 1.00
IntFile : events.e

Method : C:\HPCHEM\2\METHODS\1232SF.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003
Last Update : Sun May 04 12:41:19 2003
Response via : Single Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
2	L1	Aroclor-1232-1	500.000	495.253	0.9	99	0.00
3	L1	Aroclor-1232-2	500.000	638.992	-27.8#	128	0.00
4	L1	Aroclor-1232-3	500.000	542.076	-8.4	108	0.00
5	L1	Aroclor-1232-4	500.000	540.662	-8.1	108	0.00
6	L1	Aroclor-1232-5	500.000	508.214	-1.6	102	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4GF17542.D 1232SF.M Sun May 04 12:41:48 2003 Page 1

Data File : C:\HPCHEM\2\DATA\050203\4GF17542.D Vial: 20
Acq On : 2 May 2003 18:59 Operator: ECL
Sample : 1232 ALT 500 PPB Inst : HP4
Misc : SOS64-10 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:41 2003 Quant Results File: 1232SF.RES

Quant Method : C:\HPCHEM\2\METHODS\1232SF.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003
Last Update : Sun May 04 12:41:19 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

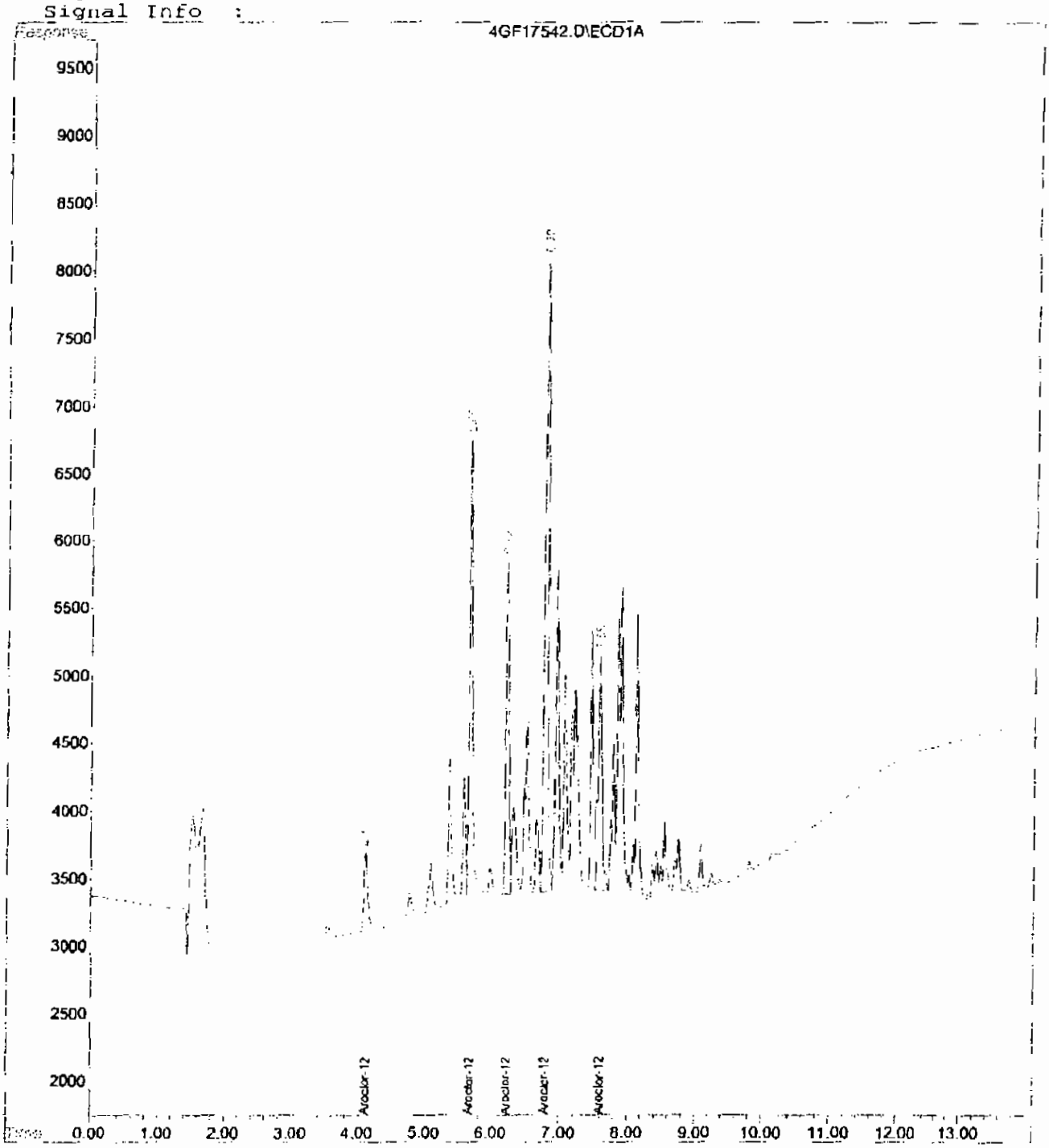
Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
1) S 2,4,5,6-Tetrachloro-M-Xyle	0.00	0	N.D.	UG/L
Spiked Amount 20.000	Recovery	=	0.00%	
7) S Decachlorobiphenyl	0.00	0	N.D.	UG/L
Spiked Amount 20.000	Recovery	=	0.00%	
Target Compounds				
2) L1 Aroclor-1232-1	4.11	21740	495.253	UG/L
3) L1 Aroclor-1232-2	5.67	110419	638.992	UG/L
4) L1 Aroclor-1232-3	6.22	82086	542.076	UG/L
5) L1 Aroclor-1232-4	6.79	160574	540.662	UG/L
6) L1 Aroclor-1232-5	7.59	69118	508.214	UG/L
Sum Aroclor-1232-1		443937	2725.198	UG/L
Average Aroclor-1232-1			545.040	UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Vial: 20
Acq On : 2 May 2003 18:59 Operator: ECL
Sample : 1232 ALT 500 PPB Inst : HP4
Misc : SOS64-10 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:41 2003 Quant Results File: 1232SF.RES

Quant Method : C:\HPCHEM\2\METHODS\1232SF.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003
Last Update : Sun May 04 12:41:19 2003
Response via : Single Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Method : C:\HPCHEM\2\METHODS\1221SF.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003
Last Update : Sun May 04 12:42:41 2003

Calibration Files
500 =4GF17543.D = =
= =

		Compound	500	Avg	%RSD
1)	S	2,4,5,6-Tetrachloro-M	7.620	7.620#E3	0.00
2)	L1	Aroclor-1221-1	7.778	7.778#E1	0.00
3)	L1	Aroclor-1221-2	9.585	9.585#E1	0.00
4)	L1	Aroclor-1221-3	6.435	6.435#E1	0.00
5)	L1	Aroclor-1221-4	2.582	2.582#E2	0.00
6)	L1	Aroclor-1221-5	4.096	4.096#E1	0.00
7)	S	Decachlorobiphenyl	6.754	6.754#E3	0.00

(#) = Out of Range

Data File : C:\HPCHEM\2\DATA\050203\4GF17543.D Vial: 21
Acq On : 2 May 2003 19:18 Operator: ECL
Sample : 1221 500 PPB Inst : HP4
Misc : SOS64-07 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:42 2003 Quant Results File: 1221SF.RES

Quant Method : C:\HPCHEM\2\METHODS\1221SF.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003
Last Update : Sun May 04 12:42:41 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

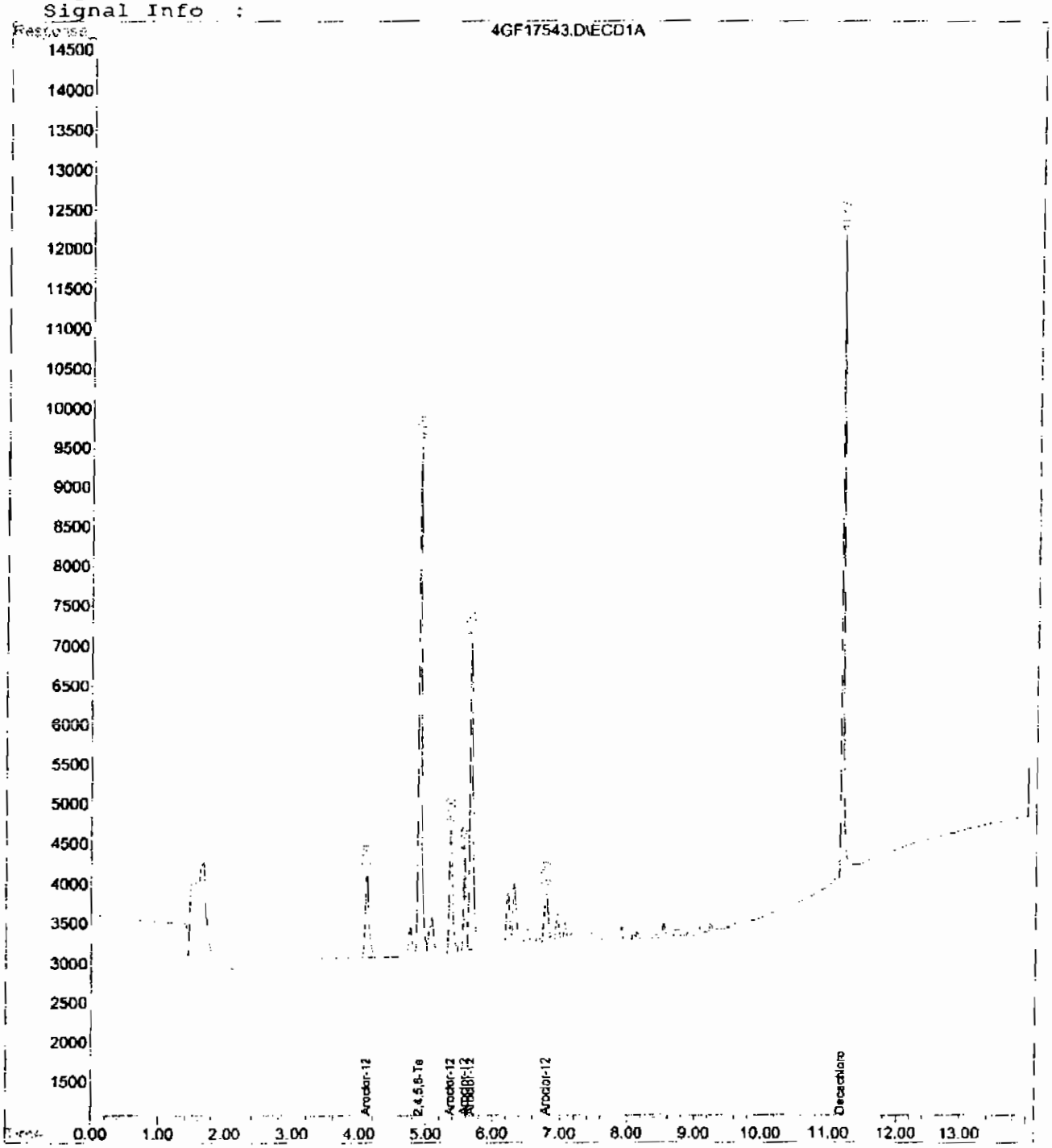
Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.89	190505	25.000	UG/L
Spiked Amount 20.000		Recovery =	125.00%	
7) S Decachlorobiphenyl	11.17	168851	25.000	UG/L
Spiked Amount 20.000		Recovery =	125.00%	
Target Compounds				
2) L1 Aroclor-1221-1	4.10	38891	500.000	UG/L
3) L1 Aroclor-1221-2	5.36	47926	500.000	UG/L
4) L1 Aroclor-1221-3	5.57	32175	500.000	UG/L
5) L1 Aroclor-1221-4	5.66	129080	500.000	UG/L
6) L1 Aroclor-1221-5	6.79	20482	500.000	UG/L
Sum Aroclor-1221-1		268554	2500.000	UG/L
Average Aroclor-1221-1			500.000	UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\050203\4GF17543.D Vial: 21
Acq On : 2 May 2003 19:18 Operator: ECL
Sample : 1221 500 PPB Inst : HP4
Misc : SOS64-07 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:42 2003 Quant Results File: 1221SF.RES

Quant Method : C:\HPCHEM\2\METHODS\1221SF.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003
Last Update : Sun May 04 12:42:41 2003
Response via : Single Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\050203\4GF17544.D Vial: 22
Acq On : 2 May 2003 19:36 Operator: ECL
Sample : 1221 ALT 500 PPB Inst : HP4
Misc : SOS64-43 Multiplr: 1.00
IntFile : events.e

Method : C:\HPCHEM\2\METHODS\1221SF.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003
Last Update : Sun May 04 12:42:41 2003
Response via : Single Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
2	L1	Aroclor-1221-1	500.000	508.451	-1.7	102	-0.01
3	L1	Aroclor-1221-2	500.000	521.315	-4.3	104	-0.02
4	L1	Aroclor-1221-3	500.000	513.875	-2.8	103	-0.02
5	L1	Aroclor-1221-4	500.000	513.160	-2.6	103	-0.02
6	L1	Aroclor-1221-5	500.000	507.447	-1.5	101	-0.02

C:\HPCHEM\2\DATA\030203\4GF17544.D Vial: 22
Acq On : 2 May 2003 19:36 Operator: ECL
Sample : 1221 ALT 500 PPB Inst : HP4
Misc : SOS64-43 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:42 2003 Quant Results File: 1221SF.RES

Quant Method : C:\HPCHEM\2\METHODS\1221SF.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003
Last Update : Sun May 04 12:42:41 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

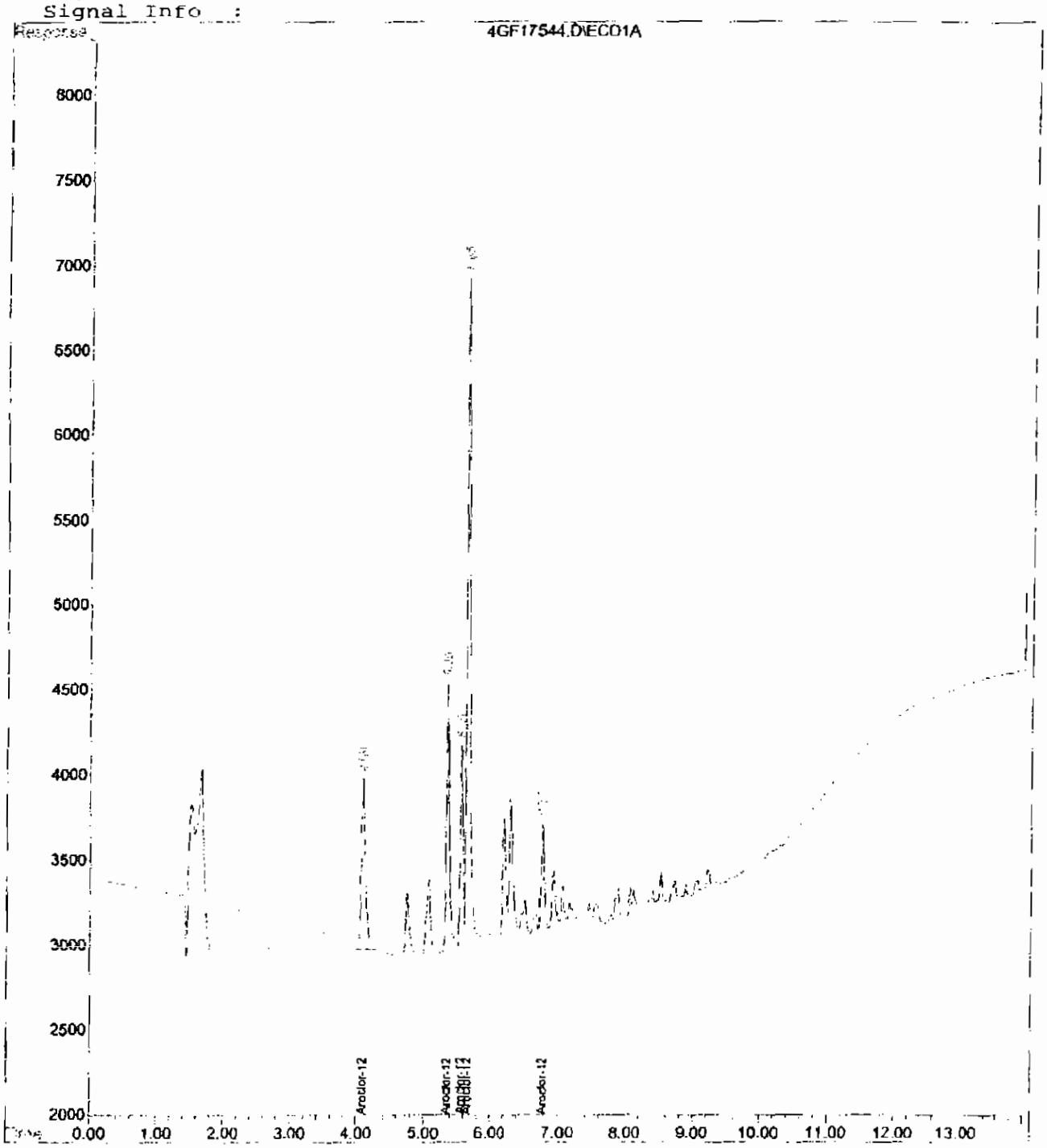
Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
1) S 2,4,5,6-Tetrachloro-M-Xyle	0.00	0	N.D.	UG/L
Spiked Amount 20.000	Recovery	=	0.00%	
7) S Decachlorobiphenyl	0.00	0	N.D.	UG/L
Spiked Amount 20.000	Recovery	=	0.00%	
Target Compounds				
2) L1 Aroclor-1221-1	4.09	39548	508.451	UG/L
3) L1 Aroclor-1221-2	5.35	49969	521.315	UG/L
4) L1 Aroclor-1221-3	5.56	33068	513.875	UG/L
5) L1 Aroclor-1221-4	5.65	132477	513.160	UG/L
6) L1 Aroclor-1221-5	6.78	20787	507.447	UG/L
Sum Aroclor-1221-1		275850	2564.249	UG/L
Average Aroclor-1221-1			512.850	UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.
4GF17544.D 1221SF.M Sun May 04 12:43:03 2003 Page 1

Data File : C:\HPCHEM\2\DATA\050203\4GF17544.D Vial: 22
Acq On : 2 May 2003 19:36 Operator: ECL
Sample : 1221 ALT 500 PPB Inst : HP4
Misc : SOS64-43 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:42 2003 Quant Results File: 1221SF.RES

Quant Method : C:\HPCHEM\2\METHODS\1221SF.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003
Last Update : Sun May 04 12:42:41 2003
Response via : Single Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\043003\4GR17890.D Vial: 1
Acq On : 30 Apr 2003 9:14 Operator: ECL
Sample : WG139378-01 1660 CCV 500 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e

Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Wed Apr 30 09:29:44 2003
Response via : Multiple Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	S	2,4,5,6-Tetrachloro-M-Xylen	25.000	25.290	-1.2	100	0.00
2	L1	Aroclor-1016-1	500.000	476.876	4.6	99	0.00
3	L1	Aroclor-1016-2	500.000	468.647	6.3	98	0.00
4	L1	Aroclor-1016-3	500.000	468.312	6.3	96	0.00
5	L1	Aroclor-1016-4	500.000	444.821	11.0	90	0.00
6	L1	Aroclor-1016-5	500.000	463.325	7.3	95	0.00
7	L2	Aroclor-1260-1	500.000	484.110	3.2	104	0.00
8	L2	Aroclor-1260-2	500.000	485.504	2.9	101	0.00
9	L2	Aroclor-1260-3	500.000	480.690	3.9	101	0.00
10	L2	Aroclor-1260-4	500.000	550.980	-10.2	116	0.00
11	L2	Aroclor-1260-5	500.000	563.553	-12.7	115	0.00
12	S	Decachlorobiphenyl	25.000	26.294	-5.2	111	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data File : C:\HPCHEM\2\DATA\043003\4GR17890.D Vial: 1
Acq On : 30 Apr 2003 9:14 Operator: ECL
Sample : WG139378-01 1660 CCV 500 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: Apr 30 9:30 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Wed Apr 30 09:29:44 2003
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

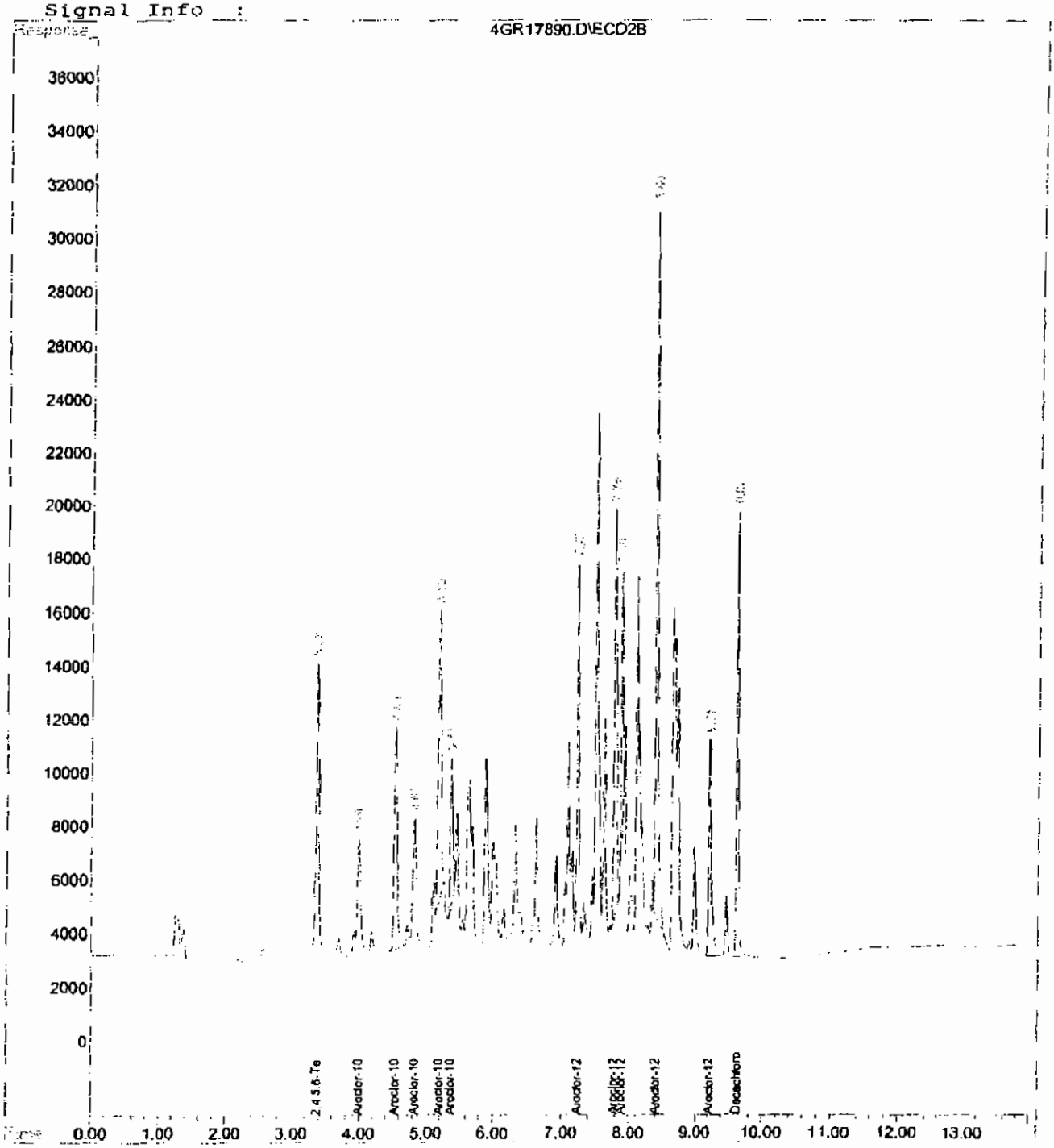
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	3.37	329425	25.290 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	126.45%
12) S Decachlorobiphenyl	9.62	336312	26.294 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	131.47%
Target Compounds			
2) L1 Aroclor-1016-1	3.99	100220	476.876 UG/L
3) L1 Aroclor-1016-2	4.54	257696	468.647 UG/L
4) L1 Aroclor-1016-3	4.83	155601	468.312 UG/L
5) L1 Aroclor-1016-4	5.19	366618	444.821 UG/L
6) L1 Aroclor-1016-5	5.37	139637	463.325 UG/L
Sum Aroclor-1016-1		1019771	2321.982 UG/L
Average Aroclor-1016-1			464.396 UG/L
7) L2 Aroclor-1260-1	7.23	275915	484.110 UG/L
8) L2 Aroclor-1260-2	7.78	404409	485.504 UG/L
9) L2 Aroclor-1260-3	7.89	143848	480.690 UG/L
10) L2 Aroclor-1260-4	8.40	599784	550.980 UG/L
11) L2 Aroclor-1260-5	9.21	212972	563.553 UG/L
Sum Aroclor-1260-1		1636927	2564.837 UG/L
Average Aroclor-1260-1			512.967 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\043003\4GR17890.D Vial: 1
Acq On : 30 Apr 2003 9:14 Operator: ECL
Sample : WG139378-01 1660 CCV 500 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: Apr 30 9:30 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Wed Apr 30 09:29:44 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\043003\4GR17901.D Vial: 12
Acq On : 30 Apr 2003 15:07 Operator: ECL
Sample : WG139378-02 1660 CCV 250 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e

Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Wed Apr 30 15:49:21 2003
Response via : Multiple Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	S	2,4,5,6-Tetrachloro-M-Xylen	12.500	12.339	1.3	95	0.00
2	L1	Aroclor-1016-1	250.000	242.557	3.0	93	0.00
3	L1	Aroclor-1016-2	250.000	244.217	2.3	93	0.00
4	L1	Aroclor-1016-3	250.000	244.567	2.2	92	0.00
5	L1	Aroclor-1016-4	250.000	263.644	-5.5	100	0.00
6	L1	Aroclor-1016-5	250.000	214.579	14.2	82	0.00
7	L2	Aroclor-1260-1	250.000	243.961	2.4	93	0.00
8	L2	Aroclor-1260-2	250.000	230.164	7.9	87	0.00
9	L2	Aroclor-1260-3	250.000	228.837	8.5	90	-0.01
10	L2	Aroclor-1260-4	250.000	279.769	-11.9	107	0.00
11	L2	Aroclor-1260-5	250.000	270.245	-8.1	102	0.00
12	S	Decachlorobiphenyl	12.500	13.490	-7.9	101	0.00

Data File : C:\HPCHEM\2\DATA\043003\4GR17901.D Vial: 12
Acq On : 30 Apr 2003 15:07 Operator: ECL
Sample : WG139378-02 1660 CCV 250 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: Apr 30 15:49 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Wed Apr 30 15:49:21 2003
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

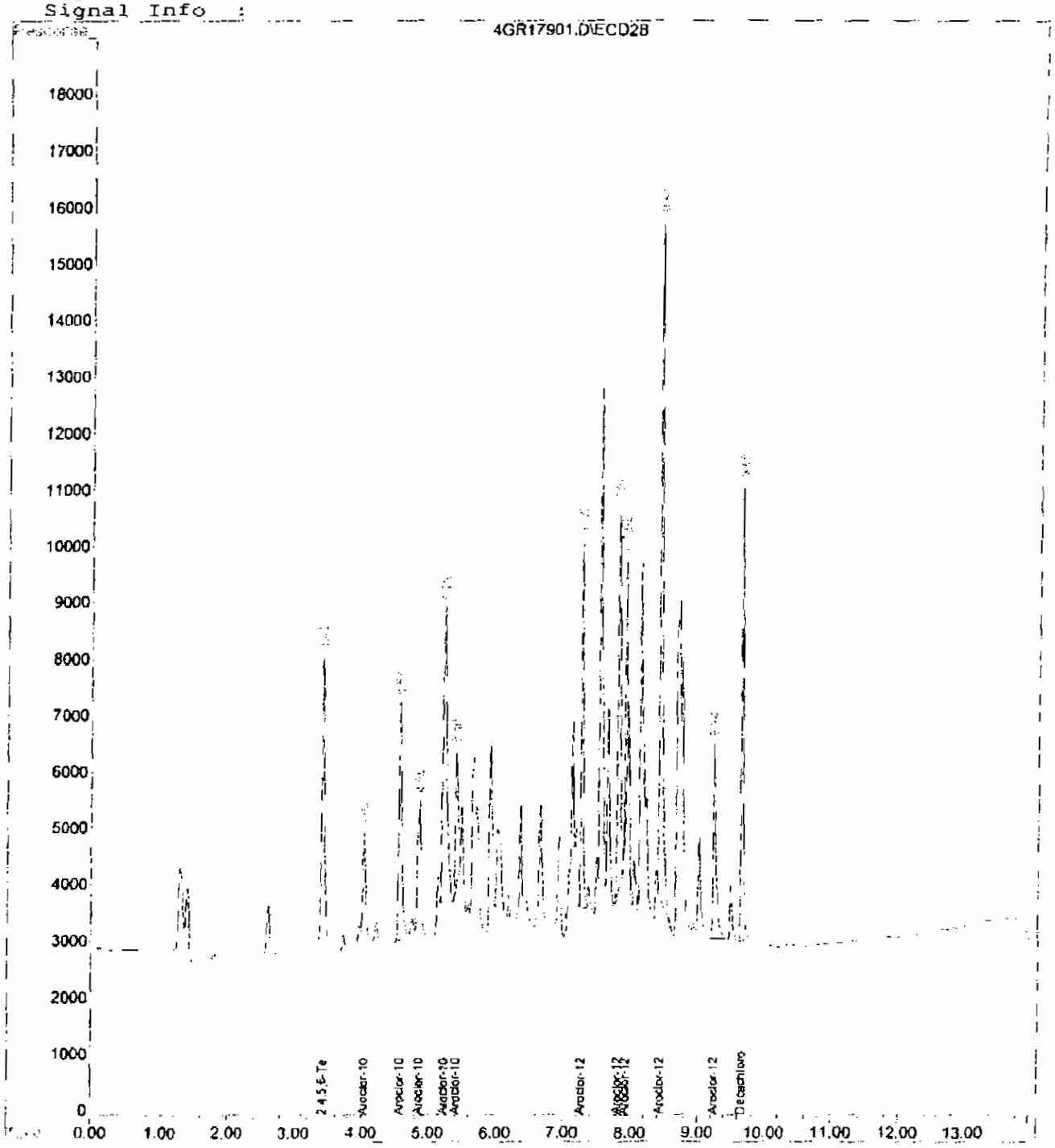
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	3.40	160733	12.339 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	61.70%
12) S Decachlorobiphenyl	9.66	172537	13.490 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	67.45%
Target Compounds			
2) L1 Aroclor-1016-1	4.02	50975	242.557 UG/L
3) L1 Aroclor-1016-2	4.57	134288	244.217 UG/L
4) L1 Aroclor-1016-3	4.85	81259	244.567 UG/L
5) L1 Aroclor-1016-4	5.22	217294	263.644 UG/L
6) L1 Aroclor-1016-5	5.40	64670	214.579 UG/L
Sum Aroclor-1016-1		548486	1209.563 UG/L
Average Aroclor-1016-1			241.913 UG/L
7) L2 Aroclor-1260-1	7.26	139044	243.961 UG/L
8) L2 Aroclor-1260-2	7.81	191719	230.164 UG/L
9) L2 Aroclor-1260-3	7.92	68480	228.837 UG/L
10) L2 Aroclor-1260-4	8.43	304550	279.769 UG/L
11) L2 Aroclor-1260-5	9.24	102128	270.245 UG/L
Sum Aroclor-1260-1		805921	1252.976 UG/L
Average Aroclor-1260-1			250.595 UG/L

(f) RT Delta > 1/2 Window (m)=manual int.

Data : C:\HPCHEM\2\DATA\043003\4GR17901.D Vial: 12
Acq On : 30 Apr 2003 15:07 Operator: ECL
Sample : WG139378-02 1660 CCV 250 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: Apr 30 15:49 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Wed Apr 30 15:49:21 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\043003\4GR17912.D Vial: 23
Acq On : 1 May 2003 8:15 Operator: ECL
Sample : WG139378-03 1660 CCV 500 PPB Inst : HP4
Misc : 1,1 SO563-02 Multiplr: 1.00
IntFile : events.e

Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Thu May 01 08:29:55 2003
Response via : Multiple Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	S	2,4,5,6-Tetrachloro-M-Xylen	25.000	24.653	1.4	98	0.00
2	L1	Aroclor-1016-1	500.000	471.339	5.7	98	0.00
3	L1	Aroclor-1016-2	500.000	454.329	9.1	95	0.00
4	L1	Aroclor-1016-3	500.000	453.102	9.4	93	0.00
5	L1	Aroclor-1016-4	500.000	498.577	0.3	101	0.00
6	L1	Aroclor-1016-5	500.000	470.641	5.9	96	-0.01
7	L2	Aroclor-1260-1	500.000	444.421	11.1	95	0.00
8	L2	Aroclor-1260-2	500.000	463.750	7.2	96	0.00
9	L2	Aroclor-1260-3	500.000	495.961	0.8	104	0.00
10	L2	Aroclor-1260-4	500.000	505.292	-1.1	106	0.00
11	L2	Aroclor-1260-5	500.000	494.469	1.1	101	0.00
12	S	Decachlorobiphenyl	25.000	22.962	8.2	97	0.00

Data File : C:\HPCHEM\2\DATA\043003\4GR17912.D Vial: 23
Acq On : 1 May 2003 8:15 Operator: ECL
Sample : WG139378-03 1660 CCV 500 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: May 1 8:29 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Thu May 01 08:29:55 2003
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

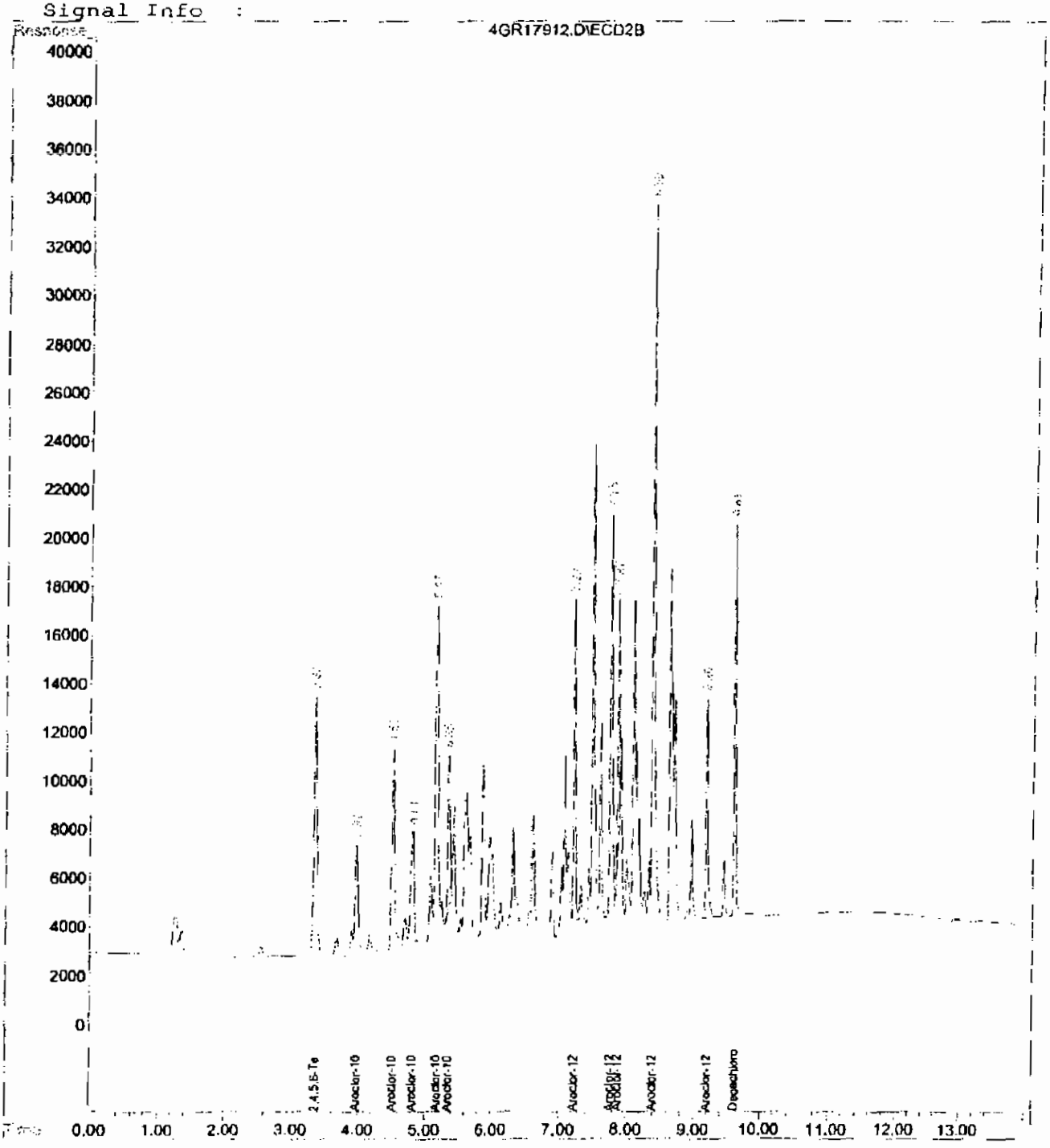
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	3.35	321125	24.653 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	123.27%
12) S Decachlorobiphenyl	9.61	293695	22.962 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	114.81%
Target Compounds			
2) L1 Aroclor-1016-1	3.97	99056	471.339 UG/L
3) L1 Aroclor-1016-2	4.52	249822	454.329 UG/L
4) L1 Aroclor-1016-3	4.81	150547	453.102 UG/L
5) L1 Aroclor-1016-4	5.17	410924	498.577 UG/L
6) L1 Aroclor-1016-5	5.35	141842	470.641 UG/L
Sum Aroclor-1016-1		1052191	2347.989 UG/L
Average Aroclor-1016-1			469.598 UG/L
7) L2 Aroclor-1260-1	7.22	253295	444.421 UG/L
8) L2 Aroclor-1260-2	7.76	386288	463.750 UG/L
9) L2 Aroclor-1260-3	7.88	148418	495.961 UG/L
10) L2 Aroclor-1260-4	8.39	550049	505.292 UG/L
11) L2 Aroclor-1260-5	9.20	186865	494.469 UG/L
Sum Aroclor-1260-1		1524914	2403.893 UG/L
Average Aroclor-1260-1			480.779 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\043003\4GR17912.D Vial: 23
Acq On : 1 May 2003 8:15 Operator: ECL
Sample : WG139378-03 1660 CCV 500 PPB Inst : HP4
Misc : 1,1 SQS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: May 1 8:29 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Thu May 01 08:29:55 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\050103\4GR17926.D Vial: 14
Acq On : 1 May 2003 13:49 Operator: ECL
Sample : WG139378-07 1660 CCV 500 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e

Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Thu May 01 14:23:45 2003
Response via : Multiple Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	S	2,4,5,6-Tetrachloro-M-Xylen	25.000	25.034	-0.1	99	0.00
2	L1	Aroclor-1016-1	500.000	463.841	7.2	96	0.00
3	L1	Aroclor-1016-2	500.000	465.403	6.9	97	0.00
4	L1	Aroclor-1016-3	500.000	464.780	7.0	95	0.00
5	L1	Aroclor-1016-4	500.000	517.586	-3.5	105	0.00
6	L1	Aroclor-1016-5	500.000	435.080	13.0	89	-0.01
7	L2	Aroclor-1260-1	500.000	466.900	6.6	100	0.00
8	L2	Aroclor-1260-2	500.000	462.187	7.6	96	0.00
9	L2	Aroclor-1260-3	500.000	456.543	8.7	96	-0.01
10	L2	Aroclor-1260-4	500.000	544.766	-9.0	114	0.00
11	L2	Aroclor-1260-5	500.000	562.008	-12.4	115	0.00
12	S	Decachlorobiphenyl	25.000	26.064	-4.3	110	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4GR17926.D 1660R.M Thu May 01 14:24:12 2003 Page 1

Data File : C:\HPCHEM\2\DATA\050103\4GR17926.D Vial: 14
Acq On : 1 May 2003 13:49 Operator: ECL
Sample : WG139378-07 1660 CCV 500 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: May 1 14:24 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Thu May 01 14:23:45 2003
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

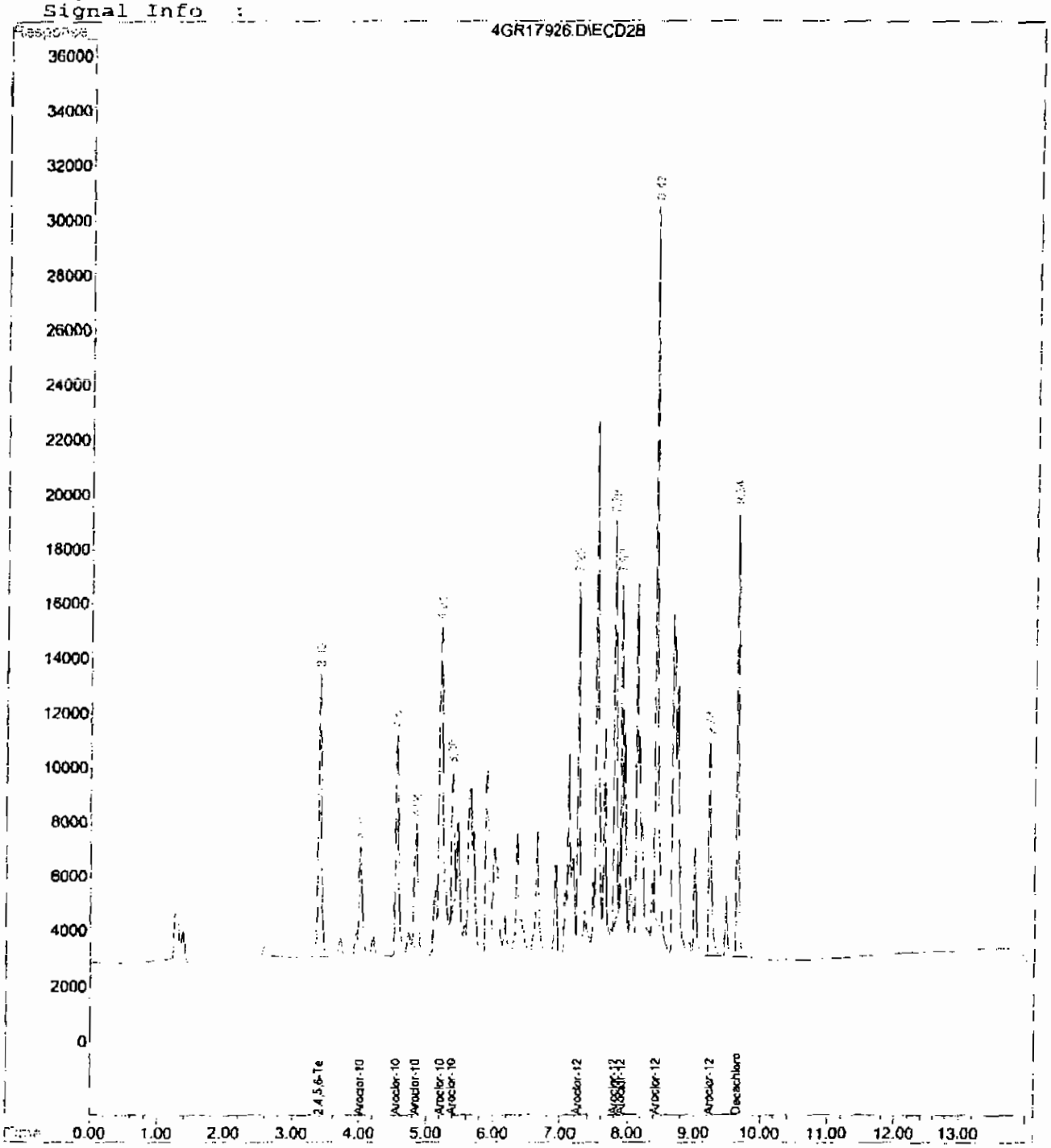
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	3.39	326097	25.034 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	125.17%
12) S Decachlorobiphenyl	9.64	333369	26.064 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	130.32%
Target Compounds			
2) L1 Aroclor-1016-1	4.01	97480	463.841 UG/L
3) L1 Aroclor-1016-2	4.55	255912	465.403 UG/L
4) L1 Aroclor-1016-3	4.84	154427	464.780 UG/L
5) L1 Aroclor-1016-4	5.21	426591	517.586 UG/L
6) L1 Aroclor-1016-5	5.38	131124	435.080 UG/L
Sum Aroclor-1016-1		1065534	2346.690 UG/L
Average Aroclor-1016-1			469.338 UG/L
7) L2 Aroclor-1260-1	7.25	266107	466.900 UG/L
8) L2 Aroclor-1260-2	7.80	384986	462.187 UG/L
9) L2 Aroclor-1260-3	7.90	136621	456.543 UG/L
10) L2 Aroclor-1260-4	8.42	593019	544.766 UG/L
11) L2 Aroclor-1260-5	9.23	212389	562.008 UG/L
Sum Aroclor-1260-1		1593122	2492.404 UG/L
Average Aroclor-1260-1			498.481 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\050103\4GR17926.D Vial: 14
Acq On : 1 May 2003 13:49 Operator: ECL
Sample : WG139378-07 1660 CCV 500 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: May 1 14:24 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Thu May 01 14:23:45 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\050103\4GR17936.D Vial: 24
Acq On : 1 May 2003 16:47 Operator: ECL
Sample : WG139378-08 1660 CCV 250 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e

Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Fri May 02 08:06:46 2003
Response via : Multiple Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	S	2,4,5,6-Tetrachloro-M-Xylen	12.500	12.345	1.2	95	0.00
2	L1	Aroclor-1016-1	250.000	240.150	3.9	93	-0.02
3	L1	Aroclor-1016-2	250.000	243.509	2.6	92	0.00
4	L1	Aroclor-1016-3	250.000	241.603	3.4	91	-0.01
5	L1	Aroclor-1016-4	250.000	268.976	-7.6	102	-0.01
6	L1	Aroclor-1016-5	250.000	220.817	11.7	85	-0.01
7	L2	Aroclor-1260-1	250.000	237.405	5.0	91	0.00
8	L2	Aroclor-1260-2	250.000	230.945	7.6	88	0.00
9	L2	Aroclor-1260-3	250.000	224.494	10.2	89	-0.01
10	L2	Aroclor-1260-4	250.000	270.536	-8.2	104	0.00
11	L2	Aroclor-1260-5	250.000	259.307	-3.7	98	0.00
12	S	Decachlorobiphenyl	12.500	12.569	-0.6	95	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4GR17936.D 1660R.M Fri May 02 08:09:33 2003 Page 1

Data File : C:\HPCHEM\2\DATA\050103\4GR17936.D Vial: 24
Acq On : 1 May 2003 16:47 Operator: ECL
Sample : WG139378-08 1660 CCV 250 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: May 2 8:06 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Fri May 02 08:06:46 2003
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

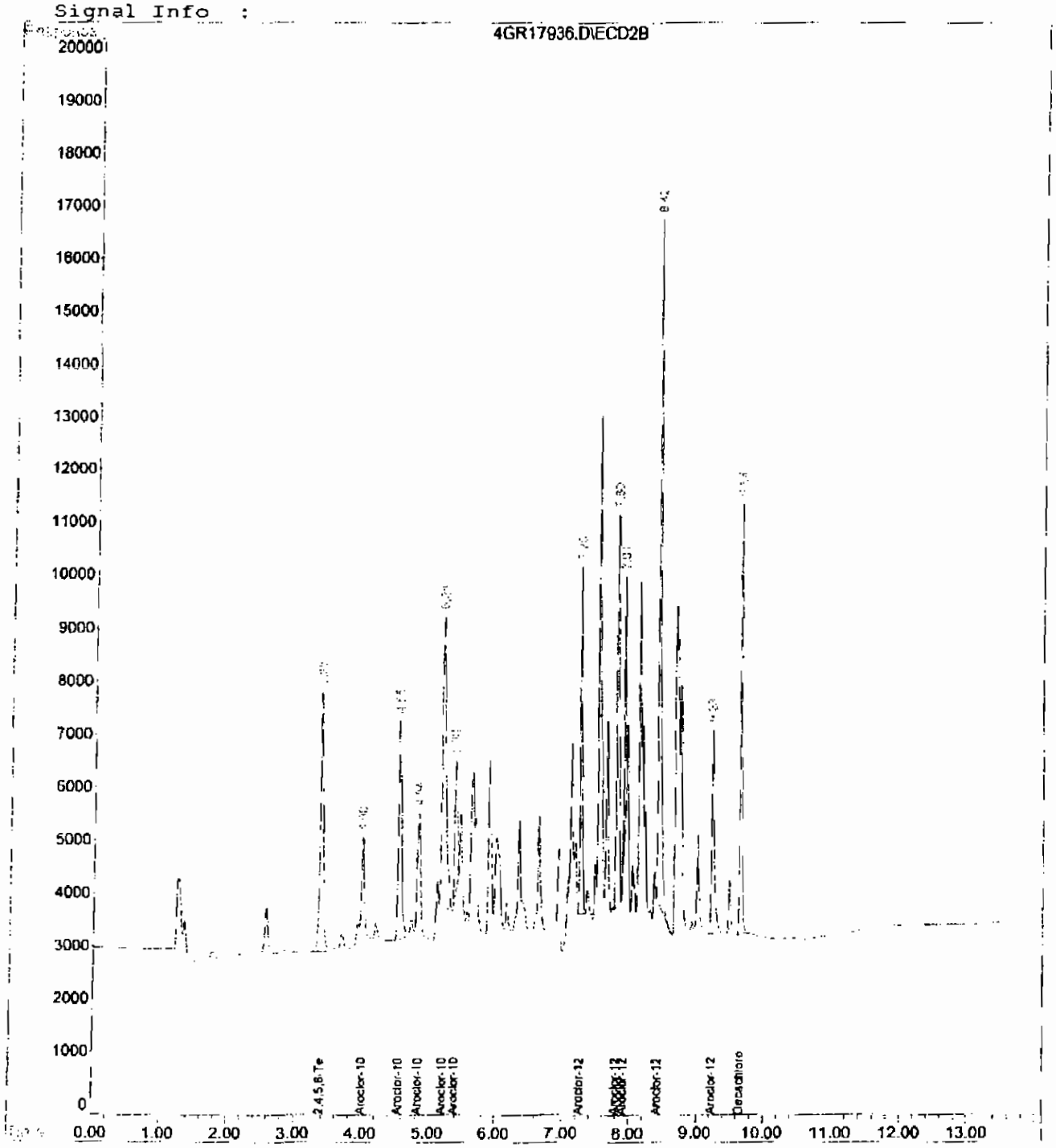
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	3.38	160808	12.345 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	61.73%
12) S Decachlorobiphenyl	9.65	160767	12.569 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	62.85%
Target Compounds			
2) L1 Aroclor-1016-1	4.00	50471	240.158 UG/L
3) L1 Aroclor-1016-2	4.55	133898	243.509 UG/L
4) L1 Aroclor-1016-3	4.84	80275	241.603 UG/L
5) L1 Aroclor-1016-4	5.21	221688	268.976 UG/L
6) L1 Aroclor-1016-5	5.39	66550	220.817 UG/L
Sum Aroclor-1016-1		552882	1215.064 UG/L
Average Aroclor-1016-1			243.013 UG/L
7) L2 Aroclor-1260-1	7.25	135307	237.405 UG/L
8) L2 Aroclor-1260-2	7.80	192370	230.945 UG/L
9) L2 Aroclor-1260-3	7.91	67180	224.494 UG/L
10) L2 Aroclor-1260-4	8.42	294499	270.536 UG/L
11) L2 Aroclor-1260-5	9.23	97995	259.307 UG/L
Sum Aroclor-1260-1		787351	1222.687 UG/L
Average Aroclor-1260-1			244.537 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\050103\4GR17936.D Vial: 24
Acq On : 1 May 2003 16:47 Operator: ECL
Sample : WG139378-08 1660 CCV 250 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: May 2 8:06 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Fri May 02 08:06:46 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\050203\4GF17545.D Vial: 23
Acq On : 2 May 2003 19:54 Operator: ECL
Sample : WG139612-08 1660 CCV 500 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e

Method : C:\HPCHEM\2\METHODS\1660F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1459
Last Update : Sun May 04 12:28:14 2003
Response via : Multiple Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	S	2,4,5,6-Tetrachloro-M-Xylen	25.000	26.358	-5.4	104	0.00
2	L1	Aroclor-1016-1	500.000	544.774	-9.0	107	0.00
3	L1	Aroclor-1016-2	500.000	516.855	-3.4	105	0.00
4	L1	Aroclor-1016-3	500.000	523.153	-4.6	104	0.00
5	L1	Aroclor-1016-4	500.000	534.058	-6.8	106	0.00
6	L1	Aroclor-1016-5	500.000	559.592	-11.9	107	0.00
7	L2	Aroclor-1260-1	500.000	509.980	-2.0	102	0.00
8	L2	Aroclor-1260-2	500.000	514.721	-2.9	101	0.00
9	L2	Aroclor-1260-3	500.000	528.194	-5.6	101	0.00
10	L2	Aroclor-1260-4	500.000	524.097	-4.8	103	0.00
11	L2	Aroclor-1260-5	500.000	532.416	-6.5	105	0.00
12	S	Decachlorobiphenyl	25.000	25.899	-3.6	100	0.00

Data File : C:\HPCHEM\2\DATA\050203\4GF17545.D Vial: 23
Acq On : 2 May 2003 19:54 Operator: ECL
Sample : WG139612-08 1660 CCV 500 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:28 2003 Quant Results File: 1660F.RES

Quant Method : C:\HPCHEM\2\METHODS\1660F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1459
Last Update : Sun May 04 12:28:14 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume inj. :
Signal Phase :
Signal Info :

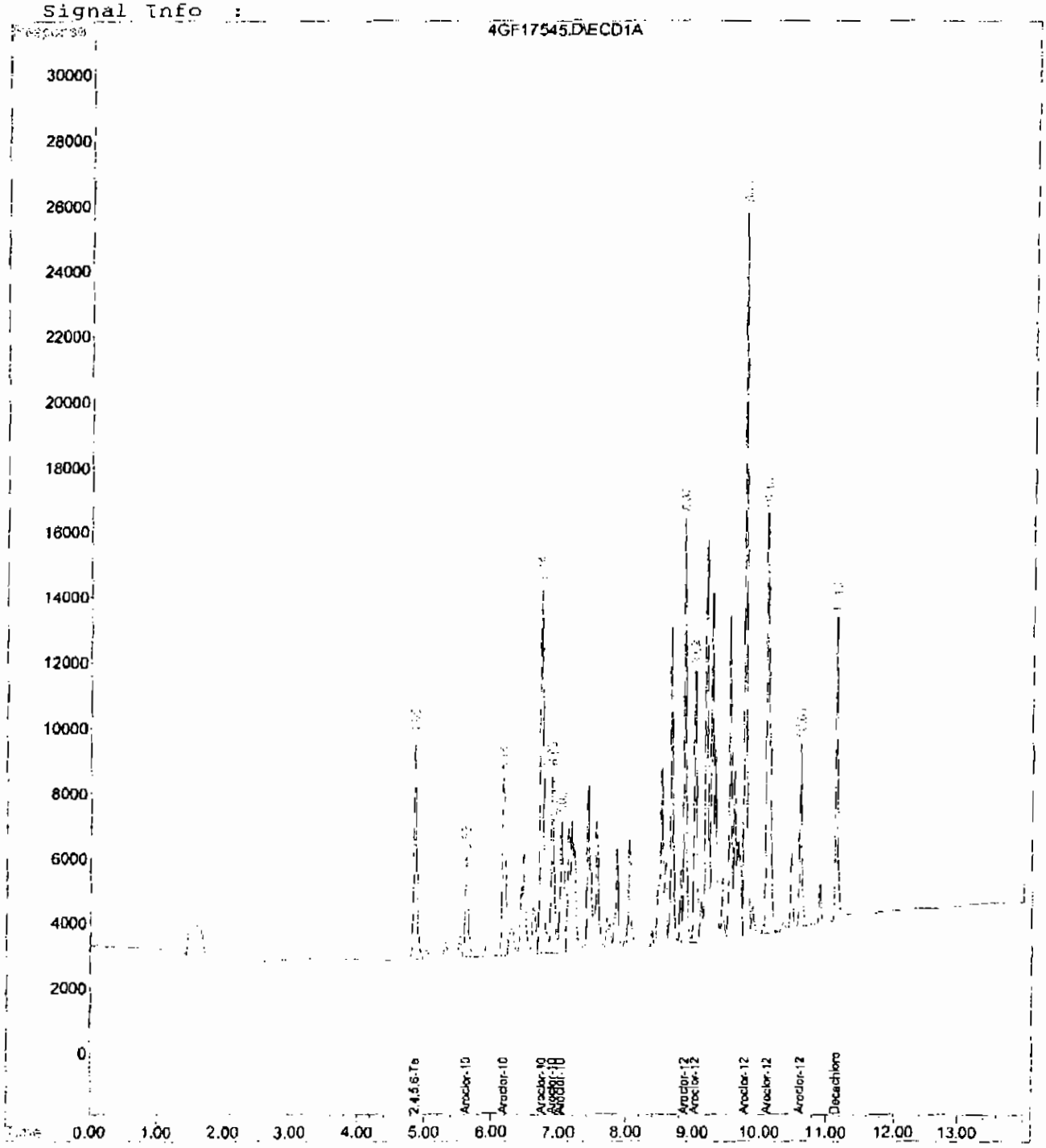
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.85	201788	26.358 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	131.79%
12) S Decachlorobiphenyl	11.13	193729	25.899 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	129.50%
Target Compounds			
2) L1 Aroclor-1016-1	5.62	97919	544.774 UG/L
3) L1 Aroclor-1016-2	6.18	184282	516.855 UG/L
4) L1 Aroclor-1016-3	6.75	389249	523.153 UG/L
5) L1 Aroclor-1016-4	6.90	168754	534.058 UG/L
6) L1 Aroclor-1016-5	7.02	130863	559.592 UG/L
Sum Aroclor-1016-1		971068	2678.431 UG/L
Average Aroclor-1016-1			535.686 UG/L
7) L2 Aroclor-1260-1	8.87	295623	509.980 UG/L
8) L2 Aroclor-1260-2	9.02	244476	514.721 UG/L
9) L2 Aroclor-1260-3	9.77	496811	528.194 UG/L
10) L2 Aroclor-1260-4	10.10	464436	524.097 UG/L
11) L2 Aroclor-1260-5	10.61	125395	532.416 UG/L
Sum Aroclor-1260-1		1626742	2609.407 UG/L
Average Aroclor-1260-1			521.881 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

C:\HPCHEM\2\DATA\050203\4GF17545.D Vial: 23
Acq On : 2 May 2003 19:54 Operator: ECL
Sample : WG139612-08 1660 CCV 500 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:28 2003 Quant Results File: 1660F.RES

Quant Method : C:\HPCHEM\2\METHODS\1660F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1459
Last Update : Sun May 04 12:28:14 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



C:\HPCHEM\2\DATA\050203\4GF17550.D Vial: 28
Acq On : 2 May 2003 21:26 Operator: ECL
Sample : WG139612-09 1660 CCV 500 PPB Inst : HP4
Misc : 1,1 SO563-02 Multiplr: 1.00
IntFile : events.e

Method : C:\HPCHEM\2\METHODS\1660F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1459
Last Update : Sun May 04 12:28:14 2003
Response via : Multiple Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	S	2,4,5,6-Tetrachloro-M-Xylen	25.000	25.789	-3.2	102	0.00
2	L1	Aroclor-1016-1	500.000	526.004	-5.2	103	0.00
3	L1	Aroclor-1016-2	500.000	499.185	0.2	101	0.00
4	L1	Aroclor-1016-3	500.000	507.448	-1.5	101	0.00
5	L1	Aroclor-1016-4	500.000	504.165	-0.8	100	0.00
6	L1	Aroclor-1016-5	500.000	525.807	-5.2	100	0.00
7	L2	Aroclor-1260-1	500.000	499.808	0.0	100	0.00
8	L2	Aroclor-1260-2	500.000	486.360	2.7	96	0.00
9	L2	Aroclor-1260-3	500.000	495.271	0.9	95	0.00
10	L2	Aroclor-1260-4	500.000	494.154	1.2	97	0.00
11	L2	Aroclor-1260-5	500.000	474.649	5.1	94	0.00
12	S	Decachlorobiphenyl	25.000	28.568	-14.3	110	0.00

Data File : C:\HPCHEM\2\DATA\050203\4GF17550.D Vial: 28
Acq On : 2 May 2003 21:26 Operator: ECL
Sample : WG139612-09 1660 CCV 500 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:28 2003 Quant Results File: 1660F.RES

Quant Method : C:\HPCHEM\2\METHODS\1660F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1459
Last Update : Sun May 04 12:28:14 2003
Response via : Initial Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :

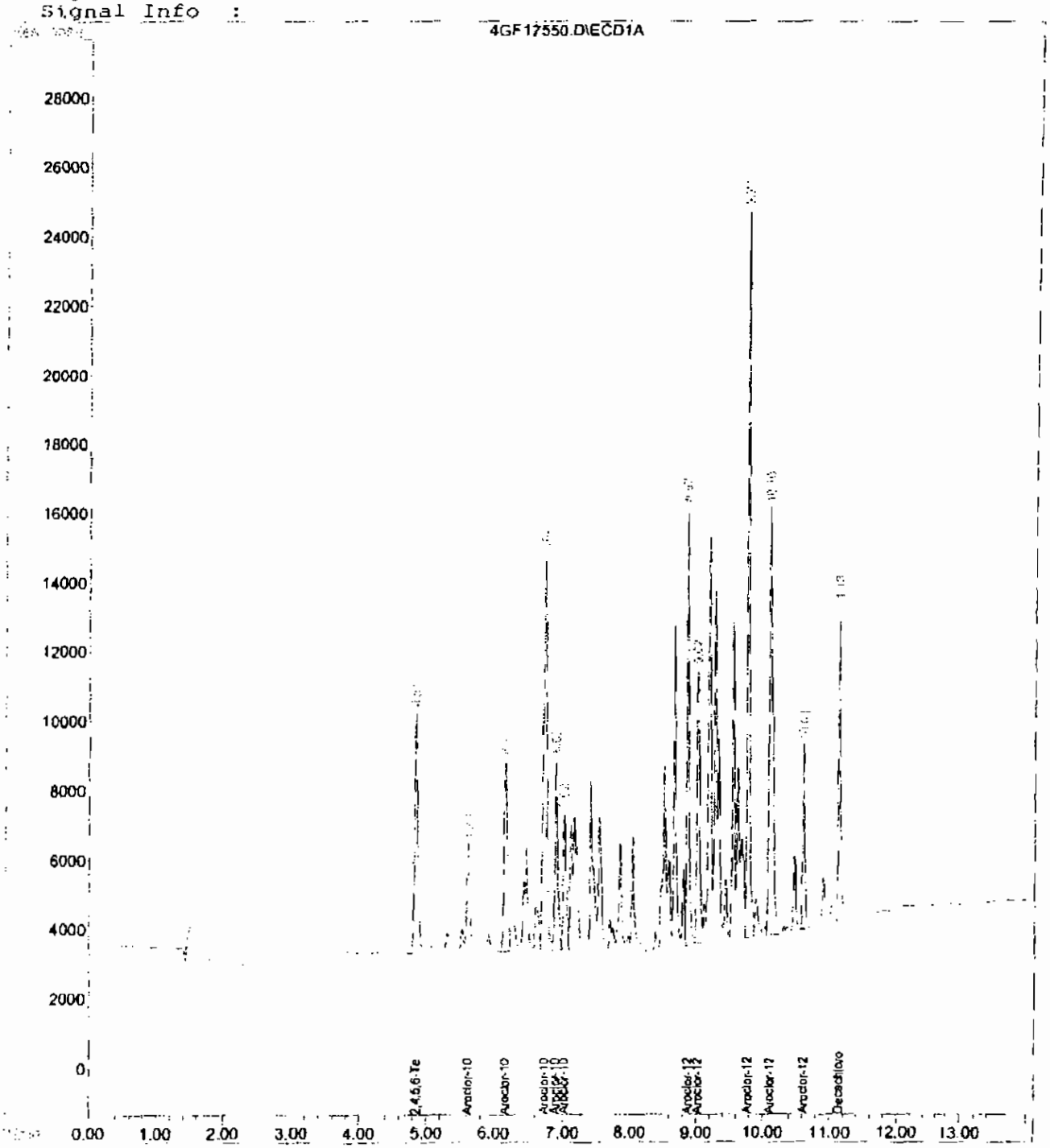
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.84	197432	25.789 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery = 128.94%	
12) S Decachlorobiphenyl	11.13	213695	28.568 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery = 142.84%	
Target Compounds			
2) L1 Aroclor-1016-1	5.61	94545	526.004 UG/L
3) L1 Aroclor-1016-2	6.17	177982	499.185 UG/L
4) L1 Aroclor-1016-3	6.74	377564	507.448 UG/L
5) L1 Aroclor-1016-4	6.90	159309	504.165 UG/L
6) L1 Aroclor-1016-5	7.02	122963	525.807 UG/L
Sum Aroclor-1016-1		932362	2562.610 UG/L
Average Aroclor-1016-1			512.522 UG/L
7) L2 Aroclor-1260-1	8.87	289727	499.808 UG/L
8) L2 Aroclor-1260-2	9.02	231005	486.360 UG/L
9) L2 Aroclor-1260-3	9.77	465845	495.271 UG/L
10) L2 Aroclor-1260-4	10.10	437902	494.154 UG/L
11) L2 Aroclor-1260-5	10.61	111790	474.649 UG/L
Sum Aroclor-1260-1		1536269	2450.242 UG/L
Average Aroclor-1260-1			490.048 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

C:\HPCHEM\2\DATA\050203\4GF17550.D Vial: 28
Acq On : 2 May 2003 21:26 Operator: ECL
Sample : WG139612-09 1660 CCV 500 PPB Inst : HP4
Misc : 1,1 SOS63-02 Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:28 2003 Quant Results File: 1660F.RES

Quant Method : C:\HPCHEM\2\METHODS\1660F.M (Chemstation Integrator)
Title : CALIBRATION May 2, 2003 @ 1459
Last Update : Sun May 04 12:28:14 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082.M

Volume Inj. :
Signal Phase :
Signal Info :



RETENTION TIME WINDOWS

Lab Name: Kemron Environmental Services

Instrument ID: HP-4 Front Column

GC Column: RTx-CLP II

	STANDARD #1	STANDARD #2	STANDARD #3
Date Run	6/24/2002	6/26/2002	6/27/2002
File #	4GF15023	4GF15060	4GF15088

COMPOUND	STD #1 RT	STD #2 RT	STD #3 RT	RT WIN
AR 1016 #1	6.03	6.01	6.00	0.046
AR 1016 #2	6.57	6.55	6.54	0.046
AR 1016 #3	7.13	7.11	7.10	0.046
AR 1016 #4	7.29	7.27	7.25	0.060
AR 1016 #5	7.41	7.39	7.38	0.046
AR 1260 #1	9.05	9.03	9.02	0.046
AR 1260 #2	9.24	9.22	9.21	0.046
AR 1260 #3	9.40	9.38	9.36	0.060
AR 1260 #4	10.15	10.13	10.11	0.060
AR 1260 #5	11.00	10.98	10.96	0.060

RETENTION TIME WINDOWS

Lab Name: Kemron Environmental Services

Instrument ID: HP-4 Rear Column

GC Column: RTx-CLP

	STANDARD #1	STANDARD #2	STANDARD #3
Date Run	6/25/2002	6/26/2002	6/27/2002
File #	4GR14321	4GR14350	4GR14368

COMPOUND	STD #1 RT	STD #2 RT	STD #3 RT	RT WIN
AR 1016 #1	4.83	4.79	4.76	0.105
AR 1016 #2	5.35	5.31	5.29	0.092
AR 1016 #3	5.63	5.59	5.57	0.092
AR 1016 #4	5.97	5.93	5.91	0.092
AR 1016 #5	6.15	6.11	6.09	0.092
AR 1260 #1	7.93	7.89	7.87	0.092
AR 1260 #2	8.19	8.16	8.14	0.075
AR 1260 #3	8.46	8.42	8.41	0.079
AR 1260 #4	9.07	9.04	9.02	0.075
AR 1260 #5	9.88	9.84	9.82	0.092

2.2.3.4 Raw QC Data

Data File : C:\HPCHEM\2\DATA\043003\4GR17891.D Vial: 2
Acq On : 30 Apr 2003 9:39 Operator: ECL
Sample : WG139270-01 BLANK V201 P95 Inst : HP4
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events.e
Quant Time: Apr 30 10:07 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Wed Apr 30 09:29:44 2003
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

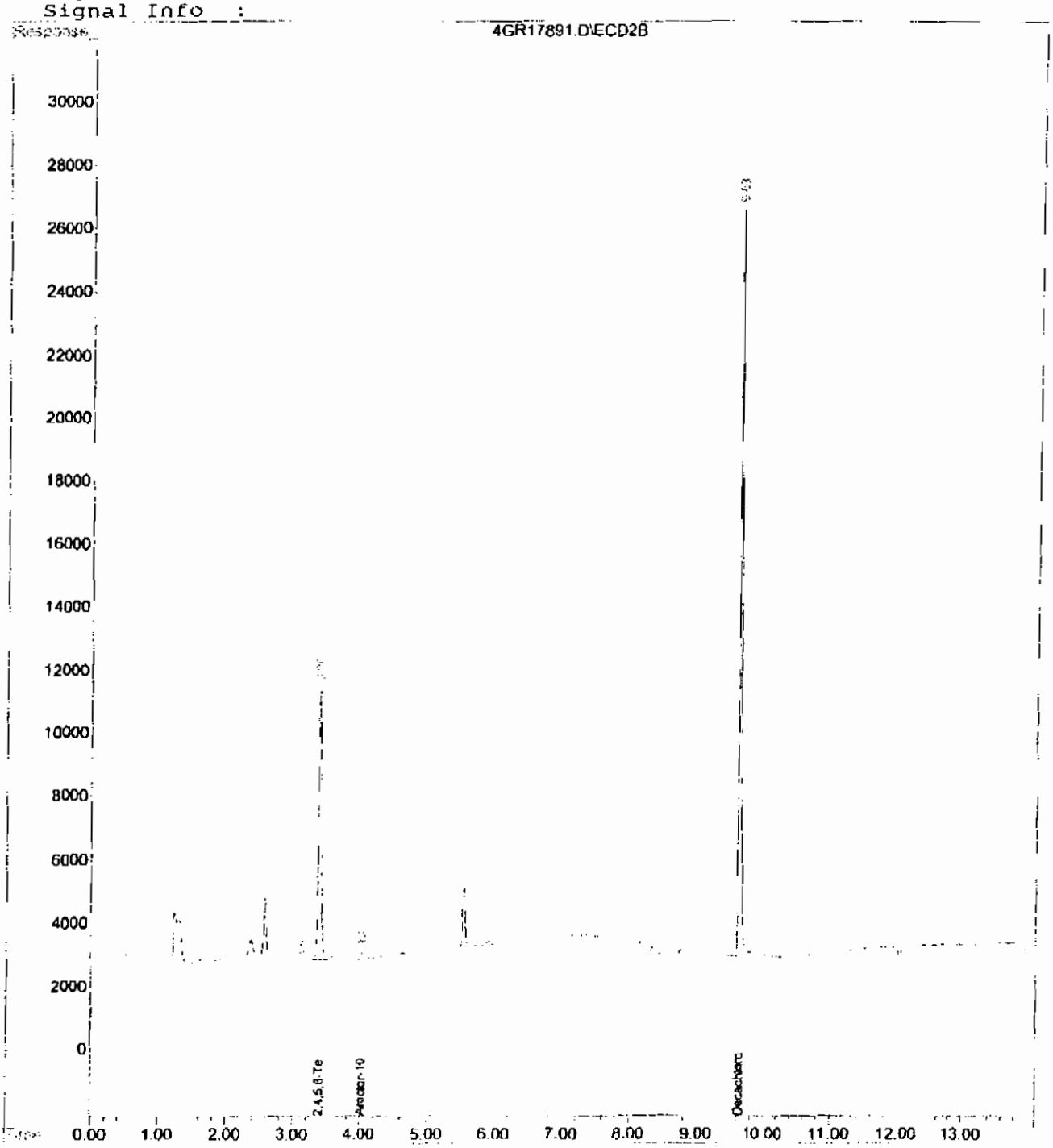
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	3.38	242027	18.580 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	92.90%
12) S Decachlorobiphenyl	9.63	453615	35.465 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	177.33%#
Target Compounds			
2) L1 Aroclor-1016-1	4.02f	6367	30.298 UG/L
3) L1 Aroclor-1016-2	0.00	0	N.D. UG/L
4) L1 Aroclor-1016-3	0.00	0	N.D. UG/L
5) L1 Aroclor-1016-4	0.00	0	N.D. UG/L
6) L1 Aroclor-1016-5	0.00	0	N.D. UG/L
Sum Aroclor-1016-1		6367	30.298 UG/L
Average Aroclor-1016-1			30.298 UG/L
7) L2 Aroclor-1260-1	0.00	0	N.D. UG/L
8) L2 Aroclor-1260-2	0.00	0	N.D. UG/L
9) L2 Aroclor-1260-3	0.00	0	N.D. UG/L
10) L2 Aroclor-1260-4	0.00	0	N.D. UG/L
11) L2 Aroclor-1260-5	0.00	0	N.D. UG/L
Sum Aroclor-1260-1		0	N.D. UG/L
Average Aroclor-1260-1			0.000 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\043003\4GR17891.D Vial: 2
Acq On : 30 Apr 2003 9:39 Operator: ECL
Sample : WG139270-01 BLANK V201 P95 Inst : HP4
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events.e
Quant Time: Apr 30 10:07 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Wed Apr 30 09:29:44 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\050103\4GR17931.D Vial: 19
Acq On : 1 May 2003 15:18 Operator: ECL
Sample : WG139368-01 BLANK V202 P73 Inst : HP4
Misc : 7,1 SOIL Multiplr: 1.00
IntFile : events.e
Quant Time: May 2 8:18 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Fri May 02 08:18:10 2003
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

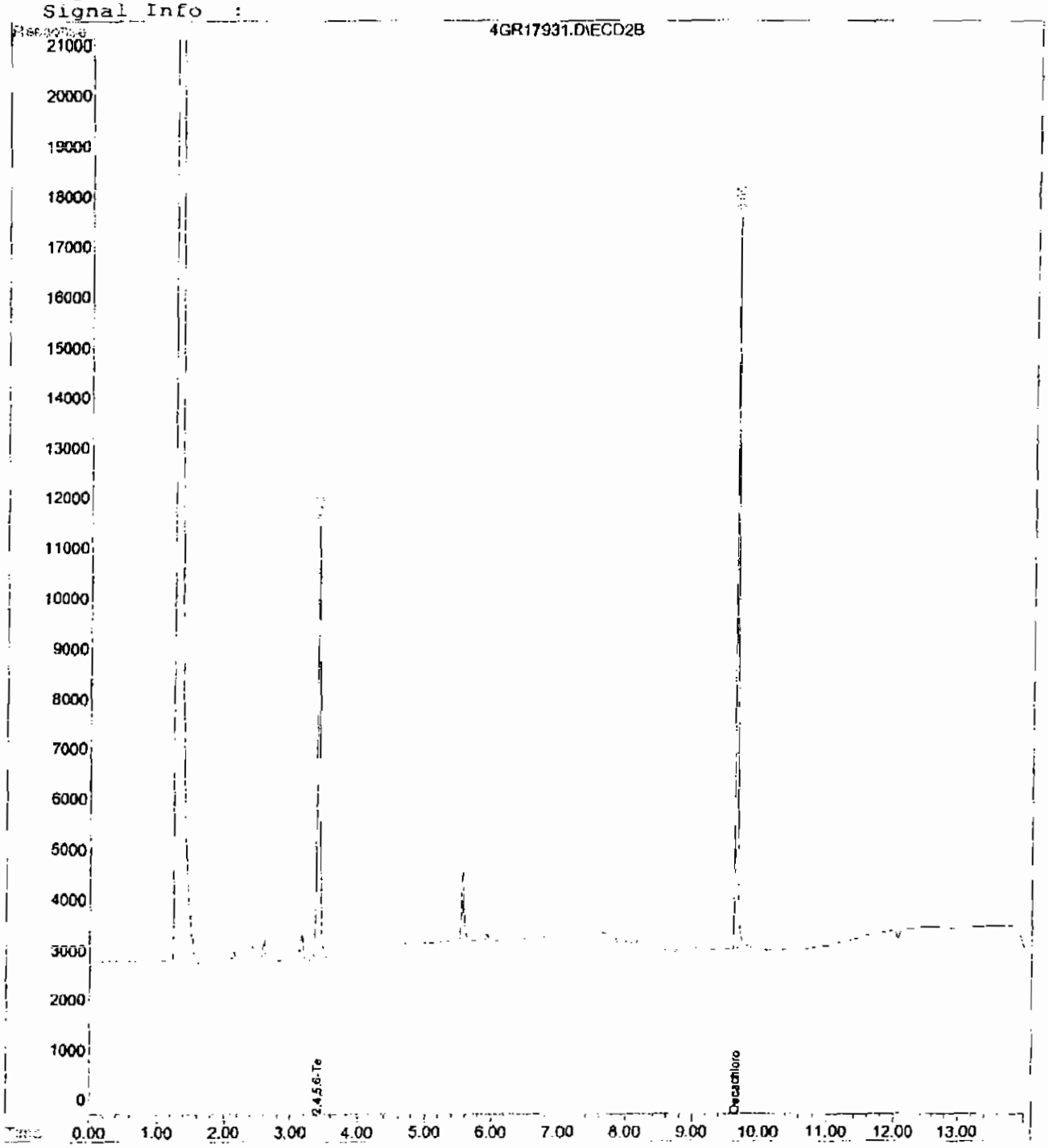
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	3.40	244826	18.795 UG/L
Spiked Amount 20.000 Range 29 - 133		Recovery =	93.98%
12) S Decachlorobiphenyl	9.65	291132	22.762 UG/L
Spiked Amount 20.000 Range 30 - 173		Recovery =	113.81%
Target Compounds			
2) L1 Aroclor-1016-1	0.00	0	N.D. UG/L
3) L1 Aroclor-1016-2	0.00	0	N.D. UG/L
4) L1 Aroclor-1016-3	0.00	0	N.D. UG/L
5) L1 Aroclor-1016-4	0.00	0	N.D. UG/L
6) L1 Aroclor-1016-5	0.00	0	N.D. UG/L
Sum Aroclor-1016-1		0	N.D. UG/L
Average Aroclor-1016-1			0.000 UG/L
7) L2 Aroclor-1260-1	0.00	0	N.D. UG/L
8) L2 Aroclor-1260-2	0.00	0	N.D. UG/L
9) L2 Aroclor-1260-3	0.00	0	N.D. UG/L
10) L2 Aroclor-1260-4	0.00	0	N.D. UG/L
11) L2 Aroclor-1260-5	0.00	0	N.D. UG/L
Sum Aroclor-1260-1		0	N.D. UG/L
Average Aroclor-1260-1			0.000 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\050103\4GR17931.D Vial: 19
Acq On : 1 May 2003 15:18 Operator: ECL
Sample : WG139368-01 BLANK V202 P73 Inst : HP4
Misc : 7,1 SOIL Multiplr: 1.00
IntFile : events.e
Quant Time: May 2 8:18 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Fri May 02 08:18:10 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\043003\4GR17892.D Vial: 3
Acq On : 30 Apr 2003 9:57 Operator: ECL
Sample : WG139270-02 LCS V201 P95 Inst : HP4
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events.e
Quant Time: Apr 30 10:13 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Wed Apr 30 09:29:44 2003
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

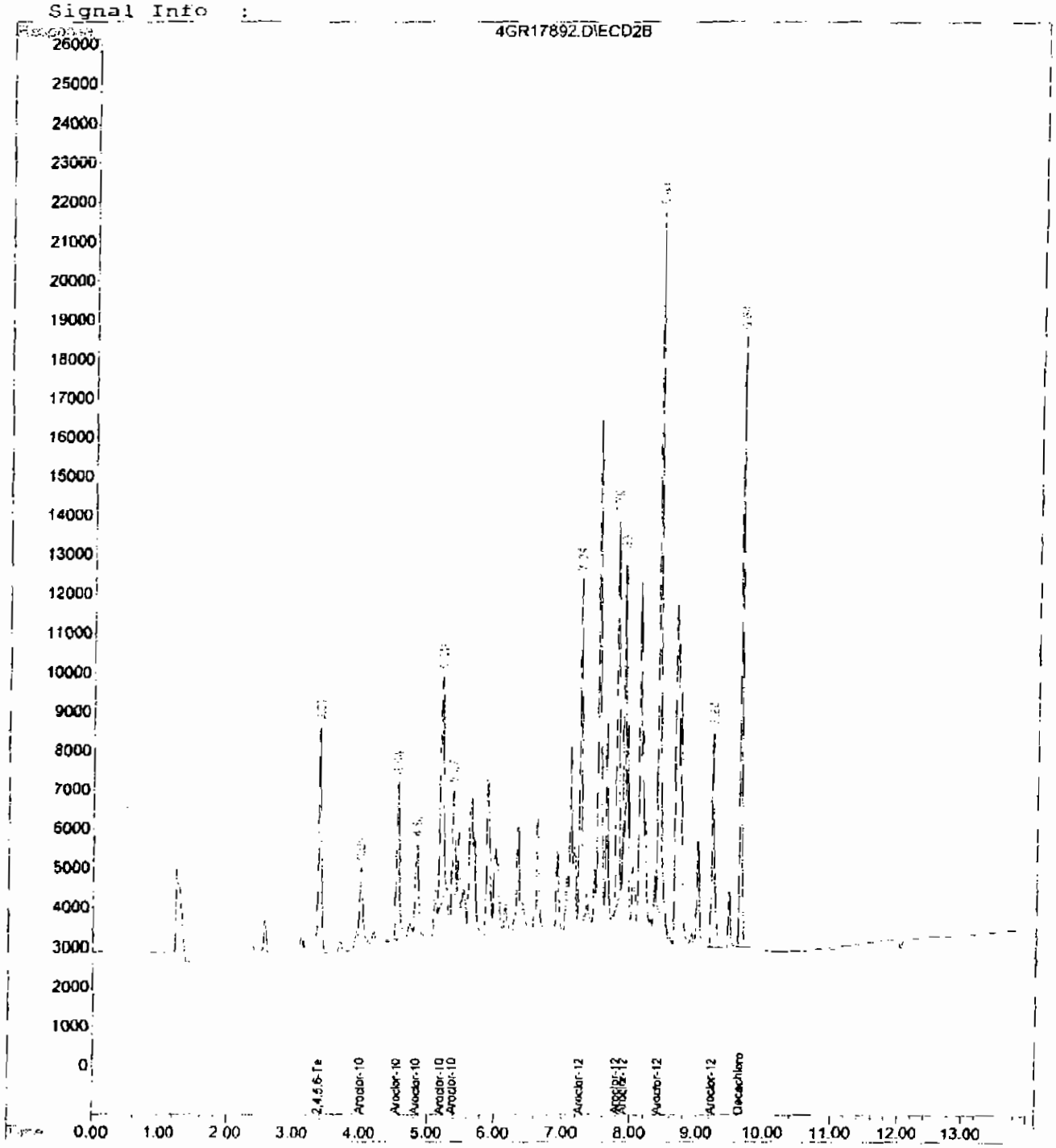
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	3.37	170474	13.087 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	65.44%
12) S Decachlorobiphenyl	9.64	304768	23.828 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	119.14%
Target Compounds			
2) L1 Aroclor-1016-1	3.99	49314	234.653 UG/L
3) L1 Aroclor-1016-2	4.54	126037	229.212 UG/L
4) L1 Aroclor-1016-3	4.83	76697	230.835 UG/L
5) L1 Aroclor-1016-4	5.20	197566	239.708 UG/L
6) L1 Aroclor-1016-5	5.37	61503	204.071 UG/L
Sum Aroclor-1016-1		511117	1138.480 UG/L
Average Aroclor-1016-1			227.696 UG/L
7) L2 Aroclor-1260-1	7.24	177432	311.315 UG/L
8) L2 Aroclor-1260-2	7.79	261917	314.439 UG/L
9) L2 Aroclor-1260-3	7.90	98118	327.879 UG/L
10) L2 Aroclor-1260-4	8.41	393636	361.606 UG/L
11) L2 Aroclor-1260-5	9.22	135955	359.755 UG/L
Sum Aroclor-1260-1		1067059	1674.994 UG/L
Average Aroclor-1260-1			334.999 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\043003\4GR17892.D Vial: 3
Acq On : 30 Apr 2003 9:57 Operator: ECL
Sample : WG139270-02 LCS V201 P95 Inst : HP4
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events.e
Quant Time: Apr 30 10:13 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Wed Apr 30 09:29:44 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\050103\4GR17932.D Vial: 20
Acq On : 1 May 2003 15:35 Operator: ECL
Sample : WG139368-02 LCS V202 P73 Inst : HP4
Misc : 7,1 SOIL Multiplr: 1.00
IntFile : events.e
Quant Time: May 2 8:19 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Fri May 02 08:18:10 2003
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

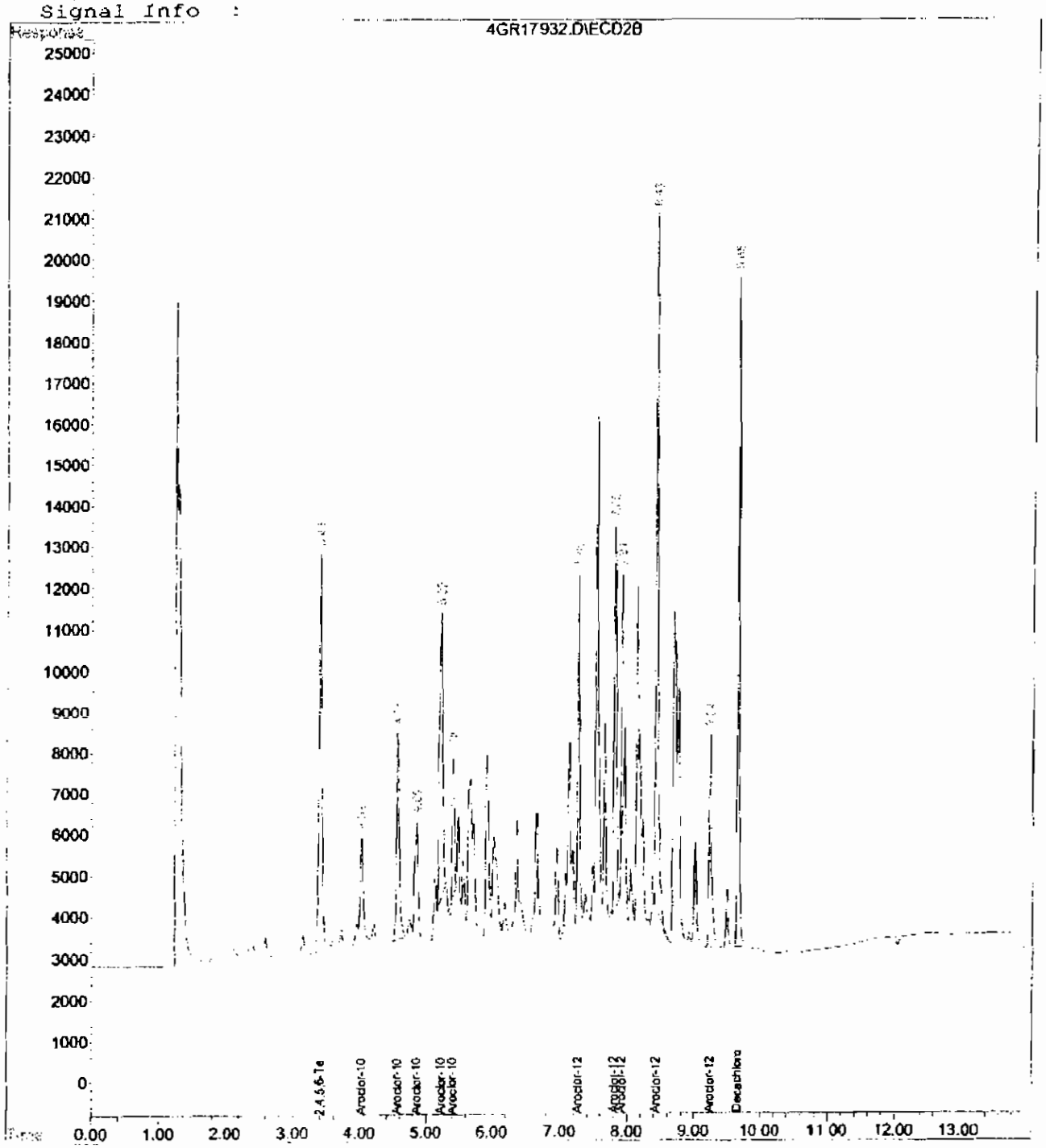
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	3.40	273580	21.003 UG/L
Spiked Amount 20.000 Range 29 - 133		Recovery =	105.01%
12) S Decachlorobiphenyl	9.65	316450	24.741 UG/L
Spiked Amount 20.000 Range 30 - 173		Recovery =	123.71%
Target Compounds			
2) L1 Aroclor-1016-1	4.02	63130	300.394 UG/L
3) L1 Aroclor-1016-2	4.56	154744	281.418 UG/L
4) L1 Aroclor-1016-3	4.85	90777	273.213 UG/L
5) L1 Aroclor-1016-4	5.22	233121	282.847 UG/L
6) L1 Aroclor-1016-5	5.39	76481	253.769 UG/L
Sum Aroclor-1016-1		618253	1391.641 UG/L
Average Aroclor-1016-1			278.328 UG/L
7) L2 Aroclor-1260-1	7.26	170274	298.756 UG/L
8) L2 Aroclor-1260-2	7.81	245478	294.703 UG/L
9) L2 Aroclor-1260-3	7.91	90170	301.319 UG/L
10) L2 Aroclor-1260-4	8.43	375161	344.635 UG/L
11) L2 Aroclor-1260-5	9.24	130507	345.338 UG/L
Sum Aroclor-1260-1		1011590	1584.751 UG/L
Average Aroclor-1260-1			316.950 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\050103\4GR17932.D Vial: 20
Acq On : 1 May 2003 15:35 Operator: ECL
Sample : WG139368-02 LCS V202 P73 Inst : HP4
Misc : 7,1 SOIL Multiplr: 1.00
IntFile : events.e
Quant Time: May 2 8:19 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Fri May 02 08:18:10 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



File : C:\HPCHEM\2\DATA\043003\4GR17893.D Vial: 4
Acq On : 30 Apr 2003 10:14 Operator: ECL
Sample : WG139270-03 LCS DUP V201 P95 Inst : HP4
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events.e
Quant Time: Apr 30 10:39 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Wed Apr 30 09:29:44 2003
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

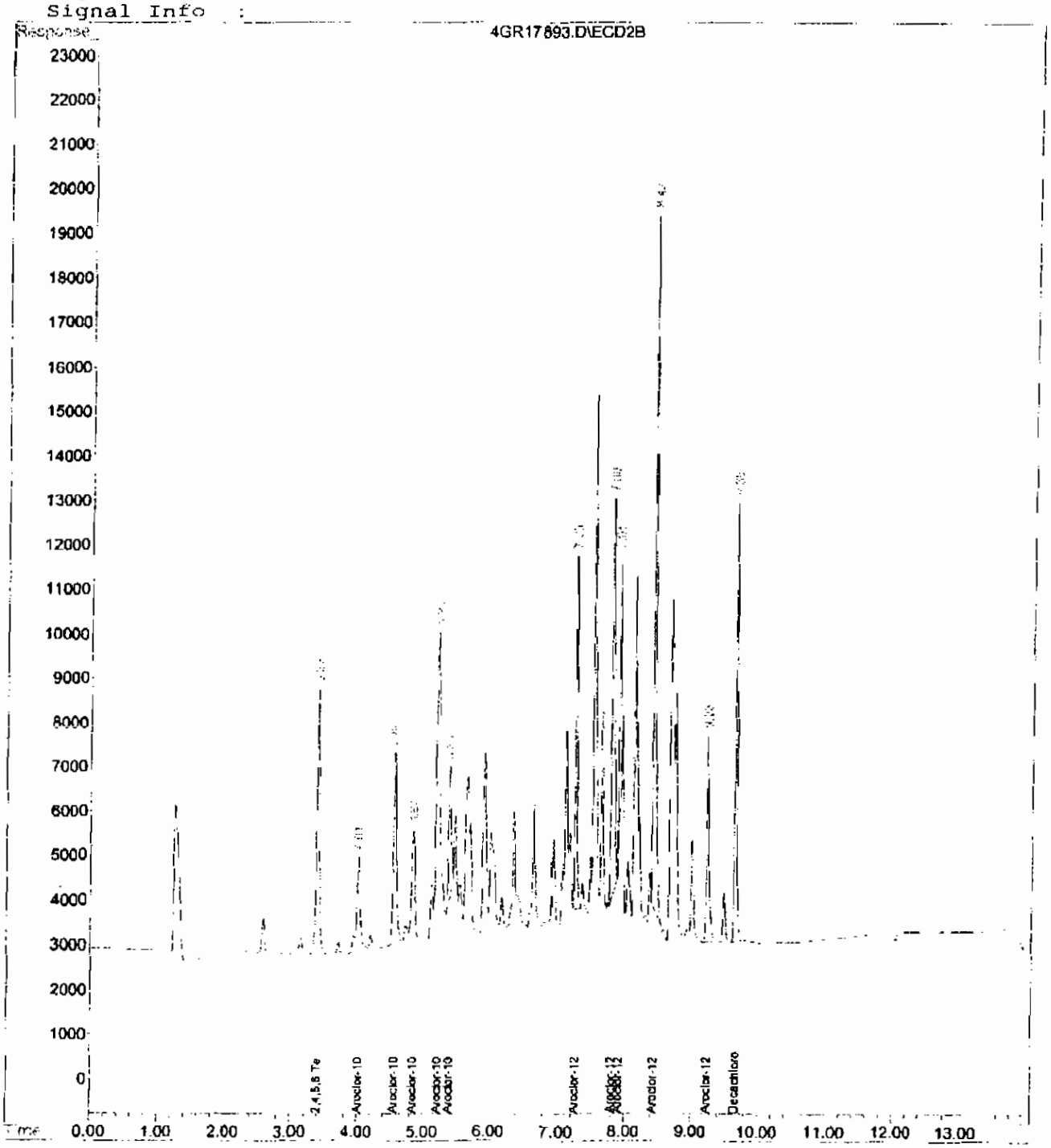
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	3.39	185041	14.205 UG/L
Spiked Amount 20.000 Range 30 - 132		Recovery =	71.03%
12) S Decachlorobiphenyl	9.65	195315	15.270 UG/L
Spiked Amount 20.000 Range 36 - 144		Recovery =	76.35%
Target Compounds			
2) L1 Aroclor-1016-1	4.01	54796	260.736 UG/L
3) L1 Aroclor-1016-2	4.55	137919	250.820 UG/L
4) L1 Aroclor-1016-3	4.84	82104	247.108 UG/L
5) L1 Aroclor-1016-4	5.21	245844	298.285 UG/L
6) L1 Aroclor-1016-5	5.39	77065	255.707 UG/L
Sum Aroclor-1016-1		597727	1312.656 UG/L
Average Aroclor-1016-1			262.531 UG/L
7) L2 Aroclor-1260-1	7.25	163470	286.819 UG/L
8) L2 Aroclor-1260-2	7.80f	238382	286.185 UG/L
9) L2 Aroclor-1260-3	7.91	86756	289.908 UG/L
10) L2 Aroclor-1260-4	8.42	347665	319.376 UG/L
11) L2 Aroclor-1260-5	9.23f	116745	308.924 UG/L
Sum Aroclor-1260-1		953019	1491.211 UG/L
Average Aroclor-1260-1			298.242 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\043003\4GR17893.D Vial: 4
Acq On : 30 Apr 2003 10:14 Operator: ECL
Sample : WG139270-03 LCS DUP V201 P95 Inst : HP4
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events.e
Quant Time: Apr 30 10:39 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Wed Apr 30 09:29:44 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\2\DATA\050103\4GR17933.D Vial: 21
Acq On : 1 May 2003 15:53 Operator: ECL
Sample : WG139368-03 LCS DUP V202 P73 Inst : HP4
Misc : 7,1 SOIL Multiplr: 1.00
IntFile : events.e
Quant Time: May 2 8:19 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Fri May 02 08:18:10 2003
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

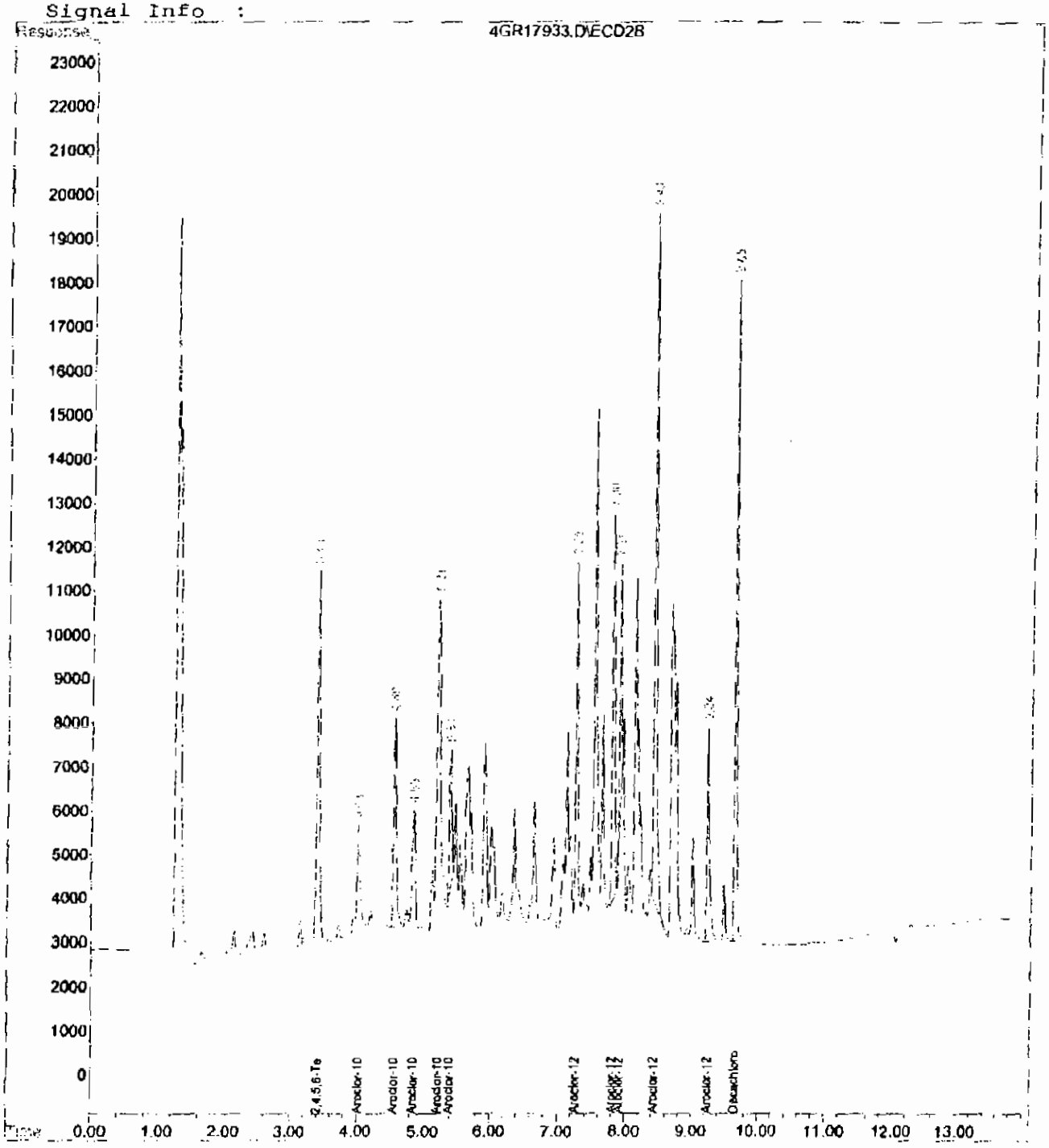
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	3.40	257861	19.796 UG/L
Spiked Amount 20.000 Range 29 - 133		Recovery =	98.98%
12) S Decachlorobiphenyl	9.65	294227	23.004 UG/L
Spiked Amount 20.000 Range 30 - 173		Recovery =	115.02%
Target Compounds			
2) L1 Aroclor-1016-1	4.02	63107	300.281 UG/L
3) L1 Aroclor-1016-2	4.56	148365	269.819 UG/L
4) L1 Aroclor-1016-3	4.85	87569	263.558 UG/L
5) L1 Aroclor-1016-4	5.21	263817	320.091 UG/L
6) L1 Aroclor-1016-5	5.39	82256	272.933 UG/L
Sum Aroclor-1016-1		645115	1426.681 UG/L
Average Aroclor-1016-1			285.336 UG/L
7) L2 Aroclor-1260-1	7.26	163425	286.739 UG/L
8) L2 Aroclor-1260-2	7.80	234017	280.944 UG/L
9) L2 Aroclor-1260-3	7.91	84260	281.567 UG/L
10) L2 Aroclor-1260-4	8.43	355762	326.814 UG/L
11) L2 Aroclor-1260-5	9.24	125778	332.824 UG/L
Sum Aroclor-1260-1		963242	1508.889 UG/L
Average Aroclor-1260-1			301.778 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\050103\4GR17933.D Vial: 21
Acq On : 1 May 2003 15:53 Operator: ECL
Sample : WG139368-03 LCS DUP V202 P73 Inst : HP4
Misc : 7,1 SOIL Multiplr: 1.00
IntFile : events.e
Quant Time: May 2 8:19 2003 Quant Results File: 1660R.RES

Quant Method : C:\HPCHEM\2\METHODS\1660R.M (Chemstation Integrator)
Title : CALIBRATION March 17, 2003 @ 1705
Last Update : Fri May 02 08:18:10 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
	100	4gr16956.d	1.	HEXANE		17 Mar 2003 15:14
2	1	4gr16957.d	1.	WG136402-01 1660 ICAL 2000 PPB	1,1 SOS63-02	17 Mar 2003 15:32
3	2	4gr16958.d	1.	WG136402-02 1660 ICAL 1000 PPB	1,1 SOS63-02	17 Mar 2003 15:51
4	3	4gr16959.d	1.	WG136402-03 1660 ICAL 500 PPB	1,1 SOS63-02	17 Mar 2003 16:10
5	4	4gr16960.d	1.	WG136402-04 1660 ICAL 250 PPB	1,1 SOS63-02	17 Mar 2003 16:28
6	5	4gr16961.d	1.	WG136402-05 1660 ICAL 100 PPB	1,1 SOS63-02	17 Mar 2003 16:47
7	6	4gr16962.d	1.	WG136402-06 1660 ICAL 50 PPB	1,1 SOS63-02	17 Mar 2003 17:05
8	7	4gr16963.d	1.	WG136402-07 1660 ALT ICV 50...	1,1 SOS63-14	17 Mar 2003 17:24
9	8	4gr16964.d	1.	1254 ICAL 2000 PPB	SOS63-41	17 Mar 2003 17:42
10	9	4gr16965.d	1.	1254 ICAL 1000 PPB	SOS63-41	17 Mar 2003 18:01
11	10	4gr16966.d	1.	1254 ICAL 500 PPB	SOS63-41	17 Mar 2003 18:19
12	11	4gr16967.d	1.	1254 ICAL 250 PPB	SOS63-41	17 Mar 2003 18:38
13	12	4gr16968.d	1.	1254 ICAL 100 PPB	SOS63-41	17 Mar 2003 18:56
14	13	4gr16969.d	1.	1254 ICAL 50 PPB	SOS63-41	17 Mar 2003 19:14
15	14	4gr16970.d	1	1254 ALT ICV 500 PPB	SOS63-08	17 Mar 2003 19:32
16	15	4gr16971.d	1.	1248 500 PPB	SOS61-40	17 Mar 2003 19:51
17	16	4gr16972.d	1.	1248 ALT 500 PPB - *	SOS64-08	17 Mar 2003 20:09
18	17	4gr16973.d	1.	1242 500 PPB	SOS61-41	17 Mar 2003 20:27
19	18	4gr16974.d	1.	1242 ALT 500 PPB	SOS63-09	17 Mar 2003 20:45
20	19	4gr16975.d	1.	1232 500 PPB	SOS64-09	17 Mar 2003 21:04
21	20	4gr16976.d	1.	1232 ALT 500 PPB	SOS64-10	17 Mar 2003 21:22
22	21	4gr16977.d	1.	1221 500 PPB	SOS64-07	17 Mar 2003 21:40
23	22	4gr16978.d	1.	1221 ALT 500 PPB	SOS61-43	17 Mar 2003 21:58
24	23	4gr16979.d	1.	WG136402-08 1660 CCV 500 PPB	1,1 SOS63-02	17 Mar 2003 22:16
25	51	4gr16980.d	1.	WG136402-09 INST. BLANK	1,1 SOS62-07	17 Mar 2003 22:34
26	52	4gr16981.d	1.	WG136354-01 BLANK V200 P79	1,1 WATER	17 Mar 2003 22:53
	53	4gr16982.d	1.	WG136354-02 LCS V200 P79	1,1 WATER	17 Mar 2003 23:11
	54	4gr16983.d	1.	WG136354-03 LCS DUP V200 P79	1,1 WATER	17 Mar 2003 23:29
29	55	4gr16984.d	1.	L0303318-01	1,1 WATER	17 Mar 2003 23:47
30	56	4gr16985.d	1.	L0303318-02	1,1 WATER	18 Mar 2003 00:05
31	57	4gr16986.d	1.	L0303318-03	1,1 WATER	18 Mar 2003 00:23
32	58	4gr16987.d	1.	L0303318-04	1,1 WATER	18 Mar 2003 00:42
33	59	4gr16988.d	1.	L0303318-05	1,1 WATER	18 Mar 2003 01:00
34	60	4gr16989.d	1.	L0303318-06 - **	1,1 WATER	18 Mar 2003 01:18
35	61	4gr16990.d	1.	L0303318-07	1,1 WATER	18 Mar 2003 01:36
36	62	4gr16991.d	1.	1254 CCV 500 PPB	SOS63-41	18 Mar 2003 01:54
37	63	4gr16992.d	1.	WG136402-10 INST. BLANK	1,1 SOS62-07	18 Mar 2003 02:12
38	64	4gr16993.d	1.	L0303318-08 - ** -A	1,1 WATER	18 Mar 2003 02:31
39	65	4gr16994.d	1.	L0303318-09	1,1 WATER	18 Mar 2003 02:49
40	66	4gr16995.d	1.	L0303318-10 -	1,1 WATER	18 Mar 2003 03:07
41	67	4gr16996.d	1.	L0303318-11	1,1 WATER	18 Mar 2003 03:25
42	68	4gr16997.d	1.	L0303318-12	1,1 WATER	18 Mar 2003 03:44
43	69	4gr16998.d	1.	WG136402-11 1660 CCV 500 PPB	1,1 SOS63-02	18 Mar 2003 04:02
44	70	4gr16999.d	1.	WG136402-12 INST. BLANK	1,1 SOS62-07	18 Mar 2003 04:20

ECL 3/18/03

KEMRON ENVIRONMENTAL SERVICES
Semivolatile GC Laboratory Maintenance Log

Analysis Date/Time 3/17/03 Instrument ID HP4 Column ID RTX-CLP Rear Data Subdirectory 031703.SEC
Analyst Initials ECL

SOP # GCS09 Rev. # ___ 8081A ___
SOP # GCS04 Rev. # ___ 8151A ___
SOP # GCS03 Rev. # ___ PRO ___
SOP # GCS02 Rev. # ___ 8015B Mod (Alcohol) ___
SOP # GCS10 Rev. # 3 8082 ✓
SOP # GCS01 Rev. # ___ 8100 ___
SOP # GCS02 Rev. # ___ 8015B Mod (DRO) ___
SOP # GCS07 Rev. # ___ 8011 ___

Analysis Date/Time ___ Instrument ID ___ Column ID ___ Data Subdirectory ___

Daily Check
☑ Gases >500 psi

Preventative Maintenance
☐ Change o-ring
☑ Change liner
☐ Change septum
☐ Clip column (___cm)
☐ Injection port seal (goldseal)
☐ Change gases ___

Returned To Control?
Yes ___ No ___

Additional Maintenance
Problem: ___

Action Taken: ___

Comments

*- 3 peaks failed but the average was within 15% = good
** - need rerun for Ar 1232 and confirmed
A - sample failed T-B-X surrogate high. DCB was good

Reviewed By [illegible]

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
	1	4gr17890.d	1.	WG139378-01 1660 CCV 500 PPB	1,1 SOS63-02	30 Apr 2003 09:14
2	2	4gr17891.d	1.	WG139270-01 BLANK V201 P95 - *	1,1 WATER	30 Apr 2003 09:39
3	3	4gr17892.d	1.	WG139270-02 LCS V201 P95	1,1 WATER	30 Apr 2003 09:57
4	4	4gr17893.d	1.	WG139270-03 LCS DUP V201 P95	1,1 WATER	30 Apr 2003 10:14
5	5	4gr17894.d	1.	L0304607-01	2,1 WATER	30 Apr 2003 10:32
6	6	4gr17895.d	1.	L0304558-01	1,1 WATER	30 Apr 2003 10:50
7	7	4gr17896.d	1.	L0304558-02 - *	1,1 WATER	30 Apr 2003 11:08
8	8	4gr17897.d	1.	L0304558-03	1,1 WATER	30 Apr 2003 11:25
9	9	4gr17898.d	1.	L0304558-04	1,1 WATER	30 Apr 2003 11:43
10	10	4gr17899.d	1.	L0304576-01 - *	1,1 WATER	30 Apr 2003 12:01
11	11	4gr17900.d	1.	L0304576-02	1,1 WATER	30 Apr 2003 12:18
12	12	4gr17901.d	1.	WG139378-02 1660 CCV 250 PPB	1,1 SOS63-02	30 Apr 2003 15:07
13	13	4gr17902.d	1.	L0304576-03 - *	1,1 SOS63-02	30 Apr 2003 15:24
14	14	4gr17903.d	1.	L0304576-04 - *	1,1 WATER	30 Apr 2003 15:42
15	15	4gr17904.d	1.	L0304576-05	1,1 WATER	30 Apr 2003 16:00
16	16	4gr17905.d	1.	L0304576-06	1,1 WATER	30 Apr 2003 16:18
17	17	4gr17906.d	1.	L0304587-02 - *	1,1 WATER	30 Apr 2003 16:36
18	18	4gr17907.d	1.	L0304593-01	1,1 WATER	30 Apr 2003 16:53
19	19	4gr17908.d	1.	L0304593-02 - *	1,1 WATER	30 Apr 2003 17:11
20	20	4gr17909.d	1.	L0304593-03	1,1 WATER	30 Apr 2003 17:28
21	21	4gr17910.d	1.	L0304594-01	1,1 WATER	30 Apr 2003 17:46
22	22	4gr17911.d	1.	L0304594-02 -	1,1 WATER	30 Apr 2003 18:03
23	23	4gr17912.d	1.	WG139378-03 1660 CCV 500 PPB - A	1,1 SOS63-02	1 May 2003 08:15

ECZ 5/1/03

RPC 5/1/03

KEMRON ENVIRONMENTAL SERVICES
Semivolatile GC Laboratory Maintenance Log

Analysis Date/Time 4/30/03 Instrument ID HF4 Column ID RTX-CLP Rear Data Subdirectory 043003
Analyst Initials ECL

SOP # GCS09 Rev. # ___ 8081A ___
SOP # GCS04 Rev. # ___ 8151A ___
SOP # GCS03 Rev. # ___ PRO ___
SOP # GCS02 Rev. # ___ 8015B Mod (Alcohol) ___
SOP # GCS10 Rev. # 3 8082 ✓
SOP # GCS01 Rev. # ___ 8100 ___
SOP # GCS03 Rev. # ___ 8015B Mod (DRO) ___
SOP # GCS07 Rev. # ___ 8011 ___

Analysis Date/Time ___ Instrument ID ___ Column ID ___ Data Subdirectory ___

Daily Check
- ☐ Gases >500 psi

Preventative Maintenance
- ☐ Change o-ring
- ☐ Change liner
- ☐ Change septum
- ☐ Clip column (___cm)
- ☐ Injection port seal (goldseal)
- ☑ Change gases Argon Methane

Returned To Control?
Yes ___ No ___

Additional Maintenance
Problem: ___

Action Taken: ___

Comments

A - Power outage caused final CCV to not inject. This is cause for time differential

* - OCB surrogate failed high

Reviewed By: RDC 5/1/03

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	4gr17913.d	1.	WG139378-04 1660 CCV 500 PPB	1,1 SOS63-02	1 May 2003 [illegible]
2	2	4gr17914.d	1.	WG139378-05 INST. BLANK	1,1 SOS64-38	1 May 2003 10:15
3	3	4gr17915.d	1.	WG139410-01 BLANK V202 P75	7,1 SOIL	1 May 2003 10:33
4	4	4gr17916.d	1.	WG139410-02 LCS V202 P75	7,1 SOIL	1 May 2003 10:51
5	5	4gr17917.d	1.	WG139410-03 LCS DUP V202 P75	7,1 SOIL	1 May 2003 11:08
6	6	4gr17918.d	1.	L0304596-05 - CF	7,1,RE SOIL	1 May 2003 11:26
7	7	4gr17919.d	1.	L0304596-07 - CF	7,1,RE SOIL	1 May 2003 11:44
8	8	4gr17920.d	1.	L0304651-01	7,1 SOIL	1 May 2003 12:02
9	9	4gr17921.d	1.	L0304651-02 - CF	7,1 SOIL	1 May 2003 12:20
10	10	4gr17922.d	1.	L0304651-03	7,1 SOIL	1 May 2003 12:38
11	11	4gr17923.d	1.	L0304651-04	7,1 SOIL	1 May 2003 12:56
12	12	4gr17924.d	1.	1254 CCV 500 PPB	SOS63-41	1 May 2003 13:13
13	13	4gr17925.d	1.	WG139378-06 INST. BLANK	1,1 SOS64-38	1 May 2003 13:31
14	14	4gr17926.d	1.	WG139378-07 1660 CCV 500 PPB	1,1 SOS63-02	1 May 2003 13:49
15	15	4gr17927.d	1.	WG139432-01 BLANK V201 P107	2,1 WATER	1 May 2003 14:07
16	16	4gr17928.d	1.	WG139432-02 LCS V201 P107	2,1 WATER	1 May 2003 14:24
17	17	4gr17929.d	1.	WG139432-03 LCS DUP V201 P107	2,1 WATER	1 May 2003 14:42
18	18	4gr17930.d	1.	L0304672-01	2,1 WATER	1 May 2003 15:00
19	19	4gr17931.d	1.	WG139368-01 BLANK V202 P73	7,1 SOIL	1 May 2003 15:18
20	20	4gr17932.d	1.	WG139368-02 LCS V202 P73	7,1 SOIL	1 May 2003 15:35
21	21	4gr17933.d	1.	WG139368-03 LCS DUP V202 P73	7,1 SOIL	1 May 2003 15:53
22	22	4gr17934.d	1.	L0304554-01 - CF - *	7,1 SOIL	1 May 2003 16:11
23	23	4gr17935.d	1.	L0304594-03 - CF - *	7,1 SOIL	1 May 2003 16:29
24	24	4gr17936.d	1.	WG139378-08 1660 CCV 250 PPB	1,1 SOS63-02	1 May 2003 16:4[illegible]
25	25	4gr17937.d	1.	RE WG139367-01 BLANK V202 P71	11,1 OIL	1 May 2003 17:05
26	26	4gr17938.d	1.	WG139367-02 LCS V202 P71	11,1 OIL	1 May 2003 17:23
C	27	4gr17939.d	1.	WG139367-03 LCS DUP V202 P71	11,1 OIL	1 May 2003 17:41
	28	4gr17940.d	1.	L0304419-01 5x - 20X	11,5 OIL	1 May 2003 17:59
29	29	4gr17941.d	1.	L0304419-02 5x - 20X	11,5 OIL	1 May 2003 18:16
30	30	4gr17942.d	1.	L0304543-06 5x - 20X	12,5 OIL	1 May 2003 18:34
31	31	4gr17943.d	1.	L0304619-01 5x - 20X	11,5 OIL	1 May 2003 18:52
32	32	4gr17944.d	1.	CC WG139378-09 1660 CCV 500 PPB	1,1 SOS63-02	1 May 2003 19:09

ECZ 5/2/03
mde 5/2/03

02 May 2003 08:06

KEMRON ENVIRONMENTAL SERVICES
Semivolatile GC Laboratory Maintenance Log

Analysis Date/Time 5/1/03 Instrument ID HP4 Column ID RTX-CLP Rear Data Subdirectory 050103
Analyst Initials ECL

SOP # GCS09 Rev. # ___ 8081A ___
SOP # GCS04 Rev. # ___ 8151A ___
SOP # GCS03 Rev. # ___ PRO ___
SOP # GCS02 Rev. # ___ 8015B Mod (Alcohol) ___
SOP # GCS10 Rev. # 3? 8082 ✓
SOP # GCS01 Rev. # ___ 8100 ___
SOP # GCS02 Rev. # ___ 8015B Mod (DRO) ___
SOP # GCS07 Rev. # ___ 8011 ___

Analysis Date/Time ___ Instrument ID ___ Column ID ___ Data Subdirectory ___

Daily Check
- ☐ Gases >500 psi

Preventative Maintenance
- ☐ Change o-ring
- ☐ Change liner
- ☐ Change septum
- ☐ Clip column (__cm)
- ☐ Injection port seal (goldseal)
- ☐ Change gases ___

Returned To Control?
Yes ___ No ___

Additional Maintenance
Problem: ___

Action Taken: ___

Comments

CF - need confirmed
CC - standard failed low.
RR - need rerun.
* - DCB surrogate failed high due to SMI.

Reviewed By: [illegible] 5/2/03

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
	1	4gf17523.d	1.	WG139612-01 1660 ICAL 2000 PPB	1,1 SOS63-02	2 May 2003 13:09
2	2	4gf17524.d	1.	WG139612-02 1660 ICAL 1000 PPB	1,1 SOS63-02	2 May 2003 13:27
3	3	4gf17525.d	1.	WG139612-03 1660 ICAL 500 PPB	1,1 SOS63-02	2 May 2003 13:46
4	4	4gf17526.d	1.	WG139612-04 1660 ICAL 250 PPB	1,1 SOS63-02	2 May 2003 14:04
5	5	4gf17527.d	1.	WG139612-05 1660 ICAL 100 PPB	1,1 SOS63-02	2 May 2003 14:23
6	6	4gf17528.d	1.	WG139612-06 1660 ICAL 50 PPB	1,1 SOS63-02	2 May 2003 14:41
7	7	4gf17529.d	1.	WG139612-07 1660 ALT ICV 50...	1,1 SOS63-14	2 May 2003 15:00
8	8	4gf17530.d	1.	1254 ICAL 2000 PPB	SOS63-41	2 May 2003 15:18
9	9	4gf17531.d	1.	1254 ICAL 1000 PPB	SOS63-41	2 May 2003 15:37
10	10	4gf17532.d	1.	1254 ICAL 500 PPB	SOS63-41	2 May 2003 15:55
11	11	4gf17533.d	1.	1254 ICAL 250 PPB	SOS63-41	2 May 2003 16:13
12	12	4gf17534.d	1.	1254 ICAL 100 PPB	SOS63-41	2 May 2003 16:32
13	13	4gf17535.d	1.	1254 ICAL 50 PPB	SOS63-41	2 May 2003 16:50
14	14	4gf17536.d	1.	1254 ALT ICV 500 PPB	SOS63-08	2 May 2003 17:09
15	15	4gf17537.d	1.	1248 500 PPB	SOS64-45	2 May 2003 17:27
16	16	4gf17538.d	1.	1248 ALT 500 PPB	SOS64-08	2 May 2003 17:45
17	17	4gf17539.d	1.	1242 500 PPB	SOS64-44	2 May 2003 18:04
18	18	4gf17540.d	1.	1242 ALT 500 PPB	SOS63-09	2 May 2003 18:23
19	19	4gf17541.d	1.	1232 500 PPB	SOS64-09	2 May 2003 18:41
20	20	4gf17542.d	1.	1232 ALT 500 PPB	SOS64-10	2 May 2003 18:59
21	21	4gf17543.d	1.	1221 500 PPB	SOS64-07	2 May 2003 19:[illegible]
22	22	4gf17544.d	1.	1221 ALT 500 PPB	SOS64-43	2 May 2003 19:36
23	23	4gf17545.d	1.	WG139612-08 1660 CCV 500 PPB	1,1 SOS63-02	2 May 2003 19:54
24	24	4gf17546.d	1.	L0304426-17 CF	1,1 WATER CF	2 May 2003 20:13
25	25	4gf17547.d	1.	L0304447-01 CF	1,1 WATER CF	2 May 2003 20:31
26	26	4gf17548.d	1.	L0304554-01 CF	7,1 SOIL CF	2 May 2003 20:49
27	27	4gf17549.d	1.	L0304594-03 CF	7,1 SOIL CF	2 May 2003 21:07
	28	4gf17550.d	1.	WG139612-09 1660 CCV 500 PPB	1,1 SOS63-02	2 May 2003 21:26
	29	4gf17551.d	1.	INST. BLANK	SOS64-38	2 May 2003 21:44
30	30	4gf17552.d	1.	L0304441-01 CF	1,1 WATER CF	2 May 2003 22:02
31	31	4gf17553.d	100.	L0304441-03 CF 100x	1,100 WATER CF	2 May 2003 22:20
32	32	4gf17554.d	1.	L0304509-01 CF	7,1 SOIL CF	2 May 2003 22:38
33	33	4gf17555.d	1.	L0304509-02 CF	7,1 SOIL CF	2 May 2003 22:57
34	34	4gf17556.d	1.	L0304509-03 CF	7,1 SOIL CF	2 May 2003 23:15
35	35	4gf17557.d	1.	L0304509-04 CF	7,1 SOIL CF	2 May 2003 23:33
36	36	4gf17558.d	1.	L0304509-09 CF	7,1 SOIL CF	2 May 2003 23:51
37	37	4gf17559.d	1.	L0304509-10 CF	7,1 SOIL CF	3 May 2003 00:09
38	38	4gf17560.d	1.	L0304509-11 CF	7,1 SOIL CF	3 May 2003 00:28
39	39	4gf17561.d	1.	L0304547-01 CF	13,1 WIPE	3 May 2003 00:46
40	40	4gf17562.d	1.	1254 CCV 500 PPB	SOS63-41	3 May 2003 01:04
41	41	4gf17563.d	1.	INST. BLANK	SOS64-38	3 May 2003 01:22
42	42	4gf17564.d	20.	L0304548-01 CF 20x	7,20 SOIL CF	3 May 2003 01:40
43	43	4gf17565.d	1.	L0304596-05 CF	7,1,RE SOIL CF	3 May 2003 01:59
44	44	4gf17566.d	1.	L0304596-07 CF	7,1,RE SOIL CF	3 May 2003 02:[illegible]
45	45	4gf17567.d	1.	L0304651-02 CF	7,1 SOIL CF	3 May 2003 02:35
46	46	4gf17568.d	1.	1660 CCV 500 PPB	SOS63-02	3 May 2003 02:53
47	47	4gf17569.d	1.	INST. BLANK	SOS63-48	3 May 2003 03:11

ECQ 5/4/03
rdl 5/5/03

KEMRON ENVIRONMENTAL SERVICES
Semivolatile GC Laboratory Maintenance Log

Analysis Date/Time 5/2/03 Instrument ID HP 4 Column ID RTx-CLP II Front Data Subdirectory 050203
Analyst Initials ECL

SOP # GCS09 Rev. # ___ 8081A ___
SOP # GCS04 Rev. # ___ 8151A ___
SOP # GCS03 Rev. # ___ PRO ___
SOP # GCS02 Rev. # ___ 8015B Mod (Alcohol) ___

SOP # GCS10 Rev. # 5 8082 ✓
SOP # GCS01 Rev. # ___ 8100 ___
SOP # GCS02 Rev. # ___ 8015B Mod (DRO) ___
SOP # GCS07 Rev. # ___ 8011 ___

Analysis Date/Time _____ Instrument ID _____ Column ID _____ Data Subdirectory _____

Daily Check
- ☑ Gases >500 psi

Preventative Maintenance
- ☐ Change o-ring
- ☐ Change liner
- ☐ Change septum
- ☐ Clip column (___cm)
- ☐ Injection port seal (goldseal)
- ☐ Change gases _____

Returned To Control?
Yes ___ No ___

Additional Maintenance
Problem: _____

Action Taken: _____

Comments

Reviewed By: [illegible] 5/7/03

Parameter: PCB-S SOP #: EXP 02 Revision #: 11
Extraction Analyst(s): PAS, CAF TV/KD Analyst(s): CAF
Date/Time Extracted: 04-30-03 950 Date TV/KD: 4-30-03
Spike/Surrogate Analyst: CAF Witness: PAS
Surrogate #: ESSC0444-10 Earliest Hold Date: 5-08-03
Spike #: A = ~~ESSC0444-07~~ CAF 4-30-03 43-03 #2 Spike #: B = —

Extraction Work Group WG 139368
Analytical Work Group WG 139446

Extract Relinquished By: CAF
Extract Received By & Date: 04/30/03

	Sample ID	Test Code	pH / <2	N	>12	Initial Vol / Wt	Amount Surrogate	Amount Spike	Final Volume	Extract Color	Emulsions / A	BN	N	Comments
1	Blank				*	30.00 g	200 uL		10 mL	T				WG 139365 C1
2	LCS				*	30.00 g		100 uL						WG 139365 C2
3	LCS DUP				*	30.00 g								WG 139365 C3
4	CH-554-01	8082			*	30.00 g								
5	CH-554-03				*	30.00 g								
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														

CAF 4-30-03

Methylene Chloride Lot #: —
Hexane Lot #: 43057
Ether Lot #: —
Methanol Lot #: —
Solvent: — Lot #: —
Reagent: 9416 Lot #: ER 0005-27
Reagent: LAB Sand Lot #: → X35635
Reagent: powd. Na_2SO_4 Lot #: → X33157
Acid: Con H_2SO_4 Lot #: X43027
Florisil Lot #: Y01559
Silica Gel Lot #: —
IR Analyst / Date / Time: —
Dried Na_2SO_4 Lot #: ER 0005-19

Color Code
T = Transparent
C = Colored
O = Opaque

SW-846 Method			On	Off	On	Off
Continuous	3520C					
Soxhlet	3540C					
ASE*	3545					
Sep Funnel	3510C					
Sonication	3550B	✓				
Waste	3580A					

* Accelerated Solvent Extractor (ASE)

Clean-ups			
Florisil 3620B	✓	GPC 3640A	
Silica Gel 3630C		Other	
Acid 3665A	✓	N/A	
Sulfur 3660B			

Peer Reviewed By: [signature] Date: 04/30/03

Extraction Notes For Volume # 202 Page # 73

General Comments: * all wts. are 30 ± .10 g.

Extraction Anomalies: NONE

Concentration Anomalies: NONE

Clean-Up Anomalies: NONE

Supervisor Review: _____ Date: _____

Parameter: PCB H_2O SOP #: EXP01 Revision #: 10
Extraction Analyst(s): CAF, PAS TV/KD Analyst(s): —
Date/Time Extracted: 4-29-03 @ 0900 Date TV/KD: 04-29-03
Spike/Surrogate Analyst: CAF Witness: PAS
Surrogate #: ES50244-10 Earliest Hold Date: 4-30-03
Spike #: A = ES50043-03 #2 Spike #: B = —

Extraction Work Group WG 139270
Analytical Work Group WG 139386

Extract Relinquished By: —
Extract Received By & Date: CAF 4/29/03

	Sample ID	Test Code	pH / <2	N	>12	Initial Vol / Wt	Amount Surrogate	Amount Spike	Final Volume	Extract Color	Emulsions / A	BN	N	Comments
1	Blank			✓		1000 mL	200 mL		10 mL	T				WG 139270-01
2	LCS			✓				100 mL						WG -02
3	LCS Dup			✓										WG -03
4	04-558-01	8082		✓		910 mL								
5	-02			✓		910 mL								
6	-03			✓		910 mL								
7	-04			✓		900 mL								
8	04-574-01			✓		900 mL								
9	-02			✓		890 mL								
10	-03			✓		910 mL								
11	-04			✓		910 mL								
12	-05			✓		900 mL								
13	-06			✓		910 mL								
14	04-587-02			✓		950 mL								
15	04-593-01			✓		860 mL								
16	-02			✓		900 mL								
17	-03			✓		860 mL								
18	04-594-01			✓		870 mL								
19	-02			✓		920 mL								
20	04-607-01			✓		480 mL								
21														
22														
23														
24														

04-29-03

Methylene Chloride Lot #: 43010
Hexane Lot #: 43057
Ether Lot #: —
Methanol Lot #: —
Solvent: — Lot #: —
Reagent: 94% Lot #: ER0005-27
Reagent: Lot #:
Reagent: Lot #:
Acid: Con H_2SO_4 Lot #: 14527
Florisil Lot #: Y01559
Silica Gel Lot #: —
IR Analyst / Date / Time: —
Dried Na_2SO_4 Lot #: ER0005-25

Color Code
T = Transparent
C = Colored
O = Opaque

SW-846 Method			On	Off	On	Off
Continuous	3520C					
Soxhlet	3540C					
ASE*	3545					
Sep Funnel	3510C	✓				
Sonication	3550B					
Waste	3580A					

* Accelerated Solvent Extractor (ASE)

Clean-ups			
Florisil 3620B	✓	GPC 3640A	
Silica Gel 3630C		Other	
Acid 3665A	✓	N/A	
Sulfur 3660B			

Peer Reviewed By: [signature] Date: 04-29-03

Extraction Notes For Volume # 201 Page # 95

General Comments: None

Extraction Anomalies: None

Concentration Anomalies: None

Clean-Up Anomalies: None

Supervisor Review: _____ Date: _____

Semi-Volatile GC Checklist

Run Date: 3/17/03

Analyst: ECL

Instrument: HP4 Rear

Method: 8082

Workorders:	Due Date:	Priority:
03-318	3/18	PIT.

		Analyst
System Performance Check:	Endrin/DDT Breakdown	
Initial Calibration:	Average RF	✓
	Linear or quadratic regression	
	Alt Source Check	✓
Continuing Calibration:	Continuing Calibration	✓
	Client Specific Requirements	✓
	Ending Standards	✓
	Special Standards	✓
Blanks:	Quant Report/Chromatogram	✓
	Surrogates	✓
LCS/LCS DUP:	Quant Report/Chromatogram	✓
	Surrogates	✓
	Spike Compounds	✓
	MS/MSD	
Samples:	Quant Reports/Chromatograms	✓
	Surrogates	✓
	Dilution runs	
	Check Sample Historics	✓
Data Package:	Manual Integrations	
	Run logs	✓
	Bench sheets	✓
	QC sheets	✓
	Upload results	✓
	Seedpak workgroups	✓
	Level 2	
	Level 3	
	Level 4 copies	✓
	Level x	
	Case narratives	

	Supervisor
Corrective Action:	
Results Reporting/Data Qualifiers:	
Client Data Package Assembly:	
Check for Completeness:	
Check for compliance with method and project requirements:	
Check the reasonableness of results:	

√ = Checked & OK

NA = Not Applicable

Comments:

Primary Reviewer: ECL 3/18/03

Secondary Reviewer: [illegible] 3/18/03

Supervisor Review: [illegible] 3/18/03

Semi-Volatile GC Checklist

Run Date: 4/30/03

Analyst: ECL

Instrument: HP4

Method: 8082

Workorders:	Due Date:	Priority:
04-558	5/8	–
04-576	5/9	–
04-587	5/9	F1
04-593	5/12	–
04-594	5/5	P1
04-607	5/1	P1

		Analyst
System Performance Check:	Endrin/DDT Breakdown	
Initial Calibration:	Average RF	
	Linear or quadratic regression	
	Alt Source Check	
Continuing Calibration:	Continuing Calibration	✓
	Client Specific Requirements	✓
	Ending Standards	✓
	Special Standards	
Blanks:	Quant Report/Chromatogram	✓
	Surrogates	✓
LCS/LCS DUP:	Quant Report/Chromatogram	✓
	Surrogates	✓
	Spike Compounds	✓
	MS/MSD	
Samples:	Quant Reports/Chromatograms	✓
	Surrogates	✓
	Dilution runs	
	Check Sample Histories	
Data Package:	Manual Integrations	
	Run logs	✓
	Bench sheets	✓
	QC sheets	✓
	Upload results	✓
	Seedpak workgroups	✓
	Level 2	✓
	Level 3	
	Level 4 copies	✓
	Level x	
	Case narratives	

	Supervisor
Corrective Action:	
Results Reporting/Data Qualifiers:	
Client Data Package Assembly:	
Check for Completeness:	
Check for compliance with method and project requirements:	
Check the reasonableness of results:	

√ = Checked & OK

NA = Not Applicable

Comments:

Primary Reviewer: ECL 5/1/03

Secondary Reviewer: [illegible] 5/1/03

Supervisor Review: [illegible] 5/1/03

Semi-Volatile GC Checklist

Run Date: 5/1/03

Analyst: ECL

Instrument: HP 4

Method: 8082

Workorders:	Due Date:	Priority:
04-596 RE	4/29	PIT
04-651	5/2	PIT
04-672	5/1	P1
04-554	5/2	P1
04-594	5/5	P1

		Analyst
System Performance Check:	Endrin/DDT Breakdown	
Initial Calibration:	Average RF	
	Linear or quadratic regression	
	Alt Source Check	
Continuing Calibration:	Continuing Calibration	✓
	Client Specific Requirements	✓
	Ending Standards	✓
	Special Standards	✓
Blanks:	Quant Report/Chromatogram	✓
	Surrogates	✓
LCS/LCS DUP:	Quant Report/Chromatogram	✓
	Surrogates	✓
	Spike Compounds	✓
	MS/MSD	
Samples:	Quant Reports/Chromatograms	✓
	Surrogates	✓
	Dilution runs	✓
	Check Sample Histories	✓
Data Package:	Manual Integrations	
	Run logs	✓
	Bench sheets	✓
	QC sheets	✓
	Upload results	✓
	Seedpak workgroups	✓
	Level 2	✓
	Level 3	
	Level 4 copies	✓
	Level x	
	Case narratives	✓

	Supervisor
Corrective Action:	
Results Reporting/Data Qualifiers:	
Client Data Package Assembly:	
Check for Completeness:	
Check for compliance with method and project requirements:	
Check the reasonableness of results:	

√ = Checked & OK

NA = Not Applicable

Comments:

Primary Reviewer: ECL 5/2/03

Secondary Reviewer: mdc 5/2/03

Supervisor Review: mdc 5/2/03

Semi-Volatile GC Checklist

Run Date: 5/2/03

Analyst: ECL

Instrument: HP4 Front

Method: 8082

Workorders: Due Date: Priority:

04-441
04-507
04-547
04-548
04-596
04-651
04-426
04-447
04-594

Confirmations

		Analyst
System Performance Check:	Endrin/DDT Breakdown	
Initial Calibration:	Average RF	✓
	Linear or quadriatic regression	
	All Source Check	✓
Continuing Calibration:	Continuing Calibration	✓
	Client Specific Requirements	✓
	Ending Standards	✓
	Special Standards	✓
Blanks:	Quant Report/Chromatogram	
	Surrogates	
LCS/LCS DUP:	Quant Report/Chromatogram	
	Surrogates	
	Spike Compounds	
	MS/MSD	
Samples:	Quant Reports/Chromatograms	✓
	Surrogates	✓
	Dilution runs	✓
	Check Sample Histories	✓
Data Package:	Manual Integrations	
	Run logs	✓
	Bench sheets	
	QC sheets	
	Upload results	
	Seedpak workgroups	
	Level 2	
	Level 3	
	Level 4 copies	
	Level x	
	Case narratives	

	Supervisor
Corrective Action:	
Results Reporting/Data Qualifiers:	
Client Data Package Assembly:	
Check for Completeness:	
Check for compliance with method and project requirements:	
Check the reasonableness of results:	

√ = Checked & OK

NA = Not Applicable

Comments:

Primary Reviewer: ECL 5/4/03

Secondary Reviewer: [illegible] 5/5/03

Supervisor Review: [illegible] 5/5/03

Example 8082 Calculations

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

			Example:
	RF = As/ Cs		
Where:	As = Area of the compound being measured in the standard		10000
	Cs = Concentration of the compound being measured (ng/ml).		100
		RF	**100**

2.0 Calculating the concentration (C) of a compound in water using data from prep log and quantitation report:*

			Example:
	C = [(Ax)(Vf)(D)] / [(RF)(Vi)]		
Where:	Ax = Area of the compound being measured		10000
	Vf = Final volume of sample extract (mL). (prep log)		1
	D = Dilution factor for sample as a multiplier (10X = 10).		1
	RF = Response factor from ICAL calculated above.		100
	Vi = Initial volume of sample (mL). (prep log)		1000
		C (ug/L)	**0.1**

3.0 Calculating the concentration (C) of a compound in soil using data from prep log and quantitation report:*

			Example:
	C = [(Ax)(Vf)(D)] / [(RF)(Vi)]		
Where:	Ax = Area of the compound being measured		10000
	Vf = Final volume of sample extract (mL).		1
	D = Dilution factor for sample as a multiplier (10X = 10).		1
	RF = Response factor from ICAL calculated above.		100
	Wi = Initial weight of sample (g).		30
		C (ug/kg)	**3.333333**

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

2.2.4 Herbicide GC Data (8151)

REPORT NARRATIVE
GC HERBICIDES

KEMRON Report No.: L0304594

METHOD

Preparation: SW- 846 3550B(Soils) 3510C(Waters)
Analysis: SW-846 8151

HOLDING TIMES

Sample Preparation: All holding times were met.
Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial calibrations: For all compounds which yielded a %RSD greater than 15%, linear or higher order equations were applied. All acceptance criteria were met.
Alternate Source Standards: All acceptance criteria were met.
Continuing Calibration : All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.
Laboratory Control Samples: The LCS yielded a % recovery for MCPP that was above the acceptance limit. All other acceptance criteria were met.
Matrix Spikes: The MS/MSD results were not associated with this sample delivery group.

SAMPLES

Surrogates: All acceptance criteria were met.
Samples: For all samples which yielded results with an RPD of greater than 40% between the primary and confirmation column the appropriate flag was applied. All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: ECL REVIEWED: [signature] DATE: 5/6/03

Rev. 7/14/00

HERBICIDES B GC DATA (8151)

Login Number 04-594

A. QC Summary

✓ Method Blank Summary
✓ Method Blank Results
✓ Laboratory Control Sample (LCS)
NA Matrix Spike/Matrix Spike Duplicate (MS/MSD)
✓ Holding Time Summary
✓ Surrogate Recovery Summary
✓ Initial Calibration Summary
✓ Initial Calibration Verification (ICV) Form (Second Source)
✓ Continuing Calibration Verification (CCV)
✓ Instrument Run Log
✓ Extraction Bench Sheet

B. Sample Data

✓ Target compound and surrogate results summary (See Summary Report)
✓ Chromatograms and quantitation report

C. Standards Data

✓ Initial calibration (ICAL) summary form
✓ Chromatograms and quantitation report for ICAL standards
✓ Initial calibration verification (ICV/second source) summary forms
✓ Initial calibration verification (ICV/second source) quantitation reports and chromatograms
✓ Continuing Calibration Verification (CCV) summary forms
✓ Continuing Calibration Verification (CCV) quantitation reports and chromatograms
✓ Retention Time Window Summary

D. Raw QC Data

✓ Method blank chromatogram and quantitation report
✓ LCS chromatogram and quantitation report
NA MS/MSD chromatogram and quantitation report
✓ Instrument Run Log
✓ Extraction Bench Sheet
✓ Daily Checklist
✓ Example Calculations

Checked By: ECZ Date: 5-5-03

2.2.4.1 QC Summary

KEMRON ENVIRONMENTAL SERVICES
METHOD BLANK SUMMARY

Login Number: L0304594
Blank File ID: 1G5872.R
Date Analyzed: 05/01/03
Time Analyzed: 16:37
Analyst: ECL

Work Group: WG139504
Blank Sample ID: WG139417-02
Instrument ID: HP1
Method: 8151A

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
05-177511-DW2-042503	L0304594-01	1G5883.R	05/01/03 23:04	CR

KEMRON FORMS - Modified 03/21/2003
Version 1.2
Report generated 05/05/2003 12:59

KEMRON ENVIRONMENTAL SERVICES
METHOD BLANK SUMMARY

Login Number: L0304594
Blank File ID: 1G5872.F
Date Analyzed: 05/01/03
Time Analyzed: 16:02
Analyst: ECL

Work Group: WG139504
Blank Sample ID: WG139417-02
Instrument ID: HP1
Method: 8151A

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG139417-03	1G5873.F	05/01/03 16:37	01
05-177511-DW2-042503	L0304594-01	1G5883.F	05/01/03 22:28	01
05-177511-DW3-042503	L0304594-02	1G5884.F	05/01/03 23:04	01
05-177511-SP2-042503	L0304594-03	1G5887.F	05/02/03 00:50	01

KEMRON FORMS - Modified 03/21/2003
Version 1.2
Report generated 05/05/2003 12:59

KEMRON ENVIRONMENTAL SERVICES
BLANK REPORT

Login Number: L0304594
Instrument ID: HP1
File ID: 1G5872.F
Workgroup (AAB#): WG139504
Contract #:

Run Date: 05/01/2003
Run Time: 16:02
Analyst: ECL
Matrix: Water
Cal ID: HP1-15-APR-03

Sample ID: WG139417-02
Prep Method: METHOD
Method: 8151A
Units: ug/L

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
2,4-D	1.00	2.00	1.00	1	U
2,4-DB	1.00	2.00	1.00	1	U
2,4,5-T	0.100	0.200	0.100	1	U
2,4,5-TP (Silvex)	0.100	0.200	0.100	1	U
Dalapon	2.50	5.00	2.50	1	U
Dicamba	0.100	0.200	0.100	1	U
Dichloroprop	1.00	2.00	1.00	1	U
Dinoseb	0.500	1.00	0.500	1	U
MCPA	100	250	100	1	U
MCPP	100	250	100	1	U
Pentachlorophenol	0.100	0.200	0.100	1	U

Surrogates	% Recovery	Surrogate Limits	Qualifier
2,4-Dichlorophenylacetic acid	88.2	20 - 144	PASS

* Analyte detected above RDL
ND Analyte Not detected at or above reporting limit

KEMRON FORMS - Modified 05/02/2003
Version 1.3
Report generated 05/05/2003 12:59

KEMRON ENVIRONMENTAL SERVICES
LABORATORY CONTROL SAMPLE

Login Number: L0304594
Instrument ID: HP1
File ID: 1G5873.F
Workgroup (AAB#): WG139504
Contract #:

Run Date: 05/01/2003
Run Time: 16:37
Analyst: ECL
Matrix: Water

Sample ID: WG139417-03
Prep Method: METHOD
Method: 8151A
Units: ug/L
Cal ID: HP1-15-APR-2003 18:16

Analytes	Expected	Found	% Rec	LCS Limits	Q
2,4,5-T	0.500	0.538	108	24 - 133	
2,4,5-TP (Silvex)	0.500	0.499	99.7	38 - 130	
2,4-D	5.00	4.61	92.1	29 - 133	
2,4-DB	5.00	4.01	80.3	29 - 123	
Dinoseb	2.50	2.01	80.6	28 - 92	
Dalapon	12.5	2.71	21.7	13 - 101	
Dicamba	0.500	0.489	97.7	43 - 129	
Dichloroprop	5.00	5.13	103	42 - 118	
MCPA	500	486	97.2	26 - 114	
MCPP	500	677	135	32 - 119	*
Pentachlorophenol	0.500	0.417	83.5	38 - 130	

Surrogates	% Recovery	Surrogate Limits	Qualifier
2,4-Dichlorophenylacetic acid	97.2	20 - 144	PASS

* Analyte outside control limits

NS Analyte not spiked

KEMRON FORMS - Modified 05/01/2003
Version 1.3
Report generated 05/05/2003 12:59

KEMRON ENVIRONMENTAL SERVICES
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method:8151A

AAB#:WG139504

Login Number:L0304594

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
05-177511-DW2-042503	04/25/03	04/26/03	04/30/03	7	5.19	05/01/03	40	1.31	
05-177511-DW2-042503	04/25/03	04/26/03	04/30/03	7	5.19	05/01/03	40	1.34	
05-177511-DW3-042503	04/25/03	04/26/03	04/30/03	7	5.16	05/01/03	40	1.34	
05-177511-DW3-042503	04/25/03	04/26/03	04/30/03	7	5.16	05/01/03	40	1.36	

* EXT = MISSED EXTRACTION HOLD TIME
*ANAL = MISSED ANALYTICAL HOLD TIME

KEMRON FORMS - Modified 12/06/2002
Version 1.2
Report generated 05/05/2003 12:59

KEMRON ENVIRONMENTAL SERVICES
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method:8151A

AAB#:WG139504

Login Number:L0304594

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
05-177511-SP2-042503	04/25/03	04/26/03	04/30/03	10.1	5.06	05/02/03	40	1.41	
05-177511-SP2-042503	04/25/03	04/26/03	04/30/03	10.1	5.06	05/02/03	40	1.43	

* EXT = MISSED EXTRACTION HOLD TIME
*ANAL = MISSED ANALYTICAL HOLD TIME

KEMRON FORMS - Modified 12/06/2002
Version 1.2
Report generated 05/05/2003 12:59

KEMRON ENVIRONMENTAL SERVICES
SURROGATE STANDARDS

Login Number: L0304594
Instrument Id: HP1
Workgroup (AAB#): WG139504

Method: 8151
CAL ID: HP1-15-APR-03
Matrix: WATER

Sample Number	Dilution	Tag	1
L0304594-01	1.00	01	97.4
L0304594-01	1.00	CF1	160
L0304594-02	1.00	01	99.7
WG139417-02	1.00	01	88.2
WG139417-03	1.00	01	97.2

Surrogates	Surrogate Limits		
1 - 2,4-Dichlorophenylacetic acid	20	-	144

Underline = Result out of surrogate limits

DL = surrogate diluted out

ND = surrogate not detected

KEMRON FORMS - Modified 01/22/2003
Version 1.2
Report generated 05/05/2003 12:59

KEMRON ENVIRONMENTAL SERVICES
SURROGATE STANDARDS

Login Number: L0304594
Instrument Id: HP1
Workgroup (AAB#): WG139504

Method: 8151
CAL ID: HP1-15-APR-03
Matrix: TCLP

Sample Number	Dilution	Tag	1
L0304594-03	1.00	01	84.1

Surrogates	Surrogate Limits		
1 - 2,4-Dichlorophenylacetic acid	20	-	144

Underline = Result out of surrogate limits

DL = surrogate diluted out

ND = surrogate not detected

Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Wed Apr 16 12:06:45 2003

Calibration Files
5 =1G5758.D 4 =1G5759.D 3 =1G5760.D
2 =1G5761.D 1 =1G5762.D

		Compound	5	4	3	2	1	Avg	%RSD
1)		Dalapon	1.589	1.767	1.861	2.006	2.161	1.877#E3	11.69
2)	S	2,4-Dichlorophenylace	0.848	0.963	1.041	1.158	1.281	1.059#E3	15.90
3)		MCPA	3.173	3.478	3.636	3.743	3.524	3.511#E3	6.13
4)		Dicamba	4.722	5.059	5.002	5.087	5.167	5.007#E3	3.40
5)		MCPP	2.082	2.201	2.156	2.051	1.570	2.012#E3	12.63
6)		Dichloroprop	1.118	1.265	1.395	1.575	1.668	1.404#E3	15.92
7)		2,4-D	1.355	1.530	1.725	1.999	2.146	1.751#E3	18.60
8)		Pentachlorophenol	1.966	2.129	2.165	2.202	2.123	2.117#E4	4.27
9)		Silvex	8.125	8.429	8.355	8.481	8.290	8.336#E3	1.66
10)		2,4,5-T	7.615	8.352	8.693	9.513	7.869	8.408#E3	8.87
11)		Dinoseb	5.477	6.115	6.589	7.131	7.514	6.565#E3	12.30
12)		2,4-DB	0.852	0.949	0.986	1.063	1.170	1.004#E3	11.93

Signal #2 Calibration Files
5 =1G5758.D 4 =1G5759.D 3 =1G5760.D
2 =1G5761.D 1 =1G5762.D

		Compound	5	4	3	2	1	Avg	%RSD
1)		Dalapon	1.486	1.585	1.669	1.803	1.984	1.705#E3	11.41
2)	S	2,4-Dichlorophenylace	0.784	0.997	1.084	1.204	1.351	1.084#E3	19.76
3)		MCPA	2.980	3.963	4.264	4.581	4.791	4.116#E3	17.21
4)		Dicamba	4.275	5.214	5.354	5.649	5.960	5.291#E3	12.02
5)		MCPP	2.113	2.540	2.685	2.526	1.967	2.366#E3	13.03
6)		Dichloroprop	1.050	1.306	1.455	1.633	1.757	1.440#E3	19.27
7)		2,4-D	1.174	1.573	1.715	1.880	2.009	1.670#E3	19.32
8)		Pentachlorophenol	1.688	2.237	2.301	2.388	2.365	2.196#E4	13.20
9)		Silvex	7.162	9.466	9.596	9.735	9.721	9.136#E3	12.14
10)		2,4,5-T	6.468	8.703	9.007	9.172	9.053	8.481#E3	13.42
11)		Dinoseb	4.718	6.256	6.760	7.455	8.029	6.644#E3	19.11
12)		2,4-DB	0.740	0.990	1.041	1.108	1.135	1.002#E3	15.72

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA\041503\1G5763.D\ECD1A.CH Vial: 6
Acq On : 15 Apr 2003 18:51 Operator: ECL
Sample : WG138386-06 HERB ALT ICV Inst : HP1
Misc : 1,1 SOS64-21 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\041503\1G5763.D\ECD2B.CH Vial: 6
Acq On : 15 Apr 2003 19:26 Operator: ECL
Sample : WG138386-01 HERB ICAL #1 Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events2.e

Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Wed Apr 16 12:06:45 2003
Response via : Multiple Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Dalapon	1250.000	1083.115	13.4	87	0.00
2	S	2,4-Dichlorophenylacetic ac	500.000	450.089	10.0	91	-0.01
3		MCPA	50.000	48.449	3.1	94	0.00
4		Dicamba	50.000	45.893	8.2	92	0.00
5		MCPP	50.000	49.640	0.7	93	0.00
6		Dichloroprop	500.000	501.584	-0.3	101	-0.01
7		2,4-D	500.000	427.613	14.5	87	-0.02
8		Pentachlorophenol	50.000	46.613	6.8	91	-0.01
9		Silvex	50.000	48.215	3.6	96	-0.02
10		2,4,5-T	50.000	46.435	7.1	90	-0.02
11		Dinoseb	250.000	231.746	7.3	92	-0.02
12		2,4-DB	500.000	437.110	12.6	89	-0.03

Signal #2

1		Dalapon	1250.000	1077.862	13.8	88	-0.01
2	S	2,4-Dichlorophenylacetic	500.000	453.447	9.3	91	-0.01
3		MCPA	50.000	45.793	8.4	88	0.00
4		Dicamba	50.000	47.139	5.7	93	0.00
5		MCPP	50.000	47.788	4.4	84	0.00
6		Dichloroprop	500.000	500.500	-0.1	99	0.00
7		2,4-D	500.000	437.155	12.6	85	0.00
8		Pentachlorophenol	50.000	47.032	5.9	90	0.00
9		Silvex	50.000	46.642	6.7	89	0.00
10		2,4,5-T	50.000	50.273	-0.5	95	-0.01
11		Dinoseb	250.000	227.044	9.2	89	0.00
12		2,4-DB	500.000	417.000	16.6#	80	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data File : C:\HPCHEM\1\DATA\050103\1G5871.D\ECD1A.CH Vial: 1
Acq On : 1 May 2003 14:01 Operator: ECL
Sample : WG139503-01 HERB CCV Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5871.D\ECD2B.CH Vial: 1
Acq On : 1 May 2003 14:37 Operator: ECL
Sample : HERB CCV Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events2.e

Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Wed Apr 16 12:06:45 2003
Response via : Multiple Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Dalapon	1250.000	1276.270	-2.1	103	0.00
2	S	2,4-Dichlorophenylacetic ac	500.000	489.007	2.2	99	0.01
3		MCPA	50.000	50.741	-1.5	98	0.00
4		Dicamba	50.000	51.820	-3.6	104	0.02
5		MCPP	50.000	51.998	-4.0	97	0.02
6		Dichloroprop	500.000	515.822	-3.2	104	0.00
7		2,4-D	500.000	504.003	-0.8	102	0.01
8		Pentachlorophenol	50.000	53.543	-7.1	105	0.01
9		Silvex	50.000	51.112	-2.2	102	0.01
10		2,4,5-T	50.000	49.880	0.2	96	0.00
11		Dinoseb	250.000	260.762	-4.3	104	0.00
12		2,4-DB	500.000	502.751	-0.6	102	0.00

Signal #2

1		Dalapon	1250.000	1352.807	-8.2	111	0.00
2	S	2,4-Dichlorophenylacetic	500.000	528.495	-5.7	106	0.00
3		MCPA	50.000	52.073	-4.1	101	0.00
4		Dicamba	50.000	55.390	-10.8	109	0.01
5		MCPP	50.000	56.701	-13.4	100	0.00
6		Dichloroprop	500.000	533.200	-6.6	106	0.00
7		2,4-D	500.000	532.237	-6.4	104	0.00
8		Pentachlorophenol	50.000	57.440	-14.9	110	0.00
9		Silvex	50.000	57.142	-14.3	109	0.00
10		2,4,5-T	50.000	57.351	-14.7	108	0.00
11		Dinoseb	250.000	267.853	-7.1	105	0.00
12		2,4-DB	500.000	560.037	-12.0	108	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1G5871.D 8151.M Thu May 01 16:01:10 2003 Page 1

Data File : C:\HPCHEM\1\DATA\050103\1G5882.D\ECD1A.CH Vial: 12
Acq On : 1 May 2003 21:53 Operator: ECL
Sample : WG139503-02 HERB CCV Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5882.D\ECD2B.CH Vial: 12
Acq On : 1 May 2003 22:28 Operator: ECL
Sample : L0304587-02 Inst : HP1
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events2.e

Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Wed Apr 16 12:06:45 2003
Response via : Multiple Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Dalapon	1250.000	1300.158	-4.0	105	0.02
2	S	2,4-Dichlorophenylacetic ac	500.000	506.144	-1.2	103	0.00
3		MCPA	50.000	52.651	-5.3	102	0.00
4		Dicamba	50.000	52.997	-6.0	106	0.00
5		MCPP	50.000	54.213	-8.4	101	0.00
6		Dichloroprop	500.000	524.057	-4.8	105	0.00
7		2,4-D	500.000	515.756	-3.2	105	0.00
8		Pentachlorophenol	50.000	54.698	-9.4	107	0.00
9		Silvex	50.000	53.214	-6.4	106	0.00
10		2,4,5-T	50.000	50.670	-1.3	98	0.00
11		Dinoseb	250.000	262.942	-5.2	105	-0.01
12		2,4-DB	500.000	517.553	-3.5	105	-0.01

Signal #2

1		Dalapon	1250.000	1351.993	-8.2	111	0.01
2	S	2,4-Dichlorophenylacetic	500.000	528.324	-5.7	106	0.00
3		MCPA	50.000	51.977	-4.0	100	0.00
4		Dicamba	50.000	55.483	-11.0	110	0.00
5		MCPP	50.000	56.848	-13.7	100	0.00
6		Dichloroprop	500.000	536.016	-7.2	106	0.00
7		2,4-D	500.000	535.476	-7.1	104	0.00
8		Pentachlorophenol	50.000	56.799	-13.6	108	0.00
9		Silvex	50.000	56.977	-14.0	108	0.00
10		2,4,5-T	50.000	56.259	-12.5	106	0.00
11		Dinoseb	250.000	269.156	-7.7	106	0.00
12		2,4-DB	500.000	562.310	-12.5	108	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1G5882.D 8151.M Fri May 02 08:01:38 2003 Page 1

Data File : C:\HPCHEM\1\DATA\050103\1G5888.D\ECD1A.CH Vial: 18
Acq On : 2 May 2003 1:25 Operator: ECL
Sample : WG139503-03 HERB CCV Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5888.D\ECD2B.CH Vial: 18
Acq On : 2 May 2003 2:01 Operator: ECL
Sample : L0304594-03 Inst : HP1
Misc : 17,1 WATER Multiplr: 1.00
IntFile : events2.e

Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Wed Apr 16 12:06:45 2003
Response via : Multiple Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Dalapon	1250.000	1312.210	-5.0	106	0.02
2	S	2,4-Dichlorophenylacetic ac	500.000	511.406	-2.3	104	0.00
3		MCPA	50.000	53.505	-7.0	103	0.00
4		Dicamba	50.000	53.406	-6.8	107	0.00
5		MCPP	50.000	55.484	-11.0	104	0.00
6		Dichloroprop	500.000	528.552	-5.7	106	0.00
7		2,4-D	500.000	520.334	-4.1	106	0.00
8		Pentachlorophenol	50.000	55.242	-10.5	108	0.00
9		Silvex	50.000	53.758	-7.5	107	0.00
10		2,4,5-T	50.000	51.164	-2.3	99	0.00
11		Dinoseb	250.000	266.124	-6.4	106	-0.01
12		2,4-DB	500.000	523.280	-4.7	107	-0.01

Signal #2

1		Dalapon	1250.000	1351.401	-8.1	110	0.02
2	S	2,4-Dichlorophenylacetic	500.000	527.188	-5.4	105	0.00
3		MCPA	50.000	51.723	-3.4	100	0.00
4		Dicamba	50.000	55.518	-11.0	110	0.00
5		MCPP	50.000	56.429	-12.9	99	0.00
6		Dichloroprop	500.000	536.944	-7.4	106	0.00
7		2,4-D	500.000	535.177	-7.0	104	0.00
8		Pentachlorophenol	50.000	56.994	-14.0	109	-0.01
9		Silvex	50.000	57.056	-14.1	109	0.00
10		2,4,5-T	50.000	56.308	-12.6	106	0.00
11		Dinoseb	250.000	268.751	-7.5	106	0.00
12		2,4-DB	500.000	564.466	-12.9	109	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1G5888.D 8151.M Fri May 02 08:03:18 2003 Page 1

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	1g5758.d	1.	WG138386-05 HERB ICAL #5	1,1 SOS63-10	15 Apr 103
2	2	1g5759.d	1.	WG138386-04 HERB ICAL #4	1,1 SOS63-10	15 Apr 103 12::
3	3	1g5760.d	1.	WG138386-03 HERB ICAL #3	1,1 SOS63-10	15 Apr 103 12::
4	4	1g5761.d	1.	WG138386-02 HERB ICAL #2	1,1 SOS63-10	15 Apr 103 12::
5	5	1g5762.d	1.	WG138386-01 HERB ICAL #1	1,1 SOS63-10	15 Apr 103 12::
6	6	1g5763.d	1.	WG138386-06 HERB ALT ICV	1,1 SOS64-21	15 Apr 103 12::
7	7	1g5764.d	1.	WG138293-02 BLANK V201 P09	1,1 WATER	15 Apr 103 12::
8	8	1g5765.d	1.	WG138293-03 LCS V201 P09	1,1 WATER	15 Apr 103 12::
9	9	1g5766.d	1.	WG138293-04 LCS DUP V201 P09	1,1 WATER	15 Apr 103 12::
10	10	1g5767.d	1.	WG138133-01 TCLP BLANK 4/10	17,1 WATER	15 Apr 103 12::
11	11	1g5768.d	1.	WG138293-01 L0304191-01	17,1 WATER	15 Apr 103 12::
12	12	1g5769.d	1.	WG138293-05 L0304191-01 MS	17,1 WATER	15 Apr 103 13::
13	13	1g5770.d	1.	WG138196-01 TCLP BLANK 4/11	17,1 WATER	15 Apr 103 13::
14	14	1g5771.d	1.	L0304184-01	17,1 WATER	15 Apr 103 13::
15	15	1g5772.d	1.	WG138386-07 HERB CCV	1,1 SOS63-10	16 Apr 103 12::
16	16	1g5773.d	1.	L0304198-01	1,1 WATER	16 Apr 103 12::
17	17	1g5774.d	1.	L0304198-02	1,1 WATER	16 Apr 103 12::
18	18	1g5775.d	1.	L0304198-03	1,1 WATER	16 Apr 103 13::
19	19	1g5776.d	1.	L0304198-04	1,1 WATER	16 Apr 103 13::
20	20	1g5777.d	1.	L0304198-05	1,1 WATER	16 Apr 103 13::
21	21	1g5778.d	1.	L0304248-01	1,1 WATER	16 Apr 103 13::
22	22	1g5779.d	1.	L0304248-02	1,1 WATER	16 Apr 103 13::
23	23	1g5780.d	1.	L0304248-03	1,1 WATER	16 Apr 103 12::
24	24	1g5781.d	1.	L0304248-04	1,1 WATER	16 Apr 103 12::
25	25	1g5782.d	1.	L0304248-05	1,1 WATER	16 Apr 103 12::
26	26	1g5783.d	1.	WG138386-08 HERB CCV	1,1 SOS63-10	16 Apr 103 12::

EC2 4/17/03

mdc 4/17/03

17 Apr 0308:38

KEMRON ENVIRONMENTAL SERVICES
Semivolatile GC Laboratory Maintenance Log

Analysis Date/Time 4/15/03 Instrument ID HF I Column ID RTx-CLP Front Data Subdirectory 041503
Analyst Initials EG

SOP # GCS09 Rev. # ___ 8081A ___
SOP # GCS04 Rev. # 2 8151A ✓
SOP # GCS03 Rev. # ___ PRO ___
SOP # GCS02 Rev. # ___ 8015B Mod (Alcohol) ___

SOP # GCS10 Rev. # ___ 8082 ___
SOP # GCS01 Rev. # ___ 8100 ___
SOP # GCS02 Rev. # ___ 8015B Mod (DRO) ___
SOP # GCS07 Rev. # ___ 8011 ___

Analysis Date/Time 4/15/03 Instrument ID HF I Column ID RTx-CLP II Back Data Subdirectory 041503

Daily Check
☑ Gases >500 psi

Preventative Maintenance
☐ Change o-ring
☑ Change liner
☑ Change septum
☑ Clip column (8 cm)
☐ Injection port seal (goldseal)
☐ Change gases ___

Returned To Control?
Yes ✓ No ___

Additional Maintenance
Problem: ___

Action Taken: ___

Comments

Reviewed By: [illegible] 4/17/03

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	1g5871.d	1.	WG139503-01 HERB CCV	1,1 SOS63-10	1 May 103 12:
2	2	1g5872.d	1.	WG139417-02 BLANK V201 P105	1,1 WATER	1 May 103 12::
3	3	1g5873.d	1.	WG139417-03 LCS V201 P105	1,1 WATER	1 May 103 12::
4	4	1g5874.d	1.	L0304585-01	1,1 WATER	1 May 103 12::
5	5	1g5875.d	1.	L0304585-02	1,1 WATER	1 May 103 12::
6	6	1g5876.d	1.	L0304585-03	1,1 WATER	1 May 103 12::
7	7	1g5877.d	1.	WG139417-01 L0304585-04	1,1 WATER	1 May 103 12::
8	8	1g5878.d	1.	WG139417-04 L0304585-05 MS	1,1 WATER	1 May 103 12::
9	9	1g5879.d	1.	WG139417-05 L0304585-06 MSD	1,1 WATER	1 May 103 12::
10	10	1g5880.d	1.	L0304585-10	1,1 WATER	1 May 103 12::
11	11	1g5881.d	1.	L0304587-02	1,1 WATER	1 May 103 12::
12	12	1g5882.d	1.	WG139503-02 HERB CCV	1,1 SOS63-10	1 May 103 12::
13	13	1g5883.d	1.	L0304594-01	1,1 WATER	1 May 103 13::
14	14	1g5884.d	1.	L0304594-02	1,1 WATER	1 May 103 13::
15	15	1g5885.d	1.	WG139291-01 TCLP BLANK 4/28	17,1 WATER	1 May 103 13::
16	16	1g5886.d	1.	L0304554-01	17,1 WATER	2 May 103 13::
17	17	1g5887.d	1.	L0304594-03	17,1 WATER	2 May 103 13::
18	18	1g5888.d	1.	WG139503-03 HERB CCV	1,1 SOS63-10	2 May 103 12::

EQ 5/2/03

02 May 0307:58

KEMRON ENVIRONMENTAL SERVICES
Semivolatile GC Laboratory Maintenance Log

Analysis Date/Time 5/1/03 Instrument ID HP I Column ID RTX-CLP Front Data Subdirectory 050103
Analyst Initials ECL

SOP # GCS09 Rev. # ___ 8081A ___
SOP # GCS04 Rev. # 2 8151A ✓
SOP # GCS03 Rev. # ___ PRO ___
SOP # GCS02 Rev. # ___ 8015B Mod (Alcohol) ___
SOP # GCS10 Rev. # ___ 8082 ___
SOP # GCS01 Rev. # ___ 8100 ___
SOP # GCS02 Rev. # ___ 8015B Mod (DRO) ___
SOP # GCS07 Rev. # ___ 8011 ___

Analysis Date/Time 5/1/03 Instrument ID HP I Column ID RTX-CLP II Back Data Subdirectory 050103

Daily Check
- ☑ Gases >500 psi

Preventative Maintenance
- ☐ Change o-ring
- ☐ Change liner
- ☐ Change septum
- ☐ Clip column (___ cm)
- ☐ Injection port seal (goldseal)
- ☐ Change gases _____

Returned To Control?
Yes ___ No ___

Additional Maintenance
Problem: _____

Action Taken: _____

Comments

Reviewed By: [illegible]

Parameter: HCB H_2O SOP #: EX401 Revision #: 12
Extraction Analyst(s): [illegible], PAS TV/KD Analyst(s): [illegible]
Date/Time Extracted: 04/30/03 @ 1500 Date TV/KD: 05-01-03
Spike/Surrogate Analyst: [illegible] Witness: CEB
Surrogate #: ESSCC44-07 Earliest Hold Date: 05/01/03
Spike #: A = ESSCC44-07 Spike #: B = —

Extraction Work Group WG 139417
Analytical Work Group WG 139504
Extract Relinquished By: [illegible]
Extract Received By & Date: 05/1/03

	Sample ID	Test Code	pH / <2	N	>12	Initial Vol / Wt	Amount Surrogate	Amount Spike	Final Volume	Extract Color	Emulsions / A	BN	N	Comments
1	Blank		✓		✓	1000 mL	1 mL		10 mL	T				WG 139417-02
2	LCS		✓		✓	⊥	⊥	1 mL	⊥	⊥				WG ⊥ -03
3	04-585-01	8151	✓		✓	980 mL	⊥		⊥	⊥				
4	-02	⊥	✓		✓	980 mL	⊥		⊥	⊥				
5	-03	⊥	✓		✓	1000 mL	⊥		⊥	⊥				
6	-04	⊥	✓		✓	⊥	⊥		⊥	⊥				WG-139417-01
7	-05MS	⊥	✓		✓	⊥	⊥	1 mL	⊥	⊥				⊥ -04*
8	-06MSD	⊥	✓		✓	⊥	⊥	⊥	⊥	⊥				⊥ -05*
9	⊥ -10	⊥	✓		✓	⊥	⊥	⊥	⊥	⊥				
10	04-587-02	⊥	✓		✓	960 mL	⊥	⊥	⊥	⊥				
11	04-594-01	⊥	✓		✓	900 mL	⊥	⊥	⊥	⊥				
12	⊥ -02	⊥	✓		✓	955 mL	⊥	⊥	⊥	⊥				
13	TBLK 4/30	8151-TC	✓		✓	100 mL	⊥	⊥	⊥	⊥				WG 139271-01
14	04-554-01	⊥	✓		✓	⊥	⊥	⊥	⊥	⊥				
15	04-594-03	⊥	✓		✓	⊥	⊥	⊥	⊥	⊥				
16														
17														
18														
19														
20														
21														
22														
23														
24														

[illegible] 05-01-03

Methylene Chloride Lot #: 43010
Hexane Lot #: 543054
Ether Lot #: 43049
Methanol Lot #: 43043
Solvent: — Lot #: —
Reagent: NaCl Lot #: 105H20
Reagent: 6 N NaOH Lot #: CR0005-14
Reagent: Iso-octane Lot #: VC4616
Acid: 12 N H_2SO_4 Lot #: CR0005-8
Florisil Lot #: —
Silica Gel Lot #: —
IR Analyst / Date / Time: —
Dried Na_2SO_4 Lot #: (Acidified) CR 0005-6

Color Code
T = Transparent
C = Colored
O = Opaque

SW-846 Method			On	Off	On	Off
Continuous	3520C					
Soxhlet	3540C					
ASE*	3545					
Sep Funnel	3510C	✓				
Sonication	3550B					
Waste	3580A					

* Accelerated Solvent Extractor (ASE)

Clean-ups			
Florisil 3620B		GPC 3640A	
Silica Gel 3630C		Other	✓
Acid 3665A		N/A	
Sulfur 3660B			

Peer Reviewed By: [illegible] Date: 05-01-03

Extraction Notes For Volume # 201 Page # 105

General Comments: * MS, MSD of 04-585-04
Diazomethane → KCCS-26
Silicic Acid → 2247N.7607

Extraction Anomalies: None

Concentration Anomalies: None

Clean-Up Anomalies: None

Supervisor Review: _____ Date: _____

2.2.4.2 Sample Data

Data File : C:\HPCHEM\1\DATA\050103\1G5883.D\ECD1A.CH Vial: 13
Acq On : 1 May 2003 22:28 Operator: ECL
Sample : L0304594-01 Inst : HP1
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5883.D\ECD2B.CH Vial: 13
Acq On : 1 May 2003 23:04 Operator: ECL
Sample : L0304594-01 Inst : HP1
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events2.e
Quant Time: May 2 9:25 2003 Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Fri May 02 09:25:07 2003
Response via : Initial Calibration
DataAcq Meth : 8151.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
S	2,4-Dichlorophen	9.85	10.32	515501	869639	487.001	802.292	#
	Spiked Amount 500.000 Range 20 - 144 Recovery =					97.40%	160.46%#	
	Target Compounds							
1)	Dalapon	0.00	0.00	0	0	N.D.	N.D.	
3)	MCPA	0.00	0.00	0	0	N.D.	N.D.	
4)	Dicamba	0.00	0.00	0	0	N.D.	N.D.	
5)	MCPP	10.42	0.00	490032	0	243.544	N.D.	#
6)	Dichloroprop	11.14	11.54	241457	77516	171.930	53.824	#
7)	2,4-D	11.47f	11.97	73611	58268	42.037	34.888	
8)	Pentachloropheno	11.67	12.43	788636	807964	37.251	36.794	
9)	Silvex	12.48f	12.98f	83631	54355	10.033	5.949	#
10)	2,4,5-T	12.82f	13.54f	79733	113445	9.483	13.377	#
11)	Dinoseb	14.65f	0.00	463794	0	70.647	N.D.	#
12)	2,4-DB	13.53	0.00	95829	0	95.467	N.D.	#

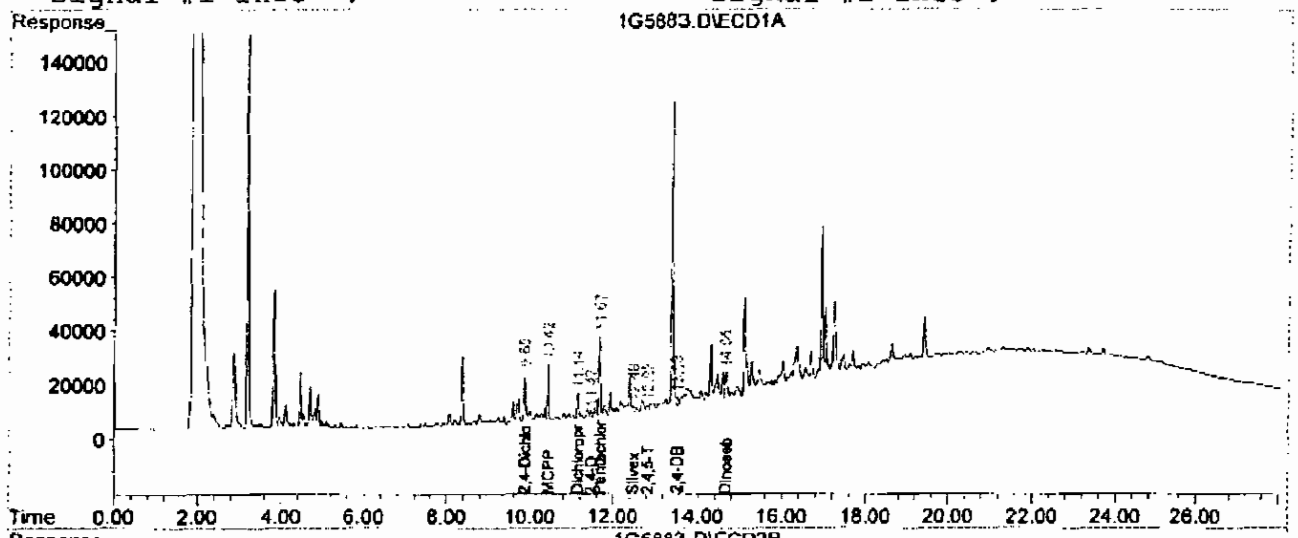
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)-manual int.

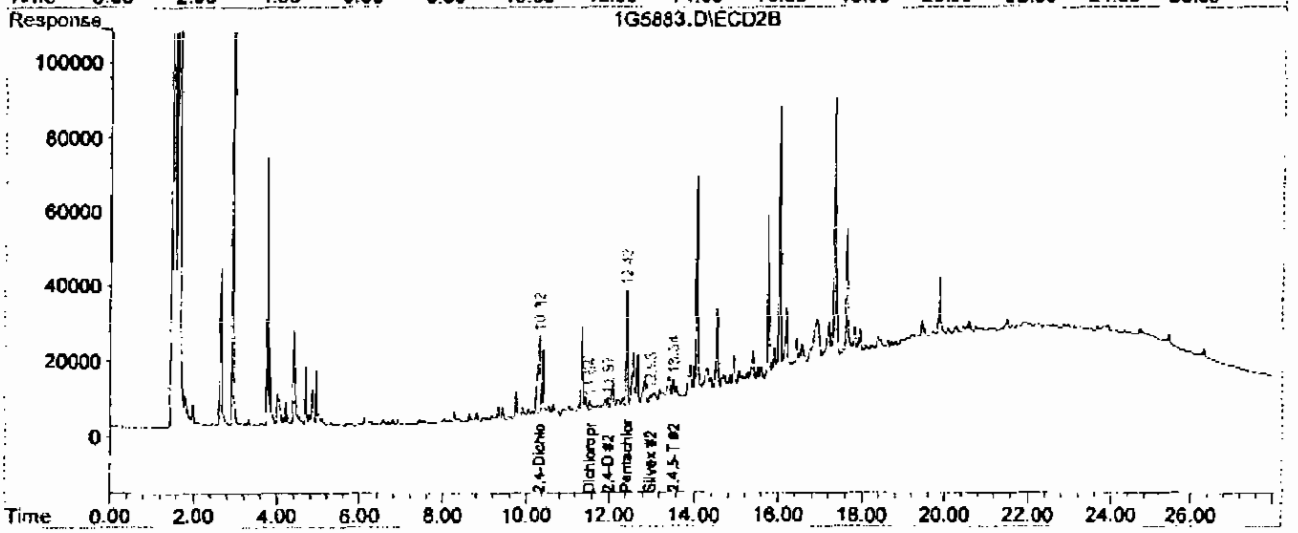
Data File : C:\HPCHEM\1\DATA\050103\1G5883.D\ECD1A.CH Vial: 13
Acq On : 1 May 2003 22:28 Operator: ECL
Sample : L0304594-01 Inst : HP1
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5883.D\ECD2B.CH Vial: 13
Acq On : 1 May 2003 23:04 Operator: ECL
Sample : L0304594-01 Inst : HP1
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events2.e
Quant Time: May 2 9:25 2003 Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Fri May 02 09:25:07 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8151.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

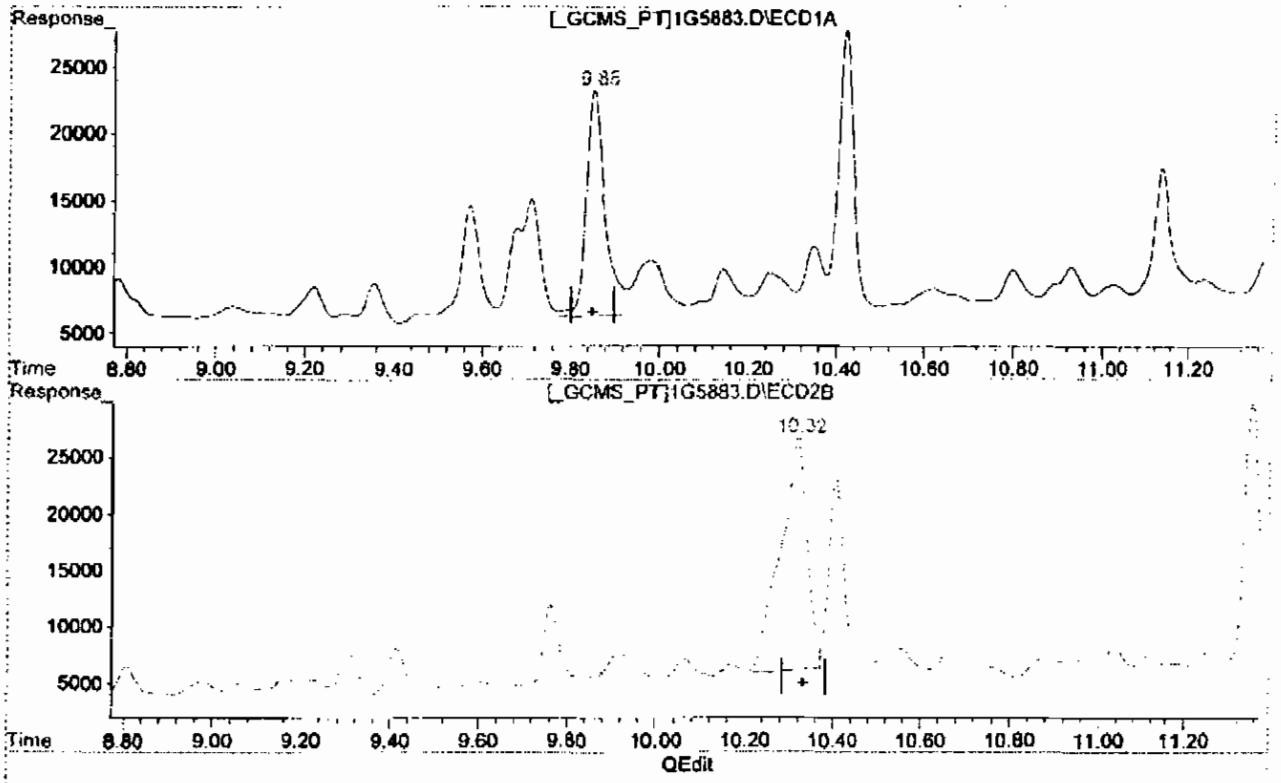




```
Data File : C:\HPCHEM\1\DATA\050103\1G5883.D\ECD1A.CH    Vial: 13
Acq On    :  1 May 2003  22:28                          Operator: ECL
Sample    : L0304594-01                                 Inst    : HP1
Misc      : 1,1 WATER                                   Multiplr: 1.00
IntFile   : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5883.D\ECD2B.CH    Vial: 13
Acq On    :  1 May 2003  23:04                          Operator: ECL
Sample    : L0304594-01                                 Inst    : HP1
Misc      : 1,1 WATER                                   Multiplr: 1.00
IntFile   : events2.e
Quant Time: May  2  9:25 2003  Quant Results File: 8151.RES


Method       : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title        : CALIBRATION April 15, 2003 @ 1851
Last Update  : Wed Apr 16 12:06:45 2003
Response via : Multiple Level Calibration
```



(2) 2,4-Dichlorophenylacetic acid (S)
9.85min 487.001ug/L
response 515501

(2) 2,4-Dichlorophenylacetic acid #2 (S)
10.32min 802.292ug/L
response 869639

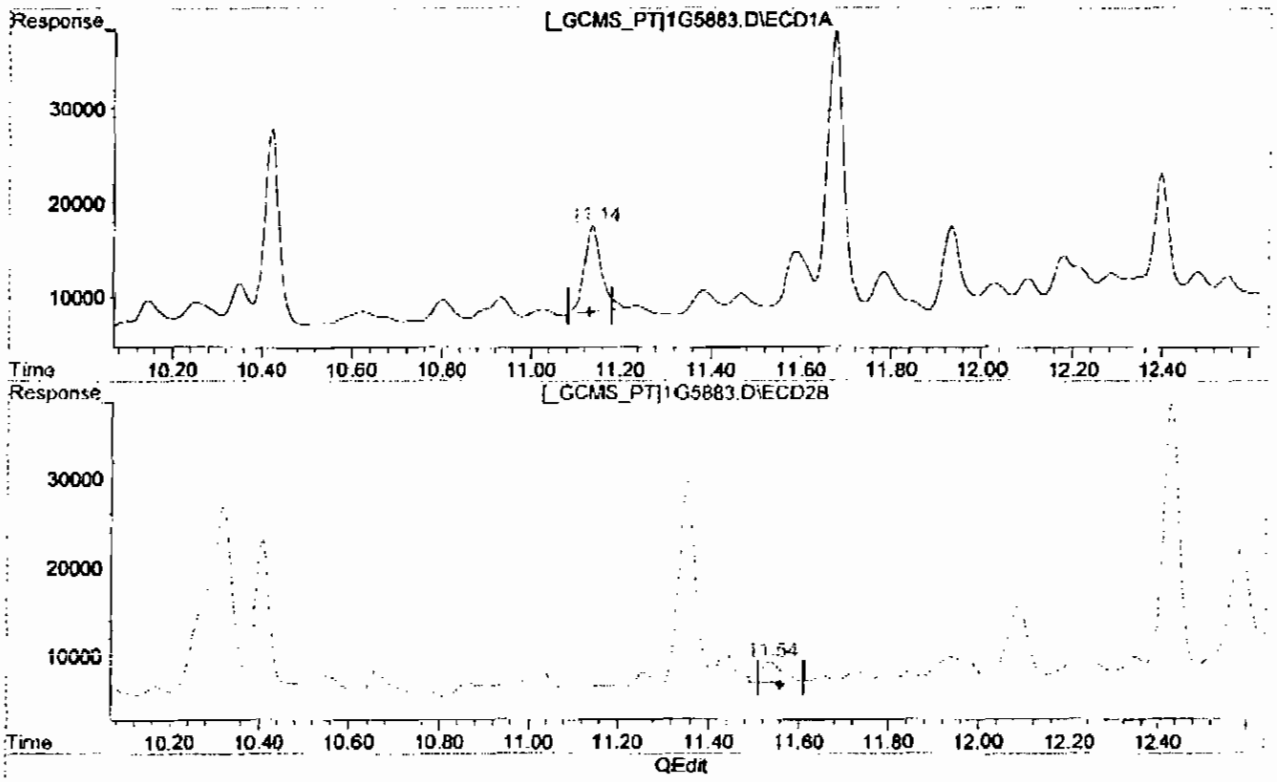
SMI.

(+) = Expected Retention Time
1G5883.D 8151.M Fri May 02 09:46:32 2003

```
Data File : C:\HPCHEM\1\DATA\050103\1G5883.D\ECD1A.CH     Vial: 13
Acq On    :  1 May 2003  22:28                          Operator: ECL
Sample    : L0304594-01                                 Inst    : HP1
Misc      : 1,1 WATER                                   Multiplr: 1.00
IntFile   : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5883.D\ECD2B.CH     Vial: 13
Acq On    :  1 May 2003  23:04                          Operator: ECL
Sample    : L0304594-01                                 Inst    : HP1
Misc      : 1,1 WATER                                   Multiplr: 1.00
IntFile   : events2.e
Quant Time: May  2  9:25 2003  Quant Results File: 8151.RES


Method       : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title        : CALIBRATION April 15, 2003 @ 1851
Last Update  : Wed Apr 16 12:06:45 2003
Response via : Multiple Level Calibration
```



(6) Dichloroprop
11.14min 171.930ug/L
response 241457

(6) Dichloroprop #2
11.54min 53.824ug/L
response 77516

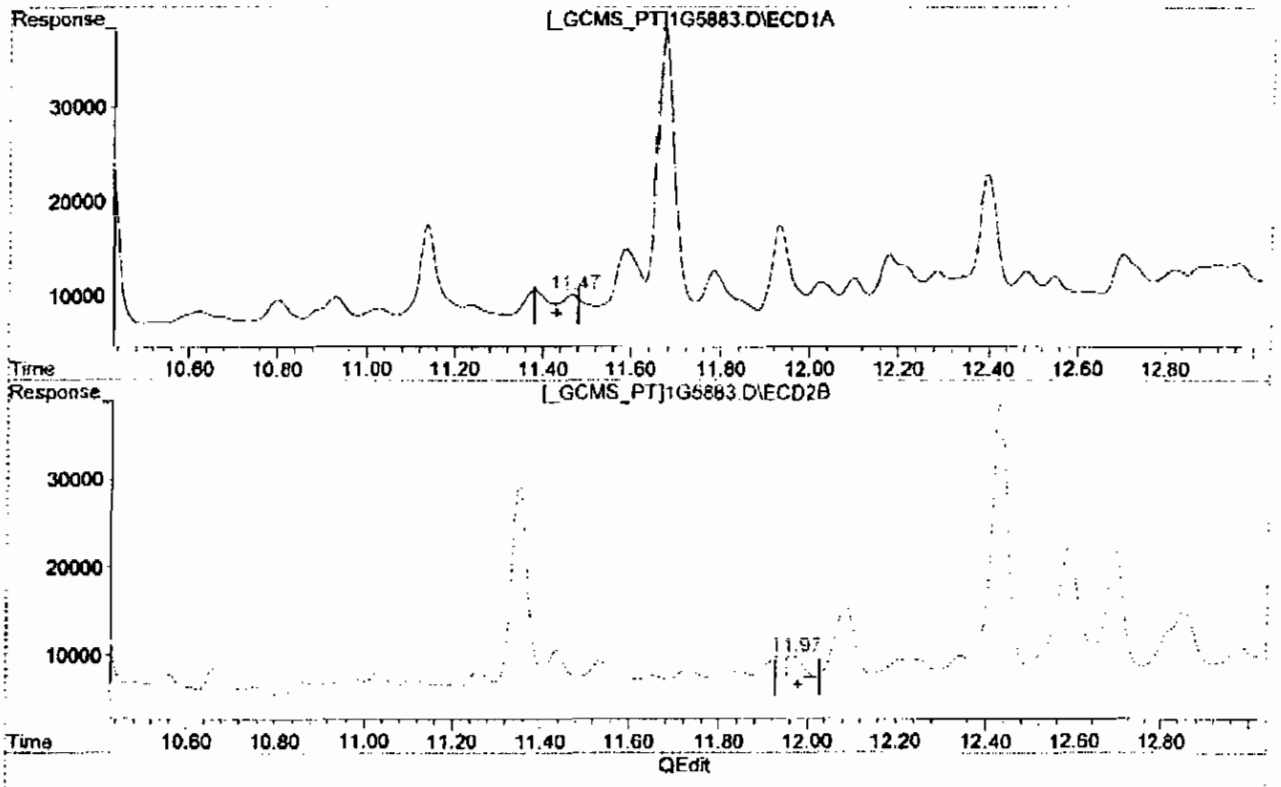
MDL

(+) = Expected Retention Time
1G5883.D 8151.M Fri May 02 09:46:52 2003

```
Data File : C:\HPCHEM\1\DATA\050103\1G5883.D\ECD1A.CH    Vial: 13
Acq On    :  1 May 2003  22:28                          Operator: ECL
Sample    : L0304594-01                                 Inst    : HP1
Misc      : 1,1 WATER                                   Multiplr: 1.00
IntFile   : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5883.D\ECD2B.CH    Vial: 13
Acq On    :  1 May 2003  23:04                          Operator: ECL
Sample    : L0304594-01                                 Inst    : HP1
Misc      : 1,1 WATER                                   Multiplr: 1.00
IntFile   : events2.e
Quant Time: May  2  9:25 2003  Quant Results File: 8151.RES


Method       : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title        : CALIBRATION April 15, 2003 @ 1851
Last Update  : Wed Apr 16 12:06:45 2003
Response via : Multiple Level Calibration
```



(7) 2,4-D
11.47min 42.037ug/L
response 73611

CMDL

(7) 2,4-D #2
11.97min 34.888ug/L
response 58268

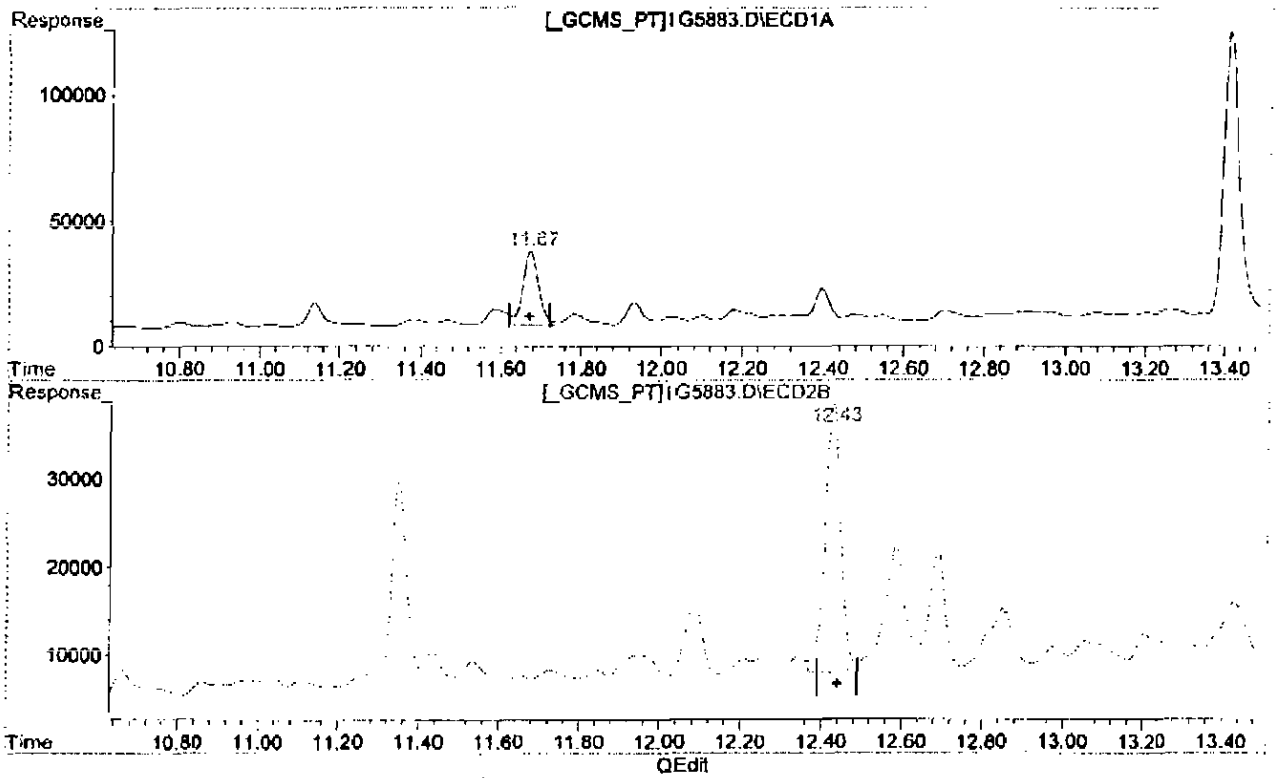
(+) = Expected Retention Time

1G5883.D 8151.M Fri May 02 09:47:03 2003

```
Data File : C:\HPCHEM\1\DATA\050103\1G5883.D\ECD1A.CH     Vial: 13
Acq On    :  1 May 2003  22:28                          Operator: ECL
Sample    : L0304594-01                                 Inst    : HP1
Misc      : 1,1 WATER                                   Multiplr: 1.00
IntFile   : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5883.D\ECD2B.CH     Vial: 13
Acq On    :  1 May 2003  23:04                          Operator: ECL
Sample    : L0304594-01                                 Inst    : HP1
Misc      : 1,1 WATER                                   Multiplr: 1.00
IntFile   : events2.e
Quant Time: May  2  9:25 2003  Quant Results File: 8151.RES


Method       : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title        : CALIBRATION April 15, 2003 @ 1851
Last Update  : Wed Apr 16 12:06:45 2003
Response via : Multiple Level Calibration
```



(8) Pentachlorophenol
11.67min 37.251ug/L
response 788636

(8) Pentachlorophenol #2
12.43min 36.794ug/L
response 807964

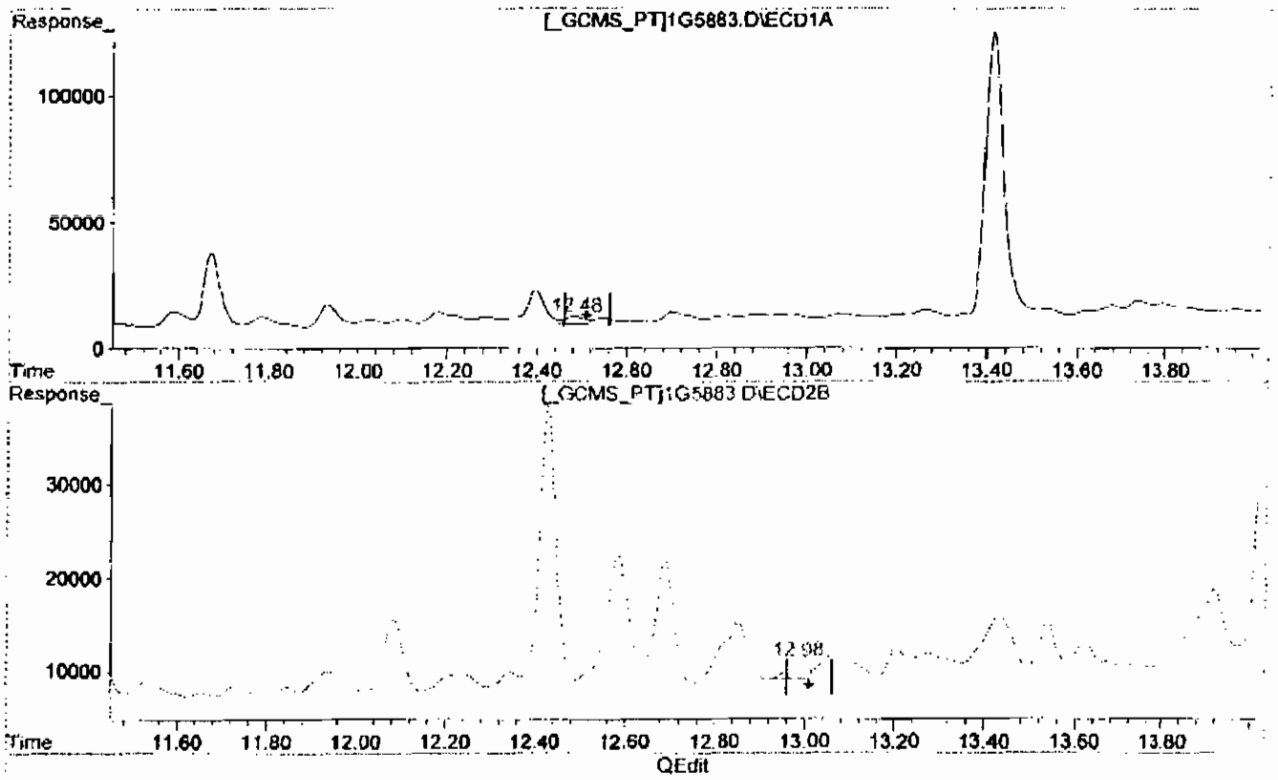
(+) = Expected Retention Time

1G5883.D 8151.M Fri May 02 09:47:20 2003

```
Data File : C:\HPCHEM\1\DATA\050103\1G5883.D\ECD1A.CH    Vial: 13
Acq On    :  1 May 2003  22:28                          Operator: ECL
Sample    : L0304594-01                                 Inst    : HP1
Misc      : 1,1 WATER                                   Multiplr: 1.00
IntFile   : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5883.D\ECD2B.CH    Vial: 13
Acq On    :  1 May 2003  23:04                          Operator: ECL
Sample    : L0304594-01                                 Inst    : HP1
Misc      : 1,1 WATER                                   Multiplr: 1.00
IntFile   : events2.e
Quant Time: May  2  9:25 2003  Quant Results File: 8151.RES


Method        : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title         : CALIBRATION April 15, 2003 @ 1851
Last Update   : Wed Apr 16 12:06:45 2003
Response via  : Multiple Level Calibration
```



(9) Silvex
12.48min 10.033ug/L
response 83631

(9) Silvex #2
12.98min 5.949ug/L
response 54355

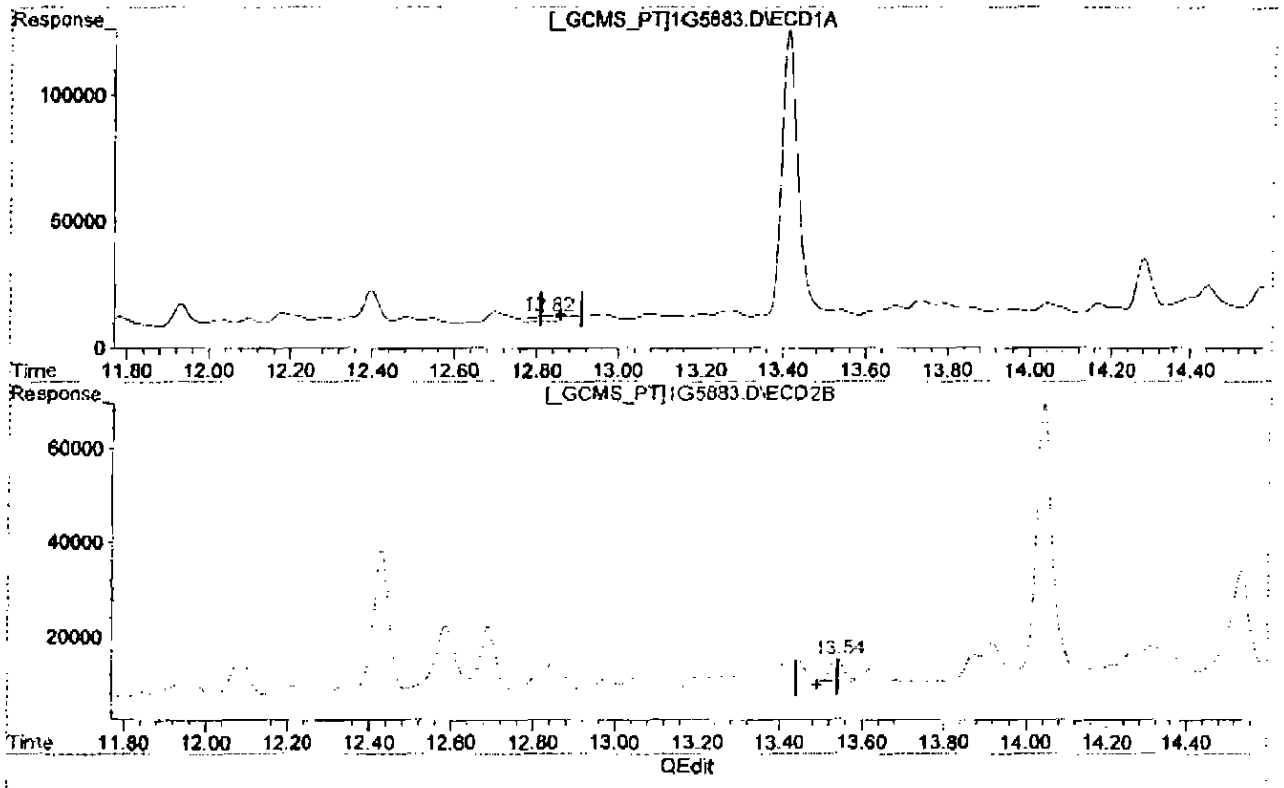
CMDL

(+) = Expected Retention Time
1G5883.D 8151.M Fri May 02 09:47:39 2003

```
Data File : C:\HPCHEM\1\DATA\050103\1G5883.D\ECD1A.CH    Vial: 13
Acq On    :  1 May 2003  22:28                          Operator: ECL
Sample    : L0304594-01                                 Inst    : HP1
Misc      : 1,1 WATER                                   Multiplr: 1.00
IntFile   : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5883.D\ECD2B.CH    Vial: 13
Acq On    :  1 May 2003  23:04                          Operator: ECL
Sample    : L0304594-01                                 Inst    : HP1
Misc      : 1,1 WATER                                   Multiplr: 1.00
IntFile   : events2.e
Quant Time: May  2  9:25 2003  Quant Results File: 8151.RES


Method       : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title        : CALIBRATION April 15, 2003 @ 1851
Last Update  : Wed Apr 16 12:06:45 2003
Response via : Multiple Level Calibration
```



(10) 2,4,5-T
12.82min 9.483ug/L
response 79733

peak shape

(10) 2,4,5-T #2
13.54min 13.377ug/L
response 113445

(+) = Expected Retention Time

1G5883.D 8151.M Fri May 02 09:47:48 2003

Data File : C:\HPCHEM\1\DATA\050103\1G5884.D\ECD1A.CH Vial: 14
Acq On : 1 May 2003 23:04 Operator: ECL
Sample : L0304594-02 Inst : HP1
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5884.D\ECD2B.CH Vial: 14
Acq On : 1 May 2003 23:39 Operator: ECL
Sample : L0304594-02 Inst : HP1
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events2.e
Quant Time: May 2 9:26 2003 Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Fri May 02 09:25:07 2003
Response via : Initial Calibration
DataAcq Meth : 8151.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
S	2,4-Dichlorophen	9.85	10.32	527494	461551	498.331	425.807	
	Spiked Amount 500.000 Range 20 - 144 Recovery =					99.67%	85.16%	
	Target Compounds							
1)	Dalapon	3.59f	3.45f	136614	66690	72.798	39.105	#
3)	MCPA	0.00	11.10	0	100552	N.D.	24.432	#
4)	Dicamba	0.00	0.00	0	0	N.D.	N.D.	
5)	MCPP	0.00	0.00	0	0	N.D.	N.D.	
6)	Dichloroprop	11.13	0.00	1640169	0	1167.883	N.D.	#
7)	2,4-D	11.46f	0.00	46261	0	26.418	N.D.	#
8)	Pentachloropheno	0.00	0.00	0	0	N.D.	N.D.	
9)	Silvex	0.00	12.98f	0	237864	N.D.	26.035	#
10)	2,4,5-T	0.00	13.53f	0	1015384	N.D.	119.731	#
11)	Dinoseb	14.65f	14.50f	763151	58001	116.246	8.730	#
12)	2,4-DB	0.00	0.00	0	0	N.D.	N.D.	

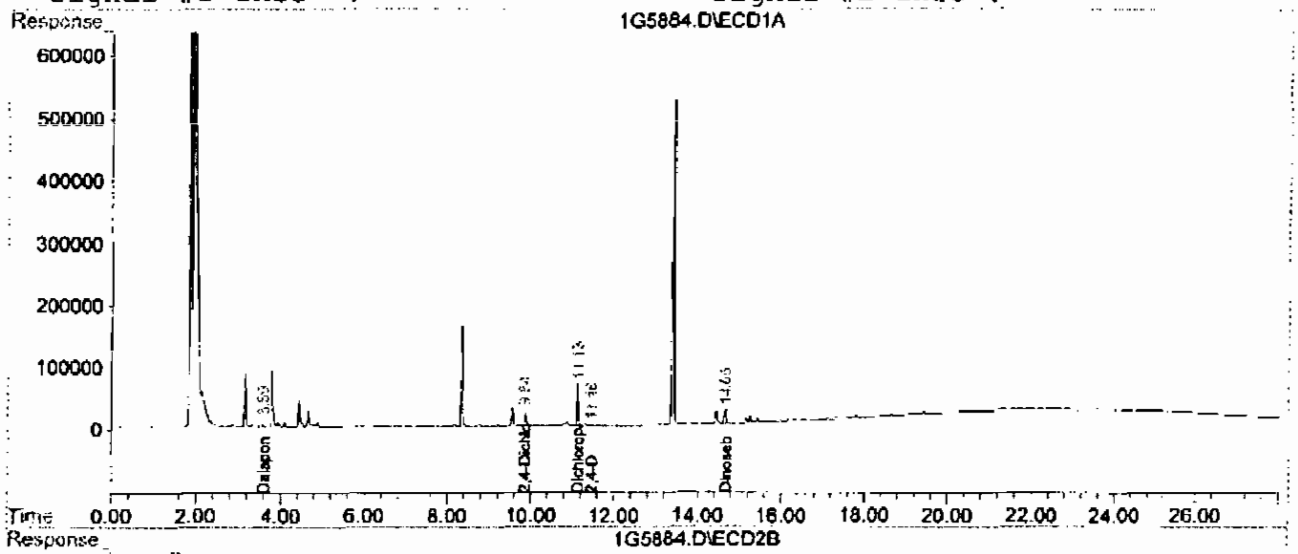
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

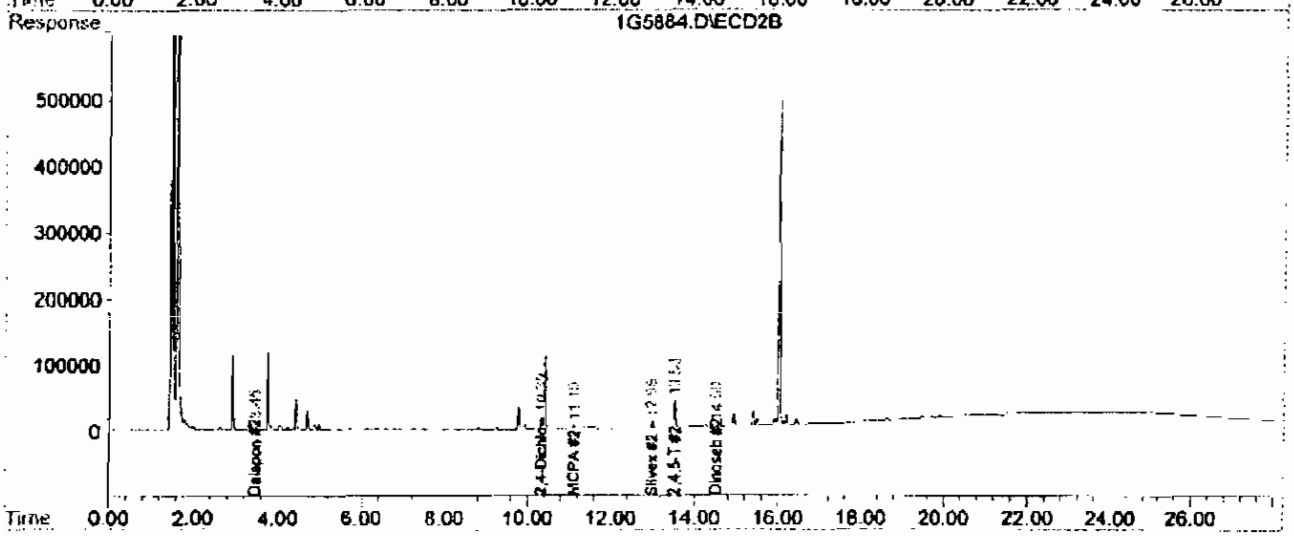
```
Data File : C:\HPCHEM\1\DATA\050103\1G5884.D\ECD1A.CH    Vial: 14
Acq On    :  1 May 2003  23:04                          Operator: ECL
Sample    : L0304594-02                                 Inst    : HP1
Misc      : 1,1 WATER                                   Multiplr: 1.00
IntFile   : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5884.D\ECD2B.CH    Vial: 14
Acq On    :  1 May 2003  23:39                          Operator: ECL
Sample    : L0304594-02                                 Inst    : HP1
Misc      : 1,1 WATER                                   Multiplr: 1.00
IntFile   : events2.e
Quant Time: May  2  9:26 2003  Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title        : CALIBRATION April 15, 2003 @ 1851
Last Update  : Fri May 02 09:25:07 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8151.M

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```

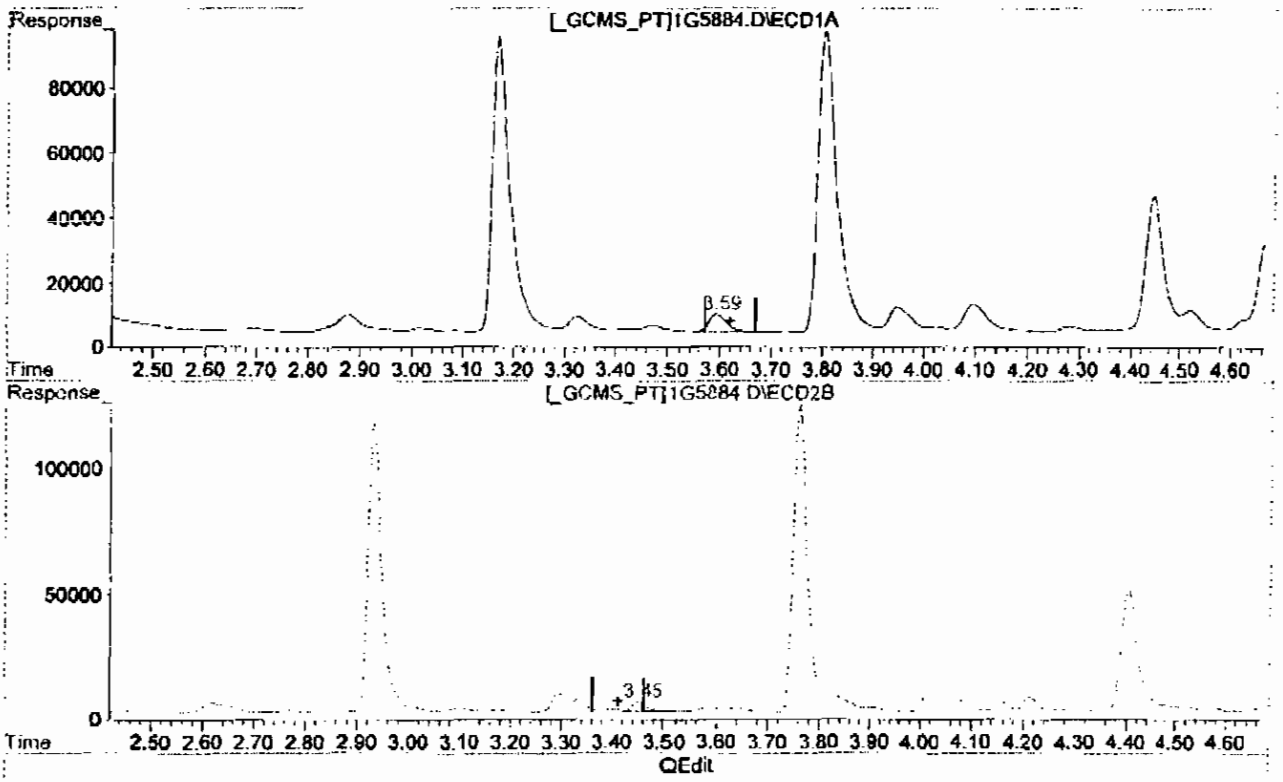




```
Data File : C:\HPCHEM\1\DATA\050103\1G5884.D\ECD1A.CH    Vial: 14
Acq On    :  1 May 2003  23:04                          Operator: ECL
Sample    : L0304594-02                                 Inst    : HP1
Misc      : 1,1 WATER                                   Multiplr: 1.00
IntFile   : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5884.D\ECD2B.CH    Vial: 14
Acq On    :  1 May 2003  23:39                          Operator: ECL
Sample    : L0304594-02                                 Inst    : HP1
Misc      : 1,1 WATER                                   Multiplr: 1.00
IntFile   : events2.e
Quant Time: May  2  9:26 2003  Quant Results File: 8151.RES


Method       : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title        : CALIBRATION April 15, 2003 @ 1851
Last Update  : Wed Apr 16 12:06:45 2003
Response via : Multiple Level Calibration
```



(1) Dalapon
3.59min 72.798ug/L
response 136614

CMBL

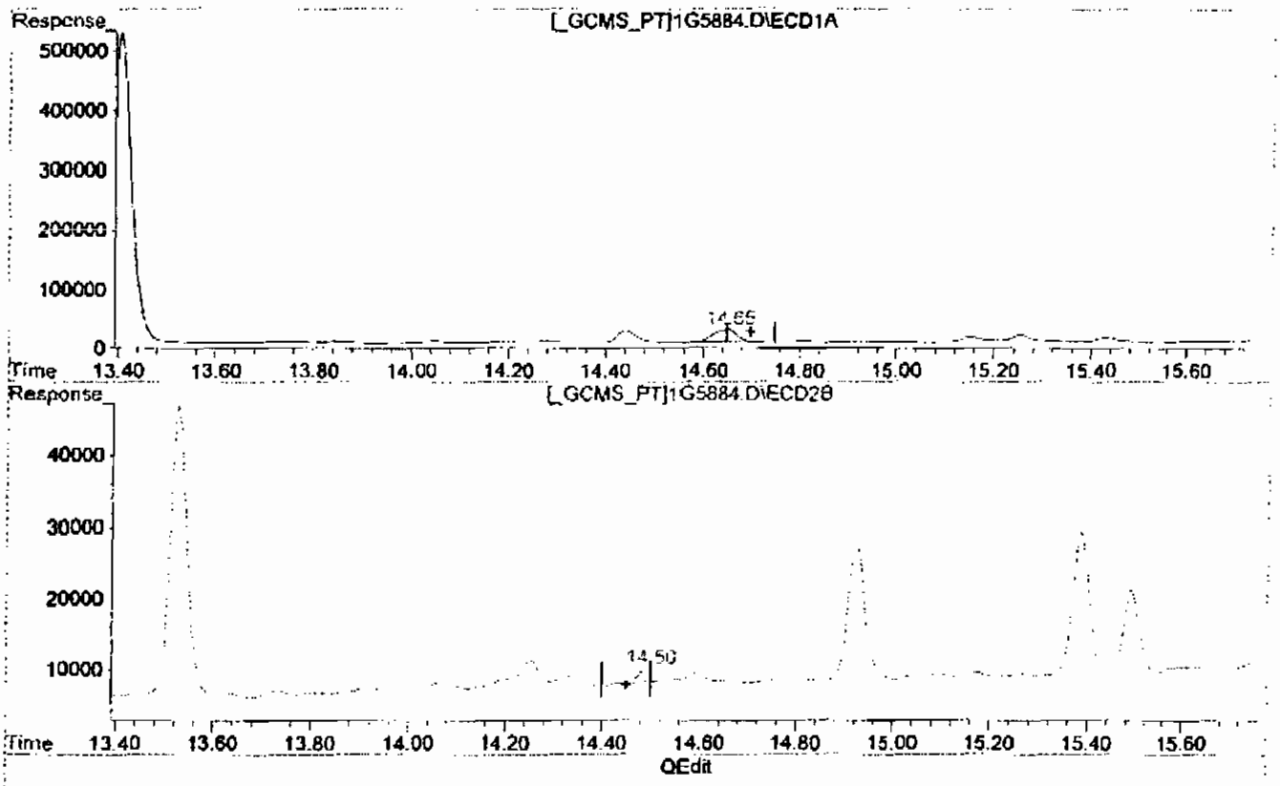
(1) Dalapon #2
3.45min 39.105ug/L
response 66690

(+) = Expected Retention Time
1G5884.D 8151.M Fri May 02 09:49:10 2003

```
Data File : C:\HPCHEM\1\DATA\050103\1G5884.D\ECD1A.CH    Vial: 14
Acq On    :  1 May 2003  23:04                          Operator: ECL
Sample    : L0304594-02                                 Inst    : HP1
Misc      : 1,1 WATER                                   Multiplr: 1.00
IntFile   : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5884.D\ECD2B.CH    Vial: 14
Acq On    :  1 May 2003  23:39                          Operator: ECL
Sample    : L0304594-02                                 Inst    : HP1
Misc      : 1,1 WATER                                   Multiplr: 1.00
IntFile   : events2.e
Quant Time: May  2  9:26 2003  Quant Results File: 8151.RES


Method       : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title        : CALIBRATION April 15, 2003 @ 1851
Last Update  : Wed Apr 16 12:06:45 2003
Response via : Multiple Level Calibration
```



(11) Dinoseb
14.65min 116.246ug/L
response 763151

(11) Dinoseb #2
14.50min 8.730ug/L
response 58001

LMDL

(+) = Expected Retention Time

1G5884.D 8151.M Fri May 02 09:49:45 2003

Data File : C:\HPCHEM\1\DATA\050103\1G5887.D\ECD1A.CH Vial: 17
Acq On : 2 May 2003 00:50 Operator: ECL
Sample : L0304594-03 Inst : HP1
Misc : 17,1 WATER Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5887.D\ECD2B.CH Vial: 17
Acq On : 2 May 2003 1:25 Operator: ECL
Sample : L0304594-03 Inst : HP1
Misc : 17,1 WATER Multiplr: 1.00
IntFile : events2.e
Quant Time: May 2 9:27 2003 Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Fri May 02 09:27:32 2003
Response via : Initial Calibration
DataAcq Meth : 8151.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
S	2,4-Dichlorophen	9.84	10.32	445245	430473	420.629	397.136	
	Spiked Amount 500.000 Range 20 - 144 Recovery =					84.13%	79.43%	
	Target Compounds							
1)	Dalapon	0.00	3.42	0	136923	N.D.	80.287	#
3)	MCPA	0.00	11.11	0	77874	N.D.	18.922	#
4)	Dicamba	0.00	0.00	0	0	N.D.	N.D.	
5)	MCPP	0.00	0.00	0	0	N.D.	N.D.	
6)	Dichloroprop	0.00	11.54	0	138784	N.D.	96.365	#
7)	2,4-D	11.46f	0.00	68952	0	39.376	N.D.	#
8)	Pentachlorophenol	0.00	0.00	0	0	N.D.	N.D.	
9)	Silvex	0.00	0.00	0	0	N.D.	N.D.	
10)	2,4,5-T	0.00	0.00	0	0	N.D.	N.D.	
11)	Dinoseb	0.00	0.00	0	0	N.D.	N.D.	
12)	2,4-DB	0.00	0.00	0	0	N.D.	N.D.	

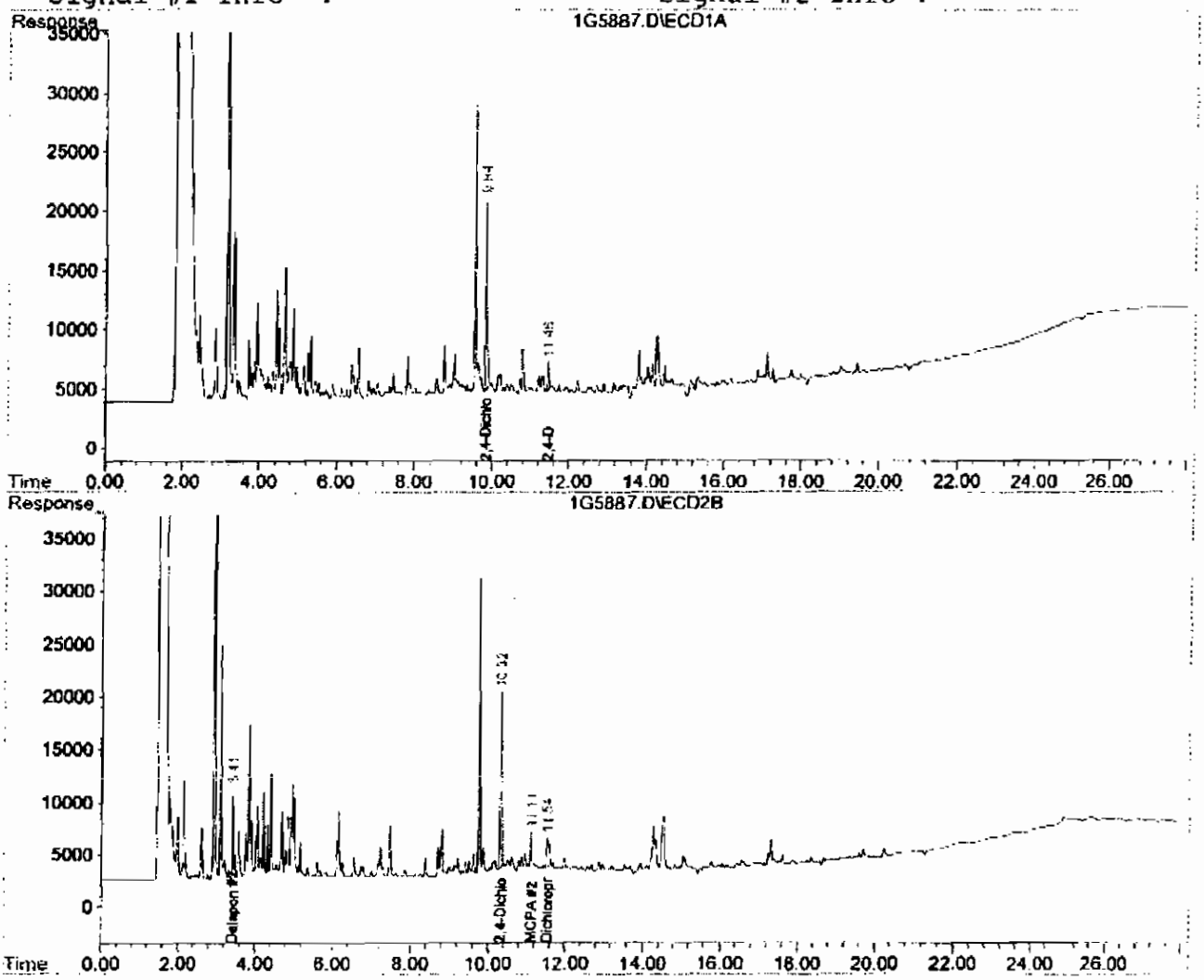
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

```
Data File : C:\HPCHEM\1\DATA\050103\1G5887.D\ECD1A.CH    Vial: 17
Acq On    :  2 May 2003  00:50                          Operator: ECL
Sample    : L0304594-03                                 Inst    : HP1
Misc      : 17,1 WATER                                  Multiplr: 1.00
IntFile   : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5887.D\ECD2B.CH    Vial: 17
Acq On    :  2 May 2003   1:25                          Operator: ECL
Sample    : L0304594-03                                 Inst    : HP1
Misc      : 17,1 WATER                                  Multiplr: 1.00
IntFile   : events2.e
Quant Time: May  2  9:27 2003  Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title        : CALIBRATION April 15, 2003 @ 1851
Last Update  : Fri May 02 09:27:32 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8151.M

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```



2.2.4.3 Standards Data

Response Factor Report HP1

Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Wed Apr 16 12:06:45 2003

Calibration Files
5 =1G5758.D 4 =1G5759.D 3 =1G5760.D
2 =1G5761.D 1 =1G5762.D

		Compound	5	4	3	2	1	Avg	%RSD
1)		Dalapon	1.589	1.767	1.861	2.006	2.161	1.877#E3	11.69
2)	S	2,4-Dichlorophenylace	0.848	0.963	1.041	1.158	1.281	1.059#E3	15.90
3)		MCPA	3.173	3.478	3.636	3.743	3.524	3.511#E3	6.13
4)		Dicamba	4.722	5.059	5.002	5.087	5.167	5.007#E3	3.40
5)		MCPP	2.082	2.201	2.156	2.051	1.570	2.012#E3	12.63
6)		Dichloroprop	1.118	1.265	1.395	1.575	1.668	1.404#E3	15.92
7)		2,4-D	1.355	1.530	1.725	1.999	2.146	1.751#E3	18.60
8)		Pentachlorophenol	1.966	2.129	2.165	2.202	2.123	2.117#E4	4.27
9)		Silvex	8.125	8.429	8.355	8.481	8.290	8.336#E3	1.66
10)		2,4,5-T	7.615	8.352	8.693	9.513	7.869	8.408#E3	8.87
11)		Dinoseb	5.477	6.115	6.589	7.131	7.514	6.565#E3	12.30
12)		2,4-DB	0.852	0.949	0.986	1.063	1.170	1.004#E3	11.93

Signal #2 Calibration Files
5 =1G5758.D 4 =1G5759.D 3 =1G5760.D
2 =1G5761.D 1 =1G5762.D

		Compound	5	4	3	2	1	Avg	%RSD
1)		Dalapon	1.486	1.585	1.669	1.803	1.984	1.705#E3	11.41
2)	S	2,4-Dichlorophenylace	0.784	0.997	1.084	1.204	1.351	1.084#E3	19.76
3)		MCPA	2.980	3.963	4.264	4.581	4.791	4.116#E3	17.21
4)		Dicamba	4.275	5.214	5.354	5.649	5.960	5.291#E3	12.02
5)		MCPP	2.113	2.540	2.685	2.526	1.967	2.366#E3	13.03
6)		Dichloroprop	1.050	1.306	1.455	1.633	1.757	1.440#E3	19.27
7)		2,4-D	1.174	1.573	1.715	1.880	2.009	1.670#E3	19.32
8)		Pentachlorophenol	1.688	2.237	2.301	2.388	2.365	2.196#E4	13.20
9)		Silvex	7.162	9.466	9.596	9.735	9.721	9.136#E3	12.14
10)		2,4,5-T	6.468	8.703	9.007	9.172	9.053	8.481#E3	13.42
11)		Dinoseb	4.718	6.256	6.760	7.455	8.029	6.644#E3	19.11
12)		2,4-DB	0.740	0.990	1.041	1.108	1.135	1.002#E3	15.72

(#) = Out of Range

```
Data File : C:\HPCHEM\1\DATA\041503\1G5758.D\ECD1A.CH    Vial: 1
Acq On    : 15 Apr 2003  15:56                          Operator: ECL
Sample    : WG138386-05 HERB ICAL #5                    Inst    : HP1
Misc      : 1,1 SOS63-10                                Multiplr: 1.00
IntFile   : events.e

Data File : C:\HPCHEM\1\DATA\041503\1G5758.D\ECD2B.CH    Vial: 1
Acq On    : 15 Apr 2003  16:31                          Operator: ECL
Sample    : WG138386-05 HERB ICAL #5                    Inst    : HP1
Misc      : 1,1 SOS63-10                                Multiplr: 1.00
IntFile   : events2.e
Quant Time: Apr 16 12:07 2003  Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title        : CALIBRATION April 15, 2003 @ 1851
Last Update  : Wed Apr 16 12:06:45 2003
Response via : Initial Calibration
DataAcq Meth : 8151.M

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
2) S	2,4-Dichlorophen	9.96	10.42	1696426	1567483	1602.638	1446.092
	Spiked Amount 500.000	Range 20 - 144		Recovery =		320.53%#	289.22%#
	Target Compounds						
1)	Dalapon	3.70	3.48	7943802	7429089	4233.075	4356.201
3)	MCPA	10.75f	11.21f	634573	595947	180.742	144.802
4)	Dicamba	10.20	10.67	944377	855043	188.597	161.618
5)	MCPP	10.53	10.88	416421	422570	206.960	178.591
6)	Dichloroprop	11.23	11.66	2236860	2100736	1592.758	1465.866
7)	2,4-D	11.54	12.07	2709502	2347262	1547.321	1405.441
8)	Pentachlorophenol	11.78	12.54	3931188	3375968	185.688	153.738
9)	Silvex	12.61	13.11	1625062	1432496	194.946	156.792
10)	2,4,5-T	12.96	13.58	1522905	1293654	181.115	152.544
11)	Dinoseb	14.81	14.55	5476519	4717832	834.205	710.138
12)	2,4-DB	13.61	14.19	1704207	1479259	1697.768	1475.627

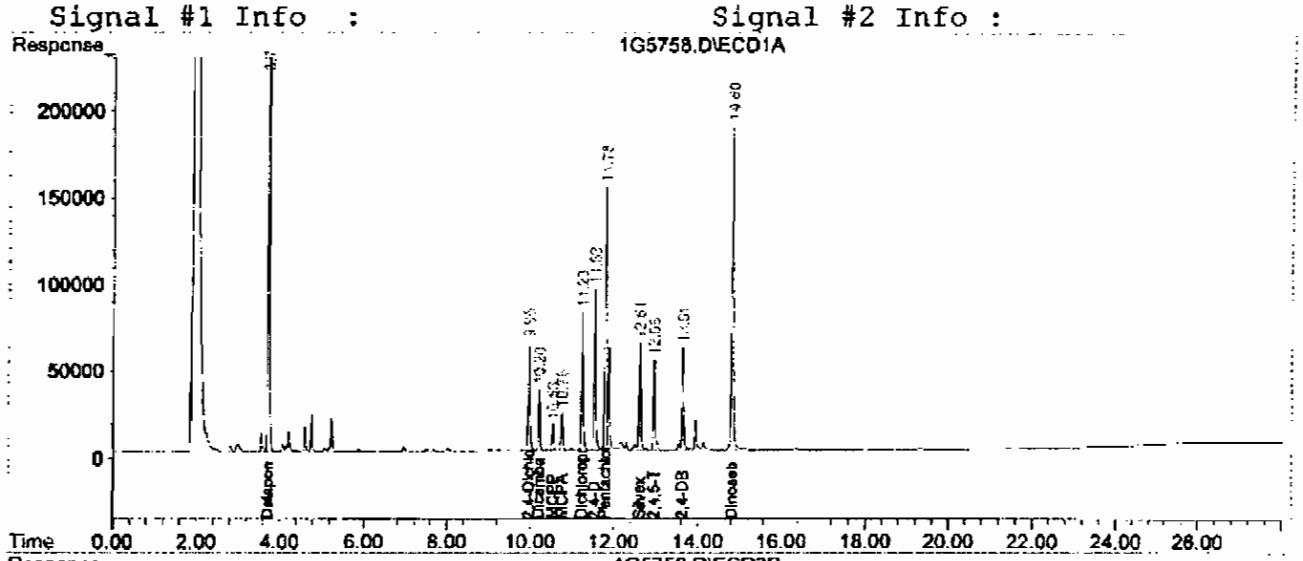
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

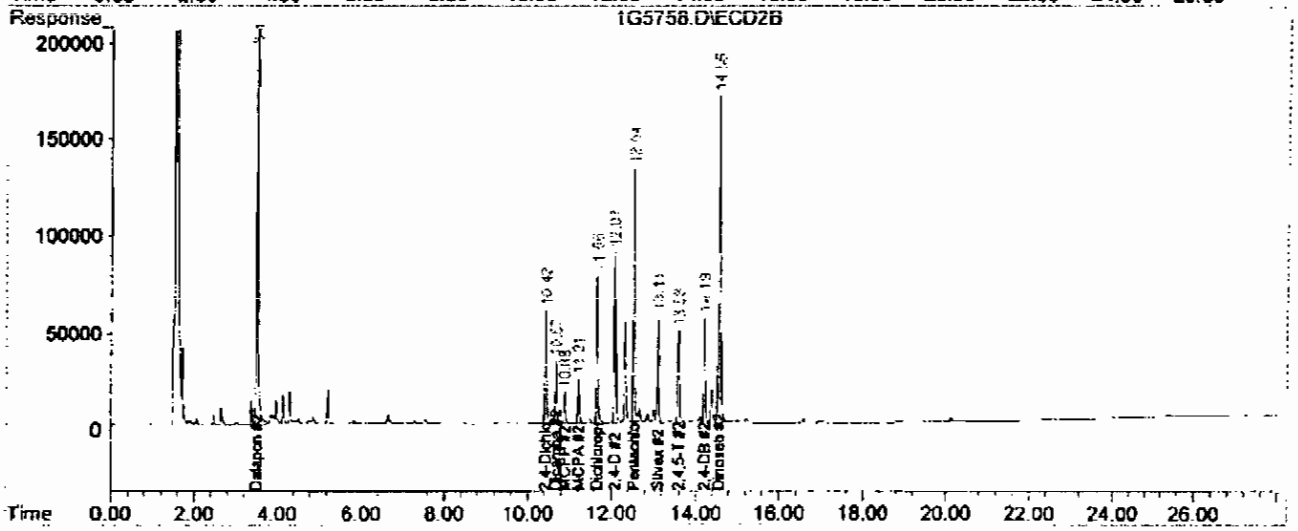
```
Data File : C:\HPCHEM\1\DATA\041503\1G5758.D\ECD1A.CH    Vial: 1
Acq On    : 15 Apr 2003  15:56                          Operator: ECL
Sample    : WG138386-05 HERB ICAL #5                    Inst    : HP1
Misc      : 1,1 SOS63-10                                Multiplr: 1.00
IntFile   : events.e

Data File : C:\HPCHEM\1\DATA\041503\1G5758.D\ECD2B.CH    Vial: 1
Acq On    : 15 Apr 2003  16:31                          Operator: ECL
Sample    : WG138386-05 HERB ICAL #5                    Inst    : HP1
Misc      : 1,1 SOS63-10                                Multiplr: 1.00
IntFile   : events2.e
Quant Time: Apr 16 12:07 2003  Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title        : CALIBRATION April 15, 2003 @ 1851
Last Update  : Wed Apr 16 12:06:45 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8151.M

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```





Data File : C:\HPCHEM\1\DATA\041503\1G5759.D\ECD1A.CH Vial: 2
Acq On : 15 Apr 2003 16:31 Operator: ECL
Sample : WG138386-04 HERB ICAL #4 Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\041503\1G5759.D\ECD2B.CH Vial: 2
Acq On : 15 Apr 2003 17:06 Operator: ECL
Sample : WG138386-05 HERB ICAL #5 Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events2.e
Quant Time: Apr 16 12:05 2003 Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Wed Apr 16 12:04:49 2003
Response via : Initial Calibration
DataAcq Meth : 8151.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
2) S	2,4-Dichlorophen	9.95	10.42	963104	997380	909.858	920.139
	Spiked Amount 500.000 Range 20 - 144 Recovery =					181.97%#	184.03%#
	Target Compounds						
1)	Dalapon	3.71	3.48	4417018	3963335	2353.731	2323.984
3)	MCPA	10.74	11.20	347808	396254	99.064	96.281
4)	Dicamba	10.20	10.67	505863	521440	101.024	98.561
5)	MCPP	10.53	10.87	220146	253996	109.412	107.346
6)	Dichloroprop	11.23	11.66	1265035	1305711	900.769	908.733
7)	2,4-D	11.54	12.07	1530020	1573487	873.751	942.137
8)	Pentachlorophenol	11.78	12.54	2129447	2237074	100.584	101.874
9)	Silvex	12.62	13.11	842893	946650	101.115	103.615
10)	2,4,5-T	12.96	13.58	835187	870264	99.327	102.619
11)	Dinoseb	14.81	14.55	3057259	3128020	465.694	470.836
12)	2,4-DB	13.62	14.19	948756	989606	945.171	987.177

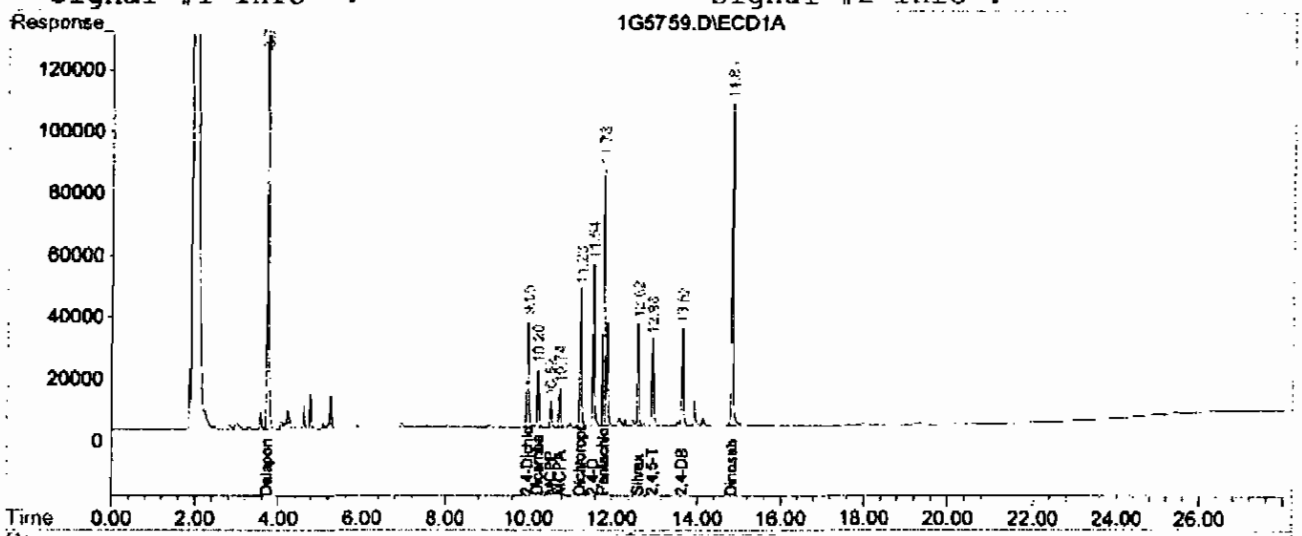
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

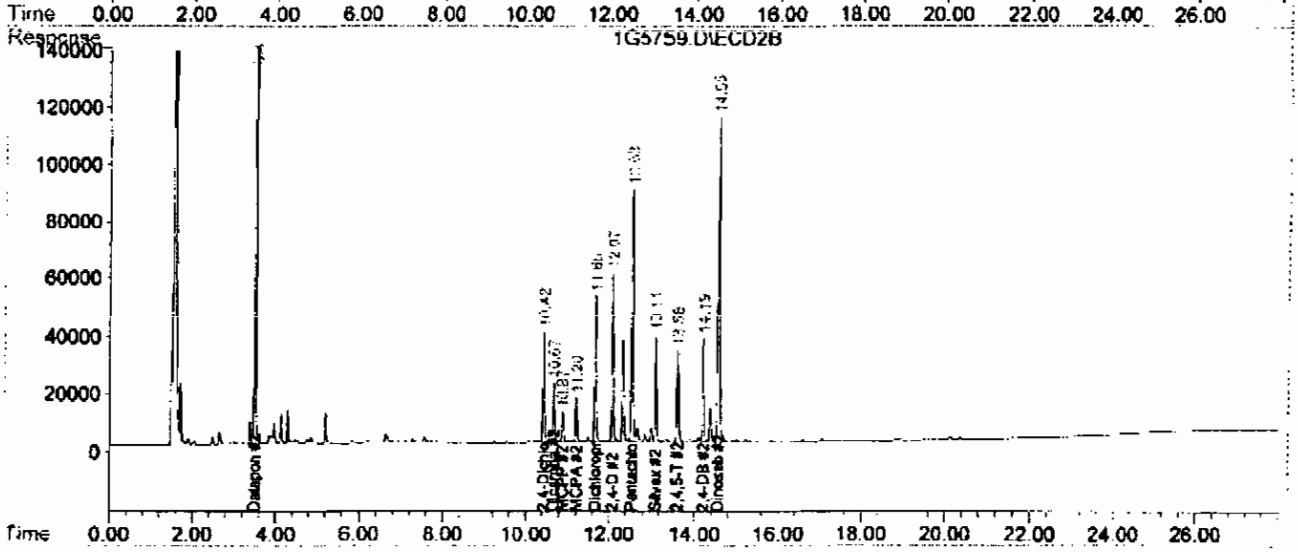
Data File : C:\HPCHEM\1\DATA\041503\1G5759.D\ECD1A.CH Vial: 2
Acq On : 15 Apr 2003 16:31 Operator: ECL
Sample : WG138386-04 HERB ICAL #4 Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\041503\1G5759.D\ECD2B.CH Vial: 2
Acq On : 15 Apr 2003 17:06 Operator: ECL
Sample : WG138386-05 HERB ICAL #5 Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events2.e
Quant Time: Apr 16 12:05 2003 Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Wed Apr 16 12:04:49 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8151.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data File : C:\HPCHEM\1\DATA\041503\1G5760.D\ECD1A.CH Vial: 3
Acq On : 15 Apr 2003 17:06 Operator: ECL
Sample : WG138386-03 HERB ICAL #3 Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\041503\1G5760.D\ECD2B.CH Vial: 3
Acq On : 15 Apr 2003 17:41 Operator: ECL
Sample : WG138386-04 HERB ICAL #4 Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events2.e
Quant Time: Apr 16 11:55 2003 Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Wed Apr 16 11:51:14 2003
Response via : Initial Calibration
DataAcq Meth : 8151.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
2) S	2,4-Dichlorophen	9.95	10.42	520729	541780	556.784	510.451
Spiked Amount	500.000 Range	20 - 144	Recovery	=		111.36%	102.09%
	Target Compounds						
1)	Dalapon	3.70	3.48	2326409	2085697	1284.980	1215.634
3)	MCPA	10.73	11.19	181820	213225	57.616	53.113
4)	Dicamba	10.20	10.67	250119	267692	54.856	51.918
5)	MCPP	10.52	10.87	107792	134239	55.153	55.175
6)	Dichloroprop	11.23	11.65	697748	727300	570.452	518.331
7)	2,4-D	11.54	12.07	862509	857576	599.122	521.874
8)	Pentachlorophenol	11.78	12.53	1082342	1150738	58.021	53.734
9)	Silvex	12.62	13.10	417749	479797	57.628	53.449
10)	2,4,5-T	12.96	13.58	434669	450336	62.140	56.981
11)	Dinoseb	14.81	14.54	1647153	1689958	283.809	266.687
12)	2,4-DB	13.62	14.19	492817	520304	633.696	578.054

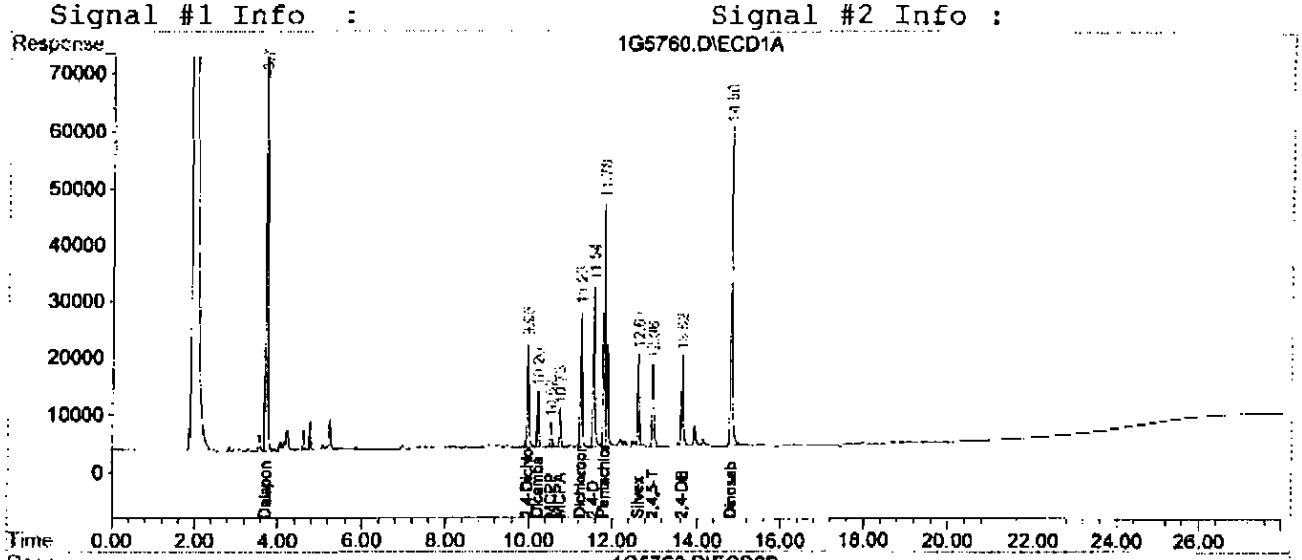
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

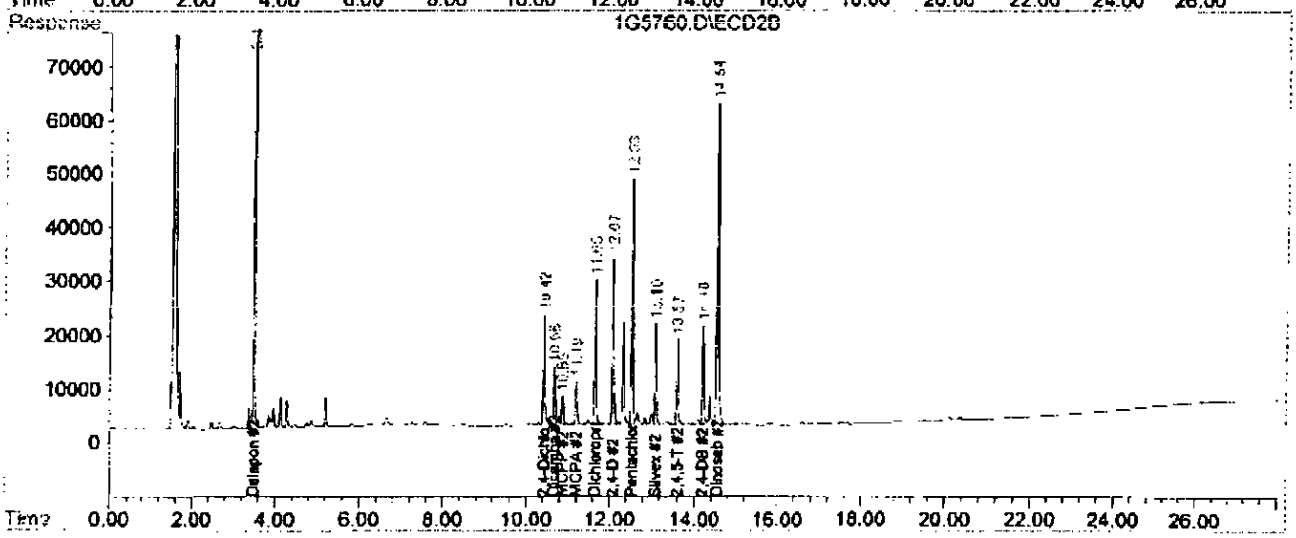
Data File : C:\HPCHEM\1\DATA\041503\1G5760.D\ECD1A.CH Vial: 3
Acq On : 15 Apr 2003 17:06 Operator: ECL
Sample : WG138386-03 HERB ICAL #3 Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\041503\1G5760.D\ECD2B.CH Vial: 3
Acq On : 15 Apr 2003 17:41 Operator: ECL
Sample : WG138386-04 HERB ICAL #4 Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events2.e
Quant Time: Apr 16 11:55 2003 Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Wed Apr 16 11:51:14 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8151.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data File : C:\HPCHEM\1\DATA\041503\1G5761.D\ECD1A.CH Vial: 4
Acq On : 15 Apr 2003 17:41 Operator: ECL
Sample : WG138386-02 HERB ICAL #2 Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\041503\1G5761.D\ECD2B.CH Vial: 4
Acq On : 15 Apr 2003 18:16 Operator: ECL
Sample : WG138386-03 HERB ICAL #3 Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events2.e
Quant Time: Apr 16 11:55 2003 Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Wed Apr 16 11:51:14 2003
Response via : Initial Calibration
DataAcq Meth : 8151.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
2) S	2,4-Dichlorophen	9.96	10.41	289603	300945	292.088	280.212
	Spiked Amount 500.000	Range	20 - 144	Recovery	=	58.42%	56.04%
	Target Compounds						
1)	Dalapon	3.70	3.48	1253442	1126820	678.115	656.343
3)	MCPA	10.73	11.19	93572	114513	27.925	28.152
4)	Dicamba	10.20	10.66	127165	141237	26.761	26.999
5)	MCPP	10.52	10.86	51272	63144	25.437	25.981
6)	Dichloroprop	11.23	11.65	393666	408256	298.836	287.572
7)	2,4-D	11.54	12.07	499836	469963	313.649	282.151
8)	Pentachlorophenol	11.78	12.53	550571	596928	27.574	27.412
9)	Silvex	12.62	13.10	212024	243386	27.054	26.590
10)	2,4,5-T	12.96	13.58	237833	229312	30.347	28.133
11)	Dinoseb	14.80	14.54	891341	931827	144.426	143.982
12)	2,4-DB	13.62	14.19	265737	276934	303.836	294.925

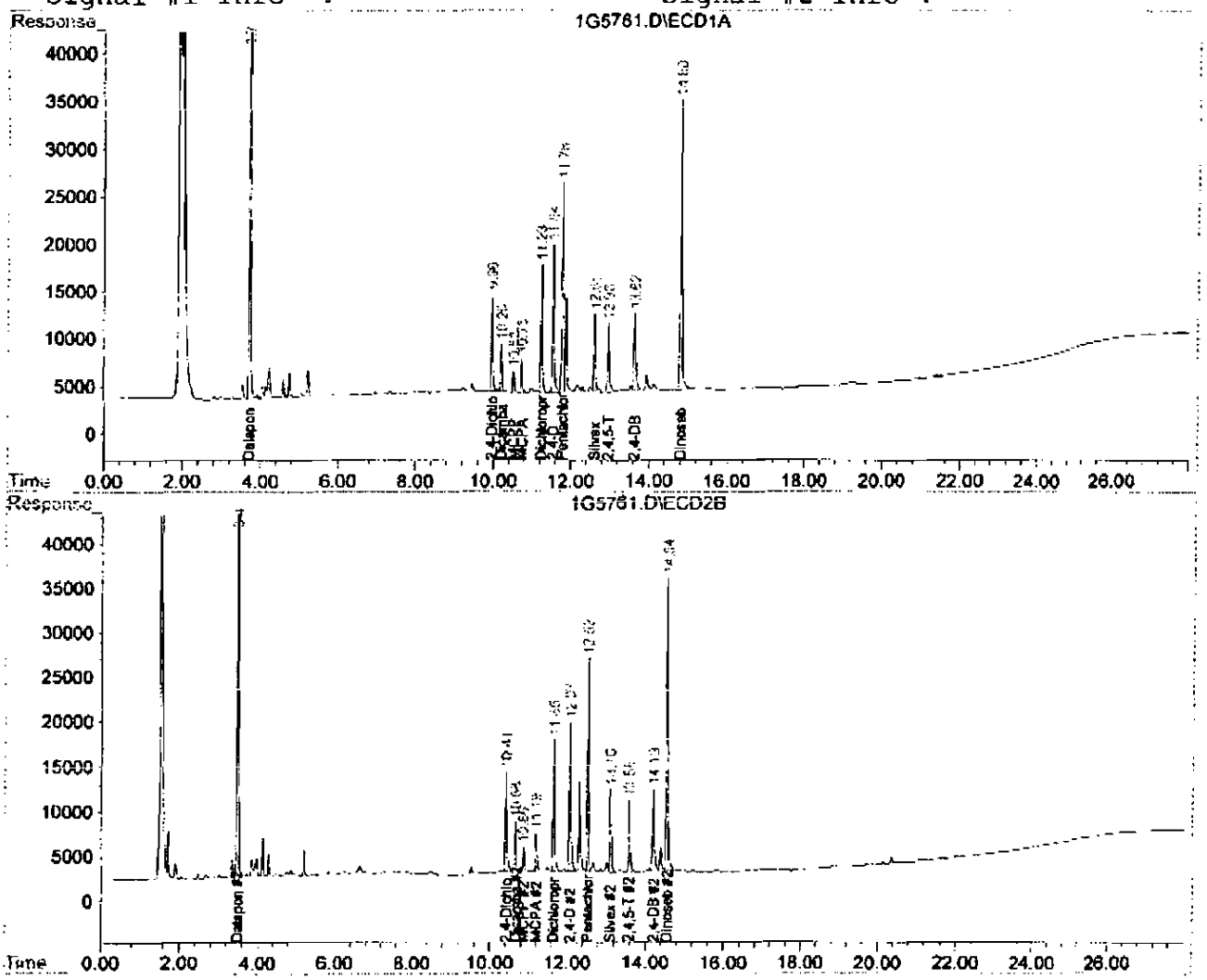
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

```
Data File : C:\HPCHEM\1\DATA\041503\1G5761.D\ECD1A.CH     Vial: 4
Acq On    : 15 Apr 2003  17:41                          Operator: ECL
Sample    : WG138386-02 HERB ICAL #2                    Inst    : HP1
Misc      : 1,1 SOS63-10                                Multiplr: 1.00
IntFile   : events.e

Data File : C:\HPCHEM\1\DATA\041503\1G5761.D\ECD2B.CH     Vial: 4
Acq On    : 15 Apr 2003  18:16                          Operator: ECL
Sample    : WG138386-03 HERB ICAL #3                    Inst    : HP1
Misc      : 1,1 SOS63-10                                Multiplr: 1.00
IntFile   : events2.e
Quant Time: Apr 16 11:55 2003  Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title        : CALIBRATION April 15, 2003 @ 1851
Last Update  : Wed Apr 16 11:51:14 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8151.M

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```



Data File : C:\HPCHEM\1\DATA\041503\1G5762.D\ECD1A.CH Vial: 5
Acq On : 15 Apr 2003 18:16 Operator: ECL
Sample : WG138386-01 HERB ICAL #1 Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\041503\1G5762.D\ECD2B.CH Vial: 5
Acq On : 15 Apr 2003 18:51 Operator: ECL
Sample : WG138386-02 HERB ICAL #2 Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events2.e
Quant Time: Apr 16 12:01 2003 Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Wed Apr 16 11:51:14 2003
Response via : Initial Calibration
DataAcq Meth : 8151.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
2) S	2,4-Dichlorophen	9.95	10.41	128142	135126	121.058	124.661
	Spiked Amount 500.000 Range 20 - 144 Recovery =					24.21%	24.93%
	Target Compounds						
1)	Dalapon	3.70	3.48	540203	496101	287.862	290.899
3)	MCPA	10.72	11.18	35245	47907	10.039	11.640
4)	Dicamba	10.19	10.66	51673	59596	10.319	11.265
5)	MCPP	10.51	10.86	15701	19673	7.804	8.314
6)	Dichloroprop	11.23	11.64	166835	175724	118.795	122.731
7)	2,4-D	11.54	12.06	214633	200851	122.571	120.261
8)	Pentachlorophenol	11.77	12.52	212346	236537	10.030	10.772
9)	Silvex	12.61	13.09	82897	97209	9.944	10.640
10)	2,4,5-T	12.97	13.57	78693	90527	9.359	10.675
11)	Dinoseb	14.80	14.53	375721	401470	57.231	60.430
12)	2,4-DB	13.63	14.19	116952	113472	116.510	113.194

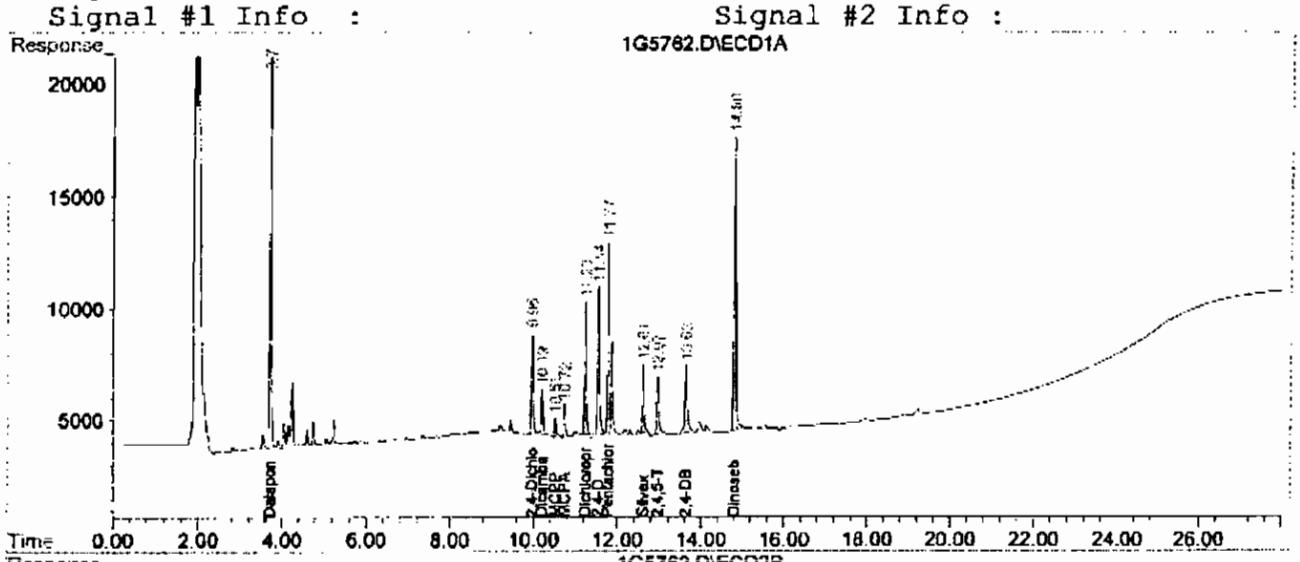
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

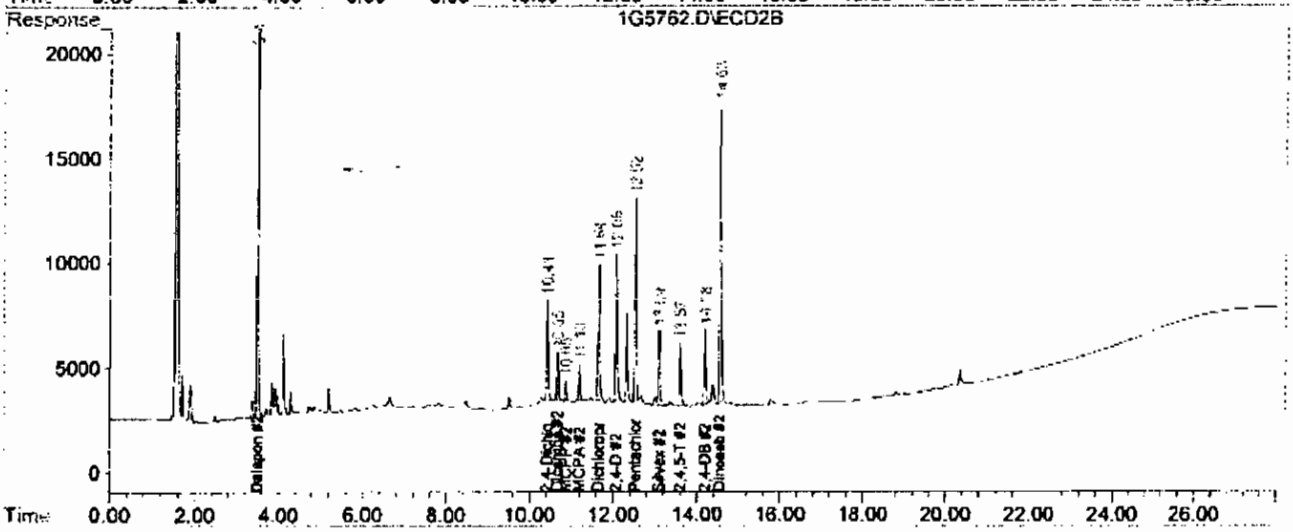
Data File : C:\HPCHEM\1\DATA\041503\1G5762.D\ECD1A.CH Vial: 5
Acq On : 15 Apr 2003 18:16 Operator: ECL
Sample : WG138386-01 HERB ICAL #1 Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\041503\1G5762.D\ECD2B.CH Vial: 5
Acq On : 15 Apr 2003 18:51 Operator: ECL
Sample : WG138386-02 HERB ICAL #2 Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events2.e
Quant Time: Apr 16 12:01 2003 Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Wed Apr 16 11:51:14 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8151.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data File : C:\HPCHEM\1\DATA\041503\1G5763.D\ECD1A.CH Vial: 6
Acq On : 15 Apr 2003 18:51 Operator: ECL
Sample : WG138386-06 HERB ALT ICV Inst : HP1
Misc : 1,1 SOS64-21 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\041503\1G5763.D\ECD2B.CH Vial: 6
Acq On : 15 Apr 2003 19:26 Operator: ECL
Sample : WG138386-01 HERB ICAL #1 Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events2.e

Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Wed Apr 16 12:06:45 2003
Response via : Multiple Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Dalapon	1250.000	1083.115	13.4	87	0.00
2	S	2,4-Dichlorophenylacetic ac	500.000	450.089	10.0	91	-0.01
3		MCPA	50.000	48.449	3.1	94	0.00
4		Dicamba	50.000	45.893	8.2	92	0.00
5		MCPP	50.000	49.640	0.7	93	0.00
6		Dichloroprop	500.000	501.584	-0.3	101	-0.01
7		2,4-D	500.000	427.613	14.5	87	-0.02
8		Pentachlorophenol	50.000	46.613	6.8	91	-0.01
9		Silvex	50.000	48.215	3.6	96	-0.02
10		2,4,5-T	50.000	46.435	7.1	90	-0.02
11		Dinoseb	250.000	231.746	7.3	92	-0.02
12		2,4-DB	500.000	437.110	12.6	89	-0.03

Signal #2

1		Dalapon	1250.000	1077.862	13.8	88	-0.01
2	S	2,4-Dichlorophenylacetic	500.000	453.447	9.3	91	-0.01
3		MCPA	50.000	45.793	8.4	88	0.00
4		Dicamba	50.000	47.139	5.7	93	0.00
5		MCPP	50.000	47.788	4.4	84	0.00
6		Dichloroprop	500.000	500.500	-0.1	99	0.00
7		2,4-D	500.000	437.155	12.6	85	0.00
8		Pentachlorophenol	50.000	47.032	5.9	90	0.00
9		Silvex	50.000	46.642	6.7	89	0.00
10		2,4,5-T	50.000	50.273	-0.5	95	-0.01
11		Dinoseb	250.000	227.044	9.2	89	0.00
12		2,4-DB	500.000	417.000	16.6#	80	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data File : C:\HPCHEM\1\DATA\041503\1G5763.D\ECD1A.CH Vial: 6
Acq On : 15 Apr 2003 18:51 Operator: ECL
Sample : WG138386-06 HERB ALT ICV Inst : HP1
Misc : 1,1 SOS64-21 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\041503\1G5763.D\ECD2B.CH Vial: 6
Acq On : 15 Apr 2003 19:26 Operator: ECL
Sample : WG138386-01 HERB ICAL #1 Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events2.e
Quant Time: Apr 16 12:24 2003 Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Wed Apr 16 12:06:45 2003
Response via : Initial Calibration
DataAcq Meth : 8151.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
S	2,4-Dichlorophen	9.94	10.40	476428	491511	450.089	453.447
	Spiked Amount 500.000 Range 20 - 144 Recovery =					90.02%	90.69%
	Target Compounds						
1)	Dalapon	3.70	3.47	2032576	1838191	1083.115	1077.862
3)	MCPA	10.71	11.18	170102	188467	48.449	45.793
4)	Dicamba	10.18	10.65	229803	249388	45.893	47.139
5)	MCPP	10.50	10.85	99880	113072	49.640	47.788
6)	Dichloroprop	11.21	11.64	704422	720815	501.584	500.500
7)	2,4-D	11.52	12.05	748790	730103	427.613	437.155
8)	Pentachloropheno	11.76	12.51	986852	1032786	46.613	47.032
9)	Silvex	12.60	13.09	401922	426130	48.215	46.642
10)	2,4,5-T	12.95	13.56	390445	426340	46.435	50.273
11)	Dinoseb	14.78	14.52	1521405	1508379	231.746	227.044
12)	2,4-DB	13.60f	14.17	438768	418027	437.110	417.000

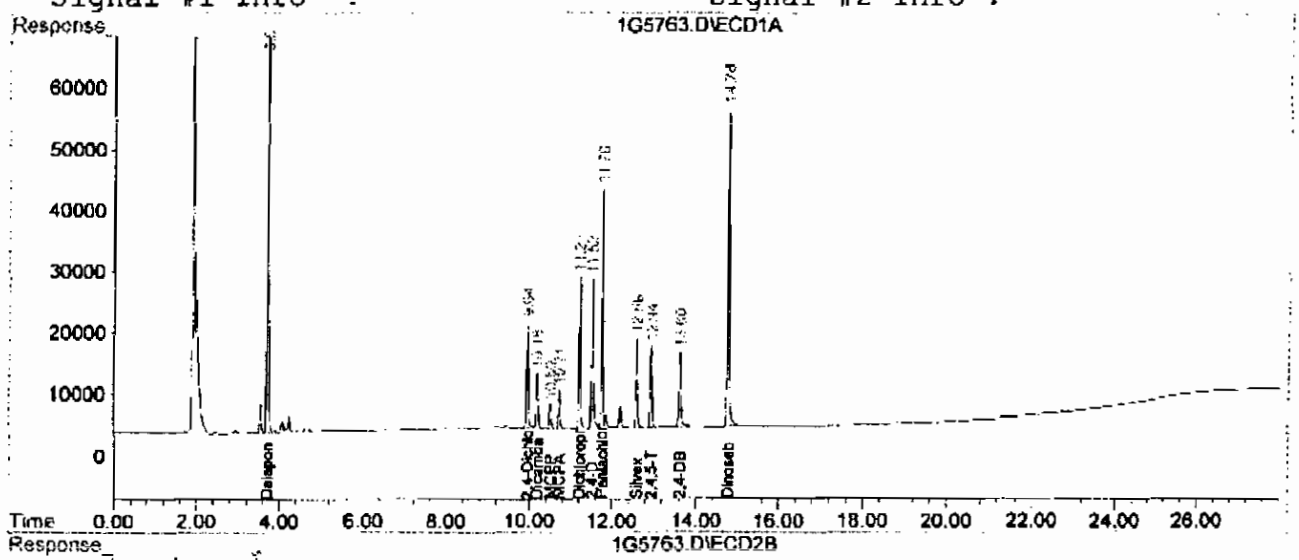
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

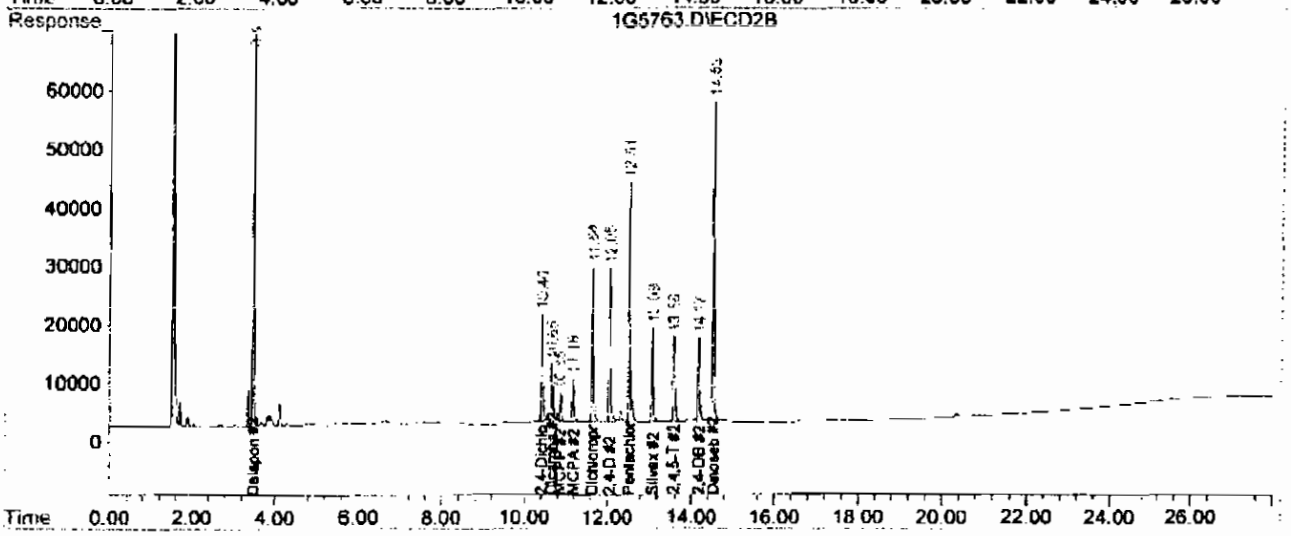
```
Data File : C:\HPCHEM\1\DATA\041503\1G5763.D\ECD1A.CH    Vial: 6
Acq On    : 15 Apr 2003  18:51                          Operator: ECL
Sample    : WG138386-06 HERB ALT ICV                    Inst    : HP1
Misc      : 1,1 SOS64-21                                Multiplr: 1.00
IntFile   : events.e

Data File : C:\HPCHEM\1\DATA\041503\1G5763.D\ECD2B.CH    Vial: 6
Acq On    : 15 Apr 2003  19:26                          Operator: ECL
Sample    : WG138386-01 HERB ICAL #1                    Inst    : HP1
Misc      : 1,1 SOS63-10                                Multiplr: 1.00
IntFile   : events2.e
Quant Time: Apr 16 12:24 2003  Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title        : CALIBRATION April 15, 2003 @ 1851
Last Update  : Wed Apr 16 12:06:45 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8151.M

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```





Data File : C:\HPCHEM\1\DATA\050103\1G5871.D\ECD1A.CH Vial: 1
Acq On : 1 May 2003 14:01 Operator: ECL
Sample : WG139503-01 HERB CCV Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5871.D\ECD2B.CH Vial: 1
Acq On : 1 May 2003 14:37 Operator: ECL
Sample : HERB CCV Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events2.e

Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Wed Apr 16 12:06:45 2003
Response via : Multiple Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Dalapon	1250.000	1276.270	-2.1	103	0.00
2	S	2,4-Dichlorophenylacetic ac	500.000	489.007	2.2	99	0.01
3		MCPA	50.000	50.741	-1.5	98	0.00
4		Dicamba	50.000	51.820	-3.6	104	0.02
5		MCPP	50.000	51.998	-4.0	97	0.02
6		Dichloroprop	500.000	515.822	-3.2	104	0.00
7		2,4-D	500.000	504.003	-0.8	102	0.01
8		Pentachlorophenol	50.000	53.543	-7.1	105	0.01
9		Silvex	50.000	51.112	-2.2	102	0.01
10		2,4,5-T	50.000	49.880	0.2	96	0.00
11		Dinoseb	250.000	260.762	-4.3	104	0.00
12		2,4-DB	500.000	502.751	-0.6	102	0.00

Signal #2

1		Dalapon	1250.000	1352.807	-8.2	111	0.00
2	S	2,4-Dichlorophenylacetic	500.000	528.495	-5.7	106	0.00
3		MCPA	50.000	52.073	-4.1	101	0.00
4		Dicamba	50.000	55.390	-10.8	109	0.01
5		MCPP	50.000	56.701	-13.4	100	0.00
6		Dichloroprop	500.000	533.200	-6.6	106	0.00
7		2,4-D	500.000	532.237	-6.4	104	0.00
8		Pentachlorophenol	50.000	57.440	-14.9	110	0.00
9		Silvex	50.000	57.142	-14.3	109	0.00
10		2,4,5-T	50.000	57.351	-14.7	108	0.00
11		Dinoseb	250.000	267.853	-7.1	105	0.00
12		2,4-DB	500.000	560.037	-12.0	108	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1G5871.D 8151.M Thu May 01 16:01:10 2003 Page 1

Data File : C:\HPCHEM\1\DATA\050103\1G5871.D\ECD1A.CH Vial: 1
Acq On : 1 May 2003 14:01 Operator: ECL
Sample : WG139503-01 HERB CCV Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5871.D\ECD2B.CH Vial: 1
Acq On : 1 May 2003 14:37 Operator: ECL
Sample : HERB CCV Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events2.e
Quant Time: May 1 15:52 2003 Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Thu May 01 15:52:34 2003
Response via : Initial Calibration
DataAcq Meth : 8151.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
2) S	2,4-Dichlorophen	9.93	10.40	517624	572859	489.007	528.495
	Spiked Amount 500.000 Range 20 - 144 Recovery =					97.80%	105.70%
	Target Compounds						
1)	Dalapon	3.69	3.47	2395051	2307085	1276.270	1352.807
3)	MCPA	10.71	11.18	178149	214313	50.741	52.073
4)	Dicamba	10.18	10.65	259482	293042	51.820	55.390
5)	MCPP	10.50	10.85	104624	134161	51.998	56.701
6)	Dichloroprop	11.21	11.64	724418	767909	515.822	533.200
7)	2,4-D	11.51	12.06	882556	888903	504.003	532.237
8)	Pentachlorophenol	11.75	12.52	1133560	1261336	53.543	57.440
9)	Silvex	12.59	13.09	426064	522063	51.112	57.142
10)	2,4,5-T	12.94	13.57	419414	486368	49.880	57.351
11)	Dinoseb	14.78	14.53	1711894	1779490	260.762	267.853
12)	2,4-DB	13.59	14.18	504658	561416	502.751	560.037

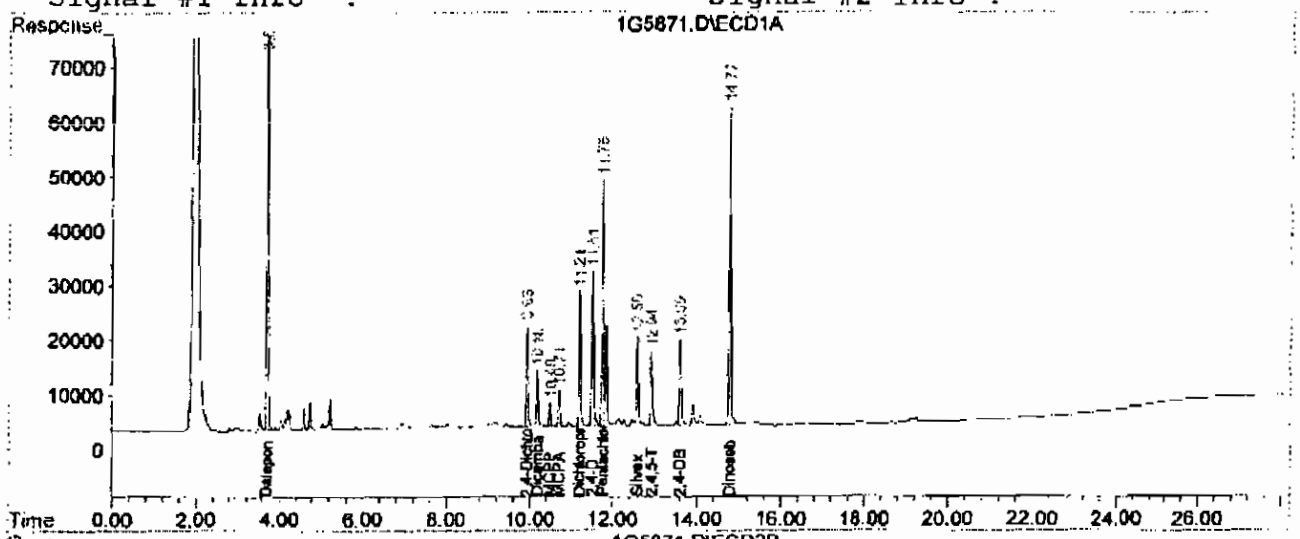
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

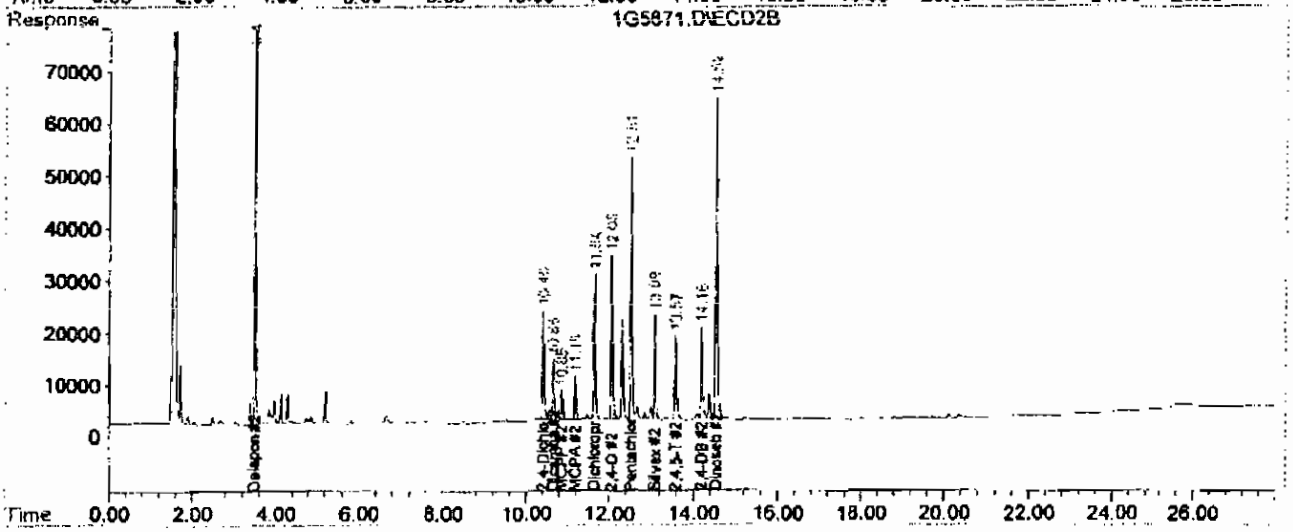
Data File : C:\HPCHEM\1\DATA\050103\1G5871.D\ECD1A.CH Vial: 1
Acq On : 1 May 2003 14:01 Operator: ECL
Sample : WG139503-01 HERB CCV Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5871.D\ECD2B.CH Vial: 1
Acq On : 1 May 2003 14:37 Operator: ECL
Sample : HERB CCV Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events2.e
Quant Time: May 1 15:52 2003 Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Thu May 01 15:52:34 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8151.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data File : C:\HPCHEM\1\DATA\050103\1G5882.D\ECD1A.CH Vial: 12
Acq On : 1 May 2003 21:53 Operator: ECL
Sample : WG139503-02 HERB CCV Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5882.D\ECD2B.CH Vial: 12
Acq On : 1 May 2003 22:28 Operator: ECL
Sample : L0304587-02 Inst : HP1
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events2.e

Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Wed Apr 16 12:06:45 2003
Response via : Multiple Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Dalapon	1250.000	1300.158	-4.0	105	0.02
2	S	2,4-Dichlorophenylacetic ac	500.000	506.144	-1.2	103	0.00
3		MCPA	50.000	52.651	-5.3	102	0.00
4		Dicamba	50.000	52.997	-6.0	106	0.00
5		MCPP	50.000	54.213	-8.4	101	0.00
6		Dichloroprop	500.000	524.057	-4.8	105	0.00
7		2,4-D	500.000	515.756	-3.2	105	0.00
8		Pentachlorophenol	50.000	54.698	-9.4	107	0.00
9		Silvex	50.000	53.214	-6.4	106	0.00
10		2,4,5-T	50.000	50.670	-1.3	98	0.00
11		Dinoseb	250.000	262.942	-5.2	105	-0.01
12		2,4-DB	500.000	517.553	-3.5	105	-0.01

Signal #2

1		Dalapon	1250.000	1351.993	-8.2	111	0.01
2	S	2,4-Dichlorophenylacetic	500.000	528.324	-5.7	106	0.00
3		MCPA	50.000	51.977	-4.0	100	0.00
4		Dicamba	50.000	55.483	-11.0	110	0.00
5		MCPP	50.000	56.848	-13.7	100	0.00
6		Dichloroprop	500.000	536.016	-7.2	106	0.00
7		2,4-D	500.000	535.476	-7.1	104	0.00
8		Pentachlorophenol	50.000	56.799	-13.6	108	0.00
9		Silvex	50.000	56.977	-14.0	108	0.00
10		2,4,5-T	50.000	56.259	-12.5	106	0.00
11		Dinoseb	250.000	269.156	-7.7	106	0.00
12		2,4-DB	500.000	562.310	-12.5	108	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data File : C:\HPCHEM\1\DATA\050103\1G5882.D\ECD1A.CH Vial: 12
Acq On : 1 May 2003 21:53 Operator: ECL
Sample : WG139503-02 HERB CCV Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5882.D\ECD2B.CH Vial: 12
Acq On : 1 May 2003 22:28 Operator: ECL
Sample : L0304587-02 Inst : HP1
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events2.e
Quant Time: May 2 8:01 2003 Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Fri May 02 07:59:15 2003
Response via : Initial Calibration
DataAcq Meth : 8151.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
) S	2,4-Dichlorophen	9.85	10.33	535764	572674	506.144	528.324
Spiked Amount		500.000	Range	20 - 144	Recovery	= 101.23%	105.66%
	Target Compounds						
1)	Dalapon	3.64	3.42	2439880	2305696	1300.158	1351.993
3)	MCPA	10.63	11.11	184854	213918	52.651	51.977
4)	Dicamba	10.10	10.58	265374	293534	52.997	55.483
5)	MCPP	10.42	10.78	109080	134510	54.213	56.848
6)	Dichloroprop	11.13	11.56	735983	771964	524.057	536.016
7)	2,4-D	11.43	11.98	903137	894312	515.756	535.476
8)	Pentachlorophenol	11.67	12.43	1158010	1247270	54.698	56.799
9)	Silvex	12.51	13.01	443587	520560	53.214	56.977
10)	2,4,5-T	12.85	13.49	426060	477110	50.670	56.259
11)	Dinoseb	14.69	14.45	1726206	1788150	262.942	269.156
12)	2,4-DB	13.51	14.10	519515	563694	517.553	562.310

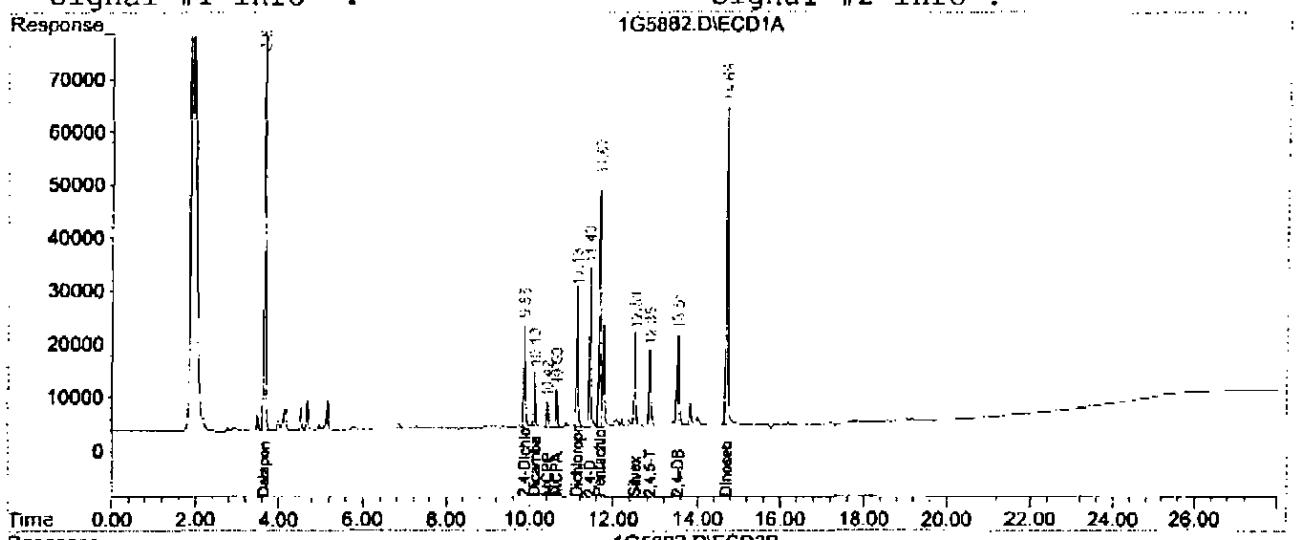
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

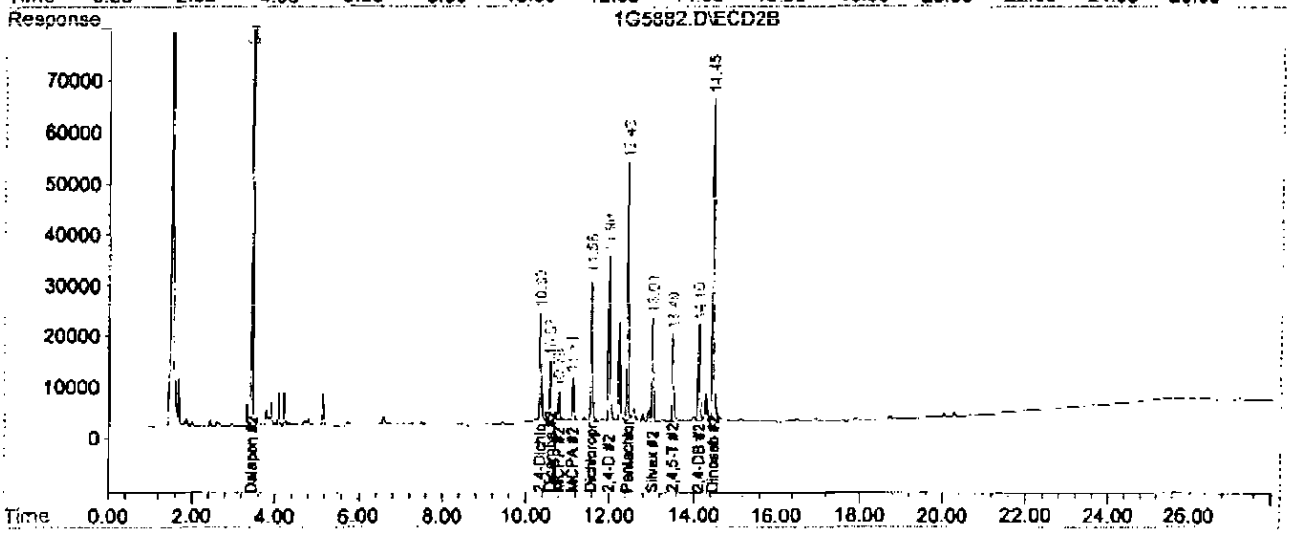
```
Data File : C:\HPCHEM\1\DATA\050103\1G5882.D\ECD1A.CH     Vial: 12
Acq On    :  1 May 2003  21:53                          Operator: ECL
Sample    : WG139503-02 HERB CCV                        Inst    : HP1
Misc      : 1,1 SOS63-10                                Multiplr: 1.00
IntFile   : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5882.D\ECD2B.CH     Vial: 12
Acq On    :  1 May 2003  22:28                          Operator: ECL
Sample    : L0304587-02                                 Inst    : HP1
Misc      : 1,1 WATER                                   Multiplr: 1.00
IntFile   : events2.e
Quant Time: May  2  8:01 2003  Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title        : CALIBRATION April 15, 2003 @ 1851
Last Update  : Fri May 02 07:59:15 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8151.M

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```





Data File : C:\HPCHEM\1\DATA\050103\1G5888.D\ECD1A.CH Vial: 18
Acq On : 2 May 2003 1:25 Operator: ECL
Sample : WG139503-03 HERB CCV Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5888.D\ECD2B.CH Vial: 18
Acq On : 2 May 2003 2:01 Operator: ECL
Sample : L0304594-03 Inst : HP1
Misc : 17,1 WATER Multiplr: 1.00
IntFile : events2.e

Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Wed Apr 16 12:06:45 2003
Response via : Multiple Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Dalapon	1250.000	1312.210	-5.0	106	0.02
2	S	2,4-Dichlorophenylacetic ac	500.000	511.406	-2.3	104	0.00
3		MCPA	50.000	53.505	-7.0	103	0.00
4		Dicamba	50.000	53.406	-6.8	107	0.00
5		MCPP	50.000	55.484	-11.0	104	0.00
6		Dichloroprop	500.000	528.552	-5.7	106	0.00
7		2,4-D	500.000	520.334	-4.1	106	0.00
8		Pentachlorophenol	50.000	55.242	-10.5	108	0.00
9		Silvex	50.000	53.758	-7.5	107	0.00
10		2,4,5-T	50.000	51.164	-2.3	99	0.00
11		Dinoseb	250.000	266.124	-6.4	106	-0.01
12		2,4-DB	500.000	523.280	-4.7	107	-0.01

Signal #2

1		Dalapon	1250.000	1351.401	-8.1	110	0.02
2	S	2,4-Dichlorophenylacetic	500.000	527.188	-5.4	105	0.00
3		MCPA	50.000	51.723	-3.4	100	0.00
4		Dicamba	50.000	55.518	-11.0	110	0.00
5		MCPP	50.000	56.429	-12.9	99	0.00
6		Dichloroprop	500.000	536.944	-7.4	106	0.00
7		2,4-D	500.000	535.177	-7.0	104	0.00
8		Pentachlorophenol	50.000	56.994	-14.0	109	-0.01
9		Silvex	50.000	57.056	-14.1	109	0.00
10		2,4,5-T	50.000	56.308	-12.6	106	0.00
11		Dinoseb	250.000	268.751	-7.5	106	0.00
12		2,4-DB	500.000	564.466	-12.9	109	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data File : C:\HPCHEM\1\DATA\050103\1G5888.D\ECD1A.CH Vial: 18
Acq On : 2 May 2003 1:25 Operator: ECL
Sample : WG139503-03 HERB CCV Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5888.D\ECD2B.CH Vial: 18
Acq On : 2 May 2003 2:01 Operator: ECL
Sample : L0304594-03 Inst : HP1
Misc : 17,1 WATER Multiplr: 1.00
IntFile : events2.e
Quant Time: May 2 8:02 2003 Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Fri May 02 08:02:03 2003
Response via : Initial Calibration
DataAcq Meth : 8151.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
2) S	2,4-Dichlorophen	9.84	10.31	541334	571443	511.406	527.188
Spiked Amount	500.000	Range	20 - 144	Recovery	=	102.28%	105.44%
	Target Compounds						
1)	Dalapon	3.63	3.42	2462497	2304686	1312.210	1351.401
3)	MCPA	10.62	11.09	187853	212871	53.505	51.723
4)	Dicamba	10.09	10.56	267426	293716	53.406	55.518
5)	MCPP	10.41	10.76	111640	133518	55.484	56.429
6)	Dichloroprop	11.12	11.55	742296	773300	528.552	536.944
7)	2,4-D	11.42	11.96	911154	893813	520.334	535.177
8)	Pentachloropheno	11.66	12.42	1169519	1251544	55.242	56.994
9)	Silvex	12.50	13.00	448123	521279	53.758	57.056
10)	2,4,5-T	12.84	13.47	430215	477527	51.164	56.308
11)	Dinoseb	14.68	14.44	1747096	1785460	266.124	268.751
12)	2,4-DB	13.50	14.09	525265	565855	523.280	564.466

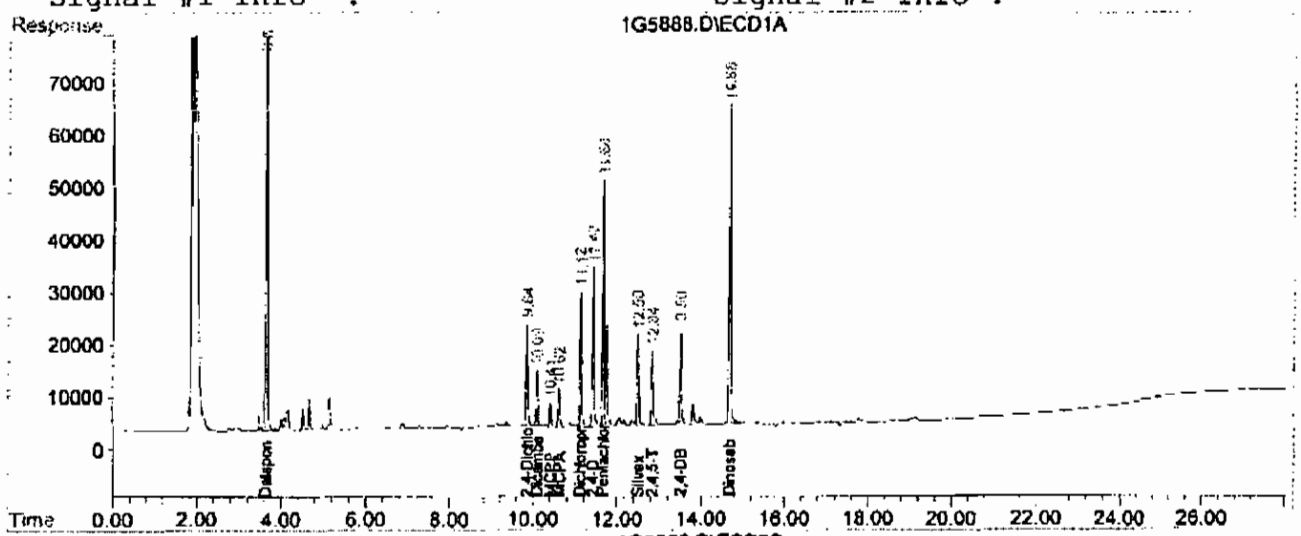
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

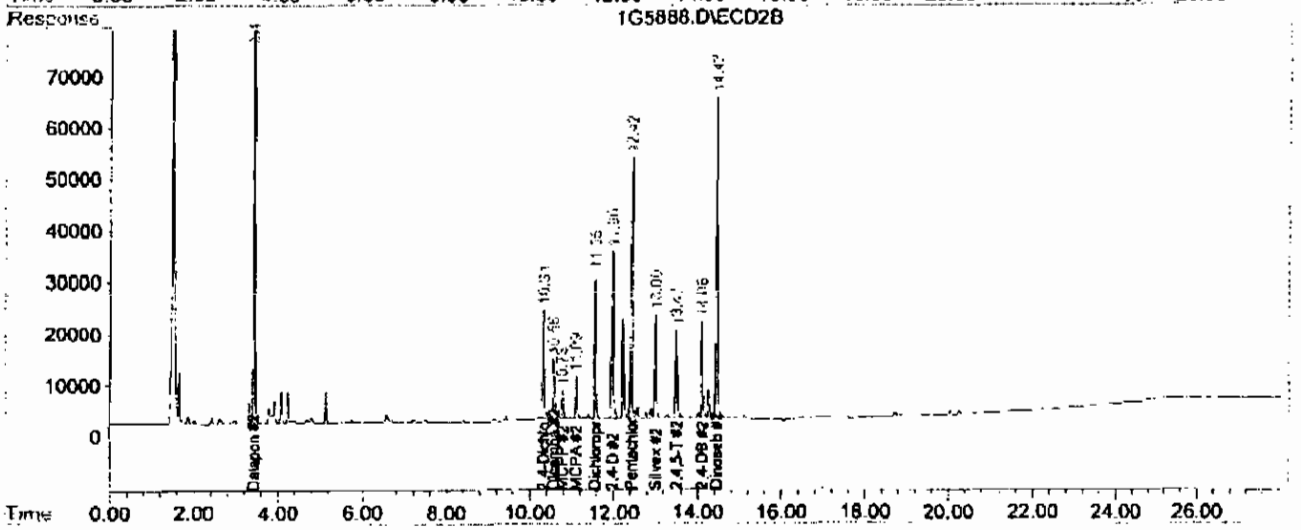
Data File : C:\HPCHEM\1\DATA\050103\1G5888.D\ECD1A.CH Vial: 18
Acq On : 2 May 2003 1:25 Operator: ECL
Sample : WG139503-03 HERB CCV Inst : HP1
Misc : 1,1 SOS63-10 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5888.D\ECD2B.CH Vial: 18
Acq On : 2 May 2003 2:01 Operator: ECL
Sample : L0304594-03 Inst : HP1
Misc : 17,1 WATER Multiplr: 1.00
IntFile : events2.e
Quant Time: May 2 8:02 2003 Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Fri May 02 08:02:03 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8151.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





RETENTION TIME WINDOWS

Lab Name: Kemron Environmental Services

Instrument ID: HP 1

GC Column: RTx-CLP (Front)

	STANDARD #1	STANDARD #2	STANDARD #3
Date Run	6/4/2002	6/6/02	6/12/02
File #	1G4958	1G4971	1G4992

COMPOUND	STD #1 RT	STD #2 RT	STD #3 RT	RT WIN
Dalapon	3.86	3.81	3.82	0.079
MCPA	11.05	10.97	10.99	0.125
Dicamba	10.52	10.44	10.47	0.121
MCPP	10.84	10.76	10.78	0.125
Dichloroprop	11.56	11.48	11.50	0.125
2,4-D	11.88	11.80	11.82	0.125
Pentachlorophenol	12.12	12.03	12.06	0.137
Silvex	12.96	12.88	12.90	0.125
2,4,5-T	13.33	13.26	13.26	0.121
Dinoseb	15.18	15.08	15.12	0.151
2,4-DB	13.99	13.92	13.93	0.114

RETENTION TIME WINDOWS

Lab Name: Kemron Environmental Services

Instrument ID: HP 1
GC Column: RTx-CLP II (Rear)

	STANDARD #1	STANDARD #2	STANDARD #3
Date Run	6/4/2002	6/6/02	6/12/02
File #	1G4958	1G4971	1G4992

COMPOUND	STD #1 RT	STD #2 RT	STD #3 RT	RT WIN
Dalapon	3.61	3.57	3.58	0.062
MCPA	11.49	11.41	11.43	0.125
Dicamba	10.96	10.88	10.90	0.125
MCPP	11.16	11.08	11.10	0.125
Dichloroprop	11.95	11.87	11.89	0.125
2,4-D	12.37	12.30	12.32	0.108
Pentachlorophenol	12.85	12.76	12.78	0.142
Silvex	13.42	13.34	13.36	0.125
2,4,5-T	13.91	13.84	13.85	0.114
Dinoseb	14.87	14.79	14.80	0.131
2,4-DB	14.53	14.45	14.46	0.131

2.2.4.4 Raw QC Data

Data File : C:\HPCHEM\1\DATA\050103\1G5872.D\ECD1A.CH Vial: 2
Acq On : 1 May 2003 16:02 Operator: ECL
Sample : WG139417-02 BLANK V201 P105 Inst : HP1
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5872.D\ECD2B.CH Vial: 2
Acq On : 1 May 2003 16:37 Operator: ECL
Sample : WG139417-02 BLANK V201 P105 Inst : HP1
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events2.e
Quant Time: May 2 9:16 2003 Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Fri May 02 09:16:22 2003
Response via : Initial Calibration
DataAcq Meth : 8151.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
) S	2,4-Dichlorophen	9.92	10.39	466633	478145	440.835	441.116	
Spiked Amount		500.000	Range	20 - 144	Recovery	=	88.17%	88.22%
	Target Compounds							
1)	Dalapon	0.00	0.00	0	0	N.D.	N.D.	
3)	MCPA	0.00	11.18	0	117114	N.D.	28.456	#
4)	Dicamba	0.00	0.00	0	0	N.D.	N.D.	
5)	MCPP	0.00	0.00	0	0	N.D.	N.D.	
6)	Dichloroprop	0.00	11.65f	0	193438	N.D.	134.315	#
7)	2,4-D	11.54f	0.00	69081	0	39.450	N.D.	#
8)	Pentachlorophenol	0.00	0.00	0	0	N.D.	N.D.	
9)	Silvex	0.00	0.00	0	0	N.D.	N.D.	
10)	2,4,5-T	0.00	0.00	0	0	N.D.	N.D.	
11)	Dinoseb	0.00	0.00	0	0	N.D.	N.D.	
12)	2,4-DB	0.00	0.00	0	0	N.D.	N.D.	

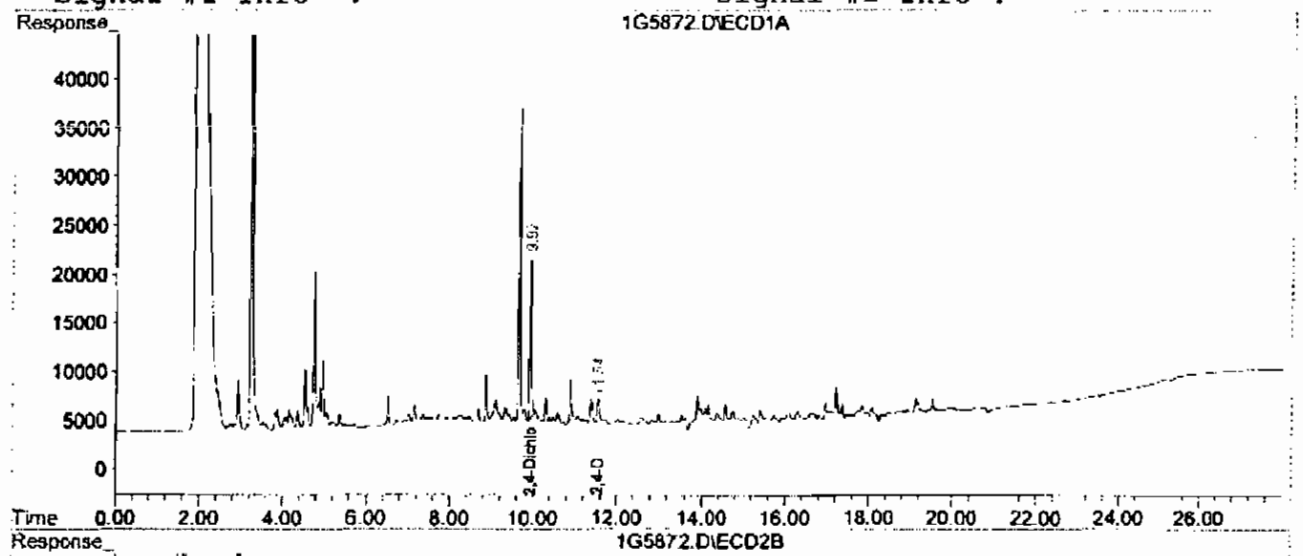
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

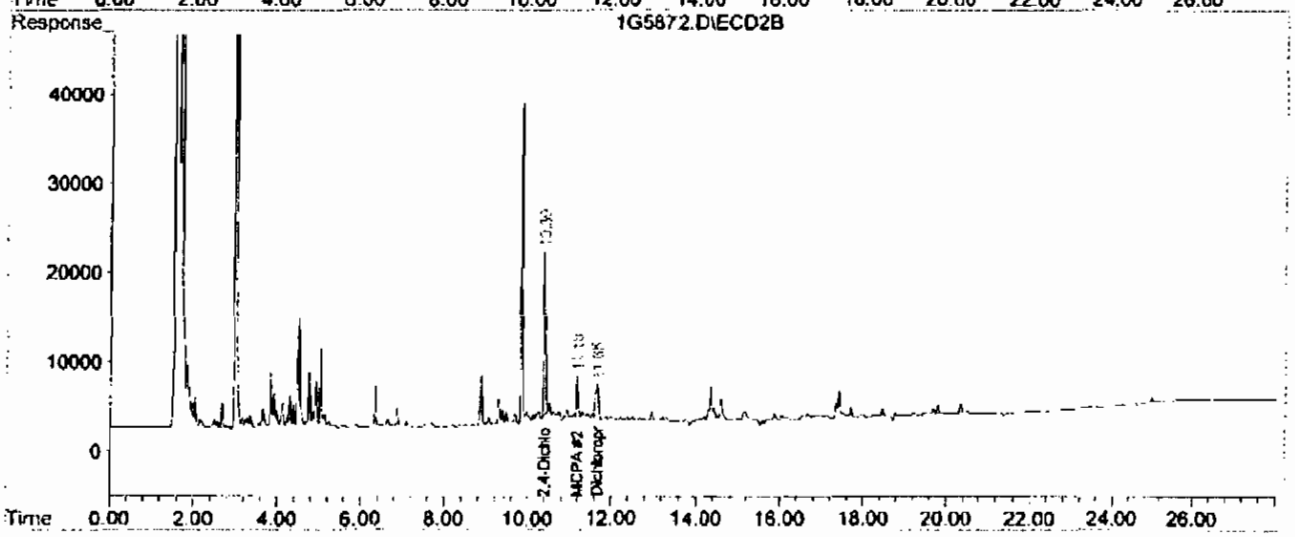
```
Data File : C:\HPCHEM\1\DATA\050103\1G5872.D\ECD1A.CH     Vial: 2
Acq On    :  1 May 2003  16:02                          Operator: ECL
Sample    : WG139417-02 BLANK V201 P105                 Inst    : HP1
Misc      : 1,1 WATER                                   Multiplr: 1.00
IntFile   : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5872.D\ECD2B.CH     Vial: 2
Acq On    :  1 May 2003  16:37                          Operator: ECL
Sample    : WG139417-02 BLANK V201 P105                 Inst    : HP1
Misc      : 1,1 WATER                                   Multiplr: 1.00
IntFile   : events2.e
Quant Time: May  2  9:16 2003  Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title        : CALIBRATION April 15, 2003 @ 1851
Last Update  : Fri May 02 09:16:22 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8151.M

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```





Data File : C:\HPCHEM\1\DATA\050103\1G5873.D\ECD1A.CH Vial: 3
Acq On : 1 May 2003 16:37 Operator: ECL
Sample : WG139417-03 LCS V201 P105 Inst : HP1
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5873.D\ECD2B.CH Vial: 3
Acq On : 1 May 2003 17:12 Operator: ECL
Sample : WG139417-03 LCS V201 P105 Inst : HP1
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events2.e
Quant Time: May 2 9:17 2003 Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Fri May 02 09:16:22 2003
Response via : Initial Calibration
DataAcq Meth : 8151.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
S	2,4-Dichlorophen	9.90	10.39	514308	466977	485.874	430.812	
	Spiked Amount 500.000 Range 20 - 144 Recovery =					97.17%	86.16%	
	Target Compounds							
1)	Dalapon	3.68	3.47	508932	517191	271.199	303.266	
3)	MCPA	10.68	11.17	170596	307776	48.590	74.783	#
4)	Dicamba	10.15	10.63	244616	226244	48.851	42.764	
5)	MCPP	10.46	10.84	136176	123944	67.679	52.382	
6)	Dichloroprop	11.18	11.62	720027	942487	512.696	654.419	#
7)	2,4-D	11.48	12.04	806732	756315	460.702	452.849	
8)	Pentachloropheno	11.72	12.50	883518	976445	41.733	44.466	
9)	Silvex	12.56	13.07	415632	442637	49.860	48.448	
10)	2,4,5-T	12.91	13.55	452322	461469	53.794	54.415	
11)	Dinoseb	14.75	14.51	1322301	1407898	201.418	211.920	
12)	2,4-DB	13.56	14.16	402885	430765	401.362	429.707	

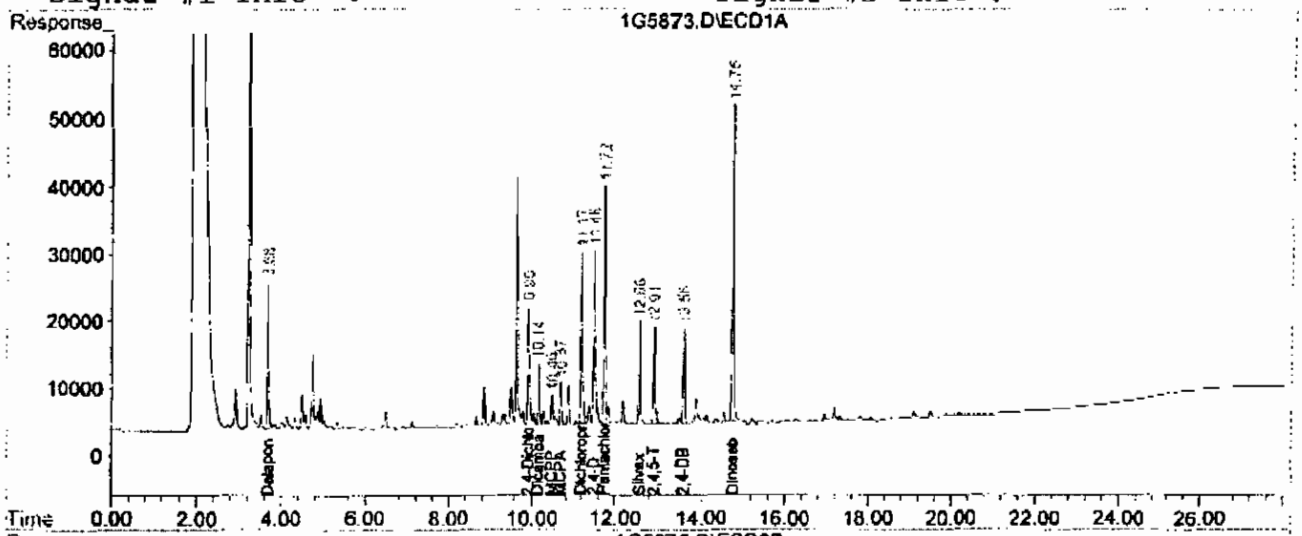
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

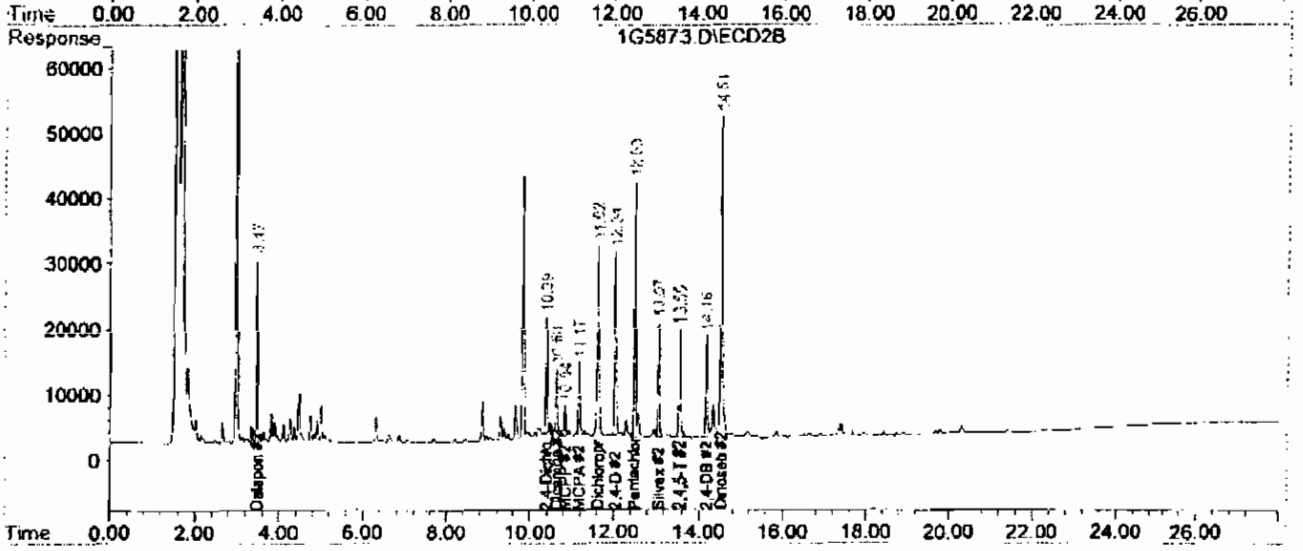
```
Data File : C:\HPCHEM\1\DATA\050103\1G5873.D\ECD1A.CH     Vial: 3
Acq On    :  1 May 2003  16:37                          Operator: ECL
Sample    : WG139417-03 LCS V201 P105                   Inst    : HP1
Misc      : 1,1 WATER                                   Multiplr: 1.00
IntFile   : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5873.D\ECD2B.CH     Vial: 3
Acq On    :  1 May 2003  17:12                          Operator: ECL
Sample    : WG139417-03 LCS V201 P105                   Inst    : HP1
Misc      : 1,1 WATER                                   Multiplr: 1.00
IntFile   : events2.e
Quant Time: May  2  9:17 2003  Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title        : CALIBRATION April 15, 2003 @ 1851
Last Update  : Fri May 02 09:16:22 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8151.M

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```





Data File : C:\HPCHEM\1\DATA\050103\1G5885.D\ECD1A.CH Vial: 15
Acq On : 1 May 2003 23:39 Operator: ECL
Sample : WG139291-01 TCLP BLANK 4/28 Inst : HP1
Misc : 17,1 WATER Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5885.D\ECD2B.CH Vial: 15
Acq On : 2 May 2003 00:15 Operator: ECL
Sample : WG139291-01 TCLP BLANK 4/28 Inst : HP1
Misc : 17,1 WATER Multiplr: 1.00
IntFile : events2.e
Quant Time: May 2 9:26 2003 Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title : CALIBRATION April 15, 2003 @ 1851
Last Update : Fri May 02 09:25:07 2003
Response via : Initial Calibration
DataAcq Meth : 8151.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
) S	2,4-Dichlorophen	9.84	10.32	431875	409574	407.998	377.855	
Spiked Amount		500.000	Range	20 - 144	Recovery	=	81.60%	75.57%
	Target Compounds							
1)	Dalapon	0.00	0.00	0	0	N.D.	N.D.	
3)	MCPA	0.00	11.10	0	120321	N.D.	29.235	#
4)	Dicamba	0.00	0.00	0	0	N.D.	N.D.	
5)	MCPP	0.00	0.00	0	0	N.D.	N.D.	
6)	Dichloroprop	0.00	11.58	0	193371	N.D.	134.268	#
7)	2,4-D	11.46f	0.00	70172	0	40.073	N.D.	#
8)	Pentachloropheno	0.00	0.00	0	0	N.D.	N.D.	
9)	Silvex	0.00	0.00	0	0	N.D.	N.D.	
10)	2,4,5-T	0.00	0.00	0	0	N.D.	N.D.	
11)	Dinoseb	0.00	14.50f	0	99934	N.D.	15.042	#
12)	2,4-DB	0.00	0.00	0	0	N.D.	N.D.	

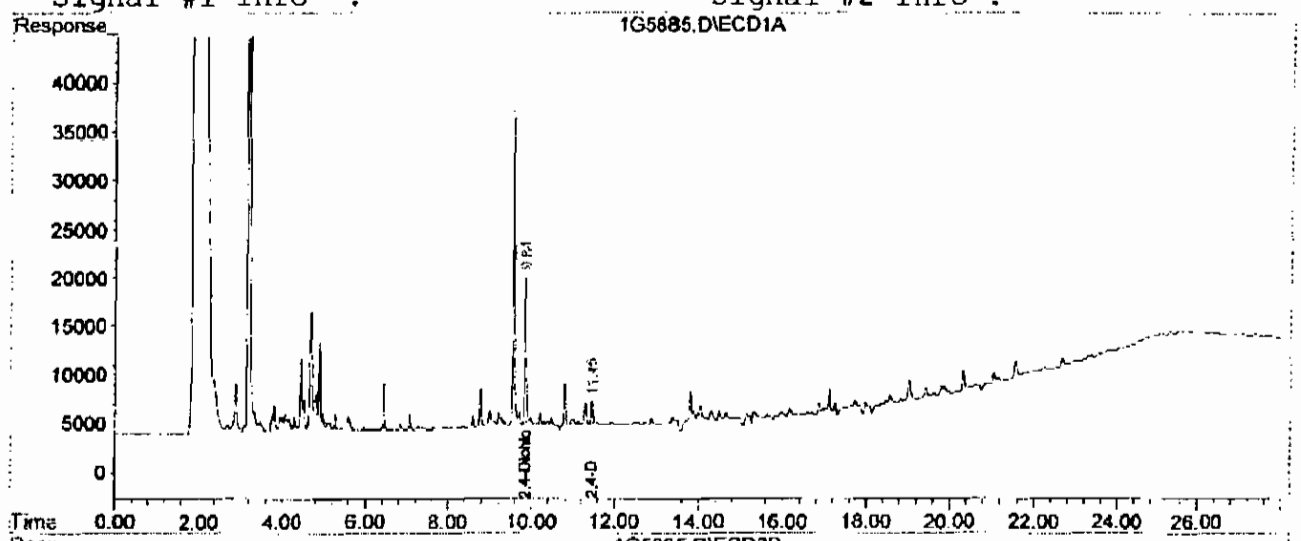
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

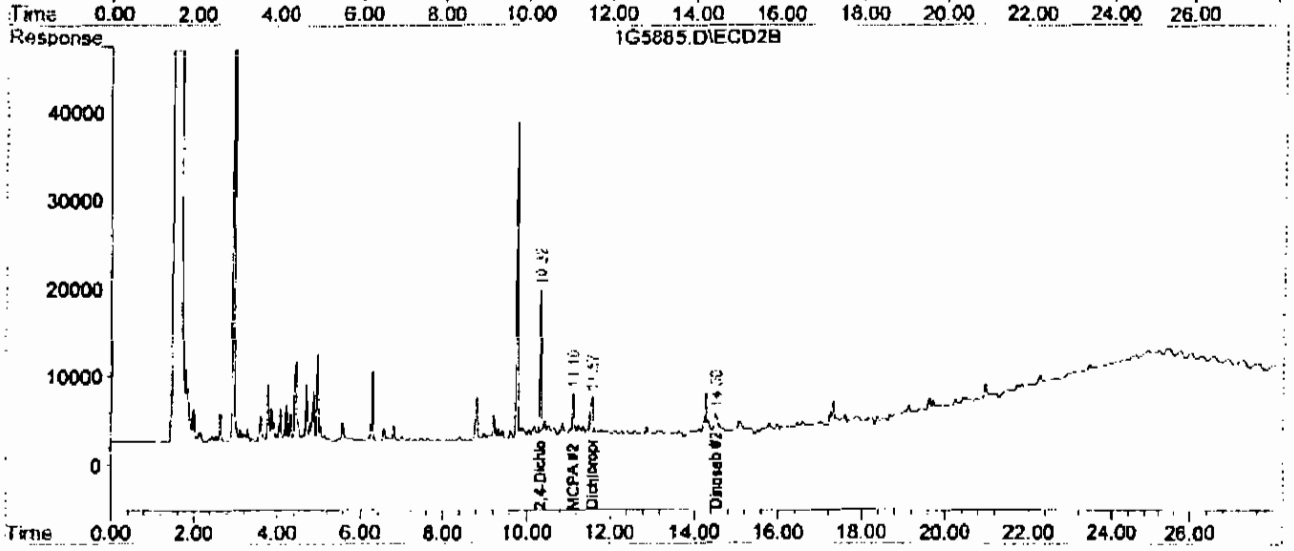
```
Data File : C:\HPCHEM\1\DATA\050103\1G5885.D\ECD1A.CH    Vial: 15
Acq On    :  1 May 2003  23:39                          Operator: ECL
Sample    : WG139291-01 TCLP BLANK 4/28                 Inst    : HP1
Misc      : 17,1 WATER                                  Multiplr: 1.00
IntFile   : events.e

Data File : C:\HPCHEM\1\DATA\050103\1G5885.D\ECD2B.CH    Vial: 15
Acq On    :  2 May 2003  00:15                          Operator: ECL
Sample    : WG139291-01 TCLP BLANK 4/28                 Inst    : HP1
Misc      : 17,1 WATER                                  Multiplr: 1.00
IntFile   : events2.e
Quant Time: May  2  9:26 2003  Quant Results File: 8151.RES

Quant Method : C:\HPCHEM\1\METHODS\8151.M (Chemstation Integrator)
Title        : CALIBRATION April 15, 2003 @ 1851
Last Update  : Fri May 02 09:25:07 2003
Response via : Multiple Level Calibration
DataAcq Meth : 8151.M

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```





Directory: c:\hpchem\1\data\041503

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	1g5758.d	1.	WG138386-05 HERB ICAL #5	1,1 SOS63-10	15 Apr 103 12::5
2	2	1g5759.d	1.	WG138386-04 HERB ICAL #4	1,1 SOS63-10	15 Apr 103 12::3
3	3	1g5760.d	1.	WG138386-03 HERB ICAL #3	1,1 SOS63-10	15 Apr 103 12::0
4	4	1g5761.d	1.	WG138386-02 HERB ICAL #2	1,1 SOS63-10	15 Apr 103 12::4
5	5	1g5762.d	1.	WG138386-01 HERB ICAL #1	1,1 SOS63-10	15 Apr 103 12::1
6	6	1g5763.d	1.	WG138386-06 HERB ALT ICV	1,1 SOS64-21	15 Apr 103 12::5
7	7	1g5764.d	1.	WG138293-02 BLANK V201 P09	1,1 WATER	15 Apr 103 12::2
8	8	1g5765.d	1.	WG138293-03 LCS V201 P09	1,1 WATER	15 Apr 103 12::0
9	9	1g5766.d	1.	WG138293-04 LCS DUP V201 P09	1,1 WATER	15 Apr 103 12::3
10	10	1g5767.d	1.	WG138133-01 TCLP BLANK 4/10	17,1 WATER	15 Apr 103 12::1
11	11	1g5768.d	1.	WG138293-01 L0304191-01	17,1 WATER	15 Apr 103 12::4
12	12	1g5769.d	1.	WG138293-05 L0304191-01 MS	17,1 WATER	15 Apr 103 13::2
13	13	1g5770.d	1.	WG138196-01 TCLP BLANK 4/11	17,1 WATER	15 Apr 103 13::5
14	14	1g5771.d	1.	L0304184-01	17,1 WATER	15 Apr 103 13::3
15	15	1g5772.d	1.	WG138386-07 HERB CCV	1,1 SOS63-10	16 Apr 103 12::2
16	16	1g5773.d	1.	L0304198-01	1,1 WATER	16 Apr 103 12::5
17	17	1g5774.d	1.	L0304198-02	1,1 WATER	16 Apr 103 12::3
18	18	1g5775.d	1.	L0304198-03	1,1 WATER	16 Apr 103 13::0
19	19	1g5776.d	1.	L0304198-04	1,1 WATER	16 Apr 103 13::4
20	20	1g5777.d	1.	L0304198-05	1,1 WATER	16 Apr 103 13::1
21	21	1g5778.d	1.	L0304248-01	1,1 WATER	16 Apr 103 13::5
22	22	1g5779.d	1.	L0304248-02	1,1 WATER	16 Apr 103 13::2
23	23	1g5780.d	1.	L0304248-03	1,1 WATER	16 Apr 103 12::0
24	24	1g5781.d	1.	L0304248-04	1,1 WATER	16 Apr 103 12::3
25	25	1g5782.d	1.	L0304248-05	1,1 WATER	16 Apr 103 12::1
26	26	1g5783.d	1.	WG138386-08 HERB CCV	1,1 SOS63-10	16 Apr 103 12::4

ECQ 4/17/03

mdl 4/17/03

17 Apr 03 08:38

KEMRON ENVIRONMENTAL SERVICES
Semivolatile GC Laboratory Maintenance Log

Analysis Date/Time 4/15/03 Instrument ID HP I Column ID Rtx-CLP Front Data Subdirectory 041503
Analyst Initials EG

SOP # GCS09 Rev. # ___ 8081A ___
SOP # GCS04 Rev. # 2 8151A ✓
SOP # GCS03 Rev. # ___ PRO ___
SOP # GCS02 Rev. # ___ 8015B Mod (Alcohol) ___

SOP # GCS10 Rev. # ___ 8082 ___
SOP # GCS01 Rev. # ___ 8100 ___
SOP # GCS02 Rev. # ___ 8015B Mod (DRO) ___
SOP # GCS07 Rev. # ___ 8011 ___

Analysis Date/Time 4/15/03 Instrument ID HP I Column ID Rtx-CLP II Rear Data Subdirectory 041503

Daily Check
- ☑ Gases >500 psi

Preventative Maintenance
- ☐ Change o-ring
- ☑ Change liner
- ☑ Change septum
- ☑ Clip column (8 cm)
- ☐ Injection port seal (goldseal)
- ☐ Change gases ___

Returned To Control?
Yes ✓ No ___

Additional Maintenance
Problem: ___

Action Taken: ___

Comments

Reviewed By: [illegible] 4/17/03

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	1g5871.d	1.	WG139503-01 HERB CCV	1,1 SOS63-10	1 May 103 12::0
2	2	1g5872.d	1.	WG139417-02 BLANK V201 P105	1,1 WATER	1 May 103 12::0
3	3	1g5873.d	1.	WG139417-03 LCS V201 P105	1,1 WATER	1 May 103 12::3
4	4	1g5874.d	1.	L0304585-01	1,1 WATER	1 May 103 12::1
5	5	1g5875.d	1.	L0304585-02	1,1 WATER	1 May 103 12::4
6	6	1g5876.d	1.	L0304585-03	1,1 WATER	1 May 103 12::2
7	7	1g5877.d	1.	WG139417-01 L0304585-04	1,1 WATER	1 May 103 12::5
8	8	1g5878.d	1.	WG139417-04 L0304585-05 MS	1,1 WATER	1 May 103 12::3
9	9	1g5879.d	1.	WG139417-05 L0304585-06 MSD	1,1 WATER	1 May 103 12::0
10	10	1g5880.d	1.	L0304585-10	1,1 WATER	1 May 103 12::4
11	11	1g5881.d	1.	L0304587-02	1,1 WATER	1 May 103 12::1
12	12	1g5882.d	1.	WG139503-02 HERB CCV	1,1 SOS63-10	1 May 103 12::5
13	13	1g5883.d	1.	L0304594-01	1,1 WATER	1 May 103 13::2
14	14	1g5884.d	1.	L0304594-02	1,1 WATER	1 May 103 13::0
15	15	1g5885.d	1.	WG139291-01 TCLP BLANK 4/28	17,1 WATER	1 May 103 13::3
16	16	1g5886.d	1.	L0304554-01	17,1 WATER	2 May 103 13::1
17	17	1g5887.d	1.	L0304594-03	17,1 WATER	2 May 103 13::5
18	18	1g5888.d	1.	WG139503-03 HERB CCV	1,1 SOS63-10	2 May 103 12::2

EQ 5/2/03
[illegible]

02 May 03 07:58

KEMRON ENVIRONMENTAL SERVICES
Semivolatile GC Laboratory Maintenance Log

Analysis Date/Time 5/1/03 Instrument ID HP I Column ID RTx-CLP Front Data Subdirectory 050103
Analyst Initials ECC

SOP # GCS09 Rev. # ___ 8081A ___
SOP # GCS04 Rev. # 2 8151A ✓
SOP # GCS03 Rev. # ___ PRO ___
SOP # GCS02 Rev. # ___ 8015B Mod (Alcohol) ___
SOP # GCS10 Rev. # ___ 8082 ___
SOP # GCS01 Rev. # ___ 8100 ___
SOP # GCS02 Rev. # ___ 8015B Mod (DRO) ___
SOP # GCS07 Rev. # ___ 8011 ___

Analysis Date/Time 5/1/03 Instrument ID HP I Column ID RTx-CLP II Rear Data Subdirectory 050103

Daily Check
✓ Gases >500 psi

Preventative Maintenance
- ☐ Change o-ring
- ☐ Change liner
- ☐ Change septum
- ☐ Clip column (___cm)
- ☐ Injection port seal (goldseal)
- ☐ Change gases _____

Returned To Control?
Yes ___ No ___

Additional Maintenance
Problem: _____

Action Taken: _____

Comments

Reviewed By: [illegible]

Parameter: HPLC H_2O SOP #: EX401 Revision #: 12
Extraction Analyst(s): [illegible], PAS TV/KD Analyst(s): [illegible]
Date/Time Extracted: 04/30/03 @ 1500 Date TV/KD: 05-01-03
Spike/Surrogate Analyst: [illegible] Witness: CEB
Surrogate #: 555ee44-07 Earliest Hold Date: 05/01/03
Spike #: A = 555ee44-07 Spike #: B = —

Extraction Work Group WG 139417
Analytical Work Group WG 139504

Extract Relinquished By: [illegible]
Extract Received By & Date: 05/1/03

	Sample ID	Test Code	pH / <2	N	>12	Initial Vol / Wt	Amount Surrogate	Amount Spike	Final Volume	Extract Color	Emulsions / A	BN	N	Comments
1	Blank		✓		✓	1000 mL	1 mL		10 mL	T				WG 139417-02
2	LCS		✓		✓	⊥	⊥	1 mL	⊥	⊥				WG ⊥ -03
3	04-585-01	8151	✓		✓	980 mL	⊥	⊥	⊥	⊥				
4	⊥ -02	⊥	✓		✓	980 mL	⊥	⊥	⊥	⊥				
5	⊥ -03	⊥	✓		✓	1000 mL	⊥	⊥	⊥	⊥				
6	⊥ -04	⊥	✓		✓	⊥	⊥	⊥	⊥	⊥				WG 139417-01
7	⊥ -05AS	⊥	✓		✓	⊥	⊥	1 mL	⊥	⊥				⊥ -04A
8	⊥ -06AS	⊥	✓		✓	⊥	⊥	⊥	⊥	⊥				⊥ -05A
9	⊥ -10	⊥	✓		✓	⊥	⊥	⊥	⊥	⊥				
10	04-587-02	⊥	✓		✓	960 mL	⊥	⊥	⊥	⊥				
11	04-594-01	⊥	✓		✓	900 mL	⊥	⊥	⊥	⊥				
12	⊥ -02	⊥	✓		✓	955 mL	⊥	⊥	⊥	⊥				
13	TBLK 7/10	8151-TC	✓		✓	100 mL	⊥	⊥	⊥	⊥				WG 139291-01
14	04-554-01	⊥	✓		✓	⊥	⊥	⊥	⊥	⊥				
15	04-594-03	⊥	✓		✓	⊥	⊥	⊥	⊥	⊥				
16														
17														
18														
19														
20														
21														
22														
23														
24														

[illegible] 05-01-03

Methylene Chloride Lot #: 43010
Hexane Lot #: 543054
Ether Lot #: 43048
Methanol Lot #: 43036387
Solvent: — Lot #: —
Reagent: NaCl Lot #: 105H20
Reagent: 6 N NaOH Lot #: EK0005-14
Reagent: Iso-octane Lot #: V04616
Acid: 12 N H_2SO_4 Lot #: EK0005-8
Florisil Lot #: —
Silica Gel Lot #: —
IR Analyst / Date / Time: —
Dried Na_2SO_4 Lot #: (Acidified) EK 0005-6

Color Code
T = Transparent
C = Colored
O = Opaque

SW-846 Method			On	Off	On	Off
Continuous	3520C					
Soxhlet	3540C					
ASE*	3545					
Sep Funnel	3510C	✓				
Sonication	3550B					
Waste	3580A					

* Accelerated Solvent Extractor (ASE)

Clean-ups			
Florisil 3620B		GPC 3640A	
Silica Gel 3630C		Other	✓
Acid 3665A		N/A	
Sulfur 3660B			

Peer Reviewed By: [illegible] Date: 05-01-03

Extraction Notes For Volume # 201 Page # 105

General Comments: * MS, MSD of 04-585-04
Diazomethane → HCCOS-26
Silicic Acid → 2847N, 3607

Extraction Anomalies: None

Concentration Anomalies: None

Clean-Up Anomalies: None

Supervisor Review: _____ Date: _____

Semi-Volatile GC Checklist

Run Date: 4/15/03

Analyst: ECL

Instrument: HP I

Method: 8151

Workorders:	Due Date:	Priority:
04-184	4/23	
04-191	4/16	F2
04-198	4/17	F2
04-248	4/18	F2

		Analyst
System Performance Check:	Endrin/DDT Breakdown	
Initial Calibration:	Average RF	✓
	Linear or quadratic regression	
	Alt Source Check	✓
Continuing Calibration:	Continuing Calibration	✓
	Client Specific Requirements	✓
	Ending Standards	✓
	Special Standards	
Blanks:	Quant Report/Chromatogram	✓
	Surrogates	✓
LCS/LCS DUP:	Quant Report/Chromatogram	✓
	Surrogates	✓
	Spike Compounds	✓
	MS/MSD	✓
Samples:	Quant Reports/Chromatograms	✓
	Surrogates	✓
	Dilution runs	
	Check Sample Histories	
Data Package:	Manual Integrations	
	Run logs	✓
	Bench sheets	✓
	QC sheets	✓
	Upload results	✓
	Seedpak workgroups	✓
	Level 2	✓
	Level 3	
	Level 4 copies	✓
	Level x	
	Case narratives	✓

	Supervisor
Corrective Action:	
Results Reporting/Data Qualifiers:	
Client Data Package Assembly:	
Check for Completeness:	
Check for compliance with method and project requirements:	
Check the reasonableness of results:	

√ = Checked & OK

NA = Not Applicable

Comments:

Primary Reviewer: EC2 4/17/03

Secondary Reviewer: [illegible] 4/18/03

Supervisor Review: [illegible] 4/18/03

Semi-Volatile GC Checklist

Run Date: 5/1/03

Analyst: ECL

Instrument: HP I

Method: 8151

Workorders:	Due Date:	Priority:
04-554	5/2	P1
04-585	5/5	F1
04-587	5/9	F1
04-594	5/5	P1

		Analyst
System Performance Check:	Endrin/DDT Breakdown	
Initial Calibration:	Average RF	
	Linear or quadratic regression	
	Alt Source Check	
Continuing Calibration:	Continuing Calibration	✓
	Client Specific Requirements	✓
	Ending Standards	✓
	Special Standards	
Blanks:	Quant Report/Chromatogram	✓
	Surrogates	✓
LCS/LCS DUP:	Quant Report/Chromatogram	✓
	Surrogates	✓
	Spike Compounds	✓
	MS/MSD	✓
Samples:	Quant Reports/Chromatograms	✓
	Surrogates	✓
	Dilution runs	
	Check Sample Histories	
Data Package:	Manual Integrations	
	Run logs	✓
	Bench sheets	✓
	QC sheets	✓
	Upload results	✓
	Seedpak workgroups	✓
	Level 2	
	Level 3	
	Level 4 copies	✓
	Level x	
	Case narratives	

	Supervisor
Corrective Action:	
Results Reporting/Data Qualifiers:	
Client Data Package Assembly:	
Check for Completeness:	
Check for compliance with method and project requirements:	
Check the reasonableness of results:	

√ = Checked & OK

NA = Not Applicable

Comments:

Primary Reviewer: EC 5/2/03

Secondary Reviewer: [illegible] 5/2/03

Supervisor Review: [illegible] 5/2/03

Example 8151 Calculations

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

		Example:
	RF = As/ Cs	
Where:	As = Area of the compound being measured in the standard	10000
	Cs = Concentration of the compound being measured (ng/ml).	100
	RF	**100**

2.0 Calculating the concentration (C) of a compound in water using data from prep log and quantitation report:*

		Example:
	C = [(Ax)(Vf)(D)] / [(RF)(Vi)]	
Where:	Ax = Area of the compound being measured	10000
	Vf = Final volume of sample extract (mL). (prep log)	1
	D = Dilution factor for sample as a multiplier (10X = 10).	1
	RF = Response factor from ICAL calculated above.	100
	Vi = Initial volume of sample (mL). (prep log)	1000
	C (ug/L)	**0.1**

3.0 Calculating the concentration (C) of a compound in soil using data from prep log and quantitation report:*

		Example:
	C = [(Ax)(Vf)(D)] / [(RF)(Vi)]	
Where:	Ax = Area of the compound being measured	10000
	Vf = Final volume of sample extract (mL).	1
	D = Dilution factor for sample as a multiplier (10X = 10).	1
	RF = Response factor from ICAL calculated above.	100
	Wi = Initial weight of sample (g).	30
	C (ug/kg)	**3.333333**

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

2.2.9 Explosives (8330)

REPORT NARRATIVE
HPLC-EXPLOSIVE RESIDUES

KEMRON Report No.: L0304594
Note: Tetryl readily decomposes in the presence of methanol/water or heat. False negative results for this analyte are possible.

METHOD

Analysis: SW-846 8330

HOLDING TIMES

Sample Preparation: All holding times were met.
Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial calibrations: For all compounds linear equations were applied. All acceptance criteria were met.
Alternate Source Standards: All acceptance criteria were met.
Continuing Calibration : All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.
Laboratory Control Samples: All acceptance criteria were met.
Matrix Spikes: An MS/MSD were not associated with this sample delivery group.

SAMPLES

Surrogates: Sample fraction 01 yielded a percent recovery for the surrogate that was above the advisory limit. There is chromatographic evidence of sample matrix interference.
Samples: All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: RDC REVIEWED: [signature] DATE: 5/1/03

Rev. 7/14/00

EXPLOSIVES HPLC DATA (8330)

Login Number L0304594

A. QC Summary

- ✓ Method Blank Summary
- ✓ Method Blank Results
- ✓ Laboratory Control Sample (LCS)
- NA Matrix Spike/Matrix Spike Duplicate (MS/MSD)
- ✓ Holding Time Summary
- ✓ Surrogate Recovery Summary
- ✓ Initial Calibration Summary
- ✓ Initial Calibration Verification (ICV) Form (Second Source)
- ✓ Continuing Calibration Verification (CCV)
- ✓ Instrument Run Log
- ✓ Extraction Bench Sheet

B. Sample Data

- ___ Target compound and surrogate results summary (See Summary Report)
- ✓ Chromatograms and quantitation report

C. Standards Data

- ✓ Initial calibration (ICAL) summary form
- ✓ Chromatograms and quantitation report for ICAL standards
- ✓ Initial calibration verification (ICV/second source) summary forms
- ✓ Initial calibration verification (ICV/second source) quantitation reports and chromatograms
- ✓ Continuing Calibration Verification (CCV) summary forms
- ✓ Continuing Calibration Verification (CCV) quantitation reports and chromatograms
- ✓ Retention Time Window Summary

D. Raw QC Data

- ✓ Method blank chromatogram and quantitation report
- ✓ LCS chromatogram and quantitation report
- NA MS/MSD chromatogram and quantitation report
- ✓ Instrument Run Log
- ✓ Extraction Bench Sheet
- ✓ Daily Checklist
- ✓ Example Calculations

Checked By: RDC Date: 5/12/03

2.2.9.1 QC Summary

KEMRON ENVIRONMENTAL SERVICES
METHOD BLANK SUMMARY

Login Number: L0304594
Blank File ID: 4L004862.F
Date Analyzed: 04/29/03
Time Analyzed: 16:42
Analyst: RDC

Work Group: WG139350
Blank Sample ID: WG139189-02
Instrument ID: HPLC4
Method: 8330

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG139189-03	4L004863.F	04/29/03 17:35	01
05-177511-DW2-042503	L0304594-01	4L004885.F	04/30/03 12:57	01
05-177511-DW3-042503	L0304594-02	4L004886.F	04/30/03 13:50	01

KEMRON FORMS - Modified 03/21/2003
Version 1.2
Report generated 05/05/2003 11:59

KEMRON ENVIRONMENTAL SERVICES
METHOD BLANK SUMMARY

Login Number: L0304594
Blank File ID: 4L004914.F
Date Analyzed: 05/04/03
Time Analyzed: 19:36
Analyst: RDC

Work Group: WG139534
Blank Sample ID: WG139397-01
Instrument ID: HPLC4
Method: 8330

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG139397-02	4L004916.F	05/04/03 21:20	01
LCS2	WG139397-03	4L004917.F	05/04/03 22:12	01
05-177511-SP2-042503	L0304594-03	4L004919.F	05/04/03 23:57	01

KEMRON FORMS - Modified 03/21/2003
Version 1.2
Report generated 05/05/2003 11:59

KEMRON ENVIRONMENTAL SERVICES
BLANK REPORT

Login Number: L0304594 Run Date: 04/29/2003 Sample ID: WG139189-02
Instrument ID: HPLC4 Run Time: 16:42 Prep Method: 3535
File ID: 4L004862.F Analyst: RDC Method: 8330
Workgroup (AAB#): WG139350 Matrix: Water Units: ug/L
Contract #: Cal ID: HPLC4-24-APR-03

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
1,3-Dinitrobenzene	0.250	1.00	0.250	1	U
2,4,6-Trinitrotoluene	0.250	1.00	0.250	1	U
2,4-Dinitrotoluene	0.250	1.00	0.250	1	U
2,6-Dinitrotoluene	0.250	1.00	0.250	1	U
2-Amino-4,6-dinitrotoluene	0.250	1.00	0.250	1	U
2-Nitrotoluene	0.250	1.00	0.250	1	U
3-Nitrotoluene	0.250	1.00	0.250	1	U
4-Amino-2,6-dinitrotoluene	0.250	1.00	0.250	1	U
4-Nitrotoluene	0.250	1.00	0.250	1	U
HMX	0.250	1.00	0.250	1	U
Nitrobenzene	0.250	1.00	0.250	1	U
RDX	0.250	1.00	0.250	1	U
1,3,5-Trinitrobenzene	0.250	1.00	0.250	1	U
Tetryl	0.250	1.00	0.250	1	U

Surrogates	% Recovery	Surrogate Limits	Qualifier
3,4-Dinitrotoluene	101	50 - 150	PASS

* Analyte detected above RDL
ND Analyte Not detected at or above reporting limit

KEMRON FORMS - Modified 05/02/2003
Version 1.3
Report generated 05/05/2003 11:59

KEMRON ENVIRONMENTAL SERVICES
BLANK REPORT

Login Number: L0304594 Run Date: 05/04/2003 Sample ID: WG139397-01
Instrument ID: HPLC4 Run Time: 19:36 Prep Method: METHOD
File ID: 4L004914.F Analyst: RDC Method: 8330
Workgroup (AAB#): WG139534 Matrix: Solid Units: mg/kg
Contract #: Cal ID: HPLC4-02-MAY-03

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
1,3,5-Trinitrobenzene	0.100	0.250	0.100	1	U
1,3-Dinitrobenzene	0.100	0.250	0.100	1	U
2,4,6-Trinitrotoluene	0.100	0.250	0.100	1	U
2,4-Dinitrotoluene	0.100	0.250	0.100	1	U
2,6-Dinitrotoluene	0.100	0.260	0.100	1	U
2-Amino-4,6-dinitrotoluene	0.100	0.260	0.100	1	U
2-Nitrotoluene	0.100	0.250	0.100	1	U
3-Nitrotoluene	0.100	0.250	0.100	1	U
4-Nitrotoluene	0.100	0.250	0.100	1	U
4-Amino-2,6-dinitrotoluene	0.100	0.260	0.100	1	U
HMX	0.100	2.20	0.100	1	U
Nitrobenzene	0.130	0.260	0.130	1	U
RDX	0.100	1.00	0.100	1	U
Tetryl	0.200	0.650	0.200	1	U

Surrogates	% Recovery	Surrogate Limits	Qualifier
3,4-Dinitrotoluene	96.8	50 - 150	PASS

* Analyte detected above RDL
ND Analyte Not detected at or above reporting limit

KEMRON FORMS - Modified 05/02/2003
Version 1.3
Report generated 05/05/2003 11:59

KEMRON ENVIRONMENTAL SERVICES
LABORATORY CONTROL SAMPLE

Login Number: L0304594 Run Date: 04/29/2003 Sample ID: WG139189-03
Instrument ID: HPLC4 Run Time: 17:35 Prep Method: 3535
File ID: 4L004863.F Analyst: RDC Method: 8330
Workgroup (AAB#): WG139350 Matrix: Water Units: ug/L
Contract #: Cal ID: HPLC4-24-APR-2003 21:05

Analytes	Expected	Found	% Rec	LCS Limits	Q
1,3-Dinitrobenzene	1.00	1.08	108	47 - 158	
2,4,6-Trinitrotoluene	1.00	0.949	94.9	52 - 143	
2,4-Dinitrotoluene	1.00	0.987	98.7	61 - 135	
2,6-Dinitrotoluene	1.00	1.10	110	60 - 137	
2-Amino-4,6-dinitrotoluene	1.00	1.02	102	50 - 153	
2-Nitrotoluene	1.00	1.01	101	43 - 133	
3-Nitrotoluene	1.00	0.949	94.9	48 - 132	
4-Amino-2,6-dinitrotoluene	1.00	1.05	105	55 - 154	
4-Nitrotoluene	1.00	1.02	102	48 - 132	
HMX	1.00	0.897	89.7	81 - 116	
Nitrobenzene	1.00	1.04	104	49 - 138	
RDX	1.00	1.17	117	51 - 161	
1,3,5-Trinitrobenzene	1.00	1.01	101	64 - 139	
Tetryl	1.00	0.951	95.1	22 - 174	

Surrogates	% Recovery	Surrogate Limits	Qualifier
3,4-Dinitrotoluene	101	50 - 150	PASS

* Analyte outside control limits

NS Analyte not spiked

KEMRON FORMS - Modified 05/01/2003
Version 1.3
Report generated 05/02/2003 16:06

KEMRON ENVIRONMENTAL SERVICES
LABORATORY CONTROL SAMPLES

Loginnum: L0304594 Worknum: WG139534 Method: 8330
Instrument ID: HPLC4 Cal ID: HPLC4-02-MAY-2003 23:11 Matrix: Solid
Analyst: RDC Contract #: Units: mg/kg
Sample ID: WG139397-02 LCS File ID: 4L004916.F Run Date: 05/04/2003 21:20
Sample ID: WG139397-03 LCS2 File ID: 4L004917.F Run Date: 05/04/2003 22:12

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Limit	Q
	Known	Found	% REC	Known	Found	% REC				
1,3,5-Trinitrobenzene	0.493	0.491	99.7	0.498	0.509	102	3.52	50 - 150	40	
1,3-Dinitrobenzene	0.493	0.519	105	0.498	0.518	104	.203	50 - 150	40	
2,4,6-Trinitrotoluene	0.493	0.475	96.4	0.498	0.459	92.3	3.29	50 - 150	40	
2,4-Dinitrotoluene	0.493	0.508	103	0.498	0.499	100	1.78	50 - 150	40	
2,6-Dinitrotoluene	0.493	0.503	102	0.498	0.490	98.4	2.76	50 - 150	40	
2-Amino-4,6-dinitrotoluene	0.493	0.522	106	0.498	0.506	102	3.09	50 - 150	40	
2-Nitrotoluene	0.493	0.480	97.5	0.498	0.480	96.5	.0924	50 - 150	40	
3-Nitrotoluene	0.493	0.486	98.7	0.498	0.479	96.3	1.47	50 - 150	40	
4-Nitrotoluene	0.493	0.472	95.7	0.498	0.467	93.9	.925	50 - 150	40	
4-Amino-2,6-dinitrotoluene	0.493	0.493	100	0.498	0.475	95.6	3.66	50 - 150	40	
HMX	0.493	0.497	101	0.498	0.488	98.0	1.82	50 - 150	40	
Nitrobenzene	0.493	0.501	102	0.498	0.505	102	.878	50 - 150	40	
RDX	0.493	0.504	102	0.498	0.509	102	.88	50 - 150	40	
Tetryl	0.493	0.369	75.0	0.498	0.439	88.2	17.2	50 - 150	40	

Surogates	LCS % Recovery	LCS2 % Recovery	Surrogate Limits	Qualifier
3,4-Dinitrotoluene	95.1	91.2	50 - 150	PASS

* FAILS %REC LIMIT

\# FAILS RPD LIMIT

KEMRON FORMS - Modified 05/01/2003
Version 1.2
Report generated 05/05/2003 11:59

KEMRON ENVIRONMENTAL SERVICES
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method:8330

AAB#:WG139350

Login Number:L0304594

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
05-177511-DW2-042503	04/25/03	04/26/03	04/28/03	7	2.86	04/30/03	40	2.24	
05-177511-DW3-042503	04/25/03	04/26/03	04/28/03	7	2.84	04/30/03	40	2.27	

* EXT = MISSED EXTRACTION HOLD TIME
*ANAL = MISSED ANALYTICAL HOLD TIME

KEMRON FORMS - Modified 12/06/2002
Version 1.2
Report generated 05/05/2003 11:59

KEMRON ENVIRONMENTAL SERVICES
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 8330

AAB#: WG139534

Login Number: L0304594

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
05-177511-SP2-042503	04/25/03	04/26/03	04/30/03	14	4.88	05/04/03	40	4.55	

* EXT = MISSED EXTRACTION HOLD TIME
*ANAL = MISSED ANALYTICAL HOLD TIME

KEMRON FORMS - Modified 12/06/2002
Version 1.2
Report generated 05/05/2003 11:59

KEMRON ENVIRONMENTAL SERVICES
SURROGATE STANDARDS

Login Number: L0304594
Instrument Id: HPLC4
Workgroup (AAB#): WG139534

Method: 8330
CAL ID: HPLC4-02-MAY-03
Matrix: SOLID

Sample Number	Dilution	Tag	1
L0304594-03	1.00	01	89.7
WG139397-01	1.00	01	96.8
WG139397-02	1.00	01	95.1
WG139397-03	1.00	01	91.2

Surrogates	Surrogate Limits		
1 - 3,4-Dinitrotoluene	50	-	150

Underline = Result out of surrogate limits

DL = surrogate diluted out

ND = surrogate not detected

KEMRON FORMS - Modified 01/22/2003
Version 1.2
Report generated 05/05/2003 11:59

KEMRON ENVIRONMENTAL SERVICES
SURROGATE STANDARDS

Login Number: L0304594
Instrument Id: HPLC4
Workgroup (AAB#): WG139350

Method: 8330
CAL ID: HPLC4-24-APR-03
Matrix: WATER

Sample Number	Dilution	Tag	1
L0304594-01	1.00	01	204
L0304594-02	1.00	01	56.7
WG139189-02	1.00	01	101
WG139189-03	1.00	01	101

Surrogates	Surrogate Limits
1 - 3,4-Dinitrotoluene	50 - 150

Underline = Result out of surrogate limits

DL = surrogate diluted out
ND = surrogate not detected

KEMRON FORMS - Modified 01/22/2003
Version 1.2
Report generated 05/05/2003 11:59

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Calibration Table

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8330 HPLC4

Calib. Data Modified : 4/25/2003 3:44:05 PM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 0.000 %
Abs. Reference Window : 0.000 min
Rel. Non-ref. Window : 0.000 %
Abs. Non-ref. Window : 0.500 min
Uncalibrated Peaks : using compound Nitrobenzene #6
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: Yes, even for non-identified peaks

Curve Type : Linear
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Sig	Lvl	Amount [ug/L]	Area	Amt/Area	Ref	Grp	Name
4.681	1	1	10.00000	1.36317	7.33585			HMX #1
		2	25.00000	3.42120	7.30739			
		3	50.00000	7.52022	6.64875			
		4	100.00000	15.03583	6.65078			
		5	500.00000	80.88615	6.18153			
		6	1000.00000	163.83752	6.10361			
7.358	1	1	10.00000	9.42478e-1	10.61032			RDX #2
		2	25.00000	3.34191	7.48076			
		3	50.00000	7.89702	6.33150			
		4	100.00000	17.53693	5.70225			
		5	500.00000	96.35172	5.18932			
		6	1000.00000	197.22536	5.07034			
9.794	1	1	10.00000	3.95324	2.52957			1,3,5-Trinitrobenzene
		2	25.00000	9.80580	2.54951			
		3	50.00000	20.51142	2.43767			
		4	100.00000	40.07835	2.49511			
		5	500.00000	210.19899	2.37870			
		6	1000.00000	430.45111	2.32314			
12.042	1	1	10.00000	5.03625	1.98560			1,3-Dinitrobenzene #4
		2	25.00000	13.33323	1.87501			

RetTime [min]	Sig	Lvl	Amount [ug/L]	Area	Amt/Area	Ref	Grp	Name
		3	50.00000	27.59870	1.81168			
		4	100.00000	54.20690	1.84478			
		5	500.00000	279.63757	1.78803			
		6	1000.00000	572.23993	1.74752			
13.091	1	1	10.00000	2.69342	3.71276			Tetryl #5
		2	25.00000	7.01731	3.56262			
		3	50.00000	14.58495	3.42819			
		4	100.00000	29.85405	3.34963			
		5	500.00000	147.51137	3.38957			
		6	1000.00000	312.90817	3.19583			
13.668	1	1	10.00000	3.34389	2.99053			Nitrobenzene #6
		2	25.00000	8.50270	2.94024			
		3	50.00000	18.57552	2.69171			
		4	100.00000	37.40242	2.67362			
		5	500.00000	189.11221	2.64393			
		6	1000.00000	384.38156	2.60158			
14.834	1	1	10.00000	1.66323	6.01240			3,4-Dinitrotoluene #7
		2	25.00000	4.70621	5.31213			
		3	50.00000	10.10620	4.94746			
		4	100.00000	20.70963	4.82867			
		5	500.00000	106.05003	4.71476			
		6	1000.00000	212.47028	4.70654			
15.540	1	1	10.00000	3.57966	2.79356			2,4,6-Trinitrotoluene
		2	25.00000	9.31047	2.68515			
		3	50.00000	18.91057	2.64402			
		4	100.00000	39.78333	2.51362			
		5	500.00000	202.83073	2.46511			
		6	1000.00000	411.69516	2.42898			
17.072	1	1	10.00000	1.69764	5.89052			4-Amino-2,6-Dinitrotol
		2	25.00000	5.03244	4.96777			
		3	50.00000	10.95360	4.56471			
		4	100.00000	23.17946	4.31416			
		5	500.00000	120.53290	4.14825			
		6	1000.00000	244.01778	4.09806			
17.800	1	1	10.00000	2.41659	4.13806			2-Amino-4,6-Dinitrotol
		2	25.00000	7.37971	3.38767			
		3	50.00000	15.26837	3.27474			
		4	100.00000	31.00566	3.22522			
		5	500.00000	161.58478	3.09435			
		6	1000.00000	333.23608	3.00088			
18.286	1	1	10.00000	1.76028	5.68090			2,6-Dinitrotoluene #11
		2	25.00000	5.83049	4.28781			
		3	50.00000	12.32918	4.05542			
		4	100.00000	24.81003	4.03063			
		5	500.00000	129.16896	3.87090			
		6	1000.00000	265.44803	3.76722			
18.857	1	1	10.00000	3.98254	2.51096			2,4-Dinitrotoluene #12
		2	25.00000	11.78135	2.12200			
		3	50.00000	25.49091	1.96148			
		4	100.00000	51.56027	1.93948			
		5	500.00000	269.51212	1.85520			
		6	1000.00000	553.21533	1.80761			
22.205	1	1	10.00000	1.81358	5.51396			2-Nitrotoluene #13
		2	25.00000	5.07849	4.92272			
		3	50.00000	9.56295	5.22851			
		4	100.00000	20.44731	4.89062			

RetTime [min]	Sig	Lvl	Amount [ug/L]	Area	Amt/Area	Ref	Grp	Name
		5	500.00000	103.24451	4.84287			
		6	1000.00000	214.69153	4.65785			
23.717	1	1	10.00000	1.29509	7.72147			4-Nitrotoluene #14
		2	25.00000	4.18652	5.97154			
		3	50.00000	7.61180	6.56875			
		4	100.00000	17.05997	5.86168			
		5	500.00000	82.24344	6.07951			
		6	1000.00000	169.84445	5.88774			
25.553	1	1	10.00000	2.29277	4.36154			3-Nitrotoluene #15
		2	25.00000	5.87134	4.25797			
		3	50.00000	11.49758	4.34874			
		4	100.00000	24.63420	4.05940			
		5	500.00000	118.74629	4.21066			
		6	1000.00000	241.37036	4.14301			

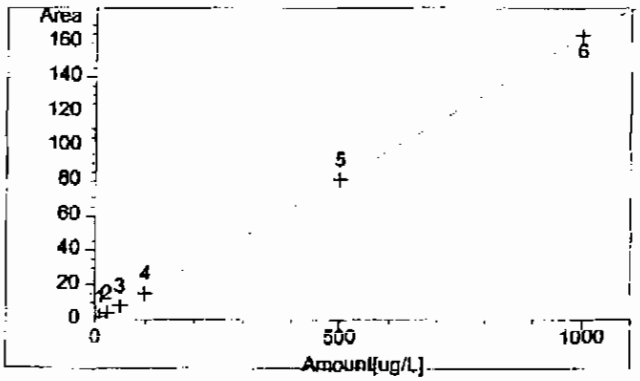
1 Warnings or Errors :

Warning : Overlapping peak time windows at 17.8 min, signal 1

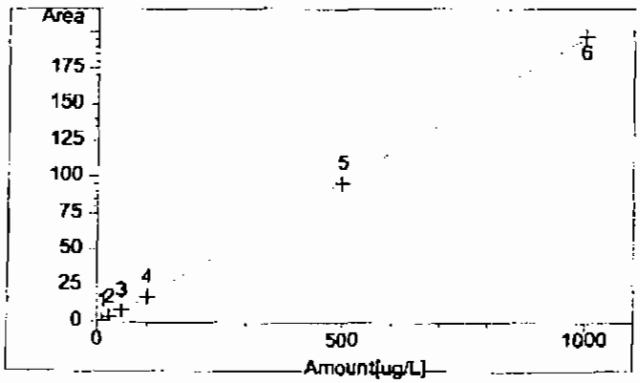
Peak Sum Table

No Entries in table

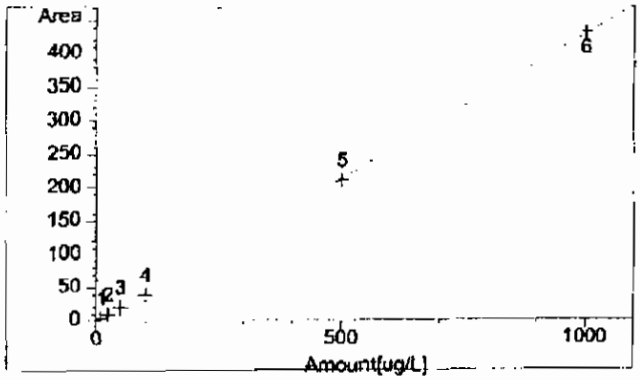
Calibration Curves



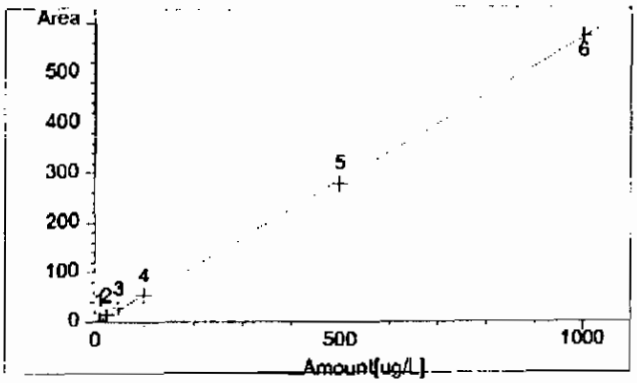
HMX #1 at exp. RT: 4.681
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99998
Residual Std. Dev.: 0.49318
Formula: y = mx + b
m: 1.64369e-1
b: -8.16195e-1
x: Amount [ug/L]
y: Area



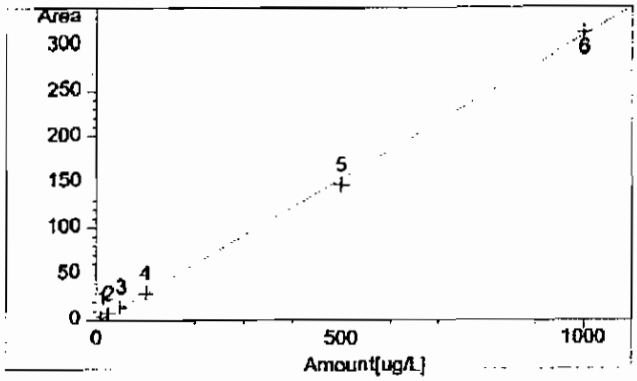
RDX #2 at exp. RT: 7.358
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99996
Residual Std. Dev.: 0.77111
Formula: y = mx + b
m: 1.98540e-1
b: -1.87404
x: Amount [ug/L]
y: Area



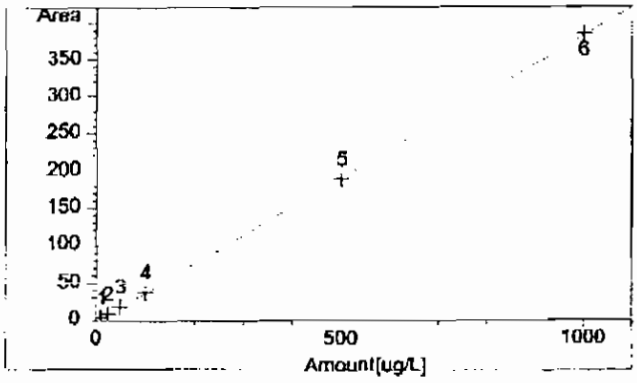
1,3,5-Trinitrobenzene #3 at exp. RT: 9.79
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99994
Residual Std. Dev.: 2.14514
Formula: y = mx + b
m: 4.30461e-1
b: -1.72131
x: Amount [ug/L]
y: Area



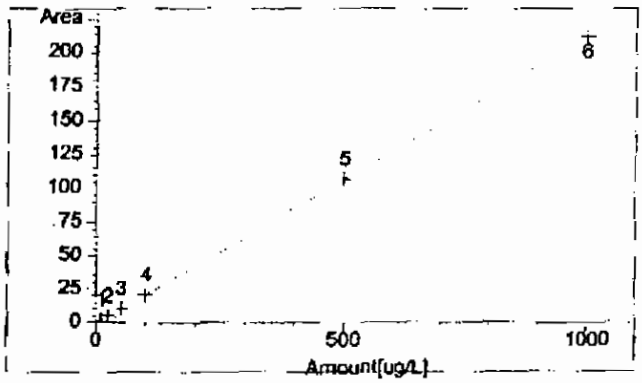
1,3-Dinitrobenzene #4 at exp. RT: 12.042
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99994
Residual Std. Dev.: 2.68433
Formula: y = mx + b
m: 5.71979e-1
b: -1.95520
x: Amount [ug/L]
y: Area



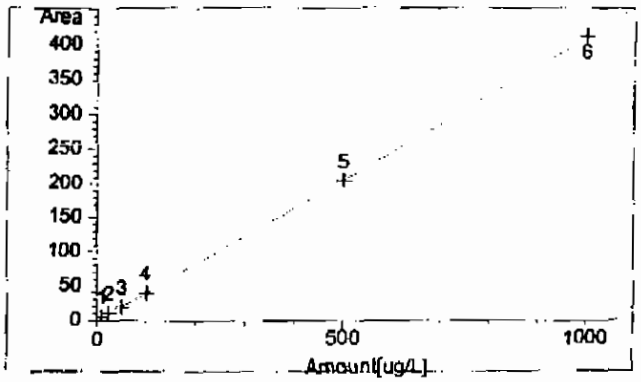
Tetryl #5 at exp. RT: 13.091
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99964
Residual Std. Dev.: 3.72754
Formula: y = mx + b
m: 3.11476e-1
b: -1.71135
x: Amount [ug/L]
y: Area



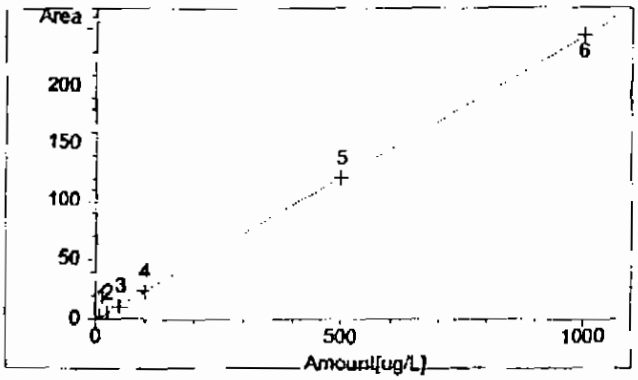
Nitrobenzene #6 at exp. RT: 13.668
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99998
Residual Std. Dev.: 1.19164
Formula: y = mx + b
m: 3.84482e-1
b: -1.08910
x: Amount [ug/L]
y: Area



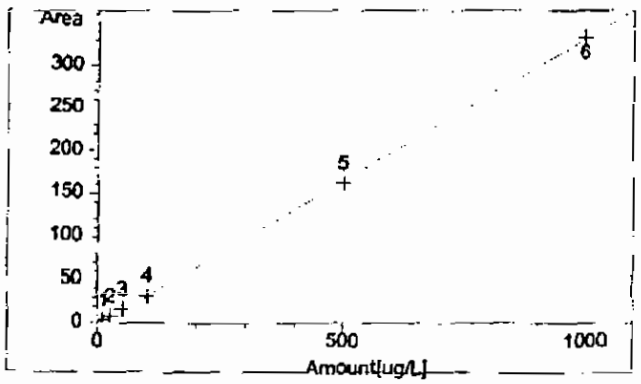
3,4-Dinitrotoluene #7 * at exp. RT: 14.8
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 1.00000
Residual Std. Dev.: 0.07121
Formula: y = mx + b
m: 2.13047e-1
b: -5.46544e-1
x: Amount [ug/L]
y: Area



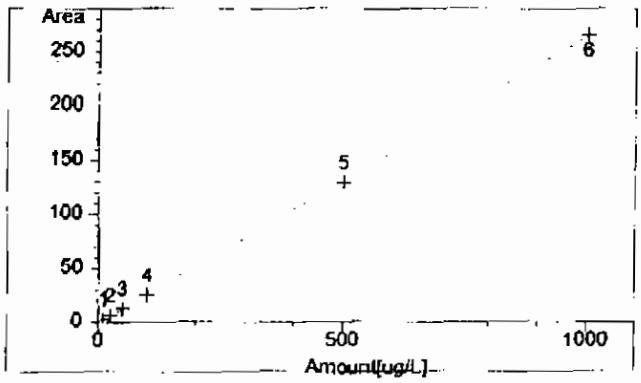
2,4,6-Trinitrotoluene #8 at exp. RT: 15.5
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99998
Residual Std. Dev.: 1.14948
Formula: y = mx + b
m: 4.12167e-1
b: -1.39854
x: Amount [ug/L]
y: Area



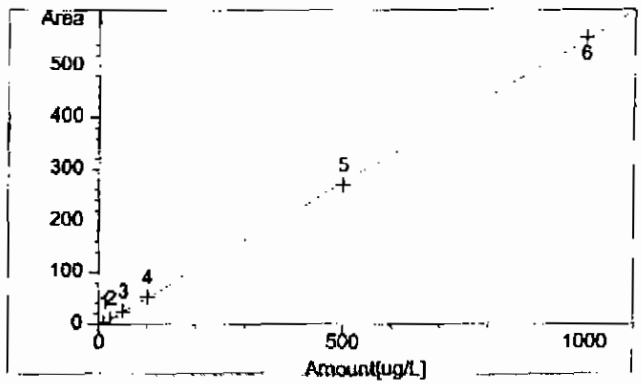
4-Amino-2,6-Dinitrotoluene #9 at exp. RT:
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99999
Residual Std. Dev.: 0.46019
Formula: y = mx + b
m: 2.44853e-1
b: -1.19390
x: Amount [ug/L]
y: Area



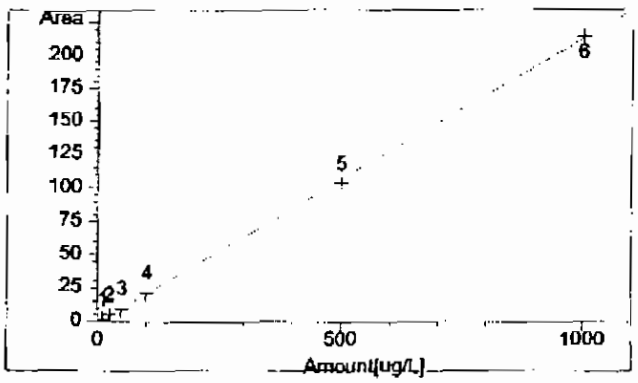
2-Amino-4,6-Dinitrotoluene #10 at exp. RT
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99991
Residual Std. Dev.: 1.97502
Formula: y = mx + b
m: 3.33399e-1
b: -1.81448
x: Amount [ug/L]
y: Area



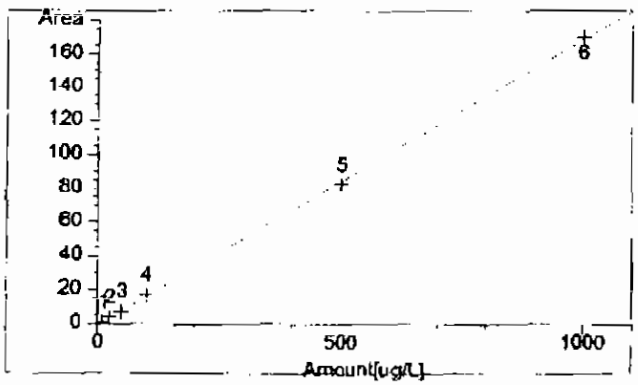
2,6-Dinitrotoluene #11 at exp. RT: 18.286
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99993
Residual Std. Dev.: 1.36443
Formula: y = mx + b
m: 2.65702e-1
b: -1.39346
x: Amount [ug/L]
y: Area



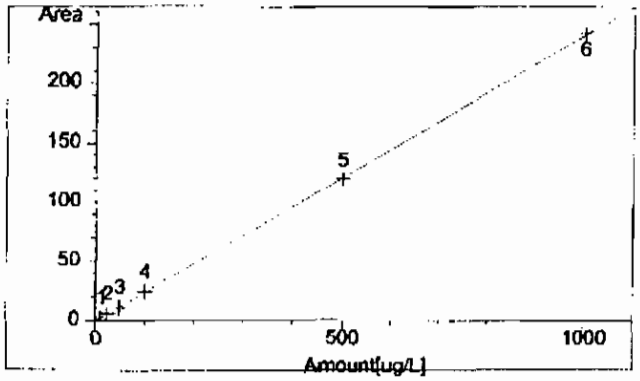
2,4-Dinitrotoluene #12 at exp. RT: 18.857
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99994
Residual Std. Dev.: 2.70759
Formula: y = mx + b
m: 5.53937e-1
b: -2.97345
x: Amount [ug/L]
y: Area



2-Nitrotoluene #13 at exp. RT: 22.205
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99984
Residual Std. Dev.: 1.68516
Formula: y = mx + b
m: 2.14338e-1
b: -1.05347
x: Amount [ug/L]
y: Area



4-Nitrotoluene #14 at exp. RT: 23.717
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99988
Residual Std. Dev.: 1.16540
Formula: y = mx + b
m: 1.69499e-1
b: -5.60713e-1
x: Amount [ug/L]
y: Area



3-Nitrotoluene #15 at exp. RT: 25.553
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99996
Residual Std. Dev.: 0.91843
Formula: y = mx + b
m: 2.40980e-1
b: -2.73047e-1
x: Amount [ug/L]
y: Area

==========

Calibration Table

8330 HPLC4

Calib. Data Modified : 5/4/2003 4:27:13 PM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 0.000 %
Abs. Reference Window : 0.000 min
Rel. Non-ref. Window : 0.000 %
Abs. Non-ref. Window : 0.500 min
Uncalibrated Peaks : using compound Nitrobenzene #6
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: Yes, even for non-identified peaks

Curve Type : Linear
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Sig	Lvl	Amount [ug/L]	Area	Amt/Area	Ref	Grp	Name
4.631	1	1	10.00000	1.57396	6.35341			HMX #1
		2	25.00000	4.00373	6.24417			
		3	50.00000	7.97567	6.26906			
		4	100.00000	18.35064	5.44940			
		5	500.00000	81.70618	6.11949			
		6	1000.00000	166.21046	6.01647			
7.239	1	1	10.00000	1.36909	7.30414			RDX #2
		2	25.00000	3.97642	6.28706			
		3	50.00000	7.96822	6.27492			
		4	100.00000	18.25620	5.47759			
		5	500.00000	94.78035	5.27536			
		6	1000.00000	197.94426	5.05193			
9.796	1	1	10.00000	3.88054	2.57696			1,3,5-Trinitrobenzene
		2	25.00000	10.03447	2.49141			
		3	50.00000	20.23016	2.47156			
		4	100.00000	43.17253	2.31629			
		5	500.00000	217.77176	2.29598			
		6	1000.00000	437.98468	2.28318			
12.025	1	1	10.00000	5.80553	1.72250			1,3-Dinitrobenzene #4
		2	25.00000	14.11635	1.77100			

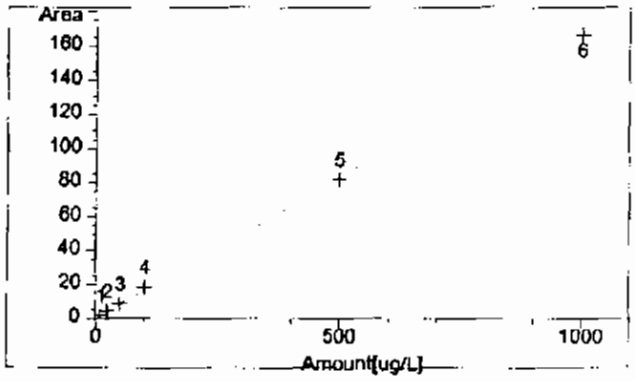
RetTime [min]	Sig	Lvl	Amount [ug/L]	Area	Amt/Area	Ref	Grp	Name
		3	50.00000	28.37236	1.76228			
		4	100.00000	56.64658	1.76533			
		5	500.00000	291.93634	1.71270			
		6	1000.00000	585.14874	1.70897			
12.988	1	1	10.00000	3.14353	3.18114			Tetryl #5
		2	25.00000	7.80422	3.20340			
		3	50.00000	15.61649	3.20174			
		4	100.00000	30.13752	3.31812			
		5	500.00000	160.47656	3.11572			
		6	1000.00000	313.70349	3.18772			
13.654	1	1	10.00000	3.81040	2.62440			Nitrobenzene #6
		2	25.00000	9.44287	2.64750			
		3	50.00000	18.73051	2.66944			
		4	100.00000	37.13404	2.69295			
		5	500.00000	193.49026	2.58411			
		6	1000.00000	379.35959	2.63602			
14.781	1	1	10.00000	2.27462	4.39633			3,4-Dinitrotoluene #7
		2	25.00000	5.23684	4.77387			
		3	50.00000	10.60707	4.71384			
		4	100.00000	20.55322	4.86542			
		5	500.00000	111.83913	4.47071			
		6	1000.00000	215.25517	4.64565			
15.574	1	1	10.00000	4.11333	2.43112			2,4,6-Trinitrotoluene
		2	25.00000	10.25914	2.43685			
		3	50.00000	19.82112	2.52256			
		4	100.00000	38.07655	2.62629			
		5	500.00000	203.73759	2.45414			
		6	1000.00000	404.13718	2.47441			
16.539	1	1	10.00000	2.57813	3.87877			4-Amino-2,6-Dinitrotol
		2	25.00000	6.48298	3.85625			
		3	50.00000	12.28848	4.06885			
		4	100.00000	21.71029	4.60611			
		5	500.00000	125.79243	3.97480			
		6	1000.00000	246.13437	4.06282			
17.440	1	1	10.00000	3.55554	2.81251			2-Amino-4,6-Dinitrotol
		2	25.00000	8.69794	2.87424			
		3	50.00000	16.78469	2.97891			
		4	100.00000	30.72612	3.25456			
		5	500.00000	171.46715	2.91601			
		6	1000.00000	343.51910	2.91105			
18.230	1	1	10.00000	2.92485	3.41898			2,6-Dinitrotoluene #11
		2	25.00000	6.66755	3.74950			
		3	50.00000	12.96977	3.85512			
		4	100.00000	23.98173	4.16984			
		5	500.00000	131.02063	3.81619			
		6	1000.00000	265.18420	3.77096			
18.878	1	1	10.00000	5.45924	1.83176			2,4-Dinitrotoluene #12
		2	25.00000	13.48203	1.85432			
		3	50.00000	26.12951	1.91354			
		4	100.00000	51.72134	1.93344			
		5	500.00000	267.79782	1.86708			
		6	1000.00000	545.61340	1.83280			
22.226	1	1	10.00000	1.91520	5.22140			2-Nitrotoluene #13
		2	25.00000	5.21716	4.79188			
		3	50.00000	10.38873	4.81291			
		4	100.00000	22.40642	4.46301			

Rettime [min]	Sig	Lvl	Amount [ug/L]	Area	Amt/Area	Ref	Grp	Name
		5	500.00000	107.90704	4.63362			
		6	1000.00000	218.03798	4.58636			
23.750	1	1	10.00000	1.67214	5.98036			4-Nitrotoluene #14
		2	25.00000	4.10438	6.09105			
		3	50.00000	8.30096	6.02340			
		4	100.00000	17.42019	5.74047			
		5	500.00000	87.53891	5.71175			
		6	1000.00000	169.68343	5.89333			
25.583	1	1	10.00000	2.21367	4.51739			3-Nitrotoluene #15
		2	25.00000	5.77062	4.33229			
		3	50.00000	11.49031	4.35149			
		4	100.00000	24.64791	4.05714			
		5	500.00000	122.69504	4.07514			
		6	1000.00000	240.64584	4.15548			

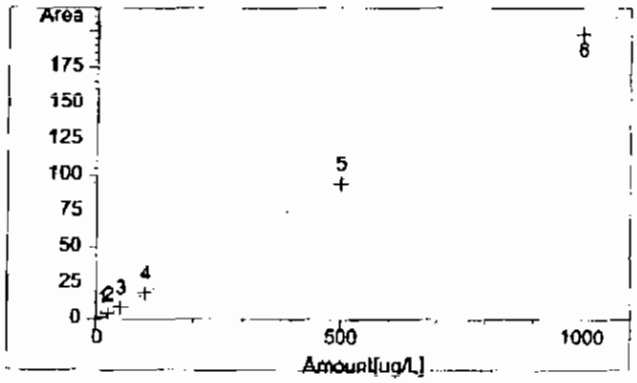
Peak Sum Table

No Entries in table

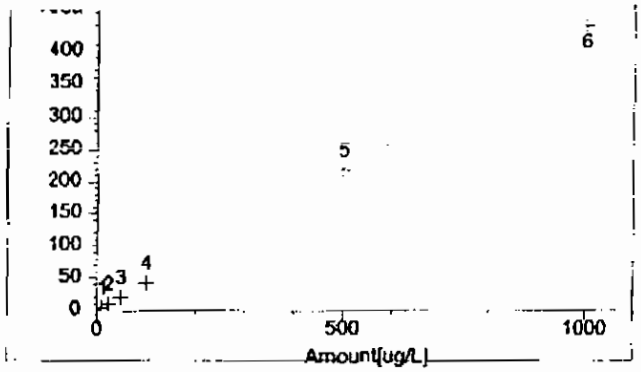
Calibration Curves



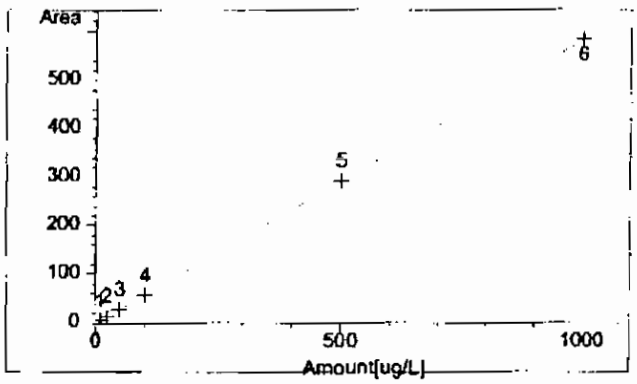
HMX #1 at exp. RT: 4.631
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99989
Residual Std. Dev.: 1.09440
Formula: y = mx + b
m: 1.65604e-1
b: 1.29773e-1
x: Amount [ug/L]
y: Area



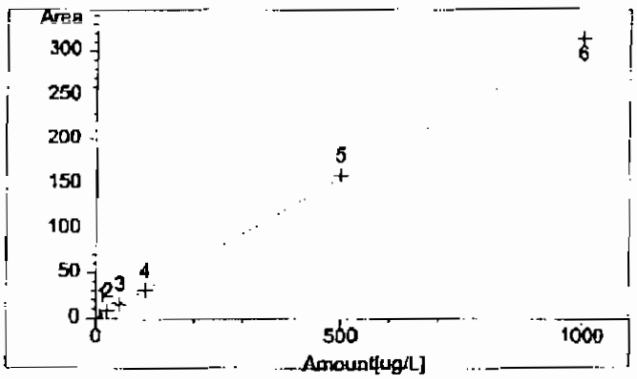
RDX #2 at exp. RT: 7.239
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99983
Residual Std. Dev.: 1.63408
Formula: y = mx + b
m: 1.98221e-1
b: -1.61802
x: Amount [ug/L]
y: Area



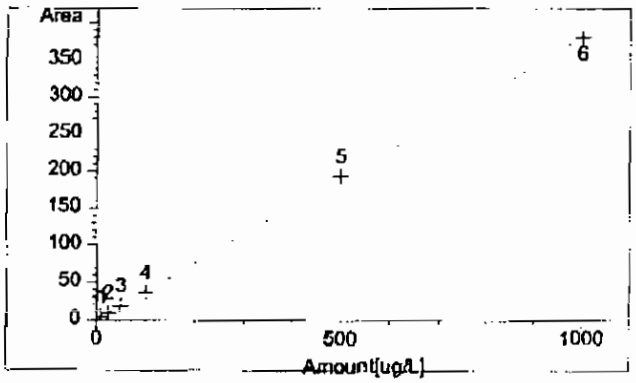
1,3,5-Trinitrobenzene #3 at exp. RT: 9.79
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 1.00000
Residual Std. Dev.: 0.55838
Formula: y = mx + b
m: 4.38745e-1
b: -1.03507
x: Amount[ug/L]
y: Area



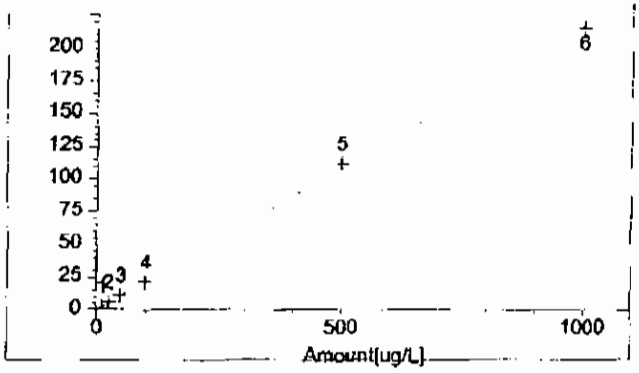
1,3-Dinitrobenzene #4 at exp. RT: 12.025
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 1.00000
Residual Std. Dev.: 0.70150
Formula: y = mx + b
m: 5.85840e-1
b: -8.52323e-1
x: Amount[ug/L]
y: Area



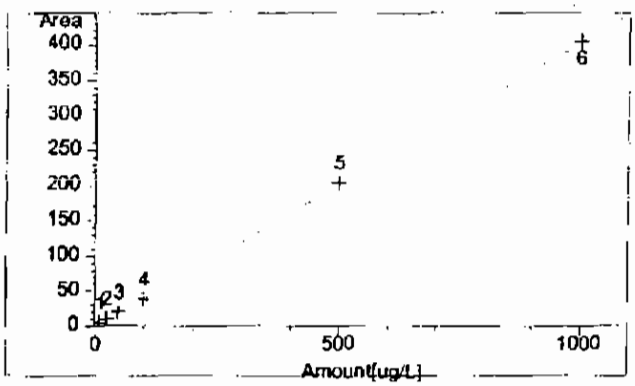
Tetryl #5 at exp. RT: 12.988
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99992
Residual Std. Dev.: 1.76195
Formula: y = mx + b
m: 3.15022e-1
b: 1.17534e-2
x: Amount[ug/L]
y: Area



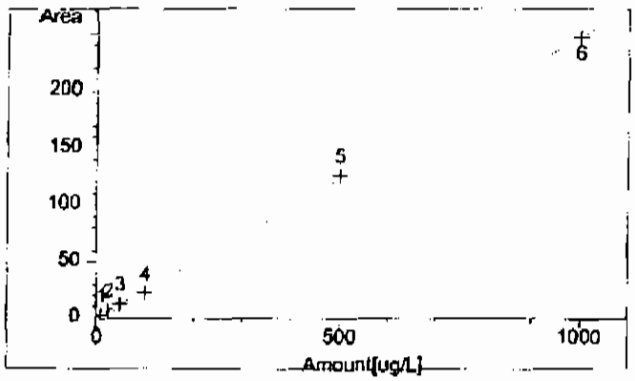
Nitrobenzene #6 at exp. RT: 13.654
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99995
Residual Std. Dev.: 1.77427
Formula: y = mx + b
m: 3.80677e-1
b: 8.77696e-2
x: Amount[ug/L]
y: Area



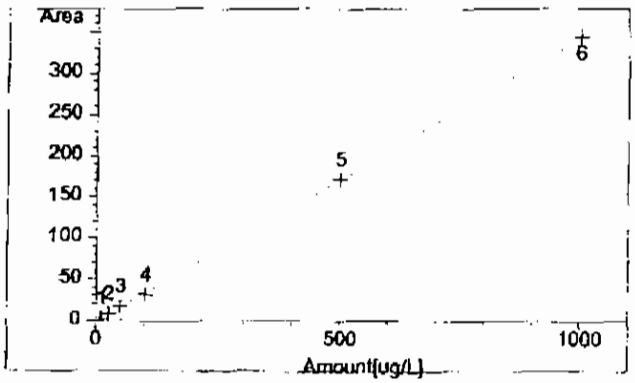
3,4-Dinitrotoluene #7 * at exp. RT: 14.7
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99979
Residual Std. Dev.: 1.97101
Formula: y = mx + b
m: 2.16697e-1
b: 1.05397e-1
x: Amount [ug/L]
y: Area



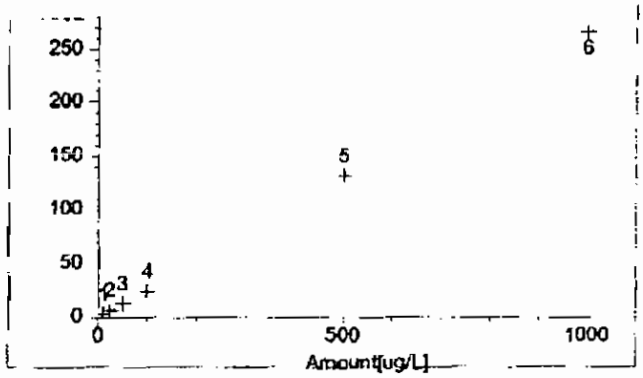
2,4,6-Trinitrotoluene #8 at exp. RT: 15.5
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99997
Residual Std. Dev.: 1.36612
Formula: y = mx + b
m: 4.05173e-1
b: -4.28536e-1
x: Amount [ug/L]
y: Area



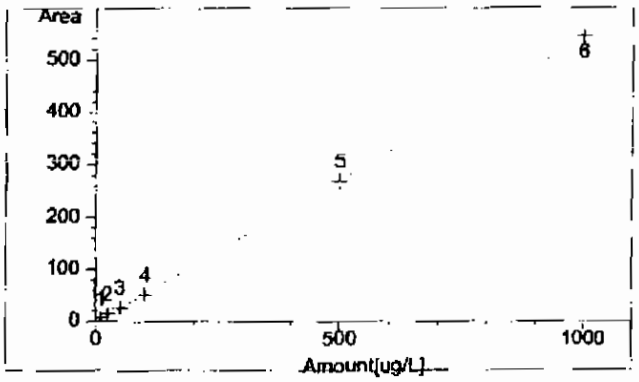
4-Amino-2,6-Dinitrotoluene #9 at exp. RT:
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99985
Residual Std. Dev.: 1.91539
Formula: y = mx + b
m: 2.47413e-1
b: -3.17505e-1
x: Amount [ug/L]
y: Area



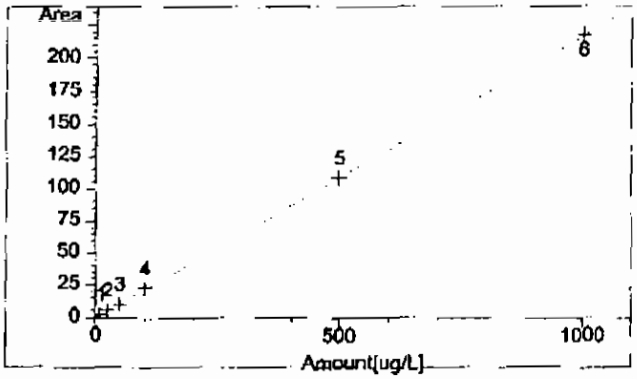
2-Amino-4,6-Dinitrotoluene #10 at exp. RT
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99995
Residual Std. Dev.: 1.59294
Formula: y = mx + b
m: 3.44305e-1
b: -9.00671e-1
x: Amount [ug/L]
y: Area



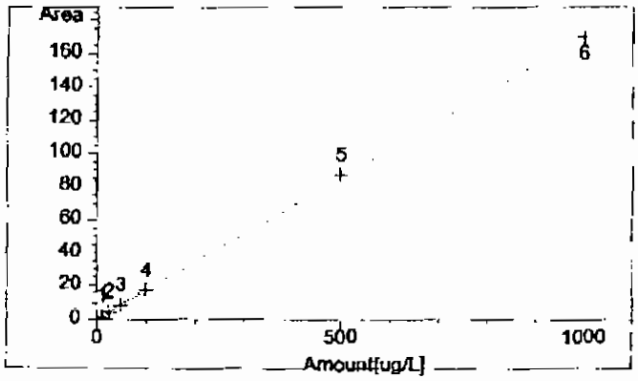
2,6-Dinitrotoluene #11 at exp. RT: 18.230
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99994
Residual Std. Dev.: 1.25186
Formula: y = mx + b
m: 2.65308e-1
b: -7.15756e-1
x: Amount [ug/L]
y: Area



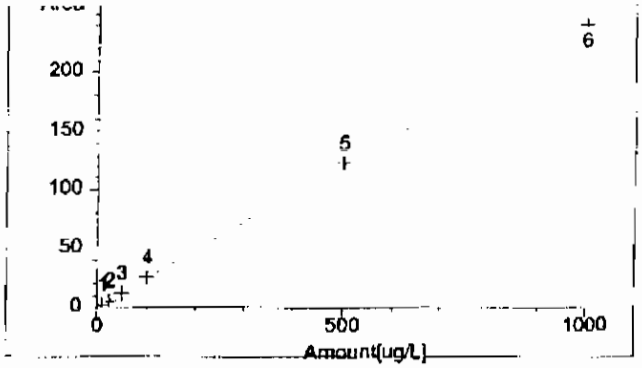
2,4-Dinitrotoluene #12 at exp. RT: 18.878
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99996
Residual Std. Dev.: 2.26034
Formula: y = mx + b
m: 5.45260e-1
b: -1.42676
x: Amount [ug/L]
y: Area



2-Nitrotoluene #13 at exp. RT: 22.226
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99998
Residual Std. Dev.: 0.63024
Formula: y = mx + b
m: 2.17908e-1
b: -2.17113e-1
x: Amount [ug/L]
y: Area



4-Nitrotoluene #14 at exp. RT: 23.750
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99987
Residual Std. Dev.: 1.20169
Formula: y = mx + b
m: 1.70435e-1
b: 2.56217e-1
x: Amount [ug/L]
y: Area



3-Nitrotoluene #15 at exp. RT: 25.583
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99994
Residual Std. Dev.: 1.13643
Formula: y = mx + b
m: 2.41474e-1
b: 9.65161e-2
x: Amount [ug/L]
y: Area

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Calibration Table

Calib. Data Modified : 5/8/2003 4:33:10 PM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 0.000 %
Abs. Reference Window : 0.000 min
Rel. Non-ref. Window : 0.000 %
Abs. Non-ref. Window : 0.500 min
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Included
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: VWD1 A, Wavelength=254 nm

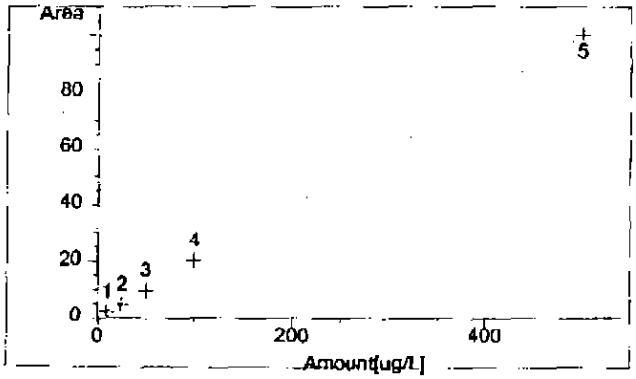
RetTime [min]	Sig	Lvl	Amount [ug/L]	Area	Amt/Area	Ref	Grp	Name
9.260	1	1	10.00000	2.05950	4.85554			NITROBENZENE #1
		2	25.00000	4.79408	5.21476			
		3	50.00000	9.95405	5.02308			
		4	100.00000	20.21405	4.94705			
		5	500.00000	100.27930	4.98607			
10.193	1	1	10.00000	3.72299	2.68602			1,3-DNB #2
		2	25.00000	7.50001	3.33333			
		3	50.00000	15.38106	3.25075			
		4	100.00000	32.38007	3.08832			
		5	500.00000	162.16501	3.08328			
10.967	1	1	10.00000	2.49225	4.01243			1,3,5-TNB #3
		2	25.00000	5.29287	4.72333			
		3	50.00000	11.85682	4.21698			
		4	100.00000	23.32750	4.28679			
		5	500.00000	116.02787	4.30931			
11.764	1	1	10.00000	1.13590	8.80361			RDX #4
		2	25.00000	2.81029	8.89587			
		3	50.00000	5.15361	9.70194			
		4	100.00000	11.21506	8.91658			
		5	500.00000	53.96355	9.26551			

RetTime [min]	Lvl Sig		Amount [ug/L]	Area	Amt/Area	Ref	Grp	Name
15.063	1	1	10.00000	3.24478	3.08187			2,4-DNT #5
		2	25.00000	8.49988	2.94122			
		3	50.00000	14.48293	3.45234			
		4	100.00000	29.25875	3.41778			
		5	500.00000	145.31290	3.44085			
16.453	1	1	10.00000	2.37249	4.21498			2-AMINO-4,6-DNT #6
		2	25.00000	4.67659	5.34577			
		3	50.00000	10.42155	4.79775			
		4	100.00000	20.63287	4.84664			
		5	500.00000	105.00517	4.76167			
17.403	1	1	10.00000	1.40340	7.12556			2,4,6-TNT #7
		2	25.00000	1.85295	13.49202			
		3	50.00000	4.61360	10.83751			
		4	100.00000	7.75884	12.88852			
		5	500.00000	39.28994	12.72591			
18.740	1	1	10.00000	2.63853	3.78999			HMX #8
		2	25.00000	5.70885	4.37917			
		3	50.00000	11.06793	4.51756			
		4	100.00000	22.20990	4.50250			
		5	500.00000	112.03613	4.46285			
19.379	1	1	10.00000	2.00231	4.99423			3,4-DNT SURR. #9
		2	25.00000	3.72121	6.71825			
		3	50.00000	6.01880	8.30730			
		4	100.00000	13.45266	7.43347			
		5	500.00000	66.32304	7.53886			

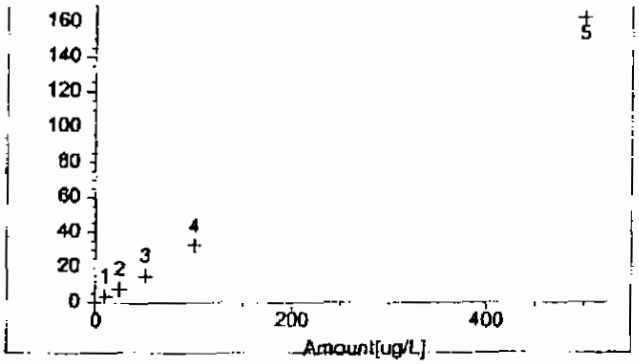
Peak Sum Table

No Entries in table

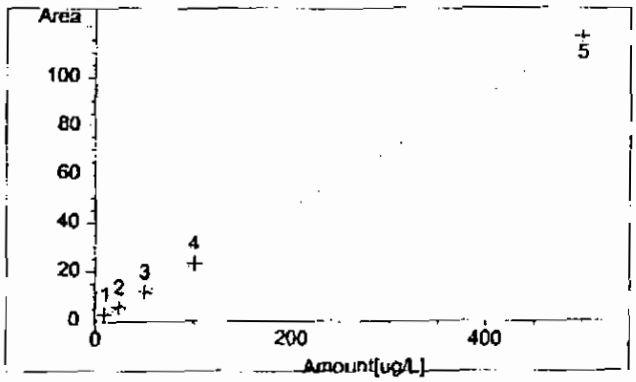
Calibration Curves



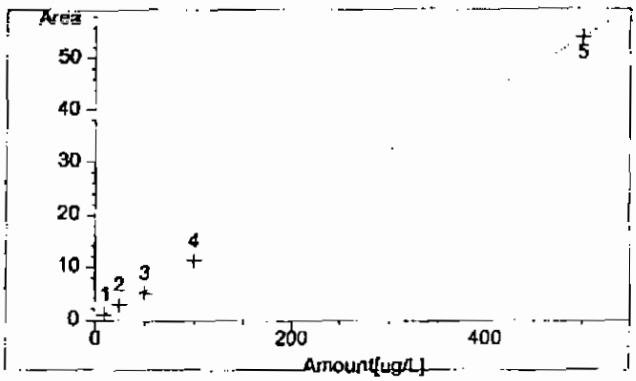
NITROBENZENE #1 at exp. RT: 9.260
VWD1 A, Wavelength=254 nm
Correlation: 0.99999
Residual Std. Dev.: 0.14067
Formula: y = mx + b
m: 2.00648e-1
b: -2.37832e-2
x: Amount [ug/L]
y: Area



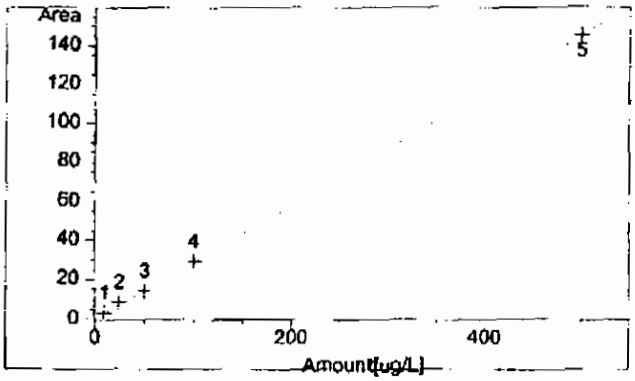
1,3-DNB #2 at exp. RT: 10.193
VWD1 A, Wavelength=254 nm
Correlation: 0.99997
Residual Std. Dev.: 0.52675
Formula: y = mx + b
m: 3.24647e-1
b: -2.05663e-1
x: Amount [ug/L]
y: Area



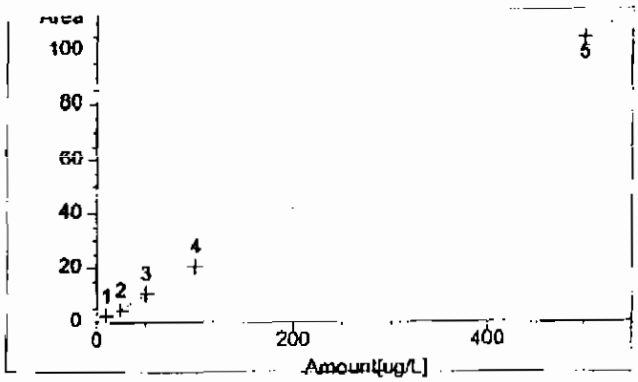
1,3,5-TNB #3 at exp. RT: 10.967
VWD1 A, Wavelength=254 nm
Correlation: 0.99998
Residual Std. Dev.: 0.30279
Formula: y = mx + b
m: 2.32107e-1
b: 7.04232e-4
x: Amount [ug/L]
y: Area



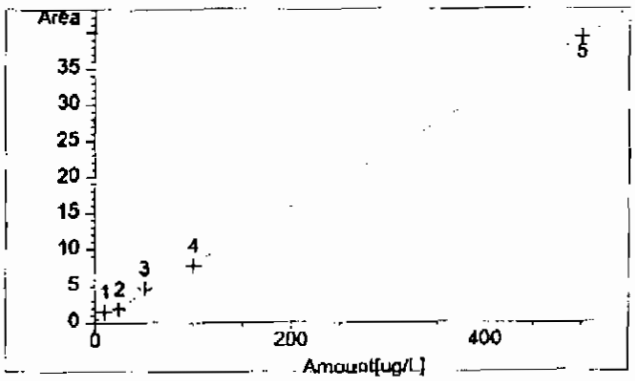
RDX #4 at exp. RT: 11.764
VWD1 A, Wavelength=254 nm
Correlation: 0.99995
Residual Std. Dev.: 0.24116
Formula: y = mx + b
m: 1.07893e-1
b: 6.19452e-2
x: Amount [ug/L]
y: Area



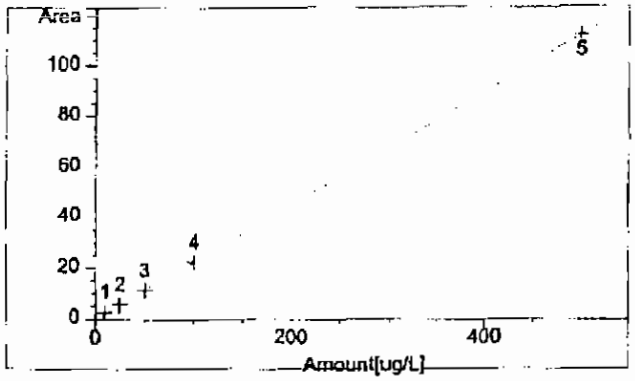
2,4-DNT #5 at exp. RT: 15.063
VWD1 A, Wavelength=254 nm
Correlation: 0.99997
Residual Std. Dev.: 0.51763
Formula: y = mx + b
m: 2.89842e-1
b: 3.76230e-1
x: Amount [ug/L]
y: Area



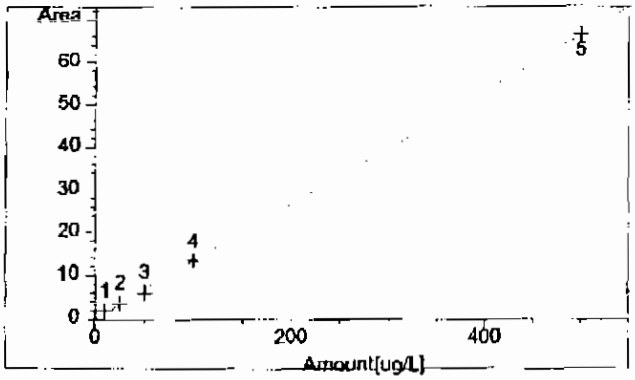
2-AMINO-4,6-DNT #6 at exp. RT: 16.453
VWD1 A, Wavelength=254 nm
Correlation: 0.99997
Residual Std. Dev.: 0.33385
Formula: y = mx + b
m: 2.10189e-1
b: -1.45136e-1
x: Amount [ug/L]
y: Area



2,4,6-TNT #7 at exp. RT: 17.403
VWD1 A, Wavelength=254 nm
Correlation: 0.99972
Residual Std. Dev.: 0.39467
Formula: y = mx + b
m: 7.80561e-2
b: 2.41718e-1
x: Amount [ug/L]
y: Area



HMX #8 at exp. RT: 18.740
VWD1 A, Wavelength=254 nm
Correlation: 0.99999
Residual Std. Dev.: 0.23114
Formula: y = mx + b
m: 2.23859e-1
b: 5.30015e-2
x: Amount [ug/L]
y: Area



3,4-DNT SURR. #9 at exp. RT: 19.379
VWD1 A, Wavelength=254 nm
Correlation: 0.99986
Residual Std. Dev.: 0.48339
Formula: y = mx + b
m: 1.32269e-1
b: 1.52322e-1
x: Amount [ug/L]
y: Area

==========

Calibration Table

Calib. Data Modified : 5/8/2003 5:28:57 PM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 0.000 %
Abs. Reference Window : 0.000 min
Rel. Non-ref. Window : 0.000 %
Abs. Non-ref. Window : 0.500 min
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Included
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: VWD1 A, Wavelength=254 nm

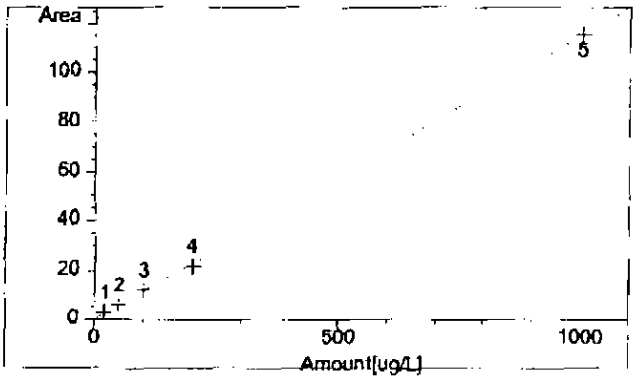
RetTime [min]	Sig	Lvl	Amount [ug/L]	Area	Amt/Area	Ref	Grp	Name
13.598	1	1	20.00000	2.86869	6.97184			NITROTOLUENES #1
		2	50.00000	6.05331	8.25995			
		3	100.00000	11.70313	8.54472			
		4	200.00000	21.83385	9.16009			
		5	1000.00000	115.18032	8.68204			
14.181	1	1	10.00000	1.75826	5.68743			NITROTOLUENE #2
		2	25.00000	3.37934	7.39790			
		3	50.00000	6.69306	7.47043			
		4	100.00000	12.91770	7.74132			
		5	500.00000	67.48347	7.40922			
16.253	1	1	10.00000	1.68191	5.94562			2,6-DNT #3
		2	25.00000	4.22340	5.91940			
		3	50.00000	7.87920	6.34582			
		4	100.00000	16.29812	6.13568			
		5	500.00000	82.33293	6.07290			
17.156	1	1	10.00000	1.31039	7.63130			4-AMINO-2,6-DNT #4
		2	25.00000	4.54840	5.49644			
		3	50.00000	7.89488	6.33321			
		4	100.00000	14.84757	6.73511			
		5	500.00000	77.98283	6.41167			

RetTime [min]	Sig	Lvl	Amount [ug/L]	Area	Amt/Area	Ref	Grp	Name
19.595	1	1	10.00000	1.55849	6.41645			3,4-DNT SURR. #9 *
		2	25.00000	4.72789	5.28777			
		3	50.00000	7.97299	6.27117			
		4	100.00000	13.38523	7.47092			
		5	500.00000	71.61559	6.98172			
29.399	1	1	10.00000	1.81679	5.50423			TETRYL #5
		2	25.00000	3.94943	6.33002			
		3	50.00000	9.18074	5.44618			
		4	100.00000	15.03300	6.65203			
		5	500.00000	86.63780	5.77115			

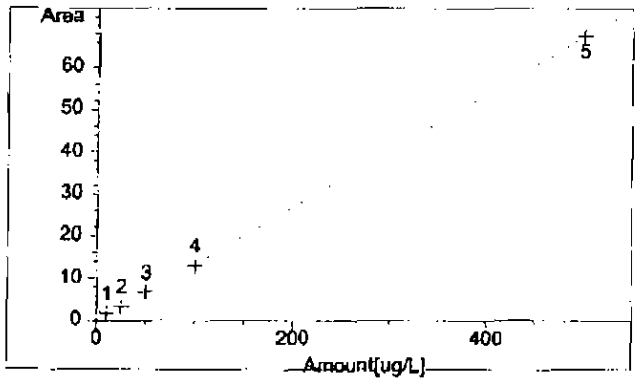
Peak Sum Table

No Entries in table

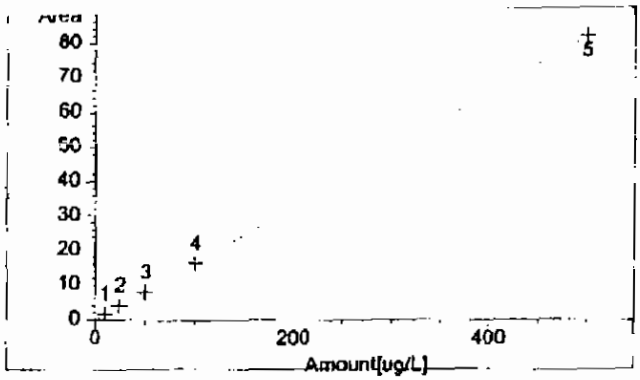
Calibration Curves



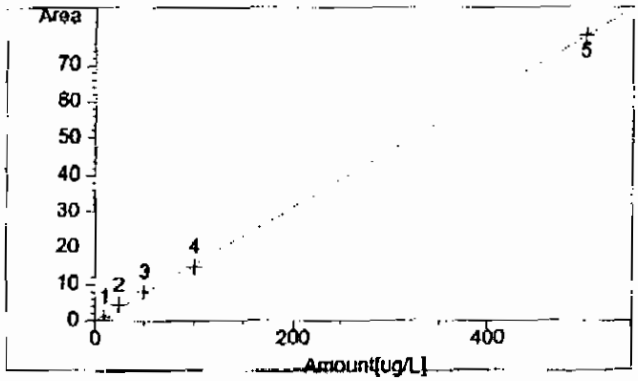
NITROTOLUENES #1 at exp. RT: 13.598
VWD1 A, Wavelength=254 nm
Correlation: 0.99991
Residual Std. Dev.: 0.67949
Formula: y = mx + b
m: 1.14964e-1
b: 2.30400e-2
x: Amount [ug/L]
y: Area



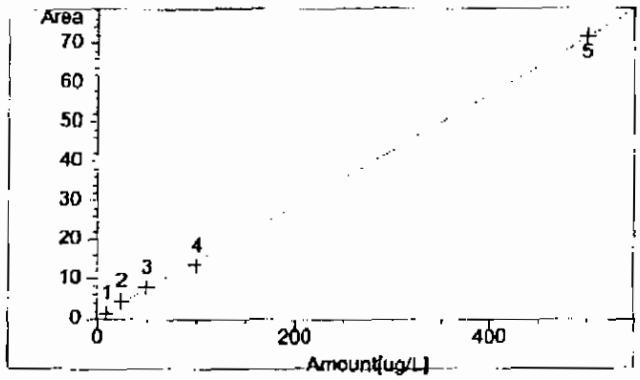
NITROTOLUENE #2 at exp. RT: 14.181
VWD1 A, Wavelength=254 nm
Correlation: 0.99993
Residual Std. Dev.: 0.35067
Formula: y = mx + b
m: 1.34798e-1
b: -1.74589e-2
x: Amount [ug/L]
y: Area



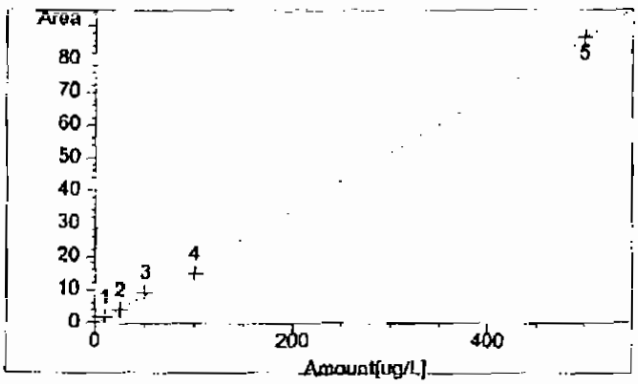
2,6-DNT #3 at exp. RT: 16.253
VWD1 A, Wavelength=254 nm
Correlation: 0.99999
Residual Std. Dev.: 0.18808
Formula: y = mx + b
m: 1.64730e-1
b: -7.07771e-2
x: Amount [ug/L]
y: Area



4-AMINO-2,6-DNT #4 at exp. RT: 17.156
VWD1 A, Wavelength=254 nm
Correlation: 0.99988
Residual Std. Dev.: 0.50973
Formula: y = mx + b
m: 1.55817e-1
b: -2.50889e-2
x: Amount [ug/L]
y: Area



3,4-DNT SURR. #9 * at exp. RT: 19.595
VWD1 A, Wavelength=254 nm
Correlation: 0.99966
Residual Std. Dev.: 0.79406
Formula: y = mx + b
m: 1.42398e-1
b: 2.86293e-1
x: Amount [ug/L]
y: Area



TETRYL #5 at exp. RT: 29.399
VWD1 A, Wavelength=254 nm
Correlation: 0.99955
Residual Std. Dev.: 1.11400
Formula: y = mx + b
m: 1.73409e-1
b: -3.61236e-1
x: Amount [ug/L]
y: Area

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Check Standard Report

Data File C:\HPCHEM\2\DATA\042403\4L004807.D Sample Name: WG139061-07 ALT
HPLC4 4/25/2003 3:46:39 PM RDC

1,1 SOS64-26 50 ppb

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

Compound	RT	Known Conc.	Cal. Conc.	%D
HMX #1	4.685	50.0	50.319	0.6
RDX #2	7.341	50.0	50.264	0.5
1,3,5-Trinitrobenzene #3	9.772	50.0	51.565	3.1
1,3-Dinitrobenzene #4	12.012	50.0	52.690	5.4
Tetryl #5	13.050	50.0	50.689	1.4
Nitrobenzene #6	13.626	50.0	51.757	3.5
3,4-Dinitrotoluene #7 *	14.801	50.0	53.999	8.0
2,4,6-Trinitrotoluene #8	15.503	50.0	50.586	1.2
4-Amino-2,6-Dinitrotolue	17.033	50.0	51.759	3.5
2-Amino-4,6-Dinitrotolue	17.784	50.0	52.130	4.3
2,6-Dinitrotoluene #11	18.215	50.0	55.818	11.6
2,4-Dinitrotoluene #12	18.811	50.0	52.019	4.0
2-Nitrotoluene #13	22.141	50.0	53.321	6.6
4-Nitrotoluene #14	23.669	50.0	49.773	-0.5
3-Nitrotoluene #15	25.549	50.0	51.231	2.5

* = Failed 15.0% Criteria

Check Standard Report

Data File C:\HPCHEM\2\DATA\050203\4L004911.D Sample Name: WG139673-07 ALT
HPLC4 5/4/2003 4:29:59 PM RDC

1,1 SOS64-48 50 ppb

Injection Date : 5/3/2003 12:03:56 AM Seq. Line : 8

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

Compound	RT	Known Conc.	Cal. Conc.	%D
HMX #1	4.644	50.0	45.982	-8.0
RDX #2	7.272	50.0	47.403	-5.2
1,3,5-Trinitrobenzene #3	9.833	50.0	47.765	-4.5
1,3-Dinitrobenzene #4	12.077	50.0	48.175	-3.7
Tetryl #5	13.058	50.0	47.563	-4.9
Nitrobenzene #6	13.715	50.0	46.391	-7.2
3,4-Dinitrotoluene #7 *	14.858	50.0	47.381	-5.2
2,4,6-Trinitrotoluene #8	15.649	50.0	48.652	-2.7
4-Amino-2,6-Dinitrotolue	16.642	50.0	48.562	-2.9
2-Amino-4,6-Dinitrotolue	17.544	50.0	50.209	0.4
2,6-Dinitrotoluene #11	18.344	50.0	52.318	4.6
2,4-Dinitrotoluene #12	18.976	50.0	48.767	-2.5
2-Nitrotoluene #13	22.334	50.0	46.823	-6.4
4-Nitrotoluene #14	23.889	50.0	44.180	-11.6
3-Nitrotoluene #15	25.761	50.0	45.409	-9.2

= Failed 15.0% Criteria

Check Standard Report

Data File C:\HPCHEM\1\DATA\050703\2L002956.D Sample Name: WG140090-06 ALTA HPLC2 5/8/2003 4:35:03 PM RDC

1,1 SOS65-02 8330 MIX A @ 50 ppb

Injection Date : 5/7/2003 9:07:34 PM Seq. Line : 7

Signal 1: VWD1 A, Wavelength=254 nm

Compound	RT	Known Conc.	Cal. Conc.	%D
NITROBENZENE #1	9.257	50.0	55.334	10.7
1,3-DNB #2	10.188	50.0	52.771	5.5
1,3,5-TNB #3	10.975	50.0	52.059	4.1
RDX #4	11.716	50.0	52.788	5.6
2,4-DNT #5	15.098	50.0	53.804	7.6
2-AMINO-4,6-DNT #6	Not Found	50.0	Not Found	NA
2,4,6-TNT #7	17.423	50.0	53.395	6.8
HMX #8	18.732	50.0	56.327	12.7
3,4-DNT SURR. #9	19.333	50.0	53.407	6.8

= Failed 15.0% Criteria

Check Standard Report

Data File C:\HPCHEM\1\DATA\050703\2L002962.D Sample Name: WG140090-12 ALTB
HPLC2 5/8/2003 4:46:46 PM RDC

1,1 SOS65-03 8330 MIX B @ 50 ppb

Injection Date : 5/7/2003 11:49:09 PM Seq. Line : 13

Signal 1: VWD1 A, Wavelength=254 nm

Compound	RT	Known Conc.	Cal. Conc.	%D
NITROBENZENE #1	Not Found	50.0	Not Found	
1,3-DNB #2	Not Found	50.0	Not Found	
1,3,5-TNB #3	Not Found	50.0	Not Found	
RDX #4	Not Found	50.0	Not Found	
2,4-DNT #5	Not Found	50.0	Not Found	
2-AMINO-4,6-DNT #6	16.370	50.0	54.927	9.9
2,4,6-TNT #7	Not Found	50.0	Not Found	
HMX #8	Not Found	50.0	Not Found	
3,4-DNT SURR. #9	19.314	50.0	53.324	6.6

= Failed 15.0% Criteria

Check Standard Report

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Data File C:\HPCHEM\1\DATA\050803\2L002973.D Sample Name: WG140090-12 ALTB
HPLC2 5/9/2003 8:09:06 AM RDC

1,1 SOS65-03 8330 MIX B @ 50 ppb remade and RR

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Injection Date : 5/8/2003 6:44:39 PM Seq. Line : 8

Signal 1: VWD1 A, Wavelength=254 nm

Compound	RT	Known Conc.	Cal. Conc.	%D
NITROTOLUENES #1	13.647	100.0	97.496	-2.5
NITROTOLUENE #2	14.229	50.0	47.459	-5.1
2,6-DNT #3	16.365	50.0	42.403	-15.2 #
4-AMINO-2,6-DNT #4	17.275	50.0	49.997	0.0
3,4-DNT SURR. #9 *	19.701	50.0	49.215	-1.6
TETRYL #5	29.681	50.0	56.935	13.9

= Failed 15.0% Criteria

Check Standard Report

Data File C:\HPCHEM\2\DATA\042903\4L004861.D Sample Name: WG139328-01 CCV
HPLC4 4/30/2003 11:22:50 AM RDC

1,1 SOS64-31 50 ppb

Injection Date : 4/29/2003 3:33:57 PM Seq. Line : 2

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

Compound	RT	Known Conc.	Cal. Conc.	%D
HMX #1	4.711	50.0	49.854	-0.3
RDX #2	7.400	50.0	51.805	3.6
1,3,5-Trinitrobenzene #3	9.803	50.0	51.733	3.5
1,3-Dinitrobenzene #4	12.062	50.0	52.024	4.0
Tetryl #5	13.154	50.0	53.940	7.9
Nitrobenzene #6	13.684	50.0	50.491	1.0
3,4-Dinitrotoluene #7 *	14.904	50.0	49.087	-1.8
2,4,6-Trinitrotoluene #8	15.563	50.0	48.979	-2.0
4-Amino-2,6-Dinitrotolue	17.278	50.0	49.304	-1.4
2-Amino-4,6-Dinitrotolue	18.007	50.0	53.191	6.4
2,6-Dinitrotoluene #11	18.273	50.0	48.661	-2.7
2,4-Dinitrotoluene #12	18.887	50.0	50.153	0.3
2-Nitrotoluene #13	22.217	50.0	53.120	6.2
4-Nitrotoluene #14	23.718	50.0	51.861	3.7
3-Nitrotoluene #15	25.592	50.0	49.932	-0.1

= Failed 15.0% Criteria

Check Standard Report

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Data File C:\HPCHEM\2\DATA\042903\4L004883.D Sample Name: WG139328-03 CCV
HPLC4 4/30/2003 2:19:58 PM RDC

1,1 SOS64-31 50 ppb

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Injection Date : 4/30/2003 11:13:27 AM Seq. Line : 24

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

Compound	RT	Known Conc.	Cal. Conc.	%D
HMX #1	4.709	50.0	55.002	10.0
RDX #2	7.393	50.0	54.170	8.3
1,3,5-Trinitrobenzene #3	9.770	50.0	52.004	4.0
1,3-Dinitrobenzene #4	12.023	50.0	52.284	4.6
Tetryl #5	13.100	50.0	45.075	-9.9
Nitrobenzene #6	13.629	50.0	48.497	-3.0
3,4-Dinitrotoluene #7 *	14.839	50.0	54.455	8.9
2,4,6-Trinitrotoluene #8	15.495	50.0	51.114	2.2
4-Amino-2,6-Dinitrotolue	17.283	50.0	53.244	6.5
2-Amino-4,6-Dinitrotolue	17.988	50.0	55.403	10.8
2,6-Dinitrotoluene #11	18.116	50.0	53.457	6.9
2,4-Dinitrotoluene #12	18.808	50.0	52.925	5.8
2-Nitrotoluene #13	22.114	50.0	48.549	-2.9
4-Nitrotoluene #14	23.631	50.0	47.571	-4.9
3-Nitrotoluene #15	25.470	50.0	46.568	-6.9

= Failed 15.0% Criteria

Check Standard Report

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Data File C:\HPCHEM\2\DATA\042903\4L004872.D Sample Name: WG139328-02 CCV
HPLC4 4/30/2003 11:48:52 AM RDC

1,1 SOS64-31 50 ppb

==========

Injection Date : 4/30/2003 1:24:52 AM Seq. Line : 13

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

Compound	RT	Known Conc.	Cal. Conc.	%D
HMX #1	4.708	50.0	54.894	9.8
RDX #2	7.393	50.0	52.737	5.5
1,3,5-Trinitrobenzene #3	9.790	50.0	51.750	3.5
1,3-Dinitrobenzene #4	12.049	50.0	52.345	4.7
Tetryl #5	13.138	50.0	50.685	1.4
Nitrobenzene #6	13.670	50.0	49.756	-0.5
3,4-Dinitrotoluene #7 *	14.886	50.0	52.904	5.8
2,4,6-Trinitrotoluene #8	15.534	50.0	51.722	3.4
4-Amino-2,6-Dinitrotolue	17.281	50.0	50.648	1.3
2-Amino-4,6-Dinitrotolue	18.017	50.0	52.002	4.0
2,6-Dinitrotoluene #11	18.228	50.0	54.686	9.4
2,4-Dinitrotoluene #12	18.860	50.0	51.902	3.8
2-Nitrotoluene #13	22.170	50.0	51.946	3.9
-Nitrotoluene #14	23.672	50.0	50.414	0.8
-Nitrotoluene #15	25.513	50.0	47.476	-5.0

= Failed 15.0% Criteria

Check Standard Report

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Data File C:\HPCHEM\2\DATA\042903\4L004887.D Sample Name: WG139328-04 CCV
HPLC4 5/1/2003 9:37:14 AM RDC

1,1 SO564-31 50 ppb

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Injection Date : 4/30/2003 2:42:16 PM Seq. Line : 28

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

Compound	RT	Known Conc.	Cal. Conc.	%D
HMX #1	4.693	50.0	53.748	7.5
RDX #2	7.356	50.0	52.931	5.9
1,3,5-Trinitrobenzene #3	9.721	50.0	52.090	4.2
1,3-Dinitrobenzene #4	11.963	50.0	52.293	4.6
Tetryl #5	13.041	50.0	43.639	-12.7
Nitrobenzene #6	13.577	50.0	49.371	-1.3
3,4-Dinitrotoluene #7 *	14.781	50.0	57.349	14.7
2,4,6-Trinitrotoluene #8	15.433	50.0	52.898	5.8
4-Amino-2,6-Dinitrotolue	17.214	50.0	53.679	7.4
2-Amino-4,6-Dinitrotolue	17.947	50.0	54.329	8.7
2,6-Dinitrotoluene #11	18.049	50.0	54.863	9.7
2,4-Dinitrotoluene #12	18.743	50.0	52.397	4.8
2-Nitrotoluene #13	22.056	50.0	47.612	-4.8
4-Nitrotoluene #14	23.540	50.0	44.610	-10.8
3-Nitrotoluene #15	25.388	50.0	44.142	-11.7

= Failed 15.0% Criteria

Check Standard Report

==========

Data File C:\HPCHEM\2\DATA\050403\4L004913.D Sample Name: WG139732-01 CCV
HPLC4 5/5/2003 9:15:54 AM RDC

1,1 SOS64-31 50 ppb

==========

Injection Date : 5/4/2003 6:44:06 PM Seq. Line : 2

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

Compound	RT	Known Conc.	Cal. Conc.	%D
HMX #1	4.625	50.0	45.302	-9.4
RDX #2	7.226	50.0	49.225	-1.6
1,3,5-Trinitrobenzene #3	9.782	50.0	48.545	-2.9
1,3-Dinitrobenzene #4	12.003	50.0	48.581	-2.8
Tetryl #5	12.955	50.0	47.326	-5.3
Nitrobenzene #6	13.634	50.0	46.339	-7.3
3,4-Dinitrotoluene #7 *	14.745	50.0	42.764	-14.5
2,4,6-Trinitrotoluene #8	15.543	50.0	44.513	-11.0
4-Amino-2,6-Dinitrotolue	16.492	50.0	44.586	-10.8
2-Amino-4,6-Dinitrotolue	17.379	50.0	49.428	-1.1
2,6-Dinitrotoluene #11	18.195	50.0	50.580	1.2
2,4-Dinitrotoluene #12	18.825	50.0	50.189	0.4
2-Nitrotoluene #13	22.153	50.0	49.130	-1.7
4-Nitrotoluene #14	23.684	50.0	52.372	4.7
-Nitrotoluene #15	25.545	50.0	53.973	7.9

= Failed 15.0% Criteria

Check Standard Report

==========

Data File C:\HPCHEM\2\DATA\050403\4L004924.D Sample Name: WG139732-02 CCV
HPLC4 5/5/2003 9:24:28 AM RDC

1,1 SOS64-31 50 ppb

==========

Injection Date : 5/5/2003 4:18:09 AM Seq. Line : 13

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

Compound	RT	Known Conc.	Cal. Conc.	%D
HMX #1	4.629	50.0	45.725	-8.6
RDX #2	7.236	50.0	49.300	-1.4
1,3,5-Trinitrobenzene #3	9.763	50.0	49.023	-2.0
1,3-Dinitrobenzene #4	11.984	50.0	48.823	-2.4
Tetryl #5	12.936	50.0	43.183	-13.6
Nitrobenzene #6	13.597	50.0	48.264	-3.5
3,4-Dinitrotoluene #7 *	14.710	50.0	50.058	0.1
2,4,6-Trinitrotoluene #8	15.491	50.0	50.691	1.4
4-Amino-2,6-Dinitrotolue	16.540	50.0	50.366	0.7
2-Amino-4,6-Dinitrotolue	17.419	50.0	50.706	1.4
2,6-Dinitrotoluene #11	18.151	50.0	51.751	3.5
2,4-Dinitrotoluene #12	18.780	50.0	50.833	1.7
2-Nitrotoluene #13	22.071	50.0	47.670	-4.7
4-Nitrotoluene #14	23.605	50.0	49.600	-0.8
3-Nitrotoluene #15	25.434	50.0	46.915	-6.2

= Failed 15.0% Criteria

Check Standard Report

==========

Data File C:\HPCHEM\1\DATA\050803\2L002974.D Sample Name: WG140197-01 CCV
HPLC2 5/9/2003 8:12:03 AM RDC

1,1 SOS64-50 8330 MIX A @ 50 ppb

==========

Injection Date : 5/8/2003 7:21:34 PM Seq. Line : 9

Signal 1: VWD1 A, Wavelength=254 nm

Compound	RT	Known Conc.	Cal. Conc.	%D
NITROBENZENE #1	9.376	50.0	48.945	-2.1
1,3-DNB #2	10.352	50.0	52.672	5.3
1,3,5-TNB #3	11.149	50.0	52.170	4.3
RDX #4	12.020	50.0	56.732	13.5
2,4-DNT #5	15.383	50.0	49.294	-1.4
2-AMINO-4,6-DNT #6	16.846	50.0	52.021	4.0
2,4,6-TNT #7	18.103	50.0	54.694	9.4
HMX #8	19.143	50.0	51.443	2.9
3,4-DNT SURR. #9	19.777	50.0	53.460	6.9

= Failed 15.0% Criteria

Check Standard Report

==========

Data File C:\HPCHEM\1\DATA\050803\2L002985.D Sample Name: WG140197-02 CCV
HPLC2 5/9/2003 8:39:35 AM RDC

1,1 SOS64-50 8330 MIX A @ 50 ppb

==========

Injection Date : 5/9/2003 2:07:46 AM Seq. Line : 20

Signal 1: VWD1 A, Wavelength=254 nm

Compound	RT	Known Conc.	Cal. Conc.	%D
NITROBENZENE #1	9.374	50.0	49.105	-1.8
1,3-DNB #2	10.338	50.0	51.308	2.6
1,3,5-TNB #3	11.124	50.0	50.360	0.7
RDX #4	12.045	50.0	55.866	11.7
2,4-DNT #5	15.358	50.0	47.573	-4.9
2-AMINO-4,6-DNT #6	16.897	50.0	52.470	4.9
2,4,6-TNT #7	18.071	50.0	43.716	-12.6
HMX #8	19.137	50.0	46.411	-7.2
3,4-DNT SURR. #9	19.796	50.0	45.762	-8.5

= Failed 15.0% Criteria

Check Standard Report

Data File C:\HPCHEM\1\DATA\050803\2L002986.D Sample Name: WG140197-03 CCV
HPLC2 5/9/2003 8:49:56 AM RDC

1,1 SOS65-01 8330 MIX A @ 50 ppb

Injection Date : 5/9/2003 2:44:39 AM Seq. Line : 21

Signal 1: VWD1 A, Wavelength=254 nm

Compound	RT	Known Conc.	Cal. Conc.	%D
NITROTOLUENES #1	13.730	100.0	97.863	-2.1
NITROTOLUENE #2	14.297	50.0	50.789	1.6
2,6-DNT #3	16.392	50.0	49.404	-1.2
4-AMINO-2,6-DNT #4	17.556	50.0	48.697	-2.6
3,4-DNT SURR. #9 *	19.825	50.0	47.933	-4.1
TETRYL #5	29.936	50.0	42.633	-14.7

= Failed 15.0% Criteria

Sequence Table:

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	1	Blank Me/AcCN/Wa	8330	1	Sample		
2	2	WG139061-01 STD6	8330	1	Sample		
3	3	WG139061-02 STD5	8330	1	Sample		
4	4	WG139061-03 STD4	8330	1	Sample		
5	5	WG139061-04 STD3	8330	1	Sample		
6	6	WG139061-05 STD2	8330	1	Sample		
7	7	WG139061-06 STD1	8330	1	Sample		
8	8	WG139061-07 ALT	8330	1	Sample		
9	9	WG138033-01 BLK	8330	1	Sample		
10	10	L0304149-01 833S	8330	1	Sample		
11	11	L0304149-02 833S	8330	1	Sample		
12	12	WG138929-02 BLK	8330	1	Sample		
13	13	WG138929-03 LCS	8330	1	Sample		
14	14	L0304410-01 833S	8330	1	Sample		
15	15	L0304410-02 833S	8330	1	Sample		
16	16	L0304410-04 833S	8330	1	Sample		
17	17	L0304410-06 833S	8330	1	Sample		
18	18	L0304410-07 833S	8330	1	Sample		
19	5	WG139061-08 CCV	8330	1	Sample		
20	19	L0304149-03 833S	8330	1	Sample		
21	20	L0304149-04 833S	8330	1	Sample		
22	21	L0304149-05 833S	8330	1	Sample		
23	22	L0304149-06 833S	8330	1	Sample		
24	23	L0304149-07 833S	8330	1	Sample		
25	24	L0304149-08 833S	8330	1	Sample		
26	25	L0304149-09 833S	8330	1	Sample		
27	26	L0304149-10 833S	8330	1	Sample		
28	27	L0304149-11 833S	8330	1	Sample		
29	28	WG138033-02 LCS	8330	1	Sample		
30	29	WG139061-09 CCV	8330	1	Sample		
31	30	WG138033-03 LCS2	8330	1	Sample		
32	31	L0304149-04 833S	8330	1	Sample		
33	32	L0304410-02 @ 5X	8330	1	Sample		
34	29	WG139061-10 CCV	8330	1	Sample		

RDC 4/28/03

Set	Run	Vial	Method	Datafile	Seqfable	Calib:RF:RT	Sample Name
No	1	1	8330	4L004800	01:01		Blank Me/AcCN/
No	2	2	8330	4L004801	02:01	DILN SOS64-31	WG139061-01 ST
No	3	3	8330	4L004802	03:01		WG139061-02 ST
No	4	4	8330	4L004803	04:01		WG139061-03 ST
No	5	5	8330	4L004804	05:01		WG139061-04 ST
No	6	6	8330	4L004805	06:01		WG139061-05 ST
No	7	7	8330	4L004806	07:01		WG139061-06 ST
No	8	8	8330	4L004807	08:01	DILN SOS64-26	WG139061-07 AL
No	9	9	8330	4L004808	09:01		WG138033-01 BL
No	10	10	8330	4L004809	10:01		L0304149-01 83
No	11	11	8330	4L004810	11:01		L0304149-02 83
No	12	12	8330	4L004811	12:01		WG138929-02 BL
No	13	13	8330	4L004812	13:01		WG138929-03 LC
No	14	14	8330	4L004813	14:01		L0304410-01 83
No	15	15	8330	4L004814	15:01	RR & RR5X	L0304410-02 83
No	16	16	8330	4L004815	16:01		L0304410-04 83
No	17	17	8330	4L004816	17:01		L0304410-06 83
No	18	18	8330	4L004817	18:01		L0304410-07 83
No	19	5	8330	4L004818	19:01	DILN SOS 64-31	WG139061-08 CC
No	20	19	8330	4L004819	20:01		L0304149-03 83
No	21	20	8330	4L004820	21:01	RR, SVNI	L0304149-04 83
No	22	21	8330	4L004821	22:01		L0304149-05 83
No	23	22	8330	4L004822	23:01		L0304149-06 83
No	24	23	8330	4L004823	24:01		L0304149-07 83
No	25	24	8330	4L004824	25:01		L0304149-08 83
No	26	25	8330	4L004825	26:01		L0304149-09 83
No	27	26	8330	4L004826	27:01		L0304149-10 83
No	28	27	8330	4L004827	28:01		L0304149-11 83
No	29	28	8330	4L004828	29:01		WG138033-02 LC
No	30	29	8330	4L004829	30:01	DILN SOS64-31	WG139061-09 CC
No	31	30	8330	4L004830	31:01		WG138033-03 LC
No	32	31	8330	4L004831	32:01		L0304149-04 83
No	33	32	8330	4L004832	33:01		L0304410-02 @
No	34	29	8330	4L004833	34:01	DILN SOS 64-31	WG139061-10 CC

RJLC
4/29/03
[illegible]

Analysis Date/Time Apr. 24, 2003 Instrument ID #PLC4 Column ID Ultracarb 5 ODS Data Subdirectory C4 24 03
Analyst Initials RWT SOP # HPLC01 Rev. # 4 8310 SOP # HPLC02 Rev. # 3 8330

Daily Check

- ☑ Mobile phase reservoir
- ☑ System pressure 228 bar
- ☑ Waste container

Returned to Control?

Yes ____ No ____

Additional Maintenance

Problem: decreasing resolution resulting in %D >15 for analytes

Action Taken: changed guard cartridge & recalibrated

Comments

L0304410-02 & 02 @ 5X need to RR — cannot confirm RDX by DAD . . . . tetryl & nitrobenzene for same sample do not confirm

Reviewed By: [illegible]

Sequence Table:

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	1	Blank Me/AcCN/Wa	8330	1	Sample		
2	2	WG139328-01 CCV	8330	1	Sample		
3	3	WG139189-02 BLK	8330	1	Sample		
4	4	WG139189-03 LCS	8330	1	Sample		
5	5	L0304506-01 833W	8330	1	Sample		
6	6	L0304506-02 833W	8330	1	Sample		
7	7	L0304506-03 833W	8330	1	Sample		
8	8	L0304506-04 833W	8330	1	Sample		
9	9	L0304506-05 833W	8330	1	Sample		
10	10	L0304506-06 833W	8330	1	Sample		
11	11	L0304506-08 833W	8330	1	Sample		
12	12	L0304506-09 833W	8330	1	Sample		
13	13	WG139328-02 CCV	8330	1	Sample		
14	14	L0304506-10 833W	8330	1	Sample		
15	15	L0304506-11 833W	8330	1	Sample		
16	16	L0304541-01 833W	8330	1	Sample		
17	17	L0304541-02 833W	8330	1	Sample		
18	18	L0304541-03 833W	8330	1	Sample		
19	19	WG139189-01 REF	8330	1	Sample		
20	20	WG139189-04 MS	8330	1	Sample		
21	21	WG139189-05 MSD	8330	1	Sample		
22	22	L0304541-07 833W	8330	1	Sample		
23	23	L0304541-08 833W	8330	1	Sample		
24	13	WG139328-03 CCV	8330	1	Sample		
25	24	L0304541-12 833W	8330	1	Sample		
26	25	L0304594-01 833W	8330	1	Sample		
27	26	L0304594-02 833W	8330	1	Sample		
28	13	WG139328-04 CCV	8330	1	Sample		

Sel	Run	Vial	Method	Datafile	SeqTable	Calib:RF:RT	D'Sample Name
No	1	1	8330	4L004860	01:01		Blank Me/AcCN
No	2	2	8330	4L004861	02:01	DIL'N SOS 64-31	WG139328-01 CC
No	3	3	8330	4L004862	03:01		WG139189-02 BL
No	4	4	8330	4L004863	04:01		WG139189-03 LC
No	5	5	8330	4L004864	05:01		L0304506-01 83
No	6	6	8330	4L004865	06:01		L0304506-02 83
No	7	7	8330	4L004866	07:01		L0304506-03 83
No	8	8	8330	4L004867	08:01		L0304506-04 83
No	9	9	8330	4L004868	09:01		L0304506-05 83
No	10	10	8330	4L004869	10:01		L0304506-06 83
No	11	11	8330	4L004870	11:01		L0304506-08 83
No	12	12	8330	4L004871	12:01		L0304506-09 83
No	13	13	8330	4L004872	13:01	SOS 64-31	WG139328-02 CC
No	14	14	8330	4L004873	14:01		L0304506-10 83
No	15	15	8330	4L004874	15:01		L0304506-11 83
No	16	16	8330	4L004875	16:01 RE		L0304541-01 83
No	17	17	8330	4L004876	17:01		L0304541-02 83
No	18	18	8330	4L004877	18:01		L0304541-03 83
No	19	19	8330	4L004878	19:01		WG139189-01 RE
No	20	20	8330	4L004879	20:01		WG139189-04 MS
No	21	21	8330	4L004880	21:01		WG139189-05 MS
No	22	22	8330	4L004881	22:01		L0304541-07 83
No	23	23	8330	4L004882	23:01		L0304541-08 83
No	24	13	8330	4L004883	24:01	SOS 64-31	WG139328-03 CC
No	25	24	8330	4L004884	25:01		L0304541-12 83
No	26	25	8330	4L004885	26:01		L0304594-01 83
No	27	26	8330	4L004886	27:01		L0304594-02 83
No	28	13	8330	4L004887	28:01	SOS 64-31	WG139328-04 CC

RHC
5/2/03
pdc 5/6/03

HPLC Laboratory Maintenance Log

Analysis Date/Time Apr. 29 2003 Instrument ID HPLC4 Column ID Ultracarb5 005 Data Subdirectory 042903
Analyst Initials [illegible] SOP # HPLC01 Rev. # 4 8310 SOP # HPLC02 Rev. # 3 8330

Daily Check
- ☑ Mobile phase reservoir
- ☑ System pressure 228 bar
- ☑ Waste container

Returned to Control?
Yes ____ No ____

Additional Maintenance
Problem: ____

Action Taken: ____

Comments

L0304506-01	RDX & NB - NC	may need 2nd column conf.
↓ -02	RDX conf via DAD	
↓ -03	tetryl - NC	(2nd column needed?)
↓ -04	tetryl conf. via DAD	
↓ -09	tetryl - NC	2nd column may be needed
↓ -10	↓	↓
↓ -11	↓	↓
L0304541-01	SWM @ 48.6%	(50-150) sent for RE
L0304541-12	tetryl - NC	2nd column may be needed
L0304594-01	RDX, 1,3,5-TNB, 4-AM-2,6-DNT, 2-AM-4,6-DNT, & 4-NT - NC	- 2nd column may be needed

Reviewed By: [illegible] 5/5/03

Sequence Table:

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	1	Blank Me/AcCN/Wa	8330	1	Sample		
2	2	WG139673-01 STD6	8330	1	Sample		
3	3	WG139673-02 STD5	8330	1	Sample		
4	4	WG139673-03 STD4	8330	1	Sample		
5	5	WG139673-04 STD3	8330	1	Sample		
6	6	WG139673-05 STD2	8330	1	Sample		
7	7	WG139673-06 STD1	8330	1	Sample		
8	8	WG139673-07 ALT	8330	1	Sample		

RJOE 5/14/03

Sel	Run	Vial	Method	Datafile	SeqTable	Calib:RF:RT	Sample Name
No	1	1	8330	4L004904	01:01		Blank Me/AcCN/
No	2	2	8330	4L004905	02:01	DILN 505 64-31	WG139673-01 ST
No	3	3	8330	4L004906	03:01		WG139673-02 ST
No	4	4	8330	4L004907	04:01		WG139673-03 ST
No	5	5	8330	4L004908	05:01		WG139673-04 ST
No	6	6	8330	4L004909	06:01		WG139673-05 ST
No	7	7	8330	4L004910	07:01		WG139673-06 ST
No	8	8	8330	4L004911	08:01	DILN. 505 64-48	WG139673-07 AL

BAC 5/4/03

KEMRON ENVIRONMENTAL SERVICES
HPLC Laboratory Maintenance Log

Analysis Date/Time May 2, 2003 Instrument ID HPLC4 Column ID Ultracarb 5005 Data Subdirectory 050203
Analyst Initials [illegible] SOP # HPLC01 Rev. # 4 8310 SOP # HPLC02 Rev. # 3 8330

Daily Check
- ☑ Mobile phase reservoir
- ☑ System pressure 227 bar
- ☑ Waste container

Returned to Control?
Yes ____ No ____

Additional Maintenance
Problem: _____

Action Taken: _____

Comments

Reviewed By: [illegible]

Sequence Table:

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	1	Blank Me/AcCN/Wa	8330	1	Sample		
2	2	WG139732-01 CCV	8330	1	Sample		
3	3	WG139397-01 BLK	8330	1	Sample		
4	4	MDL CHK	8330	1	Sample		
5	5	WG139397-02 LCS	8330	1	Sample		
6	6	WG139397-03 LCS2	8330	1	Sample		
7	7	L0304554-01 833S	8330	1	Sample		
8	8	L0304594-03 833S	8330	1	Sample		
9	9	L0304439-01 REEX	8330	1	Sample		
10	10	WG139590-01 BLK	8330	1	Sample		
11	11	WG139590-02 LCS	8330	1	Sample		
12	12	WG139590-03 LCS2	8330	1	Sample		
13	2	WG139732-02 CCV	8330	1	Sample		
14	13	L0305015-01 833W	8330	1	Sample		
15	14	L0305015-02 833W	8330	1	Sample		
16	15	L0305020-01 833W	8330	1	Sample		
17	2	WG139732-03 CCV	8330	1	Sample		

RDL 5/5/03

Sel	Run	Vial	Method	Datafile	SeqTable	Calib:RF:RT	Sample Name
No	1	1	8330	4L004912	01:01		Blank Me/AcCN
No	2	2	8330	4L004913	02:01	S05 64-31	WG139732-01 CC
No	3	3	8330	4L004914	03:01		WG139397-01 BL
No	4	4	8330	4L004915	04:01		MDL CHK
No	5	5	8330	4L004916	05:01		WG139397-02 LC
No	6	6	8330	4L004917	06:01		WG139397-03 LC
No	7	7	8330	4L004918	07:01		L0304554-01 83
No	8	8	8330	4L004919	08:01		L0304594-03 83
No	9	9	8330	4L004920	09:01		L0304439-01 RE
No	10	10	8330	4L004921	10:01		WG139590-01 BL
No	11	11	8330	4L004922	11:01		WG139590-02 LC
No	12	12	8330	4L004923	12:01		WG139590-03 LC
No	13	2	8330	4L004924	13:01	S05 64-31	WG139732-02 CC
No	14	13	8330	4L004925	14:01 AR		L0305015-01 83
No	15	14	8330	4L004926	15:01		L0305015-02 83
No	16	15	8330	4L004927	16:01		L0305020-01 83
No	17	2	8330	4L004928	17:01 cc	S0564-31	WG139732-03 CC

RAC 5/5/03
MC 5/5/03

KEMRON ENVIRONMENTAL SERVICES
HPLC Laboratory Maintenance Log

Analysis Date/Time 5/04/03 Instrument ID HPLC4 Column ID Ultracarb 5 ODS Data Subdirectory 050403
Analyst Initials AEC SOP # HPLC01 Rev. # 4 8310 SOP # HPLC02 Rev. # 3 8330

Daily Check
- [x] Mobile phase reservoir
- [x] System pressure 229 bar
- [x] Waste container

Returned to Control?
Yes ____ No ____

Additional Maintenance
Problem: _____

Action Taken: _____

Comments

Ending CCV 4L004928 / WF139732-03 %D for tetryl @ 16.4% (low)

Reviewed By: [illegible] 5/5/03

Sequence Table:

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	1	Solvent Blank	8330CONF	1	Sample		
2	2	WG140090-01 #5A	8330CONF	1	Sample		
3	3	WG140090-02 #4A	8330CONF	1	Sample		
4	4	WG140090-03 #3A	8330CONF	1	Sample		
5	5	WG140090-04 #2A	8330CONF	1	Sample		
6	6	WG140090-05 #1A	8330CONF	1	Sample		
7	7	WG140090-06 ALTA	8330CONF	1	Sample		
8	8	WG140090-07 #5B	8330CONF	1	Sample		
9	9	WG140090-08 #4B	8330CONF	1	Sample		
10	10	WG140090-09 #3B	8330CONF	1	Sample		
11	11	WG140090-10 #2B	8330CONF	1	Sample		
12	12	WG140090-11 #1B	8330CONF	1	Sample		
13	13	WG140090-12 ALTB	8330CONF	1	Sample		
14	14	L0304410-02 CONF	8330CONF	1	Sample		
15	3	WG140090-13 CCV	8330CONF	1	Sample		
16	9	WG140090-14 CCV	8330CONF	1	Sample		

RDC 5/10/03

			Method	Datafile	Seqfable	Calib:RF:RT	Sample Name
No	1	1	8330CONF	2L002950	01:01		Solvent Blank
No	2	2	8330CONF	2L002951	02:01	DIL'N SOS 64-50	WG140090-01 #5
No	3	3	8330CONF	2L002952	03:01		WG140090-02 #4
No	4	4	8330CONF	2L002953	04:01		WG140090-03 #3
No	5	5	8330CONF	2L002954	05:01		WG140090-04 #2
No	6	6	8330CONF	2L002955	06:01		WG140090-05 #1
No	7	7	8330CONF	2L002956	07:01	DIL'N SOS 65- 02	WG140090-06 AL
No	8	8	8330CONF	2L002957	08:01	RR *	WG140090-07 #5
No	9	9	8330CONF	2L002958	09:01		WG140090-08 #4
No	10	10	8330CONF	2L002959	10:01		WG140090-09 #3
No	11	11	8330CONF	2L002960	11:01		WG140090-10 #2
No	12	12	8330CONF	2L002961	12:01		WG140090-11 #1
No	13	13	8330CONF	2L002962	13:01	RR *	WG140090-12 AL
No	14	14	8330CONF	2L002963	14:01	RR	L0304410-02 CO
No	15	3	8330CONF	2L002964	15:01		WG140090-13 CC
No	16	9	8330CONF	2L002965	16:01		WG140090-14 CC

TCPC 5/9/03
[illegible]

KEMRON ENVIRONMENTAL SERVICES
HPLC Laboratory Maintenance Log (5µ 250x4.6)

Analysis Date/Time May 7, 2003 Instrument ID HPLC2 Column ID LUNA-CN Data Subdirectory 050703
Analyst Initials AGR SOP # HPLC01 Rev. # 4 8310 SOP # HPLC02 Rev. # 3 8330
2nd col. conf.

Daily Check
- ☑ Mobile phase reservoir
- ☑ System pressure 158 bar
- ☑ Waste container

Returned to Control?
Yes ____ No ____

Additional Maintenance
Problem: ____

Action Taken: ____

Comments

Due to co-elutions the conf. method is calibrated with MIXA & MIXB as follows:

MIX A NB, 1,3-DNB, 1,3,5-TNB, RDX, 2,4-DNT, 2-AM-4,6-DNT, 2,4,6-TNT, HMX, & 3,4-DNT (surr.)

MIXB 2-NT, 3-NT, 4-NT, 2,6-DNT, 4-AM-2,6-DNT, tetryl, & 3,4-DNT (surr.)

All Sources are MIX 1 & MIX 2 as follows:

MIX 1 – Same as MIX A but without 2-AM-4,6-DNT
MIX 2 – same as MIX B + with 2-AM-4,6-DNT

* ALTB (MIX2) 21002962 WG140090-12 – used to validate MIX A curve for 2-AM-4,6-DNT

* MIX B curve needs RR, run time not long enough to allow for the elution of tetryl

Reviewed By: [illegible]

Sequence Table:

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	1	Solvent Blank	8330CONF	1	Sample		
2	2	WG140090-07 #5B	8330CONF	1	Sample		
3	3	WG140090-08 #4B	8330CONF	1	Sample		
4	4	WG140090-09 #3B	8330CONF	1	Sample		
5	5	WG140090-10 #2B	8330CONF	1	Sample		
6	6	WG140090-11 #1B	8330CONF	1	Sample		
7	7	WG140090-12 ALTB	8330CONF	1	Sample		
8	7	WG140090-12 ALTB	8330CONF	1	Sample		
9	8	WG140197-01 CCV	8330CONF	1	Sample		
10	9	L0304410-02 833W	8330CONF	1	Sample		
11	10	L0304506-01 833W	8330CONF	1	Sample		
12	11	L0304506-02 833W	8330CONF	1	Sample		
13	12	L0304506-03 833W	8330CONF	1	Sample		
14	13	L0304506-04 833W	8330CONF	1	Sample		
15	14	L0304506-09 833W	8330CONF	1	Sample		
16	17	L0304506-10 833W	8330CONF	1	Sample		
17	18	L0304506-11 833W	8330CONF	1	Sample		
18	19	L0304541-12 833W	8330CONF	1	Sample		
19	20	L0304594-01 833W	8330CONF	1	Sample		
20	8	WG140197-02 CCV	8330CONF	1	Sample		
21	4	WG140197-03 CCV	8330CONF	1	Sample		
22	21	SOIL MDL CHECK	8330CONF	1	Sample		
23	8	WG140197-04 CCV	8330CONF	1	Sample		
24	4	WG140197-05 CCV	8330CONF	1	Sample		

Set	Run	Vial	Method	Datafile	SeqTable	Calib:RF:RT	Sample Name
No	1	1	8330CONF	2L002966	01:01		Solvent Blank
No	2	2	8330CONF	2L002967	02:01	DILIN SOS 65-01	WG140090-07 #5
No	3	3	8330CONF	2L002968	03:01		WG140090-08 #4
No	4	4	8330CONF	2L002969	04:01		WG140090-09 #3
No	5	5	8330CONF	2L002970	05:01		WG140090-10 #2
No	6	6	8330CONF	2L002971	06:01		WG140090-11 #1
No	7	7	8330CONF	2L002972	07:01cc	SOS 65 - 03	WG140090-12 AL
No	8	7	8330CONF	2L002973	08:01cc		WG140090-12 AL
No	9	8	8330CONF	2L002974	09:01	SOS 64-50	WG140197-01 CC
No	10	9	8330CONF	2L002975	10:01		L0304410-02 83
No	11	10	8330CONF	2L002976	11:01		L0304506-01 83
No	12	11	8330CONF	2L002977	12:01		L0304506-02 83
No	13	12	8330CONF	2L002978	13:01		L0304506-03 83
No	14	13	8330CONF	2L002979	14:01		L0304506-04 83
No	15	14	8330CONF	2L002980	15:01		L0304506-09 83
No	16	17	8330CONF	2L002981	16:01		L0304506-10 83
No	17	18	8330CONF	2L002982	17:01		L0304506-11 83
No	18	19	8330CONF	2L002983	18:01		L0304541-12 83
No	19	20	8330CONF	2L002984	19:01		L0304594-01 83
No	20	8	8330CONF	2L002985	20:01	SOS 64-50	WG140197-02 CC
No	21	4	8330CONF	2L002986	21:01	SOS 65-01	WG140197-03 CC
No	22	21	8330CONF	2L002987	22:01		SOIL MDL CHECK
No	23	8	8330CONF	2L002988	23:01	SOS 64-50	WG140197-04 CC
No	24	4	8330CONF	2L002989	24:01	SOS 65-01	WG140197-05 CC

RXC
5/9/03

KEMRON ENVIRONMENTAL SERVICES
HPLC Laboratory Maintenance Log (250x4.6)

Analysis Date/Time May 7, 2003 Instrument ID HPLC2 Column ID LUNA 5μ CN Data Subdirectory 050803
Analyst Initials RDC SOP # HPLC01 Rev. # 4 ____ 8310 SOP # HPLC02 Rev. # 3 ✓ 8330 conf.

Daily Check
- ☑ Mobile phase reservoir
- ☑ System pressure 156 bar
- ☑ Waste container

Returned to Control?
Yes ____ No ____

Additional Maintenance
Problem: ____

Action Taken: ____

Comments

alt source low for 2,6-DNT @ 15.2%D - Not required for this conf.

NOTE: HP Core error stopped inst between 21002972 & 21002973. Inst was restarted & allowed to purge with eluent x 30 min before analysis continued.

* For L0304594-01 2-NT, 3-NT, & 4-NT are not totally separated, 2 peaks are produced with one pk containing 2 of the isomers & one pk containing one other. Arbitrarily, the NT reported by the conf. column has been entered as 4-NT with an asterisk. Case Narrative will include this info. RDC.

L0304506-03, 04, 09, 10, 11 & L0304541-12 > No analytes were confirmed to be present that had been reported on the primary column. Results were not uploaded.

Reviewed By: [illegible]

Analyst: CEB
Date: 4-28-03 @ 0775
SOP#: EXTNT01 REV 5
Spike Analyst: CEB Witness: RWL
Sample Matrix: H_2O
Ext Solvent: CH_3CN Lot#: 42269
Ext Solvent: MeOH Lot#: 42247236
Ext Disk: SDB-RPS Lot#: 760082
Other: HPLC H_2O Lot#: ~~42229~~ 42269 CEB 4/28/03

Extract Relinquished By: CEB
Extract Received By: RWL
Date Extract Received: 4/28/03

Matrix Spike # / Conc: ES50044-20 @ 1.0 ppm
Surrogate Spike # / Conc: ES50044-12 @ 1.0 ppm

Extraction Work Group: WG139189
Analytical Work Group: WG139350

Sonic Bath On – Date: N/A
Time (1) N/A Temp (1) N/A
Time (2) N/A Temp (2) N/A
Sonic Bath Off – Date: N/A
Time (3) N/A Temp (3) N/A

	Project ID	Sample ID	Sample Wt (g) / Vol (mL)	Surrogate Amount (uL)	Matrix Spike Amount (uL)	Extract F. Volume (mL)	Comments
1		BLK	1000mL	1000ul		10.0mL	WG139189 -02
2		LCS	↓	↓	1000ul	↓	↓ -03
3		04-506-01	900 mL	↓	↓	↓	
4		-02	820 mL	↓	↓	↓	
5		-03	850 mL	↓	↓	↓	
6		-04	840 mL	↓	↓	↓	
7		-05	870 mL	↓	↓	↓	
8		-06	870 mL	↓	↓	↓	
9		-08	850 mL	↓	↓	↓	
10		-09	500 mL	↓	↓	↓	
11		-10	800 mL	↓	↓	↓	
12		-11	870 mL	↓	↓	↓	
13		04-541-01	920 mL	↓	↓	↓	
14		-02	870 mL	↓	↓	↓	
15		-03	900 mL	↓	↓	↓	
16		-04	920 mL	↓	↓	↓	WG139189 -01
17		-05 MS	910 mL	↓	100ul	↓	↓ -04
18		-06 MSD	910 mL	↓	↓	↓	↓ -05
19		-07	940 mL	↓	↓	↓	
20		-08	930 mL	↓	↓	↓	
21		-12	800 mL	↓	↓	↓	
22		04-594-01	900 mL	↓	↓	↓	
23		-02	950 mL	↓	↓	↓	
24							

CEB 4/28/03

All soil samples are air dried to a constant weight prior to extraction
All extracts are filtered through a 0.45 um teflon ACRODISC prior to analysis

Reviewed by:

Analyst: CEB
Date: 4-30-03 @ 1042
SOP#: EXT-902 REV
Spike Analyst: CEB Witness: RWC
Sample Matrix: SOIL
Ext Solvent: CH_3CN Lot#: 42269
Ext Solvent: — Lot#: —
Ext Disk: — Lot#: —
Other: CCI Lot#: EP0005-1

Extract Relinquished By: CEB
Extract Received By: KWC
Date Extract Received: 5/1/03

Matrix Spike # / Conc: ES50044-20 @ 1.0 ppm
Surrogate Spike # / Conc: ES50044-72 @ 1.0 ppm

Extraction Work Group: W6139397
Analytical Work Group: W6-139534

Sonic Bath On – Date: 4-30-03
Time (1) 1300 Temp (1) CTR 3.4°C BATH 10°C
Time (2) 1539 Temp (2) CTR 3.4°C BATH 12°C
Sonic Bath Off – Date: 5/1/03
Time (3) 0700 Temp (3) CTR 3.4°C BATH 12°

	Project ID	Sample ID	Sample Wt (g) / Vol (mL)	Surrogate Amount (uL)	Matrix Spike Amount (uL)	Extract F. Volume (mL)	Comments
1		BLK	2.00	1000 µl		20.0 mL	W6139397-01
2		LCS	2.03		1000 µl		-02
3		LCS DUP	2.01				-03
4		04-554-01	2.06				
5		04-594-03	2.05				
6		04-439-01	2.02				RE EXT IN HOLD
7		MDL ✓	2.01		200 µl		
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

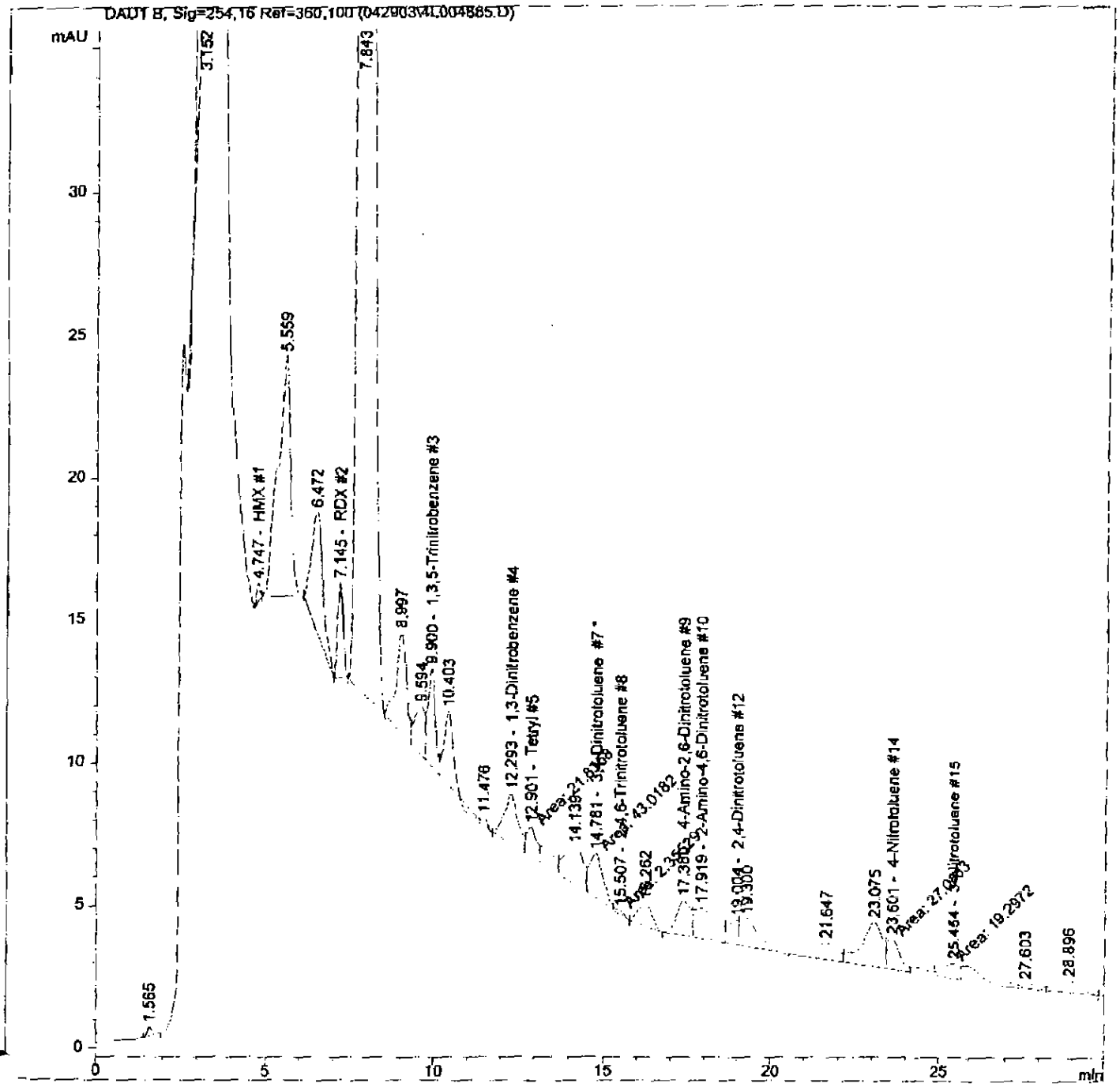
CEB 4-30-03

All soil samples are air dried to a constant weight prior to extraction
All extracts are filtered through a 0.45 um teflon ACRODISC prior to analysis

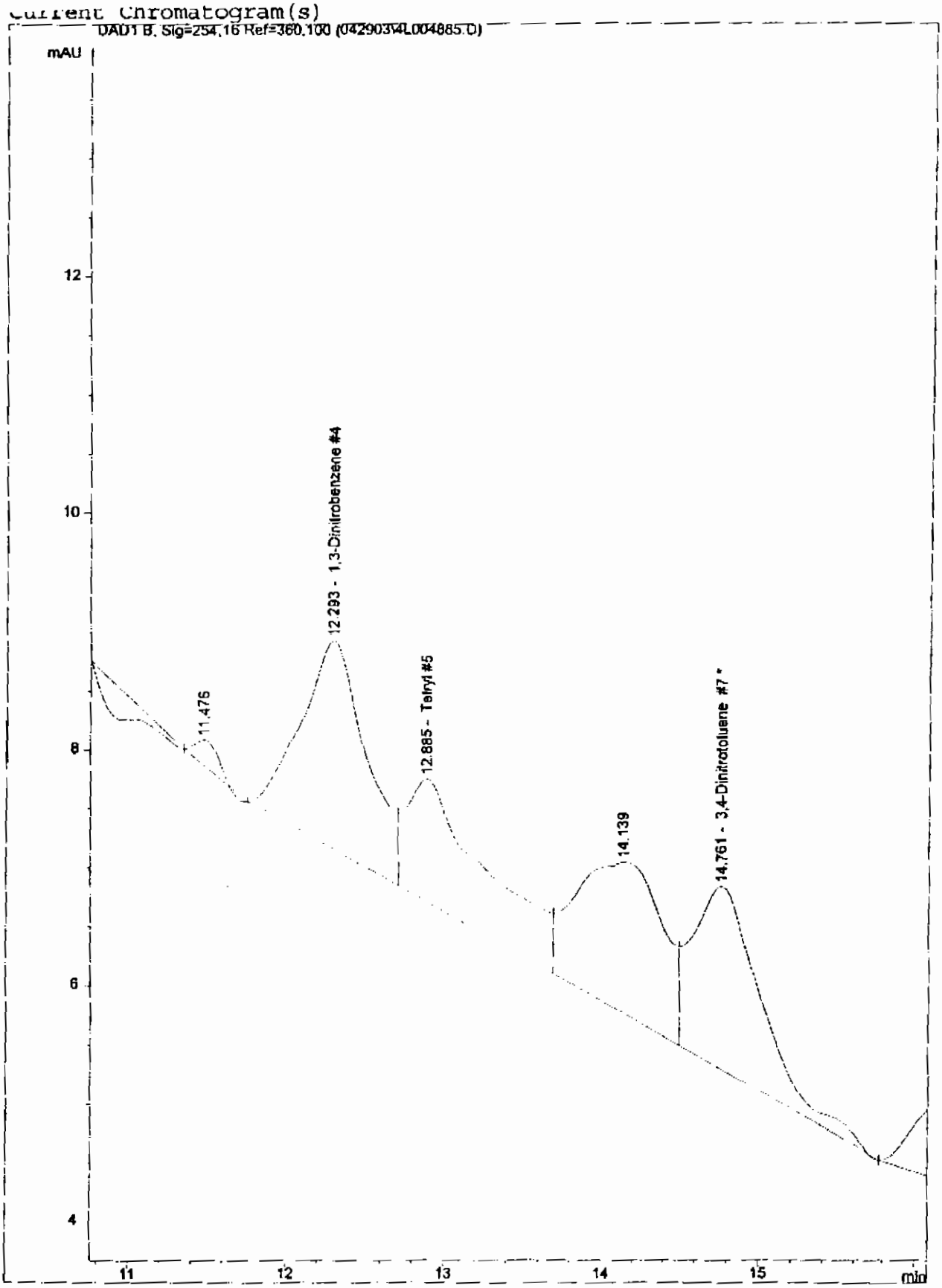
Reviewed by: _____

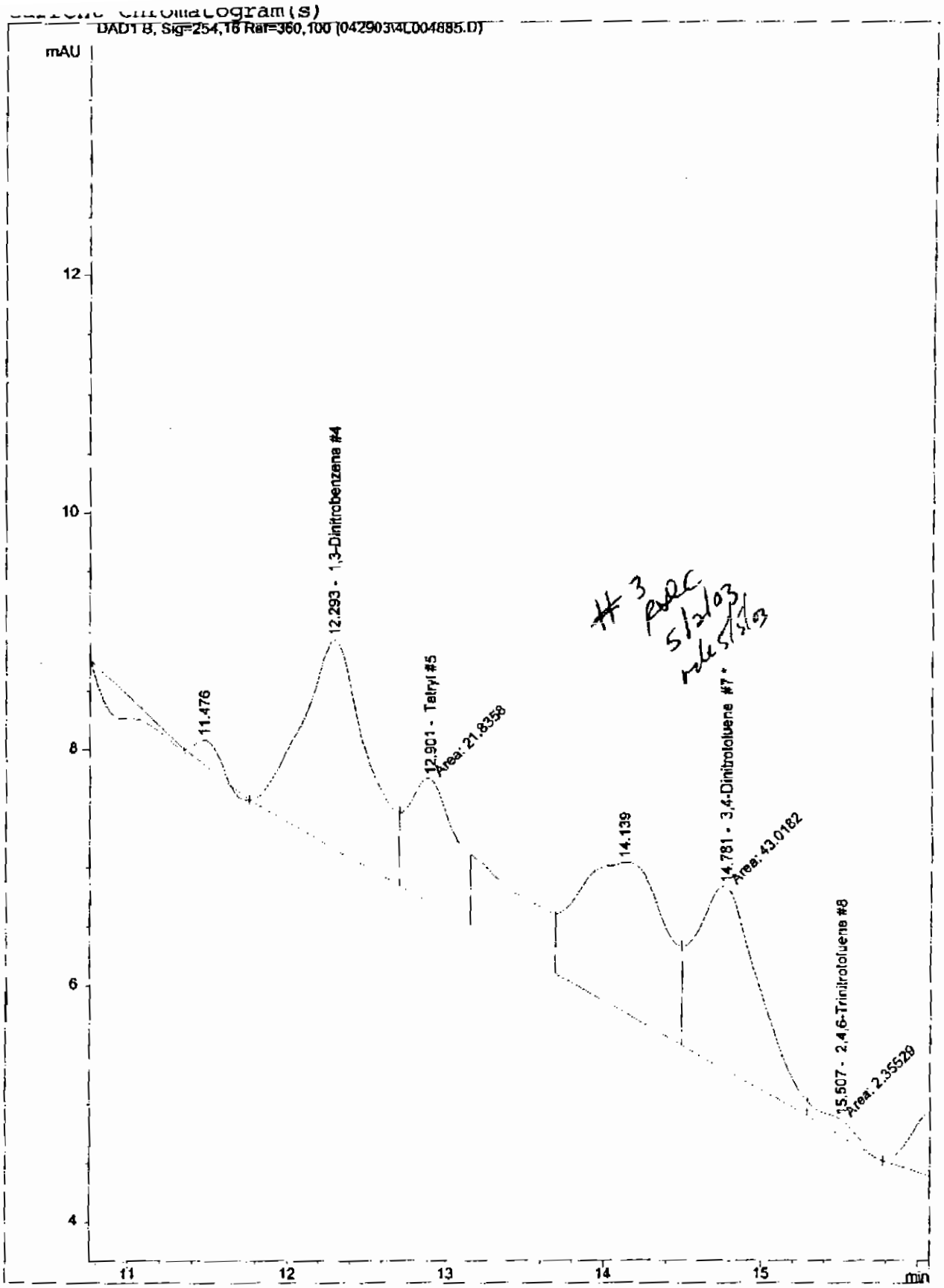
2.2.9.2 Sample Data

```
==================================================================
Injection Date   : 4/30/2003 12:57:51 PM          Seq. Line :  26
Sample Name      : L0304594-01 833W                   Vial :  25
Acq. Operator    : RDC                                 Inj :   1
                                                Inj Volume : 100 µl
Acq. Method      : C:\HPCHEM\2\METHODS\8330.M
Last changed     : 4/29/2003 2:40:07 PM by RDC
Analysis Method  : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed     : 4/30/2003 11:58:04 AM by RDC
                   (modified after loading)
8330 CALIBRATION 04/24/2003 @ 21:05
==================================================================
```



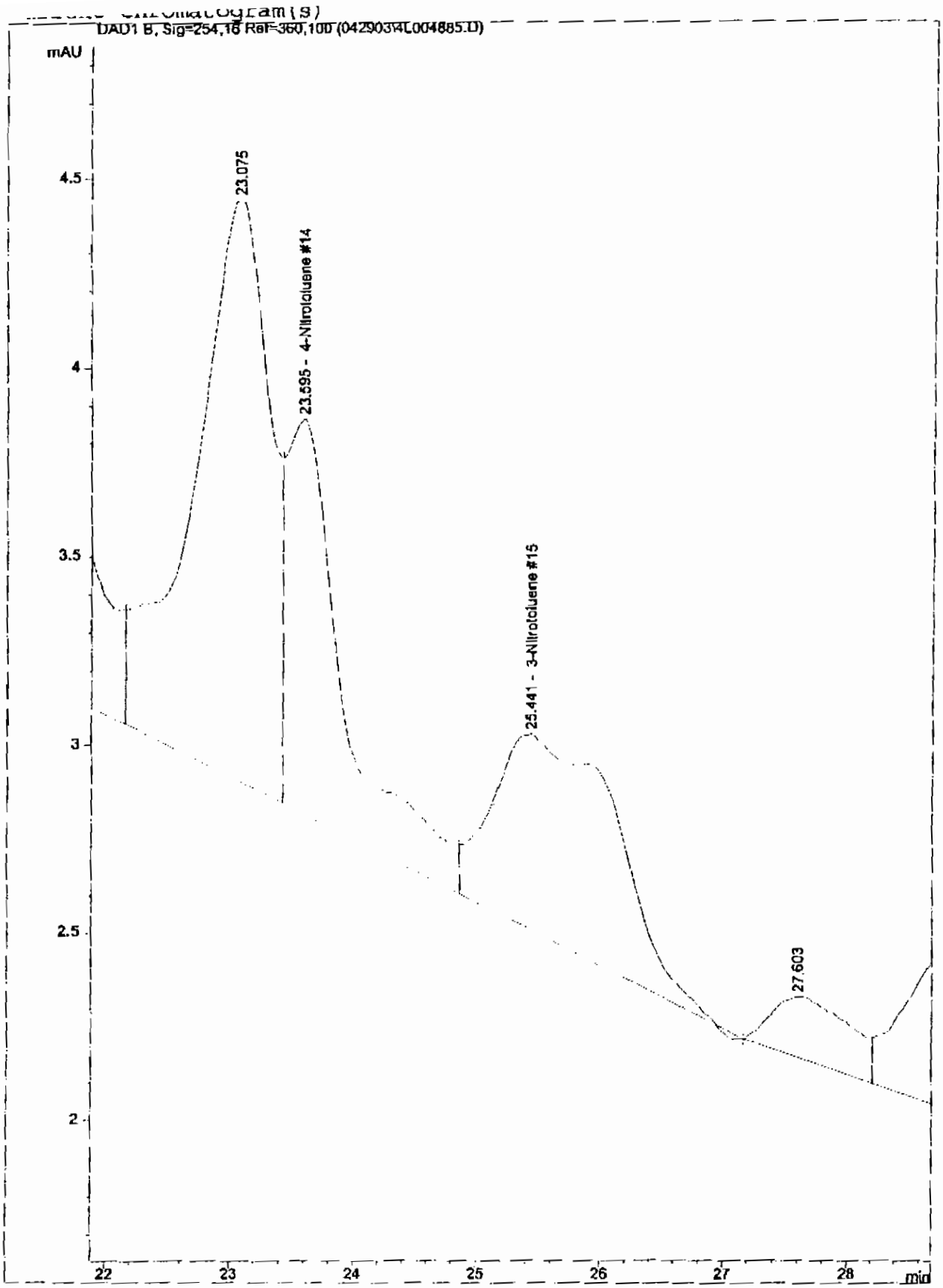
Current Chromatogram(s)





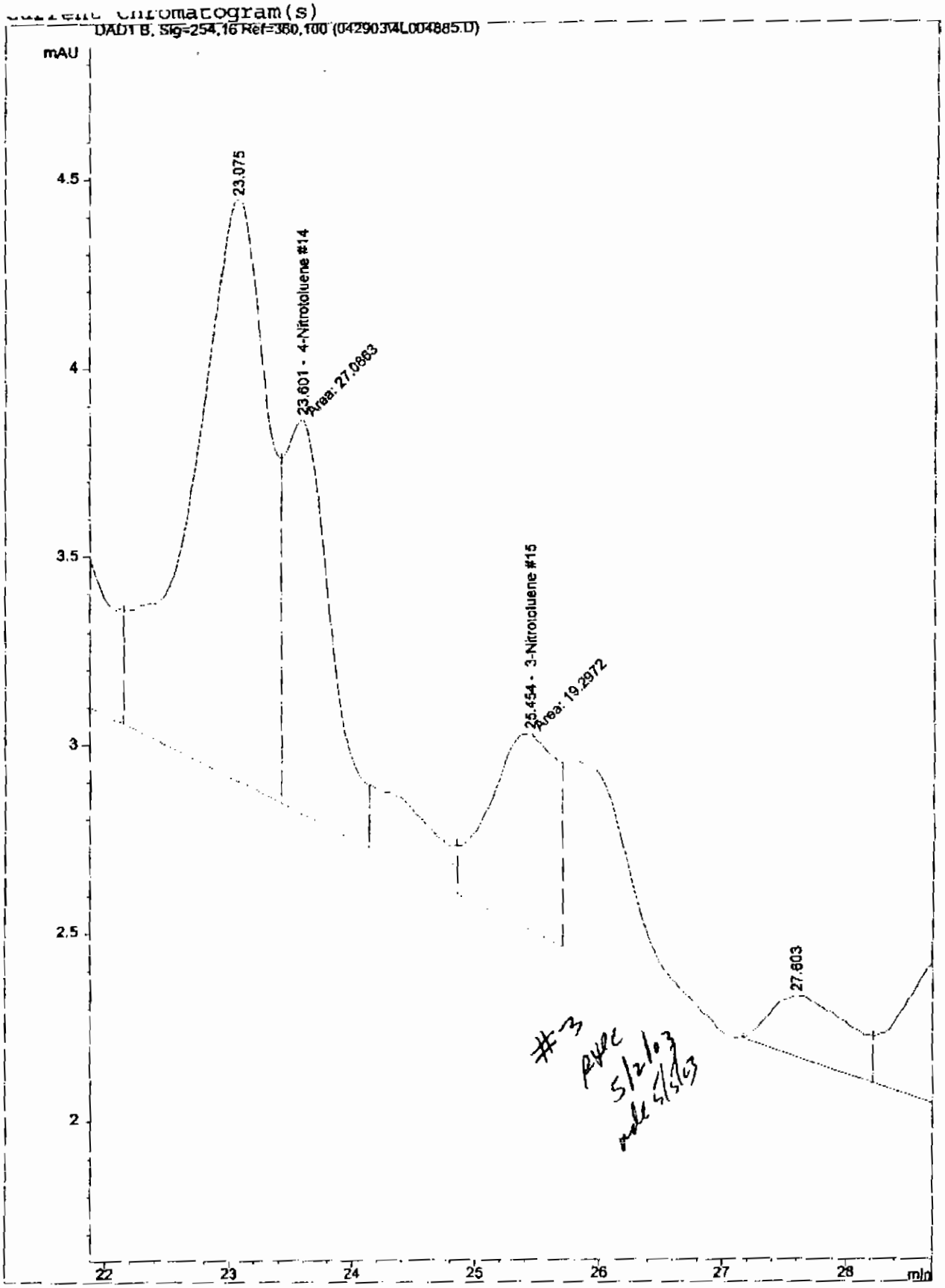
HPLC4 4/30/2003 2:28:59 PM RDC

Page 1 of 1


DAD1 B, Sig=254,16 Ref=360,100 (042903\4L004885.D)
mAU
4.5
4
3.5
3
2.5
2
23.075
23.595 - 4-Nitrotoluene #14
25.441 - 3-Nitrotoluene #15
27.603
22
23
24
25
26
27
28
min

Current Chromatogram(s)

DAD1 B, Sig=254,16 Ref=360,100 (0429034L004885.D)



#3
RWC
5/2/03
mdl 4/5/03

HPLC4 4/30/2003 2:30:32 PM RDC

Page 1 of 1

```
==================================================================
Injection Date  : 4/30/2003 12:57:51 PM          Seq. Line :  26
Sample Name     : L0304594-01 833W                    Vial :  25
Acq. Operator   : RDC                                  Inj :   1
                                                Inj Volume : 100 µl
Acq. Method     : C:\HPCHEM\2\METHODS\8330.M
Last changed    : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed    : 4/30/2003 11:58:04 AM by RDC
                  (modified after loading)
8330 CALIBRATION 04/24/2003 @ 21:05
==================================================================
```

External Standard Report

```
==================================================================
Sorted By              :      Signal
Calib. Data Modified   :      Wednesday, April 30, 2003 11:58:04 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: DAD1 B, Sig=254,16 Ref=360,100
```

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
4.747	BB	4.68392	7.14403	33.46206		HMX #1
7.145	BB	36.38103	5.29622	192.68209		RDX #2
9.900	VV	52.18753	2.39971	125.23515		1,3,5-Trinitrobenzene #3
12.293	VV	51.28461	1.81497	93.08009		1,3-Dinitrobenzene #4
12.901	MF	21.83578	3.46214	75.59850		Tetryl #5
13.694		-	-	-		Nitrobenzene #6
14.781	MF	43.01824	4.75343	204.48402		3,4-Dinitrotoluene #7 *
15.507	FM	2.35529	3.86685	9.10757		2,4,6-Trinitrotoluene #8
17.380	VV	35.80637	4.22026	151.11222		4-Amino-2,6-Dinitrotoluen
17.919	VV	51.95766	3.10415	161.28442		2-Amino-4,6-Dinitrotoluen
18.253		-	-	-		2,6-Dinitrotoluene #11
19.004	VV	18.74047	2.09169	39.19928		2,4-Dinitrotoluene #12
22.253		-	-			2-Nitrotoluene #13
23.601	MF	27.08627	6.02188	163.11016		4-Nitrotoluene #14
25.454	MF	19.29725	4.20844	81.21137		3-Nitrotoluene #15

```
Totals :                                  2.68050e4

 Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

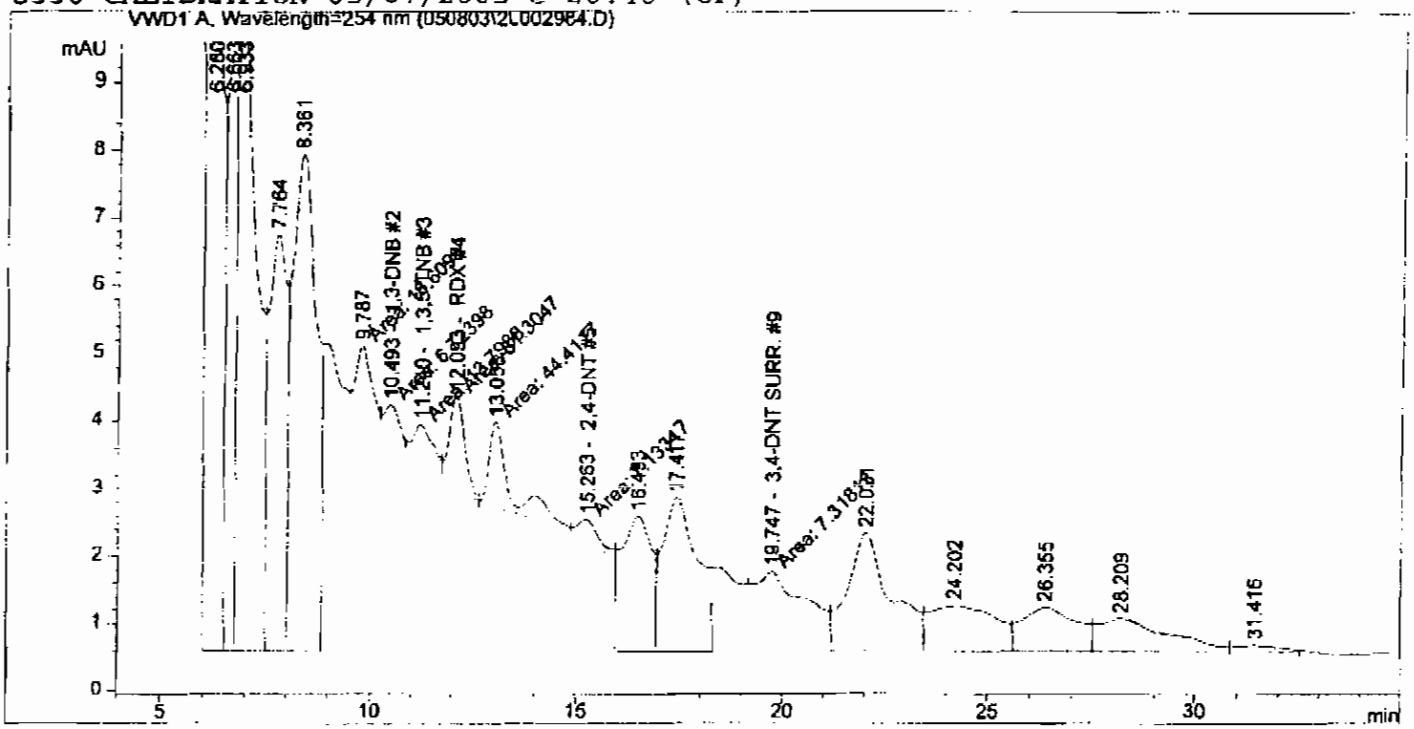
==================================================================
                    *** End of Report ***
```

1,1

==========

Injection Date : 5/9/2003 1:30:52 AM Seq. Line : 19
Sample Name : L0304594-01 833W Vial : 20
Acq. Operator : RDC Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\HPCHEM\1\METHODS\8330CONF.M
Last changed : 5/8/2003 1:39:42 PM by RDC
Analysis Method : C:\HPCHEM\1\METHODS\833CFD_A.M
Last changed : 5/9/2003 8:15:33 AM by RDC
8330 CALIBRATION 05/07/2003 @ 20:40 (CF)



==========

External Standard Report

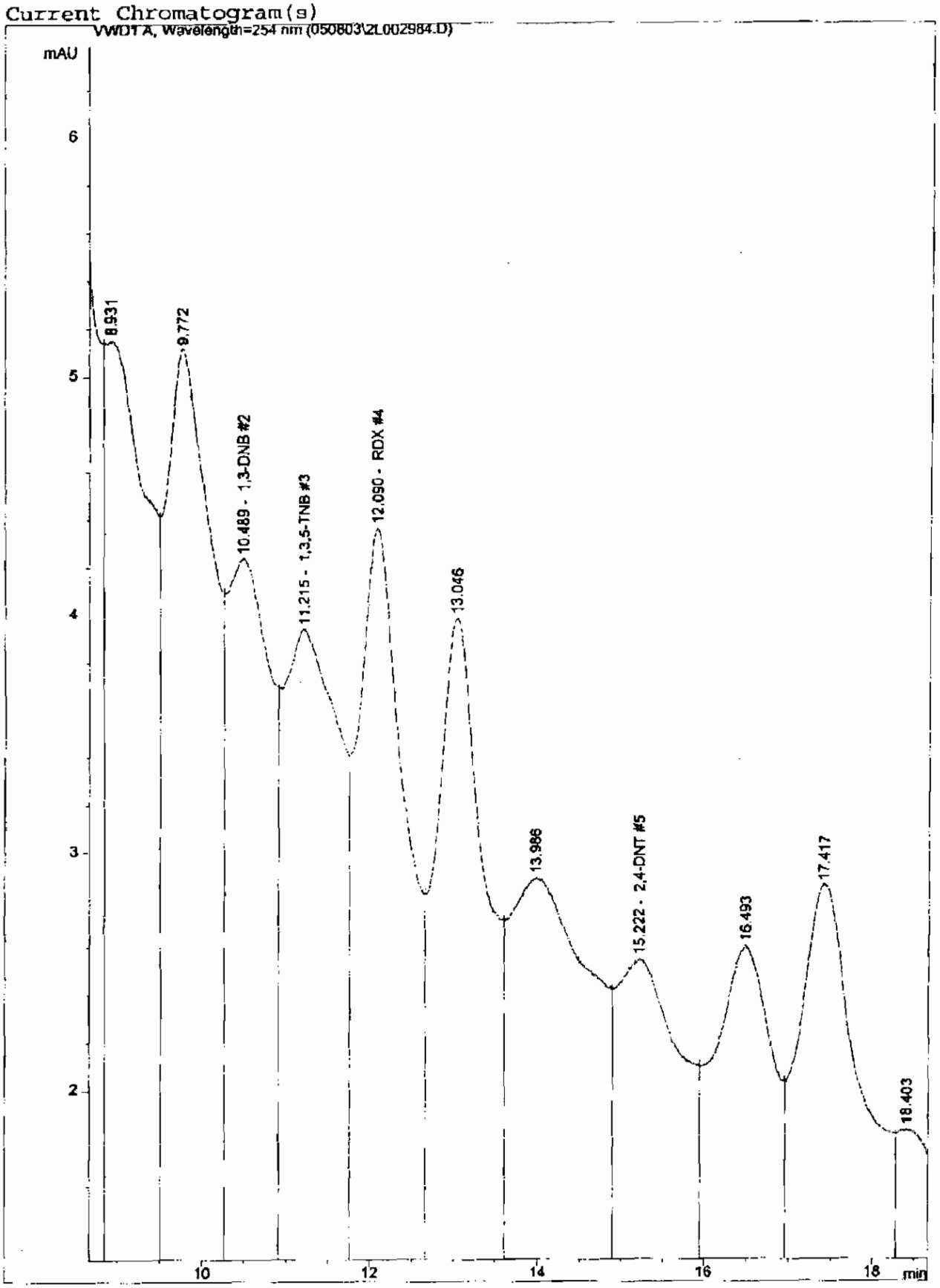
==========

Sorted By : Signal
Calib. Data Modified : 5/9/2003 8:11:56 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
9.376		-	-	-		NITROBENZENE #1
10.493	FM	6.72398	3.17448	21.34517		1,3-DNB #2
11.240	MF	13.79876	4.30814	59.44705		1,3,5-TNB #3
12.093	FM	31.30466	9.25010	289.57112		RDX #4
15.263	MF	7.13347	3.26819	23.31350		2,4-DNT #5
16.848		-	-	-		2-AMINO-4,6-DNT #6
18.103		-	-	-		2,4,6-TNT #7
19.143		-	-	-		HMX #8

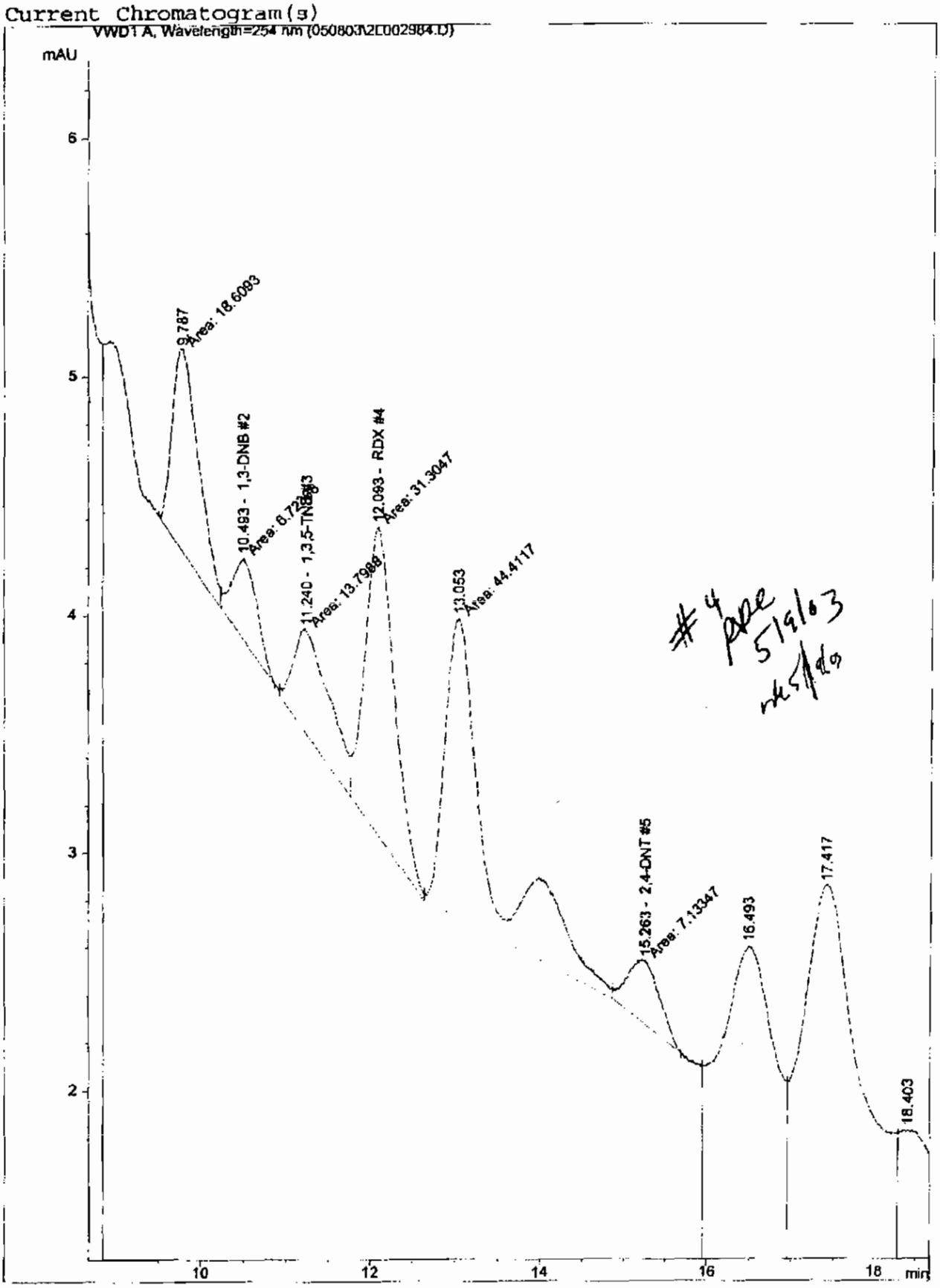
Current Chromatogram(s)



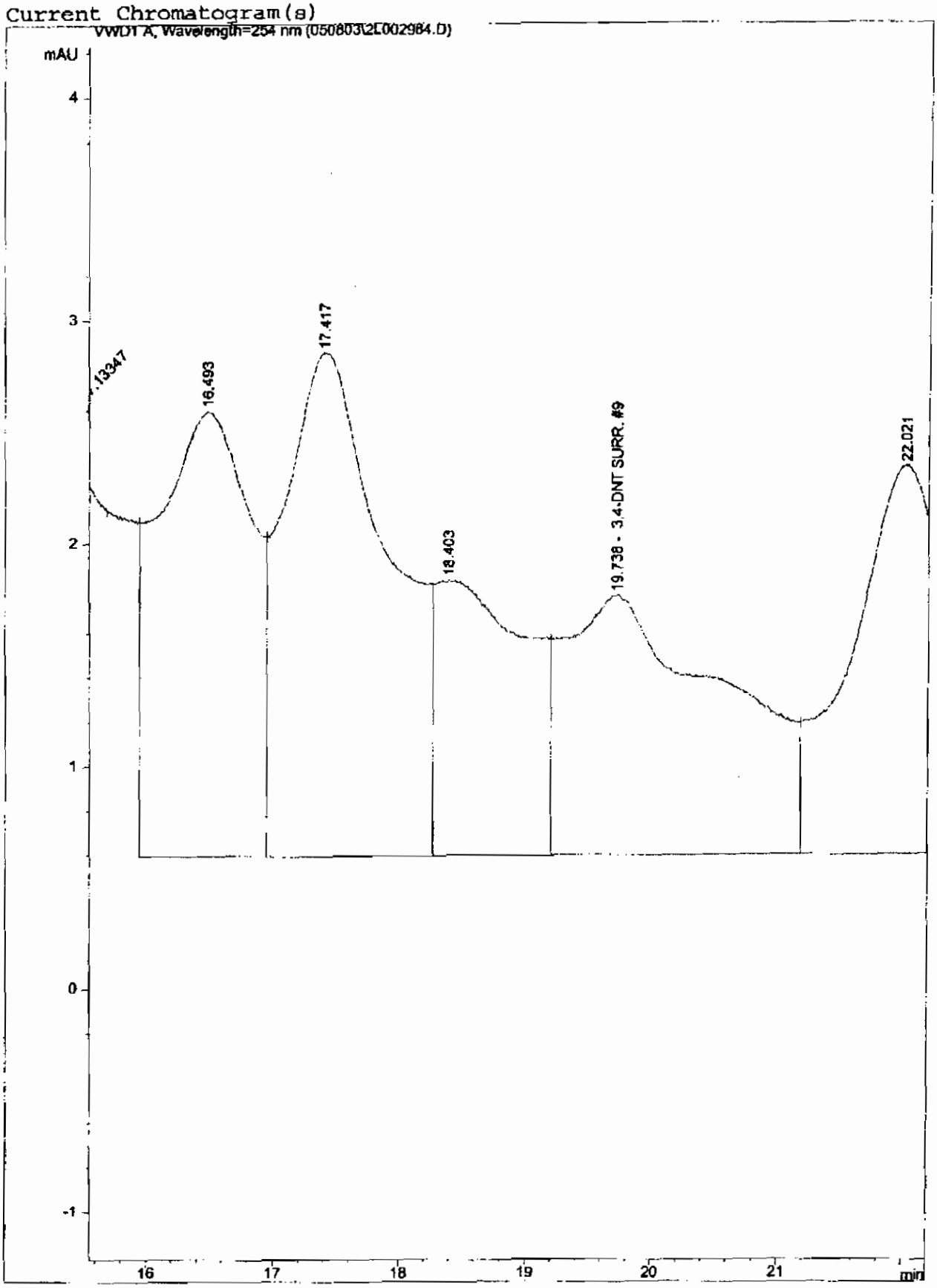
HPLC2 5/9/2003 8:27:23 AM RDC

Page 1 of 1

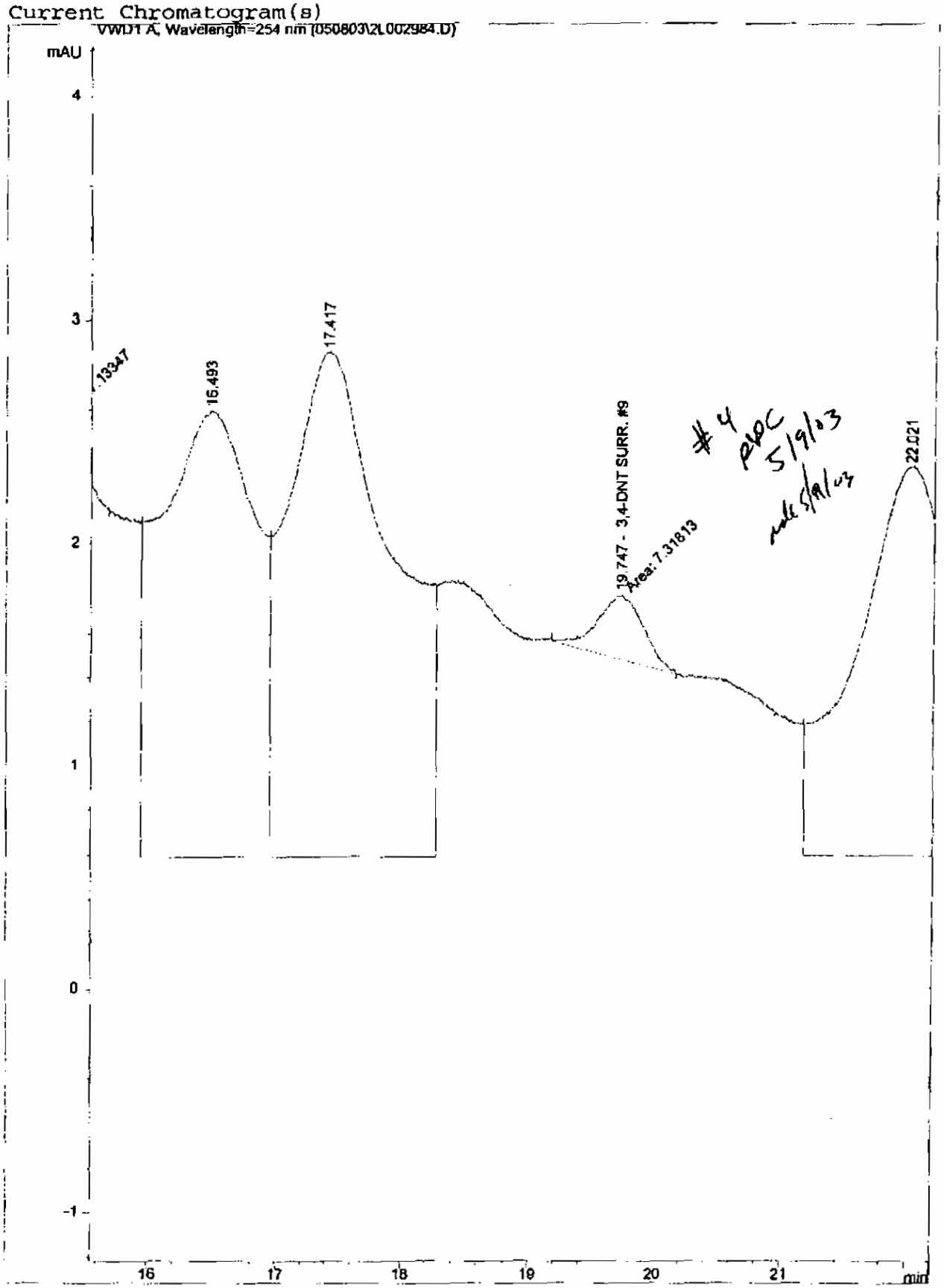
Current Chromatogram(s)



Current Chromatogram(s)



Current Chromatogram(s)



HPLC2 5/9/2003 8:29:23 AM RDC

Page 1 of 1

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
19.747	MM	7.31813	7.40300	54.17616		3,4-DNT SURR. #9

Totals : 447.85301

54.2%

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibrated compound(s) not found

==========

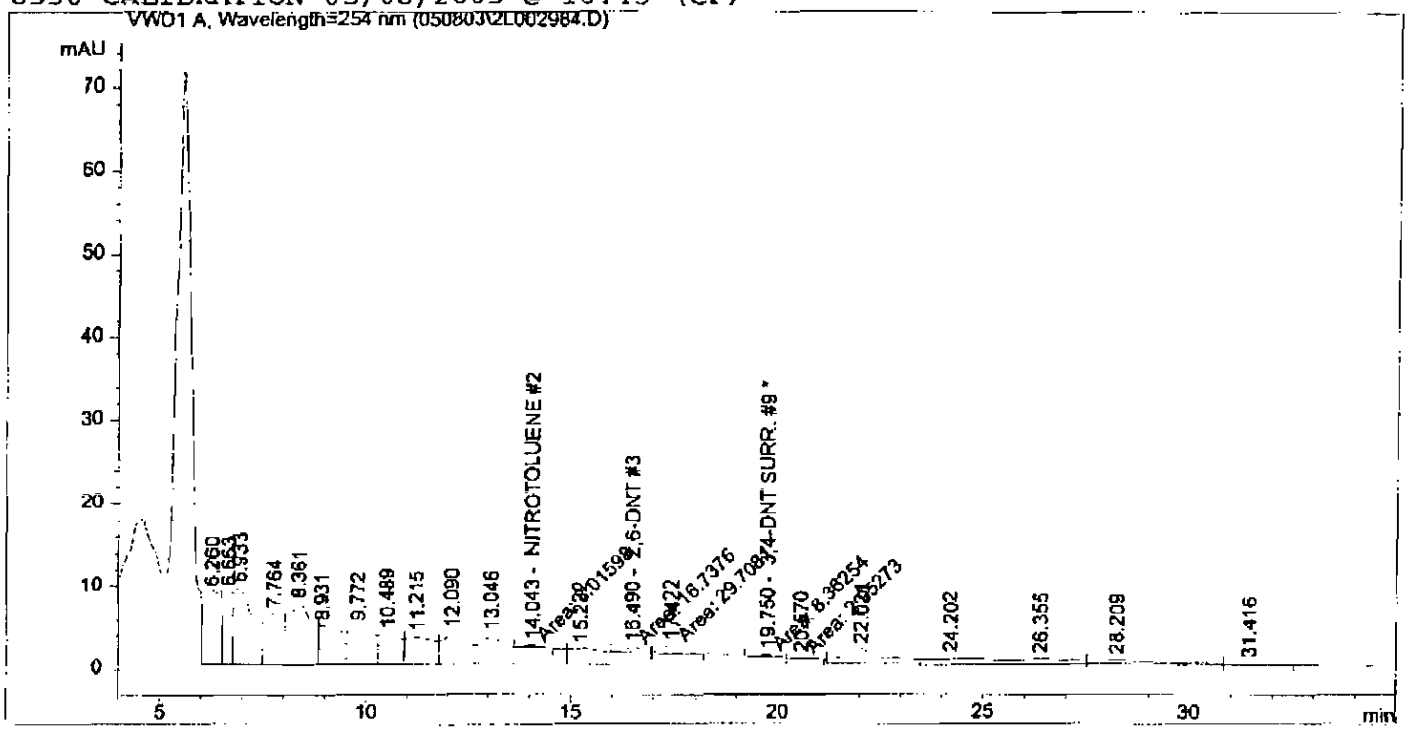
*** End of Report ***

1,1

Injection Date : 5/9/2003 1:30:52 AM
Sample Name : L0304594-01 833W
Acq. Operator : RDC

Seq. Line : 19
Vial : 20
Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\HPCHEM\1\METHODS\8330CONF.M
Last changed : 5/8/2003 1:39:42 PM by RDC
Analysis Method : C:\HPCHEM\1\METHODS\833CFD_B.M
Last changed : 5/8/2003 5:29:09 PM by RDC
8330 CALIBRATION 05/08/2003 @ 16:45 (CF)



External Standard Report

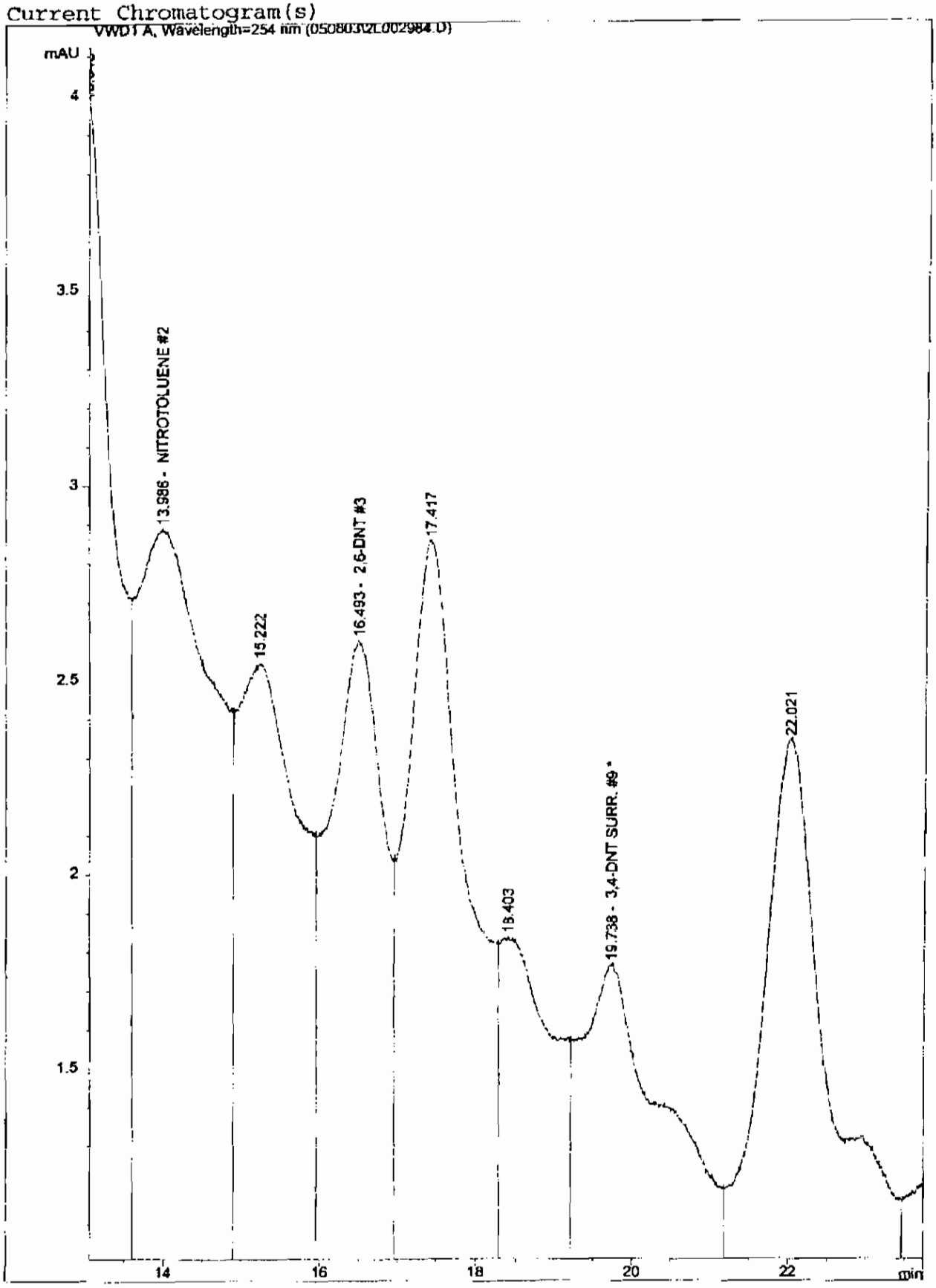
Sorted By : Signal
Calib. Data Modified : 5/8/2003 5:28:57 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.598		-	-	-		NITROTOLUENES #1
14.043	MM	8.01598	7.43467	59.59614		NITROTOLUENE #2 (f)
16.490	MF	16.73755	6.09620	102.03546		2,6-DNT #3
17.156		-	-	-		4-AMINO-2,6-DNT #4
19.750	MF	8.36254	6.78217	56.71614		3,4-DNT SURR. #9 *
29.399		-	-	-		TETRYL #5

Totals : 218.34774

Current Chromatogram(s)

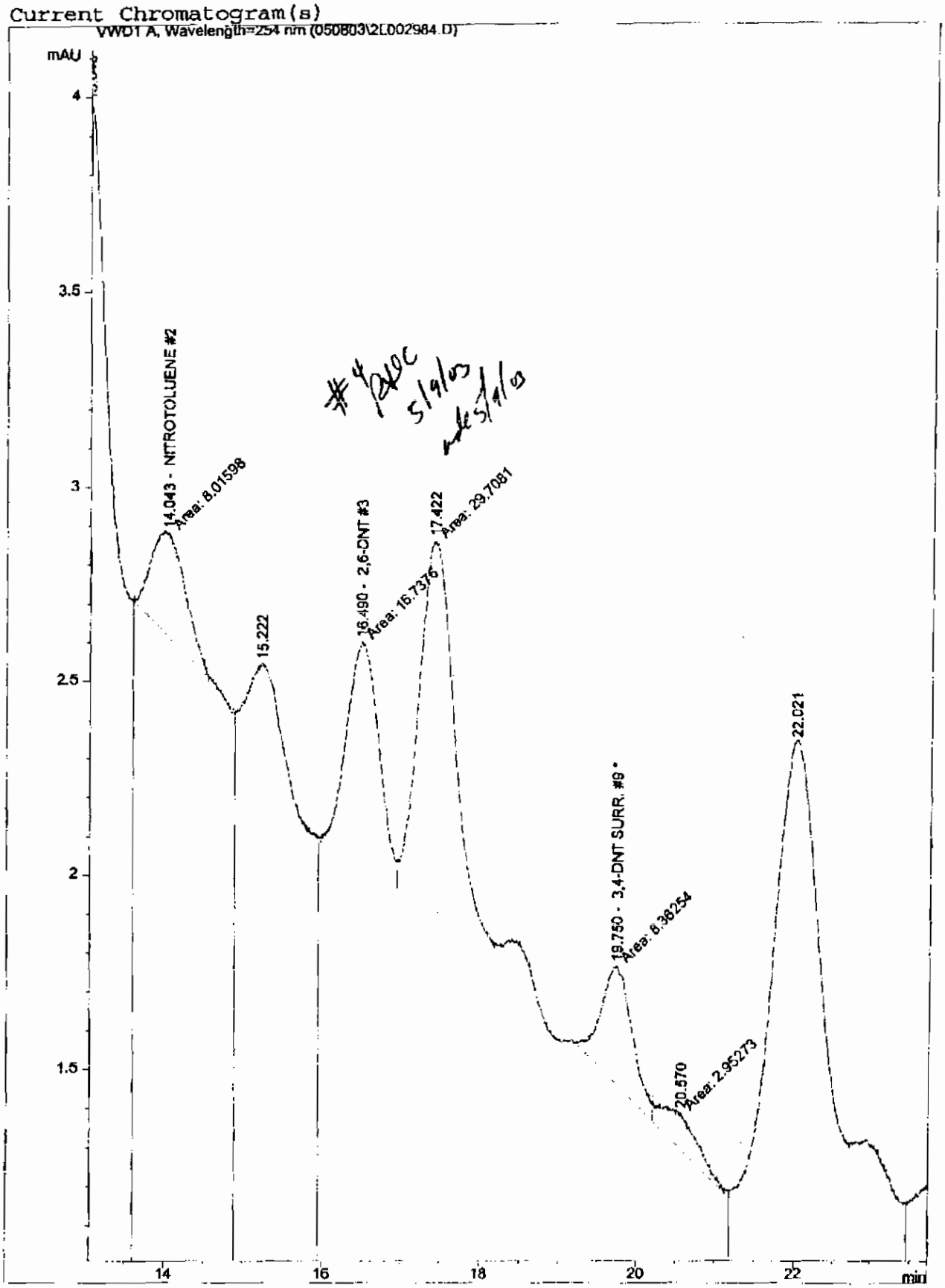


HPLC2 5/9/2003 8:33:06 AM RDC

Page 1 of 1

Current Chromatogram(s)

VWD1 A, Wavelength=254 nm (050803\2L002984.D)



#4 RDC 5/9/03 5/9/03

HPLC2 5/9/2003 8:36:26 AM RDC

Page 1 of 1

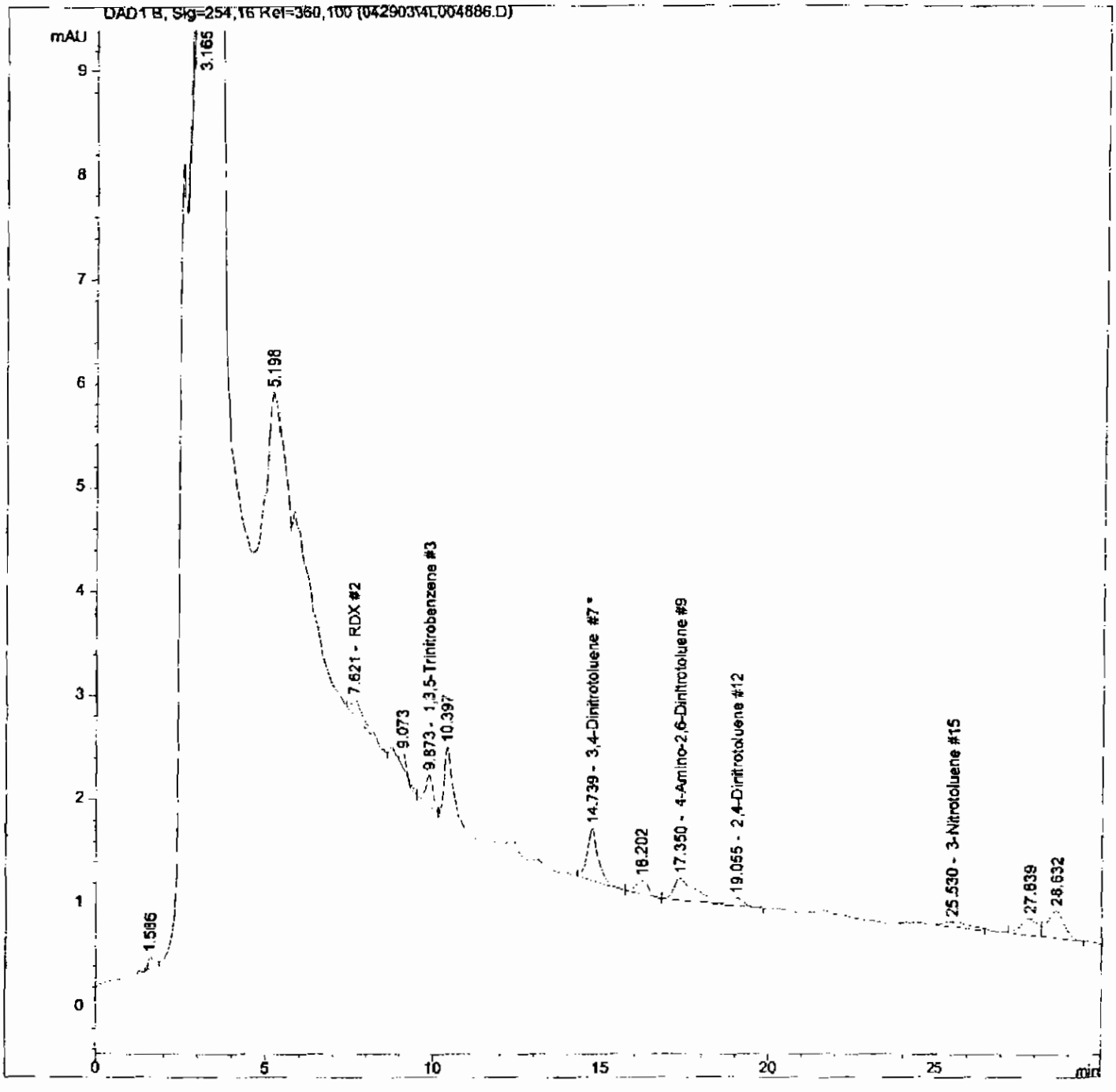
Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibrated compound(s) not found

==========

*** End of Report ***

```
==================================================================
Injection Date  : 4/30/2003 1:50:04 PM          Seq. Line :  27
Sample Name     : L0304594-02 833W                   Vial :  26
Acq. Operator   : RDC                                 Inj :   1
                                                Inj Volume : 100 µl
Acq. Method     : C:\HPCHEM\2\METHODS\8330.M
Last changed    : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed    : 4/30/2003 11:58:04 AM by RDC
                  (modified after loading)
8330 CALIBRATION 04/24/2003 @ 21:05
==================================================================
```



HPLC4 4/30/2003 2:42:45 PM RDC

Page 1 of 2

```
==================================================================
Injection Date  : 4/30/2003 1:50:04 PM          Seq. Line :  27
Sample Name     : L0304594-02 833W                   Vial :  26
Acq. Operator   : RDC                                 Inj :   1
                                                Inj Volume : 100 µl
Acq. Method     : C:\HPCHEM\2\METHODS\8330.M
Last changed    : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed    : 4/30/2003 11:58:04 AM by RDC
                  (modified after loading)
8330 CALIBRATION 04/24/2003 @ 21:05
==================================================================

==================================================================
                      External Standard Report
==================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Wednesday, April 30, 2003 11:58:04 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime  Type     Area      Amt/Area    Amount   Grp   Name
 [min]          [mAU*s]                 [ug/L]
-------|------|----------|----------|----------|--|-----------------
  4.701            -          -          -            HMX #1
  7.621 BB       4.12647    7.32422   30.22317 F      RDX #2
  9.873 VP       4.41936    3.22792   14.26535 ∠mo    1,3,5-Trinitrobenzene #3
 12.071            -          -          -            1,3-Dinitrobenzene #4
 13.152            -          -          -            Tetryl #5
 13.694            -          -          -            Nitrobenzene #6
 14.739 VP      11.53951    4.91610   56.72940 56.7%  3,4-Dinitrotoluene  #7 *
 15.584            -          -          -            2,4,6-Trinitrotoluene #8
 17.350 VP       9.38811    4.60346   43.21781 F      4-Amino-2,6-Dinitrotoluen
 17.878            -          -          -            2-Amino-4,6-Dinitrotoluen
 18.253            -          -          -            2,6-Dinitrotoluene #11
 19.055 VP       1.34934    5.78339    7.80376 ∠mo    2,4-Dinitrotoluene #12
 22.253            -          -          -            2-Nitrotoluene #13
 23.767            -          -          -            4-Nitrotoluene #14
 25.530 BB       2.94496    4.53448   13.35386 ↓      3-Nitrotoluene #15

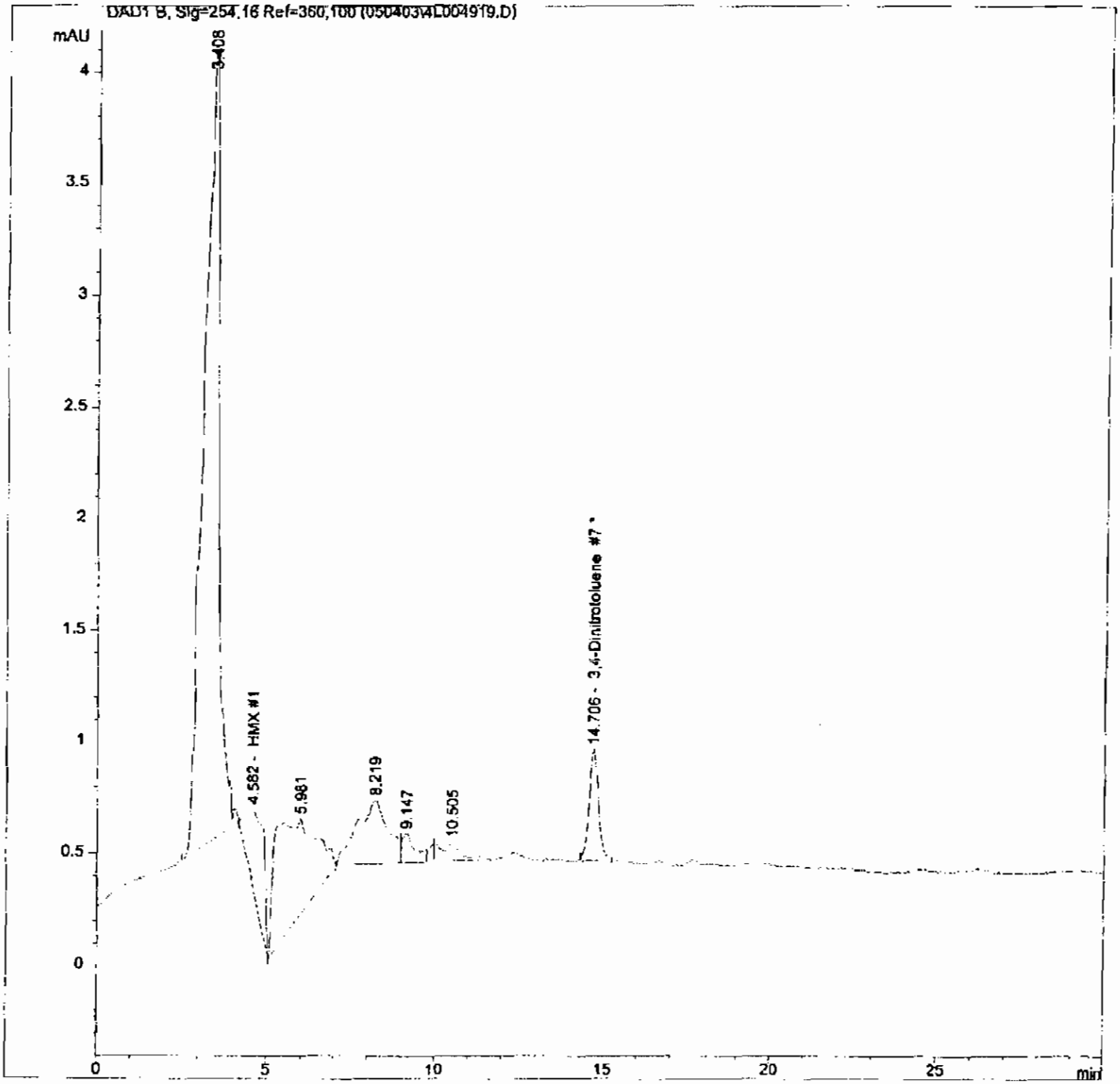
Totals :                                 6012.94616

 Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

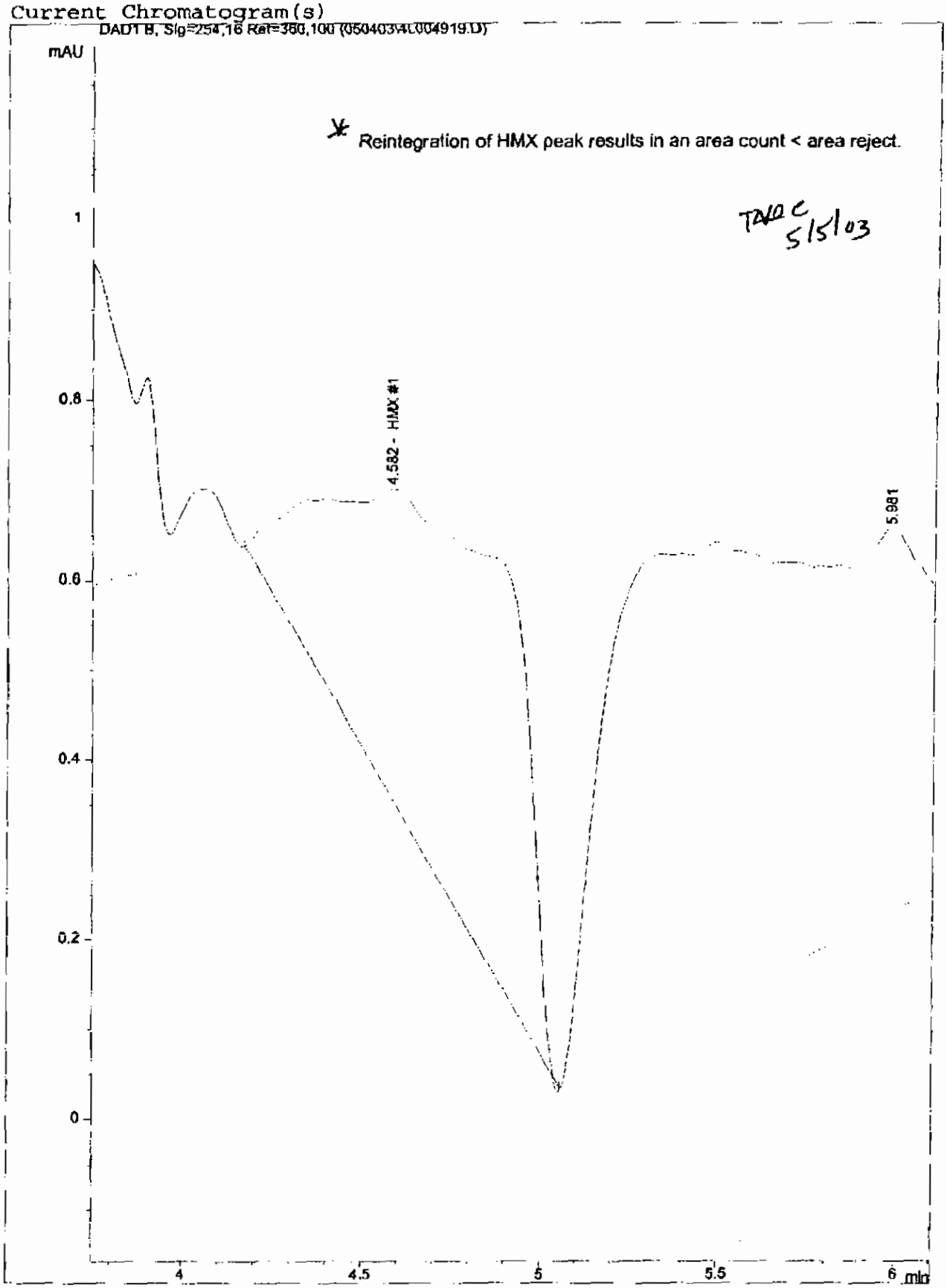
==================================================================
                      *** End of Report ***
```

```
==================================================================
Injection Date  : 5/4/2003 11:57:10 PM          Seq. Line :   8
Sample Name     : L0304594-03 833S                   Vial :   8
Acq. Operator   : RDC                                 Inj :   1
                                               Inj Volume : 100 µl
Acq. Method     : C:\HPCHEM\2\METHODS\8330.M
Last changed    : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed    : 5/5/2003 9:15:05 AM by RDC
                  (modified after loading)
8330 CALIBRATION 05/02/2003 @ 23:11
==================================================================
```



Current Chromatogram(s)

DAD1 B, Sig=254,16 Ref=360,100 (050403\4\004919.D)



* Reintegration of HMX peak results in an area count < area reject.

