Data Review
Site Name: Allied Paper (MI)
Case Number: 29602 Laboratory: Southwest Laboratory
SDG: E03K0

Friday, October 12, 2001

US EPA RECORDS CENTER REGION 5
560071

PCBs

Samples:

Sample No	Station Location	Matrix	Date Collected	Date Extracted	Date Analyzed
E03K0	AP-SD030-33A-07	Soil	08/17/01	08/24/01	09/19/01
E03K1	AP-SD030-16-01	Soil	08/17/01	08/24/01	09/19/01
E03K2	AP-SD030-16-02	Soil	08/17/01	08/24/01	09/19/01
E03K3	AP-SD030-16-03	Soil	08/17/01	08/24/01	09/19/01
E03K4	AP-SD030-16-03DP	Soil	08/17/01	08/24/01	09/19/01
E03K5	AP-SD030-16-04	Soil	08/17/01	08/24/01	09/19/01
E03K6	AP-SD030-16-05	Soil	08/17/01	08/24/01	09/19/01
E03K8	AP-SD030-24-01	Soil	08/17/01	08/24/01	09/19/01
E03K9	AP-SD030-24-02	Soil	08/17/01	08/24/01	09/19/01
E03L0	AP-SD030-24-03	Soil	08/17/01	08/24/01	09/19/01
E03L1	AP-SD030-24-04	Soil	08/17/01	08/24/01	09/19/01
E03L2	AP-SD030-24-05	Soil	08/17/01	08/24/01	09/19/01
E03L3	AP-SD030-24-06	Soil	08/17/01	08/24/01	09/19/01
E03L4	AP-SD030-31-01	Soil	08/17/01	08/24/01	09/19/01
E03L5	AP-SD030-31-02	Soil	08/17/01	08/24/01	09/19/01
E03L6	AP-SD030-31-03	Soil	08/17/01	08/24/01	09/20/01
E03L7	AP-SD030-31-04	Soil	08/17/01	08/24/01	09/20/01
E03L8	AP-SD030-31-05	Soil	08/17/01	08/24/01	09/20/01
E03L9	AP-SD030-31-06	Soil	08/17/01	08/24/01	09/20/01
E03M0	AP-SD030-32-01	Soil	08/16/01	08/24/01	09/20/01
E03M1	AP-SD030-32-02	Soil	08/16/01	08/24/01	09/20/01

Holding Time:

All samples were extracted and analyzed within the required holding time. The samples arrived in a cooler at 11.8 degrees Celsius. Therefore, qualify the results in all the samples as estimated (J/UJ).

Method Blank:

The method blank PBLKSB was associated with this SDG. PBLKSB was analyzed on 09/19/01 with (E03K0 thru E03K6, E03K8, E03K9, E03L0 thru E03L9, E03M1, E03K1DL thru E03K6DL, E03K8DL, E03K9DL, E03L0DL, E03L4DL, E03L5DL, and MS/MSD). The PBLKSB results were free of contamination. All samples underwent OLMO4.2 cleanup, Silica Gel Cleanup, and sulfuric acid cleanup prior analysis. All instrument blanks associated with this sample set were free of contamination.

Surrogate Recovery:

The method blank and investigated samples had surrogate recoveries within the acceptance quality control limits (30 to 170%), except in E03K9 (DCB2 190%), E03L0 (DCB2 195%), E03L5 (DCB2 213%), and diluted out in E03K5DL (DCB1 198D%, DCB2 185D%), E03K8DL (DCB2 191D%), E03K9DL (DCB2 192D%), E03L0DL (DCB2 225D%), and E03L5DL (DCB2 184D%). Therefore, qualify the results in detected values for the following: E03K9, E03L0, E03L5, E03K5DL, E03K8DL, E03K9DL, E03L0DL, and E03L5DL as estimated (J).

Matrix Spike/ Matrix Spike Duplicate Recovery:
The matrix spike/ matrix spike duplicate audit was performed on sample E03K0. The matrix spike/ matrix spike duplicate recoveries were within the quality control limits (29-135%). Also, the relative percent difference (RPD %) recovery was acceptable.

Laboratory Control Sample Recovery:
The laboratory control sample/laboratory control sample duplicate, and the (RPD%) relative percent difference recoveries were within the quality control limits (29 to 135%).

Retention Time:
The retention time's recovery was within the acceptance limits.

Initial And Continuing Verifications Calibration:
The initial calibrations were analyzed for the arochlor, and the recoveries were within the quality control limit of an average (RSD 20%).
The multi-component calibration verification recoveries were within the quality control limit of an average (RSD 15%).

Aroclor Analytical Sequence:
The analytical sequence for the blanks, samples, and standards were within the quality control limit.

Data Reviewed By: Tania Balikji-Shammo Date: 10/12/01

067-4A-AA/D

DATE: October 4, 2001

CC: D. GEERS
J. THORSEN
R. MEHL
T. BALLA

RECEIVED
OCT - 8 2001

Roy F Weston, Inc
3 Hawthorne Parkway Drive
Vernon Hills, IL 60061

Attn: Tonya Balla

SITE NAME: Allied Paper

CASE NO.	LAB	NO # OF SAMPLES	SDG	MATRIX
29602	SOUTHWEST	20	E03K0	Soil

Upon receipt of data, please check each package for completeness and note any missing deliverables below.

Send this form back to Sylvia Griffin, Data Management Coordinator after filling in the blanks below.

Data Received by:_____ Date:_____

PROBLEMS:

Please indicate if data is complete, and note if there are any deliverables missing from the cases noted above.

_____

_____

Received by Data Management Coordinator, CRL for file.

Date:_____

Signature:_____

FROM: U.S. EPA
Region V
Central Regional Laboratory
536 S. Clark, 10th Floor
CHICAGO, IL 60605

Sent By: Eva M. Dixon, Sr. Data Specialist
ESAT

OCT 0 4 2001

Regional Transmittal Form

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE:

SUBJECT: Review of Data
Received for Review on 9/26/01

FROM: Stephen L. Ostrodka, Chief (SMF-4J)
Superfund Field Services Section

TO: Data User: Weston

We have reviewed the data for the following case:

SITE NAME: Allied Paper (MI)

CASE NUMBER: 29602 SDG NUMBER: ~~E3~~ E03K0

Number and Type of Samples: 20 (soil)

Sample Numbers: E03K0-6, E03K8-9, E03L0-9, E03M1

Laboratory: SWOK Hrs for Review:

Following are our findings:

CC: Cecilia Moore
Region 5 TPO
Mail Code: SM-5J

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V
ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Sample Delivery Group: E03K0 CERCLIS No: MID006007306

Case No: 29602 Site Name/Location: Allied Paper

Contractor or EPA Lab: SWOK Data User: Weston

No. of Samples: 20 Date Sampled or Date Received: 9/26/01

Have Chain-of-Custody records been received? Yes ✓ No ____
Have traffic reports or packing lists been received? Yes ✓ No ____
If no, are traffic report or packing list numbers written on the Chain-of-Custody Record?
Yes ____ No ____
If no, which traffic report or packing list numbers are missing?

Are basic data forms in? Yes ✓ No ____
No of samples claimed: 20 No. of samples received: 20

Received by: Nicole Jackson/ESAT Date: ~~10/4/01~~ 9/26/01

Received by LSSS: Nicole Jackson/ESAT Date: ~~10/4/01~~ 9/26/01

Review started: ____ Reviewer Signature: ____

Total time spent on review: ____ Date review completed: ____

Copied by: Nicole Jackson/ESAT Date: 10/4/01

Mailed to user by: Nicole Jackson/ESAT Date: 10/4/01

DATA USER:
Please fill in the blanks below and return this form to:
Sylvia Griffin, Data Mgmt. Coordinator, Region V, ML-10C

Data received by: ____ Date: ____

Data review received by: ____ Date: ____

Inorganic Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
Organic Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
Dioxin data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
SAS Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK

PROBLEMS: Please indicate reasons why data are not suitable for your uses.

Received by Data Mgmt. Coordinator for Files. Date: ____

INORGANIC/ORGANIC COMPLETE SDG FILE (CSF) INVENTORY CHECKLIST

Case No. 29602 SDG No. E03K0 SDG Nos. to Follow _____ _____ _____ SAS No. _____ Date Recvd 9 / 26 / 01

EPA Lab ID: SWOK	ORIGINALS	YES	NO	N/A
Lab Location: Broken Arrow, OK	CUSTODY SEALS			
Region: 5 Audit No:	1. Present on package?	✓		
Re-Submitted CSF? Yes____ No ✓	2. Intact upon receipt?	✓		
Box No (s): _____	FORM DC-2			
COMMENTS:	3. Numbering scheme accurate?			
	4. Are enclosed documents listed?			
	5. Are listed documents enclosed?			
	FORM DC-1			
	6. Present?			
	7. Complete?			
	8. Accurate?			
	CHAIN-OF-CUSTODY RECORD(s)			
	9. Signed?			
	10. Dated?			
	TRAFFIC REPORT (s) / PACKING LIST(s)			
	11. Signed?			
	12. Dated?			
	AIRBILLS / AIRBILL STICKER			
	13. Present?			
	14. Signed?			
	15. Dated?			
	SAMPLE TAGS			
	16. Does DC-1 list tags as being included?			
	17. Present?			
	OTHER DOCUMENTS			
	18. Complete?			
	19. Legible?			
	20. Original?			
Over for additional comments.	If 'NO', does the copy indicate where the original documents are located?			

Received by: Nicole Jackson Nicole Jackson / ESAT Date 9/26/01

Audited by: _____ _____ Date / /

Audited by: _____ _____ Date / /
Signature Printed Name/ Title

TO BE COMPLETED BY CEAT

Date Recvd by CEAT: / / Date Entered: / / Date Reviewed: / /

Entered by: _____ _____

Reviewed by: _____ _____
Signature Printed Name/ Title

ESAT Tracking Log-In Sheet

Data Review Level 1
# of Folders 1

SOW Version # 4.2
Site/Project ID: 059BLA00

DATE RECEIVED AT CRL 9/26/01

USER Weston

SITE NAME Allied Paper (MI)

CASE/SAS NUMBER 29602 SDG. NO. E03K0

SAMPLING DATE 8/17/01 DATE SHIPPED 8/17/01

CONTRACT LAB SWOK

NUMBER OF SAMPLES 20 DATE TO ETM

SAMPLES	MATRIX			ANALYSES
E03K0-6	Soil	Water	Other	PCBs
E03K8-9	Soil	Water	Other	
E03L0-9	Soil	Water	Other	
E03M1	Soil	Water	Other	
	Soil	Water	Other	
	Soil	Water	Other	
	Soil	Water	Other	
	Soil	Water	Other	
	Soil	Water	Other	
	Soil	Water	Other	
	Soil	Water	Other	
	Soil	Water	Other	

ANALYSES: V = Volatiles SV = Semivolatiles P/P = Pesticides D = Dioxin
TM = Total Metals CN = Cyanide Hg = Mercury

* MAKE SURE YOU LOG DATA CASES INTO THE CASES TO LSSS BOOK *

SEP 2 6 2001

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME SOUTHWEST LABORATORY OF OKLAHOMA
CITY/STATE BROKEN ARROW, OKLAHOMA
CASE NO. 29602 SDG NO. E03K0 SDG NOS. TO FOLLOW
SAS NO.
CONTRACT NO. 68W99079
SOW NO. OLM04.2

All documents delivered in the Complete SDG File must be original documents where possible.

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
1. Inventory Sheet (Form DC-2) (Do not Number)				
2. SDG Case Narrative	1	2	✓	
3. SDG Cover Sheet/Traffic Report	3	6	✓	
4. Volatiles Data				
a. QC Summary				
System Monitoring Compound Summary (Form II	NA	NA	✓	
Matrix Spike/Matrix Spike Duplicate Summary (Form III VOA)			✓	
Method Blank Summary (Form IV VOA)			✓	
GC/MS Instrument Performance Check (Form V VOA)			✓	
Internal Standard Area and RT Summary (Form VIII VOA)			✓	
b. Sample Data				
TCL Results - (Form I VOA-1, VOA-2)			✓	
Tentatively Identified Compounds (Form I VOA-			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds identified			✓	
Quantitation reports			✓	
Mass Spectra of all reported TICs with three best library matches			✓	
c. Standards Data (All Instruments)				
Initial Calibration Data (Form VI VOA-1, VOA-2)			✓	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII VOA-1, VOA-2)			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data			✓	
BFB			✓	
Blank Data			✓	
Martix Spike/Matrix Spike Duplicate Data			✓	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. 29602 SDG NO. E03K0 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
5. Semivolatiles Data				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II SV)	NA	NA	CT	
MS/MSD Summary (Form III SV)				
Method Blank Summary (Form IV SV)				
GC/MS Instrument Performance Check (Form V SV)				
Internal Standard Area and RT Summary (Form VIII SV)				
b. Sample Data				
TCL Results - (Form I SV-1, SV-2)				
Tentatively Identified Compounds (Form I SV-				
Reconstructed total ion chromatograms (RIC) for each sample				
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds				
Quantitation reports				
Mass Spectra of TICs with three best library matches				
GPC chromatograms (if GPC is required)				
c. Standards Data (All Instruments)				
Initial Calibration Data (Form VI SV-1, SV-2)				
RICs and Quan Reports for all Standards				
Continuing Calibration Data (Form VII SV-1, SV-				
RICs and Quantitation Reports for all Standards				
d. Raw QC Data				
DFTPP				
Blank Data				
Matrix Spike/Matrix Spike Duplicate Data				
e. Raw GPC Data				
6. Pesticides Data				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II	7	8		
MS/MSD Duplicate Summary (Form III PEST)	9	10		
Method Blank Summary (Form IV PEST)	11	12		

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. 29602 SDG NO. E03K0 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
6. Pesticides Data (Cont.)				
b. Sample Data	13	228		
TCL Results - Organic Analysis Data Sheet (Form I PEST)				
Chromatograms (Primary Column)				
Chromatograms from second GC column				
GC Integration report or data system printout				
Manual work sheets				
For pesticides/Aroclors by GC/MS, Copies of raw spectra and copies of background-subtracted mass spectra of target compounds (samples & standards)				
c. Standards Data	229	421		
Initial Calibration of Single Component (Form VI PEST-1 and PEST-2)				
Initial Calibration of Multicomponent Analytes (Form VI PEST-3)				
Analyte Resolution Summary (Form VI PEST-4)				
Performance Evaluation Mixture (Form VI PEST-5)				
Individual Standard Mixture A (FORM VI PEST-6)				
Individual Standard Mixture B (FORM VI PEST-7)				
Calibration Verification Summary (Form VII PEST-1)				
Calibration Verification Summary (Form VII PEST-2)				
Analytical Sequence (Form VIII PEST)				
Florisil Cartridge Check (Form IX PEST-1)				
Pesticide GPC Calibration (Form IX PEST-2)				
Pesticide Identification Summary for Single Component Analytes (Form X PEST-1)				
Pesticide Identification Summary for Multicomponent Analytes (Form X PEST-2)				
Chromatograms and data system printouts A printout of retention times and corresponding peak areas or peak heights				
d. Raw QC Data				
Blank Data	423	457		
Matrix Spke/Matrix Spike Duplicate Data	458	474		

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. 29602 SDG NO. E03K0 SDG NOS. TO FOLLOW _____

SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
6. Pesticides Data (Cont.)				
e. Raw GPC Data	475	518	Ok	
f. Raw Florisil Data	NA	NA		
7. Miscellaneous Data				
Original preparation and analysis forms or of preparation and analysis logbook pages	519	527		
Internal sample and sample extract transfer chain-of-custody records	528	531		
Screening records	NA	NA		
All instrument output, including strip charts from screening activities (describe or list)				
8. EPA Shipping/Receiving Documents				
Airbills (No. of shipments 1)	532	532		
Chain-of-Custody Records	533	535		
Sample Tags	534	555		
Sample Log-in Sheet (Lab & DC1)	556	559		
Miscellaneous Shipping/Receiving Records (describe or list)				
Memos, Changes, Analytical Request	560	569		
	NA	NA		
9. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
10. Other Records (describe or list)				
Telephone Communication Log				

11. Comments: _____

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. 29602 SDG NO. E03K0 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	(Signature)	(Printed Name/Title)	(Date)
Completed by: (CLP Lab)	Emma Morton	Emma Morton Data Clerk	9-24-01
Verified by: (CLP Lab)	Carlyn Tackett	Carlyn Tackett/DATACLERK	9-24-01
Audited by: (EPA)			

SEP 2 6 2001

SOUTHWEST LABORATORY OF OKLAHOMA
(SWL-TULSA)
1700 West Albany, Suite A/ Broken Arrow, OK 74012
918-251-2858

SDG NARRATIVE

September 24, 2001

CONTRACT: 68W99079

CASE NO: 29602

SDG NO: E03K0

SAMPLES: E03K0, E03K0MS, E03K0MSD, E03K1, E02K1DL, E03K2, E03K2DL, E03K3, E02K3DL, E03K4, E03K4DL, E03K5, E03K5DL, E03K6, E03K6DL, E03K8, E03K8DL, E03K9, E03K9DL, E03L0, E03L0DL, E03L1, E03L2, E03L3, E03L4, E03L4DL, E03L5, E03L5DL, E03L6, E03L7, E03L8, E03L9 and E03M1.

FRACTION: Pesticide/PCB

Twenty soil samples were analyzed for PCBs, by modified EPA SOW OLM04.2 using Flex Clause Modification PCB-REG5.

Columns: The soil samples were analyzed analyzed on J&W dual analytical columns DB-17MS and DB-XLB (proprietary phase composition, length 30m, id 0.32 mm, film thickness 0.5 um) which were specifically designed for pesticide/PCB separation as required by the EPA's SOW. All applicable manufacturer's instructions were followed for the analysis of pesticides/PCBs. Manufacturer provided information on the performance characteristics of the columns are kept on site. Helium used as the carrier gas.

The following samples in this SDG labeled with a DL are considered billable since these samples required dilutions to get target compounds within instruments linear range: E03KL1DL, E03K2DL, E03K3DL, E03K4DL, E03K5DL, E03K6DL, E03K8DL, E03K9DL, E03L0DL, E03L4DL and E03L5DL.

The sample cooler arrived at 11.8 degrees Celsius (see e-mail log).

The modification for these soils included the following cleanups: OLM04.2 GPC cleanup followed by SW846 method 3630 Silica Gel Cleanup which was then followed by SW846- method 3665 sulfuric acid cleanup prior to analyses. No florisil clean up was necessary as part of the modification. As per e-mail correspondence of 8/24/01 the laboratory had made a modification for initial dilution and if PCBs are within instruments linear range no 10X more concentrated analyses will be performed by the laboratory.

Blanks: No target analytes were detected in the extraction blanks.

/

Surrogates: All surrogates were within QC limits with the following exceptions: Samples E03K9, E03L0 and E03L5 had high DCB recovery on one column. Since the recovery was high on one column and in on the other column theses samples were not re-extracted.

Laboratory Control Spikes: Arochlor 1254 was used for the laboratory control spike. The recoveries were within QC limits for laboratory control spike and laboratory control spike duplicate.

Matrix Spikes: Arochlor 1254 was used for the matrix spike and matrix spike duplicate. The MS/MSD had all recoveries within QC limits.

Retention Times: All retention times were within QC limits.

Resolution Checks: Since only PCBs were being analyzed for no resolution checks for pesticides were necessary.

Breakdown Products: Since only PCBs were being analyzed for no pesticide breakdown products were checked.

Initial Calibrations: Initial calibrations were analyzed for Aroclor 1016, 1242, 1254 and 1260 and all percent RSDs were within QC limits (average of all peaks at > 20%RSD)

Calibration Verifications: Calibration verifications were analyzed for Aroclors 1016 and 1260. All percent differences were within QC limits (average of all peaks at $\geq$ 15%).

All manual integrations in this data package for GC/EC have been performed for one of the following reasons:

a. Data system missed a peak during processing.
b. Data system improperly integrated a peak.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Harry M. Borg
Organic Program Manager September 24, 2001

Contract Laboratory Program

Sample Delivery Group (SDG)
Cover Sheet

SDG Number E03K0

8/21/01

Laboratory Name Southwest Laboratory of Ok. Laboratory Code SWOK

Contract No. 68W99079 Case No. ~~OLM04.2~~ 29602

Analyses Price 569.00 SDG Turnaround 21

EPA Sample Numbers in SDG (Listed in Numerical Order)

1) E03K0	7) E03K6	13) E03L3	19) E03L9
2) E03K1	8) E03K8	14) E03L4	20) E03M1
3) E03K2	9) E03K9	15) E03L5	21)
4) E03K3	10) E03L0	16) E03L6	22)
5) E03K4	11) E03L1	17) E03L7	23)
6) E03K5	12) E03L2	18) E03L8	24)

8/21/01

E03K0	E03M1
First Sample in SDG	Last Sample in SDG
08/20/2001	08/20/2001
First Sample Receipt Date	Last Sample Receipt Date

Note: *There are a maximum of 20* ***field*** *samples (excluding PE samples) in an SDG. Attach TRs to this form in alphanumeric order (the order listed above on this form).*

Signature Harry M Boy Date 8-21-01

Version 2.0

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No:	29602
DAS No:	
SDG No:	E03K0

L

Date Shipped:	8/17/2001
Carrier Name:	FedEx
Airbill:	821876980410
Shipped to:	Southwest Labs of Oklahoma, Inc. 1700 West Albany Suite C Broken Arrow OK 74012 (918) 251-0545

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
[signature]	8-17-01 1245	[signature]	8-20-01 8:15
2			
3			
4			

Sampler Signature: [signature]

For Lab Use Only

Lab Contract No:	68W99079
Unit Price:	569.00
Transfer To:	
Lab Contract No:	
Unit Price:	

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION		SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY E03K0 Sample Condition On Receipt
E03K0	Sediment/ Joe Ruiz	L/G	PCBs (21)	099003 (Ice Only) (1)	AP-SD030-33A-07	S:	8/17/2001	9:34		OK
E03K1	Sediment/ Joe Ruiz	L/G	PCBs (21)	099004 (Ice Only) (1)	AP-SD030-16-01	S:	8/17/2001	9:17		8-20-01
E03K2	Sediment/ Joe Ruiz	L/G	PCBs (21)	099005 (Ice Only) (1)	AP-SD030-16-02	S:	8/17/2001	9:17		
E03K3	Sediment/ Joe Ruiz	L/G	PCBs (21)	099006 (Ice Only) (1)	AP-SD030-16-03	S:	8/17/2001	9:17		
E03K4	Sediment/ Joe Ruiz	L/G	PCBs (21)	099007 (Ice Only) (1)	AP-SD030-16-03DP	S:	8/17/2001	9:17		
E03K5	Sediment/ Joe Ruiz	L/G	PCBs (21)	099008 (Ice Only) (1)	AP-SD030-16-04	S:	8/17/2001	9:17		
E03K6	Sediment/ Joe Ruiz	L/G	PCBs (21)	099009 (Ice Only) (1)	AP-SD030-16-05	S:	8/17/2001	9:17		
E03K8	Sediment/ Joe Ruiz	L/G	PCBs (21)	099011 (Ice Only) (1)	AP-SD030-24-01	S:	8/17/2001	10:08		
E03K9	Sediment/ Joe Ruiz	L/G	PCBs (21)	099012 (Ice Only) (1)	AP-SD030-24-02	S:	8/17/2001	10:08		
E03L0	Sediment/ Joe Ruiz	L/G	PCBs (21)	099013 (Ice Only) (1)	AP-SD030-24-03	S:	8/17/2001	10:08		

Shipment for Case Complete?Y	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
	E03C9, E03E9, E03H1, E03K0, E03M0		11.8°C TB	177890, 177891
Analysis Key: PCBs = PCBs	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? Y	Shipment Iced? Y

R Number: 5-490998136-081701-0002

LABORATORY COPY

R provides preliminary results. Requests for preliminary results will increase analytical costs.
nd Copy to: Contract Laboratory Analytical Services Support, 2000 Edmund Halley Dr., Reston, VA. 20191-3436 Phone 703/264-9348 Fax 703/264-9222

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No:	29602
DAS No:	
SDG No:	E03K0

L

Date Shipped:	8/17/2001
Carrier Name:	FedEx
Airbill:	821876980410
Shipped to:	Southwest Labs of Oklahoma, Inc. 1700 West Albany Suite C Broken Arrow OK 74012 (918) 251-0545

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
[illegible]	8-17-01 1245	[illegible]	8-20-01 8:15
2			
3			
4			

Sampler Signature: [illegible]

For Lab Use Only

Lab Contract No:	168W99019
Unit Price:	569.00
Transfer To:	
Lab Contract No:	
Unit Price:	

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION		SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY E03K0 Sample Condition On Receipt
E03L1	Sediment/ Joe Ruiz	L/G	PCBs (21)	099014 (Ice Only) (1)	AP-SD030-24-04	S:	8/17/2001	10:08		ok
E03L2	Sediment/ Joe Ruiz	L/G	PCBs (21)	099015 (Ice Only) (1)	AP-SD030-24-05	S:	8/17/2001	10:08		8-20-01 [illegible]
E03L3	Sediment/ Joe Ruiz	L/G	PCBs (21)	099016 (Ice Only) (1)	AP-SD030-24-06	S:	8/17/2001	10:08		
E03L4	Sediment/ Joe Ruiz	L/G	PCBs (21)	099017 (Ice Only) (1)	AP-SD030-31-01	S:	8/17/2001	8:38		
E03L5	Sediment/ Joe Ruiz	L/G	PCBs (21)	099018 (Ice Only) (1)	AP-SD030-31-02	S:	8/17/2001	8:38		
E03L6	Sediment/ Joe Ruiz	L/G	PCBs (21)	099019 (Ice Only) (1)	AP-SD030-31-03	S:	8/17/2001	8:38		
E03L7	Sediment/ Joe Ruiz	L/G	PCBs (21)	099020 (Ice Only) (1)	AP-SD030-31-04	S:	8/17/2001	8:38		
E03L8	Sediment/ Joe Ruiz	L/G	PCBs (21)	099021 (Ice Only) (1)	AP-SD030-31-05	S:	8/17/2001	8:38		
E03L9	Sediment/ Joe Ruiz	L/G	PCBs (21)	099022 (Ice Only) (1)	AP-SD030-31-06	S:	8/17/2001	8:38		
E03M0	Sediment/ Joe Ruiz	L/G	PCBs (21)	099023 (Ice Only) (1)	AP-SD030-32-01	S:	8/16/2001	17:35		

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC: E03C9, E03E9, E03H1, E03K0, E03M0	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 11.8°C FB	Chain of Custody Seal Number: 177840, 177841
Analysis Key: PCBs = PCBs	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? Y / Shipment Iced? Y

R Number: 5-490998136-081701-0002

LABORATORY COPY

R provides preliminary results. Requests for preliminary results will increase analytical costs.
nd Copy to: Contract Laboratory Analytical Services Support, 2000 Edmund Halley Dr., Reston, VA. 20191-3436 Phone 703/264-9348 Fax 703/264-9222

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 29602
DAS No:
SDG No: E03K0 **L**

Date Shipped: 8/17/2001
Carrier Name: FedEx
Airbill: 821876980410
Shipped to: Southwest Labs of Oklahoma, Inc. 1700 West Albany Suite C Broken Arrow OK 74012 (918) 251-0545

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
[illegible]	8-17-01 1245	[illegible]	8-20-01 8:15
2			
3			
4			

Sampler Signature: [illegible]

For Lab Use Only
Lab Contract No: 68W29029
Unit Price: 569.00
Transfer To:
Lab Contract No:
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION		SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt E03K0
* E03M1	Sediment/ Joe Ruiz	L/G	PCBs (21)	099024 (Ice Only) (1)	AP-SD030-32-02	S:	8/16/2001	17:35	original in SDG# E03M0	OK 8-20-01
E03M2	Sediment/ Joe Ruiz	L/G	PCBs (21)	099025 (Ice Only) (1)	AP-SD030-32-03	S:	8/16/2001	17:35		
E03M3	Sediment/ Joe Ruiz	L/G	PCBs (21)	099026 (Ice Only) (1)	AP-SD030-32-04	S:	8/16/2001	17:35		
E03M4	Sediment/ Joe Ruiz	L/G	PCBs (21)	099027 (Ice Only) (1)	AP-SD030-31-07	S:	8/17/2001	8:38		

* SDG Final Sample

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC: E03C9, E03E9, E03H1, E03K0, E03M0	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 11.8°C	Chain of Custody Seal Number: 177840, 177841
Analysis Key: PCBs = PCBs	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? Y / Shipment Iced? Y

R Number: 5-490998136-081701-0002

LABORATORY COPY

R provides preliminary results. Requests for preliminary results will increase analytical costs.
nd Copy to: Contract Laboratory Analytical Services Support, 2000 Edmund Halley Dr., Reston, VA. 20191-3436 Phone 703/264-9348 Fax 703/264-9222

2F
SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

GC Column(1): DB-17MS ID: 0.32(mm) GC Column(2): DB-XLB ID: 0.32(mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	TOT OUT
01	PBLKSB	75	75	85	88	0
02	ELCS1	66	66	75	78	0
03	ELCS2	90	93	107	110	0
04	E03K0	73	73	85	88	0
05	E03K0MS	66	66	79	84	0
06	E03K0MSD	64	64	76	77	0
07	E03K1	70	70	77	113	0
08	E03K2	73	72	85	97	0
09	E03K3	94	102	110	138	0
10	E03K4	65	72	109	102	0
11	E03K5	64	79	115	118	0
12	E03K6	70	81	103	89	0
13	E03K8	68	79	79	154	0
14	E03K9	58	62	100	190*	1
15	E03L0	70	73	114	195*	1
16	E03L1	73	76	92	110	0
17	E03L2	77	78	83	93	0
18	E03L3	79	77	90	93	0
19	E03L4	79	77	87	138	0
20	E03L5	78	77	102	213*	1
21	E03L6	91	87	93	124	0
22	E03L7	85	83	84	91	0
23	E03L8	66	63	68	70	0
24	E03L9	66	63	67	73	0
25	E03M1	64	64	73	79	0
26	E03K1DL	83	73	95	122	0
27	E03K2DL	91	80	103	115	0
28	E03K3DL	128	108	170	167	0
29	E03K4DL	110	85	134	160	0
30	E03K5DL	100	87	198D	185D	0

QC LIMITS

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl (30-170)

Column to be used to flag recovery values
* Values outside of QC limits
D Sample was diluted

2F
SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

GC Column(1): DB-17MS ID: 0.32(mm) GC Column(2): DB-XLB ID: 0.32(mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	TOT OUT
01	E03K6DL	112	98	132	137	0
02	E03K8DL	102	93	148	191D	0
03	E03K9DL	70	58	163	192D	0
04	E03L0DL	92	80	156	225D	0
05	E03L4DL	88	76	127	154	0
06	E03L5DL	84	68	162	184D	0
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

QC LIMITS

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl (30-170)

Column to be used to flag recovery values
* Values outside of QC limits
D Sample was diluted

FORM II PCB-1

3H

SOIL AROCLOR LABORATORY CONTROL SPIKE/ DUPLICATE RECOVERY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

LCS Sample NO.: ELCS1

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Aroclor-1254	133	90.2	68	29-135

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1254	133	135	102	40	50	29-135

Column to be used to flag recovery values

* Values outside of QC limits

RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

Comments: _____

_____

3F

SOIL AROCLOR MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix Spike - Client Sample NO.: E03K0

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Aroclor-1254	173	18.8	170	87	29-135

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1254	173	140	70	19	50	29-135

Column to be used to flag recovery values

* Values outside of QC limits

RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

Comments: _____

4C
AROCLOR METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

PBLKSB

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: BL0824SB Lab File ID: 3_091803

Matrix: (soil/water) SOIL Extraction: (SepF/Cont/Sonc) SONC

Sulfur Cleanup: (Y/N) Y Date Extracted: 08/24/01

Date Analyzed (1): 09/19/01 Date Analyzed (2): 09/19/01

Time Analyzed (1): 0041 Time Analyzed (2): 0041

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	ELCS1	LC0824SB	09/19/01	09/19/01
02	ELCS2	LD0824SB	09/19/01	09/19/01
03	E03K0	47351.01	09/19/01	09/19/01
04	E03K0MS	47351.02MS	09/19/01	09/19/01
05	E03K0MSD	47351.03MSD	09/19/01	09/19/01
06	E03K1	47351.04	09/19/01	09/19/01
07	E03K2	47351.05	09/19/01	09/19/01
08	E03K3	47351.06	09/19/01	09/19/01
09	E03K4	47351.07	09/19/01	09/19/01
10	E03K5	47351.08	09/19/01	09/19/01
11	E03K6	47351.09	09/19/01	09/19/01
12	E03K8	47351.10	09/19/01	09/19/01
13	E03K9	47351.11	09/19/01	09/19/01
14	E03L0	47351.12	09/19/01	09/19/01
15	E03L1	47351.13	09/19/01	09/19/01
16	E03L2	47351.14	09/19/01	09/19/01
17	E03L3	47351.15	09/19/01	09/19/01
18	E03L4	47351.16	09/19/01	09/19/01
19	E03L5	47351.17	09/19/01	09/19/01
20	E03L6	47351.18	09/20/01	09/20/01
21	E03L7	47351.19	09/20/01	09/20/01
22	E03L8	47351.20	09/20/01	09/20/01
23	E03L9	47351.21	09/20/01	09/20/01
24	E03M1	47351.22	09/20/01	09/20/01
25	E03K1DL	47351.04DL	09/21/01	09/21/01
26	E03K2DL	47351.05DL	09/21/01	09/21/01

Comments: _____

4C

AROCLOR METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

PBLKSB

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: BL0824SB Lab File ID: 3_091803

Matrix: (soil/water) SOIL Extraction: (SepF/Cont/Sonc) SONC

Sulfur Cleanup: (Y/N) Y Date Extracted: 08/24/01

Date Analyzed (1): 09/19/01 Date Analyzed (2): 09/19/01

Time Analyzed (1): 0041 Time Analyzed (2): 0041

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	E03K3DL	47351.06DL	09/21/01	09/21/01
02	E03K4DL	47351.07DL	09/21/01	09/21/01
03	E03K5DL	47351.08DL	09/21/01	09/21/01
04	E03K6DL	47351.09DL	09/21/01	09/21/01
05	E03K8DL	47351.10DL	09/21/01	09/21/01
06	E03K9DL	47351.11DL	09/21/01	09/21/01
07	E03L0DL	47351.12DL	09/21/01	09/21/01
08	E03L4DL	47351.16DL	09/21/01	09/21/01
09	E03L5DL	47351.17DL	09/21/01	09/21/01
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

Comments:

FORM IV PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03K0

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.01

Sample wt/vol: 30.4 (g/mL) G Lab File ID:_____

% Moisture: 23 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.2 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	42	UJ
11104-28-2	Aroclor-1221	42	UJ
11141-16-5	Aroclor-1232	42	UJ
53469-21-9	Aroclor-1242	20	JP
12672-29-6	Aroclor-1248	42	UJ
11097-69-1	Aroclor-1254	19	J
11096-82-5	Aroclor-1260	42	UJ
Surrogate amount spiked		8.54	

39

TBS
10-12-01

FORM I PCB

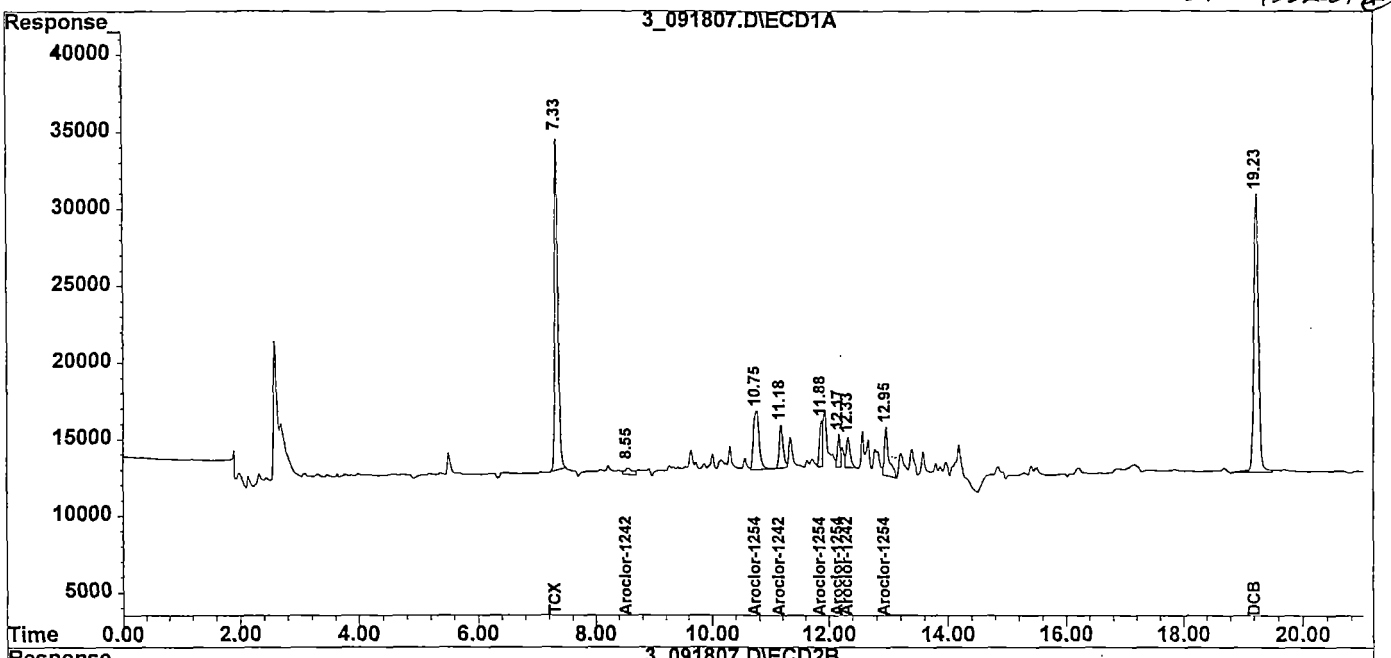
Chromatographic Report

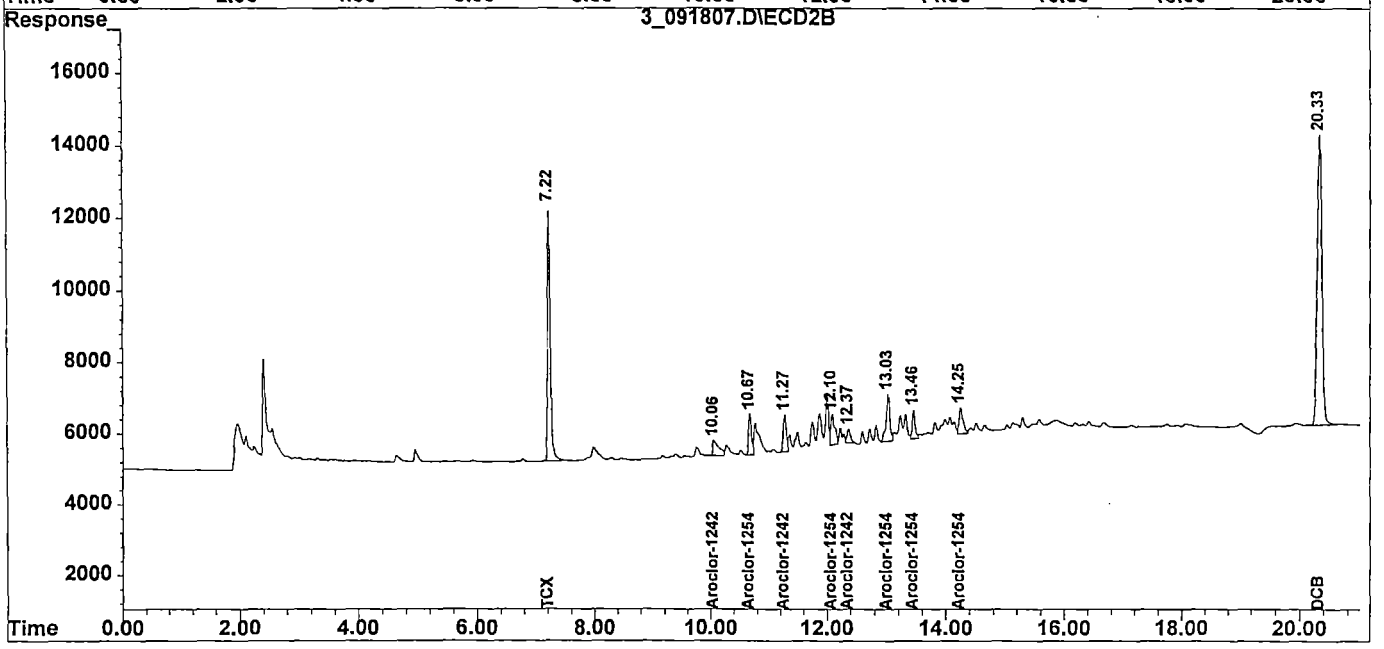
Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091807.D\ECD1A.CH Vial: 79
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091807.D\ECD2B.CH
Acq On : 19 Sep 2001 2:24 Operator: BTB
Sample : 47351.01 *E03K0 * Inst : HP_03
Misc : *EPA*30.4G/5.0ML*23 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 16:55 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

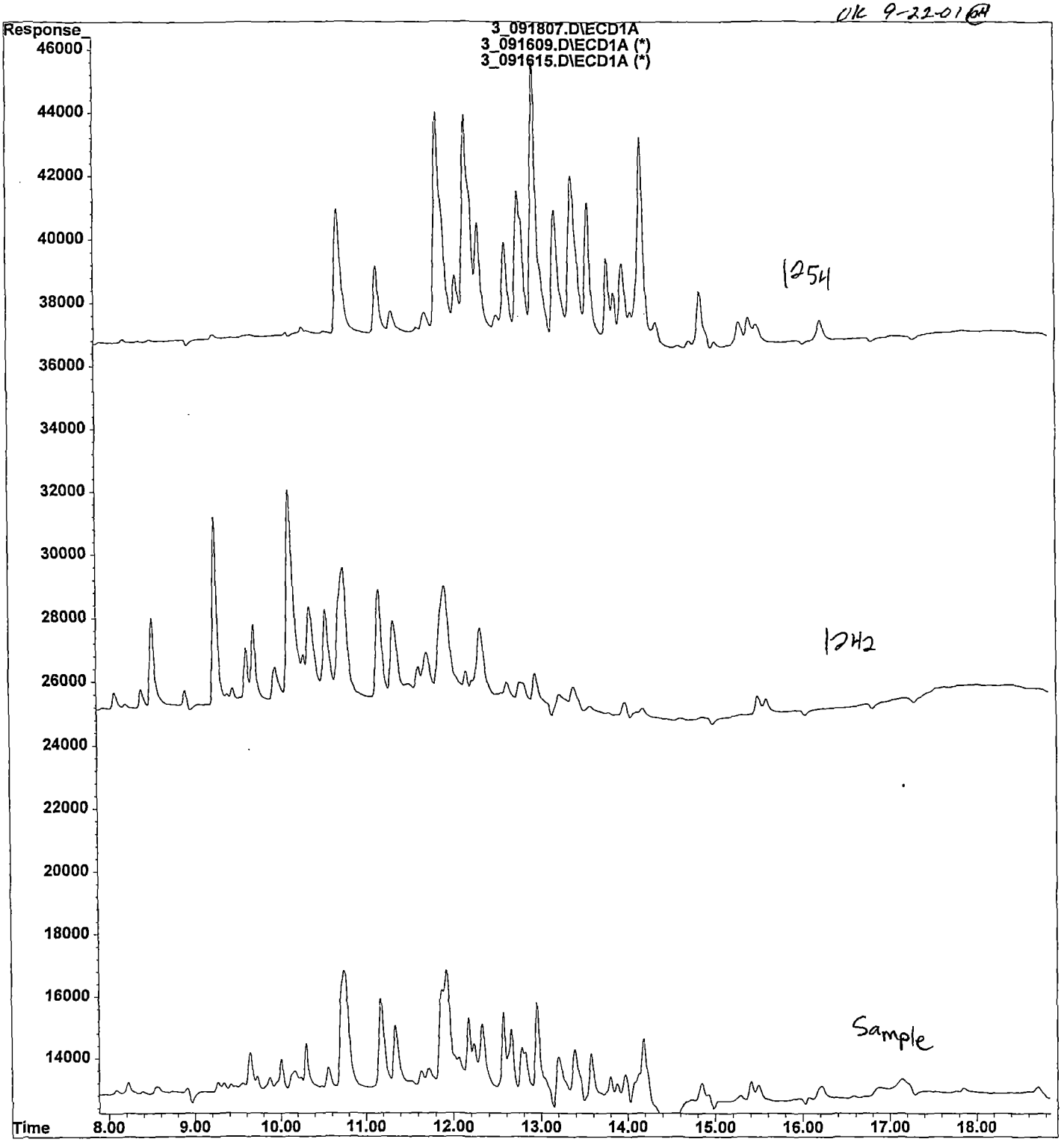
OK 9-22-01





File : F:\HPCHEM\HP\3\DATA\09_18_01\3_091807.D
Operator : BTB
Acquired : 19 Sep 2001 2:24 using AcqMethod OLM03.M
Instrument : HP_03
Sample Name: 47351.01 *E03K0 *
Misc Info : *EPA*30.4G/5.0ML*23
Vial Number: 79

OK 9-22-01



Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091807.D\ECD1A.CH Vial: 79
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091807.D\ECD2B.CH
Acq On : 19 Sep 2001 2:24 Operator: BTB
Sample : 47351.01 *E03K0 * Inst : HP_03
Misc : *EPA*30.4G/5.0ML*23 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 16:55 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

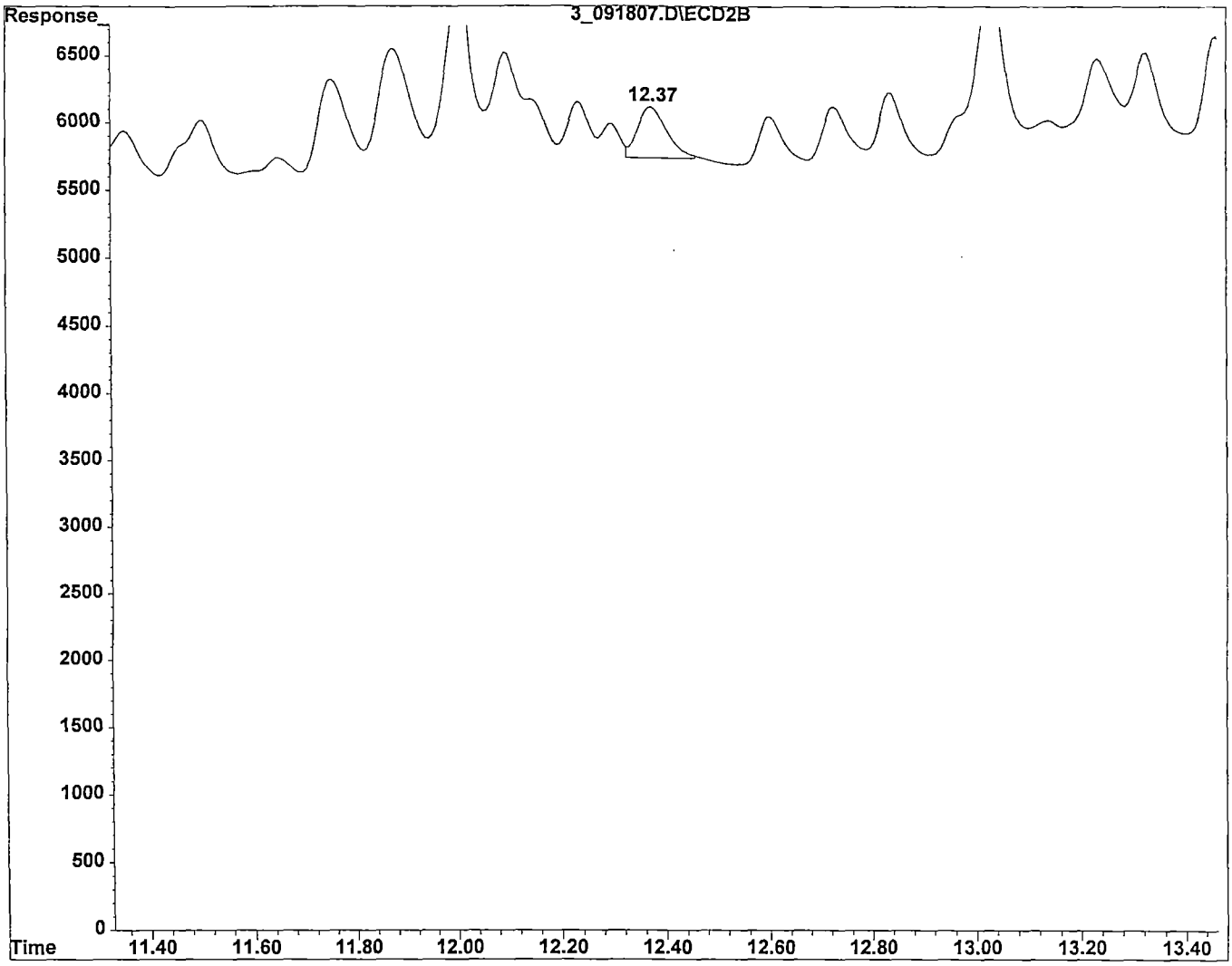
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.22	789214	237417	6.219	6.258	
	Spiked Amount 8.544			Recovery	=	72.79%	73.24%	
22)	S DCB	19.23	20.34	951930	429077	7.228	7.480	
	Spiked Amount 8.544			Recovery	=	✓84.60%	✓87.55%	
	Target Compounds:							
7)	L4 Aroclor-1242	8.55	0.00	42065	0	15.9	N.D.	#
9)	L4 Aroclor-1242 {3}	0.00	10.06	0	29700	N.D. d	9.594	#
10)	L4 Aroclor-1242 {4}	11.18	11.28	128377	35630	34.3	35.2	
11)	L4 Aroclor-1242 {5}	12.33	12.37	86382	14532	29.7	16.2m	# BTB 09/20/01
	Sum Aroclor-1242			256824	79862	79.9	60.9	
	Average Aroclor-1242					26.627	20.311	
12)	L6 Aroclor-1254	10.75f	10.67	270259	38465	57.1	33.7	#
13)	L6 Aroclor-1254 {2}	11.88	12.09	92405	40852	10.5	15.9m	#
14)	L6 Aroclor-1254 {3}	12.18	13.03	64170	54860	8.002	15.9	#
15)	L6 Aroclor-1254 {4}	12.96	13.46	164868	27576	17.8	14.5	
16)	L6 Aroclor-1254 {5}	0.00	14.25	0	35367	N.D. d	13.9	#
	Sum Aroclor-1254			591702	197120	93.5	94.0	
	Average Aroclor-1254					23.366	18.795	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091807.D
Date Acquired: 19 Sep 2001 2:24
Inst: HP_03 Operator ID: BTB
Name: 47351.01 *E03K0 *
Misc: *EPA*30.4G/5.0ML*23
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 16:55 2001 Quant Results File: XPCBI16.RES



GK 9-22-01

Aroclor-1242 {5} #2 12.37min area: 14532 m

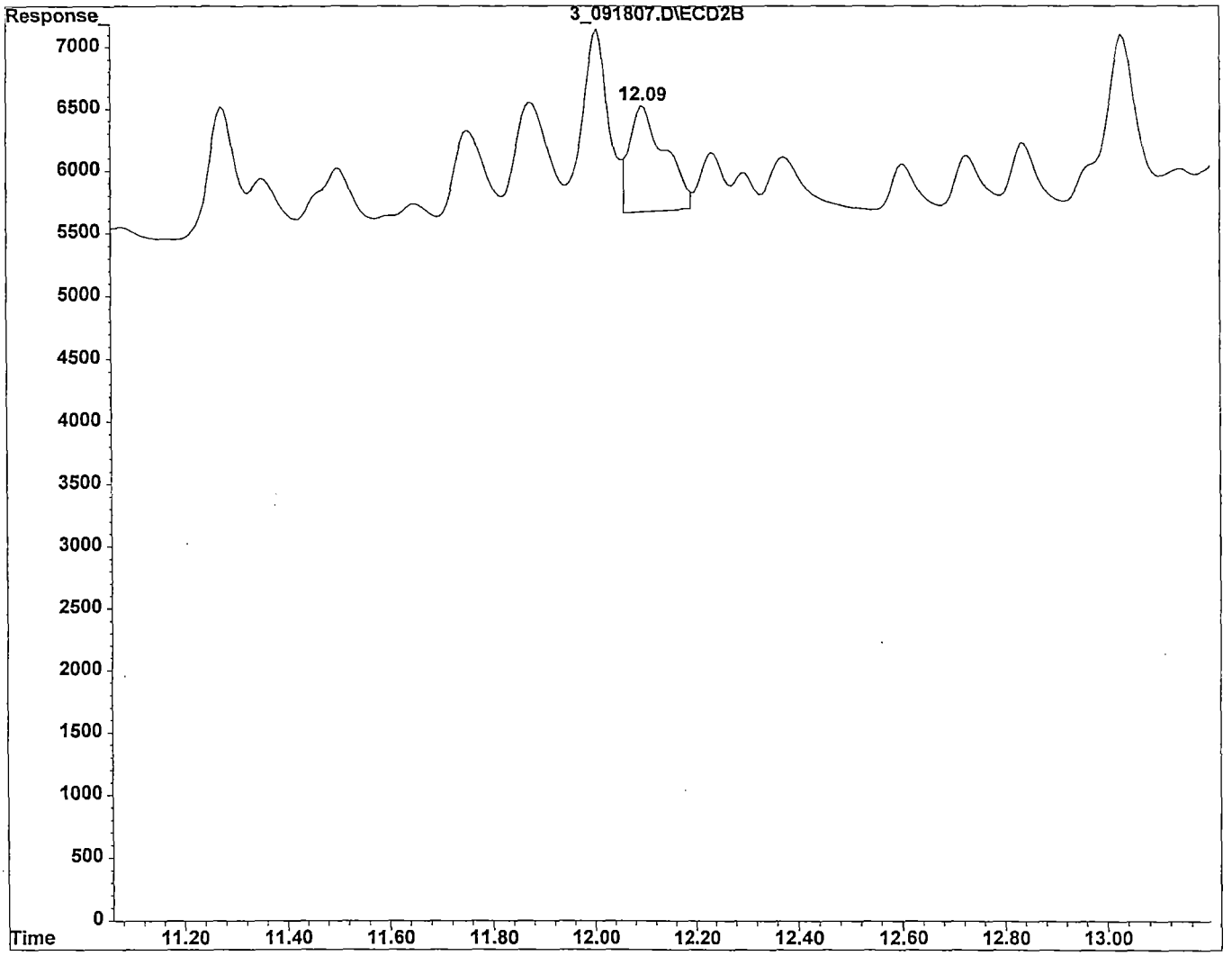
BTB 092001

Integration Time Range: 12.33 - 12.46

F:\HPCHEM\HP\3\DATA\09_18_01\3_091807.D
Report generated: Wed Sep 19 17:18:18 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091807.D
Date Acquired: 19 Sep 2001 2:24
Inst: HP_03 Operator ID: BTB
Name: 47351.01 *E03K0 *
Misc: *EPA*30.4G/5.0ML*23
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 16:55 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1254 {2} #2 12.09min area: 40852 m

Integration Time Range: 12.06 - 12.20

BTB 092001

F:\HPCHEM\HP\3\DATA\09_18_01\3_091807.D
Report generated: Wed Sep 19 17:18:18 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03K1

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.04

Sample wt/vol: 30.3 (g/mL) G Lab File ID:_____

% Moisture: 35 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	50	UJ
11104-28-2	Aroclor-1221	50	UJ
11141-16-5	Aroclor-1232	50	UJ
53469-21-9	Aroclor-1242	~~430~~ 590	~~E~~ DJ
12672-29-6	Aroclor-1248	50	UJ
11097-69-1	Aroclor-1254	~~430~~ 900	~~EP~~ DJ
11096-82-5	Aroclor-1260	270	P J
Surrogate amount spiked		10.16	

1760

apply this results
TBS 10-12-01

FORM I PCB

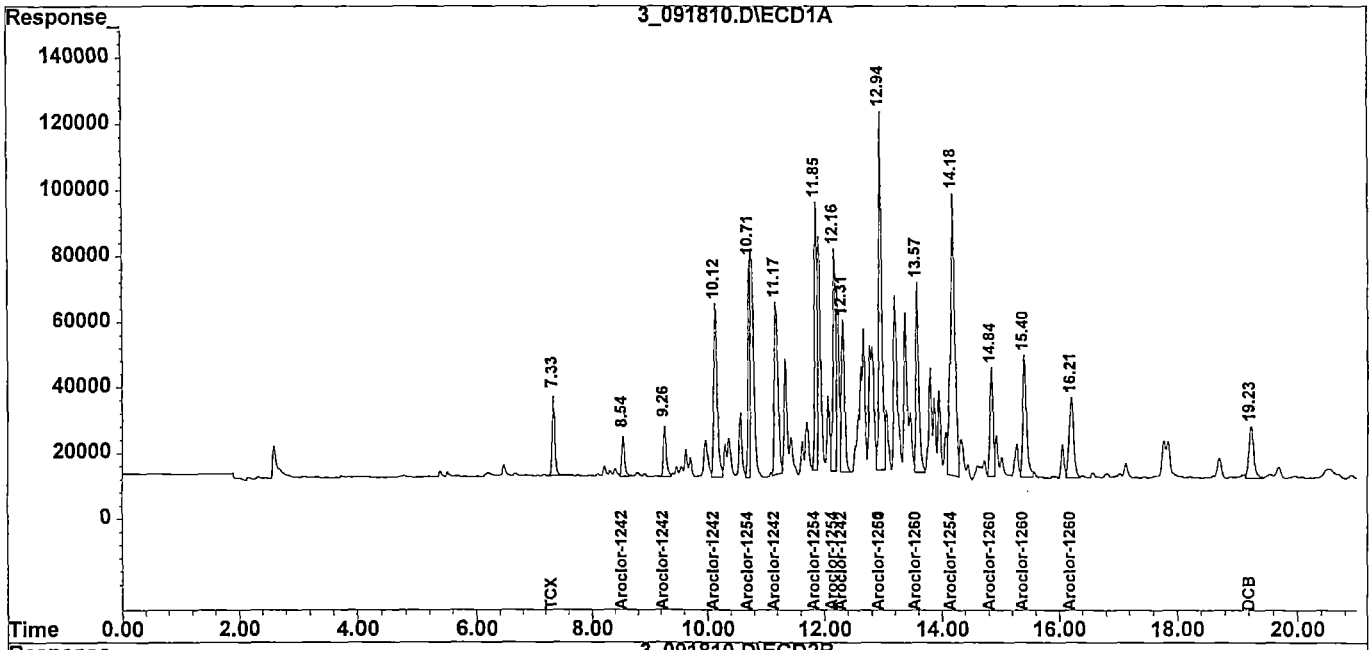
Chromatographic Report

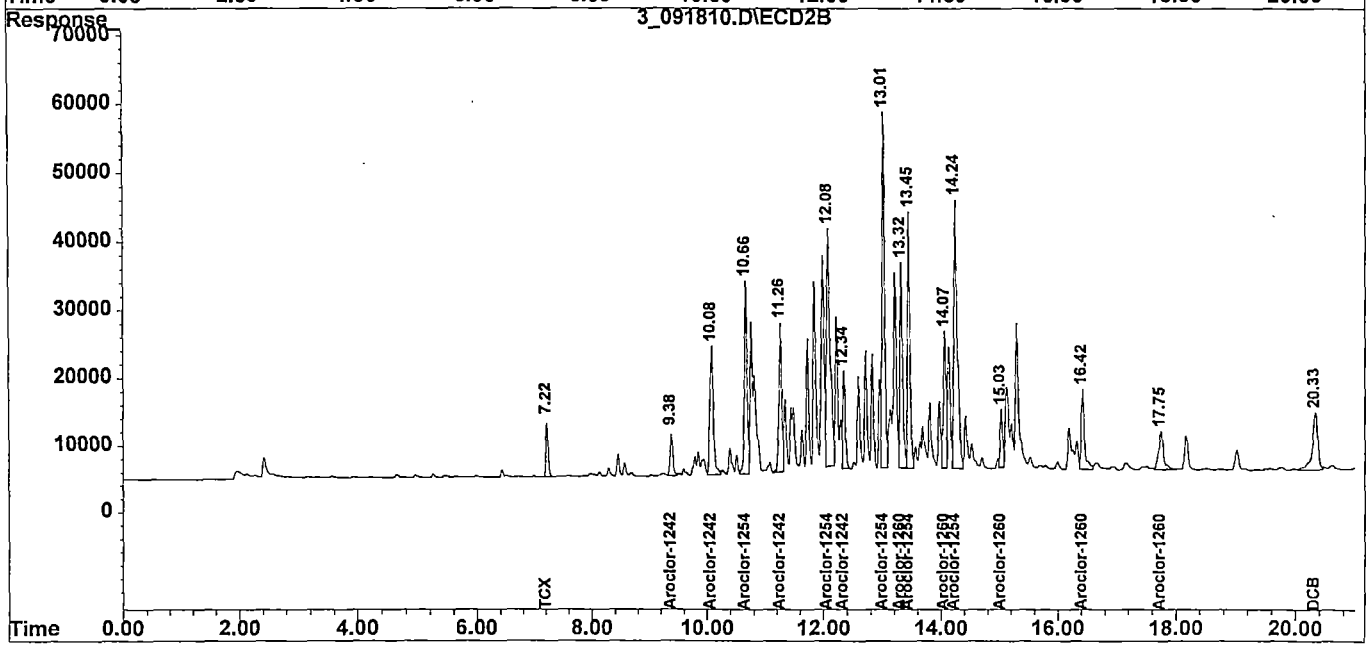
Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091810.D\ECD1A.CH Vial: 82
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091810.D\ECD2B.CH
Acq On : 19 Sep 2001 3:41 Operator: BTB
Sample : 47351.04 *E03K1 * Inst : HP_03
Misc : *EPA*30.3G/5.0ML*35 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 17:02 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

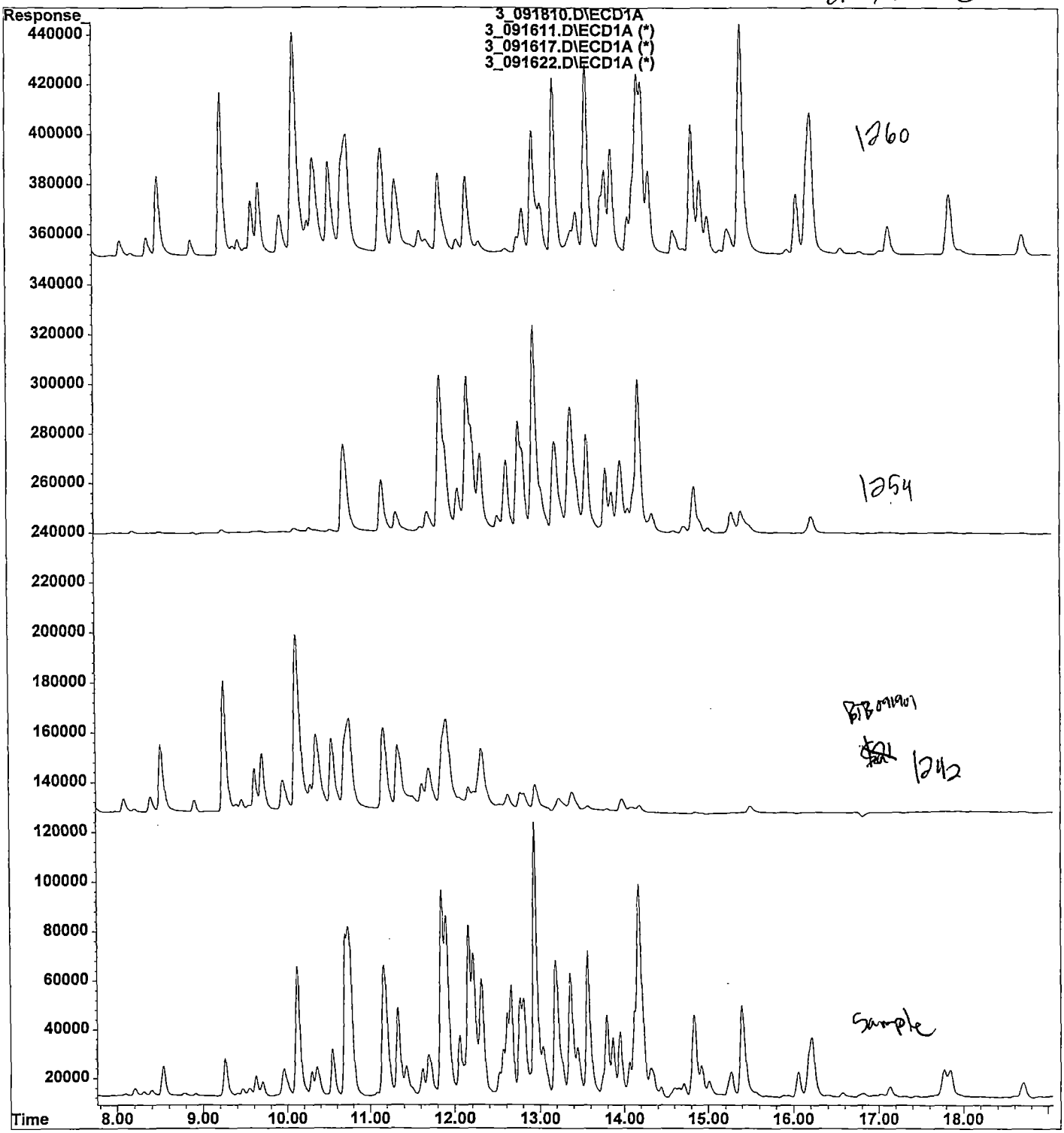
DK 9-22-01





File : F:\HPCHEM\HP\3\DATA\09_18_01\3_091810.D
Operator : BTB
Acquired : 19 Sep 2001 3:41 using AcqMethod OLM03.M
Instrument : HP_03
Sample Name: 47351.04 *E03K1 *
Misc Info : *EPA*30.3G/5.0ML*35
Vial Number: 82

OK 9-22-01



Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091810.D\ECD1A.CH Vial: 82
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091810.D\ECD2B.CH
Acq On : 19 Sep 2001 3:41 Operator: BTB
Sample : 47351.04 *E03K1 * Inst : HP_03
Misc : *EPA*30.3G/5.0ML*35 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 17:02 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

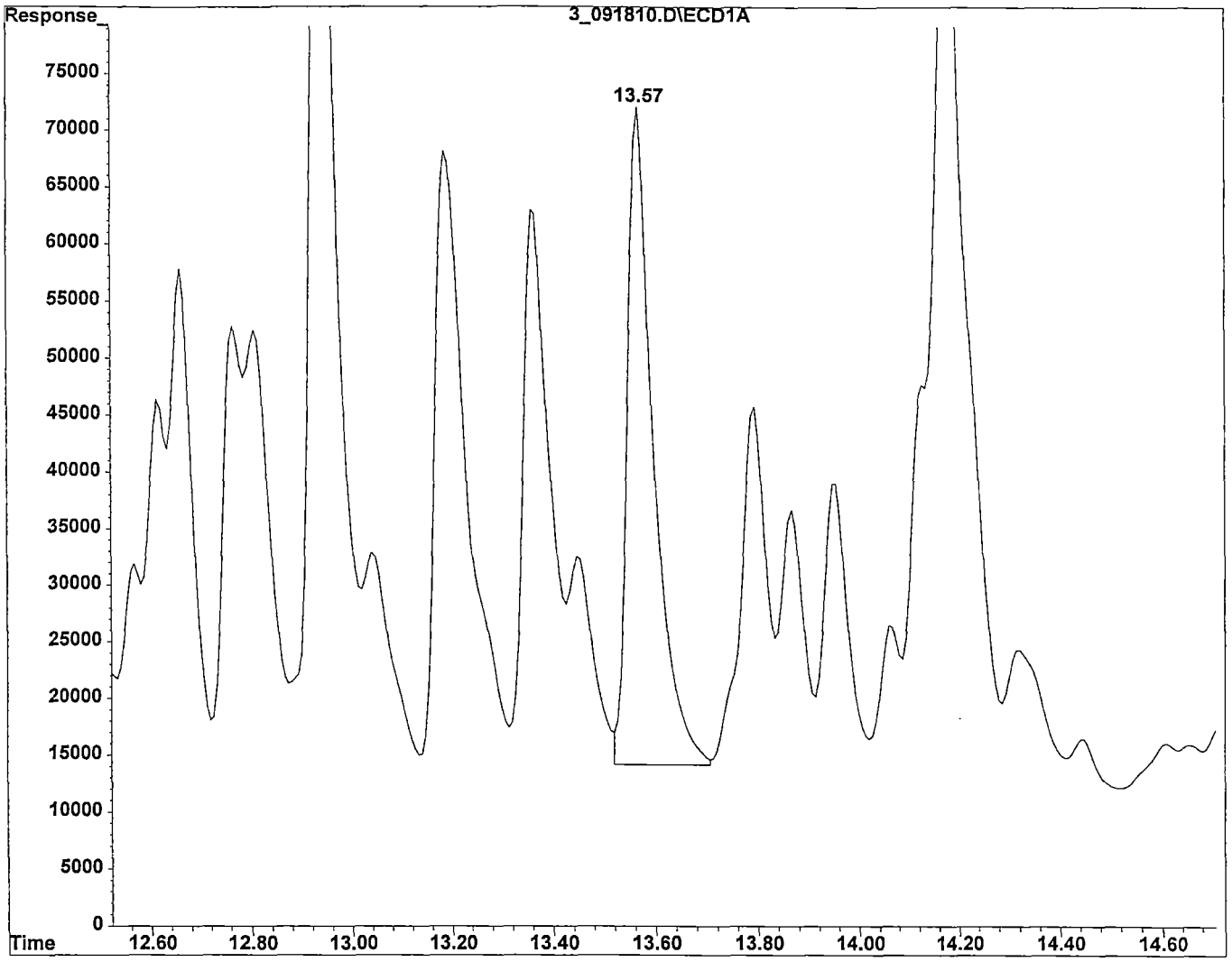
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	758564	226471	7.104	7.095
	Spiked Amount 10.155			Recovery	=	69.96%	69.87%
22)	S DCB	19.24	20.34	862042	553402	7.780	11.5 #
	Spiked Amount 10.155			Recovery	=	✓76.61%	✓113.25%
	Target Compounds:						
7)	L4 Aroclor-1242	8.54	0.00	429870	0	192.9	N.D. d #
8)	L4 Aroclor-1242 {2}	9.26	9.39	531563	211030	136.8	156.0
9)	L4 Aroclor-1242 {3}	10.13	10.08	2114582	823915	295.1	316.3
10)	L4 Aroclor-1242 {4}	11.17	11.27	2425308	751761	771.2 E	882.1 E
11)	L4 Aroclor-1242 {5}	12.31	12.35	1808685	433472	737.9	573.0m BTB 09/20/01
	Sum Aroclor-1242			7310008	2220178	2133.9	1927.5
	Average Aroclor-1242					426.781	481.867
12)	L6 Aroclor-1254	10.71	10.66	1343110	913343	337.2	951.6 E#
13)	L6 Aroclor-1254 {2}	11.86	12.08	2288924	1524053	310.2	705.2 E#
14)	L6 Aroclor-1254 {3}	12.17	13.02	1997788	1643285	296.1	567.4 #
15)	L6 Aroclor-1254 {4}	12.94	13.45	3732448	1112233	480.1	695.6 E#
16)	L6 Aroclor-1254 {5}	14.18	14.24	4582323	1622124	727.8 E	757.9 E
	Sum Aroclor-1254			13944593	6815039	2151.3	3677.7
	Average Aroclor-1254					430.258	735.535
17)	L7 Aroclor-1260	12.94	13.32	3732448	956102	887.5 E	385.8 #
18)	L7 Aroclor-1260 {2}	13.57	14.07	2051508	685526	320.7m BTB	423.8 #
19)	L7 Aroclor-1260 {3}	14.84	15.03	1273886	266545	311.4 09/20/01	125.4 #
20)	L7 Aroclor-1260 {4}	15.40	16.43	1633243	466731	177.4	214.1
21)	L7 Aroclor-1260 {5}	16.22	17.76	1370732	327559	195.5	213.1
	Sum Aroclor-1260			10061816	2702462	960.9	691.6
	Average Aroclor-1260					378.481	272.434

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091810.D
Date Acquired: 19 Sep 2001 3:41
Inst: HP_03 Operator ID: BTB
Name: 47351.04 *E03K1 *
Misc: *EPA*30.3G/5.0ML*35
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 17:02 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1260 {2} 13.57min area: 2051508 m

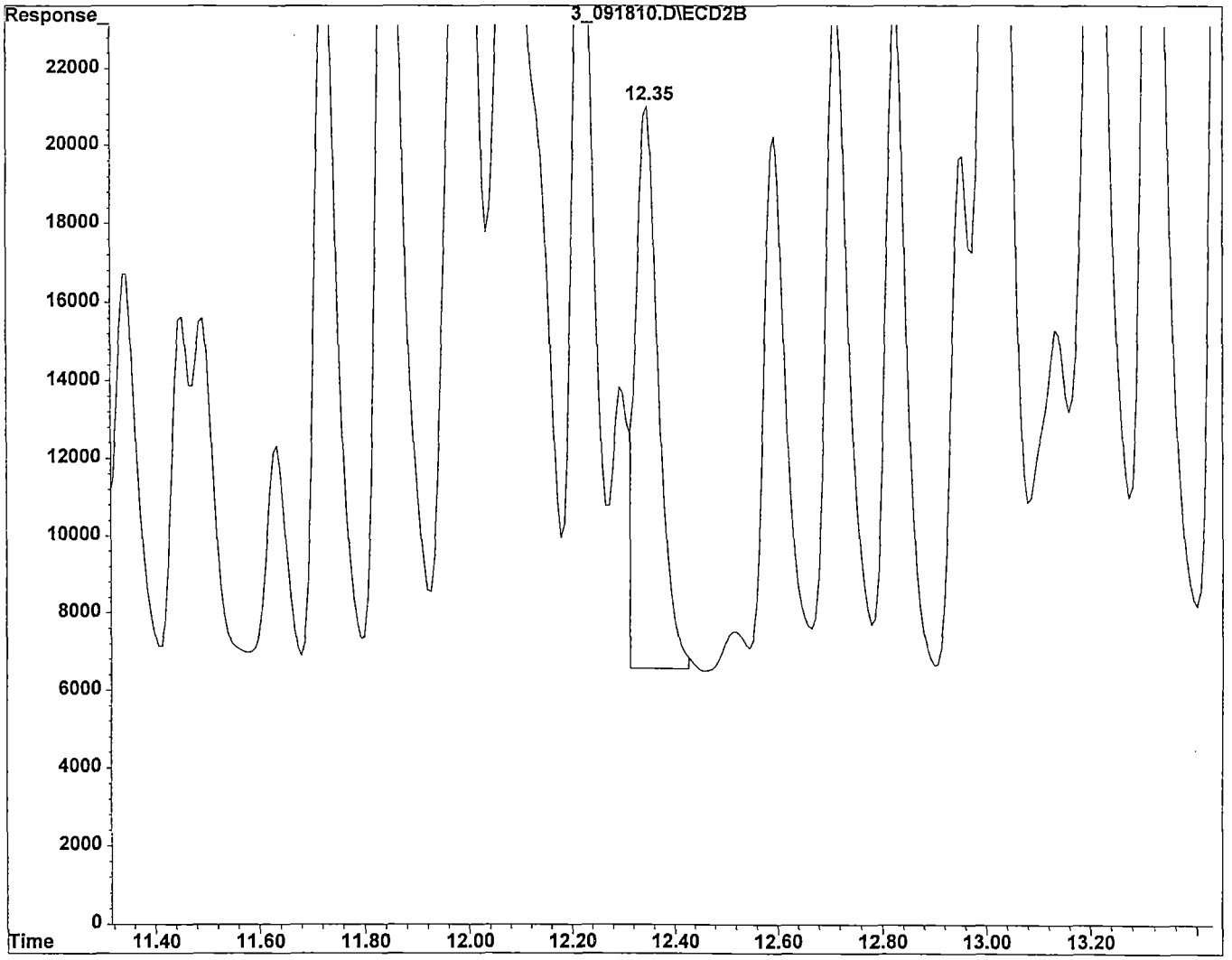
Integration Time Range: 13.52 - 13.71

BTB 092001

F:\HPCHEM\HP\3\DATA\09_18_01\3_091810.D
Report generated: Wed Sep 19 17:18:24 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091810.D
Date Acquired: 19 Sep 2001 3:41
Inst: HP_03 Operator ID: BTB
Name: 47351.04 *E03K1 *
Misc: *EPA*30.3G/5.0ML*35
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 17:02 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1242 {5} #2 12.35min area: 433472 m

Integration Time Range: 12.31 - 12.43

BTB 092001

F:\HPCHEM\HP\3\DATA\09_18_01\3_091810.D
Report generated: Wed Sep 19 17:18:25 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03K1DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.04DL

Sample wt/vol: 30.3 (g/mL) G Lab File ID:_____

% Moisture: 35 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/21/01

Injection Volume: 0.5(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 7.4 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	500	UJ
11104-28-2	Aroclor-1221	500	UJ
11141-16-5	Aroclor-1232	500	UJ
53469-21-9	Aroclor-1242	590	DJ
12672-29-6	Aroclor-1248	500	UJ
11097-69-1	Aroclor-1254	900	DJ
11096-82-5	Aroclor-1260	340	DJP
Surrogate amount spiked		10.16	

TBS
10-12-01

FORM I PCB

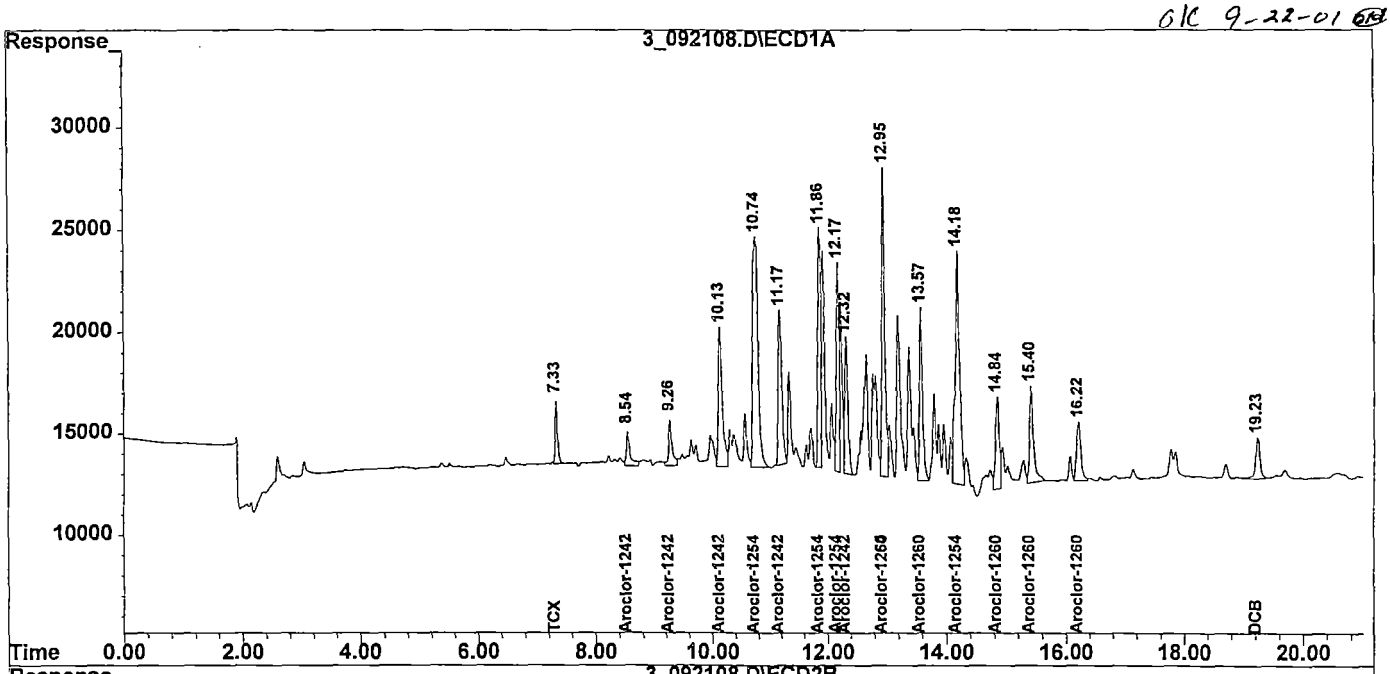
Chromatographic Report

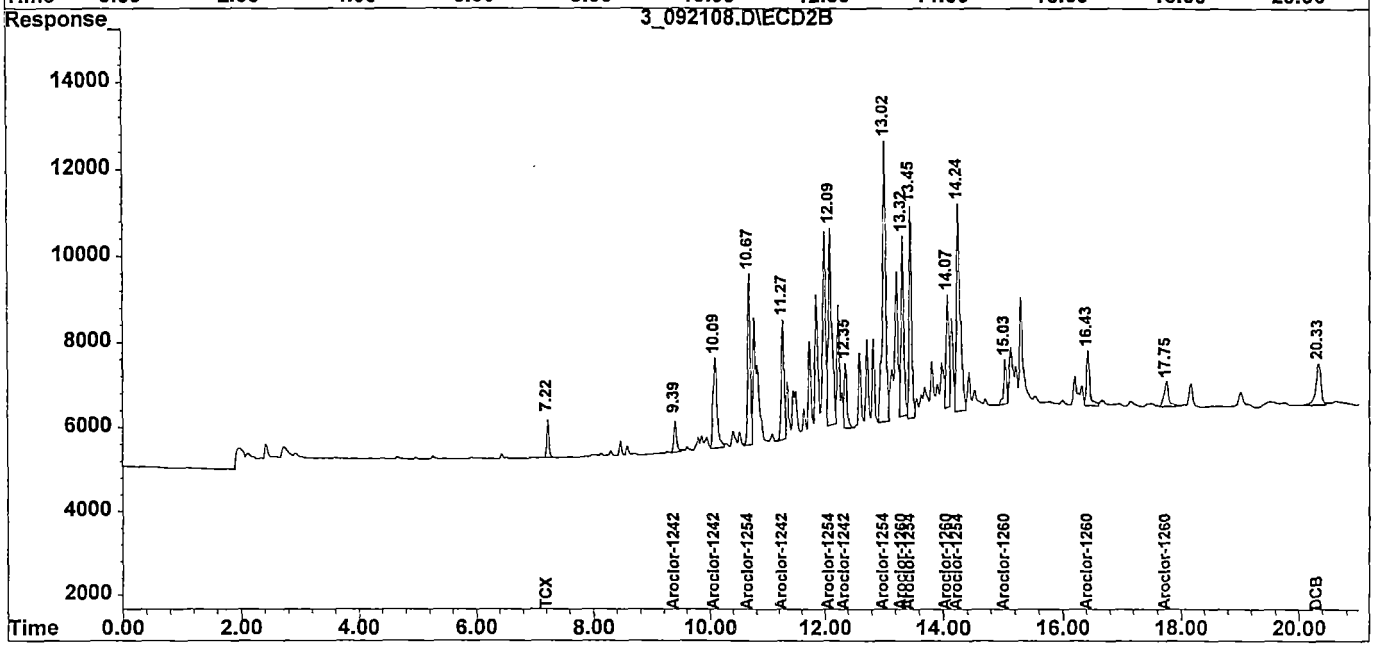
Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092108.D\ECD1A.CH Vial: 85
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092108.D\ECD2B.CH
Acq On : 21 Sep 2001 00:20 Operator: BTB
Sample : 47351.04DL, *E03K1DL, * Inst : HP_03
Misc : *EPA*30.3G/5.0ML*35 Dilution: 10.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 9:45 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

GC 9-22-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092108.D\ECD1A.CH Vial: 85
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092108.D\ECD2B.CH
Acq On : 21 Sep 2001 00:20 Operator: BTB
Sample : 47351.04DL *E03K1DL * Inst : HP_03
Misc : *EPA*30.3G/5.0ML*35 Dilution: 10.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 9:45 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

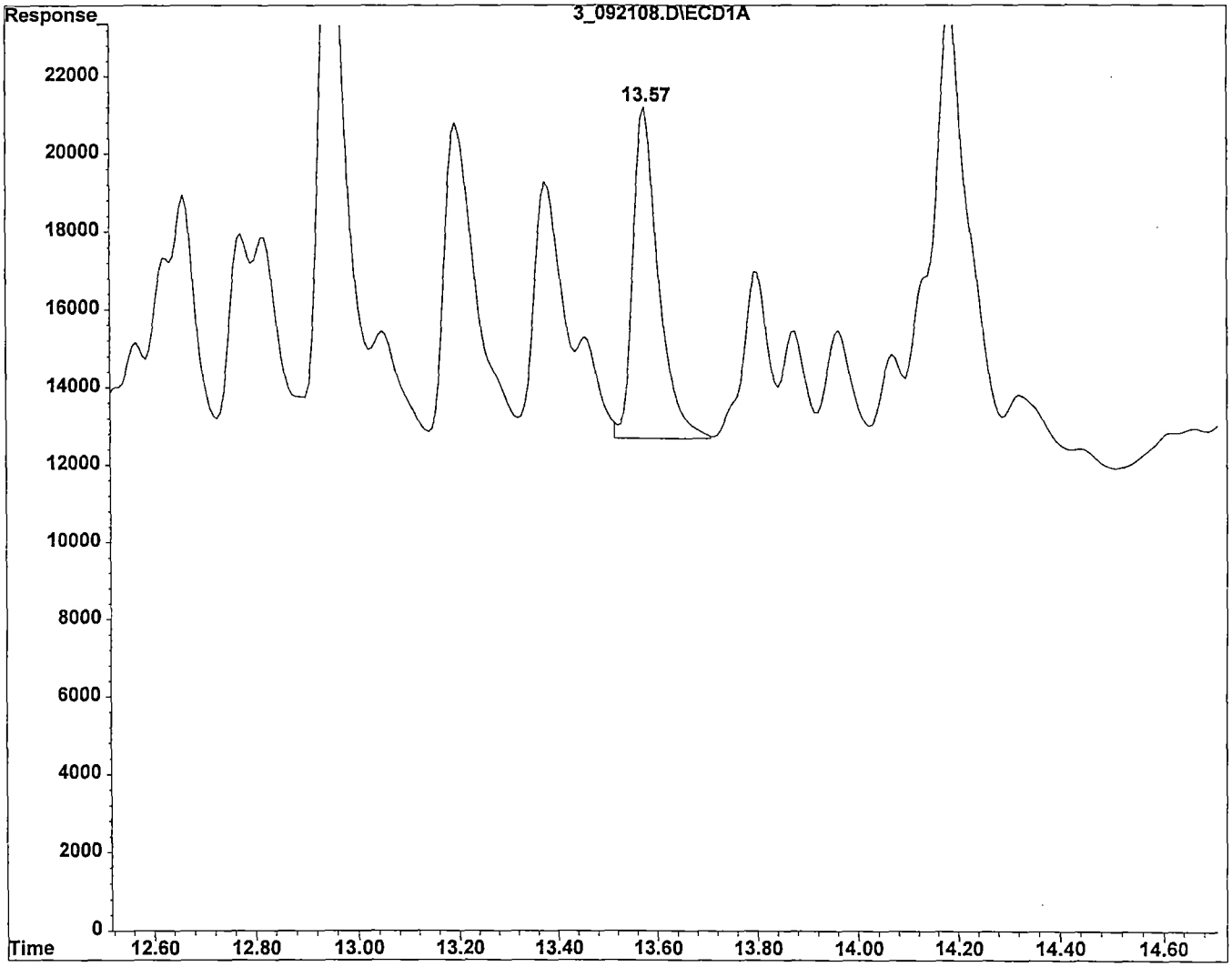
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.22	89499	23553	8.382	7.379	
	Spiked Amount 10.155			Recovery	=	82.54%	72.66%	
22)	S DCB	19.24	20.33	106549	59998	9.616	12.4	#
	Spiked Amount 10.155			Recovery	=	/94.69%	/122.11%	
	Target Compounds:							
7)	L4 Aroclor-1242	8.54	0.00	74504	0	334.4	N.D. d	#
8)	L4 Aroclor-1242 {2}	9.26	9.39	93282	23735	240.1	175.5	#
9)	L4 Aroclor-1242 {3}	10.13	10.09	324811	102671	453.3	394.2	
10)	L4 Aroclor-1242 {4}	11.18	11.27	346107	94539	1100.5	1109.3	
11)	L4 Aroclor-1242 {5}	12.32	12.35	263358	50972	1074.4	673.8m	# BTB 092101
	Sum Aroclor-1242			1102061	271916	3202.7	2352.8	
	Average Aroclor-1242					640.539	588.194	
12)	L6 Aroclor-1254	10.75	10.67	759111	127163	1905.6	1324.9	#
13)	L6 Aroclor-1254 {2}	11.86	12.09	364684	201710	494.2	933.3	#
14)	L6 Aroclor-1254 {3}	12.17	13.02	313112	252647	464.1	872.3	#
15)	L6 Aroclor-1254 {4}	12.95	13.46	523542	148450	673.4	928.4	#
16)	L6 Aroclor-1254 {5}	14.18	14.25	602403	208024	956.7	972.0	
	Sum Aroclor-1254			2562852	937994	4494.0	5030.9	
	Average Aroclor-1254					898.800	1006.181	
17)	L7 Aroclor-1260	12.95	13.32	523542	130652	1244.8	527.2m	#
18)	L7 Aroclor-1260 {2}	13.57	14.07	298528	88888	466.6m BTB	549.6m	
19)	L7 Aroclor-1260 {3}	14.85	15.04	195875	34269	478.8 092101	161.2	#
20)	L7 Aroclor-1260 {4}	15.41	16.43	224841	50063	244.2	229.6	
21)	L7 Aroclor-1260 {5}	16.22	17.76	159493	33283	227.5	216.6	
	Sum Aroclor-1260			1402279	337155	13515.7	8550.8	
	Average Aroclor-1260					532.383	336.814	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092108.D
Date Acquired: 21 Sep 2001 00:20
Inst: HP_03 Operator ID: BTB
Name: 47351.04DL *E03K1DL *
Misc: *EPA*30.3G/5.0ML*35
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 9:45 2001 Quant Results File: XPCBI16.RES



GK 9-22-01

Aroclor-1260 {2} 13.57min area: 298528 m

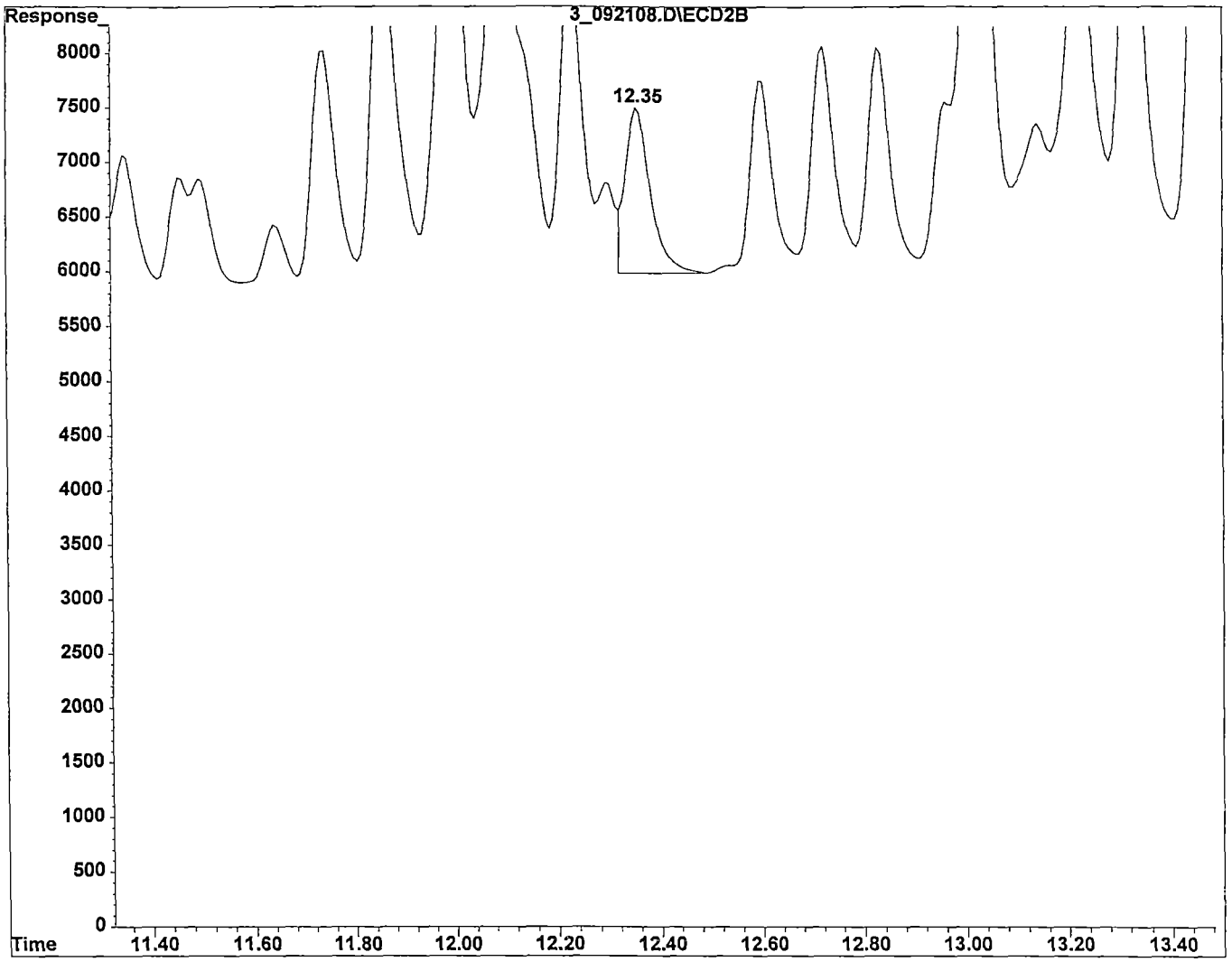
BTB 092101

Integration Time Range: 13.52 - 13.71

F:\HPCHEM\HP\3\DATA\09_21_01\3_092108.D
Report generated: Fri Sep 21 09:54:31 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092108.D
Date Acquired: 21 Sep 2001 00:20
Inst: HP_03 Operator ID: BTB
Name: 47351.04DL *E03K1DL *
Misc: *EPA*30.3G/5.0ML*35
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 9:45 2001 Quant Results File: XPCBI16.RES



ok 9-22-01

Aroclor-1242 {5} #2 12.35min area: 50972 m

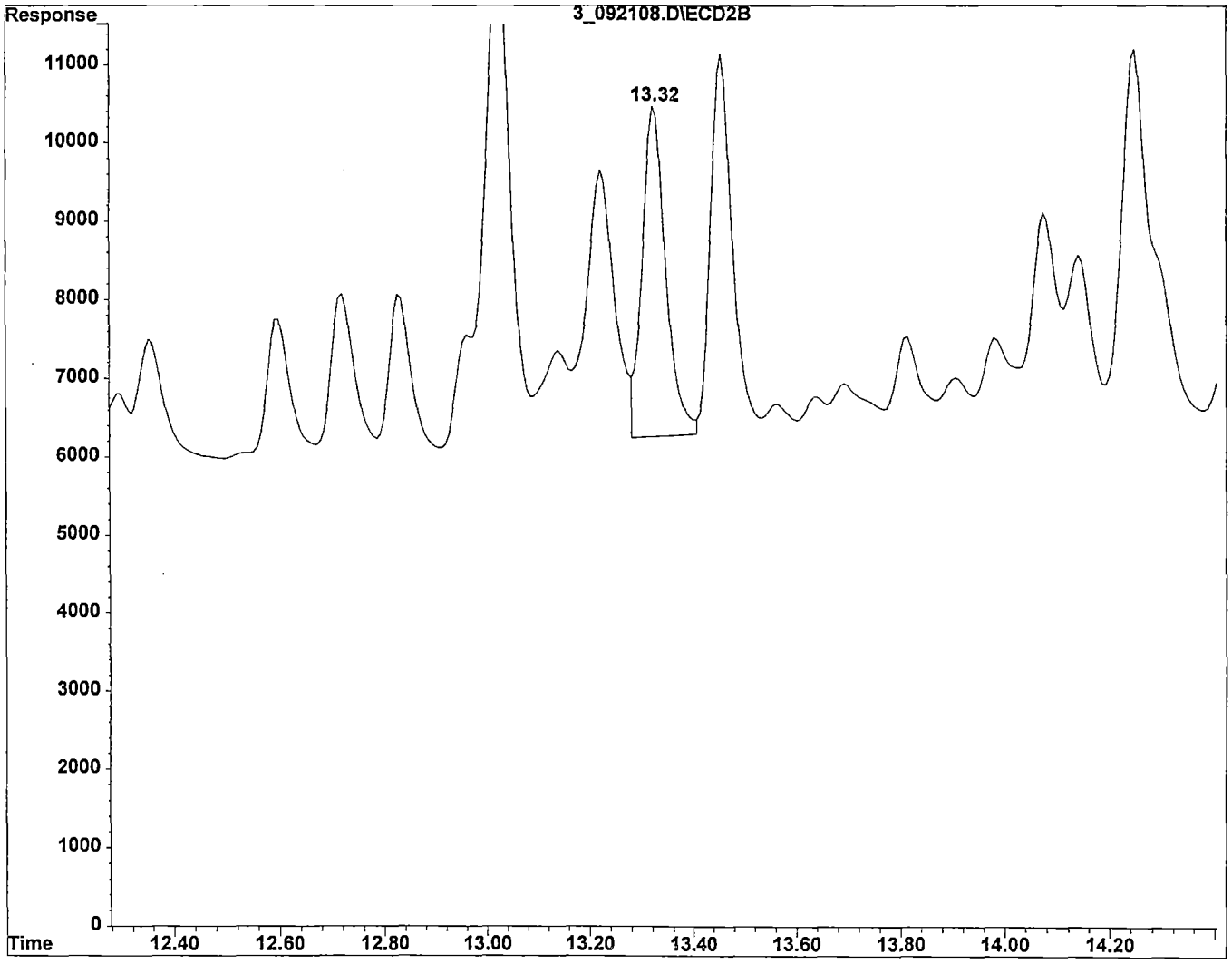
Integration Time Range: 12.32 - 12.48

BTB
092101

F:\HPCHEM\HP\3\DATA\09_21_01\3_092108.D
Report generated: Fri Sep 21 09:54:32 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092108.D
Date Acquired: 21 Sep 2001 00:20
Inst: HP_03 Operator ID: BTB
Name: 47351.04DL *E03K1DL *
Misc: *EPA*30.3G/5.0ML*35
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 9:45 2001 Quant Results File: XPCBI16.RES



Aroclor-1260 #2 13.32min area: 130652 m

Integration Time Range: 13.28 - 13.40

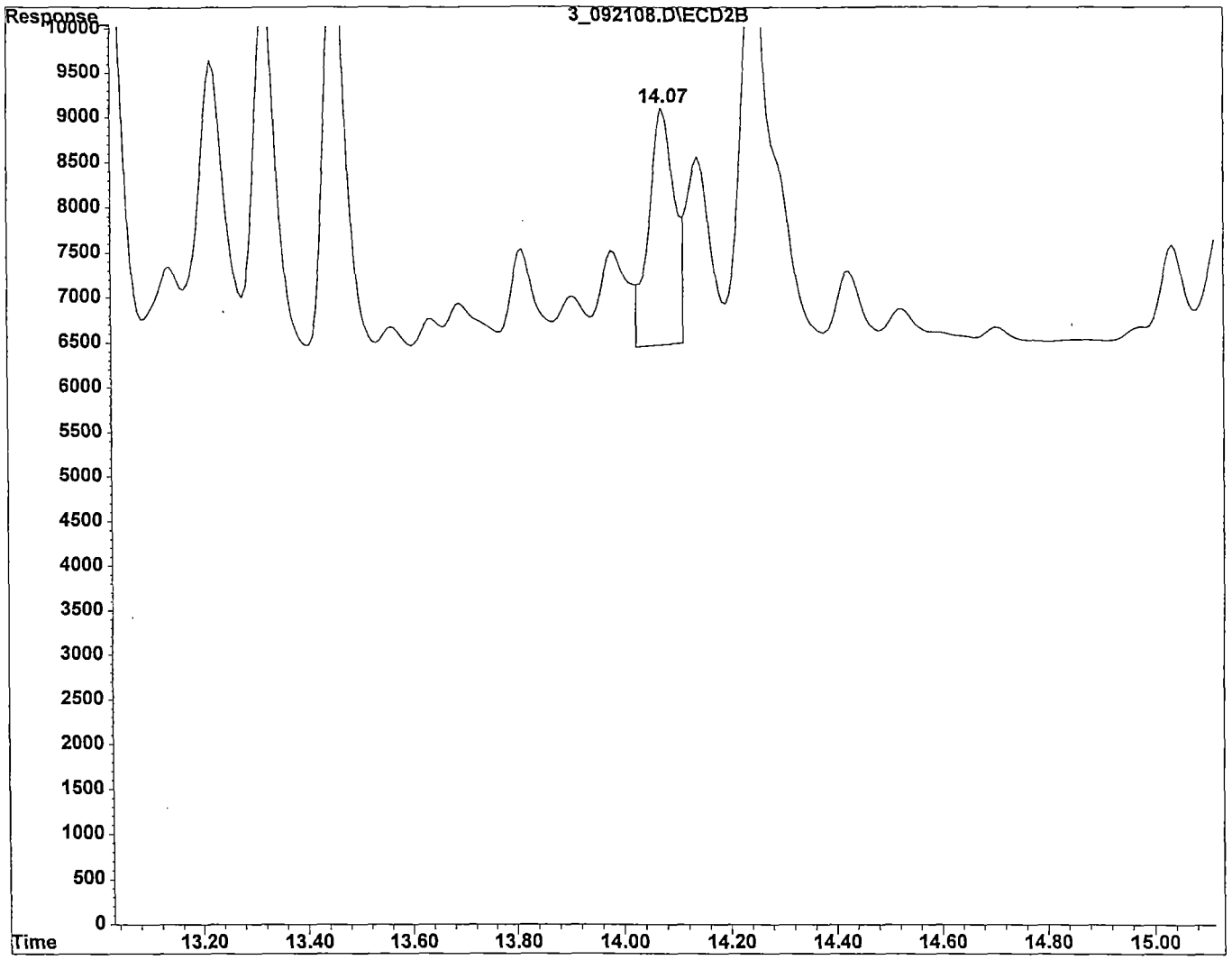
OK 9-22-01 BTB

BTB 092101

F:\HPCHEM\HP\3\DATA\09_21_01\3_092108.D
Report generated: Fri Sep 21 09:54:33 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092108.D
Date Acquired: 21 Sep 2001 00:20
Inst: HP_03 Operator ID: BTB
Name: 47351.04DL *E03K1DL *
Misc: *EPA*30.3G/5.0ML*35
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 9:45 2001 Quant Results File: XPCBI16.RES



OK 9-22-01 BH

Aroclor-1260 {2} #2 14.07min area: 88888 m

Integration Time Range: 14.03 - 14.11

BTB 092101

F:\HPCHEM\HP\3\DATA\09_21_01\3_092108.D
Report generated: Fri Sep 21 09:54:33 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03K2

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.05

Sample wt/vol: 30.1 (g/mL) G Lab File ID:_____

% Moisture: 11 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.6 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	37	U J
11104-28-2	Aroclor-1221	37	U J
11141-16-5	Aroclor-1232	37	U J
53469-21-9	Aroclor-1242	220	J
12672-29-6	Aroclor-1248	37	U J
11097-69-1	Aroclor-1254	~~440~~ 620 DJ	~~P~~
11096-82-5	Aroclor-1260	200	P J
Surrogate amount spiked		7.47	

1040

apply this results
TBS 10-12-01

FORM I PCB

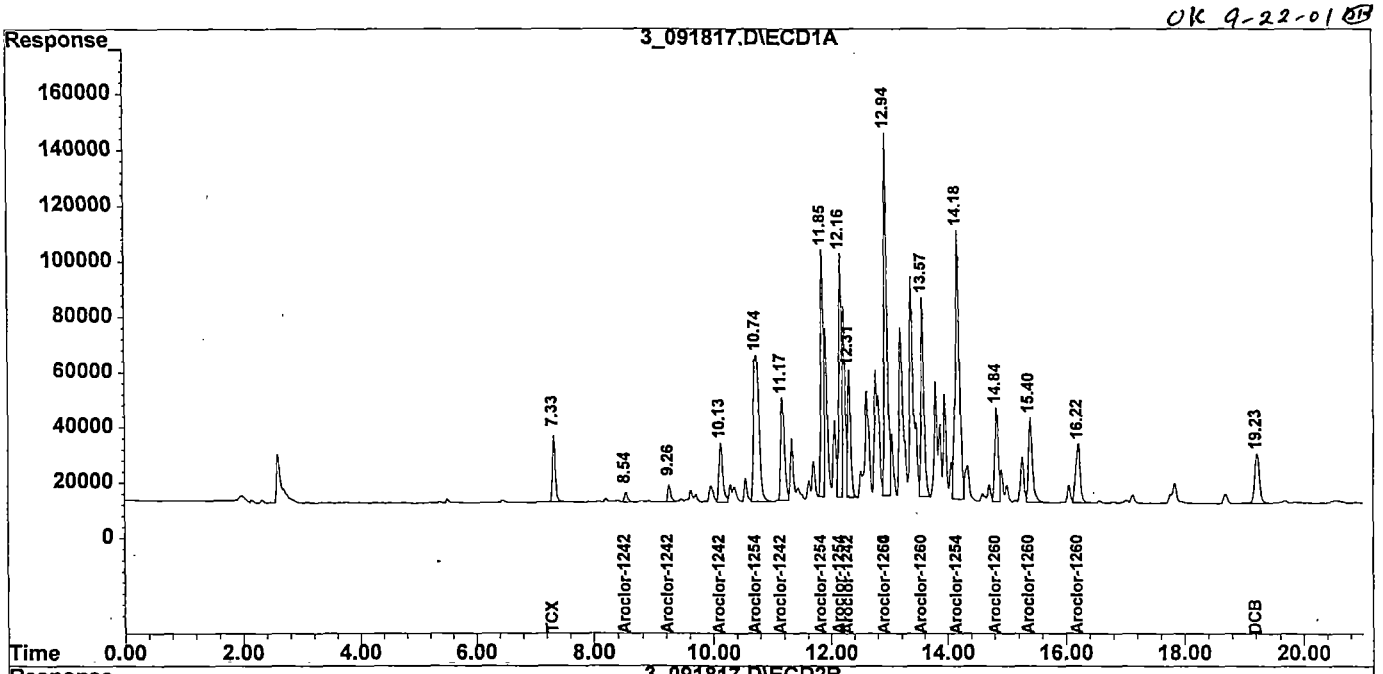
Chromatographic Report

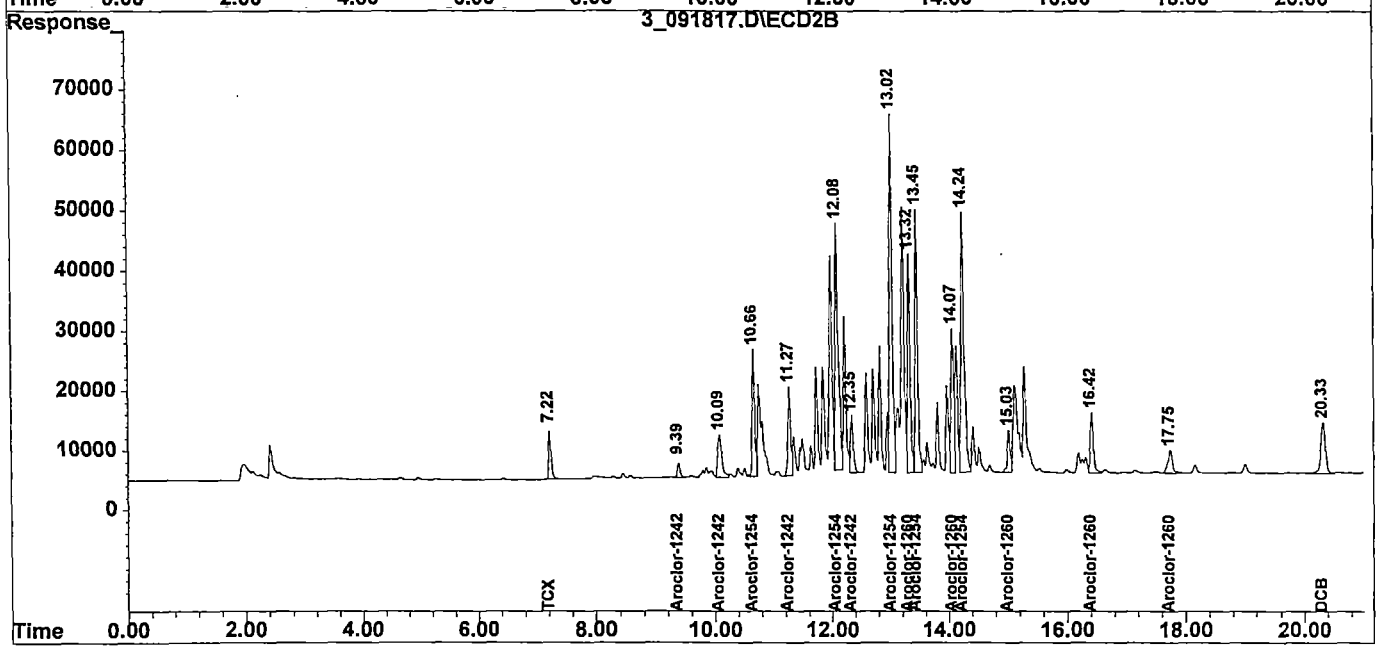
Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091817.D\ECD1A.CH Vial: 89
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091817.D\ECD2B.CH
Acq On : 19 Sep 2001 6:40 Operator: BTB
Sample : 47351.05 *E03K2 * Inst : HP_03
Misc : *EPA*30.1G/5.0ML*11 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 8:16 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

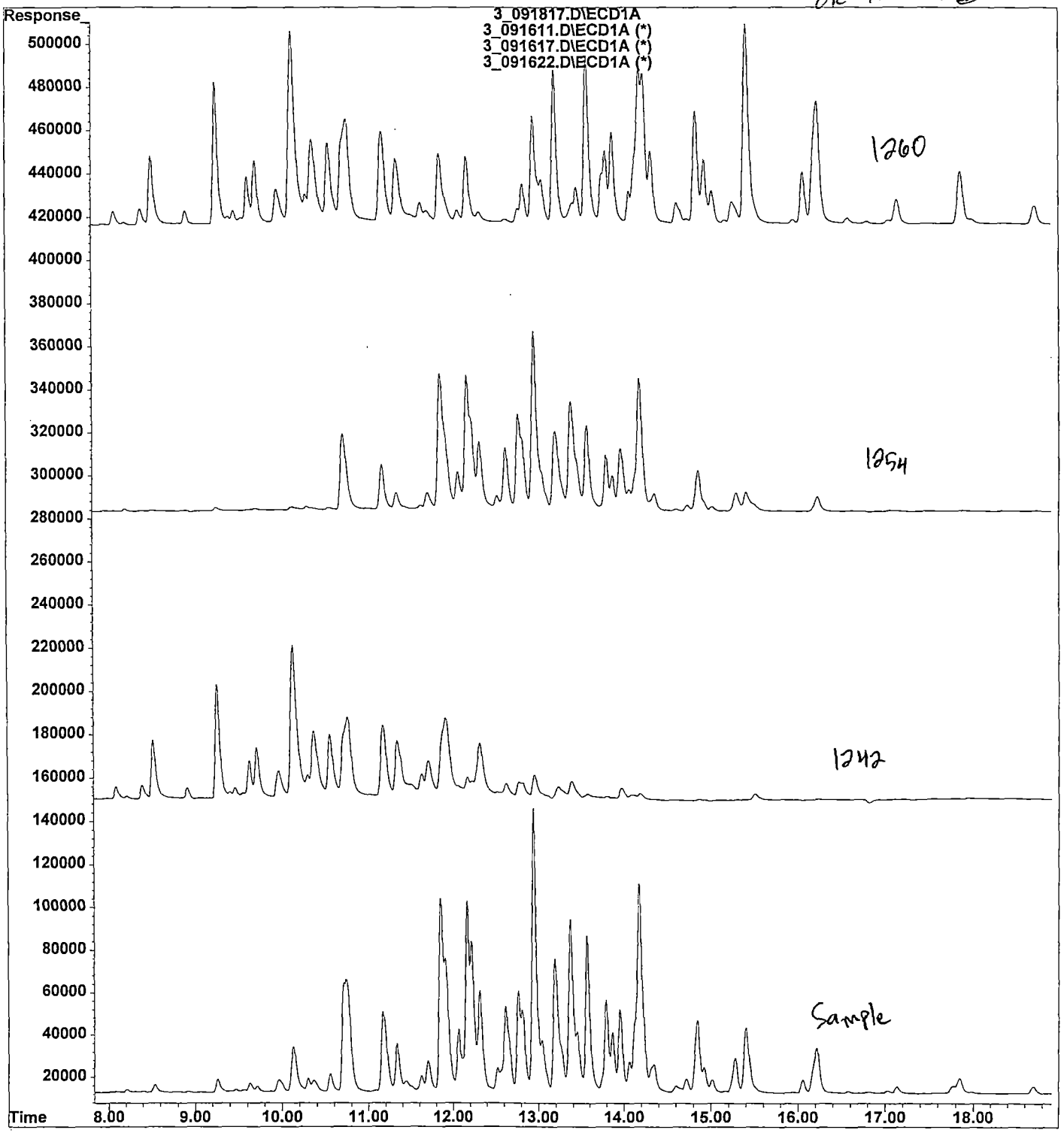
OK 9-22-01





File : F:\HPCHEM\HP\3\DATA\09_18_01\3_091817.D
Operator : BTB
Acquired : 19 Sep 2001 6:40 using AcqMethod OLM03.M
Instrument : HP_03
Sample Name: 47351.05 *E03K2 *
Misc Info : *EPA*30.1G/5.0ML*11
Vial Number: 89

OK 9-22-01



Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091817.D\ECD1A.CH Vial: 89
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091817.D\ECD2B.CH
Acq On : 19 Sep 2001 6:40 Operator: BTB
Sample : 47351.05 *E03K2 * Inst : HP_03
Misc : *EPA*30.1G/5.0ML*11 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 8:16 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

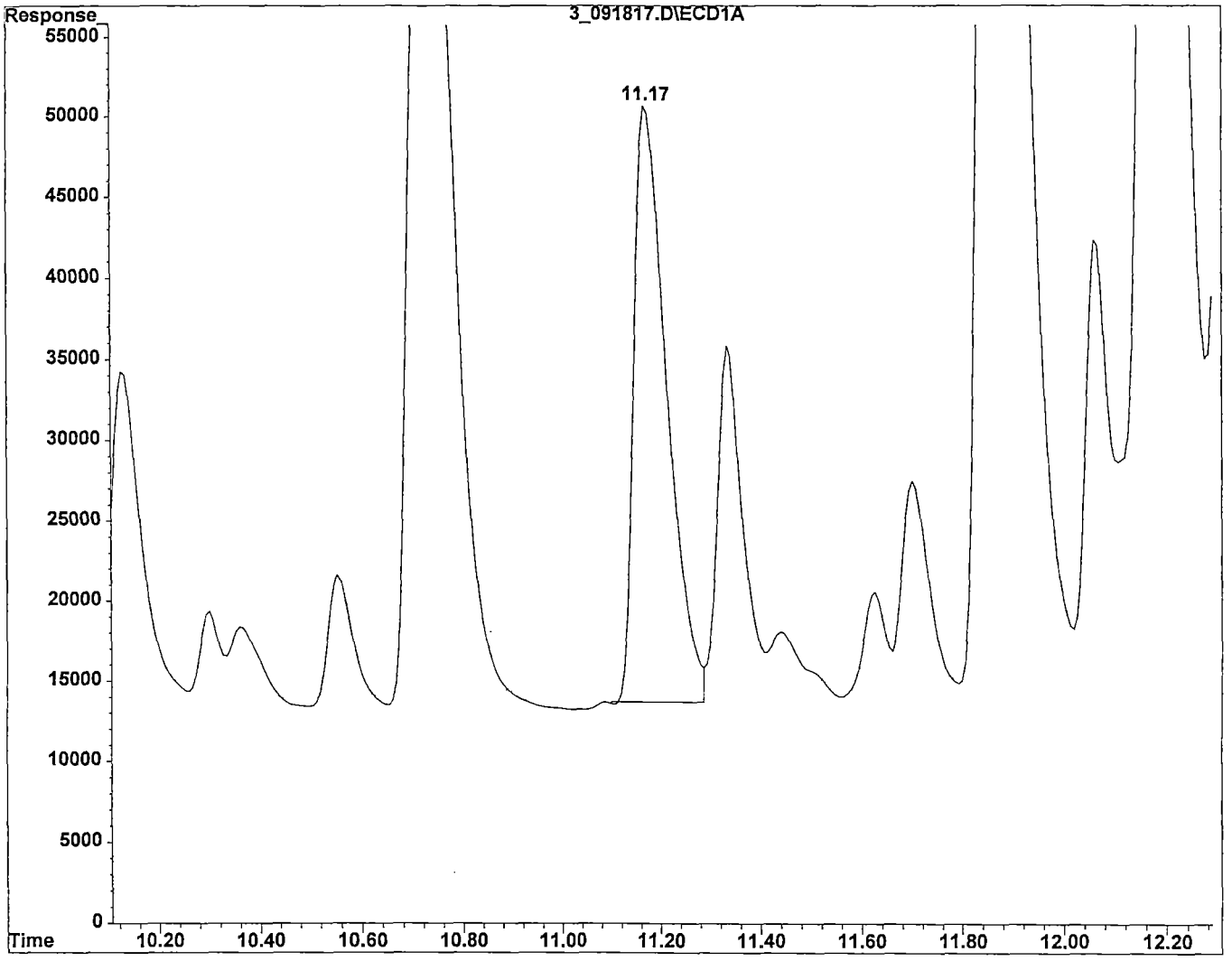
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	790426	233387	5.442	5.375
	Spiked Amount 7.466			Recovery	=	72.89%	72.00%
22)	S DCB	19.23	20.33	960990	473706	6.376	7.216
	Spiked Amount 7.466			Recovery	=	85.40%	96.65%
	Target Compounds:						
7)	L4 Aroclor-1242	8.54	0.00	130466	0	43.0	N.D. d #
8)	L4 Aroclor-1242 {2}	9.26	9.39	216890	79588	41.0	43.3
9)	L4 Aroclor-1242 {3}	10.13	10.09	936376	352429	96.1	99.5
10)	L4 Aroclor-1242 {4}	11.17	11.27	1703428	476296	398.2m BTB	410.9
11)	L4 Aroclor-1242 {5}	12.32	12.35	1779582	317580	533.8 09/20/01	308.6m # BTB 09/20/01
	Sum Aroclor-1242			4766741	1225893	1112.1	862.3
	Average Aroclor-1242					222.425	215.564
12)	L6 Aroclor-1254	10.74	10.67	3494326	665644	644.9 E	509.9 E
13)	L6 Aroclor-1254 {2}	11.86	12.08	2931565	1594128	292.1	542.3 E#
14)	L6 Aroclor-1254 {3}	12.17	13.02	2650767	2001290	288.8	508.0 E#
15)	L6 Aroclor-1254 {4}	12.94	13.45	4529832	1341926	428.4	617.0 E#
16)	L6 Aroclor-1254 {5}	14.18	14.24	4847367	1728567	566.0 E	593.8 E
	Sum Aroclor-1254			18453856	7331555	2220.1	2770.9
	Average Aroclor-1254					444.030	554.190
17)	L7 Aroclor-1260	12.94	13.32	4529832	1190218	791.8 E	353.1 #
18)	L7 Aroclor-1260 {2}	13.57	14.07	2554636	762012	293.6m	346.4
19)	L7 Aroclor-1260 {3}	14.84	15.03	1330050	221872	239.0	76.7 #
20)	L7 Aroclor-1260 {4}	15.40	16.42	1389219	378064	110.9	127.5
21)	L7 Aroclor-1260 {5}	16.22	17.75	1130437	204586	118.5	97.9
	Sum Aroclor-1260			10934173	2756752	580.0	373.8
	Average Aroclor-1260					310.778	200.299

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091817.D
Date Acquired: 19 Sep 2001 6:40
Inst: HP_03 Operator ID: BTB
Name: 47351.05 *E03K2 *
Misc: *EPA*30.1G/5.0ML*11
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:16 2001 Quant Results File: XPCBI16.RES



GK 9-22-01

Aroclor-1242 {4} 11.17min area: 1703428 m

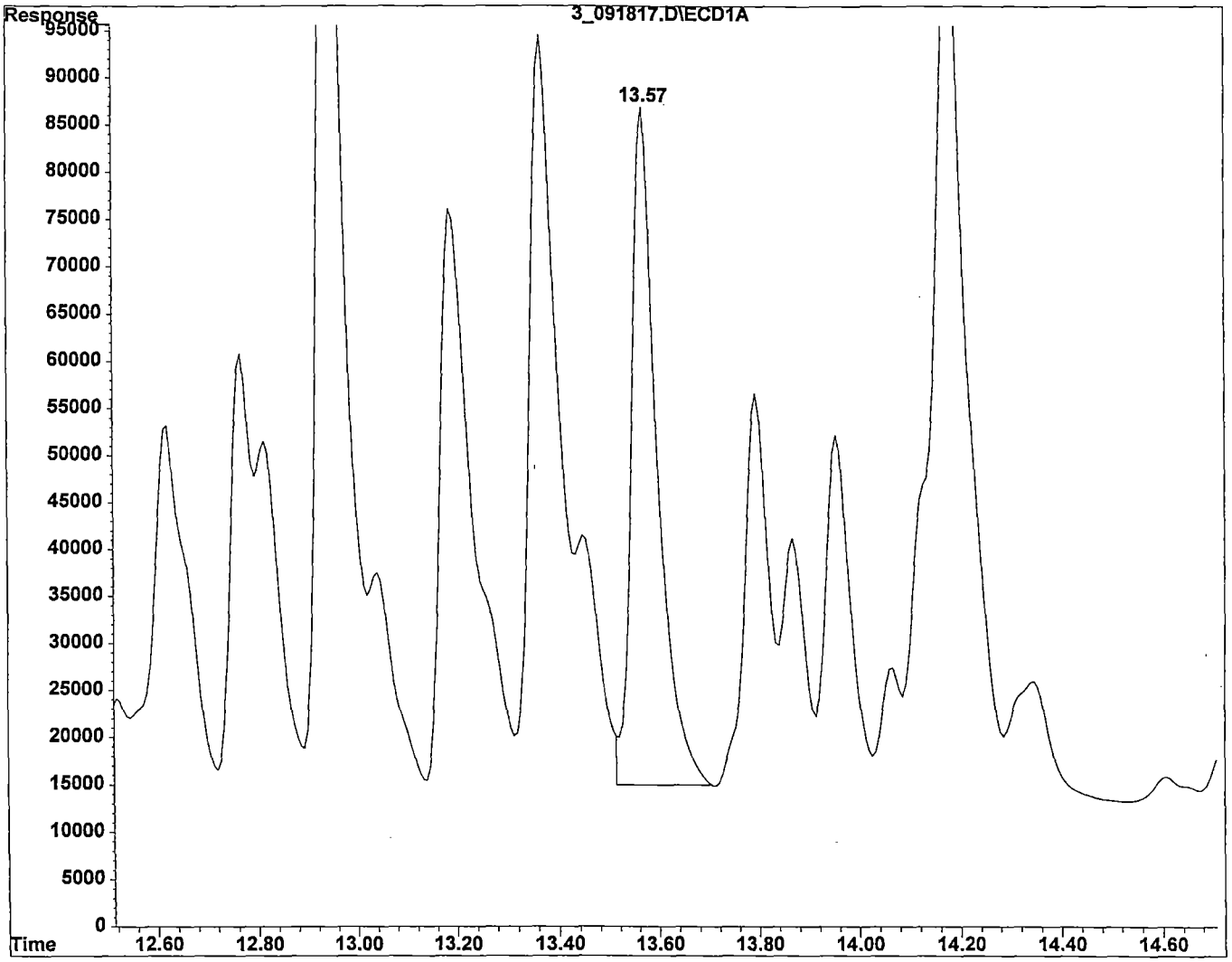
Integration Time Range: 11.10 - 11.29

BTB
09/2001

F:\HPCHEM\HP\3\DATA\09_18_01\3_091817.D
Report generated: Thu Sep 20 08:46:39 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091817.D
Date Acquired: 19 Sep 2001 6:40
Inst: HP_03 Operator ID: BTB
Name: 47351.05 *E03K2 *
Misc: *EPA*30.1G/5.0ML*11
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:16 2001 Quant Results File: XPCBI16.RES



GK 9-27-01

Aroclor-1260 {2} 13.57min area: 2554636 m

Integration Time Range: 13.51 - 13.70

BTB 092001

F:\HPCHEM\HP\3\DATA\09_18_01\3_091817.D
Report generated: Thu Sep 20 08:46:40 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03K2DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.05DL

Sample wt/vol: 30.1 (g/mL) G Lab File ID:_____

% Moisture: 11 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/21/01

Injection Volume: 0.5(uL) Dilution Factor: 10.0

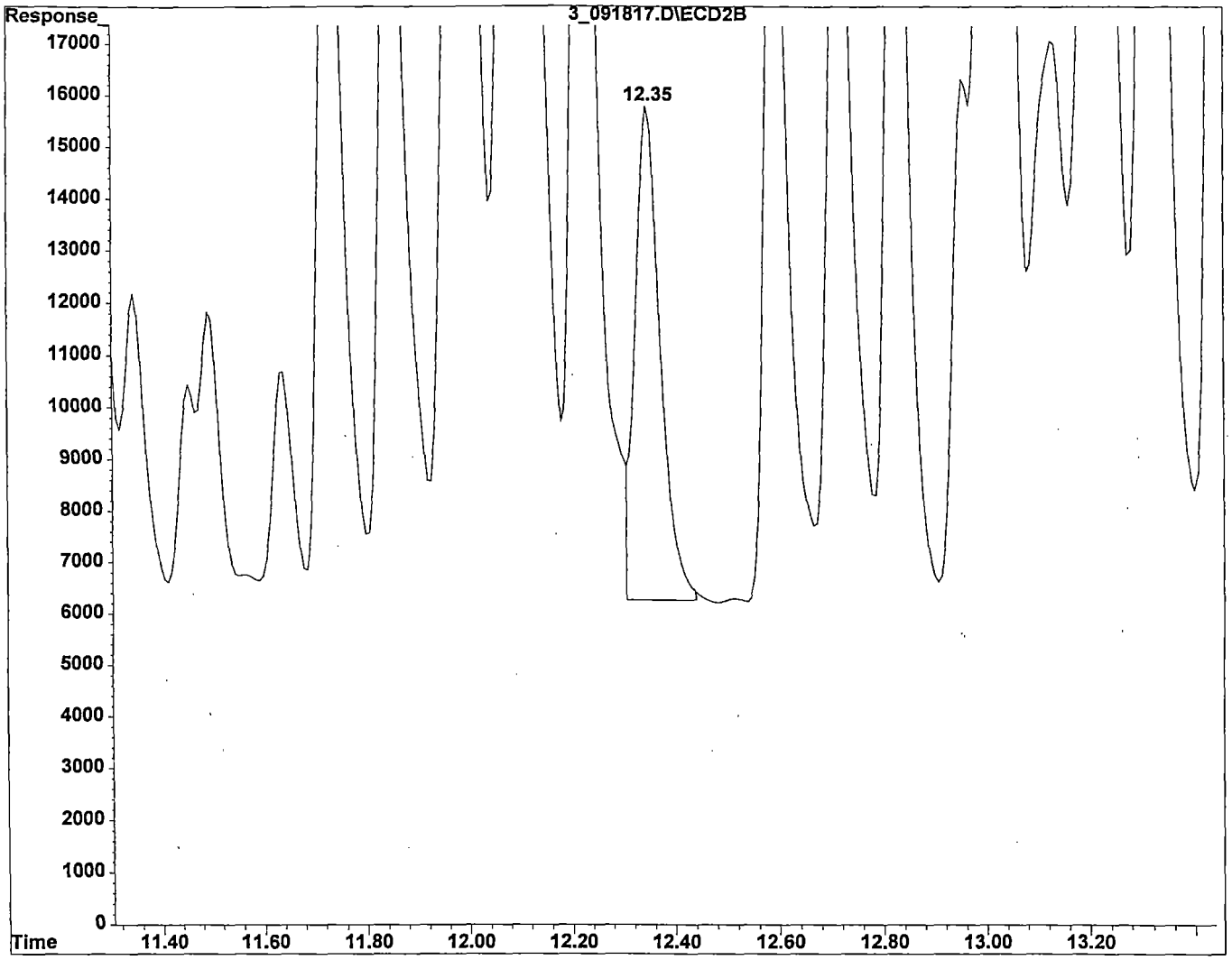
GPC Cleanup: (Y/N) Y pH: 7.6 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	370	UJ
11104-28-2	Aroclor-1221	370	UJ
11141-16-5	Aroclor-1232	370	UJ
53469-21-9	Aroclor-1242	240	DJ
12672-29-6	Aroclor-1248	370	UJ
11097-69-1	Aroclor-1254	620	DJ
11096-82-5	Aroclor-1260	250	DJP
	Surrogate amount spiked	7.47	

TBS
10-12-01

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091817.D
Date Acquired: 19 Sep 2001 6:40
Inst: HP_03 Operator ID: BTB
Name: 47351.05 *E03K2 *
Misc: *EPA*30.1G/5.0ML*11
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:16 2001 Quant Results File: XPCBI16.RES



ok 9-22-01

Aroclor-1242 {5} #2 12.35min area: 317580 m

BTB 092001

Integration Time Range: 12.30 - 12.44

F:\HPCHEM\HP\3\DATA\09_18_01\3_091817.D
Report generated: Thu Sep 20 08:46:41 2001

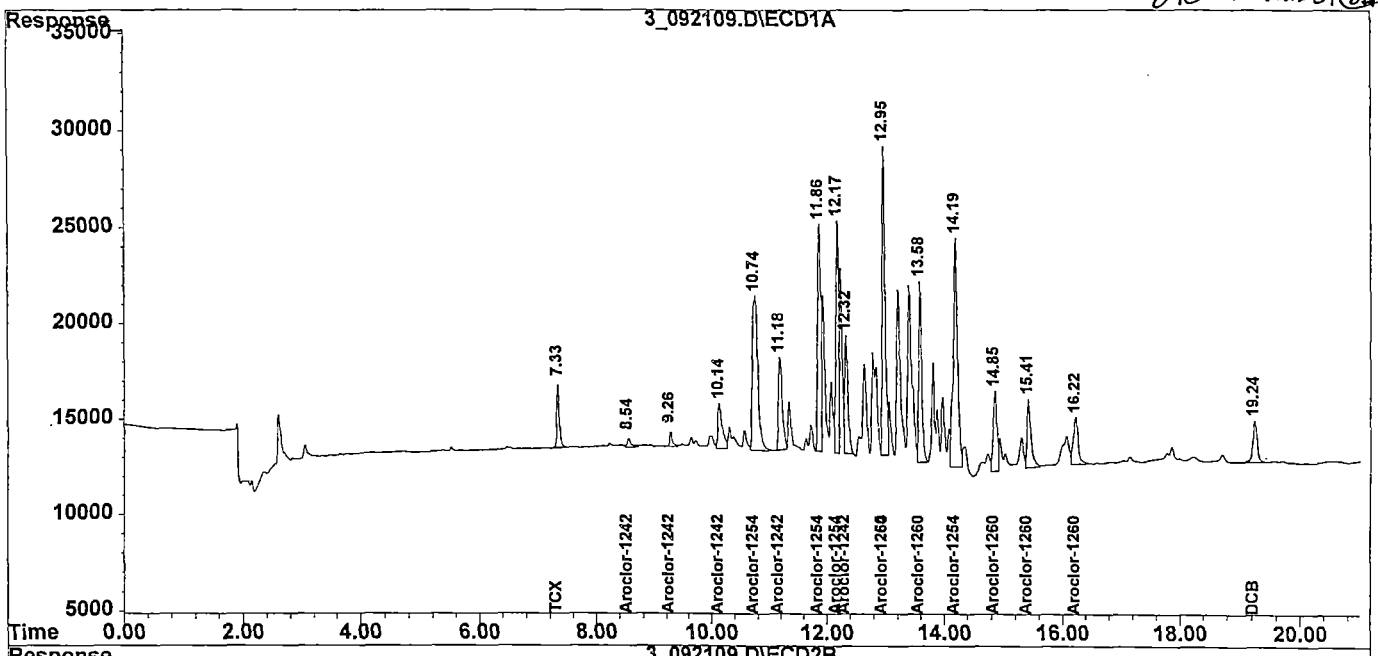
Chromatographic Report

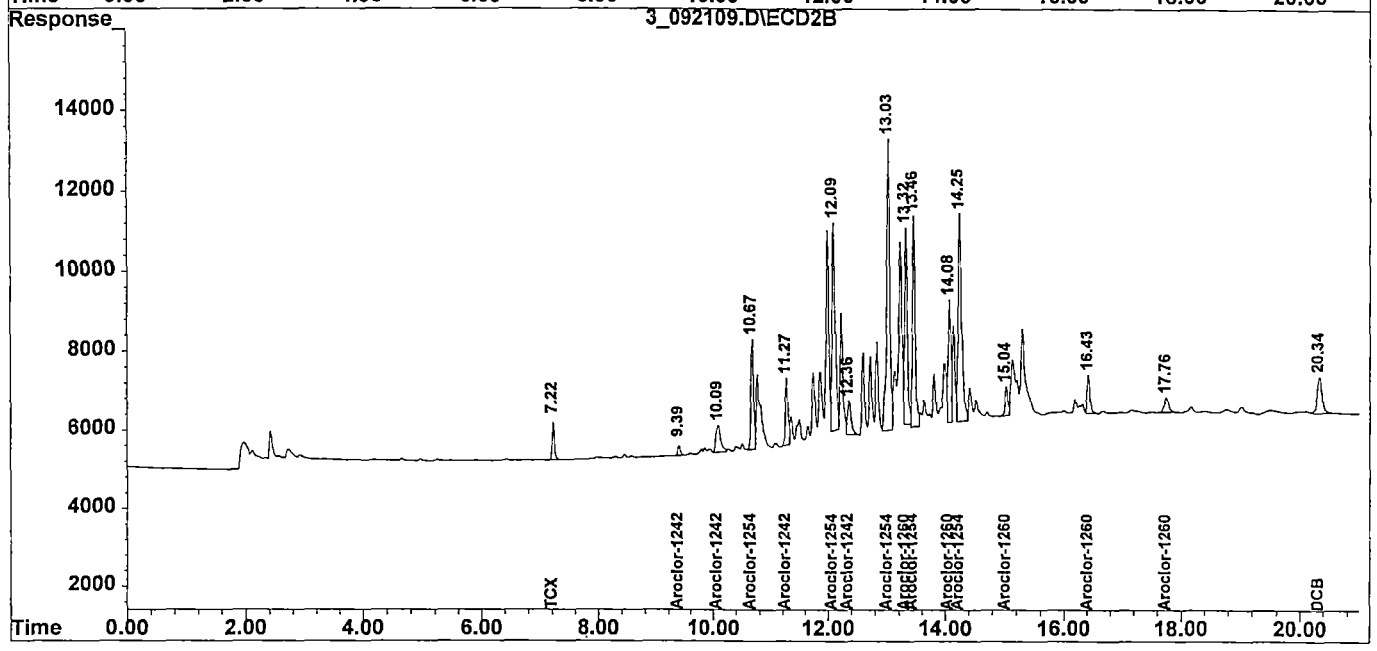
Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092109.D\ECD1A.CH Vial: 86
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092109.D\ECD2B.CH
Acq On : 21 Sep 2001 00:46 Operator: BTB
Sample : 47351.05DL *E03K2DL * Inst : HP_03
Misc : *EPA*30.1G/5.0ML*11 Dilution: 10.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 9:47 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

OK 9-22-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092109.D\ECD1A.CH Vial: 86
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092109.D\ECD2B.CH
Acq On : 21 Sep 2001 00:46 Operator: BTB
Sample : 47351.05DL *E03K2DL * Inst : HP_03
Misc : *EPA*30.1G/5.0ML*11 Dilution: 10.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 9:47 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

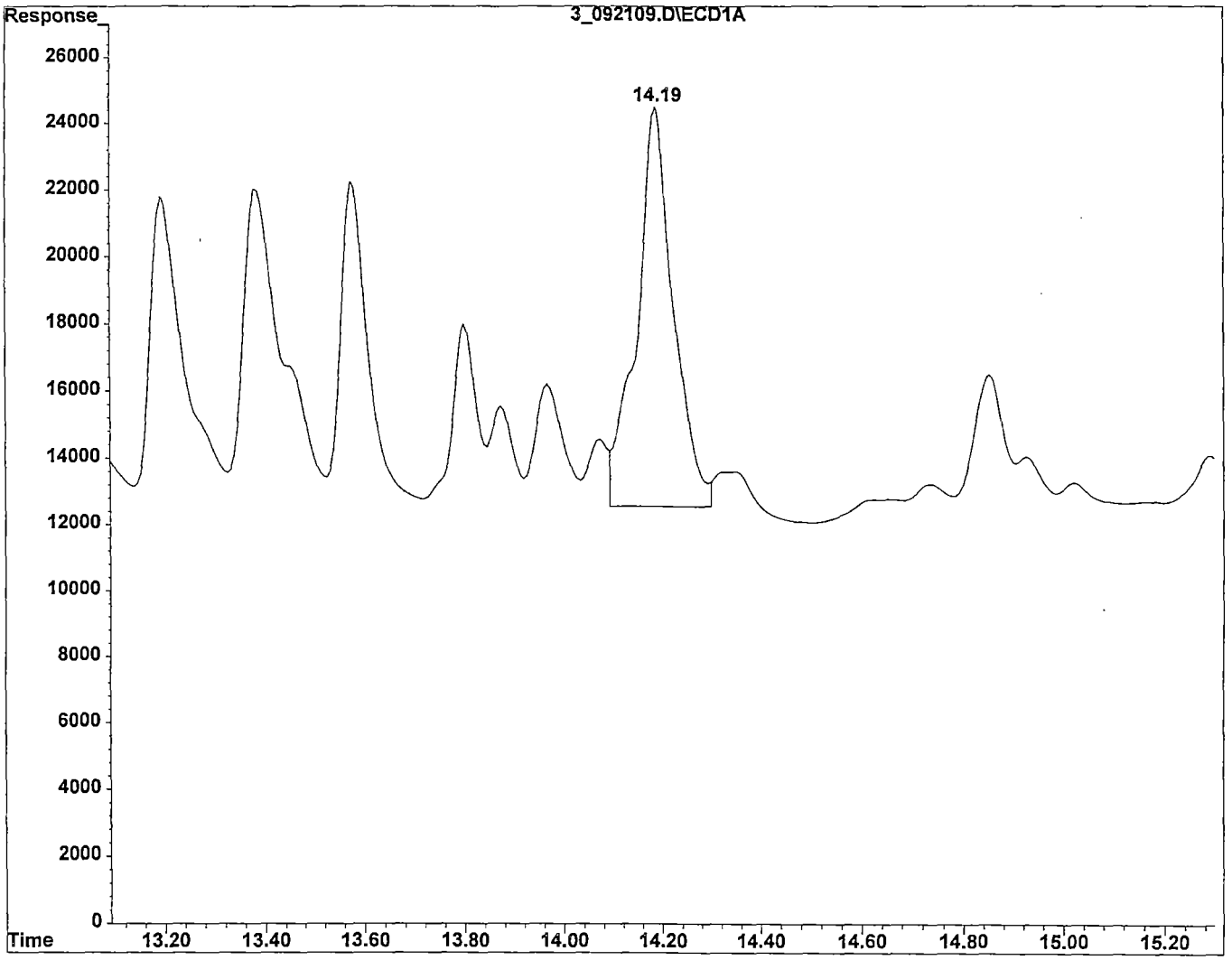
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.22	98223	25843	6.763	5.952	
	Spiked Amount 7.466			Recovery	=	90.59%	79.72%	
22)	S DCB	19.24	20.34	116098	56374	7.703	8.587	
	Spiked Amount 7.466			Recovery	=	103.18%	115.02%	
	Target Compounds:							
7)	L4 Aroclor-1242	8.54	0.00	22136	0	73.0	N.D. d	#
8)	L4 Aroclor-1242 {2}	9.26	9.39	27293	7967	51.7	43.3	
9)	L4 Aroclor-1242 {3}	10.14	10.09	126887	40558	130.2	114.5	
10)	L4 Aroclor-1242 {4}	11.18	11.28	226655	54616	529.8	471.2	
11)	L4 Aroclor-1242 {5}	12.32	12.36	242271	35400	726.7	344.0m	# BTB 09/21/01
	Sum Aroclor-1242			645243	138541	1511.4	973.0	
	Average Aroclor-1242					302.275	243.242	
12)	L6 Aroclor-1254	10.74	10.67	544498	89622	1004.9	686.5	#
13)	L6 Aroclor-1254 {2}	11.86	12.10	431980	211805	430.4	720.5	#
14)	L6 Aroclor-1254 {3}	12.18	13.03	384043	275135	418.5	698.4	#
15)	L6 Aroclor-1254 {4}	12.95	13.46	583465	177697	551.8	817.1	#
16)	L6 Aroclor-1254 {5}	14.19	14.25	611416	219078	713.9m BTB 09/21/01	752.5	
	Sum Aroclor-1254			2555401	973337	3119.4	3675.0	
	Average Aroclor-1254					623.878	734.998	
17)	L7 Aroclor-1260	12.95	13.32	583465	161612	1019.9	479.4m	#
18)	L7 Aroclor-1260 {2}	13.57	14.08	339072	103989	389.7m	472.7	
19)	L7 Aroclor-1260 {3}	14.85	15.04	180528	23127	324.4	80.0	#
20)	L7 Aroclor-1260 {4}	15.41	16.44	169085	35765	135.0	120.6	
21)	L7 Aroclor-1260 {5}	16.23	17.76	155324	20819	162.9	99.6	#
	Sum Aroclor-1260			1427474	345311	7584.8	4674.4	
	Average Aroclor-1260					406.376	250.445	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092109.D
Date Acquired: 21 Sep 2001 00:46
Inst: HP_03 Operator ID: BTB
Name: 47351.05DL *E03K2DL *
Misc: *EPA*30.1G/5.0ML*11
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 9:47 2001 Quant Results File: XPCBI16.RES



GIC 9-22-01

Aroclor-1254 {5} 14.19min area: 611416 m

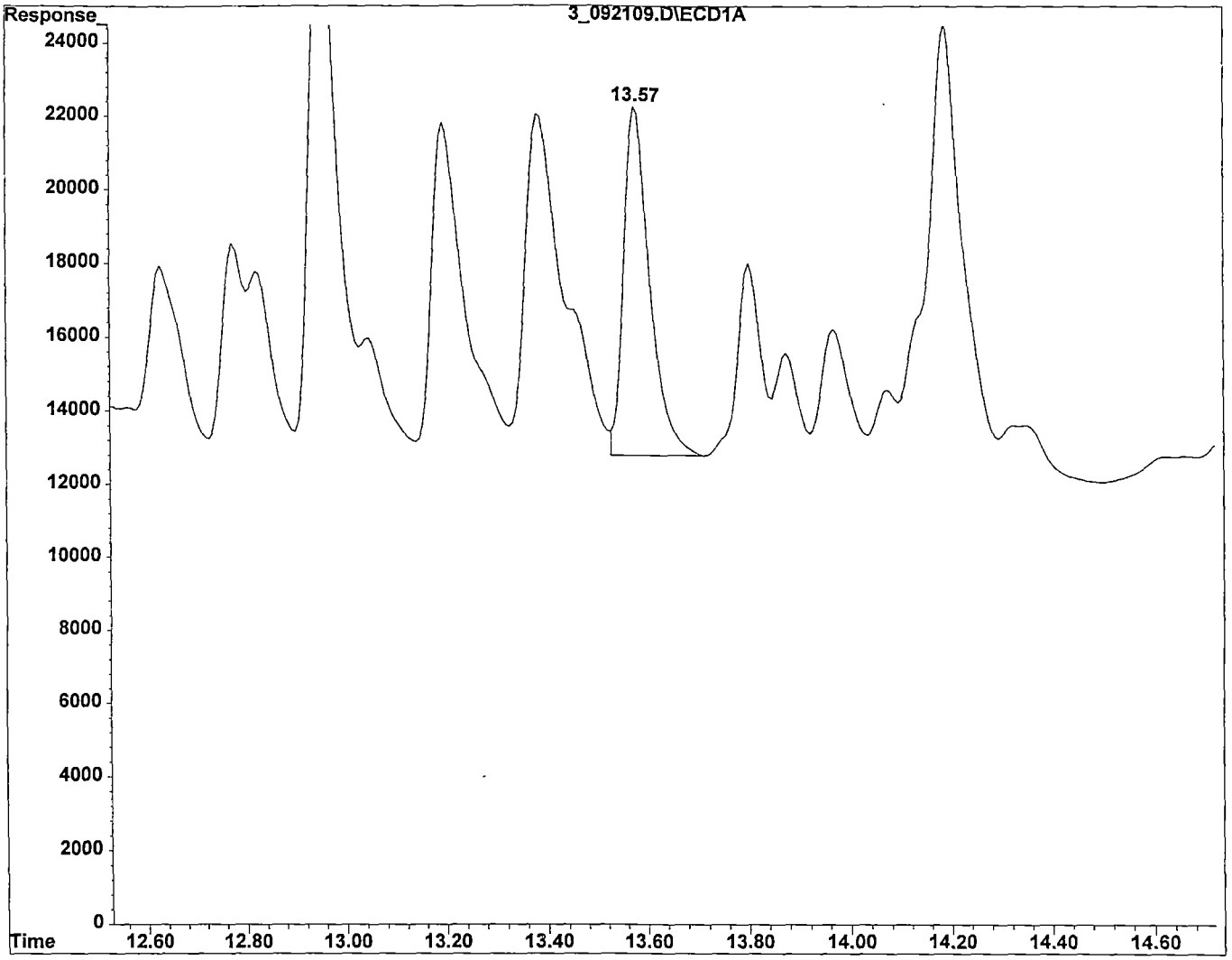
Integration Time Range: 14.09 - 14.30

BTB 09/21/01

F:\HPCHEM\HP\3\DATA\09_21_01\3_092109.D
Report generated: Fri Sep 21 09:54:35 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092109.D
Date Acquired: 21 Sep 2001 00:46
Inst: HP_03 Operator ID: BTB
Name: 47351.05DL *E03K2DL *
Misc: *EPA*30.1G/5.0ML*11
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 9:47 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1260 {2} 13.57min area: 339072 m

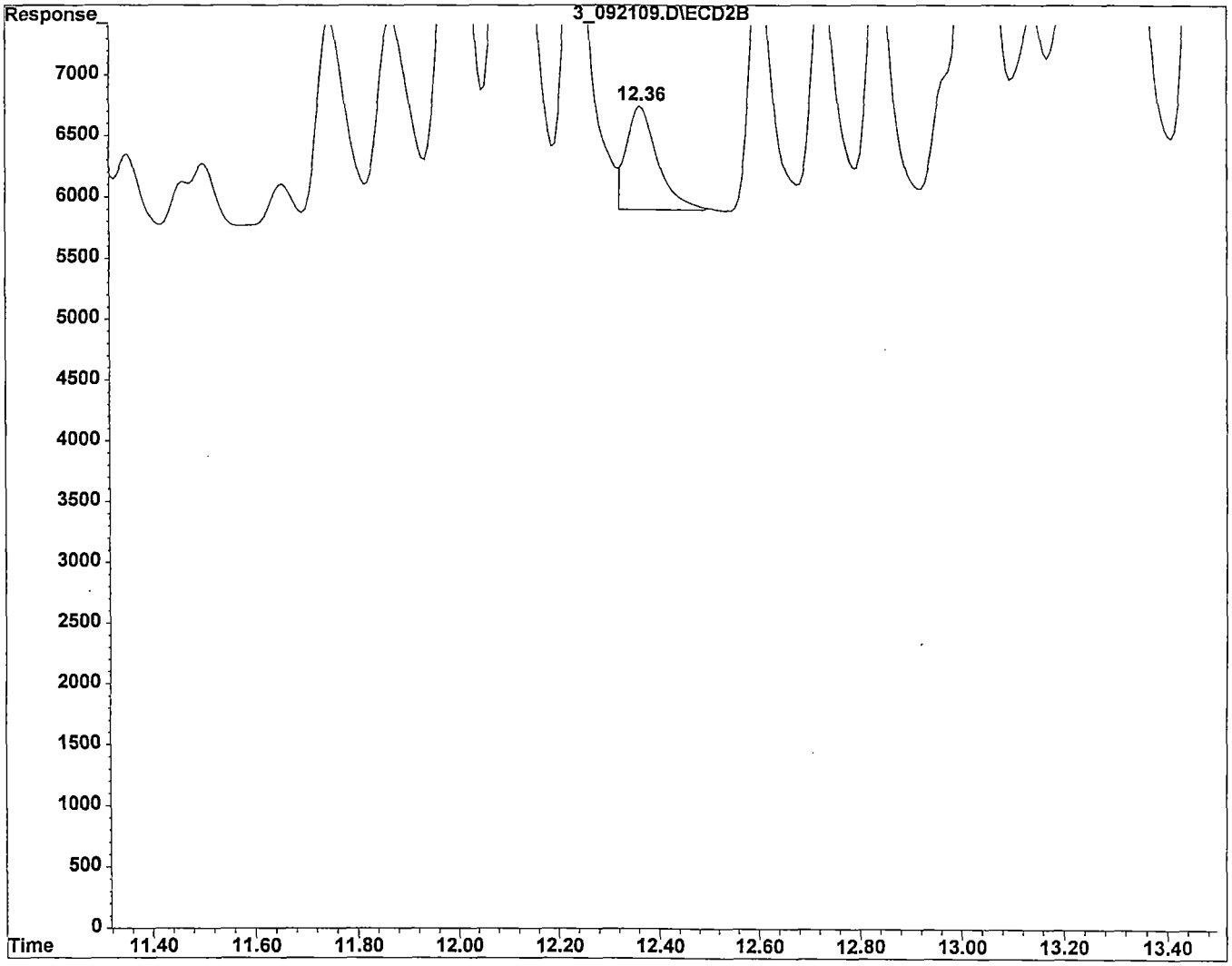
Integration Time Range: 13.53 - 13.72

BTB 092101

F:\HPCHEM\HP\3\DATA\09_21_01\3_092109.D
Report generated: Fri Sep 21 09:54:35 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092109.D
Date Acquired: 21 Sep 2001 00:46
Inst: HP_03 Operator ID: BTB
Name: 47351.05DL *E03K2DL *
Misc: *EPA*30.1G/5.0ML*11
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 9:47 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1242 {5} #2 12.36min area: 35400 m

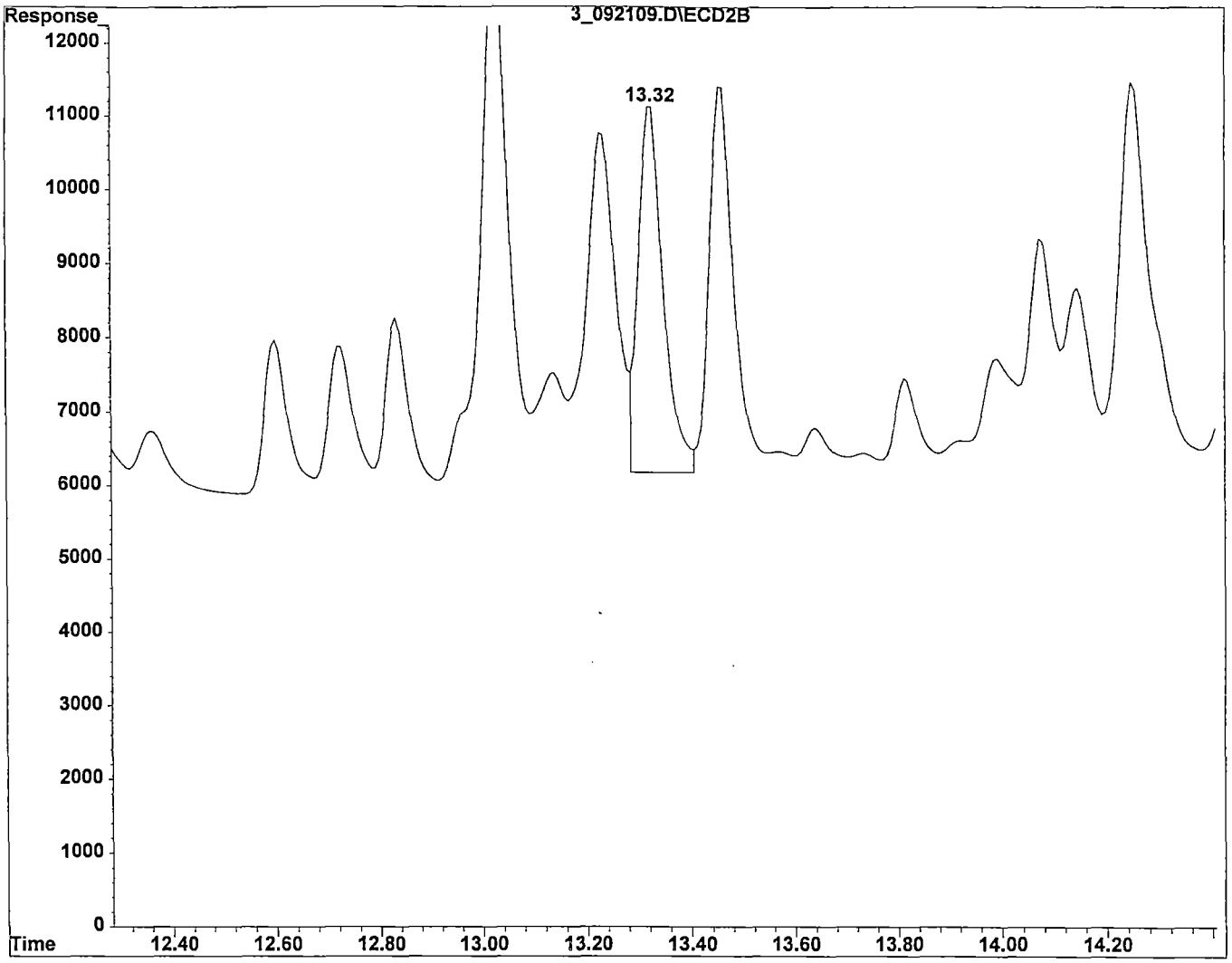
Integration Time Range: 12.32 - 12.50

BTB 092101

F:\HPCHEM\HP\3\DATA\09_21_01\3_092109.D
Report generated: Fri Sep 21 09:54:36 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092109.D
Date Acquired: 21 Sep 2001 00:46
Inst: HP_03 Operator ID: BTB
Name: 47351.05DL *E03K2DL *
Misc: *EPA*30.1G/5.0ML*11
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 9:47 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1260 #2 13.32min area: 161612 m

BTB 092101

Integration Time Range: 13.28 - 13.41

F:\HPCHEM\HP\3\DATA\09_21_01\3_092109.D
Report generated: Fri Sep 21 09:54:37 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03K3

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.06

Sample wt/vol: 30.1 (g/mL) G Lab File ID:_____

% Moisture: 47 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	62	U J
11104-28-2	Aroclor-1221	62	U J
11141-16-5	Aroclor-1232	62	U J
53469-21-9	Aroclor-1242	~~5400~~ 12000 ~~E~~	DJ
12672-29-6	Aroclor-1248	62	U J
11097-69-1	Aroclor-1254	~~3600~~ 6800 ~~E~~	DJ
11096-82-5	Aroclor-1260	~~740~~ 1100 ~~EP~~	DJP
Surrogate amount spiked		12.53	

TB 10/23

apply this results
JB 10-12-01

19900

FORM I PCB

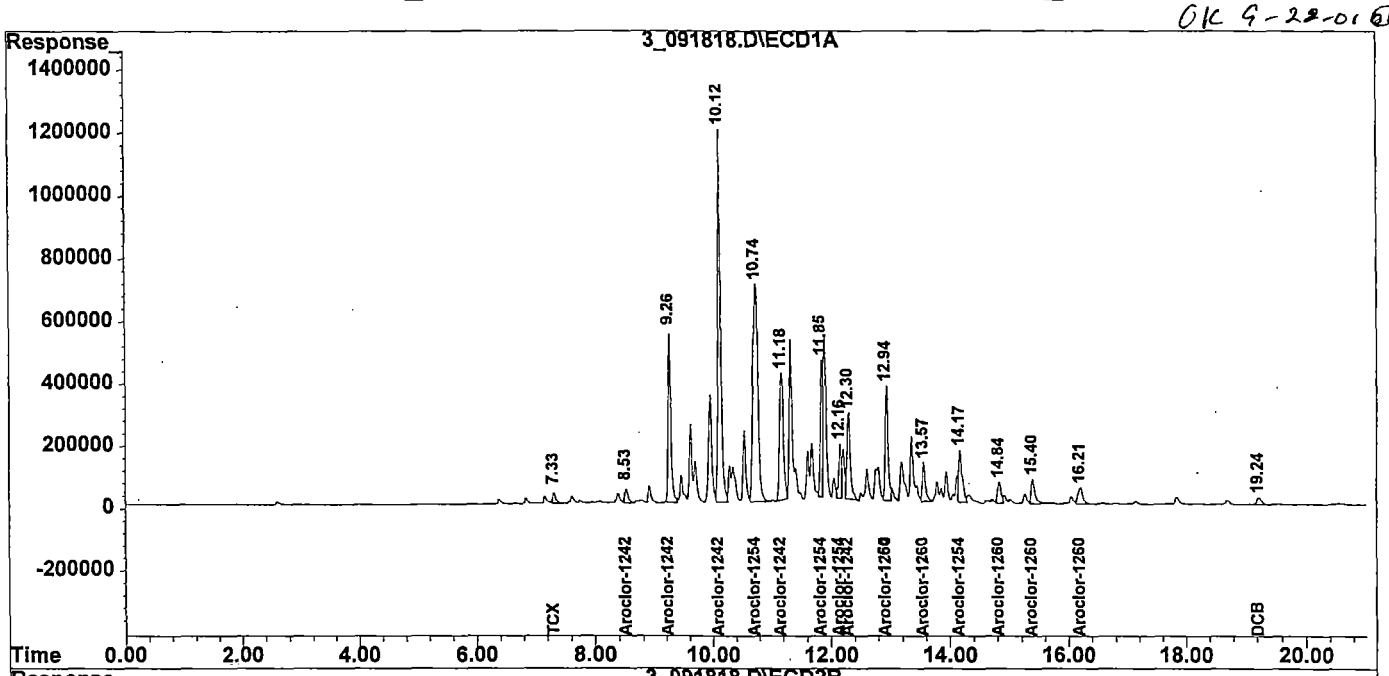
Chromatographic Report

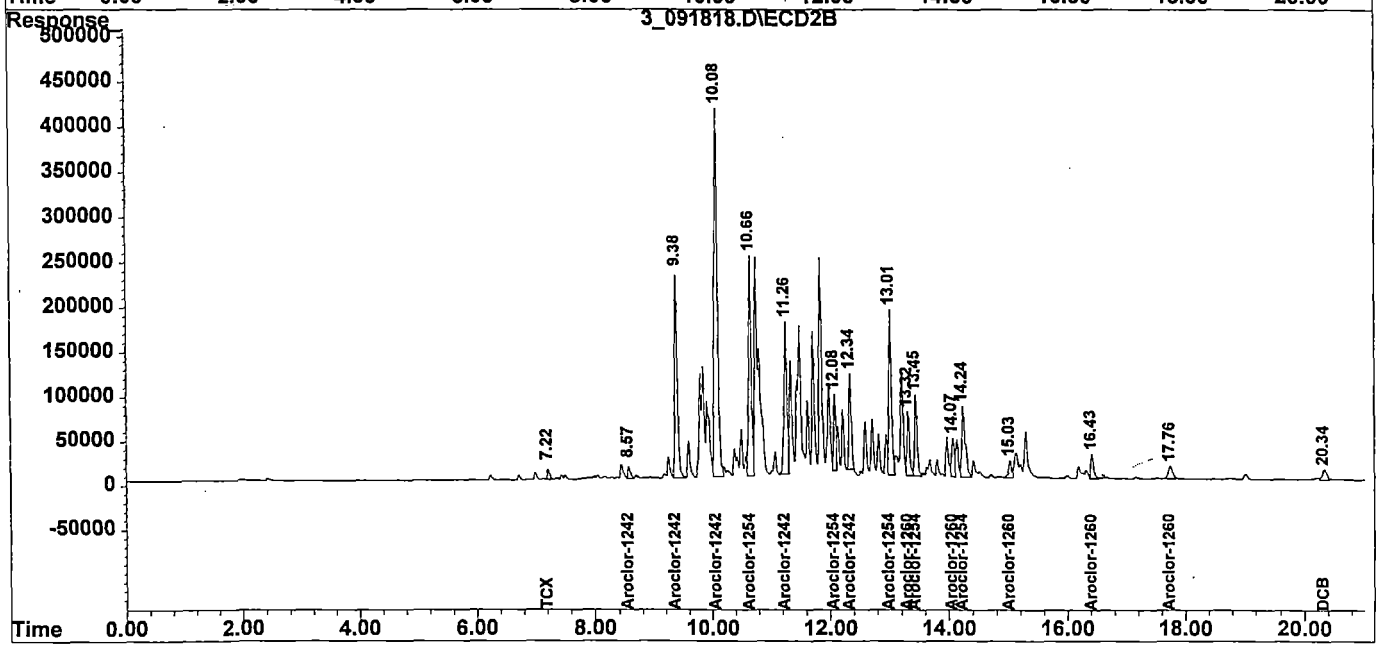
Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091818.D\ECD1A.CH Vial: 90
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091818.D\ECD2B.CH
Acq On : 19 Sep 2001 7:06 Operator: BTB
Sample : 47351.06 *E03K3 * Inst : HP_03
Misc : *EPA*30.1G/5.0ML*47 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 8:18 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

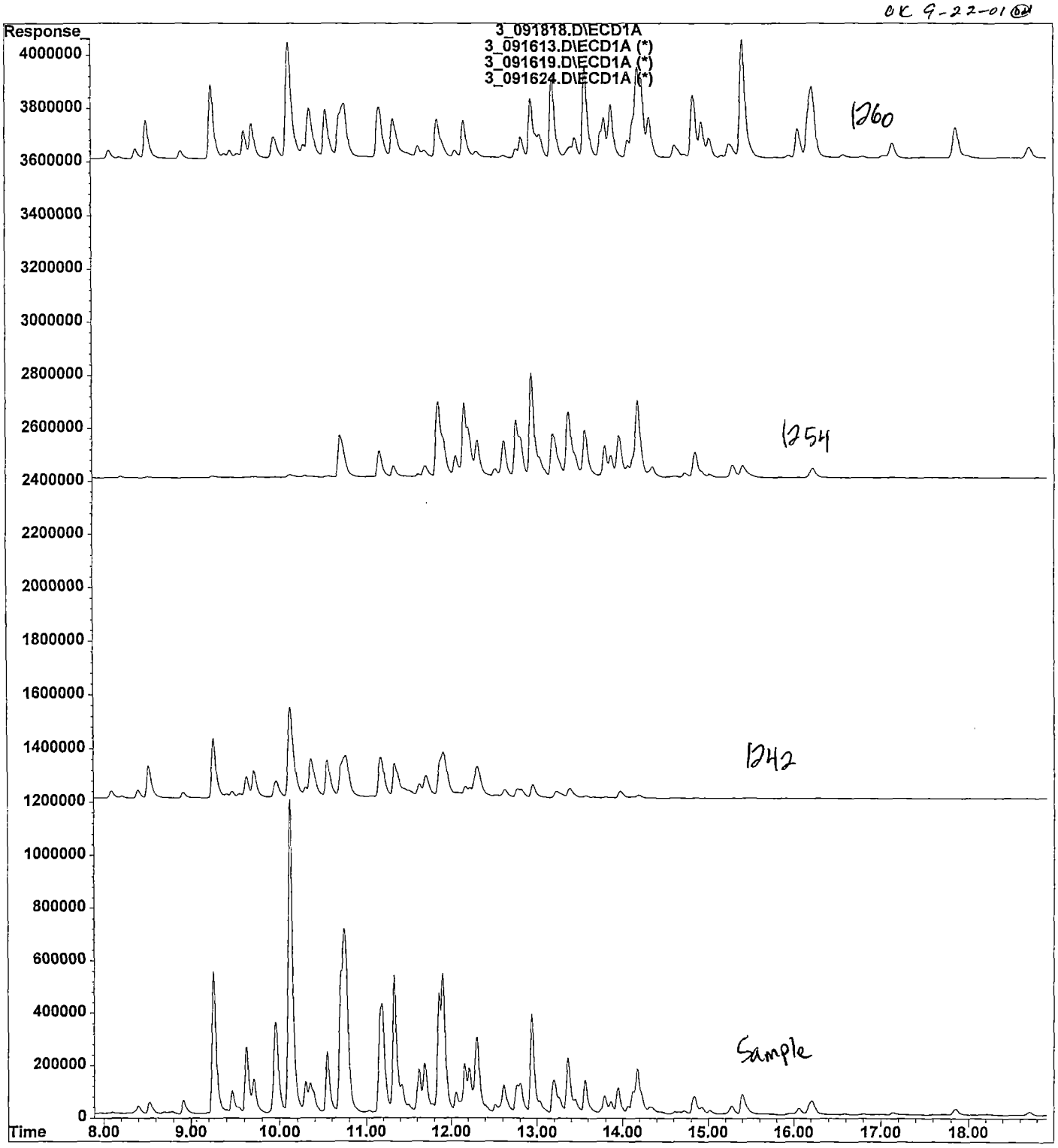
OK 9-22-01





File : F:\HPCHEM\HP\3\DATA\09_18_01\3_091818.D
Operator : BTB
Acquired : 19 Sep 2001 7:06 using AcqMethod OLM03.M
Instrument : HP_03
Sample Name: 47351.06 *E03K3 *
Misc Info : *EPA*30.1G/5.0ML*47
Vial Number: 90

OK 9-22-01



Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091818.D\ECD1A.CH Vial: 90
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091818.D\ECD2B.CH
Acq On : 19 Sep 2001 7:06 Operator: BTB
Sample : 47351.06 *E03K3 * Inst : HP_03
Misc : *EPA*30.1G/5.0ML*47 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 8:18 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

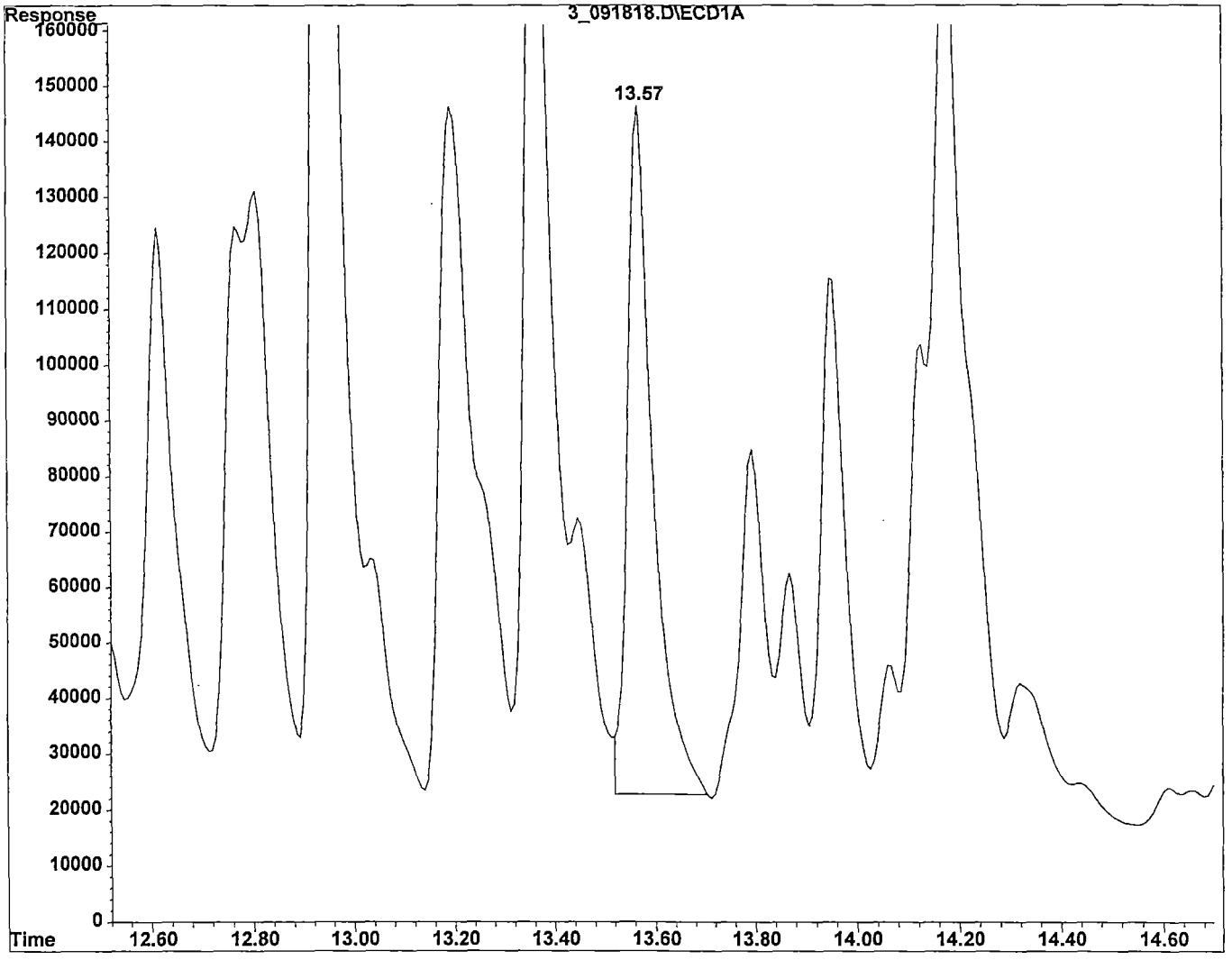
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.22	1018272	330069	11.8	12.8	
	Spiked Amount 12.537			Recovery	=	94.12%	102.10%	
22)	S DCB	19.24	20.34	1238474	676116	13.8	17.3	#
	Spiked Amount 12.537			Recovery	=	110.08%	137.99%	
	Target Compounds:							
7)	L4 Aroclor-1242	8.53	8.57	1660322	444497	919.9 E	880.8 E	
8)	L4 Aroclor-1242 {2}	9.26	9.38	17907049	7305433	5690.8 E	6669.0 E	
9)	L4 Aroclor-1242 {3}	10.12	10.08	41293132	16439620	7114.2 E	7792.2 E	
10)	L4 Aroclor-1242 {4}	11.18	11.26	19156241	5731455	7519.7 E	8302.9 E	
11)	L4 Aroclor-1242 {5}	12.31	12.35	11187766	3027067	5634.9 E	4939.8 E	
	Sum Aroclor-1242			91204509	32948072	26879.5	28584.7	
	Average Aroclor-1242					5375.908	5716.942	
12)	L6 Aroclor-1254	10.74	10.66	41647993	8037838	12907.1 E	10338.8 E	
13)	L6 Aroclor-1254 {2}	11.86	12.08	10099867	2295116	1689.8 E	1311.0 E	
14)	L6 Aroclor-1254 {3}	12.16	13.02	4960320	5579299	907.6 E	2378.2 E#	
15)	L6 Aroclor-1254 {4}	12.94	13.45	11856899	2666133	1882.9 E	2058.6 E	
16)	L6 Aroclor-1254 {5}	14.18	14.24	7573083	3428249	1484.9 E	1977.5 E#	
	Sum Aroclor-1254			76138161	22006634	18872.2	18064.2	
	Average Aroclor-1254					3774.450	3612.833	
17)	L7 Aroclor-1260	12.94	13.32	11856899	2252364	3480.5 E	1122.0 E#	
18)	L7 Aroclor-1260 {2}	13.57	14.07	4288056	1328433	827.5mE	1014.0 E	
19)	L7 Aroclor-1260 {3}	14.84	15.03	2628606	657302	793.2	381.6	#
20)	L7 Aroclor-1260 {4}	15.40	16.43	3359399	1009700	450.5	571.8	#
21)	L7 Aroclor-1260 {5}	16.22	17.76	2888564	754076	508.7	605.7	
	Sum Aroclor-1260			25021523	6001874	3798.8	2316.2	
	Average Aroclor-1260					1212.058	739.013	

BTB 09/20/01

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091818.D
Date Acquired: 19 Sep 2001 7:06
Inst: HP_03 Operator ID: BTB
Name: 47351.06 *E03K3 *
Misc: *EPA*30.1G/5.0ML*47
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:18 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1260 {2} 13.57min area: 4288056 m

Integration Time Range: 13.52 - 13.70

BTB 092001

F:\HPCHEM\HP\3\DATA\09_18_01\3_091818.D
Report generated: Thu Sep 20 08:46:42 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03K3DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.06DL

Sample wt/vol: 30.1 (g/mL) G Lab File ID:_____

% Moisture: 47 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/21/01

Injection Volume: 0.5(uL) Dilution Factor: 40.0

GPC Cleanup: (Y/N) Y pH: 7.1 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	2500	UJ
11104-28-2	Aroclor-1221	2500	UJ
11141-16-5	Aroclor-1232	2500	UJ
53469-21-9	Aroclor-1242	12000	DJ
12672-29-6	Aroclor-1248	2500	UJ
11097-69-1	Aroclor-1254	6800	DJ
11096-82-5	Aroclor-1260	1100	DJP
Surrogate amount spiked		12.53	

TBS
10-12-01

FORM I PCB

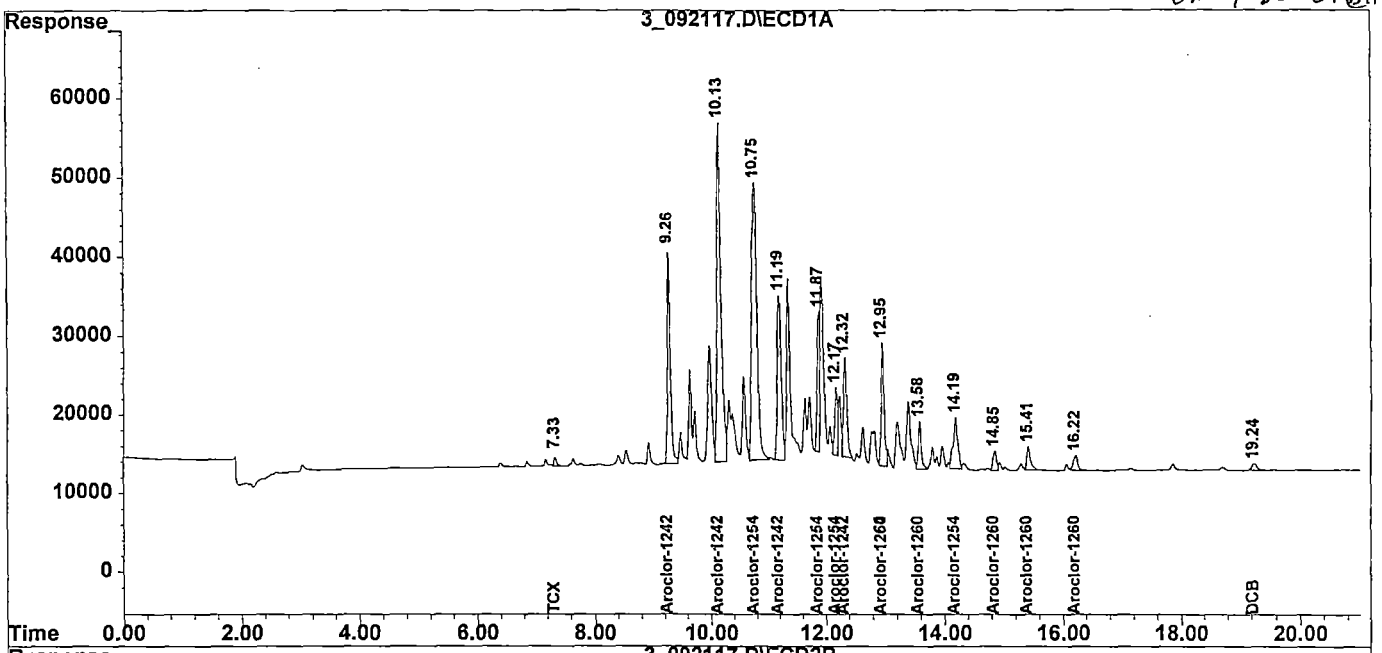
Chromatographic Report

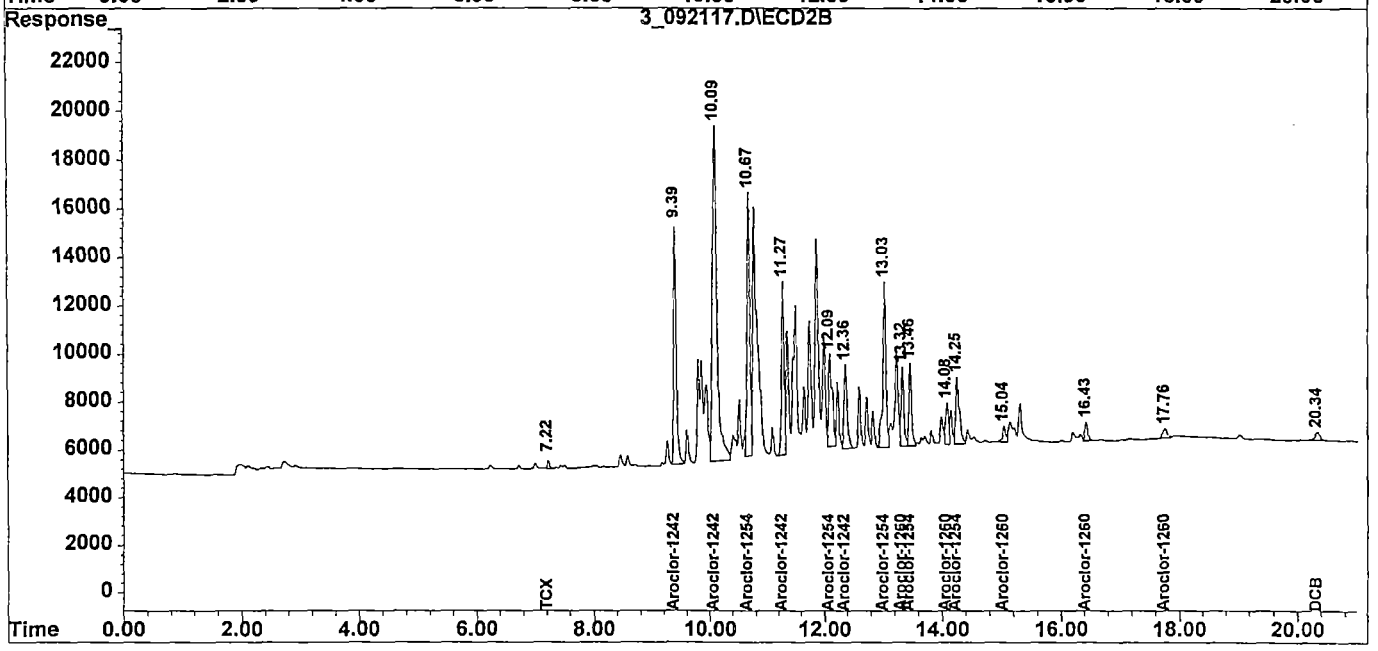
Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092117.D\ECD1A.CH Vial: 94
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092117.D\ECD2B.CH
Acq On : 21 Sep 2001 4:11 Operator: BTB
Sample : 47351.06DL *E03K3DL * Inst : HP_03
Misc : *EPA*30.1G/5.0ML*47 Dilution: 40.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 10:06 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

OK 9-22-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092117.D\ECD1A.CH Vial: 94
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092117.D\ECD2B.CH
Acq On : 21 Sep 2001 4:11 Operator: BTB
Sample : 47351.06DL *E03K3DL * Inst : HP_03
Misc : *EPA*30.1G/5.0ML*47 Dilution: 40.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 10:06 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

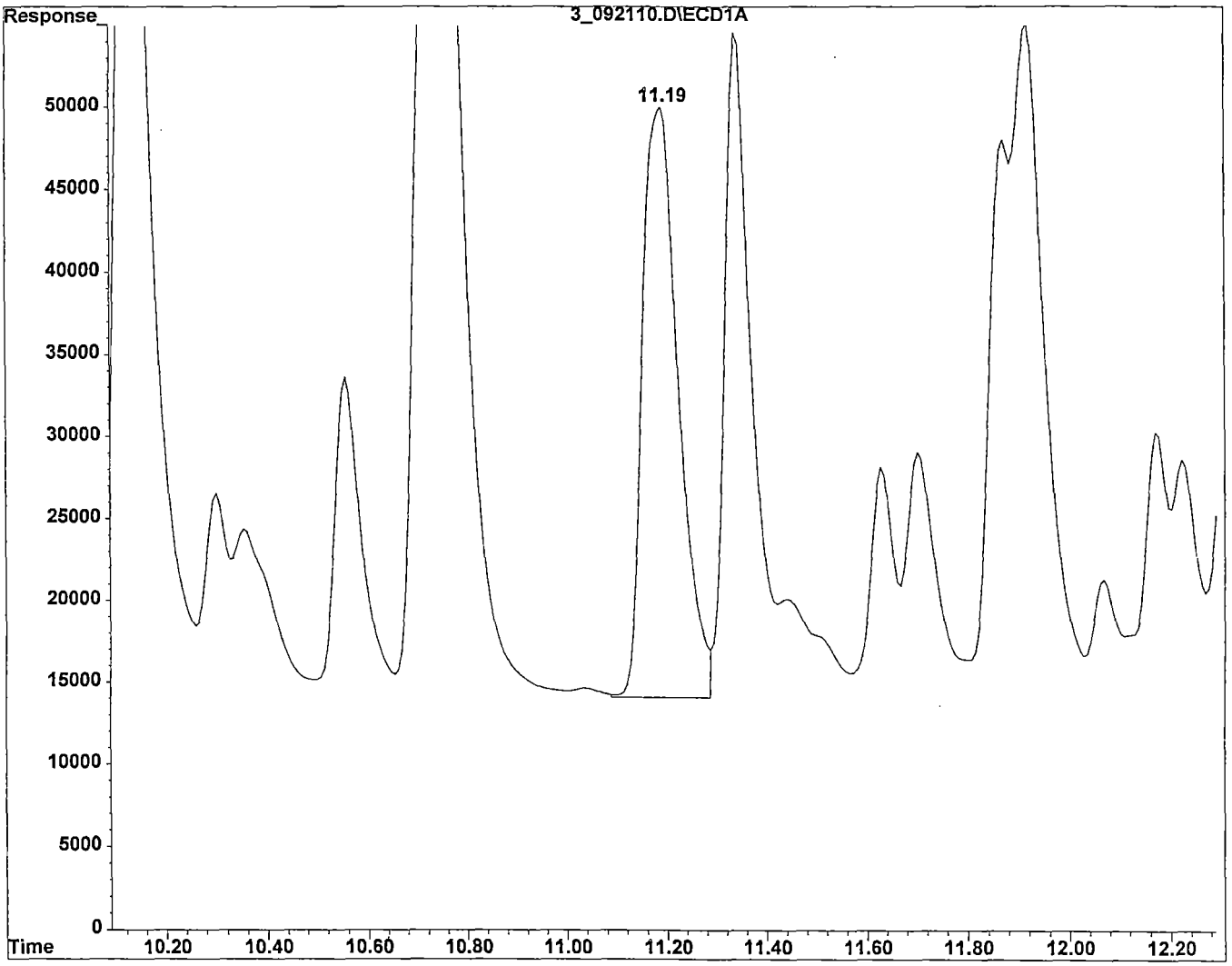
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	34694	8779	16.0	13.6
	Spiked Amount 12.537			Recovery	=	127.62%	108.48%
22)	S DCB	19.24	20.34	47742	20503	21.3	21.0
	Spiked Amount 12.537			Recovery	=	✓169.90%	✓167.51%
	Target Compounds:						
8)	L4 Aroclor-1242 {2}	9.26	9.39	985200	331519	12523.6	12105.5
9)	L4 Aroclor-1242 {3}	10.13	10.09	2070723	755902	14270.2	14331.6
10)	L4 Aroclor-1242 {4}	11.19	11.28	1063616	232888	16700.8m BTB 092101	13494.9
11)	L4 Aroclor-1242 {5}	12.32	12.36	509414	126300	10263.1	8244.2m BTB 092101
	Sum Aroclor-1242			4628953	1446608	53757.7	48176.2
	Average Aroclor-1242					13439.414	12044.056
12)	L6 Aroclor-1254	10.75f	10.67	2346605	372216	29089.5	19150.8m #
13)	L6 Aroclor-1254 {2}	11.87	12.10	452068	171879	3025.4	3927.3 #
14)	L6 Aroclor-1254 {3}	12.18	13.03	261637	258641	1914.9	4409.8 #
15)	L6 Aroclor-1254 {4}	12.95	13.46	557801	109570	3543.1	3384.1
16)	L6 Aroclor-1254 {5}	14.19	14.25	349398	123629	2740.3	2852.5
	Sum Aroclor-1254			3967509	1035935	40313.1	33724.6
	Average Aroclor-1254					8062.629	6744.913
17)	L7 Aroclor-1260	12.95	13.33	557801	107887	6549.5	2149.6 #
18)	L7 Aroclor-1260 {2}	13.57	14.08	223228	55200	1723.1m	1685.3
19)	L7 Aroclor-1260 {3}	14.85	15.04	99364	24383	1199.3	566.3 #
20)	L7 Aroclor-1260 {4}	15.41	16.44	136387	28384	731.5	642.9
21)	L7 Aroclor-1260 {5}	16.22	17.76	105377	20888	742.3	671.1
	Sum Aroclor-1260			1122157	236741	274448.9	143303.9
	Average Aroclor-1260					2189.141	1143.064

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092110.D
Date Acquired: 21 Sep 2001 1:11
Inst: HP_03 Operator ID: BTB
Name: 47351.06DL *E03K3DL *
Misc: *EPA*30.1G/5.0ML*47
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 9:50 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1242 {4} 11.19min area: 1806756 m

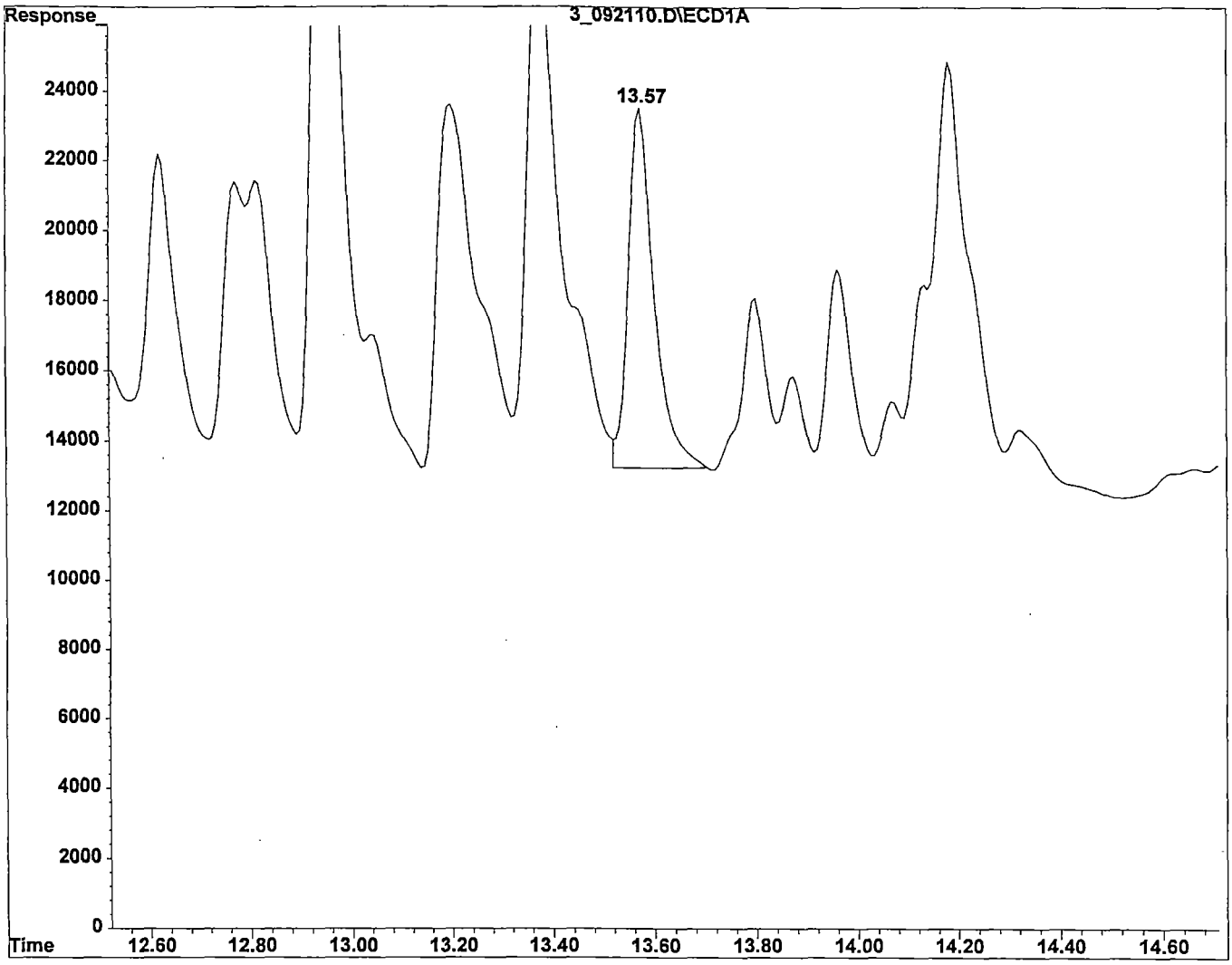
BTB 092101

Integration Time Range: 11.09 - 11.29

F:\HPCHEM\HP\3\DATA\09_21_01\3_092110.D
Report generated: Fri Sep 21 09:54:38 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092110.D
Date Acquired: 21 Sep 2001 1:11
Inst: HP_03 Operator ID: BTB
Name: 47351.06DL *E03K3DL *
Misc: *EPA*30.1G/5.0ML*47
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 9:50 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1260 {2} 13.57min area: 358396 m

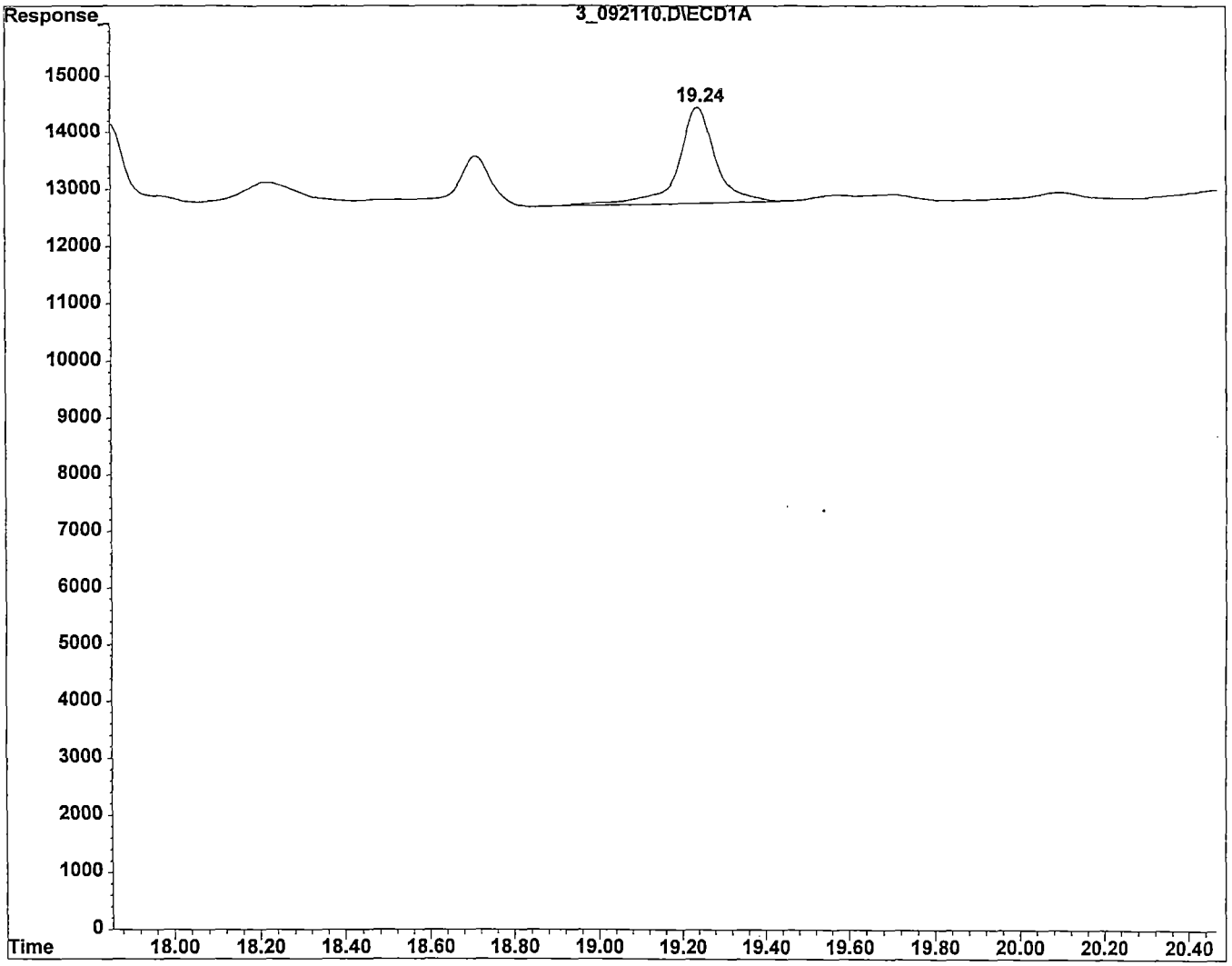
BTB 092101

Integration Time Range: 13.52 - 13.71

F:\HPCHEM\HP\3\DATA\09_21_01\3_092110.D
Report generated: Fri Sep 21 09:54:39 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092110.D
Date Acquired: 21 Sep 2001 1:11
Inst: HP_03 Operator ID: BTB
Name: 47351.06DL *E03K3DL *
Misc: *EPA*30.1G/5.0ML*47
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 9:50 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

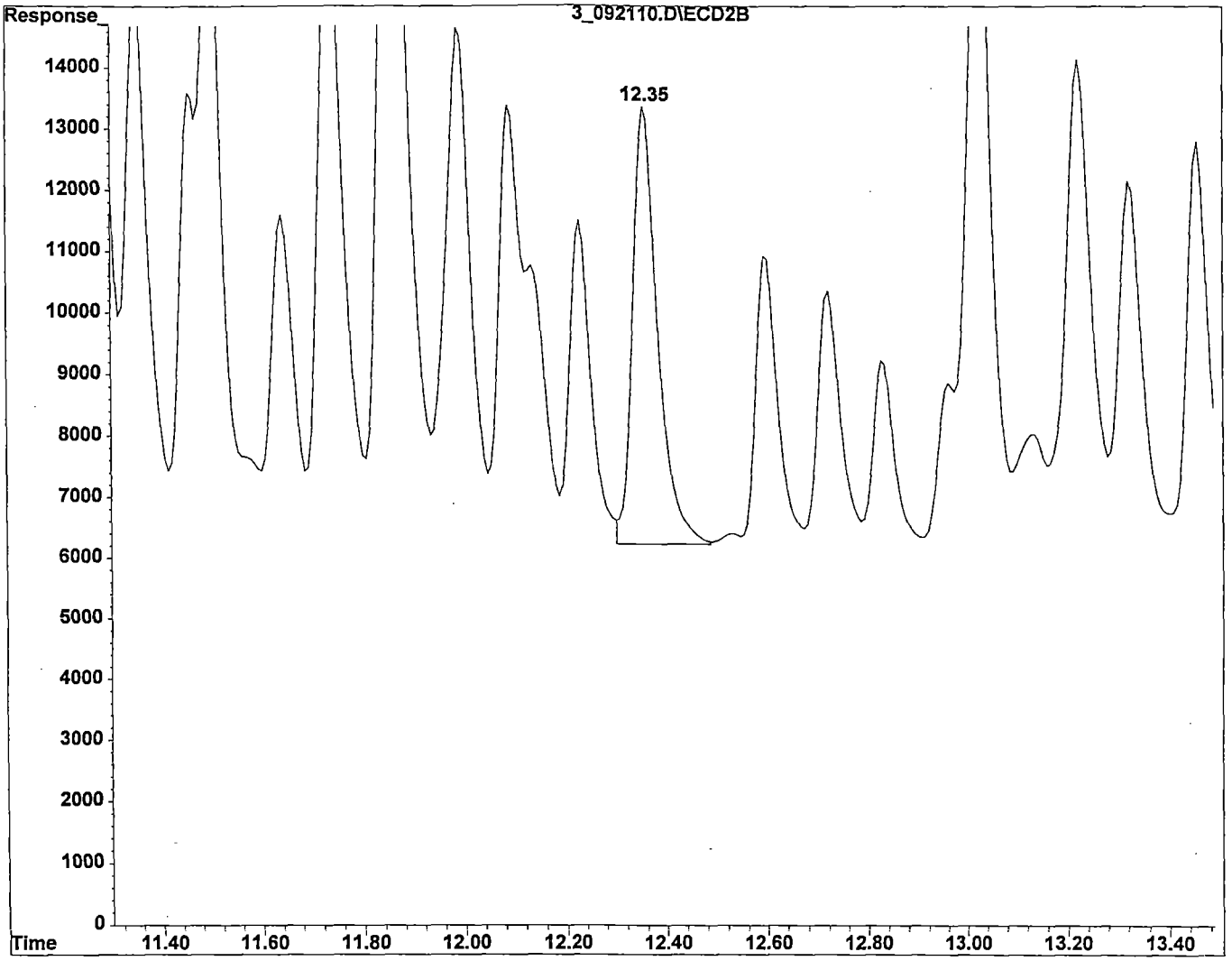
DCB 19.24min area: 106603 m BTB 092101

Integration Time Range: 18.86 - 19.46

F:\HPCHEM\HP\3\DATA\09_21_01\3_092110.D
Report generated: Fri Sep 21 09:54:39 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092110.D
Date Acquired: 21 Sep 2001 1:11
Inst: HP_03 Operator ID: BTB
Name: 47351.06DL *E03K3DL *
Misc: *EPA*30.1G/5.0ML*47
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 9:50 2001 Quant Results File: XPCBI16.RES



UK 9-22-01

Aroclor-1242 {5} #2 12.35min area: 246376 m

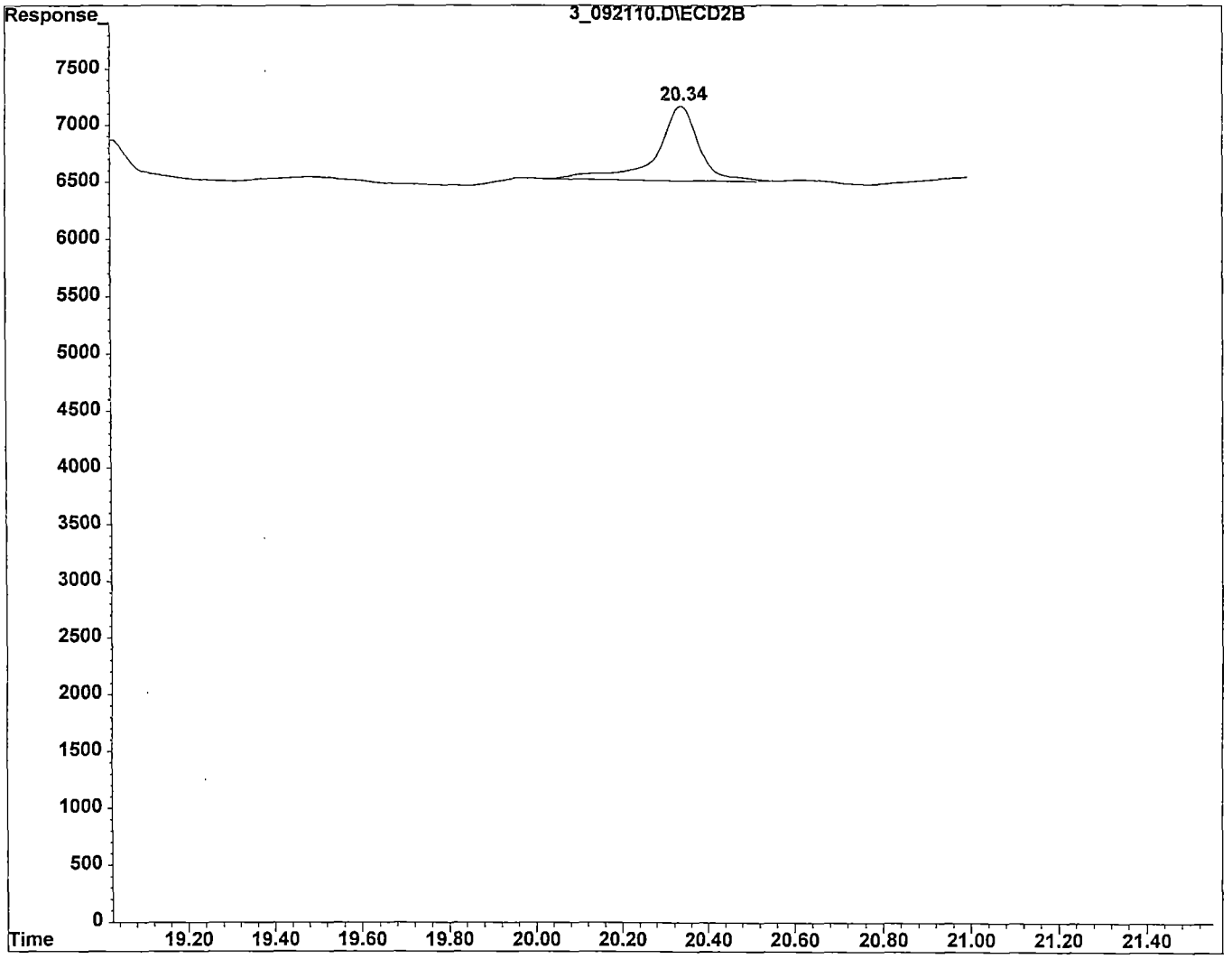
BTB 092101

Integration Time Range: 12.30 - 12.49

F:\HPCHEM\HP\3\DATA\09_21_01\3_092110.D
Report generated: Fri Sep 21 09:54:40 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092110.D
Date Acquired: 21 Sep 2001 1:11
Inst: HP_03 Operator ID: BTB
Name: 47351.06DL *E03K3DL *
Misc: *EPA*30.1G/5.0ML*47
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 9:50 2001 Quant Results File: XPCBI16.RES



