Data Review Monday, October 01, 2001
Site Name: Allied Paper (MI)
Case Number: 29602 Laboratory: Southwest Laboratory
SDG: E02B5

US EPA RECORDS CENTER REGION 5
560045

PCBs

Samples:

Sample No	Station Location	Matrix	Date Collected	Date Extracted	Date Analyzed
E02B5	AP-SD045-20-01	Soil	08/09/01	08/14/01	09/10/01
E02B6	AP-SD045-20-02	Soil	08/09/01	08/14/01	09/10/01
E02B7	AP-SD045-20-03	Soil	08/09/01	08/14/01	09/10/01
E02B8	AP-SD045-20-04	Soil	08/09/01	08/14/01	09/10/01
E02B9	AP-SD045-21-01	Soil	08/09/01	08/14/01	09/10/01
E02C0	AP-SD045-21-02	Soil	08/09/01	08/14/01	09/11/01
E02C1	AP-SD045-21-03	Soil	08/09/01	08/14/01	09/11/01
E02C2	AP-SD045-21-03DP	Soil	08/09/01	08/14/01	09/11/01
E02C3	AP-SD045-21-04	Soil	08/09/01	08/14/01	09/11/01
E02C4	AP-SD053-08-01	Soil	08/09/01	08/14/01	09/11/01
E02C5	AP-SD053-08-02	Soil	08/09/01	08/14/01	09/11/01
E02C6	AP-SD053-08-03	Soil	08/09/01	08/14/01	09/11/01
E02C7	AP-SD053-08-04	Soil	08/09/01	08/14/01	09/11/01
E02C8	AP-SD053-08-05	Soil	08/09/01	08/14/01	09/11/01
E02C9	AP-SD053-08-06	Soil	08/09/01	08/14/01	09/11/01
E02D0	AP-SD045-22-01	Soil	08/09/01	08/14/01	09/11/01
E02D1	AP-SD045-22-02	Soil	08/09/01	08/14/01	09/11/01
E02D2	AP-SD045-22-03	Soil	08/09/01	08/14/01	09/11/01
E02D3	AP-SD045-22-04	Soil	08/09/01	08/14/01	09/11/01
E02D4	AP-SD045-22-05	Soil	08/09/01	08/14/01	09/11/01

Holding Time:
All samples were extracted and analyzed within the required holding time. The samples arrived in a cooler at 1.9 degrees Celsius.

Method Blank:
The method blank PBLKSB was associated with this SDG. PBLKSB was analyzed on 09/10/01 with (E02B5 thru E02B9, E02C0 thru E02C9, E02D0 thru E02D4, 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:
All method blank and investigated samples had surrogate recoveries within the acceptance quality control limits (30 to 170%).

Matrix Spike/ Matrix Spike Duplicate Recovery:
The matrix spike/ matrix spike duplicate audit was performed on sample E02D0. The matrix spike/matrix spike duplicate recoveries were within the quality control limits (29-135%). However, the relative percent difference (RPD %) recovery was (55%) outside the quality control limits (50%). Therefore, qualify the results for aroclor-1254 in E02D0 as estimated (J).

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: 09/29/01

067-4A - APV

DATE: September 19, 2001

CC: D. Geers
J. Thorsen
R. Mehl
T. Balla

RECEIVED
SEP 21 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	E02B5	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

JB
TBS

SEP 1 9 2001

Regional Transmittal Form

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE:

SUBJECT: Review of Data
Received for Review on 9/18/01

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

TO: Data User: WASTON

We have reviewed the data for the following case:

SITE NAME: Allied Paper (MI)

CASE NUMBER: 29602 SDG NUMBER: E02B5

Number and Type of Samples: 20 (Soil)

Sample Numbers: E02B5-9, E02C0-9, E02D0-4

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: E0285 CERCLIS No: MID006007306

Case No: 29602 Site Name/Location: Allied Paper

Contractor or EPA Lab: SWOK Data User: Waston

No. of Samples: 20 Date Sampled or Date Received: 9/18/01

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: 9/18/01

Received by LSSS: Nicole Jackson / ESAT Date: 9/18/01

Review started: ____ Reviewer Signature: ____

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

Copied by: Nicole Jackson / ESAT Date: 9/19/01

Mailed to user by: Nicole Jackson / ESAT Date: 9/19/01

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: ____

CASE (CSF) INVENTORY CHECKLIST

Case No. 29602 SDG No. E0205 SDG Nos. to Follow _____ _____ _____ SAS No. _____ Date Recvd 9 / 18 / 0

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 / 18 / 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

Data Review Level 1
# of Folders 1

SOW Version # 4.2
Site/Project ID: 059BLA00

DATE RECEIVED AT CRL 9/18/01

USER Weston

SITE NAME Allied Paper (MI)

CASE/SAS NUMBER 29602

SDG. NO. E02B5

SAMPLING DATE 8/9/01

DATE SHIPPED 8/10/01

CONTRACT LAB Southwest

NUMBER OF SAMPLES 20

DATE TO ETM 9/19/01

SAMPLES	MATRIX	ANALYSES
E02B5-9	Soil Water Other	PCBs
E02C0-9	Soil Water Other	
E02D0-4	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	
	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 1 8 2001

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME SOUTHWEST LABORATORY OF OKLAHOMA
CITY/STATE BROKEN ARROW, OKLAHOMA
CASE NO. 29602 SDG NO. E0285 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. E0285 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		
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	7		
MS/MSD Duplicate Summary (Form III PEST)	8	9		
Method Blank Summary (Form IV PEST)	10	10		

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

CASE NO. 29602 SDG NO. E0285 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
6. Pesticides Data (Cont.)				
b. Sample Data	11	85		
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	86	201		
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	202	226		
Matrix Spke/Matrix Spike Duplicate Data	227	239		

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

CASE NO. 29602 SDG NO. E0285 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
6. Pesticides Data (Cont.)				
e. Raw GPC Data	240	304	SA	
f. Raw Florisil Data	NA	NA		
7. Miscellaneous Data				
Original preparation and analysis forms or of preparation and analysis logbook pages	305	308		
Internal sample and sample extract transfer chain-of-custody records	309	312		
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 2)	313	313		
Chain-of-Custody Records	314	316		
Sample Tags	317	336		
Sample Log-in Sheet (Lab & DC1)	337	340		
Miscellaneous Shipping/Receiving Records (describe or list)				
Memos, Changes, Analytical Request	341	350		
	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. E0285 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	(Signature)	(Printed Name/Title)	(Date)
Completed by: (CLP Lab)	Emma Morton	Emma Morton Data clerk	9-17-01
Verified by: (CLP Lab)	Sandra Jackett	Sandra Jackett/ Data Clerk	9/17/01
Audited by: (EPA)			

SEP 1 8 2001

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

SDG NARRATIVE

September 17, 2001

CONTRACT: 68W99079

CASE NO: 29602

SDG NO: E02B5

SAMPLES: E02B5, E02B6, E02B7, E02B8, E02B9, E02C0, E02C1, E02C2, E02C3, E02C4, E02C5, E02C6, E02C7, E02C8, E02C9, E02D0, E02D0MS, E02D0MSD, E02D1, E02D2, E02D3 and E02D4.

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 on J&W dual analytical columns DB-17MS (proprietary phase composition, length 30m, id 0.32 mm, film thickness 0.5 um) and DB-XLB (proprietary phase composition, length 30m, id 0.32 mm, film thickness 0.25 um) columns 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 sample cooler arrived at 1.9 degrees Celsius. Sample E02B9 arrived in a broken container. The laboratory transferred sample to another container (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.

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 recoveries were within QC limits but had a high RPD at 55%.

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 ≥ 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
Harry M. Borg
Organic Program Manager September 17, 2001

Contract Laboratory Program

Sample Delivery Group (SDG) Cover Sheet

SDG Number E02B5

ST 8/13/01

Laboratory Name Southwest Laboratory of Ok. Laboratory Code SWOK

Contract No. 68W99079 Case No. ~~OLM04.2~~ 29607

Analyses Price 569.00 SDG Turnaround 21

EPA Sample Numbers in SDG (Listed in Numerical Order)

1) E02B5	7) E02C1	13) E02C7	19) E02D3
2) E02B6	8) E02C2	14) E02C8	20) E02D4
3) E02B7	9) E02C3	15) E02C9	21)
4) E02B8	10) E02C4	16) E02D0	22)
5) E02B9	11) E02C5	17) E02D1	23)
6) E02C0	12) E02C6	18) E02D2	24)

ST 8/13/01

E02B5	E02D4
First Sample in SDG	Last Sample in SDG
08/11/2001	08/11/2001
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 [illegible] Date 8-13-01

Version 2.0

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

Case No:	29602 E0285
DAS No:	
SDG No:	E0285

L

Date Shipped:	8/10/2001
Carrier Name:	FedEx
Airbill:	821876980281
Shipped to:	Southwest Labs of Oklahoma, Inc. 1700 West Albany Suite C Broken Arrow OK 74012 (918) 251-0545

Chain of Custody Record

Sampler Signature:

Relinquished By	(Date / Time)	Received By	(Date / Time)
1 Mary Balla	8/11/01 1100		8-11-01 9:30
2			
3			
4			

For Lab Use Only

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

E02B5

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 E0285
E02B4	Soil/Sediment/ Heidi Nemeth	L/G	PCBs (21)	038752 (Ice Only) (1)	AP-SL053-04-05	S:	8/9/2001	15:40		OK
E02B5	Sediment/ Joe Ruiz	L/G	PCBs (21)	038753 (Ice Only) (1)	AP-SD045-20-01	S:	8/9/2001	14:46	ORIGINAL TAG SDG # E0295 8-11-01	
E02B6	Sediment/ Joe Ruiz	L/G	PCBs (21)	038754 (Ice Only) (1)	AP-SD045-20-02	S:	8/9/2001	14:46		
E02B7	Sediment/ Joe Ruiz	L/G	PCBs (21)	038755 (Ice Only) (1)	AP-SD045-20-03	S:	8/9/2001	14:46		
E02B8	Sediment/ Joe Ruiz	L/G	PCBs (21)	038756 (Ice Only) (1)	AP-SD045-20-04	S:	8/9/2001	14:46		
E02B9	Sediment/ Joe Ruiz	L/G	PCBs (21)	038757 (Ice Only) (1)	AP-SD045-21-01	S:	8/9/2001	15:02	SAMPLE CONTAINER BROKEN 8-11-01	
E02C0	Sediment/ Joe Ruiz	L/G	PCBs (21)	038758 (Ice Only) (1)	AP-SD045-21-02	S:	8/9/2001	15:02		OK
E02C1	Sediment/ Joe Ruiz	L/G	PCBs (21)	038759 (Ice Only) (1)	AP-SD045-21-03	S:	8/9/2001	15:02		
E02C2	Sediment/ Joe Ruiz	L/G	PCBs (21)	038760 (Ice Only) (1)	AP-SD045-21-03DP	S:	8/9/2001	15:02		
E02C3	Sediment/ Joe Ruiz	L/G	PCBs (21)	038761 (Ice Only) (1)	AP-SD045-21-04	S:	8/9/2001	15:02		

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
	E0291, E02B0, E02D0	Heidi Nemeth	1.9 TB.	177883, 177884

Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? Y	Shipment Iced? Y
PCBs = PCBs				

R Number: 5-490998136-081001-0001

LABORATORY COPY

R provides p[illegible]minary results. Requests for preliminary results will increase analytical costs
nd Copy to [illegible]tract Laboratory Analytical Services Support, 2000 Edmund Halley Dr., Res[illegible]A. 20191-3436 Phone 703/264-9348 Fax 703/264-9222

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

Case No: 29602 E02B5
DAS No:
SDG No: E02B5 **L**

Date Shipped: 8/10/2001
Carrier Name: FedEx
Airbill: 821876980281
Shipped to: Southwest Labs of Oklahoma, Inc. 1700 West Albany Suite C Broken Arrow OK 74012 (918) 251-0545

Chain of Custody Record

Sampler Signature:

Relinquished By	(Date / Time)	Received By	(Date / Time)
1 Bryan Ballard	8/10/01 1100		8-11-01 9:30
2			
3			
4			

For Lab Use Only

Lab Contract No: 68W99079
Unit Price: $69.080
Transfer To:
Lab Contract No:
Unit Price:

E0DB5

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
E02C4	Soil/Sediment/ Heidi Nemeth	L/G	PCBs (21)	038762 (Ice Only) (1)	AP-SL053-08-01	S:	8/9/2001	16:13		OK
E02C5	Soil/Sediment/ Heidi Nemeth	L/G	PCBs (21)	038763 (Ice Only) (1)	AP-SL053-08-02	S:	8/9/2001	16:13		
E02C6	Soil/Sediment/ Heidi Nemeth	L/G	PCBs (21)	038764 (Ice Only) (1)	AP-SL053-08-03	S:	8/9/2001	16:13		
E02C7	Soil/Sediment/ Heidi Nemeth	L/G	PCBs (21)	038765 (Ice Only) (1)	AP-SL053-08-04	S:	8/9/2001	16:13		
E02C8	Soil/Sediment/ Heidi Nemeth	L/G	PCBs (21)	038766 (Ice Only) (1)	AP-SL053-08-05	S:	8/9/2001	16:13		
E02C9	Soil/Sediment/ Heidi Nemeth	L/G	PCBs (21)	038767 (Ice Only) (1)	AP-SL053-08-06	S:	8/9/2001	16:13		
E02D0	Sediment/ Joe Ruiz	L/G	PCBs (21)	038768 (Ice Only) (1)	AP-SD045-22-01	S:	8/9/2001	15:07		
E02D1	Sediment/ Joe Ruiz	L/G	PCBs (21)	038769 (Ice Only) (1)	AP-SD045-22-02	S:	8/9/2001	15:07		
E02D5	Sediment/ Joe Ruiz	L/G	PCBs (21)	038773 (Ice Only) (1)	AP-SD045-25-01	S:	8/9/2001	15:15		
E02D6	Sediment/ Joe Ruiz	L/G	PCBs (21)	038774 (Ice Only) (1)	AP-SD045-25-02	S:	8/9/2001	15:15		

8-11-01

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
	E0291, E02B0, E02D0	Heidi Nemeth	1.5 TB	177883, 177884

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: 5-490998136-081001-0001

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 E02B5
DAS No:	
SDG No:	E0295

L

Date Shipped:	8/10/2001
Carrier Name:	FedEx
Airbill:	821876980281
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)
1 [illegible]	8/10/01 1180	[illegible]	8-11-01 9:32
2			
3			
4			

Sampler Signature: [illegible]

For Lab Use Only

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

E0285

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
E0297	Soil/Sediment/ Heidi Nemeth	L/G	PCBs (21)	038735 (Ice Only) (1)	AP-SL053-12-03	S:	8/9/2001	15:08		OK
E0298	Soil/Sediment/ Heidi Nemeth	L/G	PCBs (21)	038736 (Ice Only) (1)	AP-SL053-12-04	S:	8/9/2001	15:08		
E0299	Soil/Sediment/ Heidi Nemeth	L/G	PCBs (21)	038737 (Ice Only) (1)	AP-SL053-12-05	S:	8/9/2001	15:08		
E02A0	Soil/Sediment/ Heidi Nemeth	L/G	PCBs (21)	038738 (Ice Only) (1)	AP-SL053-12-06	S:	8/9/2001	15:08		
E02A1	Soil/Sediment/ Heidi Nemeth	L/G	PCBs (21)	038739 (Ice Only) (1)	AP-SL053-12-07	S:	8/9/2001	15:08		
E02D2	Sediment/ Joe Ruiz	L/G	PCBs (21)	038770 (Ice Only) (1)	AP-SD045-22-03	S:	8/9/2001	15:07	ORIGINAL IN SDG # E0295 8-11-01 (HS)	8-11-01 (HS)
E02D3	Sediment/ Joe Ruiz	L/G	PCBs (21)	038771 (Ice Only) (1)	AP-SD045-22-04	S:	8/9/2001	15:07		
* E02D4	Sediment/ Joe Ruiz	L/G	PCBs (21)	038772 (Ice Only) (1)	AP-SD045-22-05	S:	8/9/2001	15:07		
E02A2	Soil/Sediment/ Heidi Nemeth	L/G	PCBs (21)	038740 (Ice Only) (1)	AP-SL053-12-08	S:	8/9/2001	15:08		
E02A3	Soil/Sediment/ Heidi Nemeth	L/G	PCBs (21)	038741 (Ice Only) (1)	AP-SL053-12-09	S:	8/9/2001	15:08		

* SDG Final Samples

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
	E0291, E02B0, E02D0	Heidi Nemeth	1.9 T.B.	177883, 177884

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: 5-490998136-081001-0001

LABORATORY COPY

R provides preliminary results. Requests for preliminary results will increase analytical costs.
nd Copy to: C ract Laboratory Analytical Services Support, 2000 Edmund Halley Dr., Resto 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.: E02B5

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	80	85	103	106	0
02	ELCS1	70	78	86	88	0
03	ELCS2	71	77	85	88	0
04	E02B5	72	81	98	109	0
05	E02B6	61	70	84	88	0
06	E02B7	79	86	100	102	0
07	E02B8	78	88	94	102	0
08	E02B9	63	69	75	78	0
09	E02C0	70	79	87	97	0
10	E02C1	69	76	94	97	0
11	E02C2	56	62	81	87	0
12	E02C3	45	53	56	63	0
13	E02C4	72	79	85	94	0
14	E02C5	64	72	83	87	0
15	E02C6	63	74	80	97	0
16	E02C7	67	89	83	95	0
17	E02C8	49	57	63	71	0
18	E02C9	58	64	72	75	0
19	E02D0	70	80	86	89	0
20	E02D0MS	37	41	46	48	0
21	E02D0MSD	76	84	90	96	0
22	E02D1	67	77	82	86	0
23	E02D2	71	82	88	86	0
24	E02D3	76	90	89	94	0
25	E02D4	68	79	85	87	0
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.: E02B5

LCS Sample NO.: ELCS1

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Aroclor-1254	133	103	77	29-135

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1254	133	108	81	5	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.: E02B5

Matrix Spike - Client Sample NO.: E02D0

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Aroclor-1254	152	16.1	91.4	50	29-135

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1254	152	161	95	55 *	50	29-135

Column to be used to flag recovery values

* Values outside of QC limits

RPD: 1 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.: E02B5

Lab Sample ID: BL0814SB Lab File ID: 3_091007

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

Sulfur Cleanup: (Y/N) Y Date Extracted: 08/14/01

Date Analyzed (1): 09/10/01 Date Analyzed (2): 09/10/01

Time Analyzed (1): 1747 Time Analyzed (2): 1747

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	LC0814SB	09/10/01	09/10/01
02	ELCS2	LD0814SB	09/10/01	09/10/01
03	E02B5	47266.01	09/10/01	09/10/01
04	E02B6	47266.02	09/10/01	09/10/01
05	E02B7	47266.03	09/10/01	09/10/01
06	E02B8	47266.04	09/10/01	09/10/01
07	E02B9	47266.05	09/10/01	09/10/01
08	E02C0	47266.06	09/11/01	09/11/01
09	E02C1	47266.07	09/11/01	09/11/01
10	E02C2	47266.08	09/11/01	09/11/01
11	E02C3	47266.09	09/11/01	09/11/01
12	E02C4	47266.10	09/11/01	09/11/01
13	E02C5	47266.11	09/11/01	09/11/01
14	E02C6	47266.12	09/11/01	09/11/01
15	E02C7	47266.13	09/11/01	09/11/01
16	E02C8	47266.14	09/11/01	09/11/01
17	E02C9	47266.15	09/11/01	09/11/01
18	E02D0	47266.16	09/11/01	09/11/01
19	E02D0MS	47266.17MS	09/11/01	09/11/01
20	E02D0MSD	47266.18MSD	09/11/01	09/11/01
21	E02D1	47266.19	09/11/01	09/11/01
22	E02D2	47266.20	09/11/01	09/11/01
23	E02D3	47266.21	09/11/01	09/11/01
24	E02D4	47266.22	09/11/01	09/11/01
25				
26				

Comments:

FORM IV PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E02B5

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Matrix: (soil/water) SOIL Lab Sample ID: 47266.01

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

% Moisture: 45 decanted: (Y/N) __ Date Received: 08/11/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/14/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/10/01

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	60	U
11104-28-2	Aroclor-1221	60	U
11141-16-5	Aroclor-1232	60	U
53469-21-9	Aroclor-1242	60	U
12672-29-6	Aroclor-1248	60	U
11097-69-1	Aroclor-1254	60	U
11096-82-5	Aroclor-1260	60	U
	Surrogate amount spiked	12.09	

FORM I PCB

Chromatographic Report

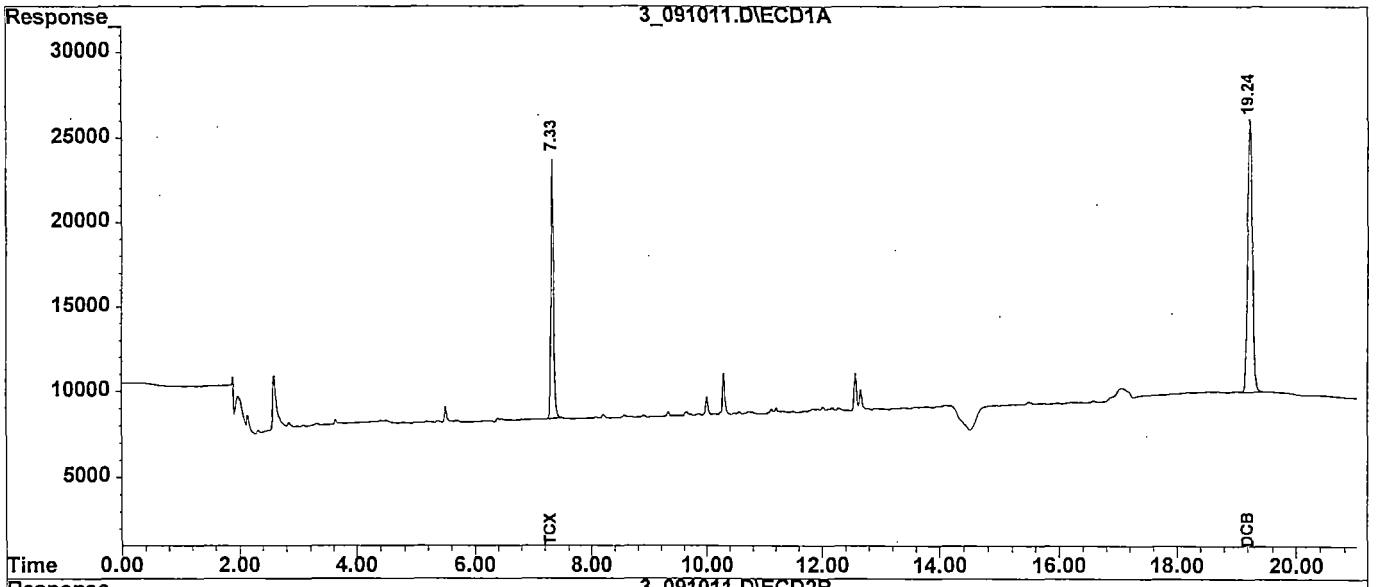
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091011.D\ECD1A.CH Vial: 50
Acq On : 10 Sep 2001 19:30 Operator: BTB
Sample : 47266.01 *E02B5 * Inst : HP_03
Misc : *EPA*30.1G/5.0ML*45 Dilution: 1.00
IntFile : events.e