TAQC 5/5/03

Injection Date : 5/4/2003 11:57:10 PM
Sample Name : L0304594-03 833S
Acq. Operator : RDC

Seq. Line : 8
Vial : 8
Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\HPCHEM\2\METHODS\8330.M
Last changed : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed : 5/5/2003 9:15:05 AM by RDC
(modified after loading)
8330 CALIBRATION 05/02/2003 @ 23:11

External Standard Report

Sorted By : Signal
Calib. Data Modified : 5/4/2003 4:27:13 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
4.582	BB	14.52274	5.98456	86.91220		HMX #1 *
7.239		-	-	-		RDX #2
9.796		-	-	-		1,3,5-Trinitrobenzene #3
12.025		-	-	-		1,3-Dinitrobenzene #4
12.988		-	-	-		Tetryl #5
13.654		-	-	-		Nitrobenzene #6
14.706	BB	9.82748	4.56526	44.86496		3,4-Dinitrotoluene #7 *
15.574		-	-	-		2,4,6-Trinitrotoluene #8
16.539		-	-	-		4-Amino-2,6-Dinitrotoluen
17.440		-	-	-		2-Amino-4,6-Dinitrotoluen
18.230		-	-	-		2,6-Dinitrotoluene #11
18.878		-	-	-		2,4-Dinitrotoluene #12
22.226		-	-	-		2-Nitrotoluene #13
23.750		-	-	-		4-Nitrotoluene #14
25.583		-	-	-		3-Nitrotoluene #15

Totals : 5435.08230

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibrated compound(s) not found

*** End of Report ***

2.2.9.3 Standards Data

Calibration Table

8330 HPLC4

Calib. Data Modified : 4/25/2003 3:44:05 PM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 0.000 %
Abs. Reference Window : 0.000 min
Rel. Non-ref. Window : 0.000 %
Abs. Non-ref. Window : 0.500 min
Uncalibrated Peaks : using compound Nitrobenzene #6
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: Yes, even for non-identified peaks

Curve Type : Linear
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Sig	Lvl	Amount [ug/L]	Area	Amt/Area	Ref	Grp	Name
4.681	1	1	10.00000	1.36317	7.33585			HMX #1
		2	25.00000	3.42120	7.30739			
		3	50.00000	7.52022	6.64875			
		4	100.00000	15.03583	6.65078			
		5	500.00000	80.88615	6.18153			
		6	1000.00000	163.83752	6.10361			
7.358	1	1	10.00000	9.42478e-1	10.61032			RDX #2
		2	25.00000	3.34191	7.48076			
		3	50.00000	7.89702	6.33150			
		4	100.00000	17.53693	5.70225			
		5	500.00000	96.35172	5.18932			
		6	1000.00000	197.22536	5.07034			
9.794	1	1	10.00000	3.95324	2.52957			1,3,5-Trinitrobenzene
		2	25.00000	9.80580	2.54951			
		3	50.00000	20.51142	2.43767			
		4	100.00000	40.07835	2.49511			
		5	500.00000	210.19899	2.37870			
		6	1000.00000	430.45111	2.32314			
12.042	1	1	10.00000	5.03625	1.98560			1,3-Dinitrobenzene #4
		2	25.00000	13.33323	1.87501			

RetTime [min]	Sig	Lvl	Amount [ug/L]	Area	Amt/Area	Ref	Grp	Name
		3	50.00000	27.59870	1.81168			
		4	100.00000	54.20690	1.84478			
		5	500.00000	279.63757	1.78803			
		6	1000.00000	572.23993	1.74752			
13.091	1	1	10.00000	2.69342	3.71276			Tetryl #5
		2	25.00000	7.01731	3.56262			
		3	50.00000	14.58495	3.42819			
		4	100.00000	29.85405	3.34963			
		5	500.00000	147.51137	3.38957			
		6	1000.00000	312.90817	3.19583			
13.668	1	1	10.00000	3.34389	2.99053			Nitrobenzene #6
		2	25.00000	8.50270	2.94024			
		3	50.00000	18.57552	2.69171			
		4	100.00000	37.40242	2.67362			
		5	500.00000	189.11221	2.64393			
		6	1000.00000	384.38156	2.60158			
14.834	1	1	10.00000	1.66323	6.01240			3,4-Dinitrotoluene #7
		2	25.00000	4.70621	5.31213			
		3	50.00000	10.10620	4.94746			
		4	100.00000	20.70963	4.82867			
		5	500.00000	106.05003	4.71476			
		6	1000.00000	212.47028	4.70654			
15.540	1	1	10.00000	3.57966	2.79356			2,4,6-Trinitrotoluene
		2	25.00000	9.31047	2.68515			
		3	50.00000	18.91057	2.64402			
		4	100.00000	39.78333	2.51362			
		5	500.00000	202.83073	2.46511			
		6	1000.00000	411.69516	2.42898			
17.072	1	1	10.00000	1.69764	5.89052			4-Amino-2,6-Dinitrotol
		2	25.00000	5.03244	4.96777			
		3	50.00000	10.95360	4.56471			
		4	100.00000	23.17946	4.31416			
		5	500.00000	120.53290	4.14825			
		6	1000.00000	244.01778	4.09806			
17.800	1	1	10.00000	2.41659	4.13806			2-Amino-4,6-Dinitrotol
		2	25.00000	7.37971	3.38767			
		3	50.00000	15.26837	3.27474			
		4	100.00000	31.00566	3.22522			
		5	500.00000	161.58478	3.09435			
		6	1000.00000	333.23608	3.00088			
18.286	1	1	10.00000	1.76028	5.68090			2,6-Dinitrotoluene #11
		2	25.00000	5.83049	4.28781			
		3	50.00000	12.32918	4.05542			
		4	100.00000	24.81003	4.03063			
		5	500.00000	129.16896	3.87090			
		6	1000.00000	265.44803	3.76722			
18.857	1	1	10.00000	3.98254	2.51096			2,4-Dinitrotoluene #12
		2	25.00000	11.78135	2.12200			
		3	50.00000	25.49091	1.96148			
		4	100.00000	51.56027	1.93948			
		5	500.00000	269.51212	1.85520			
		6	1000.00000	553.21533	1.80761			
22.205	1	1	10.00000	1.81358	5.51396			2-Nitrotoluene #13
		2	25.00000	5.07849	4.92272			
		3	50.00000	9.56295	5.22851			
		4	100.00000	20.44731	4.89062			

RetTime [min]	Sig	Lvl	Amount [ug/L]	Area	Amt/Area	Ref	Grp	Name
		5	500.00000	103.24451	4.84287			
		6	1000.00000	214.69153	4.65785			
23.717	1	1	10.00000	1.29509	7.72147			4-Nitrotoluene #14
		2	25.00000	4.18652	5.97154			
		3	50.00000	7.61180	6.56875			
		4	100.00000	17.05997	5.86168			
		5	500.00000	82.24344	6.07951			
		6	1000.00000	169.84445	5.88774			
25.553	1	1	10.00000	2.29277	4.36154			3-Nitrotoluene #15
		2	25.00000	5.87134	4.25797			
		3	50.00000	11.49758	4.34874			
		4	100.00000	24.63420	4.05940			
		5	500.00000	118.74629	4.21066			
		6	1000.00000	241.37036	4.14301			

1 Warnings or Errors :

Warning : Overlapping peak time windows at 17.8 min, signal 1

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Peak Sum Table

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No Entries in table

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Calibration Curves

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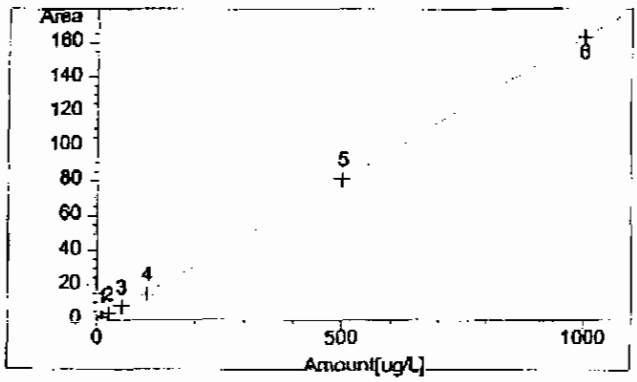
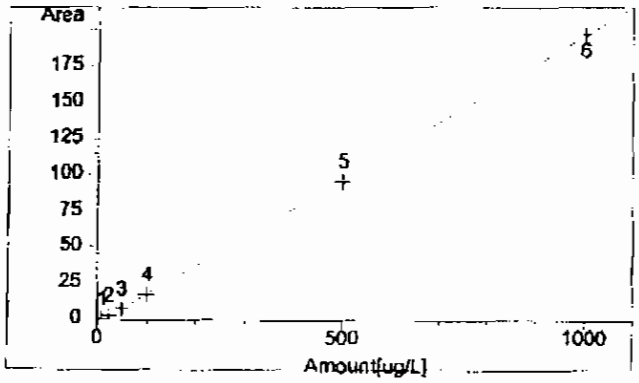
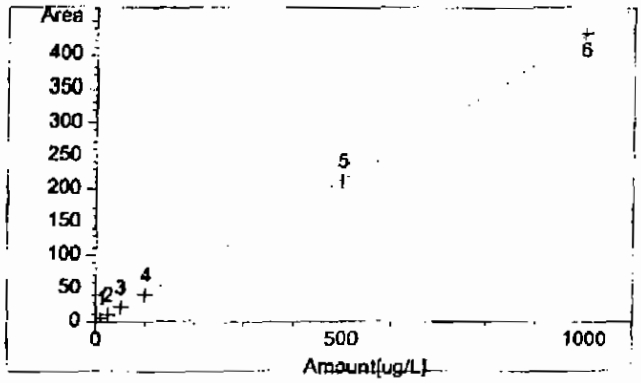


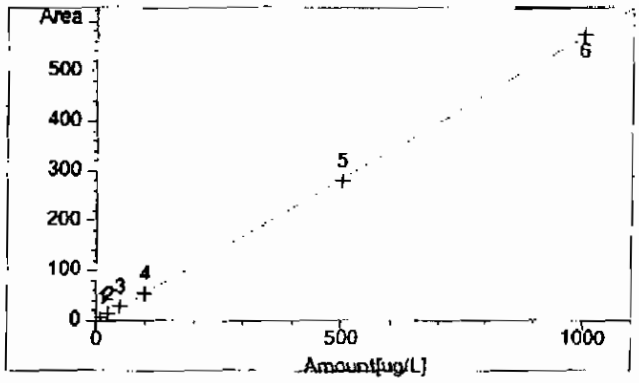
HMX #1 at exp. RT: 4.681
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99998
Residual Std. Dev.: 0.49318
Formula: y = mx + b
m: 1.64369e-1
b: -8.16195e-1
x: Amount [ug/L]
y: Area



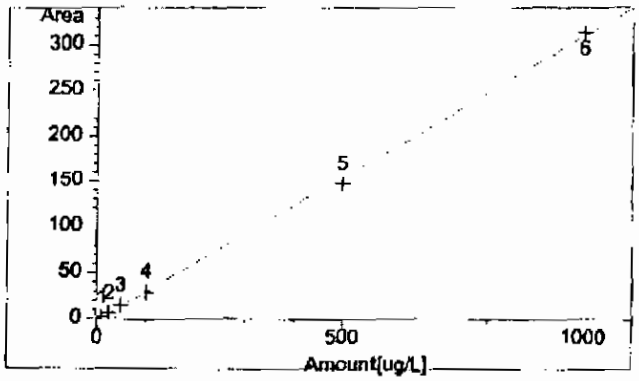
RDX #2 at exp. RT: 7.358
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99996
Residual Std. Dev.: 0.77111
Formula: y = mx + b
m: 1.98540e-1
b: -1.87404
x: Amount [ug/L]
y: Area



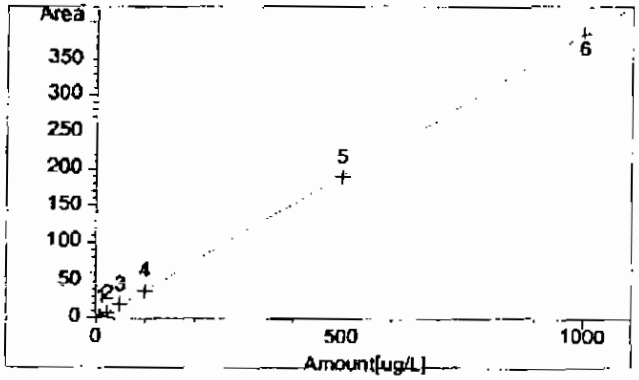
1,3,5-Trinitrobenzene #3 at exp. RT: 9.79
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99994
Residual Std. Dev.: 2.14514
Formula: y = mx + b
m: 4.30461e-1
b: -1.72131
x: Amount [ug/L]
y: Area



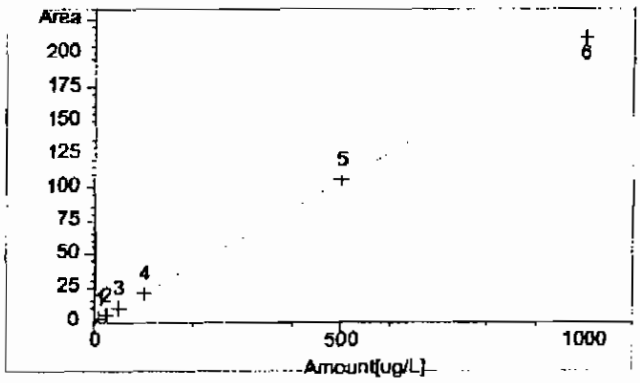
1,3-Dinitrobenzene #4 at exp. RT: 12.042
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99994
Residual Std. Dev.: 2.68433
Formula: y = mx + b
m: 5.71979e-1
b: -1.95520
x: Amount [ug/L]
y: Area



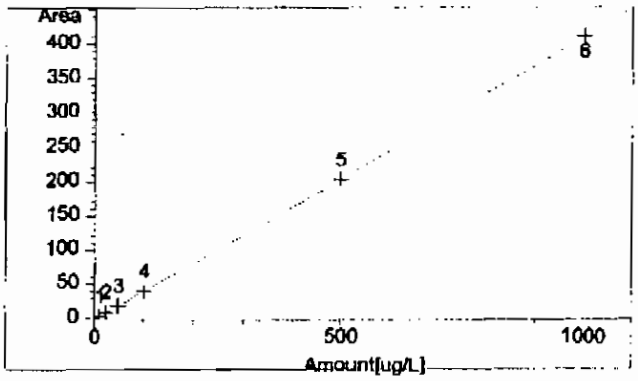
Tetryl #5 at exp. RT: 13.091
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99964
Residual Std. Dev.: 3.72754
Formula: y = mx + b
m: 3.11476e-1
b: -1.71135
x: Amount [ug/L]
y: Area



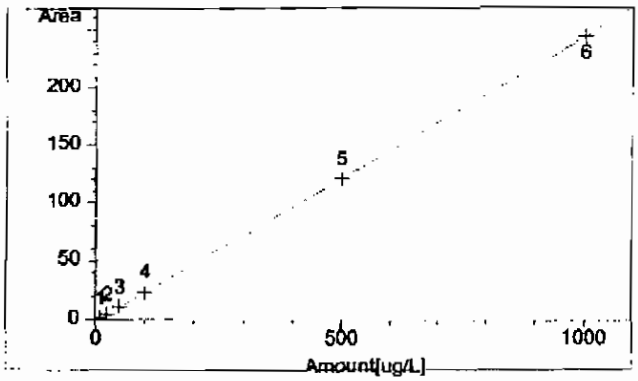
Nitrobenzene #6 at exp. RT: 13.668
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99998
Residual Std. Dev.: 1.19164
Formula: y = mx + b
m: 3.84482e-1
b: -1.08910
x: Amount [ug/L]
y: Area



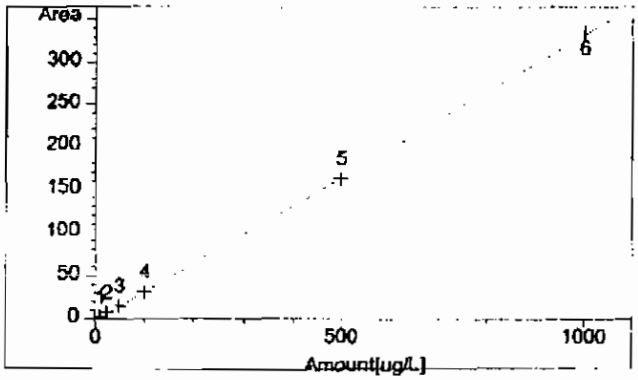
3,4-Dinitrotoluene #7 * at exp. RT: 14.8
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 1.00000
Residual Std. Dev.: 0.07121
Formula: y = mx + b
m: 2.13047e-1
b: -5.46544e-1
x: Amount [ug/L]
y: Area



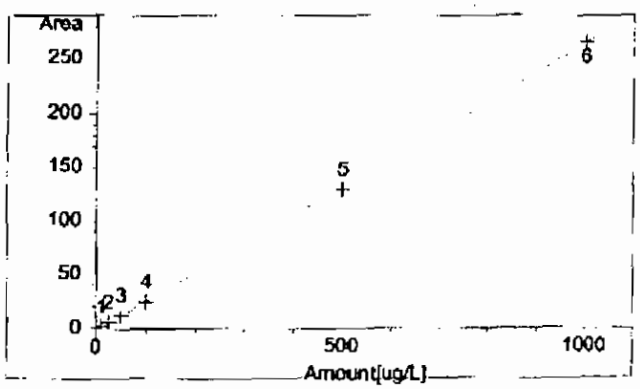
2,4,6-Trinitrotoluene #8 at exp. RT: 15.5
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99998
Residual Std. Dev.: 1.14948
Formula: y = mx + b
m: 4.12167e-1
b: -1.39854
x: Amount [ug/L]
y: Area



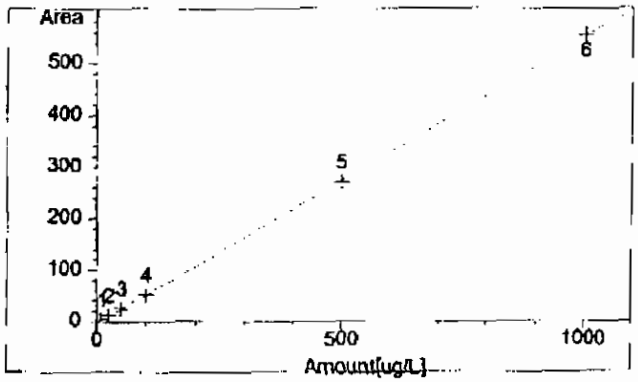
4-Amino-2,6-Dinitrotoluene #9 at exp. RT:
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99999
Residual Std. Dev.: 0.46019
Formula: y = mx + b
m: 2.44853e-1
b: -1.19390
x: Amount [ug/L]
y: Area



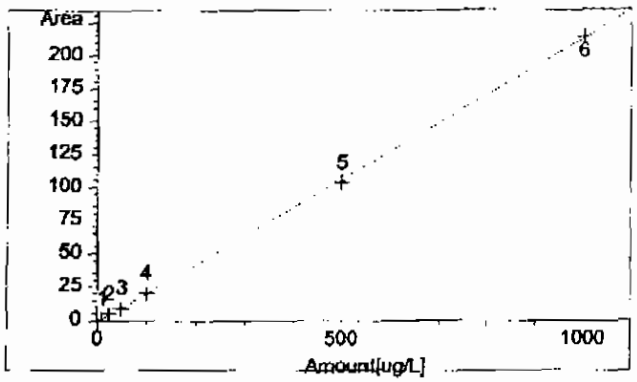
2-Amino-4,6-Dinitrotoluene #10 at exp. RT
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99991
Residual Std. Dev.: 1.97502
Formula: y = mx + b
m: 3.33399e-1
b: -1.81448
x: Amount [ug/L]
y: Area



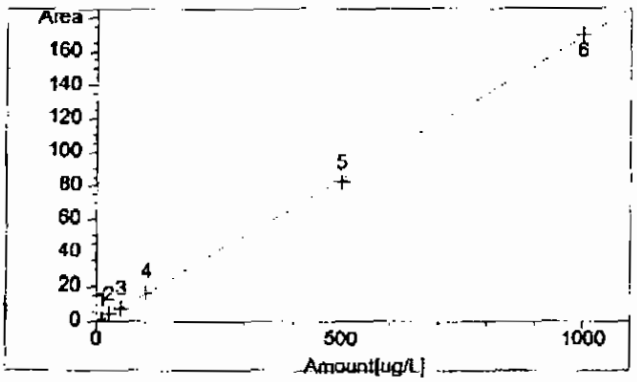
2,6-Dinitrotoluene #11 at exp. RT: 18.286
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99993
Residual Std. Dev.: 1.36443
Formula: y = mx + b
m: 2.65702e-1
b: -1.39346
x: Amount [ug/L]
y: Area



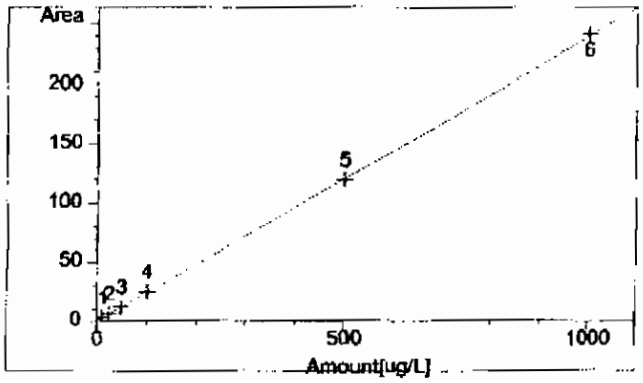
2,4-Dinitrotoluene #12 at exp. RT: 18.857
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99994
Residual Std. Dev.: 2.70759
Formula: y = mx + b
m: 5.53937e-1
b: -2.97345
x: Amount [ug/L]
y: Area



2-Nitrotoluene #13 at exp. RT: 22.205
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99984
Residual Std. Dev.: 1.68516
Formula: y = mx + b
m: 2.14338e-1
b: -1.05347
x: Amount [ug/L]
y: Area



4-Nitrotoluene #14 at exp. RT: 23.717
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99988
Residual Std. Dev.: 1.16540
Formula: y = mx + b
m: 1.69499e-1
b: -5.60713e-1
x: Amount [ug/L]
y: Area



3-Nitrotoluene #15 at exp. RT: 25.553
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99996
Residual Std. Dev.: 0.91843
Formula: y = mx + b
m: 2.40980e-1
b: -2.73047e-1
x: Amount [ug/L]
y: Area

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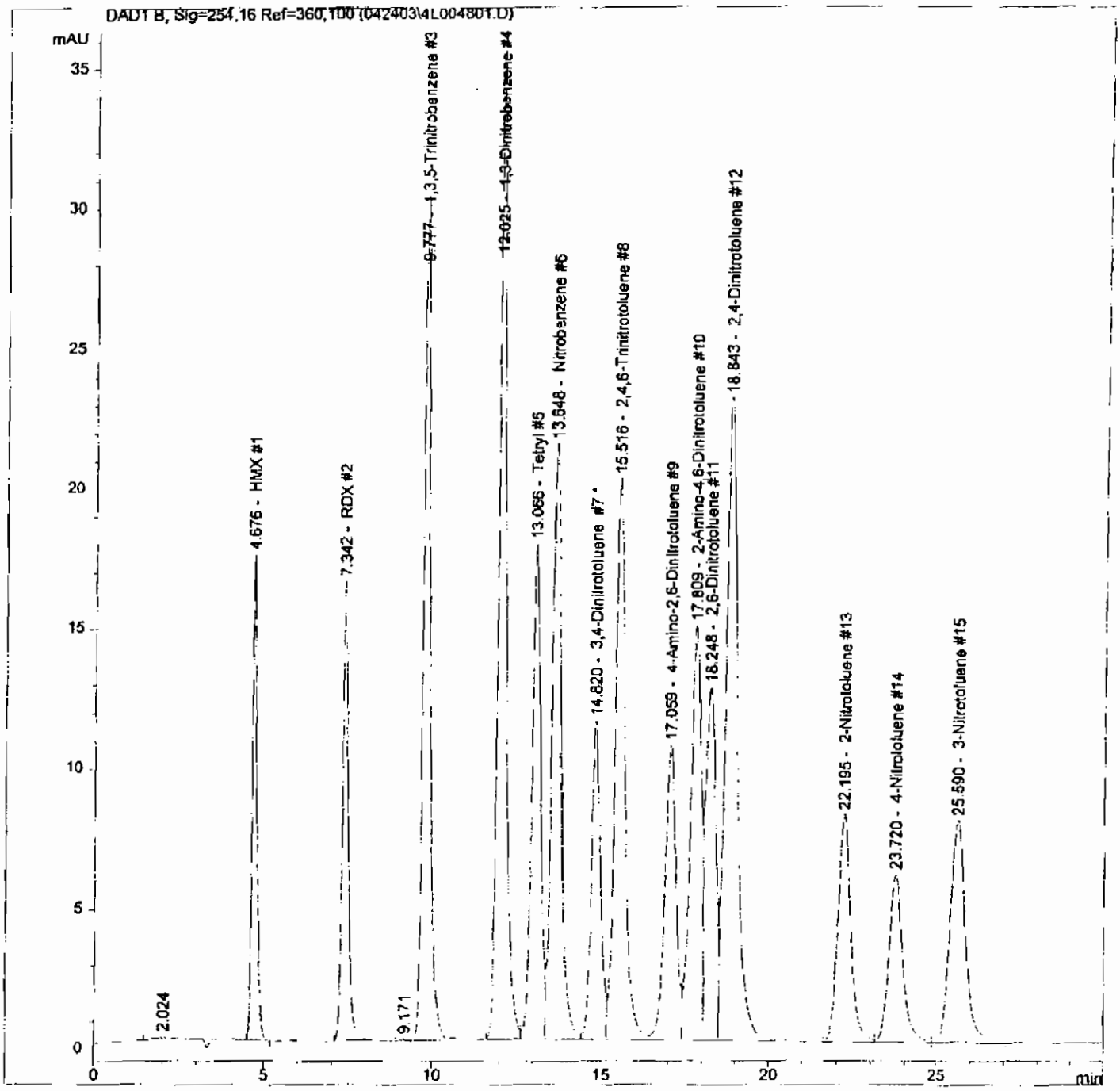
1,1 SOS64-31 1000 ppb

Injection Date	: 4/24/2003 4:44:35 PM	Seq. Line :	2
Sample Name	: WG139061-01 STD6	Vial :	2
Acq. Operator	: RDC	Inj :	1
		Inj Volume :	100 µl

Acq. Method : C:\HPCHEM\2\METHODS\8330.M
Last changed : 4/24/2003 3:50:59 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed : 4/25/2003 3:39:00 PM by RDC
(modified after loading)
8330 CALIBRATION 04/24/2003 @ 21:05



1,1 50304-31 1000 ppb

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Injection Date : 4/24/2003 4:44:35 PM
Sample Name : WG139061-01 STD6
Acq. Operator : RDC

Seq. Line : 2
Vial : 2
Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\HPCHEM\2\METHODS\8330.M
Last changed : 4/24/2003 3:50:59 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed : 4/25/2003 3:39:00 PM by RDC
(modified after loading)
8330 CALIBRATION 04/24/2003 @ 21:05

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External Standard Report

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Sorted By : Signal
Calib. Data Modified : Friday, April 25, 2003 3:38:56 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
4.676	BBA	163.83752	6.09451	998.51008		HMX #1
7.342	BBA	197.22536	5.07429	1000.77895		RDX #2
9.777	VB	430.45111	2.33238	1003.97578		1,3,5-Trinitrobenzene #3
12.025	BV	572.23993	1.75429	1003.87536		1,3-Dinitrobenzene #4
13.066	VV	312.90817	3.22808	1010.09175		Tetryl #5
13.648	VV	384.38156	2.60827	1002.57027		Nitrobenzene #6
14.820	VV	212.47028	4.70587	999.85656		3,4-Dinitrotoluene #7 *
15.516	VV	411.69516	2.43444	1002.24869		2,4,6-Trinitrotoluene #8
17.059	VV	244.01778	4.10407	1001.46510		4-Amino-2,6-Dinitrotoluen
17.809	VV	333.23608	3.01574	1004.95237		2-Amino-4,6-Dinitrotoluen
18.248	VV	265.44803	3.78337	1004.28887		2,6-Dinitrotoluene #11
18.843	VB	553.21533	1.81496	1004.06574		2,4-Dinitrotoluene #12
22.195	BV	214.69153	4.68843	1006.56538		2-Nitrotoluene #13
23.720	VV	169.84445	5.91922	1005.34708		4-Nitrotoluene #14
25.590	VB	241.37036	4.15442	1002.75414		3-Nitrotoluene #15

Totals : 1.60304e4

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

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*** End of Report ***

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Injection Date	: 4/24/2003 5:36:46 PM	Seq. Line :	3
Sample Name	: WG139061-02 STD5	Vial :	3
Acq. Operator	: RDC	Inj :	1
		Inj Volume :	100 µl

Acq. Method : C:\HPCHEM\2\METHODS\8330.M
Last changed : 4/24/2003 3:50:59 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed : 4/25/2003 3:39:36 PM by RDC
(modified after loading)
8330 CALIBRATION 04/24/2003 @ 21:05

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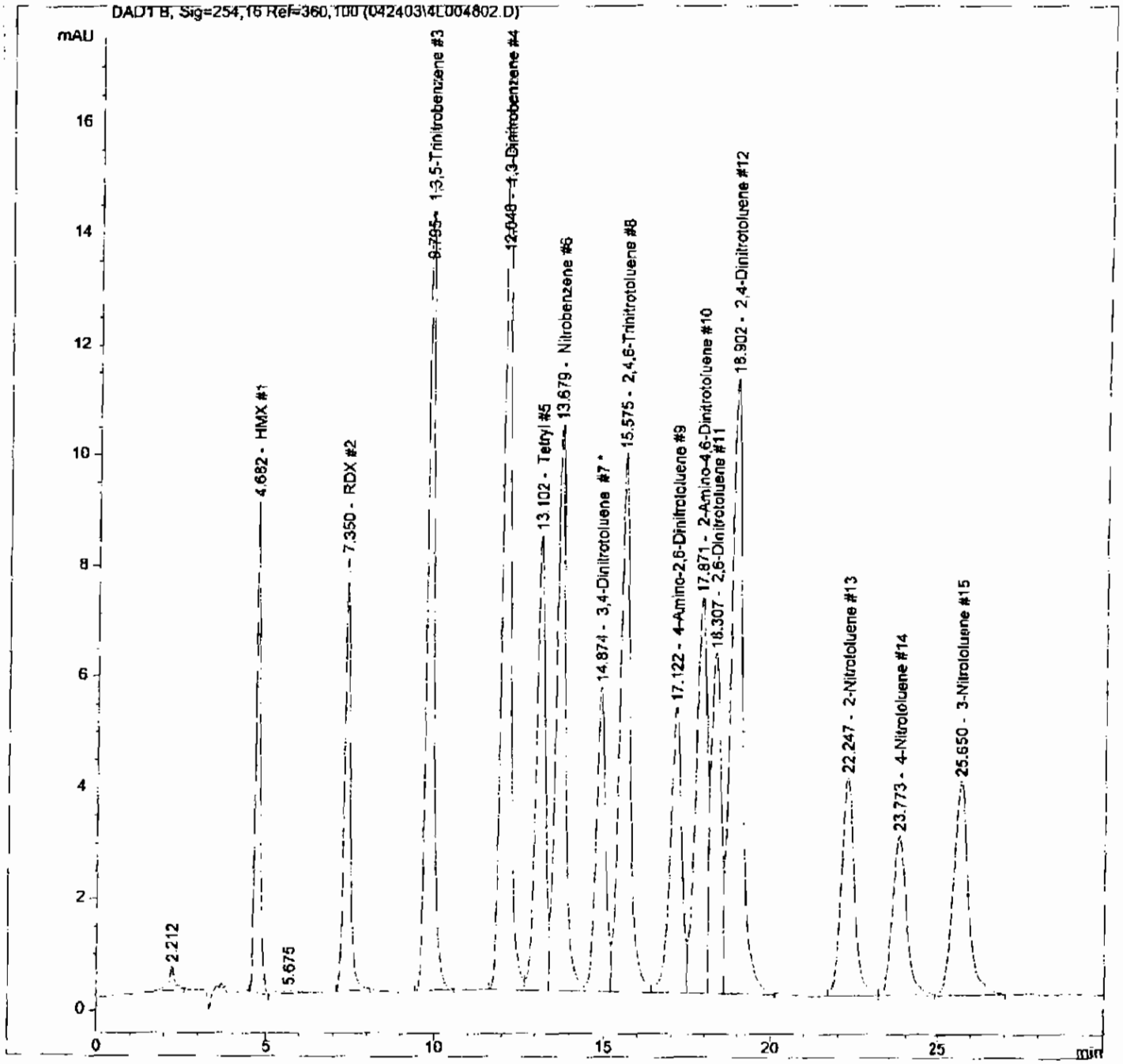

1,2 50504-34 500 ppb

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Injection Date : 4/24/2003 5:36:46 PM
Sample Name : WG139061-02 STD5
Acq. Operator : RDC

Seq. Line : 3
Vial : 3
Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\HPCHEM\2\METHODS\8330.M
Last changed : 4/24/2003 3:50:59 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed : 4/25/2003 3:39:36 PM by RDC
(modified after loading)
8330 CALIBRATION 04/24/2003 @ 21:05

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External Standard Report

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Sorted By : Signal
Calib. Data Modified : Friday, April 25, 2003 3:39:32 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
4.682	BB	80.88615	6.15133	497.55725		HMX #1
7.350	BBA	96.35172	5.12520	493.82191		RDX #2
9.795	VB	210.19899	2.34211	492.31011		1,3,5-Trinitrobenzene #3
12.048	BV	279.63757	1.76054	492.31356		1,3-Dinitrobenzene #4
13.102	VV	147.51137	3.24777	479.08227		Tetryl #5
13.679	VV	189.11221	2.61588	494.69441		Nitrobenzene #6
14.874	VV	106.05003	4.71798	500.34208		3,4-Dinitrotoluene #7 *
15.575	VV	202.83073	2.44293	495.50144		2,4,6-Trinitrotoluene #8
17.122	VV	120.53290	4.12454	497.14247		4-Amino-2,6-Dinitrotoluen
17.871	VV	161.58478	3.03309	490.10057		2-Amino-4,6-Dinitrotoluen
18.307	VV	129.16896	3.80422	491.38681		2,6-Dinitrotoluene #11
18.902	VB	269.51212	1.82518	491.90748		2,4-Dinitrotoluene #12
22.247	BV	103.24451	4.71314	486.60563		2-Nitrotoluene #13
23.773	VV	82.24344	5.93997	488.52341		4-Nitrotoluene #14
25.650	VB	118.74629	4.15927	493.89775		3-Nitrotoluene #15

Totals : 8452.87962

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

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*** End of Report ***

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==================================================================================
Injection Date   : 4/24/2003 6:28:56 PM                    Seq. Line :   4
Sample Name      : WG139061-03 STD4                              Vial :   4
Acq. Operator    : RDC                                            Inj :   1
                                                          Inj Volume : 100 µl
Acq. Method      : C:\HPCHEM\2\METHODS\8330.M
Last changed     : 4/24/2003 3:50:59 PM by RDC
Analysis Method  : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed     : 4/25/2003 3:40:59 PM by RDC
                   (modified after loading)
8330 CALIBRATION 04/24/2003 @ 21:05
==================================================================================
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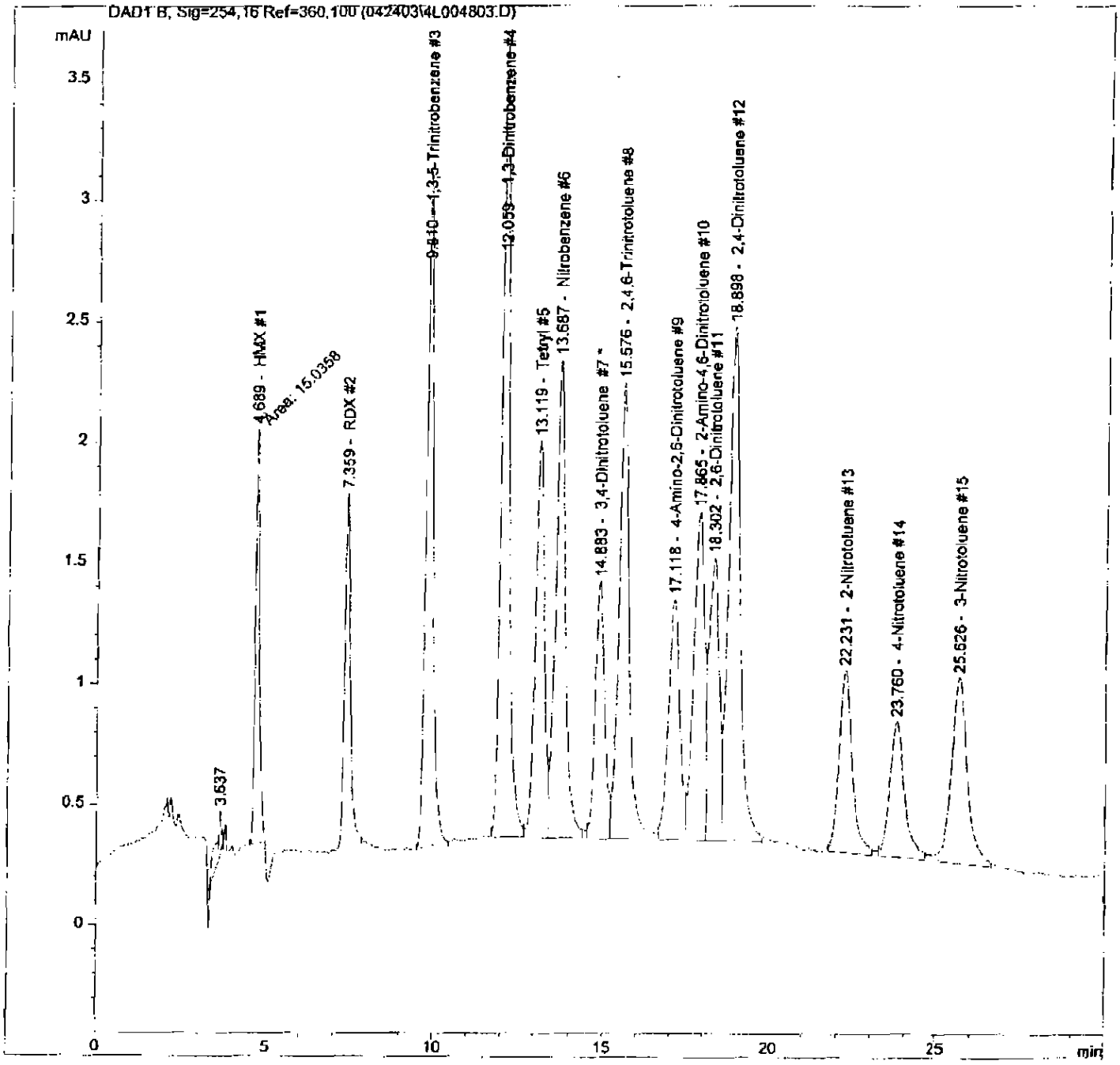
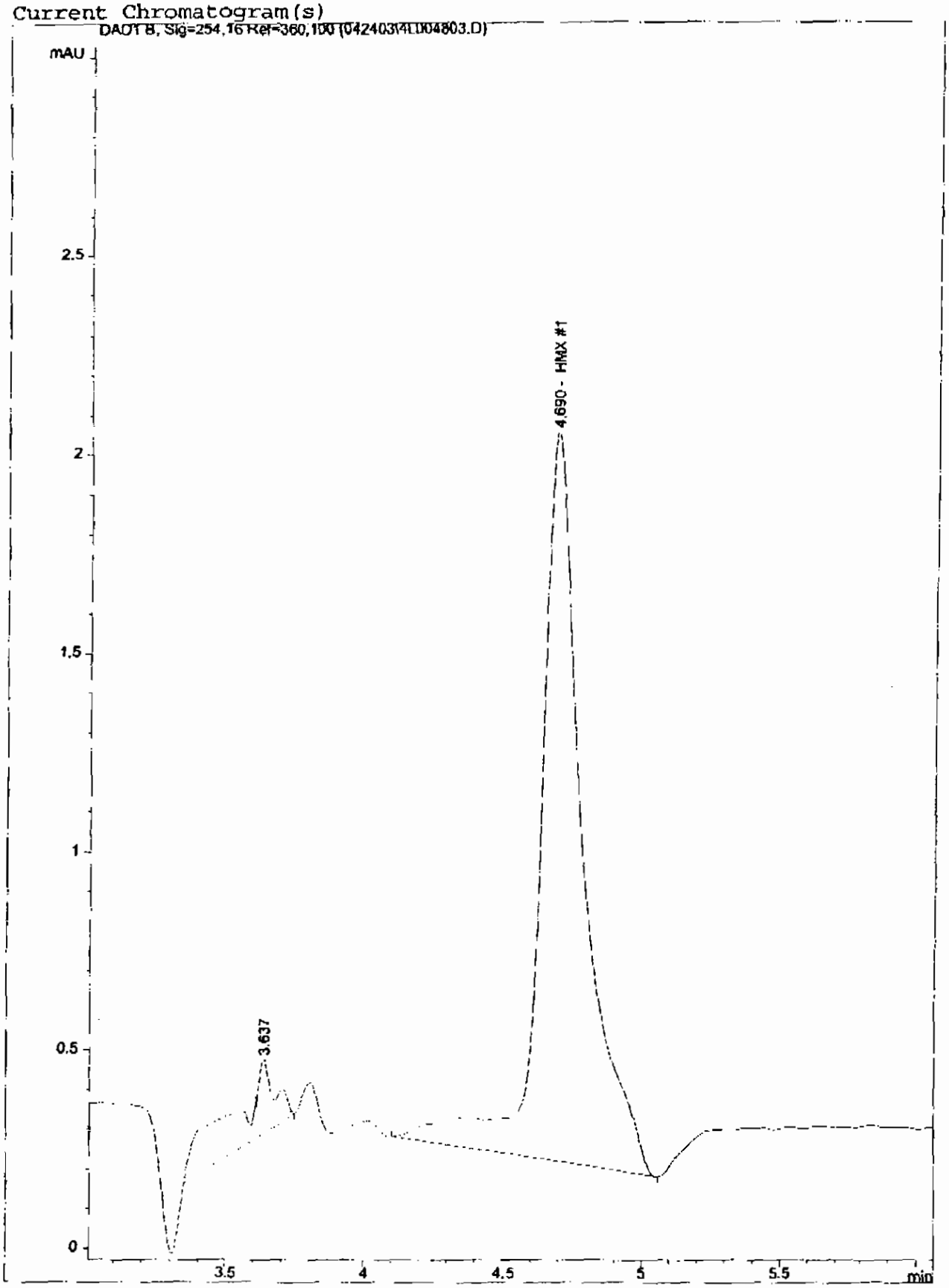
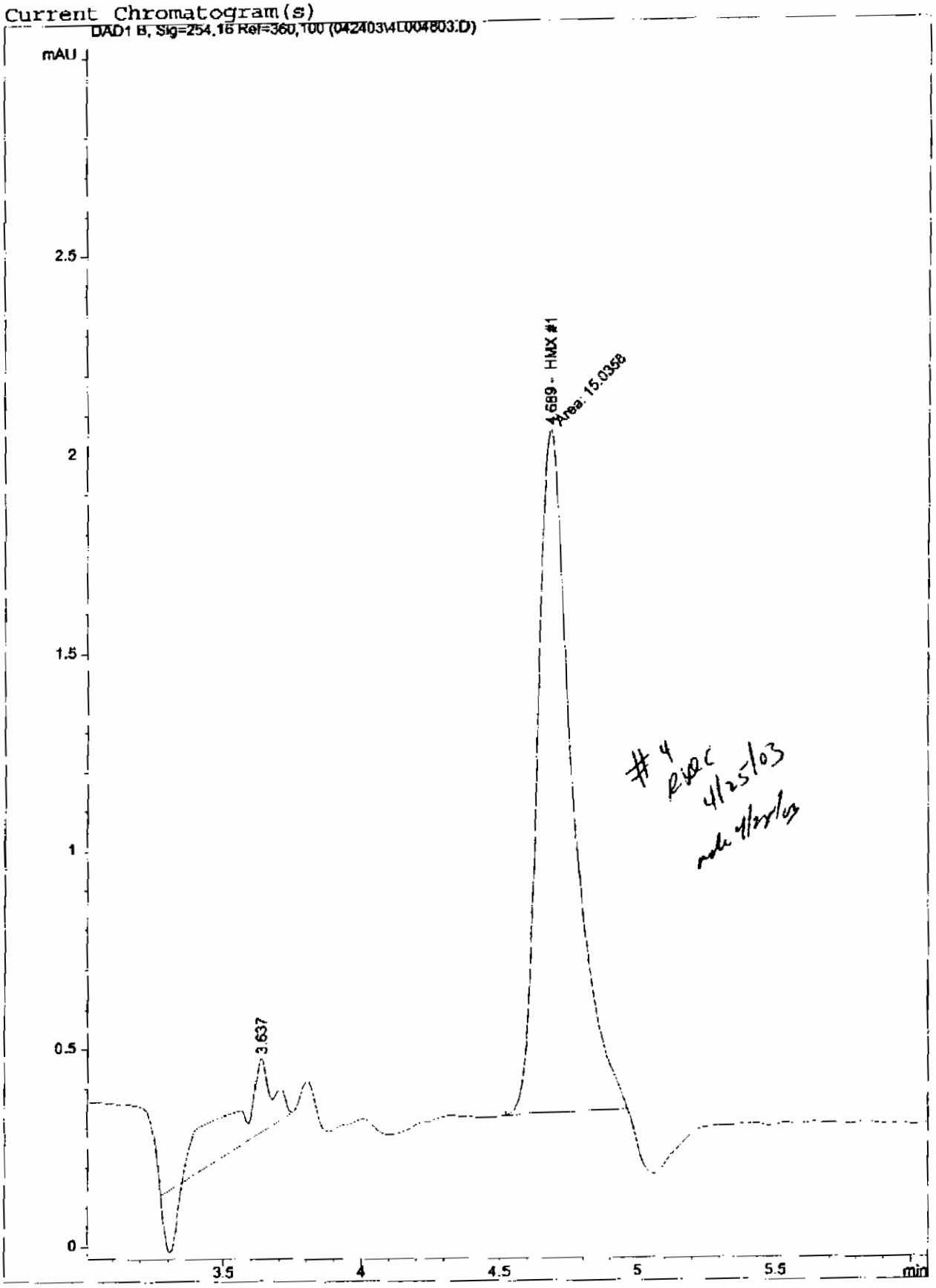


Current Chromatogram(s)



Current Chromatogram(s)

DAD1 B, Sig=254,16 Ref=360,100 (042403\4L004803.D)



```
==================================================================
Injection Date   : 4/24/2003 6:28:56 PM          Seq. Line :   4
Sample Name      : WG139061-03 STD4                  Vial :   4
Acq. Operator    : RDC                                Inj :   1
                                                Inj Volume : 100 µl
Acq. Method      : C:\HPCHEM\2\METHODS\8330.M
Last changed     : 4/24/2003 3:50:59 PM by RDC
Analysis Method  : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed     : 4/25/2003 3:40:59 PM by RDC
                   (modified after loading)
8330 CALIBRATION 04/24/2003 @ 21:05
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==================================================================
                      External Standard Report
==================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Friday, April 25, 2003 3:40:56 PM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime  Type     Area      Amt/Area    Amount   Grp   Name
 [min]           [mAU*s]                [ug/L]
-------|------|----------|----------|----------|--|-----------------
  4.689 MM       15.03583    6.42054   96.53806     HMX #1
  7.359 PBA      17.53693    5.52430   96.87921     RDX #2
  9.810 PP       40.07835    2.42286   97.10442     1,3,5-Trinitrobenzene #3
 12.059 BV       54.20690    1.81138   98.18917     1,3-Dinitrobenzene #4
 13.119 VV       29.85405    3.39456  101.34130     Tetryl #5
 13.687 VB       37.40242    2.67663  100.11255     Nitrobenzene #6
 14.883 BV       20.70963    4.81766   99.77205     3,4-Dinitrotoluene  #7 *
 15.576 VB       39.78333    2.51149   99.91552     2,4,6-Trinitrotoluene #8
 17.118 BV       23.17946    4.29444   99.54284     4-Amino-2,6-Dinitrotoluen
 17.865 VV       31.00566    3.17493   98.44090     2-Amino-4,6-Dinitrotoluen
 18.302 VV       24.81003    3.97500   98.61988     2,6-Dinitrotoluene #11
 18.898 VB       51.56027    1.90937   98.44758     2,4-Dinitrotoluene #12
 22.231 BB       20.44731    4.90591  100.31260     2-Nitrotoluene #13
 23.760 BB       17.05997    6.09365  103.95753     4-Nitrotoluene #14
 25.626 BB       24.63420    4.19572  103.35826     3-Nitrotoluene #15

Totals :                                2582.35186

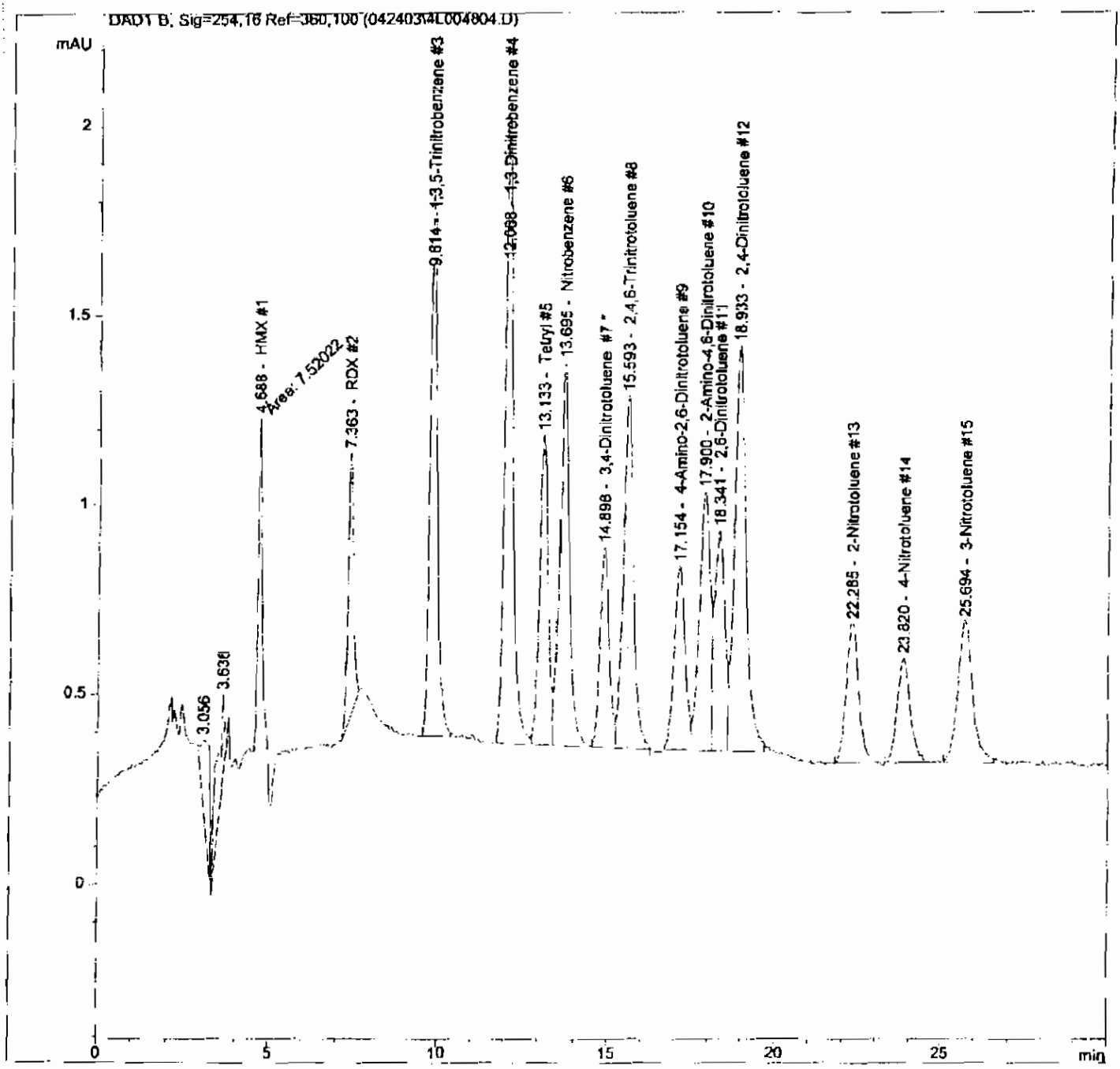
 Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

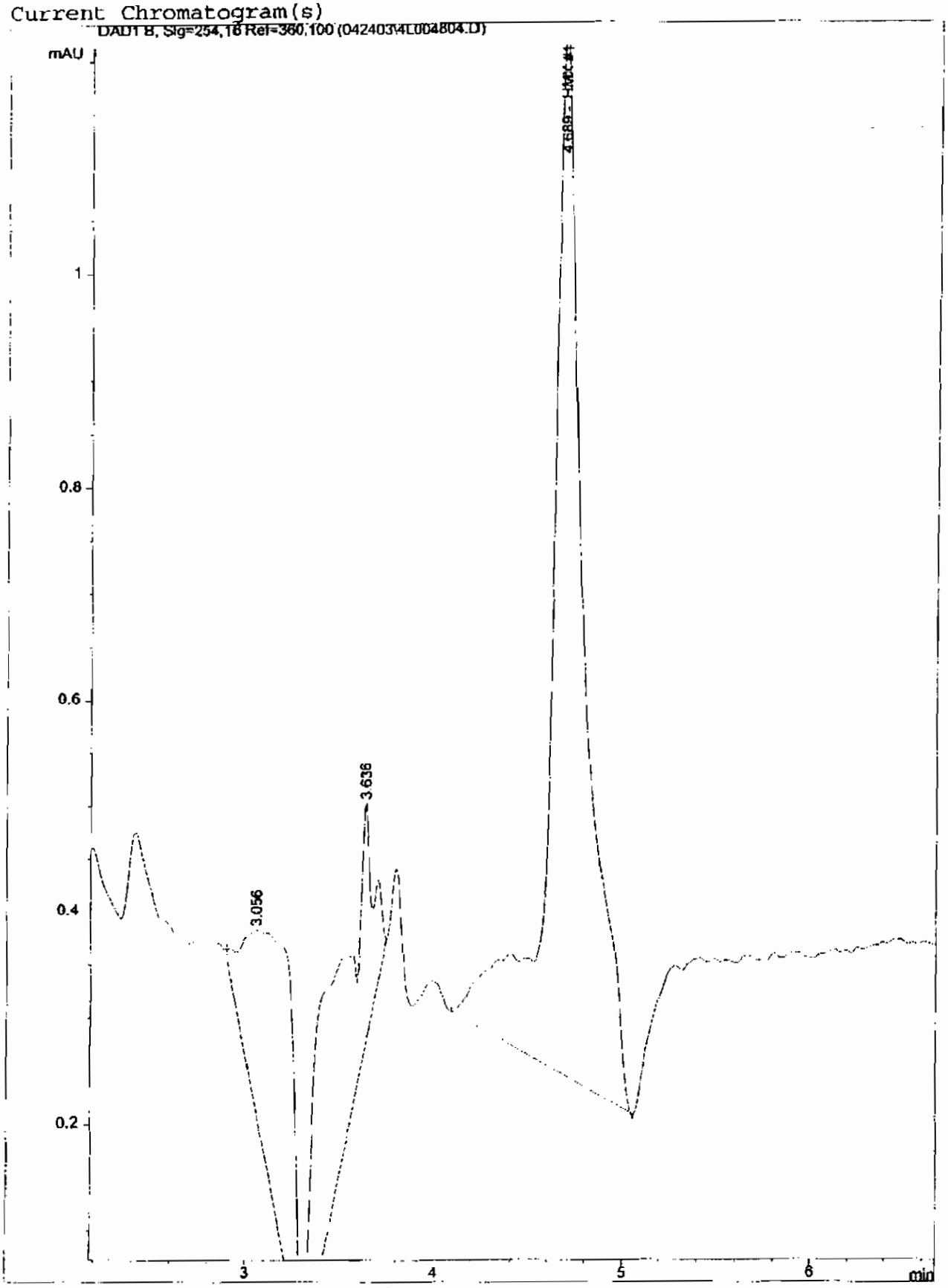
==================================================================
                      *** End of Report ***
```

Injection Date	: 4/24/2003 7:21:05 PM	Seq. Line :	5
Sample Name	: WG139061-04 STD3	Vial :	5
Acq. Operator	: RDC	Inj :	1
		Inj Volume :	100 µl

Acq. Method : C:\HPCHEM\2\METHODS\8330.M
Last changed : 4/24/2003 3:50:59 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed : 4/25/2003 3:41:48 PM by RDC
(modified after loading)
8330 CALIBRATION 04/24/2003 @ 21:05

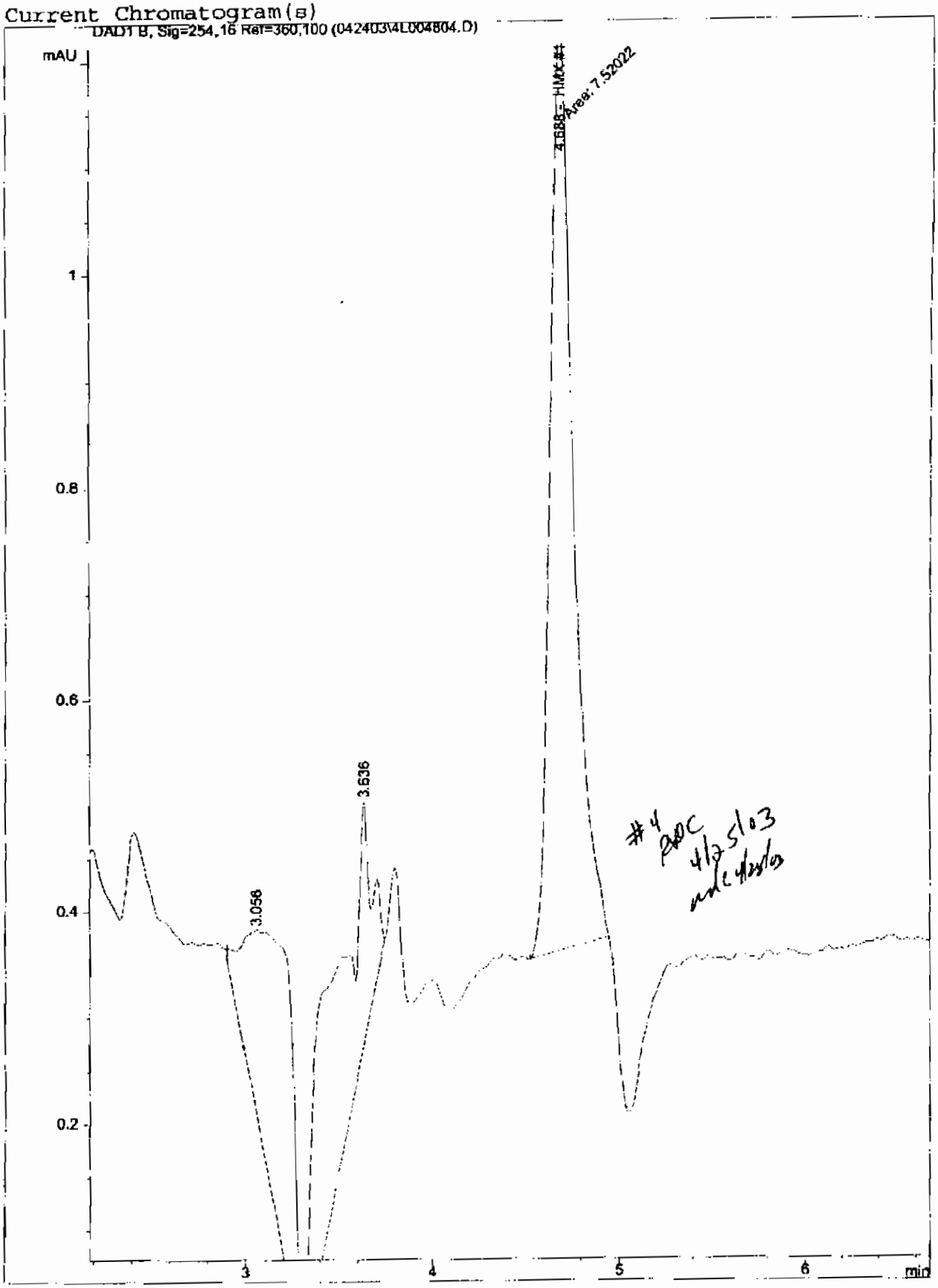


Current Chromatogram(s)



Current Chromatogram(s)

DAD1 B, Sig=254,16 Ref=360,100 (042403\4L004804.D)



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==================================================================
Injection Date  : 4/24/2003 7:21:05 PM          Seq. Line :   5
Sample Name     : WG139061-04 STD3                   Vial :   5
Acq. Operator   : RDC                                 Inj :   1
                                               Inj Volume : 100 µl
Acq. Method     : C:\HPCHEM\2\METHODS\8330.M
Last changed    : 4/24/2003 3:50:59 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed    : 4/25/2003 3:41:48 PM by RDC
                  (modified after loading)
8330 CALIBRATION 04/24/2003 @ 21:05
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==================================================================
                      External Standard Report
==================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Friday, April 25, 2003 3:41:44 PM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime  Type     Area      Amt/Area    Amount   Grp   Name
 [min]           [mAU*s]                [ug/L]
-------|------|----------|----------|----------|--|-----------------
  4.688 MM        7.52022    6.73348   50.63721     HMX #1
  7.363 PBA       7.89702    6.10674   48.22508     RDX #2
  9.814 BB       20.51142    2.51804   51.64865     1,3,5-Trinitrobenzene #3
 12.068 BB       27.59870    1.87218   51.66959     1,3-Dinitrobenzene #4
 13.133 BV       14.58495    3.58723   52.31958     Tetryl #5
 13.695 VB       18.57552    2.75339   51.14569     Nitrobenzene #6
 14.898 BV       10.10620    4.94763   50.00175     3,4-Dinitrotoluene  #7 *
 15.593 VP       18.91057    2.60563   49.27400     2,4,6-Trinitrotoluene #8
 17.154 BV       10.95360    4.52923   49.61141     4-Amino-2,6-Dinitrotoluen
 17.900 VV       15.26837    3.35585   51.23839     2-Amino-4,6-Dinitrotoluen
 18.341 VV       12.32918    4.18899   51.64677     2,6-Dinitrotoluene #11
 18.933 VB       25.49091    2.01584   51.38559     2,4-Dinitrotoluene #12
 22.285 BB        9.56295    5.17949   49.53125     2-Nitrotoluene #13
 23.820 PB        7.61180    6.33434   48.21572     4-Nitrotoluene #14
 25.694 BB       11.49758    4.24828   48.84488     3-Nitrotoluene #15

Totals :                                1773.13755

 Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

==================================================================
                      *** End of Report ***
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==================================================================
Injection Date  : 4/24/2003 8:13:14 PM          Seq. Line :   6
Sample Name     : WG139061-05 STD2                   Vial :   6
Acq. Operator   : RDC                                 Inj :   1
                                               Inj Volume : 100 µl
Acq. Method     : C:\HPCHEM\2\METHODS\8330.M
Last changed    : 4/24/2003 3:50:59 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed    : 4/25/2003 3:42:38 PM by RDC
                  (modified after loading)
8330 CALIBRATION 04/24/2003 @ 21:05
==================================================================
```
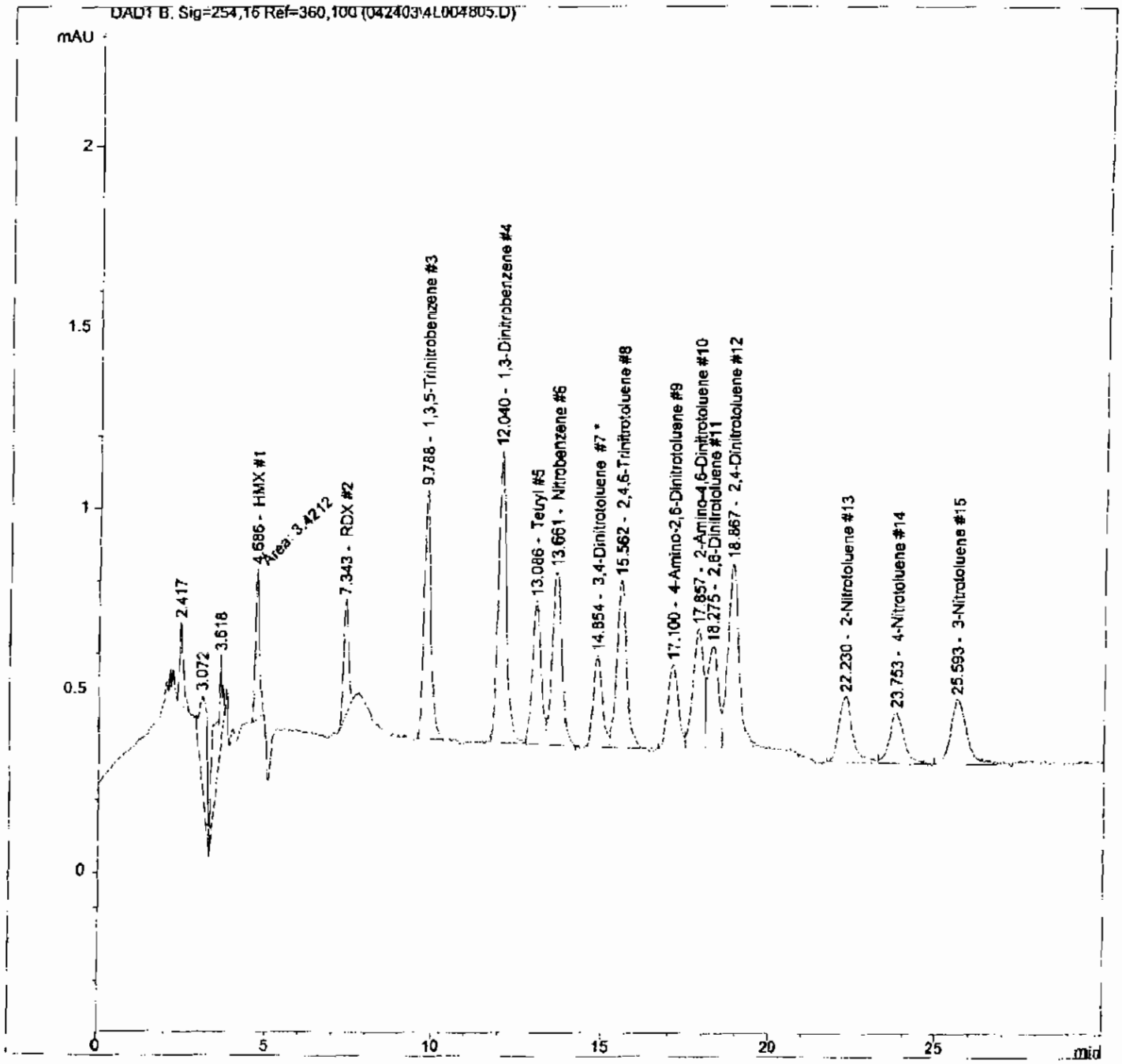
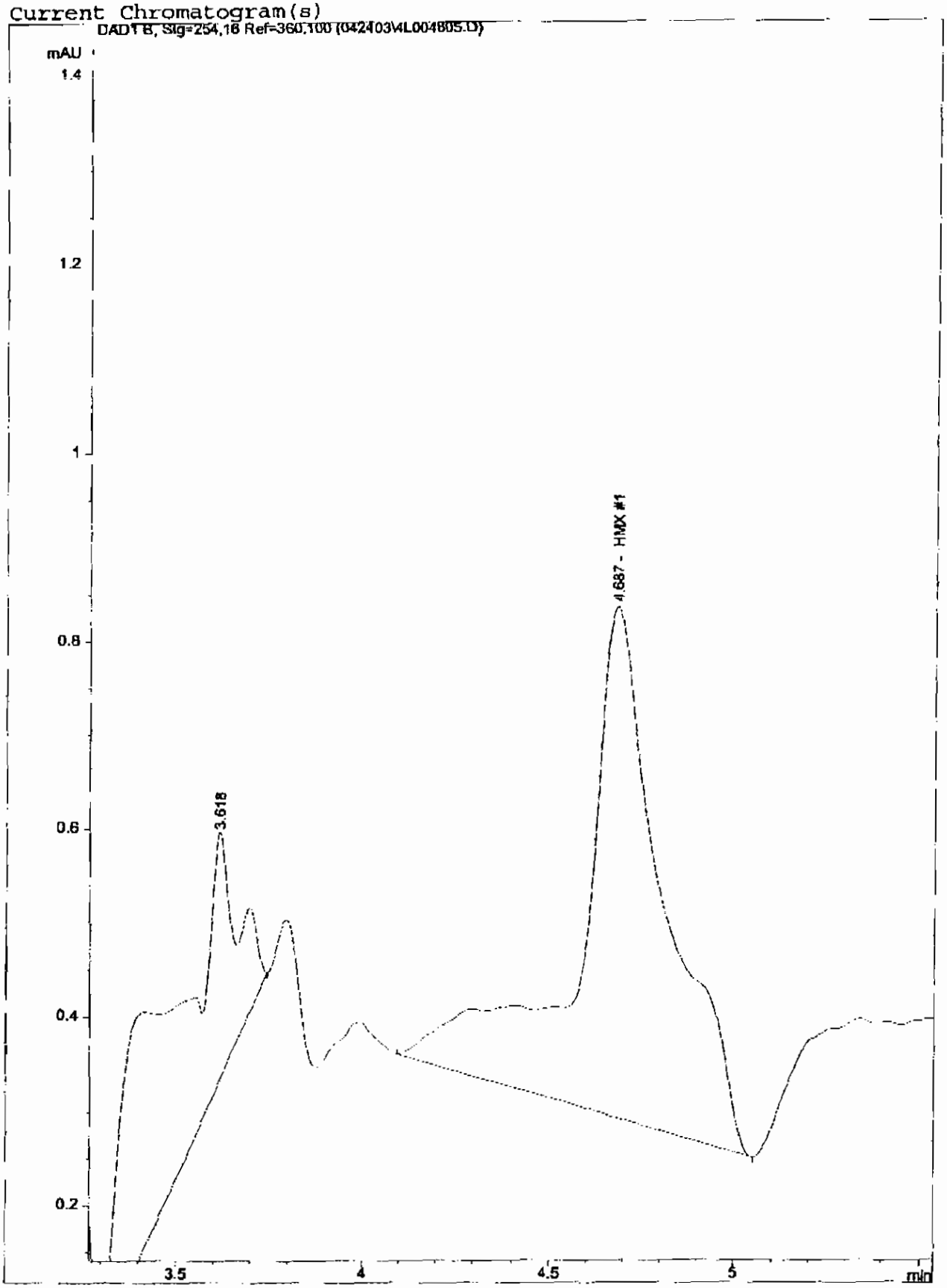
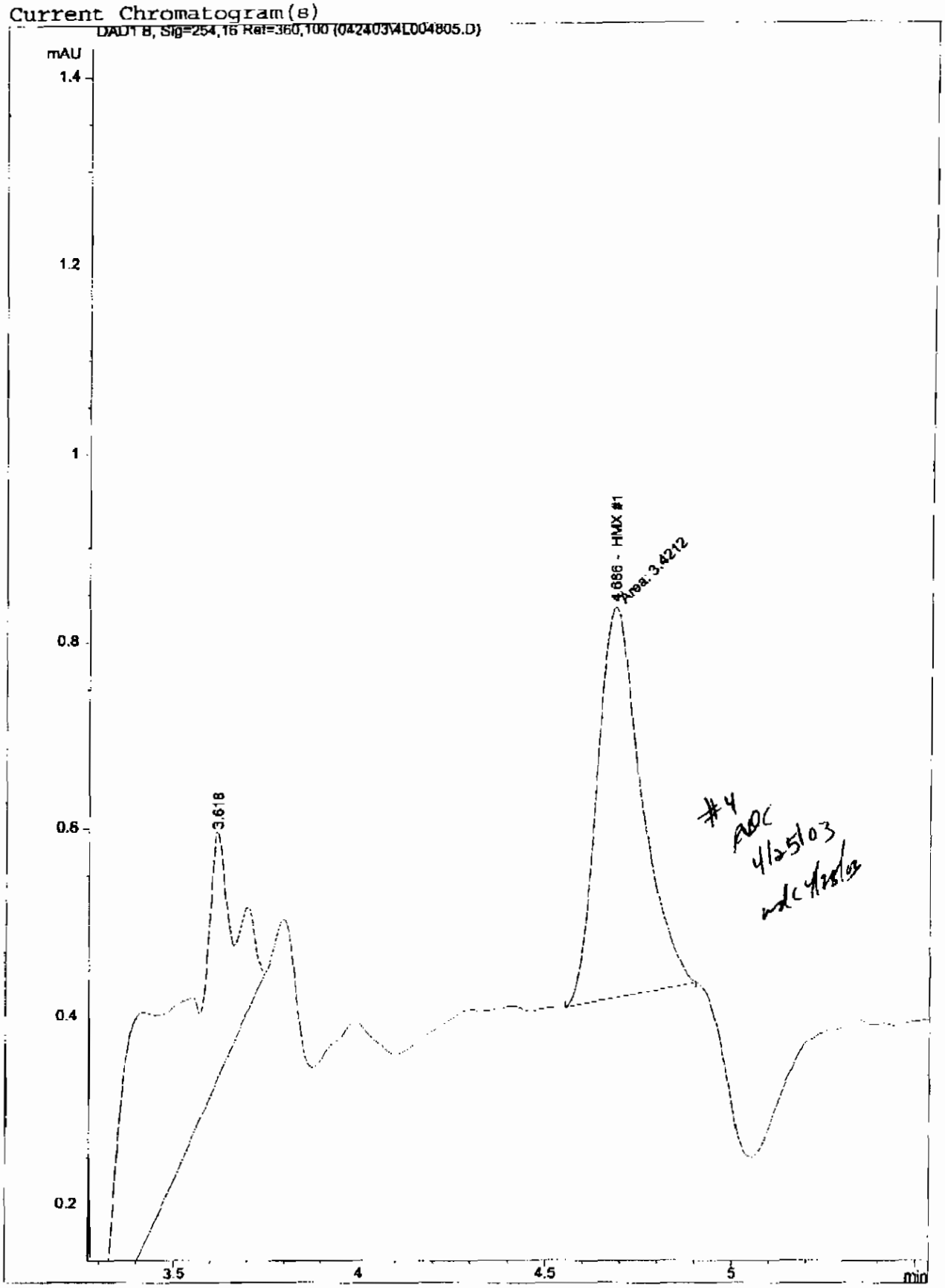



Current Chromatogram(s)



Current Chromatogram(s)



HPLC4 4/25/2003 3:42:29 PM RDC

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==================================================================
Injection Date  : 4/24/2003 8:13:14 PM          Seq. Line :   6
Sample Name     : WG139061-05 STD2                   Vial :   6
Acq. Operator   : RDC                                 Inj :   1
                                               Inj Volume : 100 µl
Acq. Method     : C:\HPCHEM\2\METHODS\8330.M
Last changed    : 4/24/2003 3:50:59 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed    : 4/25/2003 3:42:38 PM by RDC
                  (modified after loading)
8330 CALIBRATION 04/24/2003 @ 21:05
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==================================================================
                      External Standard Report
==================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Friday, April 25, 2003 3:42:35 PM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: DAD1 B, Sig=254,16 Ref=360,100
```

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
4.686	MM	3.42120	7.49305	25.63518		HMX #1
7.343	PBA	3.34191	7.52365	25.14332		RDX #2
9.788	BP	9.80580	2.73089	26.77852		1,3,5-Trinitrobenzene #3
12.040	BB	13.33323	2.00469	26.72903		1,3-Dinitrobenzene #4
13.086	BV	7.01731	3.99348	28.02352		Tetryl #5
13.661	VB	8.50270	2.93405	24.94730		Nitrobenzene #6
14.854	BV	4.70621	5.23889	24.65535		3,4-Dinitrotoluene #7 *
15.562	VB	9.31047	2.79065	25.98222		2,4,6-Trinitrotoluene #8
17.100	PV	5.03244	5.05299	25.42888		4-Amino-2,6-Dinitrotoluen
17.857	VV	7.37971	3.73688	27.57708		2-Amino-4,6-Dinitrotoluen
18.275	VV	5.83049	4.66311	27.18818		2,6-Dinitrotoluene #11
18.867	VB	11.78135	2.26088	26.63625		2,4-Dinitrotoluene #12
22.230	PB	5.07849	5.63334	28.60886		2-Nitrotoluene #13
23.753	BP	4.18652	6.68992	28.00750		4-Nitrotoluene #14
25.593	BB	5.87134	4.34271	25.49753		3-Nitrotoluene #15

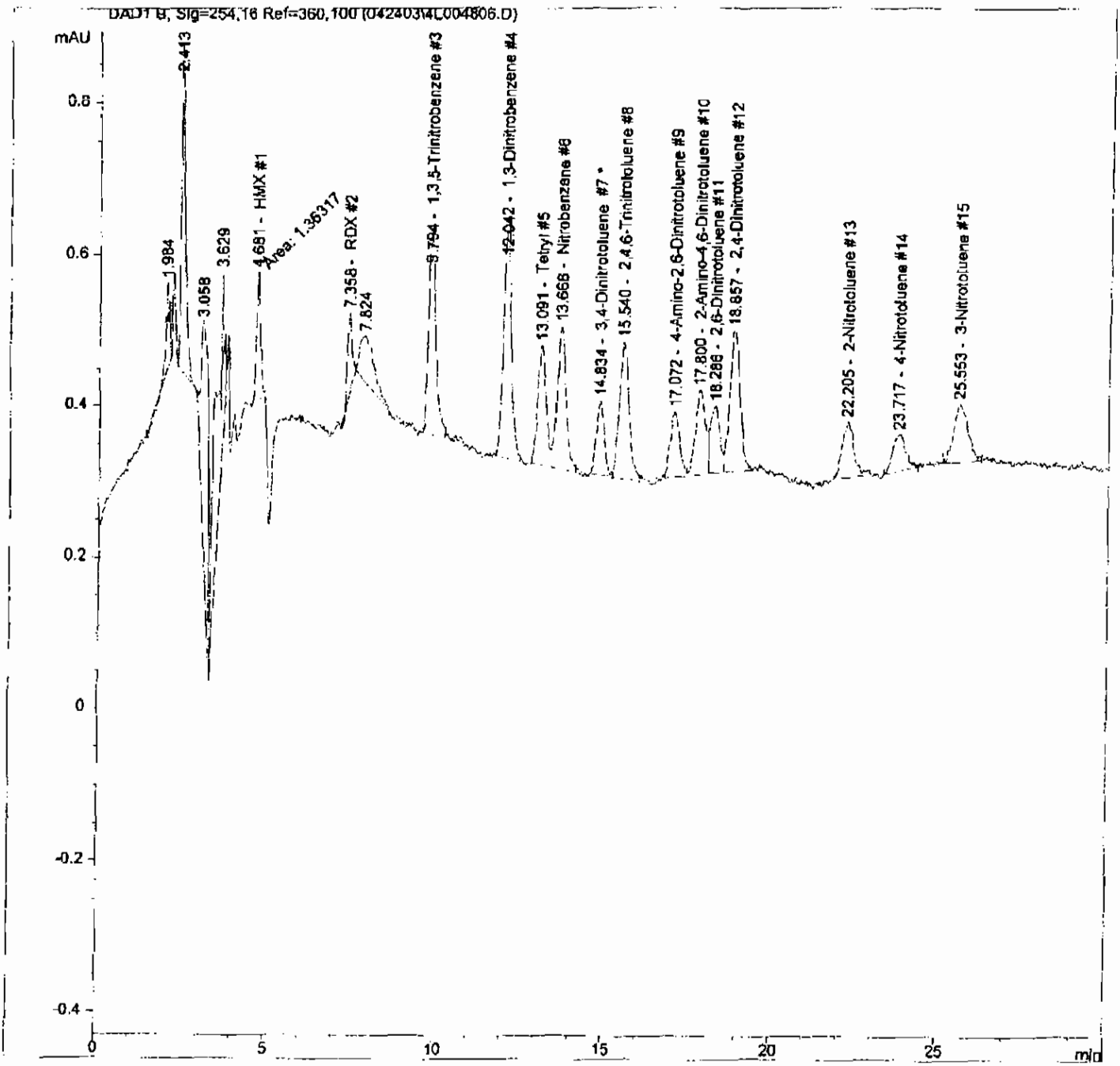
Totals : 1417.96524

Results obtained with enhanced integrator!
1 Warnings or Errors :

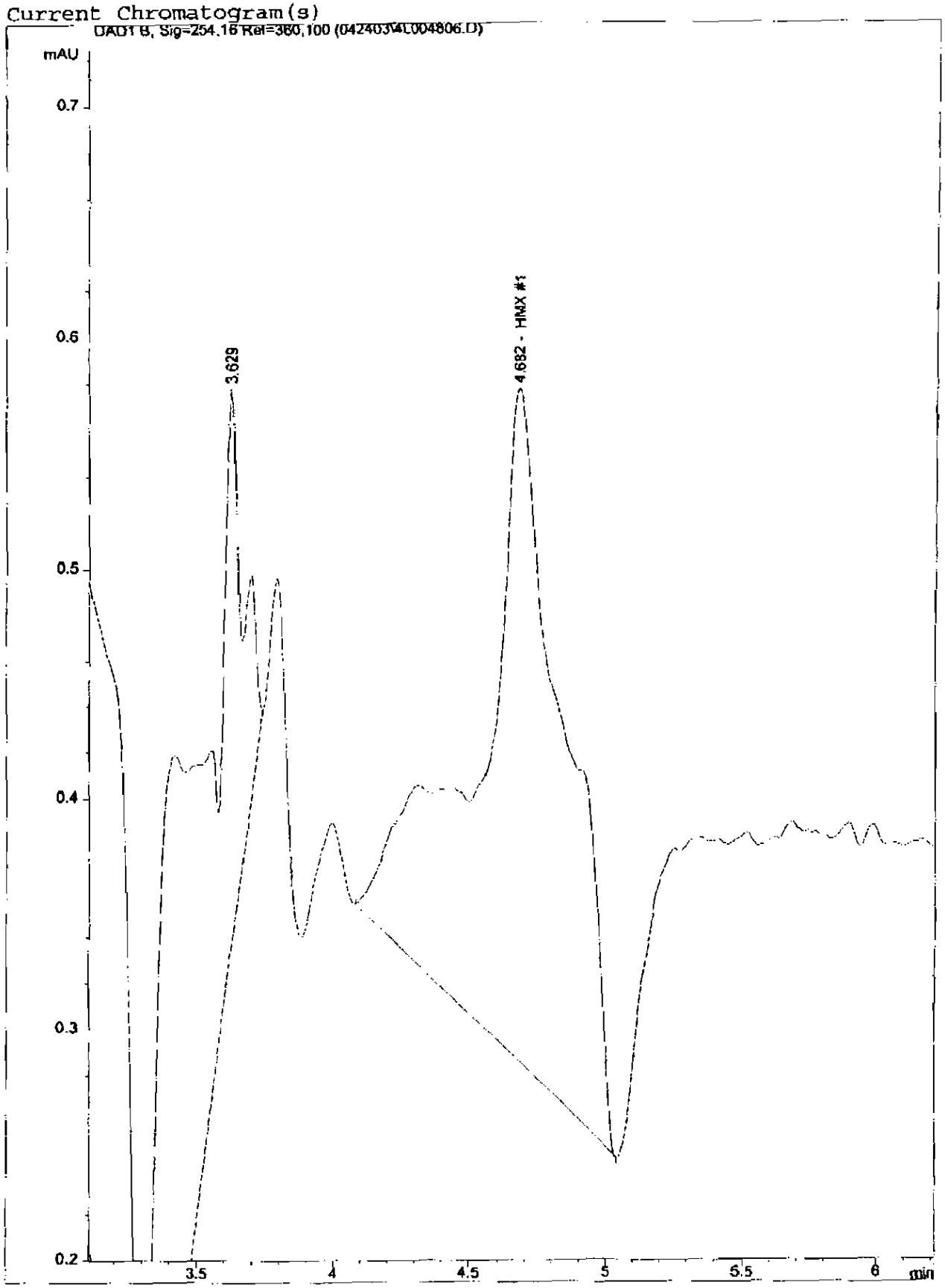
Warning : Calibration warnings (see calibration table listing)

==
*** End of Report ***

```
==================================================================
Injection Date   : 4/24/2003 9:05:27 PM          Seq. Line :   7
Sample Name      : WG139061-06 STD1                   Vial :   7
Acq. Operator    : RDC                                 Inj :   1
                                                Inj Volume : 100 µl
Acq. Method      : C:\HPCHEM\2\METHODS\8330.M
Last changed     : 4/24/2003 3:50:59 PM by RDC
Analysis Method  : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed     : 4/25/2003 3:43:30 PM by RDC
                   (modified after loading)
8330 CALIBRATION 04/24/2003 @ 21:05
==================================================================
```

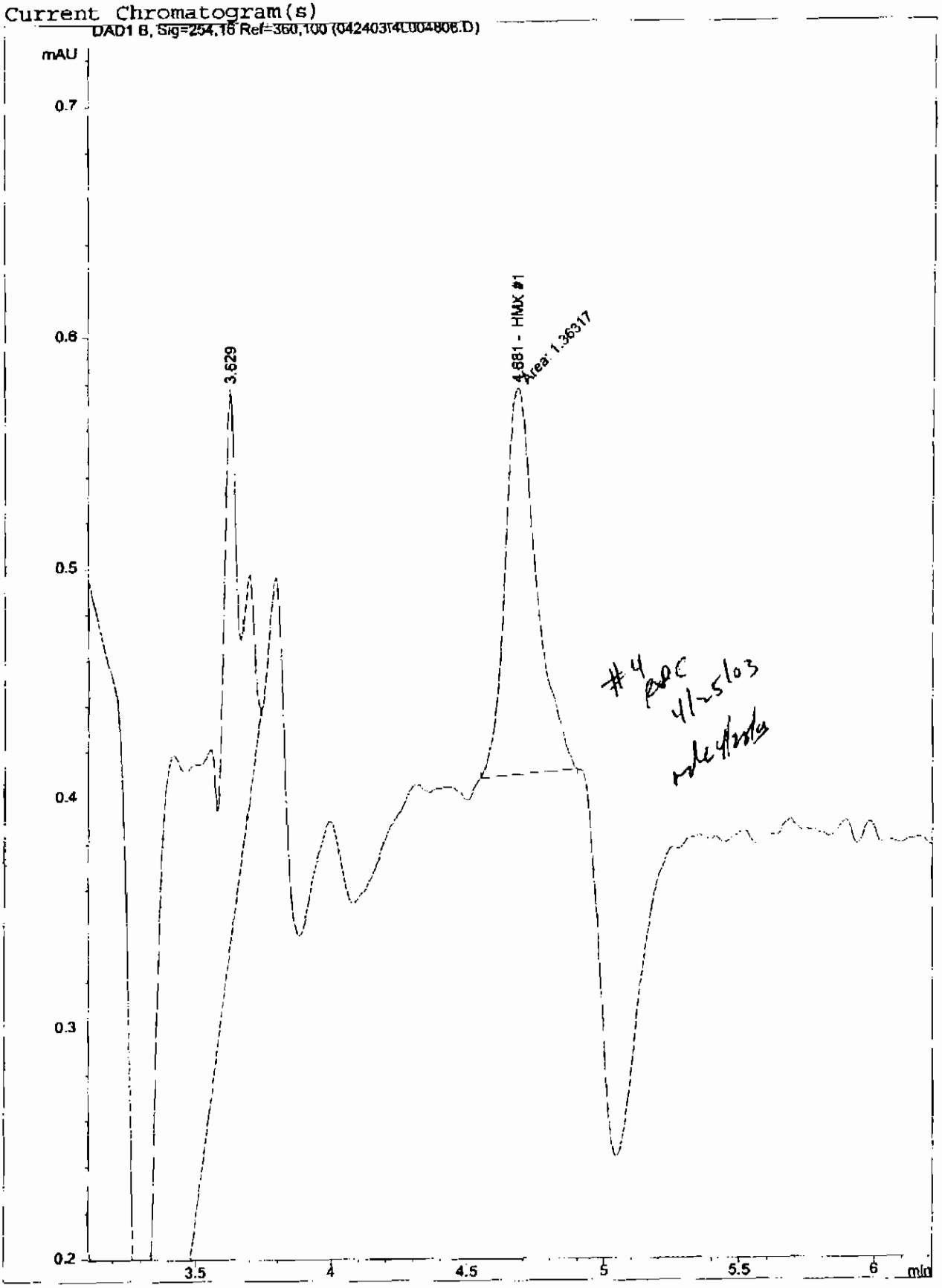


Current Chromatogram(s)



Current Chromatogram(s)

DAD1 B, Sig=254,16 Ref=360,100 (042403\4L004806.D)



```
==================================================================
Injection Date  : 4/24/2003 9:05:27 PM          Seq. Line :   7
Sample Name     : WG139061-06 STD1                   Vial :   7
Acq. Operator   : RDC                                 Inj :   1
                                                Inj Volume : 100 µl
Acq. Method     : C:\HPCHEM\2\METHODS\8330.M
Last changed    : 4/24/2003 3:50:59 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed    : 4/25/2003 3:43:30 PM by RDC
                  (modified after loading)
8330 CALIBRATION 04/24/2003 @ 21:05
==================================================================

==================================================================
                      External Standard Report
==================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Friday, April 25, 2003 3:43:27 PM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime  Type     Area      Amt/Area    Amount   Grp   Name
 [min]           [mAU*s]                [ug/L]
-------|------|----------|----------|----------|--|-----------------
  4.681 MM        1.36317    9.72660   13.25899     HMX #1
  7.358 PB      9.42478e-1  15.05196   14.18614     RDX #2
  9.794 PB        3.95324    3.33461   13.18251     1,3,5-Trinitrobenzene #3
 12.042 BB        5.03625    2.42706   12.22327     1,3-Dinitrobenzene #4
 13.091 BV        2.69342    5.25042   14.14158     Tetryl #5
 13.668 VB        3.34389    3.44801   11.52977     Nitrobenzene #6
 14.834 BV        1.66323    6.23619   10.37221     3,4-Dinitrotoluene  #7 *
 15.540 VB        3.57966    3.37410   12.07813     2,4,6-Trinitrotoluene #8
 17.072 BV        1.69764    6.95629   11.80930     4-Amino-2,6-Dinitrotoluen
 17.800 VV        2.41659    5.25149   12.69069     2-Amino-4,6-Dinitrotoluen
 18.286 VV        1.76028    6.74294   11.86949     2,6-Dinitrotoluene #11
 18.857 VB        3.98254    3.15311   12.55736     2,4-Dinitrotoluene #12
 22.205 BB        1.81358    7.37564   13.37629     2-Nitrotoluene #13
 23.717 PP        1.29509    8.45406   10.94877     4-Nitrotoluene #14
 25.553 BB        2.29277    4.64392   10.64744     3-Nitrotoluene #15

Totals :                                1254.21942

 Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

==================================================================
                      *** End of Report ***
```

Check Standard Report

Data File C:\HPCHEM\2\DATA\042403\4L004807.D Sample Name: WG139061-07 ALT
HPLC4 4/25/2003 3:46:39 PM RDC

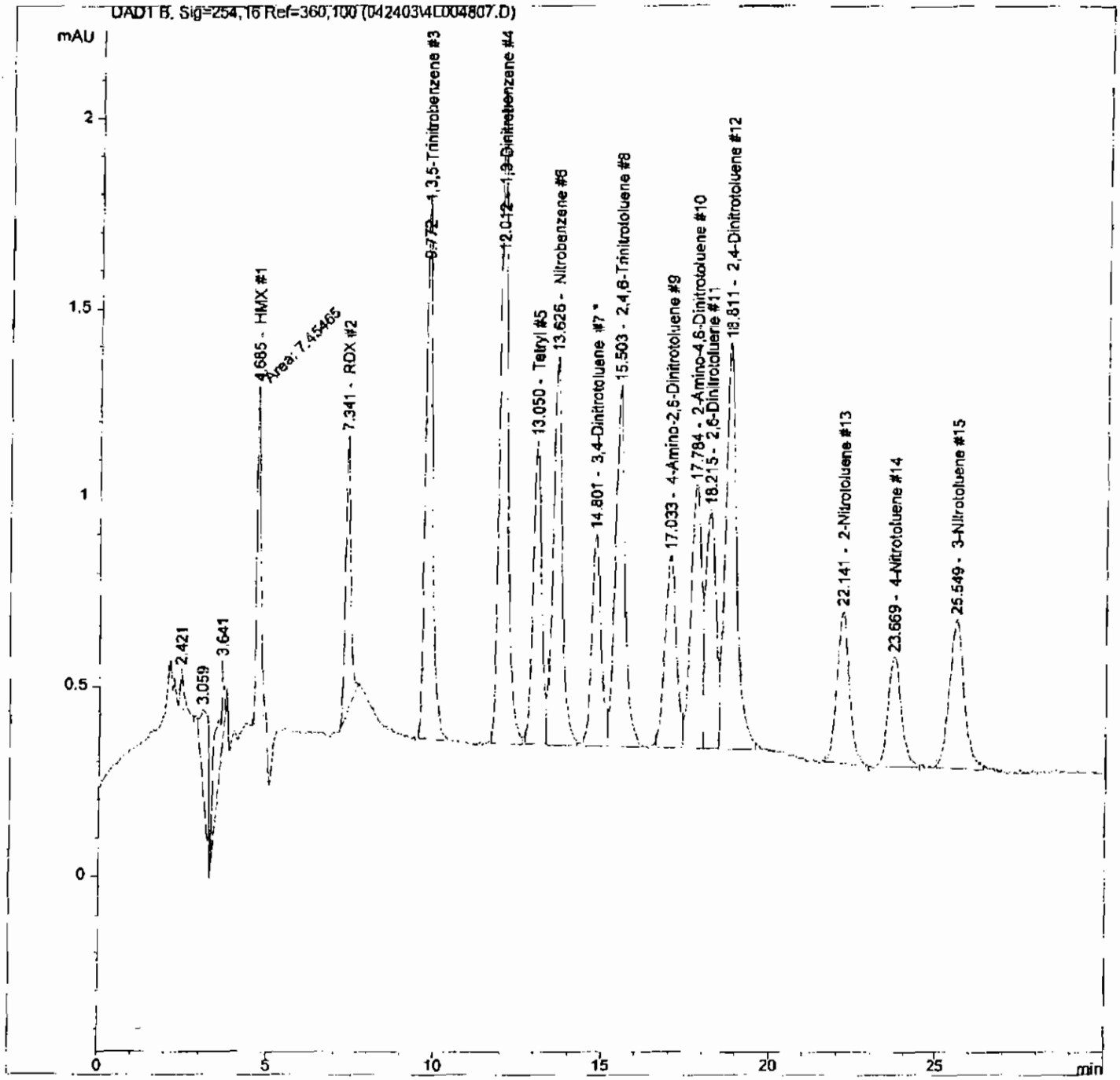
1,1 SOS64-26 50 ppb

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

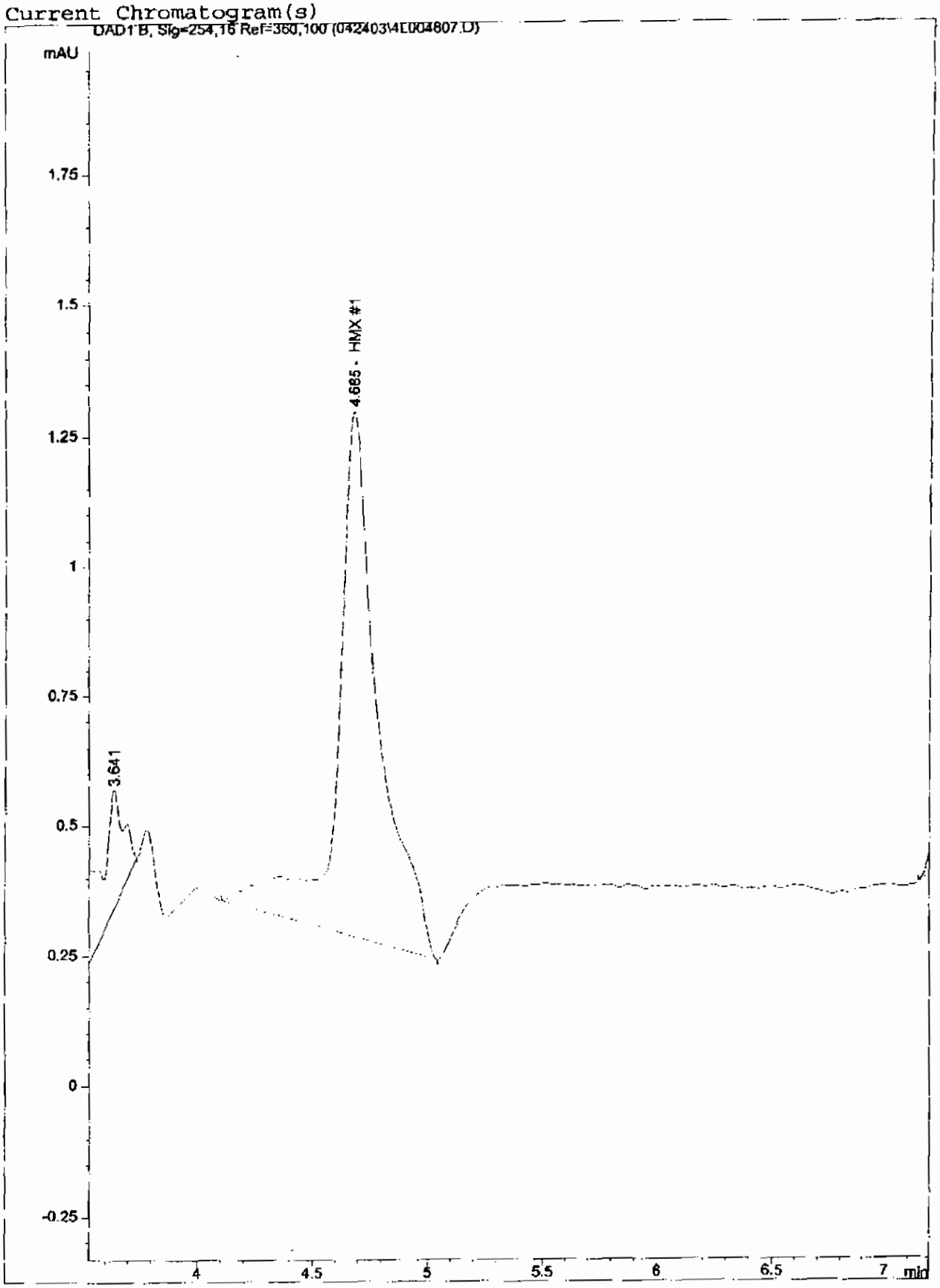
Compound	RT	Known Conc.	Cal. Conc.	%D
HMX #1	4.685	50.0	50.319	0.6
RDX #2	7.341	50.0	50.264	0.5
1,3,5-Trinitrobenzene #3	9.772	50.0	51.565	3.1
1,3-Dinitrobenzene #4	12.012	50.0	52.690	5.4
Tetryl #5	13.050	50.0	50.689	1.4
Nitrobenzene #6	13.626	50.0	51.757	3.5
3,4-Dinitrotoluene #7 *	14.801	50.0	53.999	8.0
2,4,6-Trinitrotoluene #8	15.503	50.0	50.586	1.2
4-Amino-2,6-Dinitrotolue	17.033	50.0	51.759	3.5
2-Amino-4,6-Dinitrotolue	17.784	50.0	52.130	4.3
2,6-Dinitrotoluene #11	18.215	50.0	55.818	11.6
2,4-Dinitrotoluene #12	18.811	50.0	52.019	4.0
2-Nitrotoluene #13	22.141	50.0	53.321	6.6
4-Nitrotoluene #14	23.669	50.0	49.773	-0.5
3-Nitrotoluene #15	25.549	50.0	51.231	2.5

= Failed 15.0% Criteria

```
==================================================================
Injection Date  : 4/24/2003 9:57:40 PM          Seq. Line :   8
Sample Name     : WG139061-07 ALT                    Vial :   8
Acq. Operator   : RDC                                 Inj :   1
                                               Inj Volume : 100 µl
Acq. Method     : C:\HPCHEM\2\METHODS\8330.M
Last changed    : 4/24/2003 3:50:59 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed    : 4/25/2003 3:44:06 PM by RDC
8330 CALIBRATION 04/24/2003 @ 21:05
==================================================================
```

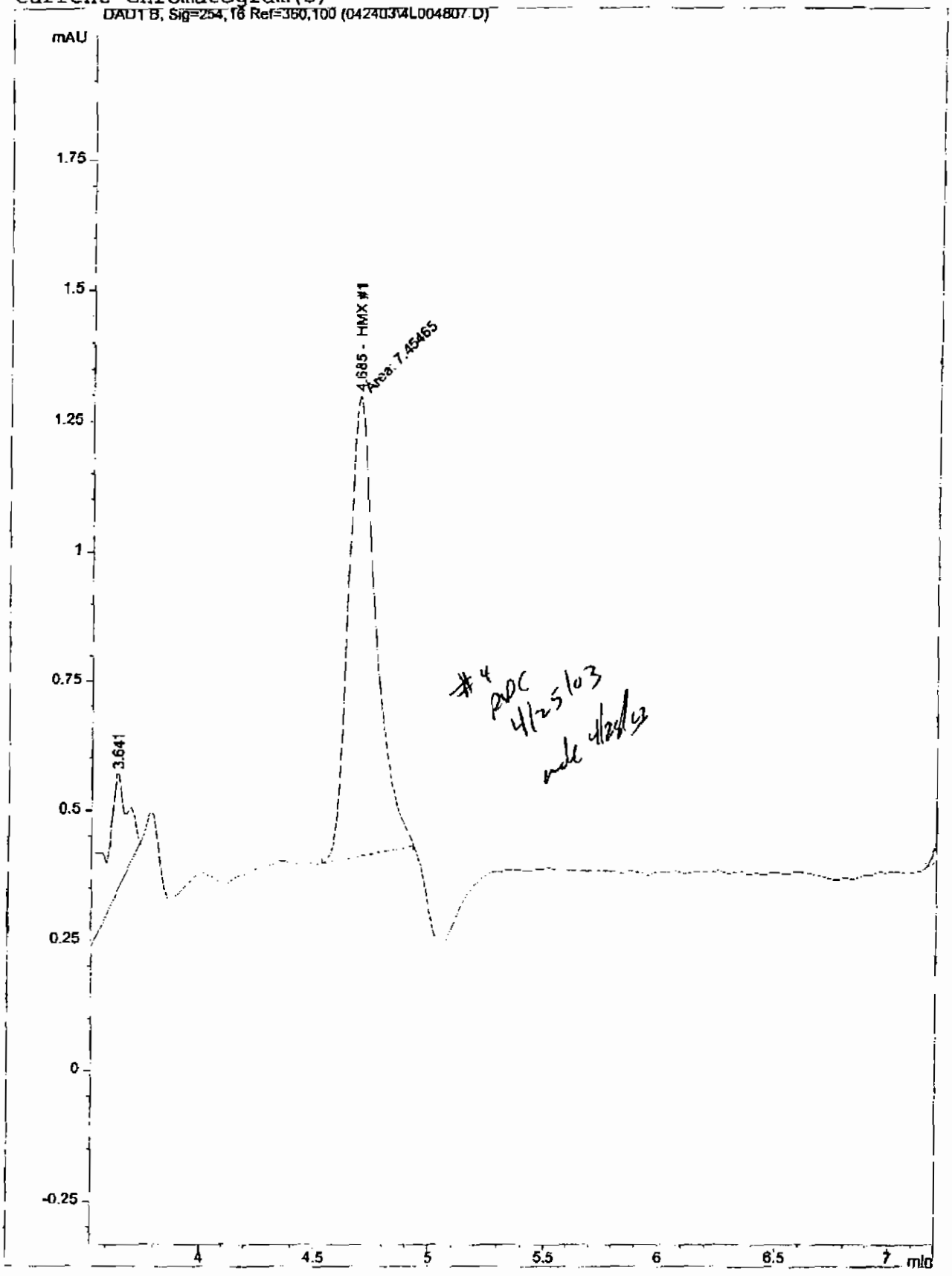


Current Chromatogram(s)



Current Chromatogram(s)

DAU1 B, Sig=254,16 Ref=360,100 (0424030\L004807.D)



HPLC4 4/25/2003 3:46:35 PM RDC

Page 1 of 1

```
==================================================================
Injection Date  : 4/24/2003 9:57:40 PM          Seq. Line :   8
Sample Name     : WG139061-07 ALT                    Vial :   8
Acq. Operator   : RDC                                 Inj :   1
                                                Inj Volume : 100 µl
Acq. Method     : C:\HPCHEM\2\METHODS\8330.M
Last changed    : 4/24/2003 3:50:59 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed    : 4/25/2003 3:44:06 PM by RDC
8330 CALIBRATION 04/24/2003 @ 21:05
==================================================================

==================================================================
                      External Standard Report
==================================================================

Sorted By              :      Signal
Calib. Data Modified   :      4/25/2003 3:44:05 PM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: DAD1 B, Sig=254,16 Ref=360,100
```

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
4.685	MM	7.45465	6.75000	50.31884		HMX #1
7.341	PBA	8.10529	6.20133	50.26360		RDX #2
9.772	BB	20.47531	2.51839	51.56478		1,3,5-Trinitrobenzene #3
12.012	BB	28.18222	1.86961	52.68978		1,3-Dinitrobenzene #4
13.050	BV	14.07692	3.60082	50.68853		Tetryl #5
13.626	VB	18.81044	2.75149	51.75669		Nitrobenzene #6
14.801	BV	10.95782	4.92790	53.99908		3,4-Dinitrotoluene #7 *
15.503	VB	19.45135	2.60064	50.58605		2,4,6-Trinitrotoluene #8
17.033	BV	11.47956	4.50884	51.75947		4-Amino-2,6-Dinitrotoluen
17.784	VV	15.56559	3.34905	52.12987		2-Amino-4,6-Dinitrotoluen
18.215	VV	13.43757	4.15390	55.81832		2,6-Dinitrotoluene #11
18.811	VB	25.84189	2.01298	52.01919		2,4-Dinitrotoluene #12
22.141	PP	10.37530	5.13925	53.32128		2-Nitrotoluene #13
23.669	PB	7.87574	6.31978	49.77292		4-Nitrotoluene #14
25.549	BB	12.07270	4.24358	51.23147		3-Nitrotoluene #15

Totals : 1767.53996

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

==
*** End of Report ***

==========

Calibration Table

==========

8330 HPLC4

Calib. Data Modified : 5/4/2003 4:27:13 PM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 0.000 %
Abs. Reference Window : 0.000 min
Rel. Non-ref. Window : 0.000 %
Abs. Non-ref. Window : 0.500 min
Uncalibrated Peaks : using compound Nitrobenzene #6
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: Yes, even for non-identified peaks

Curve Type : Linear
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Sig	Lvl	Amount [ug/L]	Area	Amt/Area	Ref	Grp	Name
4.631	1	1	10.00000	1.57396	6.35341			HMX #1
		2	25.00000	4.00373	6.24417			
		3	50.00000	7.97567	6.26906			
		4	100.00000	18.35064	5.44940			
		5	500.00000	81.70618	6.11949			
		6	1000.00000	166.21046	6.01647			
7.239	1	1	10.00000	1.36909	7.30414			RDX #2
		2	25.00000	3.97642	6.28706			
		3	50.00000	7.96822	6.27492			
		4	100.00000	18.25620	5.47759			
		5	500.00000	94.78035	5.27536			
		6	1000.00000	197.94426	5.05193			
9.796	1	1	10.00000	3.88054	2.57696			1,3,5-Trinitrobenzene
		2	25.00000	10.03447	2.49141			
		3	50.00000	20.23016	2.47156			
		4	100.00000	43.17253	2.31629			
		5	500.00000	217.77176	2.29598			
		6	1000.00000	437.98468	2.28318			
12.025	1	1	10.00000	5.80553	1.72250			1,3-Dinitrobenzene #4
		2	25.00000	14.11635	1.77100			

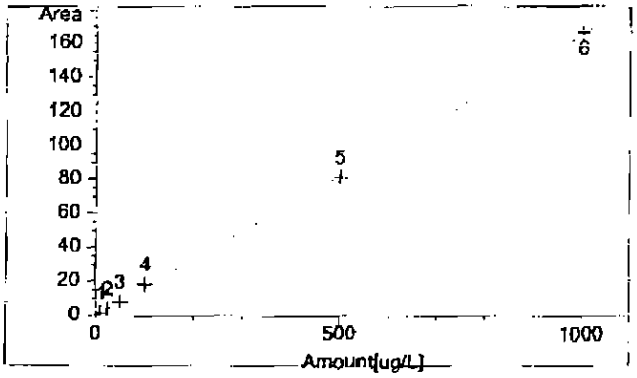
RetTime [min]	Sig	Lvl	Amount [ug/L]	Area	Amt/Area	Ref	Grp	Name
		3	50.00000	28.37236	1.76228			
		4	100.00000	56.64658	1.76533			
		5	500.00000	291.93634	1.71270			
		6	1000.00000	585.14874	1.70897			
12.988	1	1	10.00000	3.14353	3.18114			Tetryl #5
		2	25.00000	7.80422	3.20340			
		3	50.00000	15.61649	3.20174			
		4	100.00000	30.13752	3.31812			
		5	500.00000	160.47656	3.11572			
		6	1000.00000	313.70349	3.18772			
13.654	1	1	10.00000	3.81040	2.62440			Nitrobenzene #6
		2	25.00000	9.44287	2.64750			
		3	50.00000	18.73051	2.66944			
		4	100.00000	37.13404	2.69295			
		5	500.00000	193.49026	2.58411			
		6	1000.00000	379.35959	2.63602			
14.781	1	1	10.00000	2.27462	4.39633			3,4-Dinitrotoluene #7
		2	25.00000	5.23684	4.77387			
		3	50.00000	10.60707	4.71384			
		4	100.00000	20.55322	4.86542			
		5	500.00000	111.83913	4.47071			
		6	1000.00000	215.25517	4.64565			
15.574	1	1	10.00000	4.11333	2.43112			2,4,6-Trinitrotoluene
		2	25.00000	10.25914	2.43685			
		3	50.00000	19.82112	2.52256			
		4	100.00000	38.07655	2.62629			
		5	500.00000	203.73759	2.45414			
		6	1000.00000	404.13718	2.47441			
16.539	1	1	10.00000	2.57813	3.87877			4-Amino-2,6-Dinitrotol
		2	25.00000	6.48298	3.85625			
		3	50.00000	12.28848	4.06885			
		4	100.00000	21.71029	4.60611			
		5	500.00000	125.79243	3.97480			
		6	1000.00000	246.13437	4.06282			
17.440	1	1	10.00000	3.55554	2.81251			2-Amino-4,6-Dinitrotol
		2	25.00000	8.69794	2.87424			
		3	50.00000	16.78469	2.97891			
		4	100.00000	30.72612	3.25456			
		5	500.00000	171.46715	2.91601			
		6	1000.00000	343.51910	2.91105			
18.230	1	1	10.00000	2.92485	3.41898			2,6-Dinitrotoluene #11
		2	25.00000	6.66755	3.74950			
		3	50.00000	12.96977	3.85512			
		4	100.00000	23.98173	4.16984			
		5	500.00000	131.02063	3.81619			
		6	1000.00000	265.18420	3.77096			
18.878	1	1	10.00000	5.45924	1.83176			2,4-Dinitrotoluene #12
		2	25.00000	13.48203	1.85432			
		3	50.00000	26.12951	1.91354			
		4	100.00000	51.72134	1.93344			
		5	500.00000	267.79782	1.86708			
		6	1000.00000	545.61340	1.83280			
22.226	1	1	10.00000	1.91520	5.22140			2-Nitrotoluene #13
		2	25.00000	5.21716	4.79188			
		3	50.00000	10.38873	4.81291			
		4	100.00000	22.40642	4.46301			

RetTime [min]	Sig	Lvl	Amount [ug/L]	Area	Amt/Area	Ref	Grp	Name
		5	500.00000	107.90704	4.63362			
		6	1000.00000	218.03798	4.58636			
23.750	1	1	10.00000	1.67214	5.98036			4-Nitrotoluene #14
		2	25.00000	4.10438	6.09105			
		3	50.00000	8.30096	6.02340			
		4	100.00000	17.42019	5.74047			
		5	500.00000	87.53891	5.71175			
		6	1000.00000	169.68343	5.89333			
25.583	1	1	10.00000	2.21367	4.51739			3-Nitrotoluene #15
		2	25.00000	5.77062	4.33229			
		3	50.00000	11.49031	4.35149			
		4	100.00000	24.64791	4.05714			
		5	500.00000	122.69504	4.07514			
		6	1000.00000	240.64584	4.15548			

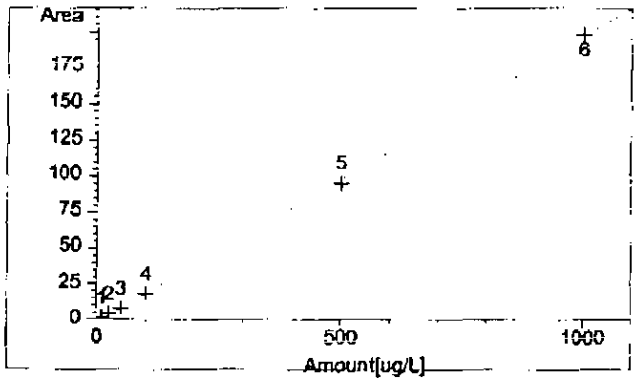
Peak Sum Table

No Entries in table

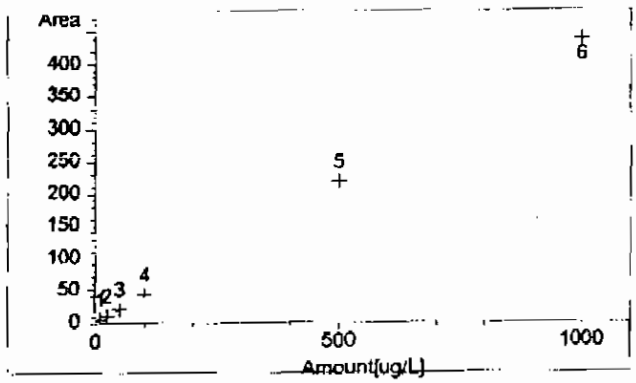
Calibration Curves



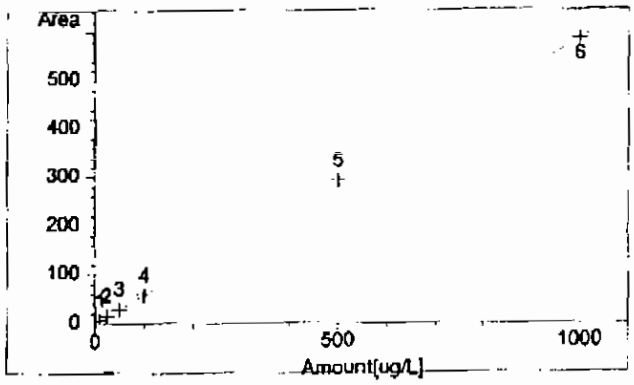
HMX #1 at exp. RT: 4.631
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99989
Residual Std. Dev.: 1.09440
Formula: y = mx + b
m: 1.65604e-1
b: 1.29773e-1
x: Amount [ug/L]
y: Area



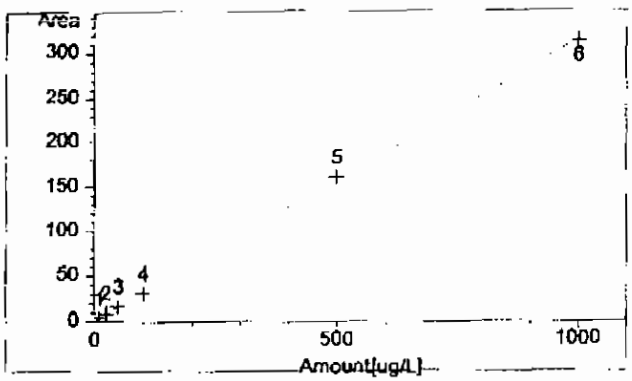
RDX #2 at exp. RT: 7.239
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99983
Residual Std. Dev.: 1.63408
Formula: y = mx + b
m: 1.98221e-1
b: -1.61802
x: Amount [ug/L]
y: Area



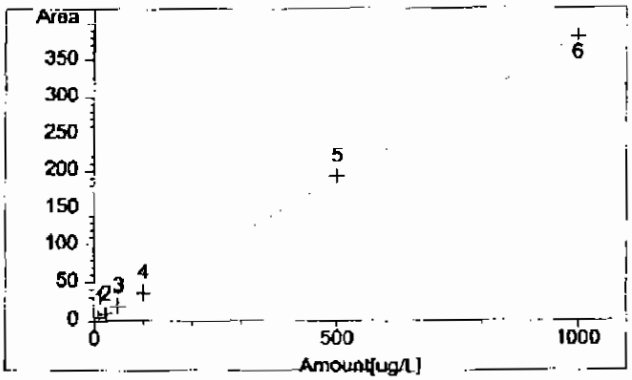
1,3,5-Trinitrobenzene #3 at exp. RT: 9.79
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 1.00000
Residual Std. Dev.: 0.55838
Formula: y = mx + b
m: 4.38745e-1
b: -1.03507
x: Amount [ug/L]
y: Area



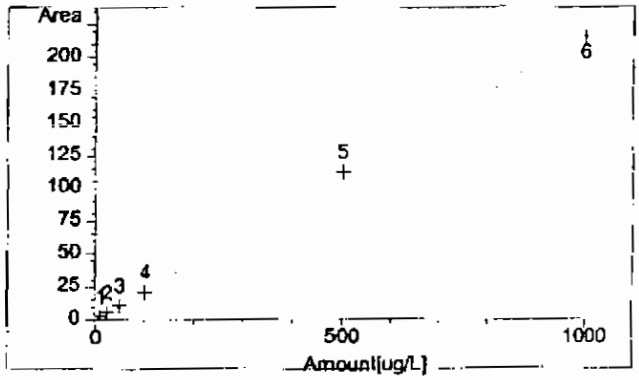
1,3-Dinitrobenzene #4 at exp. RT: 12.025
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 1.00000
Residual Std. Dev.: 0.70150
Formula: y = mx + b
m: 5.85840e-1
b: -8.52323e-1
x: Amount [ug/L]
y: Area



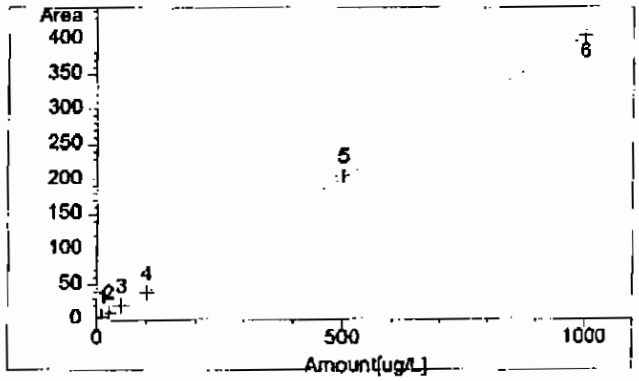
Tetryl #5 at exp. RT: 12.988
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99992
Residual Std. Dev.: 1.76195
Formula: y = mx + b
m: 3.15022e-1
b: 1.17534e-2
x: Amount [ug/L]
y: Area



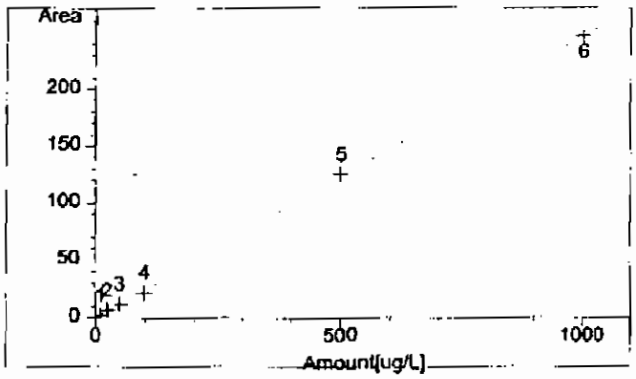
Nitrobenzene #6 at exp. RT: 13.654
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99995
Residual Std. Dev.: 1.77427
Formula: y = mx + b
m: 3.80677e-1
b: 8.77696e-2
x: Amount [ug/L]
y: Area



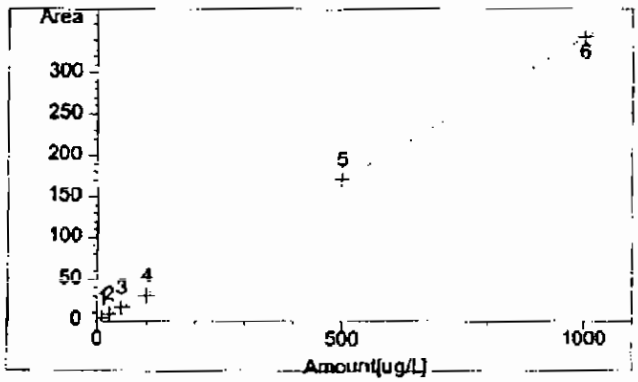
3,4-Dinitrotoluene #7 * at exp. RT: 14.7
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99979
Residual Std. Dev.: 1.97101
Formula: y = mx + b
m: 2.16697e-1
b: 1.05397e-1
x: Amount [ug/L]
y: Area



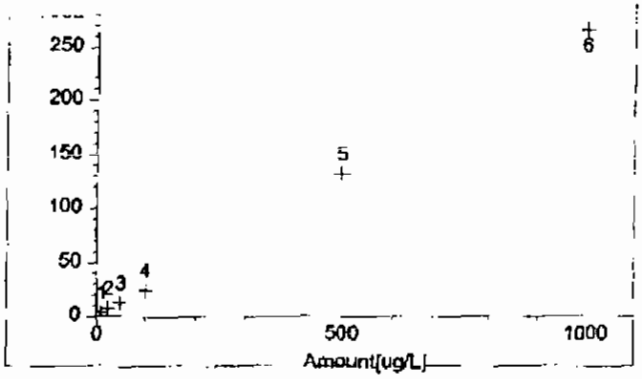
2,4,6-Trinitrotoluene #8 at exp. RT: 15.5
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99997
Residual Std. Dev.: 1.36612
Formula: y = mx + b
m: 4.05173e-1
b: -4.28536e-1
x: Amount [ug/L]
y: Area



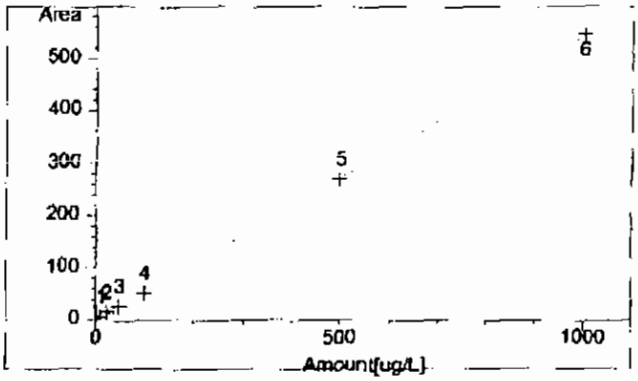
4-Amino-2,6-Dinitrotoluene #9 at exp. RT:
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99985
Residual Std. Dev.: 1.91539
Formula: y = mx + b
m: 2.47413e-1
b: -3.17505e-1
x: Amount [ug/L]
y: Area



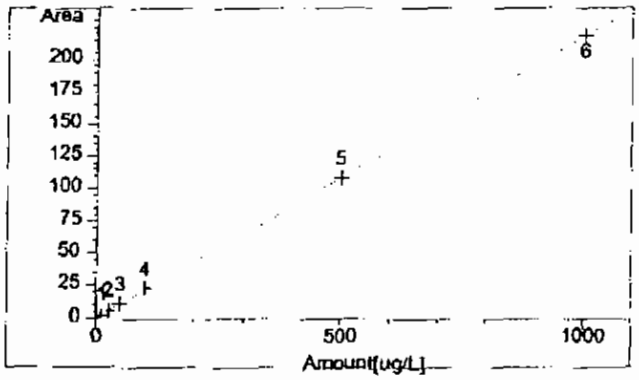
2-Amino-4,6-Dinitrotoluene #10 at exp. RT
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99995
Residual Std. Dev.: 1.59294
Formula: y = mx + b
m: 3.44305e-1
b: -9.00671e-1
x: Amount [ug/L]
y: Area



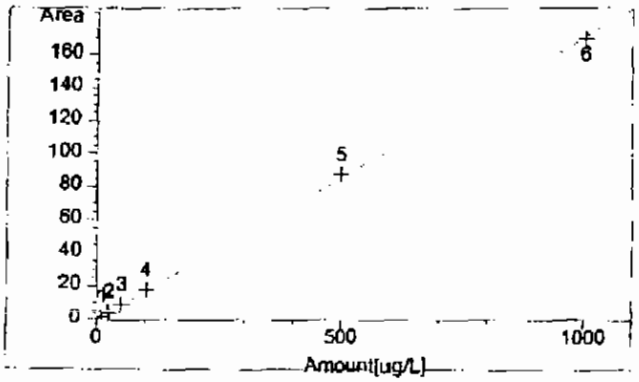
2,6-Dinitrotoluene #11 at exp. RT: 18.230
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99994
Residual Std. Dev.: 1.25186
Formula: y = mx + b
m: 2.65308e-1
b: -7.15756e-1
x: Amount [ug/L]
y: Area



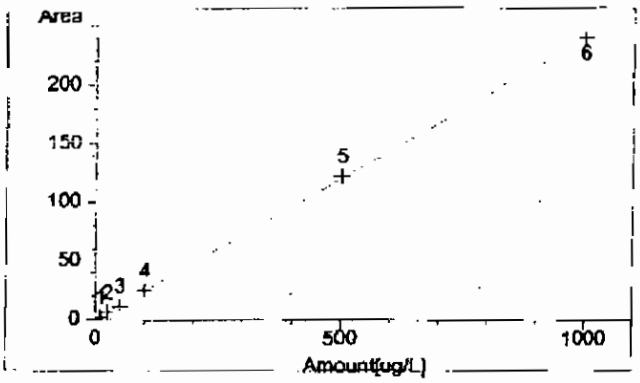
2,4-Dinitrotoluene #12 at exp. RT: 18.878
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99996
Residual Std. Dev.: 2.26034
Formula: y = mx + b
m: 5.45260e-1
b: -1.42676
x: Amount [ug/L]
y: Area



2-Nitrotoluene #13 at exp. RT: 22.226
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99998
Residual Std. Dev.: 0.63024
Formula: y = mx + b
m: 2.17908e-1
b: -2.17113e-1
x: Amount [ug/L]
y: Area



4-Nitrotoluene #14 at exp. RT: 23.750
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99987
Residual Std. Dev.: 1.20169
Formula: y = mx + b
m: 1.70435e-1
b: 2.56217e-1
x: Amount [ug/L]
y: Area



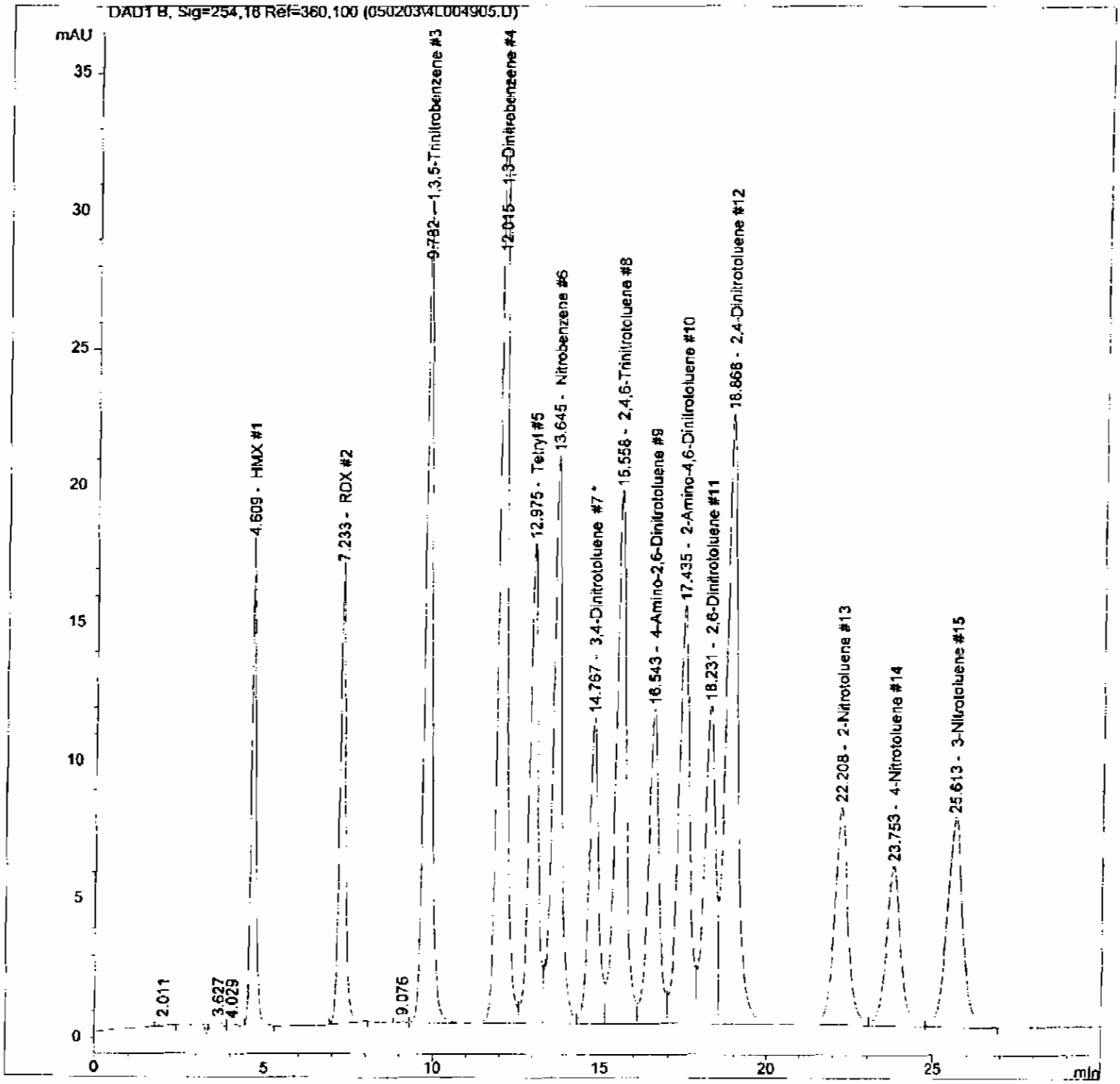
3-Nitrotoluene #15 at exp. RT: 25.583
DAD1 B, Sig=254,16 Ref=360,100
Correlation: 0.99994
Residual Std. Dev.: 1.13643
Formula: y = mx + b
m: 2.41474e-1
b: 9.65161e-2
x: Amount [ug/L]
y: Area

==========

1,1 SOS64-31 1000 ppb

Injection Date	: 5/2/2003 6:50:45 PM	Seq. Line :	2
Sample Name	: WG139673-01 STD6	Vial :	2
Acq. Operator	: RDC	Inj :	1
		Inj Volume :	100 µl

Acq. Method : C:\HPCHEM\2\METHODS\8330.M
Last changed : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed : 5/4/2003 4:21:45 PM by RDC
(modified after loading)
8330 CALIBRATION 05/02/2003 @ 23:11



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==========================================================================
Injection Date  : 5/2/2003 6:50:45 PM              Seq. Line :   2
Sample Name     : WG139673-01 STD6                      Vial :   2
Acq. Operator   : RDC                                    Inj :   1
                                                 Inj Volume : 100 µl
Acq. Method     : C:\HPCHEM\2\METHODS\8330.M
Last changed    : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed    : 5/4/2003 4:21:45 PM by RDC
                  (modified after loading)
8330 CALIBRATION 05/02/2003 @ 23:11
==========================================================================

==========================================================================
                        External Standard Report
==========================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Sunday, May 04, 2003 4:21:40 PM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: DAD1 B, Sig=254,16 Ref=360,100
```

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
4.609	BBA	166.21046	6.05137	1005.80125		HMX #1
7.233	PBA	197.94426	5.08611	1006.76575		RDX #2
9.782	VB	437.98468	2.29060	1003.24716		1,3,5-Trinitrobenzene #3
12.015	BV	585.14874	1.72492	1009.33645		1,3-Dinitrobenzene #4
12.975	VV	313.70349	3.23101	1013.57875		Tetryl #5
13.645	VV	379.35959	2.66293	1010.20710		Nitrobenzene #6
14.767	VV	215.25517	4.68636	1008.76408		3,4-Dinitrotoluene #7 *
15.558	VV	404.13718	2.49056	1006.52731		2,4,6-Trinitrotoluene #8
16.543	VV	246.13437	4.08740	1006.05024		4-Amino-2,6-Dinitrotoluen
17.435	VV	343.51910	2.92859	1006.02583		2-Amino-4,6-Dinitrotoluen
18.231	VV	265.18420	3.79571	1006.56131		2,6-Dinitrotoluene #11
18.868	VB	545.61340	1.84412	1006.17690		2,4-Dinitrotoluene #12
22.208	BV	218.03798	4.59402	1001.67075		2-Nitrotoluene #13
23.753	VV	169.68343	5.85897	994.16986		4-Nitrotoluene #14
25.613	VP	240.64584	4.13966	996.19286		3-Nitrotoluene #15

Totals : 1.59109e4

Results obtained with enhanced integrator!

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*** End of Report ***

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Injection Date : 5/2/2003 7:42:56 PM Seq. Line : 3
Sample Name : WG139673-02 STD5 Vial : 3
Acq. Operator : RDC Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\HPCHEM\2\METHODS\8330.M
Last changed : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed : 5/4/2003 4:22:23 PM by RDC
(modified after loading)
8330 CALIBRATION 05/02/2003 @ 23:11

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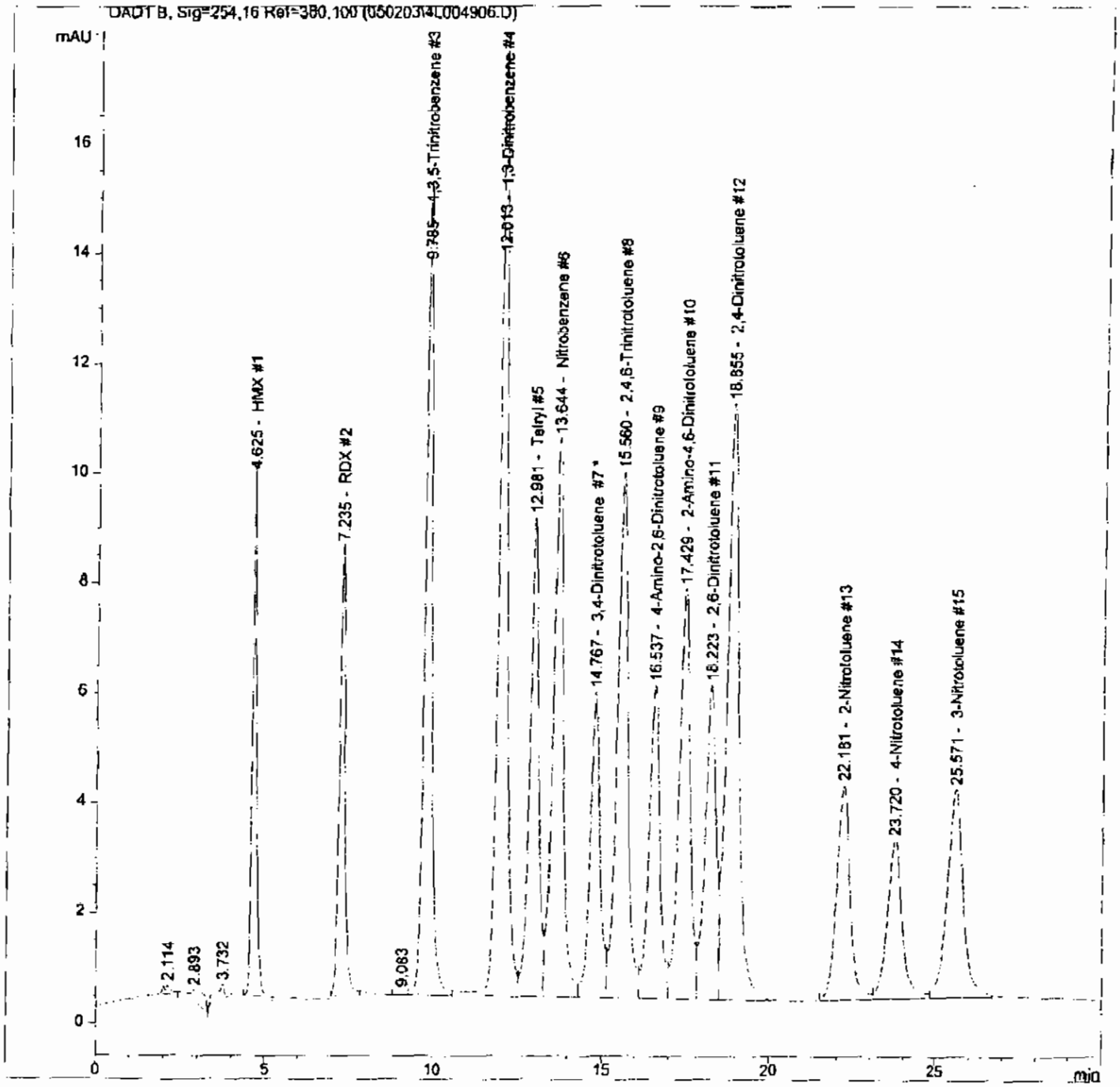

```
==================================================================
Injection Date   : 5/2/2003 7:42:56 PM            Seq. Line :   3
Sample Name      : WG139673-02 STD5                   Vial :   3
Acq. Operator    : RDC                                 Inj :   1
                                                Inj Volume : 100 µl
Acq. Method      : C:\HPCHEM\2\METHODS\8330.M
Last changed     : 4/29/2003 2:40:07 PM by RDC
Analysis Method  : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed     : 5/4/2003 4:22:23 PM by RDC
                   (modified after loading)
8330 CALIBRATION 05/02/2003 @ 23:11
==================================================================

==================================================================
                      External Standard Report
==================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Sunday, May 04, 2003 4:22:18 PM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: DAD1 B, Sig=254,16 Ref=360,100
```

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
4.625	BBA	81.70618	5.97421	488.13018		HMX #1
7.235	PBA	94.78035	5.13099	486.31724		RDX #2
9.785	VB	217.77176	2.29006	498.71122		1,3,5-Trinitrobenzene #3
12.013	BV	291.93634	1.71290	500.05789		1,3-Dinitrobenzene #4
12.981	VV	160.47656	3.17761	509.93238		Tetryl #5
13.644	VV	193.49026	2.62772	508.43788		Nitrobenzene #6
14.767	VV	111.83913	4.61470	516.10436		3,4-Dinitrotoluene #7 *
15.560	VV	203.73759	2.47454	504.15657		2,4,6-Trinitrotoluene #8
16.537	VV	125.79243	4.05494	510.08062		4-Amino-2,6-Dinitrotoluen
17.429	VV	171.46715	2.92078	500.81704		2-Amino-4,6-Dinitrotoluen
18.223	VV	131.02063	3.79092	496.68818		2,6-Dinitrotoluene #11
18.855	VB	267.79782	1.84415	493.85976		2,4-Dinitrotoluene #12
22.181	BB	107.90704	4.59832	496.19145		2-Nitrotoluene #13
23.720	BB	87.53891	5.84997	512.10010		4-Nitrotoluene #14
25.571	BB	122.69504	4.13797	507.70825		3-Nitrotoluene #15
Totals :				8276.52406		

```
 Results obtained with enhanced integrator!
==================================================================
                      *** End of Report ***
```

```
==================================================================
Injection Date   : 5/2/2003 8:35:07 PM          Seq. Line :   4
Sample Name      : WG139673-03 STD4                  Vial :   4
Acq. Operator    : RDC                               Inj :   1
                                               Inj Volume : 100 µl
Acq. Method      : C:\HPCHEM\2\METHODS\8330.M
Last changed     : 4/29/2003 2:40:07 PM by RDC
Analysis Method  : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed     : 5/4/2003 4:23:33 PM by RDC
                   (modified after loading)
8330 CALIBRATION 05/02/2003 @ 23:11
==================================================================
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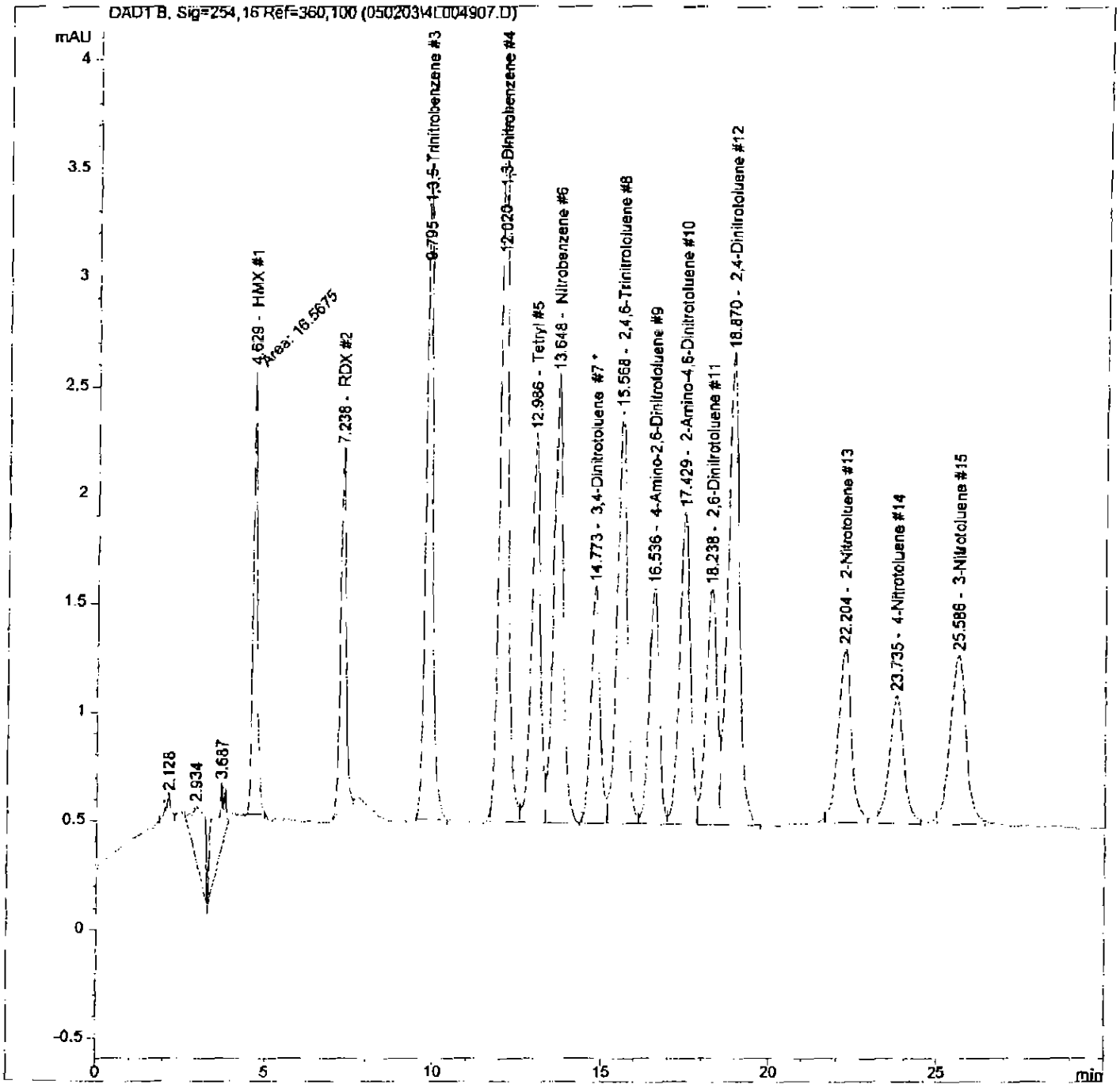
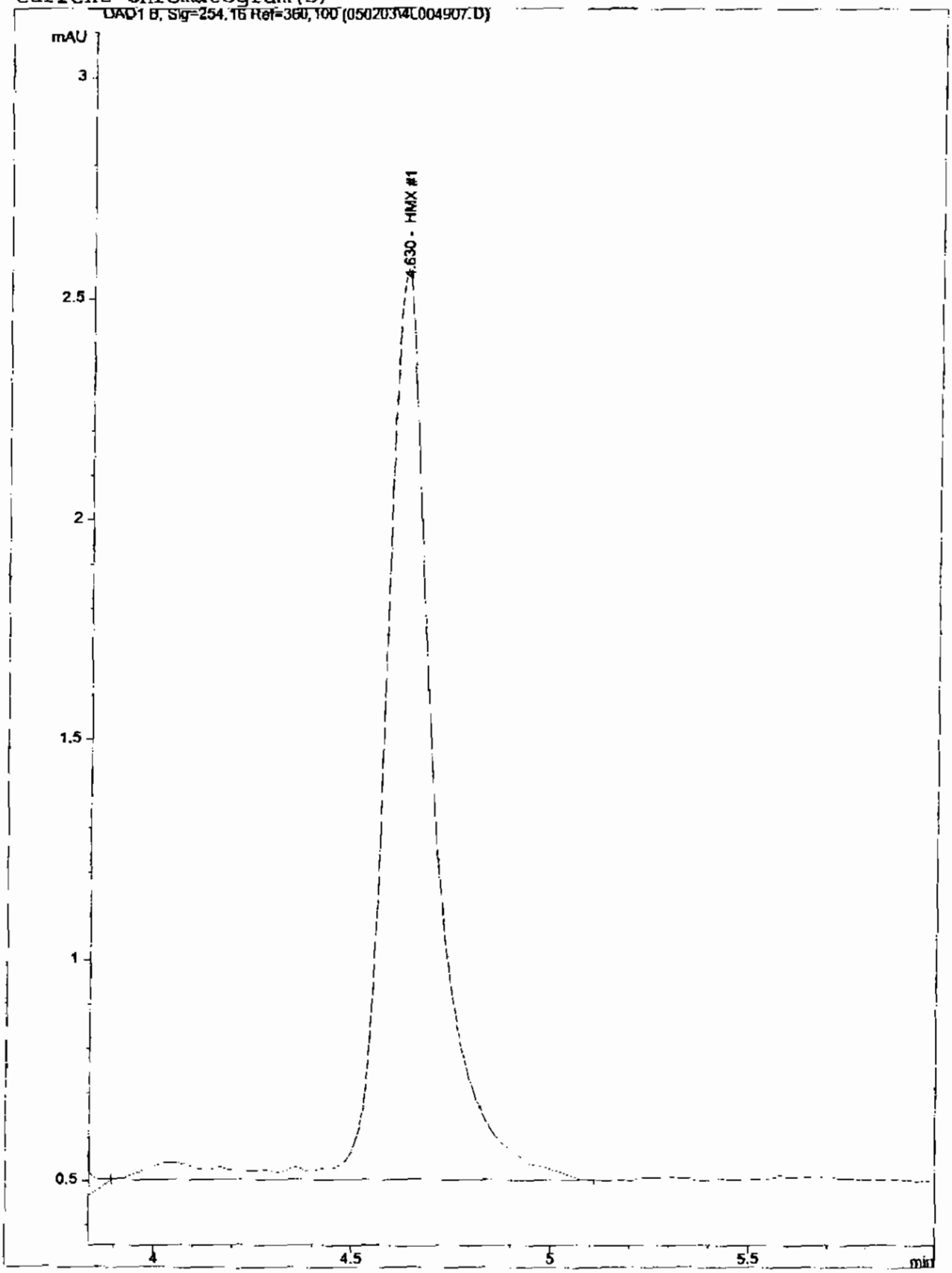
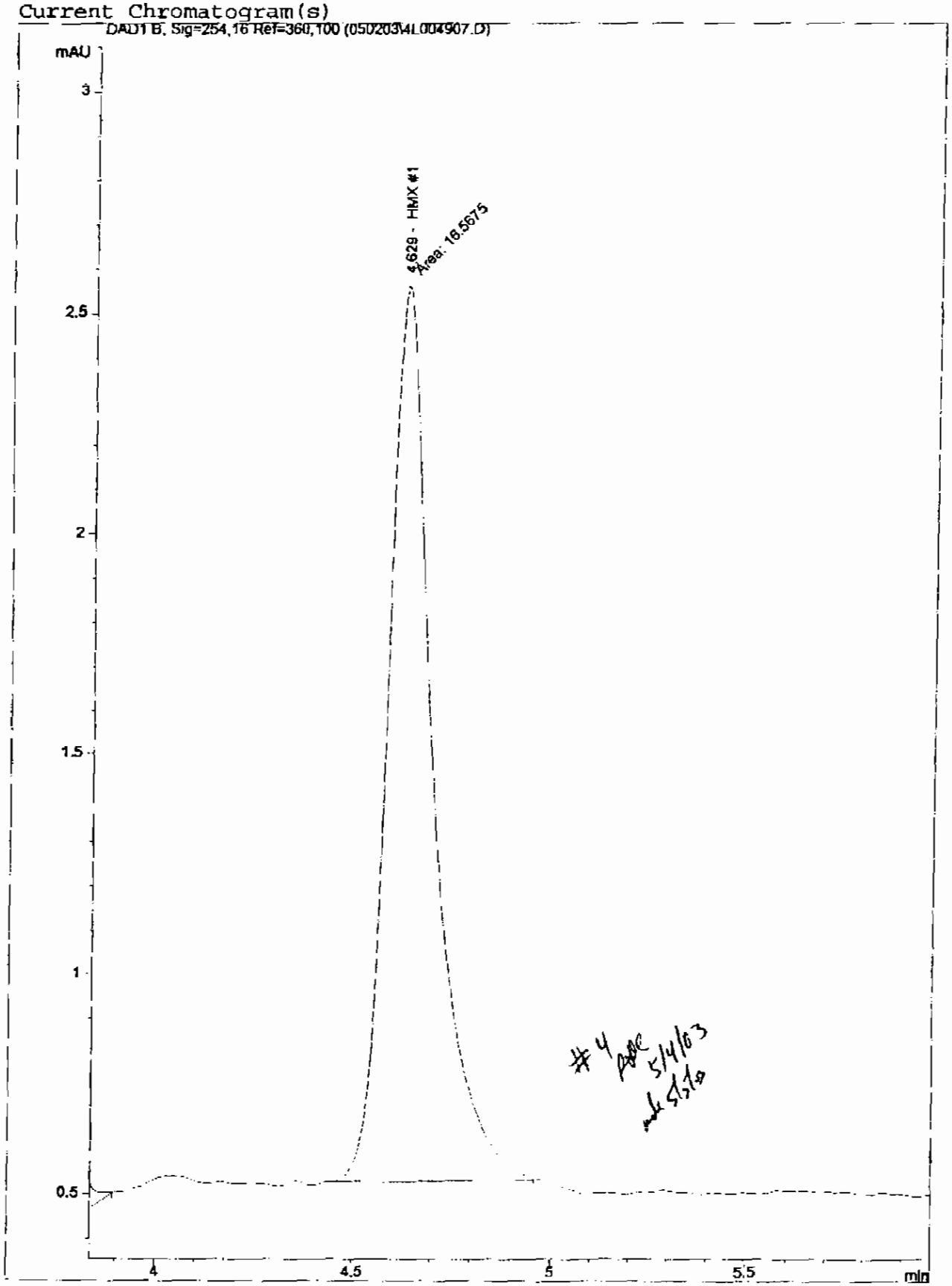


Current Chromatogram(s)



Current Chromatogram(s)



HPLC4 5/4/2003 4:23:25 PM RDC

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==========================================================================
Injection Date  : 5/2/2003 8:35:07 PM                Seq. Line :   4
Sample Name     : WG139673-03 STD4                        Vial :   4
Acq. Operator   : RDC                                      Inj :   1
                                                     Inj Volume : 100 µl
Acq. Method     : C:\HPCHEM\2\METHODS\8330.M
Last changed    : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed    : 5/4/2003 4:23:33 PM by RDC
                  (modified after loading)
8330 CALIBRATION 05/02/2003 @ 23:11
==========================================================================

==========================================================================
                        External Standard Report
==========================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Sunday, May 04, 2003 4:23:31 PM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: DAD1 B, Sig=254,16 Ref=360,100
```

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
4.629	MM	16.56754	4.86004	80.51889		HMX #1
7.238	PBA	18.25620	4.85856	88.69892		RDX #2
9.795	PB	43.17253	2.06416	89.11495		1,3,5-Trinitrobenzene #3
12.020	BV	58.97837	1.53728	90.66656		1,3-Dinitrobenzene #4
12.986	VV	32.31647	2.82001	91.13263		Tetryl #5
13.648	VB	38.17598	2.33018	88.95675		Nitrobenzene #6
14.773	BV	20.79393	4.10639	85.38806		3,4-Dinitrotoluene #7 *
15.568	VV	38.32570	2.23549	85.67674		2,4,6-Trinitrotoluene #8
16.536	VV	21.89131	3.71370	81.29775		4-Amino-2,6-Dinitrotoluen
17.429	VV	30.86336	2.69700	83.23835		2-Amino-4,6-Dinitrotoluen
18.238	VV	24.05506	3.49728	84.12729		2,6-Dinitrotoluene #11
18.870	VP	51.78456	1.68414	87.21249		2,4-Dinitrotoluene #12
22.204	BB	22.40642	4.08722	91.58006		2-Nitrotoluene #13
23.735	BB	17.42019	5.09406	88.73946		4-Nitrotoluene #14
25.586	BB	24.64791	3.63301	89.54599		3-Nitrotoluene #15

Totals : 1903.72625

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Negative results set to zero (cal. curve intercept)

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*** End of Report ***

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==================================================================
Injection Date   : 5/2/2003 9:27:16 PM              Seq. Line :   5
Sample Name      : WG139673-04 STD3                      Vial :   5
Acq. Operator    : RDC                                    Inj :   1
                                                   Inj Volume : 100 µl
Acq. Method      : C:\HPCHEM\2\METHODS\8330.M
Last changed     : 4/29/2003 2:40:07 PM by RDC
Analysis Method  : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed     : 5/4/2003 4:24:39 PM by RDC
                   (modified after loading)
8330 CALIBRATION 05/02/2003 @ 23:11
==================================================================
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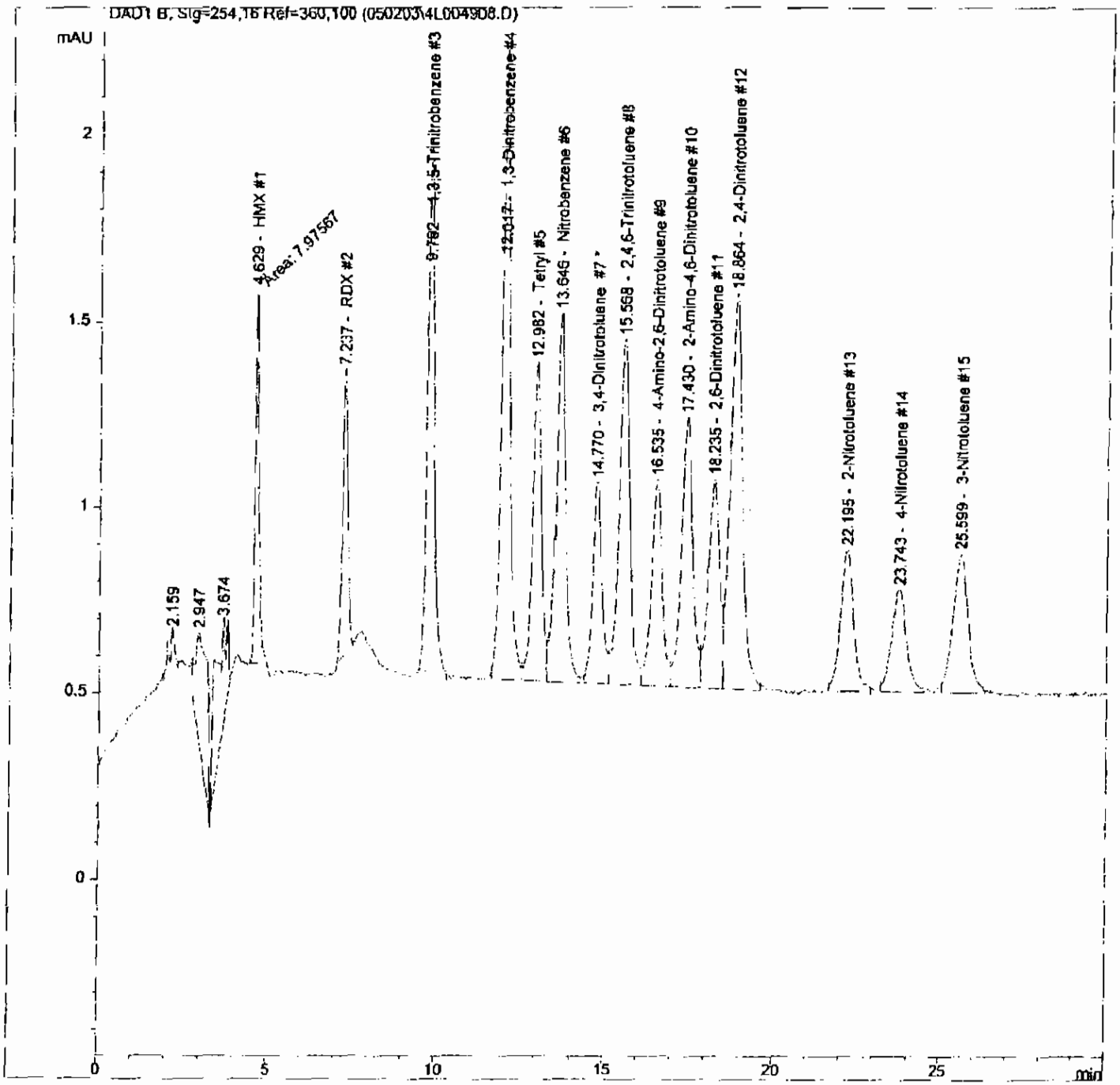
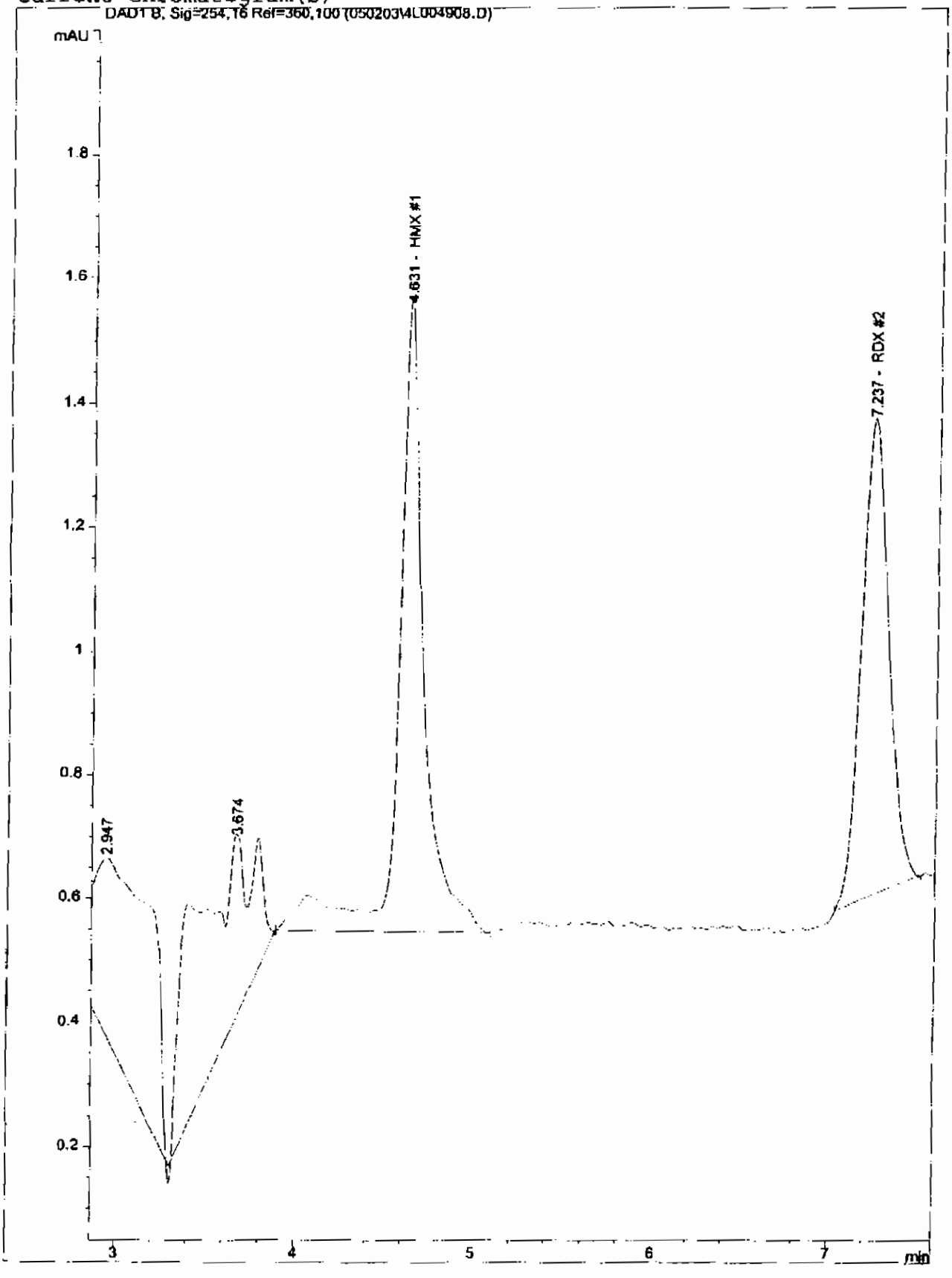


Current Chromatogram(s)



HPLC4 5/4/2003 4:24:04 PM RDC

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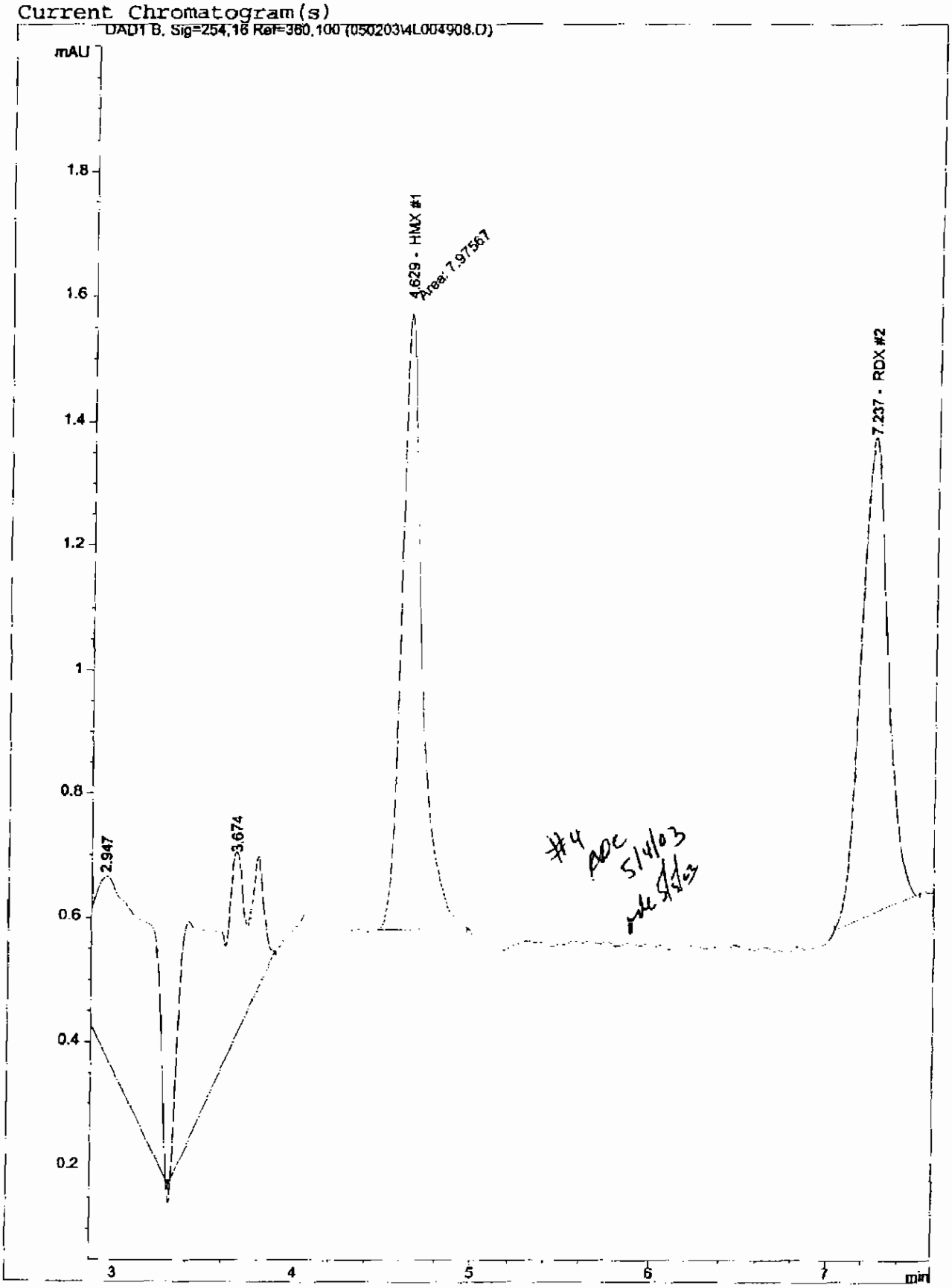
Current Chromatogram(s)



HPLC4 5/4/2003 4:24:30 PM RDC

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==================================================================
Injection Date  : 5/2/2003 9:27:16 PM            Seq. Line :   5
Sample Name     : WG139673-04 STD3                    Vial :   5
Acq. Operator   : RDC                                  Inj :   1
                                                Inj Volume : 100 µl
Acq. Method     : C:\HPCHEM\2\METHODS\8330.M
Last changed    : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed    : 5/4/2003 4:24:39 PM by RDC
                  (modified after loading)
8330 CALIBRATION 05/02/2003 @ 23:11
==================================================================

==================================================================
                      External Standard Report
==================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Sunday, May 04, 2003 4:24:36 PM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime  Type     Area      Amt/Area    Amount   Grp   Name
 [min]          [mAU*s]                 [ug/L]
-------|------|----------|----------|----------|--|------------------
  4.629 MM        7.97567    5.00409   39.91099     HMX #1
  7.237 PBA       7.96822    6.06928   48.36135     RDX #2
  9.792 BB       20.23016    2.39585   48.46837     1,3,5-Trinitrobenzene #3
 12.017 BV       28.37236    1.76376   50.04218     1,3-Dinitrobenzene #4
 12.982 VV       15.61649    3.19632   49.91529     Tetryl #5
 13.646 VB       18.73051    2.63040   49.26876     Nitrobenzene #6
 14.770 BV       10.60707    4.61207   48.92054     3,4-Dinitrotoluene  #7 *
 15.568 VV       19.82112    2.53439   50.23442     2,4,6-Trinitrotoluene #8
 16.535 VV       12.28848    4.16877   51.22790     4-Amino-2,6-Dinitrotoluen
 17.430 VV       16.78469    3.07013   51.53125     2-Amino-4,6-Dinitrotoluen
 18.235 VV       12.96977    3.98740   51.71563     2,6-Dinitrotoluene #11
 18.864 VB       26.12951    1.93926   50.67185     2,4-Dinitrotoluene #12
 22.195 BB       10.38873    4.68500   48.67115     2-Nitrotoluene #13
 23.743 BB        8.30096    5.68027   47.15169     4-Nitrotoluene #14
 25.599 BB       11.49031    4.10644   47.18430     3-Nitrotoluene #15

Totals :                                1432.21061

 Results obtained with enhanced integrator!
==================================================================
                      *** End of Report ***
```

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==================================================================
Injection Date   : 5/2/2003 10:19:29 PM          Seq. Line :   6
Sample Name      : WG139673-05 STD2                   Vial :   6
Acq. Operator    : RDC                                 Inj :   1
                                                Inj Volume : 100 µl
Acq. Method      : C:\HPCHEM\2\METHODS\8330.M
Last changed     : 4/29/2003 2:40:07 PM by RDC
Analysis Method  : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed     : 5/4/2003 4:25:21 PM by RDC
                   (modified after loading)
8330 CALIBRATION 05/02/2003 @ 23:11
==================================================================
```
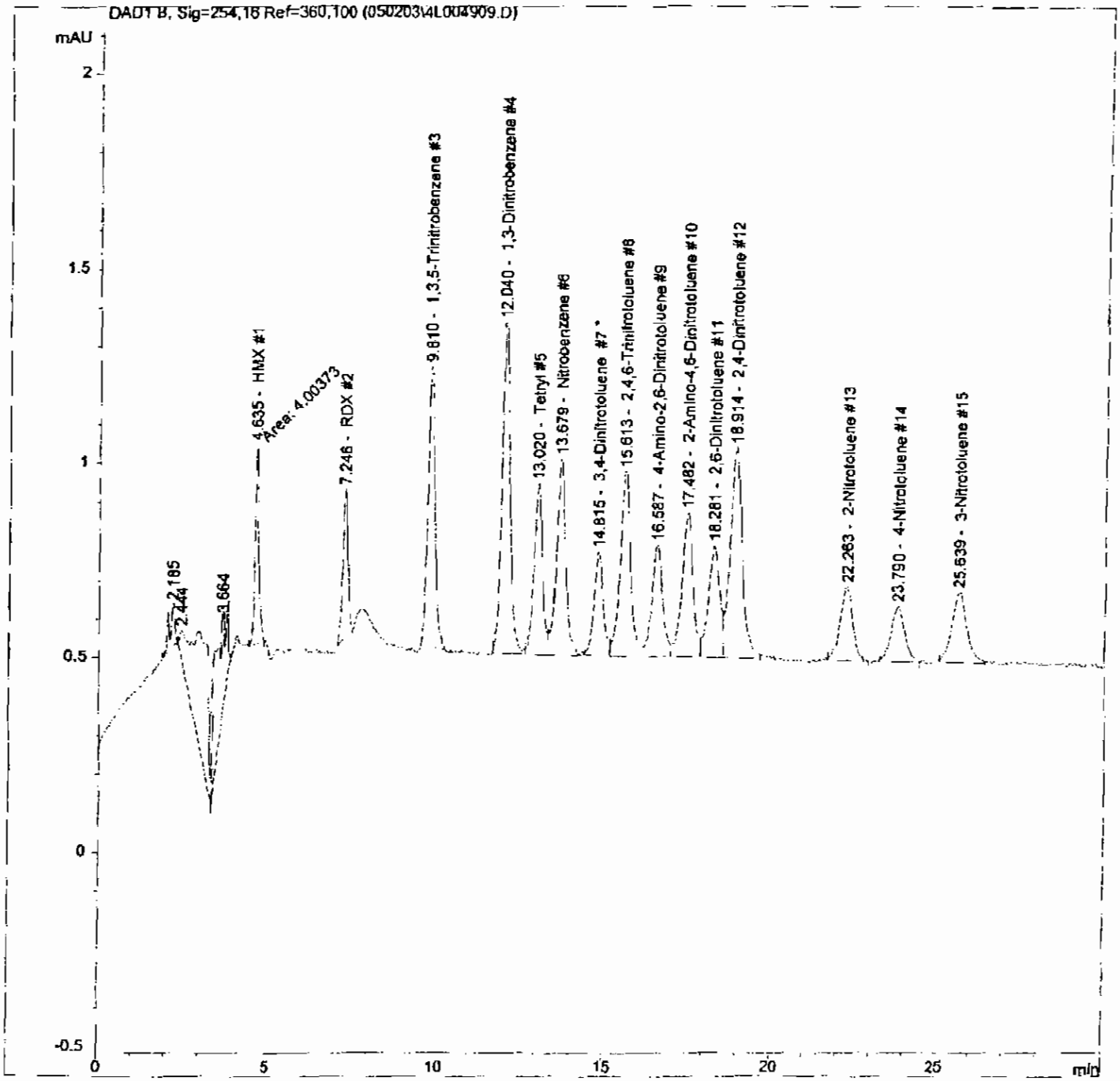
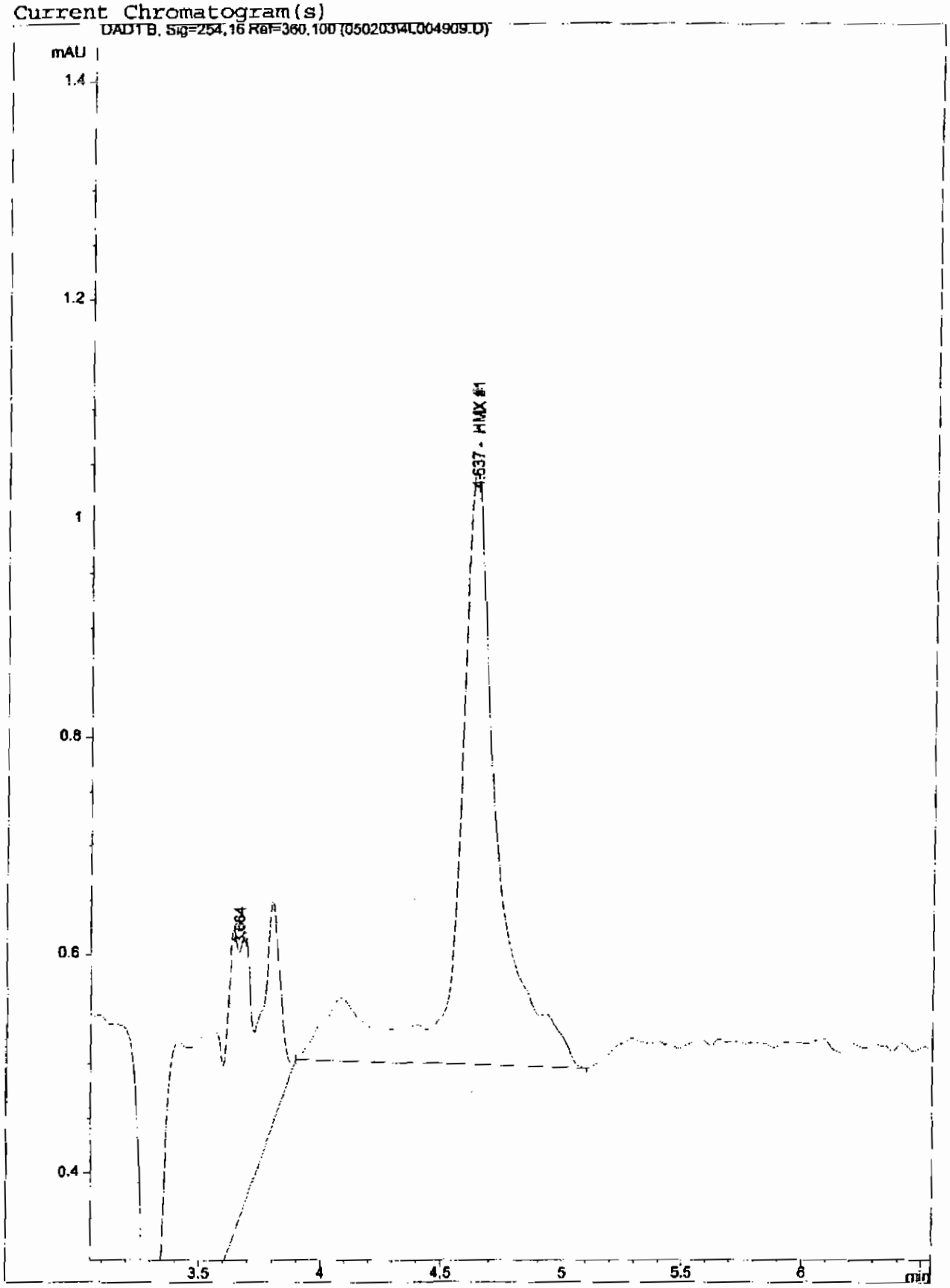



Current Chromatogram(s)



HPLC4 5/4/2003 4:25:00 PM RDC

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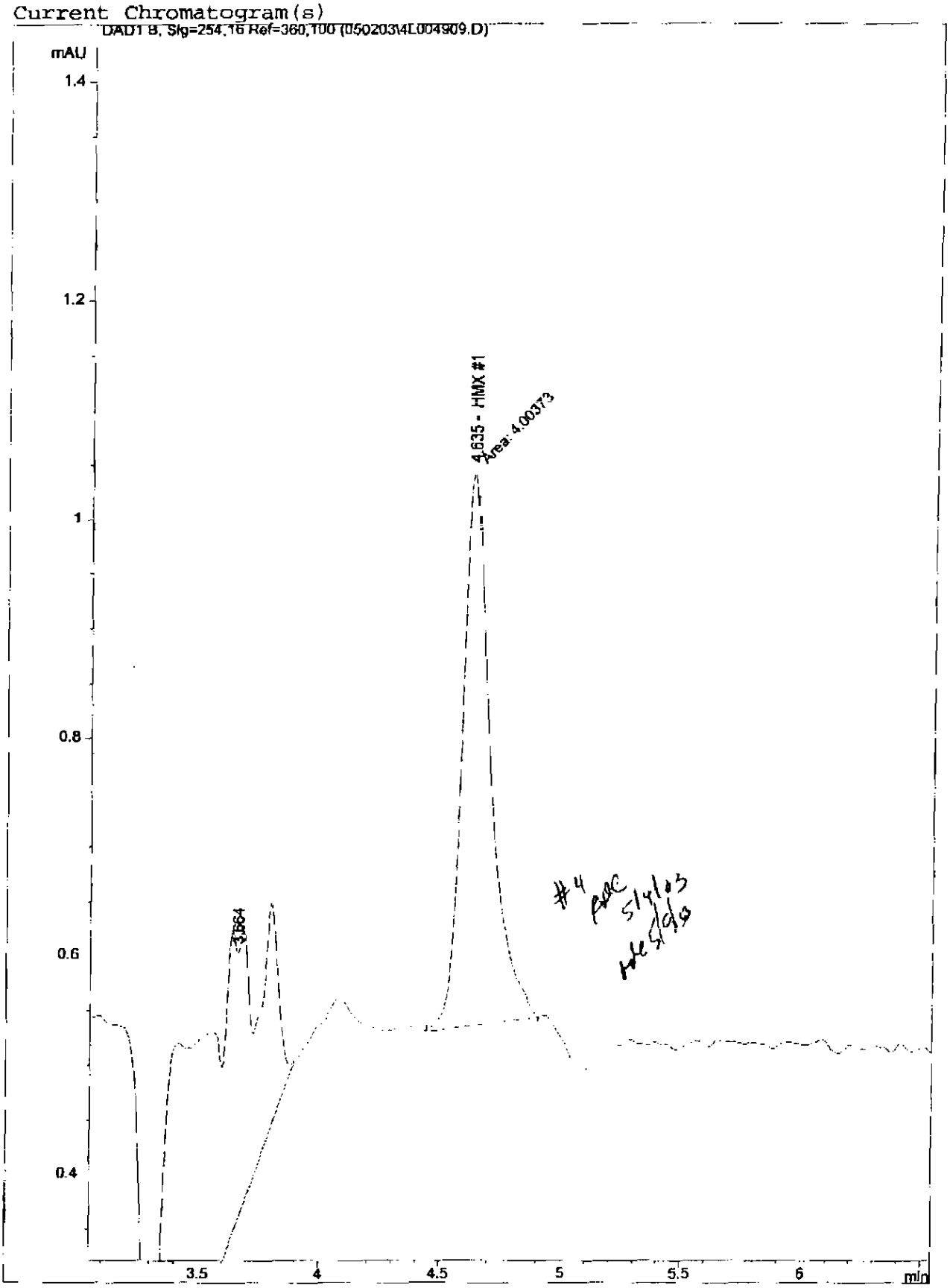
Current Chromatogram(s)



HPLC4 5/4/2003 4:25:13 PM RDC

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==================================================================
Injection Date  : 5/2/2003 10:19:29 PM          Seq. Line :   6
Sample Name     : WG139673-05 STD2                   Vial :   6
Acq. Operator   : RDC                                 Inj :   1
                                                Inj Volume : 100 µl
Acq. Method     : C:\HPCHEM\2\METHODS\8330.M
Last changed    : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed    : 5/4/2003 4:25:21 PM by RDC
                  (modified after loading)
8330 CALIBRATION 05/02/2003 @ 23:11
==================================================================

==================================================================
                      External Standard Report
==================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Sunday, May 04, 2003 4:25:18 PM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: DAD1 B, Sig=254,16 Ref=360,100
```

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
4.635	MM	4.00373	4.84956	19.41636		HMX #1
7.246	PB	3.97642	7.09765	28.22322		RDX #2
9.810	BP	10.03447	2.51434	25.23003		1,3,5-Trinitrobenzene #3
12.040	BB	14.11635	1.81142	25.57059		1,3-Dinitrobenzene #4
13.020	BV	7.80422	3.17711	24.79488		Tetryl #5
13.679	VB	9.44287	2.61137	24.65877		Nitrobenzene #6
14.815	BV	5.23684	4.56415	23.90171		3,4-Dinitrotoluene #7 *
15.613	VV	10.25914	2.58505	26.52043		2,4,6-Trinitrotoluene #8
16.587	VV	6.48298	4.25527	27.58682		4-Amino-2,6-Dinitrotoluen
17.482	VV	8.69794	3.21404	27.95549		2-Amino-4,6-Dinitrotoluen
18.281	VV	6.66755	4.18363	27.89457		2,6-Dinitrotoluene #11
18.914	VB	13.48203	2.03243	27.40132		2,4-Dinitrotoluene #12
22.263	BP	5.21716	4.78007	24.93835		2-Nitrotoluene #13
23.790	BB	4.10438	5.48857	22.52721		4-Nitrotoluene #14
25.639	BB	5.77062	4.07196	23.49774		3-Nitrotoluene #15

Totals : 1023.80556

Results obtained with enhanced integrator!

==========

*** End of Report ***

```
==================================================================
Injection Date  : 5/2/2003 11:11:43 PM          Seq. Line :   7
Sample Name     : WG139673-06 STD1                   Vial :   7
Acq. Operator   : RDC                                 Inj :   1
                                               Inj Volume : 100 µl
Acq. Method     : C:\HPCHEM\2\METHODS\8330.M
Last changed    : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed    : 5/4/2003 4:26:52 PM by RDC
                  (modified after loading)
8330 CALIBRATION 05/02/2003 @ 23:11
==================================================================
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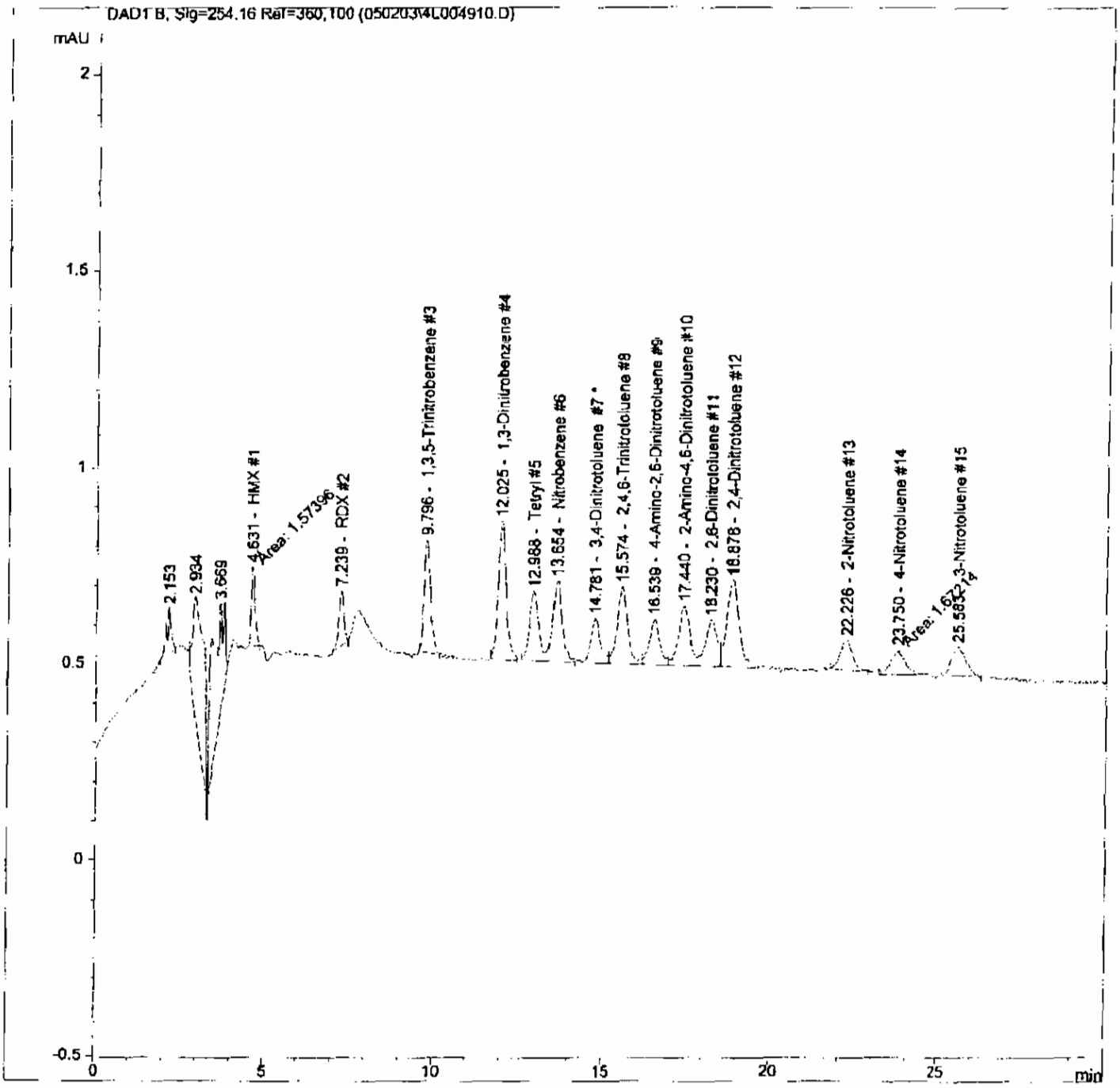
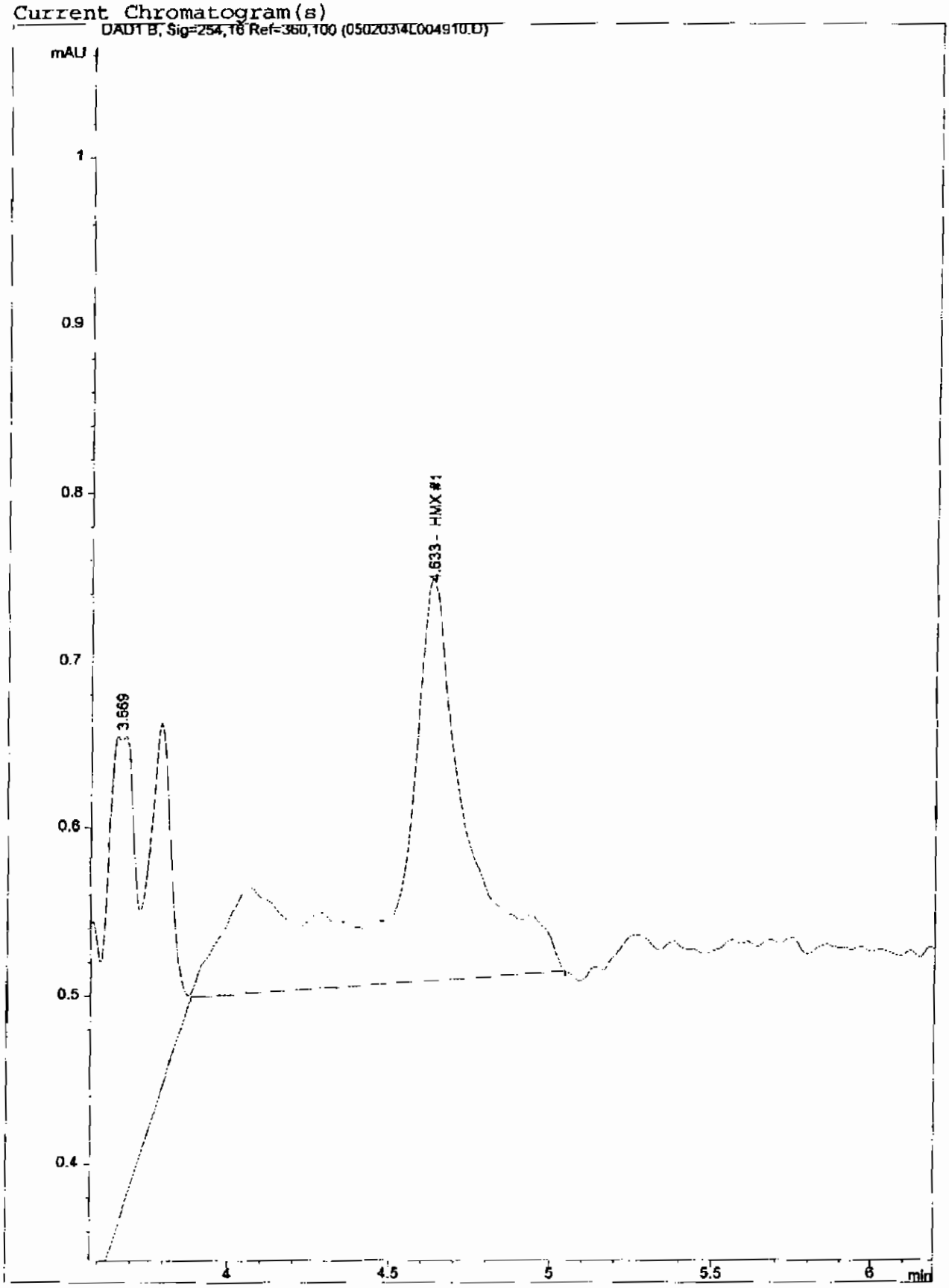
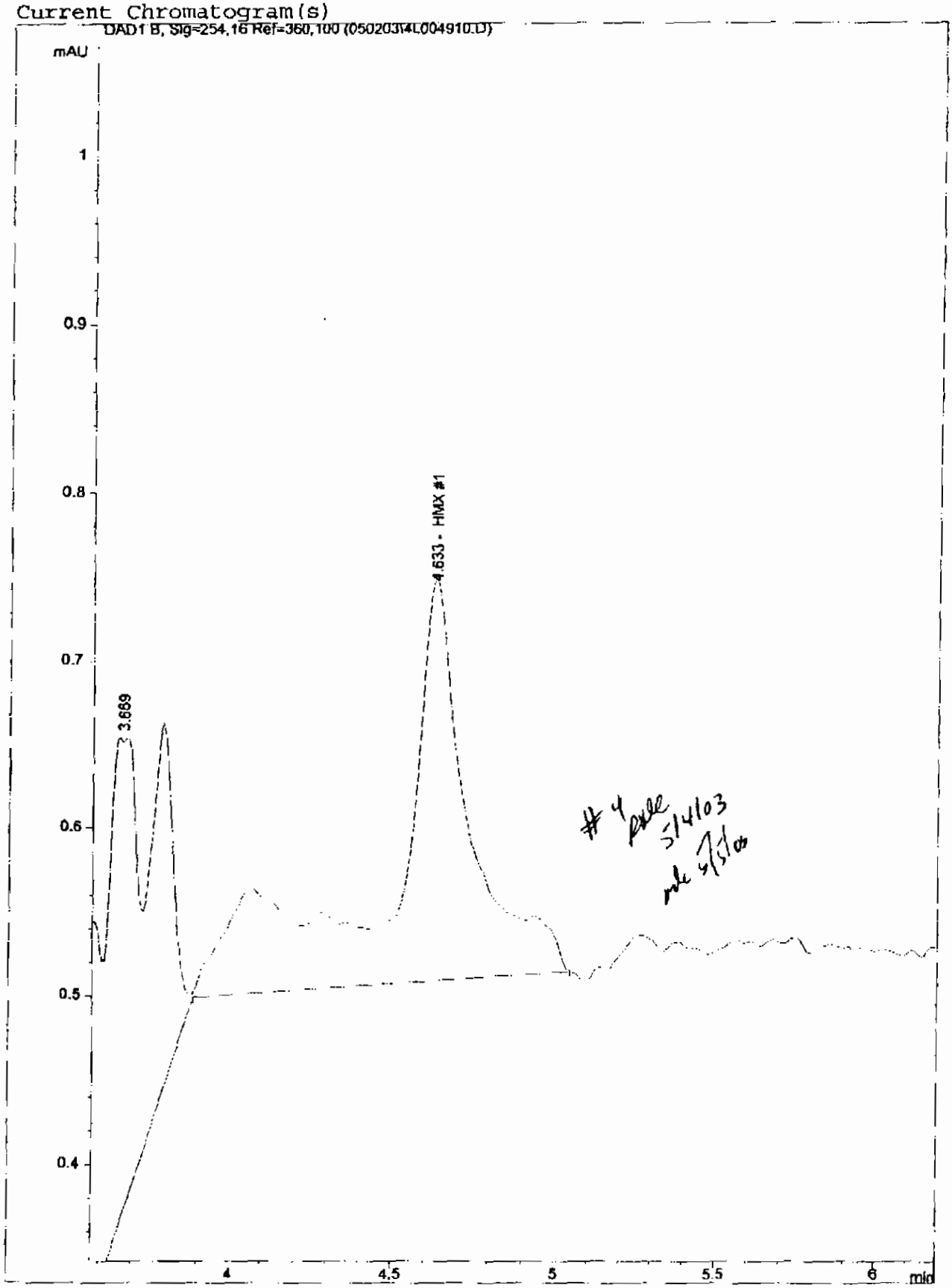


Current Chromatogram(s)



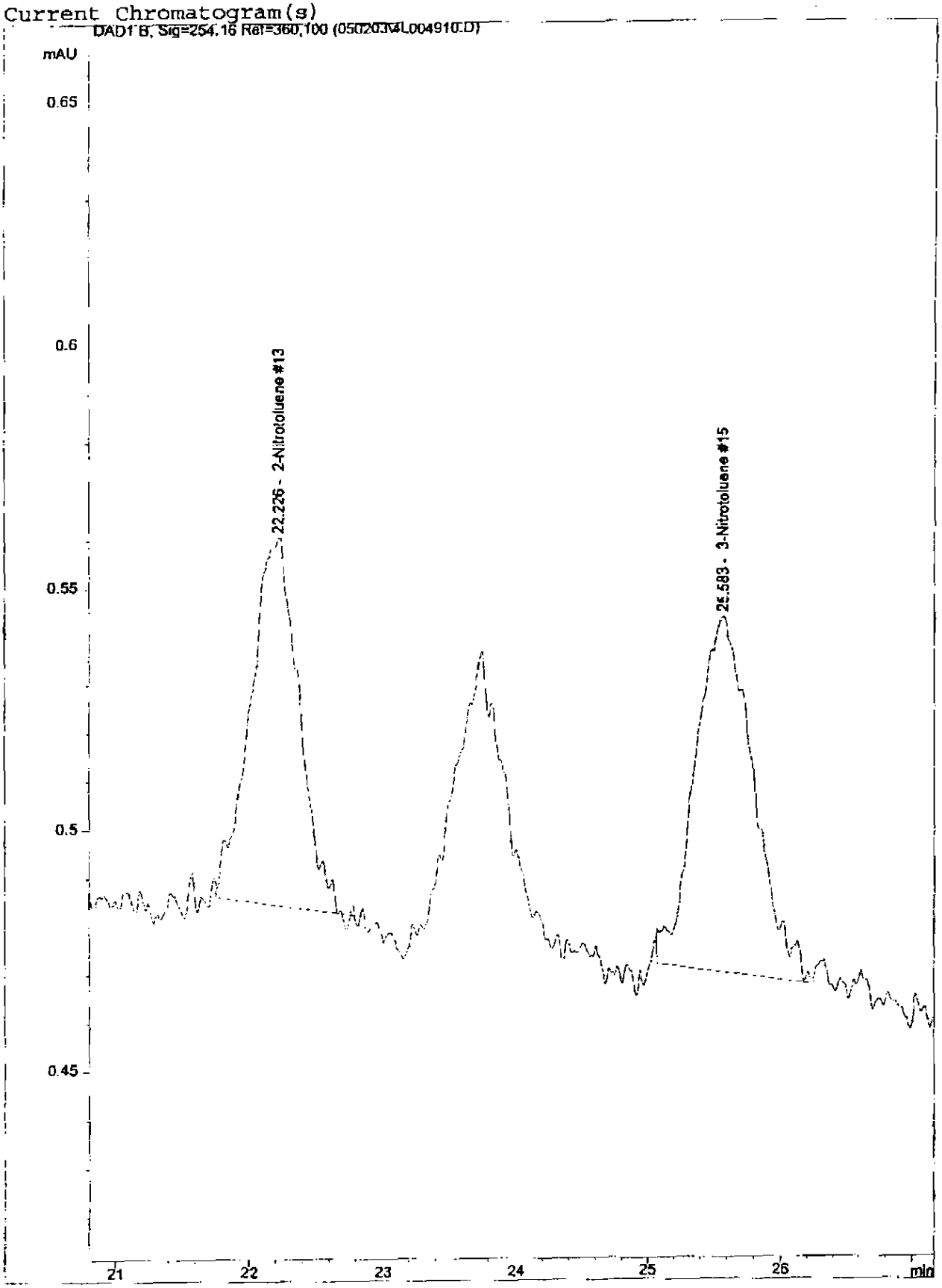
Current Chromatogram(s)



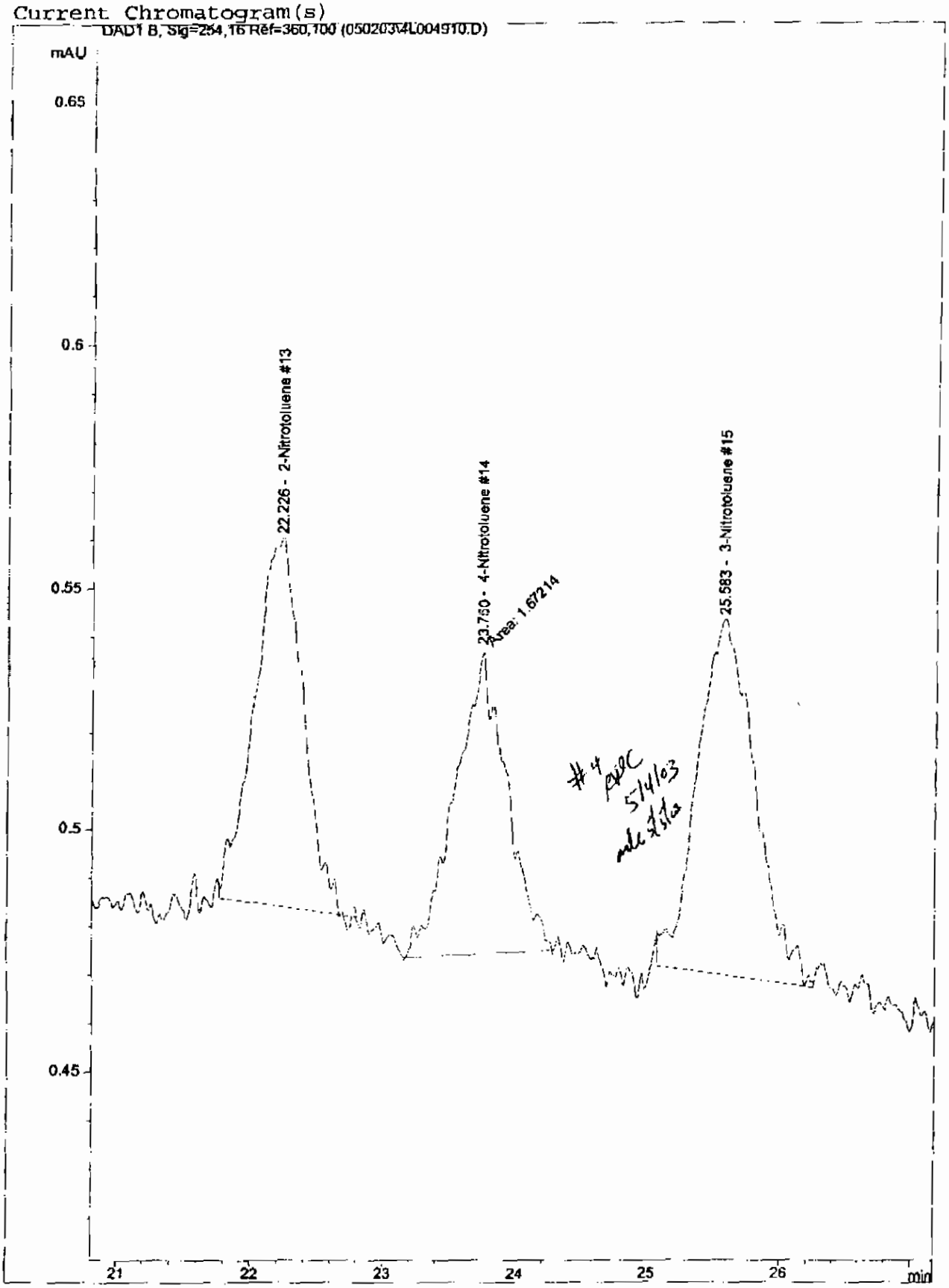
HPLC4 5/4/2003 4:25:45 PM RDC

Page 1 of 1

Current Chromatogram(s)



Current Chromatogram(s)



HPLC4 5/4/2003 4:26:43 PM RDC

Page 1 of 1

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==================================================================
Injection Date  : 5/2/2003 11:11:43 PM          Seq. Line :   7
Sample Name     : WG139673-06 STD1                   Vial :   7
Acq. Operator   : RDC                                 Inj :   1
                                               Inj Volume : 100 µl
Acq. Method     : C:\HPCHEM\2\METHODS\8330.M
Last changed    : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed    : 5/4/2003 4:26:52 PM by RDC
                  (modified after loading)
8330 CALIBRATION 05/02/2003 @ 23:11
==================================================================

==================================================================
                      External Standard Report
==================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Sunday, May 04, 2003 4:26:50 PM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime  Type     Area      Amt/Area    Amount   Grp   Name
 [min]          [mAU*s]                 [ug/L]
-------|------|----------|----------|----------|--|-----------------
  4.631 MM        1.57396    5.54064    8.72073     HMX #1
  7.239 PB        1.36909   11.00702   15.06956     RDX #2
  9.796 BB        3.88054    2.88718   11.20382     1,3,5-Trinitrobenzene #3
 12.025 BB        5.80553    1.95755   11.36463     1,3-Dinitrobenzene #4
 12.988 BV        3.14353    3.16252    9.94146     Tetryl #5
 13.654 VB        3.81040    2.56639    9.77897     Nitrobenzene #6
 14.781 BV        2.27462    4.40092   10.01043     3,4-Dinitrotoluene  #7 *
 15.574 VB        4.11333    2.72521   11.20971     2,4,6-Trinitrotoluene #8
 16.539 BV        2.57813    4.53958   11.70364     4-Amino-2,6-Dinitrotoluen
 17.440 VV        3.55554    3.64013   12.94260     2-Amino-4,6-Dinitrotoluen
 18.230 VV        2.92485    4.69159   13.72219     2,6-Dinitrotoluene #11
 18.878 VB        5.45924    2.31329   12.62882     2,4-Dinitrotoluene #12
 22.226 BB        1.91520    5.10932    9.78536     2-Nitrotoluene #13
 23.750 MM        1.67214    4.96831    8.30771     4-Nitrotoluene #14
 25.583 BB        2.21367    3.96067    8.76760     3-Nitrotoluene #15

Totals :                                851.17887

 Results obtained with enhanced integrator!
==================================================================
                      *** End of Report ***
```

Check Standard Report

==========

Data File C:\HPCHEM\2\DATA\050203\4L004911.D Sample Name: WG139673-07 ALT
HPLC4 5/4/2003 4:29:59 PM RDC

1,1 SOS64-48 50 ppb

==========

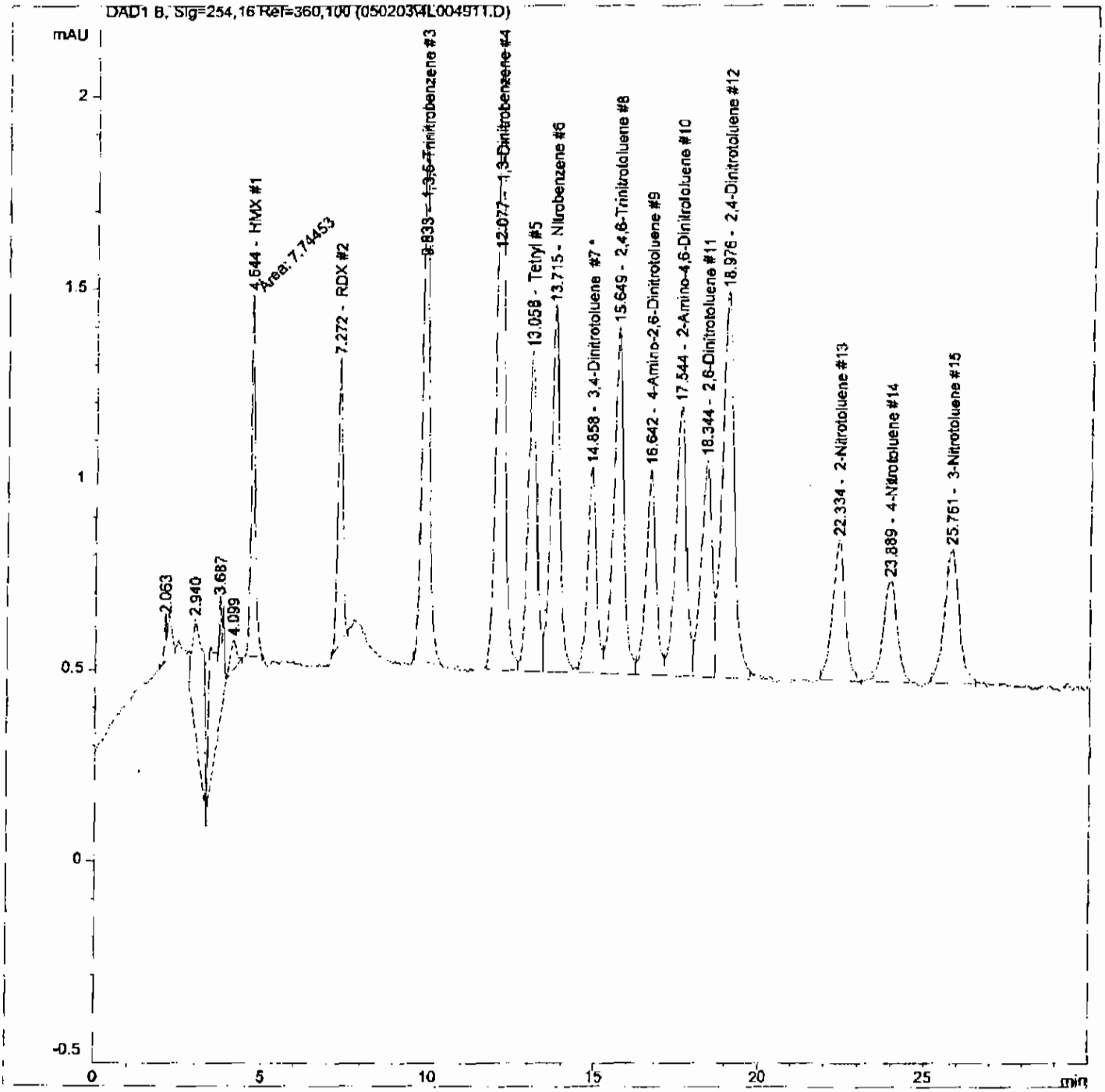
Injection Date : 5/3/2003 12:03:56 AM Seq. Line : 8

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

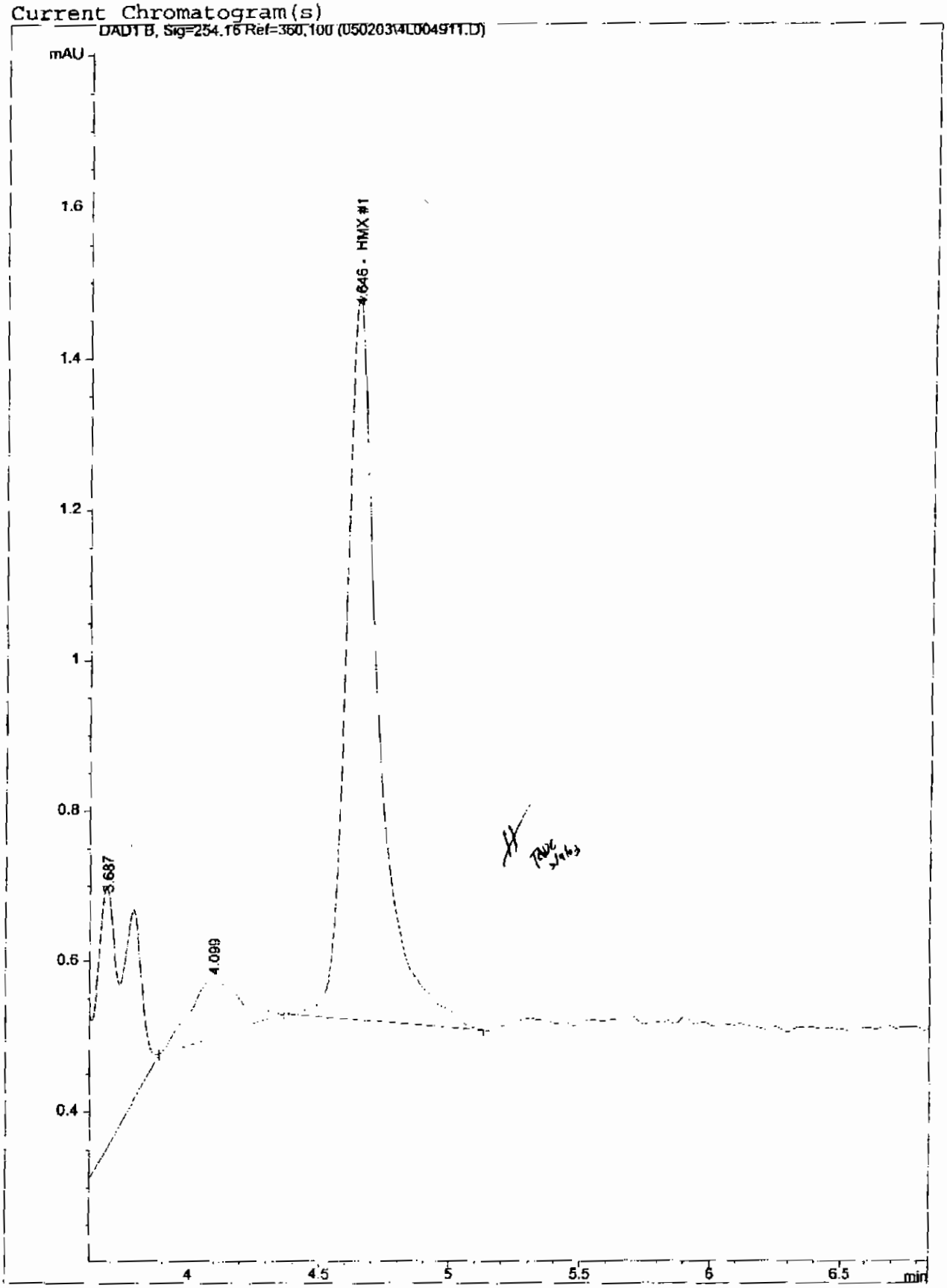
Compound	RT	Known Conc.	Cal. Conc.	%D
HMX #1	4.644	50.0	45.982	-8.0
RDX #2	7.272	50.0	47.403	-5.2
1,3,5-Trinitrobenzene #3	9.833	50.0	47.765	-4.5
1,3-Dinitrobenzene #4	12.077	50.0	48.175	-3.7
Tetryl #5	13.058	50.0	47.563	-4.9
Nitrobenzene #6	13.715	50.0	46.391	-7.2
3,4-Dinitrotoluene #7 *	14.858	50.0	47.381	-5.2
2,4,6-Trinitrotoluene #8	15.649	50.0	48.652	-2.7
4-Amino-2,6-Dinitrotolue	16.642	50.0	48.562	-2.9
2-Amino-4,6-Dinitrotolue	17.544	50.0	50.209	0.4
2,6-Dinitrotoluene #11	18.344	50.0	52.318	4.6
2,4-Dinitrotoluene #12	18.976	50.0	48.767	-2.5
2-Nitrotoluene #13	22.334	50.0	46.823	-6.4
4-Nitrotoluene #14	23.889	50.0	44.180	-11.6
3-Nitrotoluene #15	25.761	50.0	45.409	-9.2

* = Failed 15.0% Criteria

```
==================================================================
Injection Date   : 5/3/2003 12:03:56 AM          Seq. Line :   8
Sample Name      : WG139673-07 ALT                    Vial :   8
Acq. Operator    : RDC                                 Inj :   1
                                                Inj Volume : 100 µl
Acq. Method      : C:\HPCHEM\2\METHODS\8330.M
Last changed     : 4/29/2003 2:40:07 PM by RDC
Analysis Method  : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed     : 5/4/2003 4:27:15 PM by RDC
8330 CALIBRATION 05/02/2003 @ 23:11
==================================================================
```



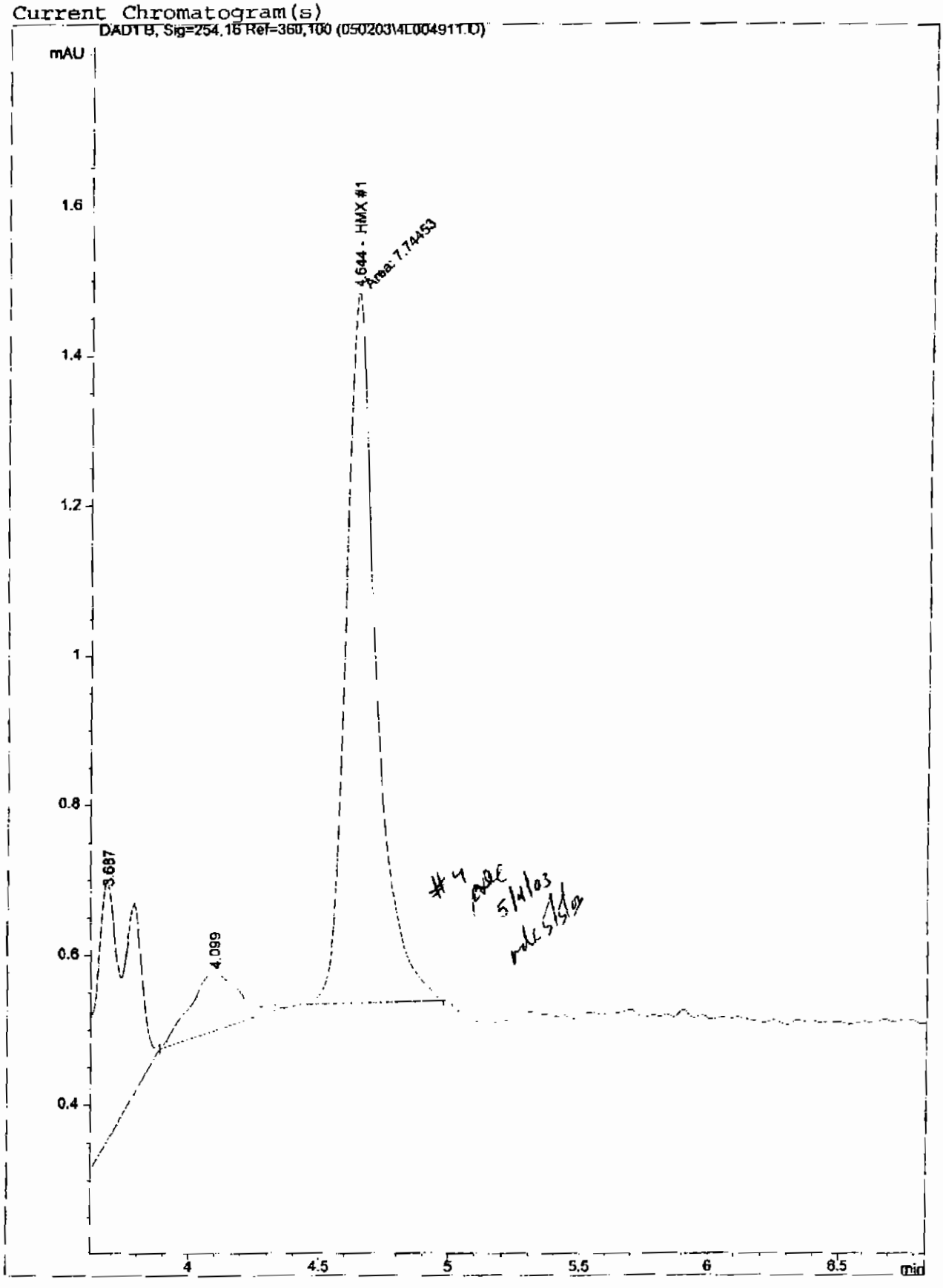
Current Chromatogram(s)



HPLC4 5/4/2003 4:29:32 PM RDC

Page 1 of 1

Current Chromatogram(s)



HPLC4 5/4/2003 4:29:56 PM RDC

Page 1 of 1

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==================================================================
Injection Date  : 5/3/2003 12:03:56 AM          Seq. Line :   8
Sample Name     : WG139673-07 ALT                    Vial :   8
Acq. Operator   : RDC                                 Inj :   1
                                                Inj Volume : 100 µl
Acq. Method     : C:\HPCHEM\2\METHODS\8330.M
Last changed    : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed    : 5/4/2003 4:27:15 PM by RDC
8330 CALIBRATION 05/02/2003 @ 23:11
==================================================================

==================================================================
                      External Standard Report
==================================================================

Sorted By              :      Signal
Calib. Data Modified   :      5/4/2003 4:27:13 PM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime  Type     Area      Amt/Area    Amount   Grp   Name
 [min]          [mAU*s]                 [ug/L]
-------|------|----------|----------|----------|--|-----------------
  4.644 MM        7.74453    5.93733   45.98187     HMX #1
  7.272 PBA       7.77821    6.09430   47.40274     RDX #2
  9.833 BP       19.92147    2.39765   47.76478     1,3,5-Trinitrobenzene #3
 12.077 BB       27.37036    1.76011   48.17475     1,3-Dinitrobenzene #4
 13.058 BV       14.99512    3.17190   47.56300     Tetryl #5
 13.715 VB       17.74767    2.61391   46.39076     Nitrobenzene #6
 14.858 BV       10.37263    4.56786   47.38071     3,4-Dinitrotoluene  #7 *
 15.649 VV       19.28394    2.52293   48.65202     2,4,6-Trinitrotoluene #8
 16.642 VV       11.69730    4.15153   48.56163     4-Amino-2,6-Dinitrotoluen
 17.544 VV       16.38657    3.06404   50.20904     2-Amino-4,6-Dinitrotoluen
 18.344 VV       13.16455    3.97414   52.31779     2,6-Dinitrotoluene #11
 18.976 VB       25.16400    1.93797   48.76707     2,4-Dinitrotoluene #12
 22.334 BB        9.98604    4.68886   46.82318     2-Nitrotoluene #13
 23.889 BB        7.78606    5.67427   44.18018     4-Nitrotoluene #14
 25.761 BB       11.06168    4.10509   45.40922     3-Nitrotoluene #15