OK 9-22-01 BR

DCB #2 20.34min area: 45854 m BTB 092101

Integration Time Range: 20.02 - 20.55

F:\HPCHEM\HP\3\DATA\09_21_01\3_092110.D
Report generated: Fri Sep 21 09:54:41 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03K4

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.07

Sample wt/vol: 30.2 (g/mL) G Lab File ID:_____

% Moisture: 49 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	64	UJ
11104-28-2	Aroclor-1221	64	UJ
11141-16-5	Aroclor-1232	64	UJ
53469-21-9	Aroclor-1242	~~5400~~ 11000	~~E~~ DJ
12672-29-6	Aroclor-1248	64	UJ
11097-69-1	Aroclor-1254	~~3300~~ 6900	DJ ~~E~~
11096-82-5	Aroclor-1260	~~710~~ 1300	~~EP~~ DJ
Surrogate amount spiked		12.99	

19200

apply this results
TBS 10-12-01

FORM I PCB

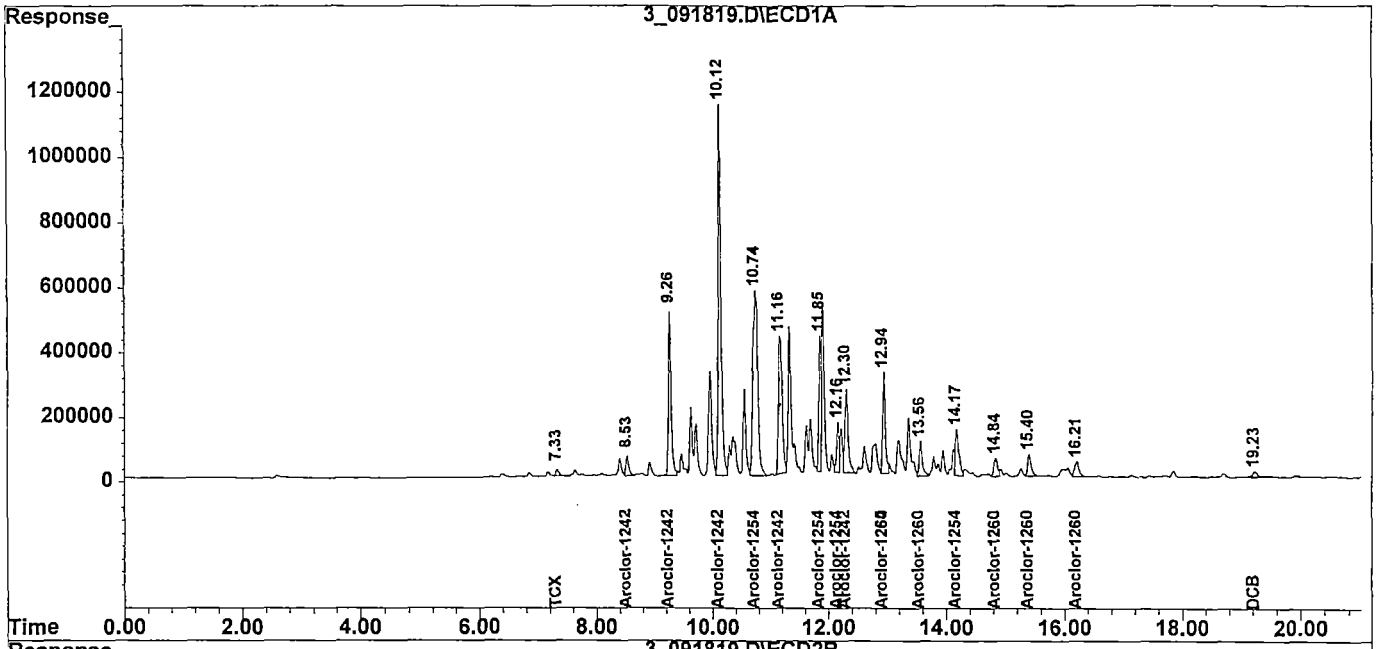
Chromatographic Report

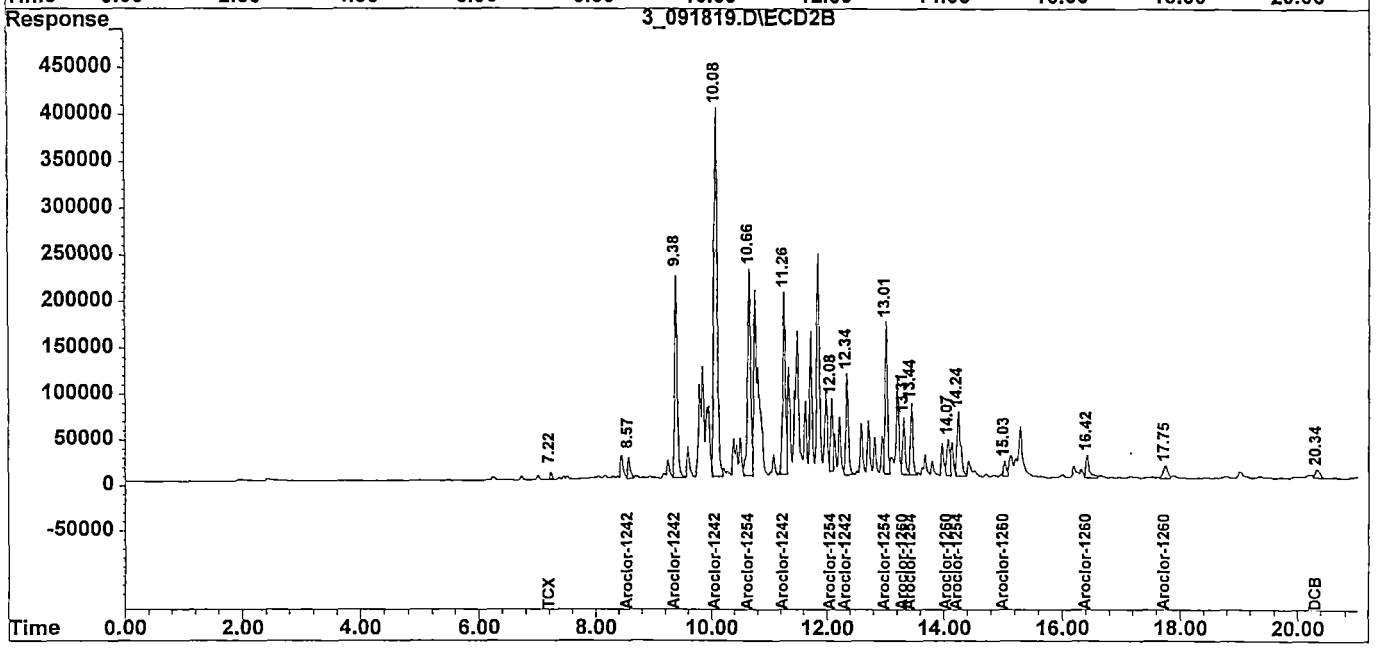
Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091819.D\ECD1A.CH Vial: 91
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091819.D\ECD2B.CH
Acq On : 19 Sep 2001 7:32 Operator: BTB
Sample : 47351.07 *E03K4 * Inst : HP_03
Misc : *EPA*30.2G/5.0ML*49 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 8:21 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

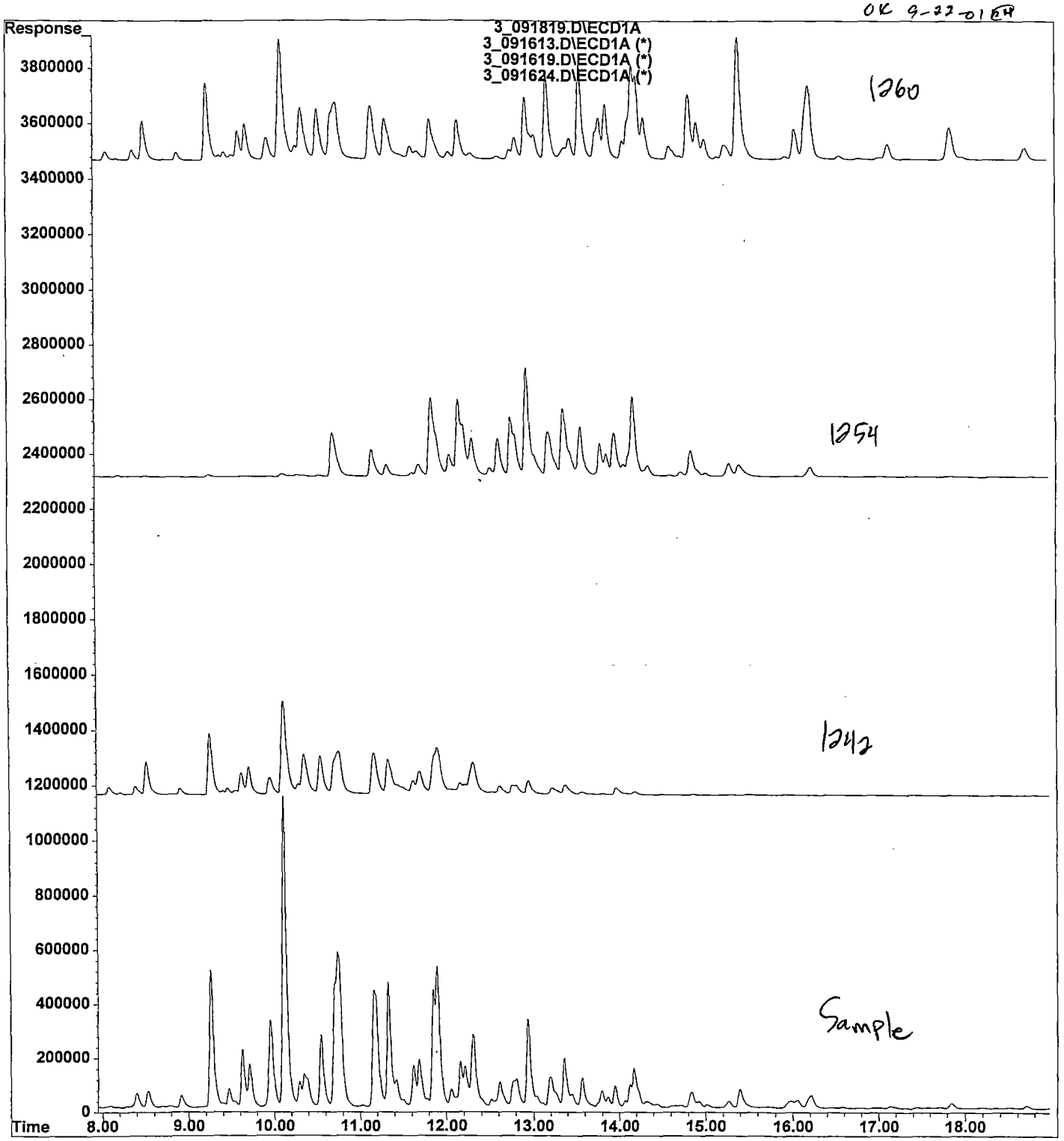
OK 9-22-01





File : F:\HPCHEM\HP\3\DATA\09_18_01\3_091819.D
Operator : BTB
Acquired : 19 Sep 2001 7:32 using AcqMethod OLM03.M
Instrument : HP_03
Sample Name: 47351.07 *E03K4 *
Misc Info : *EPA*30.2G/5.0ML*49
Vial Number: 91

OK 9-22-01 BH



Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091819.D\ECD1A.CH Vial: 91
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091819.D\ECD2B.CH
Acq On : 19 Sep 2001 7:32 Operator: BTB
Sample : 47351.07 *E03K4 * Inst : HP_03
Misc : *EPA*30.2G/5.0ML*49 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 8:21 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

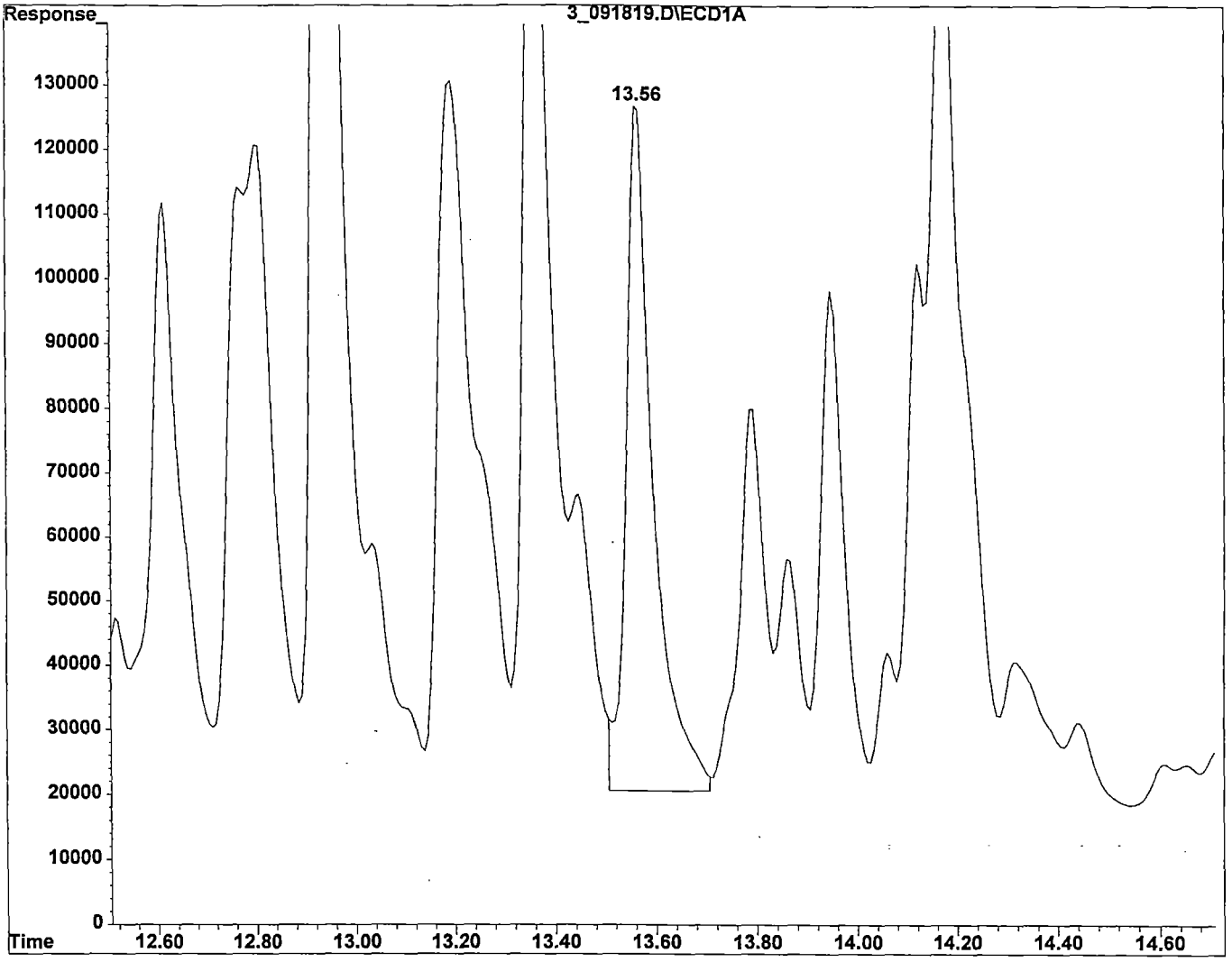
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	704683	233551	8.439	9.356
	Spiked Amount 12.985			Recovery	=	64.99%	72.05%
22)	S DCB	19.23	20.34	1222943	500788	14.1m BTB	13.3m BTB
	Spiked Amount 12.985			Recovery	=	108.58% 09201	102.42% 09201
	Target Compounds:						
7)	L4 Aroclor-1242	8.53	8.57	2300425	731764	1320.2 E	1502.0 E
8)	L4 Aroclor-1242 {2}	9.26	9.38	16679402	7068917	5490.3 E	6683.9 E
9)	L4 Aroclor-1242 {3}	10.12	10.08	39450975	16111821	7040.0 E	7910.0 E
10)	L4 Aroclor-1242 {4}	11.17	11.26	19503599	6505979	7930.0 E	9762.1 E
11)	L4 Aroclor-1242 {5}	12.30	12.34	10272979	3397468	5359.3 E	5742.6mE
	Sum Aroclor-1242			88207380	33815949	27139.7	31600.6
	Average Aroclor-1242					5427.933	6320.122
12)	L6 Aroclor-1254	10.74	10.66	34658812	8196955	11125.4 E	10920.7 E
13)	L6 Aroclor-1254 {2}	11.86	12.08	9316443	2160149	1614.5 E	1278.1 E
14)	L6 Aroclor-1254 {3}	12.16	13.01	4320560	4896592	818.8	2161.8 E#
15)	L6 Aroclor-1254 {4}	12.94	13.45	10140903	2302621	1668.0 E	1841.5 E
16)	L6 Aroclor-1254 {5}	14.17	14.24	6463342	3072695	1312.6 E	1835.8 E#
	Sum Aroclor-1254			64900060	20629011	16539.3	18038.0
	Average Aroclor-1254					3307.853	3607.594
17)	L7 Aroclor-1260	12.94	13.32	10140903	1931658	3083.3 E	996.6 E#
18)	L7 Aroclor-1260 {2}	13.56	14.07	3965416	1249791	792.6m BTB	988.1 E
19)	L7 Aroclor-1260 {3}	14.84	15.03	2329948	512153	728.2 09201	308.0 #
20)	L7 Aroclor-1260 {4}	15.40	16.42	2890889	1080255	401.5	633.6 #
21)	L7 Aroclor-1260 {5}	16.21	17.75	2566467	734778	468.1	611.3 #
	Sum Aroclor-1260			21893624	5508635	3553.9	2296.9
	Average Aroclor-1260					1094.741	707.530

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091819.D
Date Acquired: 19 Sep 2001 7:32
Inst: HP_03 Operator ID: BTB
Name: 47351.07 *E03K4 *
Misc: *EPA*30.2G/5.0ML*49
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:21 2001 Quant Results File: XPCBI16.RES



ok 9-22-01 BTB

Aroclor-1260 {2} 13.56min area: 3965416 m

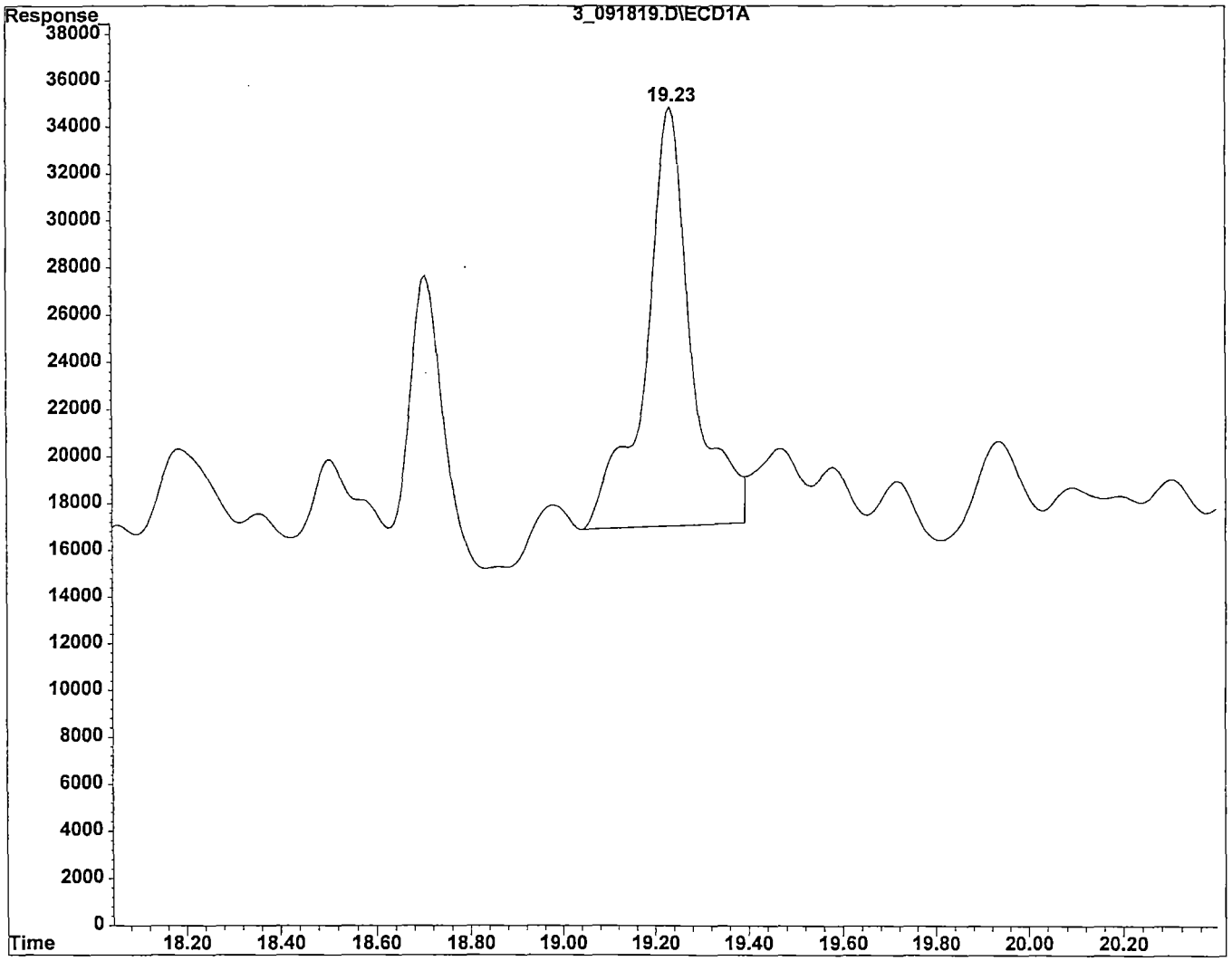
BTB 092001

Integration Time Range: 13.50 - 13.71

F:\HPCHEM\HP\3\DATA\09_18_01\3_091819.D
Report generated: Thu Sep 20 08:46:44 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091819.D
Date Acquired: 19 Sep 2001 7:32
Inst: HP_03 Operator ID: BTB
Name: 47351.07 *E03K4 *
Misc: *EPA*30.2G/5.0ML*49
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:21 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

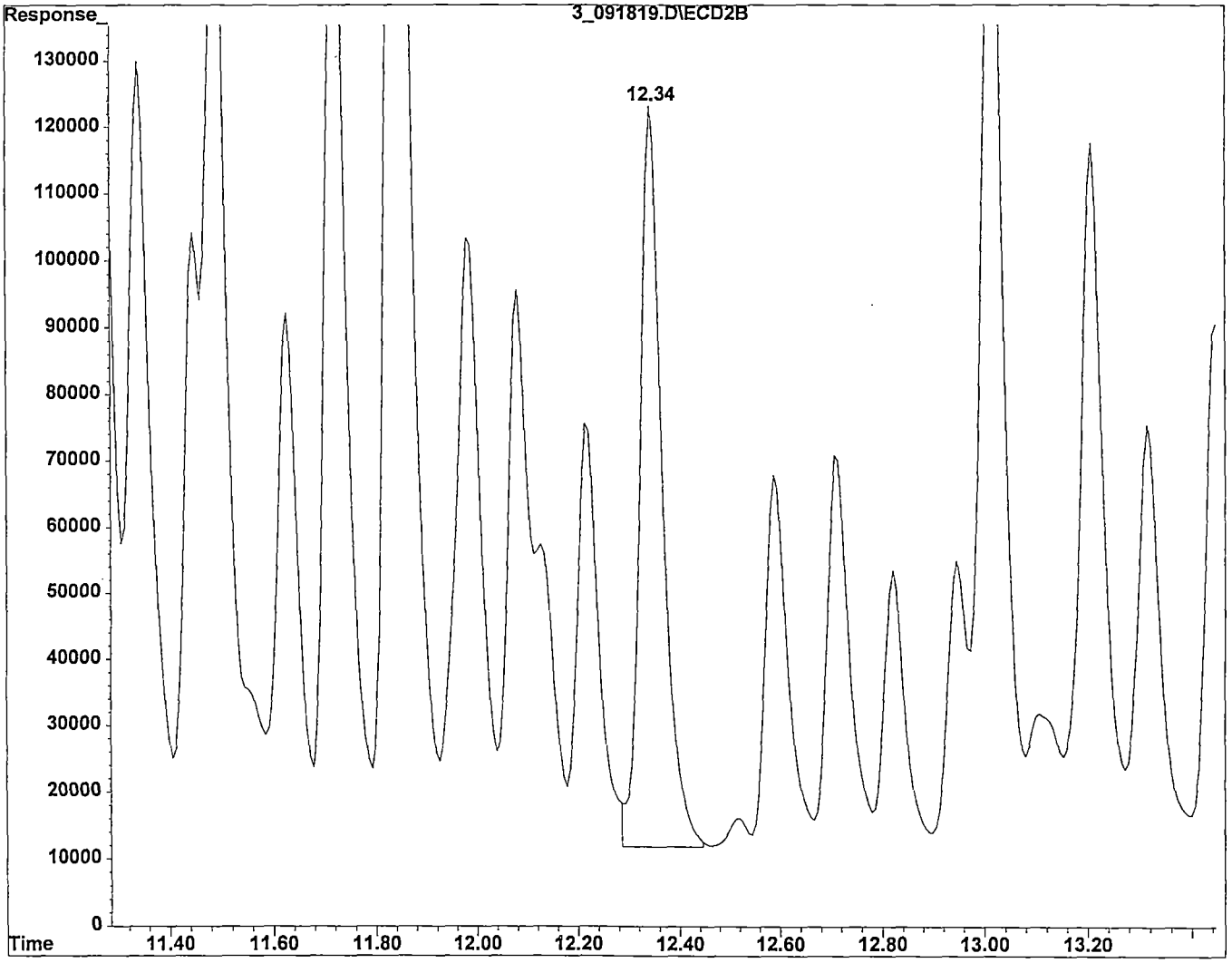
DCB 19.23min area: 1222943 m BTB

Integration Time Range: 19.04 - 19.39 09/20/01

F:\HPCHEM\HP\3\DATA\09_18_01\3_091819.D
Report generated: Thu Sep 20 08:46:44 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091819.D
Date Acquired: 19 Sep 2001 7:32
Inst: HP_03 Operator ID: BTB
Name: 47351.07 *E03K4 *
Misc: *EPA*30.2G/5.0ML*49
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:21 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

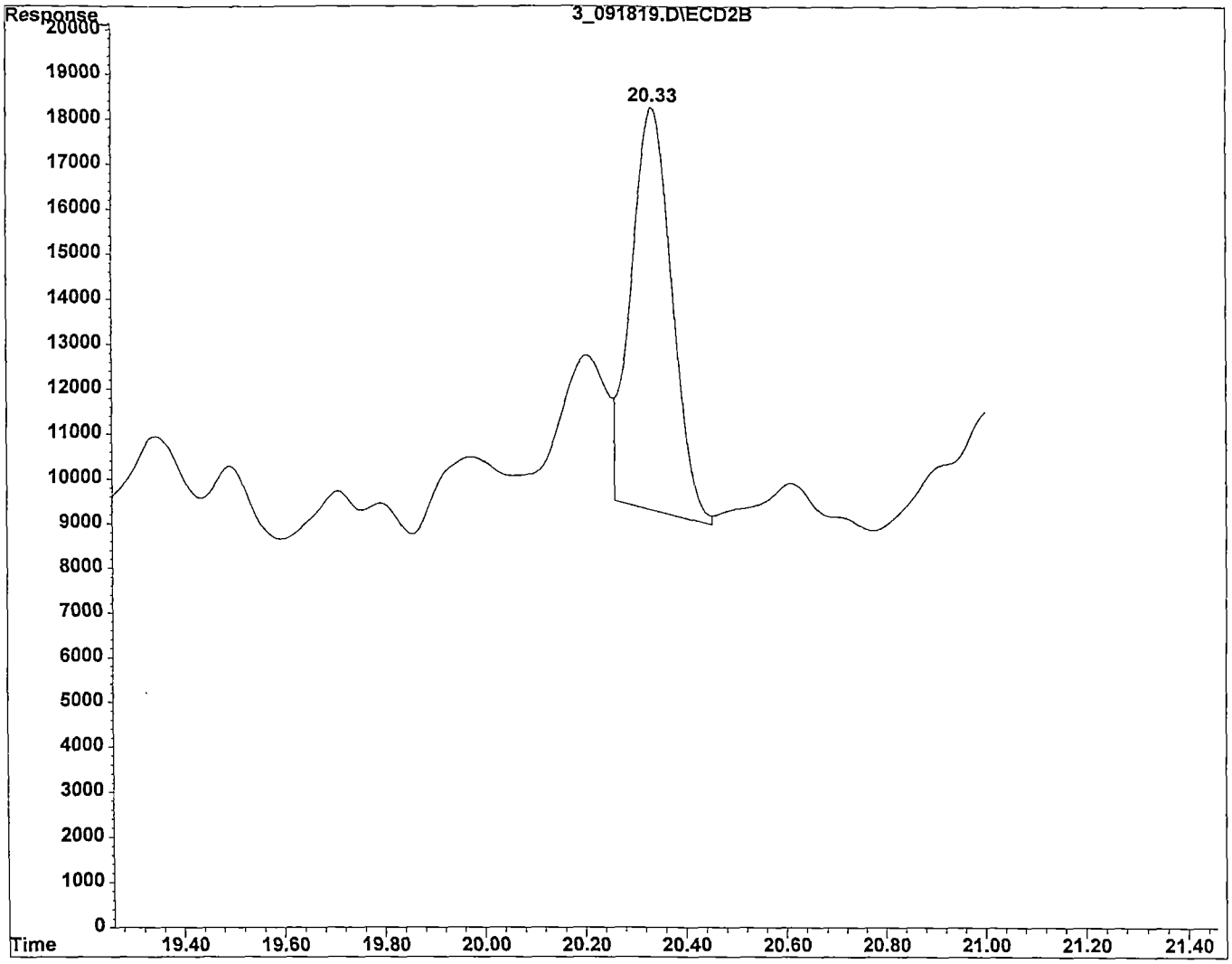
Aroclor-1242 {5} #2 12.34min area: 3397468 m BTB 092001

Integration Time Range: 12.29 - 12.45

F:\HPCHEM\HP\3\DATA\09_18_01\3_091819.D
Report generated: Thu Sep 20 08:46:45 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091819.D
Date Acquired: 19 Sep 2001 7:32
Inst: HP_03 Operator ID: BTB
Name: 47351.07 *E03K4 *
Misc: *EPA*30.2G/5.0ML*49
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:21 2001 Quant Results File: XPCBI16.RES



ok 9-22-01

DCB #2 20.34min area: 500788 m BTB 092001

Integration Time Range: 20.26 - 20.46

F:\HPCHEM\HP\3\DATA\09_18_01\3_091819.D
Report generated: Thu Sep 20 08:46:46 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03K4DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.07DL

Sample wt/vol: 30.2 (g/mL) G Lab File ID:_____

% Moisture: 49 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/21/01

Injection Volume: 0.5(uL) Dilution Factor: 40.0

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	2600	U
11104-28-2	Aroclor-1221	2600	U
11141-16-5	Aroclor-1232	2600	U
53469-21-9	Aroclor-1242	11000	D
12672-29-6	Aroclor-1248	2600	U
11097-69-1	Aroclor-1254	6900	D
11096-82-5	Aroclor-1260	1300	DJP
Surrogate amount spiked		12.99	

TB S
10-12-01

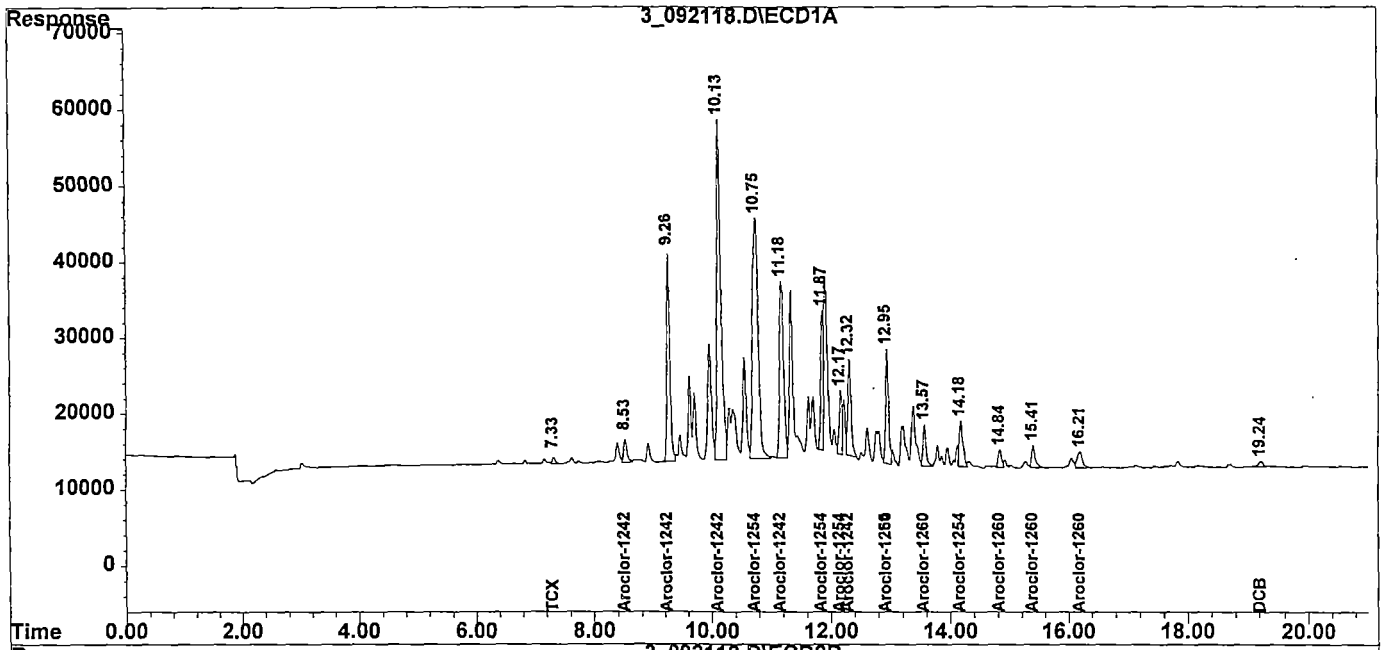
Chromatographic Report

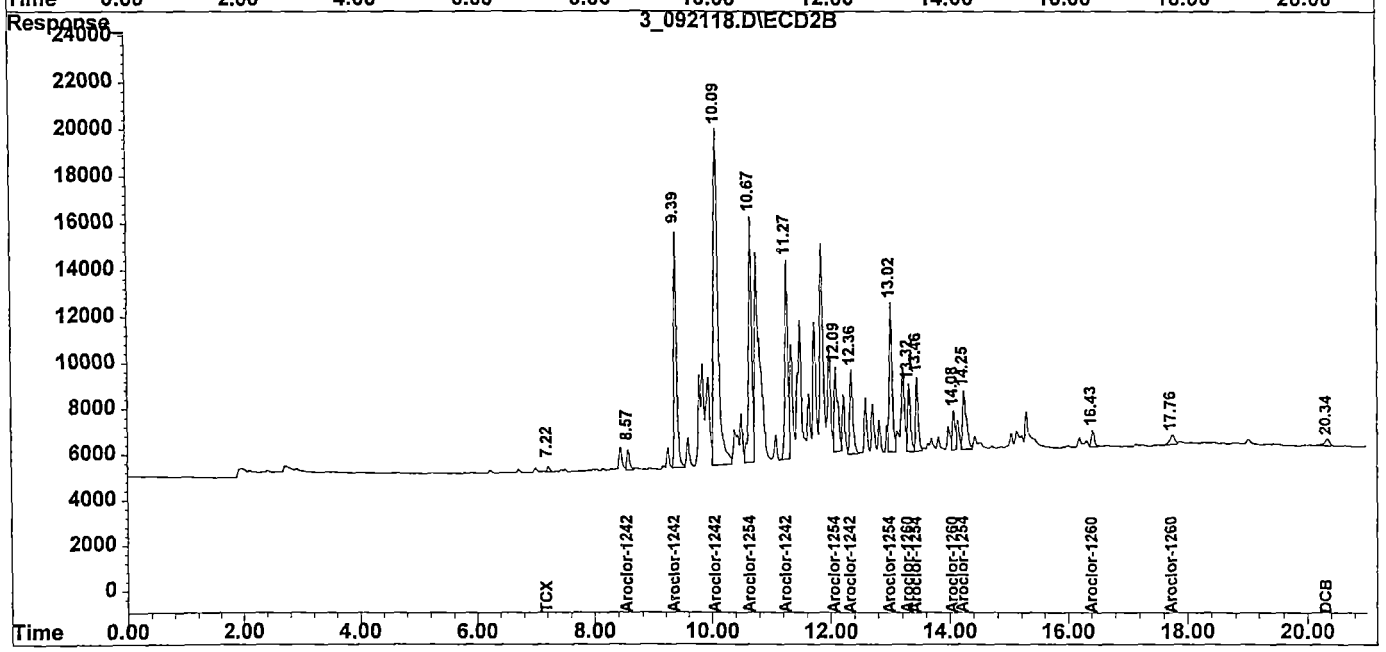
Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092118.D\ECD1A.CH Vial: 95
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092118.D\ECD2B.CH
Acq On : 21 Sep 2001 4:37 Operator: BTB
Sample : 47351.07DL *E03K4DL * Inst : HP_03
Misc : *EPA*30.2G/5.0ML*49 Dilution: 40.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 10:08 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

OK 9-22-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092118.D\ECD1A.CH Vial: 95
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092118.D\ECD2B.CH
Acq On : 21 Sep 2001 4:37 Operator: BTB
Sample : 47351.07DL *E03K4DL * Inst : HP_03
Misc : *EPA*30.2G/5.0ML*49 Dilution: 40.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 10:08 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

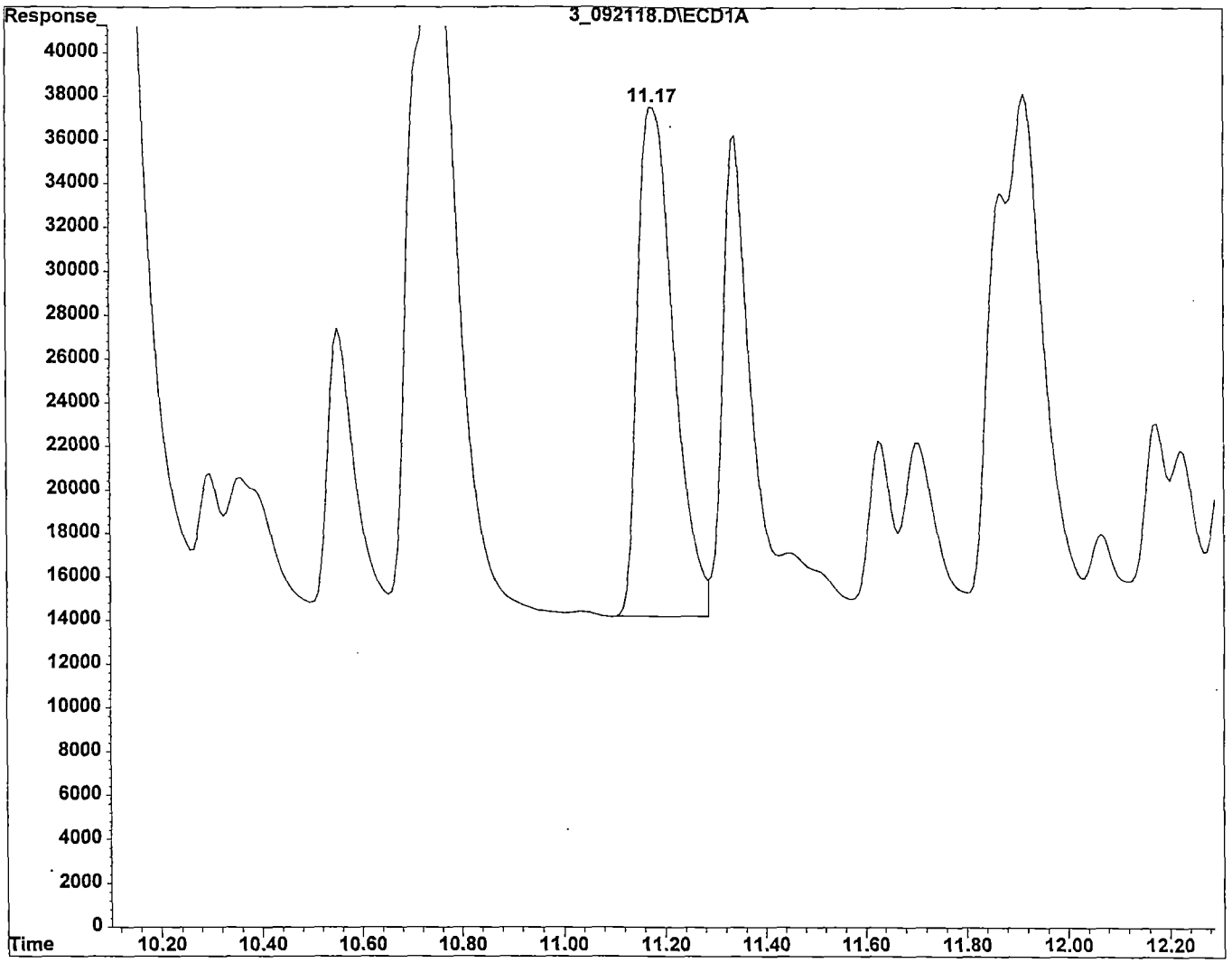
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	29861	6880	14.3	11.0
	Spiked Amount 12.985			Recovery	=	110.12%	84.71%
22)	S DCB	19.24	20.34	37556	19557	17.3m BTB 092101	20.7
	Spiked Amount 12.985			Recovery	=	133.23%	159.41%
	Target Compounds:						
7)	L4 Aroclor-1242	8.54	8.57	120565	29804	2767.6	2447.0
8)	L4 Aroclor-1242 {2}	9.26	9.39	985844	340765	12980.2	12888.2
9)	L4 Aroclor-1242 {3}	10.13	10.09	2132193	776922	15219.4	15257.1
10)	L4 Aroclor-1242 {4}	11.17	11.27	1150172	283916	18706.0m BTB 092101	17040.4
11)	L4 Aroclor-1242 {5}	12.32	12.36	506936	129828	10578.5	8777.7m BTB 092101
	Sum Aroclor-1242			4895709	1561234	60251.7	56410.3
	Average Aroclor-1242					12050.338	11282.070
12)	L6 Aroclor-1254	10.75f	10.67	2122487	393211	27252.5	20954.8
13)	L6 Aroclor-1254 {2}	11.87	12.09	449859	157563	3118.3	3729.0
14)	L6 Aroclor-1254 {3}	12.17	13.02	242593	219442	1839.0	3875.3 #
15)	L6 Aroclor-1254 {4}	12.95	13.46	521803	100532	3433.0	3216.0
16)	L6 Aroclor-1254 {5}	14.18	14.25	273131	115322	2218.7	2756.0
	Sum Aroclor-1254			3609873	986070	37861.6	34531.2
	Average Aroclor-1254					7572.324	6906.236
17)	L7 Aroclor-1260	12.95	13.32	521803	95713	6346.0	1975.3 #
18)	L7 Aroclor-1260 {2}	13.57	14.08	191628	55083	1532.1m	1741.9
19)	L7 Aroclor-1260 {3}	14.85	0.00	90808	0	1135.3	N.D. d #
20)	L7 Aroclor-1260 {4}	15.41	16.43	123348	28901	685.3	678.1
21)	L7 Aroclor-1260 {5}	16.22	17.76	138416	25232	1009.9	839.7
	Sum Aroclor-1260			1066003	204929	278106.5	135957.2
	Average Aroclor-1260					2141.698	1308.758

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092118.D
Date Acquired: 21 Sep 2001 4:37
Inst: HP_03 Operator ID: BTB
Name: 47351.07DL *E03K4DL *
Misc: *EPA*30.2G/5.0ML*49
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:08 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1242 {4} 11.17min area: 1150172 m

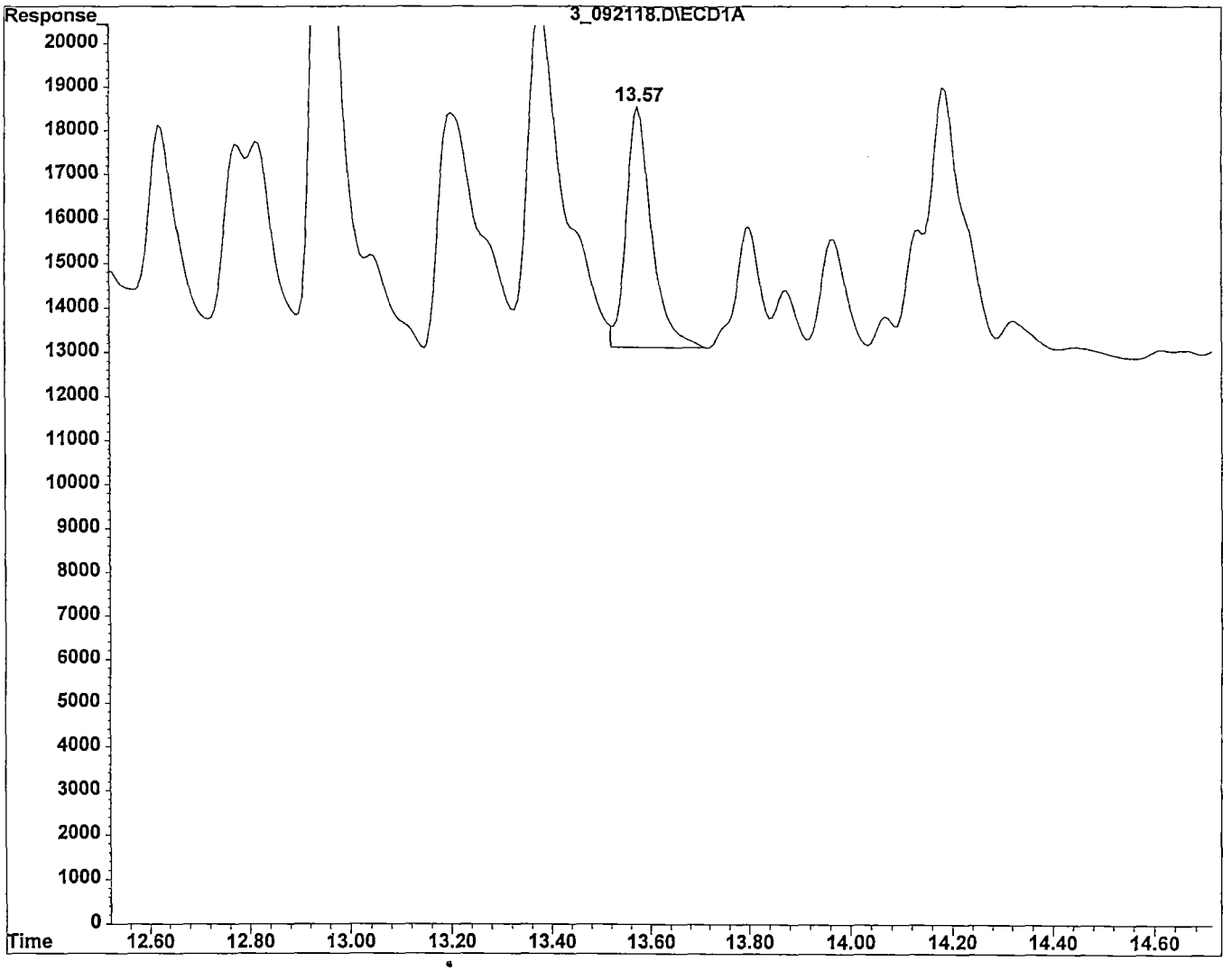
BTB 092101

Integration Time Range: 11.10 - 11.29

F:\HPCHEM\HP\3\DATA\09_21_01\3_092118.D
Report generated: Fri Sep 21 10:44:57 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092118.D
Date Acquired: 21 Sep 2001 4:37
Inst: HP_03 Operator ID: BTB
Name: 47351.07DL *E03K4DL *
Misc: *EPA*30.2G/5.0ML*49
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:08 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1260 {2} 13.57min area: 191628 m

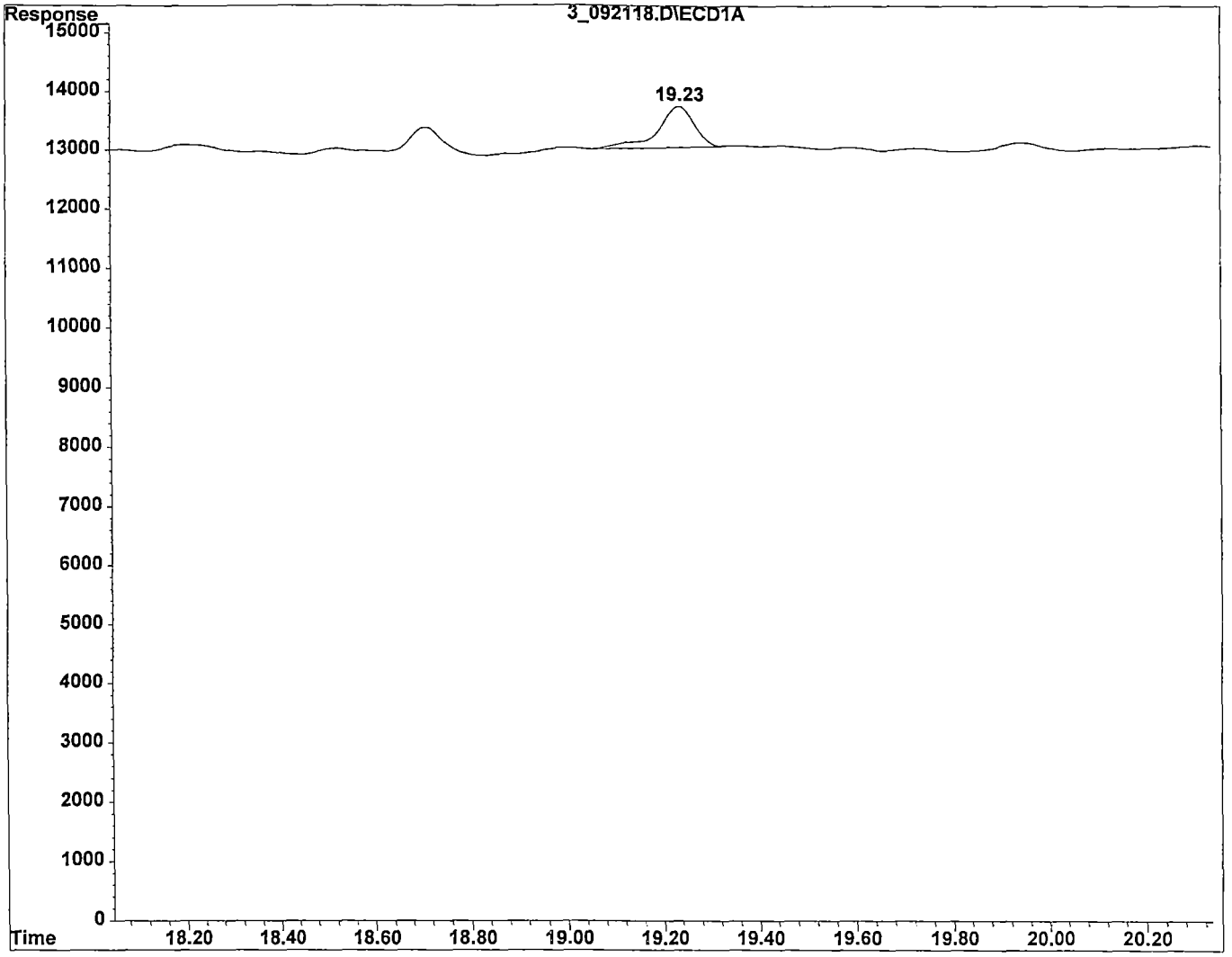
BTB 092101

Integration Time Range: 13.52 - 13.71

F:\HPCHEM\HP\3\DATA\09_21_01\3_092118.D
Report generated: Fri Sep 21 10:44:57 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092118.D
Date Acquired: 21 Sep 2001 4:37
Inst: HP_03 Operator ID: BTB
Name: 47351.07DL *E03K4DL *
Misc: *EPA*30.2G/5.0ML*49
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:08 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

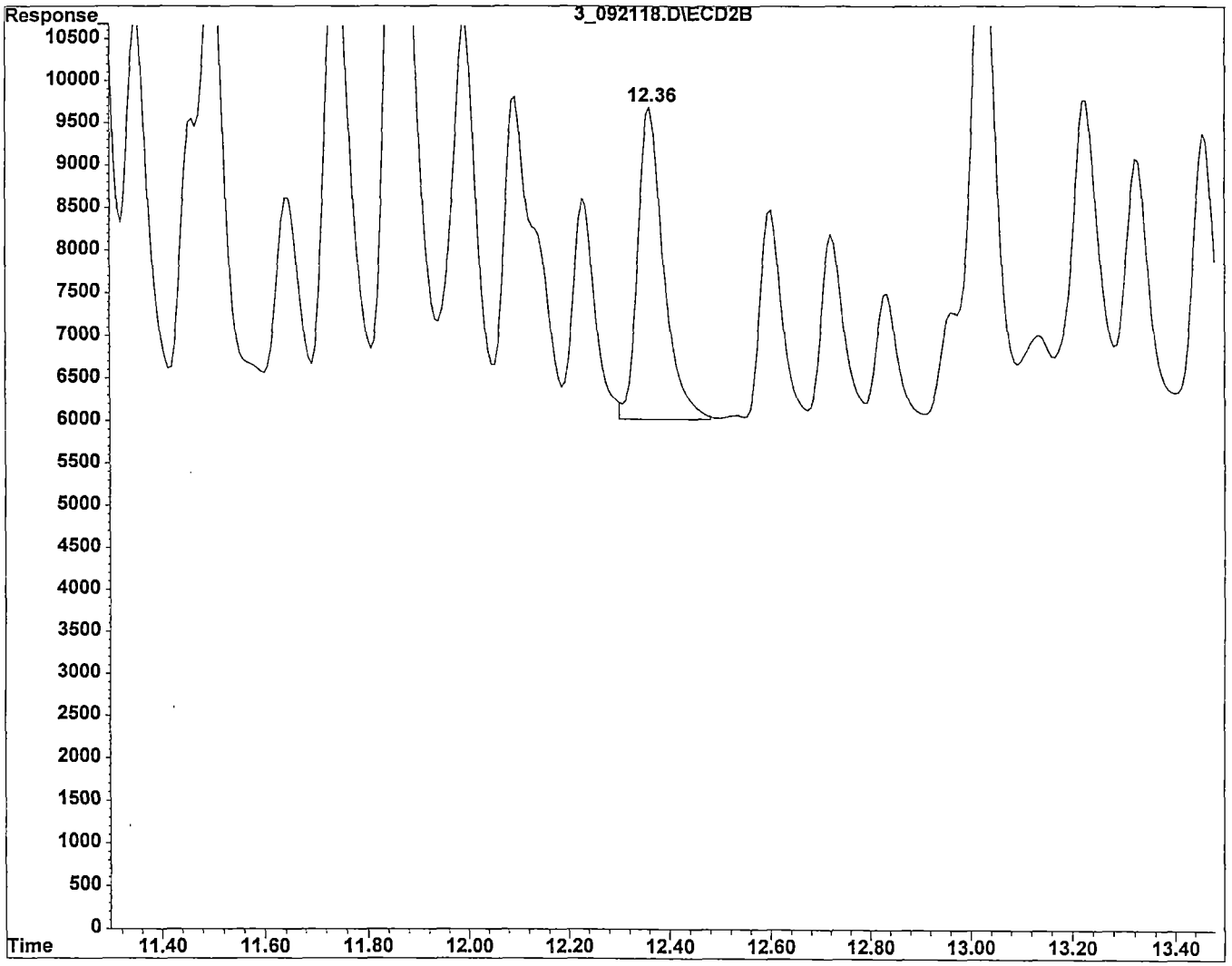
DCB 19.24min area: 37556 m BTB 092101

Integration Time Range: 19.05 - 19.33

F:\HPCHEM\HP\3\DATA\09_21_01\3_092118.D
Report generated: Fri Sep 21 10:44:58 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092118.D
Date Acquired: 21 Sep 2001 4:37
Inst: HP_03 Operator ID: BTB
Name: 47351.07DL *E03K4DL *
Misc: *EPA*30.2G/5.0ML*49
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:08 2001 Quant Results File: XPCBI16.RES



ok 9-22-01

Aroclor-1242 {5} #2 12.36min area: 129828 m

BTB 09261

Integration Time Range: 12.30 - 12.48

F:\HPCHEM\HP\3\DATA\09_21_01\3_092118.D
Report generated: Fri Sep 21 10:44:58 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03K5

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.08

Sample wt/vol: 30.6 (g/mL) G Lab File ID:_____

% Moisture: 52 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		Q
12674-11-2	Aroclor-1016	67		UJ
11104-28-2	Aroclor-1221	67		UJ
11141-16-5	Aroclor-1232	67		UJ
53469-21-9	Aroclor-1242	~~2900~~	5500	~~E~~ DJ
12672-29-6	Aroclor-1248	67		U
11097-69-1	Aroclor-1254	~~1800~~	3400	~~EP~~ DJ
11096-82-5	Aroclor-1260	~~650~~	830	~~E~~ DJP
Surrogate amount spiked		13.61		

9730

apply this results
TBS 10-12-01

FORM I PCB

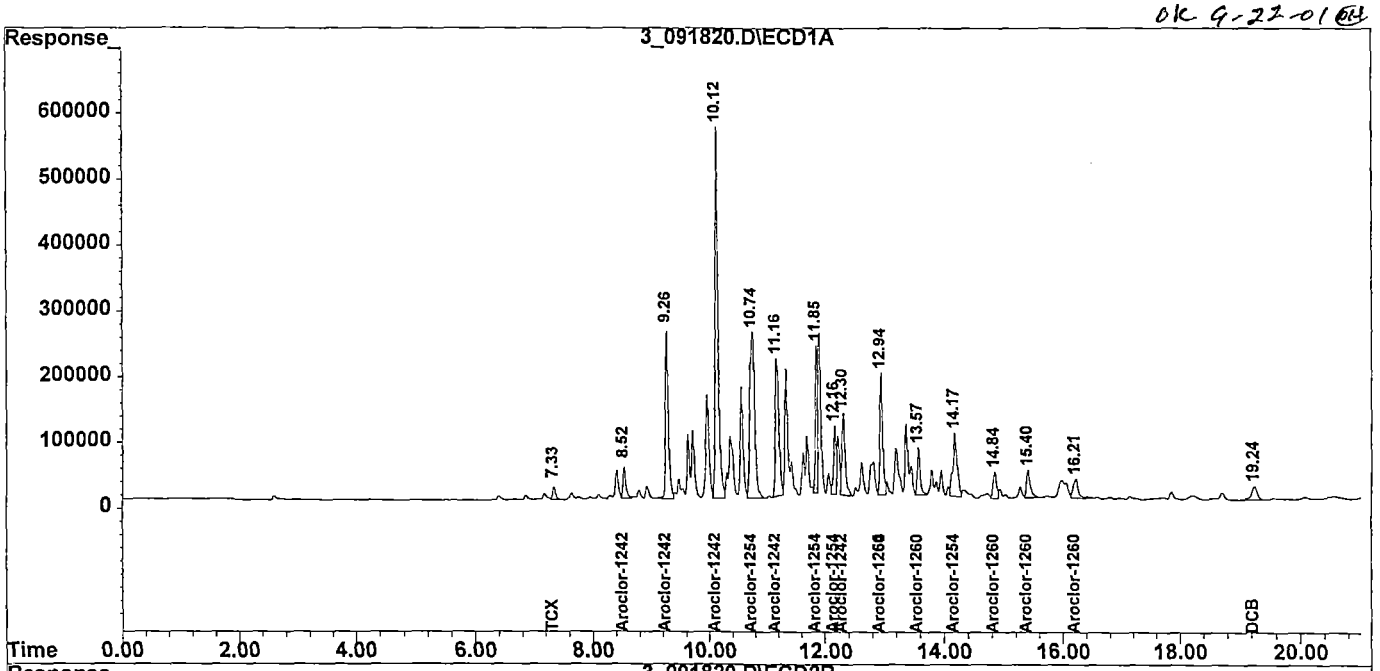
Chromatographic Report

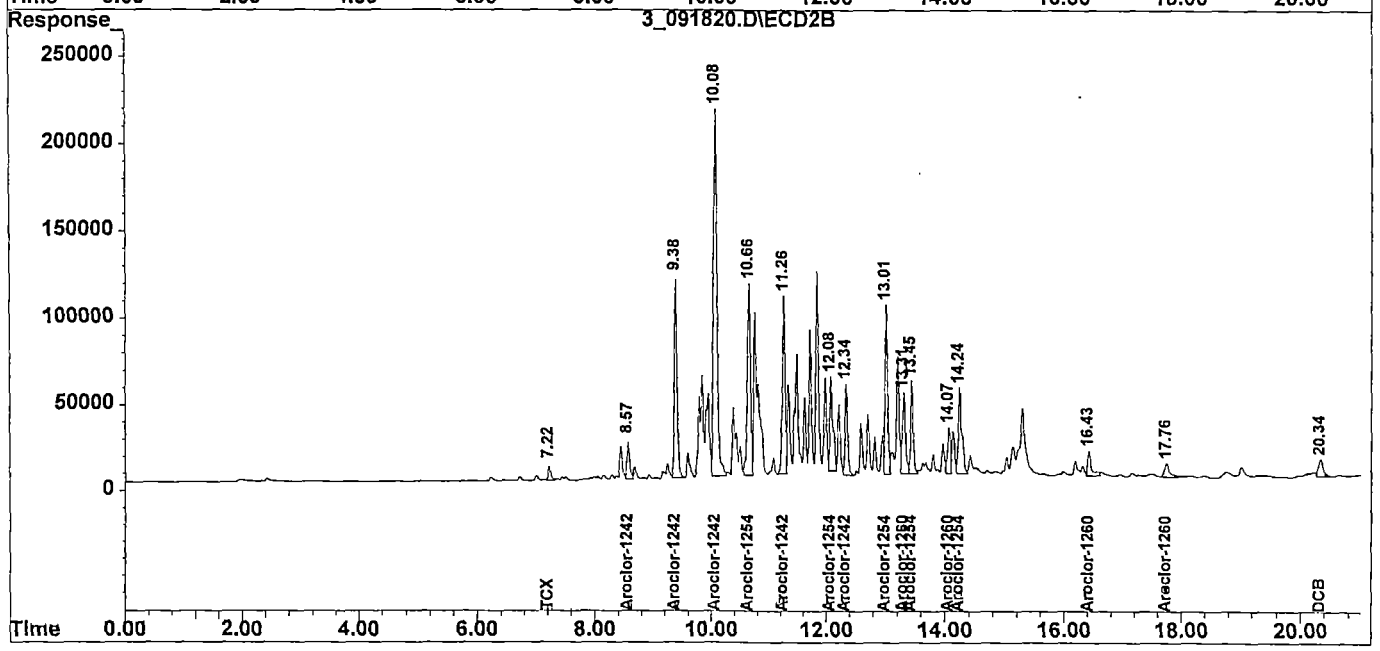
Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091820.D\ECD1A.CH Vial: 92
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091820.D\ECD2B.CH
Acq On : 19 Sep 2001 7:58 Operator: BTB
Sample : 47351.08 *E03K5 * Inst : HP_03
Misc : *EPA*30.6G/5.0ML*52 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 8:25 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

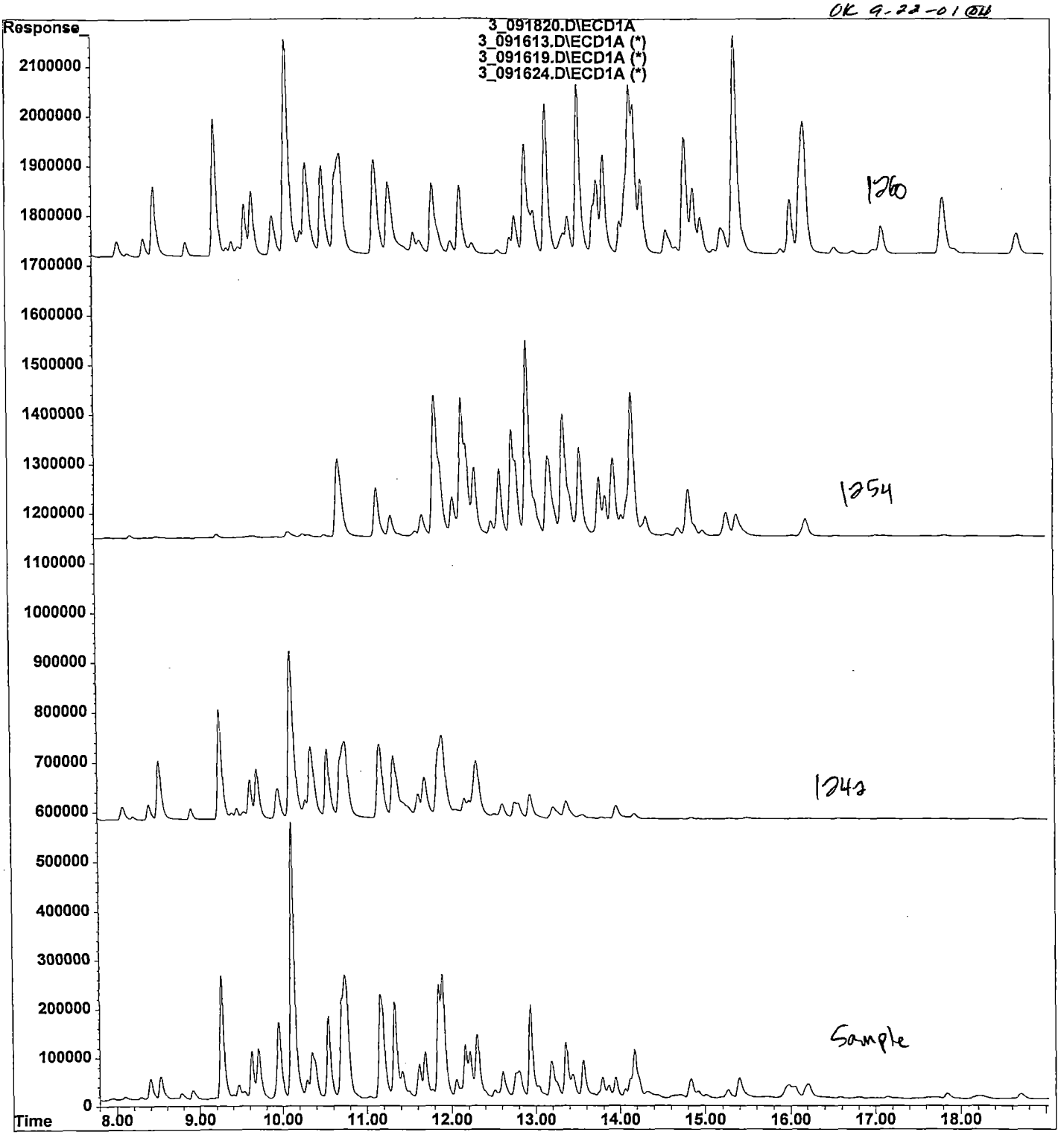
OK 9-22-01





File : F:\HPCHEM\HP\3\DATA\09_18_01\3_091820.D
Operator : BTB
Acquired : 19 Sep 2001 7:58 using AcqMethod OLM03.M
Instrument : HP_03
Sample Name: 47351.08 *E03K5 *
Misc Info : *EPA*30.6G/5.0ML*52
Vial Number: 92

OK 9-22-01 @ 4



Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091820.D\ECD1A.CH Vial: 92
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091820.D\ECD2B.CH
Acq On : 19 Sep 2001 7:58 Operator: BTB
Sample : 47351.08 *E03K5 * Inst : HP_03
Misc : *EPA*30.6G/5.0ML*52 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 8:25 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

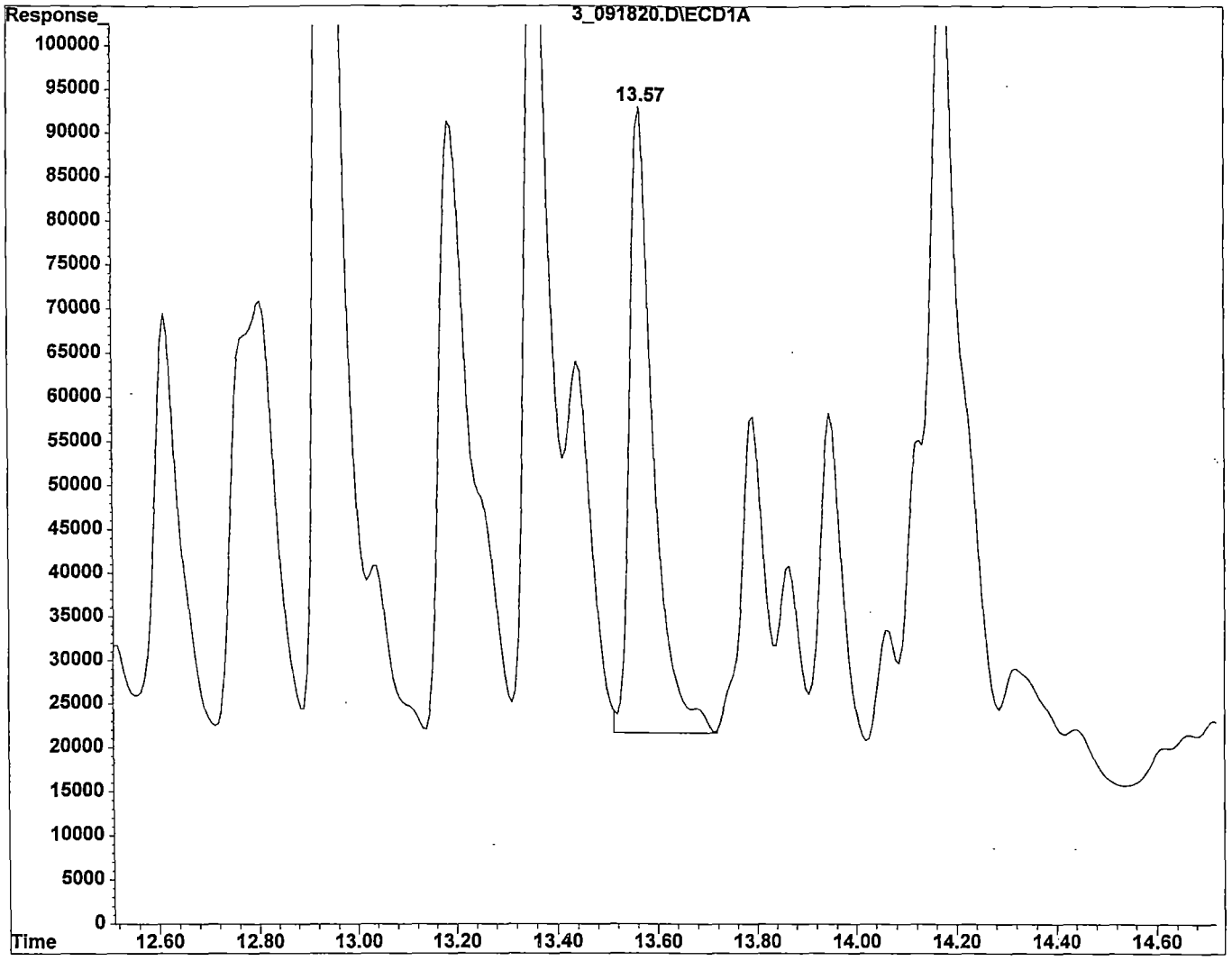
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	696557	254503	8.747	10.7
	Spiked Amount 13.617			Recovery	=	64.24%	78.58%
22)	S DCB	19.24	20.34	1294240	577283	15.7	16.0m BTB
	Spiked Amount 13.617			Recovery	=	115.30%	117.50% 09201
	Target Compounds:						
7)	L4 Aroclor-1242	8.53	8.57	1782300	688515	1072.6 E	1481.9 E#
8)	L4 Aroclor-1242 {2}	9.26	9.39	8693058	3766676	3000.5 E	3734.7 E
9)	L4 Aroclor-1242 {3}	10.12	10.08	20542121	9015314	3843.9 E	4641.2 E
10)	L4 Aroclor-1242 {4}	11.17	11.26	9421791	3494202	4017.0 E	5497.8 E#
11)	L4 Aroclor-1242 {5}	12.30	12.34	5043279	1628096	2758.9 E	2885.7mE
	Sum Aroclor-1242			45482548	18592803	14692.9	18241.3
	Average Aroclor-1242					2938.589	3648.255
12)	L6 Aroclor-1254	10.74	10.66	15704992	4389543	5286.3 E	6132.4 E
13)	L6 Aroclor-1254 {2}	11.86	12.08	5237340	2058343	951.7 E	1277.1 E#
14)	L6 Aroclor-1254 {3}	12.16	13.02	2888230	2989865	574.0	1384.2 E#
15)	L6 Aroclor-1254 {4}	12.94	13.45	5848004	1648868	1008.6 E	1382.8 E#
16)	L6 Aroclor-1254 {5}	14.18	14.24	4941853	2082841	1052.4 E	1304.9 E
	Sum Aroclor-1254			34620419	13169460	8873.1	11481.4
	Average Aroclor-1254					1774.611	2296.273
17)	L7 Aroclor-1260	12.94	13.32	5848004	1801203	1864.5 E	974.5 E#
18)	L7 Aroclor-1260 {2}	13.57	14.07	2345400	907892	491.6m BTB	752.7 #
19)	L7 Aroclor-1260 {3}	14.84	0.00	1587562	0	520.3 09201	N.D. d #
20)	L7 Aroclor-1260 {4}	15.40	16.43	1851462	678125	269.6	417.1 #
21)	L7 Aroclor-1260 {5}	16.22	17.76	1875803	520922	358.8	454.5 #
	Sum Aroclor-1260			13508231	3908142	2386.2	1769.3
	Average Aroclor-1260					700.956	649.680

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091820.D
Date Acquired: 19 Sep 2001 7:58
Inst: HP_03 Operator ID: BTB
Name: 47351.08 *E03K5 *
Misc: *EPA*30.6G/5.0ML*52
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:25 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1260 {2} 13.57min area: 2345400 m

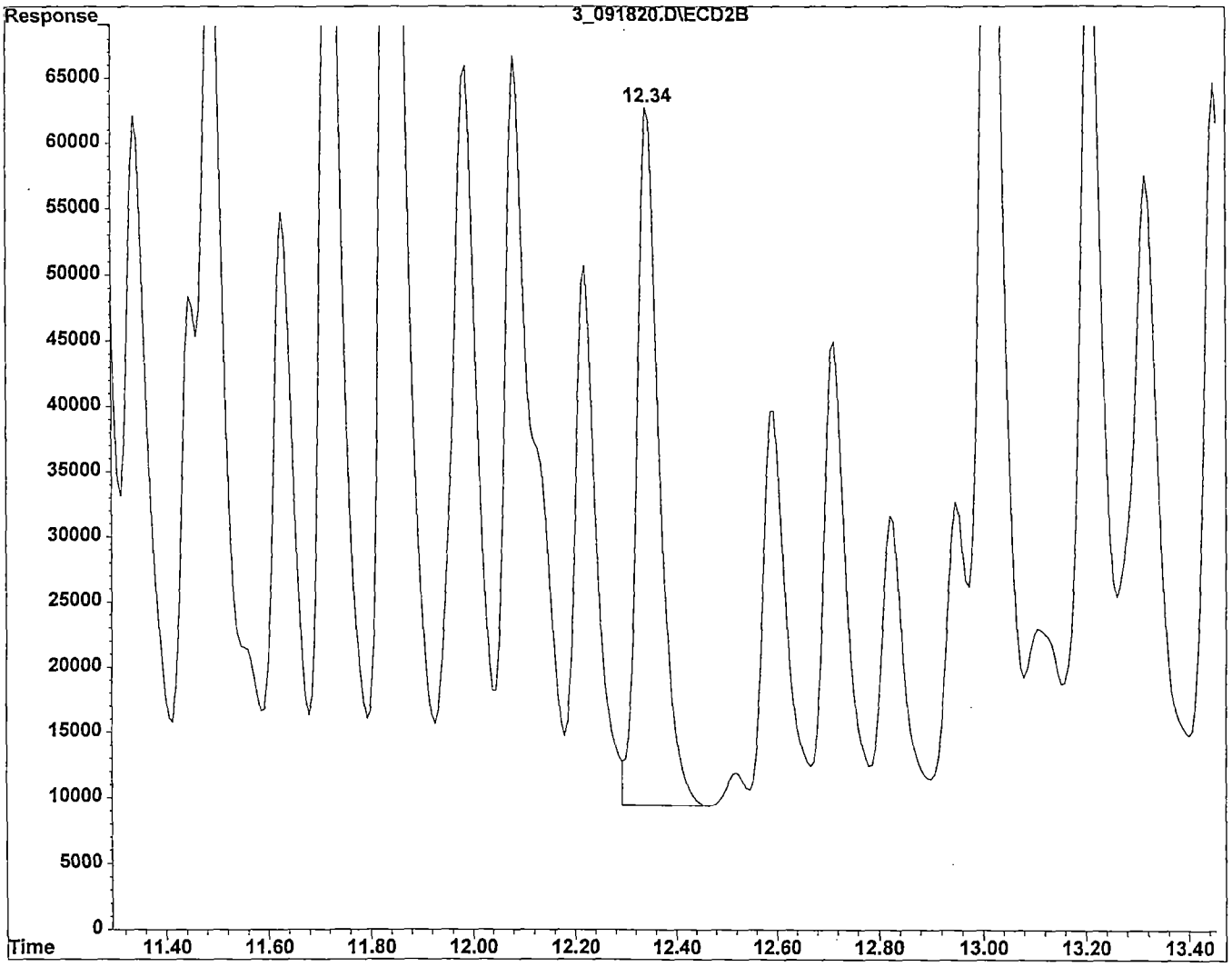
Integration Time Range: 13.51 - 13.72

BTB 092001

F:\HPCHEM\HP\3\DATA\09_18_01\3_091820.D
Report generated: Thu Sep 20 08:46:47 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091820.D
Date Acquired: 19 Sep 2001 7:58
Inst: HP_03 Operator ID: BTB
Name: 47351.08 *E03K5 *
Misc: *EPA*30.6G/5.0ML*52
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:25 2001 Quant Results File: XPCBI16.RES



OK 9-22-01 BB

Aroclor-1242 {5} #2 12.34min area: 1628096 m

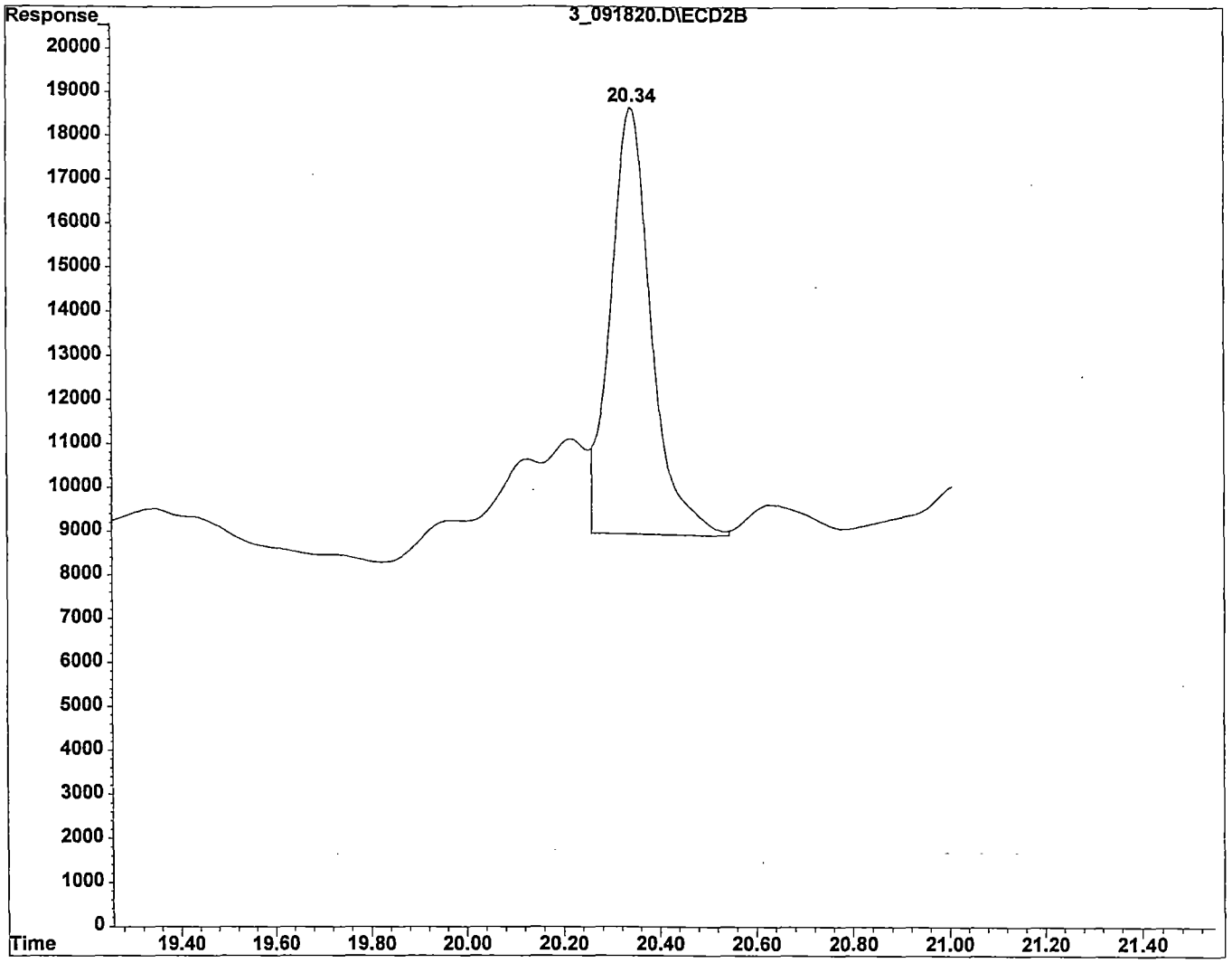
Integration Time Range: 12.29 - 12.45

BTB 092001

F:\HPCHEM\HP\3\DATA\09_18_01\3_091820.D
Report generated: Thu Sep 20 08:46:48 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091820.D
Date Acquired: 19 Sep 2001 7:58
Inst: HP_03 Operator ID: BTB
Name: 47351.08 *E03K5 *
Misc: *EPA*30.6G/5.0ML*52
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:25 2001 Quant Results File: XPCBI16.RES



OK 9-22-01 EH

DCB #2 20.34min area: 577283 m BTB 092001

Integration Time Range: 20.26 - 20.55

F:\HPCHEM\HP\3\DATA\09_18_01\3_091820.D
Report generated: Thu Sep 20 08:46:48 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03K5DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.08DL

Sample wt/vol: 30.6 (g/mL) G Lab File ID:_____

% Moisture: 52 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/21/01

Injection Volume: 0.5(uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N) Y pH: 6.7 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS; (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	1300	UJ
11104-28-2	Aroclor-1221	1300	UJ
11141-16-5	Aroclor-1232	1300	UJ
53469-21-9	Aroclor-1242	5500	DJ
12672-29-6	Aroclor-1248	1300	UJ
11097-69-1	Aroclor-1254	3400	DJ
11096-82-5	Aroclor-1260	830	DJP
Surrogate amount spiked		13.61	

TBS
10-12-01

FORM I PCB

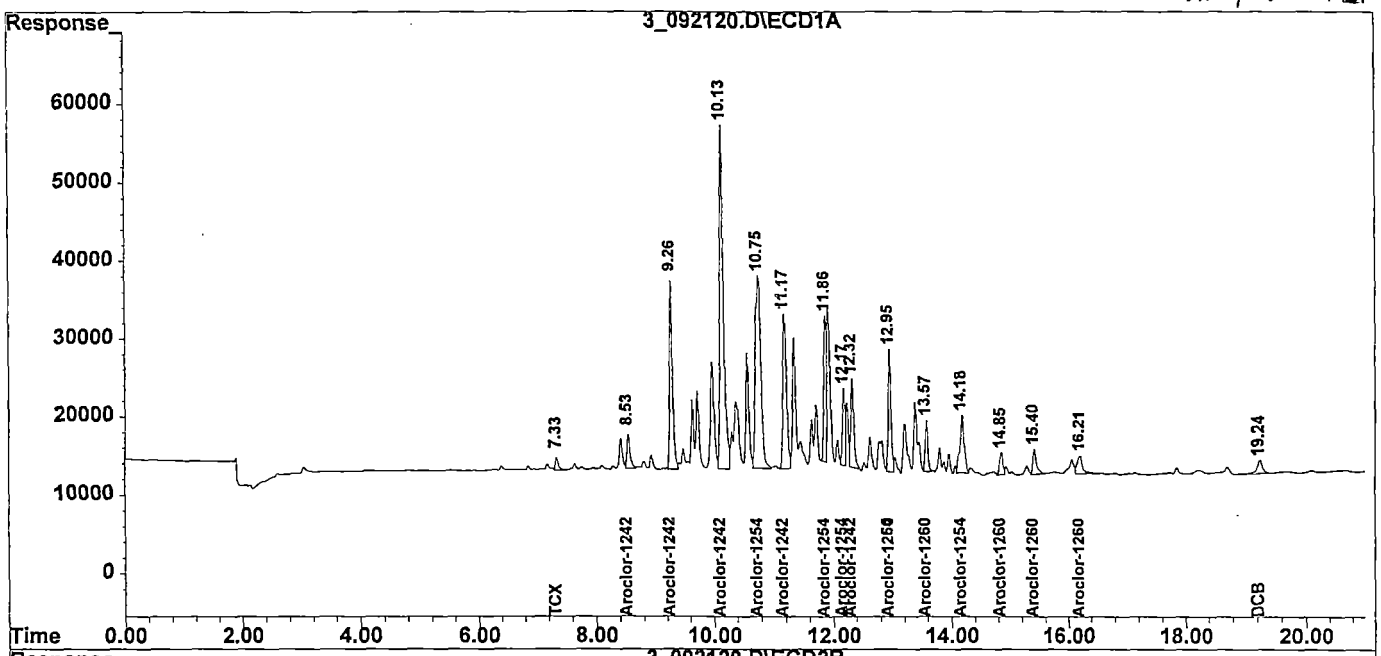
Chromatographic Report

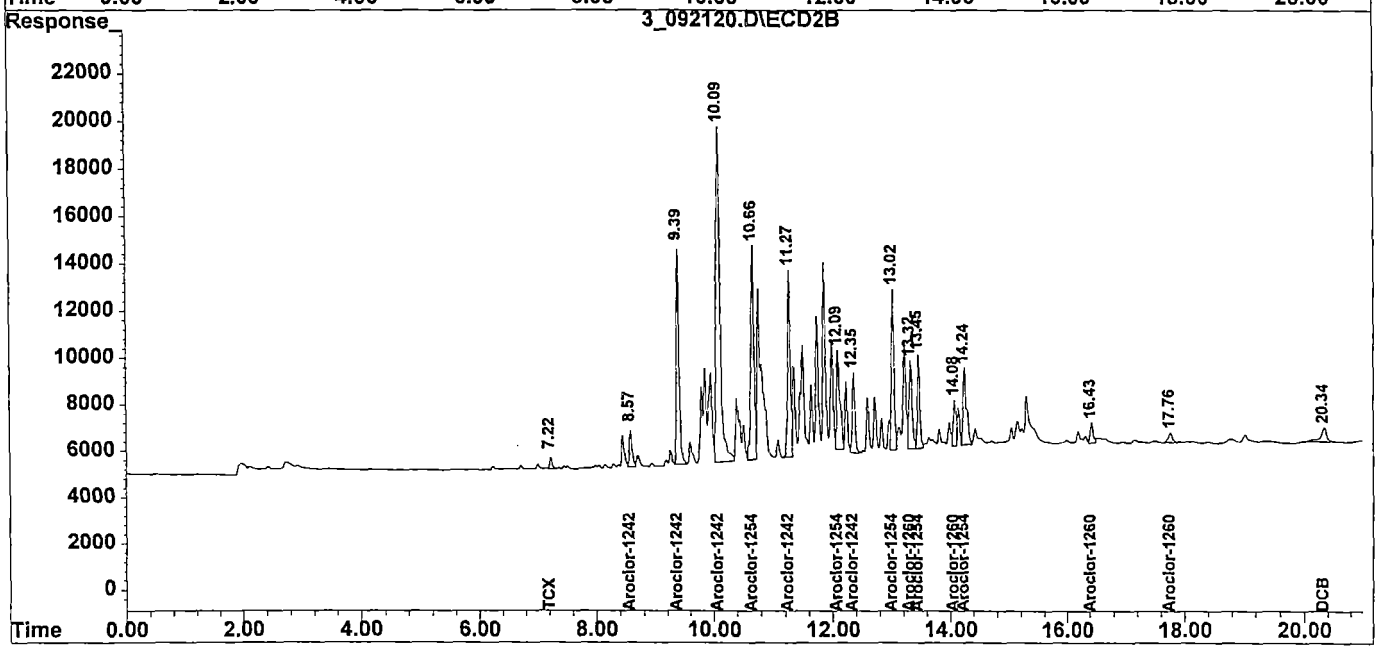
Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092120.D\ECD1A.CH Vial: 97
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092120.D\ECD2B.CH
Acq On : 21 Sep 2001 5:28 Operator: BTB
Sample : 47351.08DL *E03K5DL * Inst : HP_03
Misc : *EPA*30.6G/5.0ML*52 Dilution: 20.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 10:11 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

OK 9-27-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092120.D\ECD1A.CH Vial: 97
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092120.D\ECD2B.CH
Acq On : 21 Sep 2001 5:28 Operator: BTB
Sample : 47351.08DL *E03K5DL * Inst : HP_03
Misc : *EPA*30.6G/5.0ML*52 Dilution: 20.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 10:11 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

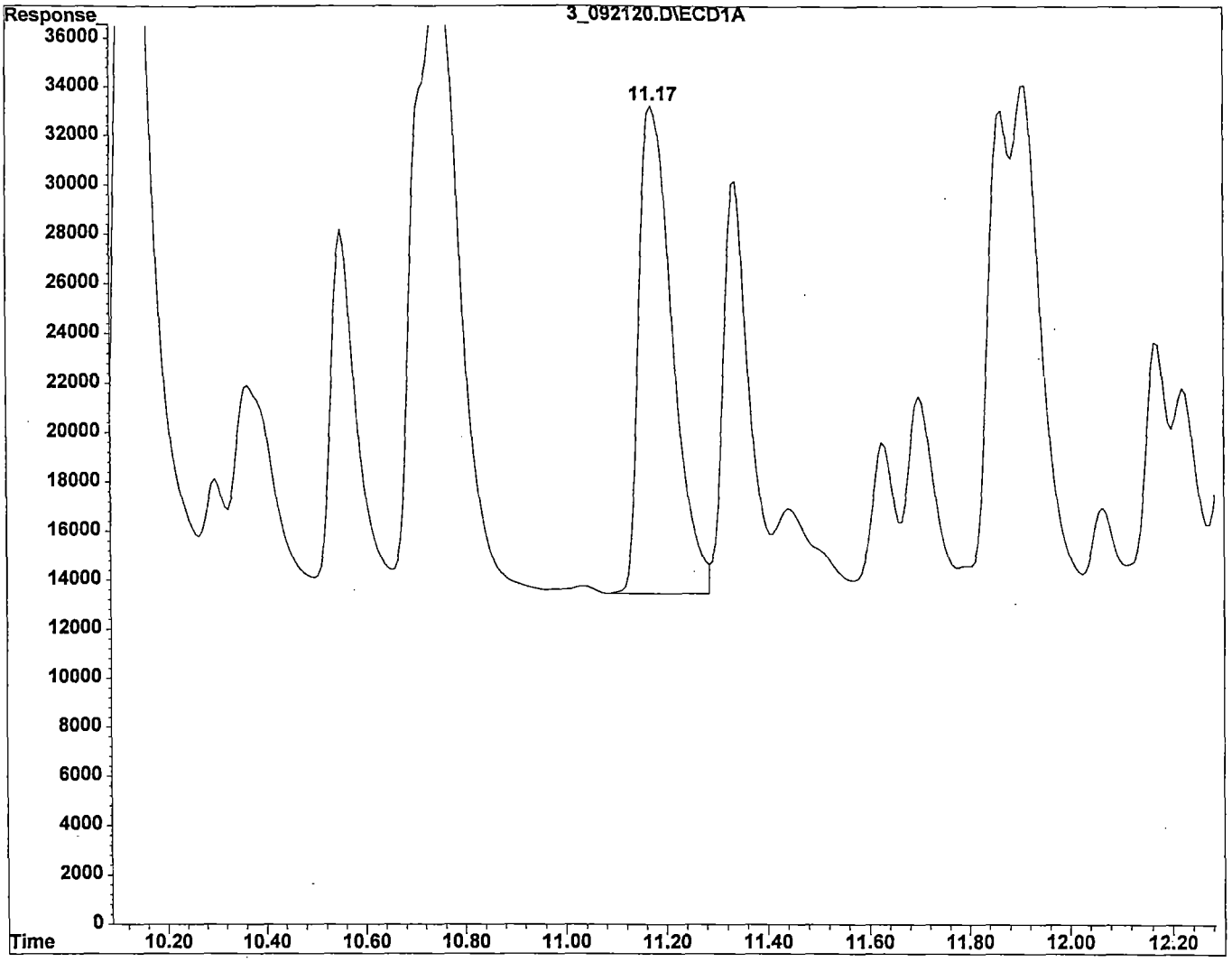
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.23	54133	14068	13.6	11.8	
	Spiked Amount 13.617			Recovery	=	99.88%	86.66%	
22)	S DCB	19.24	20.34	111145	45439	26.9m BTB 092101	25.2m BTB 092101	
	Spiked Amount 13.617			Recovery	=	197.55%	185.07%	
	Target Compounds:							
7)	L4 Aroclor-1242	8.53	8.57	166932	51215	2009.1	2204.6	
8)	L4 Aroclor-1242 {2}	9.26	9.39	848969	303624	5860.7	6020.9	
9)	L4 Aroclor-1242 {3}	10.13	10.09	1929940	715653	7222.7	7368.5	
10)	L4 Aroclor-1242 {4}	11.17	11.27	919000	264390	7836.4m	8319.9	
11)	L4 Aroclor-1242 {5}	12.32	12.35	434223	108896	4750.8	3860.2m	
	Sum Aroclor-1242			4299063	1443779	27679.8	27774.2	
	Average Aroclor-1242					5535.953	5554.832	
12)	L6 Aroclor-1254	10.75f	10.67	1611398	349762	10848.0	9772.7	
13)	L6 Aroclor-1254 {2}	11.87	12.09	508816	164996	1849.2	2047.4	
14)	L6 Aroclor-1254 {3}	12.17	13.02	279340	218757	1110.3	2025.5	#
15)	L6 Aroclor-1254 {4}	12.95	13.46	511097	120175	1763.0	2015.7	
16)	L6 Aroclor-1254 {5}	14.18	14.25	360641	139541	1536.0	1748.5	
	Sum Aroclor-1254			3271293	993232	17106.5	17609.7	
	Average Aroclor-1254					3421.302	3521.943	
17)	L7 Aroclor-1260	12.95	13.32	511097	136916	3259.0	1481.5	#
18)	L7 Aroclor-1260 {2}	13.57	14.08	200436	64695	840.2m	1072.7	#
19)	L7 Aroclor-1260 {3}	14.85	0.00	108766	0	712.9	N.D. d	#
20)	L7 Aroclor-1260 {4}	15.41	16.43	137820	31174	401.4	383.5	
21)	L7 Aroclor-1260 {5}	16.22	17.76	166117	22079	635.5	385.3	#
	Sum Aroclor-1260			1124236	254864	79643.4	45246.5	
	Average Aroclor-1260					1169.802	830.727	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092120.D
Date Acquired: 21 Sep 2001 5:28
Inst: HP_03 Operator ID: BTB
Name: 47351.08DL *E03K5DL *
Misc: *EPA*30.6G/5.0ML*52
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:11 2001 Quant Results File: XPCBI16.RES



OK 9-22-01 BB

Aroclor-1242 {4} 11.17min area: 919000 m

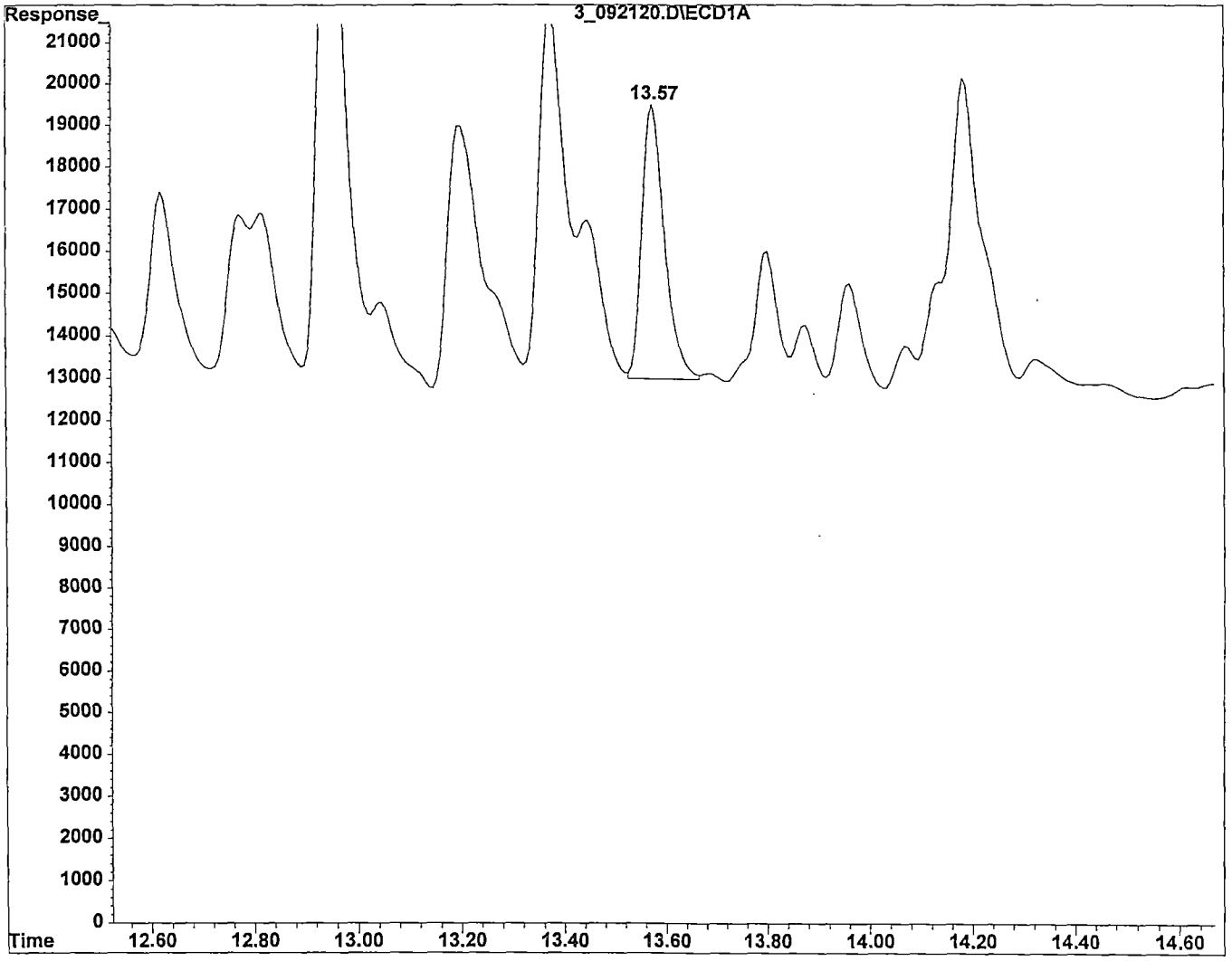
BTB 09/21/01

Integration Time Range: 11.09 - 11.28

F:\HPCHEM\HP\3\DATA\09_21_01\3_092120.D
Report generated: Fri Sep 21 10:45:03 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092120.D
Date Acquired: 21 Sep 2001 5:28
Inst: HP_03 Operator ID: BTB
Name: 47351.08DL *E03K5DL *
Misc: *EPA*30.6G/5.0ML*52
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:11 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

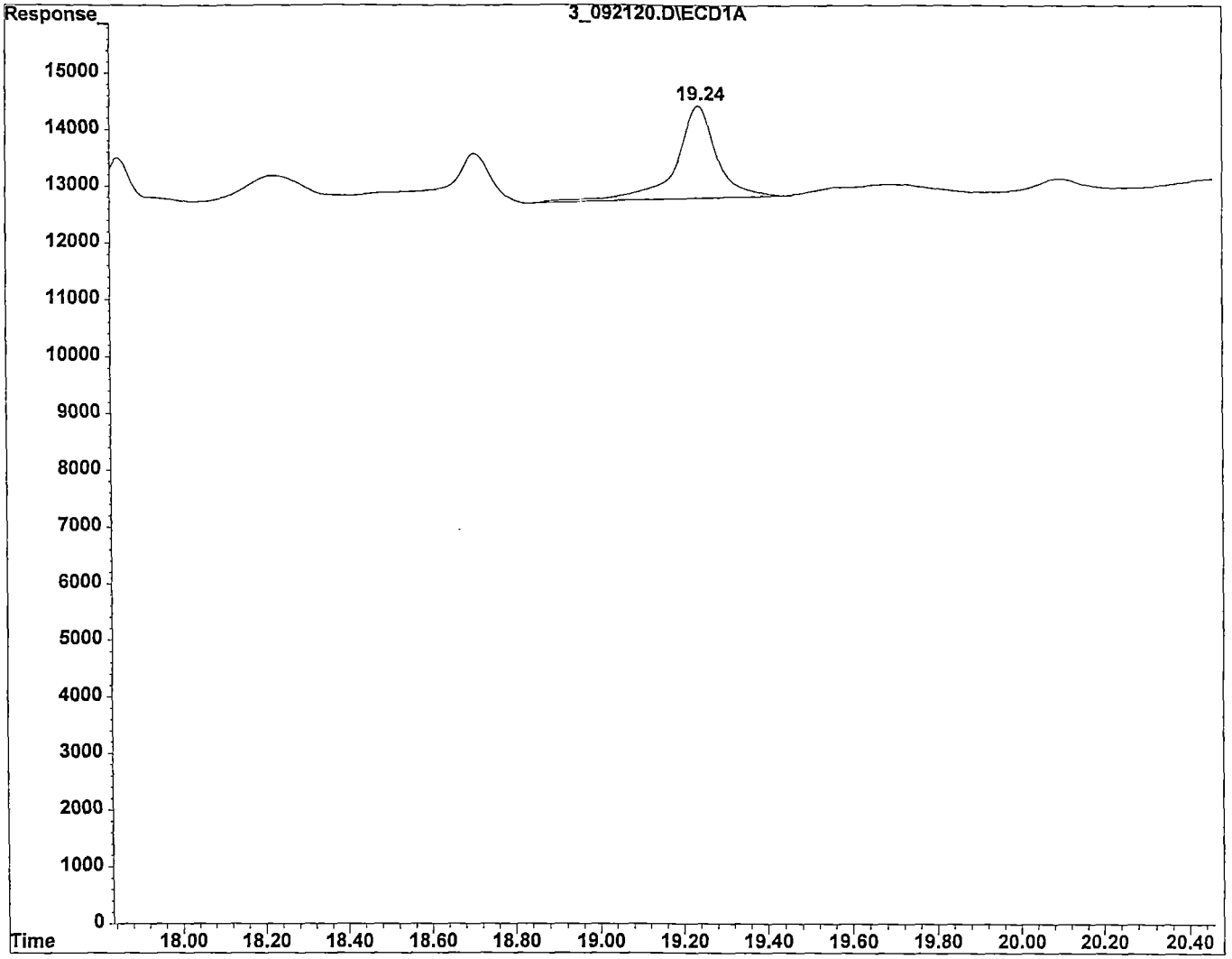
Aroclor-1260 {2} 13.57min area: 200436 m
BTB

Integration Time Range: 13.52 - 13.67 09/10/01

F:\HPCHEM\HP\3\DATA\09_21_01\3_092120.D
Report generated: Fri Sep 21 10:45:03 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092120.D
Date Acquired: 21 Sep 2001 5:28
Inst: HP_03 Operator ID: BTB
Name: 47351.08DL *E03K5DL *
Misc: *EPA*30.6G/5.0ML*52
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:11 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

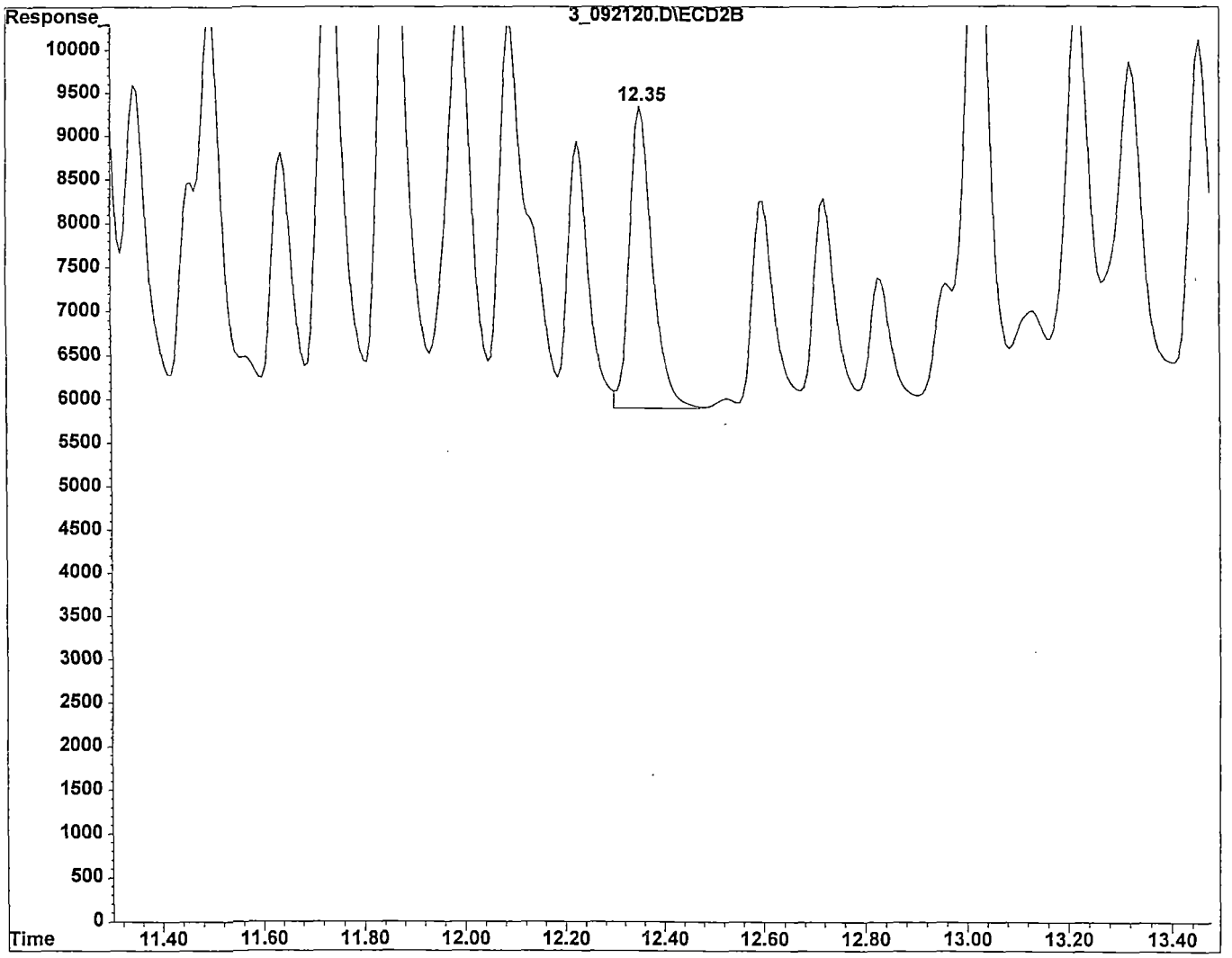
DCB 19.24min area: 111145 m BTB 092101

Integration Time Range: 18.83 - 19.46

F:\HPCHEM\HP\3\DATA\09_21_01\3_092120.D
Report generated: Fri Sep 21 10:45:04 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092120.D
Date Acquired: 21 Sep 2001 5:28
Inst: HP_03 Operator ID: BTB
Name: 47351.08DL *E03K5DL *
Misc: *EPA*30.6G/5.0ML*52
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:11 2001 Quant Results File: XPCBI16.RES



OK 9-22-01 BP

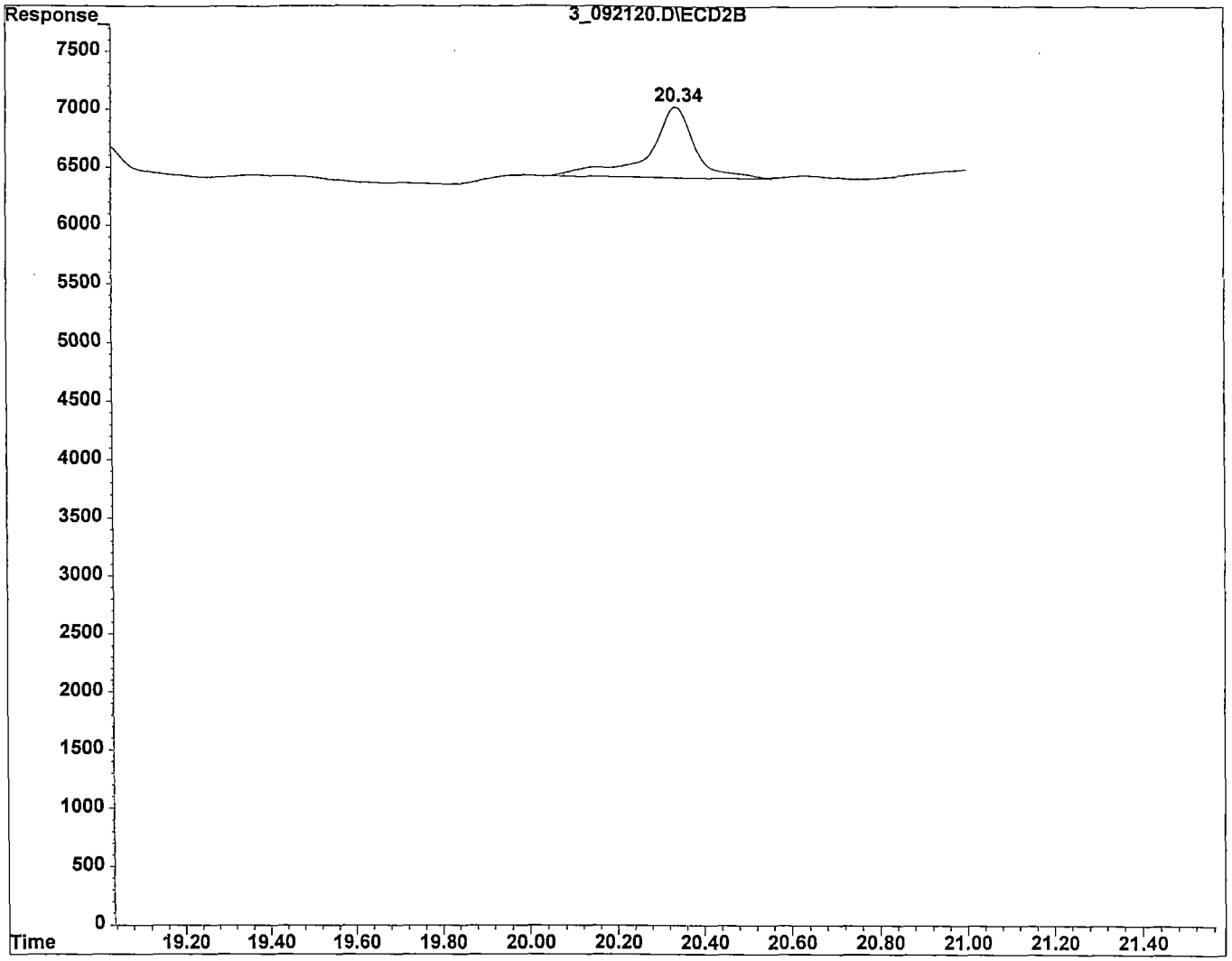
Aroclor-1242 {5} #2 12.35min area: 108896 m BTB 092101

Integration Time Range: 12.30 - 12.47

F:\HPCHEM\HP\3\DATA\09_21_01\3_092120.D
Report generated: Fri Sep 21 10:45:05 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092120.D
Date Acquired: 21 Sep 2001 5:28
Inst: HP_03 Operator ID: BTB
Name: 47351.08DL *E03K5DL *
Misc: *EPA*30.6G/5.0ML*52
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:11 2001 Quant Results File: XPCBI16.RES



ok 9-22-01 RH

DCB #2 20.34min area: 45439 m BTB092101

Integration Time Range: 20.04 - 20.56

F:\HPCHEM\HP\3\DATA\09_21_01\3_092120.D
Report generated: Fri Sep 21 10:45:05 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03K6

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.09

Sample wt/vol: 31.0 (g/mL) G Lab File ID:_____

% Moisture: 50 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	64	UJ
11104-28-2	Aroclor-1221	64	UJ
11141-16-5	Aroclor-1232	64	UJ
53469-21-9	Aroclor-1242	610	J
12672-29-6	Aroclor-1248	64	UJ
11097-69-1	Aroclor-1254	~~390~~	660 DJ ~~E~~
11096-82-5	Aroclor-1260	150	J
Surrogate amount spiked		12.90	

1420

apply this results
TBS 10-12-01

FORM I PCB

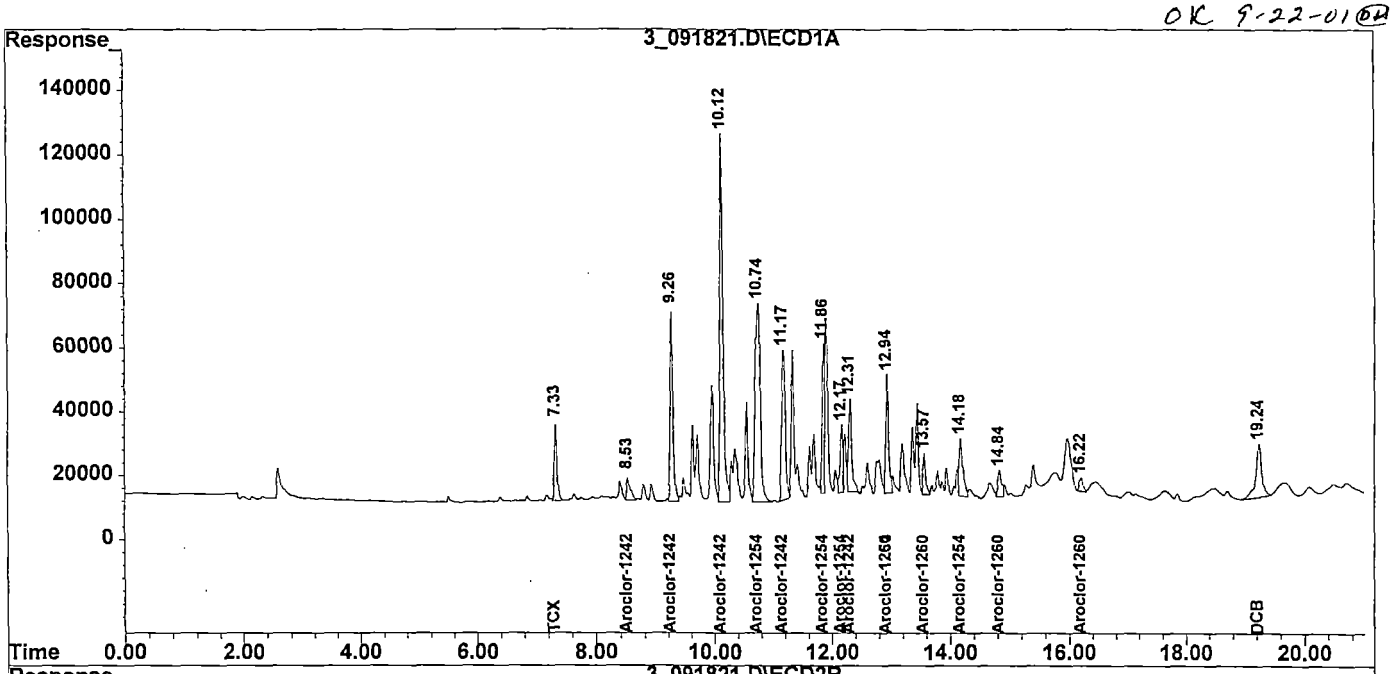
Chromatographic Report

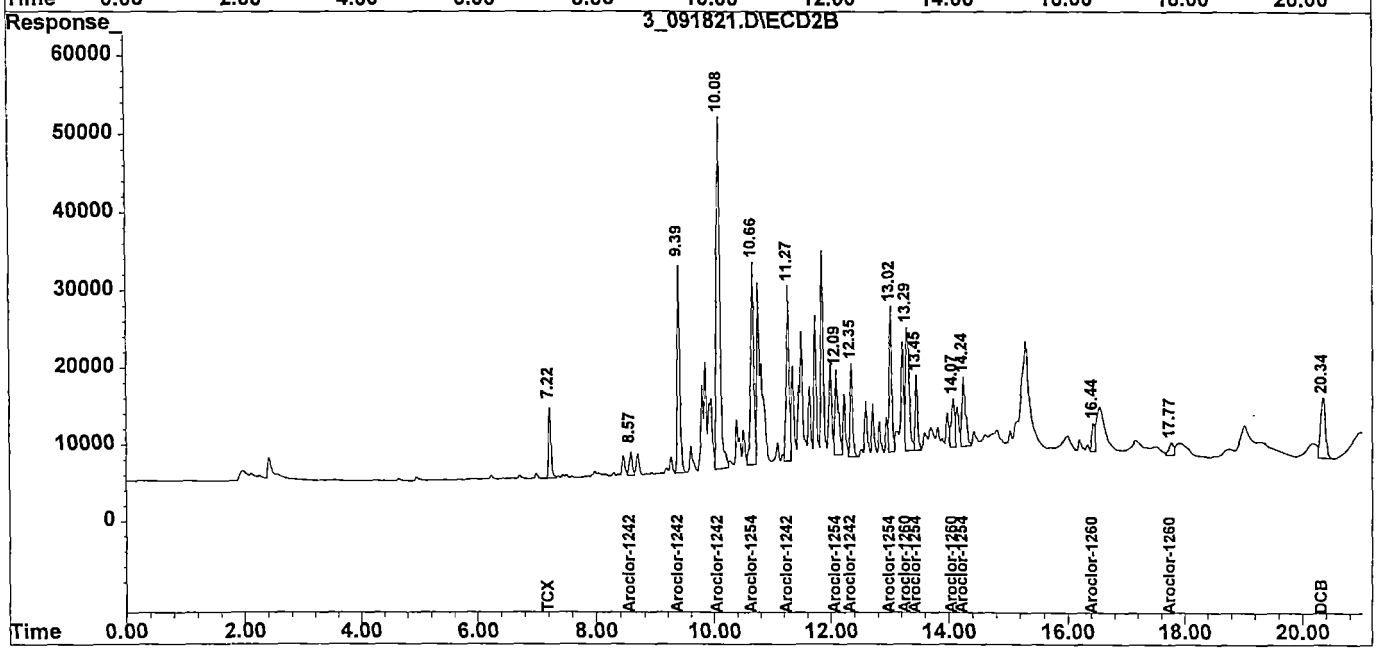
Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091821.D\ECD1A.CH Vial: 93
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091821.D\ECD2B.CH
Acq On : 19 Sep 2001 8:23 Operator: BTB
Sample : 47351.09 *E03K6 * Inst : HP_03
Misc : *EPA*31G/5.0ML*50 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 8:28 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

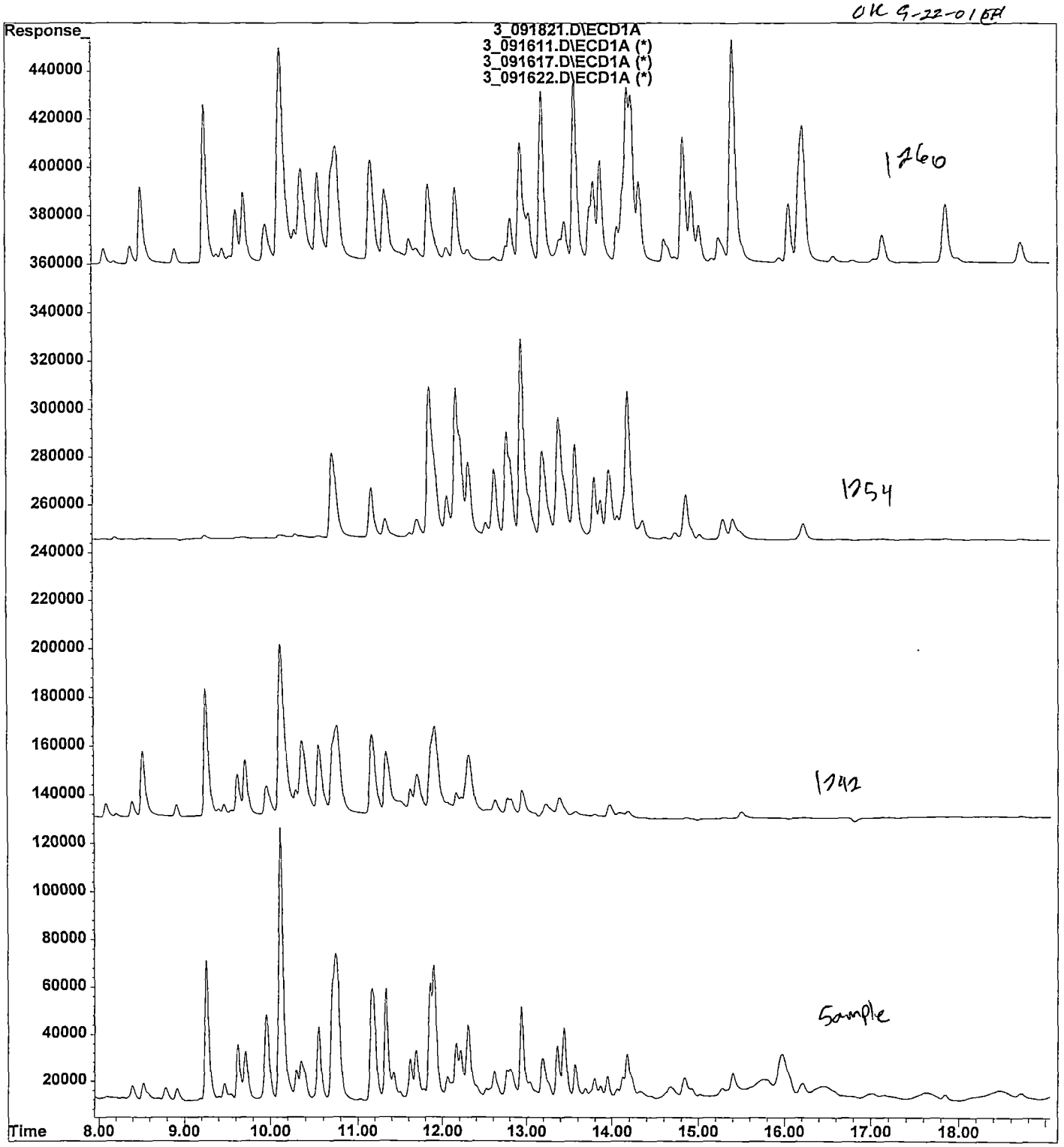
OK 9-22-01





File : F:\HPCHEM\HP\3\DATA\09_18_01\3_091821.D
Operator : BTB
Acquired : 19 Sep 2001 8:23 using AcqMethod OLM03.M
Instrument : HP_03
Sample Name: 47351.09 *E03K6 *
Misc Info : *EPA*31G/5.0ML*50
Vial Number: 93

OK 9-22-01 BH



Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091821.D\ECD1A.CH Vial: 93
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091821.D\ECD2B.CH
Acq On : 19 Sep 2001 8:23 Operator: BTB
Sample : 47351.09 *E03K6 * Inst : HP_03
Misc : *EPA*31G/5.0ML*50 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 8:28 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

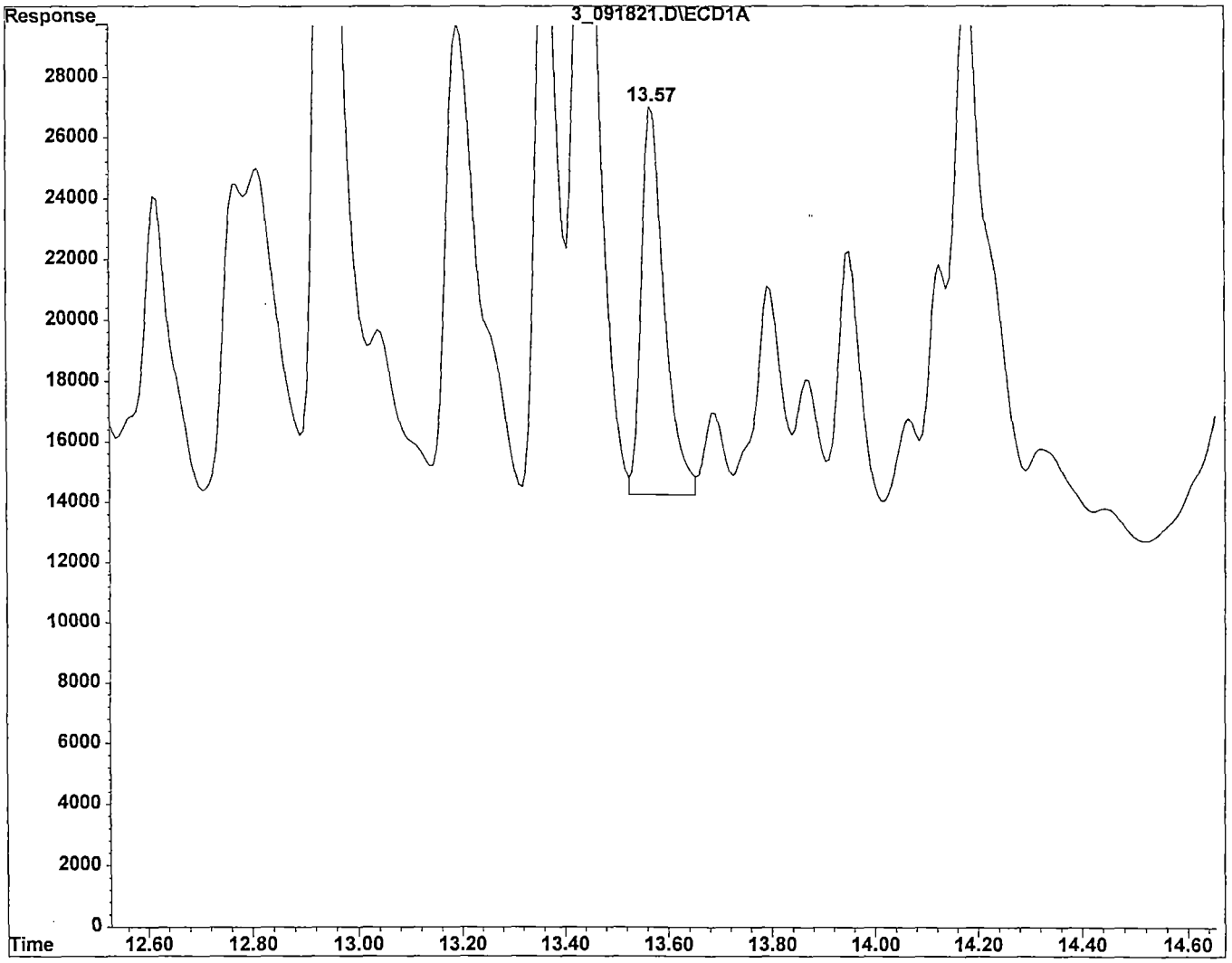
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	758403	264074	9.025	10.5
	Spiked Amount 12.903			Recovery	=	69.94%	81.38%
22)	S DCB	19.24	20.35	1159907	436358	13.3m BTB	11.5
	Spiked Amount 12.903			Recovery	=	103.08% 09/20/01	89.13%
	Target Compounds:						
7)	L4 Aroclor-1242	8.53	8.57	300700	106439	171.5	217.1 #
8)	L4 Aroclor-1242 {2}	9.26	9.39	1959625	838632	641.0	787.9
9)	L4 Aroclor-1242 {3}	10.12	10.08	4320683	1943368	766.1	948.1 E
10)	L4 Aroclor-1242 {4}	11.17	11.27	2126187	751071	859.0	1119.8 E#
11)	L4 Aroclor-1242 {5}	12.31	12.35	1197243	353252	620.6	593.3m BTB 09/20/01
	Sum Aroclor-1242			9904438	3992763	3058.2	3666.2
	Average Aroclor-1242					611.648	733.249
12)	L6 Aroclor-1254	10.75	10.66	3904359	954661	1245.4 E	1263.8 E
13)	L6 Aroclor-1254 {2}	11.86	12.09	1094051	441244	188.4	259.4 #
14)	L6 Aroclor-1254 {3}	12.17	13.02	654394	575899	123.2	252.7 #
15)	L6 Aroclor-1254 {4}	12.94	13.45	1212734	277618	198.2	220.6
16)	L6 Aroclor-1254 {5}	14.18	14.25	839344	393120	169.4	233.4 #
	Sum Aroclor-1254			7704883	2642542	1924.6	2229.9
	Average Aroclor-1254					384.916	445.984
17)	L7 Aroclor-1260	12.94	13.29f	1212734	709066	366.4	363.5
18)	L7 Aroclor-1260 {2}	13.57	14.08	389112	247926	77.3m	194.8 #
19)	L7 Aroclor-1260 {3}	14.84	0.00	377355	0	117.2	N.D. d #
20)	L7 Aroclor-1260 {4}	0.00	16.44	0	123983	N.D. d	72.3 #
21)	L7 Aroclor-1260 {5}	16.22	17.77	193394	90340	35.1	74.7 #
	Sum Aroclor-1260			2172596	1171315	384.5	455.0
	Average Aroclor-1260					148.980	176.311

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091821.D
Date Acquired: 19 Sep 2001 8:23
Inst: HP_03 Operator ID: BTB
Name: 47351.09 *E03K6 *
Misc: *EPA*31G/5.0ML*50
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:28 2001 Quant Results File: XPCBI16.RES



OK 9-22-01 BTB

Aroclor-1260 {2} 13.57min area: 389112 m

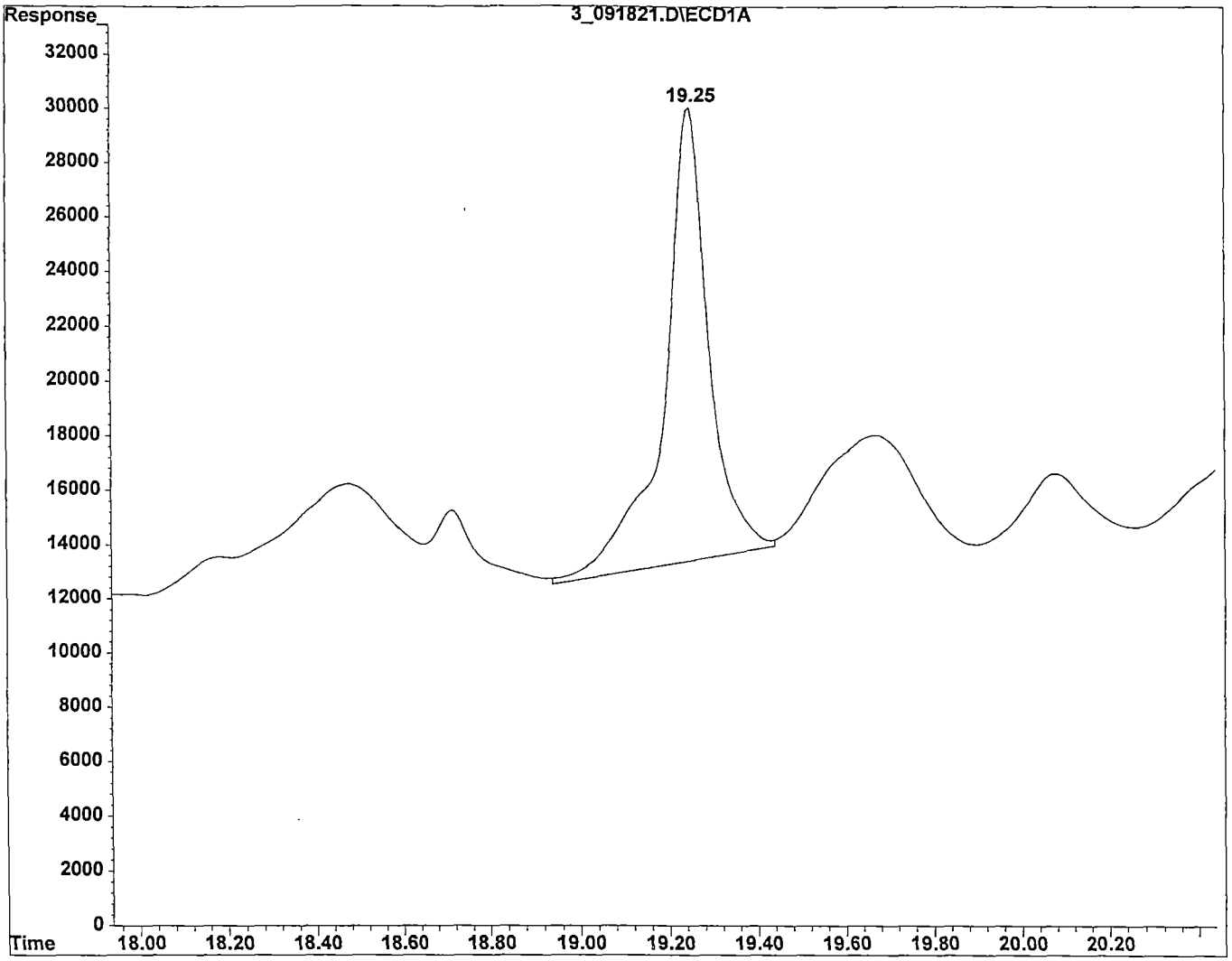
Integration Time Range: 13.53 - 13.65

BTB 092001

F:\HPCHEM\HP\3\DATA\09_18_01\3_091821.D
Report generated: Thu Sep 20 08:46:50 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091821.D
Date Acquired: 19 Sep 2001 8:23
Inst: HP_03 Operator ID: BTB
Name: 47351.09 *E03K6 *
Misc: *EPA*31G/5.0ML*50
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:28 2001 Quant Results File: XPCBI16.RES



OK 9-22-01 BTB

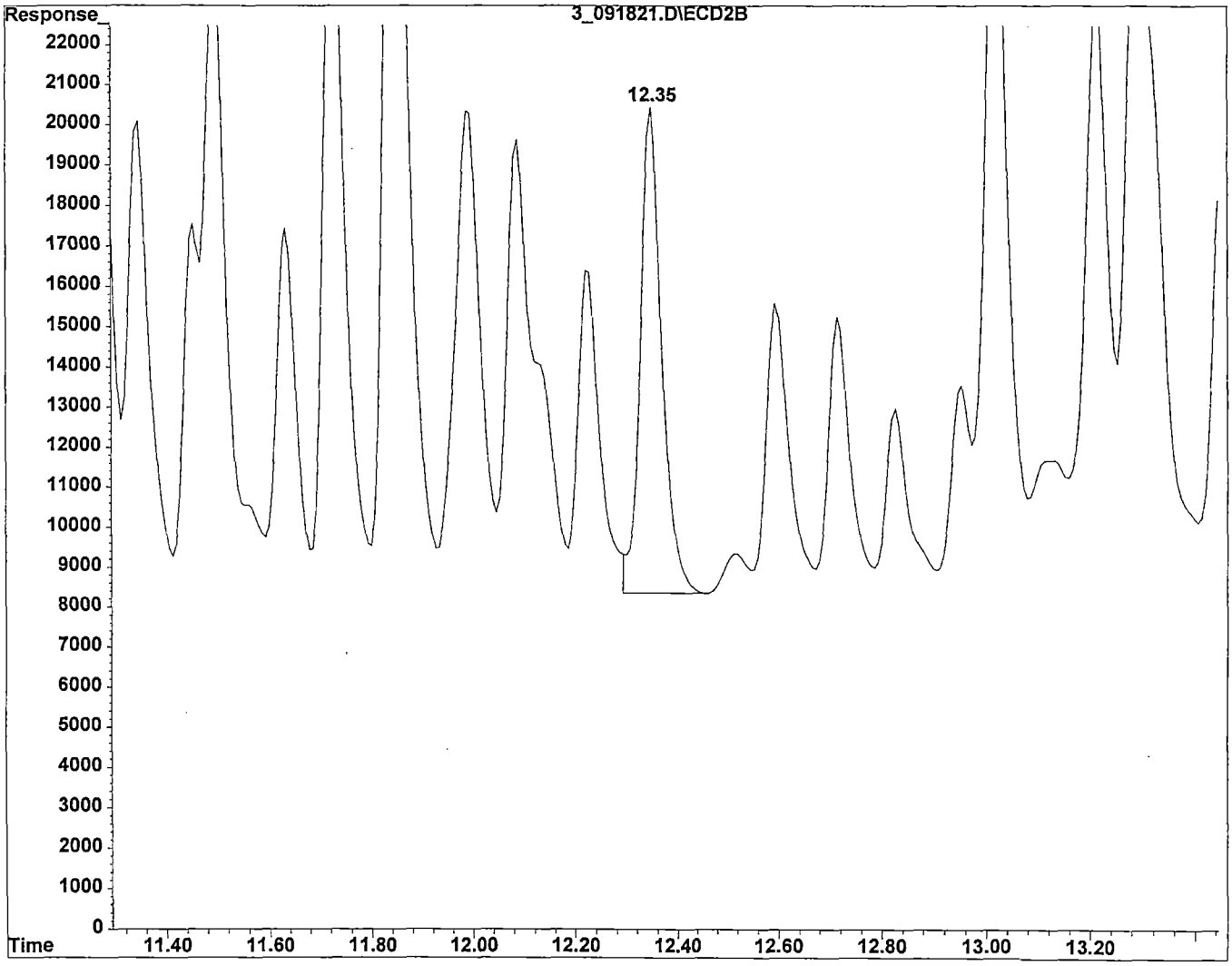
DCB 19.24min area: 1159907 m BTB 092001

Integration Time Range: 18.94 - 19.44

F:\HPCHEM\HP\3\DATA\09_18_01\3_091821.D
Report generated: Thu Sep 20 08:46:50 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091821.D
Date Acquired: 19 Sep 2001 8:23
Inst: HP_03 Operator ID: BTB
Name: 47351.09 *E03K6 *
Misc: *EPA*31G/5.0ML*50
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:28 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1242 {5} #2 12.35min area: 353252 m

Integration Time Range: 12.29 - 12.44

BTB
092001

F:\HPCHEM\HP\3\DATA\09_18_01\3_091821.D
Report generated: Thu Sep 20 08:46:51 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03K6DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.09DL

Sample wt/vol: 31.0 (g/mL) G Lab File ID:_____

% Moisture: 50 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/21/01

Injection Volume: 0.5(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 7.3 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	640	UJ
11104-28-2	Aroclor-1221	640	UJ
11141-16-5	Aroclor-1232	640	UJ
53469-21-9	Aroclor-1242	1100	DJ
12672-29-6	Aroclor-1248	640	UJ
11097-69-1	Aroclor-1254	660	DJ
11096-82-5	Aroclor-1260	200	DJ
Surrogate amount spiked		12.90	

TBS
10-12-01

FORM I PCB

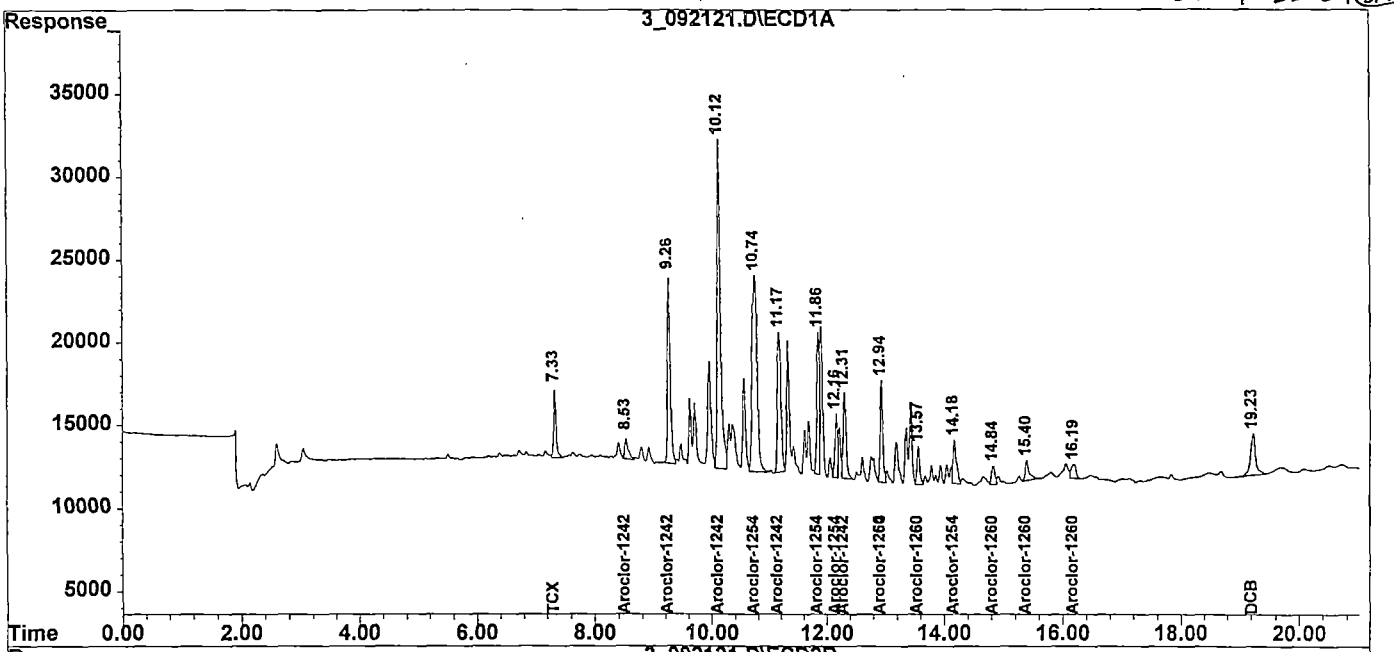
Chromatographic Report

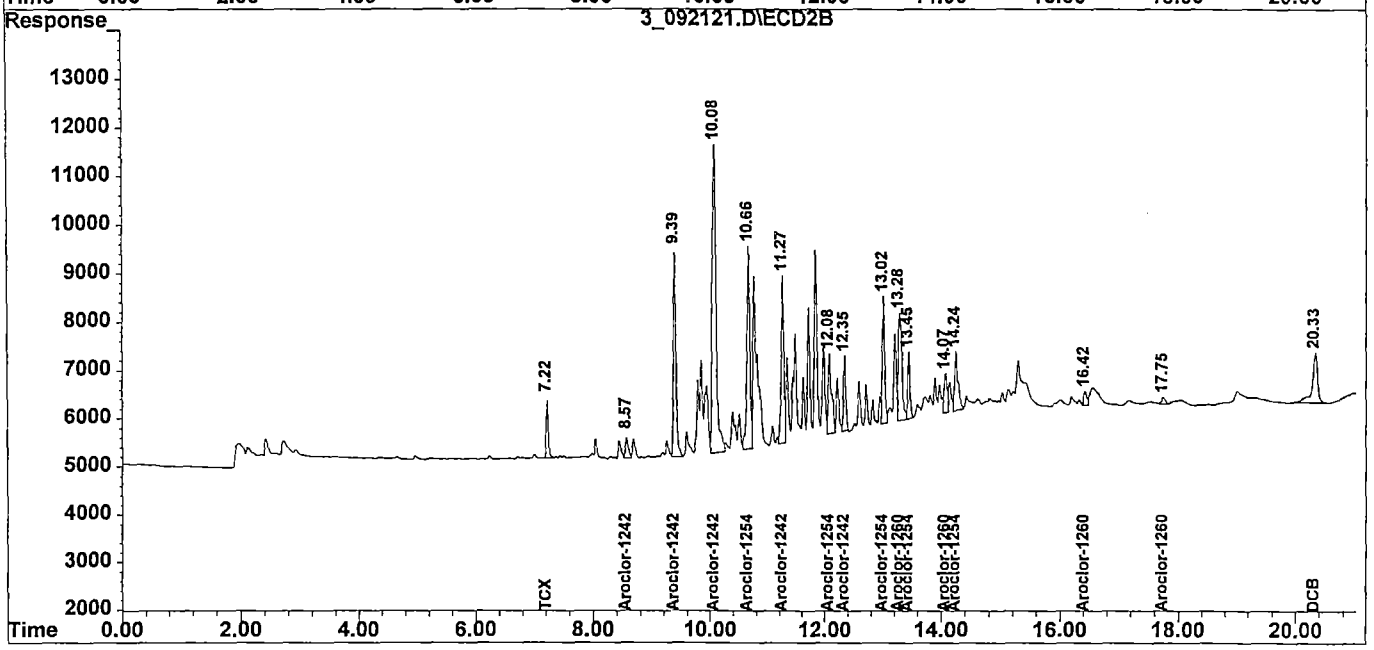
Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092121.D\ECD1A.CH Vial: 98
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092121.D\ECD2B.CH
Acq On : 21 Sep 2001 5:54 Operator: BTB
Sample : 47351.09DL *E03K6DL * Inst : HP_03
Misc : *EPA*31G/5.0ML*50 Dilution: 10.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 10:12 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

OK 9-22-01 OH





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092121.D\ECD1A.CH Vial: 98
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092121.D\ECD2B.CH
Acq On : 21 Sep 2001 5:54 Operator: BTB
Sample : 47351.09DL *E03K6DL * Inst : HP_03
Misc : *EPA*31G/5.0ML*50 Dilution: 10.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 10:12 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

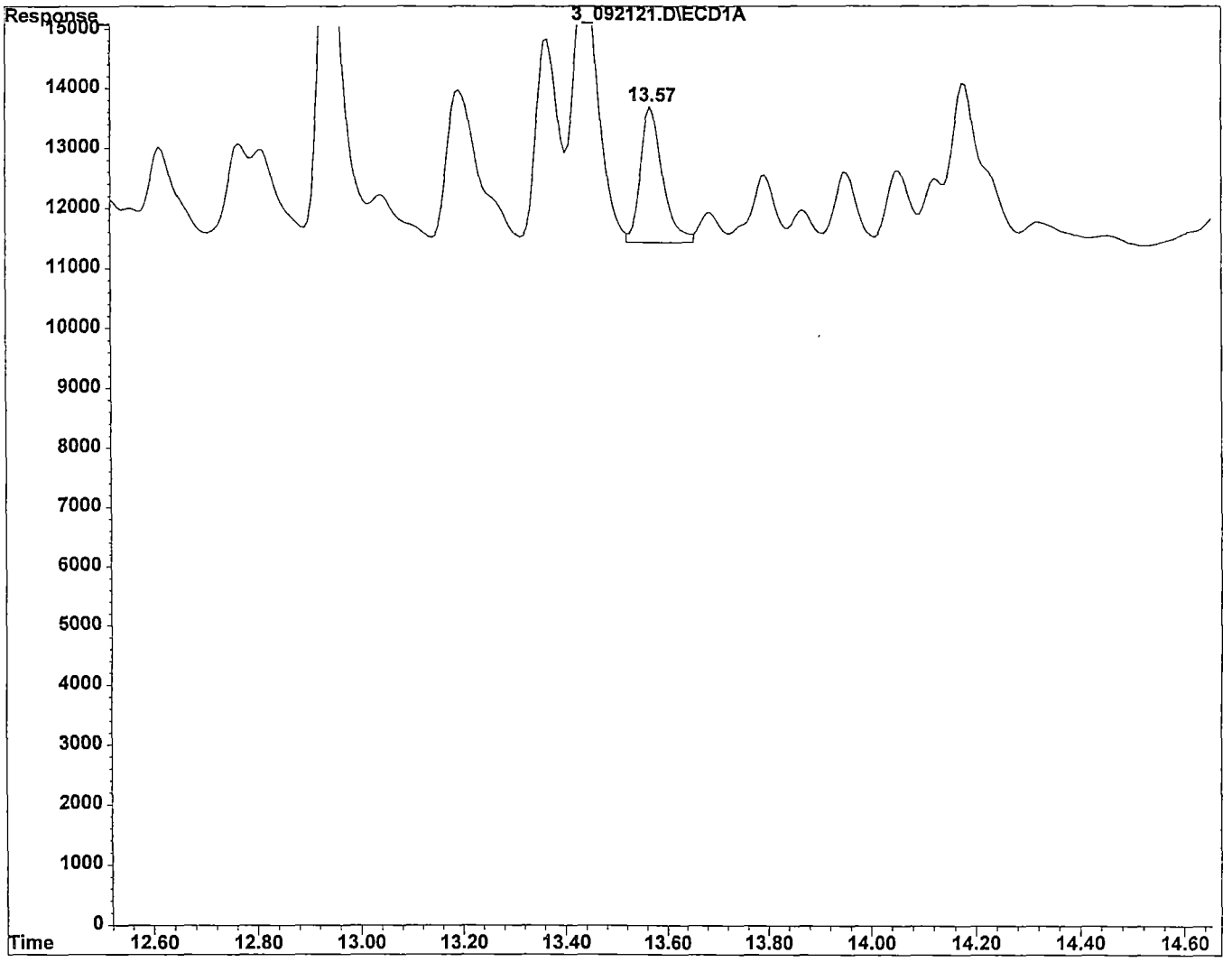
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.22	121234	31733	14.4	12.6	
	Spiked Amount 12.903			Recovery	=	111.60%	97.65%	
22)	S DCB	19.23	20.34	148188	67201	17.0m BTB	17.7	
	Spiked Amount 12.903			Recovery	=	131.75% 09/21/01	137.18%	
	Target Compounds:							
7)	L4 Aroclor-1242	8.53	8.57	53511	15024	305.2	306.4	
8)	L4 Aroclor-1242 {2}	9.26	9.39	370048	133986	1210.4	1258.9	
9)	L4 Aroclor-1242 {3}	10.13	10.09	805339	293804	1428.0	1433.3	
10)	L4 Aroclor-1242 {4}	11.17	11.27	374452	111991	1512.9	1669.8	
11)	L4 Aroclor-1242 {5}	12.31	12.35	190193	45435	985.9	763.1	
	Sum Aroclor-1242			1793544	600240	5442.3	5431.5	
	Average Aroclor-1242					1088.469	1086.299	
12)	L6 Aroclor-1254	10.75	10.66	752016	146795	2398.7	1943.4	
13)	L6 Aroclor-1254 {2}	11.86	12.09	222635	67846	383.4	398.9	
14)	L6 Aroclor-1254 {3}	12.17	13.02	110199	76850	207.5	337.1	#
15)	L6 Aroclor-1254 {4}	12.94	13.45	186087	38477	304.1	305.8	
16)	L6 Aroclor-1254 {5}	14.18	14.24	111100	53404	224.2	317.1	#
	Sum Aroclor-1254			1382037	383372	3517.9	3302.2	
	Average Aroclor-1254					703.586	660.444	
17)	L7 Aroclor-1260	12.94	13.29f	186087	100602	562.2	515.8	
18)	L7 Aroclor-1260 {2}	13.57	14.07	68404	27638	135.9m	217.1	#
19)	L7 Aroclor-1260 {3}	14.84	0.00	43461	0	135.0	N.D. d	#
20)	L7 Aroclor-1260 {4}	15.40	16.42	57511	10581	79.4	61.7	
21)	L7 Aroclor-1260 {5}	16.20f	17.75	50540	6475	91.6	53.5	#
	Sum Aroclor-1260			406003	145297	6477.5	5471.6	
	Average Aroclor-1260					200.803	212.025	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092121.D
Date Acquired: 21 Sep 2001 5:54
Inst: HP_03 Operator ID: BTB
Name: 47351.09DL *E03K6DL *
Misc: *EPA*31G/5.0ML*50
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:12 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1260 {2} 13.57min area: 68404 m

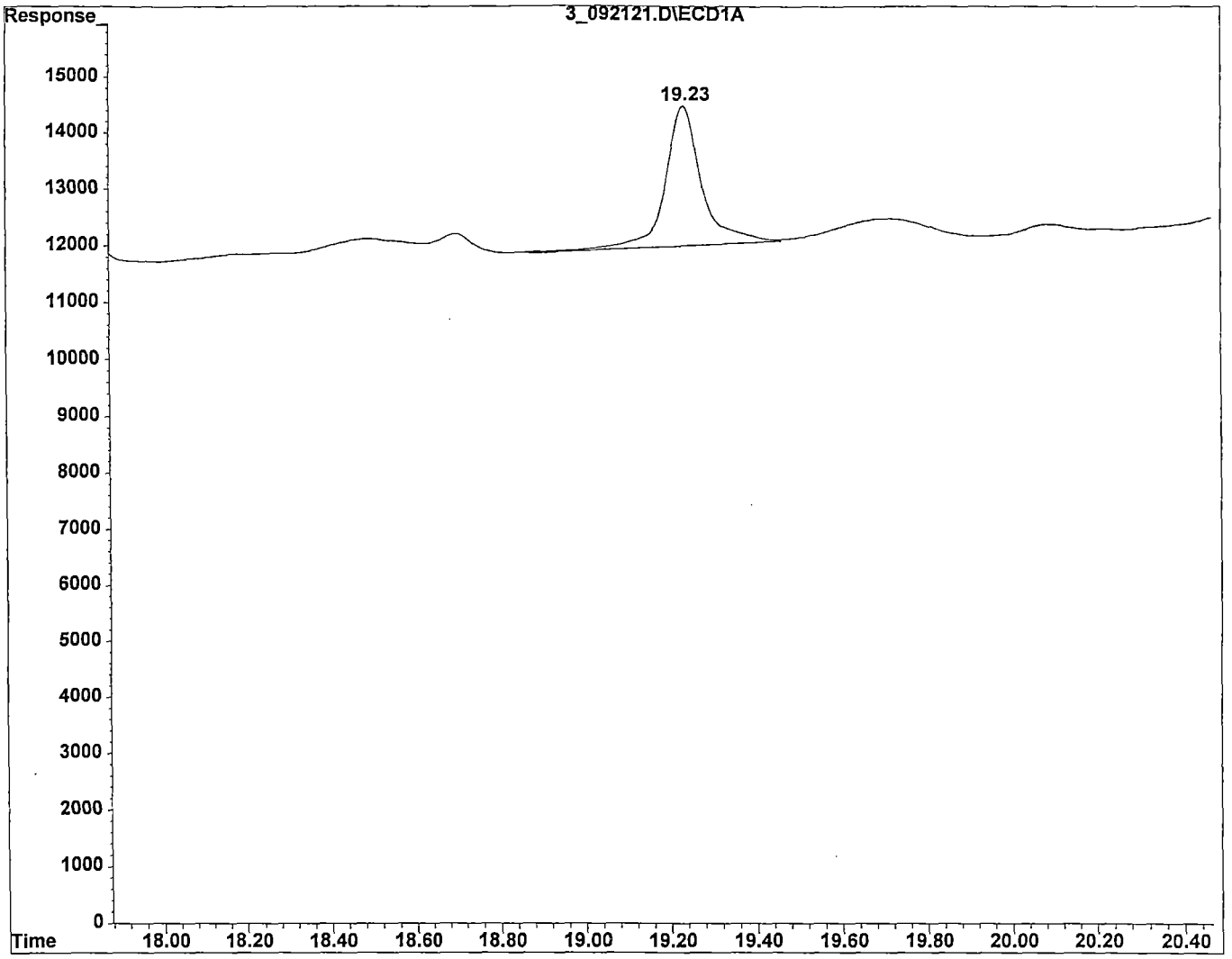
BTB 09/21/01

Integration Time Range: 13.52 - 13.65

F:\HPCHEM\HP\3\DATA\09_21_01\3_092121.D
Report generated: Fri Sep 21 10:45:07 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092121.D
Date Acquired: 21 Sep 2001 5:54
Inst: HP_03 Operator ID: BTB
Name: 47351.09DL *E03K6DL *
Misc: *EPA*31G/5.0ML*50
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:12 2001 Quant Results File: XPCBI16.RES



ok 9-22-01 BTB

DCB 19.23min area: 148188 m BTB 092101

Integration Time Range: 18.88 - 19.46

F:\HPCHEM\HP\3\DATA\09_21_01\3_092121.D
Report generated: Fri Sep 21 10:45:07 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03K8

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.10

Sample wt/vol: 30.8 (g/mL) G Lab File ID:_____

% Moisture: 31 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.6 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		Q
12674-11-2	Aroclor-1016	47		UJ
11104-28-2	Aroclor-1221	47		UJ
11141-16-5	Aroclor-1232	47		UJ
53469-21-9	Aroclor-1242	~~590~~	1100	~~EP~~ DJ
12672-29-6	Aroclor-1248	47		U
11097-69-1	Aroclor-1254	~~940~~	1800	~~EP~~ DJ
11096-82-5	Aroclor-1260	~~600~~	860	~~E~~ DJP
Surrogate amount spiked		9.41		

3760

apply this results
TBS 10-12-01

FORM I PCB

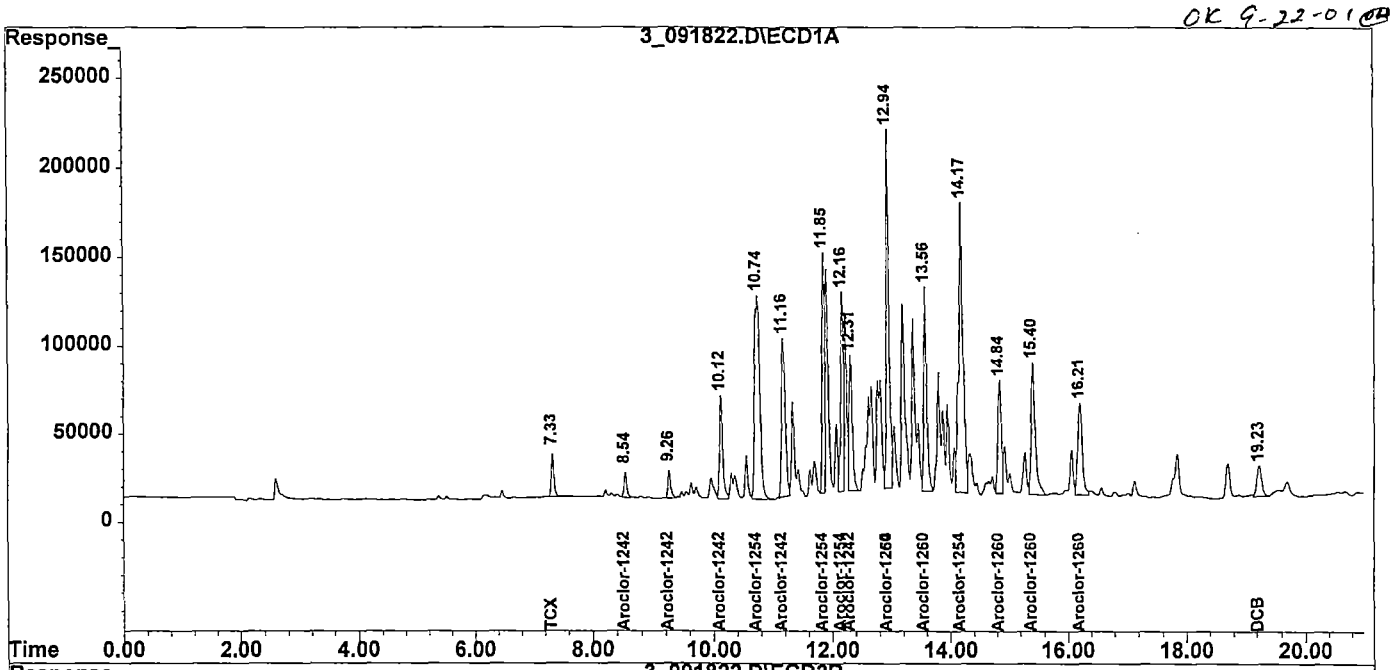
Chromatographic Report

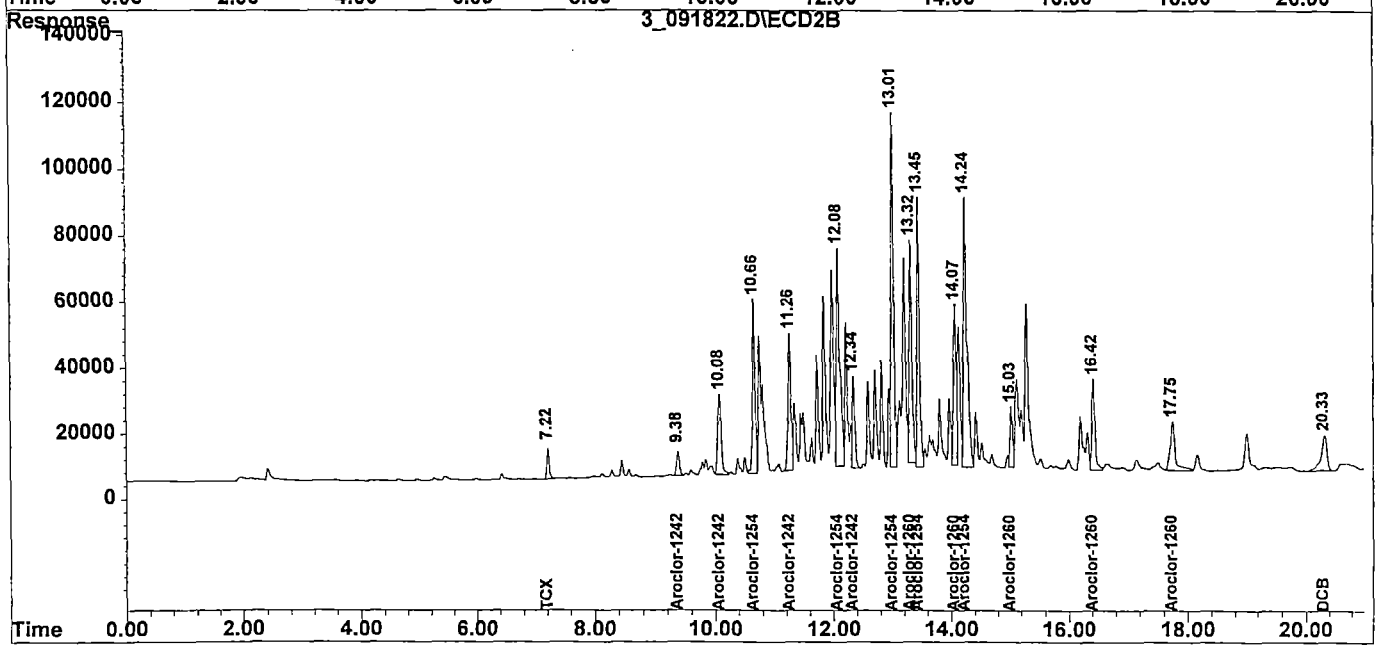
Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091822.D\ECD1A.CH Vial: 94
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091822.D\ECD2B.CH
Acq On : 19 Sep 2001 8:49 Operator: BTB
Sample : 47351.10, *E03K8 * Inst : HP_03
Misc : *EPA*30.8G/5.0ML*31 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 8:30 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

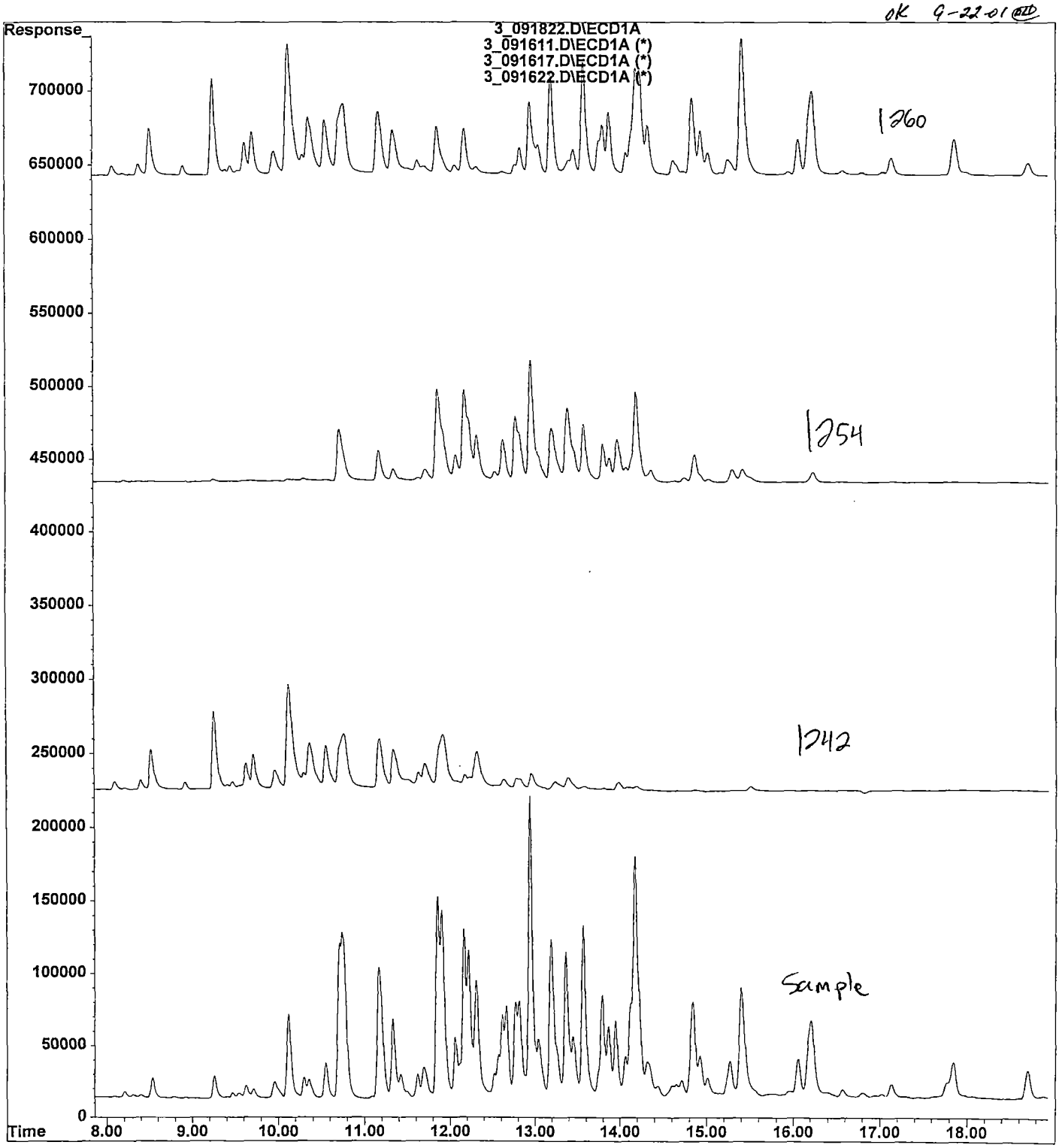
OK 9-22-01





File : F:\HPCHEM\HP\3\DATA\09_18_01\3_091822.D
Operator : BTB
Acquired : 19 Sep 2001 8:49 using AcqMethod OLM03.M
Instrument : HP_03
Sample Name: 47351.10 *E03K8 *
Misc Info : *EPA*30.8G/5.0ML*31
Vial Number: 94

OK 9-22-01



Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091822.D\ECD1A.CH Vial: 94
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091822.D\ECD2B.CH
Acq On : 19 Sep 2001 8:49 Operator: BTB
Sample : 47351.10 *E03K8 * Inst : HP_03
Misc : *EPA*30.8G/5.0ML*31 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 8:30 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

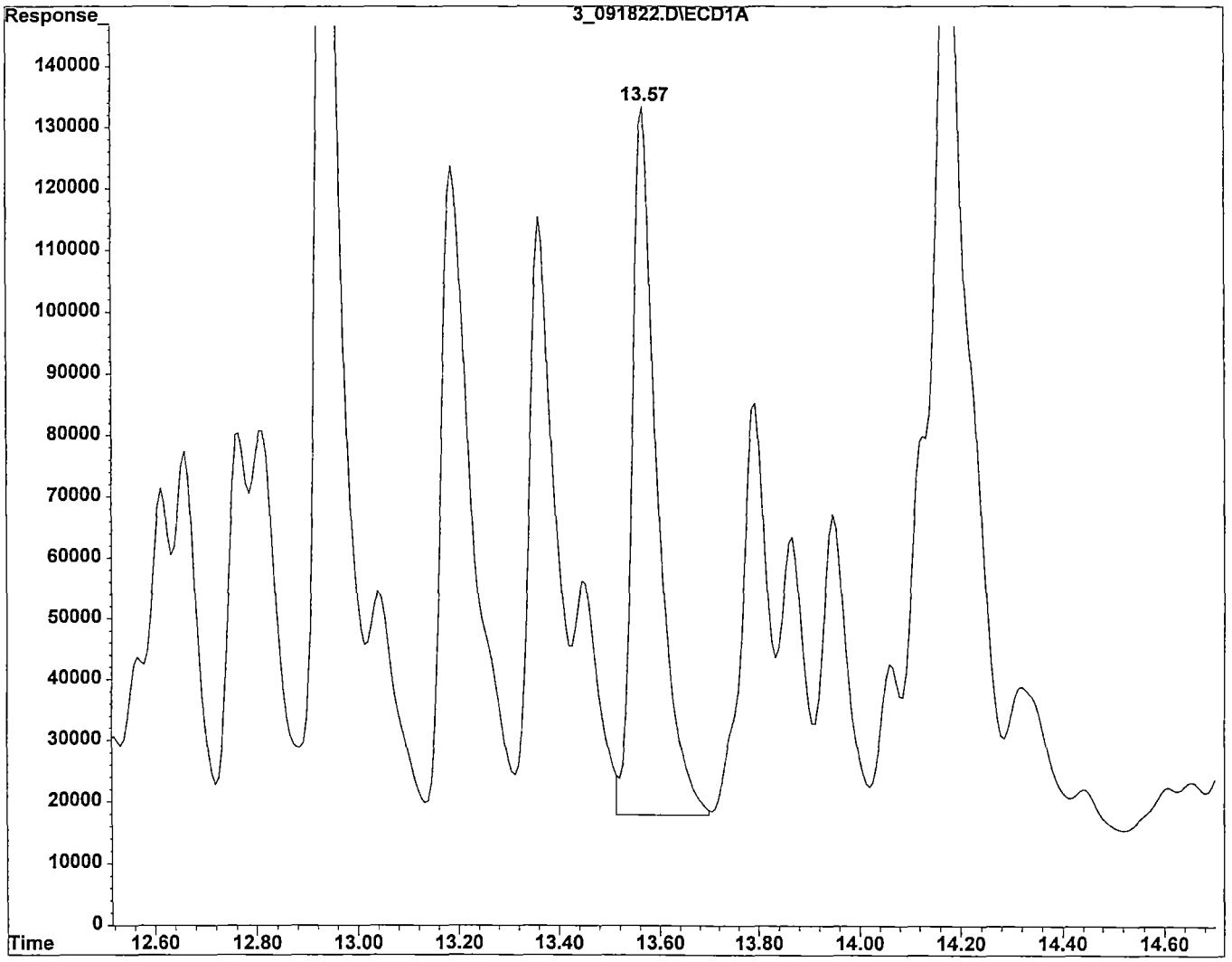
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	736233	255410	6.390	7.415
	Spiked Amount 9.411			Recovery	=	67.90%	78.79%
22)	S DCB	19.24	20.33	891918	757045	7.460	14.5 #
	Spiked Amount 9.411			Recovery	=	79.27%	154.08%
	Target Compounds:						
7)	L4 Aroclor-1242	8.54	0.00	464168	0	193.1	N.D. d #
8)	L4 Aroclor-1242 {2}	9.26	9.39	522761	246557	124.7	169.0 #
9)	L4 Aroclor-1242 {3}	10.12	10.08	2188708	1032859	283.1	367.5 #
10)	L4 Aroclor-1242 {4}	11.17	11.27	4044740	1413588	1191.9 E	1537.2 E#
11)	L4 Aroclor-1242 {5}	12.31	12.34	3027133	828976	1144.5 E	1015.5mE BTB 092001
	Sum Aroclor-1242			10247510	3521979	2937.2	3089.1
	Average Aroclor-1242					587.438	772.282
12)	L6 Aroclor-1254	10.74	10.66	7355605	1611278	1711.2 E	1555.8 E
13)	L6 Aroclor-1254 {2}	11.85	12.08	3602614	2762679	452.5	1184.6 E#
14)	L6 Aroclor-1254 {3}	12.16	13.02	3347159	3369350	459.7	1078.1 E#
15)	L6 Aroclor-1254 {4}	12.94	13.45	6662724	2407388	794.2 E	1395.3 E#
16)	L6 Aroclor-1254 {5}	14.18	14.24	8669687	3564964	1276.0 E	1543.6 E
	Sum Aroclor-1254			29637789	13715659	4693.6	6757.5
	Average Aroclor-1254					938.723	1351.495
17)	L7 Aroclor-1260	12.94	13.31	6662724	2070488	1468.1 E	774.2mE#
18)	L7 Aroclor-1260 {2}	13.57	14.07	3988300	1689324	577.7m BTB	967.9mE#
19)	L7 Aroclor-1260 {3}	14.84	15.03	2505046	570517	567.4 092001	248.7 #
20)	L7 Aroclor-1260 {4}	15.40	16.42	3546114	1042413	356.9	443.1
21)	L7 Aroclor-1260 {5}	16.21	17.75	2993087	899525	395.7	542.4 #
	Sum Aroclor-1260			19695271	6272267	1583.8	1400.5
	Average Aroclor-1260					673.176	595.257

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091822.D
Date Acquired: 19 Sep 2001 8:49
Inst: HP_03 Operator ID: BTB
Name: 47351.10 *E03K8 *
Misc: *EPA*30.8G/5.0ML*31
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:30 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1260 {2} 13.57min area: 3988300 m

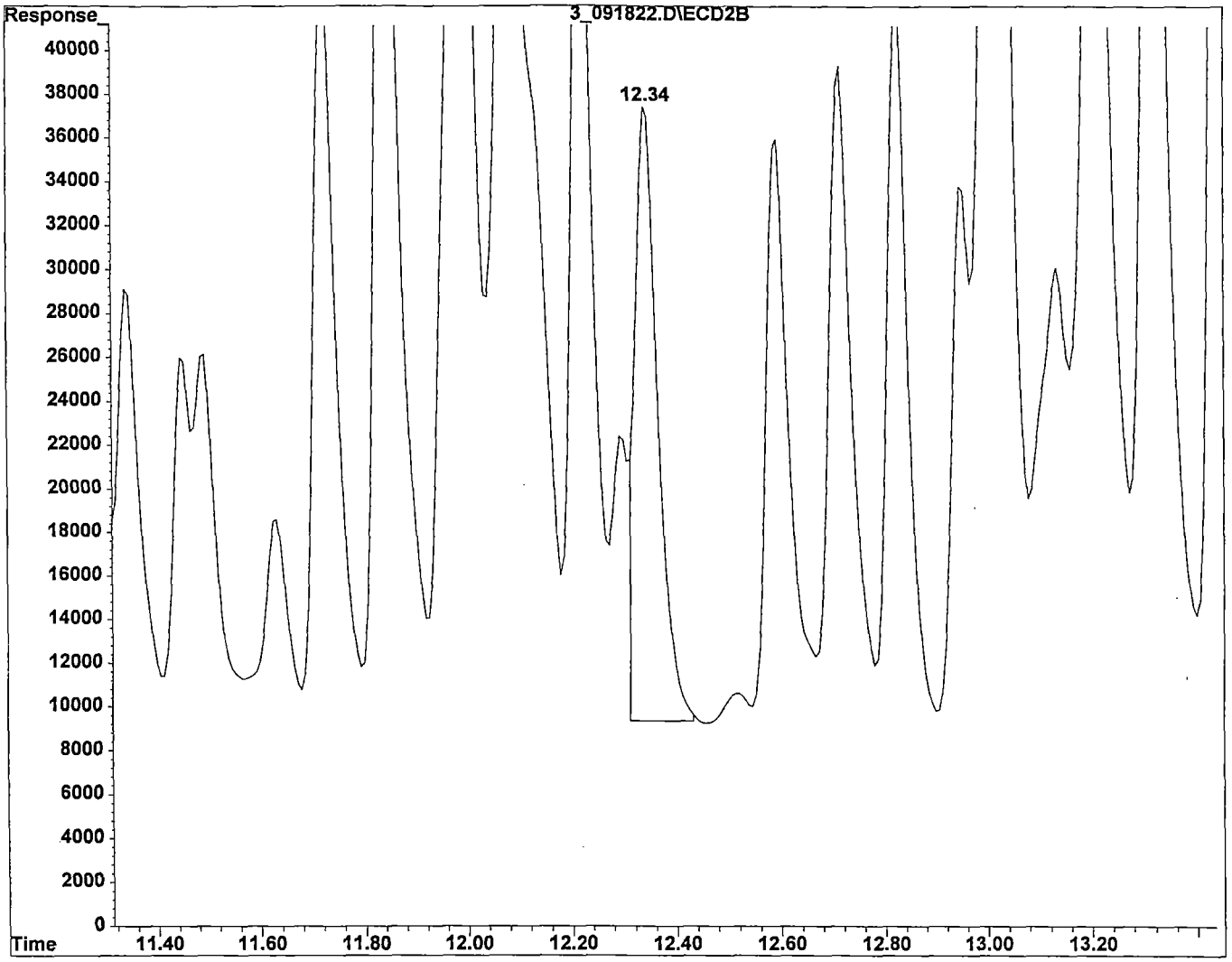
BTB 09/2001

Integration Time Range: 13.52 - 13.70

F:\HPCHEM\HP\3\DATA\09_18_01\3_091822.D
Report generated: Thu Sep 20 08:46:52 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091822.D
Date Acquired: 19 Sep 2001 8:49
Inst: HP_03 Operator ID: BTB
Name: 47351.10 *E03K8 *
Misc: *EPA*30.8G/5.0ML*31
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:30 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1242 {5} #2 12.34min area: 828976 m

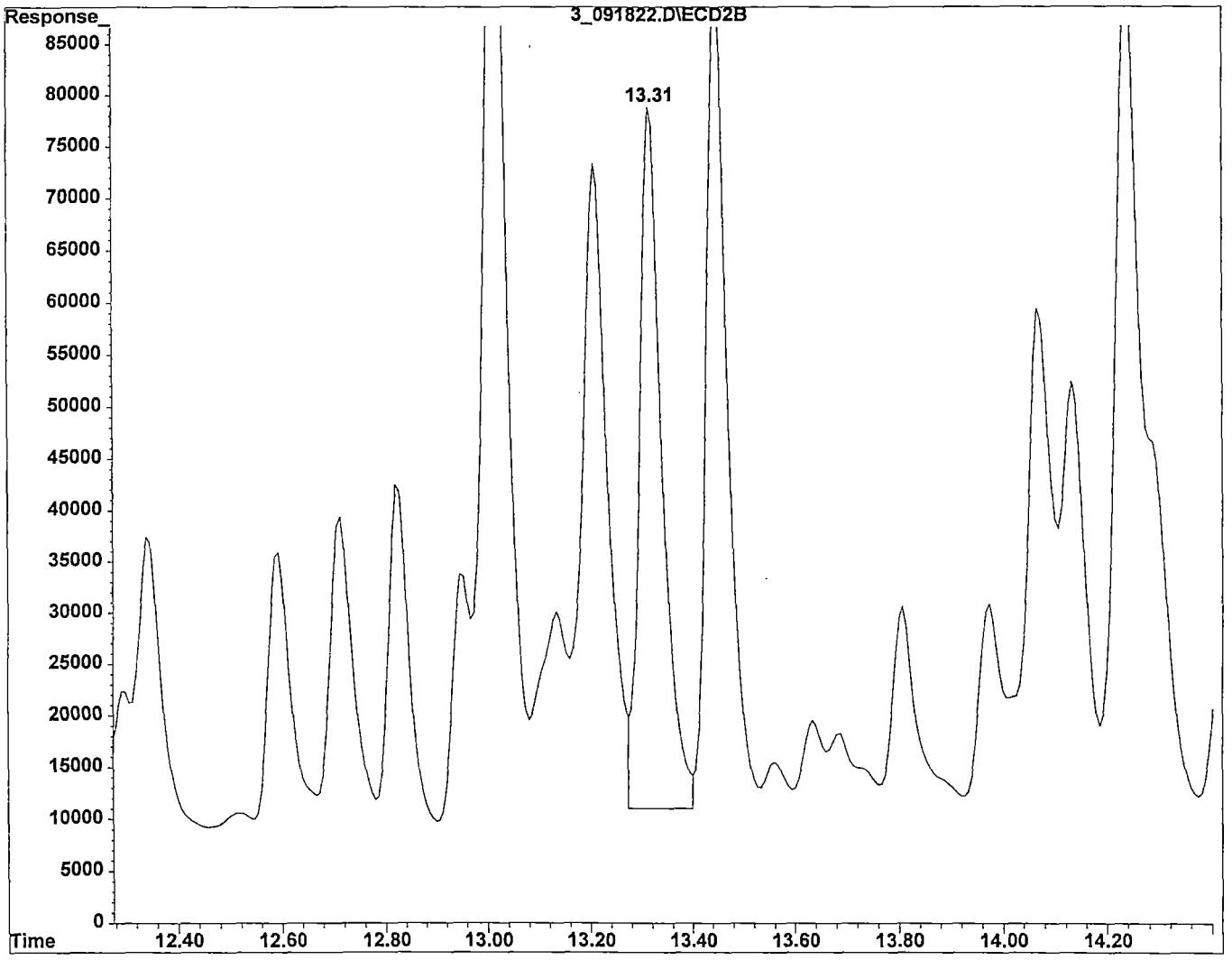
Integration Time Range: 12.31 - 12.43

BTB 09/20/01

F:\HPCHEM\HP\3\DATA\09_18_01\3_091822.D
Report generated: Thu Sep 20 08:46:53 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091822.D
Date Acquired: 19 Sep 2001 8:49
Inst: HP_03 Operator ID: BTB
Name: 47351.10 *E03K8 *
Misc: *EPA*30.8G/5.0ML*31
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:30 2001 Quant Results File: XPCBI16.RES



CK 9-22-01

Aroclor-1260 #2 13.31min area: 2070488 m

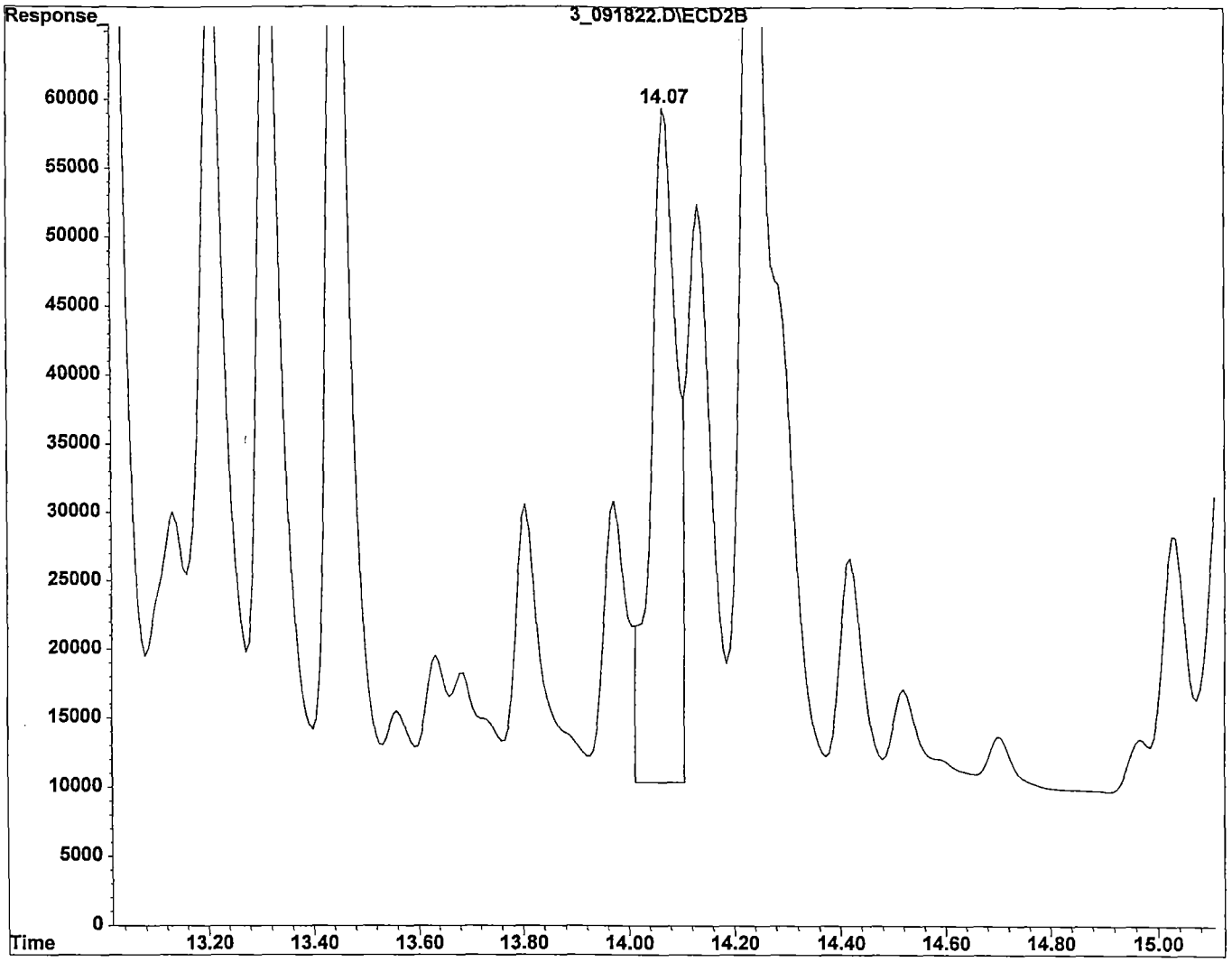
Integration Time Range: 13.27 - 13.40

BTB 092001

F:\HPCHEM\HP\3\DATA\09_18_01\3_091822.D
Report generated: Thu Sep 20 08:46:53 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091822.D
Date Acquired: 19 Sep 2001 8:49
Inst: HP_03 Operator ID: BTB
Name: 47351.10 *E03K8 *
Misc: *EPA*30.8G/5.0ML*31
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:30 2001 Quant Results File: XPCBI16.RES



ok 9-27-01 EH

Aroclor-1260 {2} #2 14.07min area: 1689324 m

Integration Time Range: 14.02 - 14.11

BTB 09209

F:\HPCHEM\HP\3\DATA\09_18_01\3_091822.D
Report generated: Thu Sep 20 08:46:54 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03K8DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.10DL

Sample wt/vol: 30.8 (g/mL) G Lab File ID:_____

% Moisture: 31 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/21/01

Injection Volume: 0.5(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 7.6 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	470	U
11104-28-2	Aroclor-1221	470	U
11141-16-5	Aroclor-1232	470	U
53469-21-9	Aroclor-1242	1100	D
12672-29-6	Aroclor-1248	470	U
11097-69-1	Aroclor-1254	1800	D
11096-82-5	Aroclor-1260	860	DP
Surrogate amount spiked		9.41	

TBS 10-12-01

FORM I PCB

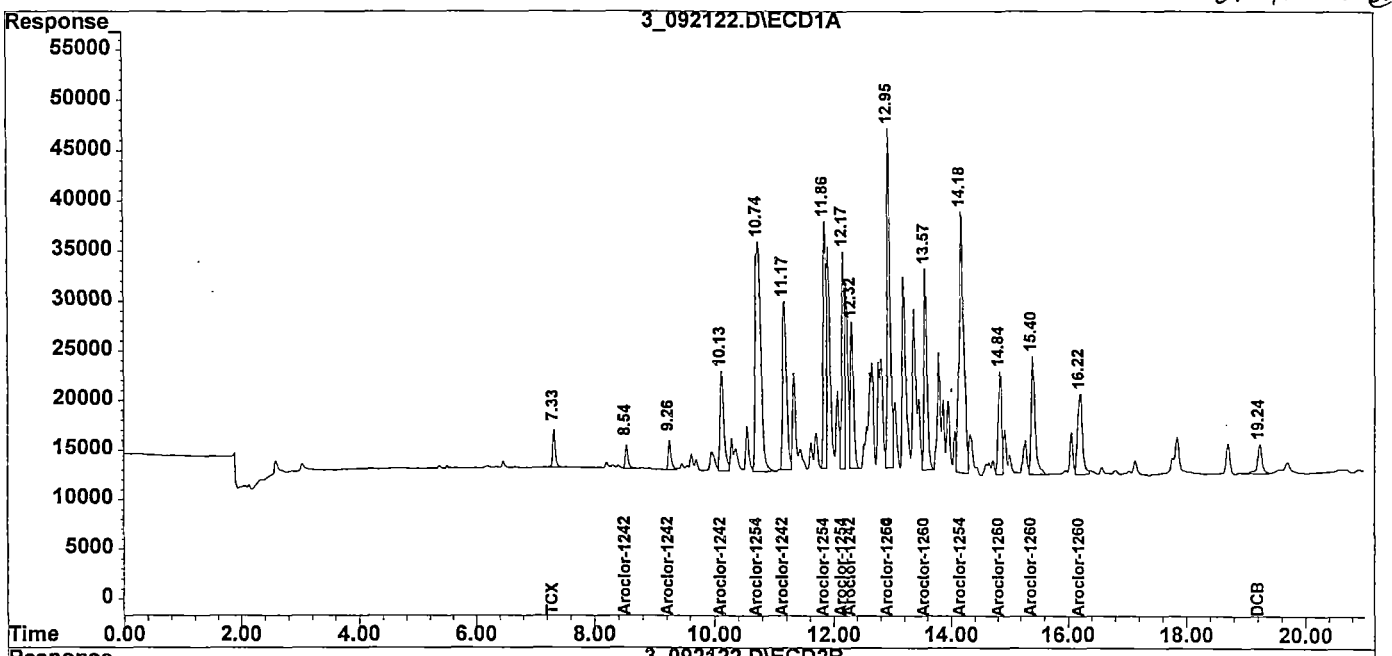
Chromatographic Report

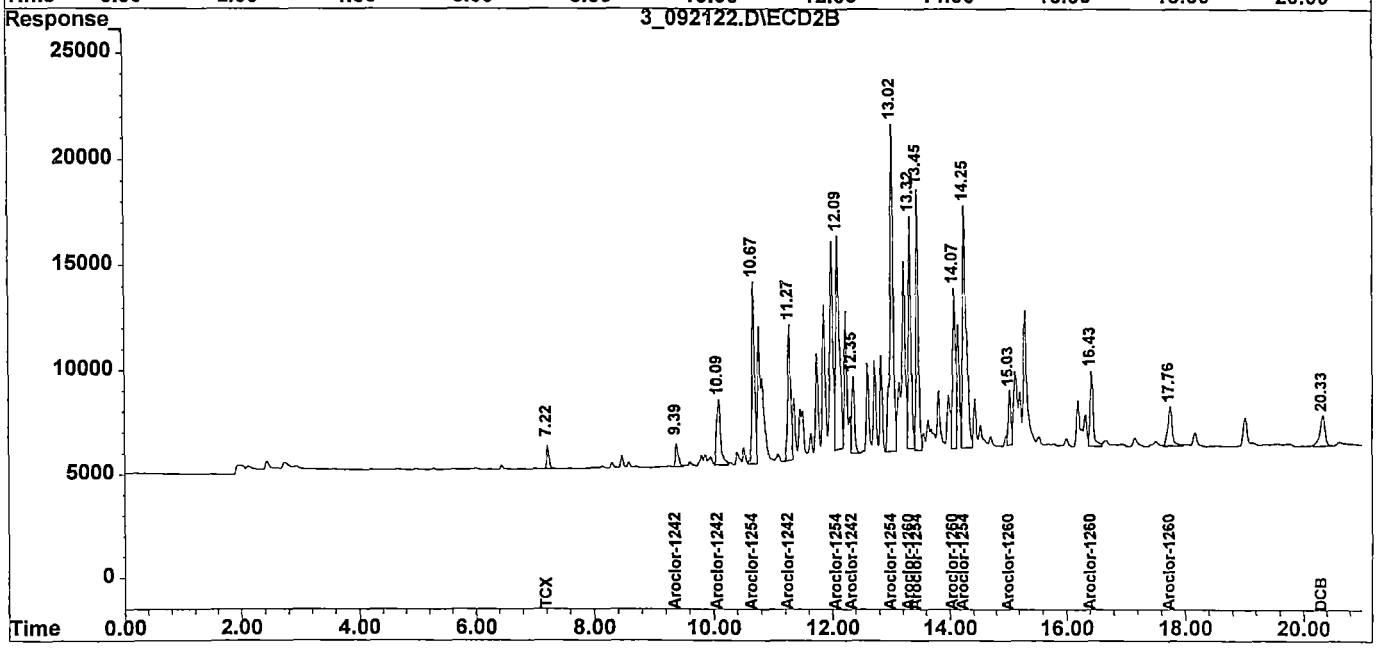
Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092122.D\ECD1A.CH Vial: 99
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092122.D\ECD2B.CH
Acq On : 21 Sep 2001 6:19 Operator: BTB
Sample : 47351.10DL *E03K8DL * Inst : HP_03
Misc : *EPA*30.8G/5.0ML*31 Dilution: 10.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 10:14 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

OK 9-22-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092122.D\ECD1A.CH Vial: 99
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092122.D\ECD2B.CH
Acq On : 21 Sep 2001 6:19 Operator: BTB
Sample : 47351.10DL *E03K8DL * Inst : HP_03
Misc : *EPA*30.8G/5.0ML*31 Dilution: 10.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 10:14 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

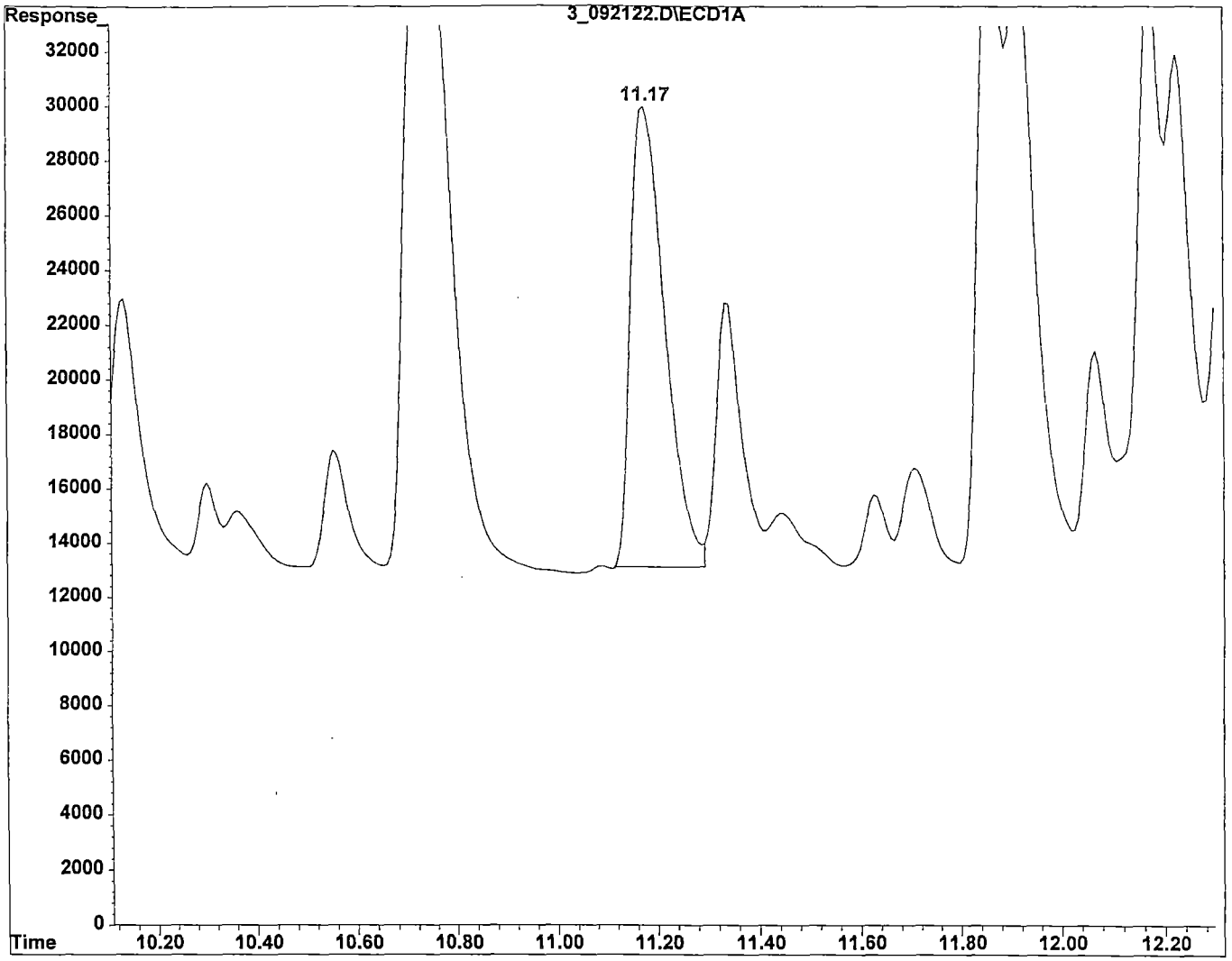
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.22	111103	30167	9.643	8.759	
	Spiked Amount 9.411			Recovery	=	102.47%	93.07%	
22)	S DCB	19.24	20.34	166871	93713	14.0	18.0	#
	Spiked Amount 9.411			Recovery	=	148.76%	191.27%	
	Target Compounds:							
7)	L4 Aroclor-1242	8.54	0.00	78762	0	327.6	N.D. d	#
8)	L4 Aroclor-1242 {2}	9.26	9.39	102528	36208	244.6	248.1	
9)	L4 Aroclor-1242 {3}	10.13	10.09	437740	154188	566.1	548.6	
10)	L4 Aroclor-1242 {4}	11.17	11.27	795464	216428	2344.0m BTB 092101	2353.5	
11)	L4 Aroclor-1242 {5}	12.32	12.35	574237	118564	2171.1	1452.4m	# BTB 092101
	Sum Aroclor-1242			1988731	525389	5653.4	4602.7	
	Average Aroclor-1242					1130.674	1150.663	
12)	L6 Aroclor-1254	10.74	10.67	1536669	273758	3574.9	2643.3	#
13)	L6 Aroclor-1254 {2}	11.86	12.09	749310	434445	941.1	1862.9	#
14)	L6 Aroclor-1254 {3}	12.17	13.02	680227	590494	934.3	1889.4	#
15)	L6 Aroclor-1254 {4}	12.95	13.46	1168585	378560	1393.0	2194.2	#
16)	L6 Aroclor-1254 {5}	14.18	14.25	1429192	511808	2103.5	2216.2	
	Sum Aroclor-1254			5563982	2189065	8946.7	10805.9	
	Average Aroclor-1254					1789.345	2161.175	
17)	L7 Aroclor-1260	12.95	13.32	1168585	351544	2575.0	1314.5m	#
18)	L7 Aroclor-1260 {2}	13.57	14.08	717808	252301	1039.8m	1445.6	#
19)	L7 Aroclor-1260 {3}	14.85	15.04	407785	80638	923.7	351.5	#
20)	L7 Aroclor-1260 {4}	15.41	16.43	548481	138531	552.1	588.9	
21)	L7 Aroclor-1260 {5}	16.22	17.76	465091	103428	614.8	623.7	
	Sum Aroclor-1260			3307750	926442	26846.1	20346.7	
	Average Aroclor-1260					1141.067	864.814	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092122.D
Date Acquired: 21 Sep 2001 6:19
Inst: HP_03 Operator ID: BTB
Name: 47351.10DL *E03K8DL *
Misc: *EPA*30.8G/5.0ML*31
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:14 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1242 {4} 11.17min area: 795464 m