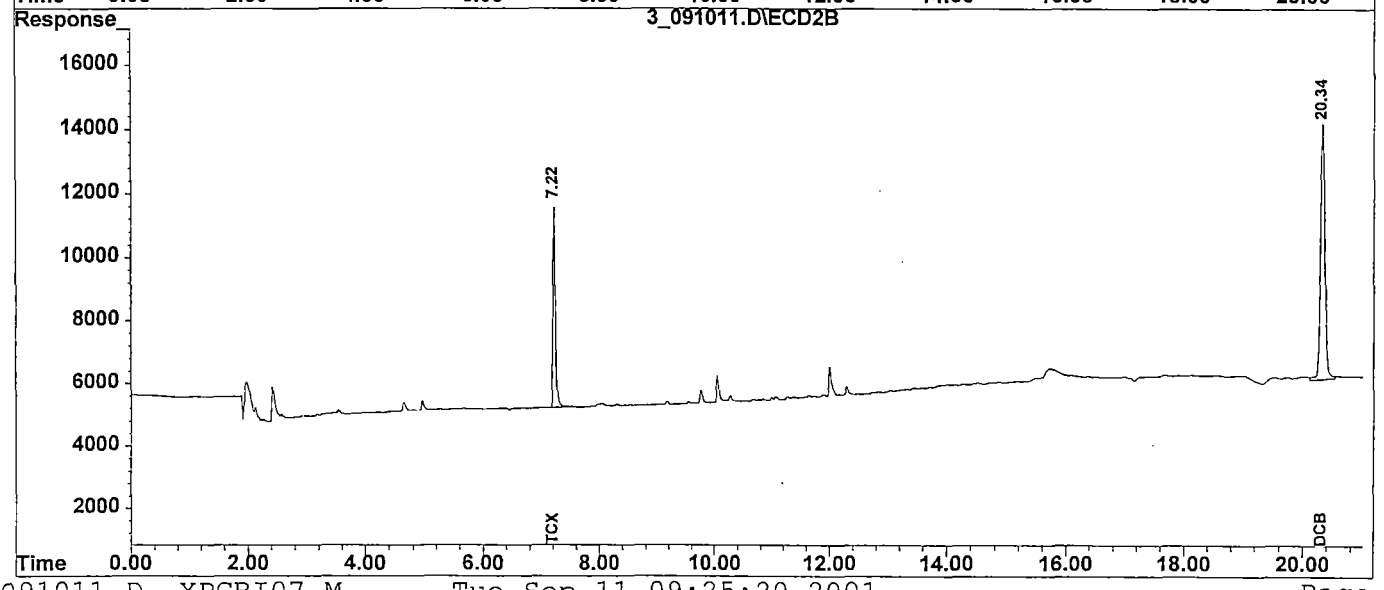
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091011.D\ECD2B.CH Vial: 50
Acq On : 10 Sep 2001 19:30 Operator: BTB
Sample : 47266.01 Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 8:56 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

ok 9-12-01

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

```
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091011.D\ECD1A.CH Vial: 50
Acq On    : 10 Sep 2001  19:30                        Operator: BTB
Sample    : 47266.01  *E02B5  *                       Inst    : HP_03
Misc      : *EPA*30.1G/5.0ML*45                       Dilution: 1.00
IntFile   : events.e

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091011.D\ECD2B.CH Vial: 50
Acq On    : 10 Sep 2001  19:30                        Operator: BTB
Sample    : 47266.01                                  Inst    : HP_03
Misc      :                                           Dilution: 1.00
IntFile   : events2.e
Quant Time: Sep 11  8:56 2001  Quant Results File: XPCBI07.RES

Method       : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	456411	188093	8.689	9.840
	Spiked Amount 12.081			Recovery	=	71.92%	81.45%
22)	S DCB	19.24	20.34	821880	434688	11.8	13.2
	Spiked Amount 12.081			Recovery	=	/97.67%	/109.26%

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.

E02B6

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Matrix: (soil/water) SOIL Lab Sample ID: 47266.02

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

% Moisture: 31 decanted: (Y/N) __ Date Received: 08/11/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/14/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/10/01

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	47	U
11104-28-2	Aroclor-1221	47	U
11141-16-5	Aroclor-1232	47	U
53469-21-9	Aroclor-1242	23	J
12672-29-6	Aroclor-1248	47	U
11097-69-1	Aroclor-1254	47	U
11096-82-5	Aroclor-1260	47	U
	Surrogate amount spiked	9.53	

FORM I PCB

Chromatographic Report

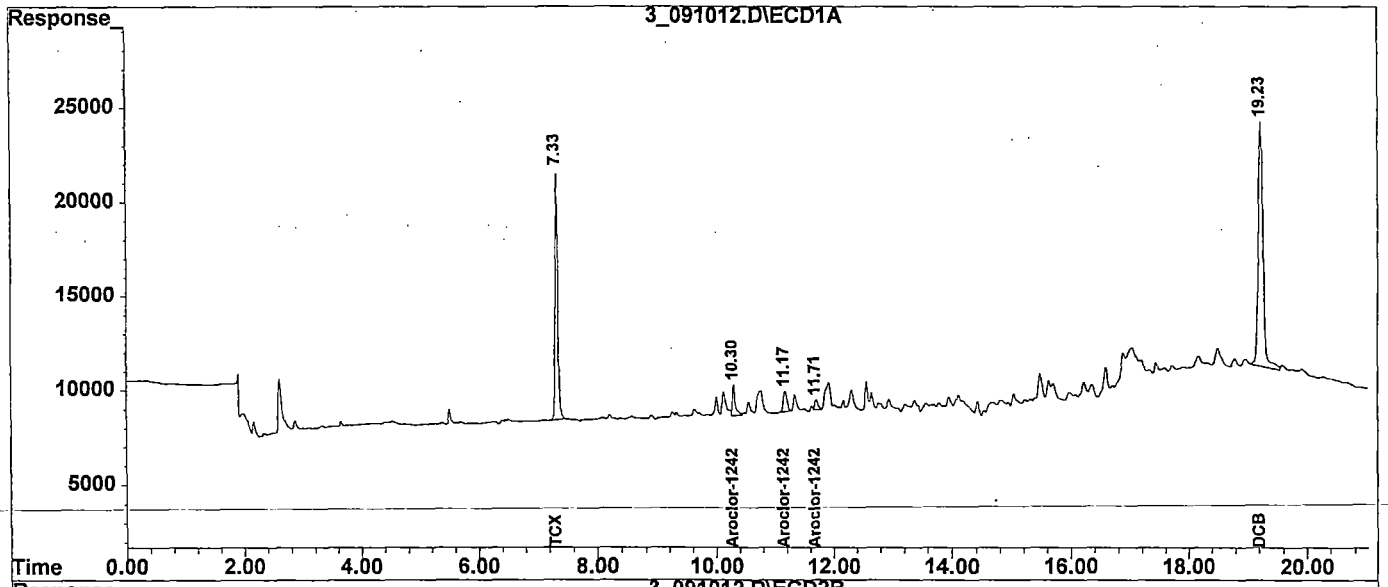
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091012.D\ECD1A.CH Vial: 51
Acq On : 10 Sep 2001 19:55 Operator: BTB
Sample : 47266.02 *E02B6 * Inst : HP_03
Misc : *EPA*30.4G/5.0ML*31 Dilution: 1.00
IntFile : events.e

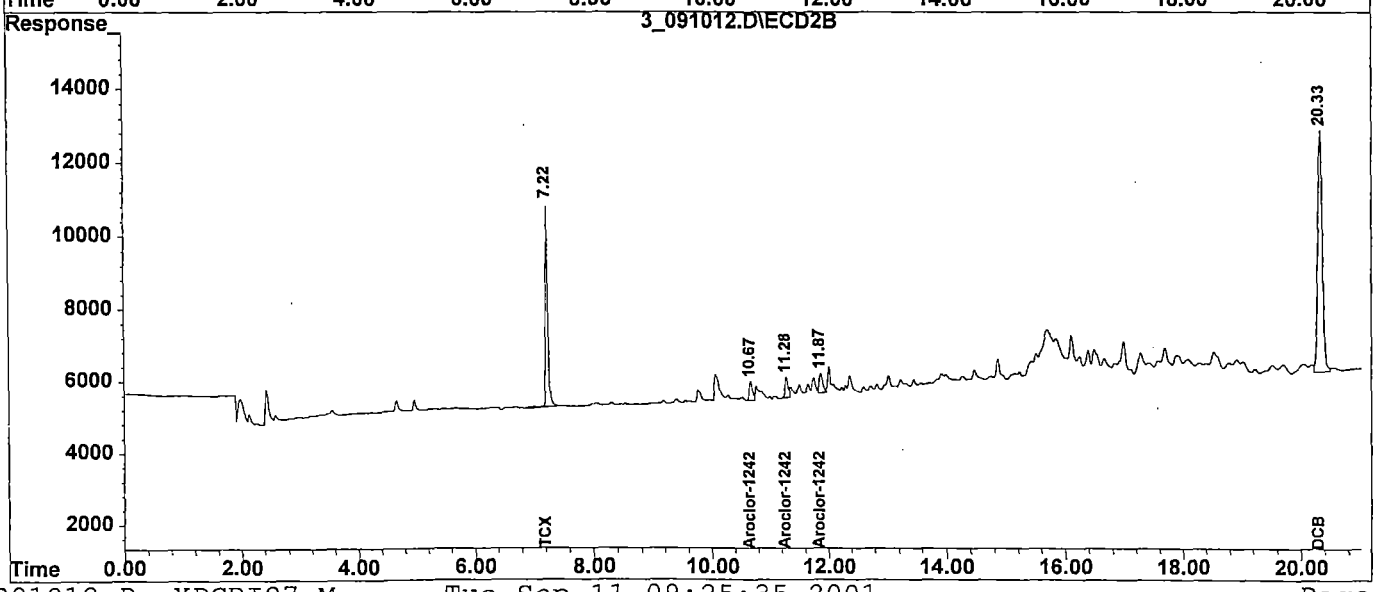
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091012.D\ECD2B.CH Vial: 51
Acq On : 10 Sep 2001 19:55 Operator: BTB
Sample : 47266.02 Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 9:03 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

ok 9-12-01

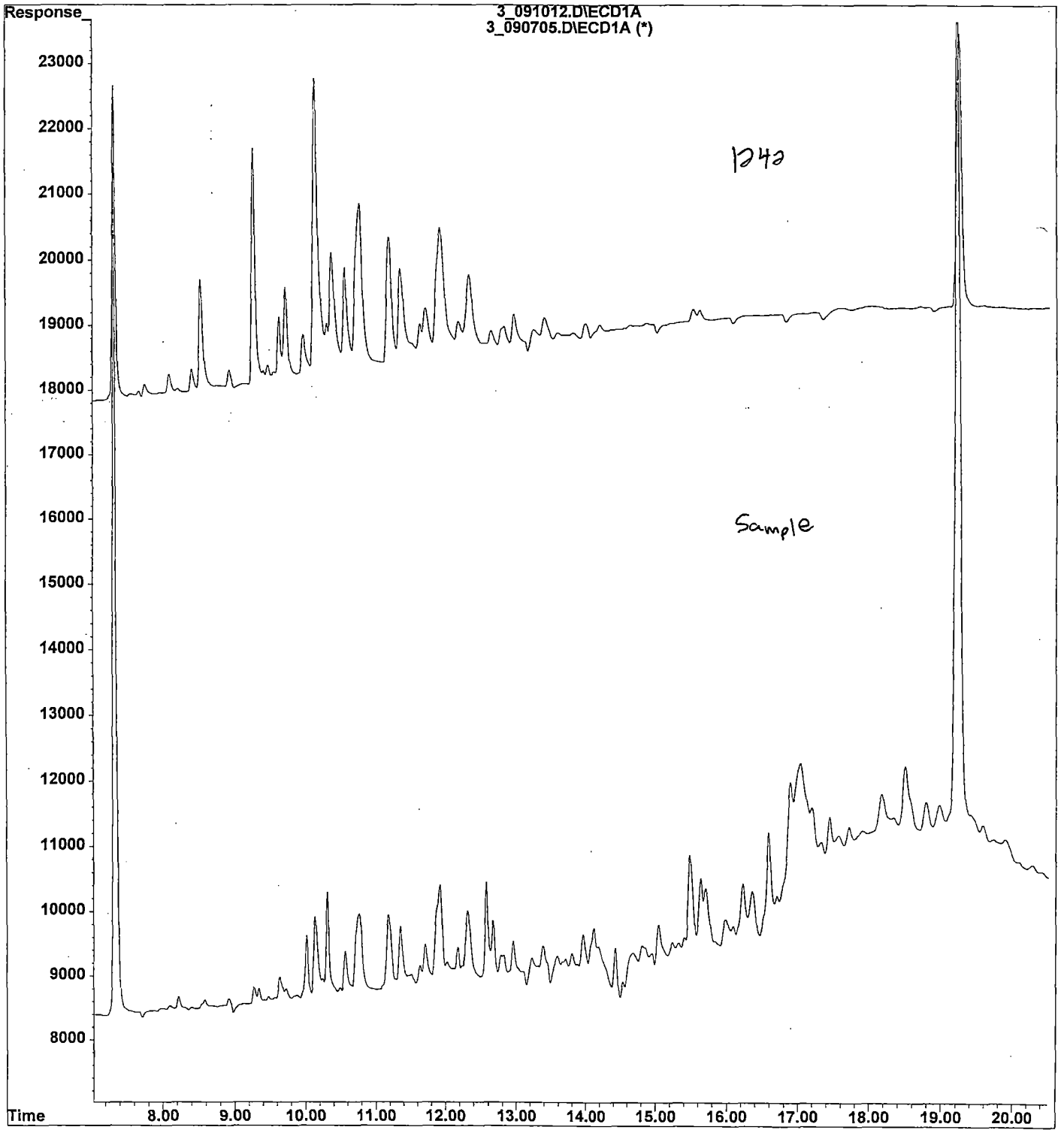
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091012.D
Operator : BTB
Acquired : 10 Sep 2001 19:55 using AcqMethod OLM03.M
Instrument : HP_03
Sample Name: 47266.02
Misc Info :
Vial Number: 51

ok 9-12-01



Quantitation Report

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091012.D\ECD1A.CH Vial: 51
Acq On : 10 Sep 2001 19:55 Operator: BTB
Sample : 47266.02 *E02B6 * Inst : HP_03
Misc : *EPA*30.4G/5.0ML*31 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091012.D\ECD2B.CH Vial: 51
Acq On : 10 Sep 2001 19:55 Operator: BTB
Sample : 47266.02 Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 9:03 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.22	388078	161786	5.831	6.680	
	Spiked Amount 9.535			Recovery	=	61.16%	70.06%	
22)	S DCB	19.23	20.33	701040	352987	7.967	8.430	
	Spiked Amount 9.535			Recovery	=	83.56%	88.41%	
	Target Compounds:							
9)	L4 Aroclor-1242 {3}	10.30f	10.67	56980	20364	27.7	22.6	
10)	L4 Aroclor-1242 {4}	11.18	11.28	48763	20664	23.3	31.3	#
11)	L4 Aroclor-1242 {5}	11.71	11.87	20575	23482	18.9	26.7	#
	Sum Aroclor-1242			126318	64509	69.9	80.6	
	Average Aroclor-1242					23.304	26.850	

(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.

E02B7

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Matrix: (soil/water) SOIL Lab Sample ID: 47266.03

Sample wt/vol: 30.5 (g/mL) G Lab File ID:_____

% Moisture: 33 decanted: (Y/N) __ Date Received: 08/11/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/14/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/10/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

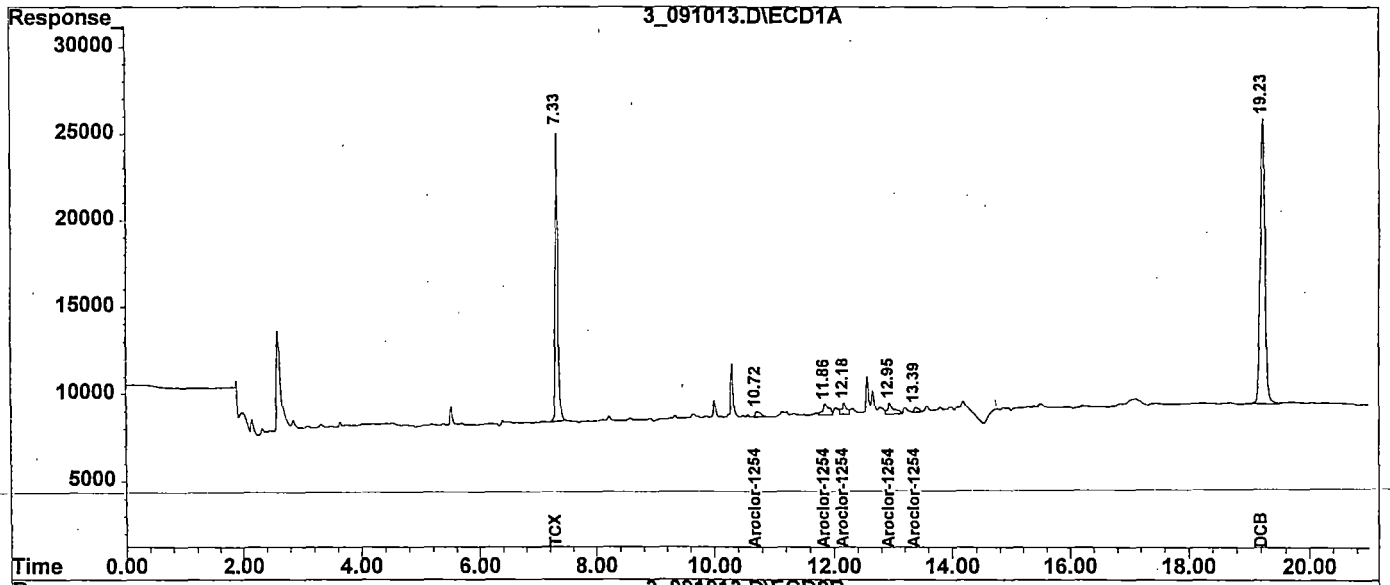
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	48	U
11104-28-2	Aroclor-1221	48	U
11141-16-5	Aroclor-1232	48	U
53469-21-9	Aroclor-1242	48	U
12672-29-6	Aroclor-1248	48	U
11097-69-1	Aroclor-1254	5.8	JP
11096-82-5	Aroclor-1260	48	U
	Surrogate amount spiked	9.79	

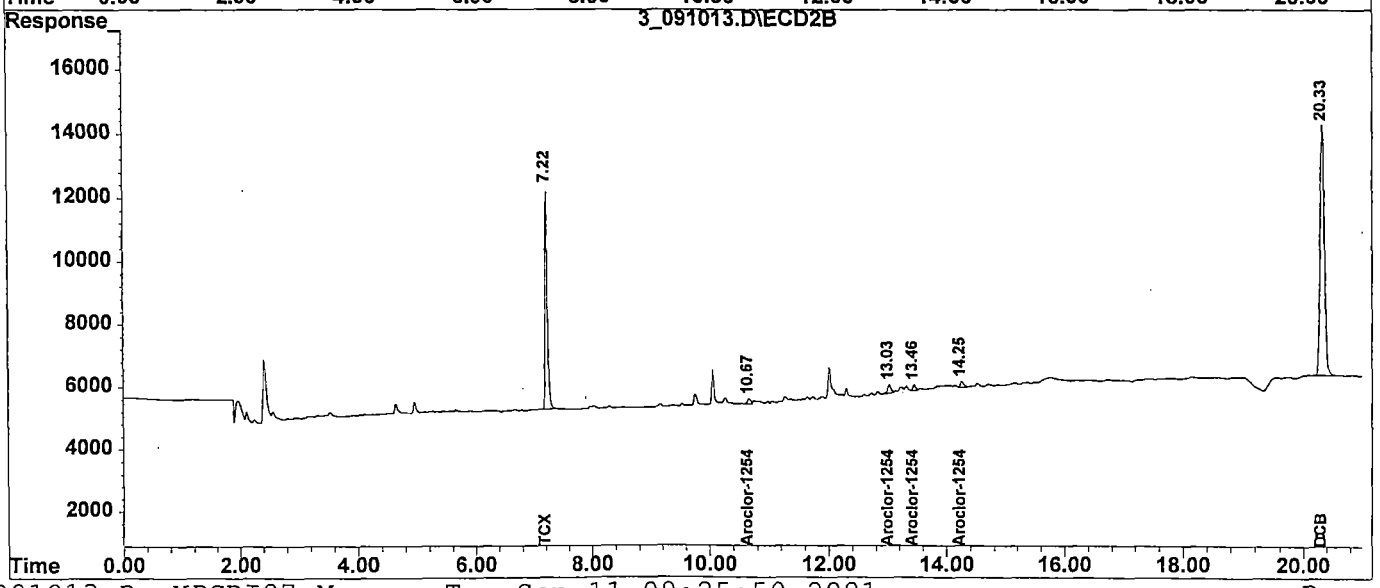
FORM I PCB

Chromatographic Report

```
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091013.D\ECD1A.CH Vial: 52
Acq On    : 10 Sep 2001  20:21                        Operator: BTB
Sample    : 47266.03  *E02B7  *                       Inst    : HP_03
Misc      : *EPA*30.5G/5.0ML*33                       Dilution: 1.00
IntFile   : events.e

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091013.D\ECD2B.CH Vial: 52
Acq On    : 10 Sep 2001  20:21                        Operator: BTB
Sample    : 47266.03                                  Inst    : HP_03
Misc      :                                           Dilution: 1.00
IntFile   : events2.e
Quant Time: Sep 11  9:07 2001  Quant Results File: XPCBI07.RES