Totals :                                1399.83579

 Results obtained with enhanced integrator!
==================================================================
                      *** End of Report ***
```

Calibration Table

Calib. Data Modified : 5/8/2003 4:33:10 PM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 0.000 %
Abs. Reference Window : 0.000 min
Rel. Non-ref. Window : 0.000 %
Abs. Non-ref. Window : 0.500 min
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Included
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: VWD1 A, Wavelength=254 nm

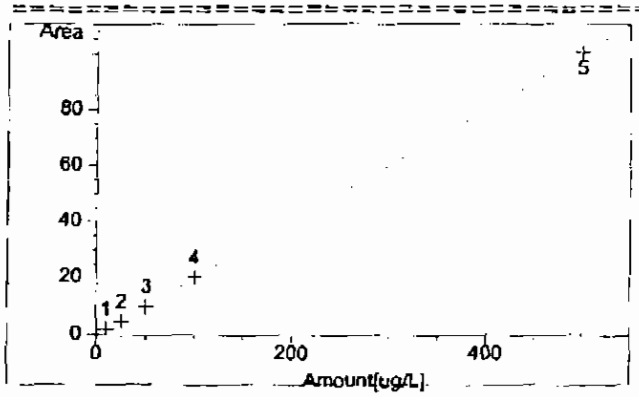
RetTime [min]	Sig	Lvl	Amount [ug/L]	Area	Amt/Area	Ref	Grp	Name
9.260	1	1	10.00000	2.05950	4.85554			NITROBENZENE #1
		2	25.00000	4.79408	5.21476			
		3	50.00000	9.95405	5.02308			
		4	100.00000	20.21405	4.94705			
		5	500.00000	100.27930	4.98607			
10.193	1	1	10.00000	3.72299	2.68602			1,3-DNB #2
		2	25.00000	7.50001	3.33333			
		3	50.00000	15.38106	3.25075			
		4	100.00000	32.38007	3.08832			
		5	500.00000	162.16501	3.08328			
10.967	1	1	10.00000	2.49225	4.01243			1,3,5-TNB #3
		2	25.00000	5.29287	4.72333			
		3	50.00000	11.85682	4.21698			
		4	100.00000	23.32750	4.28679			
		5	500.00000	116.02787	4.30931			
11.764	1	1	10.00000	1.13590	8.80361			RDX #4
		2	25.00000	2.81029	8.89587			
		3	50.00000	5.15361	9.70194			
		4	100.00000	11.21506	8.91658			
		5	500.00000	53.96355	9.26551			

RetTime [min]	Sig	Lvl	Amount [ug/L]	Area	Amt/Area	Ref	Grp	Name
15.063	1	1	10.00000	3.24478	3.08187			2,4-DNT #5
		2	25.00000	8.49988	2.94122			
		3	50.00000	14.48293	3.45234			
		4	100.00000	29.25875	3.41778			
		5	500.00000	145.31290	3.44085			
16.453	1	1	10.00000	2.37249	4.21498			2-AMINO-4,6-DNT #6
		2	25.00000	4.67659	5.34577			
		3	50.00000	10.42155	4.79775			
		4	100.00000	20.63287	4.84664			
		5	500.00000	105.00517	4.76167			
17.403	1	1	10.00000	1.40340	7.12556			2,4,6-TNT #7
		2	25.00000	1.85295	13.49202			
		3	50.00000	4.61360	10.83751			
		4	100.00000	7.75884	12.88852			
		5	500.00000	39.28994	12.72591			
18.740	1	1	10.00000	2.63853	3.78999			HMX #8
		2	25.00000	5.70885	4.37917			
		3	50.00000	11.06793	4.51756			
		4	100.00000	22.20990	4.50250			
		5	500.00000	112.03613	4.46285			
19.379	1	1	10.00000	2.00231	4.99423			3,4-DNT SURR. #9
		2	25.00000	3.72121	6.71825			
		3	50.00000	6.01880	8.30730			
		4	100.00000	13.45266	7.43347			
		5	500.00000	66.32304	7.53886			

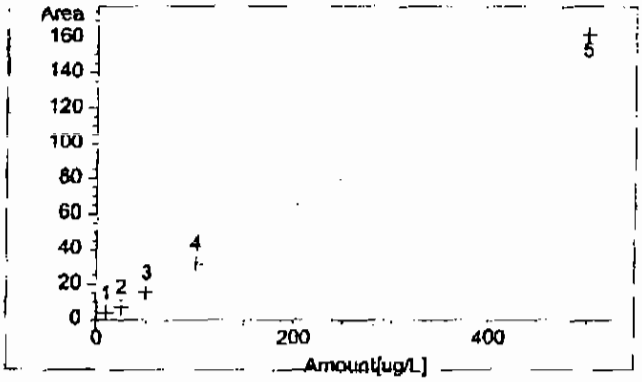
Peak Sum Table

No Entries in table

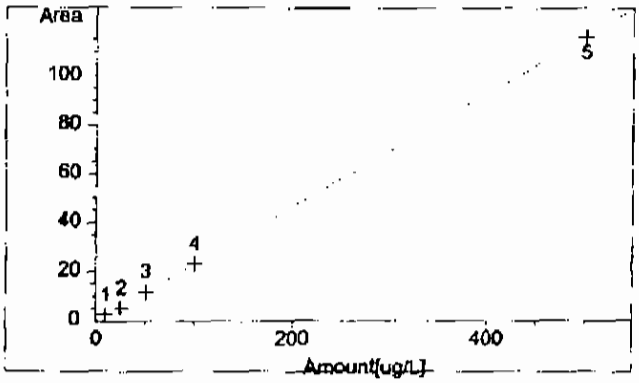
Calibration Curves



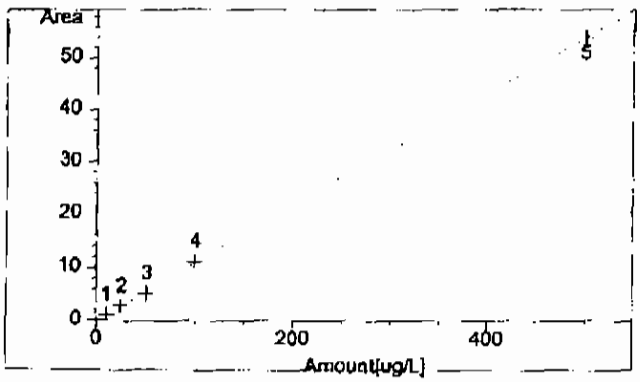
NITROBENZENE #1 at exp. RT: 9.260
VWD1 A, Wavelength=254 nm
Correlation: 0.99999
Residual Std. Dev.: 0.14067
Formula: y = mx + b
m: 2.00648e-1
b: -2.37832e-2
x: Amount [ug/L]
y: Area



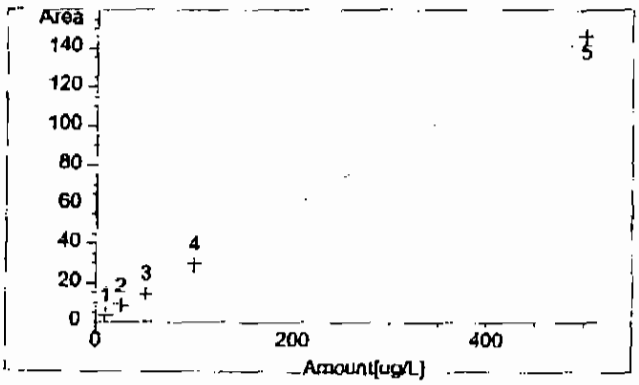
1,3-DNB #2 at exp. RT: 10.193
VWD1 A, Wavelength=254 nm
Correlation: 0.99997
Residual Std. Dev.: 0.52675
Formula: y = mx + b
m: 3.24647e-1
b: -2.05663e-1
x: Amount [ug/L]
y: Area



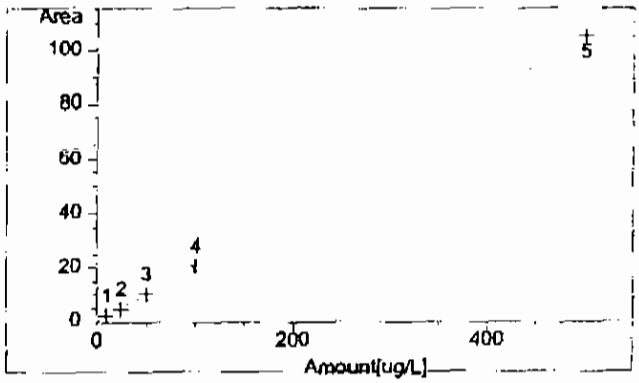
1,3,5-TNB #3 at exp. RT: 10.967
VWD1 A, Wavelength=254 nm
Correlation: 0.99998
Residual Std. Dev.: 0.30279
Formula: y = mx + b
m: 2.32107e-1
b: 7.04232e-4
x: Amount [ug/L]
y: Area



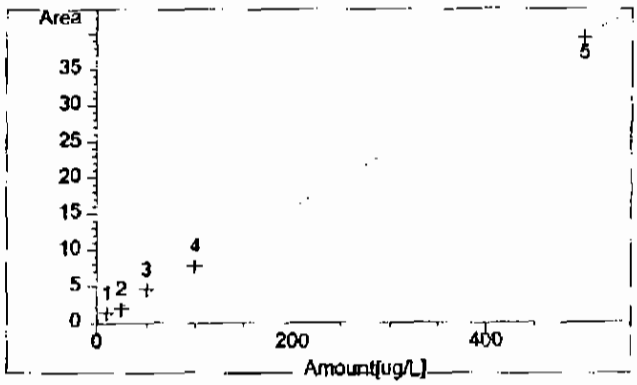
RDX #4 at exp. RT: 11.764
VWD1 A, Wavelength=254 nm
Correlation: 0.99995
Residual Std. Dev.: 0.24116
Formula: y = mx + b
m: 1.07893e-1
b: 6.19452e-2
x: Amount [ug/L]
y: Area



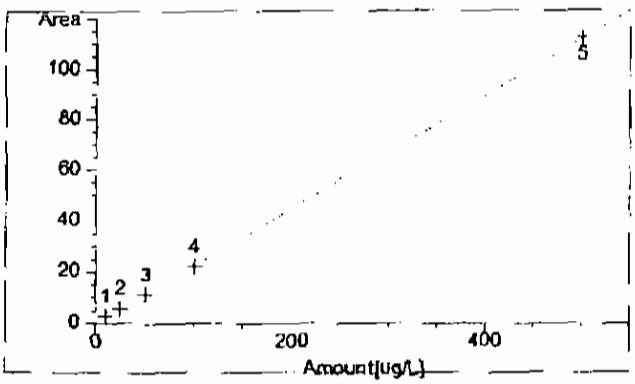
2,4-DNT #5 at exp. RT: 15.063
VWD1 A, Wavelength=254 nm
Correlation: 0.99997
Residual Std. Dev.: 0.51763
Formula: y = mx + b
m: 2.89842e-1
b: 3.76230e-1
x: Amount [ug/L]
y: Area



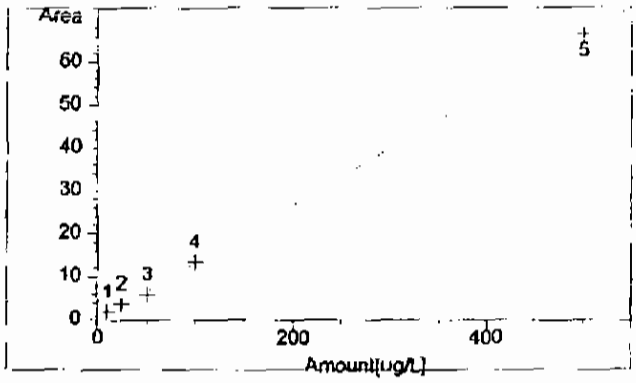
2-AMINO-4,6-DNT #6 at exp. RT: 16.453
VWD1 A, Wavelength=254 nm
Correlation: 0.99997
Residual Std. Dev.: 0.33385
Formula: y = mx + b
m: 2.10189e-1
b: -1.45136e-1
x: Amount [ug/L]
y: Area



2,4,6-TNT #7 at exp. RT: 17.403
VWD1 A, Wavelength=254 nm
Correlation: 0.99972
Residual Std. Dev.: 0.39467
Formula: y = mx + b
m: 7.80561e-2
b: 2.41718e-1
x: Amount [ug/L]
y: Area



HMX #8 at exp. RT: 18.740
VWD1 A, Wavelength=254 nm
Correlation: 0.99999
Residual Std. Dev.: 0.23114
Formula: y = mx + b
m: 2.23859e-1
b: 5.30015e-2
x: Amount [ug/L]
y: Area



3,4-DNT SURR. #9 at exp. RT: 19.379
VWD1 A, Wavelength=254 nm
Correlation: 0.99986
Residual Std. Dev.: 0.48339
Formula: y = mx + b
m: 1.32269e-1
b: 1.52322e-1
x: Amount [ug/L]
y: Area

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1,1 SOS64-50 8330 MIX A @ 500 ppb

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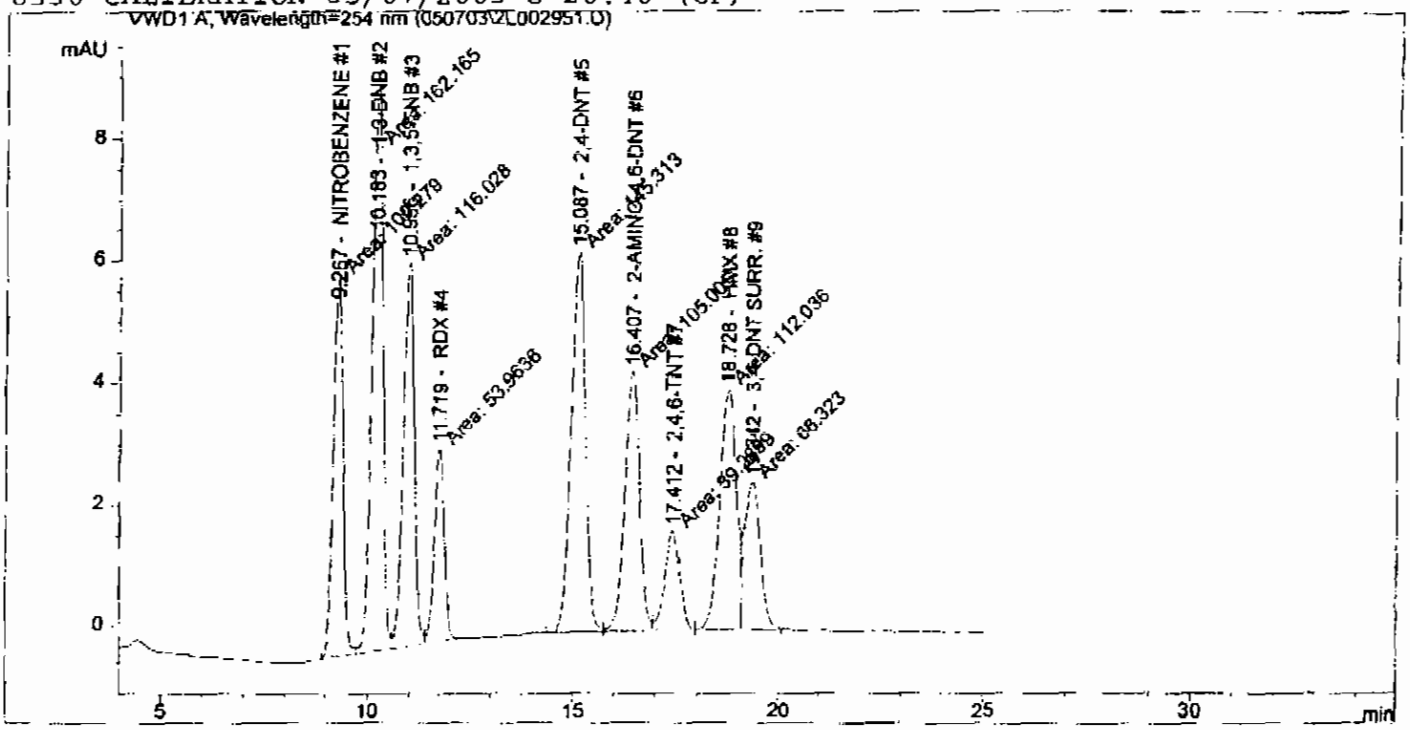
Injection Date : 5/7/2003 6:52:57 PM Seq. Line : 2
Sample Name : WG140090-01 #5A Vial : 2
Acq. Operator : RDC Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\HPCHEM\1\METHODS\8330CONF.M
Last changed : 5/7/2003 5:45:40 PM by RDC
Analysis Method : C:\HPCHEM\1\METHODS\833CFD_A.M
Last changed : 5/8/2003 4:26:26 PM by RDC
(modified after loading)

8330 CALIBRATION 05/07/2003 @ 20:40 (CF)



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External Standard Report

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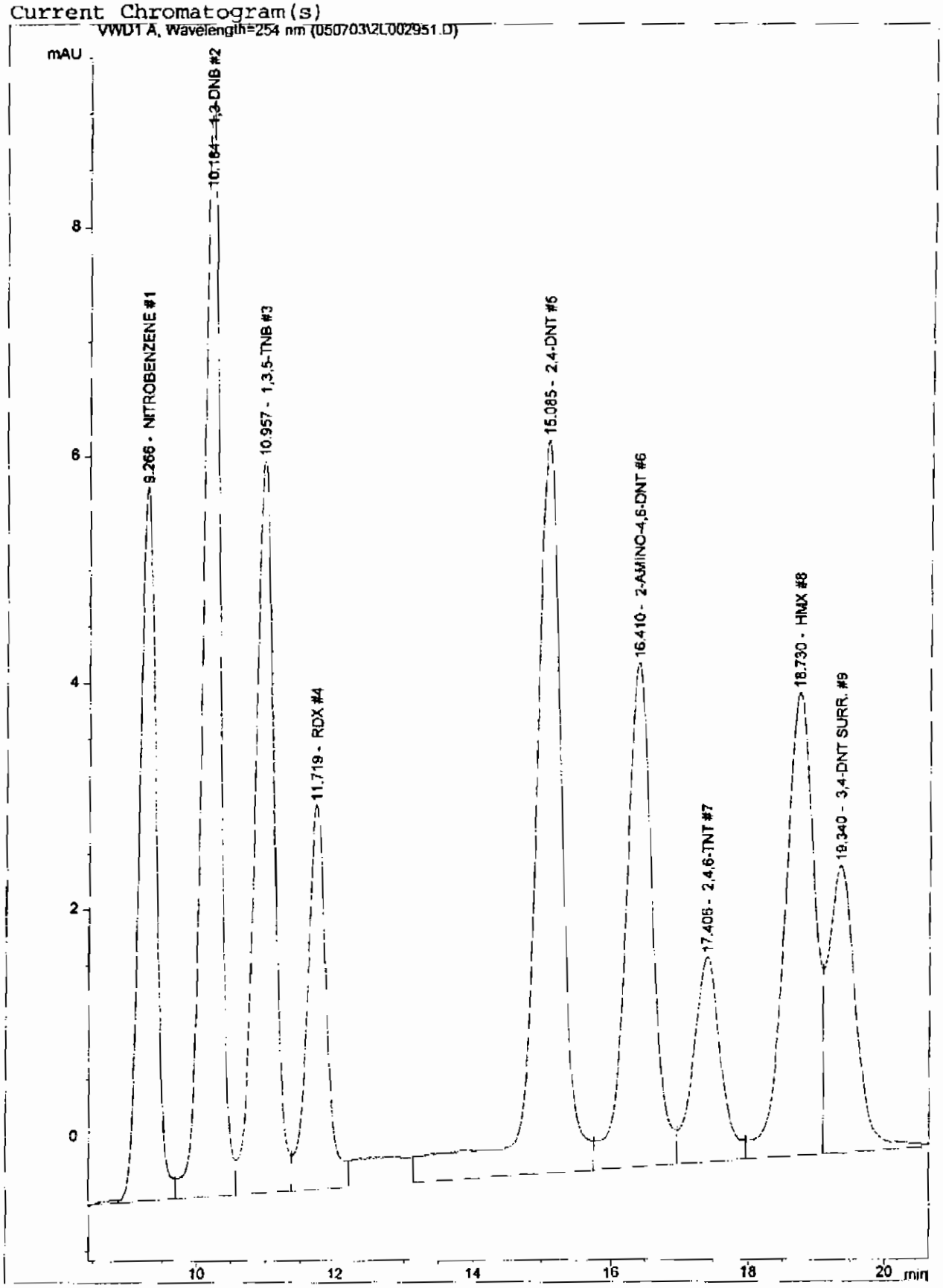
Sorted By : Signal
Calib. Data Modified : Thursday, May 08, 2003 4:26:24 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

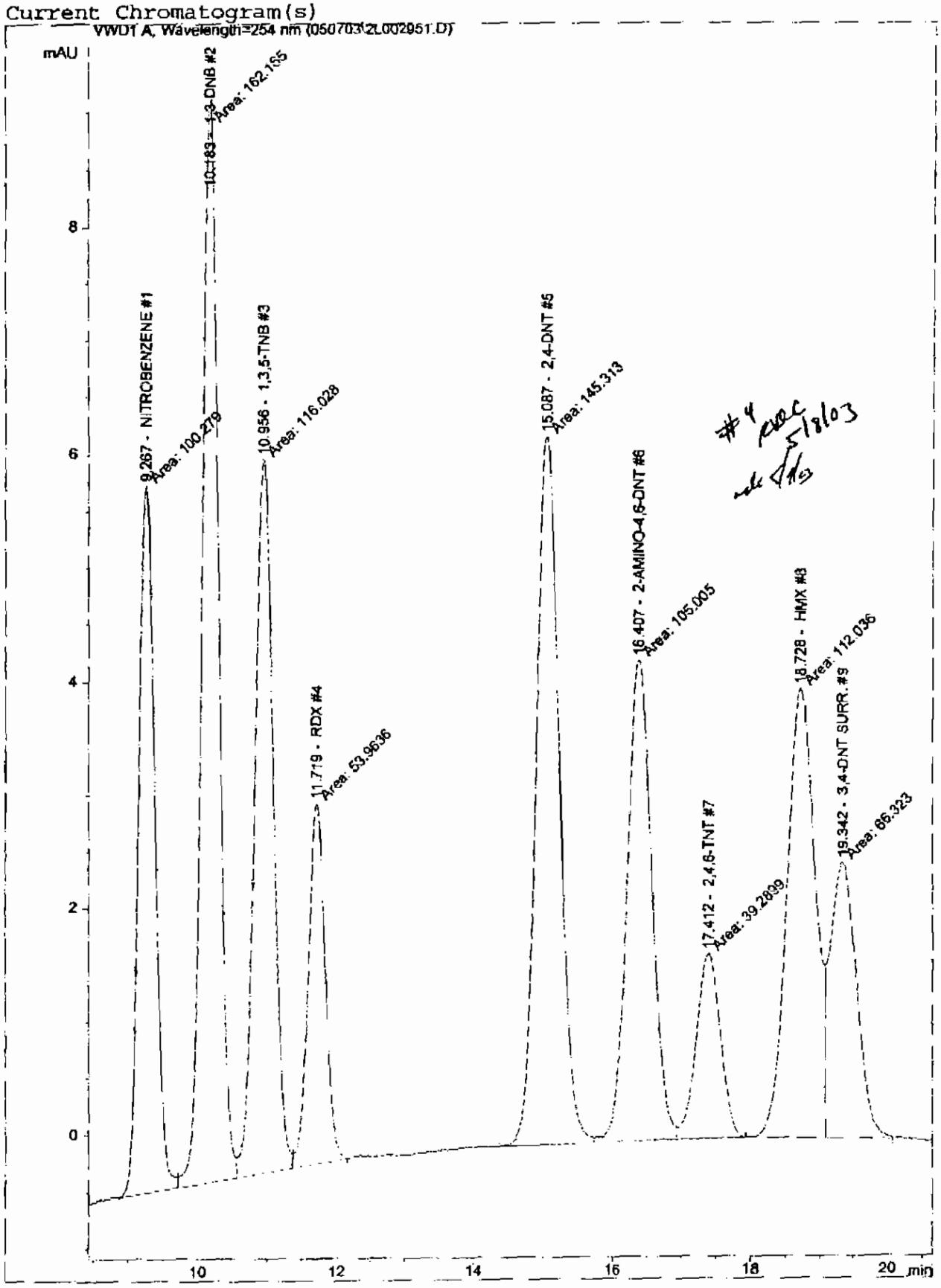
RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
9.267	MF	100.27930	4.98501	499.89316		NITROBENZENE #1
10.183	FM	162.16501	3.08385	500.09185		1,3-DNB #2
10.956	FM	116.02787	4.30609	499.62684		1,3,5-TNB #3
11.719	FM	53.96355	9.24848	499.08071		RDX #4
15.087	MF	145.31290	3.44038	499.93133		2,4-DNT #5
16.407	FM	105.00517	4.76461	500.30892		2-AMINO-4,6-DNT #6
17.412	FM	39.28994	12.73445	500.33570		2,4,6-TNT #7

Current Chromatogram(s)



Current Chromatogram(s)

VWD1 A, Wavelength=254 nm (050703\2L002951.D)



#4 RDC 5/8/03

IPLC2 5/8/2003 4:26:15 PM RDC

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
18.728	MF	112.03613	4.46506	500.24791		HMX #8
19.342	FM	66.32304	7.53927	500.02757		3,4-DNT SURR. #9

Totals : 4499.54400

Results obtained with enhanced integrator!

*** End of Report ***

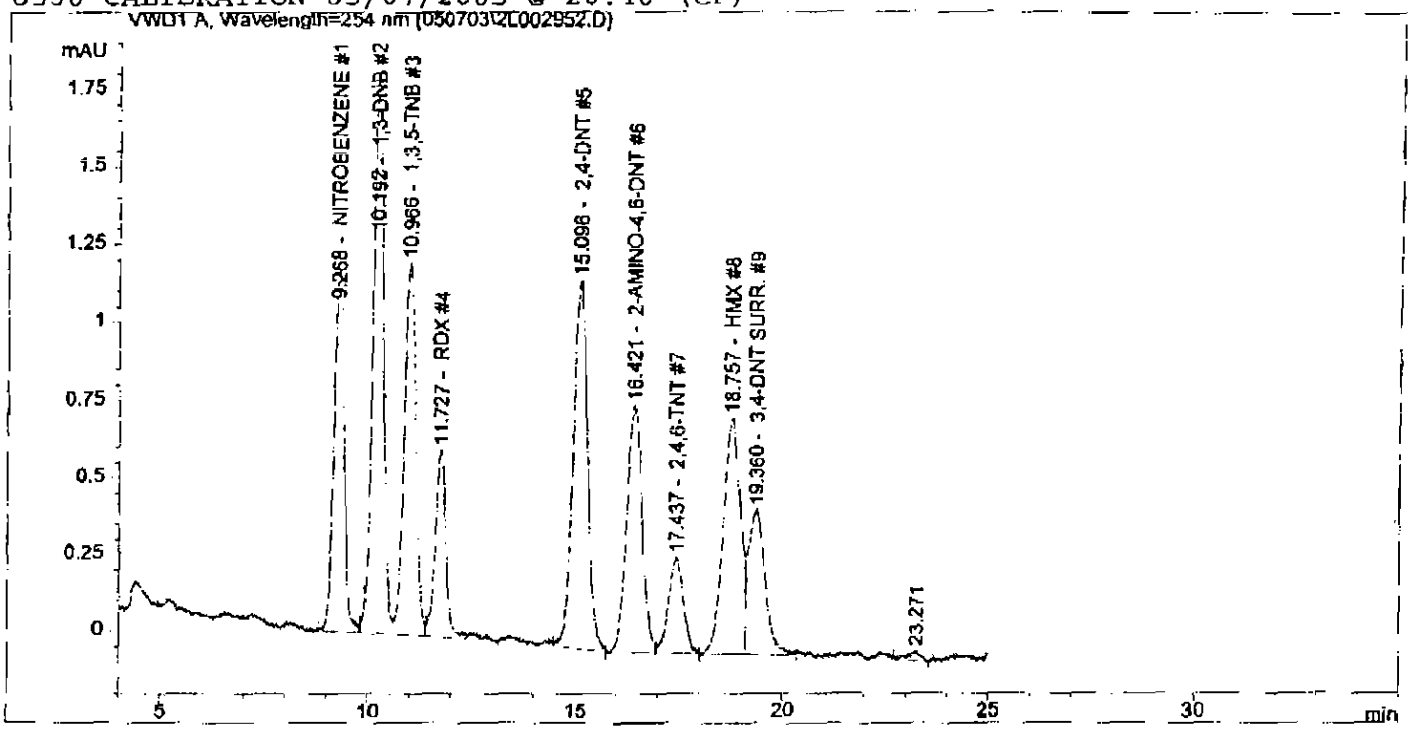
1,1 SOS64-50 8330 MIX A @ 100 ppb

==========

Injection Date : 5/7/2003 7:19:51 PM Seq. Line : 3
Sample Name : WG140090-02 #4A Vial : 3
Acq. Operator : RDC Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\HPCHEM\1\METHODS\8330CONF.M
Last changed : 5/7/2003 5:45:40 PM by RDC
Analysis Method : C:\HPCHEM\1\METHODS\833CFD_A.M
Last changed : 5/8/2003 4:26:57 PM by RDC
(modified after loading)

8330 CALIBRATION 05/07/2003 @ 20:40 (CF)



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : Thursday, May 08, 2003 4:26:55 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
9.268	BB	20.21405	4.99381	100.94522		NITROBENZENE #1
10.192	BV	32.38007	3.08765	99.97831		1,3-DNB #2
10.966	VV	23.32750	4.23996	98.90765		1,3,5-TNB #3
11.727	VB	11.21506	9.02480	101.21362		RDX #4
15.096	VP	29.25875	3.43860	100.60917		2,4-DNT #5
16.421	VV	20.63287	4.78203	98.66704		2-AMINO-4,6-DNT #6
17.437	VP	7.75884	12.36623	95.94765		2,4,6-TNT #7

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
18.757	VV	22.20990	4.45726	98.99539		HMX #8
19.360	VB	13.45266	7.53487	101.36401		3,4-DNT SURR. #9

Totals : 896.62806

Results obtained with enhanced integrator!

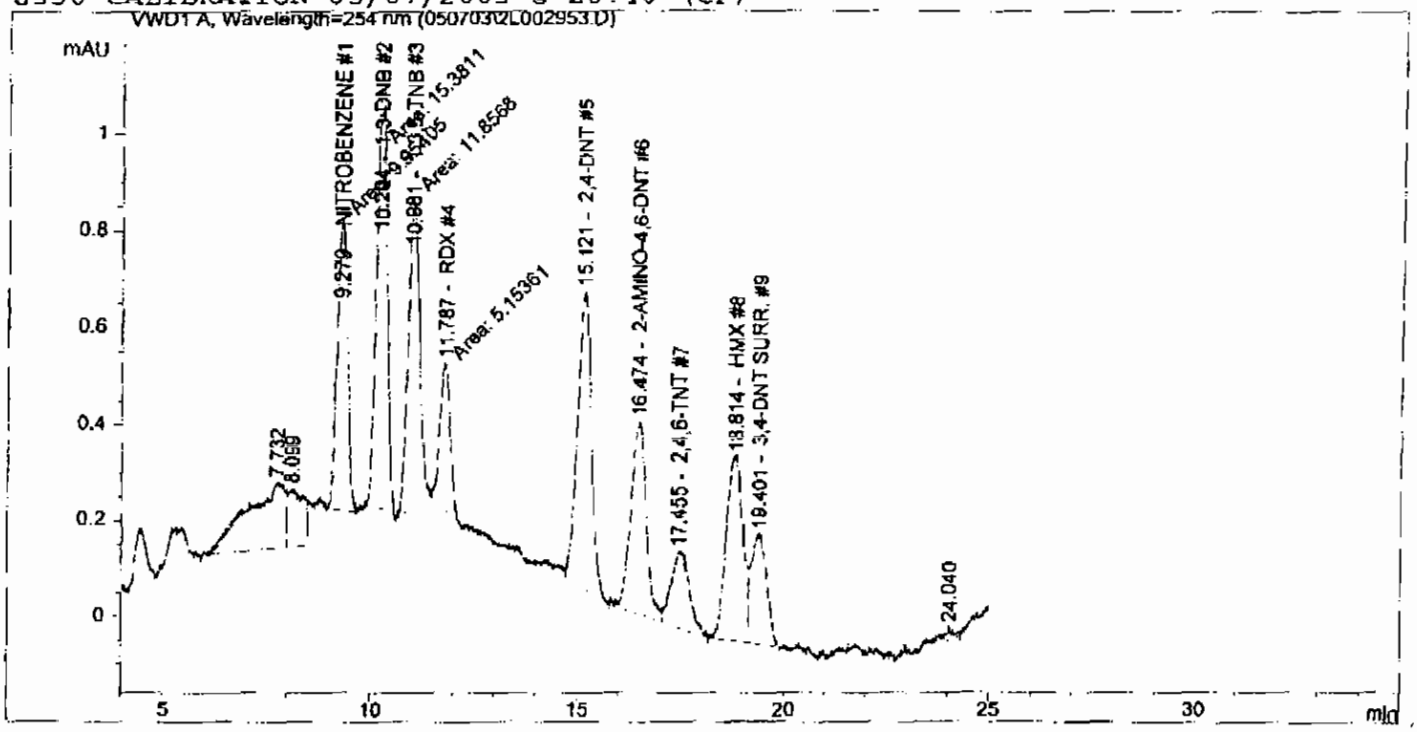
*** End of Report ***

1,1 SOS64-50 8330 MIX A @ 50 ppb

Injection Date	: 5/7/2003 7:46:46 PM	Seq. Line :	4
Sample Name	: WG140090-03 #3A	Vial :	4
Acq. Operator	: RDC	Inj :	1
		Inj Volume :	100 µl

Acq. Method : C:\HPCHEM\1\METHODS\8330CONF.M
Last changed : 5/7/2003 5:45:40 PM by RDC
Analysis Method : C:\HPCHEM\1\METHODS\833CFD_A.M
Last changed : 5/8/2003 4:28:24 PM by RDC
(modified after loading)

8330 CALIBRATION 05/07/2003 @ 20:40 (CF)



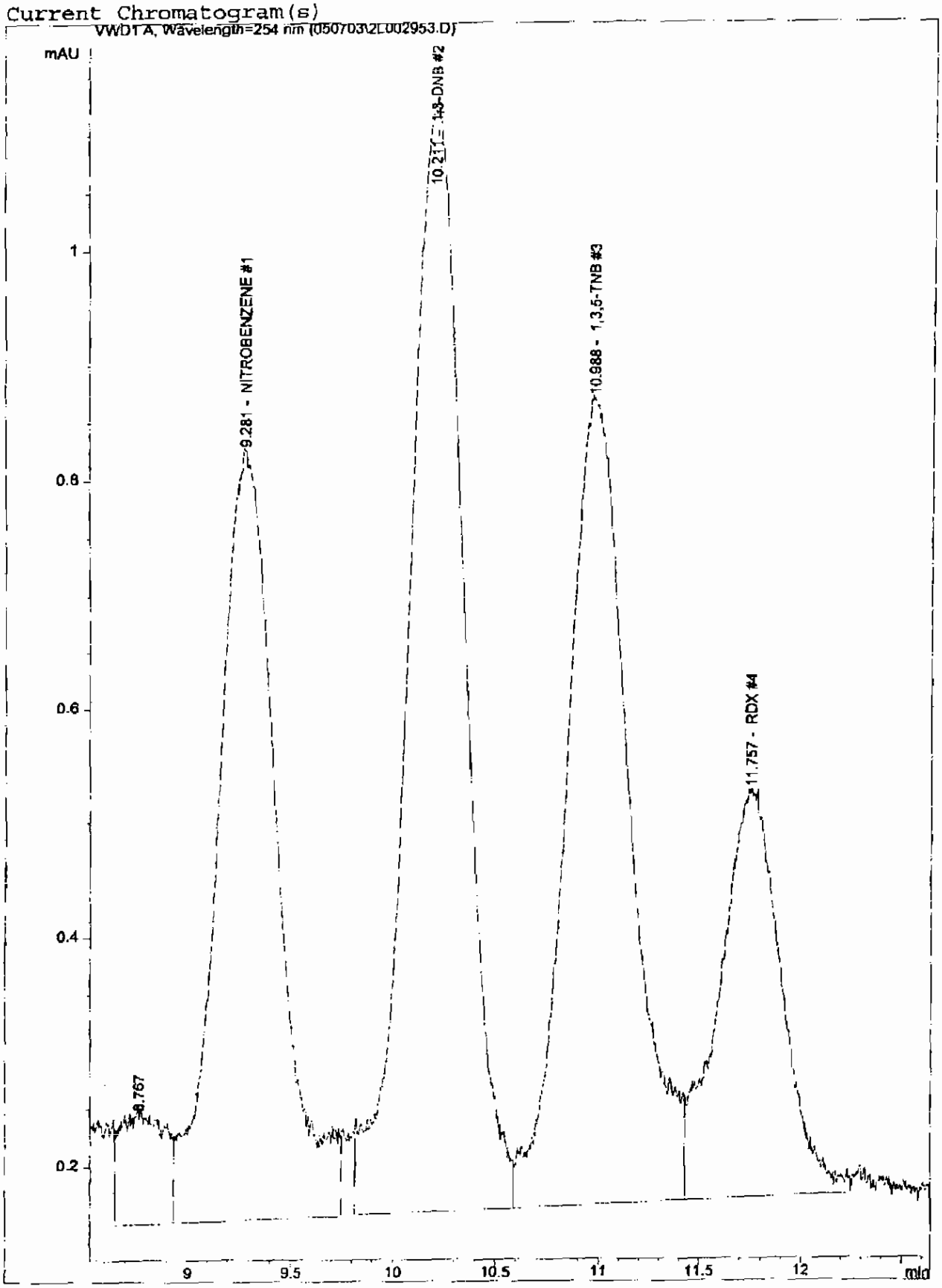
External Standard Report

Sorted By	:	Signal
Calib. Data Modified	:	Thursday, May 08, 2003 4:28:22 PM
Multiplier	:	1.0000
Dilution	:	1.0000

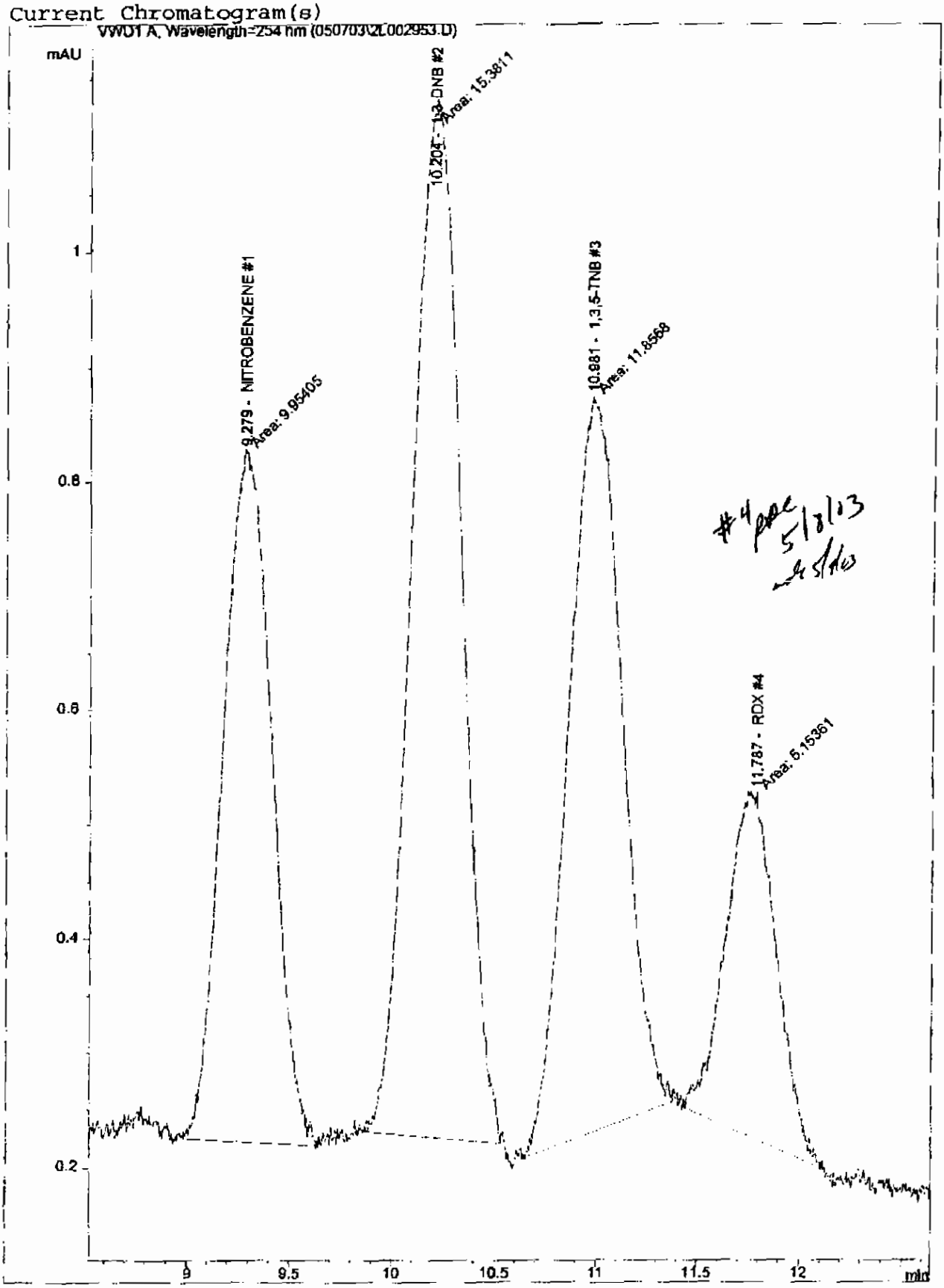
Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
9.279	MM	9.95405	5.00333	49.80339		NITROBENZENE #1
10.204	MM	15.38106	3.11609	47.92878		1,3-DNB #2
10.981	MM	11.85682	4.29379	50.91073		1,3,5-TNB #3
11.787	MM	5.15361	9.21942	47.51325		RDX #4
15.121	BB	14.48293	3.43633	49.76811		2,4-DNT #5
16.474	PV	10.42155	4.80328	50.05757		2-AMINO-4,6-DNT #6
17.455	VP	4.61360	12.05344	55.60979		2,4,6-TNT #7

Current Chromatogram(s)



Current Chromatogram(s)



#4 pac 5/8/03

HPLC2 5/8/2003 4:28:10 PM RDC

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
18.814	BV	11.06793	4.44748	49.22433		HMX #8
19.401	VP	6.01880	7.52804	45.30976		3,4-DNT SURR. #9

Totals : 446.12571

Results obtained with enhanced integrator!

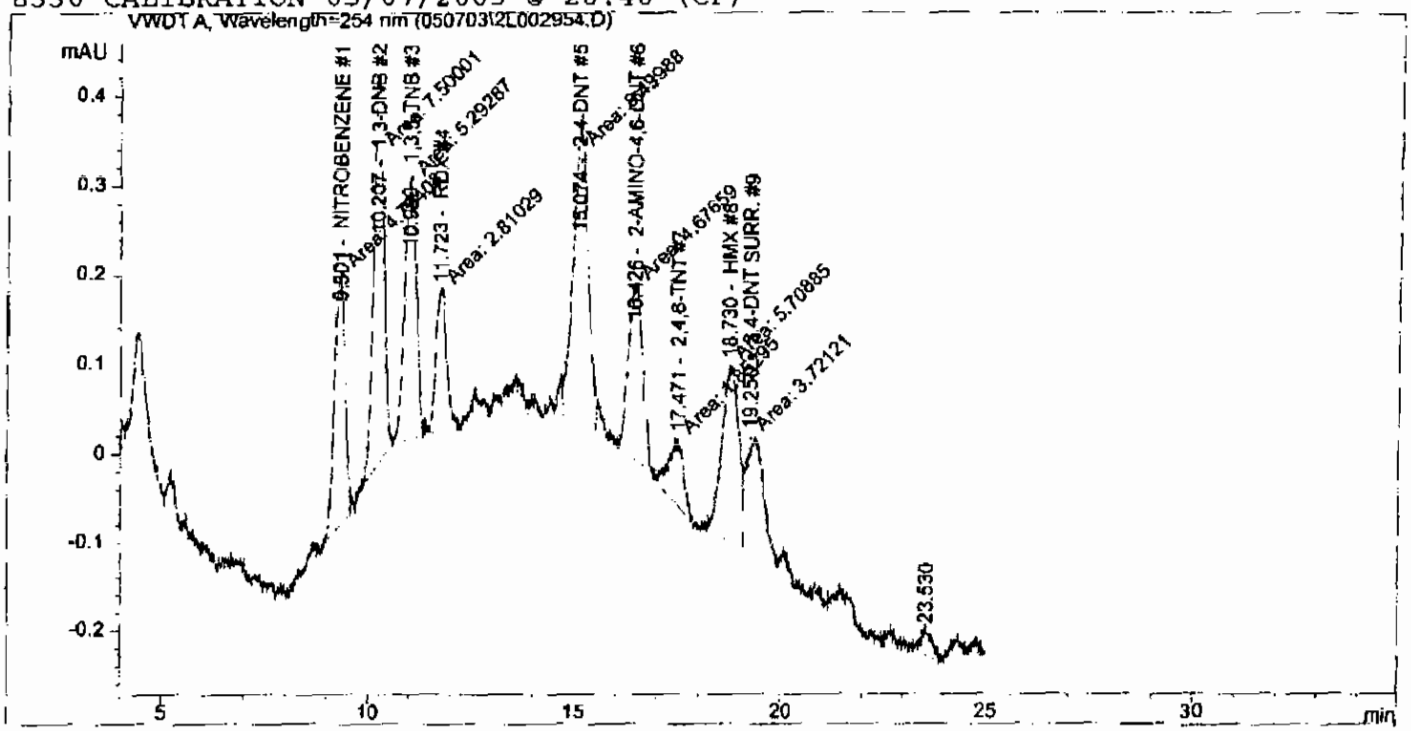
*** End of Report ***

1,1 SOS64-50 8330 MIX A @ 25 ppb

Injection Date	: 5/7/2003 8:13:43 PM	Seq. Line :	5
Sample Name	: WG140090-04 #2A	Vial :	5
Acq. Operator	: RDC	Inj :	1
		Inj Volume :	100 µl

Acq. Method : C:\HPCHEM\1\METHODS\8330CONF.M
Last changed : 5/7/2003 5:45:40 PM by RDC
Analysis Method : C:\HPCHEM\1\METHODS\833CFD_A.M
Last changed : 5/8/2003 4:30:09 PM by RDC
(modified after loading)

8330 CALIBRATION 05/07/2003 @ 20:40 (CF)



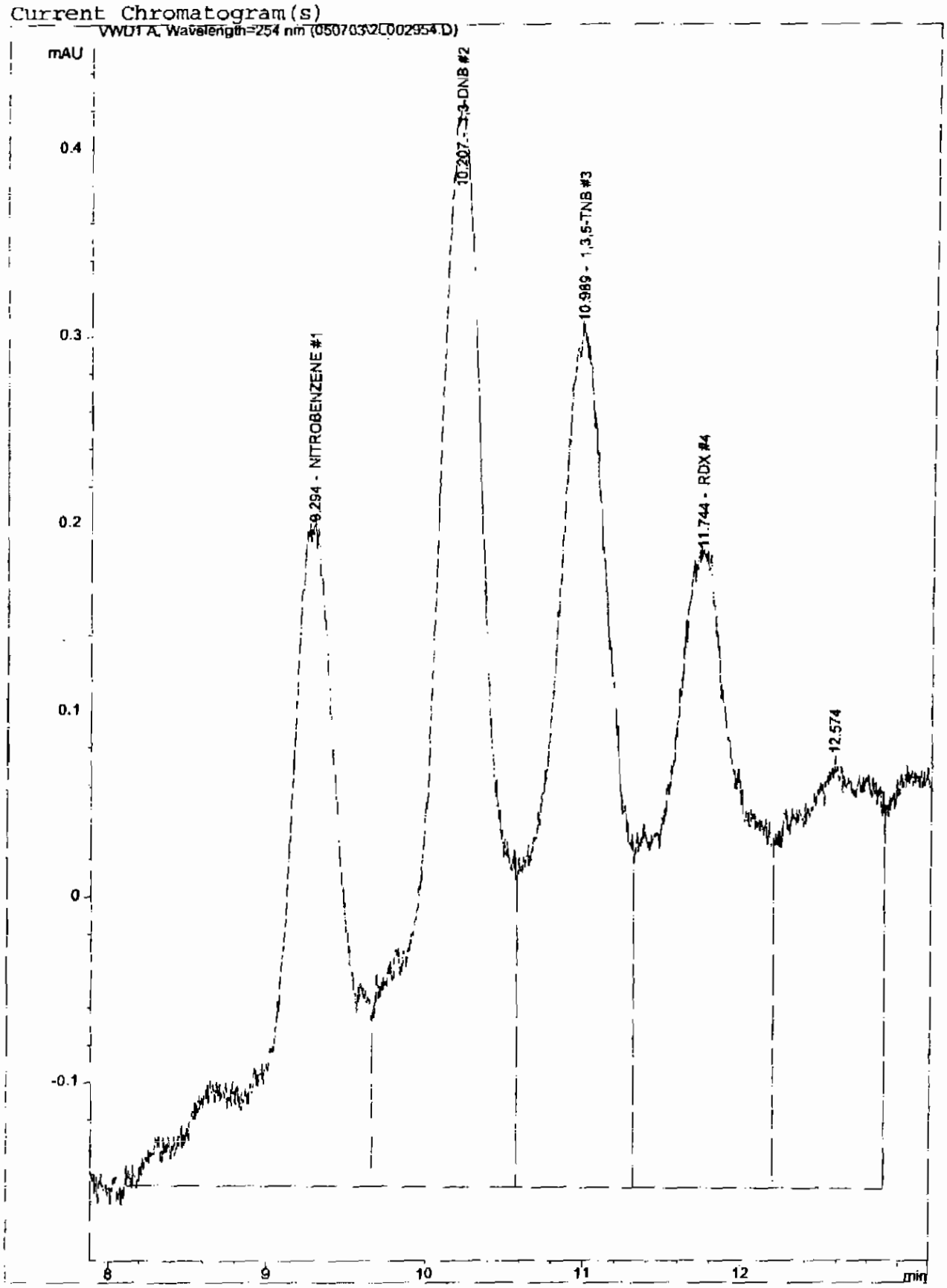
External Standard Report

Sorted By	:	Signal
Calib. Data Modified	:	Thursday, May 08, 2003 4:30:07 PM
Multiplier	:	1.0000
Dilution	:	1.0000

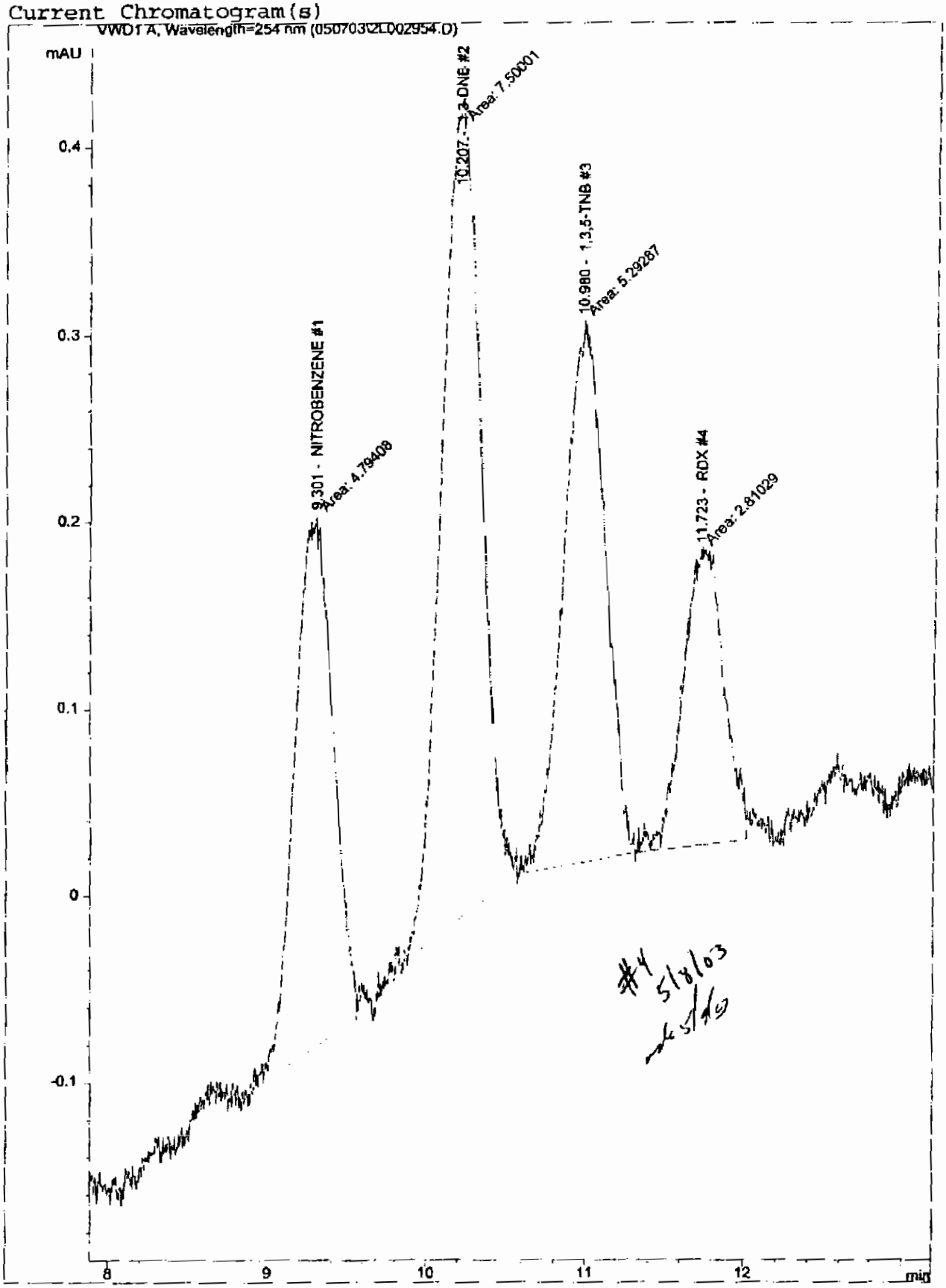
Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
9.301	MF	4.79408	5.00738	24.00581		NITROBENZENE #1
10.207	MM	7.50001	3.16474	23.73554		1,3-DNB #2
10.980	MM	5.29287	4.30779	22.80059		1,3,5-TNB #3
11.723	MF	2.81029	9.06414	25.47289		RDX #4
15.074	MF	8.49988	3.31028	28.13703		2,4-DNT #5
16.426	MF	4.67659	4.87138	22.78147		2-AMINO-4,6-DNT #6
17.471	MM	1.85295	10.99655	20.37603		2,4,6-TNT #7

Current Chromatogram(s)



Current Chromatogram(s)

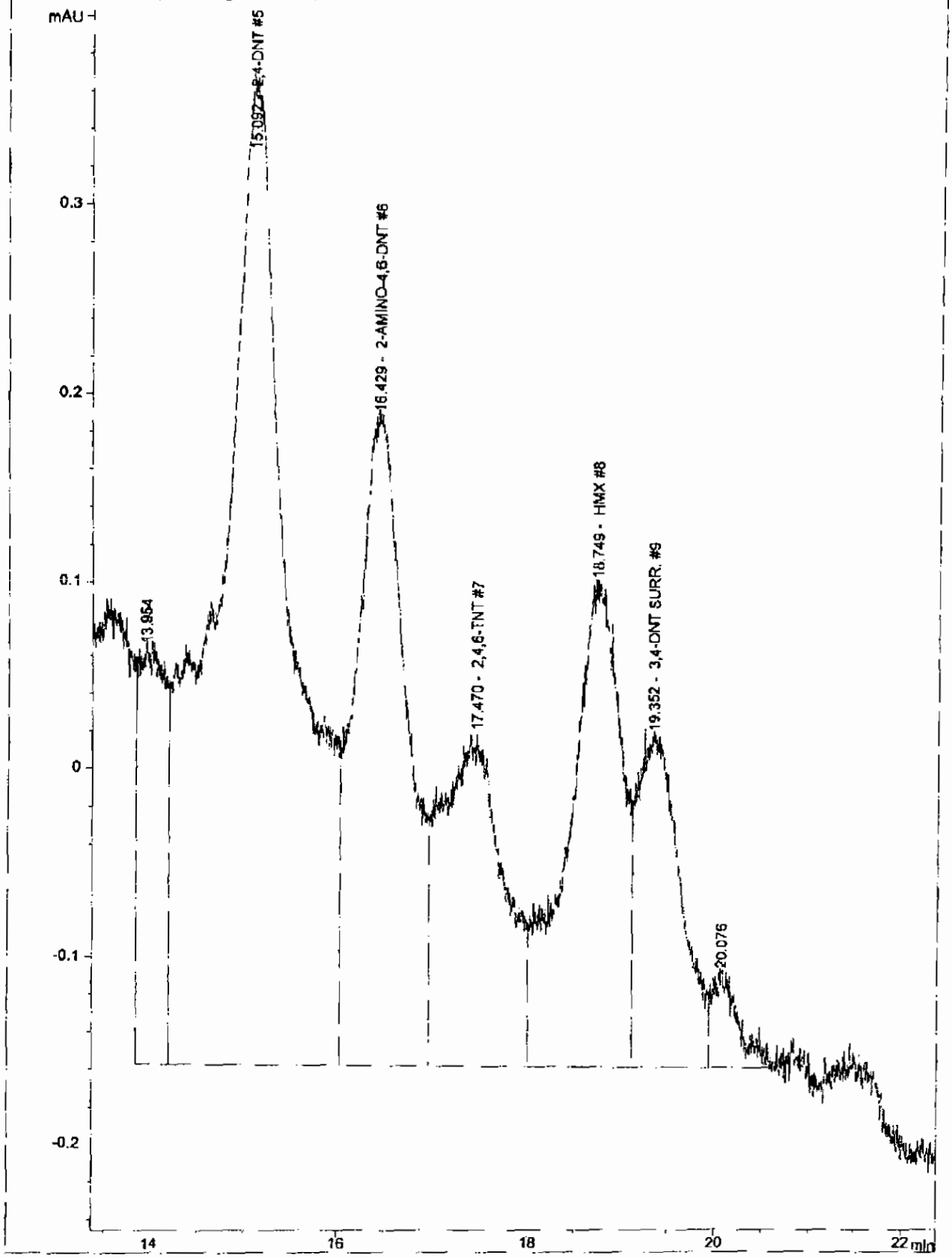


HPLC2 5/8/2003 4:29:17 PM RDC

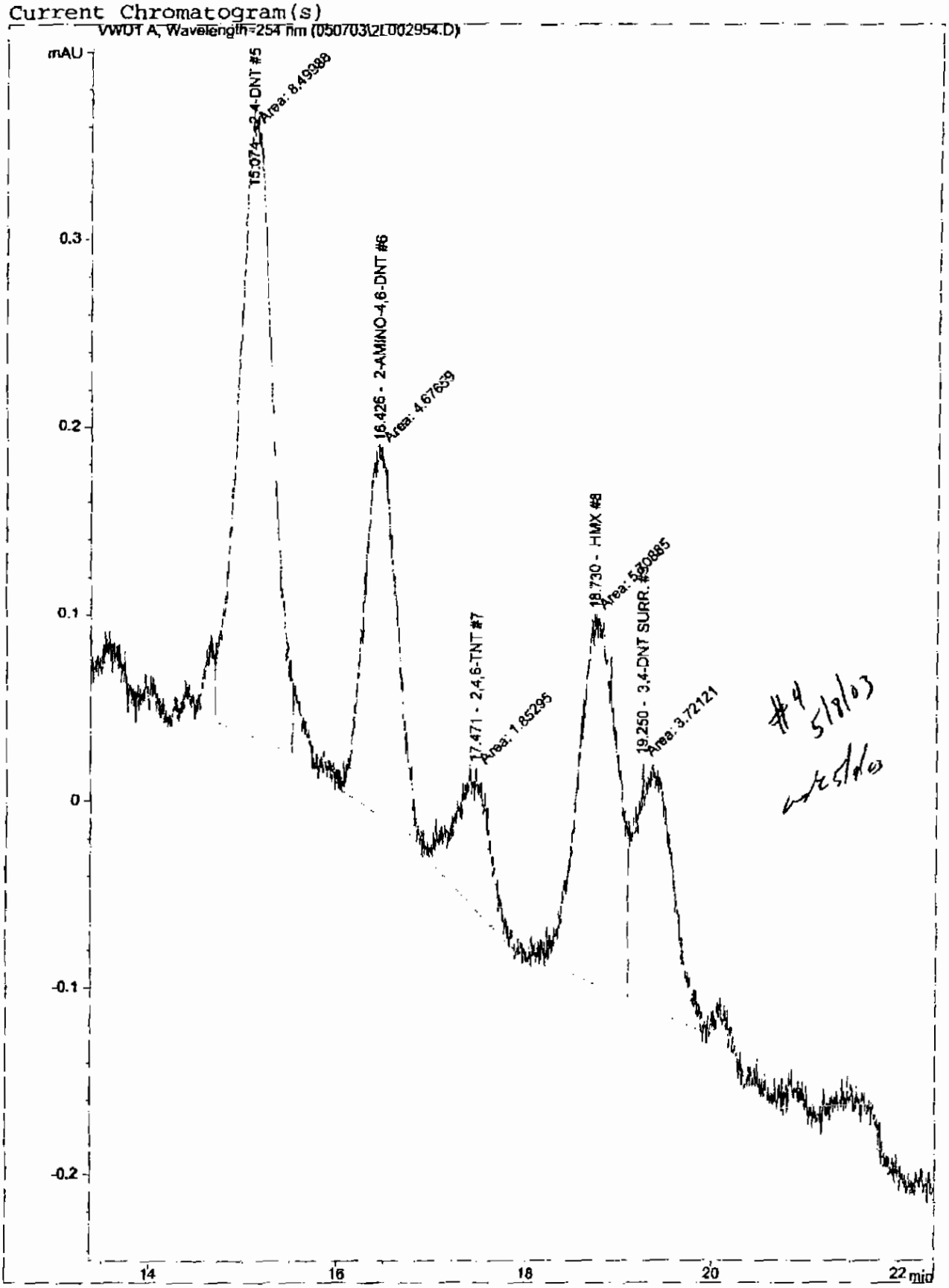
Page 1 of 1

Current Chromatogram(s)

VWD1 A, Wavelength=254 nm (050703\2L002954.D)



Current Chromatogram(s)



#9 5/8/03

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
18.730	MF	5.70885	4.41332	25.19494		HMX #8
19.250	FM	3.72121	7.54839	28.08914		3,4-DNT SURR. #9

Totals : 220.59345

Results obtained with enhanced integrator!

*** End of Report ***

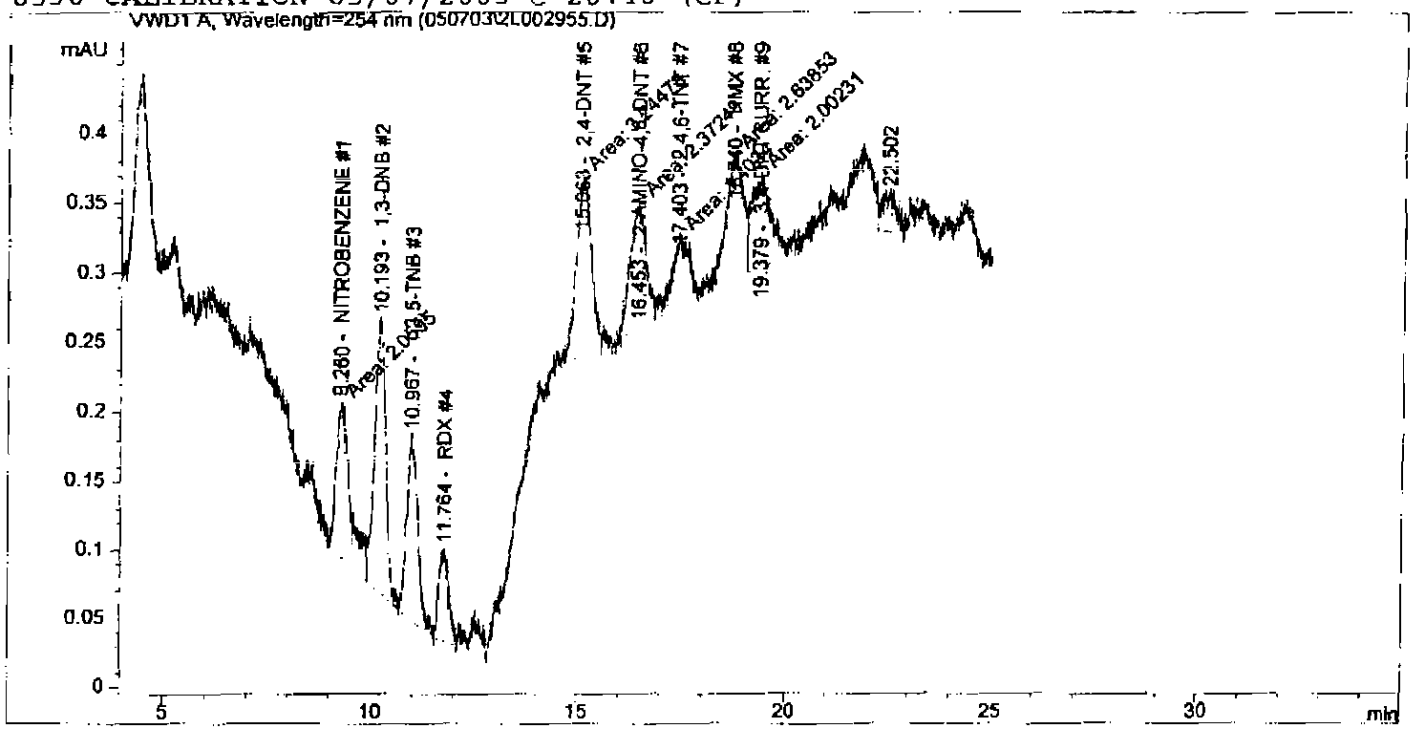
1,1 SOS64-50 8330 MIX A @ 10 ppb

==========

Injection Date : 5/7/2003 8:40:38 PM Seq. Line : 6
Sample Name : WG140090-05 #1A Vial : 6
Acq. Operator : RDC Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\HPCHEM\1\METHODS\8330CONF.M
Last changed : 5/7/2003 5:45:40 PM by RDC
Analysis Method : C:\HPCHEM\1\METHODS\833CFD_A.M
Last changed : 5/8/2003 4:31:21 PM by RDC
(modified after loading)

8330 CALIBRATION 05/07/2003 @ 20:40 (CF)



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External Standard Report

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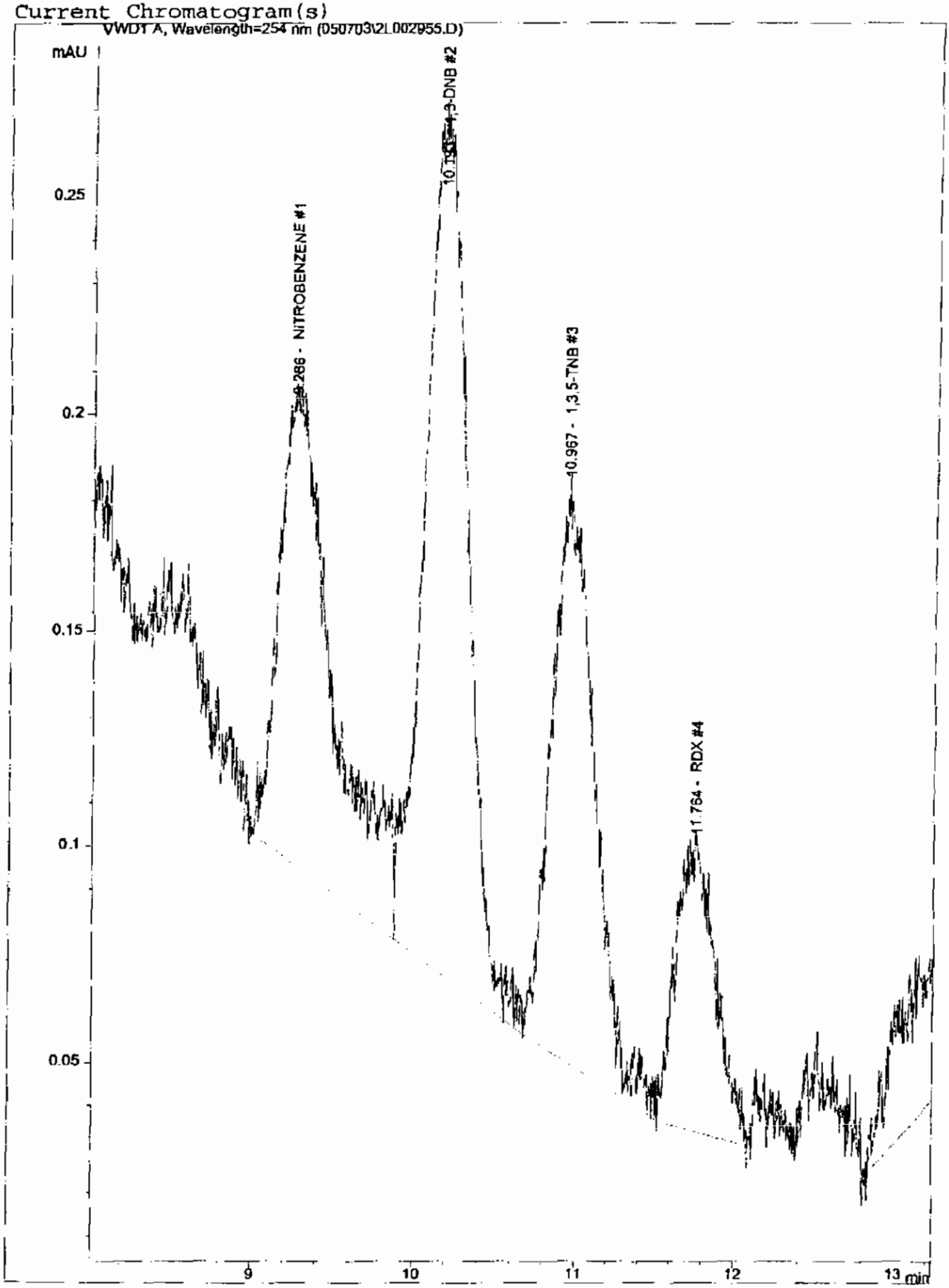
Sorted By : Signal
Calib. Data Modified : Thursday, May 08, 2003 4:31:18 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
9.260	MF	2.05950	5.04141	10.38280		NITROBENZENE #1
10.193	VP	3.72299	3.25043	12.10130		1,3-DNB #2
10.967	VP	2.49225	4.30715	10.73450		1,3,5-TNB #3
11.764	VV	1.13590	8.76299	9.95386		RDX #4
15.063	MM	3.24478	3.05011	9.89695		2,4-DNT #5
16.453	MF	2.37249	5.04867	11.97793		2-AMINO-4,6-DNT #6
17.403	FM	1.40340	10.60471	14.88264		2,4,6-TNT #7

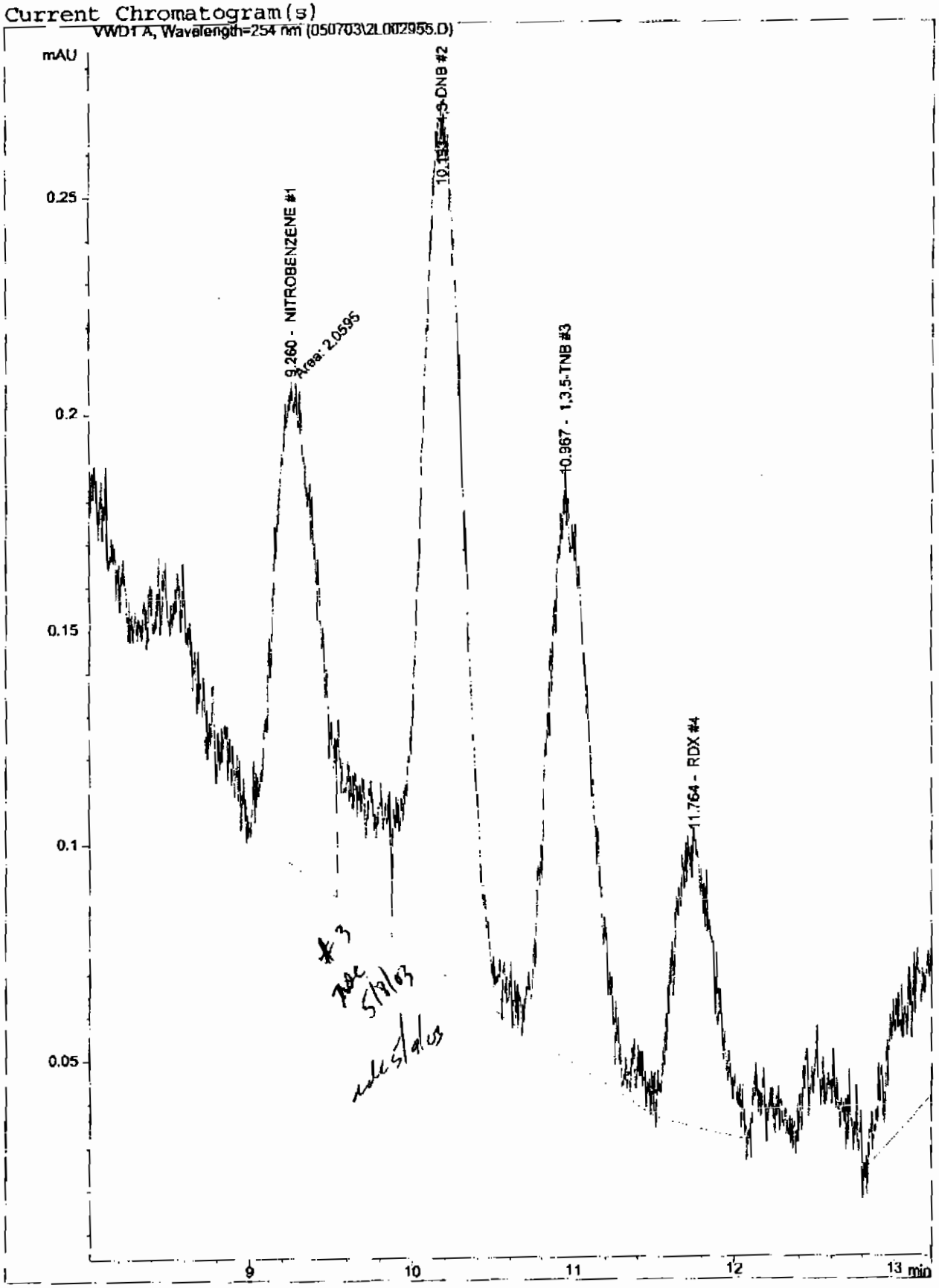
Current Chromatogram(s)



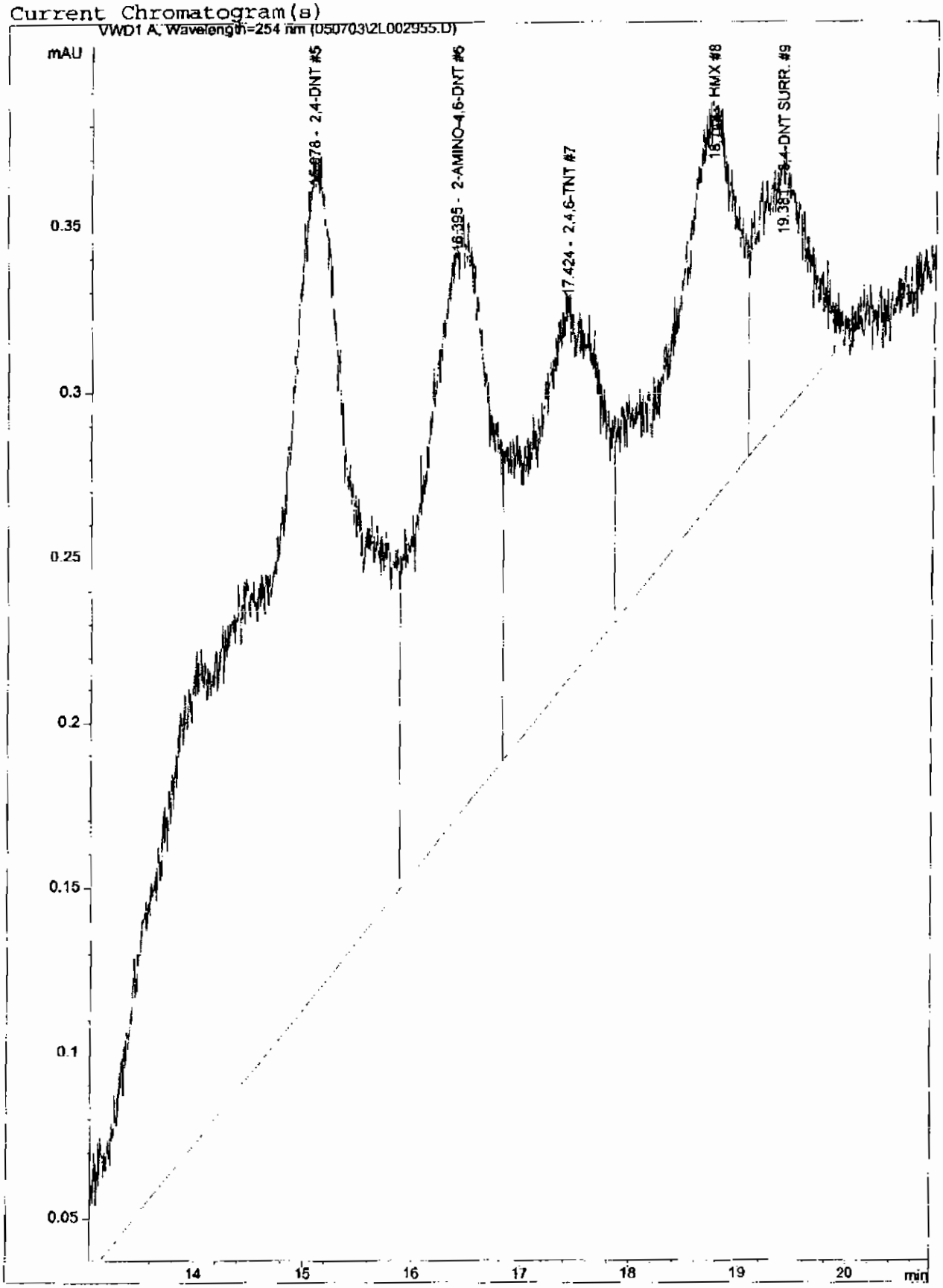
HPLC2 5/8/2003 4:30:30 PM RDC

Page 1 of 1

Current Chromatogram(s)

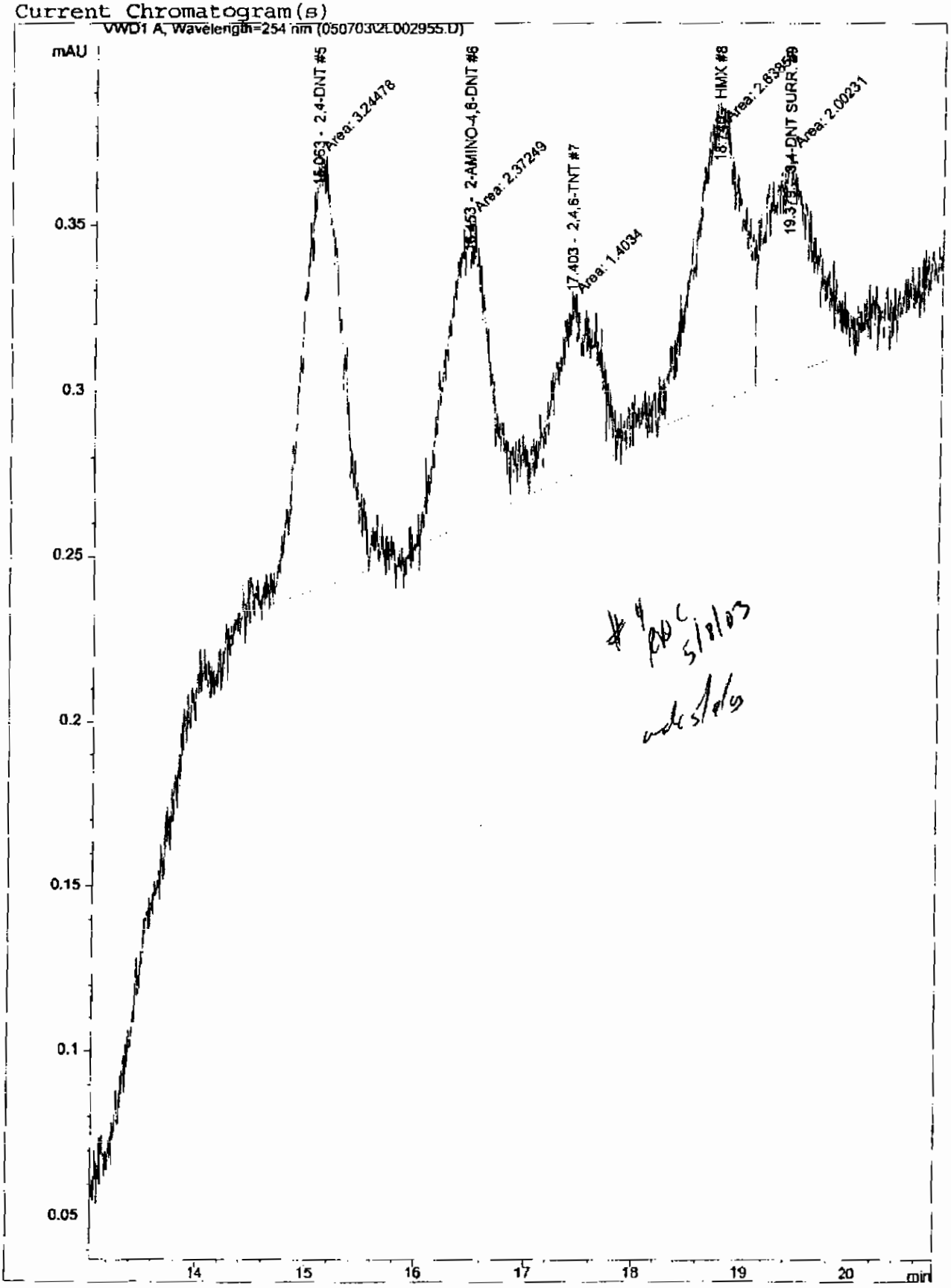


Current Chromatogram(s)
VWD1 A, Wavelength=254 nm (050703\2L002955.D)



Current Chromatogram(s)

VWD1 A, Wavelength=254 nm (050703\2L002955.D)



HPLC2 5/8/2003 4:31:11 PM RDC

Page 1 of 1

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
18.740	MF	2.63853	4.37737	11.54982		HMX #8
19.379	FM	2.00231	7.55687	15.13120		3,4-DNT SURR. #9

Totals : 106.61099

Results obtained with enhanced integrator!

*** End of Report ***

Check Standard Report

Data File C:\HPCHEM\1\DATA\050703\2L002956.D Sample Name: WG140090-06 ALTA HPLC2 5/8/2003 4:35:03 PM RDC

1,1 SOS65-02 8330 MIX A @ 50 ppb

Injection Date : 5/7/2003 9:07:34 PM Seq. Line : 7

Signal 1: VWD1 A, Wavelength=254 nm

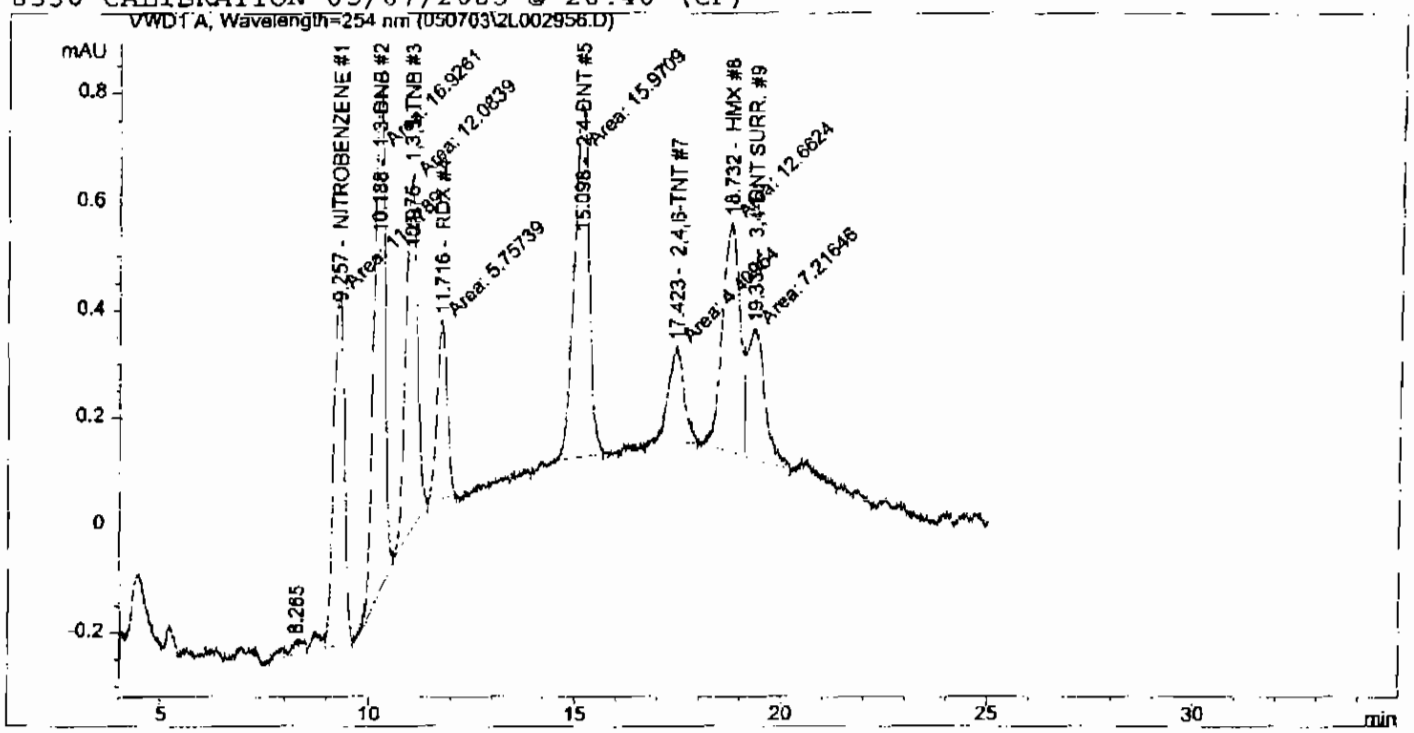
Compound	RT	Known Conc.	Cal. Conc.	%D
NITROBENZENE #1	9.257	50.0	55.334	10.7
1,3-DNB #2	10.188	50.0	52.771	5.5
1,3,5-TNB #3	10.975	50.0	52.059	4.1
RDX #4	11.716	50.0	52.788	5.6
2,4-DNT #5	15.098	50.0	53.804	7.6
2-AMINO-4,6-DNT #6	Not Found	50.0	Not Found	NA
2,4,6-TNT #7	17.423	50.0	53.395	6.8
HMX #8	18.732	50.0	56.327	12.7
3,4-DNT SURR. #9	19.333	50.0	53.407	6.8

= Failed 15.0% Criteria

1,1 S0565-02 8330 MIX A @ 50 ppb

Injection Date	: 5/7/2003 9:07:34 PM	Seq. Line :	7
Sample Name	: WG140090-06 ALTA	Vial :	7
Acq. Operator	: RDC	Inj :	1
		Inj Volume :	100 µl

Acq. Method : C:\HPCHEM\1\METHODS\8330CONF.M
Last changed : 5/7/2003 5:45:40 PM by RDC
Analysis Method : C:\HPCHEM\1\METHODS\833CFD_A.M
Last changed : 5/8/2003 4:33:10 PM by RDC
8330 CALIBRATION 05/07/2003 @ 20:40 (CF)



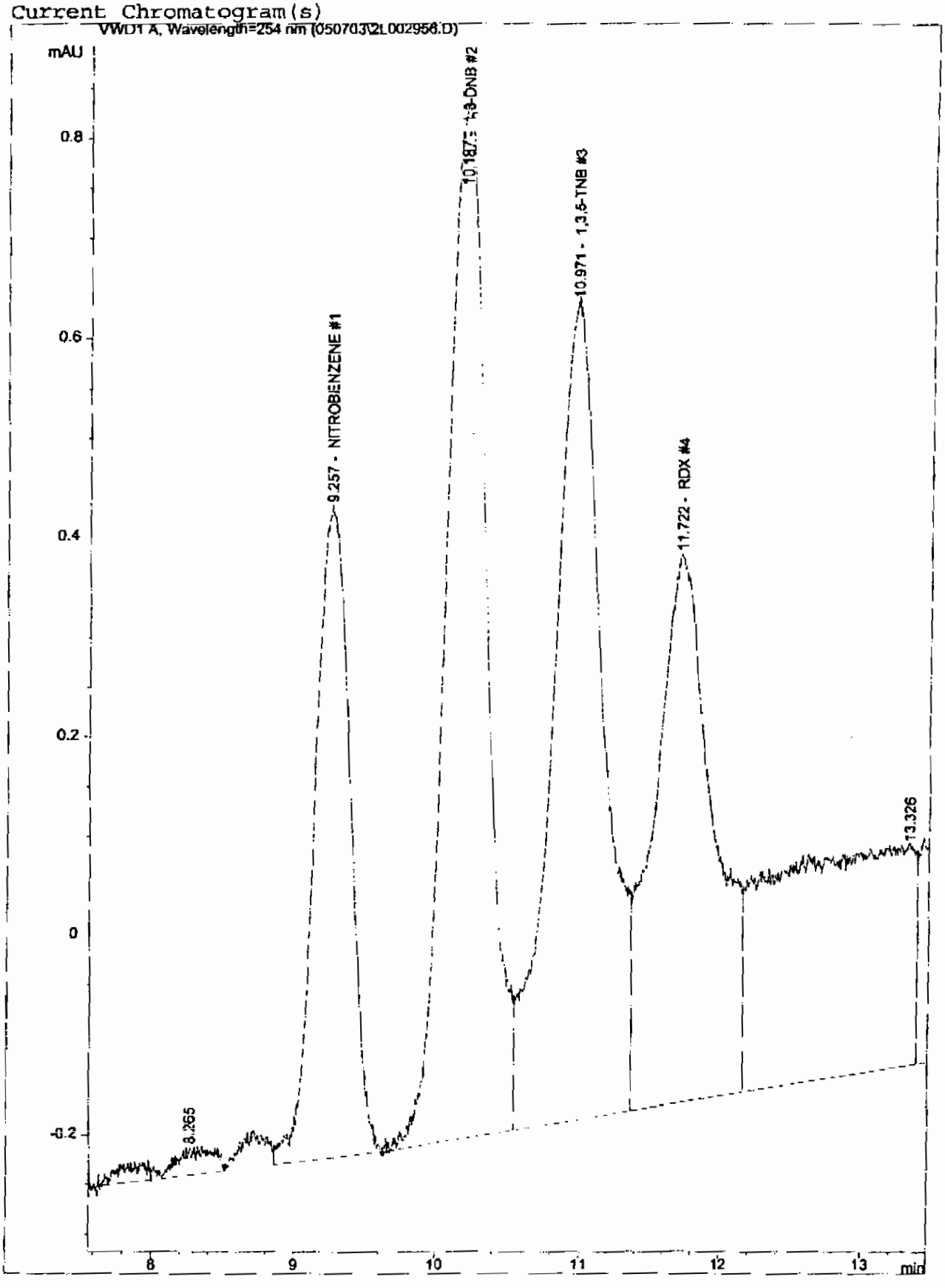
External Standard Report

Sorted By	:	Signal
Calib. Data Modified	:	5/8/2003 4:33:10 PM
Multiplier	:	1.0000
Dilution	:	1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
9.257	FM	11.07894	4.99456	55.33443		NITROBENZENE #1
10.188	MM	16.92615	3.11770	52.77060		1,3-DNB #2
10.975	MM	12.08392	4.30811	52.05886		1,3,5-TNB #3
11.716	MM	5.75739	9.16872	52.78789		RDX #4
15.098	MM	15.97089	3.36888	53.80397		2,4-DNT #5
16.453		-	-	-		2-AMINO-4,6-DNT #6
17.423	MM	4.40954	12.10902	53.39516		2,4,6-TNT #7
18.732	MF	12.66235	4.44840	56.32723		HMX #8

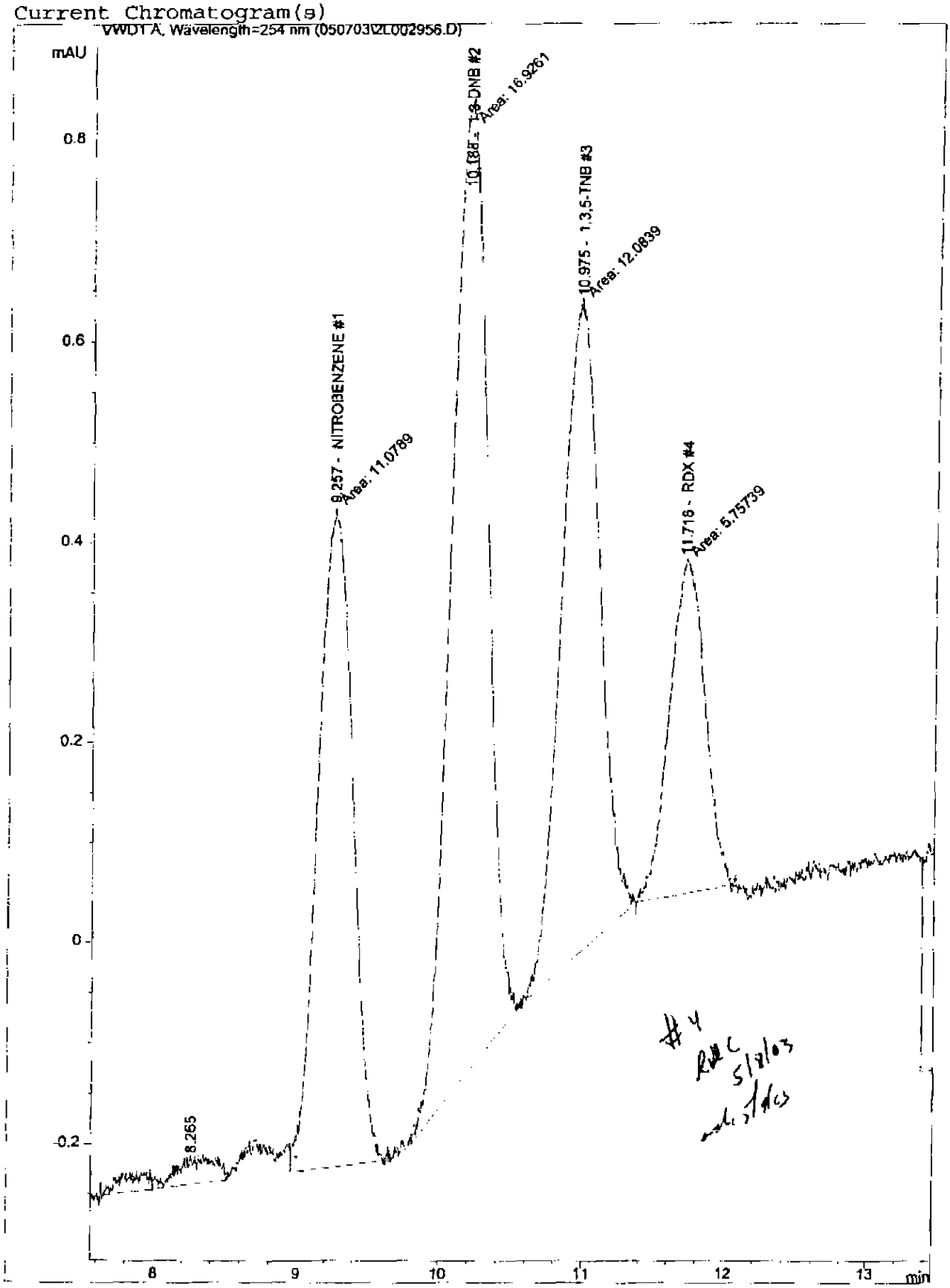
Current Chromatogram(s)



HPLC2 5/8/2003 4:33:47 PM RDC

Page 1 of 1

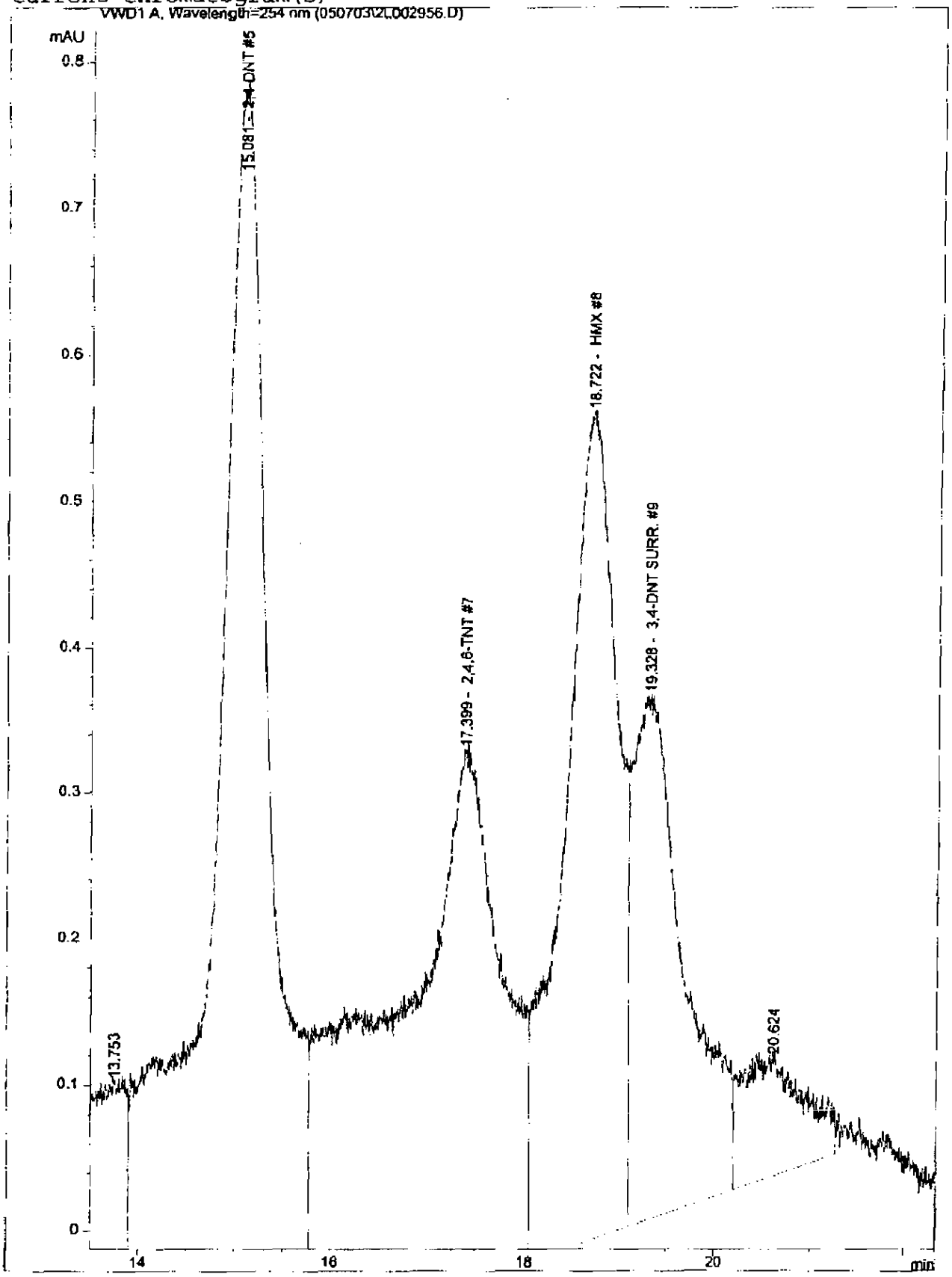
Current Chromatogram(s)



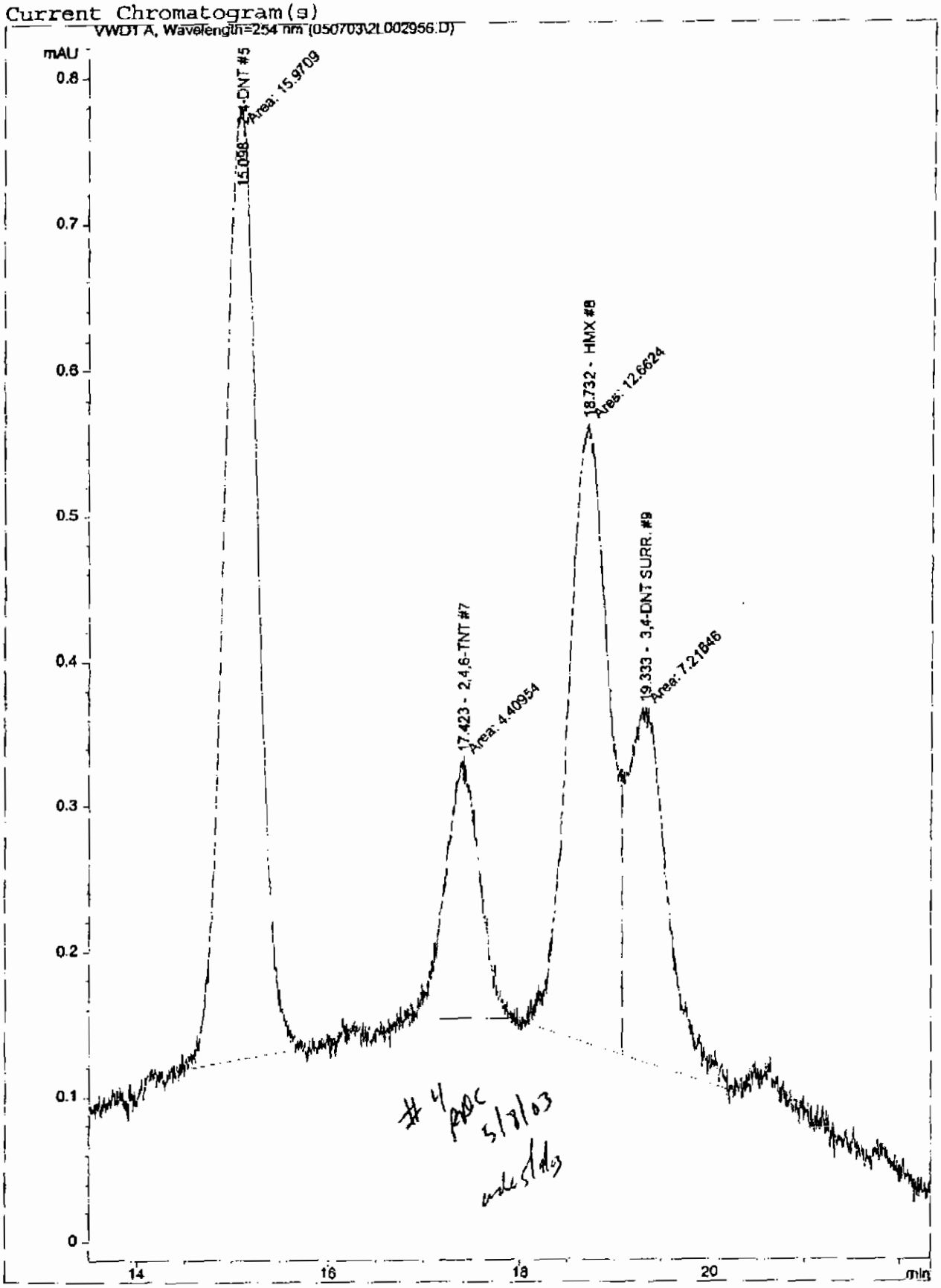
HPLC2 5/8/2003 4:34:08 PM RDC

Page 1 of 1

Current Chromatogram(s)



Current Chromatogram(s)



RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
19.333	FM	7.21646	7.40078	53.40747		3,4-DNT SURR. #9

Totals : 429.88563

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibrated compound(s) not found

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*** End of Report ***

Check Standard Report

Data File C:\HPCHEM\1\DATA\050703\2L002962.D Sample Name: WG140090-12 ALTB
HPLC2 5/8/2003 4:46:46 PM RDC

1,1 SOS65-03 8330 MIX B @ 50 ppb

Injection Date : 5/7/2003 11:49:09 PM Seq. Line : 13

Signal 1: VWD1 A, Wavelength=254 nm

Compound	RT	Known Conc.	Cal. Conc.	%D
NITROBENZENE #1	Not Found	50.0	Not Found	
1,3-DNB #2	Not Found	50.0	Not Found	
1,3,5-TNB #3	Not Found	50.0	Not Found	
RDX #4	Not Found	50.0	Not Found	
2,4-DNT #5	Not Found	50.0	Not Found	
2-AMINO-4,6-DNT #6	16.370	50.0	54.927	9.9
2,4,6-TNT #7	Not Found	50.0	Not Found	
HMX #8	Not Found	50.0	Not Found	
3,4-DNT SURR. #9	19.314	50.0	53.324	6.6

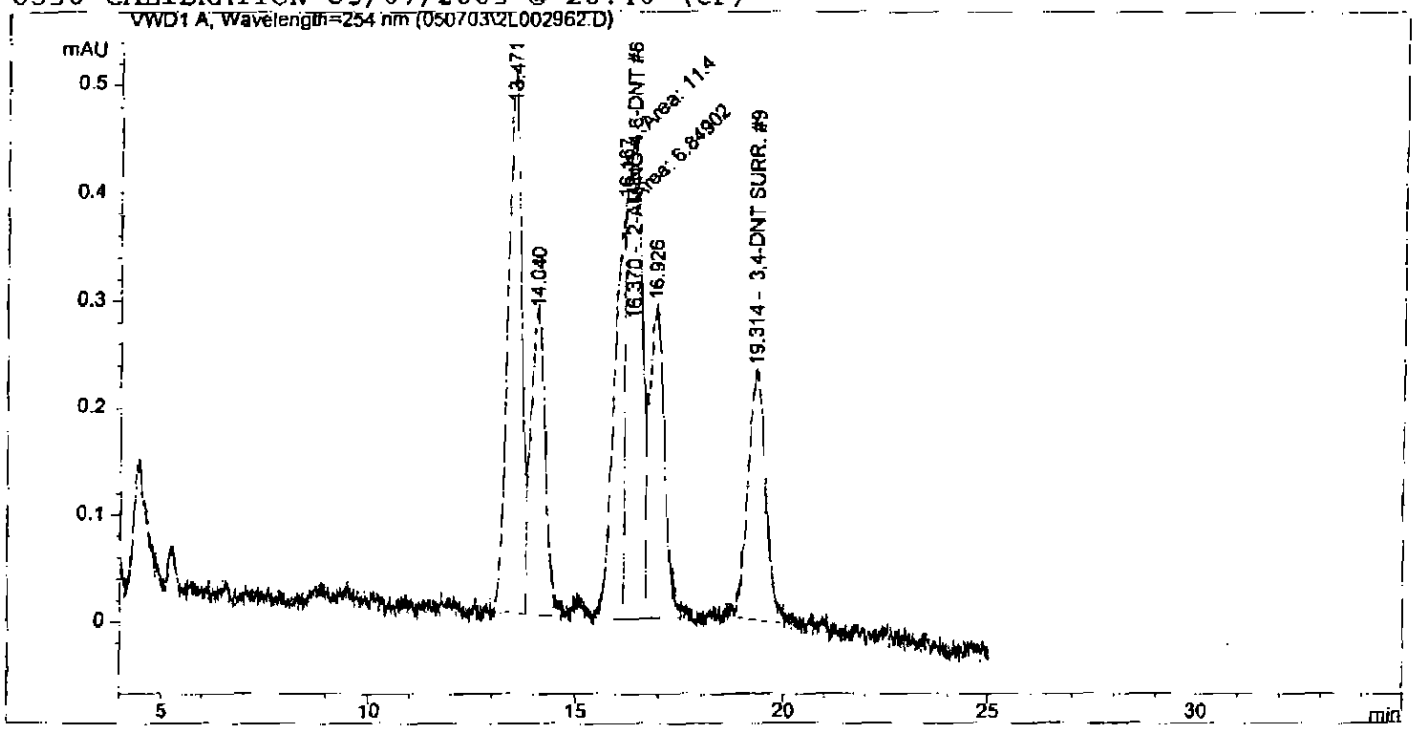
= Failed 15.0% Criteria

1,1 50565-03 8330 MIX B @ 50 ppb

==========

Injection Date : 5/7/2003 11:49:09 PM Seq. Line : 13
Sample Name : WG140090-12 ALTB Vial : 13
Acq. Operator : RDC Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\HPCHEM\1\METHODS\8330CONF.M
Last changed : 5/7/2003 5:45:40 PM by RDC
Analysis Method : C:\HPCHEM\1\METHODS\833CFD_A.M
Last changed : 5/8/2003 4:33:10 PM by RDC
8330 CALIBRATION 05/07/2003 @ 20:40 (CF)



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External Standard Report

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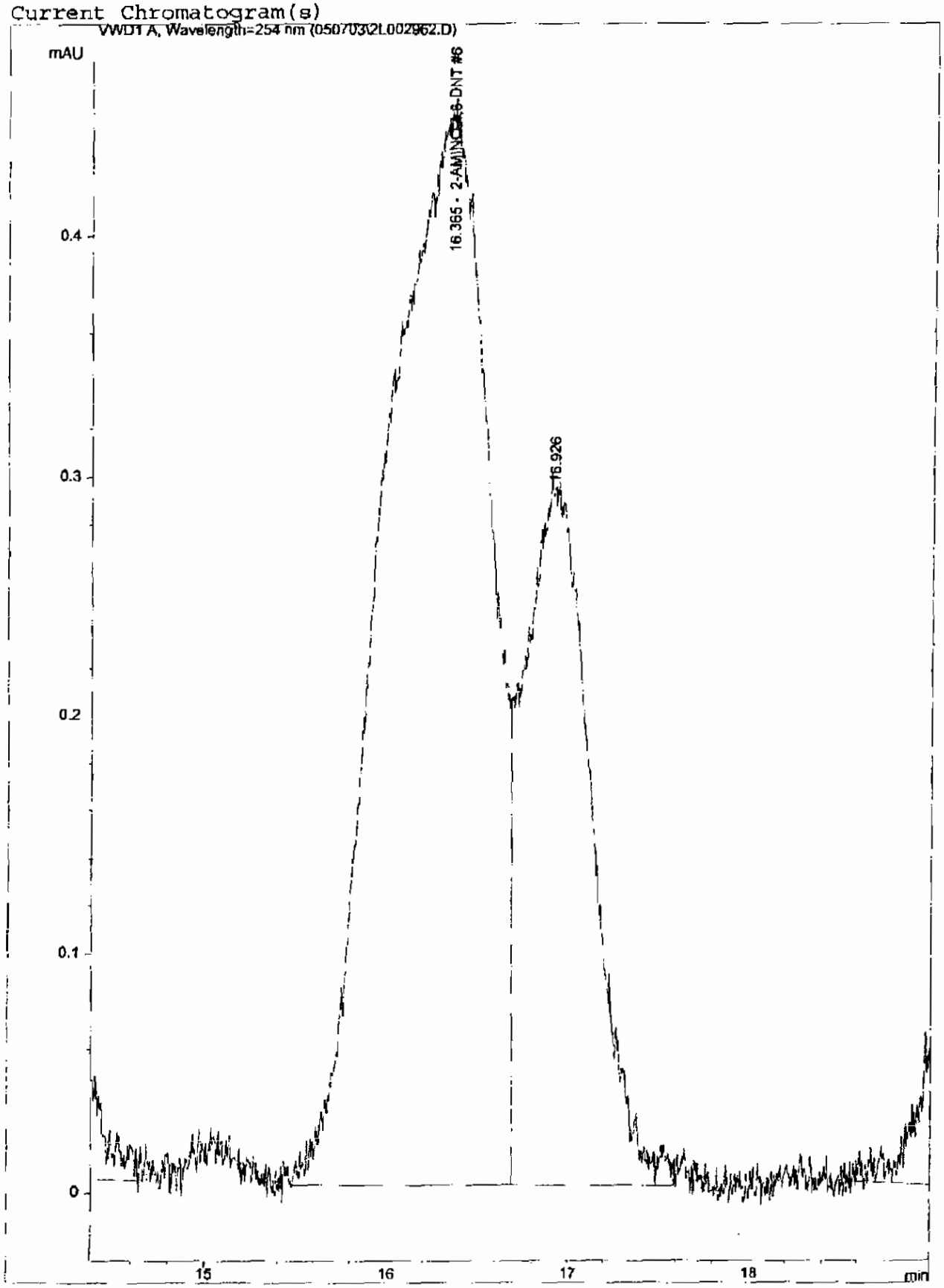
Sorted By : Signal
Calib. Data Modified : 5/8/2003 4:33:10 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

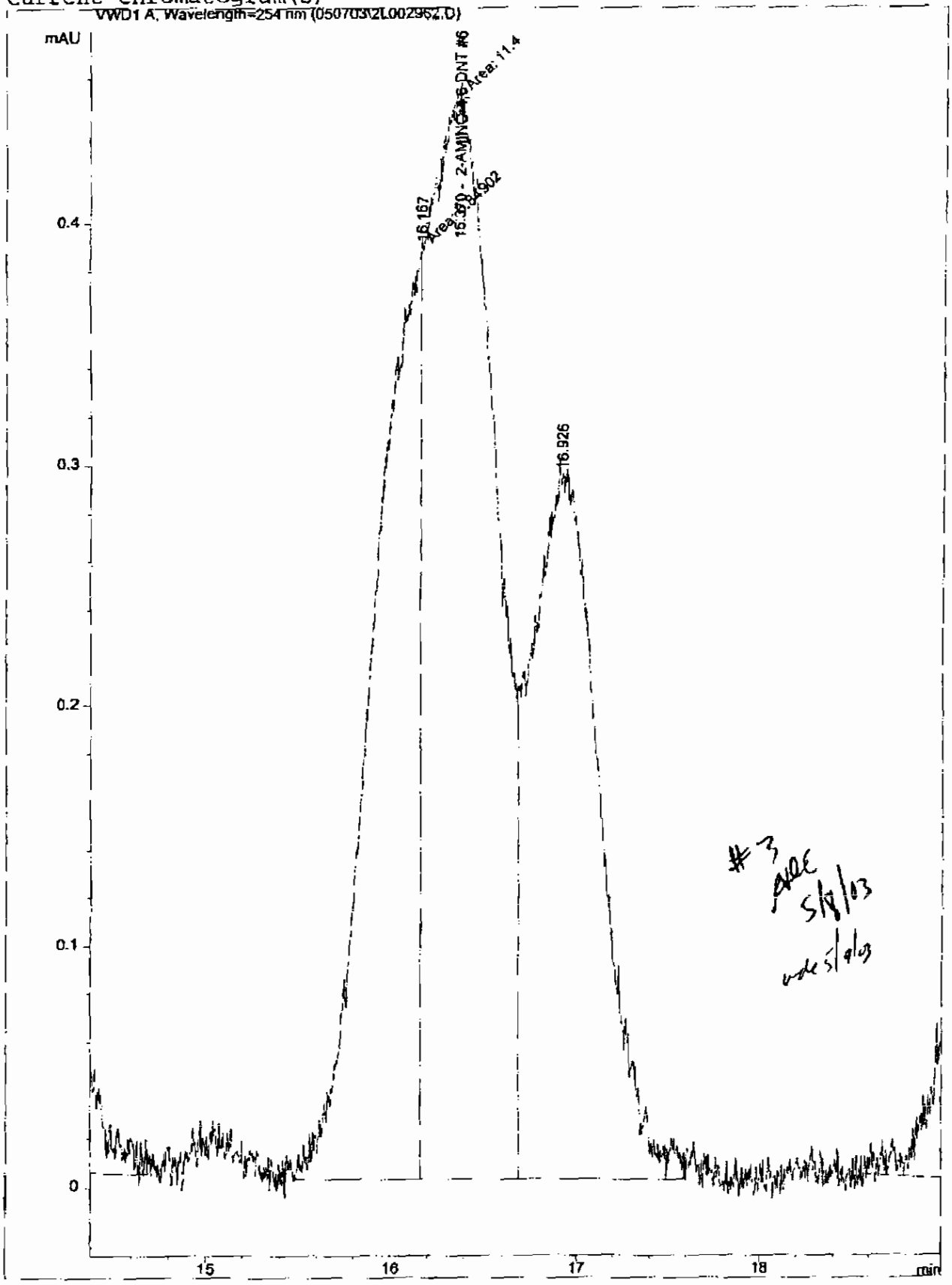
RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
9.260		-	-	-		NITROBENZENE #1
10.193		-	-	-		1,3-DNB #2
10.967		-	-	-		1,3,5-TNB #3
11.764		-	-	-		RDX #4
15.063		-	-	-		2,4-DNT #5
16.370	FM	11.39997	4.81819	54.92724		2-AMINO-4,6-DNT #6
17.403		-	-	-		2,4,6-TNT #7
18.740		-	-	-		HMX #8

Current Chromatogram(s)



Current Chromatogram(s)

VWD1 A, Wavelength=254 nm (050703\2L002962.D)



#3 [illegible] 5/8/03

[illegible] 5/9/03

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
19.314	BB	7.20543	7.40054	53.32406		3,4-DNT SURR. #9

Totals : 108.25130

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibrated compound(s) not found

==========

*** End of Report ***

Calibration Table

Calib. Data Modified : 5/8/2003 5:28:57 PM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 0.000 %
Abs. Reference Window : 0.000 min
Rel. Non-ref. Window : 0.000 %
Abs. Non-ref. Window : 0.500 min
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Included
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: VWD1 A, Wavelength=254 nm

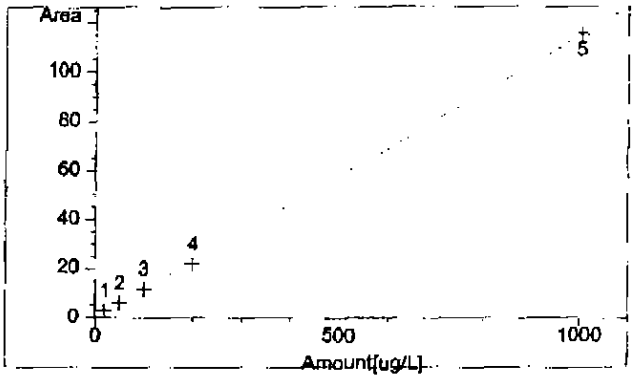
RetTime [min]	Sig	Lvl	Amount [ug/L]	Area	Amt/Area	Ref	Grp	Name
13.598	1	1	20.00000	2.86869	6.97184			NITROTOLUENES #1
		2	50.00000	6.05331	8.25995			
		3	100.00000	11.70313	8.54472			
		4	200.00000	21.83385	9.16009			
		5	1000.00000	115.18032	8.68204			
14.181	1	1	10.00000	1.75826	5.68743			NITROTOLUENE #2
		2	25.00000	3.37934	7.39790			
		3	50.00000	6.69306	7.47043			
		4	100.00000	12.91770	7.74132			
		5	500.00000	67.48347	7.40922			
16.253	1	1	10.00000	1.68191	5.94562			2,6-DNT #3
		2	25.00000	4.22340	5.91940			
		3	50.00000	7.87920	6.34582			
		4	100.00000	16.29812	6.13568			
		5	500.00000	82.33293	6.07290			
17.156	1	1	10.00000	1.31039	7.63130			4-AMINO-2,6-DNT #4
		2	25.00000	4.54840	5.49644			
		3	50.00000	7.89488	6.33321			
		4	100.00000	14.84757	6.73511			
		5	500.00000	77.98283	6.41167			

RetTime [min]	Sig	Lvl	Amount [ug/L]	Area	Amt/Area	Ref	Grp	Name
19.595	1	1	10.00000	1.55849	6.41645			3,4-DNT SURR. #9 *
		2	25.00000	4.72789	5.28777			
		3	50.00000	7.97299	6.27117			
		4	100.00000	13.38523	7.47092			
		5	500.00000	71.61559	6.98172			
29.399	1	1	10.00000	1.81679	5.50423			TETRYL #5
		2	25.00000	3.94943	6.33002			
		3	50.00000	9.18074	5.44618			
		4	100.00000	15.03300	6.65203			
		5	500.00000	86.63780	5.77115			

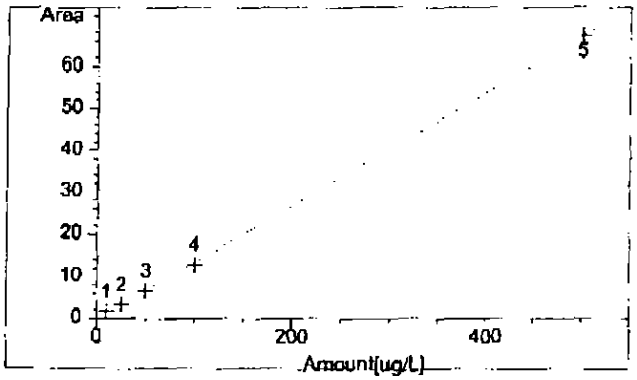
Peak Sum Table

No Entries in table

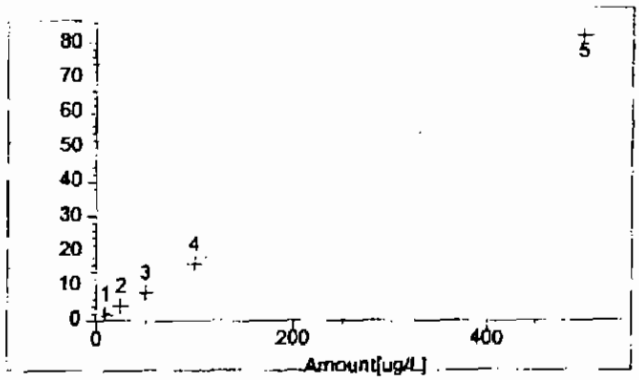
Calibration Curves



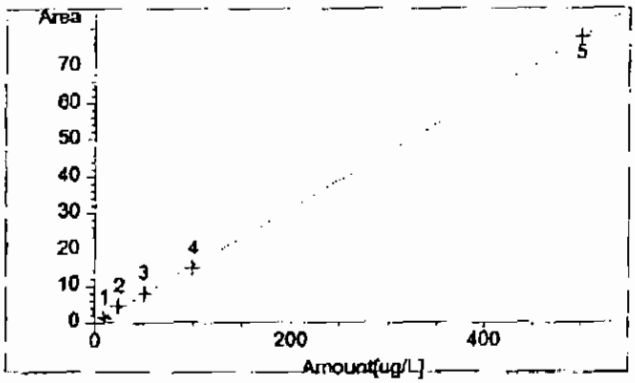
NITROTOLUENES #1 at exp. RT: 13.598
VWD1 A, Wavelength=254 nm
Correlation: 0.99991
Residual Std. Dev.: 0.67949
Formula: y = mx + b
m: 1.14964e-1
b: 2.30400e-2
x: Amount [ug/L]
y: Area



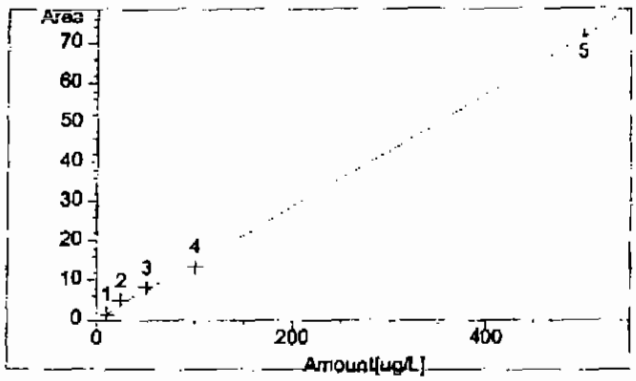
NITROTOLUENE #2 at exp. RT: 14.181
VWD1 A, Wavelength=254 nm
Correlation: 0.99993
Residual Std. Dev.: 0.35067
Formula: y = mx + b
m: 1.34798e-1
b: -1.74589e-2
x: Amount [ug/L]
y: Area



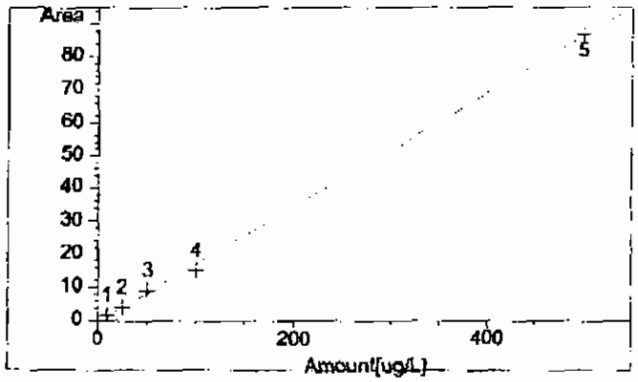
2,6-DNT #3 at exp. RT: 16.253
VWD1 A, Wavelength=254 nm
Correlation: 0.99999
Residual Std. Dev.: 0.18808
Formula: y = mx + b
m: 1.64730e-1
b: -7.07771e-2
x: Amount [ug/L]
y: Area



4-AMINO-2,6-DNT #4 at exp. RT: 17.156
VWD1 A, Wavelength=254 nm
Correlation: 0.99988
Residual Std. Dev.: 0.50973
Formula: y = mx + b
m: 1.55817e-1
b: -2.50889e-2
x: Amount [ug/L]
y: Area



3,4-DNT SURR. #9 * at exp. RT: 19.595
VWD1 A, Wavelength=254 nm
Correlation: 0.99966
Residual Std. Dev.: 0.79406
Formula: y = mx + b
m: 1.42398e-1
b: 2.86293e-1
x: Amount [ug/L]
y: Area

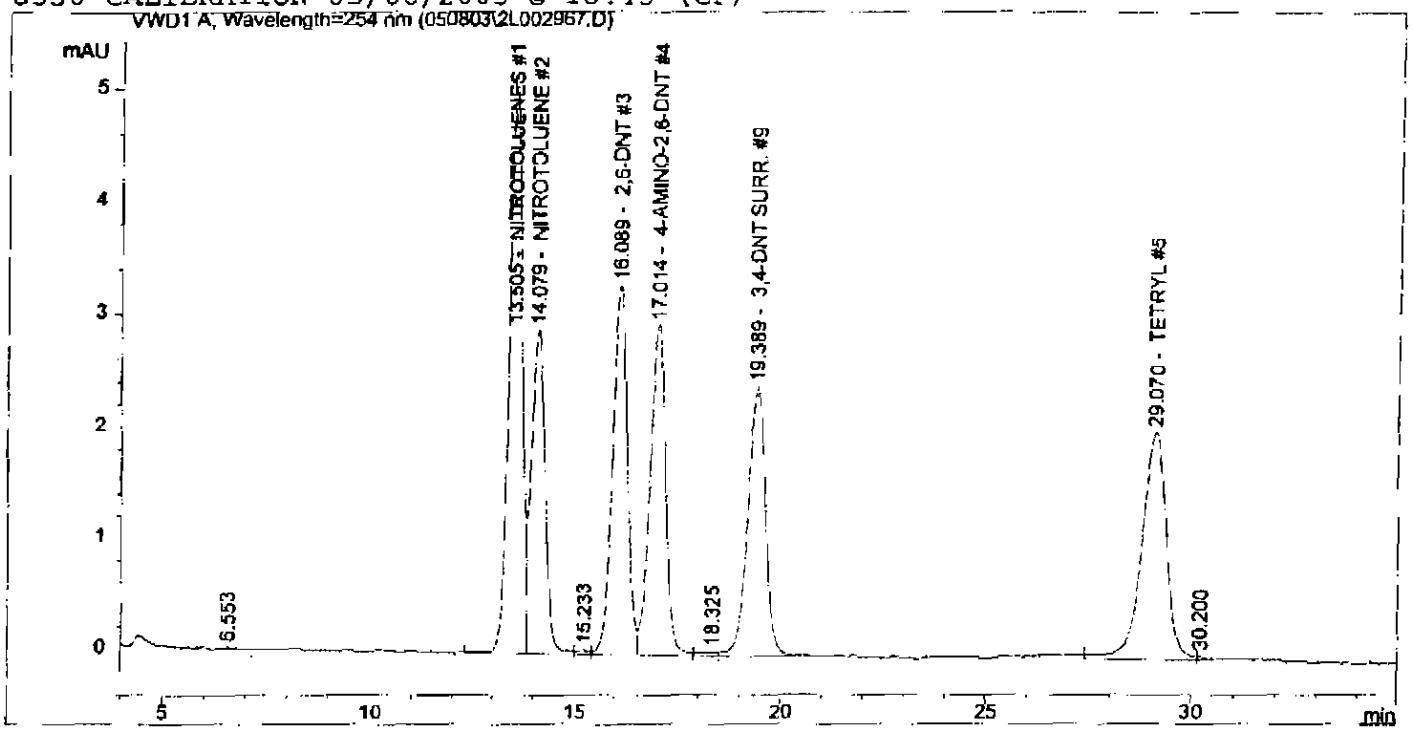


TETRYL #5 at exp. RT: 29.399
VWD1 A, Wavelength=254 nm
Correlation: 0.99955
Residual Std. Dev.: 1.11400
Formula: y = mx + b
m: 1.73409e-1
b: -3.61236e-1
x: Amount [ug/L]
y: Area

==========

1,1 SOS65-01 8330 MIX A @ 500 ppb

```
==================================================================
Injection Date  : 5/8/2003 2:18:15 PM          Seq. Line :   2
Sample Name     : WG140090-07 #5B                   Vial :   2
Acq. Operator   : RDC                                Inj :   1
                                               Inj Volume : 100 µl
Acq. Method     : C:\HPCHEM\1\METHODS\8330CONF.M
Last changed    : 5/8/2003 1:39:42 PM by RDC
Analysis Method : C:\HPCHEM\1\METHODS\833CFD_B.M
Last changed    : 5/8/2003 5:10:22 PM by RDC
                  (modified after loading)
8330 CALIBRATION 05/08/2003 @ 16:45 (CF)
```




```
==================================================================
                      External Standard Report
==================================================================

Sorted By              :      Signal
Calib. Data Modified   :      5/8/2003 5:10:07 PM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=254 nm
```

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.505	VV	115.18032	8.67538	999.23267		NITROTOLUENES #1
14.079	VB	67.48347	7.40510	499.72207		NITROTOLUENE #2
16.089	VV	82.33293	6.07711	500.34668		2,6-DNT #3
17.014	VB	77.98283	6.41136	499.97585		4-AMINO-2,6-DNT #4
19.389	VB	71.61559	6.99665	501.06907		3,4-DNT SURR. #9
29.070	BV	86.63780	5.77521	500.35141		TETRYL #5

Totals : 3500.69775

Results obtained with enhanced integrator!

==========

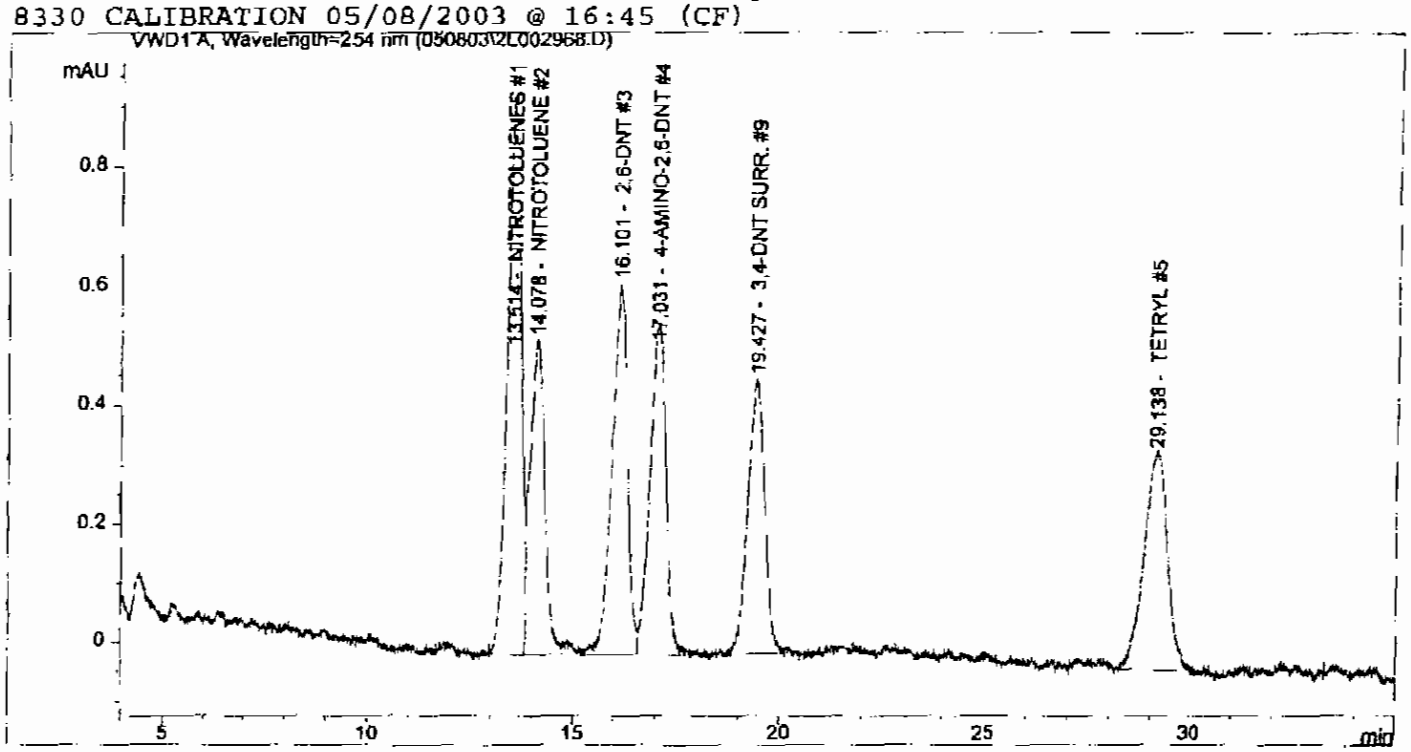
*** End of Report ***

1,1 SOS65-01 8330 MIX A @ 100 ppb

Injection Date	: 5/8/2003 2:55:08 PM	Seq. Line :	3
Sample Name	: WG140090-08 #4B	Vial :	3
Acq. Operator	: RDC	Inj :	1
		Inj Volume :	100 µl

Acq. Method : C:\HPCHEM\1\METHODS\8330CONF.M
Last changed : 5/8/2003 1:39:42 PM by RDC
Analysis Method : C:\HPCHEM\1\METHODS\833CFD_B.M
Last changed : 5/8/2003 5:10:47 PM by RDC
(modified after loading)

8330 CALIBRATION 05/08/2003 @ 16:45 (CF)



External Standard Report

Sorted By	:	Signal
Calib. Data Modified	:	Thursday, May 08, 2003 5:10:45 PM
Multiplier	:	1.0000
Dilution	:	1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.514	BV	21.83385	8.72789	190.56344		NITROTOLUENES #1
14.078	VB	12.91770	7.37453	95.26196		NITROTOLUENE #2
16.101	VV	16.29812	6.07887	99.07422		2,6-DNT #3
17.031	VP	14.84757	6.46886	96.04682		4-AMINO-2,6-DNT #4
19.427	BB	13.38523	6.95064	93.03584		3,4-DNT SURR. #9
29.138	PB	15.03300	5.94413	89.35806		TETRYL #5

Totals : 663.34034

Results obtained with enhanced integrator!

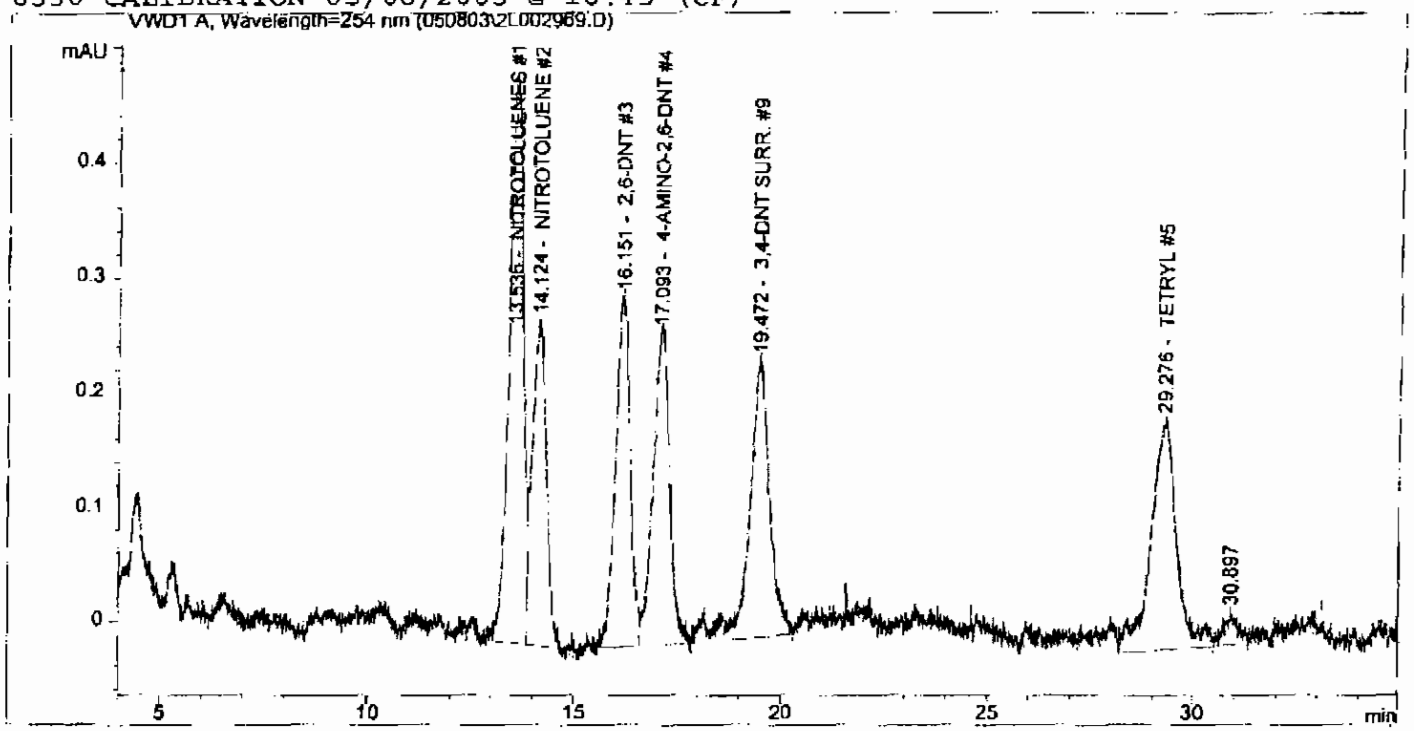
==========

*** End of Report ***

1,1 SOS65-01 8330 MIX A @ 50 ppb

Injection Date	: 5/8/2003 3:32:01 PM	Seq. Line :	4
Sample Name	: WG140090-09 #3B	Vial :	4
Acq. Operator	: RDC	Inj :	1
		Inj Volume :	100 µl
Acq. Method	: C:\HPCHEM\1\METHODS\8330CONF.M		
Last changed	: 5/8/2003 1:39:42 PM by RDC		
Analysis Method	: C:\HPCHEM\1\METHODS\833CFD_B.M		
Last changed	: 5/8/2003 5:11:08 PM by RDC (modified after loading)		

8330 CALIBRATION 05/08/2003 @ 16:45 (CF)



External Standard Report

Sorted By	:	Signal
Calib. Data Modified	:	Thursday, May 08, 2003 5:11:06 PM
Multiplier	:	1.0000
Dilution	:	1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.536	BV	11.70313	8.76189	102.54146		NITROTOLUENES #1
14.124	VP	6.69306	7.42600	49.70261		NITROTOLUENE #2
16.151	BV	7.87920	6.11159	48.15450		2,6-DNT #3
17.093	VP	7.89488	6.44583	50.88905		4-AMINO-2,6-DNT #4
19.472	VP	7.97299	6.82445	54.41123		3,4-DNT SURR. #9
29.276	VP	9.18074	5.97561	54.86053		TETRYL #5

Totals : 360.55937

Results obtained with enhanced integrator!

==========

*** End of Report ***

1,1 SOS65-01 8330 MIX A @ 25 ppb

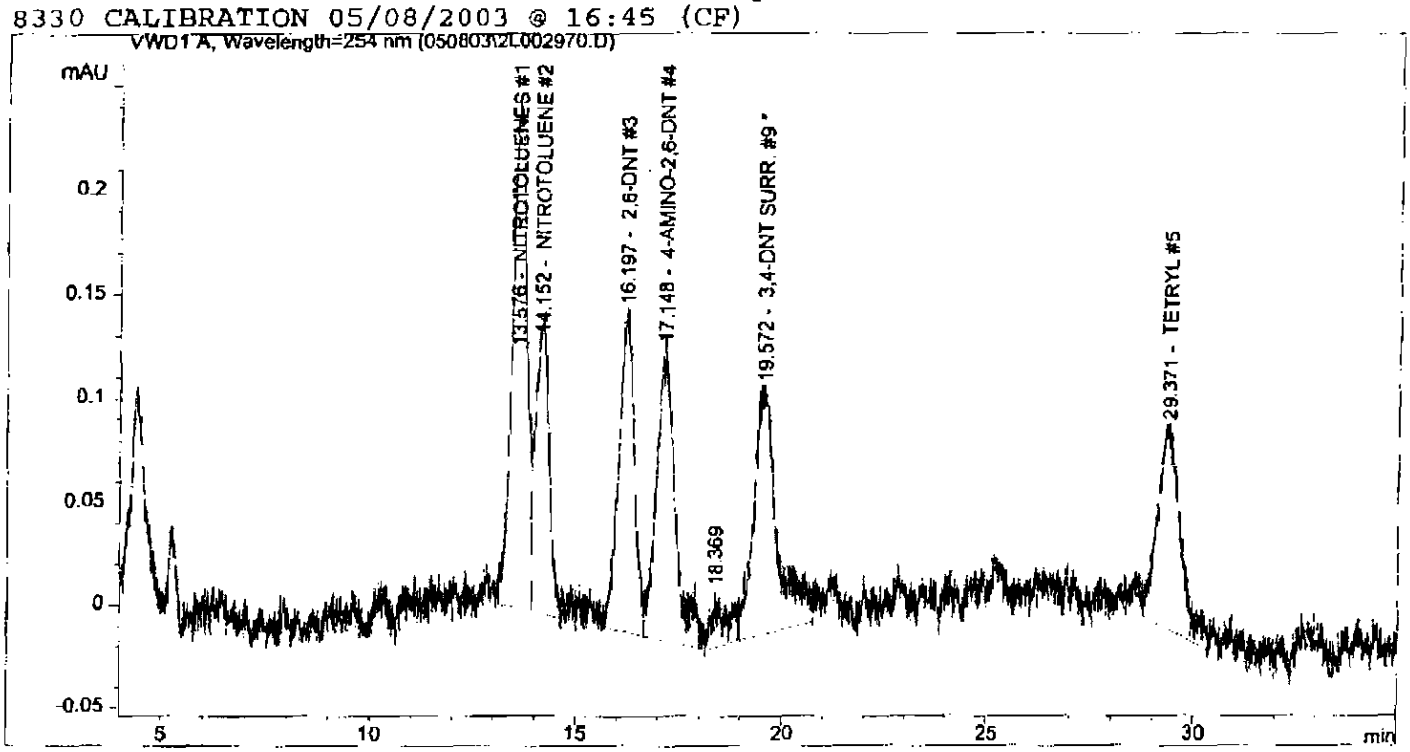
==========

Injection Date : 5/8/2003 4:08:55 PM
Sample Name : WG140090-10 #2B
Acq. Operator : RDC

Seq. Line : 5
Vial : 5
Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\HPCHEM\1\METHODS\8330CONF.M
Last changed : 5/8/2003 1:39:42 PM by RDC
Analysis Method : C:\HPCHEM\1\METHODS\833CFD_B.M
Last changed : 5/8/2003 5:11:52 PM by RDC
(modified after loading)

8330 CALIBRATION 05/08/2003 @ 16:45 (CF)



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : Thursday, May 08, 2003 5:11:46 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.576	BV	6.05331	8.74521	52.93746		NITROTOLUENES #1
14.152	VB	3.37934	7.59548	25.66770		NITROTOLUENE #2
16.197	BV	4.22340	6.15113	25.97870		2,6-DNT #3
17.148	VP	4.54840	6.39975	29.10859		4-AMINO-2,6-DNT #4
19.572	BV	4.72789	6.58392	31.12806		3,4-DNT SURR. #9 *
29.371	BP	3.94943	6.33421	25.01653		TETRYL #5

Totals : 189.83704

Results obtained with enhanced integrator!

==========

*** End of Report ***

1,1 SOS65-01 8330 MIX A @ 10 ppb

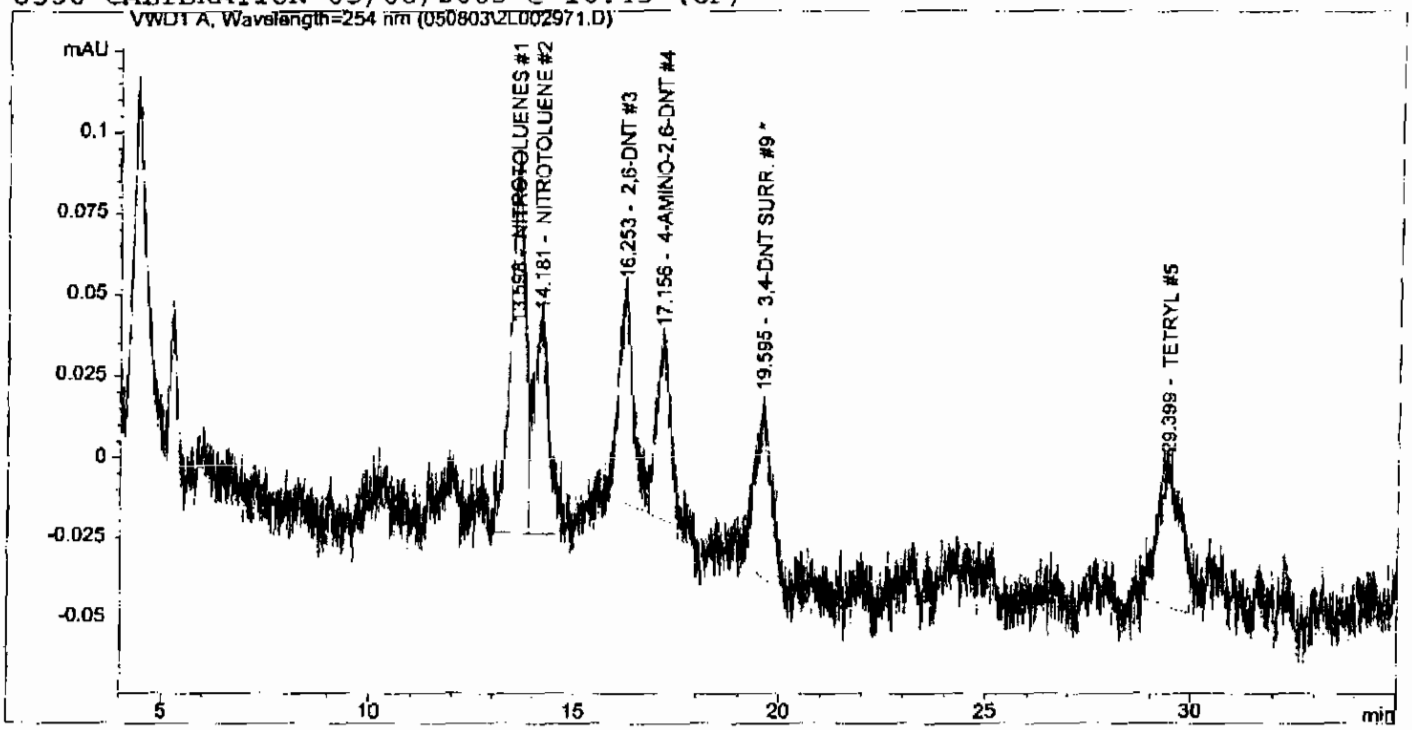
==========

Injection Date : 5/8/2003 4:45:48 PM
Sample Name : WG140090-11 #1B
Acq. Operator : RDC

Seq. Line : 6
Vial : 6
Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\HPCHEM\1\METHODS\8330CONF.M
Last changed : 5/8/2003 1:39:42 PM by RDC
Analysis Method : C:\HPCHEM\1\METHODS\833CFD_B.M
Last changed : 5/8/2003 5:28:20 PM by RDC
(modified after loading)

8330 CALIBRATION 05/08/2003 @ 16:45 (CF)



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : Thursday, May 08, 2003 5:28:17 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.598	BV	2.86869	8.62849	24.75243		NITROTOLUENES #1
14.181	VP	1.75826	7.49217	13.17321		NITROTOLUENE #2
16.253	BB	1.68191	6.32599	10.63974		2,6-DNT #3
17.156	BB	1.31039	6.54066	8.57084		4-AMINO-2,6-DNT #4
19.595	PP	1.55849	5.73255	8.93414		3,4-DNT SURR. #9 *
29.399	BB	1.81679	6.91332	12.56002		TETRYL #5

Totals : 78.63039

Results obtained with enhanced integrator!

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*** End of Report ***

Check Standard Report

==========

Data File C:\HPCHEM\1\DATA\050803\2L002973.D Sample Name: WG140090-12 ALTB
HPLC2 5/9/2003 8:09:06 AM RDC

1,1 SO565-03 8330 MIX B @ 50 ppb remade and RR

==========

Injection Date : 5/8/2003 6:44:39 PM Seq. Line : 8

Signal 1: VWD1 A, Wavelength=254 nm

Compound	RT	Known Conc.	Cal. Conc.	%D
NITROTOLUENES #1	13.647	100.0	97.496	-2.5
NITROTOLUENE #2	14.229	50.0	47.459	-5.1
2,6-DNT #3	16.365	50.0	42.403	-15.2 #
4-AMINO-2,6-DNT #4	17.275	50.0	49.997	0.0
3,4-DNT SURR. #9 *	19.701	50.0	49.215	-1.6
TETRYL #5	29.681	50.0	56.935	13.9

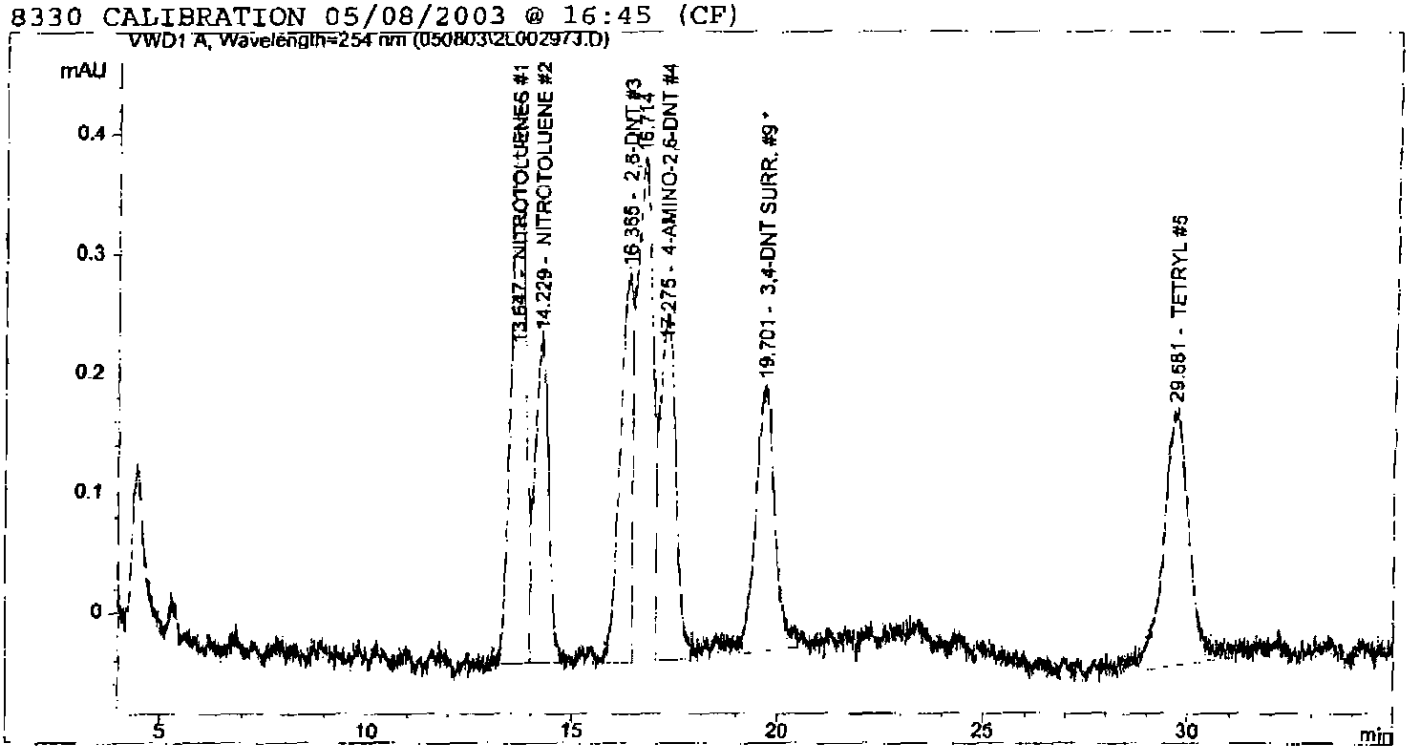
= Failed 15.0% Criteria

1,1 SOS65-03 8330 MIX B @ 50 ppb remade and RR

Injection Date	: 5/8/2003 6:44:39 PM	Seq. Line :	8
Sample Name	: WG140090-12 ALTB	Vial :	7
Acq. Operator	: RDC	Inj :	1
		Inj Volume :	100 µl

Acq. Method : C:\HPCHEM\1\METHODS\8330CONF.M
Last changed : 5/8/2003 1:39:42 PM by RDC
Analysis Method : C:\HPCHEM\1\METHODS\833CFD_B.M
Last changed : 5/9/2003 8:08:22 AM by RDC
(modified after loading)

8330 CALIBRATION 05/08/2003 @ 16:45 (CF)



External Standard Report

Sorted By	:	Signal
Calib. Data Modified	:	Friday, May 09, 2003 8:08:22 AM
Multiplier	:	1.0000
Dilution	:	1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.647	BV	11.23157	8.68051	97.49581		NITROTOLUENES #1
14.229	VP	6.37985	7.43881	47.45852		NITROTOLUENE #2
16.365	PV	6.91427	6.13267	42.40295		2,6-DNT #3
17.275	VP	7.76527	6.43852	49.99686		4-AMINO-2,6-DNT #4
19.701	BP	7.29433	6.74696	49.21450		3,4-DNT SURR. #9 *
29.681	BP	9.51183	5.98572	56.93515		TETRYL #5

Totals : 343.50379

Results obtained with enhanced integrator!

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*** End of Report ***

Check Standard Report

==========

Data File C:\HPCHEM\2\DATA\042903\4L004861.D Sample Name: WG139328-01 CCV
HPLC4 4/30/2003 11:22:50 AM RDC

1,1 SOS64-31 50 ppb

==========

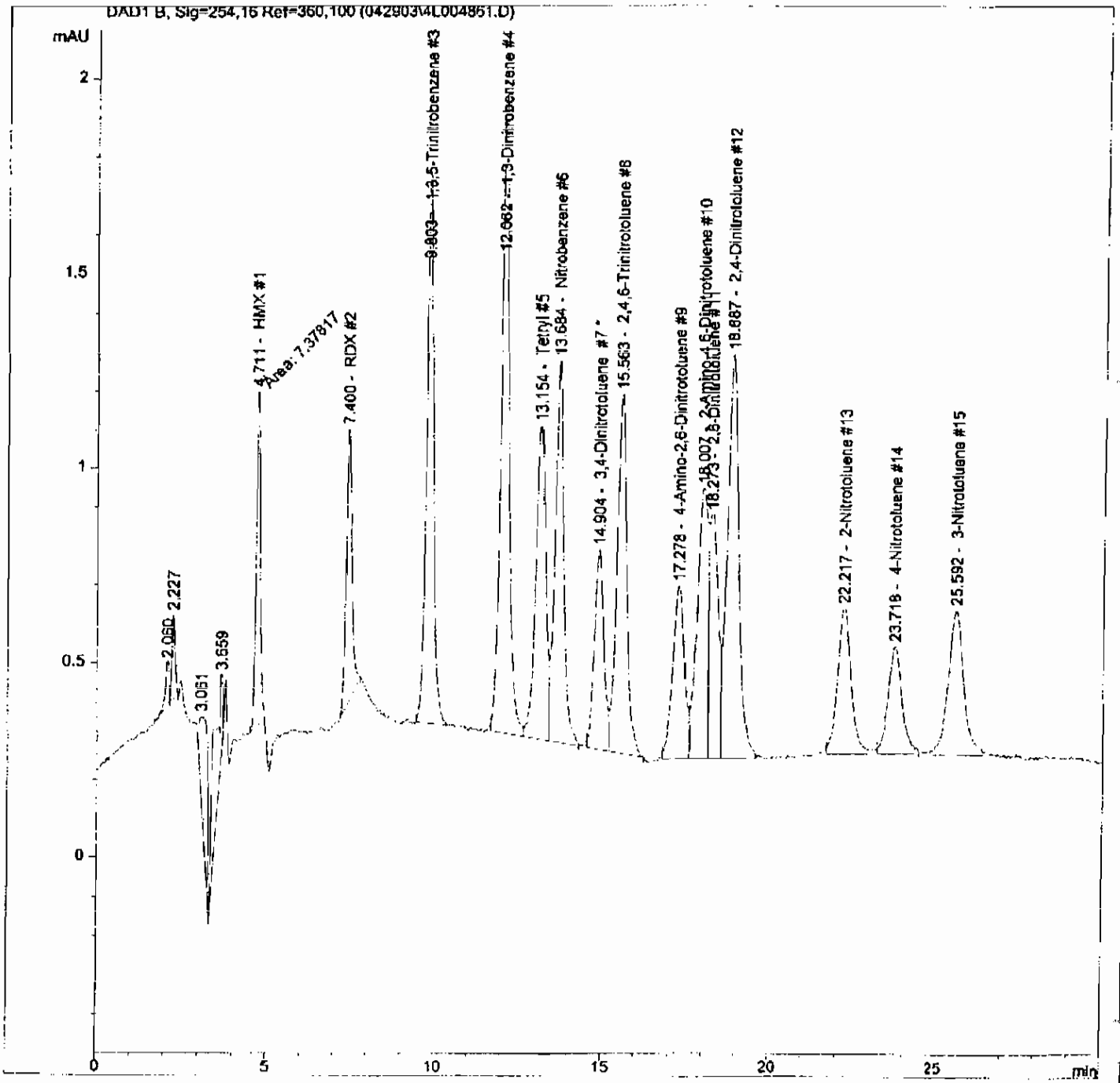
Injection Date : 4/29/2003 3:33:57 PM Seq. Line : 2

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

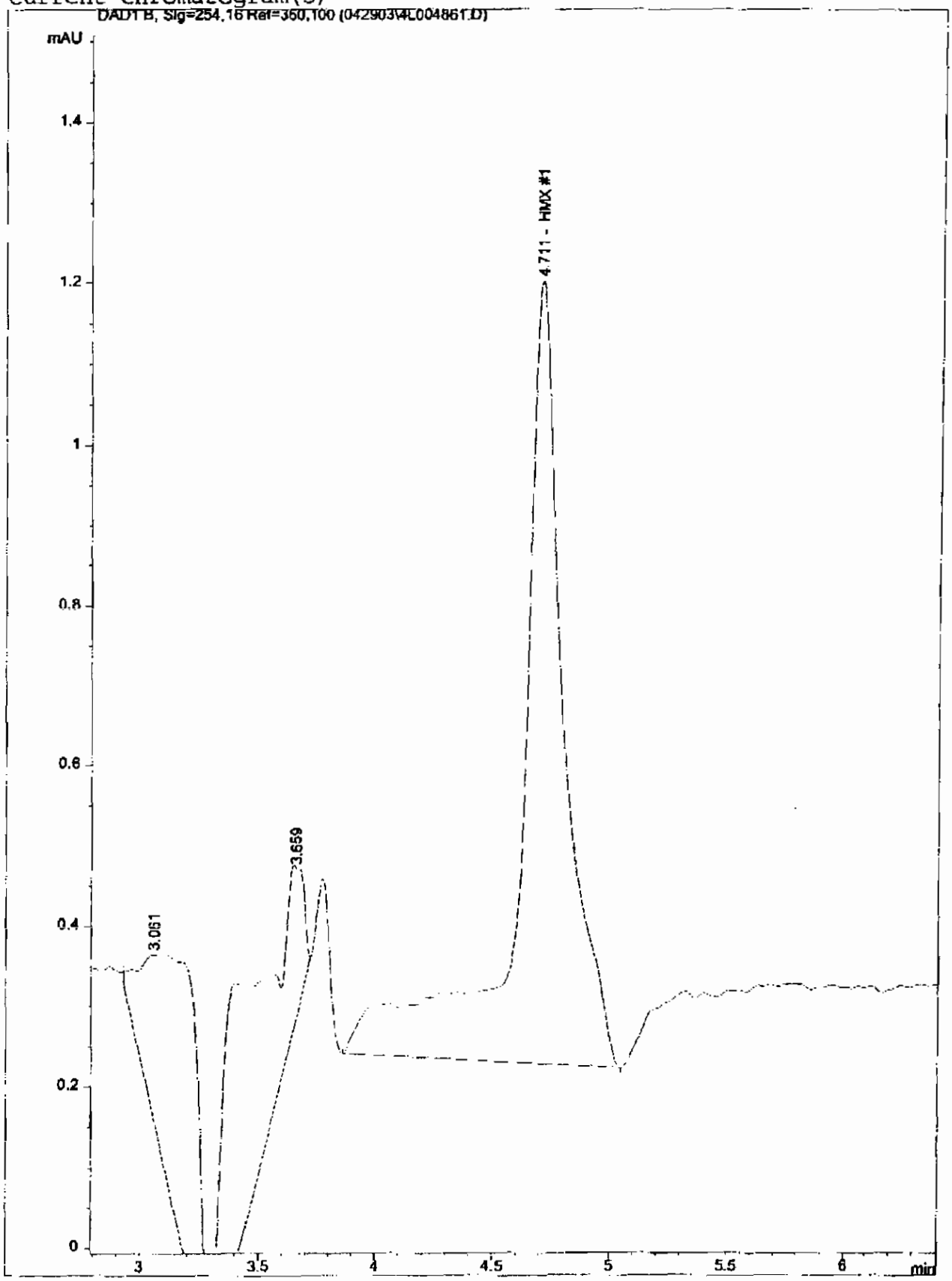
Compound	RT	Known Conc.	Cal. Conc.	%D
HMX #1	4.711	50.0	49.854	-0.3
RDX #2	7.400	50.0	51.805	3.6
1,3,5-Trinitrobenzene #3	9.803	50.0	51.733	3.5
1,3-Dinitrobenzene #4	12.062	50.0	52.024	4.0
Tetryl #5	13.154	50.0	53.940	7.9
Nitrobenzene #6	13.684	50.0	50.491	1.0
3,4-Dinitrotoluene #7 *	14.904	50.0	49.087	-1.8
2,4,6-Trinitrotoluene #8	15.563	50.0	48.979	-2.0
4-Amino-2,6-Dinitrotolue	17.278	50.0	49.304	-1.4
2-Amino-4,6-Dinitrotolue	18.007	50.0	53.191	6.4
2,6-Dinitrotoluene #11	18.273	50.0	48.661	-2.7
2,4-Dinitrotoluene #12	18.887	50.0	50.153	0.3
2-Nitrotoluene #13	22.217	50.0	53.120	6.2
4-Nitrotoluene #14	23.718	50.0	51.861	3.7
3-Nitrotoluene #15	25.592	50.0	49.932	-0.1

= Failed 15.0% Criteria

```
==================================================================
Injection Date   : 4/29/2003 3:33:57 PM          Seq. Line :   2
Sample Name      : WG139328-01 CCV                   Vial :   2
Acq. Operator    : RDC                                Inj :   1
                                                Inj Volume : 100 µl
Acq. Method      : C:\HPCHEM\2\METHODS\8330.M
Last changed     : 4/29/2003 2:40:07 PM by RDC
Analysis Method  : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed     : 4/29/2003 12:20:00 PM by RDC
                   (modified after loading)
8330 CALIBRATION 04/24/2003 @ 21:05
==================================================================
```



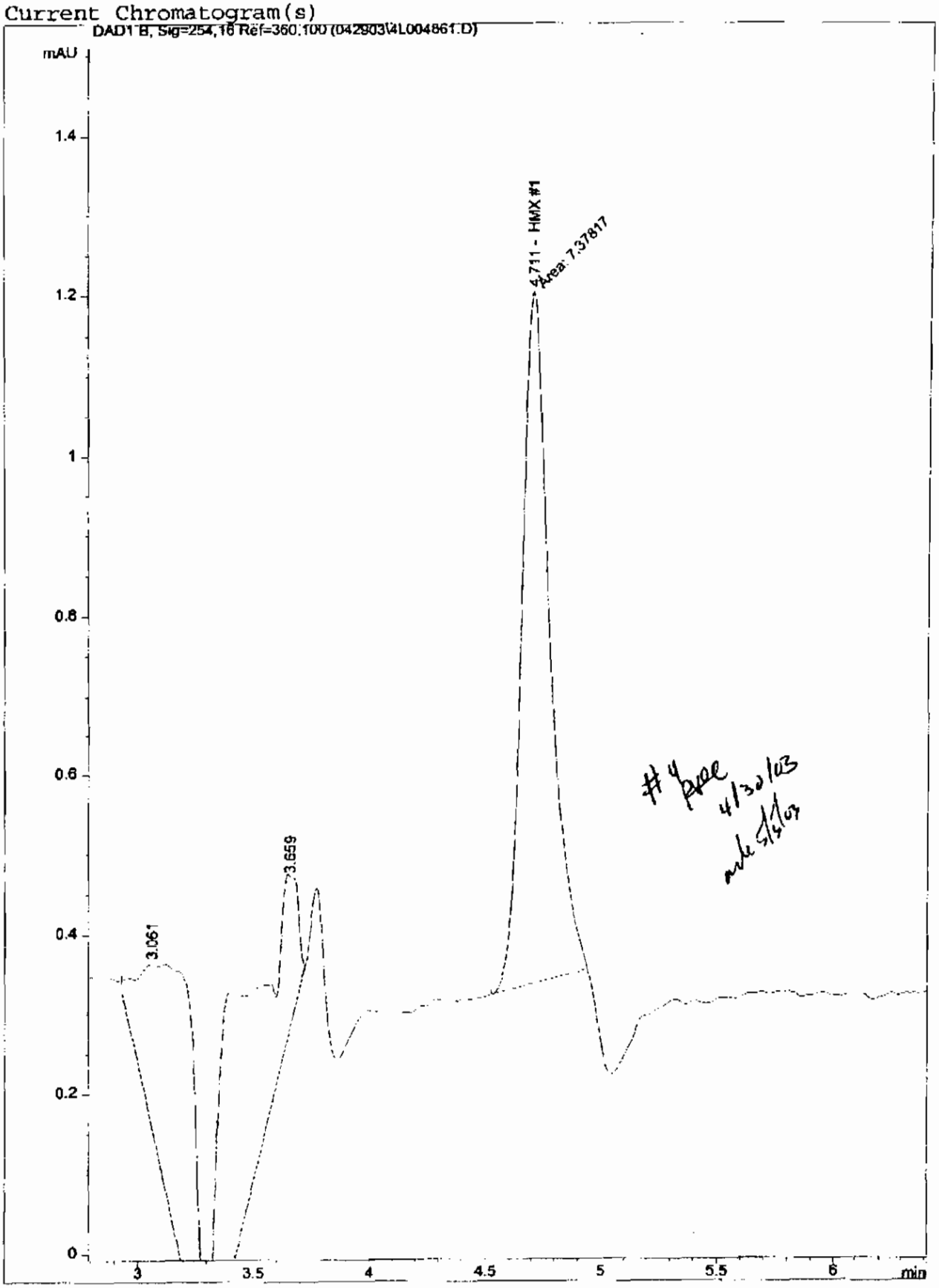
Current Chromatogram(s)



HPLC4 4/30/2003 11:22:17 AM RDC

Page 1 of 1

Current Chromatogram(s)



HPLC4 4/30/2003 11:22:39 AM RDC

Page 1 of 1

```
==================================================================
Injection Date   : 4/29/2003 3:33:57 PM          Seq. Line :   2
Sample Name      : WG139328-01 CCV                   Vial :   2
Acq. Operator    : RDC                                Inj :   1
                                                Inj Volume : 100 µl
Acq. Method      : C:\HPCHEM\2\METHODS\8330.M
Last changed     : 4/29/2003 2:40:07 PM by RDC
Analysis Method  : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed     : 4/29/2003 12:20:00 PM by RDC
                   (modified after loading)
8330 CALIBRATION 04/24/2003 @ 21:05
==================================================================

==================================================================
                      External Standard Report
==================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Tuesday, April 29, 2003 12:20:00 PM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime  Type     Area      Amt/Area    Amount   Grp   Name
 [min]           [mAU*s]                [ug/L]
-------|------|----------|----------|----------|--|-----------------
  4.711 MM        7.37817    6.75690   49.85358     HMX #1
  7.400 PBA       8.41141    6.15895   51.80544     RDX #2
  9.803 BB       20.54771    2.51770   51.73297     1,3,5-Trinitrobenzene #3
 12.062 BV       27.80119    1.87127   52.02362     1,3-Dinitrobenzene #4
 13.154 VV       15.08954    3.57463   53.93955     Tetryl #5
 13.684 VB       18.32364    2.75549   50.49057     Nitrobenzene #6
 14.904 BV        9.91122    4.95263   49.08657     3,4-Dinitrotoluene  #7 *
 15.563 VP       18.78901    2.60679   48.97908     2,4,6-Trinitrotoluene #8
 17.278 BV       10.87843    4.53231   49.30441     4-Amino-2,6-Dinitrotoluen
 18.007 VV       15.91951    3.34127   53.19143     2-Amino-4,6-Dinitrotoluen
 18.273 VV       11.53582    4.21824   48.66086     2,6-Dinitrotoluene #11
 18.887 VB       24.80832    2.02163   50.15333     2,4-Dinitrotoluene #12
 22.217 BB       10.33208    5.14123   53.11966     2-Nitrotoluene #13
 23.718 BB        8.22965    6.30171   51.86092     4-Nitrotoluene #14
 25.592 BB       11.75951    4.24608   49.93184     3-Nitrotoluene #15

Totals :                                1802.07610

 Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

==================================================================
                      *** End of Report ***
```

Check Standard Report

==========

Data File C:\HPCHEM\2\DATA\042903\4L004872.D Sample Name: WG139328-02 CCV
HPLC4 4/30/2003 11:48:52 AM RDC

1,1 SOS64-31 50 ppb

==========

Injection Date : 4/30/2003 1:24:52 AM Seq. Line : 13

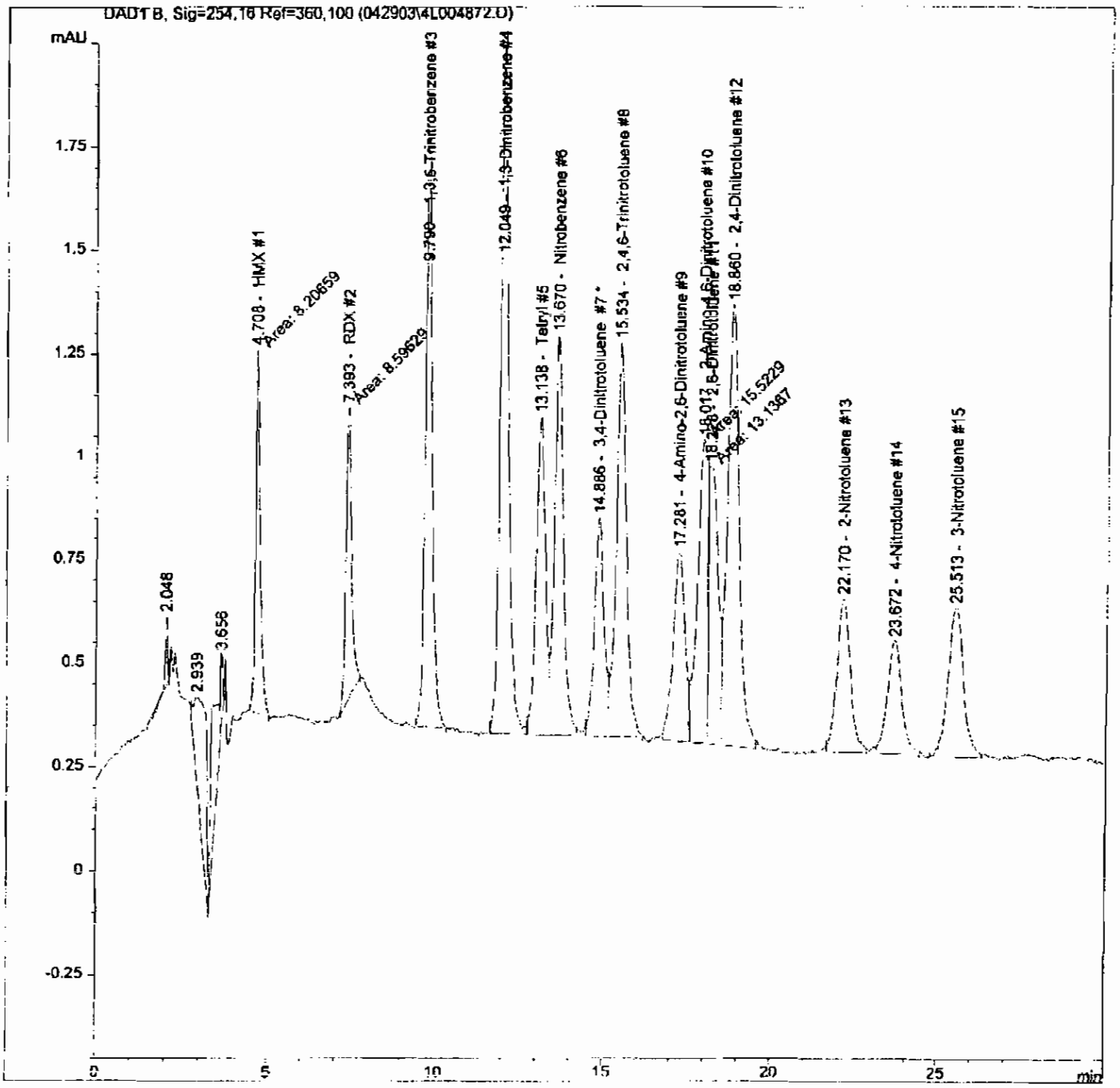
Signal 1: DAD1 B, Sig=254,16 Ref=360,100

Compound	RT	Known Conc.	Cal. Conc.	%D
HMX #1	4.708	50.0	54.894	9.8
RDX #2	7.393	50.0	52.737	5.5
1,3,5-Trinitrobenzene #3	9.790	50.0	51.750	3.5
1,3-Dinitrobenzene #4	12.049	50.0	52.345	4.7
Tetryl #5	13.138	50.0	50.685	1.4
Nitrobenzene #6	13.670	50.0	49.756	-0.5
3,4-Dinitrotoluene #7 *	14.886	50.0	52.904	5.8
2,4,6-Trinitrotoluene #8	15.534	50.0	51.722	3.4
4-Amino-2,6-Dinitrotolue	17.281	50.0	50.648	1.3
2-Amino-4,6-Dinitrotolue	18.017	50.0	52.002	4.0
2,6-Dinitrotoluene #11	18.228	50.0	54.686	9.4
2,4-Dinitrotoluene #12	18.860	50.0	51.902	3.8
2-Nitrotoluene #13	22.170	50.0	51.946	3.9
4-Nitrotoluene #14	23.672	50.0	50.414	0.8
3-Nitrotoluene #15	25.513	50.0	47.476	-5.0

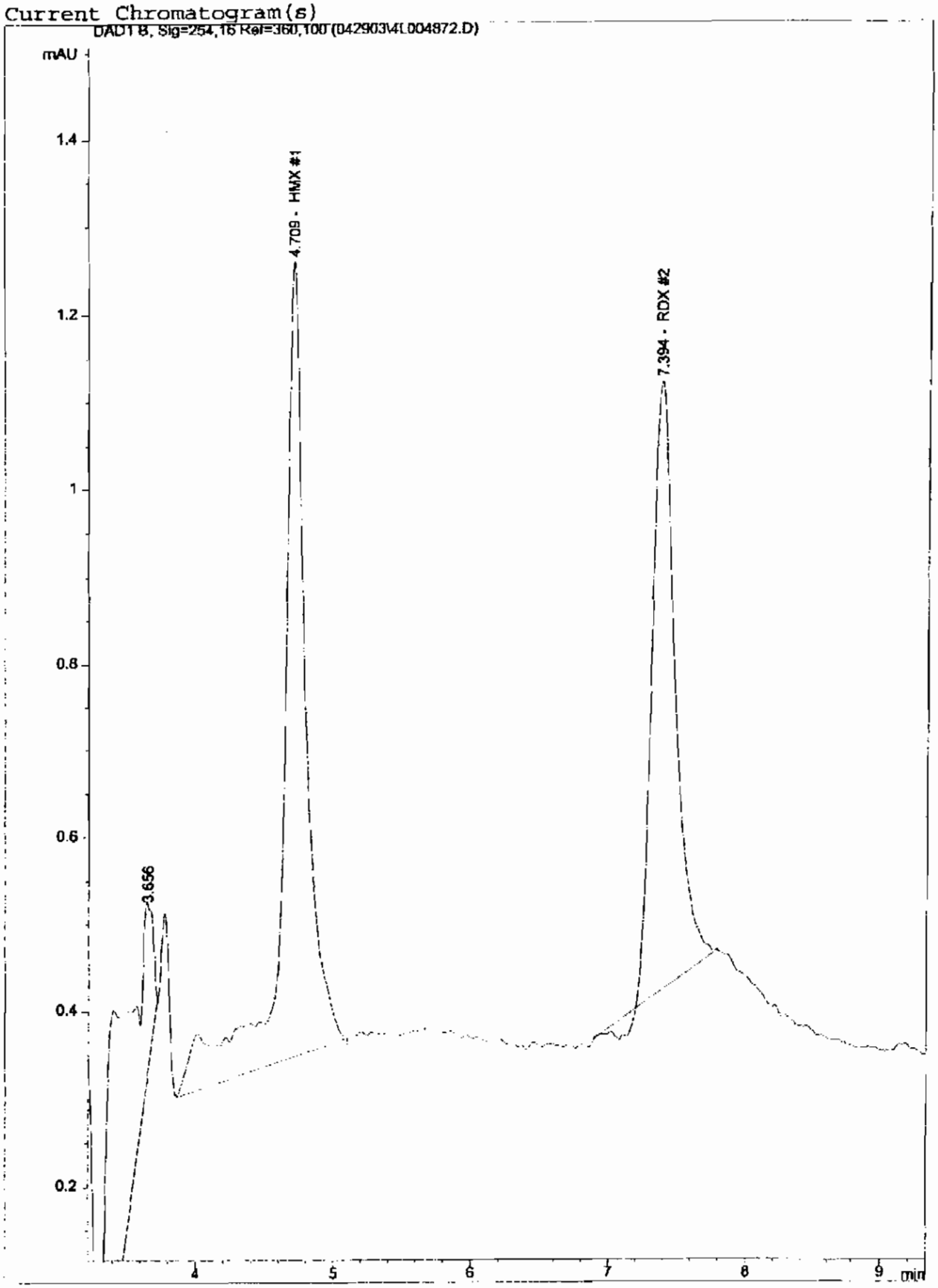
= Failed 15.0% Criteria

1,1 SOS64-31 50 ppb

```
==================================================================
Injection Date  : 4/30/2003 1:24:52 AM          Seq. Line :  13
Sample Name     : WG139328-02 CCV                    Vial :  13
Acq. Operator   : RDC                                 Inj :   1
                                               Inj Volume : 100 µl
Acq. Method     : C:\HPCHEM\2\METHODS\8330.M
Last changed    : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed    : 4/30/2003 11:24:59 AM by RDC
                  (modified after loading)
8330 CALIBRATION 04/24/2003 @ 21:05
==================================================================
```

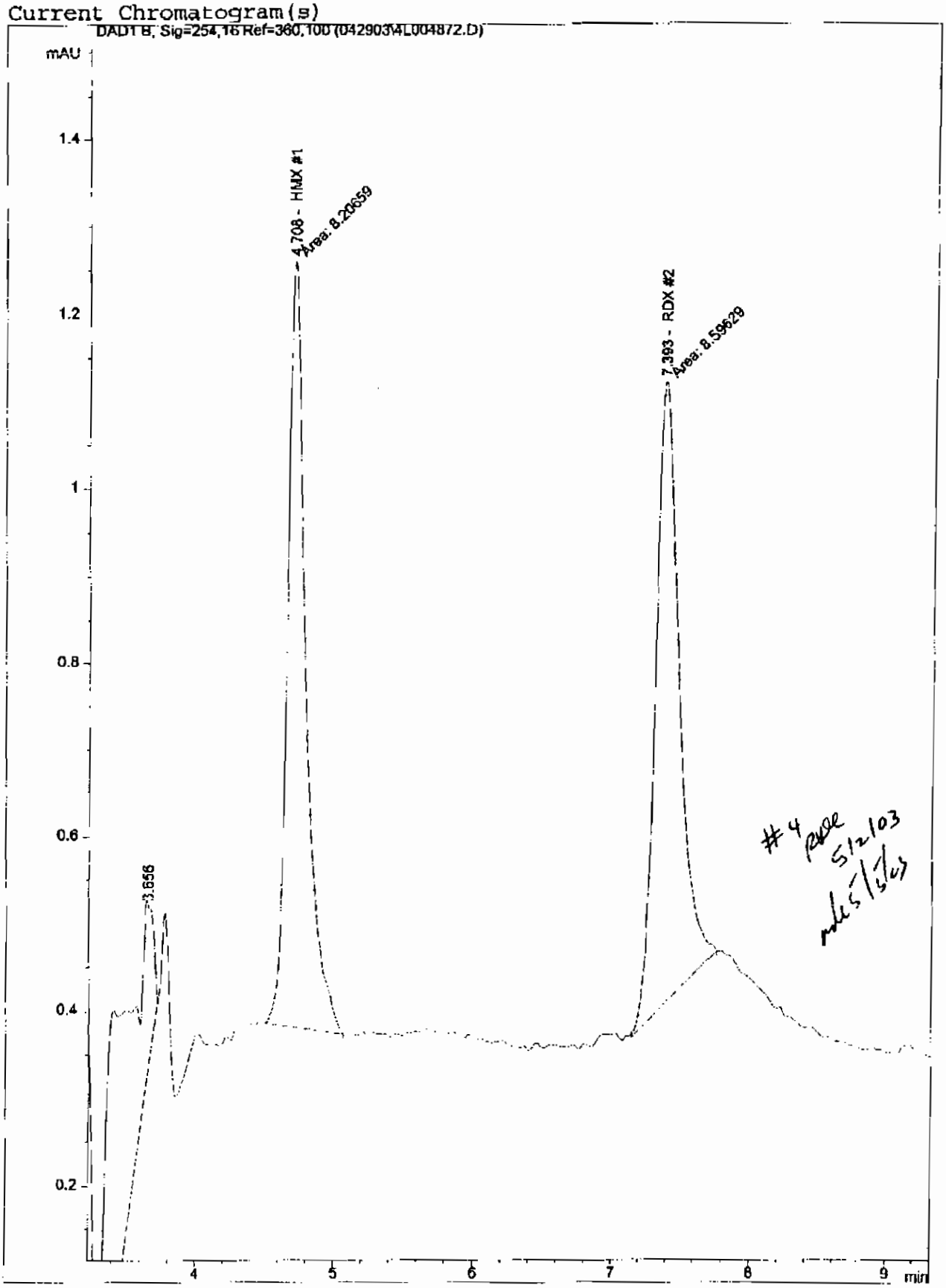


Current Chromatogram(s)

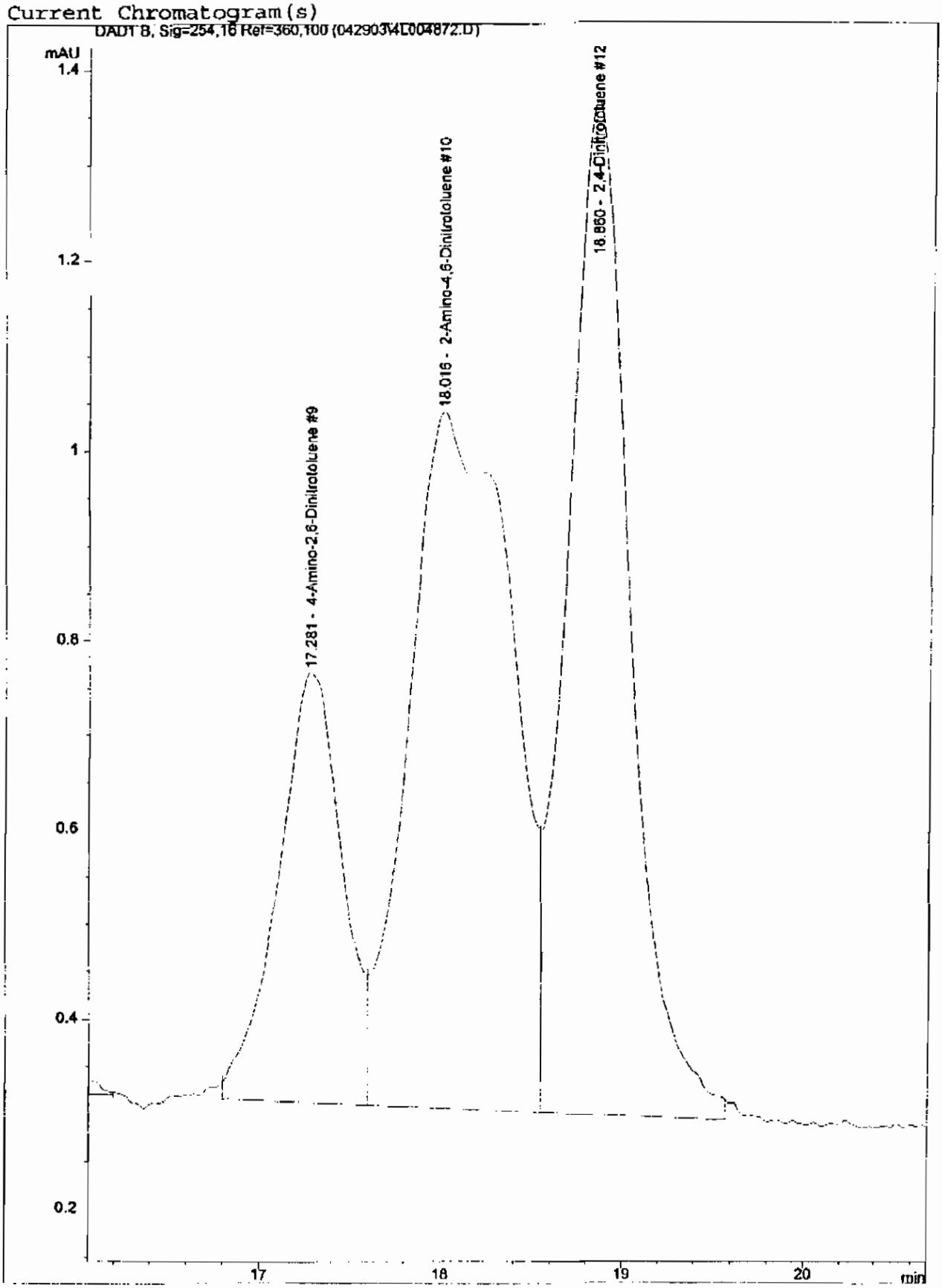


Current Chromatogram(s)

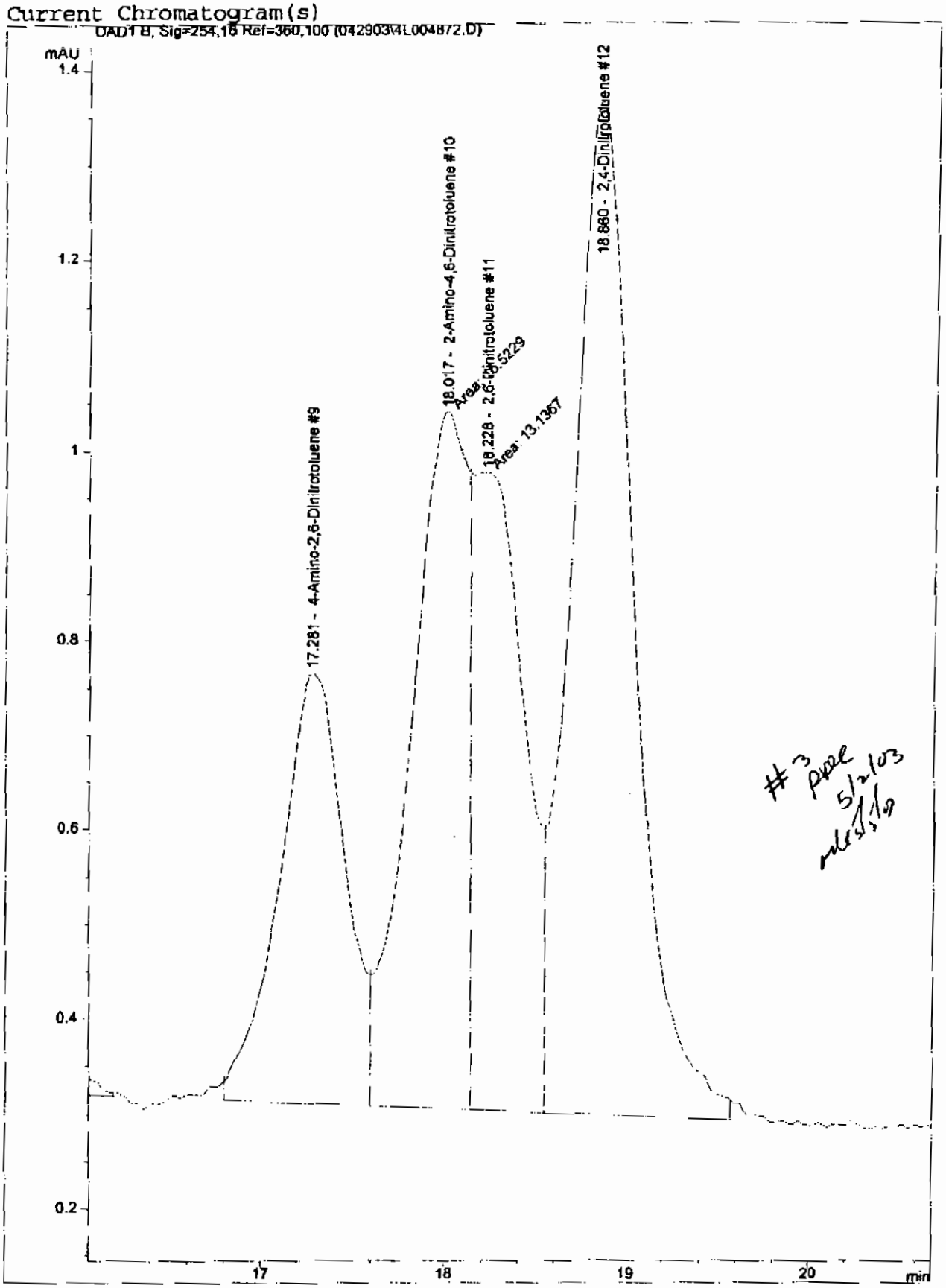
DAD1 B, Sig=254,16 Ref=360,100 (042903\4L004872.D)



Current Chromatogram(s)



Current Chromatogram(s)



#3 ppb 5/2/03 mls 1/2

```
==================================================================
Injection Date  : 4/30/2003 1:24:52 AM          Seq. Line :  13
Sample Name     : WG139328-02 CCV                    Vial :  13
Acq. Operator   : RDC                                 Inj :   1
                                                Inj Volume : 100 µl
Acq. Method     : C:\HPCHEM\2\METHODS\8330.M
Last changed    : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed    : 4/30/2003 11:24:59 AM by RDC
                  (modified after loading)
8330 CALIBRATION 04/24/2003 @ 21:05
==================================================================

==================================================================
                      External Standard Report
==================================================================

Sorted By              :      Signal
Calib. Data Modified   :      4/30/2003 11:24:57 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: DAD1 B, Sig=254,16 Ref=360,100
```

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
4.708	MM	8.20659	6.68896	54.89357		HMX #1
7.393	MM	8.59629	6.13482	52.73664		RDX #2
9.790	BB	20.55510	2.51763	51.75013		1,3,5-Trinitrobenzene #3
12.049	BB	27.98478	1.87047	52.34459		1,3-Dinitrobenzene #4
13.138	BV	14.07584	3.60085	50.68504		Tetryl #5
13.670	VB	18.04103	2.75791	49.75555		Nitrobenzene #6
14.886	BV	10.72444	4.93300	52.90366		3,4-Dinitrotoluene #7 *
15.534	VB	19.91936	2.59655	51.72153		2,4,6-Trinitrotoluene #8
17.281	BV	11.20747	4.51915	50.64824		4-Amino-2,6-Dinitrotoluen
18.017	MF	15.52290	3.35001	52.00182		2-Amino-4,6-Dinitrotoluen
18.228	FM	13.13672	4.16284	54.68604		2,6-Dinitrotoluene #11
18.860	VB	25.77717	2.01350	51.90237		2,4-Dinitrotoluene #12
22.170	BB	10.08052	5.15311	51.94596		2-Nitrotoluene #13
23.672	BB	7.98435	6.31406	50.41368		4-Nitrotoluene #14
25.513	BB	11.16775	4.25119	47.47620		3-Nitrotoluene #15

Totals : 1870.15336

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

==========
*** End of Report ***

Check Standard Report

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Data File C:\HPCHEM\2\DATA\042903\4L004883.D Sample Name: WG139328-03 CCV
HPLC4 4/30/2003 2:19:58 PM RDC

1,1 SOS64-31 50 ppb

==========

Injection Date : 4/30/2003 11:13:27 AM Seq. Line : 24

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

Compound	RT	Known Conc.	Cal. Conc.	%D
HMX #1	4.709	50.0	55.002	10.0
RDX #2	7.393	50.0	54.170	8.3
1,3,5-Trinitrobenzene #3	9.770	50.0	52.004	4.0
1,3-Dinitrobenzene #4	12.023	50.0	52.284	4.6
Tetryl #5	13.100	50.0	45.075	-9.9
Nitrobenzene #6	13.629	50.0	48.497	-3.0
3,4-Dinitrotoluene #7 *	14.839	50.0	54.455	8.9
2,4,6-Trinitrotoluene #8	15.495	50.0	51.114	2.2
4-Amino-2,6-Dinitrotolue	17.283	50.0	53.244	6.5
2-Amino-4,6-Dinitrotolue	17.988	50.0	55.403	10.8
2,6-Dinitrotoluene #11	18.116	50.0	53.457	6.9
2,4-Dinitrotoluene #12	18.808	50.0	52.925	5.8
2-Nitrotoluene #13	22.114	50.0	48.549	-2.9
4-Nitrotoluene #14	23.631	50.0	47.571	-4.9
3-Nitrotoluene #15	25.470	50.0	46.568	-6.9

* = Failed 15.0% Criteria

1,1 SOS64-31 50 ppb

```
==================================================================
Injection Date   : 4/30/2003 11:13:27 AM          Seq. Line :  24
Sample Name      : WG139328-03 CCV                     Vial :  13
Acq. Operator    : RDC                                  Inj :   1
                                                 Inj Volume : 100 µl
Acq. Method      : C:\HPCHEM\2\METHODS\8330.M
Last changed     : 4/29/2003 2:40:07 PM by RDC
Analysis Method  : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed     : 4/30/2003 11:58:04 AM by RDC
                   (modified after loading)
8330 CALIBRATION 04/24/2003 @ 21:05
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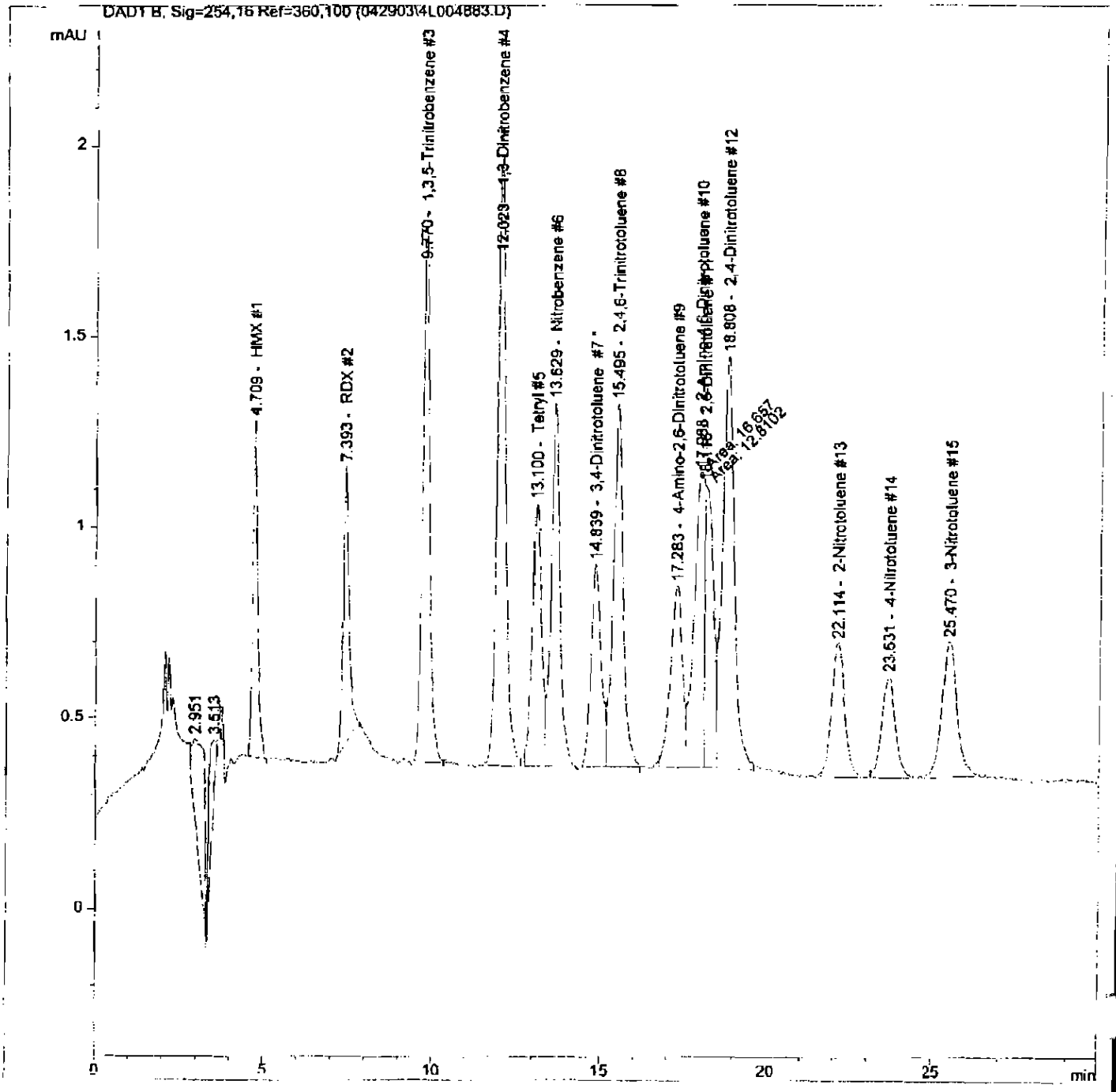
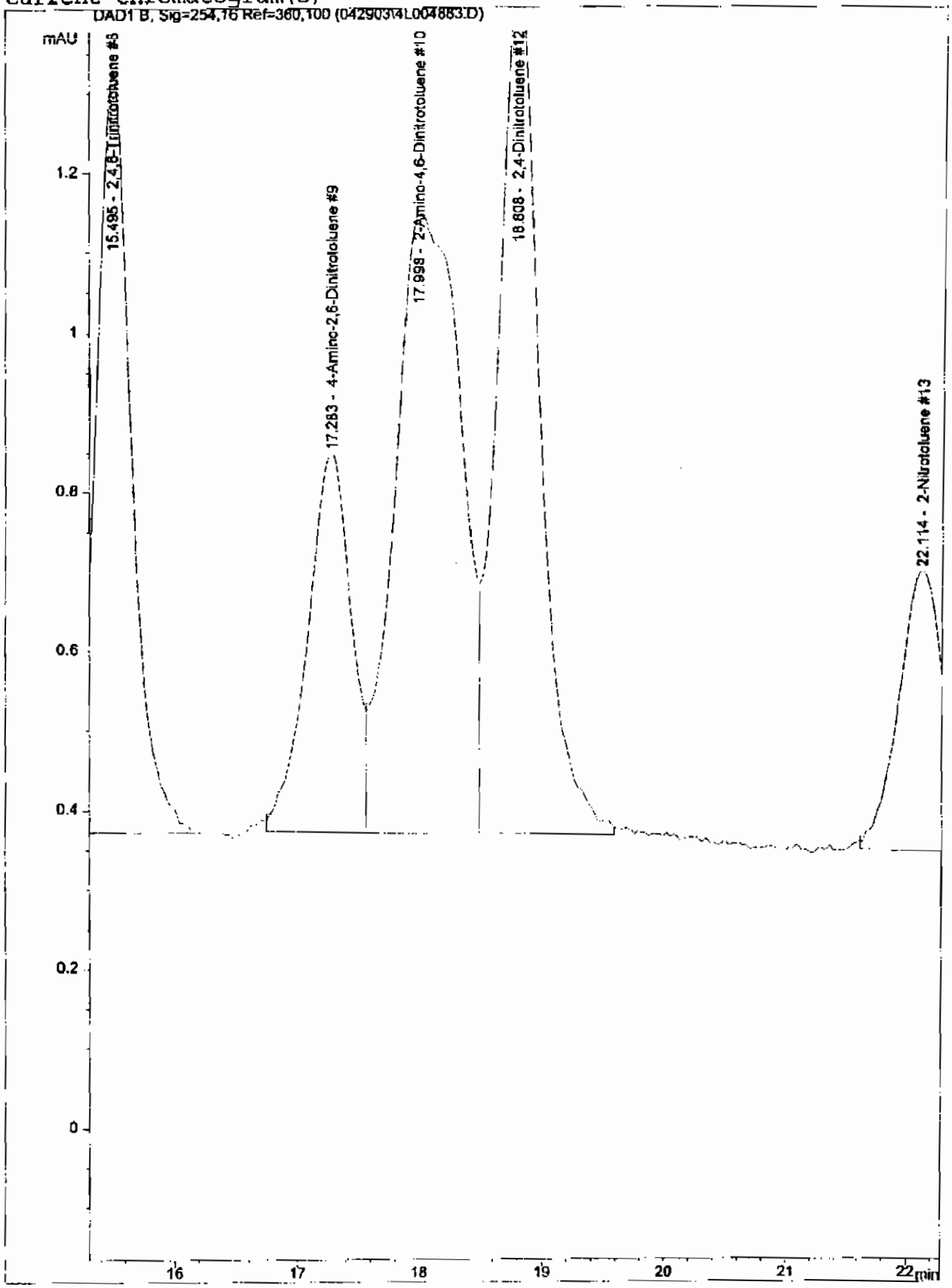
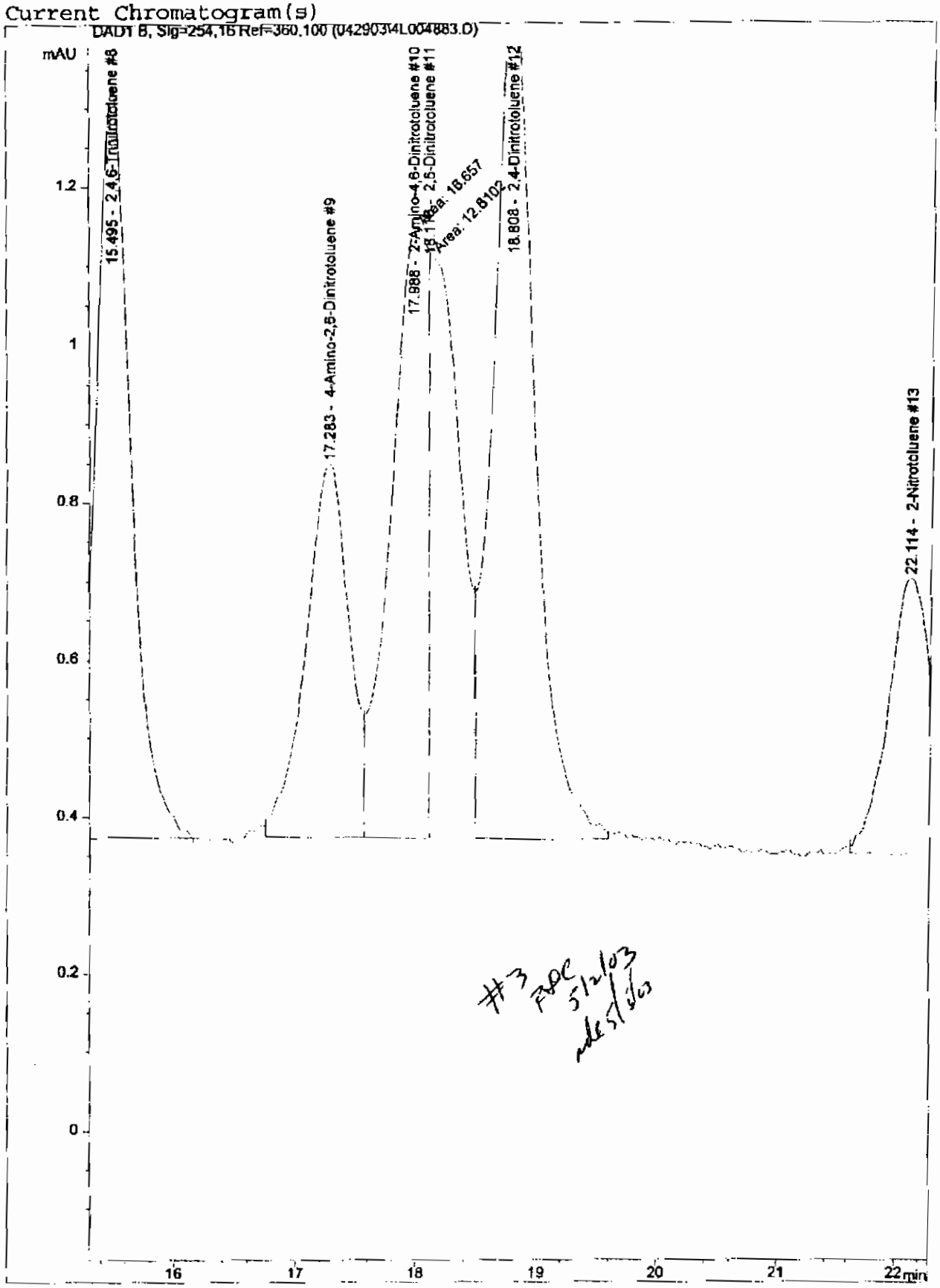


Current Chromatogram(s)

DAD1 B, Sig=254,16 Ref=360,100 (042903\4L004883.D)



Current Chromatogram(s)



#3 RDC 5/2/03
ndes 5/2/03

1,1 50564-31 50 ppb

==========

Injection Date : 4/30/2003 11:13:27 AM Seq. Line : 24
Sample Name : WG139328-03 CCV Vial : 13
Acq. Operator : RDC Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\HPCHEM\2\METHODS\8330.M
Last changed : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed : 4/30/2003 11:58:04 AM by RDC
(modified after loading)
8330 CALIBRATION 04/24/2003 @ 21:05

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External Standard Report

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Sorted By : Signal
Calib. Data Modified : Wednesday, April 30, 2003 11:58:04 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
4.709	BBA	8.22436	6.68766	55.00169		HMX #1
7.393	PBA	8.88081	6.09964	54.16969		RDX #2
9.770	BB	20.66447	2.51660	52.00421		1,3,5-Trinitrobenzene #3
12.023	BB	27.95015	1.87062	52.28405		1,3-Dinitrobenzene #4
13.100	BV	12.32839	3.65618	45.07484		Tetryl #5
13.629	VP	17.55697	2.76224	48.49655		Nitrobenzene #6
14.839	BV	11.05500	4.92585	54.45524		3,4-Dinitrotoluene #7 *
15.495	VP	19.66875	2.59872	51.11350		2,4,6-Trinitrotoluene #8
17.283	BV	11.84306	4.49580	53.24402		4-Amino-2,6-Dinitrotoluen
17.988	MF	16.65699	3.32614	55.40342		2-Amino-4,6-Dinitrotoluen
18.116	FM	12.81016	4.17301	53.45698		2,6-Dinitrotoluene #11
18.808	VB	26.34349	2.00902	52.92471		2,4-Dinitrotoluene #12
22.114	BP	9.35247	5.19106	48.54922		2-Nitrotoluene #13
23.631	BB	7.50257	6.34067	47.57129		4-Nitrotoluene #14
25.470	BB	10.94893	4.25321	46.56814		3-Nitrotoluene #15

Totals : 1901.64934

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

==========

*** End of Report ***

Data File C:\HPCHEM\2\DATA\042903\4L004887.D Sample Name: WG139328-04 CCV
HPLC4 5/1/2003 9:37:14 AM RDC

1,1 SOS64-31 50 ppb

Injection Date : 4/30/2003 2:42:16 PM Seq. Line : 28

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

Compound	RT	Known Conc.	Cal. Conc.	%D
HMX #1	4.693	50.0	53.748	7.5
RDX #2	7.356	50.0	52.931	5.9
1,3,5-Trinitrobenzene #3	9.721	50.0	52.090	4.2
1,3-Dinitrobenzene #4	11.963	50.0	52.293	4.6
Tetryl #5	13.041	50.0	43.639	-12.7
Nitrobenzene #6	13.577	50.0	49.371	-1.3
3,4-Dinitrotoluene #7 *	14.781	50.0	57.349	14.7
2,4,6-Trinitrotoluene #8	15.433	50.0	52.898	5.8
4-Amino-2,6-Dinitrotolue	17.214	50.0	53.679	7.4
2-Amino-4,6-Dinitrotolue	17.947	50.0	54.329	8.7
2,6-Dinitrotoluene #11	18.049	50.0	54.863	9.7
2,4-Dinitrotoluene #12	18.743	50.0	52.397	4.8
2-Nitrotoluene #13	22.056	50.0	47.612	-4.8
4-Nitrotoluene #14	23.540	50.0	44.610	-10.8
3-Nitrotoluene #15	25.388	50.0	44.142	-11.7

= Failed 15.0% Criteria

==========

Injection Date : 4/30/2003 2:42:16 PM
Sample Name : WG139328-04 CCV
Acq. Operator : RDC

Seq. Line : 28
Vial : 13
Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\HPCHEM\2\METHODS\8330.M
Last changed : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed : 4/30/2003 11:58:04 AM by RDC
(modified after loading)
8330 CALIBRATION 04/24/2003 @ 21:05

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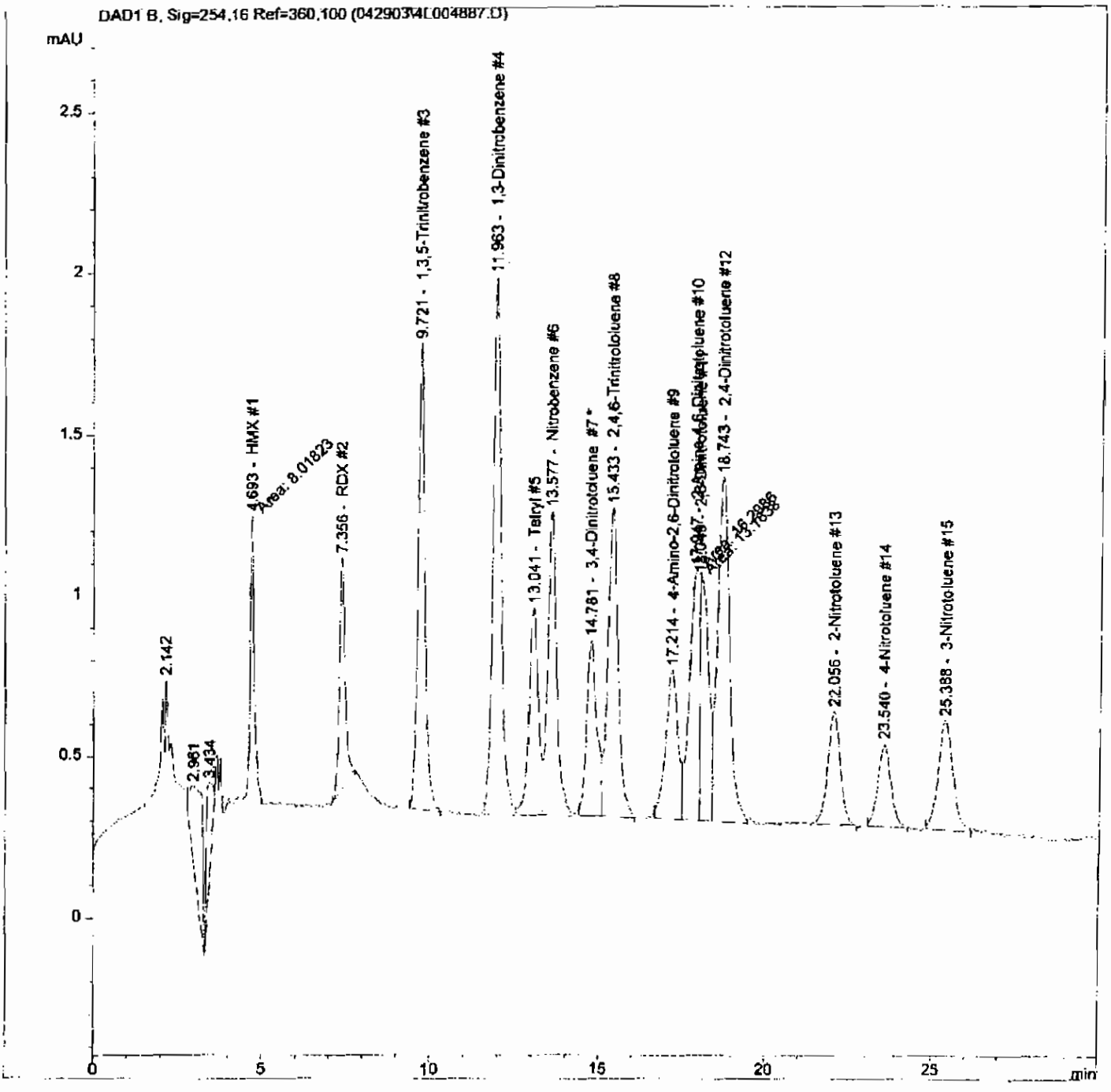
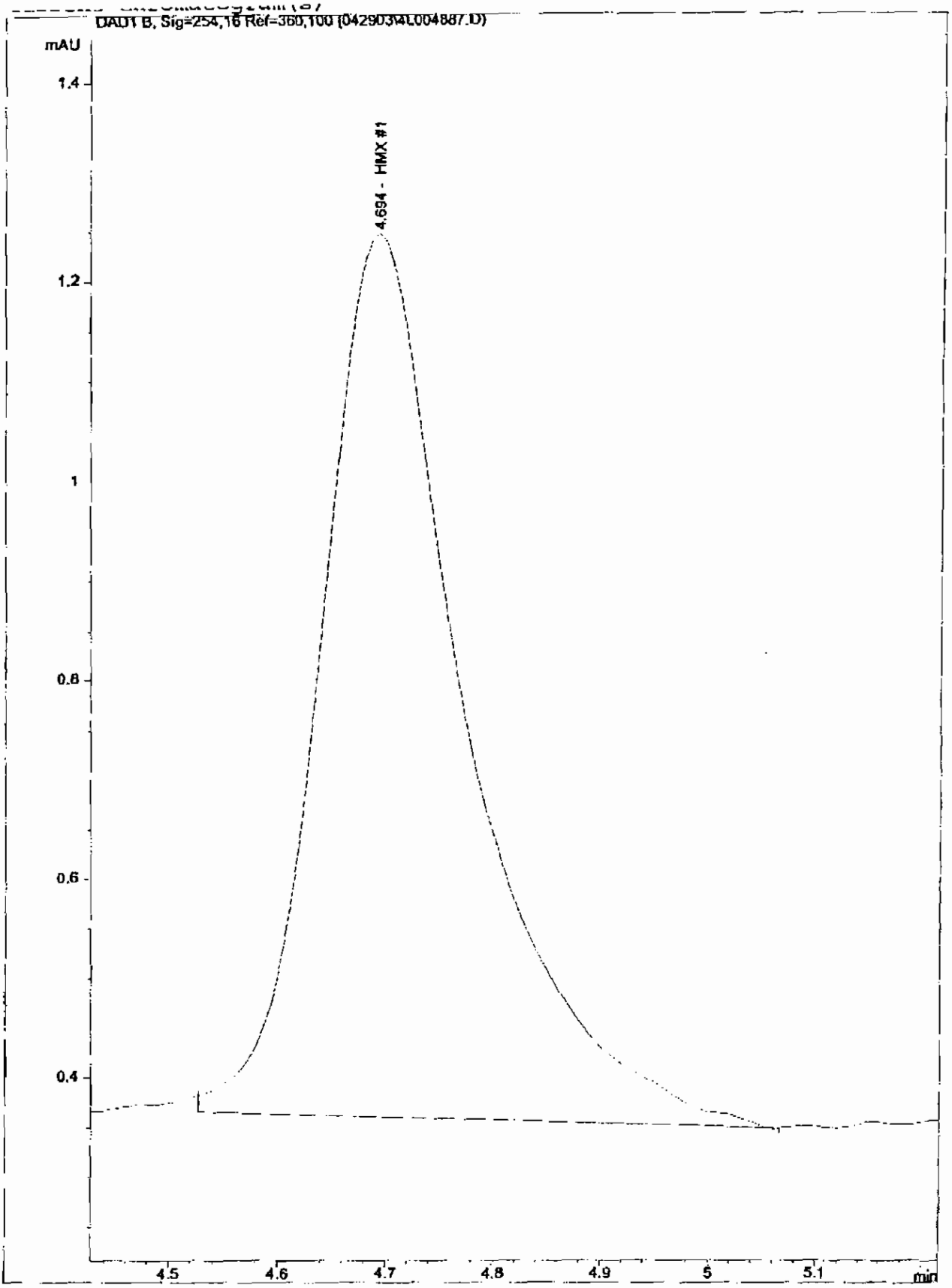
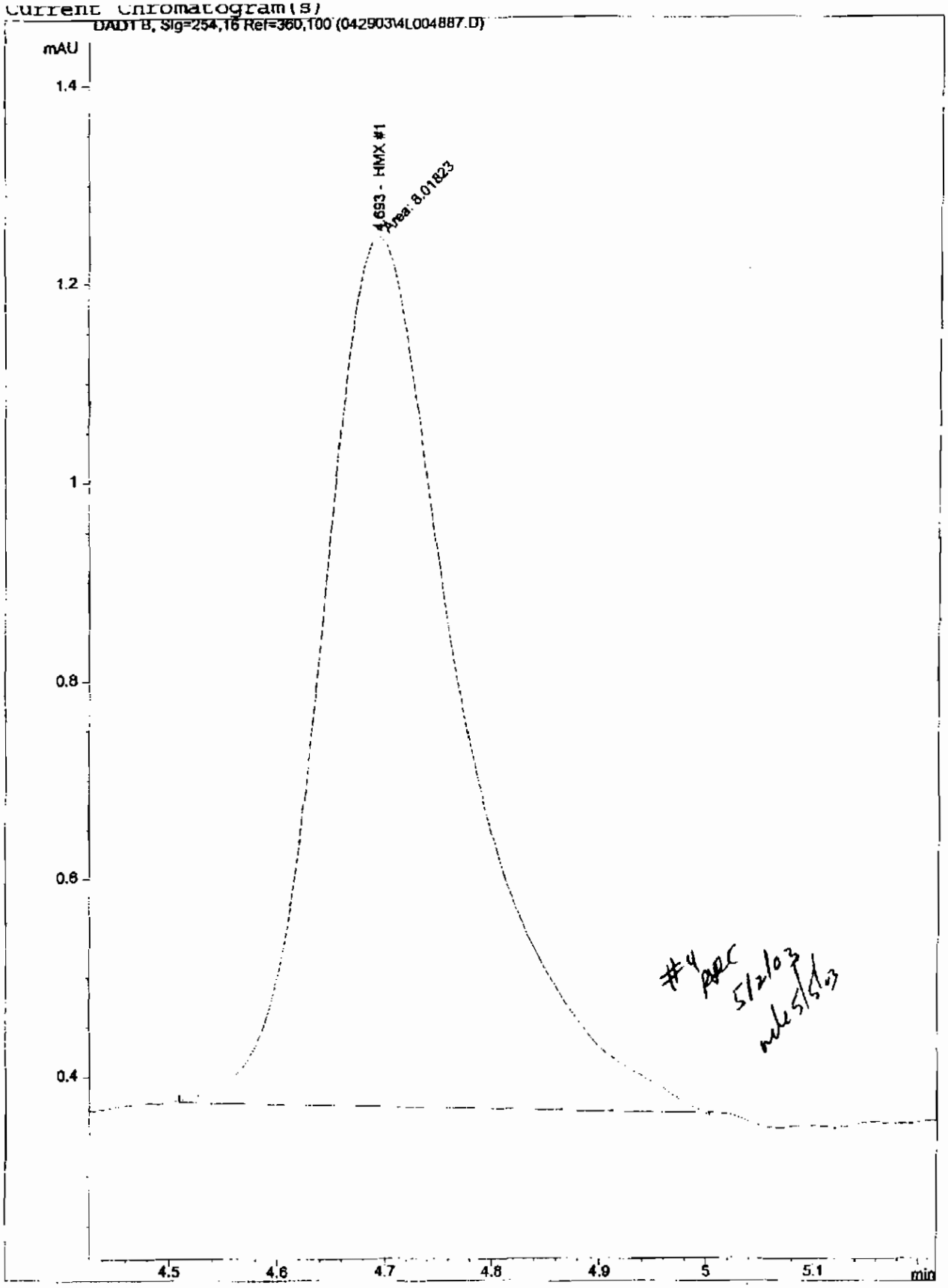



DAD1 B, Sig=254,16 Ref=360,100 (0429034L004887.D)
mAU
1.4
1.2
1
0.8
0.6
0.4
4.694 - HMX #1
4.5
4.6
4.7
4.8
4.9
5
5.1
min

Current Chromatogram(s)

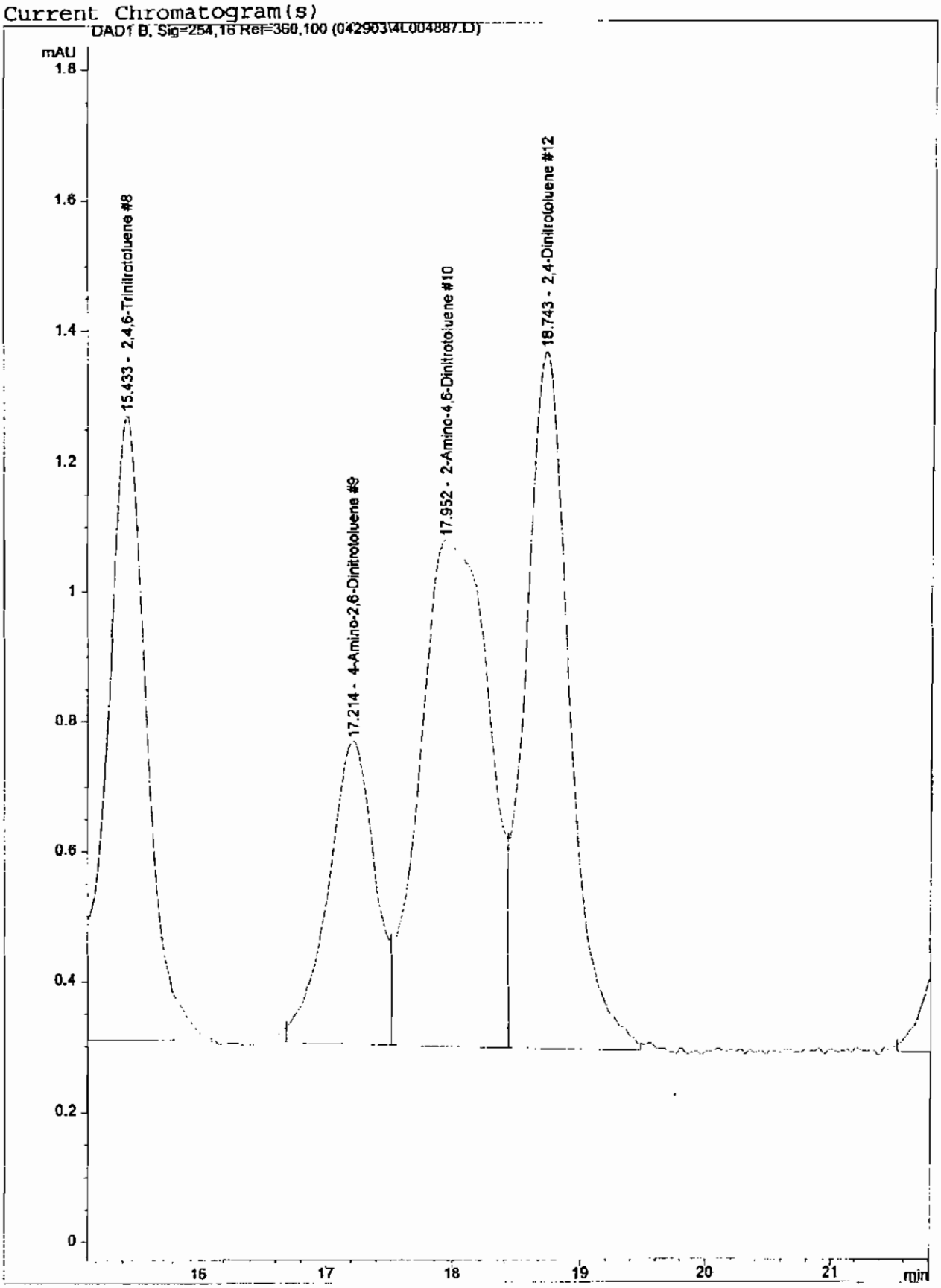
DAD1 B, Sig=254,16 Ref=360,100 (042903\4L004887.D)



HPLC4 5/1/2003 9:36:47 AM RDC

Page 1 of 1

Current Chromatogram(s)

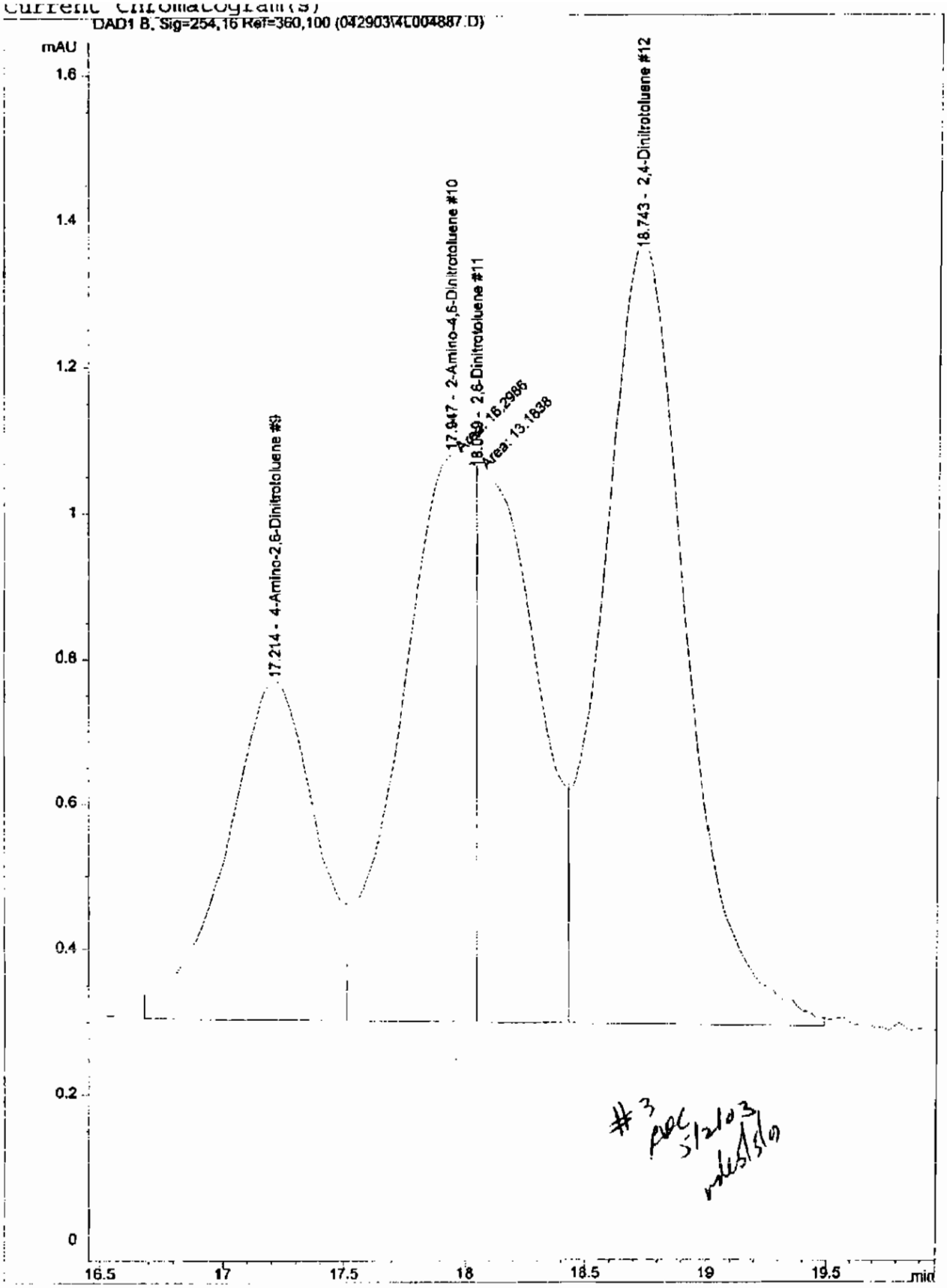


HPLC4 5/2/2003 11:49:07 AM RDC

Page 1 of 1

Current Chromatogram(s)

DAD1 B, Sig=254,16 Ref=360,100 (042903\4L004887.D)



#3 RDC 5/2/03 [illegible]

HPLC4 5/1/2003 9:37:11 AM RDC

Page 1 of 1

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==================================================================
Injection Date  : 4/30/2003 2:42:16 PM          Seq. Line :  28
Sample Name     : WG139328-04 CCV                    Vial :  13
Acq. Operator   : RDC                                 Inj :   1
                                               Inj Volume : 100 µl
Acq. Method     : C:\HPCHEM\2\METHODS\8330.M
Last changed    : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed    : 4/30/2003 11:58:04 AM by RDC
                  (modified after loading)
8330 CALIBRATION 04/24/2003 @ 21:05
==================================================================

==================================================================
                      External Standard Report
==================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Wednesday, April 30, 2003 11:58:04 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime  Type     Area      Amt/Area    Amount   Grp   Name
 [min]           [mAU*s]                [ug/L]
-------|------|----------|----------|----------|--|-----------------
  4.693 MM        8.01823    6.70318   53.74762     HMX #1
  7.356 PBA       8.63485    6.12991   52.93089     RDX #2
  9.721 BB       20.70148    2.51625   52.09018     1,3,5-Trinitrobenzene #3
 11.963 BB       27.95524    1.87060   52.29294     1,3-Dinitrobenzene #4
 13.041 BV       11.88125    3.67295   43.63930     Tetryl #5
 13.577 VB       17.89319    2.75921   49.37103     Nitrobenzene #6
 14.781 BV       11.67151    4.91359   57.34901     3,4-Dinitrotoluene  #7 *
 15.433 VB       20.40406    2.59250   52.89752     2,4,6-Trinitrotoluene #8
 17.214 BV       11.94963    4.49213   53.67926     4-Amino-2,6-Dinitrotoluen
 17.947 MF       16.29864    3.33332   54.32859     2-Amino-4,6-Dinitrotoluen
 18.049 FM       13.18377    4.16141   54.86310     2,6-Dinitrotoluene #11
 18.743 VB       26.05125    2.01131   52.39714     2,4-Dinitrotoluene #12
 22.056 BB        9.15157    5.20260   47.61193     2-Nitrotoluene #13
 23.540 BB        7.00066    6.37228   44.61019     4-Nitrotoluene #14
 25.388 BP       10.36431    4.25905   44.14211     3-Nitrotoluene #15

Totals :                                2106.55586

 Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

==================================================================
                        *** End of Report ***
```

Check Standard Report

==========

Data File C:\HPCHEM\2\DATA\050403\4L004913.D Sample Name: WG139732-01 CCV
HPLC4 5/5/2003 9:15:54 AM RDC

1,1 SOS64-31 50 ppb

==========

Injection Date : 5/4/2003 6:44:06 PM Seq. Line : 2

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

Compound	RT	Known Conc.	Cal. Conc.	%D
HMX #1	4.625	50.0	45.302	-9.4
RDX #2	7.226	50.0	49.225	-1.6
1,3,5-Trinitrobenzene #3	9.782	50.0	48.545	-2.9
1,3-Dinitrobenzene #4	12.003	50.0	48.581	-2.8
Tetryl #5	12.955	50.0	47.326	-5.3
Nitrobenzene #6	13.634	50.0	46.339	-7.3
3,4-Dinitrotoluene #7 *	14.745	50.0	42.764	-14.5
2,4,6-Trinitrotoluene #8	15.543	50.0	44.513	-11.0
4-Amino-2,6-Dinitrotolue	16.492	50.0	44.586	-10.8
2-Amino-4,6-Dinitrotolue	17.379	50.0	49.428	-1.1
2,6-Dinitrotoluene #11	18.195	50.0	50.580	1.2
2,4-Dinitrotoluene #12	18.825	50.0	50.189	0.4
2-Nitrotoluene #13	22.153	50.0	49.130	-1.7
4-Nitrotoluene #14	23.684	50.0	52.372	4.7
3-Nitrotoluene #15	25.545	50.0	53.973	7.9

= Failed 15.0% Criteria

```
==================================================================
Injection Date   : 5/4/2003 6:44:06 PM              Seq. Line :   2
Sample Name      : WG139732-01 CCV                        Vial :   2
Acq. Operator    : RDC                                     Inj :   1
                                                   Inj Volume : 100 µl
Acq. Method      : C:\HPCHEM\2\METHODS\8330.M
Last changed     : 4/29/2003 2:40:07 PM by RDC
Analysis Method  : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed     : 5/5/2003 9:15:05 AM by RDC
                   (modified after loading)
8330 CALIBRATION 05/02/2003 @ 23:11
==================================================================
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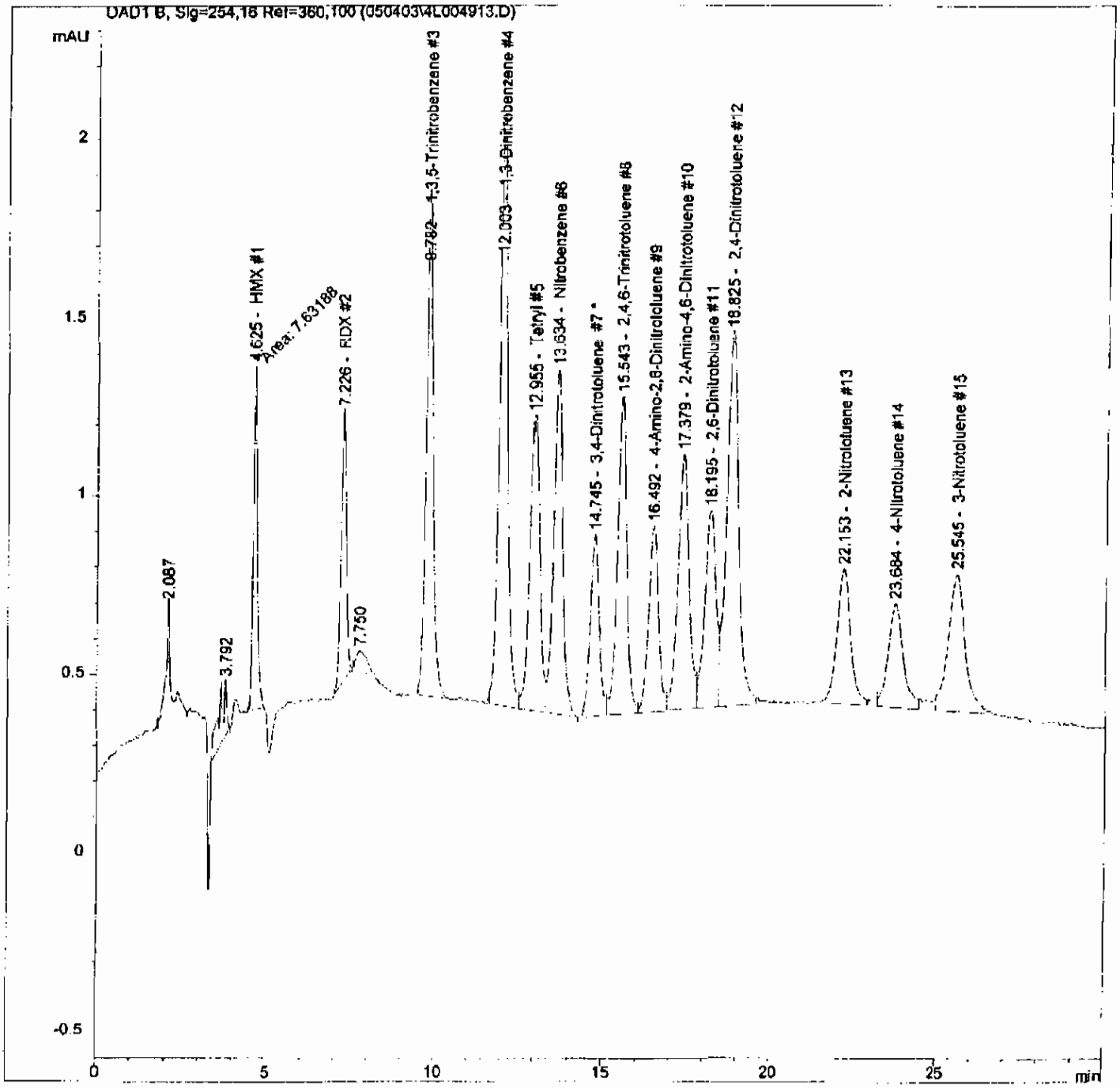
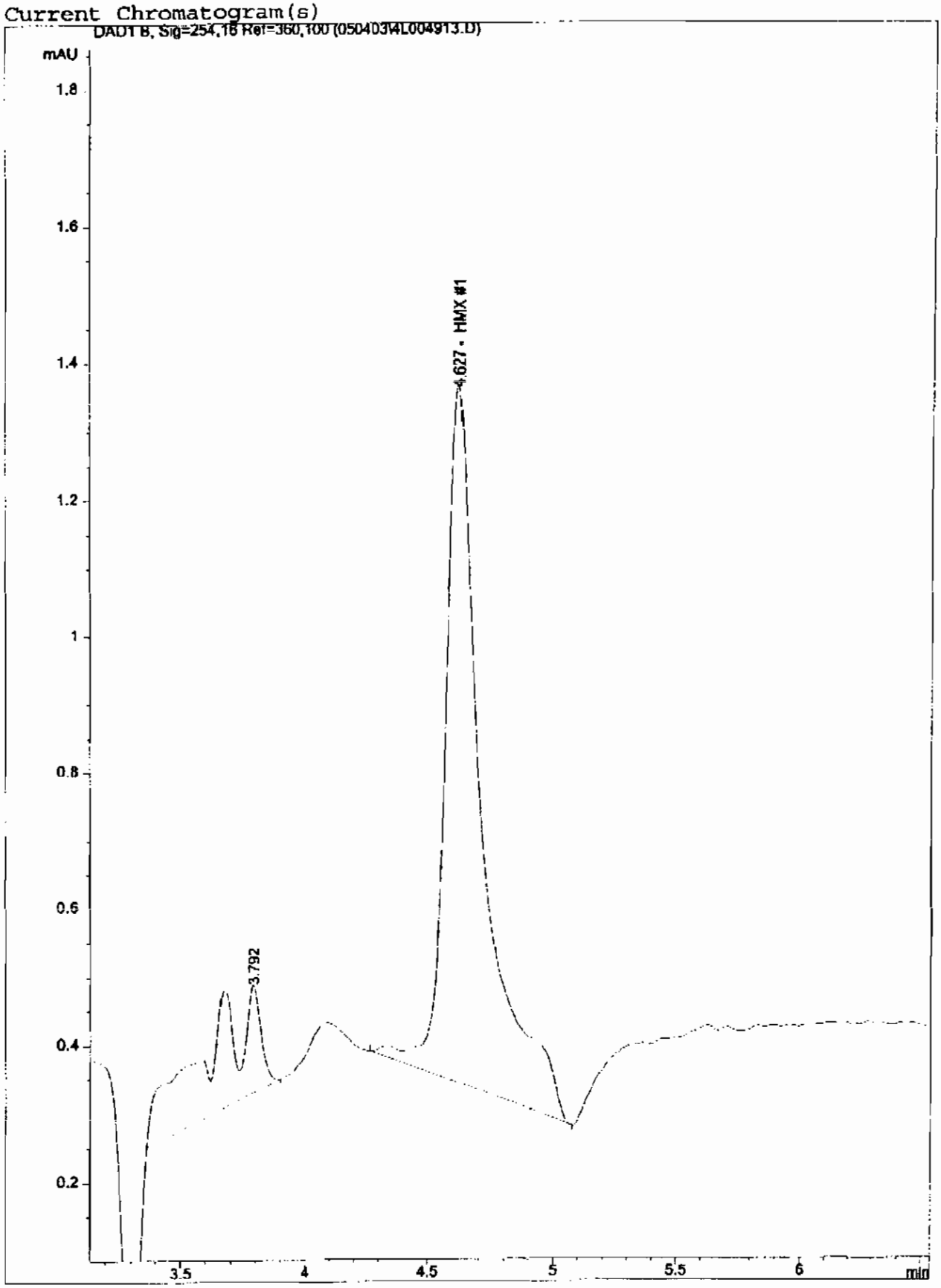
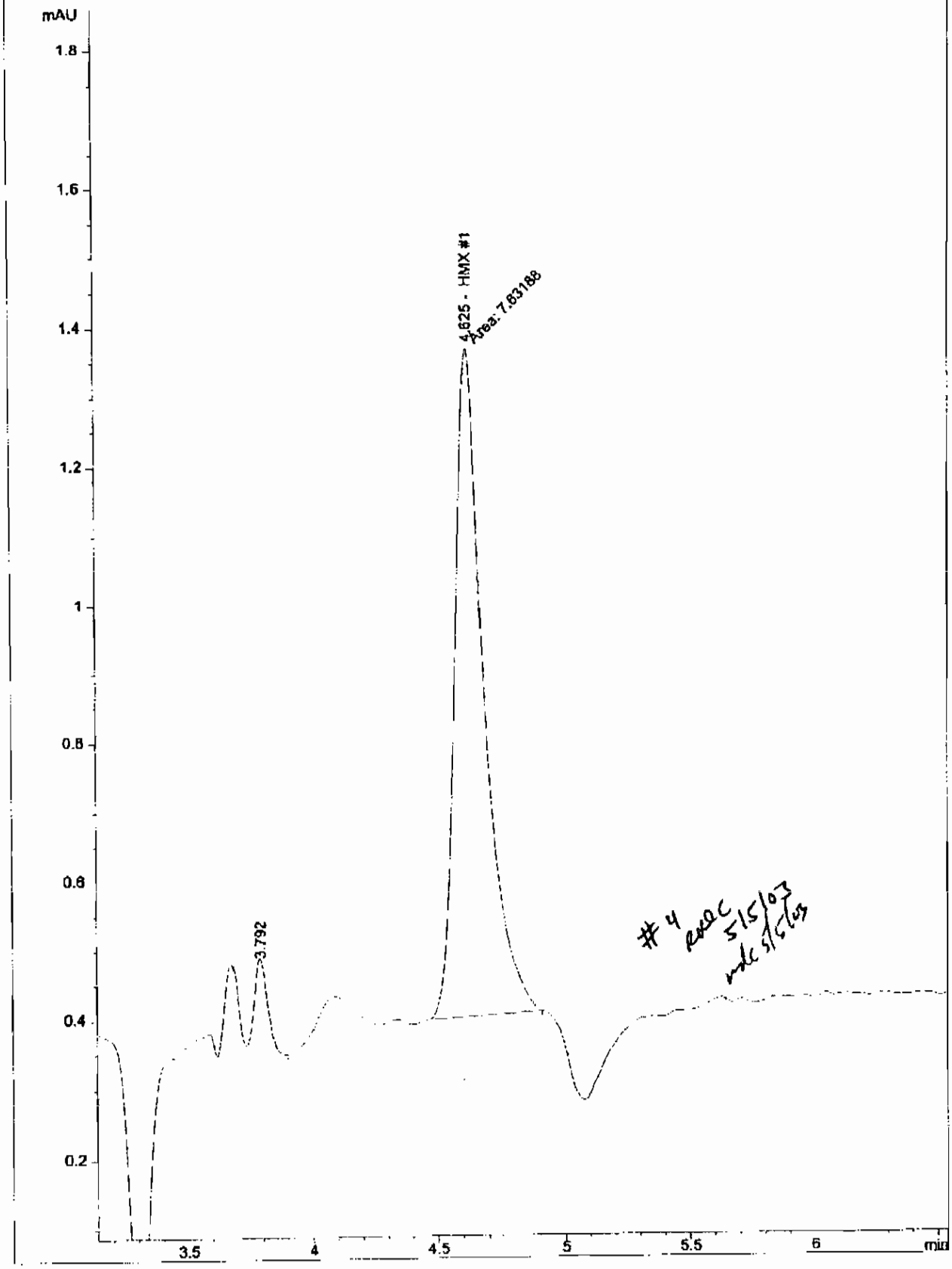


Current Chromatogram(s)



Current Chromatogram(s)

DAD1 B, Sig=254,16 Ref=360,100 (050403\4L004913.D)



HPLC4 5/5/2003 9:15:49 AM RDC

1,1 DCEA 31.30 ppb

==========

Injection Date : 5/4/2003 6:44:06 PM
Sample Name : WG139732-01 CCV
Acq. Operator : RDC

Seq. Line : 2
Vial : 2
Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\HPCHEM\2\METHODS\8330.M
Last changed : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed : 5/5/2003 9:15:05 AM by RDC
(modified after loading)
8330 CALIBRATION 05/02/2003 @ 23:11

==========

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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 5/4/2003 4:27:13 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
4.625	MM	7.63188	5.93584	45.30160		HMX #1
7.226	PBA	8.13932	6.04774	49.22453		RDX #2
9.782	BB	20.26395	2.39565	48.54538		1,3,5-Trinitrobenzene #3
12.003	BV	27.60806	1.75965	48.58050		1,3-Dinitrobenzene #4
12.955	VV	14.92055	3.17189	47.32626		Tetryl #5
13.634	VP	17.72780	2.61389	46.33856		Nitrobenzene #6
14.745	BV	9.37213	4.56285	42.76366		3,4-Dinitrotoluene #7 *
15.543	VV	17.60690	2.52815	44.51295		2,4,6-Trinitrotoluene #8
16.492	VV	10.71365	4.16160	44.58591		4-Amino-2,6-Dinitrotoluen
17.379	VV	16.11777	3.06670	49.42832		2-Amino-4,6-Dinitrotoluen
18.195	VV	12.70339	3.98158	50.57956		2,6-Dinitrotoluene #11
18.825	VB	25.93942	1.93486	50.18918		2,4-Dinitrotoluene #12
22.153	BB	10.48862	4.68408	49.12959		2-Nitrotoluene #13
23.684	BB	9.18220	5.70362	52.37181		4-Nitrotoluene #14
25.545	BB	13.12951	4.11078	53.97256		3-Nitrotoluene #15

Totals : 1529.13820

Results obtained with enhanced integrator!

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*** End of Report ***

Check Standard Report

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Data File C:\HPCHEM\2\DATA\050403\4L004924.D Sample Name: WG139732-02 CCV
HPLC4 5/5/2003 9:24:28 AM RDC

1,1 SOS64-31 50 ppb

==========

Injection Date : 5/5/2003 4:18:09 AM Seq. Line : 13

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

Compound	RT	Known Conc.	Cal. Conc.	%D
HMX #1	4.629	50.0	45.725	-8.6
RDX #2	7.236	50.0	49.300	-1.4
1,3,5-Trinitrobenzene #3	9.763	50.0	49.023	-2.0
1,3-Dinitrobenzene #4	11.984	50.0	48.823	-2.4
Tetryl #5	12.936	50.0	43.183	-13.6
Nitrobenzene #6	13.597	50.0	48.264	-3.5
3,4-Dinitrotoluene #7 *	14.710	50.0	50.058	0.1
2,4,6-Trinitrotoluene #8	15.491	50.0	50.691	1.4
4-Amino-2,6-Dinitrotolue	16.540	50.0	50.366	0.7
2-Amino-4,6-Dinitrotolue	17.419	50.0	50.706	1.4
2,6-Dinitrotoluene #11	18.151	50.0	51.751	3.5
2,4-Dinitrotoluene #12	18.780	50.0	50.833	1.7
2-Nitrotoluene #13	22.071	50.0	47.670	-4.7
4-Nitrotoluene #14	23.605	50.0	49.600	-0.8
3-Nitrotoluene #15	25.434	50.0	46.915	-6.2

= Failed 15.0% Criteria

==========

Injection Date : 5/5/2003 4:18:09 AM
Sample Name : WG139732-02 CCV
Acq. Operator : RDC

Seq. Line : 13
Vial : 2
Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\HPCHEM\2\METHODS\8330.M
Last changed : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed : 5/5/2003 9:15:05 AM by RDC
(modified after loading)
8330 CALIBRATION 05/02/2003 @ 23:11

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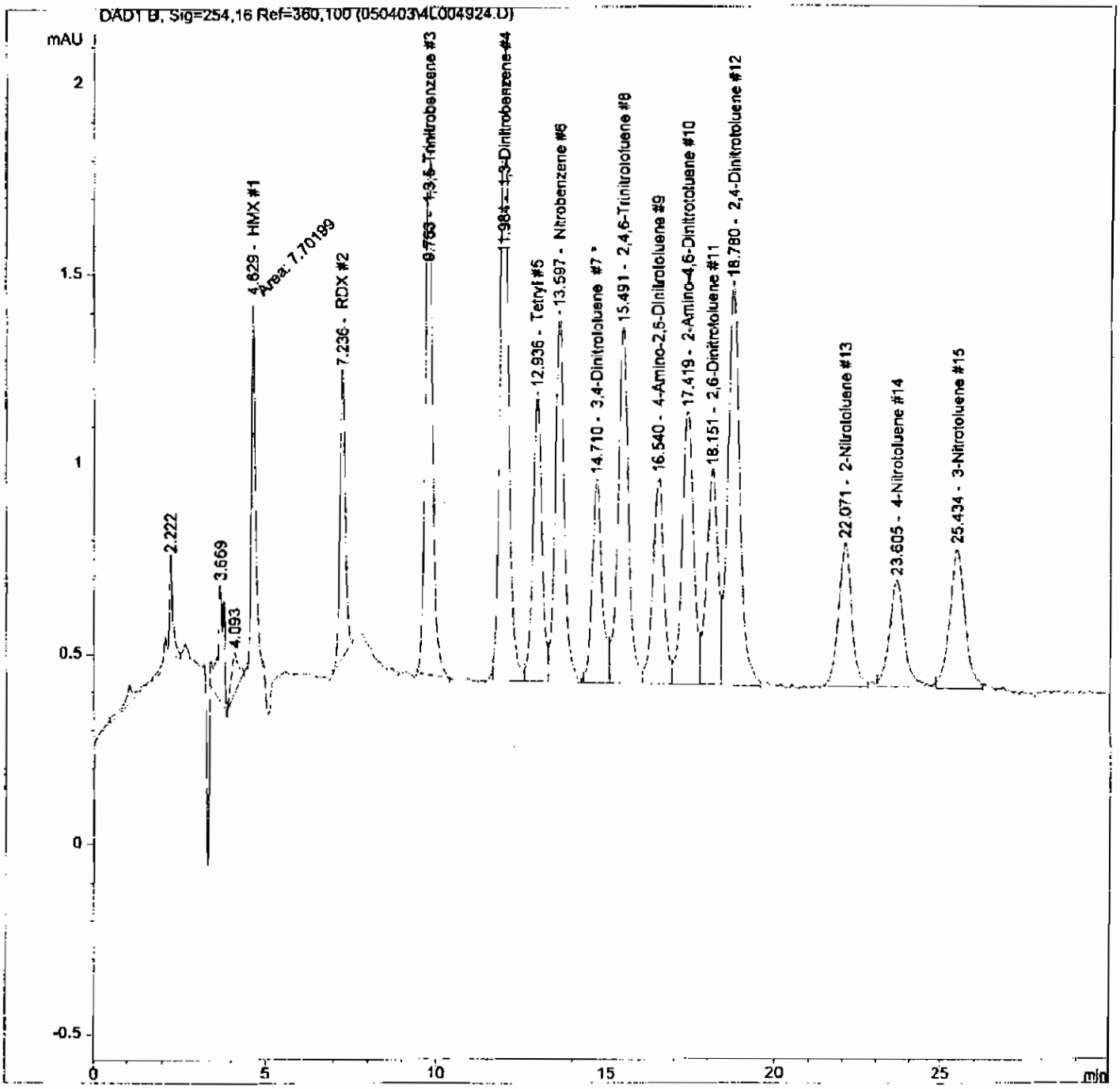
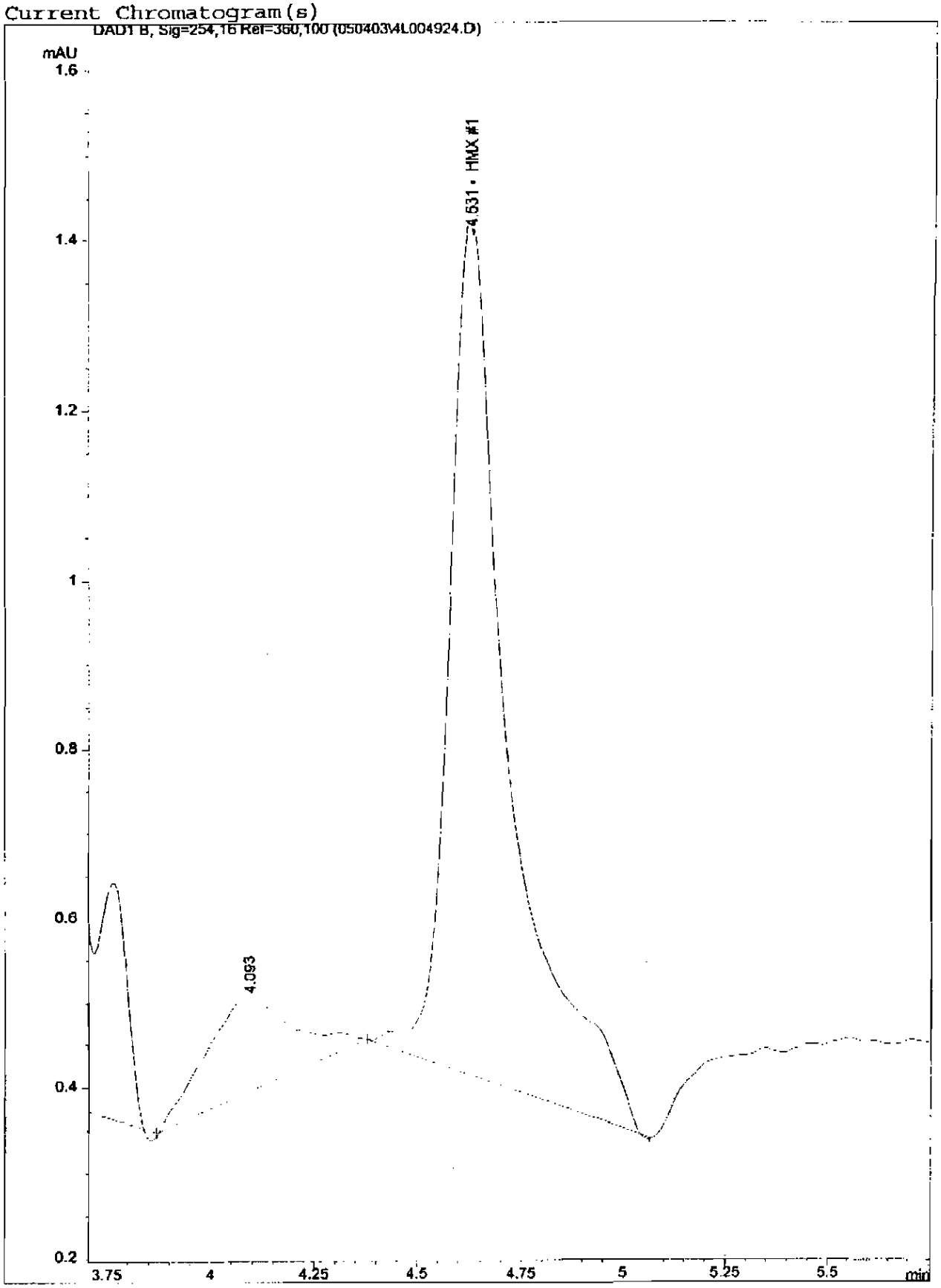
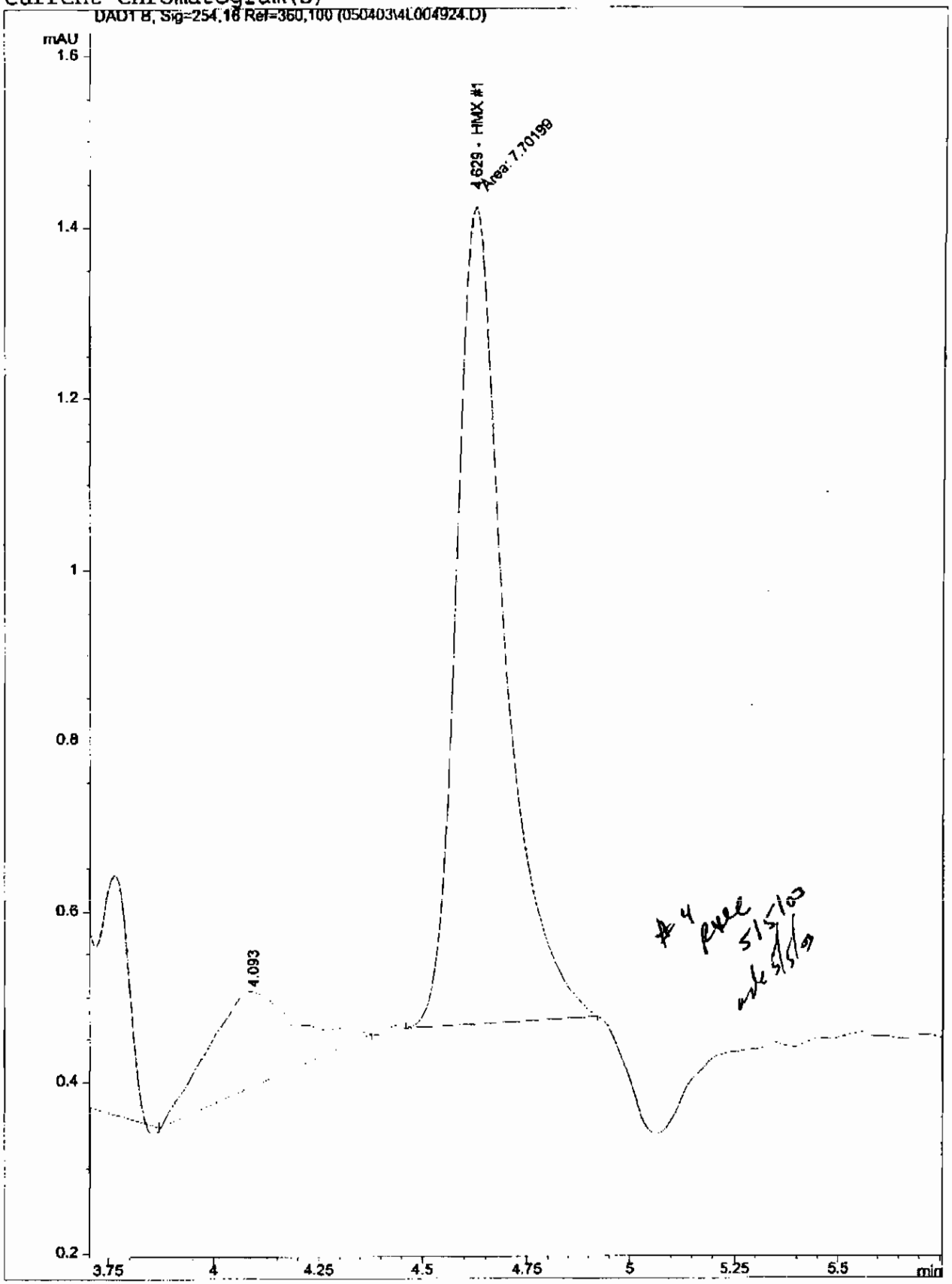


Current Chromatogram(s)



Current Chromatogram(s)



HPLC4 5/5/2003 9:24:23 AM RDC

Page 1 of 1

Injection Date : 5/5/2003 4:18:09 AM
Sample Name : WG139732-02 CCV
Acq. Operator : RDC

Seq. Line : 13
Vial : 2
Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\HPCHEM\2\METHODS\8330.M
Last changed : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed : 5/5/2003 9:15:05 AM by RDC
(modified after loading)
8330 CALIBRATION 05/02/2003 @ 23:11

External Standard Report

Sorted By : Signal
Calib. Data Modified : 5/4/2003 4:27:13 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
4.629	MM	7.70199	5.93677	45.72494		HMX #1
7.236	PBA	8.15420	6.04591	49.29958		RDX #2
9.763	PP	20.47329	2.39446	49.02251		1,3,5-Trinitrobenzene #3
11.984	BB	27.75027	1.75938	48.82324		1,3-Dinitrobenzene #4
12.936	BV	13.61523	3.17165	43.18269		Tetryl #5
13.597	VB	18.46093	2.61441	48.26440		Nitrobenzene #6
14.710	BV	10.95275	4.57034	50.05780		3,4-Dinitrotoluene #7 *
15.491	VV	20.11027	2.52068	50.69147		2,4,6-Trinitrotoluene #8
16.540	VV	12.14377	4.14749	50.36619		4-Amino-2,6-Dinitrotoluen
17.419	VV	16.55752	3.06239	50.70554		2-Amino-4,6-Dinitrotoluen
18.151	VV	13.01412	3.97651	51.75079		2,6-Dinitrotoluene #11
18.780	VB	26.29033	1.93351	50.83275		2,4-Dinitrotoluene #12
22.071	BB	10.17049	4.68705	47.66965		2-Nitrotoluene #13
23.605	BB	8.70981	5.69475	49.60012		4-Nitrotoluene #14
25.434	BB	11.42533	4.10624	46.91520		3-Nitrotoluene #15

Totals : 1350.97360

Results obtained with enhanced integrator!

*** End of Report ***

Check Standard Report

==========

Data File C:\HPCHEM\1\DATA\050803\2L002974.D Sample Name: WG140197-01 CCV
HPLC2 5/9/2003 8:12:03 AM RDC

1,1 SOS64-50 8330 MIX A @ 50 ppb

==========

Injection Date : 5/8/2003 7:21:34 PM Seq. Line : 9

Signal 1: VWD1 A, Wavelength=254 nm

Compound	RT	Known Conc.	Cal. Conc.	%D
NITROBENZENE #1	9.376	50.0	48.945	-2.1
1,3-DNB #2	10.352	50.0	52.672	5.3
1,3,5-TNB #3	11.149	50.0	52.170	4.3
RDX #4	12.020	50.0	56.732	13.5
2,4-DNT #5	15.383	50.0	49.294	-1.4
2-AMINO-4,6-DNT #6	16.846	50.0	52.021	4.0
2,4,6-TNT #7	18.103	50.0	54.694	9.4
HMX #8	19.143	50.0	51.443	2.9
3,4-DNT SURR. #9	19.777	50.0	53.460	6.9

= Failed 15.0% Criteria

1,1 SOS64-50 8330 MIX A @ 50 ppb

```
==================================================================
Injection Date  : 5/8/2003 7:21:34 PM          Seq. Line :   9
Sample Name     : WG140197-01 CCV                   Vial :   8
Acq. Operator   : RDC                               Inj :   1
                                             Inj Volume : 100 µl
Acq. Method     : C:\HPCHEM\1\METHODS\8330CONF.M
Last changed    : 5/8/2003 1:39:42 PM by RDC
Analysis Method : C:\HPCHEM\1\METHODS\833CFD_A.M
Last changed    : 5/9/2003 8:11:56 AM by RDC
                  (modified after loading)
8330 CALIBRATION 05/07/2003 @ 20:40 (CF)
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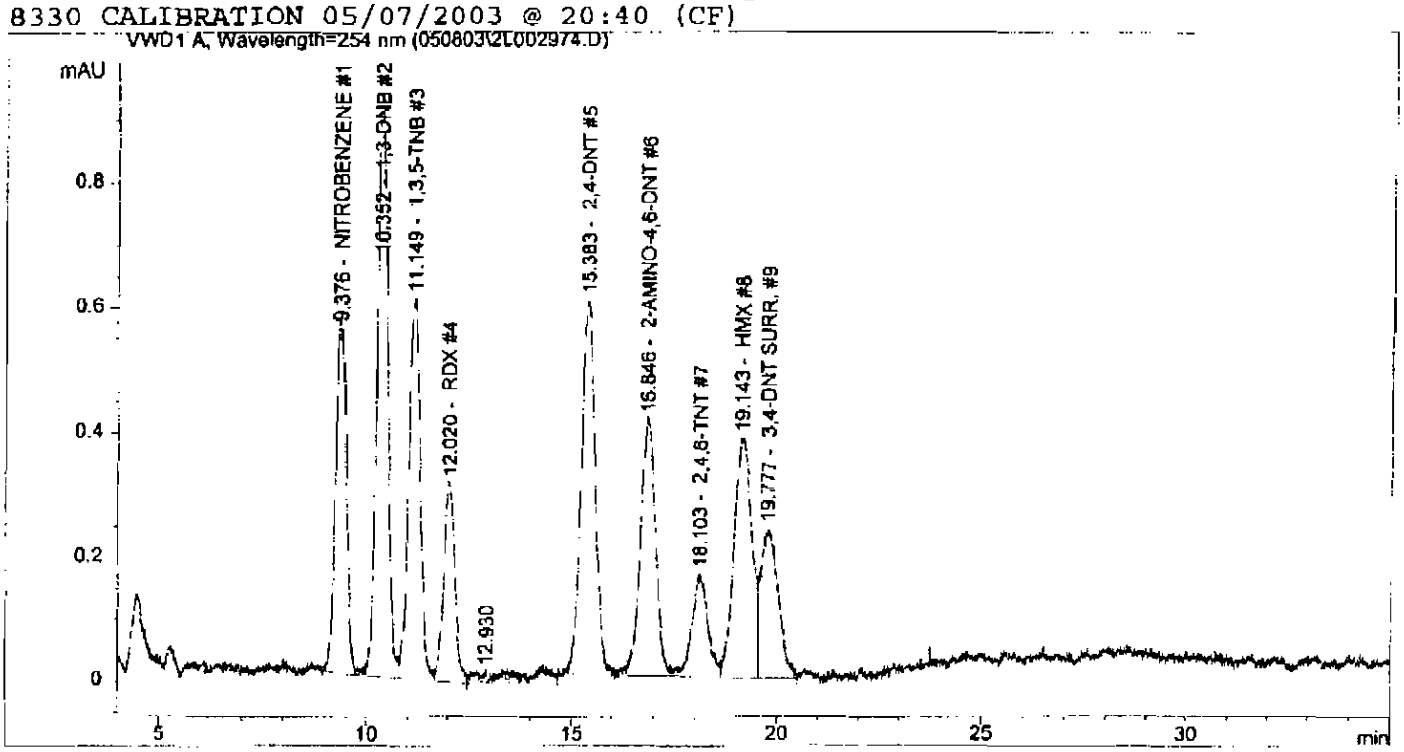


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==================================================================
                      External Standard Report
==================================================================

Sorted By              :      Signal
Calib. Data Modified   :      5/9/2003 8:11:56 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=254 nm
```

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
9.376	BB	9.79697	4.99596	48.94527		NITROBENZENE #1
10.352	BV	16.89427	3.11777	52.67241		1,3-DNB #2
11.149	VB	12.10980	4.30811	52.17037		1,3,5-TNB #3
12.020	BP	6.18292	9.17558	56.73187		RDX #4
15.383	BB	14.66383	3.36163	49.29443		2,4-DNT #5
16.846	BB	10.78920	4.82162	52.02146		2-AMINO-4,6-DNT #6
18.103	BV	4.51095	12.12481	54.69441		2,4,6-TNT #7

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
19.143	VV	11.56886	4.44663	51.44250		HMX #8
19.777	VP	7.22341	7.40094	53.45999		3,4-DNT SURR. #9

Totals : 471.43270

Results obtained with enhanced integrator!

*** End of Report ***

Check Standard Report

==========

Data File C:\HPCHEM\1\DATA\050803\2L002985.D Sample Name: WG140197-02 CCV
HPLC2 5/9/2003 8:39:35 AM RDC

1,1 SOS64-50 8330 MIX A @ 50 ppb

==========

Injection Date : 5/9/2003 2:07:46 AM Seq. Line : 20

Signal 1: VWD1 A, Wavelength=254 nm

Compound	RT	Known Conc.	Cal. Conc.	%D
NITROBENZENE #1	9.374	50.0	49.105	-1.8
1,3-DNB #2	10.338	50.0	51.308	2.6
1,3,5-TNB #3	11.124	50.0	50.360	0.7
RDX #4	12.045	50.0	55.866	11.7
2,4-DNT #5	15.358	50.0	47.573	-4.9
2-AMINO-4,6-DNT #6	16.897	50.0	52.470	4.9
2,4,6-TNT #7	18.071	50.0	43.716	-12.6
HMX #8	19.137	50.0	46.411	-7.2
3,4-DNT SURR. #9	19.796	50.0	45.762	-8.5

= Failed 15.0% Criteria

1,1 SOS64-50 8330 MIX A @ 50 ppb

```
==================================================================
Injection Date   : 5/9/2003 2:07:46 AM          Seq. Line :  20
Sample Name      : WG140197-02 CCV                   Vial :   8
Acq. Operator    : RDC                               Inj :   1
                                               Inj Volume : 100 µl
Acq. Method      : C:\HPCHEM\1\METHODS\8330CONF.M
Last changed     : 5/8/2003 1:39:42 PM by RDC
Analysis Method  : C:\HPCHEM\1\METHODS\833CFD_A.M
Last changed     : 5/9/2003 8:38:58 AM by RDC
                   (modified after loading)
8330 CALIBRATION 05/07/2003 @ 20:40 (CF)
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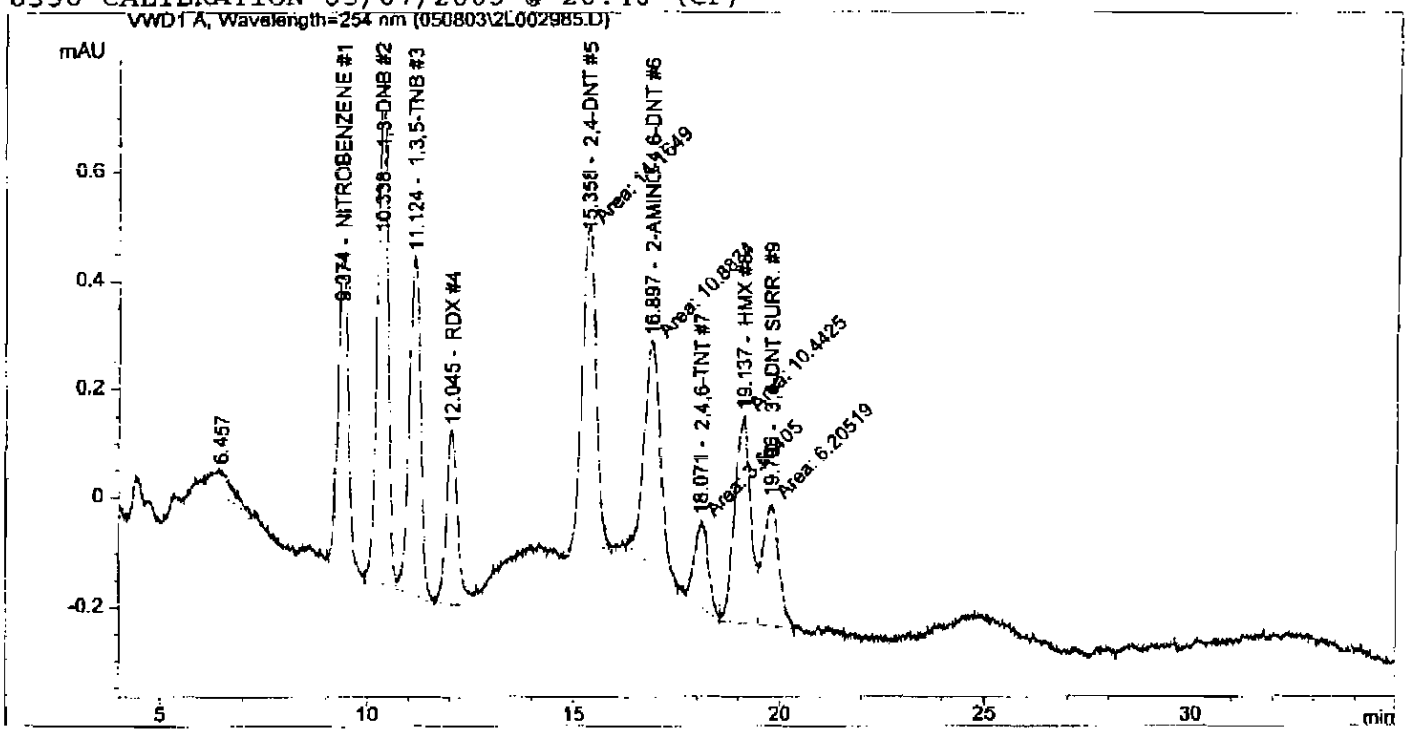


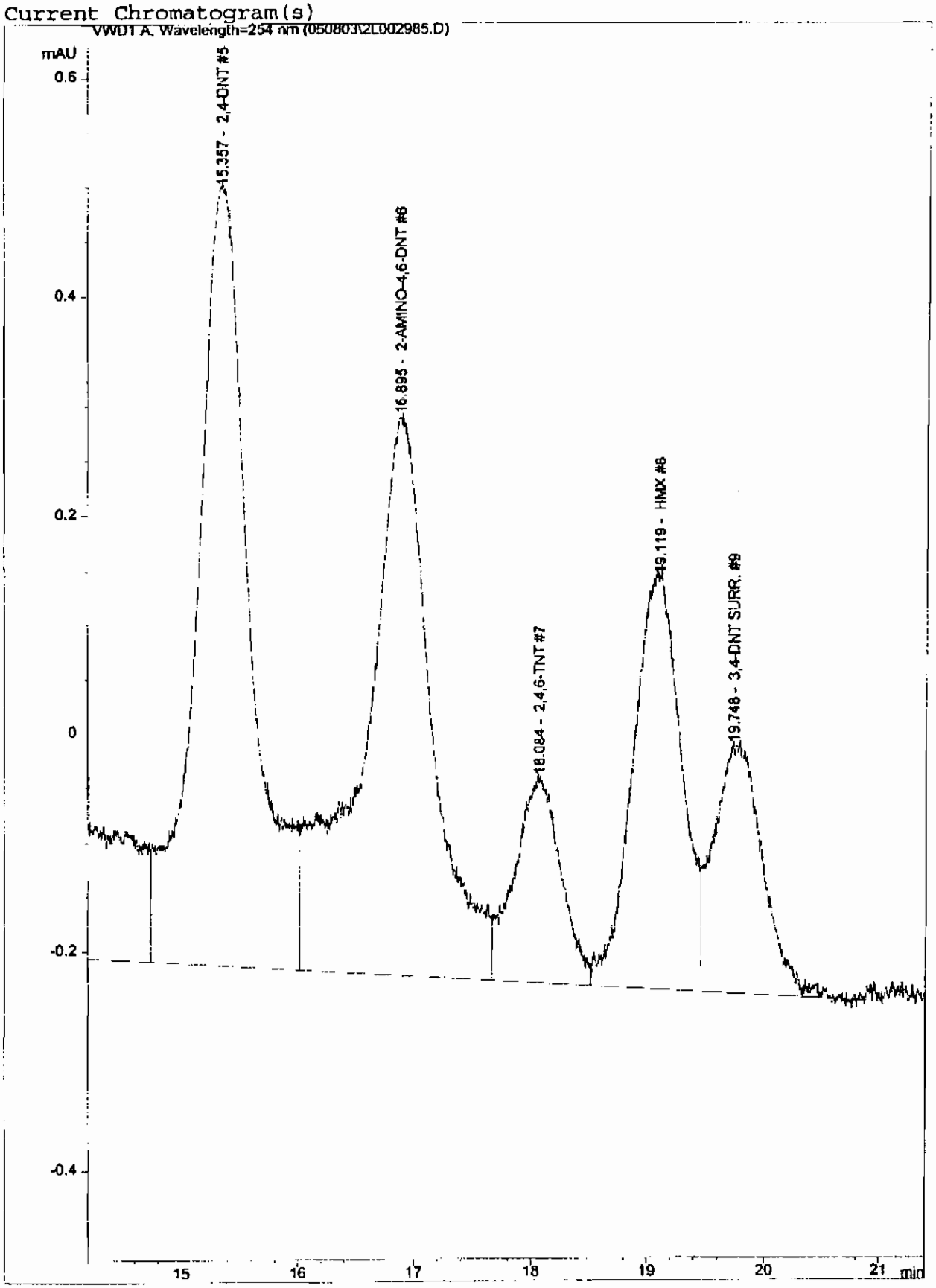

```
==================================================================
                      External Standard Report
==================================================================
```

Sorted By : Signal
Calib. Data Modified : 5/9/2003 8:11:56 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
9.374	BP	9.82910	4.99592	49.10537		NITROBENZENE #1
10.338	VV	16.45138	3.11878	51.30818		1,3-DNB #2
11.124	VP	11.68956	4.30810	50.35983		1,3,5-TNB #3
12.045	VB	6.08946	9.17415	55.86569		RDX #4
15.358	MM	14.16489	3.35852	47.57301		2,4-DNT #5
16.897	MM	10.88341	4.82107	52.46963		2-AMINO-4,6-DNT #6
18.071	MM	3.65405	11.96382	43.71643		2,4,6-TNT #7

Current Chromatogram(s)

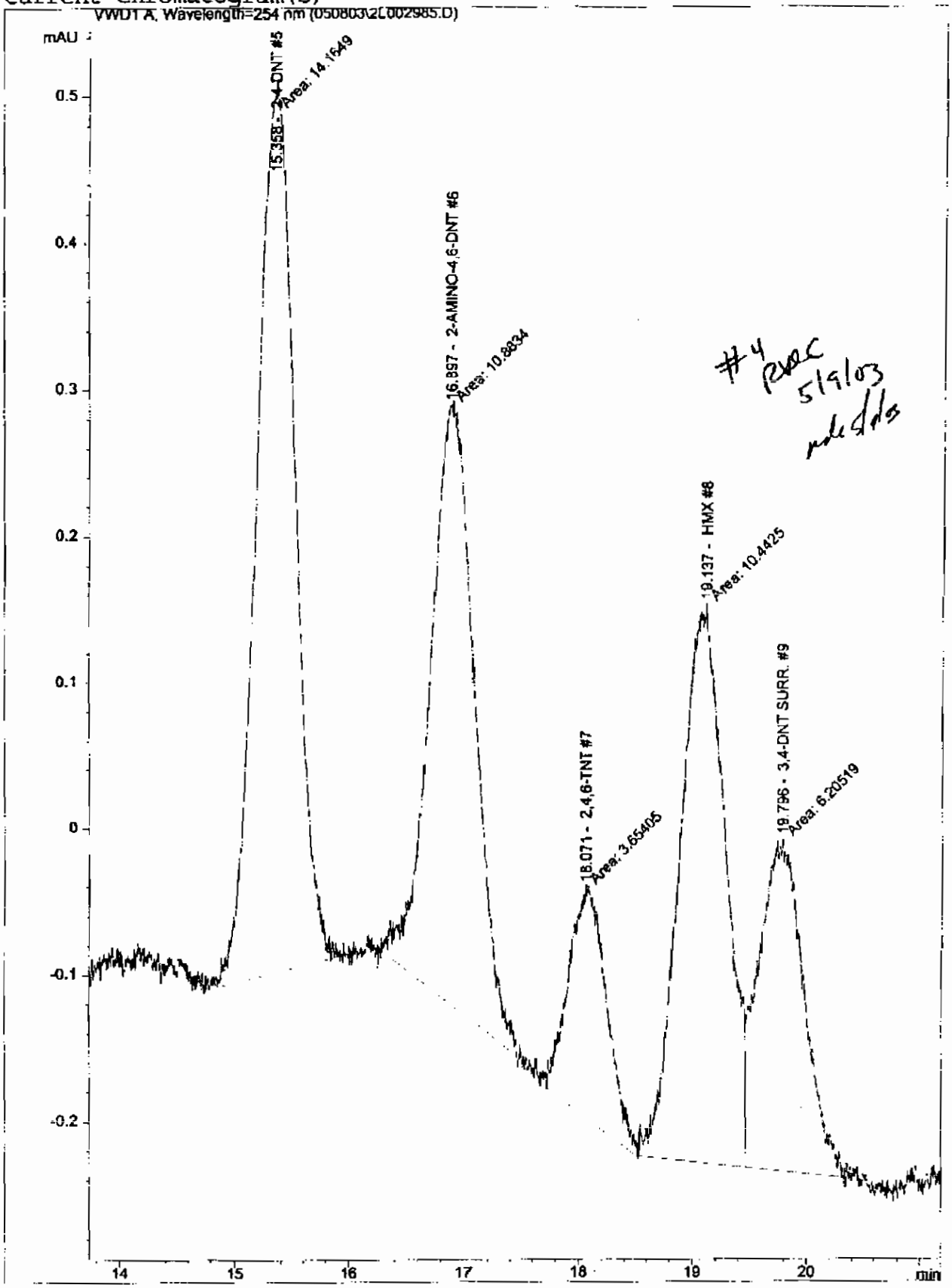


HPLC2 5/9/2003 12:01:36 PM RDC

Page 1 of 1

Current Chromatogram(s)

VWD1 A, Wavelength=254 nm (050803\2\002985.D)



RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
19.137	MF	10.44255	4.44443	46.41114		HMX #8
19.796	FM	6.20519	7.37478	45.76187		3,4-DNT SURR. #9

Totals : 442.57116

Results obtained with enhanced integrator!

*** End of Report ***

Check Standard Report

==========

Data File C:\HPCHEM\1\DATA\050803\2L002986.D Sample Name: WG140197-03 CCV
HPLC2 5/9/2003 8:49:56 AM RDC

1,1 SOS65-01 8330 MIX A @ 50 ppb

==========

Injection Date : 5/9/2003 2:44:39 AM Seq. Line : 21

Signal 1: VWD1 A, Wavelength=254 nm

Compound	RT	Known Conc.	Cal. Conc.	%D
NITROTOLUENES #1	13.730	100.0	97.863	-2.1
NITROTOLUENE #2	14.297	50.0	50.789	1.6
2,6-DNT #3	16.392	50.0	49.404	-1.2
4-AMINO-2,6-DNT #4	17.556	50.0	48.697	-2.6
3,4-DNT SURR. #9 *	19.825	50.0	47.933	-4.1
TETRYL #5	29.936	50.0	42.633	-14.7

* = Failed 15.0% Criteria

1,1 SOS65-01 8330 MIX A @ 50 ppb

```
==================================================================
Injection Date  : 5/9/2003 2:44:39 AM            Seq. Line :  21
Sample Name     : WG140197-03 CCV                     Vial :   4
Acq. Operator   : RDC                                  Inj :   1
                                                Inj Volume : 100 µl
Acq. Method     : C:\HPCHEM\1\METHODS\8330CONF.M
Last changed    : 5/8/2003 1:39:42 PM by RDC
Analysis Method : C:\HPCHEM\1\METHODS\833CFD_B.M
Last changed    : 5/9/2003 8:47:54 AM by RDC
                  (modified after loading)
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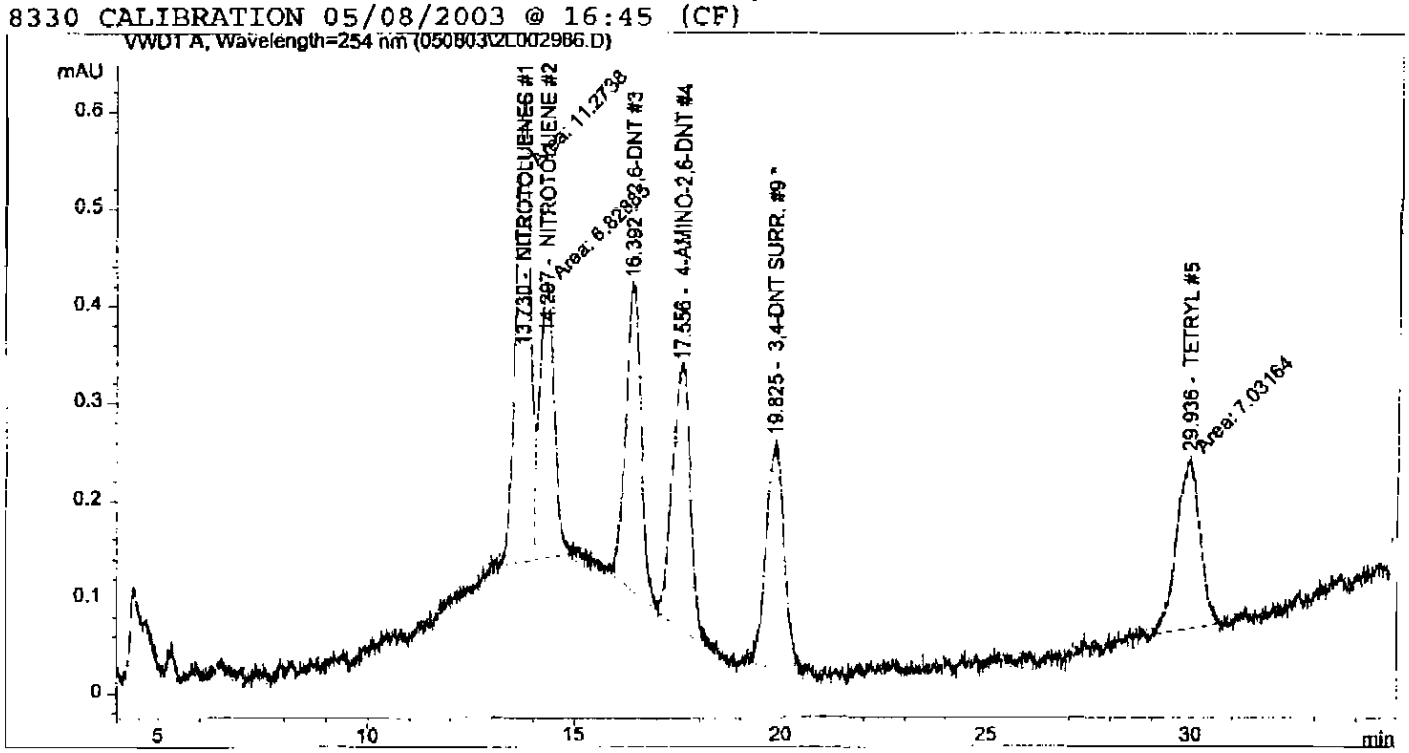
8330 CALIBRATION 05/08/2003 @ 16:45 (CF)

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==================================================================
                      External Standard Report
==================================================================
```
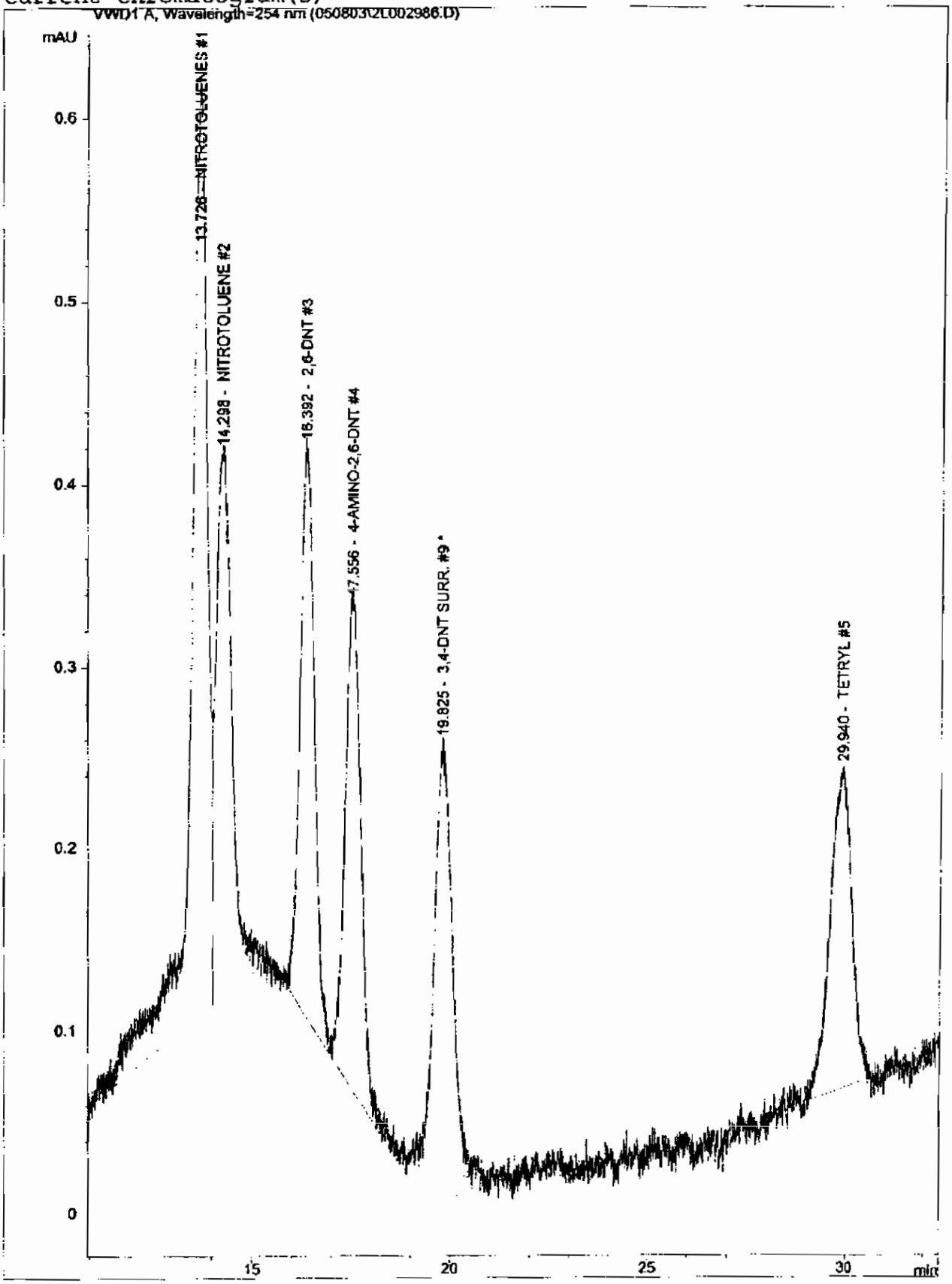

Sorted By	:	Signal
Calib. Data Modified	:	Friday, May 09, 2003 8:47:54 AM
Multiplier	:	1.0000
Dilution	:	1.0000

Signal 1: VWD1 A, Wavelength=254 nm

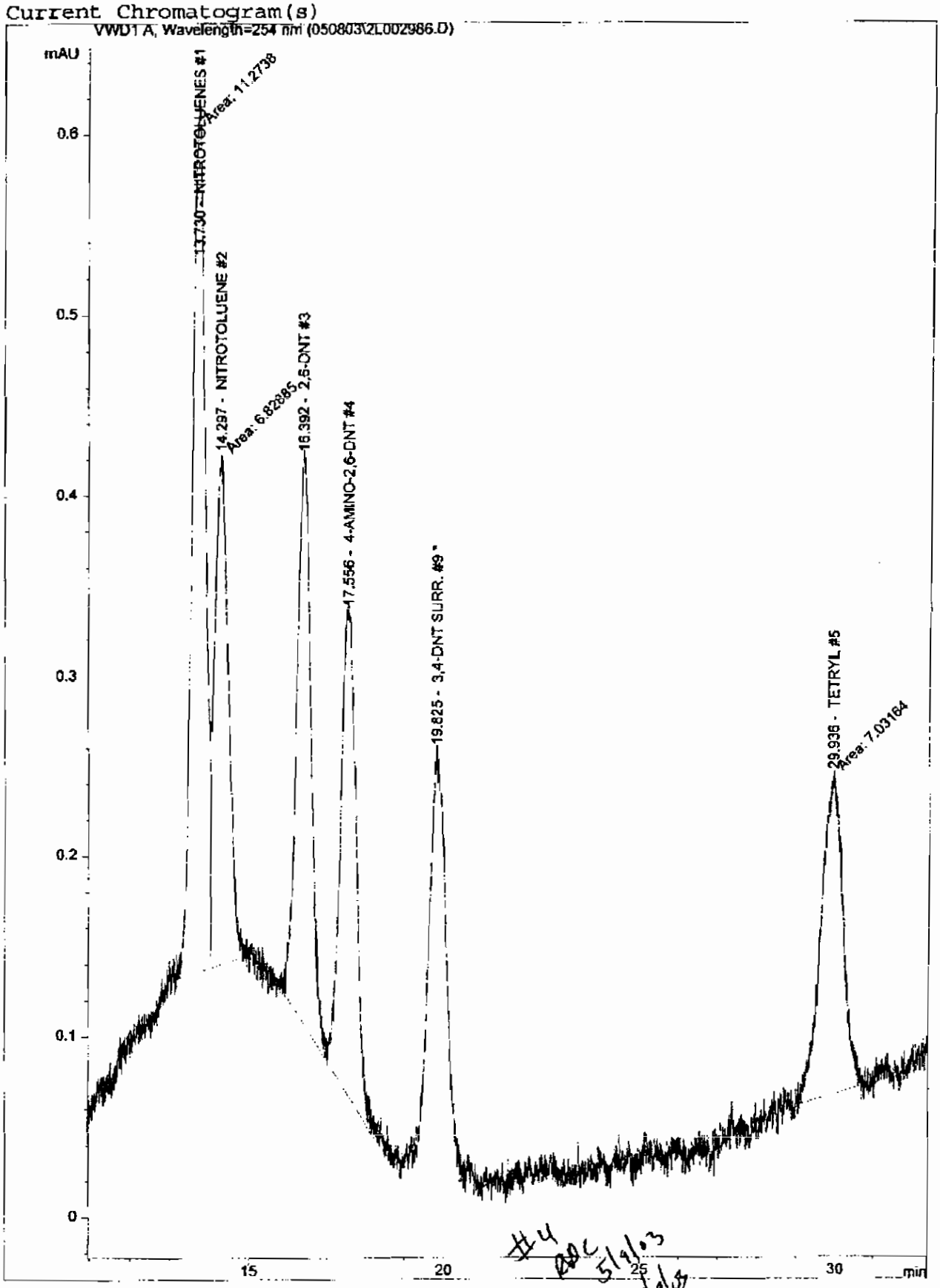
RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.730	MF	11.27379	8.68058	97.86300		NITROTOLUENES #1
14.297	FM	6.82885	7.43748	50.78939		NITROTOLUENE #2
16.392	BV	8.06763	6.12379	49.40447		2,6-DNT #3
17.556	VP	7.56278	6.43908	48.69731		4-AMINO-2,6-DNT #4
19.825	BP	7.11179	6.73988	47.93263		3,4-DNT SURR. #9 *
29.936	MM	7.03164	6.06297	42.63259		TETRYL #5

Current Chromatogram(s)



Current Chromatogram(s)

VWD1 A, Wavelength=254 nm (050803\2L002986.D)



#4 RDC 5/9/03

HPLC2 5/9/2003 8:49:52 AM RDC

Page 1 of 1

Totals : 337.31940

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

==========

*** End of Report ***

Lab Name: Kemron Environmental Services

Instrument ID: HPLC4 Method: 8330

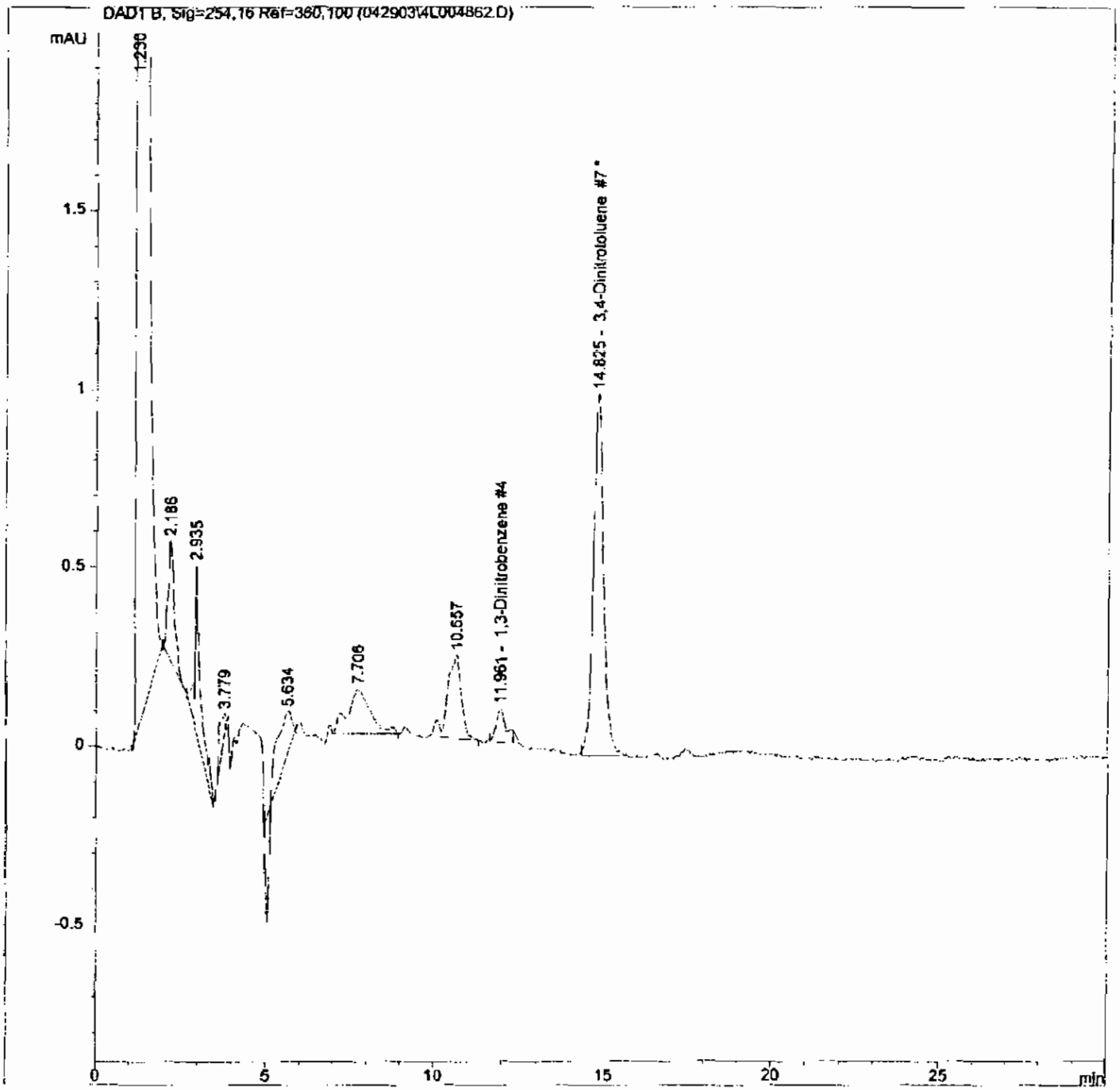
Column: Ultracarb 5 ODS 20

	STD #1	STD #2	STD #3
Date Run	07/23/2002	07/25/2002	07/26/2002
File #	4L003294	4L003317	4L003330
Time	21:06	17:22	22:58

COMPOUND	STD #1 RT	STD #2 RT	STD #3 RT	RT WIN
HMX	4.639	4.667	4.669	0.050
RDX	7.311	7.372	7.388	0.122
1,3,5-Trinitrobenzene	9.930	9.990	9.989	0.103
1,3-Dinitrobenzene	12.229	12.309	12.320	0.149
Tetryl	13.237	13.386	13.400	0.271
Nitrobenzene	13.911	14.018	14.030	0.197
3,4-Dinitrotoluene (Surr.)	15.075	15.284	15.304	0.381
2,4,6-Trinitrotoluene	15.868	16.015	16.019	0.258
4-Amino-2,6-Dinitrotoluene	16.855	17.073	17.198	0.521
2-Amino-4,6-Dinitrotoluene	17.775	17.996	18.096	0.493
2,6-Dinitrotoluene	18.622	18.825	18.849	0.374
2,4-Dinitrotoluene	19.282	19.471	19.489	0.344
2-Nitrotoluene	22.703	22.981	22.982	0.482
4-Nitrotoluene	24.294	24.580	24.579	0.495
3-Nitrotoluene	26.204	26.483	26.531	0.530

2.2.9.4 Raw QC Data

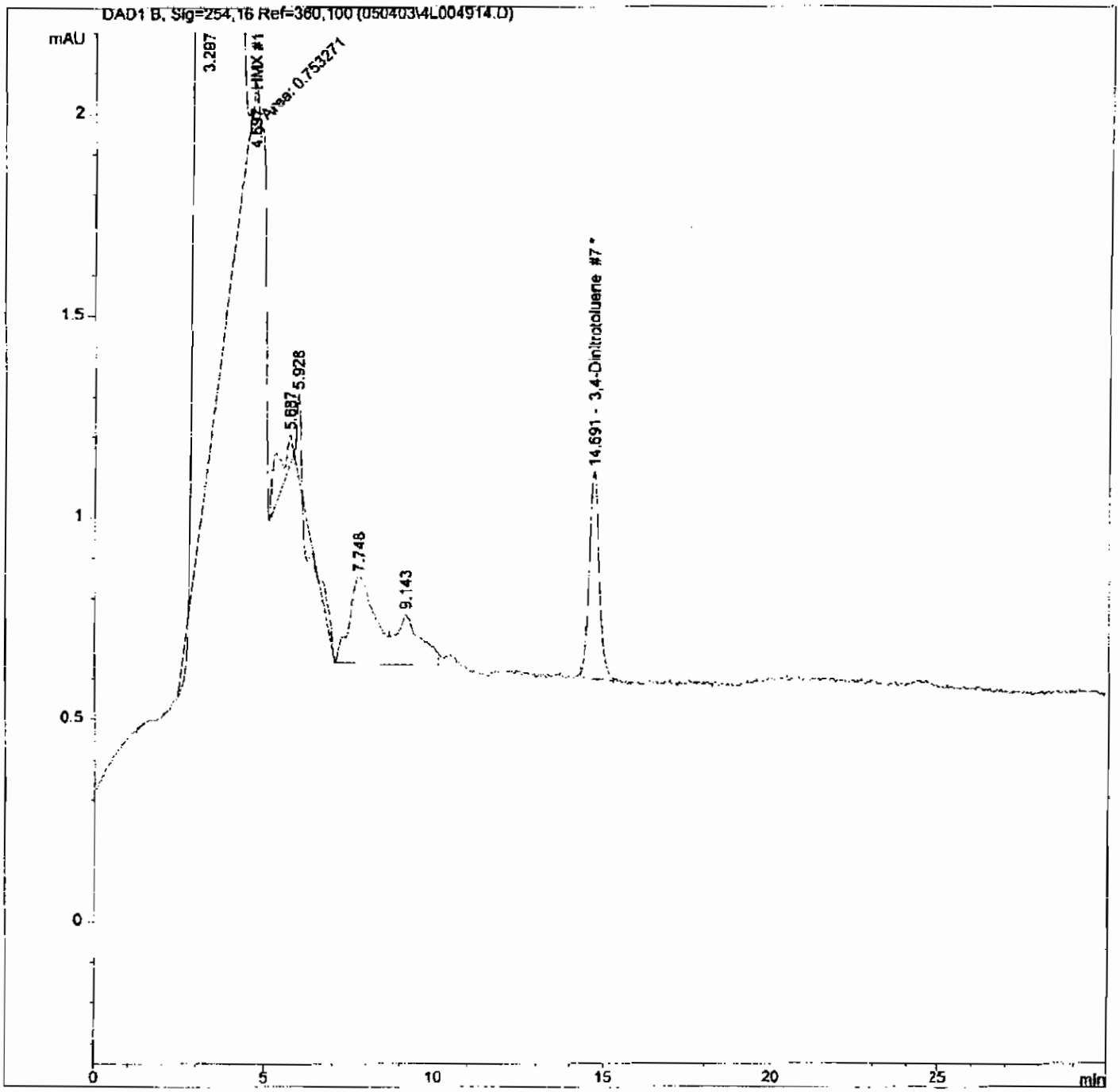
```
==================================================================
Injection Date   : 4/29/2003 4:42:47 PM          Seq. Line :   3
Sample Name      : WG139189-02 BLK                   Vial :   3
Acq. Operator    : RDC                                Inj :   1
                                                Inj Volume : 100 µl
Acq. Method      : C:\HPCHEM\2\METHODS\8330.M
Last changed     : 4/29/2003 2:40:07 PM by RDC
Analysis Method  : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed     : 4/30/2003 11:24:59 AM by RDC
                   (modified after loading)
8330 CALIBRATION 04/24/2003 @ 21:05
==================================================================
```



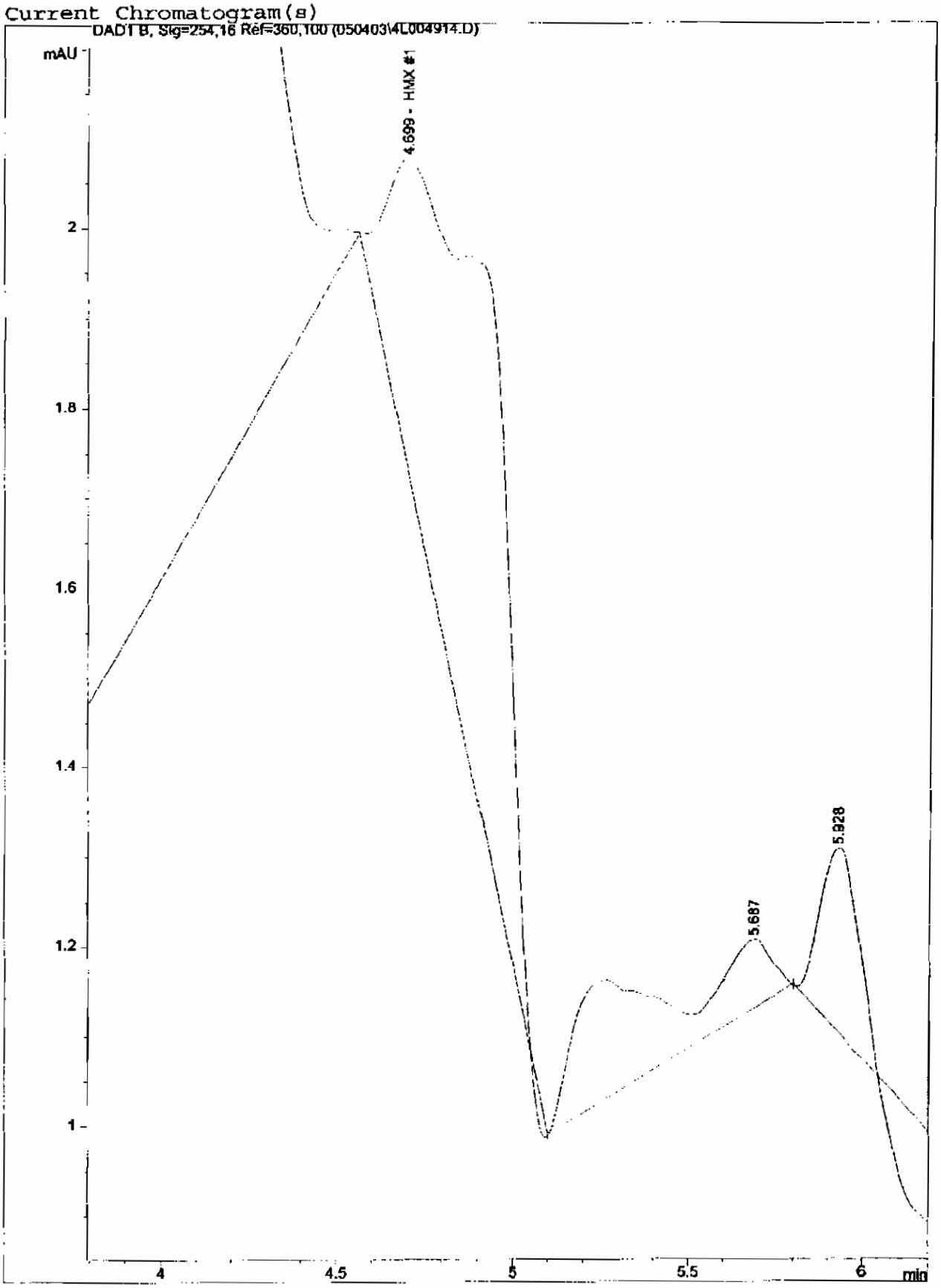
```
==================================================================
Injection Date  : 4/29/2003 4:42:47 PM          Seq. Line :   3
Sample Name     : WG139189-02 BLK                    Vial :   3
Acq. Operator   : RDC                                 Inj :   1
                                               Inj Volume : 100 µl
Acq. Method     : C:\HPCHEM\2\METHODS\8330.M
Last changed    : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed    : 4/30/2003 11:24:59 AM by RDC
                  (modified after loading)
8330 CALIBRATION 04/24/2003 @ 21:05
==================================================================

==================================================================
                      External Standard Report
==================================================================

Sorted By              :      Signal
Calib. Data Modified   :      4/30/2003 11:24:57 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime  Type     Area      Amt/Area    Amount   Grp   Name
 [min]           [mAU*s]                [ug/L]
-------|------|----------|----------|----------|--|------------------
  4.701            -          -          -          HMX #1
  7.386            -          -          -          RDX #2
  9.807            -          -          -          1,3,5-Trinitrobenzene #3
 11.961 BB       1.94260    3.50798    6.81459 CMDL 1,3-Dinitrobenzene #4
 13.152            -          -          -          Tetryl #5
 13.694            -          -          -          Nitrobenzene #6
 14.825 BB      21.03172    4.81577  101.28388 ug/L 3,4-Dinitrotoluene  #7 *
 15.584            -          -          -          2,4,6-Trinitrotoluene #8
 17.278            -          -          -          4-Amino-2,6-Dinitrotoluen
 18.003            -          -          -          2-Amino-4,6-Dinitrotoluen
 18.253            -          -          -          2,6-Dinitrotoluene #11
 18.913            -          -          -          2,4-Dinitrotoluene #12
 22.253            -          -          -          2-Nitrotoluene #13
 23.767            -          -          -          4-Nitrotoluene #14
 25.646            -          -          -          3-Nitrotoluene #15

Totals :                                  2091.61320

 Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

==================================================================
                      *** End of Report ***
```

Injection Date	: 5/4/2003 7:36:19 PM	Seq. Line :	3
Sample Name	: WG139397-01 BLK	Vial :	3
Acq. Operator	: RDC	Inj :	1
		Inj Volume :	100 µl

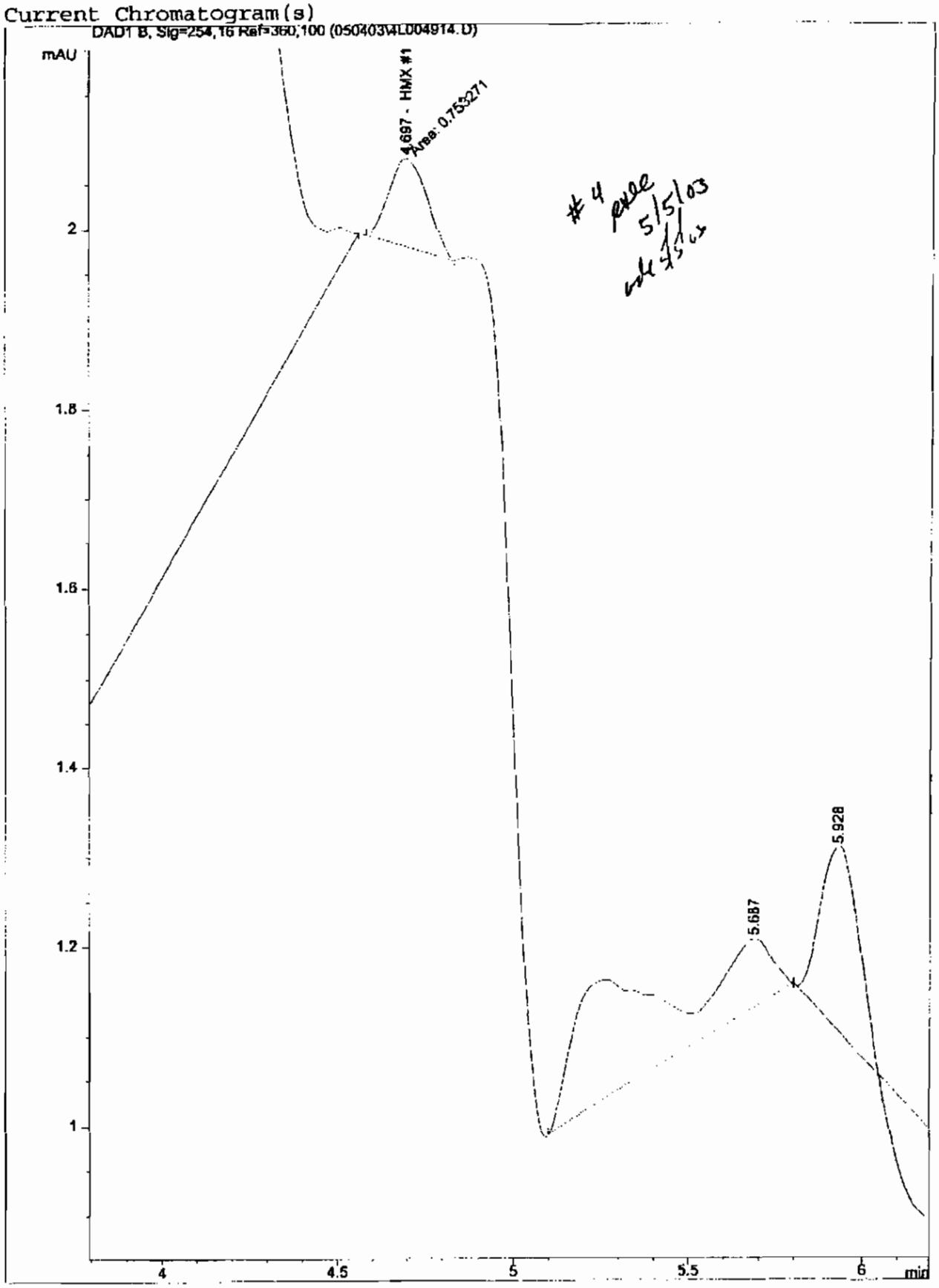
Acq. Method : C:\HPCHEM\2\METHODS\8330.M
Last changed : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed : 5/5/2003 9:15:05 AM by RDC
(modified after loading)
8330 CALIBRATION 05/02/2003 @ 23:11



Current Chromatogram(s)



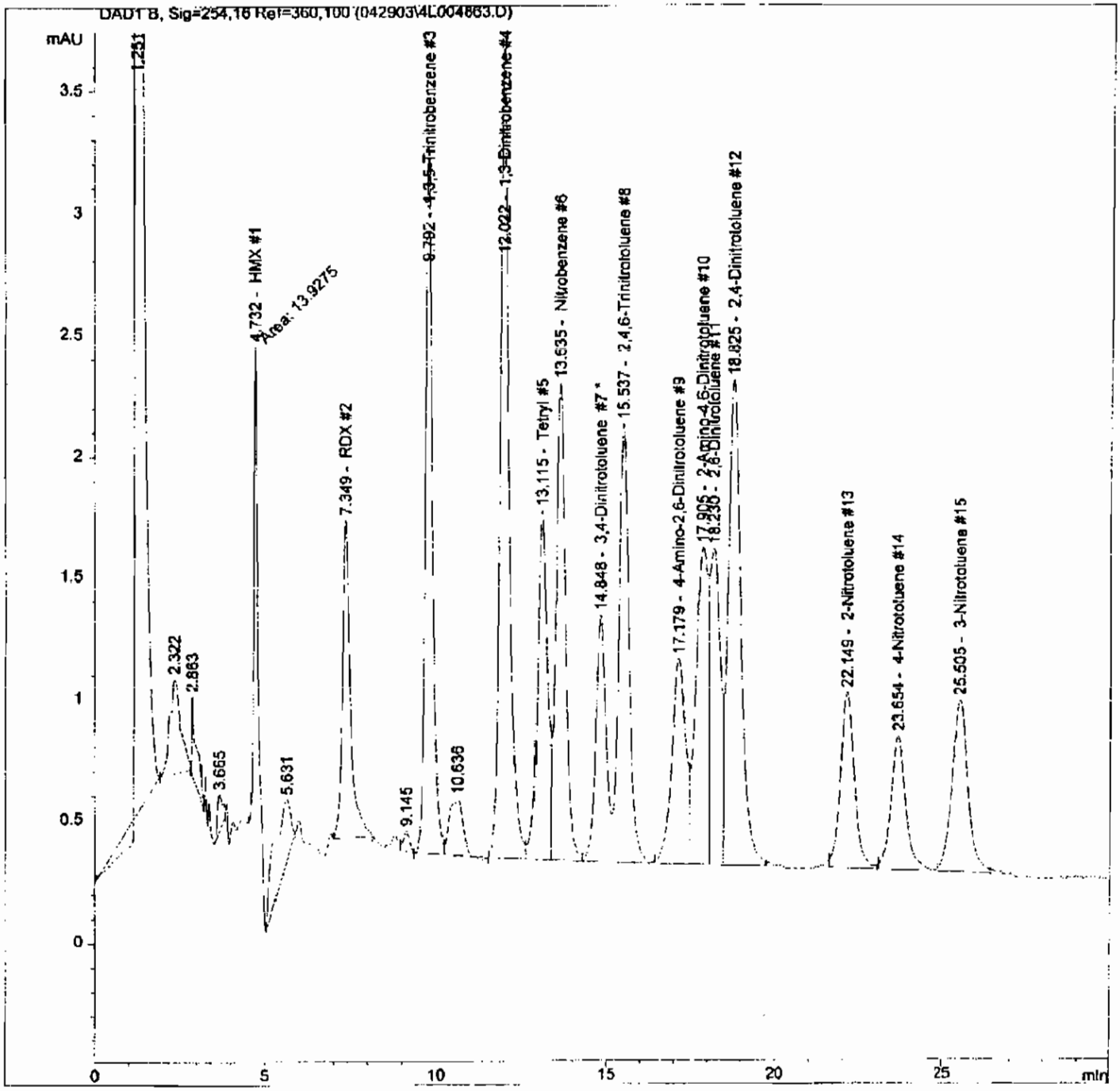
Current Chromatogram(s)



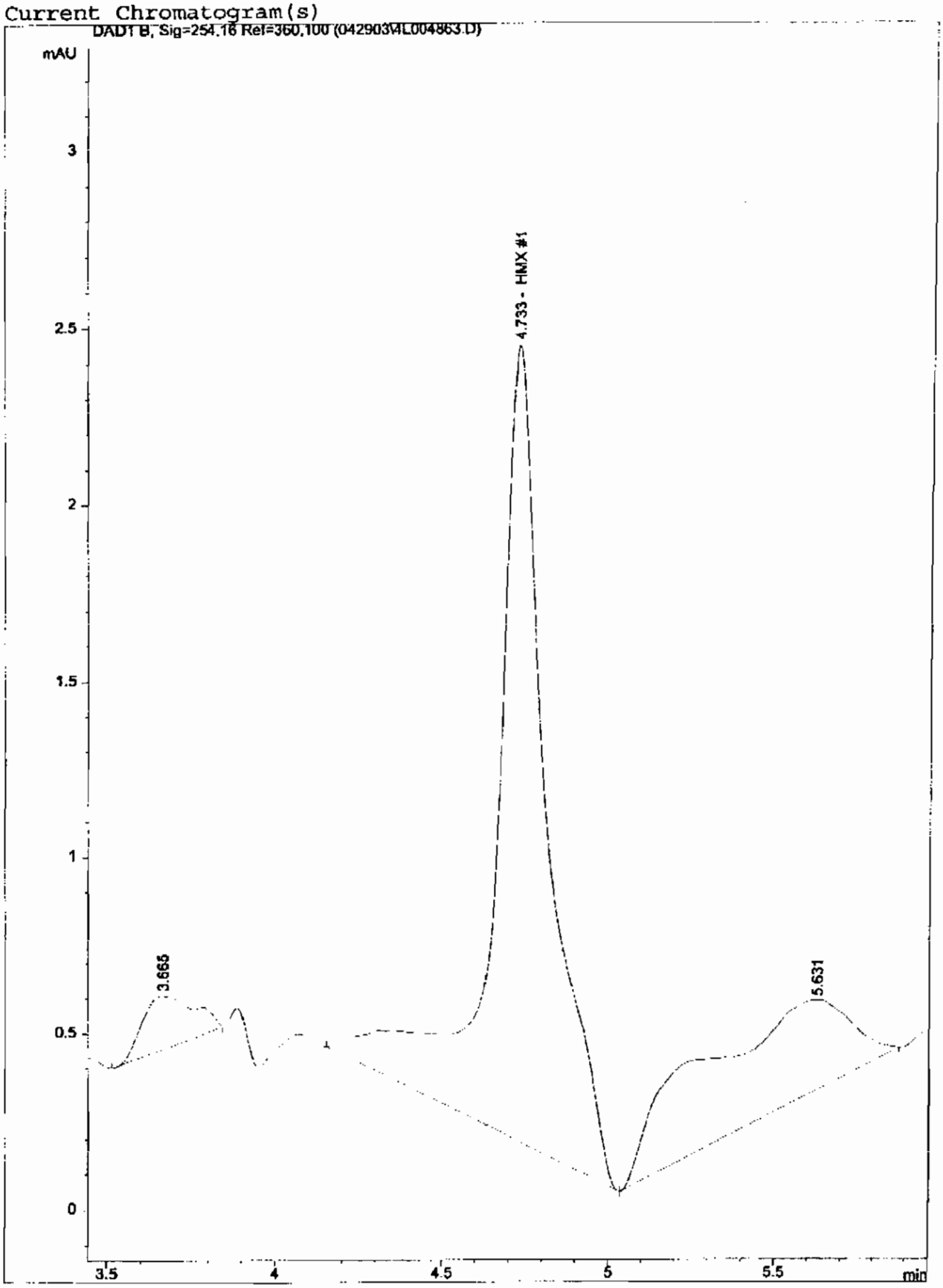
```
==================================================================
Injection Date  : 5/4/2003 7:36:19 PM            Seq. Line :   3
Sample Name     : WG139397-01 BLK                     Vial :   3
Acq. Operator   : RDC                                  Inj :   1
                                                Inj Volume : 100 µl
Acq. Method     : C:\HPCHEM\2\METHODS\8330.M
Last changed    : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed    : 5/5/2003 9:15:05 AM by RDC
                  (modified after loading)
8330 CALIBRATION 05/02/2003 @ 23:11
==================================================================

==================================================================
                      External Standard Report
==================================================================

Sorted By              :      Signal
Calib. Data Modified   :      5/4/2003 4:27:13 PM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime  Type     Area      Amt/Area    Amount   Grp   Name
 [min]          [mAU*s]                 [ug/L]
-------|------|----------|----------|----------|---|------------------
  4.697 MM     7.53271e-1    4.99820    3.76500 ND   HMX #1
  7.239            -          -          -           RDX #2
  9.796            -          -          -           1,3,5-Trinitrobenzene #3
 12.025            -          -          -           1,3-Dinitrobenzene #4
 12.988            -          -          -           Tetryl #5
 13.654            -          -          -           Nitrobenzene #6
 14.691 BB       10.59825    4.56886   48.42187     3,4-Dinitrotoluene  #7 *
 15.574            -          -          -           2,4,6-Trinitrotoluene #8
 16.539            -          -          -           4-Amino-2,6-Dinitrotoluen
 17.440            -          -          -           2-Amino-4,6-Dinitrotoluen
 18.230            -          -          -           2,6-Dinitrotoluene #11
 18.878            -          -          -           2,4-Dinitrotoluene #12
 22.226            -          -          -           2-Nitrotoluene #13
 23.750            -          -          -           4-Nitrotoluene #14
 25.583            -          -          -           3-Nitrotoluene #15

Totals :                                 2670.56758

 Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibrated compound(s) not found

==================================================================
                      *** End of Report ***
```

96.8%

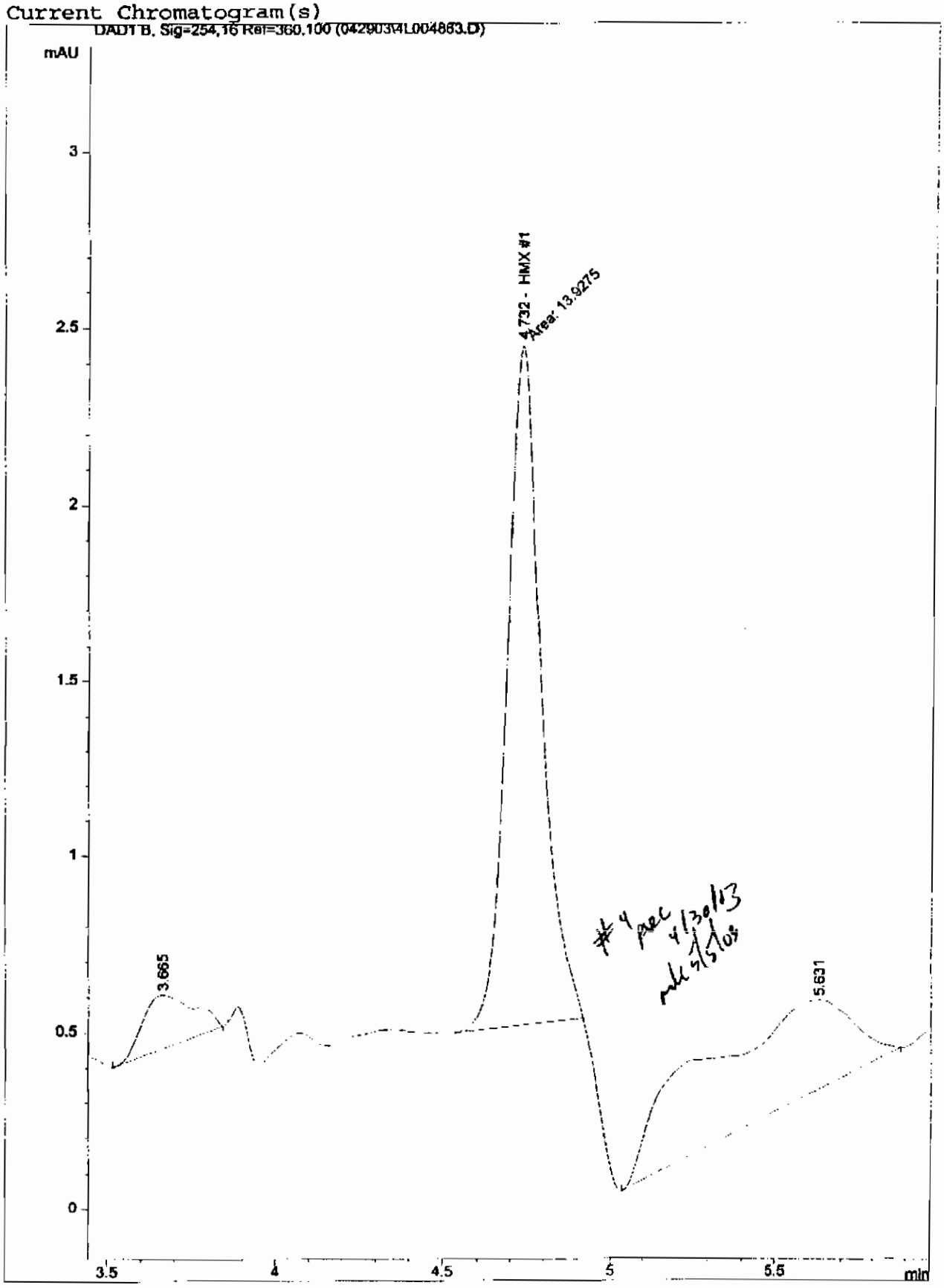
```
==================================================================
Injection Date  : 4/29/2003 5:35:01 PM          Seq. Line :   4
Sample Name     : WG139189-03 LCS                    Vial :   4
Acq. Operator   : RDC                                 Inj :   1
                                               Inj Volume : 100 µl