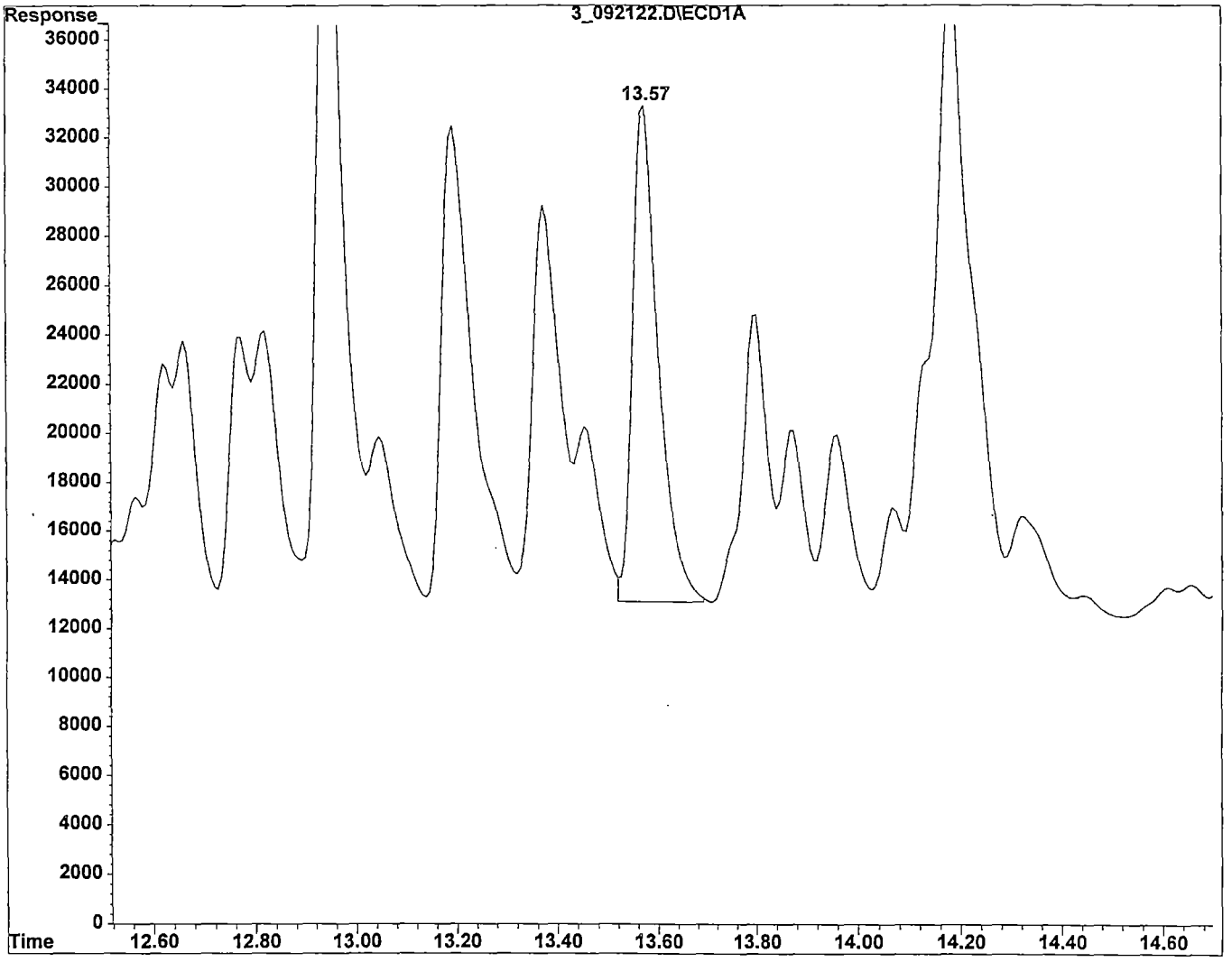
BTB 092101

Integration Time Range: 11.11 - 11.29

F:\HPCHEM\HP\3\DATA\09_21_01\3_092122.D
Report generated: Fri Sep 21 10:45:09 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092122.D
Date Acquired: 21 Sep 2001 6:19
Inst: HP_03 Operator ID: BTB
Name: 47351.10DL *E03K8DL *
Misc: *EPA*30.8G/5.0ML*31
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:14 2001 Quant Results File: XPCBI16.RES



ok 9-22-01

Aroclor-1260 {2} 13.57min area: 717808 m

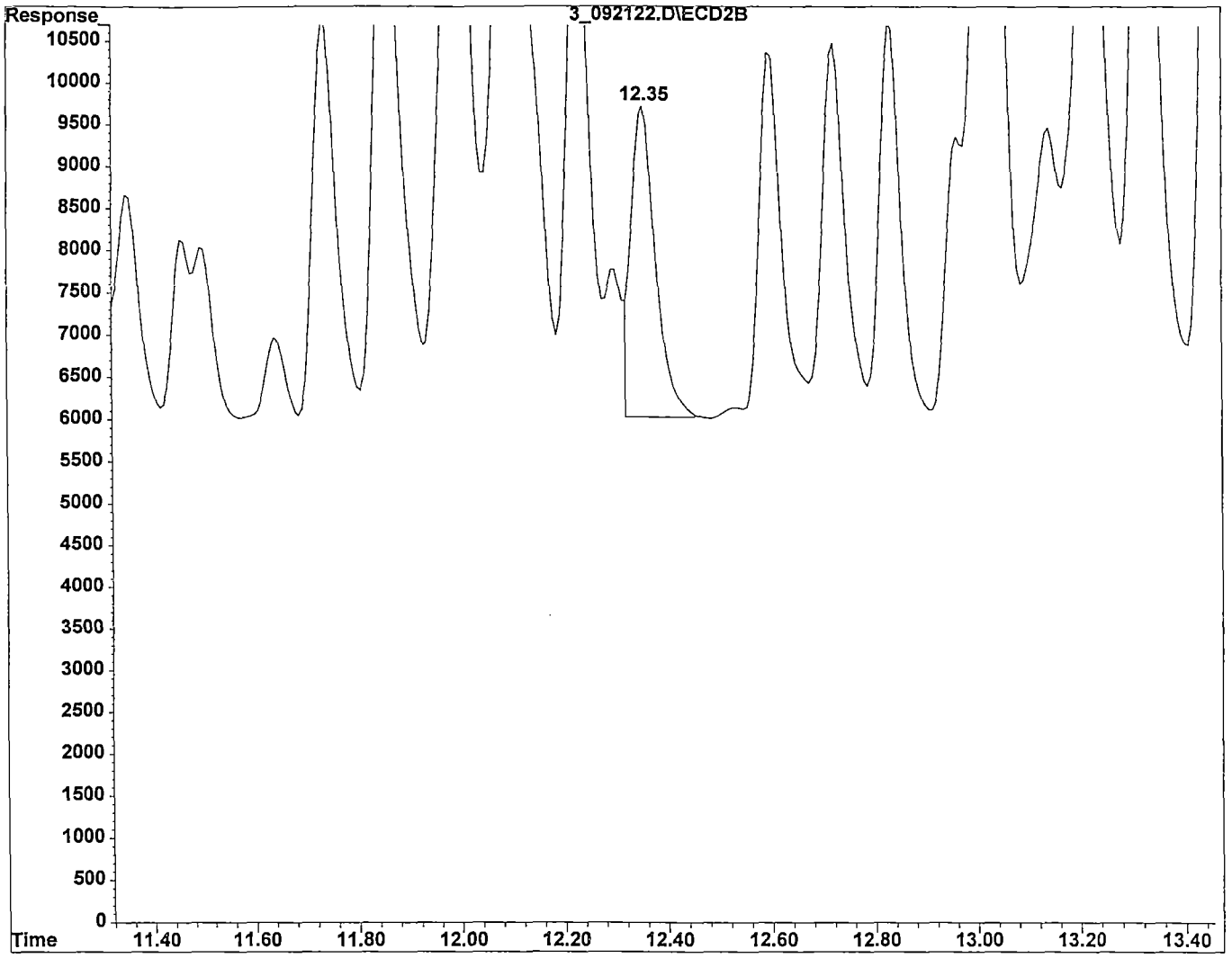
Integration Time Range: 13.52 - 13.70

BTB 092101

F:\HPCHEM\HP\3\DATA\09_21_01\3_092122.D
Report generated: Fri Sep 21 10:45:09 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092122.D
Date Acquired: 21 Sep 2001 6:19
Inst: HP_03 Operator ID: BTB
Name: 47351.10DL *E03K8DL *
Misc: *EPA*30.8G/5.0ML*31
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:14 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1242 {5} #2 12.35min area: 118564 m

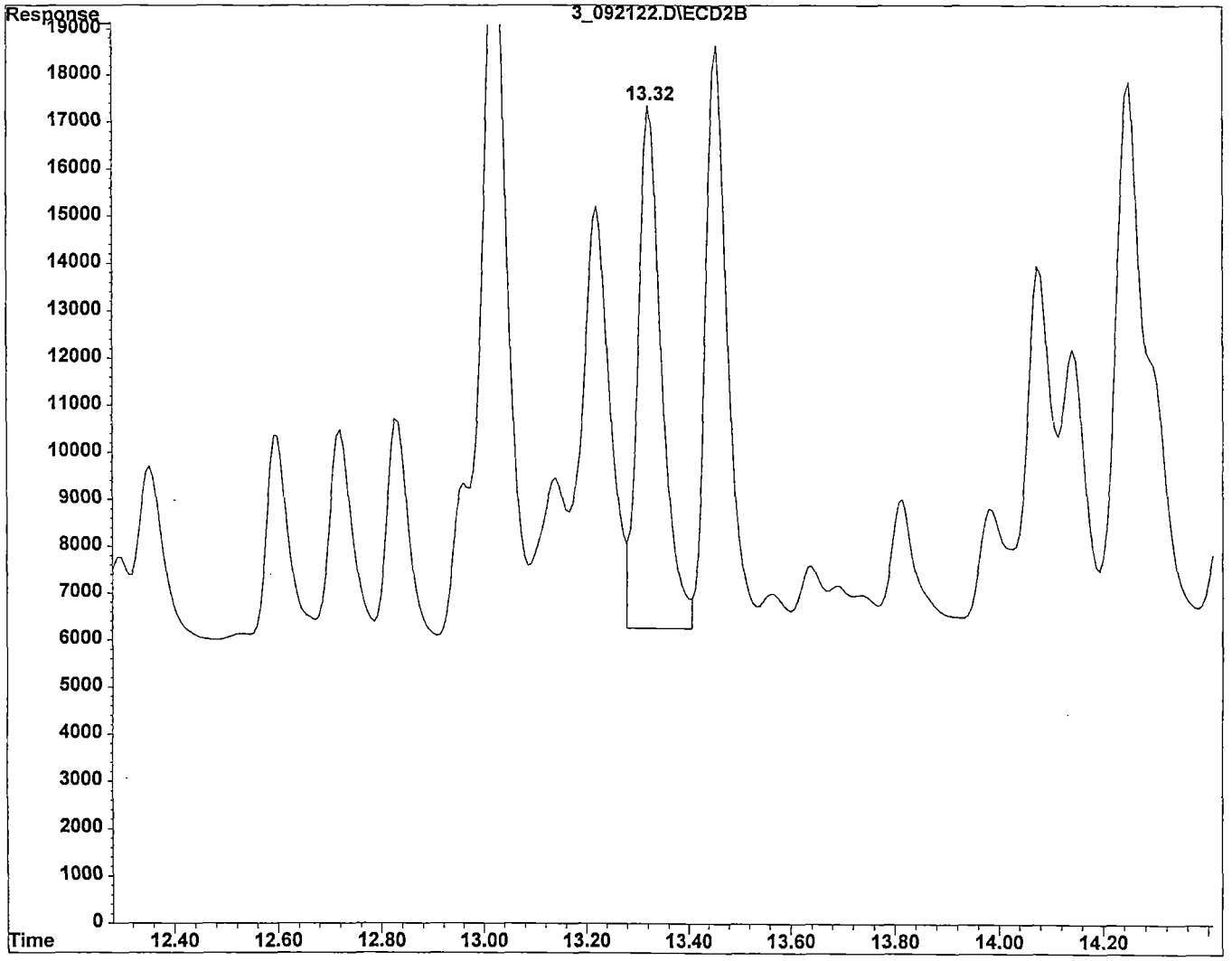
BTB 092101

Integration Time Range: 12.32 - 12.45

F:\HPCHEM\HP\3\DATA\09_21_01\3_092122.D
Report generated: Fri Sep 21 10:45:10 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092122.D
Date Acquired: 21 Sep 2001 6:19
Inst: HP_03 Operator ID: BTB
Name: 47351.10DL *E03K8DL *
Misc: *EPA*30.8G/5.0ML*31
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:14 2001 Quant Results File: XPCBI16.RES



Ok 9-22-01

Aroclor-1260 #2 13.32min area: 351544 m

Integration Time Range: 13.28 - 13.41

BTB 092101

F:\HPCHEM\HP\3\DATA\09_21_01\3_092122.D
Report generated: Fri Sep 21 10:45:10 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03K9

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.11

Sample wt/vol: 30.3 (g/mL) G Lab File ID:_____

% Moisture: 36 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	51	UJ
11104-28-2	Aroclor-1221	51	UJ
11141-16-5	Aroclor-1232	51	UJ
53469-21-9	Aroclor-1242	~~2000~~ 3400 ~~EP~~	DJ
12672-29-6	Aroclor-1248	51	UJ
11097-69-1	Aroclor-1254	~~2300~~ 3900 ~~E~~	DJ
11096-82-5	Aroclor-1260	~~680~~ 1100 ~~EP~~	DJP
Surrogate amount spiked		10.31	

apply this results
TBS 10-12-01

8400

FORM I PCB

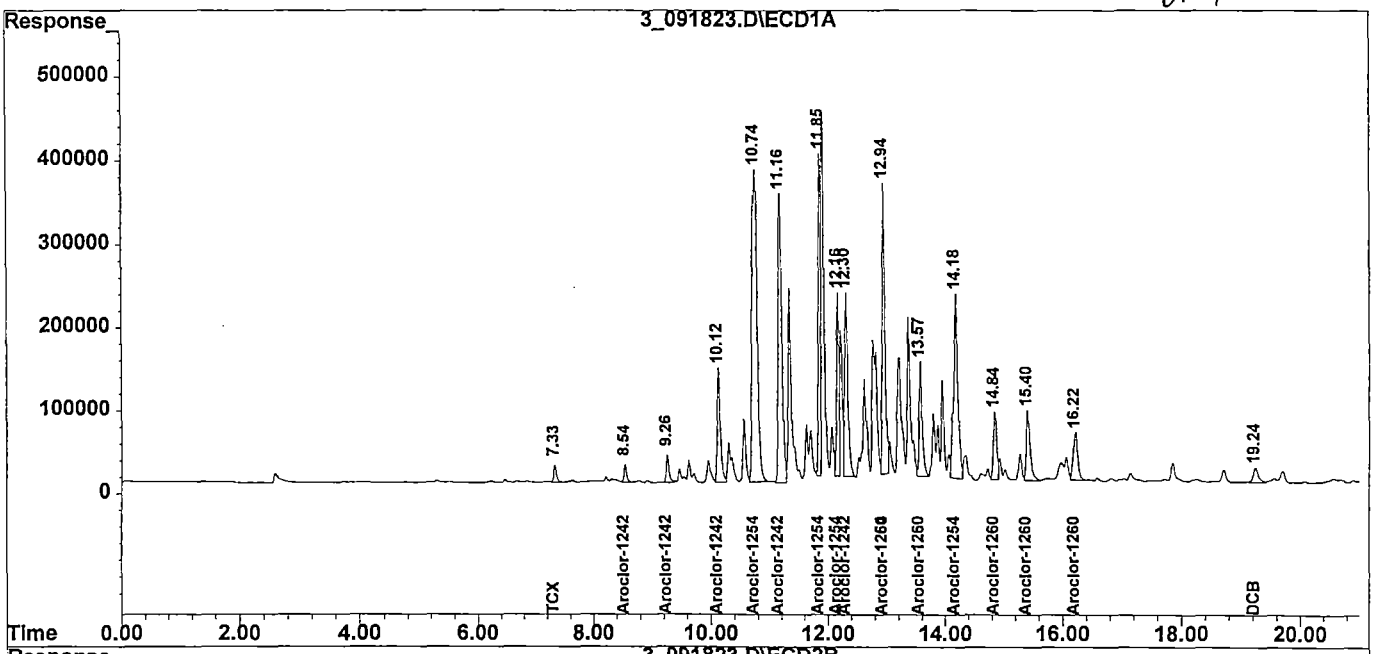
Chromatographic Report

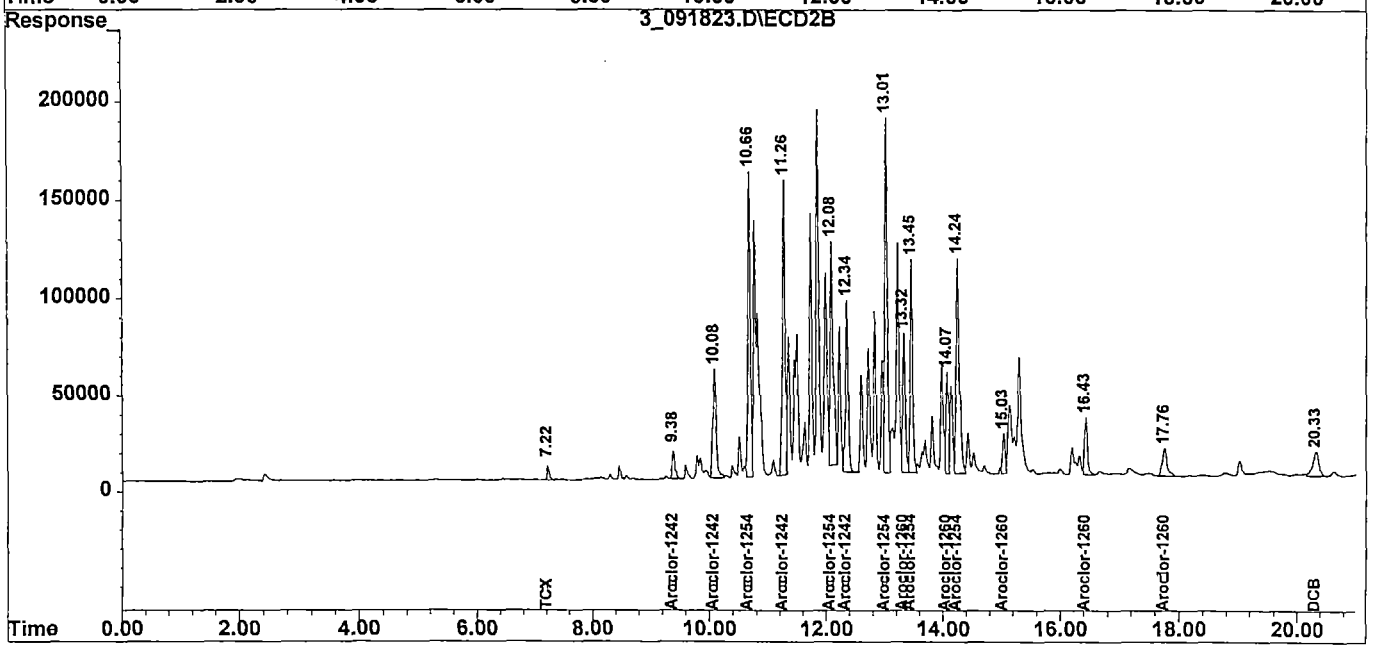
Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091823.D\ECD1A.CH Vial: 95
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091823.D\ECD2B.CH
Acq On : 19 Sep 2001 9:15 Operator: BTB
Sample : 47351.11 ,*E03K9 , * Inst : HP_03
Misc : *EPA*30.3G/5.0ML*36 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 8:33 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

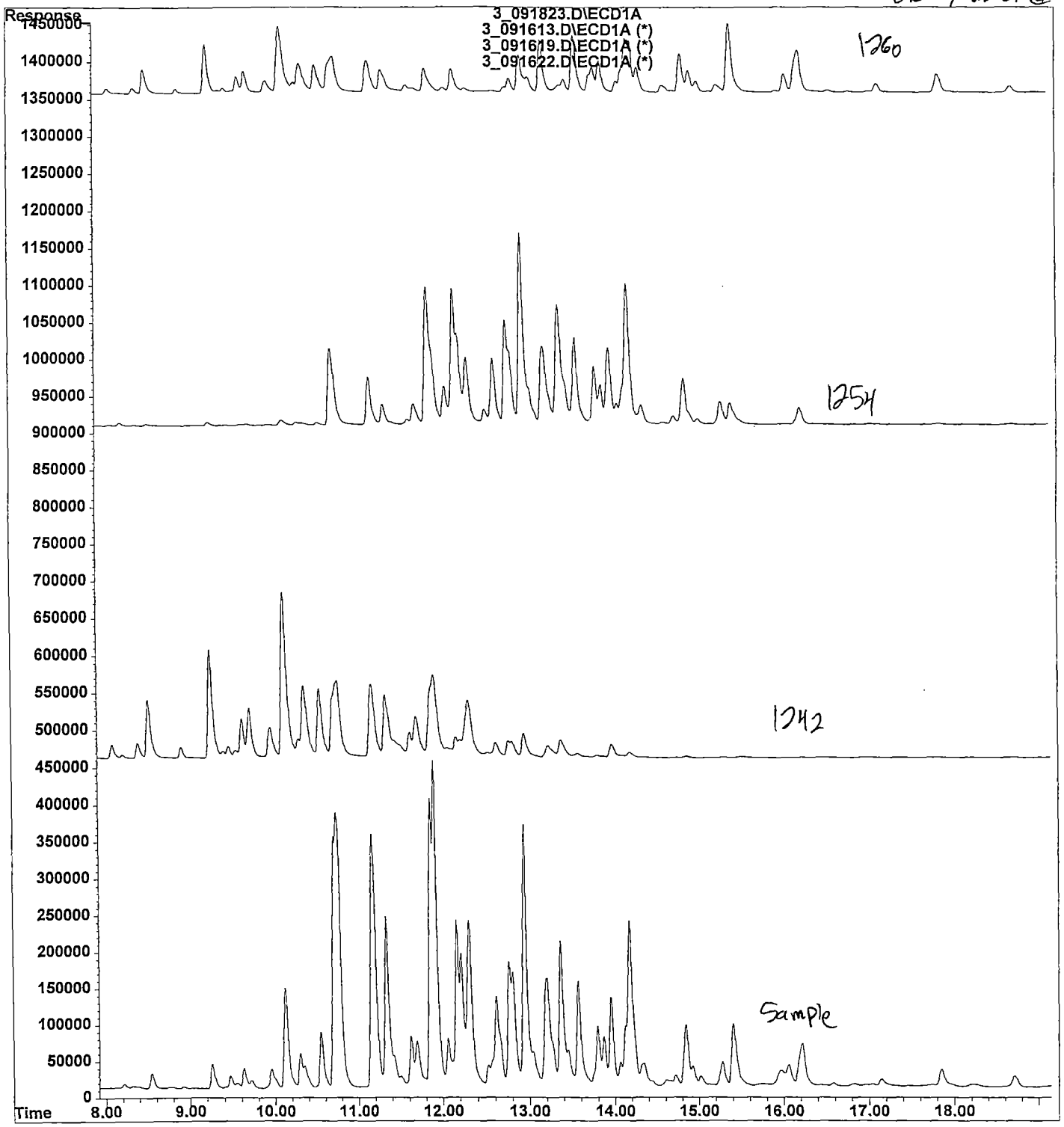
OK 9-22-01





File : F:\HPCHEM\HP\3\DATA\09_18_01\3_091823.D
Operator : BTB
Acquired : 19 Sep 2001 9:15 using AcqMethod OLM03.M
Instrument : HP_03
Sample Name: 47351.11 *E03K9 *
Misc Info : *EPA*30.3G/5.0ML*36
Vial Number: 95

OK 9-22-01



Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091823.D\ECD1A.CH Vial: 95
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091823.D\ECD2B.CH
Acq On : 19 Sep 2001 9:15 Operator: BTB
Sample : 47351.11 *E03K9 * Inst : HP_03
Misc : *EPA*30.3G/5.0ML*36 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 8:33 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

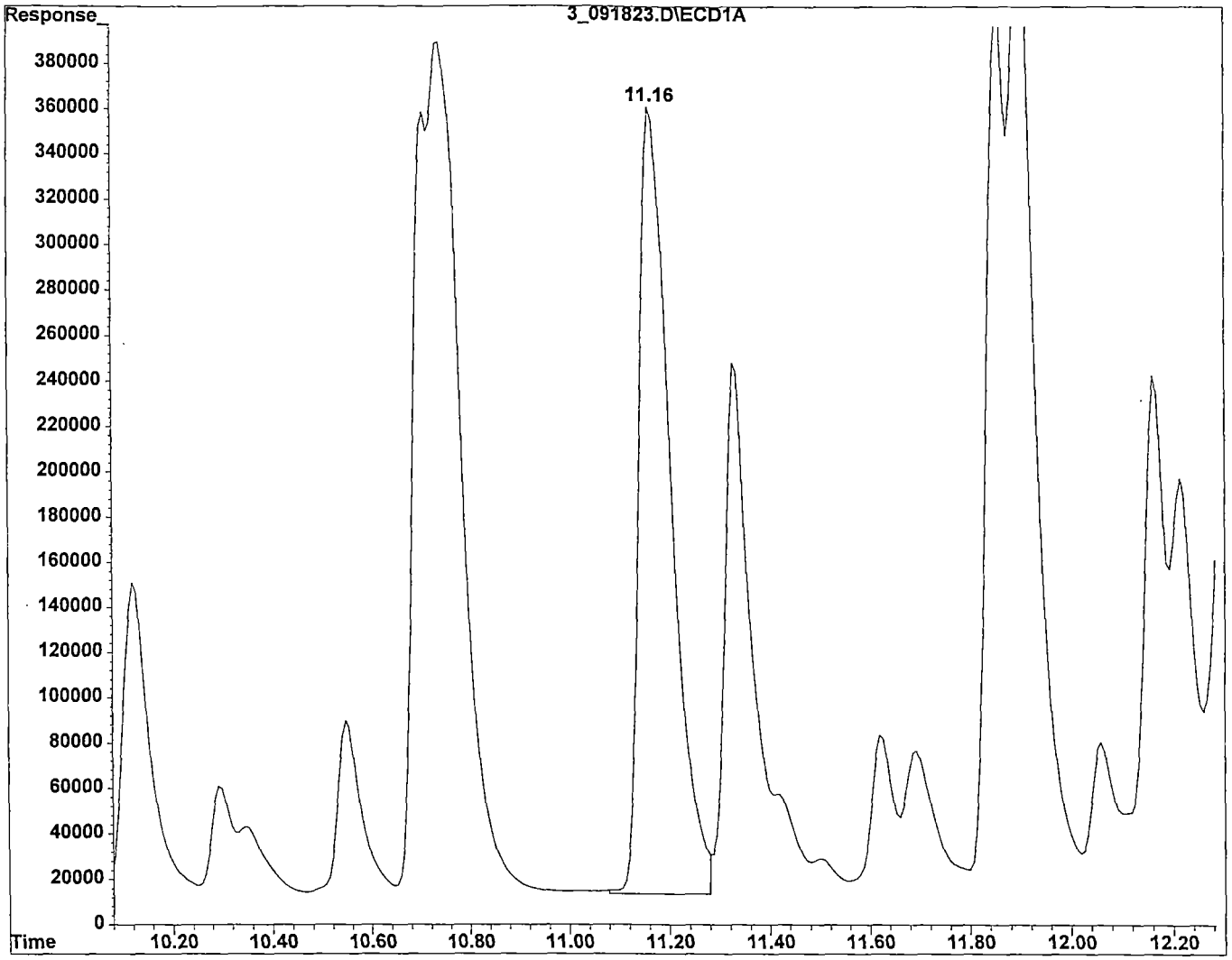
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	630296	202536	5.995	6.444
	Spiked Amount 10.314			Recovery	=	58.13%	62.48%
22)	S DCB	19.24	20.33	1122584	929014	10.3	19.5 #
	Spiked Amount 10.314			Recovery	=	99.87%	189.07%
	Target Compounds:						
7)	L4 Aroclor-1242	8.54	0.00	688908	0	314.0	N.D. d #
8)	L4 Aroclor-1242 {2}	9.26	9.39	1097518	490012	286.9	368.0 #
9)	L4 Aroclor-1242 {3}	10.12	10.08	5106139	2230420	723.7 E	869.7 E
10)	L4 Aroclor-1242 {4}	11.16	11.26	15207576	4804373	4911.0mE BTB	5725.6 E
11)	L4 Aroclor-1242 {5}	12.31	12.35	8840263	2901012	3662.9 E 09/20/01	3894.5mE BTB 09/20/01
	Sum Aroclor-1242			30940403	10425817	9898.6	10857.8
	Average Aroclor-1242					1979.722	2714.459
12)	L6 Aroclor-1254	10.74	10.66	23883286	4521930	6089.1 E	4784.9 E
13)	L6 Aroclor-1254 {2}	11.86	12.08	9225269	4242510	1269.7 E	1993.7 E#
14)	L6 Aroclor-1254 {3}	12.16	13.02	6077929	5629616	914.9 E	1974.1 E#
15)	L6 Aroclor-1254 {4}	12.94	13.45	11324226	3266423	1479.4 E	2074.8 E#
16)	L6 Aroclor-1254 {5}	14.18	14.24	11034110	4495585	1779.8 E	2133.3 E
	Sum Aroclor-1254			61544820	22156064	11532.8	12960.8
	Average Aroclor-1254					2306.565	2592.166
17)	L7 Aroclor-1260	12.94	13.32	11324226	2342792	2734.6 E	960.0 E#
18)	L7 Aroclor-1260 {2}	13.57	14.07	4792236	1710640	760.8mE	1074.1 E#
19)	L7 Aroclor-1260 {3}	14.84	15.04	3148894	656626	781.7 E	313.6 #
20)	L7 Aroclor-1260 {4}	15.40	16.43	3771545	1066415	416.0	496.8
21)	L7 Aroclor-1260 {5}	16.22	17.76	3152764	840384	456.7	555.3
	Sum Aroclor-1260			26189666	6616857	2655.7	1753.3
	Average Aroclor-1260					1029.970	679.992

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091823.D
Date Acquired: 19 Sep 2001 9:15
Inst: HP_03 Operator ID: BTB
Name: 47351.11 *E03K9 *
Misc: *EPA*30.3G/5.0ML*36
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:33 2001 Quant Results File: XPCBI16.RES



OK 9-22-01 EA

Aroclor-1242 {4} 11.16min area: 15207576 m

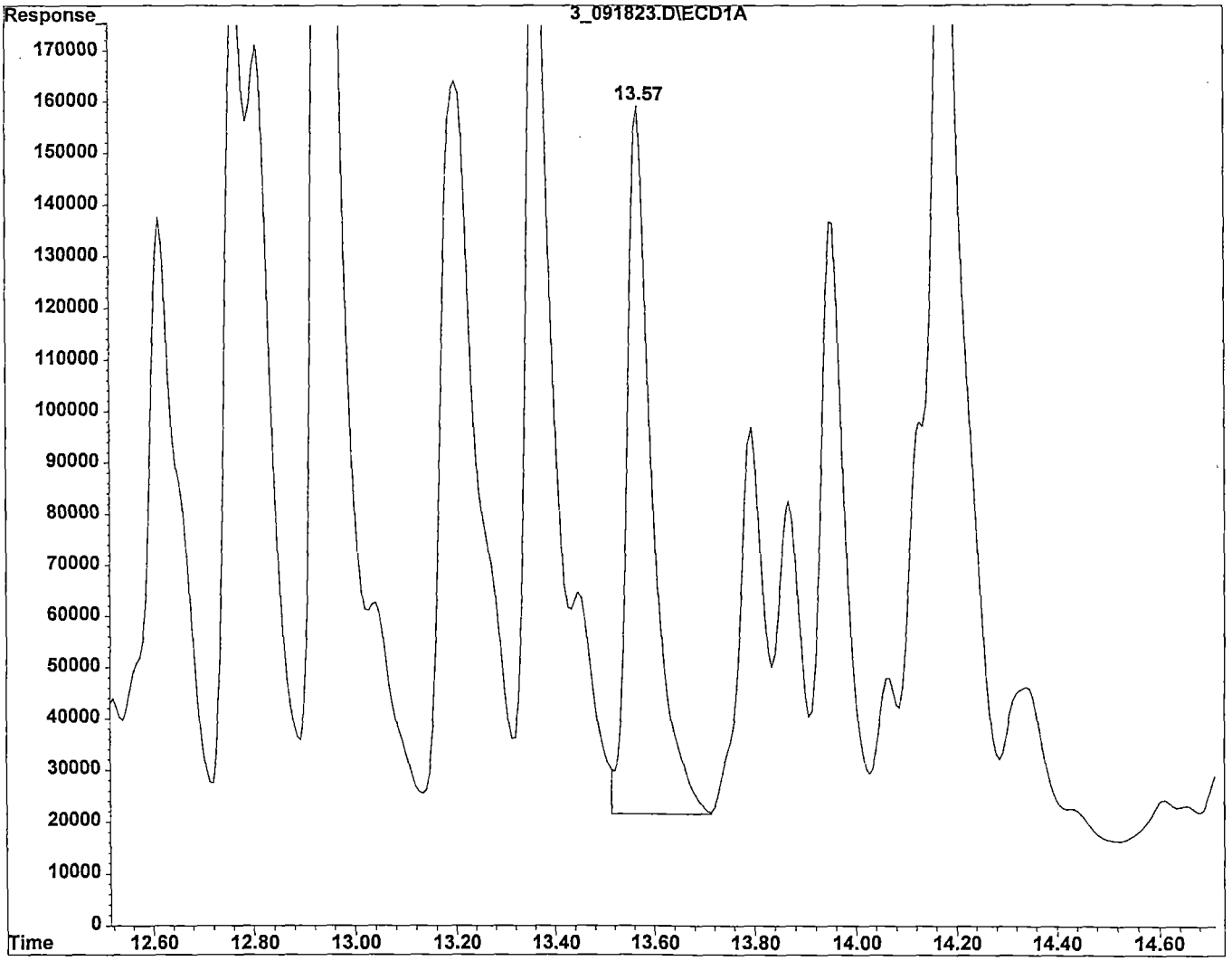
Integration Time Range: 11.08 - 11.28

BTB 092001

F:\HPCHEM\HP\3\DATA\09_18_01\3_091823.D
Report generated: Thu Sep 20 08:46:55 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091823.D
Date Acquired: 19 Sep 2001 9:15
Inst: HP_03 Operator ID: BTB
Name: 47351.11 *E03K9 *
Misc: *EPA*30.3G/5.0ML*36
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:33 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1260 {2} 13.57min area: 4792236 m

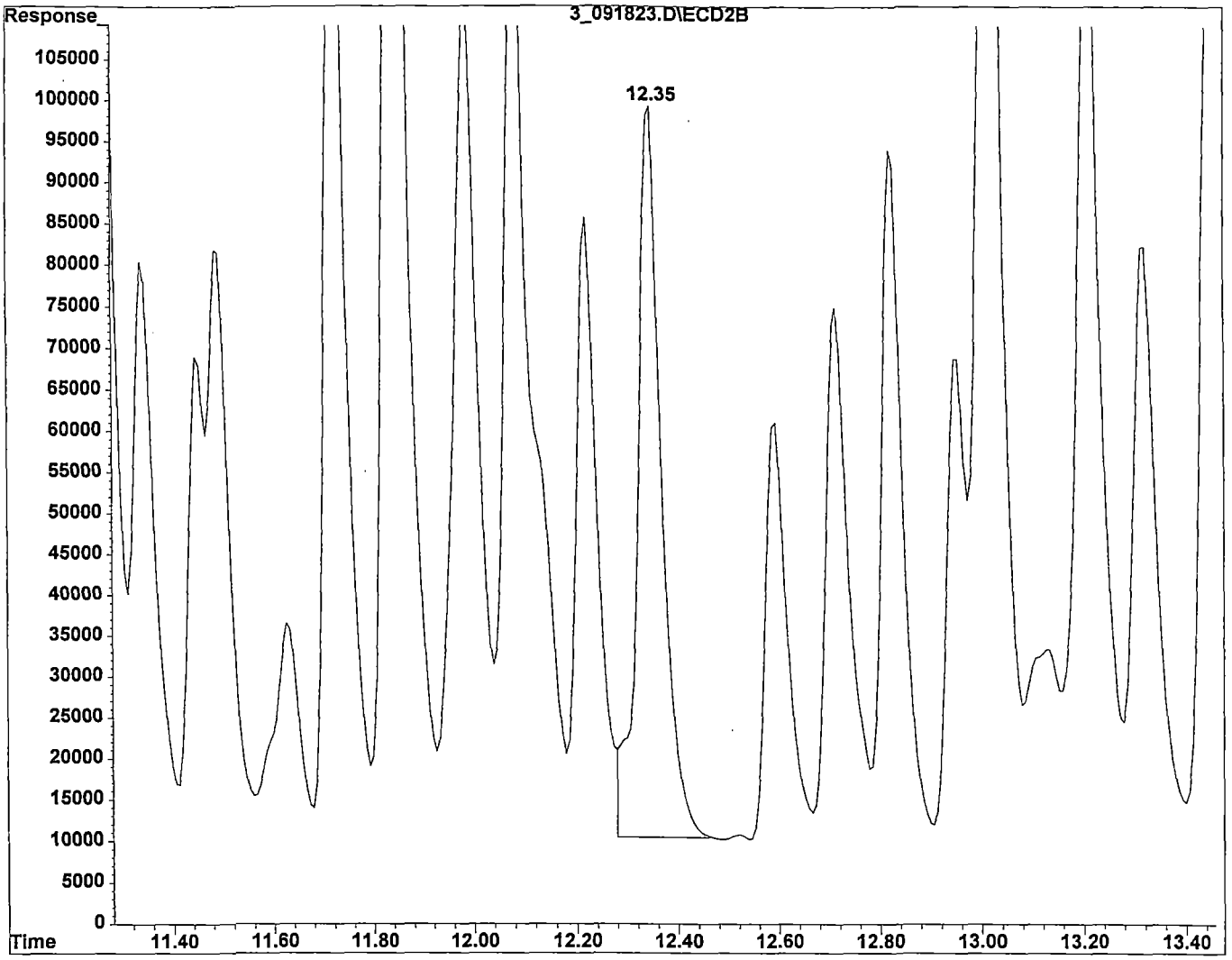
BTB 092001

Integration Time Range: 13.51 - 13.71

F:\HPCHEM\HP\3\DATA\09_18_01\3_091823.D
Report generated: Thu Sep 20 08:46:55 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091823.D
Date Acquired: 19 Sep 2001 9:15
Inst: HP_03 Operator ID: BTB
Name: 47351.11 *E03K9 *
Misc: *EPA*30.3G/5.0ML*36
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:33 2001 Quant Results File: XPCBI16.RES



ok 9-22-01

Aroclor-1242 {5} #2 12.35min area: 2901012 m

Integration Time Range: 12.28 - 12.46

BTB 092001

F:\HPCHEM\HP\3\DATA\09_18_01\3_091823.D
Report generated: Thu Sep 20 08:46:56 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03K9DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.11DL

Sample wt/vol: 30.3 (g/mL) G Lab File ID:_____

% Moisture: 36 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/21/01

Injection Volume: 0.5(uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N) Y pH: 7.4 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	1000	UJ
11104-28-2	Aroclor-1221	1000	UJ
11141-16-5	Aroclor-1232	1000	UJ
53469-21-9	Aroclor-1242	3400	DJ
12672-29-6	Aroclor-1248	1000	UJ
11097-69-1	Aroclor-1254	3900	DJ
11096-82-5	Aroclor-1260	1100	DPJ
	Surrogate amount spiked	10.31	

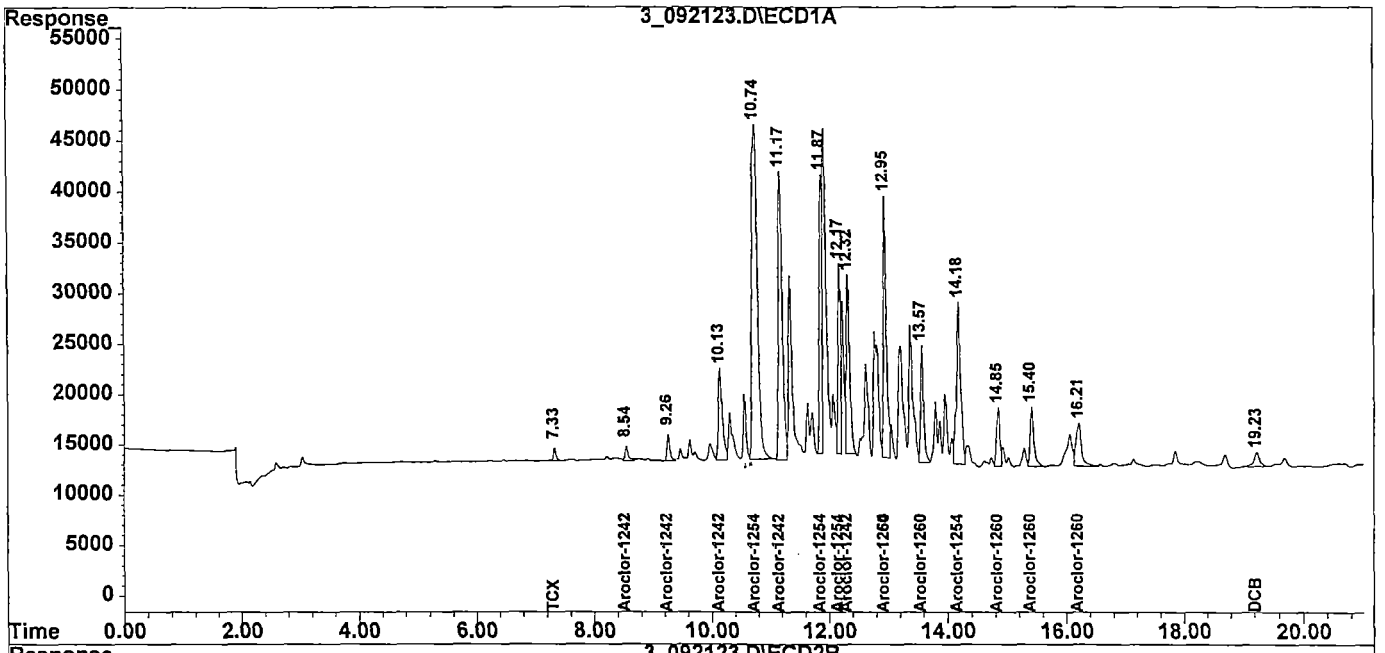
TBS
10-12-01

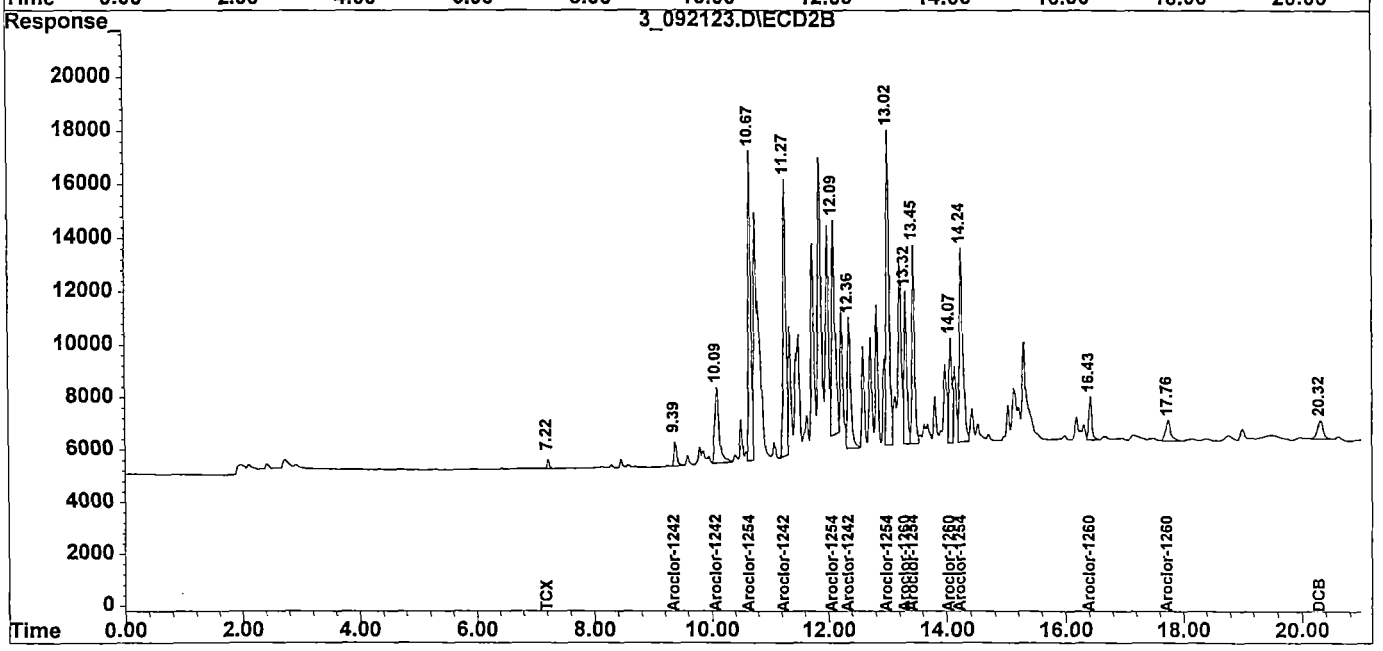
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092123.D\ECD1A.CH Vial: 100
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092123.D\ECD2B.CH
Acq On : 21 Sep 2001 6:45 Operator: BTB
Sample : 47351.11DL *E03K9DL * Inst : HP_03
Misc : *EPA*30.3G/5.0ML*36 Dilution: 20.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 10:16 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092123.D\ECD1A.CH Vial: 100
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092123.D\ECD2B.CH
Acq On : 21 Sep 2001 6:45 Operator: BTB
Sample : 47351.11DL *E03K9DL * Inst : HP_03
Misc : *EPA*30.3G/5.0ML*36 Dilution: 20.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 10:16 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

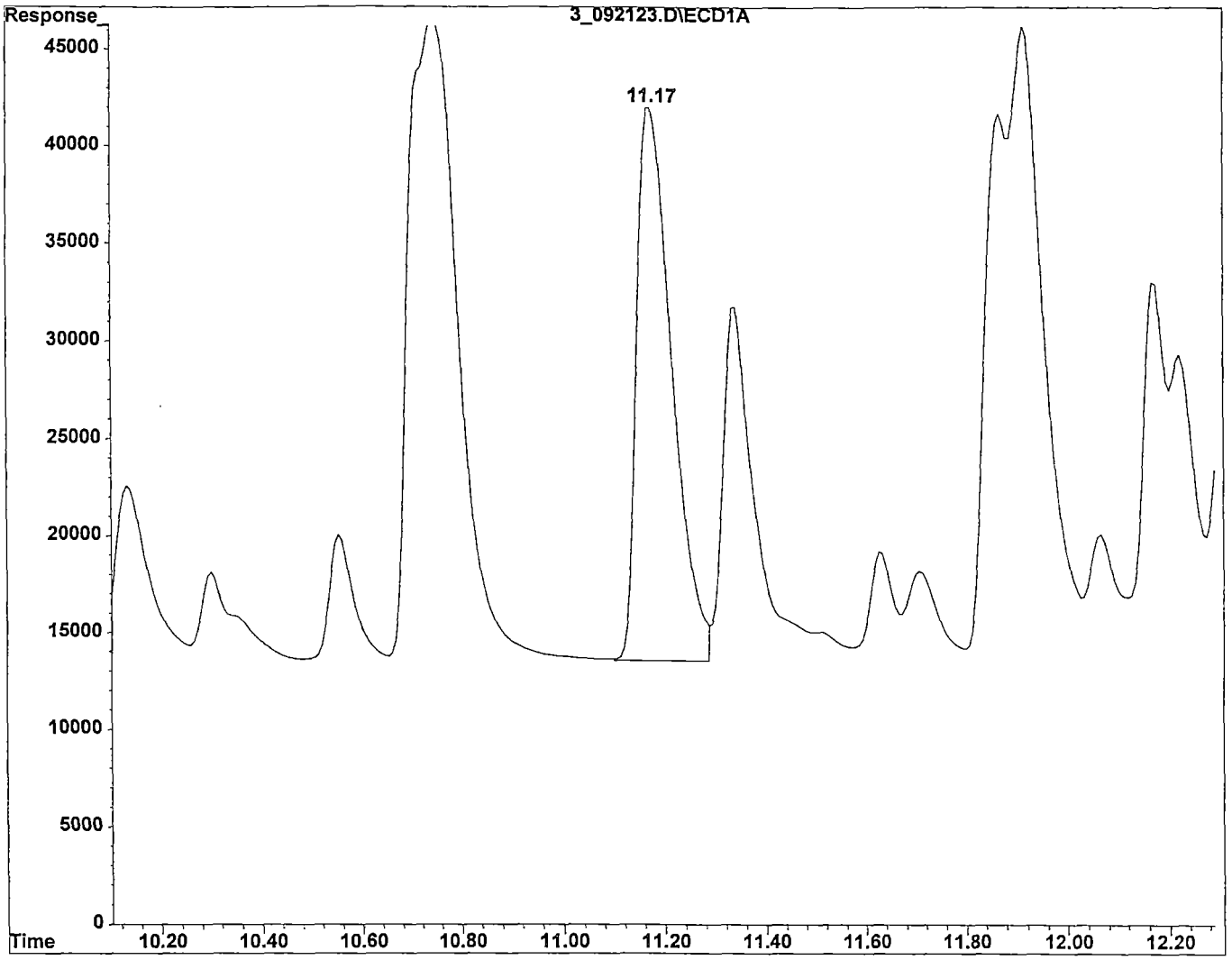
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	37936	9462	7.216	6.022
	Spiked Amount 10.314			Recovery	=	69.97%	58.39%
22)	S DCB	19.23	20.32	91580	47097	16.8m	19.8m BTB 092101
	Spiked Amount 10.314			Recovery	=	162.89%	191.98%
	Target Compounds:						
7)	L4 Aroclor-1242	8.54	0.00	55491	0	505.9	N.D. d #
8)	L4 Aroclor-1242 {2}	9.26	9.39	89485	30653	467.9	460.4
9)	L4 Aroclor-1242 {3}	10.14	10.10	432908	149932	1227.1	1169.3
10)	L4 Aroclor-1242 {4}	11.17	11.27	1366992	346162	8828.9m BTB 092101	8250.7
11)	L4 Aroclor-1242 {5}	12.32	12.36	739658	192376	6129.5	5165.2m
	Sum Aroclor-1242			2684535	719123	17159.3	15045.6
	Average Aroclor-1242					3431.869	3761.401
12)	L6 Aroclor-1254	10.75	10.67	2279176	363587	11621.5	7694.7 #
13)	L6 Aroclor-1254 {2}	11.87	12.09	759561	318664	2090.9	2995.0 #
14)	L6 Aroclor-1254 {3}	12.17	13.02	569006	411820	1713.0	2888.2 #
15)	L6 Aroclor-1254 {4}	12.95	13.46	923346	236196	2412.5	3000.6
16)	L6 Aroclor-1254 {5}	14.18	14.25	819823	310598	2644.7	2947.8
	Sum Aroclor-1254			5350911	1640865	20482.6	19526.3
	Average Aroclor-1254					4096.519	3905.251
17)	L7 Aroclor-1260	12.95	13.32	923346	191711	4459.5	1571.2 #
18)	L7 Aroclor-1260 {2}	13.57	14.08	412016	131949	1308.2m	1657.1 #
19)	L7 Aroclor-1260 {3}	14.85	0.00	230589	0	1144.8	N.D. d #
20)	L7 Aroclor-1260 {4}	15.41	16.43	265784	59054	586.4	550.2
21)	L7 Aroclor-1260 {5}	16.22	17.76	277316	45180	803.5	597.1 #
	Sum Aroclor-1260			2109051	427893	85626.3	45127.8
	Average Aroclor-1260					1660.464	1093.899

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092123.D
Date Acquired: 21 Sep 2001 6:45
Inst: HP_03 Operator ID: BTB
Name: 47351.11DL *E03K9DL *
Misc: *EPA*30.3G/5.0ML*36
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:16 2001 Quant Results File: XPCBI16.RES



ok 9-22-01 BTB

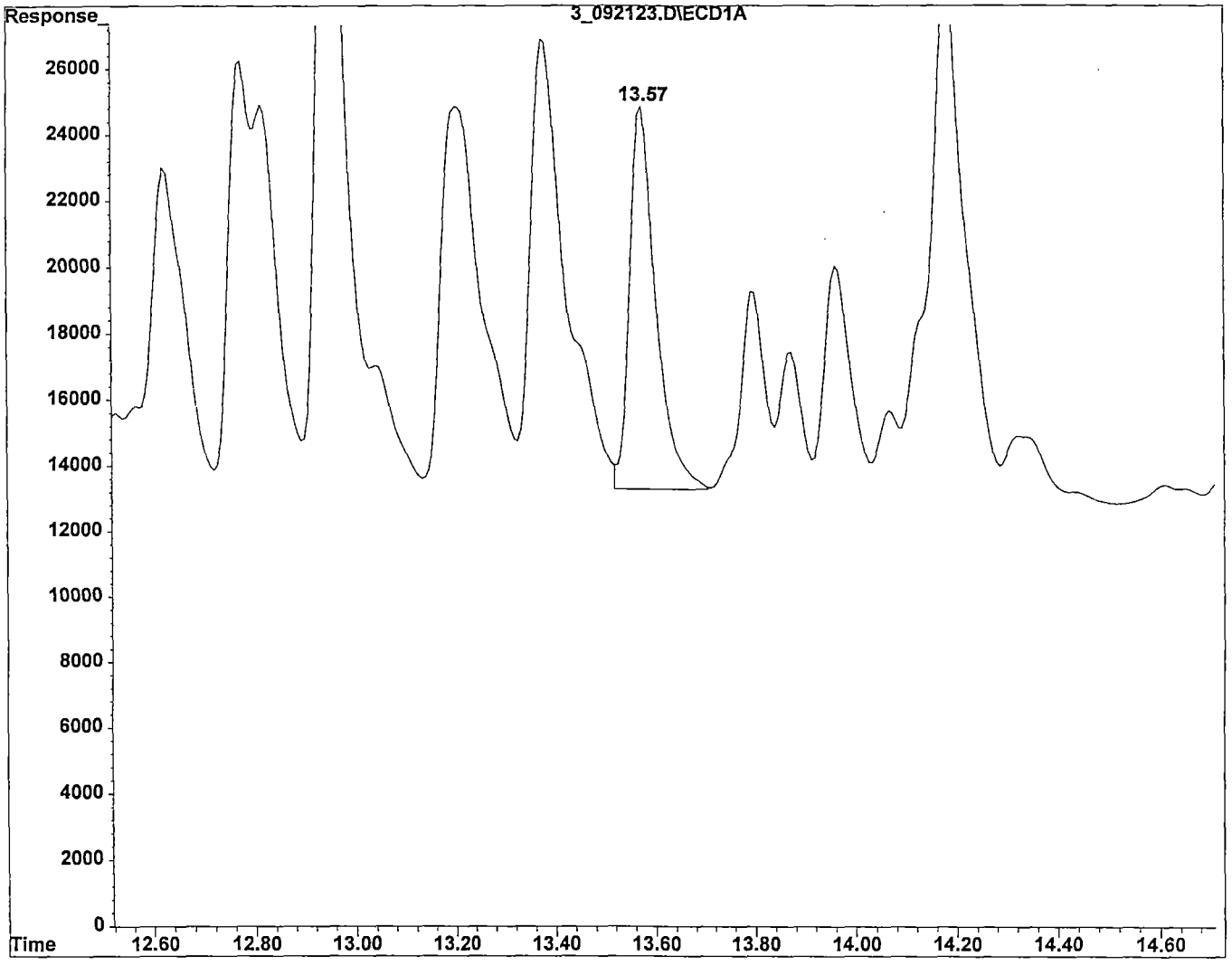
Aroclor-1242 {4} 11.17min area: 1366992 m BTB 092101

Integration Time Range: 11.10 - 11.29

F:\HPCHEM\HP\3\DATA\09_21_01\3_092123.D
Report generated: Fri Sep 21 10:45:12 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092123.D
Date Acquired: 21 Sep 2001 6:45
Inst: HP_03 Operator ID: BTB
Name: 47351.11DL *E03K9DL *
Misc: *EPA*30.3G/5.0ML*36
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:16 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1260 {2} 13.57min area: 412016 m

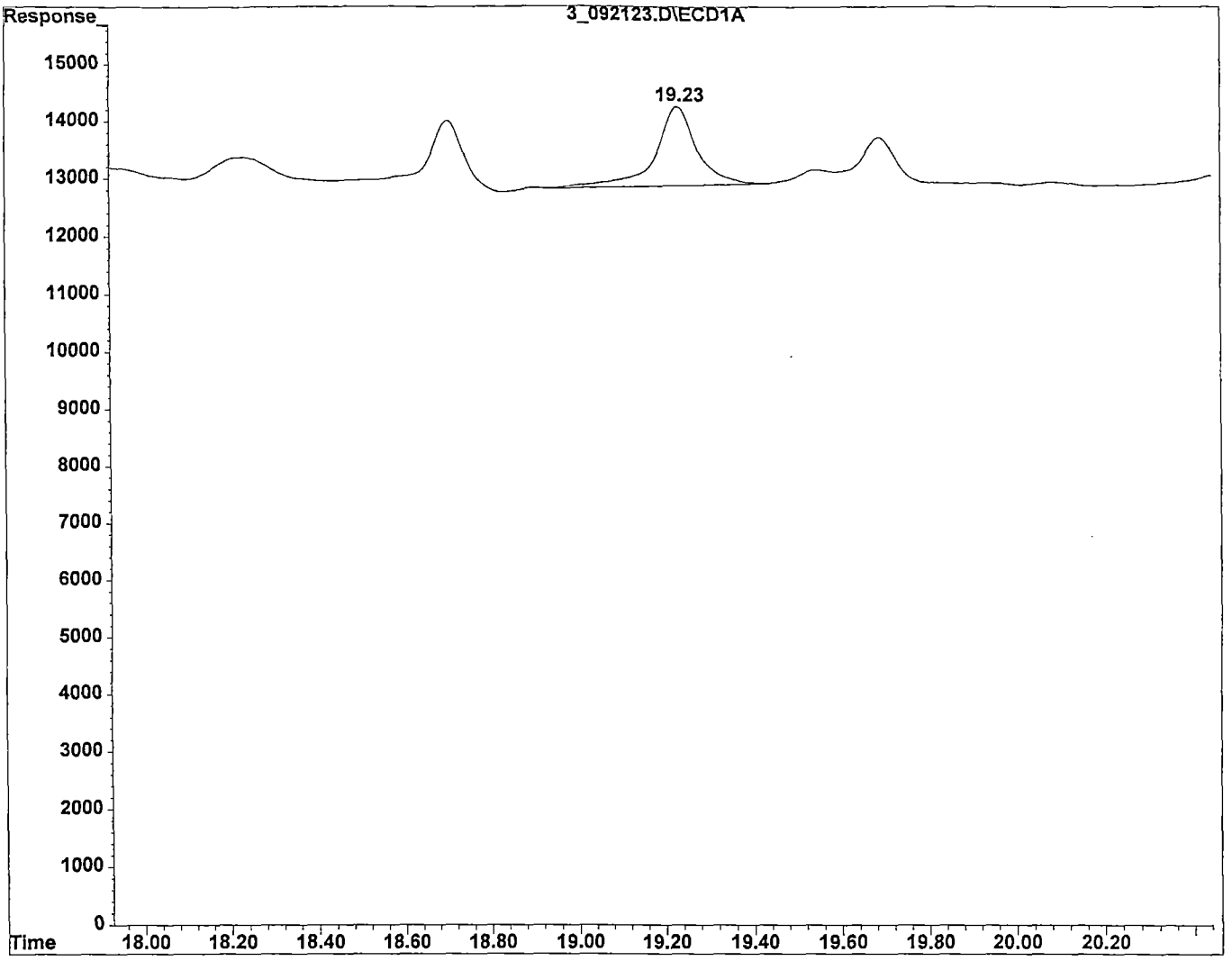
Integration Time Range: 13.52 - 13.71

BTB 092101

F:\HPCHEM\HP\3\DATA\09_21_01\3_092123.D
Report generated: Fri Sep 21 10:45:12 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092123.D
Date Acquired: 21 Sep 2001 6:45
Inst: HP_03 Operator ID: BTB
Name: 47351.11DL *E03K9DL *
Misc: *EPA*30.3G/5.0ML*36
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:16 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

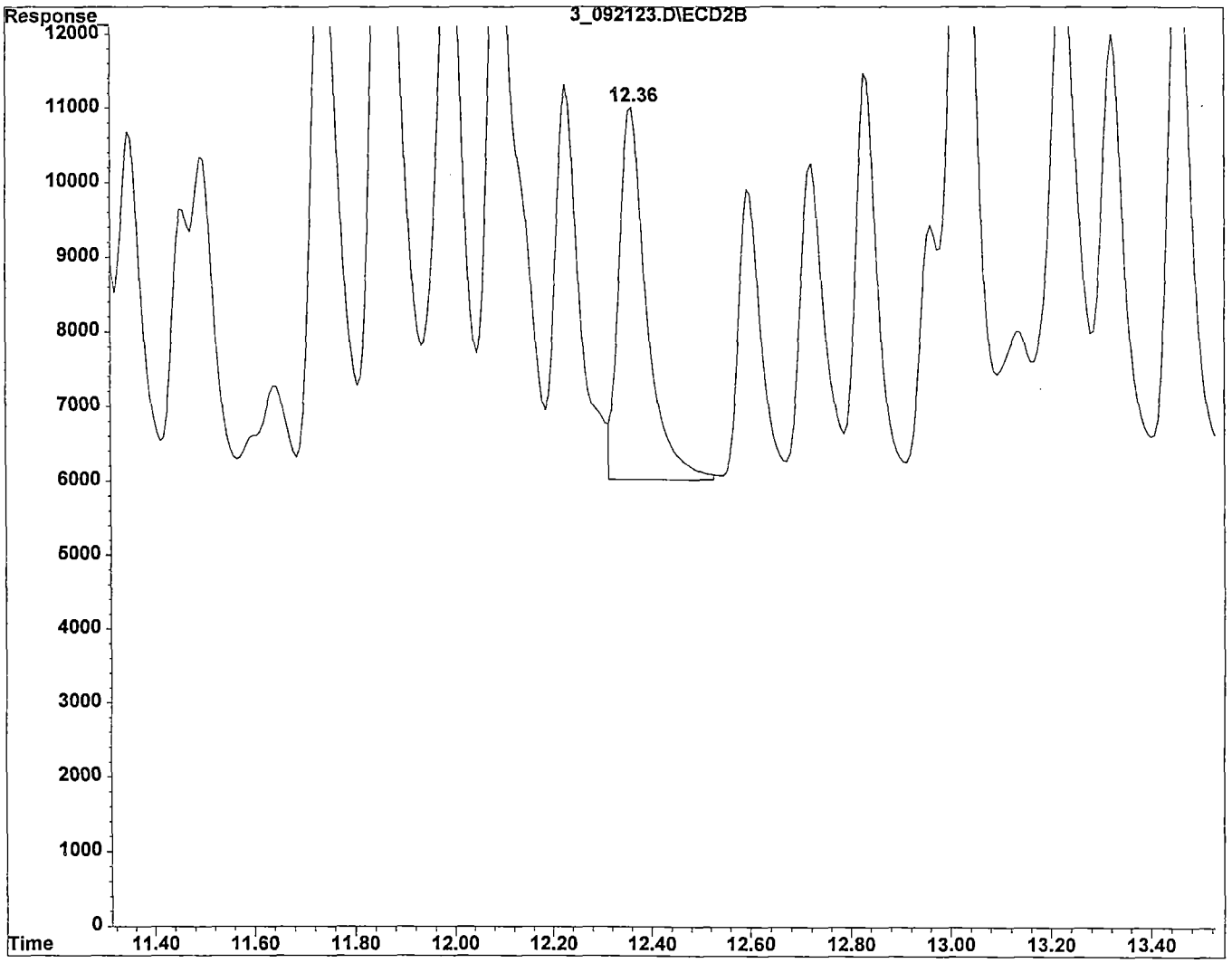
DCB 19.23min area: 91580 m BTB092101

Integration Time Range: 18.93 - 19.44

F:\HPCHEM\HP\3\DATA\09_21_01\3_092123.D
Report generated: Fri Sep 21 10:45:13 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092123.D
Date Acquired: 21 Sep 2001 6:45
Inst: HP_03 Operator ID: BTB
Name: 47351.11DL *E03K9DL *
Misc: *EPA*30.3G/5.0ML*36
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:16 2001 Quant Results File: XPCBI16.RES



Aroclor-1242 {5} #2 12.36min area: 192376 m

Integration Time Range: 12.31 - 12.53

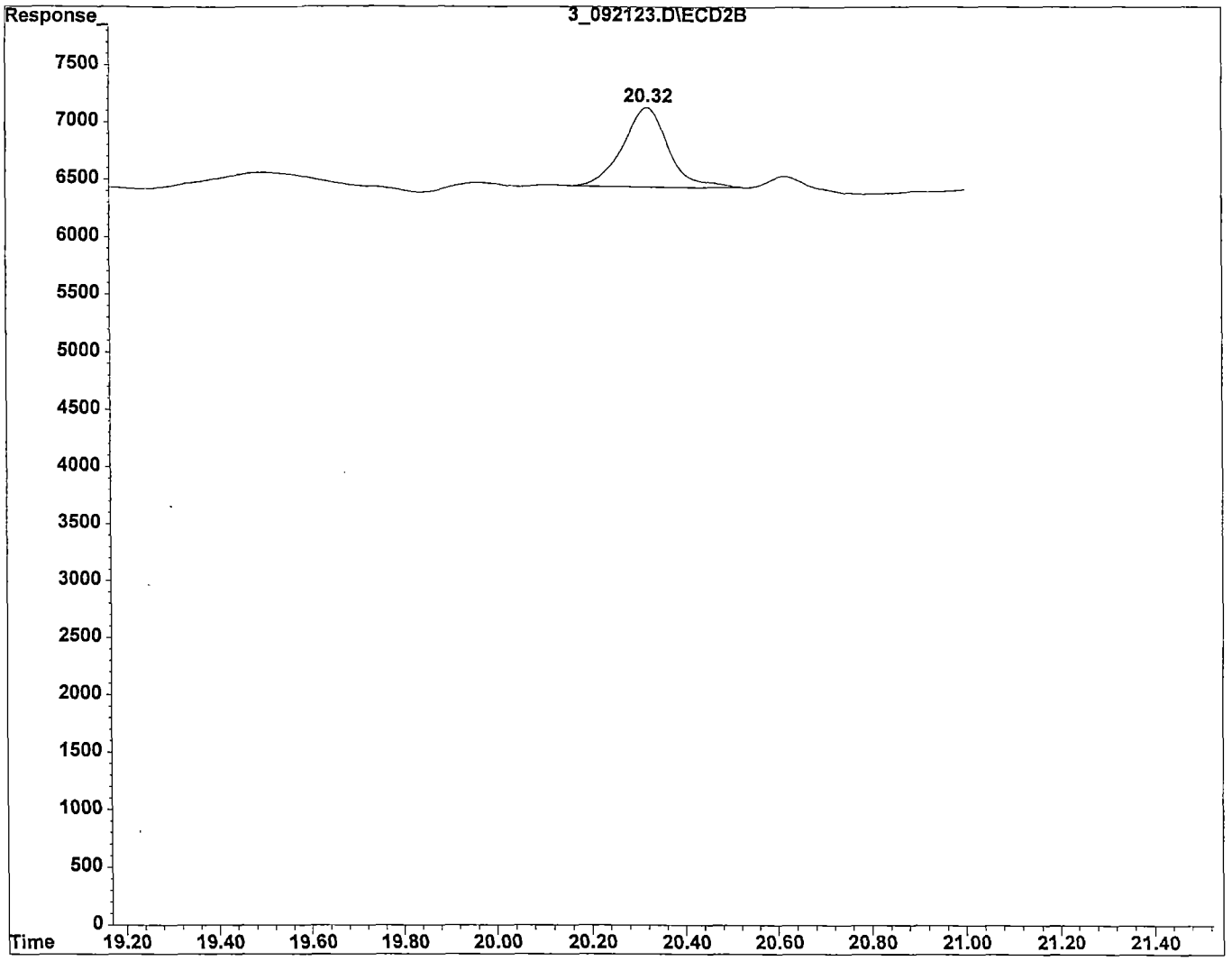
ok 9-22-01

BTB 092101

F:\HPCHEM\HP\3\DATA\09_21_01\3_092123.D
Report generated: Fri Sep 21 10:45:13 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092123.D
Date Acquired: 21 Sep 2001 6:45
Inst: HP_03 Operator ID: BTB
Name: 47351.11DL *E03K9DL *
Misc: *EPA*30.3G/5.0ML*36
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:16 2001 Quant Results File: XPCBI16.RES



ok 9-22-01 BTB

DCB #2 20.32min area: 47097 m BTB 092101

Integration Time Range: 20.17 - 20.53

F:\HPCHEM\HP\3\DATA\09_21_01\3_092123.D
Report generated: Fri Sep 21 10:45:14 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03L0

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.12

Sample wt/vol: 30.2 (g/mL) G Lab File ID:_____

% Moisture: 33 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	49	UJ
11104-28-2	Aroclor-1221	49	UJ
11141-16-5	Aroclor-1232	49	UJ
53469-21-9	Aroclor-1242	~~860~~ 1500	~~EP~~ DJ
12672-29-6	Aroclor-1248	49	UJ
11097-69-1	Aroclor-1254	~~750~~ 2000	~~EP~~ DJ
11096-82-5	Aroclor-1260	~~440~~ 590	~~EP~~ DJP
Surrogate amount spiked		9.88	

4090

apply this results
TBS 10-12-01

FORM I PCB

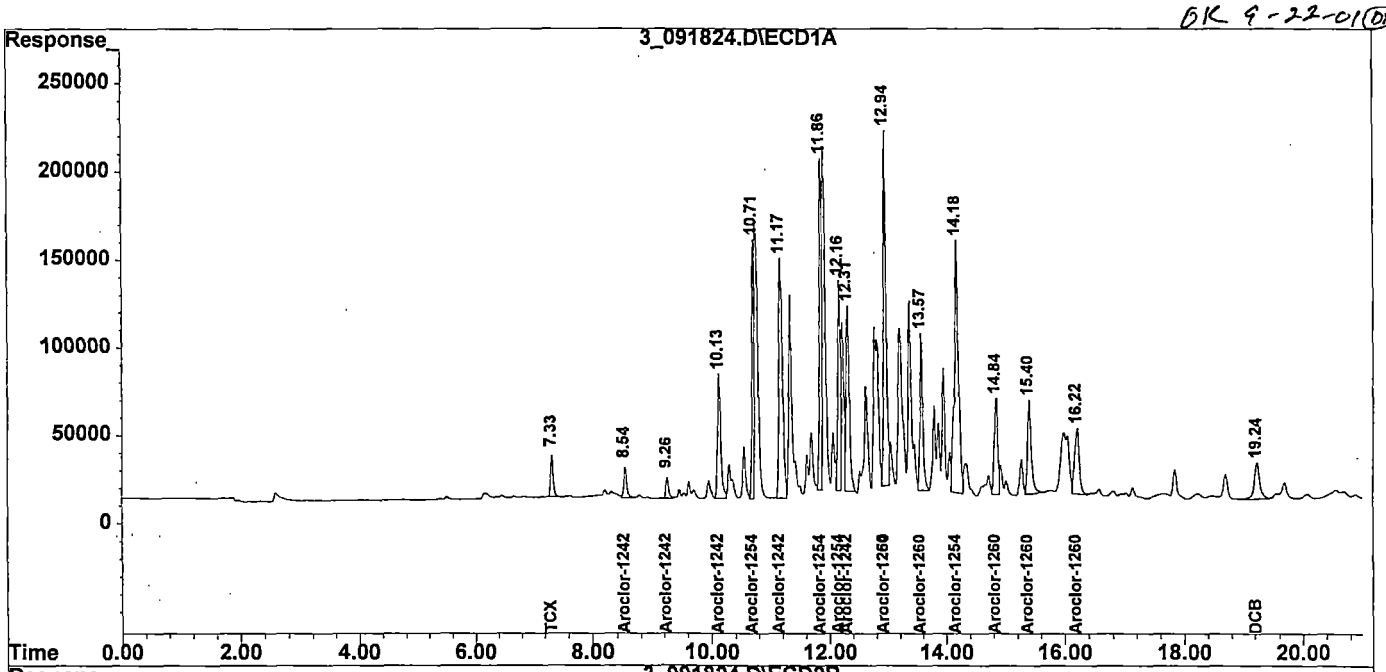
Chromatographic Report

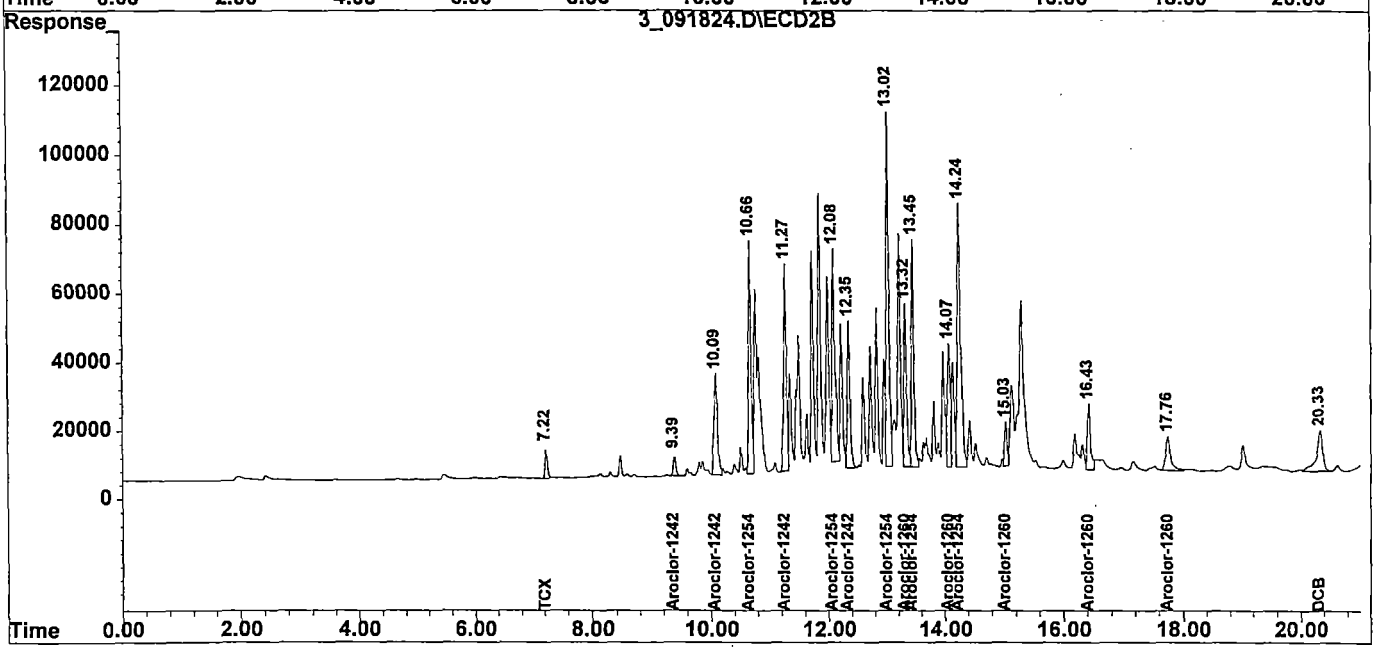
Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091824.D\ECD1A.CH Vial: 96
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091824.D\ECD2B.CH
Acq On : 19 Sep 2001 9:40 Operator: BTB
Sample : 47351.12 /*E03L0 / * Inst : HP_03
Misc : *EPA*30.2G/5.0ML*33 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 8:35 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

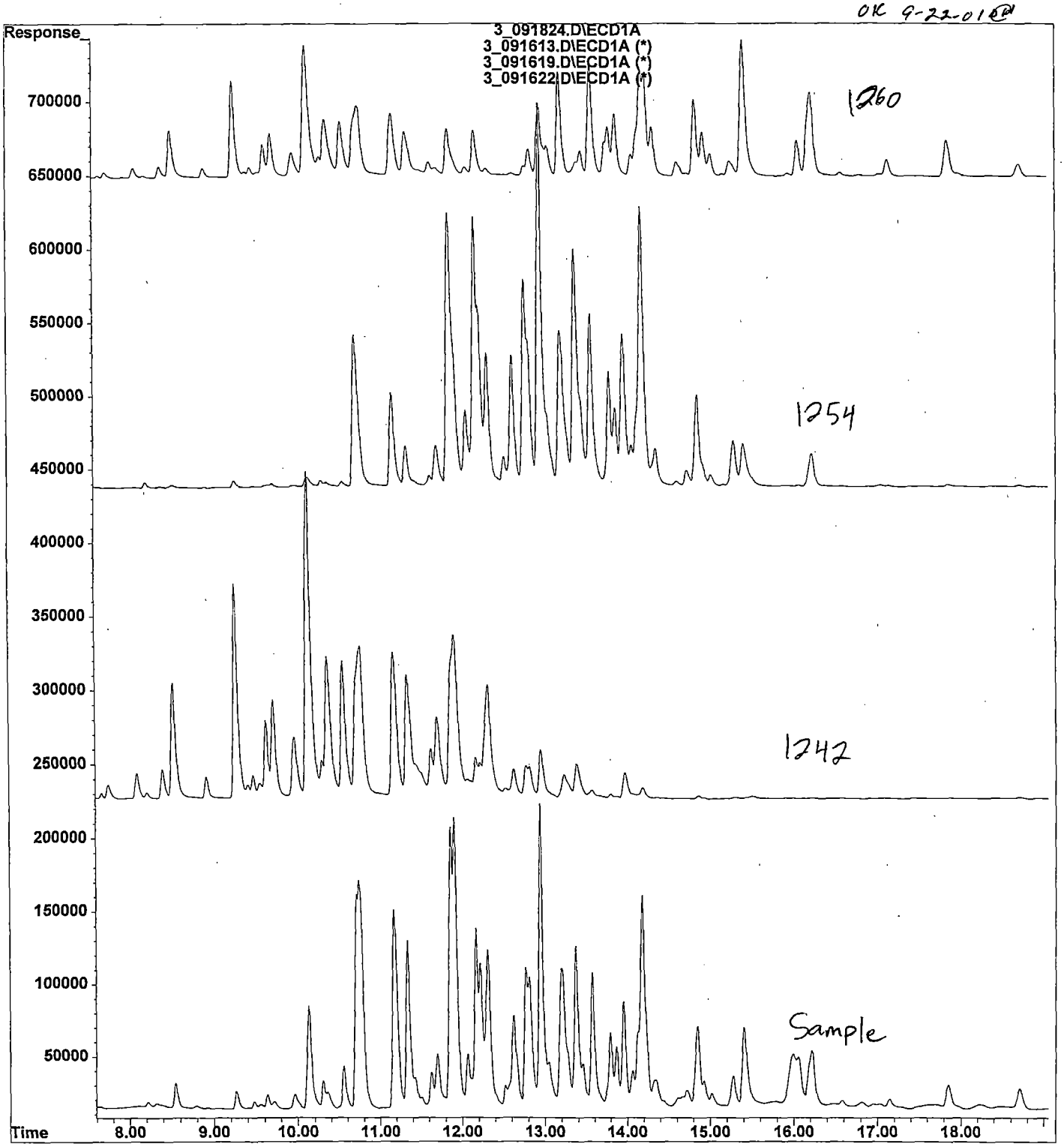
BK 9-22-01





File : F:\HPCHEM\HP\3\DATA\09_18_01\3_091824.D
Operator : BTB
Acquired : 19 Sep 2001 9:40 using AcqMethod OLM03.M
Instrument : HP_03
Sample Name: 47351.12 *E03L0 *
Misc Info : *EPA*30.2G/5.0ML*33
Vial Number: 96

OK 9-22-01



Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091824.D\ECD1A.CH Vial: 96
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091824.D\ECD2B.CH
Acq On : 19 Sep 2001 9:40 Operator: BTB
Sample : 47351.12 *E03L0 * Inst : HP_03
Misc : *EPA*30.2G/5.0ML*33 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 8:35 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

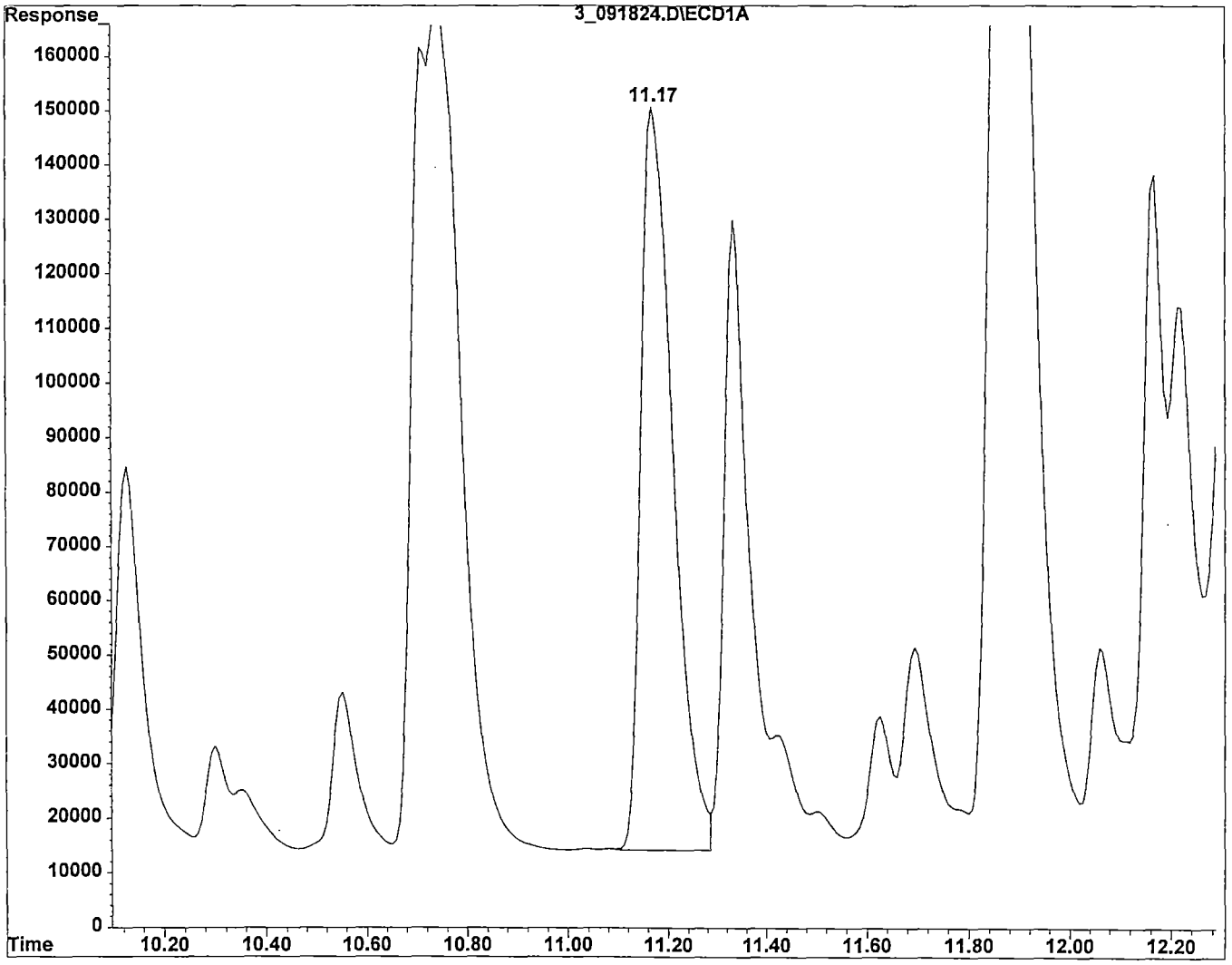
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.23	753740	236509	6.871	7.212
	Spiked Amount 9.884			Recovery	=	69.51%	72.96%
22)	S DCB	19.24	20.33	1284936	957184	11.3	19.3 #
	Spiked Amount 9.884			Recovery	=	114.32%	195.26%
	Target Compounds:						
7)	L4 Aroclor-1242	8.55	0.00	607264	0	265.3	N.D. d #
8)	L4 Aroclor-1242 {2}	9.26	9.39	389747	181763	97.7	130.8 #
9)	L4 Aroclor-1242 {3}	10.13	10.09	2665850	1150596	362.1	430.0
10)	L4 Aroclor-1242 {4}	11.17	11.27	6090048	1939348	1884.8mE BTB	2215.0 E
11)	L4 Aroclor-1242 {5}	12.31	12.35	4327481	1345656	1718.5 E 09/20/01	1731.3mE BTB 09/20/01
	Sum Aroclor-1242			14080391	4617364	4328.3	4507.2
	Average Aroclor-1242					865.670	1126.794
12)	L6 Aroclor-1254	10.71	10.66	2839974	2000910	693.9 E	2029.2 E#
13)	L6 Aroclor-1254 {2}	11.86	12.09	4842803	2288172	638.8	1030.5 E#
14)	L6 Aroclor-1254 {3}	12.17	13.02	3305737	3258898	476.9	1095.2 E#
15)	L6 Aroclor-1254 {4}	12.94	13.45	6576915	1984029	823.4 E	1207.8 E#
16)	L6 Aroclor-1254 {5}	14.18	14.24	7164772	3205487	1107.6 E	1457.8 E#
	Sum Aroclor-1254			24730201	12737496	3740.6	6820.5
	Average Aroclor-1254					748.127	1364.110
17)	L7 Aroclor-1260	12.94	13.32	6576915	1532270	1522.1 E	601.8 #
18)	L7 Aroclor-1260 {2}	13.57	14.07	3032440	1205780	461.4m	725.6 E#
19)	L7 Aroclor-1260 {3}	14.85	15.04	2173658	387537	517.1	177.4 #
20)	L7 Aroclor-1260 {4}	15.40	16.43	2414466	736105	255.3	328.7 #
21)	L7 Aroclor-1260 {5}	16.22	17.76	2067027	593159	287.0	375.7 #
	Sum Aroclor-1260			16264505	4454852	1503.8	1091.8
	Average Aroclor-1260					608.576	441.822

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091824.D
Date Acquired: 19 Sep 2001 9:40
Inst: HP_03 Operator ID: BTB
Name: 47351.12 *E03L0 *
Misc: *EPA*30.2G/5.0ML*33
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:35 2001 Quant Results File: XPCBI16.RES



ok 9-22-01 BB

Aroclor-1242 {4} 11.17min area: 6090048 m

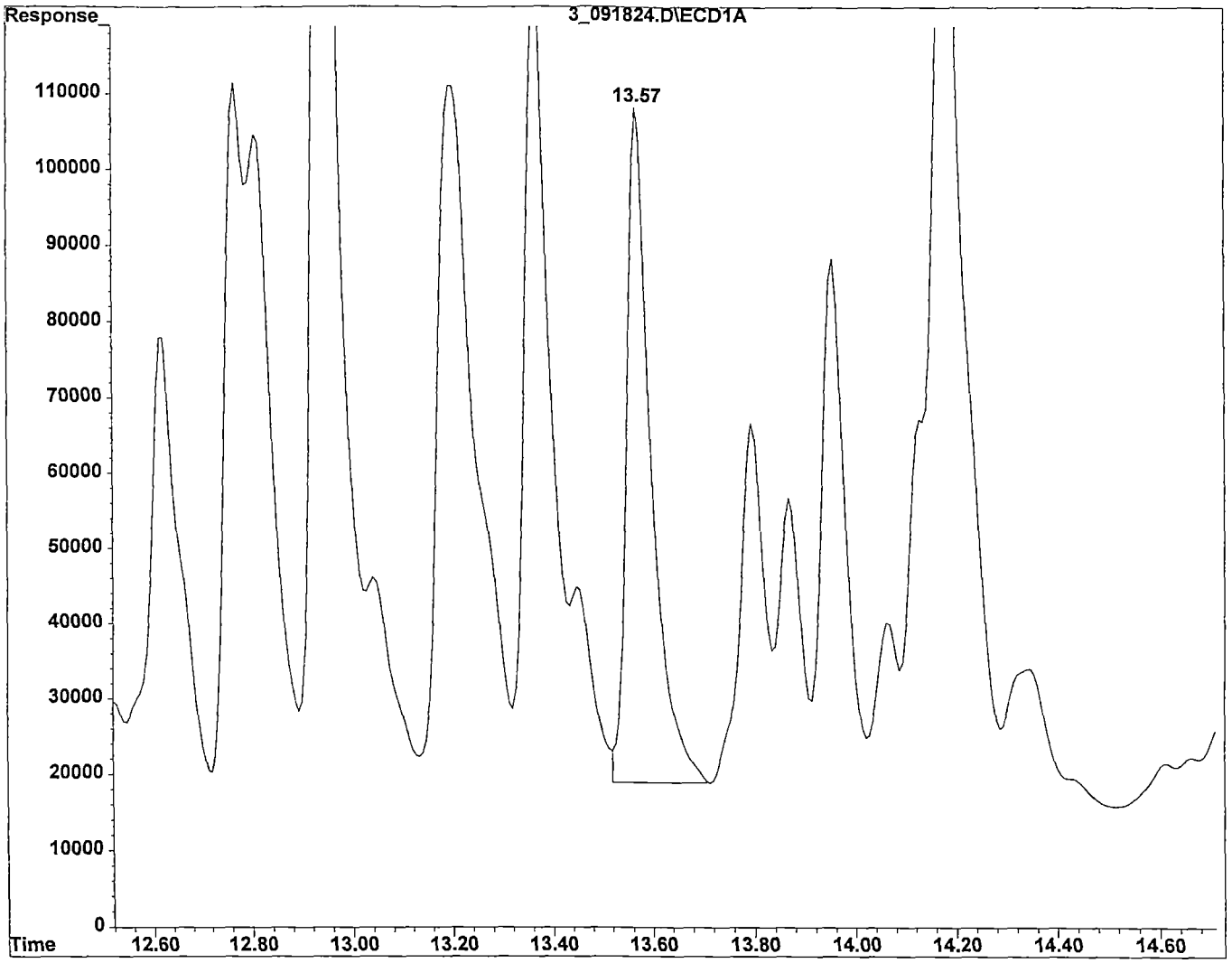
BTB 092001

Integration Time Range: 11.10 - 11.29

F:\HPCHEM\HP\3\DATA\09_18_01\3_091824.D
Report generated: Thu Sep 20 08:46:57 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091824.D
Date Acquired: 19 Sep 2001 9:40
Inst: HP_03 Operator ID: BTB
Name: 47351.12 *E03L0 *
Misc: *EPA*30.2G/5.0ML*33
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:35 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1260 {2} 13.57min area: 3032440 m

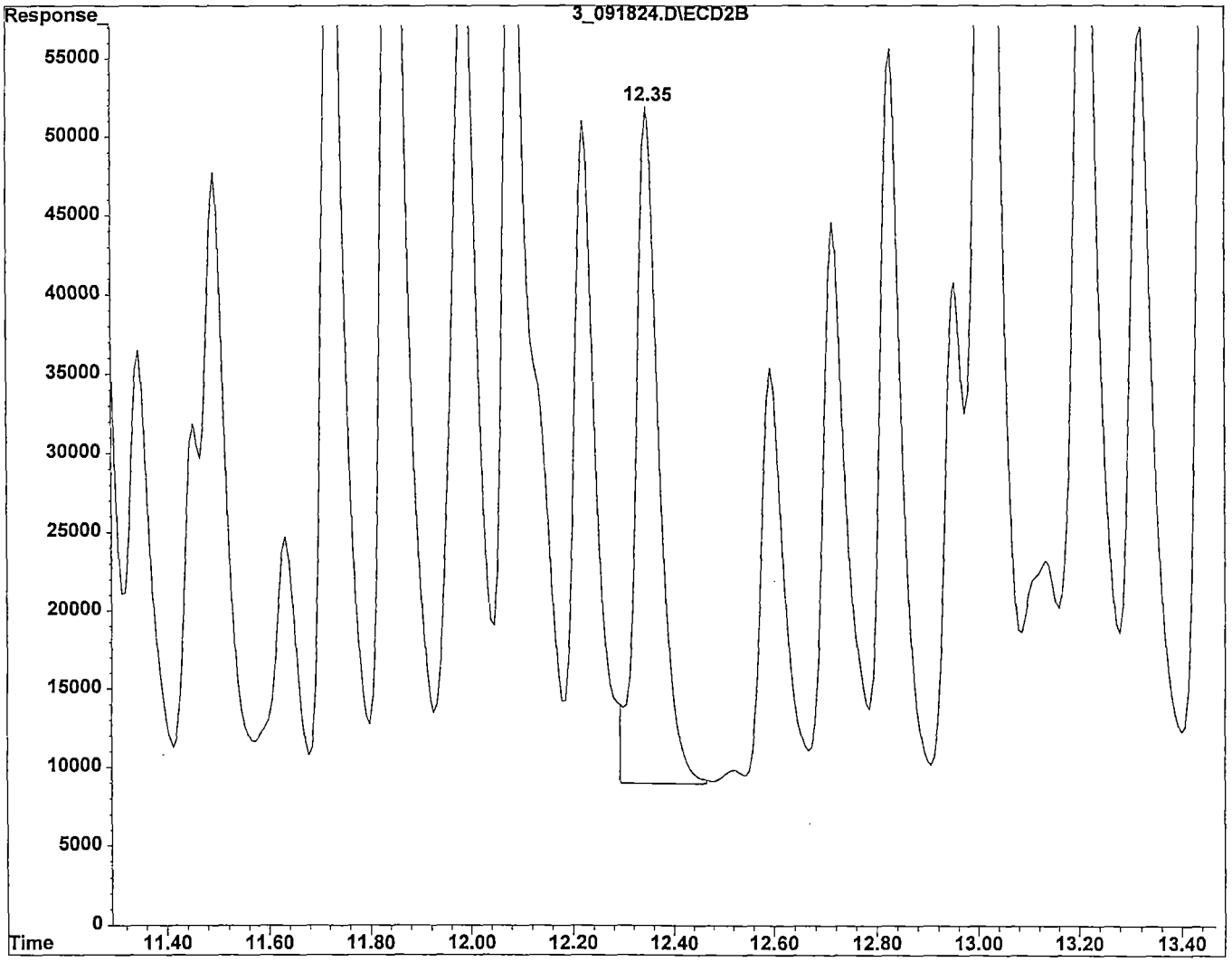
Integration Time Range: 13.52 - 13.71

BTB 092001

F:\HPCHEM\HP\3\DATA\09_18_01\3_091824.D
Report generated: Thu Sep 20 08:46:58 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091824.D
Date Acquired: 19 Sep 2001 9:40
Inst: HP_03 Operator ID: BTB
Name: 47351.12 *E03L0 *
Misc: *EPA*30.2G/5.0ML*33
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:35 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1242 {5} #2 12.35min area: 1345656 m

Integration Time Range: 12.29 - 12.47

BTB 092001

F:\HPCHEM\HP\3\DATA\09_18_01\3_091824.D
Report generated: Thu Sep 20 08:46:59 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03L0DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.12DL

Sample wt/vol: 30.2 (g/mL) G Lab File ID:_____

% Moisture: 33 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/21/01

Injection Volume: 0.5(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 7.4 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	490	U
11104-28-2	Aroclor-1221	490	U
11141-16-5	Aroclor-1232	490	U
53469-21-9	Aroclor-1242	1500	D
12672-29-6	Aroclor-1248	490	U
11097-69-1	Aroclor-1254	2000	D
11096-82-5	Aroclor-1260	590	DP
Surrogate amount spiked		9.88	

TBS
10-12-01

FORM I PCB

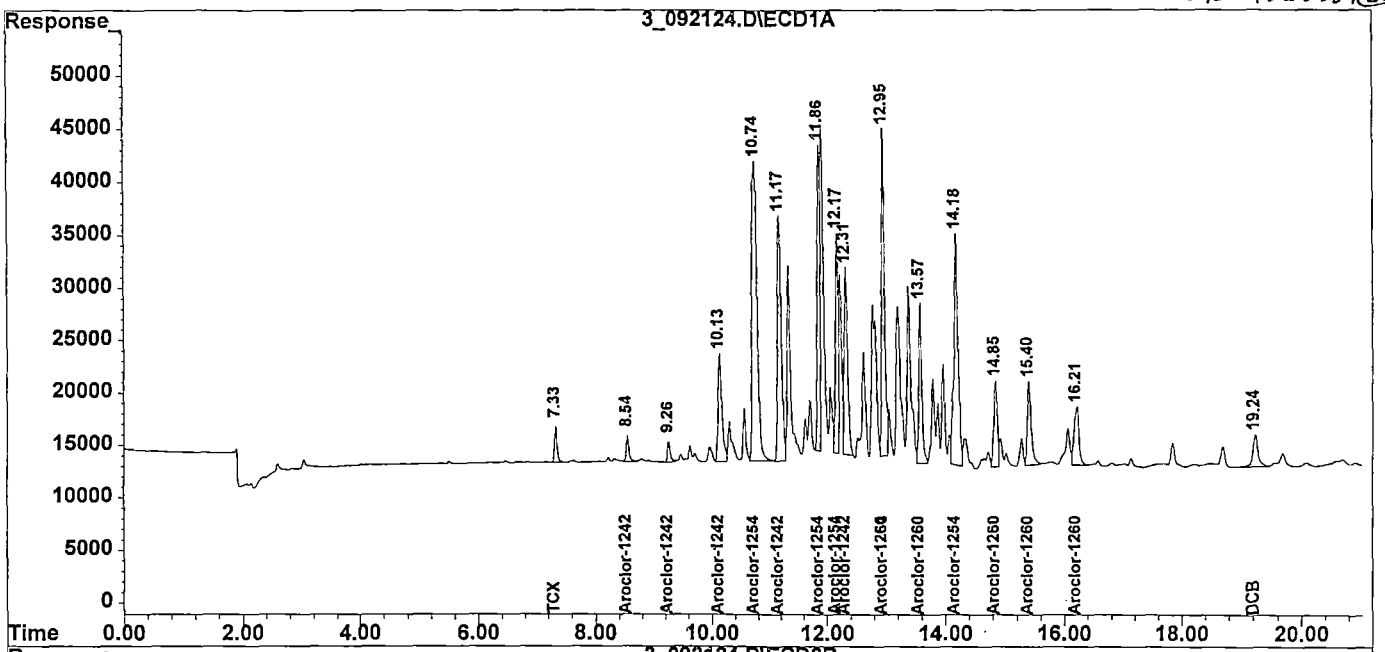
Chromatographic Report

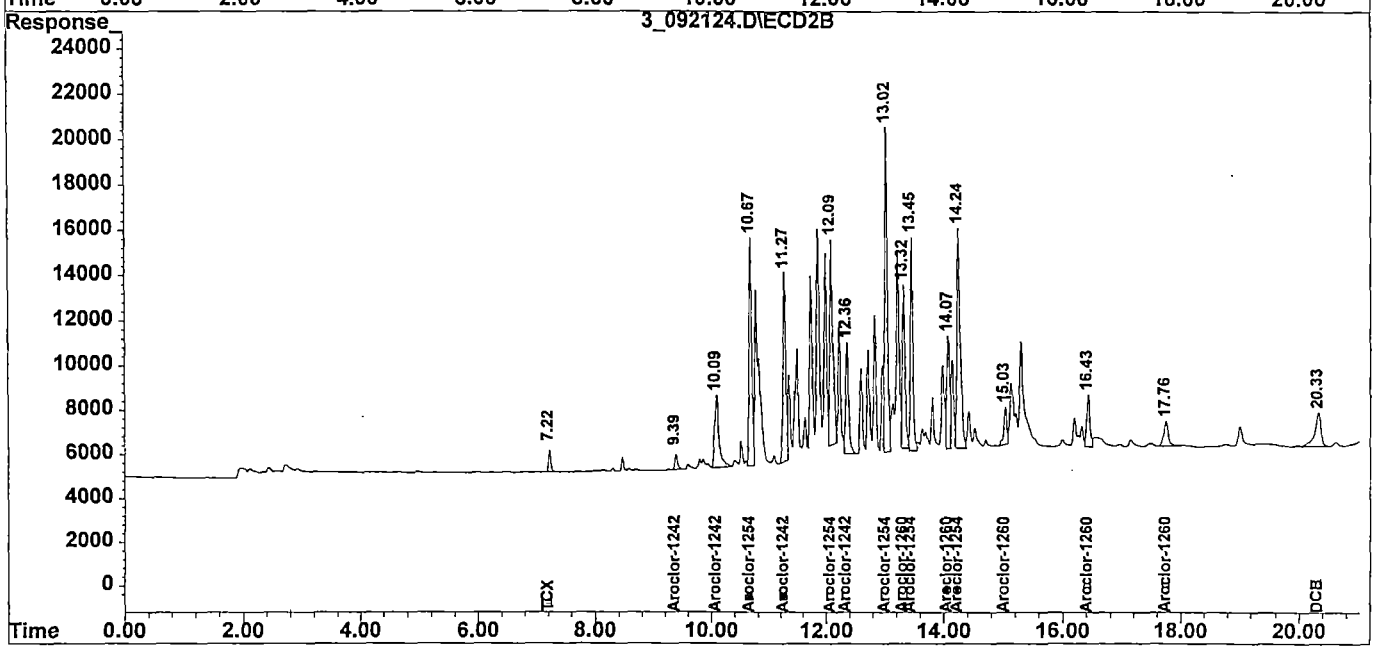
Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092124.D\ECD1A.CH Vial: 1
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092124.D\ECD2B.CH
Acq On : 21 Sep 2001 7:11 Operator: BTB
Sample : 47351.12DL *E03L0DL * Inst : HP_03
Misc : *EPA*30.2G/5.0ML*33 Dilution: 10.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 10:32 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

OK 9-22-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092124.D\ECD1A.CH Vial: 1
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092124.D\ECD2B.CH
Acq On : 21 Sep 2001 7:11 Operator: BTB
Sample : 47351.12DL *E03L0DL * Inst : HP_03
Misc : *EPA*30.2G/5.0ML*33 Dilution: 10.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 10:32 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

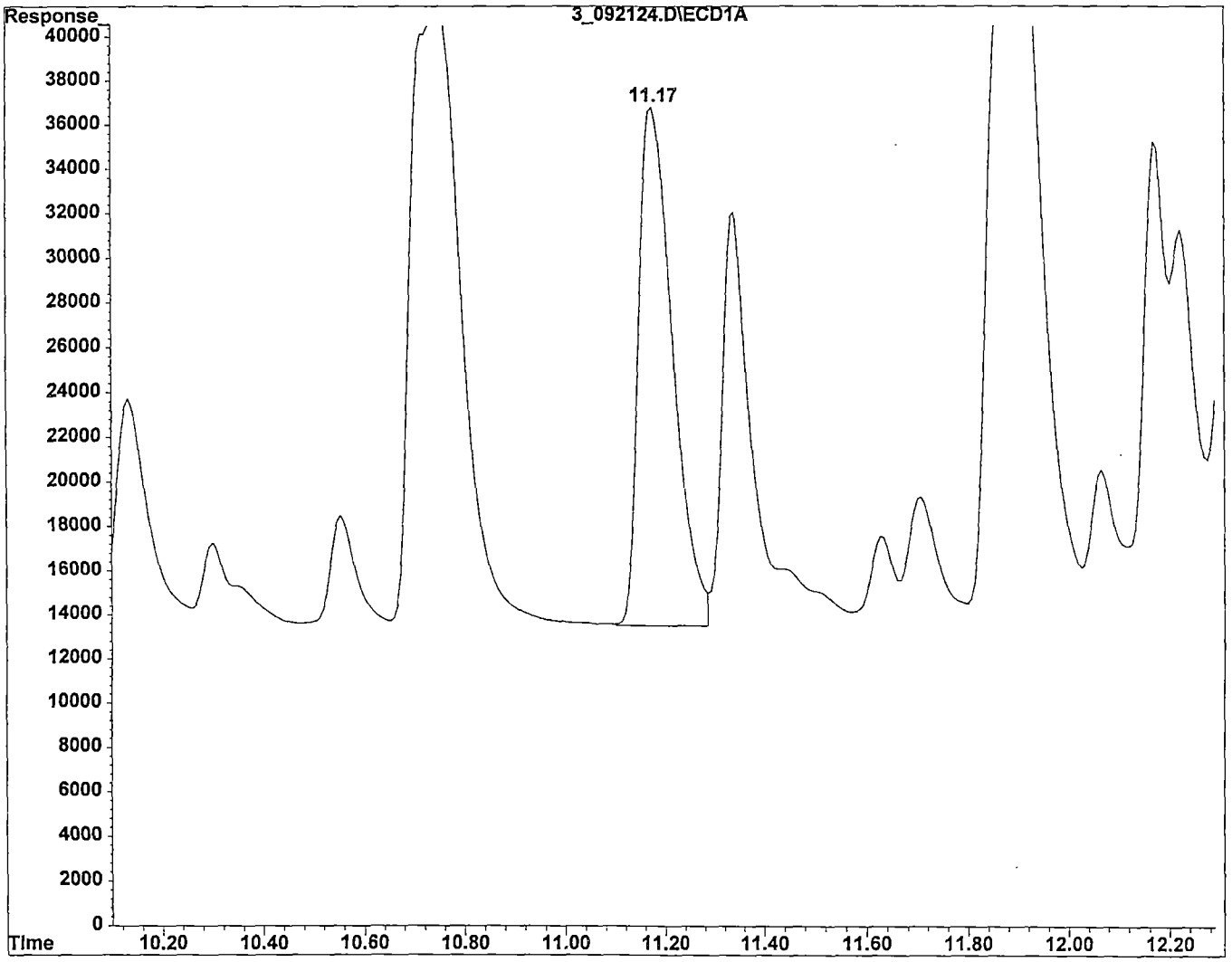
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	100014	25955	9.117	7.915
	Spiked Amount 9.884			Recovery	=	92.24%	80.08%
22)	S DCB	19.24	20.34	175085	110291	15.4	22.2 #
	Spiked Amount 9.884			Recovery	=	155.80%	224.60%
	Target Compounds:						
7)	L4 Aroclor-1242	8.54	0.00	79800	0	348.6	N.D. d #
8)	L4 Aroclor-1242 {2}	9.26	9.39	65188	23268	163.3	167.5
9)	L4 Aroclor-1242 {3}	10.14	10.09	465316	164971	632.1	616.5
10)	L4 Aroclor-1242 {4}	11.17	11.27	1105756	278931	3422.3m BTB 092101	3185.8
11)	L4 Aroclor-1242 {5}	12.32	12.35	738293	175316	2931.8	2255.6m BTB 092101
	Sum Aroclor-1242			2454353	642486	7498.0	6225.4
	Average Aroclor-1242					1499.609	1556.357
12)	L6 Aroclor-1254	10.74	10.67	1928495	317046	4712.1	3215.2 #
13)	L6 Aroclor-1254 {2}	11.87	12.09	852041	344967	1123.9	1553.6 #
14)	L6 Aroclor-1254 {3}	12.17	13.02	627877	479077	905.8	1610.0 #
15)	L6 Aroclor-1254 {4}	12.95	13.46	1088687	292196	1363.0	1778.8 #
16)	L6 Aroclor-1254 {5}	14.18	14.25	1102844	407823	1704.8	1854.7
	Sum Aroclor-1254			5599943	1841109	9809.7	10012.4
	Average Aroclor-1254					1961.941	2002.487
17)	L7 Aroclor-1260	12.95	13.32	1088687	235120	2519.6	923.4m #
18)	L7 Aroclor-1260 {2}	13.57	14.08	542484	167810	825.4m	1009.9
19)	L7 Aroclor-1260 {3}	14.85	15.04	331966	54897	789.8	251.3 #
20)	L7 Aroclor-1260 {4}	15.41	16.43	358647	88620	379.2	395.7
21)	L7 Aroclor-1260 {5}	16.22	17.76	329729	58253	457.8	368.9
	Sum Aroclor-1260			2651512	604699	24571.0	14575.2
	Average Aroclor-1260					994.341	589.829

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092124.D
Date Acquired: 21 Sep 2001 7:11
Inst: HP_03 Operator ID: BTB
Name: 47351.12DL *E03L0DL *
Misc: *EPA*30.2G/5.0ML*33
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:32 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

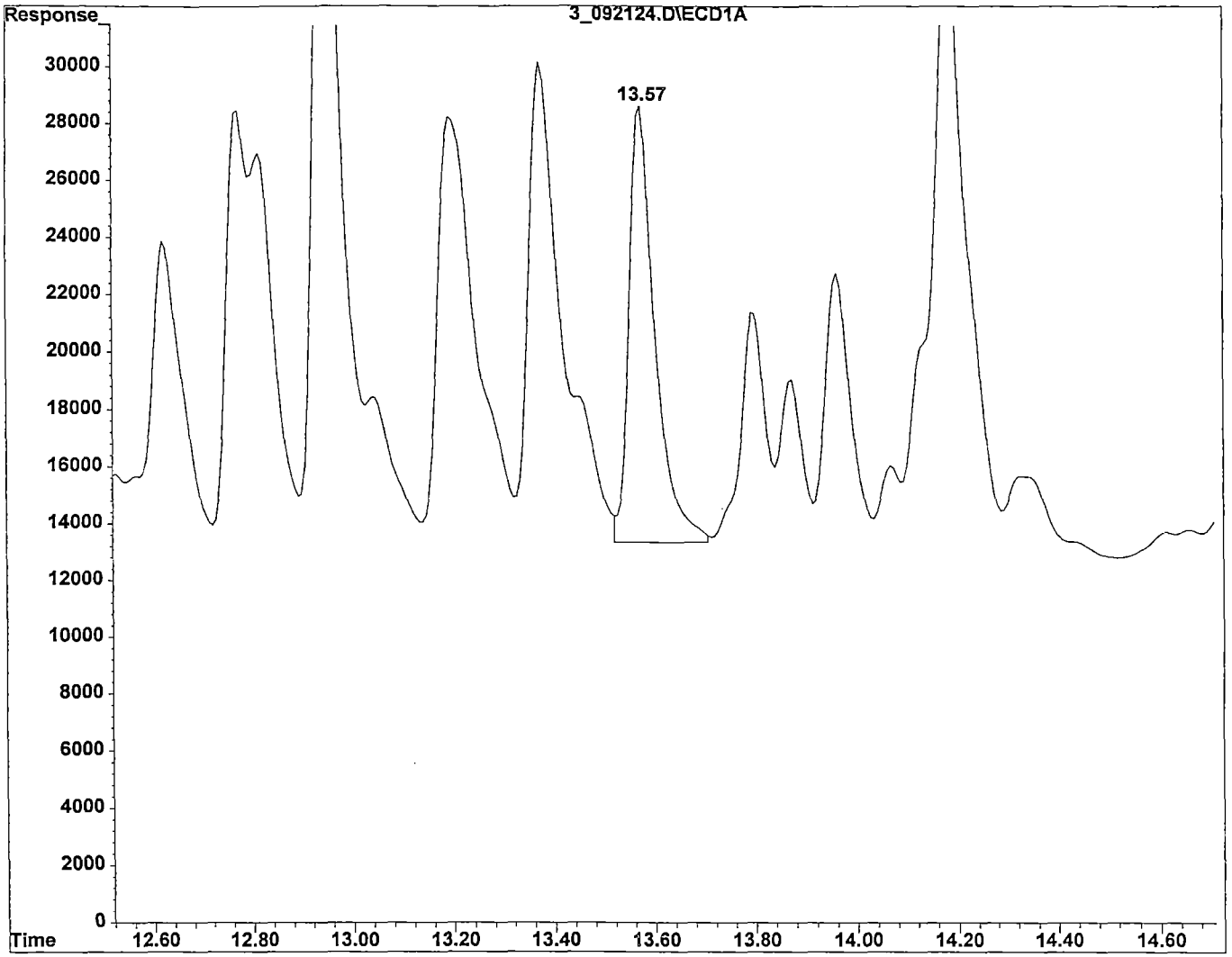
Aroclor-1242 {4} 11.17min area: 1105756 m

Integration Time Range: 11.10 - 11.29

F:\HPCHEM\HP\3\DATA\09_21_01\3_092124.D
Report generated: Fri Sep 21 10:45:15 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092124.D
Date Acquired: 21 Sep 2001 7:11
Inst: HP_03 Operator ID: BTB
Name: 47351.12DL *E03L0DL *
Misc: *EPA*30.2G/5.0ML*33
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:32 2001 Quant Results File: XPCBI16.RES



OK 9-22-01 BH

Aroclor-1260 {2} 13.57min area: 542484 m

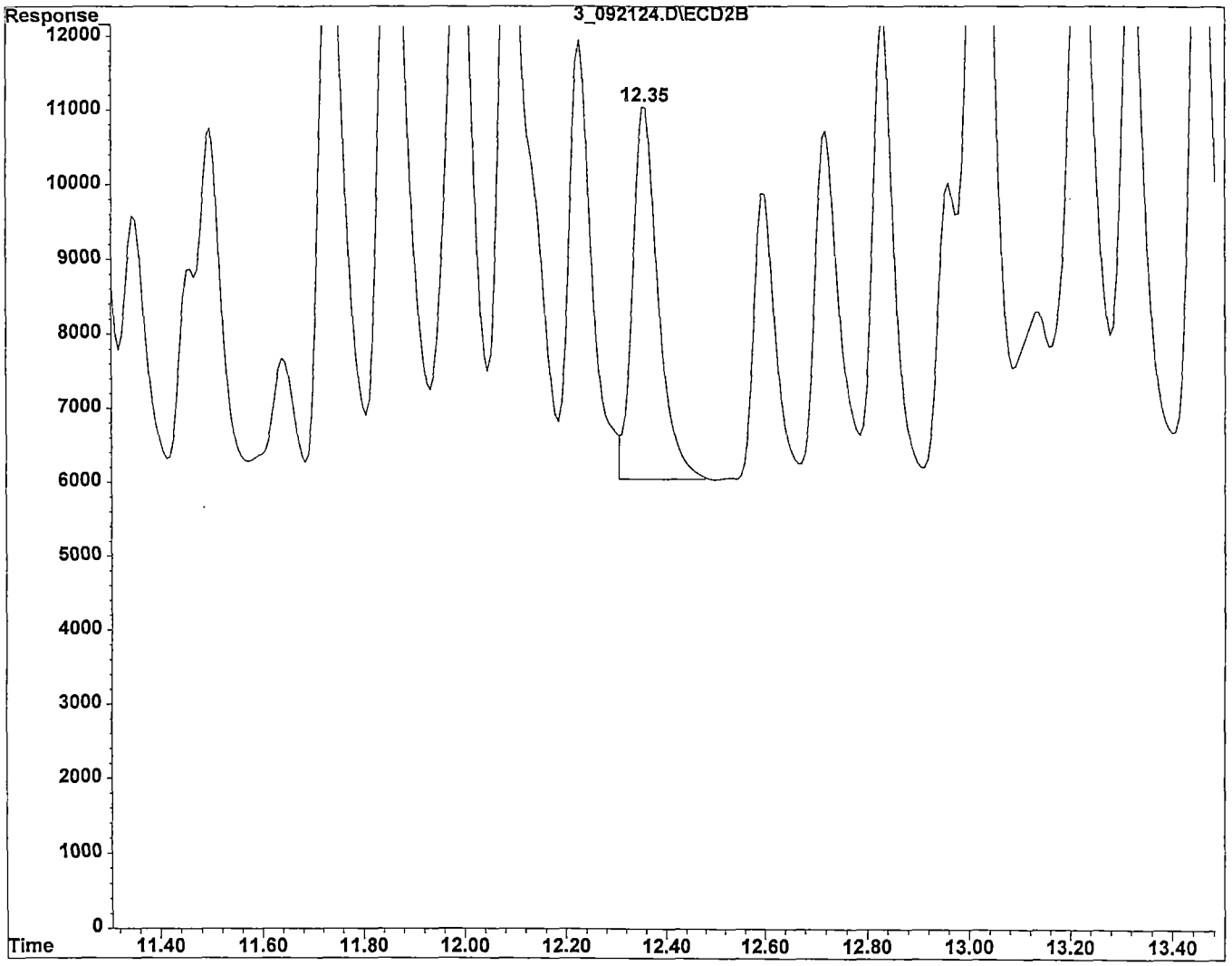
BTB 092101

Integration Time Range: 13.52 - 13.71

F:\HPCHEM\HP\3\DATA\09_21_01\3_092124.D
Report generated: Fri Sep 21 10:45:16 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092124.D
Date Acquired: 21 Sep 2001 7:11
Inst: HP_03 Operator ID: BTB
Name: 47351.12DL *E03L0DL *
Misc: *EPA*30.2G/5.0ML*33
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:32 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1242 {5} #2 12.35min area: 175316 m

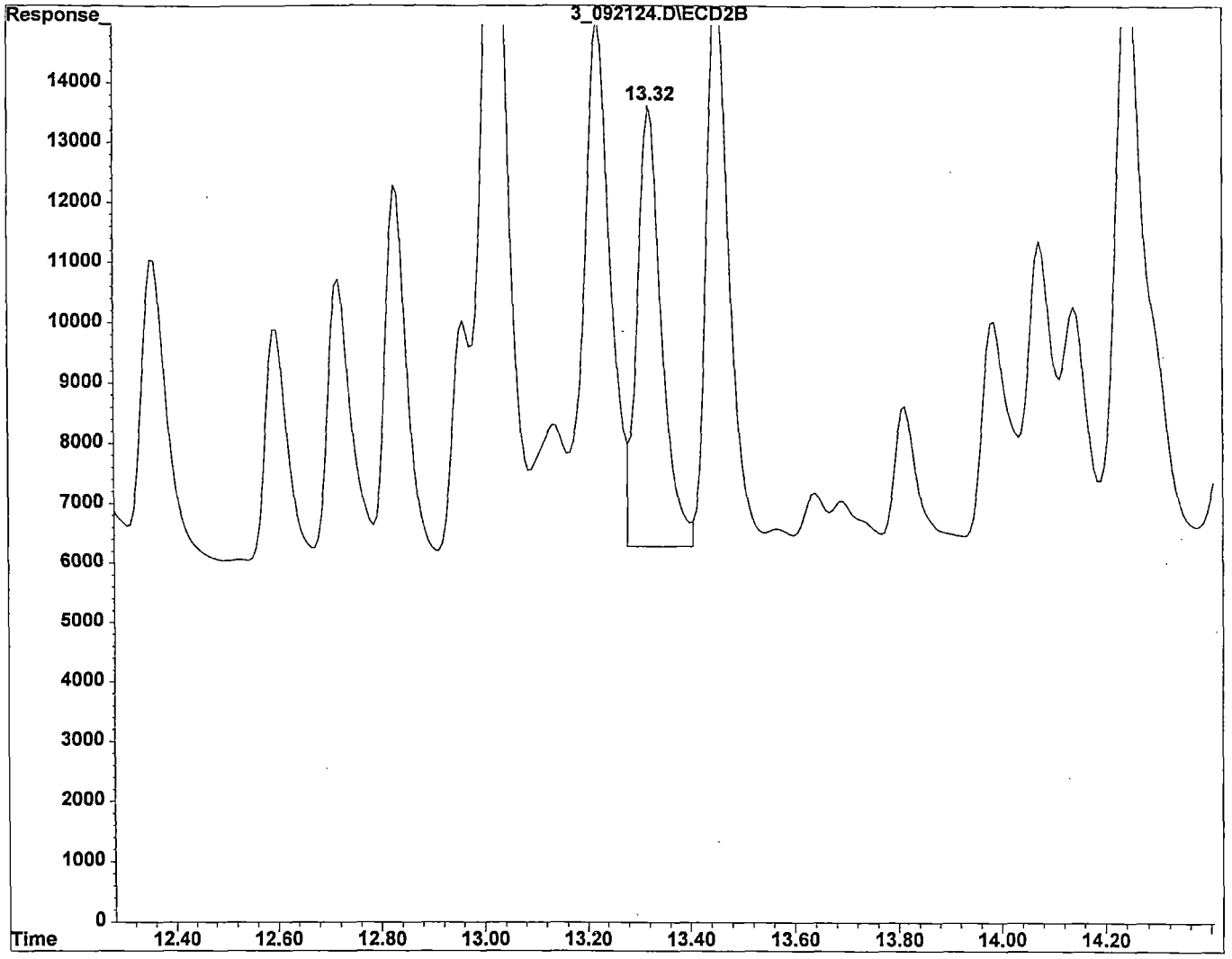
Integration Time Range: 12.31 - 12.48

BTB 092101

F:\HPCHEM\HP\3\DATA\09_21_01\3_092124.D
Report generated: Fri Sep 21 10:45:16 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092124.D
Date Acquired: 21 Sep 2001 7:11
Inst: HP_03 Operator ID: BTB
Name: 47351.12DL *E03L0DL *
Misc: *EPA*30.2G/5.0ML*33
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:32 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1260 #2 13.32min area: 235120 m

BTB 09210

Integration Time Range: 13.28 - 13.40

F:\HPCHEM\HP\3\DATA\09_21_01\3_092124.D
Report generated: Fri Sep 21 10:45:17 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03L1

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.13

Sample wt/vol: 30.2 (g/mL) G Lab File ID:_____

% Moisture: 39 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	54	UJ
11104-28-2	Aroclor-1221	54	UJ
11141-16-5	Aroclor-1232	54	UJ
53469-21-9	Aroclor-1242	130	J
12672-29-6	Aroclor-1248	54	UJ
11097-69-1	Aroclor-1254	160	PJ
11096-82-5	Aroclor-1260	75	J
Surrogate amount spiked		10.86	

365

TBS
10-12-01

FORM I PCB

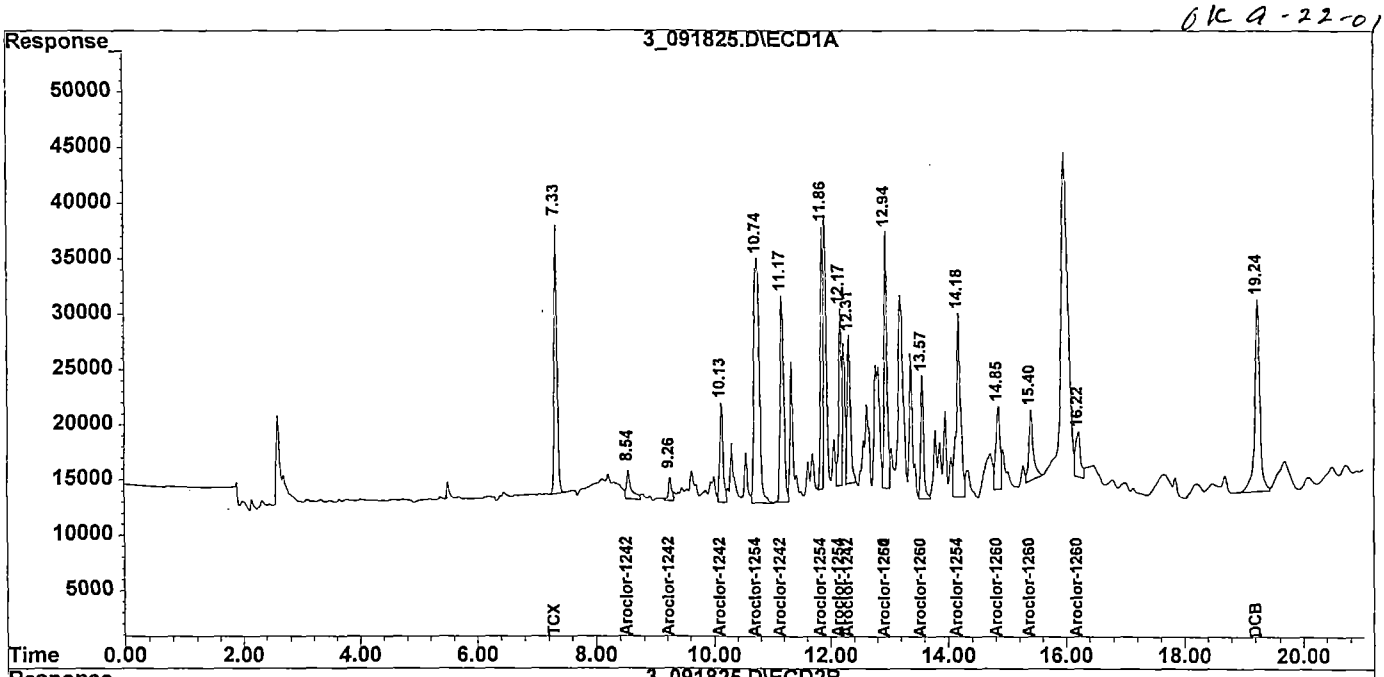
Chromatographic Report

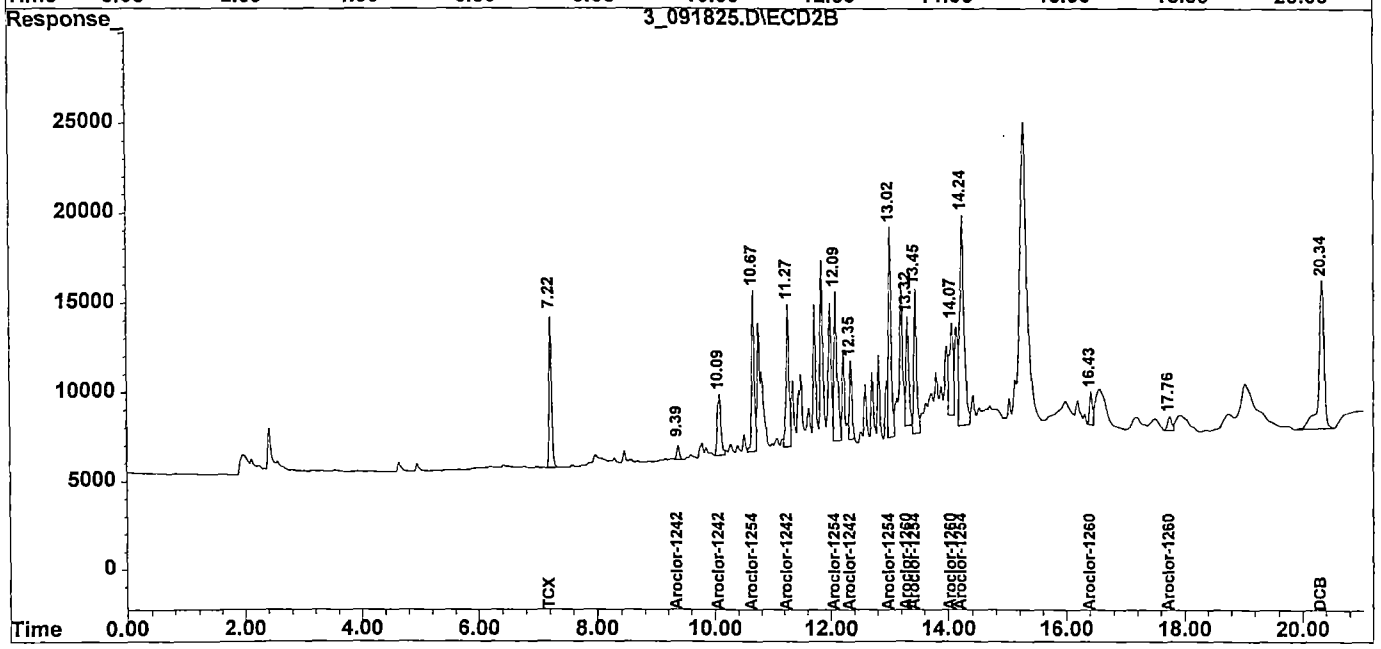
Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091825.D\ECD1A.CH Vial: 97
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091825.D\ECD2B.CH
Acq On : 19 Sep 2001 10:06 Operator: BTB
Sample : 47351.13 *E03L1 * Inst : HP_03
Misc : *EPA*30.2G/5.0ML*39 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 8:38 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

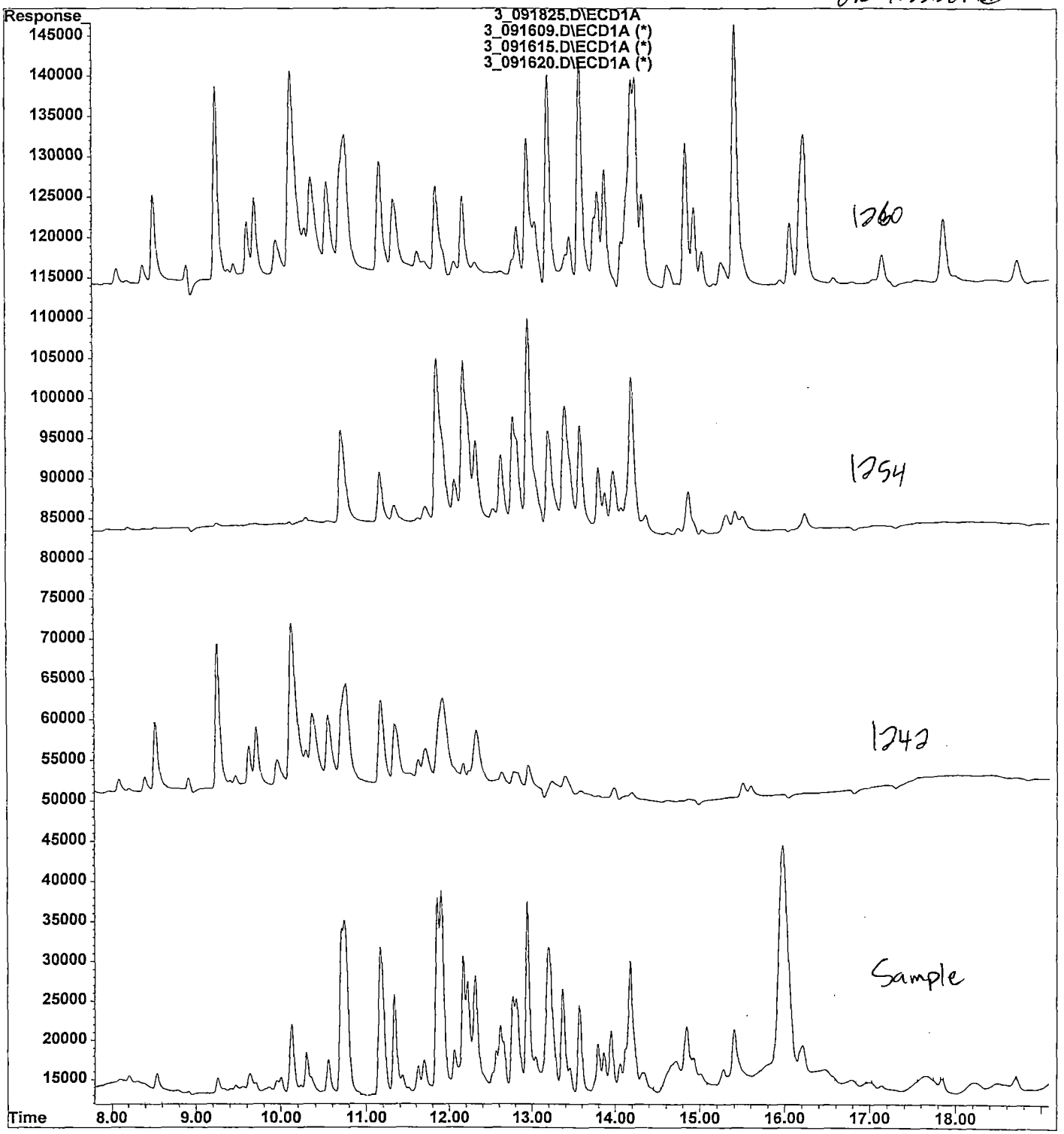
OK 9-22-01





File : F:\HPCHEM\HP\3\DATA\09_18_01\3_091825.D
Operator : BTB
Acquired : 19 Sep 2001 10:06 using AcqMethod OLM03.M
Instrument : HP_03
Sample Name: 47351.13 *E03L1 *
Misc Info : *EPA*30.2G/5.0ML*39
Vial Number: 97

OK 9-22-01



Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091825.D\ECD1A.CH Vial: 97
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091825.D\ECD2B.CH
Acq On : 19 Sep 2001 10:06 Operator: BTB
Sample : 47351.13 *E03L1 * Inst : HP_03
Misc : *EPA*30.2G/5.0ML*39 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 8:38 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

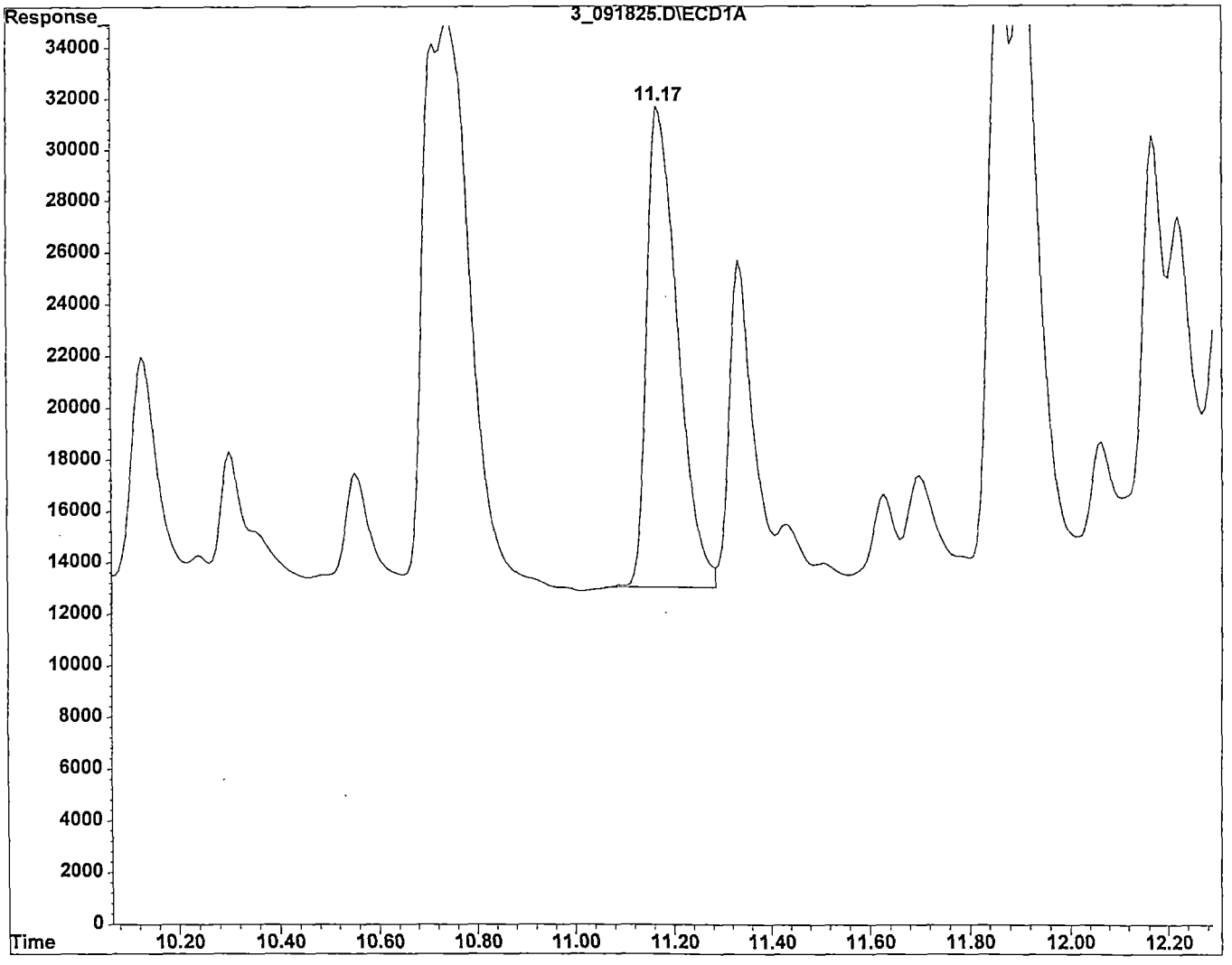
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	793261	244919	7.942	8.203
	Spiked Amount 10.857			Recovery	=	73.15%	75.56%
22)	S DCB	19.24	20.34	1033827	539986	9.975	12.0
	Spiked Amount 10.857			Recovery	=	91.88%	110.53%
	Target Compounds:						
7)	L4 Aroclor-1242	8.54	0.00	142719	0	68.5	N.D. d #
8)	L4 Aroclor-1242 {2}	9.26	9.39	79349	25718	21.8	20.3
9)	L4 Aroclor-1242 {3}	10.13	10.09	343345	148861	51.2	61.1
10)	L4 Aroclor-1242 {4}	11.17	11.27	826752	267435	281.0m BTB	335.5
11)	L4 Aroclor-1242 {5}	12.31	12.35	560566	128924	244.5 092001	182.2 #
	Sum Aroclor-1242			1952731	570938	667.1	599.1
	Average Aroclor-1242					133.417	149.780
12)	L6 Aroclor-1254	10.74	10.67	1460968	277783	392.1	309.4
13)	L6 Aroclor-1254 {2}	11.86	12.09	623414	329375	90.3	162.9 #
14)	L6 Aroclor-1254 {3}	12.17	13.02	470278	373405	74.5	137.8 #
15)	L6 Aroclor-1254 {4}	12.95	13.45	777696	261335	106.9	174.7 #
16)	L6 Aroclor-1254 {5}	14.18	14.24	844966	591950	143.5	295.7 #
	Sum Aroclor-1254			4177323	1833847	807.3	1080.6
	Average Aroclor-1254					161.468	216.123
17)	L7 Aroclor-1260	12.95	13.32	777696	200792	197.7	86.6m # BTB
18)	L7 Aroclor-1260 {2}	13.57	14.07	374852	239416	62.6m	158.2m # 092001
19)	L7 Aroclor-1260 {3}	14.85	0.00	354907	0	92.7	N.D. d #
20)	L7 Aroclor-1260 {4}	15.41	16.43	329724	62388	38.3	30.6
21)	L7 Aroclor-1260 {5}	16.22	17.76	250164	37496	38.1	26.1 #
	Sum Aroclor-1260			2087343	540092	233.1	163.7
	Average Aroclor-1260					85.902	75.385

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091825.D
Date Acquired: 19 Sep 2001 10:06
Inst: HP_03 Operator ID: BTB
Name: 47351.13 *E03L1 *
Misc: *EPA*30.2G/5.0ML*39
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:38 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1242 {4} 11.17min area: 826752 m

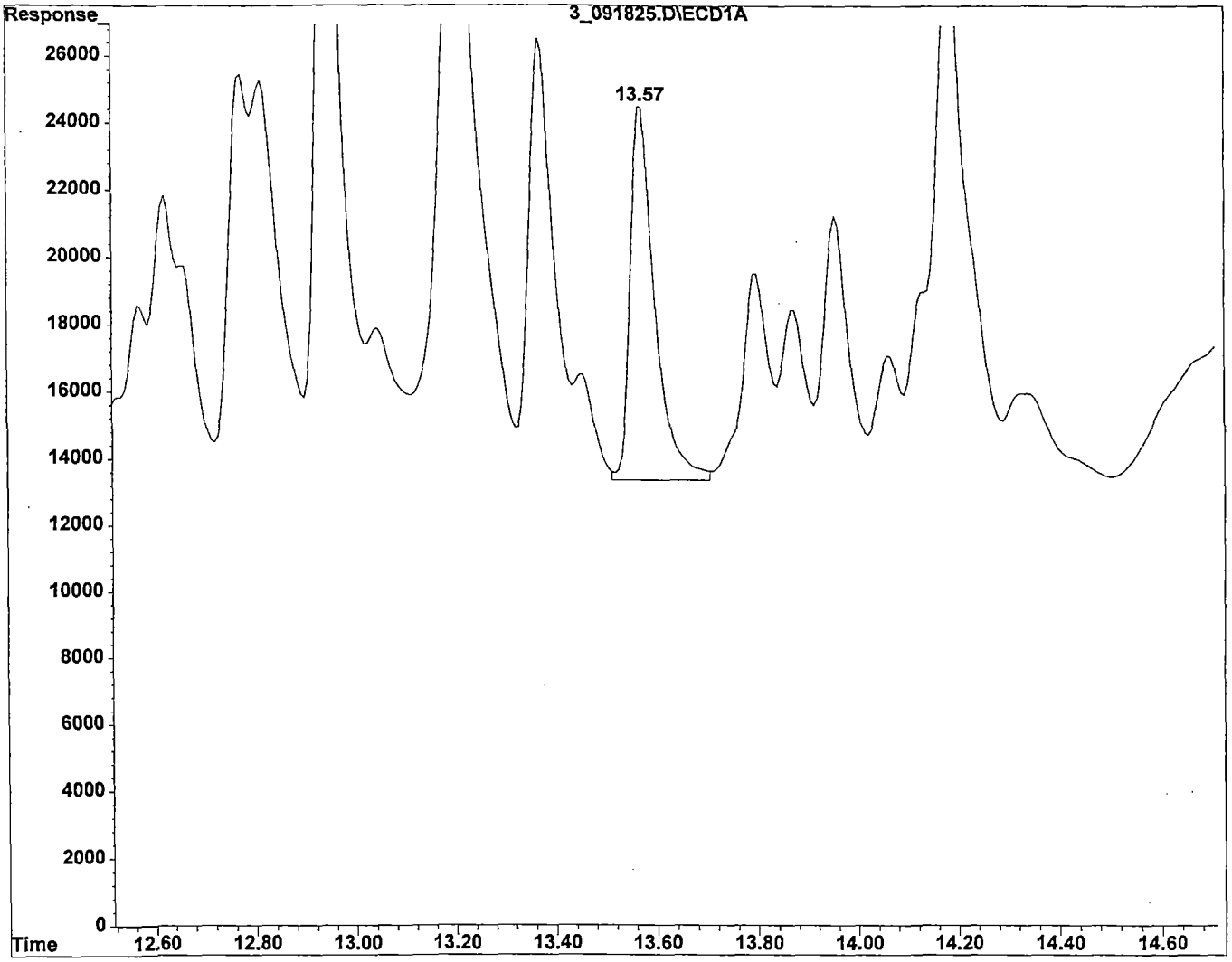
Integration Time Range: 11.06 - 11.29

BTB 09/20/01

F:\HPCHEM\HP\3\DATA\09_18_01\3_091825.D
Report generated: Thu Sep 20 08:47:00 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091825.D
Date Acquired: 19 Sep 2001 10:06
Inst: HP_03 Operator ID: BTB
Name: 47351.13 *E03L1 *
Misc: *EPA*30.2G/5.0ML*39
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:38 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1260 {2} 13.57min area: 374852 m

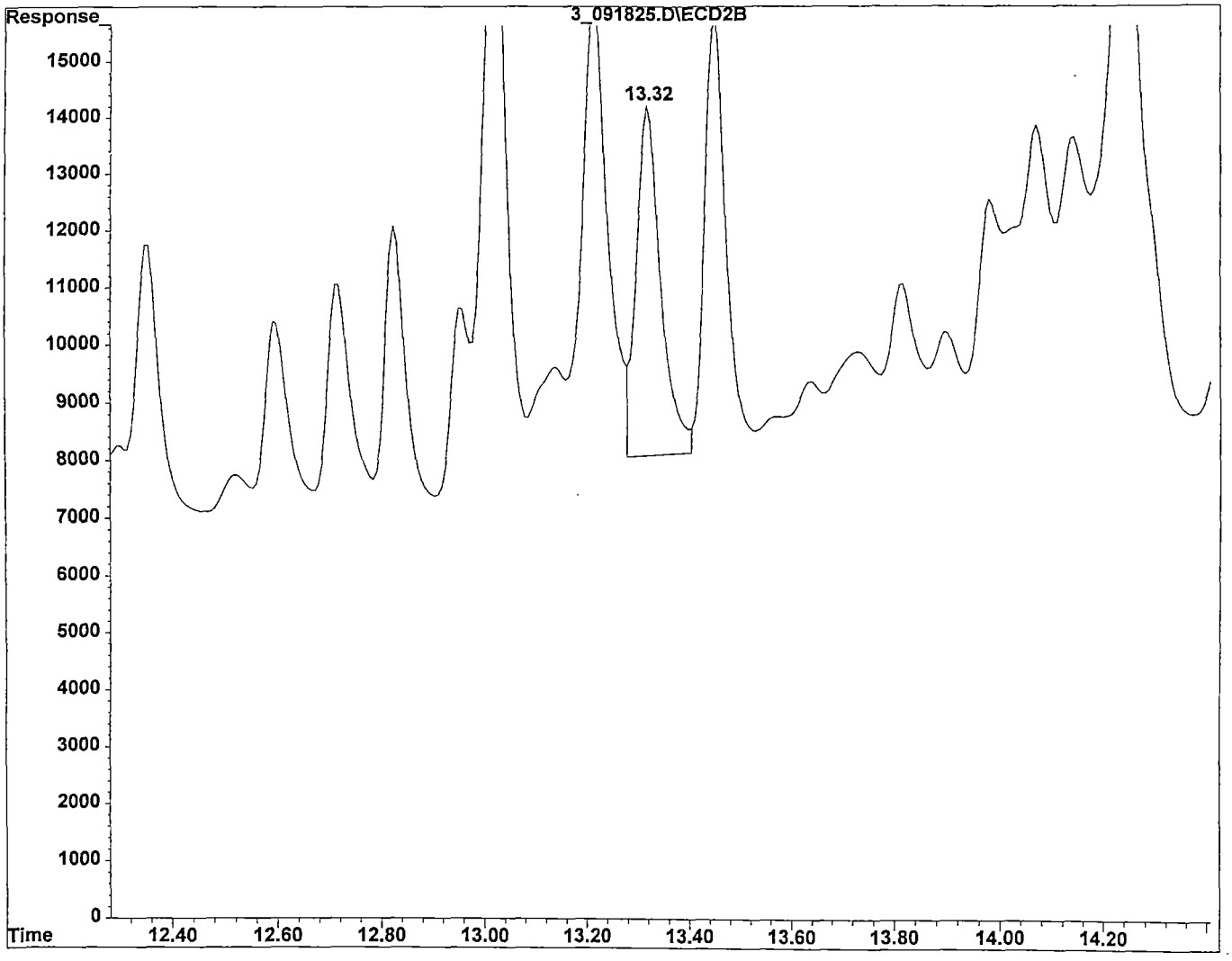
Integration Time Range: 13.51 - 13.71

BTB 092001

\HPCHEM\HP\3\DATA\09_18_01\3_091825.D
ort generated: Thu Sep 20 08:47:01 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091825.D
Date Acquired: 19 Sep 2001 10:06
Inst: HP_03 Operator ID: BTB
Name: 47351.13 *E03L1 *
Misc: *EPA*30.2G/5.0ML*39
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:38 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

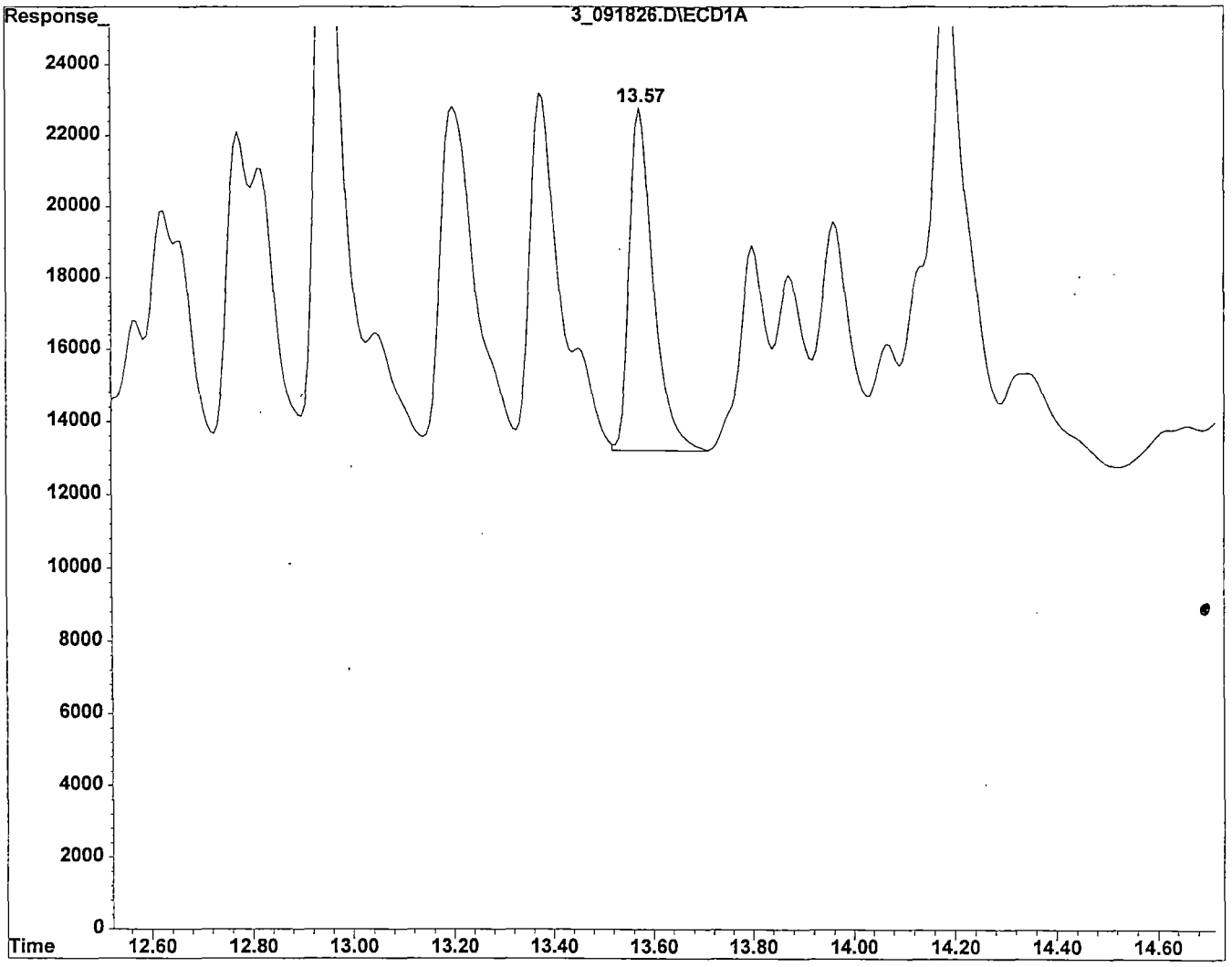
Aroclor-1260 #2 13.32min area: 200792 m

Integration Time Range: 13.28 - 13.41

BTB 092001

F:\HPCHEM\HP\3\DATA\09_18_01\3_091825.D
Report generated: Thu Sep 20 08:47:01 2001

Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:42 2001 Quant Results File: XPCBI16.RES



ok 9-22-01 EH

Aroclor-1260 {2} 13.57min area: 315516 m

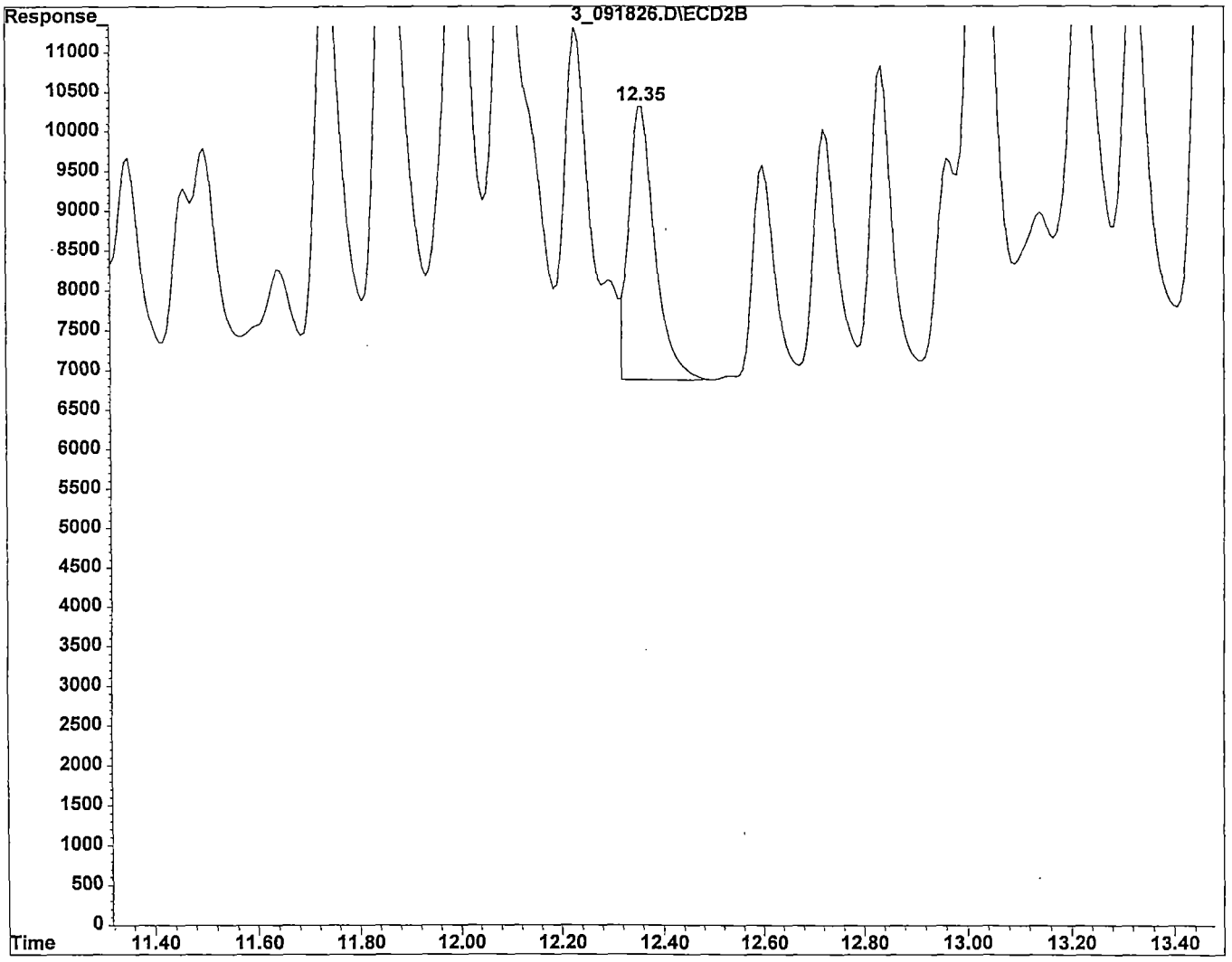
Integration Time Range: 13.52 - 13.71

BTB 092001

F:\HPCHEM\HP\3\DATA\09_18_01\3_091826.D
Report generated: Thu Sep 20 08:47:04 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091826.D
Date Acquired: 19 Sep 2001 10:32
Inst: HP_03 Operator ID: BTB
Name: 47351.14 *E03L2 *
Misc: *EPA*30.2G/5.0ML*25
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:42 2001 Quant Results File: XPCBI16.RES



ok 9-22-01 BH

Aroclor-1242 {5} #2 12.35min area: 118408 m

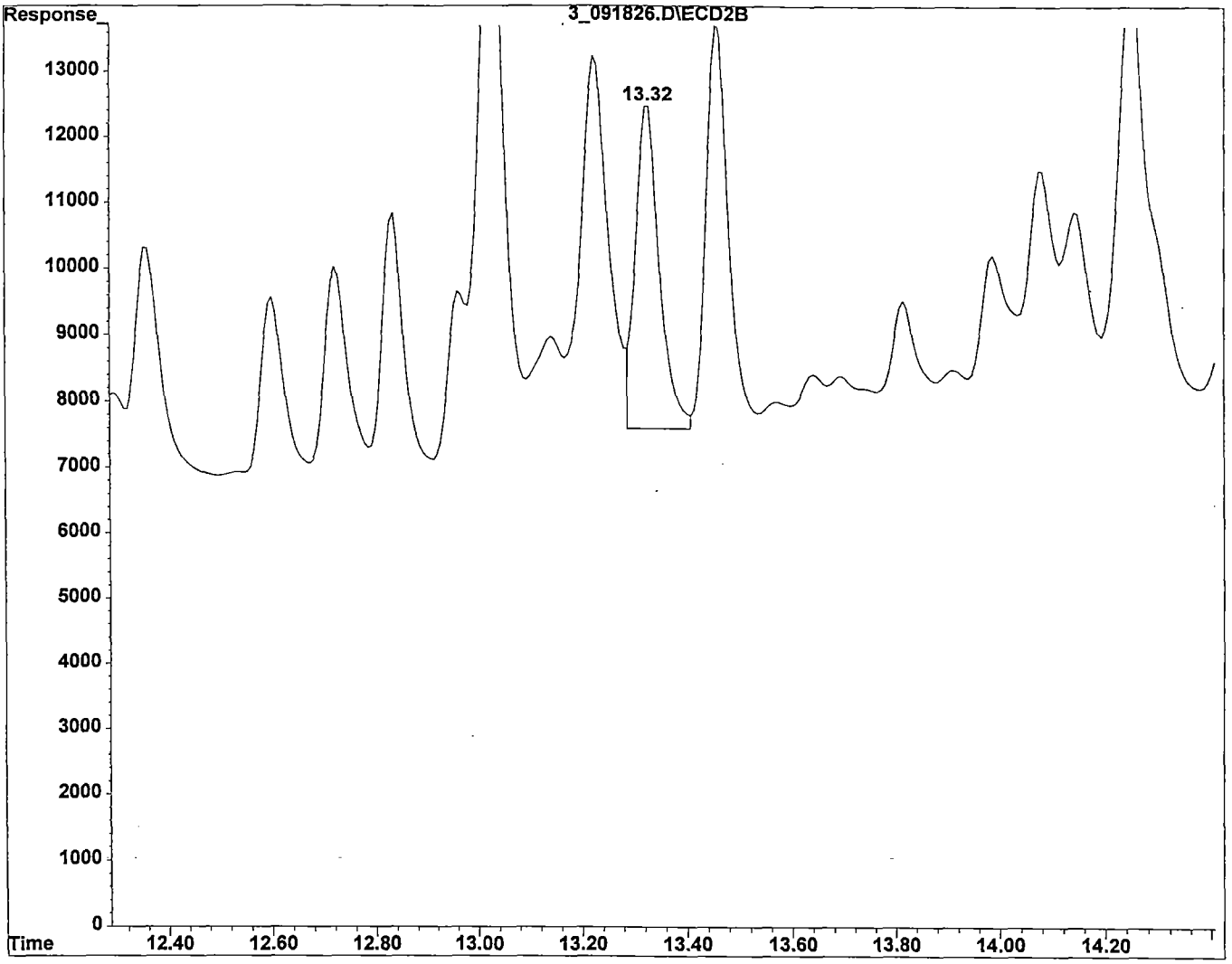
Integration Time Range: 12.32 - 12.48

BTB
092001

F:\HPCHEM\HP\3\DATA\09_18_01\3_091826.D
Report generated: Thu Sep 20 08:47:04 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091826.D
Date Acquired: 19 Sep 2001 10:32
Inst: HP_03 Operator ID: BTB
Name: 47351.14 *E03L2 *
Misc: *EPA*30.2G/5.0ML*25
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:42 2001 Quant Results File: XPCBI16.RES



OK 9-22-01 BTB

Aroclor-1260 #2 13.32min area: 152256 m

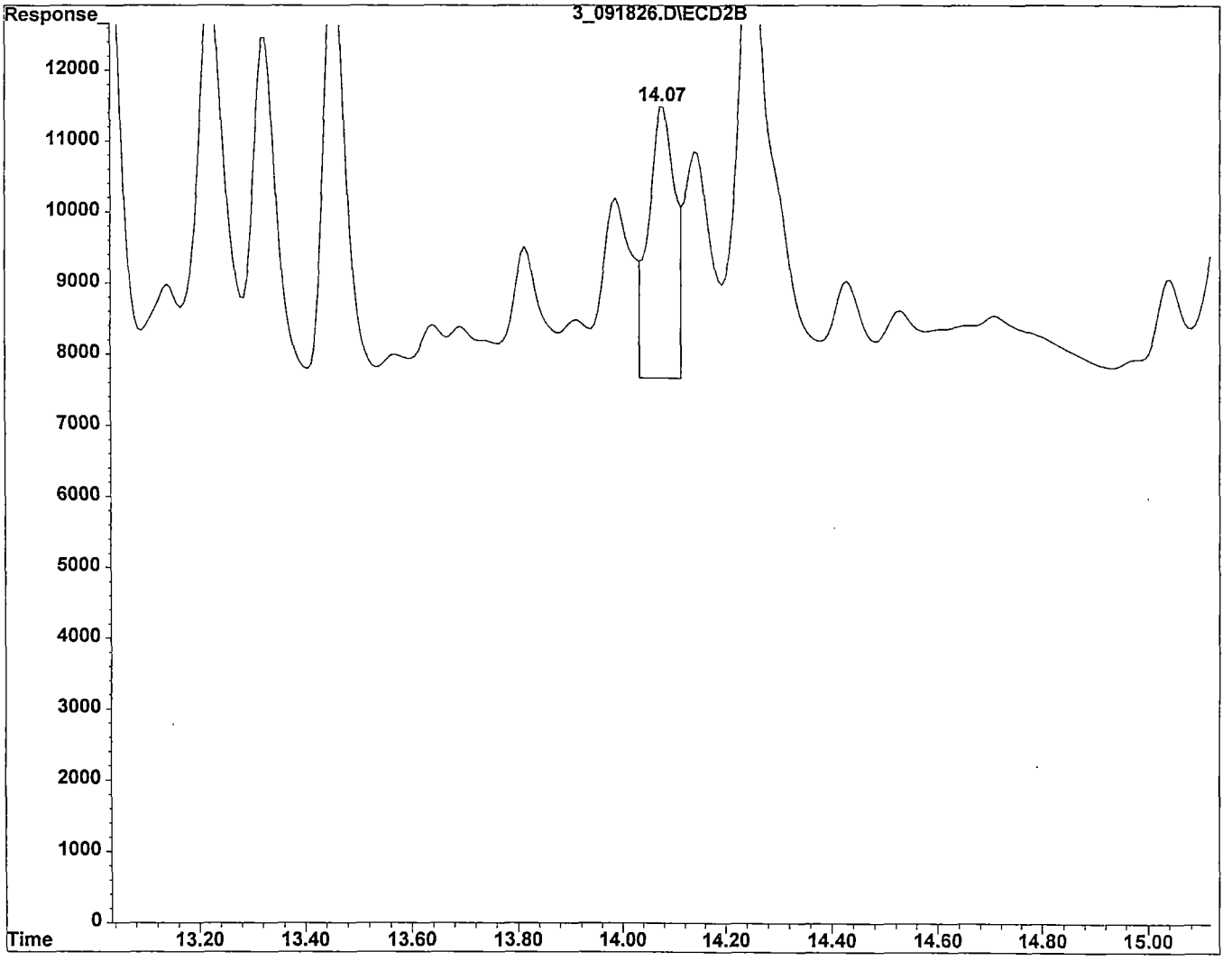
Integration Time Range: 13.29 - 13.41

BTB 092001

F:\HPCHEM\HP\3\DATA\09_18_01\3_091826.D
Report generated: Thu Sep 20 08:47:05 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091826.D
Date Acquired: 19 Sep 2001 10:32
Inst: HP_03 Operator ID: BTB
Name: 47351.14 *E03L2 *
Misc: *EPA*30.2G/5.0ML*25
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:42 2001 Quant Results File: XPCBI16.RES



OK 9-27-01

Aroclor-1260 {2} #2 14.07min area: 136448 m

Integration Time Range: 14.03 - 14.11

BTB 092001

F:\HPCHEM\HP\3\DATA\09_18_01\3_091826.D
Report generated: Thu Sep 20 08:47:05 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03L3

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.15

Sample wt/vol: 30.4 (g/mL) G Lab File ID:_____

% Moisture: 14 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.7 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	34	J
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	62	J
11096-82-5	Aroclor-1260	22	JP
Surrogate amount spiked		7.65	

118

TBS 10-12-01

FORM I PCB

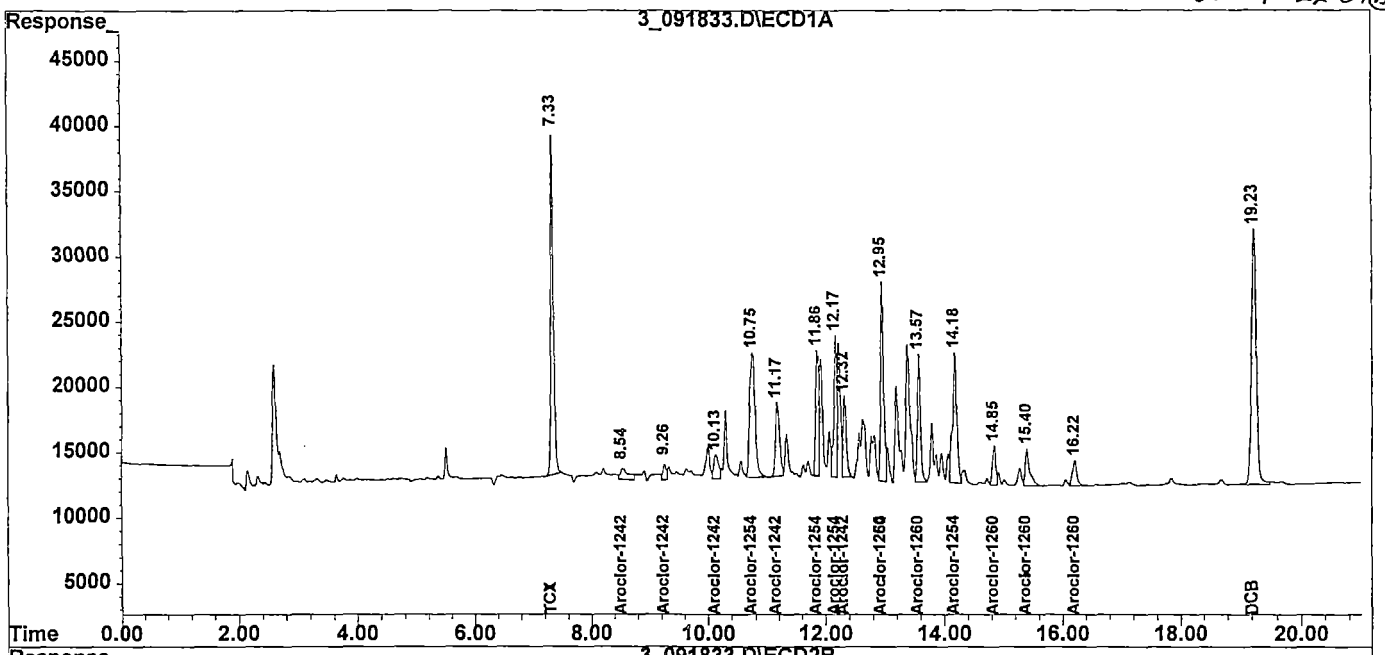
Chromatographic Report

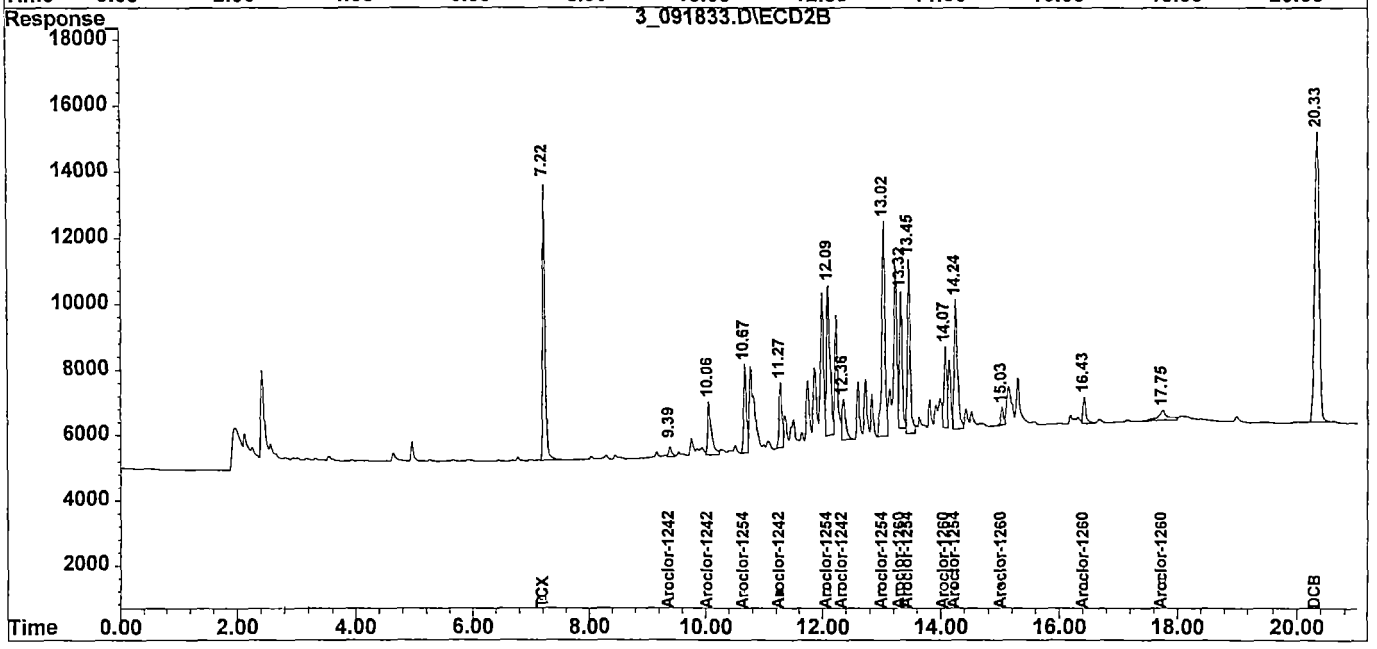
Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091833.D\ECD1A.CH Vial: 5
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091833.D\ECD2B.CH
Acq On : 19 Sep 2001 13:31 Operator: BTB
Sample : 47351.15 ✓ /*E03L3 ✓ * Inst : HP_03
Misc : *EPA*30.4G/5.0ML*14 ✓ Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 8:52 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

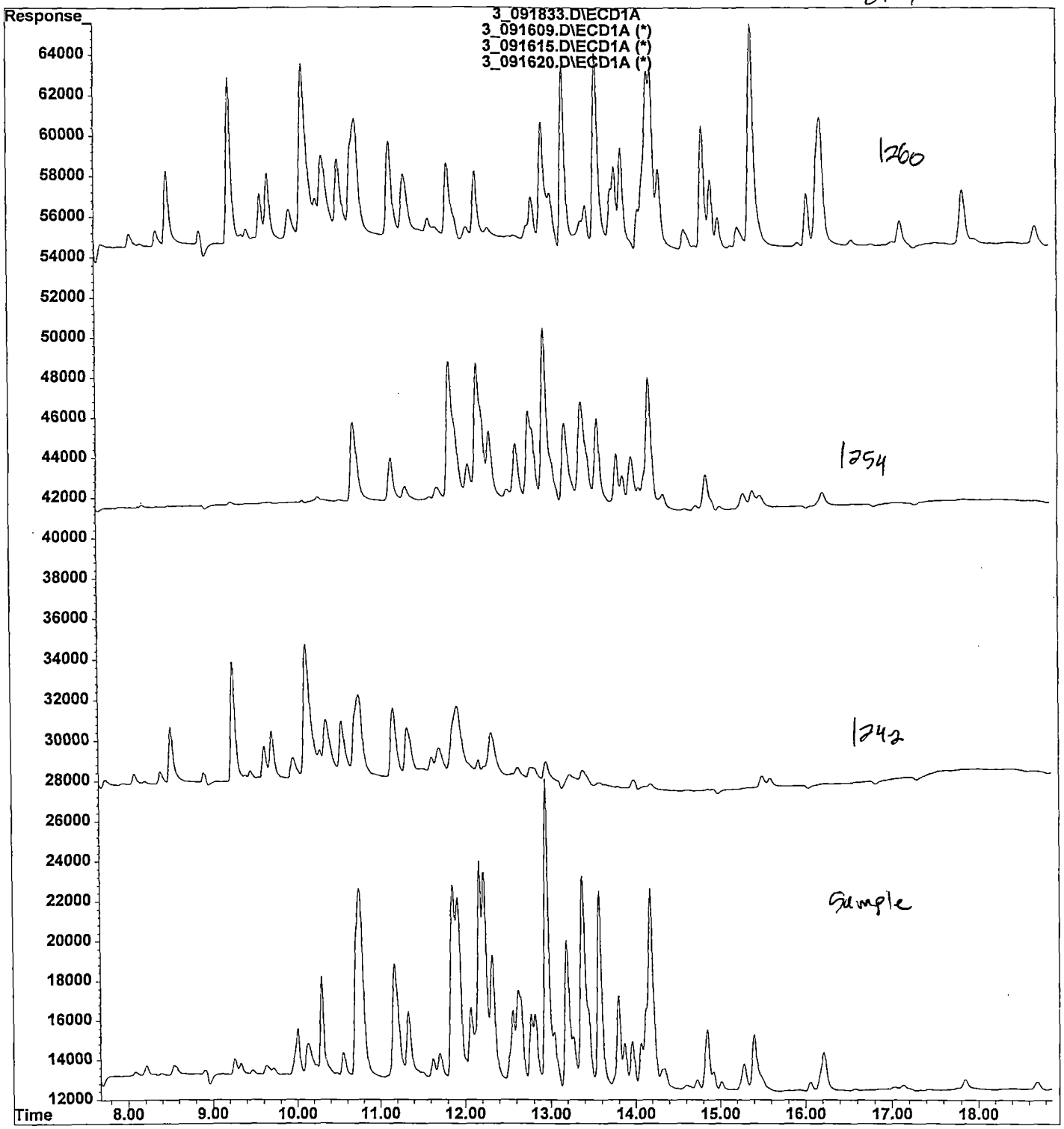
OK 9-22-01





File : F:\HPCHEM\HP\3\DATA\09_18_01\3_091833.D
Operator : BTB
Acquired : 19 Sep 2001 13:31 using AcqMethod OLM03.M
Instrument : HP_03
Sample Name: 47351.15 *E03L3 *
Misc Info : *EPA*30.4G/5.0ML*14
Vial Number: 5

OK 9-22-01



Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091833.D\ECD1A.CH Vial: 5
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091833.D\ECD2B.CH
Acq On : 19 Sep 2001 13:31 Operator: BTB
Sample : 47351.15 *E03L3 * Inst : HP_03
Misc : *EPA*30.4G/5.0ML*14 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 8:52 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

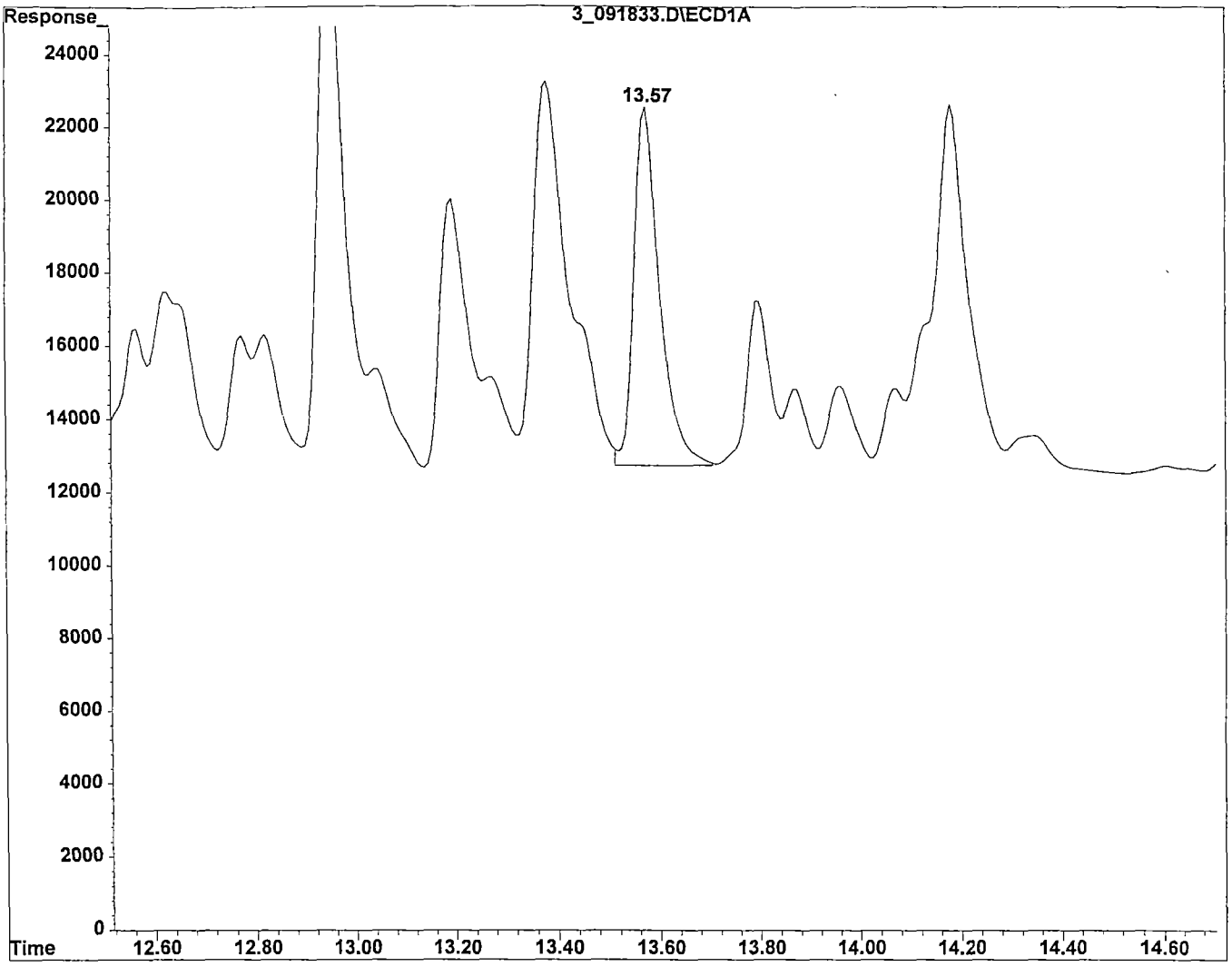
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.22	857696	250473	6.051	5.911	
	Spiked Amount 7.650			Recovery	=	79.10%	77.27%	
22)	S DCB	19.23	20.33	1008869	453664	6.859	7.081	
	Spiked Amount 7.650			Recovery	=	89.66%	92.56%	
	Target Compounds:							
7)	L4 Aroclor-1242	8.54	0.00	81885	0	27.7	N.D. d	#
8)	L4 Aroclor-1242 {2}	9.26	9.39	47873	11439	9.283	6.372	#
9)	L4 Aroclor-1242 {3}	10.14	10.06	106852	73441	11.2	21.2	#
10)	L4 Aroclor-1242 {4}	11.18	11.27	282133	67712	67.6	59.9	
11)	L4 Aroclor-1242 {5}	12.32	12.35	243882	49776	75.0	49.6m	# BTB 092001
	Sum Aroclor-1242			762625	202369	190.7	137.0	
	Average Aroclor-1242					38.147	34.258	
12)	L6 Aroclor-1254	10.75f	10.67	635643	87792	120.2	68.9	#
13)	L6 Aroclor-1254 {2}	11.86	12.09	332538	194067	33.9	67.6	#
14)	L6 Aroclor-1254 {3}	12.17	13.03	351585	237937	39.3	61.9	#
15)	L6 Aroclor-1254 {4}	12.95	13.46	547802	168351	53.1	79.3	#
16)	L6 Aroclor-1254 {5}	14.18	14.25	511298	160586	61.2	56.5	
	Sum Aroclor-1254			2378866	848733	307.7	334.3	
	Average Aroclor-1254					61.532	66.856	
17)	L7 Aroclor-1260	12.95	13.32	547802	132604	98.1	40.3m	#
18)	L7 Aroclor-1260 {2}	13.57	14.07	345028	80616	40.6m	37.5m	
19)	L7 Aroclor-1260 {3}	14.85	15.04	115639	18448	21.3 BTB 092001	6.536	#
20)	L7 Aroclor-1260 {4}	15.40	16.43	144141	31919	11.8	11.0	
21)	L7 Aroclor-1260 {5}	16.22	17.76	103288	32639	11.1	16.0	#
	Sum Aroclor-1260			1255898	296226	70.0	42.6	
	Average Aroclor-1260					36.587	22.283	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091833.D
Date Acquired: 19 Sep 2001 13:31
Inst: HP_03 Operator ID: BTB
Name: 47351.15 *E03L3 *
Misc: *EPA*30.4G/5.0ML*14
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:52 2001 Quant Results File: XPCBI16.RES



OK 9-22-01 KD

Aroclor-1260 {2} 13.57min area: 345028 m

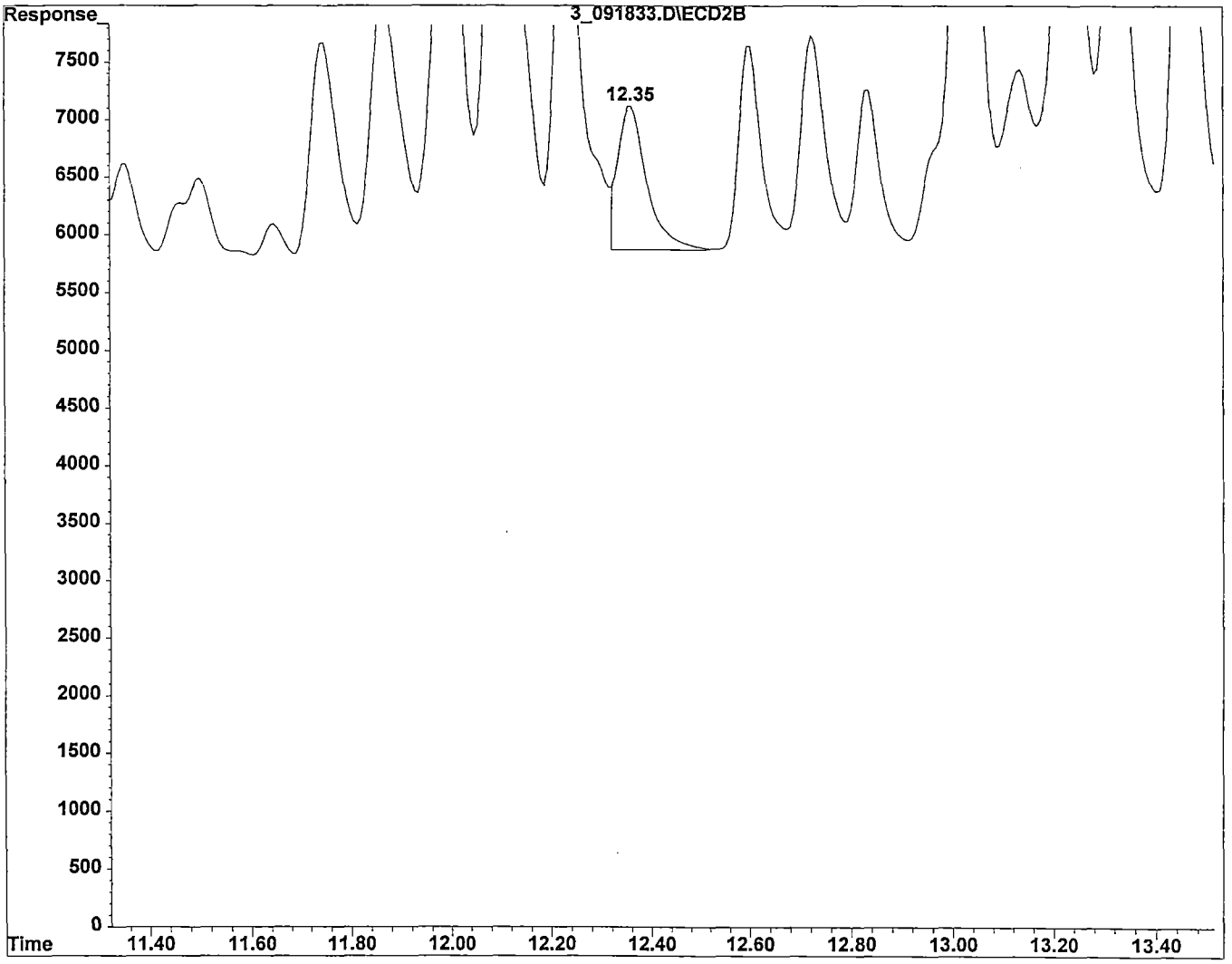
Integration Time Range: 13.52 - 13.71

BTB 092001

F:\HPCHEM\HP\3\DATA\09_18_01\3_091833.D
Report generated: Thu Sep 20 09:09:38 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091833.D
Date Acquired: 19 Sep 2001 13:31
Inst: HP_03 Operator ID: BTB
Name: 47351.15 *E03L3 *
Misc: *EPA*30.4G/5.0ML*14
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:52 2001 Quant Results File: XPCBI16.RES



OK 9-22-01 BTB

Aroclor-1242 {5} #2 12.35min area: 49776 m

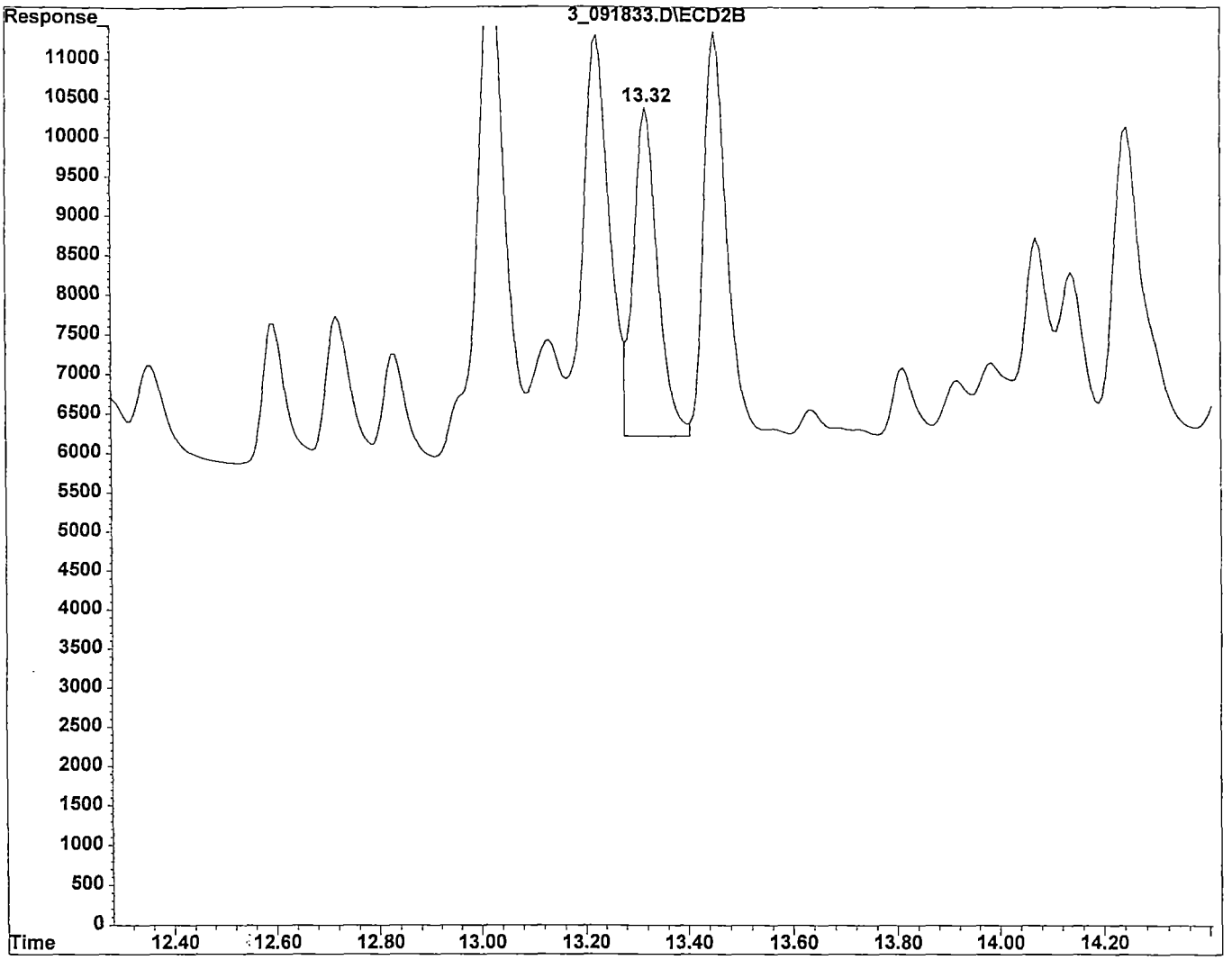
Integration Time Range: 12.32 - 12.51

BTB 092001

F:\HPCHEM\HP\3\DATA\09_18_01\3_091833.D
Report generated: Thu Sep 20 09:09:39 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091833.D
Date Acquired: 19 Sep 2001 13:31
Inst: HP_03 Operator ID: BTB
Name: 47351.15 *E03L3 *
Misc: *EPA*30.4G/5.0ML*14
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:52 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1260 #2 13.32min area: 132604 m

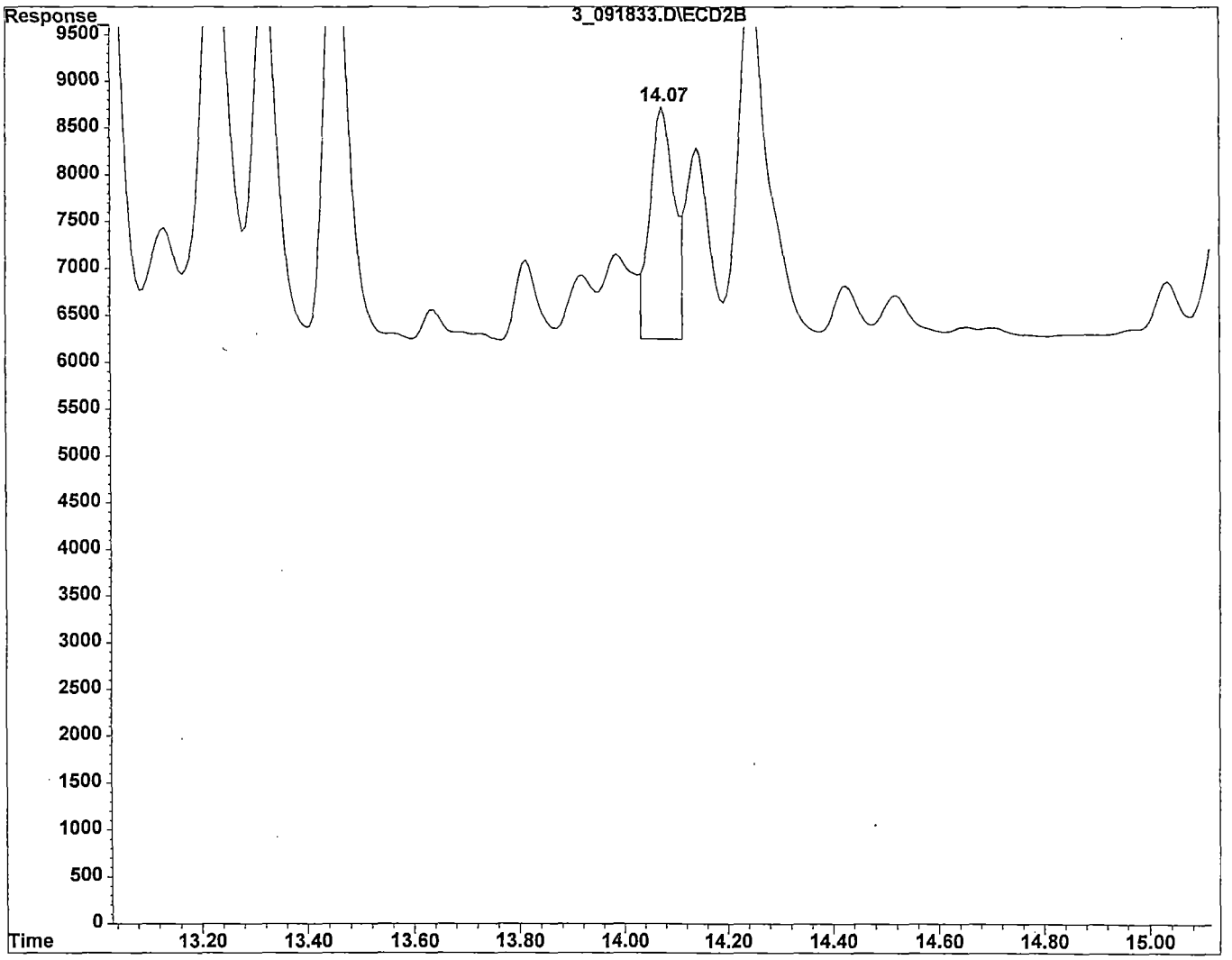
Integration Time Range: 13.28 - 13.41

BTB 09/20/01

F:\HPCHEM\HP\3\DATA\09_18_01\3_091833.D
Report generated: Thu Sep 20 09:09:39 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091833.D
Date Acquired: 19 Sep 2001 13:31
Inst: HP_03 Operator ID: BTB
Name: 47351.15 *E03L3 *
Misc: *EPA*30.4G/5.0ML*14
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:52 2001 Quant Results File: XPCBI16.RES



ok 9-22-01 GH

Aroclor-1260 {2} #2 14.07min area: 80616 m

Integration Time Range: 14.03 - 14.11

BTB 09/20/01

F:\HPCHEM\HP\3\DATA\09_18_01\3_091833.D
Report generated: Thu Sep 20 09:09:40 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03L4

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.16

Sample wt/vol: 30.3 (g/mL) G Lab File ID:_____

% Moisture: 29 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	46	UJ
11104-28-2	Aroclor-1221	46	UJ
11141-16-5	Aroclor-1232	46	UJ
53469-21-9	Aroclor-1242	~~650~~	950 DJ ~~E~~
12672-29-6	Aroclor-1248	46	UJ
11097-69-1	Aroclor-1254	~~670~~	1400 DJ ~~EP~~
11096-82-5	Aroclor-1260	~~370~~ ✓	370 PJ
Surrogate amount spiked		9.30	

2770

TBS 10-12-01 apply this results

FORM I PCB

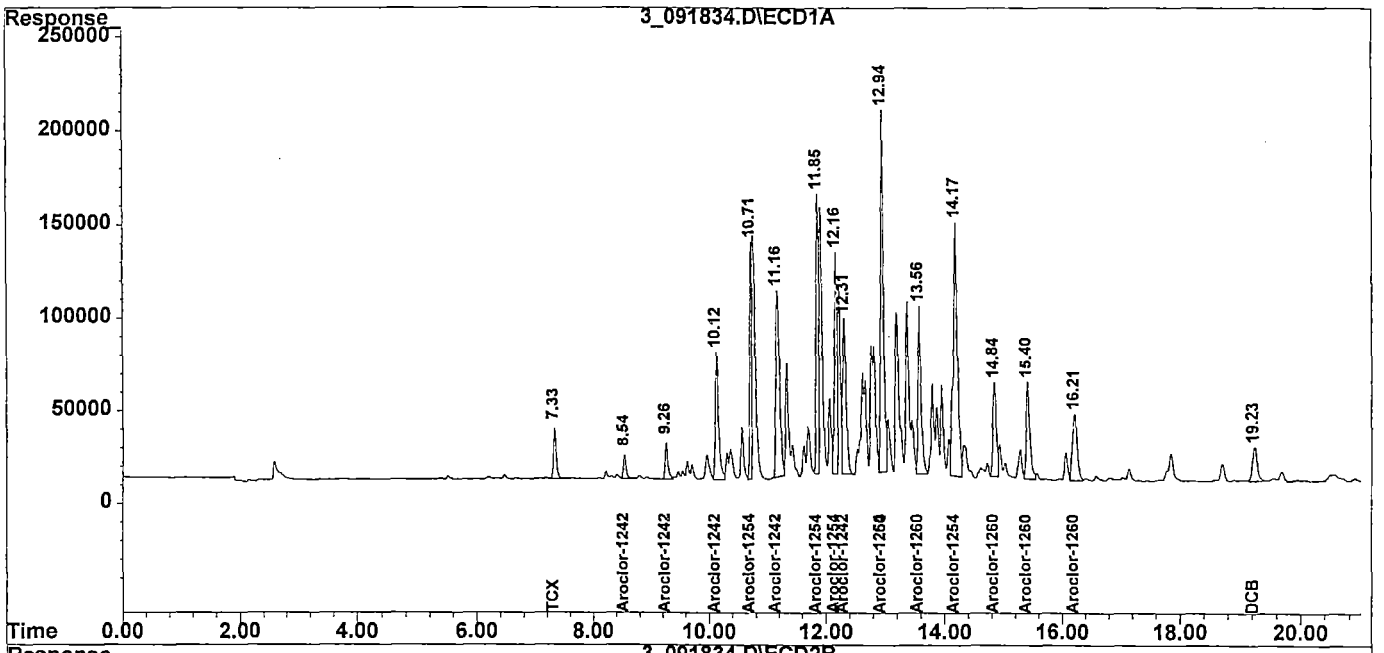
Chromatographic Report

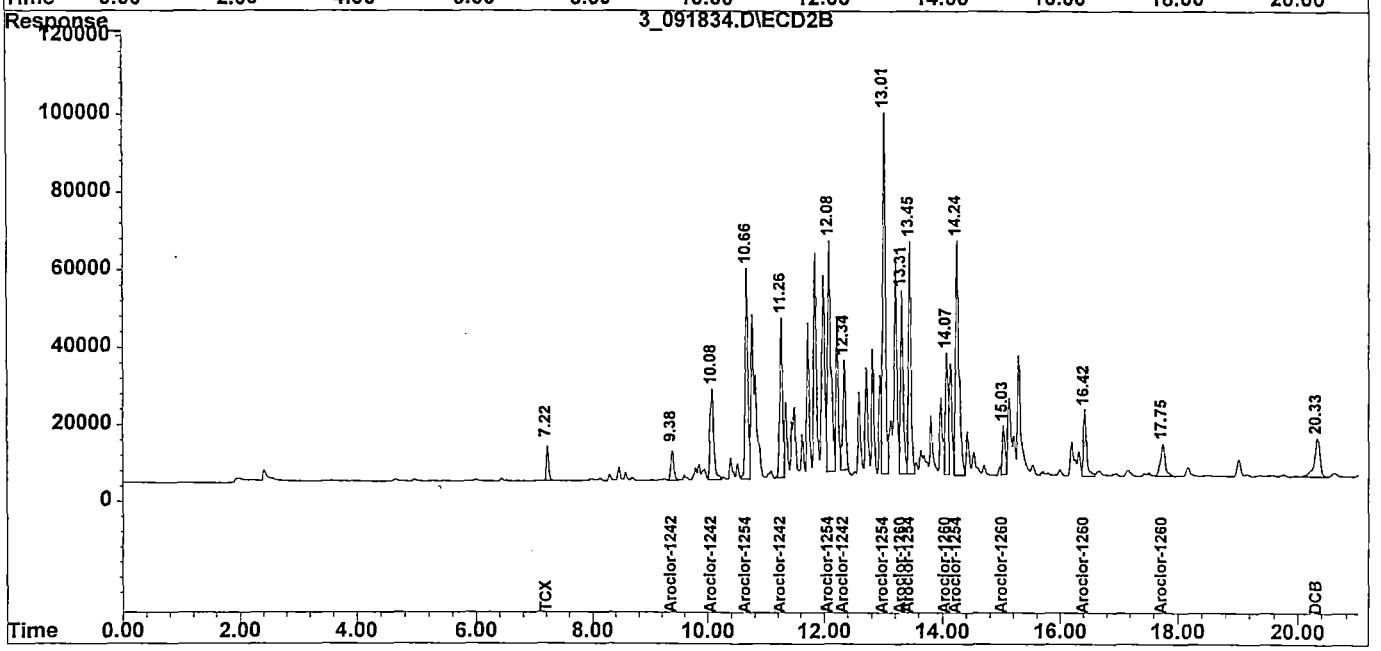
Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091834.D\ECD1A.CH Vial: 6
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091834.D\ECD2B.CH
Acq On : 19 Sep 2001 13:57 Operator: BTB
Sample : 47351.16 /*E03L4 * Inst : HP_03
Misc : *EPA*30.3G/5.0ML*29 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 8:55 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

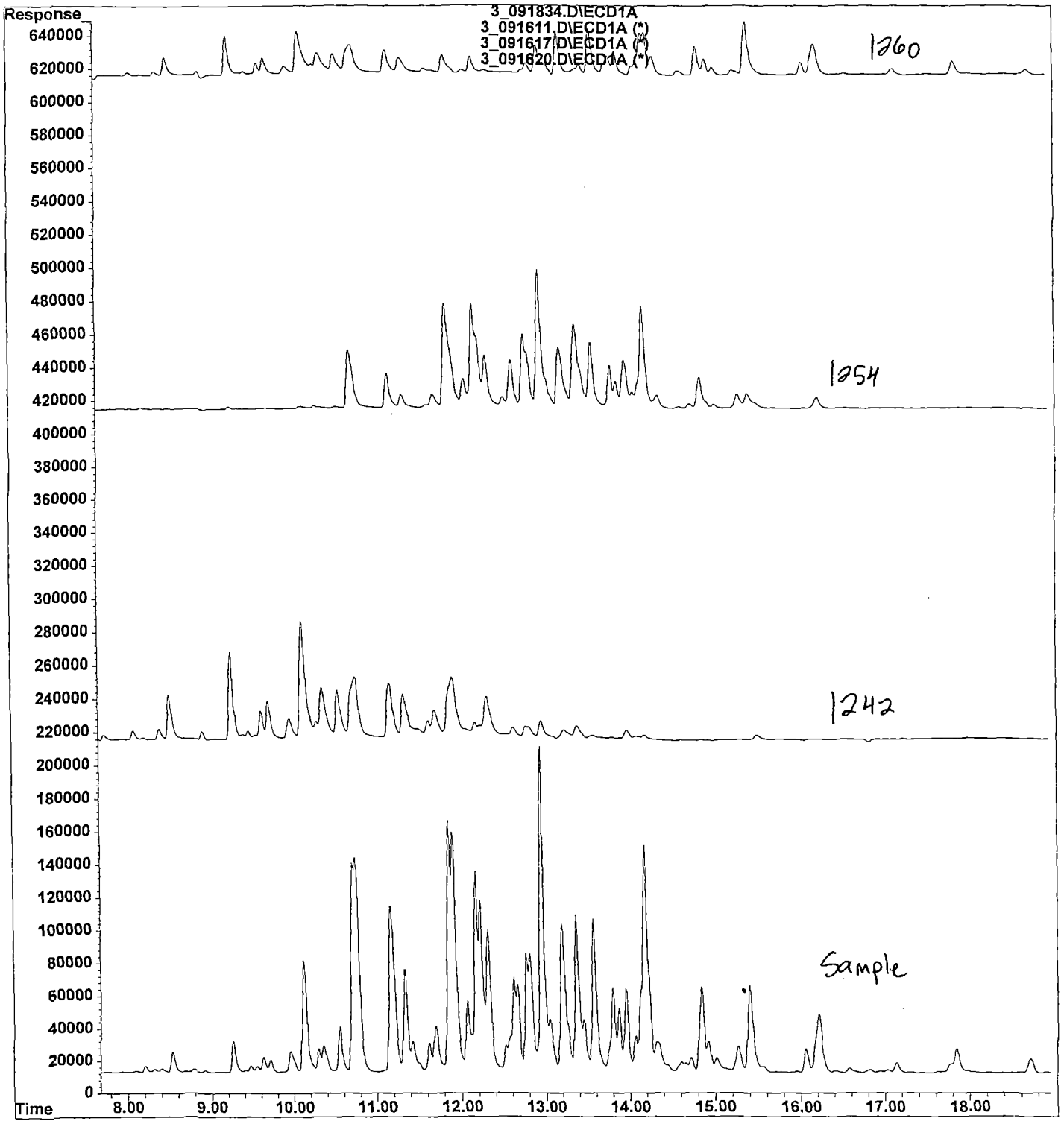
OK 9-22-01





File : F:\HPCHEM\HP\3\DATA\09_18_01\3_091834.D
Operator : BTB
Acquired : 19 Sep 2001 13:57 using AcqMethod OLM03.M
Instrument : HP_03
Sample Name: 47351.16 *E03L4 *
Misc Info : *EPA*30.3G/5.0ML*29
Vial Number: 6

OK 9-33-01



Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091834.D\ECD1A.CH Vial: 6
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091834.D\ECD2B.CH
Acq On : 19 Sep 2001 13:57 Operator: BTB
Sample : 47351.16 *E03L4 * Inst : HP_03
Misc : *EPA*30.3G/5.0ML*29 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 8:55 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