Method       : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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
```

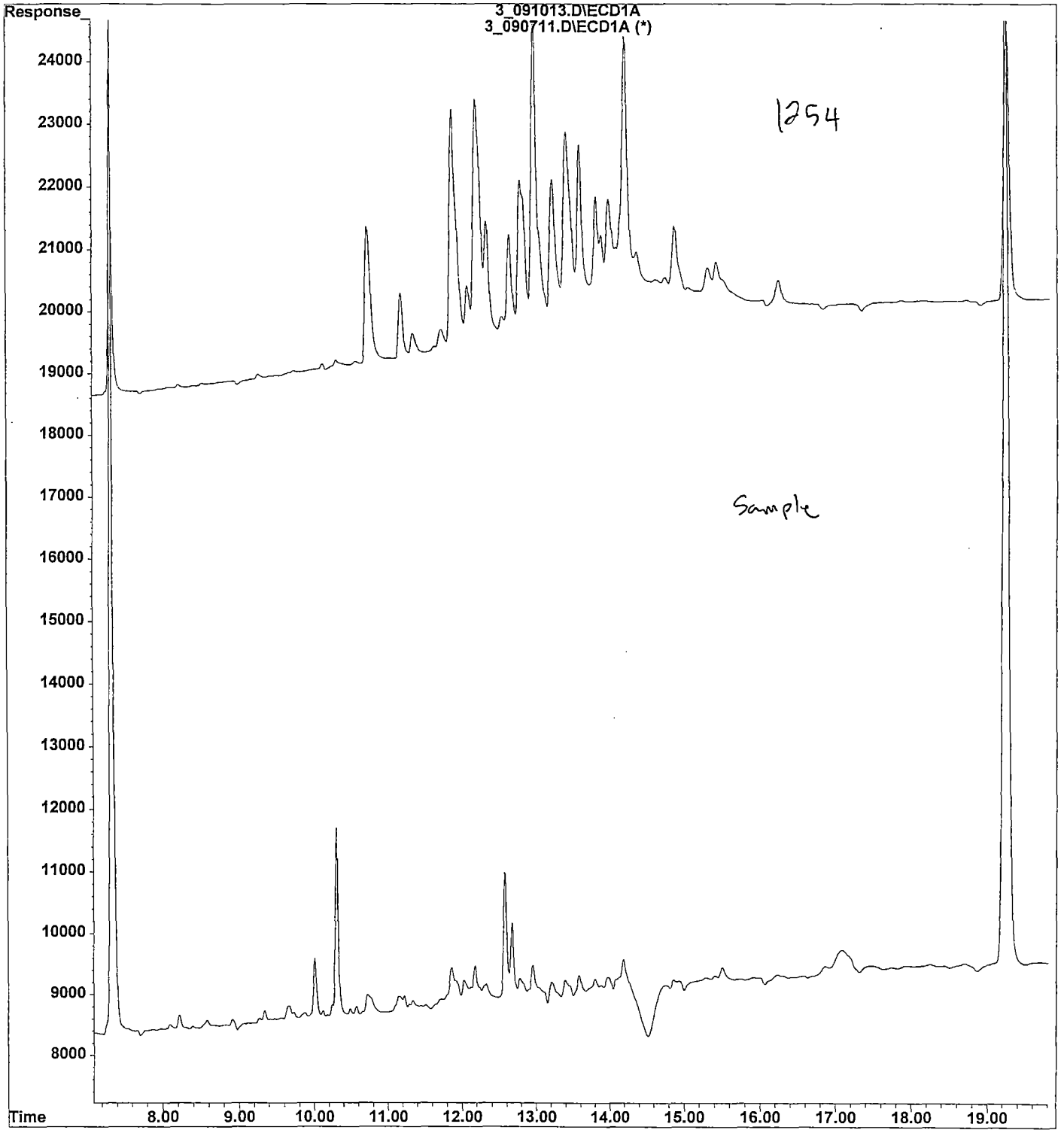
ok 9-12-01





File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091013.D
Operator : BTB
Acquired : 10 Sep 2001 20:21 using AcqMethod OLM03.M
Instrument : HP_03
Sample Name: 47266.03
Misc Info :
Vial Number: 52

ok 9-12-01



Quantitation Report

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091013.D\ECD1A.CH Vial: 52
Acq On : 10 Sep 2001 20:21 Operator: BTB
Sample : 47266.03 *E02B7 * Inst : HP_03
Misc : *EPA*30.5G/5.0ML*33 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091013.D\ECD2B.CH Vial: 52
Acq On : 10 Sep 2001 20:21 Operator: BTB
Sample : 47266.03 Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 9:07 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.22	504206	197762	7.776	8.381	
	Spiked Amount 9.787			Recovery	=	79.45%	85.63%	
22)	S DCB	19.24	20.34	835133	408093	9.742	10.0	
	Spiked Amount 9.787			Recovery	=	99.54%	102.18%	
	Target Compounds:							
12)	L6 Aroclor-1254	10.72	10.67	21746	6678	9.480	9.644	
13)	L6 Aroclor-1254 {2}	11.86	0.00	46378	0	10.3	N.D.	#
14)	L6 Aroclor-1254 {3}	12.18	13.03	37607	11295	8.351	4.506	#
15)	L6 Aroclor-1254 {4}	12.95	13.46	46060	6883	8.803	4.913	#
16)	L6 Aroclor-1254 {5}	13.39	14.25	16175	7820	4.185	4.213	
	Sum Aroclor-1254			167966	32677	41.1	23.3	
	Average Aroclor-1254					8.223	5.819	

(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.

E02B8

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Matrix: (soil/water) SOIL Lab Sample ID: 47266.04

Sample wt/vol: 30.0 (g/mL) G Lab File ID:_____

% Moisture: 43 decanted: (Y/N) __ Date Received: 08/11/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/14/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/10/01

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	58	U
11104-28-2	Aroclor-1221	58	U
11141-16-5	Aroclor-1232	58	U
53469-21-9	Aroclor-1242	58	U
12672-29-6	Aroclor-1248	58	U
11097-69-1	Aroclor-1254	58	U
11096-82-5	Aroclor-1260	58	U
	Surrogate amount spiked	11.70	

FORM I PCB

Chromatographic Report

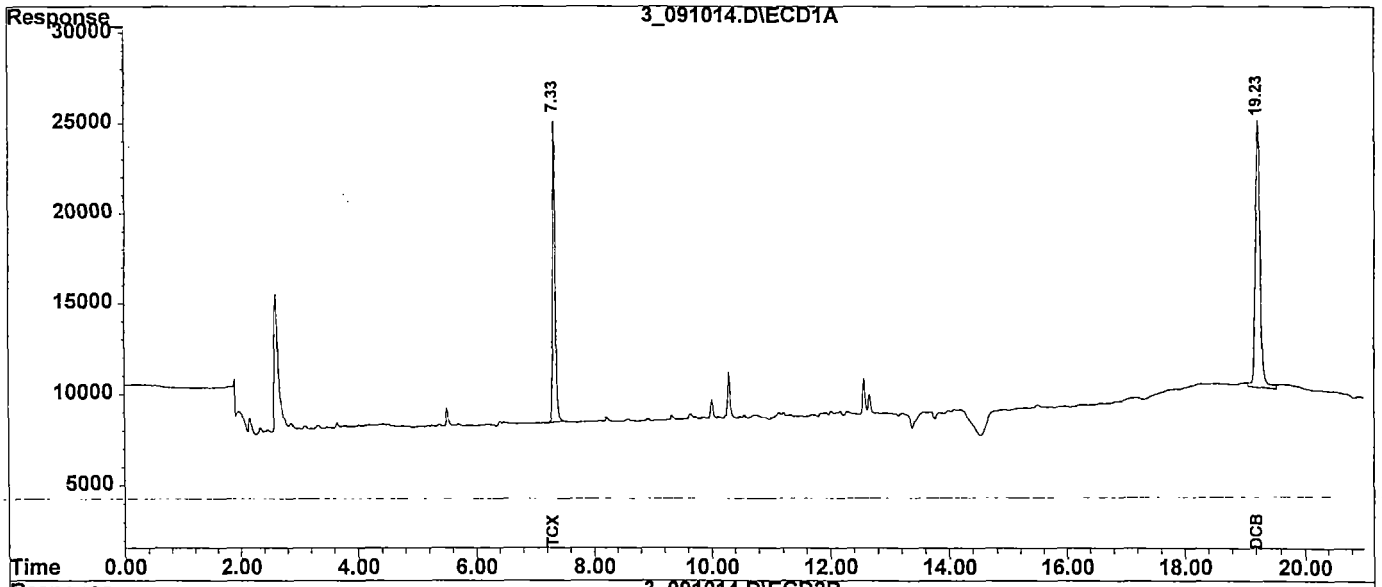
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091014.D\ECD1A.CH Vial: 53
Acq On : 10 Sep 2001 20:47 Operator: BTB
Sample : 47266.04 *E02B8 * Inst : HP_03
Misc : *EPA*30G/5.0ML*43 Dilution: 1.00
IntFile : events.e

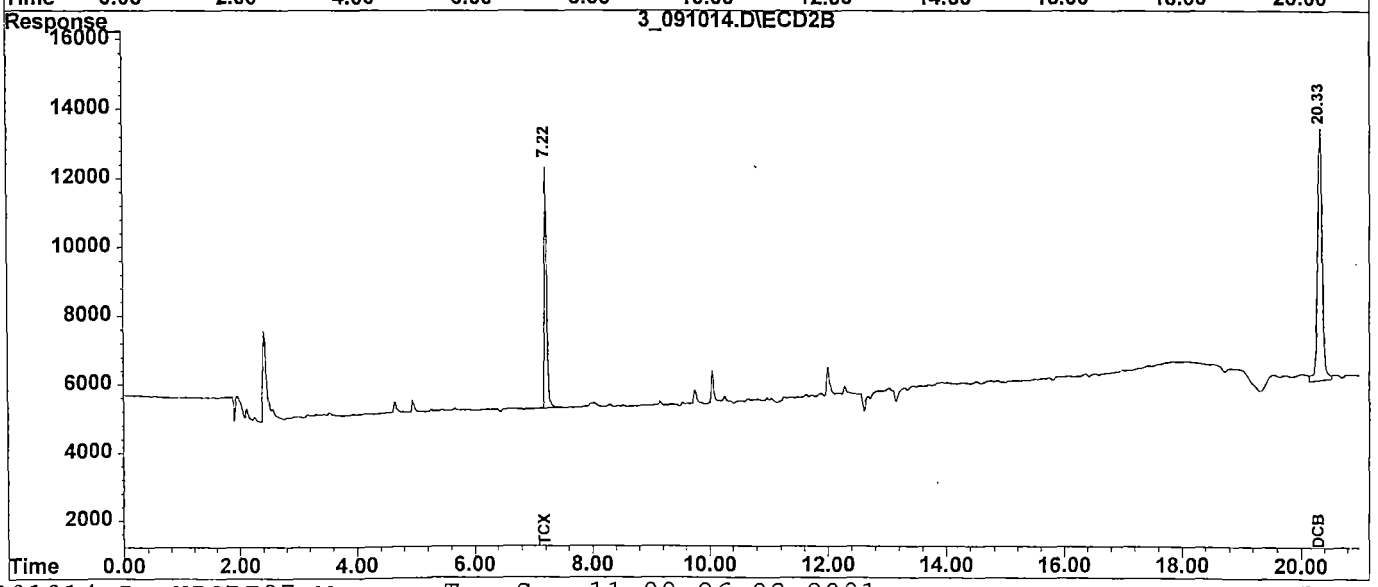
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091014.D\ECD2B.CH Vial: 53
Acq On : 10 Sep 2001 20:47 Operator: BTB
Sample : 47266.04 Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 9:09 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

ok 9-12-01

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

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091014.D\ECD1A.CH Vial: 53
Acq On : 10 Sep 2001 20:47 Operator: BTB
Sample : 47266.04 *E02B8 * Inst : HP_03
Misc : *EPA*30G/5.0ML*43 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091014.D\ECD2B.CH Vial: 53
Acq On : 10 Sep 2001 20:47 Operator: BTB
Sample : 47266.04 Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 9:09 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	496930	203151	9.159	10.3
	Spiked Amount 11.696			Recovery	=	78.31%	88.07%
22)	S DCB	19.23	20.33	792344	409192	11.0	12.0
	Spiked Amount 11.696			Recovery	=	94.05%	102.60%

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.

E02B9

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Matrix: (soil/water) SOIL Lab Sample ID: 47266.05

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

% Moisture: 36 decanted: (Y/N) __ Date Received: 08/11/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/14/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/10/01

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	51	U
11104-28-2	Aroclor-1221	51	U
11141-16-5	Aroclor-1232	51	U
53469-21-9	Aroclor-1242	40	JP
12672-29-6	Aroclor-1248	51	U
11097-69-1	Aroclor-1254	14	J
11096-82-5	Aroclor-1260	51	U
Surrogate amount spiked		10.39	

FORM I PCB

Chromatographic Report

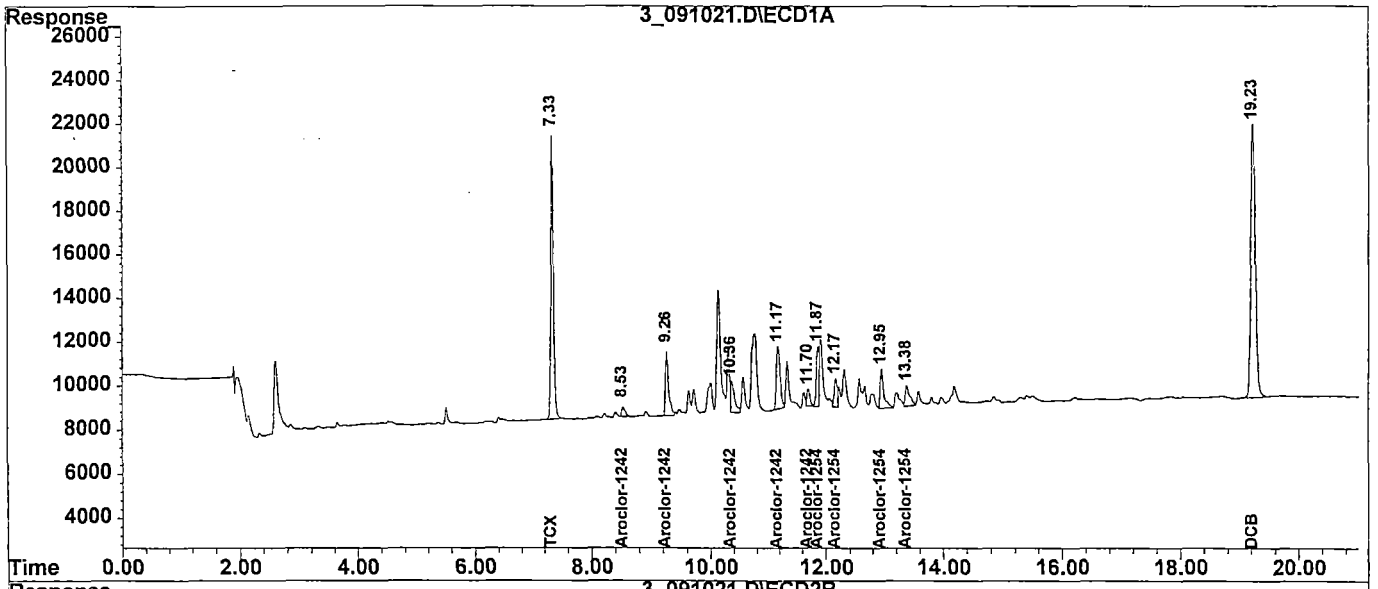
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091021.D\ECD1A.CH Vial: 60
Acq On : 10 Sep 2001 23:46 Operator: BTB
Sample : 47266.05 *E02B9 * Inst : HP_03
Misc : *EPA*30.1G/5.0ML*36 Dilution: 1.00
IntFile : events.e

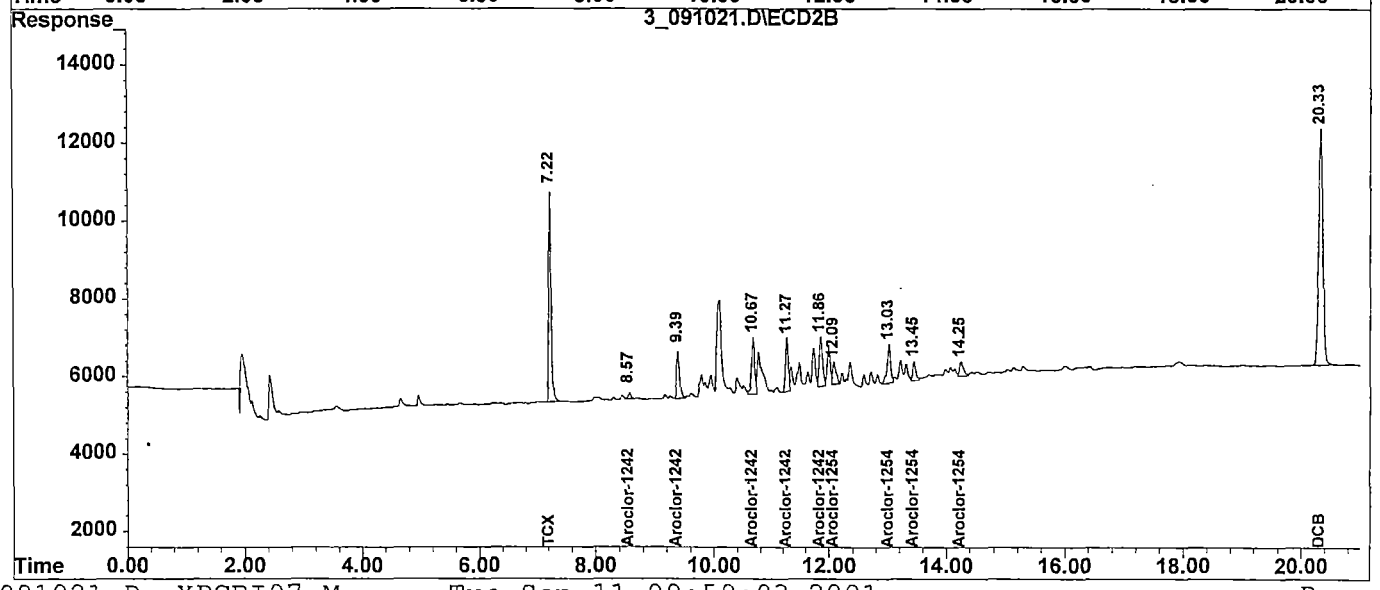
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091021.D\ECD2B.CH Vial: 60
Acq On : 10 Sep 2001 23:46 Operator: BTB
Sample : 47266.05 Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 9:33 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

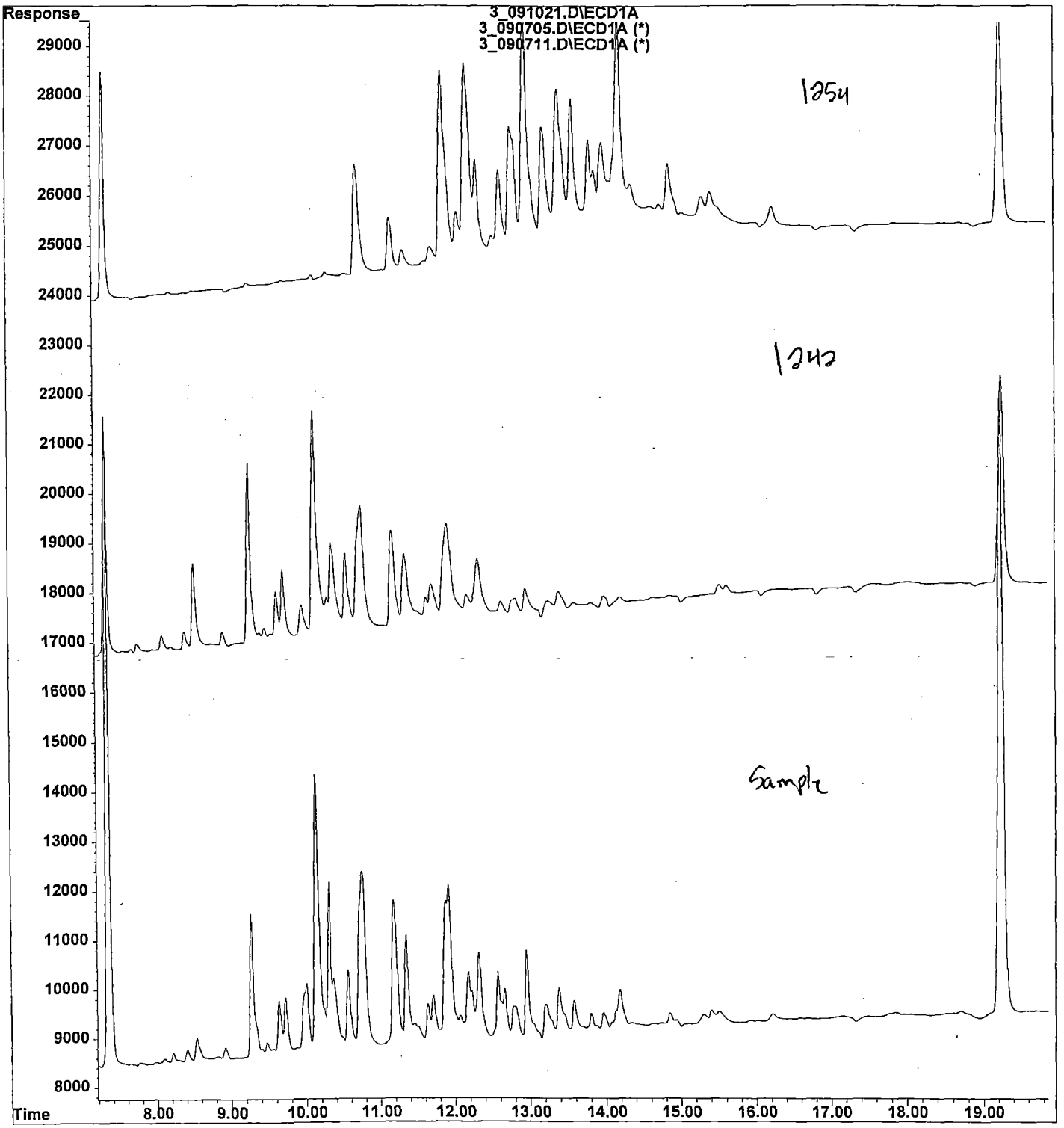
ok 9-12-01





File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091021.D
Operator : BTB
Acquired : 10 Sep 2001 23:46 using AcqMethod OLM03.M
Instrument : HP_03
Sample Name: 47266.05
Misc Info :
Vial Number: 60

ok
9-12-01



Quantitation Report

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091021.D\ECD1A.CH Vial: 60
Acq On : 10 Sep 2001 23:46 Operator: BTB
Sample : 47266.05 *E02B9 * Inst : HP_03
Misc : *EPA*30.1G/5.0ML*36 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091021.D\ECD2B.CH Vial: 60
Acq On : 10 Sep 2001 23:46 Operator: BTB
Sample : 47266.05 Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 9:33 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.22	401012	159025	6.561	7.149	
	Spiked Amount 10.382			Recovery	=	63.20%	68.86%	
22)	S DCB	19.23	20.34	632071	312761	7.821	8.134	
	Spiked Amount 10.382			Recovery	=	75.33%	78.35%	
	Target Compounds:							
7)	L4 Aroclor-1242	8.53	8.57	21079	5737	17.4	13.8	
8)	L4 Aroclor-1242 {2}	9.26	9.39	109885	41311	47.8	43.5	
9)	L4 Aroclor-1242 {3}	10.36	10.67	68259	56134	36.2	67.7	#
10)	L4 Aroclor-1242 {4}	11.18	11.28	133242	46751	69.3	77.1	
11)	L4 Aroclor-1242 {5}	11.71	11.86	29159	49749	29.2	61.6	#
	Sum Aroclor-1242			361624	199682	199.9	263.7	
	Average Aroclor-1242					39.972	52.740	
13)	L6 Aroclor-1254 {2}	11.87	12.09	73032	24090	17.2	14.1	
14)	L6 Aroclor-1254 {3}	12.18	13.03	44252	39185	10.4	16.6	#
15)	L6 Aroclor-1254 {4}	12.95	13.46	75794	17646	15.4	13.4	
16)	L6 Aroclor-1254 {5}	13.38	14.25	48046	18438	13.2	10.5	
	Sum Aroclor-1254			241124	99360	56.2	54.6	
	Average Aroclor-1254					14.044	13.647	

(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.

E02C0

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Matrix: (soil/water) SOIL Lab Sample ID: 47266.06

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

% Moisture: 56 decanted: (Y/N) __ Date Received: 08/11/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/14/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/11/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Sulfur Cleanup: (Y/N) Y

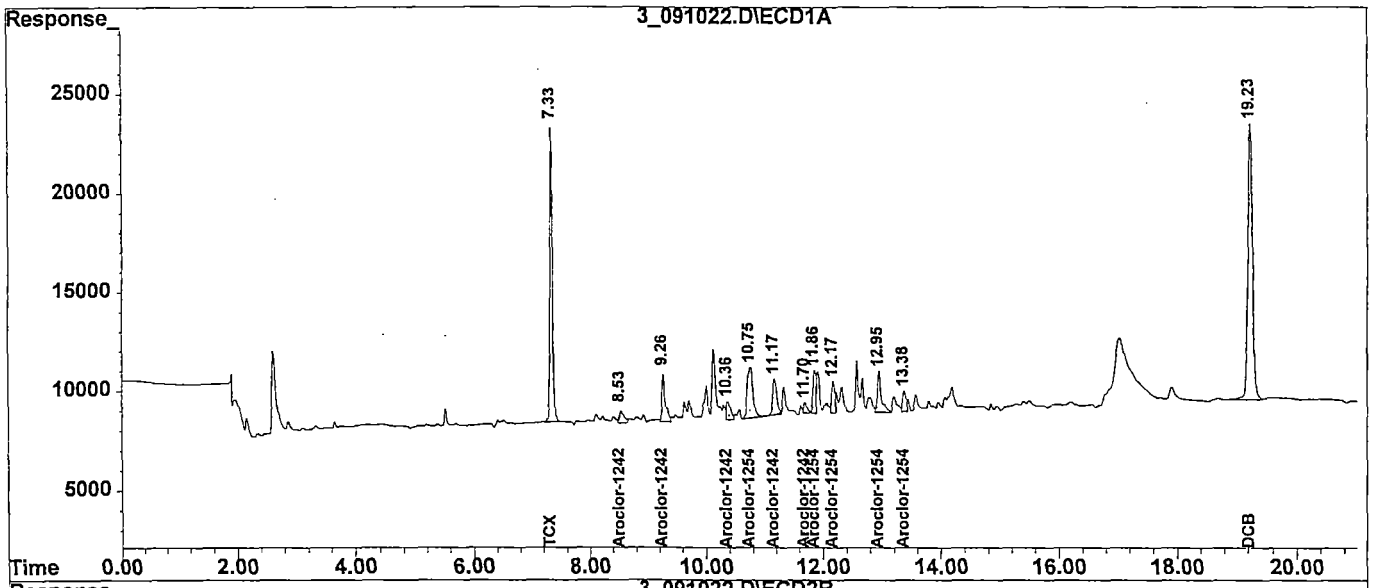
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	73	U
11104-28-2	Aroclor-1221	73	U
11141-16-5	Aroclor-1232	73	U
53469-21-9	Aroclor-1242	47	J
12672-29-6	Aroclor-1248	73	U
11097-69-1	Aroclor-1254	39	J
11096-82-5	Aroclor-1260	73	U
Surrogate amount spiked		14.76	

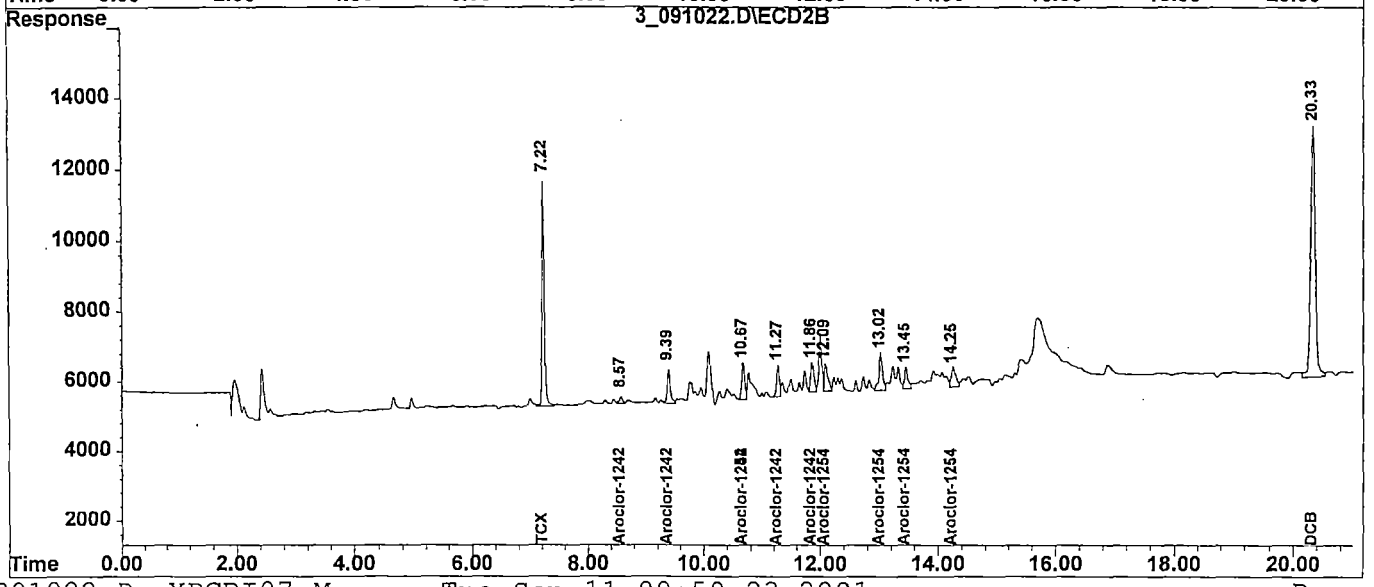
FORM I PCB

Chromatographic Report