Acq. Method     : C:\HPCHEM\2\METHODS\8330.M
Last changed    : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed    : 4/30/2003 11:24:59 AM by RDC
                  (modified after loading)
8330 CALIBRATION 04/24/2003 @ 21:05
==================================================================
```



Current Chromatogram(s)



Current Chromatogram(s)

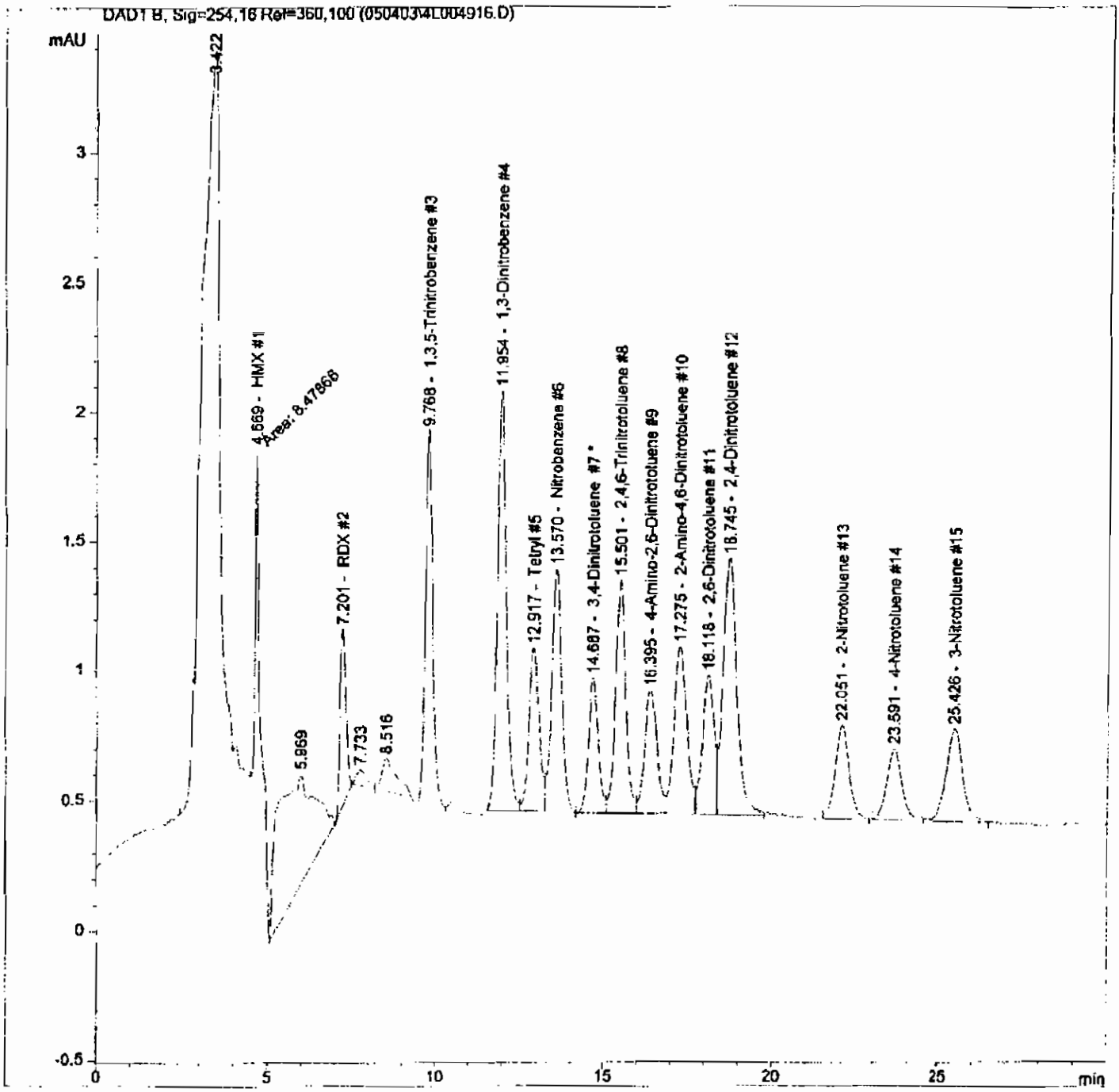


HPLC4 4/30/2003 11:25:39 AM RDC

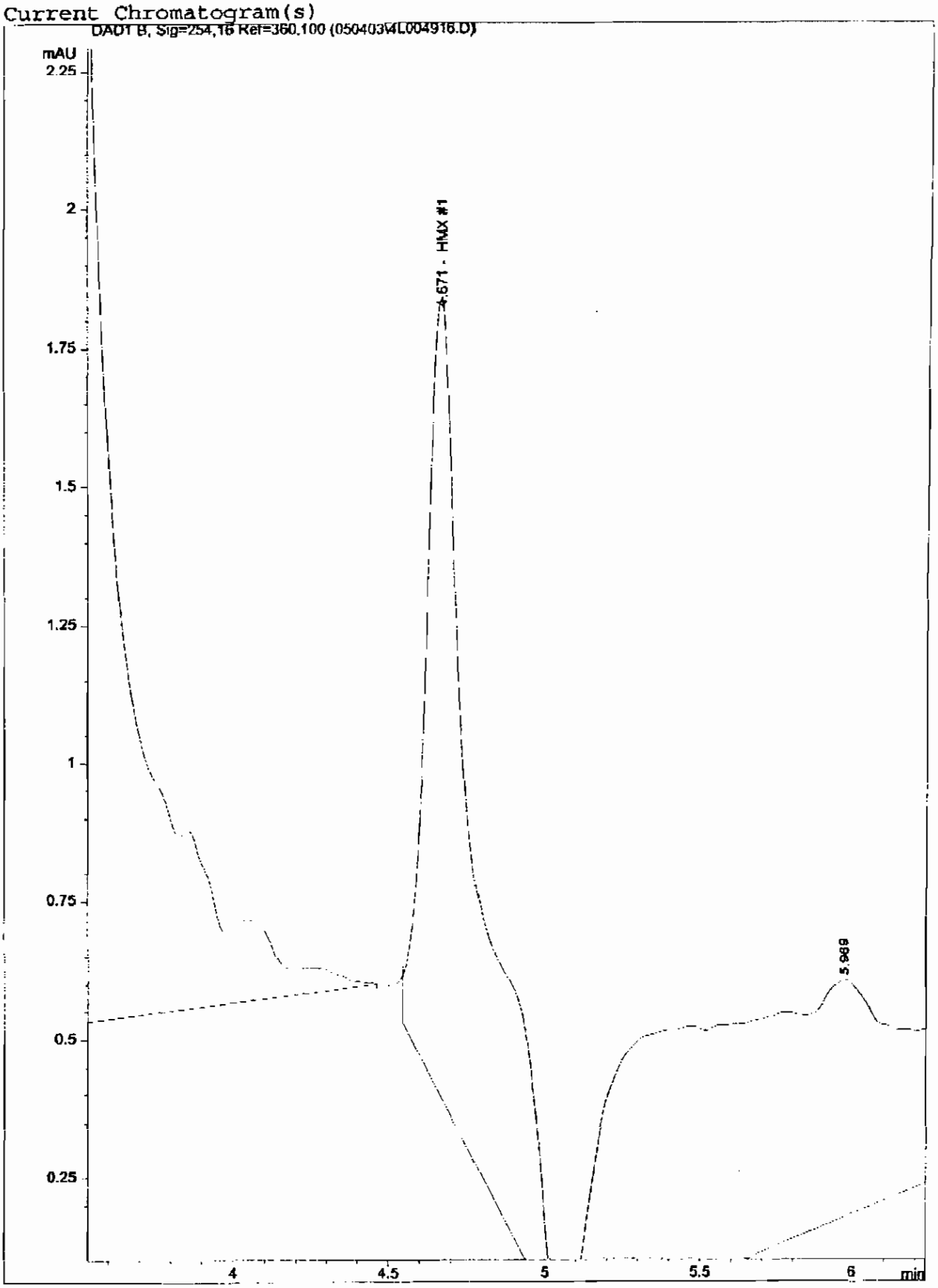
Page 1 of 1

```
==================================================================
Injection Date   : 4/29/2003 5:35:01 PM          Seq. Line :   4
Sample Name      : WG139189-03 LCS                    Vial :   4
Acq. Operator    : RDC                                 Inj :   1
                                                Inj Volume : 100 µl
Acq. Method      : C:\HPCHEM\2\METHODS\8330.M
Last changed     : 4/29/2003 2:40:07 PM by RDC
Analysis Method  : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed     : 4/30/2003 11:24:59 AM by RDC
                   (modified after loading)
8330 CALIBRATION 04/24/2003 @ 21:05
==================================================================

==================================================================
                      External Standard Report
==================================================================

Sorted By              :      Signal
Calib. Data Modified   :      4/30/2003 11:24:57 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime  Type     Area      Amt/Area    Amount   Grp   Name
 [min]          [mAU*s]                 [ug/L]
-------|------|----------|----------|----------|--|------------------
  4.732 MM       13.92746    6.44042   89.69868      HMX #1
  7.349 BBA      21.44203    5.47699  117.43773      RDX #2
  9.792 VV       41.61837    2.41917  100.68202      1,3,5-Trinitrobenzene #3
 12.022 BV       59.92569    1.80536  108.18745      1,3-Dinitrobenzene #4
 13.115 VV       27.89911    3.40745   95.06490      Tetryl #5
 13.635 VB       38.95285    2.67362  104.14508      Nitrobenzene #6
 14.848 BV       20.95852    4.81619  100.94026 101% 3,4-Dinitrotoluene  #7 *
 15.537 VP       37.72621    2.51614   94.92454      2,4,6-Trinitrotoluene #8
 17.179 BV       24.41890    4.28376  104.60483      4-Amino-2,6-Dinitrotoluen
 17.905 VV       32.26341    3.16809  102.21340      2-Amino-4,6-Dinitrotoluen
 18.230 VV       27.91727    3.95147  110.31433      2,6-Dinitrotoluene #11
 18.825 VB       51.69118    1.90911   98.68391      2,4-Dinitrotoluene #12
 22.149 BB       20.65748    4.90346  101.29312      2-Nitrotoluene #13
 23.654 BB       16.69183    6.09793  101.78559      4-Nitrotoluene #14
 25.505 BB       22.59278    4.19988   94.88695      3-Nitrotoluene #15

Totals :                                3441.20623

 Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

==================================================================
                      *** End of Report ***
```

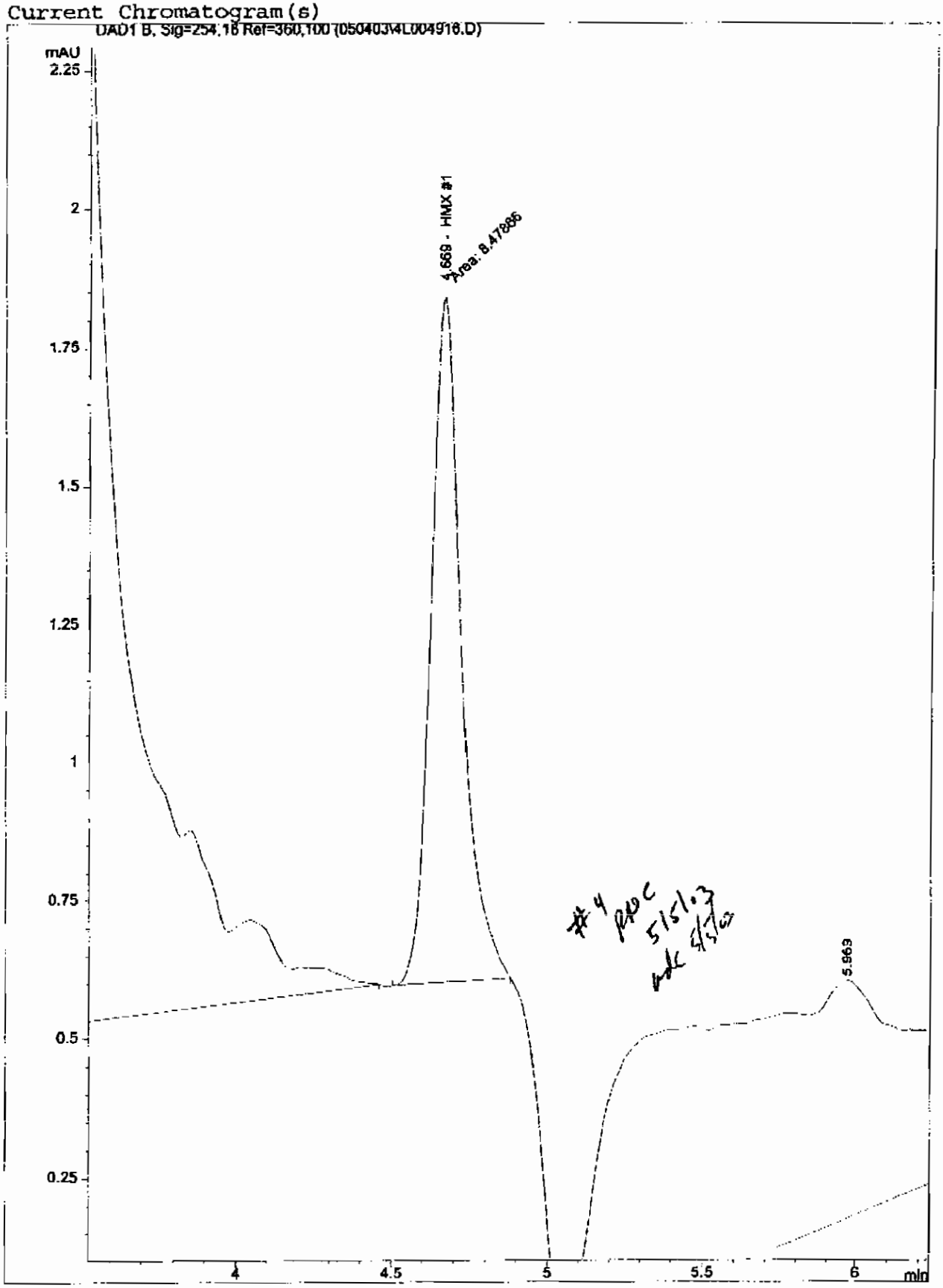
```
==================================================================
Injection Date  : 5/4/2003 9:20:35 PM              Seq. Line :   5
Sample Name     : WG139397-02 LCS                       Vial :   5
Acq. Operator   : RDC                                    Inj :   1
                                                 Inj Volume : 100 µl
Acq. Method     : C:\HPCHEM\2\METHODS\8330.M
Last changed    : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed    : 5/5/2003 9:15:05 AM by RDC
                  (modified after loading)
8330 CALIBRATION 05/02/2003 @ 23:11
==================================================================
```



Current Chromatogram(s)



Current Chromatogram(s)



HPLC4 5/5/2003 9:19:36 AM RDC

Page 1 of 1

Injection Date : 5/4/2003 9:20:35 PM
Sample Name : WG139397-02 LCS
Acq. Operator : RDC

Seq. Line : 5
Vial : 5
Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\HPCHEM\2\METHODS\8330.M
Last changed : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed : 5/5/2003 9:15:05 AM by RDC
(modified after loading)
8330 CALIBRATION 05/02/2003 @ 23:11

External Standard Report

Sorted By : Signal
Calib. Data Modified : 5/4/2003 4:27:13 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
4.669	MM	8.47866	5.94609	50.41489		HMX #1
7.201	BB	8.53204	6.00158	51.20572		RDX #2
9.768	BB	20.83549	2.39246	49.84805		1,3,5-Trinitrobenzene #3
11.954	BV	30.02393	1.75541	52.70427		1,3-Dinitrobenzene #4
12.917	VV	11.82216	3.17123	37.49078		Tetryl #5
13.570	VP	19.44239	2.61504	50.84262		Nitrobenzene #6
14.687	VV	10.40745	4.56801	47.54139	95.1%	3,4-Dinitrotoluene #7 *
15.501	VV	19.09632	2.52347	48.18896		2,4,6-Trinitrotoluene #8
16.395	VV	12.06627	4.14817	50.05293		4-Amino-2,6-Dinitrotoluen
17.275	VV	17.35539	3.05512	53.02289		2-Amino-4,6-Dinitrotoluen
18.118	VV	12.83727	3.97937	51.08421		2,6-Dinitrotoluene #11
18.745	VB	26.68263	1.93205	51.55222		2,4-Dinitrotoluene #12
22.051	BB	10.41039	4.68480	48.77055		2-Nitrotoluene #13
23.591	BB	8.41485	5.68870	47.86951		4-Nitrotoluene #14
25.426	BB	12.01083	4.10795	49.33987		3-Nitrotoluene #15

Totals : 1879.92907

Results obtained with enhanced integrator!

*** End of Report ***

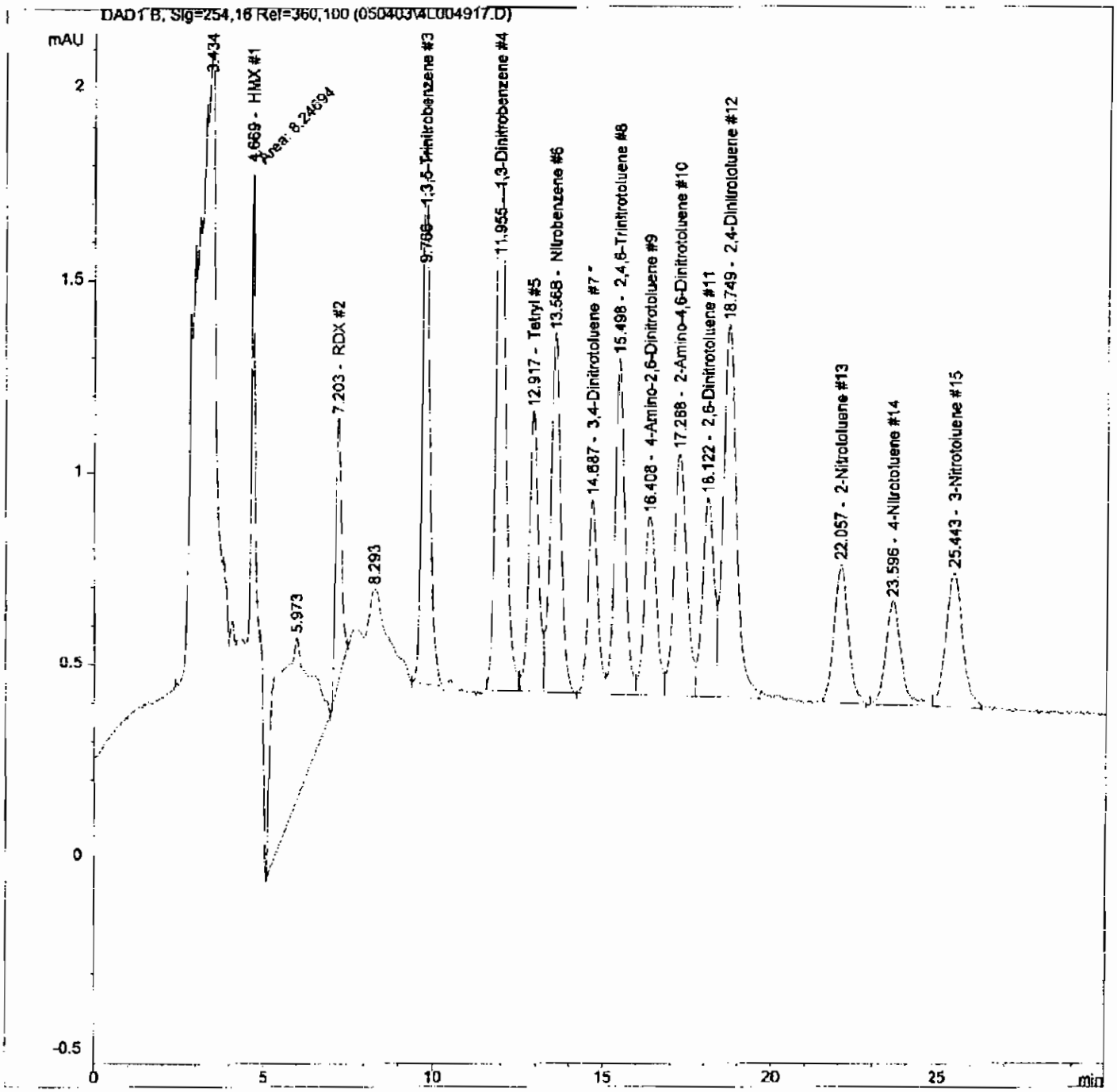
==========

Injection Date : 5/4/2003 10:12:45 PM
Sample Name : WG139397-03 LCS2
Acq. Operator : RDC

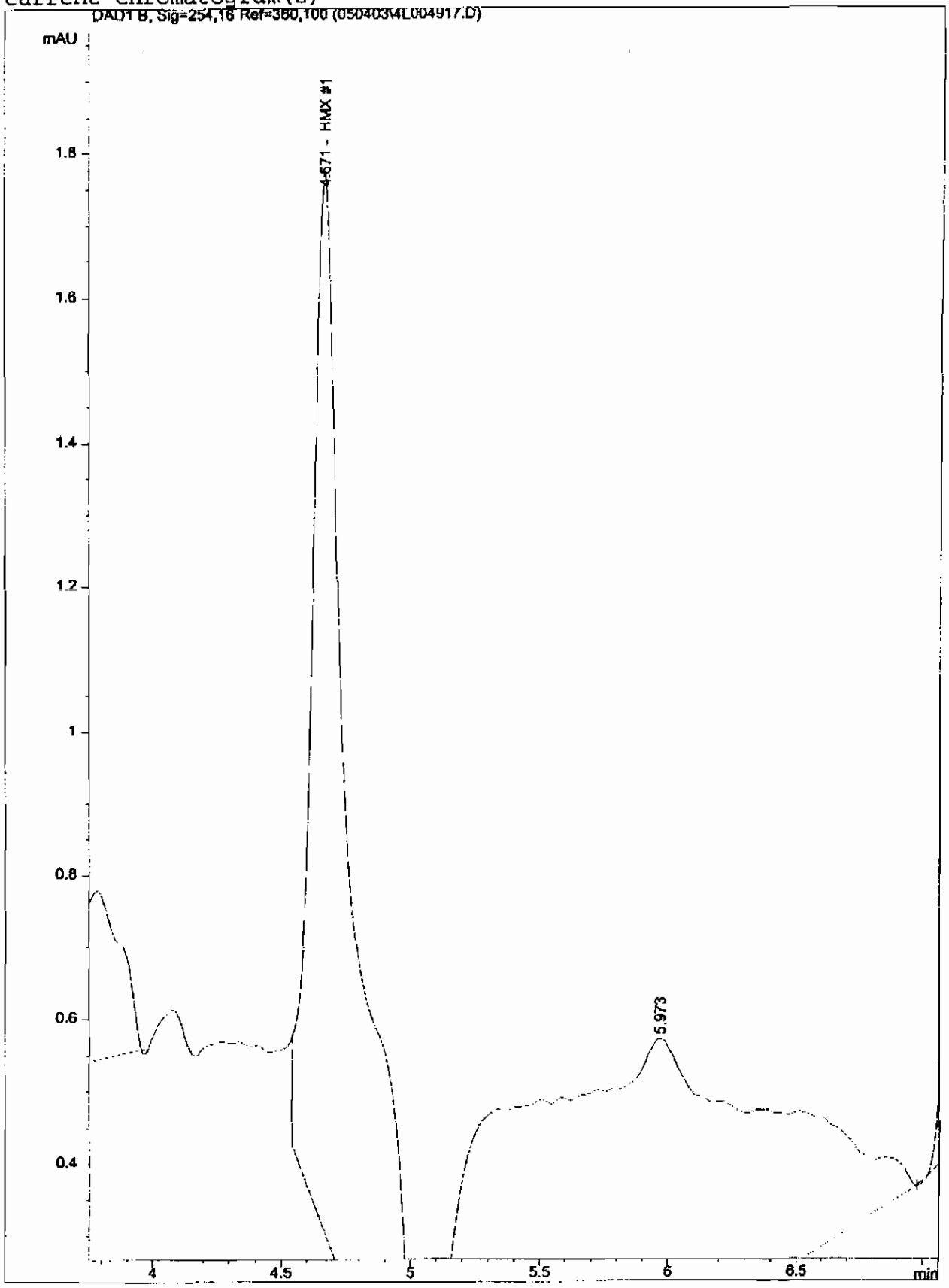
Seq. Line : 6
Vial : 6
Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\HPCHEM\2\METHODS\8330.M
Last changed : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed : 5/5/2003 9:15:05 AM by RDC
(modified after loading)
8330 CALIBRATION 05/02/2003 @ 23:11

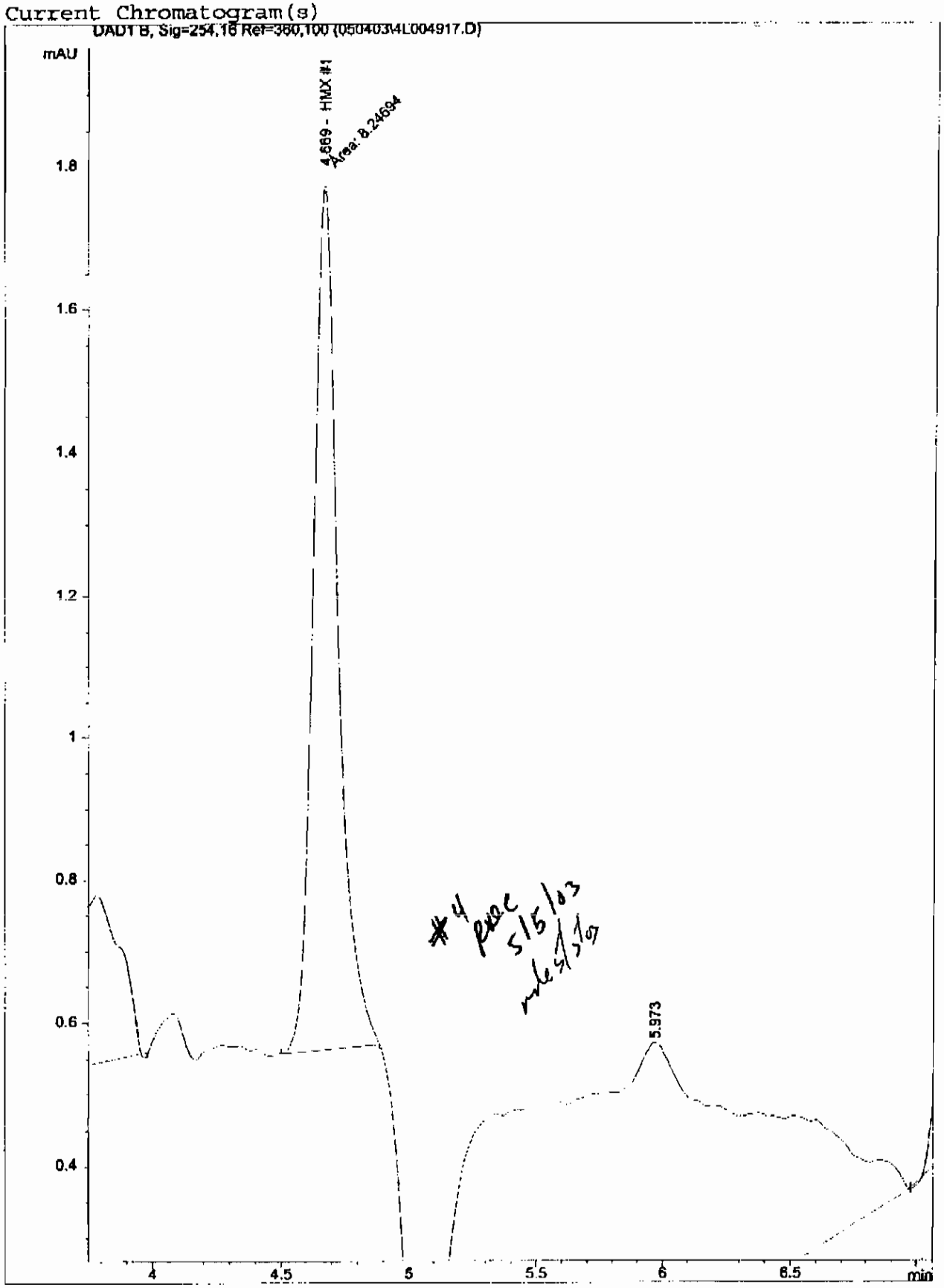
==========



Current Chromatogram(s)



Current Chromatogram(s)



Injection Date : 5/4/2003 10:12:45 PM
Sample Name : WG139397-03 LCS2
Acq. Operator : RDC

Seq. Line : 6
Vial : 6
Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\HPCHEM\2\METHODS\8330.M
Last changed : 4/29/2003 2:40:07 PM by RDC
Analysis Method : C:\HPCHEM\2\METHODS\833GRDDA.M
Last changed : 5/5/2003 9:15:05 AM by RDC
(modified after loading)
8330 CALIBRATION 05/02/2003 @ 23:11

External Standard Report

Sorted By : Signal
Calib. Data Modified : 5/4/2003 4:27:13 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
4.669	MM	8.24694	5.94350	49.01566		HMX #1
7.203	BB	8.52087	6.00283	51.14940		RDX #2
9.766	VB	21.39548	2.38950	51.12438		1,3,5-Trinitrobenzene #3
11.955	BV	29.65775	1.75601	52.07922		1,3-Dinitrobenzene #4
12.917	VV	13.90413	3.17170	44.09978		Tetryl #5
13.568	VP	19.42067	2.61503	50.78554		Nitrobenzene #6
14.687	BV	9.98607	4.56604	45.59683 91.26		3,4-Dinitrotoluene #7 *
15.498	VV	18.27903	2.52595	46.17182		2,4,6-Trinitrotoluene #8
16.408	VV	11.50358	4.15337	47.77864		4-Amino-2,6-Dinitrotoluen
17.288	VV	16.62554	3.06174	50.90310		2-Amino-4,6-Dinitrotoluen
18.122	VV	12.33853	3.98786	49.20436		2,6-Dinitrotoluene #11
18.749	VB	25.91526	1.93496	50.14487		2,4-Dinitrotoluene #12
22.057	BP	10.29596	4.68586	48.24544		2-Nitrotoluene #13
23.596	BB	8.26010	5.68535	46.96154		4-Nitrotoluene #14
25.443	BB	11.72167	4.10713	48.14238		3-Nitrotoluene #15

Totals : 1751.61922

Results obtained with enhanced integrator!

*** End of Report ***

Sequence Table:

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	1	Blank Me/AcCN/Wa	8330	1	Sample		
2	2	WG139061-01 STD6	8330	1	Sample		
3	3	WG139061-02 STD5	8330	1	Sample		
4	4	WG139061-03 STD4	8330	1	Sample		
5	5	WG139061-04 STD3	8330	1	Sample		
6	6	WG139061-05 STD2	8330	1	Sample		
7	7	WG139061-06 STD1	8330	1	Sample		
8	8	WG139061-07 ALT	8330	1	Sample		
9	9	WG138033-01 BLK	8330	1	Sample		
10	10	L0304149-01 833S	8330	1	Sample		
11	11	L0304149-02 833S	8330	1	Sample		
12	12	WG138929-02 BLK	8330	1	Sample		
13	13	WG138929-03 LCS	8330	1	Sample		
14	14	L0304410-01 833S	8330	1	Sample		
15	15	L0304410-02 833S	8330	1	Sample		
16	16	L0304410-04 833S	8330	1	Sample		
17	17	L0304410-06 833S	8330	1	Sample		
18	18	L0304410-07 833S	8330	1	Sample		
19	5	WG139061-08 CCV	8330	1	Sample		
20	19	L0304149-03 833S	8330	1	Sample		
21	20	L0304149-04 833S	8330	1	Sample		
22	21	L0304149-05 833S	8330	1	Sample		
23	22	L0304149-06 833S	8330	1	Sample		
24	23	L0304149-07 833S	8330	1	Sample		
25	24	L0304149-08 833S	8330	1	Sample		
26	25	L0304149-09 833S	8330	1	Sample		
27	26	L0304149-10 833S	8330	1	Sample		
28	27	L0304149-11 833S	8330	1	Sample		
29	28	WG138033-02 LCS	8330	1	Sample		
30	29	WG139061-09 CCV	8330	1	Sample		
31	30	WG138033-03 LCS2	8330	1	Sample		
32	31	L0304149-04 833S	8330	1	Sample		
33	32	L0304410-02 @ 5X	8330	1	Sample		
34	29	WG139061-10 CCV	8330	1	Sample		

RDC 4/28/03

Set	Run	Vial	Method	Datafile	Acquired	Calibration	Sample Name
No	1	1	8330	4L004800	01:01		Blank Me/AcCN
No	2	2	8330	4L004801	02:01	DIL'N 50564-31	WG139061-01 S
No	3	3	8330	4L004802	03:01		WG139061-02 ST
No	4	4	8330	4L004803	04:01		WG139061-03 ST
No	5	5	8330	4L004804	05:01		WG139061-04 ST
No	6	6	8330	4L004805	06:01		WG139061-05 ST
No	7	7	8330	4L004806	07:01		WG139061-06 ST
No	8	8	8330	4L004807	08:01	DIL'N 50564-26	WG139061-07 AL
No	9	9	8330	4L004808	09:01		WG138033-01 BL
No	10	10	8330	4L004809	10:01		L0304149-01 83
No	11	11	8330	4L004810	11:01		L0304149-02 83
No	12	12	8330	4L004811	12:01		WG138929-02 BL
No	13	13	8330	4L004812	13:01		WG138929-03 LC
No	14	14	8330	4L004813	14:01		L0304410-01 83
No	15	15	8330	4L004814	15:01	RR & RR5X	L0304410-02 83
No	16	16	8330	4L004815	16:01		L0304410-04 83
No	17	17	8330	4L004816	17:01		L0304410-06 83
No	18	18	8330	4L004817	18:01		L0304410-07 83
No	19	5	8330	4L004818	19:01	DIL'N 50564-31	WG139061-08 CC
No	20	19	8330	4L004819	20:01		L0304149-03 83
No	21	20	8330	4L004820	21:01	RR, SVNF	L0304149-04 83
No	22	21	8330	4L004821	22:01		L0304149-05 83
No	23	22	8330	4L004822	23:01		L0304149-06 83
No	24	23	8330	4L004823	24:01		L0304149-07 83
No	25	24	8330	4L004824	25:01		L0304149-08 83
No	26	25	8330	4L004825	26:01		L0304149-09 83
No	27	26	8330	4L004826	27:01		L0304149-10 83
No	28	27	8330	4L004827	28:01		L0304149-11 83
No	29	28	8330	4L004828	29:01		WG138033-02 LC
No	30	29	8330	4L004829	30:01	DIL'N 50564-31	WG139061-09 CC
No	31	30	8330	4L004830	31:01		WG138033-03 LC
No	32	31	8330	4L004831	32:01		L0304149-04 83
No	33	32	8330	4L004832	33:01		L0304410-02 @
No	34	29	8330	4L004833	34:01	DIL'N 50564-31	WG139061-10 CC

RJLC
4/28/03

Analysis Date/Time Apr. 24, 2003 Instrument ID #PLC4 Column ID Ultracarbs GDS Data Subdirectory 042403
Analyst Initials [illegible] SOP # HPLC01 Rev. # 4 8310 SOP # HPLC02 Rev. # 3 8330

Daily Check

- ☑ Mobile phase reservoir
- ☑ System pressure 228 bar
- ☒ Waste container

Returned to Control?

Yes ____ No ____

Additional Maintenance

Problem: decreasing resolution resulting in %D >15 for analytes

Action Taken: changed guard cartridge & recalibrated

Comments

L0304410-02 + 02 @ 5X used to RR — cannot confirm RDX by DAD ... tetryl & nitrobenzene for same sample do not confirm

Reviewed By: [illegible]

Sequence Table:

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	1	Blank Me/AcCN/Wa	8330	1	Sample		
2	2	WG139328-01 CCV	8330	1	Sample		
3	3	WG139189-02 BLK	8330	1	Sample		
4	4	WG139189-03 LCS	8330	1	Sample		
5	5	L0304506-01 833W	8330	1	Sample		
6	6	L0304506-02 833W	8330	1	Sample		
7	7	L0304506-03 833W	8330	1	Sample		
8	8	L0304506-04 833W	8330	1	Sample		
9	9	L0304506-05 833W	8330	1	Sample		
10	10	L0304506-06 833W	8330	1	Sample		
11	11	L0304506-08 833W	8330	1	Sample		
12	12	L0304506-09 833W	8330	1	Sample		
13	13	WG139328-02 CCV	8330	1	Sample		
14	14	L0304506-10 833W	8330	1	Sample		
15	15	L0304506-11 833W	8330	1	Sample		
16	16	L0304541-01 833W	8330	1	Sample		
17	17	L0304541-02 833W	8330	1	Sample		
18	18	L0304541-03 833W	8330	1	Sample		
19	19	WG139189-01 REF	8330	1	Sample		
20	20	WG139189-04 MS	8330	1	Sample		
21	21	WG139189-05 MSD	8330	1	Sample		
22	22	L0304541-07 833W	8330	1	Sample		
23	23	L0304541-08 833W	8330	1	Sample		
24	13	WG139328-03 CCV	8330	1	Sample		
25	24	L0304541-12 833W	8330	1	Sample		
26	25	L0304594-01 833W	8330	1	Sample		
27	26	L0304594-02 833W	8330	1	Sample		
28	13	WG139328-04 CCV	8330	1	Sample		

Sel	Run	Vial	Method	Datafile	SeqTable	Calib:RF:RT	Sample Name
No	1	1	8330	4L004860	01:01		Blank Me/AcCN/
No	2	2	8330	4L004861	02:01	DIL'N SOS 64-31	WG139328-01 CC
No	3	3	8330	4L004862	03:01		WG139189-02 BL
No	4	4	8330	4L004863	04:01		WG139189-03 LC
No	5	5	8330	4L004864	05:01		L0304506-01 83
No	6	6	8330	4L004865	06:01		L0304506-02 83
No	7	7	8330	4L004866	07:01		L0304506-03 83
No	8	8	8330	4L004867	08:01		L0304506-04 83
No	9	9	8330	4L004868	09:01		L0304506-05 83
No	10	10	8330	4L004869	10:01		L0304506-06 83
No	11	11	8330	4L004870	11:01		L0304506-08 83
No	12	12	8330	4L004871	12:01		L0304506-09 83
No	13	13	8330	4L004872	13:01	SOS 64-31	WG139328-02 CC
No	14	14	8330	4L004873	14:01		L0304506-10 83
No	15	15	8330	4L004874	15:01		L0304506-11 83
No	16	16	8330	4L004875	16:01	RE	L0304541-01 83
No	17	17	8330	4L004876	17:01		L0304541-02 83
No	18	18	8330	4L004877	18:01		L0304541-03 83
No	19	19	8330	4L004878	19:01		WG139189-01 RE
No	20	20	8330	4L004879	20:01		WG139189-04 MS
No	21	21	8330	4L004880	21:01		WG139189-05 MS
No	22	22	8330	4L004881	22:01		L0304541-07 83
No	23	23	8330	4L004882	23:01		L0304541-08 83
No	24	13	8330	4L004883	24:01	SOS 64-31	WG139328-03 CC
No	25	24	8330	4L004884	25:01		L0304541-12 83
No	26	25	8330	4L004885	26:01		L0304594-01 83
No	27	26	8330	4L004886	27:01		L0304594-02 83
No	28	13	8330	4L004887	28:01	SOS 64-31	WG139328-04 CC

BJC
5/2/03
[illegible]

HPLC Laboratory Maintenance Log

Analysis Date/Time Apr. 29 2003 Instrument ID HPLC4 Column ID Ultracarb5 005 Data Subdirectory 042903
Analyst Initials ARC SOP # HPLC01 Rev. # 4 ____ 8310 SOP # HPLC02 Rev. # 3 8330

Daily Check
- ☑ Mobile phase reservoir
- ☑ System pressure 228 bar
- ☑ Waste container

Returned to Control?
Yes ____ No ____

Additional Maintenance
Problem: ____

Action Taken: ____

Comments

L0304506-01	RDX & NB - NC	may need 2nd column conf.
↓ -02	RDX conf via DAD	
↓ -03	tetryl - NC	(2nd column needed?)
↓ -04	tetryl conf via DAD	
↓ -09	tetryl - NC	2nd column may be needed
↓ -10	↓	↓
↓ -11	↓	↓
L0304541-01	SUM @ 48.6%	(50-150) sent for RE
L0304541-12	tetryl - NC	2nd column may be needed
L0304594-01	RDX, 1,3,5-TNB, 4-AM-2,6-DNT, 2-AM-4,6-DNT, & 4-NT - NC	- 2nd column may be needed

Reviewed By: pde 5/5/03

Sequence Table:

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	1	Blank Me/AcCN/Wa	8330	1	Sample		
2	2	WG139673-01 STD6	8330	1	Sample		
3	3	WG139673-02 STD5	8330	1	Sample		
4	4	WG139673-03 STD4	8330	1	Sample		
5	5	WG139673-04 STD3	8330	1	Sample		
6	6	WG139673-05 STD2	8330	1	Sample		
7	7	WG139673-06 STD1	8330	1	Sample		
8	8	WG139673-07 ALT	8330	1	Sample		

RWB 5/14/03

Sel	Run	Vial	Method	Datafile	SeqTable	Calib:RF:RT	Sample Name
No	1	1	8330	4L004904	01:01		Blank Me/AcCN
No	2	2	8330	4L004905	02:01	DILN SOS 64-31	WG139673-01 ST
No	3	3	8330	4L004906	03:01		WG139673-02 ST
No	4	4	8330	4L004907	04:01		WG139673-03 ST
No	5	5	8330	4L004908	05:01		WG139673-04 ST
No	6	6	8330	4L004909	06:01		WG139673-05 ST
No	7	7	8330	4L004910	07:01		WG139673-06 ST
No	8	8	8330	4L004911	08:01	DILN. SOS 64-48	WG139673-07 AL

5/4/03

KEMRON ENVIRONMENTAL SERVICES
HPLC Laboratory Maintenance Log

Analysis Date/Time May 2, 2013 Instrument ID HPLC4 Column ID Ultracarb 5 ODS Data Subdirectory 050203
Analyst Initials BDC SOP # HPLC01 Rev. # 4 8310 SOP # HPLC02 Rev. # 3 8330

Daily Check
- ☑ Mobile phase reservoir
- ☑ System pressure 227 bar
- ☑ Waste container

Returned to Control?
Yes ____ No ____

Additional Maintenance
Problem: _____

Action Taken: _____

Comments

Reviewed By: [signature] 5/6/13

Sequence Table:

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	1	Blank Me/AcCN/Wa	8330	1	Sample		
2	2	WG139732-01 CCV	8330	1	Sample		
3	3	WG139397-01 BLK	8330	1	Sample		
4	4	MDL CHK	8330	1	Sample		
5	5	WG139397-02 LCS	8330	1	Sample		
6	6	WG139397-03 LCS2	8330	1	Sample		
7	7	L0304554-01 833S	8330	1	Sample		
8	8	L0304594-03 833S	8330	1	Sample		
9	9	L0304439-01 REEX	8330	1	Sample		
10	10	WG139590-01 BLK	8330	1	Sample		
11	11	WG139590-02 LCS	8330	1	Sample		
12	12	WG139590-03 LCS2	8330	1	Sample		
13	2	WG139732-02 CCV	8330	1	Sample		
14	13	L0305015-01 833W	8330	1	Sample		
15	14	L0305015-02 833W	8330	1	Sample		
16	15	L0305020-01 833W	8330	1	Sample		
17	2	WG139732-03 CCV	8330	1	Sample		

RAL 5/5/03

Sel	Run	Vial	Method	Datafile	SeqTable	Calib:RF:RT	Sample Name
No	1	1	8330	4L004912	01:01		Blank Me/AcCN/
No	2	2	8330	4L004913	02:01	SOS 64-31	WG139732-01 CC
No	3	3	8330	4L004914	03:01		WG139397-01 BL
No	4	4	8330	4L004915	04:01		MDL CHK
No	5	5	8330	4L004916	05:01		WG139397-02 LC
No	6	6	8330	4L004917	06:01		WG139397-03 LC
No	7	7	8330	4L004918	07:01		L0304554-01 83
No	8	8	8330	4L004919	08:01		L0304594-03 83
No	9	9	8330	4L004920	09:01		L0304439-01 RE
No	10	10	8330	4L004921	10:01		WG139590-01 BL
No	11	11	8330	4L004922	11:01		WG139590-02 LC
No	12	12	8330	4L004923	12:01		WG139590-03 LC
No	13	2	8330	4L004924	13:01	SOS 64-31	WG139732-02 CC
No	14	13	8330	4L004925	14:01 RR		L0305015-01 83
No	15	14	8330	4L004926	15:01		L0305015-02 83
No	16	15	8330	4L004927	16:01		L0305020-01 83
No	17	2	8330	4L004928	17:01 cc	SOS64-31	WG139732-03 CC

RAL 5/5/03
AL 5/5/03

KEMRON ENVIRONMENTAL SERVICES
HPLC Laboratory Maintenance Log

Analysis Date/Time 5/04/03 Instrument ID HPLC4 Column ID Ultracarb 5 ODS Data Subdirectory 050403
Analyst Initials AEC SOP # HPLC01 Rev. # 1 8310 SOP # HPLC02 Rev. # 3 8330

Daily Check
- [x] Mobile phase reservoir
- [x] System pressure 229 bar
- [x] Waste container

Returned to Control?
Yes ____ No ____

Additional Maintenance
Problem: _____

Action Taken: _____

Comments

Ending CCV 4L004928 / WF139732-03 %D for tetryl @ 16.4% (low)

Reviewed By: [illegible] 5/5/03

Sequence Table:

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	1	Solvent Blank	8330CONF	1	Sample		
2	2	WG140090-01 #5A	8330CONF	1	Sample		
3	3	WG140090-02 #4A	8330CONF	1	Sample		
4	4	WG140090-03 #3A	8330CONF	1	Sample		
5	5	WG140090-04 #2A	8330CONF	1	Sample		
6	6	WG140090-05 #1A	8330CONF	1	Sample		
7	7	WG140090-06 ALTA	8330CONF	1	Sample		
8	8	WG140090-07 #5B	8330CONF	1	Sample		
9	9	WG140090-08 #4B	8330CONF	1	Sample		
10	10	WG140090-09 #3B	8330CONF	1	Sample		
11	11	WG140090-10 #2B	8330CONF	1	Sample		
12	12	WG140090-11 #1B	8330CONF	1	Sample		
13	13	WG140090-12 ALTB	8330CONF	1	Sample		
14	14	L0304410-02 CONF	8330CONF	1	Sample		
15	3	WG140090-13 CCV	8330CONF	1	Sample		
16	9	WG140090-14 CCV	8330CONF	1	Sample		

RDC 5/9/03 2

Set	Run	Vial	Method	Datafile	Seqfable	Calib:RF:RT	Sample Name
No	1	1	8330CONF	2L002950	01:01		Solvent Blank
No	2	2	8330CONF	2L002951	02:01	DIL'N SOS 64-50	WG140090-01 #5
No	3	3	8330CONF	2L002952	03:01		WG140090-02 #4
No	4	4	8330CONF	2L002953	04:01		WG140090-03 #3
No	5	5	8330CONF	2L002954	05:01		WG140090-04 #2
No	6	6	8330CONF	2L002955	06:01		WG140090-05 #1
No	7	7	8330CONF	2L002956	07:01	DIL'N SOS 65- 02	WG140090-06 AL
No	8	8	8330CONF	2L002957	08:01	RR *	WG140090-07 #5
No	9	9	8330CONF	2L002958	09:01		WG140090-08 #4
No	10	10	8330CONF	2L002959	10:01		WG140090-09 #3
No	11	11	8330CONF	2L002960	11:01		WG140090-10 #2
No	12	12	8330CONF	2L002961	12:01		WG140090-11 #1
No	13	13	8330CONF	2L002962	13:01	RR *	WG140090-12 AL
No	14	14	8330CONF	2L002963	14:01	RR	L0304410-02 CO
No	15	3	8330CONF	2L002964	15:01		WG140090-13 CC
No	16	9	8330CONF	2L002965	16:01		WG140090-14 CC

TCPC 5/9/03

KEMRON ENVIRONMENTAL SERVICES
HPLC Laboratory Maintenance Log (5µ 250X4.6)

Analysis Date/Time May 7, 2003 Instrument ID HPLC2 Column ID LUNA-CN Data Subdirectory 050703
Analyst Initials [illegible] SOP # HPLC01 Rev. # 4 8310 SOP # HPLC02 Rev. # 3 8330
2nd col. Conf.

Daily Check
- ☑ Mobile phase reservoir
- ☑ System pressure 158 bar
- ☑ Waste container

Returned to Control?
Yes ____ No ____

Additional Maintenance
Problem: ____

Action Taken: ____

Comments

Due to co-elutions the conf method is calibrated with MIX A & MIX B as follows:

MIX A NB, 1,3-DNB, 1,3,5-TNB, RDX, 2,4-DNT, 2-AM-4,6-DNT, 2,4,6-TNT, HMX, & 3,4-DNT (surr.)

MIX B 2-NT, 3-NT, 4-NT, 2,6-DNT, 4-AM-2,6-DNT, tetryl, & 3,4-DNT (surr.)

Alt Sources are MIX 1 & MIX 2 as follows:

MIX 1 — Same as MIX A but without 2-AM-4,6-DNT
MIX 2 — Same as MIX B + with 2-AM-4,6-DNT.

* ALTB (MIX2) 21002962 WF14009012 — used to validate MIX A curve for 2-AM-4,6-DNT

* MIX B curve needs RL, run time not long enough to allow for the elution of tetryl

Reviewed By: [illegible]

Sequence Table:

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	1	Solvent Blank	8330CONF	1	Sample		
2	2	WG140090-07 #5B	8330CONF	1	Sample		
3	3	WG140090-08 #4B	8330CONF	1	Sample		
4	4	WG140090-09 #3B	8330CONF	1	Sample		
5	5	WG140090-10 #2B	8330CONF	1	Sample		
6	6	WG140090-11 #1B	8330CONF	1	Sample		
7	7	WG140090-12 ALTB	8330CONF	1	Sample		
8	7	WG140090-12 ALTB	8330CONF	1	Sample		
9	8	WG140197-01 CCV	8330CONF	1	Sample		
10	9	L0304410-02 833W	8330CONF	1	Sample		
11	10	L0304506-01 833W	8330CONF	1	Sample		
12	11	L0304506-02 833W	8330CONF	1	Sample		
13	12	L0304506-03 833W	8330CONF	1	Sample		
14	13	L0304506-04 833W	8330CONF	1	Sample		
15	14	L0304506-09 833W	8330CONF	1	Sample		
16	17	L0304506-10 833W	8330CONF	1	Sample		
17	18	L0304506-11 833W	8330CONF	1	Sample		
18	19	L0304541-12 833W	8330CONF	1	Sample		
19	20	L0304594-01 833W	8330CONF	1	Sample		
20	8	WG140197-02 CCV	8330CONF	1	Sample		
21	4	WG140197-03 CCV	8330CONF	1	Sample		
22	21	SOIL MDL CHECK	8330CONF	1	Sample		
23	8	WG140197-04 CCV	8330CONF	1	Sample		
24	4	WG140197-05 CCV	8330CONF	1	Sample		

Sel	Run	Vial	Method	Datafile	SeqTable	Calib:RF:RT	Sample Name
No	1	1	8330CONF	2L002966	01:01		Solvent Blank
No	2	2	8330CONF	2L002967	02:01	DILIN 505 65-01	WG140090-07 #5
No	3	3	8330CONF	2L002968	03:01		WG140090-08 #4
No	4	4	8330CONF	2L002969	04:01		WG140090-09 #3
No	5	5	8330CONF	2L002970	05:01		WG140090-10 #2
No	6	6	8330CONF	2L002971	06:01		WG140090-11 #1
No	7	7	8330CONF	2L002972	07:01cc	505 65 - 03	WG140090-12 AL
No	8	7	8330CONF	2L002973	08:01cc		WG140090-12 AL
No	9	8	8330CONF	2L002974	09:01	505 64-50	WG140197-01 CC
No	10	9	8330CONF	2L002975	10:01		L0304410-02 83
No	11	10	8330CONF	2L002976	11:01		L0304506-01 83
No	12	11	8330CONF	2L002977	12:01		L0304506-02 83
No	13	12	8330CONF	2L002978	13:01		L0304506-03 83
No	14	13	8330CONF	2L002979	14:01		L0304506-04 83
No	15	14	8330CONF	2L002980	15:01		L0304506-09 83
No	16	17	8330CONF	2L002981	16:01		L0304506-10 83
No	17	18	8330CONF	2L002982	17:01		L0304506-11 83
No	18	19	8330CONF	2L002983	18:01		L0304541-12 83
No	19	20	8330CONF	2L002984	19:01		L0304594-01 83
No	20	8	8330CONF	2L002985	20:01	505 64-50	WG140197-02 CC
No	21	4	8330CONF	2L002986	21:01	505 65-01	WG140197-03 CC
No	22	21	8330CONF	2L002987	22:01		SOIL MDL CHECK
No	23	8	8330CONF	2L002988	23:01	505 64-50	WG140197-04 CC
No	24	4	8330CONF	2L002989	24:01	505 65-01	WG140197-05 CC

RXQC
5/9/03

KEMRON ENVIRONMENTAL SERVICES
HPLC Laboratory Maintenance Log (250x4.6)

Analysis Date/Time May 8, 2003 Instrument ID HPLC2 Column ID LUNA 5μ CN Data Subdirectory 050803
Analyst Initials RBC SOP # HPLC01 Rev. # 4 8310 SOP # HPLC02 Rev. # 3 8330
conf.

Daily Check
- ☑ Mobile phase reservoir
- ☑ System pressure 156 bar
- ☑ Waste container

Returned to Control?
Yes ____ No ____

Additional Maintenance
Problem: ____

Action Taken: ____

Comments

Alt source low for 2,6-DNT @ 15.2%D - Not required for this conf.

NOTE: HP core error stopped inst between 21002972 & 21002973. Inst. was restarted & allowed to purge with eluent x 30 min before analysis continued.

For L0304594-01 2-NT, 3-NT, & 4-NT are not totally separated, 2 peaks are produced with one pk containing 2 of the isomers & one pk containing one other. Arbitrarily, the NT reported by the conf. column has been entered as 4-NT with an asterisk. Case narrative will include this info. RBC.

L0304506-03, 04, 09, 10, 11 > No analytes were confirmed to be present that had been reported on the primary column.
L0304541-12 Results were not uploaded.

Reviewed By: [illegible]

Analyst: CEB
Date: 4-28-03 @ 0715
SOP#: EXT01 REV 5
Spike Analyst: CEB Witness: RWC
Sample Matrix: H_2O
Ext Solvent: CH_3CN Lot#: 42269
Ext Solvent: MeOH Lot#: 42247236
Ext Disk: SDB-RPS Lot#: 760082
Other: HPLC H_2O Lot#: ~~42229~~ 42269 CEB 4-28-03

Extract Relinquished By: CEB
Extract Received By: RWC
Date Extract Received: 4/28/03

Matrix Spike # / Conc: ES50044-20 @ 1.0 ppm
Surrogate Spike # / Conc: ES50044-12 @ 1.0 ppm

Extraction Work Group: WG139189
Analytical Work Group: WG139350

Sonic Bath On – Date: N/A
Time (1) N/A Temp (1) N/A
Time (2) N/A Temp (2) N/A
Sonic Bath Off – Date: N/A
Time (3) N/A Temp (3) N/A

	Project ID	Sample ID	Sample Wt (g) / Vol (mL)	Surrogate Amount (uL)	Matrix Spike Amount (uL)	Extract F. Volume (mL)	Comments
1		BLK	1000 mL	1000 uL		10.0 mL	WG139189 -02
2		LCS	↓	↓	1000 uL	↓	↓ -03
3		04-506-01	900 mL	↓		↓	
4		-02	820 mL	↓		↓	
5		-03	850 mL	↓		↓	
6		-04	840 mL	↓		↓	
7		-05	870 mL	↓		↓	
8		-06	870 mL	↓		↓	
9		-08	850 mL	↓		↓	
10		-09	500 mL	↓		↓	
11		-10	800 mL	↓		↓	
12		-11	870 mL	↓		↓	
13		04-541-01	920 mL	↓		↓	
14		-02	870 mL	↓		↓	
15		-03	900 mL	↓		↓	
16		-04	920 mL	↓		↓	WG139189 -01
17		-05 MS	910 mL	↓	100 uL	↓	↓ -04
18		-06 MSD	910 mL	↓	↓	↓	↓ -05
19		-07	940 mL	↓		↓	
20		-08	930 mL	↓		↓	
21		-12	800 mL	↓		↓	
22		04-594-01	900 mL	↓		↓	
23		-02	950 mL	↓		↓	
24							

CEB 4/28/03

All soil samples are air dried to a constant weight prior to extraction
All extracts are filtered through a 0.45 um teflon ACRODISC prior to analysis

Reviewed by: _____

Sample Extraction Log Sheet – Method 8330 / Explosives

Analyst: CEB
Date: 4-30-03 @ 1042
SOP#: EXTM02 REV
Spike Analyst: CEB Witness: RWC
Sample Matrix: SOIL
Ext Solvent: CH_3CN Lot#: 42269
Ext Solvent: – Lot#: –
Ext Disk: – Lot#: –
Other: CAL Lot#: EF0005-1

Extract Relinquished By: CEB
Extract Received By: KBC
Date Extract Received: 5/1/03

Matrix Spike # / Conc: ES0044-20 @ 1.0 ppm
Surrogate Spike # / Conc: ES0044-12 @ 1.0 ppm

Extraction Work Group: W6139397
Analytical Work Group: W6-139534

Sonic Bath On – Date:	4-30-03
Time (1) 1300	Temp (1) CTRL 3.4°C BATH 10°C
Time (2) 1539	Temp (2) CTRL 3.4°C BATH 12°C
Sonic Bath Off – Date:	5/1/03
Time (3) 0700	Temp (3) CTRL 3.4°C BATH 12°

	Project ID	Sample ID	Sample Wt (g) / Vol (mL)	Surrogate Amount (uL)	Matrix Spike Amount (uL)	Extract F. Volume (mL)	Comments
1		BLK	2.00 g	1000 uL		20.0 mL	W6139397-01
2		LCS	2.03		1000 uL		-02
3		LCS DUP	2.01				-03
4		04-554-01	2.06				
5		04-594-03	2.05				
6		04-434-01	2.02				REEXT IN HOLD
7		MDL ✓	2.01		200 uL		
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

CEB 4-30-03

All soil samples are air dried to a constant weight prior to extraction
All extracts are filtered through a 0.45 um teflon ACRODISC prior to analysis

Reviewed by: _____

Semi-Volatile 8330 Checklist

Run Date: 24-Apr-03

Analyst: RDC

Instrument: HPLC4

Workorders:	Due Date:	Priority:
04-410	4/25/2003	F1

		Analyst
Initial Calibration:	Average RF	NA
	Linear or quadratic regression	NA
	Alt Source Check	NA
Continuing Calibration:	Continuing Calibration	√
	Client Specific Requirements	√
	Special Standards	NA
Blanks:	Quant Report/Chromatogram	√
	Surrogates	√
Laboratory Control Sample:	Quant Report/Chromatogram	√
	Surrogates	√
	Spike Compounds	√
	MS/MSD	NA
	QC Forms	√
Samples:	TCL Hits	√
	Surrogates	√
	Correct Factors	√
	Dilutions	NA
	Check Sample Histories	NA
	Corrective Action	
Data Package:	Manual Re-Integrations	√
	Level 2/2 (X)	
	Level 3	
	Level 4	
	Case narrative	

	Supervisor
Case Narrative:	
Corrective Action:	
Results Reporting/Data Qualifiers:	
Client Data Package Assembly:	
Check for Completeness:	
Check for compliance with method and project requirements:	
Check the reasonableness of results:	

Comments:

L0304410-02 needs RR....difficulty confirming RDX hit.

04-149 RR samples were not reported from this pkg.

Primary Reviewer: RDC 4/28/03

Secondary Reviewer: [illegible] 4/28/03 √

Supervisor Review: [illegible] 4/28/03 NA

Semi-Volatile 8330 Checklist

Run Date: 29-Apr-03

Analyst: RDC

Instrument: HPLC4

Workorders:	Due Date:	Priority:
04-506	5/5/2003	
04-541	5/5/2003	F1
04-594	5/5/2003	P1

		Analyst
Initial Calibration:	Average RF	NA
	Linear or quadriatic regression	NA
	Alt Source Check	NA
Continuing Calibration:	Continuing Calibration	√
	Client Specific Requirements	√
	Special Standards	NA
Blanks:	Quant Report/Chromatogram	√
	Surrogates	√
Laboratory Control Sample:	Quant Report/Chromatogram	√
	Surrogates	√
	Spike Compounds	√
	MS/MSD	√
	QC Forms	√
Samples:	TCL Hits	√
	Surrogates	√
	Correct Factors	√
	Dilutions	NA
	Check Sample Histories	NA
	Corrective Action	√
Data Package:	Manual Re-Integrations	√
	Level 2/2 (X)	
	Level 3	
	Level 4	
	Case narrative	

	Supervisor
Case Narrative:	
Corrective Action:	
Results Reporting/Data Qualifiers:	
Client Data Package Assembly:	
Check for Completeness:	
Check for compliance with method and project requirements:	
Check the reasonableness of results:	

Comments:

L0304541-01 sent for re-extraction .... surrogate @ 48.6% (50-150).

L0304506-01-04, 09-11, L0304541-12, and L0304594-01 all had analytes above the RL. Confirmation was done via the DAD but will be RR on second column.

L0304541-06MS yielded a %rec. for HMX that was below the adv. limit.

Primary Reviewer: RDC 5/2/03

Secondary Reviewer: [illegible] 5/5/03

Supervisor Review: [illegible] 5/5/03

√

NA

Semi-Volatile 8330 Checklist

Run Date: 2-May-03

Analyst: RDC

Instrument: HPLC4

Workorders: Due Date: Priority:

		Analyst
Initial Calibration:	Average RF	NA
	Linear or quadriatic regression	√
	Alt Source Check	√
Continuing Calibration:	Continuing Calibration	√
	Client Specific Requirements	NA
	Special Standards	NA
Blanks:	Quant Report/Chromatogram	NA
	Surrogates	NA
Laboratory Control Sample:	Quant Report/Chromatogram	NA
	Surrogates	NA
	Spike Compounds	NA
	MS/MSD	NA
	QC Forms	NA
Samples:	TCL Hits	NA
	Surrogates	NA
	Correct Factors	NA
	Dilutions	NA
	Check Sample Histories	NA
	Corrective Action	NA
Data Package:	Manual Re-integrations	√
	Level 2/2 (X)	
	Level 3	
	Level 4	
	Case narrative	

	Supervisor
Case Narrative:	
Corrective Action:	
Results Reporting/Data Qualifiers:	
Client Data Package Assembly:	
Check for Completeness:	
Check for compliance with method and project requirements:	
Check the reasonableness of results:	

Comments:

ICAL.....

Primary Reviewer: RDC 5/4/03

Secondary Reviewer: [illegible] 5/5/03

Supervisor Review: [illegible] 5/5/03

√

NA

Semi-Volatile 8330 Checklist

Run Date: 4-May-03

Analyst: RDC

Instrument: HPLC4

Workorders:	Due Date:	Priority:
04-439 RE	5/1/2003	
04-554	5/2/2003	P1
04-594	5/5/2003	P1

		Analyst
Initial Calibration:	Average RF	NA
	Linear or quadratic regression	NA
	Alt Source Check	NA
Continuing Calibration:	Continuing Calibration	√
	Client Specific Requirements	√
	Special Standards	NA
Blanks:	Quant Report/Chromatogram	√
	Surrogates	√
Laboratory Control Sample:	Quant Report/Chromatogram	√
	Surrogates	√
	Spike Compounds	√
	MS/MSD	NA
	QC Forms	√
Samples:	TCL Hits	√
	Surrogates	√
	Correct Factors	√
	Dilutions	NA
	Check Sample Histories	NA
	Corrective Action	NA
Data Package:	Manual Re-integrations	√
	Level 2/2 (X)	
	Level 3	
	Level 4	
	Case narrative	

	Supervisor
Case Narrative:	
Corrective Action:	
Results Reporting/Data Qualifiers:	
Client Data Package Assembly:	
Check for Completeness:	
Check for compliance with method and project requirements:	
Check the reasonableness of results:	

Comments:

Ending CCV %D >15 - low J for tetryl...

L0305015-01402 and L0305020-01 will be RR.

Primary Reviewer: RDC 5/5/03

Secondary Reviewer: [illegible] 5/5/03

Supervisor Review: [illegible] 5/5/03

√

NA

Semi-Volatile 8330 Checklist

un Date: 5/7/03 & 5/8/03

Analyst: RDC

Instrument: HPLC2

Workorders:	Due Date:	Priority:
04-410	4/25/2003	F1
04-506	5/5/2003	F1
04-541	5/5/2003	F1
04-594	5/5/2003	P1

		Analyst
Initial Calibration:	Average RF	NA
	Linear or quadratic regression	√
	Alt Source Check	√
Continuing Calibration:	Continuing Calibration	√
	Client Specific Requirements	√
	Special Standards	√
Blanks:	Quant Report/Chromatogram	
	Surrogates	
Laboratory Control Sample:	Quant Report/Chromatogram	
	Surrogates	
	Spike Compounds	
	MS/MSD	
	QC Forms	
amples:	TCL Hits	√
	Surrogates	√
	Correct Factors	√
	Dilutions	
	Check Sample Histories	
	Corrective Action	
Data Package:	Manual Re-integrations	√
	Level 2/2 (X)	
	Level 3	
	Level 4	
	Case narrative	

	Supervisor
Case Narrative:	
Corrective Action:	
Results Reporting/Data Qualifiers:	
Client Data Package Assembly:	
Check for Completeness:	
Check for compliance with method and project requirements:	
Check the reasonableness of results:	

Comments:

Confirming results were uploaded for L0304410-02, L0304506-01 & 02, and L0304594-01.

L0304506-03,04,09-11 & L0304541-12 analyses did not confirm analytes detected above the RL via the primary column. Results were not uploaded.

8330 part A ICAL - 050703

8330 part B ICAL - 050803

Primary Reviewer: RDC 5/9/03

Secondary Reviewer: [illegible] 5/9/03 √

Supervisor Review: [illegible] 5/9/03 NA

Example 8330 Calculations

1.0 Calulating the Calibration Factor (CF) from the initial calibration (ICAL) data:

		Example:
	CF = Cs/As	
Where:	As = Area of the compound being measured in the standard	10000
	Cs = Concentration of the compound being measured (ng/ml).	100
	CF	**0.01**

2.0 Calculating the concentration (C) of a compound in water using data from prep log and quantitation report:*

		Example:
	C = [(Ax)(Vf)(D)(CF)] / Vi	
Where:	Ax = Area of the compound being measured	10000
	Vf = Final volume of sample extract (mL). (prep log)	1
	D = Dilution factor for sample as a multiplier (10X = 10).	1
	CF = Calibration factor from ICAL calculated above.	**0.01**
	Vi = Initial volume of sample (mL). (prep log)	1000
	C (ug/L) =	**0.1**

3.0 Calculating the concentration (C) of a compound in soil using data from prep log and quantitation report:*

		Example:
	C = [(Ax)(Vf)(D)(CF)] / Vi	
Where:	Ax = Area of the compound being measured	10000
	Vf = Final volume of sample extract (mL).	1
	D = Dilution factor for sample as a multiplier (10X = 10).	1
	CF = Calibration factor from ICAL calculated above.	0.01
	Wi = Initial weight of sample (g).	30
	C (ug/kg)	**3.333333**

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

2.3 Metals

2.3.1 Metals I C P Data

REPORT NARRATIVE
METALS

KEMRON Login No: L0304594

METHOD

Analysis: SW-846 6010/6020/7000

HOLDING TIMES

Sample Preparation: All holding times were met.
Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial calibrations: All acceptance criteria were met.
Alternate Source Standards: All acceptance criteria were met.
Continuing Calibration : All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.
Laboratory Control Sample: All acceptance criteria were met.

SAMPLES

All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: JYB/SLP REVIEWED: Maren Beery DATE: 05/09/03

Rev. 6/00

METALS - ICP DATA
Login Number: L0304594

A. QC Summary

✓ Batch QC Summary Form

B. Raw Data

✓ Analyst checksheet
✓ Analysis runlog
✓ Instrument data: (actual order may vary)

- Initial and continuing calibration standards
- Initial and continuing calibration blanks
- Preparation blank
- Laboratory control sample
- Sample data
- Matrix spike
- Matrix spike duplicate
- Duplicate
- ICP Interference check sample
- ICP Serial dilutions (as needed)
- Post digestion spike sample (if applicable)
- Standard addition results (as needed)

C. Preparation log(s)

D. Sample Calculations

Checked By: MMB Date: 05/09/03

2.3.1.1 QC Summary

KEMRON ENVIRONMENTAL SERVICES
BLANK REPORT

Login Number:L0304594 Run Date:04/29/2003 Sample ID:WG139316-03
Instrument ID:IRIS-ICP Run Time:18:32 Prep Method:3015
File ID:IR.042903.183200 Analyst:JYH Method:6010B
Workgroup (AAB#):WG139383 Matrix:Tclp Units:mg/L
Contract #: Cal ID:IRIS-I-29-APR-03

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Arsenic, TCLP	0.0100	0.100	0.0100	1	U
Barium, TCLP	0.00250	0.0100	0.00250	1	U
Cadmium, TCLP	0.00250	0.0100	0.00250	1	U
Chromium, TCLP	0.00250	0.0200	0.00250	1	U
Lead, TCLP	0.0100	0.100	0.0100	1	U
Selenium, TCLP	0.0500	0.0800	0.0500	1	U
Silver, TCLP	0.00500	0.0100	0.00500	1	U

KEMRON FORMS - Modified 04/24/2003
Version 1.3
Report generated 05/01/2003 15:01

KEMRON ENVIRONMENTAL SERVICES
LABORATORY CONTROL SAMPLE

Login Number: L0304594
Run Date: 04/29/2003
Sample ID: WG139316-04
Instrument ID: IRIS-ICP
Run Time: 18:37
Prep Method: 3015
File ID: IR.042903.183700
Analyst: JYH
Method: 6010B
Workgroup (AAB#): WG139383
Matrix: Tclp
Units: mg/L
Contract #:
Cal ID: IRIS-I-29-APR-2003 18:01

Analytes	Expected	Found	% Rec	LCS Limits	Q
Arsenic, TCLP	1.00	0.987	98.7	80 - 120	
Barium, TCLP	10.0	10.1	101	80 - 120	
Cadmium, TCLP	1.00	0.974	97.4	80 - 120	
Chromium, TCLP	1.00	1.02	102	80 - 120	
Lead, TCLP	1.00	1.00	100	80 - 120	
Selenium, TCLP	1.00	0.993	99.3	80 - 120	
Silver, TCLP	0.200	0.217	108	80 - 120	

KEMRON FORMS - Modified 05/01/2003
Version 1.3
Report generated 05/01/2003 15:01

KEMRON ENVIRONMENTAL SERVICES
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 8

Analytical Method:6010B
Login Number:L0304594

AAB#:WG139383
Contract #:Bonnie Hogue

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
05-177511-SP2-042503	04/25/03	04/26/03	04/29/03	180	3.89	04/30/03	180	4.99	

* EXT = MISSED EXTRACTION HOLD TIME
*ANAL = MISSED ANALYITICAL HOLD TIME

KEMRON FORM9 - Modified 05/28/2002
Version 1.1
Report generated 05/09/2003 09:53

KEMRON ENVIRONMENTAL SERVICES
BLANK REPORT

Login Number: L0304594 Run Date: 05/02/2003 Sample ID: WG139542-03
Instrument ID: PE-ICP Run Time: 11:18 Prep Method: 3005A
File ID: PE.050203.111839 Analyst: MSW Method: 6010B
Workgroup (AAB#): WG139616 Matrix: Water Units: mg/L
Contract #: Cal ID: PE-ICP-02-MAY-03

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	0.0500	1	U
Arsenic	0.00200	0.00400	0.00200	1	U
Barium	0.00250	0.0100	0.00250	1	U
Beryllium	0.000250	0.0100	0.000250	1	U
Cadmium	0.00250	0.0100	0.00250	1	U
Calcium	0.100	0.200	0.100	1	U
Chromium	0.00250	0.0200	0.00250	1	U
Cobalt	0.00250	0.0200	0.00250	1	U
Copper	0.00500	0.0200	0.00500	1	U
Iron	0.0200	0.0400	0.0200	1	U
Lead	0.00250	0.00500	0.00250	1	U
Magnesium	0.250	0.500	0.250	1	U
Manganese	0.00100	0.0100	0.00100	1	U
Nickel	0.00500	0.0400	0.00500	1	U
Potassium	0.250	1.00	0.250	1	U
Silver	0.00500	0.0100	0.00500	1	U
Sodium	0.250	0.500	0.250	1	U
Vanadium	0.00500	0.0100	0.00500	1	U
Zinc	0.00500	0.0200	0.00500	1	U

KEMRON FORMS - Modified 05/02/2003
Version 1.3
Report generated 05/05/2003 15:32

KEMRON ENVIRONMENTAL SERVICES
LABORATORY CONTROL SAMPLE

Login Number:L0304594 Run Date:05/02/2003 Sample ID:WG139542-04
Instrument ID:PE-ICP Run Time:11:23 Prep Method:3005A
File ID:PE.050203.112329 Analyst:MSW Method:6010B
Workgroup (AAB#):WG139616 Matrix:Water Units:mg/L
Contract #: Cal ID:PE-ICP-02-MAY-2003 10:44

Analytes	Expected	Found	% Rec	LCS Limits	Q
Aluminum	10.0	9.35	93.5	80 - 120	
Arsenic	1.00	0.916	91.6	80 - 120	
Barium	10.0	9.00	90.0	80 - 120	
Beryllium	1.00	0.942	94.2	80 - 120	
Cadmium	1.00	0.907	90.7	80 - 120	
Calcium	10.0	9.42	94.2	80 - 120	
Chromium	1.00	0.936	93.6	80 - 120	
Cobalt	1.00	0.944	94.4	80 - 120	
Copper	1.00	0.936	93.6	80 - 120	
Iron	1.00	0.877	87.7	80 - 120	
Lead	1.00	0.953	95.3	80 - 120	
Magnesium	10.0	9.34	93.4	80 - 120	
Manganese	1.00	0.933	93.3	80 - 120	
Nickel	1.00	0.943	94.3	80 - 120	
Potassium	50.0	46.0	92.0	80 - 120	
Silver	0.200	0.188	94.0	80 - 120	
Sodium	50.0	47.0	93.9	80 - 120	
Vanadium	1.00	0.934	93.4	80 - 120	
Zinc	1.00	0.940	94.0	80 - 120	

KEMRON FORMS - Modified 05/01/2003
Version 1.3
Report generated 05/05/2003 15:33

KEMRON ENVIRONMENTAL SERVICES
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 8

Analytical Method: 6010B
Login Number: L0304594

AAB#: WG139616
Contract #: Bonnie Hogue

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.
05-177511-DW2-042503	04/25/03	04/26/03	05/01/03	180	5.94	05/02/03	180	7.12
05-177511-DW3-042503	04/25/03	04/26/03	05/01/03	180	5.91	05/02/03	180	7.07
05-177511-DW3-042503	04/25/03	04/26/03	05/01/03	180	5.91	05/02/03	180	7.25

* EXT = MISSED EXTRACTION HOLD TIME
*ANAL = MISSED ANALYITICAL HOLD TIME

KEMRON FORMS - Modified 05/28/2002
Version 1.1
Report generated 05/09/2003 09:53

KEMRON ENVIRONMENTAL SERVICES
BLANK REPORT

Login Number:L0304594 Run Date:05/05/2003 Sample ID:WG139750-04
Instrument ID:ELAN-ICP Run Time:11:29 Prep Method:3015
File ID:EL.050503.112901 Analyst:JYH Method:6020A
Workgroup (AAB#):WG139770 Matrix:Water Units:mg/L
Contract #: Cal ID:ELAN-I-05-MAY-03

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Antimony	0.000500	0.00100	0.000500	2	U
Selenium	0.000500	0.00100	0.000500	2	U
Thallium	0.000100	0.000200	0.000100	2	U

KEMRON FORMS - Modified 05/02/2003
Version 1.3
Report generated 05/07/2003 14:46

KEMRON ENVIRONMENTAL SERVICES
LABORATORY CONTROL SAMPLE

Login Number: L0304594 Run Date: 05/05/2003 Sample ID: WG139750-05
Instrument ID: ELAN-ICP Run Time: 11:33 Prep Method: 3015
File ID: EL.050503.113353 Analyst: JYH Method: 6020A
Workgroup (AAB#): WG139770 Matrix: Water Units: mg/L
Contract #: Cal ID: ELAN-I-05-MAY-2003 10:42

Analytes	Expected	Found	% Rec	LCS Limits	Q
Antimony	0.125	0.126	101	80 - 120	
Selenium	0.125	0.113	90.7	80 - 120	
Thallium	0.125	0.137	109	80 - 120	

KEMRON FORMS - Modified 05/01/2003
Version 1.3
Report generated 05/07/2003 14:46

KEMRON ENVIRONMENTAL SERVICES
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 8

Analytical Method:6020A
Login Number:L0304594

AAB#:WC139770
Contract #:Bonnie_Hogue

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.
05-177511-DW2-042503	04/25/03	04/26/03	05/02/03	180	6.98	05/06/03	180	11.1
05-177511-DW2-042503	04/25/03	04/26/03	05/02/03	180	6.98	05/06/03	180	11.2
05-177511-DW3-042503	04/25/03	04/26/03	05/02/03	180	6.95	05/06/03	180	11.1
05-177511-DW3-042503	04/25/03	04/26/03	05/02/03	180	6.95	05/06/03	180	11.2

* EXT = MISSED EXTRACTION HOLD TIME
*ANAL = MISSED ANALYITICAL HOLD TIME

KEMRON FORMS - Modified 05/28/2002
Version 1.1
Report generated 05/09/2003 09:53

2.3.1.2 Raw Data

Metals

Date: 4 /29/03
Analyst: JYH
Method: 6010B
Instrument: IRIS
Work Group: 139335 139383

	Analyst
Calibration/Linearity	
ICV/CCV	
ICB/CCB	
icsa/icsab/cri	
Blank/LCS	
MS/MSD	
Postspike/Serial Dilution	
Duplicate	
Record Results	
Excel Spreadsheets	
Results Reporting / Data Qualifiers	
Calculations & Correct Factors	
Reanalysis Assign	
Instrument Failure/Reassign	
Case Narrative	
QA Approval - Seedpak 3	
Check for Completeness	
Level IV Data 4/30	4-554
	4-594

Cal 3

WG 139398

Primary Reviewer Initials & Date Checked JYH 4/29/03

Secondary Reviewer Initials & Date Checked DA 4.30.03

✓ • Check for compliance with Method and project-specific requirements
✓ • Check the completeness of the reported information
NA • Check the information for the report narrative
✓ • Check the reasonableness of results

Supervisory Review Initials & Date Checked MB 4/30/03

Comments:

✓ - Checked & OK
NA - Not Applicable
DL - Diluted Out

KEMRON ENVIRONMENTAL SERVICES
ICP (ICP/MS) RUN LOGBOOK

ANALYST JYH DATE 4/29/03 TIME 11:33
METHOD # 6010B SOP # ME-600E Rev # 2 WORK GROUP # 139335, 139331, 139383
CAL STD SOURCE M2-17-23A ICV/CCV SOURCE M2-17-24A
ICS AB SOURCE M2-17-28B ICS A SOURCE M2-17-23A POST SPK SOURCE DS50053-60
Instrument ID: TJA IRIS: _____ Data File: _____ Perkin Elmer Optima: _____ Perkin Elmer ELAN: _____

Cup #	Sample No.	Dil	Prep Conc	Autosampler Runs	Cup #	Sample No.	Dil	Prep Conc	Autosampler Runs
	S0				27.	L0304501 03			
	1 1/200				28.	03S			
	2 1/100				29.	03SD			
	3 1/4				30.	L0304500 02			
	4 1/2				31.	02DP			
	5			ICV/ICB	32.	L0304605 01			
	ICSA				33.	01S			ICV/ICB
	ICSAB			ICV/ICB	34.	01PS			
1.	PBW T2			WG139295-03	35.	L0304537601			
2.	LCSW T2			04	36.	01PS			ICV/ICB
3.	TC BLK 4/24				37.				
4.	L0304496 01			01	38.				
5.	01S			05	39.				
6.	01SD			06	40.				
7.	L0304473 02			02	41.				
8.	02DP			03	42.				
9.	L0304498 01				43.				
10.	01S			ICV/ICB	44.				
11.	~~L0304537601~~	FRS	JYH	4/29/03	45.				
12.	01PS	PBS X5		WG139325-03	46.				
13.	~~TC~~ LCSS X5			04	47.				
14.	L0304597 01			02	48.				
15.	01DP			06	49.				
16.	01PS				50.				
17.	01SDL	5			51.				
18.	02			01	52.				
19.	02			05	53.				
20.	CR1				54.				
21.	ICSA				55.				
22.	ICSAB			ICV/ICB	56.				
23.	FRS				57.				
24.	PBW K3			WG139316-03	58.				JYH 4/29/03
25.	LCSW K3			04	59.				
26.	TC FBLK 4/29				60.				

Reviewed by: MMB 04/30/03

Comments: _____

Note: No entry for Dil represents 1X Dilution

Autosampler Run Key:
CCV - Continuing Calibration Verification
CCB = Continuing Calibration Blank
FRS = Full Recalibration Sequence
R = Analyst Rerun

KEMRON ENVIRONMENTAL SERVICES
FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

INSTRUMENT: TRIS - Jarrell Ash
METHOD: 6010B
ANALYST: Jyh
DATE: 4/29/03

UNITS: ug/L

ICV Time: 6:06 PM
CCV1 Time: 6:24 PM
CCV2 Time: 7:16 PM

	Initial Calibration Verification			Continuing Calibration Verification CCV1			CCV2		Q
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	10000	9860	98.6	10000	10000	100.0	9850	98.5	
Antimony	1200	1210	100.8	1200	1220	101.7	1200	100.0	
Arsenic	400	388	97.0	400	393	98.3	388	97.0	
Barium	1000	1000	100.0	1000	1020	102.0	1010	101.0	
Beryllium	50	49.8	99.6	50	50.2	100.4	49.7	99.4	
Cadmium	50	50.0	100.0	50	50.3	100.6	49.8	99.6	
Calcium	10000	9860	98.6	10000	9930	99.3	9820	98.2	
Chromium	500	500	100.0	500	504	100.8	499	99.8	
Cobalt	200	198	99.0	200	200	100.0	197	98.5	
Copper	500	498	99.6	500	502	100.4	498	99.6	
Iron	4000	3950	98.8	4000	3980	99.5	3950	98.8	
Lead	500	499	99.8	500	502	100.4	494	98.8	
Magnesium	10000	10100	101.0	10000	10200	102.0	10000	100.0	
Manganese	500	497	99.4	500	502	100.4	495	99.0	
Nickel	500	497	99.4	500	501	100.2	493	98.6	
Potassium	50000	49700	99.4	50000	50100	100.2	49700	99.4	
Selenium	400	395	98.8	400	400	100.0	394	98.5	
Silver	400	401	100.3	400	403	100.8	399	99.8	
Sodium	50000	50600	101.2	50000	51000	102.0	50500	101.0	
Thallium	500	505	101.0	500	509	101.8	502	100.4	
Vanadium	1000	991	99.1	1000	997	99.7	989	98.9	
Zinc	1000	988	98.8	1000	999	99.9	985	98.5	

(1) Control Limits: 90-110%

KEMRON ENVIRONMENTAL SERVICES
FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

INSTRUMENT: IRIS - Jarrell Ash
METHOD: 6010B
ANALYST: JyH
DATE: 4/29/03

UNITS: ug/L

ICV Time: 6:06 PM
CCV1 Time: 7:38 PM
CCV2 Time:

	Initial Calibration Verification			Continuing Calibration Verification CCV1			CCV2		Q
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	10000	9860	98.6	10000	9870	98.7			
Antimony	1200	1210	100.8	1200	1210	100.8			
Arsenic	400	388	97.0	400	384	96.0			
Barium	1000	1000	100.0	1000	1010	101.0			
Beryllium	50	49.8	99.6	50	49.6	99.2			
Cadmium	50	50.0	100.0	50	49.4	98.8			
Calcium	10000	9860	98.6	10000	9810	98.1			
Chromium	500	500	100.0	500	497	99.4			
Cobalt	200	198	99.0	200	198	99.0			
Copper	500	498	99.6	500	496	99.2			
Iron	4000	3950	98.8	4000	3880	97.0			
Lead	500	499	99.8	500	491	98.2			
Magnesium	10000	10100	101.0	10000	9940	99.4			
Manganese	500	497	99.4	500	495	99.0			
Nickel	500	497	99.4	500	494	98.8			
Potassium	50000	49700	99.4	50000	49100	98.2			
Selenium	400	395	98.8	400	390	97.5			
Silver	400	401	100.3	400	397	99.3			
Sodium	50000	50600	101.2	50000	49900	99.8			
Thallium	500	505	101.0	500	500	100.0			
Vanadium	1000	991	99.1	1000	978	97.8			
Zinc	1000	988	98.8	1000	985	98.5			

(1) Control Limits: 90-110%

KEMRON ENVIRONMENTAL SERVICES
FORM 3 - BLANKS

INSTRUMENT: IRIS - Jarrell Ash
METHOD: 6010B
ANALYST: Jyh
DATE: 4/29/03

UNITS: ug/L

ICB Time: 6:11 PM
CCB1 Time: 6:28 PM
CCB2 Time: 7:20 PM
CCB3 Time: 7:42 PM

Analyte	Initial Calibration Blank(ug/L)		Continuing Calibration Blank (ug/L) CCB1 1		CCB2 2		CCB3 3	
Aluminum	-7.48		-13.8		9.46		-9.23	
Antimony	-2.69		-1.44		-4.77		-6.04	
Arsenic	-1.26		-2.66		-0.28		-0.21	
Barium	0.04		0.17		0.53		0.02	
Beryllium	-0.01		0.01		0.01		-0.01	
Cadmium	0.47		0.13		0.43		0.3	
Calcium	-0.01		-5.06		0.45		12.8	
Chromium	-0.03		0.23		0.24		-0.01	
Cobalt	0.09		-0.13		0.06		0.23	
Copper	-2.04		-0.64		-2.09		-2.74	
Iron	4.42		1.54		3.18		-1.91	
Lead	2.42		3.44		1.36		-0.3	
Magnesium	40.0		18.7		14.5		13.6	
Manganese	0.02		0.14		0.09		0.13	
Nickel	-0.79		-0.73		-0.31		-0.67	
Potassium	31.2		-25.6		137		54.9	
Selenium	2.72		1.16		0.69		-3.07	
Silver	0.58		1.47		-0.77		-1.87	
Sodium	14.2		6.37		22.0		30.6	
Thallium	6.65		9.20		7.24		9.16	
Vanadium	-0.59		-2.29		-0.91		-1.35	
Zinc	-0.07		-0.15		0.22		0.22	

U = Result is less than MDL
B = Result is between MDL and RL

KEMRON ENVIRONMENTAL SERVICES
FORM 4A - INTERFERENCE CHECK SAMPLE

INSTRUMENT ID: IRIS - Jarrell Ash
METHOD: 6010B
ANALYST: Jyh
DATE: 4/29/03

UNITS: ug/L

Initial ICSA Time: 6:15 PM
Initial ICSAB Time: 6:19 PM
Final ICSA Time:
Final ICSAB Time:

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	%R	Final Found Sol. A	Final Found Sol. AB	%R	Q
Aluminum	250000	250000	248000	246000	98.4				
Antimony	0	500	15.0	509	101.8				
Arsenic	0	250	-2.92	238	95.2				
Barium	0	250	-0.14	254	101.6				
Beryllium	0	250	-0.09	247	98.8				
Cadmium	0	500	0.94	468	93.6				
Calcium	250000	250000	237000	235000	94.0				
Chromium	0	250	0.34	230	92.0				
Cobalt	0	250	-7.03	221	88.4				
Copper	0	250	5.29	249	99.6				
Iron	100000	100000	86100	89700	89.7				
Lead	0	500	-19.1	446	89.2				
Magnesium	250000	250000	248000	247000	98.8				
Manganese	0	250	0.83	220	88.0				
Nickel	0	500	-2.90	451	90.2				
Potassium	0	5000	-62.9	4990	99.8				
Selenium	0	250	-0.26	243	97.2				
Silver	0	500	2.04	485	97.0				
Sodium	0	5000	26.4	5140	102.8				
Thallium	0	500	3.25	464	92.8				
Vanadium	0	250	1.71	245	98.0				
Zinc	0	500	-3.02	485	97				

(1) Control Limits: 80-120%

ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Instrument ID: IRIS-Jarrell Ash

Date: January 17, 2003

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	As	Ba
Aluminum	308.20	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.80	0.0000500	0.0000000	0.0001000	0.0000000	0.0007700	0.0000000
Arsenic	189.00	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	455.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.00	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.70	0.0000000	0.0000000	-0.0006000	0.0000000	0.0000000	0.0000000
Cadmium	228.80	0.0000000	0.0000000	-0.0000200	0.0000000	0.0200000	-0.0015000
Calcium	273.70	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.70	0.0000000	0.0000000	0.0000380	0.0000000	0.0000000	0.0000000
Cobalt	228.60	0.0000000	0.0000000	0.0000100	0.0000000	0.0000000	0.0000000
Copper	324.70	0.0000300	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.40	0.0000000	0.0000000	0.0000000	0.0000400	-0.0023000	0.0000000
Lead	220.30	-0.0003000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lithium	670.80	0.0000000	-0.0000500	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	277.90	0.0000000	0.0000000	0.0000000	0.0000000	-0.2000000	0.0000000
Manganese	257.60	0.0000000	0.0000000	-0.0000580	0.0000190	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	-0.0000200	0.0000000	0.0000000	0.0000000
Potassium	766.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.00	0.0000400	0.0000000	-0.0005000	0.0000000	0.0000000	0.0000000
Silicon	251.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.00	0.0000000	0.0000000	-0.0000500	0.0000000	0.0000000	0.0000000
Sodium	589.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	215.20	0.0002150	0.0000290	-0.0005500	0.0000000	0.0000000	0.0000000
Thallium	190.80	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Tin	189.90	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.90	0.0000000	-0.0000190	0.0000000	0.0000300	0.0000000	0.0000000
Vanadium	310.20	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.80	0.0000000	0.0000000	0.0000760	0.0000400	0.0000000	0.0000000

Comments:

FORM AA-IN

ILM05.0

ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Instrument ID: IRIS-Jarrell Ash

Date: Jan. 17, 2003

Analyte	Wave-length (nm)	Interelement Correction Factors for: Be	Co	Cr	Cu	Mn	Mo
Aluminum	308.20	0.0000000	0.0000000	0.0000000	0.0000000	0.0018000	0.0202000
Antimony	206.80	0.0000000	0.0000000	0.0160000	0.0000000	0.0000000	0.0004700
Arsenic	189.00	0.0000000	0.0000000	-0.0023000	0.0000000	0.0000000	-0.0008000
Barium	455.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.00	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.0000750
Boron	249.70	0.0000000	0.0013800	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	228.80	0.0000000	-0.0029000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	373.70	0.0000000	0.0000000	0.0000000	0.0000000	0.0016000	0.0000000
Chromium	267.70	0.0000000	0.0000000	0.0000000	0.0000000	0.0013000	0.0000000
Cobalt	228.60	0.0000000	0.0000000	0.0000450	0.0000000	0.0000000	-0.0012000
Copper	324.70	0.0000000	0.0000000	-0.0000890	0.0000000	0.0000000	0.0000000
Iron	271.40	0.0000000	0.0960000	0.0000000	0.0000000	-0.0062000	-0.0030000
Lead	220.35	0.0000000	0.0000000	-0.0010000	0.0000000	0.0000000	-0.0012000
Lithium	670.80	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	277.90	0.0000000	0.0000000	-0.3400000	0.0000000	0.0013200	0.0160000
Manganese	257.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0063000	0.0001100	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.00	0.0000000	0.0000000	0.0000000	0.0000000	0.0034300	0.0060000
Silicon	251.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0080000
Silver	328.00	0.0000000	0.0000000	-0.0005800	0.0000000	0.0000900	-0.0002900
Sodium	589.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	215.20	0.0000000	0.0000250	0.0000000	0.0000000	0.0000000	-0.0003000
Thallium	190.80	0.0000000	-0.0015000	-0.0017000	0.0000000	0.0008000	-0.0019000
Tin	189.90	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.90	0.0000000	0.0000000	0.0005000	0.0000000	0.0000000	0.0000000
Vanadium	310.20	0.0120000	0.0000000	-0.0006000	0.0000000	0.0000000	0.0000000
Zinc	213.80	0.0000000	-0.0002800	0.0000000	0.0009000	0.0002790	0.0000000

Comments:

ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Instrument ID: IRIS-Jarrell Ash

Date: Jan. 17, 2003

Analyte	Wave-length (nm)	Interelement Correction Factors for: Ni	Sb	V	Ti	Zn
Aluminum	308.20	0.0000000	0.0000000	0.0300000	0.0013000	0.0000000
Antimony	206.80	-0.0012000	0.0000000	-0.0038000	0.0000000	0.0000000
Arsenic	189.00	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	455.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.00	0.0000000	0.0000000	-0.0003000	0.0000000	0.0000000
Boron	249.70	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	228.80	-0.0001700	0.0000000	0.0000700	0.0000000	0.0000000
Calcium	373.70	0.0006500	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.70	0.0000000	0.0000000	-0.0025000	0.0000000	0.0000000
Cobalt	228.60	0.0000000	0.0000000	0.0000000	0.0013000	0.0000000
Copper	324.70	0.0000000	0.0000000	-0.0140000	-0.0007090	0.0000000
Iron	271.40	0.0000000	0.0000000	-0.1500000	0.0000000	0.0000000
Lead	220.30	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lithium	670.80	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	277.90	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.60	0.0000000	0.0000000	-0.0000750	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	-0.0002470	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.00	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	251.60	0.0000000	0.0000000	0.0000000	0.0066470	0.0000000
Silver	328.00	0.0000000	0.0000000	-0.0300000	0.0010000	0.0000000
Sodium	589.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	215.20	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.80	0.0000000	0.0000000	-0.0220000	-0.0011000	0.0000000
Tin	189.90	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.90	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	310.20	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.80	0.0053000	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

FORM XA-IN

ILM05.0

XI-IN

ICP-AES AND ICP-MS LINEAR RANGES (QUARTERLY)

Instrument ID: IRIS-Jarrel Ash

Date: 1/30/03

Analyte	Integ. Time (Sec.)	Concentration (ug/L)
Aluminum	15.00	1000000.0
Antimony	55.00	50000.0
Arsenic	55.00	100000.0
Barium	15.00	20000.0
Beryllium	15.00	5000.0
Boron	15.00	100000.0
Cadmium	55.00	30000.0
Calcium	15.00	1000000.0
Chromium	55.00	100000.0
Cobalt	55.00	100000.0
Copper	15.00	50000.0
Iron	55.00	1000000.0
Lead	55.00	200000.0
Lithium		15000.0
Magnesium	55.00	1000000.0
Manganese	55.00	40000.0
Molybdenum		30000.0
Nickel	55.00	100000.0
Potassium	15.00	400000.0
Selenium	55.00	20000.0
Silicon		50000.0
Silver	15.00	10000.0
Sodium	15.00	400000.0
Strontium		30000.0
Thallium	55.00	20000.0
Tin		30000.0
Titanium		30000.0
Vanadium	15.00	100000.0
Zinc	55.00	40000.0

Comments:

Method: CLP5 Sample Name: S0 Operator:
Comment:
ın Time: 04/29/03 17:39 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Al3082	Ag3280	As1890	B 2496	Ba4554
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.11084	.39487	-.00062	.54621	.17838
Stddev	.01957	.01967	.01134	.01698	.09549
%RSD	17.660	4.9805	1839.4	3.1095	53.534
#1	.09700	.40878	-.00864	.55822	.11086
#2	.12468	.38097	.00740	.53420	.24590

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.28403	.34810	.49270	.05551	-1.2170
Stddev	.03924	.09056	.00979	.03140	.0357
%RSD	13.816	26.014	1.9873	56.569	2.9341
#1	.31178	.28407	.49962	.07772	-1.2423
#2	.25629	.41214	.48577	.03331	-1.1918

Elem	Cu3247	Fe2714	K 7664	Li6707	Mg2779
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.21130	.20110	-1.2018	6.2366	-.28749
Stddev	.04413	.01832	.1524	.1775	.02444
%RSD	20.884	9.1089	12.684	2.8463	8.5012
#1	.24250	.21405	-1.0940	6.3622	-.27021
	.18010	.18815	-1.3096	6.1111	-.30478

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.09715	.04164	1.2241	.90983	.10455
Stddev	.01265	.01875	.2092	.03406	.04230
%RSD	13.017	45.040	17.090	3.7440	40.463
#1	-.10609	.05490	1.0762	.88574	.13447
#2	-.08821	.02838	1.3721	.93392	.07464

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.36825	.00617	.16439	-.05613	-.02714
Stddev	.01485	.02355	.06062	.04100	.00698
%RSD	4.0314	381.87	36.876	73.038	25.718
#1	.35775	.02282	.20725	-.08512	-.02221
#2	.37875	-.01049	.12152	-.02714	-.03208

Elem	Ti3349	Tl1908	V 3102	Zn2138
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.61309	-.05428	3.9106	.10980
Stddev	.00479	.00698	.1022	.01134
%RSD	.78050	12.861	2.6121	10.324
	.60971	-.04935	3.8384	.11781
	.61647	-.05922	3.9828	.10178

Method: CLP5 Sample Name: S1 Operator:
Comment:
Run Time: 04/29/03 17:43 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Al3082	B 2496	Ba4554	Be3130	Ca3736
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.43456	4.7999	4.5949	2.2057	2.3390
Stddev	.00236	.0100	.0205	.1220	.0314
%RSD	.54421	.20744	.44568	5.5310	1.3414
#1	.43289	4.8069	4.6094	2.1194	2.3168
#2	.43624	4.7929	4.5805	2.2920	2.3612

Elem	Cr2677	Fe2714	K 7664	Li6707	Mn2576
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.36023	.65943	3.0345	10.775	6.5215
Stddev	.08898	.05759	.0937	.555	.0108
%RSD	24.700	8.7329	3.0878	5.1553	.16565
#1	-.42315	.61871	2.9682	11.168	6.5291
#2	-.29732	.70015	3.1007	10.382	6.5139

Elem	Mo2020	Na5895	Sb2068	Si2516	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.32075	27.044	.43549	1.0560	.10918
Stddev	.00610	.624	.00175	.0218	.01308
%RSD	1.9023	2.3070	.40230	2.0637	11.983
#1	.32507	27.485	.43425	1.0714	.11843
#2	.31644	26.603	.43672	1.0406	.09993

Elem	Sr2152	Ti3349	V 3102	Zn2138
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.30009	3.1129	4.8616	1.6824
Stddev	.00655	.1022	.0303	.0074
%RSD	2.1818	3.2842	.62367	.44227
#1	.29546	3.0406	4.8830	1.6772
#2	.30472	3.1852	4.8401	1.6877

Method: CLP5 Sample Name: S2 Operator:
Comment:
n Time: 04/29/03 17:47 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Al3082	Ag3280	As1890	B_2496	Ba4554
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.73754	.90719	.06846	9.0396	9.1309
Stddev	.04913	.05856	.00785	.0390	.1391
%RSD	6.6614	6.4551	11.464	.43107	1.5238
#1	.70280	.94860	.07401	9.0672	9.0325
#2	.77228	.86578	.06291	9.0121	9.2292

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4.4286	4.0253	.68972	.57824	.45827
Stddev	.0235	.0163	.00979	.01176	.10379
%RSD	.53063	.40361	1.4197	2.0334	22.647
#1	4.4453	4.0367	.69665	.58655	.53166
#2	4.4120	4.0138	.68280	.56992	.38488

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2779
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.67172	1.0119	6.8943	15.447	.50207
Stddev	.15655	.0179	.4769	.781	.01458
%RSD	23.306	1.7647	6.9167	5.0530	2.9036
#1	.78242	1.0245	6.5571	15.999	.51238
	.56103	.99926	7.2315	14.895	.49177

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	13.178	.57299	52.399	1.7591	.28465
Stddev	.024	.00612	.113	.0017	.02836
%RSD	.18518	1.0687	.21510	.09615	9.9624
#1	13.161	.56867	52.479	1.7603	.26460
#2	13.195	.57732	52.319	1.7579	.30470

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.47986	.04996	1.9648	.26892	.61154
Stddev	.03313	.00523	.0353	.00871	.02309
%RSD	6.9044	10.478	1.7949	3.2406	3.7764
#1	.50329	.04626	1.9897	.27508	.62787
#2	.45643	.05366	1.9398	.26276	.59521

Elem	Ti3349	V_3102	Zn2138
Units	Cts/S	Cts/S	Cts/S
Avg	5.4432	6.1668	3.2264
Stddev	.0282	.1406	.0025
%RSD	.51761	2.2805	.07794
	5.4631	6.2663	3.2282
	5.4233	6.0674	3.2246

Method: CLP5 Sample Name: S3 Operator:
Comment:
Run Time: 04/29/03 17:52 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Al3082	Ag3280	As1890	B_2496	Ba4554
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	15.152	13.331	1.7397	222.08	226.78
Stddev	.082	.229	.0262	1.21	.77
%RSD	.54079	1.7175	1.5035	.54532	.34124
#1	15.094	13.169	1.7582	221.22	226.23
#2	15.210	13.493	1.7212	222.93	227.32

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	105.40	92.658	4.0517	13.014	41.877
Stddev	.13	.472	.0530	.084	.164
%RSD	.12459	.50929	1.3071	.64455	.39059
#1	105.50	92.324	4.0891	12.955	41.762
#2	105.31	92.992	4.0142	13.074	41.993

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2779
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	18.381	22.374	213.20	249.71	18.302
Stddev	.021	.079	3.36	.36	.114
%RSD	.11502	.35390	1.5766	.14372	.62371
#1	18.396	22.318	210.82	249.46	18.383
#2	18.366	22.430	215.57	249.97	18.221

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	345.16	14.630	1317.7	24.439	4.7206
Stddev	1.20	.094	11.1	.132	.0245
%RSD	.34667	.64206	.83977	.54008	.51850
#1	344.31	14.564	1309.8	24.345	4.7033
#2	346.00	14.697	1325.5	24.532	4.7379

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4.1499	1.1252	49.397	8.7792	16.426
Stddev	.0253	.0052	.147	.0324	.047
%RSD	.61066	.46415	.29685	.36870	.28517
#1	4.1320	1.1289	49.293	8.7563	16.393
#2	4.1679	1.1215	49.500	8.8021	16.459

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	132.00	1.3415	61.386	78.684
Stddev	.14	.0100	.098	.235
%RSD	.10650	.74889	.15899	.29822
#1	131.90	1.3344	61.317	78.518
#2	132.10	1.3486	61.455	78.850

Method: CLP5 Sample Name: S4 Operator:
Comment:
Run Time: 04/29/03 17:56 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Al3082	Ag3280	As1890	B_2496	Ba4554
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	30.845	26.661	3.5188	447.41	464.20
Stddev	.298	.543	.0139	.91	.99
%RSD	.96614	2.0357	.39581	.20402	.21334
#1	30.634	26.277	3.5287	446.76	463.50
#2	31.055	27.045	3.5090	448.05	464.90

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	214.34	190.09	7.6508	25.880	86.739
Stddev	.73	.83	.1021	.108	.007
%RSD	.33854	.43858	1.3351	.41552	.00862
#1	213.83	189.50	7.5786	25.804	86.733
#2	214.85	190.67	7.7230	25.956	86.744

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2779
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	37.125	44.897	433.95	502.69	37.741
Stddev	.621	.354	.20	3.55	.210
%RSD	1.6724	.78903	.04510	.70646	.55590
	36.686	45.147	433.81	500.18	37.593
	37.564	44.646	434.08	505.20	37.889

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	694.28	29.963	2634.0	47.555	9.2495
Stddev	1.08	.080	2.8	.191	.0239
%RSD	.15620	.26731	.10513	.40267	.25850
#1	693.51	29.906	2636.0	47.420	9.2664
#2	695.04	30.019	2632.1	47.690	9.2326

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7.9673	2.2563	99.604	17.730	32.554
Stddev	.0306	.0039	.008	.048	.205
%RSD	.38415	.17312	.00790	.27152	.62936
#1	7.9456	2.2591	99.598	17.696	32.409
#2	7.9889	2.2536	99.609	17.764	32.698

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	272.44	2.6835	121.22	158.11
Stddev	8.59	.0340	.37	.09
%RSD	3.1522	1.2688	.30922	.05634
	278.51	2.6594	120.95	158.05
	266.37	2.7076	121.48	158.17

Method: CLP5 Sample Name: S5 Operator:
Comment:
Run Time: 04/29/03 18:01 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Al3082	Ag3280	As1890	B_2496	Ba4554
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	60.978	52.159	7.0605	883.01	917.91
Stddev	.117	.187	.0095	.05	.03
%RSD	.19105	.35896	.13463	.00580	.00326
#1	60.895	52.027	7.0672	882.97	917.89
#2	61.060	52.292	7.0538	883.05	917.93

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	419.50	378.85	14.820	51.195	173.42
Stddev	.65	.83	.014	.007	.14
%RSD	.15446	.21946	.09143	.01407	.08150
#1	419.04	378.26	14.830	51.190	173.52
#2	419.95	379.44	14.810	51.201	173.32

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2779
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	73.343	89.435	857.20	1002.8	74.665
Stddev	.354	.004	.76	8.1	.432
%RSD	.48285	.00458	.08863	.80809	.57922
#1	73.092	89.438	857.74	997.12	74.359
#2	73.593	89.432	856.67	1008.6	74.970

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1372.1	58.704	5146.2	95.047	18.229
Stddev	2.0	.021	2.4	.084	.001
%RSD	.14702	.03661	.04627	.08868	.00607
#1	1373.5	58.719	5147.9	95.106	18.228
#2	1370.7	58.689	5144.5	94.987	18.230

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	15.453	4.4269	197.65	35.137	64.624
Stddev	.041	.0392	.27	.061	.017
%RSD	.26406	.88555	.13798	.17500	.02639
#1	15.482	4.4546	197.84	35.181	64.636
#2	15.424	4.3992	197.46	35.094	64.612

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	531.80	5.3051	242.17	315.21
Stddev	.73	.0073	.93	.53
%RSD	.13680	.13848	.38234	.16687
#1	531.29	5.3103	241.52	315.58
#2	532.31	5.2999	242.83	314.83

El Name	Slope	Y-int	Correlation	Date Stdized
Al3082	3.0633	0.1111	0.9999698	04/29/03 18:04:11

Standard Name	Concentration Stated	Found	Difference Conc	%	Signal (S)IR
S0	0	-8.2256e-050		0	0.11084
S1	0.1	0.1056	0.0056	5.6	0.43456
S2	0.2	0.2045	0.0045	2.25	0.73754
S3	5	4.91	-0.09	-1.8	15.152
S4	10	10.033	0.033	0.33	30.845
S5	20	19.87	-0.13	-0.651	60.978

El Name	Slope	Y-int	Correlation	Date Stdized
Ag3280	70.1130	0.3948	0.9999770	04/29/03 18:04:11

Standard Name	Concentration Stated	Found	Difference Conc	%	Signal (S)IR
S0	0	8.956e-07	0	0	0.39487
S2	0.008	0.007308	-0.000692	-8.65	0.90719
S3	0.2	0.1845	-0.0155	-7.75	13.331
S4	0.4	0.37463	-0.0254	-6.34	26.661
S5	0.8	0.7383	-0.0617	-7.71	52.159

El Name	Slope	Y-int	Correlation	Date Stdized
As1890	8.8191	-0.0006	0.9999875	04/29/03 18:04:11

Standard Name	Concentration Stated	Found	Difference Conc	%	Signal (S)IR
S0	0	2.1309e-060		0	-0.00061655
	0.008	0.0078351	-0.000165	-2.06	0.068463
S3	0.2	0.19733	-0.00267	-1.33	1.7397
S4	0.4	0.39907	-0.000929	-0.232	3.5188
S5	0.8	0.80066	0.000662	0.0828	7.0605

El Name	Slope	Y-int	Correlation	Date Stdized
B_2496	44.2992	0.5429	0.9999777	04/29/03 18:04:11

Standard Name	Concentration Stated	Found	Difference Conc	%	Signal (S)IR
S0	0	7.4588e-050		0	0.54621
S1	0.1	0.096097	-0.0039	-3.9	4.7999
S2	0.2	0.1918	-0.0082	-4.1	9.0396
S3	5	5.0009	0.00087	0.0174	222.08
S4	10	10.087	0.0874	0.874	447.41
S5	20	19.921	-0.0794	-0.397	883.01

El Name	Slope	Y-int	Correlation	Date Stdized
Ba4554	459.4161	0.1753	0.9999685	04/29/03 18:04:11

Standard Name	Concentration Stated	Found	Difference Conc	%	Signal (S)IR
S0	0	6.7991e-060		0	0.17838
S1	0.01	0.0096202	-0.00038	-3.8	4.5949
S2	0.02	0.019493	-0.000507	-2.53	9.1309
S3	0.5	0.49324	-0.00676	-1.35	226.78
	1	1.01	0.01	1	464.2
	2	1.9976	-0.00238	-0.119	917.91

El Name	Slope	Y-int	Correlation	Date Stdized
Be3130	4249.7969	0.2819	0.9999450	04/29/03 18:04:11

Standard Name	Concentration Stated	Found	Difference Conc	%	Signal (S)IR
S0	0	4.9092e-070		0	0.28403
S1	0.0005	0.00045267	-4.73e-05	-9.47	2.2057
S2	0.001	0.00097574	-2.43e-05	-2.43	4.4286
S3	0.025	0.024736	-0.000264	-1.06	105.4
S4	0.05	0.050369	0.000369	0.737	214.34
S5	0.1	0.098643	-0.00136	-1.36	419.5

El Name	Slope	Y-int	Correlation	Date Stdized
Ca3736	18.8709	0.3484	0.9999540	04/29/03 18:04:11

Standard Name	Concentration Stated	Found	Difference Conc	%	Signal (S)IR
S0	0	-1.5207e-050		0	0.3481
S1	0.1	0.10549	0.00549	5.49	2.339
S2	0.2	0.19484	-0.00516	-2.58	4.0253
S3	5	4.8916	-0.108	-2.17	92.658
S4	10	10.054	0.0545	0.545	190.09
S5	20	20.058	0.0575	0.288	378.85

El Name	Slope	Y-int	Correlation	Date Stdized
Cd2288	139.8181	0.4932	0.9996020	04/29/03 18:04:11

Standard Name	Concentration Stated	Found	Difference Conc	%	Signal (S)IR
S0	0	-3.6937e-060		0	0.4927
S2	0.001	0.0014055	0.000405	40.5	0.68972
S3	0.025	0.025451	0.000451	1.8	4.0517
S4	0.05	0.051192	0.00119	2.38	7.6508
S5	0.1	0.10247	0.00247	2.47	14.82

El Name	Slope	Y-int	Correlation	Date Stdized
Co2286	130.5346	0.0556	0.9999835	04/29/03 18:04:11

Standard Name	Concentration Stated	Found	Difference Conc	%	Signal (S)IR
S0	0	-1.0147e-060		0	0.055513
S2	0.004	0.0040035	3.47e-06	0.0868	0.57824
S3	0.1	0.099273	-0.000727	-0.727	13.014
S4	0.2	0.19784	-0.00216	-1.08	25.88
S5	0.4	0.39177	-0.00823	-2.06	51.195

El Name	Slope	Y-int	Correlation	Date Stdized
Cr2677	175.2260	-1.2176	0.9999754	04/29/03 18:04:11

Standard Name	Concentration Stated	Found	Difference Conc	%	Signal (S)IR
S0	0	3.1873e-060		0	-1.217
S1	0.005	0.0048928	-0.000107	-2.14	-0.36023
S2	0.01	0.0095639	-0.000436	-4.36	0.45827
S3	0.25	0.24594	-0.00406	-1.62	41.877
S4	0.5	0.50196	0.00196	0.392	86.739
S5	1	0.99665	-0.00335	-0.335	173.42

El Name	Slope	Y-int	Correlation	Date Stdized
Cu3247	75.3402	0.2086	0.9995982	04/29/03 18:04:11

Standard Name	Concentration Stated	Found	Difference Conc	%	Signal (S)IR
S0	0	3.5178e-050		0	0.2113
S2	0.01	0.0061465	-0.00385	-38.5	0.67172
S3	0.25	0.24121	-0.00879	-3.52	18.381
S4	0.5	0.49	-0.01	-2	37.125
S5	1	0.97072	-0.0293	-2.93	73.343

El Name	Slope	Y-int	Correlation	Date Stdized
Fe2714	11.6061	0.2008	0.9999726	04/29/03 18:04:11

Standard Name	Concentration Stated	Found	Difference Conc	%	Signal (S)IR
S0	0	2.4476e-050		0	0.2011
S1	0.04	0.039514	-0.000486	-1.21	0.65943
S2	0.08	0.069883	-0.0101	-12.6	1.0119
S3	2	1.9105	-0.0895	-4.47	22.374
S4	4	3.8511	-0.149	-3.72	44.897
S5	8	7.6886	-0.311	-3.89	89.435

El Name	Slope	Y-int	Correlation	Date Stdized
K_7664	8.6136	-1.2049	0.9999695	04/29/03 18:04:11

Standard Name	Concentration Stated	Found	Difference Conc	%	Signal (S)IR
S0	0	0.000363820		0	-1.2018
	0.5	0.49218	-0.00782	-1.56	3.0345
S2	1	0.94029	-0.0597	-5.97	6.8943
S3	25	24.891	-0.109	-0.436	213.2
S4	50	50.519	0.519	1.04	433.95
S5	100	99.657	-0.343	-0.343	857.2

El Name	Slope	Y-int	Correlation	Date Stdized
Li6707	496.0941	6.2284	0.9999459	04/29/03 18:04:11

Standard Name	Concentration Stated	Found	Difference Conc	%	Signal (S)IR
S0	0	1.6501e-050		0	6.2366
S1	0.01	0.0091651	-0.000835	-8.35	10.775
S2	0.02	0.018583	-0.00142	-7.08	15.447
S3	0.5	0.4908	-0.0092	-1.84	249.71
S4	1	1.0007	0.000747	0.0747	502.69
S5	2	2.0089	0.00894	0.447	1002.8

El Name	Slope	Y-int	Correlation	Date Stdized
Mg2779	3.7845	-0.2871	0.9999625	04/29/03 18:04:11

Standard Name	Concentration Stated	Found	Difference Conc	%	Signal (S)IR
S0	0	-9.1741e-050		0	-0.28749
S2	0.2	0.20854	0.00854	4.27	0.50207
S3	5	4.9118	-0.0882	-1.76	18.302
	10	10.048	0.0483	0.483	37.741
	20	19.805	-0.195	-0.976	74.665

El Name	Slope	Y-int	Correlation	Date Stdized
Mn2576	1378.0828	-0.1018	0.9999802	04/29/03 18:04:11

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	3.3975e-060		0	-0.097149
S1	0.005	0.0048062	-0.000194	-3.88	6.5215
S2	0.01	0.0096364	-0.000364	-3.64	13.178
S3	0.25	0.25054	0.000536	0.214	345.16
S4	0.5	0.50387	0.00387	0.775	694.28
S5	1	0.99574	-0.00426	-0.426	1372.1

El Name	Slope	Y-int	Correlation	Date Stdized
Mo2020	29.4546	0.0412	0.9999224	04/29/03 18:04:11

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	1.4637e-050		0	0.041636
S1	0.01	0.0094909	-0.000509	-5.09	0.32075
S2	0.02	0.018055	-0.00195	-9.73	0.57299
S3	0.5	0.49531	-0.00469	-0.939	14.63
S4	1	1.0158	0.0158	1.58	29.963
S5	2	1.9916	-0.00837	-0.419	58.704

El Name	Slope	Y-int	Correlation	Date Stdized
Na5895	51.9616	1.2230	0.9999337	04/29/03 18:04:11

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	2.173e-05	0	0	1.2241
S1	0.5	0.49693	-0.00307	-0.615	27.044
S2	1	0.98488	-0.0151	-1.51	52.399
S3	25	25.335	0.335	1.34	1317.7
S4	50	50.669	0.669	1.34	2634
S5	100	99.015	-0.985	-0.985	5146.2

El Name	Slope	Y-int	Correlation	Date Stdized
Ni2316	93.7761	0.9090	0.9999663	04/29/03 18:04:11

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	9.3949e-060		0	0.90983
S2	0.01	0.0090655	-0.000935	-9.35	1.7591
S3	0.25	0.25092	0.000915	0.366	24.439
S4	0.5	0.49742	-0.00258	-0.516	47.555
S5	1	1.0039	0.00386	0.386	95.047

El Name	Slope	Y-int	Correlation	Date Stdized
Pb2203	18.3585	0.1046	0.9999769	04/29/03 18:04:11

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	-6.3716e-080		0	0.10455
S2	0.01	0.0098098	-0.00019	-1.9	0.28465
S3	0.25	0.25144	0.00144	0.575	4.7206
S4	0.5	0.49813	-0.00187	-0.374	9.2495
S5	1	0.98725	-0.0128	-1.28	18.229

El Name	Slope	Y-int	Correlation	Date Stdized
Sb2068	6.2892	0.3680	0.9997852	04/29/03 18:04:11

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	4.289e-05	0	0	0.36825
S1	0.012	0.010734	-0.00127	-10.6	0.43549
S2	0.024	0.017789	-0.00621	-25.9	0.47986
S3	0.6	0.60134	0.00134	0.224	4.1499
S4	1.2	1.2083	0.00831	0.693	7.9673
S5	2.4	2.3985	-0.00146	-0.0609	15.453

El Name	Slope	Y-int	Correlation	Date Stdized
Se1960	5.3316	0.0062	0.9999664	04/29/03 18:04:11

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S2	0.008	0.0082141	0.000214	2.68	0.04996
S3	0.2	0.20989	0.00989	4.95	1.1252
S4	0.4	0.42204	0.022	5.51	2.2563
S0	0	5.1015e-070		0	0.0061677
S5	0.8	0.82916	0.0292	3.64	4.4269

El Name	Slope	Y-int	Correlation	Date Stdized
Si2516	19.7076	0.1626	0.9999578	04/29/03 18:04:11

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	9.1469e-050		0	0.16439
	0.05	0.045335	-0.00467	-9.33	1.056
S2	0.1	0.091447	-0.00855	-8.55	1.9648
S3	2.5	2.4982	-0.00177	-0.0707	49.397
S4	5	5.0458	0.0458	0.917	99.604
S5	10	10.021	0.0209	0.209	197.65

El Name	Slope	Y-int	Correlation	Date Stdized
Sn1899	17.6506	-0.0564	0.9999656	04/29/03 18:04:11

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	1.3479e-050		0	-0.056131
S1	0.01	0.0093792	-0.000621	-6.21	0.10918
S2	0.02	0.018429	-0.00157	-7.85	0.26892
S3	0.5	0.50058	0.000582	0.116	8.7792
S4	1	1.0077	0.00771	0.771	17.73
S5	2	1.9939	-0.0061	-0.305	35.137

El Name	Slope	Y-int	Correlation	Date Stdized
Sr2152	32.5378	-0.0271	0.9999791	04/29/03 18:04:11

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	-2.1839e-070		0	-0.027141
S1	0.01	0.010057	5.67e-05	0.567	0.30009
S2	0.02	0.019629	-0.000371	-1.86	0.61154
	0.5	0.50566	0.00566	1.13	16.426
	1	1.0013	0.00132	0.132	32.554
S5	2	1.9869	-0.0131	-0.653	64.624

El Name	Slope	Y-int	Correlation	Date Stdized
Ti3349	267.4680	0.6089	0.9998971	04/29/03 18:04:11

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	1.5555e-050		0	0.61309
S1	0.01	0.0093618	-0.000638	-6.38	3.1129
S2	0.02	0.018074	-0.00193	-9.63	5.4432
S3	0.5	0.49125	-0.00875	-1.75	132
S4	1	1.0163	0.0163	1.63	272.44
S5	2	1.986	-0.014	-0.7	531.8

El Name	Slope	Y-int	Correlation	Date Stdized
Tl1908	5.7283	-0.0539	0.9998842	04/29/03 18:04:11

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	-6.2727e-050		0	-0.054282
S3	0.25	0.2436	-0.0064	-2.56	1.3415
S4	0.5	0.47788	-0.0221	-4.42	2.6835
S5	1	0.93553	-0.0645	-6.45	5.3051

El Name	Slope	Y-int	Correlation	Date Stdized
V_3102	117.9434	3.9076	0.9998638	04/29/03 18:04:11

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	2.5317e-050		0	3.9106
S1	0.01	0.0080881	-0.00191	-19.1	4.8616
S2	0.02	0.019155	-0.000845	-4.22	6.1668
S3	0.5	0.48733	-0.0127	-2.53	61.386
S4	1	0.99462	-0.00538	-0.538	121.22
S5	2	2.0202	0.0202	1.01	242.17

El Name	Slope	Y-int	Correlation	Date Stdized
Zn213B	157.0006	0.1096	0.9999981	04/29/03 18:04:11

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	1.0772e-060		0	0.1098
S1	0.01	0.010018	1.77e-05	0.177	1.6824
S2	0.02	0.019852	-0.000148	-0.74	3.2264
S3	0.5	0.50047	0.000472	0.0944	78.684
S4	1	1.0064	0.00637	0.637	158.11
S5	2	2.007	0.00698	0.349	315.21

Method: CLP5 Sample Name: ICV Operator:
Comment:
un Time: 04/29/03 18:06 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al3082	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	9.8606	.40128	.38786	9.6274	1.0049
Stddev	.0249	.00253	.00624	.0262	.0008
%RSD	.25198	.63079	1.6094	.27186	.08080
#1	9.8430	.39949	.38344	9.6089	1.0055
#2	9.8782	.40307	.39227	9.6459	1.0043
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	10.000	.40000	.40000	10.000	1.0000
Range	5.0000%	5.0000%	5.0000%	5.0000%	5.0000%

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.04982	9.8602	.05004	.19801	.49986
Stddev	.00003	.0207	.00042	.00125	.00098
%RSD	.05749	.21002	.84853	.63000	.19606
#1	.04980	9.8456	.04974	.19713	.49917
#2	.04984	9.8749	.05034	.19889	.50056
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.05000	10.000	.05000	.20000	.50000
Range	5.0000%	5.0000%	5.0000%	5.0000%	5.0000%

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.49780	3.9497	49.748	.98983	10.131
Stddev	.00075	.0226	.125	.00285	.015
%RSD	.15142	.57150	.25054	.28832	.14902
#1	.49727	3.9657	49.660	.98781	10.120
#2	.49834	3.9338	49.836	.99184	10.142
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000	4.0000	50.000	1.0000	10.000
Range	5.0000%	5.0000%	5.0000%	5.0000%	5.0000%

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.49652	.99946	50.573	.49698	.49886
Stddev	.00077	.00407	.186	.00074	.00563
%RSD	.15413	.40742	.36690	.14915	1.1277
#1	.49597	.99658	50.442	.49645	.49489
#2	.49706	1.0023	50.704	.49750	.50284
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000	1.0000	50.000	.50000	.50000
Range	5.0000%	5.0000%	5.0000%	5.0000%	5.0000%

Sample Name: ICV Run Time: 04/29/03 18:06

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	1.2137	.39510	Q -.01105	1.0025	.99310
Stddev	.0062	.00070	.00138	.0050	.00386
%RSD	.50740	.17794	12.482	.49444	.38880
#1	1.2093	.39560	-.01008	.99901	.99037
#2	1.2181	.39460	-.01203	1.0060	.99583
Check ?	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass
Value	1.2000	.40000	5.0000	1.0000	1.0000
Range	5.0000%	5.0000%	5.0000%	5.0000%	5.0000%

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	.95912	.50505	.99111	.98809
Stddev	.00044	.00190	.00294	.00208
%RSD	.04538	.37651	.29701	.21101
#1	.95943	.50640	.98903	.98661
#2	.95882	.50371	.99319	.98956
Check ?	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	.50000	1.0000	1.0000
Range	5.0000%	5.0000%	5.0000%	5.0000%

Method: CLP5 Sample Name: CCB Operator:
Comment:
un Time: 04/29/03 18:11 Type: Blank Mode: CONC Corr.Fact: 1.000000

Elem	Al3082	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00748	.00058	-.00126	.02620	.00004
Stddev	.00407	.00018	.00128	.00374	.00006
%RSD	54.407	30.651	101.91	14.284	131.87
#1	-.00460	.00070	-.00217	.02885	.00000
#2	-.01035	.00045	-.00035	.02356	.00009
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.20000	.00500	.01000	.05000	.00250
Low Limit	-.20000	-.00500	-.01000	-.05000	-.00250

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00001	-.00001	.00047	.00009	-.00003
Stddev	.00002	.00740	.00032	.00001	.00008
%RSD	162.60	52387.	67.331	10.100	311.79
#1	-.00002	-.00525	.00070	.00008	-.00008
#2	.00000	.00522	.00025	.00010	.00003
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.00025	.05000	.00100	.00250	.00250
Low Limit	-.00025	-.05000	-.00100	-.00250	-.00250

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00204	.00442	.03125	-.00024	.03999
Stddev	.00050	.00278	.01353	.00005	.00668
%RSD	24.613	62.942	43.278	19.882	16.697
#1	-.00240	.00639	.02169	-.00021	.03527
#2	-.00169	.00245	.04082	-.00028	.04471
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.01000	.02000	.25000	.05000	.10000
Low Limit	-.01000	-.02000	-.25000	-.05000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00002	.00020	.01425	-.00079	.00242
Stddev	.00002	.00070	.00402	.00037	.00002
%RSD	113.19	343.18	28.227	47.237	.91445
#1	.00000	.00070	.01709	-.00105	.00240
#2	.00004	-.00029	.01140	-.00052	.00243
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.00250	.05000	.10000	.01000	.01000
Low Limit	-.00250	-.05000	-.10000	-.01000	-.01000

Sample Name: CCB Run Time: 04/29/03 18:11

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00269	.00272	.00014	.00190	.00095
Stddev	.00404	.00090	.00129	.00074	.00069
%RSD	150.08	32.929	943.97	38.999	73.117
#1	.00016	.00335	-.00078	.00242	.00046
#2	-.00554	.00209	.00105	.00138	.00144
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.02000	.01000	.25000	.20000	.00500
Low Limit	-.02000	-.01000	-.25000	-.20000	-.00500

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	-.00006	.00665	-.00059	-.00007
Stddev	.00024	.00468	.00124	.00006
%RSD	379.13	70.305	210.26	85.096
#1	.00011	.00996	.00029	-.00003
#2	-.00023	.00335	-.00147	-.00011
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.01500	.02000	.00728	.01000
Low Limit	-.01500	-.02000	-.00728	-.01000

Method: CLP5 Sample Name: ICSA Operator:
Comment:
ın Time: 04/29/03 18:15 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al3082	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	247.88	.00204	-.00292	.03872	-.00014
Stddev	.16	.00045	.00038	.00138	.00055
%RSD	.06356	21.870	12.911	3.5535	401.31
#1	247.99	.00236	-.00319	.03969	.00025
#2	247.77	.00172	-.00266	.03775	-.00052
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	250.00	.00000	.00000	.00000	.00000
Range	±50.000	±.01600	±.04000	±.20000	±.02000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00009	237.11	.00094	-.00703	.00034
Stddev	.00001	.40	.00049	.00037	.00036
%RSD	9.8933	.16943	52.316	5.2989	105.83
#1	-.00009	236.82	.00129	-.00730	.00009
#2	-.00008	237.39	.00059	-.00677	.00060
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	250.00	.00000	.00000	.00000
Range	±.00100	±50.000	±.00400	±.01000	±.01000

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00529	86.147	-.06291	.02011	248.22
Stddev	.00034	.072	.02286	.00026	.92
%RSD	6.5117	.08407	36.336	1.2747	.36964
#1	.00505	86.096	-.04674	.02030	247.57
#2	.00554	86.199	-.07907	.01993	248.87
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	100.00	.00000	.00000	250.00
Range	±.01000	±20.000	±1.0000	±.20000	±50.000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00083	-.00038	.02642	-.00290	-.01909
Stddev	.00002	.00064	.00656	.00036	.00092
%RSD	2.6141	166.95	24.841	12.234	4.8039
#1	.00084	-.00083	.02178	-.00315	-.01974
#2	.00081	.00007	.03107	-.00265	-.01845
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000
Range	±.01000	±.20000	±1.0000	±.04000	±.04000

Sample Name: ICSA Run Time: 04/29/03 18:15

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	.01505	-.00026	.18070	-.00397	.00332
Stddev	.00029	.00091	.00002	.00124	.00256
%RSD	1.9534	347.09	.01201	31.123	77.120
#1	.01526	-.00090	.18069	-.00310	.00512
#2	.01484	.00038	.18072	-.00485	.00151
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000
Range	±.04000	±.04000	±1.0000	±1.0000	±.02000

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	.00266	.00325	.00171	-.00302
Stddev	.00056	.00689	.00140	.00019
%RSD	21.046	212.13	82.015	6.1867
#1	.00227	-.00162	.00072	-.00315
#2	.00306	.00812	.00270	-.00289
Check ?	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000
Range	±.06000	±.08000	±.02000	±.02000

Method: CLP5 Sample Name: ICSAB Operator:
Comment:
In Time: 04/29/03 18:19 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al3082	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	245.88	.48491	.23802	.02317	.25368
Stddev	.12	.00005	.00752	.00029	.00014
%RSD	.04807	.01076	3.1588	1.2688	.05591
#1	245.79	.48487	.23271	.02337	.25358
#2	245.96	.48494	.24334	.02296	.25378
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	250.00	.50000	.25000	.00000	.25000
Range	±50.000	±.10000	±.05000	±.20000	±.05000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.24663	234.70	.46781	.22067	.23038
Stddev	.00018	.62	.00034	.00063	.00044
%RSD	.07428	.26348	.07162	.28742	.19305
#1	.24676	234.26	.46757	.22022	.23007
#2	.24651	235.14	.46805	.22112	.23070
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.25000	250.00	.50000	.25000	.25000
Range	±.05000	±50.000	±.10000	±.05000	±.05000

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.24937	89.660	4.9851	.02011	246.60
Stddev	.00202	.073	.0394	.00061	.01
%RSD	.81063	.08149	.79051	3.0488	.00336
#1	.25080	89.608	5.0129	.01968	246.60
#2	.24794	89.712	4.9572	.02054	246.61
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.25000	100.00	5.0000	.00000	250.00
Range	±.05000	±20.000	±1.0000	±.20000	±50.000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.21958	.00337	5.1445	.45076	.44575
Stddev	.00052	.00004	.0001	.00047	.00168
%RSD	.23638	1.3214	.00268	.10365	.37747
#1	.21922	.00340	5.1446	.45109	.44694
#2	.21995	.00333	5.1444	.45043	.44456
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.25000	.00000	5.0000	.50000	.50000
Range	±.05000	±.20000	±1.0000	±.10000	±.10000

Sample Name: ICSAB Run Time: 04/29/03 18:19

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	.50860	.24318	.02097	-.00474	.00727
Stddev	.00334	.00014	.00146	.00005	.00035
%RSD	.65668	.05937	6.9663	1.0442	4.7838
#1	.51097	.24328	.02200	-.00471	.00702
#2	.50624	.24308	.01994	-.00478	.00751
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000	.25000	.00000	.00000	.00000
Range	±.10000	±.05000	±1.0000	±1.0000	±.02000

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	.00338	.46398	.24487	.48501
Stddev	.00009	.00052	.00082	.00021
%RSD	2.7523	.11161	.33408	.04260
#1	.00331	.46361	.24544	.48516
#2	.00345	.46434	.24429	.48487
Check ?	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.50000	.25000	.50000
Range	±.06000	±.10000	±.05000	±.10000

Method: CLP5 Sample Name: CCV Operator:
Comment:
Run Time: 04/29/03 18:24 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al3082	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	9.9993	.40286	.39297	9.7100	1.0187
Stddev	.0058	.00184	.00237	.0128	.0044
%RSD	.05831	.45602	.60285	.13157	.42853
#1	10.003	.40156	.39130	9.7010	1.0157
#2	9.9952	.40416	.39465	9.7191	1.0218
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	10.000	.40000	.40000	10.000	1.0000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.05025	9.9280	.05034	.19975	.50432
Stddev	.00023	.0357	.00025	.00046	.00008
%RSD	.46716	.35926	.49858	.23233	.01662
#1	.05008	9.9028	.05052	.19942	.50426
#2	.05042	9.9532	.05016	.20008	.50438
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.05000	10.000	.05000	.20000	.50000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.50229	3.9781	50.110	1.0015	10.190
Stddev	.00365	.0308	.154	.0055	.027
%RSD	.72658	.77519	.30796	.55129	.26613
#1	.49971	3.9999	50.000	.99755	10.171
#2	.50487	3.9563	50.219	1.0054	10.209
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000	4.0000	50.000	1.0000	10.000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.50173	1.0108	51.044	.50142	.50207
Stddev	.00052	.0017	.136	.00034	.00104
%RSD	.10349	.17243	.26632	.06748	.20781
#1	.50136	1.0096	50.948	.50118	.50133
#2	.50209	1.0121	51.140	.50166	.50281
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000	1.0000	50.000	.50000	.50000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Sample Name: CCV Run Time: 04/29/03 18:24

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	1.2211	.40046	Q -.01297	1.0110	.99623
Stddev	.0039	.00522	.00245	.0010	.00621
%RSD	.31592	1.3045	18.926	.09715	.62329
#1	1.2239	.39677	-.01123	1.0103	.99184
#2	1.2184	.40416	-.01470	1.0117	1.0006
Check ?	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass
Value	1.2000	.40000	5.0000	1.0000	1.0000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	.96510	.50910	.99699	.99876
Stddev	.00419	.00487	.00669	.00059
%RSD	.43365	.95675	.67095	.05943
#1	.96214	.50565	.99226	.99917
#2	.96806	.51254	1.0017	.99834
Check ?	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	.50000	1.0000	1.0000
Range	10.000%	10.000%	10.000%	10.000%

Method: CLP5 Sample Name: CCB Operator:
Comment:
Run Time: 04/29/03 18:28 Type: Blank Mode: CONC Corr.Fact: 1.000000

Elem	Al3082	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.01381	.00147	-.00266	.01668	.00017
Stddev	.04475	.00232	.00050	.00250	.00033
%RSD	324.04	158.19	18.648	14.973	188.29
#1	.01783	-.00017	-.00301	.01845	.00040
#2	-.04546	.00310	-.00231	.01492	-.00006
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.20000	.00500	.01000	.05000	.00250
Low Limit	-.20000	-.00500	-.01000	-.05000	-.00250

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00001	-.00506	.00013	-.00013	.00023
Stddev	.00000	.00156	.00027	.00014	.00014
%RSD	.77421	30.822	202.48	109.39	61.642
#1	.00001	-.00396	.00032	-.00003	.00032
#2	.00001	-.00616	-.00006	-.00023	.00013
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.00025	.05000	.00100	.00250	.00250
Low Limit	-.00025	-.05000	-.00100	-.00250	-.00250

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00064	.00154	-.02558	.00006	.01873
Stddev	.00059	.00254	.09891	.00045	.01561
%RSD	92.153	165.38	386.66	755.09	83.380
#1	-.00106	-.00026	.04436	-.00026	.00769
#2	-.00022	.00334	-.09552	.00038	.02977
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.01000	.02000	.25000	.05000	.10000
Low Limit	-.01000	-.02000	-.25000	-.05000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00014	.00023	.00637	-.00073	.00344
Stddev	.00001	.00018	.00376	.00021	.00061
%RSD	5.1881	75.767	58.969	29.553	17.691
#1	.00015	.00036	.00371	-.00088	.00301
#2	.00014	.00011	.00903	-.00057	.00387
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.00250	.05000	.10000	.01000	.01000
Low Limit	-.00250	-.05000	-.10000	-.01000	-.01000

Sample Name: CCB Run Time: 04/29/03 18:28

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00144	.00116	-.00105	-.00020	.00022
Stddev	.00250	.00556	.00110	.00025	.00079
%RSD	173.62	480.03	104.96	125.85	361.91
#1	-.00321	.00509	-.00027	-.00002	-.00034
#2	.00033	-.00277	-.00183	-.00037	.00078
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.02000	.01000	.25000	.20000	.00500
Low Limit	-.02000	-.01000	-.25000	-.20000	-.00500

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	-.00046	.00920	-.00229	-.00015
Stddev	.00055	.00222	.00041	.00013
%RSD	118.38	24.115	17.873	85.411
#1	-.00008	.00763	-.00258	-.00006
#2	-.00085	.01077	-.00200	-.00024
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.01500	.02000	.00728	.01000
Low Limit	-.01500	-.02000	-.00728	-.01000

Method: CLP5 Sample Name: PBW K3 Operator: JYH
Comment: WG139316-03
Run Time: 04/29/03 18:32 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al3082	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	.10041	.00078	-.00182	.00801	.00113
Stddev	.00312	.00010	.00148	.00229	.00020
%RSD	3.1107	13.316	81.235	28.556	17.435
#1	.10262	.00070	-.00287	.00962	.00127
#2	.09820	.00085	-.00078	.00639	.00099
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.20000	.00800	.02000	.10000	.01000
Low Limit	-.20000	-.00800	-.02000	-.10000	-.01000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00004	.00173	.00054	-.00019	-.00015
Stddev	.00002	.00156	.00006	.00038	.00039
%RSD	53.387	90.317	10.666	205.16	257.00
#1	-.00006	.00062	.00050	.00008	-.00042
#2	-.00003	.00283	.00059	-.00045	.00012
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.00050	.20000	.00200	.00500	.00500
Low Limit	-.00050	-.20000	-.00200	-.00500	-.00500

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00032	.00055	-.03420	-.00104	.02435
Stddev	.00145	.00250	.03957	.00157	.02351
%RSD	457.03	456.10	115.69	150.94	96.555
#1	-.00134	-.00122	-.00622	.00007	.00773
#2	.00071	.00232	-.06218	-.00215	.04098
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.00500	.02000	.50000	.10000	.10000
Low Limit	-.00500	-.02000	-.50000	-.10000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00041	-.00055	-.00493	-.00111	.00240
Stddev	.00000	.00084	.00790	.00022	.00021
%RSD	.53366	153.07	160.28	19.422	8.8794
#1	.00041	-.00115	-.01051	-.00096	.00225
#2	.00041	.00005	.00066	-.00126	.00256
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.01000	.10000	.50000	.02000	.02000
Low Limit	-.01000	-.10000	-.50000	-.02000	-.02000

Sample Name: PBW K3 Run Time: 04/29/03 18:32

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00791	-.00104	-.00186	-.00016	.00119
Stddev	.00640	.00393	.00036	.00010	.00011
%RSD	80.885	378.06	19.507	60.981	8.8687
#1	-.00339	.00174	-.00160	-.00009	.00127
#2	-.01243	-.00382	-.00212	-.00023	.00112
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.02000	.02000	1.0000	.50000	.01000
Low Limit	-.02000	-.02000	-1.0000	-.50000	-.01000

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	.00001	.00731	-.00212	.00028
Stddev	.00016	.00531	.00108	.00016
%RSD	1243.8	72.564	51.242	56.785
#1	-.00010	.01107	-.00288	.00017
#2	.00013	.00356	-.00135	.00039
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.03000	.04000	.01000	.02000
Low Limit	-.03000	-.04000	-.01000	-.02000

Method: CLP5 Sample Name: LCSW K3 Operator: JYH
Comment: WG139316-04
In Time: 04/29/03 18:37 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al3082	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	10.309	L .21693	H .98651	L 1.0197	H 10.131
Stddev	.006	.00395	.00169	.0002	.044
%RSD	.05937	1.8222	.17124	.02311	.43721
#1	10.304	.21413	.98770	1.0198	10.099
#2	10.313	.21972	.98531	1.0195	10.162
Check ?	LC Pass	LC Fail	LC Fail	LC Fail	LC Fail
High Limit	12.000	.48000	.48000	12.000	1.2000
Low Limit	8.0000	.32000	.32000	8.0000	.80000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	H 1.0148	10.146	H .97367	H 1.0123	H 1.0152
Stddev	.0044	.029	.00098	.0003	.0000
%RSD	.43390	.28397	.10046	.02847	.00404
#1	1.0180	10.126	.97298	1.0125	1.0152
#2	1.0117	10.166	.97436	1.0121	1.0151
Check ?	LC Fail	LC Pass	LC Fail	LC Fail	LC Fail
High Limit	.06000	12.000	.06000	.24000	.60000
Low Limit	.04000	8.0000	.04000	.16000	.40000

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	H .99897	L 1.1019	48.890	10.226	10.174
Stddev	.00317	.0008	.249	.026	.034
%RSD	.31702	.07168	.50845	.25157	.33870
#1	.99673	1.1013	49.066	10.244	10.150
#2	1.0012	1.1024	48.714	10.208	10.199
Check ?	LC Fail	LC Fail	LC Pass	None	LC Pass
High Limit	.60000	4.8000	60.000		12.000
Low Limit	.40000	3.2000	40.000		8.0000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	H 1.0086	1.0183	50.242	H 1.0260	H 1.0042
Stddev	.0010	.0032	.174	.0009	.0008
%RSD	.10321	.31791	.34539	.09307	.07987
#1	1.0079	1.0160	50.365	1.0253	1.0048
#2	1.0093	1.0206	50.120	1.0266	1.0036
Check ?	LC Fail	LC Pass	LC Pass	LC Fail	LC Fail
High Limit	.60000	1.2000	60.000	.60000	.60000
Low Limit	.40000	.80000	40.000	.40000	.40000

Wrong check table

Data is good JYH 4/29/03

Sample Name: LCSW K3 Run Time: 04/29/03 18:37

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	1.0166	H .99272	10.205	-.00006	1.0045
Stddev	.0035	.00214	.020	.00173	.0014
%RSD	.34651	.21568	.19557	3031.9	.13979
#1	1.0191	.99120	10.219	.00117	1.0055
#2	1.0141	.99423	10.191	-.00128	1.0035
Check ?	LC Pass	LC Fail	None	None	None
High Limit	1.4400	.48000			
Low Limit	.96000	.32000			

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	1.0668	H 1.0141	.99739	1.0093
Stddev	.0018	.0005	.00049	.0016
%RSD	.16368	.04653	.04931	.15571
#1	1.0656	1.0137	.99774	1.0104
#2	1.0681	1.0144	.99704	1.0082
Check ?	None	LC Fail	LC Pass	LC Pass
High Limit		.60000	1.2000	1.2000
Low Limit		.40000	.80000	.80000

Method: CLP5 Sample Name: TC F BLK 4/29 Operator: JYH
Comment:
In Time: 04/29/03 18:41 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al3082	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00362	.00000	-.00049	.00488	.00052
Stddev	.00561	.00141	.00158	.00135	.00016
%RSD	154.84	123500.	323.96	27.644	30.986
#1	.00758	.00100	-.00161	.00583	.00063
#2	-.00034	-.00100	.00063	.00392	.00040
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	1000.0	10.000	100.00	100.00	20.000
Low Limit	-.10000	-.01000	-.02000	-.10000	-.01000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00002	.02697	.00072	.00039	-.00010
Stddev	.00001	.00194	.00039	.00009	.00005
%RSD	84.334	7.1966	54.450	23.316	48.123
#1	-.00003	.02834	.00099	.00046	-.00013
#2	-.00001	.02560	.00044	.00033	-.00007
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	5.0000	1000.0	30.000	100.00	100.00
Low Limit	-.00050	-.10000	-.00200	-.00500	-.00500

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00029	-.00641	.01659	-.00134	.00988
Stddev	.00137	.00105	.03648	.00080	.01270
%RSD	478.33	16.425	219.94	59.668	128.59
#1	.00068	-.00567	.04238	-.00191	.01885
#2	-.00126	-.00716	-.00921	-.00078	.00090
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	1000.0	400.00	15.000	1000.0
Low Limit	-.02000	-.02000	-.50000	-.10000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00012	.00125	.01138	-.00105	.00119
Stddev	.00004	.00093	.00205	.00054	.00095
%RSD	31.341	74.686	18.046	51.434	79.407
#1	.00009	.00191	.00993	-.00143	.00052
#2	.00014	.00059	.01283	-.00067	.00187
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	40.000	30.000	300.00	100.00	200.00
Low Limit	-.01000	-.10000	-.50000	-.02000	-.02000

Sample Name: TC F BLK 4/29 Run Time: 04/29/03 18:41

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00203	.00287	.00010	.00050	.00149
Stddev	.00138	.00148	.00098	.00124	.00099
%RSD	67.985	51.508	1020.8	245.80	66.399
#1	-.00300	.00183	-.00060	.00138	.00079
#2	-.00105	.00392	.00079	-.00037	.00219
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	20.000	50.000	30.000	30.000
Low Limit	-.02000	-.02000	-1.0000	-.10000	-.01000

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	.00009	.00681	-.00329	.00092
Stddev	.00009	.00085	.00049	.00014
%RSD	98.361	12.469	15.023	15.562
#1	.00015	.00741	-.00294	.00102
#2	.00003	.00621	-.00364	.00082
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	30.000	20.000	100.00	40.000
Low Limit	-.01000	-.04000	-.01000	-.01000

Method: CLP5 Sample Name: L030450103 Operator: JYH
Comment: WG139316-01
Run Time: 04/29/03 18:45 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al3082	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00755	.00361	-.00226	.14901	.12596
Stddev	.00641	.00261	.00109	.00013	.00054
%RSD	84.926	72.285	48.174	.08788	.42679
#1	.00301	.00176	-.00149	.14892	.12558
#2	.01208	.00545	-.00303	.14910	.12634
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	1000.0	10.000	100.00	100.00	20.000
Low Limit	-.10000	-.01000	-.02000	-.10000	-.01000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00001	7.0818	.01857	.01599	.00035
Stddev	.00001	.0175	.00058	.00087	.00005
%RSD	65.860	.24657	3.1298	5.4664	14.157
#1	-.00001	7.0695	.01815	.01660	.00038
#2	-.00002	7.0942	.01898	.01537	.00031
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	5.0000	1000.0	30.000	100.00	100.00
Low Limit	-.00050	-.10000	-.00200	-.00500	-.00500

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.04543	5.0060	.40211	.00317	.93098
Stddev	.00094	.0351	.04033	.00115	.02876
%RSD	2.0732	.70044	10.029	36.281	3.0890
#1	.04477	4.9812	.43062	.00398	.91065
#2	.04610	5.0308	.37359	.00236	.95132
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	1000.0	400.00	15.000	1000.0
Low Limit	-.02000	-.02000	-.50000	-.10000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.09340	.00444	164.68	.00738	2.6121
Stddev	.00021	.00043	.89	.00005	.0124
%RSD	.22396	9.6161	.54119	.74346	.47651
#1	.09326	.00414	164.05	.00742	2.6033
#2	.09355	.00474	165.31	.00734	2.6209
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	40.000	30.000	300.00	100.00	200.00
Low Limit	-.01000	-.10000	-.50000	-.02000	-.02000

Sample Name: L030450103 Run Time: 04/29/03 18:45

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00841	.02844	.77267	.00176	.02609
Stddev	.00055	.00222	.00282	.00124	.00119
%RSD	6.5096	7.8146	.36433	70.187	4.5686
#1	-.00880	.03002	.77068	.00263	.02694
#2	-.00802	.02687	.77466	.00089	.02525
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	20.000	50.000	30.000	30.000
Low Limit	-.02000	-.02000	-1.0000	-.10000	-.01000

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	-.00006	-.01530	-.00139	1.8922
Stddev	.00033	.00041	.00101	.0084
%RSD	536.76	2.6674	72.564	.44211
#1	.00017	-.01559	-.00210	1.8863
#2	-.00030	-.01502	-.00068	1.8982
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	30.000	20.000	100.00	40.000
Low Limit	-.01000	-.04000	-.01000	-.01000

Method: CLP5 Sample Name: L030450103S Operator: JYH
Comment: WG139316-05
Run Time: 04/29/03 18:50 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al3082	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	10.051	.21288	.98370	1.1367	10.111
Stddev	.086	.00014	.00227	.0004	.018
%RSD	.85139	.06678	.23050	.03676	.17463
#1	10.112	.21298	.98530	1.1364	10.124
#2	9.9909	.21278	.98210	1.1370	10.099
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	1000.0	10.000	100.00	100.00	20.000
Low Limit	-.10000	-.01000	-.02000	-.10000	-.01000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	1.0010	17.045	.97636	1.0055	.99844
Stddev	.0030	.028	.00198	.0013	.00081
%RSD	.29614	.16367	.20251	.13360	.08152
#1	.99886	17.025	.97496	1.0046	.99787
#2	1.0030	17.065	.97775	1.0065	.99902
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	5.0000	1000.0	30.000	100.00	100.00
Low Limit	-.00050	-.10000	-.00200	-.00500	-.00500

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	1.0491	6.0382	49.420	10.208	10.947
Stddev	.0008	.0004	.217	.022	.046
%RSD	.08134	.00693	.43989	.21919	.42115
#1	1.0497	6.0379	49.266	10.224	10.979
#2	1.0485	6.0385	49.573	10.193	10.914
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	1000.0	400.00	15.000	1000.0
Low Limit	-.02000	-.02000	-.50000	-.10000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	1.0796	.99988	205.65	1.0142	3.5411
Stddev	.0012	.00031	.93	.0034	.0092
%RSD	.11508	.03065	.45338	.33568	.25908
#1	1.0788	1.0001	204.99	1.0118	3.5346
#2	1.0805	.99966	206.31	1.0166	3.5475
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	40.000	30.000	300.00	100.00	200.00
Low Limit	-.01000	-.10000	-.50000	-.02000	-.02000

Sample Name: L030450103S Run Time: 04/29/03 18:50

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	.99802	1.0203	10.882	-.00009	1.0081
Stddev	.00219	.0008	.031	.00138	.0005
%RSD	.21967	.08276	.28637	1507.7	.04555
#1	.99647	1.0209	10.860	.00089	1.0078
#2	.99957	1.0197	10.904	-.00107	1.0085
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	20.000	50.000	30.000	30.000
Low Limit	-.02000	-.02000	-1.0000	-.10000	-.01000

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	1.0234	.97075	.99082	2.8781
Stddev	.0356	.00079	.00061	.0028
%RSD	3.4810	.08094	.06197	.09663
#1	1.0486	.97020	.99039	2.8762
#2	.99821	.97131	.99126	2.8801
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	30.000	20.000	100.00	40.000
Low Limit	-.01000	-.04000	-.01000	-.01000

Method: CLP5 Sample Name: L030450103SD Operator: JYH
Comment: WG139316-06
Run Time: 04/29/03 18:54 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al3082	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	10.097	.21155	.98411	1.1379	10.179
Stddev	.019	.00495	.00248	.0003	.077
%RSD	.19225	2.3405	.25245	.02922	.75237
#1	10.083	.21505	.98235	1.1377	10.233
#2	10.111	.20805	.98587	1.1381	10.125
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	1000.0	10.000	100.00	100.00	20.000
Low Limit	-.10000	-.01000	-.02000	-.10000	-.01000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	1.0025	17.247	.97618	1.0055	.99734
Stddev	.0056	.087	.00171	.0014	.00051
%RSD	.55830	.50474	.17493	.13848	.05155
#1	1.0065	17.309	.97497	1.0045	.99697
#2	.99856	17.186	.97739	1.0064	.99770
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	5.0000	1000.0	30.000	100.00	100.00
Low Limit	-.00050	-.10000	-.00200	-.00500	-.00500

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	1.0495	6.1486	49.485	10.234	11.028
Stddev	.0052	.0050	.187	.065	.039
%RSD	.49171	.08219	.37750	.63968	.35224
#1	1.0531	6.1521	49.353	10.280	11.056
#2	1.0459	6.1450	49.617	10.188	11.001
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	1000.0	400.00	15.000	1000.0
Low Limit	-.02000	-.02000	-.50000	-.10000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	1.0798	1.0021	208.14	1.0120	3.5914
Stddev	.0004	.0009	.96	.0014	.0105
%RSD	.04021	.08767	.46096	.13976	.29224
#1	1.0801	1.0015	208.82	1.0110	3.5840
#2	1.0795	1.0027	207.47	1.0130	3.5988
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	40.000	30.000	300.00	100.00	200.00
Low Limit	-.01000	-.10000	-.50000	-.02000	-.02000

Sample Name: L030450103SD Run Time: 04/29/03 18:54

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	.99308	1.0163	10.904	.00071	1.0065
Stddev	.00095	.0010	.013	.00094	.0020
%RSD	.09578	.09451	.12234	131.89	.19619
#1	.99240	1.0156	10.894	.00005	1.0051
#2	.99375	1.0170	10.913	.00138	1.0079
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	20.000	50.000	30.000	30.000
Low Limit	-.02000	-.02000	-1.0000	-.10000	-.01000

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	.99838	.97073	.99659	2.9089
Stddev	.00755	.00630	.00761	.0089
%RSD	.75657	.64868	.76334	.30716
#1	1.0037	.96627	1.0020	2.9025
#2	.99303	.97518	.99121	2.9152
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	30.000	20.000	100.00	40.000
Low Limit	-.01000	-.04000	-.01000	-.01000

Method: CLP5 Sample Name: L030450002 Operator: JYH
Comment: WG139316-02
Run Time: 04/29/03 18:59 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al3082	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	.19539	.00085	-.00126	.00953	.20948
Stddev	.01102	.00059	.00406	.00062	.00110
%RSD	5.6385	69.596	321.60	6.4792	.52314
#1	.20318	.00043	.00161	.00997	.21026
#2	.18760	.00127	-.00413	.00910	.20871
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	1000.0	10.000	100.00	100.00	20.000
Low Limit	-.10000	-.01000	-.02000	-.10000	-.01000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00017	1.2741	.00263	.00020	.00162
Stddev	.00001	.0200	.00017	.00009	.00001
%RSD	7.0809	1.5671	6.4093	43.093	.72589
#1	.00016	1.2883	.00251	.00014	.00161
#2	.00018	1.2600	.00275	.00027	.00163
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	5.0000	1000.0	30.000	100.00	100.00
Low Limit	-.00050	-.10000	-.00200	-.00500	-.00500

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.01087	.27243	-.03766	-.00009	.09401
Stddev	.00251	.00082	.04011	.00040	.00198
%RSD	23.133	.29998	106.50	429.79	2.1037
#1	.01264	.27301	-.06602	.00019	.09261
#2	.00909	.27185	-.00930	-.00038	.09540
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	1000.0	400.00	15.000	1000.0
Low Limit	-.02000	-.02000	-.50000	-.10000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00616	.00291	163.04	.02095	.57480
Stddev	.00007	.00080	1.61	.00047	.00032
%RSD	1.1185	27.542	.98775	2.2421	.05598
#1	.00612	.00234	164.17	.02061	.57457
#2	.00621	.00347	161.90	.02128	.57503
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	40.000	30.000	300.00	100.00	200.00
Low Limit	-.01000	-.10000	-.50000	-.02000	-.02000

Sample Name: L030450002 Run Time: 04/29/03 18:59

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00508	.00929	.31255	.00138	.00603
Stddev	.00056	.00294	.00220	.00079	.00014
%RSD	10.966	31.637	.70329	57.514	2.2521
#1	-.00547	.01137	.31411	.00194	.00593
#2	-.00468	.00721	.31100	.00082	.00613
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	20.000	50.000	30.000	30.000
Low Limit	-.02000	-.02000	-1.0000	-.10000	-.01000

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	-.00013	-.01543	-.00137	.45345
Stddev	.00046	.00706	.00105	.00076
%RSD	356.80	45.769	76.842	.16870
#1	-.00045	-.01043	-.00212	.45400
#2	.00020	-.02042	-.00063	.45291
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	30.000	20.000	100.00	40.000
Low Limit	-.01000	-.04000	-.01000	-.01000

Method: CLP5 Sample Name: L030450002DP Operator: JYH
Comment: WG139316-07
Run Time: 04/29/03 19:03 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al3082	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	.22653	-.00190	-.00182	.00904	.20904
Stddev	.03295	.00140	.00267	.00073	.00071
%RSD	14.548	73.923	146.99	8.0551	.34031
#1	.24983	-.00091	.00007	.00955	.20954
#2	.20322	-.00289	-.00371	.00852	.20853
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	1000.0	10.000	100.00	100.00	20.000
Low Limit	-.10000	-.01000	-.02000	-.10000	-.01000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00013	1.2532	.00252	.00040	.00171
Stddev	.00001	.0050	.00022	.00009	.00076
%RSD	11.120	.40228	8.7608	22.377	44.459
#1	.00014	1.2568	.00268	.00034	.00225
#2	.00012	1.2497	.00236	.00046	.00118
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	5.0000	1000.0	30.000	100.00	100.00
Low Limit	-.00050	-.10000	-.00200	-.00500	-.00500

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.01225	.27479	.02339	-.00047	.08845
Stddev	.00005	.00344	.02607	.00008	.00474
%RSD	.44875	1.2532	111.48	16.411	5.3603
#1	.01221	.27235	.00495	-.00042	.08510
#2	.01229	.27722	.04182	-.00053	.09180
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	1000.0	400.00	15.000	1000.0
Low Limit	-.02000	-.02000	-.50000	-.10000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00625	.00175	160.47	.02131	.57314
Stddev	.00002	.00037	.80	.00013	.00068
%RSD	.24441	21.197	.50151	.61090	.11842
#1	.00624	.00201	161.04	.02140	.57266
#2	.00626	.00149	159.91	.02122	.57362
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	40.000	30.000	300.00	100.00	200.00
Low Limit	-.01000	-.10000	-.50000	-.02000	-.02000

Sample Name: L030450002DP Run Time: 04/29/03 19:03

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00207	.01133	.31227	-.00079	.00661
Stddev	.00263	.00131	.00122	.00138	.00004
%RSD	127.25	11.563	.39195	174.98	.63759
#1	-.00021	.01225	.31313	.00019	.00658
#2	-.00392	.01040	.31140	-.00177	.00664
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	20.000	50.000	30.000	30.000
Low Limit	-.02000	-.02000	-1.0000	-.10000	-.01000

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	.00028	-.01498	-.00076	.44826
Stddev	.00123	.00449	.00002	.00028
%RSD	432.04	30.002	3.2235	.06151
#1	-.00058	-.01180	-.00074	.44806
#2	.00115	-.01816	-.00078	.44845
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	30.000	20.000	100.00	40.000
Low Limit	-.01000	-.04000	-.01000	-.01000

Method: CLP5 Sample Name: L030460501 Operator: JYH
Comment:
Run Time: 04/29/03 19:07 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al3082	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	102.95	.04095	5.3558	2.3579	.01039
Stddev	.62	.00080	.0118	.0052	.00040
%RSD	.60611	1.9565	.21988	.22010	3.8970
#1	103.39	.04038	5.3475	2.3616	.01068
#2	102.51	.04152	5.3641	2.3543	.01010
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	1000.0	10.000	100.00	100.00	20.000
Low Limit	-.10000	-.01000	-.02000	-.10000	-.01000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.03330	62.631	.05354	.41109	.67135
Stddev	.00014	.174	.00064	.00063	.00062
%RSD	.41276	.27742	1.2046	.15259	.09195
#1	.03320	62.508	.05309	.41065	.67092
#2	.03339	62.754	.05400	.41154	.67179
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	5.0000	1000.0	30.000	100.00	100.00
Low Limit	-.00050	-.10000	-.00200	-.00500	-.00500

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	2.2862	455.92	50.894	1.8674	17.043
Stddev	.0028	.89	.117	.0038	.002
%RSD	.12324	.19469	.22899	.20327	.01299
#1	2.2842	455.29	50.812	1.8647	17.045
#2	2.2881	456.55	50.977	1.8701	17.041
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	1000.0	400.00	15.000	1000.0
Low Limit	-.02000	-.02000	-.50000	-.10000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	3.4970	.14479	98.858	1.1445	.02273
Stddev	.0018	.00032	.092	.0013	.00084
%RSD	.05115	.21779	.09272	.11524	3.6834
#1	3.4957	.14501	98.923	1.1436	.02332
#2	3.4983	.14456	98.794	1.1455	.02214
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	40.000	30.000	300.00	100.00	200.00
Low Limit	-.01000	-.10000	-.50000	-.02000	-.02000

Sample Name: L030460501 Run Time: 04/29/03 19:07

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	L -.03385	.27981	10.731	.09218	2.4973
Stddev	.00620	.00151	.008	.00069	.0255
%RSD	18.321	.54122	.07582	.75072	1.0209
#1	-.03823	.28088	10.736	.09267	2.4793
#2	-.02946	.27874	10.725	.09169	2.5153
Check ?	LC Fail	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	20.000	50.000	30.000	30.000
Low Limit	-.02000	-.02000	-1.0000	-.10000	-.01000

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	4.0467	.14457	.84827	6.5738
Stddev	.0012	.00191	.00153	.0115
%RSD	.02935	1.3223	.18060	.17562
#1	4.0475	.14321	.84936	6.5657
#2	4.0458	.14592	.84719	6.5820
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	30.000	20.000	100.00	40.000
Low Limit	-.01000	-.04000	-.01000	-.01000

Method: CLP5 Sample Name: L030460501S Operator: JYH
Comment:
Run Time: 04/29/03 19:12 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	A13082	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	111.89	.24754	6.2124	3.1418	9.7467
Stddev	.06	.00044	.0372	.0056	.0247
%RSD	.05407	.17819	.59809	.17749	.25333
#1	111.84	.24722	6.1861	3.1379	9.7642
#2	111.93	.24785	6.2387	3.1458	9.7293
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	1000.0	10.000	100.00	100.00	20.000
Low Limit	-.10000	-.01000	-.02000	-.10000	-.01000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	1.0026	70.907	.99444	1.3383	1.5879
Stddev	.0019	.276	.00442	.0076	.0057
%RSD	.18804	.38977	.44462	.56770	.35666
#1	1.0012	70.712	.99131	1.3330	1.5839
#2	1.0039	71.103	.99756	1.3437	1.5919
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	5.0000	1000.0	30.000	100.00	100.00
Low Limit	-.00050	-.10000	-.00200	-.00500	-.00500

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	3.2369	445.69	98.340	12.300	26.269
Stddev	.0002	1.83	.130	.026	.067
%RSD	.00660	.41021	.13200	.21208	.25431
#1	3.2371	444.40	98.248	12.282	26.221
#2	3.2368	446.98	98.432	12.319	26.316
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	1000.0	400.00	15.000	1000.0
Low Limit	-.02000	-.02000	-.50000	-.10000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	4.2275	1.0777	143.92	2.0712	.95929
Stddev	.0081	.0069	.31	.0095	.00731
%RSD	.19186	.64267	.21456	.45972	.76252
#1	4.2218	1.0728	143.70	2.0644	.95412
#2	4.2332	1.0826	144.14	2.0779	.96446
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	40.000	30.000	300.00	100.00	200.00
Low Limit	-.01000	-.10000	-.50000	-.02000	-.02000

Sample Name: L030460501S Run Time: 04/29/03 19:12

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	.93162	1.2241	19.544	.08809	3.3977
Stddev	.00787	.0000	.053	.00044	.0202
%RSD	.84432	.00172	.26932	.50425	.59346
#1	.92606	1.2241	19.507	.08778	3.3835
#2	.93718	1.2241	19.582	.08840	3.4120
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	20.000	50.000	30.000	30.000
Low Limit	-.02000	-.02000	-1.0000	-.10000	-.01000

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	5.0138	.47578	1.8343	7.4331
Stddev	.0021	.00282	.0001	.0345
%RSD	.04106	.59343	.00274	.46435
#1	5.0124	.47378	1.8343	7.4087
#2	5.0153	.47778	1.8344	7.4575
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	30.000	20.000	100.00	40.000
Low Limit	-.01000	-.04000	-.01000	-.01000

Method: CLP5 Sample Name: CCV Operator:
Comment:
Run Time: 04/29/03 19:16 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al3082	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	9.8544	.39901	.38757	9.6147	1.0083
Stddev	.0735	.00264	.00248	.0432	.0016
%RSD	.74605	.66077	.63921	.44901	.15616
#1	9.9064	.40087	.38582	9.5841	1.0071
#2	9.8024	.39714	.38932	9.6452	1.0094
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	10.000	.40000	.40000	10.000	1.0000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.04968	9.8167	.04982	.19680	.49869
Stddev	.00007	.0112	.00048	.00020	.00198
%RSD	.14038	.11359	.95825	.10398	.39691
#1	.04963	9.8088	.04948	.19666	.49729
#2	.04973	9.8246	.05016	.19695	.50009
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.05000	10.000	.05000	.20000	.50000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.49786	3.9475	49.697	.99948	10.038
Stddev	.00113	.0444	.141	.00103	.008
%RSD	.22779	1.1243	.28339	.10337	.07968
#1	.49866	3.9161	49.797	.99875	10.032
#2	.49706	3.9789	49.597	1.0002	10.043
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000	4.0000	50.000	1.0000	10.000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.49494	.99600	50.467	.49341	.49397
Stddev	.00144	.00541	.178	.00265	.00245
%RSD	.29175	.54345	.35302	.53638	.49509
#1	.49392	.99217	50.593	.49153	.49224
#2	.49596	.99982	50.341	.49528	.49570
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000	1.0000	50.000	.50000	.50000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Sample Name: CCV Run Time: 04/29/03 19:16

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	1.2026	.39412	Q -.01126	.99472	.98283
Stddev	.0004	.00107	.00396	.00540	.00191
%RSD	.03290	.27084	35.170	.54244	.19448
#1	1.2028	.39337	-.00846	.99091	.98419
#2	1.2023	.39488	-.01406	.99854	.98148
Check ?	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass
Value	1.2000	.40000	5.0000	1.0000	1.0000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	.95677	.50241	.98912	.98487
Stddev	.00008	.00266	.00293	.00476
%RSD	.00872	.52974	.29615	.48286
#1	.95683	.50429	.98705	.98151
#2	.95671	.50053	.99119	.98823
Check ?	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	.50000	1.0000	1.0000
Range	10.000%	10.000%	10.000%	10.000%

Method: CLP5 Sample Name: CCB Operator:
Comment:
Run Time: 04/29/03 19:20 Type: Blank Mode: CONC Corr.Fact: 1.000000

Elem	Al3082	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00946	-.00077	-.00028	.01247	.00053
Stddev	.00711	.00136	.00267	.00324	.00026
%RSD	75.142	176.89	950.59	25.951	48.805
#1	.01449	-.00172	.00161	.01475	.00072
#2	.00443	.00019	-.00217	.01018	.00035
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.20000	.00500	.01000	.05000	.00250
Low Limit	-.20000	-.00500	-.01000	-.05000	-.00250

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00001	.00045	.00043	.00006	.00024
Stddev	.00006	.00831	.00004	.00042	.00014
%RSD	1077.3	1855.3	9.1937	740.77	56.556
#1	-.00003	-.00543	.00045	.00036	.00014
#2	.00004	.00633	.00040	-.00024	.00034
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.00025	.05000	.00100	.00250	.00250
Low Limit	-.00025	-.05000	-.00100	-.00250	-.00250

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00209	.00318	.13691	-.00058	.01451
Stddev	.00343	.00238	.03625	.00004	.00347
%RSD	164.05	74.718	26.474	7.6149	23.948
#1	.00033	.00150	.16254	-.00061	.01205
#2	-.00452	.00487	.11128	-.00055	.01696
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.01000	.02000	.25000	.05000	.10000
Low Limit	-.01000	-.02000	-.25000	-.05000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00009	.00043	.02198	-.00031	.00136
Stddev	.00009	.00046	.00532	.00002	.00038
%RSD	101.42	105.90	24.208	5.7364	27.805
#1	.00015	.00076	.01822	-.00030	.00110
#2	.00002	.00011	.02575	-.00033	.00163
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.00250	.05000	.10000	.01000	.01000
Low Limit	-.00250	-.05000	-.10000	-.01000	-.01000

Sample Name: CCB Run Time: 04/29/03 19:20

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00477	.00069	.00129	.00068	.00048
Stddev	.00249	.00441	.00186	.00099	.00059
%RSD	52.217	639.88	143.57	145.94	123.84
#1	-.00653	.00381	.00260	.00138	.00089
#2	-.00301	-.00243	-.00002	-.00002	.00006
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.02000	.01000	.25000	.20000	.00500
Low Limit	-.02000	-.01000	-.25000	-.20000	-.00500

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	.00001	.00724	-.00091	.00022
Stddev	.00020	.00170	.00088	.00003
%RSD	1412.3	23.455	97.133	15.342
#1	-.00013	.00604	-.00153	.00019
#2	.00016	.00844	-.00028	.00024
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.01500	.02000	.00728	.01000
Low Limit	-.01500	-.02000	-.00728	-.01000

Method: CLP5 Sample Name: L030460501PS Operator: JYH
Comment:
Run Time: 04/29/03 19:25 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al3082	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	104.03	.26068	5.7529	3.0280	10.353
Stddev	.97	.01078	.0294	.0307	.525
%RSD	.92929	4.1338	.51150	1.0139	5.0663
#1	104.71	.25306	5.7320	3.0063	9.9825
#2	103.34	.26830	5.7737	3.0497	10.724
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	1000.0	10.000	100.00	100.00	20.000
Low Limit	-.10000	-.01000	-.02000	-.10000	-.01000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	1.0546	66.039	1.0348	1.3550	1.5763
Stddev	.0484	.246	.0392	.0394	.0386
%RSD	4.5861	.37275	3.7921	2.9069	2.4510
#1	1.0204	65.865	1.0071	1.3271	1.5490
#2	1.0888	66.213	1.0625	1.3828	1.6036
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	5.0000	1000.0	30.000	100.00	100.00
Low Limit	-.00050	-.10000	-.00200	-.00500	-.00500

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	3.1030	407.20	96.423	12.603	25.122
Stddev	.0480	.81	1.984	.538	.487
%RSD	1.5479	.19967	2.0575	4.2694	1.9370
#1	3.0691	407.77	95.020	12.222	24.778
#2	3.1370	406.62	97.825	12.983	25.466
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	1000.0	400.00	15.000	1000.0
Low Limit	-.02000	-.02000	-.50000	-.10000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	4.0213	1.1178	138.62	2.0315	1.0037
Stddev	.0321	.0420	1.38	.0384	.0381
%RSD	.79751	3.7567	.99563	1.8904	3.7971
#1	3.9987	1.0881	137.64	2.0043	.97677
#2	4.0440	1.1475	139.59	2.0586	1.0307
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	40.000	30.000	300.00	100.00	200.00
Low Limit	-.01000	-.10000	-.50000	-.02000	-.02000

Sample Name: L030460501PS Run Time: 04/29/03 19:25

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	.98500	1.2408	19.145	.08417	3.2217
Stddev	.04068	.0286	.302	.00124	.0361
%RSD	4.1302	2.3093	1.5766	1.4679	1.1197
#1	.95623	1.2206	18.932	.08505	3.1962
#2	1.0138	1.2611	19.359	.08330	3.2472
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	20.000	50.000	30.000	30.000
Low Limit	-.02000	-.02000	-1.0000	-.10000	-.01000

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	4.7469	1.1175	1.8054	6.9417
Stddev	.0157	.0388	.0474	.0174
%RSD	.33084	3.4719	2.6228	.25019
#1	4.7358	1.0900	1.7720	6.9294
#2	4.7580	1.1449	1.8389	6.9540
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	30.000	20.000	100.00	40.000
Low Limit	-.01000	-.04000	-.01000	-.01000

Method: CLP5 Sample Name: L030453601 Operator: JYH
Comment:
In Time: 04/29/03 19:29 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al3082	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	.26943	-.00017	.00158	.03408	.11180
Stddev	.02157	.00005	.00218	.00185	.00031
%RSD	8.0066	29.651	137.85	5.4255	.27456
#1	.28468	-.00013	.00312	.03539	.11202
#2	.25418	-.00020	.00004	.03278	.11158
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	1000.0	10.000	100.00	100.00	20.000
Low Limit	-.10000	-.01000	-.02000	-.10000	-.01000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00006	39.746	.00087	.00401	.00057
Stddev	.00003	.058	.00008	.00056	.00024
%RSD	47.638	.14551	9.3940	13.986	42.597
#1	.00004	39.705	.00093	.00362	.00074
#2	.00007	39.787	.00081	.00441	.00040
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	5.0000	1000.0	30.000	100.00	100.00
Low Limit	-.00050	-.10000	-.00200	-.00500	-.00500

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00056	1.2822	.34982	.00183	1.2512
Stddev	.00318	.0003	.02281	.00016	.0241
%RSD	569.31	.02295	6.5192	8.7037	1.9266
#1	.00280	1.2820	.33369	.00172	1.2342
#2	-.00169	1.2824	.36594	.00194	1.2683
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	1000.0	400.00	15.000	1000.0
Low Limit	-.02000	-.02000	-.50000	-.10000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.61204	.00086	144.24	.00350	1.0839
Stddev	.00083	.00015	.62	.00006	.0011
%RSD	.13590	17.239	.43210	1.8457	.10141
#1	.61263	.00076	144.68	.00354	1.0847
#2	.61145	.00097	143.80	.00345	1.0831
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	40.000	30.000	300.00	100.00	200.00
Low Limit	-.01000	-.10000	-.50000	-.02000	-.02000

Sample Name: L030453601 Run Time: 04/29/03 19:29

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00929	-.00160	.60410	.00064	.07093
Stddev	.00358	.00131	.00113	.00173	.00001
%RSD	38.489	81.644	.18786	269.45	.01390
#1	-.00676	-.00068	.60490	-.00058	.07094
#2	-.01182	-.00252	.60330	.00187	.07093
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	20.000	50.000	30.000	30.000
Low Limit	-.02000	-.02000	-1.0000	-.10000	-.01000

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	.00548	-.01121	-.00232	.06492
Stddev	.00005	.00167	.00070	.00027
%RSD	.97518	14.869	30.240	.40891
#1	.00552	-.01003	-.00281	.06511
#2	.00545	-.01239	-.00182	.06474
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	30.000	20.000	100.00	40.000
Low Limit	-.01000	-.04000	-.01000	-.01000

Method: CLP5 Sample Name: L030453601PS Operator: JYH
Comment:
Run Time: 04/29/03 19:33 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al3082	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	10.761	.22355	1.0387	1.0754	10.481
Stddev	.037	.00364	.0068	.0037	.038
%RSD	.34633	1.6278	.65695	.34013	.36638
#1	10.735	.22098	1.0339	1.0728	10.453
#2	10.787	.22613	1.0435	1.0780	10.508
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	1000.0	10.000	100.00	100.00	20.000
Low Limit	-.10000	-.01000	-.02000	-.10000	-.01000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	1.0474	46.654	1.0125	1.0374	1.0451
Stddev	.0034	.123	.0023	.0021	.0023
%RSD	.32702	.26297	.22327	.19720	.21985
#1	1.0450	46.568	1.0109	1.0360	1.0435
#2	1.0498	46.741	1.0141	1.0389	1.0467
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	5.0000	1000.0	30.000	100.00	100.00
Low Limit	-.00050	-.10000	-.00200	-.00500	-.00500

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	1.0391	2.3594	51.691	10.680	11.612
Stddev	.0016	.0050	.036	.044	.117
%RSD	.15161	.21110	.06897	.40909	1.0038
#1	1.0380	2.3558	51.716	10.711	11.529
#2	1.0402	2.3629	51.665	10.649	11.694
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	1000.0	400.00	15.000	1000.0
Low Limit	-.02000	-.02000	-.50000	-.10000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	1.5980	1.0441	176.61	1.0519	2.0427
Stddev	.0039	.0036	.39	.0035	.0063
%RSD	.24529	.34426	.21942	.33654	.30742
#1	1.5952	1.0415	176.89	1.0494	2.0383
#2	1.6007	1.0466	176.34	1.0544	2.0472
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	40.000	30.000	300.00	100.00	200.00
Low Limit	-.01000	-.10000	-.50000	-.02000	-.02000

Sample Name: L030453601PS Run Time: 04/29/03 19:33

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	1.0498	1.0326	11.278	-.00051	1.0963
Stddev	.0043	.0095	.025	.00059	.0033
%RSD	.40477	.92043	.21792	116.03	.30035
#1	1.0468	1.0259	11.260	-.00093	1.0939
#2	1.0528	1.0393	11.295	-.00009	1.0986
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	20.000	50.000	30.000	30.000
Low Limit	-.02000	-.02000	-1.0000	-.10000	-.01000

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	1.0944	1.0263	1.0416	1.1115
Stddev	.0085	.0024	.0027	.0035
%RSD	.77614	.22995	.25515	.31602
#1	1.0884	1.0279	1.0397	1.1090
#2	1.1004	1.0246	1.0435	1.1140
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	30.000	20.000	100.00	40.000
Low Limit	-.01000	-.04000	-.01000	-.01000

Method: CLP5 Sample Name: CCV Operator:
Comment:
Run Time: 04/29/03 19:38 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al3082	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	9.8668	.39729	.38408	9.6191	1.0111
Stddev	.0623	.00010	.00048	.0013	.0021
%RSD	.63100	.02518	.12588	.01347	.21055
#1	9.9108	.39722	.38442	9.6182	1.0127
#2	9.8227	.39736	.38374	9.6200	1.0096
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	10.000	.40000	.40000	10.000	1.0000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.04955	9.8147	.04943	.19753	.49721
Stddev	.00011	.0085	.00005	.00049	.00114
%RSD	.23165	.08628	.09334	.24832	.22837
#1	.04963	9.8087	.04940	.19719	.49641
#2	.04947	9.8207	.04947	.19788	.49801
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.05000	10.000	.05000	.20000	.50000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.49563	3.8839	49.095	.98821	9.9402
Stddev	.00091	.0069	.281	.00339	.0790
%RSD	.18274	.17736	.57333	.34335	.79444
#1	.49499	3.8791	48.896	.99061	9.9960
#2	.49627	3.8888	49.294	.98581	9.8843
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000	4.0000	50.000	1.0000	10.000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.49516	1.0005	49.888	.49383	.49099
Stddev	.00107	.0041	.399	.00162	.00045
%RSD	.21589	.40937	.80000	.32889	.09234
#1	.49440	.99757	49.606	.49268	.49131
#2	.49592	1.0034	50.170	.49497	.49066
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000	1.0000	50.000	.50000	.50000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Sample Name: CCV Run Time: 04/29/03 19:38

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	1.2078	.38956	Q -.01122	.99304	.97921
Stddev	.0090	.00117	.00013	.00095	.00056
%RSD	.74514	.30052	1.1453	.09541	.05750
#1	1.2015	.39039	-.01131	.99237	.97881
#2	1.2142	.38874	-.01113	.99371	.97961
Check ?	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass
Value	1.2000	.40000	5.0000	1.0000	1.0000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	.95516	.50001	.97785	.98538
Stddev	.00094	.00092	.00088	.00043
%RSD	.09813	.18330	.08999	.04414
#1	.95582	.50066	.97847	.98507
#2	.95450	.49936	.97722	.98569
Check ?	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	.50000	1.0000	1.0000
Range	10.000%	10.000%	10.000%	10.000%

Method: CLP5 Sample Name: CCB Operator:
Comment:
Run Time: 04/29/03 19:42 Type: Blank Mode: CONC Corr.Fact: 1.000000

Elem	Al3082	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00923	-.00187	-.00021	.01190	.00002
Stddev	.01753	.00163	.00000	.00284	.00017
%RSD	189.99	87.359	.55117	23.827	753.05
#1	.00317	-.00302	-.00021	.01391	.00014
#2	-.02162	-.00071	-.00021	.00990	-.00009
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.20000	.00500	.01000	.05000	.00250
Low Limit	-.20000	-.00500	-.01000	-.05000	-.00250

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00001	.01284	.00030	.00023	-.00001
Stddev	.00002	.00403	.00001	.00008	.00007
%RSD	211.07	31.372	4.7430	34.849	705.71
#1	-.00003	.01569	.00029	.00017	-.00006
#2	.00001	.00999	.00031	.00028	.00004
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.00025	.05000	.00100	.00250	.00250
Low Limit	-.00025	-.05000	-.00100	-.00250	-.00250

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00274	-.00191	.05491	-.00058	.01359
Stddev	.00161	.00264	.02686	.00092	.01296
%RSD	58.852	138.42	48.924	159.91	95.363
#1	-.00160	-.00377	.07391	.00008	.00443
#2	-.00388	-.00004	.03591	-.00123	.02275
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.01000	.02000	.25000	.05000	.10000
Low Limit	-.01000	-.02000	-.25000	-.05000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00013	.00038	.03058	-.00067	-.00030
Stddev	.00006	.00041	.00352	.00017	.00293
%RSD	46.124	108.91	11.502	24.966	961.54
#1	.00009	.00067	.02809	-.00079	.00176
#2	.00017	.00009	.03307	-.00055	-.00237
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.00250	.05000	.10000	.01000	.01000
Low Limit	-.00250	-.05000	-.10000	-.01000	-.01000

Sample Name: CCB Run Time: 04/29/03 19:42

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00604	-.00307	-.00486	.00047	.00016
Stddev	.00152	.00286	.00215	.00030	.00012
%RSD	25.198	93.114	44.169	63.376	76.648
#1	-.00497	-.00105	-.00334	.00026	.00007
#2	-.00712	-.00509	-.00637	.00068	.00025
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.02000	.01000	.25000	.20000	.00500
Low Limit	-.02000	-.01000	-.25000	-.20000	-.00500

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	.00001	.00916	-.00135	.00022
Stddev	.00031	.00474	.00083	.00008
%RSD	2092.0	51.697	61.153	35.627
#1	-.00020	.00581	-.00194	.00027
#2	.00023	.01251	-.00077	.00016
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.01500	.02000	.00728	.01000
Low Limit	-.01500	-.02000	-.00728	-.01000

Metals

Date: 4/30/03
Analyst: JYH
Method: 6010B
Instrument: IRIS
Work Group: 139383, 138335, 139358, 139483

	Analyst
Calibration/Linearity	
ICV/CCV	
ICB/CCB	
icsa/icsab/cri	
Blank/LCS	
MS/MSD	
Postspike/Serial Dilution	
Duplicate	
Record Results	✓
Excel Spreadsheets	
Results Reporting / Data Qualifiers	
Calculations & Correct Factors	
Reanalysis Assign	
Instrument Failure/Reassign	
Case Narrative	✓
QA Approval - Seedpak 3	
Check for Completeness	
Level IV Data 125/2	✓ 4-554
	4-594

WG 139492

Primary Reviewer Initials & Date Checked JYH 4/30/03

Secondary Reviewer Initials & Date Checked DA 5-01-03

✓ • Check for compliance with Method and project-specific requirements
✓ • Check the completeness of the reported information
✓ • Check the information for the report narrative
✓ • Check the reasonableness of results

Supervisory Review Initials & Date Checked MM3 5/1/03

Comments:

✓ - Checked & OK
NA - Not Applicable
DL - Diluted Out

KEMRON ENVIRONMENTAL SERVICES
ICP (ICP/MS) RUN LOGBOOK

ANALYST SYM DATE 4/30/03 TIME 1100
METHOD # 6010B SOP # ME600E Rev # 7. WORK GROUP # 139783, 139335, 139358, 139468
CAL STD SOURCE M2-17-35B ICV/CCV SOURCE M2-17-32B
ICS AB SOURCE M2-17-33A ICS A SOURCE M2-17-36A POST SPK SOURCE DS5-053-6
Instrument ID: TJA IRIS: ✓ Data File: 20030430.1 Perkin Elmer Optima: Perkin Elmer ELAN:

Cup #	Sample No.	Dil	Prep Conc	Autosampler Runs	Cup #	Sample No.	Dil	Prep Conc	Autosampler Runs
	S0				27.	L0304450001			
	1 1/200				28.	L0304454306			LW/LWB x2
	2 1/100				29.	PBW J5			LWG139239-03
	3 1/4				30.	LCSW J5			04
	4 1/2				31.	L0304581006			01
	5			LW/LCB	32.	06S			05
	ICSA				33.	06SD			06
	ICSAB			LW/LCB	34.	L0304562001			02
1.	TC BLK 4/28				35.	01DP			07
2.	L0304501004				36.	02			
3.	05				37.	02PS			LW/LWB
4.	L0304543002				38.	02SDL			
5.	04				39.	PBW P5			LWG139207-03
6.	05				40.	LCSW P5			04
7.	07				41.	L0304557403			01
8.	08				42.	03S			05
9.	L0304554001				43.	03SD			06
10.	01S			LW/LCB	44.	02			07
11.	L0304594003				45.	02DP			07
12.	TC FBLK 4/28				46.	01			
13.	L0304500002	2			47.	01PS			LW/LWB
14.	+1 1ppm Pb				48.	01SDL			
15.	+2				49.	04			
16.	+3			LW/LWB	50.	05			
17.	L0304501001	2			51.	06			LW/LCB
18.	L0304501002				52.				
19.	L0304543001				53.				
20.	01S				54.				
21.	L0304594001				55.				
22.	01S				56.				
23.	01				57.				
24.	L0304473001			LW/LWB	58.				
25.	L0304585001				59.				
26.	01S				60.				SYM 4/30/03

Reviewed by: MMB 05/01/03

Comments:

Note: No entry for Dil represents 1X Dilution

Autosampler Run Key:
CCV - Continuing Calibration Verification
CCB = Continuing Calibration Blank
FRS = Full Recalibration Sequence
R = Analyst Rerun

INORGANIC ANALYSES DATA SHEET
INITIAL MULTIPOINT CALIBRATION

Analytical Method: 6010B

AAB#:

Lab Name: KEMRON ENVIRONMENTAL SERVICES

Contract #:

Date of Initial Calibration: 30-Apr-03

Initial Calibration ID: IRIS-ICP 30-APR-2003

Instrument ID: IRIS-ICP

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

Analyte	Std 1	RF 1	Std 2	RF 2	Std 3	RF 3	Std 4	RF 4	Std 5	RF 5	Std 6	RF 6	r	Q
Barium	0	0	0.01	0.009526	0.02	0.019	0.5	0.4767	1	0.9843	2	2.0404	0.99977	

r = correlation coefficient

Comments:

Forms by ChemSW(707)864-0815;v1.0;12/1/97

AFCEE FORM I-3B

INORGANIC ANALYSES DATA SHEET
INITIAL MULTIPOINT CALIBRATION

Analytical Method: 6010B

AAB#:

Lab Name: KEMRON ENVIRONMENTAL SERVICES

Contract #:

Date of Initial Calibration: 30-Apr-03

Initial Calibration ID: IRIS-ICP 30-APR-2003

Instrument ID: IRIS-ICP

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

Analyte	Std 1	RF 1	Std 2	RF 2	Std 3	RF 3	Std 4	RF 4	Std 5	RF 5			r	Q
Silver	0	0	0.008	0.0069	0.2	0.1858	0.4	0.3824	0.8	0.7864			0.99985	
Arsenic	0	0	0.008	0.0055	0.2	0.1962	0.4	0.3996	0.8	0.8052			0.99998	
Cadmium	0	0	0.001	0.0013	0.025	0.0263	0.05	0.054	0.1	0.11			0.99990	
Lead	0	0	0.01	0.007	0.25	0.244	0.5	0.5004	1	1.0252			0.99989	
Selenium	0	0	0.008	0.0067	0.2	0.1806	0.4	0.4326	0.8	0.8653			0.99908	

r = correlation coefficient

Comments:

Forms by ClearSW(707)894-0845:v1.0 12/1/97

AFCEE FORM 1-3B

KEMRON ENVIRONMENTAL SERVICES
FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

INSTRUMENT: IRIS - Jarrell Ash
METHOD: 6010B
ANALYST: Jyh
DATE: 4/30/03

UNITS: ug/L

ICV Time: 11:35 AM
CCV1 Time: 11:55 AM
CCV2 Time: 1:16 PM

	Initial Calibration Verification			Continuing Calibration Verification					Q
				CCV1			CCV2		
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	10000	9890	98.9	10000	9920	99.2	9540	95.4	
Antimony	1200	1210	100.8	1200	1210	100.8	1200	100.0	
Arsenic	400	390	97.5	400	390	97.5	376	94.0	
Barium	1000	997	99.7	1000	995	99.5	974	97.4	
Beryllium	50	49.0	98.0	50	49.1	98.2	47.7	95.4	
Cadmium	50	49.4	98.8	50	49.4	98.8	48.2	96.4	
Calcium	10000	9770	97.7	10000	9790	97.9	9640	96.4	
Chromium	500	495	99.0	500	495	99.0	486	97.2	
Cobalt	200	198	99.0	200	198	99.0	195	97.5	
Copper	500	491	98.2	500	489	97.8	471	94.2	
Iron	4000	3930	98.3	4000	3930	98.3	3850	96.3	
Lead	500	493	98.6	500	492	98.4	486	97.2	
Magnesium	10000	9860	98.6	10000	9910	99.1	9600	96.0	
Manganese	500	492	98.4	500	492	98.4	483	96.6	
Nickel	500	496	99.2	500	498	99.6	488	97.6	
Potassium	50000	52800	105.6	50000	53300	106.6	52800	105.6	
Selenium	400	405	101.3	400	403	100.8	386	96.5	
Silver	400	393	98.3	400	390	97.5	384	96.0	
Sodium	50000	53700	107.4	50000	54000	108.0	53500	107.0	
Thallium	500	507	101.4	500	512	102.4	496	99.2	
Vanadium	1000	993	99.3	1000	987	98.7	968	96.8	
Zinc	1000	998	99.8	1000	996	99.6	981	98.1	

(1) Control Limits: 90-110%

KEMRON ENVIRONMENTAL SERVICES
FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

INSTRUMENT: IRIS - Jarrell Ash
METHOD: 6010B
ANALYST: Jyh
DATE: 4/30/03

UNITS: ug/L

ICV Time: 11:35 AM
CCV1 Time: 1:57 PM
CCV2 Time:

	Initial Calibration Verification			Continuing Calibration Verification CCVI			CCV2		Q
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	10000	9890	98.9	10000	9540	95.4			
Antimony	1200	1210	100.8	1200	1210	100.8			
Arsenic	400	390	97.5	400	379	94.8			
Barium	1000	997	99.7	1000	985	98.5			
Beryllium	50	49.0	98.0	50	48.1	96.2			
Cadmium	50	49.4	98.8	50	48.3	96.6			
Calcium	10000	9770	97.7	10000	9770	97.7			
Chromium	500	495	99.0	500	493	98.6			
Cobalt	200	198	99.0	200	198	99.0			
Copper	500	491	98.2	500	475	95.0			
Iron	4000	3930	98.3	4000	3900	97.5			
Lead	500	493	98.6	500	496	99.2			
Magnesium	10000	9860	98.6	10000	9670	96.7			
Manganese	500	492	98.4	500	490	98.0			
Nickel	500	496	99.2	500	495	99.0			
Potassium	50000	52800	105.6	50000	53000	106.0			
Selenium	400	405	101.3	400	400	100.0			
Silver	400	393	98.3	400	386	96.5			
Sodium	50000	53700	107.4	50000	53600	107.2			
Thallium	500	507	101.4	500	506	101.2			
Vanadium	1000	993	99.3	1000	978	97.8			
Zinc	1000	998	99.8	1000	986	98.6			

(1) Control Limits: 90-110%

KEMRON ENVIRONMENTAL SERVICES
FORM 3 - BLANKS

INSTRUMENT: IRIS - Jarrell Ash
METHOD: 6010B
ANALYST: Jyh
DATE: 4/30/03

UNITS: ug/L

ICB Time: 11:40 AM
CCB1 Time: 12:00 PM
CCB2 Time: 1:21 PM
CCB3 Time: 2:02 PM

Analyte	Initial Calibration Blank(ug/L)		Continuing Calibration Blank (ug/L) CCB1 1		CCB2 2		CCB3 3	
Aluminum	-7.82		2.52		5.88		6.08	
Antimony	-0.80		7.32		2.99		2.78	
Arsenic	-0.20		0.21		-0.83		-2.29	
Barium	-0.21		0.06		0.42		0.14	
Beryllium	0.05		0.03		0.03		0.01	
Cadmium	0.10		0.12		0.01		-0.59	
Calcium	-12.1		4.48		-16.2		-1.9	
Chromium	-0.11		0.01		0.13		0.34	
Cobalt	0.08		-0.10		-0.01		0.52	
Copper	3.21		-0.85		-1.64		-0.75	
Iron	1.24		1.04		-0.49		-0.25	
Lead	-2.48		6.47		4.22		5.24	
Magnesium	9.37		10.2		0.67		-8.18	
Manganese	-0.02		-0.02		0.06		0.06	
Nickel	0.24		0.70		-0.14		-0.12	
Potassium	-31.9		-21.2		-1.05		-11.1	
Selenium	1.76		-0.12		2.35		6.5	
Silver	2.23		1.47		-0.35		1.12	
Sodium	-0.22		2.34		10.6		9	
Thallium	5.85		9.03		1.78		-0.96	
Vanadium	0.99		-0.44		2.17		2.38	
Zinc	0.25		0		0.29		0.12	

U = Result is less than MDL
B = Result is between MDL and RL

KEMRON ENVIRONMENTAL SERVICES
FORM 4A - INTERFERENCE CHECK SAMPLE

INSTRUMENT ID: IRIS - Jarrell Ash
METHOD: 6010B
ANALYST: Jyh
DATE: 4/30/03

UNITS: ug/L

Initial ICSA Time: 11:45 AM
Initial ICSAB Time: 11:50 AM
Final ICSA Time:
Final ICSAB Time:

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found Sol. AB	Final Found %R	Q
Aluminum	250000	250000	238000	240000	96.0				
Antimony	0	500	-9.79	479	95.8				
Arsenic	0	250	-1.61	244	97.6				
Barium	0	250	-0.11	256	102.4				
Beryllium	0	250	-0.03	234	93.6				
Cadmium	0	500	0.03	507	101.4				
Calcium	250000	250000	250000	253000	101.2				
Chromium	0	250	0.96	247	98.8				
Cobalt	0	250	7.30	253	101.2				
Copper	0	250	4.22	260	104.0				
Iron	100000	100000	87800	93800	93.8				
Lead	0	500	-14.6	492	98.4				
Magnesium	250000	250000	252000	255000	102.0				
Manganese	0	250	-4.09	229	91.6				
Nickel	0	500	0.38	484	96.8				
Potassium	0	5000	50.9	4880	97.6				
Selenium	0	250	-7.90	210	84.0				
Silver	0	500	6.00	511	102.2				
Sodium	0	5000	16.5	4990	99.8				
Thallium	0	500	-30.0	499	99.8				
Vanadium	0	250	2.21	252	100.8				
Zinc	0	500	7.86	504	100.8				

(1) Control Limits: 80-120%

ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Instrument ID: IRIS-Jarrell Ash

Date: January 17, 2003

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	As	Ba
Aluminum	308.20	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.80	0.0000500	0.0000000	0.0001000	0.0000000	0.0007700	0.0000000
Arsenic	189.00	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	455.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.00	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.70	0.0000000	0.0000000	-0.0006000	0.0000000	0.0000000	0.0000000
Cadmium	228.80	0.0000000	0.0000000	-0.0000200	0.0000000	0.0200000	-0.0015000
Calcium	373.70	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.70	0.0000000	0.0000000	0.0000380	0.0000000	0.0000000	0.0000000
Cobalt	228.60	0.0000000	0.0000000	0.0000100	0.0000000	0.0000000	0.0000000
Copper	324.70	0.0000300	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.40	0.0000000	0.0000000	0.0000000	0.0000400	-0.0023000	0.0000000
Lead	220.30	-0.0003000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lithium	670.80	0.0000000	-0.0000500	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	277.90	0.0000000	0.0000000	0.0000000	0.0000000	-0.2000000	0.0000000
Manganese	257.60	0.0000000	0.0000000	-0.0000580	0.0000190	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	-0.0000200	0.0000000	0.0000000	0.0000000
Potassium	766.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.00	0.0000400	0.0000000	-0.0005000	0.0000000	0.0000000	0.0000000
Silicon	251.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.00	0.0000000	0.0000000	-0.0000500	0.0000000	0.0000000	0.0000000
Sodium	589.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	215.20	0.0002150	0.0000290	-0.0005500	0.0000000	0.0000000	0.0000000
Thallium	190.80	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Tin	189.90	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.90	0.0000000	-0.0000190	0.0000000	0.0000300	0.0000000	0.0000000
Vanadium	310.20	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.80	0.0000000	0.0000000	0.0000760	0.0000400	0.0000000	0.0000000

Comments:

ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Instrument ID: IRIS-Jarrell Ash

Date: Jan. 17, 2003

Analyte	Wave-length (nm)	Interelement Correction Factors for: Be	Co	Cr	Cu	Mn	Mo
Aluminum	308.20	0.0000000	0.0000000	0.0000000	0.0000000	0.0018000	0.0202000
Antimony	206.80	0.0000000	0.0000000	0.0160000	0.0000000	0.0000000	0.0004700
Arsenic	189.00	0.0000000	0.0000000	-0.0023000	0.0000000	0.0000000	-0.0008000
Barium	455.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.00	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.0000750
Boron	249.70	0.0000000	0.0013800	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	228.80	0.0000000	-0.0029000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	373.70	0.0000000	0.0000000	0.0000000	0.0000000	0.0016000	0.0000000
Chromium	267.70	0.0000000	0.0000000	0.0000000	0.0000000	0.0013000	0.0000000
Cobalt	228.60	0.0000000	0.0000000	0.0000450	0.0000000	0.0000000	-0.0012000
Copper	324.70	0.0000000	0.0000000	-0.0000890	0.0000000	0.0000000	0.0000000
Iron	271.40	0.0000000	0.0960000	0.0000000	0.0000000	-0.0062000	-0.0080000
Lead	220.30	0.0000000	0.0000000	-0.0010000	0.0000000	0.0000000	-0.0012000
Lithium	670.80	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	277.90	0.0000000	0.0000000	-0.3400000	0.0000000	0.0013200	0.0160000
Manganese	257.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0083000	0.0001100	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.00	0.0000000	0.0000000	0.0000000	0.0000000	0.0004300	0.0060000
Silicon	251.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0080000
Silver	328.00	0.0000000	0.0000000	-0.0005800	0.0000000	0.0000900	-0.0002900
Sodium	589.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	215.20	0.0000000	0.0000250	0.0000000	0.0000000	0.0000000	-0.0003000
Thallium	190.80	0.0000000	-0.0015000	-0.0017000	0.0000000	0.0008000	-0.0019000
Tin	189.90	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.90	0.0000000	0.0000000	0.0005000	0.0000000	0.0000000	0.0000000
Vanadium	310.20	0.0120000	0.0000000	-0.0006000	0.0000000	0.0000000	0.0000000
Zinc	213.80	0.0000000	-0.0002800	0.0000000	0.0009000	0.0002790	0.0000000

Comments:

ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Instrument ID: IRIS-Jarrell Ash

Date: Jan. 17, 2003

Analyte	Wave-length (nm)	Interelement Correction Factors for: Ni	Sb	V	Ti	Zn
Aluminum	308.20	0.0000000	0.0000000	0.0300000	0.0013000	0.0000000
Antimony	206.80	-0.0012000	0.0000000	-0.0038000	0.0000000	0.0000000
Arsenic	189.00	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	455.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.00	0.0000000	0.0000000	-0.0003000	0.0000000	0.0000000
Boron	249.70	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	228.80	-0.0001700	0.0000000	0.0000700	0.0000000	0.0000000
Calcium	373.70	0.0006500	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.70	0.0000000	0.0000000	-0.0025000	0.0000000	0.0000000
Cobalt	228.60	0.0000000	0.0000000	0.0000000	0.0013000	0.0000000
Copper	324.70	0.0000000	0.0000000	-0.0140000	-0.0007090	0.0000000
Iron	271.40	0.0000000	0.0000000	-0.1500000	0.0000000	0.0000000
Lead	220.30	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lithium	670.80	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	277.90	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.60	0.0000000	0.0000000	-0.0000750	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	-0.0002470	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.00	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	251.60	0.0000000	0.0000000	0.0000000	0.0066470	0.0000000
Silver	328.00	0.0000000	0.0000000	-0.0300000	0.0010000	0.0000000
Sodium	589.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	215.20	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.80	0.0000000	0.0000000	-0.0220000	-0.0011000	0.0000000
Tin	189.90	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.90	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	310.20	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.80	0.0053000	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

ICP-AES AND ICP-MS LINEAR RANGES (QUARTERLY)

Instrument ID: IRIS-Jarrel Ash

Date: 1/30/03

Analyte	Integ. Time (Sec.)	Concentration (ug/L)
Aluminum	15.00	1000000.0
Antimony	55.00	50000.0
Arsenic	55.00	100000.0
Barium	15.00	20000.0
Beryllium	15.00	5000.0
Boron	15.00	100000.0
Cadmium	55.00	30000.0
Calcium	15.00	1000000.0
Chromium	55.00	100000.0
Cobalt	55.00	100000.0
Copper	15.00	50000.0
Iron	55.00	1000000.0
Lead	55.00	200000.0
Lithium		15000.0
Magnesium	55.00	1000000.0
Manganese	55.00	40000.0
Molybdenum		30000.0
Nickel	55.00	100000.0
Potassium	15.00	400000.0
Selenium	55.00	20000.0
Silicon		50000.0
Silver	15.00	10000.0
Sodium	15.00	400000.0
Strontium		30000.0
Thallium	55.00	20000.0
Tin		30000.0
Titanium		30000.0
Vanadium	15.00	100000.0
Zinc	55.00	40000.0

Comments:

Method: FE3 Sample Name: S0 Operator:
Comment:
Run Time: 04/30/03 11:03 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B 2496	Ba4554
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.76047	.18781	-.03515	1.0684	.99807
Stddev	.15210	.05839	.02116	.0200	.06313
%RSD	20.001	31.090	60.202	1.8768	6.3250
#1	.70144	.23197	-.05471	1.0721	.92789
#2	.64672	.12161	-.03806	1.0863	1.0502
#3	.93324	.20984	-.01269	1.0467	1.0161

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.41617	.72926	.74457	1.0906	.90824
Stddev	.15480	.15506	.00412	.0321	.05684
%RSD	37.196	21.262	.55337	2.9437	6.2580
#1	.24302	.72906	.74933	1.1165	.87229
#2	.46432	.88441	.74217	1.1006	.97376
#3	.54117	.57430	.74222	1.0546	.87866

Elem	Cu3247	Fe2598	K 7664	Li6707	Mg2779
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.32037	-.08379	-1.3544	2.0335	-.00554
Stddev	.13785	.02866	.4455	.2962	.04721
%RSD	43.029	34.207	32.892	14.568	852.53
#1	.27616	-.11657	-1.8607	2.2211	.03866
#2	.21005	-.07137	-1.0225	1.6920	-.05528
#3	.47491	-.06343	-1.1801	2.1875	.00000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.03040	.02432	7.6517	.39911	.12158
Stddev	.03321	.01421	.1960	.02879	.02188
%RSD	109.26	58.455	2.5610	7.2127	17.994
#1	.02061	.00793	7.7635	.37268	.09674
#2	.06740	.03330	7.4254	.39487	.13797
#3	.00318	.03172	7.7661	.42979	.13005

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.19348	.10203	.06106	-.04282	.29973
Stddev	.02181	.01540	.01787	.01355	.02303
%RSD	11.271	15.098	29.275	31.646	7.6828
#1	-.17445	.11894	.05154	-.02855	.29815
#2	-.18871	.08881	.04995	-.04440	.32351
#3	-.21727	.09833	.08168	-.05551	.27754

Sample Name: S0 Run Time: 04/30/03 11:03

Elem	Ti3349	Tl1908	V 3102	Zn2138
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.39039	-.04123	4.0364	.35365
Stddev	.05565	.00363	.0714	.01801
%RSD	14.256	8.8102	1.7700	5.0928
#1	.44185	-.04044	3.9546	.37427
#2	.39799	-.04520	4.0683	.34571
#3	.33133	-.03806	4.0864	.34098

Method: FE3 Sample Name: S1 Operator:
Comment:
Run Time: 04/30/03 11:08 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Al3944	B_2496	Ba4554	Be3130	Ca3736
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.3976	4.9803	5.1933	2.5137	1.6549
Stddev	.1235	.0238	.0977	.0338	.0909
%RSD	5.1525	.47885	1.8809	1.3444	5.4951
#1	2.5281	5.0078	5.2996	2.5226	1.7592
#2	2.2824	4.9647	5.1728	2.5422	1.5916
#3	2.3824	4.9686	5.1075	2.4764	1.6141

Elem	Cr2677	Cu3247	Fe2598	K_7664	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.3487	.82933	2.3120	8.5872	19.108
Stddev	.0550	.08819	.0244	.4333	.305
%RSD	4.0787	10.634	1.0534	5.0457	1.5972
#1	1.2861	.92937	2.3287	9.0857	19.440
#2	1.3896	.79582	2.2841	8.3746	18.840
#3	1.3703	.76281	2.3233	8.3013	19.043

Elem	Mn2576	Mo2020	Na5895	Sb2068	Si2516
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3.7050	.15093	67.143	-.13745	.96371
Stddev	.0227	.01021	.243	.01169	.04245
%RSD	.61203	6.7657	.36127	8.5050	4.4045
#1	3.7051	.15382	67.371	-.12845	.95621
#2	3.6823	.13958	66.888	-.13324	.92552
#3	3.7276	.15938	67.169	-.15066	1.0094

Elem	Sn1899	Sr2152	Ti3349	V_3102	Zn2138
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.02960	.44194	2.6943	4.8247	1.4522
Stddev	.00916	.02980	.1386	.1151	.0070
%RSD	30.937	6.7426	5.1463	2.3862	.47936
#1	.01903	.46145	2.5447	4.7022	1.4589
#2	.03490	.40764	2.8185	4.8412	1.4450
#3	.03489	.45673	2.7196	4.9306	1.4527

Method: FE3 Sample Name: S2 Operator:
Comment:
Run Time: 04/30/03 11:13 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B_2496	Ba4554
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4.1495	.60096	-.00317	8.9653	9.3904
Stddev	.0866	.03900	.00893	.0466	.1950
%RSD	2.0870	6.4901	281.78	.51940	2.0770
#1	4.1769	.64174	.00159	9.0134	9.6040
#2	4.0525	.59710	-.01348	8.9204	9.2219
#3	4.2191	.56403	.00238	8.9621	9.3452

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4.3394	2.4333	.84288	1.2861	1.7477
Stddev	.1707	.1441	.00364	.0139	.0466
%RSD	3.9343	5.9223	.43142	1.0837	2.6672
#1	4.5365	2.3678	.83980	1.3021	1.7336
#2	4.2460	2.5985	.84194	1.2796	1.7997
#3	4.2357	2.3335	.84689	1.2767	1.7097

Elem	Cu3247	Fe2598	K_7664	Li6707	Mg2779
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.0323	4.6085	17.930	36.053	.40186
Stddev	.0651	.0446	.371	.553	.06382
%RSD	6.3093	.96858	2.0696	1.5338	15.881
#1	1.1065	4.6336	18.317	35.745	.36513
#2	1.0062	4.5569	17.896	35.722	.36489
#3	.98428	4.6349	17.577	36.691	.47555

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7.4751	.30765	129.24	.81301	.17286
Stddev	.0219	.00523	3.93	.01321	.02290
%RSD	.29233	1.7001	3.0390	1.6253	13.245
#1	7.4726	.30690	132.55	.79777	.19191
#2	7.4982	.30284	124.90	.82132	.14746
#3	7.4547	.31322	130.28	.81993	.17921

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.07824	.12634	1.8076	.09568	.54183
Stddev	.01212	.02163	.0106	.00814	.02852
%RSD	15.494	17.124	.58771	8.5122	5.2628
#1	-.08089	.13005	1.8017	.10468	.50911
#2	-.06501	.14587	1.8012	.09355	.55495
#3	-.08881	.10309	1.8199	.08881	.56142

Sample Name: S2 Run Time: 04/30/03 11:13

lem	Ti3349	V_3102	Zn2138
nits	Cts/S	Cts/S	Cts/S
Avg	4.7007	5.5007	2.5284
Stddev	.0811	.1035	.0279
%RSD	1.7256	1.8822	1.1024
#1	4.7909	5.4659	2.5424
#2	4.6773	5.6172	2.5464
#3	4.6339	5.4191	2.4963

Method: FE3 Sample Name: S3 Operator:
Comment:
Run Time: 04/30/03 11:18 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B_2496	Ba4554
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	84.443	11.388	1.1152	202.96	211.22
Stddev	.538	.130	.0236	.69	.97
%RSD	.63694	1.1409	2.1203	.33772	.45952
#1	84.817	11.535	1.1299	202.40	211.48
#2	83.826	11.291	1.1277	202.77	210.15
#3	84.685	11.336	1.0879	203.73	212.04

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	97.185	44.831	2.6833	6.5154	23.755
Stddev	.140	.092	.0246	.0147	.054
%RSD	.14454	.20488	.91761	.22515	.22704
#1	97.277	44.891	2.7118	6.5320	23.810
#2	97.023	44.877	2.6693	6.5043	23.754
#3	97.256	44.725	2.6690	6.5098	23.702

Elem	Cu3247	Fe2598	K_7664	Li6707	Mg2779
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	19.339	121.02	507.56	1002.8	10.375
Stddev	.168	.19	19.03	17.9	.117
%RSD	.86793	.15986	3.7486	1.7815	1.1246
#1	19.462	121.24	504.04	1000.8	10.340
#2	19.148	120.88	490.54	985.99	10.505
#3	19.407	120.94	528.11	1021.6	10.279

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	195.58	7.7091	3165.0	11.598	1.9163
Stddev	.65	.0207	124.7	.037	.0247
%RSD	.33026	.26875	3.9392	.31499	1.2875
#1	196.05	7.7214	3131.9	11.599	1.8887
#2	194.84	7.6851	3060.2	11.561	1.9239
#3	195.84	7.7206	3302.9	11.634	1.9363

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.4428	.75806	43.541	3.4240	6.6407
Stddev	.0134	.01805	.158	.0231	.0491
%RSD	.54962	2.3807	.36243	.67488	.74010
#1	2.4327	.76596	43.537	3.4365	6.6954
#2	2.4377	.77081	43.385	3.3973	6.6265
#3	2.4580	.73741	43.701	3.4381	6.6002

Sample Name: S3 Run Time: 04/30/03 11:18

Elem	Ti3349	Tl1908	V 3102	Zn2138
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	111.22	.62432	42.347	55.627
Stddev	.49	.00327	.093	.179
%RSD	.44397	.52361	.22020	.32104
#1	111.56	.62323	42.389	55.601
#2	110.65	.62173	42.240	55.462
#3	111.45	.62799	42.412	55.817

Method: FE3 Sample Name: S4 Operator:
Comment:
Run Time: 04/30/03 11:23 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B_2496	Ba4554
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	166.01	23.239	2.3080	421.76	435.13
Stddev	1.61	.068	.0258	1.68	4.64
%RSD	.96829	.29435	1.1183	.39919	1.0664
#1	164.51	23.161	2.3132	420.17	430.06
#2	165.82	23.265	2.3307	421.59	436.14
#3	167.71	23.289	2.2799	423.52	439.18

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	198.09	93.294	4.7169	11.978	49.132
Stddev	.79	.296	.0194	.028	.092
%RSD	.40019	.31708	.41203	.23153	.18794
#1	197.22	92.976	4.7081	11.989	49.099
#2	198.29	93.560	4.7392	11.946	49.236
#3	198.76	93.346	4.7034	11.998	49.061

Elem	Cu3247	Fe2598	K_7664	Li6707	Mg2779
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	38.927	252.43	967.04	1943.9	21.566
Stddev	.480	.35	24.26	33.5	.074
%RSD	1.2338	.13752	2.5090	1.7218	.34486
#1	38.524	252.29	939.04	1922.2	21.494
#2	38.798	252.83	980.34	1927.1	21.642
#3	39.458	252.18	981.75	1982.5	21.562

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	411.86	16.222	6087.3	23.722	3.8033
Stddev	.85	.050	172.7	.026	.0389
%RSD	.20642	.30527	2.8367	.11067	1.0236
#1	411.80	16.165	5889.2	23.716	3.7700
#2	412.74	16.251	6206.2	23.751	3.7939
#3	411.04	16.250	6166.4	23.700	3.8461

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5.2556	1.6733	89.281	7.1858	13.585
Stddev	.0274	.0084	.211	.0234	.040
%RSD	.52071	.50270	.23657	.32634	.29622
#1	5.2466	1.6669	89.087	7.1942	13.616
#2	5.2863	1.6828	89.251	7.2039	13.600
#3	5.2339	1.6701	89.506	7.1593	13.540

Sample Name: S4 Run Time: 04/30/03 11:23

lem	Ti3349	Tl1908	V_3102	Zn2138
nits	Cts/S	Cts/S	Cts/S	Cts/S
Avg	228.10	1.2987	83.074	117.64
Stddev	1.29	.0133	.474	.26
%RSD	.56672	1.0237	.57087	.21823
#1	226.61	1.3140	82.608	117.44
#2	228.69	1.2903	83.556	117.55
#3	228.99	1.2918	83.058	117.93

Method: FE3 Sample Name: S5 Operator:
Comment:
Run Time: 04/30/03 11:28 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B_2496	Ba4554
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	338.61	47.592	4.6860	841.79	900.92
Stddev	5.88	.506	.0194	1.59	8.32
%RSD	1.7377	1.0630	.41422	.18876	.92385
#1	332.12	47.247	4.6947	843.56	897.00
#2	343.59	48.172	4.6996	841.35	910.48
#3	340.12	47.356	4.6638	840.47	895.28

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	403.93	191.38	8.8395	23.023	99.020
Stddev	3.08	1.53	.0257	.028	.567
%RSD	.76353	.79738	.29026	.12159	.57276
#1	403.12	192.50	8.8691	23.055	99.660
#2	407.33	192.00	8.8248	23.001	98.821
#3	401.32	189.65	8.8246	23.013	98.580

Elem	Cu3247	Fe2598	K_7664	Li6707	Mg2779
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	79.737	509.36	1743.9	3814.5	44.805
Stddev	.866	1.15	21.5	140.2	.242
%RSD	1.0861	.22567	1.2334	3.6768	.53985
#1	79.043	510.63	1749.9	3652.8	44.565
#2	80.708	509.06	1720.0	3903.7	45.048
#3	79.462	508.39	1761.8	3887.0	44.801

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	842.19	32.799	10881.	48.382	7.6645
Stddev	3.80	.117	81.	.251	.0421
%RSD	.45072	.35530	.74121	.51940	.54870
#1	846.41	32.921	10855.	48.614	7.6336
#2	841.13	32.788	10817.	48.417	7.6475
#3	839.04	32.689	10971.	48.115	7.7124

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	10.847	3.2453	179.07	14.644	27.389
Stddev	.094	.0194	.34	.070	.099
%RSD	.86726	.59898	.19133	.47746	.36280
#1	10.953	3.2672	179.44	14.717	27.504
#2	10.813	3.2383	178.76	14.637	27.326
#3	10.775	3.2303	179.02	14.578	27.337

Sample Name: S5 Run Time: 04/30/03 11:28

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	472.47	2.6049	166.24	235.45
Stddev	3.57	.0138	1.29	.79
%RSD	.75545	.52887	.77314	.33341
#1	472.05	2.6201	165.87	236.24
#2	476.23	2.5933	167.66	235.46
#3	469.13	2.6012	165.17	234.67

El Name	Slope	Y-int	Correlation	Date Stdized
Al3944	16.5113	0.7601	0.9999533	04/30/03 11:32:40

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	2.1172e-050		0	0.76047
S1	0.1	0.099176	-0.000824	-0.824	2.3976
S2	0.2	0.20528	0.00528	2.64	4.1495
S3	5	5.0682	0.0682	1.36	84.443
S4	10	10.008	0.00839	0.0839	166.01
S5	20	20.462	0.462	2.31	338.61

El Name	Slope	Y-int	Correlation	Date Stdized
Ag3280	60.2790	0.1871	0.9997576	04/30/03 11:32:40

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	1.1332e-050		0	0.18781
S2	0.008	0.0068653	-0.00113	-14.2	0.60096
S3	0.2	0.18581	-0.0142	-7.09	11.388
S4	0.4	0.38241	-0.0176	-4.4	23.239
S5	0.8	0.78642	-0.0136	-1.7	47.592

El Name	Slope	Y-int	Correlation	Date Stdized
As1890	5.8634	-0.0353	0.9996773	04/30/03 11:32:40

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	2.593e-05	0	0	-0.035154
S2	0.008	0.0054805	-0.00252	-31.5	-0.0031707
S3	0.2	0.19621	-0.00379	-1.9	1.1152
S4	0.4	0.39964	-0.000361	-0.0903	2.308
S5	0.8	0.80521	0.00521	0.652	4.686

El Name	Slope	Y-int	Correlation	Date Stdized
B_2496	41.7889	1.0626	0.9998890	04/30/03 11:32:40

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	0.000138010		0	1.0684
S1	0.1	0.093751	-0.00625	-6.25	4.9803
S2	0.2	0.18911	-0.0109	-5.44	8.9653
S3	5	4.8315	-0.169	-3.37	202.96
S4	10	10.067	0.0671	0.671	421.76
S5	20	20.119	0.119	0.593	841.79

El Name	Slope	Y-int	Correlation	Date Stdized
Ba4554	441.0452	0.9920	0.9996850	04/30/03 11:32:40

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	1.3745e-050		0	0.99807
S1	0.01	0.0095258	-0.000474	-4.74	5.1933
S2	0.02	0.019042	-0.000958	-4.79	9.3904
S3	0.5	0.47666	-0.0233	-4.67	211.22
S4	1	0.98433	-0.0157	-1.57	435.13
S5	2	2.0404	0.0404	2.02	900.92

El Name	Slope	Y-int	Correlation	Date Stdized
Be3130	4137.4521	0.4163	0.9998841	04/30/03 11:32:40

Standard Name	Concentration Stated	Found	Difference Conc	%	Signal (S)IR
S0	0	-4.1799e-080		0	0.41617
S1	0.0005	0.000506926.92e-06		1.38	2.5137
S2	0.001	0.00094819-5.18e-05		-5.18	4.3394
S3	0.025	0.023389	-0.00161	-6.45	97.185
S4	0.05	0.047776	-0.00222	-4.45	198.09
S5	0.1	0.097526	-0.00247	-2.47	403.93

El Name	Slope	Y-int	Correlation	Date Stdized
Ca3736	9.3199	0.7279	0.9996279	04/30/03 11:32:40

Standard Name	Concentration Stated	Found	Difference Conc	%	Signal (S)IR
S0	0	0.000142550		0	0.72926
S1	0.1	0.099467	-0.000533	-0.533	1.6549
S2	0.2	0.18298	-0.017	-8.51	2.4333
S3	5	4.7322	-0.268	-5.36	44.831
S4	10	9.9321	-0.0679	-0.679	93.294
S5	20	20.457	0.457	2.29	191.38

El Name	Slope	Y-int	Correlation	Date Stdized
Cd2288	73.5833	0.7447	0.9997413	04/30/03 11:32:40

Standard Name	Concentration Stated	Found	Difference Conc	%	Signal (S)IR
[illegible]	0	-2.1126e-060		0	0.74457
S2	0.001	0.0013338	0.000334	33.4	0.84288
S3	0.025	0.026346	0.00135	5.38	2.6833
S4	0.05	0.053982	0.00398	7.96	4.7169
S5	0.1	0.11001	0.01	10	8.8395

El Name	Slope	Y-int	Correlation	Date Stdized
Co2286	55.9997	1.0903	0.9999599	04/30/03 11:32:40

Standard Name	Concentration Stated	Found	Difference Conc	%	Signal (S)IR
S0	0	4.2469e-060		0	1.0906
S2	0.004	0.0034964	-0.000504	-12.6	1.2861
S3	0.1	0.096877	-0.00312	-3.12	6.5154
S4	0.2	0.19442	-0.00558	-2.79	11.978
S5	0.4	0.39166	-0.00834	-2.09	23.023

El Name	Slope	Y-int	Correlation	Date Stdized
Cr2677	96.5809	0.9070	0.9996652	04/30/03 11:32:40

Standard Name	Concentration Stated	Found	Difference Conc	%	Signal (S)IR
S0	0	1.2715e-050		0	0.90824
S1	0.005	0.0045728	-0.000427	-8.54	1.3487
S2	0.01	0.0087045	-0.0013	-13	1.7477
S3	0.25	0.23657	-0.0134	-5.37	23.755
[illegible]	0.5	0.49932	-0.00068	-0.136	49.132
[illegible]	1	1.0159	0.0159	1.59	99.02

El Name	Slope	Y-int	Correlation	Date Stdized
Cu3247	79.1002	0.3211	0.9997077	04/30/03 11:32:40

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S1	0.005	0.0064257	0.00143	28.5	0.82933
S0	0	-8.7293e-060		0	0.32037
S2	0.01	0.0089919	-0.00101	-10.1	1.0323
S3	0.25	0.24043	-0.00957	-3.83	19.339
S4	0.5	0.48806	-0.0119	-2.39	38.927
S5	1	1.004	0.004	0.4	79.737

El Name	Slope	Y-int	Correlation	Date Stdized
Fe2598	63.3834	-0.0875	0.9998431	04/30/03 11:32:40

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	5.7844e-050		0	-0.083789
S1	0.04	0.037856	-0.00214	-5.36	2.312
S2	0.08	0.074088	-0.00591	-7.39	4.6085
S3	2	1.9107	-0.0893	-4.47	121.02
S4	4	3.984	-0.016	-0.4	252.43
S5	8	8.0376	0.0376	0.47	509.36

El Name	Slope	Y-int	Correlation	Date Stdized
K_7664	18.4231	-1.3336	0.9980509	04/30/03 11:32:40

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	-0.00113040		0	-1.3544
S1	0.5	0.5385	0.0385	7.7	8.5872
S2	1	1.0456	0.0456	4.56	17.93
S3	25	27.623	2.62	10.5	507.56
S4	50	52.563	2.56	5.13	967.04
S5	100	94.73	-5.27	-5.27	1743.9

El Name	Slope	Y-int	Correlation	Date Stdized
Li6707	1929.1086	1.9958	0.9997964	04/30/03 11:32:40

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	1.9541e-050		0	2.0335
S1	0.01	0.0088705	-0.00113	-11.3	19.108
S2	0.02	0.017654	-0.00235	-11.7	36.053
S3	0.5	0.51877	0.0188	3.75	1002.8
S4	1	1.0066	0.00664	0.664	1943.9
S5	2	1.9763	-0.0237	-1.19	3814.5

El Name	Slope	Y-int	Correlation	Date Stdized
Mg2779	2.1975	-0.0061	0.9996123	04/30/03 11:32:40

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	0.000233050		0	-0.005538
S2	0.2	0.18562	-0.0144	-7.19	0.40186
S3	5	4.7238	-0.276	-5.52	10.375
S4	10	9.8165	-0.183	-1.83	21.566
S5	20	20.392	0.392	1.96	44.805

El Name	Slope	Y-int	Correlation	Date Stdized
Mn2576	827.4034	0.0200	0.9996504	04/30/03 11:32:40

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	1.2512e-050		0	0.030396
S1	0.005	0.0044536	-0.000546	-10.9	3.705
S2	0.01	0.0090102	-0.00099	-9.9	7.4751
S3	0.25	0.23635	-0.0137	-5.46	195.58
S4	0.5	0.49775	-0.00225	-0.45	411.86
S5	1	1.0179	0.0179	1.79	842.19

El Name	Slope	Y-int	Correlation	Date Stdized
Mo2020	16.1713	0.0237	0.9996663	04/30/03 11:32:40

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	3.6869e-050		0	0.024317
S1	0.01	0.0078662	-0.00213	-21.3	0.15093
S2	0.02	0.017558	-0.00244	-12.2	0.30765
S3	0.5	0.47525	-0.0248	-4.95	7.7091
S4	1	1.0017	0.00167	0.167	16.222
S5	2	2.0268	0.0268	1.34	32.799

El Name	Slope	Y-int	Correlation	Date Stdized
Na5895	114.9620	7.7619	0.9980030	04/30/03 11:32:40

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
0	0	-0.000958740		0	7.6517
S1	0.5	0.51653	0.0165	3.31	67.143
S2	1	1.0567	0.0567	5.67	129.24
S3	25	27.463	2.46	9.85	3165
S4	50	52.883	2.88	5.77	6087.3
S5	100	94.581	-5.42	-5.42	10881

El Name	Slope	Y-int	Correlation	Date Stdized
Ni2316	47.0818	0.3984	0.9996759	04/30/03 11:32:40

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	1.6067e-050		0	0.39911
S2	0.01	0.008807	-0.00119	-11.9	0.81301
S3	0.25	0.23787	-0.0121	-4.85	11.598
S4	0.5	0.49539	-0.00461	-0.921	23.722
S5	1	1.0192	0.0192	1.92	48.382

El Name	Slope	Y-int	Correlation	Date Stdized
Pb2203	7.3579	0.1213	0.9995719	04/30/03 11:32:40

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	3.3557e-050		0	0.12158
S2	0.01	0.0070022	-0.003	-30	0.17286
S3	0.25	0.24395	-0.00605	-2.42	1.9163
[illegible]	0.5	0.50041	0.00041	0.0821	3.8033
[illegible]	1	1.0252	0.0252	2.52	7.6645

El Name	Slope	Y-int	Correlation	Date Stdized
Sb2068	4.6133	-0.1935	0.9998729	04/30/03 11:32:40

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	-5.8626e-060		0	-0.19348
S1	0.012	0.01214	0.00014	1.16	-0.13745
S2	0.024	0.024975	0.000975	4.06	-0.078236
S3	0.6	0.57145	-0.0285	-4.76	2.4428
S4	1.2	1.1812	-0.0188	-1.57	5.2556
S5	2.4	2.3932	-0.00684	-0.285	10.847

El Name	Slope	Y-int	Correlation	Date Stdized
Se1960	3.6325	0.1019	0.9981398	04/30/03 11:32:40

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S2	0.008	0.006718	-0.00128	-16	0.12634
S3	0.2	0.18063	-0.0194	-9.69	0.75806
S4	0.4	0.43258	0.0326	8.14	1.6733
S0	0	2.5079e-050		0	0.10203
S5	0.8	0.86534	0.0653	8.17	3.2453

El Name	Slope	Y-int	Correlation	Date Stdized
Si2516	17.8300	0.0609	0.9999517	04/30/03 11:32:40

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	1.1017e-050		0	0.061057
S1	0.05	0.050637	0.000637	1.27	0.96371
S2	0.1	0.097966	-0.00203	-2.03	1.8076
S3	2.5	2.4386	-0.0614	-2.46	43.541
S4	5	5.0039	0.00393	0.0786	89.281
S5	10	10.04	0.04	0.4	179.07

El Name	Slope	Y-int	Correlation	Date Stdized
Sn1899	7.2502	-0.0429	0.9998113	04/30/03 11:32:40

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	7.8538e-060		0	-0.042819
S1	0.01	0.0099971	-2.92e-06	-0.0292	0.029605
S2	0.02	0.019111	-0.000889	-4.45	0.09568
S3	0.5	0.47817	-0.0218	-4.37	3.424
S4	1	0.99704	-0.00296	-0.296	7.1858
S5	2	2.0257	0.0257	1.28	14.644

El Name	Slope	Y-int	Correlation	Date Stdized
Sr2152	13.3331	0.2996	0.9997283	04/30/03 11:32:40

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	6.4709e-060		0	0.29973
S1	0.01	0.010672	0.000672	6.72	0.44194
S2	0.02	0.018164	-0.00184	-9.18	0.54183
S3	0.5	0.47559	-0.0244	-4.88	6.6407
S4	1	0.99646	-0.00354	-0.354	13.585
S5	2	2.0317	0.0317	1.59	27.389

El Name	Slope	Y int	Correlation	Date Stdized
Ti3349	231.3786	0.3878	0.9997117	04/30/03 11:32:40

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	1.1144e-050		0	0.39039
S1	0.01	0.0099683	-3.17e-05	-0.317	2.6943
S2	0.02	0.01864	-0.00136	-6.8	4.7007
S3	0.5	0.47901	-0.021	-4.2	111.22
S4	1	0.98413	-0.0159	-1.59	228.1
S5	2	2.0403	0.0403	2.01	472.47

El Name	Slope	Y-int	Correlation	Date Stdized
Tl1908	2.8062	-0.0412	0.9999843	04/30/03 11:32:40

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	-1.2418e-050		0	-0.041233
S3	0.25	0.23716	-0.0128	-5.14	0.62432
S4	0.5	0.47748	-0.0225	-4.5	1.2987
S5	1	0.94296	-0.057	-5.7	2.6049

El Name	Slope	Y-int	Correlation	Date Stdized
V_3102	79.8446	4.0354	0.9997804	04/30/03 11:32:40

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S5	2	2.0314	0.0314	1.57	166.24
S4	1	0.98991	-0.0101	-1.01	83.074
S3	0.5	0.47983	-0.0202	-4.03	42.347
S2	0.02	0.018352	-0.00165	-8.24	5.5007
S1	0.01	0.009885	-0.000115	-1.15	4.8247
S0	0	1.278e-05	0	0	4.0364

El Name	Slope	Y-int	Correlation	Date Stdized
Zn2138	116.0665	0.3519	0.9997690	04/30/03 11:32:40

Standard Name	Concentration Stated	Concentration Found	Difference Conc	Difference %	Signal (S)IR
S0	0	1.509e-05	0	0	0.35365
S1	0.01	0.0094797	-0.00052	-5.2	1.4522
S2	0.02	0.018752	-0.00125	-6.24	2.5284
S3	0.5	0.47623	-0.0238	-4.75	55.627
S4	1	1.0105	0.0105	1.05	117.64
S5	2	2.0256	0.0256	1.28	235.45

Method: FE3 Sample Name: ICV Operator:
Comment:
Run Time: 04/30/03 11:35 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	9.8913	.39328	.38956	9.5906	.99673
Stddev	.0948	.00433	.00126	.0183	.00386
%RSD	.95881	1.1013	.32328	.19041	.38692
#1	9.7886	.39030	.38811	9.6047	.99237
#2	9.9756	.39825	.39035	9.5700	.99968
#3	9.9097	.39129	.39022	9.5972	.99815
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	10.000	.40000	.40000	10.000	1.0000
Range	5.0000%	5.0000%	5.0000%	5.0000%	5.0000%

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.04899	9.7721	.04941	.19799	.49452
Stddev	.00002	.0460	.00027	.00073	.00108
%RSD	.04254	.47030	.55227	.36861	.21783
#1	.04897	9.7377	.04972	.19842	.49559
#2	.04901	9.8243	.04921	.19839	.49452
#3	.04899	9.7543	.04930	.19714	.49344
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.05000	10.000	.05000	.20000	.50000
Range	5.0000%	5.0000%	5.0000%	5.0000%	5.0000%

Elem	Cu3247	Fe2598	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.49052	3.9310	Q 52.756	1.0199	9.8575
Stddev	.00475	.0068	2.052	.0174	.0188
%RSD	.96906	.17306	3.8902	1.7094	.19044
#1	.48507	3.9373	51.927	1.0000	9.8642
#2	.49273	3.9320	51.248	1.0325	9.8363
#3	.49377	3.9238	55.093	1.0273	9.8720
Check ?	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass
Value	.50000	4.0000	50.000	1.0000	10.000
Range	5.0000%	5.0000%	5.0000%	5.0000%	5.0000%

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.49160	.99523	Q 53.714	.49600	.49257
Stddev	.00080	.00117	2.170	.00051	.00283
%RSD	.16295	.11779	4.0401	.10242	.57492
#1	.49242	.99639	52.786	.49560	.49584
#2	.49157	.99527	52.161	.49657	.49092
#3	.49082	.99404	56.193	.49583	.49096
Check ?	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass
Value	.50000	1.0000	50.000	.50000	.50000
Range	5.0000%	5.0000%	5.0000%	5.0000%	5.0000%

Sample Name: ICV Run Time: 04/30/03 11:35

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	1.2082	.40512	4.8096	1.0091	.98390
Stddev	.0035	.00479	.0112	.0018	.00236
%RSD	.29339	1.1817	.23203	.17604	.24024
#1	1.2066	.40067	4.8123	1.0111	.98471
#2	1.2058	.40450	4.7974	1.0086	.98576
#3	1.2123	.41018	4.8192	1.0077	.98124
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.2000	.40000	5.0000	1.0000	1.0000
Range	5.0000%	5.0000%	5.0000%	5.0000%	5.0000%

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	.97038	.50720	.99261	.99798
Stddev	.00253	.00411	.00496	.00116
%RSD	.26034	.81094	.49922	.11618
#1	.96749	.50251	.99023	.99665
#2	.97218	.51019	.99830	.99852
#3	.97146	.50890	.98929	.99877
Check ?	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	.50000	1.0000	1.0000
Range	5.0000%	5.0000%	5.0000%	5.0000%

Method: FE3 Sample Name: CCB Operator:
Comment:
Run Time: 04/30/03 11:40 Type: Blank Mode: CONC Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00782	.00223	-.00020	.02598	-.00021
Stddev	.01401	.00103	.00293	.00554	.00038
%RSD	179.16	46.310	1468.7	21.315	178.12
#1	-.02319	.00334	.00061	.03183	-.00057
#2	-.00452	.00130	-.00344	.02527	.00018
#3	.00425	.00205	.00224	.02082	-.00024
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.20000	.00500	.01000	.05000	.00250
Low Limit	-.20000	-.00500	-.01000	-.05000	-.00250

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00005	-.01211	.00010	.00008	-.00011
Stddev	.00002	.01413	.00025	.00052	.00035
%RSD	46.674	116.73	258.13	674.56	322.58
#1	.00005	-.02830	.00024	.00042	-.00029
#2	.00006	-.00224	-.00019	-.00052	-.00033
#3	.00002	-.00579	.00024	.00033	.00030
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.00025	.05000	.00100	.00250	.00250
Low Limit	-.00025	-.05000	-.00100	-.00250	-.00250

Elem	Cu3247	Fe2598	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00321	.00124	-.03191	.00033	.00937
Stddev	.00074	.00073	.02323	.00017	.04114
%RSD	23.036	58.562	72.813	51.077	438.87
#1	.00377	.00178	-.04951	.00026	.03793
#2	.00348	.00042	-.04065	.00021	-.03778
#3	.00237	.00153	-.00557	.00053	.02797
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.01000	.02000	.25000	.05000	.10000
Low Limit	-.01000	-.02000	-.25000	-.05000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00002	-.00001	-.00022	.00024	-.00248
Stddev	.00002	.00101	.00262	.00102	.00591
%RSD	113.89	8308.3	1187.7	427.27	238.30
#1	-.00004	.00103	-.00322	-.00061	-.00032
#2	-.00001	-.00098	.00164	-.00004	.00204
#3	.00000	-.00009	.00091	.00137	-.00917
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.00250	.05000	.10000	.01000	.01000
Low Limit	-.00250	-.05000	-.10000	-.01000	-.01000

Sample Name: CCB Run Time: 04/30/03 11:40

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00080	.00176	.00171	.00292	.00115
Stddev	.00349	.00557	.00023	.00146	.00107
%RSD	434.26	315.78	13.511	49.805	92.593
#1	-.00478	-.00188	.00193	.00329	.00060
#2	.00066	.00817	.00172	.00132	.00239
#3	.00171	-.00101	.00147	.00416	.00048
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.02000	.01000	.25000	.20000	.00500
Low Limit	-.02000	-.01000	-.25000	-.20000	-.00500

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	-.00012	.00585	.00099	.00025
Stddev	.00041	.00327	.00067	.00028
%RSD	354.07	55.989	67.208	112.16
#1	-.00020	.00284	.00152	.00006
#2	-.00048	.00536	.00024	.00056
#3	.00033	.00934	.00122	.00012
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.01500	.02000	.00728	.01000
Low Limit	-.01500	-.02000	-.00728	-.01000

Method: FE3 Sample Name: ICSA Operator:
Comment:
Run Time: 04/30/03 11:45 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	237.90	.00600	-.00161	.03086	-.00011
Stddev	.82	.00222	.00114	.00248	.00014
%RSD	.34438	37.042	70.845	8.0226	128.13
#1	237.13	.00771	-.00292	.03335	.00001
#2	238.76	.00349	-.00102	.03084	-.00007
#3	237.79	.00680	-.00088	.02839	-.00027
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	250.00	.00000	.00000	.00000	.00000
Range	±50.000	±.01600	±.04000	±.20000	±.02000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00001	250.13	.00003	.00730	.00096
Stddev	.00002	1.08	.00039	.00014	.00005
%RSD	213.70	.43152	1320.7	1.9294	5.3102
#1	-.00002	250.96	.00002	.00741	.00096
#2	-.00003	248.91	.00043	.00734	.00091
#3	.00002	250.51	-.00036	.00714	.00101
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	250.00	.00000	.00000	.00000
Range	±.00100	±50.000	±.00400	±.01000	±.01000

Elem	Cu3247	Fe2598	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00422	87.840	.05094	.01436	251.77
Stddev	.00230	.075	.04057	.00012	.45
%RSD	54.638	.08537	79.647	.85897	.17767
#1	.00612	87.822	.09778	.01434	252.03
#2	.00487	87.776	.02752	.01425	251.25
#3	.00166	87.923	.02751	.01450	252.03
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	100.00	.00000	.00000	250.00
Range	±.01000	±20.000	±1.0000	±.20000	±50.000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00409	.00105	.01654	.00038	-.01460
Stddev	.00004	.00054	.00299	.00031	.00348
%RSD	1.0543	51.360	18.067	82.031	23.810
#1	-.00414	.00108	.01496	.00020	-.01733
#2	-.00409	.00050	.01466	.00020	-.01068
#3	-.00405	.00157	.01998	.00074	-.01578
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000
Range	±.01000	±.20000	±1.0000	±.04000	±.04000

Sample Name: ICSA Run Time: 04/30/03 11:45

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00979	-.00790	.12804	-.00123	.00970
Stddev	.00389	.00953	.00169	.00249	.00274
%RSD	39.674	120.61	1.3214	201.64	28.239
#1	-.01313	-.01824	.12958	.00154	.00747
#2	-.01073	-.00601	.12623	-.00328	.01276
#3	-.00553	.00054	.12832	-.00196	.00886
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000
Range	±.04000	±.04000	±1.0000	±1.0000	±.02000

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	-.01130	-.03001	.00221	.00786
Stddev	.00053	.00865	.00035	.00001
%RSD	4.6658	28.813	16.002	.18349
#1	-.01180	-.03991	.00202	.00787
#2	-.01134	-.02391	.00198	.00786
#3	-.01075	-.02622	.00261	.00784
Check ?	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000
Range	±.06000	±.08000	±.02000	±.02000

Method: FE3 Sample Name: ICSAB Operator:
Comment:
Run Time: 04/30/03 11:50 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	240.16	.51092	.24447	.01415	.25615
Stddev	2.82	.00412	.00315	.00235	.00115
%RSD	1.1739	.80545	1.2874	16.606	.45023
#1	240.45	.50740	.24566	.01678	.25673
#2	242.82	.51544	.24686	.01340	.25689
#3	237.20	.50991	.24091	.01226	.25482
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	250.00	.50000	.25000	.00000	.25000
Range	±50.000	±.10000	±.05000	±.20000	±.05000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.23444	252.84	.50693	.25290	.24680
Stddev	.00093	.68	.00128	.00084	.00083
%RSD	.39590	.26834	.25165	.33302	.33748
#1	.23363	253.12	.50812	.25231	.24776
#2	.23424	253.34	.50559	.25387	.24635
#3	.23545	252.07	.50709	.25253	.24629
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.25000	250.00	.50000	.25000	.25000
Range	±.05000	±50.000	±.10000	±.05000	±.05000

Elem	Cu3247	Fe2598	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.25979	93.795	4.8805	.01459	254.54
Stddev	.00152	.205	.0375	.00002	.52
%RSD	.58542	.21813	.76752	.12889	.20329
#1	.26088	94.030	4.8871	.01457	254.11
#2	.26045	93.697	4.9143	.01461	255.11
#3	.25806	93.657	4.8402	.01459	254.39
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.25000	100.00	5.0000	.00000	250.00
Range	±.05000	±20.000	±1.0000	±.20000	±50.000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.22874	.00067	4.9895	.48396	.49183
Stddev	.00111	.00113	.0623	.00180	.00243
%RSD	.48308	168.29	1.2493	.37113	.49395
#1	.22991	-.00057	4.9593	.48601	.48923
#2	.22859	.00095	5.0612	.48270	.49223
#3	.22772	.00164	4.9481	.48316	.49404
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.25000	.00000	5.0000	.50000	.50000
Range	±.05000	±.20000	±1.0000	±.10000	±.10000

Sample Name: ICSAB Run Time: 04/30/03 11:50

lem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	.47933	.21047	.01964	-.00619	.01110
Stddev	.00286	.00472	.00073	.00392	.00162
%RSD	.59707	2.2407	3.7404	63.340	14.568
#1	.47838	.21249	.01934	-.00415	.00943
#2	.48254	.20508	.01911	-.01071	.01265
#3	.47706	.21384	.02048	-.00371	.01122
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000	.25000	.00000	.00000	.00000
Range	±.10000	±.05000	±1.0000	±1.0000	±.02000

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	-.01256	.49932	.25168	.50401
Stddev	.00055	.00642	.00092	.00154
%RSD	4.4053	1.2853	.36550	.30586
#1	-.01200	.49973	.25071	.50577
#2	-.01260	.50553	.25180	.50333
#3	-.01310	.49271	.25253	.50292
Check ?	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.50000	.25000	.50000
Range	±.06000	±.10000	±.05000	±.10000

Method: FE3 Sample Name: CCV Operator:
Comment:
Run Time: 04/30/03 11:55 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	9.9184	.39000	.39046	9.5959	.99465
Stddev	.1129	.00393	.00206	.0315	.00452
%RSD	1.1383	1.0084	.52853	.32829	.45433
#1	10.029	.38927	.39271	9.5617	.99523
#2	9.8031	.38649	.38866	9.6023	.98987
#3	9.9234	.39425	.39000	9.6237	.99885
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	10.000	.40000	.40000	10.000	1.0000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.04906	9.7923	.04942	.19750	.49502
Stddev	.00004	.0694	.00029	.00062	.00081
%RSD	.07903	.70832	.59296	.31259	.16447
#1	.04903	9.7362	.04909	.19737	.49472
#2	.04911	9.8699	.04964	.19696	.49594
#3	.04905	9.7708	.04955	.19817	.49440
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.05000	10.000	.05000	.20000	.50000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Elem	Cu3247	Fe2598	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.48886	3.9323	53.289	1.0274	9.9074
Stddev	.00250	.0026	2.526	.0291	.0120
%RSD	.51064	.06684	4.7409	2.8313	.12122
#1	.49008	3.9321	55.830	1.0453	9.8937
#2	.48599	3.9350	50.777	.99380	9.9163
#3	.49051	3.9297	53.260	1.0430	9.9123
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000	4.0000	50.000	1.0000	10.000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.49219	.99361	53.998	.49765	.49232
Stddev	.00029	.00415	2.854	.00056	.00300
%RSD	.05891	.41774	5.2863	.11223	.60925
#1	.49221	.98937	57.068	.49829	.49376
#2	.49248	.99379	51.425	.49725	.49433
#3	.49190	.99766	53.501	.49742	.48887
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000	1.0000	50.000	.50000	.50000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Sample Name: CCV Run Time: 04/30/03 11:55

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	1.2131	.40331	4.8019	1.0036	.98233
Stddev	.0052	.00118	.0039	.0011	.00083
%RSD	.43096	.29334	.08070	.11151	.08452
#1	1.2082	.40465	4.7974	1.0046	.98292
#2	1.2186	.40242	4.8042	1.0039	.98270
#3	1.2125	.40285	4.8041	1.0024	.98138
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.2000	.40000	5.0000	1.0000	1.0000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	.97264	.51169	.98715	.99641
Stddev	.00066	.00304	.00302	.00152
%RSD	.06834	.59367	.30621	.15281
#1	.97195	.50894	.98667	.99465
#2	.97327	.51495	.99038	.99732
#3	.97269	.51116	.98439	.99726
Check ?	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	.50000	1.0000	1.0000
Range	10.000%	10.000%	10.000%	10.000%

Method: FE3 Sample Name: CCB Operator:
Comment:
Run Time: 04/30/03 12:00 Type: Blank Mode: CONC Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00252	.00147	.00021	.01313	.00006
Stddev	.00919	.00184	.00135	.00424	.00014
%RSD	363.95	124.79	649.59	32.301	213.95
#1	.00129	.00146	.00021	.01788	-.00009
#2	.01227	.00332	-.00114	.01180	.00013
#3	-.00598	-.00036	.00156	.00971	.00016
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.20000	.00500	.01000	.05000	.00250
Low Limit	-.20000	-.00500	-.01000	-.05000	-.00250

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00003	.00448	.00012	-.00010	.00001
Stddev	.00004	.01191	.00048	.00039	.00016
%RSD	114.27	265.57	386.10	384.72	2098.2
#1	.00004	-.00813	-.00043	-.00046	-.00016
#2	-.00001	.01552	.00041	.00030	.00015
#3	.00006	.00606	.00039	-.00014	.00003
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.00025	.05000	.00100	.00250	.00250
Low Limit	-.00025	-.05000	-.00100	-.00250	-.00250

Elem	Cu3247	Fe2598	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00085	.00104	-.02120	.00007	.01024
Stddev	.00042	.00075	.01101	.00006	.03629
%RSD	49.271	71.487	51.919	83.427	354.32
#1	-.00043	.00185	-.00868	.00009	.05053
#2	-.00127	.00092	-.02935	.00013	.00008
#3	-.00085	.00037	-.02558	.00001	-.01988
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.01000	.02000	.25000	.05000	.10000
Low Limit	-.01000	-.02000	-.25000	-.05000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00002	-.00013	.00234	.00070	.00047
Stddev	.00010	.00152	.00121	.00017	.00404
%RSD	547.46	1204.2	51.502	24.131	866.49
#1	.00009	.00162	.00307	.00087	-.00248
#2	-.00009	-.00083	.00095	.00053	-.00119
#3	-.00006	-.00117	.00300	.00070	.00507
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.00250	.05000	.10000	.01000	.01000
Low Limit	-.00250	-.05000	-.10000	-.01000	-.01000

Sample Name: CCB Run Time: 04/30/03 12:00

em	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00732	-.00012	.00392	.00329	.00290
Stddev	.00470	.00444	.00114	.00187	.00143
%RSD	64.188	3746.9	28.973	56.832	49.327
#1	.01172	.00469	.00511	.00154	.00429
#2	.00788	-.00100	.00382	.00307	.00143
#3	.00237	-.00405	.00284	.00526	.00298
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.02000	.01000	.25000	.20000	.00500
Low Limit	-.02000	-.01000	-.25000	-.20000	-.00500

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	-.00005	.00903	-.00044	.00000
Stddev	.00044	.00341	.00111	.00012
%RSD	832.06	37.803	251.20	4865.7
#1	-.00015	.01269	-.00166	-.00011
#2	-.00043	.00593	.00051	.00014
#3	.00043	.00846	-.00017	-.00002
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.01500	.02000	.00728	.01000
Low Limit	-.01500	-.02000	-.00728	-.01000

Method: FE3 Sample Name: TC BLK 4/28 Operator: JYH
Comment:
Run Time: 04/30/03 12:05 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00071	-.00033	.00070	.00758	.00333
Stddev	.00860	.00198	.00207	.00150	.00056
%RSD	1211.9	599.93	293.79	19.801	16.898
#1	.00054	-.00149	-.00168	.00835	.00396
#2	.00720	-.00146	.00197	.00854	.00289
#3	-.00986	.00196	.00183	.00585	.00314
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	1000.0	10.000	100.00	100.00	20.000
Low Limit	-.10000	-.01000	-.02000	-.10000	-.01000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00002	.00366	-.00015	.00020	.00051
Stddev	.00002	.01346	.00040	.00054	.00039
%RSD	112.49	368.00	259.85	271.96	78.074
#1	.00000	-.00584	-.00002	-.00008	.00089
#2	.00003	-.00225	.00016	-.00015	.00010
#3	.00001	.01906	-.00061	.00082	.00053
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	5.0000	1000.0	30.000	100.00	100.00
Low Limit	-.00050	-.10000	-.00200	-.00500	-.00500

Elem	Cu3247	Fe2598	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00068	.00304	.10391	.00015	.02460
Stddev	.00051	.00096	.03259	.00012	.02027
%RSD	74.587	31.473	31.359	78.432	82.402
#1	.00026	.00217	.06795	.00012	.04294
#2	.00125	.00288	.11230	.00006	.02802
#3	.00053	.00406	.13147	.00029	.00283
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	1000.0	400.00	15.000	1000.0
Low Limit	-.02000	-.02000	-.50000	-.10000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00002	-.00116	146.78	.00111	-.00155
Stddev	.00001	.00046	7.33	.00091	.00282
%RSD	36.300	39.431	4.9959	82.261	182.38
#1	.00001	-.00103	154.27	.00050	-.00184
#2	.00002	-.00078	139.62	.00067	-.00421
#3	.00001	-.00166	146.46	.00215	.00141
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	40.000	30.000	300.00	100.00	200.00
Low Limit	-.01000	-.10000	-.50000	-.02000	-.02000

Sample Name: TC BLK 4/28 Run Time: 04/30/03 12:05

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00741	.00058	.01160	.00037	.00250
Stddev	.00533	.00309	.00196	.00342	.00183
%RSD	71.920	532.47	16.874	917.58	73.232
#1	.00305	-.00276	.01351	-.00327	.00203
#2	.00582	.00116	.00960	.00088	.00096
#3	.01335	.00334	.01169	.00351	.00453
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	20.000	50.000	30.000	30.000
Low Limit	-.02000	-.02000	-1.0000	-.10000	-.01000

Elem	Tl3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	-.00010	-.02689	-.00258	.00123
Stddev	.00033	.00109	.00239	.00017
%RSD	324.37	4.0487	92.699	13.613
#1	.00028	-.02688	-.00213	.00104
#2	-.00029	-.02798	-.00045	.00134
#3	-.00029	-.02581	-.00516	.00132
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	30.000	20.000	100.00	40.000
Low Limit	-.01000	-.04000	-.01000	-.01000

Method: FE3 Sample Name: L030450104 Operator: JYH
Comment:
Run Time: 04/30/03 12:10 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	.02954	-.00015	-.00191	.01433	.00218
Stddev	.00942	.00064	.00192	.00070	.00029
%RSD	31.906	421.79	100.46	4.8832	13.097
#1	.03778	-.00077	-.00155	.01498	.00241
#2	.01926	-.00018	-.00398	.01441	.00227
#3	.03158	.00050	-.00020	.01359	.00186
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	1000.0	10.000	100.00	100.00	20.000
Low Limit	-.10000	-.01000	-.02000	-.10000	-.01000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00000	.30478	.00171	.00026	.00046
Stddev	.00001	.02960	.00052	.00029	.00045
%RSD	305.62	9.7112	30.532	109.42	97.877
#1	.00000	.28210	.00136	.00026	-.00006
#2	-.00001	.33827	.00231	-.00002	.00078
#3	.00001	.29398	.00146	.00055	.00067
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	5.0000	1000.0	30.000	100.00	100.00
Low Limit	-.00050	-.10000	-.00200	-.00500	-.00500

Elem	Cu3247	Fe2598	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00064	.04430	.12361	-.00014	.07216
Stddev	.00220	.00038	.02771	.00015	.01391
%RSD	343.98	.86019	22.416	103.67	19.270
#1	-.00183	.04399	.14033	-.00026	.08557
#2	.00237	.04418	.13887	.00002	.05780
#3	.00138	.04472	.09162	-.00019	.07311
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	1000.0	400.00	15.000	1000.0
Low Limit	-.02000	-.02000	-.50000	-.10000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.05006	-.00057	139.81	.00130	.14556
Stddev	.00016	.00048	2.51	.00014	.00195
%RSD	.31216	85.089	1.7978	10.698	1.3387
#1	.04988	-.00034	141.74	.00141	.14727
#2	.05017	-.00024	136.97	.00134	.14599
#3	.05013	-.00112	140.72	.00114	.14344
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	40.000	30.000	300.00	100.00	200.00
Low Limit	-.01000	-.10000	-.50000	-.02000	-.02000

Sample Name: L030450104 Run Time: 04/30/03 12:10

lem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00594	.00081	.02575	.00052	.00246
Stddev	.00425	.00661	.00070	.00067	.00159
%RSD	71.649	811.97	2.7195	128.72	64.507
#1	.00481	.00547	.02628	.00066	.00167
#2	.01064	-.00675	.02601	-.00021	.00143
#3	.00236	.00373	.02495	.00110	.00429
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	20.000	50.000	30.000	30.000
Low Limit	-.02000	-.02000	-1.0000	-.10000	-.01000

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	-.00009	-.02833	-.00303	.00534
Stddev	.00024	.00040	.00173	.00003
%RSD	287.01	1.4093	57.013	.55286
#1	-.00029	-.02824	-.00374	.00536
#2	-.00015	-.02876	-.00106	.00536
#3	.00018	-.02798	-.00429	.00531
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	30.000	20.000	100.00	40.000
Low Limit	-.01000	-.04000	-.01000	-.01000

Method: FE3 Sample Name: L030450105 Operator: JYH
Comment:
Run Time: 04/30/03 12:15 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	.37274	-.00097	-.00321	.47376	.02835
Stddev	.01717	.00121	.00292	.00184	.00062
%RSD	4.6059	124.70	90.929	.38849	2.1965
#1	.39055	.00021	-.00628	.47312	.02816
#2	.35630	-.00091	-.00046	.47234	.02783
#3	.37136	-.00221	-.00289	.47584	.02904
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	1000.0	10.000	100.00	100.00	20.000
Low Limit	-.10000	-.01000	-.02000	-.10000	-.01000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00073	19.984	.00182	.00106	.00856
Stddev	.00001	.180	.00069	.00047	.00008
%RSD	1.5866	.90154	37.884	44.679	.90076
#1	.00074	19.872	.00252	.00058	.00863
#2	.00073	19.889	.00114	.00106	.00856
#3	.00072	20.192	.00181	.00153	.00848
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	5.0000	1000.0	30.000	100.00	100.00
Low Limit	-.00050	-.10000	-.00200	-.00500	-.00500

Elem	Cu3247	Fe2598	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00512	.02376	.48939	.04667	.71692
Stddev	.00059	.00069	.03501	.00105	.02521
%RSD	11.472	2.9013	7.1541	2.2488	3.5157
#1	.00558	.02357	.48290	.04645	.72378
#2	.00532	.02318	.52720	.04782	.73798
#3	.00446	.02452	.45808	.04575	.68900
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	1000.0	400.00	15.000	1000.0
Low Limit	-.02000	-.02000	-.50000	-.10000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.08428	.00020	127.65	.00250	.00557
Stddev	.00045	.00047	3.83	.00015	.00159
%RSD	.53710	233.65	3.0026	6.1399	28.608
#1	.08381	.00015	124.37	.00265	.00377
#2	.08431	.00069	126.71	.00251	.00680
#3	.08472	-.00024	131.86	.00234	.00615
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	40.000	30.000	300.00	100.00	200.00
Low Limit	-.01000	-.10000	-.50000	-.02000	-.02000

Sample Name: L030450105 Run Time: 04/30/03 12:15

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00216	-.00112	.56851	.00278	.08220
Stddev	.00429	.00588	.00289	.00354	.00082
%RSD	198.82	524.41	.50815	127.22	.99567
#1	.00226	-.00721	.56521	.00482	.08135
#2	-.00218	-.00069	.56972	.00482	.08226
#3	.00639	.00453	.57060	-.00130	.08298
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	20.000	50.000	30.000	30.000
Low Limit	-.02000	-.02000	-1.0000	-.10000	-.01000

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	.00038	L -.17248	.00010	.16061
Stddev	.00046	.00763	.00118	.00054
%RSD	120.00	4.4257	1160.8	.33393
#1	-.00003	-.16393	.00123	.16005
#2	.00088	-.17490	.00020	.16065
#3	.00030	-.17860	-.00112	.16112
Check ?	LC Pass	LC Fail	LC Pass	LC Pass
High Limit	30.000	20.000	100.00	40.000
Low Limit	-.01000	-.04000	-.01000	-.01000

Method: FE3 Sample Name: L030454302 Operator: JYH
Comment:
Run Time: 04/30/03 12:20 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	.20886	-.00119	-.00216	1.5461	.07140
Stddev	.00163	.00222	.00113	.0003	.00059
%RSD	.78167	186.85	52.097	.02140	.83270
#1	.20966	-.00370	-.00343	1.5457	.07151
#2	.20698	-.00041	-.00126	1.5463	.07076
#3	.20994	.00054	-.00180	1.5463	.07193
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	1000.0	10.000	100.00	100.00	20.000
Low Limit	-.10000	-.01000	-.02000	-.10000	-.01000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00000	5.2331	.00220	.00183	.00060
Stddev	.0000	.0431	.00029	.00026	.00035
%RSD	1134.5	.82328	13.395	14.390	58.515
#1	.00000	5.2317	.00230	.00196	.00020
#2	.00001	5.2769	.00187	.00201	.00074
#3	-.00001	5.1907	.00243	.00153	.00085
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	5.0000	1000.0	30.000	100.00	100.00
Low Limit	-.00050	-.10000	-.00200	-.00500	-.00500

Elem	Cu3247	Fe2598	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00241	.00656	4.3524	.00112	.41248
Stddev	.00159	.00085	.0896	.00010	.02347
%RSD	66.198	13.009	2.0574	9.0427	5.6900
#1	.00110	.00719	4.3183	.00124	.43061
#2	.00194	.00690	4.2849	.00104	.42085
#3	.00418	.00559	4.4540	.00109	.38597
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	1000.0	400.00	15.000	1000.0
Low Limit	-.02000	-.02000	-.50000	-.10000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00301	.72527	135.47	.00076	-.00769
Stddev	.00002	.00314	2.44	.00093	.00462
%RSD	.82649	.43353	1.8018	122.95	60.121
#1	.00301	.72186	135.98	-.00031	-.00237
#2	.00304	.72590	137.62	.00141	-.00991
#3	.00299	.72805	132.82	.00117	-.01078
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	40.000	30.000	300.00	100.00	200.00
Low Limit	-.01000	-.10000	-.50000	-.02000	-.02000

Sample Name: L030454302 Run Time: 04/30/03 12:20

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	.01008	-.01224	.49592	.00263	.08467
Stddev	.00387	.00297	.00199	.00165	.00190
%RSD	38.355	24.306	.40039	62.726	2.2425
#1	.00656	-.01324	.49403	.00438	.08675
#2	.01422	-.00889	.49799	.00110	.08424
#3	.00946	-.01458	.49574	.00241	.08303
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	20.000	50.000	30.000	30.000
Low Limit	-.02000	-.02000	-1.0000	-.10000	-.01000

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	.00011	L -.05815	-.00218	.54670
Stddev	.00027	.00353	.00079	.00063
%RSD	249.68	6.0651	36.061	.11601
#1	.00027	-.05628	-.00224	.54608
#2	.00027	-.06222	-.00294	.54666
#3	-.00021	-.05596	-.00137	.54735
Check ?	LC Pass	LC Fail	LC Pass	LC Pass
High Limit	30.000	20.000	100.00	40.000
Low Limit	-.01000	-.04000	-.01000	-.01000

Method: PE3 Sample Name: L030454304 Operator: JYH
Comment:
Run Time: 04/30/03 12:25 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	.03511	.00012	-.00084	.04663	.00997
Stddev	.00787	.00251	.00101	.00095	.00021
%RSD	22.405	2146.7	120.45	2.0475	2.1557
#1	.04383	.00239	-.00026	.04767	.01010
#2	.02854	.00053	-.00201	.04580	.00972
#3	.03296	-.00257	-.00026	.04641	.01009
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	1000.0	10.000	100.00	100.00	20.000
Low Limit	-.10000	-.01000	-.02000	-.10000	-.01000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00009	.90611	.00048	.00041	.12977
Stddev	.00004	.02447	.00043	.00025	.00086
%RSD	40.049	2.7010	89.927	60.886	.66004
#1	.00013	.90386	.00030	.00022	.12878
#2	.00009	.88284	.00017	.00033	.13030
#3	.00006	.93163	.00098	.00070	.13022
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	5.0000	1000.0	30.000	100.00	100.00
Low Limit	-.00050	-.10000	-.00200	-.00500	-.00500

Elem	Cu3247	Fe2598	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00061	.01291	1.0856	.00693	.31194
Stddev	.00219	.00083	.0185	.00025	.01651
%RSD	358.70	6.4039	1.7070	3.6472	5.2913
#1	-.00013	.01278	1.0687	.00704	.31893
#2	.00307	.01215	1.0827	.00711	.29309
#3	-.00111	.01379	1.1054	.00664	.32379
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	1000.0	400.00	15.000	1000.0
Low Limit	-.02000	-.02000	-.50000	-.10000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00479	.00061	136.82	.00178	-.00279
Stddev	.00009	.00035	5.07	.00061	.00433
%RSD	1.8130	57.155	3.7084	34.097	155.59
#1	.00476	.00054	136.68	.00127	-.00401
#2	.00473	.00030	141.96	.00245	-.00638
#3	.00489	.00098	131.81	.00161	.00203
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	40.000	30.000	300.00	100.00	200.00
Low Limit	-.01000	-.10000	-.50000	-.02000	-.02000

Sample Name: L030454304 Run Time: 04/30/03 12:25

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00458	.00136	.18385	.00132	.18433
Stddev	.00634	.00382	.00136	.00058	.00362
%RSD	138.61	280.87	.74232	43.816	1.9650
#1	.00997	.00457	.18348	.00176	.18534
#2	.00617	-.00286	.18536	.00066	.18031
#3	-.00241	.00237	.18270	.00154	.18733
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	20.000	50.000	30.000	30.000
Low Limit	-.02000	-.02000	-1.0000	-.10000	-.01000

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	.00106	-.03226	-.00090	.11518
Stddev	.00055	.00441	.00045	.00025
%RSD	51.595	13.668	50.021	.21864
#1	.00064	-.03000	-.00062	.11492
#2	.00168	-.02944	-.00142	.11518
#3	.00087	-.03734	-.00066	.11542
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	30.000	20.000	100.00	40.000
Low Limit	-.01000	-.04000	-.01000	-.01000

Method: PB3 Sample Name: L030454305 Operator: JYH
Comment:
Run Time: 04/30/03 12:31 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	.13116	-.00108	.00177	.19632	.05777
Stddev	.00455	.00259	.00113	.00079	.00023
%RSD	3.4660	238.69	64.135	.40074	.40528
#1	.13605	-.00071	.00308	.19619	.05801
#2	.13038	.00130	.00105	.19717	.05774
#3	.12706	-.00384	.00118	.19561	.05755
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	1000.0	10.000	100.00	100.00	20.000
Low Limit	-.10000	-.01000	-.02000	-.10000	-.01000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00004	6.2384	.00561	.01477	.01498
Stddev	.00003	.0617	.00040	.00047	.00060
%RSD	75.346	.98820	7.0538	3.1778	4.0187
#1	.00004	6.2884	.00525	.01475	.01560
#2	.00001	6.2572	.00603	.01524	.01440
#3	.00006	6.1695	.00554	.01430	.01492
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	5.0000	1000.0	30.000	100.00	100.00
Low Limit	-.00050	-.10000	-.00200	-.00500	-.00500

Elem	Cu3247	Fe2598	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00513	.48879	.27983	.00211	.55677
Stddev	.00214	.00167	.02065	.00017	.02323
%RSD	41.729	.34265	7.3812	8.0718	4.1726
#1	.00756	.48686	.29727	.00212	.54615
#2	.00350	.48987	.25702	.00193	.58342
#3	.00434	.48964	.28519	.00227	.54075
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	1000.0	400.00	15.000	1000.0
Low Limit	-.02000	-.02000	-.50000	-.10000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.04036	.00031	131.47	.00961	.00384
Stddev	.00011	.00108	3.34	.00052	.00704
%RSD	.27606	344.72	2.5389	5.3811	183.19
#1	.04024	.00045	135.26	.01021	.00542
#2	.04046	.00133	130.19	.00929	.00995
#3	.04036	-.00083	128.96	.00933	-.00385
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	40.000	30.000	300.00	100.00	200.00
Low Limit	-.01000	-.10000	-.50000	-.02000	-.02000

Sample Name: LC30454305 Run Time: 04/30/03 12:31

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00528	-.00902	2.8942	.01780	.05249
Stddev	.00864	.00487	.0266	.00146	.00060
%RSD	163.50	53.935	.91990	8.1747	1.1465
#1	.00596	-.01338	2.8641	.01685	.05313
#2	.01357	-.00992	2.9039	.01707	.05193
#3	-.00367	-.00377	2.9146	.01947	.05240
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	20.000	50.000	30.000	30.000
Low Limit	-.02000	-.02000	-1.0000	-.10000	-.01000

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	.00971	-.03354	-.00067	.52594
Stddev	.00079	.00131	.00036	.00087
%RSD	8.1055	3.9081	53.213	.16545
#1	.00967	-.03429	-.00029	.52560
#2	.01052	-.03429	-.00073	.52693
#3	.00895	-.03202	-.00099	.52529
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	30.000	20.000	100.00	40.000
Low Limit	-.01000	-.04000	-.01000	-.01000

Method: FE3 Sample Name: L030454307 Operator: JYH
Comment:
Run Time: 04/30/03 12:36 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	.08551	.00015	-.00215	.05550	.05373
Stddev	.00262	.00169	.00113	.00021	.00052
%RSD	3.0608	1117.9	52.671	.37356	.96010
#1	.08518	.00202	-.00287	.05532	.05363
#2	.08827	-.00126	-.00085	.05545	.05429
#3	.08307	-.00031	-.00274	.05572	.05328
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	1000.0	10.000	100.00	100.00	20.000
Low Limit	-.10000	-.01000	-.02000	-.10000	-.01000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00053	7.9177	.00193	.00410	.00090
Stddev	.00000	.0532	.00048	.00011	.00044
%RSD	.74978	.67146	24.950	2.6801	48.744
#1	.00053	7.8705	.00245	.00400	.00130
#2	.00054	7.9074	.00180	.00409	.00097
#3	.00053	7.9753	.00152	.00422	.00043
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	5.0000	1000.0	30.000	100.00	100.00
Low Limit	-.00050	-.10000	-.00200	-.00500	-.00500

Elem	Cu3247	Fe2598	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00054	.73614	2.0943	.00384	4.3342
Stddev	.00170	.00396	.0358	.00019	.0104
%RSD	311.58	.53831	1.7085	5.0015	.24075
#1	.00250	.73270	2.0931	.00378	4.3347
#2	-.00029	.73524	2.1307	.00405	4.3444
#3	-.00057	.74048	2.0591	.00368	4.3235
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	1000.0	400.00	15.000	1000.0
Low Limit	-.02000	-.02000	-.50000	-.10000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.05476	.00038	136.33	.00350	-.00195
Stddev	.00031	.00116	3.20	.00039	.00153
%RSD	.56232	306.33	2.3458	11.113	78.494
#1	.05442	-.00068	137.22	.00394	-.00361
#2	.05487	.00020	132.77	.00324	-.00059
#3	.05501	.00162	138.98	.00331	-.00166
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	40.000	30.000	300.00	100.00	200.00
Low Limit	-.01000	-.10000	-.50000	-.02000	-.02000

Sample Name: L030454307 Run Time: 04/30/03 12:36

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00107	-.00282	2.0159	.00278	.05225
Stddev	.00243	.00291	.0056	.00310	.00173
%RSD	227.18	103.15	.27889	111.71	3.3034
#1	-.00170	-.00034	2.0223	.00220	.05124
#2	.00209	-.00209	2.0120	.00001	.05126
#3	.00282	-.00602	2.0134	.00613	.05424
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	20.000	50.000	30.000	30.000
Low Limit	-.02000	-.02000	-1.0000	-.10000	-.01000

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	-.00055	-.02542	-.00170	.18669
Stddev	.00006	.00328	.00193	.00035
%RSD	10.034	12.909	113.55	.18958
#1	-.00052	-.02846	-.00348	.18628
#2	-.00061	-.02194	-.00197	.18688
#3	-.00052	-.02585	.00035	.18690
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	30.000	20.000	100.00	40.000
Low Limit	-.01000	-.04000	-.01000	-.01000

Method: FE3 Sample Name: L030454308 Operator: JYH
Comment:
Run Time: 04/30/03 12:41 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	.44011	-.00010	-.00042	.01349	.00158
Stddev	.00531	.00289	.00100	.00058	.00028
%RSD	1.2074	2794.6	239.19	4.3321	17.786
#1	.43874	.00306	-.00155	.01416	.00173
#2	.44597	-.00078	.00035	.01309	.00176
#3	.43561	-.00259	-.00006	.01321	.00126
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	1000.0	10.000	100.00	100.00	20.000
Low Limit	-.10000	-.01000	-.02000	-.10000	-.01000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00001	.98091	.00102	.00028	.00352
Stddev	.00003	.01497	.00007	.00019	.00029
%RSD	493.79	1.5261	6.6834	69.753	8.1953
#1	-.00001	.97596	.00110	.00040	.00379
#2	-.00001	.96905	.00100	.00038	.00354
#3	.00004	.99773	.00097	.00005	.00322
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	5.0000	1000.0	30.000	100.00	100.00
Low Limit	-.00050	-.10000	-.00200	-.00500	-.00500

Elem	Cu3247	Fe2598	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00324	.11052	.08420	-.00023	.04214
Stddev	.00214	.00076	.00148	.00006	.01452
%RSD	66.177	.68746	1.7557	26.033	34.450
#1	.00570	.10971	.08272	-.00016	.05041
#2	.00179	.11064	.08568	-.00026	.05065
#3	.00222	.11121	.08421	-.00027	.02538
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	1000.0	400.00	15.000	1000.0
Low Limit	-.02000	-.02000	-.50000	-.10000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.01749	-.00078	131.46	.00421	.14090
Stddev	.00010	.00025	2.18	.00069	.00352
%RSD	.58853	31.380	1.6593	16.348	2.4966
#1	.01738	-.00103	129.74	.00444	.13932
#2	.01759	-.00054	130.71	.00475	.13845
#3	.01750	-.00078	133.91	.00343	.14493
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	40.000	30.000	300.00	100.00	200.00
Low Limit	-.01000	-.10000	-.50000	-.02000	-.02000

Sample Name: L030454308 Run Time: 04/30/03 12:41

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00565	-.00011	.02170	.00220	.00435
Stddev	.00535	.00284	.00050	.00209	.00197
%RSD	94.571	2607.0	2.3057	95.060	45.279
#1	.00129	-.00025	.02135	.00351	.00249
#2	.00406	.00280	.02228	-.00021	.00415
#3	.01162	-.00287	.02148	.00329	.00641
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	20.000	50.000	30.000	30.000
Low Limit	-.02000	-.02000	-1.0000	-.10000	-.01000

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	.00028	-.03095	-.00420	.00734
Stddev	.00037	.00357	.00114	.00014
%RSD	134.16	11.532	27.010	1.8588
#1	-.00015	-.03228	-.00500	.00730
#2	.00047	-.02690	-.00471	.00722
#3	.00052	-.03366	-.00290	.00749
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	30.000	20.000	100.00	40.000
Low Limit	-.01000	-.04000	-.01000	-.01000

Method: FE3 Sample Name: L030455401 Operator: JYH
Comment:
Run Time: 04/30/03 12:46 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B_2496
Units	ppm	ppm	ppm	ppm
Avg	L -.23543	.00055	.00061	.01433
Stddev	.01305	.00080	.00137	.00083
%RSD	5.5434	146.46	223.22	5.7773
#1	-.24836	.00147	-.00087	.01522
#2	-.22226	.00020	.00088	.01358
#3	-.23569	-.00002	.00183	.01419
Check ?	LC Fail	LC Pass	LC Pass	LC Pass
High Limit	1000.0	10.000	100.00	100.00
Low Limit	-.10000	-.01000	-.02000	-.10000

Elem	Ba4554	Be3130	Ca3736	Cd2288
Units	ppm	ppm	ppm	ppm
Avg	.14948	.00129	78.419	.00347
Stddev	.00060	.00003	.344	.00030
%RSD	.40075	2.4322	.43824	8.7928
#1	.15006	.00129	78.082	.00377
#2	.14951	.00132	78.769	.00347
#3	.14886	.00126	78.407	.00316
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	20.000	5.0000	1000.0	30.000
Low Limit	-.01000	-.00050	-.10000	-.00200

Elem	Co2286	Cr2677	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm
Avg	.00440	.00154	.02325	.00495
Stddev	.00022	.00055	.00106	.00076
%RSD	4.9394	35.567	4.5784	15.405
#1	.00422	.00217	.02240	.00419
#2	.00464	.00117	.02444	.00494
#3	.00433	.00129	.02290	.00571
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	100.00	100.00	50.000	1000.0
Low Limit	-.00500	-.00500	-.02000	-.02000

Elem	K_7664	Li6707	Mg2779	Mn2576
Units	ppm	ppm	ppm	ppm
Avg	.25774	.01747	.77023	.05782
Stddev	.01917	.00035	.01321	.00024
%RSD	7.4384	2.0059	1.7156	.41107
#1	.25711	.01759	.75614	.05757
#2	.27721	.01775	.78235	.05783
#3	.23888	.01708	.77221	.05805
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	400.00	15.000	1000.0	40.000
Low Limit	-.50000	-.10000	-.10000	-.01000

Sample Name: L030455401 Run Time: 04/30/03 12:46

Elem	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm
Avg	.00254	122.82	.00901	.02321
Stddev	.00089	1.77	.00109	.00431
%RSD	35.060	1.4430	12.050	18.575
#1	.00152	123.38	.01016	.01877
#2	.00290	124.25	.00800	.02349
#3	.00319	120.84	.00888	.02738
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	30.000	300.00	100.00	200.00
Low Limit	-.10000	-.50000	-.02000	-.02000

Elem	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm
Avg	.00954	-.00147	.20040	.00190
Stddev	.00557	.00659	.00229	.00170
%RSD	58.343	449.38	1.1424	89.242
#1	.01443	-.00844	.20035	.00241
#2	.00348	-.00061	.20272	.00001
#3	.01070	.00465	.19814	.00329
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	20.000	50.000	30.000
Low Limit	-.02000	-.02000	-1.0000	-.10000

Elem	Sr2152	Ti3349	Tl1908	V_3102
Units	ppm	ppm	ppm	ppm
Avg	.21294	-.00108	-.02469	-.00116
Stddev	.00199	.00066	.00157	.00105
%RSD	.93267	61.052	6.3748	90.215
#1	.21066	-.00036	-.02639	-.00132
#2	.21431	-.00165	-.02438	-.00004
#3	.21384	-.00122	-.02328	-.00213
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	30.000	30.000	20.000	100.00
Low Limit	-.01000	-.01000	-.04000	-.01000

Elem	Zn2138
Units	ppm
Avg	.28435
Stddev	.00039
%RSD	.13833
#1	.28401
#2	.28478
#3	.28427
Check ?	LC Pass
High Limit	40.000
Low Limit	-.01000

Method: FE3 Sample Name: L030455401S Operator: JYH
Comment:
Run Time: 04/30/03 13:11 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	8.6828	.19604	.93886	.95993	9.4060
Stddev	.0902	.00186	.00304	.00067	.0480
%RSD	1.0390	.95036	.32363	.07021	.51045
#1	8.7515	.19425	.93589	.96032	9.4537
#2	8.7163	.19591	.93873	.96031	9.4067
#3	8.5807	.19797	.94197	.95915	9.3576
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	1000.0	10.000	100.00	100.00	20.000
Low Limit	-.10000	-.01000	-.02000	-.10000	-.01000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.90400	88.734	.96942	.95729	.94771
Stddev	.00134	.398	.00314	.00624	.00697
%RSD	.14820	.44838	.32358	.65156	.73556
#1	.90276	88.279	.96603	.95033	.93995
#2	.90542	88.902	.97000	.95915	.94974
#3	.90382	89.020	.97223	.96237	.95344
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	5.0000	1000.0	30.000	100.00	100.00
Low Limit	-.00050	-.10000	-.00200	-.00500	-.00500

Elem	Cu3247	Fe2598	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.93386	.91933	41.677	8.0745	10.239
Stddev	.00518	.00631	.561	.1403	.089
%RSD	.55468	.68680	1.3465	1.7375	.87232
#1	.93308	.91209	42.061	8.1913	10.189
#2	.93939	.92364	41.937	8.1134	10.342
#3	.92911	.92228	41.033	7.9189	10.186
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	1000.0	400.00	15.000	1000.0
Low Limit	-.02000	-.02000	-.50000	-.10000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	1.0000	.94830	143.75	.97023	.95547
Stddev	.0060	.00698	4.98	.00678	.00582
%RSD	.59689	.73602	3.4636	.69896	.60873
#1	.99321	.94033	147.65	.96240	.94876
#2	1.0024	.95125	145.45	.97408	.95899
#3	1.0044	.95332	138.14	.97420	.95867
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	40.000	30.000	300.00	100.00	200.00
Low Limit	-.01000	-.10000	-.50000	-.02000	-.02000

Sample Name: L0304554015 Run Time: 04/30/03 13:11

lem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
nits	ppm	ppm	ppm	ppm	ppm
Avg	.94654	.93743	9.6339	-.00200	1.1770
Stddev	.00383	.00853	.0067	.00106	.0108
%RSD	.40490	.91015	.06974	52.927	.92061
#1	.94615	.93051	9.6298	-.00299	1.1652
#2	.95056	.94696	9.6303	-.00088	1.1792
#3	.94292	.93482	9.6417	-.00214	1.1865
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	20.000	50.000	30.000	30.000
Low Limit	-.02000	-.02000	-1.0000	-.10000	-.01000

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	.90912	.90773	.96210	1.2403
Stddev	.00182	.01301	.00300	.0030
%RSD	.19973	1.4331	.31165	.24033
#1	.90921	.89329	.96021	1.2378
#2	.91089	.91855	.96555	1.2395
#3	.90726	.91133	.96053	1.2436
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	30.000	20.000	100.00	40.000
Low Limit	-.01000	-.04000	-.01000	-.01000

Method: FE3 Sample Name: CCV Operator:
Comment:
Run Time: 04/30/03 13:16 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	9.5357	.38394	.37580	9.3863	.97424
Stddev	.1072	.00193	.00259	.0197	.00521
%RSD	1.1244	.50167	.68927	.20972	.53444
#1	9.5064	.38506	.37879	9.3859	.97507
#2	9.4461	.38504	.37434	9.3668	.96867
#3	9.6545	.38171	.37426	9.4061	.97899
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	10.000	.40000	.40000	10.000	1.0000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.04767	9.6350	.04815	.19500	.48603
Stddev	.00020	.0181	.00035	.00127	.00207
%RSD	.42619	.18754	.71717	.65011	.42506
#1	.04788	9.6543	.04853	.19508	.48757
#2	.04747	9.6184	.04806	.19622	.48684
#3	.04766	9.6323	.04786	.19369	.48368
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.05000	10.000	.05000	.20000	.50000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Elem	Cu3247	Fe2598	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.47142	3.8486	52.817	.98337	9.6003
Stddev	.00053	.0083	1.966	.02482	.0751
%RSD	.11164	.21649	3.7227	2.5237	.78263
#1	.47203	3.8547	50.911	.96735	9.6842
#2	.47108	3.8519	52.703	.97080	9.5391
#3	.47115	3.8391	54.838	1.0120	9.5777
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000	4.0000	50.000	1.0000	10.000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.48325	.98335	53.514	.48751	.48632
Stddev	.00138	.00218	2.030	.00162	.00413
%RSD	.28463	.22123	3.7938	.33227	.84863
#1	.48441	.98477	51.529	.48805	.48330
#2	.48362	.98444	53.427	.48879	.49102
#3	.48173	.98085	55.587	.48569	.48463
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000	1.0000	50.000	.50000	.50000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Sample Name: CCV Run Time: 04/30/03 13:16

em	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	1.1977	.38551	4.6979	.99698	.97122
Stddev	.0053	.00081	.0053	.00343	.00616
%RSD	.44494	.20909	.11266	.34453	.63381
#1	1.2023	.38481	4.7024	.99893	.97792
#2	1.1919	.38639	4.6992	.99900	.96992
#3	1.1990	.38532	4.6920	.99302	.96582
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.2000	.40000	5.0000	1.0000	1.0000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	.94402	.49554	.96799	.98130
Stddev	.00376	.00443	.00655	.00241
%RSD	.39871	.89410	.67714	.24556
#1	.94729	.49677	.97392	.98250
#2	.93990	.49923	.96095	.98288
#3	.94486	.49062	.96908	.97853
Check ?	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	.50000	1.0000	1.0000
ange	10.000%	10.000%	10.000%	10.000%

Method: FE3 Sample Name: CCB Operator:
Comment:
Run Time: 04/30/03 13:21 Type: Blank Mode: CONC Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00588	-.00035	-.00083	-.00137	.00042
Stddev	.00568	.00075	.00174	.00388	.00050
%RSD	96.674	211.95	210.04	283.87	118.21
#1	-.00064	-.00119	.00089	.00284	-.00014
#2	.00845	.00023	-.00260	-.00213	.00080
#3	.00982	-.00010	-.00079	-.00481	.00060
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.20000	.00500	.01000	.05000	.00250
Low Limit	-.20000	-.00500	-.01000	-.05000	-.00250

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00003	-.01624	.00001	-.00001	.00013
Stddev	.00004	.01303	.00122	.00024	.00051
%RSD	131.91	80.236	15024.	2233.9	379.87
#1	.00004	-.02908	.00132	-.00018	-.00003
#2	-.00001	-.01660	-.00109	-.00012	.00071
#3	.00006	-.00303	-.00020	.00027	-.00027
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.00025	.05000	.00100	.00250	.00250
Low Limit	-.00025	-.05000	-.00100	-.00250	-.00250

Elem	Cu3247	Fe2598	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00164	-.00049	-.00105	-.00019	.00067
Stddev	.00231	.00062	.02537	.00019	.04812
%RSD	140.63	127.20	2411.9	97.179	7229.0
#1	.00019	-.00033	.02630	-.00026	.05581
#2	-.00088	-.00118	-.00563	-.00034	-.02103
#3	-.00424	.00004	-.02383	.00002	-.03279
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.01000	.02000	.25000	.05000	.10000
Low Limit	-.01000	-.02000	-.25000	-.05000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00006	.00173	.01057	-.00014	.00422
Stddev	.00002	.00125	.00803	.00039	.00143
%RSD	38.472	71.939	75.957	282.80	33.938
#1	.00004	.00301	.00266	.00031	.00286
#2	.00009	.00051	.01871	-.00036	.00408
#3	.00007	.00169	.01033	-.00037	.00571
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.00250	.05000	.10000	.01000	.01000
Low Limit	-.00250	-.05000	-.10000	-.01000	-.01000

Sample Name: CCB Run Time: 04/30/03 13:21

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00299	.00235	.00070	-.00116	-.00153
Stddev	.00398	.00282	.00157	.00179	.00098
%RSD	132.89	119.95	225.47	154.36	64.179
#1	.00181	.00138	.00207	-.00046	-.00171
#2	-.00026	.00014	.00105	.00017	-.00240
#3	.00743	.00552	-.00102	-.00320	-.00047
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.02000	.01000	.25000	.20000	.00500
Low Limit	-.02000	-.01000	-.25000	-.20000	-.00500

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	-.00017	.00178	.00217	.00029
Stddev	.00068	.00502	.00151	.00005
%RSD	396.26	282.77	69.646	18.023
#1	-.00068	-.00071	.00068	.00030
#2	-.00045	-.00152	.00213	.00024
#3	.00060	.00755	.00370	.00034
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.01500	.02000	.00728	.01000
Low Limit	-.01500	-.02000	-.00728	-.01000

Method: FE3 Sample Name: L030459403 Operator: JYH
Comment:
Run Time: 04/30/03 13:26 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	A13944	Ag3280	As1890	B_2496
Units	ppm	ppm	ppm	ppm
Avg	L -.24389	.00008	-.00104	.00567
Stddev	.01725	.00109	.00157	.00125
%RSD	7.0708	1400.1	150.09	22.099
#1	-.25784	-.00087	-.00195	.00687
#2	-.22461	.00127	-.00195	.00576
#3	-.24923	-.00017	.00076	.00437
Check ?	LC Fail	LC Pass	LC Pass	LC Pass
High Limit	1000.0	10.000	100.00	100.00
Low Limit	-.10000	-.01000	-.02000	-.10000

Elem	Ba4554	Be3130	Ca3736	Cd2288
Units	ppm	ppm	ppm	ppm
Avg	.05729	-.00003	74.526	.00114
Stddev	.00039	.00002	.708	.00049
%RSD	.67780	78.530	.95002	42.841
#1	.05686	.00000	73.787	.00072
#2	.05762	-.00003	74.593	.00168
#3	.05739	-.00004	75.198	.00104
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	20.000	5.0000	1000.0	30.000
Low Limit	-.01000	-.00050	-.10000	-.00200

Elem	Co2286	Cr2677	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm
Avg	.00332	.00078	.00662	.00254
Stddev	.00063	.00023	.00007	.00082
%RSD	19.009	29.853	1.1062	32.191
#1	.00361	.00061	.00667	.00263
#2	.00260	.00069	.00665	.00330
#3	.00376	.00105	.00653	.00168
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	100.00	100.00	50.000	1000.0
Low Limit	-.00500	-.00500	-.02000	-.02000

Elem	K_7664	Li6707	Mg2779	Mn2576
Units	ppm	ppm	ppm	ppm
Avg	.19479	.00381	.55893	.06625
Stddev	.02644	.00037	.04516	.00053
%RSD	13.573	9.7070	8.0798	.80267
#1	.21411	.00339	.51602	.06573
#2	.20559	.00396	.60604	.06623
#3	.16466	.00407	.55472	.06679
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	400.00	15.000	1000.0	40.000
Low Limit	-.50000	-.10000	-.10000	-.01000

Sample Name: L030459403 Run Time: 04/30/03 13:26

Elem	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm
Avg	.00161	125.13	.00605	.01585
Stddev	.00081	2.48	.00068	.00241
%RSD	50.469	1.9800	11.257	15.213
#1	.00249	127.97	.00541	.01791
#2	.00089	124.00	.00677	.01645
#3	.00145	123.41	.00596	.01320
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	30.000	300.00	100.00	200.00
Low Limit	-.10000	-.50000	-.02000	-.02000

Elem	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm
Avg	.00907	.00191	.18696	-.00193
Stddev	.00266	.00748	.00093	.00285
%RSD	29.389	392.76	.49549	147.44
#1	.01174	-.00527	.18788	.00102
#2	.00905	.00966	.18698	-.00214
#3	.00641	.00133	.18603	-.00467
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	20.000	50.000	30.000
Low Limit	-.02000	-.02000	-1.0000	-.10000

Elem	Sr2152	Ti3349	Tl1908	V_3102
Units	ppm	ppm	ppm	ppm
Avg	.19429	-.00297	-.03306	-.00072
Stddev	.00131	.00066	.00509	.00133
%RSD	.67358	22.310	15.390	185.08
#1	.19543	-.00366	-.03892	-.00135
#2	.19457	-.00293	-.02983	.00081
#3	.19286	-.00233	-.03042	-.00162
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	30.000	30.000	20.000	100.00
Low Limit	-.01000	-.01000	-.04000	-.01000

Elem	Zn2138
Units	ppm
Avg	.16724
Stddev	.00061
%RSD	.36182
#1	.16669
#2	.16715
#3	.16789
Check ?	LC Pass
High Limit	40.000
Low Limit	-.01000

Method: FE3 Sample Name: TC F BLK4/26 Operator: JYH
Comment:
Run Time: 04/30/03 13:32 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00666	.00047	-.00410	-.01164	-.00004
Stddev	.01093	.00092	.00241	.00032	.00052
%RSD	164.13	193.69	58.851	2.7635	1357.4
#1	-.00494	.00036	-.00686	-.01190	-.00053
#2	.00817	.00144	-.00234	-.01128	.00051
#3	.01675	-.00038	-.00311	-.01172	-.00009
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	1000.0	10.000	100.00	100.00	20.000
Low Limit	-.10000	-.01000	-.02000	-.10000	-.01000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00003	.00265	-.00076	.00007	.00102
Stddev	.00001	.00303	.00027	.00039	.00054
%RSD	35.683	114.44	35.798	568.51	52.624
#1	.00003	.00151	-.00105	-.00018	.00146
#2	.00002	.00035	-.00051	-.00014	.00119
#3	.00003	.00608	-.00071	.00052	.00042
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	5.0000	1000.0	30.000	100.00	100.00
Low Limit	-.00050	-.10000	-.00200	-.00500	-.00500

Elem	Cu3247	Fe2598	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00036	-.00014	.02126	-.00008	-.01308
Stddev	.00058	.00021	.03366	.00022	.01090
%RSD	162.73	155.57	158.33	273.73	83.313
#1	-.00062	-.00038	-.01615	-.00031	-.01412
#2	-.00075	.00002	.04908	-.00006	-.00170
#3	.00031	-.00005	.03085	.00013	-.02342
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	1000.0	400.00	15.000	1000.0
Low Limit	-.02000	-.02000	-.50000	-.10000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00001	.00194	.01284	-.00065	.00551
Stddev	.00002	.00050	.00513	.00037	.00830
%RSD	201.59	26.001	39.949	56.953	150.54
#1	.00004	.00150	.01737	-.00027	.00715
#2	.00000	.00249	.01387	-.00069	.01286
#3	.00000	.00183	.00727	-.00101	-.00348
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	40.000	30.000	300.00	100.00	200.00
Low Limit	-.01000	-.10000	-.50000	-.02000	-.02000

Sample Name: TC F BLK4/26 Run Time: 04/30/03 13:32

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00266	.00346	-.00042	-.00235	-.00061
Stddev	.00763	.00300	.00005	.00274	.00119
%RSD	286.90	86.642	11.173	116.34	194.25
#1	.00573	.00678	-.00047	-.00067	.00034
#2	-.00918	.00263	-.00039	-.00552	-.00023
#3	-.00453	.00096	-.00038	-.00088	-.00194
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	20.000	50.000	30.000	30.000
Low Limit	-.02000	-.02000	-1.0000	-.10000	-.01000

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	-.00080	-.00084	-.00176	.00020
Stddev	.00053	.00377	.00261	.00005
%RSD	66.813	446.64	148.05	23.555
#1	-.00090	-.00403	-.00119	.00021
#2	-.00022	-.00181	.00052	.00024
#3	-.00127	.00331	-.00460	.00015
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	30.000	20.000	100.00	40.000
Low Limit	-.01000	-.04000	-.01000	-.01000

Method: FE3 Sample Name: L030450002 0.5 Operator: JYH
Comment:
Run Time: 04/30/03 13:37 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	.10078	.00187	-.00143	-.00799	.10453
Stddev	.01423	.00281	.00179	.00040	.00217
%RSD	14.119	150.00	125.69	5.0536	2.0805
#1	.11159	-.00048	-.00233	-.00763	.10678
#2	.10610	.00112	-.00259	-.00792	.10436
#3	.08466	.00498	.00064	-.00843	.10244
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	1000.0	10.000	100.00	100.00	20.000
Low Limit	-.10000	-.01000	-.02000	-.10000	-.01000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00012	.61619	.00118	.00163	.00144
Stddev	.00003	.01736	.00023	.00083	.00091
%RSD	28.039	2.8171	19.338	50.901	63.334
#1	.00015	.59762	.00136	.00203	.00231
#2	.00012	.63202	.00092	.00220	.00153
#3	.00008	.61893	.00126	.00068	.00049
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	5.0000	1000.0	30.000	100.00	100.00
Low Limit	-.00050	-.10000	-.00200	-.00500	-.00500

Elem	Cu3247	Fe2598	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00522	.14600	.02807	.00019	.02934
Stddev	.00250	.00217	.01568	.00040	.03864
%RSD	47.801	1.4893	55.879	210.60	131.70
#1	.00545	.14809	.01633	.00058	-.01138
#2	.00760	.14617	.02199	.00022	.03389
#3	.00262	.14375	.04588	-.00022	.06550
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	1000.0	400.00	15.000	1000.0
Low Limit	-.02000	-.02000	-.50000	-.10000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00307	.00053	80.392	.01131	.27875
Stddev	.00006	.00105	2.119	.00080	.00430
%RSD	2.0739	200.07	2.6352	7.1108	1.5438
#1	.00306	-.00062	82.626	.01038	.28354
#2	.00314	.00145	80.139	.01181	.27521
#3	.00302	.00075	78.412	.01174	.27751
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	40.000	30.000	300.00	100.00	200.00
Low Limit	-.01000	-.10000	-.50000	-.02000	-.02000

Y = 0.39144 Pb = 7.11

Sample Name: L030450002 0.5 Run Time: 04/30/03 13:37

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00240	-.00009	.15487	.00010	.00244
Stddev	.00730	.00255	.00041	.00513	.00116
%RSD	303.84	2877.5	.26319	4955.7	47.562
#1	-.00294	-.00264	.15531	-.00088	.00327
#2	.01071	-.00009	.15450	.00565	.00293
#3	-.00057	.00246	.15479	-.00446	.00111
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	20.000	50.000	30.000	30.000
Low Limit	-.02000	-.02000	-1.0000	-.10000	-.01000

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	-.00010	-.01745	.00119	.21838
Stddev	.00078	.00182	.00051	.00247
%RSD	806.65	10.424	42.497	1.1304
#1	.00070	-.01699	.00073	.22094
#2	-.00013	-.01946	.00173	.21819
#3	-.00086	-.01590	.00111	.21602
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	30.000	20.000	100.00	40.000
Low Limit	-.01000	-.04000	-.01000	-.01000

Method: FE3 Sample Name: +1 PPM PB Operator: JYH
Comment:
Run Time: 04/30/03 13:42 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	.09525	.00222	-.00302	-.00876	.10432
Stddev	.00628	.00273	.00274	.00007	.00483
%RSD	6.5942	122.87	90.617	.74747	4.6268
#1	.10147	.00533	-.00259	-.00879	.10936
#2	.08891	.00110	-.00594	-.00880	.10386
#3	.09538	.00023	-.00052	-.00868	.09974
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	1000.0	10.000	100.00	100.00	20.000
Low Limit	-.10000	-.01000	-.02000	-.10000	-.01000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00012	.63702	.00176	.00134	.00122
Stddev	.00002	.01321	.00051	.00053	.00054
%RSD	19.638	2.0735	28.950	39.757	44.318
#1	.00010	.65192	.00222	.00077	.00165
#2	.00013	.63237	.00186	.00144	.00061
#3	.00015	.62676	.00121	.00182	.00140
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	5.0000	1000.0	30.000	100.00	100.00
Low Limit	-.00050	-.10000	-.00200	-.00500	-.00500

Elem	Cu3247	Fe2598	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00433	.14720	.04873	.00003	.01321
Stddev	.00076	.00634	.01682	.00015	.03995
%RSD	17.672	4.3073	34.513	559.10	302.39
#1	.00370	.15276	.06762	.00008	.00772
#2	.00410	.14855	.03540	-.00014	-.02371
#3	.00518	.14029	.04316	.00014	.05563
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	1000.0	400.00	15.000	1000.0
Low Limit	-.02000	-.02000	-.50000	-.10000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00315	.00101	79.963	.01102	1.2276
Stddev	.00011	.00027	2.360	.00089	.0482
%RSD	3.5102	26.430	2.9518	8.0631	3.9229
#1	.00323	.00131	82.457	.01194	1.1858
#2	.00320	.00093	79.667	.01097	1.2168
#3	.00303	.00079	77.764	.01016	1.2803
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	40.000	30.000	300.00	100.00	200.00
Low Limit	-.01000	-.10000	-.50000	-.02000	-.02000

Sample Name: +1 PPM PB Run Time: 04/30/03 13:42

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00075	-.00221	.15567	.00207	.00320
Stddev	.00290	.00134	.00517	.00243	.00192
%RSD	385.11	60.389	3.3225	117.38	59.899
#1	-.00057	-.00237	.16044	.00017	.00111
#2	.00408	-.00346	.15638	.00123	.00362
#3	-.00125	-.00080	.15017	.00481	.00488
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	20.000	50.000	30.000	30.000
Low Limit	-.02000	-.02000	-1.0000	-.10000	-.01000

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	-.00017	-.01708	.00097	.22113
Stddev	.00057	.00985	.00024	.00841
%RSD	331.24	57.679	24.242	3.8038
#1	.00029	-.01725	.00112	.22952
#2	-.00081	-.02686	.00070	.22117
#3	.00001	-.00715	.00110	.21270
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	30.000	20.000	100.00	40.000
Low Limit	-.01000	-.04000	-.01000	-.01000

Method: FE3 Sample Name: +2 PPM PB Operator: JYH
Comment:
Run Time: 04/30/03 13:47 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	.09138	.00239	.00030	-.00933	.10396
Stddev	.00635	.00219	.00117	.00059	.00313
%RSD	6.9448	91.375	397.02	6.3064	3.0070
#1	.09778	.00233	.00012	-.00890	.10700
#2	.08508	.00461	-.00078	-.00909	.10412
#3	.09129	.00024	.00154	-.01000	.10075
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	1000.0	10.000	100.00	100.00	20.000
Low Limit	-.10000	-.01000	-.02000	-.10000	-.01000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00010	.60418	.00109	.00115	.00141
Stddev	.00003	.02090	.00031	.00032	.00030
%RSD	27.535	3.4592	28.741	28.225	21.202
#1	.00008	.61890	.00122	.00129	.00170
#2	.00013	.61338	.00132	.00138	.00143
#3	.00008	.58026	.00074	.00078	.00110
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	5.0000	1000.0	30.000	100.00	100.00
Low Limit	-.00050	-.10000	-.00200	-.00500	-.00500

Elem	Cu3247	Fe2598	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00468	.14547	.02657	.00002	.03188
Stddev	.00183	.00482	.03680	.00019	.01193
%RSD	39.036	3.3152	138.51	841.77	37.417
#1	.00679	.15007	.00287	.00012	.01992
#2	.00370	.14589	.00787	.00014	.04378
#3	.00356	.14045	.06896	-.00019	.03194
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	1000.0	400.00	15.000	1000.0
Low Limit	-.02000	-.02000	-.50000	-.10000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00311	.00098	80.771	.01043	2.0904
Stddev	.00010	.00029	1.143	.00103	.0613
%RSD	3.2521	29.978	1.4153	9.8443	2.9330
#1	.00323	.00075	80.342	.01161	2.0348
#2	.00307	.00089	79.904	.00990	2.0801
#3	.00304	.00131	82.066	.00977	2.1562
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	40.000	30.000	300.00	100.00	200.00
Low Limit	-.01000	-.10000	-.50000	-.02000	-.02000

Sample Name: +2 PPM PB Run Time: 04/30/03 13:47

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00252	-.00589	.15263	-.00004	.00362
Stddev	.00347	.00333	.00523	.00063	.00257
%RSD	137.53	56.608	3.4278	1704.5	70.875
#1	-.00025	-.00684	.15789	-.00067	.00624
#2	.00141	-.00218	.15257	-.00004	.00351
#3	.00640	-.00864	.14743	.00060	.00111
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	20.000	50.000	30.000	30.000
Low Limit	-.02000	-.02000	-1.0000	-.10000	-.01000

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	-.00049	-.01499	.00071	.21843
Stddev	.00025	.00675	.00095	.00681
%RSD	51.679	45.005	133.00	3.1187
#1	-.00026	-.00795	.00045	.22451
#2	-.00045	-.02140	-.00007	.21970
#3	-.00077	-.01563	.00176	.21107
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	30.000	20.000	100.00	40.000
Low Limit	-.01000	-.04000	-.01000	-.01000

Method: PE3 Sample Name: +3 PPM PB Operator: JYH
Comment:
Run Time: 04/30/03 13:52 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	.09467	.00081	-.00207	-.00982	.10320
Stddev	.00458	.00294	.00156	.00024	.00377
%RSD	4.8338	365.33	75.534	2.4294	3.6557
#1	.09282	.00338	-.00375	-.00956	.10647
#2	.09988	-.00240	-.00181	-.00985	.10405
#3	.09130	.00143	-.00065	-.01004	.09907
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	1000.0	10.000	100.00	100.00	20.000
Low Limit	-.10000	-.01000	-.02000	-.10000	-.01000

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00010	.61166	.00165	.00118	.00153
Stddev	.00002	.01787	.00013	.00011	.00027
%RSD	16.887	2.9208	8.0520	9.2042	17.660
#1	.00009	.63156	.00152	.00127	.00124
#2	.00008	.60643	.00178	.00106	.00178
#3	.00012	.59700	.00165	.00121	.00157
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	5.0000	1000.0	30.000	100.00	100.00
Low Limit	-.00050	-.10000	-.00200	-.00500	-.00500

Elem	Cu3247	Fe2598	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00571	.14656	.03076	-.00021	.02456
Stddev	.00053	.00464	.01587	.00022	.00712
%RSD	9.3405	3.1659	51.582	101.69	28.980
#1	.00518	.15096	.04196	-.00014	.03163
#2	.00572	.14702	.03773	-.00046	.01739
#3	.00624	.14172	.01260	-.00004	.02467
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	1000.0	400.00	15.000	1000.0
Low Limit	-.02000	-.02000	-.50000	-.10000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00308	.00086	79.919	.01005	2.9163
Stddev	.00008	.00101	5.643	.00066	.0827
%RSD	2.6427	117.54	7.0610	6.5846	2.8370
#1	.00315	-.00029	85.657	.01042	2.8371
#2	.00308	.00159	79.725	.01045	2.9097
#3	.00299	.00126	74.375	.00929	3.0022
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	40.000	30.000	300.00	100.00	200.00
Low Limit	-.01000	-.10000	-.50000	-.02000	-.02000

Sample Name: +3 PPM PB Run Time: 04/30/03 13:52

lem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00440	-.00592	.15599	-.00186	.00335
Stddev	.00144	.00278	.00379	.00068	.00040
%RSD	32.683	46.956	2.4317	36.331	11.948
#1	.00537	-.00273	.15905	-.00235	.00339
#2	.00275	-.00717	.15718	-.00109	.00374
#3	.00507	-.00785	.15175	-.00214	.00294
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	50.000	20.000	50.000	30.000	30.000
Low Limit	-.02000	-.02000	-1.0000	-.10000	-.01000

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	-.00099	-.01984	.00026	.21987
Stddev	.00059	.00805	.00133	.00687
%RSD	59.696	40.581	503.98	3.1253
#1	-.00159	-.02111	-.00020	.22643
#2	-.00040	-.01123	.00177	.22046
#3	-.00099	-.02718	-.00077	.21272
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	30.000	20.000	100.00	40.000
ow Limit	-.01000	-.04000	-.01000	-.01000

Method: FE3 Sample Name: CCV Operator:
Comment:
Run Time: 04/30/03 13:57 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	9.5373	.38584	.37866	9.4194	.98456
Stddev	.1339	.00202	.00369	.0151	.00467
%RSD	1.4042	.52469	.97567	.16058	.47402
#1	9.4839	.38817	.38292	9.4156	.98609
#2	9.4383	.38482	.37646	9.4065	.97932
#3	9.6897	.38452	.37659	9.4360	.98827
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	10.000	.40000	.40000	10.000	1.0000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.04809	9.7742	.04832	.19757	.49322
Stddev	.00016	.0721	.00038	.00111	.00195
%RSD	.33061	.73728	.79483	.56406	.39590
#1	.04827	9.8331	.04871	.19862	.49539
#2	.04795	9.7957	.04832	.19770	.49264
#3	.04806	9.6939	.04794	.19640	.49161
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.05000	10.000	.05000	.20000	.50000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Elem	Cu3247	Fe2598	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	.47544	3.9017	53.046	.97191	9.6709
Stddev	.00346	.0192	2.709	.03365	.0634
%RSD	.72809	.49110	5.1077	3.4622	.65551
#1	.47564	3.9236	51.088	.95336	9.5992
#2	.47188	3.8931	51.912	.95162	9.7194
#3	.47879	3.8883	56.139	1.0108	9.6942
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000	4.0000	50.000	1.0000	10.000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.49021	.99569	53.644	.49500	.49649
Stddev	.00174	.00070	2.733	.00191	.00405
%RSD	.35564	.07037	5.0954	.38582	.81605
#1	.49221	.99650	51.747	.49715	.50068
#2	.48939	.99537	52.409	.49351	.49621
#3	.48903	.99521	56.778	.49434	.49259
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000	1.0000	50.000	.50000	.50000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Sample Name: CCV Run Time: 04/30/03 13:57

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	1.2079	.39993	4.7272	1.0125	.99198
Stddev	.0036	.00159	.0065	.0021	.00492
%RSD	.29550	.39731	.13757	.20465	.49559
#1	1.2104	.39880	4.7331	1.0135	.99765
#2	1.2038	.40175	4.7202	1.0101	.98887
#3	1.2094	.39925	4.7281	1.0139	.98942
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.2000	.40000	5.0000	1.0000	1.0000
Range	10.000%	10.000%	10.000%	10.000%	10.000%

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	.96171	.50583	.97828	.98600
Stddev	.00494	.00790	.00182	.00095
%RSD	.51396	1.5621	.18639	.09663
#1	.96677	.51405	.98039	.98703
#2	.95689	.49830	.97730	.98516
#3	.96147	.50513	.97716	.98582
Check ?	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	.50000	1.0000	1.0000
Range	10.000%	10.000%	10.000%	10.000%

Method: FE3 Sample Name: CCB Operator:
Comment:
Run Time: 04/30/03 14:02 Type: Blank Mode: CONC Corr.Fact: 1.000000

Elem	Al3944	Ag3280	As1890	B_2496	Ba4554
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00608	.00112	-.00229	-.00138	.00014
Stddev	.00279	.00157	.00215	.00421	.00039
%RSD	45.887	140.91	93.754	305.70	279.21
#1	.00928	.00164	-.00298	.00284	.00053
#2	.00477	-.00065	-.00402	-.00140	.00012
#3	.00418	.00236	.00012	-.00558	-.00024
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.20000	.00500	.01000	.05000	.00250
Low Limit	-.20000	-.00500	-.01000	-.05000	-.00250

Elem	Be3130	Ca3736	Cd2288	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00001	-.00190	-.00059	.00052	.00034
Stddev	.00002	.01200	.00032	.00061	.00034
%RSD	177.47	632.84	53.542	117.14	97.426
#1	.00004	.01171	-.00025	-.00004	.00028
#2	.00001	-.00642	-.00066	.00117	.00071
#3	-.00001	-.01098	-.00087	.00044	.00004
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.00025	.05000	.00100	.00250	.00250
Low Limit	-.00025	-.05000	-.00100	-.00250	-.00250

Elem	Cu3247	Fe2598	K_7664	Li6707	Mg2779
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00075	-.00025	-.01113	-.00033	-.00818
Stddev	.00210	.00007	.01505	.00016	.03577
%RSD	280.86	29.565	135.19	50.536	437.21
#1	-.00317	-.00017	-.00329	-.00051	-.00667
#2	.00060	-.00031	-.02849	-.00029	.02681
#3	.00033	-.00026	-.00162	-.00018	-.04469
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.01000	.02000	.25000	.05000	.10000
Low Limit	-.01000	-.02000	-.25000	-.05000	-.10000

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00006	.00224	.00900	-.00012	.00524
Stddev	.00001	.00133	.00093	.00051	.00059
%RSD	16.311	59.531	10.306	439.24	11.273
#1	.00005	.00367	.00933	.00044	.00490
#2	.00006	.00202	.00972	-.00023	.00592
#3	.00007	.00103	.00795	-.00056	.00490
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.00250	.05000	.10000	.01000	.01000
Low Limit	-.00250	-.05000	-.10000	-.01000	-.01000

Sample Name: CCB Run Time: 04/30/03 14:02

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr2152
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00278	.00650	.00020	-.00228	.00034
Stddev	.00268	.00314	.00179	.00127	.00080
%RSD	96.416	48.323	884.67	55.606	236.95
#1	.00547	.00512	-.00186	-.00109	.00034
#2	.00277	.01009	.00130	-.00362	.00114
#3	.00011	.00428	.00116	-.00214	-.00046
Check ?	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.02000	.01000	.25000	.20000	.00500
Low Limit	-.02000	-.01000	-.25000	-.20000	-.00500

Elem	Ti3349	Tl1908	V_3102	Zn2138
Units	ppm	ppm	ppm	ppm
Avg	-.00104	-.00096	.00238	.00012
Stddev	.00085	.00317	.00104	.00005
%RSD	82.047	328.44	43.732	45.228
#1	-.00195	.00205	.00198	.00009
#2	-.00090	-.00427	.00159	.00009
#3	-.00026	-.00067	.00355	.00018
Check ?	LC Pass	LC Pass	LC Pass	LC Pass
High Limit	.01500	.02000	.00728	.01000
Low Limit	-.01500	-.02000	-.00728	-.01000

Metals

Date: 05-02-2003
Analyst: MSW/SLP
Method: 6010B
Instrument: ICP-AE
Work Group: WG139616, WG139654, WG139676

5/5
04-594
04-586

	Analyst
Calibration/Linearity	✓
ICV/CCV	✓
ICB/CCB	✓
icsa/icsab/cri	✓
Blank/LCS	✓
MS/MSD	✓
Postspike/Serial Dilution	✓
Duplicate	✓
Record Results	✓
Excel Spreadsheets	✓
Results Reporting / Data Qualifiers	
Calculations & Correct Factors	
Reanalysis Assign	
Instrument Failure/Reassign	
Case Narrative	✓
QA Approval - Seedpak 3	
Check for Completeness	
Level IV Data 04-594	✓
04-585	✓
04-505	✓

Primary Reviewer Initials & Date Checked MSW/SLP 5/2/03

Secondary Reviewer Initials & Date Checked DAS 5-5-03

✓ • Check for compliance with Method and project-specific requirements
✓ • Check the completeness of the reported information
✓ • Check the information for the report narrative
✓ • Check the reasonableness of results

Supervisory Review Initials & Date Checked MMB 5/5/03 5/6/03

Comments:

✓ - Checked & OK
NA - Not Applicable
DL - Diluted Out

KEMRON ENVIRONMENTAL SERVICES
ICP (ICP/MS) RUN LOGBOOK

ANALYST MSW / SLP DATE 05-02-2003 TIME 1029
METHOD # 6010B SOP # ME6006E Rev # 3 WORK GROUP # 139616, 139654, 139676
CAL STD SOURCE M1-17-35B ICV/CCV SOURCE M1-17-32B
ICS AB SOURCE M1-17-33A ICS A SOURCE M1-17-36A POST SPK SOURCE D550053-60
Instrument ID: TJA IRIS: _____ Data File: 0502031 Perkin Elmer Optima: ✓ Perkin Elmer ELAN: _____

Cup #	Sample No.	Dil	Prep Conc	Autosampler Runs	Cup #	Sample No.	Dil	Prep Conc	Autosampler Runs
					27.	L0304550-06			
					28.	L0304575-08			
					29.	L0304585-02			
					30.	-03			
					31.	-07			
					32.	-08			
					33.	-09			CCV, CCB
					34.	-10			CCV, CCB
1.	SO				35.	CBW F4			WG139046-03
2.	S1 1/200				36.	LCW F4			-04
3.	S2 1/2				37.	L0304505-01			-02
4.	S3				38.	-01DP			-07
5.	ICV				39.	L0304505-09			-01
6.	ICB				40.	-10S			-05
7.	ICSA				41.	-11SD			-06
8.	ICSAB				42.	L0304505-02			
9.	PB ES WG139542-03			WG139542-03	43.	-02SDL	0.2		
10.	LBSW ES WG139542-04			WG139542-04	44.	-02PS	0.9		CCV, CCB
11.	L0304606-01				45.	L0304505-03			
12.	-01PS	0.9			46.	-04			
13.	-02				47.	-05			
14.	-03			CCV, CCB	48.	-06			
15.	L0304505-04			WG139542-01	49.	-07			
16.	-05S			-05	50.	-08			
17.	-06SD			-06	51.	-12			
18.	L0304594-02			WG139542-02	52.	-13			
19.	-02DP			-07	53.	-14			
20.	L0304585-01				54.	-15			CCV, CCB
21.	-01SDL	0.2			55.	-16			
22.	-01PS	0.9			56.	-17			
23.	L0304657-01				57.	-18			
24.	L0304594-01			CCV, CCB	58.	-19			
25.	L0304550-02				59.	-20			~~CCV, CCB~~
26.	-04				60.	02SDL	0.04		

cont'd

Reviewed by: MMB 05/05/03

Comments: _____

Note: No entry for Dil represents 1X Dilution

Autosampler Run Key: CCV - Continuing Calibration Verification; CCB = Continuing Calibration Blank; FRS = Full Recalibration Sequence; R = Analyst Rerun

KEMRON ENVIRONMENTAL SERVICES
ICP (ICP/MS) RUN LOGBOOK

ANALYST MSW/SLP DATE 05/02/03 TIME 1029
METHOD # 6010B SOP # ME-006 Rev # 3 WORK GROUP # 139616, 139654, 139676
CAL STD SOURCE MI-17-35B ICV/CCV SOURCE MI-17-32B
ICS AB SOURCE MI-17-33A ICS A SOURCE MI-17-36A POST SPK SOURCE DSS-53-60
Instrument ID: TJA IRIS: Data File: 050203A Perkin Elmer Optima: ✓ Perkin Elmer ELAN:

Cup #	Sample No.	Dil	Prep Conc	Autosampler Runs	Cup #	Sample No.	Dil	Prep Conc	Autosampler Runs
					27.				
					28.				
					29.				
					30.				
					31.				
					32.				
					33.				
					34.				
1.	L0304594-02	0.01			35.				
2.	L0304605-18SDL	0.2			36.				
3.	18SDL	0.04		CCV/CCB	37.				
4.	PBW S4			WG139047-03	38.				
5.	LCSW S4			04	39.				
6.	L0304505-21			02	40.				
7.	21DP			07	41.				
8.	25			01	42.				
9.	25S			05	43.				
90.	25SD			06	44.				
91.	22				45.				
92.	22SDL	0.2			46.				
93.	32PSDL	0.99.04		CCV/CCB	47.				
94.	32PS	0.9			48.				
95.	33				49.				
96.	24			CCV/CCB	50.				
17.					51.				
18.					52.				
19.					53.				
20.					54.				
21.					55.				
22.					56.				
23.					57.				
24.					58.				
25.					59.				
26.					60.				

SLP 5/2/03

SLP 5/2/03

SLP 5/2/03

Reviewed by: MM3 05/05/03

Comments:

Note: No entry for Dil represents 1X Dilution

Autosampler Run Key:

CCV - Continuing Calibration Verification
CCB = Continuing Calibration Blank

FRS = Full Recalibration Sequence
R = Analyst Rerun

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INORGANIC ANALYSES DATA SHEET
INITIAL MULTIPOINT CALIBRATION

Analytical Method: _____ AAB#: _____

Lab Name: KEMRON ENVIRONMENTAL SERVICES Contract #: _____

Date of Initial Calibration: 2-May-03 Initial Calibration ID: PE-ICP 02-May-2003

Instrument ID: PE-ICP Concentration Units (mg/L or mg/kg dry weight): mg/L

Analyte	Std 1	RF 1	Std 2	RF 2	Std 3	RF 3	Std 4	RF 4			r	Q
Silver	0.00	1158.6	0.004	1528.5	0.4	172794	0.800	351060			0.99996	
Aluminum	0	1028.7	0.1	2657.1	10	322057	20	662413			0.99989	
Arsenic	0	-71.8	0.004	40	0.4	4405.8	0.8	9062.4			0.99991	
Barium	0	-1101	0.01	1933.6	1	225474	2	446959			0.99998	
Beryllium	0	157.4	0.0005	339.9	0.05	40227	0.1	80411			1.00000	
Calcium	0	-29.4	0.1	93.6	10	10638	20	20775			0.99992	
Cadmium	0	115.1	0.0005	139.5	0.05	15230	0.1	31397			0.99986	
Cobalt	0	92.3	0.002	239.7	0.2	25438	0.4	51676			0.99996	
Chromium	0	-1532	0.005	951.1	0.5	109208	1	217410			0.99998	
Copper	0	609.3	0.005	1048.3	0.5	138130	1	275251			0.99999	
Iron	0	-1341	0.04	235.8	4	58728	8	120577			0.99993	
Potassium	0	1859.2	0.5	6655.1	50	782767	100	1651813			0.99963	
Magnesium	0	-1589	0.1	3008.4	10	351511	20	717696			0.99995	
Manganese	0	-1505	0.005	4656	0.5	513625	1	1022710			1.00000	
Nickel	0	-510.8	0.005	599.4	0.5	66589	1	132540			0.99999	
Sodium	0	2190.1	0.5	19222	50	2230210	100	4577503			0.99991	
Lead	0	128.4	0.005	93.6	0.5	10723	1	21605			0.99997	
Vanadium	0	-359.2	0.01	1428.5	1	186885	2	374836			1.00000	
Zinc	0	538.1	0.01	1738.9	1	199715	2	399494			1.00000	

Comments:

AFCEE FORM 1-3A

KEMRON ENVIRONMENTAL SERVICES
FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

INSTRUMENT: PE - Optima 3000
METHOD: 6010B
ANALYST: Msw/Slp
DATE: 5/2/03

UNITS: ug/L

ICV Time: 10:49 AM
CCV1 Time: 11:07 AM
CCV2 Time: 11:47 AM

	Initial Calibration Verification			Continuing Calibration Verification CCV1			CCV2		Q
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	10000	9940	98.4	10000	9740	97.4	9290	92.9	
Antimony	1200	1230	102.5	1200	1210	100.8	1160	96.7	
Arsenic	400	389	97.3	400	382	95.5	364	91.0	
Barium	1000	1040	104.0	1000	1020	102.0	976	97.6	
Beryllium	50	50.1	100.2	50	49.7	99.4	47.0	94.0	
Cadmium	50	49.0	98.0	50	48.3	96.6	46.1	92.2	
Calcium	10000	10100	101.0	10000	10000	100.0	9540	95.4	
Chromium	500	511	102.2	500	503	100.6	478	95.6	
Cobalt	200	207	103.5	200	201	100.5	192	96.0	
Copper	500	513	102.6	500	509	101.8	487	97.4	
Iron	4000	4000	100.0	4000	3950	98.8	3700	92.5	
Lead	500	515	103.0	500	505	101.0	480	96.0	
Magnesium	10000	10100	101.0	10000	9910	99.1	9520	95.2	
Manganese	500	508	101.6	500	502	100.4	481	96.2	
Nickel	500	522	104.4	500	515	103.0	493	98.6	
Potassium	50000	49000	98.0	50000	48300	96.6	46400	92.8	
Selenium	400	403	100.8	400	395	98.8	380	95.0	
Silver	400	399	99.8	400	395	98.8	376	94.0	
Sodium	50000	50800	101.6	50000	49800	99.6	48100	96.2	
Thallium	500	527	105.4	500	517	103.4	418	83.6	*
Vanadium	1000	1020	102.0	1000	1000	100.0	958	95.8	
Zinc	1000	1010	101.0	1000	990	99.0	953	95.3	

(1) Control Limits: 90-110%

KEMRON ENVIRONMENTAL SERVICES
FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

INSTRUMENT: PE - Optima 3000
METHOD: 6010B
ANALYST: Msw/Slp
DATE: 5/2/03

UNITS: ug/L

ICV Time: 10:49 AM
CCV1 Time: 1:26 PM
CCV2 Time: 2:20 PM

	Initial Calibration Verification			Continuing Calibration Verification CCV1			CCV2		Q
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	10000	9840	98.4	10000	9560	95.6	10300	103.0	
Antimony	1200	1230	102.5	1200	1190	99.2	1270	105.8	
Arsenic	400	389	97.3	400	376	94.0	403	100.8	
Barium	1000	1040	104.0	1000	1000	100.0	1080	108.0	
Beryllium	50	50.1	100.2	50	48.7	97.4	53.2	106.4	
Cadmium	50	49.0	98.0	50	47.4	94.8	50.6	101.2	
Calcium	10000	10100	101.0	10000	9800	98.0	10500	105.0	
Chromium	500	511	102.2	500	491	98.2	532	106.4	
Cobalt	200	207	103.5	200	197	98.5	215	107.5	
Copper	500	513	102.6	500	499	99.8	537	107.4	
Iron	4000	4000	100.0	4000	3870	96.8	4240	106.0	
Lead	500	515	103.0	500	495	99.0	530	106.0	
Magnesium	10000	10100	101.0	10000	9690	96.9	10500	105.0	
Manganese	500	508	101.6	500	494	98.8	529	105.8	
Nickel	500	522	104.4	500	501	100.2	541	108.2	
Potassium	50000	49000	98.0	50000	49200	98.4	50200	100.4	
Selenium	400	403	100.8	400	391	97.8	421	105.3	
Silver	400	399	99.8	400	388	97.0	420	105.0	
Sodium	50000	50800	101.6	50000	50700	101.4	51800	103.6	
Thallium	500	527	105.4	500	468	93.6	540	108.0	
Vanadium	1000	1020	102.0	1000	984	98.4	1070	107.0	
Zinc	1000	1010	101.0	1000	968	96.8	1050	105.0	

(1) Control Limits: 90-110%

KEMRON ENVIRONMENTAL SERVICES
FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

INSTRUMENT: PE - Optima 3000
METHOD: 6010B
ANALYST: Msw/Slp
DATE: 5/2/03

UNITS: ug/L

ICV Time: 10:49 AM
CCV1 Time: 2:34 PM
CCV2 Time: 3:36 PM

	Initial Calibration Verification			Continuing Calibration Verification CCV1			CCV2		Q
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	10000	9840	98.4	10000	10200	102.0	9980	99.8	
Antimony	1200	1230	102.5	1200	1240	103.3	1240	103.3	
Arsenic	400	389	97.3	400	393	98.3	391	97.8	
Barium	1000	1040	104.0	1000	1070	107.0	1050	105.0	
Beryllium	50	50.1	100.2	50	53.0	106.0	51.8	103.6	
Cadmium	50	49.0	98.0	50	49.4	98.8	49.3	98.6	
Calcium	10000	10100	101.0	10000	10300	103.0	10200	102.0	
Chromium	500	511	102.2	500	528	105.6	518	103.6	
Cobalt	200	207	103.5	200	215	107.5	210	105.0	
Copper	500	513	102.6	500	534	106.8	521	104.2	
Iron	4000	4000	100.0	4000	4190	104.8	4050	101.3	
Lead	500	515	103.0	500	518	103.6	515	103.0	
Magnesium	10000	10100	101.0	10000	10400	104.0	10200	102.0	
Manganese	500	508	101.6	500	526	105.2	515	103.0	
Nickel	500	522	104.4	500	537	107.4	525	105.0	
Potassium	50000	49000	98.0	50000	50800	101.6	49200	98.4	
Selenium	400	403	100.8	400	409	102.3	407	101.8	
Silver	400	399	99.8	400	418	104.5	410	102.5	
Sodium	50000	50800	101.6	50000	52400	104.8	50700	101.4	
Thallium	500	527	105.4	500	540	108.0	532	106.4	
Vanadium	1000	1020	102.0	1000	1060	106.0	1040	104.0	
Zinc	1000	1010	101.0	1000	1040	104.0	1020	102.0	

(1) Control Limits: 90-110%

KEMRON ENVIRONMENTAL SERVICES
FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

INSTRUMENT: PE - Optima 3000
METHOD: 6010B
ANALYST: Msw/Slp
DATE: 5/2/03

UNITS: ug/L

ICV Time: 10:49 AM
CCV1 Time: 4:35 PM
CCV2 Time: 5:35 PM

	Initial Calibration Verification			Continuing Calibration Verification CCV1			CCV2		Q
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	10000	9840	98.4	10000	9910	99.1	10200	102.0	
Antimony	1200	1230	102.5	1200	1240	103.3	1250	104.2	
Arsenic	400	389	97.3	400	389	97.3	396	99.0	
Barium	1000	1040	104.0	1000	1050	105.0	1070	107.0	
Beryllium	50	50.1	100.2	50	51.8	103.6	53.0	106.0	
Cadmium	50	49.0	98.0	50	49.1	98.2	49.9	99.8	
Calcium	10000	10100	101.0	10000	10200	102.0	10300	103.0	
Chromium	500	511	102.2	500	514	102.8	526	105.2	
Cobalt	200	207	103.5	200	208	104.0	213	106.5	
Copper	500	513	102.6	500	516	103.2	528	105.6	
Iron	4000	4000	100.0	4000	4000	100.0	4130	103.3	
Lead	500	515	103.0	500	512	102.4	520	104.0	
Magnesium	10000	10100	101.0	10000	10100	101.0	10300	103.0	
Manganese	500	508	101.6	500	512	102.4	524	104.8	
Nickel	500	522	104.4	500	520	104.0	531	106.2	
Potassium	50000	49000	98.0	50000	49400	98.8	51000	102.0	
Selenium	400	403	100.8	400	405	101.3	411	102.8	
Silver	400	399	99.8	400	408	102.0	418	104.5	
Sodium	50000	50800	101.6	50000	50900	101.8	52400	104.8	
Thallium	500	527	105.4	500	507	101.4	528	105.6	
Vanadium	1000	1020	102.0	1000	1030	103.0	1060	106.0	
Zinc	1000	1010	101.0	1000	1010	101.0	1030	103.0	

(1) Control Limits: 90-110%

KEMRON ENVIRONMENTAL SERVICES
FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

INSTRUMENT: PE - Optima 3000
METHOD: 6010B
ANALYST: Msw/Slp
DATE: 5/2/03

UNITS: ug/L

ICV Time: 10:49 AM
CCV1 Time: 6:46 PM
CCV2 Time: 7:10 PM

	Initial Calibration Verification			Continuing Calibration Verification					Q
				CCV1			CCV2		
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	10000	9840	98.4	10000	10000	100.0	10400	104.0	
Antimony	1200	1230	102.5	1200	1250	104.2	1280	106.7	
Arsenic	400	389	97.3	400	397	99.3	406	101.5	
Barium	1000	1040	104.0	1000	1060	106.0	1090	109.0	
Beryllium	50	50.1	100.2	50	52.5	105.0	54.2	108.4	
Cadmium	50	49.0	98.0	50	49.9	99.8	51.1	102.2	
Calcium	10000	10100	101.0	10000	10300	103.0	10500	105.0	
Chromium	500	511	102.2	500	524	104.8	538	107.6	
Cobalt	200	207	103.5	200	213	106.5	218	109.0	
Copper	500	513	102.6	500	521	104.2	542	108.4	
Iron	4000	4000	100.0	4000	4100	102.5	4240	106.0	
Lead	500	515	103.0	500	522	104.4	533	106.6	
Magnesium	10000	10100	101.0	10000	10300	103.0	10500	105.0	
Manganese	500	508	101.6	500	520	104.0	535	107.0	
Nickel	500	522	104.4	500	530	106.0	544	108.8	
Potassium	50000	49000	98.0	50000	48100	96.2	49700	99.4	
Selenium	400	403	100.8	400	414	103.5	423	105.8	
Silver	400	399	99.8	400	411	102.8	427	106.8	
Sodium	50000	50800	101.6	50000	49700	99.4	51400	102.8	
Thallium	500	527	105.4	500	515	103.0	535	107.0	
Vanadium	1000	1020	102.0	1000	1050	105.0	1080	108.0	
Zinc	1000	1010	101.0	1000	1040	104.0	1050	105.0	

(1) Control Limits: 90-110%

KEMRON ENVIRONMENTAL SERVICES
FORM 3 - BLANKS

INSTRUMENT: PE - Optima 3000
METHOD: 6010B
ANALYST: Msw/Slp
DATE: 5/2/03

UNITS: ug/L

ICB Time: 10:54 AM
CCB1 Time: 11:12 AM
CCB2 Time: 11:52 AM
CCB3 Time: 1:31 PM

Analyte	Initial Calibration Blank(ug/L)		Continuing Calibration Blank (ug/L) CCB1 1		CCB2 2		CCB3 3	
Aluminum	-0.25		1.35		0.883		-0.722	
Antimony	0.234		-0.125		0.487		0.14	
Arsenic	-0.0424		-0.155		-0.395		-0.167	
Barium	-0.00986		-0.116		-0.0545		0.0763	
Beryllium	0.00445		0.0139		0.00714		-0.0008	
Cadmium	-0.00361		0.0329		0.129		0.0625	
Calcium	3.88		9.14		-0.562		-5.06	
Chromium	0.123		-0.0354		-0.312		0.0341	
Cobalt	-0.055		0.00949		0.023		-0.0202	
Copper	-0.0909		-0.0995		0.0505		0.0326	
Iron	3.14		2.66		-7.20		7.04	
Lead	0.0989		0.319		0.285		0.0163	
Magnesium	0.466		-0.936		-0.849		0.382	
Manganese	0.0151		-0.0369		-0.0179		0.0232	
Nickel	0.0385		-0.0596		-0.0935		0.0182	
Potassium	17.0		0.545		241		68	
Selenium	1.30		0.889		1.25		0.85	
Silver	0.108		0.225		0.324		0.099	
Sodium	5.82		-12.6		176		42.8	
Thallium	1.45		5.09		8.58		3.85	
Vanadium	0.114		-0.0379		0.0147		0.0992	
Zinc	-0.383		-0.337		-0.236		-0.335	

U = Result is less than MDL
B = Result is between MDL and RL

KEMRON ENVIRONMENTAL SERVICES
FORM 3 - BLANKS

INSTRUMENT:	PE - Optima 3000
METHOD:	6010B
ANALYST:	Msw/Slp
DATE:	5/2/03
UNITS:	ug/L
ICB Time:	10:54 AM
CCB1 Time:	2:25 PM
CCB2 Time:	2:39 PM
CCB3 Time:	3:41 PM

Analyte	Initial Calibration Blank(ug/L)		Continuing Calibration Blank (ug/L) CCB1 1		CCB2 2		CCB3 3	
Aluminum	-0.25		-0.646		-0.988		-1.37	
Antimony	0.234		-0.189		-0.0458		0.361	
Arsenic	-0.0424		0.358		0.143		-0.202	
Barium	-0.00886		0.0741		0.117		0.124	
Beryllium	0.00445		-0.00715		-0.0126		-0.0206	
Cadmium	-0.00361		0.0189		0.0081		0.11	
Calcium	3.88		-3.77		2.99		-9.84	
Chromium	0.123		0.0943		0.104		0.299	
Cobalt	-0.055		-0.0695		-0.0593		-0.114	
Copper	-0.0909		-0.118		-0.0752		-0.128	
Iron	3.14		7.10		5.27		-1.15	
Lead	0.0989		0.105		0.0395		0.0324	
Magnesium	0.466		0.551		0.644		0.971	
Manganese	0.0151		0.0348		0.0384		0.0335	
Nickel	0.0385		0.0316		0.0416		-0.0573	
Potassium	17.0		29.6		42.9		30.5	
Selenium	1.30		1.28		1.17		0.494	
Silver	0.108		0.184		0.196		0.159	
Sodium	5.82		17.9		13.6		7.27	
Thallium	1.45		2.85		1.97		3.27	
Vanadium	0.114		0.0631		0.0667		0.105	
Zinc	-0.383		-0.109		-0.249		-1.28	

U = Result is less than MDL
B = Result is between MDL and RL

KEMRON ENVIRONMENTAL SERVICES
FORM 3 - BLANKS

INSTRUMENT:	PE - Optima 3000
METHOD:	6010B
ANALYST:	Msw/Slp
DATE:	5/2/03
UNITS:	ug/L
ICB Time:	10:54 AM
CCB1 Time:	4:40 PM
CCB2 Time:	5:40 PM
CCB3 Time:	6:51 PM

Analyte	Initial Calibration Blank(ug/L)		Continuing Calibration Blank (ug/L) CCB1 1		CCB2 2		CCB3 3	
Aluminum	-0.25		-1.53		-1.61		-1.12	
Antimony	0.234		-0.336		-0.0658		0.292	
Arsenic	-0.0424		0.0147		-0.308		-0.0835	
Barium	-0.00986		0.144		0.126		0.121	
Beryllium	0.00445		-0.0161		-0.0196		-0.0214	
Cadmium	-0.00561		0.0214		0.0145		0.0544	
Calcium	3.88		1.63		-13.9		-5.44	
Chromium	0.123		0.181		0.164		0.26	
Cobalt	-0.055		-0.0846		-0.129		-0.0908	
Copper	-0.0909		-0.0762		-0.0855		-0.0899	
Iron	3.14		-1.74		-1.68		-2.43	
Lead	0.0989		0.205		-0.0514		-0.12	
Magnesium	0.466		1.28		0.776		0.442	
Manganese	0.0151		0.0494		0.036		0.0293	
Nickel	0.0385		0.0059		0.0471		-0.0816	
Potassium	17.0		12.2		8.24		16.7	
Selenium	1.30		0.486		0.482		0.926	
Silver	0.108		0.00335		0.122		0.211	
Sodium	5.82		-1.75		-11.0		-3.38	
Thallium	1.45		3.31		1.18		8.93	
Vanadium	0.114		0.144		0.00527		0.0661	
Zinc	-0.383		-1.46		-1.44		-1.37	

U = Result is less than MDL
B = Result is between MDL and RL

KEMRON ENVIRONMENTAL SERVICES
FORM 3 - BLANKS

INSTRUMENT: PE - Optima 3000
METHOD: 6010B
ANALYST: Msw/Slp
DATE: 5/2/03

UNITS: ug/L

ICB Time: 10:54 AM
CCB1 Time: 7:15 PM
CCB2 Time:
CCB3 Time:

Analyte	Initial Calibration Blank(ug/L)		Continuing Calibration Blank (ug/L) CCB1 1		CCB2 2		CCB3 3	
Aluminum	-0.25		-1.57					
Antimony	0.234		0.0363					
Arsenic	-0.0424		-0.398					
Barium	-0.00986		0.126					
Beryllium	0.00445		-0.0242					
Cadmium	-0.00361		0.0541					
Calcium	3.88		-5.07					
Chromium	0.123		0.288					
Cobalt	-0.055		-0.102					
Copper	-0.0909		-0.173					
Iron	3.14		-1.95					
Lead	0.0989		0.166					
Magnesium	0.466		0.854					
Manganese	0.0151		0.0327					
Nickel	0.0385		-0.0677					
Potassium	17.0		11.0					
Selenium	1.30		0.872					
Silver	0.108		0.061					
Sodium	5.82		-2.24					
Thallium	1.45		3.98					
Vanadium	0.114		0.111					
Zinc	-0.383		-1.31					

U = Result is less than MDL
B = Result is between MDL and RL

KEMRON ENVIRONMENTAL SERVICES
FORM 4A - INTERFERENCE CHECK SAMPLE

INSTRUMENT ID: PE - Optima 3000
METHOD: 6010B
ANALYST: Msw/Slp
DATE: 5/2/03

UNITS: ug/L

Initial ICSA Time: 10:59 AM
Initial ICSAB Time: 11:03 AM
Final ICSA Time:
Final ICSAB Time:

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found Sol. AB	Final Found %R	Q
Aluminum	250000	250000	256000	258000	103.2				
Antimony	0	500	13.2	540	108.0				
Arsenic	0	250	-5.40	252	100.8				
Barium	0	250	-1.37	245	98.0				
Beryllium	0	250	-1.22	270	108.0				
Cadmium	0	500	-0.922	494	98.8				
Calcium	250000	250000	253000	254000	101.6				
Chromium	0	250	-0.353	242	96.8				
Cobalt	0	250	6.01	230	92.0				
Copper	0	250	-2.64	257	102.8				
Iron	100000	100000	89900	91200	91.2				
Lead	0	500	-2.38	471	94.2				
Magnesium	250000	250000	251000	254000	101.6				
Manganese	0	250	-2.26	237	94.8				
Nickel	0	500	-1.09	452	90.4				
Potassium	0	5000	-195	5680	113.6				
Selenium	0	250	-12.6	258	103.2				
Silver	0	500	1.71	531	106.2				
Sodium	0	5000	38.6	5780	115.6				
Thallium	0	500	-0.704	353	70.6				*
Vanadium	0	250	-1.71	245	98.0				
Zinc	0	500	-7.48	449	89.8				

(1) Control Limits: 80-120%

10A-IN
ICP AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Instrument ID: PE - Optima 3000

Date: 4/1/2002

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	As
Aluminum	237.30	0.0000000	0.0000000	-0.1000000	-0.3400000	0.0000000
Antimony	206.80	0.0500000	0.0000000	0.1000000	0.0000000	0.0000000
Arsenic	189.00	-0.0430000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	233.40	-0.0040000	0.0000000	-0.0700000	0.0000000	0.0000000
Beryllium	234.90	0.0074000	0.0000000	0.6500000	0.0000000	0.0000000
Cadmium	228.80	0.0000000	0.0000000	-0.0010000	0.0008000	0.0000000
Calcium	227.50	-0.1090000	0.0000000	19.0000000	0.0000000	0.0000000
Chromium	267.70	0.0300000	0.0000000	-0.0430000	0.0050000	0.0000000
Cobalt	228.60	-0.0020000	0.0000000	-0.0200000	-0.0005000	0.0000000
Copper	327.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	261.40	-0.2600000	-0.0240000	0.0000000	-0.2250000	0.0000000
Lead	220.40	0.0727500	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.10	0.1170000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.80	0.0060000	0.0000000	0.0060000	0.0200000	0.0000000
Molybdenum	202.00	0.0026000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	-0.0130000	0.0000000	0.0000000
Potassium	766.50	0.0000000	0.0000000	0.0000000	4.0000000	0.0000000
Selenium	196.00	0.1060000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	288.20	0.3500000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.10	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.60	0.0000000	0.0000000	-0.5000000	0.0000000	0.0000000
Strontium	407.80	-0.2200000	0.0000000	-4.7000000	0.3600000	0.0000000
Thallium	190.80	0.0000000	0.0000000	-1.3000000	0.0000000	0.0000000
Tin	189.90	0.0800000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	337.30	-0.0400000	0.0000000	-0.0400000	0.0240000	0.0000000
Vanadium	292.40	0.0060000	0.0000000	-0.0900000	0.0000000	0.0000000
Zinc	206.20	0.0000000	0.0000000	-0.0430000	0.0100000	0.0000000

Comments:

10A-IN

ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Instrument ID: PE - Optima 3000

Date: 4/1/2002

Analyte	Wave-length (nm)	Interelement Correction Factors for: Ba	Be	Cd	Co	Cr
Aluminum	237.30	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.80	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.00	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	230.40	0.0000000	0.0040000	0.0000000	0.0000000	0.0000000
Beryllium	234.90	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	228.80	2.2200000	0.0008000	0.0000000	0.0000000	0.0000000
Calcium	227.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.70	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	238.60	0.0000000	-0.0005000	0.0000000	0.0000000	-100
Copper	327.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	241.40	0.0000000	0.0000000	0.0000000	0.00000	0.0000000
Lead	220.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.10	0.0000000	0.1050000	0.0000000	0.0000000	0.0000000
Manganese	257.60	0.0000000	0.0004000	0.0000000	0.0000000	0.0000000
Molybdenum	202.00	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.00	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	288.20	0.0000000	-0.5000000	0.0000000	0.0000000	0.0000000
Silver	328.10	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.00	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	407.80	0.0000000	-0.1000000	0.0000000	0.0000000	0.0000000
Thallium	190.80	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Tin	189.90	0.0000000	-0.0100000	0.0000000	0.0000000	0.0000000
Titanium	337.20	0.0000000	-0.0400000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.20	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

10A-IN

ICP AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Instrument ID: PE - Optima 3000

Date: 4/1/2002

Analyte	Wave-length (nm)	Interelement Correction Factors for: Cu	Mn	Mo	Ti	V
Aluminum	237.30	0.0000000	0.0000000	0.0000000	4.5000000	0.0000000
Antimony	206.80	19.0000000	0.3700000	-4.5800000	2.2000000	-0.6600000
Arsenic	189.00	-4.9900000	0.0025000	4.0400000	1.1600000	0.1000000
Barium	230.40	0.0000000	0.0000000	3.8500000	-1.0000000	0.0000000
Beryllium	234.90	0.0000000	0.0000000	-0.1200000	-0.0010000	0.0000000
Cadmium	226.80	0.2500000	0.0000000	0.0000000	0.3000000	0.1900000
Calcium	227.50	0.0000000	0.0000000	0.0000000	4.5000000	40.0000000
Chromium	267.70	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.60	0.0700000	0.0000000	-0.9200000	2.3000000	-0.0700000
Copper	327.40	0.0000000	0.0000000	0.0000000	0.3000000	0.0000000
Iron	261.40	0.0000000	-0.0000000	0.0000000	0.0000000	-3.3000000
Lead	220.40	-0.5600000	0.0000000	-3.2600000	-0.7100000	0.2000000
Magnesium	279.10	0.0000000	0.0000000	0.0000000	5.0000000	4.6000000
Manganese	257.60	0.5800000	0.0000000	0.0000000	0.0700000	0.0200000
Molybdenum	202.00	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0200000	0.0000000	0.0000000	0.1600000	-0.0700000
Potassium	766.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.00	0.0000000	0.0000000	0.0000000	-0.2000000	0.5400000
Silicon	288.20	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.10	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.00	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	407.80	0.0000000	0.0000000	165.0000000	0.0000000	0.0000000
Thallium	190.80	0.0000000	0.0000000	0.0000000	-2.5500000	-10.0000000
Tin	189.90	0.0000000	0.0000000	0.0000000	-6.0000000	0.0000000
Titanium	337.30	0.0000000	-4.7000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	-0.5900000	0.0000000	0.0000000	0.5000000	0.0000000
Zinc	206.20	-2.5000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

Form by [illegible] 3/5/1/00;a/n 118163391

11-IN

ICP-AES AND ICP-MS LINEAR RANGES (QUARTERLY)

Instrument ID: PE - Optima 3000

Date: 3/22/02 - 5/13/02

Analyte	Integ. Time (Sec.)	Concentration (ug/L)
Aluminum	10.00	450000.0
Antimony	10.00	5000.0
Arsenic	10.00	2000.0
Barium	10.00	10000.0
Beryllium	10.00	2000.0
Cadmium	10.00	1000.0
Calcium	10.00	1000000.0
Chromium	10.00	10000.0
Cobalt	10.00	10000.0
Copper	10.00	1000.0
Iron	10.00	80000.0
Lead	10.00	100000.0
Magnesium	10.00	500000.0
Manganese	10.00	10000.0
Molybdenum	10.00	10000.0
Nickel	10.00	10000.0
Potassium	10.00	100000.0
Selenium	10.00	1000.0
Silicon	10.00	10000.0
Silver	10.00	1000.0
Sodium	10.00	200000.0
Strontium	10.00	2000.0
Thallium	10.00	10000.0
Tin	10.00	1000.0
Vanadium	10.00	10000.0
Zinc	10.00	10000.0

Comments:

Forms by Cerus#(707)864-0845;j/u11016;v3.3;5/1/00;e/a 110163331

Method : PE1300

Seq.	Loc.		Sample ID
1	1		S0
2	2		S1
3	3		S2
4	4		S3
5	5		ICV 2nd Vendor
6	1		ICB
7	6		ICSA
8	7		ICSAB
9	5		CCV
10	1		CCB
11	9		PBW E5 WG139542-03
12	10		LCSW E5 WG139542-04
13	11		L030460601
14	12		L030460601PS 0.9
15	13		L030460602
16	14		L030460603
17	5		CCV
18	1		CCB

Steve L. Hargraf
5/2/03

Method : PE1300

Seq.	Loc.		Sample ID
1	1		~~S0~~
2	2		S1
3	3		S2
4	4		~~S3~~
5	15		L030458504 WG139542-01
6	16		L030458505S WG139542-05
7	17		L030458506SD WG139542-06
8	18		L030459402 WG139542-02
9	19		L030459402DP WG139542-07
10	20		L030458501
11	21		L030458501SDL 0.2
12	22		L030458501PS 0.9
13	26		L030465701
14	27		L030459401
15	5		CCV
16	1		CCB
17	28		L030455002
18	29		L030455004
19	30		L030455006
20	31		L030457508
21	32		L030458502
22	33		L030458503
23	34		L030458507
24	35		L030458508
25	36		L030458509
26	5		CCV
27	1		CCB
28	37		L030458510
29	5		CCV
30	1		CCB

5/2/03

Analysis Begun

Start Time: 5/2/2003 10:29:49 AM
Logged In Analyst: Administrator
Spectrometer Model: Optima 3000 DV

Plasma On Time: 5/2/2003 7:44:33 AM
Technique: ICP Continuous
Autosampler Model: AS-90

Sample Information File: C:\pe\Administrator\Sample Information\050203A.sif
Results Data Set: 050203A
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 1
Sample ID: S0
Analyst:
Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 5/2/2003 10:29:49 AM
Sample Prep Volume:
Data Type: Original

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	3882713.3	41616.77	1.07%		
Ag 328.068	1158.6	55.39	4.78%	[0.00]	mg/L
Al 237.312	1028.7	4.25	0.41%	[0.00]	mg/L
As 188.979	-71.8	0.82	1.14%	[0.00]	mg/L
Ba 230.424	-1100.7	10.14	0.92%	[0.00]	mg/L
Be 234.861	157.4	5.37	3.41%	[0.00]	mg/L
Ca 227.549	-29.4	2.86	9.73%	[0.00]	mg/L
Cd 228.802	115.1	1.35	1.17%	[0.00]	mg/L
Co 228.616	92.3	2.36	2.56%	[0.00]	mg/L
Cr 267.716	-1531.9	5.77	0.38%	[0.00]	mg/L
Cu 327.396	609.3	11.99	1.97%	[0.00]	mg/L
Fe 261.387	-1341.1	1.54	0.11%	[0.00]	mg/L
Mg 279.079	-1588.7	18.87	1.19%	[0.00]	mg/L
Mn 257.610	-1504.5	12.57	0.84%	[0.00]	mg/L
Mo 202.030	113.8	6.11	5.37%	[0.00]	mg/L
Ni 231.604	-510.8	8.16	1.60%	[0.00]	mg/L
Pb 220.353	128.4	3.44	2.68%	[0.00]	mg/L
Sb 206.833	74.7	1.58	2.11%	[0.00]	mg/L
Se 196.026	-83.1	4.33	5.21%	[0.00]	mg/L
Si 288.158	961.6	0.75	0.08%	[0.00]	mg/L
Sn 189.933	100.3	5.85	5.83%	[0.00]	mg/L
Ti 337.280	-1156.6	23.37	2.02%	[0.00]	mg/L
Tl 190.800	0.8	2.80	338.76%	[0.00]	mg/L
V 292.402	-359.2	12.50	3.48%	[0.00]	mg/L
Zn 206.200	538.1	4.69	0.87%	[0.00]	mg/L
K 766.490	1859.2	340.96	18.34%	[0.00]	mg/L
Na 589.592	2190.1	175.20	8.00%	[0.00]	mg/L
Sr 407.771	358.8	123.17	34.32%	[0.00]	mg/L

Sequence No.: 2
Sample ID: S1
Analyst:
Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 5/2/2003 10:34:41 AM
Sample Prep Volume:
Data Type: Original

Mean Data: S1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	3897124.6	3865.99	0.10%		
Ag 328.068	1528.5	52.30	3.42%	[0.0040]	mg/L
Al 237.312	2657.1	19.56	0.74%	[0.10]	mg/L
As 188.979	40.0	3.91	9.77%	[0.0040]	mg/L
Ba 230.424	1933.6	1.96	0.10%	[0.010]	mg/L
Be 234.861	339.9	6.60	1.94%	[0.00050]	mg/L
Ca 227.549	93.6	2.10	2.24%	[0.10]	mg/L
Cd 228.802	139.5	15.70	11.26%	[0.00050]	mg/L
Co 228.616	239.7	2.32	0.97%	[0.0020]	mg/L

Cr 267.716	951.1	5.99	0.63%	[0.0050]	mg/L
Cu 327.396	1048.3	20.28	1.93%	[0.0050]	mg/L
Fe 261.387	235.8	6.19	2.63%	[0.040]	mg/L
Mg 279.079	3008.4	8.31	0.28%	[0.10]	mg/L
Mn 257.610	4656.0	59.40	1.28%	[0.0050]	mg/L
Mo 202.030	686.3	0.57	0.08%	[0.010]	mg/L
Ni 231.604	599.4	1.41	0.24%	[0.0050]	mg/L
Pb 220.353	93.6	0.53	0.56%	[0.0050]	mg/L
Sb 206.833	229.8	4.51	1.96%	[0.012]	mg/L
Se 196.026	33.2	1.04	3.12%	[0.0040]	mg/L
Si 288.158	2743.0	60.00	2.19%	[0.050]	mg/L
Sn 189.933	79.0	5.20	6.58%	[0.010]	mg/L
Ti 337.280	9621.5	150.37	1.56%	[0.010]	mg/L
Tl 190.800	1.9	0.28	15.04%	[0.0050]	mg/L
V 292.402	1428.5	41.95	2.94%	[0.010]	mg/L
Zn 206.200	1738.9	18.46	1.06%	[0.010]	mg/L
K 766.490	6655.1	147.96	2.22%	[0.50]	mg/L
Na 589.592	19221.9	163.91	0.85%	[0.50]	mg/L
Sr 407.771	20461.8	21.65	0.11%	[0.010]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	464900	0.00000	0.999993	
Al 237.312	3	Lin Thru 0	0.0	34850	0.00000	0.999998	
As 188.979	3	Lin Thru 0	0.0	11970	0.00000	0.999943	
Ba 230.424	3	Lin Thru 0	0.0	236300	0.00000	0.999904	
Be 234.861	3	Lin Thru 0	0.0	859300	0.00000	0.999946	
Ca 227.549	3	Lin Thru 0	0.0	1110	0.00000	0.999939	
Cd 228.802	3	Lin Thru 0	0.0	327600	0.00000	0.999976	
Co 228.616	3	Lin Thru 0	0.0	136600	0.00000	0.999911	
Cr 267.716	3	Lin Thru 0	0.0	229300	0.00000	0.999930	
Cu 327.396	3	Lin Thru 0	0.0	291100	0.00000	0.999905	
Fe 261.387	3	Lin Thru 0	0.0	16020	0.00000	0.999989	
Mg 279.079	3	Lin Thru 0	0.0	38260	0.00000	0.999984	
Mn 257.610	3	Lin Thru 0	0.0	1094000	0.00000	0.999985	
Mo 202.030	3	Lin Thru 0	0.0	98450	0.00000	0.999974	
Ni 231.604	3	Lin Thru 0	0.0	139500	0.00000	0.999928	
Pb 220.353	3	Lin Thru 0	0.0	22930	0.00000	0.999999	
Sb 206.833	3	Lin Thru 0	0.0	23800	0.00000	0.999989	
Se 196.026	3	Lin Thru 0	0.0	11010	0.00000	0.999988	
Si 288.158	3	Lin Thru 0	0.0	72120	0.00000	0.999875	
Sn 189.933	3	Lin Thru 0	0.0	21070	0.00000	0.999907	
Ti 337.280	3	Lin Thru 0	0.0	1207000	0.00000	0.999994	
Tl 190.800	3	Lin Thru 0	0.0	318.9	0.00000	0.999972	
V 292.402	3	Lin Thru 0	0.0	201300	0.00000	0.999998	
Zn 206.200	3	Lin Thru 0	0.0	212100	0.00000	0.999965	
K 766.490	3	Lin Thru 0	0.0	16490	0.00000	0.999999	
Na 589.592	3	Lin Thru 0	0.0	47190	0.00000	1.000000	
Sr 407.771	3	Lin, Calc Int	-169.7	2556000	0.00000	0.999996	

Sequence No.: 3
Sample ID: S2
Analyst:
Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 5/2/2003 10:39:34 AM

Sample Prep Volume:
Date Type: Original

Mean Data: S2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	4707440.6	67442.74	1.43%		
Ag 328.068	172793.9	350.13	0.20%	[0.40]	mg/L
Al 237.312	322057.1	1186.08	0.37%	[10.00]	mg/L
As 188.979	4405.8	13.07	0.30%	[0.40]	mg/L
Ba 230.424	225474.0	964.15	0.43%	[1.00]	mg/L
Be 234.861	40226.6	180.30	0.45%	[0.05]	mg/L
Ca 227.549	10638.3	25.27	0.24%	[10.00]	mg/L
Cd 228.802	15229.8	40.13	0.26%	[0.05]	mg/L
Co 228.616	25437.6	107.90	0.42%	[0.20]	mg/L

Cr 267.716	109208.2	287.04	0.26%	[0.50]	mg/L
Cu 327.396	138129.5	190.35	0.14%	[0.50]	mg/L
Fe 261.387	58727.8	382.58	0.65%	[4.00]	mg/L
Mg 279.079	351511.3	1652.02	0.47%	[10.00]	mg/L
Mn 257.610	513625.0	1524.70	0.30%	[0.50]	mg/L
Mo 202.030	93171.9	195.69	0.21%	[1.00]	mg/L
Ni 231.604	66589.4	172.48	0.26%	[0.50]	mg/L
Pb 220.353	10723.3	22.30	0.21%	[0.50]	mg/L
Sb 206.833	26629.7	74.93	0.28%	[1.20]	mg/L
Se 196.026	4075.8	15.53	0.38%	[0.40]	mg/L
Si 288.158	350260.5	1389.96	0.40%	[5.00]	mg/L
Sn 189.933	18939.9	110.05	0.58%	[1.00]	mg/L
Ti 337.280	1127894.4	15403.88	1.37%	[1.00]	mg/L
Tl 190.800	134.5	5.11	3.80%	[0.50]	mg/L
V 292.402	186884.5	562.04	0.30%	[1.00]	mg/L
Zn 206.200	199715.0	1255.08	0.63%	[1.00]	mg/L
K 766.490	782767.1	11576.25	1.48%	[50.00]	mg/L
Na 589.592	2230210.3	36932.29	1.66%	[50.00]	mg/L
Sr 407.771	2412535.4	42559.72	1.76%	[1.00]	mg/L

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S3 **Date Collected: 5/2/2003 10:44:28 AM**
Analyst:
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: S3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	4751830.2	1243.39	0.03%		
Ag 328.068	351060.0	1196.80	0.34%	[0.80]	mg/L
Al 237.312	662412.9	812.09	0.12%	[20.00]	mg/L
As 188.979	9062.4	33.11	0.37%	[0.80]	mg/L
Ba 230.424	446959.1	876.19	0.20%	[2.00]	mg/L
Be 234.861	80410.7	40.53	0.05%	[0.10]	mg/L
Ca 227.549	20774.9	74.46	0.36%	[20.00]	mg/L
Cd 228.802	31397.1	4.93	0.02%	[0.10]	mg/L
Co 228.616	51675.5	195.90	0.38%	[0.40]	mg/L
Cr 267.716	217409.7	23.73	0.01%	[1.00]	mg/L
Cu 327.396	275251.0	1222.53	0.44%	[1.00]	mg/L
Fe 261.387	120576.8	125.31	0.10%	[8.00]	mg/L
Mg 279.079	717695.7	1063.67	0.15%	[20.00]	mg/L
Mn 257.610	1022709.9	294.23	0.03%	[1.00]	mg/L
Mo 202.030	187920.0	41.53	0.02%	[2.00]	mg/L
Ni 231.604	132539.7	138.12	0.10%	[1.00]	mg/L
Pb 220.353	21605.2	86.15	0.40%	[1.00]	mg/L
Sb 206.833	54488.7	405.50	0.74%	[2.40]	mg/L
Se 196.026	8303.1	47.07	0.57%	[0.80]	mg/L
Si 288.158	685840.8	97.51	0.01%	[10.00]	mg/L
Sn 189.933	39898.9	213.81	0.54%	[2.00]	mg/L
Ti 337.280	2246436.9	751.27	0.03%	[2.00]	mg/L
Tl 190.800	305.7	6.52	2.13%	[1.00]	mg/L
V 292.402	374835.6	285.75	0.08%	[2.00]	mg/L
Zn 206.200	399494.4	2016.40	0.50%	[2.00]	mg/L
K 766.490	1651813.0	11367.09	0.69%	[100.00]	mg/L
Na 589.592	4577502.8	41811.51	0.91%	[100.00]	mg/L
Sr 407.771	4964458.6	68574.72	1.38%	[2.00]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	437500	0.00000	0.999980	
Al 237.312	3	Lin Thru 0	0.0	32940	0.00000	0.999938	
As 188.979	3	Lin Thru 0	0.0	11270	0.00000	0.999938	
Ba 230.424	3	Lin Thru 0	0.0	223900	0.00000	0.999993	
Be 234.861	3	Lin Thru 0	0.0	804200	0.00000	1.000000	
Ca 227.549	3	Lin Thru 0	0.0	1044	0.00000	0.999954	
Cd 228.802	3	Lin Thru 0	0.0	312100	0.00000	0.999928	
Co 228.616	3	Lin Thru 0	0.0	128800	0.00000	0.999981	

Cr 267.716	3	Lin Thru 0	0.0	217600	0.00000	0.999998
Cu 327.396	3	Lin Thru 0	0.0	275500	0.00000	0.999998
Fe 261.387	3	Lin Thru 0	0.0	14990	0.00000	0.999942
Mg 279.079	3	Lin Thru 0	0.0	35740	0.00000	0.999966
Mn 257.610	3	Lin Thru 0	0.0	1024000	0.00000	0.999998
Mo 202.030	3	Lin Thru 0	0.0	93800	0.00000	0.999994
Ni 231.604	3	Lin Thru 0	0.0	132700	0.00000	0.999998
Pb 220.353	3	Lin Thru 0	0.0	21570	0.00000	0.999996
Sb 206.833	3	Lin Thru 0	0.0	22600	0.00000	0.999959
Se 196.026	3	Lin Thru 0	0.0	10340	0.00000	0.999973
Si 288.158	3	Lin Thru 0	0.0	68880	0.00000	0.999963
Sn 189.933	3	Lin Thru 0	0.0	19750	0.00000	0.999787
Ti 337.280	3	Lin Thru 0	0.0	1124000	0.00000	0.999998
Tl 190.800	3	Lin Thru 0	0.0	298.4	0.00000	0.998793
V 292.402	3	Lin Thru 0	0.0	187300	0.00000	0.999999
Zn 206.200	3	Lin Thru 0	0.0	199700	0.00000	1.000000
K 766.490	3	Lin Thru 0	0.0	16350	0.00000	0.999777
Na 589.592	3	Lin Thru 0	0.0	45540	0.00000	0.999947
Sr 407.771	3	Lin, Calc Int	-14658.6	2477000	0.00000	0.999898

Sequence No.: 5
Sample ID: ICV 2nd Vendor
Analyst:
Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 5/2/2003 10:49:28 AM
Sample Prep Volume:
Data Type: Original

Mean Data: ICV 2nd Vendor

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4787711.4						62398.28	1.30%
Ag 328.068	174718.9	0.399	mg/L	0.0007	0.399	mg/L	0.0007	0.17%
QC value within limits for Ag 328.068 Recovery = 99.85%								
Al 237.312	324761.3	9.84	mg/L	0.027	9.84	mg/L	0.027	0.27%
QC value within limits for Al 237.312 Recovery = 98.42%								
As 188.979	4439.3	0.389	mg/L	0.0012	0.389	mg/L	0.0012	0.30%
QC value within limits for As 188.979 Recovery = 97.26%								
Ba 230.424	232431.0	1.04	mg/L	0.001	1.04	mg/L	0.001	0.10%
QC value within limits for Ba 230.424 Recovery = 103.64%								
Be 234.861	40527.1	0.0501	mg/L	0.00011	0.0501	mg/L	0.00011	0.22%
QC value within limits for Be 234.861 Recovery = 100.14%								
Ca 227.549	10847.2	10.1	mg/L	0.04	10.1	mg/L	0.04	0.35%
QC value within limits for Ca 227.549 Recovery = 101.38%								
Cd 228.802	15711.8	0.0490	mg/L	0.00020	0.0490	mg/L	0.00020	0.41%
QC value within limits for Cd 228.802 Recovery = 97.91%								
Co 228.616	26612.5	0.207	mg/L	0.0002	0.207	mg/L	0.0002	0.09%
QC value within limits for Co 228.616 Recovery = 103.30%								
Cr 267.716	111163.2	0.511	mg/L	0.0000	0.511	mg/L	0.0000	0.01%
QC value within limits for Cr 267.716 Recovery = 102.24%								
Cu 327.396	141167.3	0.513	mg/L	0.0025	0.513	mg/L	0.0025	0.49%
QC value within limits for Cu 327.396 Recovery = 102.66%								
Fe 261.387	59700.5	4.00	mg/L	0.008	4.00	mg/L	0.008	0.20%
QC value within limits for Fe 261.387 Recovery = 100.00%								
Mg 279.079	361212.2	10.1	mg/L	0.03	10.1	mg/L	0.03	0.25%
QC value within limits for Mg 279.079 Recovery = 100.63%								
Mn 257.610	520339.9	0.508	mg/L	0.0003	0.508	mg/L	0.0003	0.07%
QC value within limits for Mn 257.610 Recovery = 101.57%								
Mo 202.030	96056.3	1.02	mg/L	0.000	1.02	mg/L	0.000	0.01%
QC value within limits for Mo 202.030 Recovery = 102.92%								
Ni 231.604	69241.8	0.522	mg/L	0.0007	0.522	mg/L	0.0007	0.14%
QC value within limits for Ni 231.604 Recovery = 104.45%								
Pb 220.353	11046.0	0.515	mg/L	0.0021	0.515	mg/L	0.0021	0.42%
QC value within limits for Pb 220.353 Recovery = 102.97%								
Sb 206.833	27915.2	1.23	mg/L	0.005	1.23	mg/L	0.005	0.39%
QC value within limits for Sb 206.833 Recovery = 102.33%								
Se 196.026	4197.9	0.403	mg/L	0.0013	0.403	mg/L	0.0013	0.33%
QC value within limits for Se 196.026 Recovery = 100.75%								
Si 288.158	350938.4	5.10	mg/L	0.007	5.10	mg/L	0.007	0.13%
QC value within limits for Si 288.158 Recovery = 102.08%								
Sn 189.933	19770.4	1.01	mg/L	0.005	1.01	mg/L	0.005	0.52%
QC value within limits for Sn 189.933 Recovery = 100.80%								

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Ti 337.280          1125996.3        1.00 mg/L        0.015        1.00 mg/L        0.015   1.50%
   QC value within limits for Ti 337.280  Recovery = 100.23%
Tl 190.800               153.9       0.527 mg/L       0.0277       0.527 mg/L       0.0277   5.26%
   QC value greater than the upper limit for Tl 190.800  Recovery = 105.35%
V 292.402           189999.0        1.02 mg/L        0.000        1.02 mg/L        0.000   0.05%
   QC value within limits for V 292.402  Recovery = 101.97%
Zn 206.200           203238.6        1.01 mg/L        0.010        1.01 mg/L        0.010   0.98%
   QC value within limits for Zn 206.200  Recovery = 101.29%
K 766.490            801924.4        49.0 mg/L         0.78        49.0 mg/L         0.78   1.59%
   QC value within limits for K 766.490  Recovery = 98.10%
Na 589.592          2311776.4        50.8 mg/L         0.87        50.8 mg/L         0.87   1.72%
   QC value within limits for Na 589.592  Recovery = 101.53%
Sr 407.771          2469773.7        1.00 mg/L        0.018        1.00 mg/L        0.018   1.80%
   QC value within limits for Sr 407.771  Recovery = 100.30%
QC Failed.  Continue with analysis.
```