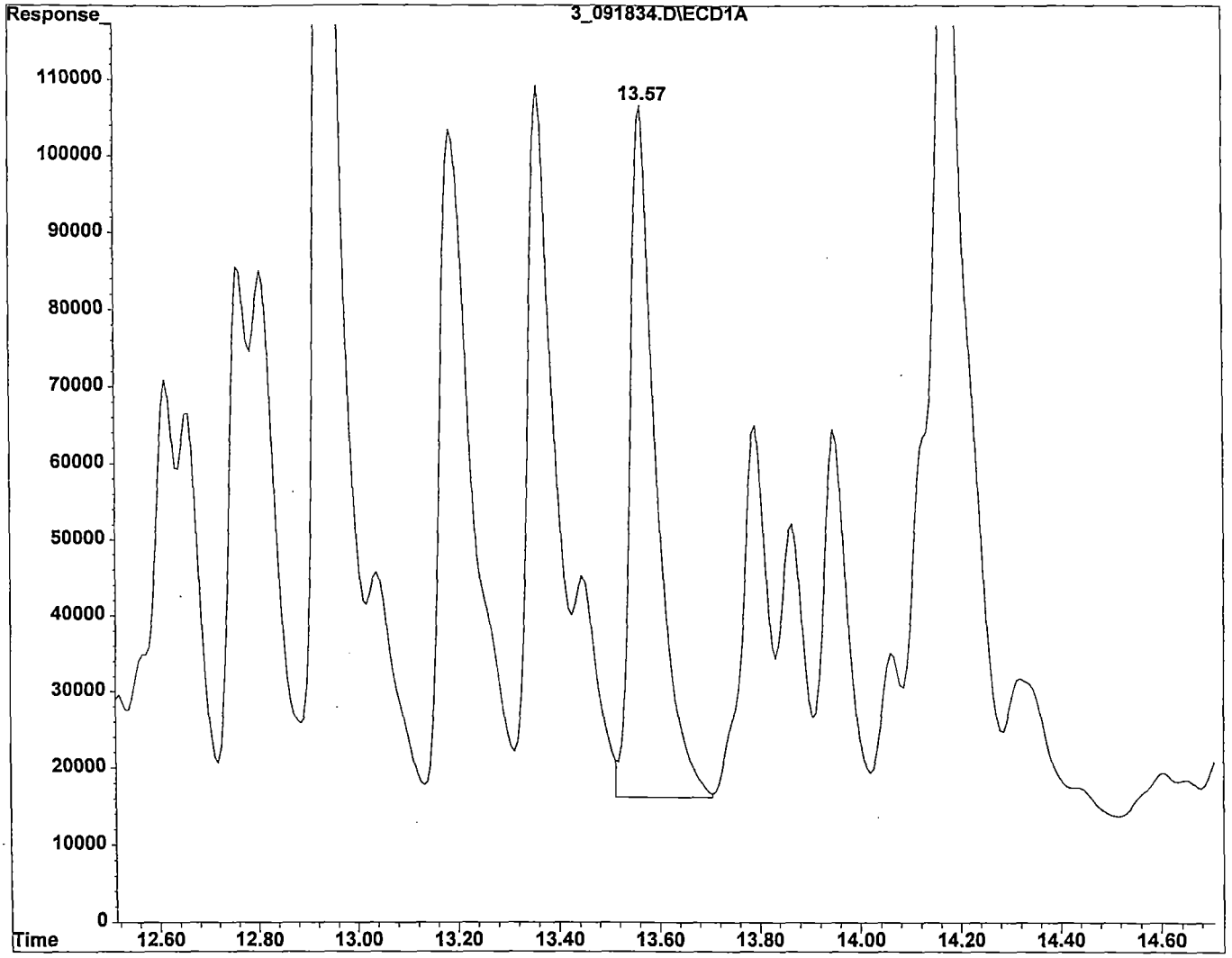
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	856804	248455	7.346	7.126
	Spiked Amount 9.297			Recovery	=	79.02%	76.65%
22)	S DCB	19.24	20.33	980210	675780	8.099	12.8 #
	Spiked Amount 9.297			Recovery	=	✓87.12%	✓137.68%
	Target Compounds:						
7)	L4 Aroclor-1242	8.54	0.00	447881	0	184.0	N.D. d #
8)	L4 Aroclor-1242 {2}	9.26	9.39	674754	261236	159.0	176.8
9)	L4 Aroclor-1242 {3}	10.12	10.08	2713552	1049611	346.7	368.9
10)	L4 Aroclor-1242 {4}	11.17	11.26	4528696	1401475	1318.3 E	1505.5 E
11)	L4 Aroclor-1242 {5}	12.31	12.34	3374695	977102	1260.4 E	1182.4 E
	Sum Aroclor-1242			11739578	3689423	3268.4	3233.7
	Average Aroclor-1242					653.686	808.428
12)	L6 Aroclor-1254	10.71	10.66	2619854	1689619	602.1 E	1611.6 E#
13)	L6 Aroclor-1254 {2}	11.85	12.08	3955294	2417455	490.7	1024.0 E#
14)	L6 Aroclor-1254 {3}	12.16	13.02	3506516	2934081	475.8	927.4 E#
15)	L6 Aroclor-1254 {4}	12.94	13.45	6488420	1794821	764.1 E	1027.7 E#
16)	L6 Aroclor-1254 {5}	14.18	14.24	6971396	2519232	1013.6 E	1077.6 E
	Sum Aroclor-1254			23541481	11355208	3346.3	5668.3
	Average Aroclor-1254					669.251	1133.669
17)	L7 Aroclor-1260	12.94	13.32	6488420	1500072	1412.4 E	554.1 #
18)	L7 Aroclor-1260 {2}	13.57	14.07	3214196	1021983	460.0m BTB 09/20/01	578.5 #
19)	L7 Aroclor-1260 {3}	14.84	15.03	1933609	387629	432.7	166.9 #
20)	L7 Aroclor-1260 {4}	15.40	16.42	2336367	668233	232.3	280.6
21)	L7 Aroclor-1260 {5}	16.22	17.76	2024662	472326	264.4	281.3
	Sum Aroclor-1260			15997255	4050243	1302.3	865.2
	Average Aroclor-1260					560.341	372.282

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091834.D
Date Acquired: 19 Sep 2001 13:57
Inst: HP_03 Operator ID: BTB
Name: 47351.16 *E03L4 *
Misc: *EPA*30.3G/5.0ML*29
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:55 2001 Quant Results File: XPCBI16.RES



ok 9-22-01

Aroclor-1260 {2} 13.57min area: 3214196 m

Integration Time Range: 13.51 - 13.70

BTB 092001

F:\HPCHEM\HP\3\DATA\09_18_01\3_091834.D
Report generated: Thu Sep 20 09:09:41 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03L4DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.16DL

Sample wt/vol: 30.3 (g/mL) G Lab File ID:_____

% Moisture: 29 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/21/01

Injection Volume: 0.5(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 7.5 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	460	U
11104-28-2	Aroclor-1221	460	U
11141-16-5	Aroclor-1232	460	U
53469-21-9	Aroclor-1242	950	D
12672-29-6	Aroclor-1248	460	U
11097-69-1	Aroclor-1254	1400	D
11096-82-5	Aroclor-1260	570	DP
Surrogate amount spiked		9.30	

TBS
10-12-01

FORM I PCB

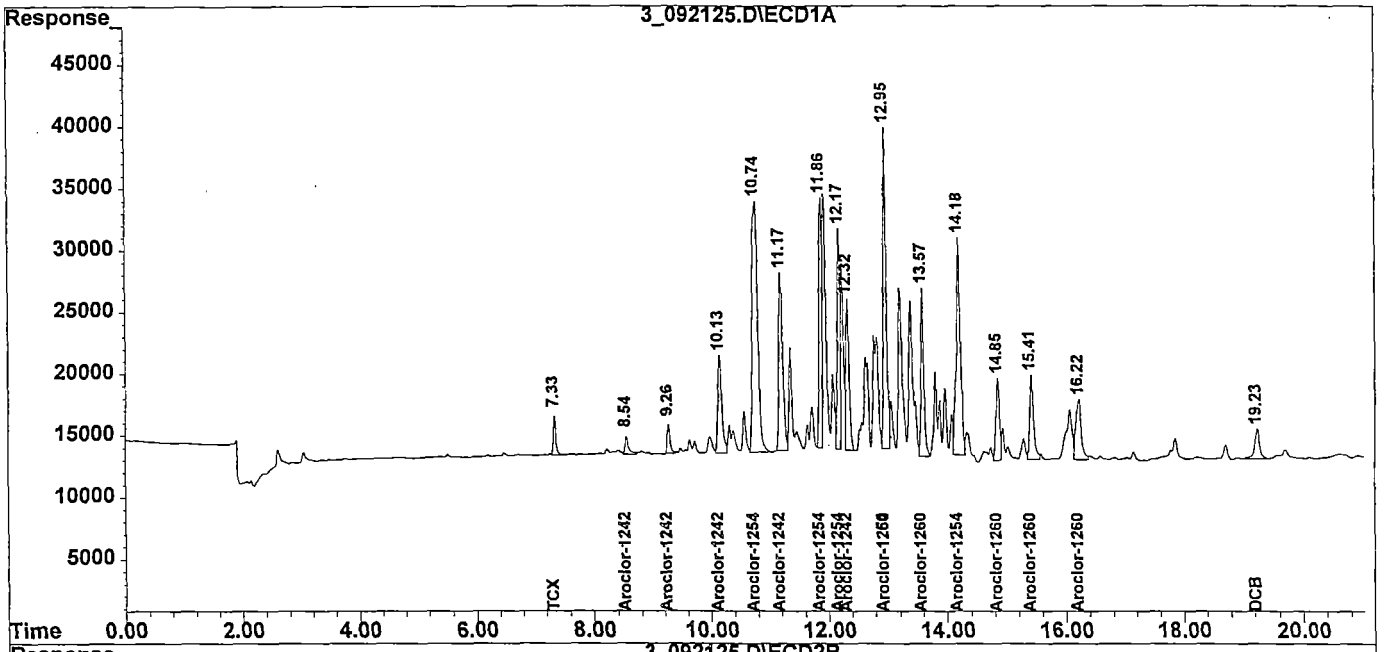
Chromatographic Report

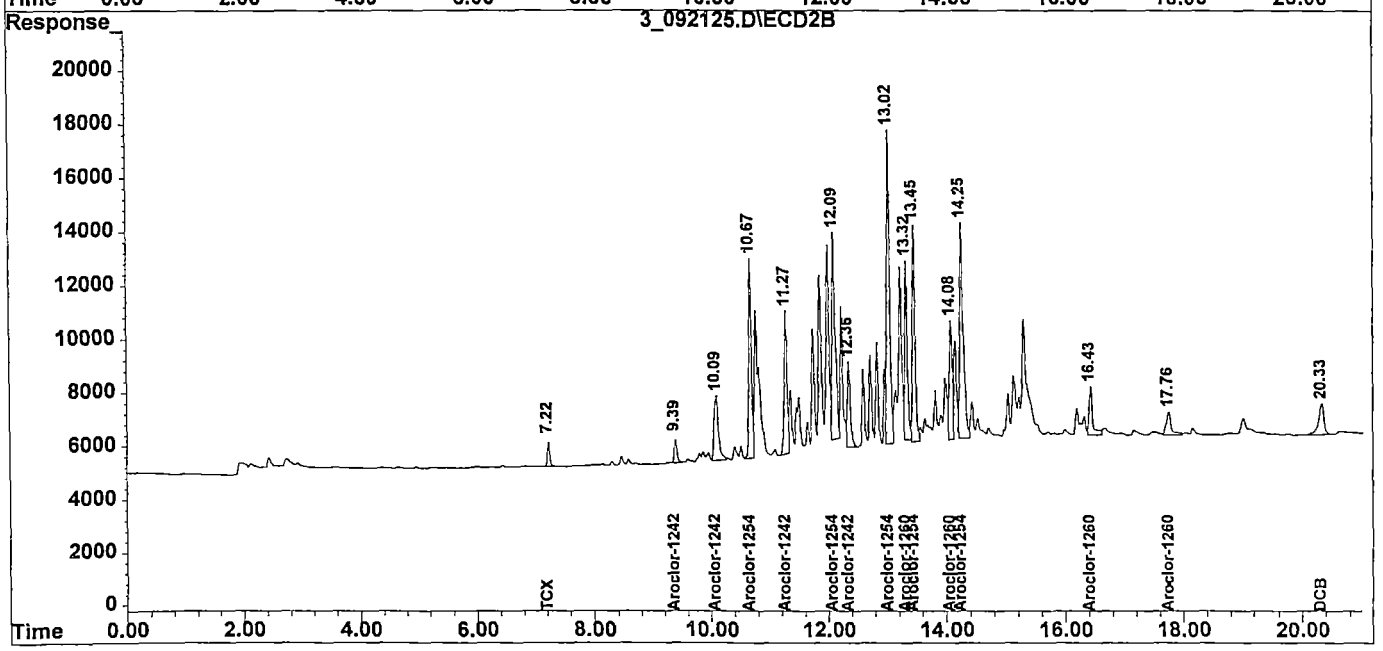
Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092125.D\ECD1A.CH Vial: 2
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092125.D\ECD2B.CH
Acq On : 21 Sep 2001 7:36 Operator: BTB
Sample : 47351.16DL *E03L4DL * Inst : HP_03
Misc : *EPA*30.3G/5.0ML*29 Dilution: 10.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 10:36 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

OK 9-22-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092125.D\ECD1A.CH Vial: 2
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092125.D\ECD2B.CH
Acq On : 21 Sep 2001 7:36 Operator: BTB
Sample : 47351.16DL *E03L4DL * Inst : HP_03
Misc : *EPA*30.3G/5.0ML*29 Dilution: 10.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 10:36 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

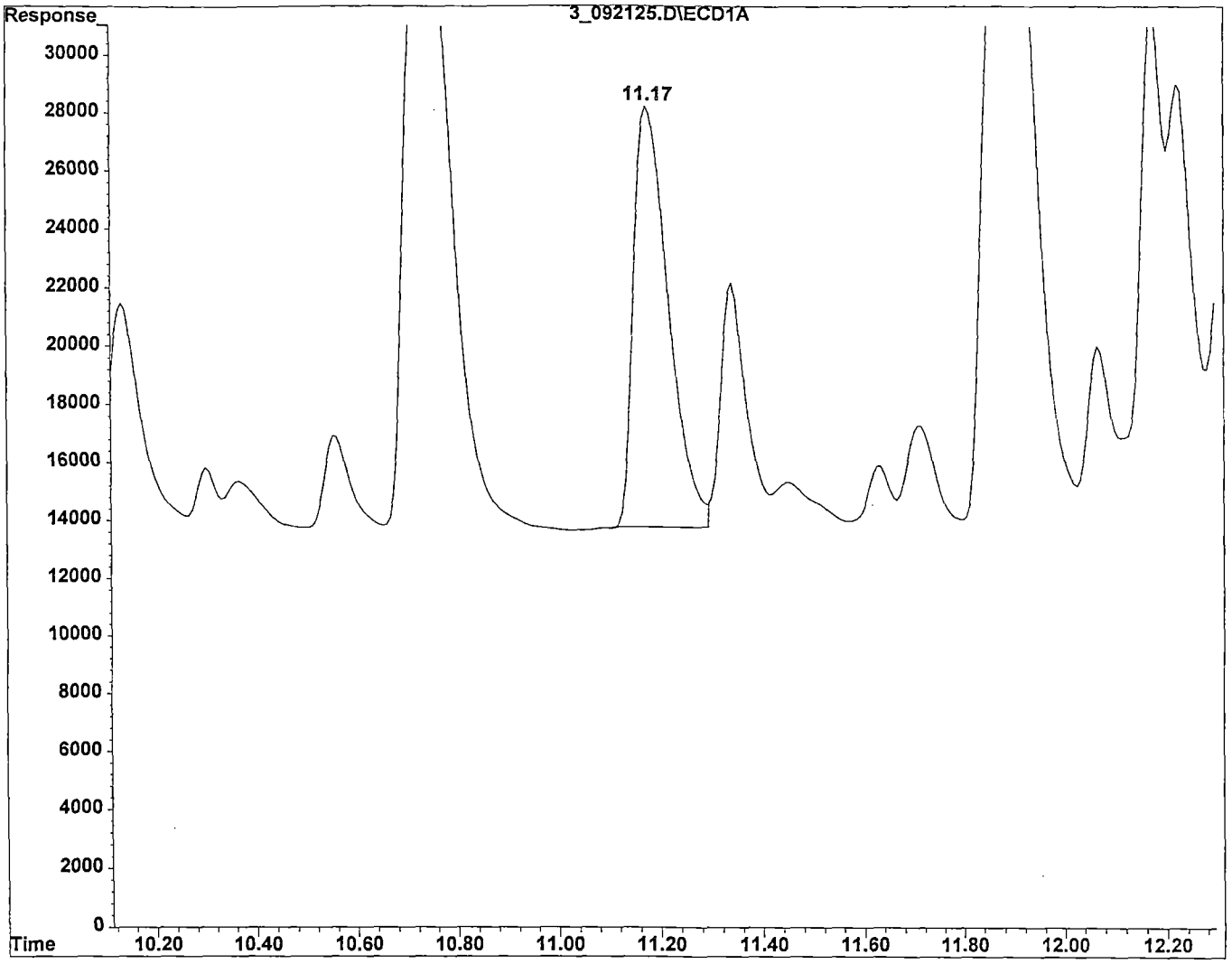
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	95592	24710	8.196	7.087
	Spiked Amount 9.297			Recovery	=	88.16%	76.23%
22)	S DCB	19.24	20.34	142463	75365	11.8	14.3
	Spiked Amount 9.297			Recovery	=	126.93%	153.82%
	Target Compounds:						
7)	L4 Aroclor-1242	8.54	0.00	63799	0	262.1	N.D. d #
8)	L4 Aroclor-1242 {2}	9.27	9.39	81756	28573	192.7	193.4
9)	L4 Aroclor-1242 {3}	10.14	10.09	365874	124643	467.4	438.1
10)	L4 Aroclor-1242 {4}	11.17	11.28	675124	174809	1965.2m BTB 092101	1877.9
11)	L4 Aroclor-1242 {5}	12.32	12.36	495775	113432	1851.7	1372.7m # BTB 092101
	Sum Aroclor-1242			1682328	441457	4739.2	3882.1
	Average Aroclor-1242					947.836	970.519
12)	L6 Aroclor-1254	10.75	10.67	1369143	235515	3146.5	2246.4 #
13)	L6 Aroclor-1254 {2}	11.86	12.09	613959	316863	761.7	1342.2 #
14)	L6 Aroclor-1254 {3}	12.17	13.02	545184	401560	739.7	1269.3 #
15)	L6 Aroclor-1254 {4}	12.95	13.46	898766	247243	1058.4	1415.7 #
16)	L6 Aroclor-1254 {5}	14.18	14.25	903011	350862	1312.9	1500.8
	Sum Aroclor-1254			4330062	1552044	7019.2	7774.4
	Average Aroclor-1254					1403.849	1554.879
17)	L7 Aroclor-1260	12.95	13.32	898766	209908	1956.4	775.4m #
18)	L7 Aroclor-1260 {2}	13.57	14.08	481828	150623	689.5m	852.5
19)	L7 Aroclor-1260 {3}	14.85	0.00	268406	0	600.6	N.D. d #
20)	L7 Aroclor-1260 {4}	15.41	16.43	311561	79663	309.8	334.5
21)	L7 Aroclor-1260 {5}	16.22	17.76	313259	51530	409.1	306.9
	Sum Aroclor-1260			2273820	491724	18432.4	10548.9
	Average Aroclor-1260					793.073	567.346

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092125.D
Date Acquired: 21 Sep 2001 7:36
Inst: HP_03 Operator ID: BTB
Name: 47351.16DL *E03L4DL *
Misc: *EPA*30.3G/5.0ML*29
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:36 2001 Quant Results File: XPCBI16.RES



Aroclor-1242 {4} 11.17min area: 675124 m

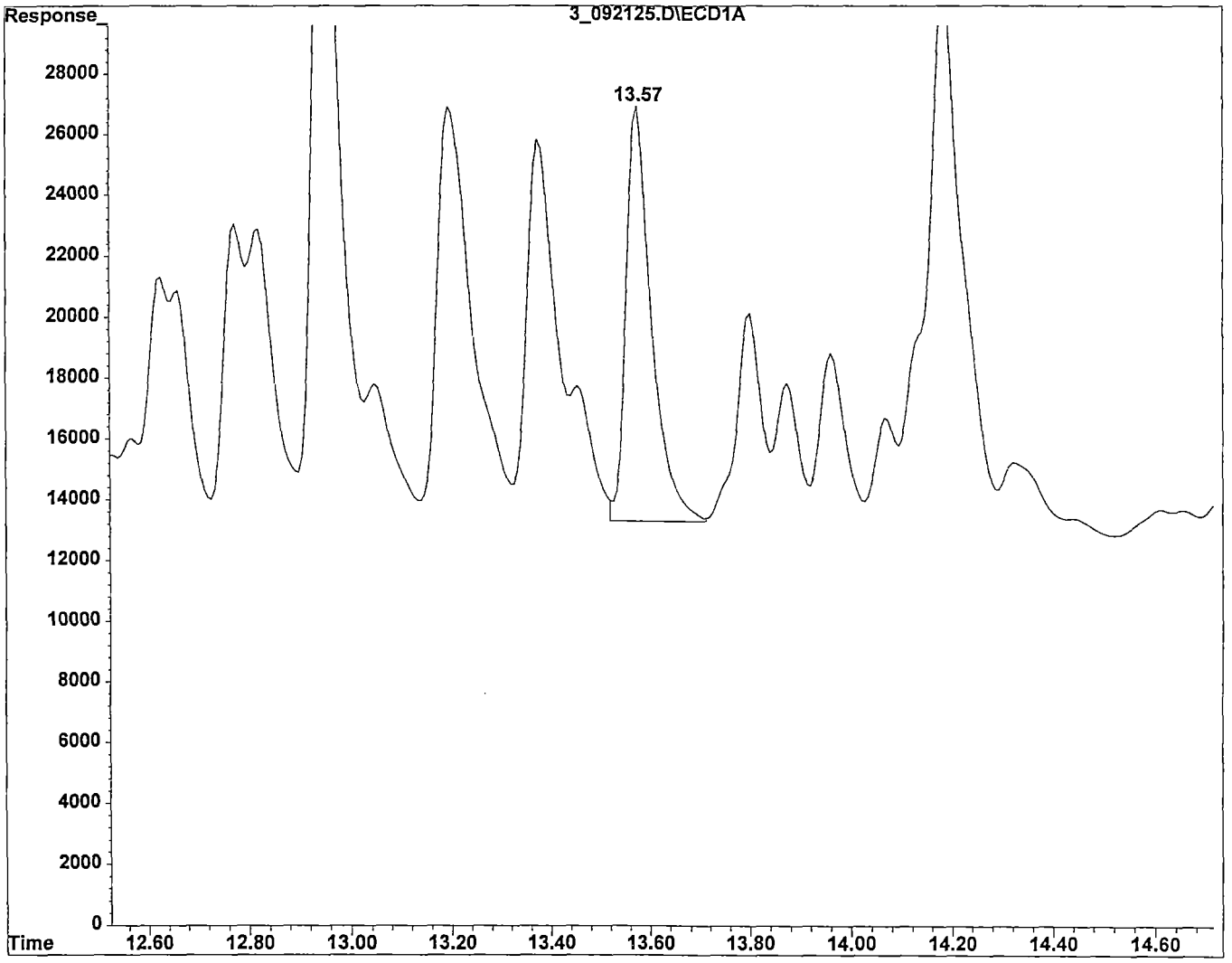
Integration Time Range: 11.11 - 11.29

OK 9-22-01 KEP
BTB
092101

F:\HPCHEM\HP\3\DATA\09_21_01\3_092125.D
Report generated: Fri Sep 21 10:45:18 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092125.D
Date Acquired: 21 Sep 2001 7:36
Inst: HP_03 Operator ID: BTB
Name: 47351.16DL *E03L4DL *
Misc: *EPA*30.3G/5.0ML*29
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:36 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1260 {2} 13.57min area: 481828 m

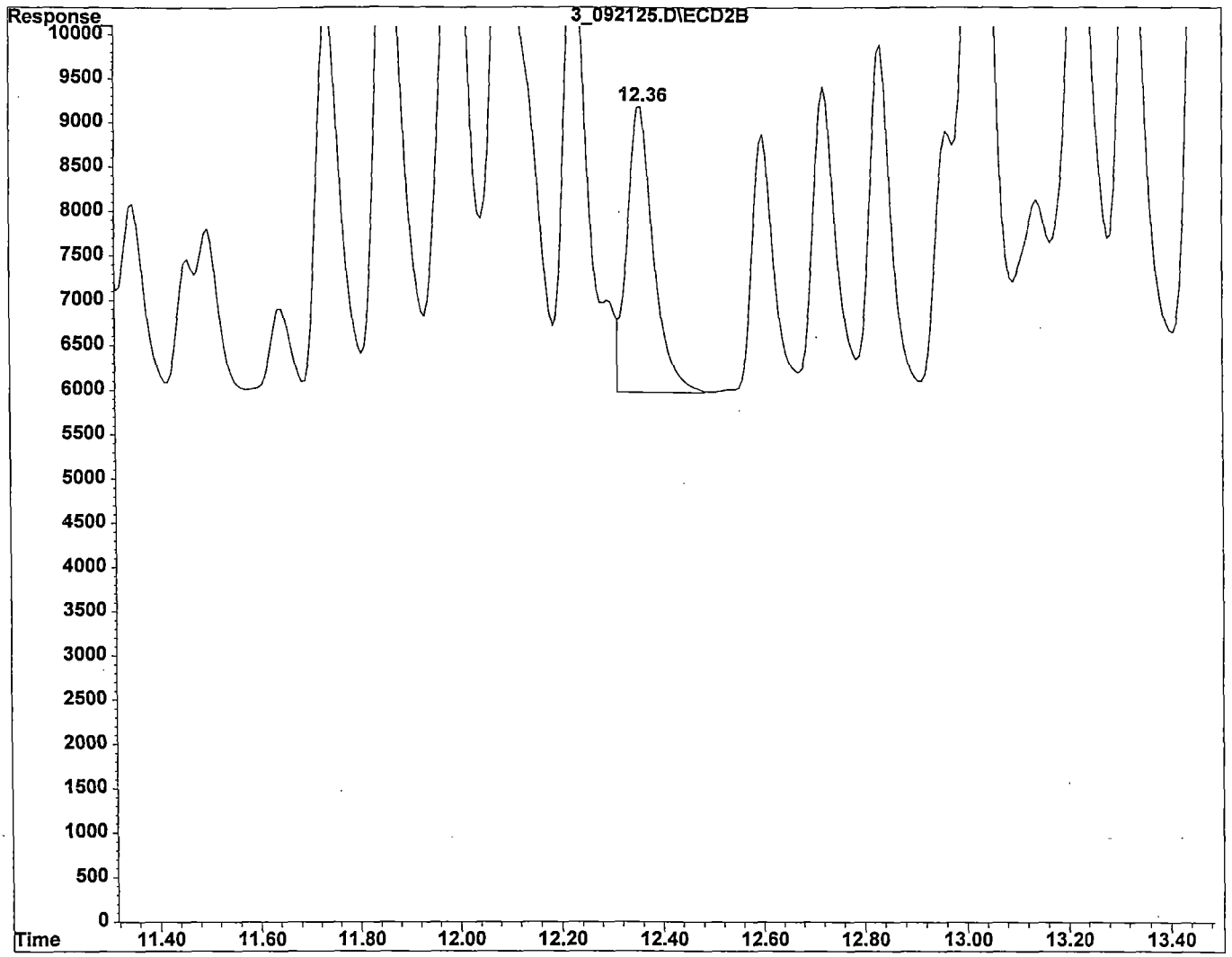
BTB 092101

Integration Time Range: 13.52 - 13.71

F:\HPCHEM\HP\3\DATA\09_21_01\3_092125.D
Report generated: Fri Sep 21 10:45:19 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092125.D
Date Acquired: 21 Sep 2001 7:36
Inst: HP_03 Operator ID: BTB
Name: 47351.16DL *E03L4DL *
Misc: *EPA*30.3G/5.0ML*29
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:36 2001 Quant Results File: XPCBI16.RES



ok 9-22-01 BTB

Aroclor-1242 {5} #2 12.36min area: 113432 m

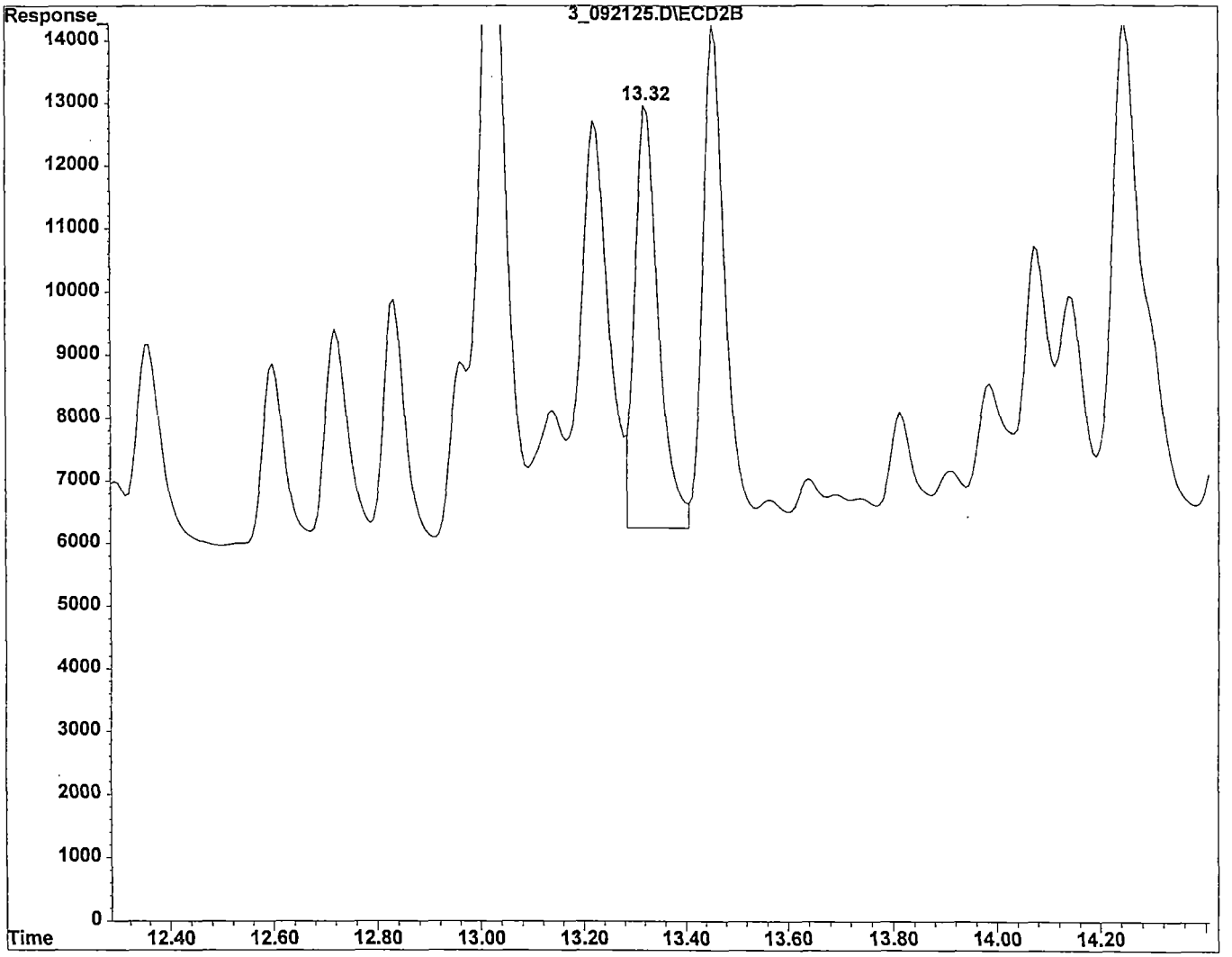
Integration Time Range: 12.32 - 12.48

BTB
092101

F:\HPCHEM\HP\3\DATA\09_21_01\3_092125.D
Report generated: Fri Sep 21 10:45:20 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092125.D
Date Acquired: 21 Sep 2001 7:36
Inst: HP_03 Operator ID: BTB
Name: 47351.16DL *E03L4DL *
Misc: *EPA*30.3G/5.0ML*29
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:36 2001 Quant Results File: XPCBI16.RES



OK 9-22-01 BH

Aroclor-1260 #2 13.32min area: 209908 m

Integration Time Range: 13.28 - 13.41

BTB 092101

F:\HPCHEM\HP\3\DATA\09_21_01\3_092125.D
Report generated: Fri Sep 21 10:45:20 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03L5

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.17

Sample wt/vol: 30.4 (g/mL) G Lab File ID:_____

% Moisture: 34 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	49	U
11104-28-2	Aroclor-1221	49	U
11141-16-5	Aroclor-1232	49	U
53469-21-9	Aroclor-1242	~~1400~~	2100DJ ~~E~~
12672-29-6	Aroclor-1248	49	U
11097-69-1	Aroclor-1254	~~1600~~	3400 ~~EP~~ DJ
11096-82-5	Aroclor-1260	~~920~~	1200 ~~EP~~ DJP
Surrogate amount spiked		9.97	

6700

apply this results TBS 10-12-01

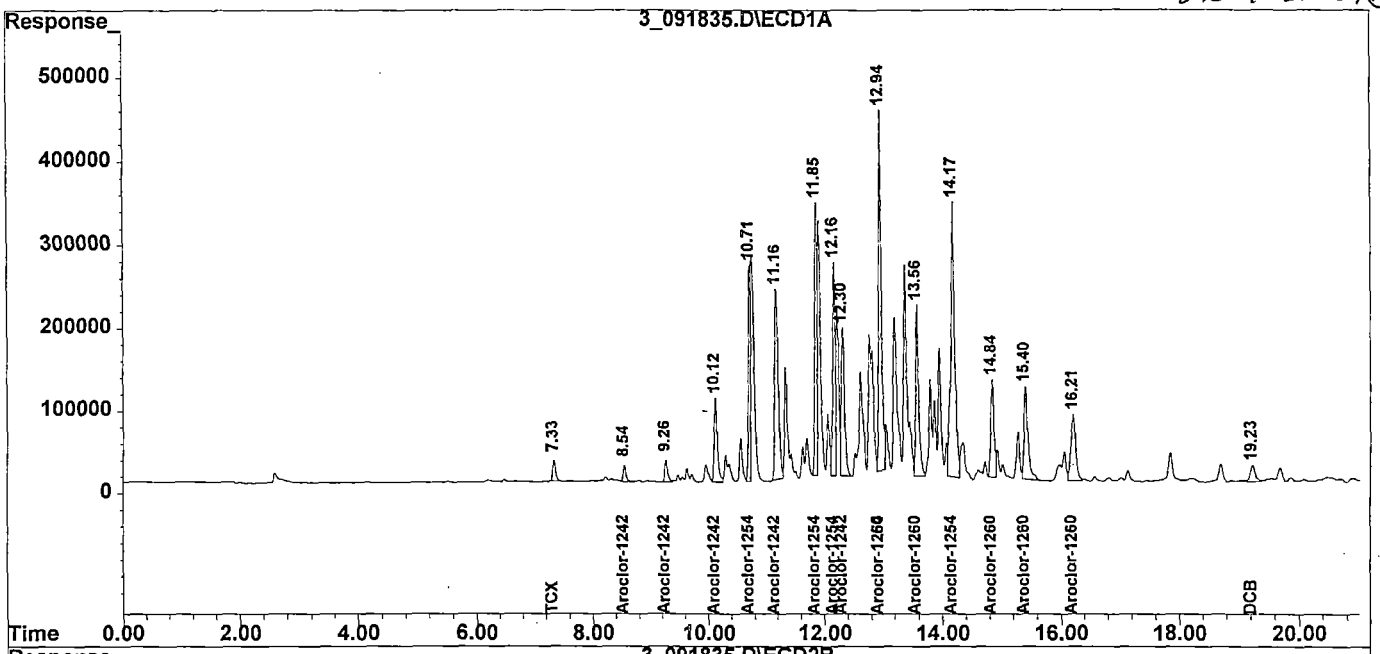
Chromatographic Report

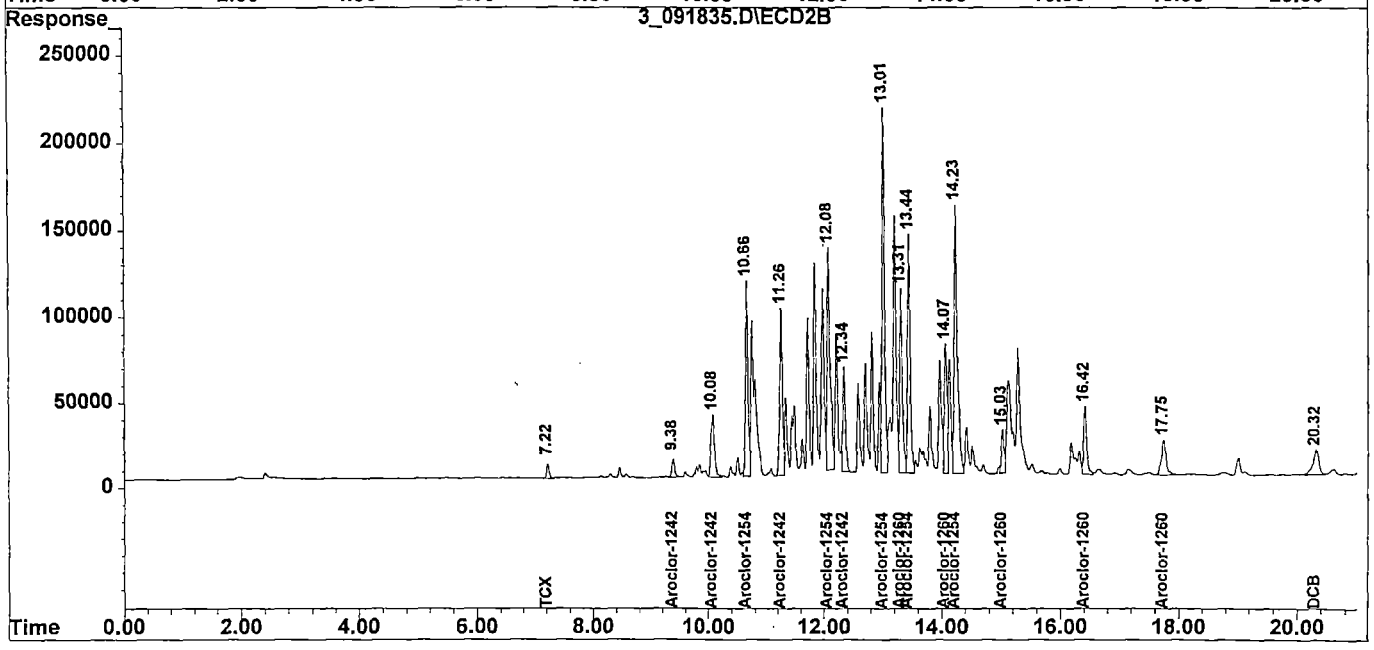
Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091835.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091835.D\ECD2B.CH
Acq On : 19 Sep 2001 14:23 Operator: BTB
Sample : 47351.17 *E03L5 * Inst : HP_03
Misc : *EPA*30.4G/5.0ML*34 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 8:57 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

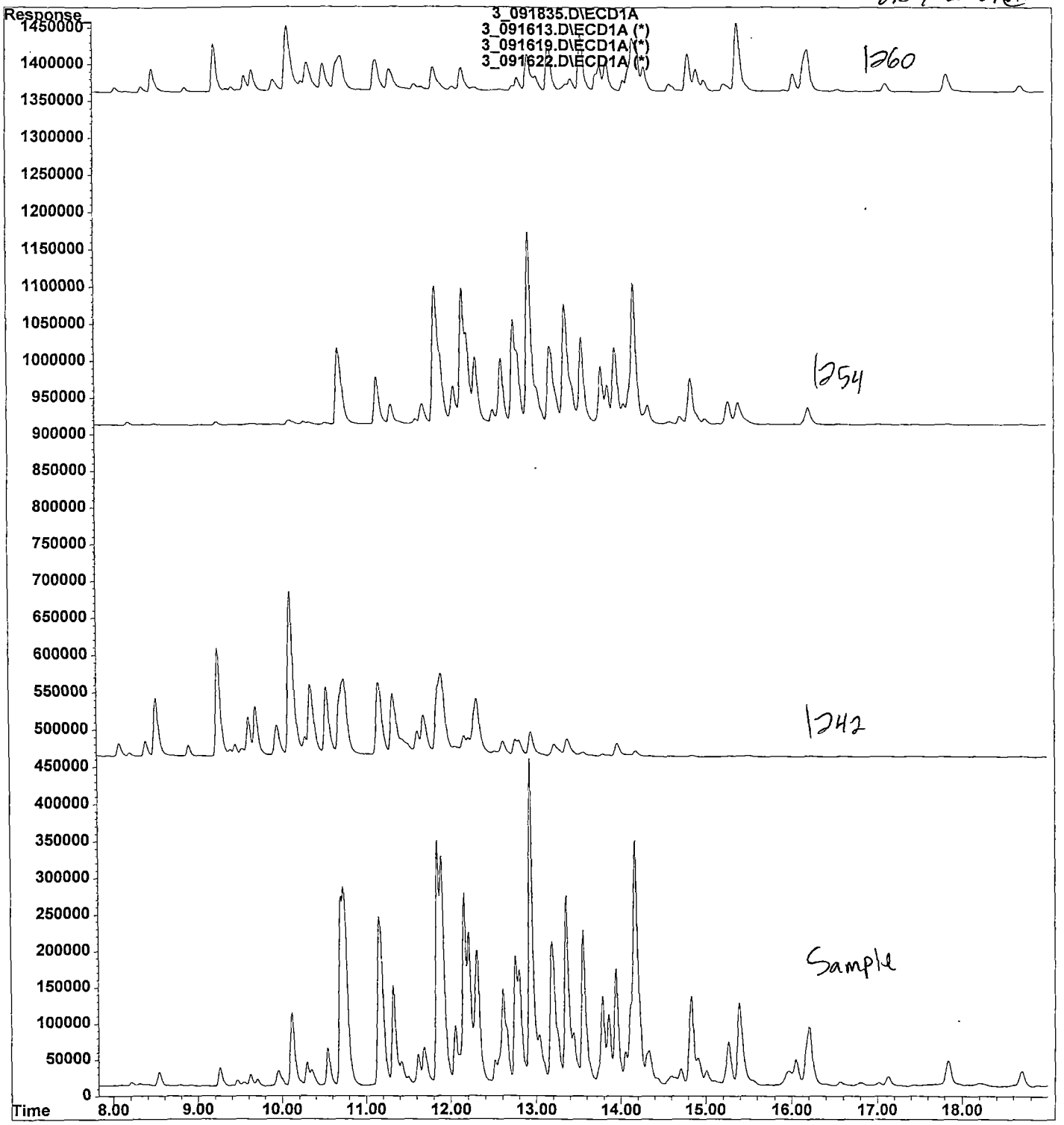
OK 9-22-01





File : F:\HPCHEM\HP\3\DATA\09_18_01\3_091835.D
Operator : BTB
Acquired : 19 Sep 2001 14:23 using AcqMethod OLM03.M
Instrument : HP_03
Sample Name: 47351.17 *E03L5 *
Misc Info : *EPA*30.4G/5.0ML*34
Vial Number: 7

OK 9-22-01 BH



Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091835.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091835.D\ECD2B.CH
Acq On : 19 Sep 2001 14:23 Operator: BTB
Sample : 47351.17 *E03L5 * Inst : HP_03
Misc : *EPA*30.4G/5.0ML*34 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 8:57 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

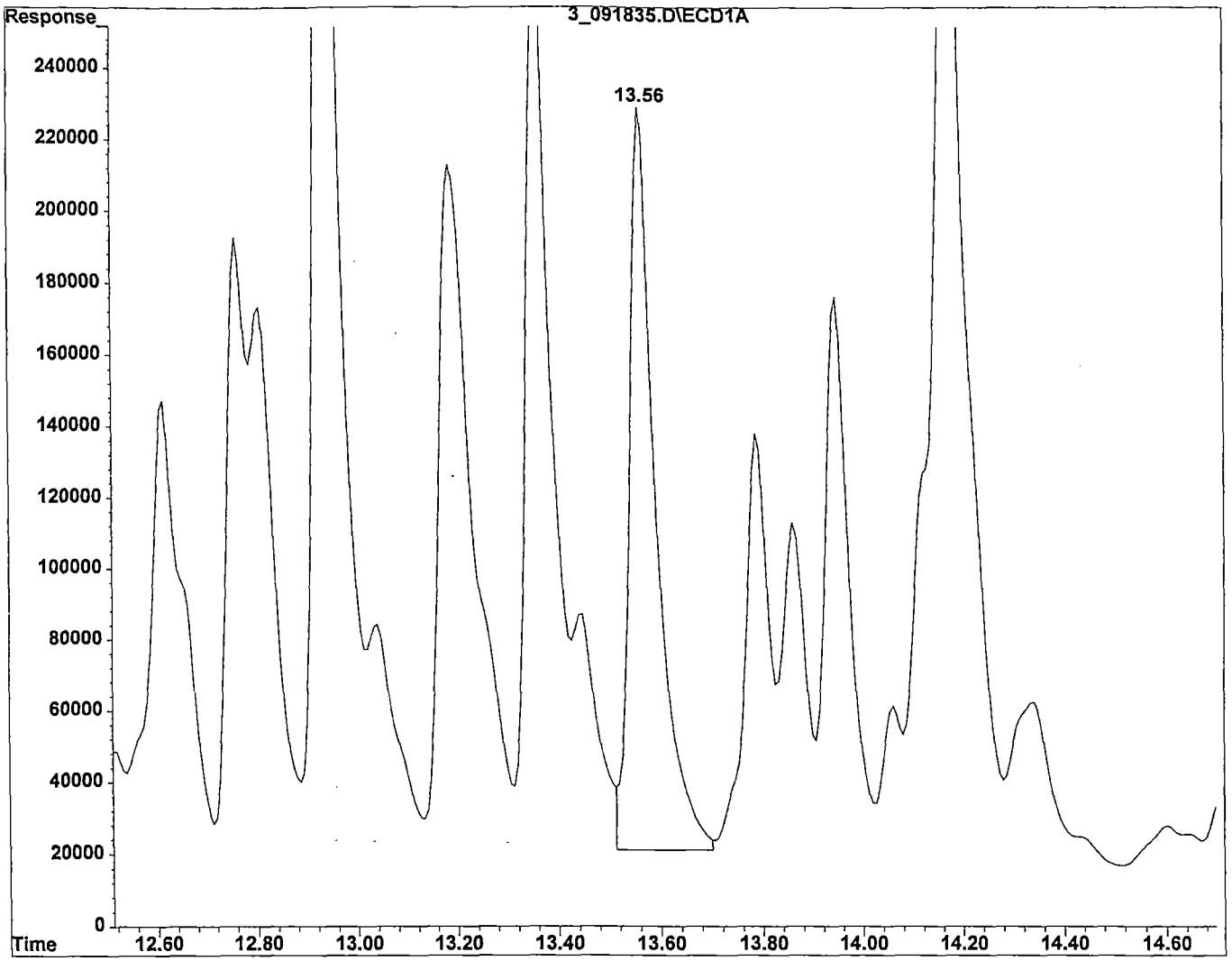
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	844493	251029	7.763	7.720
	Spiked Amount 9.968			Recovery	=	77.88%	77.45%
22)	S DCB	19.23	20.32	1147236	1045736	10.2	21.3 #
	Spiked Amount 9.968			Recovery	=	102.33%	213.68%
	Target Compounds:						
7)	L4 Aroclor-1242	8.54	0.00	651318	0	286.9	N.D. d #
8)	L4 Aroclor-1242 {2}	9.26	9.39	864361	372316	218.4	270.2
9)	L4 Aroclor-1242 {3}	10.12	10.08	3900560	1572709	534.3	592.7
10)	L4 Aroclor-1242 {4}	11.16	11.26	10095810	3169286	3151.1 E	3650.5 E
11)	L4 Aroclor-1242 {5}	12.31	12.34	7117906	1837360	2850.5 E	2384.0mE BTB 09/2001
	Sum Aroclor-1242			22629955	6951671	7041.2	6897.4
	Average Aroclor-1242					1408.248	1724.357
12)	L6 Aroclor-1254	10.71	10.66	5210974	3369284	1284.0 E	3445.8 E#
13)	L6 Aroclor-1254 {2}	11.85	12.08	8592271	4850762	1143.0 E	2203.2 E#
14)	L6 Aroclor-1254 {3}	12.16	13.01	7267979	6555945	1057.4 E	2221.9 E#
15)	L6 Aroclor-1254 {4}	12.94	13.45	13932530	4183056	1759.1 E	2568.1 E#
16)	L6 Aroclor-1254 {5}	14.17	14.24	16181332	6233864	2522.6 E	2859.1 E
	Sum Aroclor-1254			51185086	25192912	7766.2	13298.1
	Average Aroclor-1254					1553.235	2659.621
17)	L7 Aroclor-1260	12.94	13.32	13932530	3364386	3251.8 E	1332.5 E#
18)	L7 Aroclor-1260 {2}	13.56	14.07	7341708	2421623	1126.5mE BTB	1469.6 E#
19)	L7 Aroclor-1260 {3}	14.84	15.03	4492326	783236	1077.8 E 09/2001	361.6 #
20)	L7 Aroclor-1260 {4}	15.40	16.42	5326703	1515598	567.9	682.4
21)	L7 Aroclor-1260 {5}	16.21	17.75	4555245	1164036	637.8	743.4
	Sum Aroclor-1260			35648512	9248878	3320.3	2287.5
	Average Aroclor-1260					1332.362	917.919

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091835.D
Date Acquired: 19 Sep 2001 14:23
Inst: HP_03 Operator ID: BTB
Name: 47351.17 *E03L5 *
Misc: *EPA*30.4G/5.0ML*34
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:57 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1260 {2} 13.56min area: 7341708 m

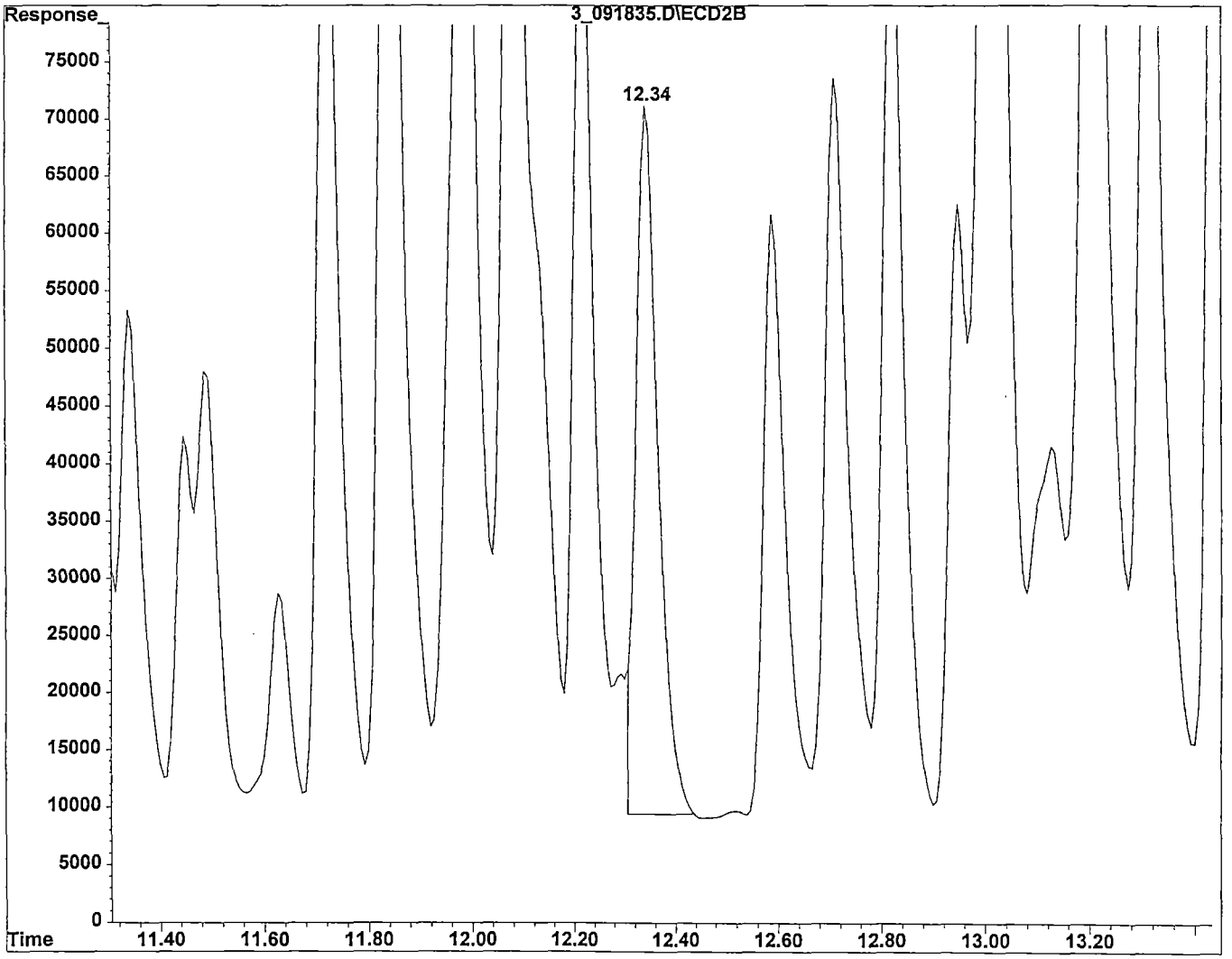
BTB 092001

Integration Time Range: 13.51 - 13.70

F:\HPCHEM\HP\3\DATA\09_18_01\3_091835.D
Report generated: Thu Sep 20 09:09:43 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091835.D
Date Acquired: 19 Sep 2001 14:23
Inst: HP_03 Operator ID: BTB
Name: 47351.17 *E03L5 *
Misc: *EPA*30.4G/5.0ML*34
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:57 2001 Quant Results File: XPCBI16.RES



OK 9-22-01 BB

Aroclor-1242 {5} #2 12.34min area: 1837360 m

Integration Time Range: 12.30 - 12.43

BTB 092001

F:\HPCHEM\HP\3\DATA\09_18_01\3_091835.D
Report generated: Thu Sep 20 09:09:44 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03L5DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.17DL

Sample wt/vol: 30.4 (g/mL) G Lab File ID:_____

% Moisture: 34 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/21/01

Injection Volume: 0.5(uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N) Y pH: 7.5 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	990	U
11104-28-2	Aroclor-1221	990	U
11141-16-5	Aroclor-1232	990	U
53469-21-9	Aroclor-1242	2100	D
12672-29-6	Aroclor-1248	990	U
11097-69-1	Aroclor-1254	3400	D
11096-82-5	Aroclor-1260	1200	DP
Surrogate amount spiked		9.97	

TBS
10-12-01

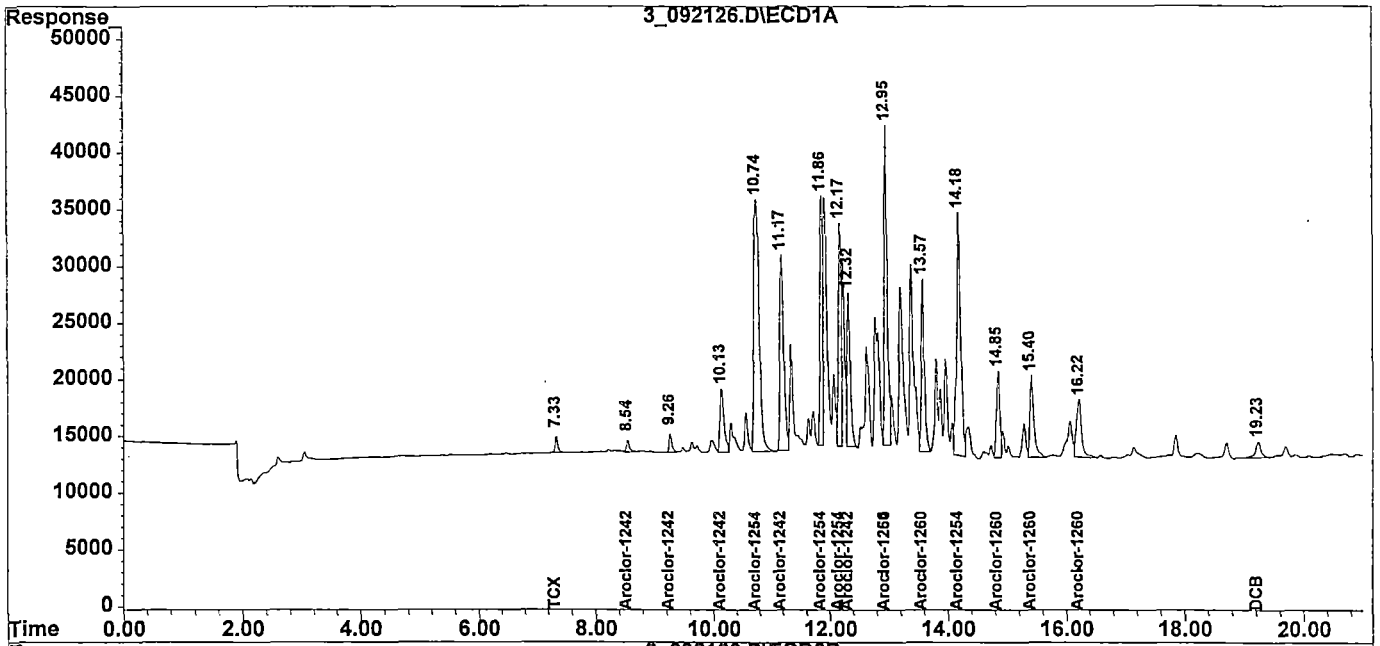
Chromatographic Report

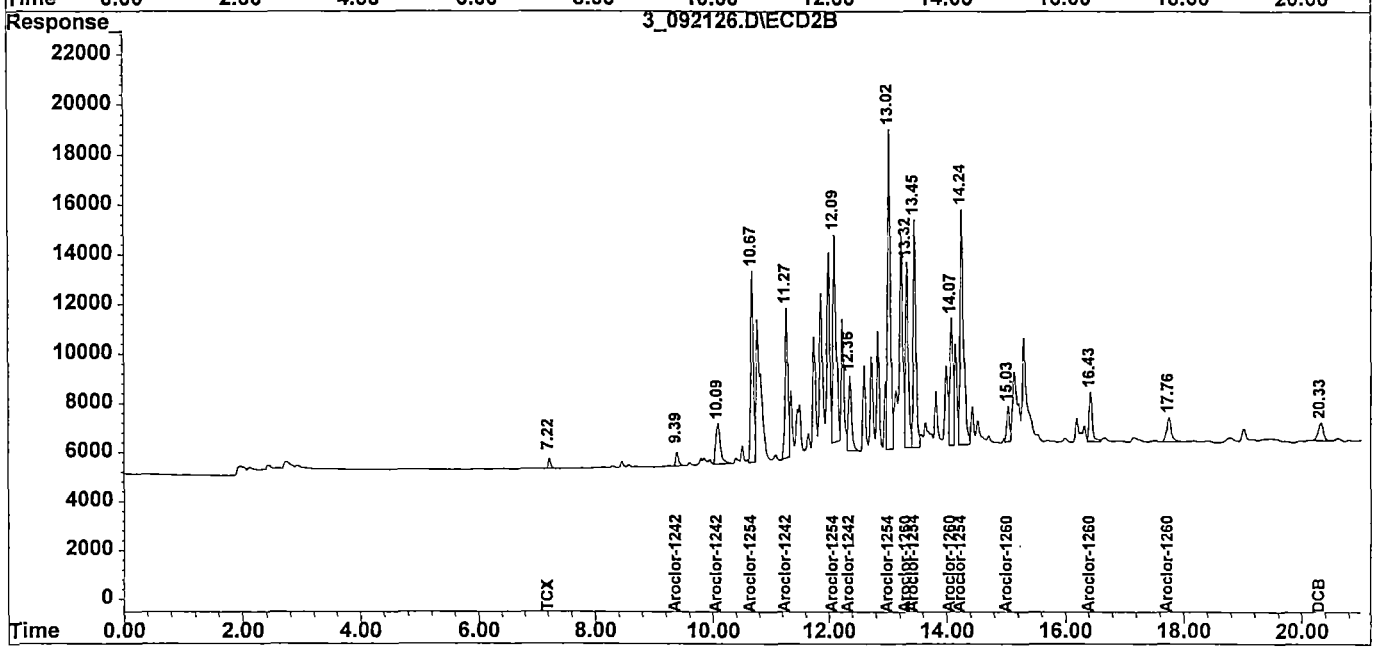
Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092126.D\ECD1A.CH Vial: 3
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092126.D\ECD2B.CH
Acq On : 21 Sep 2001 8:02 Operator: BTB
Sample : 47351.17DL *E03L5DL * Inst : HP_03
Misc : *EPA*30.4G/5.0ML*34 Dilution: 20.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 10:38 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

OK 9-22-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092126.D\ECD1A.CH Vial: 3
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092126.D\ECD2B.CH
Acq On : 21 Sep 2001 8:02 Operator: BTB
Sample : 47351.17DL *E03L5DL * Inst : HP_03
Misc : *EPA*30.4G/5.0ML*34 Dilution: 20.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 10:38 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

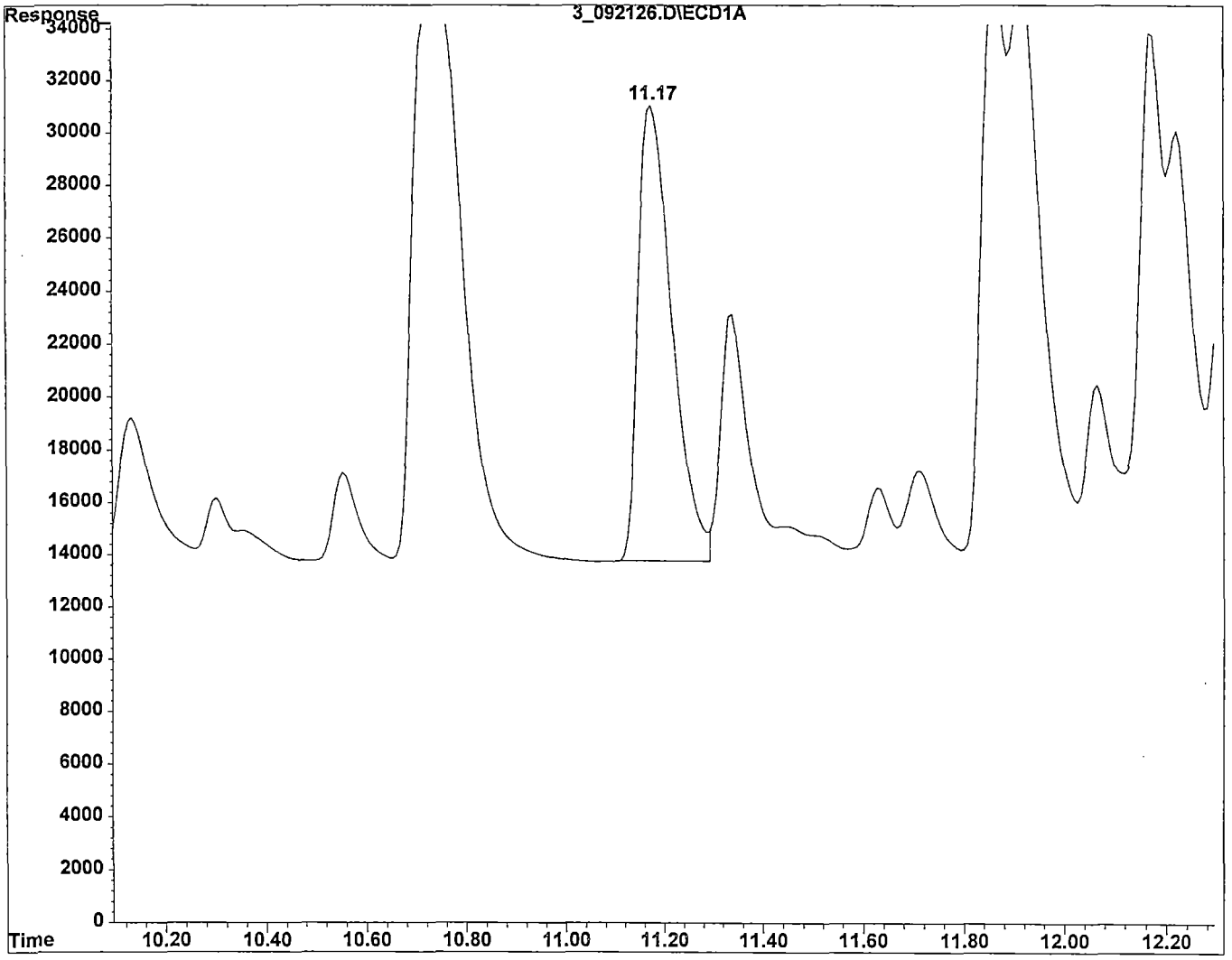
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
System Monitoring Compounds:						
1) S TCX	7.33	7.22	45498	11029	8.365	6.783
Spiked Amount 9.968			Recovery	=	83.92%	68.05%
22) S DCB	19.23	20.32	90908	44974	16.1m BTB 09/21/01	18.3m BTB 09/21/01
Spiked Amount 9.968			Recovery	=	161.52%	183.59%
Target Compounds:						
7) L4 Aroclor-1242	8.54	0.00	42636	0	375.7	N.D. d #
8) L4 Aroclor-1242 {2}	9.26	9.39	55314	19039	279.5	276.4
9) L4 Aroclor-1242 {3}	10.14	10.09	275148	91090	753.8	686.6
10) L4 Aroclor-1242 {4}	11.17	11.27	822400	200267	5133.7m	4613.5
11) L4 Aroclor-1242 {5}	12.32	12.36	553305	113208	4431.6	2937.8m #
Sum Aroclor-1242			1748801	423604	10974.3	8514.2
Average Aroclor-1242					2194.870	2128.553
12) L6 Aroclor-1254	10.74	10.67	1509618	244513	7439.7	5001.4 #
13) L6 Aroclor-1254 {2}	11.86	12.09	690056	331206	1835.9	3008.6 #
14) L6 Aroclor-1254 {3}	12.17	13.02	606974	446640	1766.1	3027.4 #
15) L6 Aroclor-1254 {4}	12.95	13.46	1004654	287983	2537.0	3536.0 #
16) L6 Aroclor-1254 {5}	14.18	14.25	1077946	397120	3361.0	3642.7
Sum Aroclor-1254			4889247	1707461	16939.7	18216.1
Average Aroclor-1254					3387.940	3643.227
17) L7 Aroclor-1260	12.95	13.32	1004654	260058	4689.6	2060.0 #
18) L7 Aroclor-1260 {2}	13.57	14.08	552856	172298	1696.6m	2091.3
19) L7 Aroclor-1260 {3}	14.85	15.04	297536	44520	1427.7	411.0 #
20) L7 Aroclor-1260 {4}	15.41	16.43	336995	77030	718.6	693.7
21) L7 Aroclor-1260 {5}	16.22	17.76	321983	56124	901.7	716.9
Sum Aroclor-1260			2514023	610030	94040.6	59538.6
Average Aroclor-1260					1886.831	1194.582

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092126.D
Date Acquired: 21 Sep 2001 8:02
Inst: HP_03 Operator ID: BTB
Name: 47351.17DL *E03L5DL *
Misc: *EPA*30.4G/5.0ML*34
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:38 2001 Quant Results File: XPCBI16.RES



Aroclor-1242 {4} 11.17min area: 822400 m

ok 9-22-01

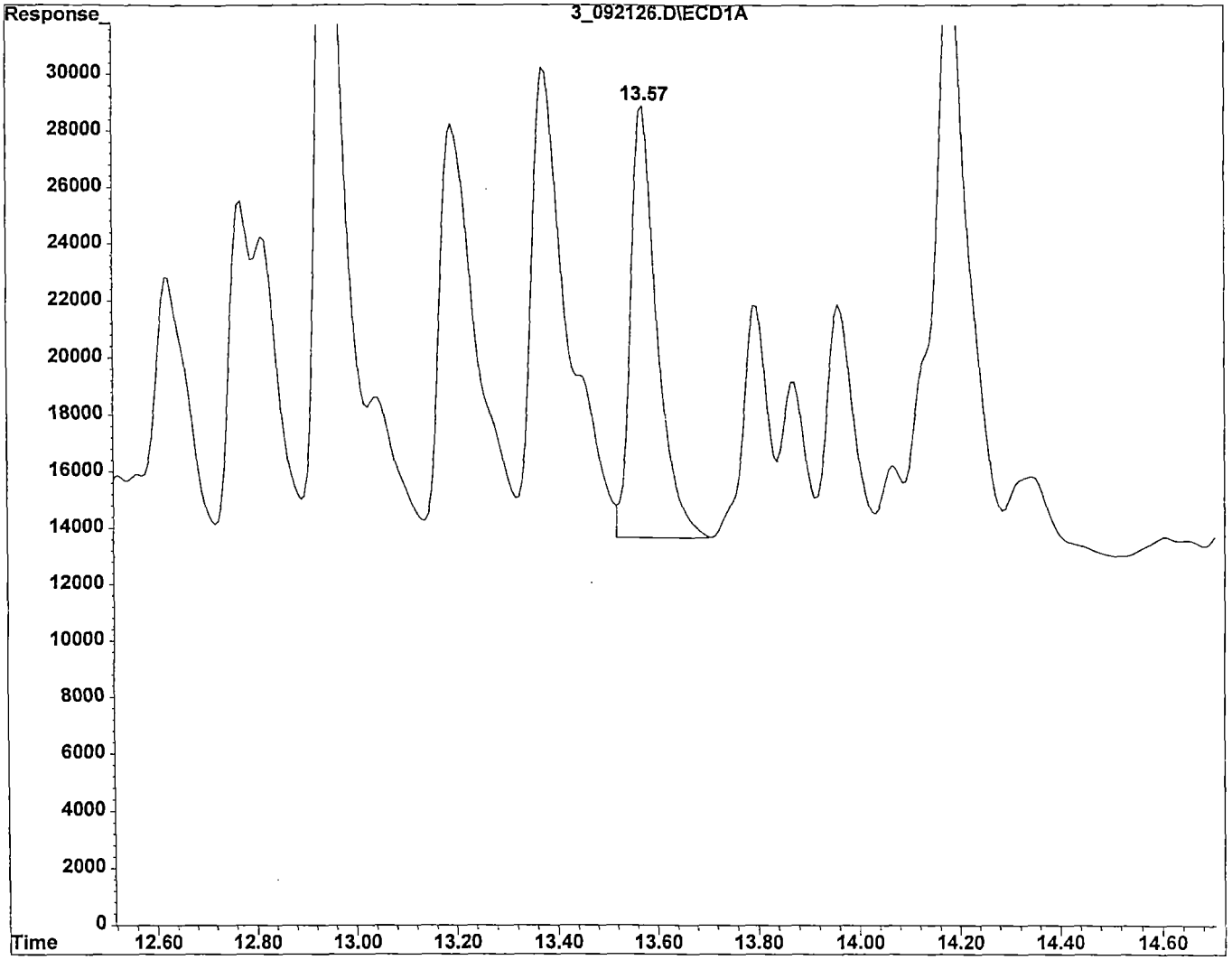
Integration Time Range: 11.09 - 11.29

BTB 092101

F:\HPCHEM\HP\3\DATA\09_21_01\3_092126.D
Report generated: Fri Sep 21 10:45:21 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092126.D
Date Acquired: 21 Sep 2001 8:02
Inst: HP_03 Operator ID: BTB
Name: 47351.17DL *E03L5DL *
Misc: *EPA*30.4G/5.0ML*34
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:38 2001 Quant Results File: XPCBI16.RES



Aroclor-1260 {2} 13.57min area: 552856 m

Integration Time Range: 13.52 - 13.70

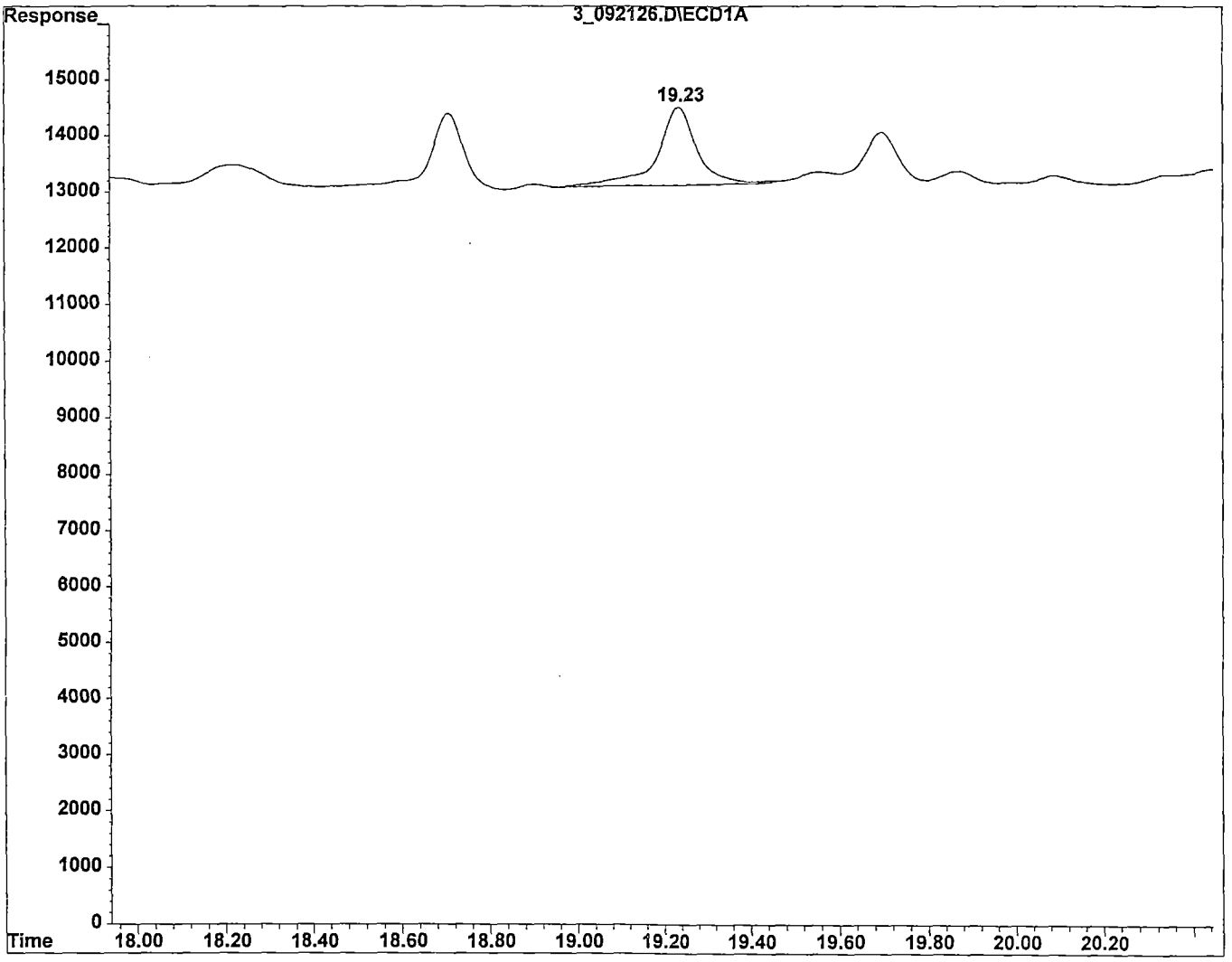
OK 9-22-01

BTB 092101

F:\HPCHEM\HP\3\DATA\09_21_01\3_092126.D
Report generated: Fri Sep 21 10:45:22 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092126.D
Date Acquired: 21 Sep 2001 8:02
Inst: HP_03 Operator ID: BTB
Name: 47351.17DL *E03L5DL *
Misc: *EPA*30.4G/5.0ML*34
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:38 2001 Quant Results File: XPCBI16.RES



ok 9-22-01 EP

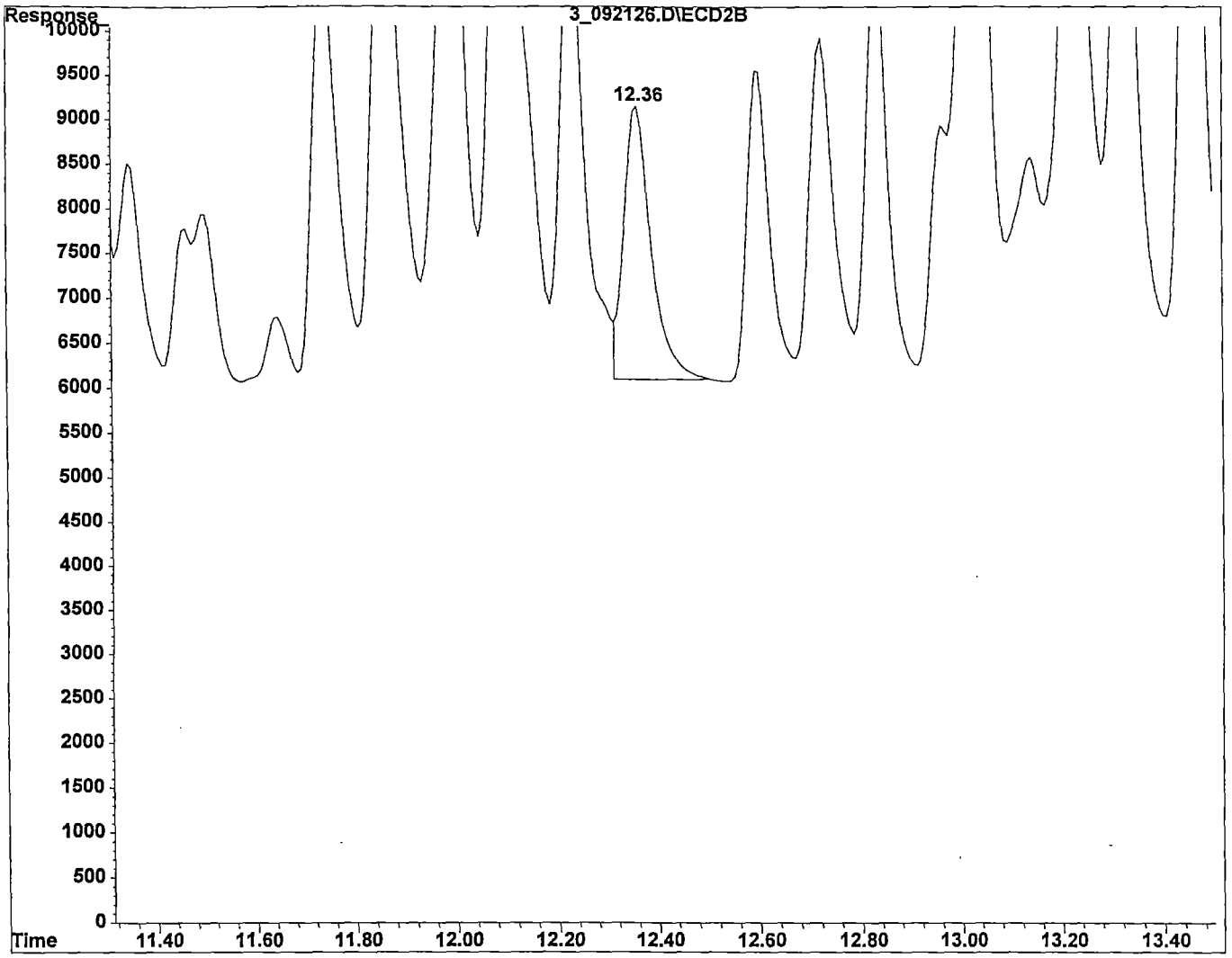
DCB 19.23min area: 90908 m BTB 092101

Integration Time Range: 18.94 - 19.44

F:\HPCHEM\HP\3\DATA\09_21_01\3_092126.D
Report generated: Fri Sep 21 10:45:22 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092126.D
Date Acquired: 21 Sep 2001 8:02
Inst: HP_03 Operator ID: BTB
Name: 47351.17DL *E03L5DL *
Misc: *EPA*30.4G/5.0ML*34
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:38 2001 Quant Results File: XPCBI16.RES



OK 9-22-01 EH

Aroclor-1242 {5} #2 12.36min area: 113208 m

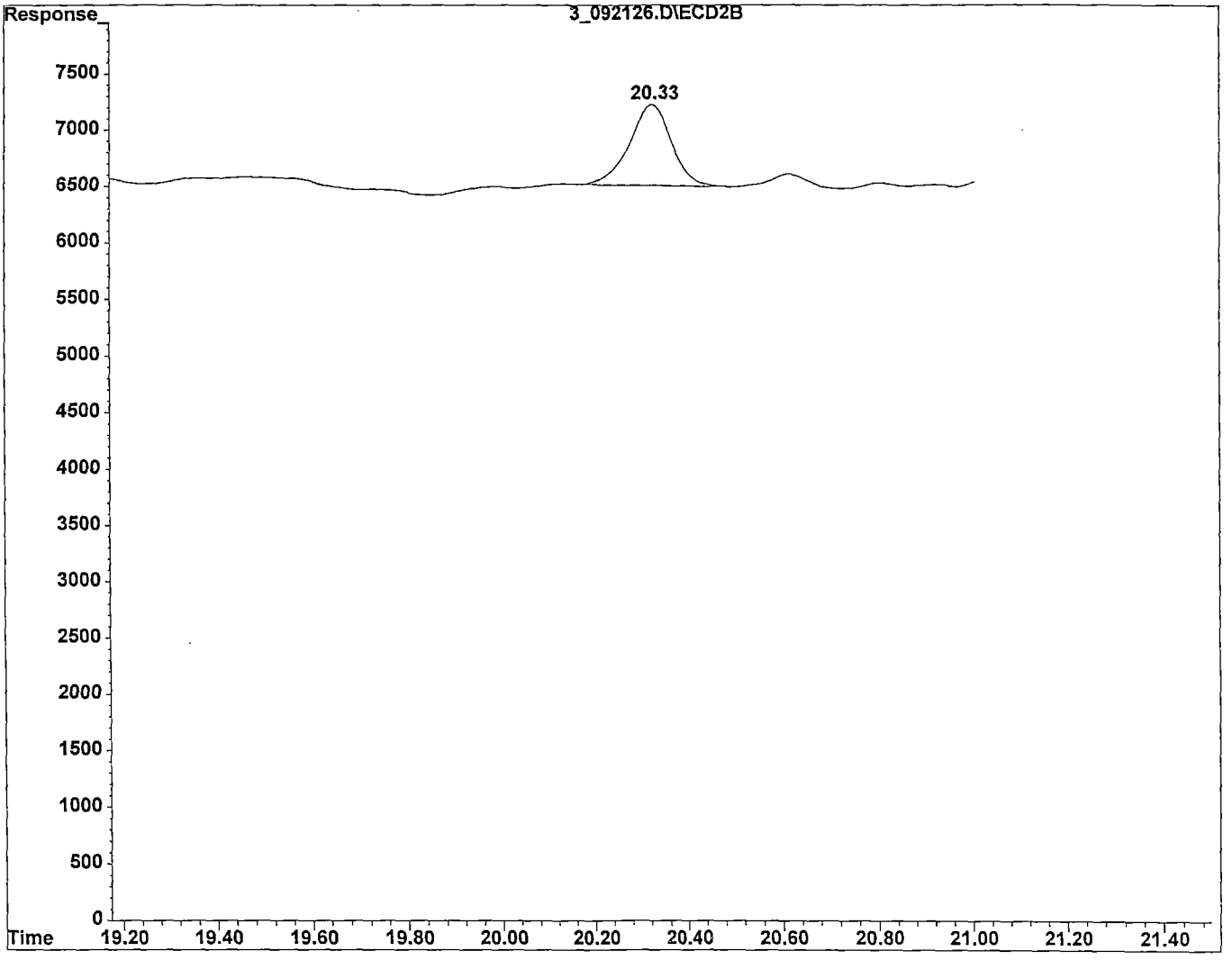
Integration Time Range: 12.31 - 12.50

BTB 092101

F:\HPCHEM\HP\3\DATA\09_21_01\3_092126.D
Report generated: Fri Sep 21 10:45:23 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092126.D
Date Acquired: 21 Sep 2001 8:02
Inst: HP_03 Operator ID: BTB
Name: 47351.17DL *E03L5DL *
Misc: *EPA*30.4G/5.0ML*34
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 10:38 2001 Quant Results File: XPCBI16.RES



Ok 9-22-01 KD

DCB #2 20.33min area: 44974 m BTB 092101

Integration Time Range: 20.17 - 20.50

F:\HPCHEM\HP\3\DATA\09_21_01\3_092126.D
Report generated: Fri Sep 21 10:45:24 2001

1D

AROCLOR ORGANICS ANALYSIS DATA SHEET

E03L6

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.18

Sample wt/vol: 30.6 (g/mL) G Lab File ID:_____

% Moisture: 32 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/20/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.7 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	48	UJ
11104-28-2	Aroclor-1221	48	UJ
11141-16-5	Aroclor-1232	48	UJ
53469-21-9	Aroclor-1242	120	J
12672-29-6	Aroclor-1248	48	UJ
11097-69-1	Aroclor-1254	180	J
11096-82-5	Aroclor-1260	78	PJ
Surrogate amount spiked		9.61	

378

TBS 10-12-01

FORM I PCB

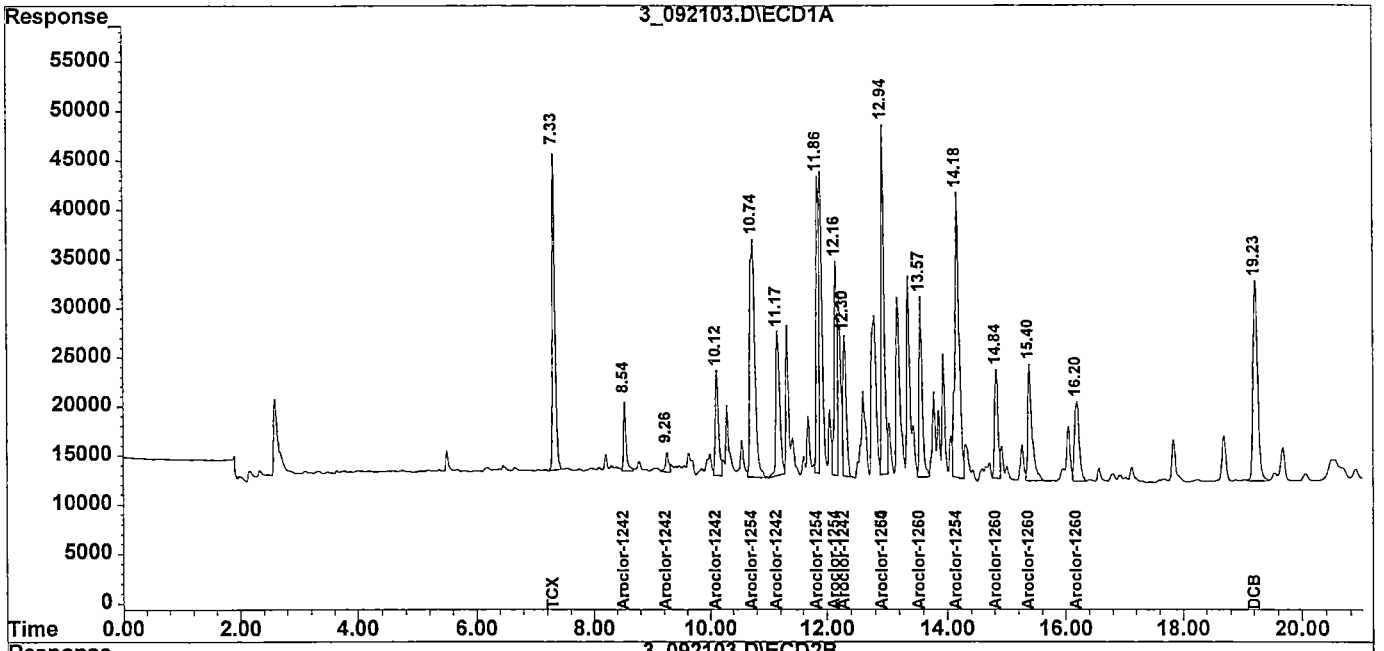
Chromatographic Report

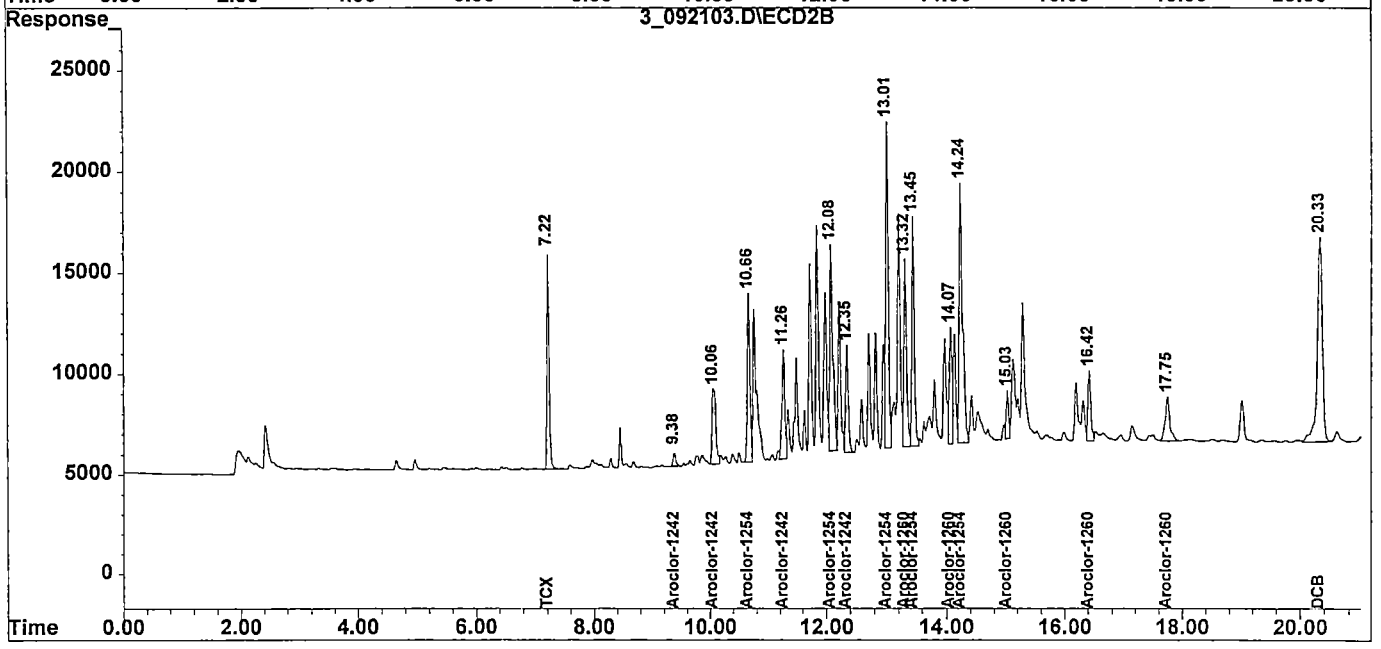
Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092103.D\ECD1A.CH Vial: 80
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092103.D\ECD2B.CH
Acq On : 20 Sep 2001 22:11 Operator: BTB
Sample : 47351.18 *E03L6 * Inst : HP_03
Misc : *EPA*30.6G/5.0ML*32 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 9:28 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

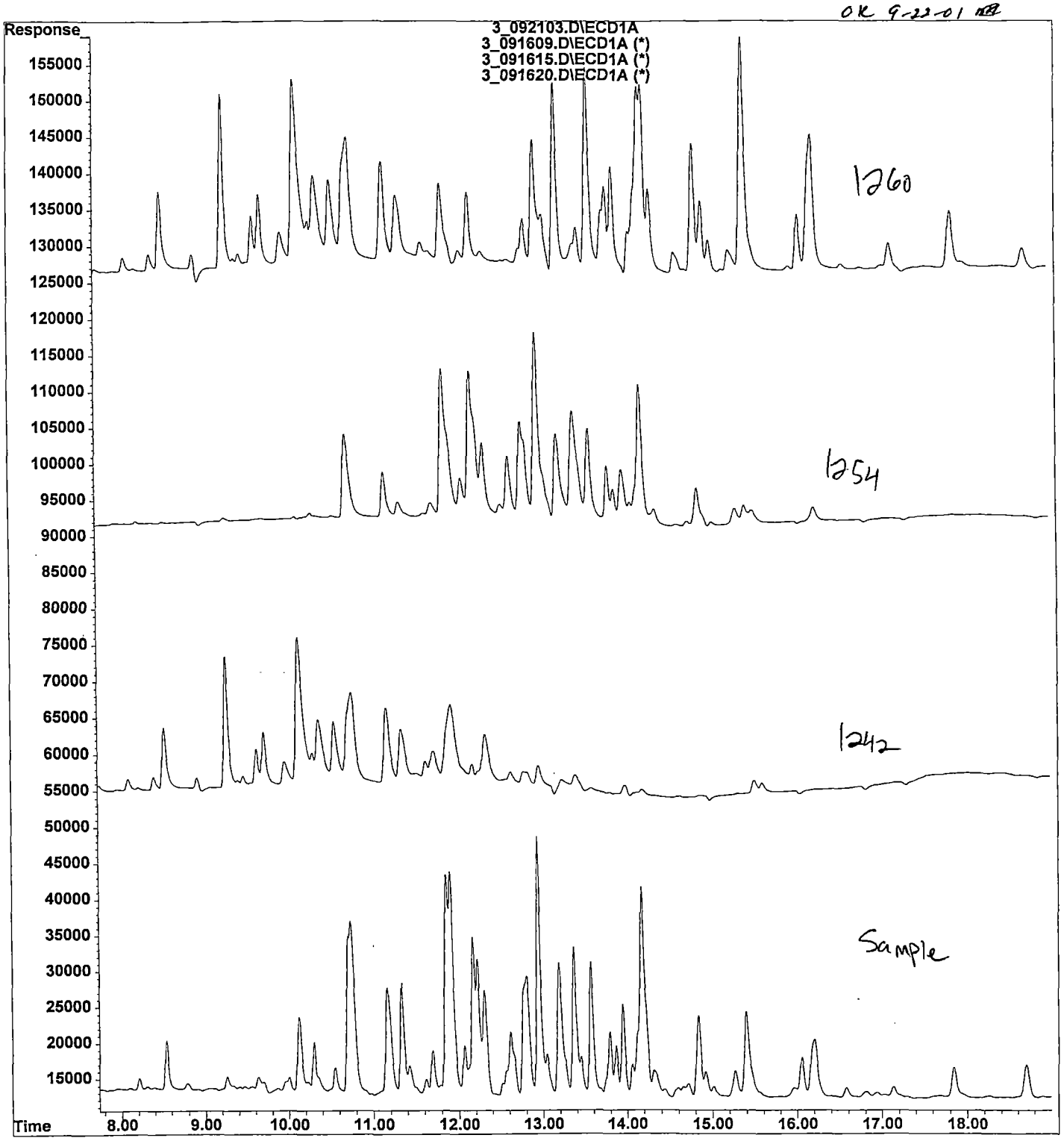
OK 9-27-01





File : F:\HPCHEM\HP\3\DATA\09_21_01\3_092103.D
Operator : BTB
Acquired : 20 Sep 2001 22:11 using AcqMethod OLM03.M
Instrument : HP_03
Sample Name: 47351.18 *E03L6 *
Misc Info : *EPA*30.6G/5.0ML*32
Vial Number: 80

OK 9-22-01



Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092103.D\ECD1A.CH Vial: 80
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092103.D\ECD2B.CH
Acq On : 20 Sep 2001 22:11 Operator: BTB
Sample : 47351.18 *E03L6 * Inst : HP_03
Misc : *EPA*30.6G/5.0ML*32 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 9:28 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

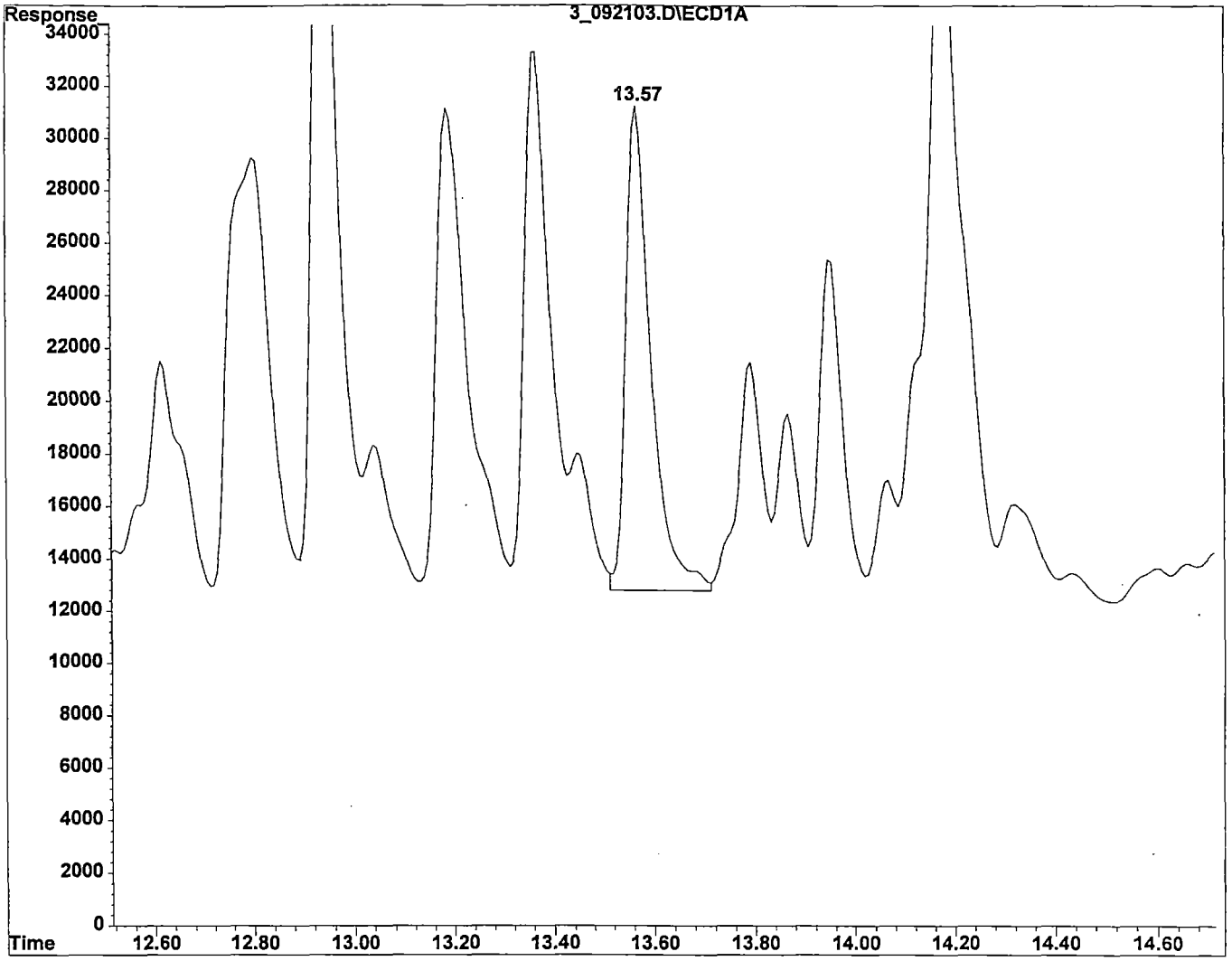
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.22	982483	282806	8.709	8.386	
	Spiked Amount 9.612			Recovery	=	90.61%	87.25%	
22)	S DCB	19.23	20.33	1045205	605638	8.928	11.9	#
	Spiked Amount 9.612			Recovery	=	92.89%	123.81%	
	Target Compounds:							
7)	L4 Aroclor-1242	8.54	0.00	224253	0	95.3	N.D. d	#
8)	L4 Aroclor-1242 {2}	9.26	9.39	80316	21967	19.6	15.4	
9)	L4 Aroclor-1242 {3}	10.13	10.06	418190	168740	55.2	61.3	
10)	L4 Aroclor-1242 {4}	11.17	11.27	680772	189304	204.9	210.3	
11)	L4 Aroclor-1242 {5}	12.31	12.35	554528	162584	214.1	203.4m BTB 092101	
	Sum Aroclor-1242			1958059	542595	589.1	490.4	
	Average Aroclor-1242					117.816	122.589	
12)	L6 Aroclor-1254	10.74	10.66	1503338	250369	357.2	246.9	#
13)	L6 Aroclor-1254 {2}	11.86	12.08	806675	388413	103.5	170.1	#
14)	L6 Aroclor-1254 {3}	12.16	13.02	650289	517673	91.2	169.2	#
15)	L6 Aroclor-1254 {4}	12.94	13.45	1155316	326718	140.7	193.4	#
16)	L6 Aroclor-1254 {5}	14.18	14.24	1457431	531096	219.1	234.9	
	Sum Aroclor-1254			5573049	2014268	911.6	1014.5	
	Average Aroclor-1254					182.326	202.893	
17)	L7 Aroclor-1260	12.94	13.32	1155316	293690	260.0	112.2	#
18)	L7 Aroclor-1260 {2}	13.57	14.07	636852	191155	94.2m BTB 092101	111.9	
19)	L7 Aroclor-1260 {3}	14.84	15.03	414577	71683	95.9	31.9	#
20)	L7 Aroclor-1260 {4}	15.40	16.42	584074	126756	60.0	55.0	
21)	L7 Aroclor-1260 {5}	16.21	17.75	471454	125170	63.7	77.1	
	Sum Aroclor-1260			3262273	808454	275.8	186.5	
	Average Aroclor-1260					114.767	77.610	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092103.D
Date Acquired: 20 Sep 2001 22:11
Inst: HP_03 Operator ID: BTB
Name: 47351.18 *E03L6 *
Misc: *EPA*30.6G/5.0ML*32
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 9:28 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

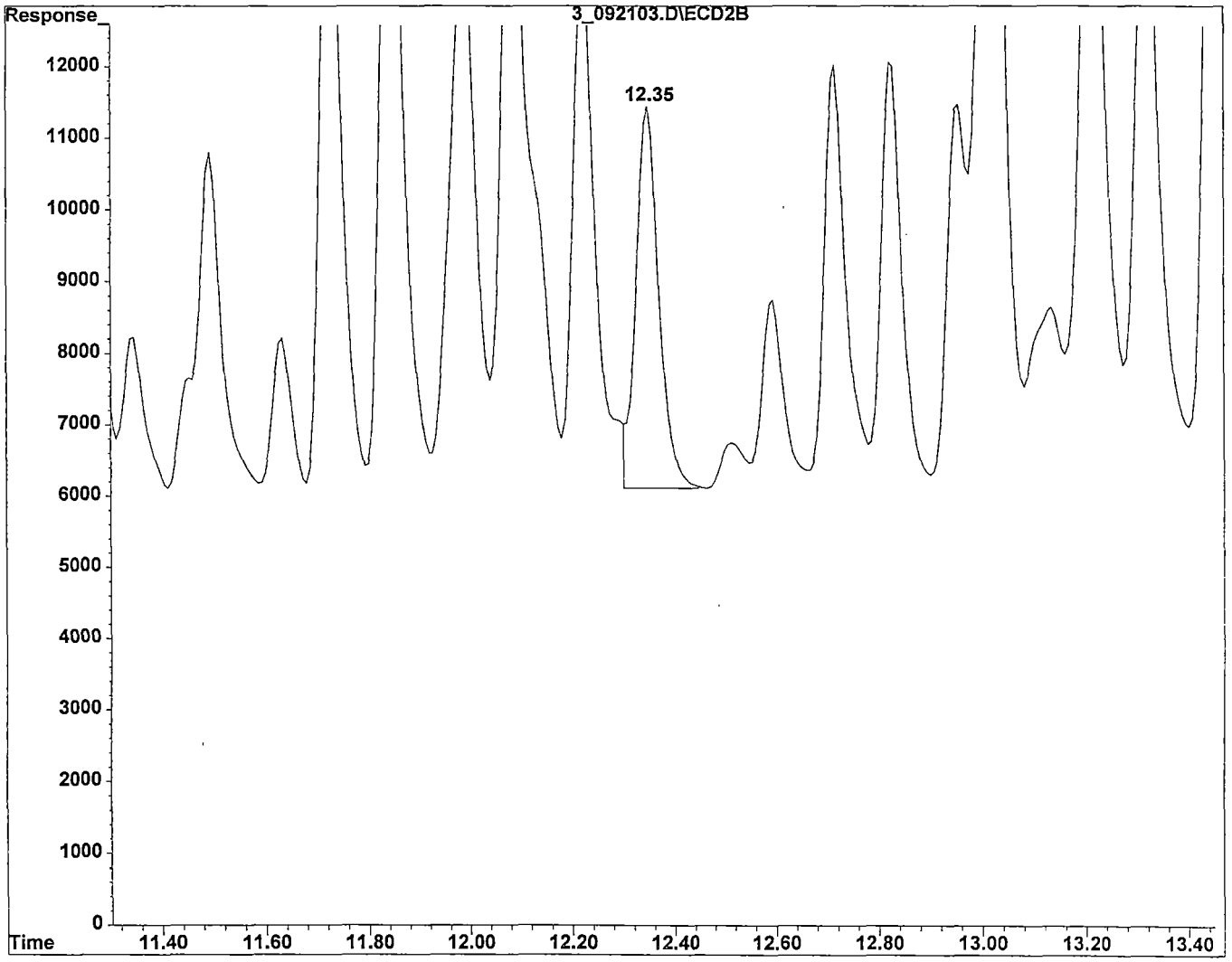
Aroclor-1260 {2} 13.57min area: 636852 m

Integration Time Range: 13.51 - 13.71

F:\HPCHEM\HP\3\DATA\09_21_01\3_092103.D
Report generated: Fri Sep 21 14:04:11 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092103.D
Date Acquired: 20 Sep 2001 22:11
Inst: HP_03 Operator ID: BTB
Name: 47351.18 *E03L6 *
Misc: *EPA*30.6G/5.0ML*32
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 9:28 2001 Quant Results File: XPCBI16.RES



OK 9-22-01 RH

Aroclor-1242 {5} #2 12.35min area: 162584 m

BTB092101

Integration Time Range: 12.30 - 12.45

F:\HPCHEM\HP\3\DATA\09_21_01\3_092103.D
Report generated: Fri Sep 21 14:04:12 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03L7

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.19

Sample wt/vol: 30.2 (g/mL) G Lab File ID:_____

% Moisture: 30 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/20/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.7 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	47	UJ
11104-28-2	Aroclor-1221	47	UJ
11141-16-5	Aroclor-1232	47	UJ
53469-21-9	Aroclor-1242	44	J
12672-29-6	Aroclor-1248	47	UJ
11097-69-1	Aroclor-1254	33	JP
11096-82-5	Aroclor-1260	18	JP
Surrogate amount spiked		9.46	

QS TBS 10-12-01

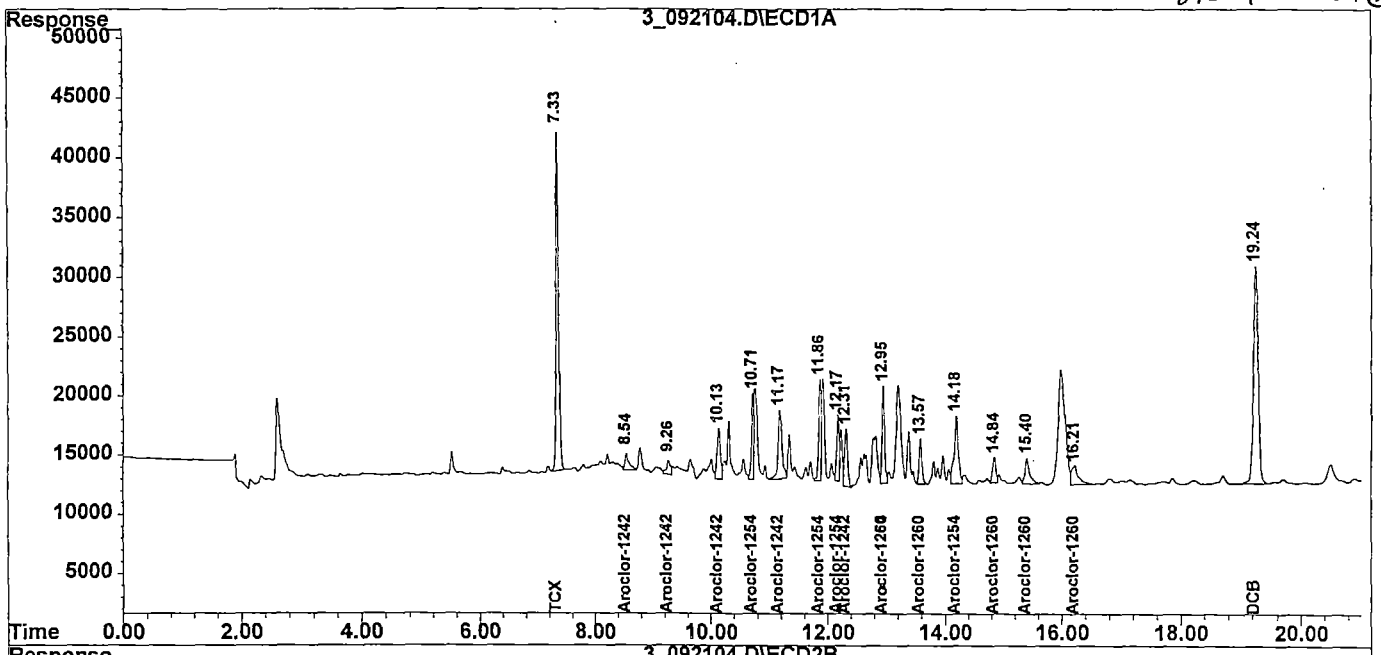
Chromatographic Report

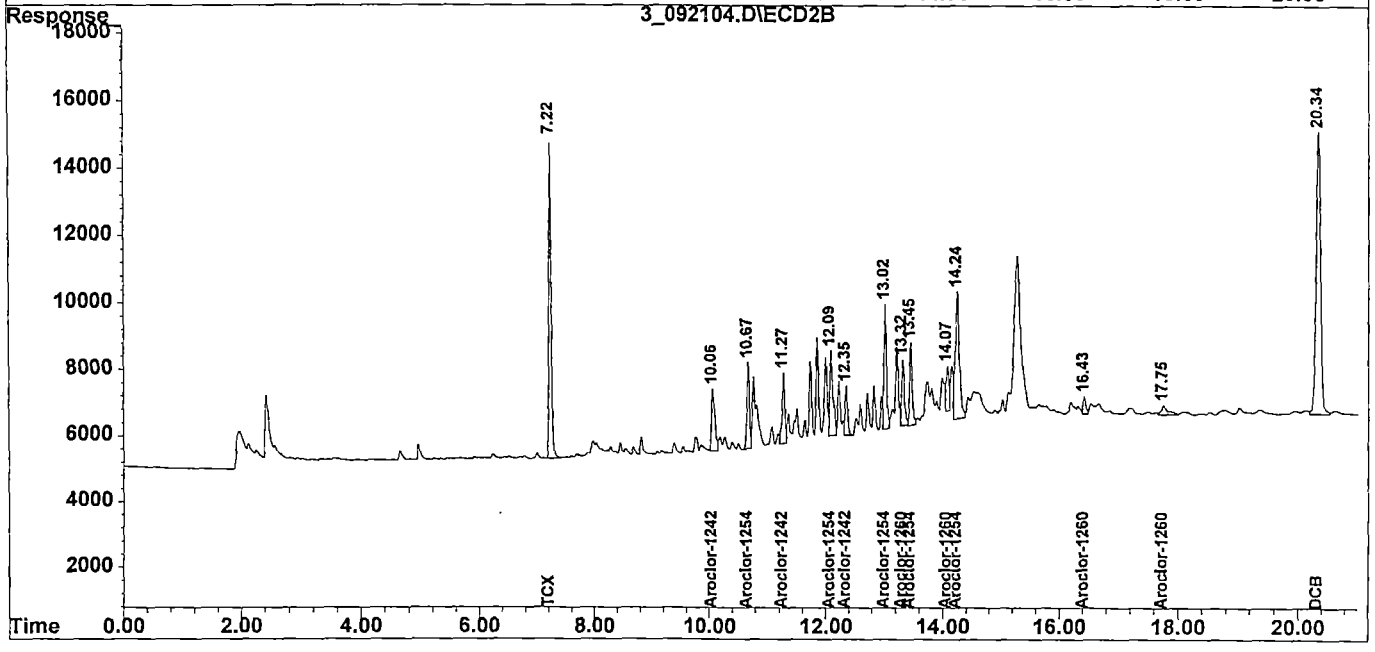
Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092104.D\ECD1A.CH Vial: 81
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092104.D\ECD2B.CH
Acq On : 20 Sep 2001 22:37 Operator: BTB
Sample : 47351.19 *E03L7✓* Inst : HP_03
Misc : *EPA*30.2G/5.0ML*30 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 9:32 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

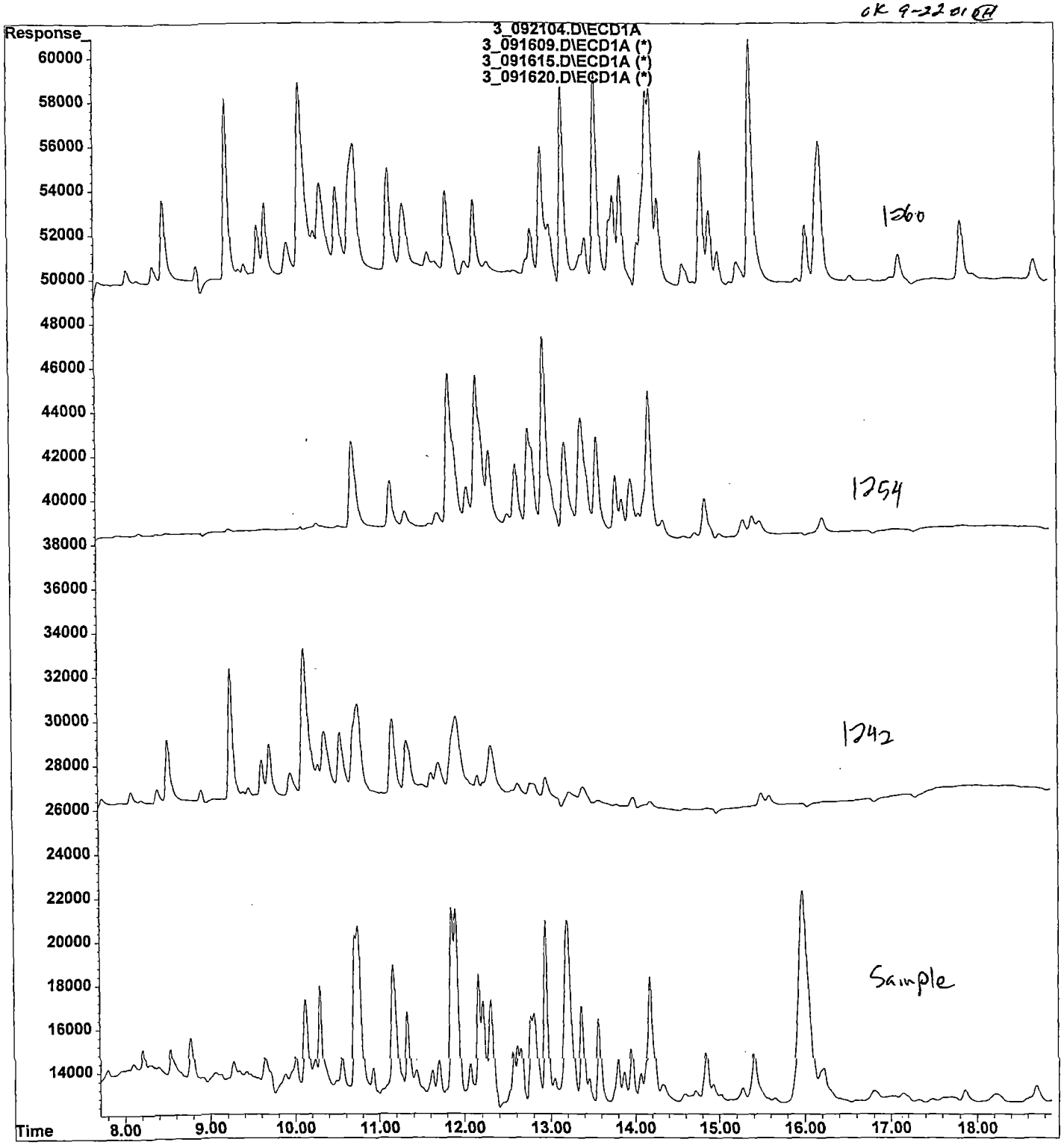
6K 9-22-01 OH





File : F:\HPCHEM\HP\3\DATA\09_21_01\3_092104.D
Operator : BTB
Acquired : 20 Sep 2001 22:37 using AcqMethod OLM03.M
Instrument : HP_03
Sample Name: 47351.19 *E03L7 *
Misc Info : *EPA*30.2G/5.0ML*30
Vial Number: 81

OK 9-22-01 BH



Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092104.D\ECD1A.CH Vial: 81
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092104.D\ECD2B.CH
Acq On : 20 Sep 2001 22:37 Operator: BTB
Sample : 47351.19 *E03L7 * Inst : HP_03
Misc : *EPA*30.2G/5.0ML*30 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 9:32 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	925597	267448	8.076	7.806
	Spiked Amount 9.461			Recovery	=	85.36%	82.51%
22)	S DCB	19.24	20.34	943740	444922	7.935	8.589
	Spiked Amount 9.461			Recovery	=	✓83.87%	✓90.79%
	Target Compounds:						
7)	L4 Aroclor-1242	8.54	0.00	70052	0	29.3	N.D. d #
8)	L4 Aroclor-1242 {2}	9.26	0.00	54359	0	13.0	N.D. d #
9)	L4 Aroclor-1242 {3}	10.13	10.06	178207	77861	23.2	27.9
10)	L4 Aroclor-1242 {4}	11.17	11.27	284508	72413	84.3	79.2
11)	L4 Aroclor-1242 {5}	12.31	12.35	186798	44188	71.0	54.4m
	Sum Aroclor-1242			773922	194462	220.8	161.4
	Average Aroclor-1242					44.155	53.810
12)	L6 Aroclor-1254	10.72	10.67	156578	78643	36.6	76.3 #
13)	L6 Aroclor-1254 {2}	11.86	12.09	262036	102561	33.1m	44.2 #
14)	L6 Aroclor-1254 {3}	12.17	13.02	161832	116184	22.3m	37.4 #
15)	L6 Aroclor-1254 {4}	12.95	13.46	257392	75029	30.8	43.7 #
16)	L6 Aroclor-1254 {5}	14.18	14.24	281936	187634	41.7	81.7 #
	Sum Aroclor-1254			1119775	560051	164.6	283.3
	Average Aroclor-1254					32.922	56.663
17)	L7 Aroclor-1260	12.95	13.32	257392	62852	57.0	23.6m #
18)	L7 Aroclor-1260 {2}	13.57	14.07	121644	45552	17.7m	26.2m #
19)	L7 Aroclor-1260 {3}	14.85	0.00	84353	0	19.2	N.D. d #
20)	L7 Aroclor-1260 {4}	15.40	16.43	120069	17984	12.1	7.685 #
21)	L7 Aroclor-1260 {5}	16.21	17.76	125833	20974	16.7	12.7
	Sum Aroclor-1260			709291	147362	58.1	33.2
	Average Aroclor-1260					24.562	17.566

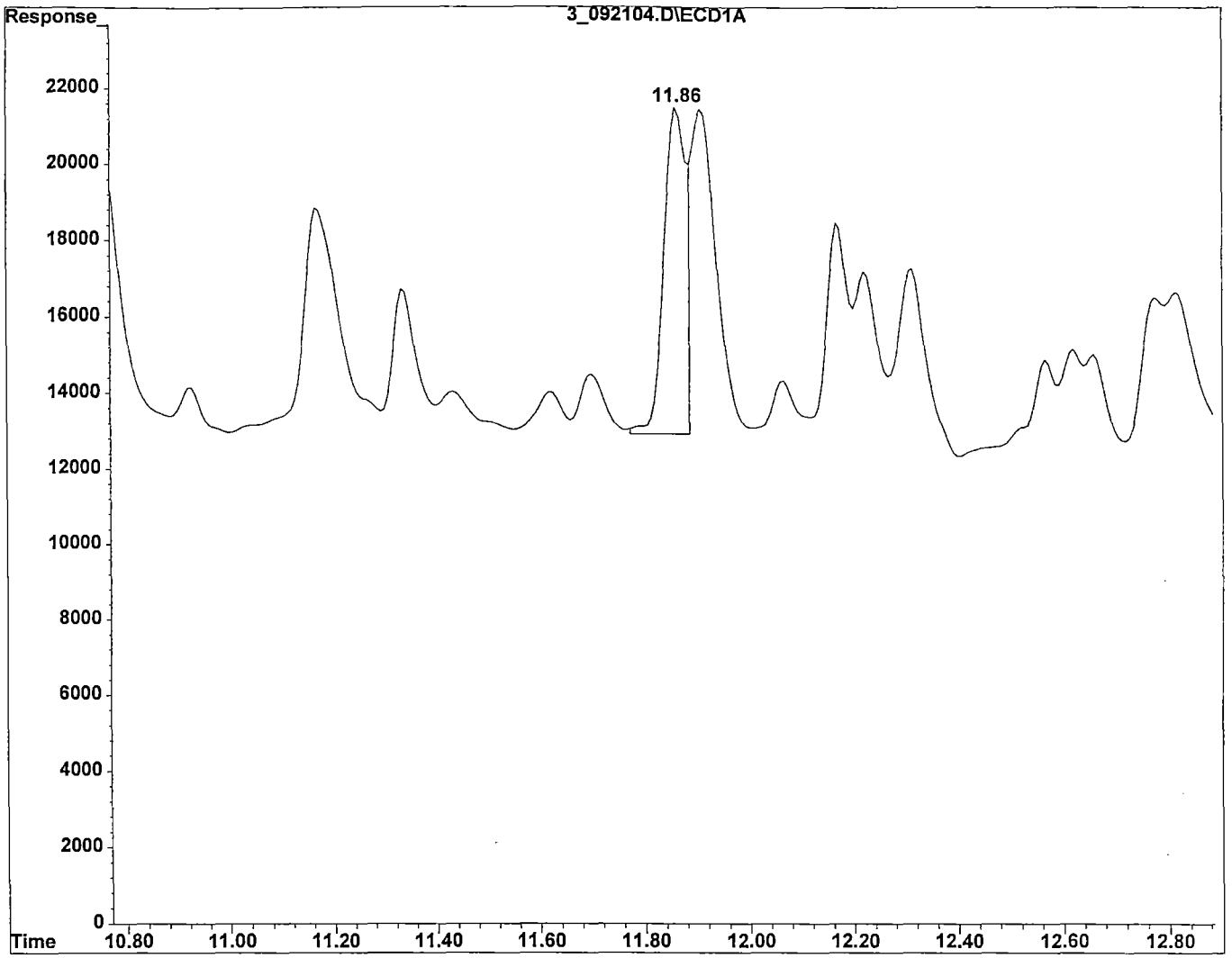
BTB 092101

BTB 092101

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092104.D
Date Acquired: 20 Sep 2001 22:37
Inst: HP_03 Operator ID: BTB
Name: 47351.19 *E03L7 *
Misc: *EPA*30.2G/5.0ML*30
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 9:32 2001 Quant Results File: XPCBI16.RES



OK 9-22-01 @R

Aroclor-1254 {2} 11.86min area: 262036 m

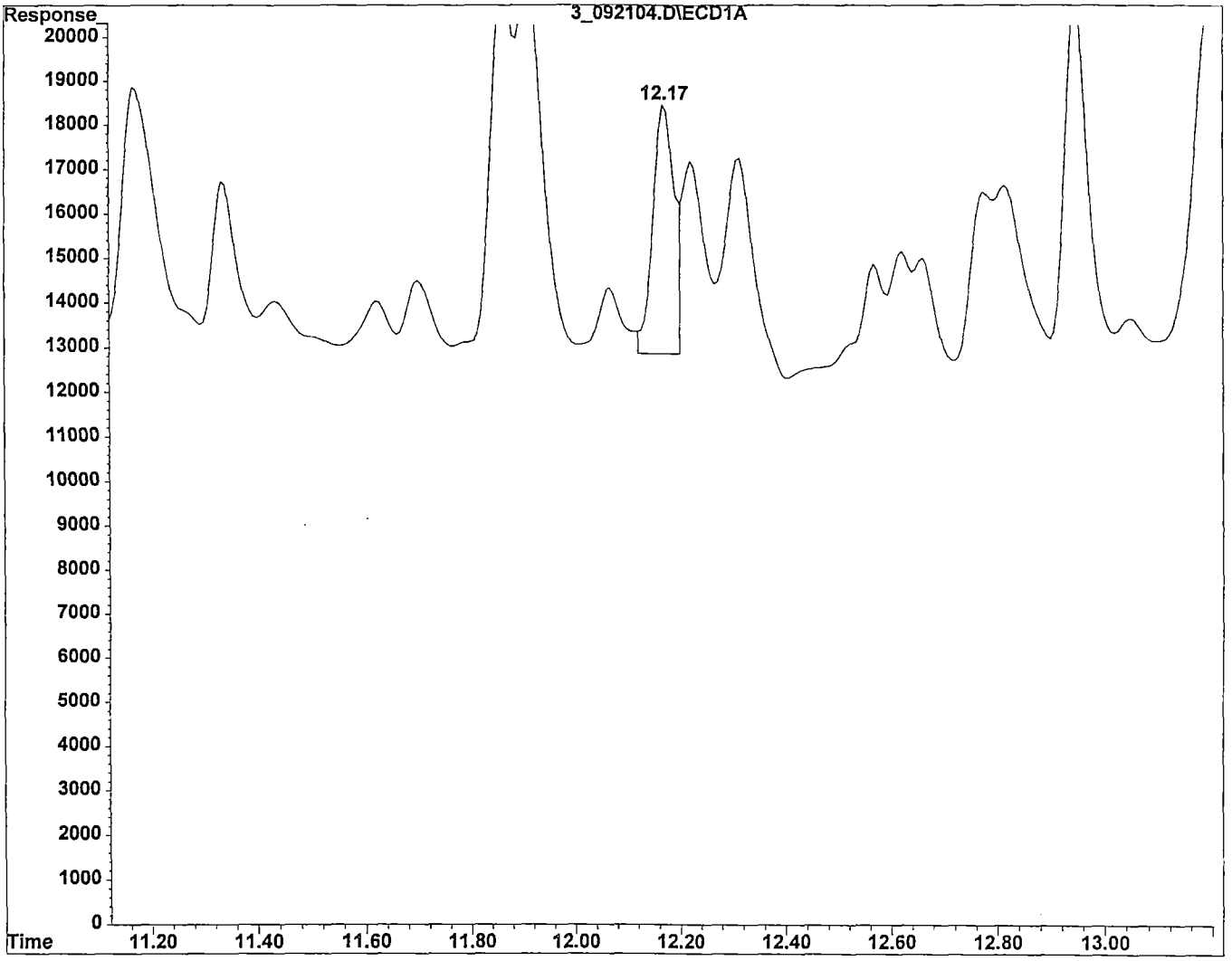
Integration Time Range: 11.77 - 11.89

BTB 092101

F:\HPCHEM\HP\3\DATA\09_21_01\3_092104.D
Report generated: Fri Sep 21 14:04:58 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092104.D
Date Acquired: 20 Sep 2001 22:37
Inst: HP_03 Operator ID: BTB
Name: 47351.19 *E03L7 *
Misc: *EPA*30.2G/5.0ML*30
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 9:32 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1254 {3} 12.17min area: 161832 m

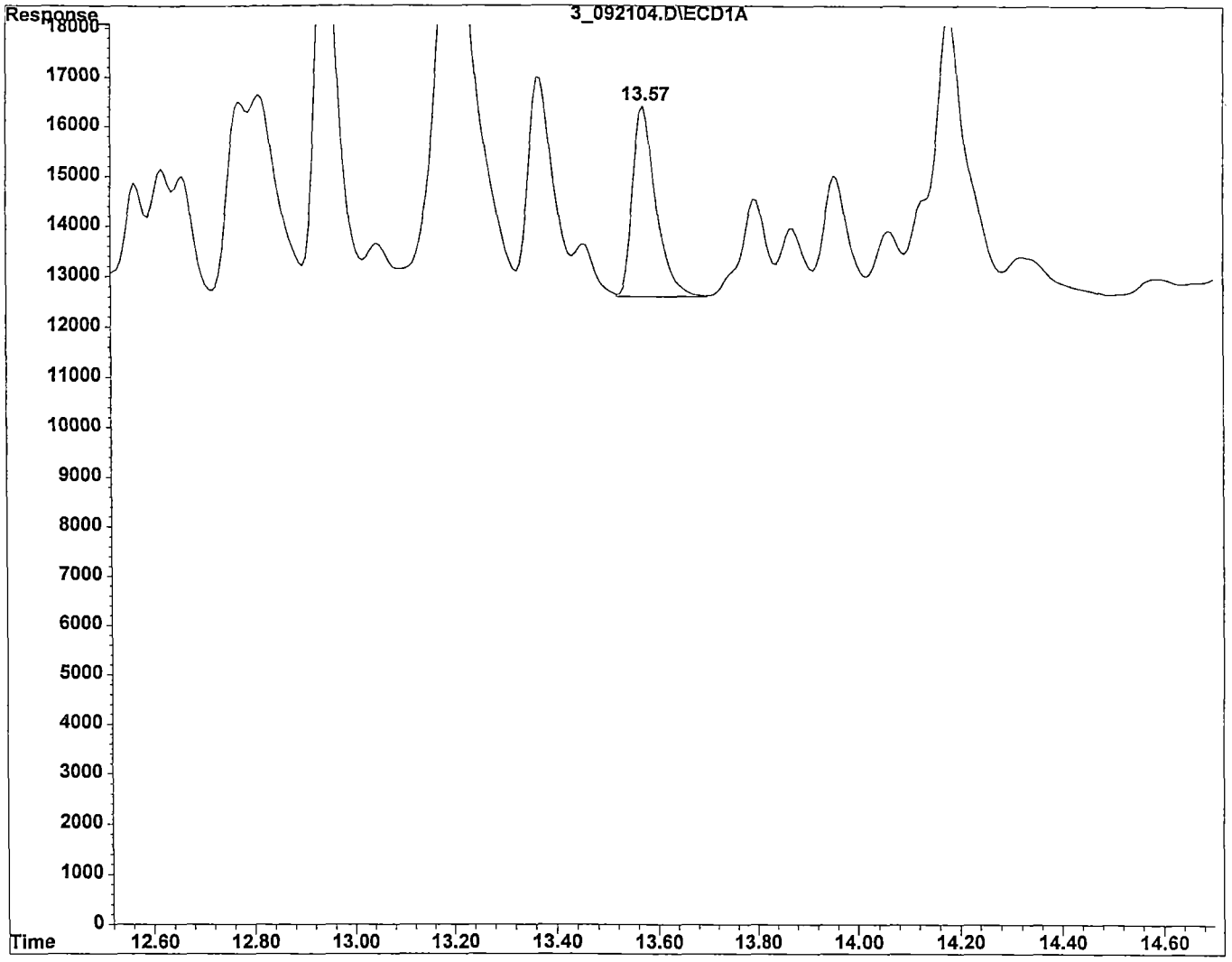
Integration Time Range: 12.12 - 12.20

BTB 09/21/01

F:\HPCHEM\HP\3\DATA\09_21_01\3_092104.D
Report generated: Fri Sep 21 14:04:59 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092104.D
Date Acquired: 20 Sep 2001 22:37
Inst: HP_03 Operator ID: BTB
Name: 47351.19 *E03L7 *
Misc: *EPA*30.2G/5.0ML*30
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 9:32 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1260 {2} 13.57min area: 121644 m

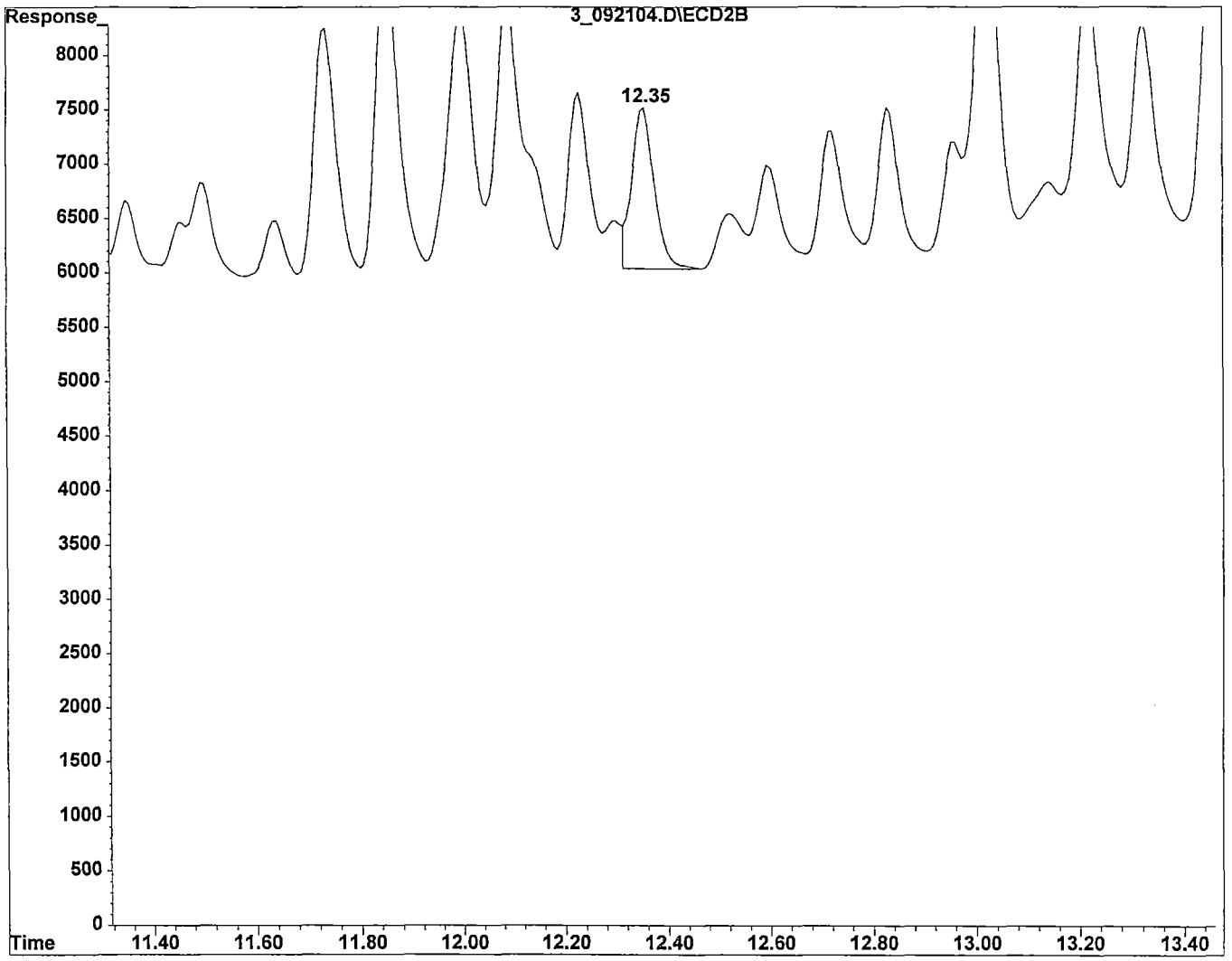
Integration Time Range: 13.52 - 13.70

BTB 092101

F:\HPCHEM\HP\3\DATA\09_21_01\3_092104.D
Report generated: Fri Sep 21 14:04:59 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092104.D
Date Acquired: 20 Sep 2001 22:37
Inst: HP_03 Operator ID: BTB
Name: 47351.19 *E03L7 *
Misc: *EPA*30.2G/5.0ML*30
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 9:32 2001 Quant Results File: XPCBI16.RES



ok 9-22-01

Aroclor-1242 {5} #2 12.35min area: 44188 m

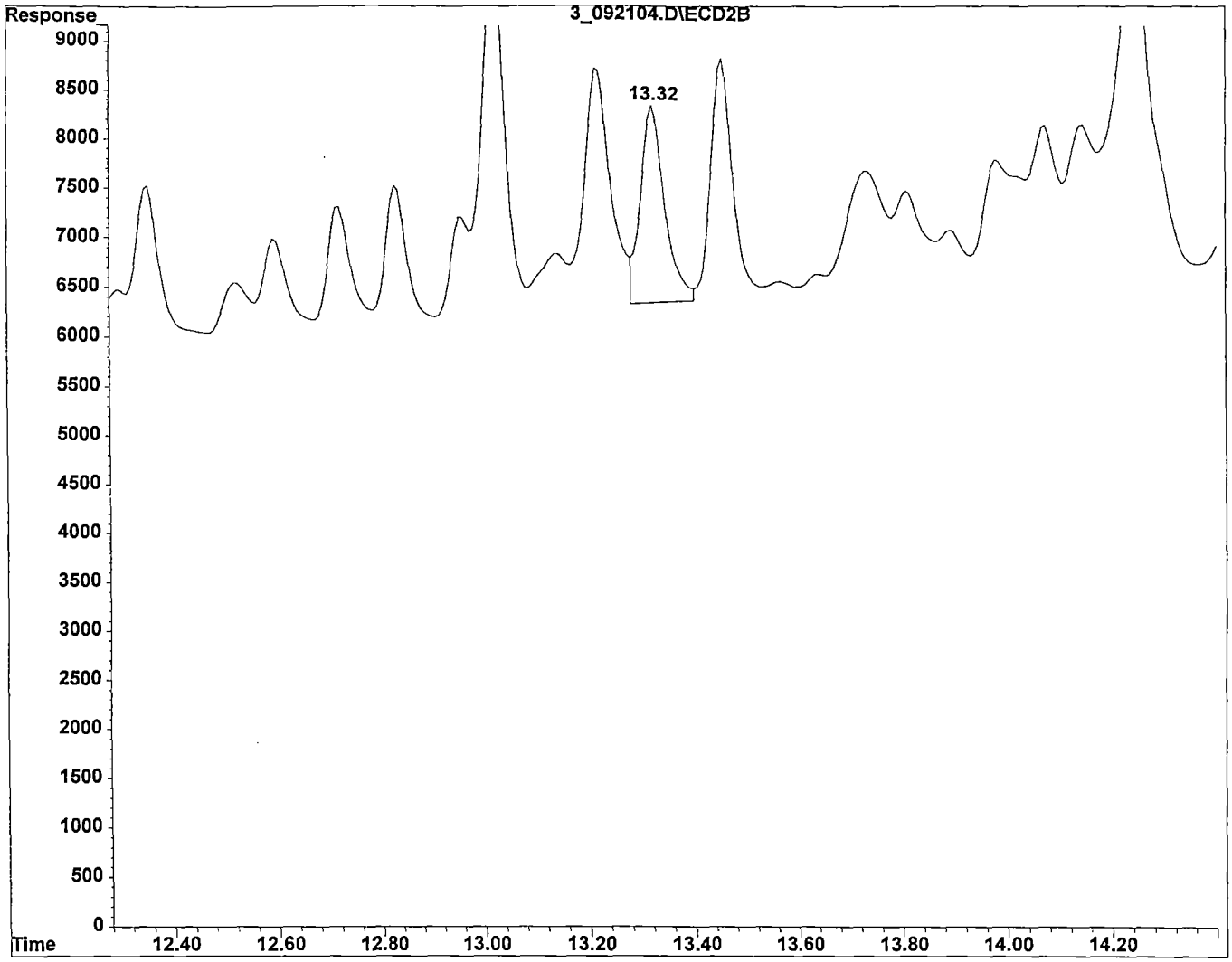
Integration Time Range: 12.32 - 12.46

BTB
092101

F:\HPCHEM\HP\3\DATA\09_21_01\3_092104.D
Report generated: Fri Sep 21 09:54:22 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092104.D
Date Acquired: 20 Sep 2001 22:37
Inst: HP_03 Operator ID: BTB
Name: 47351.19 *E03L7 *
Misc: *EPA*30.2G/5.0ML*30
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 9:32 2001 Quant Results File: XPCBI16.RES



ok 9-22-01 BH

Aroclor-1260 #2 13.32min area: 62852 m

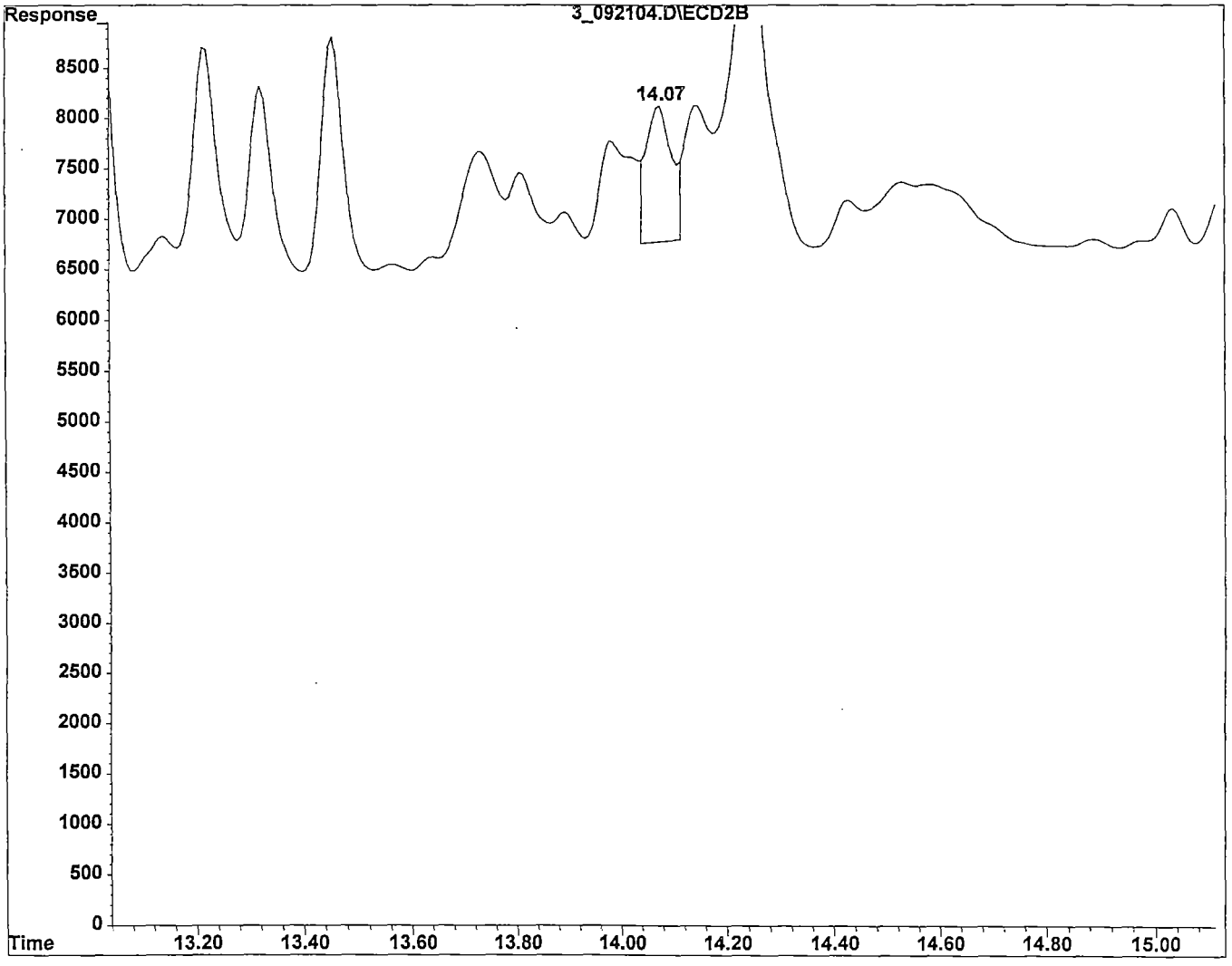
Integration Time Range: 13.28 - 13.40

BTB 092101

F:\HPCHEM\HP\3\DATA\09_21_01\3_092104.D
Report generated: Fri Sep 21 09:54:22 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092104.D
Date Acquired: 20 Sep 2001 22:37
Inst: HP_03 Operator ID: BTB
Name: 47351.19 *E03L7 *
Misc: *EPA*30.2G/5.0ML*30
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 9:32 2001 Quant Results File: XPCBI16.RES



CK 9-22-01

Aroclor-1260 {2} #2 14.07min area: 45552 m

Integration Time Range: 14.04 - 14.11

BTB 092101

F:\HPCHEM\HP\3\DATA\09_21_01\3_092104.D
Report generated: Fri Sep 21 09:54:23 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03L8

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.20

Sample wt/vol: 30.1 (g/mL) G Lab File ID:_____

% Moisture: 27 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/20/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	45	UJ
11104-28-2	Aroclor-1221	45	UJ
11141-16-5	Aroclor-1232	45	UJ
53469-21-9	Aroclor-1242	30	J
12672-29-6	Aroclor-1248	45	UJ
11097-69-1	Aroclor-1254	34	J
11096-82-5	Aroclor-1260	8.9	JP
Surrogate amount spiked		9.10	

72.9 TBS 10-12-01

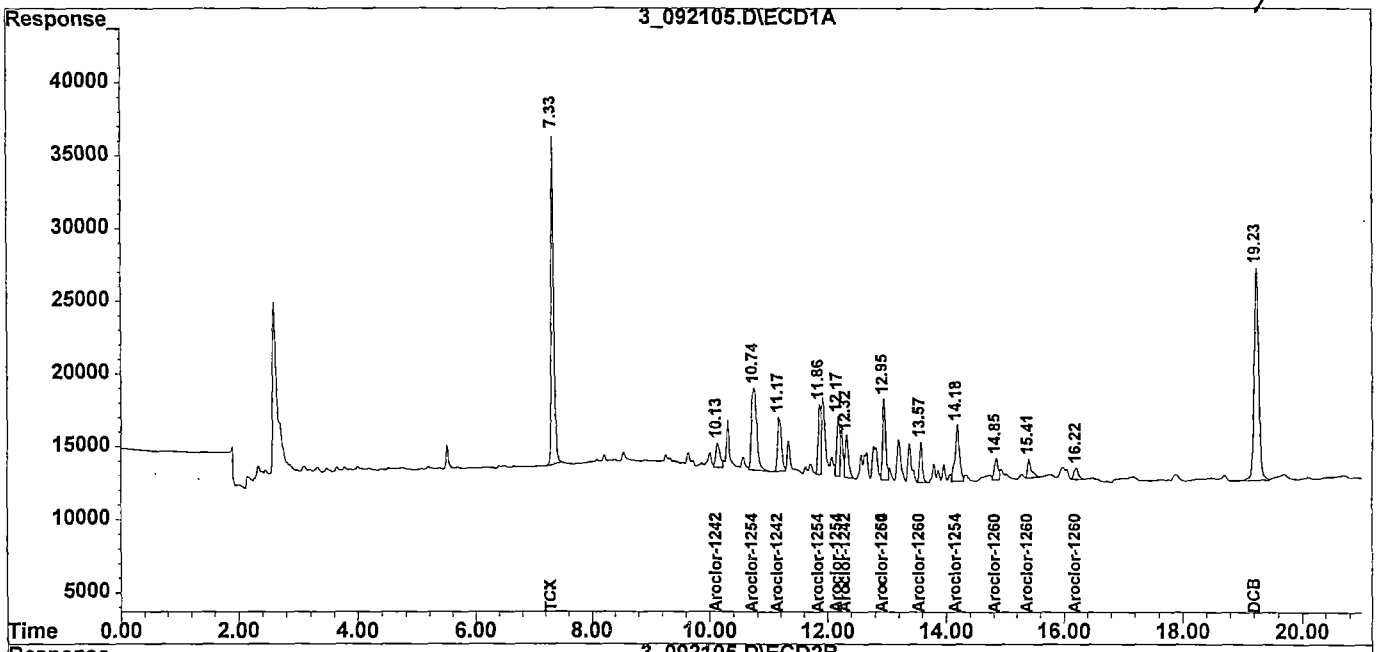
Chromatographic Report

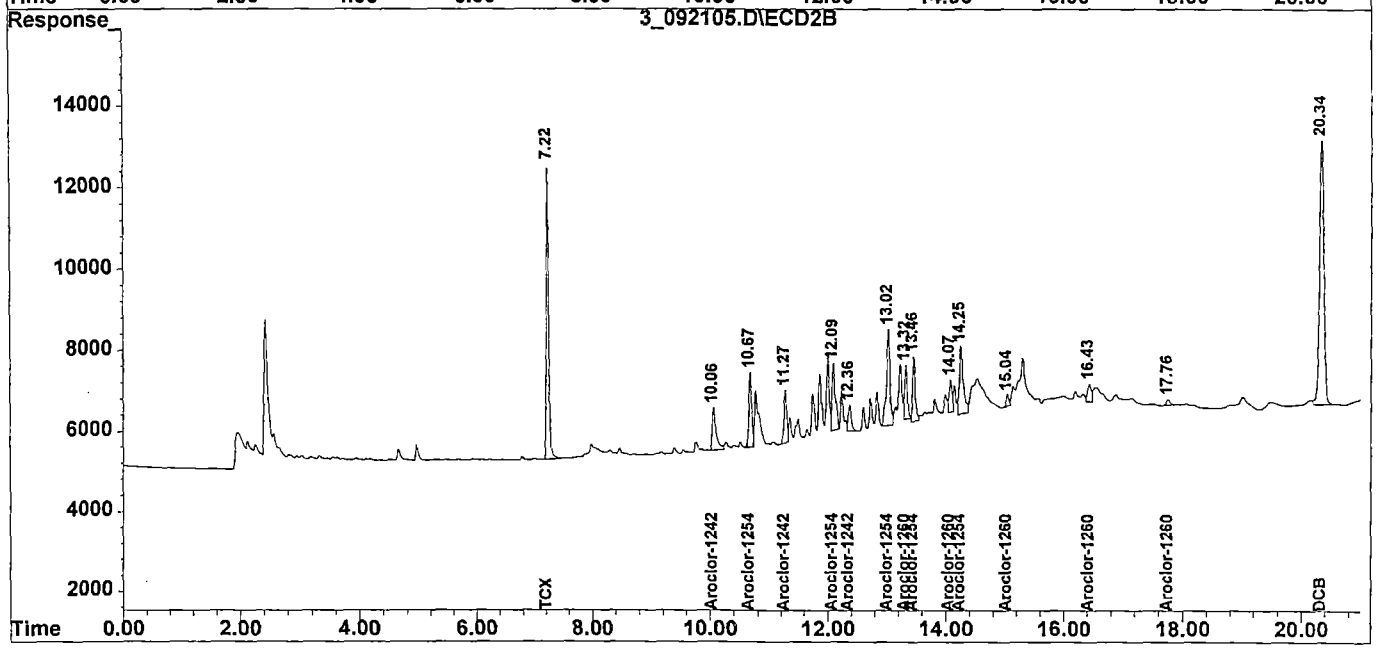
Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092105.D\ECD1A.CH Vial: 82
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092105.D\ECD2B.CH
Acq On : 20 Sep 2001 23:03 Operator: BTB
Sample : 47351.20 *E03L8 * Inst : HP_03
Misc : *EPA*30.1G/5.0ML*27 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 9:35 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

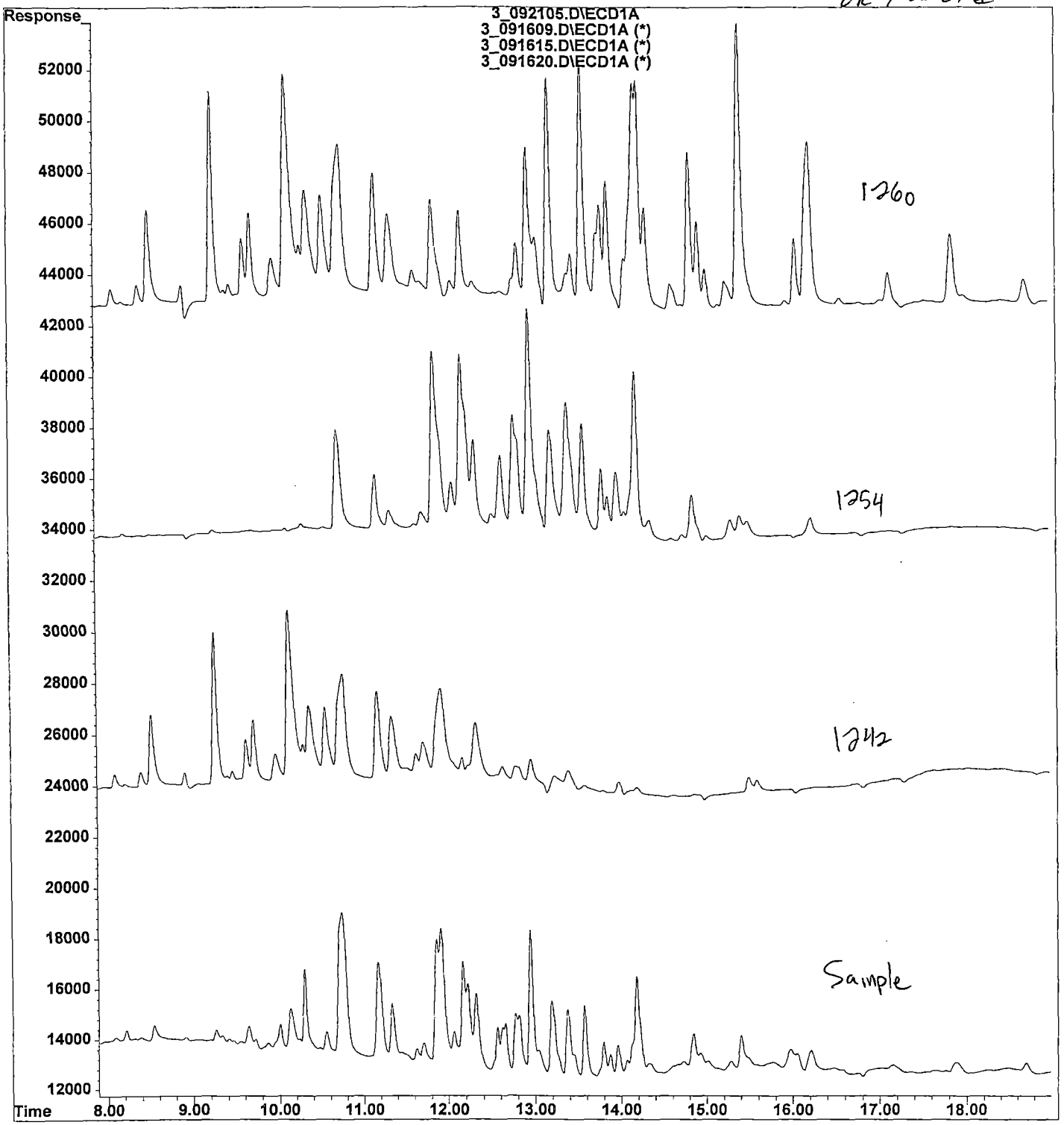
OK 9-22-01





File : F:\HPCHEM\HP\3\DATA\09_21_01\3_092105.D
Operator : BTB
Acquired : 20 Sep 2001 23:03 using AcqMethod OLM03.M
Instrument : HP_03
Sample Name: 47351.20 *E03L8 *
Misc Info : *EPA*30.1G/5.0ML*27
Vial Number: 82

OK 9-22-01



Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092105.D\ECD1A.CH Vial: 82
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092105.D\ECD2B.CH
Acq On : 20 Sep 2001 23:03 Operator: BTB
Sample : 47351.20 *E03L8 * Inst : HP_03
Misc : *EPA*30.1G/5.0ML*27 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 9:35 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

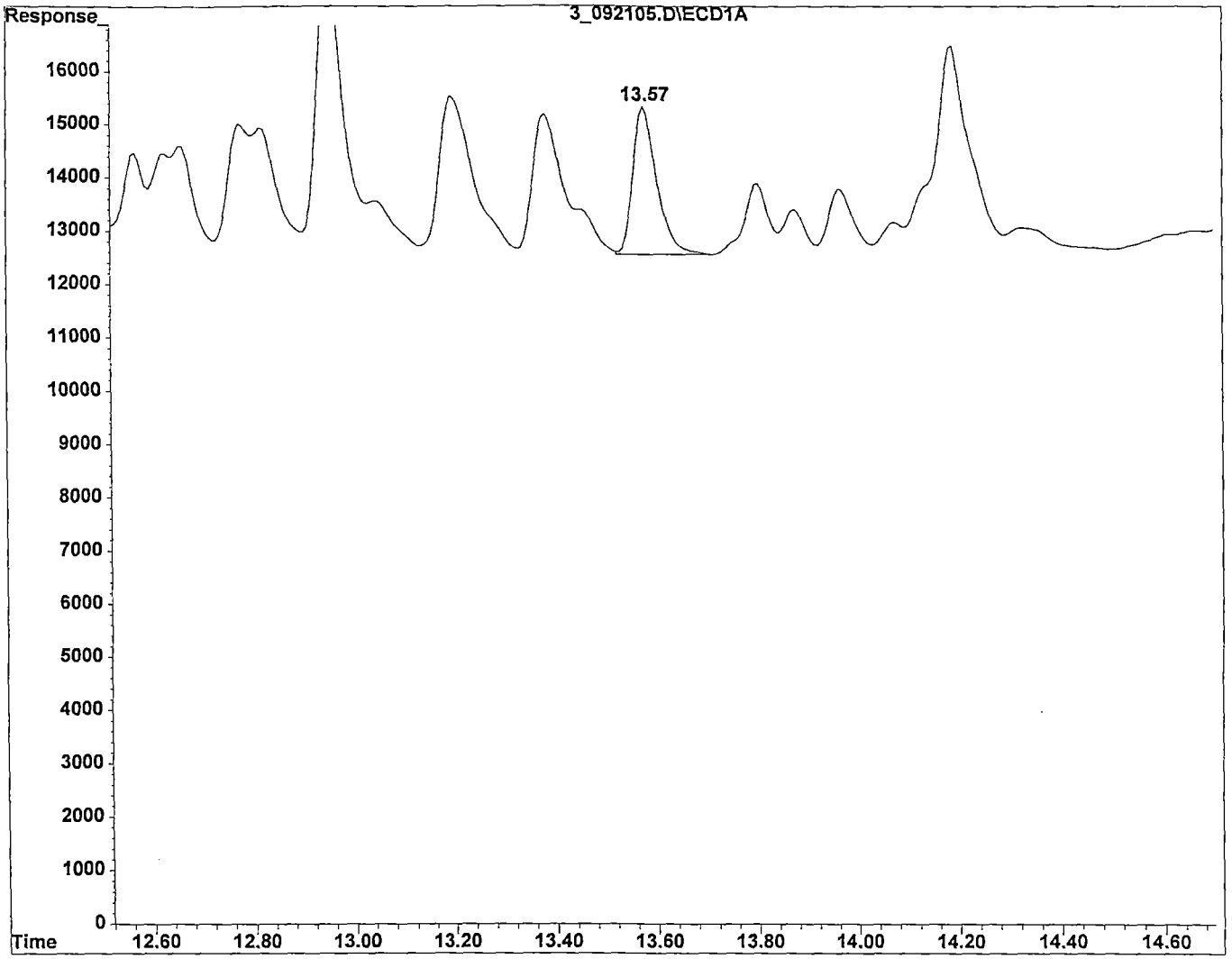
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.22	712334	202742	5.979	5.693	
	Spiked Amount 9.102			Recovery	=	65.69%	62.55%	
22)	S DCB	19.24	20.34	762561	343453	6.169	6.378	
	Spiked Amount 9.102			Recovery	=	67.78%	70.07%	
	Target Compounds:							
9)	L4 Aroclor-1242 {3}	10.14	10.06	81133	46399	10.1	16.0	#
10)	L4 Aroclor-1242 {4}	11.18	11.27	176909	43569	50.4	45.8	
11)	L4 Aroclor-1242 {5}	12.32	12.36	120363	23668	44.0	28.0m	# BTB 092101
	Sum Aroclor-1242			378405	113636	104.6	89.8	
	Average Aroclor-1242					34.861	29.944	
12)	L6 Aroclor-1254	10.74	10.67	375403	57826	84.5	54.0	#
13)	L6 Aroclor-1254 {2}	11.87	12.09	148091	67080	18.0	27.8	#
14)	L6 Aroclor-1254 {3}	12.17	13.03	129424	96835	17.2	30.0	#
15)	L6 Aroclor-1254 {4}	12.95	13.46	194866	51352	22.5	28.8	#
16)	L6 Aroclor-1254 {5}	14.19	14.25	197318	75334	28.1	31.5	
	Sum Aroclor-1254			1045102	348428	170.2	172.1	
	Average Aroclor-1254					34.041	34.425	
17)	L7 Aroclor-1260	12.95	13.32	194866	40784	41.5	14.7m	#
18)	L7 Aroclor-1260 {2}	13.57	14.07	89960	26596	12.6m BTB	14.7m	
19)	L7 Aroclor-1260 {3}	14.85	15.04	65229	8871	14.3 092101	3.740	#
20)	L7 Aroclor-1260 {4}	15.41	16.43	63097	18677	6.143	7.679	#
21)	L7 Aroclor-1260 {5}	16.22	17.76	41812	6179	5.346	3.603	#
	Sum Aroclor-1260			454963	101107	36.4	20.3	
	Average Aroclor-1260					15.982	8.902	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092105.D
Date Acquired: 20 Sep 2001 23:03
Inst: HP_03 Operator ID: BTB
Name: 47351.20 *E03L8 *
Misc: *EPA*30.1G/5.0ML*27
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 9:35 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1260 {2} 13.57min area: 89960 m

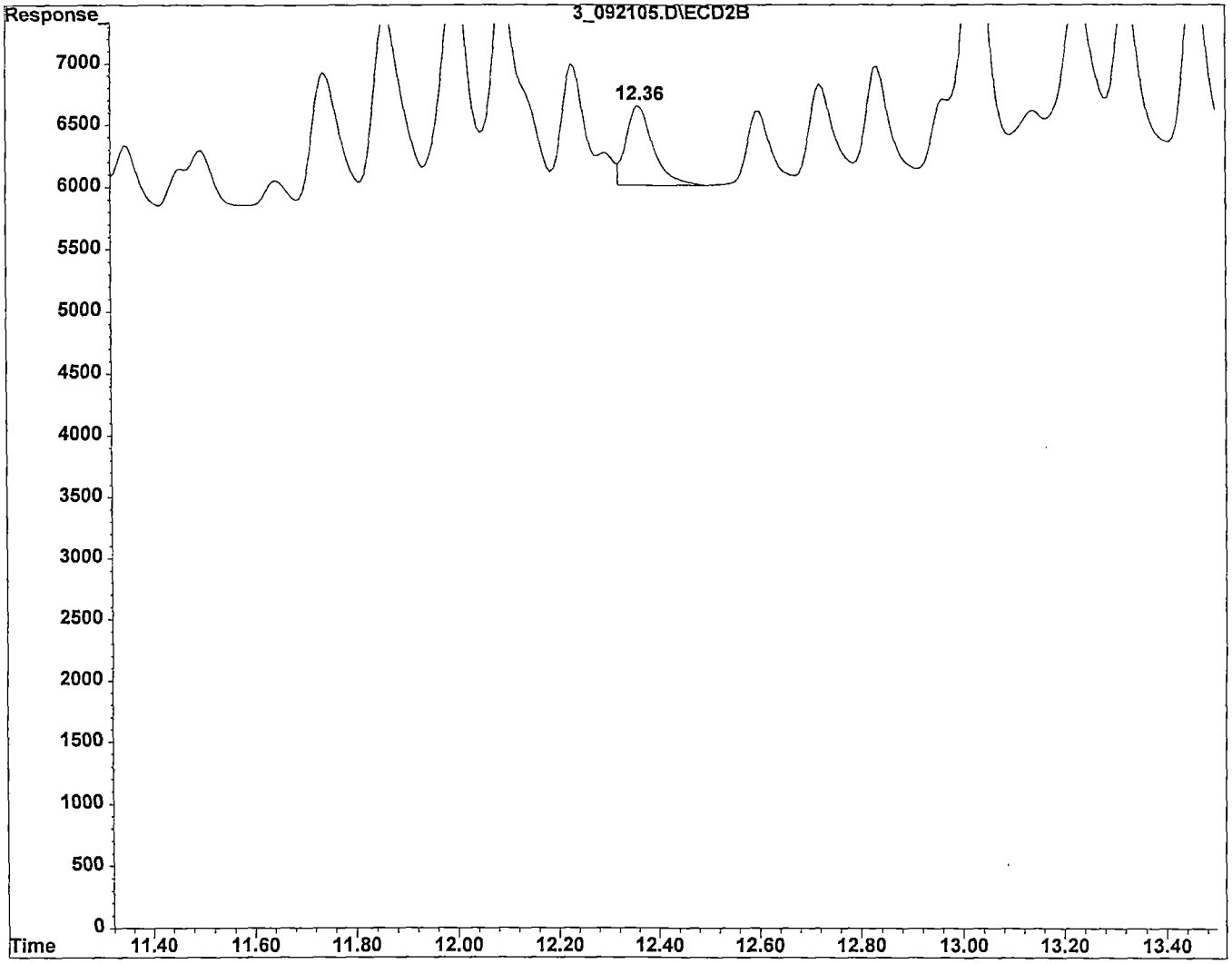
Integration Time Range: 13.52 - 13.70

BTB 092101

F:\HPCHEM\HP\3\DATA\09_21_01\3_092105.D
Report generated: Fri Sep 21 09:54:24 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092105.D
Date Acquired: 20 Sep 2001 23:03
Inst: HP_03 Operator ID: BTB
Name: 47351.20 *E03L8 *
Misc: *EPA*30.1G/5.0ML*27
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 9:35 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1242 {5} #2 12.36min area: 23668 m

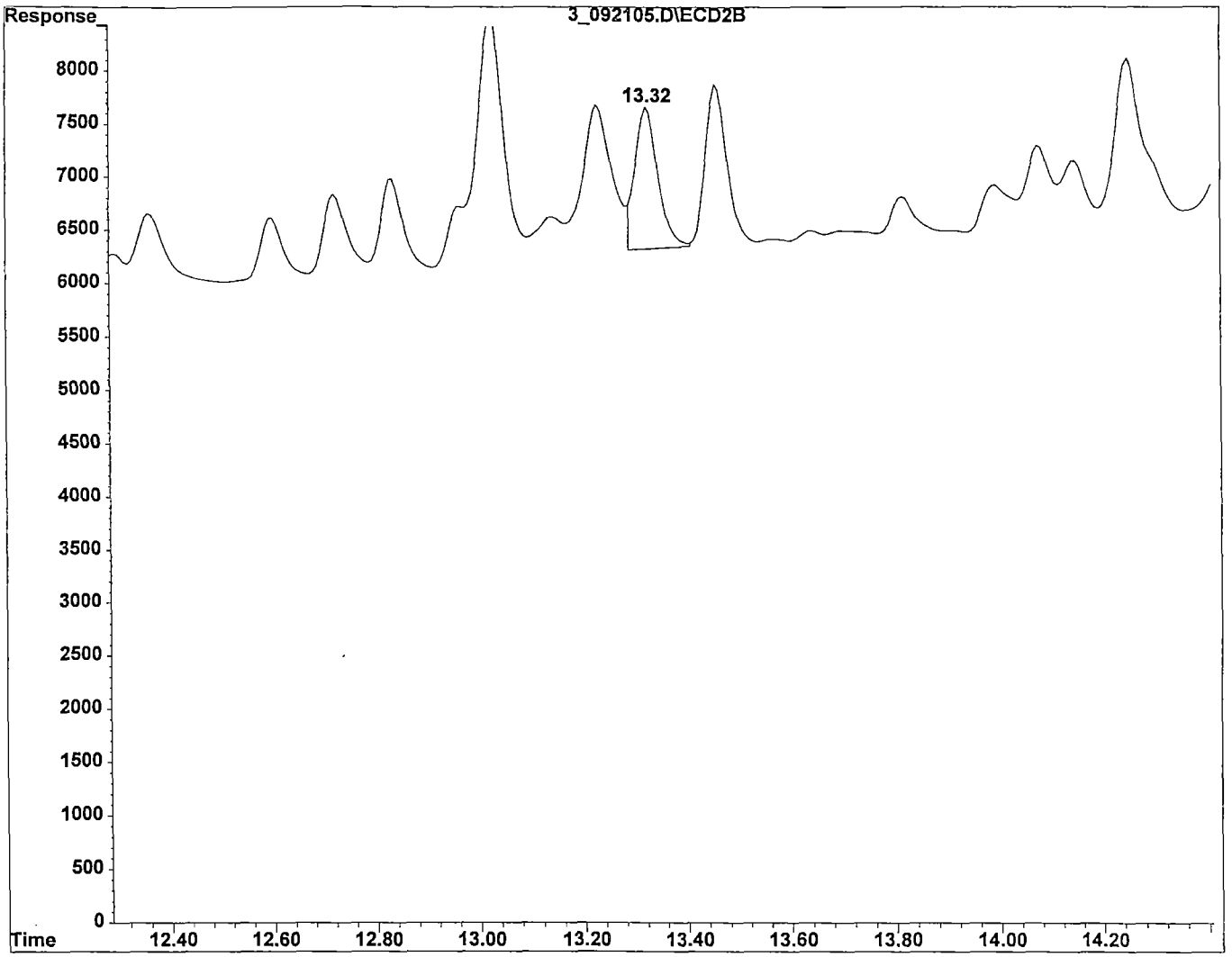
Integration Time Range: 12.32 - 12.50

BTB
092101

F:\HPCHEM\HP\3\DATA\09_21_01\3_092105.D
Report generated: Fri Sep 21 09:54:25 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092105.D
Date Acquired: 20 Sep 2001 23:03
Inst: HP_03 Operator ID: BTB
Name: 47351.20 *E03L8 *
Misc: *EPA*30.1G/5.0ML*27
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 9:35 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1260 #2 13.32min area: 40784 m

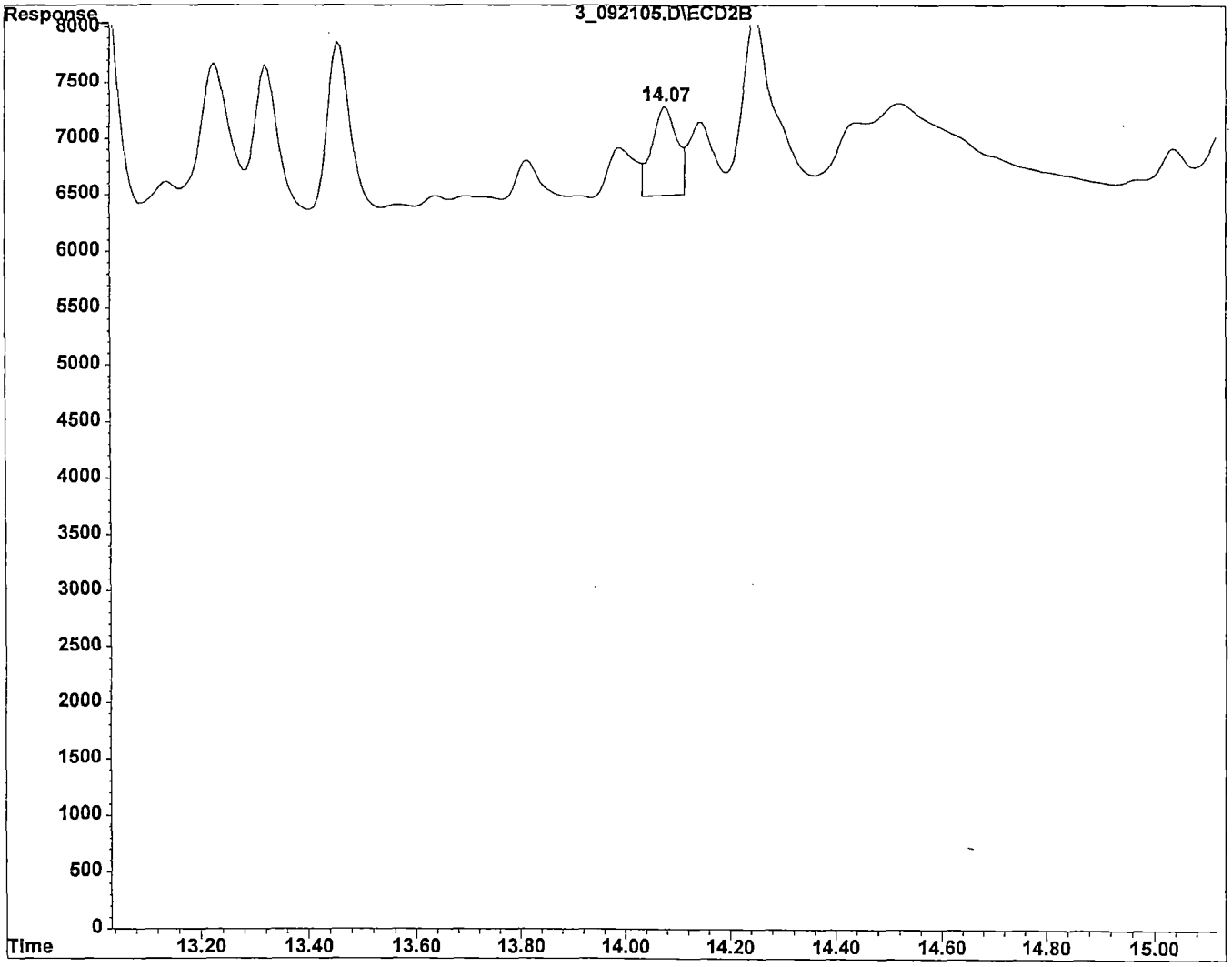
BTB 09/24/01

Integration Time Range: 13.28 - 13.41

F:\HPCHEM\HP\3\DATA\09_21_01\3_092105.D
Report generated: Fri Sep 21 09:54:26 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092105.D
Date Acquired: 20 Sep 2001 23:03
Inst: HP_03 Operator ID: BTB
Name: 47351.20 *E03L8 *
Misc: *EPA*30.1G/5.0ML*27
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 9:35 2001 Quant Results File: XPCBI16.RES



OIC 9-23-01

Aroclor-1260 {2} #2 14.07min area: 26596 m

Integration Time Range: 14.03 - 14.12

BTB
092101

F:\HPCHEM\HP\3\DATA\09_21_01\3_092105.D
Report generated: Fri Sep 21 09:54:26 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03L9

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.21

Sample wt/vol: 30.8 (g/mL) G Lab File ID:_____

% Moisture: 33 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/20/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	48	UJ
11104-28-2	Aroclor-1221	48	UJ
11141-16-5	Aroclor-1232	48	UJ
53469-21-9	Aroclor-1242	7.4	JP
12672-29-6	Aroclor-1248	48	UJ
11097-69-1	Aroclor-1254	11	J
11096-82-5	Aroclor-1260	48	UJ
Surrogate amount spiked		9.69	

TBS 10-12-01

FORM I PCB

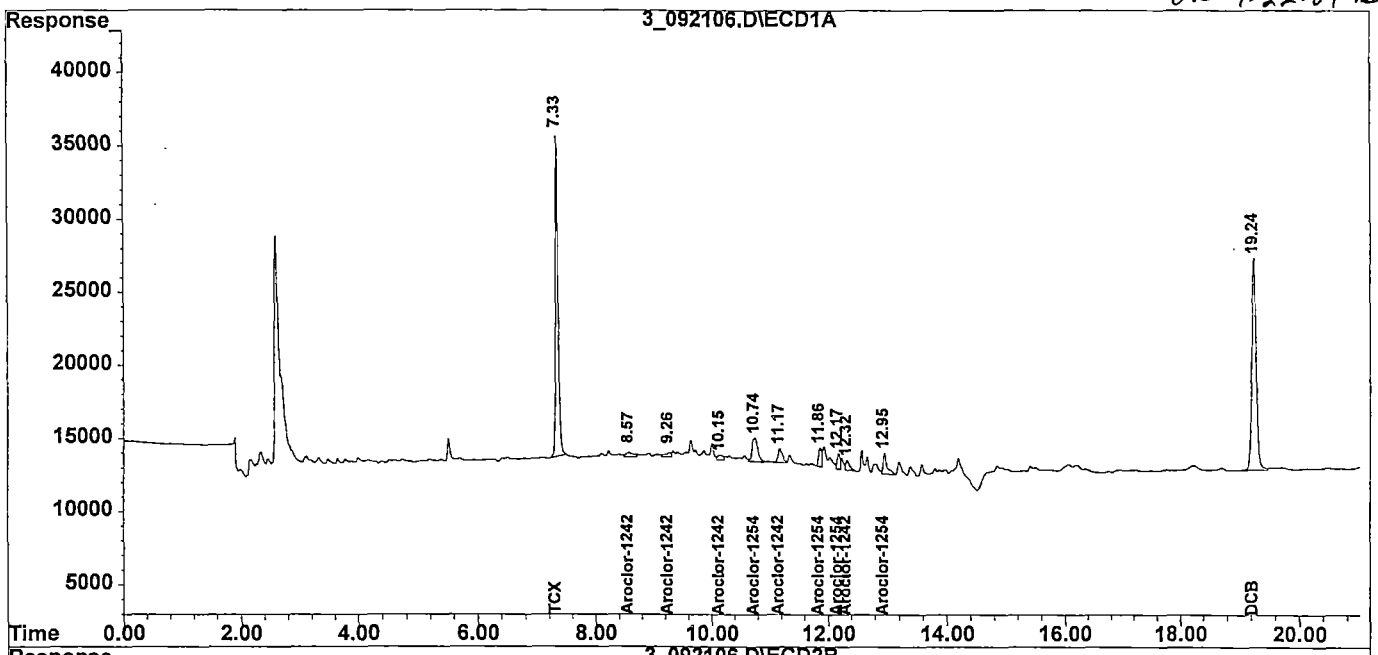
Chromatographic Report

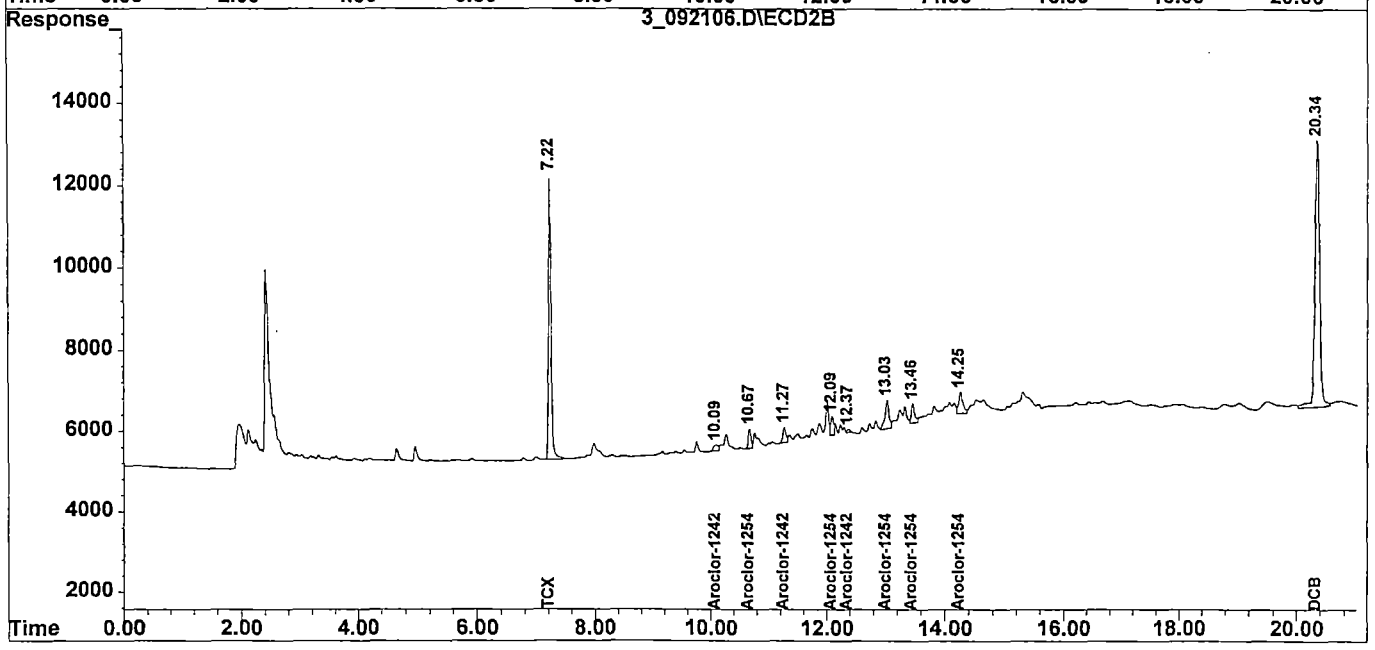
Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092106.D\ECD1A.CH Vial: 83
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092106.D\ECD2B.CH
Acq On : 20 Sep 2001 23:28 Operator: BTB
Sample : 47351.21 *E03L9 * Inst : HP_03
Misc : *EPA*30.8G/5.0ML*33 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 9:39 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

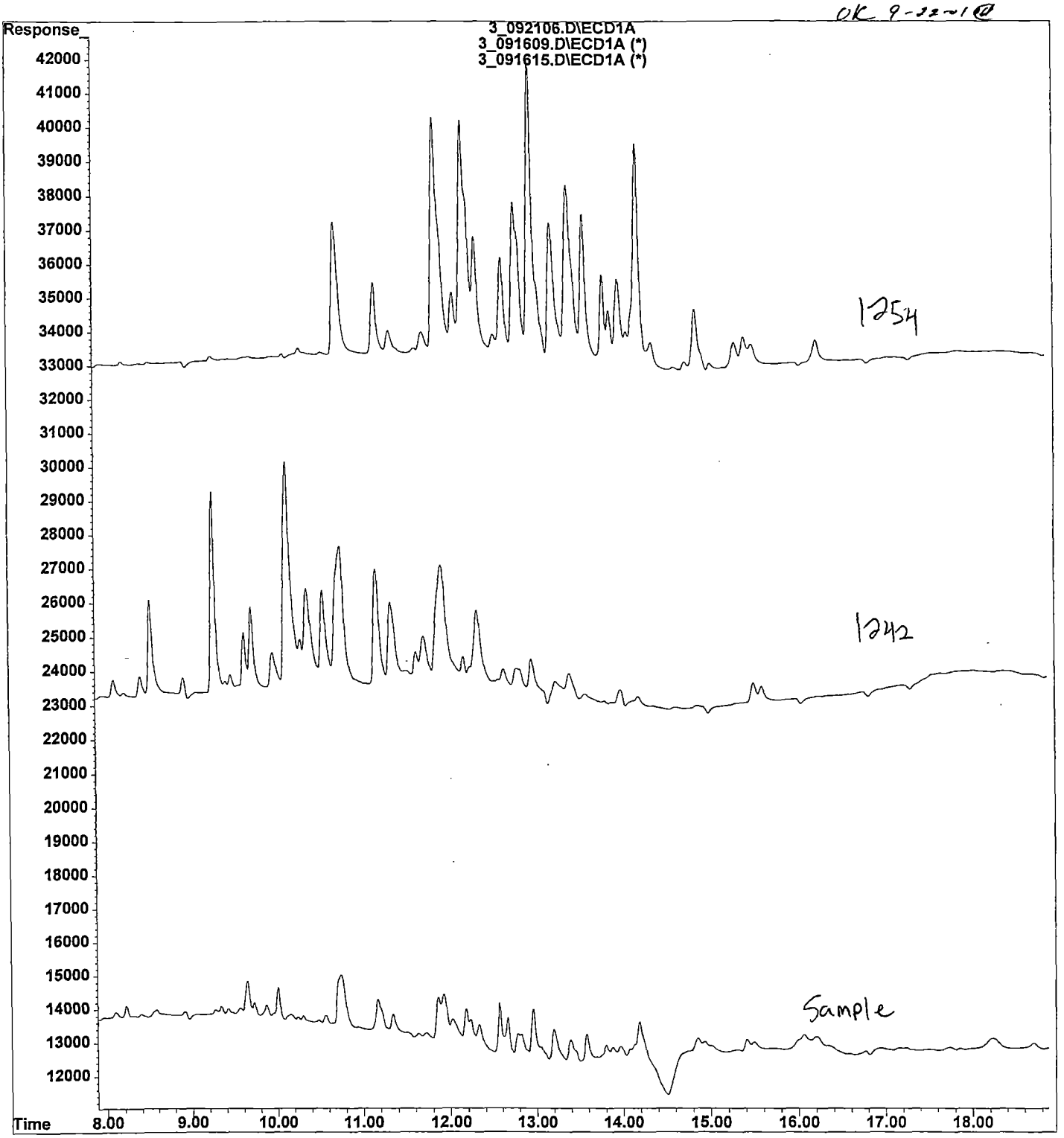
OK 9-22-01 RB





File : F:\HPCHEM\HP\3\DATA\09_21_01\3_092106.D
Operator : BTB
Acquired : 20 Sep 2001 23:28 using AcqMethod OLM03.M
Instrument : HP_03
Sample Name: 47351.21 *E03L9 *
Misc Info : *EPA*30.8G/5.0ML*33
Vial Number: 83

OK 9-22-01



Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092106.D\ECD1A.CH Vial: 83
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092106.D\ECD2B.CH
Acq On : 20 Sep 2001 23:28 Operator: BTB
Sample : 47351.21 *E03L9 * Inst : HP_03
Misc : *EPA*30.8G/5.0ML*33 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 9:39 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

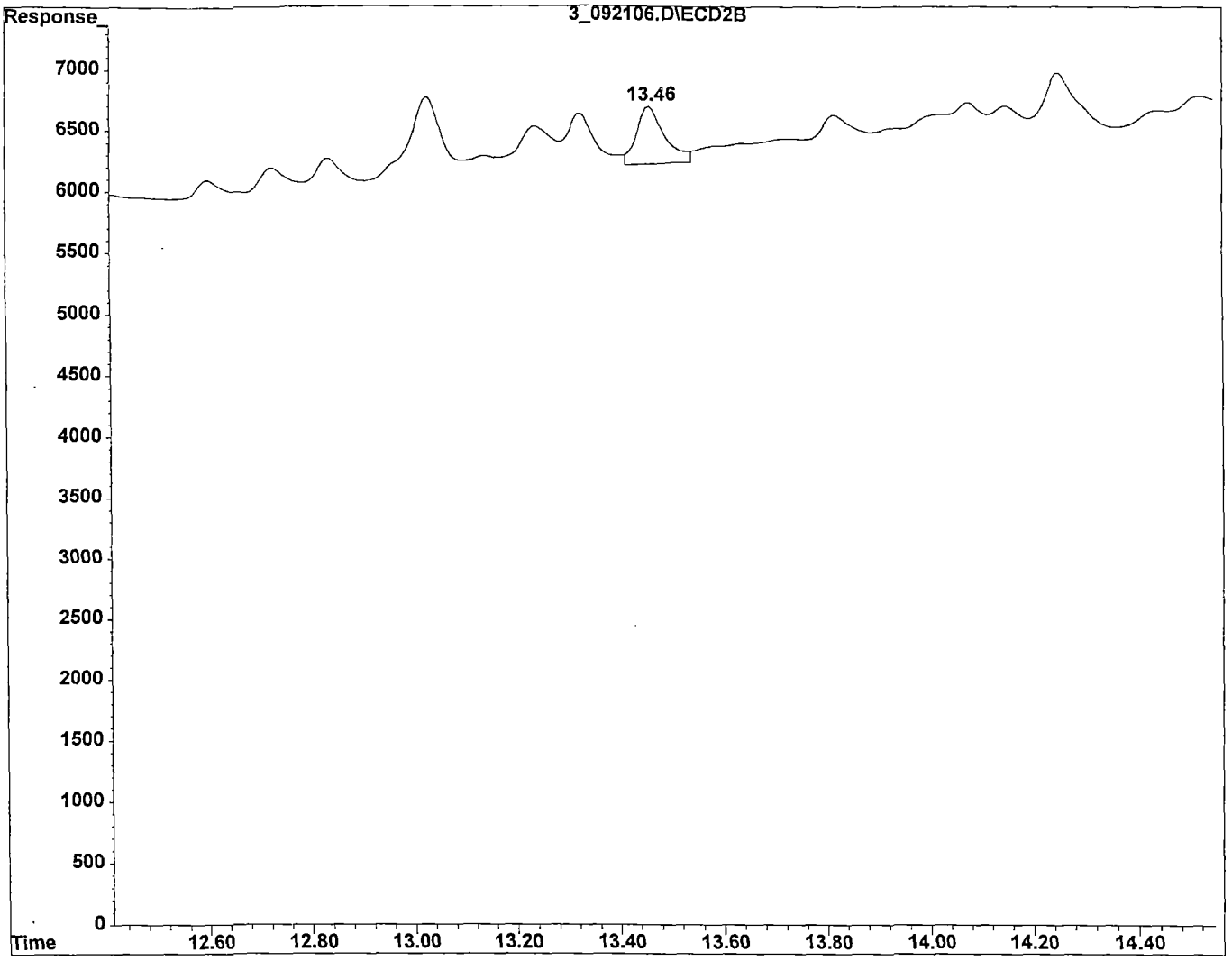
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.22	712896	204267	6.372	6.108	
	Spiked Amount 9.692			Recovery	=	65.75%	63.02%	
22)	S DCB	19.24	20.34	749418	357946	6.455	7.078	
	Spiked Amount 9.692			Recovery	=	✓66.60%	✓73.03%	
	Target Compounds:							
7)	L4 Aroclor-1242	8.58f	0.00	28633	0	12.3	N.D.	#
8)	L4 Aroclor-1242 {2}	9.26	0.00	21272	0	5.226	N.D. d	#
9)	L4 Aroclor-1242 {3}	10.15	10.09	20838	8252	2.775	3.024	
10)	L4 Aroclor-1242 {4}	11.17	11.27	50181	13529	15.2	15.2	
11)	L4 Aroclor-1242 {5}	12.33	12.37	30718	3154	12.0	3.979	#
	Sum Aroclor-1242			151643	24935	47.5	22.2	
	Average Aroclor-1242					9.491	7.385	
12)	L6 Aroclor-1254	10.75	10.67	118757	15565	28.5	15.5	#
13)	L6 Aroclor-1254 {2}	11.87	12.09	43722	16455	5.655	7.266	#
14)	L6 Aroclor-1254 {3}	12.18	13.03	34208	32928	4.839	10.9	#
15)	L6 Aroclor-1254 {4}	12.96	13.46	64965	17832	7.975	10.6m	# BTB
16)	L6 Aroclor-1254 {5}	0.00	14.25	0	26936	N.D. d	12.0m	# 092101
	Sum Aroclor-1254			261651	109716	46.9	56.2	
	Average Aroclor-1254					11.730	11.250	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092106.D
Date Acquired: 20 Sep 2001 23:28
Inst: HP_03 Operator ID: BTB
Name: 47351.21 *E03L9 *
Misc: *EPA*30.8G/5.0ML*33
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 9:39 2001 Quant Results File: XPCBI16.RES



OK 9-22 OKRP

Aroclor-1254 {4} #2 13.46min area: 17832 m

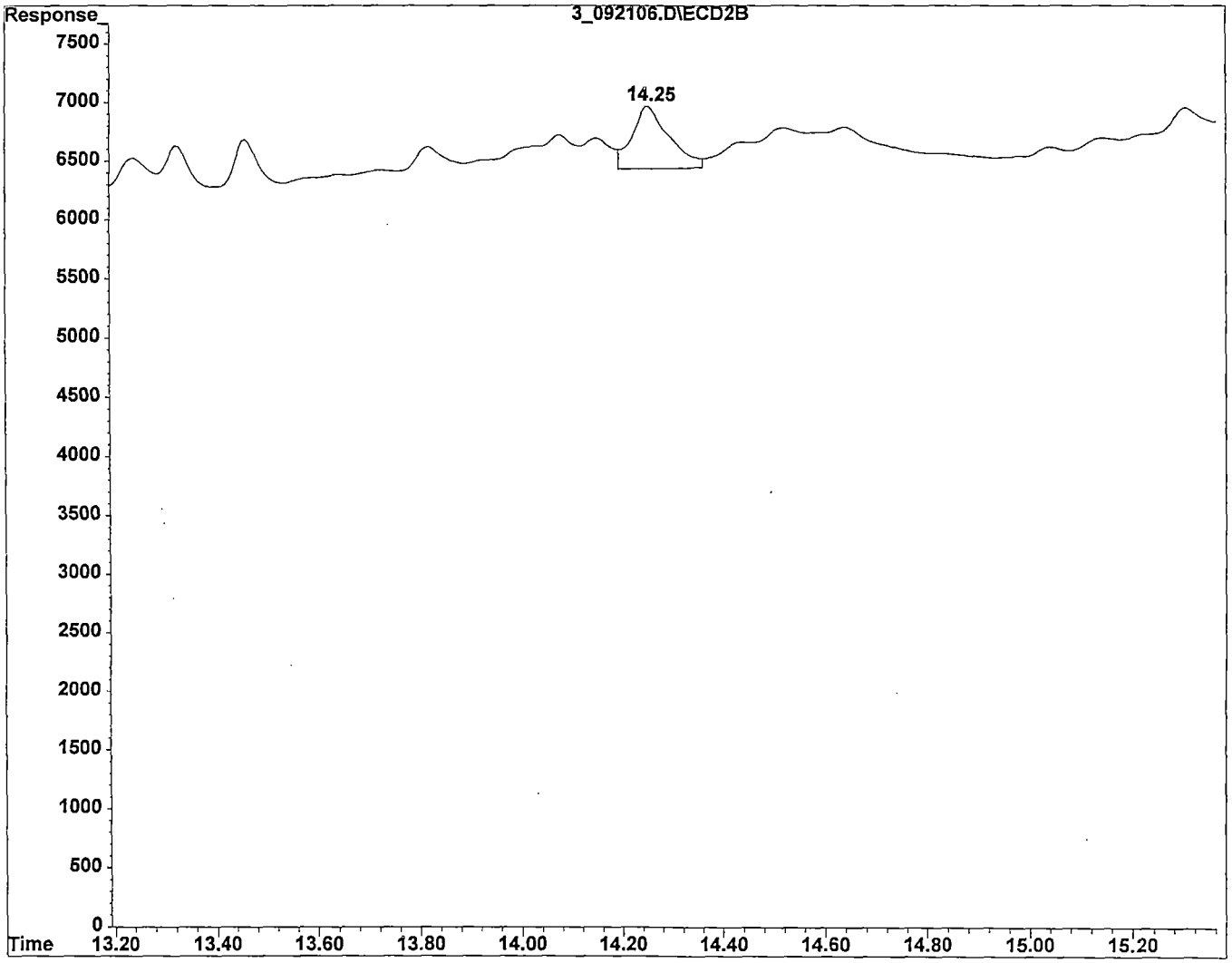
Integration Time Range: 13.41 - 13.54

BTB 09/21

F:\HPCHEM\HP\3\DATA\09_21_01\3_092106.D
Report generated: Fri Sep 21 09:54:28 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092106.D
Date Acquired: 20 Sep 2001 23:28
Inst: HP_03 Operator ID: BTB
Name: 47351.21 *E03L9 *
Misc: *EPA*30.8G/5.0ML*33
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 9:39 2001 Quant Results File: XPCBI16.RES



OK 9-22-01 (BT)

Aroclor-1254 {5} #2 14.25min area: 26936 m

BTB 092101

Integration Time Range: 14.19 - 14.36

F:\HPCHEM\HP\3\DATA\09_21_01\3_092106.D
Report generated: Fri Sep 21 09:54:28 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03M1

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.22

Sample wt/vol: 30.3 (g/mL) G Lab File ID:_____

% Moisture: 42 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/20/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	56	U J
11104-28-2	Aroclor-1221	56	U
11141-16-5	Aroclor-1232	56	U
53469-21-9	Aroclor-1242	56	U
12672-29-6	Aroclor-1248	56	U
11097-69-1	Aroclor-1254	56	U
11096-82-5	Aroclor-1260	56	U
Surrogate amount spiked		11.39	

TBS 10-12-01

WJ

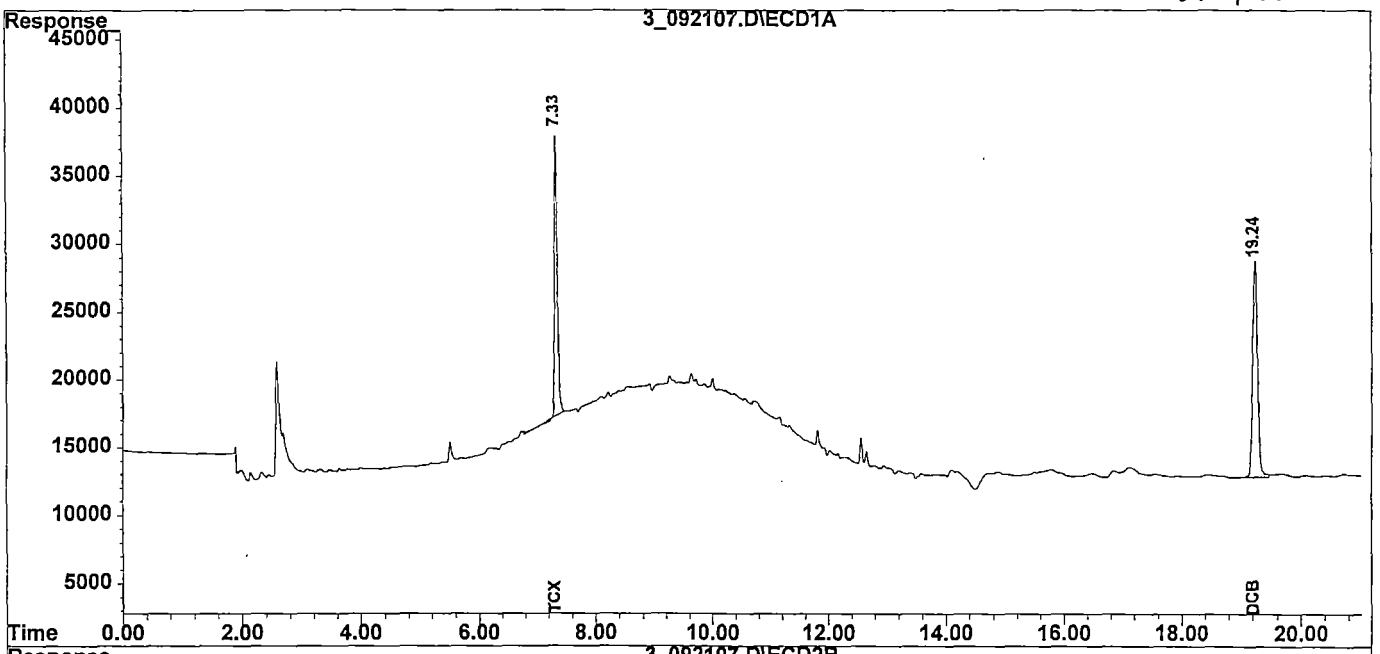
Chromatographic Report

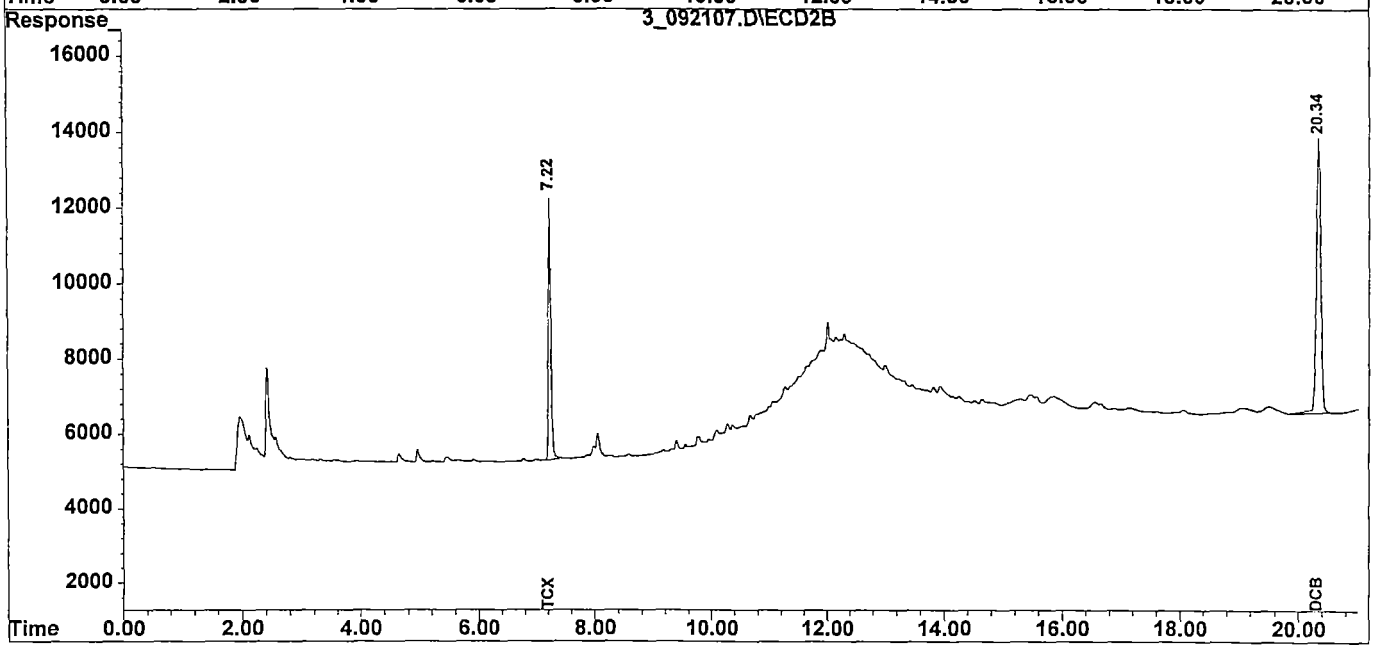
Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092107.D\ECD1A.CH Vial: 84
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092107.D\ECD2B.CH
Acq On : 20 Sep 2001 23:54 Operator: BTB
Sample : 47351.22 ✓,*E03M1✓ * ✓ Inst : HP_03
Misc : *EPA*30.3G/5.0ML*42 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 9:42 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

ok 9-22-01 (OH)