```
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091022.D\ECD1A.CH Vial: 61
Acq On    : 11 Sep 2001  00:12                        Operator: BTB
Sample    : 47266.06  *E02C0  *                       Inst    : HP_03
Misc      : *EPA*30.8G/5.0ML*56                       Dilution: 1.00
IntFile   : events.e

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091022.D\ECD2B.CH Vial: 61
Acq On    : 11 Sep 2001  00:12                        Operator: BTB
Sample    : 47266.06                                  Inst    : HP_03
Misc      :                                           Dilution: 1.00
IntFile   : events2.e
Quant Time: Sep 11  9:37 2001  Quant Results File: XPCBI07.RES

Method       : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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
```

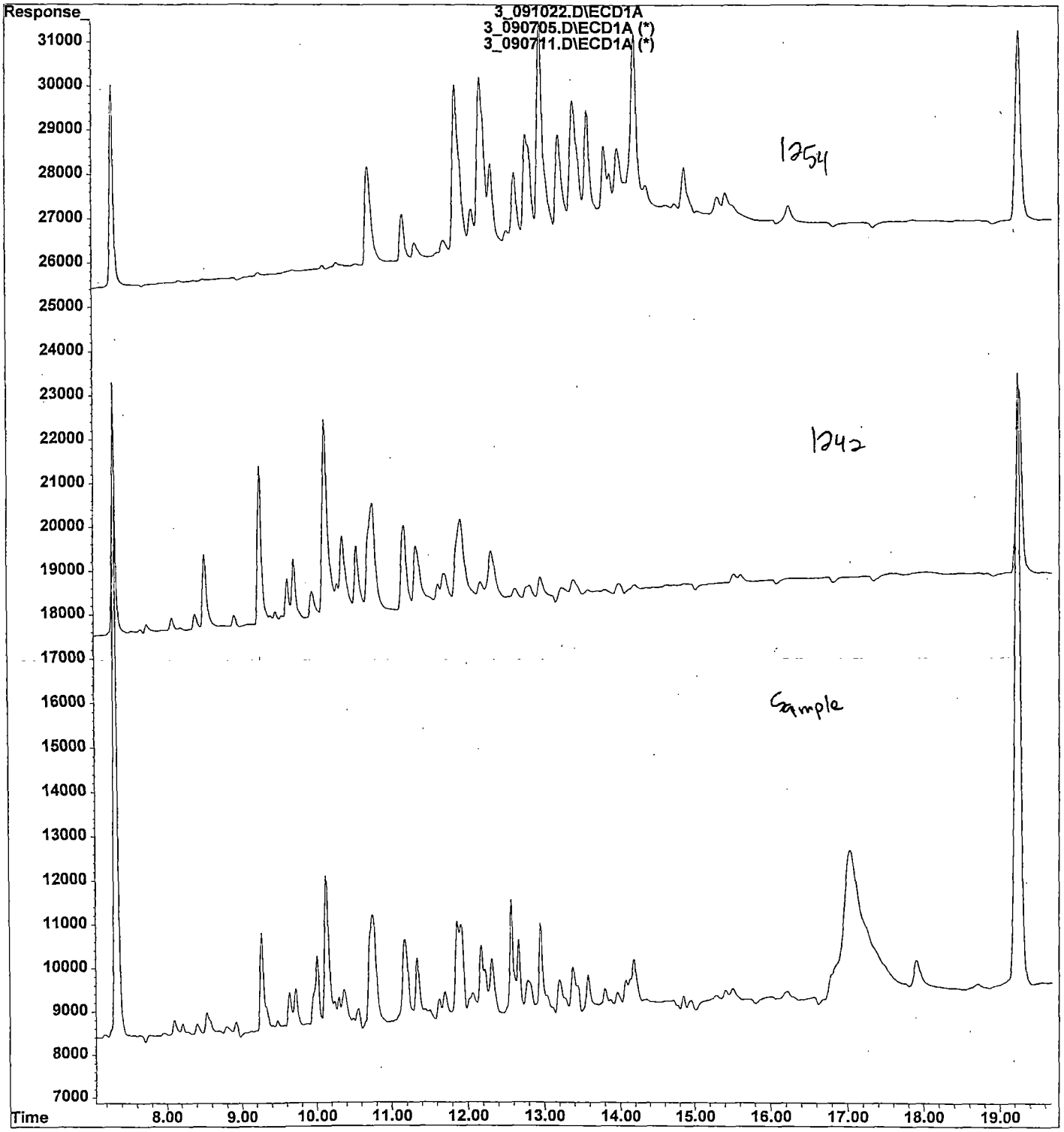
ok 9-12-01





File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091022.D
Operator : BTB
Acquired : 11 Sep 2001 00:12 using AcqMethod OLM03.M
Instrument : HP_03
Sample Name: 47266.06
Misc Info :
Vial Number: 61

ok 9-12-01



Quantitation Report

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091022.D\ECD1A.CH Vial: 61
Acq On : 11 Sep 2001 00:12 Operator: BTB
Sample : 47266.06 *E02C0 * Inst : HP_03
Misc : *EPA*30.8G/5.0ML*56 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091022.D\ECD2B.CH Vial: 61
Acq On : 11 Sep 2001 00:12 Operator: BTB
Sample : 47266.06 Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 9:37 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

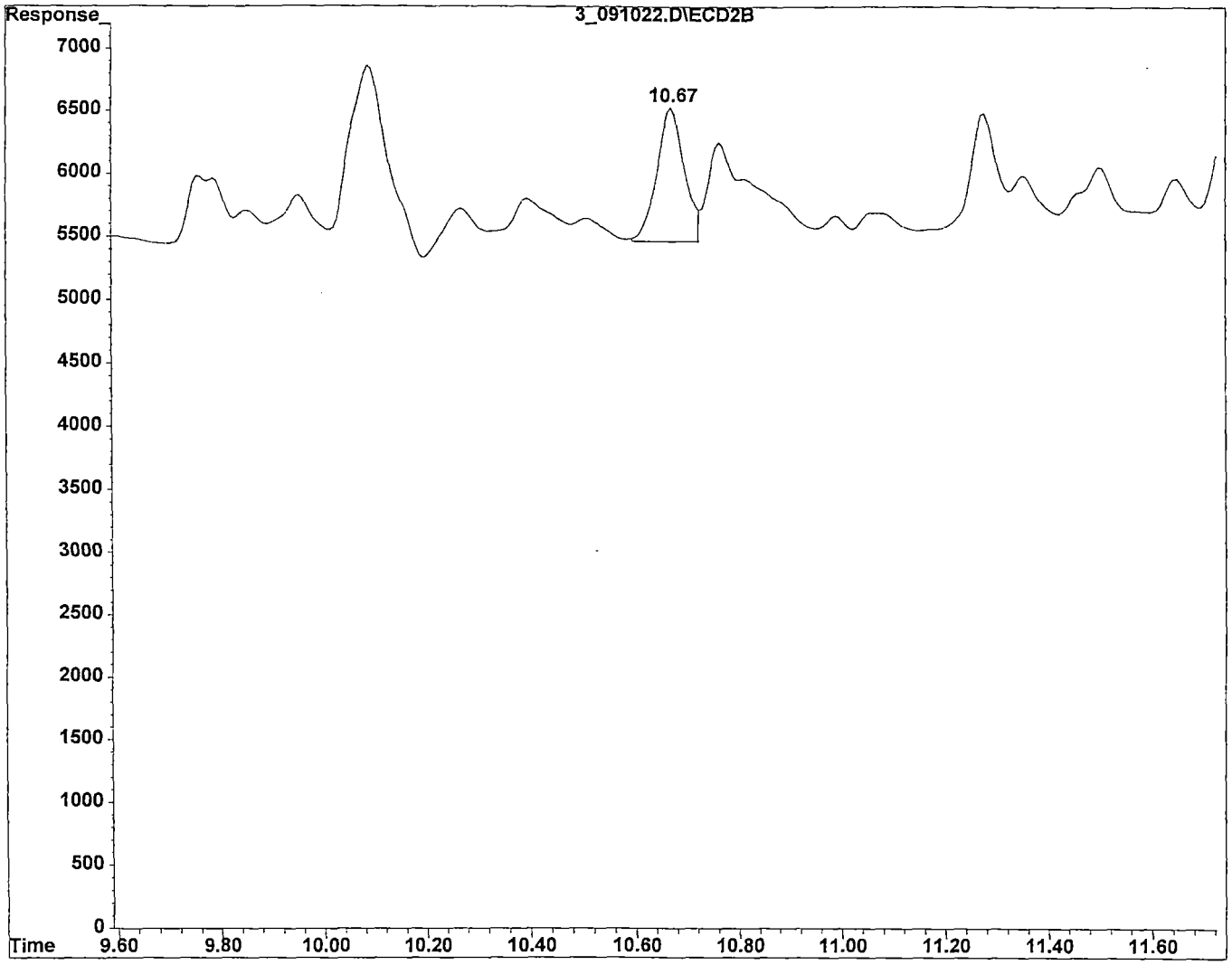
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.22	445184	183495	10.4	11.7	
	Spiked Amount 14.758			Recovery	=	70.47%	79.28%	
22)	S DCB	19.23	20.34	733338	388086	12.9	14.3	
	Spiked Amount 14.758			Recovery	=	87.41%	96.90%	
	Target Compounds:							
7)	L4 Aroclor-1242	8.53	8.57	34101	7449	40.1	25.4	#
8)	L4 Aroclor-1242 {2}	9.26	9.39	96396	36608	59.6	54.9	
9)	L4 Aroclor-1242 {3}	10.37	10.67	47558	39336	35.8	67.4m	#
10)	L4 Aroclor-1242 {4}	11.17	11.27	93373	31448	69.0	73.7m	
11)	L4 Aroclor-1242 {5}	11.70	11.86	20292	33988	28.9	59.8m	#
	Sum Aroclor-1242			291721	148829	233.4	281.2	
	Average Aroclor-1242					46.680	56.246	
12)	L6 Aroclor-1254	10.75f	10.67	174210	40044	114.5	87.2m	
13)	L6 Aroclor-1254 {2}	11.87	12.09	67142	35347	22.5	29.4	#
14)	L6 Aroclor-1254 {3}	12.18	13.03	53220	44474	17.8	26.8	#
15)	L6 Aroclor-1254 {4}	12.95	13.46	92047	26131	26.5	28.1	
16)	L6 Aroclor-1254 {5}	13.38	14.25	40787	30959	15.9	25.1	#
	Sum Aroclor-1254			427405	176954	197.2	196.6	
	Average Aroclor-1254					39.450	39.329	

BTB 09/10)

(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_10_01\3_091022.D
Date Acquired: 11 Sep 2001 00:12
Inst: HP_03 Operator ID: BTB
Name: 47266.06 *E02C0 *
Misc: *EPA*30.8G/5.0ML*56
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 11 9:37 2001 Quant Results File: XPCBI07.RES



Aroclor-1242 {3} #2 10.67min area: 39336 m

Integration Time Range: 10.59 - 10.72

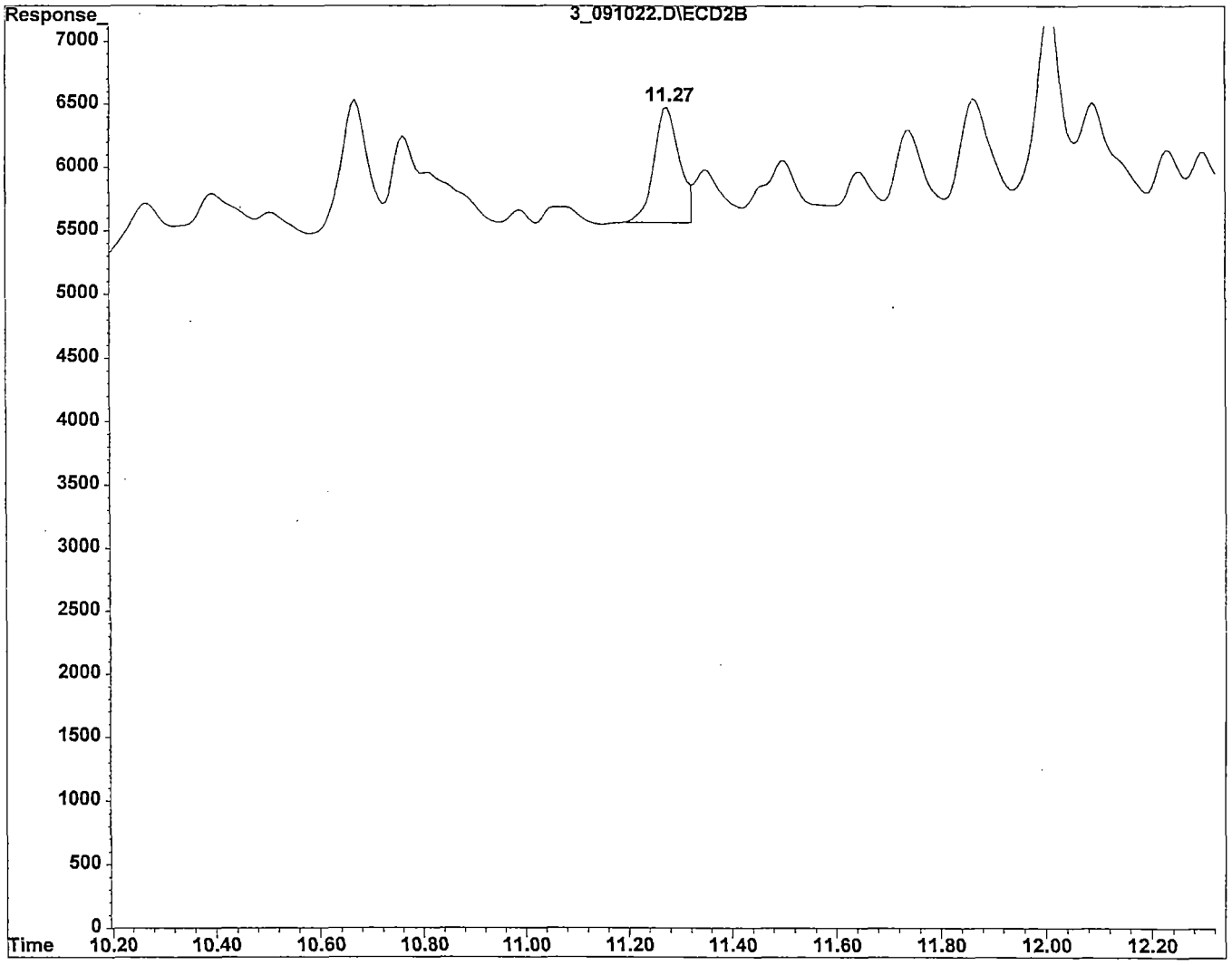
BTB
091101

BR
9-12-01

F:\HPCHEM\HP\3\DATA\09_10_01\3_091022.D
Report generated: Tue Sep 11 10:01:58 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_10_01\3_091022.D
Date Acquired: 11 Sep 2001 00:12
Inst: HP_03 Operator ID: BTB
Name: 47266.06 *E02C0 *
Misc: *EPA*30.8G/5.0ML*56
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 11 9:37 2001 Quant Results File: XPCBI07.RES



Aroclor-1242 {4} #2 11.27min area: 31448 m

Integration Time Range: 11.20 - 11.32

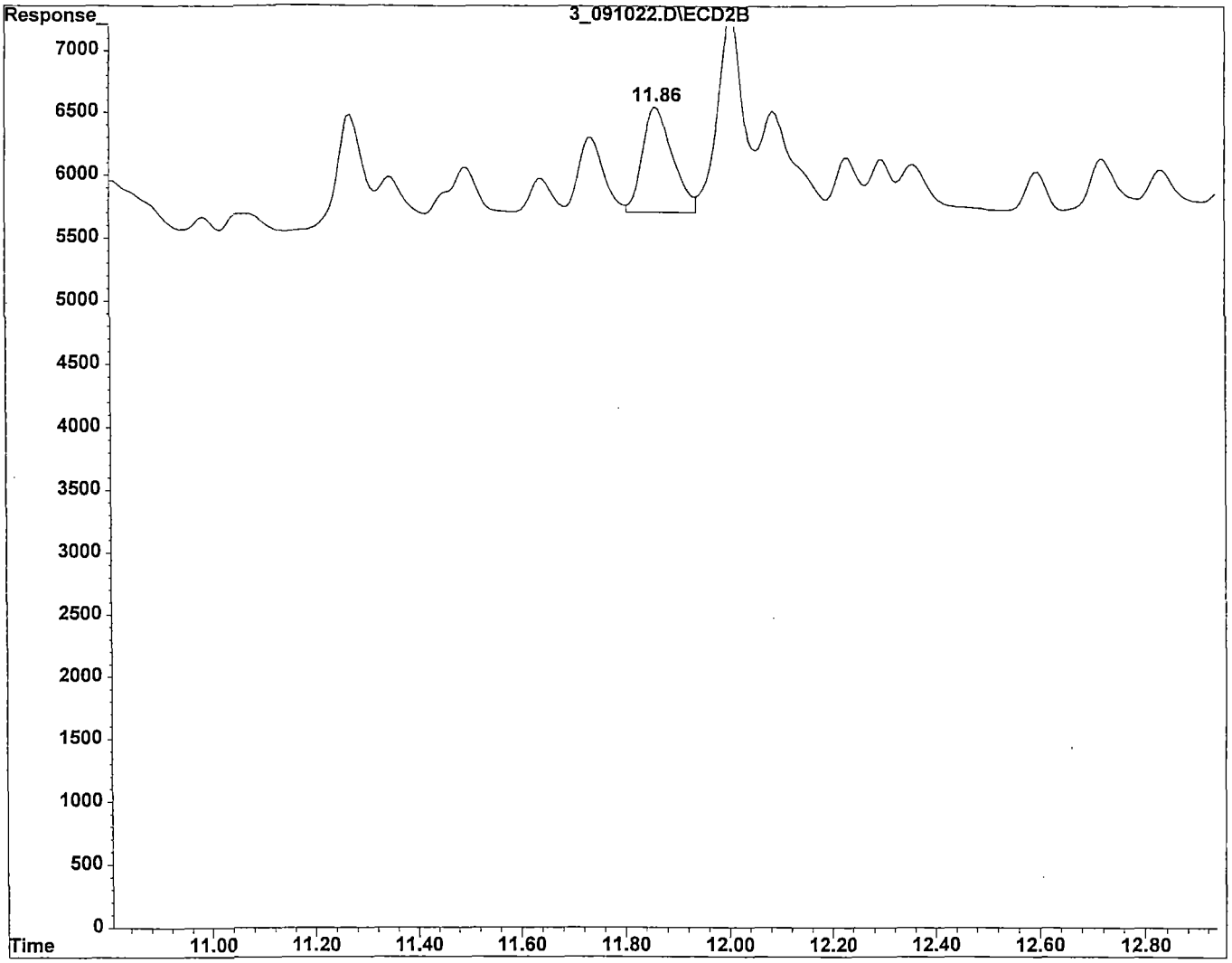
BTB
091101

ok
9-12-01

F:\HPCHEM\HP\3\DATA\09_10_01\3_091022.D
Report generated: Tue Sep 11 10:01:58 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_10_01\3_091022.D
Date Acquired: 11 Sep 2001 00:12
Inst: HP_03 Operator ID: BTB
Name: 47266.06 *E02C0 *
Misc: *EPA*30.8G/5.0ML*56
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 11 9:37 2001 Quant Results File: XPCBI07.RES



Aroclor-1242 {5} #2 11.86min area: 33988 m

Integration Time Range: 11.81 - 11.94

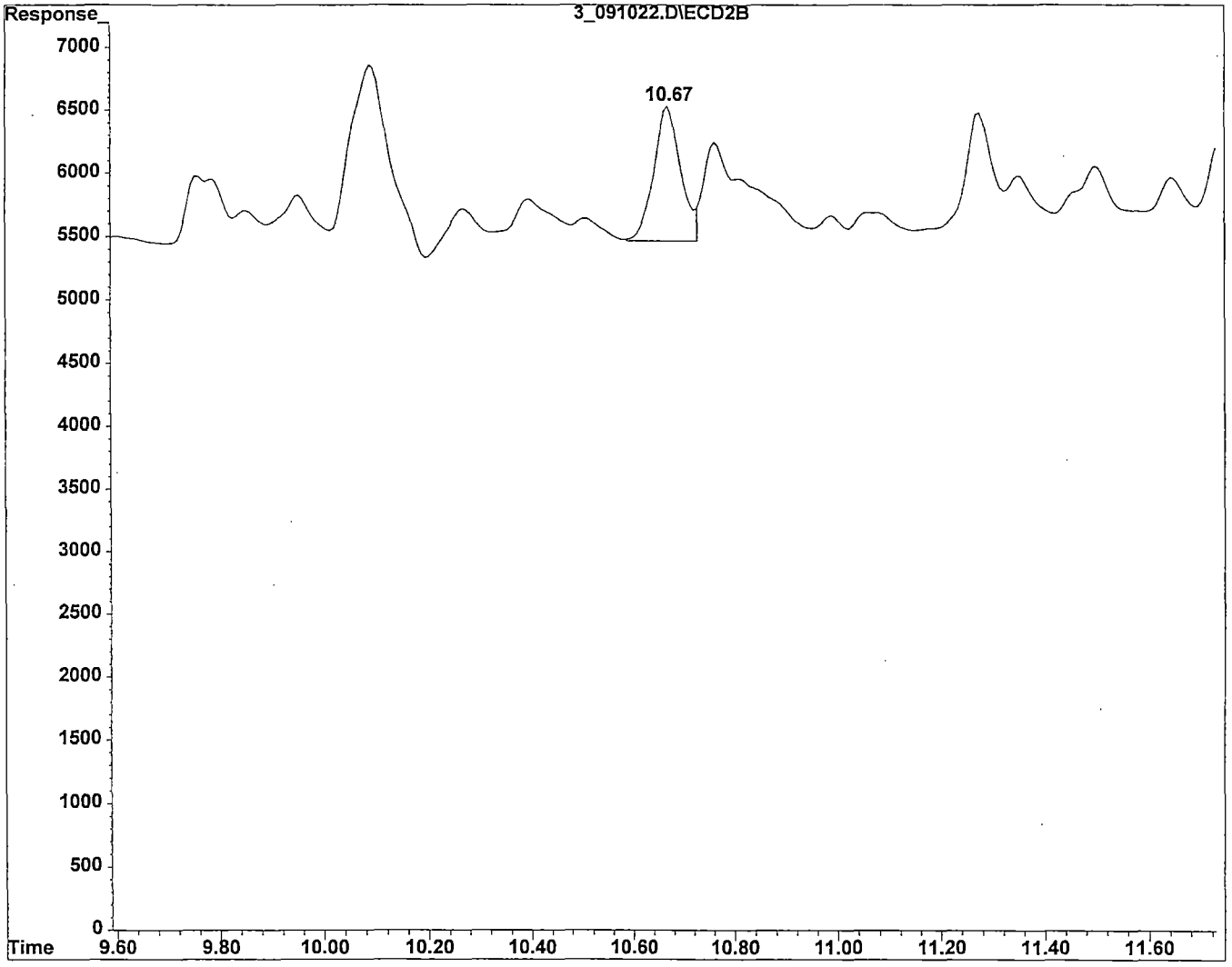
BTB 091101

ok 9-12-01

F:\HPCHEM\HP\3\DATA\09_10_01\3_091022.D
Report generated: Tue Sep 11 10:01:59 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_10_01\3_091022.D
Date Acquired: 11 Sep 2001 00:12
Inst: HP_03 Operator ID: BTB
Name: 47266.06 *E02C0 *
Misc: *EPA*30.8G/5.0ML*56
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 11 9:37 2001 Quant Results File: XPCBI07.RES



Aroclor-1254 #2 10.67min area: 40044 m

Integration Time Range: 10.59 - 10.73

BTB 091101

ok 9-12-01 BB

F:\HPCHEM\HP\3\DATA\09_10_01\3_091022.D
Report generated: Tue Sep 11 10:01:59 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E02C1

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Matrix: (soil/water) SOIL Lab Sample ID: 47266.07

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

% Moisture: 30 decanted: (Y/N) __ Date Received: 08/11/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/14/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/11/01

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	47	U
11104-28-2	Aroclor-1221	47	U
11141-16-5	Aroclor-1232	47	U
53469-21-9	Aroclor-1242	47	U
12672-29-6	Aroclor-1248	47	U
11097-69-1	Aroclor-1254	47	U
11096-82-5	Aroclor-1260	47	U
	Surrogate amount spiked	9.43	

FORM I PCB

Chromatographic Report

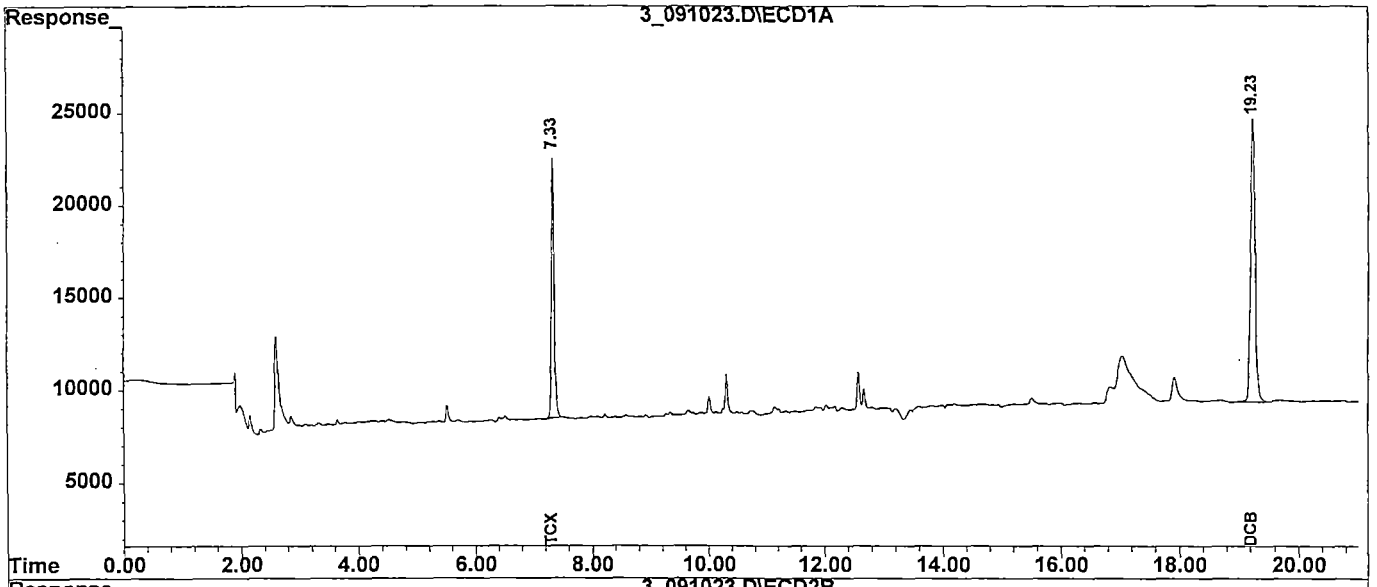