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Sequence No.: 6 **Autosampler Location: 1**
Sample ID: ICB **Date Collected: 5/2/2003 10:54:24 AM**
Analyst:
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	3824713.7						40376.36	1.06%
Ag 328.068	47.2	0.00011	mg/L	0.000020	0.00011	mg/L	0.000020	18.46%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 237.312	-7.9	-0.00025	mg/L	0.000621	-0.00025	mg/L	0.000621	248.15%
QC value within limits for Al 237.312 Recovery = Not calculated								
As 188.979	-0.4	-0.00004	mg/L	0.000062	-0.00004	mg/L	0.000062	145.38%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 230.424	-1.6	-0.00001	mg/L	0.000023	-0.00001	mg/L	0.000023	232.45%
QC value within limits for Ba 230.424 Recovery = Not calculated								
Be 234.861	3.7	0.00000	mg/L	0.000009	0.00000	mg/L	0.000009	203.20%
QC value within limits for Be 234.861 Recovery = Not calculated								
Ca 227.549	4.1	0.00388	mg/L	0.004061	0.00388	mg/L	0.004061	104.71%
QC value within limits for Ca 227.549 Recovery = Not calculated								
Cd 228.802	-1.1	0.00000	mg/L	0.000013	0.00000	mg/L	0.000013	361.02%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616	-7.2	-0.00006	mg/L	0.000006	-0.00006	mg/L	0.000006	11.32%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716	26.7	0.00012	mg/L	0.000048	0.00012	mg/L	0.000048	38.76%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.396	-25.0	-0.00009	mg/L	0.000000	-0.00009	mg/L	0.000000	0.14%
QC value within limits for Cu 327.396 Recovery = Not calculated								
Fe 261.387	47.1	0.00314	mg/L	0.000079	0.00314	mg/L	0.000079	2.53%
QC value within limits for Fe 261.387 Recovery = Not calculated								
Mg 279.079	18.1	0.00047	mg/L	0.000063	0.00047	mg/L	0.000063	13.46%
QC value within limits for Mg 279.079 Recovery = Not calculated								
Mn 257.610	15.6	0.00002	mg/L	0.000005	0.00002	mg/L	0.000005	33.07%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.030	83.5	0.00089	mg/L	0.000084	0.00089	mg/L	0.000084	9.48%
QC value within limits for Mo 202.030 Recovery = Not calculated								
Ni 231.604	5.1	0.00004	mg/L	0.000048	0.00004	mg/L	0.000048	124.56%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353	2.1	0.00010	mg/L	0.000455	0.00010	mg/L	0.000455	459.91%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.833	5.2	0.00023	mg/L	0.000179	0.00023	mg/L	0.000179	76.75%
QC value within limits for Sb 206.833 Recovery = Not calculated								
Se 196.026	13.5	0.00130	mg/L	0.000617	0.00130	mg/L	0.000617	47.33%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 288.158	163.9	0.00238	mg/L	0.000091	0.00238	mg/L	0.000091	3.80%
QC value within limits for Si 288.158 Recovery = Not calculated								
Sn 189.933	89.4	0.00453	mg/L	0.000269	0.00453	mg/L	0.000269	5.94%
QC value within limits for Sn 189.933 Recovery = Not calculated								
Ti 337.280	-21.6	-0.00002	mg/L	0.000102	-0.00002	mg/L	0.000102	535.90%
QC value within limits for Ti 337.280 Recovery = Not calculated								
Tl 190.800	0.4	0.00145	mg/L	0.001261	0.00145	mg/L	0.001261	86.83%
QC value within limits for Tl 190.800 Recovery = Not calculated								

```
V 292.402                 21.0     0.00011 mg/L      0.000013     0.00011 mg/L      0.000013  11.54%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 206.200                -76.5    -0.00038 mg/L      0.000042    -0.00038 mg/L      0.000042  10.88%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490                277.9      0.0170 mg/L       0.00065      0.0170 mg/L       0.00065   3.84%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592               265.0     0.00582 mg/L      0.000203     0.00582 mg/L      0.000203   3.49%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771                38.6     0.00593 mg/L      0.000007     0.00593 mg/L      0.000007   0.11%
   QC value within limits for Sr 407.771  Recovery = Not calculated
All analytes passed QC.
```

Sequence No.: 7 **Autosampler Location: 6**
Sample ID: ICSA **Date Collected: 5/2/2003 10:59:15 AM**
Analyst:
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4581136.1						59018.18	1.29%
Ag 328.068	747.1	0.00171	mg/L	0.000098	0.00171	mg/L	0.000098	5.76%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 237.312	8441723.3	256	mg/L	3.6	256	mg/L	3.6	1.39%
QC value within limits for Al 237.312 Recovery = 102.45%								
As 188.979	-152.9	-0.00540	mg/L	0.002887	-0.00540	mg/L	0.002887	53.51%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 230.424	-2174.3	-0.00137	mg/L	0.000357	-0.00137	mg/L	0.000357	26.11%
QC value within limits for Ba 230.424 Recovery = Not calculated								
Be 234.861	7538.2	-0.00122	mg/L	0.000046	-0.00122	mg/L	0.000046	3.79%
QC value less than the lower limit for Be 234.861 Recovery = Not calculated								
Ca 227.549	265841.0	253	mg/L	4.7	253	mg/L	4.7	1.85%
QC value within limits for Ca 227.549 Recovery = 101.07%								
Cd 228.802	-41.4	-0.00092	mg/L	0.000005	-0.00092	mg/L	0.000005	0.52%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616	619.9	0.00601	mg/L	0.000464	0.00601	mg/L	0.000464	7.73%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716	-1847.6	-0.00035	mg/L	0.000175	-0.00035	mg/L	0.000175	49.57%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.396	-727.3	-0.00264	mg/L	0.000237	-0.00264	mg/L	0.000237	9.00%
QC value within limits for Cu 327.396 Recovery = Not calculated								
Fe 261.387	1347544.7	89.9	mg/L	1.17	89.9	mg/L	1.17	1.30%
QC value within limits for Fe 261.387 Recovery = 89.88%								
Mg 279.079	8982430.5	251	mg/L	1.8	251	mg/L	1.8	0.73%
QC value within limits for Mg 279.079 Recovery = 100.53%								
Mn 257.610	-1708.7	-0.00226	mg/L	0.000064	-0.00226	mg/L	0.000064	2.83%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.030	9.3	-0.00057	mg/L	0.000649	-0.00057	mg/L	0.000649	114.43%
QC value within limits for Mo 202.030 Recovery = Not calculated								
Ni 231.604	-299.4	-0.00109	mg/L	0.000002	-0.00109	mg/L	0.000002	0.20%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353	-258.1	-0.00238	mg/L	0.003162	-0.00238	mg/L	0.003162	132.67%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.833	846.4	0.0132	mg/L	0.00757	0.0132	mg/L	0.00757	57.32%
QC value within limits for Sb 206.833 Recovery = Not calculated								
Se 196.026	287.7	-0.0126	mg/L	0.00111	-0.0126	mg/L	0.00111	8.84%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 288.158	3734.2	0.271	mg/L	0.0016	0.271	mg/L	0.0016	0.60%
QC value within limits for Si 288.158 Recovery = Not calculated								
Sn 189.933	309.6	-0.00226	mg/L	0.002561	-0.00226	mg/L	0.002561	113.37%
QC value within limits for Sn 189.933 Recovery = Not calculated								
Ti 337.280	3582.4	0.00719	mg/L	0.000075	0.00719	mg/L	0.000075	1.05%
QC value within limits for Ti 337.280 Recovery = Not calculated								
Tl 190.800	7.8	-0.00070	mg/L	0.008357	-0.00070	mg/L	0.008357	>999.9%
QC value within limits for Tl 190.800 Recovery = Not calculated								
V 292.402	-1533.3	-0.00171	mg/L	0.000002	-0.00171	mg/L	0.000002	0.09%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200	1788.9	-0.00748	mg/L	0.000550	-0.00748	mg/L	0.000550	7.34%
QC value within limits for Zn 206.200 Recovery = Not calculated								

```
K 766.490              1750.7      -0.195 mg/L       0.0059      -0.195 mg/L       0.0059   3.02%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592             1760.0      0.0386 mg/L      0.00454      0.0386 mg/L      0.00454  11.75%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771             5716.3     0.00823 mg/L     0.000047     0.00823 mg/L     0.000047   0.58%
   QC value within limits for Sr 407.771  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

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Sequence No.: 8 **Autosampler Location:** 7
Sample ID: ICSAB **Date Collected:** 5/2/2003 11:03:35 AM
Analyst:
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type:** Original

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4630972.3						4204.56	0.09%
Ag 328.068	232273.5	0.531	mg/L	0.0058	0.531	mg/L	0.0058	1.09%
QC value within limits for Ag 328.068 Recovery = 106.19%								
Al 237.312	8517068.0	258	mg/L	0.1	258	mg/L	0.1	0.06%
QC value within limits for Al 237.312 Recovery = 103.35%								
As 188.979	2728.7	0.252	mg/L	0.0006	0.252	mg/L	0.0006	0.25%
QC value within limits for As 188.979 Recovery = 100.61%								
Ba 230.424	52884.7	0.245	mg/L	0.0039	0.245	mg/L	0.0039	1.60%
QC value within limits for Ba 230.424 Recovery = 97.96%								
Be 234.861	225434.6	0.270	mg/L	0.0001	0.270	mg/L	0.0001	0.05%
QC value within limits for Be 234.861 Recovery = 107.84%								
Ca 227.549	267594.2	254	mg/L	3.0	254	mg/L	3.0	1.17%
QC value within limits for Ca 227.549 Recovery = 101.69%								
Cd 228.802	154451.4	0.494	mg/L	0.0047	0.494	mg/L	0.0047	0.95%
QC value within limits for Cd 228.802 Recovery = 98.72%								
Co 228.616	29375.4	0.230	mg/L	0.0027	0.230	mg/L	0.0027	1.19%
QC value within limits for Co 228.616 Recovery = 91.84%								
Cr 267.716	50831.2	0.242	mg/L	0.0019	0.242	mg/L	0.0019	0.77%
QC value within limits for Cr 267.716 Recovery = 96.73%								
Cu 327.396	70759.8	0.257	mg/L	0.0036	0.257	mg/L	0.0036	1.38%
QC value within limits for Cu 327.396 Recovery = 102.76%								
Fe 261.387	1367451.5	91.2	mg/L	0.47	91.2	mg/L	0.47	0.52%
QC value within limits for Fe 261.387 Recovery = 91.23%								
Mg 279.079	9063014.1	254	mg/L	0.1	254	mg/L	0.1	0.03%
QC value within limits for Mg 279.079 Recovery = 101.43%								
Mn 257.610	243016.3	0.237	mg/L	0.0012	0.237	mg/L	0.0012	0.51%
QC value within limits for Mn 257.610 Recovery = 94.67%								
Mo 202.030	-144.7	-0.00221	mg/L	0.000467	-0.00221	mg/L	0.000467	21.09%
QC value within limits for Mo 202.030 Recovery = Not calculated								
Ni 231.604	59771.0	0.452	mg/L	0.0064	0.452	mg/L	0.0064	1.41%
QC value within limits for Ni 231.604 Recovery = 90.35%								
Pb 220.353	9957.7	0.471	mg/L	0.0104	0.471	mg/L	0.0104	2.20%
QC value within limits for Pb 220.353 Recovery = 94.27%								
Sb 206.833	12829.2	0.540	mg/L	0.0062	0.540	mg/L	0.0062	1.16%
QC value within limits for Sb 206.833 Recovery = 108.06%								
Se 196.026	3092.6	0.258	mg/L	0.0015	0.258	mg/L	0.0015	0.57%
QC value within limits for Se 196.026 Recovery = 103.00%								
Si 288.158	2729.3	0.258	mg/L	0.0003	0.258	mg/L	0.0003	0.13%
QC value within limits for Si 288.158 Recovery = Not calculated								
Sn 189.933	98.0	-0.0131	mg/L	0.00262	-0.0131	mg/L	0.00262	19.94%
QC value within limits for Sn 189.933 Recovery = Not calculated								
Ti 337.280	3597.2	0.00726	mg/L	0.000114	0.00726	mg/L	0.000114	1.57%
QC value within limits for Ti 337.280 Recovery = Not calculated								
Tl 190.800	113.2	0.353	mg/L	0.0186	0.353	mg/L	0.0186	5.25%
QC value less than the lower limit for Tl 190.800 Recovery = 70.69%								
V 292.402	44274.5	0.245	mg/L	0.0017	0.245	mg/L	0.0017	0.67%
QC value within limits for V 292.402 Recovery = 98.05%								
Zn 206.200	92969.9	0.449	mg/L	0.0015	0.449	mg/L	0.0015	0.32%
QC value within limits for Zn 206.200 Recovery = 89.77%								
K 766.490	97873.1	5.68	mg/L	0.019	5.68	mg/L	0.019	0.33%
QC value within limits for K 766.490 Recovery = 113.67%								
Na 589.592	263298.7	5.78	mg/L	0.073	5.78	mg/L	0.073	1.26%
QC value within limits for Na 589.592 Recovery = 115.63%								

Sr 407.771 5445.5 0.00812 mg/L 0.000071 0.00812 mg/L 0.000071 0.87%
QC value within limits for Sr 407.771 Recovery = Not calculated
QC Failed. Continue with analysis.

Sequence No.: 9
Sample ID: CCV
Analyst:
Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 5/2/2003 11:07:57 AM
Sample Prep Volume:
Data Type: Original

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	4773226.1						44848.37	0.94%
Ag 328.068	172985.3	0.395	mg/L	0.0029	0.395	mg/L	0.0029	0.74%
QC value within limits for Ag 328.068 Recovery = 98.86%								
Al 237.312	321373.1	9.74	mg/L	0.078	9.74	mg/L	0.078	0.80%
QC value within limits for Al 237.312 Recovery = 97.40%								
As 188.979	4358.6	0.382	mg/L	0.0016	0.382	mg/L	0.0016	0.41%
QC value within limits for As 188.979 Recovery = 95.48%								
Ba 230.424	229215.9	1.02	mg/L	0.006	1.02	mg/L	0.006	0.62%
QC value within limits for Ba 230.424 Recovery = 102.21%								
Be 234.861	40209.3	0.0497	mg/L	0.00043	0.0497	mg/L	0.00043	0.87%
QC value within limits for Be 234.861 Recovery = 99.36%								
Ca 227.549	10727.7	10.0	mg/L	0.03	10.0	mg/L	0.03	0.31%
QC value within limits for Ca 227.549 Recovery = 100.27%								
Cd 228.802	15500.9	0.0483	mg/L	0.00016	0.0483	mg/L	0.00016	0.32%
QC value within limits for Cd 228.802 Recovery = 96.60%								
Co 228.616	25848.5	0.201	mg/L	0.0005	0.201	mg/L	0.0005	0.26%
QC value within limits for Co 228.616 Recovery = 100.33%								
Cr 267.716	109291.9	0.503	mg/L	0.0035	0.503	mg/L	0.0035	0.69%
QC value within limits for Cr 267.716 Recovery = 100.51%								
Cu 327.396	139919.0	0.509	mg/L	0.0029	0.509	mg/L	0.0029	0.57%
QC value within limits for Cu 327.396 Recovery = 101.75%								
Fe 261.387	58951.4	3.95	mg/L	0.037	3.95	mg/L	0.037	0.94%
QC value within limits for Fe 261.387 Recovery = 98.74%								
Mg 279.079	355770.9	9.91	mg/L	0.084	9.91	mg/L	0.084	0.85%
QC value within limits for Mg 279.079 Recovery = 99.12%								
Mn 257.610	514035.5	0.502	mg/L	0.0033	0.502	mg/L	0.0033	0.65%
QC value within limits for Mn 257.610 Recovery = 100.34%								
Mo 202.030	94583.5	1.01	mg/L	0.005	1.01	mg/L	0.005	0.54%
QC value within limits for Mo 202.030 Recovery = 101.34%								
Ni 231.604	68216.7	0.515	mg/L	0.0044	0.515	mg/L	0.0044	0.85%
QC value within limits for Ni 231.604 Recovery = 102.90%								
Pb 220.353	10827.9	0.505	mg/L	0.0018	0.505	mg/L	0.0018	0.35%
QC value within limits for Pb 220.353 Recovery = 100.94%								
Sb 206.833	27519.8	1.21	mg/L	0.004	1.21	mg/L	0.004	0.29%
QC value within limits for Sb 206.833 Recovery = 100.88%								
Se 196.026	4118.1	0.395	mg/L	0.0005	0.395	mg/L	0.0005	0.13%
QC value within limits for Se 196.026 Recovery = 98.83%								
Si 288.158	349693.7	5.09	mg/L	0.039	5.09	mg/L	0.039	0.76%
QC value within limits for Si 288.158 Recovery = 101.71%								
Sn 189.933	18059.3	0.920	mg/L	0.0026	0.920	mg/L	0.0026	0.28%
QC value within limits for Sn 189.933 Recovery = 92.12%								
Ti 337.280	1115635.5	0.993	mg/L	0.0085	0.993	mg/L	0.0085	0.86%
QC value within limits for Ti 337.280 Recovery = 99.31%								
Tl 190.800	151.1	0.517	mg/L	0.0143	0.517	mg/L	0.0143	2.77%
QC value within limits for Tl 190.800 Recovery = 103.45%								
V 292.402	187245.3	1.00	mg/L	0.006	1.00	mg/L	0.006	0.55%
QC value within limits for V 292.402 Recovery = 100.49%								
Zn 206.200	198571.8	0.990	mg/L	0.0083	0.990	mg/L	0.0083	0.84%
QC value within limits for Zn 206.200 Recovery = 98.96%								
K 766.490	789741.0	48.3	mg/L	0.85	48.3	mg/L	0.85	1.77%
QC value within limits for K 766.490 Recovery = 96.61%								
Na 589.592	2266390.7	49.8	mg/L	0.80	49.8	mg/L	0.80	1.61%
QC value within limits for Na 589.592 Recovery = 99.53%								
Sr 407.771	2424579.3	0.985	mg/L	0.0182	0.985	mg/L	0.0182	1.85%
QC value within limits for Sr 407.771 Recovery = 98.47%								

All analytes passed QC.

Sequence No.: 10
Sample ID: CCB
Analyst:
Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 5/2/2003 11:12:53 AM

Sample Prep Volume:
Data Type: Original

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	3856662.3						59927.37	1.55%
Ag 328.068	98.5	0.00023	mg/L	0.000058	0.00023	mg/L	0.000058	25.96%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 237.312	44.7	0.00135	mg/L	0.000114	0.00135	mg/L	0.000114	8.47%
QC value within limits for Al 237.312 Recovery = Not calculated								
As 188.979	-1.8	-0.00016	mg/L	0.000282	-0.00016	mg/L	0.000282	181.36%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 230.424	-26.0	-0.00012	mg/L	0.000050	-0.00012	mg/L	0.000050	43.17%
QC value within limits for Ba 230.424 Recovery = Not calculated								
Be 234.861	11.3	0.00001	mg/L	0.000003	0.00001	mg/L	0.000003	22.54%
QC value within limits for Be 234.861 Recovery = Not calculated								
Ca 227.549	9.6	0.00914	mg/L	0.001271	0.00914	mg/L	0.001271	13.91%
QC value within limits for Ca 227.549 Recovery = Not calculated								
Cd 228.802	10.2	0.00003	mg/L	0.000003	0.00003	mg/L	0.000003	9.15%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616	1.2	0.00001	mg/L	0.000034	0.00001	mg/L	0.000034	355.31%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716	-7.7	-0.00004	mg/L	0.000059	-0.00004	mg/L	0.000059	165.49%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.396	-27.4	-0.00010	mg/L	0.000032	-0.00010	mg/L	0.000032	32.27%
QC value within limits for Cu 327.396 Recovery = Not calculated								
Fe 261.387	39.9	0.00266	mg/L	0.000731	0.00266	mg/L	0.000731	27.49%
QC value within limits for Fe 261.387 Recovery = Not calculated								
Mg 279.079	-33.4	-0.00094	mg/L	0.000031	-0.00094	mg/L	0.000031	3.29%
QC value within limits for Mg 279.079 Recovery = Not calculated								
Mn 257.610	-37.8	-0.00004	mg/L	0.000001	-0.00004	mg/L	0.000001	3.93%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.030	1.9	0.00002	mg/L	0.000043	0.00002	mg/L	0.000043	215.93%
QC value within limits for Mo 202.030 Recovery = Not calculated								
Ni 231.604	-7.9	-0.00006	mg/L	0.000007	-0.00006	mg/L	0.000007	12.13%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353	6.9	0.00032	mg/L	0.000311	0.00032	mg/L	0.000311	97.68%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.833	-2.8	-0.00012	mg/L	0.000199	-0.00012	mg/L	0.000199	159.75%
QC value within limits for Sb 206.833 Recovery = Not calculated								
Se 196.026	9.2	0.00089	mg/L	0.000710	0.00089	mg/L	0.000710	79.90%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 288.158	63.1	0.00092	mg/L	0.000532	0.00092	mg/L	0.000532	57.82%
QC value within limits for Si 288.158 Recovery = Not calculated								
Sn 189.933	91.3	0.00462	mg/L	0.000327	0.00462	mg/L	0.000327	7.07%
QC value within limits for Sn 189.933 Recovery = Not calculated								
Ti 337.280	-15.1	-0.00001	mg/L	0.000034	-0.00001	mg/L	0.000034	254.54%
QC value within limits for Ti 337.280 Recovery = Not calculated								
Tl 190.800	1.5	0.00509	mg/L	0.000805	0.00509	mg/L	0.000805	15.83%
QC value within limits for Tl 190.800 Recovery = Not calculated								
V 292.402	-7.1	-0.00004	mg/L	0.000074	-0.00004	mg/L	0.000074	195.62%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200	-67.4	-0.00034	mg/L	0.000007	-0.00034	mg/L	0.000007	2.05%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490	8.9	0.00055	mg/L	0.006491	0.00055	mg/L	0.006491	>999.9%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592	-574.3	-0.0126	mg/L	0.00171	-0.0126	mg/L	0.00171	13.60%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771	122.5	0.00597	mg/L	0.000026	0.00597	mg/L	0.000026	0.44%
QC value within limits for Sr 407.771 Recovery = Not calculated								

All analytes passed QC.

Analysis Begun

Start Time: 5/2/2003 11:18:38 AM

Plasma On Time: 5/2/2003 7:44:33 AM

Logged In Analyst: Administrator
Spectrometer Model: Optima 3000 DV

Technique: ICP Continuous
Autosampler Model: AS-90

Sample Information File: C:\pe\Administrator\Sample Information\050203A.sif
Results Data Set: 050203A
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 11
Sample ID: PBW E5 WG139542-03
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 5/2/2003 11:18:39 AM

Sample Prep Volume:
Data Type: Original

Mean Data: PBW E5 WG139542-03

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4082049.0						70604.06	1.73%
Ag 328.068	85.3	0.00019	mg/L	0.000050	0.00019	mg/L	0.000050	25.78%
Al 237.312	41.7	0.00125	mg/L	0.000240	0.00125	mg/L	0.000240	19.21%
As 188.979	-1.0	-0.00009	mg/L	0.000523	-0.00009	mg/L	0.000523	612.96%
Ba 230.424	-34.2	-0.00015	mg/L	0.000025	-0.00015	mg/L	0.000025	16.46%
Be 234.861	15.1	0.00002	mg/L	0.000001	0.00002	mg/L	0.000001	6.90%
Ca 227.549	5.8	0.00545	mg/L	0.003706	0.00545	mg/L	0.003706	68.02%
Cd 228.802	16.3	0.00005	mg/L	0.000010	0.00005	mg/L	0.000010	18.54%
Co 228.616	-8.6	-0.00007	mg/L	0.000033	-0.00007	mg/L	0.000033	49.57%
Cr 267.716	-31.9	-0.00015	mg/L	0.000028	-0.00015	mg/L	0.000028	18.81%
Cu 327.396	70.7	0.00026	mg/L	0.000135	0.00026	mg/L	0.000135	52.59%
Fe 261.387	74.9	0.00500	mg/L	0.000547	0.00500	mg/L	0.000547	10.95%
Mg 279.079	-20.2	-0.00055	mg/L	0.000083	-0.00055	mg/L	0.000083	15.11%
Mn 257.610	877.0	0.00086	mg/L	0.000026	0.00086	mg/L	0.000026	3.03%
Mo 202.030	-30.6	-0.00033	mg/L	0.000024	-0.00033	mg/L	0.000024	7.23%
Ni 231.604	-7.3	-0.00005	mg/L	0.000048	-0.00005	mg/L	0.000048	87.57%
Pb 220.353	3.8	0.00018	mg/L	0.000184	0.00018	mg/L	0.000184	104.92%
Sb 206.833	2.4	0.00011	mg/L	0.000407	0.00011	mg/L	0.000407	382.19%
Se 196.026	7.2	0.00069	mg/L	0.000404	0.00069	mg/L	0.000404	58.38%
Si 288.158	-227.1	-0.00329	mg/L	0.000104	-0.00329	mg/L	0.000104	3.17%
Sn 189.933	56.7	0.00287	mg/L	0.000041	0.00287	mg/L	0.000041	1.44%
Ti 337.280	74.9	0.00007	mg/L	0.000138	0.00007	mg/L	0.000138	206.36%
Tl 190.800	1.6	0.00531	mg/L	0.002290	0.00531	mg/L	0.002290	43.11%
V 292.402	-10.9	-0.00006	mg/L	0.000013	-0.00006	mg/L	0.000013	21.48%
Zn 206.200	-293.9	-0.00147	mg/L	0.000042	-0.00147	mg/L	0.000042	2.83%
K 766.490	108.4	0.00663	mg/L	0.013129	0.00663	mg/L	0.013129	198.02%
Na 589.592	-603.8	-0.0133	mg/L	0.00508	-0.0133	mg/L	0.00508	38.34%
Sr 407.771	38.9	0.00593	mg/L	0.000011	0.00593	mg/L	0.000011	0.18%

Sequence No.: 12
Sample ID: LCSW E5 WG139542-04
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 5/2/2003 11:23:29 AM

Sample Prep Volume:
Data Type: Original

Mean Data: LCSW E5 WG139542-04

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4651447.0						6677.08	0.14%
Ag 328.068	82263.2	0.188	mg/L	0.0005	0.188	mg/L	0.0005	0.29%
Al 237.312	311977.7	9.35	mg/L	0.018	9.35	mg/L	0.018	0.19%
As 188.979	10353.8	0.916	mg/L	0.0045	0.916	mg/L	0.0045	0.49%
Ba 230.424	2015355.5	9.00	mg/L	0.024	9.00	mg/L	0.024	0.26%
Be 234.861	757353.4	0.942	mg/L	0.0023	0.942	mg/L	0.0023	0.24%
Ca 227.549	10142.3	9.42	mg/L	0.035	9.42	mg/L	0.035	0.37%
Cd 228.802	283864.8	0.907	mg/L	0.0028	0.907	mg/L	0.0028	0.30%
Co 228.616	120394.2	0.944	mg/L	0.0021	0.944	mg/L	0.0021	0.22%
Cr 267.716	203671.2	0.936	mg/L	0.0026	0.936	mg/L	0.0026	0.28%
Cu 327.396	257651.4	0.936	mg/L	0.0053	0.936	mg/L	0.0053	0.57%
Fe 261.387	12016.2	0.877	mg/L	0.0034	0.877	mg/L	0.0034	0.39%
Mg 279.079	334991.7	9.34	mg/L	0.023	9.34	mg/L	0.023	0.25%
Mn 257.610	956208.5	0.933	mg/L	0.0030	0.933	mg/L	0.0030	0.32%

Mo 202.030	84546.4	0.901 mg/L	0.0045	0.901 mg/L	0.0045	0.50%
Ni 231.604	125050.3	0.943 mg/L	0.0032	0.943 mg/L	0.0032	0.34%
Pb 220.353	20486.5	0.953 mg/L	0.0048	0.953 mg/L	0.0048	0.50%
Sb 206.833	21577.7	0.943 mg/L	0.0038	0.943 mg/L	0.0038	0.41%
Se 196.026	9374.9	0.904 mg/L	0.0090	0.904 mg/L	0.0090	0.99%
Si 288.158	649842.6	9.44 mg/L	0.029	9.44 mg/L	0.029	0.31%
Sn 189.933	-180.4	-0.00406 mg/L	0.000154	-0.00406 mg/L	0.000154	3.79%
Ti 337.280	1074235.9	0.956 mg/L	0.0030	0.956 mg/L	0.0030	0.32%
Tl 190.800	238.7	0.811 mg/L	0.0235	0.811 mg/L	0.0235	2.89%
V 292.402	173378.0	0.934 mg/L	0.0027	0.934 mg/L	0.0027	0.29%
Zn 206.200	188198.4	0.940 mg/L	0.0025	0.940 mg/L	0.0025	0.27%
K 766.490	752308.7	46.0 mg/L	0.08	46.0 mg/L	0.08	0.17%
Na 589.592	2138362.8	47.0 mg/L	0.06	47.0 mg/L	0.06	0.13%
Sr 407.771	2308708.4	0.938 mg/L	0.0016	0.938 mg/L	0.0016	0.18%

Recovery Check: LCSW B5 WG139542-04

Analyte	Expected Conc.	Measured Conc.	Std. Dev.	Units	Recovery (%)
Tl 190.800	1.01	0.811	0.023	mg/L	80.6
K 766.490	50.0	46.0	0.079	mg/L	92.0
Na 589.592	50.0	47.0	0.062	mg/L	93.9
Sr 407.771	1.01	0.938	0.002	mg/L	93.2
Ag 328.068	0.200	0.188	0.001	mg/L	93.9
Al 237.312	10.0	9.35	0.018	mg/L	93.5
As 188.979	1.000	0.916	0.005	mg/L	91.6
Ba 230.424	10.00	9.00	0.024	mg/L	90.0
Be 234.861	1.00	0.942	0.002	mg/L	94.2
Ca 227.549	10.0	9.42	0.035	mg/L	94.1
Cd 228.802	1.00	0.907	0.003	mg/L	90.7
Co 228.616	1.000	0.944	0.002	mg/L	94.4
Cr 267.716	1.000	0.936	0.003	mg/L	93.6
Cu 327.396	1.00	0.936	0.005	mg/L	93.6
Fe 261.387	1.00	0.877	0.003	mg/L	87.2
Mg 279.079	10.00	9.34	0.023	mg/L	93.4
Mn 257.610	1.00	0.933	0.003	mg/L	93.3
Mo 202.030	0.995	0.901	0.004	mg/L	90.6
Ni 231.604	1.000	0.943	0.003	mg/L	94.3
Pb 220.353	1.00	0.953	0.005	mg/L	95.3
Sb 206.833	1.00	0.943	0.004	mg/L	94.3
Se 196.026	1.00	0.904	0.009	mg/L	90.3
Si 288.158	10.00	9.44	0.029	mg/L	94.5
Sn 189.933	1.00	-0.00406	0.000	mg/L	-0.7
Ti 337.280	1.000	0.956	0.003	mg/L	95.6
V 292.402	1.000	0.934	0.003	mg/L	93.4
Zn 206.200	0.999	0.940	0.002	mg/L	94.1

Sequence No.: 13
Sample ID: L030460601
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 11
Data Collected: 5/2/2003 11:28:22 AM

Sample Prep Volume:
Data Type: Original

Mean Data: L030460601

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4589930.9						95876.86	2.09%
Ag 328.068	435.4	0.00100	mg/L	0.000063	0.00100	mg/L	0.000063	6.36%
Al 237.312	368.1	0.0172	mg/L	0.00033	0.0172	mg/L	0.00033	1.94%
As 188.979	-0.6	-0.00006	mg/L	0.000368	-0.00006	mg/L	0.000368	581.87%
Ba 230.424	15751.0	0.0707	mg/L	0.00097	0.0707	mg/L	0.00097	1.37%
Be 234.861	92.9	0.00011	mg/L	0.000002	0.00011	mg/L	0.000002	1.96%
Ca 227.549	83812.4	80.3	mg/L	0.92	80.3	mg/L	0.92	1.15%
Cd 228.802	76.0	0.00016	mg/L	0.000007	0.00016	mg/L	0.000007	4.46%
Co 228.616	-8.9	0.00007	mg/L	0.000030	0.00007	mg/L	0.000030	43.67%
Cr 267.716	-24.4	0.00020	mg/L	0.000021	0.00020	mg/L	0.000021	10.74%
Cu 327.396	68580.4	0.249	mg/L	0.0054	0.249	mg/L	0.0054	2.17%
Fe 261.387	596.2	0.0407	mg/L	0.00008	0.0407	mg/L	0.00008	0.20%
Mg 279.079	648523.0	18.1	mg/L	0.36	18.1	mg/L	0.36	2.01%
Mn 257.610	3841.9	0.00354	mg/L	0.000003	0.00354	mg/L	0.000003	0.09%

Mo 202.030	314.5	0.00335 mg/L	0.000142	0.00335 mg/L	0.000142	4.22%
Ni 231.604	8.9	0.00007 mg/L	0.000004	0.00007 mg/L	0.000004	6.01%
Pb 220.353	104.9	0.00486 mg/L	0.000270	0.00486 mg/L	0.000270	5.55%
Sb 206.833	16.2	0.00073 mg/L	0.000014	0.00073 mg/L	0.000014	1.96%
Se 196.026	52.9	0.00511 mg/L	0.001162	0.00511 mg/L	0.001162	22.76%
Si 288.158	565749.8	8.25 mg/L	0.166	8.25 mg/L	0.166	2.01%
Sn 189.933	-270.3	-0.0129 mg/L	0.00032	-0.0129 mg/L	0.00032	2.50%
Ti 337.280	-94.4	0.00005 mg/L	0.000040	0.00005 mg/L	0.000040	86.72%
Tl 190.800	7.1	0.0237 mg/L	0.00542	0.0237 mg/L	0.00542	22.91%
V 292.402	115.7	0.00062 mg/L	0.000012	0.00062 mg/L	0.000012	1.90%
Zn 206.200	4609.5	0.0222 mg/L	0.00005	0.0222 mg/L	0.00005	0.24%
K 766.490	24223.6	1.46 mg/L	0.029	1.46 mg/L	0.029	1.97%
Na 589.592	1261719.6	27.7 mg/L	0.52	27.7 mg/L	0.52	1.86%
Sr 407.771	339185.1	0.143 mg/L	0.0028	0.143 mg/L	0.0028	1.97%

Sequence No.: 14
Sample ID: L030460601PS 0.9
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 12
Date Collected: 5/2/2003 11:33:17 AM

Sample Prep Volume:
Data Type: Original

Mean Data: L030460601PS 0.9

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4687341.6						9511.00	0.20%
Ag 328.068	91370.8	0.209	mg/L	0.0009	0.209	mg/L	0.0009	0.44%
Al 237.312	351784.4	10.6	mg/L	0.02	10.6	mg/L	0.02	0.15%
As 188.979	11388.1	1.01	mg/L	0.000	1.01	mg/L	0.000	0.04%
Ba 230.424	2086371.3	9.32	mg/L	0.006	9.32	mg/L	0.006	0.06%
Be 234.861	830197.1	1.03	mg/L	0.002	1.03	mg/L	0.002	0.19%
Ca 227.549	84545.3	80.7	mg/L	0.16	80.7	mg/L	0.16	0.19%
Cd 228.802	309067.0	0.988	mg/L	0.0011	0.988	mg/L	0.0011	0.11%
Co 228.616	121620.5	0.954	mg/L	0.0004	0.954	mg/L	0.0004	0.04%
Cr 267.716	212888.8	0.979	mg/L	0.0009	0.979	mg/L	0.0009	0.09%
Cu 327.396	340605.1	1.24	mg/L	0.003	1.24	mg/L	0.003	0.21%
Fe 261.387	11138.8	0.821	mg/L	0.0202	0.821	mg/L	0.0202	2.46%
Mg 279.079	960247.7	26.8	mg/L	0.06	26.8	mg/L	0.06	0.21%
Mn 257.610	1005843.8	0.982	mg/L	0.0008	0.982	mg/L	0.0008	0.08%
Mo 202.030	90509.2	0.965	mg/L	0.0004	0.965	mg/L	0.0004	0.04%
Ni 231.604	126817.0	0.956	mg/L	0.0000	0.956	mg/L	0.0000	0.00%
Pb 220.353	21497.1	1.00	mg/L	0.008	1.00	mg/L	0.008	0.77%
Sb 206.833	23660.1	1.03	mg/L	0.015	1.03	mg/L	0.015	1.43%
Se 196.026	9798.5	0.945	mg/L	0.0128	0.945	mg/L	0.0128	1.36%
Si 288.158	1133622.6	16.5	mg/L	0.04	16.5	mg/L	0.04	0.22%
Sn 189.933	-331.4	-0.0107	mg/L	0.00077	-0.0107	mg/L	0.00077	7.19%
Ti 337.280	1156041.5	1.03	mg/L	0.002	1.03	mg/L	0.002	0.20%
Tl 190.800	282.2	0.958	mg/L	0.0037	0.958	mg/L	0.0037	0.39%
V 292.402	186350.6	1.00	mg/L	0.002	1.00	mg/L	0.002	0.22%
Zn 206.200	198454.4	0.990	mg/L	0.0022	0.990	mg/L	0.0022	0.22%
K 766.490	938514.1	57.4	mg/L	1.12	57.4	mg/L	1.12	1.96%
Na 589.592	3710854.7	81.5	mg/L	0.50	81.5	mg/L	0.50	0.61%
Sr 407.771	2995034.9	1.22	mg/L	0.001	1.22	mg/L	0.001	0.10%

Recovery Check: L030460601PS 0.9

Analyte	Expected Conc.	Measured Conc.	Std. Dev.	Units	Recovery (%)
Tl 190.800	1.02	0.958	0.004	mg/L	93.4
K 766.490	51.5	57.4	1.123	mg/L	111.8
Na 589.592	77.7	81.5	0.495	mg/L	107.6
Sr 407.771	1.14	1.22	0.001	mg/L	107.2
Ag 328.068	0.201	0.209	0.001	mg/L	103.9
Al 237.312	10.0	10.6	0.016	mg/L	105.4
As 188.979	1.000	1.01	0.000	mg/L	100.8
Ba 230.424	10.1	9.32	0.006	mg/L	92.5
Be 234.861	1.00	1.03	0.002	mg/L	103.2
Ca 227.549	90.3	80.7	0.157	mg/L	4.0
Cd 228.802	1.00	0.988	0.001	mg/L	98.8
Co 228.616	1.00	0.954	0.000	mg/L	95.4
Cr 267.716	1.00	0.979	0.001	mg/L	97.9

Cu 327.396	1.25	1.24	0.003	mg/L	98.8
Fe 261.387	1.04	0.821	0.020	mg/L	78.0
Mg 279.079	28.1	26.8	0.057	mg/L	86.8
Mn 257.610	1.00	0.982	0.001	mg/L	97.8
Mo 202.030	0.998	0.965	0.000	mg/L	96.6
Ni 231.604	1.00	0.956	0.000	mg/L	95.6
Pb 220.353	1.00	1.00	0.008	mg/L	99.5
Sb 206.833	1.00	1.03	0.015	mg/L	103.4
Se 196.026	1.01	0.945	0.013	mg/L	94.0
Si 288.158	18.3	16.5	0.036	mg/L	82.5
Sn 189.933	0.986	-0.0107	0.001	mg/L	0.2
Ti 337.280	1.000	1.03	0.002	mg/L	102.9
V 292.402	1.00	1.00	0.002	mg/L	100.3
Zn 206.200	1.02	0.990	0.002	mg/L	96.8

Sequence No.: 15
Sample ID: L030460602
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 5/2/2003 11:37:36 AM

Sample Prep Volume:
Data Type: Original

Mean Data: L030460602

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4100329.3						48470.18	1.18%
Ag 328.068	1019.7	0.00233	mg/L	0.000093	0.00233	mg/L	0.000093	3.97%
Al 237.312	46784.2	1.32	mg/L	0.031	1.32	mg/L	0.031	2.31%
As 188.979	-22.4	0.00230	mg/L	0.001734	0.00230	mg/L	0.001734	75.48%
Ba 230.424	76334.6	0.344	mg/L	0.0075	0.344	mg/L	0.0075	2.19%
Be 234.861	2865.6	0.00052	mg/L	0.000158	0.00052	mg/L	0.000158	30.29%
Ca 227.549	55450.1	52.2	mg/L	1.16	52.2	mg/L	1.16	2.21%
Cd 228.802	1271.6	0.00402	mg/L	0.000049	0.00402	mg/L	0.000049	1.22%
Co 228.616	1505.0	0.0121	mg/L	0.00012	0.0121	mg/L	0.00012	0.99%
Cr 267.716	11632.5	0.0555	mg/L	0.00042	0.0555	mg/L	0.00042	0.76%
Cu 327.396	3009267.6	10.9	mg/L	0.11	10.9	mg/L	0.11	0.99%
Fe 261.387	567806.9	37.9	mg/L	0.87	37.9	mg/L	0.87	2.29%
Mg 279.079	944116.3	26.4	mg/L	0.53	26.4	mg/L	0.53	2.01%
Mn 257.610	197740.8	0.193	mg/L	0.0044	0.193	mg/L	0.0044	2.27%
Mo 202.030	4609.1	0.0491	mg/L	0.00047	0.0491	mg/L	0.00047	0.95%
Ni 231.604	30036.4	0.227	mg/L	0.0023	0.227	mg/L	0.0023	1.00%
Pb 220.353	7171.1	0.327	mg/L	0.0026	0.327	mg/L	0.0026	0.80%
Sb 206.833	478.9	0.0169	mg/L	0.00056	0.0169	mg/L	0.00056	3.29%
Se 196.026	23.9	-0.00746	mg/L	0.000274	-0.00746	mg/L	0.000274	3.67%
Si 288.158	2025526.4	29.4	mg/L	0.38	29.4	mg/L	0.38	1.30%
Sn 189.933	29.9	0.00251	mg/L	0.000433	0.00251	mg/L	0.000433	17.26%
Ti 337.280	108124.0	0.0978	mg/L	0.00212	0.0978	mg/L	0.00212	2.17%
Tl 190.800	12.0	0.0294	mg/L	0.00656	0.0294	mg/L	0.00656	22.30%
V 292.402	-113.2	0.00327	mg/L	0.000118	0.00327	mg/L	0.000118	3.62%
Zn 206.200	1230428.7	6.16	mg/L	0.174	6.16	mg/L	0.174	2.82%
K 766.490	3966679.2	243	mg/L	4.7	243	mg/L	4.7	1.95%
Na 589.592	Saturated2							
Saturated in preshot (code 2)								
Sr 407.771	358046.1	0.150	mg/L	0.0035	0.150	mg/L	0.0035	2.29%

Sequence No.: 16
Sample ID: L030460603
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 5/2/2003 11:42:32 AM

Sample Prep Volume:
Data Type: Original

Mean Data: L030460603

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	3679315.2						37941.92	1.03%
Ag 328.068	941.0	0.00215	mg/L	0.000091	0.00215	mg/L	0.000091	4.23%
Al 237.312	39059.2	1.13	mg/L	0.012	1.13	mg/L	0.012	1.07%
As 188.979	-583.6	-0.0494	mg/L	0.00060	-0.0494	mg/L	0.00060	1.22%
Ba 230.424	49211.3	0.221	mg/L	0.0030	0.221	mg/L	0.0030	1.34%

Be 234.861	1822.5	0.00053 mg/L	0.000055	0.00053 mg/L	0.000055	10.32%
Ca 227.549	38466.2	36.3 mg/L	0.40	36.3 mg/L	0.40	1.10%
Cd 228.802	1211.7	0.00396 mg/L	0.000053	0.00396 mg/L	0.000053	1.34%
Co 228.616	742.3	0.00608 mg/L	0.000166	0.00608 mg/L	0.000166	2.73%
Cr 267.716	10014.9	0.0472 mg/L	0.00084	0.0472 mg/L	0.00084	1.78%
Cu 327.396	2081306.1	7.56 mg/L	0.069	7.56 mg/L	0.069	0.91%
Fe 261.387	323373.2	21.6 mg/L	0.27	21.6 mg/L	0.27	1.26%
Mg 279.079	593957.6	16.6 mg/L	0.22	16.6 mg/L	0.22	1.33%
Mn 257.610	160412.8	0.156 mg/L	0.0017	0.156 mg/L	0.0017	1.12%
Mo 202.030	4048.1	0.0432 mg/L	0.00071	0.0432 mg/L	0.00071	1.66%
Ni 231.604	27370.0	0.207 mg/L	0.0037	0.207 mg/L	0.0037	1.81%
Pb 220.353	21744.8	1.00 mg/L	0.018	1.00 mg/L	0.018	1.80%
Sb 206.833	814.3	0.0336 mg/L	0.00068	0.0336 mg/L	0.00068	2.04%
Se 196.026	71.5	0.00125 mg/L	0.000018	0.00125 mg/L	0.000018	1.45%
Si 288.158	1752049.2	25.5 mg/L	0.29	25.5 mg/L	0.29	1.13%
Sn 189.933	88.7	0.00508 mg/L	0.000383	0.00508 mg/L	0.000383	7.54%
Ti 337.280	59043.5	0.0534 mg/L	0.00048	0.0534 mg/L	0.00048	0.91%
Tl 190.800	7.9	0.0202 mg/L	0.00182	0.0202 mg/L	0.00182	9.01%
V 292.402	-161.0	0.00150 mg/L	0.000027	0.00150 mg/L	0.000027	1.77%
Zn 206.200	820125.0	4.10 mg/L	0.058	4.10 mg/L	0.058	1.42%
K 766.490	8900373.9	544 mg/L	20.7	544 mg/L	20.7	3.80%
Na 589.592	Saturated2					
Saturated in preshot (code 2)						
Sr 407.771	243250.2	0.104 mg/L	0.0002	0.104 mg/L	0.0002	0.16%

Sequence No.: 17
Sample ID: CCV
Analyst:
Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 5/2/2003 11:47:30 AM
Sample Prep Volume:
Data Type: Original

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4586015.6						30071.82	0.66%
Ag 328.068	164618.0	0.376	mg/L	0.0027	0.376	mg/L	0.0027	0.73%
QC value within limits for Ag 328.068 Recovery = 94.08%								
Al 237.312	306575.1	9.29	mg/L	0.068	9.29	mg/L	0.068	0.73%
QC value within limits for Al 237.312 Recovery = 92.91%								
As 188.979	4159.6	0.364	mg/L	0.0003	0.364	mg/L	0.0003	0.08%
QC value within limits for As 188.979 Recovery = 91.11%								
Ba 230.424	218839.6	0.976	mg/L	0.0075	0.976	mg/L	0.0075	0.77%
QC value within limits for Ba 230.424 Recovery = 97.58%								
Be 234.861	38071.1	0.0470	mg/L	0.00036	0.0470	mg/L	0.00036	0.77%
QC value within limits for Be 234.861 Recovery = 94.08%								
Ca 227.549	10210.3	9.54	mg/L	0.020	9.54	mg/L	0.020	0.21%
QC value within limits for Ca 227.549 Recovery = 95.44%								
Cd 228.802	14782.0	0.0461	mg/L	0.00005	0.0461	mg/L	0.00005	0.10%
QC value within limits for Cd 228.802 Recovery = 92.12%								
Co 228.616	24726.3	0.192	mg/L	0.0000	0.192	mg/L	0.0000	0.02%
QC value within limits for Co 228.616 Recovery = 95.97%								
Cr 267.716	103862.8	0.478	mg/L	0.0035	0.478	mg/L	0.0035	0.74%
QC value within limits for Cr 267.716 Recovery = 95.52%								
Cu 327.396	134029.3	0.487	mg/L	0.0029	0.487	mg/L	0.0029	0.60%
QC value within limits for Cu 327.396 Recovery = 97.47%								
Fe 261.387	55187.4	3.70	mg/L	0.039	3.70	mg/L	0.039	1.05%
QC value within limits for Fe 261.387 Recovery = 92.44%								
Mg 279.079	341555.3	9.52	mg/L	0.062	9.52	mg/L	0.062	0.66%
QC value within limits for Mg 279.079 Recovery = 95.16%								
Mn 257.610	492721.6	0.481	mg/L	0.0037	0.481	mg/L	0.0037	0.78%
QC value within limits for Mn 257.610 Recovery = 96.18%								
Mo 202.030	90447.1	0.964	mg/L	0.0081	0.964	mg/L	0.0081	0.84%
QC value within limits for Mo 202.030 Recovery = 96.91%								
Ni 231.604	65318.5	0.493	mg/L	0.0033	0.493	mg/L	0.0033	0.67%
QC value within limits for Ni 231.604 Recovery = 98.53%								
Pb 220.353	10299.2	0.480	mg/L	0.0000	0.480	mg/L	0.0000	0.00%
QC value within limits for Pb 220.353 Recovery = 96.02%								
Sb 206.833	26225.8	1.16	mg/L	0.000	1.16	mg/L	0.000	0.01%
QC value within limits for Sb 206.833 Recovery = 96.14%								
Se 196.026	3957.8	0.380	mg/L	0.0009	0.380	mg/L	0.0009	0.23%

```
   QC value within limits for Se 196.026  Recovery = 94.99%
Si 288.158          338282.9       4.92 mg/L        0.025        4.92 mg/L        0.025   0.52%
   QC value within limits for Si 288.158  Recovery = 98.39%
Sn 189.933           16124.1      0.822 mg/L       0.0154       0.822 mg/L       0.0154   1.87%
   QC value less than the lower limit for Sn 189.933  Recovery = 82.28%
Ti 337.280         1066956.0      0.949 mg/L       0.0065       0.949 mg/L       0.0065   0.69%
   QC value within limits for Ti 337.280  Recovery = 94.98%
Tl 190.800             121.7      0.418 mg/L       0.0155       0.418 mg/L       0.0155   3.70%
   QC value less than the lower limit for Tl 190.800  Recovery = 83.65%
V 292.402           178430.1      0.958 mg/L       0.0069       0.958 mg/L       0.0069   0.72%
   QC value within limits for V 292.402  Recovery = 95.76%
Zn 206.200          191303.1      0.953 mg/L       0.0072       0.953 mg/L       0.0072   0.75%
   QC value within limits for Zn 206.200  Recovery = 95.34%
K 766.490           759261.2       46.4 mg/L         0.46        46.4 mg/L         0.46   0.99%
   QC value within limits for K 766.490  Recovery = 92.88%
Na 589.592         2192343.8       48.1 mg/L         0.48        48.1 mg/L         0.48   1.00%
   QC value within limits for Na 589.592  Recovery = 96.28%
Sr 407.771         2287551.0      0.929 mg/L       0.0104       0.929 mg/L       0.0104   1.12%
   QC value within limits for Sr 407.771  Recovery = 92.94%
QC Failed.  Continue with analysis.
```

Sequence No.: 18
Sample ID: CCB
Analyst:
Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 5/2/2003 11:52:24 AM
Sample Prep Volume:
Data Type: Original

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4011716.0						35904.96	0.90%
Ag 328.068	141.9	0.00032	mg/L	0.000073	0.00032	mg/L	0.000073	22.52%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 237.312	28.4	0.00088	mg/L	0.000552	0.00088	mg/L	0.000552	62.50%
QC value within limits for Al 237.312 Recovery = Not calculated								
As 188.979	-4.4	-0.00040	mg/L	0.000231	-0.00040	mg/L	0.000231	58.53%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 230.424	-11.7	-0.00005	mg/L	0.000045	-0.00005	mg/L	0.000045	83.15%
QC value within limits for Ba 230.424 Recovery = Not calculated								
Be 234.861	5.2	0.00001	mg/L	0.000004	0.00001	mg/L	0.000004	60.39%
QC value within limits for Be 234.861 Recovery = Not calculated								
Ca 227.549	-0.8	-0.00056	mg/L	0.001896	-0.00056	mg/L	0.001896	337.54%
QC value within limits for Ca 227.549 Recovery = Not calculated								
Cd 228.802	40.0	0.00013	mg/L	0.000028	0.00013	mg/L	0.000028	21.87%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616	2.9	0.00002	mg/L	0.000000	0.00002	mg/L	0.000000	1.37%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716	-67.7	-0.00031	mg/L	0.000072	-0.00031	mg/L	0.000072	23.07%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.396	13.9	0.00005	mg/L	0.000057	0.00005	mg/L	0.000057	112.49%
QC value within limits for Cu 327.396 Recovery = Not calculated								
Fe 261.387	-107.9	-0.00720	mg/L	0.000824	-0.00720	mg/L	0.000824	11.45%
QC value within limits for Fe 261.387 Recovery = Not calculated								
Mg 279.079	-29.4	-0.00085	mg/L	0.000429	-0.00085	mg/L	0.000429	50.57%
QC value within limits for Mg 279.079 Recovery = Not calculated								
Mn 257.610	-18.5	-0.00002	mg/L	0.000005	-0.00002	mg/L	0.000005	30.10%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.030	50.6	0.00054	mg/L	0.000030	0.00054	mg/L	0.000030	5.53%
QC value within limits for Mo 202.030 Recovery = Not calculated								
Ni 231.604	-12.4	-0.00009	mg/L	0.000045	-0.00009	mg/L	0.000045	47.85%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353	6.1	0.00029	mg/L	0.000442	0.00029	mg/L	0.000442	154.82%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.833	10.8	0.00049	mg/L	0.000521	0.00049	mg/L	0.000521	107.04%
QC value within limits for Sb 206.833 Recovery = Not calculated								
Se 196.026	12.9	0.00125	mg/L	0.001234	0.00125	mg/L	0.001234	98.75%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 288.158	-20.6	-0.00030	mg/L	0.000007	-0.00030	mg/L	0.000007	2.35%
QC value within limits for Si 288.158 Recovery = Not calculated								
Sn 189.933	137.7	0.00697	mg/L	0.000107	0.00697	mg/L	0.000107	1.54%

QC value within limits for Sn 189.933 Recovery = Not calculated

Ti 337.280	-153.6	-0.00014	mg/L	0.000025	-0.00014	mg/L	0.000025	18.06%

QC value within limits for Ti 337.280 Recovery = Not calculated

Tl 190.800	2.6	0.00858	mg/L	0.000516	0.00858	mg/L	0.000516	6.01%

QC value within limits for Tl 190.800 Recovery = Not calculated

V 292.402	3.3	0.00001	mg/L	0.000051	0.00001	mg/L	0.000051	345.72%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 206.200	-47.0	-0.00024	mg/L	0.000014	-0.00024	mg/L	0.000014	5.99%

QC value within limits for Zn 206.200 Recovery = Not calculated

K 766.490	3944.7	0.241	mg/L	0.0131	0.241	mg/L	0.0131	5.42%

QC value within limits for K 766.490 Recovery = Not calculated

Na 589.592	8017.0	0.176	mg/L	0.0059	0.176	mg/L	0.0059	3.37%

QC value within limits for Na 589.592 Recovery = Not calculated

Sr 407.771	21.2	0.00593	mg/L	0.000023	0.00593	mg/L	0.000023	0.38%

QC value within limits for Sr 407.771 Recovery = Not calculated

All analytes passed QC.

Analysis Begun

Start Time: 5/2/2003 12:37:03 PM
Logged In Analyst: Administrator
Spectrometer Model: Optima 3000 DV

Plasma On Time: 5/2/2003 7:44:33 AM
Technique: ICP Continuous
Autosampler Model: AS-90

Sample Information File: C:\pe\Administrator\Sample Information\050203A.sif
Results Data Set: 050203A
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 5
Sample ID: L030458504 WG139542-01
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 5/2/2003 12:37:03 PM
Sample Prep Volume:
Data Type: Original

Mean Data: L030458504 WG139542-01

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4625201.9						12718.88	0.27%
Ag 328.068	391.7	0.00090	mg/L	0.000157	0.00090	mg/L	0.000157	17.58%
Al 237.312	90087.3	2.73	mg/L	0.035	2.73	mg/L	0.035	1.29%
As 188.979	14.5	0.00136	mg/L	0.000001	0.00136	mg/L	0.000001	0.04%
Ba 230.424	24404.3	0.109	mg/L	0.0012	0.109	mg/L	0.0012	1.06%
Be 234.861	258.9	0.00016	mg/L	0.000001	0.00016	mg/L	0.000001	0.37%
Ca 227.549	60950.0	58.4	mg/L	0.57	58.4	mg/L	0.57	0.98%
Cd 228.802	31.9	0.00003	mg/L	0.000002	0.00003	mg/L	0.000002	7.28%
Co 228.616	44.8	0.00044	mg/L	0.000010	0.00044	mg/L	0.000010	2.29%
Cr 267.716	395.1	0.00202	mg/L	0.000079	0.00202	mg/L	0.000079	3.91%
Cu 327.396	1043.5	0.00382	mg/L	0.000042	0.00382	mg/L	0.000042	1.11%
Fe 261.387	24257.9	1.62	mg/L	0.028	1.62	mg/L	0.028	1.75%
Mg 279.079	279761.2	7.82	mg/L	0.068	7.82	mg/L	0.068	0.87%
Mn 257.610	17444.2	0.0170	mg/L	0.00016	0.0170	mg/L	0.00016	0.93%
Mo 202.030	118.7	0.00126	mg/L	0.000017	0.00126	mg/L	0.000017	1.32%
Ni 231.604	233.0	0.00178	mg/L	0.000031	0.00178	mg/L	0.000031	1.75%
Pb 220.353	63.7	0.00299	mg/L	0.000165	0.00299	mg/L	0.000165	5.53%
Sb 206.833	25.2	0.00068	mg/L	0.000023	0.00068	mg/L	0.000023	3.29%
Se 196.026	49.4	0.00418	mg/L	0.000689	0.00418	mg/L	0.000689	16.48%
Si 288.158	795875.0	11.6	mg/L	0.03	11.6	mg/L	0.03	0.28%
Sn 189.933	-300.2	-0.0146	mg/L	0.00009	-0.0146	mg/L	0.00009	0.63%
Ti 337.280	44395.5	0.0397	mg/L	0.00074	0.0397	mg/L	0.00074	1.87%
Tl 190.800	1.6	0.00498	mg/L	0.004926	0.00498	mg/L	0.004926	98.86%
V 292.402	1085.8	0.00592	mg/L	0.000052	0.00592	mg/L	0.000052	0.87%
Zn 206.200	1152.9	0.00521	mg/L	0.000031	0.00521	mg/L	0.000031	0.60%
K 766.490	66923.3	4.08	mg/L	0.007	4.08	mg/L	0.007	0.16%
Na 589.592	563031.6	12.4	mg/L	0.01	12.4	mg/L	0.01	0.11%
Sr 407.771	717655.0	0.296	mg/L	0.0007	0.296	mg/L	0.0007	0.25%

Sequence No.: 6
Sample ID: L030458505S WG139542-05
Analyst: MSW/SLP

Autosampler Location: 16
Date Collected: 5/2/2003 12:42:00 PM

Sample Wt:
Dilution:

Sample Prep Volume:
Data Type: Original

Mean Data: L030458505S WG139542-05

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4818035.5						13921.58	0.29%
Ag 328.068	88986.4	0.203	mg/L	0.0018	0.203	mg/L	0.0018	0.88%
Al 237.312	456655.1	13.7	mg/L	0.12	13.7	mg/L	0.12	0.89%
As 188.979	11281.3	0.998	mg/L	0.0061	0.998	mg/L	0.0061	0.62%
Ba 230.424	2097733.0	9.37	mg/L	0.023	9.37	mg/L	0.023	0.25%
Be 234.861	831065.0	1.03	mg/L	0.002	1.03	mg/L	0.002	0.23%
Ca 227.549	72400.8	69.0	mg/L	0.54	69.0	mg/L	0.54	0.78%
Cd 228.802	300564.2	0.961	mg/L	0.0058	0.961	mg/L	0.0058	0.61%
Co 228.616	122117.1	0.958	mg/L	0.0005	0.958	mg/L	0.0005	0.05%
Cr 267.716	211286.6	0.971	mg/L	0.0019	0.971	mg/L	0.0019	0.20%
Cu 327.396	271465.0	0.986	mg/L	0.0103	0.986	mg/L	0.0103	1.04%
Fe 261.387	34363.6	2.37	mg/L	0.005	2.37	mg/L	0.005	0.21%
Mg 279.079	650662.8	18.2	mg/L	0.00	18.2	mg/L	0.00	0.01%
Mn 257.610	1016254.8	0.992	mg/L	0.0027	0.992	mg/L	0.0027	0.28%
Mo 202.030	89204.4	0.951	mg/L	0.0005	0.951	mg/L	0.0005	0.06%
Ni 231.604	127416.9	0.961	mg/L	0.0016	0.961	mg/L	0.0016	0.16%
Pb 220.353	21310.6	0.991	mg/L	0.0047	0.991	mg/L	0.0047	0.47%
Sb 206.833	23327.4	1.02	mg/L	0.004	1.02	mg/L	0.004	0.39%
Se 196.026	9700.9	0.935	mg/L	0.0045	0.935	mg/L	0.0045	0.48%
Si 288.158	1568353.4	22.8	mg/L	0.01	22.8	mg/L	0.01	0.04%
Sn 189.933	-421.9	-0.0154	mg/L	0.00009	-0.0154	mg/L	0.00009	0.57%
Ti 337.280	1195654.6	1.06	mg/L	0.003	1.06	mg/L	0.003	0.29%
Tl 190.800	264.6	0.899	mg/L	0.0333	0.899	mg/L	0.0333	3.71%
V 292.402	184953.2	0.997	mg/L	0.0048	0.997	mg/L	0.0048	0.48%
Zn 206.200	190537.6	0.951	mg/L	0.0052	0.951	mg/L	0.0052	0.55%
K 766.490	897149.7	54.9	mg/L	0.34	54.9	mg/L	0.34	0.62%
Na 589.592	2938174.5	64.5	mg/L	2.65	64.5	mg/L	2.65	4.10%
Sr 407.771	3245522.2	1.32	mg/L	0.056	1.32	mg/L	0.056	4.25%

Recovery Check: L030458505S WG139542-05

Analyte	Expected Conc.	Measured Conc.	Std. Dev.	Units	Recovery (%)
Tl 190.800	1.00	0.899	0.033	mg/L	89.4
K 766.490	54.1	54.9	0.340	mg/L	101.6
Na 589.592	62.4	64.5	2.645	mg/L	104.3
Sr 407.771	1.30	1.32	0.056	mg/L	102.0
Ag 328.068	0.201	0.203	0.002	mg/L	101.3
Al 237.312	12.7	13.7	0.122	mg/L	110.0
As 188.979	1.00	0.998	0.006	mg/L	99.7
Ba 230.424	10.1	9.37	0.023	mg/L	92.6
Be 234.861	1.00	1.03	0.002	mg/L	103.3
Ca 227.549	68.4	69.0	0.542	mg/L	106.7
Cd 228.802	1.00	0.961	0.006	mg/L	96.1
Co 228.616	1.00	0.958	0.000	mg/L	95.8
Cr 267.716	1.00	0.971	0.002	mg/L	96.9
Cu 327.396	1.00	0.986	0.010	mg/L	98.3
Fe 261.387	2.62	2.37	0.005	mg/L	75.1
Mg 279.079	17.8	18.2	0.002	mg/L	103.4
Mn 257.610	1.02	0.992	0.003	mg/L	97.5
Mo 202.030	0.996	0.951	0.001	mg/L	95.4
Ni 231.604	1.00	0.961	0.002	mg/L	95.9
Pb 220.353	1.00	0.991	0.005	mg/L	98.8
Sb 206.833	1.00	1.02	0.004	mg/L	101.9
Se 196.026	1.00	0.935	0.004	mg/L	93.1
Si 288.158	21.6	22.8	0.008	mg/L	112.2
Sn 189.933	0.984	-0.0154	0.000	mg/L	-0.1
Ti 337.280	1.04	1.06	0.003	mg/L	102.5
V 292.402	1.01	0.997	0.005	mg/L	99.1
Zn 206.200	1.01	0.951	0.005	mg/L	94.5

Sequence No.: 7
Sample ID: L030458506SD WG139542-06
Analyst: MSW/SLP

Autosampler Location: 17
Date Collected: 5/2/2003 12:47:04 PM

Sample Wt:
Dilution:

Sample Prep Volume:
Data Type: Original

Mean Data: L030458506SD WG139542-06

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4756209.1						40527.23	0.85%
Ag 328.068	90722.1	0.207	mg/L	0.0039	0.207	mg/L	0.0039	1.88%
Al 237.312	468215.1	14.1	mg/L	0.19	14.1	mg/L	0.19	1.36%
As 188.979	11236.8	0.994	mg/L	0.0002	0.994	mg/L	0.0002	0.02%
Ba 230.424	2109494.4	9.42	mg/L	0.057	9.42	mg/L	0.057	0.60%
Be 234.861	832770.8	1.04	mg/L	0.009	1.04	mg/L	0.009	0.84%
Ca 227.549	73837.1	70.4	mg/L	1.07	70.4	mg/L	1.07	1.52%
Cd 228.802	306056.5	0.978	mg/L	0.0123	0.978	mg/L	0.0123	1.26%
Co 228.616	124194.7	0.974	mg/L	0.0079	0.974	mg/L	0.0079	0.81%
Cr 267.716	215060.3	0.989	mg/L	0.0093	0.989	mg/L	0.0093	0.94%
Cu 327.396	276306.4	1.00	mg/L	0.017	1.00	mg/L	0.017	1.68%
Fe 261.387	35635.7	2.46	mg/L	0.037	2.46	mg/L	0.037	1.51%
Mg 279.079	662752.3	18.5	mg/L	0.17	18.5	mg/L	0.17	0.90%
Mn 257.610	1019210.0	0.995	mg/L	0.0069	0.995	mg/L	0.0069	0.69%
Mo 202.030	90988.0	0.970	mg/L	0.0086	0.970	mg/L	0.0086	0.88%
Ni 231.604	129702.2	0.978	mg/L	0.0069	0.978	mg/L	0.0069	0.71%
Pb 220.353	21220.3	0.987	mg/L	0.0000	0.987	mg/L	0.0000	0.00%
Sb 206.833	23255.3	1.02	mg/L	0.000	1.02	mg/L	0.000	0.02%
Se 196.026	9693.2	0.934	mg/L	0.0011	0.934	mg/L	0.0011	0.12%
Si 288.158	1580736.6	23.0	mg/L	0.17	23.0	mg/L	0.17	0.75%
Sn 189.933	-415.4	-0.0151	mg/L	0.00013	-0.0151	mg/L	0.00013	0.87%
Ti 337.280	1197846.0	1.07	mg/L	0.010	1.07	mg/L	0.010	0.91%
Tl 190.800	277.0	0.940	mg/L	0.0319	0.940	mg/L	0.0319	3.39%
V 292.402	188333.5	1.01	mg/L	0.010	1.01	mg/L	0.010	0.96%
Zn 206.200	193424.1	0.965	mg/L	0.0010	0.965	mg/L	0.0010	0.10%
K 766.490	941977.6	57.6	mg/L	1.66	57.6	mg/L	1.66	2.88%
Na 589.592	3051498.2	67.0	mg/L	0.74	67.0	mg/L	0.74	1.10%
Sr 407.771	3354584.8	1.36	mg/L	0.010	1.36	mg/L	0.010	0.72%

Duplicate Check: L030458506SD WG139542-06

Analyte	Expected Conc.	Measured Conc.	Std. Dev.	Units	Difference (%)
Tl 190.800	0.899	0.940	0.032	mg/L	4.5
K 766.490	54.9	57.6	1.661	mg/L	4.9
Na 589.592	64.5	67.0	0.740	mg/L	3.8
Sr 407.771	1.32	1.36	0.010	mg/L	3.3
Y 360.073			0.000	mg/L	Not calculated
Ag 328.068	0.203	0.207	0.004	mg/L	1.9
Al 237.312	13.7	14.1	0.192	mg/L	2.5
As 188.979	0.998	0.994	0.000	mg/L	0.4
Ba 230.424	9.37	9.42	0.057	mg/L	0.6
Be 234.861	1.03	1.04	0.009	mg/L	0.2
Ca 227.549	69.0	70.4	1.068	mg/L	2.0
Cd 228.802	0.961	0.978	0.012	mg/L	1.8
Co 228.616	0.958	0.974	0.008	mg/L	1.7
Cr 267.716	0.971	0.989	0.009	mg/L	1.8
Cu 327.396	0.986	1.00	0.017	mg/L	1.8
Fe 261.387	2.37	2.46	0.037	mg/L	3.6
Mg 279.079	18.2	18.5	0.167	mg/L	1.8
Mn 257.610	0.992	0.995	0.007	mg/L	0.3
Mo 202.030	0.951	0.970	0.009	mg/L	2.0
Ni 231.604	0.961	0.978	0.007	mg/L	1.8
Pb 220.353	0.991	0.987	0.000	mg/L	0.4
Sb 206.833	1.02	1.02	0.000	mg/L	0.3
Se 196.026	0.935	0.934	0.001	mg/L	0.1
Si 288.158	22.8	23.0	0.173	mg/L	0.8
Sn 189.933	-0.0154	-0.0151	0.000	mg/L	-2.1
Ti 337.280	1.06	1.07	0.010	mg/L	0.2
V 292.402	0.997	1.01	0.010	mg/L	1.8
Zn 206.200	0.951	0.965	0.001	mg/L	1.5

Sequence No.: 8
Sample ID: L030459402 WG139542-02

Autosampler Location: 18
Date Collected: 5/2/2003 12:51:59 PM

Analyst: MSW/SLP
Sample Wt:
Dilution:
Sample Prep Volume:
Data Type: Original

Mean Data: L030459402 WG139542-02

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4700900.4						25603.73	0.54%
Ag 328.068	525.5	0.00120	mg/L	0.000029	0.00120	mg/L	0.000029	2.41%
Al 237.312	99719.2	3.03	mg/L	0.005	3.03	mg/L	0.005	0.17%
As 188.979	115.3	0.0103	mg/L	0.00041	0.0103	mg/L	0.00041	3.95%
Ba 230.424	69908.2	0.313	mg/L	0.0006	0.313	mg/L	0.0006	0.20%
Be 234.861	366.4	0.00023	mg/L	0.000027	0.00023	mg/L	0.000027	11.87%
Ca 227.549	62458.5	59.8	mg/L	0.04	59.8	mg/L	0.04	0.06%
Cd 228.802	286.4	0.00080	mg/L	0.000011	0.00080	mg/L	0.000011	1.37%
Co 228.616	251.2	0.00235	mg/L	0.000024	0.00235	mg/L	0.000024	1.00%
Cr 267.716	4109.6	0.0195	mg/L	0.00008	0.0195	mg/L	0.00008	0.41%
Cu 327.396	79022.1	0.287	mg/L	0.0008	0.287	mg/L	0.0008	0.28%
Fe 261.387	36134.1	2.41	mg/L	0.005	2.41	mg/L	0.005	0.20%
Mg 279.079	1141173.9	31.9	mg/L	0.21	31.9	mg/L	0.21	0.67%
Mn 257.610	92616.9	0.0901	mg/L	0.00001	0.0901	mg/L	0.00001	0.01%
Mo 202.030	3108.7	0.0331	mg/L	0.00004	0.0331	mg/L	0.00004	0.12%
Ni 231.604	1688.8	0.0128	mg/L	0.00003	0.0128	mg/L	0.00003	0.25%
Pb 220.353	2341.4	0.109	mg/L	0.0001	0.109	mg/L	0.0001	0.08%
Sb 206.833	1157.4	0.0506	mg/L	0.00035	0.0506	mg/L	0.00035	0.69%
Se 196.026	61.0	0.00504	mg/L	0.001422	0.00504	mg/L	0.001422	28.19%
Si 288.158	593523.0	8.65	mg/L	0.048	8.65	mg/L	0.048	0.55%
Sn 189.933	-226.9	-0.0110	mg/L	0.00006	-0.0110	mg/L	0.00006	0.58%
Ti 337.280	33399.7	0.0299	mg/L	0.00006	0.0299	mg/L	0.00006	0.20%
Tl 190.800	13.0	0.0432	mg/L	0.00305	0.0432	mg/L	0.00305	7.05%
V 292.402	6639.0	0.0358	mg/L	0.00000	0.0358	mg/L	0.00000	0.01%
Zn 206.200	60729.8	0.302	mg/L	0.0008	0.302	mg/L	0.0008	0.25%
K 766.490	374201.1	22.9	mg/L	0.66	22.9	mg/L	0.66	2.89%
Na 589.592	10208091.2	224	mg/L	4.3	224	mg/L	4.3	1.91%
Sr 407.771	1455569.5	0.594	mg/L	0.0153	0.594	mg/L	0.0153	2.58%

Sequence No.: 9
Autosampler Location: 19
Sample ID: L030459402DP WG139542-07
Date Collected: 5/2/2003 12:56:54 PM
Analyst: MSW/SLP
Sample Wt:
Dilution:
Sample Prep Volume:
Data Type: Original

Mean Data: L030459402DP WG139542-07

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4618336.3						4383.76	0.09%
Ag 328.068	498.6	0.00114	mg/L	0.000143	0.00114	mg/L	0.000143	12.52%
Al 237.312	161779.0	4.91	mg/L	0.016	4.91	mg/L	0.016	0.33%
As 188.979	122.9	0.0111	mg/L	0.00097	0.0111	mg/L	0.00097	8.79%
Ba 230.424	72903.5	0.326	mg/L	0.0021	0.326	mg/L	0.0021	0.64%
Be 234.861	455.9	0.00025	mg/L	0.000023	0.00025	mg/L	0.000023	9.22%
Ca 227.549	64622.5	61.8	mg/L	0.27	61.8	mg/L	0.27	0.44%
Cd 228.802	289.1	0.00079	mg/L	0.000024	0.00079	mg/L	0.000024	3.06%
Co 228.616	296.6	0.00271	mg/L	0.000027	0.00271	mg/L	0.000027	0.99%
Cr 267.716	5596.1	0.0264	mg/L	0.00033	0.0264	mg/L	0.00033	1.26%
Cu 327.396	95329.9	0.346	mg/L	0.0017	0.346	mg/L	0.0017	0.48%
Fe 261.387	48158.2	3.21	mg/L	0.028	3.21	mg/L	0.028	0.86%
Mg 279.079	1187879.9	33.2	mg/L	0.07	33.2	mg/L	0.07	0.21%
Mn 257.610	96898.7	0.0943	mg/L	0.00045	0.0943	mg/L	0.00045	0.47%
Mo 202.030	3434.9	0.0366	mg/L	0.00052	0.0366	mg/L	0.00052	1.42%
Ni 231.604	1914.7	0.0145	mg/L	0.00023	0.0145	mg/L	0.00023	1.58%
Pb 220.353	2568.9	0.119	mg/L	0.0018	0.119	mg/L	0.0018	1.48%
Sb 206.833	1311.0	0.0571	mg/L	0.00038	0.0571	mg/L	0.00038	0.66%
Se 196.026	37.4	0.00243	mg/L	0.000997	0.00243	mg/L	0.000997	41.08%
Si 288.158	791842.2	11.5	mg/L	0.01	11.5	mg/L	0.01	0.09%
Sn 189.933	-185.5	-0.00893	mg/L	0.000241	-0.00893	mg/L	0.000241	2.70%
Ti 337.280	45283.2	0.0405	mg/L	0.00028	0.0405	mg/L	0.00028	0.70%
Tl 190.800	4.9	0.0159	mg/L	0.00143	0.0159	mg/L	0.00143	9.01%
V 292.402	7212.1	0.0390	mg/L	0.00066	0.0390	mg/L	0.00066	1.68%

Zn 206.200	66713.3	0.332 mg/L	0.0014	0.332 mg/L	0.0014	0.43%
K 766.490	404940.4	24.7 mg/L	0.31	24.7 mg/L	0.31	1.27%
Na 589.592	10837152.3	238 mg/L	0.9	238 mg/L	0.9	0.36%
Sr 407.771	1556534.8	0.634 mg/L	0.0029	0.634 mg/L	0.0029	0.46%

Duplicate Check: L030459402DP WG139542-07

Analyte	Expected Conc.	Measured Conc.	Std. Dev.	Units	Difference (%)
Tl 190.800	0.0432	0.0159	0.001	mg/L	92.7
K 766.490	22.9	24.7	0.314	mg/L	7.9
Na 589.592	224	238	0.866	mg/L	6.0
Sr 407.771	0.594	0.634	0.003	mg/L	6.6
Y 360.073			0.000	mg/L	Not calculated
Ag 328.068	0.00120	0.00114	0.000	mg/L	5.2
Al 237.312	3.03	4.91	0.016	mg/L	47.4
As 188.979	0.0103	0.0111	0.001	mg/L	6.9
Ba 230.424	0.313	0.326	0.002	mg/L	4.2
Be 234.861	0.00023	0.00025	0.000	mg/L	9.4
Ca 227.549	59.8	61.8	0.273	mg/L	3.4
Cd 228.802	0.00080	0.00079	0.000	mg/L	0.5
Co 228.616	0.00235	0.00271	0.000	mg/L	14.1
Cr 267.716	0.0195	0.0264	0.000	mg/L	30.0
Cu 327.396	0.287	0.346	0.002	mg/L	18.7
Fe 261.387	2.41	3.21	0.028	mg/L	28.5
Mg 279.079	31.9	33.2	0.068	mg/L	4.0
Mn 257.610	0.0901	0.0943	0.000	mg/L	4.5
Mo 202.030	0.0331	0.0366	0.001	mg/L	10.0
Ni 231.604	0.0128	0.0145	0.000	mg/L	12.6
Pb 220.353	0.109	0.119	0.002	mg/L	9.3
Sb 206.833	0.0506	0.0571	0.000	mg/L	12.0
Se 196.026	0.00504	0.00243	0.001	mg/L	70.1
Si 288.158	8.65	11.5	0.010	mg/L	28.6
Sn 189.933	-0.0110	-0.00893	0.000	mg/L	-20.4
Ti 337.280	0.0299	0.0405	0.000	mg/L	30.1
V 292.402	0.0358	0.0390	0.001	mg/L	8.5
Zn 206.200	0.302	0.332	0.001	mg/L	9.4

Sequence No.: 10
Sample ID: L030458501
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 20
Date Collected: 5/2/2003 1:01:50 PM

Sample Prep Volume:
Data Type: Original

Mean Data: L030458501

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4477302.0						47323.15	1.06%
Ag 328.068	232.0	0.00053	mg/L	0.000058	0.00053	mg/L	0.000058	10.99%
Al 237.312	163169.2	4.94	mg/L	0.021	4.94	mg/L	0.021	0.42%
As 188.979	29.9	0.00296	mg/L	0.000492	0.00296	mg/L	0.000492	16.65%
Ba 230.424	26352.7	0.118	mg/L	0.0000	0.118	mg/L	0.0000	0.00%
Be 234.861	551.0	0.00030	mg/L	0.000052	0.00030	mg/L	0.000052	17.45%
Ca 227.549	36194.3	34.6	mg/L	0.06	34.6	mg/L	0.06	0.17%
Cd 228.802	59.0	0.00012	mg/L	0.000003	0.00012	mg/L	0.000003	2.69%
Co 228.616	198.7	0.00160	mg/L	0.000036	0.00160	mg/L	0.000036	2.23%
Cr 267.716	929.0	0.00456	mg/L	0.000055	0.00456	mg/L	0.000055	1.21%
Cu 327.396	1478.9	0.00542	mg/L	0.000158	0.00542	mg/L	0.000158	2.91%
Fe 261.387	60018.1	4.00	mg/L	0.010	4.00	mg/L	0.010	0.24%
Mg 279.079	243292.4	6.80	mg/L	0.008	6.80	mg/L	0.008	0.12%
Mn 257.610	138467.0	0.135	mg/L	0.0001	0.135	mg/L	0.0001	0.10%
Mo 202.030	162.6	0.00172	mg/L	0.000010	0.00172	mg/L	0.000010	0.58%
Ni 231.604	630.1	0.00481	mg/L	0.000075	0.00481	mg/L	0.000075	1.55%
Pb 220.353	103.9	0.00471	mg/L	0.000098	0.00471	mg/L	0.000098	2.07%
Sb 206.833	37.1	0.00073	mg/L	0.000158	0.00073	mg/L	0.000158	21.57%
Se 196.026	39.9	0.00250	mg/L	0.001185	0.00250	mg/L	0.001185	47.30%
Si 288.158	949779.8	13.8	mg/L	0.10	13.8	mg/L	0.10	0.72%
Sn 189.933	-232.6	-0.0115	mg/L	0.00028	-0.0115	mg/L	0.00028	2.45%
Ti 337.280	65317.8	0.0583	mg/L	0.00035	0.0583	mg/L	0.00035	0.60%
Tl 190.800	6.4	0.0205	mg/L	0.00131	0.0205	mg/L	0.00131	6.38%

V 292.402	1922.6	0.0106	mg/L	0.00002	0.0106	mg/L	0.00002	0.23%
Zn 206.200	2789.4	0.0133	mg/L	0.00003	0.0133	mg/L	0.00003	0.24%
K 766.490	119956.9	7.33	mg/L	0.034	7.33	mg/L	0.034	0.46%
Na 589.592	594006.1	13.0	mg/L	0.05	13.0	mg/L	0.05	0.38%
Sr 407.771	448029.0	0.187	mg/L	0.0013	0.187	mg/L	0.0013	0.72%

Sequence No.: 11
Sample ID: L030458501SDL 0.2
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 21
Date Collected: 5/2/2003 1:06:43 PM
Sample Prep Volume:
Data Type: Original

Mean Data: L030458501SDL 0.2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4273274.2						61774.26	1.45%
Ag 328.068	100.7	0.00023	mg/L	0.000042	0.00023	mg/L	0.000042	18.24%
Al 237.312	30600.6	0.928	mg/L	0.0071	0.928	mg/L	0.0071	0.77%
As 188.979	5.8	0.00054	mg/L	0.000145	0.00054	mg/L	0.000145	26.89%
Ba 230.424	4734.5	0.0212	mg/L	0.00010	0.0212	mg/L	0.00010	0.47%
Be 234.861	75.5	0.00003	mg/L	0.000045	0.00003	mg/L	0.000045	130.12%
Ca 227.549	6098.5	5.83	mg/L	0.059	5.83	mg/L	0.059	1.01%
Cd 228.802	28.8	0.00008	mg/L	0.000019	0.00008	mg/L	0.000019	23.59%
Co 228.616	36.8	0.00029	mg/L	0.000028	0.00029	mg/L	0.000028	9.93%
Cr 267.716	181.5	0.00088	mg/L	0.000014	0.00088	mg/L	0.000014	1.54%
Cu 327.396	264.3	0.00097	mg/L	0.000132	0.00097	mg/L	0.000132	13.55%
Fe 261.387	8842.2	0.590	mg/L	0.0057	0.590	mg/L	0.0057	0.97%
Mg 279.079	43099.1	1.21	mg/L	0.011	1.21	mg/L	0.011	0.93%
Mn 257.610	25269.9	0.0247	mg/L	0.00008	0.0247	mg/L	0.00008	0.33%
Mo 202.030	35.8	0.00038	mg/L	0.000050	0.00038	mg/L	0.000050	13.11%
Ni 231.604	117.6	0.00090	mg/L	0.000083	0.00090	mg/L	0.000083	9.21%
Pb 220.353	23.1	0.00108	mg/L	0.000084	0.00108	mg/L	0.000084	7.78%
Sb 206.833	7.0	0.00014	mg/L	0.000230	0.00014	mg/L	0.000230	159.38%
Se 196.026	26.4	0.00234	mg/L	0.000033	0.00234	mg/L	0.000033	1.42%
Si 288.158	174608.9	2.54	mg/L	0.038	2.54	mg/L	0.038	1.51%
Sn 189.933	-129.6	-0.00649	mg/L	0.000121	-0.00649	mg/L	0.000121	1.86%
Ti 337.280	16848.6	0.0150	mg/L	0.00025	0.0150	mg/L	0.00025	1.65%
Tl 190.800	2.1	0.00694	mg/L	0.008376	0.00694	mg/L	0.008376	120.71%
V 292.402	397.9	0.00217	mg/L	0.000015	0.00217	mg/L	0.000015	0.69%
Zn 206.200	900.9	0.00439	mg/L	0.000079	0.00439	mg/L	0.000079	1.80%
K 766.490	21904.0	1.34	mg/L	0.022	1.34	mg/L	0.022	1.65%
Na 589.592	105012.3	2.31	mg/L	0.059	2.31	mg/L	0.059	2.54%
Sr 407.771	77458.1	0.0372	mg/L	0.00078	0.0372	mg/L	0.00078	2.09%

Sequence No.: 12
Sample ID: L030458501PS 0.9
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 22
Date Collected: 5/2/2003 1:11:34 PM
Sample Prep Volume:
Data Type: Original

Mean Data: L030458501PS 0.9

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4469766.9						47609.45	1.07%
Ag 328.068	81915.7	0.187	mg/L	0.0025	0.187	mg/L	0.0025	1.36%
Al 237.312	530265.5	16.0	mg/L	0.18	16.0	mg/L	0.18	1.15%
As 188.979	10531.3	0.932	mg/L	0.0194	0.932	mg/L	0.0194	2.09%
Ba 230.424	1983580.0	8.86	mg/L	0.062	8.86	mg/L	0.062	0.70%
Be 234.861	763579.1	0.949	mg/L	0.0101	0.949	mg/L	0.0101	1.07%
Ca 227.549	40809.5	38.7	mg/L	0.39	38.7	mg/L	0.39	1.01%
Cd 228.802	280287.3	0.896	mg/L	0.0095	0.896	mg/L	0.0095	1.06%
Co 228.616	117033.2	0.918	mg/L	0.0073	0.918	mg/L	0.0073	0.79%
Cr 267.716	198577.2	0.913	mg/L	0.0083	0.913	mg/L	0.0083	0.90%
Cu 327.396	257619.7	0.936	mg/L	0.0156	0.936	mg/L	0.0156	1.67%
Fe 261.387	70351.8	4.77	mg/L	0.064	4.77	mg/L	0.064	1.34%
Mg 279.079	552325.8	15.4	mg/L	0.13	15.4	mg/L	0.13	0.81%
Mn 257.610	1051713.4	1.03	mg/L	0.010	1.03	mg/L	0.010	0.96%
Mo 202.030	83334.2	0.888	mg/L	0.0108	0.888	mg/L	0.0108	1.21%

Ni 231.604	122190.1	0.921 mg/L	0.0074	0.921 mg/L	0.0074	0.80%
Pb 220.353	20253.6	0.942 mg/L	0.0185	0.942 mg/L	0.0185	1.96%
Sb 206.833	21858.3	0.955 mg/L	0.0183	0.955 mg/L	0.0183	1.92%
Se 196.026	8995.2	0.866 mg/L	0.0192	0.866 mg/L	0.0192	2.21%
Si 288.158	1676099.3	24.4 mg/L	0.26	24.4 mg/L	0.26	1.08%
Sn 189.933	-356.9	-0.0123 mg/L	0.00008	-0.0123 mg/L	0.00008	0.69%
Ti 337.280	1241369.1	1.10 mg/L	0.014	1.10 mg/L	0.014	1.29%
Tl 190.800	282.0	0.956 mg/L	0.0197	0.956 mg/L	0.0197	2.06%
V 292.402	173113.4	0.933 mg/L	0.0101	0.933 mg/L	0.0101	1.08%
Zn 206.200	183731.4	0.916 mg/L	0.0028	0.916 mg/L	0.0028	0.31%
K 766.490	894078.3	54.7 mg/L	0.64	54.7 mg/L	0.64	1.18%
Na 589.592	2745434.0	60.3 mg/L	0.75	60.3 mg/L	0.75	1.24%
Sr 407.771	2748244.3	1.12 mg/L	0.009	1.12 mg/L	0.009	0.80%

Duplicate Check: L030458501PS 0.9

Analyte	Expected Conc.	Measured Conc.	Std. Dev.	Units	Difference (%)
Tl 190.800	0.0205	0.956	0.020	mg/L	191.6
K 766.490	7.33	54.7	0.643	mg/L	152.7
Na 589.592	13.0	60.3	0.747	mg/L	128.8
Sr 407.771	0.187	1.12	0.009	mg/L	142.6
Y 360.073			0.000	mg/L	Not calculated
Ag 328.068	0.00053	0.187	0.003	mg/L	198.9
Al 237.312	4.94	16.0	0.184	mg/L	105.4
As 188.979	0.00296	0.932	0.019	mg/L	198.7
Ba 230.424	0.118	8.86	0.062	mg/L	194.7
Be 234.861	0.00030	0.949	0.010	mg/L	199.9
Ca 227.549	34.6	38.7	0.391	mg/L	11.3
Cd 228.802	0.00012	0.896	0.010	mg/L	199.9
Co 228.616	0.00160	0.918	0.007	mg/L	199.3
Cr 267.716	0.00456	0.913	0.008	mg/L	198.0
Cu 327.396	0.00542	0.936	0.016	mg/L	197.7
Fe 261.387	4.00	4.77	0.064	mg/L	17.4
Mg 279.079	6.80	15.4	0.126	mg/L	77.5
Mn 257.610	0.135	1.03	0.010	mg/L	153.5
Mo 202.030	0.00172	0.888	0.011	mg/L	199.2
Ni 231.604	0.00481	0.921	0.007	mg/L	197.9
Pb 220.353	0.00471	0.942	0.019	mg/L	198.0
Sb 206.833	0.00073	0.955	0.018	mg/L	199.7
Se 196.026	0.00250	0.866	0.019	mg/L	198.8
Si 288.158	13.8	24.4	0.263	mg/L	55.3
Sn 189.933	-0.0115	-0.0123	0.000	mg/L	-7.3
Ti 337.280	0.0583	1.10	0.014	mg/L	179.9
V 292.402	0.0106	0.933	0.010	mg/L	195.5
Zn 206.200	0.0133	0.916	0.003	mg/L	194.3

Sequence No.: 13
Sample ID: L030465701
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 26
Date Collected: 5/2/2003 1:16:28 PM

Sample Prep Volume:
Data Type: Original

Mean Data: L030465701

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4504061.0						64983.93	1.44%
Ag 328.068	2709.6	0.00619	mg/L	0.000345	0.00619	mg/L	0.000345	5.57%
Al 237.312	31035.8	0.939	mg/L	0.0467	0.939	mg/L	0.0467	4.98%
As 188.979	11.3	0.00110	mg/L	0.000359	0.00110	mg/L	0.000359	32.77%
Ba 230.424	9157.2	0.0410	mg/L	0.00182	0.0410	mg/L	0.00182	4.43%
Be 234.861	173.0	0.00011	mg/L	0.000011	0.00011	mg/L	0.000011	9.94%
Ca 227.549	2120.2	2.00	mg/L	0.017	2.00	mg/L	0.017	0.86%
Cd 228.802	61.6	0.00019	mg/L	0.000003	0.00019	mg/L	0.000003	1.66%
Co 228.616	584.6	0.00456	mg/L	0.000006	0.00456	mg/L	0.000006	0.13%
Cr 267.716	401.5	0.00190	mg/L	0.000061	0.00190	mg/L	0.000061	3.23%
Cu 327.396	4242.6	0.0154	mg/L	0.00076	0.0154	mg/L	0.00076	4.96%
Fe 261.387	17460.7	1.17	mg/L	0.054	1.17	mg/L	0.054	4.63%
Mg 279.079	14467.0	0.405	mg/L	0.0145	0.405	mg/L	0.0145	3.58%
Mn 257.610	854672.3	0.835	mg/L	0.0130	0.835	mg/L	0.0130	1.55%

Mo 202.030	165.7	0.00176	mg/L	0.000096	0.00176	mg/L	0.000096	5.42%
Ni 231.604	1660.7	0.0125	mg/L	0.00009	0.0125	mg/L	0.00009	0.75%
Pb 220.353	57.9	0.00261	mg/L	0.000122	0.00261	mg/L	0.000122	4.68%
Sb 206.833	12.3	0.00004	mg/L	0.000014	0.00004	mg/L	0.000014	34.93%
Se 196.026	19.4	0.00151	mg/L	0.000242	0.00151	mg/L	0.000242	16.03%
Si 288.158	341478.2	4.96	mg/L	0.083	4.96	mg/L	0.083	1.68%
Sn 189.933	-49.3	-0.00245	mg/L	0.000000	-0.00245	mg/L	0.000000	0.00%
Ti 337.280	19160.5	0.0171	mg/L	0.00074	0.0171	mg/L	0.00074	4.32%
Tl 190.800	4.0	0.0133	mg/L	0.00512	0.0133	mg/L	0.00512	38.47%
V 292.402	295.6	0.00169	mg/L	0.000034	0.00169	mg/L	0.000034	2.00%
Zn 206.200	23922.6	0.120	mg/L	0.0041	0.120	mg/L	0.0041	3.46%
K 766.490	28114.2	1.72	mg/L	0.049	1.72	mg/L	0.049	2.85%
Na 589.592	306254.2	6.72	mg/L	0.199	6.72	mg/L	0.199	2.96%
Sr 407.771	54459.4	0.0279	mg/L	0.00072	0.0279	mg/L	0.00072	2.60%

Sequence No.: 14 **Autosampler Location: 27**
Sample ID: L030459401 **Date Collected: 5/2/2003 1:21:23 PM**
Analyst: MSW/SLP
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: L030459401

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4696534.3						192944.31	4.11%
Ag 328.068	412.4	0.00094	mg/L	0.000124	0.00094	mg/L	0.000124	13.19%
Al 237.312	1125.6	0.0330	mg/L	0.00561	0.0330	mg/L	0.00561	17.00%
As 188.979	8.0	0.00087	mg/L	0.000299	0.00087	mg/L	0.000299	34.20%
Ba 230.424	25757.2	0.115	mg/L	0.0026	0.115	mg/L	0.0026	2.27%
Be 234.861	393.9	0.00013	mg/L	0.000001	0.00013	mg/L	0.000001	0.79%
Ca 227.549	53390.6	51.0	mg/L	0.88	51.0	mg/L	0.88	1.73%
Cd 228.802	63.9	0.00014	mg/L	0.000021	0.00014	mg/L	0.000021	15.34%
Co 228.616	78.8	0.00089	mg/L	0.000027	0.00089	mg/L	0.000027	3.03%
Cr 267.716	-249.9	-0.00036	mg/L	0.000021	-0.00036	mg/L	0.000021	5.96%
Cu 327.396	2858.7	0.0104	mg/L	0.00033	0.0104	mg/L	0.00033	3.15%
Fe 261.387	69525.7	4.64	mg/L	0.178	4.64	mg/L	0.178	3.83%
Mg 279.079	1245795.5	34.9	mg/L	1.41	34.9	mg/L	1.41	4.06%
Mn 257.610	212636.2	0.207	mg/L	0.0057	0.207	mg/L	0.0057	2.73%
Mo 202.030	7346.7	0.0783	mg/L	0.00123	0.0783	mg/L	0.00123	1.58%
Ni 231.604	853.7	0.00649	mg/L	0.000177	0.00649	mg/L	0.000177	2.73%
Pb 220.353	37.5	0.00115	mg/L	0.000425	0.00115	mg/L	0.000425	37.05%
Sb 206.833	73.4	0.00315	mg/L	0.000031	0.00315	mg/L	0.000031	0.99%
Se 196.026	52.5	0.00391	mg/L	0.000120	0.00391	mg/L	0.000120	3.07%
Si 288.158	141726.4	2.08	mg/L	0.054	2.08	mg/L	0.054	2.61%
Sn 189.933	-285.2	-0.0139	mg/L	0.00002	-0.0139	mg/L	0.00002	0.12%
Ti 337.280	-222.5	0.00007	mg/L	0.000002	0.00007	mg/L	0.000002	3.20%
Tl 190.800	3.3	0.00957	mg/L	0.006796	0.00957	mg/L	0.006796	71.04%
V 292.402	52.2	0.00076	mg/L	0.000057	0.00076	mg/L	0.000057	7.53%
Zn 206.200	2391.2	0.0100	mg/L	0.00010	0.0100	mg/L	0.00010	1.02%
K 766.490	358448.5	21.9	mg/L	0.10	21.9	mg/L	0.10	0.46%
Na 589.592	8179852.3	180	mg/L	0.2	180	mg/L	0.2	0.12%
Sr 407.771	1474715.0	0.601	mg/L	0.0029	0.601	mg/L	0.0029	0.49%

Sequence No.: 15 **Autosampler Location: 5**
Sample ID: CCV **Date Collected: 5/2/2003 1:26:20 PM**
Analyst:
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4699196.5						56877.33	1.21%
Ag 328.068	169628.6	0.388	mg/L	0.0057	0.388	mg/L	0.0057	1.47%
QC value within limits for Ag 328.068 Recovery = 96.94%								
Al 237.312	315561.1	9.56	mg/L	0.123	9.56	mg/L	0.123	1.29%
QC value within limits for Al 237.312 Recovery = 95.63%								
As 188.979	4286.4	0.376	mg/L	0.0002	0.376	mg/L	0.0002	0.06%

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   QC value within limits for As 188.979  Recovery = 93.90%
Ba 230.424          224393.8        1.00 mg/L        0.008        1.00 mg/L        0.008   0.85%
   QC value within limits for Ba 230.424  Recovery = 100.06%
Be 234.861           39379.4      0.0487 mg/L      0.00048      0.0487 mg/L      0.00048   0.99%
   QC value within limits for Be 234.861  Recovery = 97.30%
Ca 227.549           10484.4        9.80 mg/L        0.001        9.80 mg/L        0.001   0.01%
   QC value within limits for Ca 227.549  Recovery = 98.00%
Cd 228.802           15221.8      0.0474 mg/L      0.00004      0.0474 mg/L      0.00004   0.09%
   QC value within limits for Cd 228.802  Recovery = 94.86%
Co 228.616           25421.6       0.197 mg/L       0.0004       0.197 mg/L       0.0004   0.20%
   QC value within limits for Co 228.616  Recovery = 98.67%
Cr 267.716          106759.1       0.491 mg/L       0.0049       0.491 mg/L       0.0049   1.00%
   QC value within limits for Cr 267.716  Recovery = 98.19%
Cu 327.396          137238.7       0.499 mg/L       0.0085       0.499 mg/L       0.0085   1.71%
   QC value within limits for Cu 327.396  Recovery = 99.80%
Fe 261.387           57692.4        3.87 mg/L        0.030        3.87 mg/L        0.030   0.77%
   QC value within limits for Fe 261.387  Recovery = 96.63%
Mg  279.079         347959.2        9.69 mg/L        0.045        9.69 mg/L        0.045   0.47%
   QC value within limits for Mg  279.079  Recovery = 96.94%
Mn 257.610          505862.3       0.494 mg/L       0.0047       0.494 mg/L       0.0047   0.95%
   QC value within limits for Mn 257.610  Recovery = 98.75%
Mo 202.030           92767.8       0.989 mg/L       0.0030       0.989 mg/L       0.0030   0.31%
   QC value within limits for Mo 202.030  Recovery = 99.41%
Ni 231.604           66456.2       0.501 mg/L       0.0030       0.501 mg/L       0.0030   0.59%
   QC value within limits for Ni 231.604  Recovery = 100.25%
Pb 220.353           10617.7       0.495 mg/L       0.0007       0.495 mg/L       0.0007   0.15%
   QC value within limits for Pb 220.353  Recovery = 98.98%
Sb 206.833           26949.3        1.19 mg/L        0.002        1.19 mg/L        0.002   0.21%
   QC value within limits for Sb 206.833  Recovery = 98.79%
Se 196.026            4067.8       0.391 mg/L       0.0014       0.391 mg/L       0.0014   0.36%
   QC value within limits for Se 196.026  Recovery = 97.63%
Si 288.158          347399.6        5.05 mg/L        0.049        5.05 mg/L        0.049   0.97%
   QC value within limits for Si 288.158  Recovery = 101.04%
Sn 189.933           18421.4       0.938 mg/L       0.0038       0.938 mg/L       0.0038   0.41%
   QC value within limits for Sn 189.933  Recovery = 93.95%
Ti 337.280         1096320.6       0.975 mg/L       0.0120       0.975 mg/L       0.0120   1.23%
   QC value within limits for Ti 337.280  Recovery = 97.59%
Tl 190.800             136.3       0.468 mg/L       0.0143       0.468 mg/L       0.0143   3.07%
   QC value within limits for Tl 190.800  Recovery = 93.53%
V 292.402           183433.4       0.984 mg/L       0.0100       0.984 mg/L       0.0100   1.01%
   QC value within limits for V 292.402  Recovery = 98.44%
Zn 206.200          194218.1       0.968 mg/L       0.0054       0.968 mg/L       0.0054   0.56%
   QC value within limits for Zn 206.200  Recovery = 96.78%
K 766.490           804672.7        49.2 mg/L         2.10        49.2 mg/L         2.10   4.26%
   QC value within limits for K 766.490  Recovery = 98.43%
Na 589.592         2308991.9        50.7 mg/L         2.20        50.7 mg/L         2.20   4.33%
   QC value within limits for Na 589.592  Recovery = 101.40%
Sr 407.771         2444449.7       0.993 mg/L       0.0392       0.993 mg/L       0.0392   3.95%
   QC value within limits for Sr 407.771  Recovery = 99.27%
All analytes passed QC.
```

Sequence No.: 16
Sample ID: CCB
Analyst:
Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 5/2/2003 1:31:15 PM

Sample Prep Volume:
Data Type: Original

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sampla Conc.	Sampla Units	Std.Dev.	RSD
Y 360.073	3898913.0						3547.84	0.09%
Ag 328.068	43.3	0.00010	mg/L	0.000153	0.00010	mg/L	0.000153	154.25%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 237.312	-23.1	-0.00072	mg/L	0.000343	-0.00072	mg/L	0.000343	47.58%
QC value within limits for Al 237.312 Recovery = Not calculated								
As 188.979	-1.9	-0.00017	mg/L	0.000014	-0.00017	mg/L	0.000014	8.35%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 230.424	17.2	0.00008	mg/L	0.000058	0.00008	mg/L	0.000058	75.50%
QC value within limits for Ba 230.424 Recovery = Not calculated								
Be 234.861	-0.2	0.00000	mg/L	0.000002	0.00000	mg/L	0.000002	277.17%

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   QC value within limits for Be 234.861  Recovery = Not calculated
Ca 227.549                -5.1    -0.00506 mg/L      0.003434    -0.00506 mg/L      0.003434  67.85%
   QC value within limits for Ca 227.549  Recovery = Not calculated
Cd 228.802                19.4     0.00006 mg/L      0.000021     0.00006 mg/L      0.000021  33.29%
   QC value within limits for Cd 228.802  Recovery = Not calculated
Co 228.616                -2.7    -0.00002 mg/L      0.000035    -0.00002 mg/L      0.000035 174.19%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716                 7.4     0.00003 mg/L      0.000035     0.00003 mg/L      0.000035 102.04%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 327.396                 9.0     0.00003 mg/L      0.000158     0.00003 mg/L      0.000158 483.18%
   QC value within limits for Cu 327.396  Recovery = Not calculated
Fe 261.387               105.6     0.00704 mg/L      0.000361     0.00704 mg/L      0.000361   5.12%
   QC value within limits for Fe 261.387  Recovery = Not calculated
Mg  279.079               14.1     0.00038 mg/L      0.000226     0.00038 mg/L      0.000226  59.17%
   QC value within limits for Mg  279.079  Recovery = Not calculated
Mn 257.610                23.8     0.00002 mg/L      0.000003     0.00002 mg/L      0.000003  10.93%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.030                24.7     0.00026 mg/L      0.000052     0.00026 mg/L      0.000052  19.64%
   QC value within limits for Mo 202.030  Recovery = Not calculated
Ni 231.604                 2.4     0.00002 mg/L      0.000051     0.00002 mg/L      0.000051 281.58%
   QC value within limits for Ni 231.604  Recovery = Not calculated
Pb 220.353                 0.4     0.00002 mg/L      0.000146     0.00002 mg/L      0.000146 894.17%
   QC value within limits for Pb 220.353  Recovery = Not calculated
Sb 206.833                 3.2     0.00014 mg/L      0.000059     0.00014 mg/L      0.000059  42.12%
   QC value within limits for Sb 206.833  Recovery = Not calculated
Se 196.026                 8.8     0.00085 mg/L      0.001703     0.00085 mg/L      0.001703 200.34%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 288.158               145.2     0.00211 mg/L      0.000037     0.00211 mg/L      0.000037   1.78%
   QC value within limits for Si 288.158  Recovery = Not calculated
Sn 189.933                46.4     0.00235 mg/L      0.000612     0.00235 mg/L      0.000612  26.03%
   QC value within limits for Sn 189.933  Recovery = Not calculated
Ti 337.280                -8.0    -0.00001 mg/L      0.000028    -0.00001 mg/L      0.000028 412.46%
   QC value within limits for Ti 337.280  Recovery = Not calculated
Tl 190.800                 1.2     0.00385 mg/L      0.004015     0.00385 mg/L      0.004015 104.19%
   QC value within limits for Tl 190.800  Recovery = Not calculated
V 292.402                 18.4     0.00010 mg/L      0.000001     0.00010 mg/L      0.000001   0.93%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 206.200               -66.8    -0.00034 mg/L      0.000016    -0.00034 mg/L      0.000016   4.75%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490                1111.6     0.0680 mg/L       0.00210      0.0680 mg/L       0.00210   3.08%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592               1950.1     0.0428 mg/L       0.00215      0.0428 mg/L       0.00215   5.03%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771                59.6    0.00594 mg/L      0.000003     0.00594 mg/L      0.000003   0.05%
   QC value within limits for Sr 407.771  Recovery = Not calculated
All analytes passed QC.
```

Sequence No.: 17
Sample ID: L030455002
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 28
Date Collected: 5/2/2003 1:36:06 PM

Sample Prep Volume:
Data Type: Original

Mean Data: L030455002

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4697900.9						29977.72	0.64%
Ag 328.068	340.1	0.00078	mg/L	0.000106	0.00078	mg/L	0.000106	13.61%
Al 237.312	1912.5	0.0275	mg/L	0.00058	0.0275	mg/L	0.00058	2.10%
As 188.979	-13.1	0.00024	mg/L	0.000620	0.00024	mg/L	0.000620	262.81%
Ba 230.424	3579.7	0.0169	mg/L	0.00001	0.0169	mg/L	0.00001	0.05%
Be 234.861	904.3	0.00018	mg/L	0.000089	0.00018	mg/L	0.000089	49.75%
Ca 227.549	18888.6	17.8	mg/L	0.34	17.8	mg/L	0.34	1.93%
Cd 228.802	17.8	0.00005	mg/L	0.000007	0.00005	mg/L	0.000007	14.10%
Co 228.616	243.5	0.00198	mg/L	0.000019	0.00198	mg/L	0.000019	0.95%
Cr 267.716	35.5	0.00080	mg/L	0.000090	0.00080	mg/L	0.000090	11.23%
Cu 327.396	111.8	0.00041	mg/L	0.000003	0.00041	mg/L	0.000003	0.64%
Fe 261.387	177043.3	11.8	mg/L	0.29	11.8	mg/L	0.29	2.48%
Mg 279.079	280364.6	7.84	mg/L	0.191	7.84	mg/L	0.191	2.43%
Mn 257.610	1125643.7	1.10	mg/L	0.004	1.10	mg/L	0.004	0.36%

Mo 202.030	310.3	0.00331	mg/L	0.000033	0.00331	mg/L	0.000033	1.00%
Ni 231.604	180.1	0.00151	mg/L	0.000032	0.00151	mg/L	0.000032	2.13%
Pb 220.353	57.7	0.00091	mg/L	0.000394	0.00091	mg/L	0.000394	43.16%
Sb 206.833	39.7	0.00018	mg/L	0.000406	0.00018	mg/L	0.000406	220.04%
Se 196.026	15.1	-0.00149	mg/L	0.001051	-0.00149	mg/L	0.001051	70.35%
Si 288.158	842345.1	12.2	mg/L	0.05	12.2	mg/L	0.05	0.45%
Sn 189.933	-186.1	-0.00924	mg/L	0.000655	-0.00924	mg/L	0.000655	7.08%
Ti 337.280	123.0	0.00061	mg/L	0.000019	0.00061	mg/L	0.000019	3.18%
Tl 190.800	-0.3	-0.00456	mg/L	0.000641	-0.00456	mg/L	0.000641	14.07%
V 292.402	-56.0	0.00077	mg/L	0.000026	0.00077	mg/L	0.000026	3.36%
Zn 206.200	2330.6	0.0108	mg/L	0.00002	0.0108	mg/L	0.00002	0.21%
K 766.490	49562.2	3.02	mg/L	0.126	3.02	mg/L	0.126	4.17%
Na 589.592	633517.6	13.9	mg/L	0.51	13.9	mg/L	0.51	3.67%
Sr 407.771	242192.1	0.104	mg/L	0.0036	0.104	mg/L	0.0036	3.47%

Sequence No.: 18
Sample ID: L030455004
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 29
Date Collected: 5/2/2003 1:41:02 PM

Sample Prep Volume:
Data Type: Original

Mean Data: L030455004

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4598930.5						24941.90	0.54%
Ag 328.068	164.6	0.00038	mg/L	0.000126	0.00038	mg/L	0.000126	33.44%
Al 237.312	1202.3	0.0191	mg/L	0.00247	0.0191	mg/L	0.00247	12.88%
As 188.979	-7.1	0.00018	mg/L	0.000280	0.00018	mg/L	0.000280	156.25%
Ba 230.424	2509.1	0.0117	mg/L	0.00016	0.0117	mg/L	0.00016	1.36%
Be 234.861	579.5	0.00018	mg/L	0.000043	0.00018	mg/L	0.000043	24.38%
Ca 227.549	14174.5	13.4	mg/L	0.02	13.4	mg/L	0.02	0.15%
Cd 228.802	15.5	0.00004	mg/L	0.000013	0.00004	mg/L	0.000013	29.47%
Co 228.616	281.9	0.00225	mg/L	0.000095	0.00225	mg/L	0.000095	4.22%
Cr 267.716	118.1	0.00092	mg/L	0.000001	0.00092	mg/L	0.000001	0.09%
Cu 327.396	141.1	0.00051	mg/L	0.000011	0.00051	mg/L	0.000011	2.13%
Fe 261.387	101732.1	6.79	mg/L	0.009	6.79	mg/L	0.009	0.13%
Mg 279.079	181226.8	5.07	mg/L	0.011	5.07	mg/L	0.011	0.21%
Mn 257.610	173544.8	0.169	mg/L	0.0004	0.169	mg/L	0.0004	0.22%
Mo 202.030	169.0	0.00180	mg/L	0.000067	0.00180	mg/L	0.000067	3.73%
Ni 231.604	170.7	0.00137	mg/L	0.000140	0.00137	mg/L	0.000140	10.21%
Pb 220.353	45.7	0.00111	mg/L	0.000098	0.00111	mg/L	0.000098	8.84%
Sb 206.833	24.9	0.00036	mg/L	0.000019	0.00036	mg/L	0.000019	5.24%
Se 196.026	20.5	0.00029	mg/L	0.000514	0.00029	mg/L	0.000514	179.22%
Si 288.158	674375.6	9.80	mg/L	0.065	9.80	mg/L	0.065	0.66%
Sn 189.933	-167.8	-0.00836	mg/L	0.000433	-0.00836	mg/L	0.000433	5.18%
Ti 337.280	107.9	0.00039	mg/L	0.000000	0.00039	mg/L	0.000000	0.03%
Tl 190.800	1.7	0.00352	mg/L	0.008275	0.00352	mg/L	0.008275	234.96%
V 292.402	23.6	0.00074	mg/L	0.000046	0.00074	mg/L	0.000046	6.17%
Zn 206.200	2051.4	0.00973	mg/L	0.000072	0.00973	mg/L	0.000072	0.74%
K 766.490	24294.7	1.48	mg/L	0.003	1.48	mg/L	0.003	0.18%
Na 589.592	646757.2	14.2	mg/L	0.03	14.2	mg/L	0.03	0.24%
Sr 407.771	241642.7	0.103	mg/L	0.0001	0.103	mg/L	0.0001	0.06%

Sequence No.: 19
Sample ID: L030455006
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 30
Date Collected: 5/2/2003 1:45:58 PM

Sample Prep Volume:
Data Type: Original

Mean Data: L030455006

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4082484.0						12583.61	0.31%
Ag 328.068	110.6	0.00025	mg/L	0.000125	0.00025	mg/L	0.000125	49.28%
Al 237.312	-1.4	-0.00010	mg/L	0.000261	-0.00010	mg/L	0.000261	269.06%
As 188.979	1.9	0.00017	mg/L	0.000175	0.00017	mg/L	0.000175	100.41%
Ba 230.424	19.5	0.00009	mg/L	0.000007	0.00009	mg/L	0.000007	7.51%
Be 234.861	-3.9	-0.00001	mg/L	0.000000	-0.00001	mg/L	0.000000	6.12%

Ca 227.549	-4.0	-0.00443	mg/L	0.002303	-0.00443	mg/L	0.002303	52.01%
Cd 228.802	13.2	0.00004	mg/L	0.000002	0.00004	mg/L	0.000002	5.06%
Co 228.616	61.5	0.00048	mg/L	0.000051	0.00048	mg/L	0.000051	10.70%
Cr 267.716	27.6	0.00013	mg/L	0.000011	0.00013	mg/L	0.000011	8.48%
Cu 327.396	155.1	0.00056	mg/L	0.000117	0.00056	mg/L	0.000117	20.79%
Fe 261.387	322.5	0.0216	mg/L	0.00212	0.0216	mg/L	0.00212	9.86%
Mg 279.079	134.6	0.00378	mg/L	0.000458	0.00378	mg/L	0.000458	12.10%
Mn 257.610	1898.8	0.00185	mg/L	0.000072	0.00185	mg/L	0.000072	3.87%
Mo 202.030	-34.0	-0.00036	mg/L	0.000034	-0.00036	mg/L	0.000034	9.38%
Ni 231.604	23.2	0.00017	mg/L	0.000014	0.00017	mg/L	0.000014	7.74%
Pb 220.353	2.9	0.00013	mg/L	0.000112	0.00013	mg/L	0.000112	85.08%
Sb 206.833	2.2	0.00009	mg/L	0.000006	0.00009	mg/L	0.000006	6.72%
Se 196.026	6.1	0.00058	mg/L	0.000575	0.00058	mg/L	0.000575	98.89%
Si 288.158	271.8	0.00394	mg/L	0.000318	0.00394	mg/L	0.000318	8.08%
Sn 189.933	7.5	0.00038	mg/L	0.000242	0.00038	mg/L	0.000242	63.57%
Ti 337.280	53.1	0.00005	mg/L	0.000027	0.00005	mg/L	0.000027	55.21%
Tl 190.800	1.7	0.00581	mg/L	0.001938	0.00581	mg/L	0.001938	33.36%
V 292.402	15.0	0.00008	mg/L	0.000063	0.00008	mg/L	0.000063	75.96%
Zn 206.200	-161.0	-0.00081	mg/L	0.000094	-0.00081	mg/L	0.000094	11.69%
K 766.490	1397.1	0.0855	mg/L	0.00247	0.0855	mg/L	0.00247	2.89%
Na 589.592	2977.0	0.0654	mg/L	0.00349	0.0654	mg/L	0.00349	5.33%
Sr 407.771	-32.5	0.00590	mg/L	0.000020	0.00590	mg/L	0.000020	0.34%

Sequence No.: 20
Sample ID: L030457508
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 31
Date Collected: 5/2/2003 1:50:54 PM

Sample Prep Volume:
Data Type: Original

Mean Data: L030457508

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4081798.3						132565.11	3.25%
Ag 328.068	3.3	0.00001	mg/L	0.000063	0.00001	mg/L	0.000063	847.77%
Al 237.312	-30.8	-0.00099	mg/L	0.000537	-0.00099	mg/L	0.000537	54.45%
As 188.979	-0.2	-0.00001	mg/L	0.000241	-0.00001	mg/L	0.000241	>999.9%
Ba 230.424	32.3	0.00015	mg/L	0.000050	0.00015	mg/L	0.000050	34.16%
Be 234.861	-4.1	-0.00001	mg/L	0.000001	-0.00001	mg/L	0.000001	13.64%
Ca 227.549	61.4	0.0584	mg/L	0.00644	0.0584	mg/L	0.00644	11.03%
Cd 228.802	13.8	0.00004	mg/L	0.000014	0.00004	mg/L	0.000014	31.29%
Co 228.616	-10.3	-0.00008	mg/L	0.000015	-0.00008	mg/L	0.000015	18.72%
Cr 267.716	23.9	0.00011	mg/L	0.000042	0.00011	mg/L	0.000042	37.60%
Cu 327.396	138.5	0.00050	mg/L	0.000024	0.00050	mg/L	0.000024	4.83%
Fe 261.387	283.6	0.0189	mg/L	0.00005	0.0189	mg/L	0.00005	0.27%
Mg 279.079	63.0	0.00177	mg/L	0.000405	0.00177	mg/L	0.000405	22.87%
Mn 257.610	2467.8	0.00241	mg/L	0.000002	0.00241	mg/L	0.000002	0.10%
Mo 202.030	-34.6	-0.00037	mg/L	0.000015	-0.00037	mg/L	0.000015	4.16%
Ni 231.604	0.4	0.00000	mg/L	0.000071	0.00000	mg/L	0.000071	>999.9%
Pb 220.353	3.9	0.00018	mg/L	0.000166	0.00018	mg/L	0.000166	92.34%
Sb 206.833	1.7	0.00007	mg/L	0.000421	0.00007	mg/L	0.000421	624.28%
Se 196.026	12.1	0.00117	mg/L	0.000547	0.00117	mg/L	0.000547	46.82%
Si 288.158	12648.7	0.184	mg/L	0.0030	0.184	mg/L	0.0030	1.66%
Sn 189.933	1.4	0.00007	mg/L	0.000181	0.00007	mg/L	0.000181	249.32%
Ti 337.280	55.1	0.00005	mg/L	0.000035	0.00005	mg/L	0.000035	69.73%
Tl 190.800	0.8	0.00255	mg/L	0.001459	0.00255	mg/L	0.001459	57.12%
V 292.402	9.3	0.00005	mg/L	0.000034	0.00005	mg/L	0.000034	65.40%
Zn 206.200	-316.6	-0.00159	mg/L	0.000017	-0.00159	mg/L	0.000017	1.05%
K 766.490	668.5	0.0409	mg/L	0.00453	0.0409	mg/L	0.00453	11.07%
Na 589.592	19763.6	0.434	mg/L	0.0070	0.434	mg/L	0.0070	1.61%
Sr 407.771	415.5	0.00609	mg/L	0.000049	0.00609	mg/L	0.000049	0.81%

Sequence No.: 21
Sample ID: L030458502
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 32
Date Collected: 5/2/2003 1:55:50 PM

Sample Prep Volume:
Data Type: Original

Mean Data: L030458502

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4339103.5						43036.74	0.99%
Ag 328.068	288.4	0.00066	mg/L	0.000049	0.00066	mg/L	0.000049	7.49%
Al 237.312	18492.4	0.563	mg/L	0.0045	0.563	mg/L	0.0045	0.79%
As 188.979	10.4	0.00094	mg/L	0.000457	0.00094	mg/L	0.000457	48.53%
Ba 230.424	23421.9	0.105	mg/L	0.0009	0.105	mg/L	0.0009	0.87%
Be 234.861	105.9	0.00009	mg/L	0.000027	0.00009	mg/L	0.000027	30.87%
Ca 227.549	47873.1	45.9	mg/L	0.26	45.9	mg/L	0.26	0.57%
Cd 228.802	52.4	0.00012	mg/L	0.000033	0.00012	mg/L	0.000033	27.68%
Co 228.616	-6.8	0.00008	mg/L	0.000022	0.00008	mg/L	0.000022	28.54%
Cr 267.716	94.6	0.00058	mg/L	0.000013	0.00058	mg/L	0.000013	2.32%
Cu 327.396	1022.2	0.00372	mg/L	0.000075	0.00372	mg/L	0.000075	2.01%
Fe 261.387	6812.0	0.455	mg/L	0.0011	0.455	mg/L	0.0011	0.24%
Mg 279.079	263583.1	7.37	mg/L	0.088	7.37	mg/L	0.088	1.19%
Mn 257.610	5244.1	0.00503	mg/L	0.000029	0.00503	mg/L	0.000029	0.57%
Mo 202.030	77.6	0.00083	mg/L	0.000016	0.00083	mg/L	0.000016	1.98%
Ni 231.604	144.2	0.00109	mg/L	0.000082	0.00109	mg/L	0.000082	7.45%
Pb 220.353	39.9	0.00184	mg/L	0.000002	0.00184	mg/L	0.000002	0.13%
Sb 206.833	13.5	0.00050	mg/L	0.000056	0.00050	mg/L	0.000056	11.33%
Se 196.026	43.1	0.00401	mg/L	0.000742	0.00401	mg/L	0.000742	18.50%
Si 288.158	561067.8	8.17	mg/L	0.093	8.17	mg/L	0.093	1.14%
Sn 189.933	-274.9	-0.0134	mg/L	0.00011	-0.0134	mg/L	0.00011	0.82%
Ti 337.280	12244.5	0.0110	mg/L	0.00005	0.0110	mg/L	0.00005	0.41%
Tl 190.800	3.8	0.0127	mg/L	0.00228	0.0127	mg/L	0.00228	17.98%
V 292.402	523.7	0.00283	mg/L	0.000030	0.00283	mg/L	0.000030	1.07%
Zn 206.200	209.8	0.00063	mg/L	0.000017	0.00063	mg/L	0.000017	2.76%
K 766.490	137746.2	8.42	mg/L	0.091	8.42	mg/L	0.091	1.08%
Na 589.592	221026.6	4.85	mg/L	0.075	4.85	mg/L	0.075	1.55%
Sr 407.771	600393.4	0.248	mg/L	0.0025	0.248	mg/L	0.0025	1.01%

Sequence No.: 22
Sample ID: L030458503
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 33
Date Collected: 5/2/2003 2:00:40 PM

Sample Prep Volume:
Data Type: Original

Mean Data: L030458503

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4454264.8						24067.07	0.54%
Ag 328.068	386.5	0.00088	mg/L	0.000232	0.00088	mg/L	0.000232	26.24%
Al 237.312	89237.0	2.71	mg/L	0.012	2.71	mg/L	0.012	0.45%
As 188.979	24.0	0.00231	mg/L	0.000402	0.00231	mg/L	0.000402	17.42%
Ba 230.424	27604.7	0.124	mg/L	0.0013	0.124	mg/L	0.0013	1.07%
Be 234.861	330.1	0.00019	mg/L	0.000039	0.00019	mg/L	0.000039	21.02%
Ca 227.549	69399.4	66.4	mg/L	0.44	66.4	mg/L	0.44	0.66%
Cd 228.802	45.9	0.00006	mg/L	0.000002	0.00006	mg/L	0.000002	2.49%
Co 228.616	163.2	0.00139	mg/L	0.000006	0.00139	mg/L	0.000006	0.45%
Cr 267.716	534.0	0.00277	mg/L	0.000026	0.00277	mg/L	0.000026	0.92%
Cu 327.396	1364.3	0.00498	mg/L	0.000075	0.00498	mg/L	0.000075	1.51%
Fe 261.387	35490.8	2.37	mg/L	0.033	2.37	mg/L	0.033	1.40%
Mg 279.079	445520.2	12.5	mg/L	0.04	12.5	mg/L	0.04	0.30%
Mn 257.610	80264.5	0.0783	mg/L	0.00069	0.0783	mg/L	0.00069	0.88%
Mo 202.030	136.4	0.00145	mg/L	0.000033	0.00145	mg/L	0.000033	2.27%
Ni 231.604	656.6	0.00499	mg/L	0.000087	0.00499	mg/L	0.000087	1.75%
Pb 220.353	83.2	0.00378	mg/L	0.000280	0.00378	mg/L	0.000280	7.41%
Sb 206.833	27.3	0.00069	mg/L	0.000317	0.00069	mg/L	0.000317	45.65%
Se 196.026	21.0	0.00125	mg/L	0.000126	0.00125	mg/L	0.000126	10.09%
Si 288.158	890864.4	13.0	mg/L	0.06	13.0	mg/L	0.06	0.44%
Sn 189.933	-302.1	-0.0146	mg/L	0.00037	-0.0146	mg/L	0.00037	2.52%
Ti 337.280	40035.2	0.0358	mg/L	0.00035	0.0358	mg/L	0.00035	0.96%
Tl 190.800	2.5	0.00795	mg/L	0.009566	0.00795	mg/L	0.009566	120.29%
V 292.402	1334.5	0.00733	mg/L	0.000031	0.00733	mg/L	0.000031	0.42%
Zn 206.200	2328.1	0.0108	mg/L	0.00019	0.0108	mg/L	0.00019	1.73%
K 766.490	101932.8	6.22	mg/L	0.191	6.22	mg/L	0.191	3.07%
Na 589.592	1259943.6	27.7	mg/L	0.85	27.7	mg/L	0.85	3.09%
Sr 407.771	1008325.6	0.413	mg/L	0.0118	0.413	mg/L	0.0118	2.85%

Sequence No.: 23
Sample ID: L030458507
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 34
Date Collected: 5/2/2003 2:05:31 PM

Sample Prep Volume:
Data Type: Original

Mean Data: L030458507

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4675070.7						3700.68	0.08%
Ag 328.068	537.8	0.00123	mg/L	0.000097	0.00123	mg/L	0.000097	7.85%
Al 237.312	15746.2	0.487	mg/L	0.0045	0.487	mg/L	0.0045	0.93%
As 188.979	2.6	0.00026	mg/L	0.000324	0.00026	mg/L	0.000324	125.12%
Ba 230.424	22152.2	0.0994	mg/L	0.00114	0.0994	mg/L	0.00114	1.14%
Be 234.861	113.1	0.00010	mg/L	0.000016	0.00010	mg/L	0.000016	16.42%
Ca 227.549	108393.4	104	mg/L	1.3	104	mg/L	1.3	1.25%
Cd 228.802	31.5	-0.00001	mg/L	0.000018	-0.00001	mg/L	0.000018	233.02%
Co 228.616	30.1	0.00041	mg/L	0.000016	0.00041	mg/L	0.000016	3.79%
Cr 267.716	-89.0	0.00011	mg/L	0.000086	0.00011	mg/L	0.000086	78.03%
Cu 327.396	689.4	0.00251	mg/L	0.000192	0.00251	mg/L	0.000192	7.65%
Fe 261.387	6450.7	0.432	mg/L	0.0001	0.432	mg/L	0.0001	0.02%
Mg 279.079	1051446.9	29.4	mg/L	0.02	29.4	mg/L	0.02	0.08%
Mn 257.610	70211.5	0.0683	mg/L	0.00064	0.0683	mg/L	0.00064	0.94%
Mo 202.030	83.3	0.00089	mg/L	0.000022	0.00089	mg/L	0.000022	2.51%
Ni 231.604	86.0	0.00065	mg/L	0.000027	0.00065	mg/L	0.000027	4.15%
Pb 220.353	75.2	0.00347	mg/L	0.000417	0.00347	mg/L	0.000417	12.03%
Sb 206.833	18.2	0.00072	mg/L	0.000306	0.00072	mg/L	0.000306	42.66%
Se 196.026	56.3	0.00530	mg/L	0.000968	0.00530	mg/L	0.000968	18.26%
Si 288.158	547860.9	8.01	mg/L	0.010	8.01	mg/L	0.010	0.12%
Sn 189.933	-334.5	-0.0159	mg/L	0.00011	-0.0159	mg/L	0.00011	0.68%
Ti 337.280	4511.6	0.00420	mg/L	0.000055	0.00420	mg/L	0.000055	1.32%
Tl 190.800	2.5	0.00815	mg/L	0.000811	0.00815	mg/L	0.000811	9.95%
V 292.402	258.5	0.00141	mg/L	0.000030	0.00141	mg/L	0.000030	2.14%
Zn 206.200	318.2	0.00009	mg/L	0.000049	0.00009	mg/L	0.000049	55.01%
K 766.490	28003.5	1.68	mg/L	0.052	1.68	mg/L	0.052	3.07%
Na 589.592	2485582.1	54.6	mg/L	2.47	54.6	mg/L	2.47	4.52%
Sr 407.771	1746634.0	0.711	mg/L	0.0338	0.711	mg/L	0.0338	4.76%

Sequence No.: 24
Sample ID: L030458508
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 35
Date Collected: 5/2/2003 2:10:25 PM

Sample Prep Volume:
Data Type: Original

Mean Data: L030458508

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4649990.8						24875.86	0.53%
Ag 328.068	516.4	0.00118	mg/L	0.000074	0.00118	mg/L	0.000074	6.28%
Al 237.312	18145.6	0.554	mg/L	0.0034	0.554	mg/L	0.0034	0.61%
As 188.979	4.5	0.00043	mg/L	0.000105	0.00043	mg/L	0.000105	24.47%
Ba 230.424	21965.9	0.0986	mg/L	0.00040	0.0986	mg/L	0.00040	0.41%
Be 234.861	148.2	0.00014	mg/L	0.000022	0.00014	mg/L	0.000022	15.18%
Ca 227.549	113021.6	108	mg/L	0.8	108	mg/L	0.8	0.71%
Cd 228.802	24.4	-0.00002	mg/L	0.000036	-0.00002	mg/L	0.000036	152.10%
Co 228.616	28.7	0.00039	mg/L	0.000003	0.00039	mg/L	0.000003	0.74%
Cr 267.716	36.4	0.00043	mg/L	0.000091	0.00043	mg/L	0.000091	21.35%
Cu 327.396	584.9	0.00213	mg/L	0.000036	0.00213	mg/L	0.000036	1.69%
Fe 261.387	6542.5	0.437	mg/L	0.0076	0.437	mg/L	0.0076	1.75%
Mg 279.079	509307.7	14.2	mg/L	0.04	14.2	mg/L	0.04	0.29%
Mn 257.610	23083.8	0.0224	mg/L	0.00016	0.0224	mg/L	0.00016	0.73%
Mo 202.030	30.9	0.00033	mg/L	0.000029	0.00033	mg/L	0.000029	8.74%
Ni 231.604	115.7	0.00088	mg/L	0.000140	0.00088	mg/L	0.000140	15.88%
Pb 220.353	60.0	0.00277	mg/L	0.000293	0.00277	mg/L	0.000293	10.57%
Sb 206.833	18.5	0.00072	mg/L	0.000102	0.00072	mg/L	0.000102	14.16%
Se 196.026	29.4	0.00269	mg/L	0.000628	0.00269	mg/L	0.000628	23.31%
Si 288.158	443120.5	6.49	mg/L	0.037	6.49	mg/L	0.037	0.57%
Sn 189.933	-350.7	-0.0167	mg/L	0.00019	-0.0167	mg/L	0.00019	1.16%
Ti 337.280	7828.6	0.00715	mg/L	0.000210	0.00715	mg/L	0.000210	2.93%

Tl 190.800	0.2	0.00068 mg/L	0.007043	0.00068 mg/L	0.007043	>999.9%
V 292.402	340.0	0.00185 mg/L	0.000020	0.00185 mg/L	0.000020	1.10%
Zn 206.200	647.9	0.00249 mg/L	0.000062	0.00249 mg/L	0.000062	2.50%
K 766.490	29760.6	1.80 mg/L	0.003	1.80 mg/L	0.003	0.15%
Na 589.592	1975787.8	43.4 mg/L	0.75	43.4 mg/L	0.75	1.72%
Sr 407.771	1500282.6	0.612 mg/L	0.0126	0.612 mg/L	0.0126	2.07%

Sequence No.: 25
Sample ID: L030458509
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 36
Date Collected: 5/2/2003 2:15:18 PM
Sample Prep Volume:
Data Type: Original

Mean Data: L030458509

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4710927.6						33012.93	0.70%
Ag 328.068	315.2	0.00072	mg/L	0.000093	0.00072	mg/L	0.000093	12.96%
Al 237.312	117526.4	3.56	mg/L	0.115	3.56	mg/L	0.115	3.22%
As 188.979	21.2	0.00211	mg/L	0.000016	0.00211	mg/L	0.000016	0.75%
Ba 230.424	27476.9	0.123	mg/L	0.0029	0.123	mg/L	0.0029	2.37%
Be 234.861	447.1	0.00027	mg/L	0.000004	0.00027	mg/L	0.000004	1.49%
Ca 227.549	43154.6	41.3	mg/L	1.17	41.3	mg/L	1.17	2.84%
Cd 228.802	34.1	0.00005	mg/L	0.000027	0.00005	mg/L	0.000027	57.26%
Co 228.616	146.5	0.00123	mg/L	0.000001	0.00123	mg/L	0.000001	0.06%
Cr 267.716	636.9	0.00318	mg/L	0.000046	0.00318	mg/L	0.000046	1.46%
Cu 327.396	1639.0	0.00599	mg/L	0.000245	0.00599	mg/L	0.000245	4.09%
Fe 261.387	44921.6	3.00	mg/L	0.083	3.00	mg/L	0.083	2.76%
Mg 279.079	267343.7	7.48	mg/L	0.171	7.48	mg/L	0.171	2.29%
Mn 257.610	99880.0	0.0975	mg/L	0.00302	0.0975	mg/L	0.00302	3.10%
Mo 202.030	98.5	0.00104	mg/L	0.000092	0.00104	mg/L	0.000092	8.88%
Ni 231.604	543.8	0.00415	mg/L	0.000088	0.00415	mg/L	0.000088	2.12%
Pb 220.353	94.4	0.00428	mg/L	0.000117	0.00428	mg/L	0.000117	2.74%
Sb 206.833	19.2	0.00018	mg/L	0.000150	0.00018	mg/L	0.000150	83.56%
Se 196.026	17.8	0.00072	mg/L	0.000660	0.00072	mg/L	0.000660	91.33%
Si 288.158	765897.5	11.1	mg/L	0.08	11.1	mg/L	0.08	0.73%
Sn 189.933	-267.0	-0.0131	mg/L	0.00036	-0.0131	mg/L	0.00036	2.71%
Ti 337.280	49680.6	0.0444	mg/L	0.00151	0.0444	mg/L	0.00151	3.40%
Tl 190.800	1.7	0.00505	mg/L	0.002012	0.00505	mg/L	0.002012	39.83%
V 292.402	1502.2	0.00827	mg/L	0.000187	0.00827	mg/L	0.000187	2.26%
Zn 206.200	1654.5	0.00767	mg/L	0.000194	0.00767	mg/L	0.000194	2.54%
K 766.490	110718.6	6.76	mg/L	0.019	6.76	mg/L	0.019	0.27%
Na 589.592	626954.7	13.8	mg/L	0.06	13.8	mg/L	0.06	0.41%
Sr 407.771	499880.1	0.208	mg/L	0.0016	0.208	mg/L	0.0016	0.77%

Sequence No.: 26
Sample ID: CCV
Analyst:
Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 5/2/2003 2:20:09 PM
Sample Prep Volume:
Data Type: Original

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	5037802.8						5456.11	0.11%
Ag 328.068	183717.1	0.420	mg/L	0.0033	0.420	mg/L	0.0033	0.78%
QC value within limits for Ag 328.068 Recovery = 104.99%								
Al 237.312	338898.1	10.3	mg/L	0.06	10.3	mg/L	0.06	0.60%
QC value within limits for Al 237.312 Recovery = 102.70%								
As 188.979	4595.9	0.403	mg/L	0.0011	0.403	mg/L	0.0011	0.28%
QC value within limits for As 188.979 Recovery = 100.68%								
Ba 230.424	242768.7	1.08	mg/L	0.005	1.08	mg/L	0.005	0.46%
QC value within limits for Ba 230.424 Recovery = 108.25%								
Be 234.861	43090.2	0.0532	mg/L	0.00019	0.0532	mg/L	0.00019	0.36%
QC value within limits for Be 234.861 Recovery = 106.47%								
Ca 227.549	11233.0	10.5	mg/L	0.03	10.5	mg/L	0.03	0.28%
QC value within limits for Ca 227.549 Recovery = 104.95%								
Cd 228.802	16257.7	0.0506	mg/L	0.00013	0.0506	mg/L	0.00013	0.25%

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   QC value within limits for Cd 228.802  Recovery = 101.30%
Co 228.616            27747.3       0.215 mg/L        0.0009       0.215 mg/L        0.0009   0.40%
   QC value within limits for Co 228.616  Recovery = 107.69%
Cr 267.716           115613.4       0.532 mg/L        0.0020       0.532 mg/L        0.0020   0.39%
   QC value within limits for Cr 267.716  Recovery = 106.33%
Cu 327.396           147567.3       0.537 mg/L        0.0053       0.537 mg/L        0.0053   0.99%
   QC value within limits for Cu 327.396  Recovery = 107.31%
Fe 261.387            63339.3        4.24 mg/L         0.020        4.24 mg/L         0.020   0.47%
   QC value within limits for Fe 261.387  Recovery = 106.09%
Mg  279.079          375864.6        10.5 mg/L          0.04        10.5 mg/L          0.04   0.38%
   QC value within limits for Mg  279.079  Recovery = 104.72%
Mn 257.610           542272.7       0.529 mg/L        0.0025       0.529 mg/L        0.0025   0.47%
   QC value within limits for Mn 257.610  Recovery = 105.85%
Mo 202.030            99403.2        1.06 mg/L         0.006        1.06 mg/L         0.006   0.57%
   QC value within limits for Mo 202.030  Recovery = 106.50%
Ni 231.604            71747.7       0.541 mg/L        0.0027       0.541 mg/L        0.0027   0.49%
   QC value within limits for Ni 231.604  Recovery = 108.23%
Pb 220.353            11374.9       0.530 mg/L        0.0014       0.530 mg/L        0.0014   0.26%
   QC value within limits for Pb 220.353  Recovery = 106.04%
Sb 206.833            28890.6        1.27 mg/L         0.003        1.27 mg/L         0.003   0.26%
   QC value within limits for Sb 206.833  Recovery = 105.90%
Se 196.026             4382.9       0.421 mg/L        0.0016       0.421 mg/L        0.0016   0.39%
   QC value within limits for Se 196.026  Recovery = 105.19%
Si 288.158           370124.9        5.38 mg/L         0.022        5.38 mg/L         0.022   0.40%
   QC value within limits for Si 288.158  Recovery = 107.65%
Sn 189.933            20023.7        1.02 mg/L         0.004        1.02 mg/L         0.004   0.36%
   QC value within limits for Sn 189.933  Recovery = 102.12%
Ti 337.280          1187817.5        1.06 mg/L         0.000        1.06 mg/L         0.000   0.04%
   QC value within limits for Ti 337.280  Recovery = 105.74%
Tl 190.800               157.7       0.540 mg/L        0.0048       0.540 mg/L        0.0048   0.88%
   QC value within limits for Tl 190.800  Recovery = 108.01%
V 292.402            198733.0        1.07 mg/L         0.007        1.07 mg/L         0.007   0.68%
   QC value within limits for V 292.402  Recovery = 106.65%
Zn 206.200           210045.6        1.05 mg/L         0.000        1.05 mg/L         0.000   0.04%
   QC value within limits for Zn 206.200  Recovery = 104.67%
K 766.490            820319.3        50.2 mg/L          1.06        50.2 mg/L          1.06   2.10%
   QC value within limits for K 766.490  Recovery = 100.35%
Na 589.592          2357032.3        51.8 mg/L          0.99        51.8 mg/L          0.99   1.92%
   QC value within limits for Na 589.592  Recovery = 103.51%
Sr 407.771          2504340.5        1.02 mg/L         0.023        1.02 mg/L         0.023   2.31%
   QC value within limits for Sr 407.771  Recovery = 101.69%
All analytes passed QC.
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Sequence No.: 27 **Autosampler Location:** 1
Sample ID: CCB **Date Collected:** 5/2/2003 2:25:06 PM
Analyst:
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type:** Original

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4096576.0						54461.06	1.33%
Ag 328.068	80.7	0.00018	mg/L	0.000012	0.00018	mg/L	0.000012	6.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 237.312	-20.7	-0.00065	mg/L	0.000222	-0.00065	mg/L	0.000222	34.42%
QC value within limits for Al 237.312 Recovery = Not calculated								
As 188.979	4.0	0.00036	mg/L	0.000453	0.00036	mg/L	0.000453	126.28%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 230.424	16.6	0.00007	mg/L	0.000007	0.00007	mg/L	0.000007	9.94%
QC value within limits for Ba 230.424 Recovery = Not calculated								
Be 234.861	-5.3	-0.00001	mg/L	0.000004	-0.00001	mg/L	0.000004	58.01%
QC value within limits for Be 234.861 Recovery = Not calculated								
Ca 227.549	-3.8	-0.00377	mg/L	0.000625	-0.00377	mg/L	0.000625	16.57%
QC value within limits for Ca 227.549 Recovery = Not calculated								
Cd 228.802	6.2	0.00002	mg/L	0.000016	0.00002	mg/L	0.000016	86.46%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616	-9.0	-0.00007	mg/L	0.000004	-0.00007	mg/L	0.000004	5.99%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716	20.5	0.00009	mg/L	0.000039	0.00009	mg/L	0.000039	41.48%