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092107.D\ECD1A.CH Vial: 84
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092107.D\ECD2B.CH
Acq On : 20 Sep 2001 23:54 Operator: BTB
Sample : 47351.22 *E03M1 * Inst : HP_03
Misc : *EPA*30.3G/5.0ML*42 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 9:42 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	689667	207548	7.238	7.287
	Spiked Amount 11.380			Recovery	=	63.60%	64.03%
22)	S DCB	19.24	20.34	826428	388935	8.359	9.031
	Spiked Amount 11.380			Recovery	=	73.45%	79.36%

Target Compounds:

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Instrument ID: HP_03A Date(s) Analyzed: 09/16/01 09/16/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-17MS ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1242 L1	0.10	1	8.53	1392990	MEAN
		2	9.27	2277240	
		3	10.14	3926240	
		4	11.18	1637440	
		5	12.33	1224360	
Aroclor 1242 L2	0.20	1	8.53	1172510	MEAN
		2	9.26	2122345	
		3	10.13	3993125	
		4	11.18	1711780	
		5	12.33	1141420	
Aroclor 1242 L3	0.40	1	8.53	1180753	MEAN
		2	9.26	2061803	
		3	10.13	3837340	
		4	11.17	1705620	
		5	12.32	1336470	
Aroclor 1242 L4	0.80	1	8.53	1029215	MEAN
		2	9.26	1833078	
		3	10.13	3453063	
		4	11.17	1564910	
		5	12.31	1315550	
Aroclor 1242 L5	1.60	1	8.53	881244	MEAN
		2	9.26	1567898	
		3	10.13	2982248	
		4	11.17	1364523	
		5	12.31	1204945	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1242 MEAN	1	8.53	8.48	8.58	1131342	16.9
	2	9.26	9.21	9.31	1972473	14.0
	3	10.13	10.08	10.18	3638403	11.6
	4	11.17	11.12	11.22	1596855	8.9
	5	12.32	12.27	12.37	1244549	6.5

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Instrument ID: HP_03B Date(s) Analyzed: 09/16/01 09/16/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-XLB ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1242 L1	0.10	1	8.57	321070	MEAN
		2	9.39	724160	
		3	10.09	1375630	
		4	11.28	422610	
		5	12.38	360800	
Aroclor 1242 L2	0.20	1	8.57	337375	MEAN
		2	9.39	741490	
		3	10.09	1423700	
		4	11.28	443310	
		5	12.38	421260	
Aroclor 1242 L3	0.40	1	8.57	337990	MEAN
		2	9.39	728935	
		3	10.09	1408403	
		4	11.28	462803	
		5	12.37	400020	
Aroclor 1242 L4	0.80	1	8.57	310388	MEAN
		2	9.39	662123	
		3	10.09	1288735	
		4	11.27	438244	
		5	12.37	379075	
Aroclor 1242 L5	1.60	1	8.57	274785	MEAN
		2	9.39	576599	
		3	10.09	1115940	
		4	11.27	396570	
		5	12.37	359465	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1242 MEAN	1	8.57	8.52	8.62	316322	8.2
	2	9.39	9.34	9.44	686661	10.0
	3	10.09	10.04	10.14	1322482	9.6
	4	11.28	11.23	11.33	432707	5.7
	5	12.37	12.32	12.42	384124	6.9

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Instrument ID: HP_03A Date(s) Analyzed: 09/16/01 09/16/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-17MS ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1254 L1	0.10	1	10.72	2286500	MEAN
		2	11.87	4056410	
		3	12.18	3689490	
		4	12.96	4210990	
		5	14.20	3147000	
Aroclor 1254 L2	0.20	1	10.72	2400415	MEAN
		2	11.86	4260525	
		3	12.18	3857115	
		4	12.96	4620665	
		5	14.19	4031760	
Aroclor 1254 L3	0.40	1	10.72	2051763	MEAN
		2	11.86	3907293	
		3	12.18	3588648	
		4	12.96	4003333	
		5	14.19	3196185	
Aroclor 1254 L4	0.80	1	10.72	1813805	MEAN
		2	11.86	3474848	
		3	12.18	3172336	
		4	12.95	3667550	
		5	14.19	2933496	
Aroclor 1254 L5	1.60	1	10.72	1560790	MEAN
		2	11.86	3033997	
		3	12.17	2821695	
		4	12.95	3234499	
		5	14.18	2676723	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1254 MEAN	1	10.72	10.67	10.77	2022655	16.9
	2	11.86	11.81	11.91	3746614	13.1
	3	12.18	12.13	12.23	3425857	12.3
	4	12.96	12.91	13.01	3947407	13.4
	5	14.19	14.14	14.24	3197033	15.9

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Instrument ID: HP_03B Date(s) Analyzed: 09/16/01 09/16/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-XLB ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1254 L1	0.10	1	10.68	511150	MEAN
		2	12.10	1175200	
		3	13.04	1586190	
		4	13.47	871670	
		5	14.26	1096500	
Aroclor 1254 L2	0.20	1	10.67	564030	MEAN
		2	12.10	1254995	
		3	13.03	1729885	
		4	13.46	926330	
		5	14.25	1239255	
Aroclor 1254 L3	0.40	1	10.67	498283	MEAN
		2	12.10	1129210	
		3	13.03	1567925	
		4	13.46	825438	
		5	14.25	1100335	
Aroclor 1254 L4	0.80	1	10.67	460596	MEAN
		2	12.09	1022094	
		3	13.03	1298030	
		4	13.46	756781	
		5	14.25	1041651	
Aroclor 1254 L5	1.60	1	10.67	402601	MEAN
		2	12.09	905229	
		3	13.02	1170963	
		4	13.46	678939	
		5	14.25	955746	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1254 MEAN	1	10.67	10.62	10.72	487332	12.3
	2	12.10	12.05	12.15	1097346	12.4
	3	13.03	12.98	13.08	1470599	15.6
	4	13.46	13.41	13.51	811832	11.9
	5	14.25	14.20	14.30	1086698	9.5

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Instrument ID: HP_03A Date(s) Analyzed: 09/16/01 09/16/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-17MS ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1016 L1	0.10	1	8.53	1593800	MEAN
		2	9.26	3058520	
		3	10.13	5160880	
		4	10.77	4542340	
		5	11.18	2086240	
Aroclor 1016 L2	0.20	1	8.53	1532780	MEAN
		2	9.26	2778360	
		3	10.13	5210130	
		4	10.77	4090865	
		5	11.18	2122895	
Aroclor 1016 L3	0.40	1	8.53	1379420	MEAN
		2	9.26	2593275	
		3	10.13	5014395	
		4	10.77	3767810	
		5	11.18	2096023	
Aroclor 1016 L4	0.80	1	8.53	1201891	MEAN
		2	9.26	2240040	
		3	10.13	4316955	
		4	10.77	3217446	
		5	11.18	1822983	
Aroclor 1016 L5	1.60	1	8.53	1068821	MEAN
		2	9.26	2006733	
		3	10.12	3887882	
		4	10.76	2845966	
		5	11.17	1682556	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1016 MEAN	1	8.53	8.48	8.58	1355343	16.3
	2	9.26	9.21	9.31	2535386	16.5
	3	10.13	10.08	10.18	4718048	12.4
	4	10.77	10.72	10.82	3692886	18.3
	5	11.18	11.13	11.23	1962139	10.1

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Instrument ID: HP_03A Date(s) Analyzed: 09/16/01 09/16/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-17MS ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1260 L1	0.10	1	12.96	2545200	MEAN
		2	13.58	4087000	
		3	14.84	2274290	
		4	15.42	5229460	
		5	16.23	3842210	
Aroclor 1260 L2	0.20	1	12.96	2301790	MEAN
		2	13.58	3484120	
		3	14.84	2220095	
		4	15.42	4993640	
		5	16.23	3769560	
Aroclor 1260 L3	0.40	1	12.95	2166158	MEAN
		2	13.58	3313470	
		3	14.84	2152223	
		4	15.41	4780250	
		5	16.23	3681480	
Aroclor 1260 L4	0.80	1	12.95	1934058	MEAN
		2	13.57	2790880	
		3	14.84	1954621	
		4	15.41	4355330	
		5	16.23	3378309	
Aroclor 1260 L5	1.60	1	12.95	1730044	MEAN
		2	13.57	2565985	
		3	14.83	1785564	
		4	15.41	4015347	
		5	16.22	3126346	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1260 MEAN	1	12.95	12.90	13.00	2135450	14.8
	2	13.58	13.53	13.63	3248291	18.5
	3	14.84	14.79	14.89	2077359	9.8
	4	15.41	15.36	15.46	4674805	10.5
	5	16.23	16.18	16.28	3559581	8.4

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Instrument ID: HP_03B Date(s) Analyzed: 09/16/01 09/16/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-XLB ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1016 L1	0.10	1	8.57	412770	MEAN
		2	9.39	998990	
		3	10.09	1793960	
		4	10.67	799760	
		5	11.28	553410	
Aroclor 1016 L2	0.20	1	8.57	409405	MEAN
		2	9.39	950955	
		3	10.09	1779860	
		4	10.67	819820	
		5	11.28	540970	
Aroclor 1016 L3	0.40	1	8.57	406708	MEAN
		2	9.39	924113	
		3	10.09	1823270	
		4	10.66	848460	
		5	11.28	542480	
Aroclor 1016 L4	0.80	1	8.57	361261	MEAN
		2	9.39	811813	
		3	10.09	1615808	
		4	10.66	767414	
		5	11.27	498305	
Aroclor 1016 L5	1.60	1	8.57	333530	MEAN
		2	9.39	740969	
		3	10.09	1478819	
		4	10.66	714483	
		5	11.27	474536	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1016 MEAN	1	8.57	8.52	8.62	384735	9.2
	2	9.39	9.34	9.44	885368	12.0
	3	10.09	10.04	10.14	1698343	8.7
	4	10.66	10.61	10.71	789987	6.5
	5	11.28	11.23	11.33	521940	6.5

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Instrument ID: HP_03B Date(s) Analyzed: 09/16/01 09/16/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-XLB ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1260 L1	0.10	1	13.33	1390000	MEAN
		2	14.08	921360	
		3	15.04	1146690	
		4	16.44	1166830	
		5	17.77	779660	
Aroclor 1260 L2	0.20	1	13.33	1412995	MEAN
		2	14.08	925850	
		3	15.04	1139830	
		4	16.44	1149225	
		5	17.77	805545	
Aroclor 1260 L3	0.40	1	13.33	1316448	MEAN
		2	14.08	850825	
		3	15.04	1092150	
		4	16.44	1144290	
		5	17.76	800278	
Aroclor 1260 L4	0.80	1	13.32	1150900	MEAN
		2	14.08	745358	
		3	15.04	1061109	
		4	16.44	1069455	
		5	17.77	775293	
Aroclor 1260 L5	1.60	1	13.32	1021665	MEAN
		2	14.08	662860	
		3	15.04	958374	
		4	16.43	1004808	
		5	17.76	741055	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1260 MEAN	1	13.32	13.27	13.37	1258402	13.3
	2	14.08	14.03	14.13	821251	14.0
	3	15.04	14.99	15.09	1079631	7.1
	4	16.44	16.39	16.49	1106922	6.2
	5	17.77	17.72	17.82	780366	3.3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Instrument ID: HP_03A Date(s) Analyzed: 09/16/01 09/16/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-17MS ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1221	0.40	1	8.10	811603	SINGLE
		2	8.40	584420	POINT
		3	8.53	2227165	
		4			
		5			
Aroclor 1232	0.40	1	8.41	432260	SINGLE
		2	9.26	1275500	POINT
		3	9.72	682990	
		4	10.56	835720	
		5			
Aroclor 1248	0.40	1	9.72	340080	SINGLE
		2	10.55	960600	POINT
		3	11.71	1316430	
		4	12.63	716480	
		5	13.97	657170	

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Instrument ID: HP_03B Date(s) Analyzed: 09/16/01 09/16/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-XLB ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1221	0.40	1	8.14	226718	SINGLE
		2	8.44	157923	POINT
		3	8.57	496595	
		4			
		5			
Aroclor 1232	0.40	1	8.57	464300	SINGLE
		2	9.39	485510	POINT
		3	10.09	897530	
		4	11.28	230170	
		5			
Aroclor 1248	0.40	1	9.96	102743	SINGLE
		2	10.40	211753	POINT
		3	12.23	222470	
		4	12.60	238150	
		5	13.46	187335	

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 09/16/01 09/16/01

Client Sample No.(PIBLK): PIBLK3J Date Analyzed : 09/18/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 2232

Client Sample No.: AR1660L33N Date Analyzed : 09/18/01

Lab Sample ID : 5-210-7 Time Analyzed : 2258

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.53	8.48	8.58	1346360	1355343	0.7
Aroclor 1016 #2	9.26	9.21	9.31	2512440	2535386	0.9
Aroclor 1016 #3	10.12	10.08	10.18	4247220	4718048	10.0
Aroclor 1016 #4	10.76	10.72	10.82	3795503	3692886	2.8
Aroclor 1016 #5	11.17	11.13	11.23	1849240	1962139	5.8
Aroclor 1260 #1	12.95	12.90	13.00	2234018	2135450	4.6
Aroclor 1260 #2	13.57	13.53	13.63	3443520	3248291	6.0
Aroclor 1260 #3	14.83	14.79	14.89	2220705	2077359	6.9
Aroclor 1260 #4	15.40	15.36	15.46	4968190	4674805	6.3
Aroclor 1260 #5	16.22	16.18	16.28	3668870	3559581	3.1

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

FORM VII PCB

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 09/16/01 09/16/01

Client Sample No.(PIBLK): PIBLK3J Date Analyzed : 09/18/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 2232

Client Sample No.: AR1660L33N Date Analyzed : 09/18/01

Lab Sample ID : 5-210-7 Time Analyzed : 2258

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.57	8.52	8.62	418953	384735	8.9
Aroclor 1016 #2	9.39	9.34	9.44	956958	885368	8.1
Aroclor 1016 #3	10.09	10.04	10.14	1826153	1698343	7.5
Aroclor 1016 #4	10.67	10.61	10.71	851023	789987	7.7
Aroclor 1016 #5	11.27	11.23	11.33	585533	521940	12.2
Aroclor 1260 #1	13.32	13.27	13.37	1294280	1258402	2.9
Aroclor 1260 #2	14.07	14.03	14.13	898840	821251	9.4
Aroclor 1260 #3	15.03	14.99	15.09	1165240	1079631	7.9
Aroclor 1260 #4	16.43	16.39	16.49	1157705	1106922	4.6
Aroclor 1260 #5	17.76	17.72	17.82	850723	780366	9.0

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 09/16/01 09/16/01

Client Sample No.(PIBLK): PIBLK3K Date Analyzed : 09/19/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 0523

Client Sample No.: AR1660L33P Date Analyzed : 09/19/01

Lab Sample ID : 5-210-7 Time Analyzed : 0549

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.53	8.48	8.58	1242725	1355343	8.3
Aroclor 1016 #2	9.26	9.21	9.31	2331293	2535386	8.1
Aroclor 1016 #3	10.13	10.08	10.18	4550453	4718048	3.6
Aroclor 1016 #4	10.76	10.72	10.82	3512208	3692886	4.9
Aroclor 1016 #5	11.17	11.13	11.23	2045310	1962139	4.2
Aroclor 1260 #1	12.95	12.90	13.00	2024295	2135450	5.2
Aroclor 1260 #2	13.57	13.53	13.63	3018320	3248291	7.1
Aroclor 1260 #3	14.83	14.79	14.89	2117925	2077359	2.0
Aroclor 1260 #4	15.41	15.36	15.46	4646260	4674805	0.6
Aroclor 1260 #5	16.22	16.18	16.28	3545978	3559581	0.4

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 09/16/01 09/16/01

Client Sample No.(PIBLK): PIBLK3K Date Analyzed : 09/19/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 0523

Client Sample No.: AR1660L33P Date Analyzed : 09/19/01

Lab Sample ID : 5-210-7 Time Analyzed : 0549

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.57	8.52	8.62	386223	384735	0.4
Aroclor 1016 #2	9.39	9.34	9.44	866530	885368	2.1
Aroclor 1016 #3	10.09	10.04	10.14	1743048	1698343	2.6
Aroclor 1016 #4	10.67	10.61	10.71	814970	789987	3.2
Aroclor 1016 #5	11.28	11.23	11.33	523705	521940	0.3
Aroclor 1260 #1	13.32	13.27	13.37	1277860	1258402	1.6
Aroclor 1260 #2	14.07	14.03	14.13	910010	821251	10.8
Aroclor 1260 #3	15.03	14.99	15.09	1203560	1079631	11.5
Aroclor 1260 #4	16.43	16.39	16.49	1147400	1106922	3.7
Aroclor 1260 #5	17.76	17.72	17.82	832133	780366	6.6

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 09/16/01 09/16/01

Client Sample No.(PIBLK): PIBLK3L Date Analyzed : 09/19/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 1214

Client Sample No.: AR1660L33R Date Analyzed : 09/19/01

Lab Sample ID : 5-210-7 Time Analyzed : 1240

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.53	8.48	8.58	1261045	1355343	7.0
Aroclor 1016 #2	9.26	9.21	9.31	2310913	2535386	8.9
Aroclor 1016 #3	10.14	10.08	10.18	4365763	4718048	7.5
Aroclor 1016 #4	10.77	10.72	10.82	3280933	3692886	11.2
Aroclor 1016 #5	11.17	11.13	11.23	1863060	1962139	5.1
Aroclor 1260 #1	12.95	12.90	13.00	1843210	2135450	13.7
Aroclor 1260 #2	13.57	13.53	13.63	2720750	3248291	16.2*
Aroclor 1260 #3	14.84	14.79	14.89	1831948	2077359	11.8
Aroclor 1260 #4	15.41	15.36	15.46	4034713	4674805	13.7
Aroclor 1260 #5	16.22	16.18	16.28	3117260	3559581	12.4

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 09/16/01 09/16/01

Client Sample No.(PIBLK): PIBLK3L Date Analyzed : 09/19/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 1214

Client Sample No.: AR1660L33R Date Analyzed : 09/19/01

Lab Sample ID : 5-210-7 Time Analyzed : 1240

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.57	8.52	8.62	385628	384735	0.2
Aroclor 1016 #2	9.39	9.34	9.44	847440	885368	4.3
Aroclor 1016 #3	10.09	10.04	10.14	1689025	1698343	0.5
Aroclor 1016 #4	10.67	10.61	10.71	776338	789987	1.7
Aroclor 1016 #5	11.28	11.23	11.33	495085	521940	5.2
Aroclor 1260 #1	13.33	13.27	13.37	1146248	1258402	8.9
Aroclor 1260 #2	14.08	14.03	14.13	744913	821251	9.3
Aroclor 1260 #3	15.04	14.99	15.09	968240	1079631	10.3
Aroclor 1260 #4	16.44	16.39	16.49	993223	1106922	10.3
Aroclor 1260 #5	17.76	17.72	17.82	714788	780366	8.4

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 09/16/01 09/16/01

Client Sample No.(PIBLK): PIBLK3M Date Analyzed : 09/19/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 1814

Client Sample No.: AR1660L33T Date Analyzed : 09/19/01

Lab Sample ID : 5-210-7 Time Analyzed : 1840

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.53	8.48	8.58	1383998	1355343	2.1
Aroclor 1016 #2	9.26	9.21	9.31	2545100	2535386	0.4
Aroclor 1016 #3	10.13	10.08	10.18	4834680	4718048	2.5
Aroclor 1016 #4	10.77	10.72	10.82	3791825	3692886	2.7
Aroclor 1016 #5	11.17	11.13	11.23	2045570	1962139	4.3
Aroclor 1260 #1	12.95	12.90	13.00	2074003	2135450	2.9
Aroclor 1260 #2	13.57	13.53	13.63	3110750	3248291	4.2
Aroclor 1260 #3	14.83	14.79	14.89	2170393	2077359	4.5
Aroclor 1260 #4	15.40	15.36	15.46	4794790	4674805	2.6
Aroclor 1260 #5	16.22	16.18	16.28	3624643	3559581	1.8

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

FORM VII PCB

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 09/16/01 09/16/01

Client Sample No.(PIBLK): PIBLK3M Date Analyzed : 09/19/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 1814

Client Sample No.: AR1660L33T Date Analyzed : 09/19/01

Lab Sample ID : 5-210-7 Time Analyzed : 1840

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.57	8.52	8.62	439748	384735	14.3
Aroclor 1016 #2	9.39	9.34	9.44	913128	885368	3.1
Aroclor 1016 #3	10.09	10.04	10.14	1840470	1698343	8.4
Aroclor 1016 #4	10.67	10.61	10.71	849295	789987	7.5
Aroclor 1016 #5	11.28	11.23	11.33	551535	521940	5.7
Aroclor 1260 #1	13.32	13.27	13.37	1281370	1258402	1.8
Aroclor 1260 #2	14.08	14.03	14.13	840480	821251	2.3
Aroclor 1260 #3	15.04	14.99	15.09	1111895	1079631	3.0
Aroclor 1260 #4	16.43	16.39	16.49	1126763	1106922	1.8
Aroclor 1260 #5	17.76	17.72	17.82	821350	780366	5.3

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 09/16/01 09/16/01

Client Sample No.(PIBLK): PIBLK3P Date Analyzed : 09/20/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 2003

Client Sample No.: AR1660L33A Date Analyzed : 09/20/01

Lab Sample ID : 5-210-7 Time Analyzed : 2028

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.53	8.48	8.58	1410353	1355343	4.1
Aroclor 1016 #2	9.26	9.21	9.31	2591643	2535386	2.2
Aroclor 1016 #3	10.13	10.08	10.18	4851295	4718048	2.8
Aroclor 1016 #4	10.77	10.72	10.82	3487370	3692886	5.6
Aroclor 1016 #5	11.17	11.13	11.23	1928670	1962139	1.7
Aroclor 1260 #1	12.95	12.90	13.00	1780600	2135450	16.6*
Aroclor 1260 #2	13.57	13.53	13.63	2676810	3248291	17.6*
Aroclor 1260 #3	14.84	14.79	14.89	1991235	2077359	4.2
Aroclor 1260 #4	15.41	15.36	15.46	4094688	4674805	12.4
Aroclor 1260 #5	16.23	16.18	16.28	3194448	3559581	10.3

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 09/16/01 09/16/01

Client Sample No.(PIBLK): PIBLK3P Date Analyzed : 09/20/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 2003

Client Sample No.: AR1660L33A Date Analyzed : 09/20/01

Lab Sample ID : 5-210-7 Time Analyzed : 2028

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.57	8.52	8.62	419905	384735	9.1
Aroclor 1016 #2	9.39	9.34	9.44	929978	885368	5.0
Aroclor 1016 #3	10.09	10.04	10.14	1842385	1698343	8.5
Aroclor 1016 #4	10.67	10.61	10.71	850603	789987	7.7
Aroclor 1016 #5	11.28	11.23	11.33	544458	521940	4.3
Aroclor 1260 #1	13.33	13.27	13.37	1205868	1258402	4.2
Aroclor 1260 #2	14.08	14.03	14.13	814578	821251	0.8
Aroclor 1260 #3	15.04	14.99	15.09	1011788	1079631	6.3
Aroclor 1260 #4	16.43	16.39	16.49	1080335	1106922	2.4
Aroclor 1260 #5	17.76	17.72	17.82	738668	780366	5.3

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 09/16/01 09/16/01

Client Sample No.(PIBLK): PIBLK3Q Date Analyzed : 09/21/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 0254

Client Sample No.: AR1660L33C Date Analyzed : 09/21/01

Lab Sample ID : 5-210-7 Time Analyzed : 0320

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.53	8.48	8.58	1433955	1355343	5.8
Aroclor 1016 #2	9.26	9.21	9.31	2641538	2535386	4.2
Aroclor 1016 #3	10.13	10.08	10.18	5045275	4718048	6.9
Aroclor 1016 #4	10.77	10.72	10.82	3782228	3692886	2.4
Aroclor 1016 #5	11.17	11.13	11.23	2116800	1962139	7.9
Aroclor 1260 #1	12.95	12.90	13.00	2079558	2135450	2.6
Aroclor 1260 #2	13.58	13.53	13.63	3109390	3248291	4.3
Aroclor 1260 #3	14.84	14.79	14.89	2135200	2077359	2.8
Aroclor 1260 #4	15.41	15.36	15.46	4678203	4674805	0.1
Aroclor 1260 #5	16.23	16.18	16.28	3516040	3559581	1.2

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 09/16/01 09/16/01

Client Sample No.(PIBLK): PIBLK3Q Date Analyzed : 09/21/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 0254

Client Sample No.: AR1660L33C Date Analyzed : 09/21/01

Lab Sample ID : 5-210-7 Time Analyzed : 0320

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.57	8.52	8.62	419610	384735	9.1
Aroclor 1016 #2	9.39	9.34	9.44	948908	885368	7.2
Aroclor 1016 #3	10.09	10.04	10.14	1891968	1698343	11.4
Aroclor 1016 #4	10.67	10.61	10.71	869235	789987	10.0
Aroclor 1016 #5	11.28	11.23	11.33	566530	521940	8.5
Aroclor 1260 #1	13.33	13.27	13.37	1312650	1258402	4.3
Aroclor 1260 #2	14.08	14.03	14.13	862938	821251	5.1
Aroclor 1260 #3	15.04	14.99	15.09	1102960	1079631	2.2
Aroclor 1260 #4	16.44	16.39	16.49	1142318	1106922	3.2
Aroclor 1260 #5	17.77	17.72	17.82	809718	780366	3.8

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 09/16/01 09/16/01

Client Sample No.(PIBLK): PIBLK3R Date Analyzed : 09/21/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 1010

Client Sample No.: AR1660L33F Date Analyzed : 09/21/01

Lab Sample ID : 5-210-7 Time Analyzed : 1036

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.53	8.48	8.58	1411843	1355343	4.2
Aroclor 1016 #2	9.26	9.21	9.31	2625980	2535386	3.6
Aroclor 1016 #3	10.13	10.08	10.18	5069698	4718048	7.5
Aroclor 1016 #4	10.77	10.72	10.82	3769075	3692886	2.1
Aroclor 1016 #5	11.17	11.13	11.23	2203960	1962139	12.3
Aroclor 1260 #1	12.95	12.90	13.00	2156498	2135450	1.0
Aroclor 1260 #2	13.57	13.53	13.63	3168350	3248291	2.5
Aroclor 1260 #3	14.83	14.79	14.89	2330070	2077359	12.2
Aroclor 1260 #4	15.41	15.36	15.46	4746905	4674805	1.5
Aroclor 1260 #5	16.23	16.18	16.28	3579958	3559581	0.6

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 09/16/01 09/16/01

Client Sample No.(PIBLK): PIBLK3R Date Analyzed : 09/21/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 1010

Client Sample No.: AR1660L33F Date Analyzed : 09/21/01

Lab Sample ID : 5-210-7 Time Analyzed : 1036

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.57	8.52	8.62	413275	384735	7.4
Aroclor 1016 #2	9.39	9.34	9.44	934853	885368	5.6
Aroclor 1016 #3	10.09	10.04	10.14	1876470	1698343	10.5
Aroclor 1016 #4	10.67	10.61	10.71	867473	789987	9.8
Aroclor 1016 #5	11.28	11.23	11.33	552498	521940	5.9
Aroclor 1260 #1	13.33	13.27	13.37	1362975	1258402	8.3
Aroclor 1260 #2	14.08	14.03	14.13	1133813	821251	38.1*
Aroclor 1260 #3	15.04	14.99	15.09	1193053	1079631	10.5
Aroclor 1260 #4	16.44	16.39	16.49	1202478	1106922	8.6
Aroclor 1260 #5	17.76	17.72	17.82	849180	780366	8.8

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

8D
AROCLOR ANALYTICAL SEQUENCE

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SAS No.: SDG No.: E03K0

GC Column: DB-17MS ID: 0.32(mm) Init. Calib. Date(s): 09/16/01

Instrument ID: HP_03A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	RESC3E	5-171-7	09/16/01	1303	7.34	19.25
02	AR1221L33E	5-420-6	09/16/01	1329	7.33	19.24
03	AR1232L33E	5-422-6	09/16/01	1355	7.33	19.24
04	AR1242L13E	5-11-7	09/16/01	1420	7.33	19.24
05	AR1242L23E	5-10-7	09/16/01	1446	7.33	19.25
06	AR1242L33E	5-9-7	09/16/01	1512	7.33	19.24
07	AR1242L43E	5-8-7	09/16/01	1537	7.33	19.24
08	AR1242L53E	5-7-7	09/16/01	1603	7.33	19.24
09	AR1248L33E	5-424-6	09/16/01	1629	7.33	19.24
10	AR1254L13E	5-6-7	09/16/01	1654	7.33	19.25
11	AR1254L23E	5-5-7	09/16/01	1720	7.33	19.24
12	AR1254L33E	5-4-7	09/16/01	1746	7.33	19.24
13	AR1254L43E	5-3-7	09/16/01	1811	7.33	19.25
14	AR1254L53E	5-2-7	09/16/01	1837	7.33	19.24
15	AR1660L13E	5-212-7	09/16/01	1902	7.33	19.24
16	AR1660L23E	5-211-7	09/16/01	1928	7.33	19.25
17	AR1660L33E	5-210-7	09/16/01	1954	7.33	19.24
18	AR1660L43E	5-209-7	09/16/01	2019	7.33	19.25
19	AR1660L53E	5-208-7	09/16/01	2045	7.33	19.24
20	PIBLK3E	5-131-7	09/16/01	2110	7.33	19.24
21	PIBLK3J	5-131-7	09/18/01	2232	7.33	19.24
22	AR1660L33N	5-210-7	09/18/01	2258	7.33	19.23
23	PBLKSB	BL0824SB	09/19/01	0041	7.33	19.24
24	ELCS1	LC0824SB	09/19/01	0132	7.33	19.24
25	ELCS2	LD0824SB	09/19/01	0158	7.33	19.23
26	E03K0	47351.01	09/19/01	0224	7.33	19.23
27	E03K0MS	47351.02MS	09/19/01	0249	7.34	19.24
28	E03K0MSD	47351.03MSD	09/19/01	0315	7.33	19.23
29	E03K1	47351.04	09/19/01	0341	7.33	19.24
30	PIBLK3K	5-131-7	09/19/01	0523	7.33	19.24
31	AR1660L33P	5-210-7	09/19/01	0549	7.33	19.24
32	E03K2	47351.05	09/19/01	0640	7.33	19.23
33	E03K3	47351.06	09/19/01	0706	7.33	19.24
34	E03K4	47351.07	09/19/01	0732	7.33	19.23
35	E03K5	47351.08	09/19/01	0758	7.33	19.24

TCX = Tetrachloro-m-xylene (+/- 0.05 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

8D
AROCLOR ANALYTICAL SEQUENCE

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SAS No.: SDG No.: E03K0

GC Column: DB-17MS ID: 0.32(mm) Init. Calib. Date(s): 09/16/01

Instrument ID: HP_03A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	E03K6	47351.09	09/19/01	0823	7.33	19.24
02	E03K8	47351.10	09/19/01	0849	7.33	19.24
03	E03K9	47351.11	09/19/01	0915	7.33	19.24
04	E03L0	47351.12	09/19/01	0940	7.33	19.24
05	E03L1	47351.13	09/19/01	1006	7.33	19.24
06	E03L2	47351.14	09/19/01	1032	7.33	19.24
07	PIBLK3L	5-131-7	09/19/01	1214	7.33	19.24
08	AR1660L33R	5-210-7	09/19/01	1240	7.33	19.24
09	E03L3	47351.15	09/19/01	1331	7.33	19.23
10	E03L4	47351.16	09/19/01	1357	7.33	19.24
11	E03L5	47351.17	09/19/01	1423	7.33	19.23
12	PIBLK3M	5-131-7	09/19/01	1814	7.33	19.24
13	AR1660L33T	5-210-7	09/19/01	1840	7.33	19.23
14	PIBLK3P	5-131-7	09/20/01	2003	7.33	19.25
15	AR1660L33A	5-210-7	09/20/01	2028	7.33	19.24
16	E03L6	47351.18	09/20/01	2211	7.33	19.23
17	E03L7	47351.19	09/20/01	2237	7.33	19.24
18	E03L8	47351.20	09/20/01	2303	7.33	19.24
19	E03L9	47351.21	09/20/01	2328	7.33	19.24
20	E03M1	47351.22	09/20/01	2354	7.33	19.24
21	E03K1DL	47351.04DL	09/21/01	0020	7.33	19.24
22	E03K2DL	47351.05DL	09/21/01	0046	7.33	19.24
23	PIBLK3Q	5-131-7	09/21/01	0254	7.33	19.25
24	AR1660L33C	5-210-7	09/21/01	0320	7.33	19.24
25	E03K3DL	47351.06DL	09/21/01	0411	7.33	19.24
26	E03K4DL	47351.07DL	09/21/01	0437	7.33	19.24
27	E03K5DL	47351.08DL	09/21/01	0528	7.33	19.24
28	E03K6DL	47351.09DL	09/21/01	0554	7.33	19.23
29	E03K8DL	47351.10DL	09/21/01	0619	7.33	19.24
30	E03K9DL	47351.11DL	09/21/01	0645	7.33	19.23
31	E03L0DL	47351.12DL	09/21/01	0711	7.33	19.24
32	E03L4DL	47351.16DL	09/21/01	0736	7.33	19.24
33	E03L5DL	47351.17DL	09/21/01	0802	7.33	19.23
34	PIBLK3R	5-131-7	09/21/01	1010	7.33	19.24
35	AR1660L33F	5-210-7	09/21/01	1036	7.33	19.24

TCX = Tetrachloro-m-xylene (+/- 0.05 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

8D
AROCLOR ANALYTICAL SEQUENCE

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SAS No.: SDG No.: E03K0

GC Column: DB-XLB ID: 0.32(mm) Init. Calib. Date(s): 09/16/01

Instrument ID: HP_03B

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	RESC3E	5-171-7	09/16/01	1303	7.23	20.35
02	AR1221L33E	5-420-6	09/16/01	1329	7.22	20.35
03	AR1232L33E	5-422-6	09/16/01	1355	7.22	20.35
04	AR1242L13E	5-11-7	09/16/01	1420	7.22	20.35
05	AR1242L23E	5-10-7	09/16/01	1446	7.22	20.35
06	AR1242L33E	5-9-7	09/16/01	1512	7.22	20.35
07	AR1242L43E	5-8-7	09/16/01	1537	7.22	20.34
08	AR1242L53E	5-7-7	09/16/01	1603	7.22	20.34
09	AR1248L33E	5-424-6	09/16/01	1629	7.22	20.34
10	AR1254L13E	5-6-7	09/16/01	1654	7.22	20.35
11	AR1254L23E	5-5-7	09/16/01	1720	7.22	20.34
12	AR1254L33E	5-4-7	09/16/01	1746	7.22	20.34
13	AR1254L43E	5-3-7	09/16/01	1811	7.22	20.35
14	AR1254L53E	5-2-7	09/16/01	1837	7.22	20.34
15	AR1660L13E	5-212-7	09/16/01	1902	7.22	20.34
16	AR1660L23E	5-211-7	09/16/01	1928	7.22	20.35
17	AR1660L33E	5-210-7	09/16/01	1954	7.22	20.34
18	AR1660L43E	5-209-7	09/16/01	2019	7.22	20.35
19	AR1660L53E	5-208-7	09/16/01	2045	7.22	20.34
20	PIBLK3E	5-131-7	09/16/01	2110	7.22	20.34
21	PIBLK3J	5-131-7	09/18/01	2232	7.22	20.34
22	AR1660L33N	5-210-7	09/18/01	2258	7.22	20.33
23	PBLKSB	BL0824SB	09/19/01	0041	7.22	20.34
24	ELCS1	LC0824SB	09/19/01	0132	7.22	20.34
25	ELCS2	LD0824SB	09/19/01	0158	7.22	20.34
26	E03K0	47351.01	09/19/01	0224	7.22	20.34
27	E03K0MS	47351.02MS	09/19/01	0249	7.23	20.34
28	E03K0MSD	47351.03MSD	09/19/01	0315	7.22	20.34
29	E03K1	47351.04	09/19/01	0341	7.22	20.34
30	PIBLK3K	5-131-7	09/19/01	0523	7.22	20.34
31	AR1660L33P	5-210-7	09/19/01	0549	7.22	20.34
32	E03K2	47351.05	09/19/01	0640	7.22	20.33
33	E03K3	47351.06	09/19/01	0706	7.22	20.34
34	E03K4	47351.07	09/19/01	0732	7.22	20.34
35	E03K5	47351.08	09/19/01	0758	7.22	20.34

TCX = Tetrachloro-m-xylene (+/- 0.05 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

8D
AROCLOR ANALYTICAL SEQUENCE

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SAS No.: SDG No.: E03K0

GC Column: DB-XLB ID: 0.32(mm) Init. Calib. Date(s): 09/16/01

Instrument ID: HP_03B

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	E03K6	47351.09	09/19/01	0823	7.22	20.35
02	E03K8	47351.10	09/19/01	0849	7.22	20.33
03	E03K9	47351.11	09/19/01	0915	7.22	20.33
04	E03L0	47351.12	09/19/01	0940	7.23	20.33
05	E03L1	47351.13	09/19/01	1006	7.22	20.34
06	E03L2	47351.14	09/19/01	1032	7.22	20.34
07	PIBLK3L	5-131-7	09/19/01	1214	7.22	20.34
08	AR1660L33R	5-210-7	09/19/01	1240	7.22	20.34
09	E03L3	47351.15	09/19/01	1331	7.22	20.33
10	E03L4	47351.16	09/19/01	1357	7.22	20.33
11	E03L5	47351.17	09/19/01	1423	7.22	20.32
12	PIBLK3M	5-131-7	09/19/01	1814	7.22	20.34
13	AR1660L33T	5-210-7	09/19/01	1840	7.22	20.33
14	PIBLK3P	5-131-7	09/20/01	2003	7.22	20.35
15	AR1660L33A	5-210-7	09/20/01	2028	7.22	20.34
16	E03L6	47351.18	09/20/01	2211	7.22	20.33
17	E03L7	47351.19	09/20/01	2237	7.22	20.34
18	E03L8	47351.20	09/20/01	2303	7.22	20.34
19	E03L9	47351.21	09/20/01	2328	7.22	20.34
20	E03M1	47351.22	09/20/01	2354	7.22	20.34
21	E03K1DL	47351.04DL	09/21/01	0020	7.22	20.33
22	E03K2DL	47351.05DL	09/21/01	0046	7.22	20.34
23	PIBLK3Q	5-131-7	09/21/01	0254	7.22	20.35
24	AR1660L33C	5-210-7	09/21/01	0320	7.22	20.35
25	E03K3DL	47351.06DL	09/21/01	0411	7.22	20.34
26	E03K4DL	47351.07DL	09/21/01	0437	7.22	20.34
27	E03K5DL	47351.08DL	09/21/01	0528	7.23	20.34
28	E03K6DL	47351.09DL	09/21/01	0554	7.22	20.34
29	E03K8DL	47351.10DL	09/21/01	0619	7.22	20.34
30	E03K9DL	47351.11DL	09/21/01	0645	7.22	20.32
31	E03L0DL	47351.12DL	09/21/01	0711	7.22	20.34
32	E03L4DL	47351.16DL	09/21/01	0736	7.22	20.34
33	E03L5DL	47351.17DL	09/21/01	0802	7.22	20.32
34	PIBLK3R	5-131-7	09/21/01	1010	7.22	20.34
35	AR1660L33F	5-210-7	09/21/01	1036	7.22	20.34

TCX = Tetrachloro-m-xylene (+/- 0.05 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

ELCS1

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: LC0824SB Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	10.72	10.67	10.77	82.3		
Aroclor-1254	2	11.86	11.81	11.91	90.8		
	3	12.18	12.13	12.23	95.9		
COLUMN 1	4	12.95	12.91	13.01	88.3		
	5	14.19	14.14	14.24	93.9	90	
	1	10.67	10.62	10.72	84.8		
	2	12.10	12.05	12.15	95.2		
	3	13.03	12.98	13.08	93.8		
COLUMN 2	4	13.46	13.41	13.51	97.3		
	5	14.25	14.20	14.30	98.3	94	4.4
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

page 1 of 1

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

ELCS2

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: LD0824SB Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
Aroclor-1254 COLUMN 1	1	10.72	10.67	10.77	123		
	2	11.86	11.81	11.91	134		
	3	12.17	12.13	12.23	137		
	4	12.95	12.91	13.01	135		
	5	14.18	14.14	14.24	146	140	
COLUMN 2	1	10.67	10.62	10.72	131		
	2	12.09	12.05	12.15	140		
	3	13.03	12.98	13.08	129		
	4	13.46	13.41	13.51	139		
	5	14.25	14.20	14.30	142	140	0.0
_____ COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						
_____ COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

page 1 of 1

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03K0

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.01 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	8.55	8.48	8.58	15.9		
Aroclor-1242	2						
	3						
COLUMN 1	4	11.18	11.12	11.22	34.3		
	5	12.33	12.27	12.37	29.7	27	
	1						
	2						
	3	10.06	10.04	10.14	9.6		
COLUMN 2	4	11.28	11.23	11.33	35.2		
	5	12.37	12.32	12.42	16.2	20	35.0
	1	10.75	10.67	10.77	57.1		
Aroclor-1254	2	11.88	11.81	11.91	10.5		
	3	12.18	12.13	12.23	8.0		
COLUMN 1	4	12.96	12.91	13.01	17.8		
	5					23	
	1	10.67	10.62	10.72	33.7		
	2	12.09	12.05	12.15	15.9		
	3	13.03	12.98	13.08	15.9		
COLUMN 2	4	13.46	13.41	13.51	14.5		
	5	14.25	14.20	14.30	13.9	19	21.1
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

page 1 of 1

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03K0MS

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.02MS Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
Aroclor-1242 COLUMN 1	1	8.55	8.48	8.58	14.4		
	2						
	3	10.15	10.08	10.18	11.3		
	4	11.18	11.12	11.22	106		
	5	12.32	12.27	12.37	160	73	
Aroclor-1242 COLUMN 2	1						
	2						
	3	10.10	10.04	10.14	12.7		
	4	11.28	11.23	11.33	115		
	5	12.37	12.32	12.42	72.9	67	9.0
Aroclor-1254 COLUMN 1	1	10.72	10.67	10.77	178		
	2	11.86	11.81	11.91	164		
	3	12.18	12.13	12.23	155		
	4	12.95	12.91	13.01	153		
	5	14.18	14.14	14.24	199	170	
Aroclor-1254 COLUMN 2	1	10.68	10.62	10.72	162		
	2	12.10	12.05	12.15	154		
	3	13.03	12.98	13.08	163		
	4	13.46	13.41	13.51	210		
	5	14.25	14.20	14.30	230	180	5.9
_____ COLUMN 1	1						
	2						
	3						
	4						
	5						
_____ COLUMN 2	1						
	2						
	3						
	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03K0MSD

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.03MSD Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	8.54	8.48	8.58	25.1		
Aroclor-1242	2	9.26	9.21	9.31	10.2		
	3	10.14	10.08	10.18	10.8		
COLUMN 1	4	11.17	11.12	11.22	99.7		
	5	12.32	12.27	12.37	149	59	
	1						
	2						
	3	10.06	10.04	10.14	17.3		
COLUMN 2	4	11.28	11.23	11.33	110		
	5	12.36	12.32	12.42	61.6	63	6.8
	1	10.72	10.67	10.77	170		
Aroclor-1254	2	11.86	11.81	11.91	147		
	3	12.17	12.13	12.23	137		
COLUMN 1	4	12.95	12.91	13.01	134		
	5	14.18	14.14	14.24	134	140	
	1	10.67	10.62	10.72	158		
	2	12.09	12.05	12.15	139		
	3	13.03	12.98	13.08	128		
COLUMN 2	4	13.46	13.41	13.51	137		
	5	14.25	14.20	14.30	140	140	0.0
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03K1

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.04 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	8.54	8.48	8.58	193		
Aroclor-1242	2	9.26	9.21	9.31	137		
	3	10.13	10.08	10.18	295		
COLUMN 1	4	11.17	11.12	11.22	771		
	5	12.31	12.27	12.37	738	430	
	1						
	2	9.39	9.34	9.44	156		
	3	10.08	10.04	10.14	316		
COLUMN 2	4	11.27	11.23	11.33	882		
	5	12.35	12.32	12.42	573	480	11.6
	1	10.71	10.67	10.77	337		
Aroclor-1254	2	11.86	11.81	11.91	310		
	3	12.17	12.13	12.23	296		
COLUMN 1	4	12.94	12.91	13.01	480		
	5	14.18	14.14	14.24	728	430	
	1	10.66	10.62	10.72	952		
	2	12.08	12.05	12.15	705		
	3	13.02	12.98	13.08	567		
COLUMN 2	4	13.45	13.41	13.51	696		
	5	14.24	14.20	14.30	758	740	72.1
	1	12.94	12.90	13.00	887		
Aroclor-1260	2	13.57	13.53	13.63	321		
	3	14.84	14.79	14.89	311		
COLUMN 1	4	15.40	15.36	15.46	177		
	5	16.22	16.18	16.28	196	380	
	1	13.32	13.27	13.37	386		
	2	14.07	14.03	14.13	424		
	3	15.03	14.99	15.09	125		
COLUMN 2	4	16.43	16.39	16.49	214		
	5	17.76	17.72	17.82	213	270	40.7

At least 3 peaks are required for identification of multicomponent analytes

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03K1DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.04DL Date(s) Analyzed: 09/21/01 09/21/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	8.54	8.48	8.58	334		
Aroclor-1242	2	9.26	9.21	9.31	240		
	3	10.13	10.08	10.18	453		
COLUMN 1	4	11.18	11.12	11.22	1100		
	5	12.32	12.27	12.37	1070	640	
	1						
	2	9.39	9.34	9.44	176		
	3	10.09	10.04	10.14	394		
COLUMN 2	4	11.27	11.23	11.33	1110		
	5	12.35	12.32	12.42	674	590	8.5
	1	10.75	10.67	10.77	1910		
Aroclor-1254	2	11.86	11.81	11.91	494		
	3	12.17	12.13	12.23	464		
COLUMN 1	4	12.95	12.91	13.01	673		
	5	14.18	14.14	14.24	957	900	
	1	10.67	10.62	10.72	1320		
	2	12.09	12.05	12.15	933		
	3	13.02	12.98	13.08	872		
COLUMN 2	4	13.46	13.41	13.51	928		
	5	14.25	14.20	14.30	972	1000	11.1
	1	12.95	12.90	13.00	1240		
Aroclor-1260	2	13.57	13.53	13.63	467		
	3	14.85	14.79	14.89	479		
COLUMN 1	4	15.41	15.36	15.46	244		
	5	16.22	16.18	16.28	228	530	
	1	13.32	13.27	13.37	527		
	2	14.07	14.03	14.13	550		
	3	15.04	14.99	15.09	161		
COLUMN 2	4	16.43	16.39	16.49	230		
	5	17.76	17.72	17.82	217	340	55.9

At least 3 peaks are required for identification of multicomponent analytes

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03K2

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.05 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	8.54	8.48	8.58	43.0		
Aroclor-1242	2	9.26	9.21	9.31	41.0		
	3	10.13	10.08	10.18	96.1		
COLUMN 1	4	11.17	11.12	11.22	398		
	5	12.32	12.27	12.37	534	220	
	1						
	2	9.39	9.34	9.44	43.3		
	3	10.09	10.04	10.14	99.5		
COLUMN 2	4	11.27	11.23	11.33	411		
	5	12.35	12.32	12.42	309	220	0.0
	1	10.74	10.67	10.77	645		
Aroclor-1254	2	11.86	11.81	11.91	292		
	3	12.17	12.13	12.23	289		
COLUMN 1	4	12.94	12.91	13.01	428		
	5	14.18	14.14	14.24	566	440	
	1	10.67	10.62	10.72	510		
	2	12.08	12.05	12.15	542		
	3	13.02	12.98	13.08	508		
COLUMN 2	4	13.45	13.41	13.51	617		
	5	14.24	14.20	14.30	594	550	25.0
	1	12.94	12.90	13.00	792		
Aroclor-1260	2	13.57	13.53	13.63	294		
	3	14.84	14.79	14.89	239		
COLUMN 1	4	15.40	15.36	15.46	111		
	5	16.22	16.18	16.28	119	310	
	1	13.32	13.27	13.37	353		
	2	14.07	14.03	14.13	346		
	3	15.03	14.99	15.09	76.7		
COLUMN 2	4	16.42	16.39	16.49	127		
	5	17.75	17.72	17.82	97.9	200	55.0

At least 3 peaks are required for identification of multicomponent analytes

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03K2DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.05DL Date(s) Analyzed: 09/21/01 09/21/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
Aroclor-1242 COLUMN 1	1	8.54	8.48	8.58	73.0		
	2	9.26	9.21	9.31	51.7		
	3	10.14	10.08	10.18	130		
	4	11.18	11.12	11.22	530		
	5	12.32	12.27	12.37	727	300	
Aroclor-1242 COLUMN 2	1						
	2	9.39	9.34	9.44	43.3		
	3	10.09	10.04	10.14	114		
	4	11.28	11.23	11.33	471		
	5	12.36	12.32	12.42	344	240	25.0
Aroclor-1254 COLUMN 1	1	10.74	10.67	10.77	1000		
	2	11.86	11.81	11.91	430		
	3	12.18	12.13	12.23	418		
	4	12.95	12.91	13.01	552		
	5	14.19	14.14	14.24	714	620	
Aroclor-1254 COLUMN 2	1	10.67	10.62	10.72	686		
	2	12.10	12.05	12.15	721		
	3	13.03	12.98	13.08	698		
	4	13.46	13.41	13.51	817		
	5	14.25	14.20	14.30	753	740	19.4
Aroclor-1260 COLUMN 1	1	12.95	12.90	13.00	1020		
	2	13.57	13.53	13.63	390		
	3	14.85	14.79	14.89	324		
	4	15.41	15.36	15.46	135		
	5	16.23	16.18	16.28	163	410	
Aroclor-1260 COLUMN 2	1	13.32	13.27	13.37	479		
	2	14.08	14.03	14.13	473		
	3	15.04	14.99	15.09	80.0		
	4	16.44	16.39	16.49	121		
	5	17.76	17.72	17.82	99.6	250	64.0

At least 3 peaks are required for identification of multicomponent analytes

page 1 of 1

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03K3

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.06 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	8.53	8.48	8.58	920		
Aroclor-1242	2	9.26	9.21	9.31	5690		
	3	10.12	10.08	10.18	7110		
COLUMN 1	4	11.18	11.12	11.22	7520		
	5	12.31	12.27	12.37	5630	5400	
	1	8.57	8.52	8.62	881		
	2	9.38	9.34	9.44	6670		
	3	10.08	10.04	10.14	7790		
COLUMN 2	4	11.26	11.23	11.33	8300		
	5	12.35	12.32	12.42	4940	5700	5.6
	1	10.74	10.67	10.77	12900		
Aroclor-1254	2	11.86	11.81	11.91	1690		
	3	12.16	12.13	12.23	908		
COLUMN 1	4	12.94	12.91	13.01	1880		
	5	14.18	14.14	14.24	1480	3800	
	1	10.66	10.62	10.72	10300		
	2	12.08	12.05	12.15	1310		
	3	13.02	12.98	13.08	2380		
COLUMN 2	4	13.45	13.41	13.51	2060		
	5	14.24	14.20	14.30	1980	3600	5.6
	1	12.94	12.90	13.00	3480		
Aroclor-1260	2	13.57	13.53	13.63	827		
	3	14.84	14.79	14.89	793		
COLUMN 1	4	15.40	15.36	15.46	450		
	5	16.22	16.18	16.28	509	1200	
	1	13.32	13.27	13.37	1120		
	2	14.07	14.03	14.13	1010		
	3	15.03	14.99	15.09	382		
COLUMN 2	4	16.43	16.39	16.49	572		
	5	17.76	17.72	17.82	606	740	62.2

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03K3DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.06DL Date(s) Analyzed: 09/21/01 09/21/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1						
Aroclor-1242	2	9.26	9.21	9.31	12500		
	3	10.13	10.08	10.18	14300		
COLUMN 1	4	11.19	11.12	11.22	16700		
	5	12.32	12.27	12.37	10300	13000	
	1						
	2	9.39	9.34	9.44	12100		
	3	10.09	10.04	10.14	14300		
COLUMN 2	4	11.28	11.23	11.33	13500		
	5	12.36	12.32	12.42	8240	12000	8.3
	1	10.75	10.67	10.77	29100		
Aroclor-1254	2	11.87	11.81	11.91	3030		
	3	12.18	12.13	12.23	1910		
COLUMN 1	4	12.95	12.91	13.01	3540		
	5	14.19	14.14	14.24	2740	8100	
	1	10.67	10.62	10.72	19200		
	2	12.10	12.05	12.15	3930		
	3	13.03	12.98	13.08	4410		
COLUMN 2	4	13.46	13.41	13.51	3380		
	5	14.25	14.20	14.30	2850	6800	19.1
	1	12.95	12.90	13.00	6550		
Aroclor-1260	2	13.57	13.53	13.63	1720		
	3	14.85	14.79	14.89	1200		
COLUMN 1	4	15.41	15.36	15.46	732		
	5	16.22	16.18	16.28	742	2200	
	1	13.33	13.27	13.37	2150		
	2	14.08	14.03	14.13	1690		
	3	15.04	14.99	15.09	566		
COLUMN 2	4	16.44	16.39	16.49	643		
	5	17.76	17.72	17.82	671	1100	100

At least 3 peaks are required for identification of multicomponent analytes

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03K4

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.07 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	8.53	8.48	8.58	1320		
Aroclor-1242	2	9.26	9.21	9.31	5490		
	3	10.12	10.08	10.18	7040		
COLUMN 1	4	11.17	11.12	11.22	7930		
	5	12.30	12.27	12.37	5360	5400	
	1	8.57	8.52	8.62	1500		
	2	9.38	9.34	9.44	6680		
	3	10.08	10.04	10.14	7910		
COLUMN 2	4	11.26	11.23	11.33	9760		
	5	12.34	12.32	12.42	5740	6300	16.7
	1	10.74	10.67	10.77	11100		
Aroclor-1254	2	11.86	11.81	11.91	1610		
	3	12.16	12.13	12.23	819		
COLUMN 1	4	12.94	12.91	13.01	1670		
	5	14.17	14.14	14.24	1310	3300	
	1	10.66	10.62	10.72	10900		
	2	12.08	12.05	12.15	1280		
	3	13.01	12.98	13.08	2160		
COLUMN 2	4	13.45	13.41	13.51	1840		
	5	14.24	14.20	14.30	1840	3600	9.1
	1	12.94	12.90	13.00	3080		
Aroclor-1260	2	13.56	13.53	13.63	793		
	3	14.84	14.79	14.89	728		
COLUMN 1	4	15.40	15.36	15.46	402		
	5	16.21	16.18	16.28	468	1100	
	1	13.32	13.27	13.37	997		
	2	14.07	14.03	14.13	988		
	3	15.03	14.99	15.09	308		
COLUMN 2	4	16.42	16.39	16.49	634		
	5	17.75	17.72	17.82	611	710	54.9

At least 3 peaks are required for identification of multicomponent analytes

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03K4DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.07DL Date(s) Analyzed: 09/21/01 09/21/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	8.54	8.48	8.58	2770		
Aroclor-1242	2	9.26	9.21	9.31	13000		
	3	10.13	10.08	10.18	15200		
COLUMN 1	4	11.17	11.12	11.22	18700		
	5	12.32	12.27	12.37	10600	12000	
	1	8.57	8.52	8.62	2450		
	2	9.39	9.34	9.44	12900		
	3	10.09	10.04	10.14	15300		
COLUMN 2	4	11.27	11.23	11.33	17000		
	5	12.36	12.32	12.42	8780	11000	9.1
	1	10.75	10.67	10.77	27300		
Aroclor-1254	2	11.87	11.81	11.91	3120		
	3	12.17	12.13	12.23	1840		
COLUMN 1	4	12.95	12.91	13.01	3430		
	5	14.18	14.14	14.24	2220	7600	
	1	10.67	10.62	10.72	21000		
	2	12.09	12.05	12.15	3730		
	3	13.02	12.98	13.08	3880		
COLUMN 2	4	13.46	13.41	13.51	3220		
	5	14.25	14.20	14.30	2760	6900	10.1
	1	12.95	12.90	13.00	6350		
Aroclor-1260	2	13.57	13.53	13.63	1530		
	3	14.85	14.79	14.89	1140		
COLUMN 1	4	15.41	15.36	15.46	685		
	5	16.22	16.18	16.28	1010	2100	
	1	13.32	13.27	13.37	1980		
	2	14.08	14.03	14.13	1740		
	3						
COLUMN 2	4	16.43	16.39	16.49	678		
	5	17.76	17.72	17.82	840	1300	61.5

At least 3 peaks are required for identification of multicomponent analytes

page 1 of 1

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03K5

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.08 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	8.53	8.48	8.58	1070		
Aroclor-1242	2	9.26	9.21	9.31	3000		
	3	10.12	10.08	10.18	3840		
COLUMN 1	4	11.17	11.12	11.22	4020		
	5	12.30	12.27	12.37	2760	2900	
	1	8.57	8.52	8.62	1480		
	2	9.39	9.34	9.44	3730		
	3	10.08	10.04	10.14	4640		
COLUMN 2	4	11.26	11.23	11.33	5500		
	5	12.34	12.32	12.42	2890	3600	24.1
	1	10.74	10.67	10.77	5290		
Aroclor-1254	2	11.86	11.81	11.91	952		
.	3	12.16	12.13	12.23	574		
COLUMN 1	4	12.94	12.91	13.01	1010		
	5	14.18	14.14	14.24	1050	1800	
	1	10.66	10.62	10.72	6130		
	2	12.08	12.05	12.15	1280		
	3	13.02	12.98	13.08	1380		
COLUMN 2	4	13.45	13.41	13.51	1380		
	5	14.24	14.20	14.30	1300	2300	27.8
	1	12.94	12.90	13.00	1860		
Aroclor-1260	2	13.57	13.53	13.63	492		
	3	14.84	14.79	14.89	520		
COLUMN 1	4	15.40	15.36	15.46	270		
	5	16.22	16.18	16.28	359	700	
	1	13.32	13.27	13.37	974		
	2	14.07	14.03	14.13	753		
	3						
COLUMN 2	4	16.43	16.39	16.49	417		
	5	17.76	17.72	17.82	454	650	7.7

At least 3 peaks are required for identification of multicomponent analytes

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03K5DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.08DL Date(s) Analyzed: 09/21/01 09/21/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	8.53	8.48	8.58	2010		
Aroclor-1242	2	9.26	9.21	9.31	5860		
	3	10.13	10.08	10.18	7220		
COLUMN 1	4	11.17	11.12	11.22	7840		
	5	12.32	12.27	12.37	4750	5500	
	1	8.57	8.52	8.62	2200		
	2	9.39	9.34	9.44	6020		
	3	10.09	10.04	10.14	7370		
COLUMN 2	4	11.27	11.23	11.33	8320		
	5	12.35	12.32	12.42	3860	5600	1.8
	1	10.75	10.67	10.77	10800		
Aroclor-1254	2	11.87	11.81	11.91	1850		
	3	12.17	12.13	12.23	1110		
COLUMN 1	4	12.95	12.91	13.01	1760		
	5	14.18	14.14	14.24	1540	3400	
	1	10.67	10.62	10.72	9770		
	2	12.09	12.05	12.15	2050		
	3	13.02	12.98	13.08	2030		
COLUMN 2	4	13.46	13.41	13.51	2020		
	5	14.25	14.20	14.30	1750	3500	2.9
	1	12.95	12.90	13.00	3260		
Aroclor-1260	2	13.57	13.53	13.63	840		
	3	14.85	14.79	14.89	713		
COLUMN 1	4	15.41	15.36	15.46	401		
	5	16.22	16.18	16.28	635	1200	
	1	13.32	13.27	13.37	1480		
	2	14.08	14.03	14.13	1070		
	3						
COLUMN 2	4	16.43	16.39	16.49	383		
	5	17.76	17.72	17.82	385	830	44.6

At least 3 peaks are required for identification of multicomponent analytes

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03K6

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.09 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	8.53	8.48	8.58	171		
Aroclor-1242	2	9.26	9.21	9.31	641		
	3	10.12	10.08	10.18	766		
COLUMN 1	4	11.17	11.12	11.22	859		
	5	12.31	12.27	12.37	621	610	
	1	8.57	8.52	8.62	217		
	2	9.39	9.34	9.44	788		
	3	10.08	10.04	10.14	948		
COLUMN 2	4	11.27	11.23	11.33	1120		
	5	12.35	12.32	12.42	593	730	19.7
	1	10.75	10.67	10.77	1250		
Aroclor-1254	2	11.86	11.81	11.91	188		
	3	12.17	12.13	12.23	123		
COLUMN 1	4	12.94	12.91	13.01	198		
	5	14.18	14.14	14.24	169	390	
	1	10.66	10.62	10.72	1260		
	2	12.09	12.05	12.15	259		
	3	13.02	12.98	13.08	253		
COLUMN 2	4	13.45	13.41	13.51	221		
	5	14.25	14.20	14.30	233	450	15.4
	1	12.94	12.90	13.00	366		
Aroclor-1260	2	13.57	13.53	13.63	77.3		
	3	14.84	14.79	14.89	117		
COLUMN 1	4						
	5	16.22	16.18	16.28	35.1	150	
	1	13.29	13.27	13.37	364		
	2	14.08	14.03	14.13	195		
	3						
COLUMN 2	4	16.44	16.39	16.49	72.3		
	5	17.77	17.72	17.82	74.7	180	20.0

At least 3 peaks are required for identification of multicomponent analytes

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03K6DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.09DL Date(s) Analyzed: 09/21/01 09/21/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	8.53	8.48	8.58	305		
Aroclor-1242	2	9.26	9.21	9.31	1210		
	3	10.13	10.08	10.18	1430		
COLUMN 1	4	11.17	11.12	11.22	1510		
	5	12.31	12.27	12.37	986	1100	
	1	8.57	8.52	8.62	306		
	2	9.39	9.34	9.44	1260		
	3	10.09	10.04	10.14	1430		
COLUMN 2	4	11.27	11.23	11.33	1670		
	5	12.35	12.32	12.42	763	1100	0.0
	1	10.75	10.67	10.77	2400		
Aroclor-1254	2	11.86	11.81	11.91	383		
	3	12.17	12.13	12.23	208		
COLUMN 1	4	12.94	12.91	13.01	304		
	5	14.18	14.14	14.24	224	700	
	1	10.66	10.62	10.72	1940		
	2	12.09	12.05	12.15	399		
	3	13.02	12.98	13.08	337		
COLUMN 2	4	13.45	13.41	13.51	306		
	5	14.24	14.20	14.30	317	660	6.1
	1	12.94	12.90	13.00	562		
Aroclor-1260	2	13.57	13.53	13.63	136		
	3	14.84	14.79	14.89	135		
COLUMN 1	4	15.40	15.36	15.46	79.4		
	5	16.20	16.18	16.28	91.6	200	
	1	13.29	13.27	13.37	516		
	2	14.07	14.03	14.13	217		
	3						
COLUMN 2	4	16.42	16.39	16.49	61.7		
	5	17.75	17.72	17.82	53.5	210	5.0

At least 3 peaks are required for identification of multicomponent analytes

page 1 of 1

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03K8

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.10 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	8.54	8.48	8.58	193		
Aroclor-1242	2	9.26	9.21	9.31	125		
	3	10.12	10.08	10.18	283		
COLUMN 1	4	11.17	11.12	11.22	1190		
	5	12.31	12.27	12.37	1140	590	
	1						
	2	9.39	9.34	9.44	169		
	3	10.08	10.04	10.14	367		
COLUMN 2	4	11.27	11.23	11.33	1540		
	5	12.34	12.32	12.42	1020	770	30.5
	1	10.74	10.67	10.77	1710		
Aroclor-1254	2	11.85	11.81	11.91	452		
	3	12.16	12.13	12.23	460		
COLUMN 1	4	12.94	12.91	13.01	794		
	5	14.18	14.14	14.24	1280	940	
	1	10.66	10.62	10.72	1560		
	2	12.08	12.05	12.15	1180		
	3	13.02	12.98	13.08	1080		
COLUMN 2	4	13.45	13.41	13.51	1400		
	5	14.24	14.20	14.30	1540	1400	48.9
	1	12.94	12.90	13.00	1470		
Aroclor-1260	2	13.57	13.53	13.63	578		
	3	14.84	14.79	14.89	567		
COLUMN 1	4	15.40	15.36	15.46	357		
	5	16.21	16.18	16.28	396	670	
	1	13.31	13.27	13.37	774		
	2	14.07	14.03	14.13	968		
	3	15.03	14.99	15.09	249		
COLUMN 2	4	16.42	16.39	16.49	443		
	5	17.75	17.72	17.82	542	600	11.7

At least 3 peaks are required for identification of multicomponent analytes

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03K8DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.10DL Date(s) Analyzed: 09/21/01 09/21/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	8.54	8.48	8.58	328		
Aroclor-1242	2	9.26	9.21	9.31	245		
	3	10.13	10.08	10.18	566		
COLUMN 1	4	11.17	11.12	11.22	2340		
	5	12.32	12.27	12.37	2170	1100	
	1						
	2	9.39	9.34	9.44	248		
	3	10.09	10.04	10.14	549		
COLUMN 2	4	11.27	11.23	11.33	2350		
	5	12.35	12.32	12.42	1450	1100	0.0
	1	10.74	10.67	10.77	3570		
Aroclor-1254	2	11.86	11.81	11.91	941		
	3	12.17	12.13	12.23	934		
COLUMN 1	4	12.95	12.91	13.01	1390		
	5	14.18	14.14	14.24	2100	1800	
	1	10.67	10.62	10.72	2640		
	2	12.09	12.05	12.15	1860		
	3	13.02	12.98	13.08	1890		
COLUMN 2	4	13.46	13.41	13.51	2190		
	5	14.25	14.20	14.30	2220	2200	22.2
	1	12.95	12.90	13.00	2570		
Aroclor-1260	2	13.57	13.53	13.63	1040		
	3	14.85	14.79	14.89	924		
COLUMN 1	4	15.41	15.36	15.46	552		
	5	16.22	16.18	16.28	615	1100	
	1	13.32	13.27	13.37	1310		
	2	14.08	14.03	14.13	1450		
	3	15.04	14.99	15.09	351		
COLUMN 2	4	16.43	16.39	16.49	589		
	5	17.76	17.72	17.82	624	860	27.9

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03K9

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.11 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	8.54	8.48	8.58	314		
Aroclor-1242	2	9.26	9.21	9.31	287		
	3	10.12	10.08	10.18	724		
COLUMN 1	4	11.16	11.12	11.22	4910		
	5	12.31	12.27	12.37	3660	2000	
	1						
	2	9.39	9.34	9.44	368		
	3	10.08	10.04	10.14	870		
COLUMN 2	4	11.26	11.23	11.33	5730		
	5	12.35	12.32	12.42	3890	2700	35.0
	1	10.74	10.67	10.77	6090		
Aroclor-1254	2	11.86	11.81	11.91	1270		
	3	12.16	12.13	12.23	915		
COLUMN 1	4	12.94	12.91	13.01	1480		
	5	14.18	14.14	14.24	1780	2300	
	1	10.66	10.62	10.72	4780		
	2	12.08	12.05	12.15	1990		
	3	13.02	12.98	13.08	1970		
COLUMN 2	4	13.45	13.41	13.51	2070		
	5	14.24	14.20	14.30	2130	2600	13.0
	1	12.94	12.90	13.00	2730		
Aroclor-1260	2	13.57	13.53	13.63	761		
	3	14.84	14.79	14.89	782		
COLUMN 1	4	15.40	15.36	15.46	416		
	5	16.22	16.18	16.28	457	1000	
	1	13.32	13.27	13.37	960		
	2	14.07	14.03	14.13	1070		
	3	15.04	14.99	15.09	314		
COLUMN 2	4	16.43	16.39	16.49	497		
	5	17.76	17.72	17.82	555	680	47.1

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03K9DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.11DL Date(s) Analyzed: 09/21/01 09/21/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	8.54	8.48	8.58	506		
Aroclor-1242	2	9.26	9.21	9.31	468		
	3	10.14	10.08	10.18	1230		
COLUMN 1	4	11.17	11.12	11.22	8830		
	5	12.32	12.27	12.37	6130	3400	
	1						
	2	9.39	9.34	9.44	460		
	3	10.10	10.04	10.14	1170		
COLUMN 2	4	11.27	11.23	11.33	8250		
	5	12.36	12.32	12.42	5170	3800	11.8
	1	10.75	10.67	10.77	11600		
Aroclor-1254	2	11.87	11.81	11.91	2090		
	3	12.17	12.13	12.23	1710		
COLUMN 1	4	12.95	12.91	13.01	2410		
	5	14.18	14.14	14.24	2640	4100	
	1	10.67	10.62	10.72	7690		
	2	12.09	12.05	12.15	3000		
	3	13.02	12.98	13.08	2890		
COLUMN 2	4	13.46	13.41	13.51	3000		
	5	14.25	14.20	14.30	2950	3900	5.1
	1	12.95	12.90	13.00	4460		
Aroclor-1260	2	13.57	13.53	13.63	1310		
	3	14.85	14.79	14.89	1140		
COLUMN 1	4	15.41	15.36	15.46	586		
	5	16.22	16.18	16.28	803	1700	
	1	13.32	13.27	13.37	1570		
	2	14.08	14.03	14.13	1660		
	3						
COLUMN 2	4	16.43	16.39	16.49	550		
	5	17.76	17.72	17.82	597	1100	54.5

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03L0

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.12 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
Aroclor-1242 COLUMN 1	1	8.55	8.48	8.58	265		
	2	9.26	9.21	9.31	97.7		
	3	10.13	10.08	10.18	362		
	4	11.17	11.12	11.22	1880		
	5	12.31	12.27	12.37	1720	860	
Aroclor-1242 COLUMN 2	1						
	2	9.39	9.34	9.44	131		
	3	10.09	10.04	10.14	430		
	4	11.27	11.23	11.33	2220		
	5	12.35	12.32	12.42	1730	1100	27.9
Aroclor-1254 COLUMN 1	1	10.71	10.67	10.77	694		
	2	11.86	11.81	11.91	639		
	3	12.17	12.13	12.23	477		
	4	12.94	12.91	13.01	823		
	5	14.18	14.14	14.24	1110	750	
Aroclor-1254 COLUMN 2	1	10.66	10.62	10.72	2030		
	2	12.09	12.05	12.15	1030		
	3	13.02	12.98	13.08	1100		
	4	13.45	13.41	13.51	1210		
	5	14.24	14.20	14.30	1460	1400	86.7
Aroclor-1260 COLUMN 1	1	12.94	12.90	13.00	1520		
	2	13.57	13.53	13.63	461		
	3	14.85	14.79	14.89	517		
	4	15.40	15.36	15.46	255		
	5	16.22	16.18	16.28	287	610	
Aroclor-1260 COLUMN 2	1	13.32	13.27	13.37	602		
	2	14.07	14.03	14.13	726		
	3	15.04	14.99	15.09	177		
	4	16.43	16.39	16.49	329		
	5	17.76	17.72	17.82	376	440	38.6

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03L0DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.12DL Date(s) Analyzed: 09/21/01 09/21/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	8.54	8.48	8.58	349		
Aroclor-1242	2	9.26	9.21	9.31	163		
	3	10.14	10.08	10.18	632		
COLUMN 1	4	11.17	11.12	11.22	3420		
	5	12.32	12.27	12.37	2930	1500	
	1						
	2	9.39	9.34	9.44	167		
	3	10.09	10.04	10.14	617		
COLUMN 2	4	11.27	11.23	11.33	3190		
	5	12.35	12.32	12.42	2260	1600	6.7
	1	10.74	10.67	10.77	4710		
Aroclor-1254	2	11.87	11.81	11.91	1120		
	3	12.17	12.13	12.23	906		
COLUMN 1	4	12.95	12.91	13.01	1360		
	5	14.18	14.14	14.24	1700	2000	
	1	10.67	10.62	10.72	3220		
	2	12.09	12.05	12.15	1550		
	3	13.02	12.98	13.08	1610		
COLUMN 2	4	13.46	13.41	13.51	1780		
	5	14.25	14.20	14.30	1850	2000	0.0
	1	12.95	12.90	13.00	2520		
Aroclor-1260	2	13.57	13.53	13.63	825		
	3	14.85	14.79	14.89	790		
COLUMN 1	4	15.41	15.36	15.46	379		
	5	16.22	16.18	16.28	458	990	
	1	13.32	13.27	13.37	923		
	2	14.08	14.03	14.13	1010		
	3	15.04	14.99	15.09	251		
COLUMN 2	4	16.43	16.39	16.49	396		
	5	17.76	17.72	17.82	369	590	67.8

At least 3 peaks are required for identification of multicomponent analytes

page 1 of 1

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03L1

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.13 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
Aroclor-1242 COLUMN 1	1	8.54	8.48	8.58	68.5		
	2	9.26	9.21	9.31	21.8		
	3	10.13	10.08	10.18	51.2		
	4	11.17	11.12	11.22	281		
	5	12.31	12.27	12.37	244	130	
Aroclor-1242 COLUMN 2	1						
	2	9.39	9.34	9.44	20.3		
	3	10.09	10.04	10.14	61.1		
	4	11.27	11.23	11.33	335		
	5	12.35	12.32	12.42	182	150	15.4
Aroclor-1254 COLUMN 1	1	10.74	10.67	10.77	392		
	2	11.86	11.81	11.91	90.3		
	3	12.17	12.13	12.23	74.5		
	4	12.95	12.91	13.01	107		
	5	14.18	14.14	14.24	143	160	
Aroclor-1254 COLUMN 2	1	10.67	10.62	10.72	309		
	2	12.09	12.05	12.15	163		
	3	13.02	12.98	13.08	138		
	4	13.45	13.41	13.51	175		
	5	14.24	14.20	14.30	296	220	37.5
Aroclor-1260 COLUMN 1	1	12.95	12.90	13.00	198		
	2	13.57	13.53	13.63	62.6		
	3	14.85	14.79	14.89	92.7		
	4	15.41	15.36	15.46	38.3		
	5	16.22	16.18	16.28	38.1	86	
Aroclor-1260 COLUMN 2	1	13.32	13.27	13.37	86.6		
	2	14.07	14.03	14.13	158		
	3						
	4	16.43	16.39	16.49	30.6		
	5	17.76	17.72	17.82	26.1	75	14.7

At least 3 peaks are required for identification of multicomponent analytes

page 1 of 1

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03L2

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.14 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
Aroclor-1242 COLUMN 1	1	8.55	8.48	8.58	34.6		
	2	9.27	9.21	9.31	18.8		
	3	10.14	10.08	10.18	38.1		
	4	11.17	11.12	11.22	208		
	5	12.32	12.27	12.37	165	93	
Aroclor-1242 COLUMN 2	1						
	2	9.39	9.34	9.44	14.7		
	3	10.10	10.04	10.14	34.4		
	4	11.27	11.23	11.33	222		
	5	12.35	12.32	12.42	136	100	7.5
Aroclor-1254 COLUMN 1	1	10.75	10.67	10.77	291		
	2	11.87	11.81	11.91	63.1		
	3	12.17	12.13	12.23	54.0		
	4	12.95	12.91	13.01	76.1		
	5	14.19	14.14	14.24	107	120	
Aroclor-1254 COLUMN 2	1	10.67	10.62	10.72	213		
	2	12.09	12.05	12.15	119		
	3	13.02	12.98	13.08	102		
	4	13.46	13.41	13.51	114		
	5	14.25	14.20	14.30	135	140	16.7
Aroclor-1260 COLUMN 1	1	12.95	12.90	13.00	141		
	2	13.57	13.53	13.63	42.9		
	3	14.85	14.79	14.89	47.7		
	4	15.41	15.36	15.46	27.7		
	5	16.22	16.18	16.28	18.3	56	
Aroclor-1260 COLUMN 2	1	13.32	13.27	13.37	53.4		
	2	14.07	14.03	14.13	73.4		
	3	15.04	14.99	15.09	20.3		
	4	16.43	16.39	16.49	20.3		
	5	17.76	17.72	17.82	13.6	36	55.6

At least 3 peaks are required for identification of multicomponent analytes

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03L3

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.15 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	8.54	8.48	8.58	27.7		
Aroclor-1242	2	9.26	9.21	9.31	9.3		
	3	10.14	10.08	10.18	11.2		
COLUMN 1	4	11.18	11.12	11.22	67.6		
	5	12.32	12.27	12.37	75.0	38	
	1						
	2	9.39	9.34	9.44	6.4		
	3	10.06	10.04	10.14	21.2		
COLUMN 2	4	11.27	11.23	11.33	59.9		
	5	12.35	12.32	12.42	49.6	34	11.8
	1	10.75	10.67	10.77	120		
Aroclor-1254	2	11.86	11.81	11.91	33.9		
	3	12.17	12.13	12.23	39.3		
COLUMN 1	4	12.95	12.91	13.01	53.1		
	5	14.18	14.14	14.24	61.2	62	
	1	10.67	10.62	10.72	68.9		
	2	12.09	12.05	12.15	67.6		
	3	13.03	12.98	13.08	61.9		
COLUMN 2	4	13.46	13.41	13.51	79.3		
	5	14.25	14.20	14.30	56.5	67	8.1
	1	12.95	12.90	13.00	98.1		
Aroclor-1260	2	13.57	13.53	13.63	40.6		
	3	14.85	14.79	14.89	21.3		
COLUMN 1	4	15.40	15.36	15.46	11.8		
	5	16.22	16.18	16.28	11.1	37	
	1	13.32	13.27	13.37	40.3		
	2	14.07	14.03	14.13	37.5		
	3	15.04	14.99	15.09	6.5		
COLUMN 2	4	16.43	16.39	16.49	11.0		
	5	17.76	17.72	17.82	16.0	22	68.2

At least 3 peaks are required for identification of multicomponent analytes

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03L4

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.16 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
Aroclor-1242 COLUMN 1	1	8.54	8.48	8.58	184		
	2	9.26	9.21	9.31	159		
	3	10.12	10.08	10.18	347		
	4	11.17	11.12	11.22	1320		
	5	12.31	12.27	12.37	1260	650	
Aroclor-1242 COLUMN 2	1						
	2	9.39	9.34	9.44	177		
	3	10.08	10.04	10.14	369		
	4	11.26	11.23	11.33	1510		
	5	12.34	12.32	12.42	1180	810	24.6
Aroclor-1254 COLUMN 1	1	10.71	10.67	10.77	602		
	2	11.85	11.81	11.91	491		
	3	12.16	12.13	12.23	476		
	4	12.94	12.91	13.01	764		
	5	14.18	14.14	14.24	1010	670	
Aroclor-1254 COLUMN 2	1	10.66	10.62	10.72	1610		
	2	12.08	12.05	12.15	1020		
	3	13.02	12.98	13.08	927		
	4	13.45	13.41	13.51	1030		
	5	14.24	14.20	14.30	1080	1100	64.2
Aroclor-1260 COLUMN 1	1	12.94	12.90	13.00	1410		
	2	13.57	13.53	13.63	460		
	3	14.84	14.79	14.89	433		
	4	15.40	15.36	15.46	232		
	5	16.22	16.18	16.28	264	560	
Aroclor-1260 COLUMN 2	1	13.32	13.27	13.37	554		
	2	14.07	14.03	14.13	578		
	3	15.03	14.99	15.09	167		
	4	16.42	16.39	16.49	281		
	5	17.76	17.72	17.82	281	370	51.4

At least 3 peaks are required for identification of multicomponent analytes

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03L4DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.16DL Date(s) Analyzed: 09/21/01 09/21/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	8.54	8.48	8.58	262		
Aroclor-1242	2	9.27	9.21	9.31	193		
	3	10.14	10.08	10.18	467		
COLUMN 1	4	11.17	11.12	11.22	1970		
	5	12.32	12.27	12.37	1850	950	
	1						
	2	9.39	9.34	9.44	193		
	3	10.09	10.04	10.14	438		
COLUMN 2	4	11.28	11.23	11.33	1880		
	5	12.36	12.32	12.42	1370	970	2.1
	1	10.75	10.67	10.77	3150		
Aroclor-1254	2	11.86	11.81	11.91	762		
	3	12.17	12.13	12.23	740		
COLUMN 1	4	12.95	12.91	13.01	1060		
	5	14.18	14.14	14.24	1310	1400	
	1	10.67	10.62	10.72	2250		
	2	12.09	12.05	12.15	1340		
	3	13.02	12.98	13.08	1270		
COLUMN 2	4	13.46	13.41	13.51	1420		
	5	14.25	14.20	14.30	1500	1600	14.3
	1	12.95	12.90	13.00	1960		
Aroclor-1260	2	13.57	13.53	13.63	690		
	3	14.85	14.79	14.89	601		
COLUMN 1	4	15.41	15.36	15.46	310		
	5	16.22	16.18	16.28	409	790	
	1	13.32	13.27	13.37	775		
	2	14.08	14.03	14.13	853		
	3						
COLUMN 2	4	16.43	16.39	16.49	335		
	5	17.76	17.72	17.82	307	570	38.6

At least 3 peaks are required for identification of multicomponent analytes

page 1 of 1

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03L5

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.17 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	8.54	8.48	8.58	287		
Aroclor-1242	2	9.26	9.21	9.31	218		
	3	10.12	10.08	10.18	534		
COLUMN 1	4	11.16	11.12	11.22	3150		
	5	12.31	12.27	12.37	2850	1400	
	1						
	2	9.39	9.34	9.44	270		
	3	10.08	10.04	10.14	593		
COLUMN 2	4	11.26	11.23	11.33	3650		
	5	12.34	12.32	12.42	2380	1700	21.4
	1	10.71	10.67	10.77	1280		
Aroclor-1254	2	11.85	11.81	11.91	1140		
	3	12.16	12.13	12.23	1060		
COLUMN 1	4	12.94	12.91	13.01	1760		
	5	14.17	14.14	14.24	2520	1600	
	1	10.66	10.62	10.72	3450		
	2	12.08	12.05	12.15	2200		
	3	13.01	12.98	13.08	2220		
COLUMN 2	4	13.45	13.41	13.51	2570		
	5	14.24	14.20	14.30	2860	2700	68.8
	1	12.94	12.90	13.00	3250		
Aroclor-1260	2	13.56	13.53	13.63	1130		
	3	14.84	14.79	14.89	1080		
COLUMN 1	4	15.40	15.36	15.46	568		
	5	16.21	16.18	16.28	638	1300	
	1	13.32	13.27	13.37	1330		
	2	14.07	14.03	14.13	1470		
	3	15.03	14.99	15.09	362		
COLUMN 2	4	16.42	16.39	16.49	682		
	5	17.75	17.72	17.82	743	920	41.3

At least 3 peaks are required for identification of multicomponent analytes

page 1 of 1

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03L5DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.17DL Date(s) Analyzed: 09/21/01 09/21/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	8.54	8.48	8.58	376		
Aroclor-1242	2	9.26	9.21	9.31	280		
	3	10.14	10.08	10.18	754		
COLUMN 1	4	11.17	11.12	11.22	5130		
	5	12.32	12.27	12.37	4430	2200	
	1						
	2	9.39	9.34	9.44	276		
	3	10.09	10.04	10.14	687		
COLUMN 2	4	11.27	11.23	11.33	4610		
	5	12.36	12.32	12.42	2940	2100	4.8
	1	10.74	10.67	10.77	7440		
Aroclor-1254	2	11.86	11.81	11.91	1840		
	3	12.17	12.13	12.23	1770		
COLUMN 1	4	12.95	12.91	13.01	2540		
	5	14.18	14.14	14.24	3360	3400	
	1	10.67	10.62	10.72	5000		
	2	12.09	12.05	12.15	3010		
	3	13.02	12.98	13.08	3030		
COLUMN 2	4	13.46	13.41	13.51	3540		
	5	14.25	14.20	14.30	3640	3600	5.9
	1	12.95	12.90	13.00	4690		
Aroclor-1260	2	13.57	13.53	13.63	1700		
	3	14.85	14.79	14.89	1430		
COLUMN 1	4	15.41	15.36	15.46	719		
	5	16.22	16.18	16.28	902	1900	
	1	13.32	13.27	13.37	2060		
	2	14.08	14.03	14.13	2090		
	3	15.04	14.99	15.09	411		
COLUMN 2	4	16.43	16.39	16.49	694		
	5	17.76	17.72	17.82	717	1200	58.3

At least 3 peaks are required for identification of multicomponent analytes

page 1 of 1

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03L6

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.18 Date(s) Analyzed: 09/20/01 09/20/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
Aroclor-1242 COLUMN 1	1	8.54	8.48	8.58	95.3		
	2	9.26	9.21	9.31	19.6		
	3	10.13	10.08	10.18	55.2		
	4	11.17	11.12	11.22	205		
	5	12.31	12.27	12.37	214	120	
Aroclor-1242 COLUMN 2	1						
	2	9.39	9.34	9.44	15.4		
	3	10.06	10.04	10.14	61.3		
	4	11.27	11.23	11.33	210		
	5	12.35	12.32	12.42	203	120	0.0
Aroclor-1254 COLUMN 1	1	10.74	10.67	10.77	357		
	2	11.86	11.81	11.91	103		
	3	12.16	12.13	12.23	91.2		
	4	12.94	12.91	13.01	141		
	5	14.18	14.14	14.24	219	180	
Aroclor-1254 COLUMN 2	1	10.66	10.62	10.72	247		
	2	12.08	12.05	12.15	170		
	3	13.02	12.98	13.08	169		
	4	13.45	13.41	13.51	193		
	5	14.24	14.20	14.30	235	200	11.1
Aroclor-1260 COLUMN 1	1	12.94	12.90	13.00	260		
	2	13.57	13.53	13.63	94.2		
	3	14.84	14.79	14.89	95.9		
	4	15.40	15.36	15.46	60.0		
	5	16.21	16.18	16.28	63.7	110	
Aroclor-1260 COLUMN 2	1	13.32	13.27	13.37	112		
	2	14.07	14.03	14.13	112		
	3	15.03	14.99	15.09	31.9		
	4	16.42	16.39	16.49	55.0		
	5	17.75	17.72	17.82	77.1	78	41.0

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03L7

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.19 Date(s) Analyzed: 09/20/01 09/20/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	8.54	8.48	8.58	29.3		
Aroclor-1242	2	9.26	9.21	9.31	13.0		
	3	10.13	10.08	10.18	23.2		
COLUMN 1	4	11.17	11.12	11.22	84.3		
	5	12.31	12.27	12.37	71.0	44	
	1						
	2						
	3	10.06	10.04	10.14	27.9		
COLUMN 2	4	11.27	11.23	11.33	79.2		
	5	12.35	12.32	12.42	54.4	54	22.7
	1	10.72	10.67	10.77	36.6		
Aroclor-1254	2	11.86	11.81	11.91	33.1		
	3	12.17	12.13	12.23	22.3		
COLUMN 1	4	12.95	12.91	13.01	30.8		
	5	14.18	14.14	14.24	41.7	33	
	1	10.67	10.62	10.72	76.3		
	2	12.09	12.05	12.15	44.2		
	3	13.02	12.98	13.08	37.4		
COLUMN 2	4	13.46	13.41	13.51	43.7		
	5	14.24	14.20	14.30	81.7	57	72.7
	1	12.95	12.90	13.00	57.0		
Aroclor-1260	2	13.57	13.53	13.63	17.7		
	3	14.85	14.79	14.89	19.2		
COLUMN 1	4	15.40	15.36	15.46	12.1		
	5	16.21	16.18	16.28	16.7	25	
	1	13.32	13.27	13.37	23.6		
	2	14.07	14.03	14.13	26.2		
	3						
COLUMN 2	4	16.43	16.39	16.49	7.7		
	5	17.76	17.72	17.82	12.7	18	38.9

At least 3 peaks are required for identification of multicomponent analytes

page 1 of 1

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03L8

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.20 Date(s) Analyzed: 09/20/01 09/20/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
Aroclor-1242	1						
	2						
COLUMN 1	3	10.14	10.08	10.18	10.1		
	4	11.18	11.12	11.22	50.4		
	5	12.32	12.27	12.37	44.0	35	
	1						
	2						
COLUMN 2	3	10.06	10.04	10.14	16.0		
	4	11.27	11.23	11.33	45.8		
	5	12.36	12.32	12.42	28.0	30	16.7
Aroclor-1254	1	10.74	10.67	10.77	84.5		
	2	11.87	11.81	11.91	18.0		
COLUMN 1	3	12.17	12.13	12.23	17.2		
	4	12.95	12.91	13.01	22.5		
	5	14.19	14.14	14.24	28.1	34	
	1	10.67	10.62	10.72	54.0		
	2	12.09	12.05	12.15	27.8		
	3	13.03	12.98	13.08	30.0		
COLUMN 2	4	13.46	13.41	13.51	28.8		
	5	14.25	14.20	14.30	31.5	34	0.0
Aroclor-1260	1	12.95	12.90	13.00	41.5		
	2	13.57	13.53	13.63	12.6		
COLUMN 1	3	14.85	14.79	14.89	14.3		
	4	15.41	15.36	15.46	6.1		
	5	16.22	16.18	16.28	5.4	16	
	1	13.32	13.27	13.37	14.7		
	2	14.07	14.03	14.13	14.7		
	3	15.04	14.99	15.09	3.7		
COLUMN 2	4	16.43	16.39	16.49	7.7		
	5	17.76	17.72	17.82	3.6	8.9	79.8

At least 3 peaks are required for identification of multicomponent analytes

page 1 of 1

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03L9

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Lab Sample ID: 47351.21 Date(s) Analyzed: 09/20/01 09/20/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
Aroclor-1242 COLUMN 1	1	8.58	8.48	8.58	12.3		
	2	9.26	9.21	9.31	5.2		
	3	10.15	10.08	10.18	2.8		
	4	11.17	11.12	11.22	15.2		
	5	12.33	12.27	12.37	12.0	9.5	
COLUMN 2	1						
	2						
	3	10.09	10.04	10.14	3.0		
	4	11.27	11.23	11.33	15.2		
	5	12.37	12.32	12.42	4.0	7.4	28.4
Aroclor-1254 COLUMN 1	1	10.75	10.67	10.77	28.5		
	2	11.87	11.81	11.91	5.7		
	3	12.18	12.13	12.23	4.8		
	4	12.96	12.91	13.01	8.0		
	5					12	
COLUMN 2	1	10.67	10.62	10.72	15.5		
	2	12.09	12.05	12.15	7.3		
	3	13.03	12.98	13.08	10.9		
	4	13.46	13.41	13.51	10.6		
	5	14.25	14.20	14.30	12.0	11	9.1
_____ COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

page 1 of 1

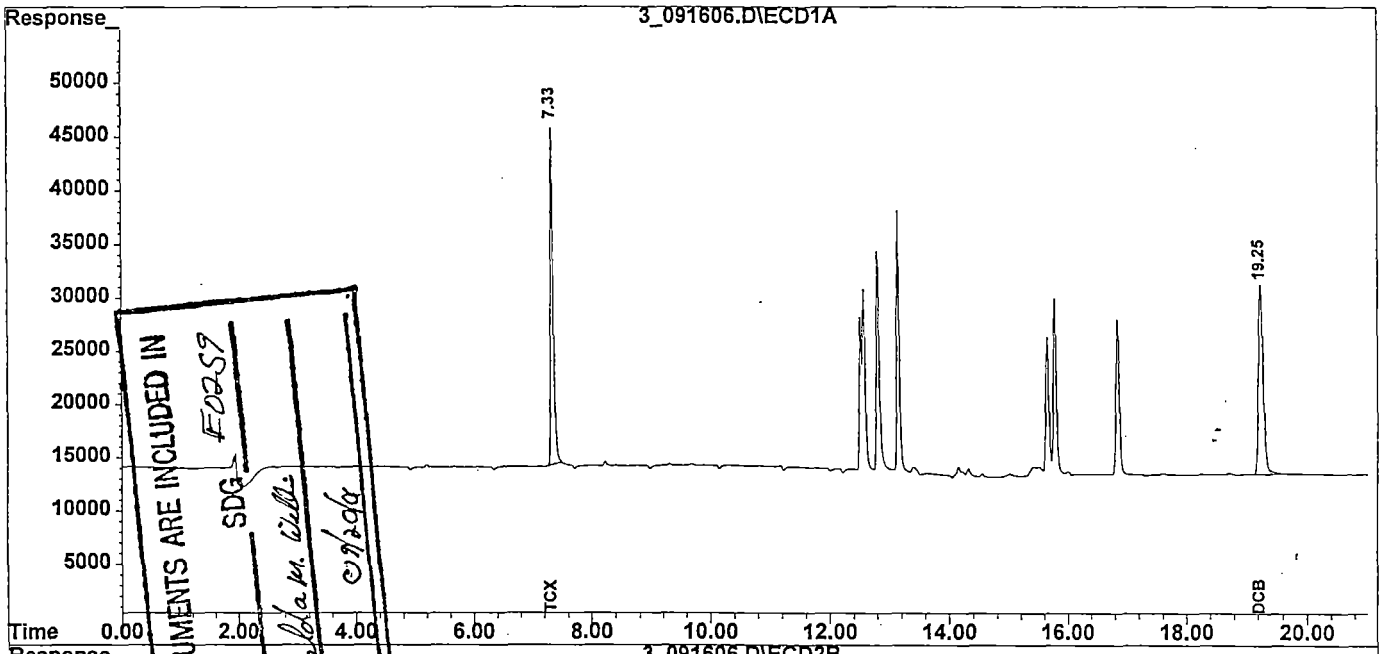
FORM X PCB

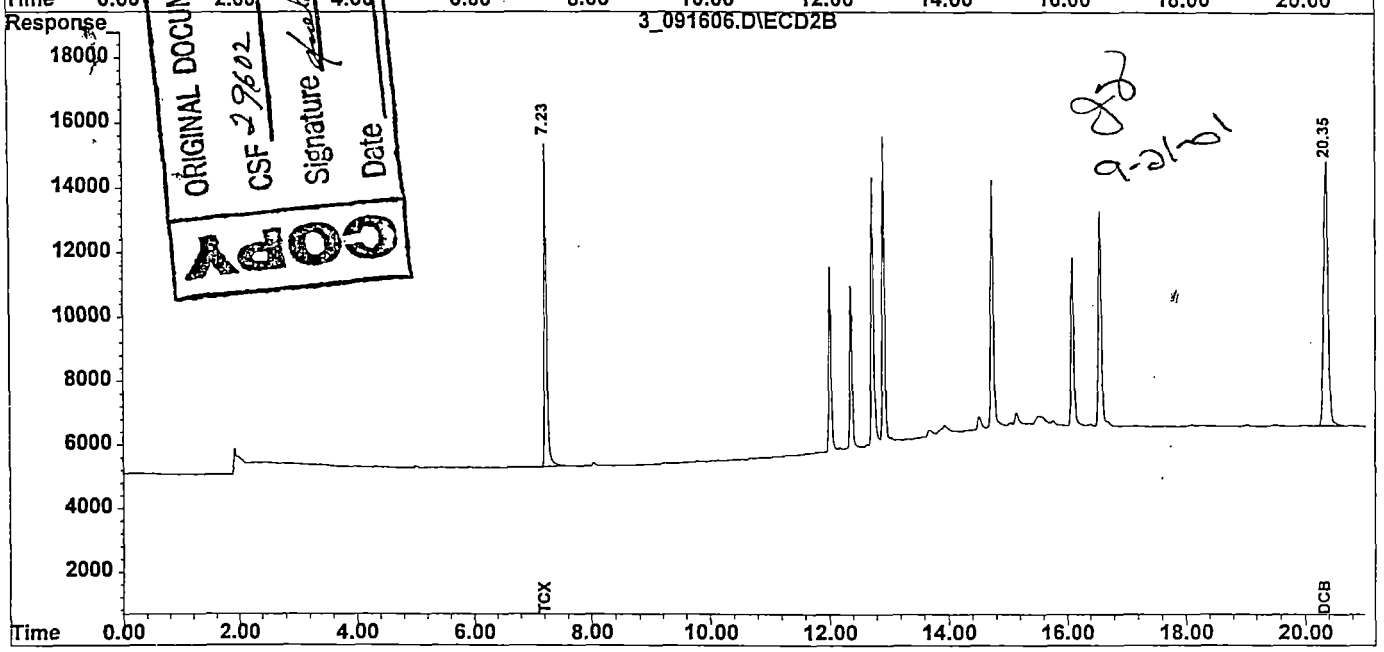
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091606.D\ECD1A.CH Vial: 6
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091606.D\ECD2B.CH
Acq On : 16 Sep 2001 13:03 Operator: DDC
Sample : RESC3E Inst : HP_03
Misc : 5-171-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 9:48 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





ORIGINAL DOCUMENTS ARE INCLUDED IN
SDG E0259
CSF 29602
Signature
Date 09/20/01
COPY

9-21-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091606.D\ECD1A.CH Vial: 6
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091606.D\ECD2B.CH
Acq On : 16 Sep 2001 13:03 Operator: DDC
Sample : RESC3E Inst : HP_03
Misc : 5-171-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 9:48 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.34	7.23	1030565	294835	32.5	25.5
22)	S DCB	19.25	20.35	974287	429721	23.2	21.5
	Target Compounds:						

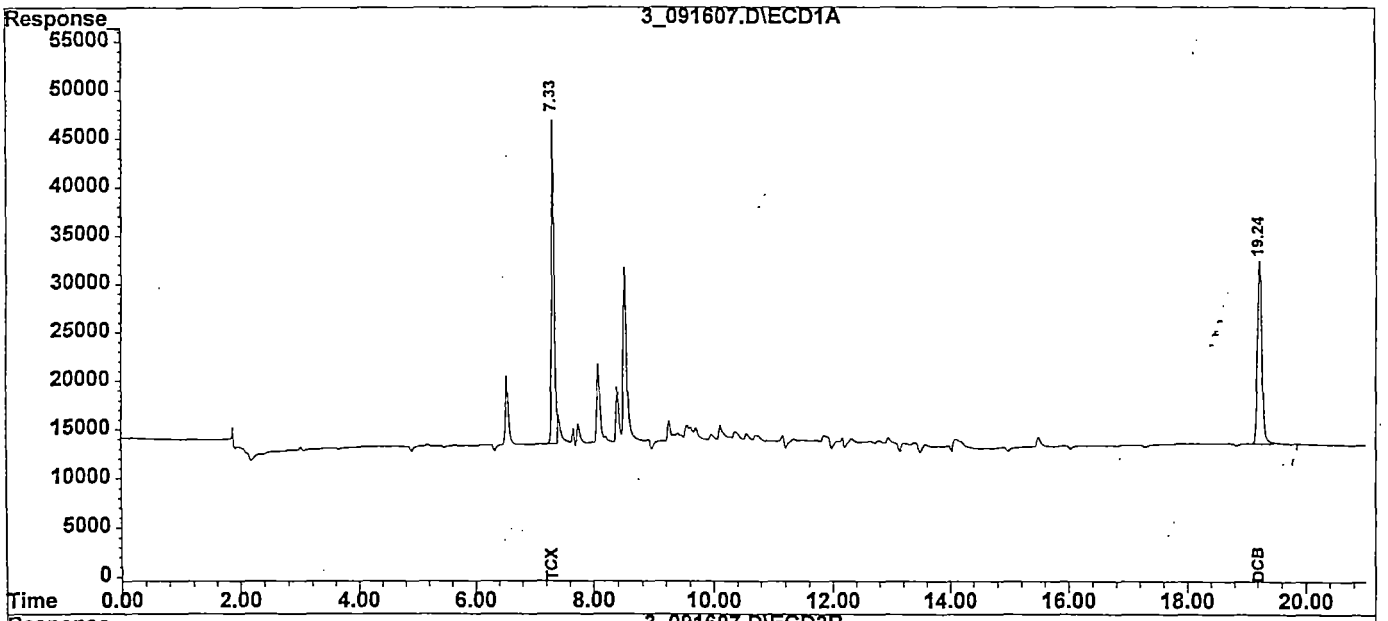
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

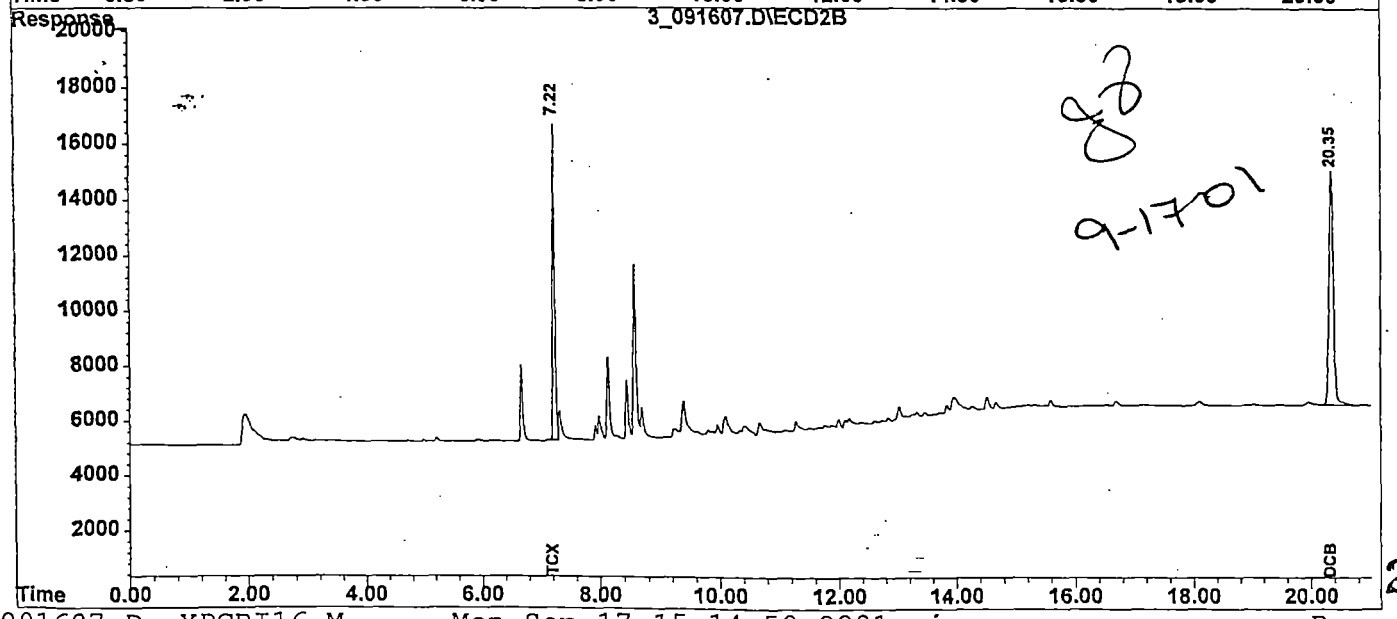
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091607.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091607.D\ECD2B.CH
Acq On : 16 Sep 2001 13:29 Operator: DDC
Sample : AR1221L33E Inst : HP_03
Misc : 5-420-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 15:04 2001 Quant Results File: XPCBI16.RES
Quant Time: Sep 17 15:04 2001 Quant Results File: xspcbi16.RES

Pesticide Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001

Multi-Component Method : f:\hpchem\hp\3\data\09_16_01\xspcbi16.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





8
9-17-01

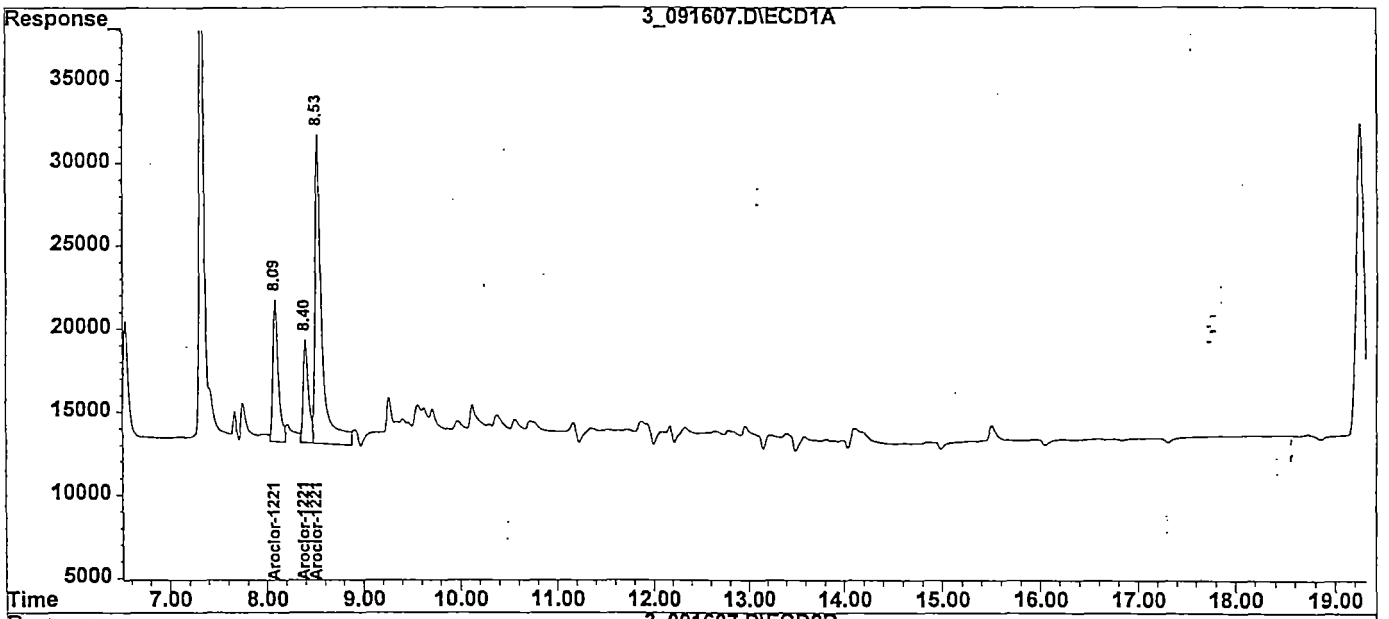
293

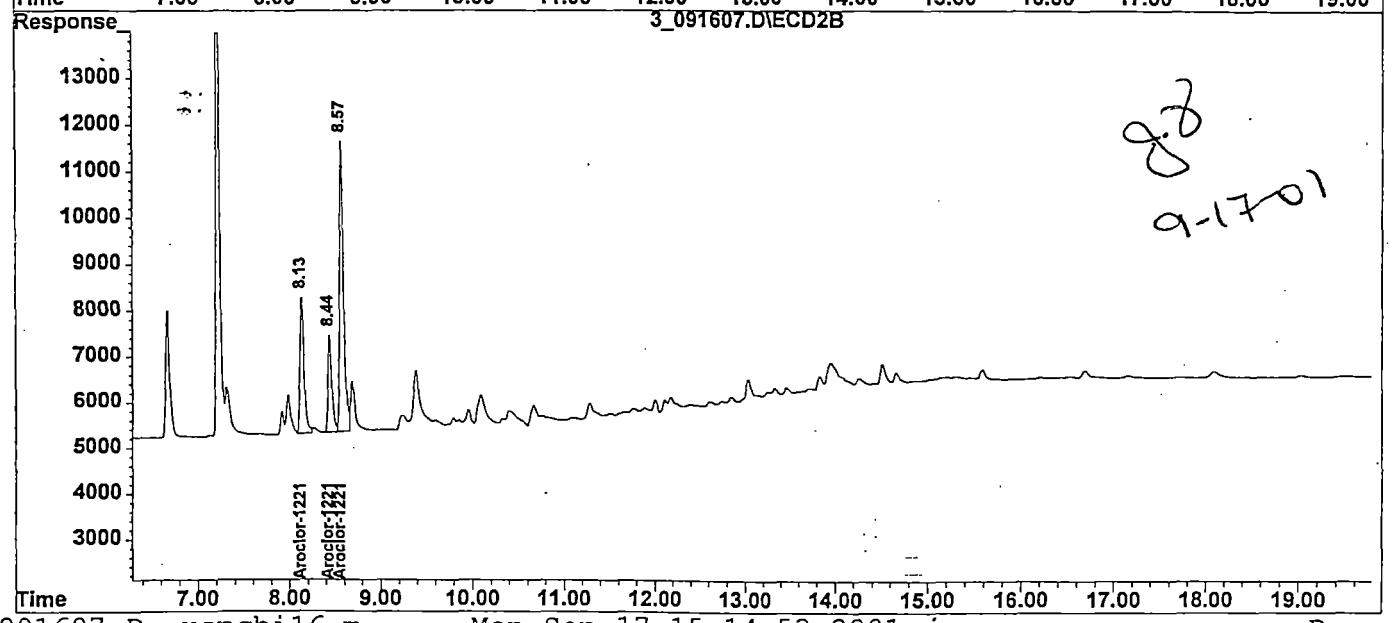
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091607.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091607.D\ECD2B.CH
Acq On : 16 Sep 2001 13:29 Operator: DDC
Sample : AR1221L33E Inst : HP_03
Misc : 5-420-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 15:04 2001 Quant Results File: xspcbi16.RES
Quant Time: Sep 17 15:04 2001 Quant Results File: xspcbi16.RES

Pesticide Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001

Multi-Component Method : f:\hpchem\hp\3\data\09_16_01\xspcbi16.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 Signal #2 Info : .32
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





g.8
9-17-01

294

Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091607.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091607.D\ECD2B.CH
Acq On : 16 Sep 2001 13:29 Operator: DDC
Sample : AR1221L33E Inst : HP_03
Misc : 5-420-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 15:04 2001 Quant Results File: XPCBI16.RES
Multi Time: Sep 17 15:04 2001 Quant Results File: xspcbi16.RES

Pesticide Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001

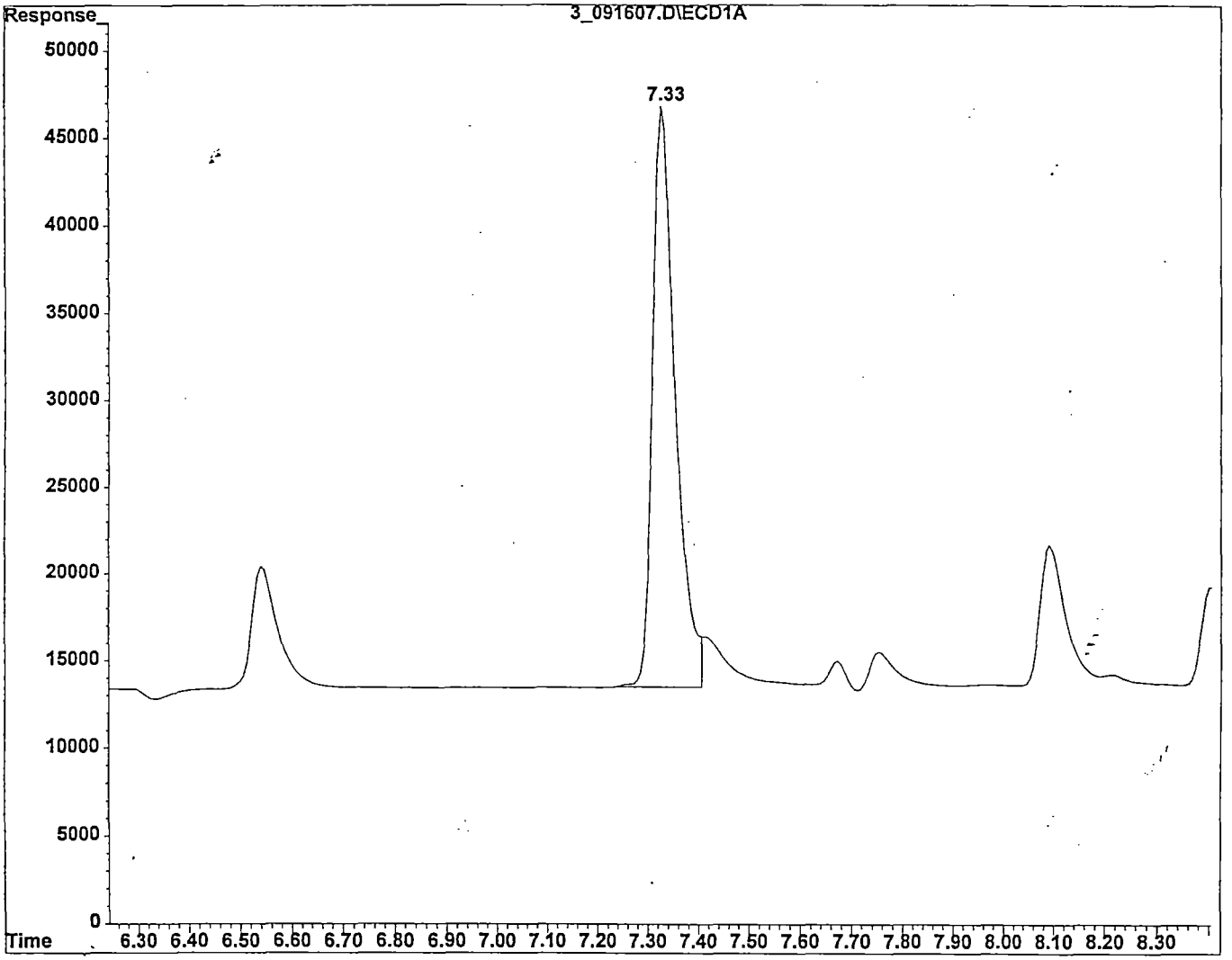
Multi-Component Method : f:\hpchem\hp\3\data\09_16_01\xspcbi16.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.22	1033451	299095	19.0m BTB	18.5	
22)	S DCB	19.24	20.35	994436	451721	17.7m BTB	18.4	
	Target Compounds:							
	Multi-Component Compounds:							
2)	L2 Aroclor-1221	8.10	8.14	324641	90687	808.5	543.2	#
3)	L2 Aroclor-1221 {2}	8.40	8.44	233768	63169	842.7	573.5	#
4)	L2 Aroclor-1221 {3}	8.53	8.57	890866	198638	785.2	535.0	#
	Sum Aroclor-1221			1449275	352495	2436.4	1651.8	
	Average Aroclor-1221					812.119	550.587	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091607.D
Date Acquired: 16 Sep 2001 13:29
Inst: HP_03 Operator ID: DDC
Name: AR1221L33E
Misc: 5-420-6
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 15:04 2001 Quant Results File: XPCBI16.RES



TCX 7.33min area: 1033451 m

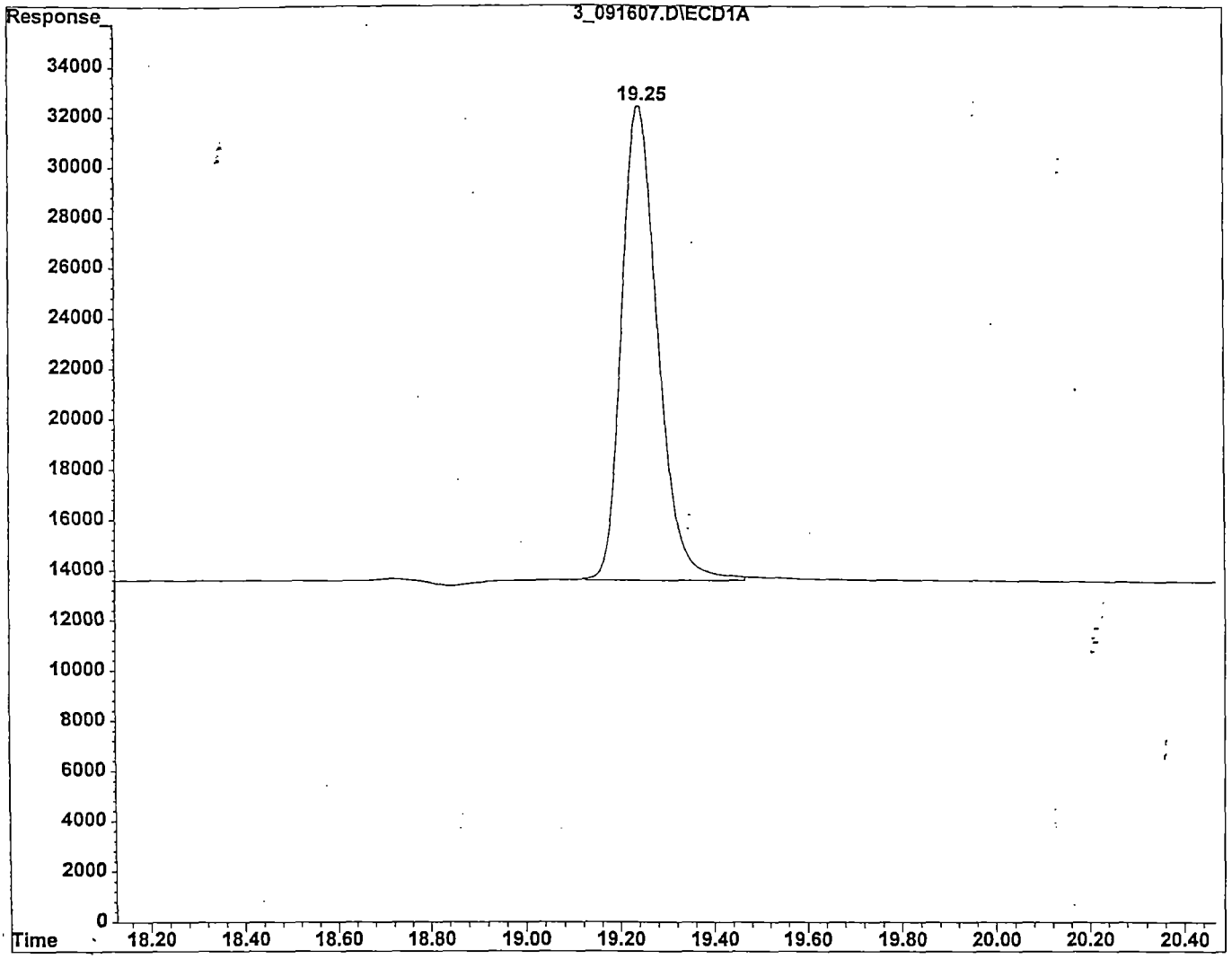
BTB 091701

Integration Time Range: 7.24 - 7.40

F:\HPCHEM\HP\3\DATA\09_16_01\3_091607.D
Report generated: Mon Sep 17 15:33:47 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091607.D
Date Acquired: 16 Sep 2001 13:29
Inst: HP_03 Operator ID: DDC
Name: AR1221L33E
Misc: 5-420-6
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 15:04 2001 Quant Results File: XPCBI16.RES



DCB 19.24min area: 994436 m BTB 091701

Integration Time Range: 19.13 - 19.46

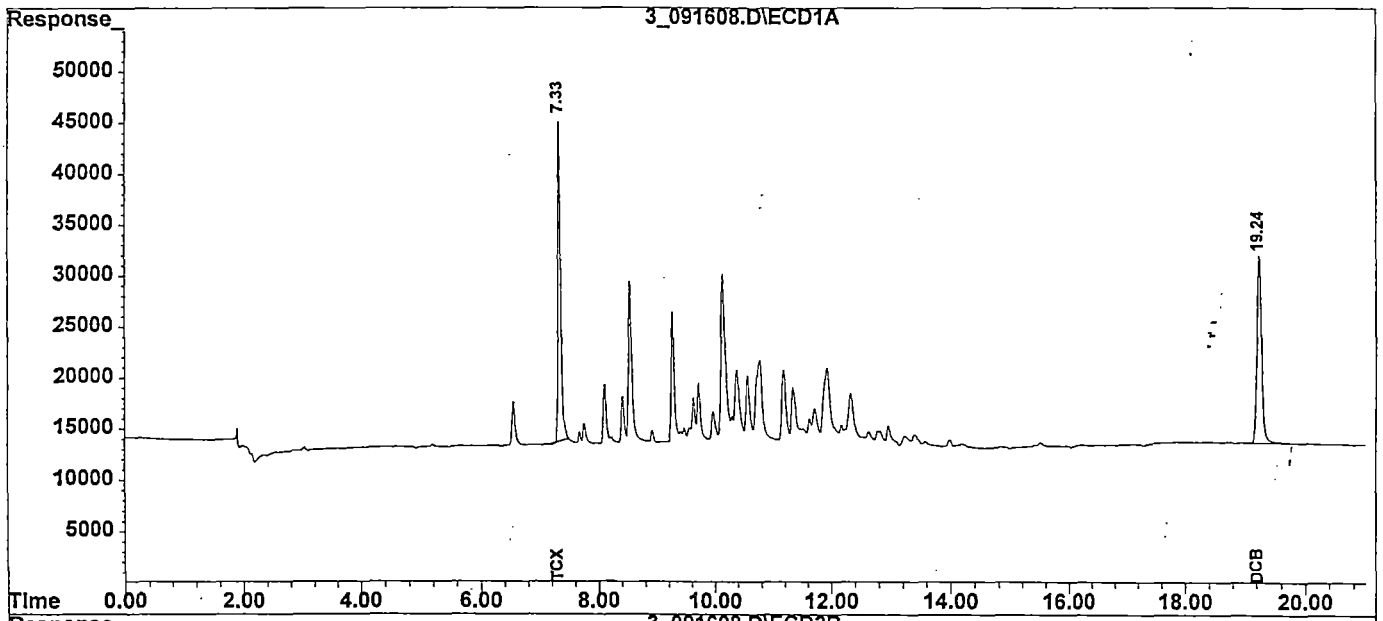
F:\HPCHEM\HP\3\DATA\09_16_01\3_091607.D
Report generated: Mon Sep 17 15:33:48 2001

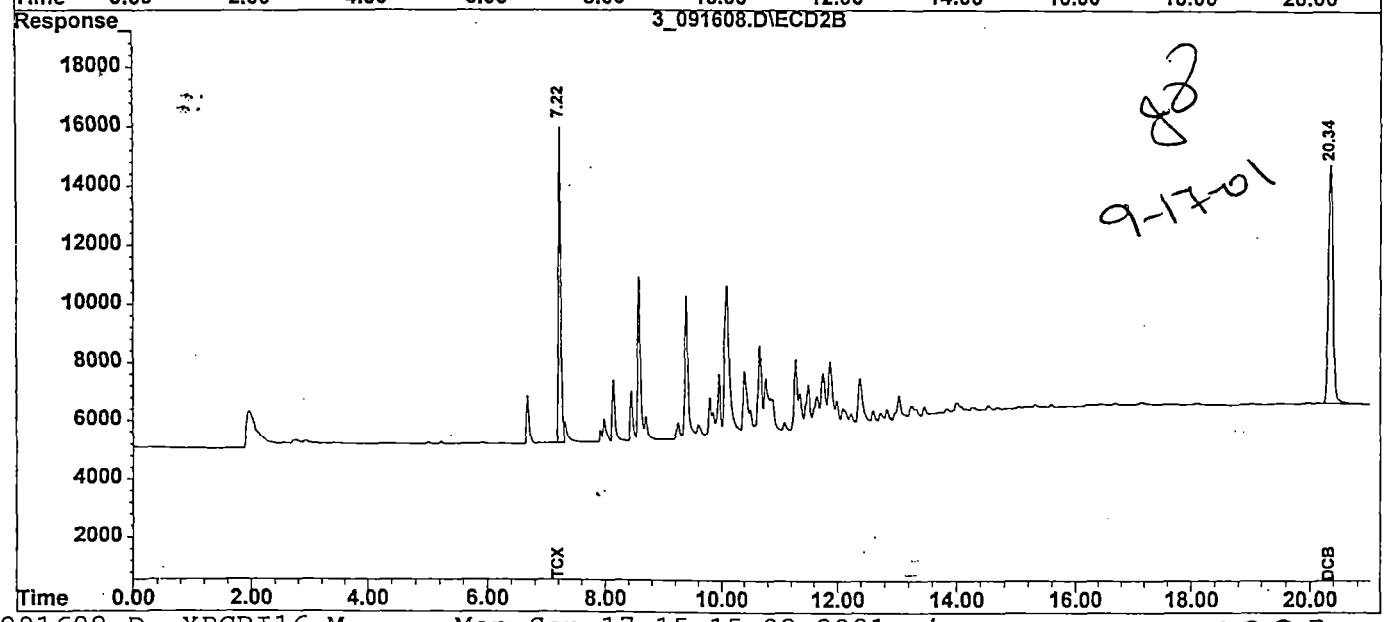
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091608.D\ECD1A.CH Vial: 8
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091608.D\ECD2B.CH
Acq On : 16 Sep 2001 13:55 Operator: DDC
Sample : AR1232L33E Inst : HP_03
Misc : 5-422-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 15:05 2001 Quant Results File: XPCBI16.RES
Quant Time: Sep 17 15:09 2001 Quant Results File: xspcbi16.RES

Pesticide Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001

Multi-Component Method : f:\hpchem\hp\3\data\09_16_01\xspcbi16.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





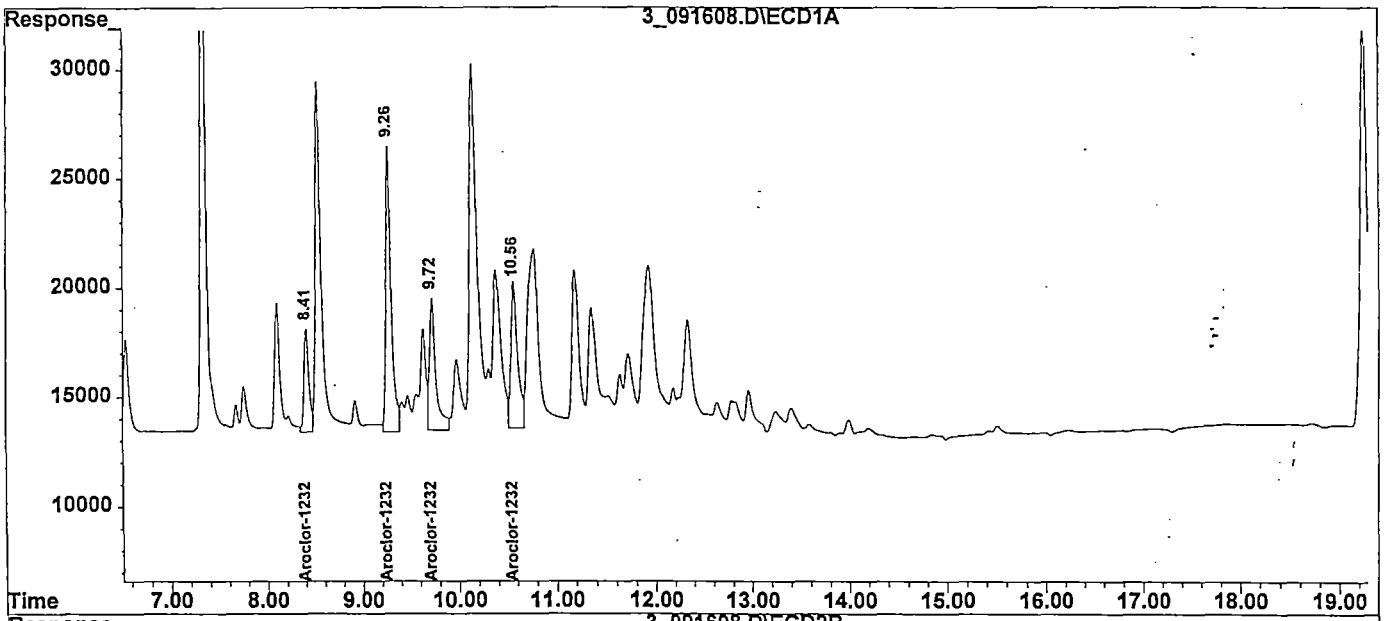
8
9-17-01

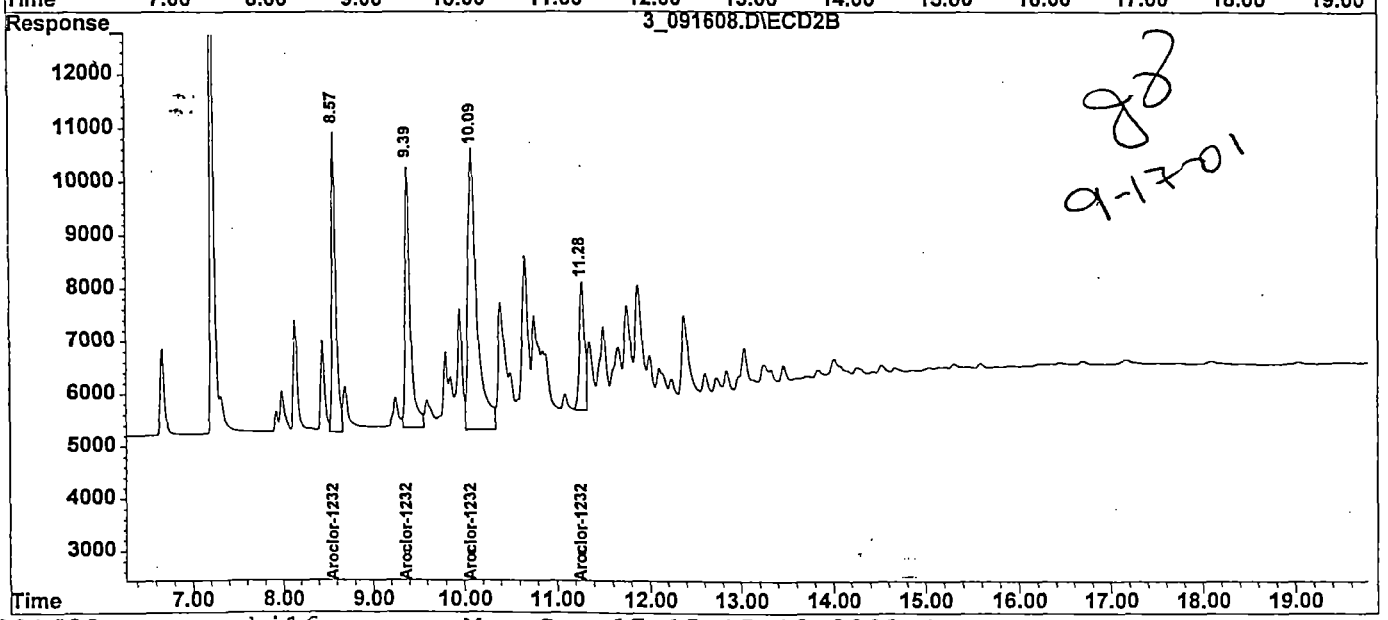
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091608.D\ECD1A.CH Vial: 8
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091608.D\ECD2B.CH
Acq On : 16 Sep 2001 13:55 Operator: DDC
Sample : AR1232L33E Inst : HP_03
Misc : 5-422-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 15:09 2001 Quant Results File: xspcbi16.RES
Quant Time: Sep 17 15:09 2001 Quant Results File: xspcbi16.RES

Pesticide Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001

Multi-Component Method : f:\hpchem\hp\3\data\09_16_01\xspcbi16.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 Signal #2 Info : .32
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





gB
9-17-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091608.D\ECD1A.CH Vial: 8
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091608.D\ECD2B.CH
Acq On : 16 Sep 2001 13:55 Operator: DDC
Sample : AR1232L33E Inst : HP_03
Misc : 5-422-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 15:05 2001 Quant Results File: XPCBI16.RES
Multi Time: Sep 17 15:09 2001 Quant Results File: xspcbi16.RES

Pesticide Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001

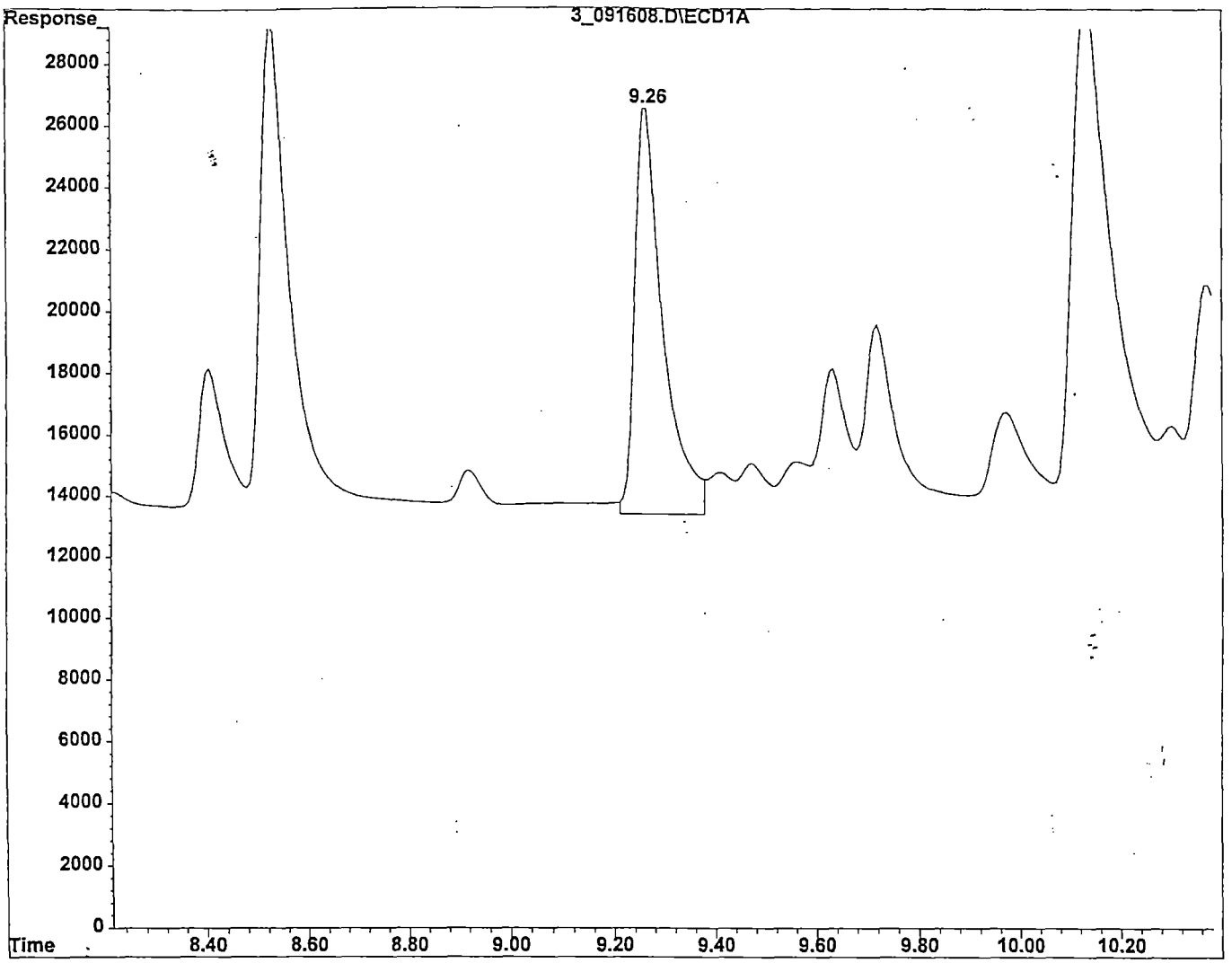
Multi-Component Method : f:\hpchem\hp\3\data\09_16_01\xspcbi16.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	1026319	293385	18.9	18.1
22)	S DCB	19.24	20.35	1004385	438886	17.9	17.9
	Target Compounds:						
	Multi-Component Compounds:						
5)	L3 Aroclor-1232	8.41	8.57f	172904	185720	795.2	2207.1m # BTB 091701
6)	L3 Aroclor-1232 {2}	9.26	9.39f	510200	194204	692.0m BTB 091701	1474.5m #
7)	L3 Aroclor-1232 {3}	9.72	10.09f	273196	359012	836.9m	2204.3m #
8)	L3 Aroclor-1232 {4}	10.56	11.28f	334288	92068	851.1m	660.9m
	Sum Aroclor-1232			1290588	831004	3175.2	6546.8
	Average Aroclor-1232					793.808	1636.702

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091608.D
Date Acquired: 16 Sep 2001 13:55
Inst: HP_03 Operator ID: DDC
Name: AR1232L33E
Misc: 5-422-6
Method: f:\hpchem\hp\3\data\09_16_01\xspcbi16.m
Title:
Quant Time: Sep 17 15:09 2001 Quant Results File: xspcbi16.RES



Aroclor-1232 {2} 9.26min area: 510200 m

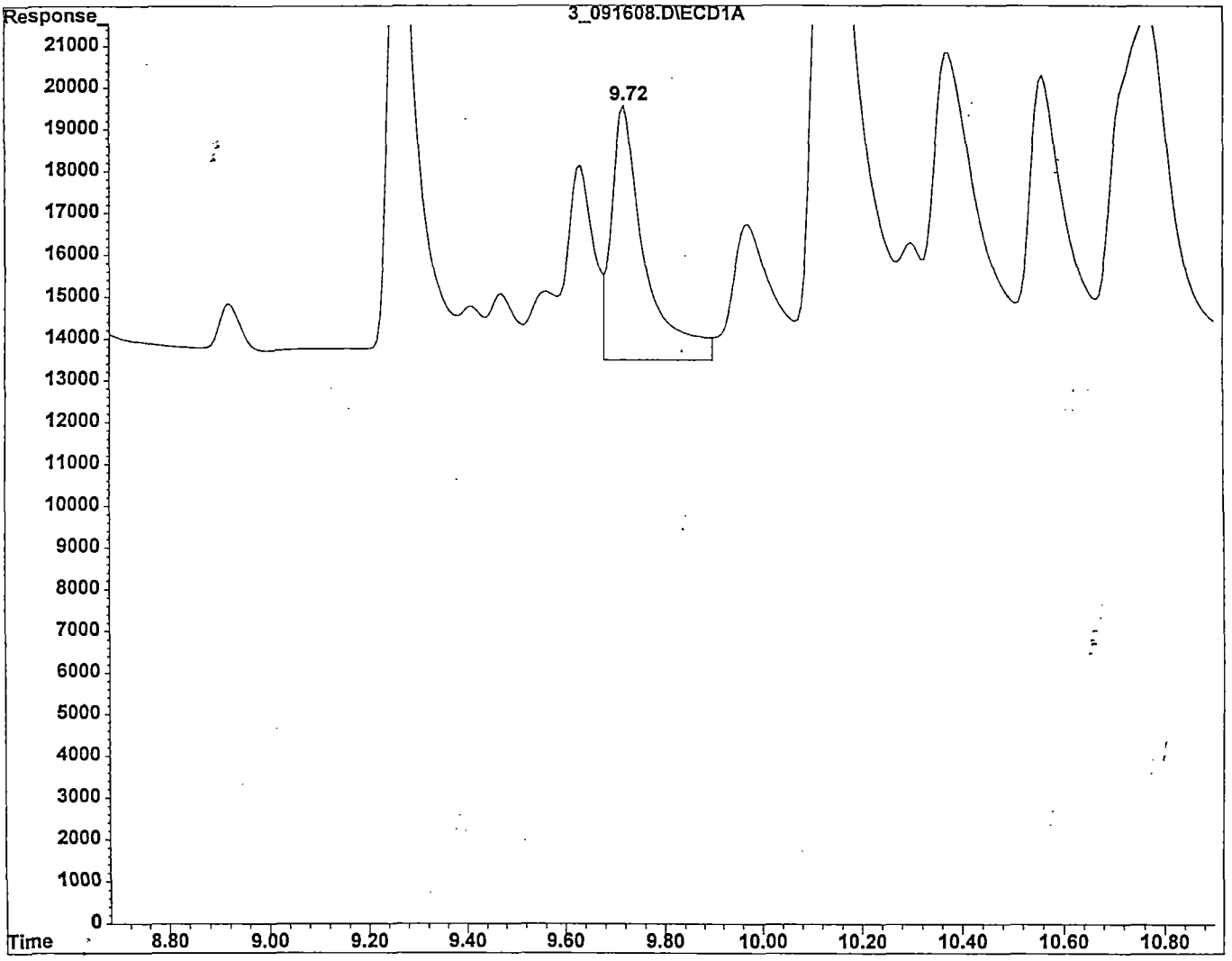
Integration Time Range: 9.21 - 9.38

BTB 091701

F:\HPCHEM\HP\3\DATA\09_16_01\3_091608.D
Report generated: Mon Sep 17 15:33:51 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091608.D
Date Acquired: 16 Sep 2001 13:55
Inst: HP_03 Operator ID: DDC
Name: AR1232L33E
Misc: 5-422-6
Method: f:\hpchem\hp\3\data\09_16_01\xspcbi16.m
Title:
Quant Time: Sep 17 15:09 2001 Quant Results File: xspcbi16.RES



Aroclor-1232 {3} 9.72min area: 273196 m

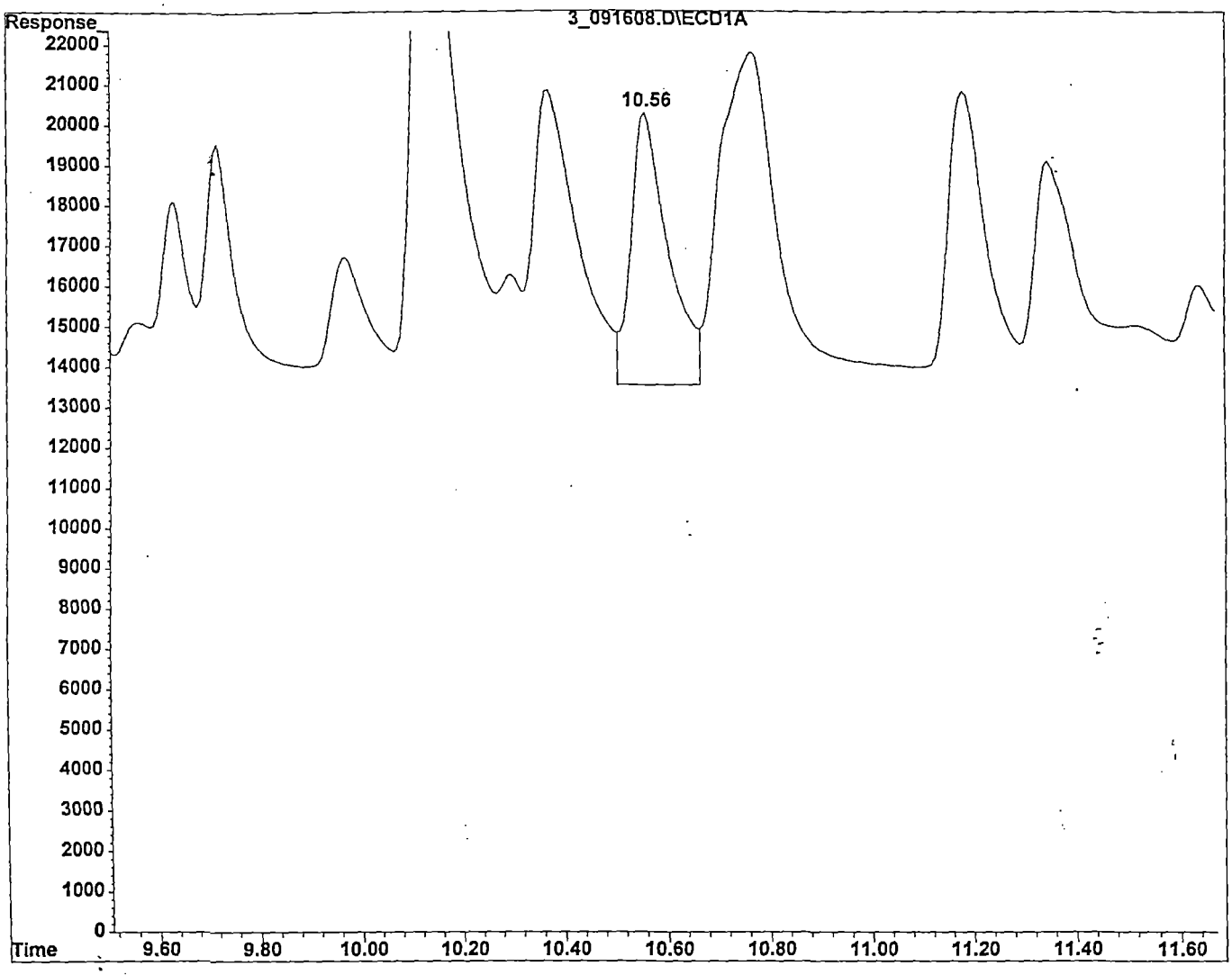
Integration Time Range: 9.68 - 9.90

BTB
091701

F:\HPCHEM\HP\3\DATA\09_16_01\3_091608.D
Report generated: Mon Sep 17 15:33:52 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091608.D
Date Acquired: 16 Sep 2001 13:55
Inst: HP_03 Operator ID: DDC
Name: AR1232L33E
Misc: 5-422-6
Method: f:\hpchem\hp\3\data\09_16_01\xspcbi16.m
Title:
Quant Time: Sep 17 15:09 2001 Quant Results File: xspcbi16.RES



Aroclor-1232 {4} 10.56min area: 334288 m

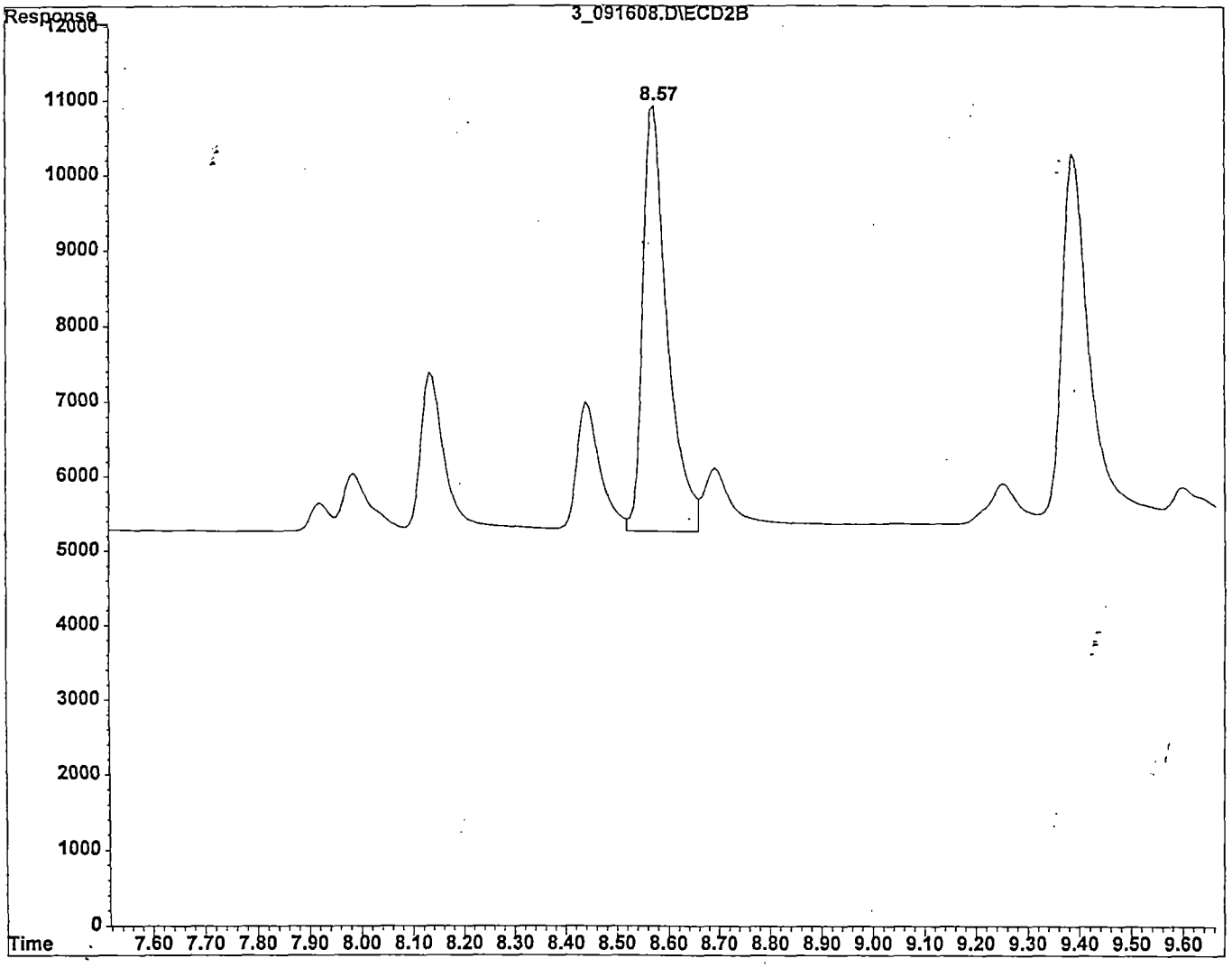
Integration Time Range: 10.51 - 10.67

BTB 091701

F:\HPCHEM\HP\3\DATA\09_16_01\3_091608.D
Report generated: Mon Sep 17 15:33:52 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091608.D
Date Acquired: 16 Sep 2001 13:55
Inst: HP_03 Operator ID: DDC
Name: AR1232L33E
Misc: 5-422-6
Method: f:\hpchem\hp\3\data\09_16_01\xspcbi16.m
Title:
Quant Time: Sep 17 15:09 2001 Quant Results File: xspcbi16.RES



Aroclor-1232 #2 8.57min area: 185720 m

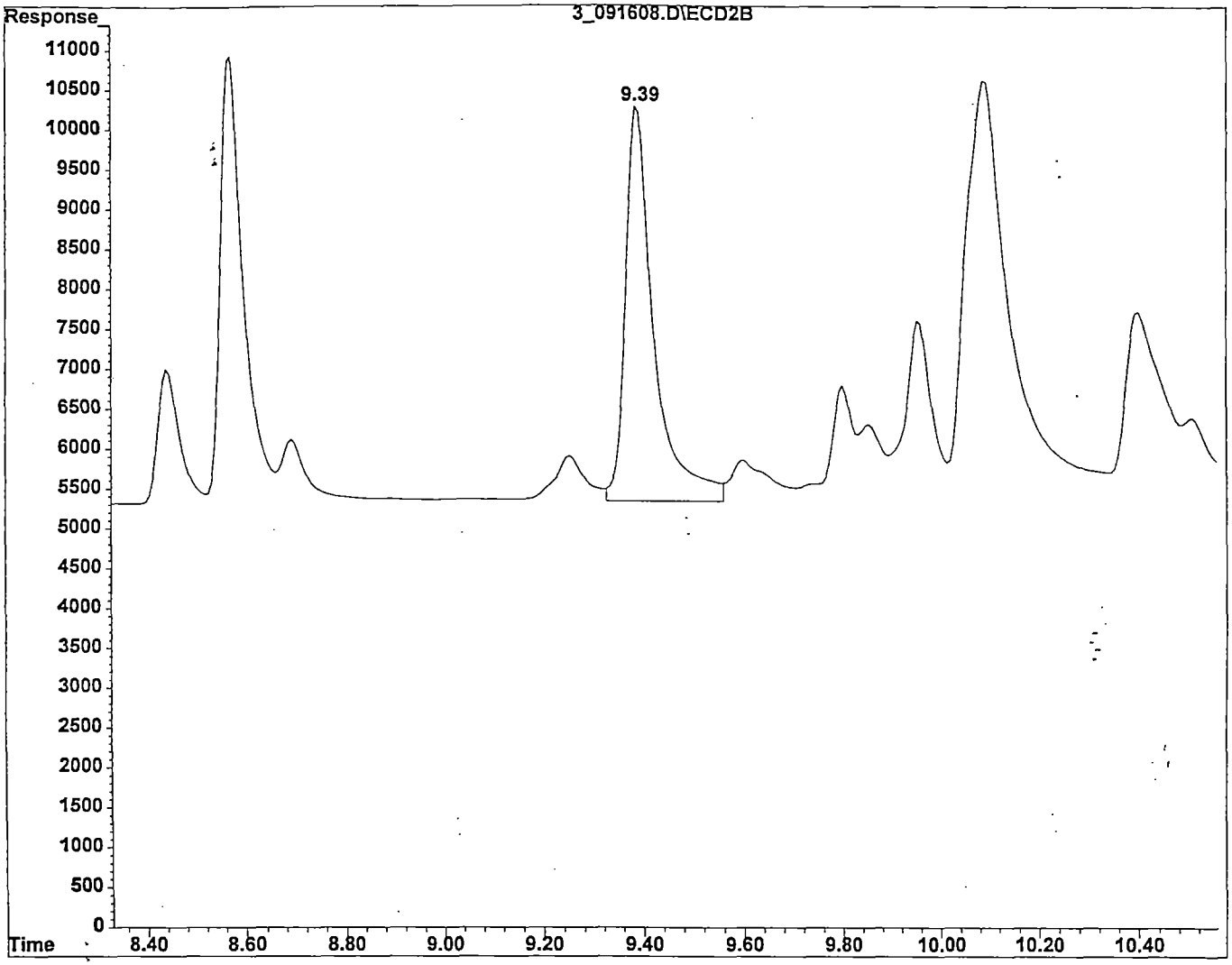
Integration Time Range: 8.52 - 8.66

BTB
091701

F:\HPCHEM\HP\3\DATA\09_16_01\3_091608.D
Report generated: Mon Sep 17 15:33:53 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091608.D
Date Acquired: 16 Sep 2001 13:55
Inst: HP_03 Operator ID: DDC
Name: AR1232L33E
Misc: 5-422-6
Method: f:\hpchem\hp\3\data\09_16_01\xspcbi16.m
Title:
Quant Time: Sep 17 15:09 2001 Quant Results File: xspcbi16.RES



Aroclor-1232 {2} #2 9.39min area: 194204 m

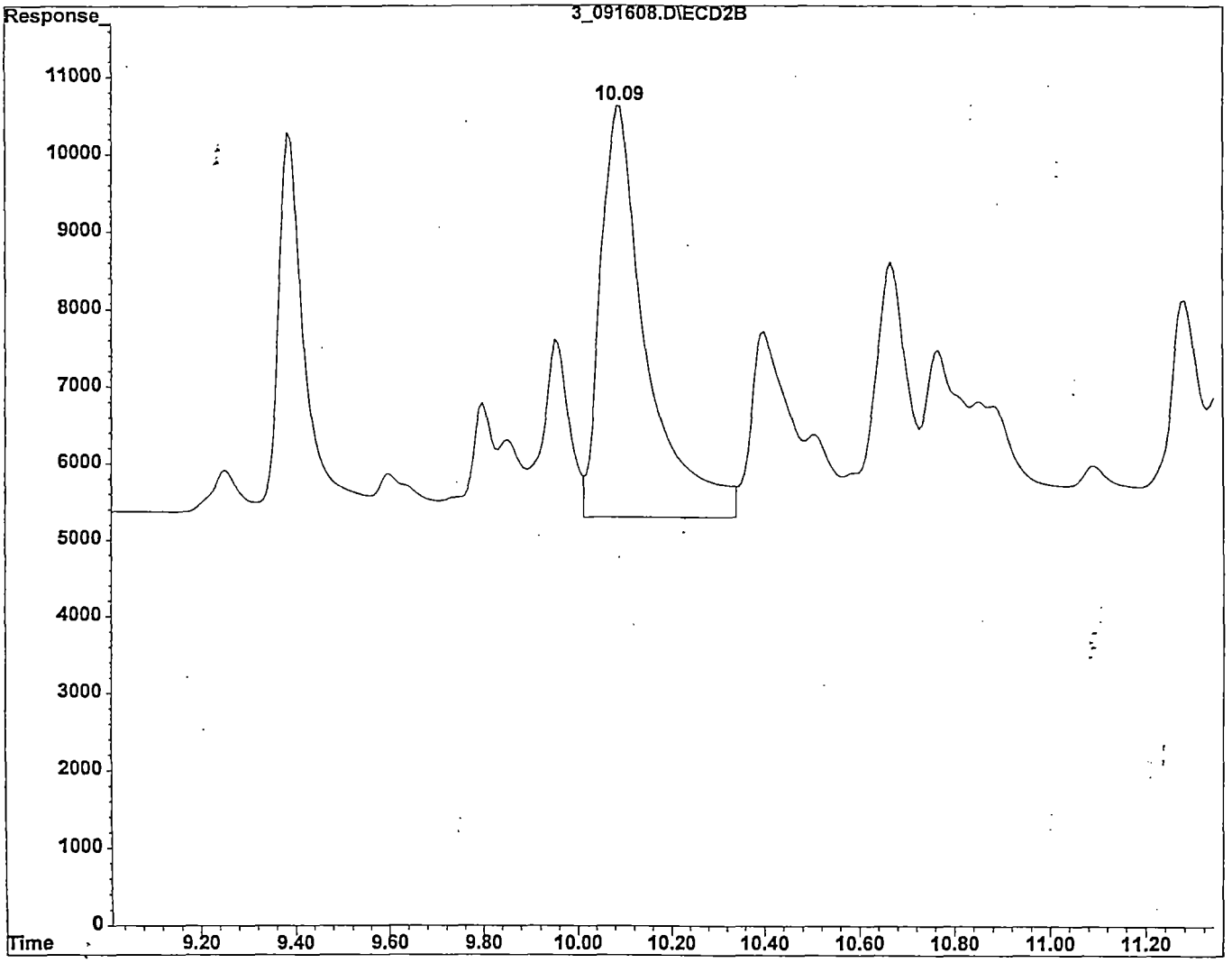
BTB
091701

Integration Time Range: 9.33 - 9.56

F:\HPCHEM\HP\3\DATA\09_16_01\3_091608.D
Report generated: Mon Sep 17 15:33:53 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091608.D
Date Acquired: 16 Sep 2001 13:55
Inst: HP_03 Operator ID: DDC
Name: ARI232L33E
Misc: 5-422-6
Method: f:\hpchem\hp\3\data\09_16_01\xspcbi16.m
Title:
Quant Time: Sep 17 15:09 2001 Quant Results File: xspcbi16.RES



Aroclor-1232 {3} #2 10.09min area: 359012 m

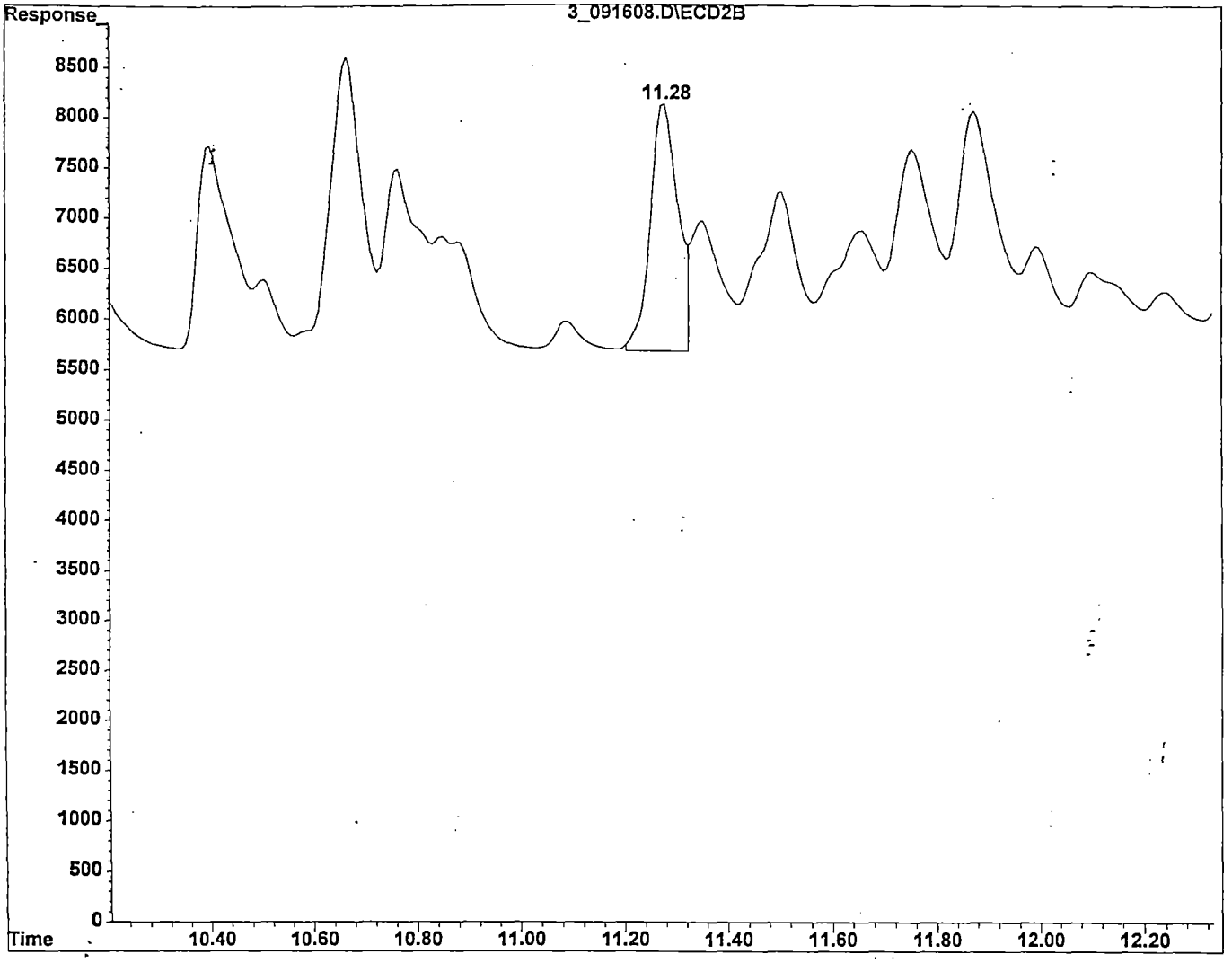
Integration Time Range: 10.01 - 10.34

BTB
091701

F:\HPCHEM\HP\3\DATA\09_16_01\3_091608.D
Report generated: Mon Sep 17 15:33:54 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091608.D
Date Acquired: 16 Sep 2001 13:55
Inst: HP_03 Operator ID: DDC
Name: AR1232L33E
Misc: 5-422-6
Method: f:\hpchem\hp\3\data\09_16_01\xspcbi16.m
Title:
Quant Time: Sep 17 15:09 2001 Quant Results File: xspcbi16.RES



Aroclor-1232 {4} #2 11.28min area: 92068 m

Integration Time Range: 11.20 - 11.33

BTB 091701

F:\HPCHEM\HP\3\DATA\09_16_01\3_091608.D
Report generated: Mon Sep 17 15:33:54 2001

Response Factor Report HP_03

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

Calibration Files
L1 =3_091609.D L2 =3_091610.D L3 =3_091611.D
L4 =3_091612.D L5 =3_091613.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
7) Aroclor-1242	1.4	1.2	1.2	1.0	0.9	1.1 E3	16.86
8) Aroclor-1242 {2}	2.3	2.1	2.1	1.8	1.6	2.0 E3	14.03
9) Aroclor-1242 {3}	3.9	4.0	3.8	3.5	3.0	3.6 E3	11.61
10) Aroclor-1242 {4}	1.6	1.7	1.7	1.6	1.4	1.6 E3	8.95
11) Aroclor-1242 {5}	1.2	1.1	1.3	1.3	1.2	1.2 E3	6.49

Signal #2 Calibration Files
L1 =3_091609.D L2 =3_091610.D L3 =3_091611.D
L4 =3_091612.D L5 =3_091613.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
30) Aroclor-1242 #2	321.1	337.4	338.0	310.4	274.8	316.3	8.21
31) Aroclor-1242 {2} #2	724.2	741.5	728.9	662.1	576.6	686.7	10.01
32) Aroclor-1242 {3} #2	1.4	1.4	1.4	1.3	1.1	1.3 E3	9.58
33) Aroclor-1242 {4} #2	422.6	443.3	462.8	438.2	396.6	432.7	5.73
34) Aroclor-1242 {5} #2	360.8	421.3	400.0	379.1	359.5	384.1	6.90

(#) = Out of Range

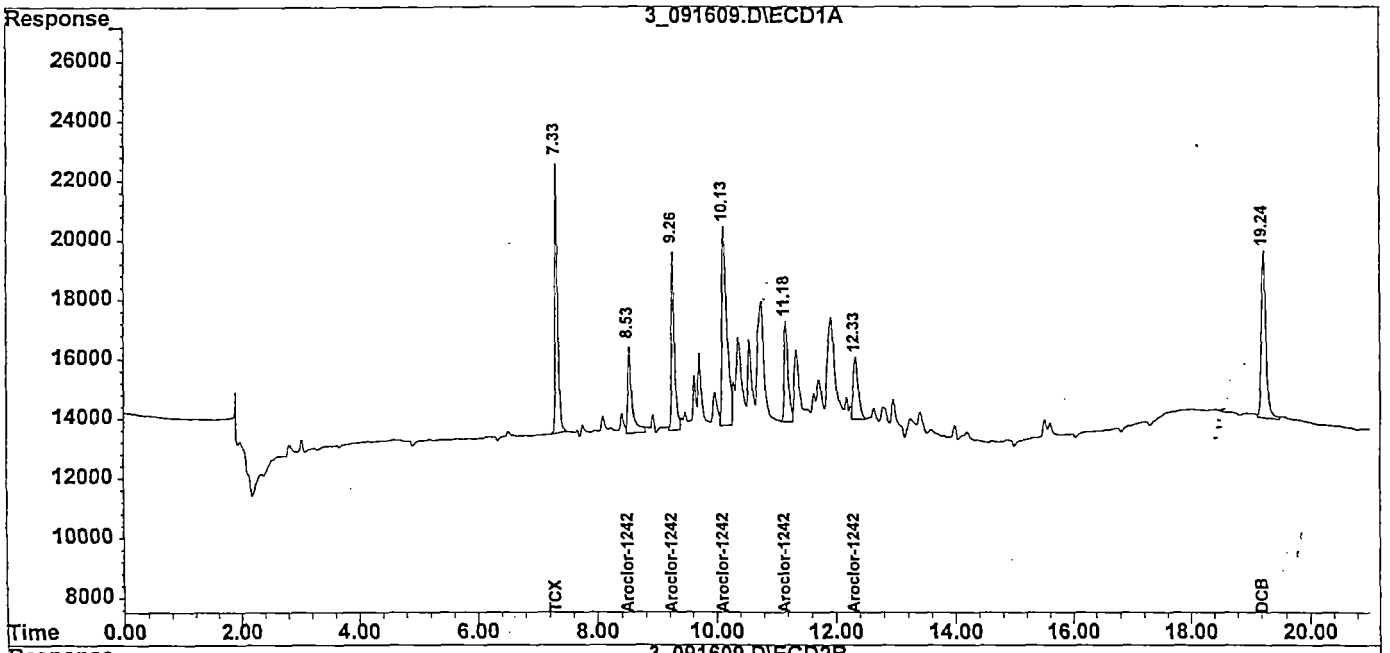
XPCBI16.M Mon Sep 17 11:21:12 2001

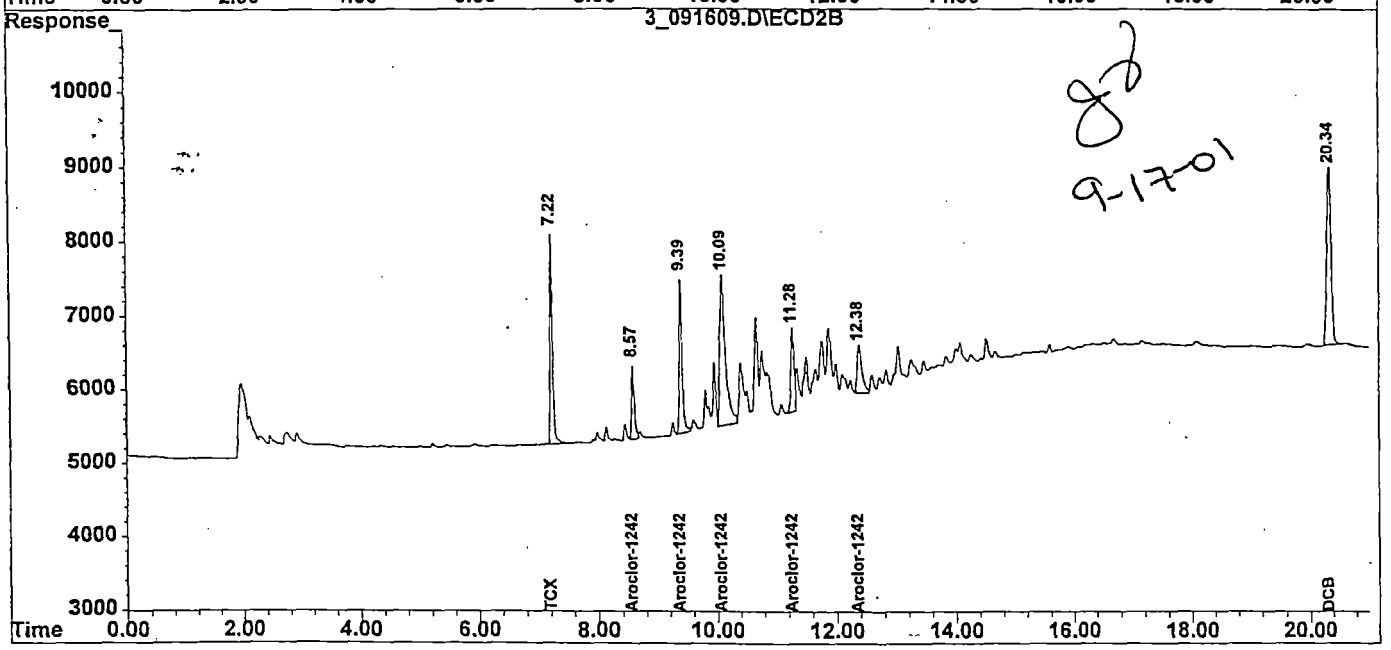
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091609.D\ECD1A.CH Vial: 9
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091609.D\ECD2B.CH
Acq On : 16 Sep 2001 14:20 Operator: DDC
Sample : AR1242L13E Inst : HP_03
Misc : 5-11-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 10:57 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





gd
9-17-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091609.D\ECD1A.CH Vial: 9
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091609.D\ECD2B.CH
Acq On : 16 Sep 2001 14:20 Operator: DDC
Sample : AR1242L13E Inst : HP_03
Misc : 5-11-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 10:57 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

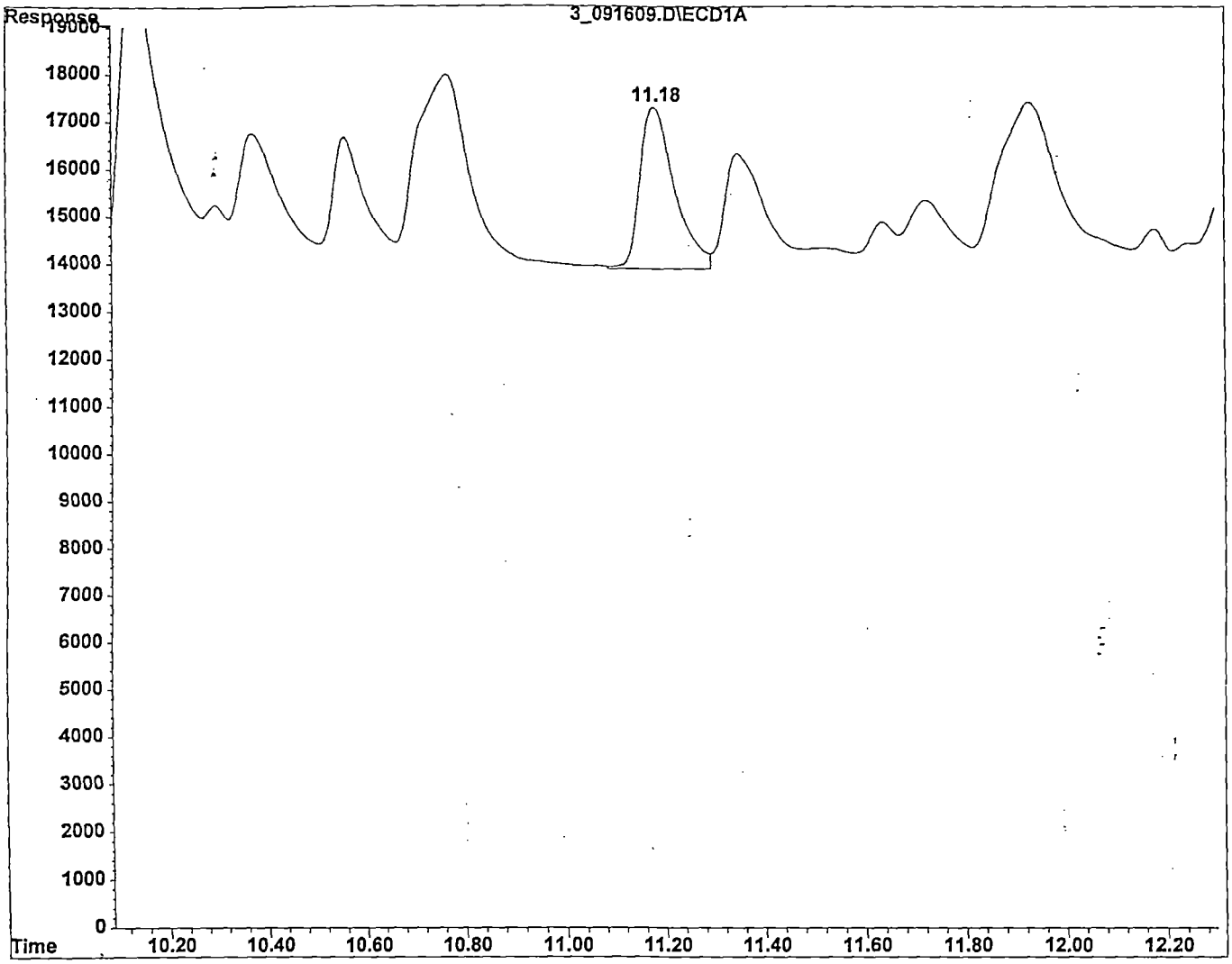
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	281165	80426	7.593	6.364
22)	S DCB	19.24	20.35	292155	121665	6.568	5.869
	Target Compounds:						
7)	L4 Aroclor-1242	8.53	8.57	139299	32107	179.2	136.3
8)	L4 Aroclor-1242 {2}	9.27	9.39	227724	72416	164.9	136.3
9)	L4 Aroclor-1242 {3}	10.14	10.09	392624	137563	254.7	227.5
10)	L4 Aroclor-1242 {4}	11.18	11.28	163744	42261	151.9m BB	123.8
11)	L4 Aroclor-1242 {5}	12.33	12.38	122436	36080	188.9m 09/17/01	89.3m # BB 09/17/01
	Sum Aroclor-1242			1045828	320426	939.6	713.2
	Average Aroclor-1242					187.923	142.637

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091609.D
Date Acquired: 16 Sep 2001 14:20
Inst: HP_03 Operator ID: DDC
Name: AR1242L13E
Misc: 5-11-7
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 10:57 2001 Quant Results File: XPCBI16.RES



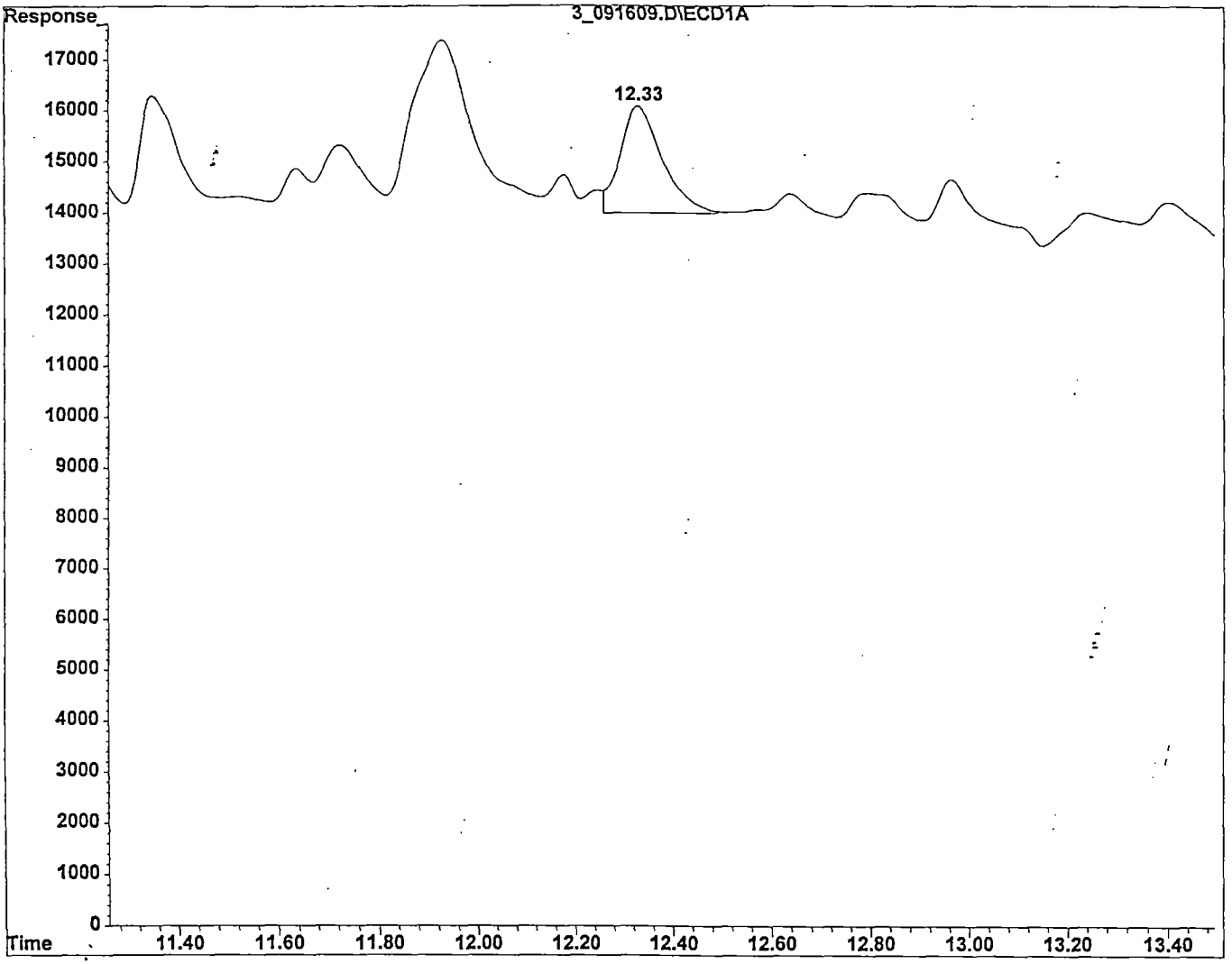
Aroclor-1242 {4} 11.18min area: 163744 m BTB 091701

Integration Time Range: 11.09 - 11.30

F:\HPCHEM\HP\3\DATA\09_16_01\3_091609.D
Report generated: Mon Sep 17 11:25:05 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091609.D
Date Acquired: 16 Sep 2001 14:20
Inst: HP_03 Operator ID: DDC
Name: AR1242L13E
Misc: 5-11-7
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 10:57 2001 Quant Results File: XPCBI16.RES



Aroclor-1242 {5} 12.33min area: 122436 m

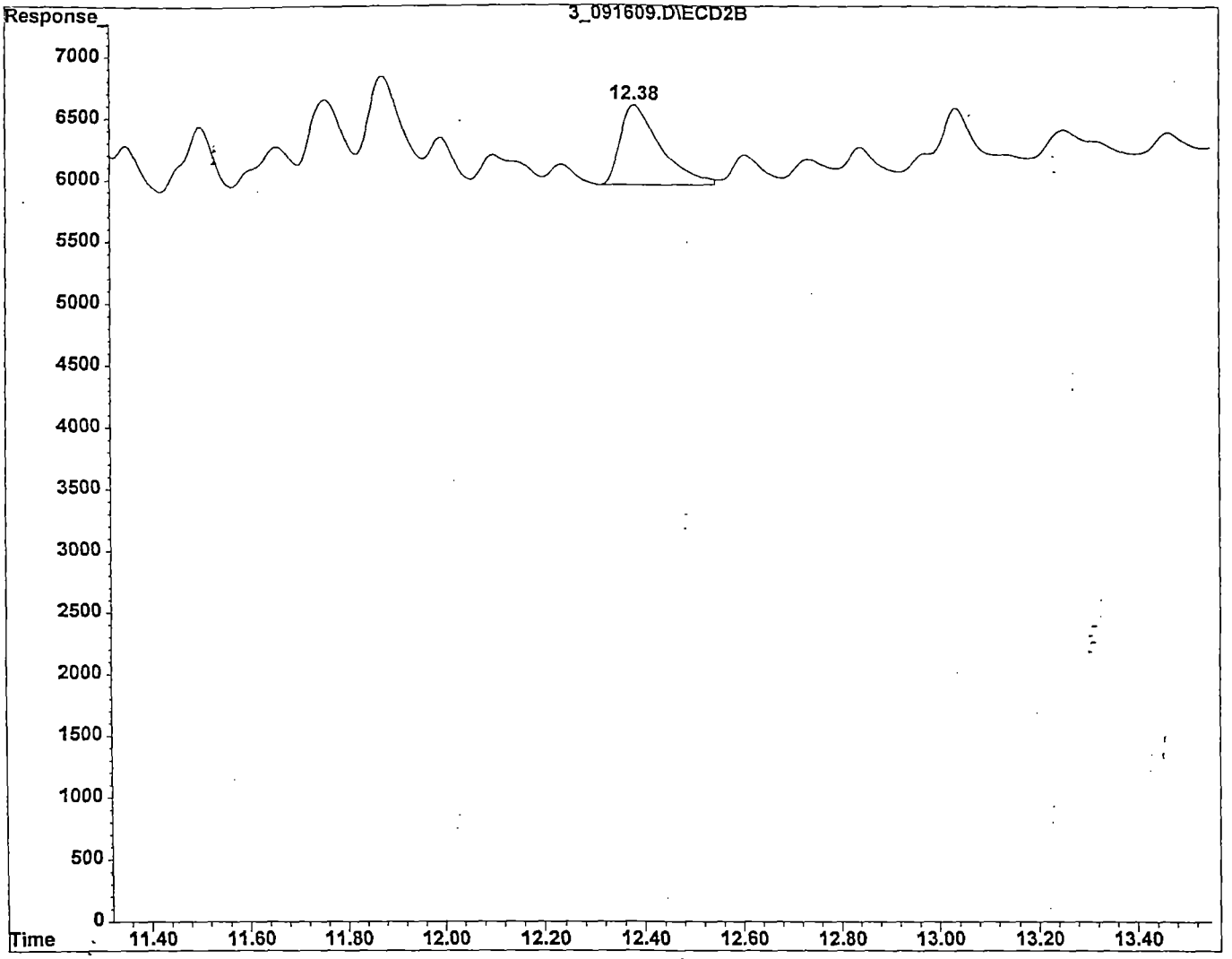
Integration Time Range: 12.26 - 12.49

BTB 091701

F:\HPCHEM\HP\3\DATA\09_16_01\3_091609.D
Report generated: Mon Sep 17 11:25:06 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091609.D
Date Acquired: 16 Sep 2001 14:20
Inst: HP_03 Operator ID: DDC
Name: AR1242L13E
Misc: 5-11-7
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 10:57 2001 Quant Results File: XPCBI16.RES



Aroclor-1242 {5} #2 12.38min area: 36080 m

Integration Time Range: 12.32 - 12.55

BJB 091701

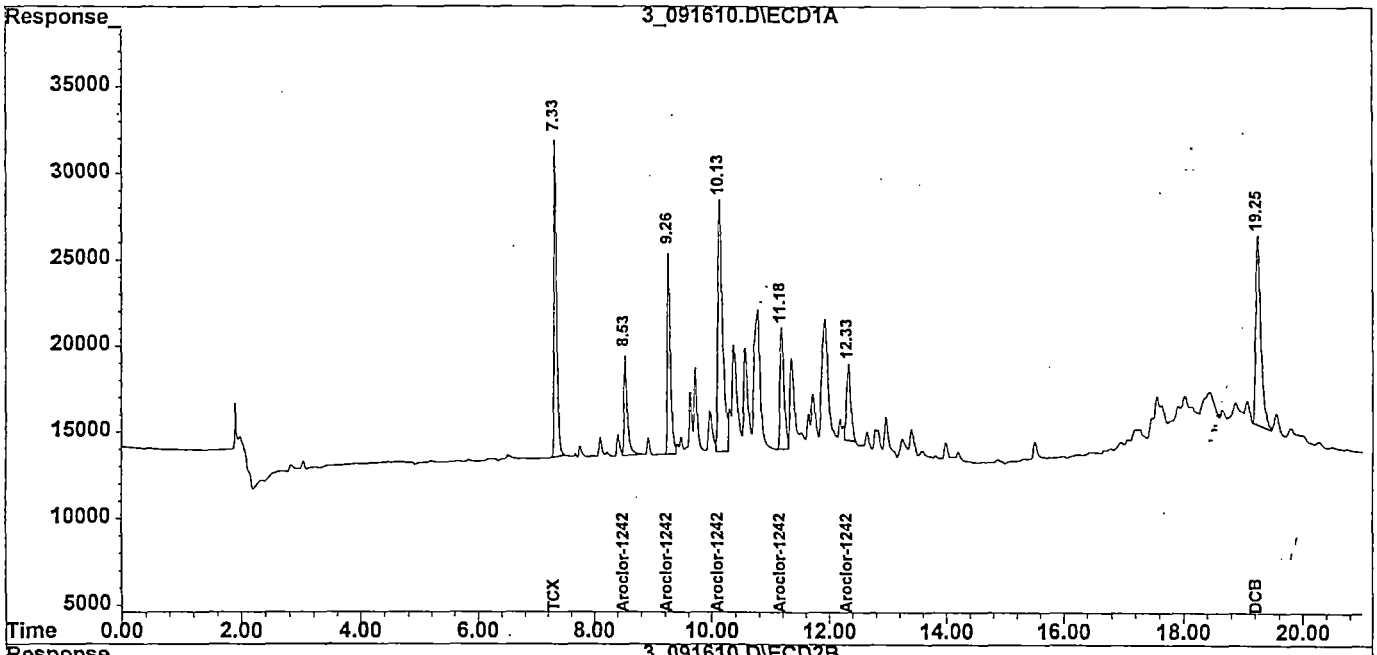
F:\HPCHEM\HP\3\DATA\09_16_01\3_091609.D
Report generated: Mon Sep 17 11:25:07 2001

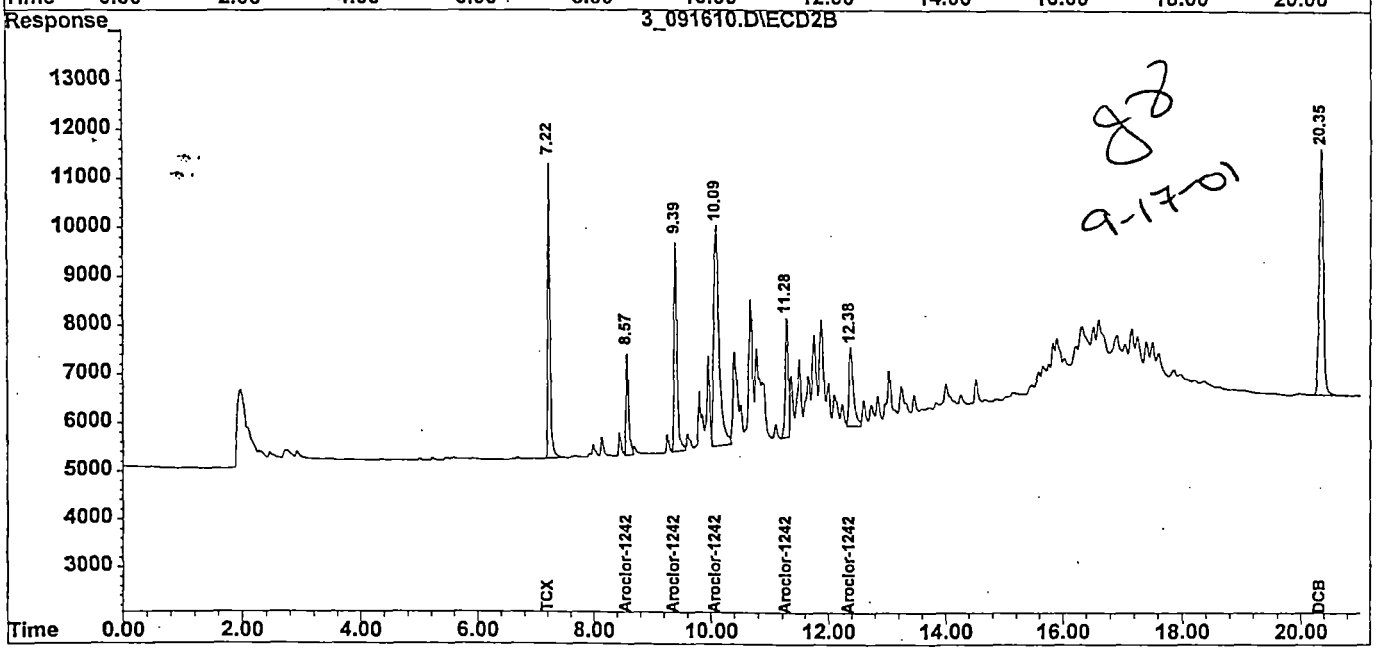
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091610.D\ECD1A.CH Vial: 10
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091610.D\ECD2B.CH
Acq On : 16 Sep 2001 14:46 Operator: DDC
Sample : AR1242L23E Inst : HP_03
Misc : 5-10-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 10:58 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





gg
9-17-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091610.D\ECD1A.CH Vial: 10
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091610.D\ECD2B.CH
Acq On : 16 Sep 2001 14:46 Operator: DDC
Sample : AR1242L23E Inst : HP_03
Misc : 5-10-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 10:58 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

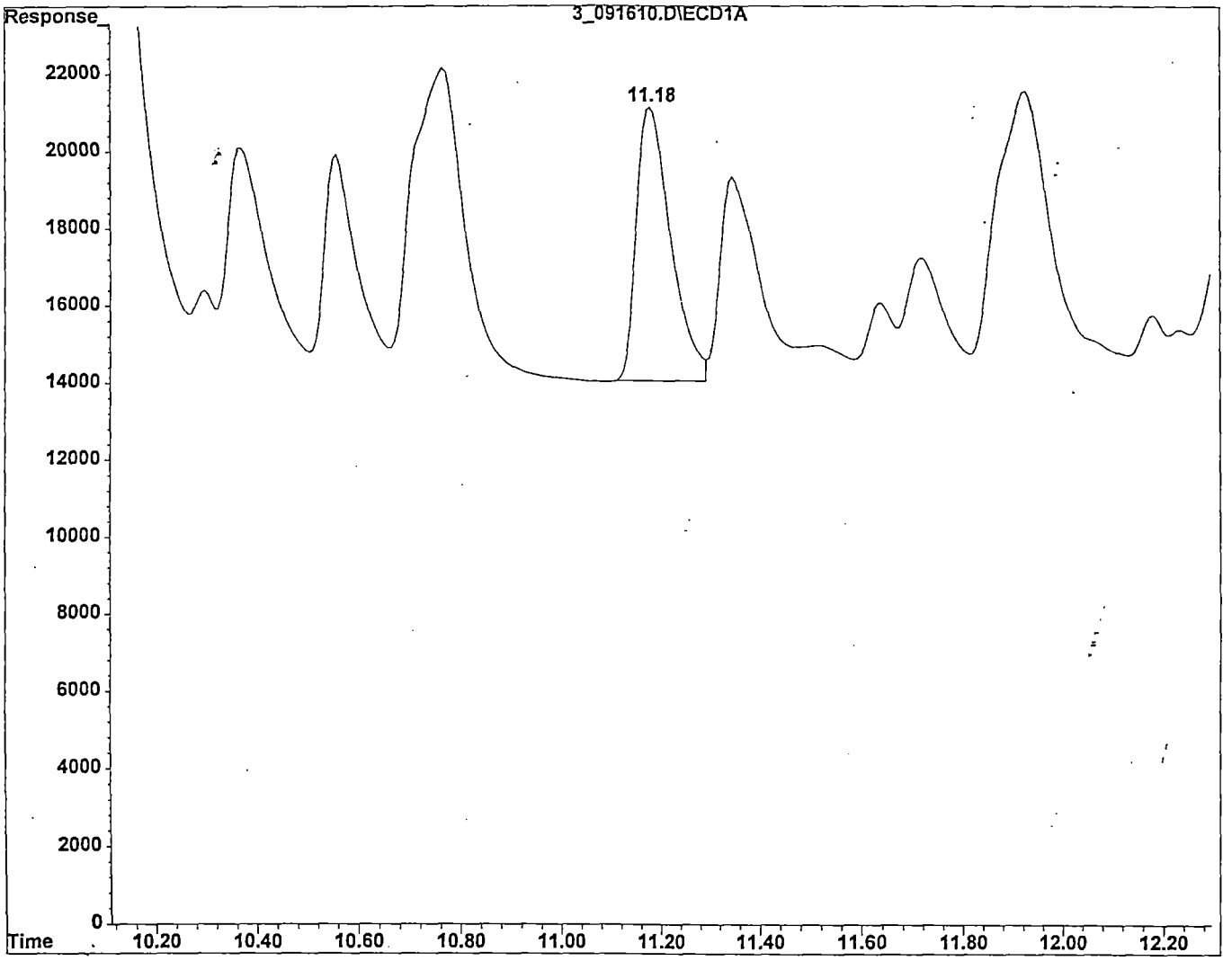
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	576559	169507	15.6	13.4
22)	S DCB	19.25	20.35	626932	253672	14.1	12.2
	Target Compounds:						
7)	L4 Aroclor-1242	8.53	8.57	234502	67475	301.7	286.5
8)	L4 Aroclor-1242 {2}	9.26	9.39	424469	148298	307.4	279.1
9)	L4 Aroclor-1242 {3}	10.13	10.09	798625	284740	518.1	470.9
10)	L4 Aroclor-1242 {4}	11.18	11.28	342356	88662	317.5m BTB 091701	259.7
11)	L4 Aroclor-1242 {5}	12.33	12.38	228284	84252	352.3	208.4m # BTB 091701
	Sum Aroclor-1242			2028236	673427	1796.9	1504.7
	Average Aroclor-1242					359.386	300.938

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091610.D
Date Acquired: 16 Sep 2001 14:46
Inst: HP_03 Operator ID: DDC
Name: ARI242L23E
Misc: 5-10-7
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 10:58 2001 Quant Results File: XPCBI16.RES



Aroclor-1242 {4} 11.18min area: 342356 m

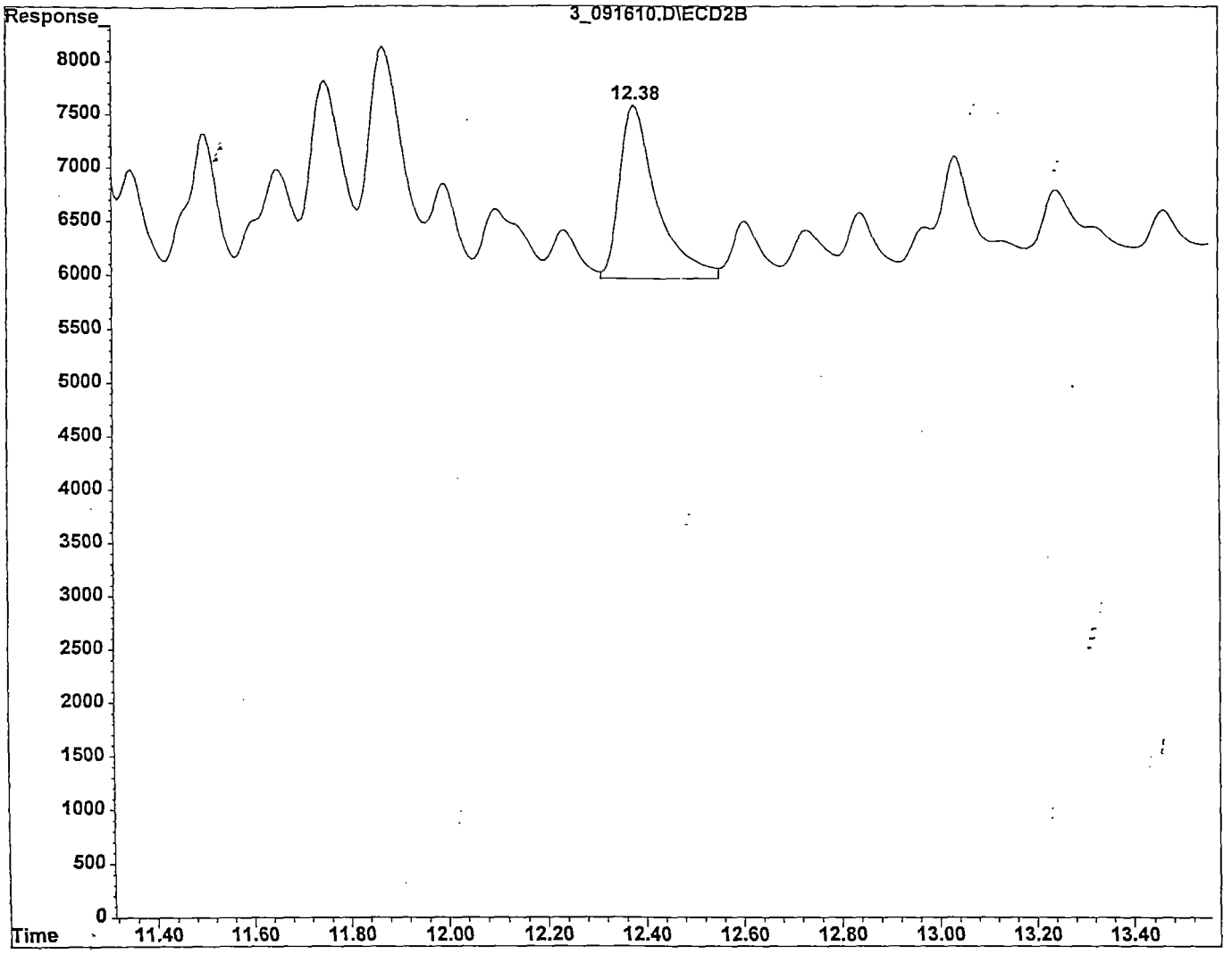
BTB 091701

Integration Time Range: 11.11 - 11.29

F:\HPCHEM\HP\3\DATA\09_16_01\3_091610.D
Report generated: Mon Sep 17 11:25:08 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091610.D
Date Acquired: 16 Sep 2001 14:46
Inst: HP_03 Operator ID: DDC
Name: AR1242L23E
Misc: 5-10-7
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 10:58 2001 Quant Results File: XPCBI16.RES



Aroclor-1242 {5} #2 12.38min area: 84252 m

BTB 091701

Integration Time Range: 12.31 - 12.55

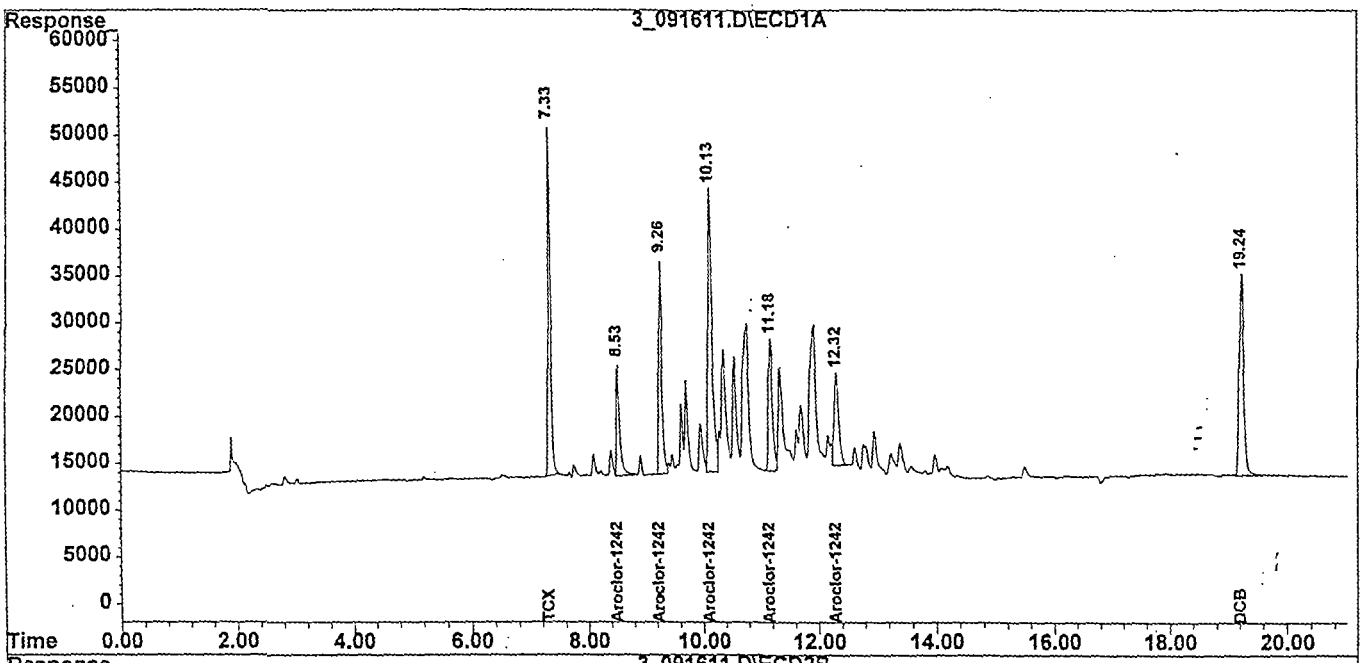
F:\HPCHEM\HP\3\DATA\09_16_01\3_091610.D
Report generated: Mon Sep 17 11:25:08 2001