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091023.D\ECD1A.CH Vial: 62
Acq On : 11 Sep 2001 00:38 Operator: BTB
Sample : 47266.07 *E02C1 * Inst : HP_03
Misc : *EPA*30.3G/5.0ML*30 Dilution: 1.00
IntFile : events.e

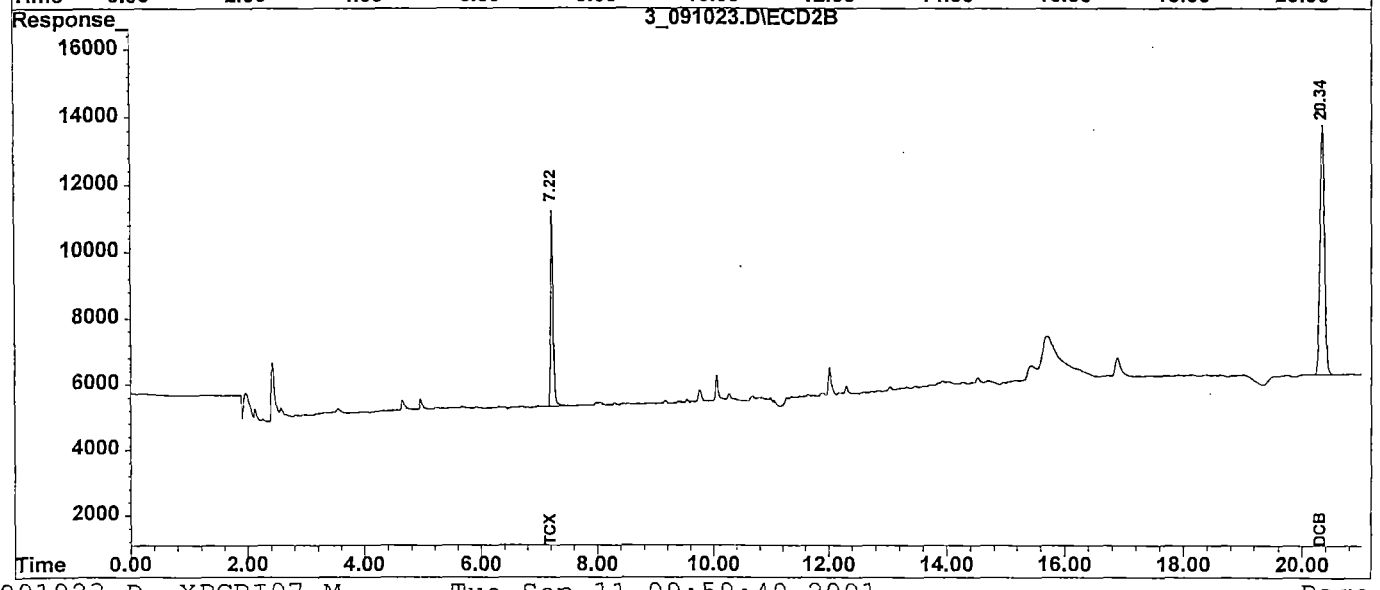
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091023.D\ECD2B.CH Vial: 62
Acq On : 11 Sep 2001 00:38 Operator: BTB
Sample : 47266.07 Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 9:40 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

ok 9-12-01





Quantitation Report

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091023.D\ECD1A.CH Vial: 62
Acq On : 11 Sep 2001 00:38 Operator: BTB
Sample : 47266.07 *E02C1 * Inst : HP_03
Misc : *EPA*30.3G/5.0ML*30 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091023.D\ECD2B.CH Vial: 62
Acq On : 11 Sep 2001 00:38 Operator: BTB
Sample : 47266.07 Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 9:40 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	437068	176245	6.494	7.196
	Spiked Amount 9.430			Recovery	=	68.87%	76.31%
22)	S DCB	19.24	20.34	786860	386662	8.843	9.133
	Spiked Amount 9.430			Recovery	=	93.78%	96.86%

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.

E02C2

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Matrix: (soil/water) SOIL Lab Sample ID: 47266.08

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

% Moisture: 28 decanted: (Y/N) __ Date Received: 08/11/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/14/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/11/01

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	46	U
11104-28-2	Aroclor-1221	46	U
11141-16-5	Aroclor-1232	46	U
53469-21-9	Aroclor-1242	46	U
12672-29-6	Aroclor-1248	46	U
11097-69-1	Aroclor-1254	46	U
11096-82-5	Aroclor-1260	46	U
Surrogate amount spiked		9.23	

FORM I PCB

Chromatographic Report

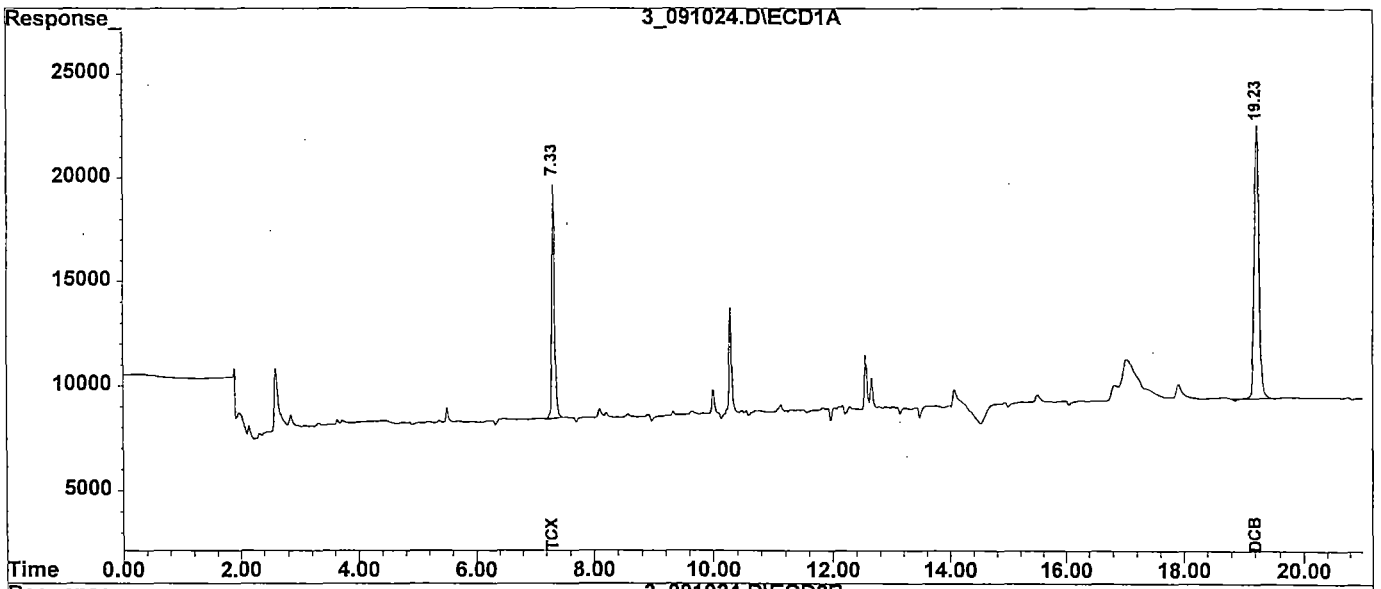
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091024.D\ECD1A.CH Vial: 63
Acq On : 11 Sep 2001 1:03 Operator: BTB
Sample : 47266.08 *E02C2 * Inst : HP_03
Misc : *EPA*30.1G/5.0ML*28 Dilution: 1.00
IntFile : events.e

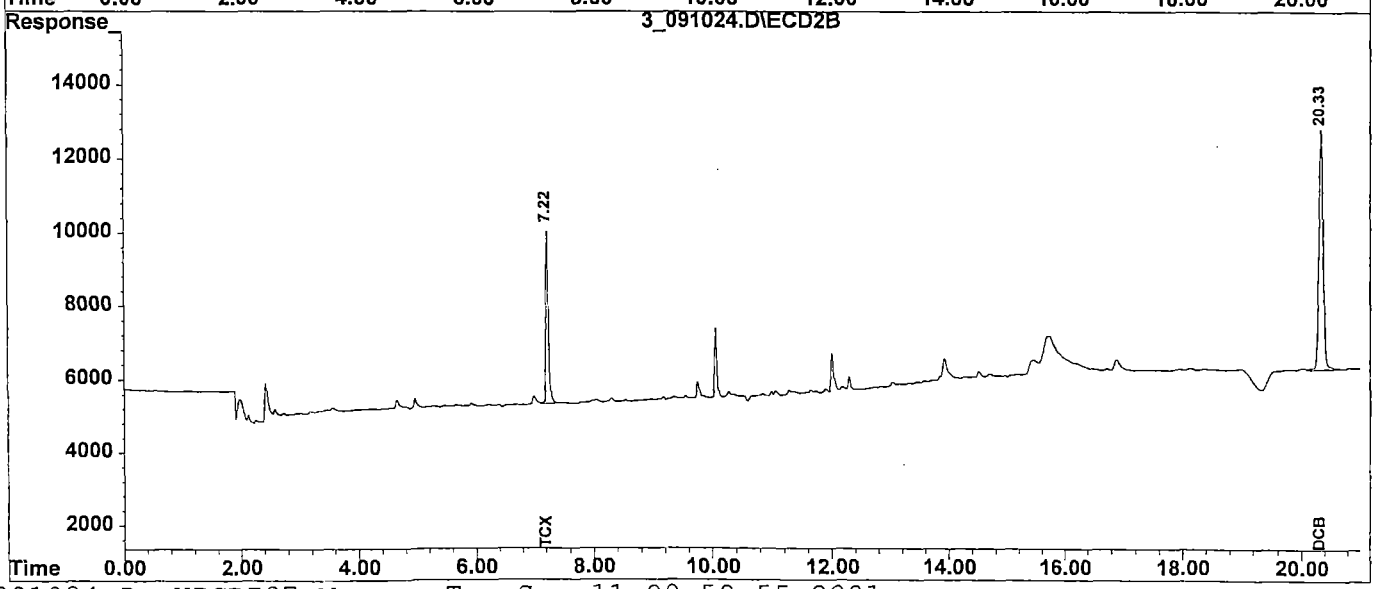
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091024.D\ECD2B.CH Vial: 63
Acq On : 11 Sep 2001 1:03 Operator: BTB
Sample : 47266.08 Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 9:41 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

ok 9-12-01





Quantitation Report

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091024.D\ECD1A.CH Vial: 63
Acq On : 11 Sep 2001 1:03 Operator: BTB
Sample : 47266.08 *E02C2 * Inst : HP_03
Misc : *EPA*30.1G/5.0ML*28 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091024.D\ECD2B.CH Vial: 63
Acq On : 11 Sep 2001 1:03 Operator: BTB
Sample : 47266.08 Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 9:41 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	357547	142500	5.200	5.694
	Spiked Amount 9.228			Recovery	=	56.35%	61.70%
22)	S DCB	19.24	20.34	676900	345905	7.445	7.996
	Spiked Amount 9.228			Recovery	=	80.67%	86.64%

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.

E02C3

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Matrix: (soil/water) SOIL Lab Sample ID: 47266.09

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

% Moisture: 31 decanted: (Y/N) __ Date Received: 08/11/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/14/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/11/01

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	48	U
11104-28-2	Aroclor-1221	48	U
11141-16-5	Aroclor-1232	48	U
53469-21-9	Aroclor-1242	48	U
12672-29-6	Aroclor-1248	48	U
11097-69-1	Aroclor-1254	48	U
11096-82-5	Aroclor-1260	48	U
	Surrogate amount spiked	9.63	

FORM I PCB

Chromatographic Report

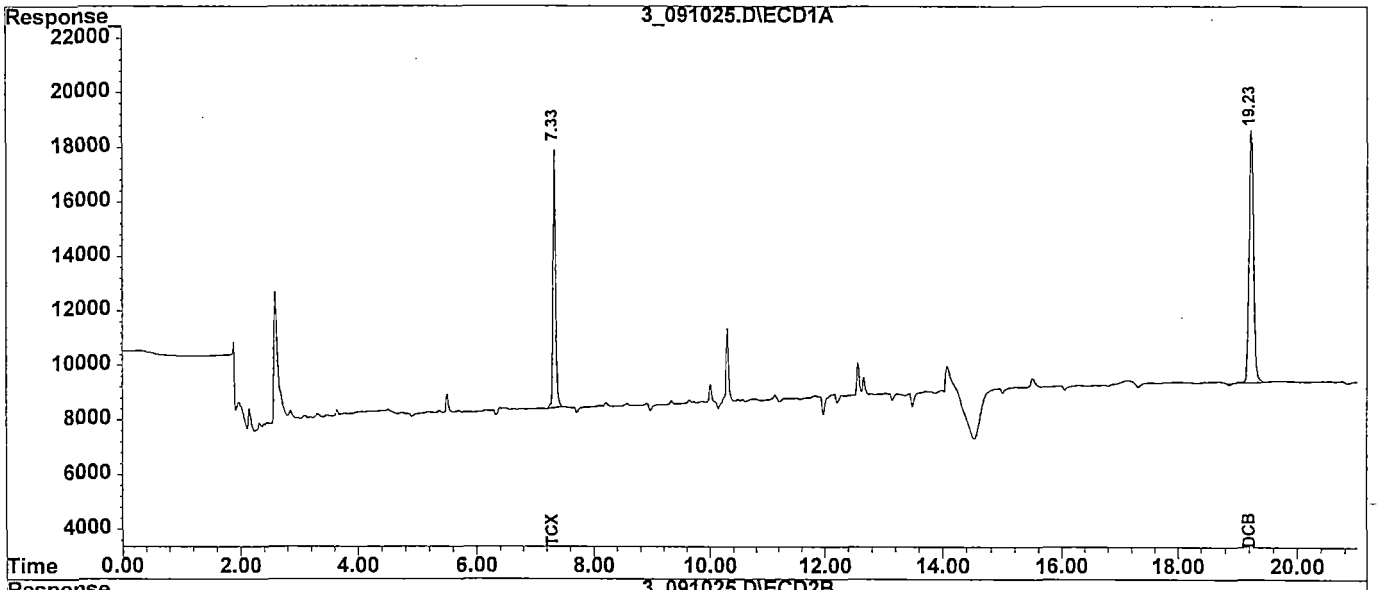
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091025.D\ECD1A.CH Vial: 64
Acq On : 11 Sep 2001 1:29 Operator: BTB
Sample : 47266.09 *E02C3 * Inst : HP_03
Misc : *EPA*30.1G/5.0ML*31 Dilution: 1.00
IntFile : events.e

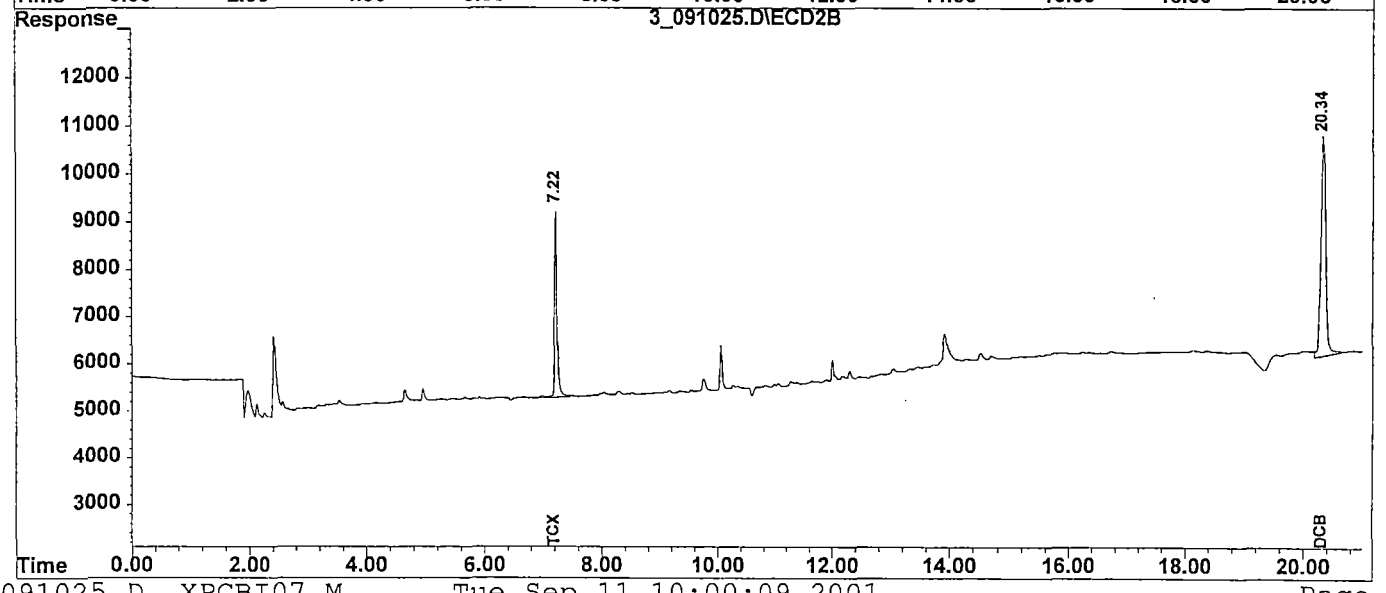
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091025.D\ECD2B.CH Vial: 64
Acq On : 11 Sep 2001 1:29 Operator: BTB
Sample : 47266.09 Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 9:43 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

ok 9-12-01 [illegible]

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

```
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091025.D\ECD1A.CH Vial: 64
Acq On    : 11 Sep 2001   1:29                        Operator: BTB
Sample    : 47266.09  *E02C3  *                       Inst    : HP_03
Misc      : *EPA*30.1G/5.0ML*31                       Dilution: 1.00
IntFile   : events.e

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091025.D\ECD2B.CH Vial: 64
Acq On    : 11 Sep 2001   1:29                        Operator: BTB
Sample    : 47266.09                                  Inst    : HP_03
Misc      :                                           Dilution: 1.00
IntFile   : events2.e
Quant Time: Sep 11  9:43 2001  Quant Results File: XPCBI07.RES

Method       : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	285449	122217	4.332	5.096
	Spiked Amount 9.630			Recovery	=	44.99%	52.92%
22)	S DCB	19.24	20.34	469830	251283	5.392	6.061
	Spiked Amount 9.630			Recovery	=	55.99%	62.94%

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.