```
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 327.396              -32.5    -0.00012 mg/L      0.000081    -0.00012 mg/L      0.000081  68.57%
   QC value within limits for Cu 327.396  Recovery = Not calculated
Fe 261.387              106.5     0.00710 mg/L      0.000206     0.00710 mg/L      0.000206   2.90%
   QC value within limits for Fe 261.387  Recovery = Not calculated
Mg  279.079              19.8     0.00055 mg/L      0.000164     0.00055 mg/L      0.000164  29.82%
   QC value within limits for Mg  279.079  Recovery = Not calculated
Mn 257.610               35.7     0.00003 mg/L      0.000006     0.00003 mg/L      0.000006  17.08%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.030                7.5     0.00008 mg/L      0.000048     0.00008 mg/L      0.000048  60.19%
   QC value within limits for Mo 202.030  Recovery = Not calculated
Ni 231.604                4.2     0.00003 mg/L      0.000014     0.00003 mg/L      0.000014  43.19%
   QC value within limits for Ni 231.604  Recovery = Not calculated
Pb 220.353                2.3     0.00011 mg/L      0.000229     0.00011 mg/L      0.000229 216.98%
   QC value within limits for Pb 220.353  Recovery = Not calculated
Sb 206.833               -4.2    -0.00019 mg/L      0.000071    -0.00019 mg/L      0.000071  37.46%
   QC value within limits for Sb 206.833  Recovery = Not calculated
Se 196.026               13.3     0.00128 mg/L      0.000086     0.00128 mg/L      0.000086   6.69%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 288.158              179.3     0.00260 mg/L      0.000114     0.00260 mg/L      0.000114   4.38%
   QC value within limits for Si 288.158  Recovery = Not calculated
Sn 189.933               39.2     0.00199 mg/L      0.000353     0.00199 mg/L      0.000353  17.78%
   QC value within limits for Sn 189.933  Recovery = Not calculated
Ti 337.280              -42.9    -0.00004 mg/L      0.000091    -0.00004 mg/L      0.000091 240.63%
   QC value within limits for Ti 337.280  Recovery = Not calculated
Tl 190.800                0.9     0.00285 mg/L      0.001764     0.00285 mg/L      0.001764  61.86%
   QC value within limits for Tl 190.800  Recovery = Not calculated
V 292.402                11.5     0.00006 mg/L      0.000028     0.00006 mg/L      0.000028  44.12%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 206.200              -21.8    -0.00011 mg/L      0.000001    -0.00011 mg/L      0.000001   1.23%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490               484.1      0.0296 mg/L       0.00783      0.0296 mg/L       0.00783  26.43%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592              817.3      0.0179 mg/L       0.00187      0.0179 mg/L       0.00187  10.44%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771              125.7     0.00597 mg/L      0.000001     0.00597 mg/L      0.000001   0.02%
   QC value within limits for Sr 407.771  Recovery = Not calculated
All analytes passed QC.
```

Sequence No.: 28 **Autosampler Location: 37**
Sample ID: L030458510 **Date Collected: 5/2/2003 2:29:57 PM**
Analyst: MSW/SLP
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: L030458510

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4672628.0						77096.52	1.65%
Ag 328.068	352.0	0.00080	mg/L	0.000081	0.00080	mg/L	0.000081	10.02%
Al 237.312	72020.7	2.19	mg/L	0.028	2.19	mg/L	0.028	1.29%
As 188.979	8.4	0.00081	mg/L	0.000632	0.00081	mg/L	0.000632	77.91%
Ba 230.424	25091.5	0.112	mg/L	0.0008	0.112	mg/L	0.0008	0.75%
Be 234.861	232.6	0.00015	mg/L	0.000001	0.00015	mg/L	0.000001	0.91%
Ca 227.549	63771.7	61.1	mg/L	0.96	61.1	mg/L	0.96	1.57%
Cd 228.802	35.3	0.00004	mg/L	0.000029	0.00004	mg/L	0.000029	67.31%
Co 228.616	26.5	0.00032	mg/L	0.000033	0.00032	mg/L	0.000033	10.35%
Cr 267.716	372.8	0.00191	mg/L	0.000089	0.00191	mg/L	0.000089	4.68%
Cu 327.396	1097.9	0.00401	mg/L	0.000113	0.00401	mg/L	0.000113	2.81%
Fe 261.387	19833.4	1.32	mg/L	0.013	1.32	mg/L	0.013	0.95%
Mg 279.079	290813.8	8.13	mg/L	0.113	8.13	mg/L	0.113	1.39%
Mn 257.610	14241.2	0.0138	mg/L	0.00019	0.0138	mg/L	0.00019	1.40%
Mo 202.030	157.8	0.00168	mg/L	0.000009	0.00168	mg/L	0.000009	0.52%
Ni 231.604	235.6	0.00180	mg/L	0.000027	0.00180	mg/L	0.000027	1.52%
Pb 220.353	54.8	0.00257	mg/L	0.000151	0.00257	mg/L	0.000151	5.89%
Sb 206.833	34.3	0.00073	mg/L	0.000086	0.00073	mg/L	0.000086	11.78%
Se 196.026	47.3	0.00409	mg/L	0.001798	0.00409	mg/L	0.001798	43.91%
Si 288.158	729819.5	10.6	mg/L	0.18	10.6	mg/L	0.18	1.65%
Sn 189.933	-262.3	-0.0127	mg/L	0.00034	-0.0127	mg/L	0.00034	2.71%
Ti 337.280	34966.2	0.0313	mg/L	0.00046	0.0313	mg/L	0.00046	1.47%

Tl 190.800	3.5	0.0115 mg/L	0.00523	0.0115 mg/L	0.00523	45.47%
V 292.402	984.8	0.00536 mg/L	0.000034	0.00536 mg/L	0.000034	0.64%
Zn 206.200	834.2	0.00363 mg/L	0.000004	0.00363 mg/L	0.000004	0.10%
K 766.490	69607.5	4.25 mg/L	0.009	4.25 mg/L	0.009	0.22%
Na 589.592	606929.1	13.3 mg/L	0.07	13.3 mg/L	0.07	0.54%
Sr 407.771	768127.5	0.316 mg/L	0.0020	0.316 mg/L	0.0020	0.64%

Sequence No.: 29
Sample ID: CCV
Analyst:
Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 5/2/2003 2:34:51 PM
Sample Prep Volume:
Data Type: Original

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4969275.1						39494.81	0.79%
Ag 328.068	182901.0	0.418	mg/L	0.0010	0.418	mg/L	0.0010	0.24%
QC value within limits for Ag 328.068 Recovery = 104.53%								
Al 237.312	336502.5	10.2	mg/L	0.03	10.2	mg/L	0.03	0.26%
QC value within limits for Al 237.312 Recovery = 101.98%								
As 188.979	4487.3	0.393	mg/L	0.0090	0.393	mg/L	0.0090	2.28%
QC value within limits for As 188.979 Recovery = 98.29%								
Ba 230.424	240612.6	1.07	mg/L	0.000	1.07	mg/L	0.000	0.02%
QC value within limits for Ba 230.424 Recovery = 107.29%								
Be 234.861	42879.3	0.0530	mg/L	0.00020	0.0530	mg/L	0.00020	0.38%
QC value within limits for Be 234.861 Recovery = 105.96%								
Ca 227.549	10976.5	10.3	mg/L	0.26	10.3	mg/L	0.26	2.53%
QC value within limits for Ca 227.549 Recovery = 102.52%								
Cd 228.802	15871.1	0.0494	mg/L	0.00133	0.0494	mg/L	0.00133	2.68%
QC value within limits for Cd 228.802 Recovery = 98.88%								
Co 228.616	27656.2	0.215	mg/L	0.0002	0.215	mg/L	0.0002	0.09%
QC value within limits for Co 228.616 Recovery = 107.34%								
Cr 267.716	114758.8	0.528	mg/L	0.0004	0.528	mg/L	0.0004	0.07%
QC value within limits for Cr 267.716 Recovery = 105.54%								
Cu 327.396	146858.9	0.534	mg/L	0.0032	0.534	mg/L	0.0032	0.59%
QC value within limits for Cu 327.396 Recovery = 106.80%								
Fe 261.387	62474.3	4.19	mg/L	0.001	4.19	mg/L	0.001	0.04%
QC value within limits for Fe 261.387 Recovery = 104.64%								
Mg 279.079	372398.7	10.4	mg/L	0.04	10.4	mg/L	0.04	0.36%
QC value within limits for Mg 279.079 Recovery = 103.75%								
Mn 257.610	538498.2	0.526	mg/L	0.0005	0.526	mg/L	0.0005	0.09%
QC value within limits for Mn 257.610 Recovery = 105.12%								
Mo 202.030	98611.3	1.05	mg/L	0.003	1.05	mg/L	0.003	0.24%
QC value within limits for Mo 202.030 Recovery = 105.65%								
Ni 231.604	71136.5	0.537	mg/L	0.0014	0.537	mg/L	0.0014	0.26%
QC value within limits for Ni 231.604 Recovery = 107.31%								
Pb 220.353	11105.3	0.518	mg/L	0.0130	0.518	mg/L	0.0130	2.51%
QC value within limits for Pb 220.353 Recovery = 103.54%								
Sb 206.833	28222.2	1.24	mg/L	0.033	1.24	mg/L	0.033	2.68%
QC value within limits for Sb 206.833 Recovery = 103.44%								
Se 196.026	4260.3	0.409	mg/L	0.0120	0.409	mg/L	0.0120	2.94%
QC value within limits for Se 196.026 Recovery = 102.23%								
Si 288.158	367572.5	5.35	mg/L	0.011	5.35	mg/L	0.011	0.21%
QC value within limits for Si 288.158 Recovery = 106.91%								
Sn 189.933	19744.8	1.01	mg/L	0.015	1.01	mg/L	0.015	1.47%
QC value within limits for Sn 189.933 Recovery = 100.69%								
Ti 337.280	1172638.7	1.04	mg/L	0.010	1.04	mg/L	0.010	0.97%
QC value within limits for Ti 337.280 Recovery = 104.38%								
Tl 190.800	157.8	0.540	mg/L	0.0080	0.540	mg/L	0.0080	1.48%
QC value within limits for Tl 190.800 Recovery = 108.08%								
V 292.402	197480.1	1.06	mg/L	0.001	1.06	mg/L	0.001	0.07%
QC value within limits for V 292.402 Recovery = 105.98%								
Zn 206.200	207898.1	1.04	mg/L	0.010	1.04	mg/L	0.010	0.93%
QC value within limits for Zn 206.200 Recovery = 103.60%								
K 766.490	831127.9	50.8	mg/L	0.21	50.8	mg/L	0.21	0.41%
QC value within limits for K 766.490 Recovery = 101.67%								
Na 589.592	2386121.7	52.4	mg/L	0.14	52.4	mg/L	0.14	0.27%
QC value within limits for Na 589.592 Recovery = 104.79%								
Sr 407.771	2535595.2	1.03	mg/L	0.006	1.03	mg/L	0.006	0.57%

QC value within limits for Sr 407.771 Recovery = 102.95%
All analytes passed QC.

Sequence No.: 30
Sample ID: CCB
Analyst:
Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 5/2/2003 2:39:47 PM
Sample Prep Volume:
Data Type: Original

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	3835119.6						23116.98	0.60%
Ag 328.068	85.9	0.00020	mg/L	0.000119	0.00020	mg/L	0.000119	60.48%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 237.312	-32.1	-0.00099	mg/L	0.000241	-0.00099	mg/L	0.000241	24.44%
QC value within limits for Al 237.312 Recovery = Not calculated								
As 188.979	1.6	0.00014	mg/L	0.000101	0.00014	mg/L	0.000101	70.68%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 230.424	26.1	0.00012	mg/L	0.000030	0.00012	mg/L	0.000030	25.23%
QC value within limits for Ba 230.424 Recovery = Not calculated								
Be 234.861	-9.8	-0.00001	mg/L	0.000003	-0.00001	mg/L	0.000003	27.71%
QC value within limits for Be 234.861 Recovery = Not calculated								
Ca 227.549	3.3	0.00299	mg/L	0.000183	0.00299	mg/L	0.000183	6.13%
QC value within limits for Ca 227.549 Recovery = Not calculated								
Cd 228.802	2.7	0.00001	mg/L	0.000025	0.00001	mg/L	0.000025	309.05%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616	-7.6	-0.00006	mg/L	0.000034	-0.00006	mg/L	0.000034	56.54%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716	22.6	0.00010	mg/L	0.000064	0.00010	mg/L	0.000064	61.86%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.396	-20.7	-0.00008	mg/L	0.000306	-0.00008	mg/L	0.000306	406.70%
QC value within limits for Cu 327.396 Recovery = Not calculated								
Fe 261.387	79.0	0.00527	mg/L	0.000651	0.00527	mg/L	0.000651	12.36%
QC value within limits for Fe 261.387 Recovery = Not calculated								
Mg 279.079	23.0	0.00064	mg/L	0.000152	0.00064	mg/L	0.000152	23.56%
QC value within limits for Mg 279.079 Recovery = Not calculated								
Mn 257.610	39.4	0.00004	mg/L	0.000007	0.00004	mg/L	0.000007	18.41%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.030	-4.9	-0.00005	mg/L	0.000060	-0.00005	mg/L	0.000060	112.94%
QC value within limits for Mo 202.030 Recovery = Not calculated								
Ni 231.604	5.5	0.00004	mg/L	0.000033	0.00004	mg/L	0.000033	78.89%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353	0.9	0.00004	mg/L	0.000031	0.00004	mg/L	0.000031	77.64%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.833	-1.0	-0.00005	mg/L	0.000061	-0.00005	mg/L	0.000061	133.08%
QC value within limits for Sb 206.833 Recovery = Not calculated								
Se 196.026	12.1	0.00117	mg/L	0.000026	0.00117	mg/L	0.000026	2.21%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 288.158	61.7	0.00090	mg/L	0.000374	0.00090	mg/L	0.000374	41.74%
QC value within limits for Si 288.158 Recovery = Not calculated								
Sn 189.933	52.9	0.00268	mg/L	0.000198	0.00268	mg/L	0.000198	7.41%
QC value within limits for Sn 189.933 Recovery = Not calculated								
Ti 337.280	-3.1	0.00000	mg/L	0.000036	0.00000	mg/L	0.000036	>999.9%
QC value within limits for Ti 337.280 Recovery = Not calculated								
Tl 190.800	0.6	0.00197	mg/L	0.001545	0.00197	mg/L	0.001545	78.49%
QC value within limits for Tl 190.800 Recovery = Not calculated								
V 292.402	12.2	0.00007	mg/L	0.000004	0.00007	mg/L	0.000004	5.40%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200	-49.6	-0.00025	mg/L	0.000006	-0.00025	mg/L	0.000006	2.22%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490	701.7	0.0429	mg/L	0.00211	0.0429	mg/L	0.00211	4.91%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592	620.9	0.0136	mg/L	0.00093	0.0136	mg/L	0.00093	6.81%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771	12.2	0.00592	mg/L	0.000020	0.00592	mg/L	0.000020	0.34%
QC value within limits for Sr 407.771 Recovery = Not calculated								

All analytes passed QC.

Method : PE1300

Seq.	Loc.		Sample ID	Status
1	35		PBW F4 WG139046-03	Being Analyzed
2	36	☑	LCSW F4 WG139046-04	
3	37		L030450501 WG139046-02	
4	38		L030450501DP WG139046-07	
5	39		L030450509 WG139046-01	
6	40	☑	L030450510S WG139046-05	
7	41		L030450511SD WG139046-06	
8	42		L030450502	
9	43		L030450502SDL 0.2	
10	44	☑	L030450502PS 0.9	
11	5		CCV	
12	1		CCB	
13	45		L030450503	
14	46		L030450504	
15	47		L030450505	
16	48		L030450506	
17	49		L030450507	
18	50		L030450508	
19	51		L030450512	
20	52		L030450513	
21	53		L030450514	
22	54		L030450515	
23	5		CCV	
24	1		CCB	
25	55		L030450516	
26	56		L030450517	
27	57		L030450518	
28	58		L030450519	
29	59		L030450520	
30	5		~~CCV~~	
31	1		~~CCB~~ 5/2/03	

L030450502SDL 0.04
L030459402 0.01
L030460518SDL 0.2
L030450518SDL 0.04
CCV
CCB

Analysis Begun

Start Time: 5/2/2003 2:48:48 PM
Logged In Analyst: Administrator
Spectrometer Model: Optima 3000 DV

Plasma On Time: 5/2/2003 7:44:33 AM
Technique: ICP Continuous
Autosampler Model: AS-90

Sample Information File: C:\pe\Administrator\Sample Information\050203A.sif
Results Data Set: 050203A
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 1
Sample ID: PBW F4 WG139046-03
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 35
Date Collected: 5/2/2003 2:48:48 PM
Sample Prep Volume:
Data Type: Original

Mean Data: PBW F4 WG139046-03

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4371110.7						69460.06	1.59%
Ag 328.068	11.5	0.00003	mg/L	0.000042	0.00003	mg/L	0.000042	159.31%
Al 237.312	-32.5	-0.00096	mg/L	0.000150	-0.00096	mg/L	0.000150	15.60%
As 188.979	-0.1	-0.00001	mg/L	0.000209	-0.00001	mg/L	0.000209	>999.9%
Ba 230.424	39.0	0.00018	mg/L	0.000010	0.00018	mg/L	0.000010	5.39%
Be 234.861	-22.4	-0.00003	mg/L	0.000004	-0.00003	mg/L	0.000004	14.42%
Ca 227.549	-3.5	-0.00321	mg/L	0.001556	-0.00321	mg/L	0.001556	48.44%
Cd 228.802	-2.1	-0.00001	mg/L	0.000001	-0.00001	mg/L	0.000001	14.02%
Co 228.616	-11.2	-0.00009	mg/L	0.000029	-0.00009	mg/L	0.000029	33.32%
Cr 267.716	6.5	0.00003	mg/L	0.000013	0.00003	mg/L	0.000013	45.22%
Cu 327.396	55.2	0.00020	mg/L	0.000070	0.00020	mg/L	0.000070	35.13%
Fe 261.387	-95.2	-0.00635	mg/L	0.000743	-0.00635	mg/L	0.000743	11.70%
Mg 279.079	65.8	0.00190	mg/L	0.000169	0.00190	mg/L	0.000169	8.88%
Mn 257.610	397.8	0.00039	mg/L	0.000006	0.00039	mg/L	0.000006	1.46%
Mo 202.030	-119.7	-0.00128	mg/L	0.000008	-0.00128	mg/L	0.000008	0.63%
Ni 231.604	13.2	0.00010	mg/L	0.000088	0.00010	mg/L	0.000088	88.59%
Pb 220.353	-0.6	-0.00003	mg/L	0.000076	-0.00003	mg/L	0.000076	284.02%
Sb 206.833	-9.7	-0.00044	mg/L	0.000527	-0.00044	mg/L	0.000527	121.18%
Se 196.026	3.8	0.00037	mg/L	0.000885	0.00037	mg/L	0.000885	238.74%
Si 288.158	-193.1	-0.00281	mg/L	0.000304	-0.00281	mg/L	0.000304	10.85%
Sn 189.933	-2.8	-0.00014	mg/L	0.000238	-0.00014	mg/L	0.000238	168.72%
Ti 337.280	144.3	0.00013	mg/L	0.000018	0.00013	mg/L	0.000018	14.30%
Tl 190.800	1.2	0.00403	mg/L	0.000450	0.00403	mg/L	0.000450	11.18%
V 292.402	-29.1	-0.00016	mg/L	0.000006	-0.00016	mg/L	0.000006	4.00%
Zn 206.200	-354.7	-0.00178	mg/L	0.000061	-0.00178	mg/L	0.000061	3.46%
K 766.490	562.5	0.0344	mg/L	0.01769	0.0344	mg/L	0.01769	51.40%
Na 589.592	319.7	0.00702	mg/L	0.001922	0.00702	mg/L	0.001922	27.38%
Sr 407.771	-117.9	0.00587	mg/L	0.000024	0.00587	mg/L	0.000024	0.40%

Sequence No.: 2
Sample ID: LCSW F4 WG139046-04
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 36
Date Collected: 5/2/2003 2:53:41 PM
Sample Prep Volume:
Data Type: Original

Mean Data: LCSW F4 WG139046-04

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	5163268.8						2411.09	0.05%
Ag 328.068	96126.7	0.220	mg/L	0.0014	0.220	mg/L	0.0014	0.64%
Al 237.312	358144.5	10.7	mg/L	0.04	10.7	mg/L	0.04	0.36%
As 188.979	11837.9	1.05	mg/L	0.028	1.05	mg/L	0.028	2.63%
Ba 230.424	2317468.0	10.4	mg/L	0.06	10.4	mg/L	0.06	0.56%
Be 234.861	882572.7	1.10	mg/L	0.004	1.10	mg/L	0.004	0.36%
Ca 227.549	11550.5	10.7	mg/L	0.30	10.7	mg/L	0.30	2.82%
Cd 228.802	324929.1	1.04	mg/L	0.002	1.04	mg/L	0.002	0.21%
Co 228.616	137365.2	1.08	mg/L	0.002	1.08	mg/L	0.002	0.15%

Cr 267.716	234052.8	1.08 mg/L	0.001	1.08 mg/L	0.001	0.05%
Cu 327.396	296570.7	1.08 mg/L	0.010	1.08 mg/L	0.010	0.90%
Fe 261.387	14473.0	1.05 mg/L	0.033	1.05 mg/L	0.033	3.14%
Mg 279.079	384744.1	10.7 mg/L	0.03	10.7 mg/L	0.03	0.27%
Mn 257.610	1105807.2	1.08 mg/L	0.004	1.08 mg/L	0.004	0.38%
Mo 202.030	101507.0	1.08 mg/L	0.003	1.08 mg/L	0.003	0.24%
Ni 231.604	142922.6	1.08 mg/L	0.005	1.08 mg/L	0.005	0.51%
Pb 220.353	23092.0	1.07 mg/L	0.028	1.07 mg/L	0.028	2.58%
Sb 206.833	24684.4	1.08 mg/L	0.029	1.08 mg/L	0.029	2.71%
Se 196.026	11272.2	1.09 mg/L	0.031	1.09 mg/L	0.031	2.89%
Si 288.158	742186.4	10.8 mg/L	0.07	10.8 mg/L	0.07	0.61%
Sn 189.933	-302.9	-0.00942 mg/L	0.000514	-0.00942 mg/L	0.000514	5.46%
Ti 337.280	1250743.7	1.11 mg/L	0.001	1.11 mg/L	0.001	0.05%
Tl 190.800	313.5	1.06 mg/L	0.078	1.06 mg/L	0.078	7.34%
V 292.402	203140.7	1.09 mg/L	0.002	1.09 mg/L	0.002	0.19%
Zn 206.200	214355.5	1.07 mg/L	0.013	1.07 mg/L	0.013	1.22%
K 766.490	854117.7	52.2 mg/L	0.22	52.2 mg/L	0.22	0.41%
Na 589.592	2428664.5	53.3 mg/L	0.14	53.3 mg/L	0.14	0.26%
Sr 407.771	2598630.8	1.05 mg/L	0.006	1.05 mg/L	0.006	0.61%

Recovery Check: LCSW F4 WG139046-04

Analyte	Expected Conc.	Measured Conc.	Std. Dev.	Units	Recovery (%)
Tl 190.800	1.00	1.06	0.078	mg/L	106.0
K 766.490	50.0	52.2	0.216	mg/L	104.4
Na 589.592	50.0	53.3	0.140	mg/L	106.6
Sr 407.771	1.01	1.05	0.006	mg/L	104.9
Ag 328.068	0.200	0.220	0.001	mg/L	109.9
Al 237.312	10.00	10.7	0.039	mg/L	107.3
As 188.979	1.000	1.05	0.028	mg/L	104.7
Ba 230.424	10.0	10.4	0.058	mg/L	103.5
Be 234.861	1.000	1.10	0.004	mg/L	109.7
Ca 227.549	10.00	10.7	0.303	mg/L	107.3
Cd 228.802	1.000	1.04	0.002	mg/L	103.9
Co 228.616	1.000	1.08	0.002	mg/L	107.8
Cr 267.716	1.00	1.08	0.001	mg/L	107.6
Cu 327.396	1.00	1.08	0.010	mg/L	107.7
Fe 261.387	0.994	1.05	0.033	mg/L	105.8
Mg 279.079	10.0	10.7	0.029	mg/L	107.2
Mn 257.610	1.00	1.08	0.004	mg/L	107.9
Mo 202.030	0.994	1.08	0.003	mg/L	108.9
Ni 231.604	1.00	1.08	0.005	mg/L	107.8
Pb 220.353	1.000	1.07	0.028	mg/L	107.4
Sb 206.833	1.000	1.08	0.029	mg/L	108.0
Se 196.026	1.00	1.09	0.031	mg/L	108.7
Si 288.158	10.00	10.8	0.066	mg/L	107.9
Sn 189.933	0.998	-0.00942	0.001	mg/L	-0.9
Ti 337.280	1.000	1.11	0.001	mg/L	111.3
V 292.402	1.000	1.09	0.002	mg/L	109.5
Zn 206.200	0.998	1.07	0.013	mg/L	107.2

Sequence No.: 3
Sample ID: L030450501 WG139046-02
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 5/2/2003 2:58:35 PM
Sample Prep Volume:
Data Type: Original

Mean Data: L030450501 WG139046-02

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	5118098.0						19638.89	0.38%
Ag 328.068	556.4	0.00127	mg/L	0.000029	0.00127	mg/L	0.000029	2.30%
Al 237.312	581.5	0.0251	mg/L	0.00032	0.0251	mg/L	0.00032	1.28%
As 188.979	5.2	0.00056	mg/L	0.000325	0.00056	mg/L	0.000325	57.86%
Ba 230.424	33158.0	0.149	mg/L	0.0018	0.149	mg/L	0.0018	1.23%
Be 234.861	141.9	0.00007	mg/L	0.000031	0.00007	mg/L	0.000031	47.52%
Ca 227.549	111079.9	106	mg/L	1.4	106	mg/L	1.4	1.34%
Cd 228.802	61.6	0.00009	mg/L	0.000009	0.00009	mg/L	0.000009	9.92%
Co 228.616	-14.4	0.00015	mg/L	0.000049	0.00015	mg/L	0.000049	31.70%

Cr 267.716	-219.3	-0.00038 mg/L	0.000009	-0.00038 mg/L	0.000009	2.32%
Cu 327.396	996.6	0.00362 mg/L	0.000088	0.00362 mg/L	0.000088	2.43%
Fe 261.387	20897.2	1.40 mg/L	0.022	1.40 mg/L	0.022	1.56%
Mg 279.079	1197557.4	33.5 mg/L	0.16	33.5 mg/L	0.16	0.47%
Mn 257.610	95104.6	0.0925 mg/L	0.00134	0.0925 mg/L	0.00134	1.44%
Mo 202.030	1129.0	0.0120 mg/L	0.00006	0.0120 mg/L	0.00006	0.54%
Ni 231.604	20.0	0.00017 mg/L	0.000070	0.00017 mg/L	0.000070	41.56%
Pb 220.353	61.7	0.00267 mg/L	0.000690	0.00267 mg/L	0.000690	25.87%
Sb 206.833	23.4	0.00094 mg/L	0.000152	0.00094 mg/L	0.000152	16.15%
Se 196.026	20.1	0.00159 mg/L	0.000619	0.00159 mg/L	0.000619	38.90%
Si 288.158	483216.4	7.07 mg/L	0.022	7.07 mg/L	0.022	0.32%
Sn 189.933	-349.7	-0.0166 mg/L	0.00027	-0.0166 mg/L	0.00027	1.65%
Ti 337.280	-157.0	0.00009 mg/L	0.000012	0.00009 mg/L	0.000012	13.76%
Tl 190.800	8.0	0.0264 mg/L	0.00632	0.0264 mg/L	0.00632	23.95%
V 292.402	-30.1	-0.00003 mg/L	0.000005	-0.00003 mg/L	0.000005	14.25%
Zn 206.200	3005.9	0.0133 mg/L	0.00010	0.0133 mg/L	0.00010	0.72%
K 766.490	51198.3	3.09 mg/L	0.024	3.09 mg/L	0.024	0.79%
Na 589.592	752874.4	16.5 mg/L	0.57	16.5 mg/L	0.57	3.44%
Sr 407.771	1044895.6	0.428 mg/L	0.0142	0.428 mg/L	0.0142	3.33%

Sequence No.: 4
Sample ID: L030450501DP WG139046-07
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 5/2/2003 3:03:31 PM
Sample Prep Volume:
Data Type: Original

Mean Data: L030450501DP WG139046-07

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	5175040.1						9229.27	0.18%
Ag 328.068	546.4	0.00125	mg/L	0.000085	0.00125	mg/L	0.000085	6.84%
Al 237.312	490.4	0.0221	mg/L	0.00013	0.0221	mg/L	0.00013	0.59%
As 188.979	1.0	0.00019	mg/L	0.000018	0.00019	mg/L	0.000018	9.20%
Ba 230.424	31921.8	0.143	mg/L	0.0021	0.143	mg/L	0.0021	1.44%
Be 234.861	166.3	0.00010	mg/L	0.000032	0.00010	mg/L	0.000032	31.64%
Ca 227.549	106585.6	102	mg/L	1.5	102	mg/L	1.5	1.49%
Cd 228.802	36.2	0.00001	mg/L	0.000015	0.00001	mg/L	0.000015	149.20%
Co 228.616	-13.3	0.00015	mg/L	0.000003	0.00015	mg/L	0.000003	1.64%
Cr 267.716	-219.4	-0.00040	mg/L	0.000101	-0.00040	mg/L	0.000101	25.37%
Cu 327.396	177.6	0.00064	mg/L	0.000024	0.00064	mg/L	0.000024	3.78%
Fe 261.387	20026.7	1.34	mg/L	0.014	1.34	mg/L	0.014	1.07%
Mg 279.079	1158504.9	32.4	mg/L	0.04	32.4	mg/L	0.04	0.11%
Mn 257.610	91142.9	0.0887	mg/L	0.00131	0.0887	mg/L	0.00131	1.48%
Mo 202.030	1054.1	0.0112	mg/L	0.00005	0.0112	mg/L	0.00005	0.46%
Ni 231.604	3.3	0.00004	mg/L	0.000013	0.00004	mg/L	0.000013	30.41%
Pb 220.353	59.1	0.00255	mg/L	0.000003	0.00255	mg/L	0.000003	0.12%
Sb 206.833	29.4	0.00121	mg/L	0.000160	0.00121	mg/L	0.000160	13.22%
Se 196.026	11.1	0.00073	mg/L	0.001540	0.00073	mg/L	0.001540	209.87%
Si 288.158	467817.5	6.84	mg/L	0.010	6.84	mg/L	0.010	0.15%
Sn 189.933	-347.6	-0.0166	mg/L	0.00041	-0.0166	mg/L	0.00041	2.45%
Ti 337.280	-202.6	0.00004	mg/L	0.000061	0.00004	mg/L	0.000061	166.62%
Tl 190.800	3.3	0.0107	mg/L	0.00393	0.0107	mg/L	0.00393	36.66%
V 292.402	-34.8	-0.00006	mg/L	0.000048	-0.00006	mg/L	0.000048	74.10%
Zn 206.200	2636.8	0.0115	mg/L	0.00007	0.0115	mg/L	0.00007	0.57%
K 766.490	47694.4	2.88	mg/L	0.073	2.88	mg/L	0.073	2.54%
Na 589.592	729450.1	16.0	mg/L	0.24	16.0	mg/L	0.24	1.47%
Sr 407.771	1010344.3	0.414	mg/L	0.0047	0.414	mg/L	0.0047	1.14%

Sequence No.: 5
Sample ID: L030450509 WG139046-01
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 5/2/2003 3:08:25 PM
Sample Prep Volume:
Data Type: Original

Mean Data: L030450509 WG139046-01

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	5136120.4						48536.53	0.95%

Ag 328.068	450.4	0.00103	mg/L	0.000003	0.00103	mg/L	0.000003	0.28%
Al 237.312	245.4	0.0185	mg/L	0.00034	0.0185	mg/L	0.00034	1.82%
As 188.979	-0.5	-0.00013	mg/L	0.000179	-0.00013	mg/L	0.000179	134.19%
Ba 230.424	23502.1	0.105	mg/L	0.0004	0.105	mg/L	0.0004	0.33%
Be 234.861	60.4	0.00008	mg/L	0.000000	0.00008	mg/L	0.000000	0.11%
Ca 227.549	85874.9	82.3	mg/L	0.05	82.3	mg/L	0.05	0.07%
Cd 228.802	40.4	0.00004	mg/L	0.000036	0.00004	mg/L	0.000036	95.52%
Co 228.616	-20.8	0.00004	mg/L	0.000033	0.00004	mg/L	0.000033	87.54%
Cr 267.716	-206.3	-0.00039	mg/L	0.000029	-0.00039	mg/L	0.000029	7.38%
Cu 327.396	251.2	0.00091	mg/L	0.000031	0.00091	mg/L	0.000031	3.45%
Fe 261.387	-140.7	-0.00776	mg/L	0.000422	-0.00776	mg/L	0.000422	5.44%
Mg 279.079	1163807.3	32.6	mg/L	0.25	32.6	mg/L	0.25	0.77%
Mn 257.610	2175.1	0.00177	mg/L	0.000020	0.00177	mg/L	0.000020	1.16%
Mo 202.030	1620.3	0.0173	mg/L	0.00008	0.0173	mg/L	0.00008	0.47%
Ni 231.604	-25.4	-0.00019	mg/L	0.000042	-0.00019	mg/L	0.000042	21.74%
Pb 220.353	45.9	0.00215	mg/L	0.000060	0.00215	mg/L	0.000060	2.80%
Sb 206.833	15.6	0.00080	mg/L	0.000194	0.00080	mg/L	0.000194	24.34%
Se 196.026	23.7	0.00230	mg/L	0.000087	0.00230	mg/L	0.000087	3.79%
Si 288.158	456205.5	6.66	mg/L	0.049	6.66	mg/L	0.049	0.74%
Sn 189.933	-326.0	-0.0157	mg/L	0.00019	-0.0157	mg/L	0.00019	1.20%
Ti 337.280	-204.6	-0.00005	mg/L	0.000009	-0.00005	mg/L	0.000009	18.15%
Tl 190.800	2.6	0.00859	mg/L	0.007563	0.00859	mg/L	0.007563	88.08%
V 292.402	-8.2	-0.00004	mg/L	0.000036	-0.00004	mg/L	0.000036	94.90%
Zn 206.200	51.2	-0.00137	mg/L	0.000006	-0.00137	mg/L	0.000006	0.44%
K 766.490	44490.9	2.68	mg/L	0.062	2.68	mg/L	0.062	2.33%
Na 589.592	423545.4	9.30	mg/L	0.163	9.30	mg/L	0.163	1.76%
Sr 407.771	584072.4	0.242	mg/L	0.0042	0.242	mg/L	0.0042	1.76%

Sequence No.: 6
Sample ID: L0304505108 WG139046-05
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 40
Date Collected: 5/2/2003 3:13:20 PM
Sample Prep Volume:
Data Type: Original

Mean Data: L0304505108 WG139046-05

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	5033634.0						53872.78	1.07%
Ag 328.068	99016.3	0.226	mg/L	0.0023	0.226	mg/L	0.0023	1.03%
Al 237.312	377142.9	11.3	mg/L	0.11	11.3	mg/L	0.11	0.98%
As 188.979	11849.4	1.05	mg/L	0.014	1.05	mg/L	0.014	1.31%
Ba 230.424	2217644.9	9.90	mg/L	0.096	9.90	mg/L	0.096	0.97%
Be 234.861	905191.7	1.13	mg/L	0.011	1.13	mg/L	0.011	0.97%
Ca 227.549	89293.4	85.2	mg/L	0.92	85.2	mg/L	0.92	1.08%
Cd 228.802	328939.5	1.05	mg/L	0.011	1.05	mg/L	0.011	1.01%
Co 228.616	128000.1	1.00	mg/L	0.011	1.00	mg/L	0.011	1.09%
Cr 267.716	225629.3	1.04	mg/L	0.012	1.04	mg/L	0.012	1.12%
Cu 327.396	296763.1	1.08	mg/L	0.009	1.08	mg/L	0.009	0.79%
Fe 261.387	12531.9	0.918	mg/L	0.0169	0.918	mg/L	0.0169	1.84%
Mg 279.079	1498589.1	41.9	mg/L	0.44	41.9	mg/L	0.44	1.06%
Mn 257.610	1068077.8	1.04	mg/L	0.010	1.04	mg/L	0.010	0.94%
Mo 202.030	101899.2	1.09	mg/L	0.011	1.09	mg/L	0.011	1.00%
Ni 231.604	132193.1	0.997	mg/L	0.0085	0.997	mg/L	0.0085	0.85%
Pb 220.353	21988.4	1.02	mg/L	0.019	1.02	mg/L	0.019	1.86%
Sb 206.833	24784.1	1.08	mg/L	0.021	1.08	mg/L	0.021	1.93%
Se 196.026	11030.7	1.06	mg/L	0.020	1.06	mg/L	0.020	1.87%
Si 288.158	1141808.4	16.6	mg/L	0.18	16.6	mg/L	0.18	1.07%
Sn 189.933	-465.9	-0.0170	mg/L	0.00009	-0.0170	mg/L	0.00009	0.53%
Ti 337.280	1238596.9	1.10	mg/L	0.011	1.10	mg/L	0.011	0.98%
Tl 190.800	265.7	0.904	mg/L	0.0578	0.904	mg/L	0.0578	6.39%
V 292.402	202074.9	1.09	mg/L	0.011	1.09	mg/L	0.011	1.03%
Zn 206.200	198391.0	0.989	mg/L	0.0128	0.989	mg/L	0.0128	1.29%
K 766.490	916236.6	56.0	mg/L	1.32	56.0	mg/L	1.32	2.36%
Na 589.592	2865656.7	62.9	mg/L	1.51	62.9	mg/L	1.51	2.40%
Sr 407.771	3114322.7	1.26	mg/L	0.032	1.26	mg/L	0.032	2.57%

Recovery Check: L0304505108 WG139046-05

Analyte	Expected Conc.	Measured Conc.	Std. Dev.	Units	Recovery (%)

Tl 190.800	1.01	0.904	0.058	mg/L	89.5
K 766.490	52.7	56.0	1.323	mg/L	106.6
Na 589.592	59.3	62.9	1.513	mg/L	107.2
Sr 407.771	1.24	1.26	0.032	mg/L	102.1
Ag 328.068	0.201	0.226	0.002	mg/L	112.7
Al 237.312	10.0	11.3	0.111	mg/L	113.0
As 188.979	1.000	1.05	0.014	mg/L	104.8
Ba 230.424	10.1	9.90	0.096	mg/L	98.0
Be 234.861	1.00	1.13	0.011	mg/L	112.5
Ca 227.549	92.3	85.2	0.921	mg/L	29.5
Cd 228.802	1.00	1.05	0.011	mg/L	105.1
Co 228.616	1.00	1.00	0.011	mg/L	100.4
Cr 267.716	1.000	1.04	0.012	mg/L	103.8
Cu 327.396	1.00	1.08	0.009	mg/L	107.7
Fe 261.387	0.992	0.918	0.017	mg/L	92.6
Mg 279.079	42.6	41.9	0.445	mg/L	93.2
Mn 257.610	1.00	1.04	0.010	mg/L	104.1
Mo 202.030	1.01	1.09	0.011	mg/L	107.4
Ni 231.604	1.000	0.997	0.009	mg/L	99.7
Pb 220.353	1.00	1.02	0.019	mg/L	102.1
Sb 206.833	1.00	1.08	0.021	mg/L	108.3
Se 196.026	1.00	1.06	0.020	mg/L	106.2
Si 288.158	16.7	16.6	0.178	mg/L	99.6
Sn 189.933	0.983	-0.0170	0.000	mg/L	-0.1
Ti 337.280	0.999	1.10	0.011	mg/L	110.3
V 292.402	1.000	1.09	0.011	mg/L	108.9
Zn 206.200	0.999	0.989	0.013	mg/L	99.0

Sequence No.: 7
Sample ID: L0304505115D WG139046-06
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 41
Date Collected: 5/2/2003 3:17:40 PM
Sample Prep Volume:
Data Type: Original

Mean Data: L0304505115D WG139046-06

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4859610.0						123137.64	2.53%
Ag 328.068	93456.3	0.214	mg/L	0.0060	0.214	mg/L	0.0060	2.83%
Al 237.312	356703.0	10.7	mg/L	0.29	10.7	mg/L	0.29	2.73%
As 188.979	11385.2	1.01	mg/L	0.001	1.01	mg/L	0.001	0.13%
Ba 230.424	2123507.7	9.48	mg/L	0.199	9.48	mg/L	0.199	2.10%
Be 234.861	862861.5	1.07	mg/L	0.026	1.07	mg/L	0.026	2.40%
Ca 227.549	83969.8	80.1	mg/L	2.03	80.1	mg/L	2.03	2.53%
Cd 228.802	311858.3	0.997	mg/L	0.0240	0.997	mg/L	0.0240	2.41%
Co 228.616	122697.9	0.963	mg/L	0.0184	0.963	mg/L	0.0184	1.91%
Cr 267.716	215874.9	0.993	mg/L	0.0225	0.993	mg/L	0.0225	2.27%
Cu 327.396	281707.8	1.02	mg/L	0.027	1.02	mg/L	0.027	2.65%
Fe 261.387	12363.7	0.904	mg/L	0.0144	0.904	mg/L	0.0144	1.59%
Mg 279.079	1413372.6	39.5	mg/L	0.88	39.5	mg/L	0.88	2.22%
Mn 257.610	1019741.7	0.995	mg/L	0.0230	0.995	mg/L	0.0230	2.31%
Mo 202.030	97293.8	1.04	mg/L	0.021	1.04	mg/L	0.021	2.07%
Ni 231.604	126645.6	0.955	mg/L	0.0203	0.955	mg/L	0.0203	2.13%
Pb 220.353	21165.6	0.986	mg/L	0.0026	0.986	mg/L	0.0026	0.26%
Sb 206.833	23826.4	1.04	mg/L	0.013	1.04	mg/L	0.013	1.22%
Se 196.026	10664.9	1.03	mg/L	0.013	1.03	mg/L	0.013	1.25%
Si 288.158	1077547.6	15.7	mg/L	0.35	15.7	mg/L	0.35	2.21%
Sn 189.933	-472.4	-0.0177	mg/L	0.00196	-0.0177	mg/L	0.00196	11.08%
Ti 337.280	1177363.0	1.05	mg/L	0.026	1.05	mg/L	0.026	2.48%
Tl 190.800	265.7	0.903	mg/L	0.0176	0.903	mg/L	0.0176	1.95%
V 292.402	192203.8	1.04	mg/L	0.024	1.04	mg/L	0.024	2.34%
Zn 206.200	190812.1	0.951	mg/L	0.0162	0.951	mg/L	0.0162	1.70%
K 766.490	919020.0	56.2	mg/L	0.52	56.2	mg/L	0.52	0.93%
Na 589.592	2867745.9	63.0	mg/L	0.56	63.0	mg/L	0.56	0.89%
Sr 407.771	3114210.4	1.26	mg/L	0.008	1.26	mg/L	0.008	0.65%

Sequence No.: 8
Sample ID: L030450502
Analyst: MSW/SLP

Autosampler Location: 42
Date Collected: 5/2/2003 3:21:58 PM

Sample Wt: Sample Prep Volume:
Dilution: Data Type: Original

Mean Data: L030450502

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4950896.8						10362.14	0.21%
Ag 328.068	495.8	0.00113	mg/L	0.000130	0.00113	mg/L	0.000130	11.48%
Al 237.312	480.7	0.0214	mg/L	0.00000	0.0214	mg/L	0.00000	0.01%
As 188.979	9.9	0.00097	mg/L	0.000180	0.00097	mg/L	0.000180	18.50%
Ba 230.424	33617.2	0.151	mg/L	0.0000	0.151	mg/L	0.0000	0.01%
Be 234.861	155.0	0.00009	mg/L	0.000018	0.00009	mg/L	0.000018	20.23%
Ca 227.549	102678.7	98.3	mg/L	0.18	98.3	mg/L	0.18	0.18%
Cd 228.802	72.6	0.00013	mg/L	0.000012	0.00013	mg/L	0.000012	9.61%
Co 228.616	-9.9	0.00019	mg/L	0.000004	0.00019	mg/L	0.000004	2.16%
Cr 267.716	-204.0	-0.00035	mg/L	0.000077	-0.00035	mg/L	0.000077	21.74%
Cu 327.396	249.7	0.00091	mg/L	0.000065	0.00091	mg/L	0.000065	7.18%
Fe 261.387	19755.5	1.32	mg/L	0.003	1.32	mg/L	0.003	0.25%
Mg 279.079	1105420.9	30.9	mg/L	0.05	30.9	mg/L	0.05	0.16%
Mn 257.610	107689.1	0.105	mg/L	0.0002	0.105	mg/L	0.0002	0.24%
Mo 202.030	1063.5	0.0113	mg/L	0.00001	0.0113	mg/L	0.00001	0.08%
Ni 231.604	-12.7	-0.00008	mg/L	0.000022	-0.00008	mg/L	0.000022	27.71%
Pb 220.353	57.4	0.00248	mg/L	0.000202	0.00248	mg/L	0.000202	8.15%
Sb 206.833	41.0	0.00172	mg/L	0.000877	0.00172	mg/L	0.000877	50.98%
Se 196.026	32.4	0.00280	mg/L	0.000642	0.00280	mg/L	0.000642	22.91%
Si 288.158	457211.6	6.69	mg/L	0.011	6.69	mg/L	0.011	0.16%
Sn 189.933	-344.0	-0.0164	mg/L	0.00025	-0.0164	mg/L	0.00025	1.50%
Ti 337.280	-244.0	-0.00001	mg/L	0.000020	-0.00001	mg/L	0.000020	292.73%
Tl 190.800	12.5	0.0416	mg/L	0.00193	0.0416	mg/L	0.00193	4.64%
V 292.402	-19.4	0.00002	mg/L	0.000009	0.00002	mg/L	0.000009	51.32%
Zn 206.200	1111.9	0.00396	mg/L	0.000021	0.00396	mg/L	0.000021	0.52%
K 766.490	49146.6	2.97	mg/L	0.073	2.97	mg/L	0.073	2.46%
Na 589.592	682758.4	15.0	mg/L	0.37	15.0	mg/L	0.37	2.49%
Sr 407.771	860544.3	0.353	mg/L	0.0086	0.353	mg/L	0.0086	2.44%

Sequence No.: 9 Autosampler Location: 43
Sample ID: L030450502SDL 0.2 Date Collected: 5/2/2003 3:26:55 PM
Analyst: MSW/SLP
Sample Wt: Sample Prep Volume:
Dilution: Data Type: Original

Mean Data: L030450502SDL 0.2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4470053.0						85196.40	1.91%
Ag 328.068	137.2	0.00031	mg/L	0.000171	0.00031	mg/L	0.000171	54.38%
Al 237.312	91.8	0.00416	mg/L	0.000081	0.00416	mg/L	0.000081	1.94%
As 188.979	-0.3	-0.00002	mg/L	0.000040	-0.00002	mg/L	0.000040	262.33%
Ba 230.424	6273.7	0.0281	mg/L	0.00025	0.0281	mg/L	0.00025	0.88%
Be 234.861	64.0	0.00007	mg/L	0.000021	0.00007	mg/L	0.000021	32.56%
Ca 227.549	18318.0	17.5	mg/L	0.11	17.5	mg/L	0.11	0.64%
Cd 228.802	34.8	0.00009	mg/L	0.000009	0.00009	mg/L	0.000009	9.16%
Co 228.616	-4.6	0.00001	mg/L	0.000040	0.00001	mg/L	0.000040	338.24%
Cr 267.716	25.1	0.00022	mg/L	0.000060	0.00022	mg/L	0.000060	27.48%
Cu 327.396	54.0	0.00020	mg/L	0.000230	0.00020	mg/L	0.000230	117.26%
Fe 261.387	2669.7	0.178	mg/L	0.0022	0.178	mg/L	0.0022	1.24%
Mg 279.079	198375.0	5.55	mg/L	0.044	5.55	mg/L	0.044	0.79%
Mn 257.610	20327.4	0.0198	mg/L	0.00018	0.0198	mg/L	0.00018	0.90%
Mo 202.030	149.0	0.00159	mg/L	0.000088	0.00159	mg/L	0.000088	5.53%
Ni 231.604	-5.1	-0.00004	mg/L	0.000064	-0.00004	mg/L	0.000064	176.78%
Pb 220.353	23.0	0.00104	mg/L	0.000045	0.00104	mg/L	0.000045	4.33%
Sb 206.833	4.4	0.00018	mg/L	0.000047	0.00018	mg/L	0.000047	26.79%
Se 196.026	29.6	0.00282	mg/L	0.000737	0.00282	mg/L	0.000737	26.17%
Si 288.158	80402.2	1.18	mg/L	0.006	1.18	mg/L	0.006	0.53%
Sn 189.933	-219.6	-0.0109	mg/L	0.00016	-0.0109	mg/L	0.00016	1.50%
Ti 337.280	-56.4	-0.00001	mg/L	0.000034	-0.00001	mg/L	0.000034	227.62%
Tl 190.800	4.2	0.0140	mg/L	0.00528	0.0140	mg/L	0.00528	37.66%
V 292.402	43.4	0.00025	mg/L	0.000015	0.00025	mg/L	0.000015	5.87%
Zn 206.200	500.5	0.00222	mg/L	0.000041	0.00222	mg/L	0.000041	1.85%

K 766.490	8654.5	0.523	mg/L	0.0043	0.523	mg/L	0.0043	0.82%
Na 589.592	114140.4	2.51	mg/L	0.029	2.51	mg/L	0.029	1.15%
Sr 407.771	146425.5	0.0650	mg/L	0.00074	0.0650	mg/L	0.00074	1.14%

Sequence No.: 10
Sample ID: L030450502PS 0.9
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 44
Date Collected: 5/2/2003 3:31:50 PM

Sample Prep Volume:
Data Type: Original

Mean Data: L030450502PS 0.9

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4954587.6						5929.71	0.12%
Ag 328.068	94759.7	0.217	mg/L	0.0009	0.217	mg/L	0.0009	0.40%
Al 237.312	361231.0	10.8	mg/L	0.04	10.8	mg/L	0.04	0.38%
As 188.979	11447.1	1.01	mg/L	0.004	1.01	mg/L	0.004	0.41%
Ba 230.424	2135317.4	9.54	mg/L	0.014	9.54	mg/L	0.014	0.15%
Be 234.861	870475.1	1.08	mg/L	0.003	1.08	mg/L	0.003	0.26%
Ca 227.549	98834.6	94.4	mg/L	0.07	94.4	mg/L	0.07	0.07%
Cd 228.802	314344.7	1.00	mg/L	0.002	1.00	mg/L	0.002	0.18%
Co 228.616	122685.2	0.963	mg/L	0.0015	0.963	mg/L	0.0015	0.16%
Cr 267.716	216777.1	0.997	mg/L	0.0016	0.997	mg/L	0.0016	0.16%
Cu 327.396	284204.0	1.03	mg/L	0.004	1.03	mg/L	0.004	0.39%
Fe 261.387	28137.9	1.96	mg/L	0.021	1.96	mg/L	0.021	1.08%
Mg 279.079	1369117.1	38.3	mg/L	0.03	38.3	mg/L	0.03	0.08%
Mn 257.610	1113885.0	1.09	mg/L	0.002	1.09	mg/L	0.002	0.20%
Mo 202.030	97043.6	1.03	mg/L	0.001	1.03	mg/L	0.001	0.10%
Ni 231.604	126517.5	0.954	mg/L	0.0025	0.954	mg/L	0.0025	0.26%
Pb 220.353	21240.8	0.988	mg/L	0.0056	0.988	mg/L	0.0056	0.56%
Sb 206.833	23966.0	1.05	mg/L	0.012	1.05	mg/L	0.012	1.19%
Se 196.026	10747.2	1.04	mg/L	0.011	1.04	mg/L	0.011	1.03%
Si 288.158	1081245.7	15.7	mg/L	0.04	15.7	mg/L	0.04	0.22%
Sn 189.933	-447.3	-0.0163	mg/L	0.00147	-0.0163	mg/L	0.00147	9.05%
Ti 337.280	1185120.7	1.05	mg/L	0.003	1.05	mg/L	0.003	0.29%
Tl 190.800	285.4	0.969	mg/L	0.0253	0.969	mg/L	0.0253	2.61%
V 292.402	193195.1	1.04	mg/L	0.004	1.04	mg/L	0.004	0.40%
Zn 206.200	191761.7	0.956	mg/L	0.0010	0.956	mg/L	0.0010	0.11%
K 766.490	930950.6	56.9	mg/L	0.50	56.9	mg/L	0.50	0.88%
Na 589.592	3143134.1	69.0	mg/L	1.09	69.0	mg/L	1.09	1.58%
Sr 407.771	3408231.0	1.38	mg/L	0.025	1.38	mg/L	0.025	1.81%

Recovery Check: L030450502PS 0.9

Analyte	Expected Conc.	Measured Conc.	Std. Dev.	Units	Recovery (%)
Tl 190.800	1.01	0.969	0.025	mg/L	95.5
K 766.490	50.5	56.9	0.498	mg/L	112.8
Na 589.592	52.5	69.0	1.093	mg/L	133.0
Sr 407.771	1.07	1.38	0.025	mg/L	131.7
Ag 328.068	0.200	0.217	0.001	mg/L	108.2
Al 237.312	10.0	10.8	0.041	mg/L	108.3
As 188.979	1.000	1.01	0.004	mg/L	101.3
Ba 230.424	10.0	9.54	0.014	mg/L	95.1
Be 234.861	1.00	1.08	0.003	mg/L	108.2
Ca 227.549	27.5	94.4	0.066	mg/L	768.1
Cd 228.802	1.00	1.00	0.002	mg/L	100.5
Co 228.616	1.00	0.963	0.002	mg/L	96.3
Cr 267.716	1.00	0.997	0.002	mg/L	99.7
Cu 327.396	1.00	1.03	0.004	mg/L	103.2
Fe 261.387	1.16	1.96	0.021	mg/L	177.8
Mg 279.079	15.5	38.3	0.030	mg/L	327.1
Mn 257.610	1.02	1.09	0.002	mg/L	106.7
Mo 202.030	0.997	1.03	0.001	mg/L	103.8
Ni 231.604	1.000	0.954	0.002	mg/L	95.4
Pb 220.353	1.00	0.988	0.006	mg/L	98.7
Sb 206.833	1.00	1.05	0.012	mg/L	104.8
Se 196.026	1.00	1.04	0.011	mg/L	103.4
Si 288.158	11.2	15.7	0.035	mg/L	145.7
Sn 189.933	0.988	-0.0163	0.001	mg/L	-0.5

Ti 337.280	0.999	1.05	0.003	mg/L	105.5
V 292.402	1.00	1.04	0.004	mg/L	104.1
Zn 206.200	1.00	0.956	0.001	mg/L	95.3

Sequence No.: 11
Sample ID: CCV
Analyst:
Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 5/2/2003 3:36:12 PM
Sample Prep Volume:
Data Type: Original

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4891828.7						20083.73	0.41%
Ag 328.068	179189.7	0.410	mg/L	0.0024	0.410	mg/L	0.0024	0.60%
QC value within limits for Ag 328.068 Recovery = 102.40%								
Al 237.312	329188.0	9.98	mg/L	0.067	9.98	mg/L	0.067	0.67%
QC value within limits for Al 237.312 Recovery = 99.76%								
As 188.979	4457.1	0.391	mg/L	0.0026	0.391	mg/L	0.0026	0.68%
QC value within limits for As 188.979 Recovery = 97.64%								
Ba 230.424	236432.9	1.05	mg/L	0.003	1.05	mg/L	0.003	0.26%
QC value within limits for Ba 230.424 Recovery = 105.43%								
Be 234.861	41955.3	0.0518	mg/L	0.00021	0.0518	mg/L	0.00021	0.41%
QC value within limits for Be 234.861 Recovery = 103.68%								
Ca 227.549	10885.3	10.2	mg/L	0.05	10.2	mg/L	0.05	0.45%
QC value within limits for Ca 227.549 Recovery = 101.71%								
Cd 228.802	15822.7	0.0493	mg/L	0.00021	0.0493	mg/L	0.00021	0.43%
QC value within limits for Cd 228.802 Recovery = 98.59%								
Co 228.616	27097.7	0.210	mg/L	0.0012	0.210	mg/L	0.0012	0.59%
QC value within limits for Co 228.616 Recovery = 105.17%								
Cr 267.716	112595.6	0.518	mg/L	0.0017	0.518	mg/L	0.0017	0.32%
QC value within limits for Cr 267.716 Recovery = 103.55%								
Cu 327.396	143224.5	0.521	mg/L	0.0034	0.521	mg/L	0.0034	0.65%
QC value within limits for Cu 327.396 Recovery = 104.16%								
Fe 261.387	60437.3	4.05	mg/L	0.014	4.05	mg/L	0.014	0.35%
QC value within limits for Fe 261.387 Recovery = 101.24%								
Mg 279.079	365058.5	10.2	mg/L	0.03	10.2	mg/L	0.03	0.26%
QC value within limits for Mg 279.079 Recovery = 101.71%								
Mn 257.610	527745.2	0.515	mg/L	0.0023	0.515	mg/L	0.0023	0.45%
QC value within limits for Mn 257.610 Recovery = 103.02%								
Mo 202.030	96569.7	1.03	mg/L	0.002	1.03	mg/L	0.002	0.23%
QC value within limits for Mo 202.030 Recovery = 103.47%								
Ni 231.604	69585.2	0.525	mg/L	0.0010	0.525	mg/L	0.0010	0.19%
QC value within limits for Ni 231.604 Recovery = 104.97%								
Pb 220.353	11039.1	0.515	mg/L	0.0025	0.515	mg/L	0.0025	0.49%
QC value within limits for Pb 220.353 Recovery = 102.91%								
Sb 206.833	28063.2	1.24	mg/L	0.006	1.24	mg/L	0.006	0.51%
QC value within limits for Sb 206.833 Recovery = 102.86%								
Se 196.026	4237.6	0.407	mg/L	0.0025	0.407	mg/L	0.0025	0.62%
QC value within limits for Se 196.026 Recovery = 101.70%								
Si 288.158	360031.8	5.24	mg/L	0.037	5.24	mg/L	0.037	0.71%
QC value within limits for Si 288.158 Recovery = 104.72%								
Sn 189.933	19452.1	0.991	mg/L	0.0117	0.991	mg/L	0.0117	1.19%
QC value within limits for Sn 189.933 Recovery = 99.20%								
Ti 337.280	1158821.1	1.03	mg/L	0.004	1.03	mg/L	0.004	0.36%
QC value within limits for Ti 337.280 Recovery = 103.15%								
Tl 190.800	155.3	0.532	mg/L	0.0201	0.532	mg/L	0.0201	3.78%
QC value within limits for Tl 190.800 Recovery = 106.37%								
V 292.402	194145.7	1.04	mg/L	0.004	1.04	mg/L	0.004	0.39%
QC value within limits for V 292.402 Recovery = 104.19%								
Zn 206.200	204842.1	1.02	mg/L	0.004	1.02	mg/L	0.004	0.36%
QC value within limits for Zn 206.200 Recovery = 102.08%								
K 766.490	804437.8	49.2	mg/L	0.11	49.2	mg/L	0.11	0.23%
QC value within limits for K 766.490 Recovery = 98.40%								
Na 589.592	2308517.8	50.7	mg/L	0.12	50.7	mg/L	0.12	0.23%
QC value within limits for Na 589.592 Recovery = 101.38%								
Sr 407.771	2449249.9	0.995	mg/L	0.0006	0.995	mg/L	0.0006	0.06%
QC value within limits for Sr 407.771 Recovery = 99.47%								

All analytes passed QC.

Sequence No.: 12
Sample ID: CCB
Analyst:
Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 5/2/2003 3:41:10 PM

Sample Prep Volume:
Data Type: Original

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	3844135.9						18010.18	0.47%
Ag 328.068	69.8	0.00016	mg/L	0.000065	0.00016	mg/L	0.000065	40.87%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 237.312	-45.3	-0.00137	mg/L	0.000096	-0.00137	mg/L	0.000096	7.04%
QC value within limits for Al 237.312 Recovery = Not calculated								
As 188.979	-2.3	-0.00020	mg/L	0.000372	-0.00020	mg/L	0.000372	184.21%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 230.424	27.9	0.00012	mg/L	0.000002	0.00012	mg/L	0.000002	2.00%
QC value within limits for Ba 230.424 Recovery = Not calculated								
Be 234.861	-16.6	-0.00002	mg/L	0.000004	-0.00002	mg/L	0.000004	20.21%
QC value within limits for Be 234.861 Recovery = Not calculated								
Ca 227.549	-10.3	-0.00984	mg/L	0.007719	-0.00984	mg/L	0.007719	78.42%
QC value within limits for Ca 227.549 Recovery = Not calculated								
Cd 228.802	34.2	0.00011	mg/L	0.000024	0.00011	mg/L	0.000024	22.06%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616	-14.8	-0.00011	mg/L	0.000020	-0.00011	mg/L	0.000020	17.16%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716	65.0	0.00030	mg/L	0.000022	0.00030	mg/L	0.000022	7.50%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.396	-35.3	-0.00013	mg/L	0.000062	-0.00013	mg/L	0.000062	48.22%
QC value within limits for Cu 327.396 Recovery = Not calculated								
Fe 261.387	-17.1	-0.00115	mg/L	0.000026	-0.00115	mg/L	0.000026	2.30%
QC value within limits for Fe 261.387 Recovery = Not calculated								
Mg 279.079	34.8	0.00097	mg/L	0.000231	0.00097	mg/L	0.000231	23.78%
QC value within limits for Mg 279.079 Recovery = Not calculated								
Mn 257.610	34.5	0.00003	mg/L	0.000008	0.00003	mg/L	0.000008	25.36%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.030	7.7	0.00008	mg/L	0.000028	0.00008	mg/L	0.000028	33.78%
QC value within limits for Mo 202.030 Recovery = Not calculated								
Ni 231.604	-7.6	-0.00006	mg/L	0.000023	-0.00006	mg/L	0.000023	39.98%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353	0.7	0.00003	mg/L	0.000075	0.00003	mg/L	0.000075	231.88%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.833	8.3	0.00036	mg/L	0.000115	0.00036	mg/L	0.000115	31.74%
QC value within limits for Sb 206.833 Recovery = Not calculated								
Se 196.026	5.1	0.00049	mg/L	0.000243	0.00049	mg/L	0.000243	49.21%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 288.158	125.0	0.00181	mg/L	0.000196	0.00181	mg/L	0.000196	10.81%
QC value within limits for Si 288.158 Recovery = Not calculated								
Sn 189.933	40.9	0.00207	mg/L	0.000306	0.00207	mg/L	0.000306	14.75%
QC value within limits for Sn 189.933 Recovery = Not calculated								
Ti 337.280	-17.0	-0.00002	mg/L	0.000028	-0.00002	mg/L	0.000028	181.39%
QC value within limits for Ti 337.280 Recovery = Not calculated								
Tl 190.800	2.5	0.00827	mg/L	0.003374	0.00827	mg/L	0.003374	40.78%
QC value within limits for Tl 190.800 Recovery = Not calculated								
V 292.402	19.2	0.00011	mg/L	0.000004	0.00011	mg/L	0.000004	4.10%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200	-256.3	-0.00128	mg/L	0.000019	-0.00128	mg/L	0.000019	1.50%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490	498.8	0.0305	mg/L	0.01171	0.0305	mg/L	0.01171	38.37%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592	330.9	0.00727	mg/L	0.001631	0.00727	mg/L	0.001631	22.45%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771	57.9	0.00594	mg/L	0.000012	0.00594	mg/L	0.000012	0.20%
QC value within limits for Sr 407.771 Recovery = Not calculated								

All analytes passed QC.

Sequence No.: 13
Sample ID: L030450503
Analyst: MSW/SLP

Autosampler Location: 45
Date Collected: 5/2/2003 3:46:01 PM

Sample Wt: Sample Prep Volume:
Dilution: Data Type: Original

Mean Data: L030450503

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4894947.6						49849.76	1.02%
Ag 328.068	455.2	0.00104	mg/L	0.000043	0.00104	mg/L	0.000043	4.14%
Al 237.312	314.4	0.0200	mg/L	0.00005	0.0200	mg/L	0.00005	0.24%
As 188.979	12.9	0.00108	mg/L	0.000099	0.00108	mg/L	0.000099	9.18%
Ba 230.424	15721.4	0.0705	mg/L	0.00092	0.0705	mg/L	0.00092	1.30%
Be 234.861	55.3	0.00007	mg/L	0.000000	0.00007	mg/L	0.000000	0.18%
Ca 227.549	88370.1	84.7	mg/L	1.15	84.7	mg/L	1.15	1.36%
Cd 228.802	50.7	0.00007	mg/L	0.000002	0.00007	mg/L	0.000002	2.92%
Co 228.616	-1.4	0.00014	mg/L	0.000013	0.00014	mg/L	0.000013	9.25%
Cr 267.716	-174.6	-0.00027	mg/L	0.000048	-0.00027	mg/L	0.000048	17.48%
Cu 327.396	417.1	0.00151	mg/L	0.000117	0.00151	mg/L	0.000117	7.74%
Fe 261.387	486.0	0.0341	mg/L	0.00121	0.0341	mg/L	0.00121	3.57%
Mg 279.079	1108014.7	31.0	mg/L	0.39	31.0	mg/L	0.39	1.27%
Mn 257.610	21021.5	0.0202	mg/L	0.00042	0.0202	mg/L	0.00042	2.06%
Mo 202.030	1245.5	0.0133	mg/L	0.00010	0.0133	mg/L	0.00010	0.73%
Ni 231.604	105.4	0.00079	mg/L	0.000039	0.00079	mg/L	0.000039	4.85%
Pb 220.353	47.7	0.00222	mg/L	0.000358	0.00222	mg/L	0.000358	16.12%
Sb 206.833	34.9	0.00162	mg/L	0.000144	0.00162	mg/L	0.000144	8.90%
Se 196.026	30.6	0.00295	mg/L	0.000758	0.00295	mg/L	0.000758	25.70%
Si 288.158	331627.2	4.86	mg/L	0.063	4.86	mg/L	0.063	1.30%
Sn 189.933	-300.2	-0.0144	mg/L	0.00039	-0.0144	mg/L	0.00039	2.68%
Ti 337.280	-111.2	0.00004	mg/L	0.000113	0.00004	mg/L	0.000113	299.22%
Tl 190.800	6.1	0.0203	mg/L	0.00182	0.0203	mg/L	0.00182	8.95%
V 292.402	128.4	0.00069	mg/L	0.000005	0.00069	mg/L	0.000005	0.73%
Zn 206.200	626.6	0.00158	mg/L	0.000054	0.00158	mg/L	0.000054	3.40%
K 766.490	46522.6	2.81	mg/L	0.047	2.81	mg/L	0.047	1.67%
Na 589.592	670746.2	14.7	mg/L	0.07	14.7	mg/L	0.07	0.45%
Sr 407.771	889521.5	0.365	mg/L	0.0020	0.365	mg/L	0.0020	0.55%

Sequence No.: 14 Autosampler Location: 46
Sample ID: L030450504 Date Collected: 5/2/2003 3:50:59 PM
Analyst: MSW/SLP
Sample Wt: Sample Prep Volume:
Dilution: Data Type: Original

Mean Data: L030450504

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4903656.2						8513.15	0.17%
Ag 328.068	548.2	0.00125	mg/L	0.000124	0.00125	mg/L	0.000124	9.89%
Al 237.312	1022.3	0.0298	mg/L	0.00067	0.0298	mg/L	0.00067	2.26%
As 188.979	130.9	0.0120	mg/L	0.00006	0.0120	mg/L	0.00006	0.51%
Ba 230.424	542522.1	2.42	mg/L	0.001	2.42	mg/L	0.001	0.04%
Be 234.861	438.3	0.00009	mg/L	0.000018	0.00009	mg/L	0.000018	19.71%
Ca 227.549	86213.7	82.5	mg/L	1.94	82.5	mg/L	1.94	2.35%
Cd 228.802	190.2	0.00049	mg/L	0.000031	0.00049	mg/L	0.000031	6.40%
Co 228.616	-123.8	0.00209	mg/L	0.000000	0.00209	mg/L	0.000000	0.01%
Cr 267.716	-377.4	-0.00074	mg/L	0.000013	-0.00074	mg/L	0.000013	1.74%
Cu 327.396	231.1	0.00084	mg/L	0.000018	0.00084	mg/L	0.000018	2.20%
Fe 261.387	85985.0	5.74	mg/L	0.090	5.74	mg/L	0.090	1.56%
Mg 279.079	1563491.3	43.7	mg/L	0.05	43.7	mg/L	0.05	0.11%
Mn 257.610	173768.4	0.169	mg/L	0.0030	0.169	mg/L	0.0030	1.76%
Mo 202.030	4860.2	0.0518	mg/L	0.00010	0.0518	mg/L	0.00010	0.18%
Ni 231.604	13.7	0.00018	mg/L	0.000017	0.00018	mg/L	0.000017	9.86%
Pb 220.353	68.8	0.00240	mg/L	0.000075	0.00240	mg/L	0.000075	3.14%
Sb 206.833	59.6	0.00230	mg/L	0.000304	0.00230	mg/L	0.000304	13.22%
Se 196.026	6.3	-0.00083	mg/L	0.000538	-0.00083	mg/L	0.000538	64.73%
Si 288.158	433568.1	6.34	mg/L	0.006	6.34	mg/L	0.006	0.09%
Sn 189.933	-322.5	-0.0155	mg/L	0.00014	-0.0155	mg/L	0.00014	0.89%
Ti 337.280	-260.3	0.00013	mg/L	0.000118	0.00013	mg/L	0.000118	90.72%
Tl 190.800	4.2	0.0125	mg/L	0.00532	0.0125	mg/L	0.00532	42.70%
V 292.402	-114.5	-0.00006	mg/L	0.000071	-0.00006	mg/L	0.000071	110.59%
Zn 206.200	519.6	0.00016	mg/L	0.000010	0.00016	mg/L	0.000010	6.16%

K 766.490	221258.8	13.5 mg/L	0.01	13.5 mg/L	0.01	0.04%
Na 589.592	8649373.1	190 mg/L	3.4	190 mg/L	3.4	1.77%
Sr 407.771	Saturated2					

Saturated in preshot (code 2)

Sequence No.: 15 — **Autosampler Location: 47**
Sample ID: L030450505 — **Date Collected: 5/2/2003 3:56:02 PM**
Analyst: MSW/SLP
Sample Wt: — **Sample Prep Volume:**
Dilution: — **Data Type: Original**

Mean Data: L030450505

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4993709.2						13961.33	0.28%
Ag 328.068	736.5	0.00168	mg/L	0.000064	0.00168	mg/L	0.000064	3.80%
Al 237.312	747.5	0.0315	mg/L	0.00007	0.0315	mg/L	0.00007	0.21%
As 188.979	96.7	0.00849	mg/L	0.000267	0.00849	mg/L	0.000267	3.14%
Ba 230.424	15455.5	0.0694	mg/L	0.00001	0.0694	mg/L	0.00001	0.01%
Be 234.861	62.5	0.00007	mg/L	0.000002	0.00007	mg/L	0.000002	2.77%
Ca 227.549	110639.0	106	mg/L	0.2	106	mg/L	0.2	0.22%
Cd 228.802	35.2	-0.00001	mg/L	0.000021	-0.00001	mg/L	0.000021	173.13%
Co 228.616	136.4	0.00123	mg/L	0.000069	0.00123	mg/L	0.000069	5.61%
Cr 267.716	-4.6	0.00043	mg/L	0.000027	0.00043	mg/L	0.000027	6.32%
Cu 327.396	671.3	0.00244	mg/L	0.000111	0.00244	mg/L	0.000111	4.56%
Fe 261.387	970.6	0.0728	mg/L	0.00009	0.0728	mg/L	0.00009	0.12%
Mg 279.079	943193.4	26.4	mg/L	0.03	26.4	mg/L	0.03	0.13%
Mn 257.610	1360120.8	1.33	mg/L	0.000	1.33	mg/L	0.000	0.01%
Mo 202.030	1970.9	0.0210	mg/L	0.00001	0.0210	mg/L	0.00001	0.05%
Ni 231.604	629.1	0.00474	mg/L	0.000023	0.00474	mg/L	0.000023	0.48%
Pb 220.353	59.4	0.00277	mg/L	0.000343	0.00277	mg/L	0.000343	12.38%
Sb 206.833	33.0	0.00109	mg/L	0.000085	0.00109	mg/L	0.000085	7.78%
Se 196.026	26.6	0.00255	mg/L	0.000780	0.00255	mg/L	0.000780	30.57%
Si 288.158	209289.0	3.09	mg/L	0.004	3.09	mg/L	0.004	0.13%
Sn 189.933	-348.5	-0.0166	mg/L	0.00022	-0.0166	mg/L	0.00022	1.31%
Ti 337.280	-113.0	0.00007	mg/L	0.000012	0.00007	mg/L	0.000012	17.06%
Tl 190.800	2.2	0.00739	mg/L	0.004275	0.00739	mg/L	0.004275	57.82%
V 292.402	180.6	0.00099	mg/L	0.000028	0.00099	mg/L	0.000028	2.84%
Zn 206.200	1016.7	0.00376	mg/L	0.000014	0.00376	mg/L	0.000014	0.37%
K 766.490	84155.3	5.12	mg/L	0.066	5.12	mg/L	0.066	1.28%
Na 589.592	1512238.7	33.2	mg/L	0.39	33.2	mg/L	0.39	1.18%
Sr 407.771	2848131.7	1.16	mg/L	0.011	1.16	mg/L	0.011	0.97%

Sequence No.: 16 — **Autosampler Location: 48**
Sample ID: L030450506 — **Date Collected: 5/2/2003 4:01:03 PM**
Analyst: MSW/SLP
Sample Wt: — **Sample Prep Volume:**
Dilution: — **Data Type: Original**

Mean Data: L030450506

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	5069079.6						1913.20	0.04%
Ag 328.068	490.0	0.00112	mg/L	0.000271	0.00112	mg/L	0.000271	24.20%
Al 237.312	1155.3	0.0274	mg/L	0.00086	0.0274	mg/L	0.00086	3.16%
As 188.979	122.6	0.0115	mg/L	0.00024	0.0115	mg/L	0.00024	2.11%
Ba 230.424	53680.6	0.241	mg/L	0.0018	0.241	mg/L	0.0018	0.74%
Be 234.861	495.2	0.00013	mg/L	0.000035	0.00013	mg/L	0.000035	28.07%
Ca 227.549	102358.9	97.9	mg/L	0.68	97.9	mg/L	0.68	0.69%
Cd 228.802	52.8	0.00005	mg/L	0.000014	0.00005	mg/L	0.000014	28.33%
Co 228.616	110.5	0.00126	mg/L	0.000013	0.00126	mg/L	0.000013	1.06%
Cr 267.716	-237.8	-0.00035	mg/L	0.000052	-0.00035	mg/L	0.000052	15.07%
Cu 327.396	282.3	0.00102	mg/L	0.000003	0.00102	mg/L	0.000003	0.32%
Fe 261.387	92433.6	6.17	mg/L	0.028	6.17	mg/L	0.028	0.45%
Mg 279.079	1012129.9	28.3	mg/L	0.05	28.3	mg/L	0.05	0.16%
Mn 257.610	299230.4	0.292	mg/L	0.0022	0.292	mg/L	0.0022	0.76%
Mo 202.030	2522.6	0.0269	mg/L	0.00019	0.0269	mg/L	0.00019	0.70%
Ni 231.604	79.8	0.00068	mg/L	0.000011	0.00068	mg/L	0.000011	1.56%

Pb 220.353	81.6	0.00290 mg/L	0.000336	0.00290 mg/L	0.000336	11.60%
Sb 206.833	52.5	0.00176 mg/L	0.000214	0.00176 mg/L	0.000214	12.19%
Se 196.026	9.7	-0.00061 mg/L	0.000200	-0.00061 mg/L	0.000200	32.88%
Si 288.158	620863.2	9.06 mg/L	0.004	9.06 mg/L	0.004	0.05%
Sn 189.933	-339.2	-0.0162 mg/L	0.00003	-0.0162 mg/L	0.00003	0.18%
Ti 337.280	-93.6	0.00032 mg/L	0.000032	0.00032 mg/L	0.000032	10.09%
Tl 190.800	2.1	0.00513 mg/L	0.007259	0.00513 mg/L	0.007259	141.58%
V 292.402	-101.6	0.00003 mg/L	0.000031	0.00003 mg/L	0.000031	115.82%
Zn 206.200	778.7	0.00222 mg/L	0.000005	0.00222 mg/L	0.000005	0.23%
K 766.490	13609.9	0.799 mg/L	0.0188	0.799 mg/L	0.0188	2.35%
Na 589.592	448494.9	9.85 mg/L	0.017	9.85 mg/L	0.017	0.17%
Sr 407.771	1039831.1	0.426 mg/L	0.0015	0.426 mg/L	0.0015	0.36%

Sequence No.: 17 — **Autosampler Location: 49**
Sample ID: L030450507 — **Date Collected: 5/2/2003 4:05:55 PM**
Analyst: MSW/SLP
Sample Wt: — **Sample Prep Volume:**
Dilution: — **Data Type: Original**

Mean Data: L030450507

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	5011768.6						37342.49	0.75%
Ag 328.068	613.7	0.00140	mg/L	0.000032	0.00140	mg/L	0.000032	2.27%
Al 237.312	552.1	0.0254	mg/L	0.00006	0.0254	mg/L	0.00006	0.22%
As 188.979	61.6	0.00548	mg/L	0.000132	0.00548	mg/L	0.000132	2.40%
Ba 230.424	14412.4	0.0647	mg/L	0.00005	0.0647	mg/L	0.00005	0.07%
Be 234.861	74.9	0.00006	mg/L	0.000013	0.00006	mg/L	0.000013	23.14%
Ca 227.549	96979.0	92.9	mg/L	0.14	92.9	mg/L	0.14	0.15%
Cd 228.802	25.2	-0.00003	mg/L	0.000009	-0.00003	mg/L	0.000009	31.82%
Co 228.616	56.8	0.00059	mg/L	0.000005	0.00059	mg/L	0.000005	0.83%
Cr 267.716	-61.9	0.00023	mg/L	0.000077	0.00023	mg/L	0.000077	33.16%
Cu 327.396	270.2	0.00098	mg/L	0.000127	0.00098	mg/L	0.000127	13.00%
Fe 261.387	6844.7	0.463	mg/L	0.0018	0.463	mg/L	0.0018	0.38%
Mg 279.079	1047307.5	29.3	mg/L	0.19	29.3	mg/L	0.19	0.65%
Mn 257.610	1040442.8	1.02	mg/L	0.006	1.02	mg/L	0.006	0.61%
Mo 202.030	917.6	0.00978	mg/L	0.000119	0.00978	mg/L	0.000119	1.22%
Ni 231.604	155.7	0.00118	mg/L	0.000044	0.00118	mg/L	0.000044	3.74%
Pb 220.353	48.5	0.00219	mg/L	0.000015	0.00219	mg/L	0.000015	0.70%
Sb 206.833	40.9	0.00144	mg/L	0.000068	0.00144	mg/L	0.000068	4.67%
Se 196.026	29.9	0.00278	mg/L	0.001302	0.00278	mg/L	0.001302	46.84%
Si 288.158	363869.6	5.33	mg/L	0.009	5.33	mg/L	0.009	0.17%
Sn 189.933	-342.0	-0.0164	mg/L	0.00023	-0.0164	mg/L	0.00023	1.43%
Ti 337.280	-118.9	0.00006	mg/L	0.000072	0.00006	mg/L	0.000072	118.47%
Tl 190.800	1.9	0.00637	mg/L	0.000479	0.00637	mg/L	0.000479	7.52%
V 292.402	-11.9	-0.00002	mg/L	0.000052	-0.00002	mg/L	0.000052	315.08%
Zn 206.200	994.3	0.00349	mg/L	0.000045	0.00349	mg/L	0.000045	1.30%
K 766.490	24171.8	1.44	mg/L	0.010	1.44	mg/L	0.010	0.71%
Na 589.592	755370.7	16.6	mg/L	0.06	16.6	mg/L	0.06	0.37%
Sr 407.771	1473028.7	0.601	mg/L	0.0014	0.601	mg/L	0.0014	0.24%

Sequence No.: 18 — **Autosampler Location: 50**
Sample ID: L030450508 — **Date Collected: 5/2/2003 4:10:48 PM**
Analyst: MSW/SLP
Sample Wt: — **Sample Prep Volume:**
Dilution: — **Data Type: Original**

Mean Data: L030450508

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4981087.0						73213.42	1.47%
Ag 328.068	503.8	0.00115	mg/L	0.000062	0.00115	mg/L	0.000062	5.34%
Al 237.312	345.4	0.0186	mg/L	0.00003	0.0186	mg/L	0.00003	0.15%
As 188.979	3.1	0.00025	mg/L	0.000059	0.00025	mg/L	0.000059	23.32%
Ba 230.424	22633.6	0.101	mg/L	0.0021	0.101	mg/L	0.0021	2.08%
Be 234.861	88.7	0.00008	mg/L	0.000026	0.00008	mg/L	0.000026	33.64%
Ca 227.549	90780.7	87.0	mg/L	1.39	87.0	mg/L	1.39	1.60%
Cd 228.802	20.9	-0.00002	mg/L	0.000025	-0.00002	mg/L	0.000025	124.06%

Co 228.616	614.0	0.00496	mg/L	0.000028	0.00496	mg/L	0.000028	0.57%
Cr 267.716	-164.9	-0.00027	mg/L	0.000038	-0.00027	mg/L	0.000038	14.06%
Cu 327.396	482.2	0.00175	mg/L	0.000052	0.00175	mg/L	0.000052	2.99%
Fe 261.387	6368.6	0.427	mg/L	0.0022	0.427	mg/L	0.0022	0.51%
Mg 279.079	981347.6	27.4	mg/L	0.40	27.4	mg/L	0.40	1.44%
Mn 257.610	109014.1	0.106	mg/L	0.0019	0.106	mg/L	0.0019	1.79%
Mo 202.030	1305.2	0.0139	mg/L	0.00001	0.0139	mg/L	0.00001	0.08%
Ni 231.604	58.4	0.00045	mg/L	0.000013	0.00045	mg/L	0.000013	2.84%
Pb 220.353	41.4	0.00187	mg/L	0.000196	0.00187	mg/L	0.000196	10.45%
Sb 206.833	42.9	0.00190	mg/L	0.000124	0.00190	mg/L	0.000124	6.52%
Se 196.026	21.7	0.00199	mg/L	0.000614	0.00199	mg/L	0.000614	30.83%
Si 288.158	529670.9	7.73	mg/L	0.113	7.73	mg/L	0.113	1.46%
Sn 189.933	-324.9	-0.0156	mg/L	0.00001	-0.0156	mg/L	0.00001	0.09%
Ti 337.280	-128.0	0.00004	mg/L	0.000029	0.00004	mg/L	0.000029	69.13%
Tl 190.800	0.8	0.00254	mg/L	0.001009	0.00254	mg/L	0.001009	39.64%
V 292.402	-17.3	-0.00005	mg/L	0.000031	-0.00005	mg/L	0.000031	63.84%
Zn 206.200	482.5	0.00102	mg/L	0.000112	0.00102	mg/L	0.000112	11.00%
K 766.490	34510.9	2.08	mg/L	0.015	2.08	mg/L	0.015	0.73%
Na 589.592	390031.6	8.56	mg/L	0.189	8.56	mg/L	0.189	2.21%
Sr 407.771	817396.0	0.336	mg/L	0.0069	0.336	mg/L	0.0069	2.05%

Sequence No.: 19 **Autosampler Location: 51**
Sample ID: L030450512 **Date Collected: 5/2/2003 4:15:41 PM**
Analyst: MSW/SLP
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: L030450512

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4995919.7						38777.28	0.78%
Ag 328.068	375.7	0.00086	mg/L	0.000019	0.00086	mg/L	0.000019	2.21%
Al 237.312	669.8	0.0206	mg/L	0.00219	0.0206	mg/L	0.00219	10.66%
As 188.979	55.9	0.00516	mg/L	0.000031	0.00516	mg/L	0.000031	0.60%
Ba 230.424	169683.0	0.758	mg/L	0.0056	0.758	mg/L	0.0056	0.74%
Be 234.861	236.3	0.00006	mg/L	0.000014	0.00006	mg/L	0.000014	24.74%
Ca 227.549	71410.0	68.3	mg/L	0.28	68.3	mg/L	0.28	0.41%
Cd 228.802	85.5	0.00019	mg/L	0.000007	0.00019	mg/L	0.000007	3.67%
Co 228.616	-11.1	0.00091	mg/L	0.000042	0.00091	mg/L	0.000042	4.56%
Cr 267.716	-178.7	-0.00026	mg/L	0.000041	-0.00026	mg/L	0.000041	15.89%
Cu 327.396	226.6	0.00082	mg/L	0.000000	0.00082	mg/L	0.000000	0.06%
Fe 261.387	44749.6	2.99	mg/L	0.016	2.99	mg/L	0.016	0.54%
Mg 279.079	908878.3	25.4	mg/L	0.25	25.4	mg/L	0.25	0.97%
Mn 257.610	138306.9	0.135	mg/L	0.0011	0.135	mg/L	0.0011	0.78%
Mo 202.030	2856.3	0.0304	mg/L	0.00002	0.0304	mg/L	0.00002	0.07%
Ni 231.604	203.7	0.00157	mg/L	0.000102	0.00157	mg/L	0.000102	6.48%
Pb 220.353	45.0	0.00168	mg/L	0.000041	0.00168	mg/L	0.000041	2.44%
Sb 206.833	43.1	0.00173	mg/L	0.000292	0.00173	mg/L	0.000292	16.83%
Se 196.026	6.4	-0.00013	mg/L	0.000290	-0.00013	mg/L	0.000290	225.31%
Si 288.158	493277.9	7.20	mg/L	0.057	7.20	mg/L	0.057	0.79%
Sn 189.933	-314.1	-0.0152	mg/L	0.00037	-0.0152	mg/L	0.00037	2.42%
Ti 337.280	-69.1	0.00017	mg/L	0.000009	0.00017	mg/L	0.000009	5.09%
Tl 190.800	3.7	0.0115	mg/L	0.00123	0.0115	mg/L	0.00123	10.66%
V 292.402	-51.8	0.00001	mg/L	0.000009	0.00001	mg/L	0.000009	72.91%
Zn 206.200	622.1	0.00171	mg/L	0.000036	0.00171	mg/L	0.000036	2.09%
K 766.490	52585.5	3.19	mg/L	0.053	3.19	mg/L	0.053	1.67%
Na 589.592	860474.9	18.9	mg/L	0.15	18.9	mg/L	0.15	0.81%
Sr 407.771	6532143.4	2.64	mg/L	0.032	2.64	mg/L	0.032	1.22%

Sequence No.: 20 **Autosampler Location: 52**
Sample ID: L030450513 **Date Collected: 5/2/2003 4:20:36 PM**
Analyst: MSW/SLP
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: L030450513

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD

Y 360.073	4954960.4					10547.50	0.21%
Ag 328.068	469.7	0.00107	mg/L	0.000115	0.00107 mg/L	0.000115	10.76%
Al 237.312	512.9	0.0248	mg/L	0.00016	0.0248 mg/L	0.00016	0.65%
As 188.979	128.6	0.0115	mg/L	0.00100	0.0115 mg/L	0.00100	8.71%
Ba 230.424	42676.6	0.191	mg/L	0.0021	0.191 mg/L	0.0021	1.09%
Be 234.861	143.1	0.00008	mg/L	0.000008	0.00008 mg/L	0.000008	9.68%
Ca 227.549	88912.0	85.2	mg/L	0.96	85.2 mg/L	0.96	1.13%
Cd 228.802	43.1	0.00002	mg/L	0.000013	0.00002 mg/L	0.000013	86.95%
Co 228.616	70.4	0.00086	mg/L	0.000012	0.00086 mg/L	0.000012	1.39%
Cr 267.716	-163.6	-0.00006	mg/L	0.000033	-0.00006 mg/L	0.000033	52.34%
Cu 327.396	235.2	0.00085	mg/L	0.000066	0.00085 mg/L	0.000066	7.73%
Fe 261.387	18487.4	1.24	mg/L	0.030	1.24 mg/L	0.030	2.41%
Mg 279.079	1335545.7	37.4	mg/L	0.11	37.4 mg/L	0.11	0.30%
Mn 257.610	471675.2	0.460	mg/L	0.0012	0.460 mg/L	0.0012	0.25%
Mo 202.030	1765.5	0.0188	mg/L	0.00005	0.0188 mg/L	0.00005	0.27%
Ni 231.604	116.7	0.00090	mg/L	0.000081	0.00090 mg/L	0.000081	9.04%
Pb 220.353	51.5	0.00223	mg/L	0.000119	0.00223 mg/L	0.000119	5.32%
Sb 206.833	22.1	0.00080	mg/L	0.000260	0.00080 mg/L	0.000260	32.67%
Se 196.026	18.6	0.00149	mg/L	0.000741	0.00149 mg/L	0.000741	49.69%
Si 288.158	459137.5	6.71	mg/L	0.008	6.71 mg/L	0.008	0.12%
Sn 189.933	-322.6	-0.0155	mg/L	0.00053	-0.0155 mg/L	0.00053	3.39%
Ti 337.280	-197.7	0.00001	mg/L	0.000029	0.00001 mg/L	0.000029	297.60%
Tl 190.800	2.7	0.00870	mg/L	0.010476	0.00870 mg/L	0.010476	120.40%
V 292.402	-38.1	-0.00008	mg/L	0.000015	-0.00008 mg/L	0.000015	18.65%
Zn 206.200	292.6	-0.00046	mg/L	0.000067	-0.00046 mg/L	0.000067	14.72%
K 766.490	38216.4	2.29	mg/L	0.007	2.29 mg/L	0.007	0.30%
Na 589.592	608773.1	13.4	mg/L	0.02	13.4 mg/L	0.02	0.11%
Sr 407.771	647369.0	0.267	mg/L	0.0004	0.267 mg/L	0.0004	0.15%

Sequence No.: 21
Sample ID: L030450514
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 53
Date Collected: 5/2/2003 4:25:28 PM

Sample Prep Volume:
Data Type: Original

Mean Data: L030450514

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	5064866.2						65219.37	1.29%
Ag 328.068	472.3	0.00108	mg/L	0.000019	0.00108	mg/L	0.000019	1.80%
Al 237.312	581.6	0.0270	mg/L	0.00073	0.0270	mg/L	0.00073	2.71%
As 188.979	135.6	0.0121	mg/L	0.00006	0.0121	mg/L	0.00006	0.48%
Ba 230.424	44415.0	0.199	mg/L	0.0019	0.199	mg/L	0.0019	0.95%
Be 234.861	148.1	0.00007	mg/L	0.000015	0.00007	mg/L	0.000015	20.03%
Ca 227.549	91971.6	88.1	mg/L	0.92	88.1	mg/L	0.92	1.04%
Cd 228.802	44.0	0.00001	mg/L	0.000004	0.00001	mg/L	0.000004	32.93%
Co 228.616	73.3	0.00090	mg/L	0.000012	0.00090	mg/L	0.000012	1.34%
Cr 267.716	-172.4	-0.00007	mg/L	0.000036	-0.00007	mg/L	0.000036	53.19%
Cu 327.396	267.9	0.00097	mg/L	0.000042	0.00097	mg/L	0.000042	4.33%
Fe 261.387	20923.9	1.40	mg/L	0.019	1.40	mg/L	0.019	1.35%
Mg 279.079	1397852.9	39.1	mg/L	0.59	39.1	mg/L	0.59	1.52%
Mn 257.610	486082.4	0.474	mg/L	0.0074	0.474	mg/L	0.0074	1.56%
Mo 202.030	1857.1	0.0198	mg/L	0.00008	0.0198	mg/L	0.00008	0.43%
Ni 231.604	101.6	0.00078	mg/L	0.000026	0.00078	mg/L	0.000026	3.35%
Pb 220.353	45.5	0.00192	mg/L	0.000047	0.00192	mg/L	0.000047	2.44%
Sb 206.833	36.4	0.00142	mg/L	0.000253	0.00142	mg/L	0.000253	17.86%
Se 196.026	13.8	0.00098	mg/L	0.000441	0.00098	mg/L	0.000441	44.95%
Si 288.158	480269.1	7.02	mg/L	0.097	7.02	mg/L	0.097	1.39%
Sn 189.933	-334.3	-0.0161	mg/L	0.00013	-0.0161	mg/L	0.00013	0.80%
Ti 337.280	-183.9	0.00003	mg/L	0.000039	0.00003	mg/L	0.000039	116.07%
Tl 190.800	2.4	0.00751	mg/L	0.000585	0.00751	mg/L	0.000585	7.79%
V 292.402	-37.0	-0.00006	mg/L	0.000003	-0.00006	mg/L	0.000003	4.76%
Zn 206.200	569.6	0.00083	mg/L	0.000024	0.00083	mg/L	0.000024	2.85%
K 766.490	40054.9	2.40	mg/L	0.011	2.40	mg/L	0.011	0.47%
Na 589.592	629486.3	13.8	mg/L	0.20	13.8	mg/L	0.20	1.47%
Sr 407.771	669758.4	0.276	mg/L	0.0042	0.276	mg/L	0.0042	1.52%

Sequence No.: 22
Sample ID: L030450515

Autosampler Location: 54
Date Collected: 5/2/2003 4:30:22 PM

Analyst: MSW/SLP
Sample Wt: Sample Prep Volume:
Dilution: Data Type: Original

Mean Data: L030450515

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	5040373.0						65007.51	1.29%
Ag 328.068	463.7	0.00106	mg/L	0.000003	0.00106	mg/L	0.000003	0.31%
Al 237.312	304.7	0.0226	mg/L	0.00026	0.0226	mg/L	0.00026	1.15%
As 188.979	-0.8	-0.00012	mg/L	0.000444	-0.00012	mg/L	0.000444	356.79%
Ba 230.424	27613.4	0.124	mg/L	0.0012	0.124	mg/L	0.0012	1.00%
Be 234.861	61.3	0.00008	mg/L	0.000002	0.00008	mg/L	0.000002	2.98%
Ca 227.549	111600.8	107	mg/L	1.4	107	mg/L	1.4	1.35%
Cd 228.802	31.7	-0.00001	mg/L	0.000002	-0.00001	mg/L	0.000002	11.61%
Co 228.616	-23.1	0.00005	mg/L	0.000039	0.00005	mg/L	0.000039	75.87%
Cr 267.716	-212.2	-0.00031	mg/L	0.000008	-0.00031	mg/L	0.000008	2.74%
Cu 327.396	307.7	0.00112	mg/L	0.000023	0.00112	mg/L	0.000023	2.09%
Fe 261.387	-129.3	-0.00665	mg/L	0.000375	-0.00665	mg/L	0.000375	5.65%
Mg 279.079	1398982.3	39.1	mg/L	0.57	39.1	mg/L	0.57	1.45%
Mn 257.610	7885.0	0.00727	mg/L	0.000009	0.00727	mg/L	0.000009	0.12%
Mo 202.030	969.8	0.0103	mg/L	0.00003	0.0103	mg/L	0.00003	0.33%
Ni 231.604	28.1	0.00021	mg/L	0.000005	0.00021	mg/L	0.000005	2.24%
Pb 220.353	52.2	0.00244	mg/L	0.000383	0.00244	mg/L	0.000383	15.74%
Sb 206.833	51.1	0.00233	mg/L	0.000095	0.00233	mg/L	0.000095	4.06%
Se 196.026	23.4	0.00227	mg/L	0.000079	0.00227	mg/L	0.000079	3.51%
Si 288.158	338384.0	4.97	mg/L	0.071	4.97	mg/L	0.071	1.43%
Sn 189.933	-343.8	-0.0163	mg/L	0.00012	-0.0163	mg/L	0.00012	0.75%
Ti 337.280	-222.8	-0.00003	mg/L	0.000018	-0.00003	mg/L	0.000018	66.02%
Tl 190.800	0.2	0.00057	mg/L	0.006153	0.00057	mg/L	0.006153	>999.9%
V 292.402	-7.2	-0.00004	mg/L	0.000003	-0.00004	mg/L	0.000003	6.54%
Zn 206.200	79.6	-0.00156	mg/L	0.000041	-0.00156	mg/L	0.000041	2.63%
K 766.490	41859.4	2.51	mg/L	0.059	2.51	mg/L	0.059	2.34%
Na 589.592	483291.4	10.6	mg/L	0.32	10.6	mg/L	0.32	3.02%
Sr 407.771	789233.1	0.325	mg/L	0.0090	0.325	mg/L	0.0090	2.77%

Sequence No.: 23 Autosampler Location: 5
Sample ID: CCV Date Collected: 5/2/2003 4:35:18 PM
Analyst:
Sample Wt: Sample Prep Volume:
Dilution: Data Type: Original

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4824403.9						130524.86	2.71%
Ag 328.068	178442.7	0.408	mg/L	0.0032	0.408	mg/L	0.0032	0.78%
QC value within limits for Ag 328.068 Recovery = 101.98%								
Al 237.312	326992.5	9.91	mg/L	0.099	9.91	mg/L	0.099	1.00%
QC value within limits for Al 237.312 Recovery = 99.10%								
As 188.979	4440.2	0.389	mg/L	0.0014	0.389	mg/L	0.0014	0.37%
QC value within limits for As 188.979 Recovery = 97.28%								
Ba 230.424	234711.6	1.05	mg/L	0.010	1.05	mg/L	0.010	0.95%
QC value within limits for Ba 230.424 Recovery = 104.66%								
Be 234.861	41947.5	0.0518	mg/L	0.00055	0.0518	mg/L	0.00055	1.07%
QC value within limits for Be 234.861 Recovery = 103.67%								
Ca 227.549	10870.0	10.2	mg/L	0.01	10.2	mg/L	0.01	0.09%
QC value within limits for Ca 227.549 Recovery = 101.59%								
Cd 228.802	15771.8	0.0491	mg/L	0.00014	0.0491	mg/L	0.00014	0.28%
QC value within limits for Cd 228.802 Recovery = 98.28%								
Co 228.616	26812.5	0.208	mg/L	0.0022	0.208	mg/L	0.0022	1.04%
QC value within limits for Co 228.616 Recovery = 104.06%								
Cr 267.716	111680.4	0.514	mg/L	0.0054	0.514	mg/L	0.0054	1.04%
QC value within limits for Cr 267.716 Recovery = 102.71%								
Cu 327.396	142025.0	0.516	mg/L	0.0041	0.516	mg/L	0.0041	0.79%
QC value within limits for Cu 327.396 Recovery = 103.28%								
Fe 261.387	59686.4	4.00	mg/L	0.051	4.00	mg/L	0.051	1.28%
QC value within limits for Fe 261.387 Recovery = 99.98%								
Mg 279.079	361202.6	10.1	mg/L	0.11	10.1	mg/L	0.11	1.05%

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   QC value within limits for Mg  279.079  Recovery = 100.63%
Mn 257.610          524293.2       0.512 mg/L        0.0046       0.512 mg/L        0.0046   0.91%
   QC value within limits for Mn 257.610  Recovery = 102.35%
Mo 202.030           95567.6        1.02 mg/L         0.006        1.02 mg/L         0.006   0.60%
   QC value within limits for Mo 202.030  Recovery = 102.39%
Ni 231.604           68922.7       0.520 mg/L        0.0062       0.520 mg/L        0.0062   1.19%
   QC value within limits for Ni 231.604  Recovery = 103.97%
Pb 220.353           10982.2       0.512 mg/L        0.0008       0.512 mg/L        0.0008   0.15%
   QC value within limits for Pb 220.353  Recovery = 102.38%
Sb 206.833           28007.6        1.24 mg/L         0.002        1.24 mg/L         0.002   0.20%
   QC value within limits for Sb 206.833  Recovery = 102.66%
Se 196.026            4222.6       0.405 mg/L        0.0007       0.405 mg/L        0.0007   0.17%
   QC value within limits for Se 196.026  Recovery = 101.35%
Si 288.158          359252.2        5.22 mg/L         0.057        5.22 mg/L         0.057   1.10%
   QC value within limits for Si 288.158  Recovery = 104.49%
Sn 189.933           19688.6        1.00 mg/L         0.008        1.00 mg/L         0.008   0.80%
   QC value within limits for Sn 189.933  Recovery = 100.40%
Ti 337.280          1146205.3        1.02 mg/L         0.026        1.02 mg/L         0.026   2.53%
   QC value within limits for Ti 337.280  Recovery = 102.03%
Tl 190.800              148.0       0.507 mg/L        0.0139       0.507 mg/L        0.0139   2.73%
   QC value within limits for Tl 190.800  Recovery = 101.44%
V 292.402           192719.4        1.03 mg/L         0.008        1.03 mg/L         0.008   0.75%
   QC value within limits for V 292.402  Recovery = 103.42%
Zn 206.200          202534.9        1.01 mg/L         0.013        1.01 mg/L         0.013   1.29%
   QC value within limits for Zn 206.200  Recovery = 100.93%
K 766.490           808314.0        49.4 mg/L          1.45        49.4 mg/L          1.45   2.93%
   QC value within limits for K 766.490  Recovery = 98.88%
Na 589.592         2318448.1        50.9 mg/L          1.56        50.9 mg/L          1.56   3.06%
   QC value within limits for Na 589.592  Recovery = 101.82%
Sr 407.771         2449707.0       0.995 mg/L        0.0256       0.995 mg/L        0.0256   2.57%
   QC value within limits for Sr 407.771  Recovery = 99.49%
All analytes passed QC.
```

Sequence No.: 24 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 5/2/2003 4:40:14 PM**
Analyst:
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	3971458.4						102820.97	2.59%
Ag 328.068	1.5	0.00000	mg/L	0.000019	0.00000	mg/L	0.000019	565.24%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 237.312	-50.7	-0.00153	mg/L	0.000210	-0.00153	mg/L	0.000210	13.73%
QC value within limits for Al 237.312 Recovery = Not calculated								
As 188.979	0.2	0.00001	mg/L	0.000947	0.00001	mg/L	0.000947	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 230.424	32.3	0.00014	mg/L	0.000005	0.00014	mg/L	0.000005	3.47%
QC value within limits for Ba 230.424 Recovery = Not calculated								
Be 234.861	-13.0	-0.00002	mg/L	0.000010	-0.00002	mg/L	0.000010	63.82%
QC value within limits for Be 234.861 Recovery = Not calculated								
Ca 227.549	1.7	0.00163	mg/L	0.006103	0.00163	mg/L	0.006103	374.63%
QC value within limits for Ca 227.549 Recovery = Not calculated								
Cd 228.802	6.7	0.00002	mg/L	0.000007	0.00002	mg/L	0.000007	33.49%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616	-10.9	-0.00008	mg/L	0.000019	-0.00008	mg/L	0.000019	22.10%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716	39.3	0.00018	mg/L	0.000044	0.00018	mg/L	0.000044	24.50%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.396	-21.0	-0.00008	mg/L	0.000026	-0.00008	mg/L	0.000026	34.25%
QC value within limits for Cu 327.396 Recovery = Not calculated								
Fe 261.387	-26.0	-0.00174	mg/L	0.000480	-0.00174	mg/L	0.000480	27.56%
QC value within limits for Fe 261.387 Recovery = Not calculated								
Mg 279.079	45.9	0.00128	mg/L	0.000258	0.00128	mg/L	0.000258	20.12%
QC value within limits for Mg 279.079 Recovery = Not calculated								
Mn 257.610	50.7	0.00005	mg/L	0.000004	0.00005	mg/L	0.000004	7.19%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.030	7.6	0.00008	mg/L	0.000020	0.00008	mg/L	0.000020	24.29%

QC value within limits for Mo 202.030 Recovery = Not calculated

Ni 231.604	0.8	0.00001	mg/L	0.000011	0.00001	mg/L	0.000011	190.96%

QC value within limits for Ni 231.604 Recovery = Not calculated

Pb 220.353	4.4	0.00020	mg/L	0.000346	0.00020	mg/L	0.000346	169.08%

QC value within limits for Pb 220.353 Recovery = Not calculated

Sb 206.833	-7.5	-0.00034	mg/L	0.000026	-0.00034	mg/L	0.000026	7.81%

QC value within limits for Sb 206.833 Recovery = Not calculated

Se 196.026	5.0	0.00049	mg/L	0.000096	0.00049	mg/L	0.000096	19.68%

QC value within limits for Se 196.026 Recovery = Not calculated

Si 288.158	41.5	0.00060	mg/L	0.000094	0.00060	mg/L	0.000094	15.63%

QC value within limits for Si 288.158 Recovery = Not calculated

Sn 189.933	44.4	0.00225	mg/L	0.000561	0.00225	mg/L	0.000561	24.92%

QC value within limits for Sn 189.933 Recovery = Not calculated

Ti 337.280	9.8	0.00001	mg/L	0.000036	0.00001	mg/L	0.000036	415.68%

QC value within limits for Ti 337.280 Recovery = Not calculated

Tl 190.800	1.0	0.00331	mg/L	0.001268	0.00331	mg/L	0.001268	38.32%

QC value within limits for Tl 190.800 Recovery = Not calculated

V 292.402	26.7	0.00014	mg/L	0.000019	0.00014	mg/L	0.000019	13.44%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 206.200	-292.6	-0.00146	mg/L	0.000039	-0.00146	mg/L	0.000039	2.69%

QC value within limits for Zn 206.200 Recovery = Not calculated

K 766.490	200.1	0.0122	mg/L	0.00698	0.0122	mg/L	0.00698	57.06%

QC value within limits for K 766.490 Recovery = Not calculated

Na 589.592	-79.7	-0.00175	mg/L	0.001126	-0.00175	mg/L	0.001126	64.31%

QC value within limits for Na 589.592 Recovery = Not calculated

Sr 407.771	-66.3	0.00589	mg/L	0.000030	0.00589	mg/L	0.000030	0.52%

QC value within limits for Sr 407.771 Recovery = Not calculated

All analytes passed QC.

Sequence No.: 25
Sample ID: L030450516
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 55
Date Collected: 5/2/2003 4:45:05 PM
Sample Prep Volume:
Data Type: Original

Mean Data: L030450516

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4835607.9						30650.31	0.63%
Ag 328.068	459.5	0.00105	mg/L	0.000128	0.00105	mg/L	0.000128	12.16%
Al 237.312	468.8	0.0209	mg/L	0.00049	0.0209	mg/L	0.00049	2.33%
As 188.979	35.6	0.00322	mg/L	0.000500	0.00322	mg/L	0.000500	15.51%
Ba 230.424	33306.6	0.149	mg/L	0.0021	0.149	mg/L	0.0021	1.42%
Be 234.861	142.5	0.00008	mg/L	0.000009	0.00008	mg/L	0.000009	11.15%
Ca 227.549	82225.2	78.8	mg/L	0.84	78.8	mg/L	0.84	1.06%
Cd 228.802	23.9	-0.00002	mg/L	0.000024	-0.00002	mg/L	0.000024	146.42%
Co 228.616	-21.6	0.00009	mg/L	0.000020	0.00009	mg/L	0.000020	22.98%
Cr 267.716	-69.8	0.00024	mg/L	0.000093	0.00024	mg/L	0.000093	39.33%
Cu 327.396	165.8	0.00060	mg/L	0.000214	0.00060	mg/L	0.000214	35.62%
Fe 261.387	18091.5	1.21	mg/L	0.022	1.21	mg/L	0.022	1.84%
Mg 279.079	1061952.6	29.7	mg/L	0.35	29.7	mg/L	0.35	1.18%
Mn 257.610	460841.6	0.450	mg/L	0.0039	0.450	mg/L	0.0039	0.87%
Mo 202.030	1489.3	0.0159	mg/L	0.00005	0.0159	mg/L	0.00005	0.29%
Ni 231.604	98.3	0.00076	mg/L	0.000014	0.00076	mg/L	0.000014	1.88%
Pb 220.353	55.2	0.00240	mg/L	0.000148	0.00240	mg/L	0.000148	6.15%
Sb 206.833	35.5	0.00137	mg/L	0.000778	0.00137	mg/L	0.000778	56.67%
Se 196.026	19.2	0.00156	mg/L	0.001572	0.00156	mg/L	0.001572	100.92%
Si 288.158	418926.6	6.12	mg/L	0.048	6.12	mg/L	0.048	0.78%
Sn 189.933	-284.0	-0.0136	mg/L	0.00007	-0.0136	mg/L	0.00007	0.50%
Ti 337.280	-177.5	0.00002	mg/L	0.000162	0.00002	mg/L	0.000162	984.19%
Tl 190.800	2.5	0.00801	mg/L	0.006630	0.00801	mg/L	0.006630	82.79%
V 292.402	-31.1	-0.00005	mg/L	0.000065	-0.00005	mg/L	0.000065	141.25%
Zn 206.200	232.0	-0.00038	mg/L	0.000002	-0.00038	mg/L	0.000002	0.52%
K 766.490	39828.2	2.40	mg/L	0.098	2.40	mg/L	0.098	4.09%
Na 589.592	431095.8	9.47	mg/L	0.435	9.47	mg/L	0.435	4.60%
Sr 407.771	1193597.6	0.488	mg/L	0.0205	0.488	mg/L	0.0205	4.20%

Sequence No.: 26
Sample ID: L030450517

Autosampler Location: 56
Date Collected: 5/2/2003 4:50:00 PM

Analyst: MSW/SLP
Sample Wt: Sample Prep Volume:
Dilution: Data Type: Original

Mean Data: L030450517

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	5121627.5						13174.22	0.26%
Ag 328.068	534.8	0.00122	mg/L	0.000020	0.00122	mg/L	0.000020	1.64%
Al 237.312	517.0	0.0213	mg/L	0.00127	0.0213	mg/L	0.00127	5.94%
As 188.979	-4.6	-0.00023	mg/L	0.000002	-0.00023	mg/L	0.000002	0.88%
Ba 230.424	79927.6	0.358	mg/L	0.0025	0.358	mg/L	0.0025	0.70%
Be 234.861	173.8	0.00006	mg/L	0.000049	0.00006	mg/L	0.000049	79.03%
Ca 227.549	111388.5	107	mg/L	0.7	107	mg/L	0.7	0.64%
Cd 228.802	36.7	0.00001	mg/L	0.000014	0.00001	mg/L	0.000014	153.90%
Co 228.616	-38.6	0.00022	mg/L	0.000036	0.00022	mg/L	0.000036	16.65%
Cr 267.716	-221.6	-0.00038	mg/L	0.000005	-0.00038	mg/L	0.000005	1.22%
Cu 327.396	226.0	0.00082	mg/L	0.000010	0.00082	mg/L	0.000010	1.16%
Fe 261.387	29035.9	1.94	mg/L	0.019	1.94	mg/L	0.019	1.00%
Mg 279.079	1163689.2	32.6	mg/L	0.00	32.6	mg/L	0.00	0.01%
Mn 257.610	84506.2	0.0822	mg/L	0.00060	0.0822	mg/L	0.00060	0.74%
Mo 202.030	877.0	0.00935	mg/L	0.000110	0.00935	mg/L	0.000110	1.18%
Ni 231.604	3.0	0.00005	mg/L	0.000022	0.00005	mg/L	0.000022	45.74%
Pb 220.353	69.2	0.00293	mg/L	0.000163	0.00293	mg/L	0.000163	5.55%
Sb 206.833	66.6	0.00279	mg/L	0.000005	0.00279	mg/L	0.000005	0.18%
Se 196.026	6.2	0.00011	mg/L	0.000926	0.00011	mg/L	0.000926	816.19%
Si 288.158	502531.4	7.35	mg/L	0.003	7.35	mg/L	0.003	0.04%
Sn 189.933	-340.9	-0.0162	mg/L	0.00011	-0.0162	mg/L	0.00011	0.65%
Ti 337.280	-127.2	0.00014	mg/L	0.000035	0.00014	mg/L	0.000035	26.23%
Tl 190.800	3.6	0.0113	mg/L	0.00224	0.0113	mg/L	0.00224	19.73%
V 292.402	-33.0	0.00000	mg/L	0.000010	0.00000	mg/L	0.000010	405.80%
Zn 206.200	116.2	-0.00113	mg/L	0.000031	-0.00113	mg/L	0.000031	2.77%
K 766.490	22749.3	1.35	mg/L	0.020	1.35	mg/L	0.020	1.49%
Na 589.592	331323.4	7.28	mg/L	0.159	7.28	mg/L	0.159	2.18%
Sr 407.771	1195215.4	0.488	mg/L	0.0088	0.488	mg/L	0.0088	1.79%

Sequence No.: 27 Autosampler Location: 57
Sample ID: L030450518 Date Collected: 5/2/2003 4:54:56 PM
Analyst: MSW/SLP
Sample Wt: Sample Prep Volume:
Dilution: Data Type: Original

Mean Data: L030450518

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4845789.5						15983.61	0.33%
Ag 328.068	504.0	0.00115	mg/L	0.000150	0.00115	mg/L	0.000150	13.02%
Al 237.312	986.1	0.0300	mg/L	0.00202	0.0300	mg/L	0.00202	6.71%
As 188.979	-5.3	0.00000	mg/L	0.000087	0.00000	mg/L	0.000087	>999.9%
Ba 230.424	54212.6	0.243	mg/L	0.0023	0.243	mg/L	0.0023	0.96%
Be 234.861	335.8	0.00009	mg/L	0.000050	0.00009	mg/L	0.000050	58.33%
Ca 227.549	119902.6	115	mg/L	1.2	115	mg/L	1.2	1.02%
Cd 228.802	23.8	-0.00004	mg/L	0.000025	-0.00004	mg/L	0.000025	64.91%
Co 228.616	3.6	0.00042	mg/L	0.000039	0.00042	mg/L	0.000039	9.43%
Cr 267.716	-240.0	-0.00034	mg/L	0.000019	-0.00034	mg/L	0.000019	5.50%
Cu 327.396	186.4	0.00068	mg/L	0.000064	0.00068	mg/L	0.000064	9.50%
Fe 261.387	62129.9	4.15	mg/L	0.036	4.15	mg/L	0.036	0.87%
Mg 279.079	1237009.2	34.6	mg/L	0.03	34.6	mg/L	0.03	0.07%
Mn 257.610	73369.9	0.0713	mg/L	0.00077	0.0713	mg/L	0.00077	1.07%
Mo 202.030	325.6	0.00347	mg/L	0.000093	0.00347	mg/L	0.000093	2.69%
Ni 231.604	-22.8	-0.00012	mg/L	0.000009	-0.00012	mg/L	0.000009	7.63%
Pb 220.353	60.3	0.00218	mg/L	0.000477	0.00218	mg/L	0.000477	21.89%
Sb 206.833	32.9	0.00105	mg/L	0.000211	0.00105	mg/L	0.000211	20.06%
Se 196.026	13.6	0.00028	mg/L	0.000585	0.00028	mg/L	0.000585	207.87%
Si 288.158	518528.5	7.59	mg/L	0.013	7.59	mg/L	0.013	0.17%
Sn 189.933	-348.4	-0.0165	mg/L	0.00058	-0.0165	mg/L	0.00058	3.51%
Ti 337.280	-218.6	0.00016	mg/L	0.000016	0.00016	mg/L	0.000016	10.47%
Tl 190.800	5.8	0.0183	mg/L	0.00254	0.0183	mg/L	0.00254	13.87%
V 292.402	-68.2	0.00000	mg/L	0.000031	0.00000	mg/L	0.000031	>999.9%

Zn 206.200	-128.7	-0.00256	mg/L	0.000010	-0.00256	mg/L	0.000010	0.41%
K 766.490	13159.5	0.764	mg/L	0.0076	0.764	mg/L	0.0076	0.99%
Na 589.592	438196.7	9.62	mg/L	0.077	9.62	mg/L	0.077	0.80%
Sr 407.771	1618220.4	0.659	mg/L	0.0022	0.659	mg/L	0.0022	0.34%

Sequence No.: 28
Sample ID: L030450519
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 58
Date Collected: 5/2/2003 4:59:52 PM
Sample Prep Volume:
Data Type: Original

Mean Data: L030450519

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4397498.7						82354.93	1.87%
Ag 328.068	62.0	0.00014	mg/L	0.000235	0.00014	mg/L	0.000235	166.03%
Al 237.312	-109.9	-0.00333	mg/L	0.000007	-0.00333	mg/L	0.000007	0.22%
As 188.979	0.9	0.00009	mg/L	0.000399	0.00009	mg/L	0.000399	466.53%
Ba 230.424	99.2	0.00045	mg/L	0.000047	0.00045	mg/L	0.000047	10.42%
Be 234.861	-24.5	-0.00003	mg/L	0.000003	-0.00003	mg/L	0.000003	10.35%
Ca 227.549	20.6	0.0198	mg/L	0.00617	0.0198	mg/L	0.00617	31.15%
Cd 228.802	0.5	0.00000	mg/L	0.000005	0.00000	mg/L	0.000005	369.94%
Co 228.616	-14.5	-0.00011	mg/L	0.000005	-0.00011	mg/L	0.000005	4.24%
Cr 267.716	12.6	0.00006	mg/L	0.000060	0.00006	mg/L	0.000060	103.63%
Cu 327.396	116.6	0.00042	mg/L	0.000215	0.00042	mg/L	0.000215	50.77%
Fe 261.387	-24.7	-0.00165	mg/L	0.000638	-0.00165	mg/L	0.000638	38.55%
Mg 279.079	121.0	0.00344	mg/L	0.000074	0.00344	mg/L	0.000074	2.16%
Mn 257.610	483.4	0.00047	mg/L	0.000004	0.00047	mg/L	0.000004	0.76%
Mo 202.030	-104.6	-0.00112	mg/L	0.000003	-0.00112	mg/L	0.000003	0.26%
Ni 231.604	5.0	0.00004	mg/L	0.000062	0.00004	mg/L	0.000062	164.67%
Pb 220.353	-3.0	-0.00014	mg/L	0.000066	-0.00014	mg/L	0.000066	47.13%
Sb 206.833	13.9	0.00061	mg/L	0.000368	0.00061	mg/L	0.000368	60.48%
Se 196.026	7.1	0.00069	mg/L	0.000624	0.00069	mg/L	0.000624	90.40%
Si 288.158	1043.3	0.0152	mg/L	0.00028	0.0152	mg/L	0.00028	1.82%
Sn 189.933	-2.8	-0.00014	mg/L	0.000042	-0.00014	mg/L	0.000042	29.31%
Ti 337.280	71.0	0.00006	mg/L	0.000022	0.00006	mg/L	0.000022	35.47%
Tl 190.800	2.0	0.00658	mg/L	0.002426	0.00658	mg/L	0.002426	36.85%
V 292.402	-17.8	-0.00010	mg/L	0.000039	-0.00010	mg/L	0.000039	40.63%
Zn 206.200	-275.4	-0.00138	mg/L	0.000017	-0.00138	mg/L	0.000017	1.26%
K 766.490	-54.2	-0.00332	mg/L	0.009339	-0.00332	mg/L	0.009339	281.08%
Na 589.592	11939.7	0.262	mg/L	0.0059	0.262	mg/L	0.0059	2.24%
Sr 407.771	161.0	0.00598	mg/L	0.000005	0.00598	mg/L	0.000005	0.08%

Sequence No.: 29
Sample ID: L030450520
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 59
Date Collected: 5/2/2003 5:04:46 PM
Sample Prep Volume:
Data Type: Original

Mean Data: L030450520

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4839718.2						89319.15	1.85%
Ag 328.068	406.4	0.00093	mg/L	0.000105	0.00093	mg/L	0.000105	11.26%
Al 237.312	547.3	0.0245	mg/L	0.00030	0.0245	mg/L	0.00030	1.25%
As 188.979	8.3	0.00073	mg/L	0.000388	0.00073	mg/L	0.000388	52.85%
Ba 230.424	23078.2	0.103	mg/L	0.0014	0.103	mg/L	0.0014	1.40%
Be 234.861	103.7	0.00009	mg/L	0.000013	0.00009	mg/L	0.000013	15.06%
Ca 227.549	92404.3	88.5	mg/L	1.05	88.5	mg/L	1.05	1.18%
Cd 228.802	31.0	0.00001	mg/L	0.000002	0.00001	mg/L	0.000002	19.99%
Co 228.616	622.7	0.00503	mg/L	0.000078	0.00503	mg/L	0.000078	1.55%
Cr 267.716	-99.7	0.00004	mg/L	0.000068	0.00004	mg/L	0.000068	189.98%
Cu 327.396	166.7	0.00061	mg/L	0.000230	0.00061	mg/L	0.000230	38.03%
Fe 261.387	8393.7	0.562	mg/L	0.0037	0.562	mg/L	0.0037	0.66%
Mg 279.079	988092.6	27.6	mg/L	0.41	27.6	mg/L	0.41	1.47%
Mn 257.610	110160.7	0.107	mg/L	0.0010	0.107	mg/L	0.0010	0.94%
Mo 202.030	1285.1	0.0137	mg/L	0.00010	0.0137	mg/L	0.00010	0.76%
Ni 231.604	74.9	0.00057	mg/L	0.000002	0.00057	mg/L	0.000002	0.28%

Pb 220.353	46.0	0.00207	mg/L	0.000367	0.00207	mg/L	0.000367	17.76%
Sb 206.833	16.6	0.00072	mg/L	0.000051	0.00072	mg/L	0.000051	7.08%
Se 196.026	3.3	0.00018	mg/L	0.001072	0.00018	mg/L	0.001072	606.77%
Si 288.158	540111.0	7.89	mg/L	0.127	7.89	mg/L	0.127	1.60%
Sn 189.933	-327.9	-0.0157	mg/L	0.00004	-0.0157	mg/L	0.00004	0.23%
Ti 337.280	158.5	0.00031	mg/L	0.000038	0.00031	mg/L	0.000038	12.50%
Tl 190.800	0.7	0.00205	mg/L	0.002151	0.00205	mg/L	0.002151	105.01%
V 292.402	-11.7	0.00000	mg/L	0.000039	0.00000	mg/L	0.000039	954.03%
Zn 206.200	36.2	-0.00123	mg/L	0.000053	-0.00123	mg/L	0.000053	4.32%
K 766.490	34522.0	2.08	mg/L	0.096	2.08	mg/L	0.096	4.63%
Na 589.592	405859.3	8.91	mg/L	0.445	8.91	mg/L	0.445	4.99%
Sr 407.771	849233.5	0.349	mg/L	0.0155	0.349	mg/L	0.0155	4.43%

Analysis Begun

Start Time: 5/2/2003 5:09:00 PM
Logged In Analyst: Administrator
Spectrometer Model: Optima 3000 DV

Plasma On Time: 5/2/2003 7:44:33 AM
Technique: ICP Continuous
Autosampler Model: AS-90

Sample Information File: C:\pe\Administrator\Sample Information\050203A.sif
Results Data Set: 050203A
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 1
Sample ID: L0304505029DL 0.04
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 60
Date Collected: 5/2/2003 5:09:01 PM

Sample Prep Volume:
Data Type: Original

Mean Data: L0304505028DL 0.04

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4115385.8						20370.01	0.49%
Ag 328.068	44.8	0.00010	mg/L	0.000210	0.00010	mg/L	0.000210	205.50%
Al 237.312	164.6	0.00527	mg/L	0.000151	0.00527	mg/L	0.000151	2.86%
As 188.979	0.6	0.00006	mg/L	0.000375	0.00006	mg/L	0.000375	639.18%
Ba 230.424	1195.6	0.00535	mg/L	0.000112	0.00535	mg/L	0.000112	2.10%
Be 234.861	-7.1	-0.00001	mg/L	0.000002	-0.00001	mg/L	0.000002	15.06%
Ca 227.549	3106.5	2.98	mg/L	0.032	2.98	mg/L	0.032	1.09%
Cd 228.802	-1.4	-0.00001	mg/L	0.000004	-0.00001	mg/L	0.000004	52.44%
Co 228.616	-9.2	-0.00006	mg/L	0.000018	-0.00006	mg/L	0.000018	28.67%
Cr 267.716	72.2	0.00035	mg/L	0.000024	0.00035	mg/L	0.000024	6.92%
Cu 327.396	17.6	0.00006	mg/L	0.000147	0.00006	mg/L	0.000147	231.24%
Fe 261.387	371.5	0.0248	mg/L	0.00089	0.0248	mg/L	0.00089	3.57%
Mg 279.079	36063.9	1.01	mg/L	0.023	1.01	mg/L	0.023	2.28%
Mn 257.610	3944.1	0.00384	mg/L	0.000036	0.00384	mg/L	0.000036	0.94%
Mo 202.030	-23.9	-0.00025	mg/L	0.000017	-0.00025	mg/L	0.000017	6.77%
Ni 231.604	7.3	0.00006	mg/L	0.000110	0.00006	mg/L	0.000110	199.07%
Pb 220.353	2.9	0.00013	mg/L	0.000216	0.00013	mg/L	0.000216	165.03%
Sb 206.833	-5.5	-0.00026	mg/L	0.000439	-0.00026	mg/L	0.000439	171.95%
Se 196.026	-6.2	-0.00061	mg/L	0.000267	-0.00061	mg/L	0.000267	43.95%
Si 288.158	13752.4	0.201	mg/L	0.0060	0.201	mg/L	0.0060	2.97%
Sn 189.933	-92.3	-0.00464	mg/L	0.000168	-0.00464	mg/L	0.000168	3.61%
Ti 337.280	-18.8	-0.00001	mg/L	0.000014	-0.00001	mg/L	0.000014	123.31%
Tl 190.800	0.5	0.00153	mg/L	0.001807	0.00153	mg/L	0.001807	118.09%
V 292.402	25.2	0.00014	mg/L	0.000016	0.00014	mg/L	0.000016	11.41%
Zn 206.200	319.3	0.00155	mg/L	0.000046	0.00155	mg/L	0.000046	2.97%
K 766.490	1305.6	0.0787	mg/L	0.00683	0.0787	mg/L	0.00683	8.68%
Na 589.592	16613.1	0.365	mg/L	0.0368	0.365	mg/L	0.0368	10.09%
Sr 407.771	20849.1	0.0143	mg/L	0.00089	0.0143	mg/L	0.00089	6.21%

Sequence No.: 2
Sample ID: L030459402 0.01
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 61
Date Collected: 5/2/2003 5:13:56 PM

Sample Prep Volume:
Data Type: Original

Mean Data: L030459402 0.01

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4057691.1						65297.66	1.61%
Ag 328.068	45.1	0.00010	mg/L	0.000147	0.00010	mg/L	0.000147	142.73%
Al 237.312	727.3	0.0221	mg/L	0.00010	0.0221	mg/L	0.00010	0.44%
As 188.979	-2.1	-0.00018	mg/L	0.000208	-0.00018	mg/L	0.000208	114.20%
Ba 230.424	665.9	0.00298	mg/L	0.000052	0.00298	mg/L	0.000052	1.74%
Be 234.861	-22.0	-0.00003	mg/L	0.000005	-0.00003	mg/L	0.000005	16.26%
Ca 227.549	537.6	0.515	mg/L	0.0022	0.515	mg/L	0.0022	0.43%
Cd 228.802	7.9	0.00002	mg/L	0.000029	0.00002	mg/L	0.000029	116.72%
Co 228.615	-12.4	-0.00009	mg/L	0.000004	-0.00009	mg/L	0.000004	3.79%

Cr 267.716	111.5	0.00052	mg/L	0.000064	0.00052	mg/L	0.000064	12.41%
Cu 327.396	600.8	0.00218	mg/L	0.000197	0.00218	mg/L	0.000197	9.05%
Fe 261.387	194.0	0.0130	mg/L	0.00041	0.0130	mg/L	0.00041	3.17%
Mg 279.079	9544.7	0.267	mg/L	0.0008	0.267	mg/L	0.0008	0.29%
Mn 257.610	990.9	0.00097	mg/L	0.000001	0.00097	mg/L	0.000001	0.08%
Mo 202.030	-37.6	-0.00040	mg/L	0.000031	-0.00040	mg/L	0.000031	7.78%
Ni 231.604	23.1	0.00017	mg/L	0.000021	0.00017	mg/L	0.000021	12.21%
Pb 220.353	23.1	0.00107	mg/L	0.000007	0.00107	mg/L	0.000007	0.65%
Sb 206.833	7.4	0.00031	mg/L	0.000154	0.00031	mg/L	0.000154	49.04%
Se 196.026	4.8	0.00046	mg/L	0.000029	0.00046	mg/L	0.000029	6.26%
Si 288.158	4211.7	0.0614	mg/L	0.00202	0.0614	mg/L	0.00202	3.28%
Sn 189.933	-27.8	-0.00140	mg/L	0.000211	-0.00140	mg/L	0.000211	15.07%
Ti 337.280	322.5	0.00029	mg/L	0.000021	0.00029	mg/L	0.000021	7.44%
Tl 190.800	0.8	0.00280	mg/L	0.000389	0.00280	mg/L	0.000389	13.87%
V 292.402	60.0	0.00033	mg/L	0.000026	0.00033	mg/L	0.000026	8.01%
Zn 206.200	1079.6	0.00539	mg/L	0.000022	0.00539	mg/L	0.000022	0.40%
K 766.490	2938.2	0.179	mg/L	0.0070	0.179	mg/L	0.0070	3.92%
Na 589.592	86668.0	1.90	mg/L	0.036	1.90	mg/L	0.036	1.87%
Sr 407.771	12382.2	0.0109	mg/L	0.00012	0.0109	mg/L	0.00012	1.08%

Analysis Begun

Start Time: 5/2/2003 5:26:11 PM
Logged In Analyst: Administrator
Spectrometer Model: Optima 3000 DV

Plasma On Time: 5/2/2003 7:44:33 AM
Technique: ICP Continuous
Autosampler Model: AS-90

Sample Information File: C:\pe\Administrator\Sample Information\050203A.sif
Results Data Set: 050203A
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 1
Sample ID: L030450518SDL 0.2
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 62
Data Collected: 5/2/2003 5:26:11 PM

Sample Prep Volume:
Data Type: Original

Mean Data: L030450518SDL 0.2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4403521.6						27354.65	0.62%
Ag 328.068	178.8	0.00041	mg/L	0.000001	0.00041	mg/L	0.000001	0.30%
Al 237.312	119.8	0.00430	mg/L	0.000227	0.00430	mg/L	0.000227	5.26%
As 188.979	-6.4	-0.00051	mg/L	0.000523	-0.00051	mg/L	0.000523	103.44%
Ba 230.424	10046.2	0.0450	mg/L	0.00057	0.0450	mg/L	0.00057	1.26%
Be 234.861	32.4	0.00000	mg/L	0.000018	0.00000	mg/L	0.000018	>999.9%
Ca 227.549	21278.9	20.4	mg/L	0.12	20.4	mg/L	0.12	0.58%
Cd 228.802	18.0	0.00004	mg/L	0.000025	0.00004	mg/L	0.000025	64.67%
Co 228.616	-7.2	0.00001	mg/L	0.000063	0.00001	mg/L	0.000063	451.05%
Cr 267.716	5.6	0.00015	mg/L	0.000006	0.00015	mg/L	0.000006	4.22%
Cu 327.396	32.5	0.00012	mg/L	0.000283	0.00012	mg/L	0.000283	240.28%
Fe 261.387	7713.0	0.515	mg/L	0.0019	0.515	mg/L	0.0019	0.37%
Mg 279.079	222052.9	6.21	mg/L	0.007	6.21	mg/L	0.007	0.12%
Mn 257.610	13887.2	0.0135	mg/L	0.00004	0.0135	mg/L	0.00004	0.33%
Mo 202.030	2.5	0.00003	mg/L	0.000004	0.00003	mg/L	0.000004	15.67%
Ni 231.604	7.1	0.00006	mg/L	0.000049	0.00006	mg/L	0.000049	81.26%
Pb 220.353	21.3	0.00091	mg/L	0.000145	0.00091	mg/L	0.000145	15.90%
Sb 206.833	9.1	0.00034	mg/L	0.000197	0.00034	mg/L	0.000197	57.26%
Se 196.026	7.9	0.00063	mg/L	0.000303	0.00063	mg/L	0.000303	47.81%
Si 288.158	91333.8	1.34	mg/L	0.003	1.34	mg/L	0.003	0.23%
Sn 189.933	-228.7	-0.0114	mg/L	0.00051	-0.0114	mg/L	0.00051	4.47%
Ti 337.280	-154.1	-0.00008	mg/L	0.000115	-0.00008	mg/L	0.000115	137.25%
Tl 190.800	1.1	0.00338	mg/L	0.001198	0.00338	mg/L	0.001198	35.44%
V 292.402	24.1	0.00018	mg/L	0.000040	0.00018	mg/L	0.000040	22.92%
Zn 206.200	468.5	0.00201	mg/L	0.000068	0.00201	mg/L	0.000068	3.40%
K 766.490	1842.4	0.105	mg/L	0.0035	0.105	mg/L	0.0035	3.37%
Na 589.592	69477.6	1.53	mg/L	0.034	1.53	mg/L	0.034	2.22%
Sr 407.771	264153.3	0.113	mg/L	0.0025	0.113	mg/L	0.0025	2.19%

Sequence No.: 2
Sample ID: L030450518SDL 0.04
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 63
Date Collected: 5/2/2003 5:31:07 PM

Sample Prep Volume:
Data Type: Original

Mean Data: L030450518SDL 0.04

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4234900.1						18985.38	0.45%
Ag 328.068	66.2	0.00015	mg/L	0.000029	0.00015	mg/L	0.000029	19.33%
Al 237.312	14.3	0.00060	mg/L	0.000220	0.00060	mg/L	0.000220	36.47%
As 188.979	-1.7	-0.00014	mg/L	0.000213	-0.00014	mg/L	0.000213	155.78%
Ba 230.424	2001.0	0.00896	mg/L	0.000031	0.00896	mg/L	0.000031	0.34%
Be 234.861	-16.1	-0.00003	mg/L	0.000004	-0.00003	mg/L	0.000004	14.34%
Ca 227.549	3900.3	3.73	mg/L	0.012	3.73	mg/L	0.012	0.32%
Cd 228.802	8.3	0.00002	mg/L	0.000001	0.00002	mg/L	0.000001	5.86%
Co 228.616	-12.5	-0.00008	mg/L	0.000042	-0.00008	mg/L	0.000042	50.67%

Cr 267.716	56.4	0.00028 mg/L	0.000002	0.00028 mg/L	0.000002	0.71%
Cu 327.396	-1.9	-0.00001 mg/L	0.000020	-0.00001 mg/L	0.000020	282.15%
Fe 261.387	1319.6	0.0881 mg/L	0.00073	0.0881 mg/L	0.00073	0.83%
Mg 279.079	43567.3	1.22 mg/L	0.000	1.22 mg/L	0.000	0.00%
Mn 257.610	2982.7	0.00290 mg/L	0.000029	0.00290 mg/L	0.000029	1.01%
Mo 202.030	-37.4	-0.00040 mg/L	0.000040	-0.00040 mg/L	0.000040	10.06%
Ni 231.604	-1.3	-0.00001 mg/L	0.000097	-0.00001 mg/L	0.000097	>999.9%
Pb 220.353	4.9	0.00021 mg/L	0.000351	0.00021 mg/L	0.000351	166.14%
Sb 206.833	2.7	0.00010 mg/L	0.000106	0.00010 mg/L	0.000106	105.20%
Se 196.026	2.3	0.00020 mg/L	0.000065	0.00020 mg/L	0.000065	32.71%
Si 288.158	16433.6	0.240 mg/L	0.0002	0.240 mg/L	0.0002	0.07%
Sn 189.933	-114.7	-0.00577 mg/L	0.000058	-0.00577 mg/L	0.000058	1.01%
Ti 337.280	-12.5	0.00000 mg/L	0.000072	0.00000 mg/L	0.000072	>999.9%
Tl 190.800	0.6	0.00209 mg/L	0.005480	0.00209 mg/L	0.005480	261.82%
V 292.402	28.1	0.00016 mg/L	0.000053	0.00016 mg/L	0.000053	32.90%
Zn 206.200	970.2	0.00479 mg/L	0.000219	0.00479 mg/L	0.000219	4.57%
K 766.490	690.0	0.0407 mg/L	0.00102	0.0407 mg/L	0.00102	2.50%
Na 589.592	12930.8	0.284 mg/L	0.0055	0.284 mg/L	0.0055	1.93%
Sr 407.771	49733.7	0.0260 mg/L	0.00013	0.0260 mg/L	0.00013	0.50%

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Sequence No.: 3 **Autosampler Location: 5**
Sample ID: CCV **Date Collected: 5/2/2003 5:35:56 PM**
Analyst:
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4989358.1						23968.47	0.48%
Ag 328.068	182719.3	0.418	mg/L	0.0008	0.418	mg/L	0.0008	0.20%
QC value within limits for Ag 328.068 Recovery = 104.42%								
Al 237.312	334952.2	10.2	mg/L	0.04	10.2	mg/L	0.04	0.36%
QC value within limits for Al 237.312 Recovery = 101.51%								
As 188.979	4521.6	0.396	mg/L	0.0010	0.396	mg/L	0.0010	0.26%
QC value within limits for As 188.979 Recovery = 99.05%								
Ba 230.424	239624.1	1.07	mg/L	0.002	1.07	mg/L	0.002	0.17%
QC value within limits for Ba 230.424 Recovery = 106.85%								
Be 234.861	42857.7	0.0530	mg/L	0.00016	0.0530	mg/L	0.00016	0.30%
QC value within limits for Be 234.861 Recovery = 105.91%								
Ca 227.549	11036.7	10.3	mg/L	0.06	10.3	mg/L	0.06	0.57%
QC value within limits for Ca 227.549 Recovery = 103.12%								
Cd 228.802	16019.8	0.0499	mg/L	0.00022	0.0499	mg/L	0.00022	0.44%
QC value within limits for Cd 228.802 Recovery = 99.81%								
Co 228.616	27460.2	0.213	mg/L	0.0013	0.213	mg/L	0.0013	0.61%
QC value within limits for Co 228.616 Recovery = 106.57%								
Cr 267.716	114330.9	0.526	mg/L	0.0015	0.526	mg/L	0.0015	0.28%
QC value within limits for Cr 267.716 Recovery = 105.15%								
Cu 327.396	145304.7	0.528	mg/L	0.0026	0.528	mg/L	0.0026	0.49%
QC value within limits for Cu 327.396 Recovery = 105.67%								
Fe 261.387	61712.2	4.13	mg/L	0.011	4.13	mg/L	0.011	0.28%
QC value within limits for Fe 261.387 Recovery = 103.37%								
Mg 279.079	369579.5	10.3	mg/L	0.02	10.3	mg/L	0.02	0.21%
QC value within limits for Mg 279.079 Recovery = 102.97%								
Mn 257.610	536410.0	0.524	mg/L	0.0011	0.524	mg/L	0.0011	0.21%
QC value within limits for Mn 257.610 Recovery = 104.71%								
Mo 202.030	97704.5	1.04	mg/L	0.002	1.04	mg/L	0.002	0.24%
QC value within limits for Mo 202.030 Recovery = 104.68%								
Ni 231.604	70413.2	0.531	mg/L	0.0015	0.531	mg/L	0.0015	0.27%
QC value within limits for Ni 231.604 Recovery = 106.22%								
Pb 220.353	11161.2	0.520	mg/L	0.0033	0.520	mg/L	0.0033	0.63%
QC value within limits for Pb 220.353 Recovery = 104.05%								
Sb 206.833	28413.2	1.25	mg/L	0.006	1.25	mg/L	0.006	0.48%
QC value within limits for Sb 206.833 Recovery = 104.14%								
Se 196.026	4283.7	0.411	mg/L	0.0017	0.411	mg/L	0.0017	0.42%
QC value within limits for Se 196.026 Recovery = 102.80%								
Si 288.158	366460.1	5.33	mg/L	0.007	5.33	mg/L	0.007	0.14%
QC value within limits for Si 288.158 Recovery = 106.59%								
Sn 189.933	20218.3	1.03	mg/L	0.001	1.03	mg/L	0.001	0.05%
QC value within limits for Sn 189.933 Recovery = 103.10%								

Ti 337.280	1180215.1	1.05 mg/L	0.007	1.05 mg/L	0.007	0.68%
QC value within limits for Ti 337.280 Recovery = 105.06%						
Tl 190.800	154.2	0.528 mg/L	0.0051	0.528 mg/L	0.0051	0.97%
QC value within limits for Tl 190.800 Recovery = 105.70%						
V 292.402	197142.1	1.06 mg/L	0.003	1.06 mg/L	0.003	0.24%
QC value within limits for V 292.402 Recovery = 105.79%						
Zn 206.200	206386.0	1.03 mg/L	0.001	1.03 mg/L	0.001	0.10%
QC value within limits for Zn 206.200 Recovery = 102.84%						
K 766.490	833059.8	51.0 mg/L	1.32	51.0 mg/L	1.32	2.59%
QC value within limits for K 766.490 Recovery = 101.91%						
Na 589.592	2386326.1	52.4 mg/L	1.45	52.4 mg/L	1.45	2.76%
QC value within limits for Na 589.592 Recovery = 104.80%						
Sr 407.771	2529079.8	1.03 mg/L	0.029	1.03 mg/L	0.029	2.81%
QC value within limits for Sr 407.771 Recovery = 102.69%						

All analytes passed QC.

Sequence No.: 4
Sample ID: CCB
Analyst:
Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 5/2/2003 5:40:52 PM
Sample Prep Volume:
Data Type: Original

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	3834710.0						17362.03	0.45%
Ag 328.068	53.2	0.00012	mg/L	0.000019	0.00012	mg/L	0.000019	15.43%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 237.312	-53.2	-0.00161	mg/L	0.000275	-0.00161	mg/L	0.000275	17.08%
QC value within limits for Al 237.312 Recovery = Not calculated								
As 188.979	-3.5	-0.00031	mg/L	0.000280	-0.00031	mg/L	0.000280	90.97%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 230.424	28.1	0.00013	mg/L	0.000002	0.00013	mg/L	0.000002	1.43%
QC value within limits for Ba 230.424 Recovery = Not calculated								
Be 234.861	-15.9	-0.00002	mg/L	0.000002	-0.00002	mg/L	0.000002	7.69%
QC value within limits for Be 234.861 Recovery = Not calculated								
Ca 227.549	-14.5	-0.0139	mg/L	0.00338	-0.0139	mg/L	0.00338	24.38%
QC value within limits for Ca 227.549 Recovery = Not calculated								
Cd 228.802	4.3	0.00001	mg/L	0.000005	0.00001	mg/L	0.000005	33.99%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616	-16.6	-0.00013	mg/L	0.000034	-0.00013	mg/L	0.000034	26.42%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716	35.6	0.00016	mg/L	0.000078	0.00016	mg/L	0.000078	47.78%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.396	-23.5	-0.00009	mg/L	0.000094	-0.00009	mg/L	0.000094	110.02%
QC value within limits for Cu 327.396 Recovery = Not calculated								
Fe 261.387	-25.1	-0.00168	mg/L	0.000016	-0.00168	mg/L	0.000016	0.94%
QC value within limits for Fe 261.387 Recovery = Not calculated								
Mg 279.079	27.4	0.00078	mg/L	0.000226	0.00078	mg/L	0.000226	29.16%
QC value within limits for Mg 279.079 Recovery = Not calculated								
Mn 257.610	36.9	0.00004	mg/L	0.000003	0.00004	mg/L	0.000003	9.55%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.030	-18.6	-0.00020	mg/L	0.000078	-0.00020	mg/L	0.000078	39.45%
QC value within limits for Mo 202.030 Recovery = Not calculated								
Ni 231.604	6.2	0.00005	mg/L	0.000043	0.00005	mg/L	0.000043	90.63%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353	-1.1	-0.00005	mg/L	0.000148	-0.00005	mg/L	0.000148	287.28%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.833	-1.4	-0.00007	mg/L	0.000093	-0.00007	mg/L	0.000093	141.01%
QC value within limits for Sb 206.833 Recovery = Not calculated								
Se 196.026	5.0	0.00048	mg/L	0.000161	0.00048	mg/L	0.000161	33.41%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 288.158	-82.6	-0.00121	mg/L	0.000066	-0.00121	mg/L	0.000066	5.46%
QC value within limits for Si 288.158 Recovery = Not calculated								
Sn 189.933	40.1	0.00203	mg/L	0.000162	0.00203	mg/L	0.000162	8.00%
QC value within limits for Sn 189.933 Recovery = Not calculated								
Ti 337.280	-51.0	-0.00005	mg/L	0.000034	-0.00005	mg/L	0.000034	74.00%
QC value within limits for Ti 337.280 Recovery = Not calculated								
Tl 190.800	0.4	0.00118	mg/L	0.003843	0.00118	mg/L	0.003843	325.18%
QC value within limits for Tl 190.800 Recovery = Not calculated								

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V 292.402                  0.8     0.00001 mg/L      0.000009     0.00001 mg/L      0.000009 175.09%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 206.200              -287.8    -0.00144 mg/L      0.000003    -0.00144 mg/L      0.000003   0.22%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490               134.7     0.00824 mg/L      0.001861     0.00824 mg/L      0.001861  22.58%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592              -502.8    -0.0110 mg/L       0.00250     -0.0110 mg/L       0.00250  22.67%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771                24.0     0.00593 mg/L      0.000027     0.00593 mg/L.     0.000027   0.46%
   QC value within limits for Sr 407.771  Recovery = Not calculated
All analytes passed QC.
```

Method : PE1300

Seq.	Loc.		Sample ID	Status
1	64		PBW S4 WG139047-03	Being Analyzed
2	65		LCSW S4 WG139047-04	
3	66		L030450521 WG139047-02	
4	67		L030450521DP WG139047-07	
5	68		L030450525 WG139047-01	
6	69		L030450525S WG139047-05	
7	70		L030450525SD WG139047-06	
8	71		L030450522	
9	72		L030450522SDL 0.2	
10	73		L030450522SDL 0.04	
11	5		CCV	
12	1		CCB	
13	74		L030450522PS 0.9	
14	75		L030450523	
15	76		L030450524	
16	5		CCV	
17	1		CCB	

Analysis Begun

Start Time: 5/2/2003 5:57:19 PM
Logged In Analyst: Administrator
Spectrometer Model: Optima 3000 DV

Plasma On Time: 5/2/2003 7:44:33 AM
Technique: ICP Continuous
Autosampler Model: AS-90

Sample Information File: C:\pe\Administrator\Sample Information\050203A.sif
Results Data Set: 050203A
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 1
Sample ID: PBW S4 WG139047-03
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 64
Date Collected: 5/2/2003 5:57:19 PM

Sample Prep Volume:
Data Type: Original

Mean Data: PBW S4 WG139047-03

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4306003.3						2349.32	0.05%
Ag 328.068	83.6	0.00019	mg/L	0.000053	0.00019	mg/L	0.000053	27.67%
Al 237.312	-110.5	-0.00333	mg/L	0.000375	-0.00333	mg/L	0.000375	11.29%
As 188.979	-0.3	-0.00002	mg/L	0.000631	-0.00002	mg/L	0.000631	>999.9%
Ba 230.424	38.7	0.00018	mg/L	0.000016	0.00018	mg/L	0.000016	9.34%
Be 234.861	-26.7	-0.00003	mg/L	0.000007	-0.00003	mg/L	0.000007	22.31%
Ca 227.549	-15.7	-0.0148	mg/L	0.00161	-0.0148	mg/L	0.00161	10.85%
Cd 228.802	15.6	0.00005	mg/L	0.000000	0.00005	mg/L	0.000000	0.79%
Co 228.616	-17.0	-0.00013	mg/L	0.000069	-0.00013	mg/L	0.000069	51.83%
Cr 267.716	-13.7	-0.00006	mg/L	0.000078	-0.00006	mg/L	0.000078	122.27%
Cu 327.396	70.1	0.00025	mg/L	0.000096	0.00025	mg/L	0.000096	37.82%
Fe 261.387	-134.6	-0.00898	mg/L	0.000612	-0.00898	mg/L	0.000612	6.82%
Mg 279.079	43.5	0.00128	mg/L	0.000091	0.00128	mg/L	0.000091	7.14%
Mn 257.610	58.9	0.00006	mg/L	0.000002	0.00006	mg/L	0.000002	4.22%
Mo 202.030	-116.1	-0.00124	mg/L	0.000053	-0.00124	mg/L	0.000053	4.31%
Ni 231.604	-1.0	-0.00001	mg/L	0.000039	-0.00001	mg/L	0.000039	481.16%
Pb 220.353	-1.6	-0.00008	mg/L	0.000174	-0.00008	mg/L	0.000174	230.19%
Sb 206.833	6.5	0.00028	mg/L	0.000439	0.00028	mg/L	0.000439	155.31%
Se 196.026	-5.7	-0.00055	mg/L	0.001990	-0.00055	mg/L	0.001990	365.11%
Si 288.158	-401.5	-0.00584	mg/L	0.000012	-0.00584	mg/L	0.000012	0.20%
Sn 189.933	-8.2	-0.00041	mg/L	0.000077	-0.00041	mg/L	0.000077	18.52%
Ti 337.280	28.9	0.00003	mg/L	0.000074	0.00003	mg/L	0.000074	293.22%
Tl 190.800	1.8	0.00619	mg/L	0.002628	0.00619	mg/L	0.002628	42.45%
V 292.402	-43.0	-0.00023	mg/L	0.000003	-0.00023	mg/L	0.000003	1.35%
Zn 206.200	-427.9	-0.00214	mg/L	0.000052	-0.00214	mg/L	0.000052	2.42%
K 766.490	92.5	0.00566	mg/L	0.002943	0.00566	mg/L	0.002943	52.01%
Na 589.592	-617.0	-0.0135	mg/L	0.00244	-0.0135	mg/L	0.00244	17.99%
Sr 407.771	34.5	0.00593	mg/L	0.000003	0.00593	mg/L	0.000003	0.04%

Sequence No.: 2
Sample ID: LCSW S4 WG139047-04
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 65
Date Collected: 5/2/2003 6:02:08 PM

Sample Prep Volume:
Data Type: Original

Mean Data: LCSW S4 WG139047-04

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	5102237.7						10350.25	0.20%
Ag 328.068	96038.3	0.220	mg/L	0.0014	0.220	mg/L	0.0014	0.62%
Al 237.312	354807.8	10.6	mg/L	0.04	10.6	mg/L	0.04	0.41%
As 188.979	11475.4	1.02	mg/L	0.027	1.02	mg/L	0.027	2.62%
Ba 230.424	2287991.5	10.2	mg/L	0.01	10.2	mg/L	0.01	0.08%
Be 234.861	880199.4	1.09	mg/L	0.002	1.09	mg/L	0.002	0.14%
Ca 227.549	11140.5	10.3	mg/L	0.27	10.3	mg/L	0.27	2.59%
Cd 228.802	320425.8	1.02	mg/L	0.003	1.02	mg/L	0.003	0.25%
Co 228.616	136353.8	1.07	mg/L	0.002	1.07	mg/L	0.002	0.20%

Cr 267.716	231470.1	1.06 mg/L	0.002	1.06 mg/L	0.002	0.14%
Cu 327.396	294491.7	1.07 mg/L	0.007	1.07 mg/L	0.007	0.66%
Fe 261.387	13828.9	1.01 mg/L	0.030	1.01 mg/L	0.030	3.00%
Mg 279.079	378650.5	10.5 mg/L	0.00	10.5 mg/L	0.00	0.01%
Mn 257.610	1089907.5	1.06 mg/L	0.000	1.06 mg/L	0.000	0.02%
Mo 202.030	100065.8	1.07 mg/L	0.003	1.07 mg/L	0.003	0.28%
Ni 231.604	140118.9	1.06 mg/L	0.001	1.06 mg/L	0.001	0.06%
Pb 220.353	22327.0	1.04 mg/L	0.024	1.04 mg/L	0.024	2.35%
Sb 206.833	23879.5	1.04 mg/L	0.027	1.04 mg/L	0.027	2.55%
Se 196.026	10921.7	1.05 mg/L	0.028	1.05 mg/L	0.028	2.63%
Si 288.158	745415.4	10.8 mg/L	0.03	10.8 mg/L	0.03	0.32%
Sn 189.933	-299.2	-0.00930 mg/L	0.000333	-0.00930 mg/L	0.000333	3.58%
Ti 337.280	1238808.8	1.10 mg/L	0.002	1.10 mg/L	0.002	0.19%
Tl 190.800	304.9	1.03 mg/L	0.017	1.03 mg/L	0.017	1.61%
V 292.402	202298.5	1.09 mg/L	0.003	1.09 mg/L	0.003	0.26%
Zn 206.200	209733.2	1.05 mg/L	0.007	1.05 mg/L	0.007	0.62%
K 766.490	868336.4	53.1 mg/L	0.04	53.1 mg/L	0.04	0.07%
Na 589.592	2472255.2	54.3 mg/L	0.01	54.3 mg/L	0.01	0.02%
Sr 407.771	2639657.3	1.07 mg/L	0.004	1.07 mg/L	0.004	0.33%

Recovery Check: LCSW S4 WG139047-04

Analyte	Expected Conc.	Measured Conc.	Std. Dev.	Units	Recovery (%)
Tl 190.800	1.01	1.03	0.017	mg/L	102.9
K 766.490	50.0	53.1	0.038	mg/L	106.2
Na 589.592	50.0	54.3	0.011	mg/L	108.6
Sr 407.771	1.01	1.07	0.004	mg/L	106.6
Ag 328.068	0.200	0.220	0.001	mg/L	109.7
Al 237.312	10.00	10.6	0.043	mg/L	106.3
As 188.979	1.000	1.02	0.027	mg/L	101.5
Ba 230.424	10.0	10.2	0.008	mg/L	102.2
Be 234.861	1.000	1.09	0.002	mg/L	109.4
Ca 227.549	9.99	10.3	0.267	mg/L	103.5
Cd 228.802	1.00	1.02	0.003	mg/L	102.4
Co 228.616	1.000	1.07	0.002	mg/L	107.0
Cr 267.716	1.000	1.06	0.002	mg/L	106.4
Cu 327.396	1.00	1.07	0.007	mg/L	107.0
Fe 261.387	0.991	1.01	0.030	mg/L	101.7
Mg 279.079	10.0	10.5	0.001	mg/L	105.5
Mn 257.610	1.00	1.06	0.000	mg/L	106.4
Mo 202.030	0.994	1.07	0.003	mg/L	107.3
Ni 231.604	1.000	1.06	0.001	mg/L	105.7
Pb 220.353	1.000	1.04	0.024	mg/L	103.9
Sb 206.833	1.00	1.04	0.027	mg/L	104.3
Se 196.026	0.999	1.05	0.028	mg/L	105.4
Si 288.158	9.99	10.8	0.034	mg/L	108.4
Sn 189.933	0.998	-0.00930	0.000	mg/L	-0.9
Ti 337.280	1.000	1.10	0.002	mg/L	110.3
V 292.402	1.000	1.09	0.003	mg/L	109.0
Zn 206.200	0.998	1.05	0.007	mg/L	104.9

Sequence No.: 3
Sample ID: L030450521 WG139047-02
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 66
Date Collected: 5/2/2003 6:07:01 PM

Sample Prep Volume:
Data Type: Original

Mean Data: L030450521 WG139047-02

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4922064.4						59910.01	1.22%
Ag 328.068	388.0	0.00089	mg/L	0.000038	0.00089	mg/L	0.000038	4.26%
Al 237.312	974.9	0.0284	mg/L	0.00384	0.0284	mg/L	0.00384	13.52%
As 188.979	63.5	0.00591	mg/L	0.000363	0.00591	mg/L	0.000363	6.14%
Ba 230.424	181510.1	0.811	mg/L	0.0035	0.811	mg/L	0.0035	0.43%
Be 234.861	302.6	0.00009	mg/L	0.000021	0.00009	mg/L	0.000021	22.85%
Ca 227.549	75047.0	71.8	mg/L	0.25	71.8	mg/L	0.25	0.34%
Cd 228.802	208.6	0.00058	mg/L	0.000025	0.00058	mg/L	0.000025	4.37%
Co 228.616	-7.1	0.00101	mg/L	0.000055	0.00101	mg/L	0.000055	5.42%

Cr 267.716	108.8	0.00110	mg/L	0.000029	0.00110	mg/L	0.000029	2.62%
Cu 327.396	239.9	0.00087	mg/L	0.000280	0.00087	mg/L	0.000280	32.10%
Fe 261.387	53863.8	3.59	mg/L	0.015	3.59	mg/L	0.015	0.42%
Mg 279.079	939982.5	26.3	mg/L	0.35	26.3	mg/L	0.35	1.35%
Mn 257.610	148788.6	0.145	mg/L	0.0004	0.145	mg/L	0.0004	0.29%
Mo 202.030	2978.7	0.0318	mg/L	0.00042	0.0318	mg/L	0.00042	1.32%
Ni 231.604	333.0	0.00256	mg/L	0.000038	0.00256	mg/L	0.000038	1.47%
Pb 220.353	53.0	0.00196	mg/L	0.000010	0.00196	mg/L	0.000010	0.51%
Sb 206.833	27.9	0.00098	mg/L	0.000279	0.00098	mg/L	0.000279	28.47%
Se 196.026	11.4	0.00020	mg/L	0.001001	0.00020	mg/L	0.001001	491.51%
Si 288.158	515951.6	7.53	mg/L	0.091	7.53	mg/L	0.091	1.21%
Sn 189.933	-310.0	-0.0150	mg/L	0.00019	-0.0150	mg/L	0.00019	1.29%
Ti 337.280	238.9	0.00047	mg/L	0.000105	0.00047	mg/L	0.000105	22.24%
Tl 190.800	7.5	0.0241	mg/L	0.00394	0.0241	mg/L	0.00394	16.32%
V 292.402	-58.7	0.00004	mg/L	0.000052	0.00004	mg/L	0.000052	121.99%
Zn 206.200	626.8	0.00167	mg/L	0.000015	0.00167	mg/L	0.000015	0.90%
K 766.490	53157.0	3.22	mg/L	0.055	3.22	mg/L	0.055	1.72%
Na 589.592	877118.1	19.3	mg/L	0.42	19.3	mg/L	0.42	2.16%
Sr 407.771	6688975.3	2.71	mg/L	0.076	2.71	mg/L	0.076	2.80%

Sequence No.: 4 **Autosampler Location: 67**
Sample ID: L030450521DP WG139047-07 **Date Collected: 5/2/2003 6:11:57 PM**
Analyst: MSW/SLP
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: L030450521DP WG139047-07

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4912914.8						149558.76	3.04%
Ag 328.068	411.0	0.00094	mg/L	0.000037	0.00094	mg/L	0.000037	3.98%
Al 237.312	942.3	0.0276	mg/L	0.00173	0.0276	mg/L	0.00173	6.25%
As 188.979	60.1	0.00560	mg/L	0.001067	0.00560	mg/L	0.001067	19.05%
Ba 230.424	175891.6	0.786	mg/L	0.0191	0.786	mg/L	0.0191	2.43%
Be 234.861	277.6	0.00007	mg/L	0.000031	0.00007	mg/L	0.000031	43.36%
Ca 227.549	72774.5	69.6	mg/L	1.86	69.6	mg/L	1.86	2.67%
Cd 228.802	174.1	0.00047	mg/L	0.000004	0.00047	mg/L	0.000004	0.94%
Co 228.616	-5.2	0.00099	mg/L	0.000019	0.00099	mg/L	0.000019	1.93%
Cr 267.716	79.1	0.00095	mg/L	0.000001	0.00095	mg/L	0.000001	0.07%
Cu 327.396	286.4	0.00104	mg/L	0.000008	0.00104	mg/L	0.000008	0.75%
Fe 261.387	52086.7	3.48	mg/L	0.108	3.48	mg/L	0.108	3.10%
Mg 279.079	921971.6	25.8	mg/L	0.79	25.8	mg/L	0.79	3.07%
Mn 257.610	144213.5	0.141	mg/L	0.0037	0.141	mg/L	0.0037	2.63%
Mo 202.030	2821.1	0.0301	mg/L	0.00065	0.0301	mg/L	0.00065	2.15%
Ni 231.604	307.8	0.00236	mg/L	0.000054	0.00236	mg/L	0.000054	2.28%
Pb 220.353	55.3	0.00208	mg/L	0.000089	0.00208	mg/L	0.000089	4.29%
Sb 206.833	22.8	0.00076	mg/L	0.000148	0.00076	mg/L	0.000148	19.46%
Se 196.026	-5.5	-0.00140	mg/L	0.000859	-0.00140	mg/L	0.000859	61.35%
Si 288.158	506194.0	7.38	mg/L	0.224	7.38	mg/L	0.224	3.04%
Sn 189.933	-309.6	-0.0150	mg/L	0.00023	-0.0150	mg/L	0.00023	1.53%
Ti 337.280	163.6	0.00040	mg/L	0.000070	0.00040	mg/L	0.000070	17.61%
Tl 190.800	5.4	0.0171	mg/L	0.00133	0.0171	mg/L	0.00133	7.77%
V 292.402	-56.9	0.00004	mg/L	0.000003	0.00004	mg/L	0.000003	6.89%
Zn 206.200	545.5	0.00129	mg/L	0.000030	0.00129	mg/L	0.000030	2.30%
K 766.490	53578.8	3.25	mg/L	0.009	3.25	mg/L	0.009	0.29%
Na 589.592	888919.6	19.5	mg/L	0.17	19.5	mg/L	0.17	0.89%
Sr 407.771	6802418.1	2.75	mg/L	0.026	2.75	mg/L	0.026	0.93%

Duplicate Check: L030450521DP WG139047-07

Analyte	Expected Conc.	Measured Conc.	Std. Dev.	Units	Difference (%)
Tl 190.800	0.0241	0.0171	0.001	mg/L	33.9
K 766.490	3.22	3.25	0.009	mg/L	0.8
Na 589.592	19.3	19.5	0.174	mg/L	1.3
Sr 407.771	2.71	2.75	0.026	mg/L	1.7
Y 360.073			0.000	mg/L	Not calculated
Ag 328.068	0.00089	0.00094	0.000	mg/L	5.8
Al 237.312	0.0284	0.0276	0.002	mg/L	2.9
As 188.979	0.00591	0.00560	0.001	mg/L	5.4

Ba 230.424	0.811	0.786	0.019	mg/L	3.1
Be 234.861	0.00009	0.00007	0.000	mg/L	26.8
Ca 227.549	71.8	69.6	1.862	mg/L	3.1
Cd 228.802	0.00058	0.00047	0.000	mg/L	20.4
Co 228.616	0.00101	0.00099	0.000	mg/L	1.8
Cr 267.716	0.00110	0.00095	0.000	mg/L	14.6
Cu 327.396	0.00087	0.00104	0.000	mg/L	17.7
Fe 261.387	3.59	3.48	0.108	mg/L	3.4
Mg 279.079	26.3	25.8	0.791	mg/L	1.9
Mn 257.610	0.145	0.141	0.004	mg/L	3.1
Mo 202.030	0.0318	0.0301	0.001	mg/L	5.4
Ni 231.604	0.00256	0.00236	0.000	mg/L	7.8
Pb 220.353	0.00196	0.00208	0.000	mg/L	5.9
Sb 206.833	0.00098	0.00076	0.000	mg/L	24.7
Se 196.026	0.00020	-0.00140	0.001	mg/L	-268.1
Si 288.158	7.53	7.38	0.224	mg/L	1.9
Sn 189.933	-0.0150	-0.0150	0.000	mg/L	-0.0
Ti 337.280	0.00047	0.00040	0.000	mg/L	17.3
V 292.402	0.00004	0.00004	0.000	mg/L	9.2
Zn 206.200	0.00167	0.00129	0.000	mg/L	25.4

Sequence No.: 5
Sample ID: L030450525 WG139047-01
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 68
Date Collected: 5/2/2003 6:16:52 PM
Sample Prep Volume:
Data Type: Original

Mean Data: L030450525 WG139047-01

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4359352.4						103702.81	2.38%
Ag 328.068	14.6	0.00003	mg/L	0.000054	0.00003	mg/L	0.000054	160.76%
Al 237.312	-15.6	-0.00046	mg/L	0.000028	-0.00046	mg/L	0.000028	6.03%
As 188.979	-0.4	-0.00003	mg/L	0.000026	-0.00003	mg/L	0.000026	97.56%
Ba 230.424	67.7	0.00031	mg/L	0.000015	0.00031	mg/L	0.000015	5.04%
Be 234.861	-18.8	-0.00002	mg/L	0.000005	-0.00002	mg/L	0.000005	19.87%
Ca 227.549	47.8	0.0459	mg/L	0.00810	0.0459	mg/L	0.00810	17.65%
Cd 228.802	12.3	0.00004	mg/L	0.000015	0.00004	mg/L	0.000015	39.38%
Co 228.616	-19.7	-0.00015	mg/L	0.000003	-0.00015	mg/L	0.000003	1.96%
Cr 267.716	5.9	0.00003	mg/L	0.000030	0.00003	mg/L	0.000030	109.75%
Cu 327.396	110.3	0.00040	mg/L	0.000258	0.00040	mg/L	0.000258	64.43%
Fe 261.387	-53.4	-0.00357	mg/L	0.000256	-0.00357	mg/L	0.000256	7.17%
Mg 279.079	114.1	0.00324	mg/L	0.000204	0.00324	mg/L	0.000204	6.29%
Mn 257.610	166.5	0.00016	mg/L	0.000008	0.00016	mg/L	0.000008	5.00%
Mo 202.030	-110.4	-0.00118	mg/L	0.000042	-0.00118	mg/L	0.000042	3.57%
Ni 231.604	4.0	0.00003	mg/L	0.000049	0.00003	mg/L	0.000049	163.51%
Pb 220.353	9.3	0.00043	mg/L	0.000306	0.00043	mg/L	0.000306	70.83%
Sb 206.833	-3.2	-0.00015	mg/L	0.000225	-0.00015	mg/L	0.000225	153.16%
Se 196.026	3.8	0.00037	mg/L	0.000011	0.00037	mg/L	0.000011	3.04%
Si 288.158	1822.1	0.0265	mg/L	0.00016	0.0265	mg/L	0.00016	0.59%
Sn 189.933	3.0	0.00015	mg/L	0.000100	0.00015	mg/L	0.000100	66.01%
Ti 337.280	26.8	0.00002	mg/L	0.000030	0.00002	mg/L	0.000030	126.47%
Tl 190.800	-0.3	-0.00115	mg/L	0.006344	-0.00115	mg/L	0.006344	551.73%
V 292.402	-29.4	-0.00016	mg/L	0.000027	-0.00016	mg/L	0.000027	17.31%
Zn 206.200	-257.2	-0.00129	mg/L	0.000030	-0.00129	mg/L	0.000030	2.30%
K 766.490	119.5	0.00731	mg/L	0.003556	0.00731	mg/L	0.003556	48.66%
Na 589.592	11512.0	0.253	mg/L	0.0097	0.253	mg/L	0.0097	3.86%
Sr 407.771	389.3	0.00607	mg/L	0.000044	0.00607	mg/L	0.000044	0.73%

Sequence No.: 6
Sample ID: L030450525S WG139047-05
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 69
Date Collected: 5/2/2003 6:21:45 PM
Sample Prep Volume:
Data Type: Original

Mean Data: L030450525S WG139047-05

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD

Y 360.073	5032836.0				9115.30	0.18%
Ag 328.068	96858.0	0.221 mg/L	0.0003	0.221 mg/L	0.0003	0.12%
Al 237.312	359696.0	10.8 mg/L	0.02	10.8 mg/L	0.02	0.16%
As 188.979	11906.7	1.05 mg/L	0.010	1.05 mg/L	0.010	0.91%
Ba 230.424	2305496.4	10.3 mg/L	0.01	10.3 mg/L	0.01	0.09%
Be 234.861	885894.3	1.10 mg/L	0.002	1.10 mg/L	0.002	0.20%
Ca 227.549	11623.9	10.8 mg/L	0.09	10.8 mg/L	0.09	0.80%
Cd 228.802	325081.4	1.04 mg/L	0.001	1.04 mg/L	0.001	0.10%
Co 228.616	138169.1	1.08 mg/L	0.004	1.08 mg/L	0.004	0.40%
Cr 267.716	234756.0	1.08 mg/L	0.002	1.08 mg/L	0.002	0.20%
Cu 327.396	297046.4	1.08 mg/L	0.001	1.08 mg/L	0.001	0.14%
Fe 261.387	14368.4	1.05 mg/L	0.006	1.05 mg/L	0.006	0.60%
Mg 279.079	384543.2	10.7 mg/L	0.04	10.7 mg/L	0.04	0.34%
Mn 257.610	1100909.2	1.07 mg/L	0.001	1.07 mg/L	0.001	0.12%
Mo 202.030	101488.0	1.08 mg/L	0.000	1.08 mg/L	0.000	0.04%
Ni 231.604	142350.5	1.07 mg/L	0.005	1.07 mg/L	0.005	0.47%
Pb 220.353	23227.7	1.08 mg/L	0.008	1.08 mg/L	0.008	0.74%
Sb 206.833	24778.0	1.08 mg/L	0.006	1.08 mg/L	0.006	0.59%
Se 196.026	11263.8	1.09 mg/L	0.008	1.09 mg/L	0.008	0.71%
Si 288.158	747017.0	10.9 mg/L	0.01	10.9 mg/L	0.01	0.07%
Sn 189.933	-297.5	-0.00916 mg/L	0.000480	-0.00916 mg/L	0.000480	5.24%
Ti 337.280	1249173.0	1.11 mg/L	0.002	1.11 mg/L	0.002	0.16%
Tl 190.800	291.1	0.989 mg/L	0.0712	0.989 mg/L	0.0712	7.20%
V 292.402	204808.8	1.10 mg/L	0.001	1.10 mg/L	0.001	0.13%
Zn 206.200	213624.8	1.07 mg/L	0.006	1.07 mg/L	0.006	0.53%
K 766.490	838614.7	51.3 mg/L	2.27	51.3 mg/L	2.27	4.43%
Na 589.592	2405040.7	52.8 mg/L	2.12	52.8 mg/L	2.12	4.02%
Sr 407.771	2552033.6	1.04 mg/L	0.047	1.04 mg/L	0.047	4.52%

Recovery Check: L030450525S WG139047-05

Analyte	Expected Conc.	Measured Conc.	Std. Dev.	Units	Recovery (%)
Tl 190.800	0.999	0.989	0.071	mg/L	99.0
K 766.490	50.0	51.3	2.270	mg/L	102.6
Na 589.592	50.3	52.8	2.124	mg/L	105.1
Sr 407.771	1.01	1.04	0.047	mg/L	103.0
Ag 328.068	0.200	0.221	0.000	mg/L	110.7
Al 237.312	10.00	10.8	0.018	mg/L	107.8
As 188.979	1.000	1.05	0.010	mg/L	105.3
Ba 230.424	10.0	10.3	0.009	mg/L	103.0
Be 234.861	1.000	1.10	0.002	mg/L	110.2
Ca 227.549	10.0	10.8	0.086	mg/L	107.5
Cd 228.802	1.00	1.04	0.001	mg/L	103.9
Co 228.616	1.000	1.08	0.004	mg/L	108.4
Cr 267.716	1.00	1.08	0.002	mg/L	107.9
Cu 327.396	1.00	1.08	0.001	mg/L	107.9
Fe 261.387	0.996	1.05	0.006	mg/L	104.9
Mg 279.079	10.0	10.7	0.036	mg/L	107.1
Mn 257.610	1.00	1.07	0.001	mg/L	107.5
Mo 202.030	0.994	1.08	0.000	mg/L	108.9
Ni 231.604	1.00	1.07	0.005	mg/L	107.3
Pb 220.353	1.00	1.08	0.008	mg/L	108.0
Sb 206.833	1.000	1.08	0.006	mg/L	108.3
Se 196.026	1.00	1.09	0.008	mg/L	108.6
Si 288.158	10.0	10.9	0.007	mg/L	108.3
Sn 189.933	0.999	-0.00916	0.000	mg/L	-0.9
Ti 337.280	1.000	1.11	0.002	mg/L	111.2
V 292.402	1.000	1.10	0.001	mg/L	110.4
Zn 206.200	0.999	1.07	0.006	mg/L	106.8

Sequence No.: 7
Sample ID: L030450525SD WG139047-06
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 70
Date Collected: 5/2/2003 6:26:40 PM

Sample Prep Volume:
Data Type: Original

Mean Data: L030450525SD WG139047-06

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD

Y 360.073	5053261.7					47088.35	0.93%
Ag 328.068	95572.5	0.218	mg/L	0.0028	0.218 mg/L	0.0028	1.28%
Al 237.312	354950.5	10.6	mg/L	0.11	10.6 mg/L	0.11	1.00%
As 188.979	11822.6	1.05	mg/L	0.003	1.05 mg/L	0.003	0.33%
Ba 230.424	2288172.8	10.2	mg/L	0.09	10.2 mg/L	0.09	0.90%
Be 234.861	878022.6	1.09	mg/L	0.011	1.09 mg/L	0.011	0.98%
Ca 227.549	11504.6	10.7	mg/L	0.03	10.7 mg/L	0.03	0.24%
Cd 228.802	320654.3	1.03	mg/L	0.011	1.03 mg/L	0.011	1.11%
Co 228.616	136263.3	1.07	mg/L	0.011	1.07 mg/L	0.011	1.03%
Cr 267.716	231736.3	1.07	mg/L	0.011	1.07 mg/L	0.011	1.00%
Cu 327.396	294260.5	1.07	mg/L	0.014	1.07 mg/L	0.014	1.31%
Fe 261.387	14220.6	1.03	mg/L	0.004	1.03 mg/L	0.004	0.35%
Mg 279.079	379750.1	10.6	mg/L	0.08	10.6 mg/L	0.08	0.75%
Mn 257.610	1092353.0	1.07	mg/L	0.010	1.07 mg/L	0.010	0.93%
Mo 202.030	100636.6	1.07	mg/L	0.009	1.07 mg/L	0.009	0.83%
Ni 231.604	140442.3	1.06	mg/L	0.008	1.06 mg/L	0.008	0.72%
Pb 220.353	22997.0	1.07	mg/L	0.005	1.07 mg/L	0.005	0.48%
Sb 206.833	24524.7	1.07	mg/L	0.003	1.07 mg/L	0.003	0.27%
Se 196.026	11195.9	1.08	mg/L	0.004	1.08 mg/L	0.004	0.35%
Si 288.158	733988.8	10.7	mg/L	0.07	10.7 mg/L	0.07	0.67%
Sn 189.933	-296.8	-0.00915	mg/L	0.000172	-0.00915 mg/L	0.000172	1.88%
Ti 337.280	1241813.8	1.10	mg/L	0.010	1.10 mg/L	0.010	0.95%
Tl 190.800	299.6	1.02	mg/L	0.086	1.02 mg/L	0.086	8.49%
V 292.402	201968.4	1.09	mg/L	0.014	1.09 mg/L	0.014	1.26%
Zn 206.200	210375.1	1.05	mg/L	0.005	1.05 mg/L	0.005	0.51%
K 766.490	836736.6	51.2	mg/L	0.18	51.2 mg/L	0.18	0.34%
Na 589.592	2399228.9	52.7	mg/L	0.20	52.7 mg/L	0.20	0.39%
Sr 407.771	2550983.5	1.04	mg/L	0.005	1.04 mg/L	0.005	0.48%

Recovery Check: L030450525SD WG139047-06

Analyte	Expected Conc.	Measured Conc.	Std. Dev.	Units	Recovery (%)
Tl 190.800	0.999	1.02	0.086	mg/L	101.8
K 766.490	50.0	51.2	0.176	mg/L	102.3
Na 589.592	50.3	52.7	0.203	mg/L	104.9
Sr 407.771	1.01	1.04	0.005	mg/L	103.0
Ag 328.068	0.200	0.218	0.003	mg/L	109.2
Al 237.312	10.00	10.6	0.106	mg/L	106.4
As 188.979	1.000	1.05	0.003	mg/L	104.6
Ba 230.424	10.0	10.2	0.092	mg/L	102.2
Be 234.861	1.000	1.09	0.011	mg/L	109.2
Ca 227.549	10.0	10.7	0.026	mg/L	106.4
Cd 228.802	1.00	1.03	0.011	mg/L	102.5
Co 228.616	1.000	1.07	0.011	mg/L	106.9
Cr 267.716	1.00	1.07	0.011	mg/L	106.5
Cu 327.396	1.00	1.07	0.014	mg/L	106.9
Fe 261.387	0.996	1.03	0.004	mg/L	103.8
Mg 279.079	10.0	10.6	0.080	mg/L	105.8
Mn 257.610	1.00	1.07	0.010	mg/L	106.6
Mo 202.030	0.994	1.07	0.009	mg/L	107.9
Ni 231.604	1.00	1.06	0.008	mg/L	105.9
Pb 220.353	1.00	1.07	0.005	mg/L	106.9
Sb 206.833	1.000	1.07	0.003	mg/L	107.2
Se 196.026	1.00	1.08	0.004	mg/L	108.0
Si 288.158	10.0	10.7	0.071	mg/L	106.4
Sn 189.933	0.999	-0.00915	0.000	mg/L	-0.9
Ti 337.280	1.000	1.10	0.010	mg/L	110.5
V 292.402	1.000	1.09	0.014	mg/L	108.8
Zn 206.200	0.999	1.05	0.005	mg/L	105.1

Sequence No.: 8
Sample ID: L030450522
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 71
Date Collected: 5/2/2003 6:31:35 PM

Sample Prep Volume:
Data Type: Original

Mean Data: L030450522

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD

Y 360.073	4906356.2					66679.54	1.36%
Ag 328.068	461.2	0.00105	mg/L	0.000019	0.00105 mg/L	0.000019	1.84%
Al 237.312	644.9	0.0261	mg/L	0.00049	0.0261 mg/L	0.00049	1.86%
As 188.979	36.5	0.00331	mg/L	0.000428	0.00331 mg/L	0.000428	12.91%
Ba 230.424	33826.9	0.151	mg/L	0.0004	0.151 mg/L	0.0004	0.29%
Be 234.861	143.8	0.00008	mg/L	0.000011	0.00008 mg/L	0.000011	13.67%
Ca 227.549	82947.0	79.4	mg/L	0.28	79.4 mg/L	0.28	0.35%
Cd 228.802	72.1	0.00014	mg/L	0.000005	0.00014 mg/L	0.000005	3.70%
Co 228.616	-19.4	0.00011	mg/L	0.000018	0.00011 mg/L	0.000018	17.03%
Cr 267.716	10.0	0.00061	mg/L	0.000021	0.00061 mg/L	0.000021	3.39%
Cu 327.396	280.6	0.00102	mg/L	0.000087	0.00102 mg/L	0.000087	8.53%
Fe 261.387	19399.6	1.30	mg/L	0.006	1.30 mg/L	0.006	0.50%
Mg 279.079	1066430.0	29.8	mg/L	0.40	29.8 mg/L	0.40	1.34%
Mn 257.610	466812.0	0.456	mg/L	0.0057	0.456 mg/L	0.0057	1.25%
Mo 202.030	1514.2	0.0161	mg/L	0.00029	0.0161 mg/L	0.00029	1.79%
Ni 231.604	86.8	0.00067	mg/L	0.000039	0.00067 mg/L	0.000039	5.75%
Pb 220.353	50.8	0.00218	mg/L	0.000467	0.00218 mg/L	0.000467	21.38%
Sb 206.833	18.3	0.00060	mg/L	0.000249	0.00060 mg/L	0.000249	41.83%
Se 196.026	22.4	0.00184	mg/L	0.001899	0.00184 mg/L	0.001899	103.30%
Si 288.158	420385.0	6.14	mg/L	0.069	6.14 mg/L	0.069	1.13%
Sn 189.933	-315.8	-0.0152	mg/L	0.00017	-0.0152 mg/L	0.00017	1.09%
Ti 337.280	-123.1	0.00007	mg/L	0.000055	0.00007 mg/L	0.000055	79.97%
Tl 190.800	9.0	0.0298	mg/L	0.00499	0.0298 mg/L	0.00499	16.75%
V 292.402	-40.2	-0.00008	mg/L	0.000011	-0.00008 mg/L	0.000011	13.66%
Zn 206.200	117.2	-0.00096	mg/L	0.000040	-0.00096 mg/L	0.000040	4.12%
K 766.490	37783.5	2.28	mg/L	0.072	2.28 mg/L	0.072	3.15%
Na 589.592	394693.1	8.67	mg/L	0.164	8.67 mg/L	0.164	1.89%
Sr 407.771	1095987.6	0.448	mg/L	0.0095	0.448 mg/L	0.0095	2.12%

Sequence No.: 9
Sample ID: L030450522SDL 0.2
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 72
Date Collected: 5/2/2003 6:36:31 PM
Sample Prep Volume:
Data Type: Original

Mean Data: L030450522SDL 0.2

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4541428.6						62192.42	1.37%
Ag 328.068	158.8	0.00036	mg/L	0.000124	0.00036	mg/L	0.000124	34.17%
Al 237.312	120.5	0.00503	mg/L	0.000103	0.00503	mg/L	0.000103	2.05%
As 188.979	5.1	0.00046	mg/L	0.000359	0.00046	mg/L	0.000359	77.44%
Ba 230.424	6422.0	0.0287	mg/L	0.00000	0.0287	mg/L	0.00000	0.01%
Be 234.861	6.4	-0.00001	mg/L	0.000012	-0.00001	mg/L	0.000012	213.42%
Ca 227.549	14946.5	14.3	mg/L	0.08	14.3	mg/L	0.08	0.59%
Cd 228.802	35.9	0.00010	mg/L	0.000001	0.00010	mg/L	0.000001	0.80%
Co 228.616	-12.2	-0.00005	mg/L	0.000017	-0.00005	mg/L	0.000017	36.55%
Cr 267.716	70.9	0.00043	mg/L	0.000024	0.00043	mg/L	0.000024	5.68%
Cu 327.396	26.7	0.00010	mg/L	0.000150	0.00010	mg/L	0.000150	154.96%
Fe 261.387	2615.9	0.175	mg/L	0.0049	0.175	mg/L	0.0049	2.79%
Mg 279.079	195741.4	5.48	mg/L	0.061	5.48	mg/L	0.061	1.12%
Mn 257.610	88368.6	0.0863	mg/L	0.00014	0.0863	mg/L	0.00014	0.16%
Mo 202.030	237.9	0.00254	mg/L	0.000106	0.00254	mg/L	0.000106	4.19%
Ni 231.604	17.4	0.00013	mg/L	0.000034	0.00013	mg/L	0.000034	25.24%
Pb 220.353	21.3	0.00096	mg/L	0.000132	0.00096	mg/L	0.000132	13.69%
Sb 206.833	5.7	0.00021	mg/L	0.000201	0.00021	mg/L	0.000201	95.73%
Se 196.026	32.4	0.00308	mg/L	0.001120	0.00308	mg/L	0.001120	36.32%
Si 288.158	75367.4	1.10	mg/L	0.000	1.10	mg/L	0.000	0.03%
Sn 189.933	-204.0	-0.0102	mg/L	0.00000	-0.0102	mg/L	0.00000	0.03%
Ti 337.280	-75.7	-0.00004	mg/L	0.000081	-0.00004	mg/L	0.000081	215.56%
Tl 190.800	2.7	0.00907	mg/L	0.000381	0.00907	mg/L	0.000381	4.20%
V 292.402	50.0	0.00029	mg/L	0.000019	0.00029	mg/L	0.000019	6.63%
Zn 206.200	466.5	0.00205	mg/L	0.000151	0.00205	mg/L	0.000151	7.35%
K 766.490	6788.7	0.409	mg/L	0.0021	0.409	mg/L	0.0021	0.50%
Na 589.592	72085.7	1.58	mg/L	0.006	1.58	mg/L	0.006	0.36%
Sr 407.771	203368.9	0.0880	mg/L	0.00082	0.0880	mg/L	0.00082	0.93%

Sequence No.: 10
Sample ID: L030450522SDL 0.04

Autosampler Location: 73
Date Collected: 5/2/2003 6:41:24 PM

Analyst: MSW/SLP
Sample Wt: Sample Prep Volume:
Dilution: Data Type: Original

Mean Data: L030450522SDL 0.04

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4055143.4						101240.74	2.50%
Ag 328.068	42.8	0.00010	mg/L	0.000015	0.00010	mg/L	0.000015	15.10%
Al 237.312	-5.2	0.00010	mg/L	0.000186	0.00010	mg/L	0.000186	178.93%
As 188.979	-1.3	-0.00011	mg/L	0.000088	-0.00011	mg/L	0.000088	79.55%
Ba 230.424	1177.5	0.00527	mg/L	0.000033	0.00527	mg/L	0.000033	0.63%
Be 234.861	-10.6	-0.00002	mg/L	0.000007	-0.00002	mg/L	0.000007	47.99%
Ca 227.549	2508.3	2.40	mg/L	0.002	2.40	mg/L	0.002	0.09%
Cd 228.802	31.3	0.00010	mg/L	0.000003	0.00010	mg/L	0.000003	2.60%
Co 228.616	-12.6	-0.00009	mg/L	0.000033	-0.00009	mg/L	0.000033	37.20%
Cr 267.716	105.0	0.00050	mg/L	0.000108	0.00050	mg/L	0.000108	21.54%
Cu 327.396	-27.6	-0.00010	mg/L	0.000001	-0.00010	mg/L	0.000001	0.83%
Fe 261.387	399.2	0.0268	mg/L	0.00075	0.0268	mg/L	0.00075	2.82%
Mg 279.079	35239.5	0.986	mg/L	0.0278	0.986	mg/L	0.0278	2.82%
Mn 257.610	16726.4	0.0163	mg/L	0.00044	0.0163	mg/L	0.00044	2.67%
Mo 202.030	-0.8	-0.00001	mg/L	0.000024	-0.00001	mg/L	0.000024	272.03%
Ni 231.604	-3.0	-0.00002	mg/L	0.000029	-0.00002	mg/L	0.000029	131.47%
Pb 220.353	2.5	0.00011	mg/L	0.000001	0.00011	mg/L	0.000001	0.85%
Sb 206.833	8.5	0.00036	mg/L	0.000156	0.00036	mg/L	0.000156	43.71%
Se 196.026	17.8	0.00172	mg/L	0.000318	0.00172	mg/L	0.000318	18.51%
Si 288.158	13004.9	0.190	mg/L	0.0076	0.190	mg/L	0.0076	3.98%
Sn 189.933	-78.5	-0.00395	mg/L	0.000502	-0.00395	mg/L	0.000502	12.71%
Ti 337.280	41.6	0.00004	mg/L	0.000010	0.00004	mg/L	0.000010	22.93%
Tl 190.800	2.9	0.00962	mg/L	0.005978	0.00962	mg/L	0.005978	62.15%
V 292.402	26.8	0.00015	mg/L	0.000017	0.00015	mg/L	0.000017	11.05%
Zn 206.200	-48.8	-0.00029	mg/L	0.000061	-0.00029	mg/L	0.000061	20.85%
K 766.490	1425.5	0.0860	mg/L	0.00192	0.0860	mg/L	0.00192	2.24%
Na 589.592	13211.6	0.290	mg/L	0.0117	0.290	mg/L	0.0117	4.05%
Sr 407.771	37227.6	0.0209	mg/L	0.00043	0.0209	mg/L	0.00043	2.04%

Sequence No.: 11 Autosampler Location: 5
Sample ID: CCV Date Collected: 5/2/2003 6:46:18 PM
Analyst:
Sample Wt: Sample Prep Volume:
Dilution: Data Type: Original

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4991236.7						7298.94	0.15%
Ag 328.068	179997.7	0.411	mg/L	0.0047	0.411	mg/L	0.0047	1.14%
QC value within limits for Ag 328.068 Recovery = 102.87%								
Al 237.312	331445.4	10.0	mg/L	0.10	10.0	mg/L	0.10	0.99%
QC value within limits for Al 237.312 Recovery = 100.44%								
As 188.979	4527.7	0.397	mg/L	0.0053	0.397	mg/L	0.0053	1.34%
QC value within limits for As 188.979 Recovery = 99.19%								
Ba 230.424	238468.6	1.06	mg/L	0.005	1.06	mg/L	0.005	0.51%
QC value within limits for Ba 230.424 Recovery = 106.34%								
Be 234.861	42493.1	0.0525	mg/L	0.00030	0.0525	mg/L	0.00030	0.57%
QC value within limits for Be 234.861 Recovery = 105.01%								
Ca 227.549	11020.8	10.3	mg/L	0.10	10.3	mg/L	0.10	0.93%
QC value within limits for Ca 227.549 Recovery = 102.98%								
Cd 228.802	16028.6	0.0499	mg/L	0.00068	0.0499	mg/L	0.00068	1.36%
QC value within limits for Cd 228.802 Recovery = 99.87%								
Co 228.616	27439.1	0.213	mg/L	0.0010	0.213	mg/L	0.0010	0.49%
QC value within limits for Co 228.616 Recovery = 106.48%								
Cr 267.716	113885.7	0.524	mg/L	0.0031	0.524	mg/L	0.0031	0.59%
QC value within limits for Cr 267.716 Recovery = 104.74%								
Cu 327.396	143321.4	0.521	mg/L	0.0067	0.521	mg/L	0.0067	1.29%
QC value within limits for Cu 327.396 Recovery = 104.23%								
Fe 261.387	61263.4	4.10	mg/L	0.034	4.10	mg/L	0.034	0.83%
QC value within limits for Fe 261.387 Recovery = 102.62%								
Mg 279.079	369124.0	10.3	mg/L	0.04	10.3	mg/L	0.04	0.38%

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   QC value within limits for Mg  279.079  Recovery = 102.84%
Mn 257.610          532564.5       0.520 mg/L        0.0037       0.520 mg/L        0.0037   0.71%
   QC value within limits for Mn 257.610  Recovery = 103.96%
Mo 202.030           97572.4        1.04 mg/L         0.009        1.04 mg/L         0.009   0.84%
   QC value within limits for Mo 202.030  Recovery = 104.54%
Ni 231.604           70313.4       0.530 mg/L        0.0022       0.530 mg/L        0.0022   0.41%
   QC value within limits for Ni 231.604  Recovery = 106.07%
Pb 220.353           11195.9       0.522 mg/L        0.0059       0.522 mg/L        0.0059   1.12%
   QC value within limits for Pb 220.353  Recovery = 104.37%
Sb 206.833           28418.6        1.25 mg/L         0.015        1.25 mg/L         0.015   1.23%
   QC value within limits for Sb 206.833  Recovery = 104.16%
Se 196.026            4309.7       0.414 mg/L        0.0053       0.414 mg/L        0.0053   1.27%
   QC value within limits for Se 196.026  Recovery = 103.44%
Si 288.158          362375.8        5.27 mg/L         0.031        5.27 mg/L         0.031   0.59%
   QC value within limits for Si 288.158  Recovery = 105.40%
Sn 189.933           19922.8        1.01 mg/L         0.017        1.01 mg/L         0.017   1.72%
   QC value within limits for Sn 189.933  Recovery = 101.60%
Ti 337.280         1177360.7        1.05 mg/L         0.001        1.05 mg/L         0.001   0.10%
   QC value within limits for Ti 337.280  Recovery = 104.80%
Tl 190.800             150.1       0.515 mg/L        0.0370       0.515 mg/L        0.0370   7.19%
   QC value within limits for Tl 190.800  Recovery = 102.93%
V 292.402           195832.1        1.05 mg/L         0.008        1.05 mg/L         0.008   0.78%
   QC value within limits for V 292.402  Recovery = 105.09%
Zn 206.200          208035.2        1.04 mg/L         0.001        1.04 mg/L         0.001   0.12%
   QC value within limits for Zn 206.200  Recovery = 103.67%
K 766.490           786129.5        48.1 mg/L          0.22        48.1 mg/L          0.22   0.45%
   QC value within limits for K 766.490  Recovery = 96.16%
Na 589.592         2264058.5        49.7 mg/L          0.21        49.7 mg/L          0.21   0.42%
   QC value within limits for Na 589.592  Recovery = 99.43%
Sr 407.771         2407644.4       0.978 mg/L        0.0005       0.978 mg/L        0.0005   0.05%
   QC value within limits for Sr 407.771  Recovery = 97.79%
All analytes passed QC.
```

Sequence No.: 12 | **Autosampler Location: 1**
Sample ID: CCB | **Date Collected: 5/2/2003 6:51:15 PM**
Analyst:
Sample Wt: | **Sample Prep Volume:**
Dilution: | **Data Type: Original**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	3938963.1						17464.23	0.44%
Ag 328.068	92.1	0.00021	mg/L	0.000235	0.00021	mg/L	0.000235	111.73%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 237.312	-37.3	-0.00112	mg/L	0.000397	-0.00112	mg/L	0.000397	35.36%
QC value within limits for Al 237.312 Recovery = Not calculated								
As 188.979	-0.9	-0.00008	mg/L	0.000397	-0.00008	mg/L	0.000397	475.53%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 230.424	27.3	0.00012	mg/L	0.000020	0.00012	mg/L	0.000020	16.23%
QC value within limits for Ba 230.424 Recovery = Not calculated								
Be 234.861	-17.4	-0.00002	mg/L	0.000002	-0.00002	mg/L	0.000002	8.30%
QC value within limits for Be 234.861 Recovery = Not calculated								
Ca 227.549	-5.8	-0.00544	mg/L	0.010296	-0.00544	mg/L	0.010296	189.17%
QC value within limits for Ca 227.549 Recovery = Not calculated								
Cd 228.802	17.0	0.00005	mg/L	0.000033	0.00005	mg/L	0.000033	61.59%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616	-11.7	-0.00009	mg/L	0.000033	-0.00009	mg/L	0.000033	36.90%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716	56.6	0.00026	mg/L	0.000017	0.00026	mg/L	0.000017	6.61%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.396	-24.8	-0.00009	mg/L	0.000026	-0.00009	mg/L	0.000026	28.59%
QC value within limits for Cu 327.396 Recovery = Not calculated								
Fe 261.387	-36.4	-0.00243	mg/L	0.000347	-0.00243	mg/L	0.000347	14.27%
QC value within limits for Fe 261.387 Recovery = Not calculated								
Mg 279.079	15.9	0.00044	mg/L	0.000084	0.00044	mg/L	0.000084	19.02%
QC value within limits for Mg 279.079 Recovery = Not calculated								
Mn 257.610	30.1	0.00003	mg/L	0.000011	0.00003	mg/L	0.000011	35.94%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.030	5.0	0.00005	mg/L	0.000029	0.00005	mg/L	0.000029	54.65%

```
   QC value within limits for Mo 202.030  Recovery = Not calculated
Ni 231.604              -10.8    -0.00008 mg/L      0.000026    -0.00008 mg/L      0.000026  32.31%
   QC value within limits for Ni 231.604  Recovery = Not calculated
Pb 220.353               -2.6    -0.00012 mg/L      0.000254    -0.00012 mg/L      0.000254 212.28%
   QC value within limits for Pb 220.353  Recovery = Not calculated
Sb 206.833                6.7     0.00029 mg/L      0.000366     0.00029 mg/L      0.000366 125.33%
   QC value within limits for Sb 206.833  Recovery = Not calculated
Se 196.026                9.6     0.00093 mg/L      0.000721     0.00093 mg/L      0.000721  77.87%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 288.158               -2.6    -0.00004 mg/L      0.000099    -0.00004 mg/L      0.000099 240.89%
   QC value within limits for Si 288.158  Recovery = Not calculated
Sn 189.933               38.2     0.00194 mg/L      0.000265     0.00194 mg/L      0.000265  13.70%
   QC value within limits for Sn 189.933  Recovery = Not calculated
Ti 337.280              -52.2    -0.00005 mg/L      0.000017    -0.00005 mg/L      0.000017  36.45%
   QC value within limits for Ti 337.280  Recovery = Not calculated
Tl 190.800                2.7     0.00893 mg/L      0.003814     0.00893 mg/L      0.003814  42.72%
   QC value within limits for Tl 190.800  Recovery = Not calculated
V 292.402                12.0     0.00007 mg/L      0.000037     0.00007 mg/L      0.000037  55.79%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 206.200             -274.3    -0.00137 mg/L      0.000049    -0.00137 mg/L      0.000049   3.58%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490               273.1      0.0167 mg/L       0.00250      0.0167 mg/L       0.00250  14.96%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592              -154.0    -0.00338 mg/L      0.002532    -0.00338 mg/L      0.002532  74.89%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771               12.0     0.00592 mg/L      0.000006     0.00592 mg/L      0.000006   0.10%
   QC value within limits for Sr 407.771  Recovery = Not calculated
All analytes passed QC.
```

Sequence No.: 13 **Autosampler Location: 74**
Sample ID: L030450522PS 0.9 **Date Collected: 5/2/2003 6:56:06 PM**
Analyst: MSW/SLP
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: L030450522PS 0.9

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 160.073	4955957.8						54560.58	1.10%
Ag 328.068	98548.9	0.225	mg/L	0.0034	0.225	mg/L	0.0034	1.51%
Al 237.312	373879.1	11.2	mg/L	0.16	11.2	mg/L	0.16	1.43%
As 188.979	12055.5	1.07	mg/L	0.010	1.07	mg/L	0.010	0.94%
Ba 230.424	2219110.6	9.91	mg/L	0.094	9.91	mg/L	0.094	0.95%
Be 234.861	893036.3	1.11	mg/L	0.013	1.11	mg/L	0.013	1.18%
Ca 227.549	82968.9	79.1	mg/L	0.95	79.1	mg/L	0.95	1.20%
Cd 228.802	327121.6	1.05	mg/L	0.013	1.05	mg/L	0.013	1.23%
Co 228.616	127476.5	1.00	mg/L	0.010	1.00	mg/L	0.010	1.03%
Cr 267.716	223945.4	1.03	mg/L	0.013	1.03	mg/L	0.013	1.23%
Cu 327.396	293338.2	1.07	mg/L	0.013	1.07	mg/L	0.013	1.24%
Fe 261.387	29263.5	2.04	mg/L	0.031	2.04	mg/L	0.031	1.53%
Mg 279.079	1343977.9	37.6	mg/L	0.38	37.6	mg/L	0.38	1.01%
Mn 257.610	1462807.6	1.43	mg/L	0.015	1.43	mg/L	0.015	1.06%
Mo 202.030	101370.1	1.08	mg/L	0.011	1.08	mg/L	0.011	1.05%
Ni 231.604	131475.5	0.991	mg/L	0.0094	0.991	mg/L	0.0094	0.95%
Pb 220.353	22417.5	1.04	mg/L	0.011	1.04	mg/L	0.011	1.09%
Sb 206.833	25074.7	1.10	mg/L	0.021	1.10	mg/L	0.021	1.89%
Se 196.026	11202.6	1.08	mg/L	0.012	1.08	mg/L	0.012	1.11%
Si 288.158	1083042.8	15.8	mg/L	0.17	15.8	mg/L	0.17	1.08%
Sn 189.933	-412.7	-0.0144	mg/L	0.00014	-0.0144	mg/L	0.00014	0.97%
Ti 337.280	1236759.8	1.10	mg/L	0.013	1.10	mg/L	0.013	1.18%
Tl 190.800	311.5	1.06	mg/L	0.035	1.06	mg/L	0.035	3.29%
V 292.402	201371.5	1.08	mg/L	0.010	1.08	mg/L	0.010	0.95%
Zn 206.200	198509.4	0.989	mg/L	0.0069	0.989	mg/L	0.0069	0.70%
K 766.490	943505.9	57.7	mg/L	1.03	57.7	mg/L	1.03	1.79%
Na 589.592	3011358.0	66.1	mg/L	0.23	66.1	mg/L	0.23	0.35%
Sr 407.771	3800808.3	1.54	mg/L	0.003	1.54	mg/L	0.003	0.22%

Recovery Check: L030450522PS 0.9

Analyte	Expected	Measured	Std.	Units	Recovery

	Conc.	Conc.	Dev.		(%)
Tl 190.800	1.03	1.06	0.035	mg/L	102.7
K 766.490	52.3	57.7	1.033	mg/L	110.8
Na 589.592	58.7	66.1	0.230	mg/L	114.9
Sr 407.771	1.45	1.54	0.003	mg/L	109.2
Ag 328.068	0.201	0.225	0.003	mg/L	112.1
Al 237.312	10.0	11.2	0.160	mg/L	111.9
As 188.979	1.00	1.07	0.010	mg/L	106.3
Ba 230.424	10.2	9.91	0.094	mg/L	97.6
Be 234.861	1.00	1.11	0.013	mg/L	111.0
Ca 227.549	89.4	79.1	0.947	mg/L	-2.9
Cd 228.802	1.00	1.05	0.013	mg/L	104.5
Co 228.616	1.00	1.00	0.010	mg/L	100.0
Cr 267.716	1.00	1.03	0.013	mg/L	102.9
Cu 327.396	1.00	1.07	0.013	mg/L	106.5
Fe 261.387	2.30	2.04	0.031	mg/L	73.8
Mg 279.079	39.8	37.6	0.379	mg/L	77.2
Mn 257.610	1.46	1.43	0.015	mg/L	97.2
Mo 202.030	1.01	1.08	0.011	mg/L	107.0
Ni 231.604	1.00	0.991	0.009	mg/L	99.1
Pb 220.353	1.00	1.04	0.011	mg/L	104.1
Sb 206.833	1.00	1.10	0.021	mg/L	109.6
Se 196.026	1.00	1.08	0.012	mg/L	107.8
Si 288.158	16.1	15.8	0.171	mg/L	96.2
Sn 189.933	0.983	-0.0144	0.000	mg/L	0.1
Ti 337.280	1.000	1.10	0.013	mg/L	110.1
V 292.402	1.000	1.08	0.010	mg/L	108.5
Zn 206.200	0.999	0.989	0.007	mg/L	99.0

Sequence No.: 14
Sample ID: L030450523
Analyst: MSW/SLP
Sample Wt:
Dilution:

Autosampler Location: 75
Date Collected: 5/2/2003 7:00:27 PM

Sample Prep Volume:
Data Type: Original

Mean Data: L030450523

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4762021.9						2783.52	0.06%
Ag 328.068	425.8	0.00097	mg/L	0.000029	0.00097	mg/L	0.000029	3.00%
Al 237.312	800.9	0.0295	mg/L	0.00028	0.0295	mg/L	0.00028	0.95%
As 188.979	-4.2	-0.00022	mg/L	0.000014	-0.00022	mg/L	0.000014	6.34%
Ba 230.424	71180.6	0.318	mg/L	0.0008	0.318	mg/L	0.0008	0.26%
Be 234.861	193.1	0.00011	mg/L	0.000004	0.00011	mg/L	0.000004	3.76%
Ca 227.549	101413.5	97.1	mg/L	0.50	97.1	mg/L	0.50	0.52%
Cd 228.802	68.5	0.00012	mg/L	0.000014	0.00012	mg/L	0.000014	11.31%
Co 228.616	-39.7	0.00015	mg/L	0.000007	0.00015	mg/L	0.000007	4.62%
Cr 267.716	-175.3	-0.00024	mg/L	0.000001	-0.00024	mg/L	0.000001	0.62%
Cu 327.396	126.3	0.00046	mg/L	0.000008	0.00046	mg/L	0.000008	1.78%
Fe 261.387	25264.9	1.69	mg/L	0.008	1.69	mg/L	0.008	0.48%
Mg 279.079	1039406.9	29.1	mg/L	0.08	29.1	mg/L	0.08	0.26%
Mn 257.610	74348.7	0.0723	mg/L	0.00031	0.0723	mg/L	0.00031	0.43%
Mo 202.030	822.6	0.00877	mg/L	0.000035	0.00877	mg/L	0.000035	0.40%
Ni 231.604	-17.9	-0.00011	mg/L	0.000004	-0.00011	mg/L	0.000004	3.71%
Pb 220.353	57.1	0.00241	mg/L	0.000387	0.00241	mg/L	0.000387	16.07%
Sb 206.833	5.9	0.00012	mg/L	0.000149	0.00012	mg/L	0.000149	119.54%
Se 196.026	17.4	0.00126	mg/L	0.000817	0.00126	mg/L	0.000817	64.87%
Si 288.158	449923.6	6.58	mg/L	0.011	6.58	mg/L	0.011	0.17%
Sn 189.933	-322.4	-0.0154	mg/L	0.00027	-0.0154	mg/L	0.00027	1.78%
Ti 337.280	-122.5	0.00011	mg/L	0.000038	0.00011	mg/L	0.000038	33.08%
Tl 190.800	4.8	0.0155	mg/L	0.00375	0.0155	mg/L	0.00375	24.14%
V 292.402	-23.7	0.00003	mg/L	0.000034	0.00003	mg/L	0.000034	132.70%
Zn 206.200	-79.1	-0.00192	mg/L	0.000003	-0.00192	mg/L	0.000003	0.16%
K 766.490	20979.3	1.25	mg/L	0.022	1.25	mg/L	0.022	1.79%
Na 589.592	300600.0	6.60	mg/L	0.245	6.60	mg/L	0.245	3.71%
Sr 407.771	1069928.9	0.438	mg/L	0.0148	0.438	mg/L	0.0148	3.37%

Sequence No.: 15
Sample ID: L030450524

Autosampler Location: 76
Date Collected: 5/2/2003 7:05:24 PM

Analyst: MSW/SLP
Sample Wt: Sample Prep Volume:
Dilution: Data Type: Original

Mean Data: L030450524

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	4879665.5						140349.35	2.88%
Ag 328.068	506.4	0.00116	mg/L	0.000091	0.00116	mg/L	0.000091	7.83%
Al 237.312	926.4	0.0282	mg/L	0.00176	0.0282	mg/L	0.00176	6.26%
As 188.979	-6.8	-0.00013	mg/L	0.000485	-0.00013	mg/L	0.000485	366.47%
Ba 230.424	53045.8	0.238	mg/L	0.0092	0.238	mg/L	0.0092	3.88%
Be 234.861	325.7	0.00008	mg/L	0.000026	0.00008	mg/L	0.000026	32.30%
Ca 227.549	116841.2	112	mg/L	4.4	112	mg/L	4.4	3.98%
Cd 228.802	58.1	0.00008	mg/L	0.000009	0.00008	mg/L	0.000009	12.14%
Co 228.616	-9.8	0.00030	mg/L	0.000050	0.00030	mg/L	0.000050	16.24%
Cr 267.716	-256.2	-0.00043	mg/L	0.000055	-0.00043	mg/L	0.000055	12.94%
Cu 327.396	204.1	0.00074	mg/L	0.000286	0.00074	mg/L	0.000286	38.58%
Fe 261.387	61090.6	4.08	mg/L	0.168	4.08	mg/L	0.168	4.12%
Mg 279.079	1207166.1	33.8	mg/L	1.00	33.8	mg/L	1.00	2.97%
Mn 257.610	70776.8	0.0687	mg/L	0.00249	0.0687	mg/L	0.00249	3.62%
Mo 202.030	311.9	0.00333	mg/L	0.000091	0.00333	mg/L	0.000091	2.74%
Ni 231.604	-32.5	-0.00019	mg/L	0.000006	-0.00019	mg/L	0.000006	3.28%
Pb 220.353	63.6	0.00234	mg/L	0.000162	0.00234	mg/L	0.000162	6.93%
Sb 206.833	30.4	0.00095	mg/L	0.000300	0.00095	mg/L	0.000300	31.58%
Se 196.026	24.3	0.00133	mg/L	0.000050	0.00133	mg/L	0.000050	3.73%
Si 288.158	507212.4	7.42	mg/L	0.213	7.42	mg/L	0.213	2.88%
Sn 189.933	-339.7	-0.0161	mg/L	0.00047	-0.0161	mg/L	0.00047	2.90%
Ti 337.280	-237.2	0.00013	mg/L	0.000105	0.00013	mg/L	0.000105	80.10%
Tl 190.800	3.7	0.0113	mg/L	0.00112	0.0113	mg/L	0.00112	9.92%
V 292.402	-55.4	0.00006	mg/L	0.000005	0.00006	mg/L	0.000005	7.39%
Zn 206.200	-86.3	-0.00230	mg/L	0.000087	-0.00230	mg/L	0.000087	3.78%
K 766.490	12700.5	0.736	mg/L	0.0213	0.736	mg/L	0.0213	2.90%
Na 589.592	408306.9	8.97	mg/L	0.009	8.97	mg/L	0.009	0.10%
Sr 407.771	1526590.6	0.622	mg/L	0.0012	0.622	mg/L	0.0012	0.19%

Sequence No.: 16 Autosampler Location: 5
Sample ID: CCV Date Collected: 5/2/2003 7:10:22 PM
Analyst:
Sample Wt: Sample Prep Volume:
Dilution: Data Type: Original

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	5077450.5						83226.39	1.64%
Ag 328.068	186709.5	0.427	mg/L	0.0080	0.427	mg/L	0.0080	1.88%
QC value within limits for Ag 328.068 Recovery = 106.70%								
Al 237.312	342226.3	10.4	mg/L	0.18	10.4	mg/L	0.18	1.76%
QC value within limits for Al 237.312 Recovery = 103.71%								
As 188.979	4635.4	0.406	mg/L	0.0054	0.406	mg/L	0.0054	1.32%
QC value within limits for As 188.979 Recovery = 101.56%								
Ba 230.424	245041.0	1.09	mg/L	0.017	1.09	mg/L	0.017	1.59%
QC value within limits for Ba 230.424 Recovery = 109.27%								
Be 234.861	43862.7	0.0542	mg/L	0.00086	0.0542	mg/L	0.00086	1.58%
QC value within limits for Be 234.861 Recovery = 108.39%								
Ca 227.549	11287.9	10.5	mg/L	0.15	10.5	mg/L	0.15	1.44%
QC value within limits for Ca 227.549 Recovery = 105.47%								
Cd 228.802	16399.2	0.0511	mg/L	0.00068	0.0511	mg/L	0.00068	1.32%
QC value within limits for Cd 228.802 Recovery = 102.18%								
Co 228.616	28110.3	0.218	mg/L	0.0038	0.218	mg/L	0.0038	1.73%
QC value within limits for Co 228.616 Recovery = 109.10%								
Cr 267.716	116899.9	0.538	mg/L	0.0088	0.538	mg/L	0.0088	1.64%
QC value within limits for Cr 267.716 Recovery = 107.51%								
Cu 327.396	149145.8	0.542	mg/L	0.0105	0.542	mg/L	0.0105	1.93%
QC value within limits for Cu 327.396 Recovery = 108.46%								
Fe 261.387	63256.3	4.24	mg/L	0.075	4.24	mg/L	0.075	1.78%
QC value within limits for Fe 261.387 Recovery = 105.95%								
Mg 279.079	378415.6	10.5	mg/L	0.16	10.5	mg/L	0.16	1.52%

QC value within limits for Mg 279.079 Recovery = 105.43%

Mn 257.610	547854.4	0.535 mg/L	0.0083	0.535 mg/L	0.0083	1.54%

QC value within limits for Mn 257.610 Recovery = 106.94%

Mo 202.030	99798.2	1.06 mg/L	0.017	1.06 mg/L	0.017	1.55%

QC value within limits for Mo 202.030 Recovery = 106.92%

Ni 231.604	72062.5	0.544 mg/L	0.0083	0.544 mg/L	0.0083	1.53%

QC value within limits for Ni 231.604 Recovery = 108.71%

Pb 220.353	11438.6	0.533 mg/L	0.0072	0.533 mg/L	0.0072	1.36%

QC value within limits for Pb 220.353 Recovery = 106.64%

Sb 206.833	29056.5	1.28 mg/L	0.016	1.28 mg/L	0.016	1.24%

QC value within limits for Sb 206.833 Recovery = 106.50%

Se 196.026	4410.0	0.423 mg/L	0.0059	0.423 mg/L	0.0059	1.40%

QC value within limits for Se 196.026 Recovery = 105.84%

Si 288.158	371607.3	5.40 mg/L	0.074	5.40 mg/L	0.074	1.36%

QC value within limits for Si 288.158 Recovery = 108.08%

Sn 189.933	20470.9	1.04 mg/L	0.021	1.04 mg/L	0.021	2.05%

QC value within limits for Sn 189.933 Recovery = 104.39%

Ti 337.280	1196971.6	1.06 mg/L	0.019	1.06 mg/L	0.019	1.75%

QC value within limits for Ti 337.280 Recovery = 106.55%

Tl 190.800	156.1	0.535 mg/L	0.0291	0.535 mg/L	0.0291	5.44%

QC value within limits for Tl 190.800 Recovery = 107.00%

V 292.402	201417.5	1.08 mg/L	0.018	1.08 mg/L	0.018	1.65%

QC value within limits for V 292.402 Recovery = 108.09%

Zn 206.200	210487.1	1.05 mg/L	0.014	1.05 mg/L	0.014	1.33%

QC value within limits for Zn 206.200 Recovery = 104.89%

K 766.490	812054.9	49.7 mg/L	2.01	49.7 mg/L	2.01	4.06%

QC value within limits for K 766.490 Recovery = 99.34%

Na 589.592	2342614.0	51.4 mg/L	2.04	51.4 mg/L	2.04	3.97%

QC value within limits for Na 589.592 Recovery = 102.88%

Sr 407.771	2485519.5	1.01 mg/L	0.044	1.01 mg/L	0.044	4.32%

QC value within limits for Sr 407.771 Recovery = 100.93%

All analytes passed QC.

Sequence No.: 17
Sample ID: CCB
Analyst:
Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 5/2/2003 7:15:18 PM
Sample Prep Volume:
Data Type: Original

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	3852511.3						28869.54	0.75%
Ag 328.068	26.7	0.00006	mg/L	0.000008	0.00006	mg/L	0.000008	12.74%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 237.312	-52.0	-0.00157	mg/L	0.000073	-0.00157	mg/L	0.000073	4.62%
QC value within limits for Al 237.312 Recovery = Not calculated								
As 188.979	-4.5	-0.00040	mg/L	0.000544	-0.00040	mg/L	0.000544	136.52%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 230.424	28.4	0.00013	mg/L	0.000026	0.00013	mg/L	0.000026	20.69%
QC value within limits for Ba 230.424 Recovery = Not calculated								
Be 234.861	-19.6	-0.00002	mg/L	0.000000	-0.00002	mg/L	0.000000	1.51%
QC value within limits for Be 234.861 Recovery = Not calculated								
Ca 227.549	-5.4	-0.00507	mg/L	0.009503	-0.00507	mg/L	0.009503	187.41%
QC value within limits for Ca 227.549 Recovery = Not calculated								
Cd 228.802	16.6	0.00005	mg/L	0.000001	0.00005	mg/L	0.000001	2.10%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616	-13.2	-0.00010	mg/L	0.000007	-0.00010	mg/L	0.000007	6.56%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716	62.7	0.00029	mg/L	0.000060	0.00029	mg/L	0.000060	20.89%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.396	-47.7	-0.00017	mg/L	0.000063	-0.00017	mg/L	0.000063	36.47%
QC value within limits for Cu 327.396 Recovery = Not calculated								
Fe 261.387	-29.2	-0.00195	mg/L	0.000070	-0.00195	mg/L	0.000070	3.61%
QC value within limits for Fe 261.387 Recovery = Not calculated								
Mg 279.079	30.6	0.00085	mg/L	0.000067	0.00085	mg/L	0.000067	7.89%
QC value within limits for Mg 279.079 Recovery = Not calculated								
Mn 257.610	33.7	0.00003	mg/L	0.000006	0.00003	mg/L	0.000006	19.57%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.030	8.8	0.00009	mg/L	0.000002	0.00009	mg/L	0.000002	1.99%

```
   QC value within limits for Mo 202.030  Recovery = Not calculated
Ni 231.604                -9.0    -0.00007 mg/L      0.000003    -0.00007 mg/L      0.000003   4.05%
   QC value within limits for Ni 231.604  Recovery = Not calculated
Pb 220.353                 3.6     0.00017 mg/L      0.000274     0.00017 mg/L      0.000274 164.90%
   QC value within limits for Pb 220.353  Recovery = Not calculated
Sb 206.833                 0.9     0.00004 mg/L      0.000241     0.00004 mg/L      0.000241 663.53%
   QC value within limits for Sb 206.833  Recovery = Not calculated
Se 196.026                 9.0     0.00087 mg/L      0.000537     0.00087 mg/L      0.000537  61.58%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 288.158                10.3     0.00015 mg/L      0.000020     0.00015 mg/L      0.000020  13.45%
   QC value within limits for Si 288.158  Recovery = Not calculated
Sn 189.933                44.2     0.00224 mg/L      0.000146     0.00224 mg/L      0.000146   6.50%
   QC value within limits for Sn 189.933  Recovery = Not calculated
Ti 337.280                74.7     0.00007 mg/L      0.000066     0.00007 mg/L      0.000066 100.04%
   QC value within limits for Ti 337.280  Recovery = Not calculated
Tl 190.800                 1.2     0.00398 mg/L      0.006351     0.00398 mg/L      0.006351 159.60%
   QC value within limits for Tl 190.800  Recovery = Not calculated
V 292.402                 20.2     0.00011 mg/L      0.000016     0.00011 mg/L      0.000016  14.25%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 206.200              -262.0    -0.00131 mg/L      0.000048    -0.00131 mg/L      0.000048   3.68%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490                179.0      0.0110 mg/L       0.00398      0.0110 mg/L       0.00398  36.36%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592              -102.2    -0.00224 mg/L      0.002065    -0.00224 mg/L      0.002065  92.00%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771               -47.5     0.00590 mg/L      0.000016     0.00590 mg/L      0.000016   0.28%
   QC value within limits for Sr 407.771  Recovery = Not calculated
All analytes passed QC.
```

Metals

Date: 5/05/03
Analyst: JYM
Method: 6020A
Instrument: Elan
Work Group: 139770

	Analyst
Calibration/Linearity	
ICV/CCV	
ICB/CCB	
icsa/icsab/cri	
Blank/LCS	
MS/MSD	
Postspike/Serial Dilution	
Duplicate	
Record Results	
Excel Spreadsheets	
Results Reporting / Data Qualifiers	
Calculations & Correct Factors	
Reanalysis Assign	
Instrument Failure/Reassign	
Case Narrative	
QA Approval - Seedpak 3	
Check for Completeness	
Level IV Data	05001 04653
	05013
	04585
	04574

Cal 1

Primary Reviewer Initials & Date Checked JYM 5/05/03

Secondary Reviewer Initials & Date Checked DAS 5.6.03

✓ • Check for compliance with Method and project-specific requirements
✓ • Check the completeness of the reported information
NA • Check the information for the report narrative
✓ • Check the reasonableness of results

Supervisory Review Initials & Date Checked MB 5/6/03

Comments:

✓ - Checked & OK
NA - Not Applicable
DL - Diluted Out

KEMRON ENVIRONMENTAL SERVICES
ICP (ICP/MS) RUN LOGBOOK

ANALYST [illegible] DATE 5/05/03 TIME 10:34
METHOD # 6020A SOP # ME700 Rev # 1 WORK GROUP # 139770, 139769
CAL STD SOURCE M2-17-21A ICV/CCV SOURCE M2-17-34B
ICS AB SOURCE M2-17-28A ICS A SOURCE M2-17-21B POST SPK SOURCE M2-1-13-2a
Instrument ID: TJA IRIS: _____ Data File: _____ Perkin Elmer Optima: _____ Perkin Elmer ELAN: _____

Cup #	Sample No.	Dil	Prep Conc	Autosampler Runs	Cup #	Sample No.	Dil	Prep Conc	Autosampler Runs
	S0				27.	QCMRL			
	1 1/20				28.	PBS R3	4		
	2 1/5				29.	LCSS R3			
	3				30.	L030501101			
	ICV				31.	01DP			
	ICB				32.	03			
	ICSA				33.	03S			
	ICSAB			cw/cwB	34.	03SD			
1.	PBW H2	x 2		w/c 139756-04	35.	05			cw/cwB
2.	LCSW H2	4		05	36.	05SDL	20		
3.	L030458504	2		01	37.	05PS			
4.	05S			06	38.	07			
5.	06SD			07	39.	08			
6.	L030465305			08	40.	L030501301			
7.	05DP			10	41.	02			
8.	L030502109			cw/cwB	42.	03			cw/cwB
9.	09SDL	10			43.	ICSA			
10.	09PS	2			44.	ICSAB			cw/cwB
11.	L030501303	2			45.				
12.	ICSA				46.				
13.	ICSAB			cw/cwB	47.				
14.	FRS	**			48.				
15.	PBS R3	4		w/c 139756-03	49.				
16.	LCSS R3			04	50.				
17.	L030501101			02	51.				
18.	01DP			07	52.				
19.	03			01	53.				
20.	03S			05	54.				
21.	03SD			06	55.				
22.	05			cw/cwB	56.				
23.	ICSA				57.				
24.	ICSAB			cw/cwB	58.				
25.	FRS				59.				
26.	QCMRL				60.				[illegible] 5/5/03

Reviewed by: _____

Comments: * QCMRL (0.1ppb) and QCMRL (0.5ppb) were run prior PBW H2
** QCMRL (0.25ppb) and QCMRL (0.5ppb) were run prior PBS R3

Note: No entry for Dil represents 1X Dilution

Autosampler Run Key:
CCV - Continuing Calibration Verification
CCB = Continuing Calibration Blank
FRS = Full Recalibration Sequence
R = Analyst Rerun

KEMRON ENVIRONMENTAL SERVICES
FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

INSTRUMENT: PE - ICP/MS
METHOD: 6020A
ANALYST: Jyh
DATE: Monday, May 05, 2003

UNITS: ug/L

ICV Time: 10:45 AM
CCV1 Time: 11:09 AM
CCV2 Time: 12:08 PM

	Initial Calibration Verification			Continuing Calibration Verification CCV1			CCV2		Q
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	50	59.7	119.4	50	42.5	85.0	44.0	88.0	*
Antimony	50	53.5	107.0	50	49.7	99.4	49.1	98.2	
Arsenic	50	51.9	103.8	50	48.6	97.2	48.5	97.0	
Barium	50	52.8	105.6	50	57.1	114.2	46.3	92.6	*
Beryllium	50	45.3	90.6	50	34.3	68.6	29.6	59.2	*
Cadmium	50	45.4	90.8	50	46.1	92.2	46.4	92.8	
Calcium	5000	4190	83.8	5000	4290	85.8	4730	94.6	*
Chromium	50	54.0	108.0	50	53.8	107.6	49.9	99.8	
Cobalt	50	52.9	105.8	50	52.7	105.4	48.5	97.0	
Copper	50	58.3	116.6	50	54.5	109.0	50.4	100.8	*
Iron	5000	3860	77.2	5000	3090	61.8	3490	69.8	*
Lead	50	52.2	104.4	50	51.3	102.6	47.9	95.8	
Magnesium	5000	5190	103.8	5000	3900	78.0	4600	92.0	*
Manganese	50	57.4	114.8	50	59.1	118.2	55.9	111.8	*
Nickel	50	50.5	101.0	50	50.3	100.6	52.7	105.4	
Potassium	5000	5060	101.2	5000	3940	78.8	4290	85.8	*
Selenium	50	52.6	105.2	50	49.2	98.4	49.2	98.4	
Silver	50	53.3	106.6	50	48.3	96.6	48.0	96.0	
Sodium	5000	5380	107.6	5000	3790	75.8	4480	89.6	*
Thallium	50	52.6	105.2	50	51.7	103.4	47.3	94.6	
Vanadium	50	52.1	104.2	50	50.6	101.2	46.2	92.4	
Zinc	50	52.5	105.0	50	57.0	114.0	41.8	83.6	*

(1) Control Limits: 90-110%

KEMRON ENVIRONMENTAL SERVICES
FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

INSTRUMENT: PE - ICP/MS
METHOD: 6020A
ANALYST: Jyh
DATE: Monday, May 05, 2003

UNITS: ug/L

ICV Time: 10:45 AM
CCV1 Time: 12:42 PM
CCV2 Time:

	Initial Calibration Verification			Continuing Calibration Verification CCV1			CCV2		Q
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	50	59.7	119.4	50	39.1	78.2			*
Antimony	50	53.5	107.0	50	43.5	87.0			*
Arsenic	50	51.9	103.8	50	43.3	86.6			*
Barium	50	52.8	105.6	50	46.6	93.2			
Beryllium	50	45.3	90.6	50	45.8	91.6			
Cadmium	50	45.4	90.8	50	43.0	86.0			*
Calcium	5000	4190	83.8	5000	3400	68.0			*
Chromium	50	54.0	108.0	50	43.2	86.4			*
Cobalt	50	52.9	105.8	50	44.2	88.4			*
Copper	50	58.3	116.6	50	51.0	102.0			*
Iron	5000	3860	77.2	5000	3140	62.8			*
Lead	50	52.2	104.4	50	45.6	91.2			
Magnesium	5000	5190	103.8	5000	3810	76.2			*
Manganese	50	57.4	114.8	50	47.7	95.4			*
Nickel	50	50.5	101.0	50	43.0	86.0			*
Potassium	5000	5060	101.2	5000	3870	77.4			*
Selenium	50	52.6	105.2	50	43.2	86.4			*
Silver	50	53.3	106.6	50	44.1	88.2			*
Sodium	5000	5380	107.6	5000	3480	69.6			*
Thallium	50	52.6	105.2	50	46.4	92.8			
Vanadium	50	52.1	104.2	50	42.1	84.2			*
Zinc	50	52.5	105.0	50	53.2	106.4			

(1) Control Limits: 90-110%

KEMRON ENVIRONMENTAL SERVICES
FORM 3 - BLANKS

INSTRUMENT: PE - ICP/MS
METHOD: 6020A
ANALYST: Jyh
DATE: Monday, May 05, 2003

UNITS: ug/L

ICB Time: 10:50 AM
CCB1 Time: 11:14 AM
CCB2 Time: 12:12 PM
CCB3 Time: 12:47 PM

Analyte	Initial Calibration Blank(ug/L)		Continuing Calibration Blank (ug/L) CCB1 1		CCB2 2		CCB3 3	
Aluminum	0.124		0.597		0.507		0.15	
Antimony	0.0977		0.0807		0.0731		0.0723	
Arsenic	0.0013		-0.0076		0.0275		0.0083	
Barium	0		0		0		0	
Beryllium	0		0		0		0	
Cadmium	-0.134		-0.184		-0.184		-0.186	
Calcium	-4.00		-28.3		3.40		-28.3	
Chromium	0.327		0		0		0	
Cobalt	0.0557		0		0		0.0307	
Copper	0.13		0.124		0		0.134	
Iron	-0.40		-5.70		-4.60		-3.2	
Lead	-0.0052		0.0006		-0.0001		0.0047	
Magnesium	0		0		0		-0.2	
Manganese	0.0738		0.124		0.122		0.0802	
Nickel	-0.169		-0.297		-0.14		-0.153	
Potassium	2.10		2.30		2.80		-1.6	
Selenium	-0.0404		-0.061		-0.0045		-0.0422	
Silver	0		0.0308		0		0.0328	
Sodium	-0.10		0.30		-0.10		-0.7	
Thallium	0.0002		0.0294		-0.0008		0.0092	
Vanadium	-0.327		0.0218		-0.202		-0.173	
Zinc	-0.372		-0.222		-1.01		-1.47	

U = Result is less than MDL
B = Result is between MDL and RL

KEMRON ENVIRONMENTAL SERVICES
FORM 4B - INTERFERENCE CHECK SAMPLE (ICP/MS)

INSTRUMENT ID: PE - ICP/MS
METHOD: 6020A
ANALYST: Jyh
DATE: Monday, May 05, 2003

UNITS: ug/L

ICSA Time: 10:55:17
ICSAB Time: 11:04:27

Analyte	True Sol. A	True Sol. AB	Found Sol. A	Found Sol. AB	%R	Q
Aluminum	10000	10000	10600	10500.0	105.0	
Antimony	0	100	0	96.6	96.6	
Arsenic	0	100	0	93.4	93.4	
Barium	0	100	0	99.1	99.1	
Beryllium	0	100	0	85.2	85.2	
Cadmium	0	100	0	87.5	87.5	
Calcium	30000	30000	23800	26100.0	87.0	
Chromium	0	100	1	111.0	111.0	
Cobalt	0	100	0	85.3	85.3	
Copper	0	100	0	100.0	100.0	
Iron	25000	25000	14600	23100.0	92.4	
Lead	0	100	0	101.0	101.0	
Magnesium	10000	10000	7870	7540.0	75.4	*
Manganese	0	100	1	102.0	102.0	
Nickel	0	100	0	94.5	94.5	
Potassium	10000	10000	7940	8240.0	82.4	
Selenium	0	100	0	92.5	92.5	
Silver	0	100	0	27.0	27.0	*
Sodium	25000	25000	19200	18400.0	73.6	*
Thallium	0	100	0	102.0	102.0	
Vanadium	0	100	0	93.4	93.4	
Zinc	0	100	6	98.4	98.4	

(1) Control Limits: 80-120%

KEMRON ENVIRONMENTAL SERVICES
11-IN
ICP-AES AND ICP-MS LINEAR RANGES (QUARTERLY)

Instrument ID: PE - ICP/MS

Date: 9/21/01

Analyte	Integ. Time (Sec.)	Concentration (ug/L)
Antimony	40.00	100.0
Arsenic	40.00	100.0
Barium	10.00	100.0
Beryllium	10.00	100.0
Cadmium	40.00	100.0
Chromium	40.00	100.0
Cobalt	40.00	100.0
Copper	10.00	100.0
Lead	40.00	100.0
Manganese	40.00	100.0
Nickel	40.00	100.0
Selenium	40.00	100.0
Silver	10.00	100.0
Thallium	40.00	100.0
Vanadium	40.00	100.0
Zinc	40.00	100.0

Comments:

Forms by Chemdat/[illegible] 3/5/1/00/mm [illegible]

FORM XI-IN ILM05.0

Instrument Tuning Report

File Name: 060501.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
He	3.016	2.977	582	2064	0.694	
Li	7.016	6.979	1556	2060	0.685	
Co	58.933	58.878	14248	1950	0.719	
In	114.904	114.829	27899	1939	0.739	
Tl	204.975	205.026	49684	2242	0.722	

Relative Std. Dev.

Mass	Meas. Intens. RSD
2.000	1.915
3.000	1.854
4.000	24.635
5.000	59.265
6.000	1.212
7.000	0.683
8.000	91.287
9.000	1.577
58.000	2.039
59.000	1.338
60.000	22.612
114.000	1.787
115.000	2.122
116.000	6.571
204.000	3.439
205.000	2.556
206.000	2.102

Instrument Tuning Report

File Name: 060501.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
He	3.016	3.028	585	2064	0.673	
Li	7.016	6.929	1561	2060	0.659	
Co	58.933	58.878	14256	1950	0.707	
In	114.904	114.829	27898	1939	0.738	
Tl	204.975	204.976	49683	2242	0.720	

Relative Std. Dev.

Mass	Meas. Intens. RSD
2.000	1.174
3.000	1.161
4.000	33.402
5.000	61.237
6.000	1.187
7.000	2.037
8.000	71.188
9.000	2.462
58.000	0.892
59.000	1.311
60.000	19.569
114.000	1.606
115.000	1.232
116.000	15.509
204.000	1.027
205.000	1.059
206.000	1.165

Instrument Tuning Report

File Name: 060501.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
He	3.016	3.026	586	2064	0.683	
Li	7.016	7.029	1563	2060	0.675	
Co	58.933	58.979	14266	1950	0.716	
In	114.904	114.978	27916	1939	0.733	
Tl	204.975	204.975	49682	2242	0.719	

Relative Std. Dev.

Mass	Meas. Intens. RSD
2.000	1.297
3.000	2.069
4.000	30.046
5.000	72.818
6.000	0.650
7.000	1.135
8.000	94.786
9.000	0.853
58.000	2.102
59.000	1.297
60.000	32.452
114.000	2.386
115.000	0.547
116.000	4.948
204.000	2.677
205.000	0.894
206.000	0.842

Instrument Tuning Report

File Name: 060501.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
He	3.016	3.078	597	2064	0.686	
Li	7.016	7.029	1565	2060	0.680	
Co	58.933	58.978	14276	1950	0.714	
In	114.904	114.929	27922	1939	0.735	
Tl	204.975	204.976	49682	2242	0.721	

Relative Std. Dev.

Mass	Meas. Intens. RSD
2.000	2.223
3.000	1.641
4.000	23.697
5.000	67.420
6.000	0.800
7.000	0.899
8.000	74.920
9.000	2.779
58.000	1.613
59.000	0.305
60.000	11.609
114.000	1.194
115.000	1.106
116.000	13.788
204.000	1.009
205.000	1.045
206.000	1.349

Instrument Tuning Report

File Name: 060501.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
He	3.016	3.028	599	2064	0.688	
Li	7.016	6.979	1556	2060	0.686	
Co	58.933	58.878	14262	1950	0.717	
In	114.904	114.879	27915	1939	0.732	
Tl	204.975	204.975	49682	2242	0.719	

Relative Std. Dev.

Mass	Meas. Intens. RSD
2.000	1.237
3.000	1.607
4.000	23.713
5.000	50.000
6.000	2.144
7.000	1.796
8.000	58.685
9.000	1.649
58.000	2.986
59.000	1.052
60.000	22.372
114.000	1.597
115.000	1.226
116.000	12.993
204.000	1.444
205.000	0.712
206.000	1.692

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Monday, May 05, 2003 10:08:45
Sample Description:
Method File: C:\elandata\Method\Service\6020 methods\6020 daily.mth
Dataset File: c:\elandata\dataset\042903\Sample.303
Tuning File: c:\elandata\Tuning\060501.tun
Optimization File: c:\elandata\Optimize\6020.dac
Dual Detector Mode: Dual
Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
Mg	24.0	32259.4	32259.385	316.757	1.0
Rh	102.9	258925.6	258925.551	2260.872	0.9
Pb	208.0	174075.3	174075.311	2380.802	1.4
Ba	137.9	241793.2	241793.209	5786.509	2.4
Ba++	69.0	3516.4	0.015	0.001	4.3
Ce	139.9	305581.1	305561.109	5506.541	1.8
CeO	155.9	8440.5	0.028	0.001	4.8
Bkgd	220.0	2.0	2.000	2.739	136.9

Current Optimization File Data

Current Value	Description
0.98	Nebulizer Gas Flow
8.50	Lens Voltage
1550.00	ICP RF Power
-1900.00	Analog Stage Voltage
1350.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-6.00	AC Rod Offset
60.00	Service DAC 1
0.00	Quadrupole Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	37	9.0	6080.8
Co	59	37	10.0	134702.1
Rh	103	37	11.3	305569.5
Pb	208	37	13.8	195410.9

Method 6020 - Summary Report

Sample ID: Blank

Sample Date/Time: Monday, May 05, 2003 10:34:00
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: c:\elandata\Method\service\6020 methods\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	17010.425					ug/L
	Be	9	0.000					ug/L
	Al	27	1000.058					ug/L
>	Sc-1	45	253912.383					ug/L
	V	51	2925.336					ug/L
	Cr	52	7335.457					ug/L
	Cr	53	0.000					ug/L
	Mn	55	333.345					ug/L
	Co	59	0.000					ug/L
	Ni	60	666.713					ug/L
	Cu	65	0.000					ug/L
	Zn	66	3000.338					ug/L
	Ge	72	845666.850					ug/L
	As	75	163.653					ug/L
	Se	77	166.635					ug/L
	Se	82	134.133					ug/L
	Y	89	765711.390					ug/L
	Rh	103	0.000					ug/L
	Ag	107	0.000					ug/L
	Cd	114	1000.105					ug/L
>	In	115	732209.982					ug/L
	Sb	123	14.122					ug/L
	Ba	135	0.000					ug/L
	Ce	140	1000.058					ug/L
>	Tb	159	690298.928					ug/L
	Ho	165	0.000					ug/L
	Tl	203	47.667					ug/L
	Tl	205	133.468					ug/L
	Pb	206	333.671					ug/L
	Pb	207	300.304					ug/L
	Pb	208	1179.991					ug/L
>	Bi	209	517619.117					ug/L
	Na	23	8335.866					mg/L
	Mg	24	666.690					mg/L
	K	39	433832.705					mg/L
	Ca	43	333.345					mg/L
	Fe	54	35639.936					mg/L
	Fe	57	9002.929					mg/L

⊢>	Sc	45	253912.383	mg/L
	Cl	35	8335.819	mg/L
	Kr	83	152.669	mg/L
	U	238	0.000	mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
⌈	Be	9					
|	Al	27					
⊢>	Sc-1	45					
⌈	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
⊢>	Ge	72					
|	As	75					
|	Se	77					
⌊	Se	82					
	Y	89					
⌈	Rh	103					
|	Ag	107					
|	Cd	114					
⊢>	In	115					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⊢>	Tb	159					
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
⊢>	Bi	209					
⌈	Na	23					
|	Mg	24					
|	K	39					
|	Ca	43					
|	Fe	54					
|	Fe	57					
⊢>	Sc	45					
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Monday, May 05, 2003 10:36:52
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 2
Method File: c:\elandata\Method\service\6020 methods\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
Li	6	15341.715	-1668.71				ug/L
Be	9	1333.450	0.01	5.0000	6.014	120.281	ug/L
Al	27	26024.313	0.10	5.0000	0.496	9.926	ug/L
Sc-1	45	238657.056	238657.06				ug/L
V	51	50317.416	0.06	5.0000	1.759	35.182	ug/L
Cr	52	47079.201	0.05	5.0000	0.999	19.975	ug/L
Cr	53	5667.822	0.01	5.0000	1.113	22.256	ug/L
Mn	55	62471.155	0.07	5.0000	0.576	11.510	ug/L
Co	59	49754.311	0.06	5.0000	0.902	18.043	ug/L
Ni	60	10337.360	0.01	5.0000	1.830	36.596	ug/L
Cu	65	16009.175	0.02	5.0000	0.898	17.960	ug/L
Zn	66	15341.902	0.01	5.0000	1.440	28.800	ug/L
Ge	72	839538.193	839538.19				ug/L
As	75	10387.259	0.01	5.0000	0.100	1.997	ug/L
Se	77	1201.258	0.00	5.0000	2.327	46.532	ug/L
Se	82	1241.221	0.00	5.0000	0.221	4.425	ug/L
Y	89	774117.138	8405.75				ug/L
Rh	103	0.000	0.00				ug/L
Ag	107	58453.832	0.08	5.0000	0.536	10.720	ug/L
Cd	114	27352.656	0.04	5.0000	1.689	33.778	ug/L
In	115	722513.376	722513.38				ug/L
Sb	123	25954.146	0.04	5.0000	0.054	1.087	ug/L
Ba	135	12005.136	0.02	5.0000	0.833	16.668	ug/L
Ce	140	1333.403	0.00				ug/L
Tb	159	649497.185	649497.19				ug/L
Ho	165	0.000	0.00				ug/L
Tl	203	36402.359	36354.69	5.0000	0.082	1.635	ug/L
Tl	205	88192.745	88059.28	5.0000	0.118	2.362	ug/L
Pb	206	30529.792	30196.12	5.0000	0.219	4.386	ug/L
Pb	207	27788.264	27487.96	5.0000	0.490	9.800	ug/L
Pb	208	124173.493	122993.50	5.0000	0.129	2.577	ug/L
Bi	209	542346.671	542346.67				ug/L
Na	23	1627663.471	6.80	0.5000	0.023	4.518	mg/L
Mg	24	1237458.747	5.20	0.5000	0.027	5.301	mg/L
K	39	4168155.264	15.93	0.5000	0.087	17.314	mg/L
Ca	43	6334.792	0.03	0.5000	0.157	31.339	mg/L
Fe	54	331515.760	1.25	0.5000	0.053	10.686	mg/L
Fe	57	129899.369	0.50	0.5000	0.104	20.761	mg/L

↳ Sc	45	238657.056	238657.06		mg/L
Cl	35	12338.807	4002.99		mg/L
Kr	83	173.003	20.33		mg/L
U	238	0.000	0.00		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
┌	Be	9					
│	Al	27					
↳	Sc-1	45					
┌	V	51					
│	Cr	52					
│	Cr	53					
│	Mn	55					
│	Co	59					
│	Ni	60					
│	Cu	65					
│	Zn	66					
↳	Ge	72					
│	As	75					
│	Se	77					
└	Se	82					
	Y	89					
┌	Rh	103					
│	Ag	107					
│	Cd	114					
↳	In	115					
└	Sb	123					
┌	Ba	135					
│	Ce	140					
↳	Tb	159					
┌	Ho	165					
│	Tl	203					
│	Tl	205					
│	Pb	206					
│	Pb	207					
│	Pb	208					
↳	Bi	209					
┌	Na	23					
│	Mg	24					
│	K	39					
│	Ca	43					
│	Fe	54					
│	Fe	57					
↳	Sc	45					
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 1
Report Date/Time: Monday, May 05, 2003 10:37:25
Page 2

Method 6020 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Monday, May 05, 2003 10:39:44
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 3
Method File: c:\elandata\Method\service\6020 methods\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
Li	6	15008.323	-2002.10				ug/L
Be	9	3000.385	0.01	18.9251	9.134	48.265	ug/L
Al	27	67829.239	0.26	19.3365	2.998	15.502	ug/L
Sc-1	45	254253.661	254253.66				ug/L
V	51	158135.415	0.18	19.7067	2.229	11.310	ug/L
Cr	52	151466.161	0.17	19.8500	0.791	3.984	ug/L
Cr	53	15675.550	0.02	19.4465	4.320	22.213	ug/L
Mn	55	263085.712	0.31	20.0400	2.285	11.400	ug/L
Co	59	223740.191	0.26	20.1046	0.868	4.318	ug/L
Ni	60	41729.894	0.05	20.0389	4.788	23.894	ug/L
Cu	65	50758.959	0.06	19.6661	3.955	20.113	ug/L
Zn	66	36381.619	0.04	19.4166	5.556	28.616	ug/L
Ge	72	858748.466	858748.47				ug/L
As	75	42084.729	0.05	20.0023	0.532	2.659	ug/L
Se	77	3837.723	0.00	19.8246	6.672	33.658	ug/L
Se	82	4666.711	0.01	19.9989	0.970	4.852	ug/L
Y	89	734430.799	-31260.59				ug/L
Rh	103	0.000	0.00				ug/L
Ag	107	216639.236	0.29	19.8822	1.668	8.387	ug/L
Cd	114	94630.397	0.13	19.8304	1.886	9.512	ug/L
In	115	737238.926	737238.93				ug/L
Sb	123	107888.946	0.15	20.0220	0.229	1.142	ug/L
Ba	135	44069.646	0.07	19.8649	2.263	11.394	ug/L
Ce	140	1000.058	0.00				ug/L
Tb	159	659273.274	659273.27				ug/L
Ho	165	0.000	0.00				ug/L
Tl	203	148831.814	148784.15	20.0266	0.234	1.170	ug/L
Tl	205	373149.126	373015.66	20.0657	0.676	3.368	ug/L
Pb	206	132746.457	132412.79	20.1039	0.649	3.229	ug/L
Pb	207	111242.918	110942.61	20.0105	0.968	4.829	ug/L
Pb	208	511308.680	510128.69	20.0420	0.442	2.207	ug/L
Bi	209	566716.565	566716.56				ug/L
Na	23	8670916.357	34.21	2.0243	0.140	6.901	mg/L
Mg	24	5725432.500	22.63	2.0096	0.179	8.930	mg/L
K	39	15727461.133	60.36	1.9935	0.121	6.069	mg/L
Ca	43	25357.508	0.10	1.9939	0.496	24.873	mg/L
Fe	54	1273584.979	4.90	1.9973	0.278	13.940	mg/L
Fe	57	564633.087	2.20	2.0101	0.237	11.777	mg/L

↳ Sc	45	254253.661	254253.66		mg/L
Cl	35	12338.784	4002.97		mg/L
Kr	83	159.002	6.33		mg/L
U	238	0.000	0.00		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
┌	Be	9					
│	Al	27					
↳	Sc-1	45					
┌	V	51					
│	Cr	52					
│	Cr	53					
│	Mn	55					
│	Co	59					
│	Ni	60					
│	Cu	65					
│	Zn	66					
↳	Ge	72					
│	As	75					
│	Se	77					
└	Se	82					
	Y	89					
┌	Rh	103					
│	Ag	107					
│	Cd	114					
↳	In	115					
└	Sb	123					
┌	Ba	135					
│	Ce	140					
↳	Tb	159					
┌	Ho	165					
│	Tl	203					
│	Tl	205					
│	Pb	206					
│	Pb	207					
│	Pb	208					
↳	Bi	209					
┌	Na	23					
│	Mg	24					
│	K	39					
│	Ca	43					
│	Fe	54					
│	Fe	57					
↳	Sc	45					
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 2
Report Date/Time: Monday, May 05, 2003 10:40:18

Method 6020 - Summary Report

Sample ID: Standard 3

Sample Date/Time: Monday, May 05, 2003 10:42:37
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 4
Method File: c:\elandata\Method\service\6020 methods\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	17343.886	333.46				ug/L
	Be	9	24354.293	0.11	101.7626	18.114	17.800	ug/L
	Al	27	316490.225	1.36	99.9728	4.825	4.826	ug/L
>	Sc-1	45	232548.863	232548.86				ug/L
	V	51	862635.108	0.99	100.2900	1.824	1.819	ug/L
	Cr	52	764647.320	0.87	100.1133	7.287	7.278	ug/L
	Cr	53	90621.500	0.10	100.3971	8.199	8.167	ug/L
	Mn	55	1180156.174	1.35	99.4802	3.022	3.038	ug/L
	Co	59	1057792.905	1.21	99.7229	2.646	2.656	ug/L
	Ni	60	233225.485	0.27	100.4373	5.409	5.385	ug/L
	Cu	65	241704.450	0.28	99.6560	8.685	8.715	ug/L
	Zn	66	168340.697	0.19	99.7774	19.181	19.224	ug/L
	Ge	72	871641.880	871641.88				ug/L
	As	75	210349.545	0.24	99.9505	0.885	0.886	ug/L
	Se	77	17528.277	0.02	99.6736	4.138	4.152	ug/L
	Se	82	22887.648	0.03	99.9198	1.427	1.428	ug/L
	Y	89	772014.476	6303.09				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	988760.859	1.32	99.5313	3.470	3.486	ug/L
	Cd	114	558035.376	0.75	100.5840	4.345	4.320	ug/L
>	In	115	746620.705	746620.70				ug/L
	Sb	123	541601.276	0.73	99.9692	1.357	1.358	ug/L
	Ba	135	187222.888	0.25	98.6666	13.989	14.178	ug/L
	Ce	140	3333.753	0.00				ug/L
>	Tb	159	749903.342	749903.34				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	743802.494	743754.83	100.0045	0.946	0.946	ug/L
	Tl	205	1760068.693	1759935.23	99.7711	1.383	1.366	ug/L
	Pb	206	649855.414	649521.74	99.9428	1.111	1.112	ug/L
	Pb	207	551044.295	550743.99	99.9728	3.938	3.939	ug/L
	Pb	208	2495863.337	2494483.35	99.9170	1.518	1.519	ug/L
>	Bi	209	592198.609	592198.61				ug/L
	Na	23	44176690.132	189.88	10.0451	0.165	1.640	mg/L
	Mg	24	28642594.932	123.33	10.0355	0.641	6.389	mg/L
	K	39	78838939.781	337.93	10.0426	0.605	6.021	mg/L
	Ca	43	108421.894	0.46	9.9788	1.657	16.601	mg/L
	Fe	54	8226017.101	35.32	10.1258	0.688	6.791	mg/L
	Fe	57	3557542.246	15.28	10.1168	0.406	4.013	mg/L

↳ Sc	45	232548.863	232548.86		mg/L
Cl	35	13340.267	5004.45		mg/L
Kr	83	161.669	9.00		mg/L
U	238	0.000	0.00		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
┌	Be	9					
│	Al	27					
↳	Sc-1	45					
┌	V	51					
│	Cr	52					
│	Cr	53					
│	Mn	55					
│	Co	59					
│	Ni	60					
│	Cu	65					
│	Zn	66					
↳	Ge	72					
│	As	75					
│	Se	77					
└	Se	82					
	Y	89					
┌	Rh	103					
│	Ag	107					
│	Cd	114					
↳	In	115					
└	Sb	123					
┌	Ba	135					
│	Ce	140					
↳	Tb	159					
┌	Ho	165					
│	Tl	203					
│	Tl	205					
│	Pb	206					
│	Pb	207					
│	Pb	208					
↳	Bi	209					
┌	Na	23					
│	Mg	24					
│	K	39					
│	Ca	43					
│	Fe	54					
│	Fe	57					
↳	Sc	45					
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 3
Report Date/Time: Monday, May 05, 2003 10:43:12
Page 2

Method 6020 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Monday, May 05, 2003 10:45:31
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: c:\elandata\Method\service\6020 methods\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
Li	6	14340.582	-2669.84				ug/L
Be	9	11338.352	0.05	45.2592	18.429	40.719	ug/L
Al	27	196010.579	0.81	59.7383	5.047	8.448	ug/L
Sc-1	45	240677.538	240677.54				ug/L
V	51	444083.031	0.51	52.1159	2.501	4.799	ug/L
Cr	52	386497.895	0.44	50.7427	2.074	4.088	ug/L
Cr	53	48081.151	0.06	53.9958	4.646	8.605	ug/L
Mn	55	672512.881	0.78	57.3995	4.059	7.071	ug/L
Co	59	553535.294	0.64	52.8642	2.460	4.653	ug/L
Ni	60	116136.953	0.13	50.5120	0.856	1.695	ug/L
Cu	65	139680.417	0.16	58.3299	2.377	4.075	ug/L
Zn	66	88943.070	0.10	52.4819	2.323	4.425	ug/L
Ge	72	860516.175	860516.17				ug/L
As	75	107934.936	0.13	51.9122	0.235	0.454	ug/L
Se	77	10380.822	0.01	59.3993	3.511	5.911	ug/L
Se	82	11864.048	0.01	52.6338	0.178	0.338	ug/L
Y	89	769915.164	4203.79				ug/L
Rh	103	0.000	0.00				ug/L
Ag	107	522067.828	0.71	53.2693	3.015	5.660	ug/L
Cd	114	249150.240	0.34	45.4362	2.217	4.880	ug/L
In	115	736044.788	736044.79				ug/L
Sb	123	285714.989	0.39	53.4987	0.664	1.242	ug/L
Ba	135	96998.140	0.13	52.8421	5.543	10.489	ug/L
Ce	140	2000.140	0.00				ug/L
Tb	159	720049.855	720049.86				ug/L
Ho	165	0.000	0.00				ug/L
Tl	203	391053.844	391006.18	52.5743	0.474	0.902	ug/L
Tl	205	933802.583	933669.11	52.9299	1.313	2.480	ug/L
Pb	206	362124.877	361791.21	55.6693	1.335	2.398	ug/L
Pb	207	264420.317	264120.01	47.9439	0.654	1.385	ug/L
Pb	208	1304874.051	1303494.06	52.2117	0.536	1.027	ug/L
Bi	209	584541.933	584541.93				ug/L
Na	23	24487453.706	101.73	5.3816	0.456	8.476	mg/L
Mg	24	15347554.235	63.76	5.1884	0.016	0.300	mg/L
K	39	41334994.003	170.11	5.0553	0.381	7.528	mg/L
Ca	43	47077.888	0.19	4.1917	0.427	10.190	mg/L
Fe	54	4270613.763	17.60	5.0469	0.036	0.717	mg/L
Fe	57	1410348.200	5.83	3.8629	0.104	2.705	mg/L

|> Sc	45	240677.538	240677.54		mg/L
Cl	35	11671.580	3335.78		mg/L
Kr	83	163.669	11.00		mg/L
U	238	0.000	0.00		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
⌈	Be	9	90.518				
|	Al	27	119.477				
|>	Sc-1	45		94.788			
⌈	V	51	104.232				
|	Cr	52	101.485				
|	Cr	53	107.992				
|	Mn	55	114.799				
|	Co	59	105.728				
|	Ni	60	101.024				
|	Cu	65	116.660				
|	Zn	66	104.964				
|>	Ge	72		101.756			
|	As	75	103.824				
|	Se	77	118.799				
⌊	Se	82	105.268				
	Y	89					
⌈	Rh	103					
|	Ag	107	106.539				
|	Cd	114	90.872				
|>	In	115		100.524			
⌊	Sb	123	106.997				
⌈	Ba	135	105.684				
|	Ce	140					
|>	Tb	159		104.310			
⌈	Ho	165					
|	Tl	203	105.149				
|	Tl	205	105.860				
|	Pb	206	111.339				
|	Pb	207	95.888				
|	Pb	208	104.423				
|>	Bi	209		112.929			
⌈	Na	23	107.631				
|	Mg	24	103.767				
|	K	39	101.106				
|	Ca	43	83.834				
|	Fe	54	100.939				
|	Fe	57	77.258				
|>	Sc	45		94.788			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Std 1	Be	9	ICV is out of limits (+/-10%)
QC Std 1	Al	27	ICV is out of limits (+/-10%)
QC Std 1	Mn	55	ICV is out of limits (+/-10%)
QC Std 1	Cu	65	ICV is out of limits (+/-10%)
QC Std 1	Se	77	ICV is out of limits (+/-10%)
QC Std 1	Pb	206	ICV is out of limits (+/-10%)
QC Std 1	Fe	57	ICV is out of limits (+/-10%)

Method 6020 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Monday, May 05, 2003 10:50:24
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: c:\elandata\Method\service\6020 methods\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	16676.402	-334.02				ug/L
	Be	9	0.000	0.00	0.0000	0.000		ug/L
	Al	27	1666.772	0.00	0.1235	0.111	90.144	ug/L
>	Sc-1	45	291979.586	291979.59				ug/L
	V	51	271.486	-0.00	-0.3266	0.168	51.410	ug/L
	Cr	52	6668.230	-0.00	-0.1834	0.098	53.661	ug/L
	Cr	53	333.345	0.00	0.3271	0.567	173.205	ug/L
	Mn	55	1333.403	0.00	0.0738	0.040	54.589	ug/L
	Co	59	666.713	0.00	0.0557	0.096	173.205	ug/L
	Ni	60	333.345	-0.00	-0.1693	0.221	130.372	ug/L
	Cu	65	333.345	0.00	0.1296	0.224	173.205	ug/L
	Zn	66	2667.017	-0.00	-0.3716	1.196	321.910	ug/L
>	Ge	72	944374.740	944374.74				ug/L
	As	75	184.195	0.00	0.0013	0.029	2218.400	ug/L
	Se	77	33.367	-0.00	-0.8178	0.294	35.926	ug/L
	Se	82	139.430	-0.00	-0.0404	0.088	217.749	ug/L
	Y	89	900910.667	135199.28				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	0.000	0.00	0.0000	0.000		ug/L
	Cd	114	324.403	-0.00	-0.1341	0.091	67.583	ug/L
>	In	115	838273.714	838273.71				ug/L
	Sb	123	608.971	0.00	0.0977	0.010	10.018	ug/L
	Ba	135	0.000	0.00	0.0000	0.000		ug/L
	Ce	140	1000.105	-0.00				ug/L
>	Tb	159	755488.608	755488.61				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	49.001	1.33	0.0002	0.000	198.431	ug/L
	Tl	205	200.202	66.73	0.0038	0.006	150.001	ug/L
	Pb	206	233.570	-100.10	-0.0154	0.039	251.664	ug/L
	Pb	207	166.835	-133.47	-0.0242	0.021	86.602	ug/L
	Pb	208	1049.426	-130.56	-0.0052	0.012	234.192	ug/L
>	Bi	209	639284.731	639284.73				ug/L
	Na	23	9002.929	-0.00	-0.0001	0.000	556.315	mg/L
	Mg	24	666.690	-0.00	-0.0000	0.000	398.793	mg/L
	K	39	514665.711	0.07	0.0021	0.012	551.386	mg/L
	Ca	43	333.345	-0.00	-0.0040	0.042	1044.048	mg/L
	Fe	54	24505.060	-0.05	-0.0151	0.019	123.120	mg/L
	Fe	57	9670.647	-0.00	-0.0004	0.016	4219.297	mg/L

Sc	45	291979.586	291979.59		mg/L
Cl	35	14340.629	6004.81		mg/L
Kr	83	175.003	22.33		mg/L
U	238	0.000	0.00		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
	Be	9					
	Al	27					
>	Sc-1	45		114.992			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Co	59					
	Ni	60					
	Cu	65					
	Zn	66					
>	Ge	72		111.672			
	As	75					
	Se	77					
	Se	82					
	Y	89					
	Rh	103					
	Ag	107					
	Cd	114					
>	In	115		114.485			
	Sb	123					
	Ba	135					
	Ce	140					
>	Tb	159		109.444			
	Ho	165					
	Tl	203					
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		123.505			
	Na	23					
	Mg	24					
	K	39					
	Ca	43					
	Fe	54					
	Fe	57					
>	Sc	45		114.992			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 2
Report Date/Time: Monday, May 05, 2003 10:50:57

QC Std 2	Se	77	ICB is out of limits (+/-3*IDL)
QC Std 2	Cd	114	ICB is out of limits (+/-3*IDL)
Bi 209 Int Std for QC Std		209	RERUN FOR AFCEE QC

Method 6020 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Monday, May 05, 2003 10:55:17
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 6
Method File: c:\elandata\Method\service\6020 methods\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	18679.439	1669.01				ug/L
	Be	9	0.000	0.00	0.0000	0.000		ug/L
	Al	27	42037559.514	144.09	10629.1667	589.579	5.547	ug/L
>	Sc-1	45	291858.110	291958.11				ug/L
	V	51	2341.652	-0.00	-0.0994	0.530	532.663	ug/L
	Cr	52	13005.988	0.00	0.5534	0.215	38.834	ug/L
	Cr	53	666.713	0.00	0.6585	1.141	173.205	ug/L
	Mn	55	7668.732	0.01	0.5542	0.035	6.351	ug/L
	Co	59	1000.058	0.00	0.0845	0.085	100.270	ug/L
	Ni	60	1666.885	0.00	0.3610	0.829	229.557	ug/L
	Cu	65	1000.058	0.00	0.3713	0.367	98.967	ug/L
	Zn	66	14674.418	0.01	6.1455	1.806	29.383	ug/L
>	Ge	72	965578.748	965578.75				ug/L
	As	75	126.694	-0.00	-0.0261	0.027	103.179	ug/L
	Se	77	533.877	0.00	1.7851	0.628	35.176	ug/L
	Se	82	132.169	-0.00	-0.0839	0.007	7.924	ug/L
	Y	89	856989.903	91278.51				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	0.000	0.00	0.0000	0.000		ug/L
	Cd	114	982.173	-0.00	-0.0180	0.166	924.714	ug/L
>	In	115	793568.543	793568.54				ug/L
	Sb	123	606.628	0.00	0.1027	0.002	1.763	ug/L
	Ba	135	0.000	0.00	0.0000	0.000		ug/L
	Ce	140	2000.233	0.00				ug/L
>	Tb	159	775498.935	775498.93				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	788.696	741.03	0.0996	0.007	7.463	ug/L
	Tl	205	2002.149	1868.68	0.1059	0.029	27.839	ug/L
	Pb	206	900.930	587.26	0.0873	0.015	17.647	ug/L
	Pb	207	667.351	387.05	0.0666	0.046	68.635	ug/L
	Pb	208	3239.062	2059.07	0.0825	0.013	16.075	ug/L
>	Bi	209	599402.324	599402.32				ug/L
	Na	23	105891691.702	363.48	19.2288	1.848	9.609	mg/L
	Mg	24	28148757.089	96.72	7.8699	0.745	9.465	mg/L
	K	39	78435671.547	267.21	7.9409	0.259	3.257	mg/L
	Ca	43	320912.530	1.10	23.7502	2.838	11.951	mg/L
	Fe	54	14474006.662	49.54	14.2050	1.017	7.157	mg/L
	Fe	57	6424921.296	21.98	14.5757	0.549	3.768	mg/L

⊢>	Sc	45	291958.110	291958.11	mg/L
	Cl	35	4086770.365	4078434.55	mg/L
	Kr	83	176.336	23.67	mg/L
	U	238	333.345	333.35	mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
⌈	Be	9					
|	Al	27	106.292				
⊢>	Sc-1	45		114.984			
⌈	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		114.180			
|	As	75					
|	Se	77					
⌊	Se	82					
	Y	89					
⌈	Rh	103					
|	Ag	107					
|	Cd	114					
|>	In	115		108.380			
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⊢>	Tb	159		112.342			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
⊢>	Bi	209		115.800			
⌈	Na	23	76.915				
|	Mg	24	78.699				
|	K	39	79.409				
|	Ca	43	79.167				
|	Fe	54	56.820				
|	Fe	57	58.303				
⊢>	Sc	45		114.984			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 4
Report Date/Time: Monday, May 05, 2003 10:55:52
Page 2

QC Std 4	Na	23	ICSA is out of limits (+/-20%)
QC Std 4	Mg	24	ICSA is out of limits (+/-20%)
QC Std 4	K	39	ICSA is out of limits (+/-20%)
QC Std 4	Ca	43	ICSA is out of limits (+/-20%)
QC Std 4	Fe	54	ICSA is out of limits (+/-20%)
QC Std 4	Fe	57	ICSA is out of limits (+/-20%)

Method 6020 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Monday, May 05, 2003 11:04:27
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 7
Method File: c:\elandata\Method\service\6020 methods\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	22016.426	5008.00				ug/L
	Be	9	26692.616	0.09	85.2415	18.506	21.710	ug/L
	Al	27	42550212.679	141.70	10452.2096	677.750	6.484	ug/L
>	Sc-1	45	300465.908	300465.91				ug/L
	V	51	941391.379	0.92	93.3842	4.435	4.750	ug/L
	Cr	52	920157.195	0.89	102.8121	8.793	8.553	ug/L
	Cr	53	117484.653	0.11	111.0424	10.218	9.202	ug/L
	Mn	55	1415607.179	1.39	101.8505	6.649	6.529	ug/L
	Co	59	1059919.848	1.04	85.2733	0.594	0.697	ug/L
	Ni	60	257305.673	0.25	94.5364	7.338	7.762	ug/L
	Cu	65	285492.384	0.28	100.4310	1.402	1.396	ug/L
	Zn	66	194657.523	0.19	98.4290	10.183	10.345	ug/L
>	Ge	72	1021522.417	1021522.42				ug/L
	As	75	230357.187	0.23	93.4074	1.509	1.616	ug/L
	Se	77	17728.729	0.02	85.8579	3.198	3.724	ug/L
	Se	82	24623.097	0.02	92.4938	1.667	1.803	ug/L
	Y	89	841814.251	78102.86				ug/L
	Rh	103	333.345	0.00				ug/L
	Ag	107	300122.152	0.36	26.9769	0.727	2.694	ug/L
	Cd	114	543468.332	0.65	87.4734	3.486	3.987	ug/L
>	In	115	835962.707	835962.71				ug/L
	Sb	123	585950.633	0.70	96.5905	0.997	1.032	ug/L
	Ba	135	183505.166	0.25	99.1055	6.319	6.376	ug/L
	Ce	140	2333.532	0.00				ug/L
>	Tb	159	728106.425	728106.43				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	758219.929	758172.26	101.9431	1.578	1.548	ug/L
	Tl	205	1804889.808	1804556.34	102.3007	2.567	2.509	ug/L
	Pb	206	684204.438	683870.77	105.2281	1.211	1.150	ug/L
	Pb	207	537037.023	536736.72	97.4301	1.650	1.694	ug/L
	Pb	208	2517027.828	2515847.63	100.7728	1.381	1.370	ug/L
>	Bi	209	629368.715	629368.71				ug/L
	Na	23	104568045.556	348.57	18.4399	0.957	5.191	mg/L
	Mg	24	27819531.860	92.70	7.5429	0.310	4.108	mg/L
	K	39	83678158.591	277.13	8.2356	0.370	4.494	mg/L
	Ca	43	362934.394	1.21	26.0575	3.588	13.768	mg/L
	Fe	54	23905211.334	79.53	22.6040	1.284	5.629	mg/L
	Fe	57	10491192.083	34.91	23.1441	0.970	4.192	mg/L

I> Sc	45	300465.908	300465.91		mg/L
Cl	35	4449378.354	4441042.53		mg/L
Kr	83	223.671	71.00		mg/L
U	238	0.000	0.00		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
	Be	9					
	Al	27	104.522				
I>	Sc-1	45		118.334			
	V	51	93.384				
	Cr	52	102.812				
	Cr	53	111.042				
	Mn	55	101.850				
	Co	59	85.273				
	Ni	60	94.536				
	Cu	65	100.431				
	Zn	66	98.429				
I>	Ge	72		120.795			
	As	75	93.407				
	Se	77	85.858				
	Se	82	92.494				
	Y	89					
	Rh	103					
	Ag	107	26.977				
	Cd	114	87.473				
I>	In	115		114.170			
	Sb	123	96.591				
	Ba	135					
	Ce	140					
I>	Tb	159		105.477			
	Ho	165					
	Tl	203	101.943				
	Tl	205	102.301				
	Pb	206	105.228				
	Pb	207	97.430				
	Pb	208	100.773				
I>	Bi	209		121.589			
	Na	23	73.760				
	Mg	24	75.429				
	K	39	82.356				
	Ca	43	86.858				
	Fe	54	91.216				
	Fe	57	92.576				
I>	Sc	45		118.334			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 5
Report Date/Time: Monday, May 05, 2003 11:05:03

Ge 72 Int Std for QC Std		72	RERUN FOR AFCEE QC
QC Std 5	Ag	107	ICSAB is out of limits {+/-20%}
Bi 209 Int Std for QC Std		209	RERUN FOR AFCEE QC
QC Std 5	Na	23	ICSAB is out of limits {+/-20%}
QC Std 5	Mg	24	ICSAB is out of limits {+/-20%}

Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Monday, May 05, 2003 11:09:22
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: c:\elandata\Method\service\6020 methods\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	21349.563	4339.14				ug/L
	Be	9	11337.932	0.04	34.3174	6.127	17.854	ug/L
	Al	27	184857.030	0.58	42.5111	1.735	4.081	ug/L
>	Sc-1	45	318512.268	318512.27				ug/L
	V	51	477910.885	0.50	50.5721	4.352	8.605	ug/L
	Cr	52	437314.056	0.45	51.7707	5.170	9.987	ug/L
	Cr	53	53100.915	0.06	53.7781	10.216	18.996	ug/L
	Mn	55	767772.364	0.80	59.1357	2.424	4.098	ug/L
	Co	59	611829.040	0.64	52.7248	0.888	1.684	ug/L
	Ni	60	128241.206	0.13	50.3108	2.723	5.413	ug/L
	Cu	65	144731.426	0.15	54.5091	2.690	4.936	ug/L
	Zn	66	106733.766	0.11	57.0291	7.104	12.457	ug/L
>	Ge	72	953762.893	953762.89				ug/L
	As	75	112030.490	0.12	48.6136	0.456	0.936	ug/L
	Se	77	9946.741	0.01	51.2053	0.905	1.767	ug/L
	Se	82	12309.548	0.01	49.2378	0.792	1.608	ug/L
	Y	89	876465.617	110754.23				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	510999.228	0.64	48.3189	2.444	5.059	ug/L
	Cd	114	272925.181	0.34	46.1142	3.198	6.934	ug/L
>	In	115	794517.869	794517.87				ug/L
	Sb	123	286790.041	0.36	49.7453	0.681	1.368	ug/L
	Ba	135	100354.270	0.15	57.0589	6.993	12.255	ug/L
	Ce	140	1333.450	0.00				ug/L
>	Tb	159	691342.234	691342.23				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	384393.284	384345.62	51.6787	1.014	1.961	ug/L
	Tl	205	931084.076	930950.61	52.7758	2.175	4.122	ug/L
	Pb	206	346940.101	346606.43	53.3328	1.327	2.488	ug/L
	Pb	207	265546.325	265246.02	48.1483	2.585	5.370	ug/L
	Pb	208	1281605.200	1280425.21	51.2877	0.529	1.031	ug/L
>	Bi	209	594344.715	594344.72				ug/L
	Na	23	22832896.023	71.67	3.7915	0.114	3.019	mg/L
	Mg	24	15249815.495	47.89	3.8968	0.200	5.133	mg/L
	K	39	42746432.822	132.59	3.9402	0.311	7.880	mg/L
	Ca	43	63811.704	0.20	4.2940	0.778	18.107	mg/L
	Fe	54	4837639.502	15.05	4.3151	0.096	2.232	mg/L
	Fe	57	1494838.471	4.68	3.0896	0.226	7.307	mg/L

⊢>	Sc	45	318512.266	318512.27	mg/L
	Cl	35	23352.786	15016.97	mg/L
	Kr	83	175.003	22.33	mg/L
	U	238	0.000	0.00	mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
⊢	Be	9	68.635				
|	Al	27	85.022				
⊢>	Sc-1	45		125.442			
⊢	V	51	101.144				
|	Cr	52	103.541				
|	Cr	53	107.556				
|	Mn	55	118.271				
|	Co	59	105.450				
|	Ni	60	100.622				
|	Cu	65	109.018				
|	Zn	66	114.058				
⊢>	Ge	72		112.782			
|	As	75	97.227				
|	Se	77	102.411				
⊢	Se	82	98.476				
	Y	89					
⊢	Rh	103					
|	Ag	107	96.638				
|	Cd	114	92.228				
⊢>	In	115		108.510			
⊢	Sb	123	99.491				
⊢	Ba	135	114.118				
|	Ce	140					
⊢>	Tb	159		100.151			
⊢	Ho	165					
|	Tl	203	103.357				
|	Tl	205	105.552				
|	Pb	206	106.666				
|	Pb	207	96.297				
|	Pb	208	102.575				
⊢>	Bi	209		114.823			
⊢	Na	23	75.830				
|	Mg	24	77.937				
|	K	39	78.805				
|	Ca	43	85.881				
|	Fe	54	86.303				
|	Fe	57	61.791				
⊢>	Sc	45		125.442			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Monday, May 05, 2003 11:09:57

QC Std 6	Be	9	CCV is out of limits (+/-10%)
QC Std 6	Al	27	CCV is out of limits (+/-10%)
Sc-1 45 Int Std for QC Std		45	
QC Std 6	Mn	55	CCV is out of limits (+/-10%)
QC Std 6	Zn	66	CCV is out of limits (+/-10%)
QC Std 6	Ba	135	CCV is out of limits (+/-10%)
QC Std 6	Na	23	CCV is out of limits (+/-10%)
QC Std 6	Mg	24	CCV is out of limits (+/-10%)
QC Std 6	K	39	CCV is out of limits (+/-10%)
Sc 45 Int Std for QC Std		45	

Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Monday, May 05, 2003 11:14:14
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: c:\elandata\Method\service\6020 methods\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	22350.835	5340.41				ug/L
	Be	9	0.000	0.00	0.0000	0.000		ug/L
	Al	27	3667.238	0.01	0.5973	0.459	76.910	ug/L
>	Sc-1	45	300808.339	300808.34				ug/L
	V	51	3534.755	0.00	0.0218	0.037	169.419	ug/L
	Cr	52	10003.525	0.00	0.1985	0.119	59.709	ug/L
	Cr	53	0.000	0.00	0.0000	0.000		ug/L
	Mn	55	2000.163	0.00	0.1237	0.078	61.770	ug/L
	Co	59	0.000	0.00	0.0000	0.000		ug/L
	Ni	60	0.000	-0.00	-0.2968	0.000	0.000	ug/L
	Cu	65	333.345	0.00	0.1236	0.214	173.205	ug/L
	Zn	66	3000.385	-0.00	-0.2216	0.954	430.412	ug/L
>	Ge	72	962088.694	962088.69				ug/L
	As	75	168.576	-0.00	-0.0076	0.031	408.678	ug/L
	Se	77	133.468	-0.00	-0.2921	0.305	104.321	ug/L
	Se	82	137.394	-0.00	-0.0610	0.086	141.258	ug/L
	Y	89	843531.418	77820.03				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	333.345	0.00	0.0308	0.053	173.205	ug/L
	Cd	114	0.000	-0.00	-0.1841	0.000	0.000	ug/L
>	In	115	795625.489	795625.49				ug/L
	Sb	123	482.171	0.00	0.0807	0.007	9.197	ug/L
	Ba	135	0.000	0.00	0.0000	0.000		ug/L
	Ce	140	1666.772	0.00				ug/L
>	Tb	159	722188.791	722188.79				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	266.672	219.00	0.0294	0.002	5.871	ug/L
	Tl	205	1101.148	987.68	0.0549	0.026	47.408	ug/L
	Pb	206	400.407	66.74	0.0103	0.031	299.997	ug/L
	Pb	207	133.468	-166.84	-0.0303	0.028	91.651	ug/L
	Pb	208	1195.564	15.57	0.0006	0.005	759.041	ug/L
>	Bi	209	599418.766	599418.77				ug/L
	Na	23	11338.539	0.01	0.0003	0.001	354.793	mg/L
	Mg	24	666.690	-0.00	-0.0000	0.000	490.377	mg/L
	K	39	534509.195	0.08	0.0023	0.006	278.388	mg/L
	Ca	43	0.000	-0.00	-0.0283			mg/L
	Fe	54	39107.361	-0.01	-0.0035	0.007	201.902	mg/L
	Fe	57	8337.033	-0.01	-0.0057	0.016	271.558	mg/L

>	Sc	45	300808.339	300808.34	mg/L
	Cl	35	19346.808	11010.99	mg/L
	Kr	83	166.669	14.00	mg/L
	U	238	0.000	0.00	mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
	Be	9					
	Al	27					
>	Sc-1	45		118.469			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Co	59					
	Ni	60					
	Cu	65					
	Zn	66					
>	Ge	72		113.767			
	As	75					
	Se	77					
	Se	82					
	Y	89					
	Rh	103					
	Ag	107					
	Cd	114					
>	In	115		108.661			
	Sb	123					
	Ba	135					
	Ce	140					
>	Tb	159		104.620			
	Ho	165					
	Tl	203					
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		115.803			
	Na	23					
	Mg	24					
	K	39					
	Ca	43					
	Fe	54					
	Fe	57					
>	Sc	45		118.469			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Std 7	Mn	55	CCB is out of limits (+/-3*IDL)
QC Std 7	Ni	60	CCB is out of limits (+/-3*IDL)
QC Std 7	Cd	114	CCB is out of limits (+/-3*IDL)
QC Std 7	Tl	205	CCB is out of limits (+/-3*IDL)

Method 6020 - Summary Report

Sample ID: QCMRL

Sample Date/Time: Monday, May 05, 2003 11:19:09
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 9
Method File: c:\elandata\Method\service\6020 methods\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
Li	6	26024.173	9013.75				ug/L
Be	9	333.345	0.00	0.9209	1.595	173.205	ug/L
Al	27	15007.949	0.04	3.0134	0.500	16.589	ug/L
Sc-1	45	336248.194	336248.19				ug/L
V	51	2859.148	-0.00	-0.0591	0.648	1096.231	ug/L
Cr	52	10337.196	0.00	0.1823	0.279	153.311	ug/L
Cr	53	333.345	0.00	0.3167	0.549	173.205	ug/L
Mn	55	4334.092	0.00	0.2868	0.152	52.891	ug/L
Co	59	2333.555	0.00	0.1892	0.092	48.835	ug/L
Ni	60	333.345	-0.00	-0.1734	0.214	123.268	ug/L
Cu	65	333.345	0.00	0.1203	0.208	173.205	ug/L
Zn	66	2000.233	-0.00	-0.8311	1.034	124.450	ug/L
Ge	72	1009741.772	1009741.77				ug/L
As	75	470.025	0.00	0.1128	0.003	3.038	ug/L
Se	77	166.835	-0.00	-0.1591	0.755	474.851	ug/L
Se	82	178.409	0.00	0.0697	0.015	21.438	ug/L
Y	89	881108.765	115397.38				ug/L
Rh	103	0.000	0.00				ug/L
Ag	107	666.690	0.00	0.0614	0.053	86.649	ug/L
Cd	114	1315.542	0.00	0.0331	0.192	579.474	ug/L
In	115	825834.502	825834.50				ug/L
Sb	123	943.241	0.00	0.1547	0.004	2.300	ug/L
Ba	135	1000.058	0.00	0.4865	0.505	103.849	ug/L
Ce	140	2000.163	0.00				ug/L
Tb	159	811466.982	811466.98				ug/L
Ho	165	0.000	0.00				ug/L
Tl	203	1077.051	1029.38	0.1384	0.005	3.822	ug/L
Tl	205	2636.213	2502.74	0.1419	0.007	4.619	ug/L
Pb	206	1835.292	1501.62	0.2311	0.073	31.507	ug/L
Pb	207	1801.918	1501.61	0.2726	0.055	20.001	ug/L
Pb	208	7267.373	6087.38	0.2438	0.023	9.549	ug/L
Bi	209	628588.370	628588.37				ug/L
Na	23	18876.543	0.02	0.0009	0.000	41.099	mg/L
Mg	24	2000.303	0.00	0.0003	0.001	240.841	mg/L
K	39	513165.918	-0.18	-0.0054	0.007	128.562	mg/L
Ca	43	0.000	-0.00	-0.0283			mg/L
Fe	54	39096.935	-0.03	-0.0072	0.006	77.229	mg/L
Fe	57	9670.063	-0.01	-0.0045	0.004	89.345	mg/L

⊢> Sc	45	336248.194	336248.19		mg/L
Cl	35	18345.697	10009.88		mg/L
Kr	83	200.670	48.00		mg/L
U	238	0.000	0.00		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
⌈	Be	9					
|	Al	27					
⊢>	Sc-1	45		132.427			
⌈	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
⊢>	Ge	72		119.402			
|	As	75					
|	Se	77					
⌊	Se	82					
	Y	89					
⌈	Rh	103					
|	Ag	107					
|	Cd	114					
⊢>	In	115		112.787			
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⊢>	Tb	159		117.553			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
⊢>	Bi	209		121.438			
⌈	Na	23					
|	Mg	24					
|	K	39					
|	Ca	43					
|	Fe	54					
|	Fe	57					
⊢>	Sc	45		132.427			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QCMRL
Report Date/Time: Monday, May 05, 2003 11:19:45

Sc-1 45 Int Std for sample	45	
Bi 209 Int Std for sample	209	RERUN FOR AFCEE SAMPLE
Sc 45 Int Std for sample	45	

Method 6020 - Summary Report

Sample ID: QCMRL

Sample Date/Time: Monday, May 05, 2003 11:24:07
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 10
Method File: c:\elandata\Method\service\6020 methods\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	18011.651	1001.23				ug/L
	Be	9	0.000	0.00	0.0000	0.000		ug/L
	Al	27	22016.953	0.06	4.2766	0.200	4.687	ug/L
>	Sc-1	45	356054.468	356054.47				ug/L
	V	51	12420.346	0.01	0.8767	0.381	43.436	ug/L
	Cr	52	19346.806	0.01	1.1703	0.418	35.718	ug/L
	Cr	53	1000.058	0.00	0.9359	0.926	98.974	ug/L
	Mn	55	10670.868	0.01	0.7356	0.220	29.840	ug/L
	Co	59	8669.304	0.01	0.6946	0.039	5.644	ug/L
	Ni	60	1000.058	0.00	0.0678	0.361	531.966	ug/L
	Cu	65	2000.163	0.00	0.7048	0.361	51.195	ug/L
	Zn	66	12672.690	0.01	4.6543	2.207	47.412	ug/L
>	Ge	72	1025294.036	1025294.04				ug/L
	As	75	1614.005	0.00	0.5724	0.020	3.463	ug/L
	Se	77	168.835	-0.00	-0.1668	1.034	619.606	ug/L
	Se	82	310.203	0.00	0.5565	0.119	21.309	ug/L
	Y	89	885002.866	119291.48				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	10003.571	0.01	0.9119	0.152	16.672	ug/L
	Cd	114	4667.437	0.00	0.5793	0.089	15.435	ug/L
>	In	115	823790.216	823790.22				ug/L
	Sb	123	3883.477	0.00	0.6469	0.025	3.933	ug/L
	Ba	135	1666.818	0.00	0.8755	0.781	89.161	ug/L
	Ce	140	1666.958	0.00				ug/L
>	Tb	159	757983.735	757983.73				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	4984.586	4936.92	0.6638	0.009	1.395	ug/L
	Tl	205	12952.156	12818.69	0.7267	0.033	4.513	ug/L
	Pb	206	4638.726	4305.06	0.6624	0.047	7.106	ug/L
	Pb	207	4638.758	4338.45	0.7875	0.217	27.536	ug/L
	Pb	208	19529.931	18349.94	0.7350	0.054	7.322	ug/L
>	Bi	209	655799.163	655799.16				ug/L
	Na	23	42733.391	0.09	0.0046	0.002	39.053	mg/L
	Mg	24	4000.630	0.01	0.0007	0.000	57.793	mg/L
	K	39	627842.385	0.06	0.0017	0.002	144.858	mg/L
	Ca	43	2333.555	0.01	0.1146	0.073	63.996	mg/L
	Fe	54	31824.031	-0.05	-0.0148	0.002	11.077	mg/L
	Fe	57	11004.867	-0.00	-0.0033	0.009	277.660	mg/L

I> Sc	45	356054.468	356054.47		mg/L
Cl	35	18679.065	10343.25		mg/L
Kr	83	152.336	-0.33		mg/L
U	238	0.000	0.00		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
	Be	9					
	Al	27					
>	Sc-1	45		140.227			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Co	59					
	Ni	60					
	Cu	65					
	Zn	66					
>	Ge	72		121.241			
	As	75					
	Se	77					
	Se	82					
	Y	89					
	Rh	103					
	Ag	107					
	Cd	114					
>	In	115		112.507			
	Sb	123					
	Ba	135					
	Ce	140					
>	Tb	159		109.805			
	Ho	165					
	Tl	203					
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		126.695			
	Na	23					
	Mg	24					
	K	39					
	Ca	43					
	Fe	54					
	Fe	57					
>	Sc	45		140.227			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QCMRL
Report Date/Time: Monday, May 05, 2003 11:24:43

Sc-1 45 Int Std for sample	45	
Ge 72 Int Std for sample	72	RERUN FOR AFCEE SAMPLE
Bi 209 Int Std for sample	209	RERUN FOR AFCEE SAMPLE
Sc 45 Int Std for sample	45	

Method 6020 - Summary Report

Sample ID: PBW H2 WG139750-04

Sample Date/Time: Monday, May 05, 2003 11:29:01
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 11
Method File: c:\elandata\Method\service\6020 methods\6020a.mth
Sample Description: 2

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	24020.481	7010.06				ug/L
	Be	9	0.000	0.00	0.0000	0.000		ug/L
	Al	27	2333.532	0.00	0.2192	0.109	49.765	ug/L
>	Sc-1	45	336246.890	336246.89				ug/L
	V	51	4396.799	0.00	0.1043	0.192	184.423	ug/L
	Cr	52	8669.421	0.00	0.0181	0.262	1444.642	ug/L
	Cr	53	666.713	0.00	0.6565	1.137	173.205	ug/L
	Mn	55	1333.403	0.00	0.0710	0.043	60.752	ug/L
	Co	59	333.345	0.00	0.0279	0.048	173.205	ug/L
	Ni	60	333.345	-0.00	-0.1669	0.225	134.741	ug/L
	Cu	65	0.000	0.00	0.0000	0.000		ug/L
	Zn	66	2333.625	-0.00	-0.6142	1.111	180.881	ug/L
>	Ge	72	979703.312	979703.31				ug/L
	As	75	248.010	0.00	0.0251	0.044	175.783	ug/L
	Se	77	100.100	-0.00	-0.4760	0.007	1.393	ug/L
	Se	82	158.126	0.00	0.0116	0.100	858.004	ug/L
	Y	89	868313.181	102601.79				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	0.000	0.00	0.0000	0.000		ug/L
	Cd	114	-8.942	-0.00	-0.1856	0.002	1.345	ug/L
>	In	115	822828.234	822828.23				ug/L
	Sb	123	97.493	0.00	0.0136	0.003	20.421	ug/L
	Ba	135	0.000	0.00	0.0000	0.000		ug/L
	Ce	140	2333.578	0.00				ug/L
>	Tb	159	723186.705	723186.70				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	57.334	9.67	0.0013	0.000	31.604	ug/L
	Tl	205	200.203	66.73	0.0038	0.011	299.999	ug/L
	Pb	206	333.672	0.00	0.0000	0.039	17957610.209	ug/L
	Pb	207	333.671	33.37	0.0061	0.010	173.209	ug/L
	Pb	208	1284.030	104.04	0.0042	0.008	195.028	ug/L
>	Bi	209	600325.553	600325.55				ug/L
	Na	23	5334.792	-0.01	-0.0007	0.000	35.608	mg/L
	Mg	24	1000.058	0.00	0.0000	0.000	967.990	mg/L
	K	39	580763.251	0.01	0.0004	0.007	1580.009	mg/L
	Ca	43	0.000	-0.00	-0.0283			mg/L
	Fe	54	29454.141	-0.05	-0.0154	0.006	40.870	mg/L
	Fe	57	10670.845	-0.00	-0.0024	0.006	255.793	mg/L

L>	Sc	45	336246.890	336246.89	mg/L
	Cl	35	17679.615	9343.80	mg/L
	Kr	83	197.003	44.33	mg/L
	U	238	0.000	0.00	mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
⌈	Be	9					
|	Al	27					
L>	Sc-1	45		132.426			
⌈	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		115.850			
|	As	75					
|	Se	77					
L	Se	82					
	Y	89					
⌈	Rh	103					
|	Ag	107					
|	Cd	114					
|>	In	115		112.376			
L	Sb	123					
⌈	Ba	135					
|	Ce	140					
L>	Tb	159		104.764			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
L>	Bi	209		115.978			
⌈	Na	23					
|	Mg	24					
|	K	39					
|	Ca	43					
|	Fe	54					
|	Fe	57					
L>	Sc	45		132.426			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: PBW H2 WG139750-04
Report Date/Time: Monday, May 05, 2003 11:29:34
Page 2

Sc-1 45 Int Std for sample	45
Sc 45 Int Std for sample	45

Method 6020 - Summary Report

Sample ID: LCSW H2 WG139750-05

Sample Date/Time: Monday, May 05, 2003 11:33:53
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 12
Method File: c:\elandata\Method\service\6020 methods\6020a.mth
Sample Description: 4

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	20348.430	3338.01				ug/L
	Be	9	4334.045	0.01	13.7563	5.025	36.525	ug/L
	Al	27	110093.717	0.36	26.5197	5.971	22.516	ug/L
>	Sc-1	45	307634.038	307634.04				ug/L
	V	51	243426.096	0.25	25.5021	1.167	4.576	ug/L
	Cr	52	262065.085	0.27	30.5308	3.074	10.067	ug/L
	Cr	53	25022.268	0.03	25.2457	3.923	15.540	ug/L
	Mn	55	405355.156	0.42	31.0890	2.184	7.026	ug/L
	Co	59	311376.587	0.33	26.7252	2.384	8.920	ug/L
	Ni	60	77885.196	0.08	30.3130	6.582	21.712	ug/L
	Cu	65	76538.154	0.08	28.7395	1.495	5.203	ug/L
	Zn	66	50425.828	0.05	25.8618	7.053	27.272	ug/L
>	Ge	72	957179.679	957179.68				ug/L
	As	75	55572.415	0.06	23.9867	0.249	1.037	ug/L
	Se	77	4471.841	0.00	22.3951	1.933	8.631	ug/L
	Se	82	5771.512	0.01	22.6746	0.330	1.457	ug/L
	Y	89	826287.185	60575.80				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	262404.772	0.33	24.7487	2.545	10.284	ug/L
	Cd	114	134960.014	0.17	22.6386	0.531	2.346	ug/L
>	In	115	796880.921	796880.92				ug/L
	Sb	123	145906.472	0.18	25.2387	0.679	2.692	ug/L
	Ba	135	54772.222	0.08	30.4845	3.488	11.440	ug/L
	Ce	140	1000.105	-0.00				ug/L
>	Tb	159	706387.987	706387.99				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	203100.862	203053.20	27.3023	0.477	1.747	ug/L
	Tl	205	485628.867	485495.42	27.5228	0.504	1.833	ug/L
	Pb	206	185582.482	185248.81	28.5045	0.680	2.385	ug/L
	Pb	207	143459.748	143159.44	25.9868	0.631	2.429	ug/L
	Pb	208	686179.352	684999.36	27.4378	0.188	0.685	ug/L
>	Bi	209	635669.909	635669.91				ug/L
	Na	23	21683.305	0.04	0.0020	0.000	14.330	mg/L
	Mg	24	1333.403	0.00	0.0001	0.000	106.535	mg/L
	K	39	560603.614	0.12	0.0036	0.008	226.779	mg/L
	Ca	43	333.345	-0.00	-0.0070	0.037	523.320	mg/L
	Fe	54	48378.823	0.02	0.0049	0.005	103.981	mg/L
	Fe	57	9002.999	-0.01	-0.0043	0.004	87.487	mg/L

↳ Sc	45	307634.038	307634.04		mg/L
Cl	35	15675.644	7339.82		mg/L
Kr	83	170.669	18.00		mg/L
U	238	0.000	0.00		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
	Be	9					
	Al	27					
↳	Sc-1	45		121.158			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Co	59					
	Ni	60					
	Cu	65					
	Zn	66					
↳	Ge	72		113.186			
	As	75					
	Se	77					
	Se	82					
	Y	89					
	Rh	103					
	Ag	107					
	Cd	114					
↳	In	115		108.832			
	Sb	123					
	Ba	135					
	Ce	140					
↳	Tb	159		102.331			
	Ho	165					
	Tl	203					
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
↳	Bi	209		122.806			
	Na	23					
	Mg	24					
	K	39					
	Ca	43					
	Fe	54					
	Fe	57					
↳	Sc	45		121.158			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: LCSW H2 WG139750-05
Report Date/Time: Monday, May 05, 2003 11:34:26

Sc-1 45 Int Std for sample	45	
Bi 209 Int Std for sample	209	RERUN FOR AFCEE SAMPLE
Sc 45 Int Std for sample	45	

Method 6020 - Summary Report

Sample ID: L030458504 WG139750-01

Sample Date/Time: Monday, May 05, 2003 11:38:44
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 13
Method File: c:\elandata\Method\service\6020 methods\6020a.mth
Sample Description: 2

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	23686.575	6676.15				ug/L
	Be	9	0.000	0.00	0.0000	0.000		ug/L
	Al	27	1078979.998	3.83	282.5180	27.898	9.875	ug/L
>	Sc-1	45	282436.636	282436.64				ug/L
	V	51	12869.285	0.01	1.0752	0.470	43.706	ug/L
	Cr	52	14008.429	0.01	0.7532	1.025	136.046	ug/L
	Cr	53	1000.058	0.00	1.0459	1.036	99.082	ug/L
	Mn	55	84920.858	0.09	6.7593	0.887	12.823	ug/L
	Co	59	4334.022	0.00	0.3882	0.107	27.630	ug/L
	Ni	60	6001.354	0.01	2.1644	0.832	38.420	ug/L
	Cu	65	4334.045	0.00	1.6976	0.617	36.373	ug/L
	Zn	66	15675.316	0.01	7.1074	0.995	14.002	ug/L
	Ge	72	919561.414	919561.41				ug/L
	As	75	1394.555	0.00	0.5486	0.025	4.478	ug/L
	Se	77	200.203	0.00	0.1073	1.105	1029.456	ug/L
	Se	82	379.589	0.00	0.9815	0.066	6.748	ug/L
	Y	89	659469.036	93757.65				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	333.345	0.00	0.0309	0.054	173.205	ug/L
	Cd	114	-8.942	-0.00	-0.1856	0.003	1.389	ug/L
>	In	115	799769.052	799769.05				ug/L
	Sb	123	1894.969	0.00	0.3239	0.012	3.809	ug/L
	Ba	135	67604.075	0.12	45.8163	5.145	11.230	ug/L
	Ce	140	15675.550	0.02				ug/L
>	Tb	159	751340.531	751340.53				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	368.342	320.67	0.0431	0.004	8.134	ug/L
	Tl	205	834.198	700.73	0.0397	0.028	70.472	ug/L
	Pb	206	2702.976	2369.31	0.3646	0.134	36.838	ug/L
	Pb	207	2702.959	2402.65	0.4361	0.018	4.167	ug/L
	Pb	208	11337.225	10157.23	0.4068	0.036	8.818	ug/L
>	Bi	209	641028.505	641028.51				ug/L
	Na	23	23163807.560	82.20	4.3484	0.435	10.004	mg/L
	Mg	24	9516666.779	33.79	2.7495	0.237	8.635	mg/L
	K	39	13342507.592	45.77	1.3600	0.198	14.579	mg/L
	Ca	43	264782.655	0.94	20.2999	3.283	16.174	mg/L
	Fe	54	291559.532	0.89	0.2558	0.008	3.134	mg/L
	Fe	57	129250.664	0.42	0.2809	0.034	11.959	mg/L

↳ Sc	45	282436.636	282436.64		mg/L
Cl	35	64146.948	55811.13		mg/L
Kr	83	148.669	-4.00		mg/L
U	238	13005.941	13005.94		mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
Li	6					
Be	9					
Al	27					
↳ Sc-1	45		111.234			
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		108.738			
As	75					
Se	77					
Se	82					
Y	89					
Rh	103					
Ag	107					
Cd	114					
> In	115		109.227			
Sb	123					
Ba	135					
Ce	140					
↳ Tb	159		108.843			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
↳ Bi	209		123.842			
Na	23					
Mg	24					
K	39					
Ca	43					
Fe	54					
Fe	57					
↳ Sc	45		111.234			
Cl	35					
Kr	83					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Bi 209 Int Std for sample 209 RERUN FOR AFCEE SAMPLE

Method 6020 - Summary Report

Sample ID: L030458505S WG139750-06

Sample Date/Time: Monday, May 05, 2003 11:43:37
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 14
Method File: c:\elandata\Method\service\6020 methods\6020a.mth
Sample Description: 2

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	18345.720	1335.30				ug/L
	Be	9	8669.888	0.03	31.7691	15.396	48.462	ug/L
	Al	27	1209826.690	4.75	350.1184	46.008	13.141	ug/L
>	Sc-1	45	257663.967	257663.97				ug/L
	V	51	392730.126	0.43	43.7745	4.086	9.335	ug/L
	Cr	52	372125.801	0.40	46.3774	2.320	5.002	ug/L
	Cr	53	40726.186	0.05	43.4837	8.675	19.951	ug/L
	Mn	55	749144.474	0.83	60.8044	0.946	1.556	ug/L
	Co	59	568507.422	0.63	51.6401	5.626	10.895	ug/L
	Ni	60	119840.676	0.13	49.5740	7.222	14.568	ug/L
	Cu	65	136314.033	0.15	54.1421	0.941	1.737	ug/L
	Zn	66	93640.573	0.10	52.5605	4.546	8.649	ug/L
>	Ge	72	904834.139	904834.14				ug/L
	As	75	96394.471	0.11	44.0789	0.109	0.247	ug/L
	Se	77	6941.974	0.01	37.4091	4.159	11.117	ug/L
	Se	82	9304.099	0.01	39.0992	0.328	0.840	ug/L
	Y	89	814239.134	48527.74				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	430402.830	0.55	41.4871	2.109	5.083	ug/L
	Cd	114	250843.597	0.32	43.1964	1.398	3.235	ug/L
>	In	115	779417.045	779417.05				ug/L
	Sb	123	227079.638	0.29	40.1465	0.071	0.176	ug/L
	Ba	135	163270.829	0.23	88.8500	16.888	19.008	ug/L
	Ce	140	17010.495	0.02				ug/L
>	Tb	159	728191.938	728191.94				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	356757.272	356709.60	47.9628	0.544	1.133	ug/L
	Tl	205	858445.805	858312.34	48.6579	0.915	1.881	ug/L
	Pb	206	311537.113	311203.44	47.8853	1.438	3.004	ug/L
	Pb	207	257253.588	256953.28	46.6430	2.094	4.489	ug/L
	Pb	208	1197476.908	1196296.92	47.9179	1.170	2.441	ug/L
>	Bi	209	606973.054	606973.05				ug/L
	Na	23	21509249.877	84.35	4.4621	0.581	13.025	mg/L
	Mg	24	9339193.804	36.67	2.9839	0.394	13.198	mg/L
	K	39	12542272.189	47.06	1.3985	0.033	2.362	mg/L
	Ca	43	270198.507	1.06	22.8795	3.352	14.649	mg/L
	Fe	54	290003.639	0.98	0.2817	0.006	2.219	mg/L
	Fe	57	107409.468	0.39	0.2603	0.083	31.881	mg/L

⌊> Sc	45	257663.967	257663.97		mg/L
Cl	35	80562.201	72226.38		mg/L
Kr	83	158.669	6.00		mg/L
U	238	13339.777	13339.78		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
⌈	Be	9					
|	Al	27					
⌊>	Sc-1	45		101.478			
⌈	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		106.997			
|	As	75					
|	Se	77					
⌊	Se	82					
	Y	89					
⌈	Rh	103					
|	Ag	107					
|	Cd	114					
|>	In	115		106.447			
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		105.489			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
⌊>	Bi	209		117.262			
⌈	Na	23					
|	Mg	24					
|	K	39					
|	Ca	43					
|	Fe	54					
|	Fe	57					
⌊>	Sc	45		101.478			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L030458505S WG139750-06
Report Date/Time: Monday, May 05, 2003 11:44:10
Page 2

Method 6020 - Summary Report

Sample ID: L030458506SD WG139750-07

Sample Date/Time: Monday, May 05, 2003 11:46:29
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 15
Method File: c:\elandata\Method\service\6020 methods\6020a.mth
Sample Description: 2

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	19012.667	2002.24				ug/L
	Be	9	12339.368	0.05	44.4020	20.224	45.547	ug/L
	Al	27	1538104.805	5.66	417.7117	29.564	7.078	ug/L
>	Sc-1	45	271569.019	271569.02				ug/L
	V	51	417906.411	0.48	48.6324	2.650	5.449	ug/L
	Cr	52	400903.822	0.45	52.2445	4.327	8.281	ug/L
	Cr	53	40728.765	0.05	45.4049	15.058	33.164	ug/L
	Mn	55	723960.879	0.83	61.3052	5.104	8.325	ug/L
	Co	59	496853.971	0.57	47.0788	3.573	7.589	ug/L
	Ni	60	123533.956	0.14	53.3022	3.930	7.373	ug/L
	Cu	65	132962.953	0.15	55.0584	9.943	18.059	ug/L
	Zn	66	92301.815	0.10	54.0586	8.285	15.326	ug/L
>	Ge	72	867512.715	867512.72				ug/L
	As	75	99500.662	0.11	47.4630	0.257	0.542	ug/L
	Se	77	7309.179	0.01	41.1831	1.639	3.981	ug/L
	Se	82	9618.868	0.01	42.2082	0.573	1.357	ug/L
	Y	89	859535.728	93824.34				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	459962.100	0.60	45.3598	2.633	5.806	ug/L
	Cd	114	255622.175	0.33	44.9283	4.417	9.832	ug/L
>	In	115	762635.310	762635.31				ug/L
	Sb	123	233250.295	0.31	42.1497	0.324	0.768	ug/L
	Ba	135	169331.458	0.24	95.1302	7.423	7.803	ug/L
	Ce	140	16676.613	0.02				ug/L
>	Tb	159	702272.524	702272.52				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	364897.698	364850.03	49.0574	1.135	2.314	ug/L
	Tl	205	874995.438	874861.97	49.5961	1.388	2.799	ug/L
	Pb	206	320677.271	320343.60	49.2917	0.980	1.988	ug/L
	Pb	207	259529.528	259229.22	47.0561	2.008	4.268	ug/L
	Pb	208	1223148.929	1221968.94	48.9462	0.994	2.031	ug/L
>	Bi	209	584721.491	584721.49				ug/L
	Na	23	20040829.933	73.80	3.9040	0.036	0.910	mg/L
	Mg	24	8593292.694	31.70	2.5796	0.097	3.766	mg/L
	K	39	12252423.146	43.47	1.2919	0.052	3.990	mg/L
	Ca	43	258317.182	0.95	20.5794	1.984	9.639	mg/L
	Fe	54	304824.763	0.99	0.2827	0.035	12.523	mg/L
	Fe	57	140021.126	0.48	0.3180	0.008	2.426	mg/L

|>	Sc	45	271569.019	271569.02	mg/L
	Cl	35	66822.805	58486.99	mg/L
	Kr	83	149.002	-3.87	mg/L
	U	238	14674.675	14874.87	mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
⌈	Be	9					
|	Al	27					
|>	Sc-1	45		106.954			
⌈	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		102.583			
|	As	75					
|	Se	77					
⌊	Se	82					
	Y	89					
⌈	Rh	103					
|	Ag	107					
|	Cd	114					
|>	In	115		104.155			
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
|>	Tb	159		101.735			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|>	Bi	209		112.964			
⌈	Na	23					
|	Mg	24					
|	K	39					
|	Ca	43					
|	Fe	54					
|	Fe	57					
|>	Sc	45		106.954			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L030458506SD WG139750-07
Report Date/Time: Monday, May 05, 2003 11:49:03

Method 6020 - Summary Report

Sample ID: L030465305 WG139750-03

Sample Date/Time: Monday, May 05, 2003 11:53:22
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 16
Method File: c:\elandata\Method\service\6020 methods\6020a.mth
Sample Description: 2

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	13006.128	-4004.30				ug/L
	Be	9	0.000	0.00	0.0000	0.000		ug/L
	Al	27	13673.262	0.05	3.5672	0.673	18.877	ug/L
>	Sc-1	45	263413.194	263413.19				ug/L
	V	51	7400.887	0.01	0.5351	0.282	52.653	ug/L
	Cr	52	14340.722	0.01	0.9486	0.379	39.996	ug/L
	Cr	53	0.000	0.00	0.0000	0.000		ug/L
	Mn	55	16342.801	0.02	1.3894	0.213	15.296	ug/L
	Co	59	3000.408	0.00	0.2910	0.193	66.346	ug/L
	Ni	60	4000.653	0.00	1.4851	0.903	60.824	ug/L
	Cu	65	1000.058	0.00	0.4223	0.422	100.029	ug/L
	Zn	66	3667.332	0.00	0.4054	1.778	438.615	ug/L
>	Ge	72	847279.868	847279.87				ug/L
	As	75	540.850	0.00	0.1843	0.048	26.298	ug/L
	Se	77	233.569	0.00	0.3913	0.897	229.228	ug/L
	Se	82	251.643	0.00	0.5341	0.103	19.301	ug/L
	Y	89	741443.326	-24268.06				ug/L
	Rh	103	333.345	0.00				ug/L
	Ag	107	0.000	0.00	0.0000	0.000		ug/L
	Cd	114	973.206	-0.00	-0.0074	0.013	176.476	ug/L
>	In	115	743584.356	743584.36				ug/L
	Sb	123	873.654	0.00	0.1591	0.008	5.233	ug/L
	Ba	135	387533.199	0.54	213.9737	26.198	12.244	ug/L
	Ce	140	1666.818	0.00				ug/L
>	Tb	159	715192.476	715192.48				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	457.012	409.34	0.0550	0.007	12.816	ug/L
	Tl	205	967.872	834.20	0.0473	0.026	54.112	ug/L
	Pb	206	600.614	266.94	0.0411	0.031	75.000	ug/L
	Pb	207	767.456	467.15	0.0848	0.042	49.488	ug/L
	Pb	208	2957.841	1777.85	0.0712	0.013	18.845	ug/L
>	Bi	209	569343.826	569343.83				ug/L
	Na	23	173728556.698	660.64	34.9492	1.581	4.524	mg/L
	Mg	24	36379387.818	138.27	11.2506	0.352	3.130	mg/L
	K	39	3210393.206	10.49	0.3117	0.025	7.893	mg/L
	Ca	43	620887.853	2.36	50.9740	4.572	8.970	mg/L
	Fe	54	76807.740	0.15	0.0428	0.011	26.199	mg/L
	Fe	57	55443.058	0.18	0.1171	0.031	26.232	mg/L

↳ Sc	45	263413.194	263413.19		mg/L
Cl	35	69167.109	60831.29		mg/L
Kr	83	146.669	-6.00		mg/L
U	238	26357.774	26357.77		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
┌	Be	9					
│	Al	27					
↳	Sc-1	45		103.742			
┌	V	51					
│	Cr	52					
│	Cr	53					
│	Mn	55					
│	Co	59					
│	Ni	60					
│	Cu	65					
│	Zn	66					
>	Ge	72		100.191			
│	As	75					
│	Se	77					
└	Se	82					
	Y	89					
┌	Rh	103					
│	Ag	107					
│	Cd	114					
>	In	115		101.553			
└	Sb	123					
┌	Ba	135					
│	Ce	140					
↳	Tb	159		103.606			
┌	Ho	165					
│	Tl	203					
│	Tl	205					
│	Pb	206					
│	Pb	207					
│	Pb	208					
↳	Bi	209		109.993			
┌	Na	23					
│	Mg	24					
│	K	39					
│	Ca	43					
│	Fe	54					
│	Fe	57					
↳	Sc	45		103.742			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L030465305DP WG139750-10

Sample Date/Time: Monday, May 05, 2003 11:58:15
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 17
Method File: c:\elandata\Method\service\6020 methods\6020a.mth
Sample Description: 2