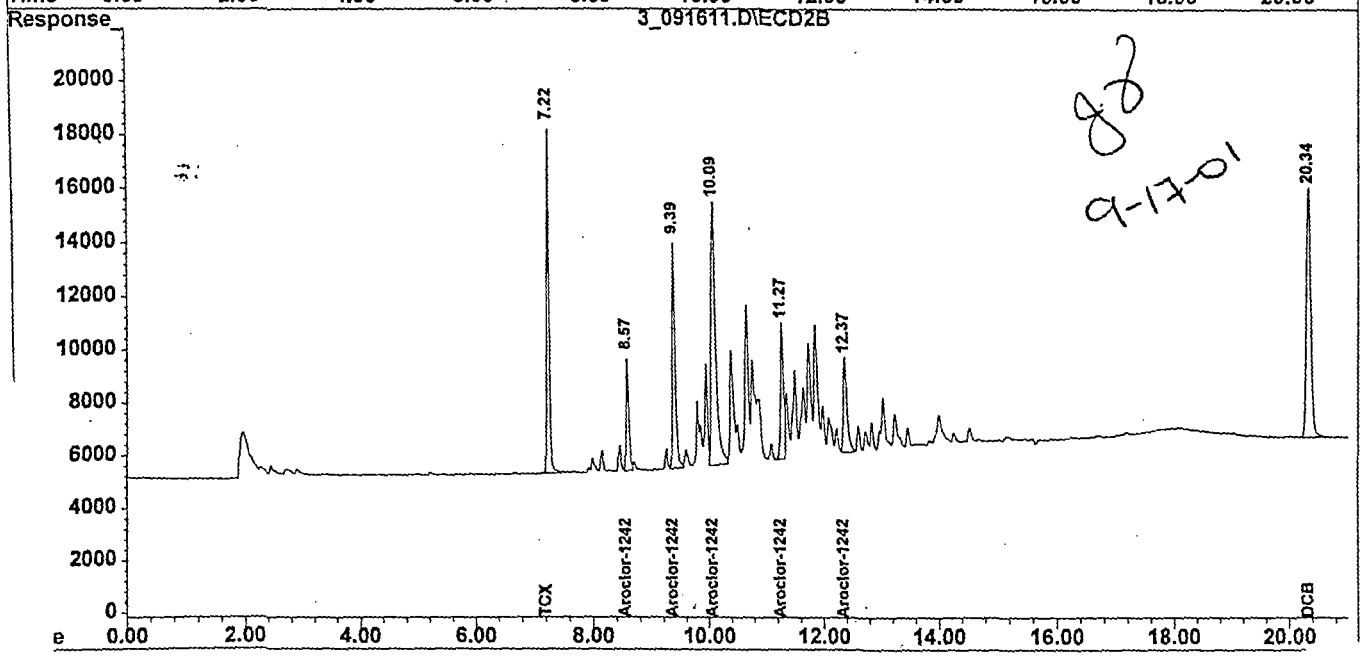
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091611.D\ECD1A.CH Vial: 11
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091611.D\ECD2B.CH
Acq On : 16 Sep 2001 15:12 Operator: DDC
Sample : AR1242L33E Inst : HP_03
Misc : 5-9-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 10:59 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





gg
9-17-01

511.D XPCBI16.M Mon Sep 17 11:20:37 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091611.D\ECD1A.CH Vial: 11
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091611.D\ECD2B.CH
Acq On : 16 Sep 2001 15:12 Operator: DDC
Sample : AR1242L33E Inst : HP_03
Misc : 5-9-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 10:59 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

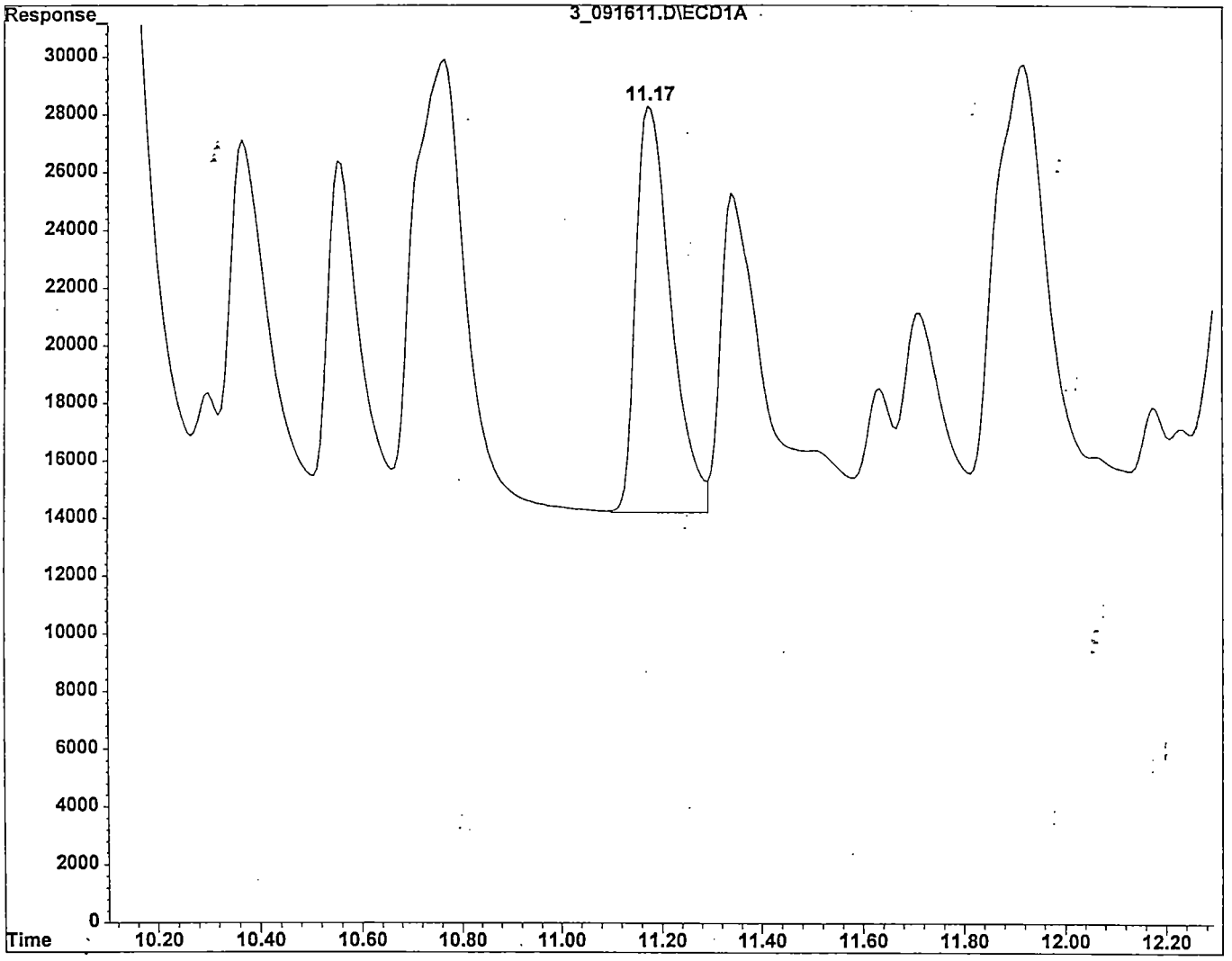
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	1183544	357391	32.0	28.3
22)	S DCB	19.24	20.35	1144022	505581	25.7	24.4
	Target Compounds:						
7)	L4 Aroclor-1242	8.53	8.57	472301	135196	607.7	574.1
8)	L4 Aroclor-1242 {2}	9.26	9.39	824721	291574	597.2	548.8
9)	L4 Aroclor-1242 {3}	10.13	10.09	1534936	563361	995.8	931.8
10)	L4 Aroclor-1242 {4}	11.17	11.28	682248	185121	632.7m BTB 091701	542.2
11)	L4 Aroclor-1242 {5}	12.32	12.37	534588	160008	825.0m	395.8m #BTB 091701
	Sum Aroclor-1242			4048795	1335260	3658.3	2992.7
	Average Aroclor-1242					731.651	598.534

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091611.D
Date Acquired: 16 Sep 2001 15:12
Inst: HP_03 Operator ID: DDC
Name: AR1242L33E
Misc: 5-9-7
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 10:59 2001 Quant Results File: XPCBI16.RES



Aroclor-1242 {4} 11.17min area: 682248 m

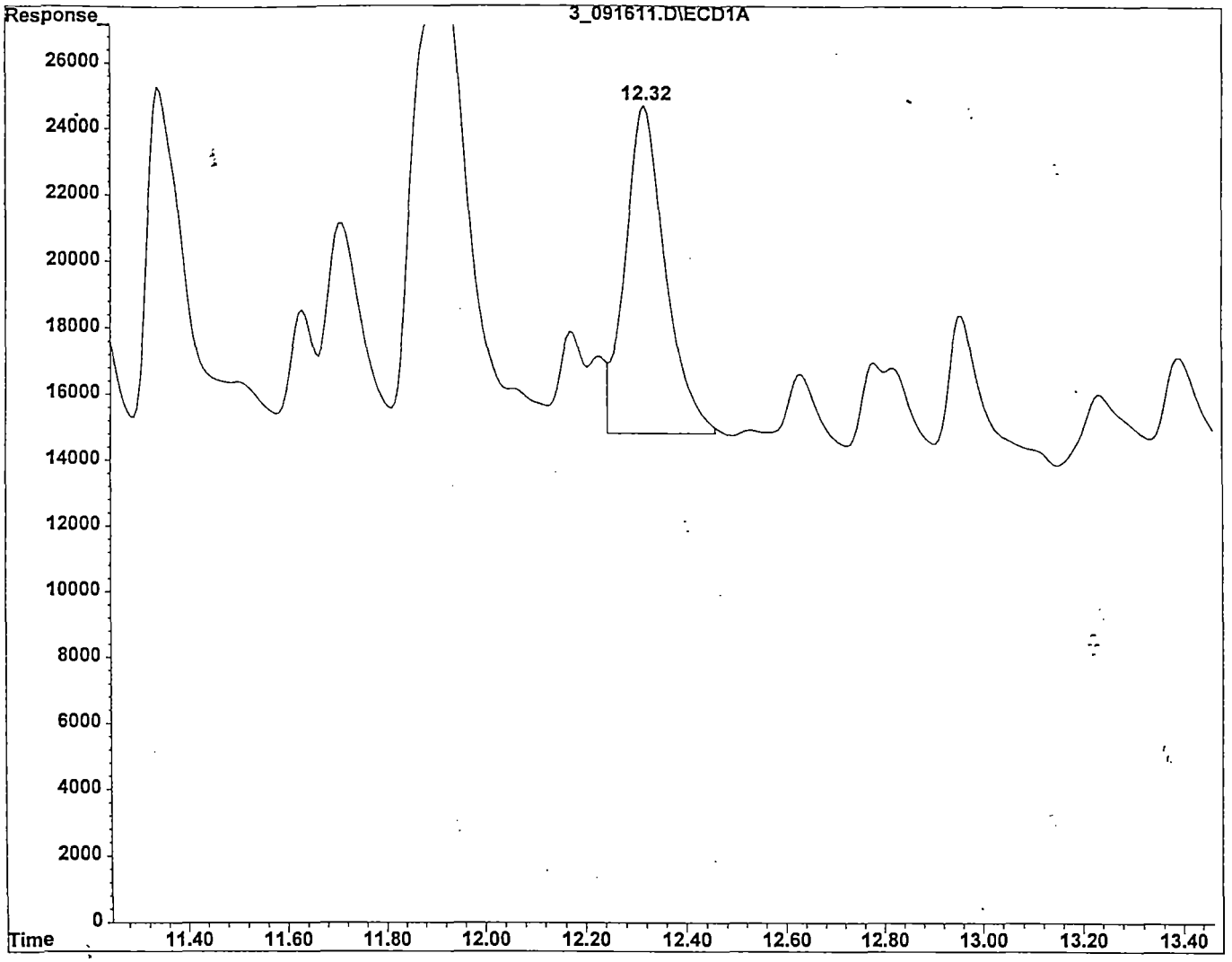
BTB 09/01

Integration Time Range: 11.10 - 11.29

F:\HPCHEM\HP\3\DATA\09_16_01\3_091611.D
Report generated: Mon Sep 17 11:25:10 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091611.D
Date Acquired: 16 Sep 2001 15:12
Inst: HP_03 Operator ID: DDC
Name: AR1242L33E
Misc: 5-9-7
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 10:59 2001 Quant Results File: XPCBI16.RES



Aroclor-1242 {5} 12.32min area: 534588 m

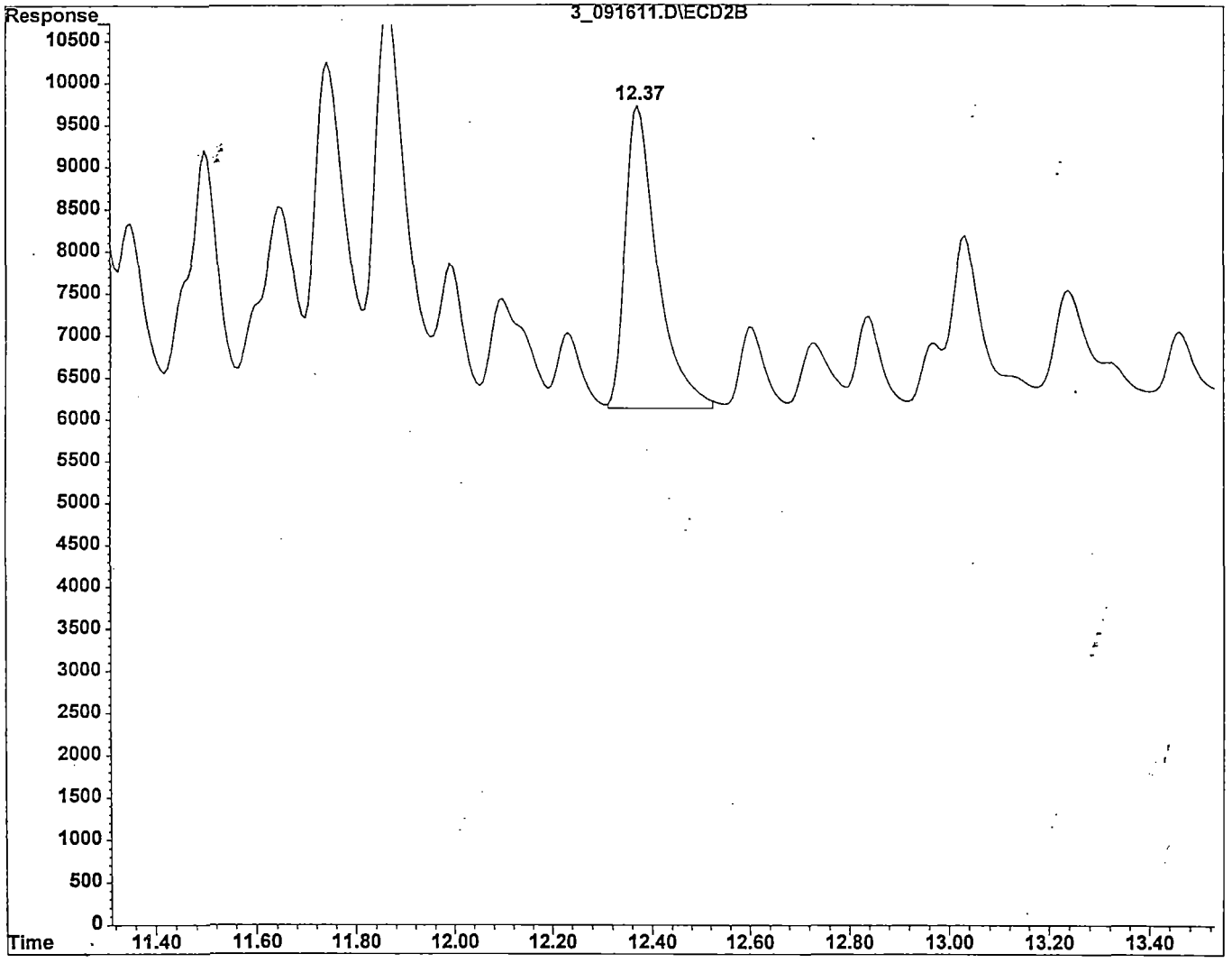
BTB 091701

Integration Time Range: 12.25 - 12.46

F:\HPCHEM\HP\3\DATA\09_16_01\3_091611.D
Report generated: Mon Sep 17 11:25:10 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091611.D
Date Acquired: 16 Sep 2001 15:12
Inst: HP_03 Operator ID: DDC
Name: AR1242L33E
Misc: 5-9-7
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 10:59 2001 Quant Results File: XPCBI16.RES



Aroclor-1242 {5} #2 12.37min area: 160008 m

BTB 091701

Integration Time Range: 12.31 - 12.53

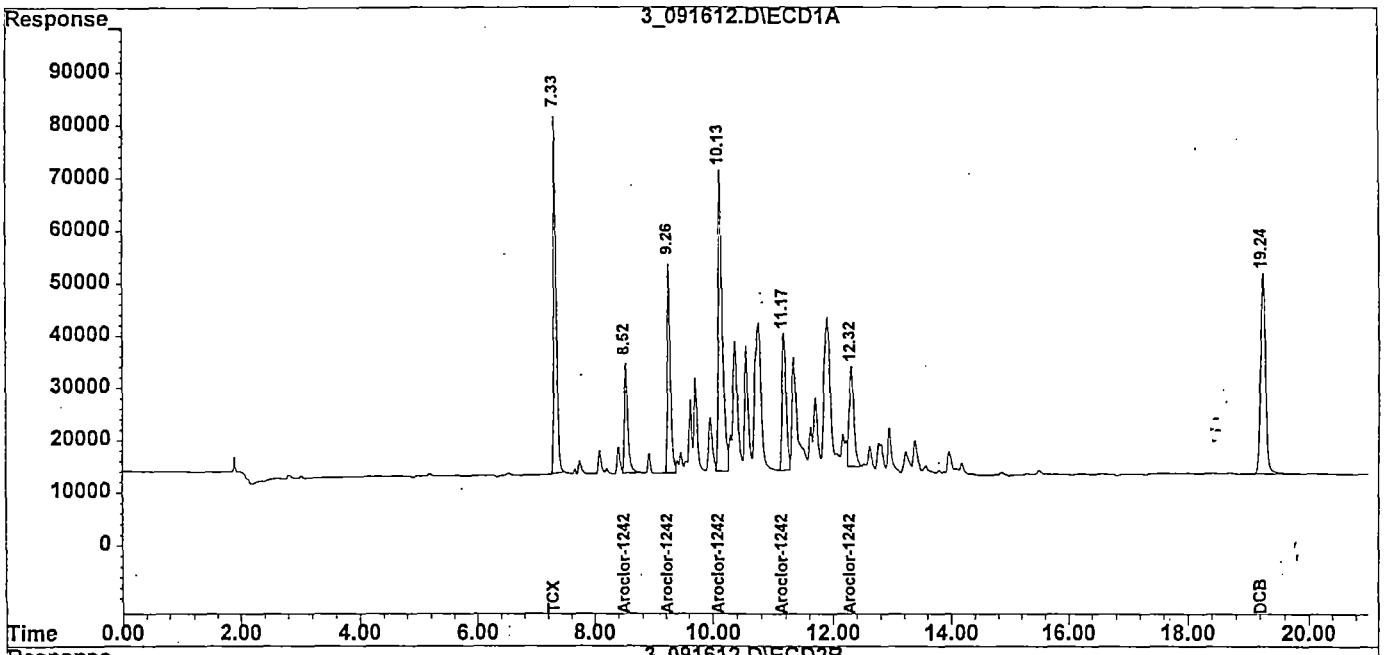
F:\HPCHEM\HP\3\DATA\09_16_01\3_091611.D
Report generated: Mon Sep 17 11:25:11 2001

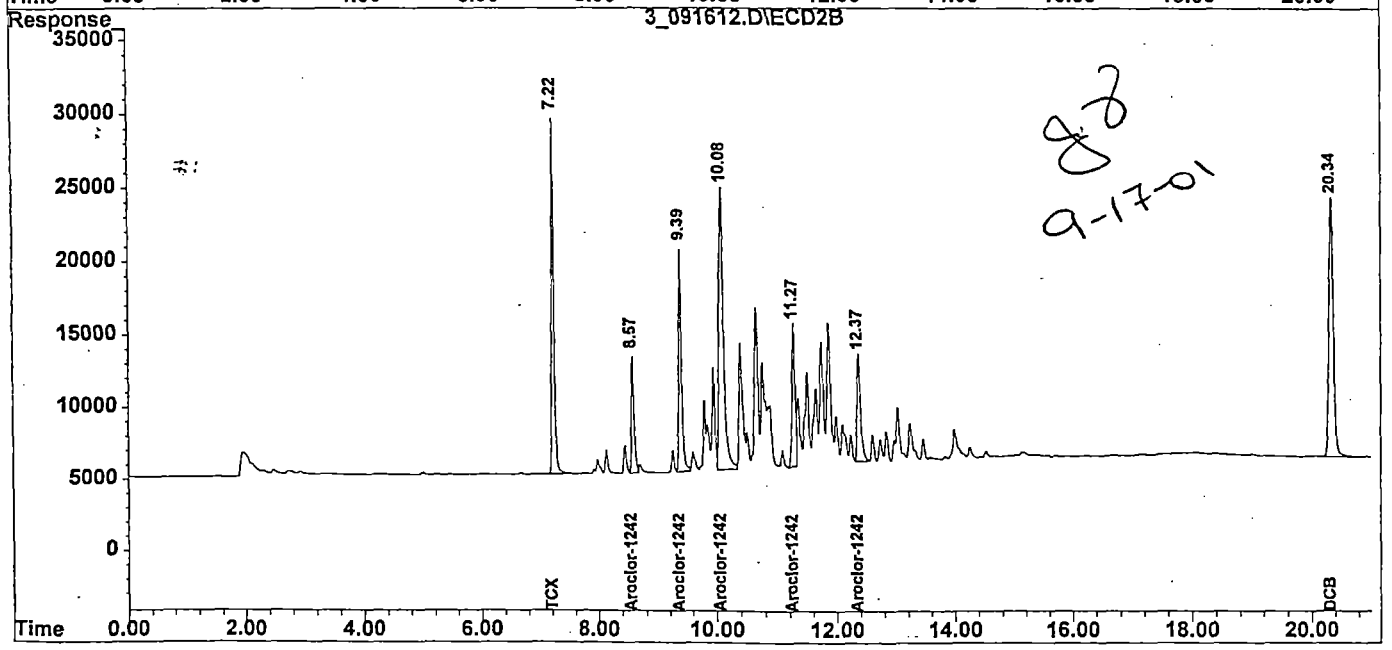
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091612.D\ECD1A.CH Vial: 12
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091612.D\ECD2B.CH
Acq On : 16 Sep 2001 15:37 Operator: DDC
Sample : AR1242L43E Inst : HP_03
Misc : 5-8-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 11:00 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





8
9-17-01

Quantitation Report

gnal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091612.D\ECD1A.CH Vial: 12
gnal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091612.D\ECD2B.CH
q On : 16 Sep 2001 15:37 Operator: DDC
mple : AR1242L43E Inst : HP_03
sc : 5-8-7 Dilution: 1.00
tFile Signal #1: events.e IntFile Signal #2: events2.e
ant Time: Sep 17 11:00 2001 Quant Results File: XPCBI16.RES

thod : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
tle-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
st Update : Thu Sep 06 08:09:33 2001
sponse via : Initial Calibration

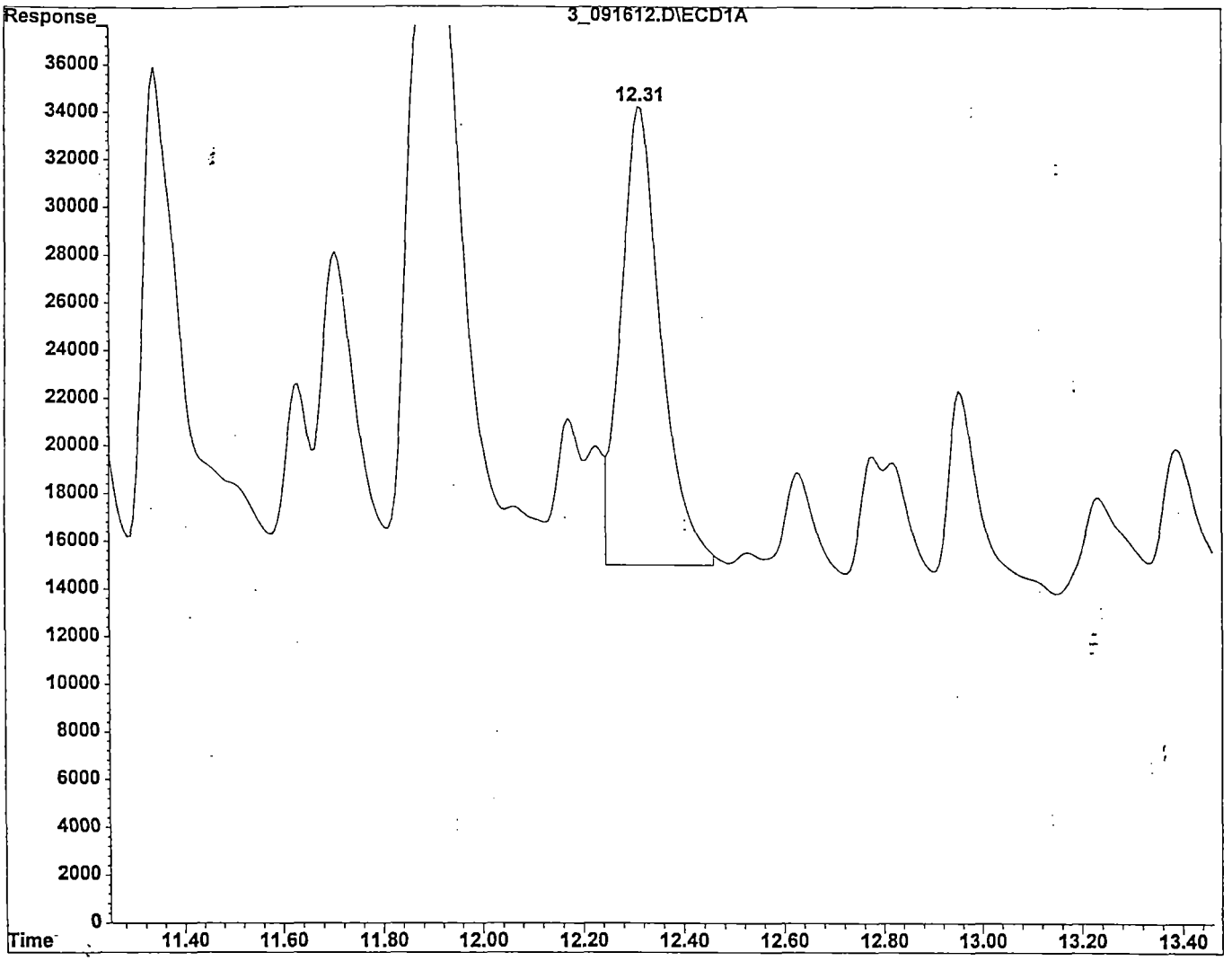
lume Inj. : 0.5uL
gnal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
gnal #1 Info : .32 mm Signal #2 Info : .32 mm
gnal #1 Inst : HP_03A Signal #2 Inst : HP_03B

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
tem Monitoring Compounds:						
FCX	7.33	7.22	2212667	687042	59.8	54.4
DCB	19.24	20.34	2134950	955976	48.0	46.1
get Compounds:						
Aroclor-1242	8.53	8.57	823372	248310	1059.3	1054.4
Aroclor-1242 {2}	9.26	9.39	1466462	529698	1061.9	997.0
Aroclor-1242 {3}	10.13	10.09	2762450	1030988	1792.1	1705.2
Aroclor-1242 {4}	11.17	11.27	1251928	350595	1161.0m BTB 091701	1026.8
Aroclor-1242 {5}	12.31	12.37	1052440	303260	1624.1m	750.2m # BTB 091701
Aroclor-1242			7356653	2462851	6698.4	5533.6
Aroclor-1242					1339.677	1106.726

Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091612.D
Date Acquired: 16 Sep 2001 15:37
Inst: HP_03 Operator ID: DDC
Name: AR1242L43E
Misc: 5-8-7
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 11:00 2001 Quant Results File: XPCBI16.RES



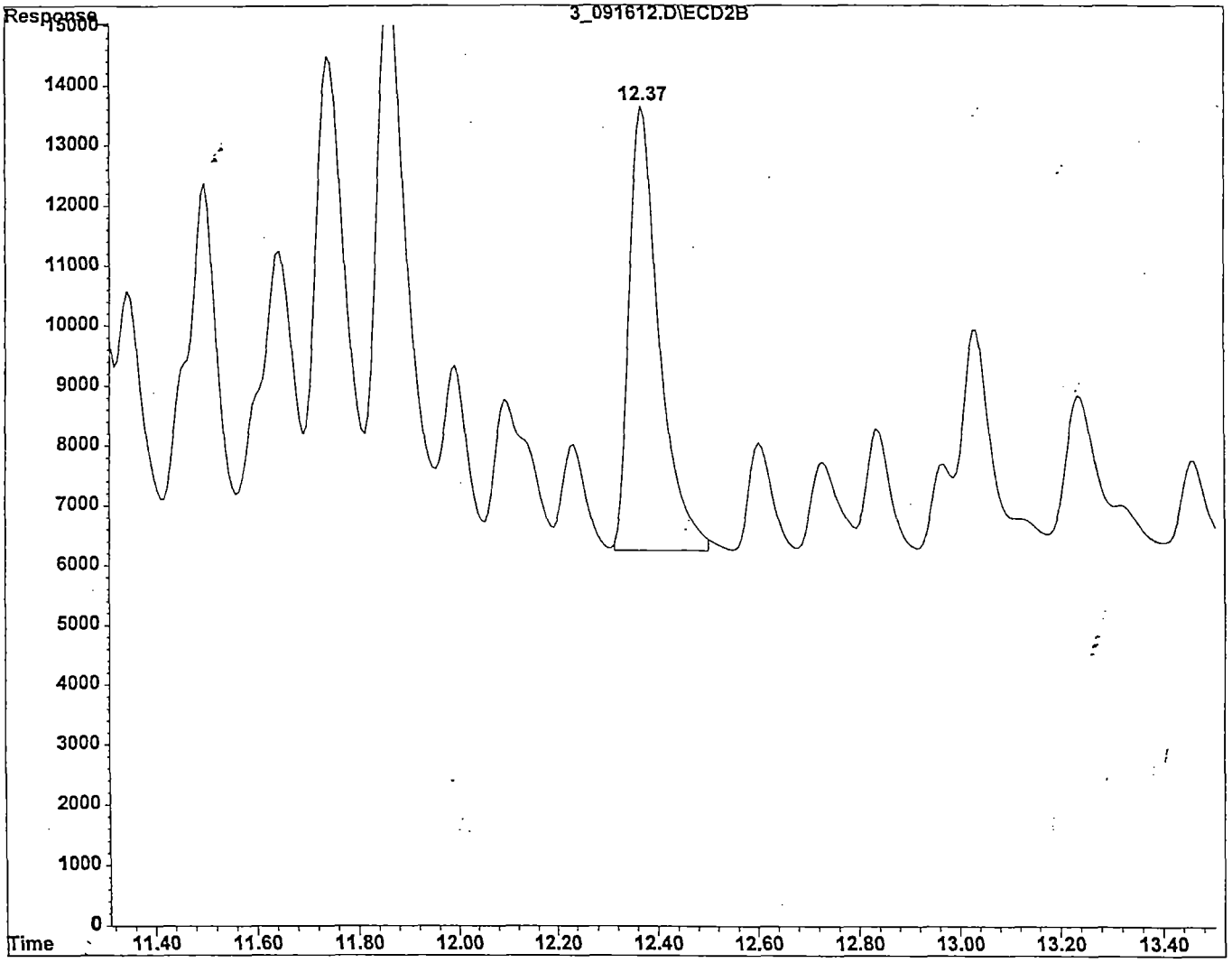
Aroclor-1242 {5} 12.31min area: 1052440 m BTB 091701

Integration Time Range: 12.25 - 12.46

F:\HPCHEM\HP\3\DATA\09_16_01\3_091612.D
Report generated: Mon Sep 17 11:25:12 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091612.D
Date Acquired: 16 Sep 2001 15:37
Inst: HP_03 Operator ID: DDC
Name: AR1242L43E
Misc: 5-8-7
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 11:00 2001 Quant Results File: XPCBI16.RES



Aroclor-1242 {5} #2 12.37min area: 303260 m

BTB 091701

Integration Time Range: 12.31 - 12.50

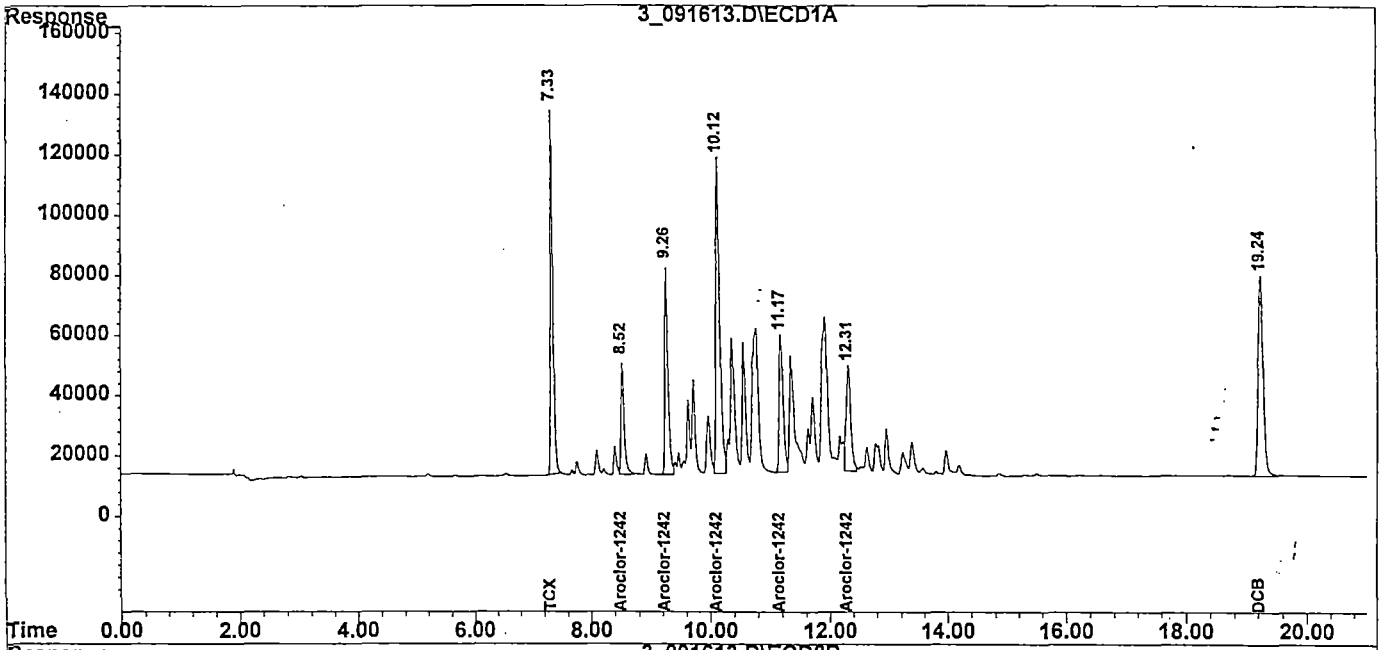
F:\HPCHEM\HP\3\DATA\09_16_01\3_091612.D
Report generated: Mon Sep 17 11:25:13 2001

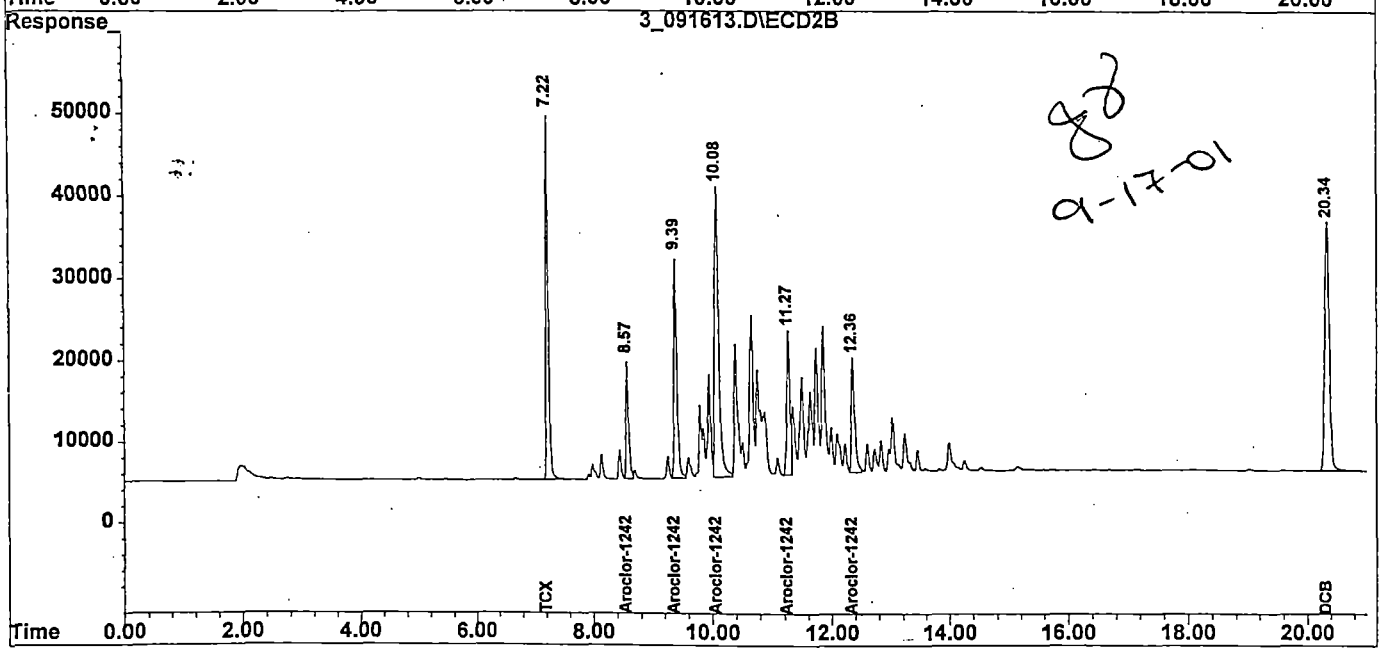
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091613.D\ECD1A.CH Vial: 13
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091613.D\ECD2B.CH
Acq On : 16 Sep 2001 16:03 Operator: DDC
Sample : AR1242L53E Inst : HP_03
Misc : 5-7-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 11:01 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





9-17-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091613.D\ECD1A.CH Vial: 13
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091613.D\ECD2B.CH
Acq On : 16 Sep 2001 16:03 Operator: DDC
Sample : AR1242L53E Inst : HP_03
Misc : 5-7-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 11:01 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

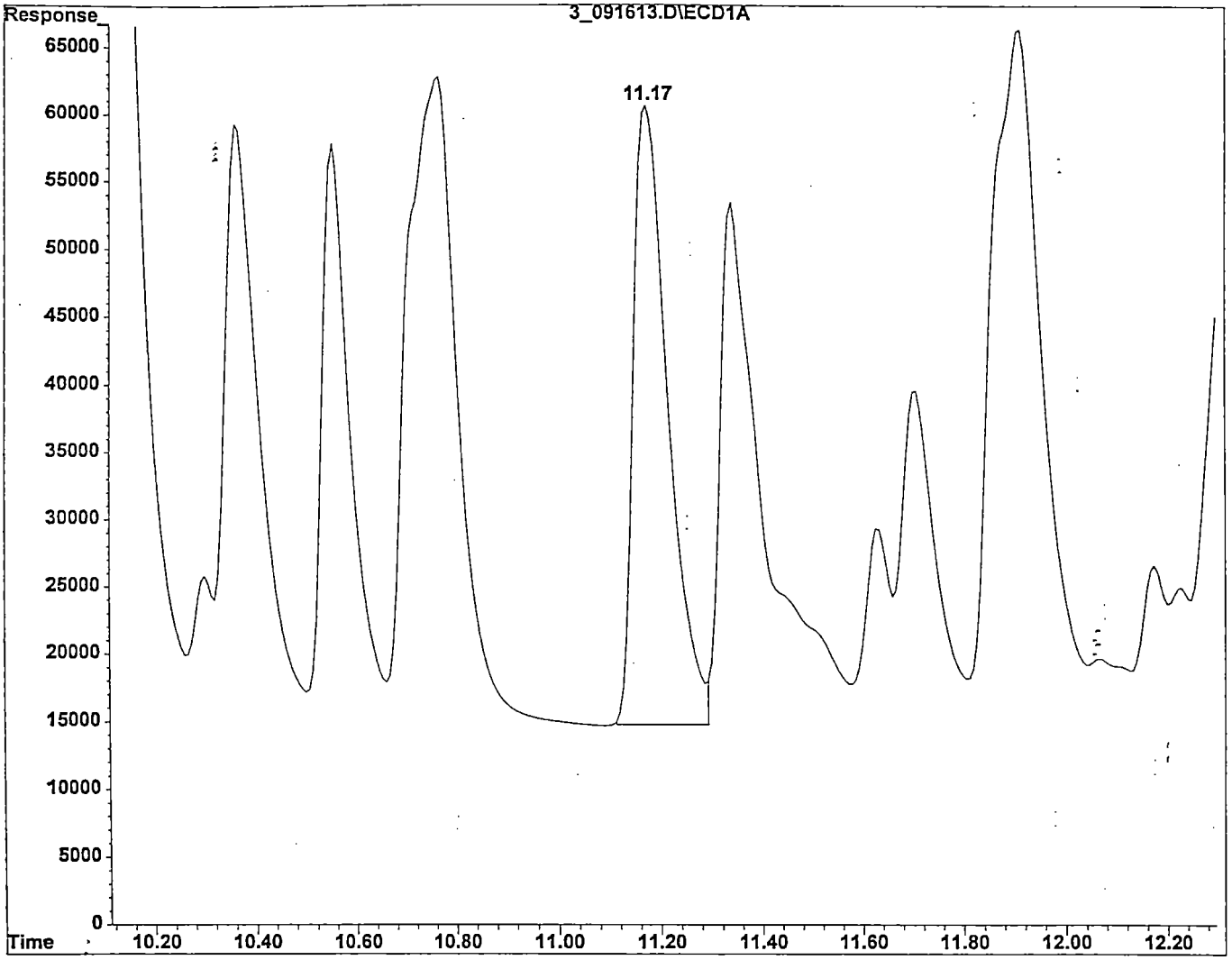
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	4012531	1282368	108.4 E	101.5 E
22)	S DCB	19.24	20.34	3716001	1693523	83.5	81.7
	Target Compounds:						
7)	L4 Aroclor-1242	8.53	8.57	1409990	439656	1814.1 E	1866.8
8)	L4 Aroclor-1242 {2}	9.26	9.39	2508637	922559	1816.5	1736.5 E
9)	L4 Aroclor-1242 {3}	10.13	10.09	4771597	1785504	3095.5	2953.2 E
10)	L4 Aroclor-1242 {4}	11.17	11.27	2183236	634512	2024.7m BJB	1858.4 E
11)	L4 Aroclor-1242 {5}	12.31	12.37	1927912	575144	2975.1mE 09/17/01	1422.8m # BJB 09/17/01
	Sum Aroclor-1242			12801373	4357375	11725.8	9837.6
	Average Aroclor-1242					2345.166	1967.529

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091613.D
Date Acquired: 16 Sep 2001 16:03
Inst: HP_03 Operator ID: DDC
Name: ARI242L53E
Misc: 5-7-7
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 11:01 2001 Quant Results File: XPCBI16.RES



Aroclor-1242 {4} 11.17min area: 2183236 m

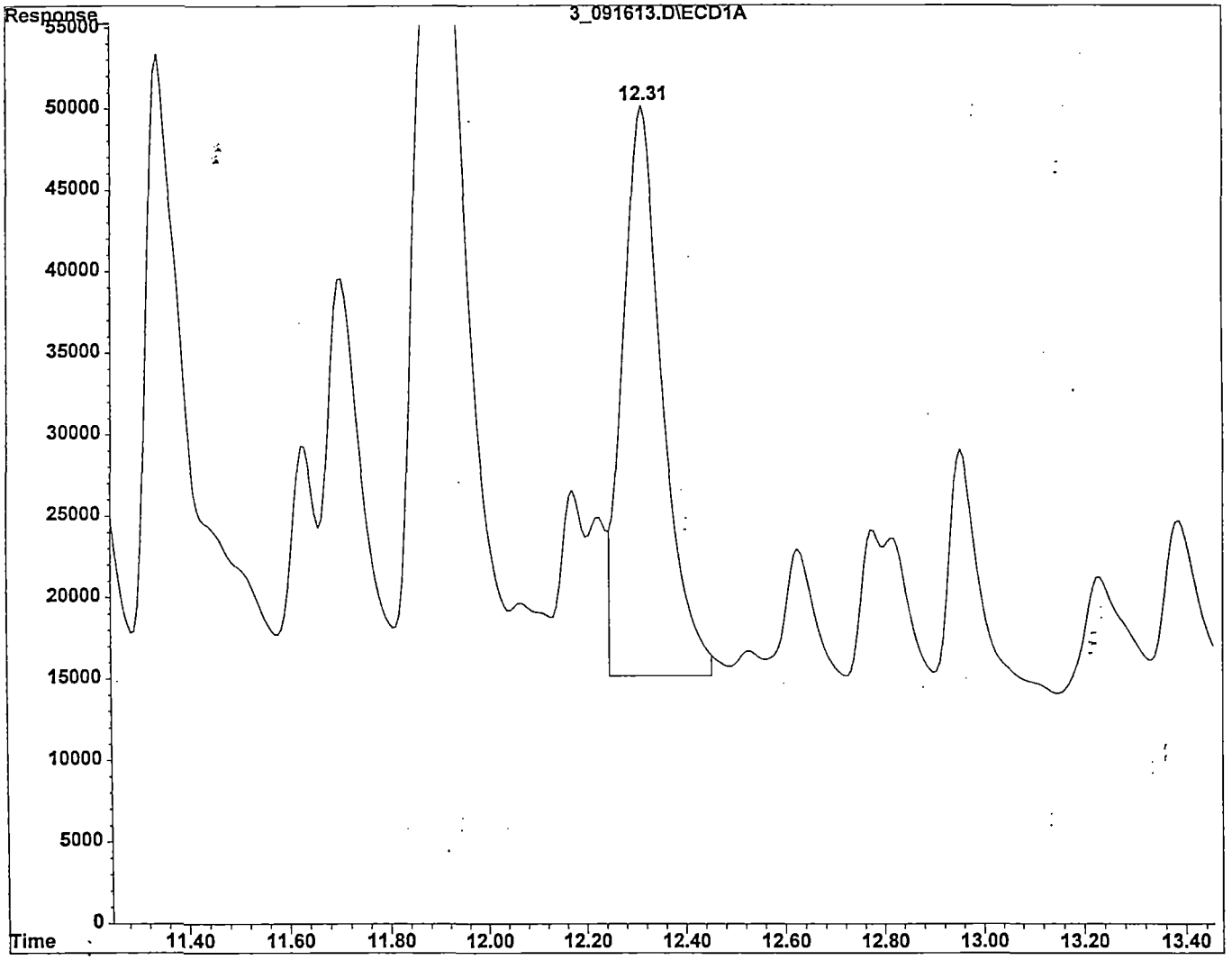
BTB 091701

Integration Time Range: 11.11 - 11.30

F:\HPCHEM\HP\3\DATA\09_16_01\3_091613.D
Report generated: Mon Sep 17 11:25:15 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091613.D
Date Acquired: 16 Sep 2001 16:03
Inst: HP_03 Operator ID: DDC
Name: AR1242L53E
Misc: 5-7-7
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 11:01 2001 Quant Results File: XPCBI16.RES



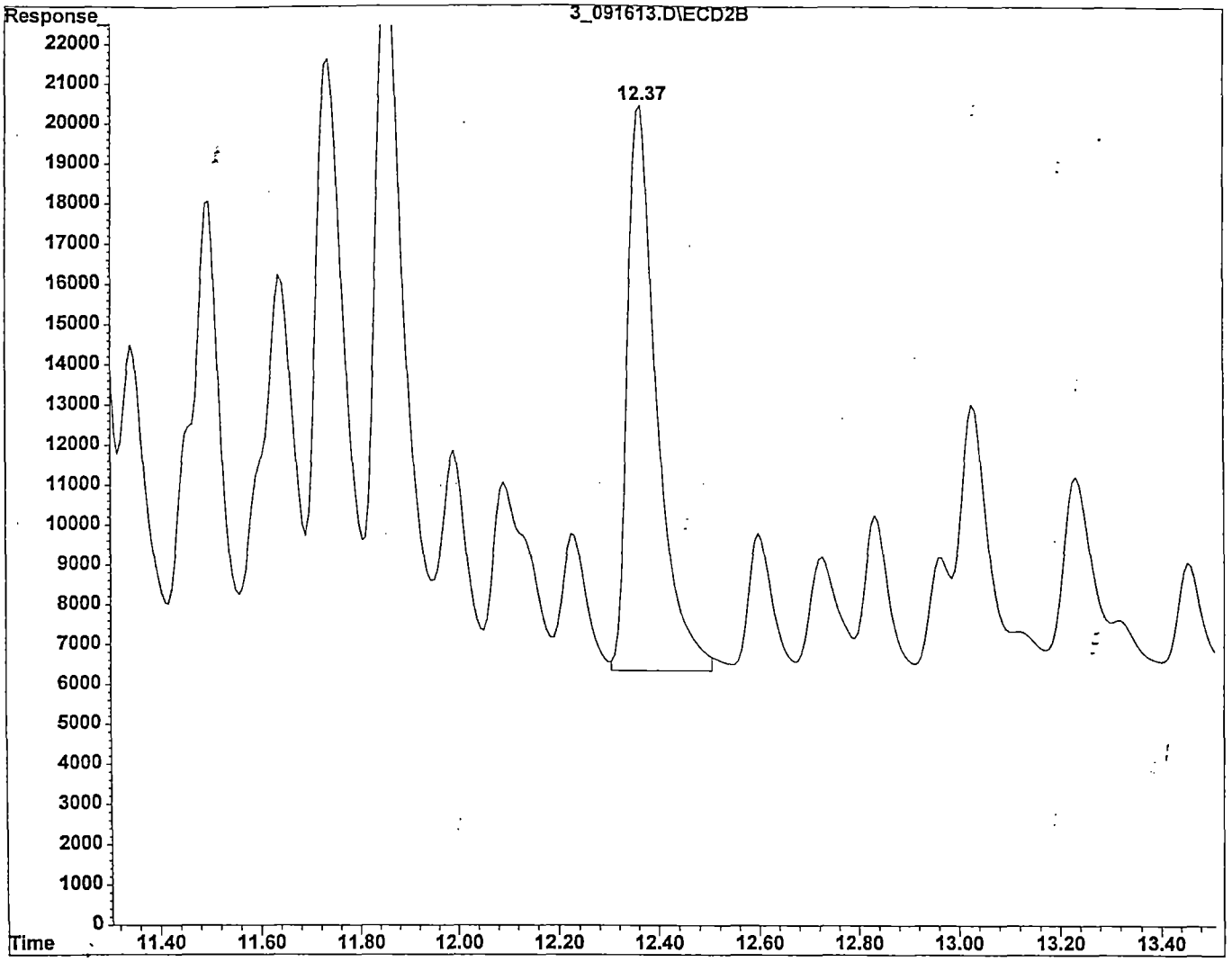
Aroclor-1242 {5} 12.31min area: 1927912 m BTB 091701

Integration Time Range: 12.25 - 12.46

F:\HPCHEM\HP\3\DATA\09_16_01\3_091613.D
Report generated: Mon Sep 17 11:25:15 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091613.D
Date Acquired: 16 Sep 2001 16:03
Inst: HP_03 Operator ID: DDC
Name: AR1242L53E
Misc: 5-7-7
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 11:01 2001 Quant Results File: XPCBI16.RES



Aroclor-1242 {5} #2 12.37min area: 575144 m

BTB 091701

Integration Time Range: 12.31 - 12.51

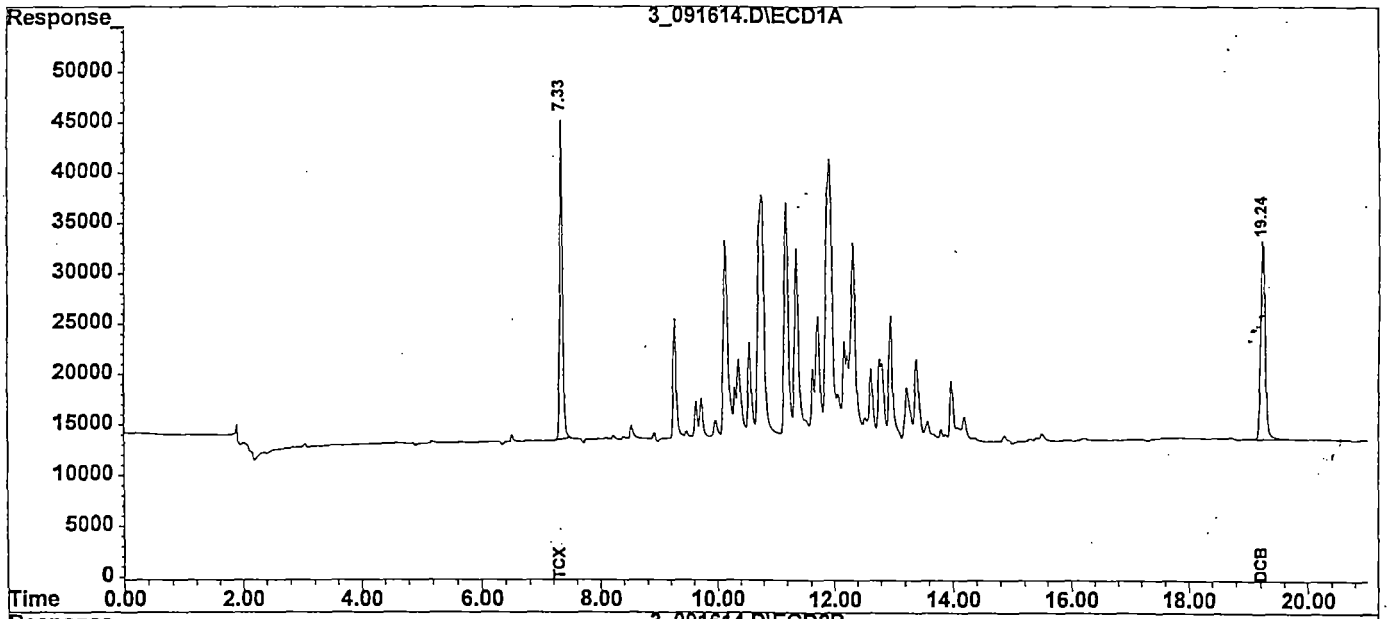
F:\HPCHEM\HP\3\DATA\09_16_01\3_091613.D
Report generated: Mon Sep 17 11:25:16 2001

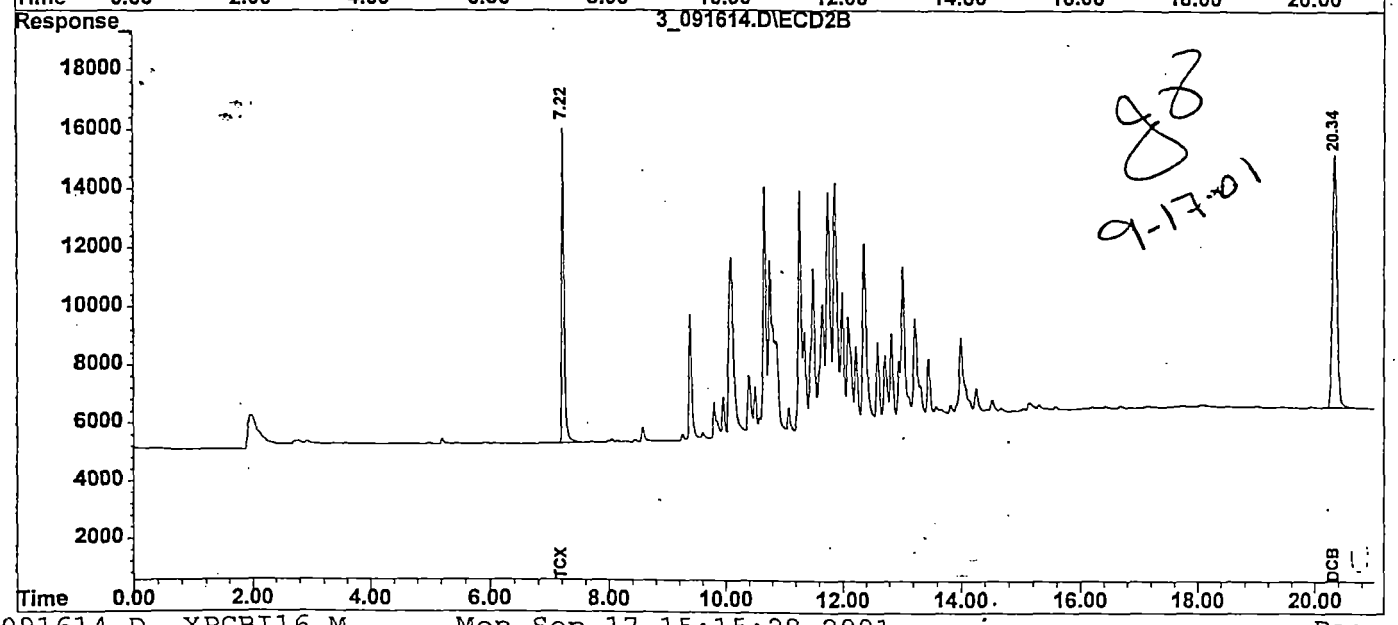
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091614.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091614.D\ECD2B.CH
Acq On : 16 Sep 2001 16:29 Operator: DDC
Sample : AR1248L33E Inst : HP_03
Misc : 5-424-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 15:11 2001 Quant Results File: XPCBI16.RES
Quant Time: Sep 17 15:13 2001 Quant Results File: xspcbi16.RES

Pesticide Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001

Multi-Component Method : f:\hpchem\hp\3\data\09_16_01\xspcbi16.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





9-17-01

332

Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091614.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091614.D\ECD2B.CH
Acq On : 16 Sep 2001 16:29 Operator: DDC
Sample : AR1248L33E Inst : HP_03
Misc : 5-424-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 15:11 2001 Quant Results File: XPCBI16.RES
Multi Time: Sep 17 15:13 2001 Quant Results File: xspcbi16.RES

Pesticide Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001

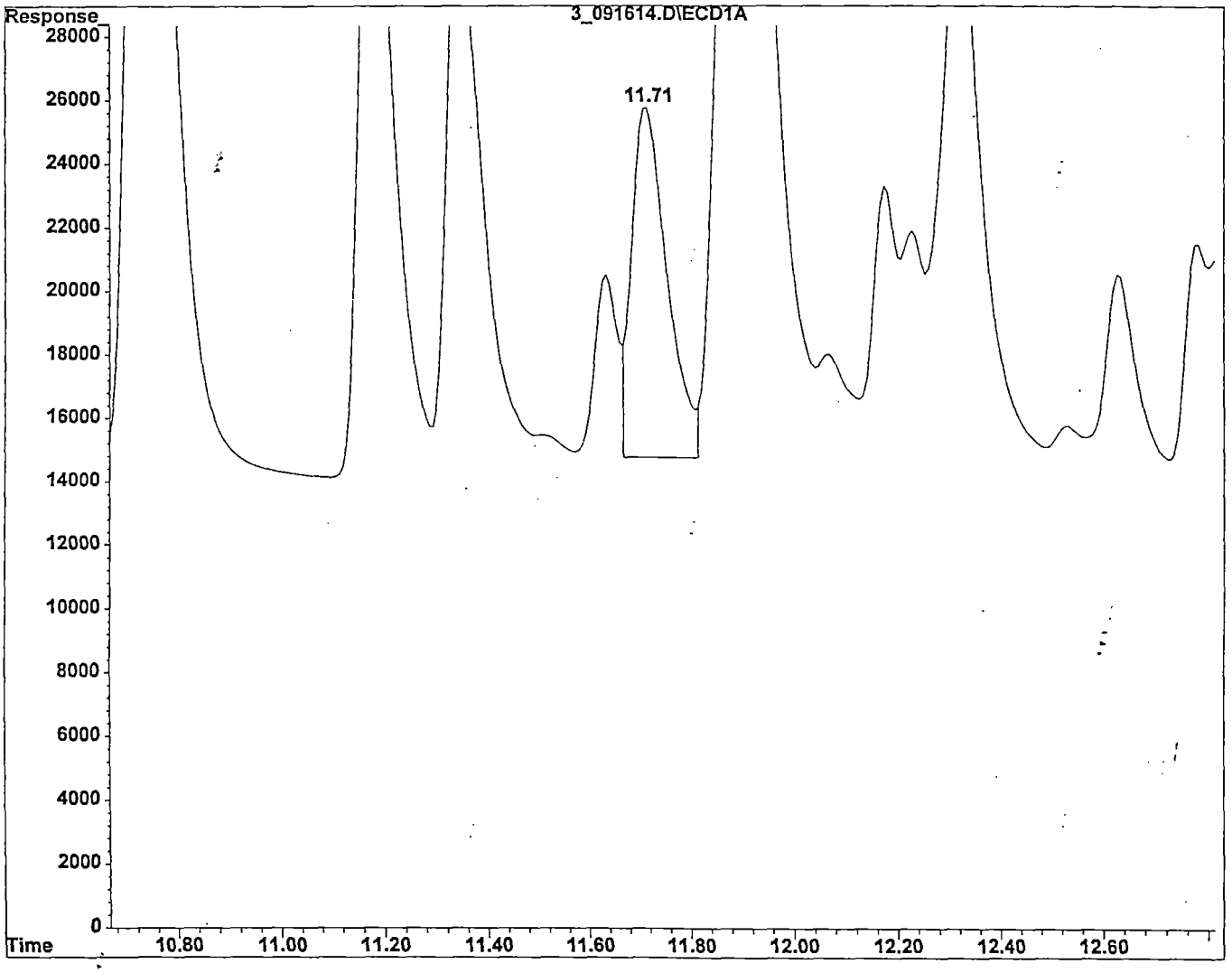
Multi-Component Method : f:\hpchem\hp\3\data\09_16_01\xspcbi16.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
System Monitoring Compounds:						
S TCX	7.33	7.22	1029821	307157	18.9	19.0
S DCB	19.24	20.34	1086286	468840	19.3	19.1
Target Compounds:						
Multi-Component Compounds:						
5 Aroclor-1248	9.72	9.96	136032	41097	730.9m BTB 09/17/01	572.5
5 Aroclor-1248 {2}	10.55	10.40	384240	84701	740.1m	565.7
5 Aroclor-1248 {3}	11.71	12.23	526572	88988	589.2m	487.3m BTB 09/17/01
5 Aroclor-1248 {4}	12.63	12.60	286592	95260	644.0m	543.7m
5 Aroclor-1248 {5}	13.97	13.46	262868	74934	601.3m	532.9
Sum Aroclor-1248			1596304	384979	3305.5	2702.1
ge Aroclor-1248					661.098	540.423

RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
> Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091614.D
Date Acquired: 16 Sep 2001 16:29
Inst: HP_03 Operator ID: DDC
Name: AR1248L33E
Misc: 5-424-6
Method: f:\hpchem\hp\3\data\09_16_01\xspcbi16.m
Title:
Quant Time: Sep 17 15:13 2001 Quant Results File: xspcbi16.RES



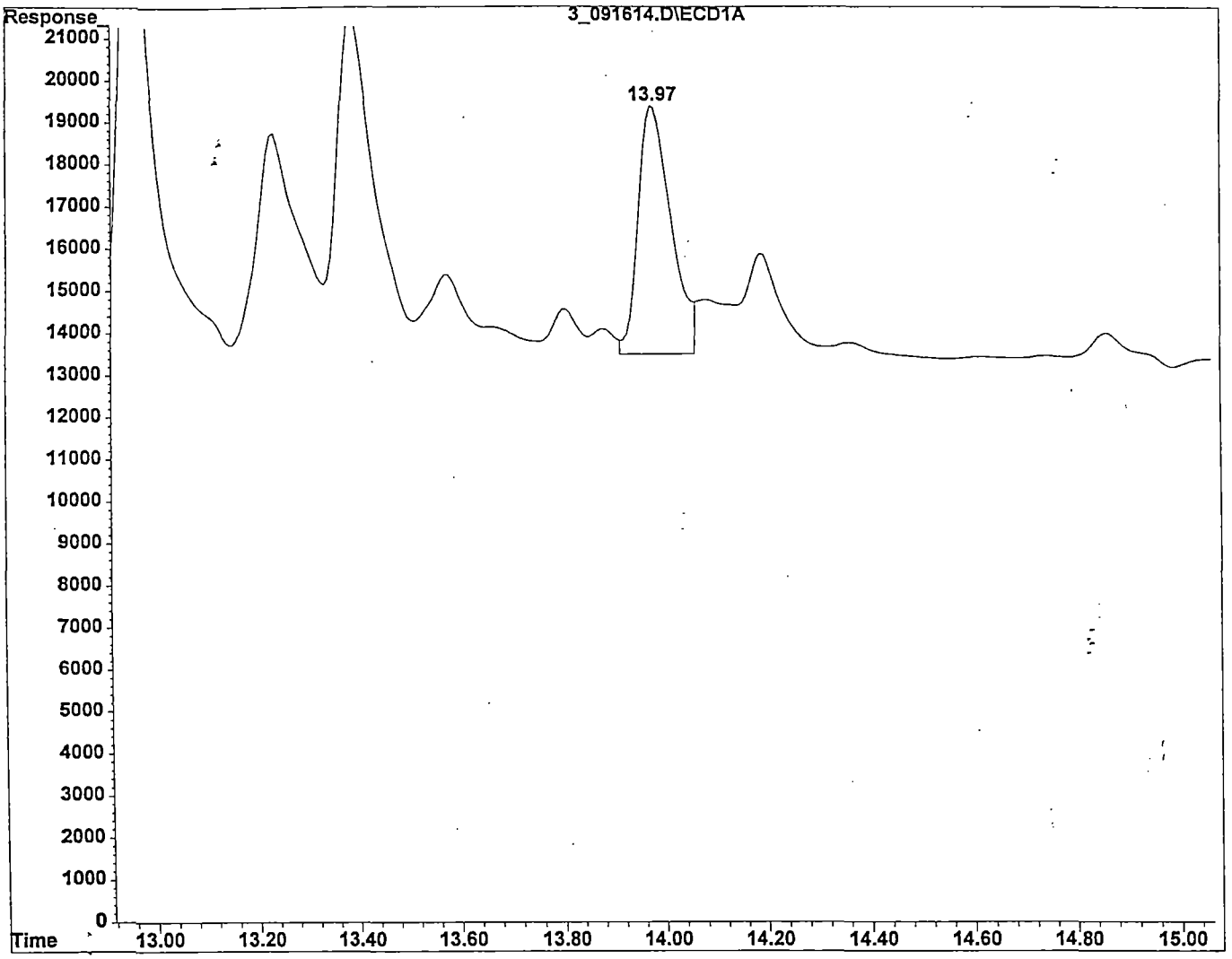
Aroclor-1248 {3} 11.71min area: 526572 m

BTB
091701

Integration Time Range: 11.67 - 11.81

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091614.D
Date Acquired: 16 Sep 2001 16:29
Inst: HP_03 Operator ID: DDC
Name: AR1248L33E
Misc: 5-424-6
Method: f:\hpchem\hp\3\data\09_16_01\xspcbi16.m
Title:
Quant Time: Sep 17 15:13 2001 Quant Results File: xspcbi16.RES



Aroclor-1248 {5} 13.97min area: 262868 m

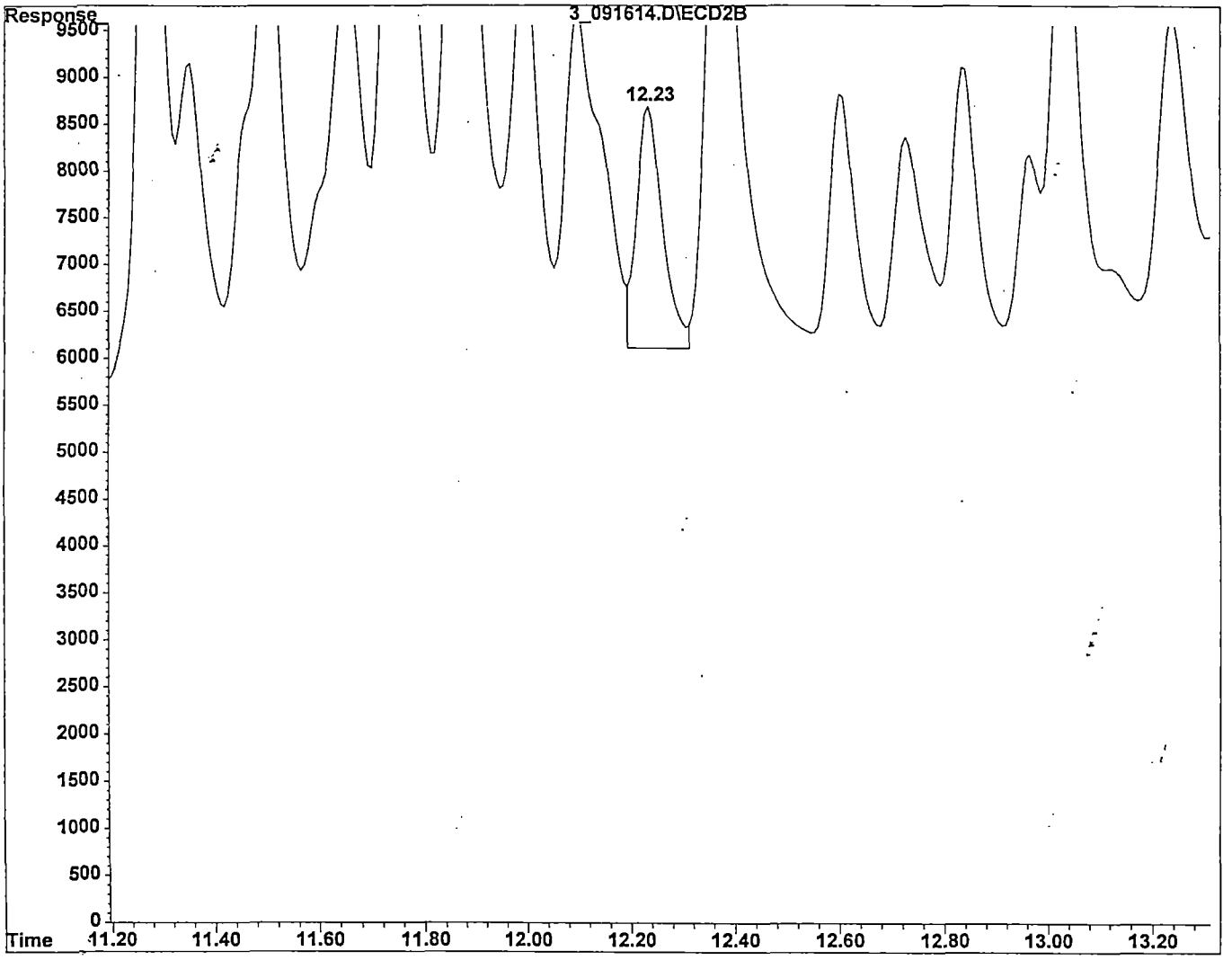
Integration Time Range: 13.92 - 14.06

BTB
091701

F:\HPCHEM\HP\3\DATA\09_16_01\3_091614.D
Report generated: Mon Sep 17 15:33:59 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091614.D
Date Acquired: 16 Sep 2001 16:29
Inst: HP_03 Operator ID: DDC
Name: AR1248L33E
Misc: 5-424-6
Method: f:\hpchem\hp\3\data\09_16_01\xspcbi16.m
Title:
Quant Time: Sep 17 15:13 2001 Quant Results File: xspcbi16.RES



Aroclor-1248 {3} #2 12.23min area: 88988 m

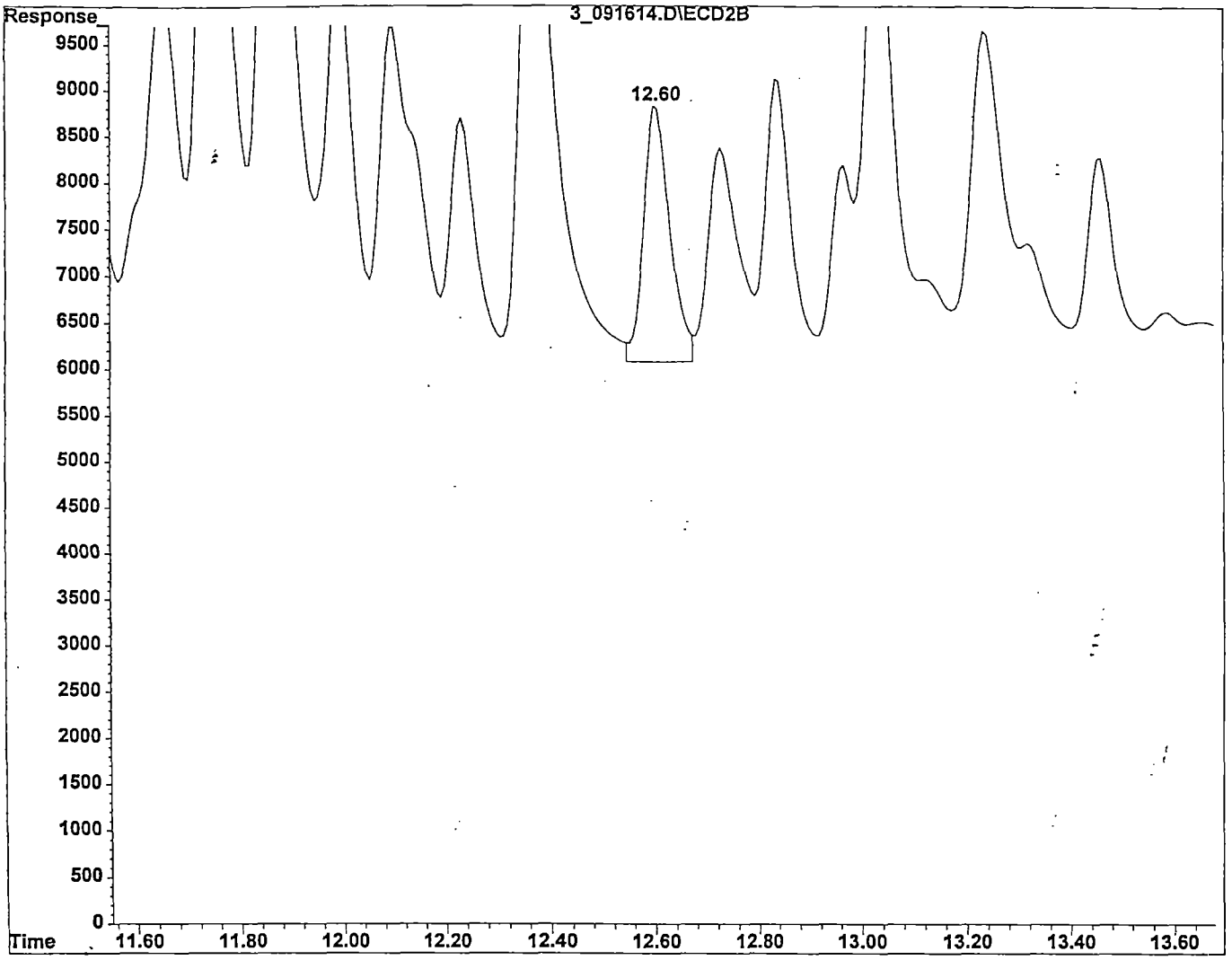
Integration Time Range: 12.20 - 12.31

BTB
091701

F:\HPCHEM\HP\3\DATA\09_16_01\3_091614.D
Report generated: Mon Sep 17 15:33:59 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091614.D
Date Acquired: 16 Sep 2001 16:29
Inst: HP_03 Operator ID: DDC
Name: AR1248L33E
Misc: 5-424-6
Method: f:\hpchem\hp\3\data\09_16_01\xspcbi16.m
Title:
Quant Time: Sep 17 15:13 2001 Quant Results File: xspcbi16.RES



Aroclor-1248 {4} #2 12.60min area: 95260 m

Integration Time Range: 12.55 - 12.68

BTB
091701

F:\HPCHEM\HP\3\DATA\09_16_01\3_091614.D
Report generated: Mon Sep 17 15:34:00 2001

Response Factor Report HP_03

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

Calibration Files
L1 =3_091615.D L2 =3_091616.D L3 =3_091617.D
L4 =3_091618.D L5 =3_091619.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
12) Aroclor-1254	2.3	2.4	2.1	1.8	1.6	2.0 E3	16.95
13) Aroclor-1254 {2}	4.1	4.3	3.9	3.5	3.0	3.7 E3	13.13
14) Aroclor-1254 {3}	3.7	3.9	3.6	3.2	2.8	3.4 E3	12.31
15) Aroclor-1254 {4}	4.2	4.6	4.0	3.7	3.2	3.9 E3	13.36
16) Aroclor-1254 {5}	3.1	4.0	3.2	2.9	2.7	3.2 E3	15.95

Signal #2 Calibration Files
L1 =3_091615.D L2 =3_091616.D L3 =3_091617.D
L4 =3_091618.D L5 =3_091619.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
35) Aroclor-1254 #2	511.2	564.0	498.3	460.6	402.6	487.3	12.34
36) Aroclor-1254 {2} #2	1.2	1.3	1.1	1.0	0.9	1.1 E3	12.44
37) Aroclor-1254 {3} #2	1.6	1.7	1.6	1.3	1.2	1.5 E3	15.57
38) Aroclor-1254 {4} #2	871.7	926.3	825.4	756.8	678.9	811.8	11.94
39) Aroclor-1254 {5} #2	1.1	1.2	1.1	1.0	1.0	1.1 E3	9.51

(#) = Out of Range

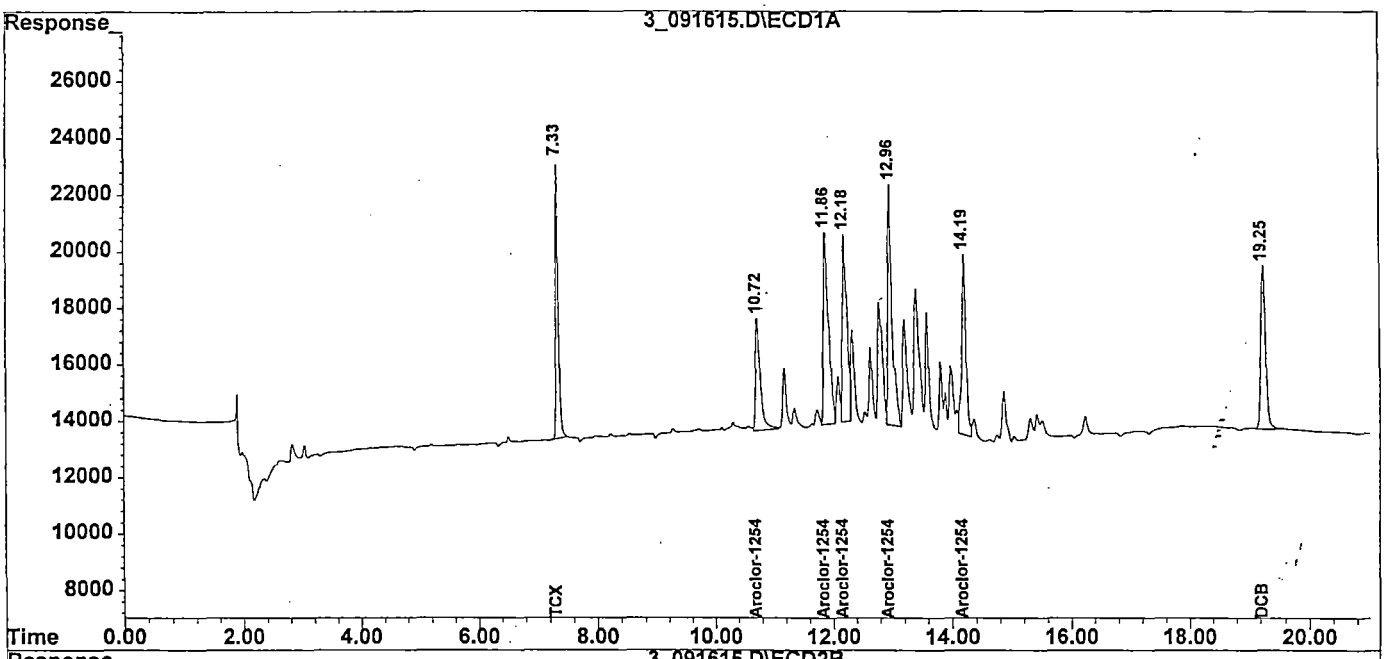
XPCBI16.M Mon Sep 17 11:30:23 2001

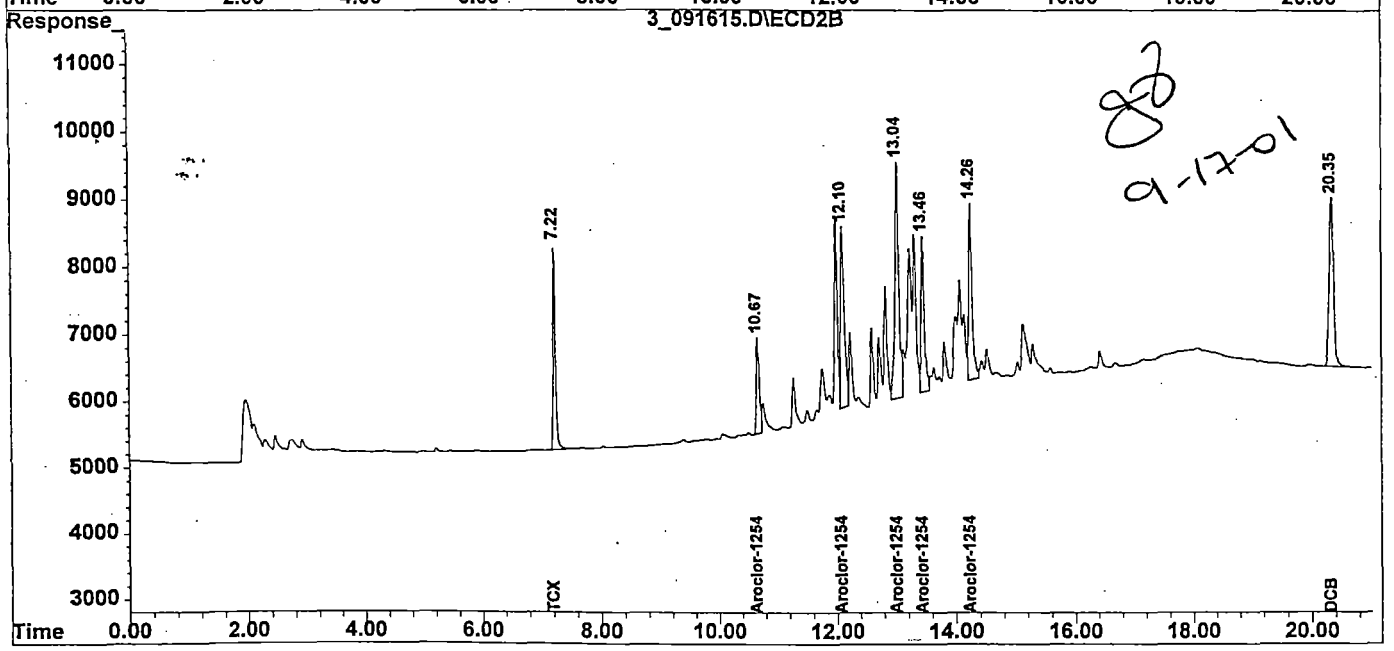
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091615.D\ECD1A.CH Vial: 15
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091615.D\ECD2B.CH
Acq On : 16 Sep 2001 16:54 Operator: DDC
Sample : AR1254L13E Inst : HP_03
Misc : 5-6-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 11:09 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





8
9-17-01

339

Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091615.D\ECD1A.CH Vial: 15
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091615.D\ECD2B.CH
Acq On : 16 Sep 2001 16:54 Operator: DDC
Sample : AR1254L13E Inst : HP_03
Misc : 5-6-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 11:09 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	292578	83731	7.805	6.557
22)	S DCB	19.25	20.35	297359	128486	6.654	6.118
	Target Compounds:						
12)	L6 Aroclor-1254	10.72	10.68	228650	51115	171.1	137.6
13)	L6 Aroclor-1254 {2}	11.87	12.10	405641	117520	158.7	126.0
14)	L6 Aroclor-1254 {3}	12.18	13.04	368949	158619	148.7	125.7
15)	L6 Aroclor-1254 {4}	12.96	13.47	421099	87167	146.1	123.5
16)	L6 Aroclor-1254 {5}	14.20	14.26	314700	109650	151.4	117.1
	Sum Aroclor-1254			1739039	524071	775.9	629.9
	Average Aroclor-1254					155.186	125.989

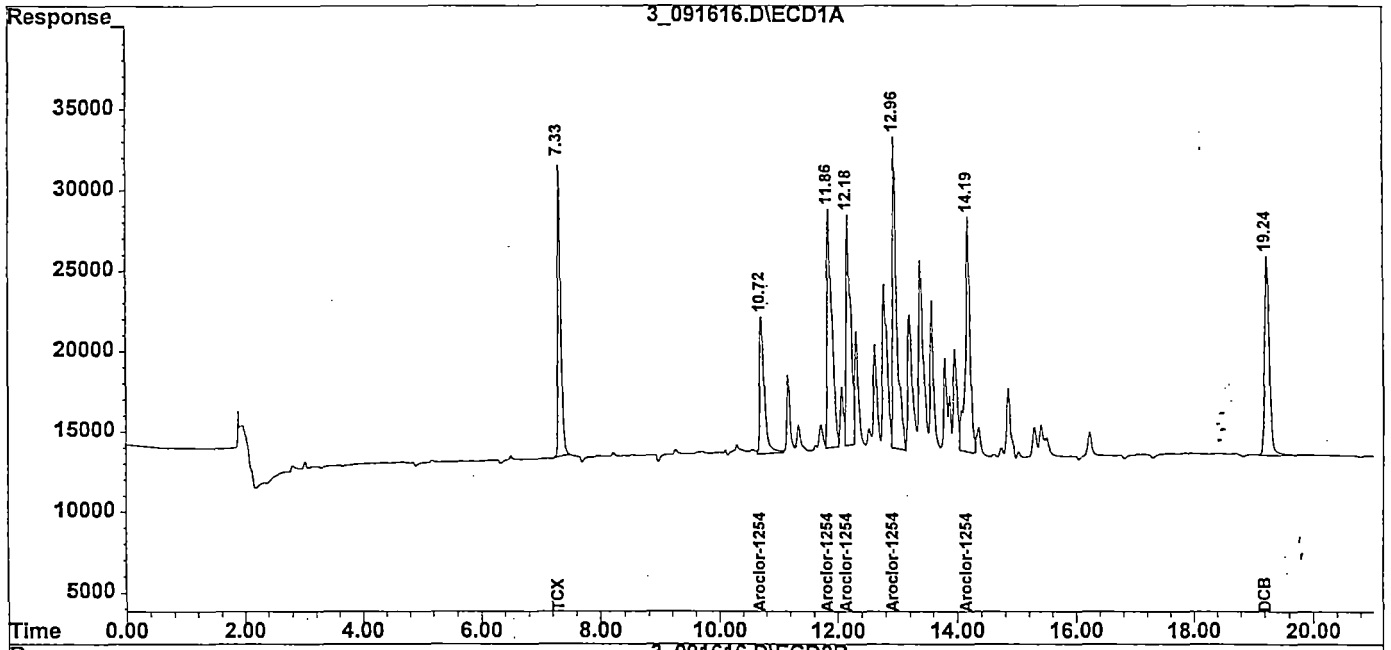
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

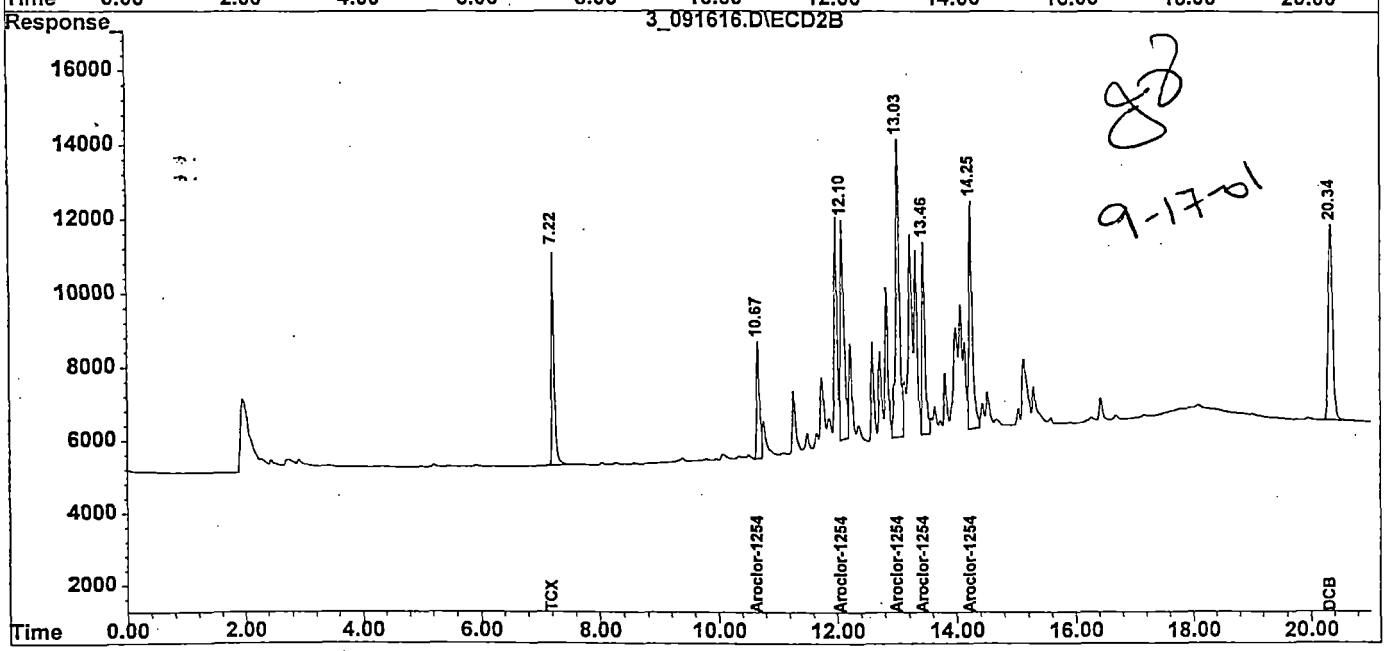
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091616.D\ECD1A.CH Vial: 16
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091616.D\ECD2B.CH
Acq On : 16 Sep 2001 17:20 Operator: DDC
Sample : AR1254L23E Inst : HP_03
Misc : 5-5-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 11:10 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





gd
9-17-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091616.D\ECD1A.CH Vial: 16
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091616.D\ECD2B.CH
Acq On : 16 Sep 2001 17:20 Operator: DDC
Sample : AR1254L23E Inst : HP_03
Misc : 5-5-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 11:10 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.22	622943	182076	16.6	14.3	
22)	S DCB	19.24	20.34	667770	283063	14.9	13.5	
	Target Compounds:							
12)	L6 Aroclor-1254	10.72	10.67	480083	112806	359.2	303.8	
13)	L6 Aroclor-1254 {2}	11.86	12.10	852105	250999	333.3	269.0	
14)	L6 Aroclor-1254 {3}	12.18	13.03	771423	345977	310.9	274.1	
15)	L6 Aroclor-1254 {4}	12.96	13.46	924133	185266	320.6	262.6	
16)	L6 Aroclor-1254 {5}	14.19	14.25	806352	247851	387.9	264.7	#
	Sum Aroclor-1254			3834096	1142900	1711.9	1374.2	
	Average Aroclor-1254					342.389	274.847	

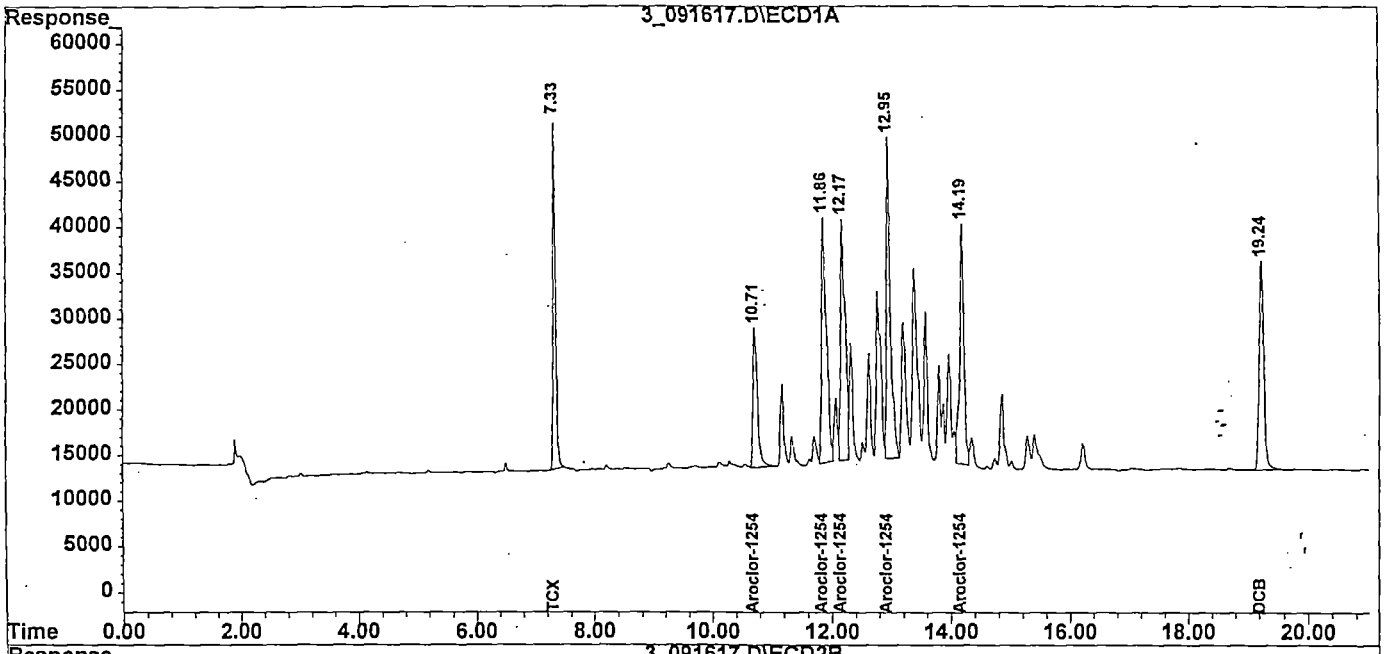
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

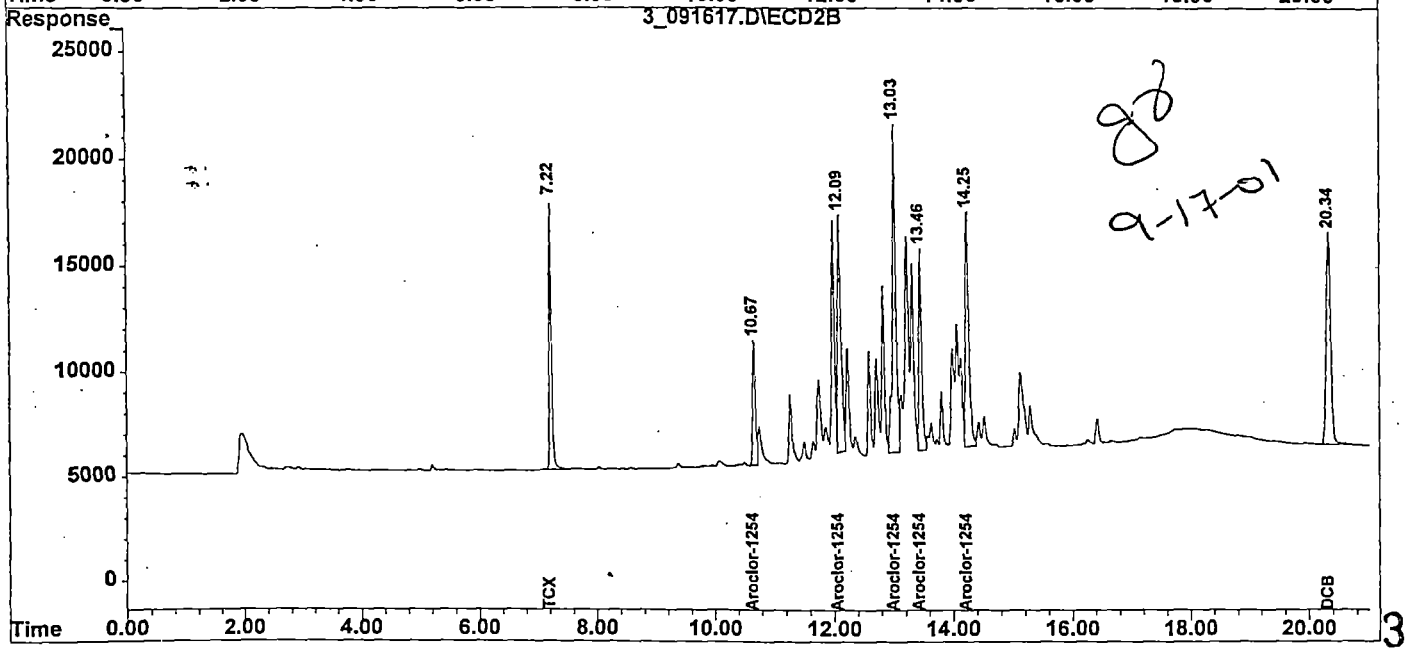
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091617.D\ECD1A.CH Vial: 17
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091617.D\ECD2B.CH
Acq On : 16 Sep 2001 17:46 Operator: DDC
Sample : AR1254L33E Inst : HP_03
Misc : 5-4-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 11:10 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





gb
9-17-01

343

Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091617.D\ECD1A.CH Vial: 17
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091617.D\ECD2B.CH
Acq On : 16 Sep 2001 17:46 Operator: DDC
Sample : AR1254L33E Inst : HP_03
Misc : 5-4-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 11:10 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
S	TCX	7.33	7.22	1199193	359688	32.0	28.2
S	DCB	19.24	20.34	1221907	533828	27.3	25.4
	Target Compounds:						
)	L6 Aroclor-1254	10.72	10.67	820705	199313	614.1	536.7
)	L6 Aroclor-1254 {2}	11.86	12.10	1562917	451684	611.4	484.2
)	L6 Aroclor-1254 {3}	12.18	13.03	1435459	627170	578.5	497.0
)	L6 Aroclor-1254 {4}	12.96	13.46	1601333	330175	555.5	467.9
)	L6 Aroclor-1254 {5}	14.19	14.25	1278474	440134	615.1	470.1
	Sum Aroclor-1254			6698888	2048477	2974.5	2455.8
	verage Aroclor-1254					594.907	491.167

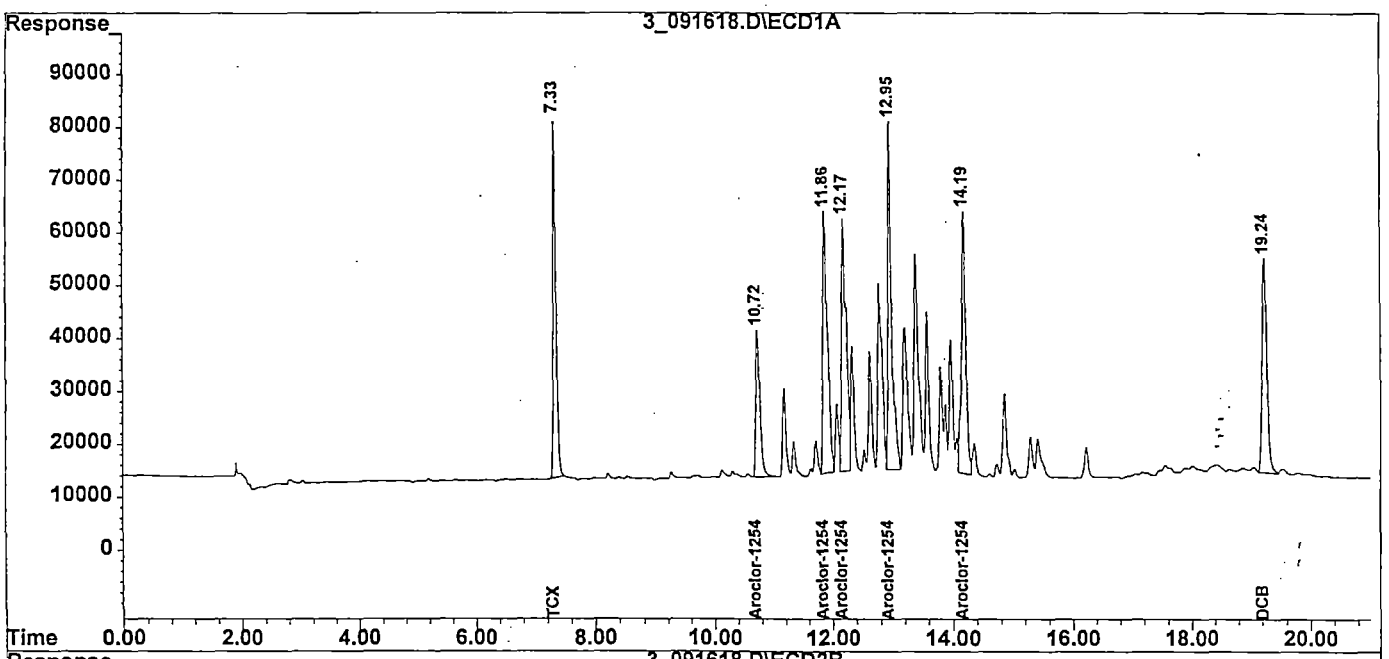
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

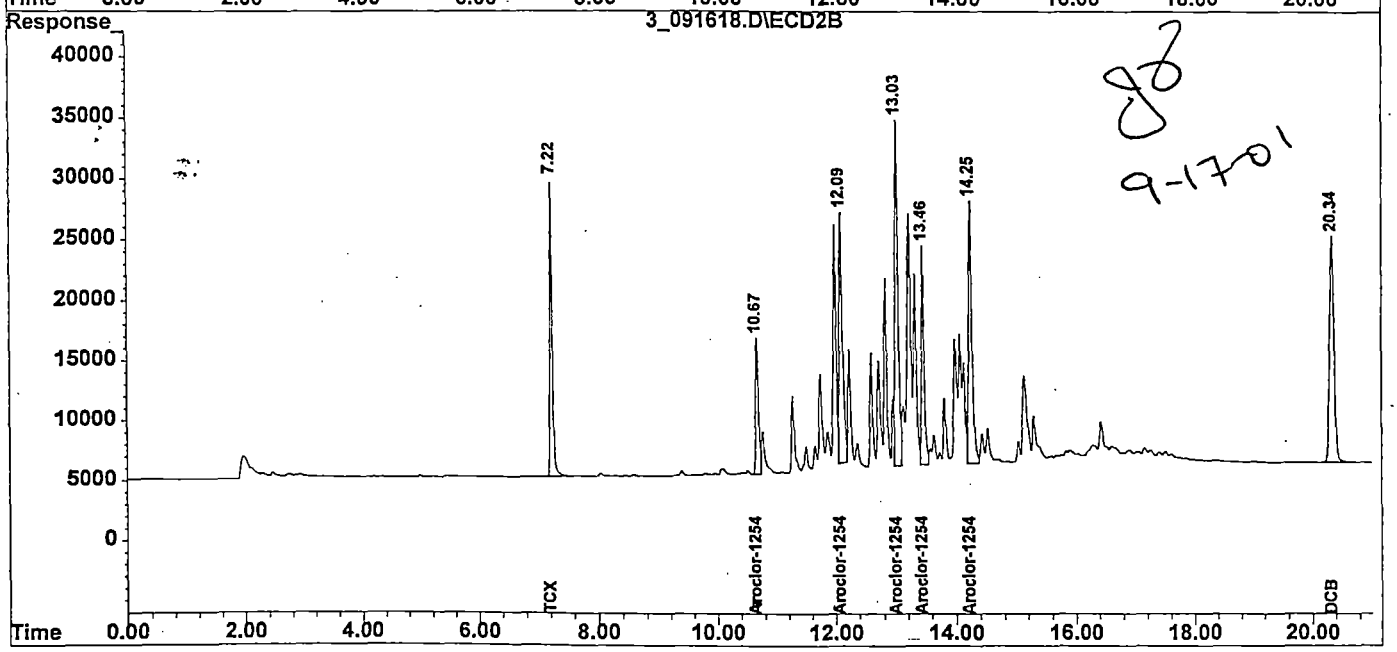
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091618.D\ECD1A.CH Vial: 18
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091618.D\ECD2B.CH
Acq On : 16 Sep 2001 18:11 Operator: DDC
Sample : AR1254L43E Inst : HP_03
Misc : 5-3-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 11:11 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





8
9-17-01

345

Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091618.D\ECD1A.CH Vial: 18
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091618.D\ECD2B.CH
Acq On : 16 Sep 2001 18:11 Operator: DDC
Sample : AR1254L43E Inst : HP_03
Misc : 5-3-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 11:11 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	2255388	700820	60.2	54.9
22)	S DCB	19.25	20.35	2216204	991444	49.6	47.2
	Target Compounds:						
12)	L6 Aroclor-1254	10.72	10.67	1451044	368477	1085.7	992.3
13)	L6 Aroclor-1254 {2}	11.86	12.09	2779878	817675	1087.5	876.5
14)	L6 Aroclor-1254 {3}	12.18	13.03	2537869	1038424	1022.7	822.8
15)	L6 Aroclor-1254 {4}	12.95	13.46	2934040	605425	1017.9	858.0
16)	L6 Aroclor-1254 {5}	14.19	14.25	2346797	833321	1129.0	890.0
	Sum Aroclor-1254			12049627	3663322	5342.8	4439.6
	Average Aroclor-1254					1068.559	887.912

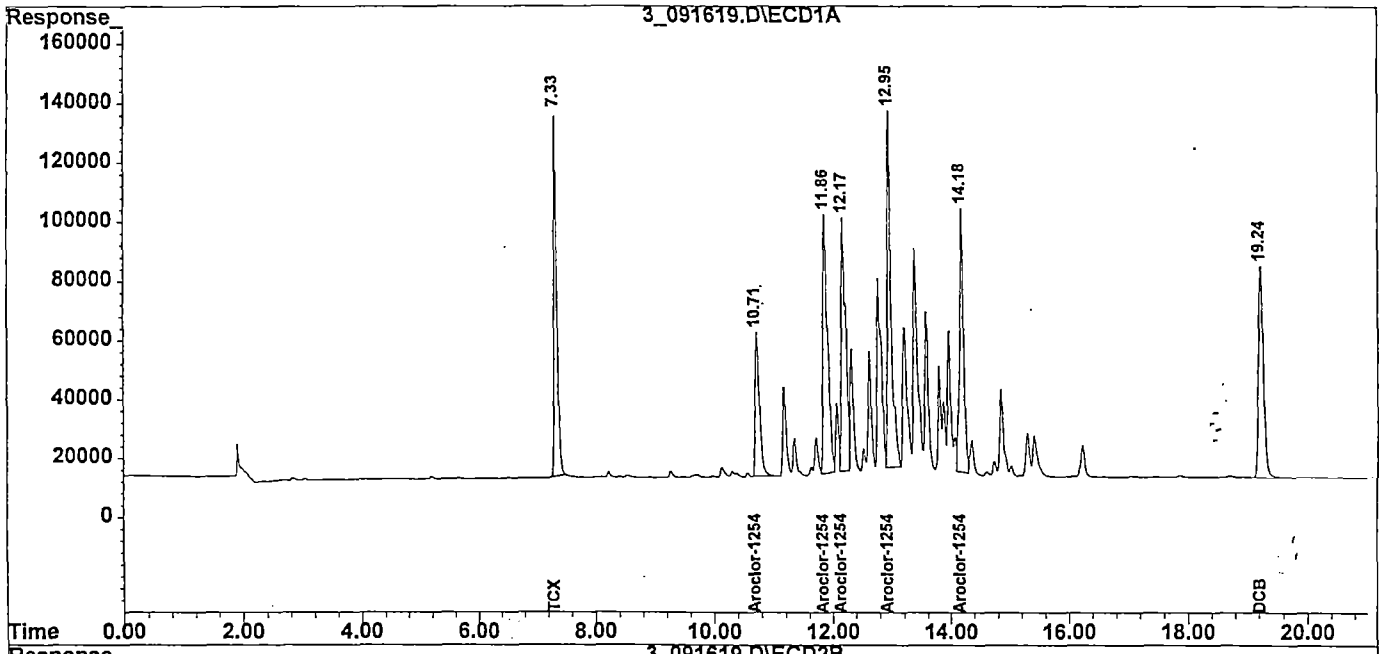
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

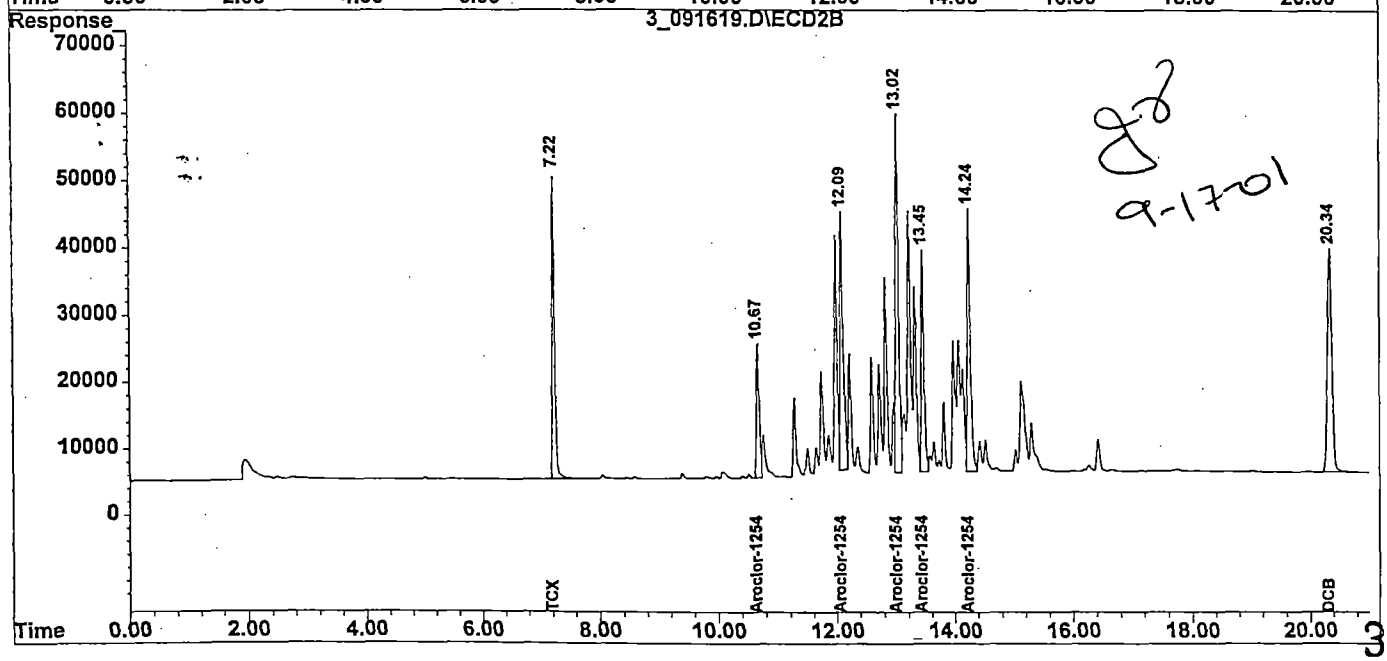
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091619.D\ECD1A.CH Vial: 19
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091619.D\ECD2B.CH
Acq On : 16 Sep 2001 18:37 Operator: DDC
Sample : AR1254L53E Inst : HP_03
Misc : 5-2-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 11:11 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





9-17-01

347

Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091619.D\ECD1A.CH Vial: 19
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091619.D\ECD2B.CH
Acq On : 16 Sep 2001 18:37 Operator: DDC
Sample : AR1254L53E Inst : HP_03
Misc : 5-2-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 11:11 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	4159402	1343579	111.0 E	105.2 E
22)	S DCB	19.24	20.34	4036729	1814523	90.3 E	86.4 E
	Target Compounds:						
12)	L6 Aroclor-1254	10.72	10.67	2497264	644161	1868.5 E	1734.7
13)	L6 Aroclor-1254 {2}	11.86	12.09	4854395	1448366	1899.1	1552.5
14)	L6 Aroclor-1254 {3}	12.17	13.02	4514712	1873541	1819.3 E	1484.5 E
15)	L6 Aroclor-1254 {4}	12.95	13.46	5175198	1086303	1795.4	1539.5 E
16)	L6 Aroclor-1254 {5}	14.18	14.25	4282756	1529194	2060.4	1633.2 E
	Sum Aroclor-1254			21324326	6581565	9442.7	7944.4
	Average Aroclor-1254					1888.530	1588.883

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

Response Factor Report HP_03

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

Calibration Files
L1 =3_091620.D L2 =3_091621.D L3 =3_091622.D
L4 =3_091623.D L5 =3_091624.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
1) TCX	58.0	56.5	56.4	50.9	49.3	54.2 E3	7.13
2) Aroclor-1016	1.6	1.5	1.4	1.2	1.1	1.4 E3	16.27
3) Aroclor-1016 {2}	3.1	2.8	2.6	2.2	2.0	2.5 E3	16.53
4) Aroclor-1016 {3}	5.2	5.2	5.0	4.3	3.9	4.7 E3	12.43
5) Aroclor-1016 {4}	4.5	4.1	3.8	3.2	2.8	3.7 E3	18.31
6) Aroclor-1016 {5}	2.1	2.1	2.1	1.8	1.7	2.0 E3	10.09
17) Aroclor-1260	2.5	2.3	2.2	1.9	1.7	2.1 E3	14.83
18) Aroclor-1260 {2}	4.1	3.5	3.3	2.8	2.6	3.2 E3	18.46
19) Aroclor-1260 {3}	2.3	2.2	2.2	2.0	1.8	2.1 E3	9.78
20) Aroclor-1260 {4}	5.2	5.0	4.8	4.4	4.0	4.7 E3	10.47
21) Aroclor-1260 {5}	3.8	3.8	3.7	3.4	3.1	3.6 E3	8.42
22) DCB	61.8	60.5	57.5	53.0	48.4	56.3 E3	9.89

Signal #2 Calibration Files
L1 =3_091620.D L2 =3_091621.D L3 =3_091622.D
L4 =3_091623.D L5 =3_091624.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
24) TCX #2	16.3	16.3	16.9	15.9	15.7	16.2 E3	3.03
25) Aroclor-1016 #2	412.8	409.4	406.7	361.3	333.5	384.7	9.24
26) Aroclor-1016 {2} #2	999.0	951.0	924.1	811.8	741.0	885.4	11.98
27) Aroclor-1016 {3} #2	1.8	1.8	1.8	1.6	1.5	1.7 E3	8.65
28) Aroclor-1016 {4} #2	799.8	819.8	848.5	767.4	714.5	790.0	6.52
29) Aroclor-1016 {5} #2	553.4	541.0	542.5	498.3	474.5	521.9	6.48
40) Aroclor-1260 #2	1.4	1.4	1.3	1.2	1.0	1.3 E3	13.31
41) Aroclor-1260 {2} #2	921.4	925.8	850.8	745.4	662.9	821.3	13.97
42) Aroclor-1260 {3} #2	1.1	1.1	1.1	1.1	1.0	1.1 E3	7.07
43) Aroclor-1260 {4} #2	1.2	1.1	1.1	1.1	1.0	1.1 E3	6.16
44) Aroclor-1260 {5} #2	779.7	805.5	800.3	775.3	741.1	780.4	3.27
45) DCB #2	26.2	25.8	25.5	23.5	21.6	24.5 E3	7.95

(#) = Out of Range

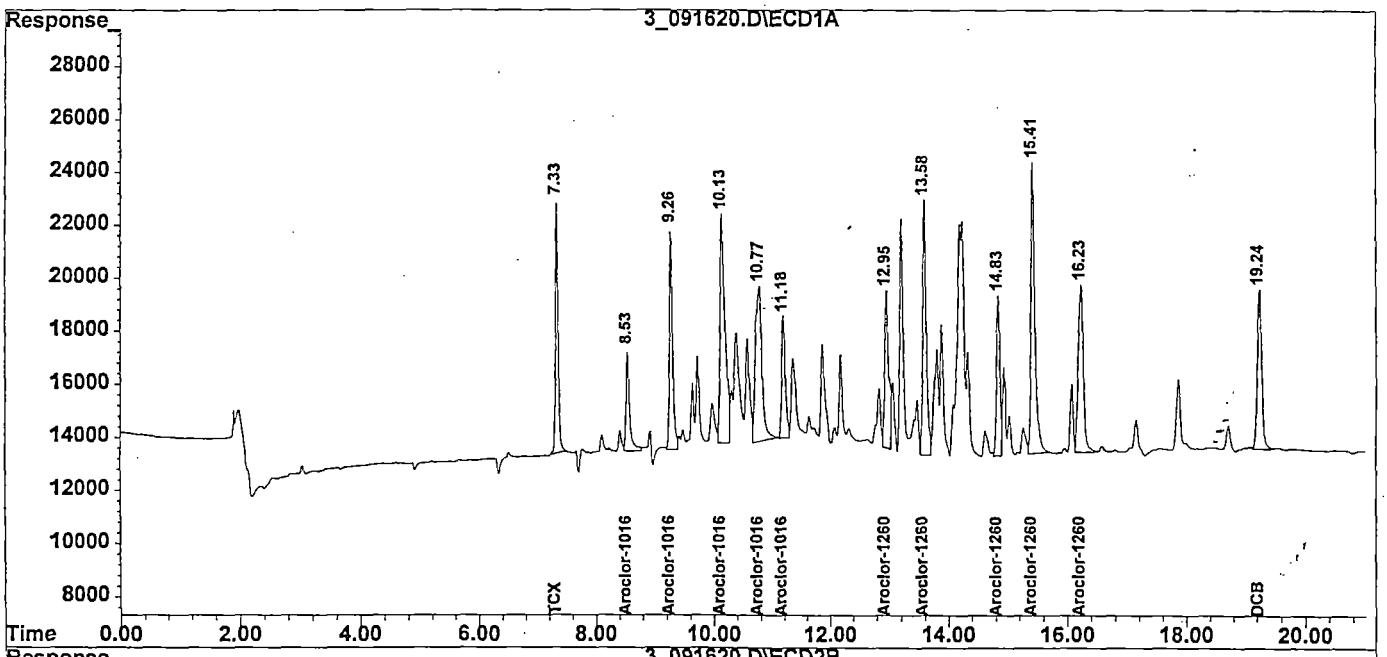
XPCBI16.M Mon Sep 17 15:32:24 2001

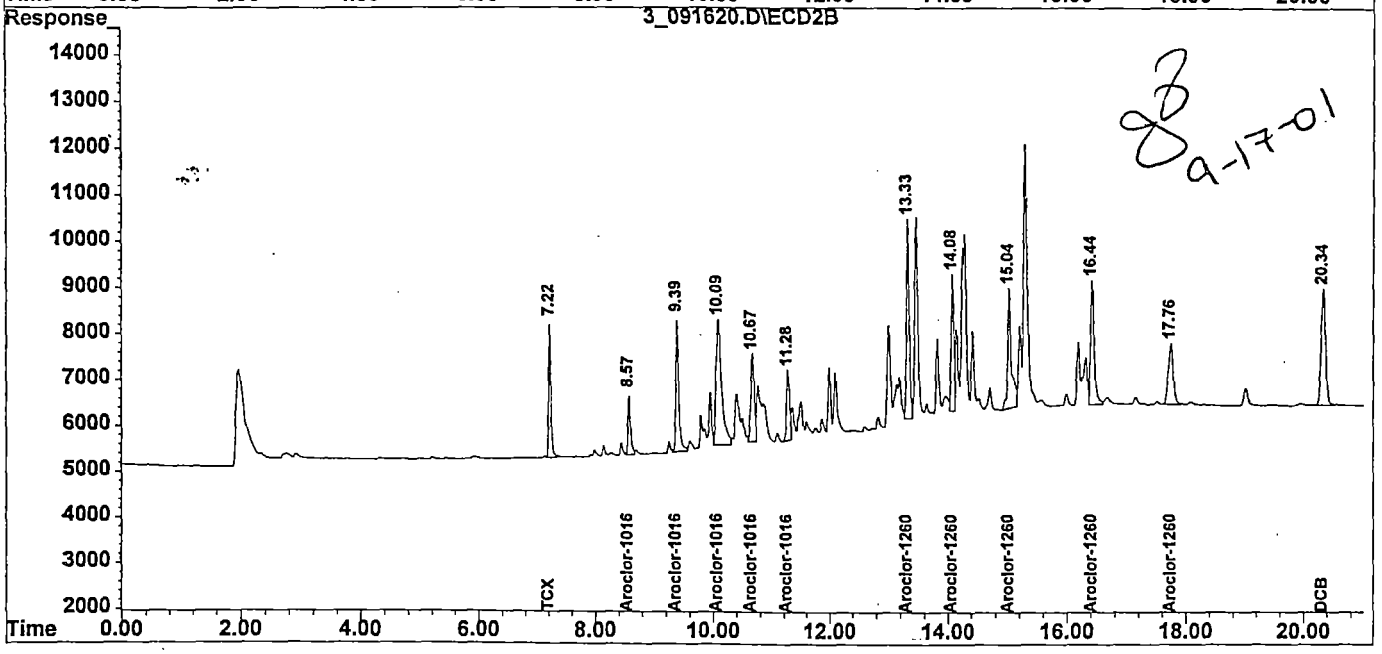
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091620.D\ECD1A.CH Vial: 20
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091620.D\ECD2B.CH
Acq On : 16 Sep 2001 19:02 Operator: DDC
Sample : AR1660L13E Inst : HP_03
Misc : 5-212-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 15:26 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





9-17-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091620.D\ECD1A.CH Vial: 20
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091620.D\ECD2B.CH
Acq On : 16 Sep 2001 19:02 Operator: DDC
Sample : AR1660L13E Inst : HP_03
Misc : 5-212-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 15:26 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

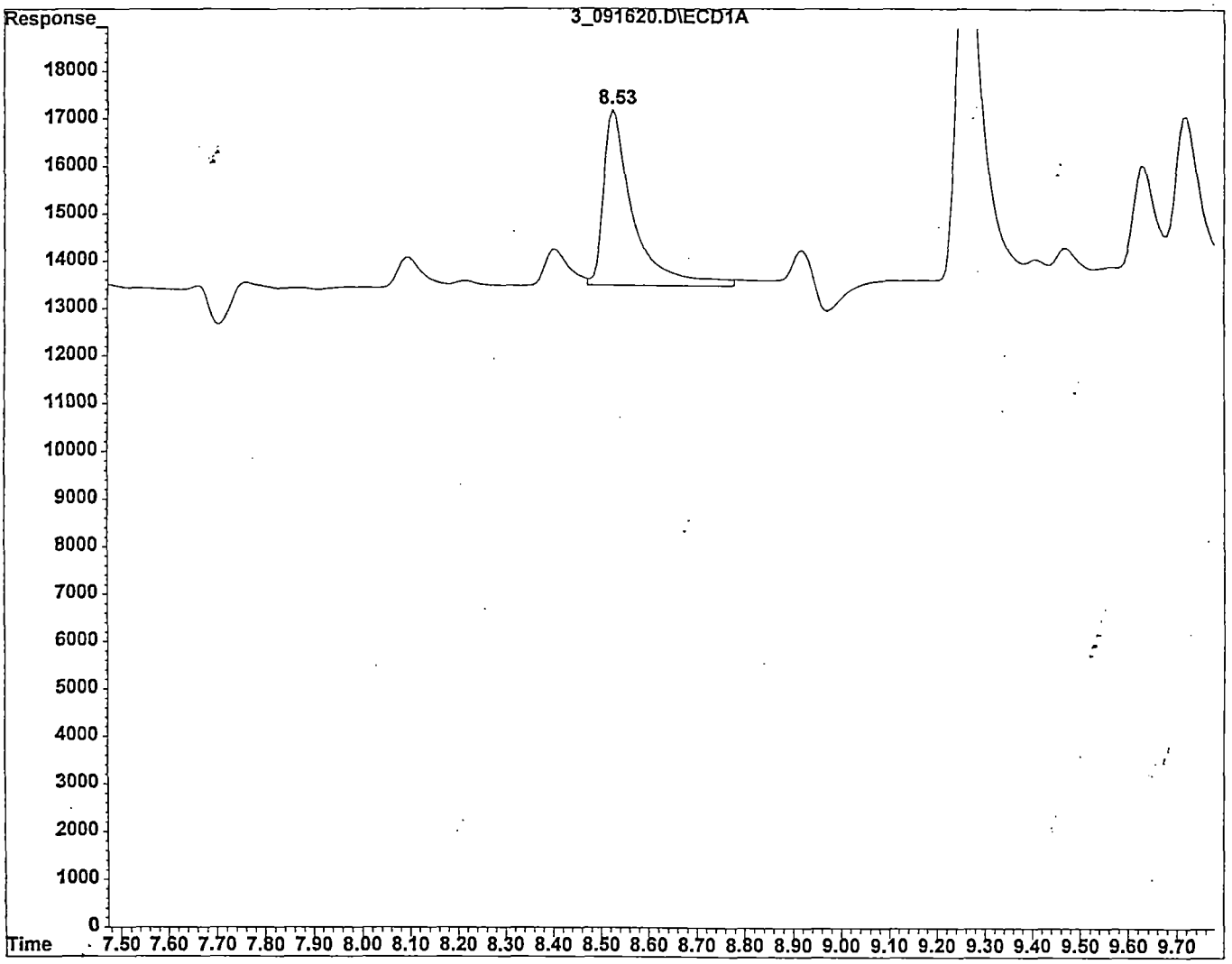
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	290000	81308	5.333	5.017
22)	S DCB	19.24	20.34	309189	131064	5.496	5.348
	Target Compounds:						
2)	L1 Aroclor-1016	8.53	8.57	159380	41277	64.2m BTB	56.4
3)	L1 Aroclor-1016 {2}	9.26	9.39	305852	99899	121.7m 091701	112.9
4)	L1 Aroclor-1016 {3}	10.13	10.09	516088	179396	134.6m	180.4m #BTB
5)	L1 Aroclor-1016 {4}	10.77	10.67	454234	79976	214.6	107.3m # 091701
6)	L1 Aroclor-1016 {5}	11.18	11.28	208624	55341	71.4m	45.3 #
	Sum Aroclor-1016			1644178	455889	606.5	502.3
	Average Aroclor-1016					121.297	100.465
17)	L7 Aroclor-1260	12.96	13.33	254520	139000	119.2	111.7m
18)	L7 Aroclor-1260 {2}	13.58	14.08	408700	92136	125.1m	109.4m
19)	L7 Aroclor-1260 {3}	14.84	15.04	227429	114669	109.5	106.2
20)	L7 Aroclor-1260 {4}	15.42	16.44	522946	116683	111.9	105.4
21)	L7 Aroclor-1260 {5}	16.23	17.77	384221	77966	107.9	99.9
	Sum Aroclor-1260			1797816	540454	573.6	532.6
	Average Aroclor-1260					114.722	106.522

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091620.D
Date Acquired: 16 Sep 2001 19:02
Inst: HP_03 Operator ID: DDC
Name: AR1660L13E
Misc: 5-212-7
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 15:26 2001 Quant Results File: XPCBI16.RES



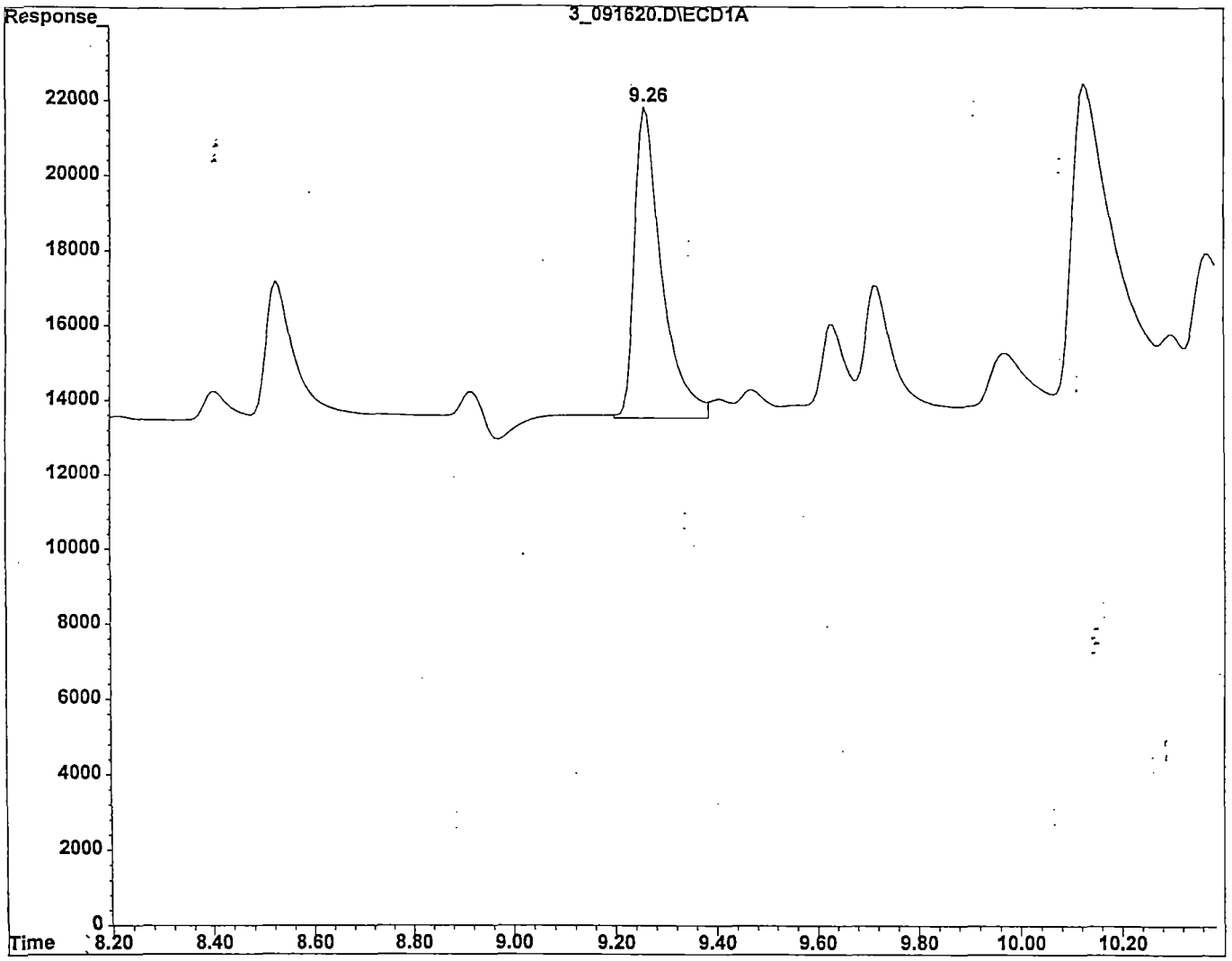
Aroclor-1016 8.53min area: 159380 m

Integration Time Range: 8.47 - 8.78 BTB 091701

F:\HPCHEM\HP\3\DATA\09_16_01\3_091620.D
Report generated: Mon Sep 17 15:34:01 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091620.D
Date Acquired: 16 Sep 2001 19:02
Inst: HP_03 Operator ID: DDC
Name: AR1660L13E
Misc: 5-212-7
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 15:26 2001 Quant Results File: XPCBI16.RES



Aroclor-1016 {2} 9.26min area: 305852 m

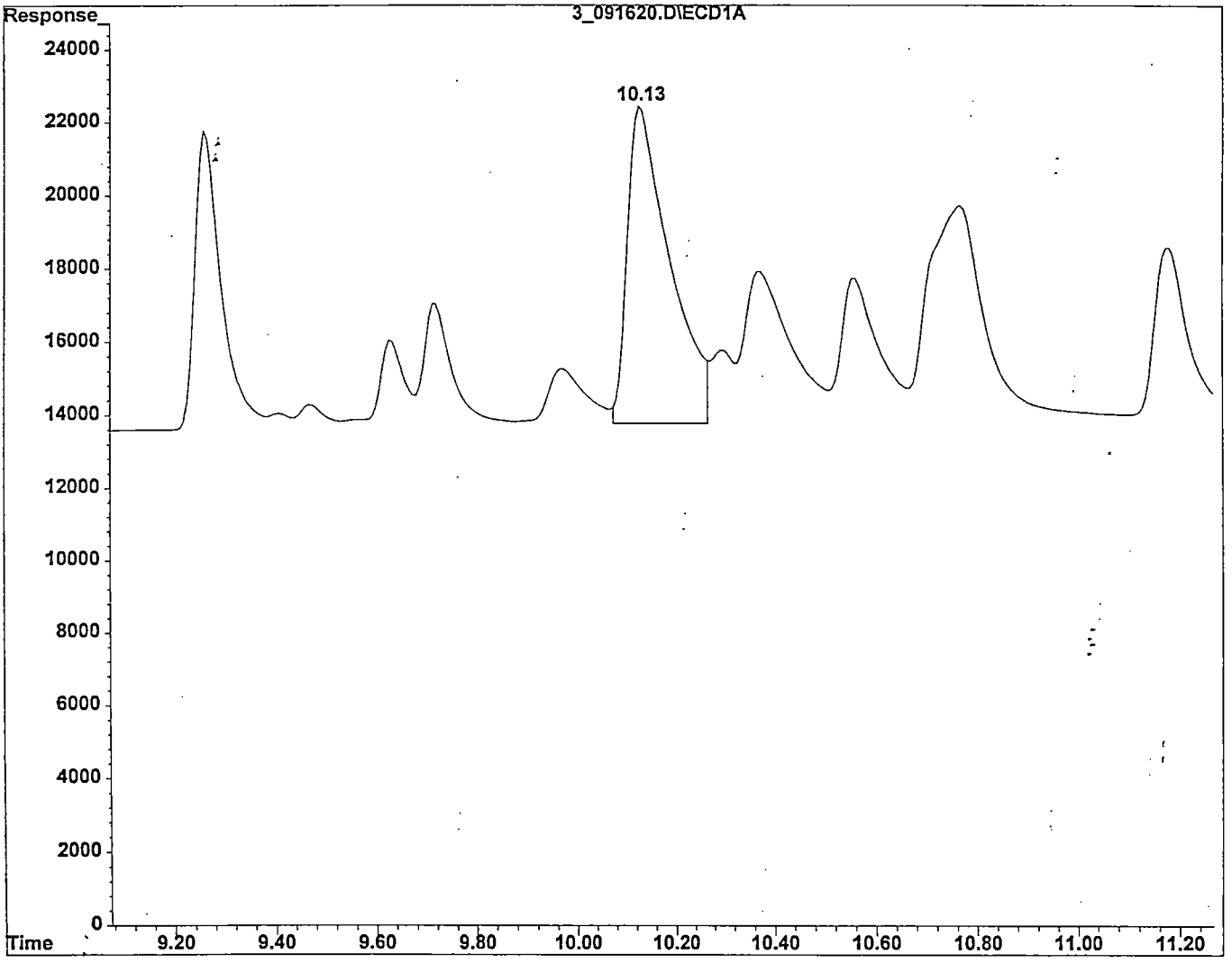
Integration Time Range: 9.20 - 9.39

BTB
091701

F:\HPCHEM\HP\3\DATA\09_16_01\3_091620.D
Report generated: Mon Sep 17 15:34:02 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091620.D
Date Acquired: 16 Sep 2001 19:02
Inst: HP_03 Operator ID: DDC
Name: AR1660L13E
Misc: 5-212-7
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 15:26 2001 Quant Results File: XPCBI16.RES



Aroclor-1016 {3} 10.13min area: 516088 m

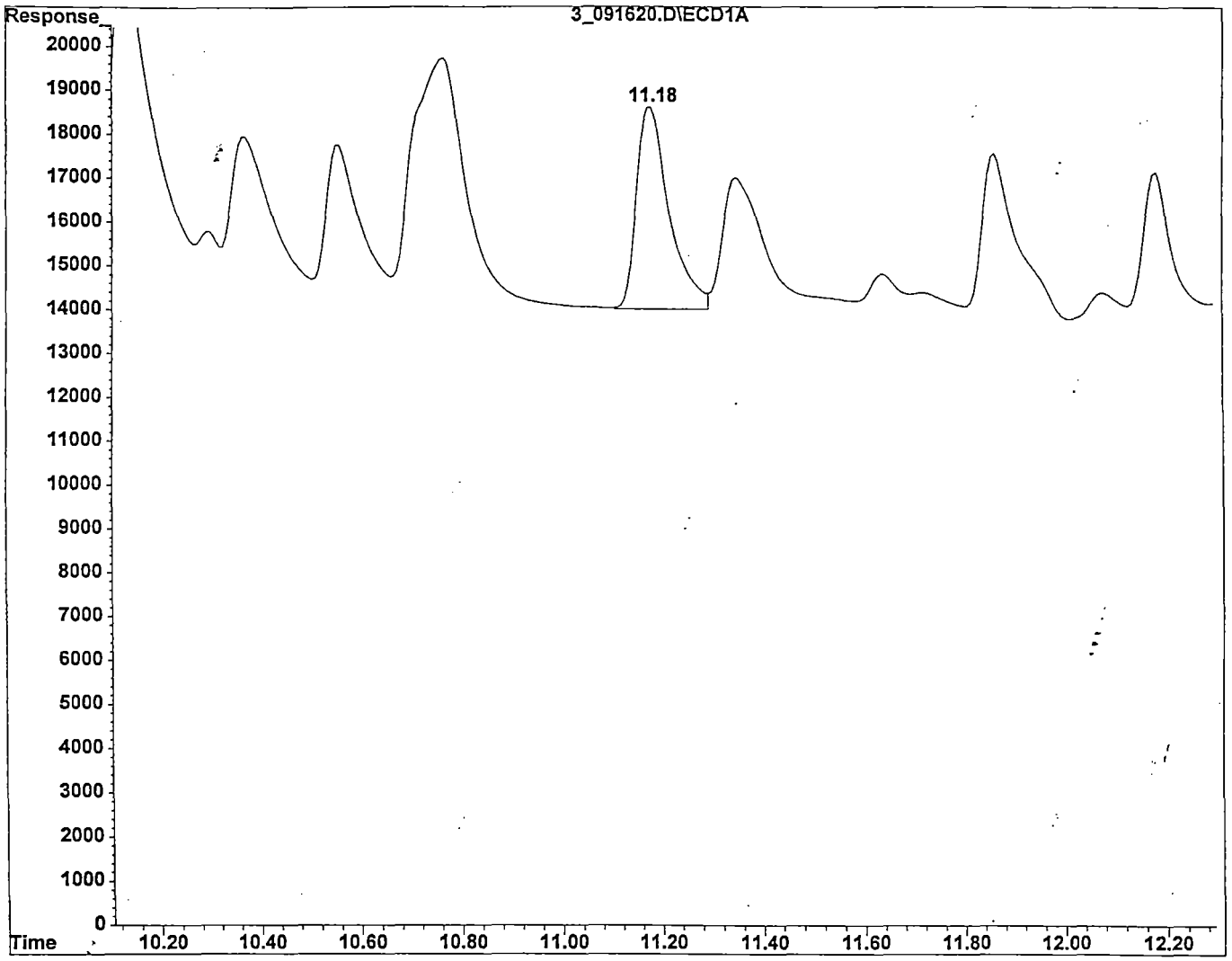
Integration Time Range: 10.07 - 10.27

BTB
091701

F:\HPCHEM\HP\3\DATA\09_16_01\3_091620.D
Report generated: Mon Sep 17 15:34:02 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091620.D
Date Acquired: 16 Sep 2001 19:02
Inst: HP_03 Operator ID: DDC
Name: AR1660L13E
Misc: 5-212-7
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 15:26 2001 Quant Results File: XPCBI16.RES



Aroclor-1016 {5} 11.18min area: 208624 m

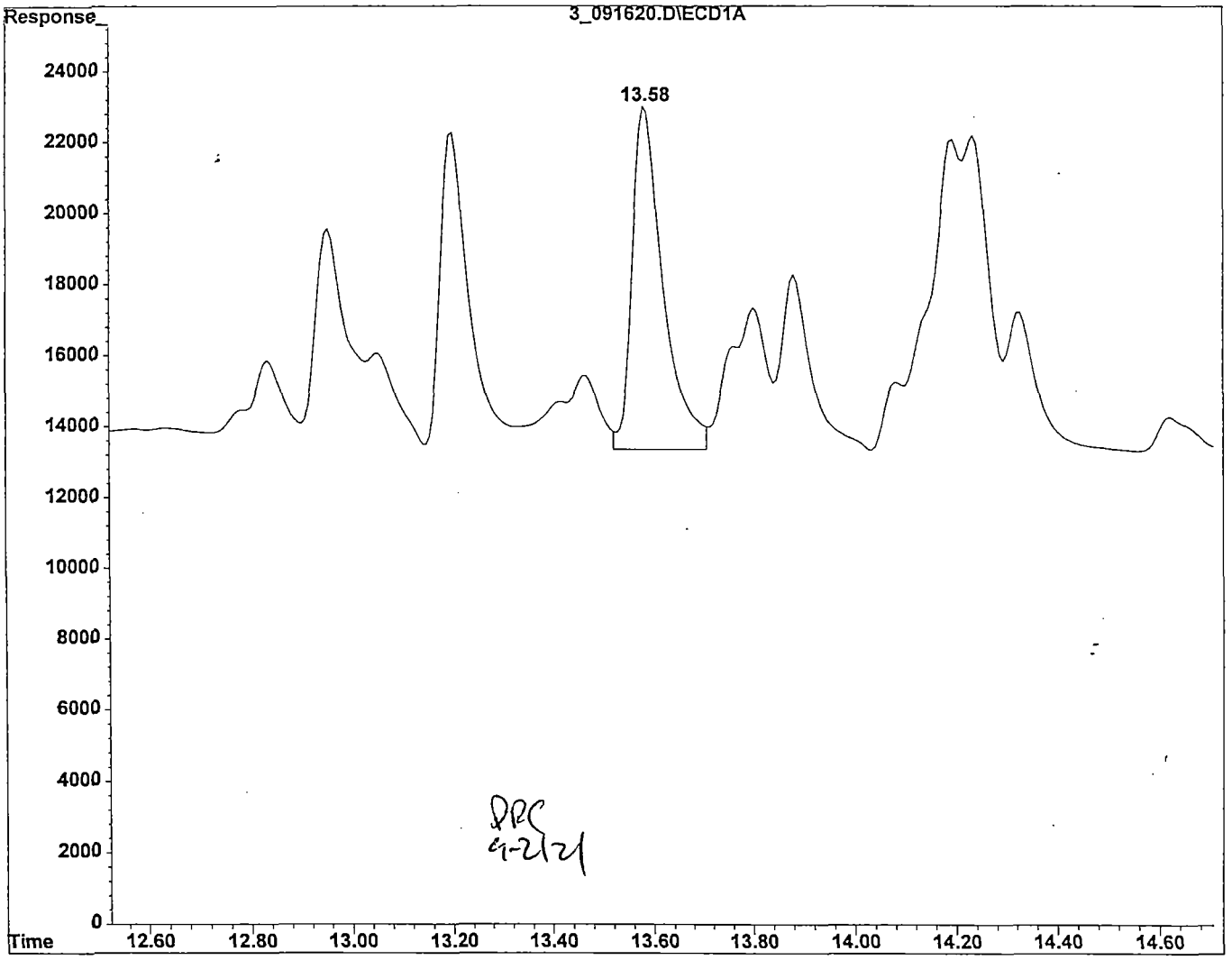
Integration Time Range: 11.11 - 11.29

BTB
091701

F:\HPCHEM\HP\3\DATA\09_16_01\3_091620.D
Report generated: Mon Sep 17 15:34:03 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091620.D
Date Acquired: 16 Sep 2001 19:02
Inst: HP_03 Operator ID: DDC
Name: AR1660L13E
Misc: 5-212-7
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 15:26 2001 Quant Results File: XPCBI16.RES



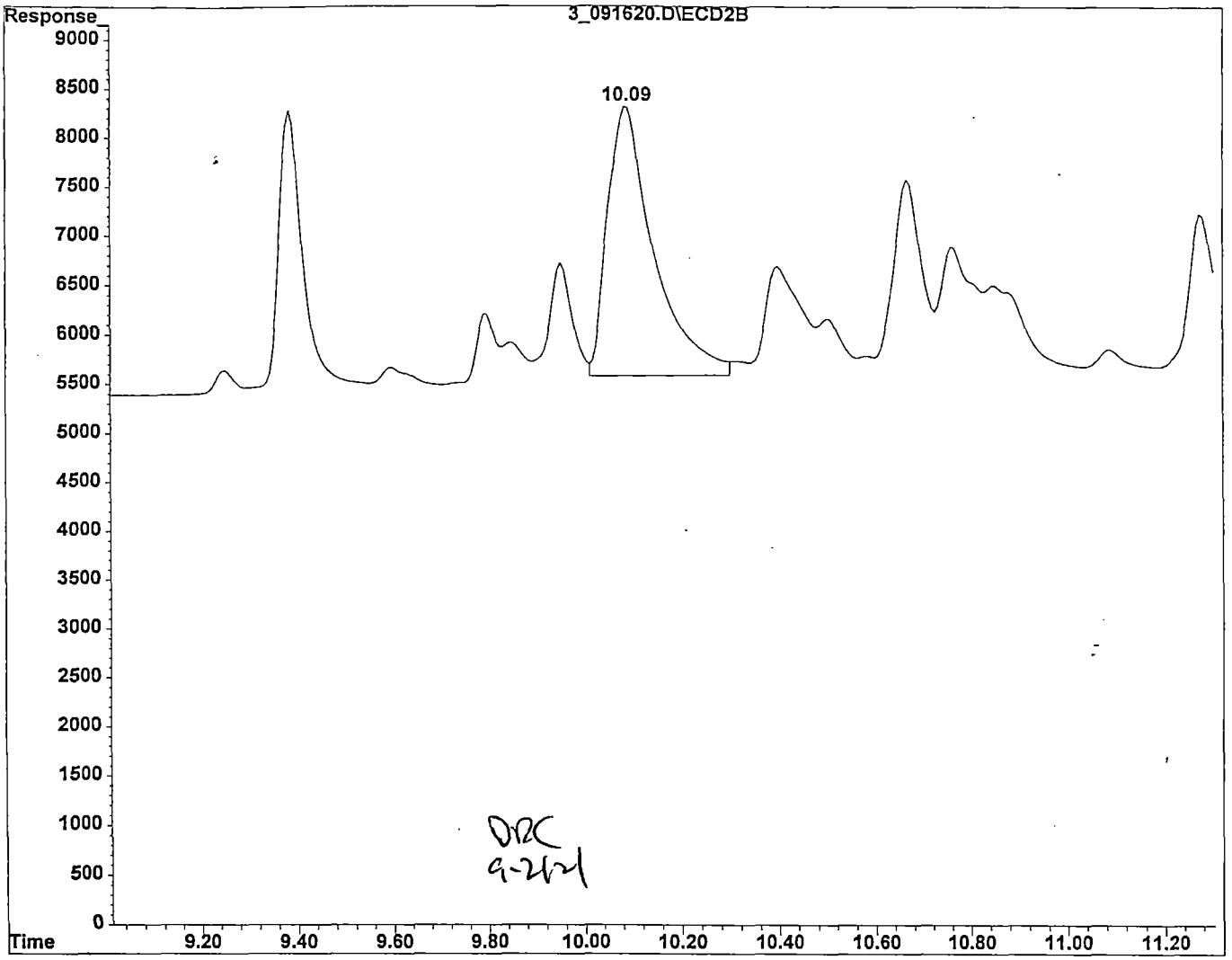
Aroclor-1260 {2} 13.58min area: 408700 m

Integration Time Range: 13.52 - 13.70

F:\HPCHEM\HP\3\DATA\09_16_01\3_091620.D
Report generated: Fri Sep 21 08:54:39 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091620.D
Date Acquired: 16 Sep 2001 19:02
Inst: HP_03 Operator ID: DDC
Name: AR1660L13E
Misc: 5-212-7
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 15:26 2001 Quant Results File: XPCBI16.RES



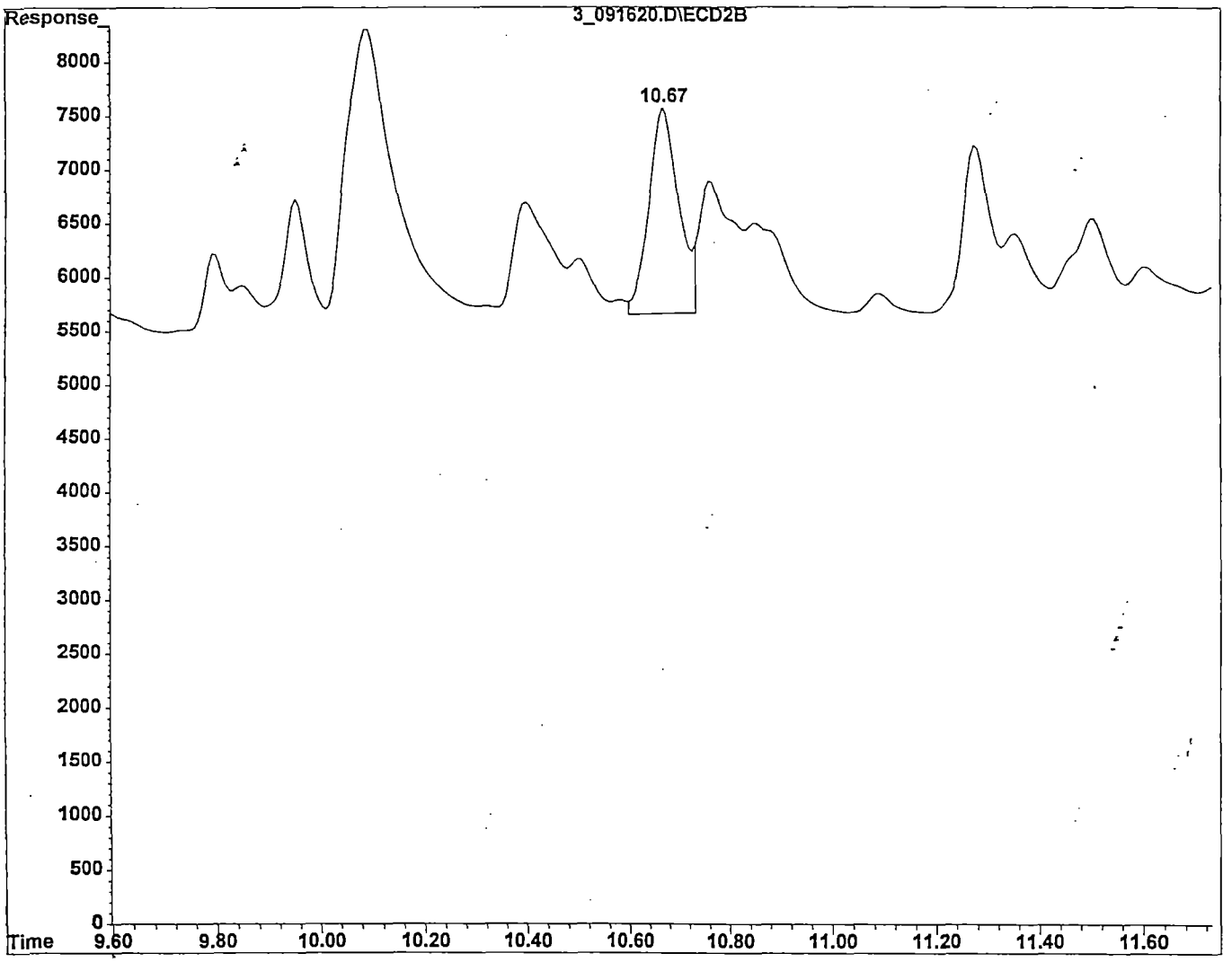
Aroclor-1016 {3} #2 10.09min area: 179396 m

Integration Time Range: 10.01 - 10.30

F:\HPCHEM\HP\3\DATA\09_16_01\3_091620.D
Report generated: Fri Sep 21 08:54:39 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091620.D
Date Acquired: 16 Sep 2001 19:02
Inst: HP_03 Operator ID: DDC
Name: AR1660L13E
Misc: 5-212-7
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 15:26 2001 Quant Results File: XPCBI16.RES



Aroclor-1016 {4} #2 10.67min area: 79976 m

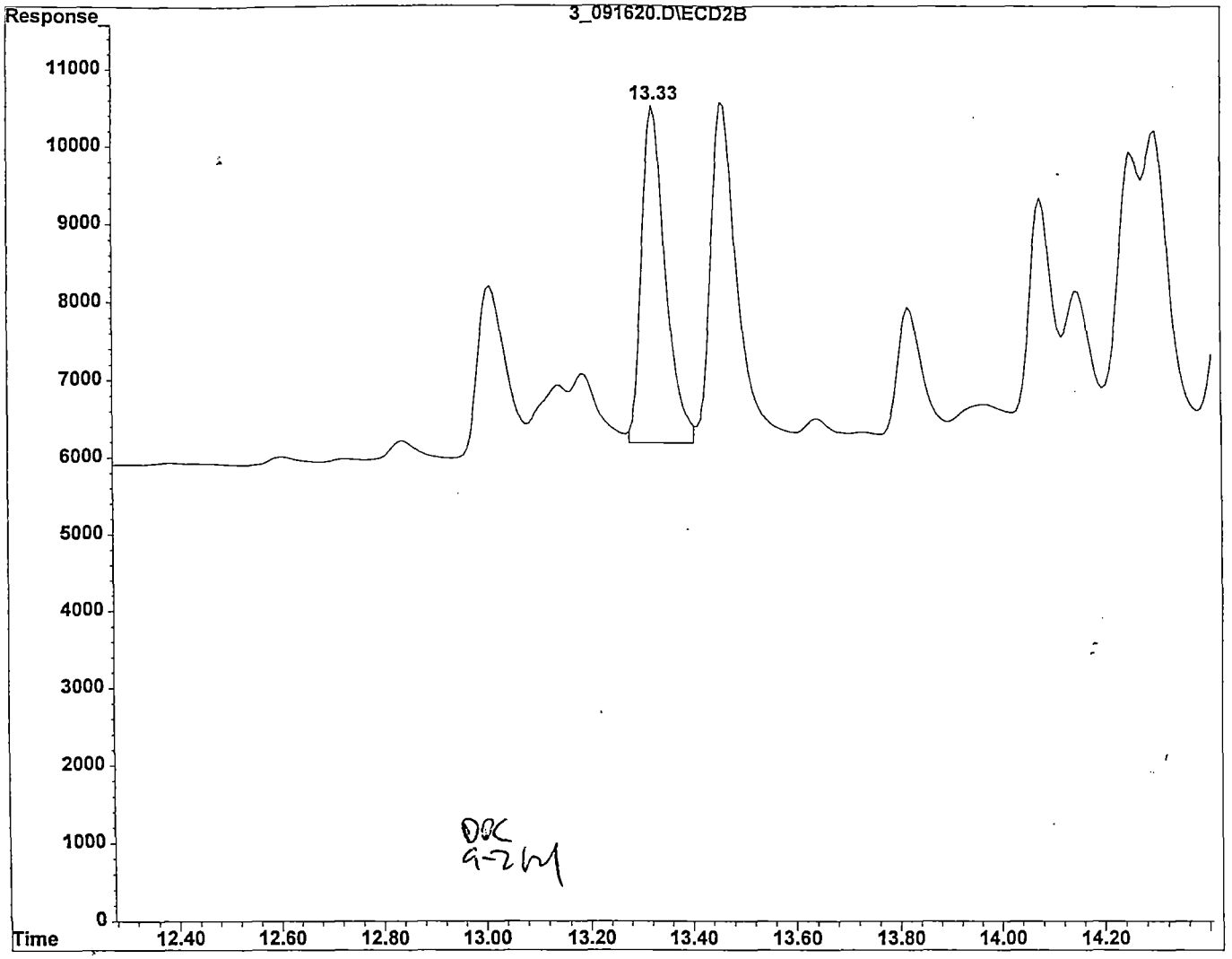
Integration Time Range: 10.60 - 10.73

BTB
091701

F:\HPCHEM\HP\3\DATA\09_16_01\3_091620.D
Report generated: Mon Sep 17 15:34:04 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091620.D
Date Acquired: 16 Sep 2001 19:02
Inst: HP_03 Operator ID: DDC
Name: AR1660L13E
Misc: 5-212-7
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 15:26 2001 Quant Results File: XPCBI16.RES



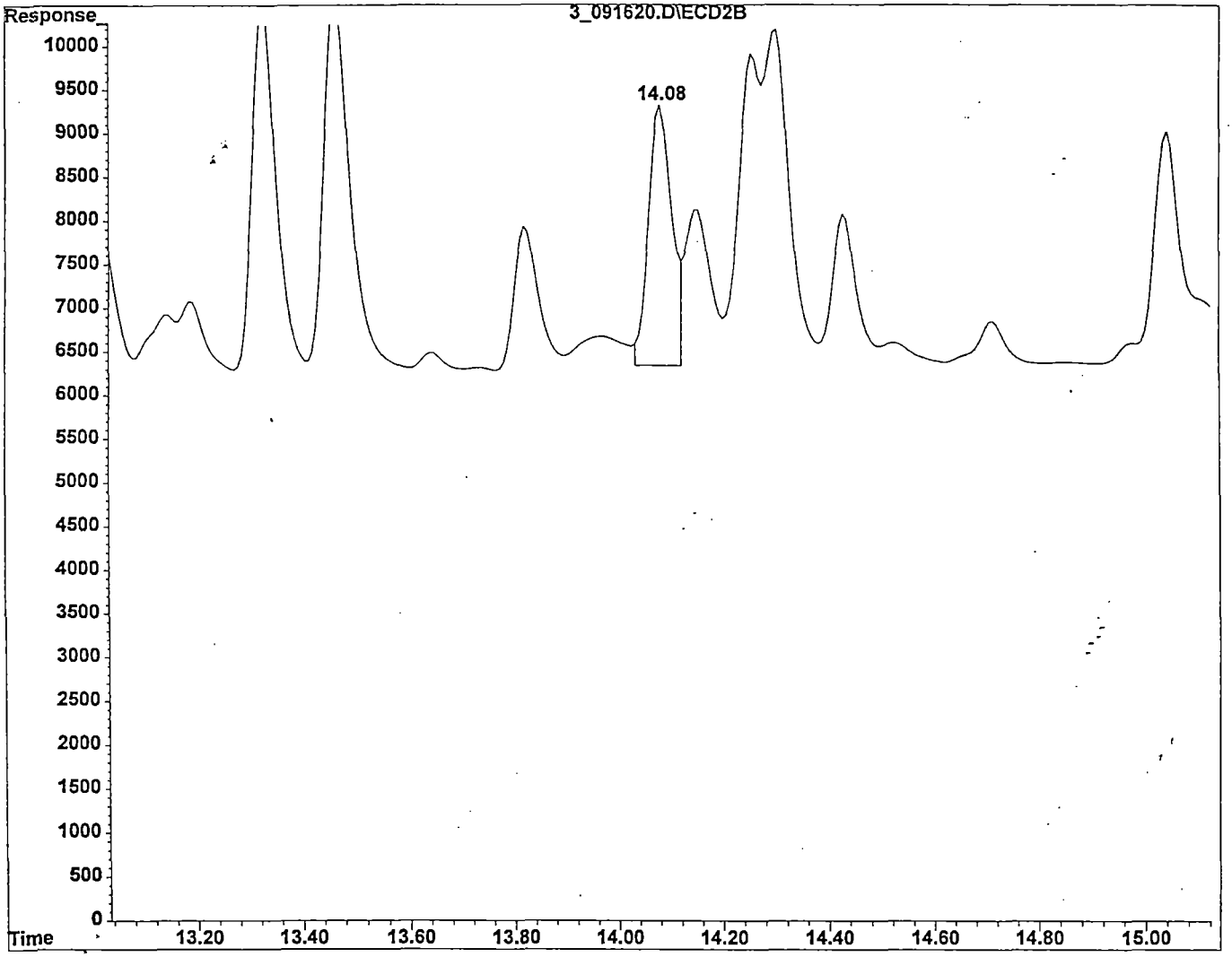
Aroclor-1260 #2 13.33min area: 139000 m

Integration Time Range: 13.28 - 13.41

F:\HPCHEM\HP\3\DATA\09_16_01\3_091620.D
Report generated: Fri Sep 21 08:54:40 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091620.D
Date Acquired: 16 Sep 2001 19:02
Inst: HP_03 Operator ID: DDC
Name: AR1660L13E
Misc: 5-212-7
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 15:26 2001 Quant Results File: XPCBI16.RES



Aroclor-1260 {2} #2 14.08min area: 92136 m

Integration Time Range: 14.03 - 14.12

BTB
091701

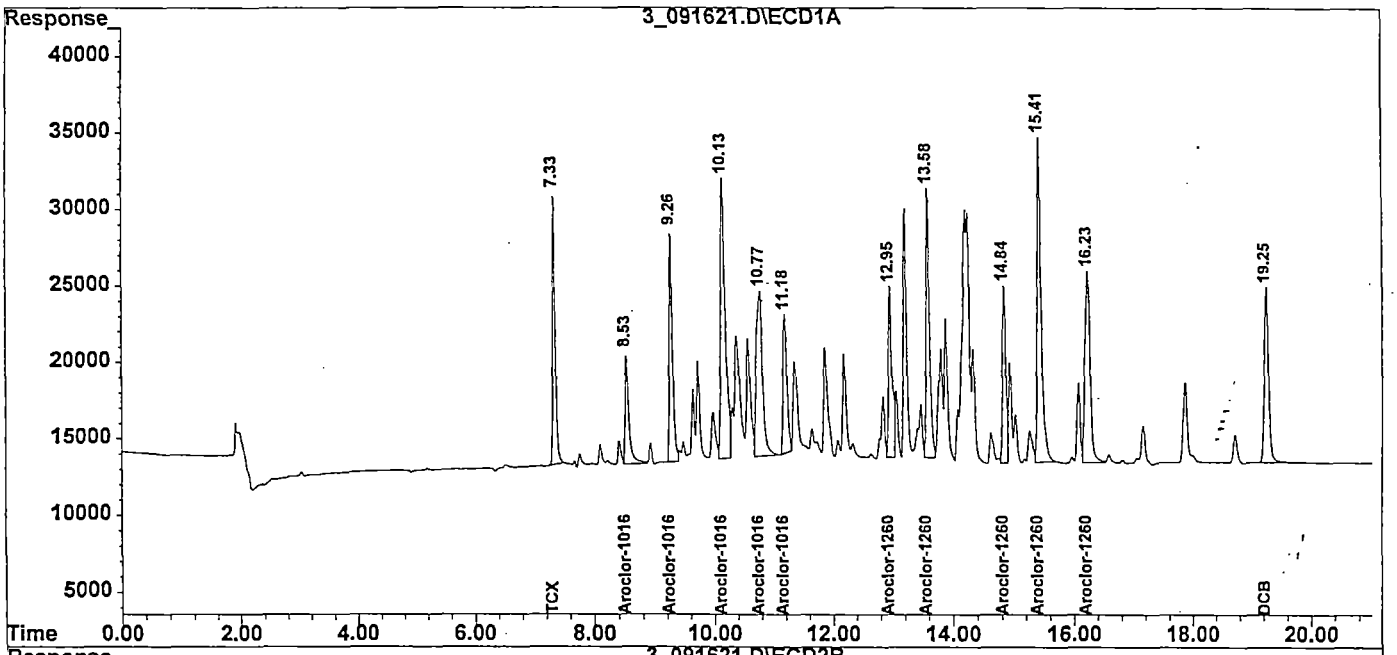
F:\HPCHEM\HP\3\DATA\09_16_01\3_091620.D
Report generated: Mon Sep 17 15:34:06 2001

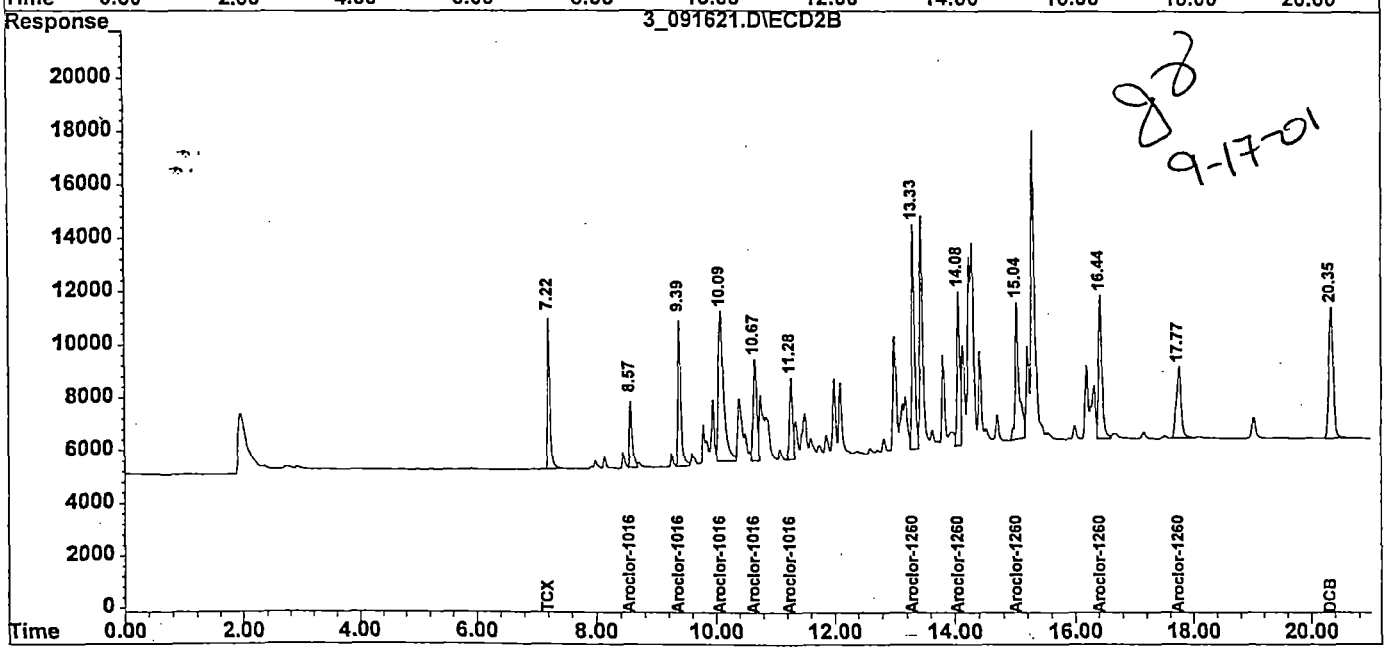
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091621.D\ECD1A.CH Vial: 21
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091621.D\ECD2B.CH
Acq On : 16 Sep 2001 19:28 Operator: DDC
Sample : AR1660L23E Inst : HP_03
Misc : 5-211-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 15:27 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





8 9-17-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091621.D\ECD1A.CH Vial: 21
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091621.D\ECD2B.CH
Acq On : 16 Sep 2001 19:28 Operator: DDC
Sample : AR1660L23E Inst : HP_03
Misc : 5-211-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 15:27 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

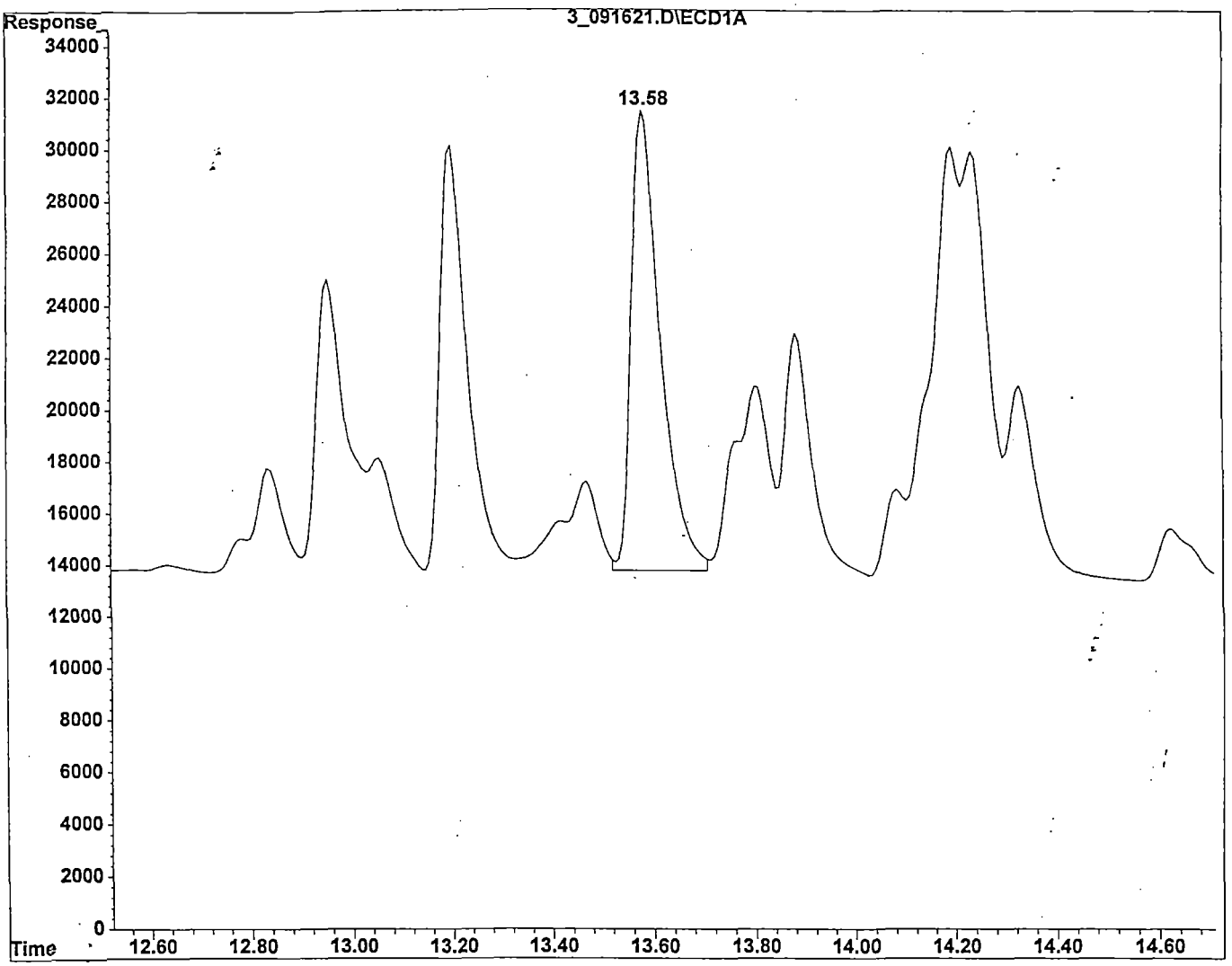
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	564921	162974	10.4	10.1
22)	S DCB	19.25	20.35	605323	257961	10.8	10.5
	Target Compounds:						
2)	L1 Aroclor-1016	8.53	8.57	306556	81881	110.8	112.1
3)	L1 Aroclor-1016 {2}	9.26	9.39	555672	190191	202.0	214.8
4)	L1 Aroclor-1016 {3}	10.13	10.09	1042026	355972	268.6	354.4m # BTB
5)	L1 Aroclor-1016 {4}	10.77	10.67	818173	163964	374.0	221.9m # 09/17/01
6)	L1 Aroclor-1016 {5}	11.18	11.28	424579	108194	146.1	89.1 # ↓
	Sum Aroclor-1016			3147007	900202	1101.5	992.4
	Average Aroclor-1016					220.307	198.485
17)	L7 Aroclor-1260	12.96	13.33	460358	282599	215.6	222.7
18)	L7 Aroclor-1260 {2}	13.58	14.08	696824	185170	223.6m BTB	221.0
19)	L7 Aroclor-1260 {3}	14.84	15.04	444019	227966	213.7 09/17/01	211.2
20)	L7 Aroclor-1260 {4}	15.42	16.44	998728	229845	213.6	207.6
21)	L7 Aroclor-1260 {5}	16.23	17.77	753912	161109	211.8	206.5
	Sum Aroclor-1260			3353841	1086689	1078.3	1068.9
	Average Aroclor-1260					215.663	213.778

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091621.D
Date Acquired: 16 Sep 2001 19:28
Inst: HP_03 Operator ID: DDC
Name: AR1660L23E
Misc: 5-211-7
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 15:27 2001 Quant Results File: XPCBI16.RES



Aroclor-1260 {2} 13.58min area: 696824 m

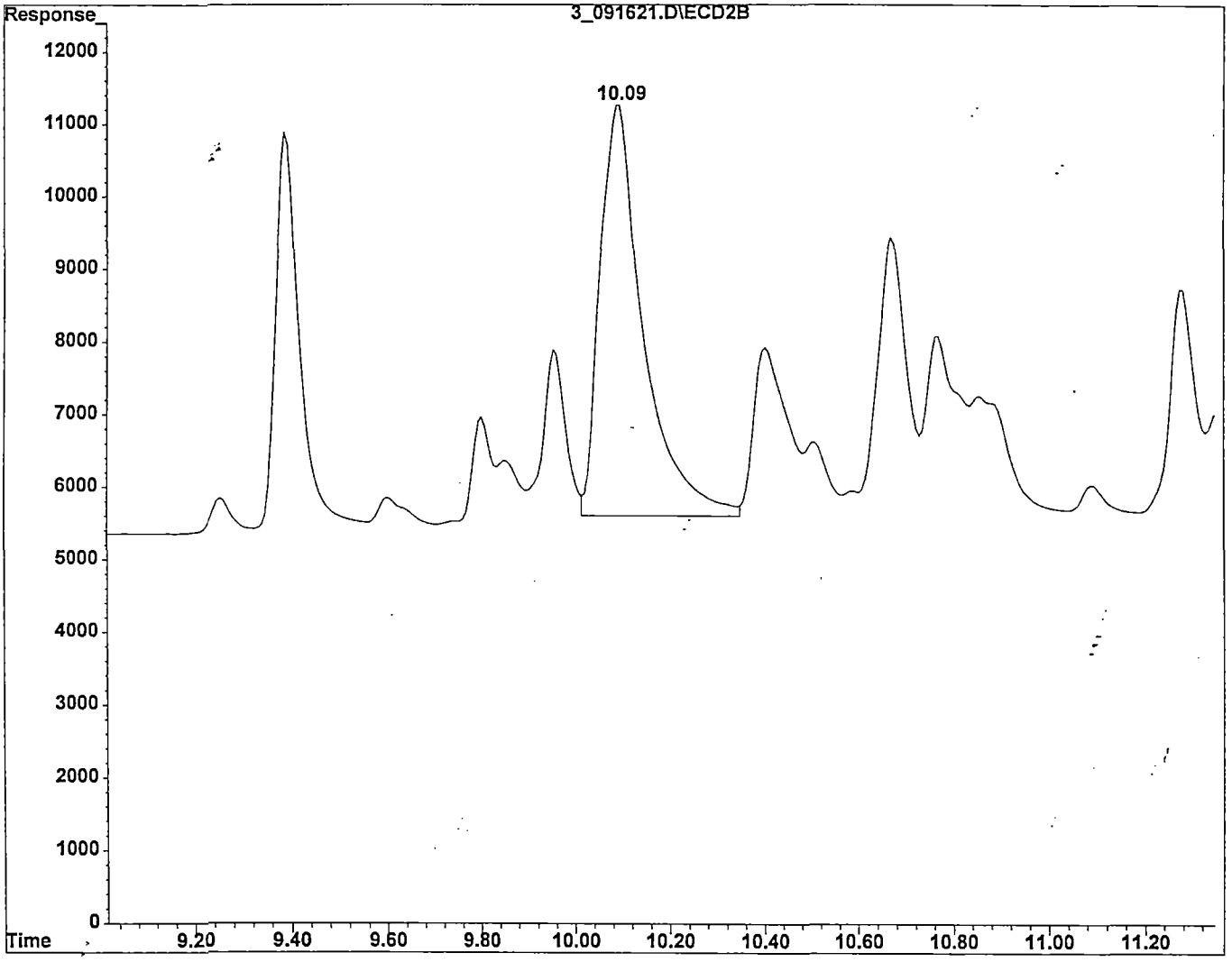
Integration Time Range: 13.52 - 13.71

BTB
091701

F:\HPCHEM\HP\3\DATA\09_16_01\3_091621.D
Report generated: Mon Sep 17 15:34:07 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091621.D
Date Acquired: 16 Sep 2001 19:28
Inst: HP_03 Operator ID: DDC
Name: AR1660L23E
Misc: 5-211-7
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 15:27 2001 Quant Results File: XPCBI16.RES



Aroclor-1016 {3} #2 10.09min area: 355972 m

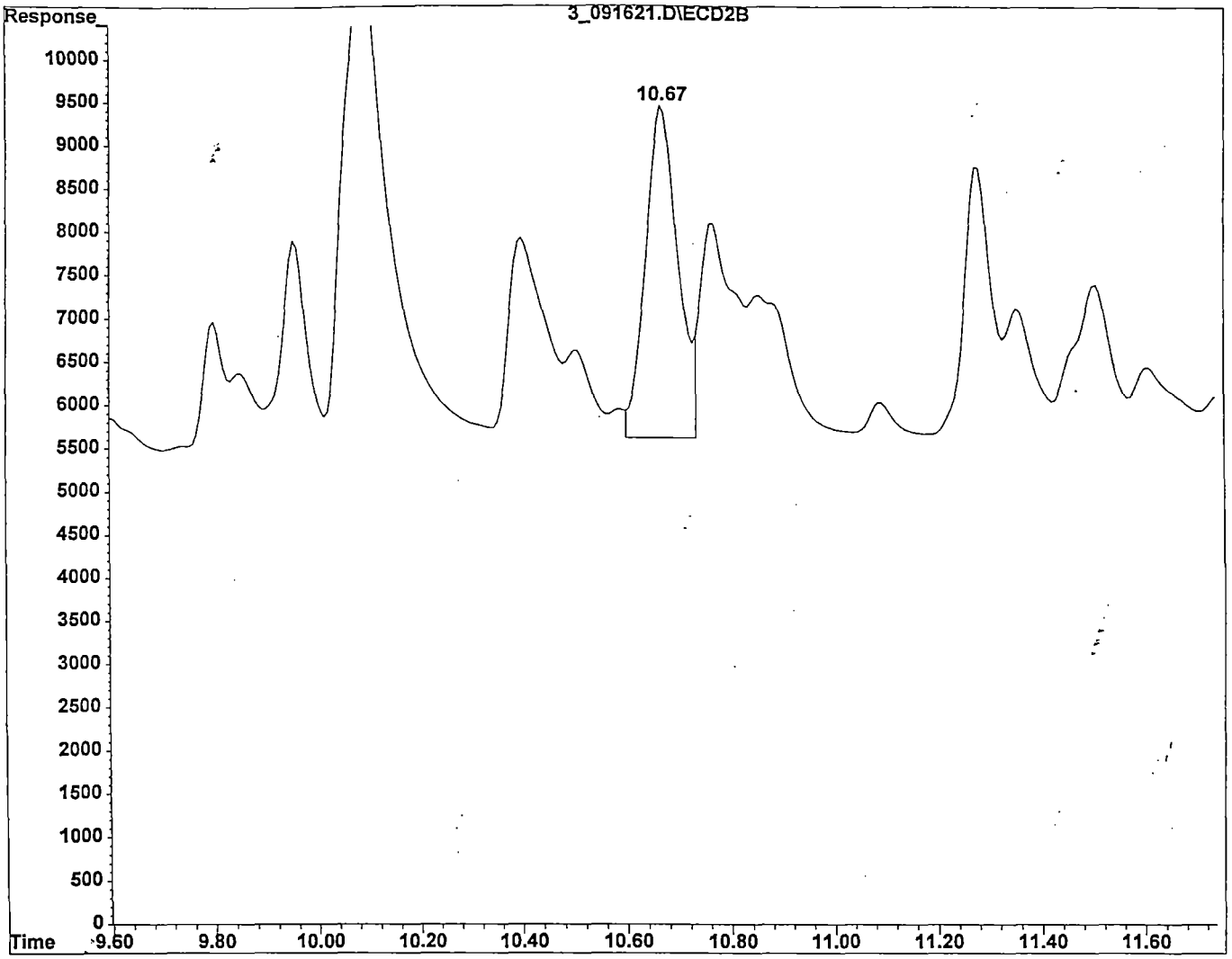
Integration Time Range: 10.02 - 10.34

BTB 091701

F:\HPCHEM\HP\3\DATA\09_16_01\3_091621.D
Report generated: Mon Sep 17 15:34:08 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091621.D
Date Acquired: 16 Sep 2001 19:28
Inst: HP_03 Operator ID: DDC
Name: AR1660L23E
Misc: 5-211-7
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 15:27 2001 Quant Results File: XPCBI16.RES



Aroclor-1016 {4} #2 10.67min area: 163964 m

Integration Time Range: 10.60 - 10.74

BTB
091701

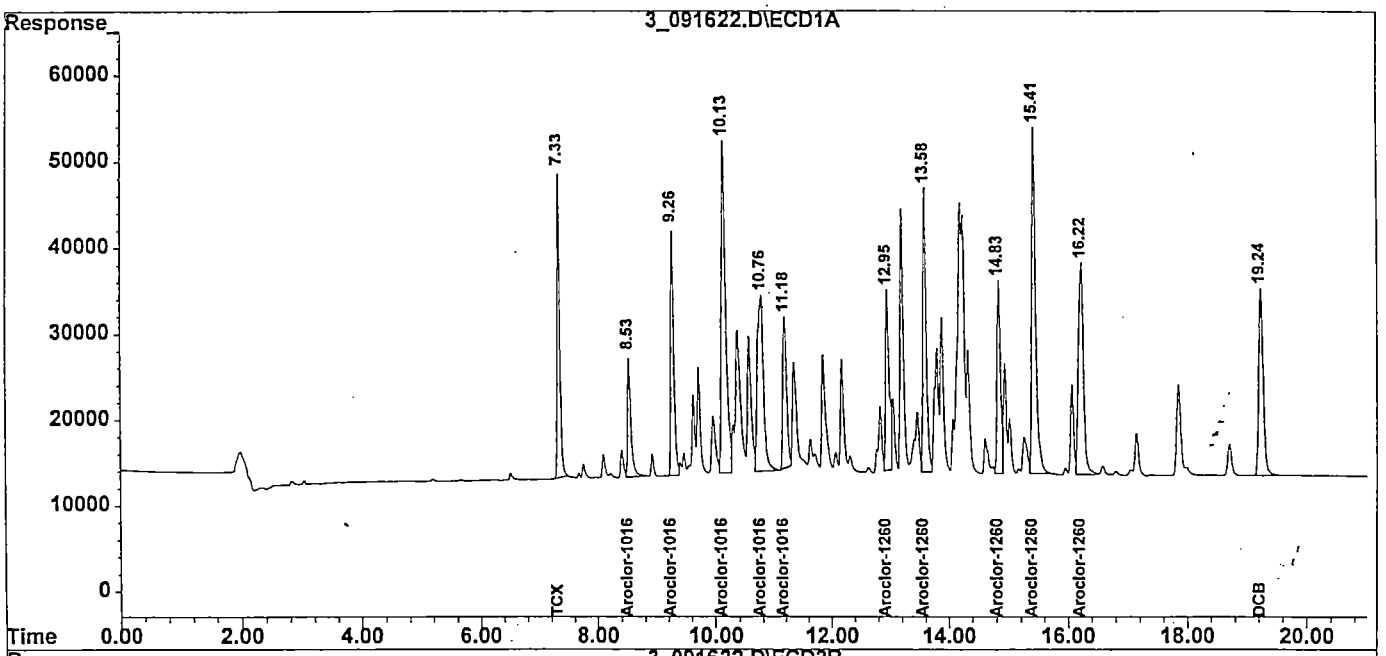
F:\HPCHEM\HP\3\DATA\09_16_01\3_091621.D
Report generated: Mon Sep 17 15:34:08 2001

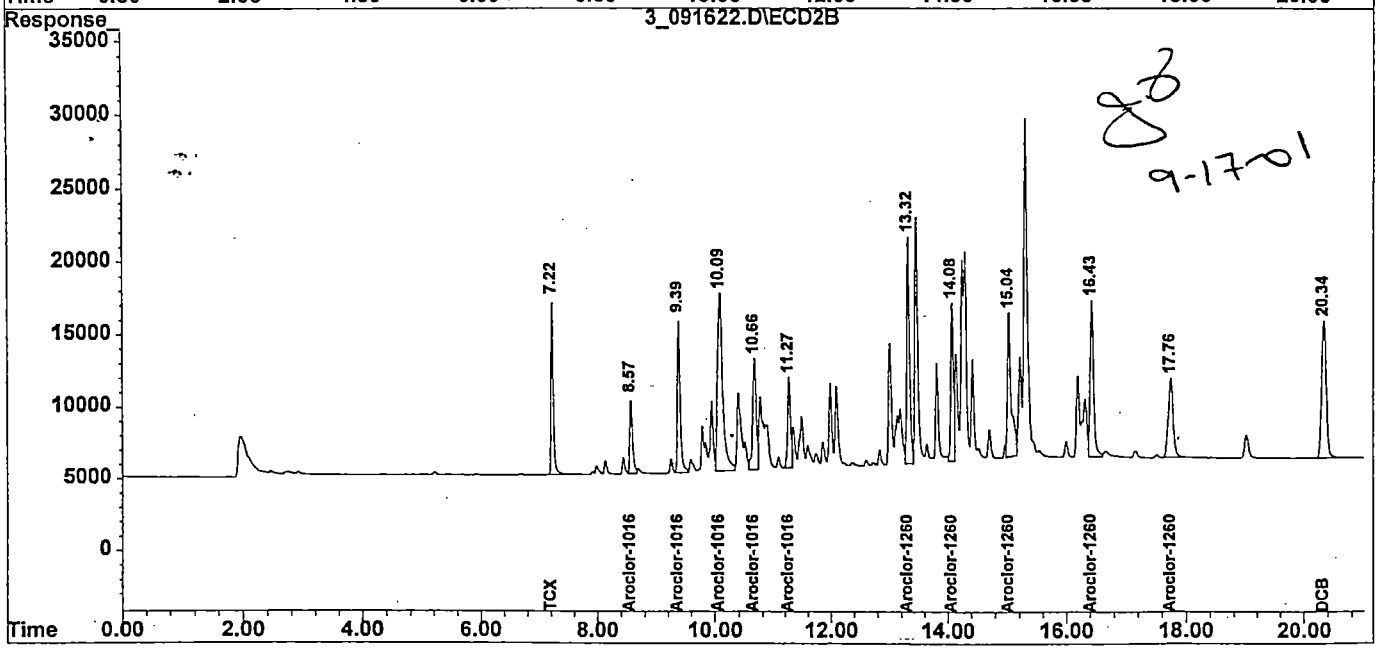
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091622.D\ECD1A.CH Vial: 22
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091622.D\ECD2B.CH
Acq On : 16 Sep 2001 19:54 Operator: DDC
Sample : AR1660L33E Inst : HP_03
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 15:28 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





gb
9-17-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091622.D\ECD1A.CH Vial: 22
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091622.D\ECD2B.CH
Acq On : 16 Sep 2001 19:54 Operator: DDC
Sample : AR1660L33E Inst : HP_03
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 15:28 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

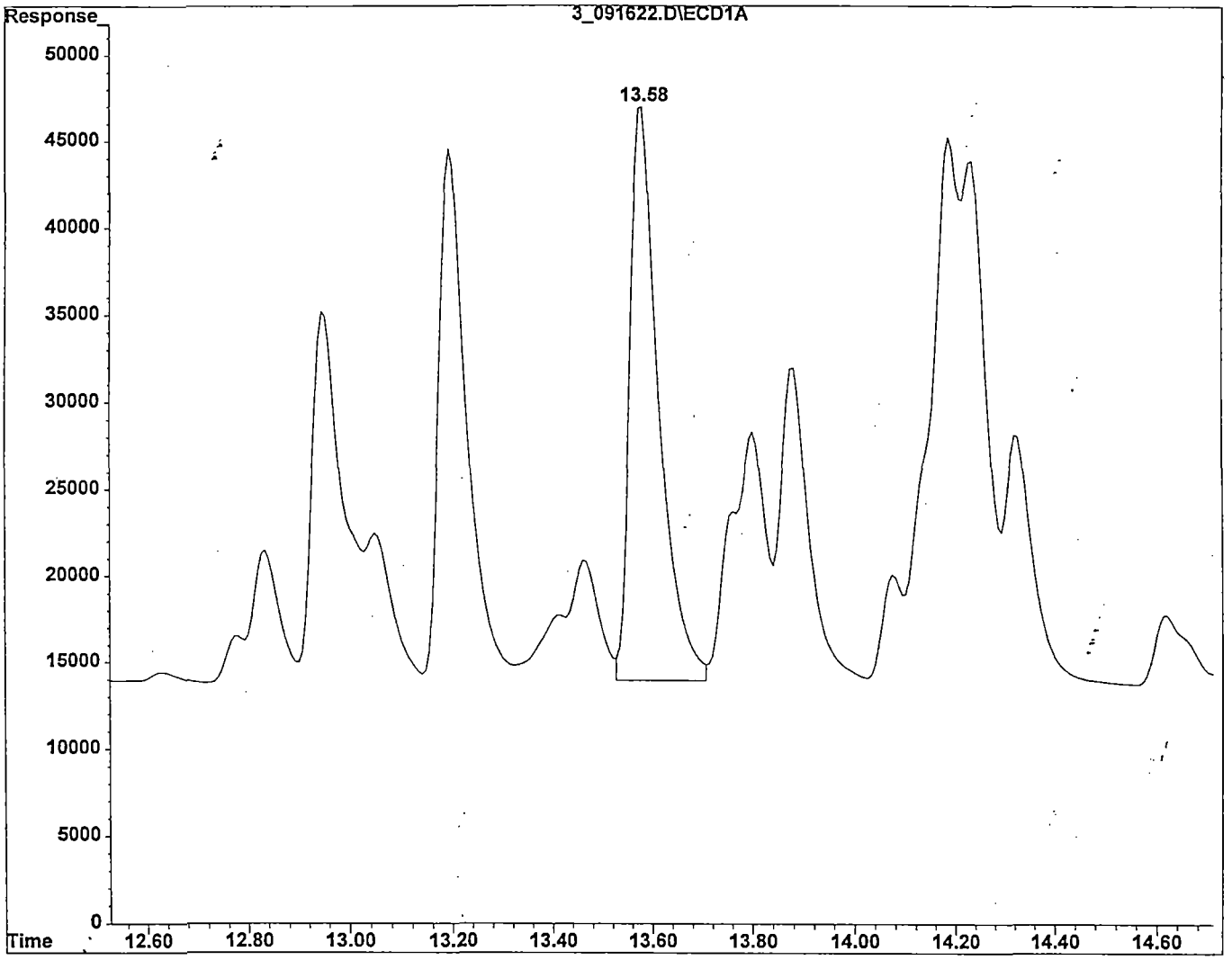
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.22	1128271	338870	20.8	20.9	
22)	S DCB	19.24	20.34	1150850	509623	20.5	20.8	
	Target Compounds:							
2)	L1 Aroclor-1016	8.53	8.57	551768	162683	220.0	250.6	
3)	L1 Aroclor-1016 {2}	9.26	9.39	1037310	369645	377.1	417.5	
4)	L1 Aroclor-1016 {3}	10.13	10.09	2005758	729308	488.8	599.0	
5)	L1 Aroclor-1016 {4}	10.77	10.66	1507124	339384	567.7	458.5	
6)	L1 Aroclor-1016 {5}	11.18	11.28	838409	216992	318.1	215.3	#
	Sum Aroclor-1016			5940369	1818013	1971.7	1940.9	
	Average Aroclor-1016					394.340	388.182	
17)	L7 Aroclor-1260	12.95	13.33	866463	526579	405.8	411.0	
18)	L7 Aroclor-1260 {2}	13.58	14.08	1325388	340330	443.5m	406.1	
19)	L7 Aroclor-1260 {3}	14.84	15.04	860889	436860	414.4	404.6	
20)	L7 Aroclor-1260 {4}	15.41	16.44	1912100	457716	409.0	413.5	
21)	L7 Aroclor-1260 {5}	16.23	17.76	1472592	320111	413.7	410.2	
	Sum Aroclor-1260			6437432	2081597	2086.4	2045.5	
	Average Aroclor-1260					417.273	409.097	

BTP 091701

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091622.D
Date Acquired: 16 Sep 2001 19:54
Inst: HP_03 Operator ID: DDC
Name: AR1660L33E
Misc: 5-210-7
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 15:28 2001 Quant Results File: XPCBI16.RES



Aroclor-1260 {2} 13.58min area: 1325388 m

Integration Time Range: 13.53 - 13.71

BTB
091701

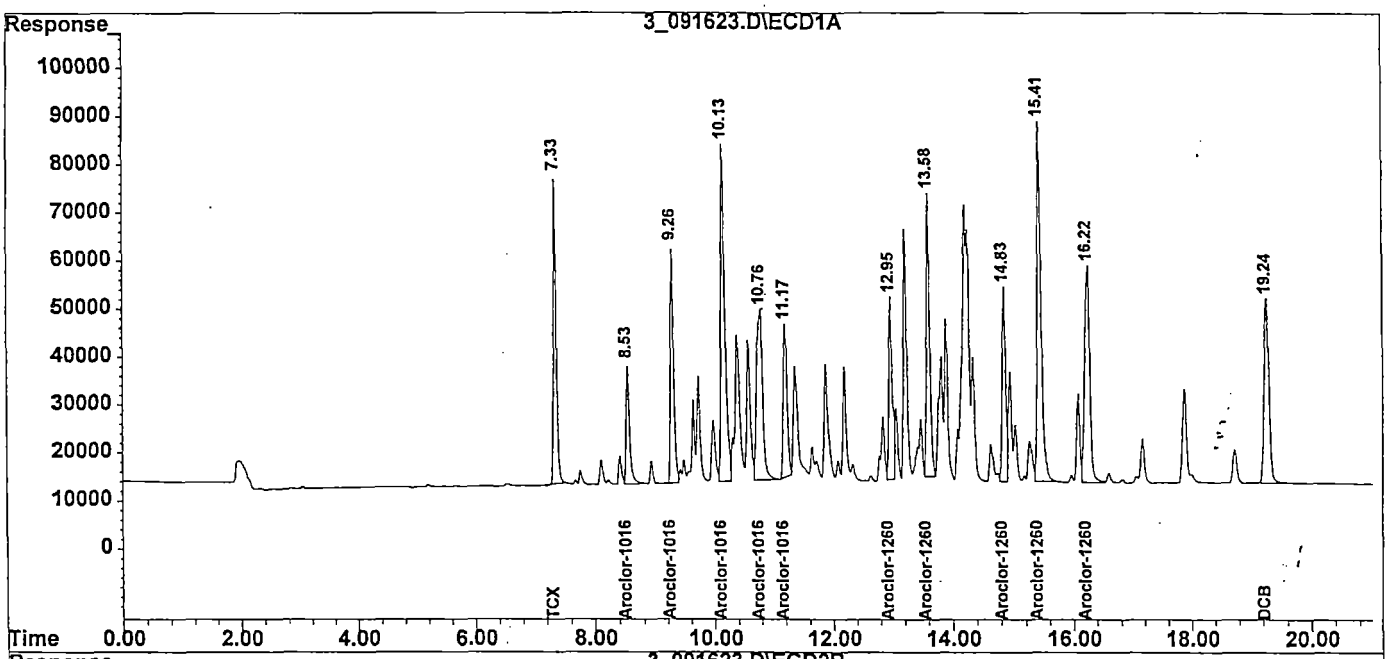
F:\HPCHEM\HP\3\DATA\09_16_01\3_091622.D
Report generated: Mon Sep 17 15:34:09 2001

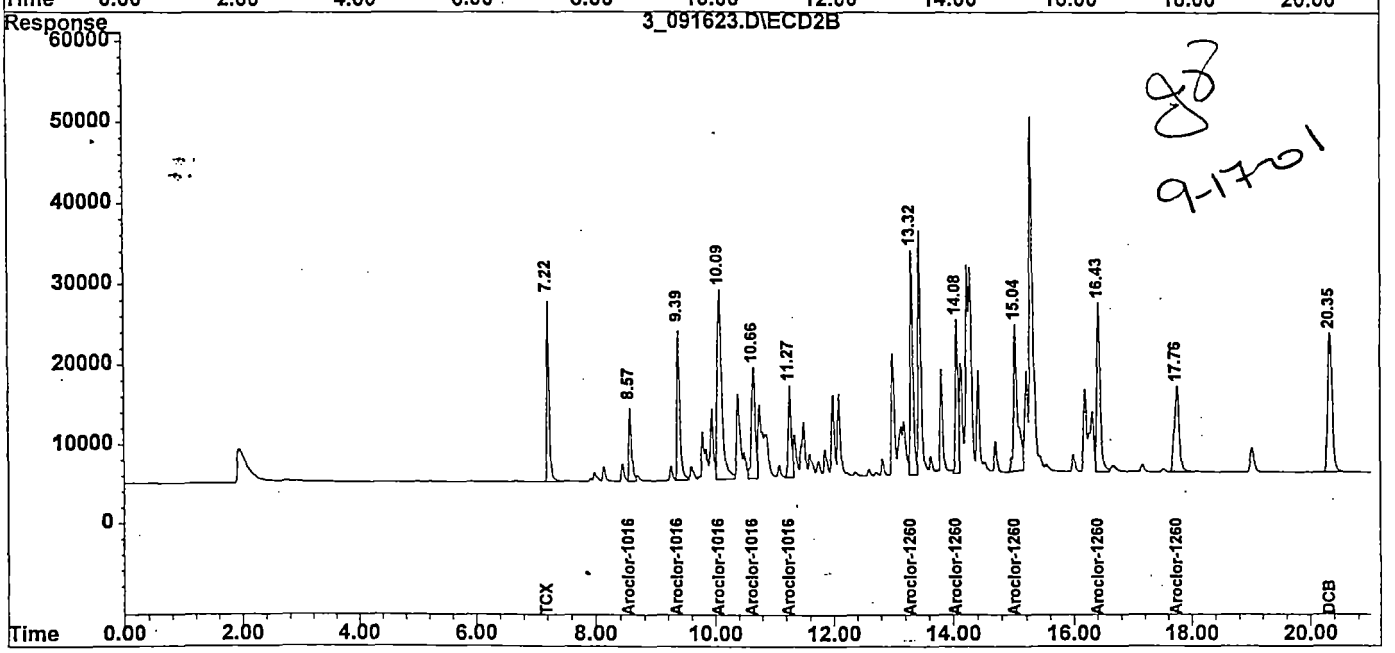
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091623.D\ECD1A.CH Vial: 23
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091623.D\ECD2B.CH
Acq On : 16 Sep 2001 20:19 Operator: DDC
Sample : AR1660L43E Inst : HP_03
Misc : 5-209-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 15:28 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





88
9-17-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091623.D\ECD1A.CH Vial: 23
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091623.D\ECD2B.CH
Acq On : 16 Sep 2001 20:19 Operator: DDC
Sample : AR1660L43E Inst : HP_03
Misc : 5-209-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 15:28 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

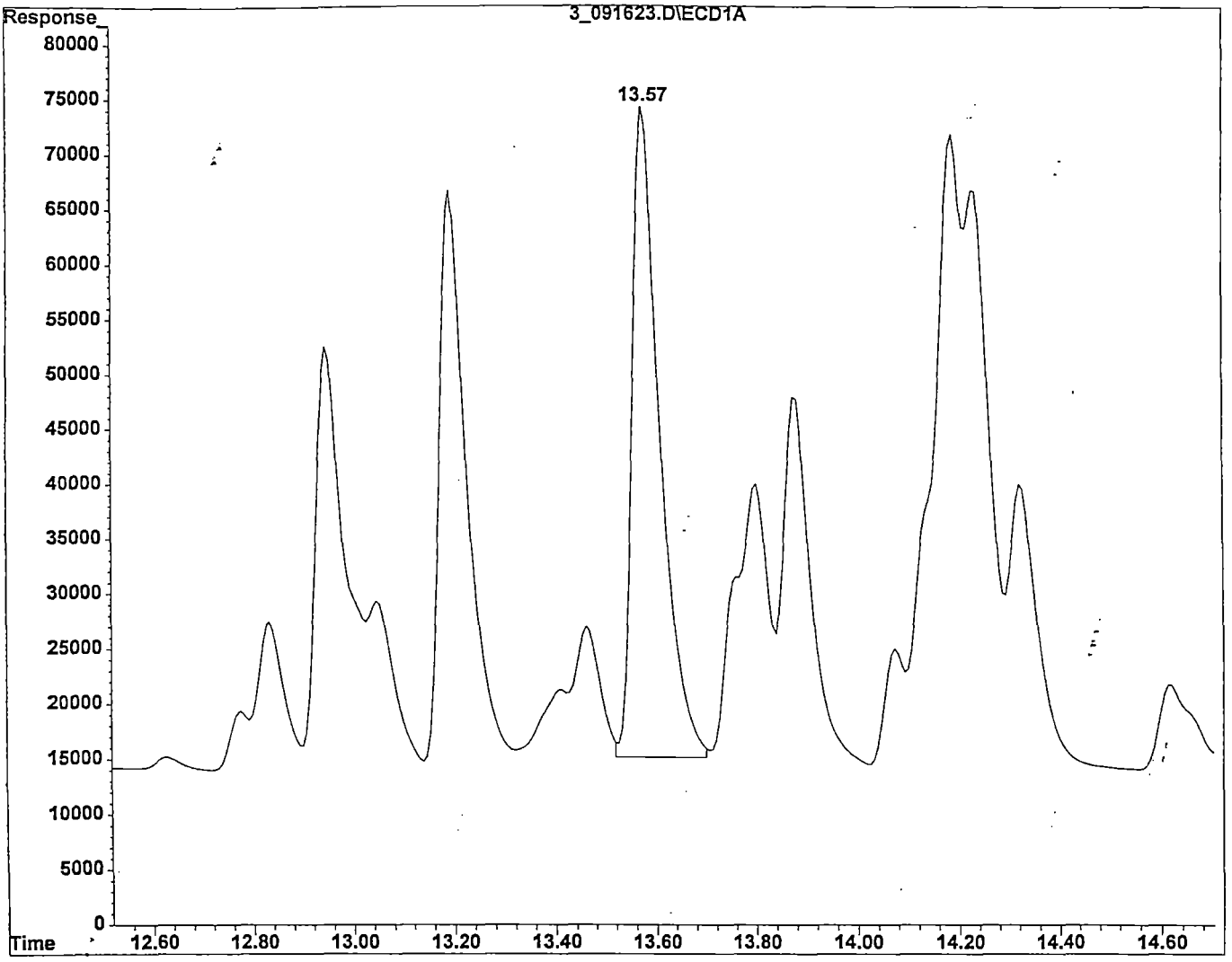
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	2036568	635095	37.6	39.2
22)	S DCB	19.25	20.35	2120962	938260	37.7	38.3
	Target Compounds:						
2)	L1 Aroclor-1016	8.53	8.57	961513	289009	433.1	515.1
3)	L1 Aroclor-1016 {2}	9.26	9.39	1792032	649450	651.5	733.5
4)	L1 Aroclor-1016 {3}	10.13	10.09	3453564	1292646	793.4	915.2
5)	L1 Aroclor-1016 {4}	10.77	10.66	2573957	613931	845.5	811.7
6)	L1 Aroclor-1016 {5}	11.18	11.27	1458386	398644	621.2	485.3
	Sum Aroclor-1016			10239452	3243681	3344.7	3460.8
	Average Aroclor-1016					668.942	692.155
17)	L7 Aroclor-1260	12.95	13.32	1547246	920720	724.6	718.6
18)	L7 Aroclor-1260 {2}	13.57	14.08	2232704	596286	776.7m	711.6
19)	L7 Aroclor-1260 {3}	14.84	15.04	1563697	848887	752.7	786.3
20)	L7 Aroclor-1260 {4}	15.41	16.44	3484264	855564	745.3	772.9
21)	L7 Aroclor-1260 {5}	16.23	17.77	2702647	620234	759.3	794.8
	Sum Aroclor-1260			11530559	3841691	3758.6	3784.2
	Average Aroclor-1260					751.712	756.842