E02C4

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Matrix: (soil/water) SOIL Lab Sample ID: 47266.10

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

% Moisture: 34 decanted: (Y/N) __ Date Received: 08/11/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/14/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/11/01

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	50	U
11104-28-2	Aroclor-1221	50	U
11141-16-5	Aroclor-1232	50	U
53469-21-9	Aroclor-1242	50	U
12672-29-6	Aroclor-1248	50	U
11097-69-1	Aroclor-1254	50	U
11096-82-5	Aroclor-1260	50	U
	Surrogate amount spiked	10.07	

Chromatographic Report

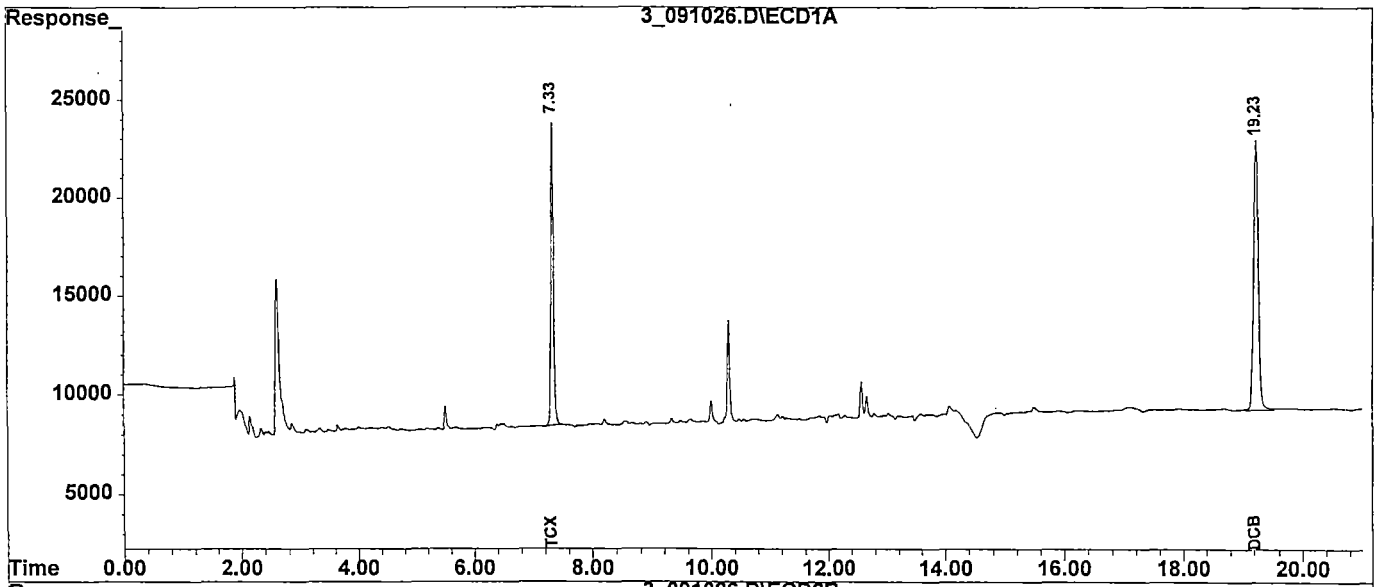
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091026.D\ECD1A.CH Vial: 65
Acq On : 11 Sep 2001 1:54 Operator: BTB
Sample : 47266.10 *E02C4 * Inst : HP_03
Misc : *EPA*30.1G/5.0ML*34 Dilution: 1.00
IntFile : events.e

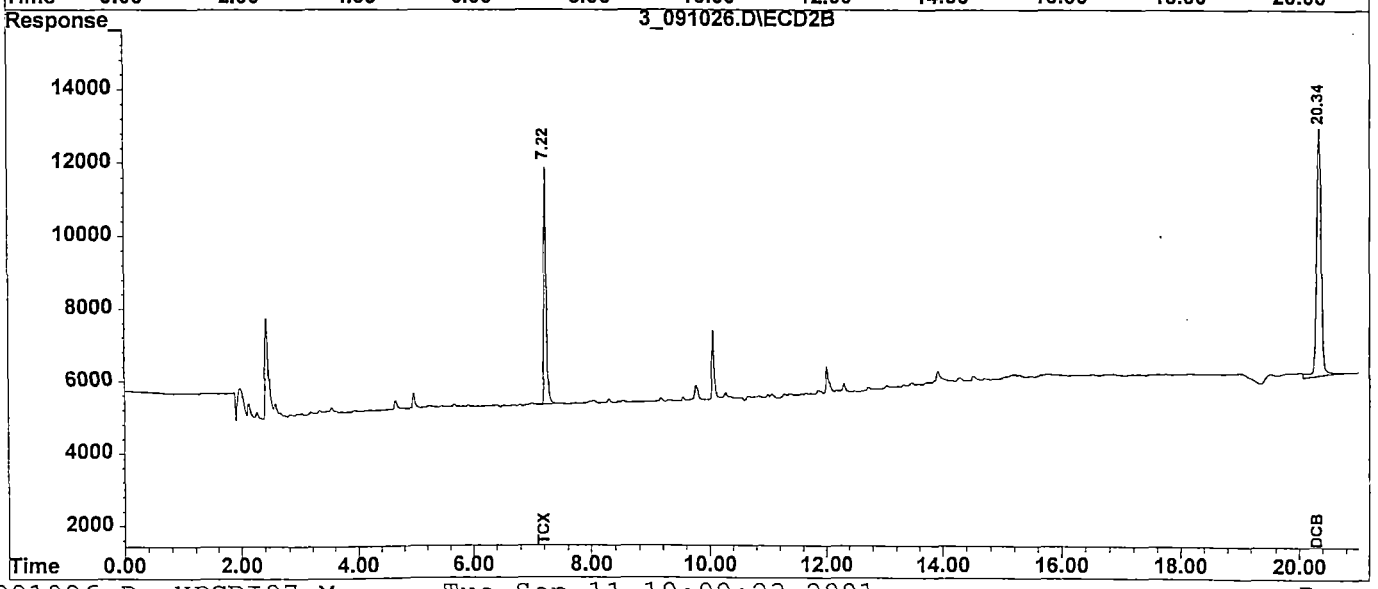
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091026.D\ECD2B.CH Vial: 65
Acq On : 11 Sep 2001 1:54 Operator: BTB
Sample : 47266.10 Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 9:44 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

ok 9-12-01





Quantitation Report

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091026.D\ECD1A.CH Vial: 65
Acq On : 11 Sep 2001 1:54 Operator: BTB
Sample : 47266.10 *E02C4 * Inst : HP_03
Misc : *EPA*30.1G/5.0ML*34 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091026.D\ECD2B.CH Vial: 65
Acq On : 11 Sep 2001 1:54 Operator: BTB
Sample : 47266.10 Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 9:44 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	455832	183263	7.231	7.989
	Spiked Amount 10.067			Recovery	=	71.83%	79.35%
22)	S DCB	19.24	20.34	711923	374379	8.542	9.441
	Spiked Amount 10.067			Recovery	=	84.85%	93.78%

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.

E02C5

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Matrix: (soil/water) SOIL Lab Sample ID: 47266.11

Sample wt/vol: 30.0 (g/mL) G Lab File ID:_____

% Moisture: 49 decanted: (Y/N) __ Date Received: 08/11/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/14/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/11/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

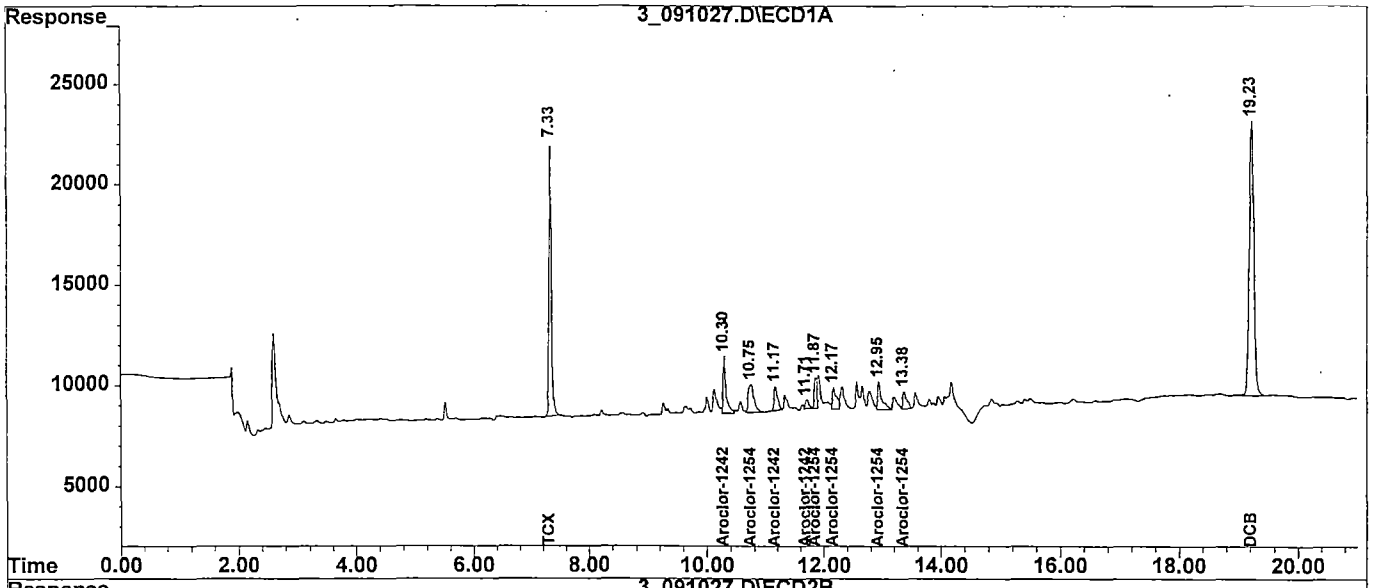
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	65	U
11104-28-2	Aroclor-1221	65	U
11141-16-5	Aroclor-1232	65	U
53469-21-9	Aroclor-1242	38	J
12672-29-6	Aroclor-1248	65	U
11097-69-1	Aroclor-1254	22	J
11096-82-5	Aroclor-1260	65	U
	Surrogate amount spiked	13.08	

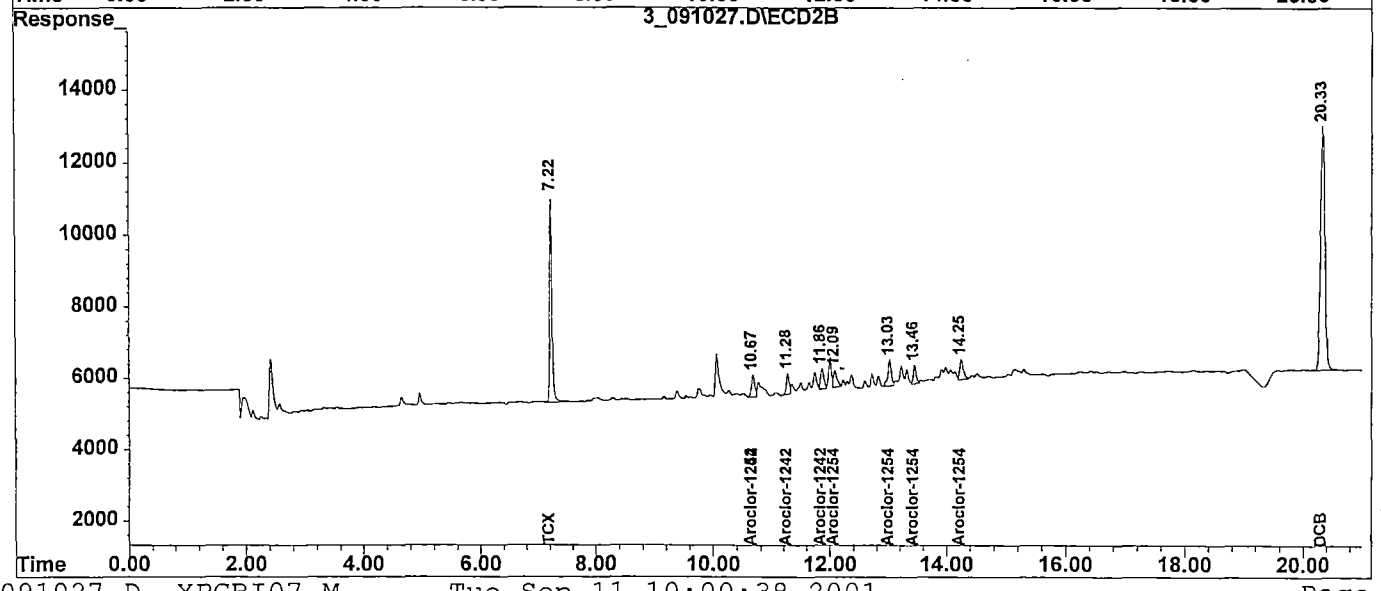
FORM I PCB

Chromatographic Report

```
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091027.D\ECD1A.CH Vial: 66
Acq On    : 11 Sep 2001   2:20                        Operator: BTB
Sample    : 47266.11  *E02C5  *                       Inst    : HP_03
Misc      : *EPA*30G/5.0ML*49                         Dilution: 1.00
IntFile   : events.e

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091027.D\ECD2B.CH Vial: 66
Acq On    : 11 Sep 2001   2:20                        Operator: BTB
Sample    : 47266.11                                  Inst    : HP_03
Misc      :                                           Dilution: 1.00
IntFile   : events2.e
Quant Time: Sep 11  9:47 2001  Quant Results File: XPCBI07.RES

Method        : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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
```

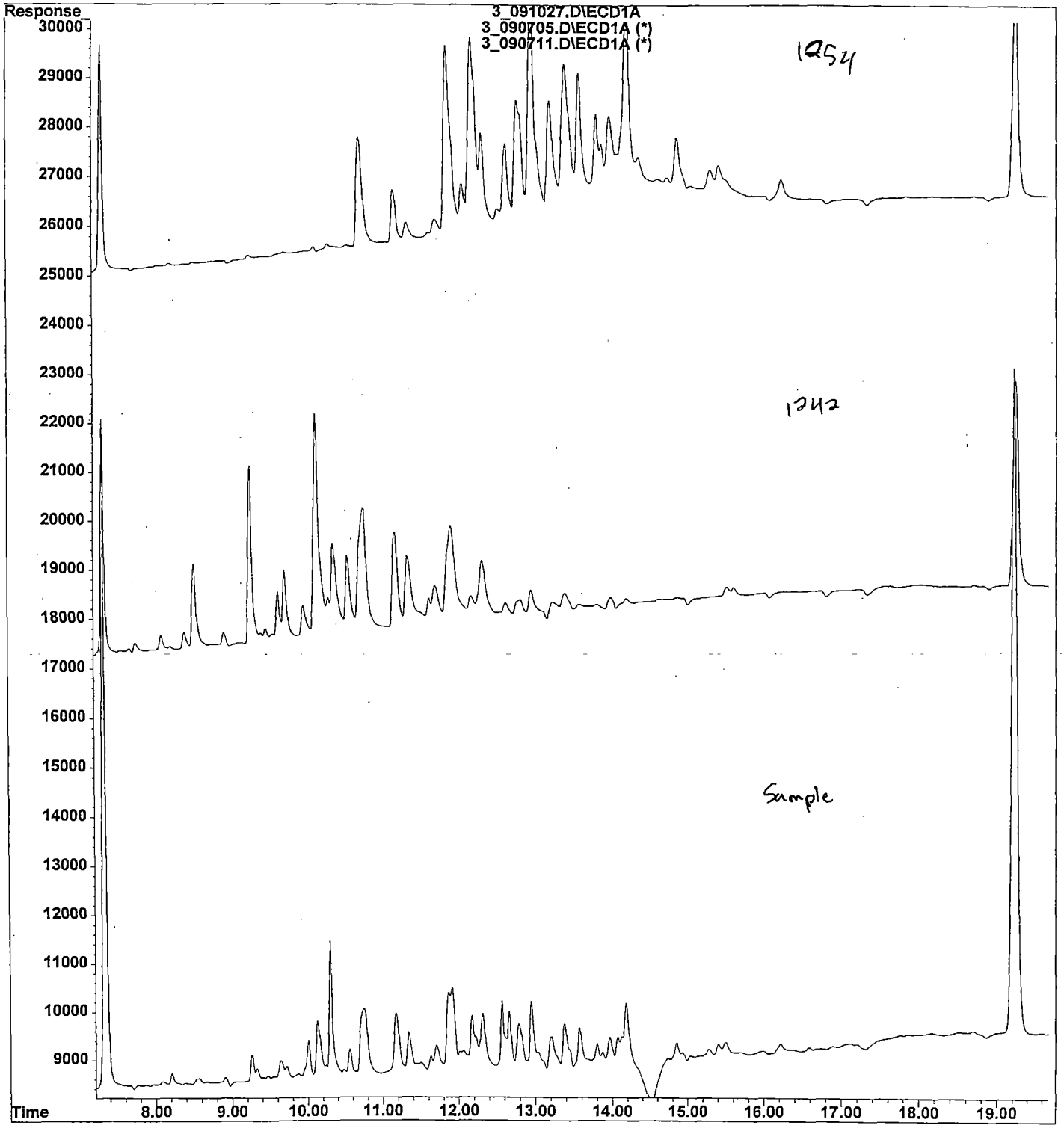
ok 9-12-01





File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091027.D
Operator : BTB
Acquired : 11 Sep 2001 2:20 using AcqMethod OLM03.M
Instrument : HP_03
Sample Name: 47266.11
Misc Info :
Vial Number: 66

ok 9-12-01



Quantitation Report

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091027.D\ECD1A.CH Vial: 66
Acq On : 11 Sep 2001 2:20 Operator: BTB
Sample : 47266.11 *E02C5 * Inst : HP_03
Misc : *EPA*30G/5.0ML*49 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091027.D\ECD2B.CH Vial: 66
Acq On : 11 Sep 2001 2:20 Operator: BTB
Sample : 47266.11 Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 9:47 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.22	403427	165526	8.310	9.369	
	Spiked Amount 13.072			Recovery	=	63.57%	71.67%	
22)	S DCB	19.23	20.34	698600	346054	10.9	11.3	
	Spiked Amount 13.072			Recovery	=	83.39%	86.45%	
	Target Compounds:							
9)	L4 Aroclor-1242 {3}	10.30f	10.67	95881	22814	63.9	34.7	#
10)	L4 Aroclor-1242 {4}	11.18	11.28	54270	20798	35.5	43.2	
11)	L4 Aroclor-1242 {5}	11.71	11.87	18637	23258	23.5	36.2	#
	Sum Aroclor-1242			168789	66870	123.0	114.1	
	Average Aroclor-1242					40.984	38.028	
12)	L6 Aroclor-1254	10.75f	10.67	97430	22814	56.7	44.0	
13)	L6 Aroclor-1254 {2}	11.87	12.09	45390	20161	13.5	14.9	
14)	L6 Aroclor-1254 {3}	12.18	13.03	51282	30765	15.2	16.4	
15)	L6 Aroclor-1254 {4}	12.95	13.46	66631	17797	17.0	17.0	
16)	L6 Aroclor-1254 {5}	13.38	14.25	41548	24638	14.4	17.7	
	Sum Aroclor-1254			302282	116176	116.8	110.0	
	Average Aroclor-1254					23.352	21.991	

(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.