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	18679.252	1668.83				ug/L
	Be	9	0.000	0.00	0.0000	0.000		ug/L
	Al	27	7668.942	0.03	2.1617	0.925	42.778	ug/L
>	Sc-1	45	229495.896	229495.90				ug/L
	V	51	2170.312	-0.00	-0.0725	0.462	637.020	ug/L
	Cr	52	11337.979	0.01	0.6363	0.383	60.127	ug/L
	Cr	53	1333.450	0.00	1.6247	1.874	115.362	ug/L
	Mn	55	14674.254	0.02	1.3180	0.126	9.571	ug/L
	Co	59	5001.039	0.01	0.5160	0.280	54.241	ug/L
	Ni	60	3000.408	0.00	1.1090	0.931	83.922	ug/L
	Cu	65	666.713	0.00	0.2973	0.515	173.205	ug/L
	Zn	66	1333.450	-0.00	-0.9910	0.995	100.423	ug/L
>	Ge	72	799952.690	799952.69				ug/L
	As	75	504.865	0.00	0.1815	0.030	16.706	ug/L
	Se	77	66.734	-0.00	-0.5685	0.363	63.828	ug/L
	Se	82	253.679	0.00	0.6124	0.057	9.378	ug/L
	Y	89	727697.032	-37814.36				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	333.345	0.00	0.0347	0.060	173.205	ug/L
	Cd	114	1315.565	0.00	0.0645	0.286	443.176	ug/L
>	In	115	719935.101	719935.10				ug/L
	Sb	123	310.170	0.00	0.0567	0.002	3.773	ug/L
	Ba	135	378622.839	0.56	220.1275	13.304	6.044	ug/L
	Ce	140	2666.923	0.00				ug/L
>	Tb	159	677056.686	677056.69				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	410.677	363.01	0.0488	0.006	13.016	ug/L
	Tl	205	800.826	667.36	0.0378	0.020	54.085	ug/L
	Pb	206	600.617	266.95	0.0411	0.062	149.999	ug/L
	Pb	207	500.510	200.21	0.0363	0.018	50.000	ug/L
	Pb	208	2341.859	1161.87	0.0465	0.018	38.509	ug/L
>	Bi	209	541747.729	541747.73				ug/L
	Na	23	176375848.991	768.76	40.6685	1.365	3.357	mg/L
	Mg	24	35885549.973	156.45	12.7301	0.508	3.990	mg/L
	K	39	2682345.806	9.96	0.2959	0.094	31.674	mg/L
	Ca	43	535178.085	2.33	50.2728	2.043	4.064	mg/L
	Fe	54	70189.724	0.16	0.0472	0.014	28.944	mg/L
	Fe	57	41062.036	0.14	0.0953	0.035	36.335	mg/L

⊢>	Sc	45	229495.896	229495.90	mg/L
	Cl	35	60128.050	51792.23	mg/L
	Kr	83	139.669	-13.00	mg/L
	U	238	25357.554	25357.55	mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
⌈	Be	9					
|	Al	27					
⊢>	Sc-1	45		90.384			
⌈	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		94.594			
|	As	75					
|	Se	77					
⌊	Se	82					
	Y	89					
⌈	Rh	103					
|	Ag	107					
|	Cd	114					
|>	In	115		98.324			
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⊢>	Tb	159		98.082			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
⊢>	Bi	209		104.661			
⌈	Na	23					
|	Mg	24					
|	K	39					
|	Ca	43					
|	Fe	54					
|	Fe	57					
⊢>	Sc	45		90.384			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L030500109

Sample Date/Time: Monday, May 05, 2003 12:03:09
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 18
Method File: c:\elandata\Method\service\6020 methods\6020a.mth
Sample Description: 2

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	20682.032	3671.61				ug/L
	Be	9	0.000	0.00	0.0000	0.000		ug/L
	Al	27	24356.610	0.11	8.2424	3.944	47.846	ug/L
>	Sc-1	45	213930.355	213930.35				ug/L
	V	51	4650.970	0.00	0.2460	0.368	149.586	ug/L
	Cr	52	12338.761	0.01	0.7976	0.320	40.171	ug/L
	Cr	53	333.345	0.00	0.4024	0.697	173.205	ug/L
	Mn	55	4667.483	0.01	0.4051	0.146	36.033	ug/L
	Co	59	1333.450	0.00	0.1376	0.157	113.787	ug/L
	Ni	60	333.345	-0.00	-0.1383	0.274	198.406	ug/L
	Cu	65	1666.818	0.00	0.7516	0.687	91.403	ug/L
	Zn	66	1666.795	-0.00	-0.7543	0.781	103.547	ug/L
>	Ge	72	792019.640	792019.64				ug/L
	As	75	157.319	0.00	0.0019	0.026	1350.642	ug/L
	Se	77	33.367	-0.00	-0.7766	0.365	47.037	ug/L
	Se	82	117.306	-0.00	-0.0411	0.080	194.429	ug/L
	Y	89	769967.965	4256.58				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	0.000	0.00	0.0000	0.000		ug/L
	Cd	114	-17.885	-0.00	-0.1876	0.006	3.186	ug/L
>	In	115	721662.196	721662.20				ug/L
	Sb	123	406.337	0.00	0.0751	0.006	7.689	ug/L
	Ba	135	333.345	0.00	0.2035	0.353	173.205	ug/L
	Ce	140	3667.145	0.00				ug/L
>	Tb	159	665490.918	665490.92				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	37.334	-10.33	-0.0014	0.001	82.305	ug/L
	Tl	205	100.101	-33.37	-0.0019	0.006	299.997	ug/L
	Pb	206	1234.623	900.95	0.1386	0.047	33.946	ug/L
	Pb	207	667.351	367.05	0.0668	0.046	68.635	ug/L
	Pb	208	4257.192	3077.20	0.1233	0.021	17.039	ug/L
>	Bi	209	539941.225	539941.23				ug/L
	Na	23	567043.721	2.63	0.1393	0.015	11.049	mg/L
	Mg	24	7335.597	0.03	0.0026	0.002	66.149	mg/L
	K	39	418105.197	0.24	0.0072	0.005	75.717	mg/L
	Ca	43	666.713	0.00	0.0332	0.106	321.092	mg/L
	Fe	54	77530.900	0.22	0.0638	0.011	17.341	mg/L
	Fe	57	10003.992	0.01	0.0076	0.015	195.494	mg/L

↳ Sc	45	213930.355	213930.35		mg/L
Cl	35	9670.086	1334.27		mg/L
Kr	83	146.669	-6.00		mg/L
U	238	0.000	0.00		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
┌	Be	9					
│	Al	27					
↳	Sc-1	45		84.254			
┌	V	51					
│	Cr	52					
│	Cr	53					
│	Mn	55					
│	Co	59					
│	Ni	60					
│	Cu	65					
│	Zn	66					
↳	Ge	72		93.656			
│	As	75					
│	Se	77					
└	Se	82					
	Y	89					
┌	Rh	103					
│	Ag	107					
│	Cd	114					
↳	In	115		98.559			
└	Sb	123					
┌	Ba	135					
│	Ce	140					
↳	Tb	159		96.406			
┌	Ho	165					
│	Tl	203					
│	Tl	205					
│	Pb	206					
│	Pb	207					
│	Pb	208					
↳	Bi	209		104.312			
┌	Na	23					
│	Mg	24					
│	K	39					
│	Ca	43					
│	Fe	54					
│	Fe	57					
↳	Sc	45		84.254			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L030500109
Report Date/Time: Monday, May 05, 2003 12:03:43

Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Monday, May 05, 2003 12:08:03
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 5
Method File: c:\elandata\Method\service\6020 methods\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	16009.129	-1001.30				ug/L
	Be	9	7335.271	0.03	29.5675	5.291	17.895	ug/L
	Al	27	143383.958	0.60	44.0244	1.528	3.470	ug/L
>	Sc-1	45	238645.208	238645.21				ug/L
	V	51	390255.029	0.45	46.1800	2.252	4.876	ug/L
	Cr	52	368013.292	0.42	48.6994	0.608	1.249	ug/L
	Cr	53	44068.146	0.05	49.9429	4.521	9.053	ug/L
	Mn	55	649476.452	0.76	55.8749	2.830	5.065	ug/L
	Co	59	503390.894	0.59	48.4950	1.996	4.115	ug/L
	Ni	60	120175.326	0.14	52.6761	5.928	11.254	ug/L
	Cu	65	119501.417	0.14	50.3528	5.543	11.008	ug/L
	Zn	66	70641.937	0.08	41.8043	1.191	2.850	ug/L
>	Ge	72	853189.398	853189.40				ug/L
	As	75	99903.017	0.12	48.4651	0.835	1.722	ug/L
	Se	77	8577.893	0.01	49.4308	11.147	22.552	ug/L
	Se	82	11011.187	0.01	49.2363	0.598	1.215	ug/L
	Y	89	788817.054	22905.66				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	466527.272	0.64	48.0017	4.052	8.440	ug/L
	Cd	114	252547.887	0.34	46.4204	1.681	3.622	ug/L
>	In	115	730900.054	730900.05				ug/L
	Sb	123	260292.767	0.38	49.1008	1.142	2.327	ug/L
	Ba	135	80227.265	0.12	46.3315	9.789	21.128	ug/L
	Ce	140	0.000	-0.00				ug/L
>	Tb	159	687200.354	687200.35				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	351471.464	351423.80	47.2521	0.998	2.112	ug/L
	Tl	205	869707.881	869574.41	49.2964	0.914	1.853	ug/L
	Pb	206	327982.805	327649.13	50.4158	1.744	3.460	ug/L
	Pb	207	252532.714	252232.41	45.7860	2.167	4.732	ug/L
	Pb	208	1196568.115	1195388.12	47.8815	1.446	3.020	ug/L
>	Bi	209	542965.256	542965.26				ug/L
	Na	23	20206285.702	84.60	4.4757	0.287	6.404	mg/L
	Mg	24	13475085.744	56.50	4.5973	0.156	3.393	mg/L
	K	39	34882702.256	144.37	4.2902	0.132	3.067	mg/L
	Ca	43	52766.282	0.22	4.7284	0.789	16.895	mg/L
	Fe	54	3794680.521	15.77	4.5213	0.105	2.331	mg/L
	Fe	57	1266159.359	5.27	3.4927	0.062	1.772	mg/L

↳ Sc	45	238645.208	238645.21		mg/L
Cl	35	10003.665	1667.85		mg/L
Kr	83	156.002	3.33		mg/L
U	238	0.000	0.00		mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
Li	6					
Be	9	59.135				
Al	27	88.049				
↳ Sc-1	45		93.987			
V	51	92.360				
Cr	52	97.399				
Cr	53	99.886				
Mn	55	111.750				
Co	59	96.990				
Ni	60	105.352				
Cu	65	100.706				
Zn	66	83.609				
↳ Ge	72		100.890			
As	75	96.930				
Se	77	98.862				
Se	82	98.473				
Y	89					
Rh	103					
Ag	107	96.003				
Cd	114	92.841				
↳ In	115		99.821			
Sb	123	98.202				
Ba	135	92.663				
Ce	140					
↳ Tb	159		99.551			
Ho	165					
Tl	203	94.504				
Tl	205	98.593				
Pb	206	100.832				
Pb	207	91.572				
Pb	208	95.763				
↳ Bi	209		104.897			
Na	23	89.514				
Mg	24	91.947				
K	39	85.804				
Ca	43	94.567				
Fe	54	90.426				
Fe	57	69.855				
↳ Sc	45		93.987			
Cl	35					
Kr	83					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Monday, May 05, 2003 12:08:37

QC Std 6	Be	9	CCV is out of limits (+/-10%)
QC Std 6	Al	27	CCV is out of limits (+/-10%)
QC Std 6	Mn	55	CCV is out of limits (+/-10%)
QC Std 6	Zn	66	CCV is out of limits (+/-10%)
QC Std 6	Se	77	CCV is out of limits (+/-10%)
QC Std 6	Ba	135	CCV is out of limits (+/-10%)

Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Monday, May 05, 2003 12:12:55
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 1
Method File: c:\elandata\Method\service\6020 methods\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	21016.171	4005.75				ug/L
	Be	9	0.000	0.00	0.0000	0.000		ug/L
	Al	27	2666.947	0.01	0.5072	0.436	86.048	ug/L
>	Sc-1	45	255955.686	255955.69				ug/L
	V	51	1196.068	-0.00	-0.2016	0.323	160.239	ug/L
	Cr	52	6334.885	-0.00	-0.1013	0.369	364.436	ug/L
	Cr	53	0.000	0.00	0.0000	0.000		ug/L
	Mn	55	1666.818	0.00	0.1223	0.138	112.828	ug/L
	Co	59	0.000	0.00	0.0000	0.000		ug/L
	Ni	60	333.345	-0.00	-0.1401	0.271	193.798	ug/L
	Cu	65	0.000	0.00	0.0000	0.000		ug/L
	Zn	66	1333.450	-0.00	-1.0128	0.966	95.380	ug/L
>	Ge	72	815263.675	815263.68				ug/L
	As	75	212.523	0.00	0.0275	0.028	102.590	ug/L
	Se	77	0.000	-0.00	-0.9875	0.000	0.000	ug/L
	Se	82	128.379	-0.00	-0.0045	0.017	392.162	ug/L
	Y	89	695940.186	-69771.20				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	0.000	0.00	0.0000	0.000		ug/L
	Cd	114	0.000	-0.00	-0.1841	0.000	0.000	ug/L
>	In	115	688448.411	688448.41				ug/L
	Sb	123	378.918	0.00	0.0731	0.009	12.114	ug/L
	Ba	135	0.000	0.00	0.0000	0.000		ug/L
	Ce	140	1000.035	0.00				ug/L
>	Tb	159	675301.125	675301.12				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	42.000	-5.67	-0.0008	0.000	52.941	ug/L
	Tl	205	200.202	66.73	0.0038	0.010	259.807	ug/L
	Pb	206	367.038	33.37	0.0051	0.009	173.205	ug/L
	Pb	207	233.569	-66.74	-0.0121	0.010	86.602	ug/L
	Pb	208	1176.625	-3.37	-0.0001	0.005	3485.296	ug/L
>	Bi	209	505375.435	505375.43				ug/L
	Na	23	7668.732	-0.00	-0.0001	0.000	203.844	mg/L
	Mg	24	666.713	-0.00	-0.0000	0.000	5904.969	mg/L
	K	39	457231.925	0.09	0.0028	0.008	276.820	mg/L
	Ca	43	333.345	0.00	0.0034	0.055	1621.256	mg/L
	Fe	54	24843.249	-0.04	-0.0124	0.004	35.963	mg/L
	Fe	57	7335.247	-0.01	-0.0046	0.001	30.135	mg/L

↳ Sc	45	255955.686	255955.69		mg/L
Cl	35	10337.103	2001.28		mg/L
Kr	83	148.002	-4.67		mg/L
U	238	0.000	0.00		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
┌	Be	9					
│	Al	27					
↳	Sc-1	45		100.805			
┌	V	51					
│	Cr	52					
│	Cr	53					
│	Mn	55					
│	Co	59					
│	Ni	60					
│	Cu	65					
│	Zn	66					
↳	Ge	72		96.405			
│	As	75					
│	Se	77					
└	Se	82					
	Y	89					
┌	Rh	103					
│	Ag	107					
│	Cd	114					
↳	In	115		94.023			
└	Sb	123					
┌	Ba	135					
│	Ce	140					
↳	Tb	159		97.827			
┌	Ho	165					
│	Tl	203					
│	Tl	205					
│	Pb	206					
│	Pb	207					
│	Pb	208					
↳	Bi	209		97.635			
┌	Na	23					
│	Mg	24					
│	K	39					
│	Ca	43					
│	Fe	54					
│	Fe	57					
↳	Sc	45		100.805			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Monday, May 05, 2003 12:13:29
Page 2

QC Std 7	V	51	CCB is out of limits (+/-3*IDL)
QC Std 7	Mn	55	CCB is out of limits (+/-3*IDL)
QC Std 7	Ni	60	CCB is out of limits (+/-3*IDL)
QC Std 7	Zn	66	CCB is out of limits (+/-3*IDL)
QC Std 7	Se	77	CCB is out of limits (+/-3*IDL)
QC Std 7	Cd	114	CCB is out of limits (+/-3*IDL)

Method 6020 - Summary Report

Sample ID: L030500109SDL

Sample Date/Time: Monday, May 05, 2003 12:17:48
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 19
Method File: c:\elandata\Method\service\6020 methods\6020a.mth
Sample Description: 10

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	19347.297	2336.87				ug/L
	Be	9	0.000	0.00	0.0000	0.000		ug/L
	Al	27	5000.969	0.02	1.2477	0.611	49.003	ug/L
>	Sc-1	45	242730.342	242730.34				ug/L
	V	51	2610.289	-0.00	-0.0390	0.279	715.690	ug/L
	Cr	52	10337.196	0.00	0.3913	0.329	83.993	ug/L
	Cr	53	333.345	0.00	0.3785	0.656	173.205	ug/L
	Mn	55	1333.520	0.00	0.0862	0.199	231.419	ug/L
	Co	59	0.000	0.00	0.0000	0.000		ug/L
	Ni	60	333.345	-0.00	-0.1536	0.248	161.482	ug/L
	Cu	65	0.000	0.00	0.0000	0.000		ug/L
	Zn	66	3000.478	-0.00	-0.0172	1.653	9592.377	ug/L
>	Ge	72	858012.406	858012.41				ug/L
	As	75	206.337	0.00	0.0196	0.015	74.106	ug/L
	Se	77	133.468	-0.00	-0.2071	0.344	166.138	ug/L
	Se	82	144.198	0.00	0.0375	0.079	210.492	ug/L
	Y	89	767787.743	2076.35				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	0.000	0.00	0.0000	0.000		ug/L
	Cd	114	0.000	-0.00	-0.1841	0.000	0.000	ug/L
>	In	115	723516.885	723516.89				ug/L
	Sb	123	210.416	0.00	0.0374	0.005	14.411	ug/L
	Ba	135	333.345	0.00	0.1965	0.340	173.205	ug/L
	Ce	140	2667.017	0.00				ug/L
>	Tb	159	676657.504	676657.50				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	34.000	-13.67	-0.0018	0.001	38.718	ug/L
	Tl	205	66.734	-66.73	-0.0038	0.003	86.602	ug/L
	Pb	206	667.350	333.68	0.0513	0.018	34.641	ug/L
	Pb	207	400.407	100.10	0.0182	0.031	173.206	ug/L
	Pb	208	2311.823	1131.83	0.0453	0.009	20.645	ug/L
>	Bi	209	551636.070	551636.07				ug/L
	Na	23	138671.125	0.55	0.0289	0.006	19.339	mg/L
	Mg	24	1666.818	0.00	0.0004	0.001	152.509	mg/L
	K	39	471683.462	0.25	0.0073	0.005	69.442	mg/L
	Ca	43	1000.035	0.00	0.0614	0.011	18.602	mg/L
	Fe	54	35754.506	0.01	0.0016	0.002	147.629	mg/L
	Fe	57	7001.785	-0.01	-0.0040	0.006	156.171	mg/L

[> Sc	45	242730.342	242730.34		mg/L
Cl	35	18011.441	9675.62		mg/L
Kr	83	187.669	15.00		mg/L
U	238	0.000	0.00		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
[	Be	9					
|	Al	27					
[>	Sc-1	45		95.596			
[	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
[>	Ge	72		101.460			
|	As	75					
|	Se	77					
[	Se	82					
	Y	89					
[	Rh	103					
|	Ag	107					
|	Cd	114					
[>	In	115		98.813			
[	Sb	123					
[	Ba	135					
|	Ce	140					
[>	Tb	159		98.024			
[	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
[>	Bi	209		106.572			
[	Na	23					
|	Mg	24					
|	K	39					
|	Ca	43					
|	Fe	54					
|	Fe	57					
[>	Sc	45		95.596			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L030500109PS

Sample Date/Time: Monday, May 05, 2003 12:22:42
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 20
Method File: c:\elandata\Method\service\6020 methods\6020a.mth
Sample Description: 2

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	22016.976	5006.55				ug/L
	Be	9	10670.985	0.04	42.8550	13.831	31.807	ug/L
	Al	27	193978.854	0.81	59.9901	7.992	13.322	ug/L
>	Sc-1	45	238648.412	238648.41				ug/L
	V	51	383965.918	0.46	46.5938	4.218	9.052	ug/L
	Cr	52	377249.944	0.44	51.2298	1.366	2.667	ug/L
	Cr	53	47077.653	0.06	54.6892	4.243	7.759	ug/L
	Mn	55	614653.264	0.74	54.2092	3.275	6.042	ug/L
	Co	59	517196.208	0.62	51.0770	1.094	2.141	ug/L
	Ni	60	107071.392	0.13	48.2011	7.350	15.248	ug/L
	Cu	65	128580.657	0.15	55.5018	5.786	10.425	ug/L
	Zn	66	71851.405	0.08	43.5132	8.594	19.751	ug/L
>	Ge	72	832339.469	832339.47				ug/L
	As	75	92423.389	0.11	45.9499	0.472	1.028	ug/L
	Se	77	6875.216	0.01	40.3183	5.319	13.193	ug/L
	Se	82	9042.594	0.01	41.3473	0.308	0.746	ug/L
	Y	89	781511.188	15799.80				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	485811.854	0.65	48.6971	3.124	6.416	ug/L
	Cd	114	256254.818	0.34	45.9002	2.207	4.808	ug/L
>	In	115	749667.296	749667.30				ug/L
	Sb	123	259672.659	0.35	47.7322	0.744	1.558	ug/L
	Ba	135	89282.152	0.13	49.9489	9.026	18.071	ug/L
	Ce	140	2667.017	0.00				ug/L
>	Tb	159	704991.817	704991.82				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	363873.601	363825.93	48.9197	0.960	1.962	ug/L
	Tl	205	883230.977	883097.51	50.0630	1.860	3.715	ug/L
	Pb	206	333444.709	333111.04	51.2562	1.394	2.720	ug/L
	Pb	207	256845.072	256544.77	46.5688	1.770	3.801	ug/L
	Pb	208	1233150.351	1231970.36	49.3468	1.210	2.453	ug/L
>	Bi	209	588886.056	588886.06				ug/L
	Na	23	599661.452	2.49	0.1315	0.007	5.312	mg/L
	Mg	24	8335.983	0.03	0.0026	0.001	34.858	mg/L
	K	39	430438.555	0.10	0.0028	0.005	168.882	mg/L
	Ca	43	333.345	0.00	0.0041	0.056	1365.583	mg/L
	Fe	54	85675.461	0.22	0.0628	0.009	14.104	mg/L
	Fe	57	12338.878	0.02	0.0111	0.010	93.091	mg/L

↳ Sc	45	238648.412	238648.41		mg/L
Cl	35	12338.761	4002.94		mg/L
Kr	83	158.669	6.00		mg/L
U	238	0.000	0.00		mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
Li	6					
Be	9					
Al	27					
↳ Sc-1	45		93.988			
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
↳ Ge	72		98.424			
As	75					
Se	77					
Se	82					
Y	89					
Rh	103					
Ag	107					
Cd	114					
↳ In	115		102.384			
Sb	123					
Ba	135					
Ce	140					
↳ Tb	159		102.128			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
↳ Bi	209		113.768			
Na	23					
Mg	24					
K	39					
Ca	43					
Fe	54					
Fe	57					
↳ Sc	45		93.988			
Cl	35					
Kr	83					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L030500109PS
Report Date/Time: Monday, May 05, 2003 12:23:17
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Method 6020 - Summary Report

Sample ID: L030501303

Sample Date/Time: Monday, May 05, 2003 12:27:37
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 21
Method File: c:\elandata\Method\service\6020 methods\6020a.mth
Sample Description: 2

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	19347.929	2337.50				ug/L
⌈	Be	9	0.000	0.00	0.0000	0.000		ug/L
|	Al	27	16342.684	0.06	4.3732	0.357	8.161	ug/L
|>	Sc-1	45	260032.801	260032.80				ug/L
⌈	V	51	3080.248	0.00	0.0230	0.371	1614.975	ug/L
|	Cr	52	13673.776	0.01	0.8861	0.683	77.095	ug/L
|	Cr	53	1666.795	0.00	1.9302	1.346	69.679	ug/L
|	Mn	55	6668.441	0.01	0.5567	0.267	47.913	ug/L
|	Co	59	2333.672	0.00	0.2293	0.247	107.598	ug/L
|	Ni	60	1000.058	0.00	0.1547	0.452	292.355	ug/L
|	Cu	65	2666.970	0.00	1.1451	0.654	57.072	ug/L
|	Zn	66	6334.862	0.00	2.1235	1.471	69.284	ug/L
|>	Ge	72	835801.731	835801.73				ug/L
|	As	75	203.347	0.00	0.0207	0.027	129.684	ug/L
|	Se	77	66.734	-0.00	-0.5861	0.695	118.595	ug/L
⌊	Se	82	134.589	0.00	0.0096	0.109	1138.664	ug/L
	Y	89	764964.339	-747.05				ug/L
⌈	Rh	103	0.000	0.00				ug/L
|	Ag	107	0.000	0.00	0.0000	0.000		ug/L
|	Cd	114	-8.942	-0.00	-0.1857	0.003	1.464	ug/L
|>	In	115	747314.130	747314.13				ug/L
⌊	Sb	123	658.434	0.00	0.1187	0.001	1.056	ug/L
⌈	Ba	135	333.345	0.00	0.1851	0.321	173.205	ug/L
|	Ce	140	1333.403	0.00				ug/L
|>	Tb	159	744971.533	744971.53				ug/L
⌈	Ho	165	0.000	0.00				ug/L
|	Tl	203	38.334	-9.33	-0.0013	0.001	40.564	ug/L
|	Tl	205	33.367	-100.10	-0.0057	0.003	57.735	ug/L
|	Pb	206	900.930	567.26	0.0873	0.015	17.647	ug/L
|	Pb	207	367.039	66.74	0.0121	0.038	312.250	ug/L
|	Pb	208	2799.400	1619.41	0.0649	0.007	10.153	ug/L
|>	Bi	209	588226.641	588226.64				ug/L
⌈	Na	23	490694.395	1.85	0.0981	0.004	4.211	mg/L
|	Mg	24	14341.563	0.05	0.0043	0.002	51.592	mg/L
|	K	39	409640.709	-0.13	-0.0039	0.002	45.384	mg/L
|	Ca	43	2333.555	0.01	0.1637	0.093	56.857	mg/L
|	Fe	54	64763.172	0.11	0.0312	0.007	21.974	mg/L
|	Fe	57	8336.099	-0.00	-0.0023	0.010	424.300	mg/L

↳ Sc	45	260032.801	280032.80		mg/L
Cl	35	13005.988	4670.17		mg/L
Kr	83	135.002	-17.67		mg/L
U	238	0.000	0.00		mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
Li	6					
Be	9					
Al	27					
↳ Sc-1	45		102.410			
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
↳ Ge	72		98.833			
As	75					
Se	77					
Se	82					
Y	89					
Rh	103					
Ag	107					
Cd	114					
↳ In	115		102.063			
Sb	123					
Ba	135					
Ce	140					
↳ Tb	159		107.920			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
↳ Bi	209		113.641			
Na	23					
Mg	24					
K	39					
Ca	43					
Fe	54					
Fe	57					
↳ Sc	45		102.410			
Cl	35					
Kr	83					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L030501303
Report Date/Time: Monday, May 05, 2003 12:28:12
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Method 6020 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Monday, May 05, 2003 12:32:32
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 6
Method File: c:\elandata\Method\service\6020 methods\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	21683.258	4672.83				ug/L
	Be	9	0.000	0.00	0.0000	0.000		ug/L
	Al	27	38278102.972	129.49	9551.9686	281.844	2.951	ug/L
>	Sc-1	45	295696.786	295696.79				ug/L
	V	51	-1588.699	-0.01	-0.5163	0.611	118.379	ug/L
	Cr	52	9670.460	0.00	0.1432	0.559	390.011	ug/L
	Cr	53	1666.818	0.00	1.6490	1.513	91.773	ug/L
	Mn	55	2666.947	0.00	0.1723	0.088	51.129	ug/L
	Co	59	1000.105	0.00	0.0847	0.147	173.205	ug/L
	Ni	60	1666.772	0.00	0.3469	0.223	64.275	ug/L
	Cu	65	666.713	0.00	0.2446	0.424	173.205	ug/L
	Zn	66	12005.136	0.01	4.6122	1.094	23.720	ug/L
>	Ge	72	974830.049	974830.05				ug/L
	As	75	180.487	-0.00	-0.0034	0.053	1535.372	ug/L
	Se	77	300.304	0.00	0.5521	0.886	160.498	ug/L
	Se	82	128.861	-0.00	-0.1028	0.068	66.038	ug/L
	Y	89	834351.292	68639.90				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	0.000	0.00	0.0000	0.000		ug/L
	Cd	114	991.116	-0.00	-0.0215	0.159	739.624	ug/L
>	In	115	812875.369	812875.37				ug/L
	Sb	123	506.548	0.00	0.0834	0.008	9.355	ug/L
	Ba	135	0.000	0.00	0.0000	0.000		ug/L
	Ce	140	1666.772	0.00				ug/L
>	Tb	159	713120.516	713120.52				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	536.349	468.68	0.0657	0.003	4.115	ug/L
	Tl	205	1267.991	1134.52	0.0643	0.009	13.479	ug/L
	Pb	206	800.824	467.15	0.0719	0.031	42.858	ug/L
	Pb	207	700.720	400.42	0.0727	0.055	75.001	ug/L
	Pb	208	3135.987	1956.00	0.0783	0.017	21.811	ug/L
>	Bi	209	664254.229	664254.23				ug/L
	Na	23	99438916.739	336.32	17.7916	0.378	2.122	mg/L
	Mg	24	25350342.641	85.79	6.9803	0.389	5.574	mg/L
	K	39	72588282.151	243.99	7.2509	0.438	6.034	mg/L
	Ca	43	299100.684	1.01	21.7871	0.799	3.667	mg/L
	Fe	54	13892497.142	46.84	13.4316	0.190	1.416	mg/L
	Fe	57	6268177.148	21.24	14.0842	1.287	9.136	mg/L

↳ Sc	45	295696.786	295696.79		mg/L
Cl	35	3837105.848	3828770.03		mg/L
Kr	83	167.003	14.33		mg/L
U	238	0.000	0.00		mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
Li	6					
Be	9					
Al	27	95.520				
Sc-1	45		116.456			
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
Ge	72		115.274			
As	75					
Se	77					
Se	82					
Y	89					
Rh	103					
Ag	107					
Cd	114					
In	115		111.017			
Sb	123					
Ba	135					
Ce	140					
Tb	159		103.306			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
Bi	209		128.329			
Na	23	71.167				
Mg	24	69.803				
K	39	72.509				
Ca	43	72.624				
Fe	54	53.727				
Fe	57	56.337				
Sc	45		116.456			
Cl	35					
Kr	83					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 4
Report Date/Time: Monday, May 05, 2003 12:33:07
Page 2

Bi 209 Int Std for QC Std		209	RERUN FOR AFCEE QC
QC Std 4	Na	23	ICSA is out of limits (+/-20%)
QC Std 4	Mg	24	ICSA is out of limits (+/-20%)
QC Std 4	K	39	ICSA is out of limits (+/-20%)
QC Std 4	Ca	43	ICSA is out of limits (+/-20%)
QC Std 4	Fe	54	ICSA is out of limits (+/-20%)
QC Std 4	Fe	57	ICSA is out of limits (+/-20%)

Sample ID: QC Std 4
Report Date/Time: Monday, May 05, 2003 12:33:07
Page 3

Method 6020 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Monday, May 05, 2003 12:37:27
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 7
Method File: c:\elandata\Method\service\6020 methods\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	16343.245	-667.18				ug/L
	Be	9	25690.033	0.10	99.1542	13.002	13.113	ug/L
	Al	27	38448987.361	153.89	11351.6534	420.108	3.701	ug/L
>	Sc-1	45	249832.448	249832.45				ug/L
	V	51	843898.059	0.93	94.8211	2.133	2.249	ug/L
	Cr	52	795227.460	0.87	100.5964	4.274	4.249	ug/L
	Cr	53	106398.193	0.12	114.0668	13.834	12.128	ug/L
	Mn	55	1228165.641	1.36	99.8972	4.012	4.017	ug/L
	Co	59	998757.866	1.11	91.0595	4.197	4.610	ug/L
	Ni	60	233905.456	0.26	97.4255	8.045	8.257	ug/L
	Cu	65	266133.862	0.29	106.0056	7.613	7.182	ug/L
	Zn	66	202096.999	0.22	116.0990	14.078	12.126	ug/L
>	Ge	72	901741.696	901741.70				ug/L
	As	75	215529.255	0.24	99.0005	1.625	1.642	ug/L
	Se	77	18831.279	0.02	103.5893	9.423	9.096	ug/L
	Se	82	23124.520	0.03	98.4346	2.172	2.206	ug/L
	Y	89	740027.396	-25683.99				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	297765.352	0.40	30.3319	3.614	11.913	ug/L
	Cd	114	515830.244	0.70	94.0804	8.304	8.826	ug/L
>	In	115	737897.680	737897.68				ug/L
	Sb	123	553223.093	0.75	103.3180	0.635	0.614	ug/L
	Ba	135	186888.419	0.27	107.9212	7.302	6.766	ug/L
	Ce	140	2333.578	0.00				ug/L
>	Tb	159	679472.093	679472.09				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	707949.811	707902.14	95.1838	1.039	1.092	ug/L
	Tl	205	1716287.047	1716153.58	97.2891	1.444	1.485	ug/L
	Pb	206	655111.069	654777.40	100.7515	4.628	4.594	ug/L
	Pb	207	501649.629	501349.32	91.0065	1.078	1.184	ug/L
	Pb	208	2398266.649	2397086.66	96.0158	1.726	1.798	ug/L
>	Bi	209	600682.518	600682.52				ug/L
	Na	23	102086209.031	408.67	21.6193	0.648	2.996	mg/L
	Mg	24	26502630.943	106.07	8.6307	0.285	3.304	mg/L
	K	39	72991550.385	290.46	8.6320	0.333	3.856	mg/L
	Ca	43	290948.861	1.16	25.0758	2.190	8.732	mg/L
	Fe	54	20116813.122	80.36	23.0460	0.248	1.078	mg/L
	Fe	57	9548443.388	38.18	25.3171	0.586	2.313	mg/L

↳ Sc	45	249832.448	249832.45		mg/L
Cl	35	3991660.073	3983324.25		mg/L
Kr	83	196.670	44.00		mg/L
U	238	0.000	0.00		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
┌	Be	9					
│	Al	27	113.517				
↳	Sc-1	45		98.393			
┌	V	51	94.821				
│	Cr	52	100.596				
│	Cr	53	114.067				
│	Mn	55	99.897				
│	Co	59	91.059				
│	Ni	60	97.425				
│	Cu	65	106.006				
│	Zn	66	116.099				
↳	Ge	72		106.631			
│	As	75	99.001				
│	Se	77	103.589				
└	Se	82	98.435				
	Y	89					
┌	Rh	103					
│	Ag	107	30.332				
│	Cd	114	94.080				
↳	In	115		100.777			
└	Sb	123	103.318				
┌	Ba	135					
│	Ce	140					
↳	Tb	159		98.432			
┌	Ho	165					
│	Tl	203	95.184				
│	Tl	205	97.289				
│	Pb	206	100.751				
│	Pb	207	91.007				
│	Pb	208	96.016				
↳	Bi	209		116.047			
┌	Na	23	86.477				
│	Mg	24	86.307				
│	K	39	86.320				
│	Ca	43	83.586				
│	Fe	54	92.184				
│	Fe	57	101.268				
↳	Sc	45		98.393			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 5
Report Date/Time: Monday, May 05, 2003 12:38:02
Page 2

QC Std 5	Ag	107	ICSAB is out of limits (+/-20%)

Sample ID: QC Std 5
Report Date/Time: Monday, May 05, 2003 12:38:02
Page 3

Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Monday, May 05, 2003 12:42:22
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 5
Method File: c:\elandata\Method\service\6020 methods\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	20682.429	3672.00				ug/L
	Be	9	13005.941	0.05	45.7610	6.403	13.992	ug/L
	Al	27	146088.042	0.53	39.1243	8.614	22.016	ug/L
>	Sc-1	45	275985.136	275985.14				ug/L
	V	51	397661.751	0.41	42.0684	4.205	9.998	ug/L
	Cr	52	379308.956	0.39	44.8023	2.375	5.301	ug/L
	Cr	53	42736.015	0.04	43.2493	15.504	35.848	ug/L
	Mn	55	619133.204	0.65	47.6593	1.753	3.677	ug/L
	Co	59	512432.503	0.54	44.1903	5.724	12.953	ug/L
	Ni	60	109753.472	0.11	43.0332	2.297	5.337	ug/L
	Cu	65	135648.876	0.14	50.9686	5.688	11.160	ug/L
	Zn	66	99683.668	0.10	53.1659	8.284	15.581	ug/L
>	Ge	72	954621.676	954621.68				ug/L
	As	75	99972.982	0.10	43.3453	0.792	1.826	ug/L
	Se	77	8744.764	0.01	44.8234	2.767	6.172	ug/L
	Se	82	10831.587	0.01	43.2208	0.667	1.589	ug/L
	Y	89	820235.019	54523.63				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	467565.569	0.59	44.0880	1.849	4.194	ug/L
	Cd	114	255625.533	0.32	43.0195	4.155	9.658	ug/L
>	In	115	796043.154	796043.15				ug/L
	Sb	123	250845.095	0.32	43.4855	1.949	4.481	ug/L
	Ba	135	85590.591	0.12	46.5893	4.748	10.191	ug/L
	Ce	140	1000.035	-0.00				ug/L
>	Tb	159	722541.461	722541.46				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	345074.875	345027.21	46.3920	0.384	0.828	ug/L
	Tl	205	803428.486	803295.02	45.5390	0.939	2.061	ug/L
	Pb	206	314162.820	313829.15	48.2893	1.401	2.902	ug/L
	Pb	207	228608.689	228308.38	41.4433	0.916	2.211	ug/L
	Pb	208	1139780.837	1138600.85	45.6069	0.742	1.627	ug/L
>	Bi	209	646645.218	646645.22				ug/L
	Na	23	18078627.931	65.76	3.4786	0.300	8.616	mg/L
	Mg	24	12850072.224	46.88	3.8148	0.498	13.058	mg/L
	K	39	36092506.958	130.12	3.8669	0.578	14.950	mg/L
	Ca	43	43399.749	0.16	3.3984	0.668	19.653	mg/L
	Fe	54	3889652.686	14.01	4.0176	0.317	7.879	mg/L
	Fe	57	1310512.001	4.73	3.1366	0.240	7.642	mg/L

⊢>	Sc	45	275985.136	275985.14	mg/L
	Cl	35	23352.997	15017.18	mg/L
	Kr	83	172.003	19.33	mg/L
	U	238	0.000	0.00	mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
⊢	Be	9	91.522				
⊢	Al	27	78.249				
⊢>	Sc-1	45		108.693			
⊢	V	51	84.137				
⊢	Cr	52	89.605				
⊢	Cr	53	86.499				
⊢	Mn	55	95.319				
⊢	Co	59	88.381				
⊢	Ni	60	86.066				
⊢	Cu	65	101.937				
⊢	Zn	66	106.332				
⊢>	Ge	72		112.884			
⊢	As	75	86.691				
⊢	Se	77	89.647				
⊢	Se	82	86.442				
	Y	89					
⊢	Rh	103					
⊢	Ag	107	88.176				
⊢	Cd	114	86.039				
⊢>	In	115		108.718			
⊢	Sb	123	86.971				
⊢	Ba	135	93.179				
⊢	Ce	140					
⊢>	Tb	159		104.671			
⊢	Ho	165					
⊢	Tl	203	92.784				
⊢	Tl	205	91.078				
⊢	Pb	206	96.579				
⊢	Pb	207	82.887				
⊢	Pb	208	91.214				
⊢>	Bi	209		124.927			
⊢	Na	23	69.571				
⊢	Mg	24	76.296				
⊢	K	39	77.339				
⊢	Ca	43	67.967				
⊢	Fe	54	80.351				
⊢	Fe	57	62.731				
⊢>	Sc	45		108.693			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Monday, May 05, 2003 12:42:57
Page 2

QC Std 6	Al	27	CCV is out of limits (+/-10%)
QC Std 6	V	51	CCV is out of limits (+/-10%)
QC Std 6	Cr	52	CCV is out of limits (+/-10%)
QC Std 6	Cr	53	CCV is out of limits (+/-10%)
QC Std 6	Co	59	CCV is out of limits (+/-10%)
QC Std 6	Ni	60	CCV is out of limits (+/-10%)
QC Std 6	As	75	CCV is out of limits (+/-10%)
QC Std 6	Se	77	CCV is out of limits (+/-10%)
QC Std 6	Se	82	CCV is out of limits (+/-10%)
QC Std 6	Ag	107	CCV is out of limits (+/-10%)
QC Std 6	Cd	114	CCV is out of limits (+/-10%)
QC Std 6	Sb	123	CCV is out of limits (+/-10%)
QC Std 6	Pb	207	CCV is out of limits (+/-10%)
Bi 209 Int Std for QC Std		209	RERUN FOR AFCEE QC
QC Std 6	Na	23	CCV is out of limits (+/-10%)
QC Std 6	Mg	24	CCV is out of limits (+/-10%)
QC Std 6	K	39	CCV is out of limits (+/-10%)
QC Std 6	Ca	43	CCV is out of limits (+/-10%)

Sample ID: QC Std 6
Report Date/Time: Monday, May 05, 2003 12:42:57
Page 3

Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Monday, May 05, 2003 12:47:14
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 1
Method File: c:\elandata\Method\service\6020 methods\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	17677.605	667.18				ug/L
	Be	9	0.000	0.00	0.0000	0.000		ug/L
	Al	27	1666.795	0.00	0.1500	0.284	189.584	ug/L
>	Sc-1	45	273938.459	273938.46				ug/L
	V	51	1529.446	-0.00	-0.1734	0.295	170.321	ug/L
	Cr	52	6334.979	-0.00	-0.1727	0.436	252.225	ug/L
	Cr	53	0.000	0.00	0.0000	0.000		ug/L
	Mn	55	1333.427	0.00	0.0802	0.095	117.867	ug/L
	Co	59	333.345	0.00	0.0307	0.053	173.205	ug/L
	Ni	60	333.345	-0.00	-0.1526	0.250	163.769	ug/L
	Cu	65	333.345	0.00	0.1343	0.233	173.205	ug/L
	Zn	66	666.690	-0.00	-1.4749	0.338	22.946	ug/L
>	Ge	72	888123.611	888123.61				ug/L
	As	75	190.214	0.00	0.0083	0.034	408.799	ug/L
	Se	77	66.734	-0.00	-0.6152	0.322	52.418	ug/L
	Se	82	131.169	-0.00	-0.0422	0.074	176.527	ug/L
	Y	89	801545.789	35834.40				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	333.345	0.00	0.0328	0.057	173.205	ug/L
	Cd	114	-8.942	-0.00	-0.1857	0.003	1.470	ug/L
>	In	115	753850.127	753850.13				ug/L
	Sb	123	410.004	0.00	0.0723	0.007	9.629	ug/L
	Ba	135	0.000	0.00	0.0000	0.000		ug/L
	Ce	140	1333.520	0.00				ug/L
>	Tb	159	694181.276	694181.28				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	116.335	68.67	0.0092	0.001	6.882	ug/L
	Tl	205	266.937	133.47	0.0076	0.009	114.565	ug/L
	Pb	206	266.936	-66.73	-0.0103	0.009	86.602	ug/L
	Pb	207	433.774	133.47	0.0242	0.028	114.565	ug/L
	Pb	208	1296.395	116.40	0.0047	0.007	151.273	ug/L
>	Bi	209	581305.936	581305.94				ug/L
	Na	23	5334.477	-0.01	-0.0007	0.001	72.879	mg/L
	Mg	24	0.000	-0.00	-0.0002	0.000	0.000	mg/L
	K	39	453832.819	-0.05	-0.0016	0.005	312.228	mg/L
	Ca	43	0.000	-0.00	-0.0283			mg/L
	Fe	54	31189.632	-0.03	-0.0077	0.007	86.496	mg/L
	Fe	57	8335.866	-0.00	-0.0032	0.006	186.100	mg/L

↳ Sc	45	273938.459	273938.46		mg/L
Cl	35	16009.059	7673.24		mg/L
Kr	83	161.003	8.33		mg/L
U	238	0.000	0.00		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
┌	Be	9					
│	Al	27					
↳	Sc-1	45		107.887			
┌	V	51					
│	Cr	52					
│	Cr	53					
│	Mn	55					
│	Co	59					
│	Ni	60					
│	Cu	65					
│	Zn	66					
↳	Ge	72		105.021			
│	As	75					
│	Se	77					
└	Se	82					
	Y	89					
┌	Rh	103					
│	Ag	107					
│	Cd	114					
↳	In	115		102.955			
└	Sb	123					
┌	Ba	135					
│	Ce	140					
↳	Tb	159		100.562			
┌	Ho	165					
│	Tl	203					
│	Tl	205					
│	Pb	206					
│	Pb	207					
│	Pb	208					
↳	Bi	209		112.304			
┌	Na	23					
│	Mg	24					
│	K	39					
│	Ca	43					
│	Fe	54					
│	Fe	57					
↳	Sc	45		107.887			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Monday, May 05, 2003 12:47:48
Page 2

QC Std 7	V	51	CCB is out of limits (+/-3*IDL)
QC Std 7	Mn	55	CCB is out of limits (+/-3*IDL)
QC Std 7	Co	59	CCB is out of limits (+/-3*IDL)
QC Std 7	Ni	60	CCB is out of limits (+/-3*IDL)
QC Std 7	Zn	66	CCB is out of limits (+/-3*IDL)
QC Std 7	Se	77	CCB is out of limits (+/-3*IDL)
QC Std 7	Cd	114	CCB is out of limits (+/-3*IDL)

Metals

Date: 5/06/03
Analyst: JYH
Method: 6020 A
Instrument: Elan
Work Group: 139720, 139953

	Analyst
Calibration/Linearity	
ICV/CCV	
ICB/CCB	
icsa/icsab/cri	
Blank/LCS	
MS/MSD	
Postspike/Serial Dilution	
Duplicate	
Record Results	
Excel Spreadsheets	
Results Reporting / Data Qualifiers	
Calculations & Correct Factors	
Reanalysis Assign	
Instrument Failure/Reassign	
Case Narrative	
QA Approval - Seedpak 3	
Check for Completeness	
Level IV Data	04585
	04594
	04653
	04589, 612, 633

Cal 2

WG139964

Primary Reviewer Initials & Date Checked JYH 5/06/03

Secondary Reviewer Initials & Date Checked GLP 5/7/03

✓ • Check for compliance with Method and project-specific requirements
✓ • Check the completeness of the reported information
NA • Check the information for the report narrative
✓ • Check the reasonableness of results

Supervisory Review Initials & Date Checked MMB 05/07/03

Comments:

✓ - Checked & OK
NA - Not Applicable
DL - Diluted Out

KEMRON ENVIRONMENTAL SERVICES
ICP (ICP/MS) RUN LOGBOOK

ANALYST JM DATE 5/06/03 TIME 1051
METHOD # 6020A SOP # ME700 Rev # 1 WORK GROUP # 139769, 139770, 139753
CAL STD SOURCE M2-17-21A ICV/CCV SOURCE M2-17-34B
ICS AB SOURCE M2-17-28A ICS A SOURCE M2-17-21B POST SPK SOURCE MS-1-B-2
Instrument ID: TJA IRIS: Data File: 050603 Perkin Elmer Optima: Perkin Elmer ELAN: ✓

Cup #	Sample No.	Dil	Prep Conc	Autosampler Runs	Cup #	Sample No.	Dil	Prep Conc	Autosampler Runs
	50				27.	L030465304SD	2	LW/LCB	W6139755-01
	1 1/20				28.	L030458501			
	2 1/5				29.	03			
	3				30.	07			
	ICV				31.	08			
	ICB				32.	09			
	ICSA				33.	10			
	ICSAB			W/LCB	34.	L030467401			
1.	L030500101	4			35.	02			W/LCB
2.	02PS	4			36.	QCMRL			
3.	02500	20			37.	PBW C4	2		W6139755-03
4.	08	4			38.	LCSW C4	4		04
5.	L030501301				39.	L030458906	2		01
6.	02				40.	075			05
7.	03	2			41.	08SD			06
8.	L030458501				42.	02			02
9.	01PS				43.	02DP			07
10.	01500	10		W/LCB	44.	03			
11.	02	2			45.	03PS			W/LCB
12.	03				46.	03500	10		
13.	07				47.	04			
14.	08				48.	05			
15.	09				49.	L030467402			
16.	10				50.	03			
17.	L030459401				51.	04			
18.	02				52.	05			
19.	L030465301				53.	06			
20.	01PS	1		W/LCB	54.	L030457502			
21.	FRS				55.	03			W/LCB
22.	L030465301	2			56.	04			
23.	01PS	2			57.	05			
24.	01500	10			58.	07			
25.	02			W6139755-02	59.	ICSA			
26.	03S			08	60.	ICSAB			W/LCB

Reviewed by: MMB 05/07/03

Comments:

Note: No entry for Dil represents 1X Dilution

Autosampler Run Key:

CCV - Continuing Calibration Verification
CCB = Continuing Calibration Blank

FRS = Full Recalibration Sequence
R = Analyst Rerun

KEMRON ENVIRONMENTAL SERVICES
FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

INSTRUMENT: PE - ICP/MS
METHOD: 6020A
ANALYST: JTyh
DATE: Tuesday, May 06, 2003

UNITS: ug/L

ICV Time: 2:28 PM
CCV1 Time: 2:48 PM
CCV2 Time: 3:27 PM

	Initial Calibration Verification			Continuing Calibration Verification CCV1			CCV2		Q
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	50	48.1	96.2	50	60.8	121.6	52.5	105.0	*
Antimony	50	54.7	109.4	50	52.2	104.4	50.4	100.8	
Arsenic	50	52.8	105.6	50	49.7	99.4	49.7	99.4	
Barium	50	48.7	97.4	50	52.1	104.2	47.4	94.8	
Beryllium	50	52.9	105.8	50	69.7	139.4	82.8	165.6	*
Cadmium	50	56.2	112.4	50	58.6	117.2	53.1	106.2	*
Calcium	5000	4990	99.8	5000	5510	110.2	4510	90.2	*
Chromium	50	71.5	143.0	50	59.8	119.6	53.4	106.8	*
Cobalt	50	56.0	112.0	50	54.3	108.6	49.3	98.6	*
Copper	50	55.4	110.8	50	48.4	96.8	51.0	102.0	*
Iron	5000	4180	83.6	5000	4790	95.8	3880	77.6	*
Lead	50	51.6	103.2	50	50.8	101.6	48.2	96.4	
Magnesium	5000	5520	110.4	5000	6220	124.4	5430	108.6	*
Manganese	50	60.0	120.0	50	55.7	111.4	52.8	105.6	*
Nickel	50	54.8	109.6	50	52.7	105.4	51.5	103.0	
Potassium	5000	5150	103.0	5000	5900	118.0	5060	101.2	*
Selenium	50	53.9	107.8	50	48.0	96.0	49.8	99.6	
Silver	50	49.7	99.4	50	49.1	98.2	45.8	91.6	
Sodium	5000	4920	98.4	5000	5680	113.6	5390	107.8	*
Thallium	50	51.2	102.4	50	50.2	100.4	47.8	95.6	
Vanadium	50	57.1	114.2	50	49.8	99.6	49.7	99.4	*
Zinc	50	53.6	107.2	50	41.9	83.8	51.0	102.0	*

(1) Control Limits: 90-110%

KEMRON ENVIRONMENTAL SERVICES
FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

INSTRUMENT: PE - ICP/MS
METHOD: 6020A
ANALYST: Jyh
DATE: Tuesday, May 06, 2003

UNITS: ug/L

ICV Time: 2:28 PM
CCV1 Time: 4:16 PM
CCV2 Time: 5:29 PM

	Initial Calibration Verification			Continuing Calibration Verification CCV1			CCV2		
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	50	48.1	96.2	50	57.9	115.8	65.6	131.2	*
Antimony	50	54.7	109.4	50	55.7	111.4	58.3	116.6	*
Arsenic	50	52.8	105.6	50	53.9	107.8	57.7	115.4	*
Barium	50	48.7	97.4	50	48.9	97.8	53.5	107.0	
Beryllium	50	52.9	105.8	50	69.1	138.2	84.3	168.6	*
Cadmium	50	56.2	112.4	50	59.0	118.0	57.2	114.4	*
Calcium	5000	4990	99.8	5000	5470	109.4	5520	110.4	*
Chromium	50	71.5	143.0	50	49.4	98.8	59.4	118.8	*
Cobalt	50	56.0	112.0	50	53.2	106.4	55.2	110.4	*
Copper	50	55.4	110.8	50	54.8	109.6	59.7	119.4	*
Iron	5000	4180	83.6	5000	4530	90.6	4660	93.2	*
Lead	50	51.6	103.2	50	49.5	99.0	48.8	97.6	
Magnesium	5000	5520	110.4	5000	6320	126.4	6660	133.2	*
Manganese	50	60.0	120.0	50	59.6	119.2	60.4	120.8	*
Nickel	50	54.8	109.6	50	52.3	104.6	51.8	103.6	
Potassium	5000	5150	103.0	5000	5710	114.2	5820	116.4	*
Selenium	50	53.9	107.8	50	53.8	107.6	59.3	118.6	*
Silver	50	49.7	99.4	50	48.7	97.4	52.8	105.6	
Sodium	5000	4920	98.4	5000	5900	118.0	6000	120.0	*
Thallium	50	51.2	102.4	50	48.0	96.0	47.9	95.8	
Vanadium	50	57.1	114.2	50	51.2	102.4	56.6	113.2	*
Zinc	50	53.6	107.2	50	47.5	95.0	54.1	108.2	

(1) Control Limits: 90-110%

KEMRON ENVIRONMENTAL SERVICES
FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

INSTRUMENT: PE - ICP/MS
METHOD: 6020A
ANALYST: Jyh
DATE: Tuesday, May 06, 2003

UNITS: ug/L

ICV Time: 2:28 PM
CCV1 Time: 6:28 PM
CCV2 Time: 7:12 PM

	Initial Calibration Verification			Continuing Calibration Verification CCV1			CCV2		Q
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	50	48.1	96.2	50	65.6	131.2	58.5	117.0	*
Antimony	50	54.7	109.4	50	57.1	114.2	56.8	113.6	*
Arsenic	50	52.8	105.6	50	58.3	116.6	55.6	111.2	*
Barium	50	48.7	97.4	50	45.5	91.0	55.1	110.2	*
Beryllium	50	52.9	105.8	50	79.9	159.8	84.8	169.6	*
Cadmium	50	56.2	112.4	50	59.5	119.0	62.0	124.0	*
Calcium	5000	4990	99.8	5000	5460	109.2	5300	106.0	
Chromium	50	71.5	143.0	50	61.7	123.4	60.2	120.4	*
Cobalt	50	56.0	112.0	50	56.0	112.0	57.9	115.8	*
Copper	50	55.4	110.8	50	56.6	113.2	57.6	115.2	*
Iron	5000	4180	83.6	5000	4200	84.0	4390	87.8	*
Lead	50	51.6	103.2	50	49.8	99.6	50.6	101.2	
Magnesium	5000	5520	110.4	5000	5670	113.4	6310	126.2	*
Manganese	50	60.0	120.0	50	65.1	130.2	59.8	119.6	*
Nickel	50	54.8	109.6	50	55.3	110.6	59.0	118.0	*
Potassium	5000	5150	103.0	5000	5070	101.4	5460	109.2	
Selenium	50	53.9	107.8	50	60.0	120.0	57.0	114.0	*
Silver	50	49.7	99.4	50	53.9	107.8	50.9	101.8	
Sodium	5000	4920	98.4	5000	5370	107.4	5650	113.0	*
Thallium	50	51.2	102.4	50	48.9	97.8	49.5	99.0	
Vanadium	50	57.1	114.2	50	56.3	112.6	56.1	112.2	*
Zinc	50	53.6	107.2	50	53.7	107.4	55.9	111.8	*

(1) Control Limits: 90-110%

KEMRON ENVIRONMENTAL SERVICES
FORM 3 - BLANKS

INSTRUMENT: PE - ICP/MS
METHOD: 6020A
ANALYST: Jyh
DATE: Tuesday, May 06, 2003

UNITS: ug/L

ICB Time: 2:33 PM
CCB1 Time: 2:53 PM
CCB2 Time: 3:32 PM
CCB3 Time: 4:21 PM

Analyte	Initial Calibration Blank(ug/L)		Continuing Calibration Blank (ug/L) CCB1 1		CCB2 2		CCB3 3	
Aluminum	-0.191		0.196		-0.0163		0.0064	
Antimony	0.114		0.0774		0.0777		0.0664	
Arsenic	0.0165		0.0162		0.0391		0.0578	
Barium	0		0		0		0	
Beryllium	0		0		0		0	
Cadmium	0.0805		0		0		0	
Calcium	-44.5		-44.5		-44.5		-44.5	
Chromium	0.532		-0.50		-0.50		-0.5	
Cobalt	0		0		0.0416		0	
Copper	0		0		0		0	
Iron	-4.60		-4.40		-3.60		-7.1	
Lead	0.0059		0.0089		0.004		0.0032	
Magnesium	0.30		0.20		0		0.9	
Manganese	0.0788		0.0319		0.0008		0.0437	
Nickel	0		0		0.201		0	
Potassium	-1.90		1.80		-3.00		-9.1	
Selenium	0.0401		0.054		0.113		0.173	
Silver	0		0		0.0396		0	
Sodium	-0.20		-0.70		0.80		0.2	
Thallium	-0.0008		0.0164		-0.0003		-0.0001	
Vanadium	0.241		0.332		0.139		0.027	
Zinc	-0.231		0.213		-0.0016		0.756	

U = Result is less than MDL
B Result is between MDL and RL

KEMRON ENVIRONMENTAL SERVICES
FORM 3 - BLANKS

INSTRUMENT: PE - ICP/MS
METHOD: 6020A
ANALYST: Jyh
DATE: Tuesday, May 06, 2003

UNITS: ug/L

ICB Time: 2:33 PM
CCB1 Time: 5:34 PM
CCB2 Time: 6:32 PM
CCB3 Time: 7:17 PM

Analyte	Initial Calibration Blank(ug/L)		Continuing Calibration Blank (ug/L) CCB1 1		CCB2 2		CCB3 3	
Aluminum	-0.191		0.113		0.398		-0.307	
Antimony	0.114		0.0708		0.0658		0.0635	
Arsenic	0.0165		0.0387		0.0594		0.0359	
Barium	0		0		0		0	
Beryllium	0		0		0		0	
Cadmium	0.0805		-0.0022		-0.0023		-0.002	
Calcium	-44.5		-44.5		-44.5		-7	
Chromium	0.532		-0.50		-0.50		0.0121	
Cobalt	0		0		0		0	
Copper	0		0		0		0	
Iron	-4.60		-1.00		10.2		-8.6	
Lead	0.0059		0.0005		0.003		0.0019	
Magnesium	0.30		0		0		0	
Manganese	0.0788		0.143		-0.028		0.0027	
Nickel	0		0		0.718		0.407	
Potassium	-1.30		-8.80		-11.5		-10.2	
Selenium	0.0401		0.121		0.169		0.113	
Silver	0		0		0		0	
Sodium	-0.20		0.50		-0.80		-0.1	
Thallium	-0.0008		-0.0016		-0.0019		0.008	
Vanadium	0.241		0.0716		-0.0643		0.392	
Zinc	-0.231		0.59		0.893		-0.231	

U Result is less than MDL
B = Result is between MDL and RL

KEMRON ENVIRONMENTAL SERVICES
FORM 4B - INTERFERENCE CHECK SAMPLE (ICP/MS)

INSTRUMENT ID: PE - ICP/MS
METHOD: 6020A
ANALYST: Jyh
DATE: Tuesday, May 06, 2003

UNITS: ug/L

ICSA Time: 14:38:45
ICSAB Time: 14:43:40

Analyte	True Sol. A	True Sol. AB	Found Sol. A	Found Sol. AB	%R	Q
Aluminum	10000	10000	12200	13700.0	137.0	*
Antimony	0	100	0	112.0	112.0	
Arsenic	0	100	0	104.0	104.0	
Barium	0	100	0	113.0	113.0	
Beryllium	0	100	0	141.0	141.0	*
Cadmium	0	100	0	112.0	112.0	
Calcium	30000	30000	26400	31300.0	104.3	
Chromium	0	100	0	118.0	118.0	
Cobalt	0	100	0	100.0	100.0	
Copper	0	100	0	105.0	105.0	
Iron	25000	25000	22600	30400.0	121.6	*
Lead	0	100	0	101.0	101.0	
Magnesium	10000	10000	9730	11400.0	114.0	
Manganese	0	100	0	101.0	101.0	
Nickel	0	100	0	118.0	118.0	
Potassium	10000	10000	9550	10200.0	102.0	
Selenium	0	100	0	101.0	101.0	
Silver	0	100	0	36.2	36.2	*
Sodium	25000	25000	23600	27300.0	109.2	
Thallium	0	100	0	98.7	98.7	
Vanadium	0	100	0	108.0	108.0	
Zinc	0	100	4	97.1	97.1	

(1) Control Limits: 80-120%

KEMRON ENVIRONMENTAL SERVICES
11-IN
ICP-AES AND ICP-MS LINEAR RANGES (QUARTERLY)

Instrument ID: PE - ICP/MS

Date: 9/21/01

Analyte	Integ. Time (Sec.)	Concentration (ug/L)
Antimony	40.00	100.0
Arsenic	40.00	100.0
Barium	10.00	100.0
Beryllium	10.00	100.0
Cadmium	40.00	100.0
Chromium	40.00	100.0
Cobalt	40.00	100.0
Copper	10.00	100.0
Lead	40.00	100.0
Manganese	40.00	100.0
Nickel	40.00	100.0
Selenium	40.00	100.0
Silver	10.00	100.0
Thallium	40.00	100.0
Vanadium	40.00	100.0
Zinc	40.00	100.0

Comments:

Forms by [illegible]

FORM XI-IN ILM05.0

Method 6020 - Summary Report

Sample ID: Blank

Sample Date/Time: Tuesday, May 06, 2003 14:17:28
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\Service\6020 methods\6020A.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	11337.979					ug/L
	Be	9	0.000					ug/L
	Al	27	1000.035					ug/L
>	Sc-1	45	152818.585					ug/L
	V	51	860.715					ug/L
	Cr	52	8335.983					ug/L
	Cr	53	333.345					ug/L
	Mn	55	666.690					ug/L
	Co	59	0.000					ug/L
	Ni	60	0.000					ug/L
	Cu	65	0.000					ug/L
	Zn	66	333.345					ug/L
	Ge	72	663676.406					ug/L
	As	75	129.659					ug/L
	Se	77	200.202					ug/L
	Se	82	97.726					ug/L
	Y	89	597929.857					ug/L
	Rh	103	0.000					ug/L
	Ag	107	0.000					ug/L
	Cd	114	0.000					ug/L
>	In	115	576529.053					ug/L
	Sb	123	51.413					ug/L
	Ba	135	0.000					ug/L
	Ce	140	1000.058					ug/L
>	Tb	159	543839.283					ug/L
	Ho	165	0.000					ug/L
	Tl	203	36.000					ug/L
	Tl	205	0.000					ug/L
	Pb	206	0.000					ug/L
	Pb	207	33.367					ug/L
	Pb	208	97.701					ug/L
>	Bi	209	430070.443					ug/L
	Na	23	5334.337					mg/L
	Mg	24	0.000					mg/L
	K	39	394451.007					mg/L
	Ca	43	333.345					mg/L
	Fe	54	22785.016					mg/L
	Fe	57	6001.330					mg/L

⊢>	Sc	45	152818.585	mg/L
	Cl	35	10004.506	mg/L
	Kr	83	120.668	mg/L
	U	238	0.000	mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
⌈	Be	9					
|	Al	27					
⊢>	Sc-1	45					
⌈	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72					
|	As	75					
|	Se	77					
⌊	Se	82					
	Y	89					
⌈	Rh	103					
|	Ag	107					
|	Cd	114					
|>	In	115					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⊢>	Tb	159					
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
⊢>	Bi	209					
⌈	Na	23					
|	Mg	24					
|	K	39					
|	Ca	43					
|	Fe	54					
|	Fe	57					
⊢>	Sc	45					
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Blank
Report Date/Time: Tuesday, May 06, 2003 14:18:02
Page 2

Method 6020 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Tuesday, May 06, 2003 14:20:20
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 2
Method File: C:\elandata\Method\Service\6020 methods\6020A.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	13339.613	2001.63				ug/L
⌈	Be	9	666.690	0.00	5.0000	4.331	86.622	ug/L
|	Al	27	23687.370	0.13	5.0000	1.446	28.914	ug/L
⌊>	Sc-1	45	173382.053	173382.05				ug/L
⌈	V	51	30731.417	0.04	5.0000	0.507	10.143	ug/L
|	Cr	52	35378.426	0.04	5.0000	1.460	29.193	ug/L
|	Cr	53	4334.279	0.01	5.0000	4.386	87.729	ug/L
|	Mn	55	59123.520	0.09	5.0000	0.712	14.240	ug/L
|	Co	59	46409.937	0.07	5.0000	0.860	17.200	ug/L
|	Ni	60	11338.399	0.02	5.0000	2.138	42.767	ug/L
|	Cu	65	10337.407	0.02	5.0000	1.828	36.560	ug/L
|	Zn	66	8669.304	0.01	5.0000	0.310	6.204	ug/L
	Ge	72	672450.024	672450.02				ug/L
	As	75	9207.870	0.01	5.0000	0.121	2.425	ug/L
|	Se	77	500.510	0.00	5.0000	3.307	66.144	ug/L
⌊	Se	82	1096.736	0.00	5.0000	0.221	4.419	ug/L
	Y	89	616699.852	18769.99				ug/L
⌈	Rh	103	0.000	0.00				ug/L
|	Ag	107	45406.557	0.08	5.0000	0.866	17.312	ug/L
|	Cd	114	22008.034	0.04	5.0000	0.301	6.022	ug/L
|>	In	115	604906.751	604906.75				ug/L
⌊	Sb	123	23951.879	0.04	5.0000	0.126	2.514	ug/L
⌈	Ba	135	5334.547	0.01	5.0000	3.218	64.353	ug/L
|	Ce	140	666.713	-0.00				ug/L
⌊>	Tb	159	569183.830	569183.83				ug/L
⌈	Ho	165	0.000	0.00				ug/L
|	Tl	203	34782.986	34746.99	5.0000	0.101	2.029	ug/L
|	Tl	205	84768.898	84768.90	5.0000	0.209	4.172	ug/L
|	Pb	206	28155.853	28155.85	5.0000	0.093	1.851	ug/L
|	Pb	207	25046.965	25013.60	5.0000	0.053	1.061	ug/L
|	Pb	208	116082.872	115985.17	5.0000	0.035	0.706	ug/L
⌊>	Bi	209	456116.216	456116.22				ug/L
⌈	Na	23	1328581.456	7.66	0.5000	0.058	11.640	mg/L
|	Mg	24	949208.089	5.48	0.5000	0.025	5.054	mg/L
|	K	39	3783676.602	19.29	0.5000	0.026	5.290	mg/L
|	Ca	43	5000.898	0.03	0.5000	0.138	27.654	mg/L
|	Fe	54	273957.250	1.44	0.5000	0.049	9.758	mg/L
|	Fe	57	109758.265	0.60	0.5000	0.086	17.160	mg/L

L>	Sc	45	173382.053	173382.05	mg/L
	Cl	35	8336.837	-1667.87	mg/L
	Kr	83	126.002	5.33	mg/L
	U	238	0.000	0.00	mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
[	Be	9					
|	Al	27					
L>	Sc-1	45					
[	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72					
|	As	75					
|	Se	77					
L	Se	82					
	Y	89					
[	Rh	103					
|	Ag	107					
|	Cd	114					
|>	In	115					
L	Sb	123					
[	Ba	135					
|	Ce	140					
L>	Tb	159					
[	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
L>	Bi	209					
[	Na	23					
|	Mg	24					
|	K	39					
|	Ca	43					
|	Fe	54					
|	Fe	57					
L>	Sc	45					
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 1
Report Date/Time: Tuesday, May 06, 2003 14:20:54

Method 6020 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Tuesday, May 06, 2003 14:23:12
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 3
Method File: C:\elandata\Method\Service\6020 methods\6020A.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	12672.479	1334.50				ug/L
	Be	9	3333.730	0.02	20.2221	2.018	9.980	ug/L
	Al	27	66823.299	0.39	19.6260	3.022	15.396	ug/L
>	Sc-1	45	168997.555	168997.55				ug/L
	V	51	145603.673	0.21	20.1918	5.317	26.335	ug/L
	Cr	52	140017.858	0.19	20.1981	1.137	5.629	ug/L
	Cr	53	16343.993	0.02	19.9822	9.434	47.211	ug/L
	Mn	55	243055.467	0.36	20.0239	1.283	6.407	ug/L
	Co	59	166295.757	0.24	19.8434	0.122	0.614	ug/L
	Ni	60	40726.045	0.06	19.8520	3.951	19.901	ug/L
	Cu	65	40392.749	0.06	19.9526	4.831	24.212	ug/L
	Zn	66	35044.497	0.05	20.0286	4.553	22.733	ug/L
>	Ge	72	682536.997	682537.00				ug/L
	As	75	37428.766	0.05	20.0139	0.045	0.226	ug/L
	Se	77	3770.939	0.01	20.8105	2.239	10.759	ug/L
	Se	82	4316.320	0.01	20.0462	0.322	1.606	ug/L
	Y	89	612204.387	14274.53				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	167646.976	0.28	19.9297	0.806	4.042	ug/L
	Cd	114	94294.824	0.16	20.1032	1.883	9.366	ug/L
>	In	115	590563.552	590563.55				ug/L
	Sb	123	98956.934	0.17	20.0666	0.405	2.021	ug/L
	Ba	135	33373.587	0.06	20.4354	4.010	19.623	ug/L
	Ce	140	2000.303	0.00				ug/L
>	Tb	159	547686.123	547686.12				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	142434.663	142398.66	20.0282	0.171	0.856	ug/L
	Tl	205	352754.064	352754.06	20.0457	0.708	3.532	ug/L
	Pb	206	122074.270	122074.27	20.0915	0.175	0.869	ug/L
	Pb	207	103443.207	103409.84	20.0382	0.703	3.511	ug/L
	Pb	208	481734.482	481636.78	20.0433	0.302	1.508	ug/L
>	Bi	209	469618.136	469618.14				ug/L
	Na	23	7362819.644	43.85	2.0361	0.294	14.420	mg/L
	Mg	24	5126129.443	30.56	2.0337	0.291	14.305	mg/L
	K	39	13250744.202	76.20	1.9985	0.240	12.024	mg/L
	Ca	43	19013.088	0.11	2.0040	0.597	29.772	mg/L
	Fe	54	1078006.469	6.23	2.0092	0.111	5.521	mg/L
	Fe	57	456176.349	2.67	2.0128	0.216	10.752	mg/L

⊢>	Sc	45	168997.555	168997.55	mg/L
	Cl	35	8669.304	-1335.20	mg/L
	Kr	83	157.002	36.33	mg/L
	U	238	0.000	0.00	mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
⌈	Be	9					
|	Al	27					
⊢>	Sc-1	45					
⌈	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72					
|	As	75					
|	Se	77					
⌊	Se	82					
	Y	89					
⌈	Rh	103					
|	Ag	107					
|	Cd	114					
|>	In	115					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⊢>	Tb	159					
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
⊢>	Bi	209					
⌈	Na	23					
|	Mg	24					
|	K	39					
|	Ca	43					
|	Fe	54					
|	Fe	57					
⊢>	Sc	45					
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 2
Report Date/Time: Tuesday, May 06, 2003 14:23:46

Method 6020 - Summary Report

Sample ID: Standard 3

Sample Date/Time: Tuesday, May 06, 2003 14:26:05
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 4
Method File: C:\elandata\Method\Service\6020 methods\6020A.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	13339.940	2001.96				ug/L
	Be	9	17010.285	0.09	99.5912	14.784	14.844	ug/L
	Al	27	292634.597	1.51	98.7141	1.784	1.807	ug/L
>	Sc-1	45	192623.394	192623.39				ug/L
	V	51	681591.738	0.99	99.7410	1.897	1.902	ug/L
	Cr	52	625064.460	0.89	99.7285	3.750	3.760	ug/L
	Cr	53	69168.895	0.10	99.2879	13.608	13.706	ug/L
	Mn	55	936431.135	1.36	98.7617	4.378	4.433	ug/L
	Co	59	827029.176	1.20	99.9008	7.456	7.463	ug/L
	Ni	60	175067.888	0.25	99.2500	5.421	5.462	ug/L
	Cu	65	201075.383	0.29	99.9344	6.153	6.157	ug/L
	Zn	66	149447.696	0.22	99.3003	7.942	7.998	ug/L
	Ge	72	689759.866	689759.87				ug/L
	As	75	181960.471	0.26	99.8547	1.012	1.013	ug/L
	Se	77	15123.166	0.02	99.3532	10.551	10.620	ug/L
	Se	82	20382.218	0.03	99.8048	1.398	1.400	ug/L
	Y	89	663815.049	65885.19				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	927953.164	1.50	100.1956	6.748	6.735	ug/L
	Cd	114	461334.998	0.74	99.7262	4.852	4.865	ug/L
>	In	115	620366.074	620366.07				ug/L
	Sb	123	487568.410	0.79	99.7461	0.125	0.125	ug/L
	Ba	135	160235.084	0.29	99.8476	6.826	6.837	ug/L
	Ce	140	1666.818	0.00				ug/L
>	Tb	159	556658.914	556658.91				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	701319.773	701283.77	99.9436	1.666	1.667	ug/L
	Tl	205	1666898.717	1666698.72	99.7729	3.222	3.230	ug/L
	Pb	206	607481.925	607481.92	99.9993	2.828	2.828	ug/L
	Pb	207	516658.234	516624.87	100.0044	3.515	3.515	ug/L
	Pb	208	2357482.554	2357384.85	99.9212	1.572	1.573	ug/L
>	Bi	209	501871.397	501871.40				ug/L
	Na	23	36235000.045	188.19	9.9414	1.603	16.124	mg/L
	Mg	24	23704169.063	123.07	9.9108	0.433	4.366	mg/L
	K	39	66537260.470	342.79	9.9544	0.671	6.742	mg/L
	Ca	43	94316.103	0.49	9.9415	1.547	15.560	mg/L
	Fe	54	6507675.182	33.65	10.0319	0.807	8.040	mg/L
	Fe	57	2845491.106	14.74	10.0403	0.463	4.610	mg/L

⊢> Sc	45	192623.394	192623.39		mg/L
Cl	35	6668.230	-3336.28		mg/L
Kr	83	147.669	27.00		mg/L
U	238	0.000	0.00		mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
Li	6					
Be	9					
Al	27					
Sc-1	45					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
Ge	72					
As	75					
Se	77					
Se	82					
Y	89					
Rh	103					
Ag	107					
Cd	114					
In	115					
Sb	123					
Ba	135					
Ce	140					
Tb	159					
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
Bi	209					
Na	23					
Mg	24					
K	39					
Ca	43					
Fe	54					
Fe	57					
Sc	45					
Cl	35					
Kr	83					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 3
Report Date/Time: Tuesday, May 06, 2003 14:26:40
Page 2

Method 6020 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Tuesday, May 06, 2003 14:28:59
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\Service\6020 methods\6020A.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	14007.167	2669.19				ug/L
	Be	9	6336.146	0.05	52.9453	33.155	62.622	ug/L
	Al	27	138335.957	0.74	48.0817	4.393	9.136	ug/L
>	Sc-1	45	187231.067	187231.07				ug/L
	V	51	373023.272	0.57	57.1217	4.516	7.906	ug/L
	Cr	52	332523.948	0.49	54.9457	6.639	12.082	ug/L
	Cr	53	47751.114	0.07	71.4750	21.131	29.564	ug/L
	Mn	55	543855.399	0.82	60.0156	3.796	6.325	ug/L
	Co	59	442413.562	0.67	55.9714	1.328	2.372	ug/L
	Ni	60	92298.422	0.14	54.7733	4.441	8.108	ug/L
	Cu	65	106395.220	0.16	55.3725	2.941	5.311	ug/L
	Zn	66	77210.428	0.12	53.6476	7.494	13.968	ug/L
	Ge	72	658910.833	658910.83				ug/L
	As	75	91932.559	0.14	52.7831	0.972	1.842	ug/L
	Se	77	8377.513	0.01	56.9805	5.223	9.166	ug/L
	Se	82	10562.969	0.02	53.9250	1.526	2.831	ug/L
	Y	89	564957.536	-32972.32				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	442784.656	0.74	49.6905	5.253	10.572	ug/L
	Cd	114	250847.212	0.42	56.2127	2.311	4.112	ug/L
>	In	115	598097.698	598097.70				ug/L
	Sb	123	257968.203	0.43	54.7491	0.906	1.655	ug/L
	Ba	135	74864.055	0.14	48.6775	8.757	17.989	ug/L
	Ce	140	333.345	-0.00				ug/L
>	Tb	159	538660.925	538660.92				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	359606.540	359570.54	51.2443	0.863	1.683	ug/L
	Tl	205	891356.649	891356.65	53.3589	2.072	3.883	ug/L
	Pb	206	327877.455	327877.46	53.9728	0.179	0.331	ug/L
	Pb	207	252122.603	252089.24	48.7976	1.056	2.165	ug/L
	Pb	208	1217027.560	1216929.86	51.5814	0.271	0.526	ug/L
>	Bi	209	471537.986	471537.99				ug/L
	Na	23	17321240.033	93.16	4.9216	0.490	9.949	mg/L
	Mg	24	12708582.628	68.51	5.5169	0.624	11.310	mg/L
	K	39	33268630.235	177.24	5.1470	0.774	15.044	mg/L
	Ca	43	45739.805	0.24	4.9938	0.615	12.321	mg/L
	Fe	54	3417556.242	18.21	5.4289	0.391	7.211	mg/L
	Fe	57	1147318.000	6.14	4.1850	0.461	11.018	mg/L

↳ Sc	45	187231.067	187231.07		mg/L
Cl	35	9669.993	-334.51		mg/L
Kr	83	169.003	48.33		mg/L
U	238	0.000	0.00		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
┌	Be	9	105.891				
│	Al	27	96.163				
↳	Sc-1	45		122.519			
┌	V	51	114.243				
│	Cr	52	109.891				
│	Cr	53	142.950				
│	Mn	55	120.031				
│	Co	59	111.943				
│	Ni	60	109.547				
│	Cu	65	110.745				
│	Zn	66	107.295				
↳	Ge	72		99.282			
│	As	75	105.566				
│	Se	77	113.961				
└	Se	82	107.850				
	Y	89					
┌	Rh	103					
│	Ag	107	99.381				
│	Cd	114	112.425				
↳	In	115		103.741			
└	Sb	123	109.498				
┌	Ba	135	97.355				
│	Ce	140					
↳	Tb	159		99.084			
┌	Ho	165					
│	Tl	203	102.489				
│	Tl	205	106.718				
│	Pb	206	107.946				
│	Pb	207	97.595				
│	Pb	208	103.163				
↳	Bi	209		109.642			
┌	Na	23	98.433				
│	Mg	24	110.337				
│	K	39	102.940				
│	Ca	43	99.876				
│	Fe	54	108.578				
│	Fe	57	83.699				
↳	Sc	45		122.519			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 1
Report Date/Time: Tuesday, May 06, 2003 14:29:34
Page 2

QC Std 1	Be	9	ICV is out of limits (+/-10%)
Sc-1 45 Int Std for QC Std		45	
QC Std 1	V	51	ICV is out of limits (+/-10%)
QC Std 1	Cr	53	ICV is out of limits (+/-10%)
QC Std 1	Mn	55	ICV is out of limits (+/-10%)
QC Std 1	Co	59	ICV is out of limits (+/-10%)
QC Std 1	Cu	65	ICV is out of limits (+/-10%)
QC Std 1	Se	77	ICV is out of limits (+/-10%)
QC Std 1	Cd	114	ICV is out of limits (+/-10%)
Sc 45 Int Std for QC Std		45	

Method 6020 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Tuesday, May 06, 2003 14:33:52
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\Service\6020 methods\6020A.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	10670.682	-667.30				ug/L
	Be	9	0.000	0.00	0.0000	0.000		ug/L
	Al	27	666.713	-0.00	-0.1908	0.409	214.426	ug/L
>	Sc-1	45	165964.276	165964.28				ug/L
	V	51	2356.300	0.00	0.2412	0.167	69.365	ug/L
	Cr	52	6668.441	-0.00	-0.2386	0.523	219.153	ug/L
	Cr	53	666.713	0.00	0.5315	1.786	335.967	ug/L
	Mn	55	1333.403	0.00	0.0788	0.065	81.922	ug/L
	Co	59	0.000	0.00	0.0000	0.000		ug/L
	Ni	60	0.000	0.00	0.0000	0.000		ug/L
	Cu	65	0.000	0.00	0.0000	0.000		ug/L
	Zn	66	0.000	-0.00	-0.2307	0.000	0.000	ug/L
>	Ge	72	637707.943	637707.94				ug/L
	As	75	152.292	0.00	0.0165	0.043	261.810	ug/L
	Se	77	33.367	-0.00	-1.1471	0.413	35.981	ug/L
	Se	82	101.342	0.00	0.0401	0.095	236.993	ug/L
	Y	89	599395.691	1465.83				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	0.000	0.00	0.0000	0.000		ug/L
	Cd	114	333.345	0.00	0.0805	0.139	173.205	ug/L
>	In	115	564230.033	564230.03				ug/L
	Sb	123	557.259	0.00	0.1139	0.004	3.501	ug/L
	Ba	135	0.000	0.00	0.0000	0.000		ug/L
	Ce	140	333.345	-0.00				ug/L
>	Tb	159	544657.596	544657.60				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	30.334	-5.67	-0.0008	0.000	10.189	ug/L
	Tl	205	33.367	33.37	0.0020	0.003	173.205	ug/L
	Pb	206	100.101	100.10	0.0165	0.016	100.000	ug/L
	Pb	207	66.734	33.37	0.0065	0.011	173.205	ug/L
	Pb	208	236.835	139.13	0.0059	0.006	105.439	ug/L
>	Bi	209	435024.828	435024.83				ug/L
	Na	23	5000.945	-0.00	-0.0002	0.001	302.143	mg/L
	Mg	24	666.690	0.00	0.0003	0.000	86.624	mg/L
	K	39	417375.059	-0.07	-0.0019	0.001	32.842	mg/L
	Ca	43	0.000	-0.00	-0.0445	0.000	0.000	mg/L
	Fe	54	18824.724	-0.03	-0.0101	0.009	89.030	mg/L
	Fe	57	5334.384	-0.01	-0.0046	0.008	163.552	mg/L

⌊>	Sc	45	165964.276	165964.28	mg/L
	Cl	35	8669.327	-1335.18	mg/L
	Kr	83	139.669	19.00	mg/L
	U	238	0.000	0.00	mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
⌈	Be	9					
|	Al	27					
⌊>	Sc-1	45		108.602			
⌈	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		96.087			
|	As	75					
|	Se	77					
⌊	Se	82					
	Y	89					
⌈	Rh	103					
|	Ag	107					
|	Cd	114					
|>	In	115		97.867			
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		100.187			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
⌊>	Bi	209		101.152			
⌈	Na	23					
|	Mg	24					
|	K	39					
|	Ca	43					
|	Fe	54					
|	Fe	57					
⌊>	Sc	45		108.602			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 2
Report Date/Time: Tuesday, May 06, 2003 14:34:25

QC Std 2	Se	77	ICB is out of limits (+/-3*IDL)
QC Std 2	Cd	114	ICB is out of limits (+/-3*IDL)

Method 6020 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Tuesday, May 06, 2003 14:38:45
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 6
Method File: C:\elandata\Method\Service\6020 methods\6020A.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	16009.690	4671.71				ug/L
	Be	9	0.000	0.00	0.0000	0.000		ug/L
	Al	27	36227029.305	186.30	12157.9985	828.632	6.816	ug/L
>	Sc-1	45	194991.704	194991.70				ug/L
	V	51	1700.708	0.00	0.0970	0.689	709.923	ug/L
	Cr	52	8002.404	-0.00	-0.2459	0.391	158.980	ug/L
	Cr	53	333.345	-0.00	-0.0642	0.754	1174.160	ug/L
	Mn	55	4667.647	0.01	0.3684	0.295	80.117	ug/L
	Co	59	668.713	0.00	0.0714	0.124	173.205	ug/L
	Ni	60	666.690	0.00	0.3340	0.289	86.603	ug/L
	Cu	65	666.690	0.00	0.2962	0.257	86.625	ug/L
	Zn	66	6868.604	0.01	3.7273	2.382	63.918	ug/L
	Ge	72	774088.483	774088.48				ug/L
	As	75	207.843	0.00	0.0276	0.024	86.732	ug/L
	Se	77	300.304	0.00	0.3905	1.008	258.128	ug/L
	Se	82	126.256	0.00	0.0533	0.062	115.597	ug/L
	Y	89	614998.626	17068.77				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	0.000	0.00	0.0000	0.000		ug/L
	Cd	114	2000.163	0.00	0.4056	0.197	48.649	ug/L
>	In	115	658748.556	658748.56				ug/L
	Sb	123	553.544	0.00	0.0953	0.007	6.890	ug/L
	Ba	135	0.000	0.00	0.0000	0.000		ug/L
	Ce	140	2666.923	0.00				ug/L
>	Tb	159	632378.453	632378.45				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	512.014	476.01	0.0678	0.003	4.896	ug/L
	Tl	205	1134.514	1134.51	0.0679	0.014	20.378	ug/L
	Pb	206	1167.885	1167.88	0.1922	0.053	27.554	ug/L
	Pb	207	533.877	500.51	0.0969	0.022	23.094	ug/L
	Pb	208	3031.171	2933.47	0.1243	0.013	10.223	ug/L
>	Bi	209	570315.649	570315.65				ug/L
	Na	23	68864726.136	445.79	23.5502	2.216	9.410	mg/L
	Mg	24	23539556.778	120.87	9.7336	0.565	5.807	mg/L
	K	39	64319351.788	328.75	9.5468	1.244	13.033	mg/L
	Ca	43	252893.470	1.30	26.4491	1.367	5.167	mg/L
	Fe	54	13424975.724	68.83	20.5174	0.928	4.524	mg/L
	Fe	57	6480605.994	33.22	22.6303	0.391	1.727	mg/L

Sc	45	194991.704	194991.70		mg/L
Cl	35	3420901.403	3410896.90		mg/L
Kr	83	196.337	75.67		mg/L
U	238	0.000	0.00		mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
Li	6					
Be	9					
Al	27	121.580				
Sc-1	45		127.597			
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
Ge	72		116.636			
As	75					
Se	77					
Se	82					
Y	89					
Rh	103					
Ag	107					
Cd	114					
In	115		114.261			
Sb	123					
Ba	135					
Ce	140					
Tb	159		116.323			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
Bi	209		132.610			
Na	23	94.201				
Mg	24	97.336				
K	39	95.468				
Ca	43	88.164				
Fe	54	82.070				
Fe	57	90.521				
Sc	45		127.597			
Cl	35					
Kr	83					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 4
Report Date/Time: Tuesday, May 06, 2003 14:39:20

QC Std 4	Al	27	ICSA is out of limits (+/-20%)
Sc-1 45 Int Std for QC Std		45	
Bi 209 Int Std for QC Std		209	RERUN FOR AFCEE QC
Sc 45 Int Std for QC Std		45	

Method 6020 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Tuesday, May 06, 2003 14:43:40
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 7
Method File: C:\elandata\Method\Service\6020 methods\6020A.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	13339.590	2001.61				ug/L
	Be	9	21015.750	0.12	140.6773	21.005	14.931	ug/L
	Al	27	35201736.023	209.39	13665.0610	718.652	5.259	ug/L
>	Sc-1	45	168319.985	168319.99				ug/L
	V	51	760794.635	1.06	107.6392	3.012	2.798	ug/L
	Cr	52	629928.305	0.87	97.1785	4.341	4.467	ug/L
	Cr	53	85254.289	0.12	118.4692	10.431	8.805	ug/L
	Mn	55	988065.393	1.38	100.8458	6.808	6.751	ug/L
	Co	59	858033.051	1.20	100.2589	4.402	4.391	ug/L
	Ni	60	214948.333	0.30	118.0053	14.610	12.381	ug/L
	Cu	65	218323.622	0.31	104.8697	2.502	2.386	ug/L
	Zn	66	151478.817	0.21	97.1025	13.698	14.107	ug/L
>	Ge	72	713672.888	713672.89				ug/L
	As	75	196063.237	0.27	104.0296	2.241	2.154	ug/L
	Se	77	15624.190	0.02	99.3149	10.162	10.232	ug/L
	Se	82	21285.970	0.03	100.7792	2.298	2.280	ug/L
	Y	89	595539.975	-2389.88				ug/L
	Rh	103	333.345	0.00				ug/L
	Ag	107	323989.243	0.54	36.2167	2.853	7.877	ug/L
	Cd	114	498888.755	0.83	111.8074	4.481	4.008	ug/L
>	In	115	598777.126	598777.13				ug/L
	Sb	123	526291.241	0.88	111.5830	2.204	1.975	ug/L
	Ba	135	174392.480	0.32	112.8047	1.913	1.696	ug/L
	Ce	140	1333.403	0.00				ug/L
>	Tb	159	537614.906	537614.91				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	692768.580	692732.58	98.7249	1.927	1.952	ug/L
	Tl	205	1657257.002	1657257.00	99.2077	2.457	2.476	ug/L
	Pb	206	653170.392	653170.39	107.5202	0.378	0.352	ug/L
	Pb	207	505520.204	505486.84	97.8484	1.522	1.555	ug/L
	Pb	208	2379016.926	2378919.22	100.8340	0.583	0.578	ug/L
>	Bi	209	459609.817	459609.82				ug/L
	Na	23	86864726.136	517.33	27.3294	2.994	10.956	mg/L
	Mg	24	23868781.348	142.17	11.4486	1.361	11.887	mg/L
	K	39	59681906.361	352.40	10.2334	0.626	6.112	mg/L
	Ca	43	257642.075	1.53	31.2749	2.990	9.562	mg/L
	Fe	54	16459798.210	97.86	29.1730	2.854	9.782	mg/L
	Fe	57	7519210.248	44.88	30.4417	1.803	5.923	mg/L

↳ Sc	45	168319.985	168319.99		mg/L
Cl	35	3596256.036	3586251.53		mg/L
Kr	83	167.869	47.00		mg/L
U	238	0.000	0.00		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
┌	Be	9					
│	Al	27	136.651				
↳	Sc-1	45		110.144			
┌	V	51	107.639				
│	Cr	52	97.178				
│	Cr	53	118.469				
│	Mn	55	100.846				
│	Co	59	100.259				
│	Ni	60	118.005				
│	Cu	65	104.870				
│	Zn	66	97.102				
↳	Ge	72		107.533			
│	As	75	104.030				
│	Se	77	99.315				
└	Se	82	100.779				
	Y	89					
┌	Rh	103					
│	Ag	107	36.217				
│	Cd	114	111.807				
↳	In	115		103.859			
└	Sb	123	111.583				
┌	Ba	135					
│	Ce	140					
↳	Tb	159		98.892			
┌	Ho	165					
│	Tl	203	98.725				
│	Tl	205	99.208				
│	Pb	206	107.520				
│	Pb	207	97.848				
│	Pb	208	100.834				
↳	Bi	209		106.868			
┌	Na	23	109.317				
│	Mg	24	114.486				
│	K	39	102.334				
│	Ca	43	104.250				
│	Fe	54	116.692				
│	Fe	57	121.767				
↳	Sc	45		110.144			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 5
Report Date/Time: Tuesday, May 06, 2003 14:44:16
Page 2

QC Std 5	Al	27	ICSAB is out of limits {+/-20%}
QC Std 5	Ag	107	ICSAB is out of limits {+/-20%}
QC Std 5	Fe	57	ICSAB is out of limits {+/-20%}

Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, May 06, 2003 14:48:35
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\Service\6020 methods\6020A.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	14340.535	3002.56				ug/L
	Be	9	10003.571	0.06	69.7155	10.290	14.760	ug/L
	Al	27	149782.886	0.93	60.7960	10.940	17.995	ug/L
>	Sc-1	45	162260.550	162260.55				ug/L
	V	51	357078.819	0.49	49.8283	2.827	5.673	ug/L
	Cr	52	320568.814	0.43	48.1802	4.266	8.854	ug/L
	Cr	53	43734.686	0.06	59.8170	10.504	17.561	ug/L
	Mn	55	552827.264	0.76	55.6712	0.915	1.644	ug/L
	Co	59	469993.383	0.65	54.2892	6.343	11.683	ug/L
	Ni	60	97332.865	0.13	52.7478	6.189	11.733	ug/L
	Cu	65	102031.428	0.14	48.4212	3.868	7.989	ug/L
	Zn	66	66152.883	0.09	41.8659	1.725	4.121	ug/L
	Ge	72	722222.728	722222.73				ug/L
	As	75	94912.761	0.13	49.7102	0.313	0.629	ug/L
	Se	77	7375.958	0.01	45.5526	5.269	11.566	ug/L
	Se	82	10326.912	0.01	48.0412	1.189	2.475	ug/L
	Y	89	607664.316	9734.46				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	446910.149	0.73	49.0945	4.302	8.764	ug/L
	Cd	114	268462.974	0.44	58.5590	0.985	1.682	ug/L
>	In	115	610255.977	610255.98				ug/L
	Sb	123	250851.226	0.41	52.1637	0.244	0.469	ug/L
	Ba	135	86595.214	0.15	52.1281	4.360	8.365	ug/L
	Ce	140	1000.035	-0.00				ug/L
>	Tb	159	579565.317	579565.32				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	352550.066	352514.07	50.2386	0.984	1.958	ug/L
	Tl	205	855687.437	855687.44	51.2237	1.168	2.280	ug/L
	Pb	206	327199.933	327199.93	53.8613	2.477	4.600	ug/L
	Pb	207	252296.701	252263.33	48.8313	2.845	5.826	ug/L
	Pb	208	1197536.027	1197438.33	50.7552	1.437	2.832	ug/L
>	Bi	209	468146.032	468146.03				ug/L
	Na	23	17241096.982	107.47	5.6776	0.768	13.518	mg/L
	Mg	24	12384502.391	77.22	6.2185	0.812	13.063	mg/L
	K	39	32865374.111	203.07	5.8969	1.033	17.516	mg/L
	Ca	43	43399.773	0.27	5.5126	1.178	21.367	mg/L
	Fe	54	3496749.497	21.65	6.4552	0.843	13.054	mg/L
	Fe	57	1131122.414	7.03	4.7874	0.738	15.420	mg/L

⊢> Sc	45	162260.550	162260.55		mg/L
Cl	35	17677.652	7673.15		mg/L
Kr	83	180.336	59.67		mg/L
U	238	0.000	0.00		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
⌈	Be	9	139.431				
|	Al	27	121.592				
⊢>	Sc-1	45		106.179			
⌈	V	51	99.657				
|	Cr	52	96.360				
|	Cr	53	119.634				
|	Mn	55	111.342				
|	Co	59	108.578				
|	Ni	60	105.496				
|	Cu	65	96.842				
|	Zn	66	83.732				
|>	Ge	72		108.822			
|	As	75	99.420				
|	Se	77	91.105				
⌊	Se	82	96.082				
	Y	89					
⌈	Rh	103					
|	Ag	107	98.189				
|	Cd	114	117.118				
|>	In	115		105.850			
⌊	Sb	123	104.327				
⌈	Ba	135	104.256				
|	Ce	140					
⊢>	Tb	159		106.608			
⌈	Ho	165					
|	Tl	203	100.477				
|	Tl	205	102.447				
|	Pb	206	107.723				
|	Pb	207	97.663				
|	Pb	208	101.510				
⊢>	Bi	209		108.853			
⌈	Na	23	113.552				
|	Mg	24	124.370				
|	K	39	117.938				
|	Ca	43	110.252				
|	Fe	54	129.104				
|	Fe	57	95.748				
⊢>	Sc	45		106.179			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Tuesday, May 06, 2003 14:49:10

QC Std 6	Be	9	CCV is out of limits (+/-10%)
QC Std 6	Al	27	CCV is out of limits (+/-10%)
QC Std 6	Mn	55	CCV is out of limits (+/-10%)
QC Std 6	Zn	66	CCV is out of limits (+/-10%)
QC Std 6	Cd	114	CCV is out of limits (+/-10%)
QC Std 6	Mg	24	CCV is out of limits (+/-10%)
QC Std 6	Ca	43	CCV is out of limits (+/-10%)
QC Std 6	Fe	54	CCV is out of limits (+/-10%)

Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, May 06, 2003 14:53:28
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\Service\6020 methods\6020A.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	11337.979	0.00				ug/L
	Be	9	0.000	0.00	0.0000	0.000		ug/L
	Al	27	1666.795	0.00	0.1960	0.373	190.272	ug/L
>	Sc-1	45	169340.576	169340.56				ug/L
	V	51	3161.052	0.00	0.3316	0.259	78.229	ug/L
	Cr	52	8002.544	-0.00	-0.1102	0.593	537.867	ug/L
	Cr	53	0.000	-0.00	-0.4995	0.000	0.000	ug/L
	Mn	55	1000.035	0.00	0.0319	0.001	4.443	ug/L
	Co	59	0.000	0.00	0.0000	0.000		ug/L
	Ni	60	0.000	0.00	0.0000	0.000		ug/L
	Cu	65	0.000	0.00	0.0000	0.000		ug/L
	Zn	66	666.690	0.00	0.2133	0.385	180.322	ug/L
>	Ge	72	693236.974	693236.97				ug/L
	As	75	153.941	0.00	0.0102	0.025	240.091	ug/L
	Se	77	133.468	-0.00	-0.5032	0.374	74.235	ug/L
	Se	82	113.060	0.00	0.0540	0.033	61.869	ug/L
	Y	89	588985.966	-8943.89				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	0.000	0.00	0.0000	0.000		ug/L
	Cd	114	0.000	0.00	0.0000	0.000		ug/L
>	In	115	580295.481	580295.48				ug/L
	Sb	123	405.798	0.00	0.0774	0.008	7.888	ug/L
	Ba	135	0.000	0.00	0.0000	0.000		ug/L
	Ce	140	1000.058	0.00				ug/L
>	Tb	159	572997.565	572997.57				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	151.002	115.00	0.0164	0.004	21.878	ug/L
	Tl	205	166.835	166.84	0.0100	0.009	91.652	ug/L
	Pb	206	133.468	133.47	0.0220	0.019	86.603	ug/L
	Pb	207	100.101	66.73	0.0129	0.019	150.000	ug/L
	Pb	208	307.903	210.20	0.0089	0.006	72.624	ug/L
>	Bi	209	425437.581	425437.58				ug/L
	Na	23	3667.192	-0.01	-0.0007	0.001	90.241	mg/L
	Mg	24	333.345	0.00	0.0002	0.000	173.205	mg/L
	K	39	442757.148	0.06	0.0018	0.011	584.789	mg/L
	Ca	43	0.000	-0.00	-0.0445	0.000	0.000	mg/L
	Fe	54	20790.221	-0.03	-0.0076	0.010	126.217	mg/L
	Fe	57	5667.939	-0.01	-0.0044	0.009	195.203	mg/L

⊢>	Sc	45	169340.576	169340.58	mg/L
	Cl	35	14007.027	4002.52	mg/L
	Kr	83	120.668	-0.00	mg/L
	U	238	0.000	0.00	mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
⌈	Be	9					
|	Al	27					
⊢>	Sc-1	45		110.812			
⌈	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
⊢>	Ge	72		104.454			
|	As	75					
|	Se	77					
⌊	Se	82					
	Y	89					
⌈	Rh	103					
|	Ag	107					
|	Cd	114					
⊢>	In	115		100.653			
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⊢>	Tb	159		105.400			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
⊢>	Bi	209		98.923			
⌈	Na	23					
|	Mg	24					
|	K	39					
|	Ca	43					
|	Fe	54					
|	Fe	57					
⊢>	Sc	45		110.812			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Tuesday, May 06, 2003 14:54:01

QC Std 7	V	51	CCB is out of limits (+/-3*IDL)
QC Std 7	Se	77	CCB is out of limits (+/-3*IDL)

Method 6020 - Summary Report

Sample ID: L030465301

Sample Date/Time: Tuesday, May 06, 2003 14:58:19
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 47
Method File: C:\elandata\Method\Service\6020 methods\6020A.mth
Sample Description: 2

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	13674.547	2336.57				ug/L
⌈	Be	9	0.000	0.00	0.0000	0.000		ug/L
|	Al	27	12672.853	0.07	4.4079	1.875	42.543	ug/L
|>	Sc-1	45	171017.768	171017.77				ug/L
⌈	V	51	4943.955	0.01	0.6247	0.655	104.783	ug/L
|	Cr	52	10337.313	0.00	0.3384	0.564	166.710	ug/L
|	Cr	53	1333.450	0.00	1.4894	2.262	151.869	ug/L
|	Mn	55	48418.385	0.07	5.2362	1.302	24.859	ug/L
|	Co	59	666.690	0.00	0.0830	0.072	86.603	ug/L
|	Ni	60	1666.772	0.00	0.9823	0.346	35.217	ug/L
|	Cu	65	666.690	0.00	0.3415	0.296	86.803	ug/L
|	Zn	66	1666.818	0.00	0.9245	1.054	113.988	ug/L
	Ge	72	664635.855	664635.86				ug/L
⌈	As	75	478.759	0.00	0.1989	0.009	4.379	ug/L
|	Se	77	166.835	-0.00	-0.2356	0.388	164.795	ug/L
L	Se	82	209.069	0.00	0.5676	0.050	8.787	ug/L
	Y	89	603538.299	5608.44				ug/L
⌈	Rh	103	333.345	0.00				ug/L
|	Ag	107	0.000	0.00	0.0000	0.000		ug/L
|	Cd	114	-17.885	-0.00	-0.0040	0.003	86.812	ug/L
|>	In	115	598491.385	598491.36				ug/L
L	Sb	123	591.801	0.00	0.1141	0.017	14.708	ug/L
⌈	Ba	135	84248.912	0.16	55.5255	6.525	11.751	ug/L
|	Ce	140	2000.163	0.00				ug/L
|>	Tb	159	528608.045	528608.04				ug/L
⌈	Ho	165	0.000	0.00				ug/L
|	Tl	203	286.672	250.67	0.0357	0.001	2.994	ug/L
|	Tl	205	700.719	700.72	0.0419	0.010	24.744	ug/L
|	Pb	206	300.303	300.30	0.0494	0.000	0.000	ug/L
|	Pb	207	168.835	133.47	0.0258	0.011	43.301	ug/L
|	Pb	208	1157.162	1059.46	0.0449	0.004	9.223	ug/L
|>	Bi	209	478516.098	478516.10				ug/L
⌈	Na	23	155860137.181	912.01	48.1795	4.232	8.784	mg/L
|	Mg	24	11350531.475	66.39	5.3465	0.172	3.216	mg/L
|	K	39	1463344.398	5.98	0.1736	0.009	5.426	mg/L
|	Ca	43	176078.766	1.03	20.9799	0.210	1.000	mg/L
|	Fe	54	63517.692	0.22	0.0663	0.010	14.633	mg/L
|	Fe	57	21683.445	0.09	0.0595	0.014	22.861	mg/L

⊢>	Sc	45	171017.768	171017.77	mg/L
	Cl	35	26023.705	16019.20	mg/L
	Kr	83	168.336	47.67	mg/L
	U	238	16342.824	16342.82	mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
⊢	Be	9					
|	Al	27					
⊢>	Sc-1	45		111.909			
⊢	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		100.145			
|	As	75					
|	Se	77					
⊢	Se	82					
	Y	89					
⊢	Rh	103					
|	Ag	107					
|	Cd	114					
|>	In	115		103.809			
⊢	Sb	123					
⊢	Ba	135					
|	Ce	140					
⊢>	Tb	159		97.235			
⊢	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
⊢>	Bi	209		111.265			
⊢	Na	23					
|	Mg	24					
|	K	39					
|	Ca	43					
|	Fe	54					
|	Fe	57					
⊢>	Sc	45		111.909			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L030465301PS

Sample Date/Time: Tuesday, May 06, 2003 15:03:12
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 48
Method File: C:\elandata\Method\Service\6020 methods\6020A.mth
Sample Description: 2

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	16343.291	5005.31				ug/L
	Be	9	9002.929	0.05	59.8879	12.018	20.067	ug/L
	Al	27	163263.309	0.96	62.8148	7.283	11.563	ug/L
>	Sc-1	45	169335.306	169335.31				ug/L
	V	51	319481.597	0.49	49.5857	6.951	14.019	ug/L
	Cr	52	330129.679	0.50	55.3303	5.784	10.454	ug/L
	Cr	53	39054.034	0.06	59.2936	8.511	14.354	ug/L
	Mn	55	558031.243	0.86	62.4852	2.093	3.349	ug/L
	Co	59	437957.789	0.67	56.2006	3.028	5.388	ug/L
	Ni	60	96997.291	0.15	58.3897	6.222	10.655	ug/L
	Cu	65	103380.935	0.16	54.5676	9.984	18.297	ug/L
	Zn	66	58787.666	0.09	41.3508	2.514	6.079	ug/L
	Ge	72	649501.656	649501.66				ug/L
	As	75	89060.082	0.14	51.8669	0.952	1.835	ug/L
	Se	77	6975.350	0.01	47.9339	3.867	8.067	ug/L
	Se	82	8830.341	0.01	45.6483	1.050	2.301	ug/L
	Y	89	603160.958	5231.10				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	435238.087	0.74	49.7527	4.512	9.068	ug/L
	Cd	114	234901.752	0.40	53.7838	3.182	5.917	ug/L
>	In	115	585877.574	585877.57				ug/L
	Sb	123	255819.703	0.44	55.4111	0.505	0.911	ug/L
	Ba	135	178443.574	0.34	116.6651	7.685	6.476	ug/L
	Ce	140	3667.238	0.01				ug/L
>	Tb	159	523442.986	523442.99				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	345707.911	345671.91	49.2635	1.033	2.096	ug/L
	Tl	205	837023.000	837023.00	50.1064	1.822	3.637	ug/L
	Pb	206	315594.835	315594.83	51.9509	1.313	2.528	ug/L
	Pb	207	237732.275	237698.91	46.0120	1.526	3.316	ug/L
	Pb	208	1168729.036	1168631.34	49.5342	1.090	2.200	ug/L
>	Bi	209	454560.120	454560.12				ug/L
	Na	23	157018333.529	929.41	49.0987	2.477	5.046	mg/L
	Mg	24	11556296.832	68.40	5.5078	0.246	4.469	mg/L
	K	39	1395795.855	5.68	0.1649	0.011	6.534	mg/L
	Ca	43	176419.749	1.05	21.3410	2.628	12.314	mg/L
	Fe	54	57504.871	0.19	0.0574	0.014	24.461	mg/L
	Fe	57	23019.115	0.10	0.0657	0.018	27.582	mg/L

⊢> Sc	45	169335.306	169335.31		mg/L
Cl	35	27025.750	17021.24		mg/L
Kr	83	132.002	11.33		mg/L
U	238	20682.195	20682.20		mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
Li	6					
Be	9					
Al	27					
Sc-1	45		110.808			
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
Ge	72		97.864			
As	75					
Se	77					
Se	82					
Y	89					
Rh	103					
Ag	107					
Cd	114					
In	115		101.622			
Sb	123					
Ba	135					
Ce	140					
Tb	159		96.285			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
Bi	209		105.694			
Na	23					
Mg	24					
K	39					
Ca	43					
Fe	54					
Fe	57					
Sc	45		110.808			
Cl	35					
Kr	83					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L030465301PS
Report Date/Time: Tuesday, May 06, 2003 15:03:46

Method 6020 - Summary Report

Sample ID: L030465301SDL

Sample Date/Time: Tuesday, May 06, 2003 15:08:05
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 49
Method File: C:\elandata\Method\Service\6020 methods\6020A.mth
Sample Description: 10

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	18679.462	7341.48				ug/L
	Be	9	0.000	0.00	0.0000	0.000		ug/L
	Al	27	9669.969	0.05	3.2952	0.535	16.233	ug/L
>	Sc-1	45	171370.312	171370.31				ug/L
	V	51	-790.943	-0.00	-0.2384	0.192	80.351	ug/L
	Cr	52	5668.079	-0.00	-0.5488	0.531	96.748	ug/L
	Cr	53	0.000	-0.00	-0.4995	0.000	0.000	ug/L
	Mn	55	8669.304	0.01	0.7768	0.054	6.952	ug/L
	Co	59	0.000	0.00	0.0000	0.000		ug/L
	Ni	60	0.000	0.00	0.0000	0.000		ug/L
	Cu	65	333.345	0.00	0.1545	0.268	173.205	ug/L
	Zn	66	1000.058	0.00	0.3884	0.618	159.167	ug/L
	Ge	72	742560.120	742560.12				ug/L
	As	75	308.217	0.00	0.0832	0.026	31.395	ug/L
	Se	77	66.734	-0.00	-0.9734	0.357	36.652	ug/L
	Se	82	148.684	0.00	0.1798	0.060	33.279	ug/L
	Y	89	657805.550	59875.69				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	0.000	0.00	0.0000	0.000		ug/L
	Cd	114	324.403	0.00	0.0677	0.122	180.286	ug/L
>	In	115	641806.226	641806.23				ug/L
	Sb	123	364.960	0.00	0.0609	0.007	10.852	ug/L
	Ba	135	19680.782	0.03	11.1852	3.247	29.026	ug/L
	Ce	140	1333.427	0.00				ug/L
>	Tb	159	617768.284	617768.28				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	38.667	2.67	0.0004	0.000	120.548	ug/L
	Tl	205	166.835	166.84	0.0100	0.009	91.652	ug/L
	Pb	206	0.000	0.00	0.0000	0.000		ug/L
	Pb	207	200.202	166.84	0.0323	0.019	60.000	ug/L
	Pb	208	630.546	532.85	0.0226	0.005	22.045	ug/L
>	Bi	209	530179.426	530179.43				ug/L
	Na	23	30940388.166	182.40	9.6356	1.118	11.607	mg/L
	Mg	24	1651381.758	9.81	0.7900	0.143	18.163	mg/L
	K	39	634850.919	1.18	0.0342	0.017	51.018	mg/L
	Ca	43	33706.720	0.20	4.0228	0.639	15.875	mg/L
	Fe	54	23526.331	-0.01	-0.0026	0.009	339.541	mg/L
	Fe	57	7001.739	0.00	0.0019	0.009	448.675	mg/L

⊢>	Sc	45	171370.312	171370.31		mg/L
	Cl	35	9336.671	-667.83		mg/L
	Kr	83	156.669	36.00		mg/L
	U	238	2333.576	2333.58		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
⊢	Be	9					
|	Al	27					
⊢>	Sc-1	45		112.140			
⊢	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
⊢>	Ge	72		111.886			
|	As	75					
|	Se	77					
⊢	Se	82					
	Y	89					
⊢	Rh	103					
|	Ag	107					
|	Cd	114					
⊢>	In	115		111.322			
⊢	Sb	123					
⊢	Ba	135					
|	Ce	140					
⊢>	Tb	159		113.636			
⊢	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
⊢>	Bi	209		123.277			
⊢	Na	23					
|	Mg	24					
|	K	39					
|	Ca	43					
|	Fe	54					
|	Fe	57					
⊢>	Sc	45		112.140			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Bi 209 Int Std for sample 209 RERUN FOR AFCEE SAMPLE

Method 6020 - Summary Report

Sample ID: L030465302 WG139750-02

Sample Date/Time: Tuesday, May 06, 2003 15:12:58
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 50
Method File: C:\elandata\Method\Service\6020 methods\6020A.mth
Sample Description: 2

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	14007.027	2669.05				ug/L
⌈	Be	9	0.000	0.00	0.0000	0.000		ug/L
|	Al	27	51761.963	0.31	20.1146	4.657	23.151	ug/L
|>	Sc-1	45	166987.226	166987.23				ug/L
⌈	V	51	4703.303	0.01	0.6204	0.463	74.699	ug/L
|	Cr	52	6001.284	-0.00	-0.3417	0.171	50.088	ug/L
|	Cr	53	333.345	0.00	0.0309	0.919	2969.282	ug/L
|	Mn	55	13339.660	0.02	1.4647	0.237	16.173	ug/L
|	Co	59	1333.427	0.00	0.1769	0.153	86.606	ug/L
|	Ni	60	1666.818	0.00	1.0361	0.947	91.402	ug/L
|	Cu	65	1666.818	0.00	0.9069	0.836	92.141	ug/L
|	Zn	66	4334.045	0.01	2.9247	1.117	38.200	ug/L
|>	Ge	72	631484.469	631484.47				ug/L
|	As	75	691.482	0.00	0.3411	0.045	13.279	ug/L
|	Se	77	100.100	-0.00	-0.6573	0.007	1.127	ug/L
L	Se	82	219.780	0.00	0.6824	0.141	20.595	ug/L
	Y	89	609393.848	11463.99				ug/L
⌈	Rh	103	0.000	0.00				ug/L
|	Ag	107	0.000	0.00	0.0000	0.000		ug/L
|	Cd	114	315.460	0.00	0.0715	0.129	180.884	ug/L
|>	In	115	580901.795	580901.79				ug/L
L	Sb	123	380.670	0.00	0.0718	0.007	10.229	ug/L
⌈	Ba	135	144735.408	0.27	93.9035	10.621	11.311	ug/L
|	Ce	140	3333.823	0.00				ug/L
|>	Tb	159	536226.692	536226.69				ug/L
⌈	Ho	165	0.000	0.00				ug/L
|	Tl	203	338.674	302.67	0.0431	0.006	13.176	ug/L
|	Tl	205	633.983	633.98	0.0380	0.015	39.737	ug/L
|	Pb	206	467.142	467.14	0.0769	0.025	32.733	ug/L
|	Pb	207	333.672	300.31	0.0581	0.040	69.389	ug/L
|	Pb	208	1699.851	1602.15	0.0679	0.004	5.690	ug/L
|>	Bi	209	448465.031	448465.03				ug/L
⌈	Na	23	82693767.227	505.27	26.6920	4.396	16.470	mg/L
|	Mg	24	11751773.920	71.78	5.7802	1.066	18.445	mg/L
|	K	39	1264250.576	5.12	0.1488	0.036	24.039	mg/L
|	Ca	43	185201.303	1.13	23.0879	5.040	21.831	mg/L
|	Fe	54	48248.314	0.15	0.0449	0.030	66.887	mg/L
|	Fe	57	27027.318	0.13	0.0874	0.048	54.765	mg/L

⊢>	Sc	45	166987.226	166987.23	mg/L
	Cl	35	59791.586	49787.08	mg/L
	Kr	83	117.002	-3.67	mg/L
	U	238	12672.409	12672.41	mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
⌈	Be	9					
|	Al	27					
⊢>	Sc-1	45		109.272			
⌈	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		95.149			
|	As	75					
|	Se	77					
⌊	Se	82					
	Y	89					
⌈	Rh	103					
|	Ag	107					
|	Cd	114					
|>	In	115		100.758			
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⊢>	Tb	159		98.636			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
⊢>	Bi	209		104.277			
⌈	Na	23					
|	Mg	24					
|	K	39					
|	Ca	43					
|	Fe	54					
|	Fe	57					
⊢>	Sc	45		109.272			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L030465303S WG139750-08

Sample Date/Time: Tuesday, May 06, 2003 15:17:52
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 51
Method File: C:\elandata\Method\Service\6020 methods\6020A.mth
Sample Description: 2

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	13673.682	2335.70				ug/L
	Be	9	8669.584	0.05	53.6255	12.686	23.658	ug/L
	Al	27	224823.533	1.33	86.9010	37.821	43.522	ug/L
>	Sc-1	45	178143.479	178143.48				ug/L
	V	51	354362.187	0.57	57.3929	2.901	5.055	ug/L
	Cr	52	307269.515	0.48	53.6802	0.463	0.863	ug/L
	Cr	53	39722.056	0.06	62.9508	5.247	8.335	ug/L
	Mn	55	1758656.946	2.82	205.5945	3.563	1.733	ug/L
	Co	59	428030.243	0.69	57.2912	5.970	10.420	ug/L
	Ni	60	94310.446	0.15	59.2223	1.779	3.004	ug/L
	Cu	65	97332.229	0.16	53.5939	4.924	9.187	ug/L
	Zn	66	67157.696	0.11	49.3179	2.135	4.329	ug/L
>	Ge	72	622627.253	622627.25				ug/L
	As	75	86950.242	0.14	52.8250	0.177	0.334	ug/L
	Se	77	6674.904	0.01	47.8471	3.463	7.238	ug/L
	Se	82	8796.589	0.01	47.4557	0.239	0.503	ug/L
	Y	89	593412.264	-4517.59				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	413227.883	0.71	47.5024	1.392	2.931	ug/L
	Cd	114	246795.087	0.42	56.7818	5.748	10.123	ug/L
>	In	115	582852.793	582852.79				ug/L
	Sb	123	254796.368	0.44	55.4743	0.583	1.051	ug/L
	Ba	135	262762.378	0.46	159.6848	15.600	9.769	ug/L
	Ce	140	1000.058	-0.00				ug/L
>	Tb	159	570176.794	570176.79				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	345503.445	345467.44	49.2344	1.192	2.422	ug/L
	Tl	205	833439.129	833439.13	49.8918	1.057	2.118	ug/L
	Pb	206	305026.626	305026.63	50.2113	1.825	3.635	ug/L
	Pb	207	251137.701	251104.33	48.6069	0.936	1.926	ug/L
	Pb	208	1170287.611	1170189.91	49.6002	1.034	2.085	ug/L
>	Bi	209	487542.155	487542.16				ug/L
	Na	23	81735570.878	472.10	24.9400	4.555	18.266	mg/L
	Mg	24	11864944.866	66.94	5.5520	1.232	22.195	mg/L
	K	39	1575038.723	6.52	0.1893	0.048	25.480	mg/L
	Ca	43	173384.831	1.00	20.4020	4.225	20.710	mg/L
	Fe	54	60831.384	0.20	0.0590	0.016	27.765	mg/L
	Fe	57	17344.260	0.06	0.0395	0.000	1.065	mg/L

↳ Sc	45	178143.479	178143.48		mg/L
Cl	35	58787.760	48783.25		mg/L
Kr	83	147.669	27.00		mg/L
U	238	10003.571	10003.57		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
	Be	9					
	Al	27					
↳	Sc-1	45		116.572			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Co	59					
	Ni	60					
	Cu	65					
	Zn	66					
↳	Ge	72		93.815			
	As	75					
	Se	77					
	Se	82					
	Y	89					
	Rh	103					
	Ag	107					
	Cd	114					
↳	In	115		101.097			
	Sb	123					
	Ba	135					
	Ce	140					
↳	Tb	159		104.881			
	Ho	165					
	Tl	203					
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
↳	Bi	209		108.713			
	Na	23					
	Mg	24					
	K	39					
	Ca	43					
	Fe	54					
	Fe	57					
↳	Sc	45		116.572			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L030465304SD WG139750-09

Sample Date/Time: Tuesday, May 06, 2003 15:22:46
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 52
Method File: C:\elandata\Method\Service\6020 methods\6020A.mth
Sample Description: 2

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	16343.174	5005.20				ug/L
	Be	9	7001.715	0.04	45.4717	3.285	7.224	ug/L
	Al	27	204812.284	1.18	76.9393	16.610	21.588	ug/L
>	Sc-1	45	174395.118	174395.12				ug/L
	V	51	349580.354	0.57	57.1414	4.542	7.949	ug/L
	Cr	52	303865.593	0.48	53.5624	1.461	2.727	ug/L
	Cr	53	37382.585	0.06	59.7510	6.808	11.393	ug/L
	Mn	55	496542.554	0.80	58.5309	6.349	10.847	ug/L
	Co	59	417691.080	0.68	56.4224	2.410	4.271	ug/L
	Ni	60	83245.090	0.13	52.7656	7.650	14.501	ug/L
	Cu	65	112106.848	0.18	62.2671	4.980	7.998	ug/L
	Zn	66	68166.763	0.11	50.4931	10.192	20.184	ug/L
>	Ge	72	617075.740	617075.74				ug/L
	As	75	87497.002	0.14	53.6358	0.485	0.904	ug/L
	Se	77	8741.699	0.01	48.7727	8.972	18.396	ug/L
	Se	82	8713.645	0.01	47.4278	1.399	2.949	ug/L
	Y	89	551103.762	-46826.10				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	407060.153	0.70	46.9414	2.327	4.957	ug/L
	Cd	114	252213.462	0.43	58.2095	5.824	10.004	ug/L
>	In	115	581022.508	581022.51				ug/L
	Sb	123	254035.854	0.44	55.4873	0.811	1.462	ug/L
	Ba	135	233253.507	0.45	155.0284	22.863	14.747	ug/L
	Ce	140	2333.532	0.00				ug/L
>	Tb	159	522747.342	522747.34				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	345751.975	345715.98	49.2698	0.693	1.406	ug/L
	Tl	205	842906.857	842906.86	50.4586	0.162	0.321	ug/L
	Pb	206	303558.877	303558.88	49.9697	0.826	1.653	ug/L
	Pb	207	247914.785	247881.42	47.9831	2.230	4.647	ug/L
	Pb	208	1167275.418	1167177.72	49.4725	1.130	2.285	ug/L
>	Bi	209	444758.717	444758.72				ug/L
	Na	23	81570114.257	469.46	24.8004	2.401	9.681	mg/L
	Mg	24	11589733.702	66.81	5.3804	0.596	11.073	mg/L
	K	39	1205910.112	4.35	0.1263	0.013	10.094	mg/L
	Ca	43	211899.457	1.22	24.8663	2.750	11.060	mg/L
	Fe	54	53558.791	0.16	0.0475	0.013	27.284	mg/L
	Fe	57	16009.059	0.05	0.0364	0.012	33.841	mg/L

⊢>	Sc	45	174395.118	174395.12	mg/L
	Cl	35	58453.198	48448.69	mg/L
	Kr	83	126.669	6.00	mg/L
	U	238	13673.332	13673.33	mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
⌈	Be	9					
|	Al	27					
⊢>	Sc-1	45		114.119			
⌈	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
⊢>	Ge	72		92.978			
|	As	75					
|	Se	77					
⌊	Se	82					
	Y	89					
⌈	Rh	103					
|	Ag	107					
|	Cd	114					
⊢>	In	115		100.779			
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⊢>	Tb	159		96.157			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
⊢>	Bi	209		103.415			
⌈	Na	23					
|	Mg	24					
|	K	39					
|	Ca	43					
|	Fe	54					
|	Fe	57					
⊢>	Sc	45		114.119			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L030465304SD WG139750-09
Report Date/Time: Tuesday, May 06, 2003 15:23:21

Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, May 06, 2003 15:27:40
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 5
Method File: C:\elandata\Method\Service\6020 methods\6020A.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	14007.144	2669.17				ug/L
	Be	9	12672.994	0.07	82.7800	32.222	38.925	ug/L
	Al	27	138670.225	0.80	52.5027	2.813	5.358	ug/L
>	Sc-1	45	171358.156	171358.16				ug/L
	V	51	337397.043	0.49	49.7254	9.285	18.672	ug/L
	Cr	52	292294.284	0.41	46.3164	0.748	1.615	ug/L
	Cr	53	37048.703	0.05	53.3899	8.039	15.058	ug/L
	Mn	55	496154.644	0.72	52.7710	3.080	5.837	ug/L
	Co	59	404313.719	0.59	49.3039	2.252	4.567	ug/L
	Ni	60	89954.522	0.13	51.4795	9.119	17.713	ug/L
	Cu	65	101694.629	0.15	50.9846	2.268	4.448	ug/L
	Zn	66	76205.734	0.11	51.0125	8.029	15.739	ug/L
>	Ge	72	663634.029	683634.03				ug/L
	As	75	89733.067	0.13	49.6515	1.098	2.212	ug/L
	Se	77	7509.485	0.01	49.0587	2.843	5.796	ug/L
	Se	82	10127.477	0.01	49.7901	1.205	2.420	ug/L
	Y	89	670793.546	72863.69				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	419408.569	0.68	45.7878	1.975	4.313	ug/L
	Cd	114	243051.947	0.40	53.1140	1.772	3.337	ug/L
>	In	115	613691.163	613691.16				ug/L
	Sb	123	243592.771	0.40	50.3710	0.665	1.321	ug/L
	Ba	135	75199.957	0.14	47.3619	7.101	14.993	ug/L
	Ce	140	1666.795	0.00				ug/L
>	Tb	159	553197.053	553197.05				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	335211.404	335175.40	47.7676	1.039	2.174	ug/L
	Tl	205	809036.665	809036.67	48.4310	0.929	1.918	ug/L
	Pb	206	309970.208	309970.21	51.0250	2.041	4.000	ug/L
	Pb	207	235391.177	235357.81	45.5588	1.223	2.684	ug/L
	Pb	208	1138618.752	1136521.05	48.1731	1.216	2.524	ug/L
>	Bi	209	499235.701	499235.70				ug/L
	Na	23	17478940.875	102.10	5.3939	0.335	6.213	mg/L
	Mg	24	11594877.836	67.48	5.4339	0.544	10.008	mg/L
	K	39	30244209.305	174.21	5.0590	0.188	3.717	mg/L
	Ca	43	38386.176	0.22	4.5136	0.683	15.122	mg/L
	Fe	54	3021127.057	17.53	5.2245	0.440	8.430	mg/L
	Fe	57	981262.904	5.70	3.8828	0.187	4.822	mg/L

↳ Sc	45	171358.156	171358.16		mg/L
Cl	35	7335.504	-2669.00		mg/L
Kr	83	130.669	10.00		mg/L
U	238	0.000	0.00		mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
Li	6					
Be	9	165.560				
Al	27	105.005				
↳ Sc-1	45		112.132			
V	51	99.451				
Cr	52	92.633				
Cr	53	106.780				
Mn	55	105.542				
Co	59	98.608				
Ni	60	102.959				
Cu	65	101.969				
Zn	66	102.025				
↳ Ge	72		103.007			
As	75	99.303				
Se	77	98.117				
Se	82	99.580				
Y	89					
Rh	103					
Ag	107	91.576				
Cd	114	106.228				
↳ In	115		106.446			
Sb	123	100.742				
Ba	135	94.724				
Ce	140					
↳ Tb	159		101.758			
Ho	165					
Tl	203	95.535				
Tl	205	96.862				
Pb	206	102.050				
Pb	207	91.118				
Pb	208	96.346				
↳ Bi	209		116.082			
Na	23	107.878				
Mg	24	108.678				
K	39	101.180				
Ca	43	90.271				
Fe	54	104.489				
Fe	57	77.656				
↳ Sc	45		112.132			
Cl	35					
Kr	83					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Tuesday, May 06, 2003 15:28:15
Page 2

QC Std 6	Be	9	CCV is out of limits (+/-10%)

Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, May 06, 2003 15:32:33
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 1
Method File: C:\elandata\Method\Service\6020 methods\6020A.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	14007.167	2669.19				ug/L
	Be	9	0.000	0.00	0.0000	0.000		ug/L
	Al	27	1000.105	-0.00	-0.0163	0.712	4375.836	ug/L
>	Sc-1	45	165962.423	165962.42				ug/L
	V	51	1767.072	0.00	0.1389	0.050	36.050	ug/L
	Cr	52	5000.898	-0.01	-0.5583	0.156	28.019	ug/L
	Cr	53	0.000	-0.00	-0.4995	0.000	0.000	ug/L
	Mn	55	666.690	0.00	0.0008	0.064	7789.309	ug/L
	Co	59	333.345	0.00	0.0416	0.072	173.205	ug/L
	Ni	60	333.345	0.00	0.2012	0.349	173.205	ug/L
	Cu	65	0.000	0.00	0.0000	0.000		ug/L
	Zn	66	333.345	-0.00	-0.0016	0.397	24558.387	ug/L
	Ge	72	660393.721	660393.72				ug/L
	As	75	197.679	0.00	0.0391	0.040	101.065	ug/L
	Se	77	66.734	-0.00	-0.9184	0.405	44.047	ug/L
	Se	82	119.255	0.00	0.1129	0.098	86.876	ug/L
	Y	89	606989.936	9060.08				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	333.345	0.00	0.0396	0.069	173.205	ug/L
	Cd	114	0.000	0.00	0.0000	0.000		ug/L
>	In	115	574023.532	574023.53				ug/L
	Sb	123	403.089	0.00	0.0777	0.011	14.089	ug/L
	Ba	135	0.000	0.00	0.0000	0.000		ug/L
	Ce	140	1333.450	0.00				ug/L
>	Tb	159	526543.711	526543.71				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	34.000	-2.00	-0.0003	0.001	259.808	ug/L
	Tl	205	66.734	66.73	0.0040	0.003	86.603	ug/L
	Pb	206	66.734	66.73	0.0110	0.010	86.603	ug/L
	Pb	207	33.367	-0.00	-0.0000	1934[illegible]04094399200.000		ug/L
	Pb	208	191.435	93.73	0.0040	0.001	14.485	ug/L
>	Bi	209	441747.379	441747.38				ug/L
	Na	23	8335.796	0.02	0.0008	0.000	42.303	mg/L
	Mg	24	0.000	0.00	0.0000	0.000		mg/L
	K	39	411198.200	-0.10	-0.0030	0.002	60.700	mg/L
	Ca	43	0.000	-0.00	-0.0445	0.000	0.000	mg/L
	Fe	54	20540.853	-0.03	-0.0076	0.007	88.717	mg/L
	Fe	57	5667.845	-0.01	-0.0036	0.005	142.835	mg/L

⌊>	Sc	45	165962.423	165962.42		mg/L
	Cl	35	9670.413	-334.09		mg/L
	Kr	83	150.336	29.67		mg/L
	U	238	0.000	0.00		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
⌈	Be	9					
|	Al	27					
⌊>	Sc-1	45		108.601			
⌈	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		99.505			
|	As	75					
|	Se	77					
⌊	Se	82					
	Y	89					
⌈	Rh	103					
|	Ag	107					
|	Cd	114					
|>	In	115		99.565			
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		96.855			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
⌊>	Bi	209		102.715			
⌈	Na	23					
|	Mg	24					
|	K	39					
|	Ca	43					
|	Fe	54					
|	Fe	57					
⌊>	Sc	45		108.601			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Tuesday, May 06, 2003 15:33:07
Page 2

QC Std 7	V	51	CCB is out of limits (+/-3*IDL)
QC Std 7	Co	59	CCB is out of limits (+/-3*IDL)
QC Std 7	Ni	60	CCB is out of limits (+/-3*IDL)
QC Std 7	Se	77	CCB is out of limits (+/-3*IDL)

Method 6020 - Summary Report

Sample ID: L030458502

Sample Date/Time: Tuesday, May 06, 2003 15:37:26
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 39
Method File: C:\elandata\Method\Service\6020 methods\6020A.mth
Sample Description: 2

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	12339.041	1001.06				ug/L
⌈	Be	9	0.000	0.00	0.0000	0.000		ug/L
|	Al	27	246115.376	1.55	100.9307	14.828	14.692	ug/L
⌊>	Sc-1	45	159217.227	159217.23				ug/L
⌈	V	51	6708.825	0.01	0.9435	0.743	78.712	ug/L
|	Cr	52	9670.694	0.00	0.3079	1.029	334.321	ug/L
|	Cr	53	666.713	0.00	0.5365	1.794	334.450	ug/L
|	Mn	55	18679.159	0.03	2.0671	0.379	18.336	ug/L
|	Co	59	666.713	0.00	0.0868	0.150	173.205	ug/L
|	Ni	60	1333.403	0.00	0.8202	0.350	42.664	ug/L
|	Cu	65	4667.530	0.01	2.5315	1.165	46.027	ug/L
|	Zn	66	5334.384	0.01	3.6409	1.162	31.915	ug/L
|>	Ge	72	634572.496	634572.50				ug/L
|	As	75	1215.959	0.00	0.6520	0.051	7.858	ug/L
|	Se	77	300.304	0.00	0.7931	1.264	159.350	ug/L
⌊	Se	82	356.559	0.00	1.4086	0.164	11.675	ug/L
	Y	89	553899.890	-44029.97				ug/L
⌈	Rh	103	666.690	0.00				ug/L
|	Ag	107	666.690	0.00	0.0751	0.065	86.661	ug/L
|	Cd	114	324.403	0.00	0.0713	0.129	180.790	ug/L
|>	In	115	594400.794	594400.79				ug/L
⌊	Sb	123	763.392	0.00	0.1516	0.009	5.785	ug/L
⌈	Ba	135	71177.180	0.13	46.0809	3.801	8.250	ug/L
|	Ce	140	4667.577	0.01				ug/L
⌊>	Tb	159	537952.879	537952.88				ug/L
⌈	Ho	165	0.000	0.00				ug/L
|	Tl	203	74.001	38.00	0.0054	0.001	9.488	ug/L
|	Tl	205	367.039	367.04	0.0220	0.007	31.492	ug/L
|	Pb	206	567.247	567.25	0.0934	0.041	44.411	ug/L
|	Pb	207	500.510	467.14	0.0904	0.019	21.429	ug/L
|	Pb	208	2698.532	2600.83	0.1102	0.008	7.218	ug/L
⌊>	Bi	209	481259.367	481259.37				ug/L
⌈	Na	23	7287847.112	45.79	2.4189	0.090	3.711	mg/L
|	Mg	24	7433273.502	46.78	3.7674	0.227	6.030	mg/L
|	K	39	20622770.220	127.00	3.6881	0.261	7.068	mg/L
|	Ca	43	153830.866	0.96	19.6932	2.074	10.531	mg/L
|	Fe	54	92025.810	0.43	0.1277	0.008	6.294	mg/L
|	Fe	57	39722.197	0.21	0.1431	0.013	8.783	mg/L

⊢>	Sc	45	159217.227	159217.23	mg/L
	Cl	35	20681.728	10677.22	mg/L
	Kr	83	126.669	6.00	mg/L
	U	238	6334.839	6334.84	mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
⌈	Be	9					
|	Al	27					
⊢>	Sc-1	45		104.187			
⌈	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
⊢>	Ge	72		95.615			
|	As	75					
|	Se	77					
⌊	Se	82					
	Y	89					
⌈	Rh	103					
|	Ag	107					
|	Cd	114					
⊢>	In	115		103.100			
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⊢>	Tb	159		98.954			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
⊢>	Bi	209		111.902			
⌈	Na	23					
|	Mg	24					
|	K	39					
|	Ca	43					
|	Fe	54					
|	Fe	57					
⊢>	Sc	45		104.187			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L030458503

Sample Date/Time: Tuesday, May 06, 2003 15:42:20
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 40
Method File: C:\elandata\Method\Service\6020 methods\6020A.mth
Sample Description: 2

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	16677.758	5339.78				ug/L
⌈	Be	9	0.000	0.00	0.0000	0.000		ug/L
|	Al	27	1033386.713	6.01	392.2921	28.786	7.338	ug/L
|>	Sc-1	45	171356.256	171356.26				ug/L
⌈	V	51	14454.500	0.02	2.1939	0.491	22.372	ug/L
|	Cr	52	12005.206	0.01	0.7287	0.464	63.722	ug/L
|	Cr	53	333.345	0.00	0.0298	0.917	3076.328	ug/L
|	Mn	55	463757.031	0.74	53.6454	3.186	5.939	ug/L
|	Co	59	8668.230	0.01	0.8840	0.074	8.361	ug/L
|	Ni	60	2667.017	0.00	1.6614	1.302	78.379	ug/L
|	Cu	65	4667.610	0.01	2.5450	2.200	86.447	ug/L
|	Zn	66	8336.146	0.01	5.8554	2.941	50.219	ug/L
|>	Ge	72	628621.443	628621.44				ug/L
|	As	75	2197.170	0.00	1.2499	0.036	2.857	ug/L
|	Se	77	133.468	-0.00	-0.4107	0.420	102.374	ug/L
⌊	Se	82	295.746	0.00	1.0973	0.124	11.267	ug/L
	Y	89	618111.912	20182.05				ug/L
⌈	Rh	103	0.000	0.00				ug/L
|	Ag	107	0.000	0.00	0.0000	0.000		ug/L
|	Cd	114	-8.942	-0.00	-0.0021	0.004	173.205	ug/L
|>	In	115	584071.500	584071.50				ug/L
⌊	Sb	123	608.638	0.00	0.1210	0.007	6.005	ug/L
⌈	Ba	135	88610.159	0.16	56.9316	6.443	11.317	ug/L
|	Ce	140	26692.452	0.05				ug/L
⌊>	Tb	159	540716.781	540716.78				ug/L
⌈	Ho	165	0.000	0.00				ug/L
|	Tl	203	232.338	196.34	0.0280	0.002	7.663	ug/L
|	Tl	205	700.719	700.72	0.0419	0.010	24.744	ug/L
|	Pb	206	3770.943	3770.94	0.6207	0.099	16.005	ug/L
|	Pb	207	3303.704	3270.34	0.6330	0.172	27.212	ug/L
|	Pb	208	15817.409	15719.71	0.6663	0.016	2.352	ug/L
⌊>	Bi	209	464987.970	464987.97				ug/L
⌈	Na	23	39378675.848	230.00	12.1503	0.499	4.109	mg/L
|	Mg	24	12474524.735	72.92	5.8721	0.330	5.628	mg/L
|	K	39	14800759.928	83.84	2.4348	0.062	2.544	mg/L
|	Ca	43	231553.827	1.35	27.4959	3.145	11.436	mg/L
|	Fe	54	278353.908	1.48	0.4404	0.022	4.976	mg/L
|	Fe	57	121517.190	0.67	0.4563	0.036	7.965	mg/L

L> Sc	45	171356.256	171356.26		mg/L
Cl	35	42731.821	32727.32		mg/L
Kr	83	139.335	18.67		mg/L
U	238	31701.904	31701.90		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
⌈	Be	9					
|	Al	27					
L>	Sc-1	45		112.131			
⌈	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		94.718			
|	As	75					
|	Se	77					
L	Se	82					
	Y	89					
⌈	Rh	103					
|	Ag	107					
|	Cd	114					
|>	In	115		101.308			
L	Sb	123					
⌈	Ba	135					
|	Ce	140					
L>	Tb	159		99.462			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
L>	Bi	209		108.119			
⌈	Na	23					
|	Mg	24					
|	K	39					
|	Ca	43					
|	Fe	54					
|	Fe	57					
L>	Sc	45		112.131			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L030458507

Sample Date/Time: Tuesday, May 06, 2003 15:47:14
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 41
Method File: C:\elandata\Method\Service\6020 methods\6020A.mth
Sample Description: 2

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	11338.165	0.19				ug/L
	Be	9	0.000	0.00	0.0000	0.000		ug/L
	Al	27	272250.192	1.79	116.9339	1.118	0.956	ug/L
>	Sc-1	45	151470.545	151470.55				ug/L
	V	51	5552.148	0.01	0.7918	0.303	38.235	ug/L
	Cr	52	5334.384	-0.00	-0.4238	0.270	63.757	ug/L
	Cr	53	666.690	0.00	0.5983	0.951	158.908	ug/L
	Mn	55	280701.833	0.43	31.1612	2.651	8.509	ug/L
	Co	59	1333.403	0.00	0.1833	0.081	44.242	ug/L
	Ni	60	3667.472	0.01	2.3430	2.397	102.293	ug/L
	Cu	65	666.690	0.00	0.3743	0.324	86.610	ug/L
	Zn	66	4334.185	0.01	3.0337	2.166	71.409	ug/L
>	Ge	72	607742.397	607742.40				ug/L
	As	75	744.752	0.00	0.3901	0.016	3.993	ug/L
	Se	77	66.734	-0.00	-0.8796	0.876	99.581	ug/L
	Se	82	328.087	0.00	1.3326	0.051	3.851	ug/L
	Y	89	584475.855	-13454.00				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	0.000	0.00	0.0000	0.000		ug/L
	Cd	114	315.460	0.00	0.0761	0.137	180.352	ug/L
>	In	115	569517.512	569517.51				ug/L
	Sb	123	397.919	0.00	0.0774	0.004	5.591	ug/L
	Ba	135	62135.701	0.12	41.4929	3.879	9.349	ug/L
	Ce	140	9336.625	0.02				ug/L
>	Tb	159	523539.505	523539.51				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	256.672	220.67	0.0314	0.004	13.153	ug/L
	Tl	205	367.039	367.04	0.0220	0.009	41.660	ug/L
	Pb	206	1668.443	1668.44	0.2746	0.110	39.952	ug/L
	Pb	207	1234.623	1201.26	0.2325	0.056	24.057	ug/L
	Pb	208	6243.157	6145.46	0.2605	0.042	16.022	ug/L
>	Bi	209	441154.935	441154.93				ug/L
	Na	23	71642716.984	476.34	25.1638	2.733	10.862	mg/L
	Mg	24	27325639.336	181.08	14.5825	0.995	6.822	mg/L
	K	39	3610402.486	21.35	0.6201	0.047	7.538	mg/L
	Ca	43	367876.138	2.44	49.7969	4.542	9.120	mg/L
	Fe	54	87116.640	0.43	0.1273	0.011	8.249	mg/L
	Fe	57	58118.566	0.35	0.2376	0.048	20.257	mg/L

↳ Sc	45	151470.545	151470.55		mg/L
Cl	35	47079.295	37074.79		mg/L
Kr	83	125.668	5.00		mg/L
U	238	33039.026	33039.03		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
⌈	Be	9					
|	Al	27					
↳	Sc-1	45		99.118			
⌈	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
>	Ge	72		91.572			
|	As	75					
|	Se	77					
⌊	Se	82					
	Y	89					
⌈	Rh	103					
|	Ag	107					
|	Cd	114					
>	In	115		98.784			
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
↳	Tb	159		96.303			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
↳	Bi	209		102.577			
⌈	Na	23					
|	Mg	24					
|	K	39					
|	Ca	43					
|	Fe	54					
|	Fe	57					
↳	Sc	45		99.118			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L030458508

Sample Date/Time: Tuesday, May 06, 2003 15:52:06
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 42
Method File: C:\elandata\Method\Service\6020 methods\6020A.mth
Sample Description: 2

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	11004.400	-333.58				ug/L
	Be	9	0.000	0.00	0.0000	0.000		ug/L
	Al	27	277673.968	1.90	124.1219	15.586	12.557	ug/L
>	Sc-1	45	147436.011	147436.01				ug/L
	V	51	4076.788	0.01	0.5939	0.453	76.251	ug/L
	Cr	52	8002.404	0.00	0.1559	0.561	359.714	ug/L
	Cr	53	333.345	0.00	0.0614	0.971	1582.426	ug/L
	Mn	55	88607.332	0.15	11.1070	0.525	4.728	ug/L
	Co	59	2000.233	0.00	0.2881	0.280	97.174	ug/L
	Ni	60	1333.450	0.00	0.8762	1.001	114.239	ug/L
	Cu	65	2000.163	0.00	1.2059	0.655	54.326	ug/L
	Zn	66	9003.326	0.02	6.9257	3.537	51.066	ug/L
>	Ge	72	577879.643	577879.64				ug/L
	As	75	733.116	0.00	0.4083	0.076	18.503	ug/L
	Se	77	233.569	0.00	0.5099	1.330	260.808	ug/L
	Se	82	232.121	0.00	0.8704	0.223	25.590	ug/L
	Y	89	539686.294	-58243.58				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	0.000	0.00	0.0000	0.000		ug/L
	Cd	114	0.000	0.00	0.0000	0.000		ug/L
>	In	115	545480.129	545480.13				ug/L
	Sb	123	375.003	0.00	0.0761	0.009	11.716	ug/L
	Ba	135	65483.173	0.14	47.6143	2.439	5.122	ug/L
	Ce	140	9337.092	0.02				ug/L
>	Tb	159	478560.219	478560.22				ug/L
	Ho	165	333.345	333.35				ug/L
	Tl	203	260.005	224.00	0.0319	0.002	5.486	ug/L
	Tl	205	533.881	533.88	0.0320	0.023	70.987	ug/L
	Pb	206	2369.233	2369.23	0.3900	0.034	8.797	ug/L
	Pb	207	1668.433	1635.07	0.3165	0.022	7.070	ug/L
	Pb	208	8386.376	8288.68	0.3513	0.018	5.054	ug/L
>	Bi	209	448062.022	448062.02				ug/L
	Na	23	60722579.985	415.93	21.9724	2.100	9.556	mg/L
	Mg	24	14172088.925	97.16	7.8241	0.830	10.608	mg/L
	K	39	3878189.756	24.15	0.7013	0.119	16.947	mg/L
	Ca	43	386164.770	2.64	53.9594	5.106	9.463	mg/L
	Fe	54	88047.862	0.45	0.1349	0.017	12.374	mg/L
	Fe	57	50098.800	0.31	0.2087	0.110	52.788	mg/L

⊢>	Sc	45	147436.011	147436.01	mg/L
	Cl	35	48417.143	38412.64	mg/L
	Kr	83	149.336	28.67	mg/L
	U	238	19680.502	19680.50	mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
⌈	Be	9					
|	Al	27					
⊢>	Sc-1	45		96.478			
⌈	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		87.073			
|	As	75					
|	Se	77					
⌊	Se	82					
	Y	89					
⌈	Rh	103					
|	Ag	107					
|	Cd	114					
|>	In	115		94.615			
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⊢>	Tb	159		88.029			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
⊢>	Bi	209		104.183			
⌈	Na	23					
|	Mg	24					
|	K	39					
|	Ca	43					
|	Fe	54					
|	Fe	57					
⊢>	Sc	45		96.478			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L030458509

Sample Date/Time: Tuesday, May 06, 2003 15:57:03
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 43
Method File: C:\elandata\Method\Service\6020 methods\6020A.mth
Sample Description: 2

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	11671.651	333.67				ug/L
	Be	9	0.000	0.00	0.0000	0.000		ug/L
	Al	27	2534319.489	16.60	1083.1096	194.806	17.986	ug/L
>	Sc-1	45	151468.341	151468.34				ug/L
	V	51	13544.630	0.02	2.1955	2.589	117.917	ug/L
	Cr	52	11672.001	0.01	0.8120	0.936	115.287	ug/L
	Cr	53	1333.450	0.00	1.7544	2.582	147.191	ug/L
	Mn	55	372460.191	0.63	46.0159	0.620	1.348	ug/L
	Co	59	4334.045	0.01	0.6139	0.217	35.267	ug/L
	Ni	60	4000.583	0.01	2.6580	0.664	24.988	ug/L
	Cu	65	3667.355	0.01	2.1363	1.780	83.316	ug/L
	Zn	66	25021.964	0.04	19.3043	1.352	7.005	ug/L
>	Ge	72	588423.954	588423.95				ug/L
	As	75	1974.978	0.00	1.1974	0.039	3.231	ug/L
	Se	77	33.367	-0.00	-1.1249	0.451	40.104	ug/L
	Se	82	143.770	0.00	0.3295	0.138	41.921	ug/L
	Y	89	554572.615	-43357.24				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	0.000	0.00	0.0000	0.000		ug/L
	Cd	114	-17.885	-0.00	-0.0042	0.004	86.607	ug/L
>	In	115	560091.530	560091.53				ug/L
	Sb	123	1125.414	0.00	0.2437	0.009	3.596	ug/L
	Ba	135	81231.017	0.17	58.0206	5.856	10.093	ug/L
	Ce	140	44402.801	0.09				ug/L
>	Tb	159	487871.760	487871.76				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	314.673	278.67	0.0397	0.002	6.281	ug/L
	Tl	205	834.194	834.19	0.0499	0.019	38.576	ug/L
	Pb	206	6207.560	6207.56	1.0218	0.076	7.393	ug/L
	Pb	207	5406.437	5373.07	1.0401	0.121	11.639	ug/L
	Pb	208	25543.926	25446.23	1.0786	0.037	3.401	ug/L
>	Bi	209	429193.243	429193.24				ug/L
	Na	23	20374431.746	134.64	7.1129	0.340	4.777	mg/L
	Mg	24	7008882.454	46.23	3.7230	0.110	2.943	mg/L
	K	39	15424546.745	99.47	2.8884	0.138	4.780	mg/L
	Ca	43	123537.077	0.82	16.7735	3.380	20.149	mg/L
	Fe	54	507206.633	3.21	0.9578	0.091	9.531	mg/L
	Fe	57	230206.496	1.50	1.0213	0.257	25.163	mg/L

Sc	45	151468.341	151468.34		mg/L
Cl	35	64813.839	54809.33		mg/L
Kr	83	130.669	10.00		mg/L
U	238	5334.430	5334.43		mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
Li	6					
Be	9					
Al	27					
Sc-1	45		99.116			
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
Ge	72		88.661			
As	75					
Se	77					
Se	82					
Y	89					
Rh	103					
Ag	107					
Cd	114					
In	115		97.149			
Sb	123					
Ba	135					
Ce	140					
Tb	159		89.742			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
Bi	209		99.796			
Na	23					
Mg	24					
K	39					
Ca	43					
Fe	54					
Fe	57					
Sc	45		99.116			
Cl	35					
Kr	83					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L030458509
Report Date/Time: Tuesday, May 06, 2003 15:57:38

Method 6020 - Summary Report

Sample ID: L030458510

Sample Date/Time: Tuesday, May 06, 2003 16:01:58
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 44
Method File: C:\elandata\Method\Service\6020 methods\6020A.mth
Sample Description: 2

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	13674.710	2336.73				ug/L
	Be	9	0.000	0.00	0.0000	0.000		ug/L
	Al	27	848836.663	5.67	369.7538	20.820	5.631	ug/L
>	Sc-1	45	150121.751	150121.75				ug/L
	V	51	9062.910	0.01	1.4196	0.136	9.610	ug/L
	Cr	52	10670.658	0.01	0.6139	0.117	19.033	ug/L
	Cr	53	1333.450	0.00	1.7525	2.584	147.459	ug/L
	Mn	55	51426.111	0.09	6.2652	0.528	8.433	ug/L
	Co	59	2333.578	0.00	0.3296	0.217	65.873	ug/L
	Ni	60	2333.578	0.00	1.5409	1.003	65.092	ug/L
	Cu	65	3333.963	0.01	1.9396	1.877	96.796	ug/L
	Zn	66	14674.231	0.02	11.1752	0.853	7.630	ug/L
	Ge	72	590919.004	590919.00				ug/L
	As	75	1195.252	0.00	0.6921	0.049	7.072	ug/L
	Se	77	233.569	0.00	0.4274	0.893	208.912	ug/L
	Se	82	336.573	0.00	1.4336	0.051	3.544	ug/L
	Y	89	596533.966	-1395.89				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	0.000	0.00	0.0000	0.000		ug/L
	Cd	114	-8.942	-0.00	-0.0020	0.004	173.205	ug/L
>	In	115	586492.626	586492.63				ug/L
	Sb	123	1041.667	0.00	0.2141	0.004	1.978	ug/L
	Ba	135	71849.100	0.14	49.2956	5.611	11.383	ug/L
	Ce	140	13673.215	0.03				ug/L
>	Tb	159	505807.733	505807.73				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	160.336	144.34	0.0206	0.002	9.304	ug/L
	Tl	205	367.041	367.04	0.0220	0.019	87.670	ug/L
	Pb	206	2135.632	2135.63	0.3516	0.069	19.517	ug/L
	Pb	207	1368.111	1334.74	0.2584	0.132	51.053	ug/L
	Pb	208	7496.675	7398.97	0.3136	0.043	13.553	ug/L
>	Bi	209	443156.291	443156.29				ug/L
	Na	23	17375530.487	116.06	6.1314	0.667	10.880	mg/L
	Mg	24	7564448.916	50.72	4.0846	0.508	12.427	mg/L
	K	39	8997652.268	57.54	1.6710	0.116	6.956	mg/L
	Ca	43	175741.632	1.18	23.9938	2.399	9.997	mg/L
	Fe	54	187260.376	1.10	0.3281	0.027	8.149	mg/L
	Fe	57	72526.809	0.45	0.3044	0.100	32.836	mg/L

⊢>	Sc	45	150121.751	150121.75	mg/L
	Cl	35	50091.313	40086.81	mg/L
	Kr	83	160.669	40.00	mg/L
	U	238	11338.212	11338.21	mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
⌈	Be	9					
|	Al	27					
⊢>	Sc-1	45		98.235			
⌈	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		89.037			
|	As	75					
|	Se	77					
⌊	Se	82					
	Y	89					
⌈	Rh	103					
|	Ag	107					
|	Cd	114					
|>	In	115		101.728			
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⊢>	Tb	159		93.041			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
⊢>	Bi	209		103.043			
⌈	Na	23					
|	Mg	24					
|	K	39					
|	Ca	43					
|	Fe	54					
|	Fe	57					
⊢>	Sc	45		98.235			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L030459401

Sample Date/Time: Tuesday, May 06, 2003 16:06:53
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 45
Method File: C:\elandata\Method\Service\6020 methods\6020A.mth
Sample Description: 2

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	12339.368	1001.39				ug/L
	Be	9	0.000	0.00	0.0000	0.000		ug/L
	Al	27	16011.139	0.10	6.6203	5.012	75.706	ug/L
>	Sc-1	45	155177.715	155177.71				ug/L
	V	51	2487.330	0.00	0.2967	0.489	164.743	ug/L
	Cr	52	6334.839	-0.00	-0.1976	0.394	199.624	ug/L
	Cr	53	1333.450	0.00	1.7638	2.595	147.132	ug/L
	Mn	55	759326.941	1.29	94.1328	1.340	1.423	ug/L
	Co	59	2333.578	0.00	0.3311	0.216	65.296	ug/L
	Ni	60	5001.249	0.01	3.3294	2.664	80.018	ug/L
	Cu	65	7868.779	0.01	4.4790	0.890	19.863	ug/L
	Zn	66	9002.906	0.01	6.8182	1.372	20.127	ug/L
>	Ge	72	586894.636	586894.64				ug/L
	As	75	2015.804	0.00	1.2271	0.091	7.375	ug/L
	Se	77	300.304	0.00	0.9659	1.571	162.672	ug/L
	Se	82	415.815	0.00	1.9052	0.071	3.701	ug/L
	Y	89	572257.113	-25672.74				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	0.000	0.00	0.0000	0.000		ug/L
	Cd	114	306.517	0.00	0.0734	0.138	187.954	ug/L
>	In	115	569201.343	569201.34				ug/L
	Sb	123	7661.999	0.01	1.6976	0.044	2.588	ug/L
	Ba	135	78885.774	0.14	49.7382	5.920	11.902	ug/L
	Ce	140	666.690	-0.00				ug/L
>	Tb	159	551444.215	551444.21				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	1733.790	1697.79	0.2420	0.018	7.459	ug/L
	Tl	205	3637.436	3637.44	0.2177	0.018	8.409	ug/L
	Pb	206	767.456	767.46	0.1263	0.038	30.123	ug/L
	Pb	207	433.776	400.41	0.0775	0.059	76.377	ug/L
	Pb	208	2629.318	2531.62	0.1073	0.016	14.629	ug/L
>	Bi	209	429858.218	429858.22				ug/L
	Na	23	261421461.514	1691.45	89.3551	5.211	5.832	mg/L
	Mg	24	32099395.606	208.21	16.7672	1.562	9.319	mg/L
	K	39	46172826.205	296.66	8.6148	0.700	8.122	mg/L
	Ca	43	165964.561	1.07	21.8947	2.335	10.666	mg/L
	Fe	54	879436.883	5.56	1.6581	0.190	11.470	mg/L
	Fe	57	372803.214	2.38	1.6241	0.202	12.442	mg/L

Sc	45	155177.715	155177.71		mg/L
Cl	35	1209893.145	1199888.64		mg/L
Kr	83	123.668	3.00		mg/L
U	238	10670.938	10670.94		mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
Li	6					
Be	9					
Al	27					
Sc-1	45		101.544			
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
Ge	72		88.431			
As	75					
Se	77					
Se	82					
Y	89					
Rh	103					
Ag	107					
Cd	114					
In	115		98.729			
Sb	123					
Ba	135					
Ce	140					
Tb	159		101.436			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
Bi	209		99.951			
Na	23					
Mg	24					
K	39					
Ca	43					
Fe	54					
Fe	57					
Sc	45		101.544			
Cl	35					
Kr	83					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L030459402

Sample Date/Time: Tuesday, May 06, 2003 16:11:49
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 46
Method File: C:\elandata\Method\Service\6020 methods\6020A.mth
Sample Description: 2

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	13005.941	1667.98				ug/L
⌈	Be	9	0.000	0.00	0.0000	0.000		ug/L
|	Al	27	3844849.808	24.73	1613.9213	223.968	13.877	ug/L
|>	Sc-1	45	157884.159	157884.16				ug/L
⌈	V	51	97392.632	0.16	16.2838	1.276	7.836	ug/L
|	Cr	52	75533.271	0.11	12.6602	1.075	8.494	ug/L
|	Cr	53	7001.715	0.01	11.1150	0.073	0.656	ug/L
|	Mn	55	325005.897	0.54	39.4084	3.484	8.840	ug/L
|	Co	59	8002.521	0.01	1.1109	0.475	42.738	ug/L
|	Ni	60	11004.400	0.02	7.1823	1.770	24.643	ug/L
|	Cu	65	278012.743	0.46	158.9656	1.779	1.119	ug/L
|	Zn	66	150458.717	0.25	115.0292	9.396	8.169	ug/L
	Ge	72	599523.424	599523.42				ug/L
|	As	75	8213.351	0.01	5.1158	0.118	2.312	ug/L
|	Se	77	200.202	0.00	0.1501	0.775	516.000	ug/L
L	Se	82	518.472	0.00	2.4352	0.133	5.451	ug/L
	Y	89	610158.532	12228.67				ug/L
⌈	Rh	103	0.000	0.00				ug/L
|	Ag	107	1333.403	0.00	0.1571	0.068	43.512	ug/L
|	Cd	114	1371.665	0.00	0.3197	0.481	150.318	ug/L
|>	In	115	588878.156	588878.16				ug/L
L	Sb	123	105665.425	0.19	23.5649	0.147	0.624	ug/L
⌈	Ba	135	195684.607	0.37	129.7906	17.039	13.128	ug/L
|	Ce	140	59791.586	0.11				ug/L
|>	Tb	159	523075.344	523075.34				ug/L
⌈	Ho	165	333.345	333.35				ug/L
|	Tl	203	1708.453	1672.45	0.2383	0.014	5.844	ug/L
|	Tl	205	4204.823	4204.82	0.2517	0.006	2.381	ug/L
|	Pb	206	263683.660	263683.66	43.4057	3.645	8.399	ug/L
|	Pb	207	218610.729	218577.36	42.3106	0.882	2.085	ug/L
|	Pb	208	1018975.193	1018877.49	43.1866	1.571	3.637	ug/L
|>	Bi	209	433966.939	433966.94				ug/L
⌈	Na	23	280283516.332	1804.96	95.3518	13.887	14.564	mg/L
|	Mg	24	26667160.196	172.01	13.8519	2.211	15.964	mg/L
|	K	39	46979338.453	299.49	8.6971	1.171	13.464	mg/L
|	Ca	43	190599.120	1.22	24.9341	2.907	11.660	mg/L
|	Fe	54	451976.939	2.76	0.8238	0.132	16.018	mg/L
|	Fe	57	209194.129	1.32	0.8964	0.188	20.960	mg/L

⌊>	Sc	45	157884.159	157884.16	mg/L
	Cl	35	1377153.259	1367148.75	mg/L
	Kr	83	166.336	45.87	mg/L
	U	238	33707.610	33707.61	mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
⌈	Be	9					
|	Al	27					
⌊>	Sc-1	45		103.315			
⌈	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
⌊>	Ge	72		90.334			
|	As	75					
|	Se	77					
⌊	Se	82					
	Y	89					
⌈	Rh	103					
|	Ag	107					
|	Cd	114					
⌊>	In	115		98.673			
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		96.217			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
⌊>	Bi	209		100.906			
⌈	Na	23					
|	Mg	24					
|	K	39					
|	Ca	43					
|	Fe	54					
|	Fe	57					
⌊>	Sc	45		103.315			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, May 06, 2003 16:16:44
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 5
Method File: C:\elandata\Method\Service\6020 methods\6020A.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	13006.221	1668.24				ug/L
⌈	Be	9	9336.484	0.06	69.0875	15.640	22.638	ug/L
|	Al	27	136993.847	0.89	57.9430	4.570	7.886	ug/L
|>	Sc-1	45	152814.553	152814.55				ug/L
⌈	V	51	321189.251	0.51	51.1809	2.260	4.416	ug/L
|	Cr	52	319543.187	0.49	54.9761	3.633	6.609	ug/L
|	Cr	53	31701.904	0.05	49.3508	3.667	7.430	ug/L
|	Mn	55	518615.612	0.82	59.6360	5.063	8.490	ug/L
|	Co	59	403979.308	0.64	53.2344	3.598	6.758	ug/L
|	Ni	60	84584.273	0.13	52.3152	5.252	10.039	ug/L
|	Cu	65	101024.144	0.16	54.7509	4.660	8.510	ug/L
|	Zn	66	65818.533	0.10	47.5286	2.933	6.170	ug/L
	Ge	72	632711.511	632711.51				ug/L
⌈	As	75	90060.121	0.14	53.8522	0.919	1.706	ug/L
|	Se	77	7142.259	0.01	50.4550	0.669	1.326	ug/L
L	Se	82	10118.325	0.02	53.7971	1.585	2.946	ug/L
	Y	89	561853.093	-36076.76				ug/L
⌈	Rh	103	0.000	0.00				ug/L
|	Ag	107	409453.125	0.73	48.6685	2.936	6.034	ug/L
|	Cd	114	247819.057	0.44	58.9818	8.031	13.617	ug/L
|>	In	115	564621.123	564621.12				ug/L
L	Sb	123	247716.003	0.44	55.7389	2.234	4.009	ug/L
⌈	Ba	135	76210.345	0.14	48.9349	11.526	23.554	ug/L
|	Ce	140	1333.450	0.00				ug/L
|>	Tb	159	542111.331	542111.33				ug/L
⌈	Ho	165	0.000	0.00				ug/L
|	Tl	203	337021.453	336985.45	48.0256	0.972	2.023	ug/L
|	Tl	205	799478.133	799478.13	47.8588	2.539	5.304	ug/L
|	Pb	206	317470.000	317470.00	52.2596	0.825	1.578	ug/L
|	Pb	207	245705.809	245672.44	47.5555	0.953	2.004	ug/L
|	Pb	208	1167576.765	1167479.06	49.4853	0.749	1.514	ug/L
|>	Bi	209	436552.115	436552.12				ug/L
⌈	Na	23	17093737.179	111.67	5.8994	0.236	3.999	mg/L
|	Mg	24	12001264.415	78.46	6.3184	0.330	5.217	mg/L
|	K	39	30445837.367	196.48	5.7057	0.355	6.217	mg/L
|	Ca	43	41059.201	0.27	5.4694	0.775	14.168	mg/L
|	Fe	54	3145212.962	20.47	6.1019	0.328	5.380	mg/L
|	Fe	57	1020191.950	6.65	4.5306	0.288	6.357	mg/L

|> Sc	45	152814.553	152814.55		mg/L
Cl	35	12005.416	2000.91		mg/L
Kr	83	128.002	7.33		mg/L
U	238	0.000	0.00		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
⌈	Be	9	138.175				
|	Al	27	115.886				
|>	Sc-1	45		99.997			
⌈	V	51	102.362				
|	Cr	52	109.952				
|	Cr	53	98.702				
|	Mn	55	119.272				
|	Co	59	106.469				
|	Ni	60	104.630				
|	Cu	65	109.502				
|	Zn	66	95.057				
|>	Ge	72		95.334			
|	As	75	107.704				
|	Se	77	100.910				
⌊	Se	82	107.594				
	Y	89					
⌈	Rh	103					
|	Ag	107	97.337				
|	Cd	114	117.964				
|>	In	115		97.935			
⌊	Sb	123	111.478				
⌈	Ba	135	97.870				
|	Ce	140					
|>	Tb	159		99.719			
⌈	Ho	165					
|	Tl	203	96.051				
|	Tl	205	95.718				
|	Pb	206	104.519				
|	Pb	207	95.111				
|	Pb	208	98.971				
|>	Bi	209		101.507			
⌈	Na	23	117.988				
|	Mg	24	126.368				
|	K	39	114.114				
|	Ca	43	109.388				
|	Fe	54	122.038				
|	Fe	57	90.613				
|>	Sc	45		99.997			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Tuesday, May 06, 2003 16:17:19

QC Std 6	Be	9	CCV is out of limits (+/-10%)
QC Std 6	Al	27	CCV is out of limits (+/-10%)
QC Std 6	Mn	55	CCV is out of limits (+/-10%)
QC Std 6	Cd	114	CCV is out of limits (+/-10%)
QC Std 6	Sb	123	CCV is out of limits (+/-10%)
QC Std 6	Ba	135	CCV is out of limits (+/-10%)
QC Std 6	Mg	24	CCV is out of limits (+/-10%)
QC Std 6	Fe	54	CCV is out of limits (+/-10%)

Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, May 06, 2003 16:21:37
Number of Replicates: 3
Aliquot Volume (mL): 1.000
Diluted To Volume (mL): 1.000
Autosampler Position: 1
Method File: C:\elandata\Method\Service\6020 methods\6020A.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Li	6	12672.900	1334.92				ug/L
	Be	9	0.000	0.00	0.0000	0.000		ug/L
	Al	27	1000.035	0.00	0.0064	0.041	630.796	ug/L
>	Sc-1	45	151470.429	151470.43				ug/L
	V	51	958.295	0.00	0.0270	0.424	1572.082	ug/L
	Cr	52	7668.756	-0.00	-0.0322	0.192	596.581	ug/L
	Cr	53	0.000	-0.00	-0.4995	0.000	0.000	ug/L
	Mn	55	1000.058	0.00	0.0437	0.116	265.150	ug/L
	Co	59	0.000	0.00	0.0000	0.000		ug/L
	Ni	60	0.000	0.00	0.0000	0.000		ug/L
	Cu	65	0.000	0.00	0.0000	0.000		ug/L
	Zn	66	1333.427	0.00	0.7564	0.655	113.049	ug/L
>	Ge	72	624362.790	624362.79				ug/L
	As	75	216.752	0.00	0.0578	0.031	54.359	ug/L
	Se	77	33.367	-0.00	-1.1415	0.422	36.994	ug/L
	Se	82	123.538	0.00	0.1727	0.089	51.733	ug/L
	Y	89	558381.061	-39548.80				ug/L
	Rh	103	0.000	0.00				ug/L
	Ag	107	0.000	0.00	0.0000	0.000		ug/L
	Cd	114	0.000	0.00	0.0000	0.000		ug/L
>	In	115	550019.452	550019.45				ug/L
	Sb	123	337.293	0.00	0.0664	0.008	12.691	ug/L
	Ba	135	0.000	0.00	0.0000	0.000		ug/L
	Ce	140	333.345	-0.00				ug/L
>	Tb	159	514817.623	514817.62				ug/L
	Ho	165	0.000	0.00				ug/L
	Tl	203	35.334	-0.67	-0.0001	0.001	754.984	ug/L
	Tl	205	66.734	66.73	0.0040	0.003	86.603	ug/L
	Pb	206	33.367	33.37	0.0055	0.010	173.205	ug/L
	Pb	207	33.367	-0.00	-0.0000	19346[illegible]04094399200.000		ug/L
	Pb	208	172.735	75.03	0.0032	0.002	73.635	ug/L
>	Bi	209	413866.075	413866.07				ug/L
	Na	23	6001.424	0.00	0.0002	0.001	337.590	mg/L
	Mg	24	1666.772	0.01	0.0009	0.000	41.094	mg/L
	K	39	345243.512	-0.31	-0.0091	0.009	99.392	mg/L
	Ca	43	0.000	-0.00	-0.0445	0.000	0.000	mg/L
	Fe	54	19130.114	-0.02	-0.0069	0.002	23.033	mg/L
	Fe	57	4333.998	-0.01	-0.0071	0.003	49.242	mg/L

⊢>	Sc	45	151470.429	151470.43	mg/L
	Cl	35	7001.996	-3002.51	mg/L
	Kr	83	154.002	33.33	mg/L
	U	238	0.000	0.00	mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
⊢	Be	9					
|	Al	27					
⊢>	Sc-1	45		99.118			
⊢	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
⊢>	Ge	72		94.076			
|	As	75					
|	Se	77					
⊢	Se	82					
	Y	89					
⊢	Rh	103					
|	Ag	107					
|	Cd	114					
⊢>	In	115		95.402			
⊢	Sb	123					
⊢	Ba	135					
|	Ce	140					
⊢>	Tb	159		94.698			
⊢	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
⊢>	Bi	209		96.232			
⊢	Na	23					
|	Mg	24					
|	K	39					
|	Ca	43					
|	Fe	54					
|	Fe	57					
⊢>	Sc	45		99.118			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Tuesday, May 06, 2003 16:22:10

QC Std 7	Zn	66	CCB is out of limits (+/-3*IDL)
QC Std 7	Se	77	CCB is out of limits (+/-3*IDL)

Method 6020 - Summary Report

Sample ID: QCMRL

Sample Date/Time: Tuesday, May 06, 2003 16:40:29
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 10
Method File: C:\elandata\Method\Service\6020 methods\6020A.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
Li	6	11671.487	333.51				ug/L
Be	9	0.000	0.00	0.0000	0.000		ug/L
Al	27	14874.347	0.07	4.6749	0.543	11.610	ug/L
Sc-1	45	186886.038	186886.04				ug/L
V	51	4485.818	0.00	0.4918	0.601	122.155	ug/L
Cr	52	8335.819	-0.00	-0.1158	0.236	203.394	ug/L
Cr	53	666.690	0.00	0.4082	0.786	192.573	ug/L
Mn	55	10337.173	0.01	0.9673	0.210	21.710	ug/L
Co	59	5001.085	0.01	0.5724	0.337	58.947	ug/L
Ni	60	333.345	0.00	0.1777	0.308	173.205	ug/L
Cu	65	666.690	0.00	0.3168	0.274	86.636	ug/L
Zn	66	5667.985	0.01	3.3883	1.910	56.379	ug/L
Ge	72	723627.759	723627.76				ug/L
As	75	1296.334	0.00	0.6050	0.058	9.505	ug/L
Se	77	200.203	-0.00	-0.1298	1.658	1277.482	ug/L
Se	82	239.316	0.00	0.6236	0.104	16.644	ug/L
Y	89	667595.194	69665.34				ug/L
Rh	103	0.000	0.00				ug/L
Ag	107	5667.822	0.01	0.5886	0.113	19.147	ug/L
Cd	114	3649.633	0.01	0.7587	0.828	109.153	ug/L
In	115	644460.897	644460.90				ug/L
Sb	123	3368.843	0.01	0.6526	0.023	3.586	ug/L
Ba	135	333.345	0.00	0.2062	0.357	173.205	ug/L
Ce	140	1000.105	-0.00				ug/L
Tb	159	593772.910	593772.91				ug/L
Ho	165	0.000	0.00				ug/L
Tl	203	4527.783	4491.76	0.6401	0.011	1.764	ug/L
Tl	205	11382.596	11382.60	0.6814	0.054	7.889	ug/L
Pb	206	3770.942	3770.94	0.6207	0.094	15.098	ug/L
Pb	207	2936.582	2903.21	0.5620	0.129	22.962	ug/L
Pb	208	15374.906	15277.20	0.6475	0.050	7.732	ug/L
Bi	209	527019.572	527019.57				ug/L
Na	23	29697.651	0.13	0.0066	0.001	20.476	mg/L
Mg	24	3000.315	0.02	0.0013	0.000	8.192	mg/L
K	39	381714.104	-0.54	-0.0156	0.002	11.734	mg/L
Ca	43	333.345	-0.00	-0.0097	0.060	622.686	mg/L
Fe	54	19445.308	-0.04	-0.0130	0.009	70.536	mg/L
Fe	57	6001.284	-0.01	-0.0046	0.005	117.369	mg/L

↳ Sc	45	186886.038	186886.04		mg/L
Cl	35	12338.761	2334.26		mg/L
Kr	83	133.002	12.33		mg/L
U	238	0.000	0.00		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Dif
	Li	6					
┌	Be	9					
│	Al	27					
↳	Sc-1	45		122.293			
┌	V	51					
│	Cr	52					
│	Cr	53					
│	Mn	55					
│	Co	59					
│	Ni	60					
│	Cu	65					
│	Zn	66					
↳	Ge	72		109.033			
│	As	75					
│	Se	77					
└	Se	82					
	Y	89					
┌	Rh	103					
│	Ag	107					
│	Cd	114					
↳	In	115		111.783			
└	Sb	123					
┌	Ba	135					
│	Ce	140					
↳	Tb	159		109.222			
┌	Ho	165					
│	Tl	203					
│	Tl	205					
│	Pb	206					
│	Pb	207					
│	Pb	208					
↳	Bi	209		122.543			
┌	Na	23					
│	Mg	24					
│	K	39					
│	Ca	43					
│	Fe	54					
│	Fe	57					
↳	Sc	45		122.293			
	Cl	35					
	Kr	83					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QCMRL
Report Date/Time: Tuesday, May 06, 2003 16:41:05
Page 2

Sc-1 45 Int Std for sample	45	
Bi 209 Int Std for sample	209	RERUN FOR AFCEE SAMPLE
Sc 45 Int Std for sample	45	

2.3.1.3 Preparation Log (s)

Metals Digestion Log

Analyst(s): TLT
Date: 5-1-03 @ 9:00
LCS: 5ml D550053-60
MS/MSD: 5ml D550053-60
Witness: VC
HNO_3 Lot #: N35
HCl Lot #: H26
H_2O_2 Lot #: —
Earliest Sample Due Date: 5/2

Box: E5

Digestion Work Group: WG 139542
Analytical Work Group: WG

General Digestion
ME401 Revision # 9 - Method 3005A-Water [X]
ME403 Revision # ____ - Method 3050B-Soil [ ]

Furnace Digestion
ME402 Revision # ____ - Method 3020A-Water [ ]
ME403 Revision # ____ - Method 3050B-Soil [ ]

AS/SE Digestion
ME410 Revision # ____ - Method 7060/7740-Water [ ]

	KEMRON #	Initial WT/Vol	Final Volume	Comments	Due Date
1	PBW	50ml	50ml	WG139542 -03	
2	LCSW			-04	
3	04-550-02				5/5
4	-04				
5	-06				
6	575-08				5/5
7	585-01			L4	5/5
8	-02				
9	-03				
10	-04			-01	
11	-05 MS			-05	
12	-06 MSD			-06	
13	-07				
14	-08				
15	-09				
16	-10				
17	594-01			L4	5/5
18	-02			-02	
19	-02dup			-07	
20	606-01				5/2
21	-02				
22	-03				
23	657-01				5/5
24					
25					
26					
27					
28					

Comments:

Peer Review By: [illegible] 5/1/03 Supervisor Review:

Microwave Digestion Log

Volume # 59
Page 9

Analyst(s): VC
Date: 4/29/03 11:00
LCS: 5 mL 0.55 oz 53.60
MS/MSD: 5 mL 0.55 oz 53.70
Witness: TLT
Earliest Sample Due Date: 4/30

Box: K3
HNO_3 Lot #: N35
HCl Lot #: —

Digestion Work Group: WG 139
Analytical Work Group: WG

ME407 - Method 3015-Water
ME406 - Method 3051-Soil-Oil

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	KEMRON #	Initial Wt/Vol	Final Volume	Initial Weight	Final Weight	Comments	Due Date
1	MB	50 mL	50 mL	42265	42261	03	
2	LCS			40322	40321	04	
3	RBKF 9/29			42013	42017	Rwf 139285 0830	4/30
4	R04605-01	5		40273	40274		
5	01MS			41258	41254		
6	RBLK 4/28	5		40558	40557	Rwf 139288 1500	
7	502 02	5		40645	40648	WG 139316 02	5/1
8	02			40714	40711	07	
9	501-03			40538	40536	WG 139316.01	5/1
10	03MS			41147	41143	05	
11	03MSD			40457	40454	06	
12	04			40063	40062		
13	05			40658	40654		
14	543 02			40773	40770		5/2
15	04			40747	40742		
16	05			41303	41303		
17	07			40746	40744		
18	08			40576	40572		
19	55401 *			41168	41165		5/2
20	01MS			40605	40600		
21	59403 *			40327	40322		5/5
22							
23							
24							
25							
26							
27							
28							
29							
30							

VC 4/29/03

Comments: * level 4

Peer Review By: [signature]

Supervisor Review: _____

Microwave Digestion Log

Volume # 59
Page 17

Analyst(s): VC
Date: 5/2/03 10:00
LCS: 0.5 mL MS 1-13-D
MS/MSD: 0.5 mL MS 1-13-D
Witness: TCT
Earliest Sample Due Date: 5/5

Box: H2
HNO_3 Lot #: N35
HCl Lot #: —

Digestion Work Group: WG 139750
Analytical Work Group: WG

ME407 - Method 3015-Water
ME406 - Method 3051-Soil-Oil

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	KEMRON #	Initial Wt/Vol	Final Volume	Initial Weight	Final Weight	Comments	Due Date
1	PBW	40mL	50 mL	28189	28185	04	
2	LCSW			27429	27423	05	
3	04 585-01 *			26157	26150		5/5
4	02			26382	26375		
5	03			26455	26450		
6	04			26445	26432	WG139750-01	
7	05 MS			26672	26667	06	
8	06 MSD			26423	26418	07	
9	07			26434	26427		
10	08			26383	26377		
11	09			26402	26398		
12	10			26257	26248		
13	594 01 *			26328	26321		5/5
14	02			26280	26275		
15	653 01 *			26443	26436		5/7
16	02			26117	26112	WG 139750-02	
17	03 MS			26418	26415	08	
18	04 MSD			26289	26286	09	
19	05			26094	26087	WG 139750-03	
20	06 LCS			26080	26074	10	
21	001-09 *			26533	26527		5/5
22	013 03 *			26085	26079		5/6
23							
24							
25							
26							
27							
28							
29							
30							

VC 5/2/03

Comments: *Level 4

Peer Review By: [signature] Supervisor Review: _____

2.3.1.4 Sample Calculations

Example 6010 Calculations
Perkin Elmer Optima 3000 (PE-ICP)

1.0 Initial Calibration (ICAL) Parameters

The system performs linear regression from data consisting of a blank and three standards:

The equation is in the form of $I = mC + b$.

Where:
- I = Mean emission intensity at the element's measured wavelength.
- C = Concentration of the element in mg/L
- m = Slope of the ICAL curve computed by system
- b = Intercept of the ICAL curve computed by system

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

$$C = [(I - b) / (m)] \} [(Qs) / (Vp)] [D]$$

Where:	Example:
I = Mean adjusted intensity at the element's measured wavelength.	307088.8
b = Intercept of the ICAL curve computed by system	373.4
m = Slope of the ICAL curve computed by system	780569.9
Qs = Sample quantity digested (defaults to 1)	1
Vp = Prep volume (defaults to 1)	1
D = Dilution factor as a multplier (10X = 10)	1
C = Concentration of element in ppm (mg/L):	0.39293778

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

$$C = [(I - b) / m] | [(Vp) / (Qs)] [D]$$

Where:	Example:
I = Mean emission intensity at the element's measured wavelength.	307088.8
b = Intercept of the ICAL curve computed by system	373.4
m = Slope of the ICAL curve computed by system	780569.9
Qs = Sample quantity digested (g)	2
Vp = Prep volume (mL)	100
D = Dilution factor as a multplier (10X = 10)	1
C = Concentration of element in ppm (mg/kg):	19.646888

5.0 Adjusting the concentration to dry weight:

$$C_{dry} = [(C_x)(100)] / P_x$$

Where:		
C_x = Concentration calculated as received (wet basis):		19.646889
P_x = Percent solids of sample (%wt)		80
	C(mg/kg)	24.556113

Example 6010 Calculations
TJA - Iris

1.0 Initial Calibration (ICAL) Parameters

The system performs linear regression from data consisting of a blank and three standards:

2.0 Calculating the concentration (C) of an element in water using data from run log and quantitation report (note: this calculation is performed automatically by the data system when correction factors have been entered):

Cx = (Cs) (Fc) (D)

Where:	Example:
Cs = Concentration computed by the data system (mg/L)(ppm)	0.1
Fc = Correction factor for the preparation data,	1
= Final volume/ initial volume	
D = Dilution factor as a multplier (10X = 10)	1
Cx = Concentration of element in ppm (mg/L):	**0.1**

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

Cx = (Cs) (Fc) (D)

Where:	Example:
Cs = Concentration computed by the data system (mg/L)(ppm)	0.1
Fc = Correction factor for the preparation data,	50
= Final volume(mL)/ initial weight (g)	
D = Dilution factor as a multplier (10X = 10)	1
Cx = Concentration of element in ppm (mg/kg):	**5**

4.0 Adjusting the concentration to dry weight:

Cdry = [(Cx)(100)] / Px

Where:		
Cx = Concentration calculated as received (wet basis):		125
Px = Percent solids of sample (%wt)		80
	C(mg/kg)	156.25

Example 6020 Calculations
Perkin Elmer ELAN ICP/MS

1.0 Initial Calibration (ICAL) Parameters

The system performs linear regression from data consisting of a blank and three standards:

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

Cx = [Cs] [(Vf / Vi)] [D]

Where:	Example:
Cs = Concentration computed by the data system (ug/L)	0.1
Vf = Diluted To Volume (mL)	50
Vi = Aliquot Volume (mL)	40
D = Manual dilution factor, if required (10X = 10)	1
Cx = Concentration of element in ppb (ug/L)	**0.125**

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

Cx = [Cs] [(Vf / Ws)] [D]

Where:	Example:
Cs = Concentration computed by the data system (ug/L)	0.1
Vf = Diluted To Volume (mL)	50
Ws = Aliquot weight (g)	0.5
D = Manual dilution factor	1
Cx = Concentration of element in ug/kg	**10**

4.0 Adjusting the concentration to dry weight:

Cdry = [(Cx)(100)] / Px

Where:	
Cx = Concentration calculated as received (wet basis):	10
Px = Percent solids of sample (%wt)	80
C(ug/kg)	**12.5**

12.5 ug/kg = 0.0125 mg/kg

2.3.3 Metals CVAA (Mercury) Data

METALS - CVAA (MERCURY) DATA
Login Number: W304594

A. ✓ **QC Summary**
✓ Batch QC Summary Form

B. Raw Data
✓ Analyst checksheet
✓ Analysis run log
✓ Instrument data: (actual order may vary)

- Initial and continuing calibration standards
- Initial and continuing calibration blanks
- Preparation blank data
- Laboratory control sample
- Sample data
- Matrix spike
- Matrix spike duplicate
- Duplicate
- Post digestion spike (if applicable)
- Serial dilution (as needed)
- Standard additions results (as needed)

C. Preparation Log(s)

D. Sample Calculations

Checked by: DA MUB Date: 05/09/03

2.3.3.1 QC Summary

KEMRON ENVIRONMENTAL SERVICES
BLANK REPORT

Login Number: L0304594 | Run Date: 05/01/2003 | Sample ID: WG139443-03
Instrument ID: PS202 | Run Time: 14:05 | Prep Method: METHOD
File ID: PS.050103.140535 | Analyst: KHR | Method: 7470A
Workgroup (AAB#): WG139511 | Matrix: Tclp | Units: mg/L
Contract #: | Cal ID: PS202-01-MAY-03

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Mercury, TCLP	0.00000520	0.000500	0.00000900	1	J

KEMRON FORMS - Modified 04/24/2003
Version 1.3
Report generated 05/01/2003 16:58

KEMRON ENVIRONMENTAL SERVICES
LABORATORY CONTROL SAMPLE

Login Number: L0304594
Instrument ID: PS202
File ID: PS.050103.140645
Workgroup (AAB#): WG139511
Contract #:

Run Date: 05/01/2003
Run Time: 14:06
Analyst: KHR
Matrix: Tclp

Sample ID: WG139443-04
Prep Method: METHOD
Method: 7470A
Units: mg/L
Cal ID: PS202-01-MAY-2003 13:57

Analytes	Expected	Found	% Rec	LCS Limits	Q
Mercury, TCLP	0.00400	0.00388	97.0	80 - 120	

KEMRON FORMS - Modified 05/01/2003
Version 1.3
Report generated 05/01/2003 16:59

KEMRON ENVIRONMENTAL SERVICES
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 8

Analytical Method:7470A
Login Number:L0304594

AAB#:WG139511
Contract #:Bonnie Hogue

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
05-177511-SP2-042503	04/25/03	04/26/03	04/30/03	28	4.81	05/01/03	28	6.04	

* EXT = MISSED EXTRACTION HOLD TIME
*ANAL = MISSED ANALYITICAL HOLD TIME

KEMRON FORMS - Modified 05/28/2002
Version 1.1
Report generated 05/09/2003 09:53

KEMRON ENVIRONMENTAL SERVICES
BLANK REPORT

Login Number:L0304594 Run Date:05/02/2003 Sample ID:WG139541-03
Instrument ID:PS202 Run Time:10:07 Prep Method:METHOD
File ID:PS.050203.100759 Analyst:MMB Method:7470A
Workgroup (AAB#):WG139661 Matrix:Water Units:mg/L
Contract #: Cal ID: PS202-02-MAY-03

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Mercury	0.0000520	0.000200	0.0000520	1	U

KEMRON FORMS - Modified 05/02/2003
Version 1.3
Report generated 05/05/2003 10:15

KEMRON ENVIRONMENTAL SERVICES
LABORATORY CONTROL SAMPLE

Login Number: L0304594
Instrument ID: PS202
File ID: PS.050203.100904
Workgroup (AAB#): WG139661
Contract #:

Run Date: 05/02/2003
Run Time: 10:09
Analyst: MMB
Matrix: Water

Sample ID: WG139541-04
Prep Method: METHOD
Method: 7470A
Units: mg/L
Cal ID: PS202-02-MAY-2003 09:57

Analytes	Expected	Found	% Rec	LCS Limits	Q
Mercury	0.00400	0.00447	112	80 - 120	

KEMRON FORMS - Modified 05/01/2003
Version 1.3
Report generated 05/05/2003 10:15

KEMRON ENVIRONMENTAL SERVICES
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 8

Analytical Method: 7470A
Login Number: L0304594

AAB#: WG139661
Contract #: Bonnie Hogue

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
05-177511-DW2-042503	04/25/03	04/26/03	05/01/03	28	6.06	05/02/03	28	7	
05-177511-DW3-042503	04/25/03	04/26/03	05/01/03	28	6.03	05/02/03	28	6.97	

* EXT = MISSED EXTRACTION HOLD TIME
*ANAL = MISSED ANALYITICAL HOLD TIME

KEMRON FORMS - Modified 05/28/2002
Version 1.1
Report generated 05/09/2003 09:53

2.3.3.2 Raw Data

Metals

Date: 5/1/03
Analyst: KCh
Method: 7470A
Instrument: P5202
Work Group: 139511, 139528

	Analyst
Calibration/Linearity	—
ICV/CCV	—
ICB/CCB	—
icsa/icsab/cri	NA
Blank/LCS	—
MS/MSD	—
Postspike/Serial Dilution	—
Duplicate	—
Record Results	—
Excel Spreadsheets	—
Results Reporting / Data Qualifiers	
Calculations & Correct Factors	
Reanalysis Assign	
Instrument Failure/Reassign	
Case Narrative	
QA Approval - Seedpak 3	
Check for Completeness	
Level IV Data	04-554
	04-554
	04-459
WS/2	04-566

WG139548

Primary Reviewer Initials & Date Checked KCh 5/1/03

Secondary Reviewer Initials & Date Checked MMB 5/1/03 5/2/03

✓ • Check for compliance with Method and project-specific requirements
✓ • Check the completeness of the reported information
✓ • Check the information for the report narrative
✓ • Check the reasonableness of results

Supervisory Review Initials & Date Checked MB 5/1/03 5/2/03

Comments:

✓ - Checked & OK
NA - Not Applicable
DL - Diluted Out

KEMRON ENVIRONMENTAL SERVICES
MERCURY RUN LOGBOOK

ANALYST Kim H Rhodes DATE 5/1/03 TIME 1351
METHOD # 7470A SOP # ME404 REV. # 6 WORK GROUP # 139511 139528
CAL STD SOURCE DS5OO 55-27 ICV/CCV SOURCE DS5 0055-28
POST SPK SOURCE DS5 0055-27 (10 PPB Std)

Cup #	Sample No.	Dil	Prep Conc	Autosampler Runs	Cup #	Sample No.	Dil	Prep Conc	Autosampler Runs
	S0				27.	04-500-01PS	0.9		CCV/CCB (x2)
	S0.2				28.	PBW A1			WG139444-03
	S1.0				29.	LCSW A1			-04
	S2.0				30.	04-400-01			-02
	S5.0				31.	01DP			-07
	S10				32.	02			
	~~FCV~~				33.	04-455-02			
	~~FCB~~			CCV/CCB	34.	03			
1.	PBW J1			WG139443-03	35.	04			
2.	LCSW J1			-04	36.	05			
3.	04-419-03				37.	06			CCV/CCB -01
4.	03PS	0.9			38.	07S			-05
5.	04				39.	08SD			-06
6.	04-500-01		1/50		40.	09			
7.	01S		↓		41.	10			
8.	TC BLK 4/28				42.	04-506-01			
9.	04-500-02		5/50		43.	01PS	0.9		
10.	04-501-03			CCV/CCB	44.	03			
11.	04			-01	45.	04			
12.	04S			-05	46.	06			
13.	04SD			-06	47.	08			CCV/CCB
14.	05				48.	11			CCV/CCB
15.	04-543-02				49.	04-419-03	0.5		
16.	04				50.	03 + 1PPB			
17.	05			-02	51.	03 + 2PPB			
18.	05DA			-07	52.	03 + 3PPB			CCV/CCB
19.	07				53.				
20.	08			CCV/CCB	54.				
21.	04-554-01				55.				
22.	04-594-03				56.				
23.	03PS	0.9			57.				
24.	03S		↓		58.				
25.	04-419-03PS RR	0.9			59.				
26.	04PS	0.9			60.				

Comments:

Note: No entry for Dil represents 1X Dilution

Autosampler Run Key:

CCV - Continuing Calibration Verification
CCB = Continuing Calibration Blank
% D = Automatic Instrument Rerun due to % RSD > 20%
FRS = Full Recalibration Sequence

ID = Automatic Instrument Dilution
R = Analyst Rerun
BLK = Blank Rerun

Reviewed By: MMB 05/02/03

INORGANIC ANALYSES DATA SHEET
INITIAL MULTIPOINT CALIBRATION

Analytical Method: 7470 AAB#:

Lab Name: KEMRON ENVIRONMENTAL SERVICES Contract #:

Date of Initial Calibration: 1-May-03 Initial Calibration ID:

Instrument ID: PS202 Concentration Units (mg/L or mg/kg dry weight): ug/L

Analyte	Std 1	RF 1	Std 2	RF 2	Std 3	RF 3	Std 4	RF 4	Std 5	RF 5	Std 6	RF 6	r	Q
Mercury	0.00	455	0.20	11801	1.00	46092	2.0	88578	5.0	231444	10.0	443636	0.99977	

r = correlation coefficient

Comments:

Forms by ChemSW/707/864-0845;v1.0;12/1/97

AFCEE FORM I-3B

KEMRON ENVIRONMENTAL SERVICES
FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

INSTRUMENT: PS202
METHOD: 7470
ANALYST: KHR
DATE: 5/1/03

UNITS: ug/L

ICV Time: 1:59 PM
CCV1 Time: 2:03 PM
CCV2 Time: 2:17 PM

	Initial Calibration Verification			Continuing Calibration Verification					Q
				CCV1			CCV2		
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Mercury	2.0	2.15	107.5	2.0	2.14	107.0	2.10	105.0	

(1) Control Limits: 80-120%

KEMRON ENVIRONMENTAL SERVICES
FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

INSTRUMENT: PS202
METHOD: 7470
ANALYST: KHR
DATE: 5/1/03

UNITS: ug/L

ICV Time: 1:59 PM
CCV1 Time: 2:31 PM
CCV2 Time: 2:49 PM

	Initial Calibration Verification			Continuing Calibration Verification CCV1			CCV2		Q
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Mercury	2.0	2.15	107.5	2.0	2.15	107.5	2.15	107.5	

(1) Control Limits: 80-120%

KEMRON ENVIRONMENTAL SERVICES
FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

INSTRUMENT: PS202
METHOD: 7470
ANALYST: KHR
DATE: 5/1/03

UNITS: ug/L

ICV Time: 1:59 PM
CCV1 Time: 3:03 PM
CCV2 Time: 3:19 PM

	Initial Calibration Verification			Continuing Calibration Verification					Q
				CCV1			CCV2		
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Mercury	2.0	2.15	107.5	2.0	2.13	106.5	2.15	107.5	

(1) Control limits: 80-120%

KEMRON ENVIRONMENTAL SERVICES
FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

INSTRUMENT: PS202
METHOD: 7470
ANALYST: KHR
DATE: 5/1/03

UNITS: ug/L

ICV Time: 1:59 PM
CCV1 Time: 3:33 PM
CCV2 Time: 3:37 PM

	Initial Calibration Verification			Continuing Calibration Verification					Q
					CCV1		CCV2		
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Mercury	2.0	2.15	107.5	2.0	2.16	108.0	2.14	107.0	

(1) Control Limits: 80-120%

KEMRON ENVIRONMENTAL SERVICE
FORM 3 - BLANKS

INSTRUMENT:	PS202
METHOD:	7470
ANALYST:	KHR
DATE:	5/1/03
UNITS:	ug/L
ICB Time:	2:01 PM
CCB1 Time:	2:04 PM
CCB2 Time:	2:18 PM
CCB3 Time:	2:32 PM

Analyte	Initial Calibration Blank(ug/L)	Continuing Calibration Blank (ug/L) CCB1	CCB2	CCB3
		1	2	3
Mercury	-.004	-.013	-.026	-.017

KEMRON ENVIRONMENTAL SERVICE
FORM 3 - BLANKS

INSTRUMENT: PS202
METHOD: 7470
ANALYST: KER
DATE: 5/1/03

UNITS: ug/L

ICB Time: 2:01 PM
CCB1 Time: 3:02 PM
CCB2 Time: 3:05 PM
CCB3 Time: 3:20 PM

Analyte	Initial Calibration Blank(ug/L)	Continuing Calibration Blank (ug/L) CCB1 1	CCB2 2	CCB3 3
Mercury	-.004	.006	.021	.001

KEMRON ENVIRONMENTAL SERVICE
FORM 3 - BLANKS

INSTRUMENT: PS202
METHOD: 7470
ANALYST: KHR
DATE: 5/1/03

UNITS: ug/L

ICB Time: 2:03 PM
CCB1 Time: 3:34 PM
CCB2 Time: 3:38 PM
CCB3 Time:

Analyte	Initial Calibration Blank(ug/L)	Continuing Calibration Blank (ug/L) CCB1 1	CCB2 2	CCB3 3
Mercury	-.004	-.012	.015	

*** Standard: 1 Rep: 1 Seq: 846 13:51:17 01 May 2003 HG

Hg .000 ppb 455

*** Standard: 2 Rep: 1 Seq: 847 13:52:27 01 May 2003 HG

Hg .200 ppb 11801

*** Standard: 3 Rep: 1 Seq: 848 13:53:39 01 May 2003 HG

Hg 1.00 ppb 46092

*** Standard: 4 Rep: 1 Seq: 849 13:54:49 01 May 2003 HG

Hg 2.00 ppb 88578

*** Standard: 5 Rep: 1 Seq: 850 13:56:05 01 May 2003 HG

Hg 5.00 ppb 231444

*** Standard: 6 Rep: 1 Seq: 851 13:57:26 01 May 2003 HG

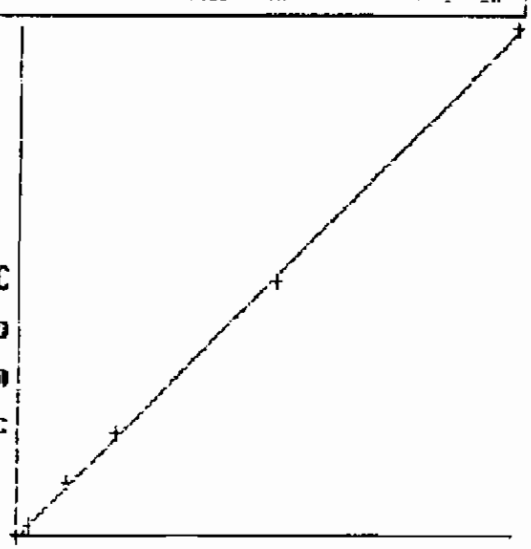
Hg 10.0 ppb 443636

RunProt: CLP2 Hg analysis in the ppb range
RunFold: 041503 Seq: 052 Batch:
Prnt: R/T On Pump: On
Rev: 4.2 13:50:00 01 May 2003 Xmit: Off Gas: 0.70 LPM
State: Idle User: KHK A/S: On

CALIBRATION: Line proto: CLP2

	Hg Conc.	Calc.	Dev.	Accepted ->linear
S1	.000	-.038	-.038	Quadratic
S2	.200	.216	.016	Wtdlinear
S3	1.00	.989	-.011	
S4	2.00	1.94	-.056	Accept
S5	5.00	5.16	.157	
S6	10.0	9.93	-.070	

A .0000000 r .995768
B 2.24906e-5 C -4.79053e-2



	Mean		
S1	455	0 SD	455
S2	11001	0 %RSD	11001
S3	46032	0 %RSD	46032
S4	88578	0 %RSD	88578
S5	231444	0 %RSD	231444
S6	443636	0 %RSD	443636

New cal coefficients stored

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-----------------------------------------------------------------------------

*** Check Standard: 2  Ck2ICV        Seq:  852     13:59:57 01 May 2003 HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          107.     2.15    2.00   ppb        .000  %

*** Check Standard: 3  Ck3ICB        Seq:  853     14:01:39 01 May 2003 HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg         -1.77    -.004    .200   ppb        .000  %

*** Check Standard: 2  Ck2CCV        Seq:  854     14:03:08 01 May 2003 HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          107.     2.14    2.00   ppb        .000  %

*** Check Standard: 3  Ck3CCB        Seq:  855     14:04:17 01 May 2003 HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg         -6.53    -.013    .200   ppb        .000  %

*** Sample ID: WG13944303            Seq:  856    14:05:35 01 May 2003 HG
                              PBW J1
Hg    .009    ppb       .000  %   .009

*** Sample ID: WG13944304            Seq:  857    14:06:45 01 May 2003 HG
                              LCSW J1
Hg    3.88    ppb       .000  %   3.88

*** Sample ID: L030441903            Seq:  858    14:07:55 01 May 2003 HG

Hg    .042    ppb       .000  %   .042

*** Sample ID: PS03 0.9              Seq:  859    14:09:02 01 May 2003 HG

Hg    1.17    ppb       .000  %   1.17

*** Sample ID: L030441904            Seq:  860    14:10:10 01 May 2003 HG

Hg    .631    ppb       .000  %   .631

*** Sample ID: L030450001            Seq:  861    14:11:35 01 May 2003 HG

Hg    .040    ppb       .000  %   .040

*** Sample ID: MS01                  Seq:  862    14:12:42 01 May 2003 HG

Hg    3.79    ppb       .000  %   3.79

*** Sample ID: TC BLK                Seq:  863    14:14:09 01 May 2003 HG
                              4/28
Hg    .010    ppb       .000  %   .010
```

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-----------------------------------------------------------------------------

*** Sample ID: L030450002            Seq:  864    14:15:20 01 May 2003 HG

Hg   -.011    ppb       .000  %  -.011

*** Sample ID: L030450103            Seq:  865    14:16:40 01 May 2003 HG

Hg   -.007    ppb       .000  %  -.007

*** Check Standard: 2  CK2CCV        Seq:  866    14:17:48 01 May 2003 HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          105.     2.10    2.00  ppb         .000  %

*** Check Standard: 3  CK3CCB        Seq:  867    14:18:57 01 May 2003 HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg         -12.8    -.026    .200  ppb         .000  %

*** Sample ID: WG13944301            Seq:  868    14:20:05 01 May 2003 HG
                            L030450104
Hg    .016    ppb       .000  %   .016

*** Sample ID: WG13944305            Seq:  869    14:21:10 01 May 2003 HG
                            L030450104S
Hg    4.45    ppb       .000  %   4.45

*** Sample ID: WG13944306            Seq:  870    14:22:19 01 May 2003 HG
                            L030450104SD
Hg    4.48    ppb       .000  %   4.48

*** Sample ID: L030450105            Seq:  871    14:23:33 01 May 2003 HG

Hg    .009    ppb       .000  %   .009

*** Sample ID: L030454302            Seq:  872    14:24:38 01 May 2003 HG

Hg    .005    ppb       .000  %   .005

*** Sample ID: L030454304            Seq:  873    14:25:44 01 May 2003 HG

Hg    .005    ppb       .000  %   .005

*** Sample ID: WG13944302            Seq:  874    14:26:49 01 May 2003 HG
                            L030454305
Hg    .022    ppb       .000  %   .022

*** Sample ID: WG13944307            Seq:  875    14:27:56 01 May 2003 HG
                            L030454305DP
Hg   -.017    ppb       .000  %  -.017
```

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-----------------------------------------------------------------------------

*** Sample ID: L030454307            Seq:  876    14:29:05 01 May 2003 HG

Hg    .002    ppb       .000  %   .002

*** Sample ID: L030454308            Seq:  877    14:30:10 01 May 2003 HG

Hg    .005    ppb       .000  %   .005

*** Check Standard: 2  Ck2CCV        Seq:  878    14:31:22 01 May 2003 HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          108.     2.15    2.00  ppb         .000  %

*** Check Standard: 3  Ck3CCB        Seq:  879    14:32:31 01 May 2003 HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg         -8.30    -.017    .200  ppb         .000  %

*** Sample ID: L030455401            Seq:  880    14:33:39 01 May 2003 HG

Hg   -.004    ppb       .000  %  -.004

*** Sample ID: L030459403            Seq:  881    14:34:55 01 May 2003 HG

Hg   -.002    ppb       .000  %  -.002

*** Sample ID: PS03 0.9              Seq:  882    14:36:23 01 May 2003 HG

Hg    1.12    ppb       .000  %   1.12

*** Sample ID: MS03                  Seq:  883    14:37:39 01 May 2003 HG

Hg    4.47    ppb       .000  %   4.47

*** Sample ID: 0441903PS             Seq:  884    14:40:03 01 May 2003 HG
                            0.9 RR
Hg    1.19    ppb       .000  %   1.19

*** Sample ID: 0441904PS             Seq:  885    14:46:39 01 May 2003 HG
                            0.9
Hg    1.44    ppb       .000  %   1.44

*** Sample ID: 0450001PS             Seq:  886    14:47:45 01 May 2003 HG
                            0.9
Hg    1.09    ppb       .000  %   1.09

*** Check Standard: 2  Ck2CCV        Seq:  887    14:49:13 01 May 2003 HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          107.     2.15    2.00  ppb         .000  %
```

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-----------------------------------------------------------------------------

*** Check Standard: 3  Ck3CCB        Seq:  888     15:02:03 01 May 2003 HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          2.82     .006    .200  ppb         .000  %

*** Check Standard: 2  Ck2CCV        Seq:  889     15:03:53 01 May 2003 HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          107.     2.13    2.00  ppb         .000  %

*** Check Standard: 3  Ck3CCB        Seq:  890     15:05:06 01 May 2003 HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          10.7     .021    .200  ppb         .000  %

*** Sample ID: WG13944403            Seq:  891     15:06:33 01 May 2003 HG
                            PBW A1
Hg    .008    ppb       .000  %   .008

*** Sample ID: WG13944404            Seq:  892     15:07:39 01 May 2003 HG
                            LCSW A1
Hg    4.41    ppb       .000  %   4.41

*** Sample ID: WG13944402            Seq:  893     15:09:13 01 May 2003 HG
                            L030442001
Hg    .024    ppb       .000  %   .024

*** Sample ID: WG13944407            Seq:  894     15:10:21 01 May 2003 HG
                            L030442001DP
Hg   -.013    ppb       .000  %  -.013

*** Sample ID: L030442002            Seq:  895     15:11:36 01 May 2003 HG

Hg   -.005    ppb       .000  %  -.005

*** Sample ID: L030445902            Seq:  896     15:12:52 01 May 2003 HG

Hg    .021    ppb       .000  %   .021

*** Sample ID: L030445903            Seq:  897     15:14:29 01 May 2003 HG

Hg    .023    ppb       .000  %   .023

*** Sample ID: L030445904            Seq:  898     15:15:45 01 May 2003 HG

Hg    .005    ppb       .000  %   .005

*** Sample ID: L030445905            Seq:  899     15:16:52 01 May 2003 HG

Hg    .021    ppb       .000  %   .021
```

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-----------------------------------------------------------------------------

*** Sample ID: WG13944401            Seq:  900    15:18:03 01 May 2003 HG
                            L030445906
Hg    .009    ppb       .000  %   .009

*** Check Standard: 2  Ck2CCV        Seq:  901    15:19:11 01 May 2003 HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          108.     2.15    2.00  ppb         .000  %

*** Check Standard: 3  Ck3CCB        Seq:  902    15:20:24 01 May 2003 HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          .416     .001    .200  ppb         .000  %

*** Sample ID: WG13944405            Seq:  903    15:21:33 01 May 2003 HG
                            L030445907S
Hg    4.52    ppb       .000  %   4.52

*** Sample ID: WG13944406            Seq:  904    15:22:40 01 May 2003 HG
                            L030445908SD
Hg    4.56    ppb       .000  %   4.56

*** Sample ID: L030445909            Seq:  905    15:23:57 01 May 2003 HG

Hg   -.036    ppb       .000  %  -.036

*** Sample ID: L030445910            Seq:  906    15:25:15 01 May 2003 HG

Hg    .019    ppb       .000  %   .019

*** Sample ID: L030450601            Seq:  907    15:26:19 01 May 2003 HG

Hg   -.011    ppb       .000  %  -.011

*** Sample ID: PS01 0.9              Seq:  908    15:27:28 01 May 2003 HG

Hg    1.06    ppb       .000  %   1.06

*** Sample ID: L030450603            Seq:  909    15:28:33 01 May 2003 HG

Hg    .021    ppb       .000  %   .021

*** Sample ID: L030450604            Seq:  910    15:29:58 01 May 2003 HG

Hg    .011    ppb       .000  %   .011

*** Sample ID: L030450606            Seq:  911    15:31:33 01 May 2003 HG

Hg    .016    ppb       .000  %   .016
```

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-----------------------------------------------------------------------------

*** Sample ID: L030450608            Seq:  912    15:32:39 01 May 2003 HG

Hg     .026    ppb       .000  %   .026

*** Check Standard: 2  Ck2CCV        Seq:  913    15:33:47 01 May 2003 HG
Line   Flag  %Rcv.   Found    True  Units      SD/RSD
Hg           108.     2.16    2.00   ppb        .000  %

*** Check Standard: 3  Ck3CCB        Seq:  914    15:34:55 01 May 2003 HG
Line   Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          -5.94    -.012    .200   ppb        .000  %

*** Sample ID: L030450611            Seq:  915    15:36:07 01 May 2003 HG

Hg     .028    ppb       .000  %   .028

*** Check Standard: 2  Ck2CCV        Seq:  916    15:37:13 01 May 2003 HG
Line   Flag  %Rcv.   Found    True  Units      SD/RSD
Hg           107.     2.14    2.00   ppb        .000  %

*** Check Standard: 3  Ck3CCB        Seq:  917    15:38:20 01 May 2003 HG
Line   Flag  %Rcv.   Found    True  Units      SD/RSD
Hg           7.50     .015    .200   ppb        .000  %

*** Sample ID: L030441903            Seq:  918    15:42:02 01 May 2003 HG
                                0.5
Hg     .030    ppb       .000  %   .030

*** Sample ID: 03 + 1PPB             Seq:  919    15:43:12 01 May 2003 HG

Hg     1.17    ppb       .000  %   1.17

*** Sample ID: 03 + 2PPB             Seq:  920    15:44:18 01 May 2003 HG

Hg     2.28    ppb       .000  %   2.28

*** Sample ID: 03 + 3PPB             Seq:  921    15:45:29 01 May 2003 HG

Hg     3.35    ppb       .000  %   3.35

*** Check Standard: 2  Ck2CCV        Seq:  922    15:49:23 01 May 2003 HG
Line   Flag  %Rcv.   Found    True  Units      SD/RSD
Hg           109.     2.17    2.00   ppb        .000  %

*** Check Standard: 3  Ck3CCB        Seq:  923    15:50:43 01 May 2003 HG
Line   Flag  %Rcv.   Found    True  Units      SD/RSD
Hg           1.14     .002    .200   ppb        .000  %
```

R = 0.9999
b = 0.047
[Hg] = ND

Metals

Date: 5/02/03
Analyst: MMB
Method: 7470A
Instrument: PS202
Work Group: WG139660, WG139661

	Analyst
Calibration/Linearity	✓
ICV/CCV	✓
ICB/CCB	✓
icsa/icsab/cri	NA
Blank/LCS	✓
MS/MSD	✓
Postspike/Serial Dilution	✓
Duplicate	✓
Record Results	✓
Excel Spreadsheets	✓
Results Reporting / Data Qualifiers	
Calculations & Correct Factors	
Reanalysis Assign	
Instrument Failure/Reassign	
Case Narrative	
QA Approval - Seedpak 3	
Check for Completeness	
Level IV Data	04-485
	04-585
	04-594

5/2

WG139662

Primary Reviewer Initials & Date Checked MMB 5/02/03

Secondary Reviewer Initials & Date Checked KM 5/5/03

✓ • Check for compliance with Method and project-specific requirements
✓ • Check the completeness of the reported information
NA • Check the information for the report narrative
✓ • Check the reasonableness of results

Supervisory Review Initials & Date Checked MB 5/5/03

Comments:

✓ - Checked & OK
NA - Not Applicable
DL - Diluted Out

KEMRON ENVIRONMENTAL SERVICES
MERCURY RUN LOGBOOK

ANALYST MMB DATE 05/02/03 TIME 0950
METHOD # 7470A SOP # ME404 REV. # 6 WORK GROUP # 139660, 139661
CAL STD SOURCE DS50055-31 ICV/CCV SOURCE DS50055-32
POST SPK SOURCE DS50055-31 (10ppb std)

Cup #	Sample No.	Dil	Prep Conc	Autosampler Runs	Cup #	Sample No.	Dil	Prep Conc	Autosampler Runs
	S0				27.	02			02
	S0.2				28.	02 MS	0.5		
	S1.0				29.	02dup			CCV/CCB/07
	S2.0				30.				
	S5.0				31.				
	S10				32.				
	ICV X2				33.				
	ICB			CCV/CCB	34.				
1.	PBW 02			WB139541C3	35.				
2.	LCSW 02			04	36.				
3.	0458501				37.				
4.	02				38.				
5.	02 MS	0.5			39.				
6.	03				40.				
7.	04			01	41.				
8.	05 MS			05	42.				
9.	06 MSD			06	43.				
10.	07			CCV/CCB	44.				
11.	08				45.				
12.	09				46.				
13.	10				47.				
14.	0459401				48.				
15.	02				49.				
16.	0448502				50.				
17.	03				51.				
18.	04				52.				
19.	05				53.				
20.	06			CCV/CCB 02	54.				
21.	06dup			07	55.				
22.	PBW 01			WB139C003	56.				
23.	LCSW 01			04	57.				
24.	0441901			01	58.				
25.	01 MS			05	59.				
26.	01 MSD			06	60.				

MMB 05/02/03

Comments:

Note: No entry for Dil represents 1X Dilution

Autosampler Run Key:

CCV - Continuing Calibration Verification
CCB = Continuing Calibration Blank
% D = Automatic Instrument Rerun due to % RSD > 20%
FRS = Full Recalibration Sequence

ID = Automatic Instrument Dilution
R = Analyst Rerun
BLK = Blank Rerun

Reviewed By: KM 5/5/03

INORGANIC ANALYSES DATA SHEET
INITIAL MULTIPOINT CALIBRATION

Analytical Method: 7470 AAB#:

Lab Name: KEMRON ENVIRONMENTAL SERVICES Contract #:

Date of Initial Calibration: 2-May-03 Initial Calibration ID:

Instrument ID: PS202 Concentration Units (mg/L or mg/kg dry weight): ug/L

Analyte	Std 1	RF 1	Std 2	RF 2	Std 3	RF 3	Std 4	RF 4	Std 5	RF 5	Std 6	RF 6	r	Q
Mercury	0.00	4472	0.20	9703	1.00	38544	2.0	76479	5.0	191424	10.0	370758	0.99990	

r = correlation coefficient

Comments:

Forms by ChemSW(707)864-0845:v1.0;12/1/97

AFCEE FORM I-3B

KEMRON ENVIRONMENTAL SERVICES
FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

INSTRUMENT: PS202
METHOD: 7470
ANALYST: Mmb
DATE: 5/2/03

UNITS: ug/L

ICV Time: 10:01 AM
CCV1 Time: 10:05 AM
CCV2 Time: 10:19 AM

	Initial Calibration Verification			Continuing Calibration Verification CCV1			CCV2		Q
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Mercury	2	2.19	109.5	2	2.22	111.0	2.22	111.0	

(1) Control Limits: 80-120%

KEMRON ENVIRONMENTAL SERVICES
FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

INSTRUMENT: PS202
METHOD: 7470
ANALYST: Mmb
DATE: 5/2/03

UNITS: ug/L

ICV Time: 10:01 AM
CCV1 Time: 10:33 AM
CCV2 Time:

	Initial Calibration Verification			Continuing Calibration Verification CCV1			CCV2		Q
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Mercury	2	2.19	109.5	2	2.18	109.0			

(1) Control Limits: 80-120%

KEMRON ENVIRONMENTAL SERVICE
FORM 3 - BLANKS

INSTRUMENT: PS202
METHOD: 7470
ANALYST: MMB
DATE: 5/2/03

UNITS: ug/L

ICB Time: 10:02 AM
CCB1 Time: 10:06 AM
CCB2 Time: 10:20 AM
CCB3 Time: 10:34 AM

Analyte	Initial Calibration Blank(ug/L)	Continuing Calibration Blank (ug/L) CCB1 1	CCB2 2	CCB3 3
Mercury	-.087	-.049	-.103	-.086

*** Standard: 1 Rep: 1 Seq: 972 09:48:22 02 May 2003 HG

Hg .000 ppb 2046

reset sequence and rerun MMB 05/02/03

*** Standard: 1 Rep: 1 Seq: 0 09:50:37 02 May 2003 HG

Hg .000 ppb 4472

*** Standard: 2 Rep: 1 Seq: 1 09:52:03 02 May 2003 HG

Hg .200 ppb 9703

*** Standard: 3 Rep: 1 Seq: 2 09:53:23 02 May 2003 HG

Hg 1.00 ppb 38544

*** Standard: 4 Rep: 1 Seq: 3 09:54:35 02 May 2003 HG

Hg 2.00 ppb 76479

*** Standard: 5 Rep: 1 Seq: 4 09:56:00 02 May 2003 HG

Hg 5.00 ppb 191424

*** Standard: 6 Rep: 1 Seq: 5 09:57:11 02 May 2003 HG

Hg 10.0 ppb 370758

*** Check Standard: 2 Ck2 ICV Seq: 6 09:59:12 02 May 2003 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg	L	-7.12	2.142	2.00	ppb	.000 %

cup was not loaded MMB 05/02/03

*** Check Standard: 2 Ck2 ICV Seq: 7 10:01:30 02 May 2003 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		109.	2.19	2.00	ppb	.000 %

*** Check Standard: 3 Ck3 ICB Seq: 8 10:02:51 02 May 2003 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		-43.7	-.087	.200	ppb	.000 %

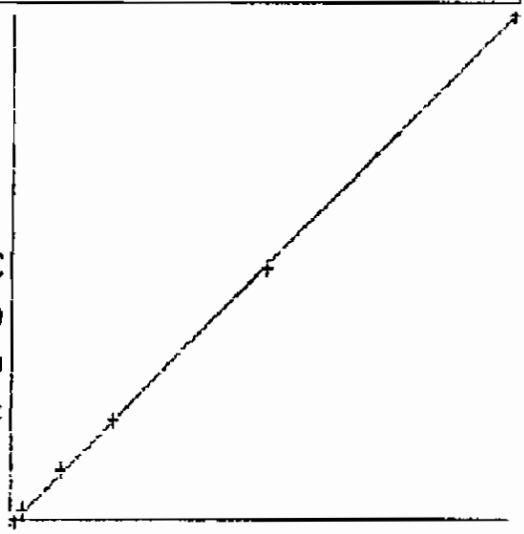
```
RunProt: CLP2        Hg analysis in the ppb range
RunFold: 050203   Seq: 9    Batch:
                  Prnt: R/T On                    Pump: On
                  Rev: 4.2    10:03:12 02 May 2003 Xwait: Off Gas:     0.70 LPM
State: Idle                                        User: MMB          A/S: On
```

CALIBRATION: Line proto: CLP2

	Hg Conc.	Calc.	Dev.	Accepted ->linear	
S1	.000	.032	.032	Quadratic	
S2	.200	.174	-.026	Utilinear	
S3	1.00	.955	-.045		C
S4	2.00	1.98	-.017	Accept	o
S5	5.00	5.10	.098		n
S6	10.0	9.96	-.042		c

A .0000000 r .999897

B 2.70986e-5 C -8.92331e-2



Relative Absorbance

	Mean		
S1	4472	0 SD	4472
S2	9703	0 %RSD	9703
S3	30544	0 %RSD	30544
S4	76479	0 %RSD	76479
S5	191424	0 %RSD	191424
S6	378758	0 %RSD	378758

For help on <hotkey> press Shift <hotkey>

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-----------------------------------------------------------------------------

*** Check Standard: 2  Ck2CCV        Seq:  9       10:05:21 02 May 2003 HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          111.     2.22    2.00   ppb        .000  %

*** Check Standard: 3  Ck3CCB        Seq:  10      10:06:52 02 May 2003 HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg         -24.3    -.049    .200   ppb        .000  %

*** Sample ID: WG13954103            Seq:  11      10:07:59 02 May 2003 HG
                              PBW B2
Hg   -.028    ppb       .000  %  -.028

*** Sample ID: WG13954104            Seq:  12      10:09:04 02 May 2003 HG
                             LCSW B2
Hg    4.47    ppb       .000  %   4.47

*** Sample ID: L030458501            Seq:  13      10:10:10 02 May 2003 HG

Hg   -.078    ppb       .000  %  -.078

*** Sample ID: L030458502            Seq:  14      10:11:16 02 May 2003 HG

Hg   -.007    ppb       .000  %  -.007

*** Sample ID: 02PS 0.9              Seq:  15      10:12:31 02 May 2003 HG

Hg    1.03    ppb       .000  %   1.03

*** Sample ID: L030458503            Seq:  16      10:13:39 02 May 2003 HG

Hg   -.051    ppb       .000  %  -.051

*** Sample ID: WG13954101            Seq:  17      10:14:46 02 May 2003 HG
                            0458504
Hg   -.039    ppb       .000  %  -.039

*** Sample ID: WG13954105            Seq:  18      10:16:02 02 May 2003 HG
                          0458505MS
Hg    4.71    ppb       .000  %   4.71

*** Sample ID: WG13954106            Seq:  19      10:17:10 02 May 2003 HG
                         0458506MSD
Hg    4.48    ppb       .000  %   4.48

*** Sample ID: L030458507            Seq:  20      10:18:17 02 May 2003 HG

Hg   -.107    ppb       .000  %  -.107
```

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-----------------------------------------------------------------------------

*** Check Standard: 2  Ck2CCV        Seq:  21      10:19:26 02 May 2003 HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          111.     2.22    2.00  ppb         .000  %

*** Check Standard: 3  Ck3CCB        Seq:  22      10:20:36 02 May 2003 HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg         -51.3    -.103    .200  ppb         .000  %

*** Sample ID: L030458508            Seq:  23      10:21:54 02 May 2003 HG

Hg   -.075    ppb       .000  %  -.075

*** Sample ID: L030458509            Seq:  24      10:23:02 02 May 2003 HG

Hg   -.060    ppb       .000  %  -.060

*** Sample ID: L030458510            Seq:  25      10:24:28 02 May 2003 HG

Hg   -.076    ppb       .000  %  -.076

*** Sample ID: L030459401            Seq:  26      10:25:34 02 May 2003 HG

Hg   -.044    ppb       .000  %  -.044

*** Sample ID: L030459402            Seq:  27      10:26:40 02 May 2003 HG

Hg    .941    ppb       .000  %   .941

*** Sample ID: L030448502            Seq:  28      10:27:46 02 May 2003 HG

Hg   -.061    ppb       .000  %  -.061

*** Sample ID: L030448503            Seq:  29      10:28:51 02 May 2003 HG

Hg   -.027    ppb       .000  %  -.027

*** Sample ID: L030448504            Seq:  30      10:29:57 02 May 2003 HG

Hg   -.047    ppb       .000  %  -.047

*** Sample ID: L030448505            Seq:  31      10:31:03 02 May 2003 HG

Hg   -.036    ppb       .000  %  -.036

*** Sample ID: WG13954102            Seq:  32      10:32:13 02 May 2003 HG
                            0448506
Hg   -.040    ppb       .000  %  -.040
```

Line Conc. Units SD/RSD 1 2 3 4 5

*** Check Standard: 2 Ck2CCV Seq: 33 10:33:20 02 May 2003 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		109.	2.18	2.00	ppb	.000 %

*** Check Standard: 3 Ck3CCB Seq: 34 10:34:38 02 May 2003 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		-43.1	-.086	.200	ppb	.000 %

*** Sample ID: WG13954107 Seq: 35 10:35:48 02 May 2003 HG
06DUP
Hg -.049 ppb .000 % -.049

*** Sample ID: WG13950003 Seq: 36 10:36:55 02 May 2003 HG
PBW 01
Hg -.128 ppb .000 % -.128

*** Sample ID: WG13950004 Seq: 37 10:38:01 02 May 2003 HG
LCSW 01
Hg 4.47 ppb .000 % 4.47

*** Sample ID: WG13950001 Seq: 38 10:39:10 02 May 2003 HG
0441901
Hg -.084 ppb .000 % -.084

*** Sample ID: WG13950005 Seq: 39 10:40:16 02 May 2003 HG
01MS
Hg 3.81 ppb .000 % 3.81

*** Sample ID: WG13950006 Seq: 40 10:41:25 02 May 2003 HG
01MSD
Hg 3.24 ppb .000 % 3.24

*** Sample ID: WG13950002 Seq: 41 10:42:37 02 May 2003 HG
0441902
Hg .030 ppb .000 % .030

*** Sample ID: 02PS 0.9 Seq: 42 10:43:54 02 May 2003 HG

Hg 1.11 ppb .000 % 1.11

*** Sample ID: WG13950007 Seq: 43 10:45:03 02 May 2003 HG
02DUP
Hg .054 ppb .000 % .054

*** Check Standard: 2 Ck2CCV Seq: 44 10:46:12 02 May 2003 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		109.	2.17	2.00	ppb	.000 %

Mercury Digestion Log

Volume No. 100
Page 13

Analyst(s): TLT
Date: 4-30-03 @ 9:00
LCS: 2ml D5500 55-25
MS/MSD: 2ml D5500 55-25
Witness: VC
H_2SO_4 Lot #: 91C
K_2SO_4 Lot #: PM 77
$KMNO_4$ Lot #: PS 57
HNO_3 Lot #: 1035
Earliest Sample Due Date: 5/1/03
ICV / CCV: D5500 55-28
Stds: 0, 0.2, 1, 2, 5, 10: D5500 55 27

Box: J1

Digestion Work Group: WG 139443

Analytical Work Group: WG

ME404 Revision # 6 - Method 7470A-Water [X]
ME405 Revision # ____ - Method 7471A-Soil

A Bath 2 Temperature @ start: 90°C @ 9:30
A Bath 2 Temperature @ end: 96°C 11:30
B Bath 2 Temperature @ start: 92°C @ 11:40
B Bath 2 Temperature @ end: 97°C @ 13:40
Pressure & Time: ——

*NOTE: All Hg standards are digested

	KEMRON #	Initial Wt/Vol	Final Volume	Comments	Due Date	Bath #
1	PBW	50ml	50ml	WG 139443 -03		2A
2	LCSW			-04		
3	04-419-03				5/2	
4	-04					
5	500 -01	1ml			5/1	
6	-01MS					
7	TC BLK 4-28	50ml				
8	04-500-02	5ml			5/1	
9	501-03				5/1	
10	-04			-01		
11	-04 ms			-05		
12	-04 msD			-06		
13	-05					
14	543 -02				5/2	
15	-04					
16	-05			-02		
17	-05dup			-07		2B
18	-07					
19	-08					
20	~~544 -01~~		TLT 5/2/03		5/1	
21	544 -03				5/1	
22	-03 ms					
23						
24						
25						

Comments: ——

Peer Review By: Vicki Colby 4/30 Supervisor Review: ____

Analyst(s): TLT
Date: 4-5-1-03@12:00
LCS: 2ml DS50055-29
MS/MSD: 2ml DS50055-29
Witness:
H_2SO_4 Lot #: 510
K_2SO_4 Lot #: P557
$KMNO_4$ Lot #: PM77
HNO_3 Lot #: N35
Earliest Sample Due Date: 5/5
ICV / CCV: DS50055-32
Stds: 0, 0.2, 1, 2, 5, 10: DS50055-31

Box: B2

Digestion Work Group: WG 139541

Analytical Work Group: WG

ME404 Revision # 6 - Method 7470A-Water
ME405 Revision # ___ - Method 7471A-Soil

A { Bath2 Temperature @ start: 93°C@12:45
Bath2 Temperature @ end: 97°C@14:45
B { Bath 2 Temperature @ start: 91°C@14:50
Bath 2 Temperature @ end: 96°C@16:50
Pressure & Time:

*NOTE: All Hg standards are digested

	KEMRON #	Initial Wt/Vol	Final Volume	Comments	Due Date	Bath #
1	PBW	50ml	50ml	WG139541-03		2A
2	LCSW			-04		
3	04-585-01				5/5	
4	-02					
5	-03					
6	-04			-01		
7	-05MS			-05		
8	-06MSD			-06		
9	-07					
10	-08					
11	-09					
12	-10					
13	594-01					
14	-02					
15	485-02					
16	-03					
17	-04					2B
18	-05					
19	-06			-02		
20	-06dup			-07		
21						
22						
23						
24						
25						

Comments: [redacted]

Peer Review By: [illegible] Supervisor Review:

2.3.3.4 Sample Calculations

Example Cold Vapor Mercury Calculations
Leeman PS202 Mercury Analyzer

1.0 Initial Calibration (ICAL) Parameters

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

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

Cx = [Cs] [(Vf / Vi)] [D]

	Example:
Where:	
Cs = Concentration computed by the data system (ug/L)	0.1
Vf = Diluted To Volume (mL)	50
Vi = Aliquot Volume (mL)	40
D = Manual dilution factor, if required (10X = 10)	1
Cx = Concentration of element in ppb (ug/L)	0.125

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

Cx = [Cs] [(Vf / Ws)] [D]

	Example:
Where:	
Cs = Concentration computed by the data system (ug/L)	0.1
Vf = Diluted To Volume (mL)	50
Ws = Aliquot weight (g)	0.5
D = Manual dilution factor	1
Cx = Concentration of element in ug/kg	10

4.0 Adjusting the concentration to dry weight:

Cdry = [(Cx)(100)] / Px

Where:		
Cx = Concentration calculated as received (wet basis):		10
Px = Percent solids of sample (%wt)		80
	C(ug/kg)	**12.5**

12.5 ug/kg = 0.0125 mg/kg

2.4 General Chemistry Data

REPORT NARRATIVE
GENERAL CHEMISTRY

KEMRON Login No: L0304594

METHOD

Analysis: See report for method reference.

HOLDING TIMES

Sample Preparation: All holding times were met.
Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.
Laboratory Control Sample: All acceptance criteria were met.
Duplicates: All acceptance criteria were met
Matrix Spikes: All acceptance criteria were met.

SAMPLES

There were no technical difficulties with this sample group

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: dih__ REVIEWED: dih DATE: 5/3/03

Rev. 6/00

GENERAL CHEMISTRY - CYANIDE DATA

Login Number: L0304594

A. QC Summary

✓ Batch QC Summary Form(s)

B. Raw Data

✓ Cover Page
✓ Analysis Benchsheet
✓ Calculation Spreadsheet
✓ Calibration Data
✓ Example Calculation
(at end of package)

Checked By: dlh **Date:** 5/3/03

A. QC SUMMARY

KEMRON ENVIRONMENTAL SERVICES
OHIO VALLEY LABORATORY
QUALITY CONTROL SUMMARY

WORKGROUP: WG130649
METHOD: 335.4/9010
MATRIX: water
UNITS: mg/L

RUN DATE: 5/2/00
ANALYST: DLN
DUPLICATE: 04-036-01
SPIKE: 04-036-02

ANALYTE	MDL	Blank	CONCENTRATION PPM T-LCS	LCS	REP1	REP2	SAMPLE RESULT	T-MS	MS	PERCENT RECOVERY LCS	LCS LCL	LCS UCL	MS	MS LCL	MS UCL	PERCENT RPD REP RPD	RPD UCL
Cyanide	0.0050	ND	0.44	0.438	3.50	3.29	0.22	0.22	0.445	99.03	90.00	110.00	101.58	83.00	107.00	6.15	15.00

NOTES & DEFINITIONS
RDL = REPORTING DETECTION LIMIT
DL = DILUTED OUT
NA = NOT APPLICABLE
ND = NOT DETECTED
NR = NOT REQUIRED
J = RDL > BLANK >= BLANK
LA = LAB ACCIDENT

LCS = LABORATORY CONTROL SAMPLE
T- LCS = TRUE VALUE OF LCS
REP1 = UNSPIKED SAMPLE REPLICATE 1
REP2 = UNSPIKED SAMPLE REPLICATE 2
SAMPLE RESULT = CONCENTRATION OF UNSPIKED MATRIX
T-MS = TRUE VALUE OF MATRIX SPIKE
MS = MATRIX SPIKE
LCL = LOWER CONTROL LIMIT
UCL = UPPER CONTROL LIMIT

REP RPD = RELATIVE PERCENT DIFFERENCE OF SAMPLE REPLICATES

B. RAW DATA

Wet Lab

Parameter: CN
Analyst/Date/Time: DLN 5/2/03@1100
SOP: K-3354 Revision: 8
Work Group(s): 139649
Preservation Check: Yes ____ No ✓

	Analyst	
Calibration/Linearity	✓	Date: 2/18/03
Second Source Check		
ICV/CCV (std)	✓	
ICB/CCB		
Blank	✓	
LCS	✓	
MS/MSD	✓	
Duplicate	✓	
Record On ACS Benchsheet	✓ dln	
Data Upload	✓	
EXCEL QC Sheet	✓	
QC Violation Sheet		
Signed Raw Data	✓	
STD/LCS On Benchsheet	✓	

Primary Reviewer Initials & Date Checked DLN 5/2/03

Secondary Reviewer Initials & Date Checked dlh 5/2/03

✓ • Check for compliance with Method and project-specific requirements
✓ • Check the completeness of the reported information
✓ • Check the information for the report narrative
✓ • Check the reasonableness of results

Supervisory Review Initials & Date Checked dlh 5/2/03

Comments:

√ - Checked & OK
NA - Not Applicable
DL - Diluted Out

Workgroup: 139649

Spec: #1 (UV-0120-02) or #2 (UV-120-IV) (circle)

Matrix: (Liquid) Soil
(mg/L) (mg/Kg)

Method EPA 335.2 / 335.4 / 9010B / 9014
SOP #: K3354 Revision 8

CCV(Cal STDs): CS-03-35-10 TRUE VALUE: 1120
Daily dilution: 5(1120)/250 = 22.4
10(22.4)/100 = 2.24
5(2.24)/50 = 0.224
1(2.24)/50 = 0.0448

LCS STOCK: CS-03-48-01A TRUE VALUE: 1104
Daily dilution: 5(1104)/250 = 22.08
10(22.08)/100 = 2.21
10(2.21)/50 = 0.442
1(2.21)/50 = 0.0442

SPIKE: (daily dilution) 5(2.21)/50 = 0.221
(same stock as LCS)

curve reference: C60006 p34
(2/18/03)

Sample	Volume mL/grams	pH>12	Sulfide Presence	Dilution	Cell Size (cm)	Apparatus	Absorbance λ = 578 nm
CCV (high): 0.224 ppm	50mL	Yes	No	1	1	NA	0.349
CCV (low): 0.0448 ppm					5		0.348
Blank							0.005
LCS: 0.0442 ppm							0.350
LCS: 0.442 ppm					1		0.691
04-638-01				1/10			0.553
02				1			0.348
04-594-01					5		0.112
02					5		0.013
04-025-01				1/10	1		0.525
02				1	1		0.320
04-616-01 wd					5		0.200
04 wd							0.120
07 wd							0.096
04-690-01							0.010
03							0.006
05							0.006
07							0.015
09							0.008
11							0.005
Duplicate: 638-01				1/10	1		0.520
MS: (0.22 ppm) 638-02				1			0.703
MSD: (ppm)							
CCV high: 0.224 ppm)							0.347
CCV (low): 0.0448 ppm)					5		0.353

ANALYST: Deanna Norton DATE/TIME: 5/2/03 @ 1100

APPROVAL: dlh 5/2/03

KEMRON ENVIRONMENTAL SERVICES
SAMPLE REPORT

Workgroup: WG139649 **Analyst:** DLN
Analyte: CYANIDE **Date:** 05/02/2003

Sample ID	Int Vol	Fnl Vol	Response	Slope	Y Intercept	Anal. Conc.	Rep. Conc.	Dil	Units
WG139649-03	50	50	0.00500	8.357	-0.001544	0.00078308	0.00078308	1	mg/L
WG139649-04	50	50	0.350	8.357	-0.001544	0.042065	0.042065	1	mg/L
WG139649-05	50	50	0.691	1.580	-0.0004887	0.43773	0.43773	1	mg/L
L0304638-01	50	50	0.553	1.580	-0.0004887	0.35038	3.5038	10	mg/L
WG139649-01	50	50	0.553	1.580	-0.0004887	0.35038	3.5038	10	mg/L
L0304638-02	50	50	0.348	1.580	-0.0004887	0.22060	0.22060	1	mg/L
WG139649-02	50	50	0.348	1.580	-0.0004887	0.22060	0.22060	1	mg/L
L0304594-01	50	50	0.112	8.357	-0.001544	0.013586	0.013586	1	mg/L
L0304594-02	50	50	0.0130	8.357	-0.001544	0.0017403	ND	1	mg/L
L0305025-01	50	50	0.525	1.580	-0.0004887	0.33265	3.3265	10	mg/L
L0305025-02	50	50	0.320	1.580	-0.0004887	0.20288	0.20288	1	mg/L
L0304616-01	50	50	0.200	8.357	-0.001544	0.024116	0.024116	1	mg/L
L0304616-04	50	50	0.120	8.357	-0.001544	0.014544	0.014544	1	mg/L
L0304616-07	50	50	0.0960	8.357	-0.001544	0.011672	0.011672	1	mg/L
L0304690-01	50	50	0.0100	8.357	-0.001544	0.0013814	ND	1	mg/L
L0304690-03	50	50	0.00600	8.357	-0.001544	0.00090274	ND	1	mg/L
L0304690-05	50	50	0.00600	8.357	-0.001544	0.00090274	ND	1	mg/L
L0304690-07	50	50	0.0150	8.357	-0.001544	0.0019797	ND	1	mg/L
L0304690-09	50	50	0.00800	8.357	-0.001544	0.0011421	ND	1	mg/L
L0304690-11	50	50	0.00500	8.357	-0.001544	0.00078308	ND	1	mg/L
WG139649-06	50	50	0.520	1.580	-0.0004887	0.32949	3.2949	10	mg/L
WG139649-07	50	50	0.703	1.580	-0.0004887	0.44533	0.44533	1	mg/L

MS = 101.7%

KEMRON FORMS - Modified 12/02/2002
Version 1.1
Report generated 05/02/2003 15:14

CONTINUING CALIBRATION REPORT

Workgroup #: WG139651
File ID: 1V.0305021100-01
CCV ID: WG139651-01
Units: mg/L
Analyte: CYANIDE

Instrument ID: UV-120-1V
Run Date: 05/02/2003
Run Time: 11:00
Analyst: DLN
Cal ID: UV-120 - 18-FEB-03

Analyte	Expected	Found	RF	%D	Q
Cyanide	.224	0.221	1.56	1.3	

* Exceeds %D Limit

CCC Calibrtion Check Compounds
SPCC System Performance Check Compounds

KEMRON FORMS - Modified 12/23/2002
Version 1.2
Report generated 05/02/2003 15:11

Workgroup #: WG139651

File ID: 1V.0305021100-02

CCV ID: WG139651-02

Units: mg/L

Analyte: CYANIDE

Instrument ID: UV-120-1V

Run Date: 05/02/2003

Run Time: 11:00

Analyst: DLN

Cal ID: UV-120 - 18-FEB-03

Analyte	Expected	Found	RF	%D	Q
Cyanide	.0448	0.0418	7.77	6.7	

* Exceeds %D Limit

CCC Calibrtion Check Compounds
SPCC System Performance Check Compounds

KEMRON FORMS - Modified 12/23/2002
Version 1.2
Report generated 05/02/2003 15:11

CONTINUING CALIBRATION REPORT

Workgroup #: WG139651
File ID: 1V.0305021100-23
CCV ID: WG139651-03
Units: mg/L
Analyte: CYANIDE

Instrument ID: UV-120-1V
Run Date: 05/02/2003
Run Time: 11:00
Analyst: DLN
Cal ID: UV-120 - 18-FEB-03

Analyte	Expected	Found	RF	%D	Q
Cyanide	.224	0.220	1.55	1.8	

* Exceeds %D Limit

CCC Calibrtion Check Compounds
SPCC System Performance Check Compounds

KEMRON FORMS - Modified 12/23/2002
Version 1.2
Report generated 05/02/2003 15:11

Workgroup #: WG139651

File ID: 1V.0305021100-24

CCV ID: WG139651-04

Units: mg/L

Analyte: CYANIDE

Instrument ID: UV-120-1V

Run Date: 05/02/2003

Run Time: 11:00

Analyst: DLN

Cal ID: UV-120 - 18-FEB-03

Analyte	Expected	Found	RF	%D	Q
Cyanide	.0448	0.0424	7.88	5.4	

* Exceeds %D Limit

CCC Calibrtion Check Compounds
SPCC System Performance Check Compounds

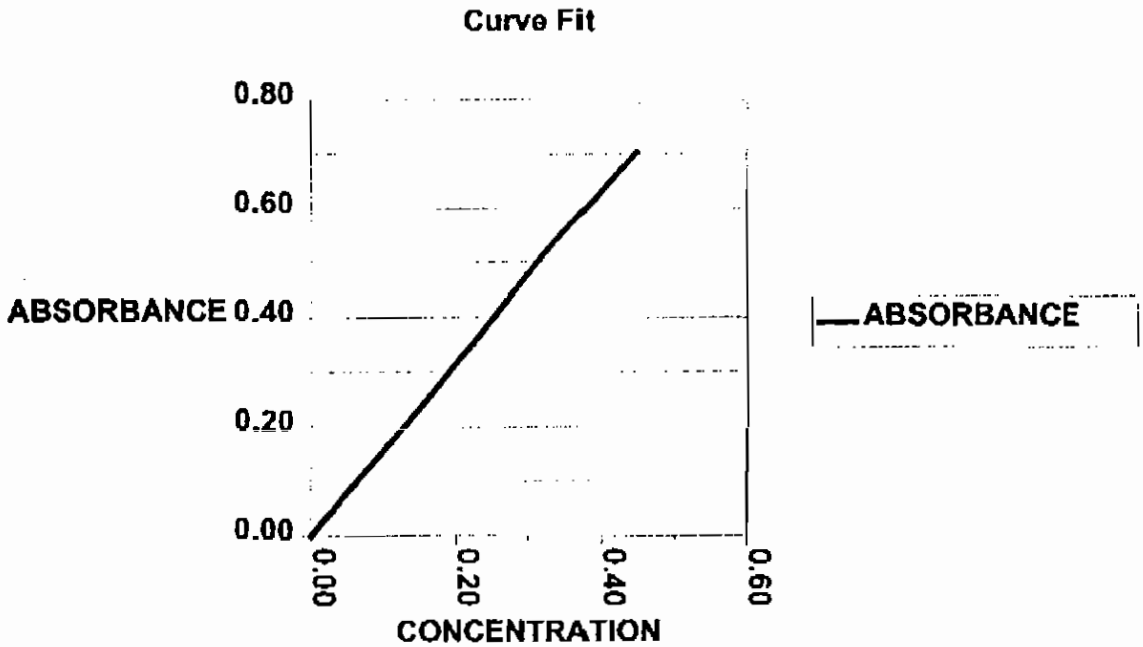
KEMRON FORMS - Modified 12/23/2002
Version 1.2
Report generated 05/02/2003 15:11

KEMRON ENVIRONMENTAL SERVICES
INITIAL CALIBRATION

Workgroup:WG134885
Analyst:JWR
Analytical Method:300
Initial Calibration Date:02/18/2003
Instrument ID:UV-120-1V

Analyte: CYANIDE (1cm)
Number of Points: 7
Slope: 1.57970
Y-Intercept: -0.000488691
Coef. Of Correlation (R^2): 0.999844
Coef. Of Correlation (R): 0.999922

Concentration X	Absorbance Y	X^2	X * Y	Y-Fitted (mX^2+B)
0.00	0.00	0.00	0.00	-0.000488691
0.0224	0.0350	0.000502	0.000784	0.0348966
0.0448	0.0700	0.00201	0.00314	0.0702819
0.112	0.174	0.0125	0.0195	0.176438
0.224	0.353	0.0502	0.0791	0.353364
0.336	0.537	0.113	0.180	0.530291
0.448	0.703	0.201	0.315	0.707217



KEMRON FORMS - Modified 01/29/2003
Version 1.0
Report generated

ALTERNATE SOURCE REPORT

Workgroup #: WG134885
File ID: 1V.0302180905-08
CCV ID: WG134885-08
Units: mg/L
Analyte: CYANIDE

Instrument ID: UV-120-1V
Run Date: 02/18/2003
Run Time: 09:05
Analyst: JWR
Cal ID: UV-120-18-FEB-03 09:05:07

Analyte	Expected	Found	RF	%D	Q
Cyanide	.221	0.231	1.65	4.5	

* Exceeds %D Limit

CCC Calibrtion Check Compounds
SPCC System Performance Check Compounds

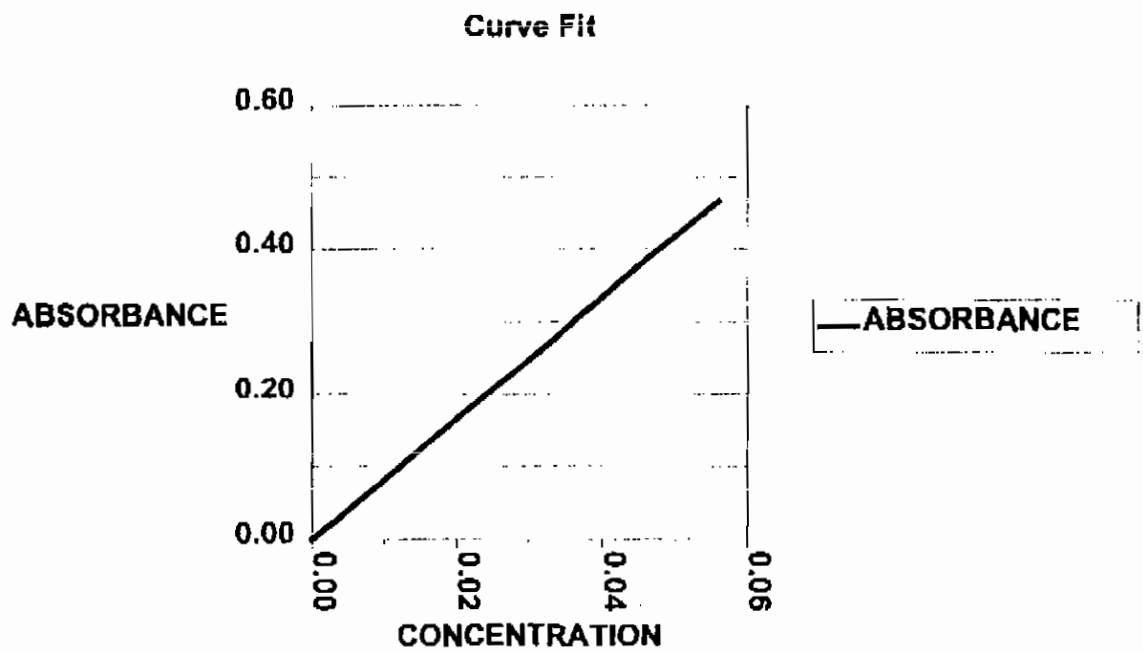
KEMRON FORMS - Modified 12/23/2002
Version 1.2
Report generated

KEMRON ENVIRONMENTAL SERVICES
INITIAL CALIBRATION

Workgroup:WG134883
Analyst:JWR
Analytical Method:300
Initial Calibration Date:02/18/2003
Instrument ID:UV-120-1V

Analyte: CYANIDE (5cm)
Number of Points: 7
Slope: 8.35720
Y-Intercept: -0.00154437
Coef. Of Correlation (R^2): 0.999943
Coef. Of Correlation (R): 0.999972

Concentration X	Absorbance Y	X^2	X * Y	Y-Fitted (mX^2+B)
0.00	0.00	0.00	0.00	-0.00154437
0.00560	0.0450	0.0000314	0.000252	0.0452560
0.0112	0.0910	0.000125	0.00102	0.0920563
0.0224	0.185	0.000502	0.00414	0.185657
0.0336	0.278	0.00113	0.00934	0.279258
0.0448	0.375	0.00201	0.0168	0.372858
0.0560	0.466	0.00314	0.0261	0.466459



KEMRON FORMS - Modified 01/29/2003
Version 1.0
Report generated

ALTERNATE SOURCE REPORT

Workgroup #: WG134883
File ID: 1V.0302180900-08
CCV ID: WG134883-08
Units: mg/L
Analyte: CYANIDE

Instrument ID: UV-120-1V
Run Date: 02/18/2003
Run Time: 09:00
Analyst: JWR
Cal ID: UV-120 - 18-FEB-03 09:00:07

Analyte	Expected	Found	RF	%D	Q
Cyanide	.0221	0.0218	8.19	1.4	

* Exceeds %D Limit

CCC Calibrtion Check Compounds
SPCC System Performance Check Compounds

KEMRON FORMS - Modified 12/23/2002
Version 1.2
Report generated

Curves

Parameter: Cyanide

Spectrophotometer: UV-120-1V

Calibration (Curve) standard stock: CS-03-35-10

Concentration: 1120 mg/L

Recipe for preparation of curve standards found in:
SOP: K3354 Revision: 8 Page: 9

Second Source Stock: CS-03-48-01 (concentration: ~~1103~~ 1104 mg/L)
5(1103)/250 = 22.08

Daily Preparation: 10(22.08)/100 = 2.21
10(2.21)/100 = 0.221
concentration = 10(0.221)/100 = 0.0221

Calibration Standards (mg/L)	Volume	Cell Size	Wavelength	Absorbance
Low Level				
0.000	50ml	5cm	578nm	0.000
0.0056	↓	↓	↓	0.045
0.0112				0.091
0.0224				0.185
0.0336				0.278
0.0448				0.375
0.0560				0.466
2nd (0.0221)				0.181
High Level				
0.000	50ml	1cm	578nm	0.000
0.0224	↓	↓	↓	0.035
0.0448				0.070
0.112				0.174
0.224				0.353
0.336				0.537
0.448				0.703
2nd (0.221)				0.364

WG134883

WG134885

Analyst: John Richards Date/Time: 02/18/03/0900

Approved by: dth 2/20/03

GENERAL CHEMISTRY DATA

Login Number: L0304594

Analyte: pH

A. QC Summary

NA Batch QC Summary Form(s)

B. Raw Data

✓ Cover Page
✓ Analysis benchsheet
NA Calculation spreadsheet
NA Calibration data
✓ Example calculation
(at end of package)

Checked By: dlh Date: 5/3/03

B. RAW DATA

Wet Lab

Parameter: pH
Analyst/Date/Time: TMM 4/28/03 1345
SOP: K-1501 Revision: 9
Work Group(s): 139250
Preservation Check: Yes _____ No _____

	Analyst	
Calibration/Linearity		Date:
Second Source Check		
ICV/CCV (std)		
ICB/CCB		
Blank		
LCS		
MS/MSD		
Duplicate	✓	
Record On ACS Benchsheet	✓	
Data Upload		
EXCEL QC Sheet		
QC Violation Sheet		
Signed Raw Data	✓	
STD/LCS On Benchsheet		

Primary Reviewer Initials & Date Checked TMM 4/28/03

Secondary Reviewer Initials & Date Checked dwh 4/28/03

✓ • Check for compliance with Method and project-specific requirements
✓ • Check the completeness of the reported information
✓ • Check the information for the report narrative
✓ • Check the reasonableness of results

Supervisory Review Initials & Date Checked dwh 4/28/03

Comments:

2

✓ - Checked & OK
NA - Not Applicable
DL - Diluted Out

	Sample	Calibration buffers	Water Misc. Liquid	50 % Slurry Of Solid	50% Water Org.Liq. Mix
	LCS 6 CS-0345-12	7,4,10	6.020		
	04-575-08		6.098		
El Cayent	LS01 04-582-03		6.69		
MS	LS01 -22		6.70		
MSD	LS01 -07		6.72		
	G-MW-1-A -12		6.53		
	G-MW-8-B -14		0845 12.580		
K-E	Blk-GW1 -09		6.64		
G-MW-13	A -16		7.39		
W-LS01	A -01		7.97		
	LCS 1045 CS-0344-17		12.48		
LS01	DUP 04-582-03		6.70		
	LCS 9 CS-03-48-03		9.031		

EPA 150.1
SW846 9040B/9045C

SOP K1501 Rev 9

ADT DW 04-26-03 1241

WORKGROUP 139174

APPROVAL _____

Circle Instrument
Orion 710A #1
Orion 710A #2
Sargent - Welch

	Sample	Calibration buffers	Water Misc. Liquid	50 % Slurry Of Solid	50% Water Org.Liq. Mix
	LCS 6 CS-0340-12	7,4,10	6.044		
	04-605-01		2.554		✓
	04-594-01		7.380		✓
	-02		7.679		✓
	04-536-01			8.612	✓
	04-554-01			8.562	✓
	04-594-03			8.524	✓
	04-575-01			6.943	✓
	02			6.927	✓
	03			7.163	✓
	04			7.267	✓
	05 do-07			7.269	✓
	~~04-594-01 DUP~~				
	04-501-01			14.176	✓
	02		10.115		✓
	03		14.060		✓
	04-498-01			6.875	✓
	04-500-02			7.012	✓
	04-543-09			7.831	✓
12.45	10			7.650	✓
LCS-	CS-04-0307		12.436		
	DUP 04-594-01		7.379		
	LCS 9 CS-0348-03	7,4,10	8.999		

EPA 150.1
SW846 9040B/9045C

SOP K1501 Rev 9

ADT Tmm 4/28/03 @ 1545

WORKGROUP 139251

APPROVAL dh 4/28/03

~~Circle Instrument~~
Orion 710A #1
Orion 710A #2
Sargent - Welch

Reviewed by: _____

GENERAL CHEMISTRY DATA

Login Number: L0304594

Analyte: HEM

A. QC Summary

✓ Batch QC Summary Form(s)

B. Raw Data

✓ Cover Page
✓ Analysis benchsheet
✓ Calculation spreadsheet
✓ Calibration data
✓ Example calculation
(at end of package)

Checked By: [illegible] Date: 5/3/03

A. QC SUMMARY

QUALITY CONTROL SUMMARY
OHIO VALLEY LABORATORY
QUALITY CONTROL SUMMARY

WORKGROUP: WG136258
METHOD: EPA 1664
MATRIX: WATER
UNITS: MG/L

RUN DATE: 4/28/00
ANALYST: DLP
DUPLICATE: LCS
SPIKE: ONS

ANALYTE	MDL	Blank	CONCENTRATION PPM T-LCS	LCS	REP1	REP2	SAMPLE RESULT	T-MS	MS	PERCENT RECOVERY LCS	LCS LCL	LCS UCL	MS	MS LCL	MS UCL	PERCENT RPD REP RPD	RPD UCL
OG-HEM	2.50	ND	20.00	22.79	22.70	23.50	ONS	20.00	ONS	90.80	78.80	114.00	ONS	78.00	114.00	3.48	18.00

NOTES & DEFINITIONS:
RDL = REPORTING DETECTION LIMIT
DL = DILUTED OUT
NA = NOT APPLICABLE
ND = DETECTED
J = RDL > BLANK >= MDL
ONS = QUANTITY INSUFFICIENT

LCS = LABORATORY CONTROL SAMPLE
T- LCS = TRUE VALUE OF LCS
REP1 = UNSPIKED SAMPLE REPLICATE 1
REP2 = UNSPIKED SAMPLE REPLICATE 2
SAMPLE RESULT = CONCENTRATION OF UNSPIKED MATRIX
T-MS = TRUE VALUE OF MATRIX SPIKE
MS = MATRIX SPIKE
LCL = LOWER CONTROL LIMIT
UCL = UPPER CONTROL LIMIT

REP RPD = RELATIVE PERCENT DIFFERENCE OF SAMPLE REPLICATES

B. RAW DATA

Wet Lab

Parameter: Hem O&G
Analyst/Date/Time: DW 04-28-03 1815
SOP: K-1664 Revision: 1
Work Group(s): 739258
Preservation Check: Yes ____ No ____

	Analyst	
Calibration/Linearity		Date:
Second Source Check		
ICV/CCV (std)		
ICB/CCB		
Blank	✓	
LCS	✓	
MS/MSD		
Duplicate		
Record On ACS Benchsheet		
Data Upload	✓	
EXCEL QC Sheet	✓	
QC Violation Sheet		
Signed Raw Data	✓	
STD/LCS On Benchsheet	✓	

Primary Reviewer Initials & Date Checked DW 04-28-03

Secondary Reviewer Initials & Date Checked dth 4/29/03

✓ • Check for compliance with Method and project-specific requirements
✓ • Check the completeness of the reported information
✓ • Check the information for the report narrative
✓ • Check the reasonableness of results

Supervisory Review Initials & Date Checked dth 4/29/03

Comments:

√ - Checked & OK
NA - Not Applicable
DL - Diluted Out

Hexane Extractable Material

SOP K-1664 Revision #: 1
☑ EPA Method 1664

Speed Vap Temperature: 35

Workgroup #: 139258
LCS: SS-07-03.04
Daily Dilution: 5(500)/1000 = 25
Matrix Spike:
Daily Dilution: QNS

All results are mg/L

Sample	Disk Type	pH Check	EXT. #	Volume (mL)	Initial Weight/ WT1 (g)	Dry Weight WT2 (g)	Comments
BLANK	WH	✓	1	100	2.5362	2.5363	
LCS: 25 mg/L			2	1000	2.5185	2.5415	
LCSDUP: 25 mg/L			1	1000	2.5158	2.5393	
04-466-01			2	880	2.5125	2.5137	
04-486-01			1	990	2.5132	2.5137	
-05			2	980	2.5365	2.5372	
-07			1	980	2.5117	2.5121	
-09			1	1000	2.5351	2.5356	
04-470-01			2	980	2.5461	2.5469	
04-527-01			1	966	2.5343	2.5352	
-02			2	966	2.5202	2.5243	
04-525-02			1	930	2.5298	2.5302	
-04			2	950	2.5166	2.5171	
-06			1	970	2.5324	2.5326	
04-594-01	WH	✓	2	920	2.5327	2.5491	orange oil layer
02			1	900	2.5337	2.5354	
MS (mg/L)							
MSD (mg/L)							

Beginning weight check
2 mg 0.0020
1 g 1.0000

Ending weight check
2 mg 0.0020
1 g 1.0000

Disk Type: (WH) Whatman SPE, (3M) 3M Empore, (CPI) CPI SPE

Analyst: Rusty Payne

Date / Time: 04-28-03/815

Reviewed by: dm 4/29/03

KEMRON ENVIRONMENTAL SERVICES
GRAVIMETRIC REPORT

Workgroup (AAB#): WG139258 Analyst: DLP
Product: 1664A\METHOD Run Date: 04/28/2003 08:15
Analyte: OIL & GREASE

SAMPLE NUMBER	INITIAL VOL	INITIAL WT	FINAL WT	Anal. Conc	Rep. Conc.	Units
WG139258-01	1000	2.5362	2.5363	0.1000	0.1000	mg/L
WG139258-02	1000	2.5188	2.5415	22.70	22.70	mg/L
WG139258-03	1000	2.5158	2.5393	23.50	23.50	mg/L
L0304466-01	880	2.5125	2.5137	1.364	ND	mg/L
L0304486-01	990	2.5132	2.5137	0.5051	ND	mg/L
L0304486-05	980	2.5365	2.5372	0.7143	ND	mg/L
L0304486-07	980	2.5117	2.5121	0.4082	ND	mg/L
L0304486-09	1000	2.5351	2.5356	0.5000	ND	mg/L
L0304470-01	980	2.5461	2.5469	0.8163	ND	mg/L
L0304527-01	960	2.5343	2.5352	0.9375	ND	mg/L
L0304527-02	960	2.5202	2.5243	4.271	ND	mg/L
L0304528-02	930	2.5298	2.5302	0.4301	ND	mg/L
L0304528-04	950	2.5166	2.5171	0.5263	ND	mg/L
L0304528-06	970	2.5324	2.5326	0.2062	ND	mg/L
L0304594-01	920	2.5327	2.5491	17.83	17.83	mg/L
L0304594-02	900	2.5337	2.5354	1.889	ND	mg/L

KEMRON FORMS - Modified 03/11/2003
Version 1.3
Report generated 04/28/2003 10:11

clh

GENERAL CHEMISTRY DATA

Login Number: L0304594

Analyte: Flashpoint

A. QC Summary

NA Batch QC Summary Form(s)

B. Raw Data

✓ Cover Page
✓ Analysis benchsheet
✓ Calculation spreadsheet
NA Calibration data
✓ Example calculation
(at end of package)

Checked By: dlh Date: 5/3/03

B. RAW DATA

Wet Lab

Parameter: FLASH
Analyst/Date/Time: DH/4/29/03
SOP: K-1016 Revision: 16
Work Group(s): 139297
Preservation Check: Yes _____ No _____

	Analyst	
Calibration/Linearity		Date: —
Second Source Check		
ICV/CCV (std)		
ICB/CCB		
Blank		
LCS	✓	
MS/MSD		
Duplicate	✓	
Record On ACS Benchsheet	✓	
Data Upload		
EXCEL QC Sheet		
QC Violation Sheet		
Signed Raw Data	✓	
STD/LCS On Benchsheet	✓	

Primary Reviewer Initials & Date Checked dch 4/30/03

Secondary Reviewer Initials & Date Checked _____

✓ • Check for compliance with Method and project-specific requirements
✓ • Check the completeness of the reported information
✓ • Check the information for the report narrative
✓ • Check the reasonableness of results

Supervisory Review Initials & Date Checked dch 4/30/03

Comments: _____

2

✓ - Checked & OK
NA - Not Applicable
DL - Diluted Out

FLASHPOINT

LCS: CS-03-41-10 Workgroup: 139297
TEMPERATURE: 21 PRESSURE: 746.4

SOP K1010 Revision #: 10 Method SW846 1010

SAMPLE	DESCRIPTION	INITIAL TEMP(C)	COMMENTS or FLASHPOINT	FINAL RESULT (C)
LCS	o-xylene	15	flashed 28	28
LCS DUP	↓	16	flashed 28.5	28.5
✓ 04-457-01	clear solvent	14	flashed 64	64
✓ 04-500-01	black thick liq "oil"	20	no flash	>95
✓ 04-458-01	red liquid "oil"	19	no flash	>95
✓ 04-543-06	thick oil	24	no flash	>95
04-594-01	water	17	no flash	>95
02	water	21	no flash	>95
✓ 04-548-01	~~soil~~ water/mud	15	no flash	>95
✓ 04-544-01	brown liq "dead fish"	14	no flash	>95
04-594-03	soil	24	no flash	>95
✓ 04-536-01	soil "fruity"	27	no flash	>95
✓ 04-554-01	soil	24	no flash	>95
✓ 04-572-01	soil	26	no flash	>95
DUP: 04-457-01	clear liq	24	flashed 63	63

ANALYST: Deanna Gibson DATE: 4/29/03/0745

REVIEWED BY: _____

[?]

G5: 139297 SHEET

1	OBSERVED BAROMETRIC PRESSURE:	746.4	
2			
3	LOWEST PRESSURE IN BRACKET:	740	ADT:DIH/4/29/03
4	TEMP CORR. 1:	2.72	
5	TEMP CORR. 2:	2.65	WRKGRP: 139297
6			
7	LOWEST PRESSURE IN BRACKET:	700	
8	GRAV CORR 1:	0.48	
9	GRAV CORR 2:	0.42	
10			
11			
12	TMP COR: 2.6724		
13			
14	GRAV COR: 0.44784		
15			
16	CORRECTED BAROMETRIC PRESSURE:	759.7197	
17			
18	CORRECTION FOR FLASH:	0.009247	
19			
20			

MAIN

30-Apr-03 04:01 PM ONLINE CAPSNUM [?]

PERCENT SOLIDS DATA

Login Number: L0304594

✓ **Analysis benchsheet**

✓ **Calculation spreadsheet**

Example calculation:

[(WT3 - WT1)/(WT2 - WT1)] * 100 = % solids

100 - (% solids) = % moisture

where: WT1 = Weight (grams) of empty container
WT2 = Weight (grams) of container and wet sample
WT3 = Weight (grams) of container and dry sample
100 = factor to get units as percent weight

Checked By: dlh Date: 5/3/03

PERCENT SOLIDS

Workgroup: 139244 ADT (on): Tmm 4/28/03 @ 1055
SOP K0003 Rev: 9 ADT (off): Tmm 4/29/03 @ 940 Approval: dlh 4/30/03

Sample	Empty Pan WT 1	WET WT 2	DRY WT 3A	WET WT 3B	DRY WT 3C
04-595-01	1.24	21.53	17.23		
02	1.24	23.73	18.55		
03	1.24	20.12	15.55		
04	1.24	19.13	13.~~93~~ 24		
05	1.24	28.53	23.92		
04-596-01	1.25	19.66	14.65		
02	1.25	28.67	22.29		
03	1.24	18.60	13.13		
04	1.23	24.14	19.59		
05	1.24	29.40	23.57		
06	1.23	18.32	13.67		
07	1.24	23.13	19.30		
04-597-01	1.24	30.53	27.26		
02	1.24	25.56	21.29		
04-554-01	1.23	26.93	22.31		
04-572-01	1.24	31.47	28.78		
04-594-03	1.24	28.73	21.40		
04-536-01	1.24	28.26	22.79		
04-488-01	1.24	20.35	11.51		
02	1.24	27.28	21.96		
Duplicate 04-596-02	1.26	21.61	16.68		

Workgroup: 139246 ADT (on): Tmm 4/28/03 @ 1435
SOP K0003 Rev: 9 ADT (off): Tmm 4/29/03 @ 945 Approval: dlh 4/30/03

Sample	Empty Pan WT 1	WET WT 2	DRY WT 3A	WET WT 3B	DRY WT 3C
04-488-03	1.22	24.53	15.46		
04	1.24	35.14	22.60		
05	1.24	18.32	5.78		
06	1.24	37.66	30.44		
07	1.21	25.71	21.30		
08	1.21	23.81	14.43		
04-575-01	1.24	22.82	1.90	Sample is mostly water	
02	1.24	23.70	1.93		
03	1.24	25.56	2.31		
04	1.24	24.15	3.33		
05-06-07	1.24	32.76	11.31		
Duplicate 04-488-~~03~~ 04	1.28	22.14	13.94		

KEMRON ENVIRONMENTAL SERVICES
PERCENT SOLID REPORT

Workgroup (AAB#):WG139244 Run Date:04/28/2003
Method:D2216-90 Run Time:10:55
Analyst:TMM

SAMPLE NUMBER	Pan WT.	Int WT.	Fnl WT.	% Solid	UNITS
L0304488-01	1.240	20.85	11.51	52.37	%
L0304488-02	1.240	27.28	21.96	79.57	%
L0304536-01	1.240	28.26	22.79	79.76	%
L0304554-01	1.230	26.93	22.31	82.02	%
L0304572-01	1.240	31.47	28.78	91.10	%
L0304594-03	1.240	28.73	21.40	73.34	%
L0304595-01	1.240	21.53	17.23	78.81	%
L0304595-02	1.240	23.73	18.55	76.97	%
L0304595-03	1.240	20.12	15.55	75.79	%
L0304595-04	1.240	19.13	13.24	67.08	%
L0304595-05	1.260	28.53	23.92	83.09	%
L0304596-01	1.250	19.66	16.65	83.65	%
L0304596-02	1.250	28.67	22.29	76.73	%
L0304596-03	1.240	18.60	13.13	68.49	%
L0304596-04	1.230	24.14	19.59	80.14	%
L0304596-05	1.240	29.40	23.57	79.30	%
L0304596-06	1.230	18.32	13.67	72.79	%
L0304596-07	1.240	23.13	19.30	82.50	%
L0304597-01	1.240	30.53	27.26	88.84	%
L0304597-02	1.240	25.56	21.29	82.44	%
WG139244-01	1.250	28.67	22.29	76.73	%
WG139244-02	1.260	21.61	16.68	75.77	%

KEMRON FORMS - Modified 03/05/2002
Version 1.2
Report generated 04/29/2003 17:17

EXAMPLE CALCULATION

CALCULATIONS REVISION 0

Cyanide (total and weak-dissociable)

[(absorbance - intercept)/(slope * dilution)/(volume)] * 50 = mg/L or mg/kg CN

where: absorbance = reading from the spectrophotometer
intercept = calculated from calibration standard absorbencies
slope = calculated from calibration standard absorbencies
dilution = dilution of the distillate in decimal form (ex. 1/5 dilution = 0.2)
volume = grams or mL of sample used in the distillation
50 = total volume (mL) in the distillation flask

Cyanide (amenable to chlorination)

The cyanide calculation is used to calculate the cyanide in the total and treated portion of the sample

(Y - X) = mg/L of mg/kg CN amenable to chlorination

where: Y = result for the total sample
X = result for the treated sample

Spectrophotometric (excluding all forms of cyanide)

(absorbance - intercept)/(slope * dilution) = mg/L

where: absorbance = reading from the spectrophotometer
intercept = calculated from calibration standard absorbencies (unique to each parameter)
slope = calculated from calibration standard absorbencies (unique to each parameter)
dilution = dilution factor in decimal form (ex. 1/5 dilution = 0.2)

Direct Readout Parameters (includes pH, fluoride, turbidity, color, residual chlorine, automated procedures)

(Readout)/(dilution) = mg/L

where: readout = direct readout from the instrument
dilution = dilution in decimal form (ex. 1/5 dilution = 0.2)

Reactive cyanide

(absorbance - intercept)/(slope * dilution) = A
(volume NaOH)/(grams of sample) = B

[A * B] = mg/kg reactive cyanide

where: absorbance = reading from the spectrophotometer
intercept = calculated from calibration standard absorbencies
slope = calculated from calibration standard absorbencies
dilution = dilution of the distillate in decimal form (ex. 1/5 dilution = 0.2)
volume NaOH = mL of NaOH in the scrubber
grams sample = grams of the sample used for analysis

Flashpoint

C + 0.033(760 - P) = flashpoint, corrected for barometric pressure

where: C = observed flashpoint (Celsius)
P = ambient barometric pressure(mm Hg) corrected for temperature and gravity

Specific gravity

Liquids, sludges
[(S - W)/(R - W)] * F = specific gravity (water = 1.00)

Solids, rocks
(P - W) = A
[(R - W) - (Q - P) = B
(A/B) * F = specific gravity (water = 1.00)

where: W = weight of container
S = weight of container & sample
R = weight of container & water
P = weight of container & solid sample
Q = weight of container, sample & water
F = temperature factor

BTU

[(D * 1.8 * A) - (C * 11373)]/B = heat of combustion (BTU/lb)

where: B = sample weight (grams)
C = benzoic acid weight if used (grams)
D = net temperature rise(corrected)
1.8 = constant to get units in BTU/lb
11373 = BTU/lb of benzoic acid
A = calibration constant of the bomb used

KEMRON ENVIRONMENTAL SERVICES
CALCULATIONS REVISION 0

Titrimetric (excludes sulfide, bromide, TX, acidity(H202))

[(A - B) * N * Q]/(volume * dilution) = mg/L

where: A = mL of titrant used for the sample
B = mL of titrant used for the blank
N = normality of the titrant
volume = volume of sample titrated
dilution = dilution in decimal form (ex. 1/5 dilution = 0.2)
Q = equivalent weight (different for each analysis)
Chloride = 35450
Hardness = 50000
Alkalinity = 50000
Acidity = 50000
Ammonia = 14000
Sulfite = 40000
TX (total halide) = 40000
Iodide = 21150

Gravimetric (excludes volatile solids, ash, oil & grease)

[(WT2 - WT1) * 1000000]/volume = mg/L

where: WT1 = weight (grams) of empty container
WT2 = weight (grams) of dried sample and container
1000000 = factor to get to mg/L
volume = mL of sample used

Oil and Grease

Using the gravimetric calculation, a blank is calculated, and all sample results are blank corrected.

Hexane Extractable Material

Use the gravimetric calculation. The samples are not blank corrected.