BTB 09/20/01

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091623.D
Date Acquired: 16 Sep 2001 20:19
Inst: HP_03 Operator ID: DDC
Name: AR1660L43E
Misc: 5-209-7
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 15:28 2001 Quant Results File: XPCBI16.RES



Aroclor-1260 {2} 13.57min area: 2232704 m

Integration Time Range: 13.52 - 13.70

BTB
091701

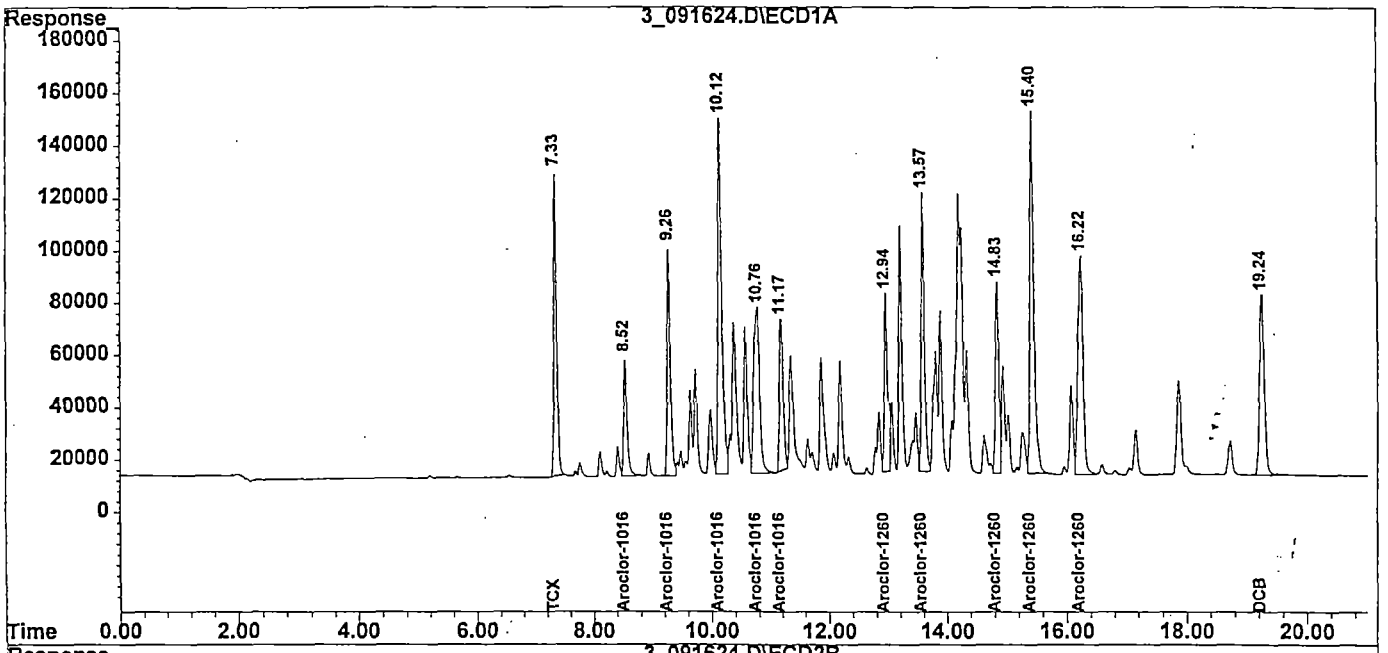
F:\HPCHEM\HP\3\DATA\09_16_01\3_091623.D
Report generated: Mon Sep 17 15:34:11 2001

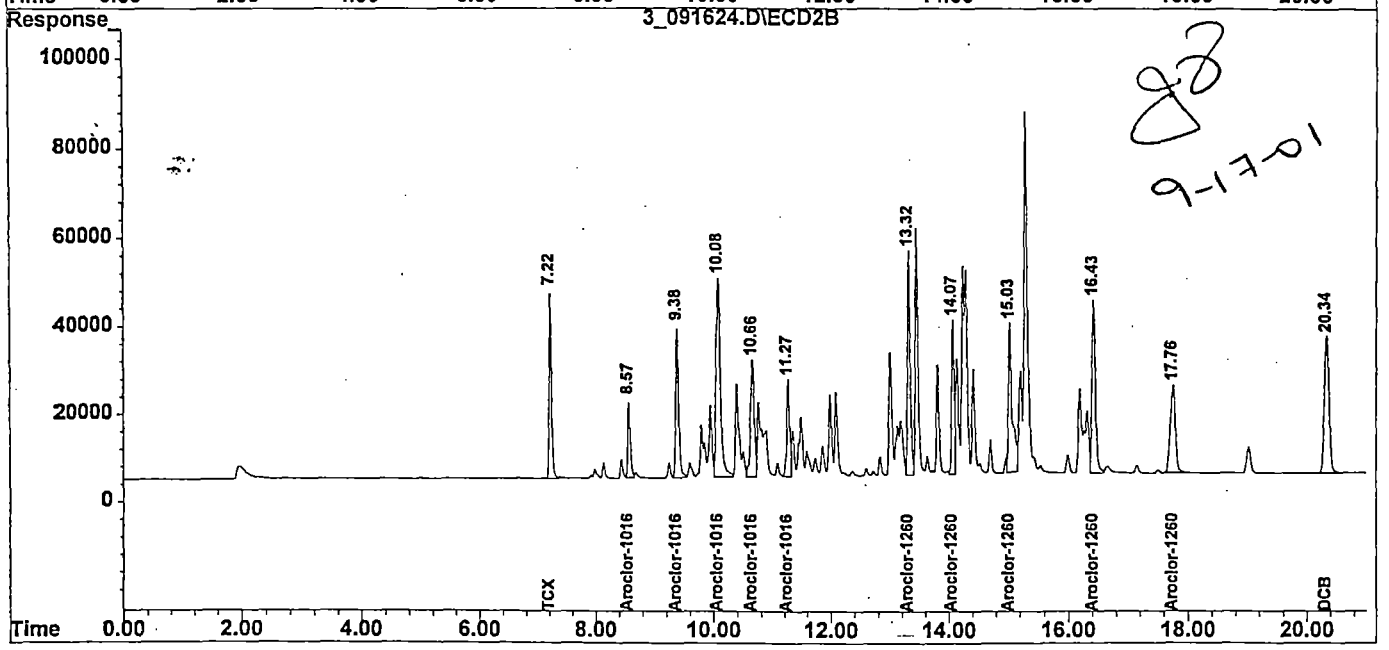
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091624.D\ECD1A.CH Vial: 24
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091624.D\ECD2B.CH
Acq On : 16 Sep 2001 20:45 Operator: DDC
Sample : AR1660L53E Inst : HP_03
Misc : 5-208-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 15:29 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





9-17-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091624.D\ECD1A.CH Vial: 24
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091624.D\ECD2B.CH
Acq On : 16 Sep 2001 20:45 Operator: DDC
Sample : AR1660L53E Inst : HP_03
Misc : 5-208-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 15:29 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

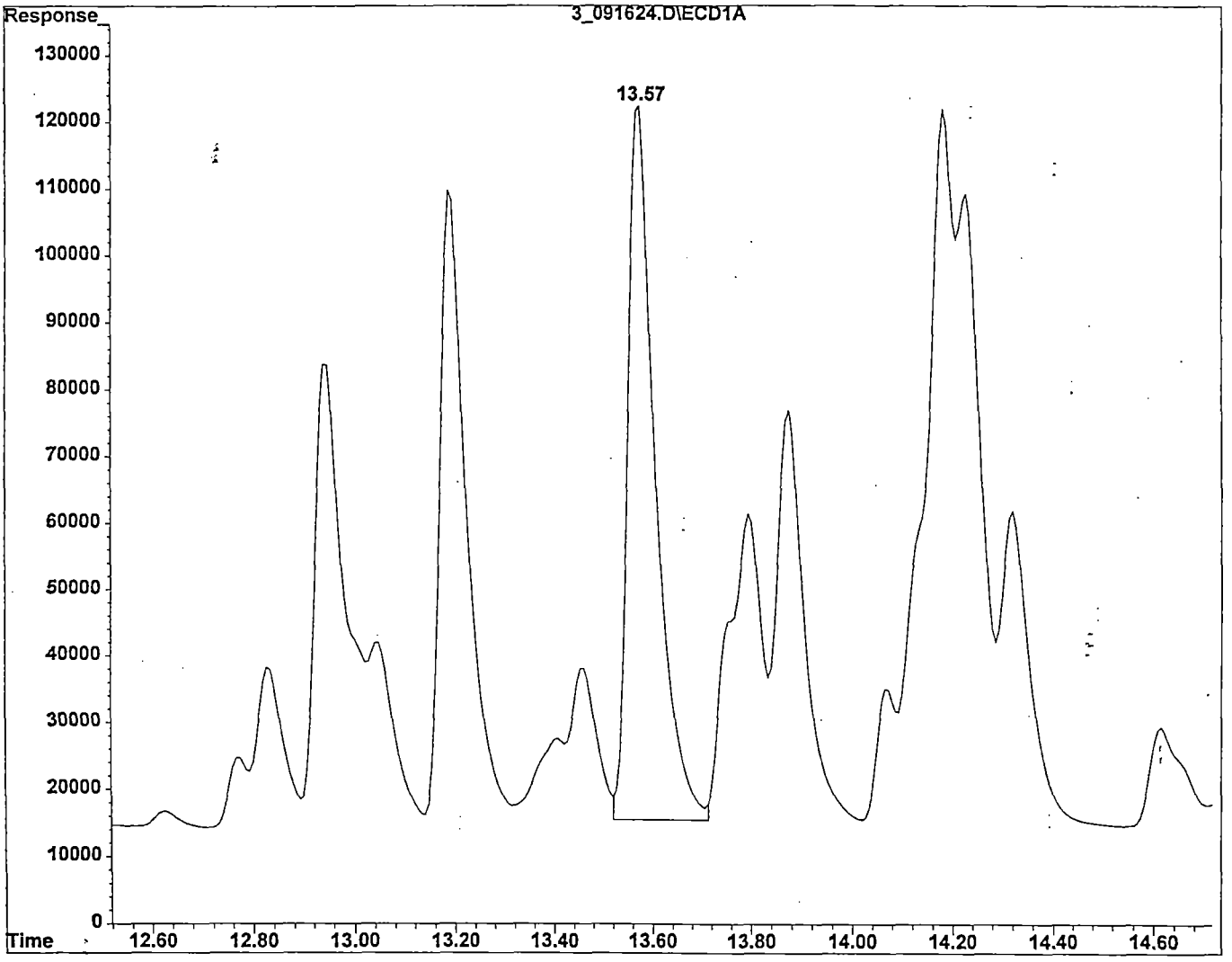
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	3941218	1252395	72.7	77.3
22)	S DCB	19.24	20.34	3869321	1726435	68.8 E	70.5
	Target Compounds:						
2)	L1 Aroclor-1016	8.53	8.57	1710114	533648	889.2 E	1124.5 E#
3)	L1 Aroclor-1016 {2}	9.26	9.39	3210773	1185551	1167.3 E	1339.0 E
4)	L1 Aroclor-1016 {3}	10.12	10.09	6220611	2366110	1360.4 E	1495.5 E
5)	L1 Aroclor-1016 {4}	10.76	10.66	4553546	1143173	1335.3	1480.1 E
6)	L1 Aroclor-1016 {5}	11.17	11.27	2692089	759258	1263.9	1149.2 E
	Sum Aroclor-1016			18387134	5987740	6016.1	6588.3
	Average Aroclor-1016					1203.223	1317.670
17)	L7 Aroclor-1260	12.95	13.32	2768070	1634664	1296.2 E	1275.9 E
18)	L7 Aroclor-1260 {2}	13.57	14.08	4105576	1060576	1468.8mE	1265.6
19)	L7 Aroclor-1260 {3}	14.83	15.04	2856903	1533399	1375.3 E	1420.3
20)	L7 Aroclor-1260 {4}	15.41	16.43	6424555	1607693	1374.3	1452.4 E
21)	L7 Aroclor-1260 {5}	16.22	17.76	5002154	1185688	1405.3 E	1519.4
	Sum Aroclor-1260			21157259	7022020	6919.9	6933.6
	Average Aroclor-1260					1383.976	1386.723

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_16_01\3_091624.D
Date Acquired: 16 Sep 2001 20:45
Inst: HP_03 Operator ID: DDC
Name: AR1660L53E
Misc: 5-208-7
Method: F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 17 15:29 2001 Quant Results File: XPCBI16.RES



Aroclor-1260 {2} 13.57min area: 4105576 m

Integration Time Range: 13.52 - 13.71

BTB
091701

F:\HPCHEM\HP\3\DATA\09_16_01\3_091624.D
Report generated: Mon Sep 17 15:34:12 2001

Continuing Calibration Report HP_03

Method : F:\HPCHEM\HP\3\DATA\09_17_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

Continuing Calibration File: 3_091771.D

Min. RRF : 0.000 Min. Rel. Area : 50%
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	54.217	55.194	E3	-1.8	98
2	L1	Aroclor-1016	1.355	1.346	E3	0.7	98
3	L1	Aroclor-1016 {2}	2.535	2.512	E3	0.9	97
4	L1	Aroclor-1016 {3}	4.718	4.247	E3	10.0	85
5	L1	Aroclor-1016 {4}	3.693	3.796	E3	-2.8	101
6	L1	Aroclor-1016 {5}	1.962	1.849	E3	5.8	88
17	L7	Aroclor-1260	2.135	2.234	E3	-4.6	103
18	L7	Aroclor-1260 {2}	3.248	3.444	E3	-6.0	104
19	L7	Aroclor-1260 {3}	2.077	2.221	E3	-6.9	103
20	L7	Aroclor-1260 {4}	4.675	4.968	E3	-6.3	104
21	L7	Aroclor-1260 {5}	3.560	3.669	E3	-3.1	100
22	S	DCB	56.261	56.190	E3	0.1	98

Signal #2
Continuing Calibration File: 3_091771.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	16.207	16.495	E3	-1.8	97
2	L1	Aroclor-1016	384.734	418.952		-8.9	103
3	L1	Aroclor-1016 {2}	885.369	956.957		-8.1	104
4	L1	Aroclor-1016 {3}	1.698	1.826	E3	-7.5	100
5	L1	Aroclor-1016 {4}	789.988	851.023		-7.7	100
6	L1	Aroclor-1016 {5}	521.940	585.533		-12.2	108
17	L7	Aroclor-1260	1.258	1.294	E3	-2.9	98
18	L7	Aroclor-1260 {2}	821.251	898.840		-9.4	106
19	L7	Aroclor-1260 {3}	1.080	1.165	E3	-7.9	107
20	L7	Aroclor-1260 {4}	1.107	1.158	E3	-4.6	101
21	L7	Aroclor-1260 {5}	780.367	850.722		-9.0	106
22	S	DCB	24.505	26.323	E3	-7.4	103

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3_091771.D XPCBI16.M Wed Sep 19 08:12:35 2001

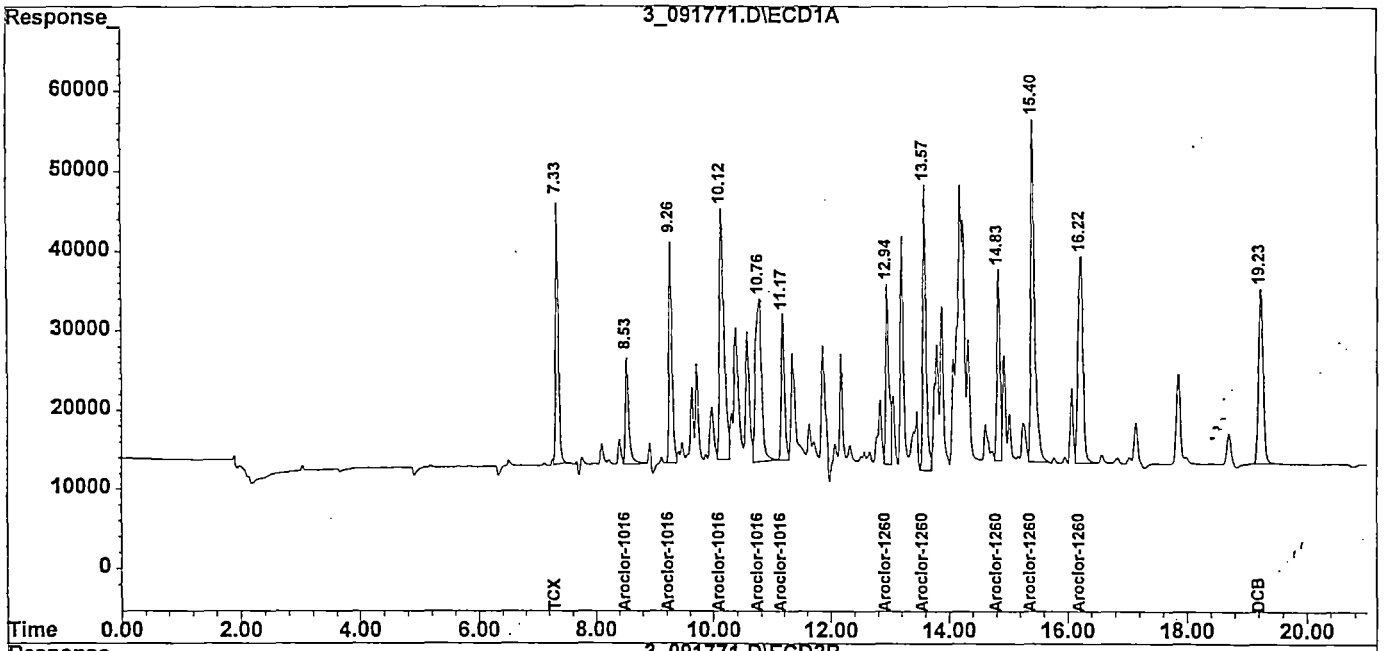
COPY
ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29602 SDG E02P5
Signature Freda M. Williams
Date 09/24/01

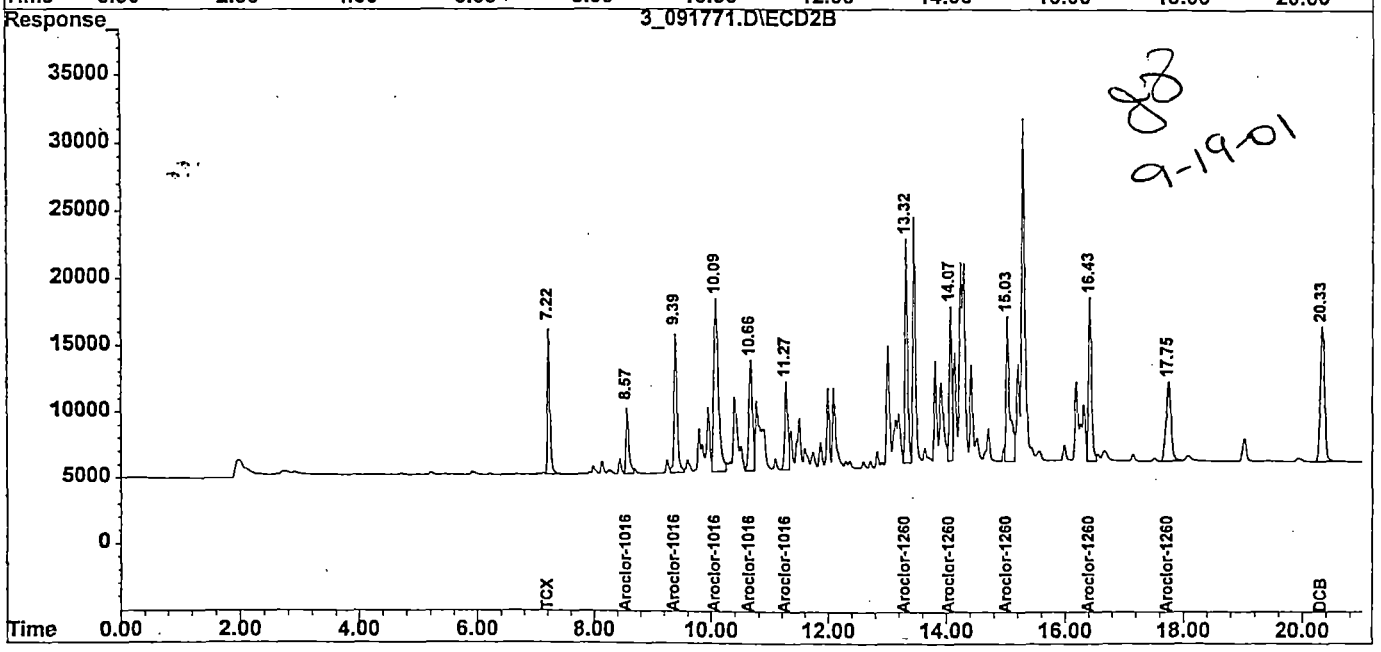
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_17_01\3_091771.D\ECD1A.CH Vial: 71
Signal #2 : F:\HPCHEM\HP\3\DATA\09_17_01\3_091771.D\ECD2B.CH
Acq On : 18 Sep 2001 22:58 Operator: BTB
Sample : AR1660L33N Inst : HP_03
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 8:11 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_17_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





8
9-19-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_17_01\3_091771.D\ECD1A.CH Vial: 71
Signal #2 : F:\HPCHEM\HP\3\DATA\09_17_01\3_091771.D\ECD2B.CH
Acq On : 18 Sep 2001 22:58 Operator: BTB
Sample : AR1660L33N Inst : HP_03
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 8:11 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_17_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

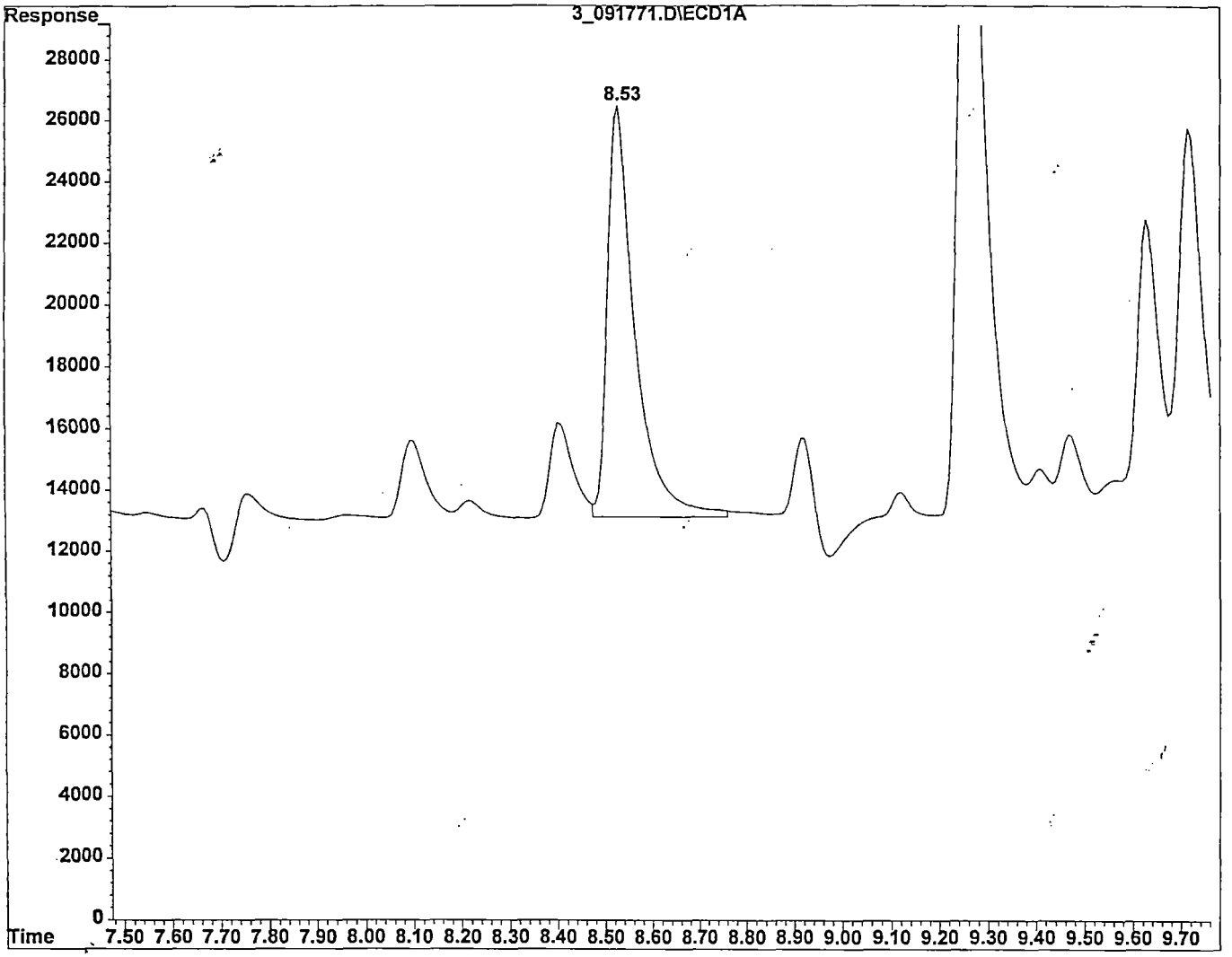
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	1103885	329893	20.4	20.4
22)	S DCB	19.23	20.33	1123802	526469	20.0m BTB 091901	21.5
	Target Compounds:						
2)	L1 Aroclor-1016	8.53	8.57	538544	167581	397.3m	435.6
3)	L1 Aroclor-1016 {2}	9.26	9.39	1004976	382783	396.4m	432.3
4)	L1 Aroclor-1016 {3}	10.12	10.09	1698888	730461	360.1m	430.1
5)	L1 Aroclor-1016 {4}	10.76	10.67	1518201	340409	411.1	430.9
6)	L1 Aroclor-1016 {5}	11.17	11.27	739696	234213	377.0m	448.7
	Sum Aroclor-1016			5500305	1855447	1941.9	2177.7
	Average Aroclor-1016					388.382	435.532
17)	L7 Aroclor-1260	12.95	13.32	893607	517712	418.5	411.4m BTB 091901
18)	L7 Aroclor-1260 {2}	13.57	14.07	1377408	359536	424.0m	437.8m
19)	L7 Aroclor-1260 {3}	14.83	15.03	888282	466096	427.6	431.7m
20)	L7 Aroclor-1260 {4}	15.40	16.43	1987276	463082	425.1	418.4
21)	L7 Aroclor-1260 {5}	16.22	17.76	1467548	340289	412.3	436.1
	Sum Aroclor-1260			6614120	2146715	2107.5	2135.3
	Average Aroclor-1260					421.498	427.066

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_17_01\3_091771.D
Date Acquired: 18 Sep 2001 22:58
Inst: HP_03 Operator ID: BTB
Name: AR1660L33N
Misc: 5-210-7
Method: F:\HPCHEM\HP\3\DATA\09_17_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 8:11 2001 Quant Results File: XPCBI16.RES



Aroclor-1016 8.53min area: 538544 m

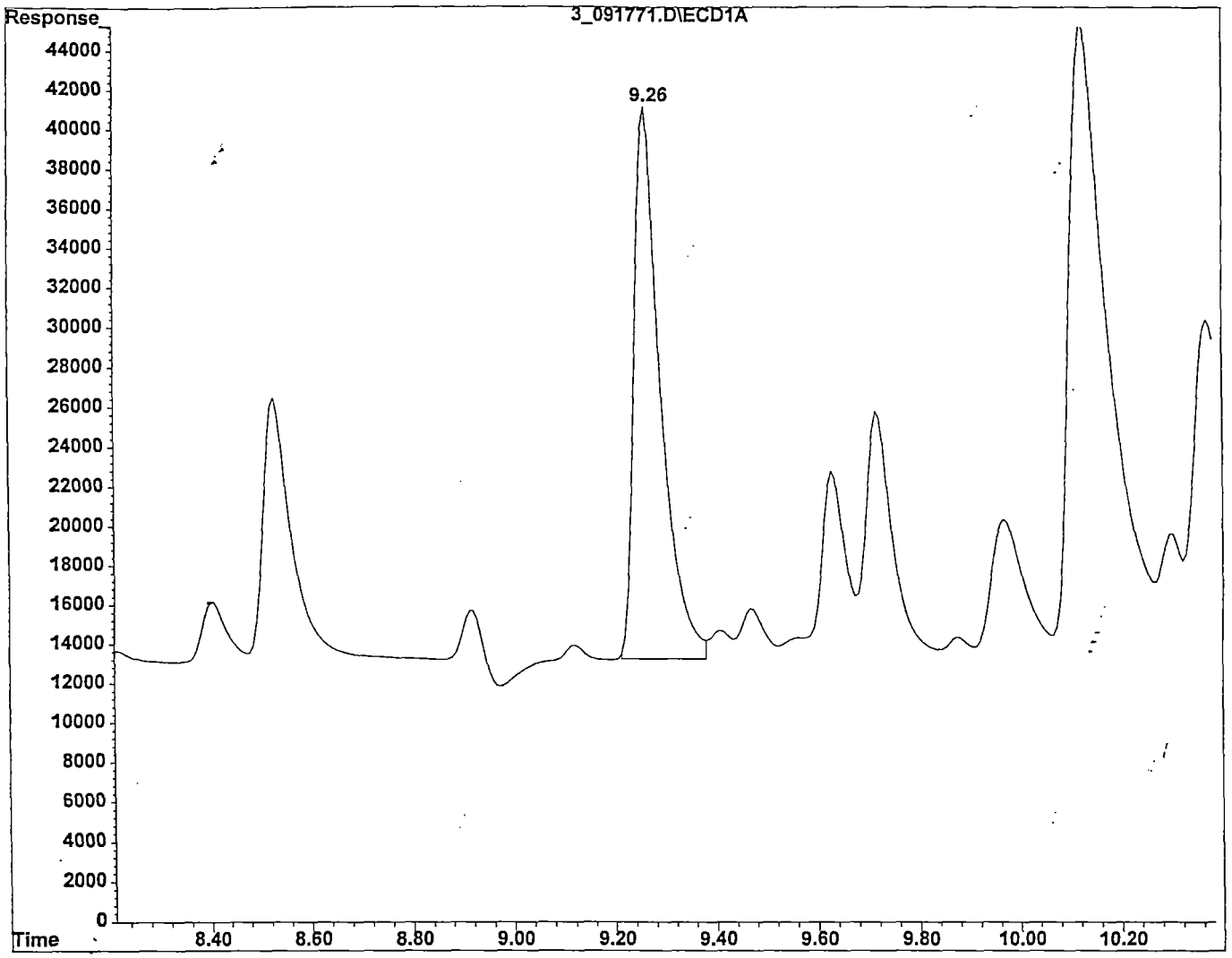
BTB 091901

Integration Time Range: 8.48 - 8.76

F:\HPCHEM\HP\3\DATA\09_17_01\3_091771.D
Report generated: Wed Sep 19 08:15:49 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_17_01\3_091771.D
Date Acquired: 18 Sep 2001 22:58
Inst: HP_03 Operator ID: BTB
Name: AR1660L33N
Misc: 5-210-7
Method: F:\HPCHEM\HP\3\DATA\09_17_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 8:11 2001 Quant Results File: XPCBI16.RES



Aroclor-1016 {2} 9.26min area: 1004976 m

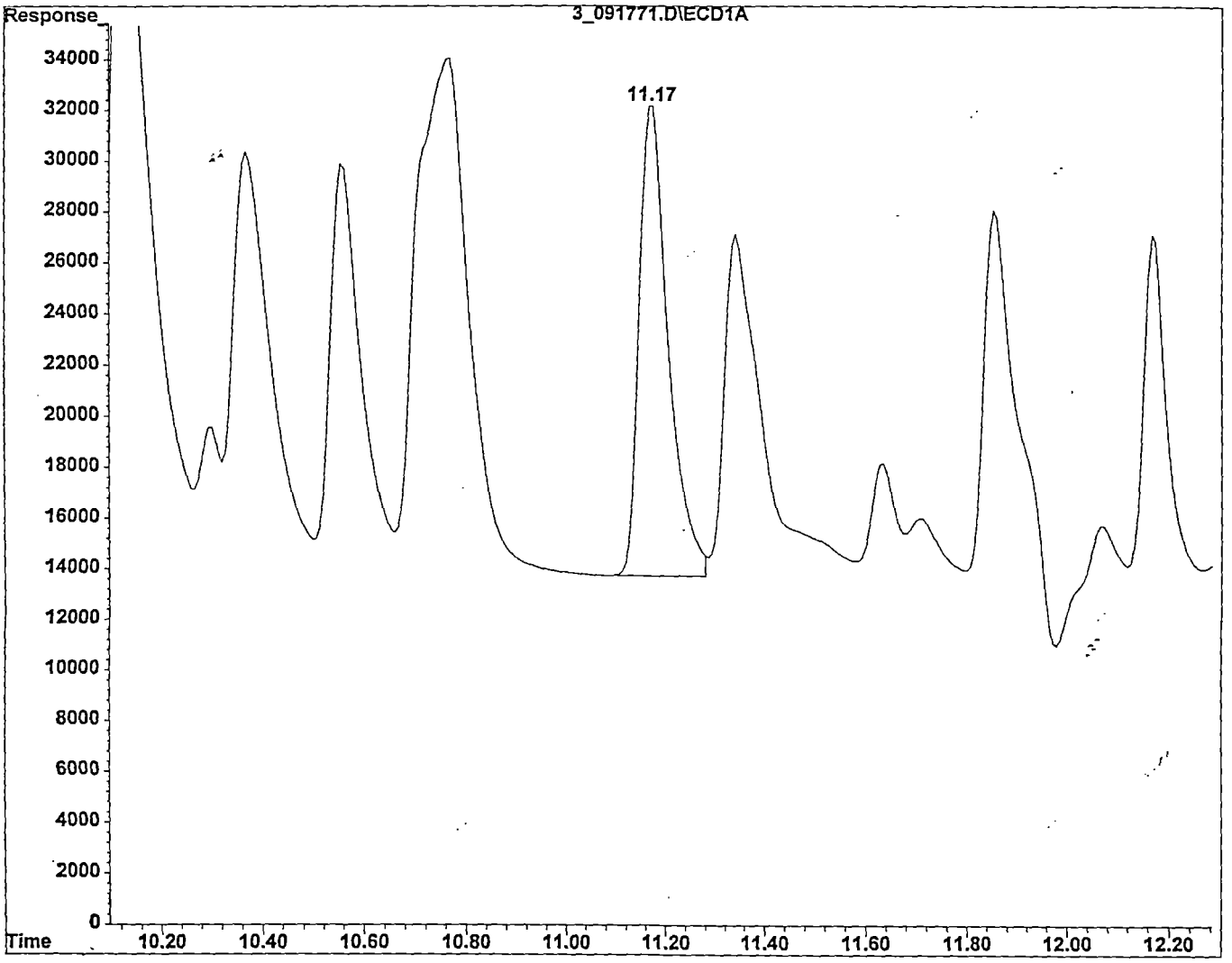
Integration Time Range: 9.21 - 9.38

BTB 091901

F:\HPCHEM\HP\3\DATA\09_17_01\3_091771.D
Report generated: Wed Sep 19 08:15:50 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_17_01\3_091771.D
Date Acquired: 18 Sep 2001 22:58
Inst: HP_03 Operator ID: BTB
Name: AR1660L33N
Misc: 5-210-7
Method: F:\HPCHEM\HP\3\DATA\09_17_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 8:11 2001 Quant Results File: XPCBI16.RES



Aroclor-1016 {5} 11.17min area: 739696 m

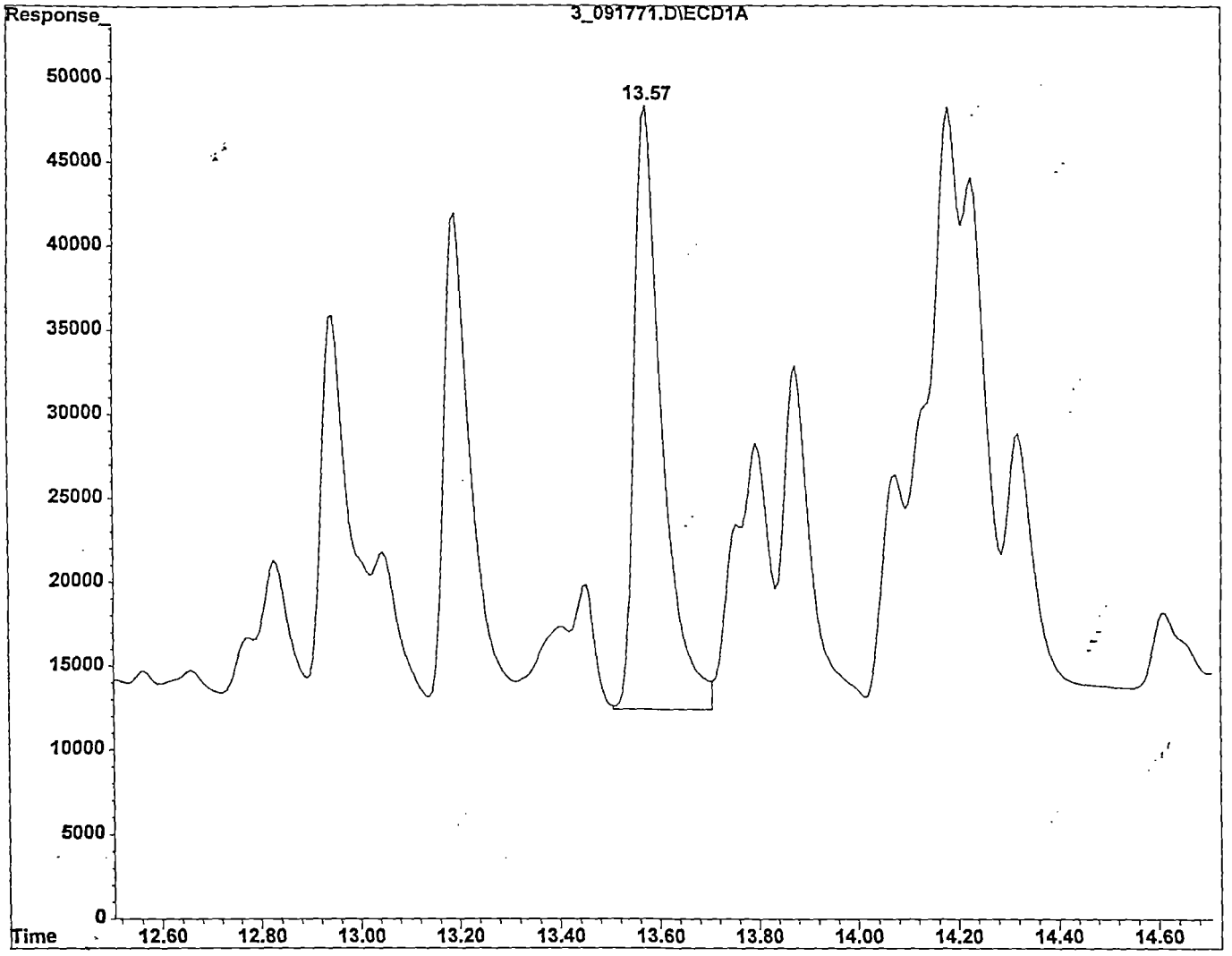
Integration Time Range: 11.10 - 11.28

BTB 091901

F:\HPCHEM\HP\3\DATA\09_17_01\3_091771.D
Report generated: Wed Sep 19 08:15:51 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_17_01\3_091771.D
Date Acquired: 18 Sep 2001 22:58
Inst: HP_03 Operator ID: BTB
Name: AR1660L33N
Misc: 5-210-7
Method: F:\HPCHEM\HP\3\DATA\09_17_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 8:11 2001 Quant Results File: XPCBI16.RES



Aroclor-1260 {2} 13.57min area: 1377408 m

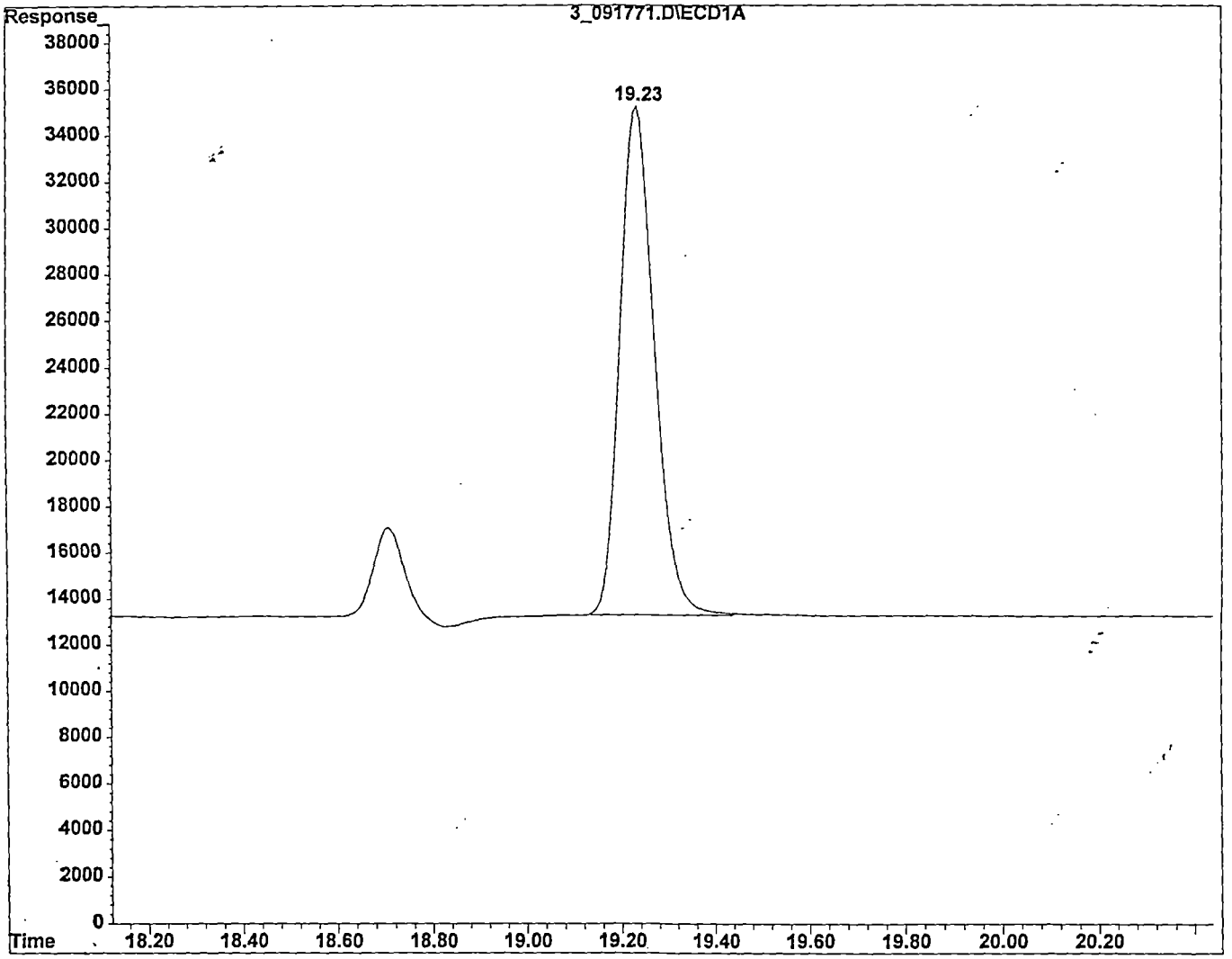
Integration Time Range: 13.51 - 13.71

BTB 091901

F:\HPCHEM\HP\3\DATA\09_17_01\3_091771.D
Report generated: Wed Sep 19 08:15:52 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_17_01\3_091771.D
Date Acquired: 18 Sep 2001 22:58
Inst: HP_03 Operator ID: BTB
Name: AR1660L33N
Misc: 5-210-7
Method: F:\HPCHEM\HP\3\DATA\09_17_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 8:11 2001 Quant Results File: XPCBI16.RES



DCB 19.23min area: 1123802 m

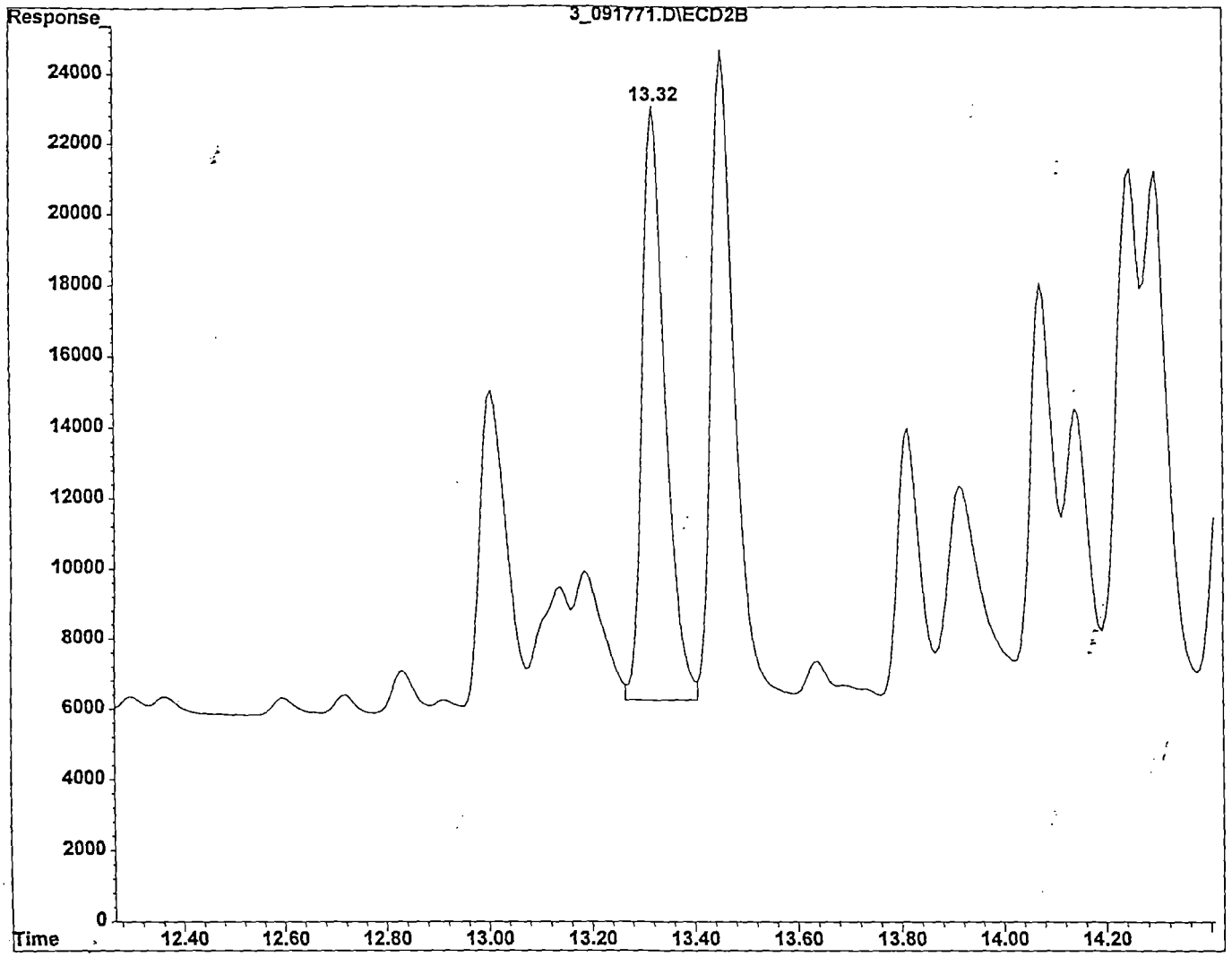
BTB 091901

Integration Time Range: 19.12 - 19.44

F:\HPCHEM\HP\3\DATA\09_17_01\3_091771.D
Report generated: Wed Sep 19 08:15:52 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_17_01\3_091771.D
Date Acquired: 18 Sep 2001 22:58
Inst: HP_03 Operator ID: BTB
Name: AR1660L33N
Misc: 5-210-7
Method: F:\HPCHEM\HP\3\DATA\09_17_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 8:11 2001 Quant Results File: XPCBI16.RES



Aroclor-1260 #2 13.32min area: 517712 m

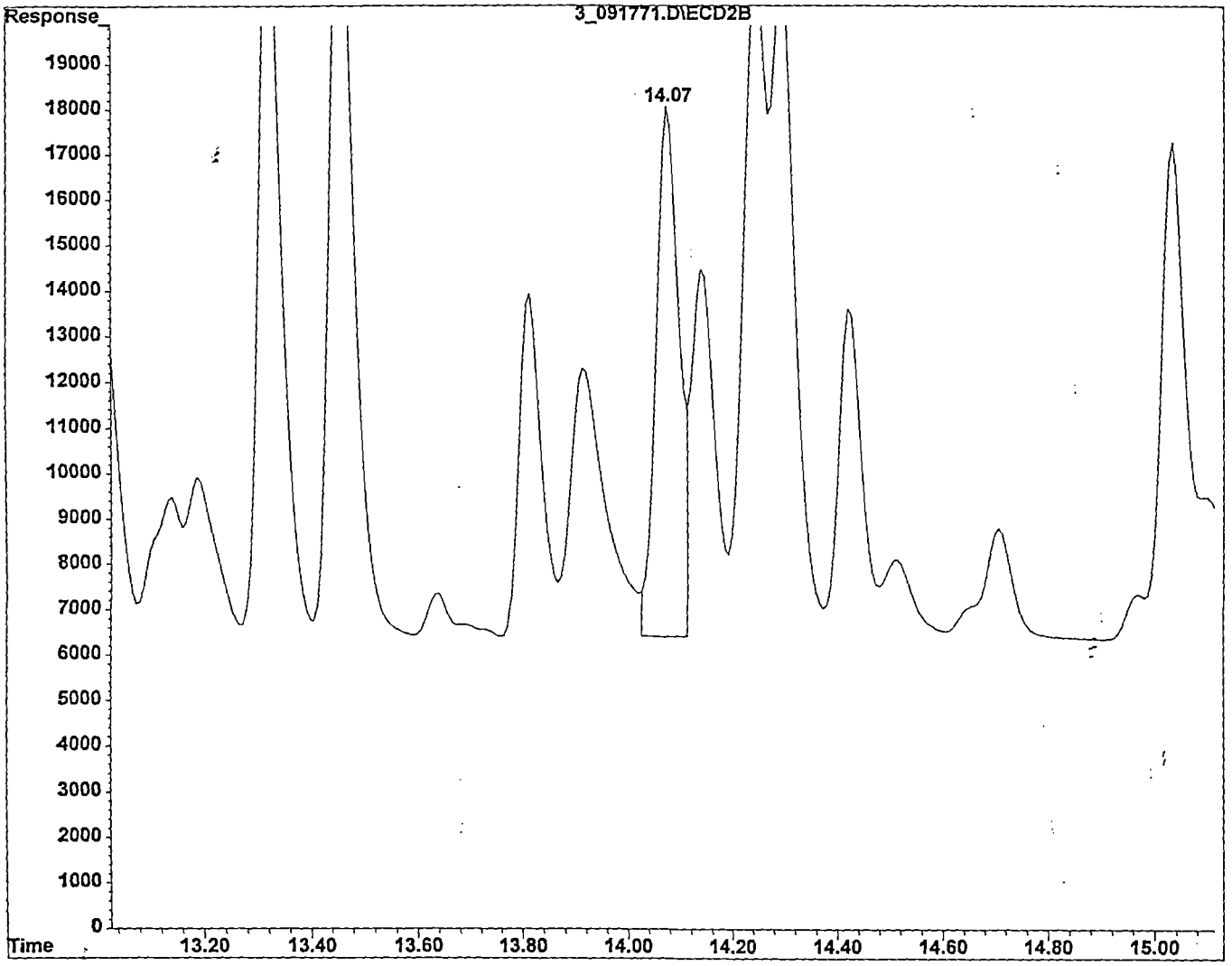
Integration Time Range: 13.27 - 13.41

BTB 091901

F:\HPCHEM\HP\3\DATA\09_17_01\3_091771.D
Report generated: Wed Sep 19 08:15:53 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_17_01\3_091771.D
Date Acquired: 18 Sep 2001 22:58
Inst: HP_03 Operator ID: BTB
Name: AR1660L33N
Misc: 5-210-7
Method: F:\HPCHEM\HP\3\DATA\09_17_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 8:11 2001 Quant Results File: XPCBI16.RES



Aroclor-1260 {2} #2 14.07min area: 359536 m

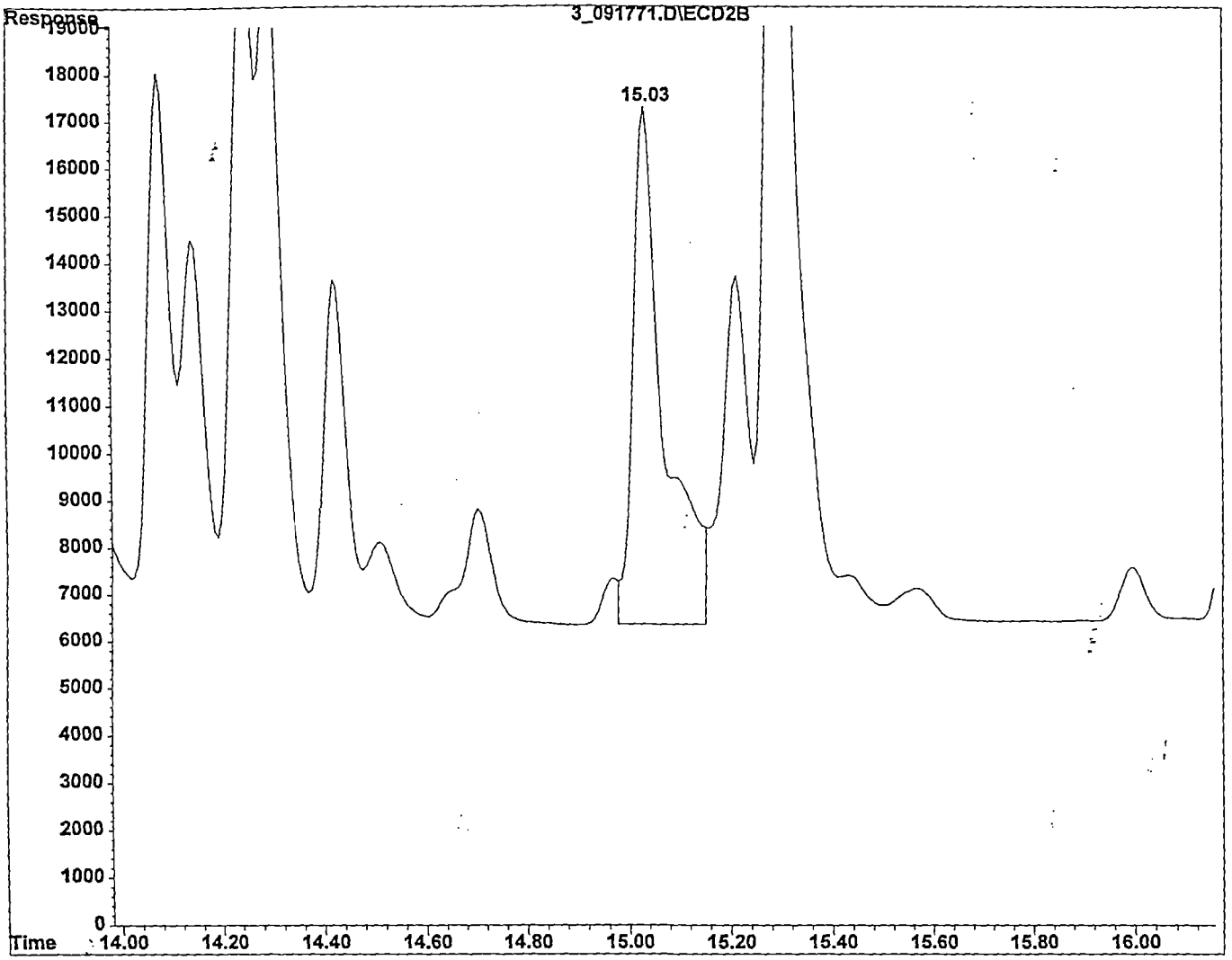
Integration Time Range: 14.03 - 14.11

BTB 29/9/01

F:\HPCHEM\HP\3\DATA\09_17_01\3_091771.D
Report generated: Wed Sep 19 08:15:53 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_17_01\3_091771.D
Date Acquired: 18 Sep 2001 22:58
Inst: HP_03 Operator ID: BTB
Name: AR1660L33N
Misc: 5-210-7
Method: F:\HPCHEM\HP\3\DATA\09_17_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 8:11 2001 Quant Results File: XPCBI16.RES



Aroclor-1260 {3} #2 15.03min area: 466096 m

Integration Time Range: 14.98 - 15.15

BTB 091901

F:\HPCHEM\HP\3\DATA\09_17_01\3_091771.D
Report generated: Wed Sep 19 08:15:54 2001

Continuing Calibration Report HP_03

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Wed Sep 19 08:17:45 2001
Response via : Initial Calibration

Continuing Calibration File: 3_091815.D

Min. RRF : 0.000 Min. Rel. Area : 50%
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	54.217	50.660	E3	6.6	90
2	L1	Aroclor-1016	1.355	1.243	E3	8.3	90
3	L1	Aroclor-1016 {2}	2.535	2.331	E3	8.0	90
4	L1	Aroclor-1016 {3}	4.718	4.550	E3	3.6	91
5	L1	Aroclor-1016 {4}	3.693	3.512	E3	4.9	93
6	L1	Aroclor-1016 {5}	1.962	2.045	E3	-4.2	98
17	L7	Aroclor-1260	2.135	2.024	E3	5.2	93
18	L7	Aroclor-1260 {2}	3.248	3.018	E3	7.1	91
19	L7	Aroclor-1260 {3}	2.077	2.118	E3	-2.0	98
20	L7	Aroclor-1260 {4}	4.675	4.646	E3	0.6	97
21	L7	Aroclor-1260 {5}	3.560	3.546	E3	0.4	96
22	S	DCB	56.261	56.215	E3	0.1	98

Signal #2
Continuing Calibration File: 3_091815.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	16.207	15.260	E3	5.8	90
2	L1	Aroclor-1016	384.734	386.223		-0.4	95
3	L1	Aroclor-1016 {2}	885.369	866.529		2.1	94
4	L1	Aroclor-1016 {3}	1.698	1.743	E3	-2.6	96
5	L1	Aroclor-1016 {4}	789.988	814.970		-3.2	96
6	L1	Aroclor-1016 {5}	521.940	523.704		-0.3	97
17	L7	Aroclor-1260	1.258	1.278	E3	-1.5	97
18	L7	Aroclor-1260 {2}	821.251	910.010		-10.8	107
19	L7	Aroclor-1260 {3}	1.080	1.204	E3	-11.5	110
20	L7	Aroclor-1260 {4}	1.107	1.147	E3	-3.7	100
21	L7	Aroclor-1260 {5}	780.367	832.132		-6.6	104
22	S	DCB	24.505	26.314	E3	-7.4	103

(#) = Out of Range SPCC's out = 0 CCC's out = 0

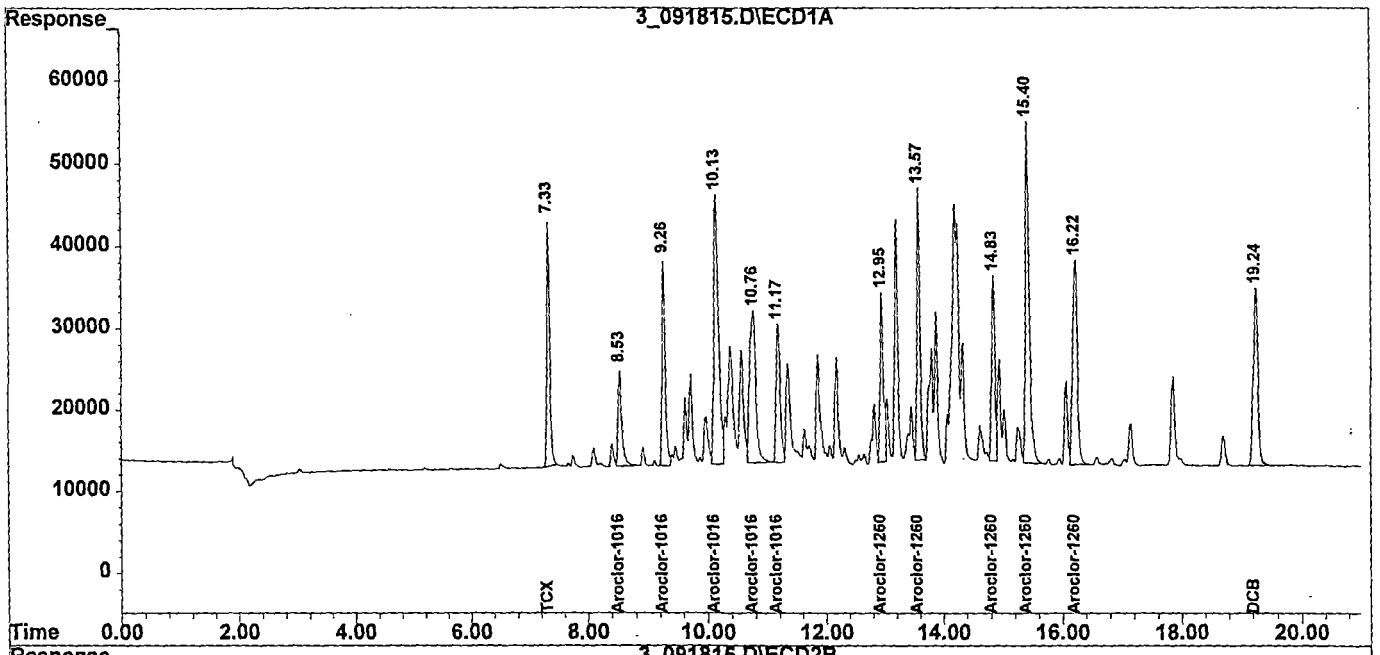
3_091815.D XPCBI16.M Wed Sep 19 08:17:54 2001

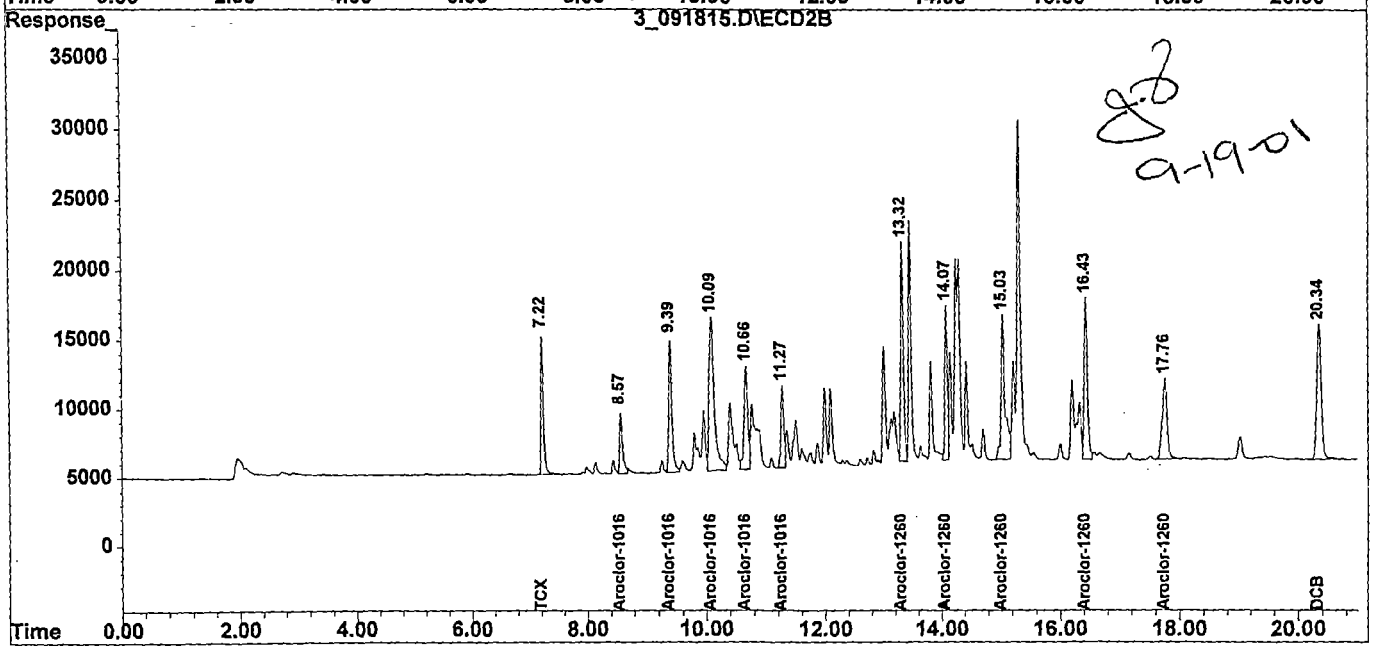
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091815.D\ECD1A.CH Vial: 87
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091815.D\ECD2B.CH
Acq On : 19 Sep 2001 5:49 Operator: BTB
Sample : AR1660L33P Inst : HP_03
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 8:17 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





gb 9-19-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091815.D\ECD1A.CH Vial: 87
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091815.D\ECD2B.CH
Acq On : 19 Sep 2001 5:49 Operator: BTB
Sample : AR1660L33P Inst : HP_03
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 8:17 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

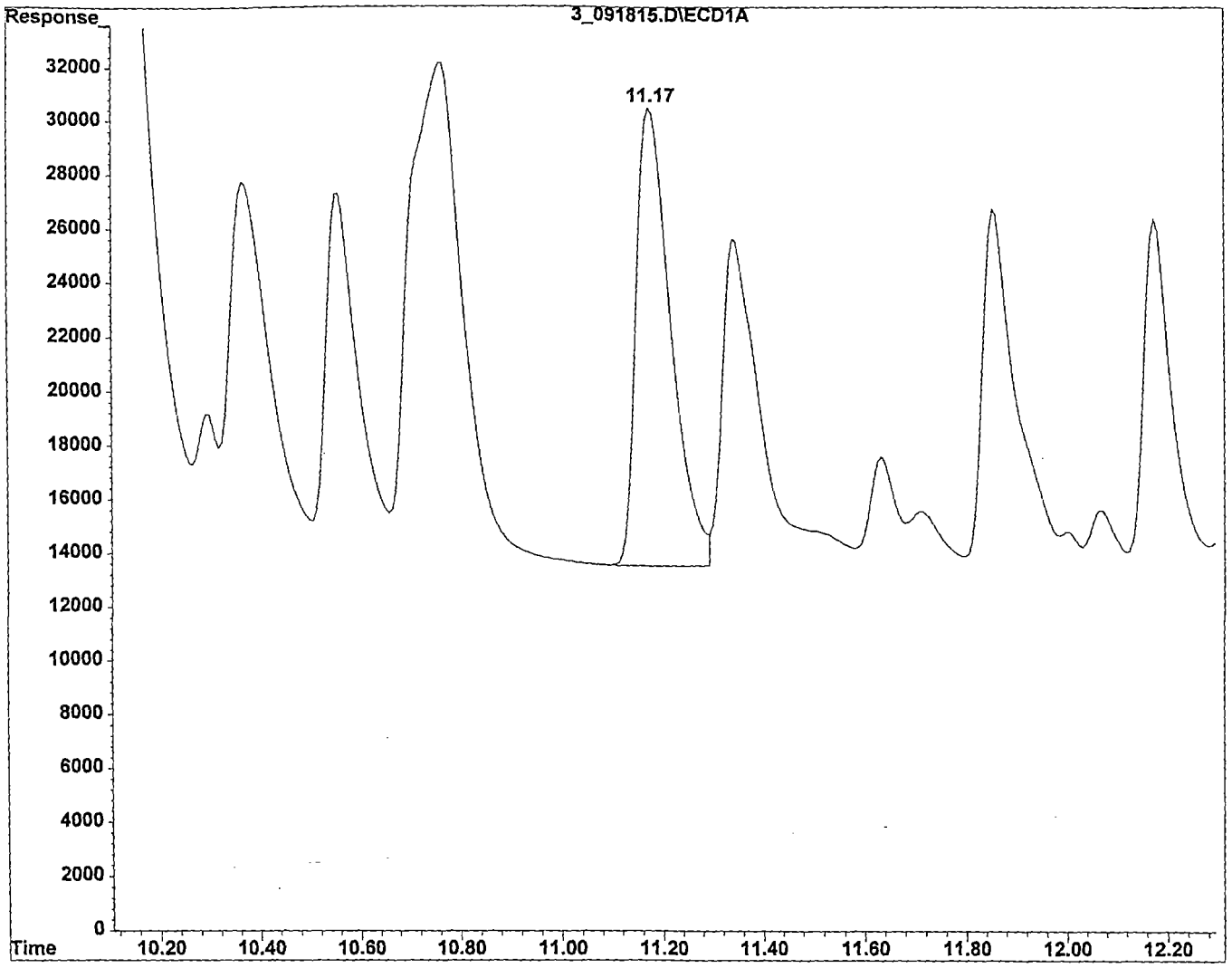
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	1013196	305194	18.7	18.8
22)	S DCB	19.24	20.34	1124299	526285	20.0	21.5
	Target Compounds:						
2)	L1 Aroclor-1016	8.53	8.57	497090	154489	366.8	401.5
3)	L1 Aroclor-1016 {2}	9.26	9.39	932517	346612	367.8	391.5
4)	L1 Aroclor-1016 {3}	10.13	10.09	1820181	697219	385.8	410.5
5)	L1 Aroclor-1016 {4}	10.76	10.67	1404883	325988	380.4	412.6
6)	L1 Aroclor-1016 {5}	11.17	11.28	818124	209482	417.0m BTB 09/19/01	401.4
	Sum Aroclor-1016			5472794	1733790	1917.7	2017.6
	Average Aroclor-1016					383.548	403.513
17)	L7 Aroclor-1260	12.95	13.32	809718	511144	379.2	406.2m BTB 09/19/01
18)	L7 Aroclor-1260 {2}	13.57	14.07	1207328	364004	371.7m	443.2m
19)	L7 Aroclor-1260 {3}	14.83	15.03	847170	481424	407.8	445.9m
20)	L7 Aroclor-1260 {4}	15.41	16.43	1858504	458960	397.6	414.6
21)	L7 Aroclor-1260 {5}	16.22	17.76	1418391	332853	398.5	426.5
	Sum Aroclor-1260			6141110	2148385	1954.7	2136.5
	Average Aroclor-1260					390.940	427.299

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091815.D
Date Acquired: 19 Sep 2001 5:49
Inst: HP_03 Operator ID: BTB
Name: AR1660L33P
Misc: 5-210-7
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 8:17 2001 Quant Results File: XPCBI16.RES



Aroclor-1016 {5} 11.17min area: 818124 m

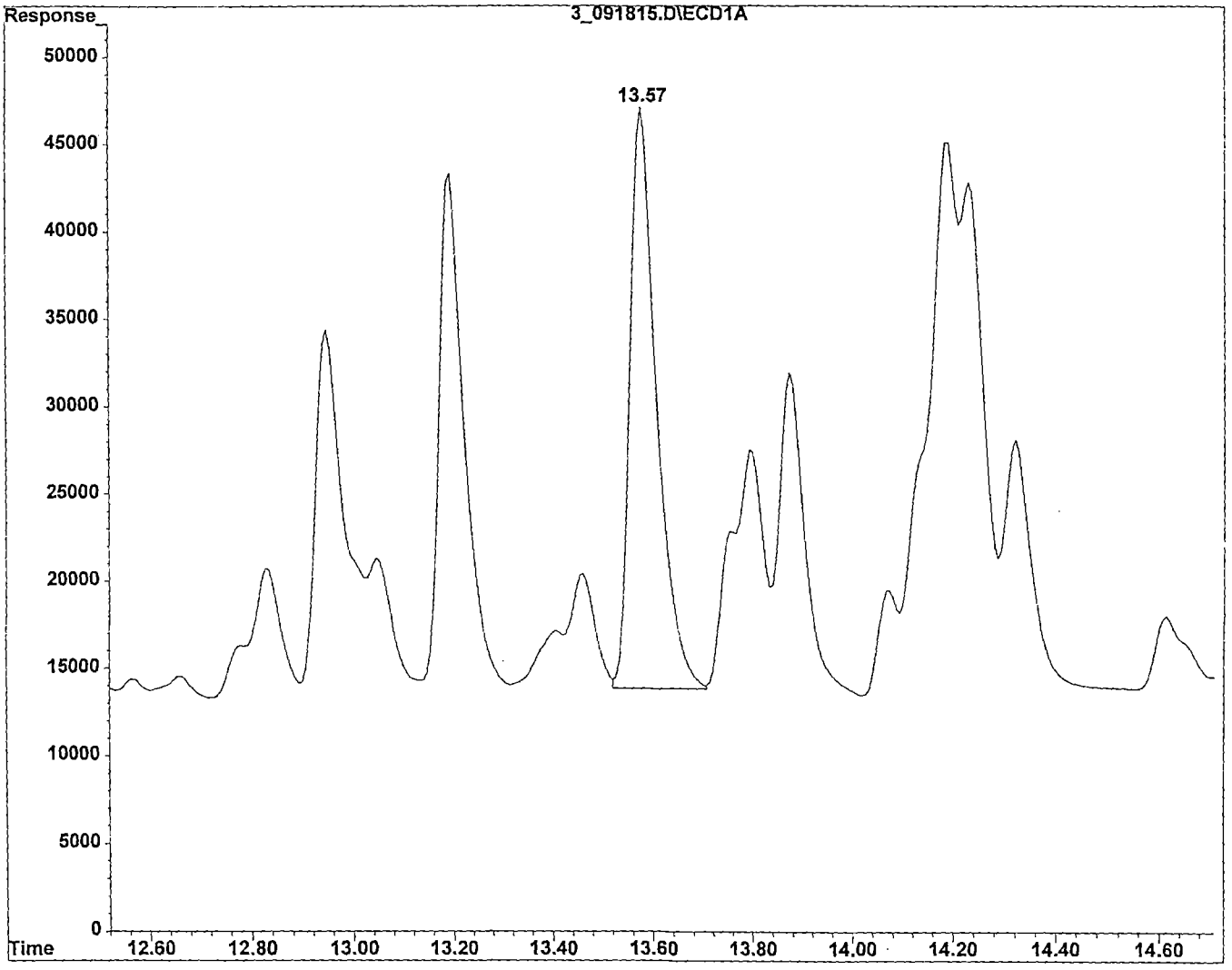
Integration Time Range: 11.11 - 11.29

BTB 091901

F:\HPCHEM\HP\3\DATA\09_18_01\3_091815.D
Report generated: Wed Sep 19 08:19:02 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091815.D
Date Acquired: 19 Sep 2001 5:49
Inst: HP_03 Operator ID: BTB
Name: AR1660L33P
Misc: 5-210-7
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 8:17 2001 Quant Results File: XPCBI16.RES



Aroclor-1260 {2} 13.57min area: 1207328 m

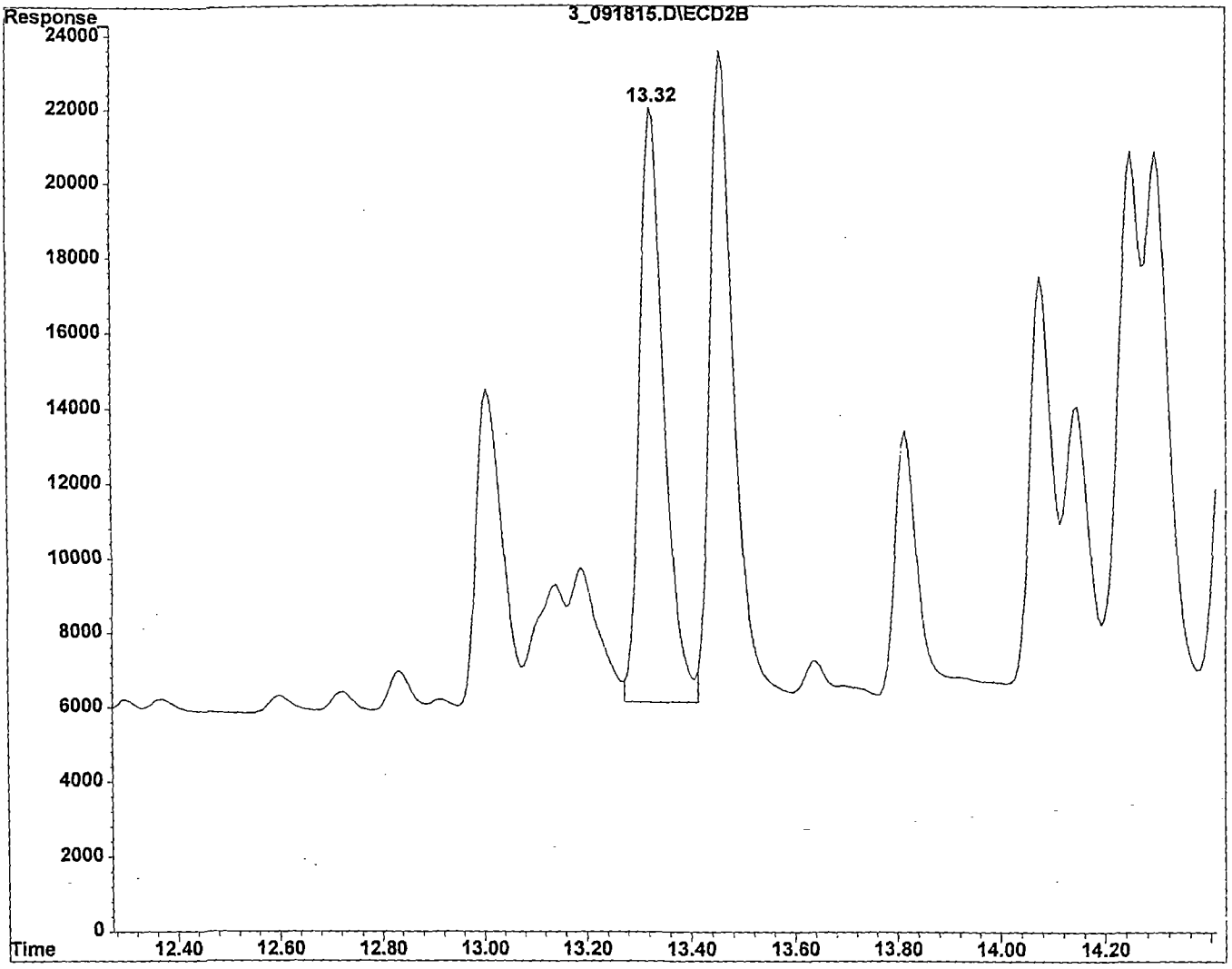
BTB 091901

Integration Time Range: 13.52 - 13.71

F:\HPCHEM\HP\3\DATA\09_18_01\3_091815.D
Report generated: Wed Sep 19 08:19:03 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091815.D
Date Acquired: 19 Sep 2001 5:49
Inst: HP_03 Operator ID: BTB
Name: AR1660L33P
Misc: 5-210-7
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 8:17 2001 Quant Results File: XPCBI16.RES



Aroclor-1260 #2 13.32min area: 511144 m

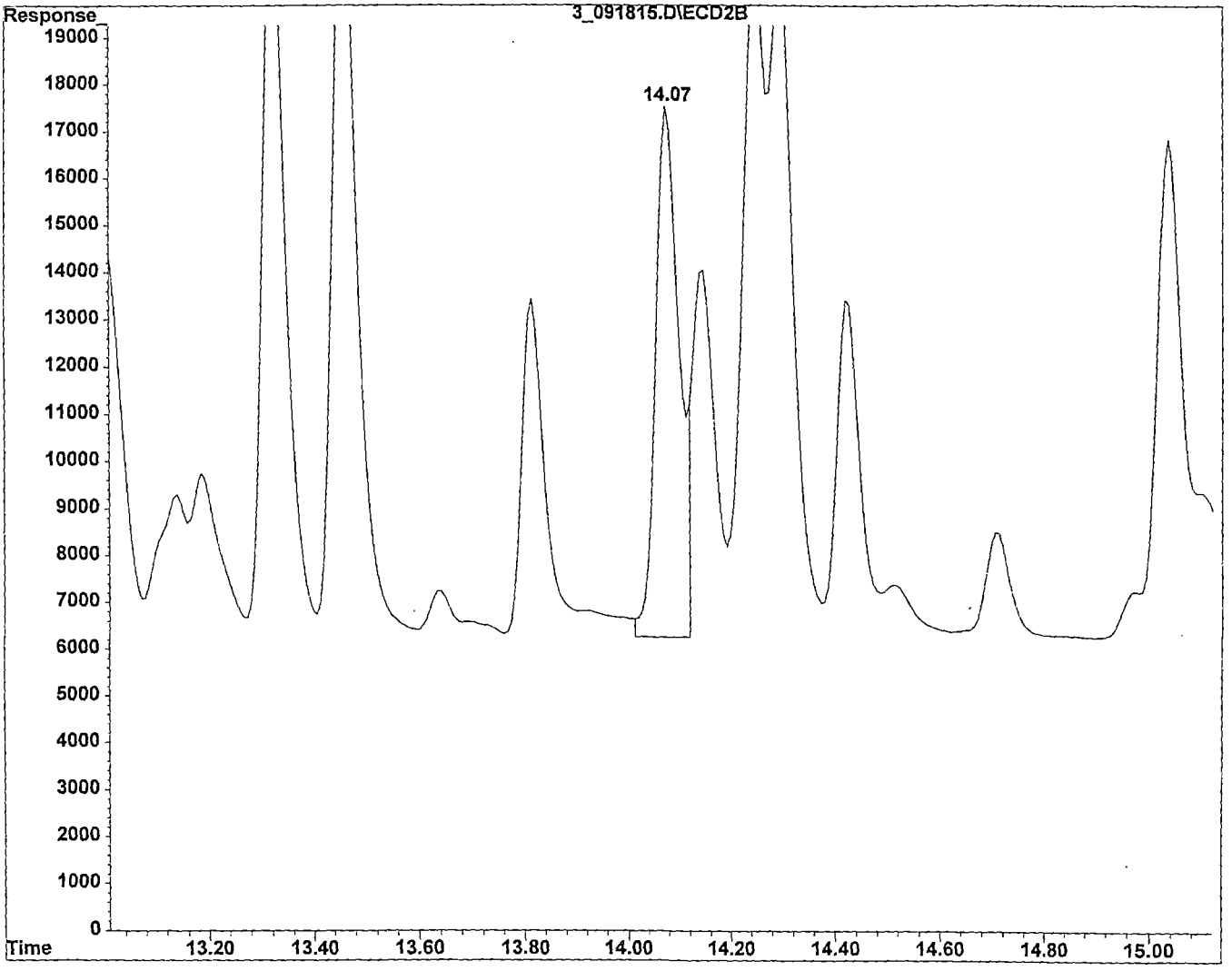
Integration Time Range: 13.27 - 13.41

BTB 091901

F:\HPCHEM\HP\3\DATA\09_18_01\3_091815.D
Report generated: Wed Sep 19 08:19:04 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091815.D
Date Acquired: 19 Sep 2001 5:49
Inst: HP_03 Operator ID: BTB
Name: AR1660L33P
Misc: 5-210-7
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 8:17 2001 Quant Results File: XPCBI16.RES



Aroclor-1260 {2} #2 14.07min area: 364004 m

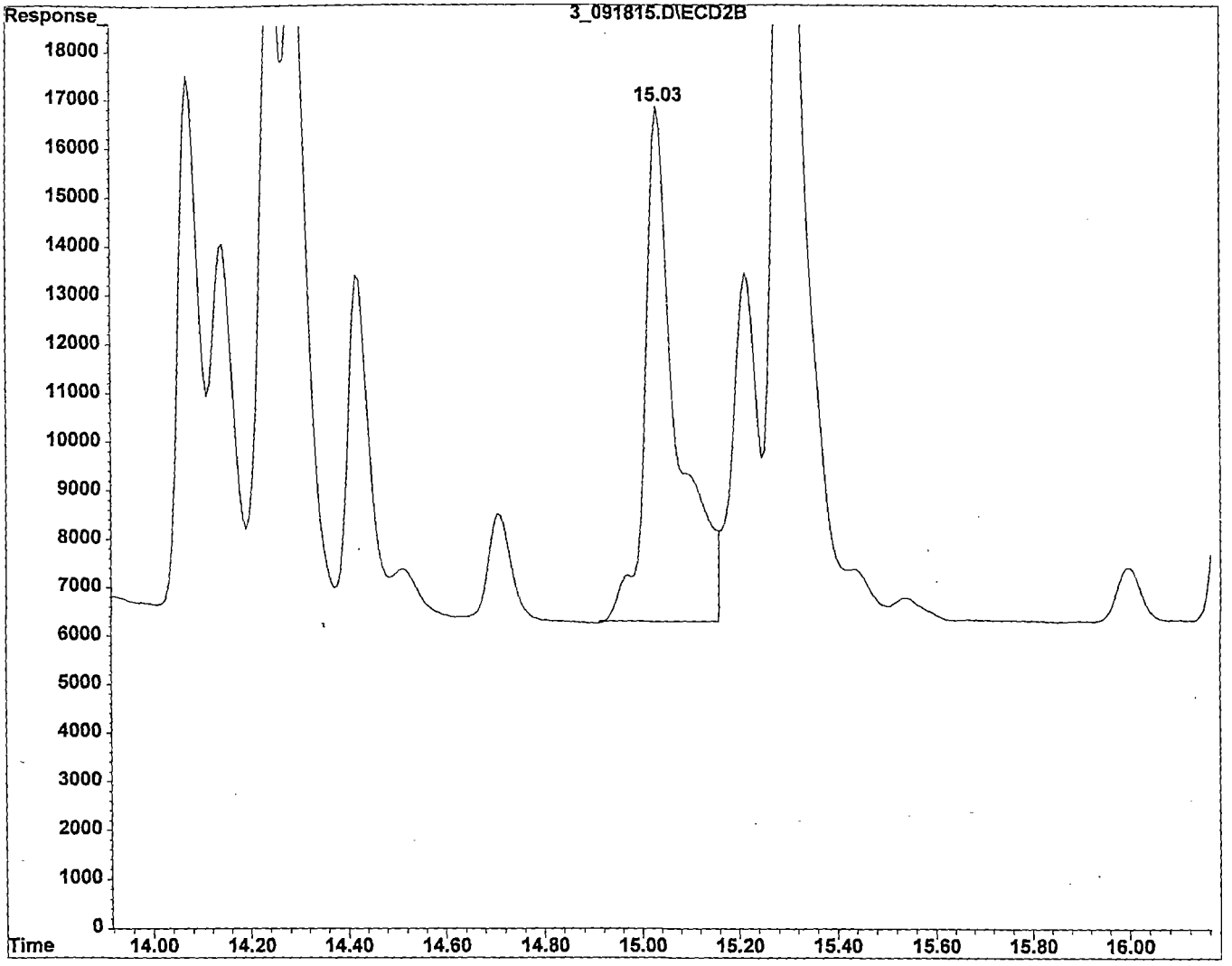
Integration Time Range: 14.01 - 14.12

BTB
091901

F:\HPCHEM\HP\3\DATA\09_18_01\3_091815.D
Report generated: Wed Sep 19 08:19:04 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091815.D
Date Acquired: 19 Sep 2001 5:49
Inst: HP_03 Operator ID: BTB
Name: AR1660L33P
Misc: 5-210-7
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 8:17 2001 Quant Results File: XPCBI16.RES



Aroclor-1260 {3} #2 15.03min area: 481424 m

Integration Time Range: 14.92 - 15.16

BTB
091901

F:\HPCHEM\HP\3\DATA\09_18_01\3_091815.D
Report generated: Wed Sep 19 08:19:05 2001

Continuing Calibration Report HP_03

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Wed Sep 19 15:04:51 2001
Response via : Initial Calibration

Continuing Calibration File: 3_091831.D

Min. RRF : 0.000 Min. Rel. Area : 50%
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	54.217	51.867	E3	4.3	92
2	L1	Aroclor-1016	1.355	1.261	E3	7.0	91
3	L1	Aroclor-1016 {2}	2.535	2.311	E3	8.9	89
4	L1	Aroclor-1016 {3}	4.718	4.366	E3	7.5	87
5	L1	Aroclor-1016 {4}	3.693	3.281	E3	11.2	87
6	L1	Aroclor-1016 {5}	1.962	1.863	E3	5.0	89
17	L7	Aroclor-1260	2.135	1.843	E3	13.7	85
18	L7	Aroclor-1260 {2}	3.248	2.721	E3	16.2#	82
19	L7	Aroclor-1260 {3}	2.077	1.832	E3	11.8	85
20	L7	Aroclor-1260 {4}	4.675	4.035	E3	13.7	84
21	L7	Aroclor-1260 {5}	3.560	3.117	E3	12.4	85
22	S	DCB	56.261	50.741	E3	9.8	88

Signal #2
Continuing Calibration File: 3_091831.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	16.207	15.343	E3	5.3	91
2	L1	Aroclor-1016	384.734	385.628		-0.2	95
3	L1	Aroclor-1016 {2}	885.369	847.441		4.3	92
4	L1	Aroclor-1016 {3}	1.698	1.689	E3	0.5	93
5	L1	Aroclor-1016 {4}	789.988	776.336		1.7	91
6	L1	Aroclor-1016 {5}	521.940	495.085		5.1	91
17	L7	Aroclor-1260	1.258	1.146	E3	8.9	87
18	L7	Aroclor-1260 {2}	821.251	744.911		9.3	88
19	L7	Aroclor-1260 {3}	1.080	0.968	E3	10.3	89
20	L7	Aroclor-1260 {4}	1.107	0.993	E3	10.3	87
21	L7	Aroclor-1260 {5}	780.367	714.787		8.4	89
22	S	DCB	24.505	22.563	E3	7.9	89

(#) = Out of Range SPCC's out = 0 CCC's out = 0

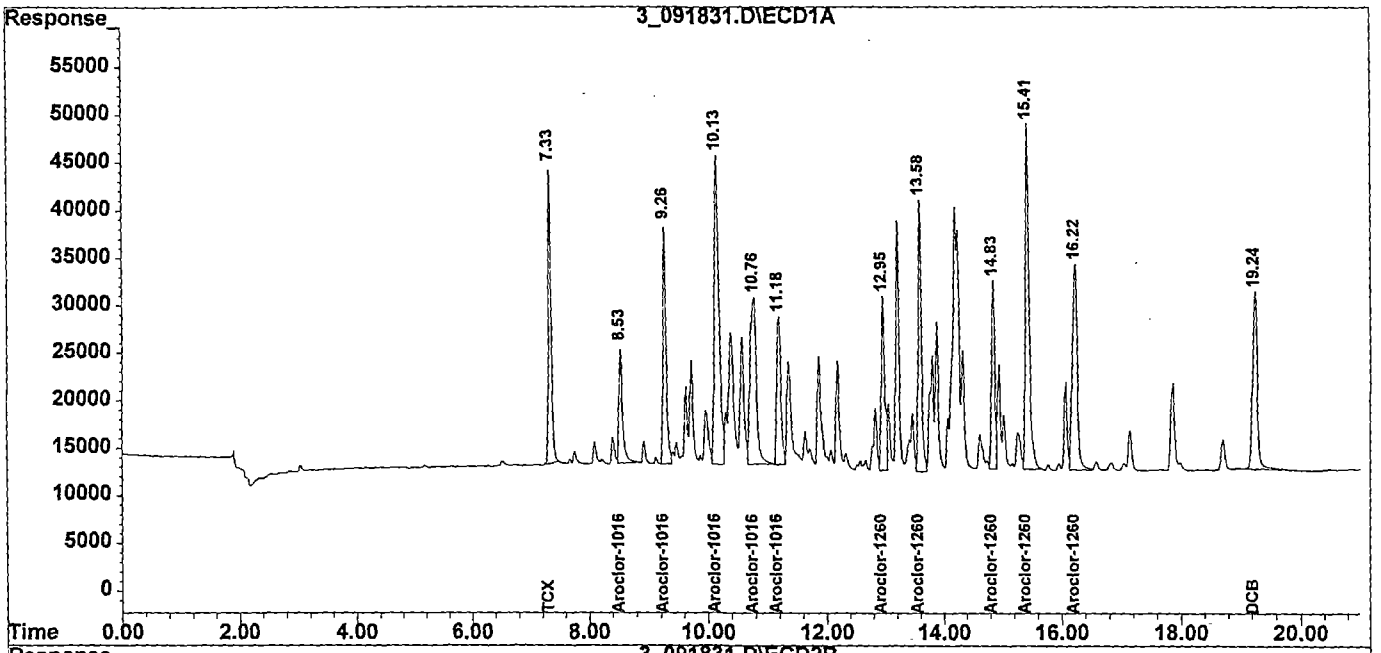
3_091831.D XPCBI16.M Wed Sep 19 15:05:01 2001

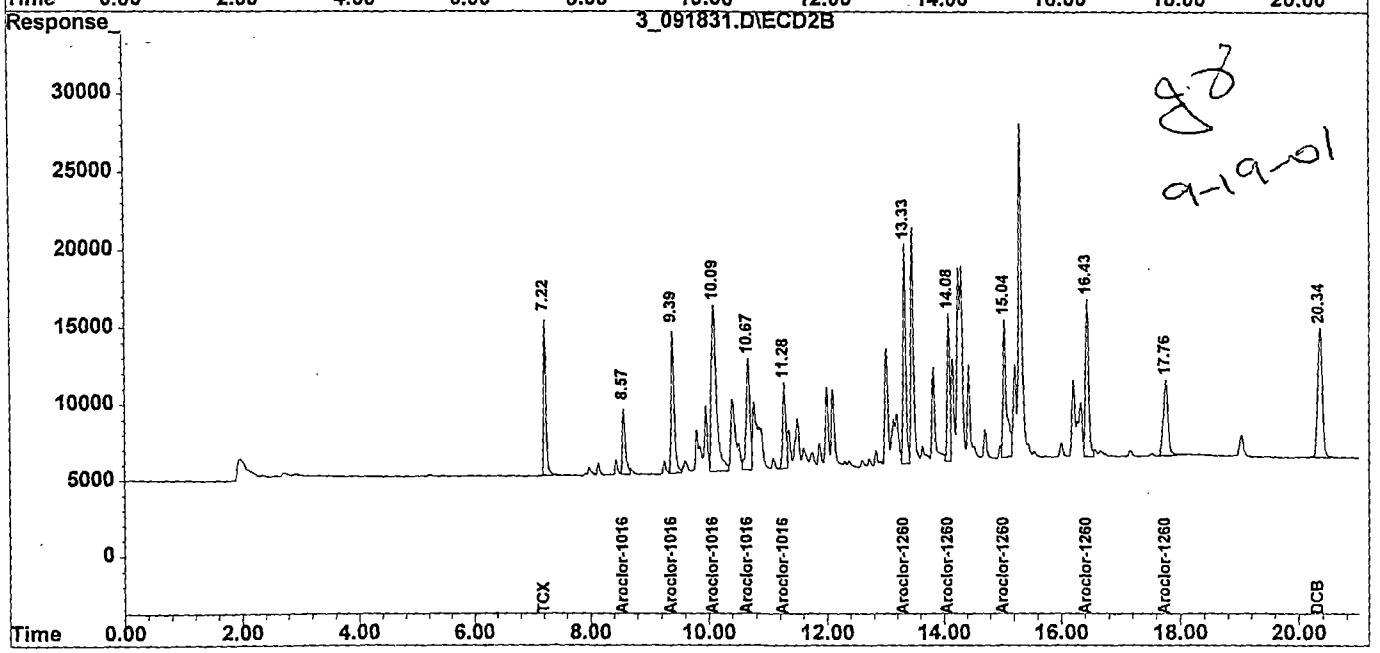
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091831.D\ECD1A.CH Vial: 3
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091831.D\ECD2B.CH
Acq On : 19 Sep 2001 12:40 Operator: BTB
Sample : AR1660L33R Inst : HP_03
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 13:40 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





gd
9-19-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091831.D\ECD1A.CH Vial: 3
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091831.D\ECD2B.CH
Acq On : 19 Sep 2001 12:40 Operator: BTB
Sample : AR1660L33R Inst : HP_03
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 13:40 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

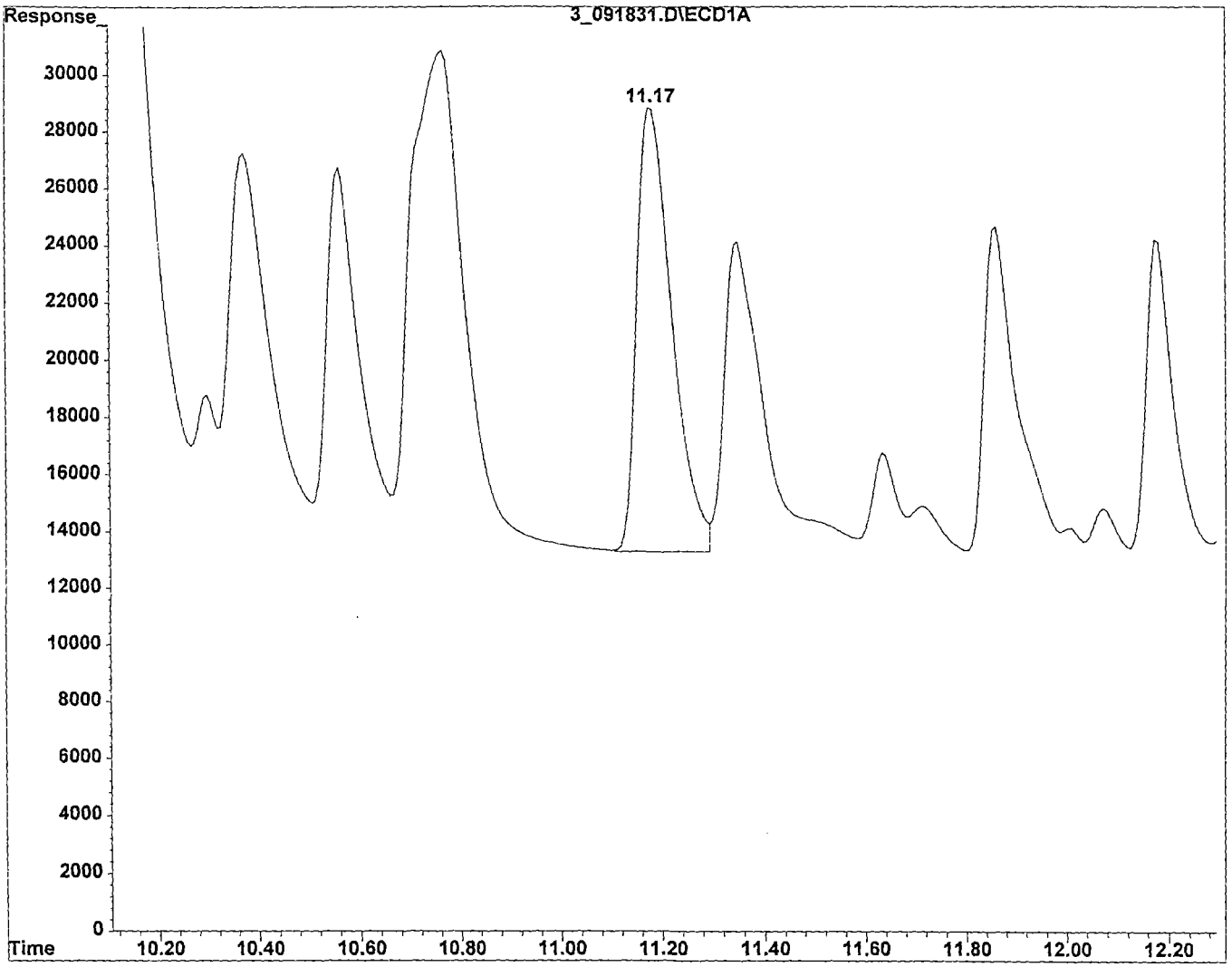
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	1037339	306855	19.1	18.9
22)	S DCB	19.24	20.34	1014824	451260	18.0	18.4
	Target Compounds:						
2)	L1 Aroclor-1016	8.53	8.57	504418	154251	372.2	400.9
3)	L1 Aroclor-1016 {2}	9.26	9.39	924365	338976	364.6	382.9
4)	L1 Aroclor-1016 {3}	10.14	10.09	1746305	675610	370.1	397.8
5)	L1 Aroclor-1016 {4}	10.77	10.67	1312373	310535	355.4	393.1
6)	L1 Aroclor-1016 {5}	11.17	11.28	745224	198034	379.8m BTB	379.4
	Sum Aroclor-1016			5232684	1677406	1842.1 091901	1954.1
	Average Aroclor-1016					368.414	390.821
17)	L7 Aroclor-1260	12.95	13.33	737284	458499	345.3m	364.4
18)	L7 Aroclor-1260 {2}	13.57	14.08	1088300	297965	335.0m	362.8
19)	L7 Aroclor-1260 {3}	14.84	15.04	732779	387296	352.7	358.7
20)	L7 Aroclor-1260 {4}	15.41	16.44	1613885	397289	345.2	358.9
21)	L7 Aroclor-1260 {5}	16.22	17.76	1246904	285915	350.3	366.4
	Sum Aroclor-1260			5419153	1826963	1728.6	1811.2
	Average Aroclor-1260					345.714	362.239

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091831.D
Date Acquired: 19 Sep 2001 12:40
Inst: HP_03 Operator ID: BTB
Name: ARI660L33R
Misc: 5-210-7
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 13:40 2001 Quant Results File: XPCBI16.RES



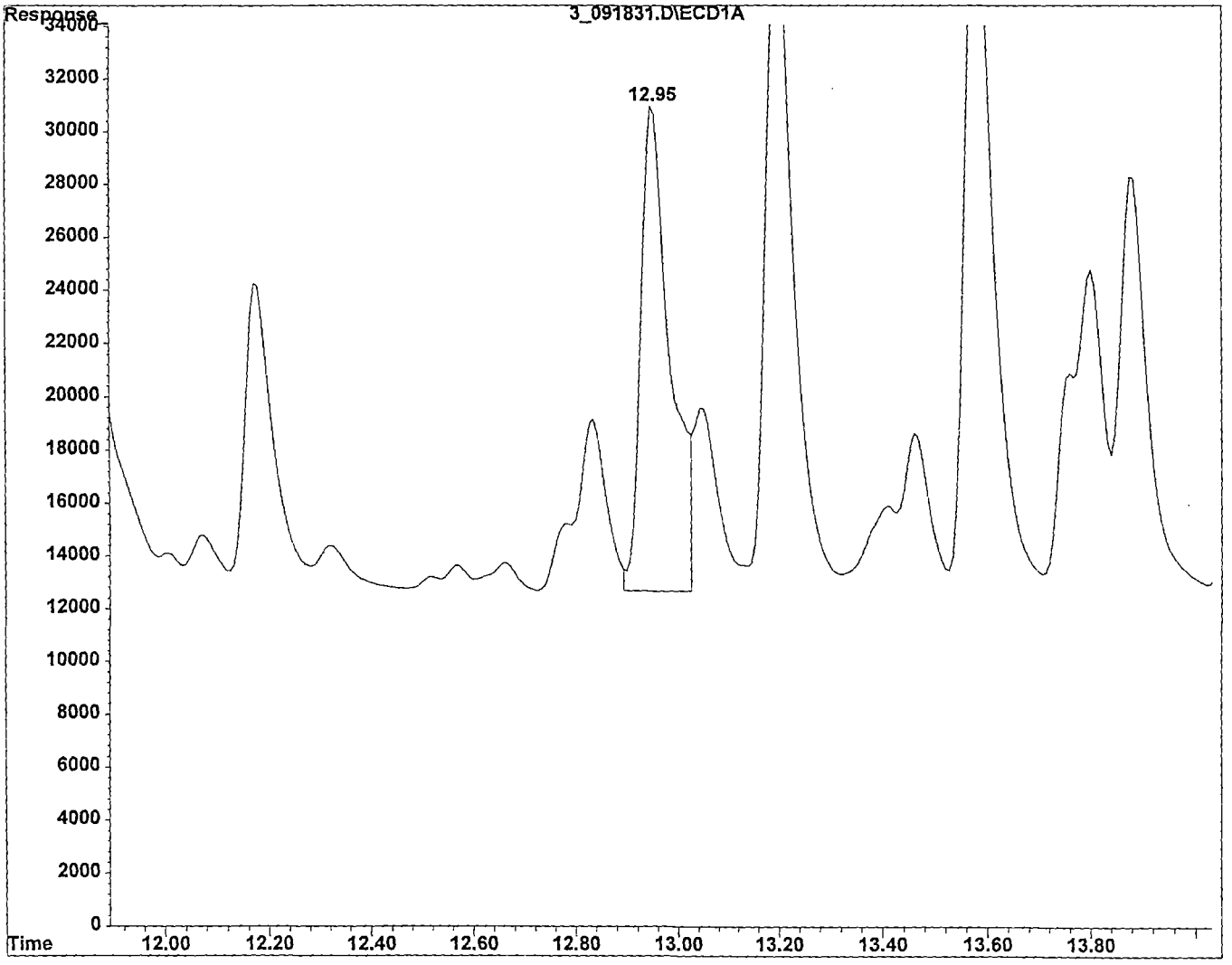
Aroclor-1016 {5} 11.17min area: 745224 m BTB 091901

Integration Time Range: 11.11 - 11.29

F:\HPCHEM\HP\3\DATA\09_18_01\3_091831.D
Report generated: Wed Sep 19 15:06:34 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091831.D
Date Acquired: 19 Sep 2001 12:40
Inst: HP_03 Operator ID: BTB
Name: AR1660L33R
Misc: 5-210-7
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 13:40 2001 Quant Results File: XPCBI16.RES



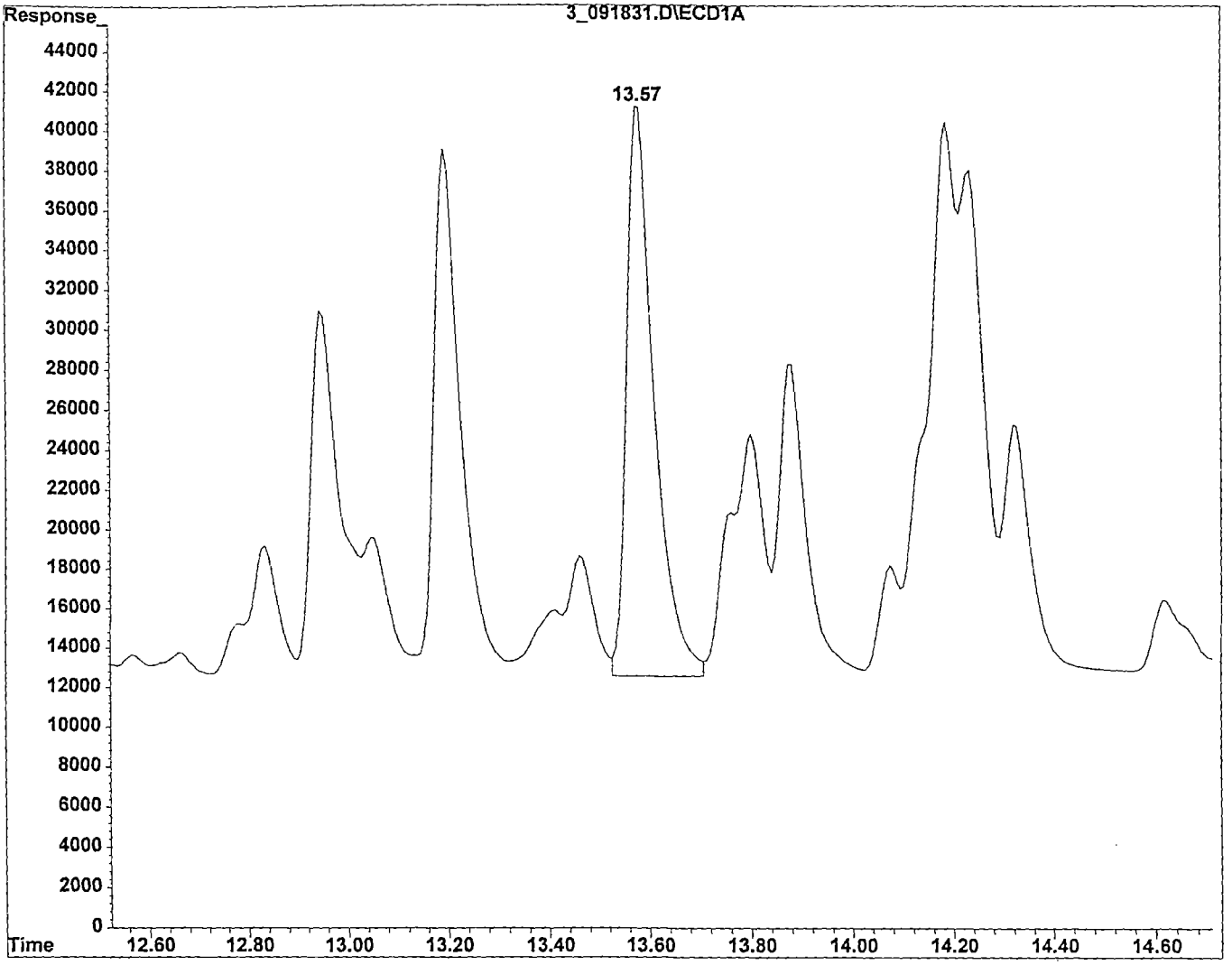
Aroclor-1260 12.95min area: 737284 m BTB 091901

Integration Time Range: 12.89 - 13.03

F:\HPCHEM\HP\3\DATA\09_18_01\3_091831.D
Report generated: Wed Sep 19 15:06:34 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091831.D
Date Acquired: 19 Sep 2001 12:40
Inst: HP_03 Operator ID: BTB
Name: AR1660L33R
Misc: 5-210-7
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 13:40 2001 Quant Results File: XPCBI16.RES



Aroclor-1260 {2} 13.57min area: 1088300 m BTB 091801

Integration Time Range: 13.52 - 13.71

F:\HPCHEM\HP\3\DATA\09_18_01\3_091831.D
Report generated: Wed Sep 19 15:06:35 2001

Continuing Calibration Report HP_03

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 20 07:30:10 2001
Response via : Initial Calibration

Continuing Calibration File: 3_091845.D

Min. RRF : 0.000 Min. Rel. Area : 50%
Max. RRF Dev : 15% Max. Rel. Area : 150%

ok 9-22-01

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	54.217	55.554	E3	-2.5	98
2	L1	Aroclor-1016	1.355	1.384	E3	-2.1	100
3	L1	Aroclor-1016 {2}	2.535	2.545	E3	-0.4	98
4	L1	Aroclor-1016 {3}	4.718	4.835	E3	-2.5	96
5	L1	Aroclor-1016 {4}	3.693	3.792	E3	-2.7	101
6	L1	Aroclor-1016 {5}	1.962	2.046	E3	-4.3	98
17	L7	Aroclor-1260	2.135	2.074	E3	2.9	96
18	L7	Aroclor-1260 {2}	3.248	3.111	E3	4.2	94
19	L7	Aroclor-1260 {3}	2.077	2.170	E3	-4.5	101
20	L7	Aroclor-1260 {4}	4.675	4.795	E3	-2.6	100
21	L7	Aroclor-1260 {5}	3.560	3.625	E3	-1.8	98
22	S	DCB	56.261	59.090	E3	-5.0	103

Signal #2
Continuing Calibration File: 3_091845.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	16.207	15.993	E3	1.3	94
2	L1	Aroclor-1016	384.734	439.746		-14.3	108
3	L1	Aroclor-1016 {2}	885.369	913.129		-3.1	99
4	L1	Aroclor-1016 {3}	1.698	1.840	E3	-8.4	101
5	L1	Aroclor-1016 {4}	789.988	849.294		-7.5	100
6	L1	Aroclor-1016 {5}	521.940	551.536		-5.7	102
17	L7	Aroclor-1260	1.258	1.281	E3	-1.8	97
18	L7	Aroclor-1260 {2}	821.251	840.479		-2.3	99
19	L7	Aroclor-1260 {3}	1.080	1.112	E3	-3.0	102
20	L7	Aroclor-1260 {4}	1.107	1.127	E3	-1.8	98
21	L7	Aroclor-1260 {5}	780.367	821.351		-5.3	103
22	S	DCB	24.505	25.394	E3	-3.6	100

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3_091845.D XPCBI16.M Thu Sep 20 07:30:19 2001

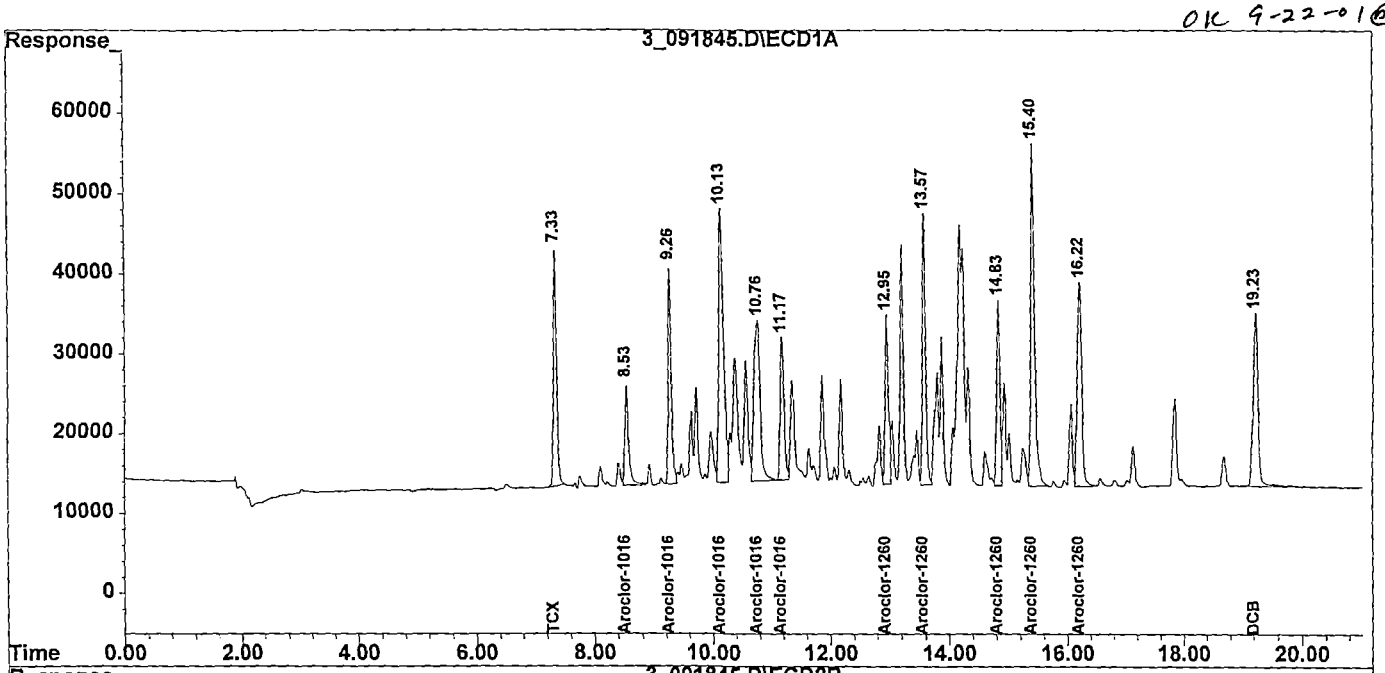
Chromatographic Report

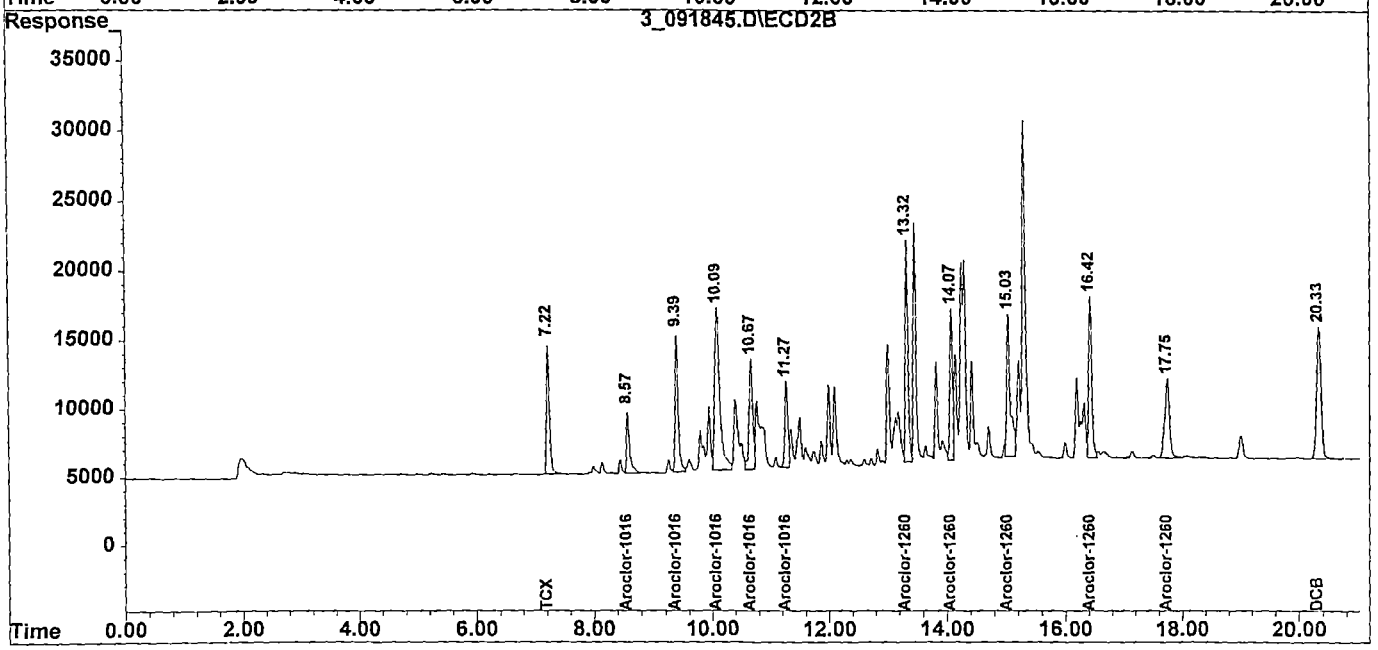
Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091845.D\ECD1A.CH Vial: 17
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091845.D\ECD2B.CH
Acq On : 19 Sep 2001 18:40 Operator: BTB
Sample : AR1660L33T Inst : HP_03
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 7:29 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

OK 9-22-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091845.D\ECD1A.CH Vial: 17
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091845.D\ECD2B.CH
Acq On : 19 Sep 2001 18:40 Operator: BTB
Sample : AR1660L33T Inst : HP_03
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 7:29 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

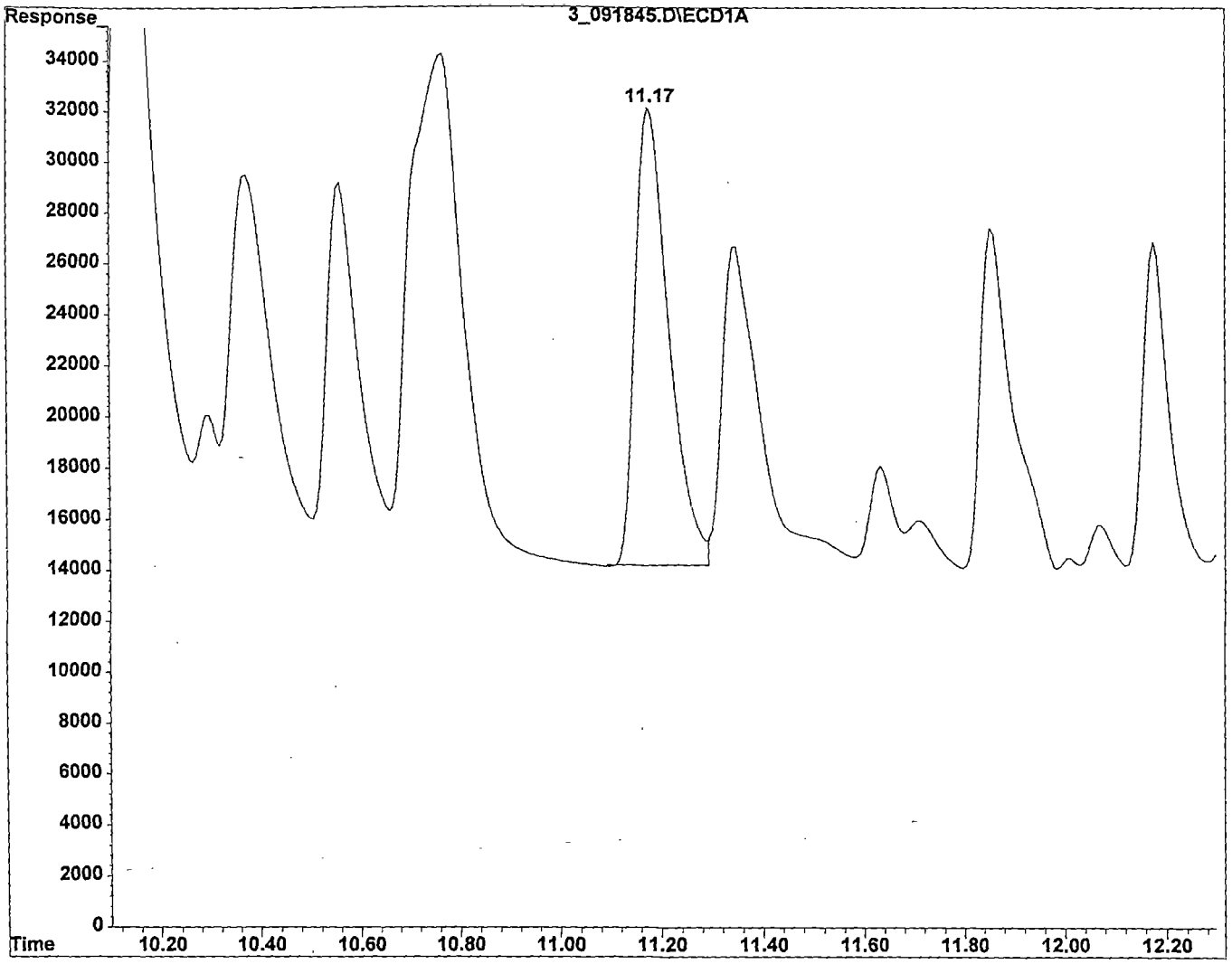
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	1111086	319851	20.5	19.7
22)	S DCB	19.23	20.33	1181805	507876	21.0	20.7
	Target Compounds:						
2)	L1 Aroclor-1016	8.53	8.57	553599	175899	408.5	457.2
3)	L1 Aroclor-1016 {2}	9.26	9.39	1018040	365251	401.5	412.5
4)	L1 Aroclor-1016 {3}	10.13	10.09	1933872	736188	409.9	433.5
5)	L1 Aroclor-1016 {4}	10.77	10.67	1516730	339718	410.7	430.0
6)	L1 Aroclor-1016 {5}	11.17	11.28	818228	220614	417.0m BTB	422.7
	Sum Aroclor-1016			5840469	1837670	2047.6 092001	2155.9
	Average Aroclor-1016					409.520	431.184
17)	L7 Aroclor-1260	12.95	13.32	829601	512548	388.5	407.3m BTB
18)	L7 Aroclor-1260 {2}	13.57	14.08	1244300	336192	383.1m	409.4 092001
19)	L7 Aroclor-1260 {3}	14.83	15.04	868157	444758	417.9	412.0
20)	L7 Aroclor-1260 {4}	15.40	16.43	1917916	450705	410.3	407.2
21)	L7 Aroclor-1260 {5}	16.22	17.76	1449857	328540	407.3	421.0
	Sum Aroclor-1260			6309831	2072743	2007.0	2056.8
	Average Aroclor-1260					401.409	411.359

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091845.D
Date Acquired: 19 Sep 2001 18:40
Inst: HP_03 Operator ID: BTB
Name: AR1660L33T
Misc: 5-210-7
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 7:29 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

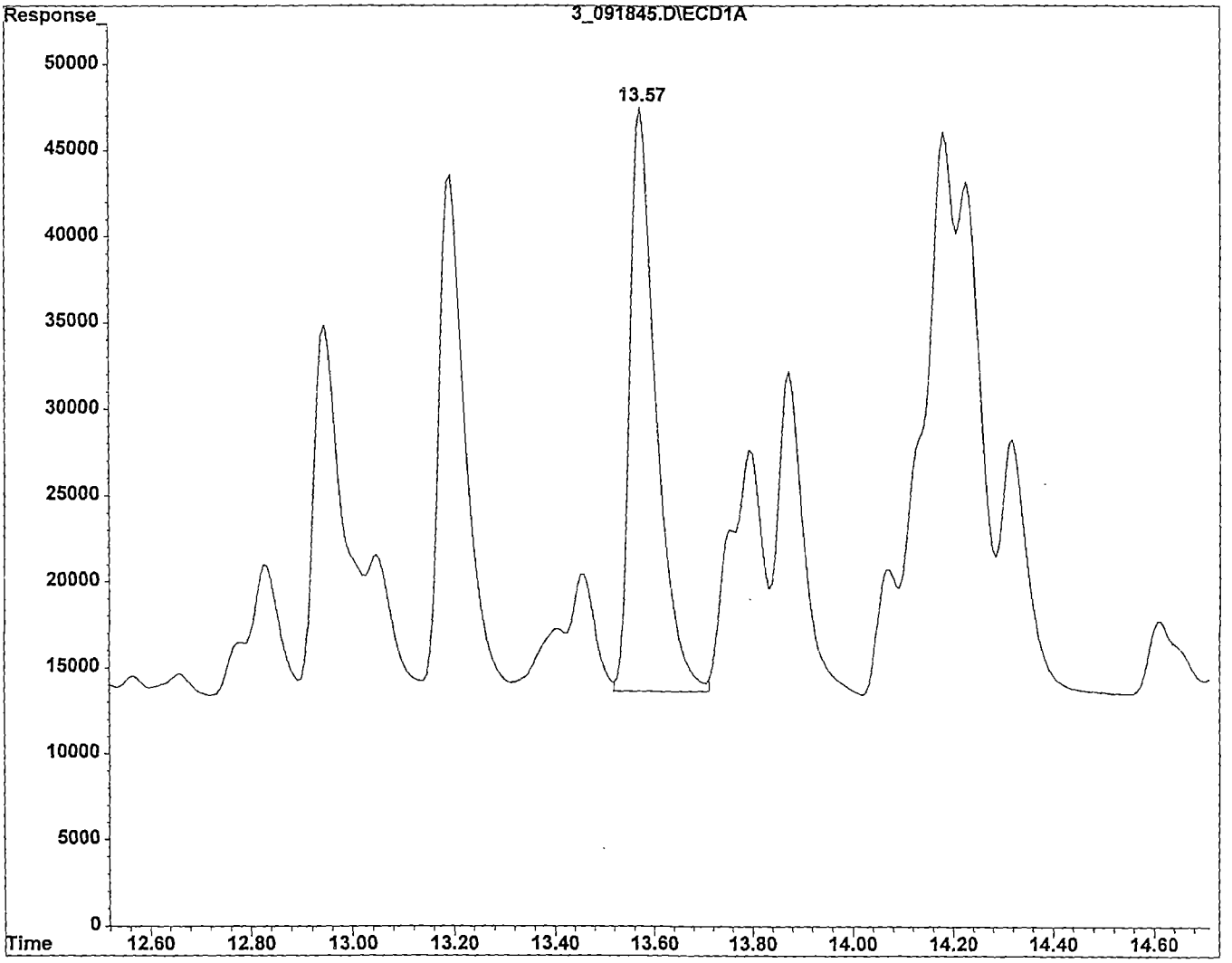
Aroclor-1016 {5} 11.17min area: 818228 m BTB

Integration Time Range: 11.10 - 11.30 092001

F:\HPCHEM\HP\3\DATA\09_18_01\3_091845.D
Report generated: Thu Sep 20 07:31:35 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091845.D
Date Acquired: 19 Sep 2001 18:40
Inst: HP_03 Operator ID: BTB
Name: AR1660L33T
Misc: 5-210-7
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 7:29 2001 Quant Results File: XPCBI16.RES



ok 9-22-01

Aroclor-1260 {2} 13.57min area: 1244300 m

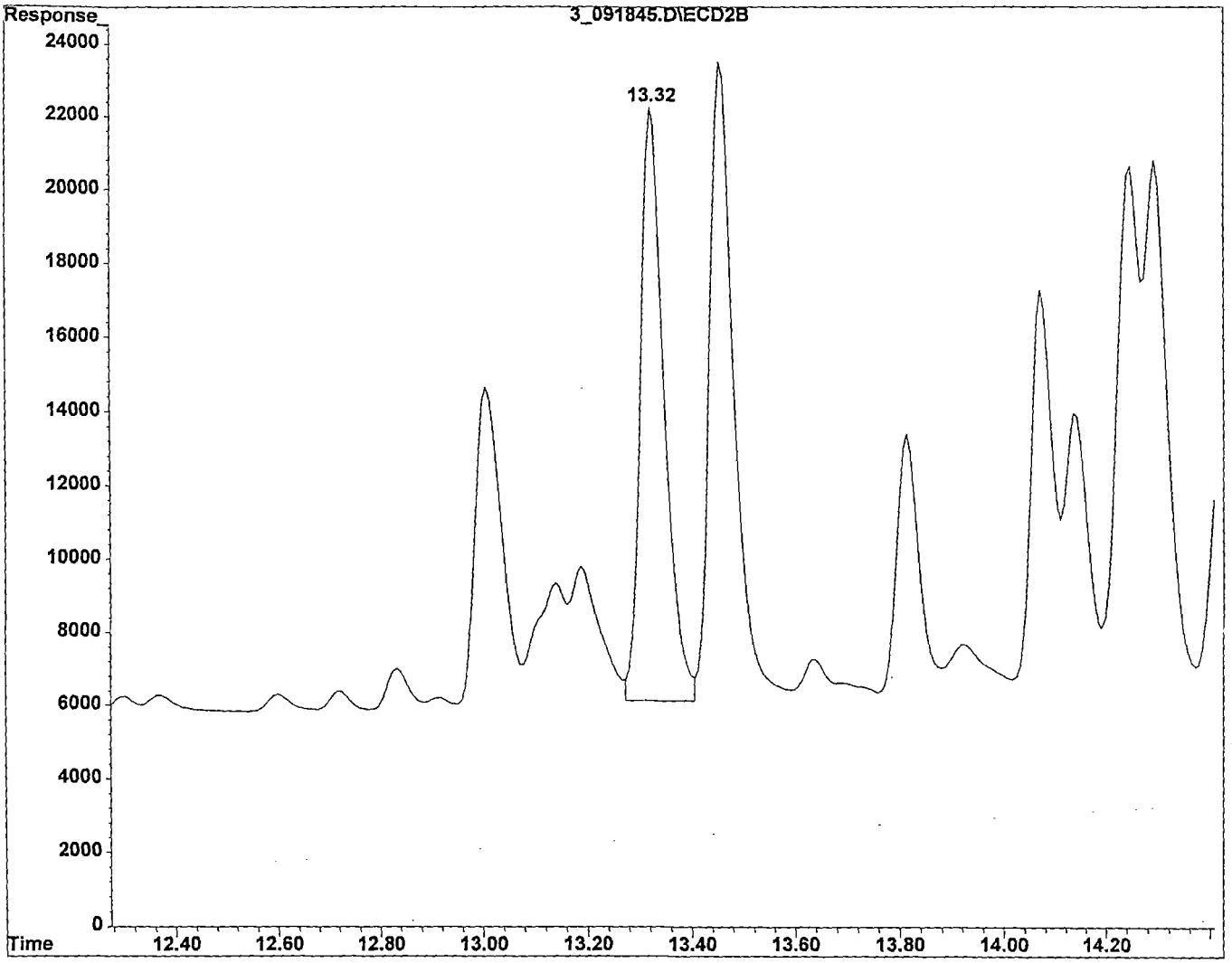
BTB 092001

Integration Time Range: 13.52 - 13.71

F:\HPCHEM\HP\3\DATA\09_18_01\3_091845.D
Report generated: Thu Sep 20 07:31:36 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091845.D
Date Acquired: 19 Sep 2001 18:40
Inst: HP_03 Operator ID: BTB
Name: AR1660L33T
Misc: 5-210-7
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 7:29 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1260 #2 13.32min area: 512548 m

BTB 092001

Integration Time Range: 13.28 - 13.41

F:\HPCHEM\HP\3\DATA\09_18_01\3_091845.D
Report generated: Thu Sep 20 07:31:36 2001

Continuing Calibration Report HP_03

Method : F:\HPCHEM\HP\3\DATA\09_20_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Fri Sep 21 07:35:00 2001
Response via : Initial Calibration

Continuing Calibration File: 3_092045.D

OK 9-22-01

Min. RRF : 0.000 Min. Rel. Area : 50%
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	54.217	59.640	E3	-10.0	106
2	L1	Aroclor-1016	1.355	1.410	E3	-4.1	102
3	L1	Aroclor-1016 {2}	2.535	2.592	E3	-2.2	100
4	L1	Aroclor-1016 {3}	4.718	4.851	E3	-2.8	97
5	L1	Aroclor-1016 {4}	3.693	3.487	E3	5.6	93
6	L1	Aroclor-1016 {5}	1.962	1.929	E3	1.7	92
17	L7	Aroclor-1260	2.135	1.781	E3	16.6#	82
18	L7	Aroclor-1260 {2}	3.248	2.677	E3	17.6#	81
19	L7	Aroclor-1260 {3}	2.077	1.991	E3	4.1	93
20	L7	Aroclor-1260 {4}	4.675	4.095	E3	12.4	86
21	L7	Aroclor-1260 {5}	3.560	3.194	E3	10.3	87
22	S	DCB	56.261	49.657	E3	11.7	86

Signal #2
Continuing Calibration File: 3_092045.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	16.207	17.503	E3	-8.0	103
2	L1	Aroclor-1016	384.734	419.906		-9.1	103
3	L1	Aroclor-1016 {2}	885.369	929.978		-5.0	101
4	L1	Aroclor-1016 {3}	1.698	1.842	E3	-8.5	101
5	L1	Aroclor-1016 {4}	789.988	850.603		-7.7	100
6	L1	Aroclor-1016 {5}	521.940	544.457		-4.3	100
17	L7	Aroclor-1260	1.258	1.206	E3	4.2	92
18	L7	Aroclor-1260 {2}	821.251	814.576		0.8	96
19	L7	Aroclor-1260 {3}	1.080	1.012	E3	6.3	93
20	L7	Aroclor-1260 {4}	1.107	1.080	E3	2.4	94
21	L7	Aroclor-1260 {5}	780.367	738.667		5.3	92
22	S	DCB	24.505	23.909	E3	2.4	94

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3_092045.D XPCBI16.M Fri Sep 21 07:35:09 2001

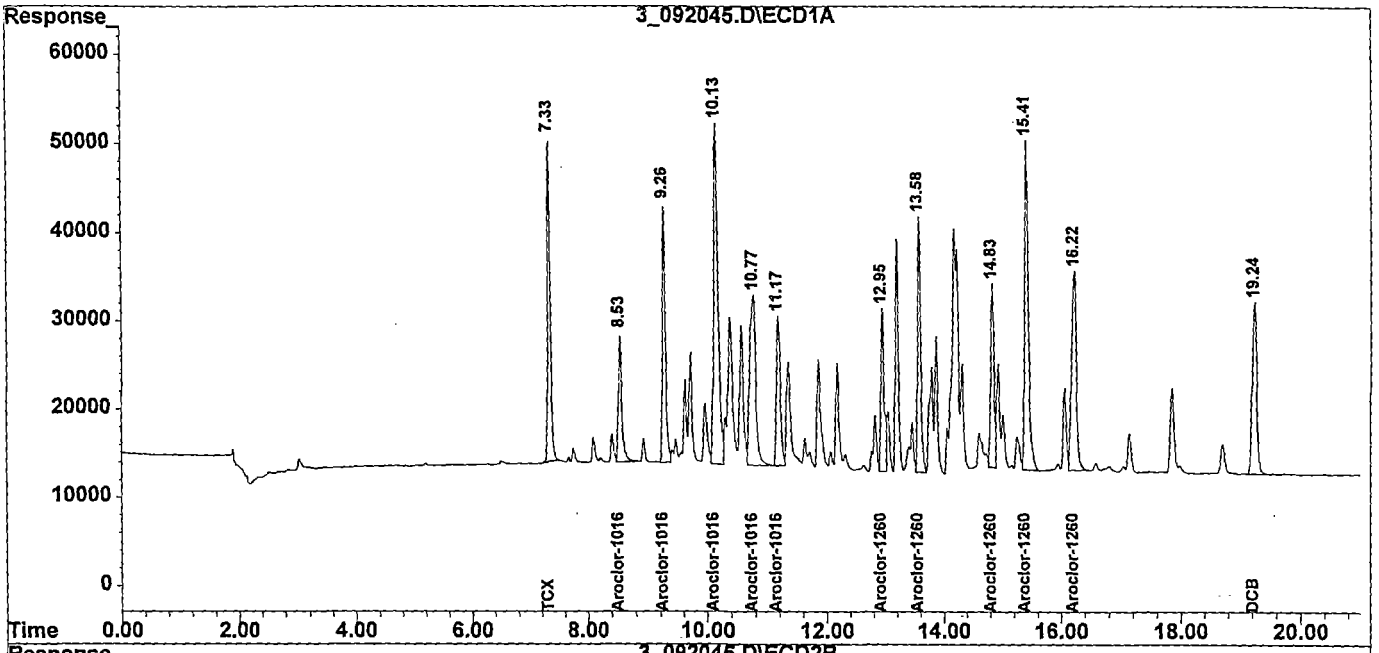
Chromatographic Report

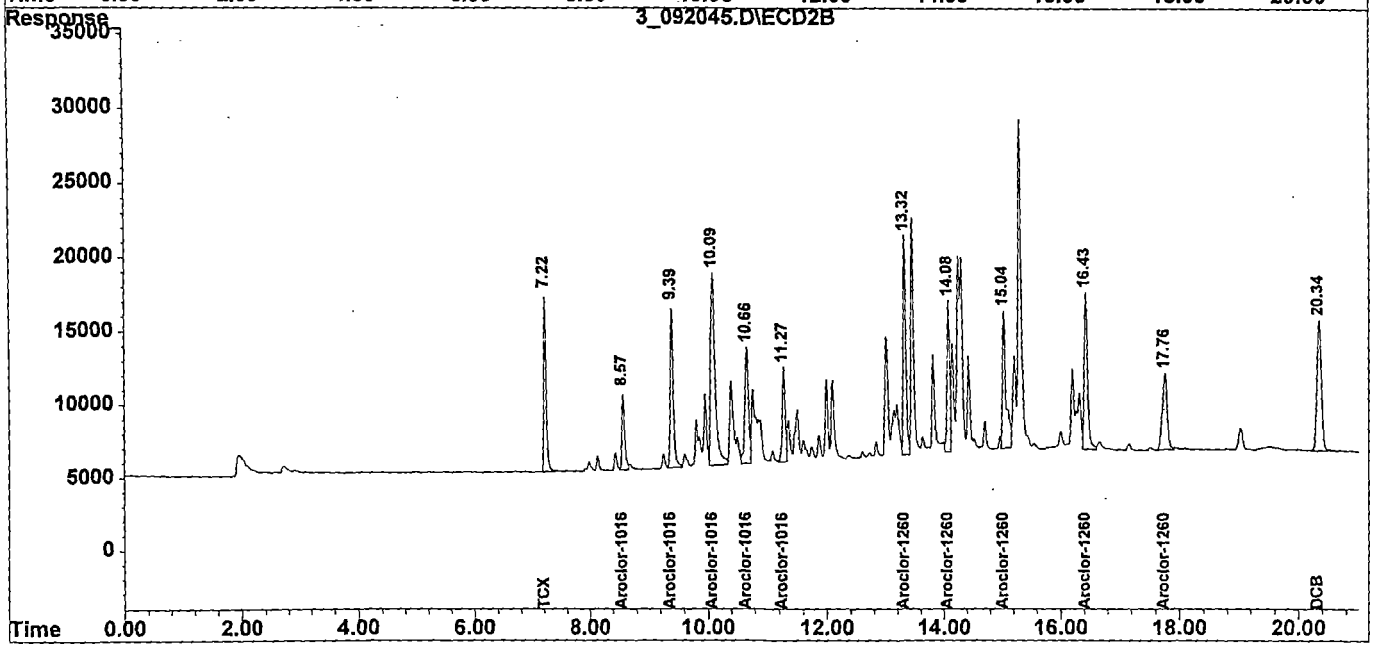
Signal #1 : F:\HPCHEM\HP\3\DATA\09_20_01\3_092045.D\ECD1A.CH Vial: 76
Signal #2 : F:\HPCHEM\HP\3\DATA\09_20_01\3_092045.D\ECD2B.CH
Acq On : 20 Sep 2001 20:28 Operator: BTB
Sample : AR1660L33A ✓ Inst : HP_03
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 7:34 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_20_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

OK 9-22-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_20_01\3_092045.D\ECD1A.CH Vial: 76
Signal #2 : F:\HPCHEM\HP\3\DATA\09_20_01\3_092045.D\ECD2B.CH
Acq On : 20 Sep 2001 20:28 Operator: BTB
Sample : AR1660L33A Inst : HP_03
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 7:34 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_20_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

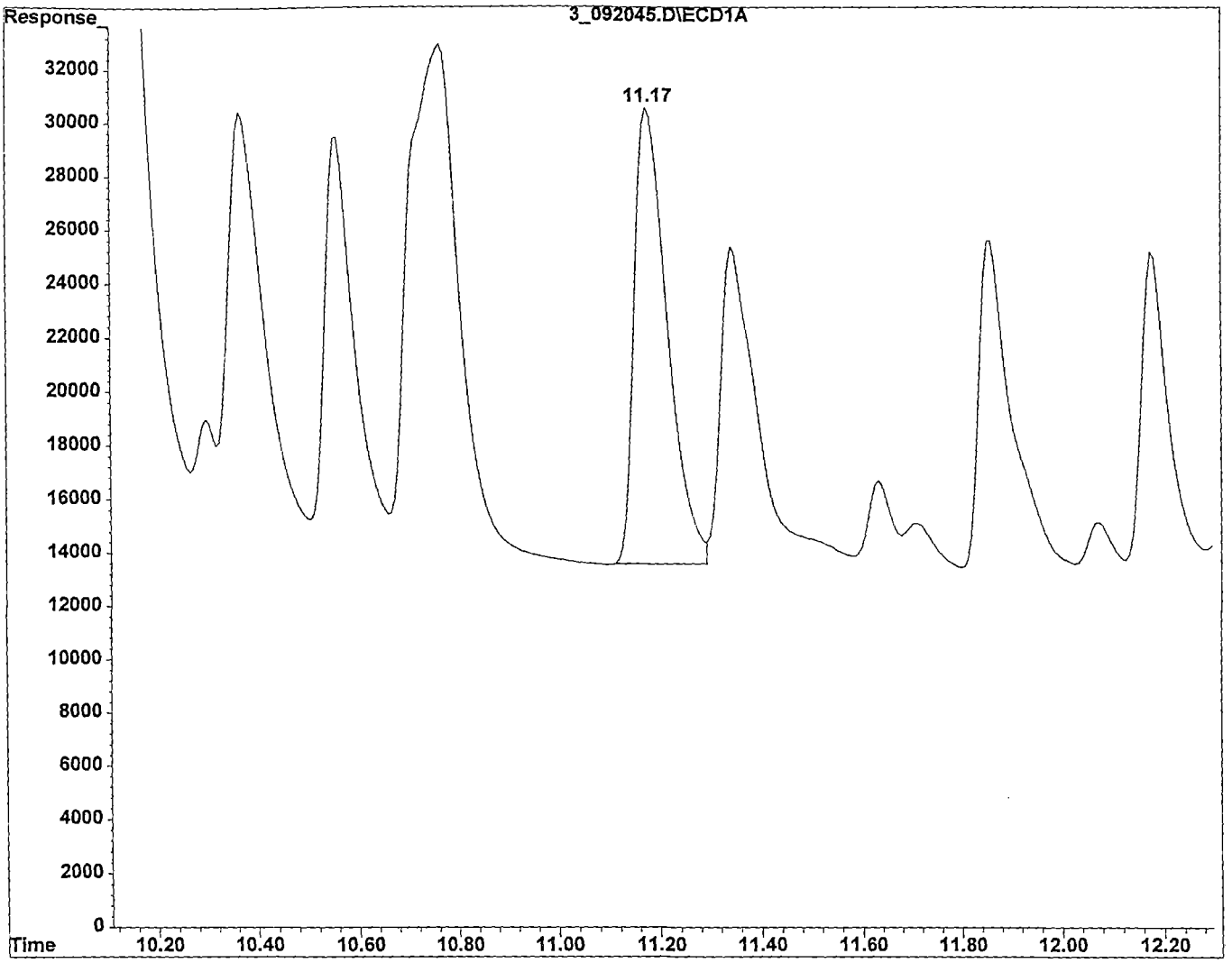
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	1192810	350056	22.0	21.6
22)	S DCB	19.24	20.34	993136	478181	17.7	19.5
	Target Compounds:						
2)	L1 Aroclor-1016	8.53	8.57	564141	167962	416.2	436.6
3)	L1 Aroclor-1016 {2}	9.26	9.39	1036657	371991	408.9	420.2
4)	L1 Aroclor-1016 {3}	10.13	10.09	1940518	736954	411.3	433.9
5)	L1 Aroclor-1016 {4}	10.77	10.67	1394948	340241	377.7	430.7
6)	L1 Aroclor-1016 {5}	11.17	11.28	771468	217783	393.2m BTB 09/20/01	417.3
	Sum Aroclor-1016			5707732	1834932	2007.3	2138.6
	Average Aroclor-1016					401.465	427.719
17)	L7 Aroclor-1260	12.95	13.33	712240	482347	333.5	383.3
18)	L7 Aroclor-1260 {2}	13.57	14.08	1070724	325831	329.6m	396.7
19)	L7 Aroclor-1260 {3}	14.84	15.04	796494	404715	383.4	374.9
20)	L7 Aroclor-1260 {4}	15.41	16.43	1637875	432134	350.4	390.4
21)	L7 Aroclor-1260 {5}	16.23	17.76	1277779	295467	359.0	378.6
	Sum Aroclor-1260			5495112	1940493	1755.9	1923.9
	Average Aroclor-1260					351.181	384.787

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_20_01\3_092045.D
Date Acquired: 20 Sep 2001 20:28
Inst: HP_03 Operator ID: BTB
Name: AR1660L33A
Misc: 5-210-7
Method: F:\HPCHEM\HP\3\DATA\09_20_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 7:34 2001 Quant Results File: XPCBI16.RES



OK 9-22-01 BB

Aroclor-1016 {5} 11.17min area: 771468 m

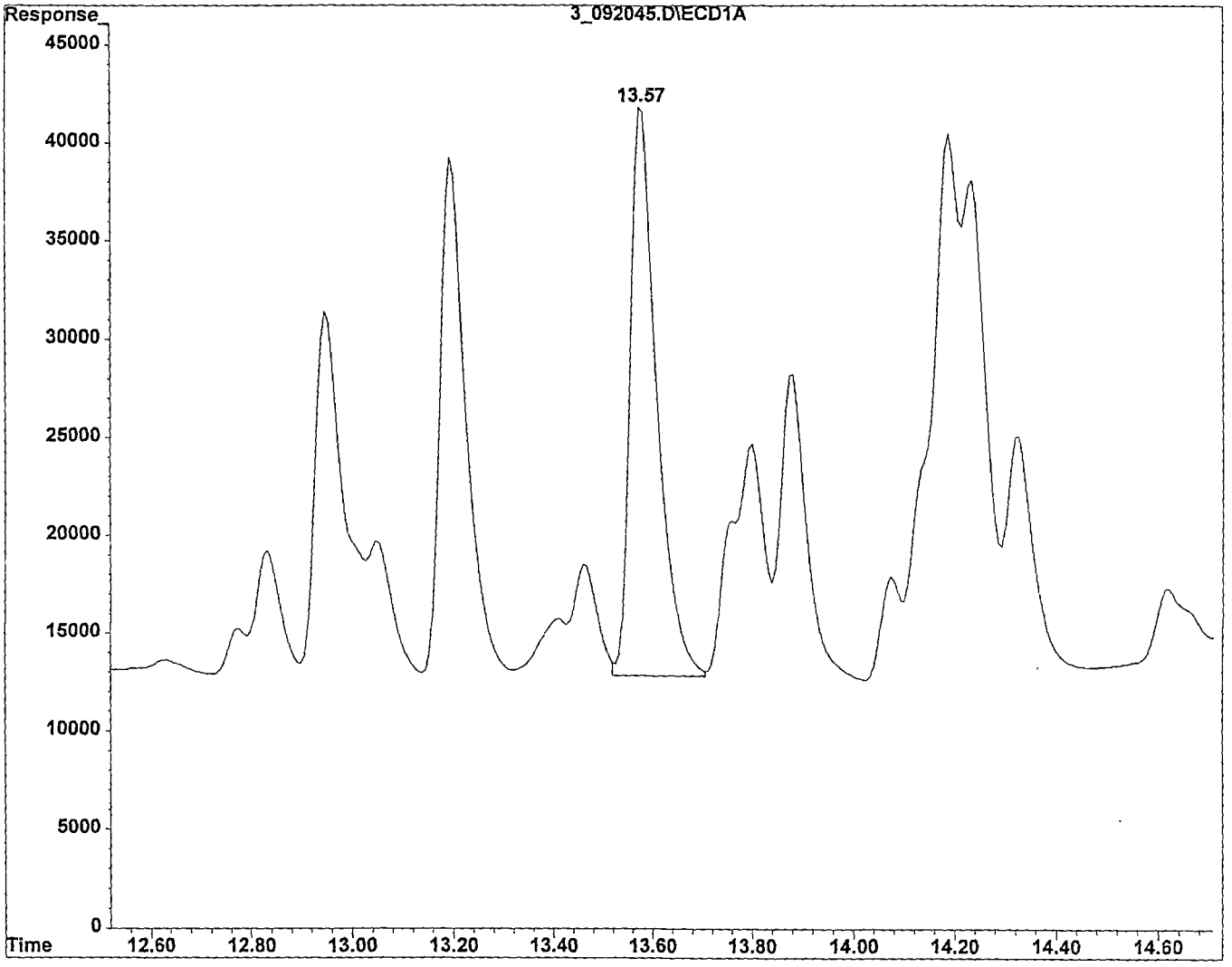
Integration Time Range: 11.11 - 11.30

BTB 092101

F:\HPCHEM\HP\3\DATA\09_20_01\3_092045.D
Report generated: Fri Sep 21 07:36:51 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_20_01\3_092045.D
Date Acquired: 20 Sep 2001 20:28
Inst: HP_03 Operator ID: BTB
Name: AR1660L33A
Misc: 5-210-7
Method: F:\HPCHEM\HP\3\DATA\09_20_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 7:34 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1260 {2} 13.57min area: 1070724

Integration Time Range: 13.52 - 13.71

F:\HPCHEM\HP\3\DATA\09_20_01\3_092045.D
Report generated: Fri Sep 21 07:36:52 2001

Continuing Calibration Report HP_03

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Fri Sep 21 08:37:32 2001
Response via : Initial Calibration

Continuing Calibration File: 3_092115.D

OK 9-22-01

Min. RRF : 0.000 Min. Rel. Area : 50%
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	54.217	58.034	E3	-7.0	103
2	L1	Aroclor-1016	1.355	1.434	E3	-5.8	104
3	L1	Aroclor-1016 {2}	2.535	2.642	E3	-4.2	102
4	L1	Aroclor-1016 {3}	4.718	5.045	E3	-6.9	101
5	L1	Aroclor-1016 {4}	3.693	3.782	E3	-2.4	100
6	L1	Aroclor-1016 {5}	1.962	2.117	E3	-7.9	101
17	L7	Aroclor-1260	2.135	2.080	E3	2.6	96
18	L7	Aroclor-1260 {2}	3.248	3.109	E3	4.3	94
19	L7	Aroclor-1260 {3}	2.077	2.135	E3	-2.8	99
20	L7	Aroclor-1260 {4}	4.675	4.678	E3	-0.1	98
21	L7	Aroclor-1260 {5}	3.560	3.516	E3	1.2	96
22	S	DCB	56.261	54.968	E3	2.3	96
		Average %Dev				47.62	

Signal #2
Continuing Calibration File: 3_092115.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	16.207	17.168	E3	-5.9	101
2	L1	Aroclor-1016	384.734	419.610		-9.1	103
3	L1	Aroclor-1016 {2}	885.369	948.908		-7.2	103
4	L1	Aroclor-1016 {3}	1.698	1.892	E3	-11.4	104
5	L1	Aroclor-1016 {4}	789.988	869.234		-10.0	102
6	L1	Aroclor-1016 {5}	521.940	566.530		-8.5	104
17	L7	Aroclor-1260	1.258	1.313	E3	-4.3	100
18	L7	Aroclor-1260 {2}	821.251	862.939		-5.1	101
19	L7	Aroclor-1260 {3}	1.080	1.103	E3	-2.2	101
20	L7	Aroclor-1260 {4}	1.107	1.142	E3	-3.2	100
21	L7	Aroclor-1260 {5}	780.367	809.717		-3.8	101
22	S	DCB	24.505	25.447	E3	-3.8	100

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3_092115.D XPCBI16.M Fri Sep 21 08:37:41 2001

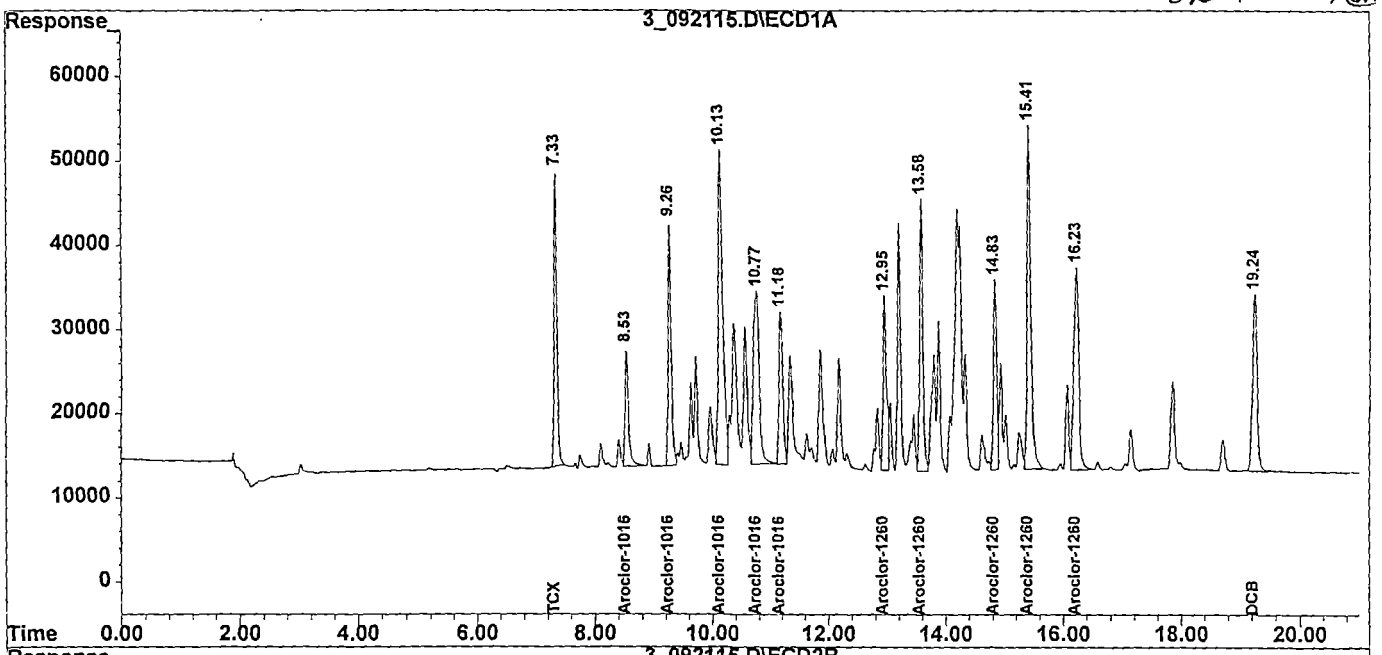
Chromatographic Report

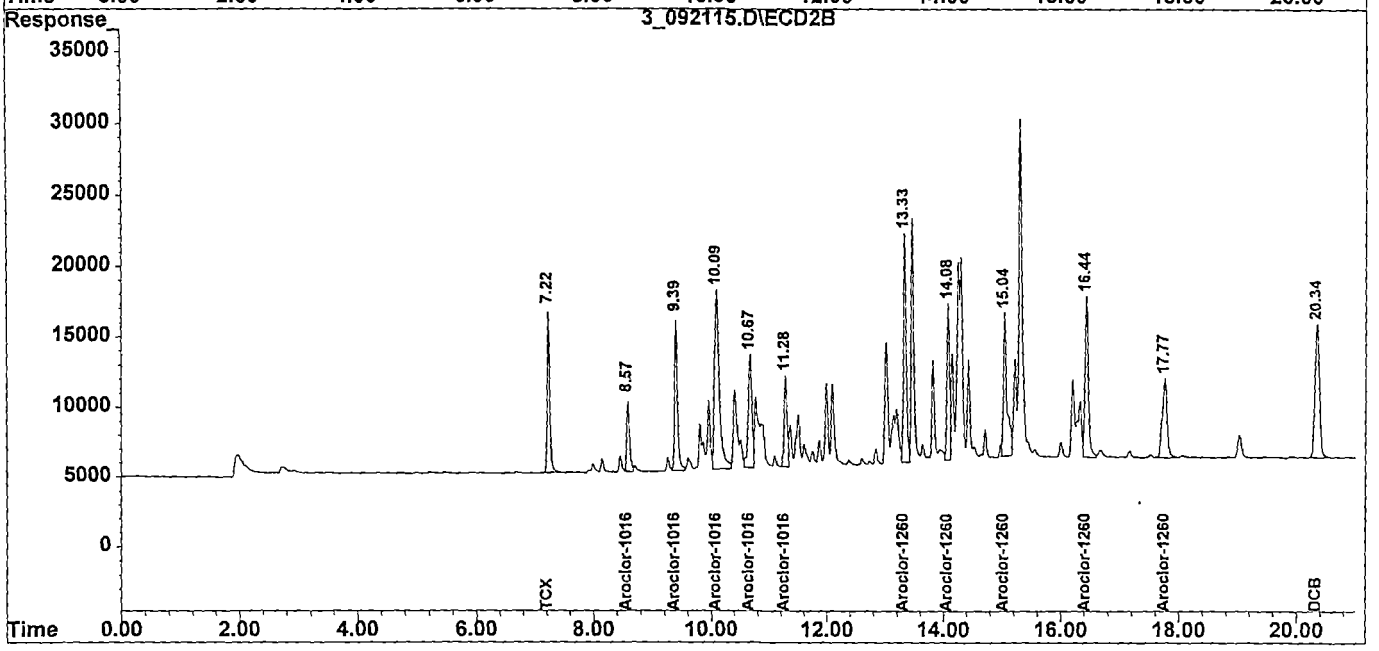
Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092115.D\ECD1A.CH Vial: 92
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092115.D\ECD2B.CH
Acq On : 21 Sep 2001 3:20 Operator: BTB
Sample : AR1660L33C Inst : HP_03
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 8:37 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

OK 9-22-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092115.D\ECD1A.CH Vial: 92
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092115.D\ECD2B.CH
Acq On : 21 Sep 2001 3:20 Operator: BTB
Sample : AR1660L33C Inst : HP_03
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 8:37 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

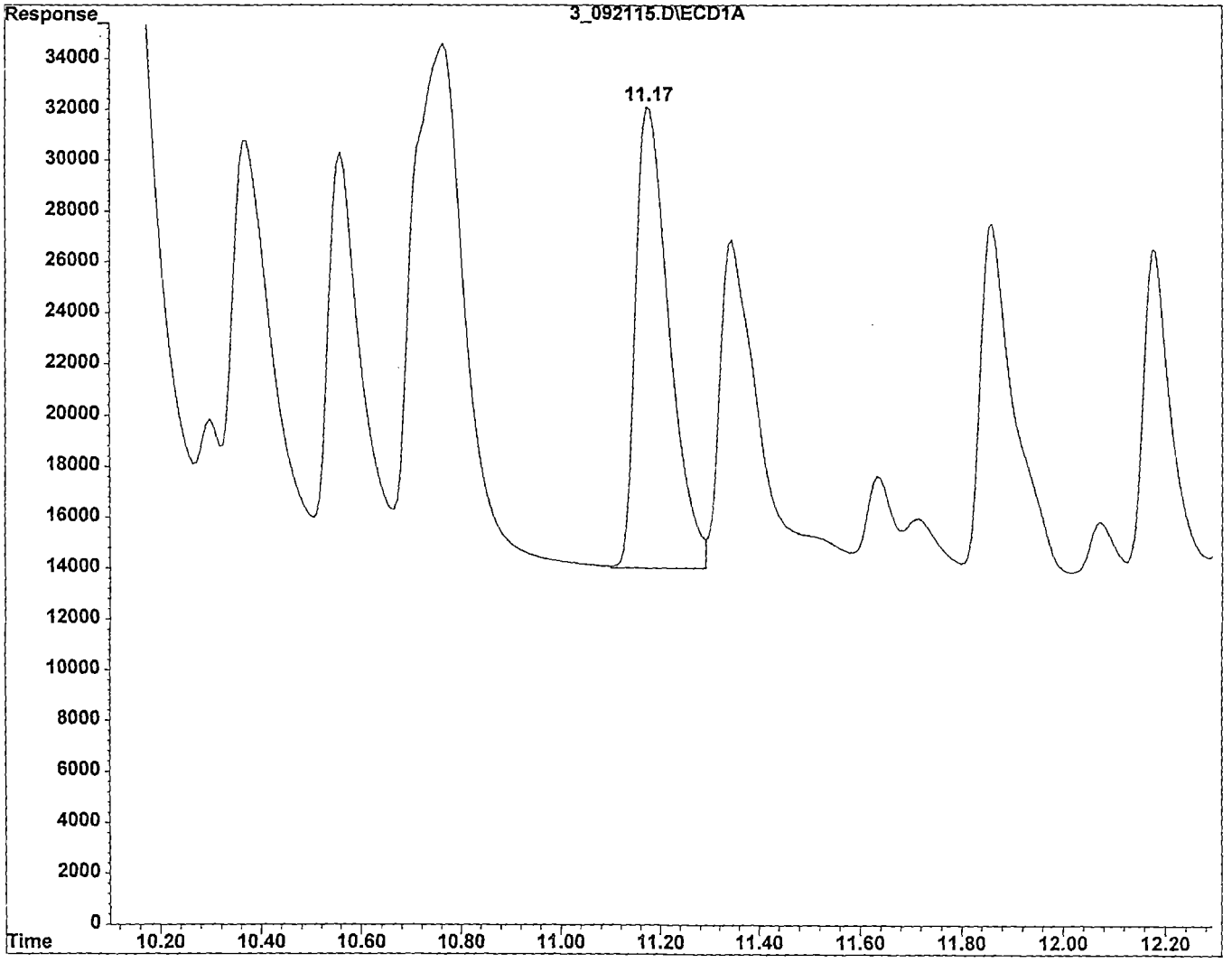
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	1160684	343362	21.4	21.2
22)	S DCB	19.24	20.35	1099359	508931	19.5	20.8
	Target Compounds:						
2)	L1 Aroclor-1016	8.53	8.57	573582	167844	423.2	436.3
3)	L1 Aroclor-1016 {2}	9.26	9.39	1056615	379563	416.7	428.7
4)	L1 Aroclor-1016 {3}	10.13	10.09	2018110	756787	427.7	445.6
5)	L1 Aroclor-1016 {4}	10.77	10.67	1512891	347694	409.7	440.1
6)	L1 Aroclor-1016 {5}	11.17	11.28	846720	226612	431.5m BTB	434.2
	Sum Aroclor-1016			6007918	1878499	2108.9 09/21/01	2184.9
	Average Aroclor-1016					421.779	436.973
17)	L7 Aroclor-1260	12.95	13.33	831823	525060	389.5	417.2
18)	L7 Aroclor-1260 {2}	13.58	14.08	1243756	345175	382.9m	420.3
19)	L7 Aroclor-1260 {3}	14.84	15.04	854080	441184	411.1	408.6
20)	L7 Aroclor-1260 {4}	15.41	16.44	1871281	456927	400.3	412.8
21)	L7 Aroclor-1260 {5}	16.23	17.77	1406416	323887	395.1	415.0
	Sum Aroclor-1260			6207355	2092233	1979.0	2074.0
	Average Aroclor-1260					395.792	414.805

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092115.D
Date Acquired: 21 Sep 2001 3:20
Inst: HP_03 Operator ID: BTB
Name: AR1660L33C
Misc: 5-210-7
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 8:37 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1016 {5} 11.17min area: 846720 m

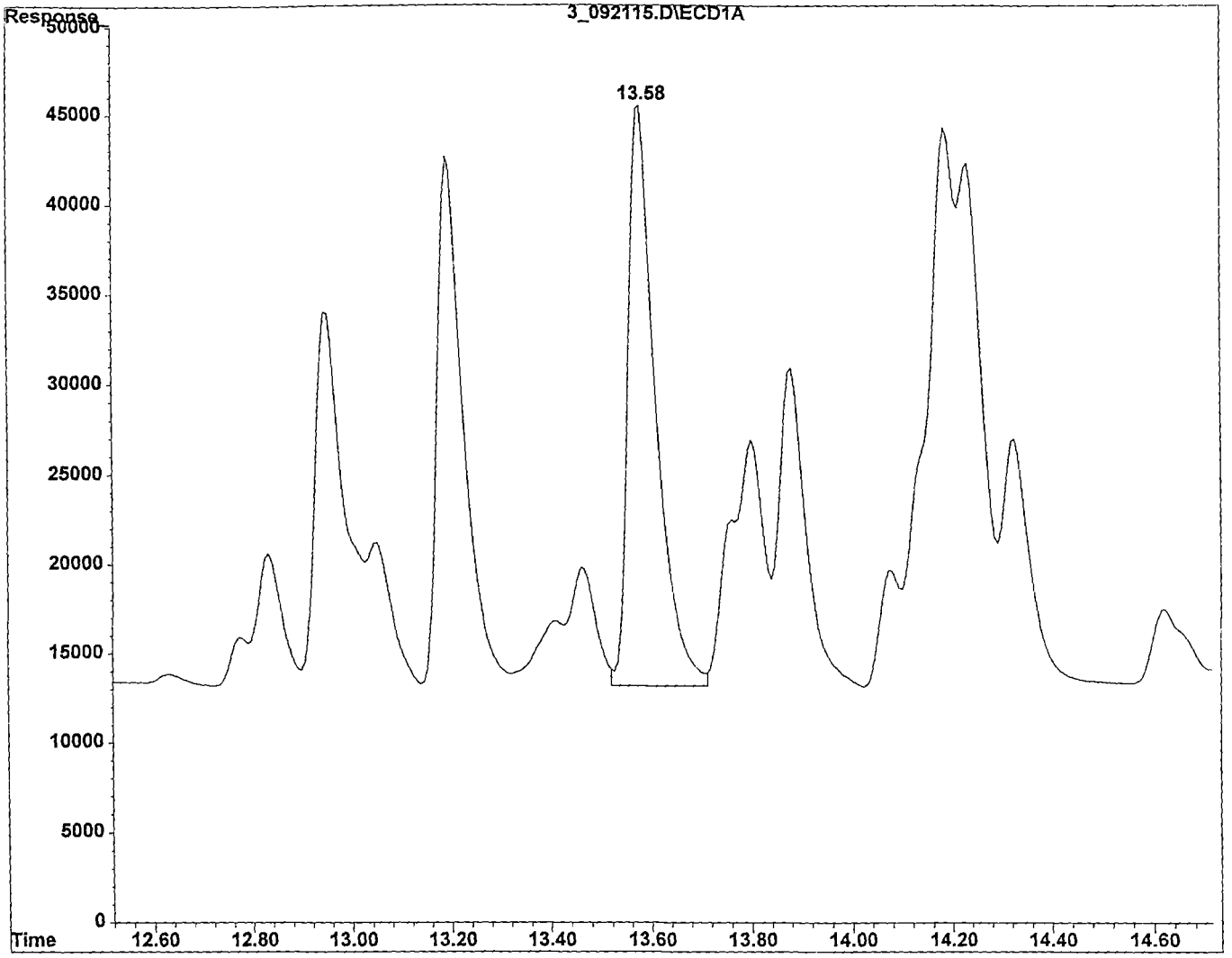
Integration Time Range: 11.10 - 11.29

BTB 092101

F:\HPCHEM\HP\3\DATA\09_21_01\3_092115.D
Report generated: Fri Sep 21 08:38:47 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092115.D
Date Acquired: 21 Sep 2001 3:20
Inst: HP_03 Operator ID: BTB
Name: AR1660L33C
Misc: 5-210-7
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 8:37 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1260 {2} 13.58min area: 1243756 m

Integration Time Range: 13.52 - 13.71

BTB 092101

F:\HPCHEM\HP\3\DATA\09_21_01\3_092115.D
Report generated: Fri Sep 21 08:38:47 2001

Continuing Calibration Report HP_03

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Fri Sep 21 13:47:36 2001
Response via : Initial Calibration

ok 9-22-01

Continuing Calibration File: 3_092132.D

Min. RRF : 0.000 Min. Rel. Area : 50%
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	54.217	57.220	E3	-5.5	101
2	L1	Aroclor-1016	1.355	1.412	E3	-4.2	102
3	L1	Aroclor-1016 {2}	2.535	2.626	E3	-3.6	101
4	L1	Aroclor-1016 {3}	4.718	5.070	E3	-7.5	101
5	L1	Aroclor-1016 {4}	3.693	3.769	E3	-2.1	100
6	L1	Aroclor-1016 {5}	1.962	2.204	E3	-12.3	105
17	L7	Aroclor-1260	2.135	2.156	E3	-1.0	100
18	L7	Aroclor-1260 {2}	3.248	3.168	E3	2.5	96
19	L7	Aroclor-1260 {3}	2.077	2.330	E3	-12.2	108
20	L7	Aroclor-1260 {4}	4.675	4.747	E3	-1.5	99
21	L7	Aroclor-1260 {5}	3.560	3.580	E3	-0.6	97
22	S	DCB	56.261	58.010	E3	-3.1	101

Signal #2
Continuing Calibration File: 3_092132.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	16.207	16.913	E3	-4.4	100
2	L1	Aroclor-1016	384.734	413.276		-7.4	102
3	L1	Aroclor-1016 {2}	885.369	934.853		-5.6	101
4	L1	Aroclor-1016 {3}	1.698	1.876	E3	-10.5	103
5	L1	Aroclor-1016 {4}	789.988	867.473		-9.8	102
6	L1	Aroclor-1016 {5}	521.940	552.499		-5.9	102
17	L7	Aroclor-1260	1.258	1.363	E3	-8.3	104
18	L7	Aroclor-1260 {2}	821.251	1133.812		-38.1#	133
19	L7	Aroclor-1260 {3}	1.080	1.193	E3	-10.5	109
20	L7	Aroclor-1260 {4}	1.107	1.202	E3	-8.6	105
21	L7	Aroclor-1260 {5}	780.367	849.180		-8.8	106
22	S	DCB	24.505	27.537	E3	-12.4	108

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3_092132.D XPCBI16.M Fri Sep 21 13:47:45 2001

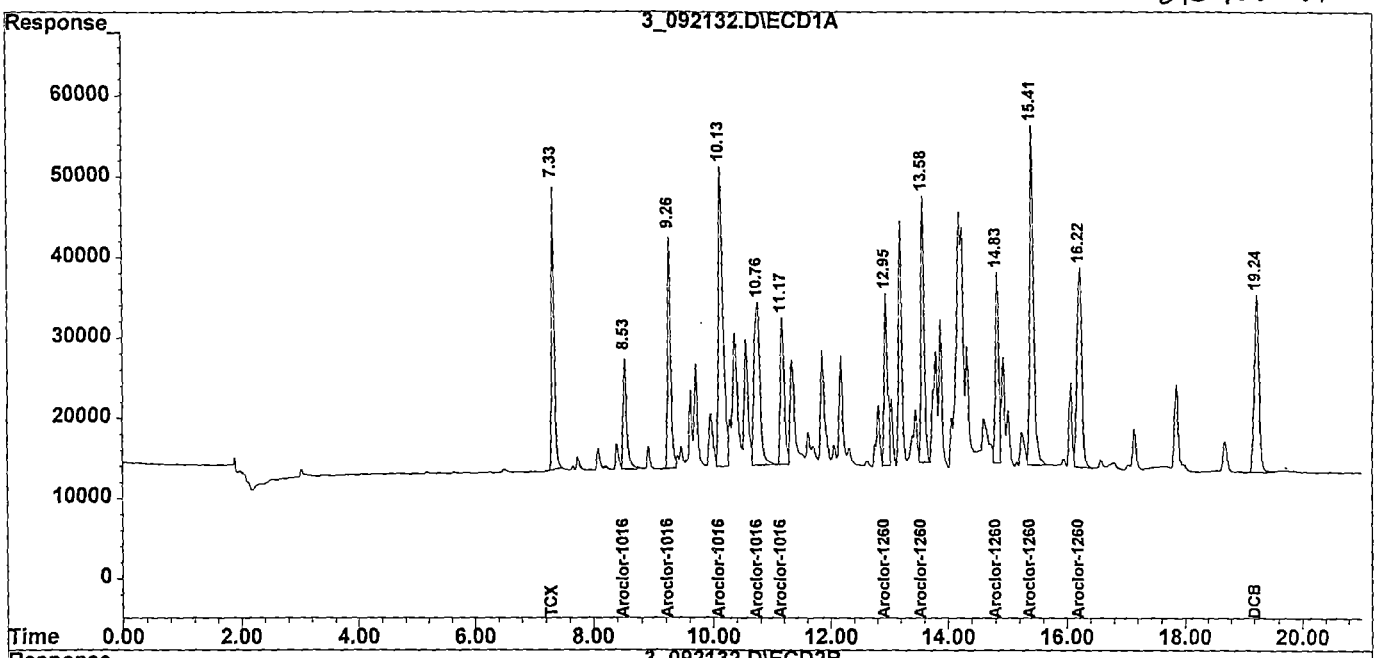
Chromatographic Report

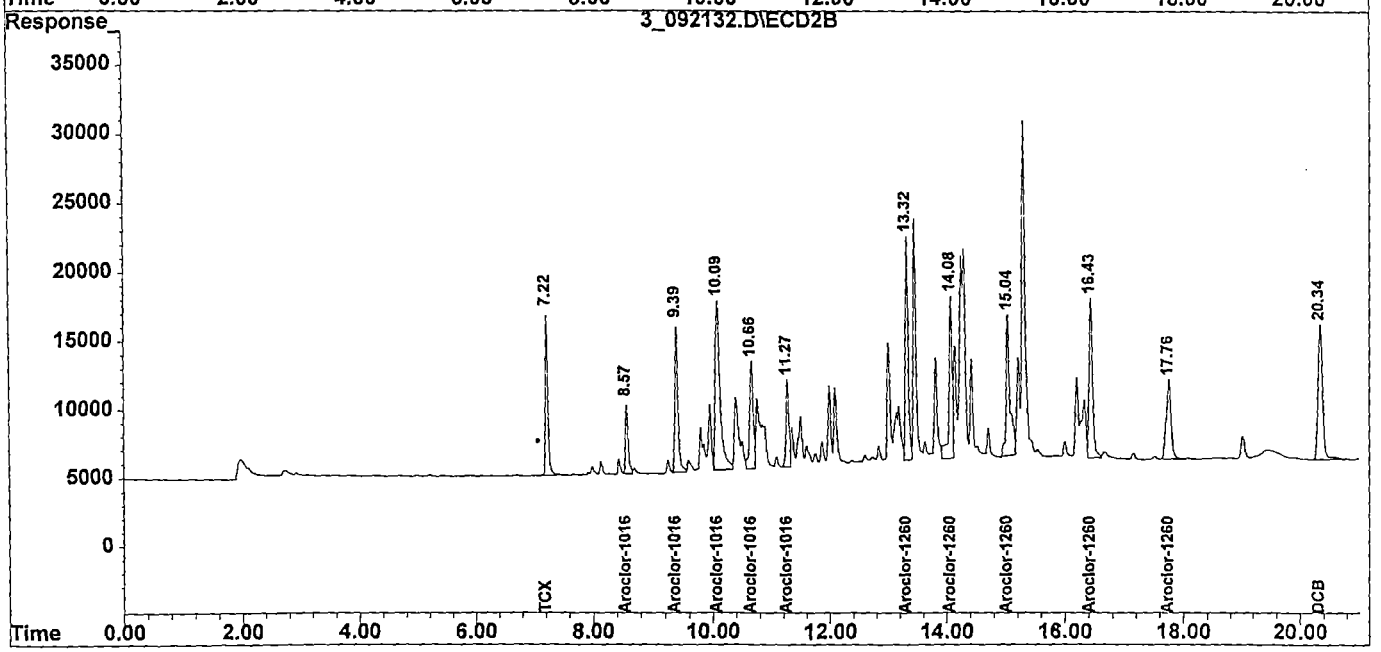
Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092132.D\ECD1A.CH Vial: 9
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092132.D\ECD2B.CH
Acq On : 21 Sep 2001 10:36 Operator: BTB
Sample : AR1660L33E ✓ Inst : HP_03
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 13:47 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

OK 9-22-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092132.D\ECD1A.CH Vial: 9
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092132.D\ECD2B.CH
Acq On : 21 Sep 2001 10:36 Operator: BTB
Sample : AR1660L33E Inst : HP_03
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 13:47 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

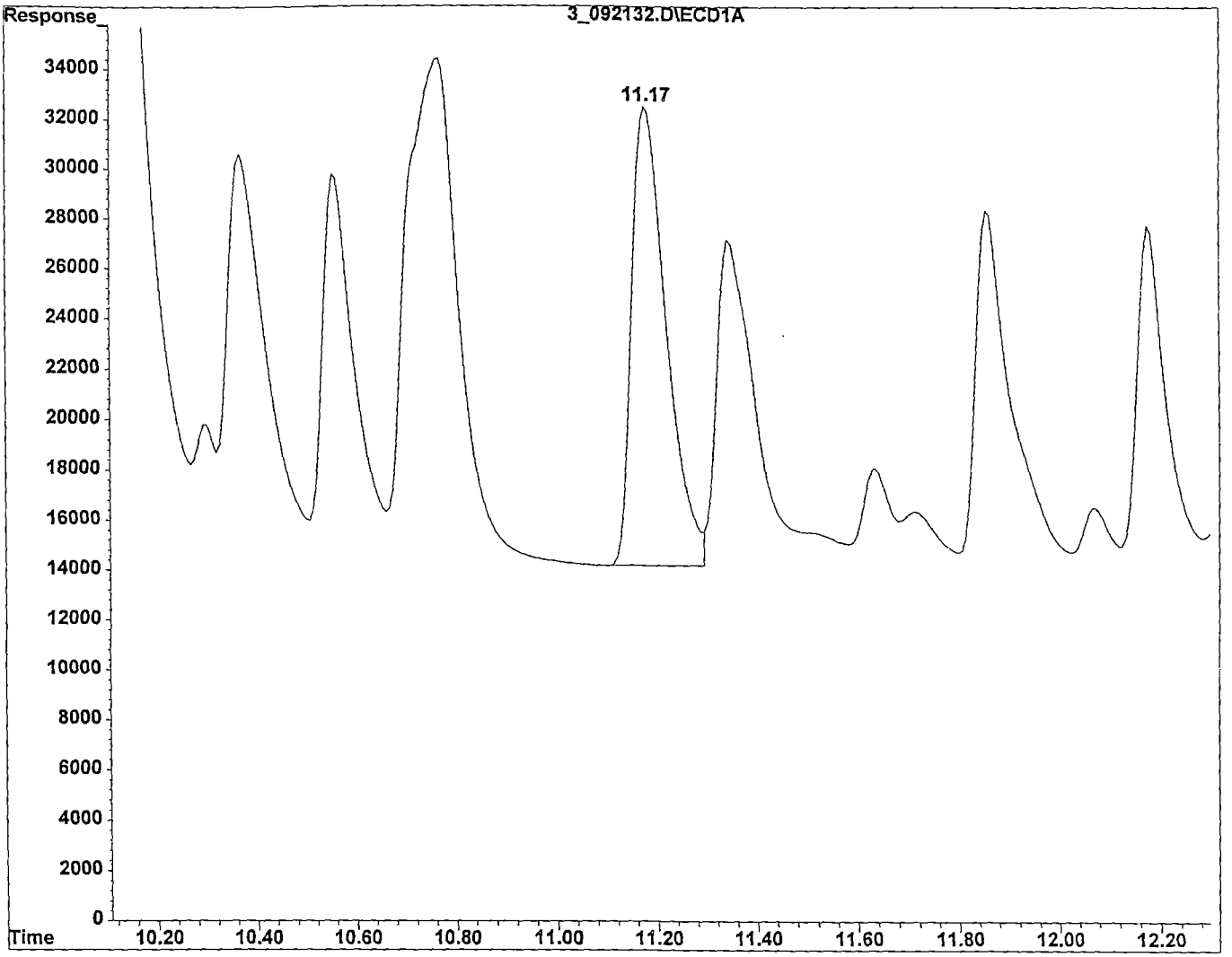
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.22	1144399	338257	21.1	20.9	
22)	S DCB	19.24	20.34	1160209	550745	20.6	22.5	
	Target Compounds:							
2)	L1 Aroclor-1016	8.53	8.57	564737	165310	416.7	429.7	
3)	L1 Aroclor-1016 {2}	9.26	9.39	1050392	373941	414.3	422.4	
4)	L1 Aroclor-1016 {3}	10.13	10.09	2027879	750588	429.8	442.0	
5)	L1 Aroclor-1016 {4}	10.77	10.67	1507630	346989	408.3	439.2	
6)	L1 Aroclor-1016 {5}	11.17	11.28	881584	220999	449.3m BTB 09201	423.4	
	Sum Aroclor-1016			6032223	1857828	2118.3	2156.6	
	Average Aroclor-1016					423.666	431.327	
17)	L7 Aroclor-1260	12.95	13.33	862599	545190	403.9	433.2	
18)	L7 Aroclor-1260 {2}	13.57	14.08	1267340	453525	390.2m	552.2	#
19)	L7 Aroclor-1260 {3}	14.83	15.04	932028	477221	448.7m	442.0	
20)	L7 Aroclor-1260 {4}	15.41	16.44	1898762	480991	406.2	434.5	
21)	L7 Aroclor-1260 {5}	16.23	17.76	1431983	339672	402.3	435.3	
	Sum Aroclor-1260			6392712	2296599	2051.2	2297.3	
	Average Aroclor-1260					410.244	459.460	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
3_092132.D XPCBI16.M Fri Sep 21 13:49:16 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092132.D
Date Acquired: 21 Sep 2001 10:36
Inst: HP_03 Operator ID: BTB
Name: AR1660L33E
Misc: 5-210-7
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 13:47 2001 Quant Results File: XPCBI16.RES



OK 9-22-01 GAP

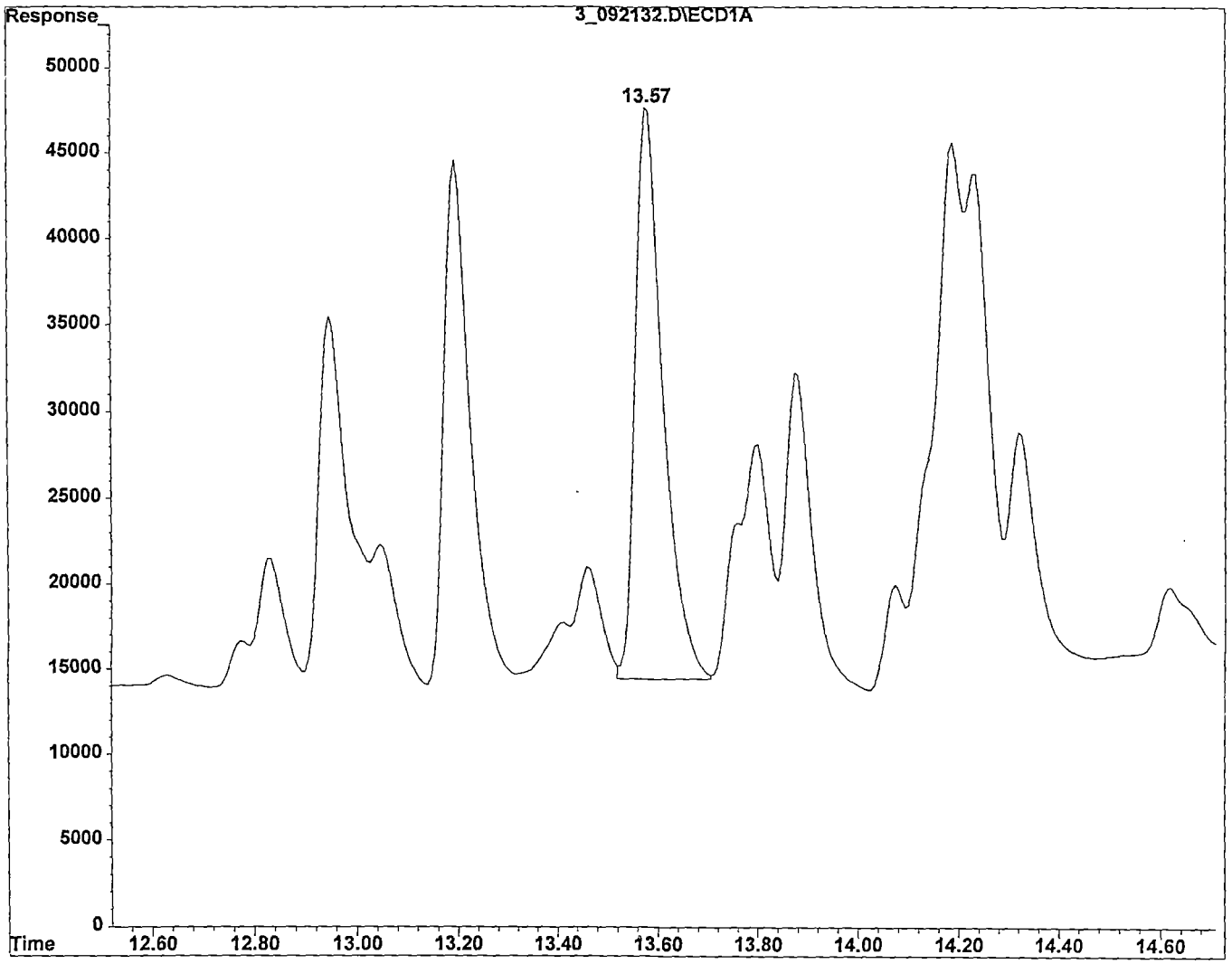
Aroclor-1016 {5} 11.17min area: 881584 m BTB 092101

Integration Time Range: 11.11 - 11.30

F:\HPCHEM\HP\3\DATA\09_21_01\3_092132.D
Report generated: Fri Sep 21 13:49:41 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092132.D
Date Acquired: 21 Sep 2001 10:36
Inst: HP_03 Operator ID: BTB
Name: AR1660L33E
Misc: 5-210-7
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 13:47 2001 Quant Results File: XPCBI16.RES



ok 9-22-01

Aroclor-1260 {2} 13.57min area: 1267340 m

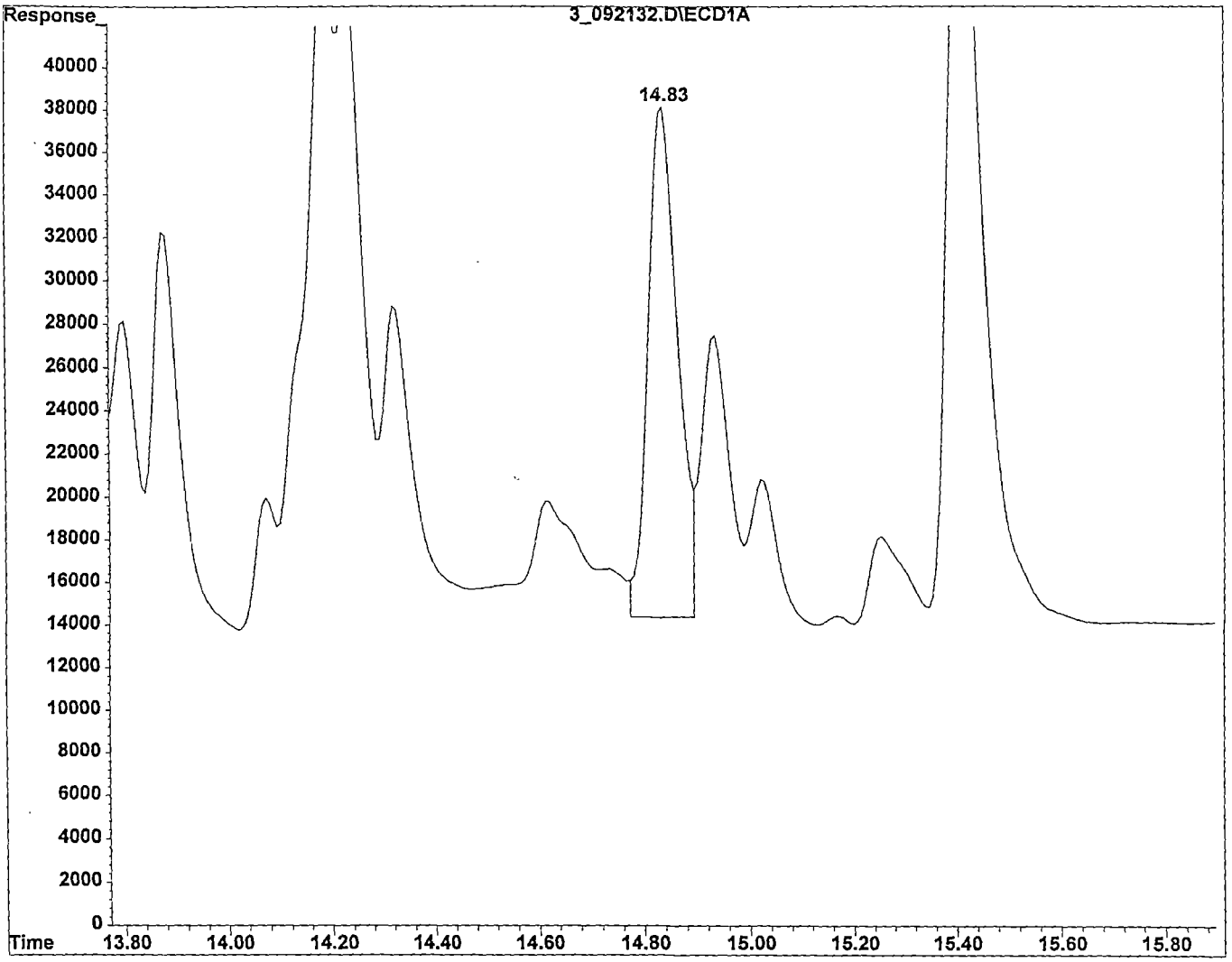
Integration Time Range: 13.52 - 13.71

BTB 092101

F:\HPCHEM\HP\3\DATA\09_21_01\3_092132.D
Report generated: Fri Sep 21 13:49:42 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_21_01\3_092132.D
Date Acquired: 21 Sep 2001 10:36
Inst: HP_03 Operator ID: BTB
Name: AR1660L33E
Misc: 5-210-7
Method: F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 21 13:47 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1260 {3} 14.83min area: 932028 m

Integration Time Range: 14.77 - 14.89

BTB 09/01

F:\HPCHEM\HP\3\DATA\09_21_01\3_092132.D
Report generated: Fri Sep 21 13:49:43 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PBLKSB

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: BL0824SB

Sample wt/vol: 30.0 (g/mL) G Lab File ID:_____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U
	Surrogate amount spiked	6.67	

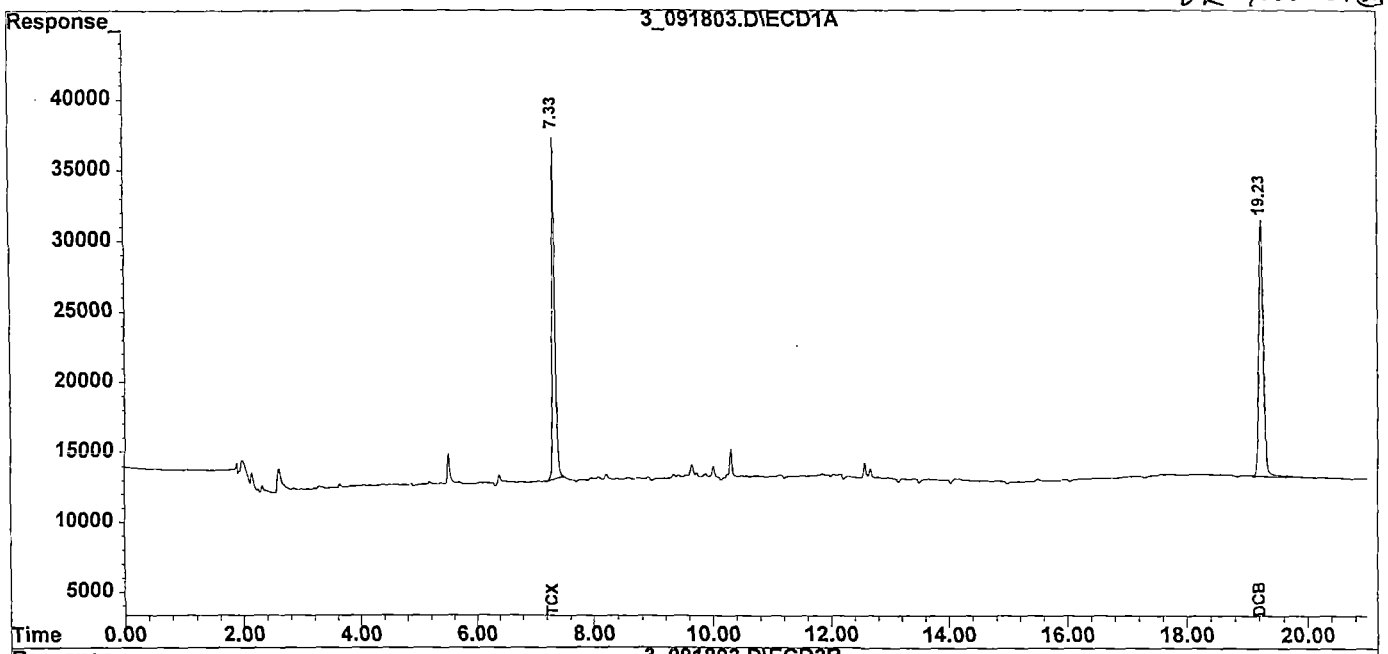
FORM I PCB

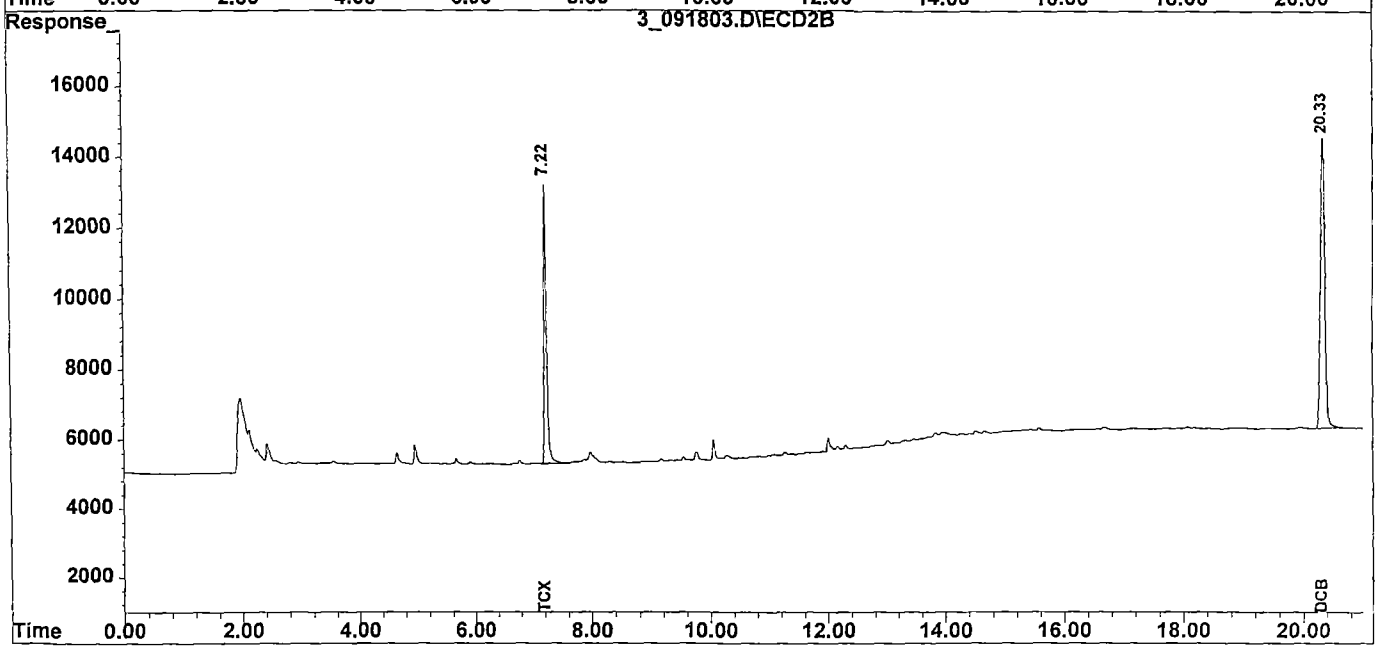
Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091803.D\ECD1A.CH Vial: 75
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091803.D\ECD2B.CH
Acq On : 19 Sep 2001 00:41 Operator: BTB
Sample : BL0824SB ✓ *PBLKSB ✓ * Inst : HP_03
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 16:50 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

OK 9-22-01 [illegible]





Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091803.D\...
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091803.D\ECD2B.CH
Acq On : 19 Sep 2001 00:41 Operator: BTB
Sample : BL0824SB *PBLKSB * Inst : HP_03
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 16:50 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	813859	243355	5.004	5.005
	Spiked Amount 6.667			Recovery	=	75.06%	75.08%
22)	S DCB	19.24	20.34	957701	430737	5.674	5.859
	Spiked Amount 6.667			Recovery	=	85.11%	87.89%

Target Compounds:

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
3_091803.D XPCBI16.M Wed Sep 19 17:15:53 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK3E

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

Sample wt/vol: _____ (g/mL) Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 09/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK3E

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

Sample wt/vol: _____ (g/mL) Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 09/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

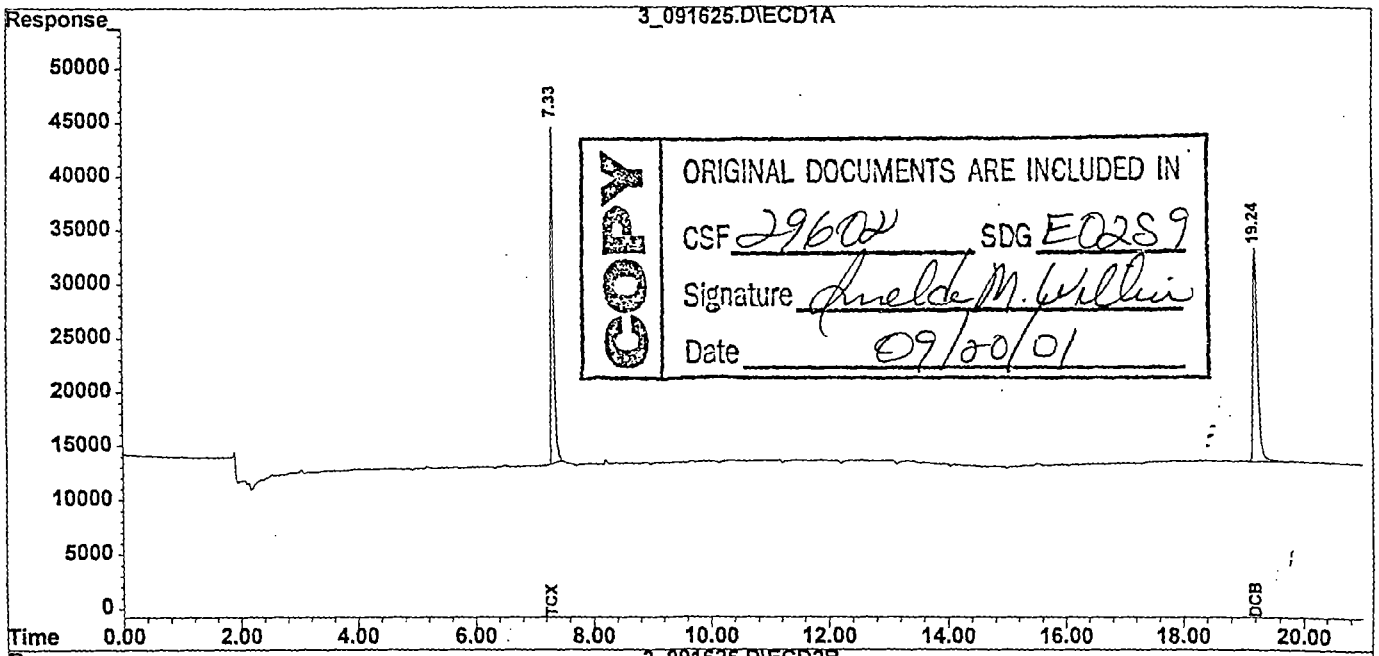
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