E02C6

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Matrix: (soil/water) SOIL Lab Sample ID: 47266.12

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

% Moisture: 81 decanted: (Y/N) __ Date Received: 08/11/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/14/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/11/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	170	U
11104-28-2	Aroclor-1221	170	U
11141-16-5	Aroclor-1232	170	U
53469-21-9	Aroclor-1242	170	U
12672-29-6	Aroclor-1248	170	U
11097-69-1	Aroclor-1254	170	U
11096-82-5	Aroclor-1260	170	U
Surrogate amount spiked		34.98	

FORM I PCB

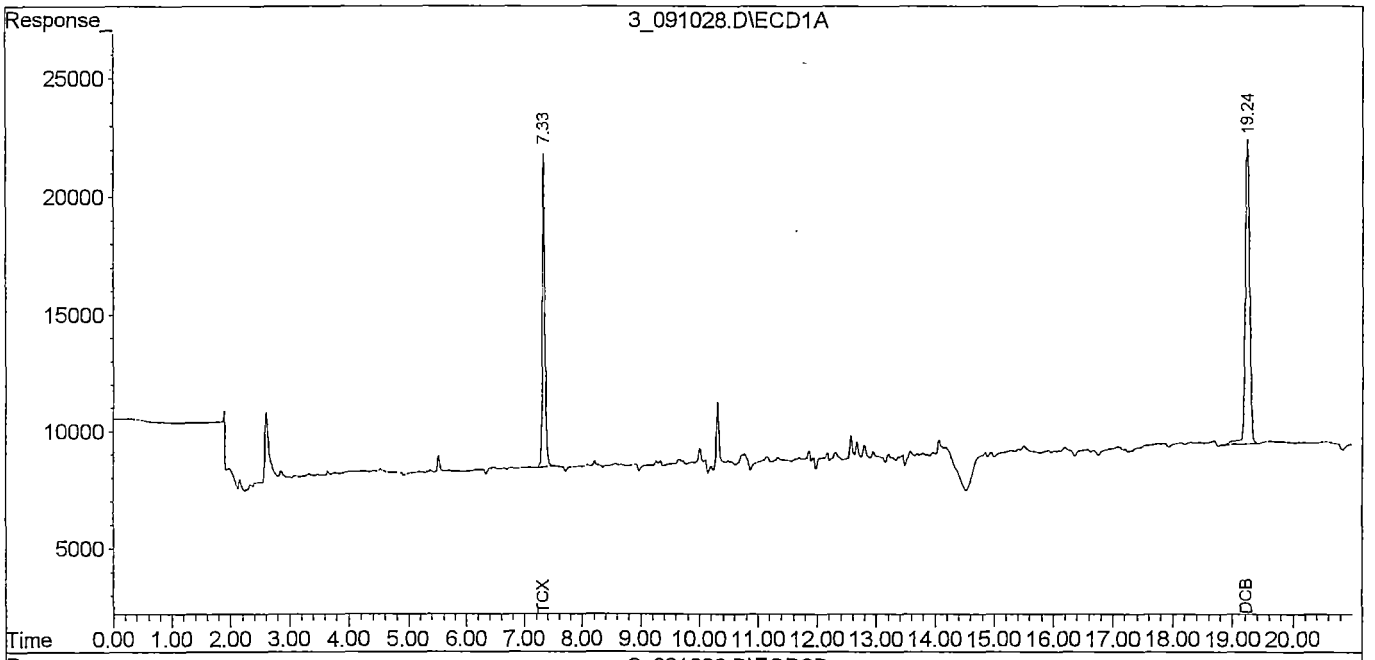
Chromatographic Report

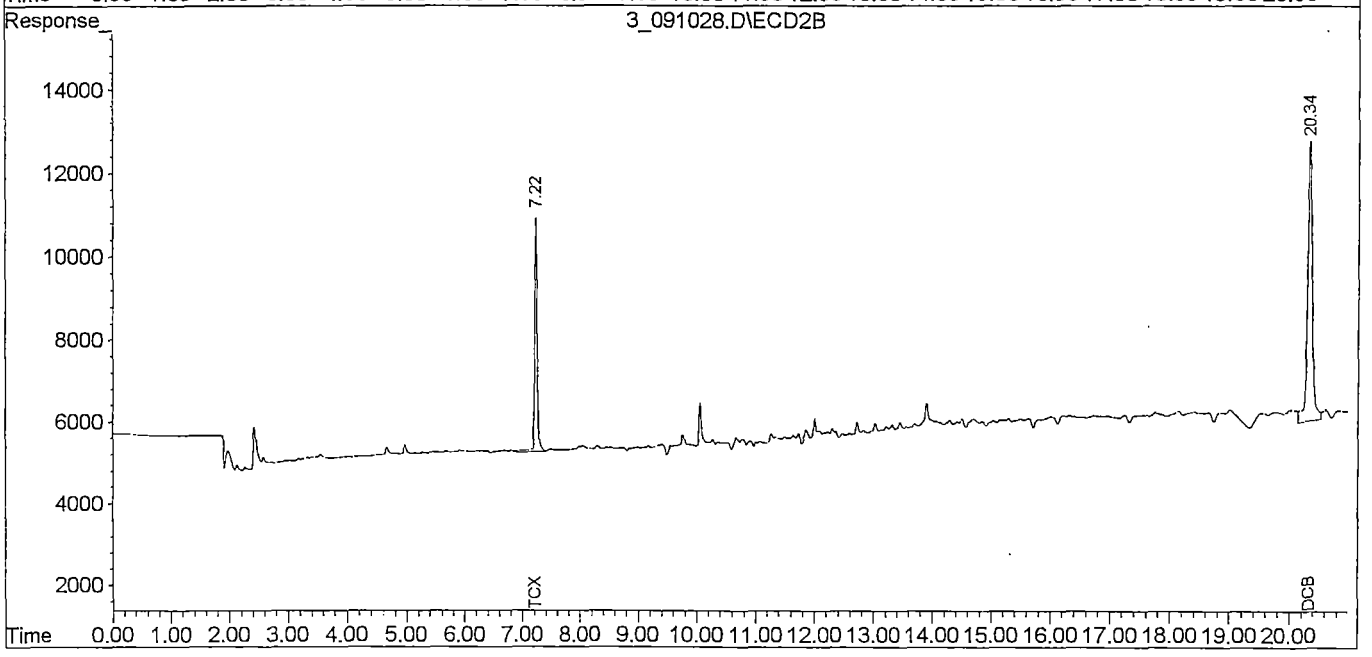
Signal #1 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091028.D\ECD1A.CH Vial: 67
Signal #2 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091028.D\ECD2B.CH
Acq On : 11 Sep 2001 2:46 Operator: BTB
Sample : 47266.12 *E02C6 * Inst : HP_03
Misc : *EPA*30.1G/5.0ML*81 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 12 11:07 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

ok 9-12-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091028.D\ECD1A.CH Vial: 67
Signal #2 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091028.D\ECD2B.CH
Acq On : 11 Sep 2001 2:46 Operator: BTB
Sample : 47266.12 *E02C6 * Inst : HP_03
Misc : *EPA*30.1G/5.0ML*81 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 12 11:07 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	400344	171715	22.1	26.0
	Spiked Amount 34.971			Recovery	=	63.19%	74.35%
22)	S DCB	19.24	20.34	669406	388360	27.9	34.0
	Spiked Amount 34.971			Recovery	=	79.78%	97.22%
	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.

E02C7

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Matrix: (soil/water) SOIL Lab Sample ID: 47266.13

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

% Moisture: 86 decanted: (Y/N) __ Date Received: 08/11/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/14/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/11/01

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	230	U
11104-28-2	Aroclor-1221	230	U
11141-16-5	Aroclor-1232	230	U
53469-21-9	Aroclor-1242	230	U
12672-29-6	Aroclor-1248	230	U
11097-69-1	Aroclor-1254	230	U
11096-82-5	Aroclor-1260	230	U
	Surrogate amount spiked	47.30	

FORM I PCB

Chromatographic Report

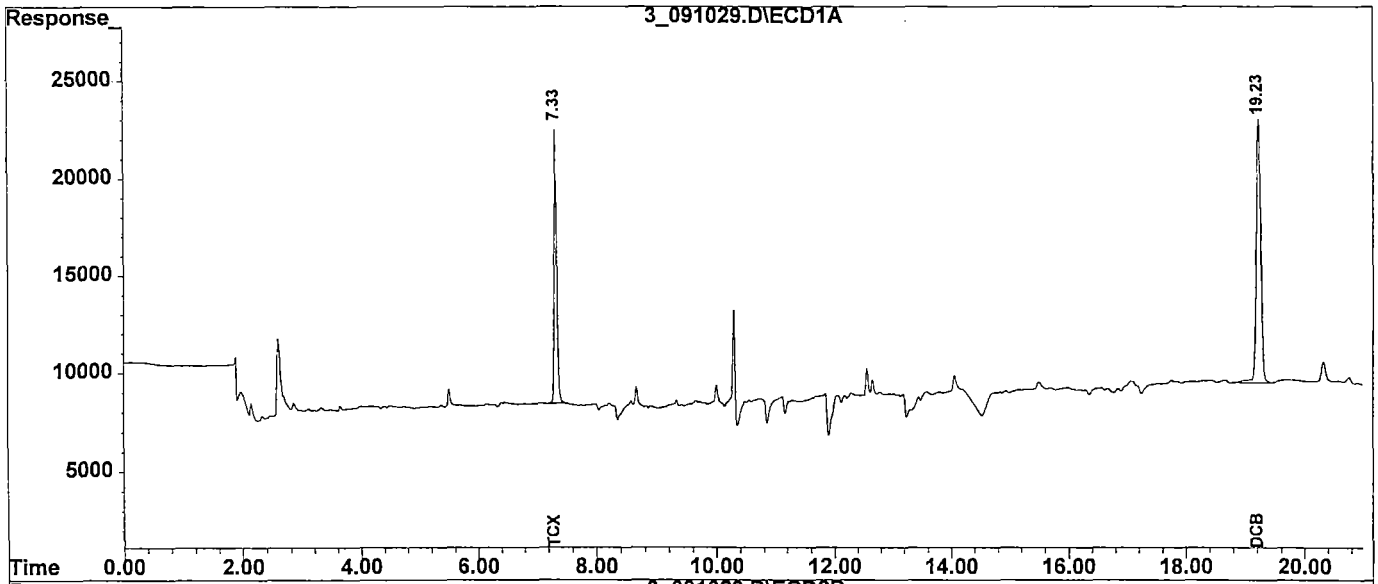
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091029.D\ECD1A.CH Vial: 68
Acq On : 11 Sep 2001 3:12 Operator: BTB
Sample : 47266.13 *E02C7 * Inst : HP_03
Misc : *EPA*30.2G/5.0ML*86 Dilution: 1.00
IntFile : events.e

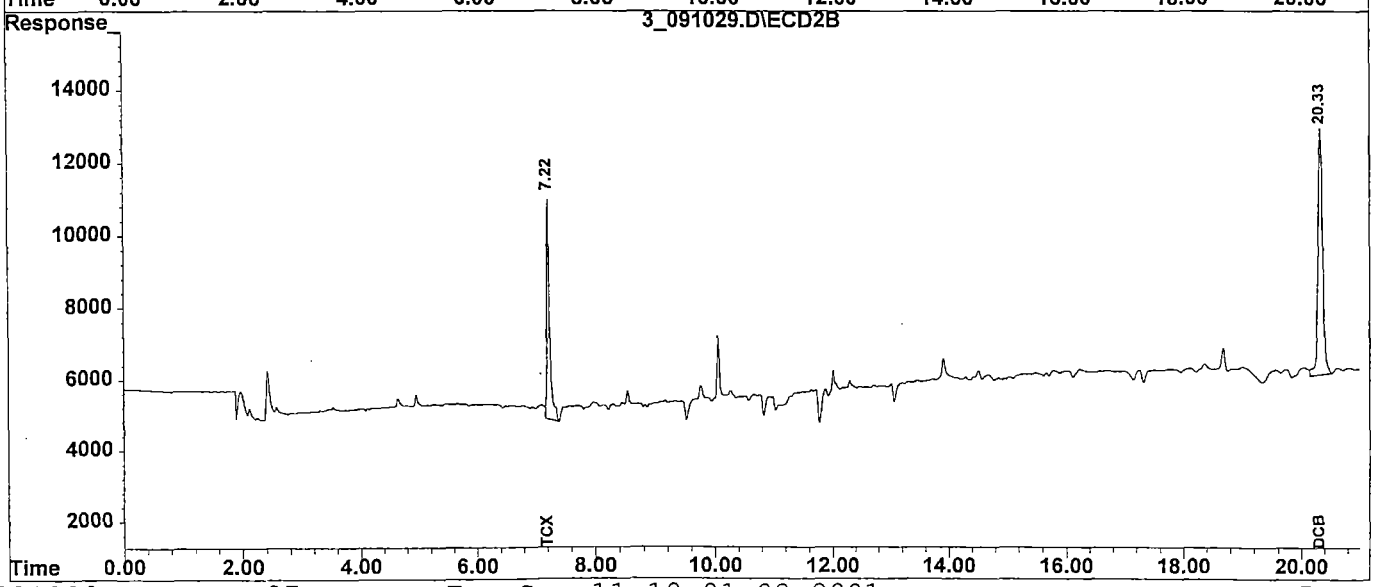
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091029.D\ECD2B.CH Vial: 68
Acq On : 11 Sep 2001 3:12 Operator: BTB
Sample : 47266.13 Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 9:57 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

ok 9-12-01

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

```
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091029.D\ECD1A.CH Vial: 68
Acq On    : 11 Sep 2001   3:12                        Operator: BTB
Sample    : 47266.13  *E02C7  *                       Inst    : HP_03
Misc      : *EPA*30.2G/5.0ML*86                       Dilution: 1.00
IntFile   : events.e

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091029.D\ECD2B.CH Vial: 68
Acq On    : 11 Sep 2001   3:12                        Operator: BTB
Sample    : 47266.13                                  Inst    : HP_03
Misc      :                                           Dilution: 1.00
IntFile   : events2.e
Quant Time: Sep 11  9:57 2001  Quant Results File: XPCBI07.RES

Method       : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.22	425196	206273	31.7	42.3	#
	Spiked Amount 47.304			Recovery	=	67.01%	89.42%	
22)	S DCB	19.24	20.34	693816	379400	39.1	45.0	
	Spiked Amount 47.304			Recovery	=	82.66%	95.13%	

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.

E02C8

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Matrix: (soil/water) SOIL Lab Sample ID: 47266.14

Sample wt/vol: 30.5 (g/mL) G Lab File ID:_____

% Moisture: 88 decanted: (Y/N) __ Date Received: 08/11/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/14/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/11/01

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	270	U
11104-28-2	Aroclor-1221	270	U
11141-16-5	Aroclor-1232	270	U
53469-21-9	Aroclor-1242	270	U
12672-29-6	Aroclor-1248	270	U
11097-69-1	Aroclor-1254	270	U
11096-82-5	Aroclor-1260	270	U
	Surrogate amount spiked	54.64	

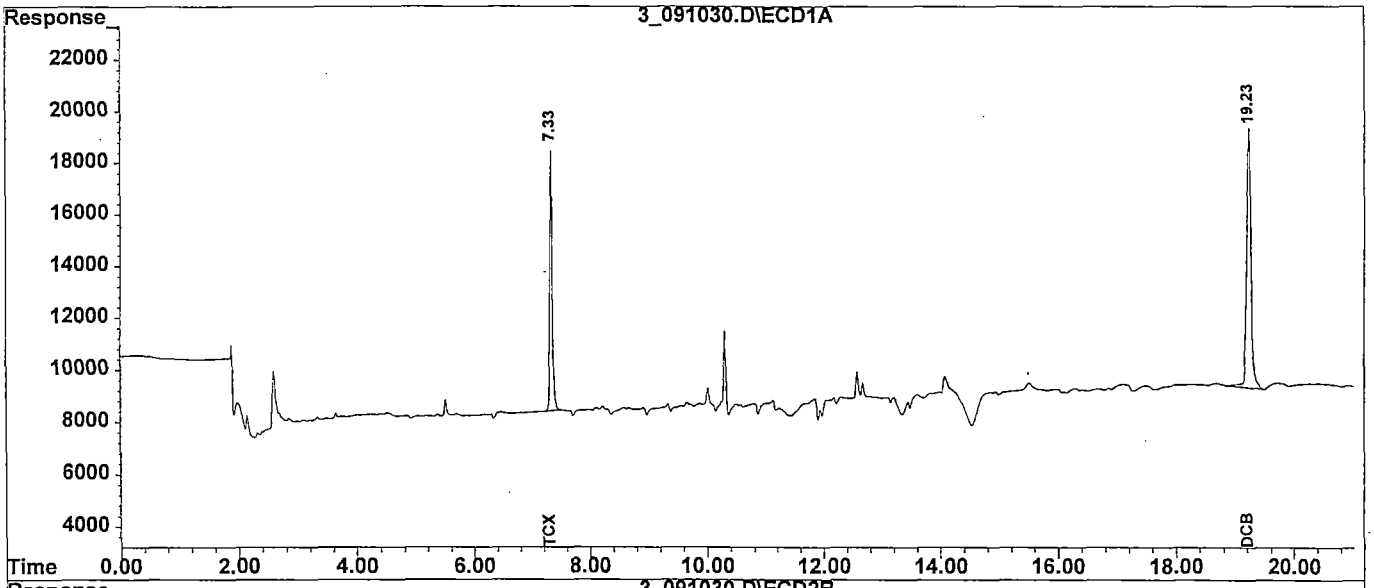
FORM I PCB

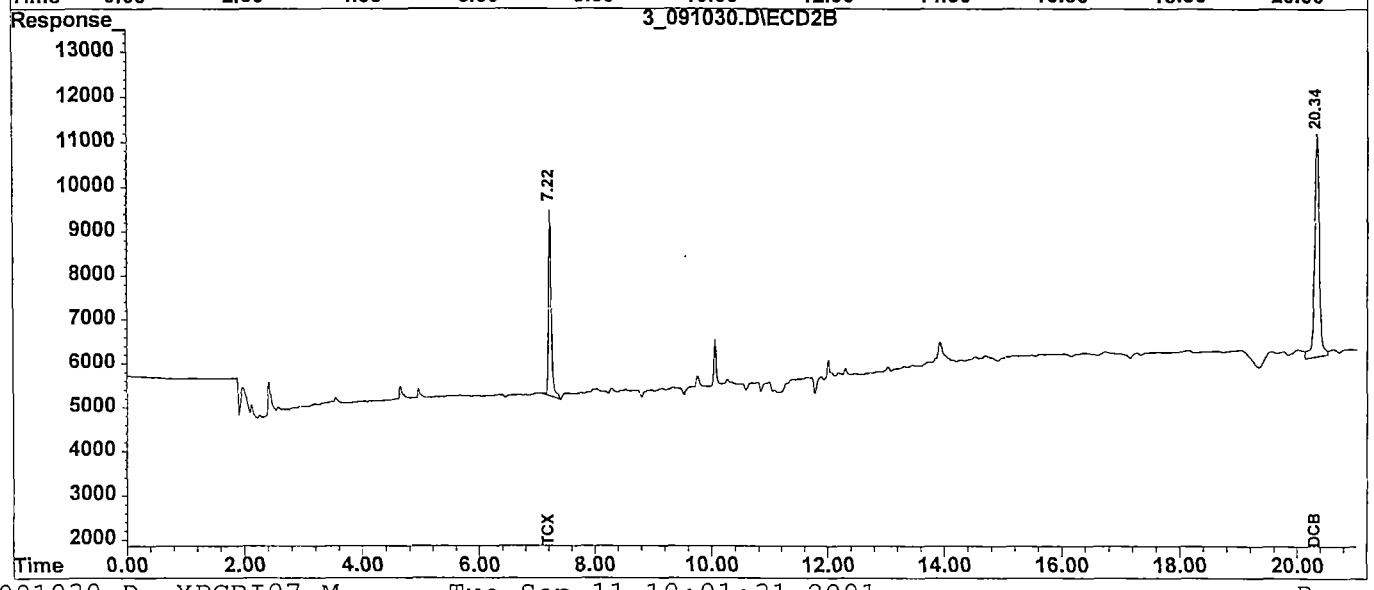
Chromatographic Report

```
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091030.D\ECD1A.CH Vial: 69
Acq On    : 11 Sep 2001   3:37                        Operator: BTB
Sample    : 47266.14  *E02C8  *                       Inst    : HP_03
Misc      : *EPA*30.5G/5.0ML*88                       Dilution: 1.00
IntFile   : events.e

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091030.D\ECD2B.CH Vial: 69
Acq On    : 11 Sep 2001   3:37                        Operator: BTB
Sample    : 47266.14                                  Inst    : HP_03
Misc      :                                           Dilution: 1.00
IntFile   : events2.e
Quant Time: Sep 11  9:57 2001  Quant Results File: XPCBI07.RES

Method        : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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
```

ok 9-12-01