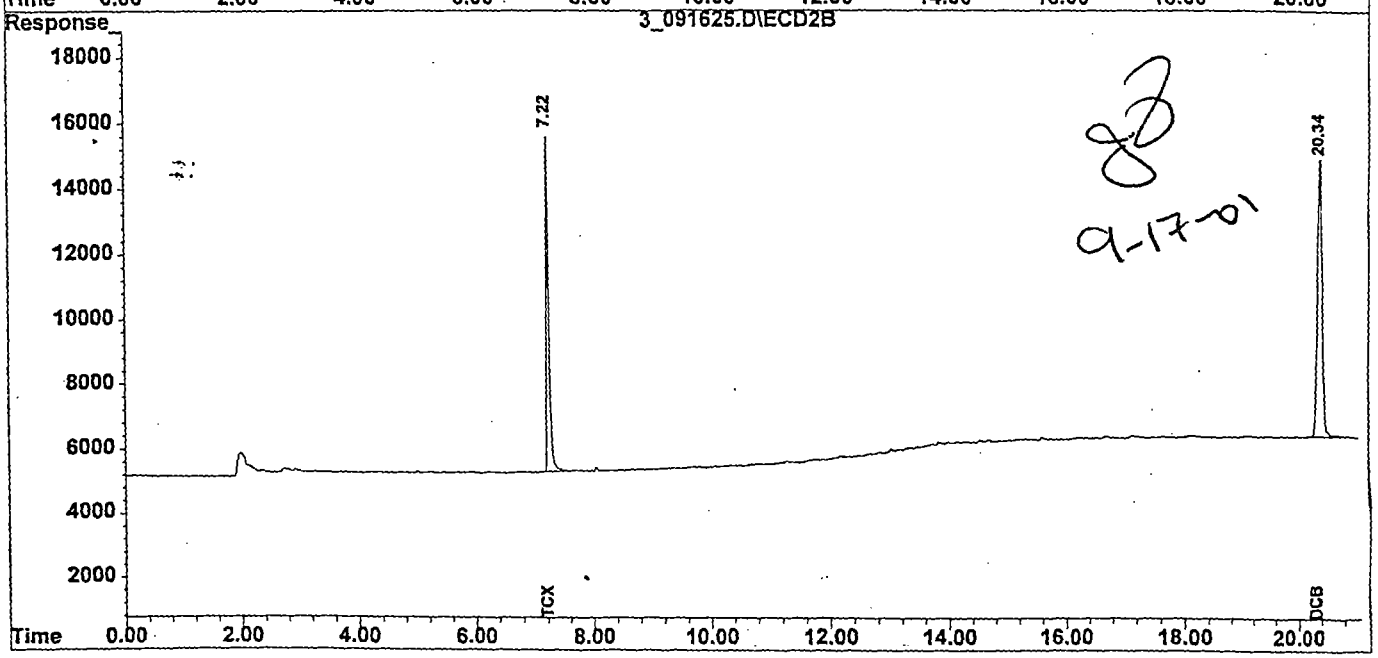
Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091625.D\ECD1A.CH Vial: 25
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091625.D\ECD2B.CH
Acq On : 16 Sep 2001 21:10 Operator: DDC
Sample : PIBLK3E Inst : HP_03
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 12:05 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B



COPY
ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29600 SDG E0289
Signature Arnelda M. Willis
Date 09/20/01



9-17-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091625.D\ECD1A.CH Vial: 25
Signal #2 : F:\HPCHEM\HP\3\DATA\09_16_01\3_091625.D\ECD2B.CH
Acq On : 16 Sep 2001 21:10 Operator: DDC
Sample : PIBLK3E Inst : HP_03
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 12:05 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_16_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	1016125	304880	18.7	18.8
22)	S DCB	19.24	20.34	1073125	463612	19.1	18.9
	Target Compounds:						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil, < med. std

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK3J

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

Sample wt/vol: _____ (g/mL) Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 09/18/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK3J

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

Sample wt/vol: _____ (g/mL) Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 09/18/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

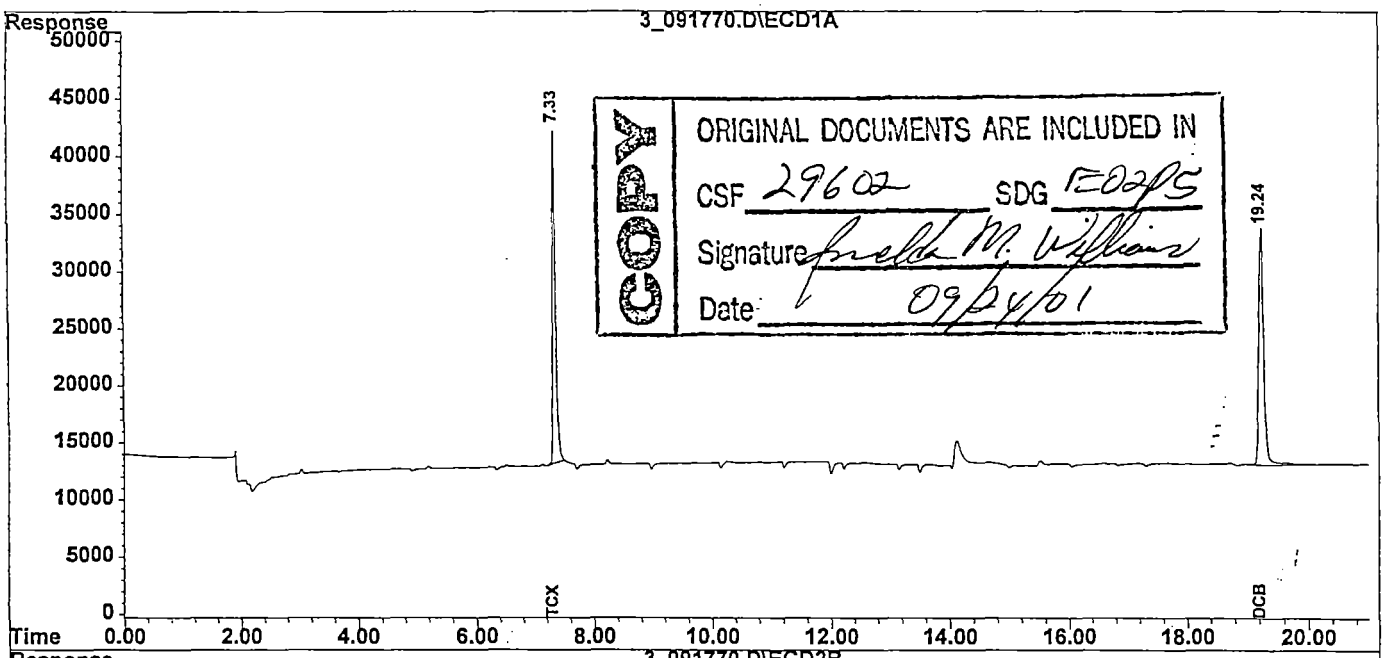
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

Chromatographic Report

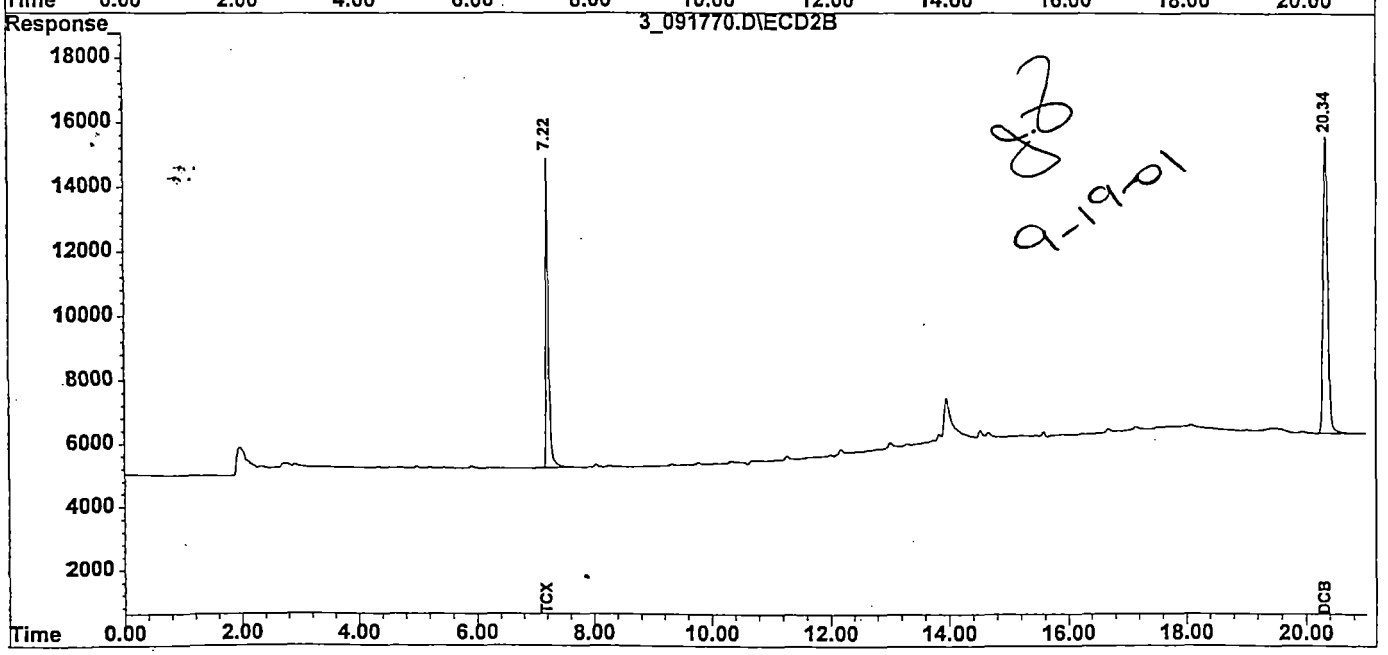
Signal #1 : F:\HPCHEM\HP\3\DATA\09_17_01\3_091770.D\ECD1A.CH Vial: 70
Signal #2 : F:\HPCHEM\HP\3\DATA\09_17_01\3_091770.D\ECD2B.CH
Acq On : 18 Sep 2001 22:32 Operator: BTB
Sample : PIBLK3J Inst : HP_03
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 8:02 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_17_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B



COPY
ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29602 SDG E02P5
Signature Freda M. Williams
Date 09/24/01



9-19-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_17_01\3_091770.D\ECD1A.CH Vial: 70
Signal #2 : F:\HPCHEM\HP\3\DATA\09_17_01\3_091770.D\ECD2B.CH
Acq On : 18 Sep 2001 22:32 Operator: BTB
Sample : PIBLK3J Inst : HP_03
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 8:02 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_17_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	1017898	308570	18.8	19.0
22)	S DCB	19.24	20.34	1144254	502972	20.3	20.5
	Target Compounds:						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK3K

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

Sample wt/vol: _____ (g/mL) Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) _____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 09/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK3K

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

Sample wt/vol: _____ (g/mL) Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 09/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

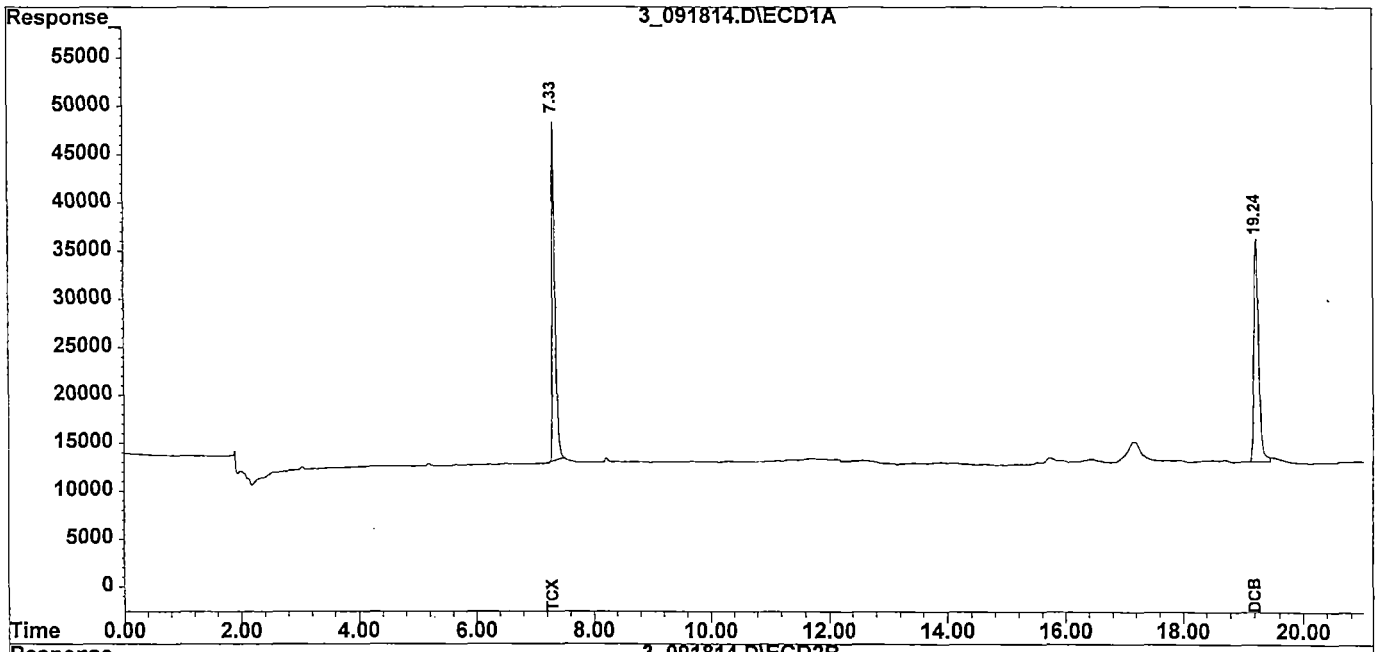
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

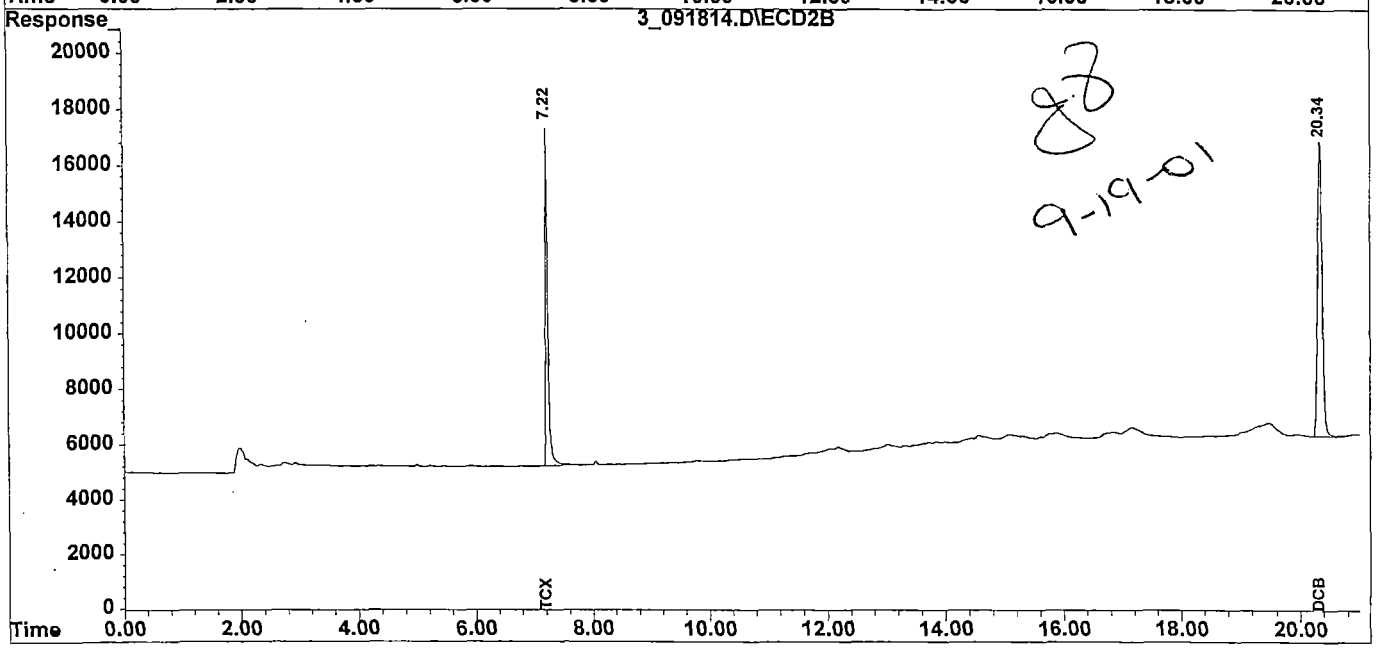
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091814.D\ECD1A.CH Vial: 86
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091814.D\ECD2B.CH
Acq On : 19 Sep 2001 5:23 Operator: BTB
Sample : PIBLK3K Inst : HP_03
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 8:15 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





8
9-19-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091814.D\ECD1A.CH Vial: 86
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091814.D\ECD2B.CH
Acq On : 19 Sep 2001 5:23 Operator: BTB
Sample : PIBLK3K Inst : HP_03
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 8:15 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

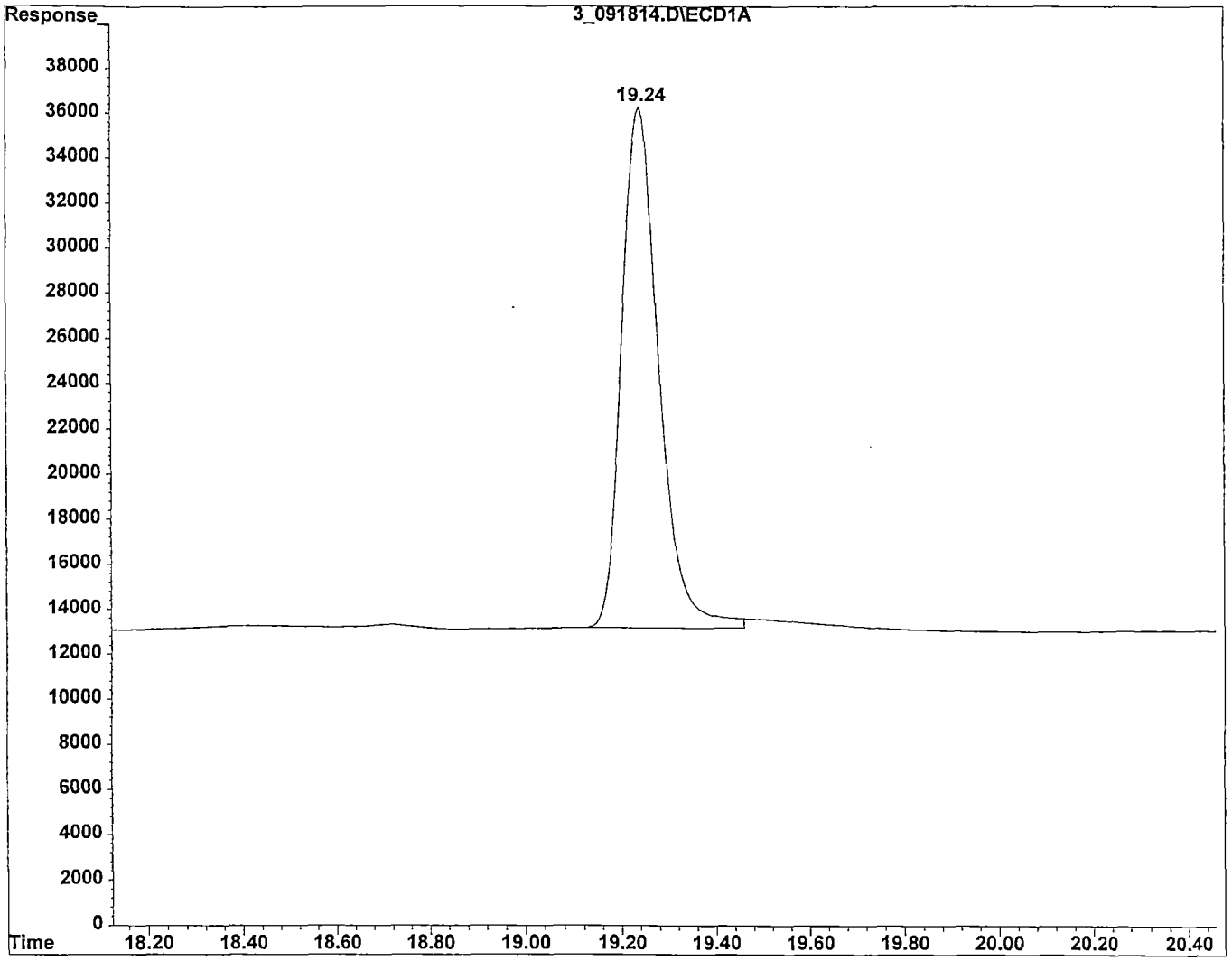
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	1192990	377058	22.0	23.3
22)	S DCB	19.24	20.34	1249600	573155	22.2m	23.4
	Target Compounds:						

BTB 09/19/01

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091814.D
Date Acquired: 19 Sep 2001 5:23
Inst: HP_03 Operator ID: BTB
Name: PIBLK3K
Misc: 5-131-7
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 8:15 2001 Quant Results File: XPCBI16.RES



DCB 19.24min area: 1249600 m BTB 091901

Integration Time Range: 19.13 - 19.46

F:\HPCHEM\HP\3\DATA\09_18_01\3_091814.D
Report generated: Wed Sep 19 08:16:12 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK3L

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

Sample wt/vol: _____ (g/mL) Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 09/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK3L

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

Sample wt/vol: _____ (g/mL) Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 09/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

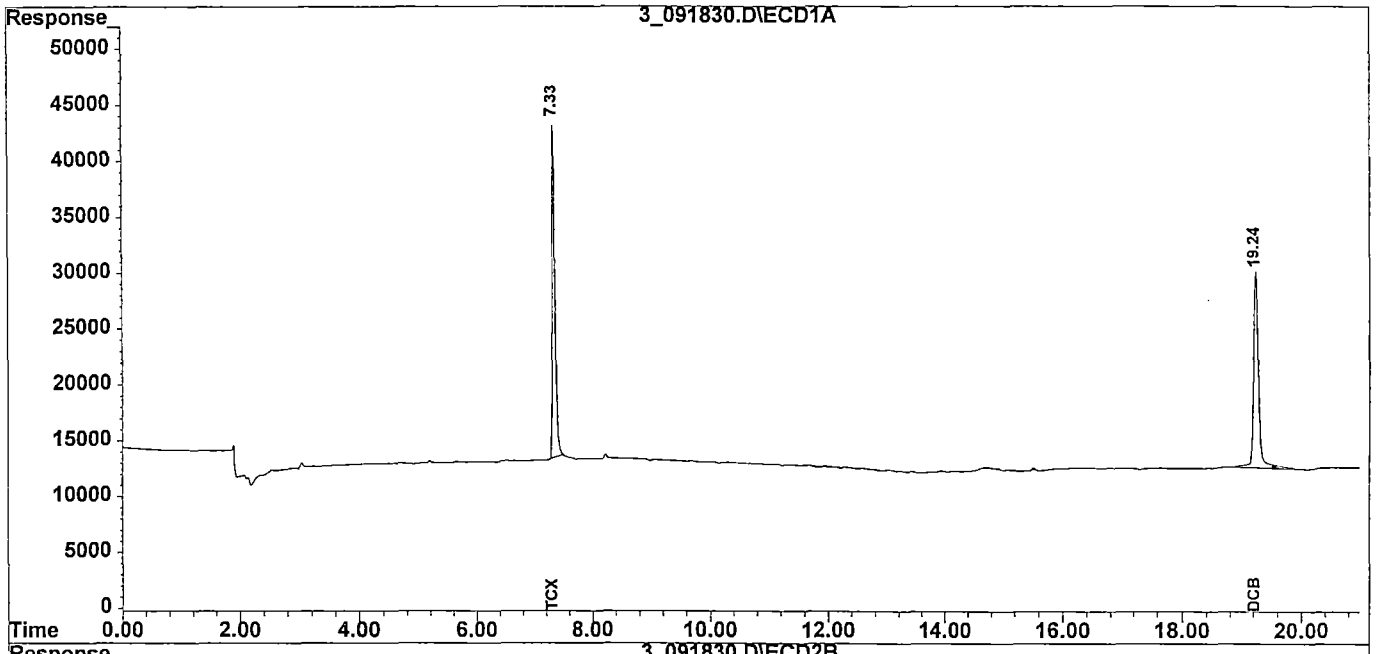
FORM I PCB

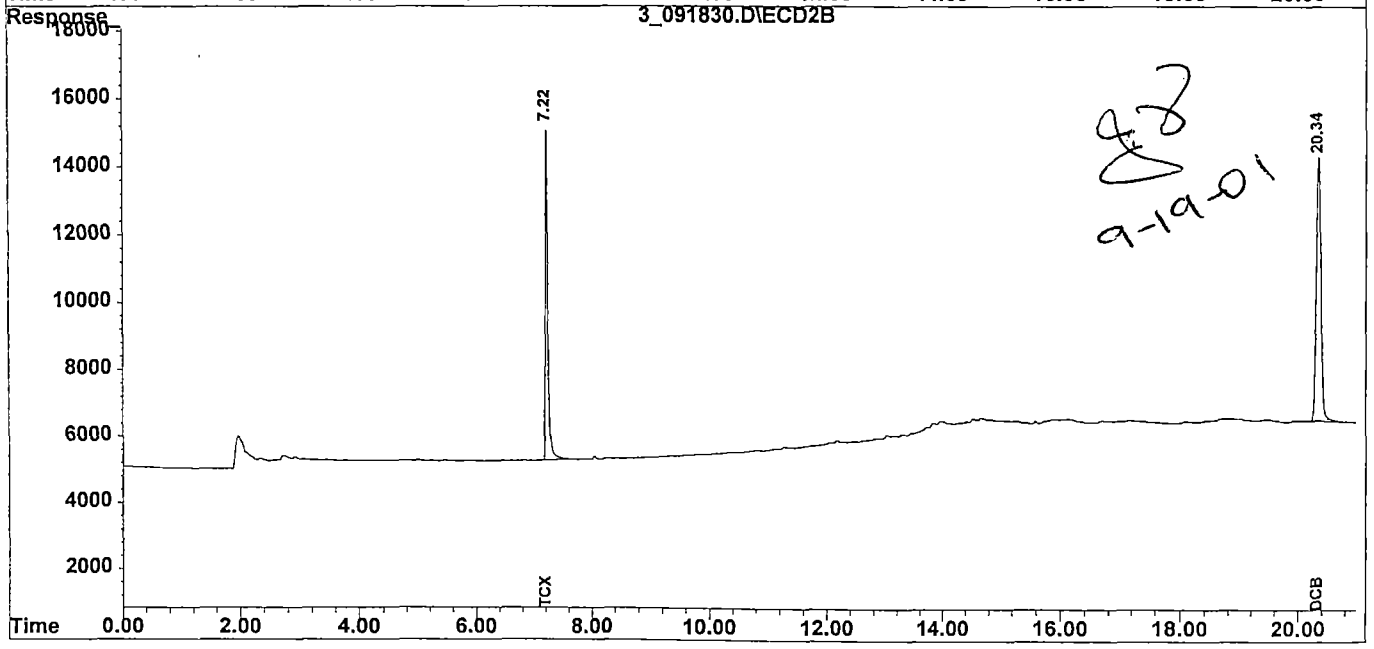
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091830.D\ECD1A.CH Vial: 2
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091830.D\ECD2B.CH
Acq On : 19 Sep 2001 12:14 Operator: BTB
Sample : PIBLK3L Inst : HP_03
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 13:34 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





9-19-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091830.D\ECD1A.CH Vial: 2
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091830.D\ECD2B.CH
Acq On : 19 Sep 2001 12:14 Operator: BTB
Sample : PIBLK3L Inst : HP_03
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 13:34 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	996431	300653	18.4	18.6
22)	S DCB	19.24	20.34	1050445	425927	18.7	17.4

Target Compounds:

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK3M

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

Sample wt/vol: _____ (g/mL) Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 09/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK3M

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

Sample wt/vol: _____ (g/mL) Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 09/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

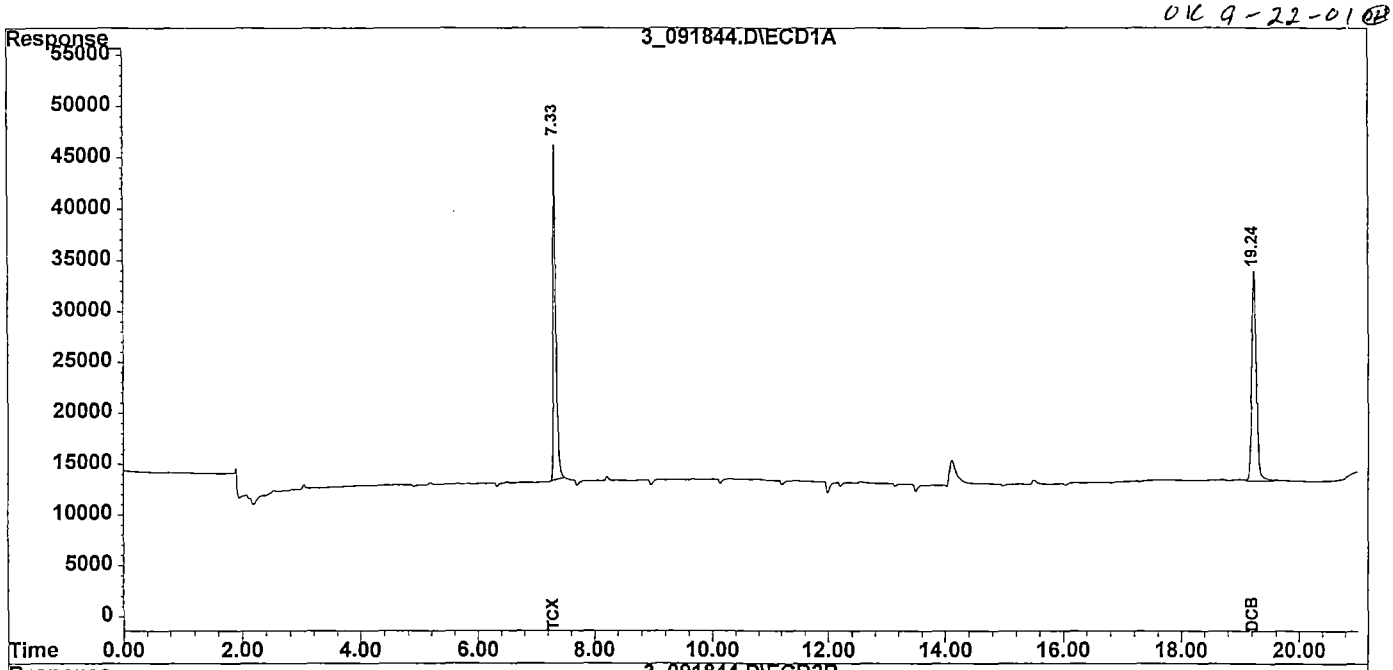
Chromatographic Report

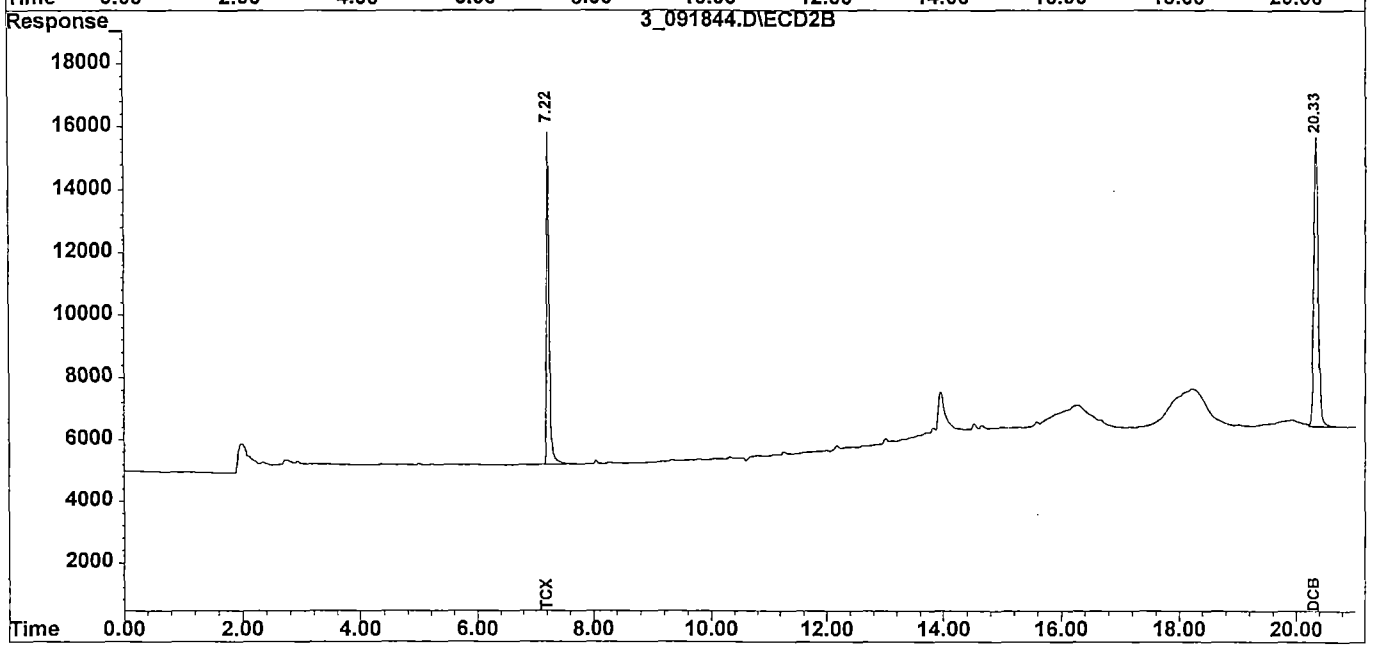
Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091844.D\ECD1A.CH Vial: 16
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091844.D\ECD2B.CH
Acq On : 19 Sep 2001 18:14 Operator: BTB
Sample : PIBLK3M ′ Inst : HP_03
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 7:28 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

OK 9-22-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091844.D\ECD1A.CH Vial: 16
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091844.D\ECD2B.CH
Acq On : 19 Sep 2001 18:14 Operator: BTB
Sample : PIBLK3M Inst : HP_03
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 7:28 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	1073709	316729	19.8	19.5
22)	S DCB	19.24	20.34	1121742	491173	19.9	20.0

Target Compounds:

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK3P

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

Sample wt/vol: _____ (g/mL) Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 09/20/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK3P

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

Sample wt/vol: _____ (g/mL) Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 09/20/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

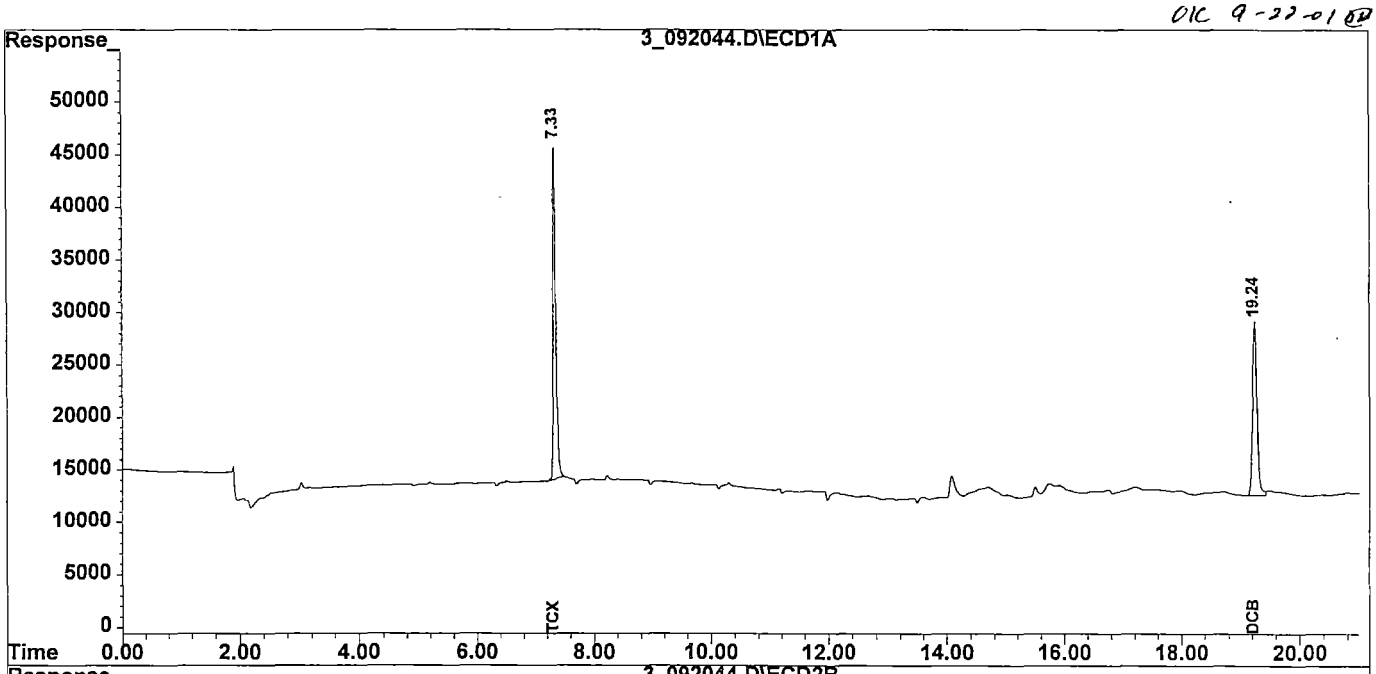
Chromatographic Report

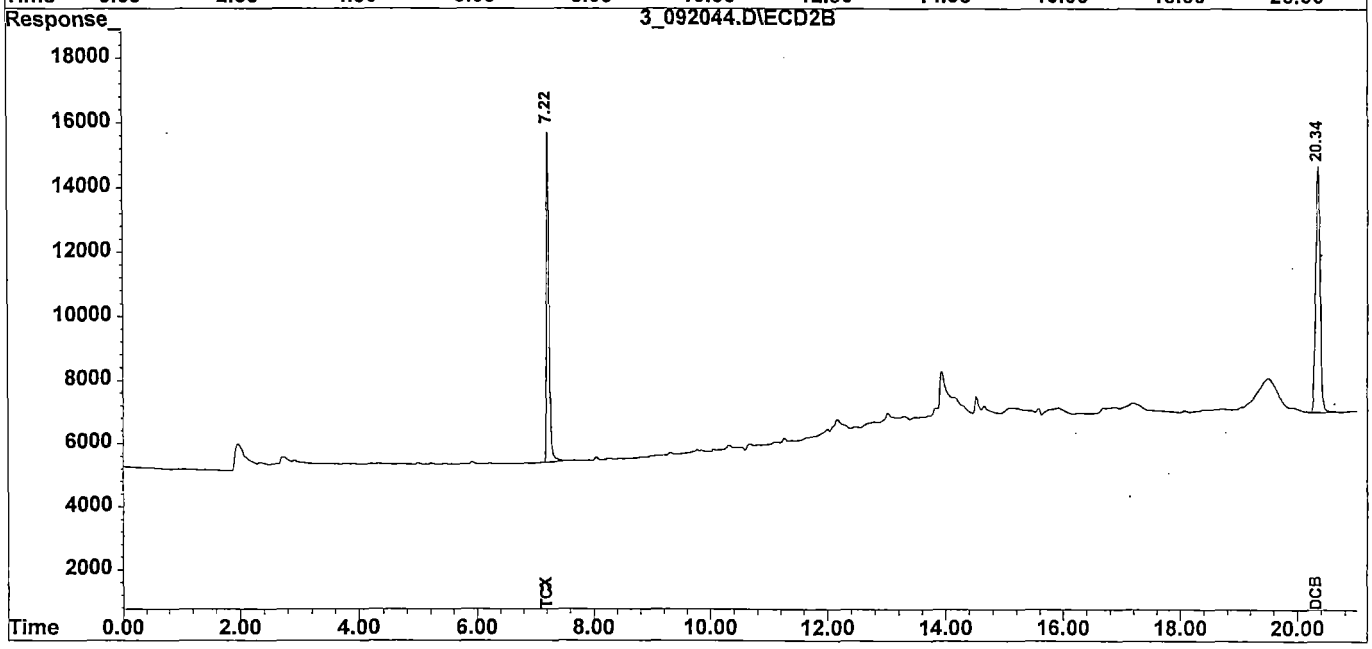
Signal #1 : F:\HPCHEM\HP\3\DATA\09_20_01\3_092044.D\ECD1A.CH Vial: 75
Signal #2 : F:\HPCHEM\HP\3\DATA\09_20_01\3_092044.D\ECD2B.CH
Acq On : 20 Sep 2001 20:03 Operator: BTB
Sample : PIBLK3P Inst : HP_03
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 7:32 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_20_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

OK 9-22-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_20_01\3_092044.D\ECD1A.CH Vial: 75
Signal #2 : F:\HPCHEM\HP\3\DATA\09_20_01\3_092044.D\ECD2B.CH
Acq On : 20 Sep 2001 20:03 Operator: BTB
Sample : PIBLK3P Inst : HP_03
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 7:32 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_20_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	1050034	305351	19.4	18.8
22)	S DCB	19.25	20.35	860454	393539	15.3	16.1
	Target Compounds:						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK3Q

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

Sample wt/vol: _____ (g/mL) Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 09/21/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK3Q

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

Sample wt/vol: _____ (g/mL) Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 09/21/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

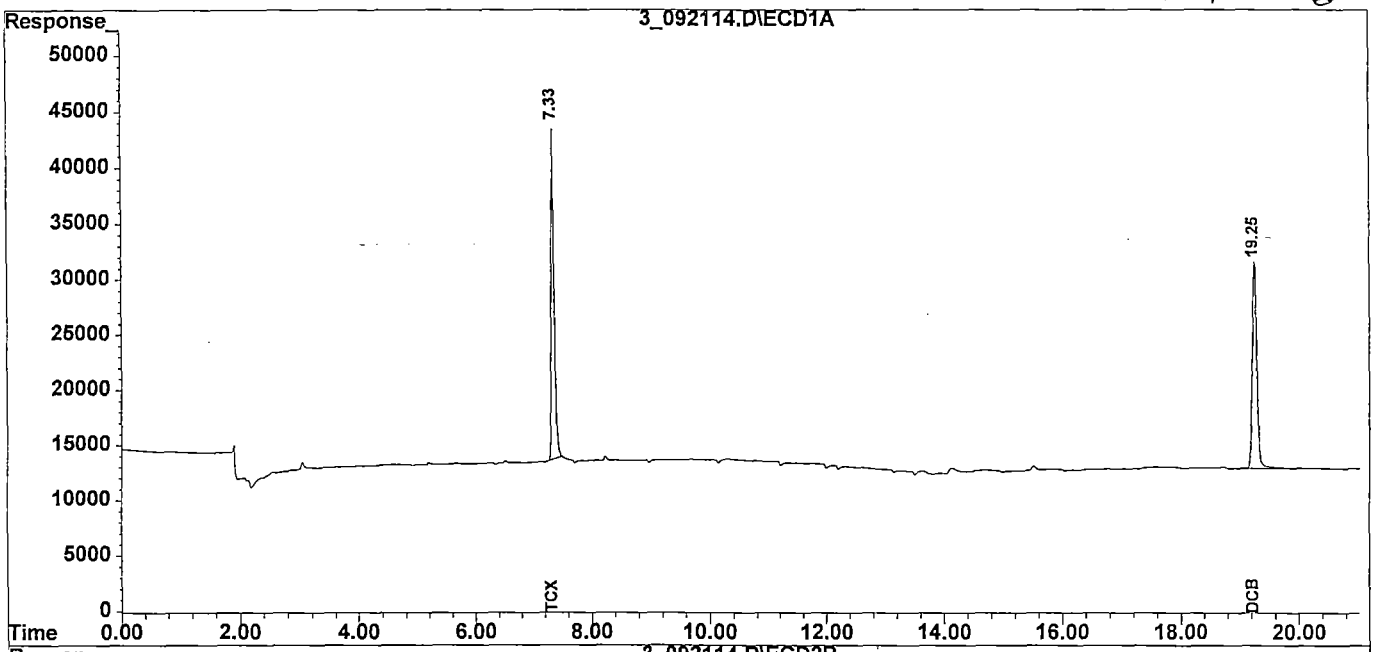
Chromatographic Report

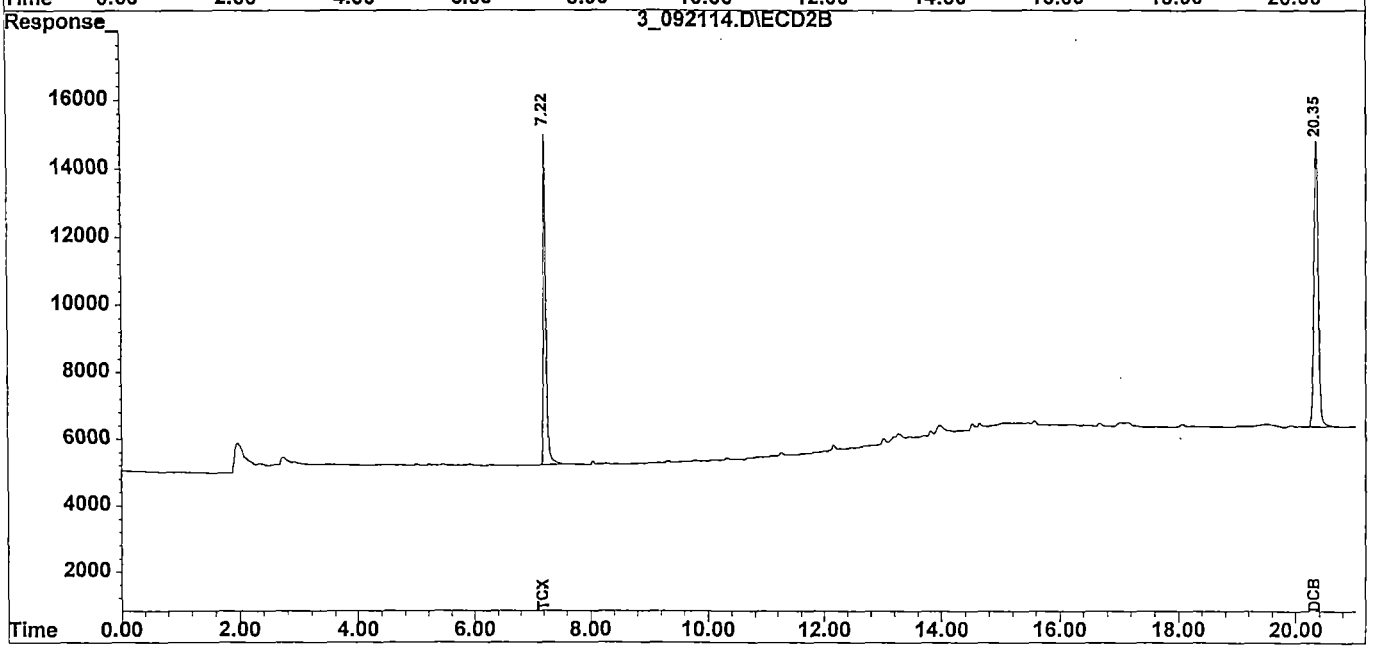
Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092114.D\ECD1A.CH Vial: 91
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092114.D\ECD2B.CH
Acq On : 21 Sep 2001 2:54 Operator: BTB
Sample : PIBLK3Q Inst : HP_03
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 8:36 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

ok 9-22-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092114.D\ECD1A.CH Vial: 91
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092114.D\ECD2B.CH
Acq On : 21 Sep 2001 2:54 Operator: BTB
Sample : PIBLK3Q Inst : HP_03
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 8:36 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	1020896	301093	18.8	18.6
22)	S DCB	19.25	20.35	998674	447706	17.8	18.3
	Target Compounds:						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK3R

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

Sample wt/vol: _____ (g/mL) Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 09/21/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK3R

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

Sample wt/vol: _____ (g/mL) Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 09/21/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

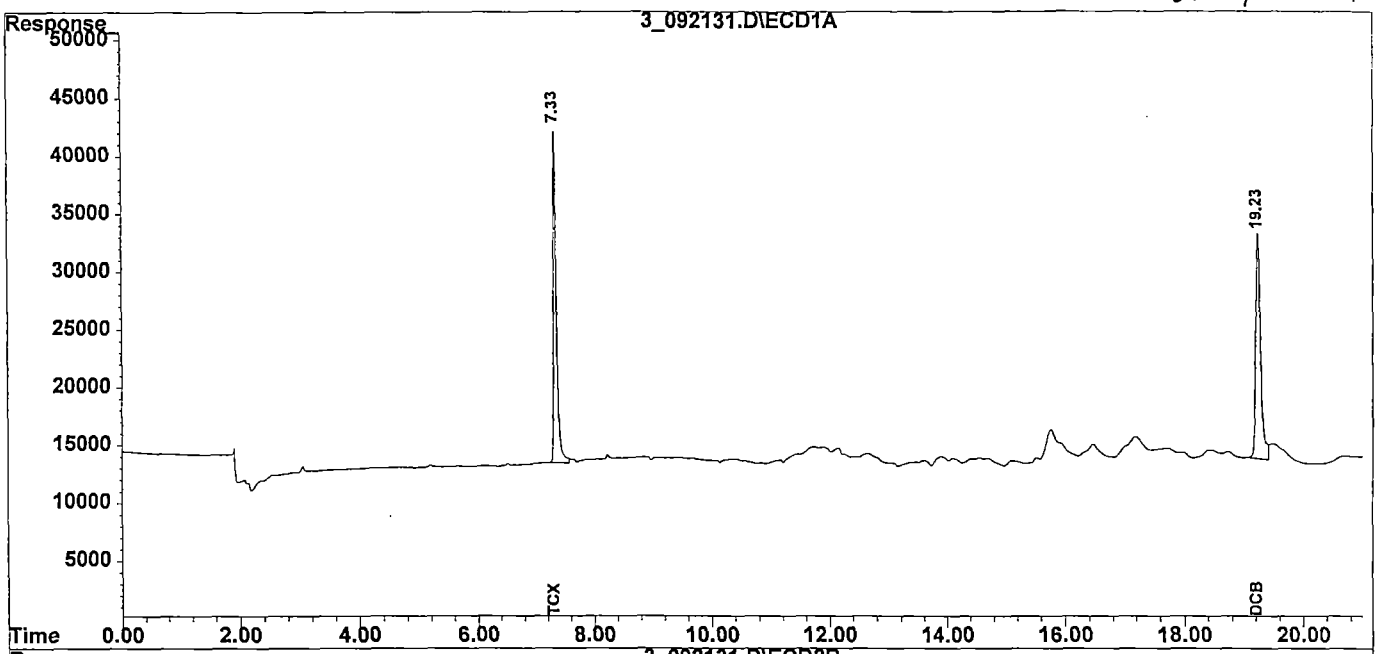
Chromatographic Report

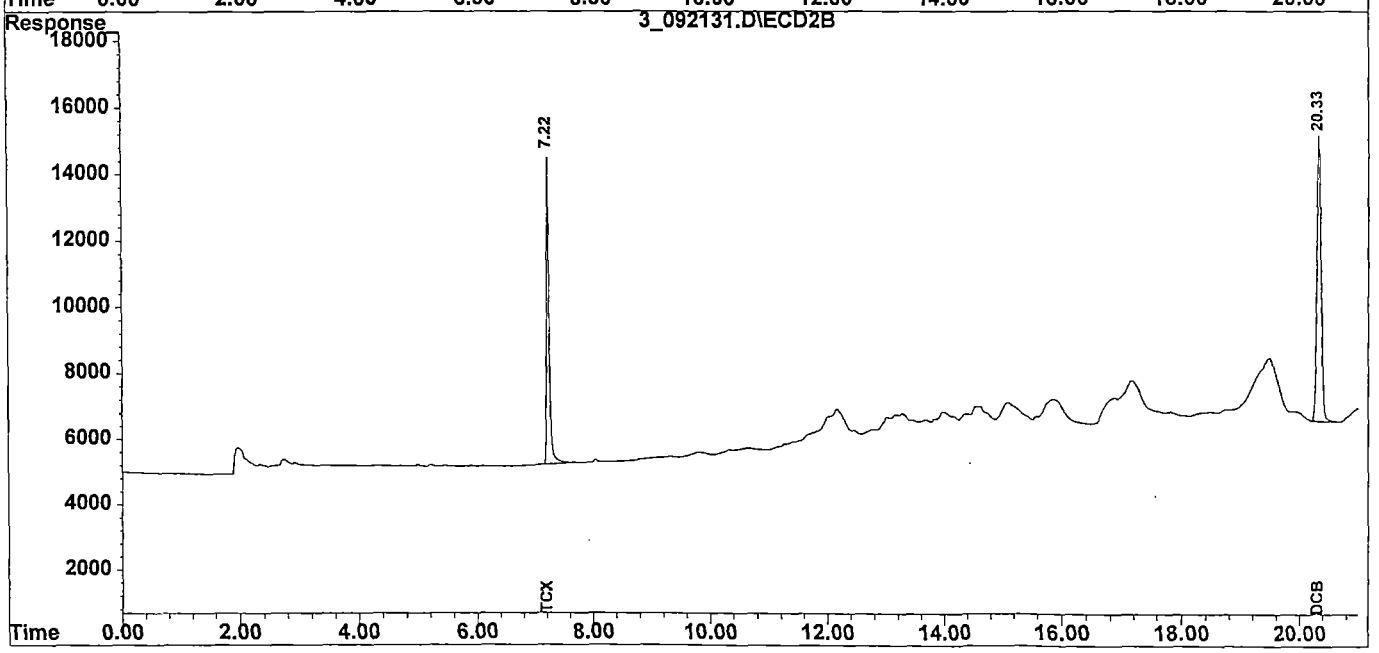
Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092131.D\ECD1A.CH Vial: 8
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092131.D\ECD2B.CH
Acq On : 21 Sep 2001 10:10 Operator: BTB
Sample : PIBLK3R ✓ Inst : HP_03
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 13:43 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

OK 9-22-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092131.D\ECD1A.CH Vial: 8
Signal #2 : F:\HPCHEM\HP\3\DATA\09_21_01\3_092131.D\ECD2B.CH
Acq On : 21 Sep 2001 10:10 Operator: BTB
Sample : PIBLK3R Inst : HP_03
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 21 13:43 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_21_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	1059332	295242	19.5m	18.2
22)	S DCB	19.24	20.34	1094349	450062	19.5	18.4
	Target Compounds:						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ELCS1

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: LC0824SB

Sample wt/vol: 30.0 (g/mL) G Lab File ID:_____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	90	
11096-82-5	Aroclor-1260	33	U
	Surrogate amount spiked	6.67	

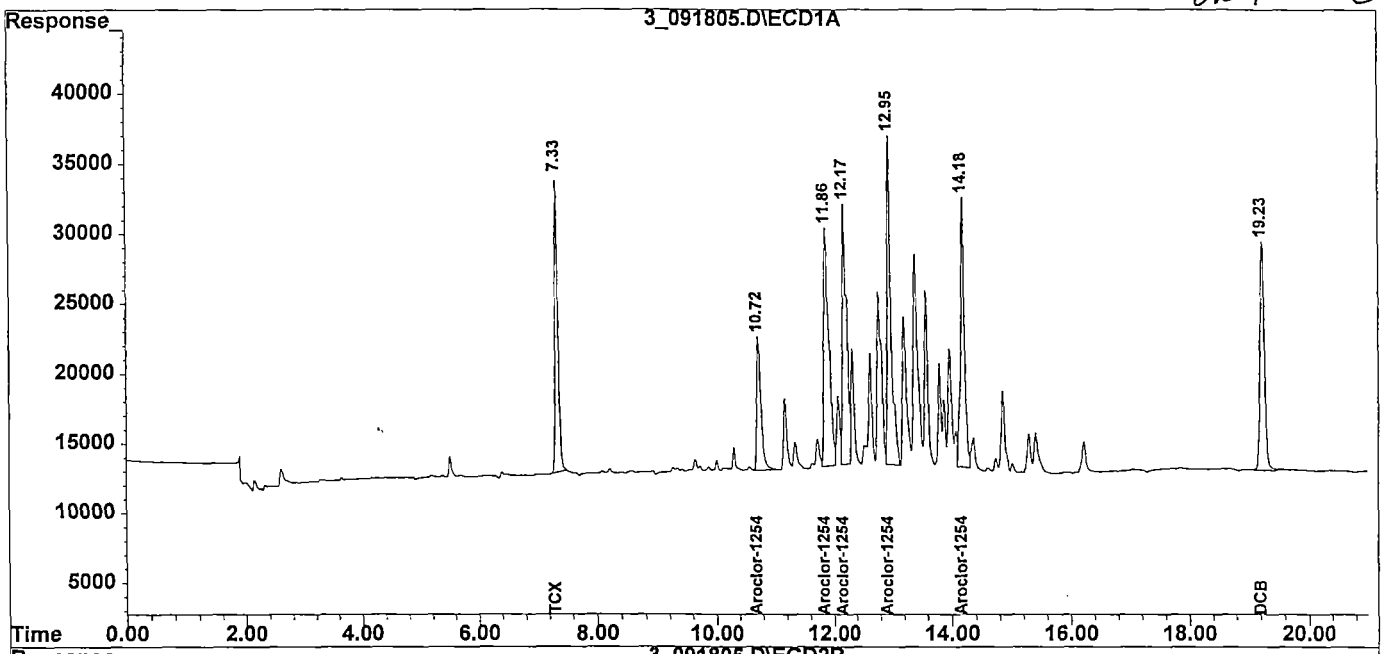
Chromatographic Report

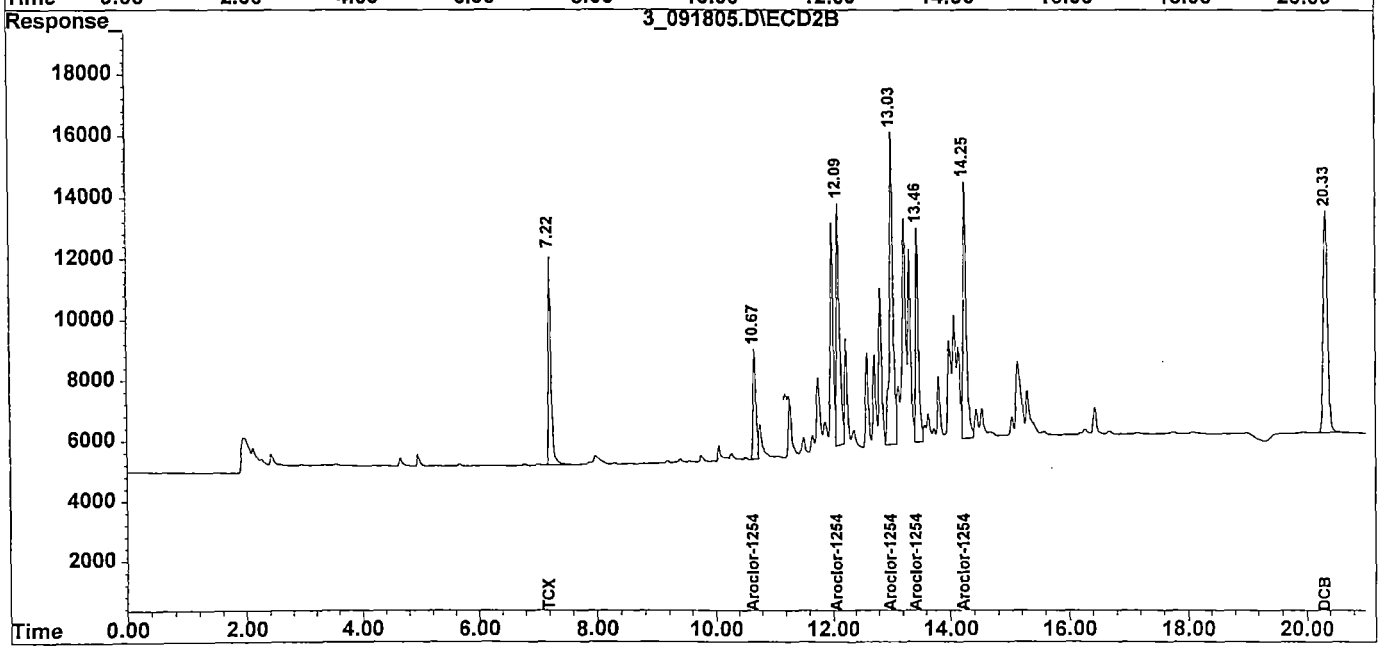
Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091805.D\ECD1A.CH Vial: 77
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091805.D\ECD2B.CH
Acq On : 19 Sep 2001 1:32 Operator: BTB
Sample : LC0824SB *ELCS1 * Inst : HP_03
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 16:51 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

OK 9-22-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091805.D\ECD1A.CH Vial: 77
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091805.D\ECD2B.CH
Acq On : 19 Sep 2001 1:32 Operator: BTB
Sample : LC0824SB *ELCS1 * Inst : HP_03
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 16:51 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	713389	214244	4.386	4.406
	Spiked Amount 6.667			Recovery	=	65.79%	66.09%
22)	S DCB	19.24	20.34	849069	383166	5.031	5.212
	Spiked Amount 6.667			Recovery	=	✓75.47%	✓78.18%
	Target Compounds:						
12)	L6 Aroclor-1254	10.72	10.67	499585	123993	82.3	84.8
13)	L6 Aroclor-1254 {2}	11.86	12.10	1021123	313265	90.8	95.2
14)	L6 Aroclor-1254 {3}	12.18	13.03	985235	413706	95.9	93.8
15)	L6 Aroclor-1254 {4}	12.95	13.46	1046196	236858	88.3	97.3
16)	L6 Aroclor-1254 {5}	14.19	14.25	900131	320619	93.9	98.3
	Sum Aroclor-1254			4452270	1408440	451.2	469.3
	Average Aroclor-1254					90.248	93.868
						68%	71%

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ELCS2

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: LD0824SB

Sample wt/vol: 30.0 (g/mL) G Lab File ID:_____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	140	
11096-82-5	Aroclor-1260	33	U
	Surrogate amount spiked	6.67	

FORM I PCB

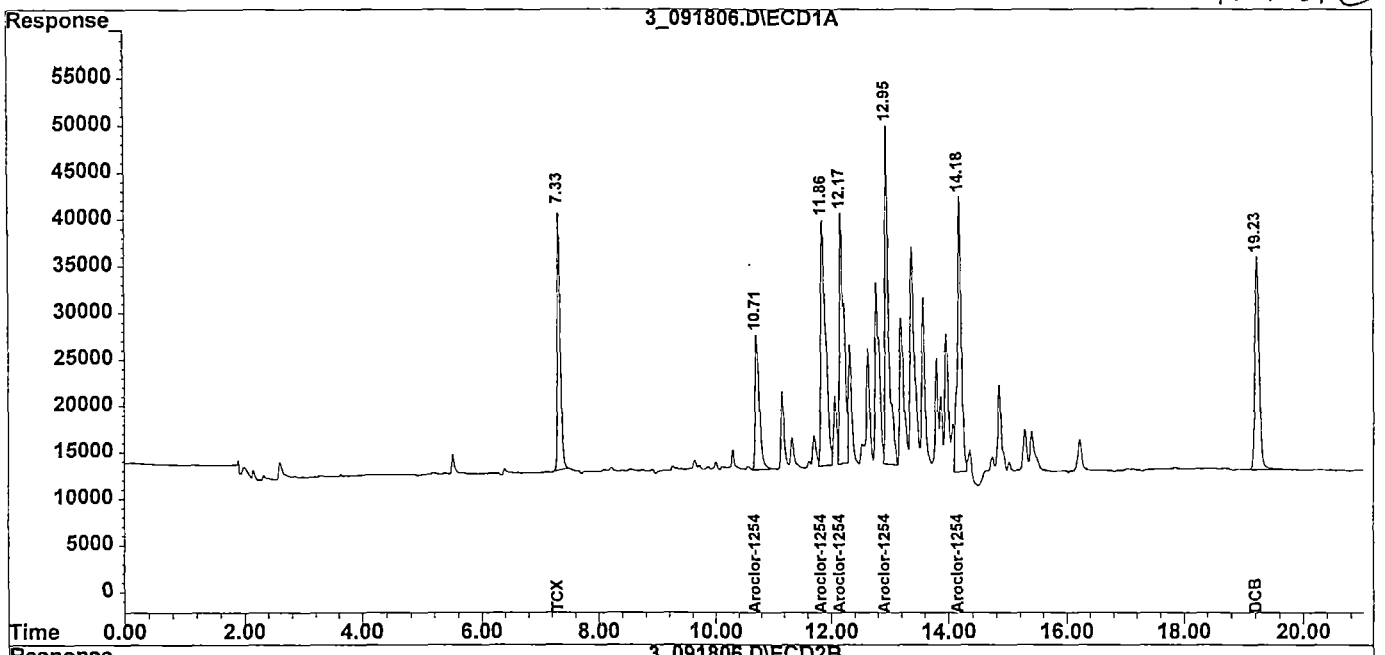
Chromatographic Report

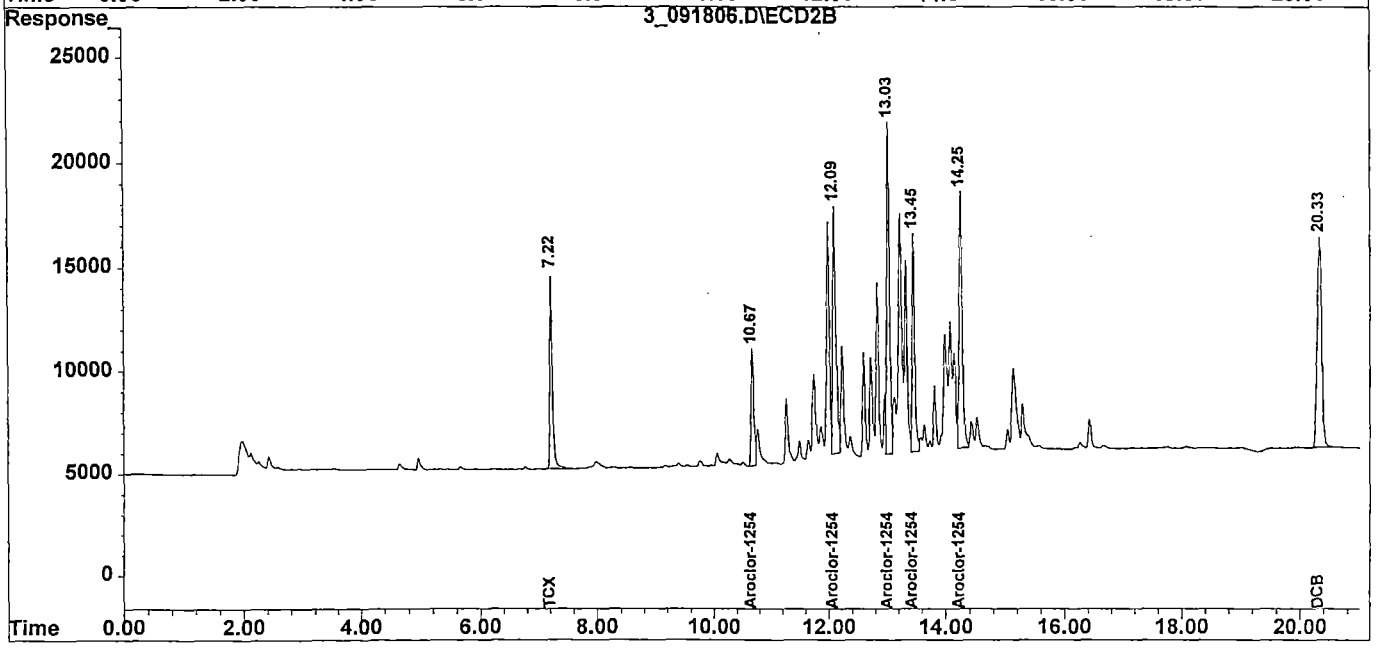
Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091806.D\ECD1A.CH Vial: 78
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091806.D\ECD2B.CH
Acq On : 19 Sep 2001 1:58 Operator: BTB
Sample : LD0824SB' *ELCS2' * Inst : HP_03
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 16:52 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

OK 9-22-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091806.D\ECD1A.CH Vial: 78
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091806.D\ECD2B.CH
Acq On : 19 Sep 2001 1:58 Operator: BTB
Sample : LD0824SB *ELCS2 * Inst : HP_03
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 16:52 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

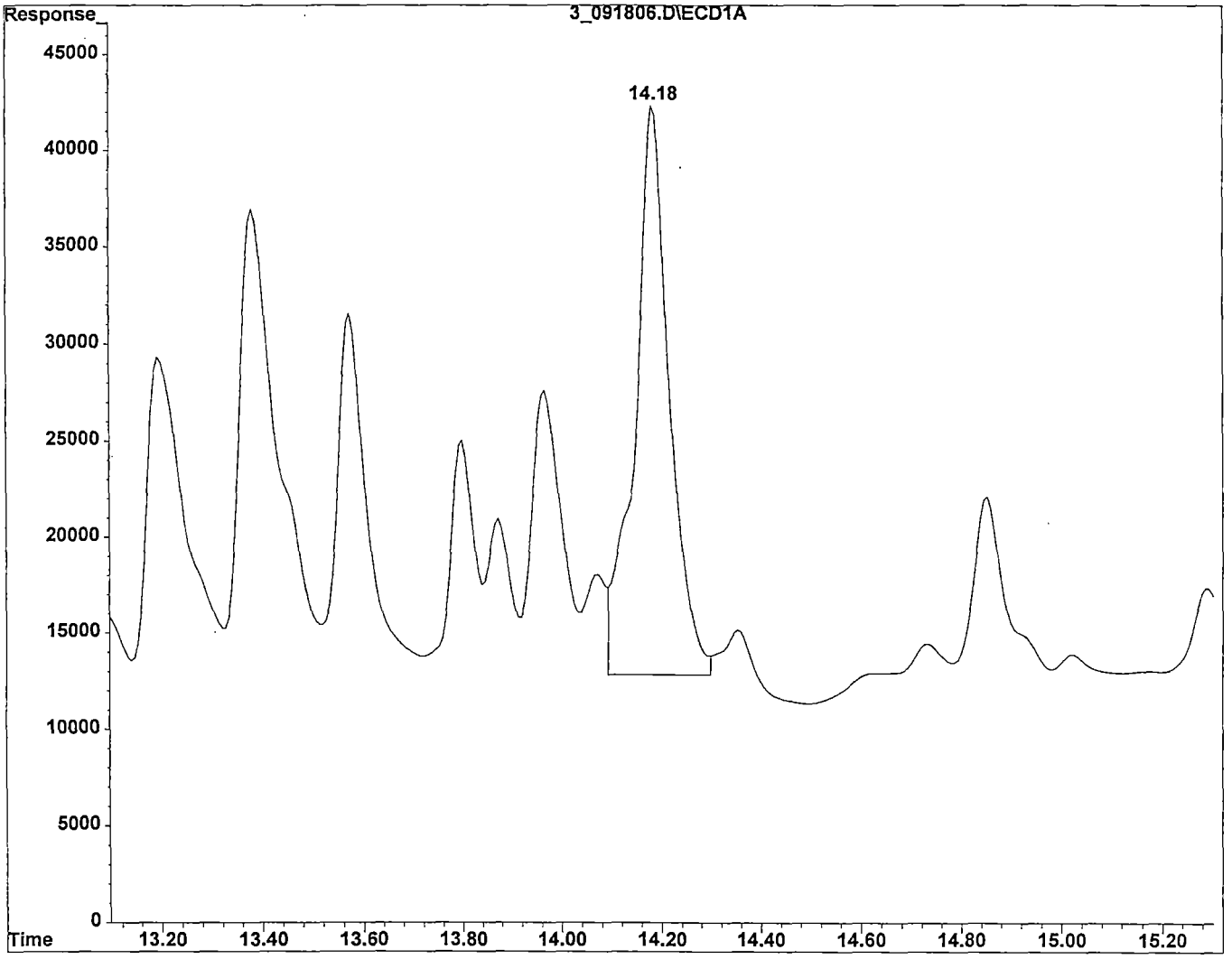
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	979748	302438	6.024	6.220
	Spiked Amount 6.667			Recovery	=	90.36%	93.30%
22)	S DCB	19.23	20.34	1200469	540951	7.113	7.358
	Spiked Amount 6.667			Recovery	=	106.70%	110.37%
	Target Compounds:						
12)	L6 Aroclor-1254	10.72	10.67	744342	192231	122.7	131.5
13)	L6 Aroclor-1254 {2}	11.86	12.09	1505337	460371	133.9	139.8
14)	L6 Aroclor-1254 {3}	12.17	13.03	1407290	571295	136.9	129.5
15)	L6 Aroclor-1254 {4}	12.95	13.46	1593807	338845	134.6	139.1
16)	L6 Aroclor-1254 {5}	14.18	14.25	1402952	462950	146.3m BTB 092001	142.0
	Sum Aroclor-1254			6653727	2025693	674.4	682.0
	Average Aroclor-1254					134.878	136.391

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091806.D
Date Acquired: 19 Sep 2001 1:58
Inst: HP_03 Operator ID: BTB
Name: LD0824SB *ELCS2 *
Misc: **30G/5.0ML*0
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 16:52 2001 Quant Results File: XPCBI16.RES



OK 9-22-01 BH

Aroclor-1254 {5} 14.18min area: 1402952 m

BTB 091901

Integration Time Range: 14.10 - 14.30

F:\HPCHEM\HP\3\DATA\09_18_01\3_091806.D
Report generated: Wed Sep 19 17:18:16 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03K0MS

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.02MS

Sample wt/vol: 30.0 (g/mL) G Lab File ID:_____

% Moisture: 23 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.2 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	43	U
11104-28-2	Aroclor-1221	43	U
11141-16-5	Aroclor-1232	43	U
53469-21-9	Aroclor-1242	67	
12672-29-6	Aroclor-1248	43	U
11097-69-1	Aroclor-1254	170	
11096-82-5	Aroclor-1260	43	U
	Surrogate amount spiked	8.66	

FORM I PCB

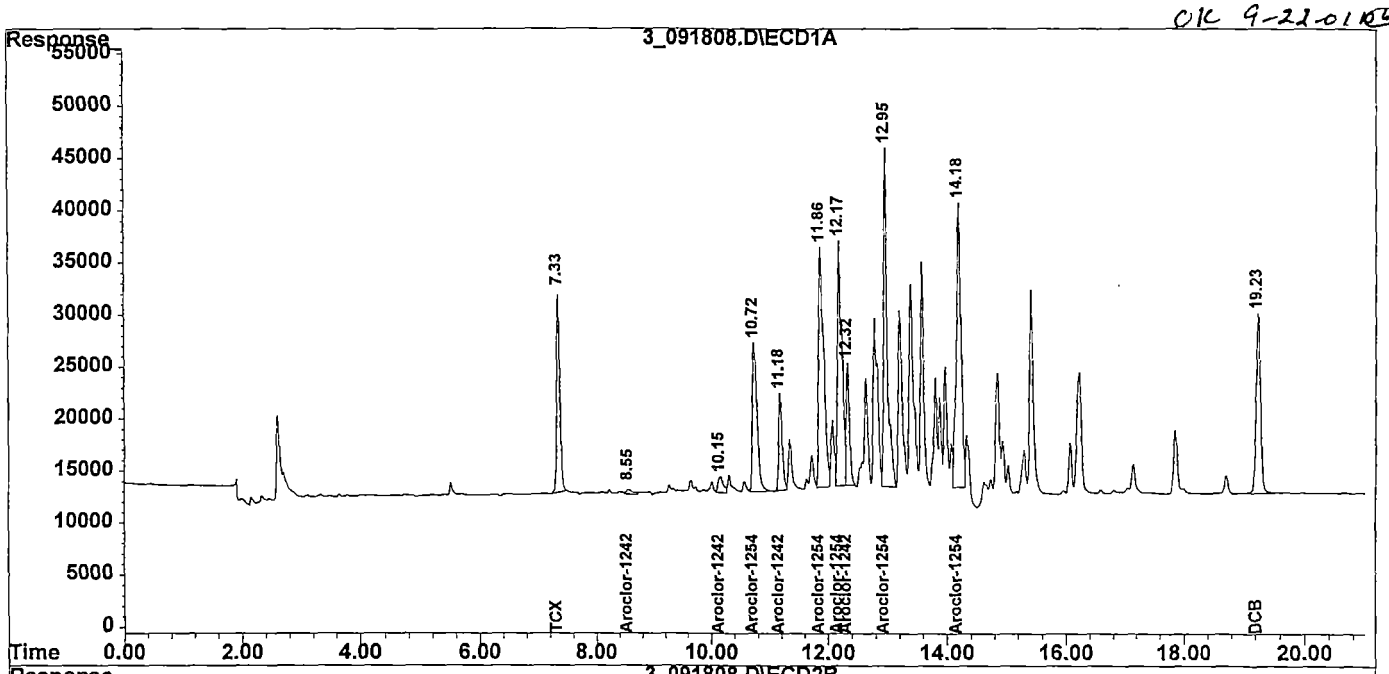
Chromatographic Report

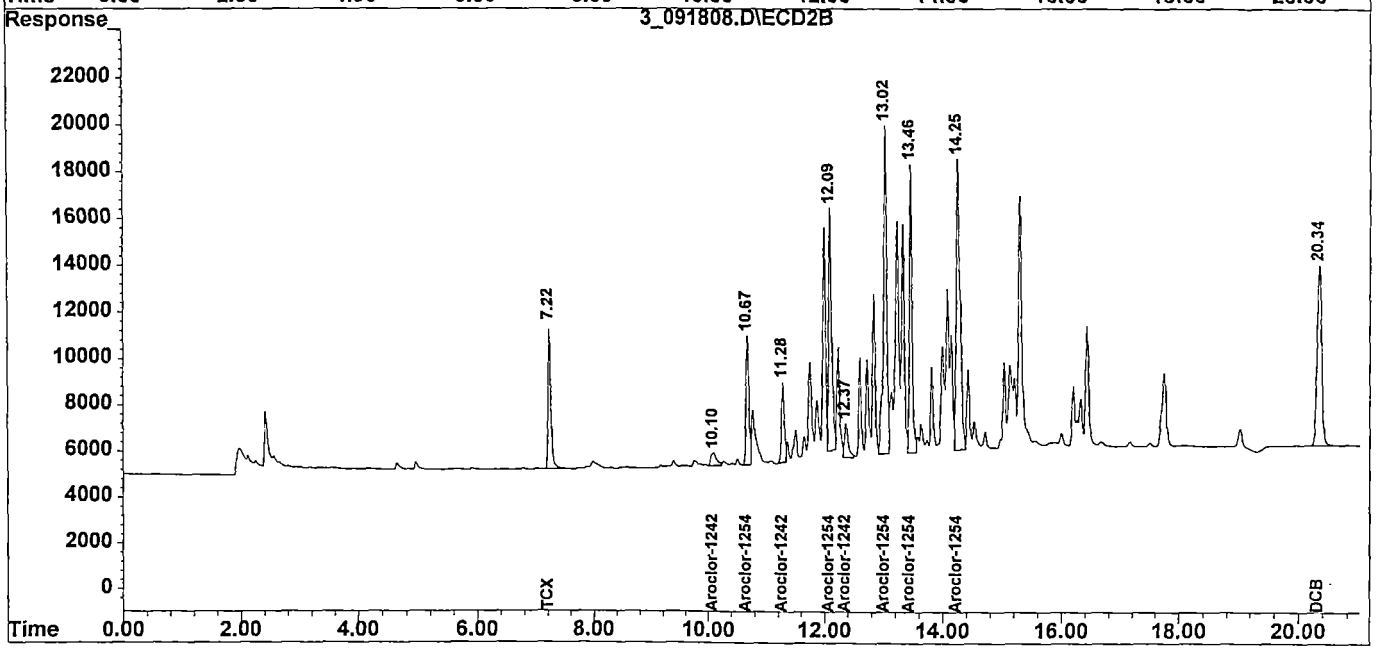
Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091808.D\ECD1A.CH Vial: 80
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091808.D\ECD2B.CH
Acq On : 19 Sep 2001 2:49 Operator: BTB
Sample : 47351.02MS ✓ *E03K0MS ✓ * Inst : HP_03
Misc : *EPA*30G✓/5.✓0ML*23✓ Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 16:57 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

OK 9-22-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091808.D\ECD1A.CH Vial: 80
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091808.D\ECD2B.CH
Acq On : 19 Sep 2001 2:49 Operator: BTB
Sample : 47351.02MS *E03K0MS * Inst : HP_03
Misc : *EPA*30G/5.0ML*23 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 16:57 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

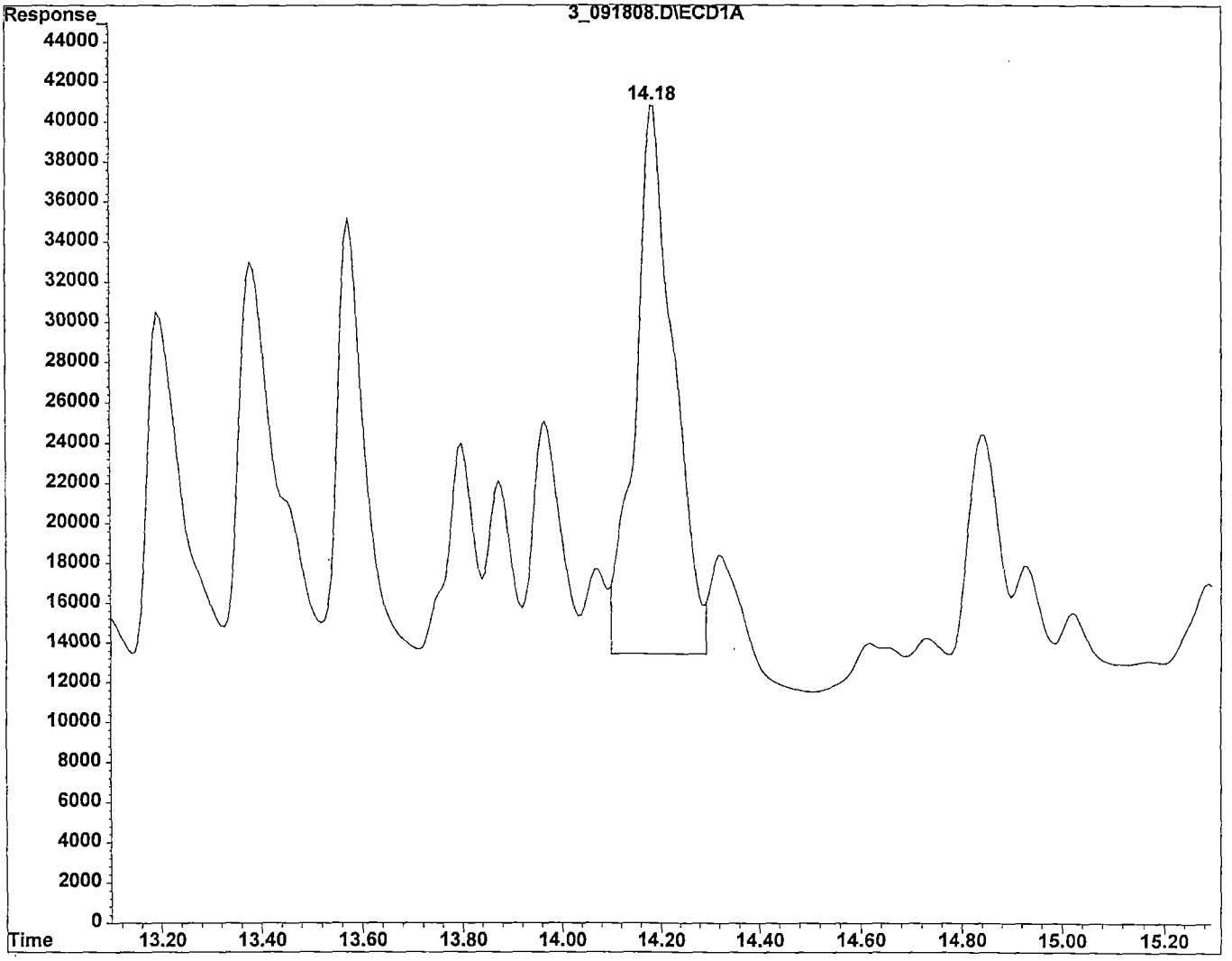
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.34	7.23	715868	214624	5.716	5.733	
	Spiked Amount 8.658			Recovery	=	66.02%	66.22%	
22)	S DCB	19.24	20.34	887217	409491	6.827	7.234	
	Spiked Amount 8.658			Recovery	=	✓78.85%	✓83.55%	
	Target Compounds:							
7)	L4 Aroclor-1242	8.55	0.00	37620	0	14.4	N.D.	#
9)	L4 Aroclor-1242 {3}	10.15	10.10	94893	38837	11.3	12.7	
10)	L4 Aroclor-1242 {4}	11.18	11.28	391410	114968	106.1	115.0	
11)	L4 Aroclor-1242 {5}	12.32	12.37	459133	64688	159.7	72.9m	# BTB 09/20/01
	Sum Aroclor-1242			983055	218493	291.5	200.6	
	Average Aroclor-1242					72.875	66.878	
12)	L6 Aroclor-1254	10.72	10.68	831986	182666	178.1	162.3	
13)	L6 Aroclor-1254 {2}	11.86	12.10	1420966	389452	164.2	153.6	
14)	L6 Aroclor-1254 {3}	12.18	13.03	1223903	555071	154.7	163.4	
15)	L6 Aroclor-1254 {4}	12.95	13.46	1395487	394418	153.0	210.3	#
16)	L6 Aroclor-1254 {5}	14.18	14.25	1472368	576277	199.4m	229.6	BTB 09/20/01
	Sum Aroclor-1254			6344709	2097884	849.3	919.2	
	Average Aroclor-1254					169.863	183.837	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091808.D
Date Acquired: 19 Sep 2001 2:49
Inst: HP_03 Operator ID: BTB
Name: 47351.02MS *E03K0MS *
Misc: *EPA*30G/5.0ML*23
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 16:57 2001 Quant Results File: XPCBI16.RES



OK 9-22-01

Aroclor-1254 {5} 14.18min area: 1472368 m

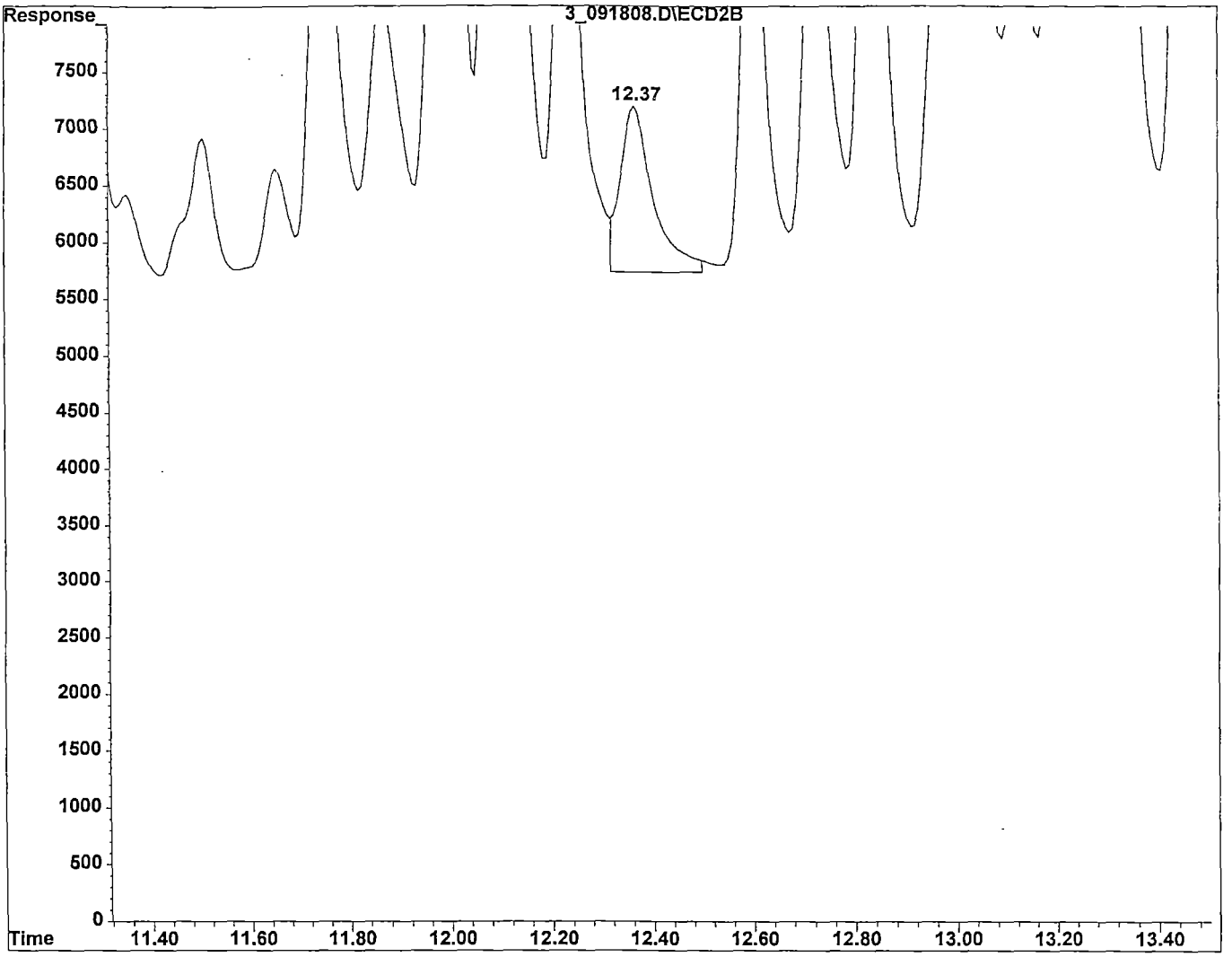
Integration Time Range: 14.10 - 14.29

BTB 092061

F:\HPCHEM\HP\3\DATA\09_18_01\3_091808.D
Report generated: Wed Sep 19 17:18:20 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091808.D
Date Acquired: 19 Sep 2001 2:49
Inst: HP_03 Operator ID: BTB
Name: 47351.02MS *E03K0MS *
Misc: *EPA*30G/5.0ML*23
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 16:57 2001 Quant Results File: XPCBI16.RES



ok 9-22-01

Aroclor-1242 {5} #2 12.37min area: 64688 m

Integration Time Range: 12.32 - 12.50

BTB 092001

F:\HPCHEM\HP\3\DATA\09_18_01\3_091808.D
Report generated: Wed Sep 19 17:18:20 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03K0MSD

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03K0

Matrix: (soil/water) SOIL Lab Sample ID: 47351.03MSD

Sample wt/vol: 30.1 (g/mL) G Lab File ID:_____

% Moisture: 23 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/24/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.2 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	43	U
11104-28-2	Aroclor-1221	43	U
11141-16-5	Aroclor-1232	43	U
53469-21-9	Aroclor-1242	59	
12672-29-6	Aroclor-1248	43	U
11097-69-1	Aroclor-1254	140	
11096-82-5	Aroclor-1260	43	U
	Surrogate amount spiked	8.63	

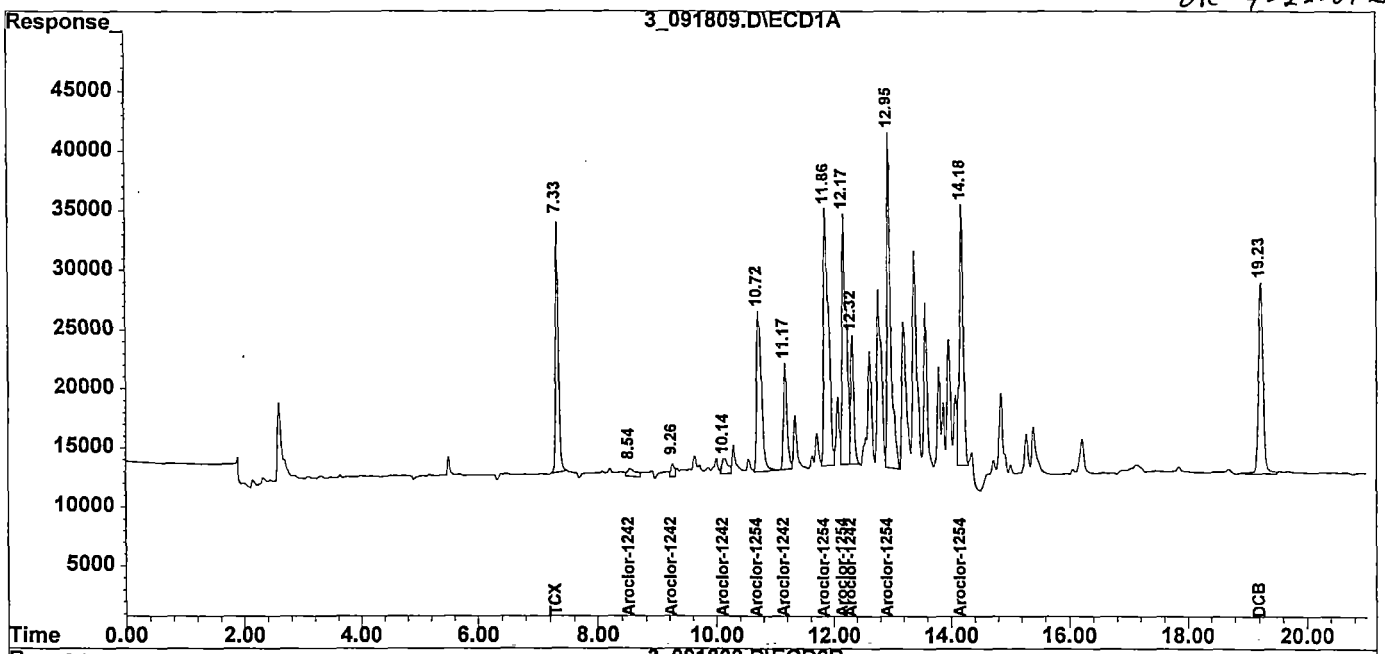
Chromatographic Report

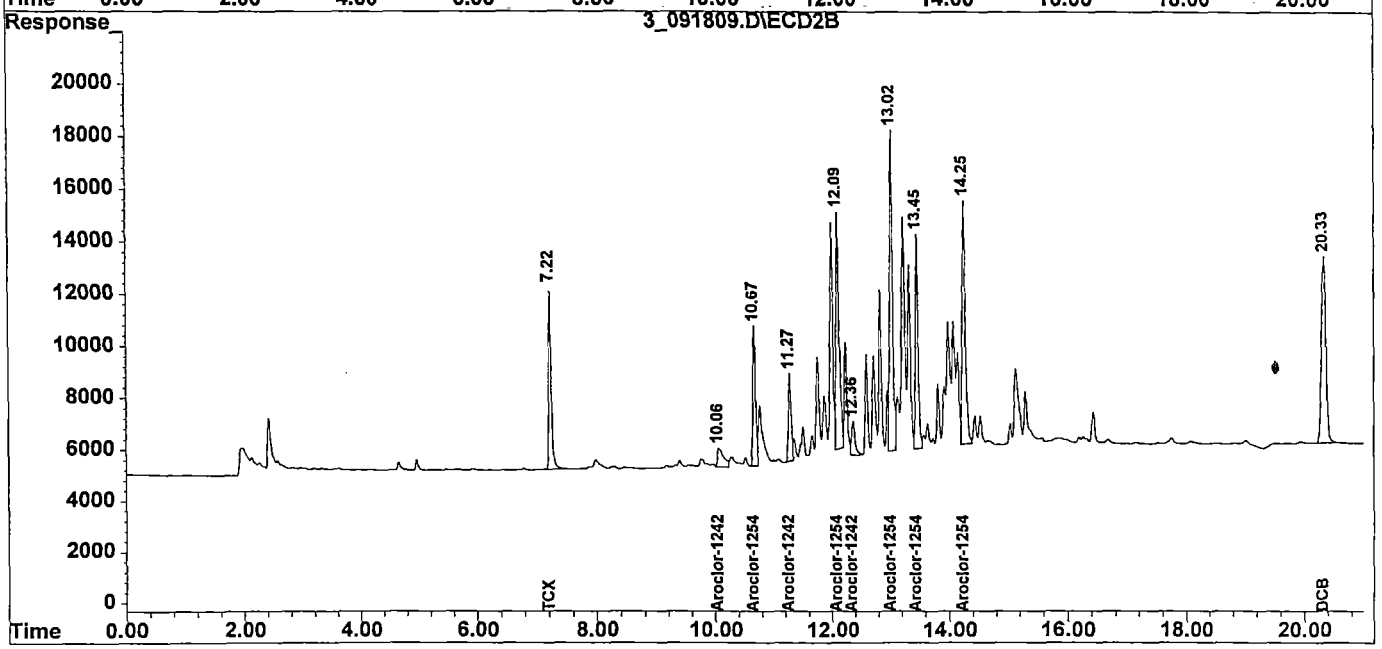
Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091809.D\ECD1A.CH Vial: 81
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091809.D\ECD2B.CH
Acq On : 19 Sep 2001 3:15 Operator: BTB
Sample : 47351.03MSD *E03K0MSD * Inst : HP_03
Misc : *EPA*30.1G/5.0ML*23 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 16:59 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

OK 9-22-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091809.D\ECD1A.CH Vial: 81
Signal #2 : F:\HPCHEM\HP\3\DATA\09_18_01\3_091809.D\ECD2B.CH
Acq On : 19 Sep 2001 3:15 Operator: BTB
Sample : 47351.03MSD *E03K0MSD * Inst : HP_03
Misc : *EPA*30.1G/5.0ML*23 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 16:59 2001 Quant Results File: XPCBI16.RES

Method : F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_16_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Initial Calibration

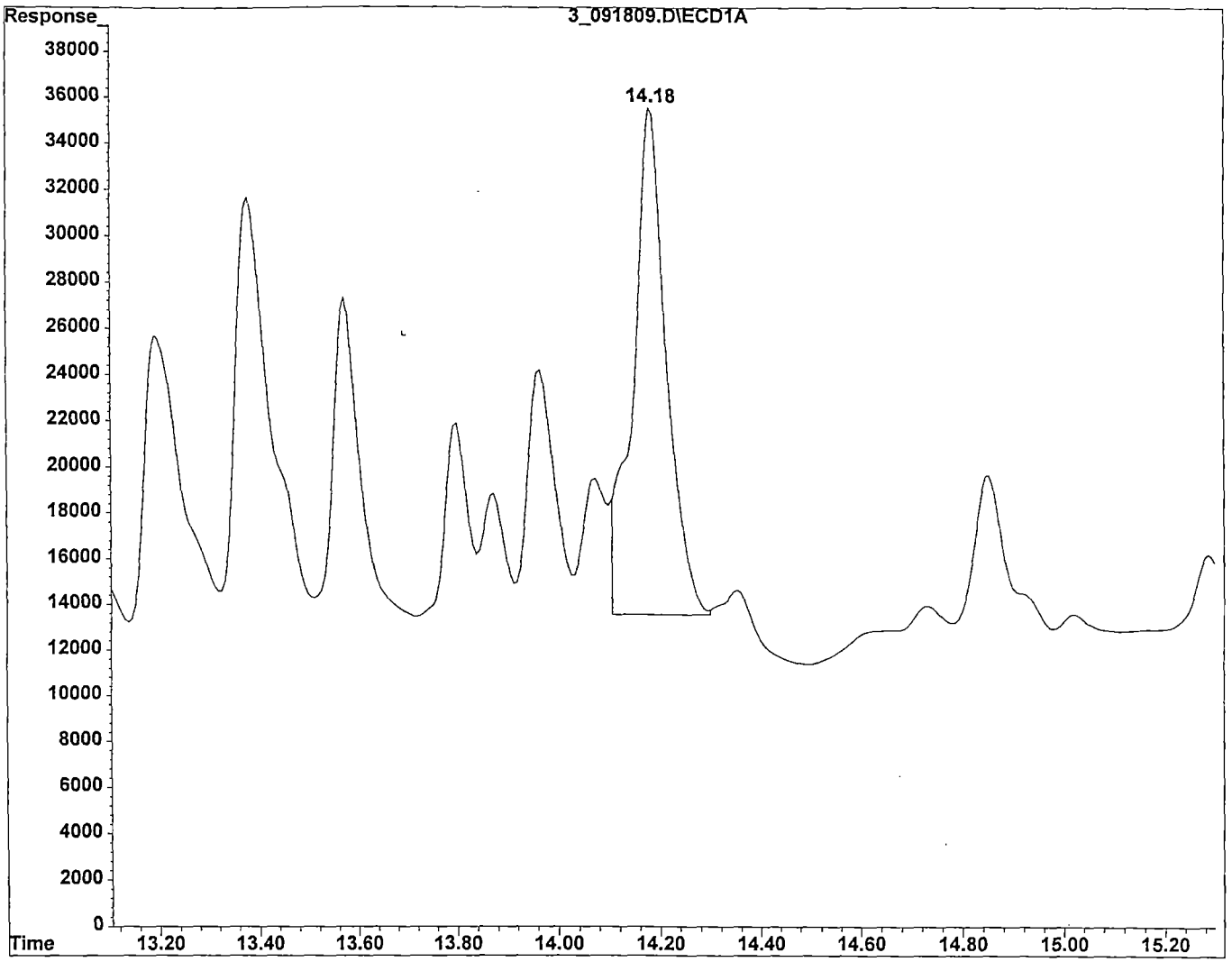
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	688645	206034	5.480	5.485
	Spiked Amount 8.629			Recovery	=	63.50%	63.56%
22)	S DCB	19.23	20.34	856849	378551	6.571	6.665
	Spiked Amount 8.629			Recovery	=	76.15%	77.24%
	Target Compounds:						
7)	L4 Aroclor-1242	8.54	0.00	65872	0	25.1	N.D. #
8)	L4 Aroclor-1242 {2}	9.26	0.00	46583	0	10.2	N.D. d #
9)	L4 Aroclor-1242 {3}	10.14	10.06	91379	53176	10.8	17.3 #
10)	L4 Aroclor-1242 {4}	11.17	11.28	368836	110329	99.7	110.0
11)	L4 Aroclor-1242 {5}	12.32	12.36	429154	54864	148.8	61.6m # BTB 09/20/01
	Sum Aroclor-1242			1001824	218369	294.6	189.0
	Average Aroclor-1242					58.917	62.995
12)	L6 Aroclor-1254	10.72	10.67	796449	178700	169.9	158.2
13)	L6 Aroclor-1254 {2}	11.86	12.09	1278956	353722	147.3	139.1
14)	L6 Aroclor-1254 {3}	12.17	13.03	1086480	435506	136.8	127.8
15)	L6 Aroclor-1254 {4}	12.95	13.46	1227320	258659	134.1	137.5
16)	L6 Aroclor-1254 {5}	14.18	14.25	994468	352250	134.2m BTB 09/20/01	139.9
	Sum Aroclor-1254			5383674	1578836	722.4	702.4
	Average Aroclor-1254					144.475	140.478

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091809.D
Date Acquired: 19 Sep 2001 3:15
Inst: HP_03 Operator ID: BTB
Name: 47351.03MSD *E03K0MSD *
Misc: *EPA*30.1G/5.0ML*23
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 16:59 2001 Quant Results File: XPCBI16.RES



OK 9-20-01

Aroclor-1254 {5} 14.18min area: 994468 m

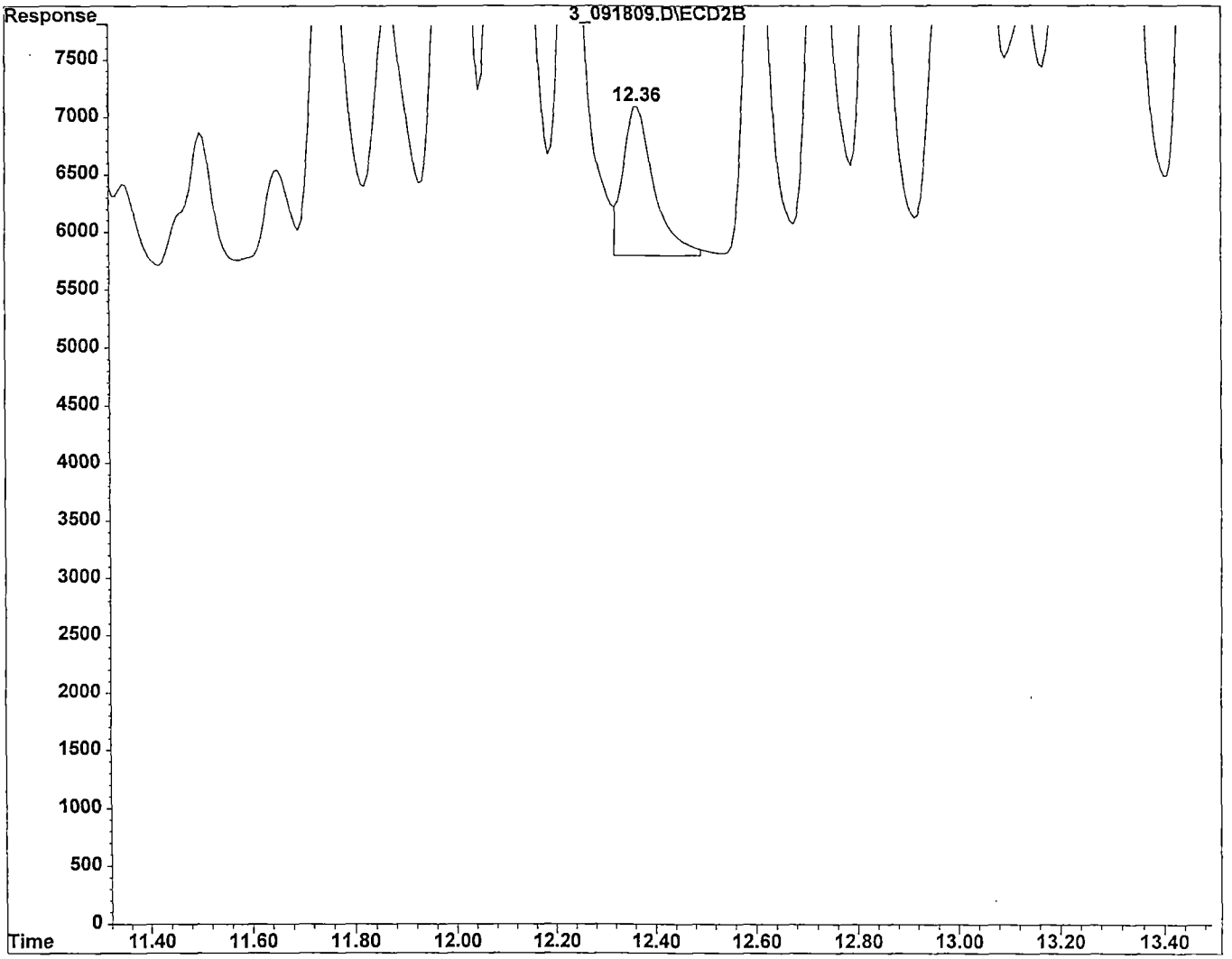
BTB 092001

Integration Time Range: 14.11 - 14.30

F:\HPCHEM\HP\3\DATA\09_18_01\3_091809.D
Report generated: Wed Sep 19 17:18:22 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_18_01\3_091809.D
Date Acquired: 19 Sep 2001 3:15
Inst: HP_03 Operator ID: BTB
Name: 47351.03MSD *E03K0MSD *
Misc: *EPA*30.1G/5.0ML*23
Method: F:\HPCHEM\HP\3\DATA\09_18_01\XPCBI16.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 16:59 2001 Quant Results File: XPCBI16.RES



ok 9-22-01

Aroclor-1242 {5} #2 12.36min area: 54864 m

BTB 092001

Integration Time Range: 12.32 - 12.49

F:\HPCHEM\HP\3\DATA\09_18_01\3_091809.D
Report generated: Wed Sep 19 17:18:23 2001

Gel Permeation Chromatography (GPC) Run Log - GPC1

SWOK/AATS SWL-OE-102-16 Rev.#: 2.1 Fraction Collected: 45 mLs

Col. ID.: 418002 Protocol: GC699 Fraction: PEST Cycle: 15-9

Cal. Std. Page: Client: EPA Case#

DATE/TIME	POS.	SAMPLE ID	FILE	COMMENT
08/29/01 14:46	1	CAL STD (INITIAL)	1_082901	
08/29/01 15:16	2	SB	1_082902	
08/29/01 15:47	3	SB	1_082903	
08/29/01 16:18	4	SB	1_082904	
08/29/01 16:49	5	SB	1_082905	
08/29/01 17:20	6	SB#082901C (PEST)	1_082906	
08/29/01 17:51	7	SB#082901D (PEST)	1_082907	
08/29/01 18:23	8	BL0824SB-EPA	1_082908	
08/29/01 18:54	9	BB0824SB-EPA	1_082909	
08/29/01 19:25	10	LC0824SB-EPA	1_082910	
08/29/01 19:55	11	LD0824SB-EPA	1_082911	
08/29/01 20:27	12	47351.21-E03L9-EPA	1_082912	
08/29/01 20:57	13	47351.01-E03K0-EPA	1_082913	
08/29/01 21:28	14	47351.02-E03K0MS-EPA	1_082914	
08/29/01 21:59	15	47351.03-E03K0MSD-EPA	1_082915	
08/29/01 22:30	16	47351.22-E03M1-EPA	1_082916	
08/29/01 23:01	17	47351.15-E03L3-EPA	1_082917	
08/29/01 23:32	18	47351.20-E03L8-EPA	1_082918	
08/30/01 00:03	19	47351.14-E03L2-EPA	1_082919	
08/30/01 00:34	20	47351.19-E03L7-EPA	1_082920	
08/30/01 01:05	21	47351.05-E03K2-EPA	1_082921	

9/6/2001 Verification Signature/Date

9/5/01 Analyst Signature/Date

Book: OE-102-16-RUN- Page No.: 25

Gel Permeation Chromatography (GPC) Run Log - GPC1

SWOK/AATS SWL-OE-102-16 Rev.#: 2.1 Fraction Collected: 45 mLs

Col. ID.: 418002 Protocol: GC699 Fraction: PEST Cycle: 15-9

Cal. Std. Page: Client: EPA Case#

DATE/TIME	POS.	SAMPLE ID	FILE	COMMENT
08/30/01 01:36	22	47351.13-E03L1-EPA	1_082922	
08/30/01 02:06	23	47351.18-E03L6-EPA	1_082923	
08/30/01 02:37	24	47351.12-E03L0-EPA	1_082924	
08/30/01 03:08	25	47351.17-E03L5-EPA	1_082925	
08/30/01 03:39	26	47351.16-E03L4-EPA	1_082926	
08/30/01 04:10	27	47351.07-E03K4-EPA	1_082927	
08/30/01 04:41	28	47351.06-E03K3-EPA	1_082928	
08/30/01 05:12	29	47351.09-E03K6-EPA	1_082929	
08/30/01 05:43	30	47351.08-E03K5-EPA	1_082930	
08/30/01 06:14	31	47351.10-E03K8-EPA	1_082931	
08/30/01 06:45	32	47351.11-E03K9-EPA	1_082932	
08/30/01 07:16	33	47351.04-E03K1-EPA	1_082933	
08/30/01 07:47	34	SB	1_082934	
08/30/01 08:18	35	SB	1_082935	
08/30/01 08:49	36	SB	1_082936	
08/30/01 09:20	37	SB	1_082937	
08/30/01 09:52	38	CAL STD (FINAL)	1_082938	

Compound	Initial RT	Final RT	% Difference
Phthalate	14.31	14.23	0.56
Methoxychlor	15.92	15.82	0.63
Perylene	20.65	20.58	0.34

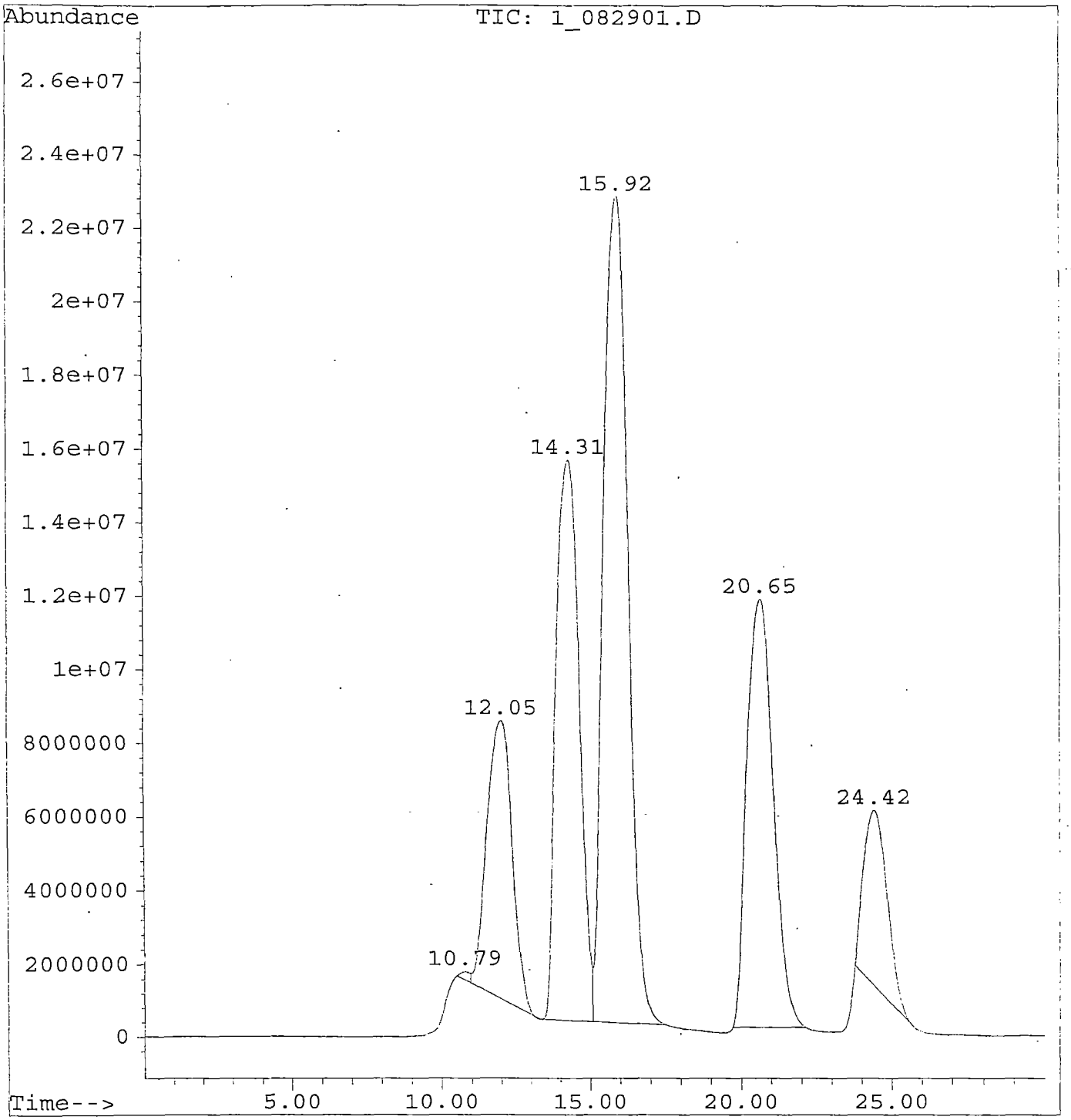
9/6/2001
Verification Signature/Date

9/5/01
Analyst Signature/Date

Book: OE-102-16-RUN- Page No.: 26

Data File : C:\HPCHEM\5\DATA\082901\1_082901.D
Acq On : 29 Aug 01 02:46 PM
Sample : CAL STD (INITIAL)
Misc : COL# 418002

Vial: 1
Operator: CR COL#
Inst : GPC1
Multiplr: 1.00



1) 12.05 = Corn Oil
2) 14.31 = Pthalate
3) 15.92 = Methoxychlor
4) 20.65 = Perylene
5) 24.42 = Sulfur

Chromatographic Resolution Report

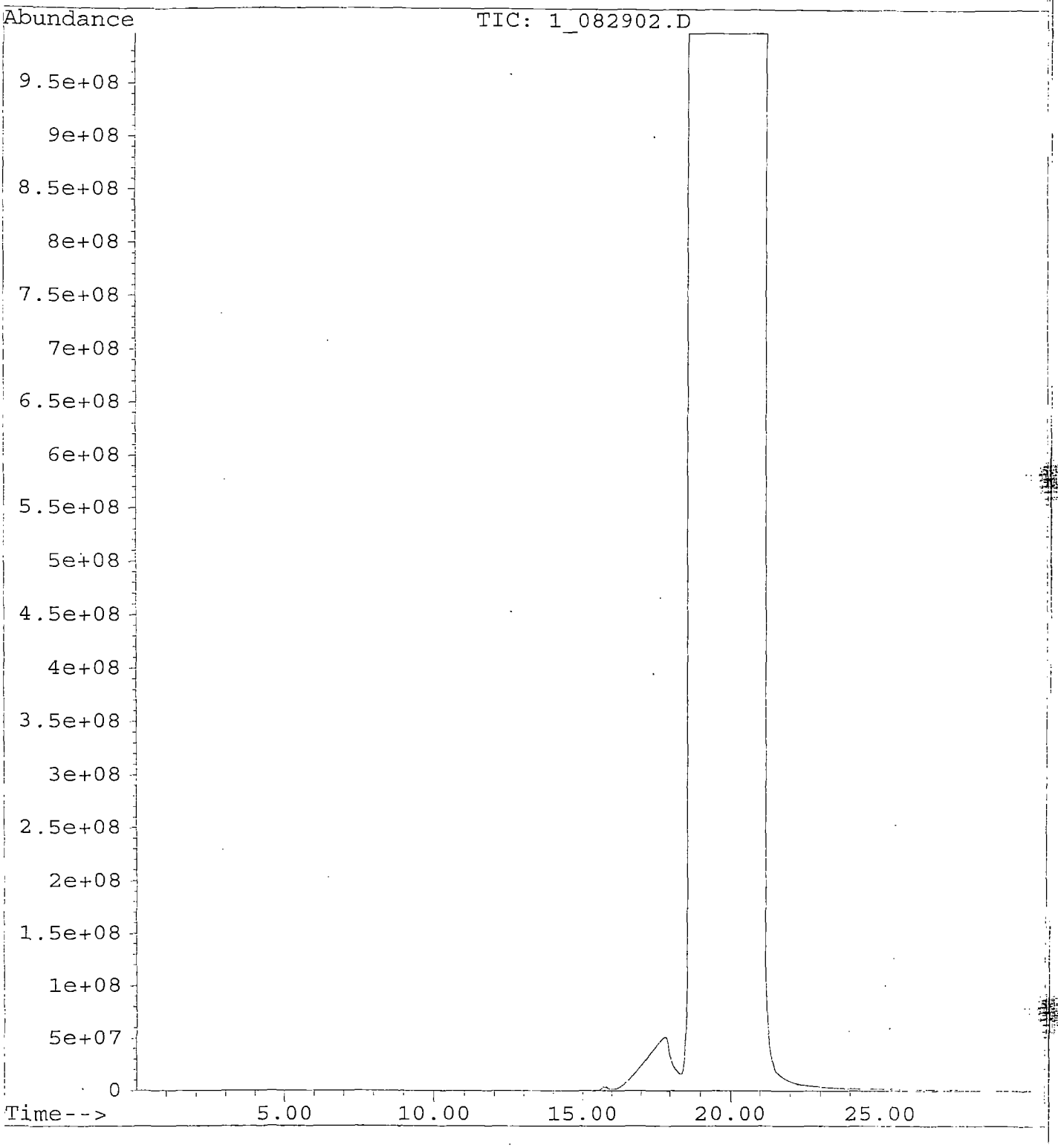
Data File : C:\HPCHEM\5\DATA\082901\1_082901.D
Acq On : 29 Aug 01 14:46
Sample : CAL STD (INITIAL)
Misc : COL# 418002

Vial: 1
Operator: CR COL# 41
Inst : GPC1
Multiplr: 1.00

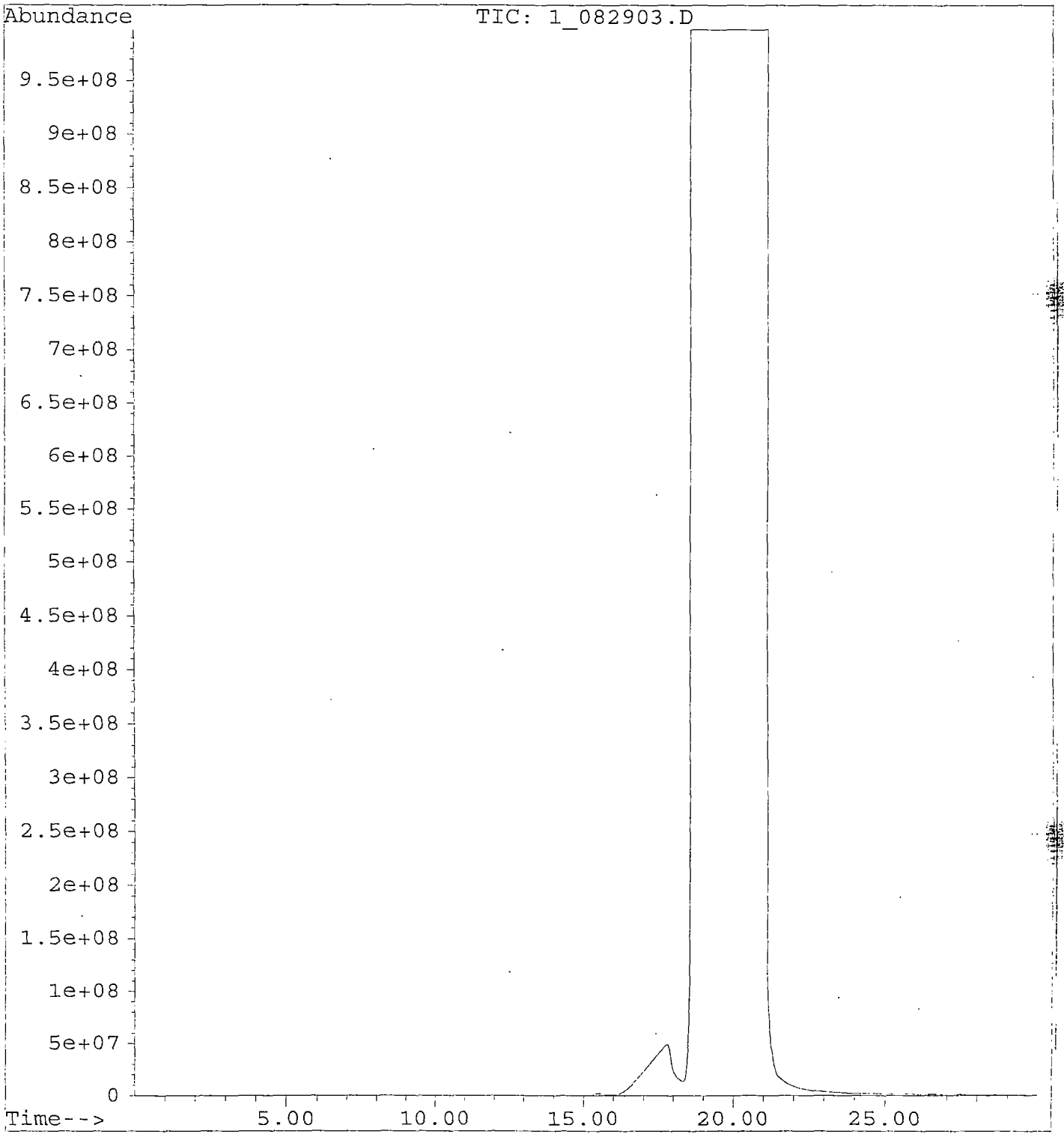
Method : C:\HPCHEM\5\METHODS\GPC.M
Title :

RT#1	RT#2	Resolution
10.789	12.050	21.41
12.050	14.306	100.00
14.306	15.921	90.50
15.921	20.649	100.00
20.649	24.417	100.00

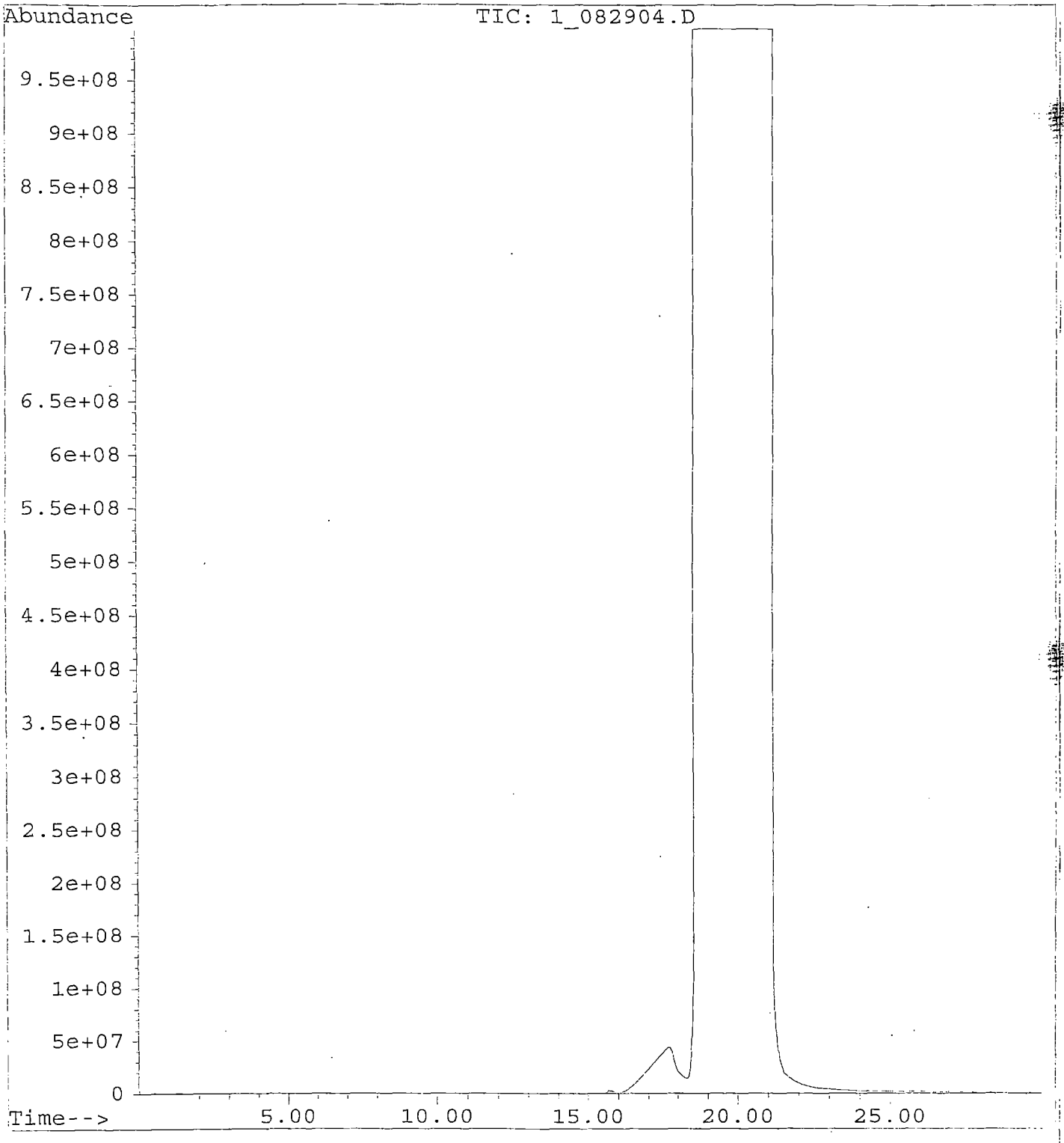
File : C:\HPCHEM\5\DATA\082901\1_082902.D
Operator : CR COL# 418002
Acquired : 29 Aug 01 15:16 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 2



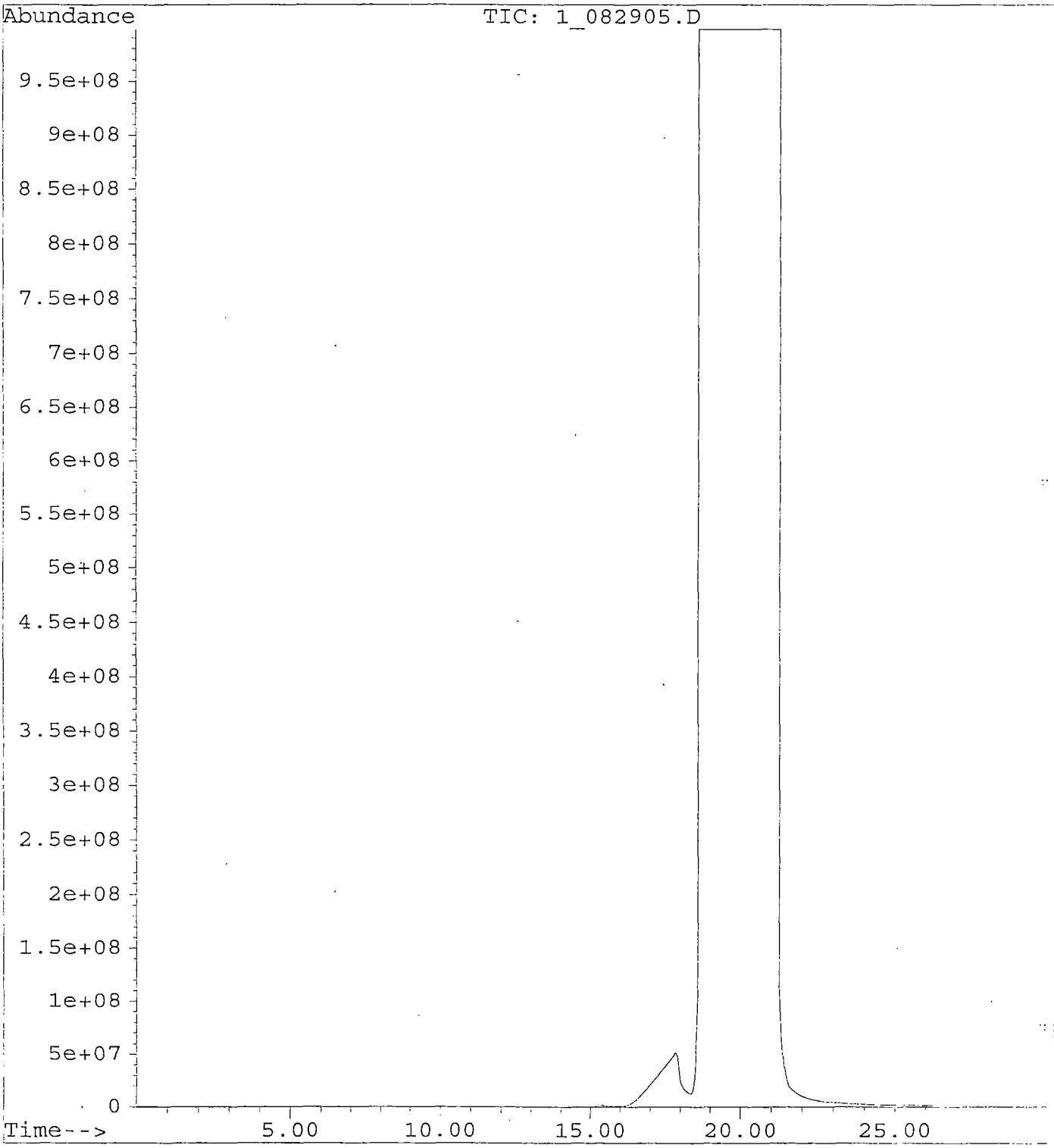
File : C:\HPCHEM\5\DATA\082901\1_082903.D
Operator : CR COL# 418002
Acquired : 29 Aug 01 15:47 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 3



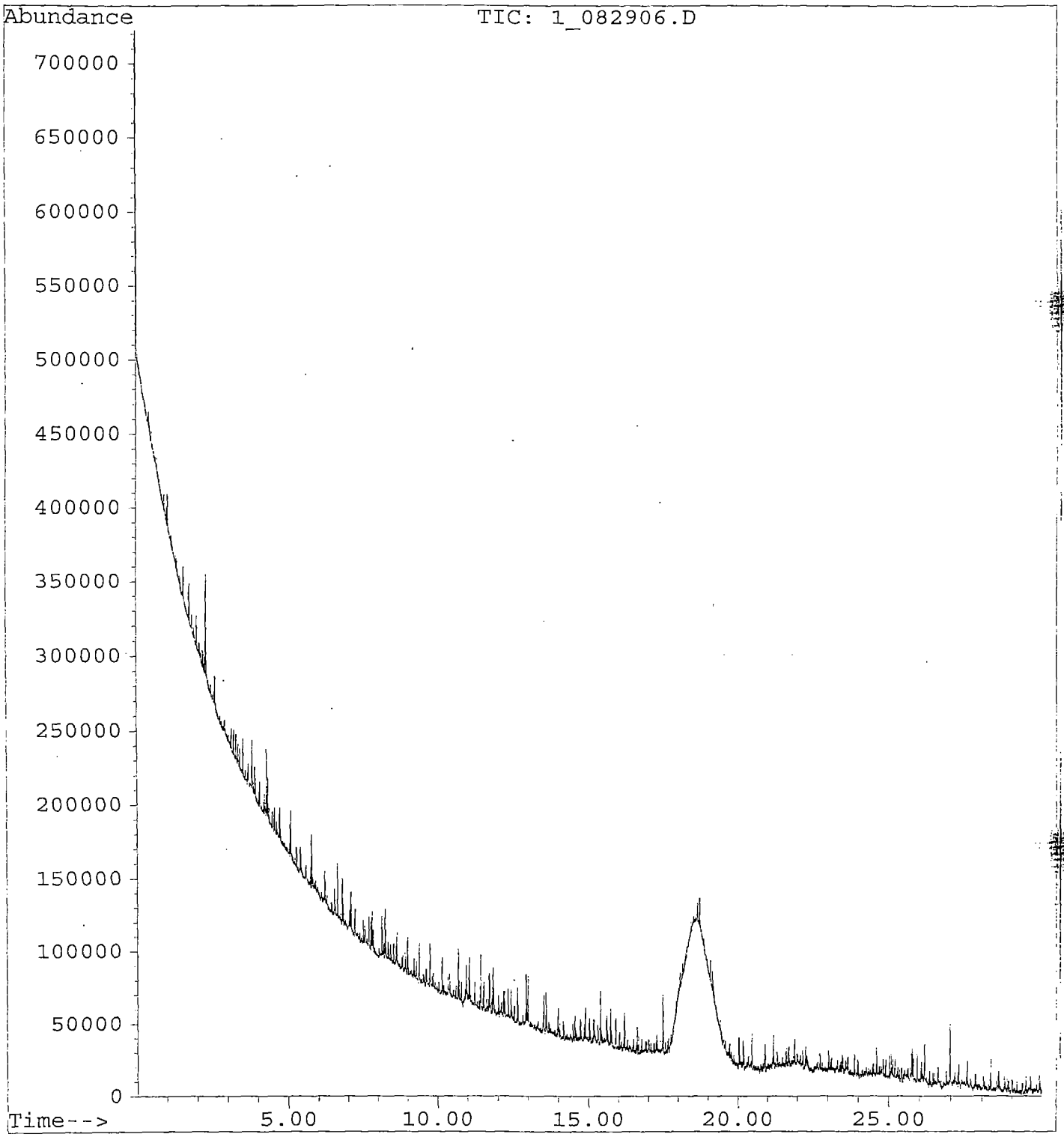
File : C:\HPCHEM\5\DATA\082901\1_082904.D
Operator : CR COL# 418002
Acquired : 29 Aug 01 16:18 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 4



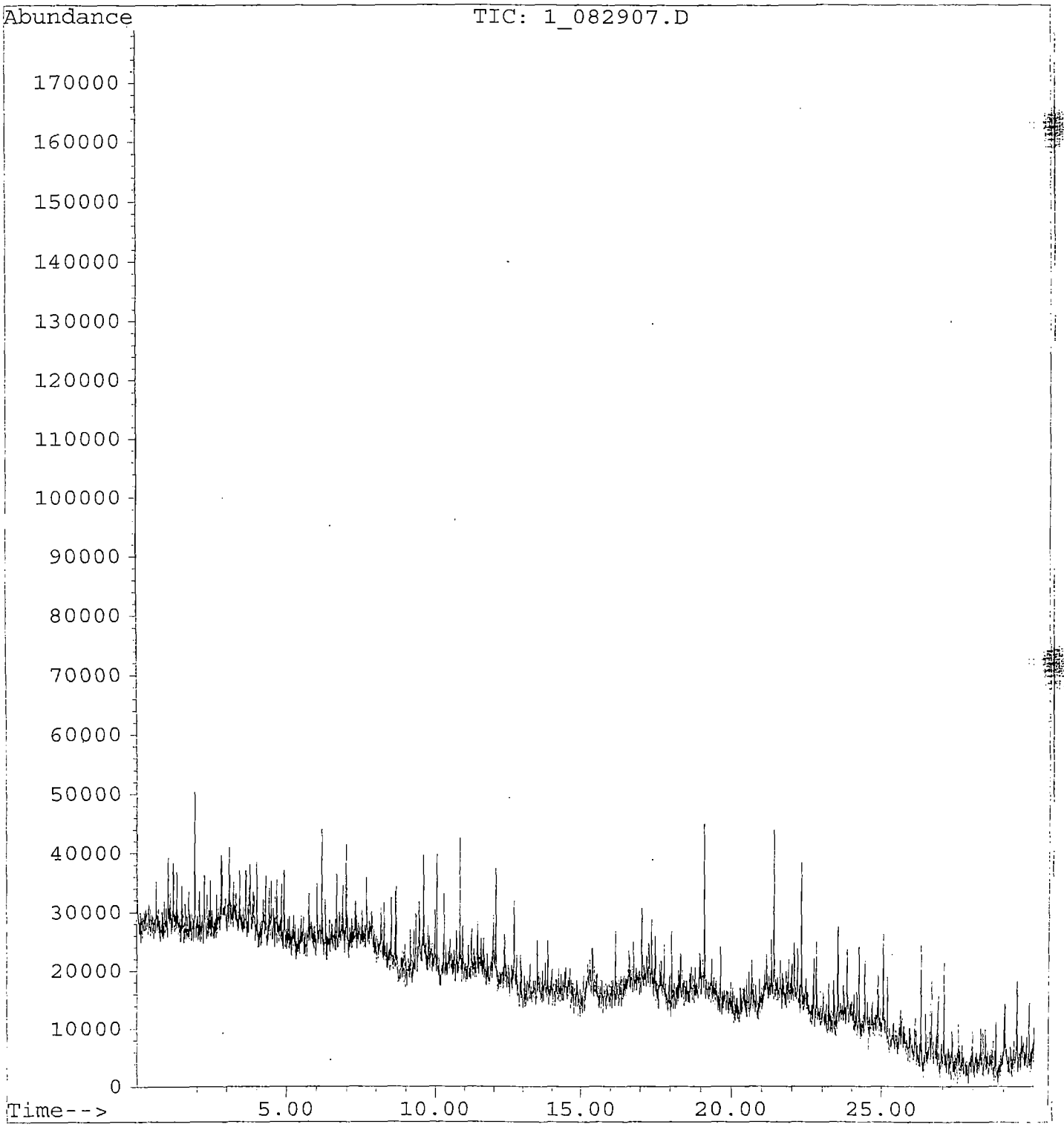
File : C:\HPCHEM\5\DATA\082901\1_082905.D
Operator : CR COL# 418002
Acquired : 29 Aug 01 16:49 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 5



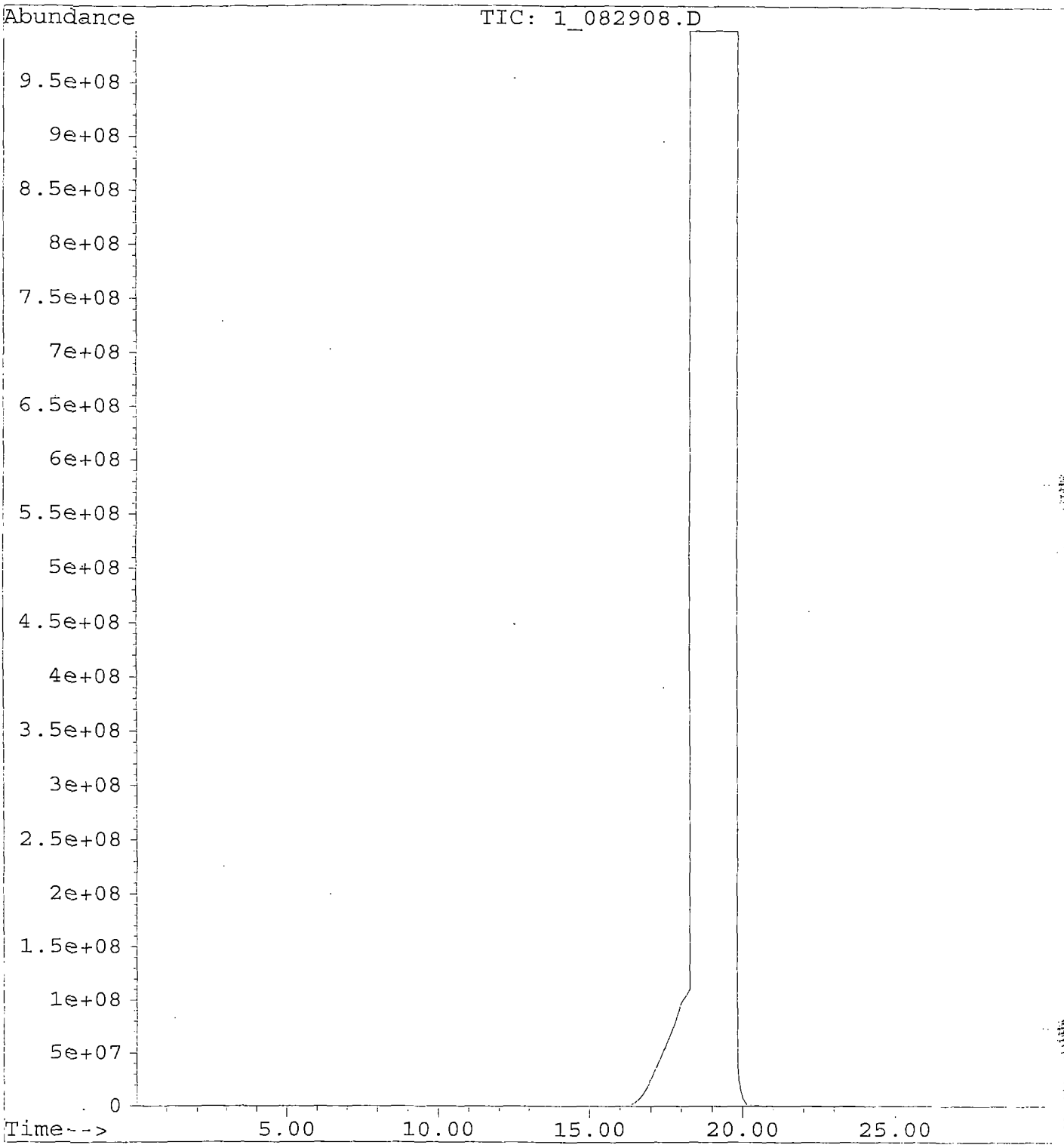
File : C:\HPCHEM\5\DATA\082901\1_082906.D
Operator : CR COL# 418002
Acquired : 29 Aug 01 17:20 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB#082901C (PEST)
Misc Info : COL# 418002
Vial Number: 6



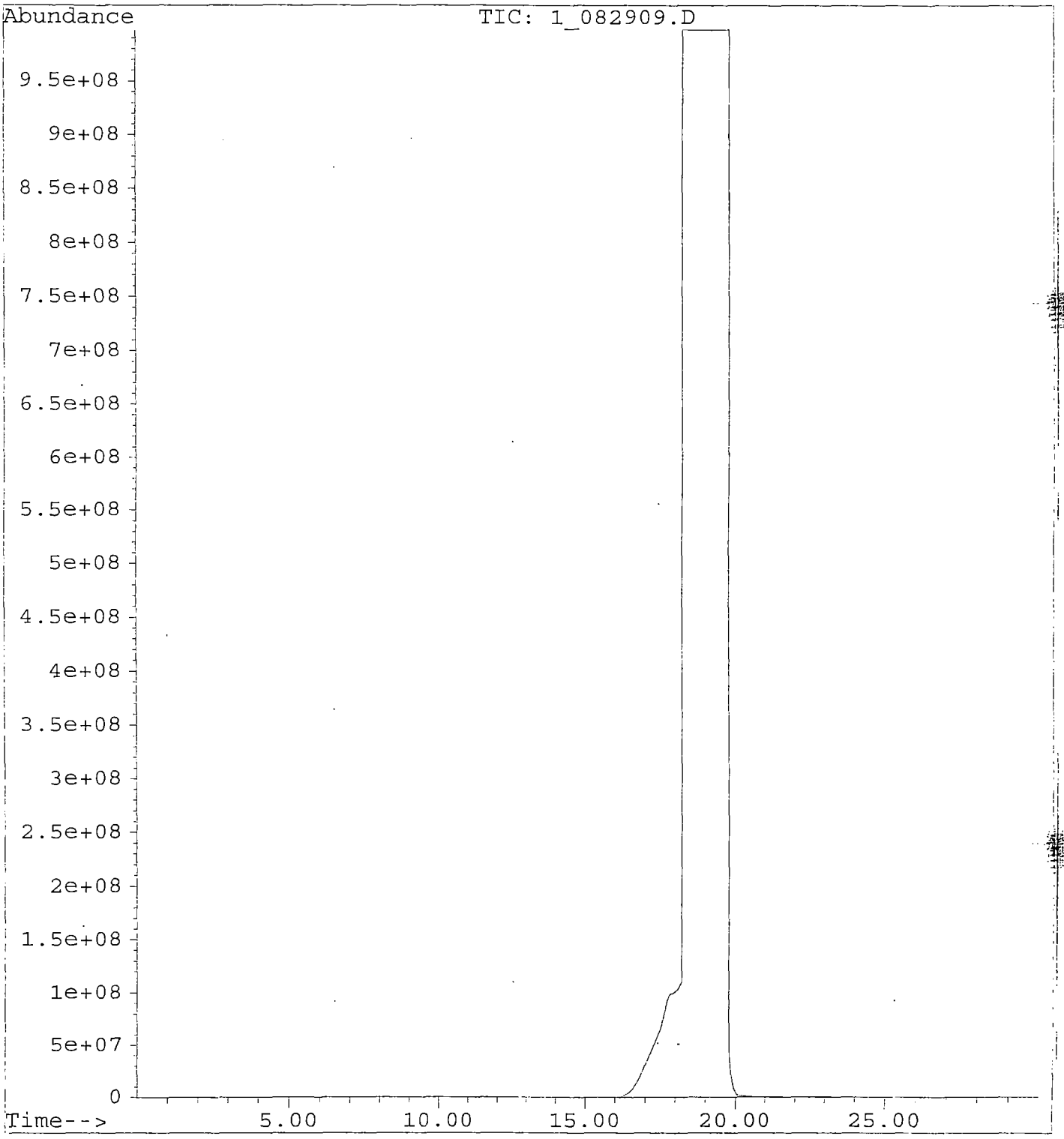
File : C:\HPCHEM\5\DATA\082901\1_082907.D
Operator : CR COL# 418002
Acquired : 29 Aug 01 17:51 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB#082901D (PEST)
Misc Info : COL# 418002
Vial Number: 7



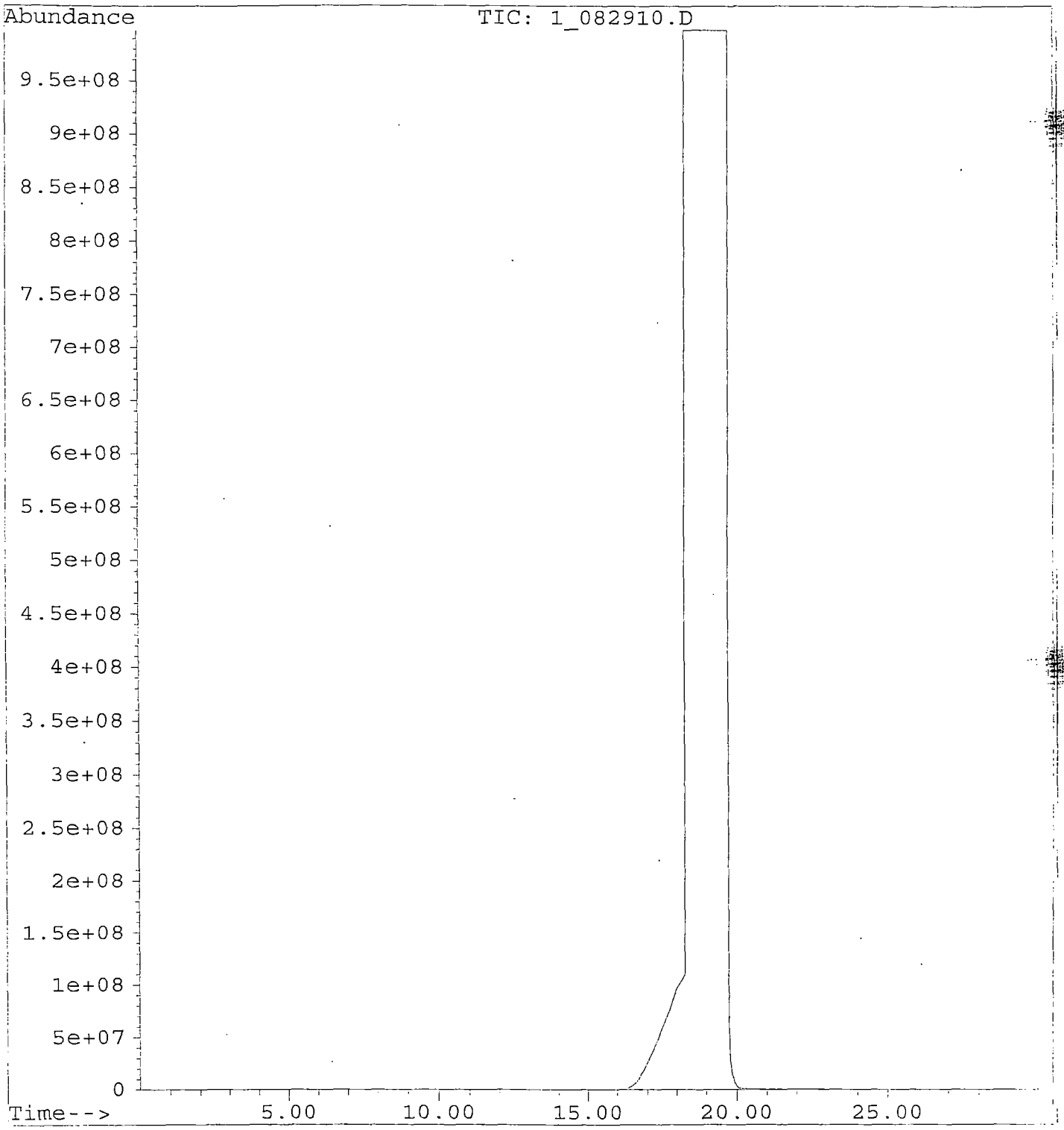
File : C:\HPCHEM\5\DATA\082901\1_082908.D
Operator : CR COL# 418002
Acquired : 29 Aug 01 18:23 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: BL0824SB-EPA
Misc Info : COL# 418002
Vial Number: 8



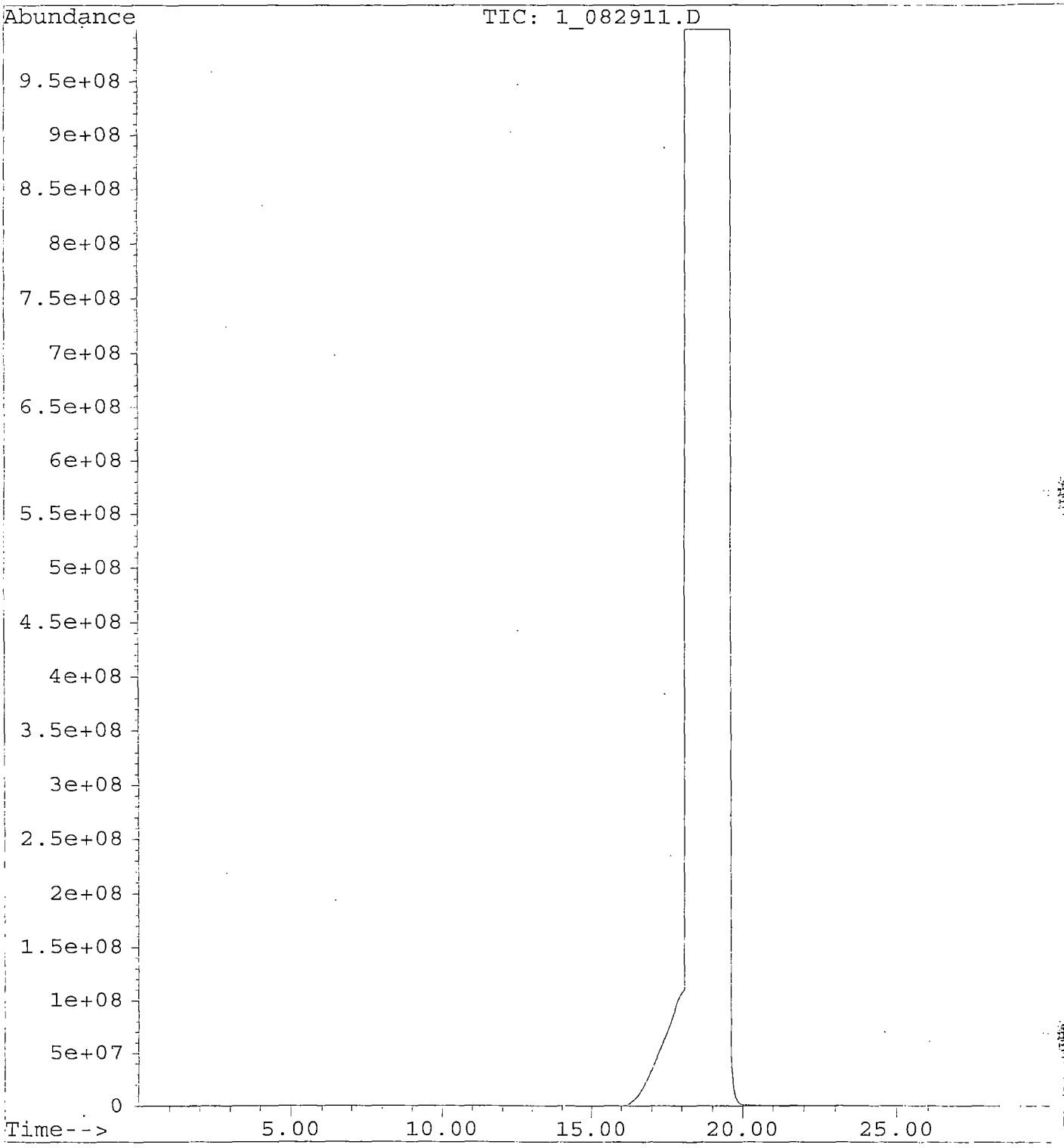
File : C:\HPCHEM\5\DATA\082901\1_082909.D
Operator : CR COL# 418002
Acquired : 29 Aug 01 18:54 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: BB0824SB-EPA
Misc Info : COL# 418002
Vial Number: 9



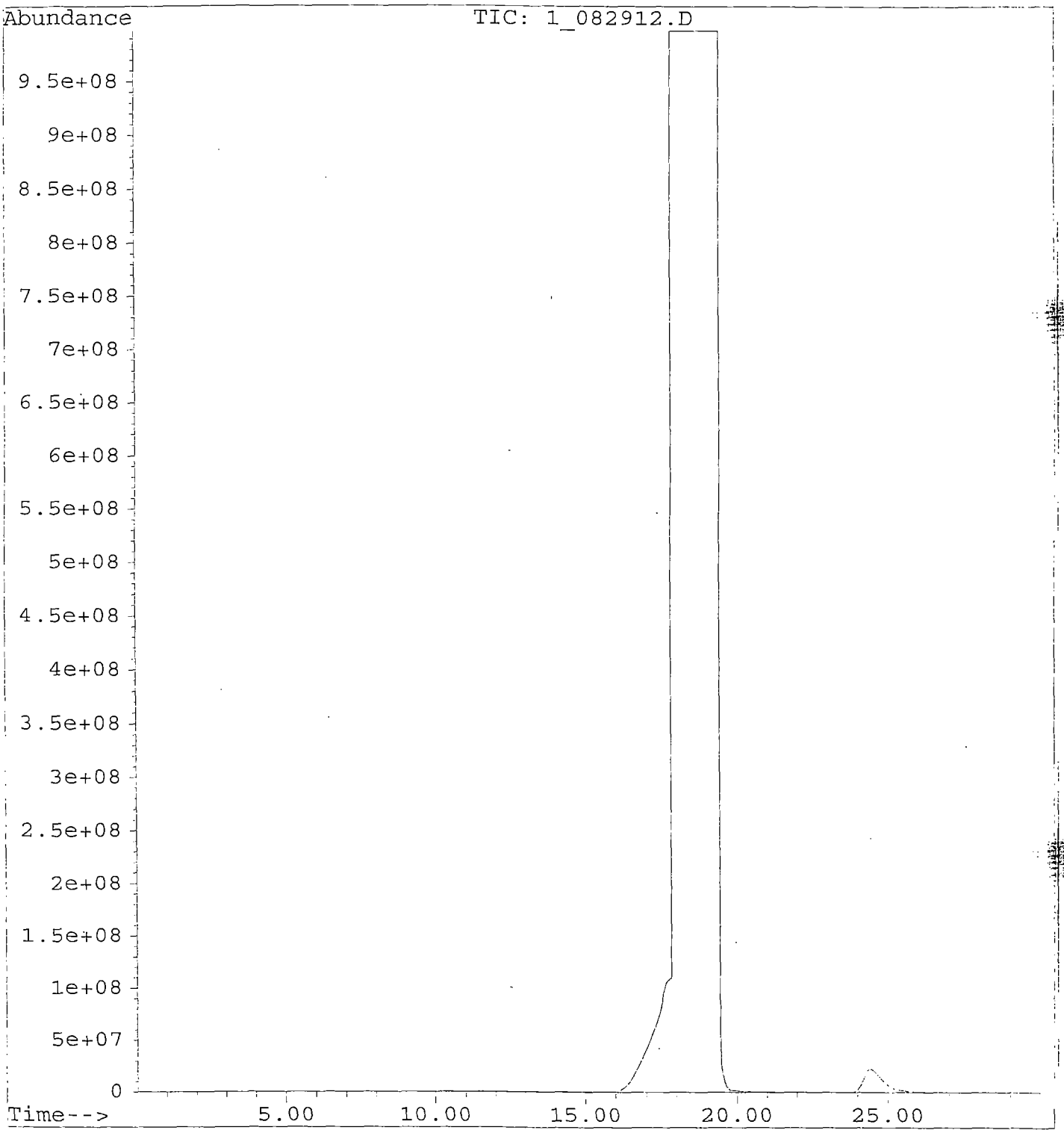
File : C:\HPCHEM\5\DATA\082901\1_082910.D
Operator : CR COL# 418002
Acquired : 29 Aug 01 19:25 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: LC0824SB-EPA
Misc Info : COL# 418002
Vial Number: 10



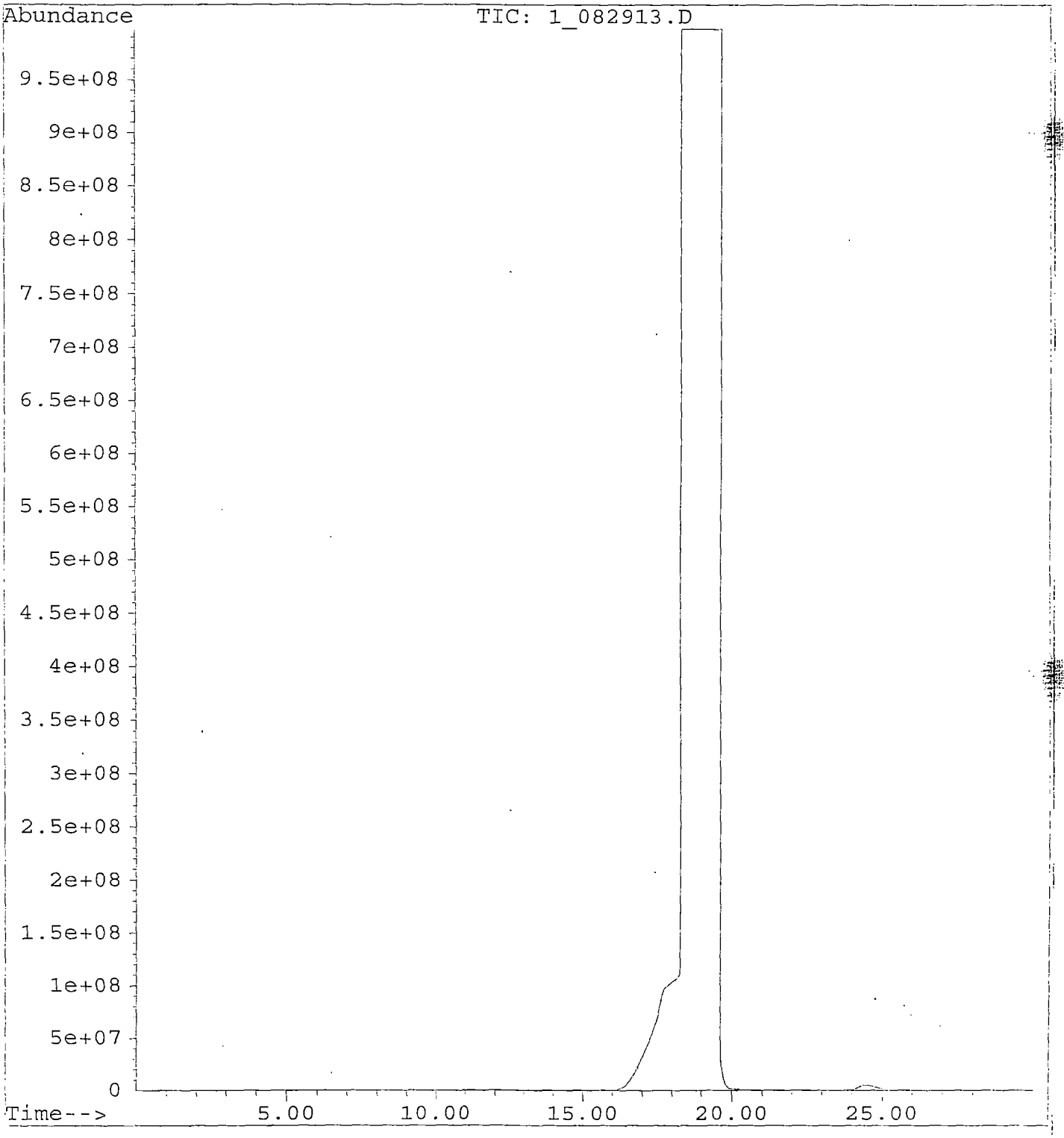
File : C:\HPCHEM\5\DATA\082901\1_082911.D
Operator : CR COL# 418002
Acquired : 29 Aug 01 19:55 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: LD0824SB-EPA
Misc Info : COL# 418002
Vial Number: 11



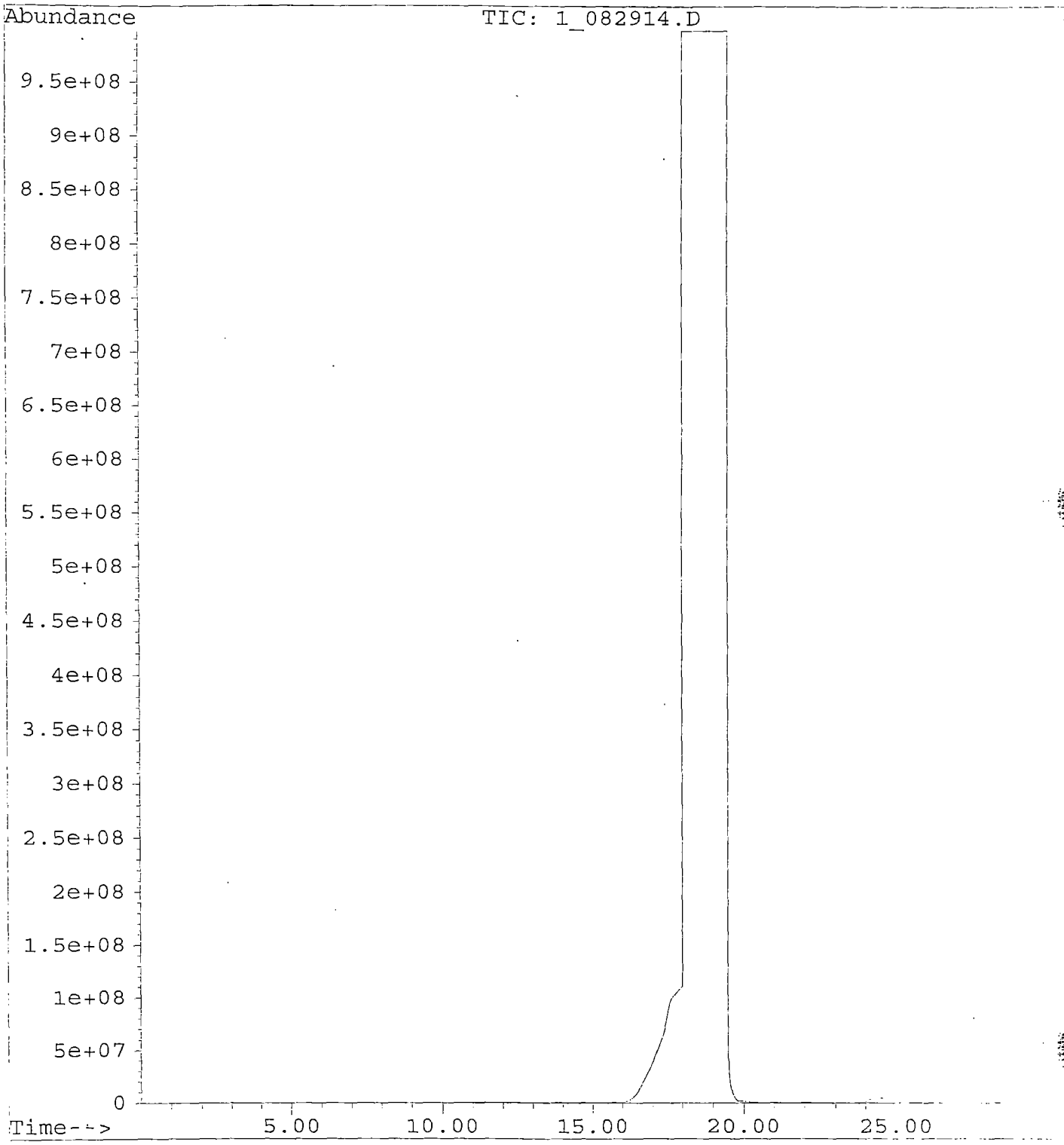
File : C:\HPCHEM\5\DATA\082901\1_082912.D
Operator : CR COL# 418002
Acquired : 29 Aug 01 20:27 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47351.21-E03L9-EPA
Misc Info : COL# 418002
Vial Number: 12



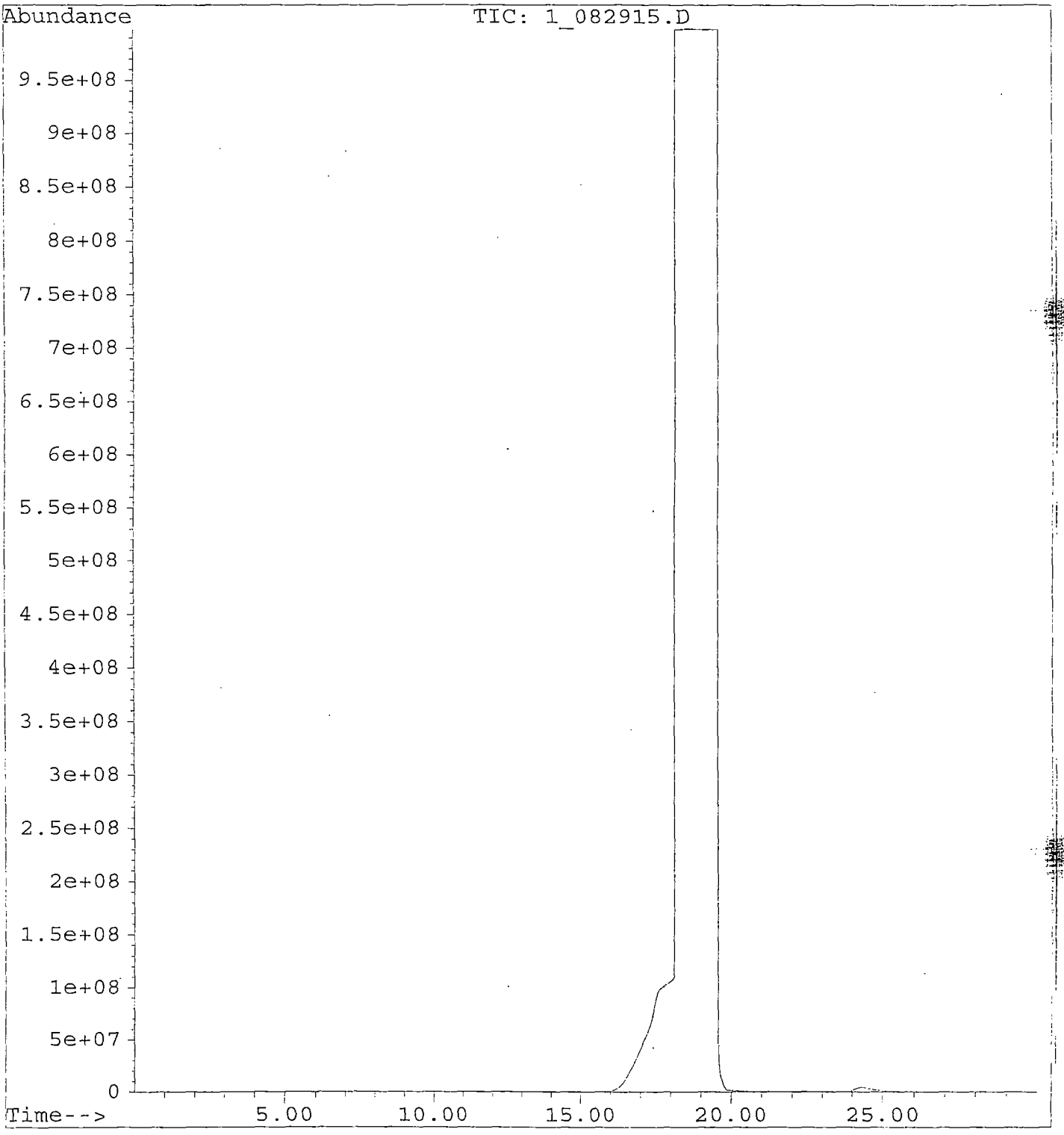
File : C:\HPCHEM\5\DATA\082901\1_082913.D
Operator : CR COL# 418002
Acquired : 29 Aug 01 20:57 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47351.01-E03K0-EPA
Misc Info : COL# 418002
Vial Number: 13



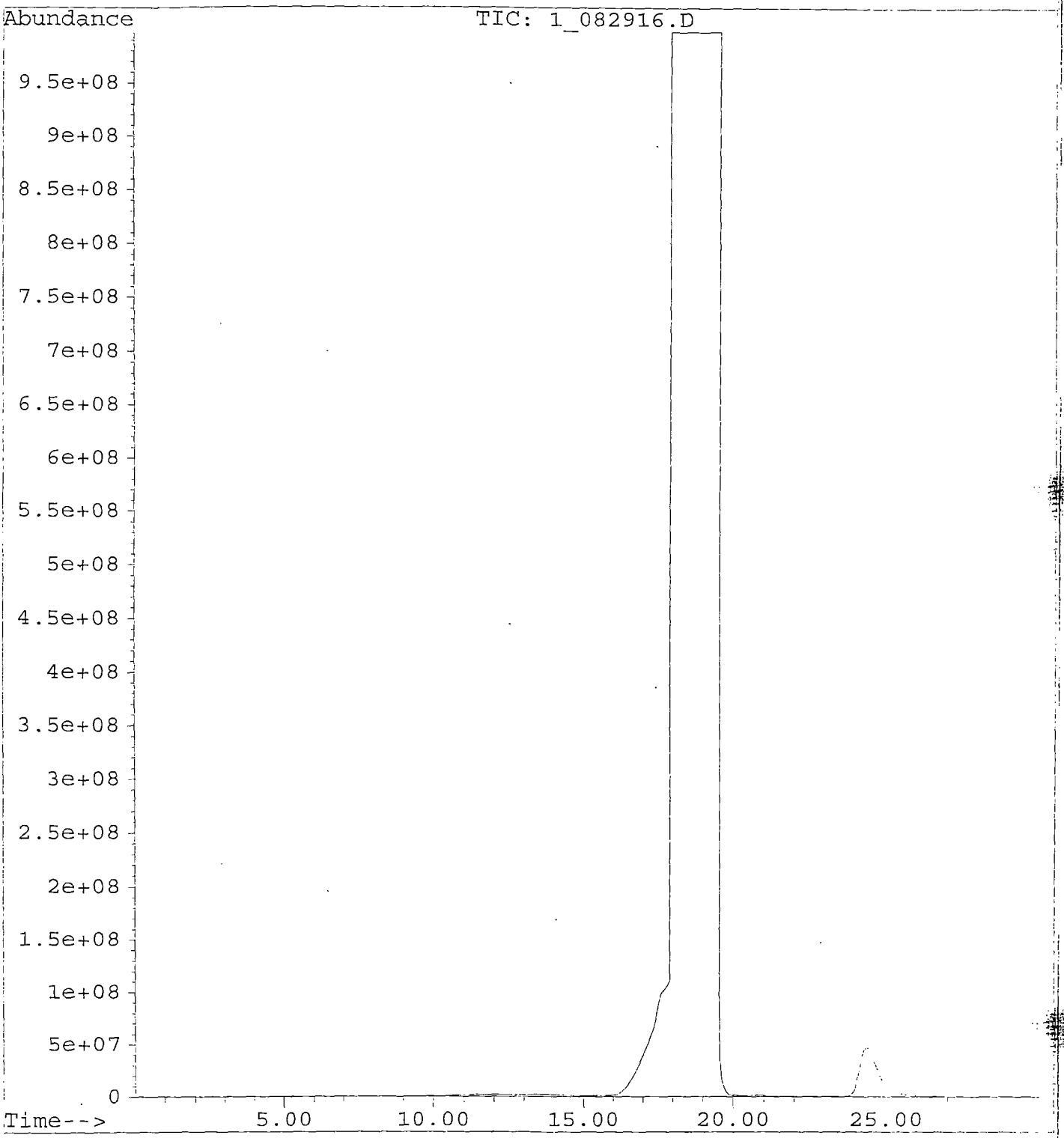
File : C:\HPCHEM\5\DATA\082901\1_082914.D
Operator : CR COL# 418002
Acquired : 29 Aug 01 21:28 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47351.02-E03K0MS-EPA
Misc Info : COL# 418002
Vial Number: 14



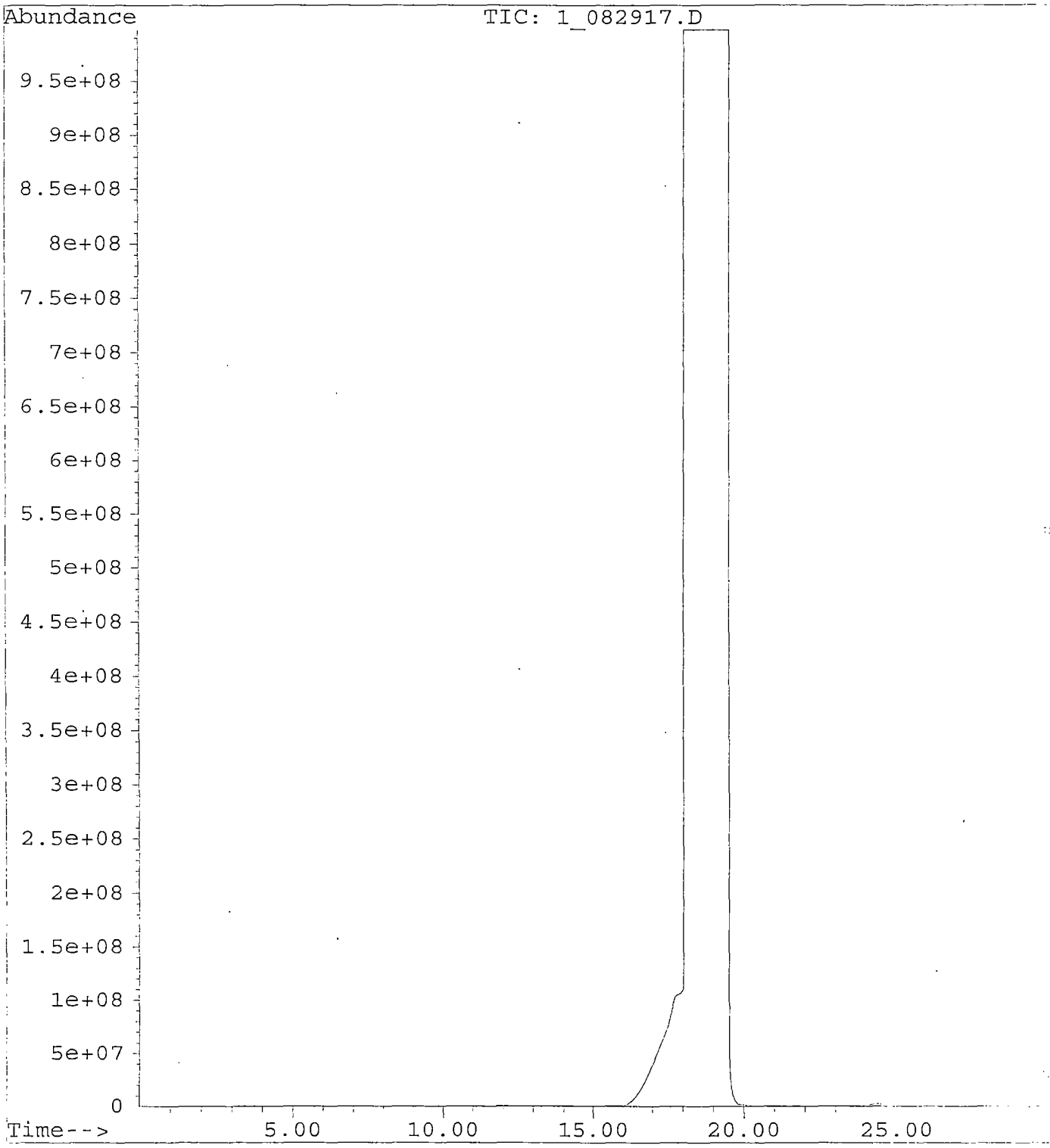
File : C:\HPCHEM\5\DATA\082901\1_082915.D
Operator : CR COL# 418002
Acquired : 29 Aug 01 21:59 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47351.03-E03K0MSD-EPA
Misc Info : COL# 418002
Vial Number: 15



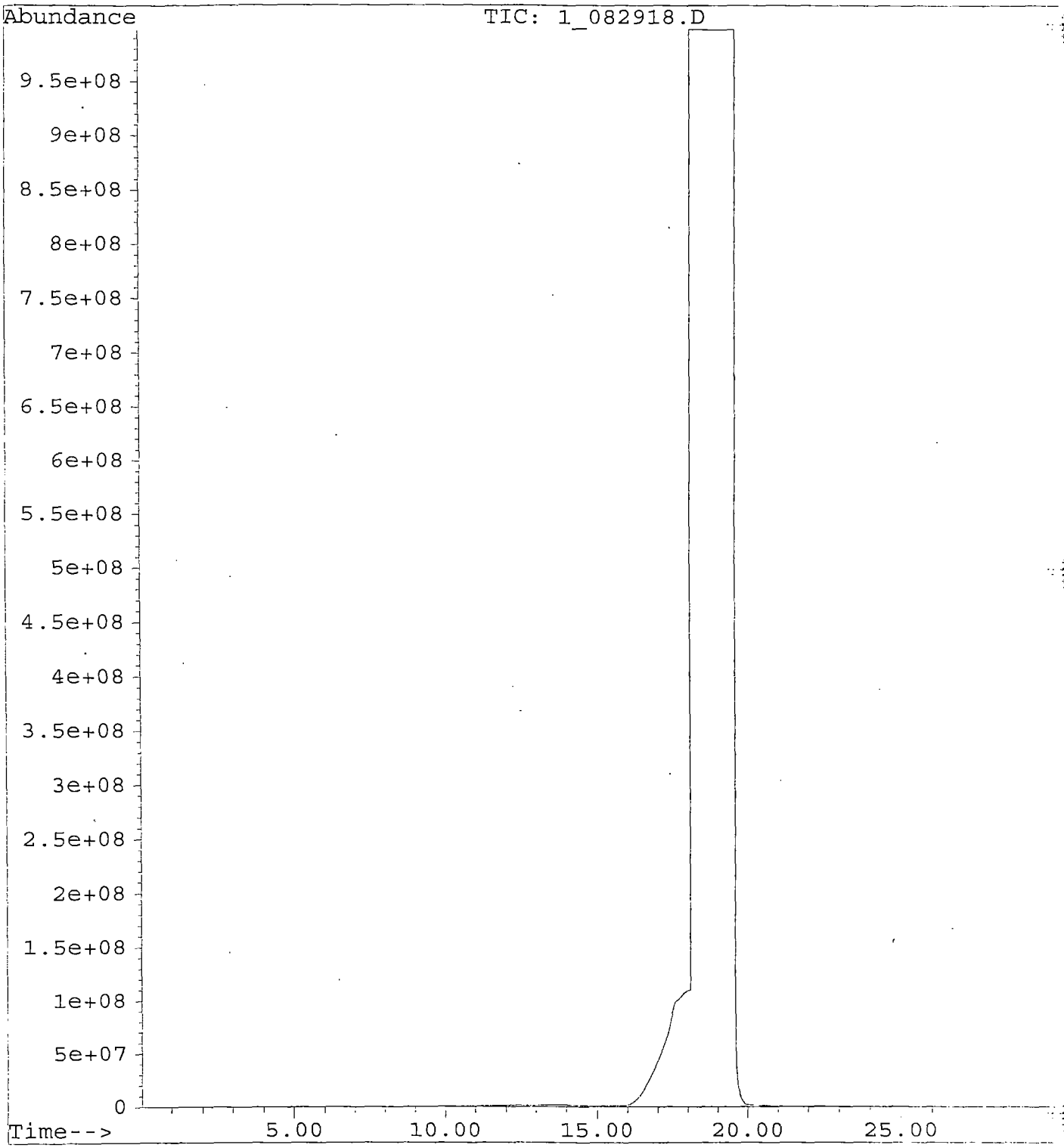
File : C:\HPCHEM\5\DATA\082901\1_082916.D
Operator : CR COL# 418002
Acquired : 29 Aug 01 22:30 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47351.22-E03M1-EPA
Misc Info : COL# 418002
Vial Number: 16



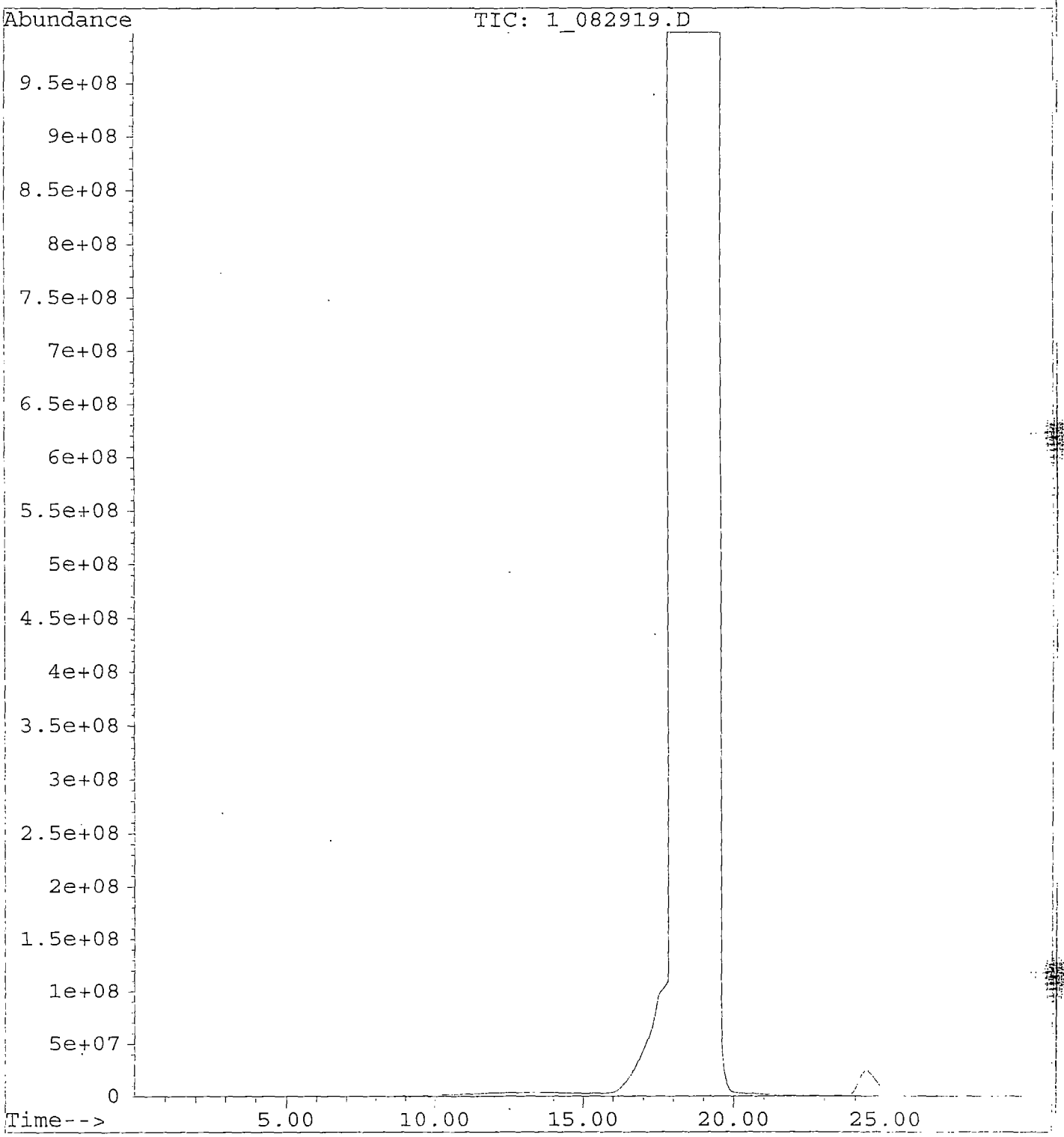
File : C:\HPCHEM\5\DATA\082901\1_082917.D
Operator : CR COL# 418002
Acquired : 29 Aug 01 23:01 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47351.15-E03L3-EPA
Misc Info : COL# 418002
Vial Number: 17



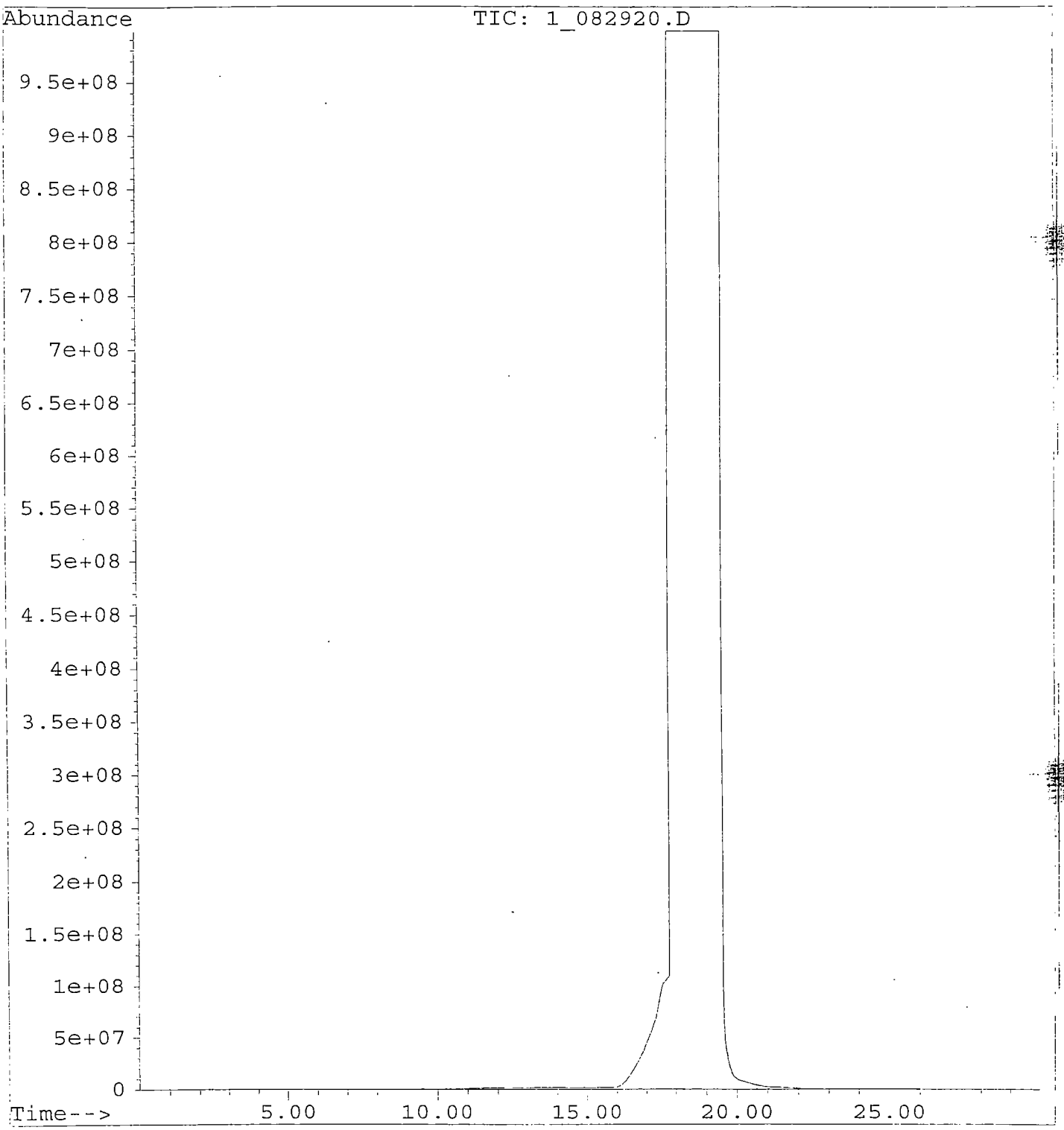
File : C:\HPCHEM\5\DATA\082901\1_082918.D
Operator : CR COL# 418002
Acquired : 29 Aug 01 23:32 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47351.20-E03L8-EPA
Misc Info : COL# 418002
Vial Number: 18



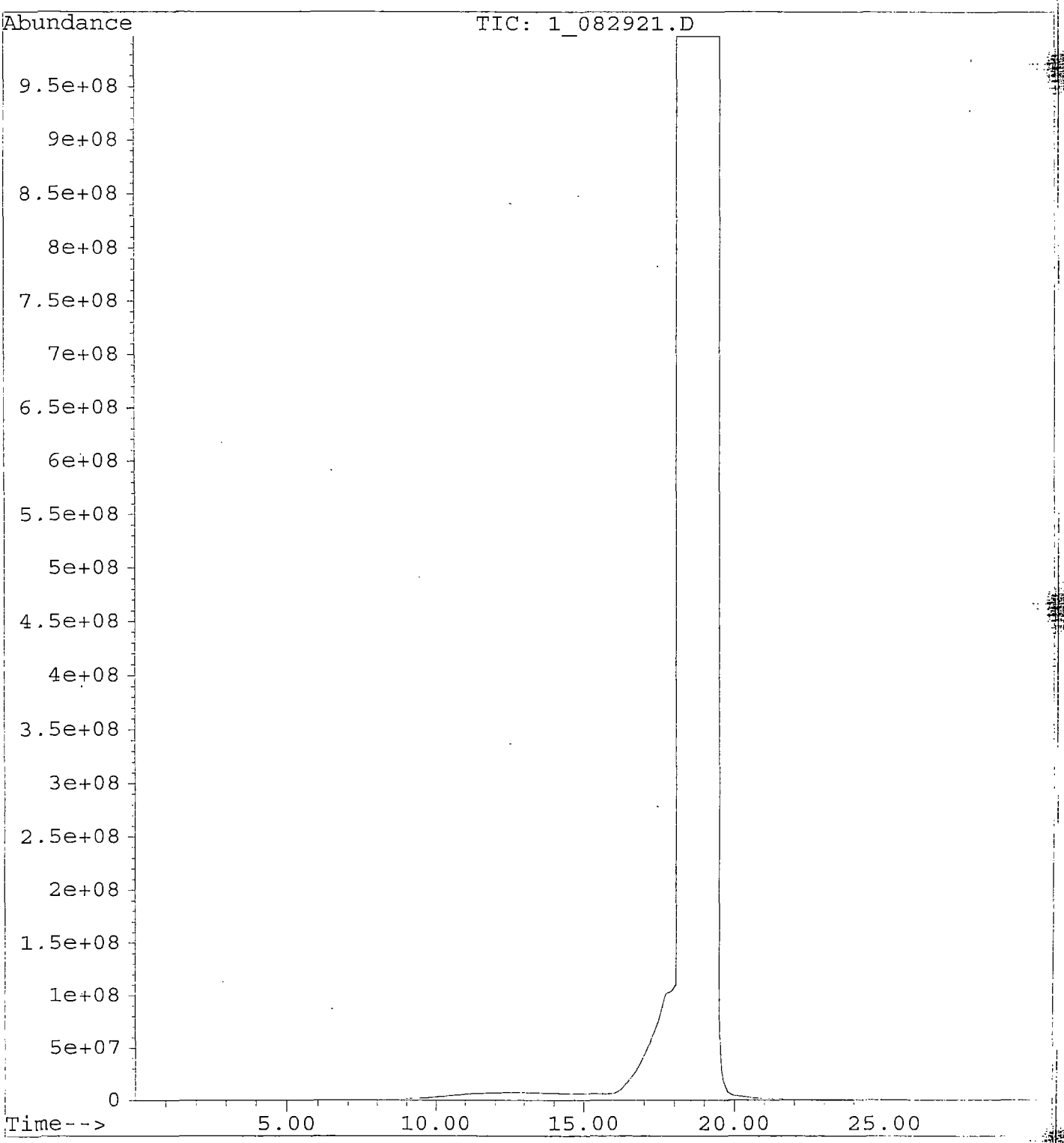
File : C:\HPCHEM\5\DATA\082901\1_082919.D
Operator : CR COL# 418002
Acquired : 30 Aug 01 00:03 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47351.14-E03L2-EPA
Misc Info : COL# 418002
Vial Number: 19



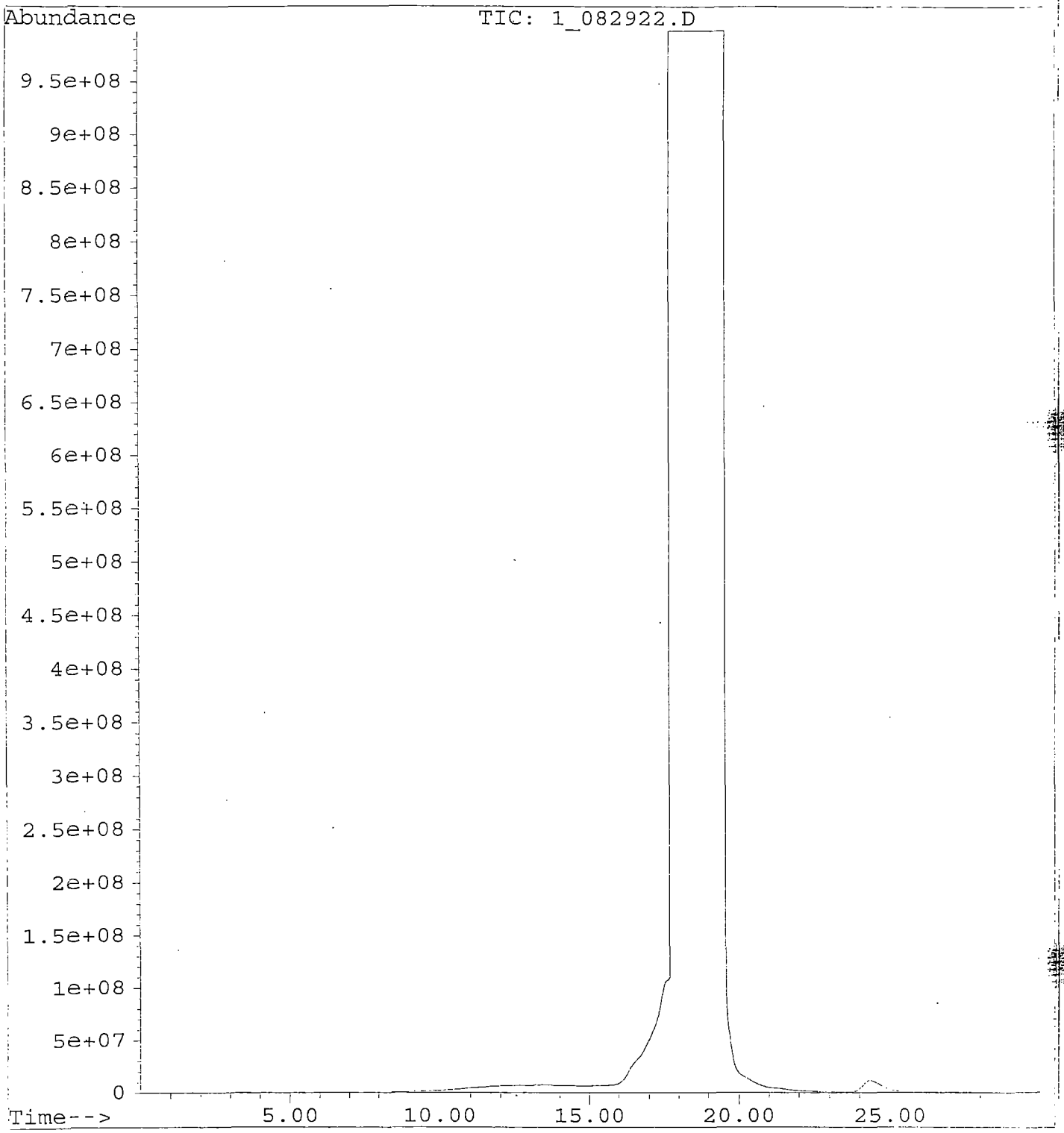
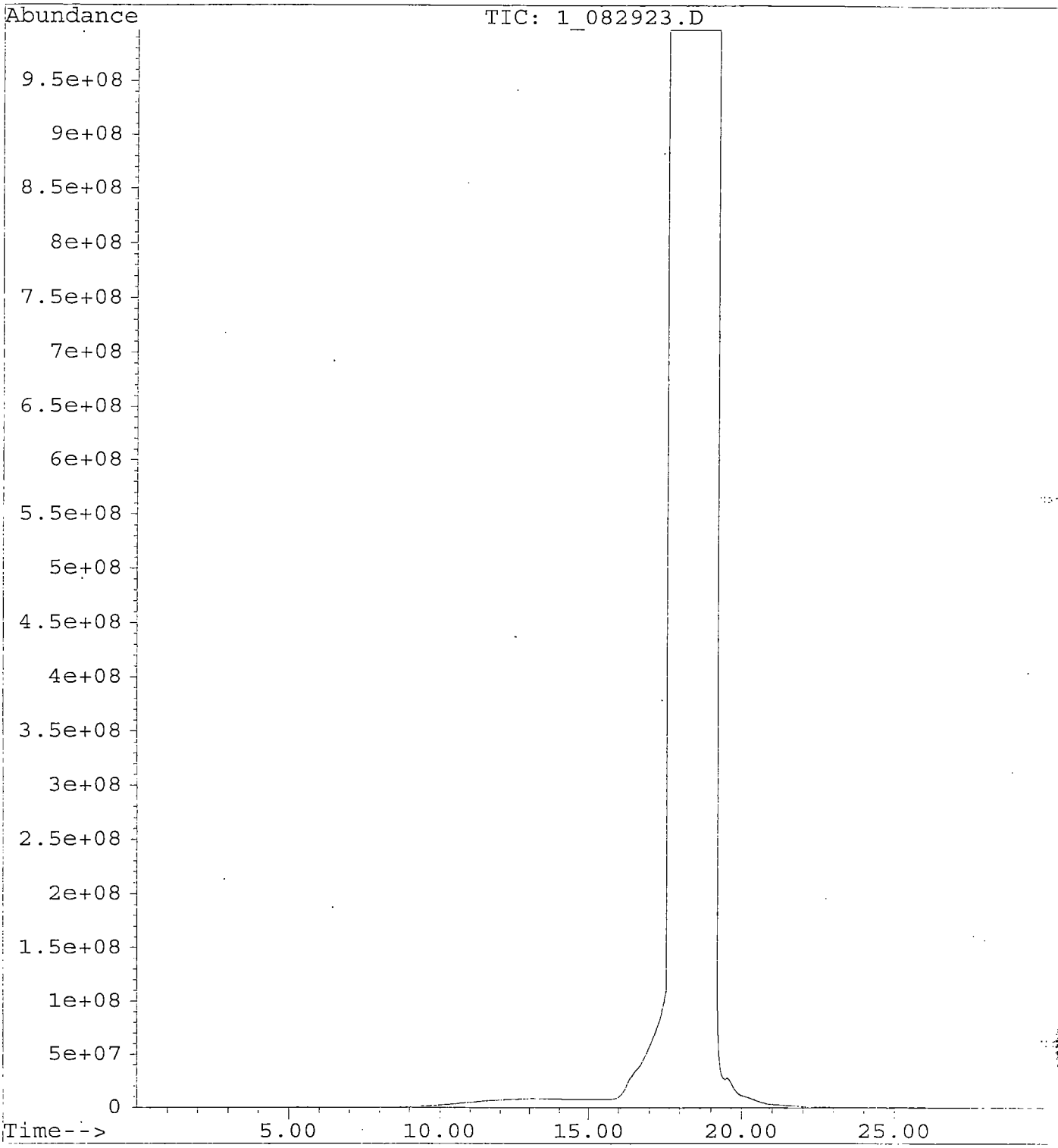
File : C:\HPCHEM\5\DATA\082901\1_082920.D
Operator : CR COL# 418002
Acquired : 30 Aug 01 00:34 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47351.19-E03L7-EPA
Misc Info : COL# 418002
Vial Number: 20



File : C:\HPCHEM\5\DATA\082901\1_082921.D
Operator : CR COL# 418002
Acquired : 30 Aug 01 01:05 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47351.05-E03K2-EPA
Misc Info : COL# 418002
Vial Number: 21



File : C:\HPCHEM\5\DATA\082901\1_082922.D
Operator : CR COL# 418002
Acquired : 30 Aug 01 01:36 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47351.13-E03L1-EPA
Misc Info : COL# 418002
Vial Number: 22



File : C:\HPCHEM\5\DATA\082901\1_082923.D
Operator : CR COL# 418002
Acquired : 30 Aug 01 02:06 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47351.18-E03L6-EPA
Misc Info : COL# 418002
Vial Number: 23