```
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

```
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091030.D\ECD1A.CH Vial: 69
Acq On    : 11 Sep 2001   3:37                        Operator: BTB
Sample    : 47266.14  *E02C8  *                       Inst    : HP_03
Misc      : *EPA*30.5G/5.0ML*88                       Dilution: 1.00
IntFile   : events.e

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091030.D\ECD2B.CH Vial: 69
Acq On    : 11 Sep 2001   3:37                        Operator: BTB
Sample    : 47266.14                                  Inst    : HP_03
Misc      :                                           Dilution: 1.00
IntFile   : events2.e
Quant Time: Sep 11  9:57 2001  Quant Results File: XPCBI07.RES

Method       : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	308079	132668	26.5	31.4
	Spiked Amount 54.645			Recovery	=	48.50%	57.46%
22)	S DCB	19.24	20.34	525846	281779	34.2	38.6
	Spiked Amount 54.645			Recovery	=	62.59%	70.64%

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.

E02C9

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Matrix: (soil/water) SOIL Lab Sample ID: 47266.15

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

% Moisture: 89 decanted: (Y/N) __ Date Received: 08/11/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/14/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/11/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	300	U
11104-28-2	Aroclor-1221	300	U
11141-16-5	Aroclor-1232	300	U
53469-21-9	Aroclor-1242	300	U
12672-29-6	Aroclor-1248	300	U
11097-69-1	Aroclor-1254	300	U
11096-82-5	Aroclor-1260	300	U
Surrogate amount spiked		60.40	

FORM I PCB

Chromatographic Report

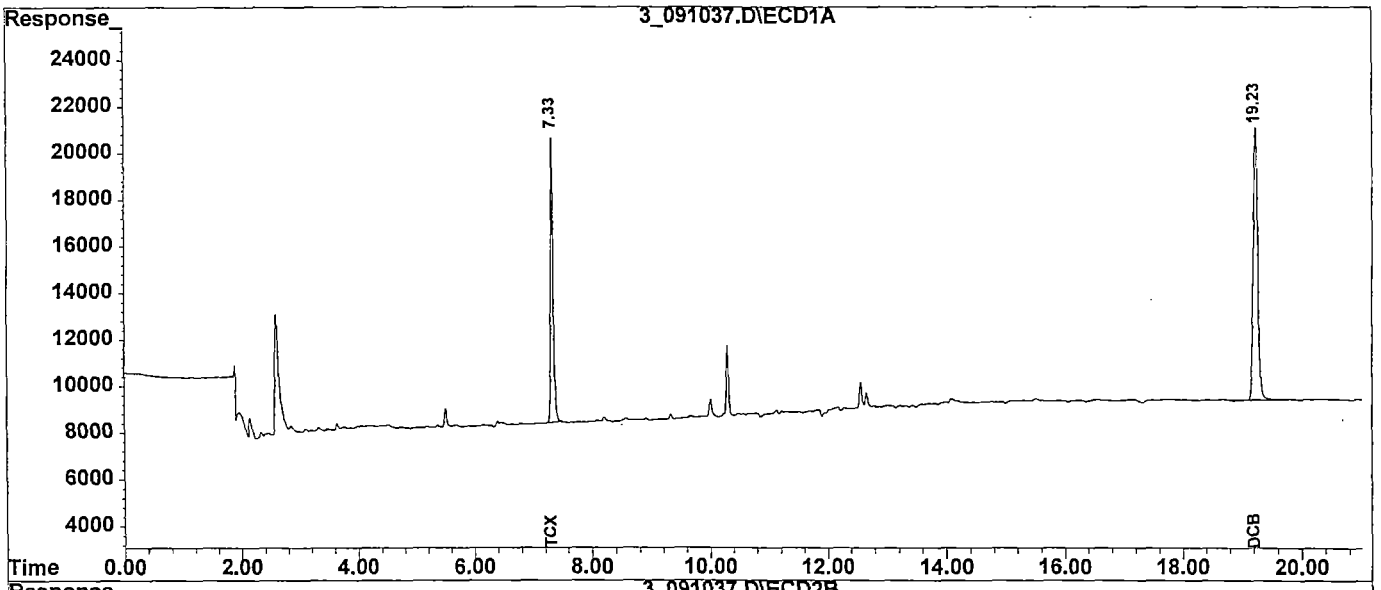
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091037.D\ECD1A.CH Vial: 76
Acq On : 11 Sep 2001 6:37 Operator: BTB
Sample : 47266.15 *E02C9 * Inst : HP_03
Misc : *EPA*30.1G/5.0ML*89 Dilution: 1.00
IntFile : events.e

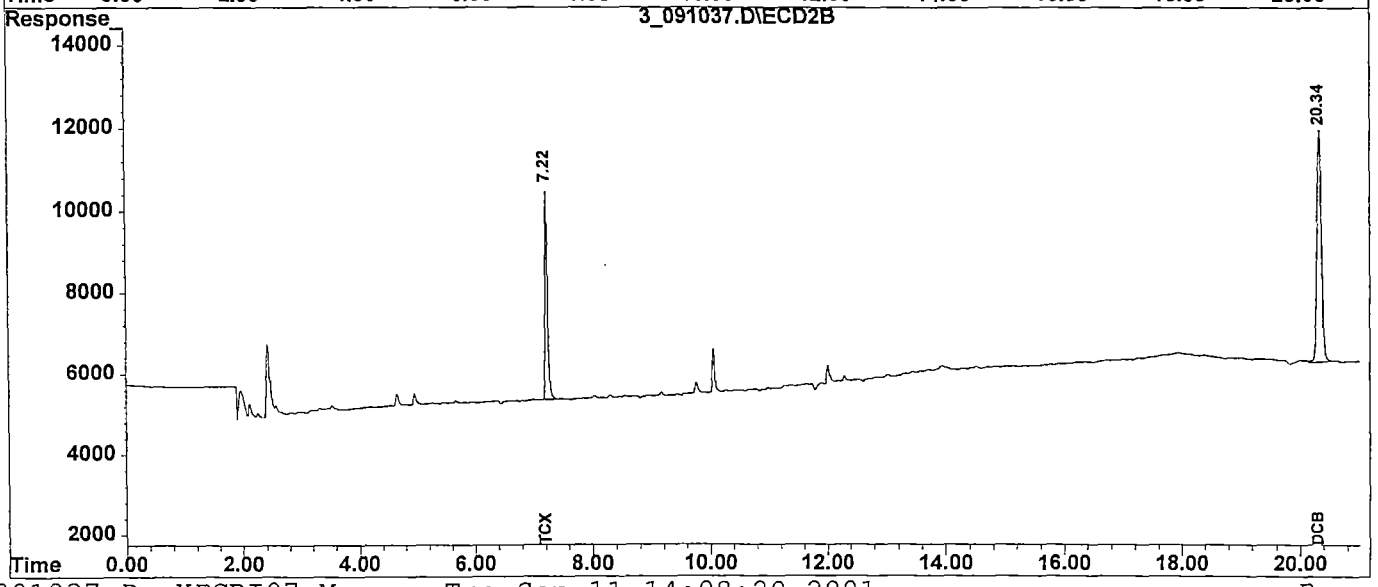
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091037.D\ECD2B.CH Vial: 76
Acq On : 11 Sep 2001 6:37 Operator: BTB
Sample : 47266.15 Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 13:46 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

ok 9-12-01 CH

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

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091037.D\ECD1A.CH Vial: 76
Acq On : 11 Sep 2001 6:37 Operator: BTB
Sample : 47266.15 *E02C9 * Inst : HP_03
Misc : *EPA*30.1G/5.0ML*89 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091037.D\ECD2B.CH Vial: 76
Acq On : 11 Sep 2001 6:37 Operator: BTB
Sample : 47266.15 Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 13:46 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	369230	148854	35.1	38.9
	Spiked Amount 60.405			Recovery	=	58.11%	64.40%
22)	S DCB	19.24	20.34	602524	297885	43.4	45.1
	Spiked Amount 60.405			Recovery	=	71.85%	74.66%

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.

E02D0

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Matrix: (soil/water) SOIL Lab Sample ID: 47266.16

Sample wt/vol: 30.0 (g/mL) G Lab File ID:_____

% Moisture: 13 decanted: (Y/N) __ Date Received: 08/11/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/14/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/11/01

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	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	48	P
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	16	J
11096-82-5	Aroclor-1260	38	U
Surrogate amount spiked		7.66	

FORM I PCB

Chromatographic Report

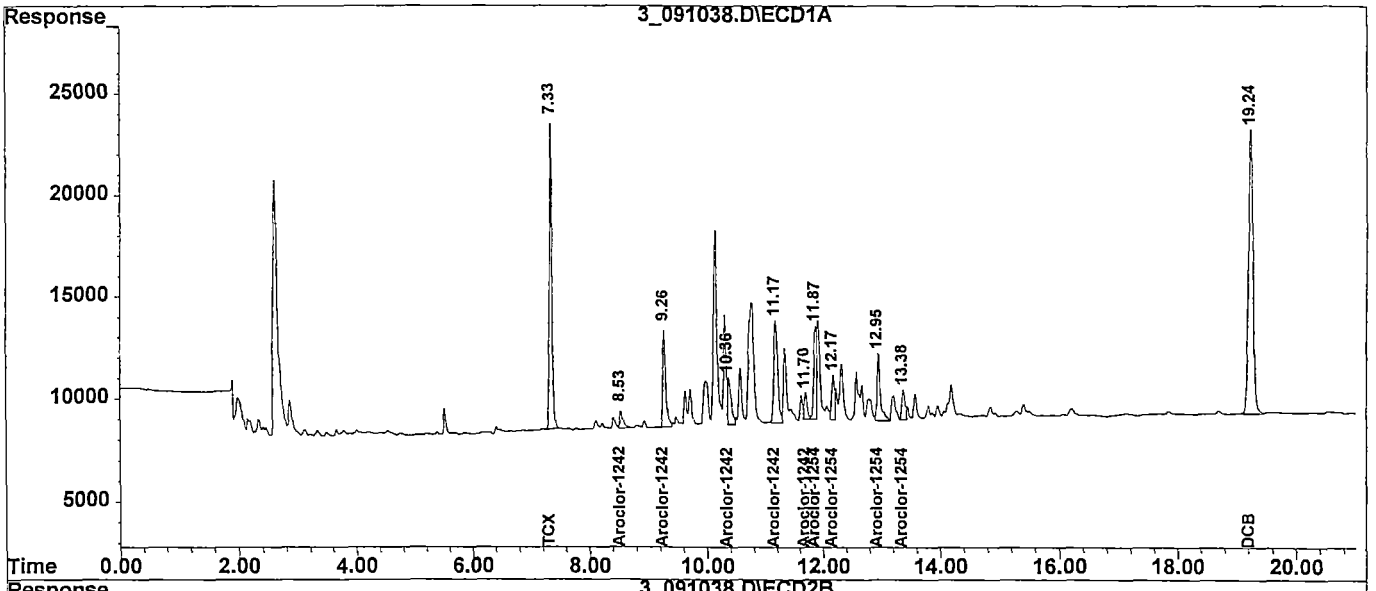
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091038.D\ECD1A.CH Vial: 77
Acq On : 11 Sep 2001 7:03 Operator: BTB
Sample : 47266.16 *E02D0 * Inst : HP_03
Misc : *EPA*30G/5.0ML*13 Dilution: 1.00
IntFile : events.e

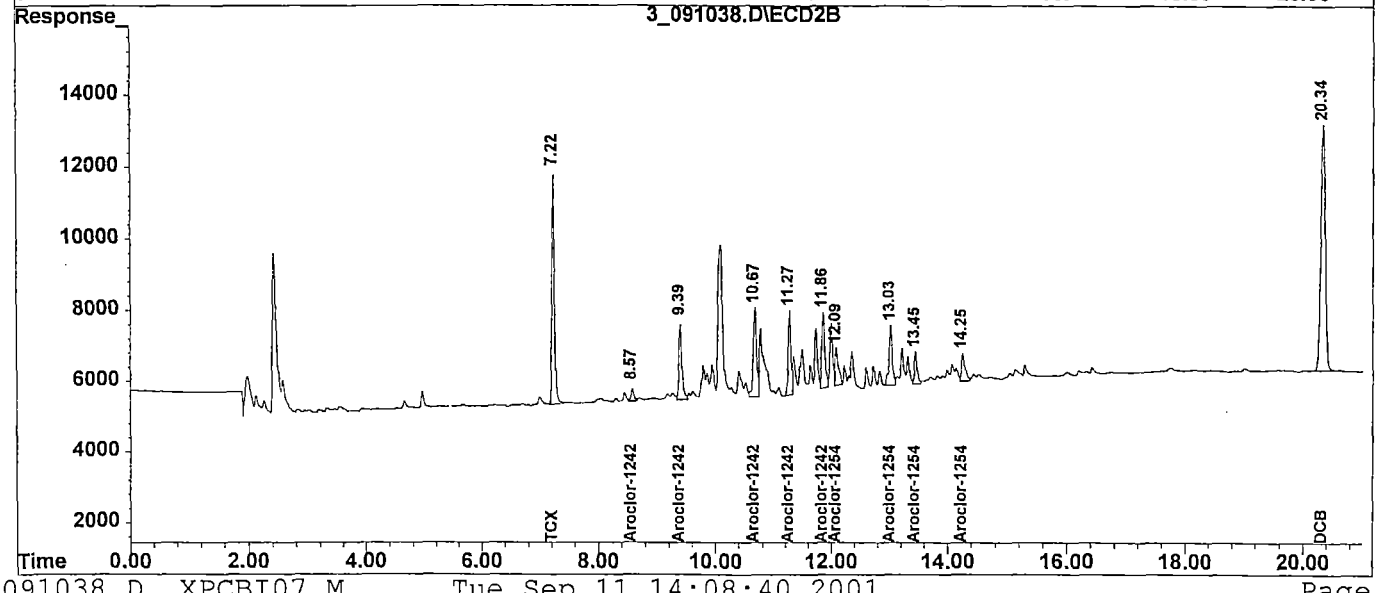
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091038.D\ECD2B.CH Vial: 77
Acq On : 11 Sep 2001 7:03 Operator: BTB
Sample : 47266.16 Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 13:54 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

ok 9-12-01

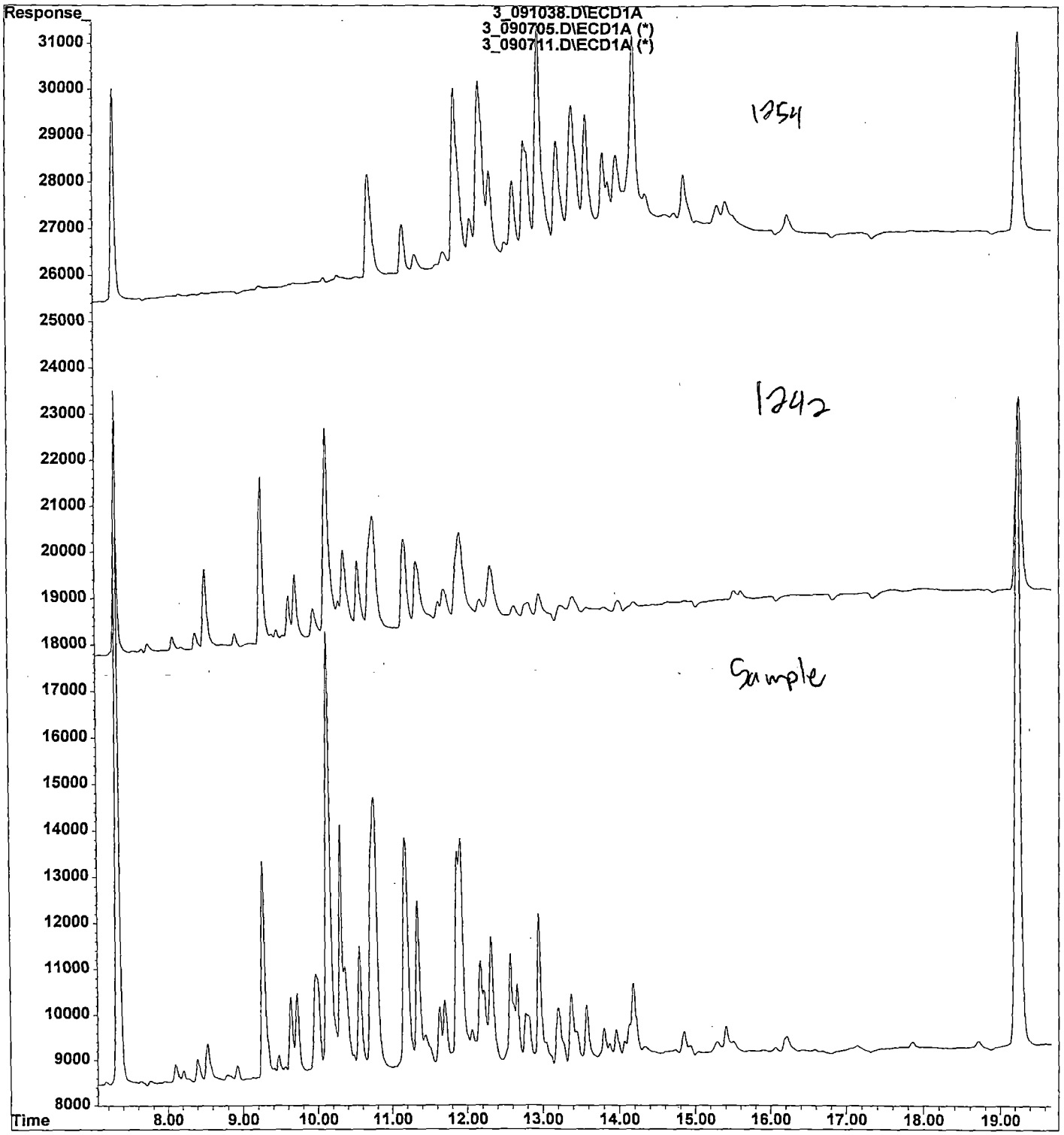
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091038.D
Operator : BTB
Acquired : 11 Sep 2001 7:03 using AcqMethod OLM03.M
Instrument : HP_03
Sample Name: 47266.16
Misc Info :
Vial Number: 77

ok 9-12-01



Quantitation Report

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091038.D\ECD1A.CH Vial: 77
Acq On : 11 Sep 2001 7:03 Operator: BTB
Sample : 47266.16 *E02D0 * Inst : HP_03
Misc : *EPA*30G/5.0ML*13 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091038.D\ECD2B.CH Vial: 77
Acq On : 11 Sep 2001 7:03 Operator: BTB
Sample : 47266.16 Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 13:54 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

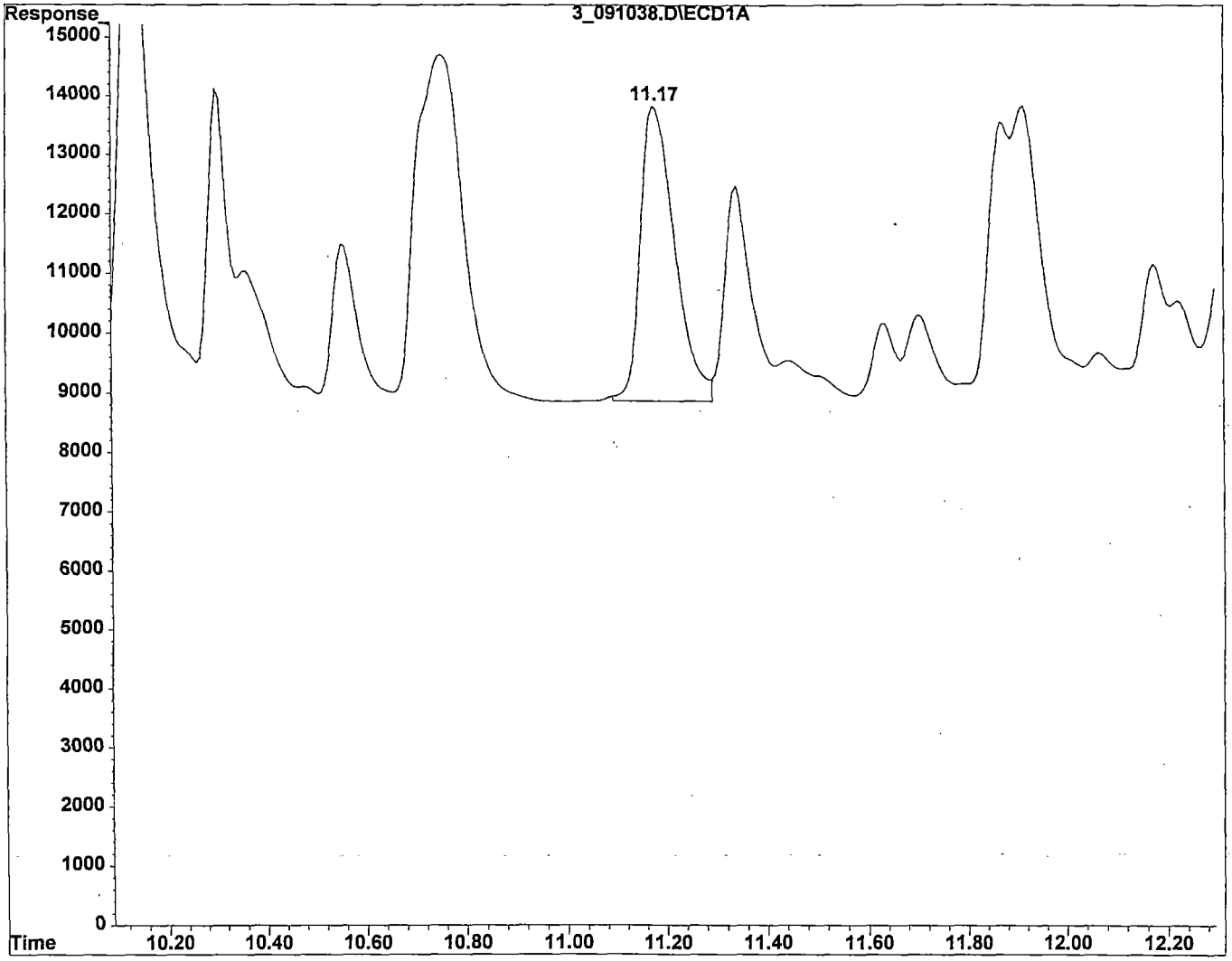
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.22	447317	183977	5.401	6.105	
	Spiked Amount 7.663			Recovery	=	70.48%	79.67%	
22)	S DCB	19.24	20.34	721995	356588	6.594	6.844	
	Spiked Amount 7.663			Recovery	=	86.05%	89.31%	
	Target Compounds:							
7)	L4 Aroclor-1242	8.53	8.57	36356	12632	22.2	22.4	
8)	L4 Aroclor-1242 {2}	9.26	9.39	170793	76918	54.9	59.8	
9)	L4 Aroclor-1242 {3}	10.36	10.67	96112	98930	37.6	88.1	#
10)	L4 Aroclor-1242 {4}	11.17	11.28	238348	80229	91.5m	97.7	
11)	L4 Aroclor-1242 {5}	11.70	11.86	46906	80005	34.7	73.1	#
	Sum Aroclor-1242			588516	348714	240.7	341.0	
	Average Aroclor-1242					48.146	68.208	
13)	L6 Aroclor-1254 {2}	11.87	12.09	125204	43973	21.8	19.0	
14)	L6 Aroclor-1254 {3}	12.18	13.03	70860	64828	12.3	20.3	#
15)	L6 Aroclor-1254 {4}	12.95	13.46	131113	30056	19.6	16.8	
16)	L6 Aroclor-1254 {5}	13.38	14.25	52032	35984	10.5	15.2	#
	Sum Aroclor-1254			379208	174841	64.2	71.2	
	Average Aroclor-1254					16.060	17.808	

BTB 091107

(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_10_01\3_091038.D
Date Acquired: 11 Sep 2001 7:03
Inst: HP_03 Operator ID: BTB
Name: 47266.16 *E02D0 *
Misc: *EPA*30G/5.0ML*13
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 11 13:54 2001 Quant Results File: XPCBI07.RES



Aroclor-1242 {4} 11.17min area: 238348 m BTB 091101

Integration Time Range: 11.09 - 11.29

ok 9-12-01

F:\HPCHEM\HP\3\DATA\09_10_01\3_091038.D
Report generated: Tue Sep 11 14:10:23 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E02D1

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Matrix: (soil/water) SOIL Lab Sample ID: 47266.19

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

% Moisture: 68 decanted: (Y/N) __ Date Received: 08/11/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/14/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/11/01

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	100	U
11104-28-2	Aroclor-1221	100	U
11141-16-5	Aroclor-1232	100	U
53469-21-9	Aroclor-1242	60	J
12672-29-6	Aroclor-1248	100	U
11097-69-1	Aroclor-1254	100	U
11096-82-5	Aroclor-1260	100	U
Surrogate amount spiked		20.62	

FORM I PCB

Chromatographic Report

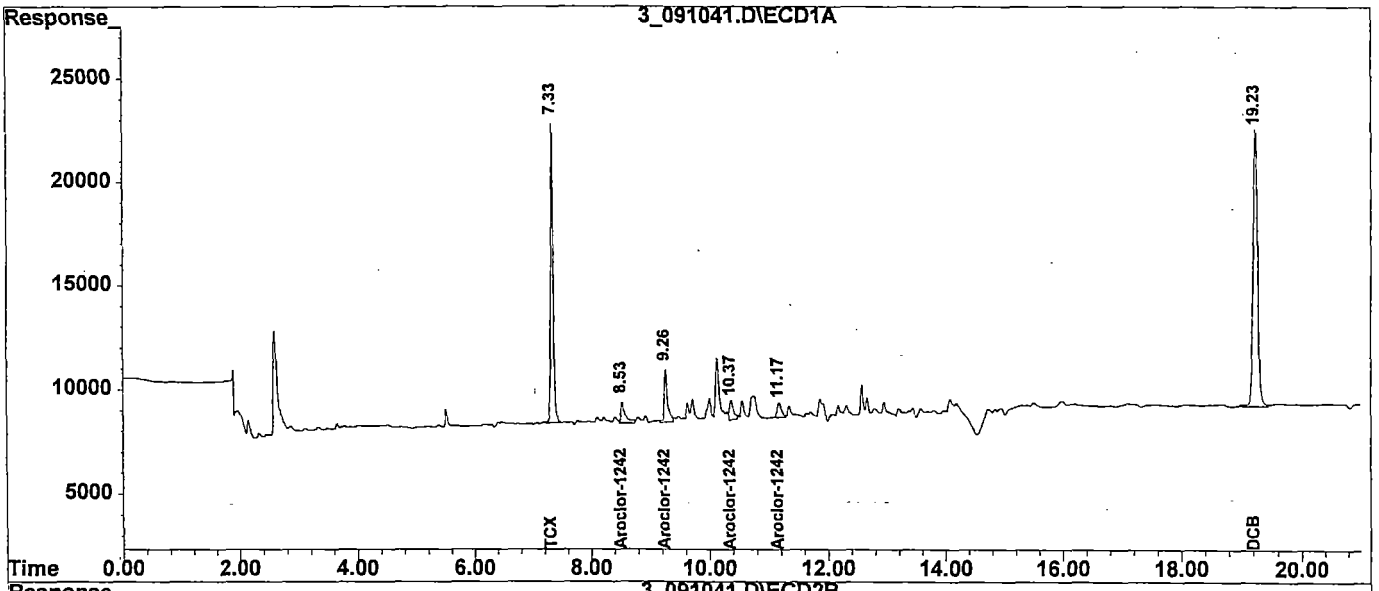
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091041.D\ECD1A.CH Vial: 80
Acq On : 11 Sep 2001 8:20 Operator: BTB
Sample : 47266.19 *E02D1 * Inst : HP_03
Misc : *EPA*30.3G/5.0ML*68 Dilution: 1.00
IntFile : events.e

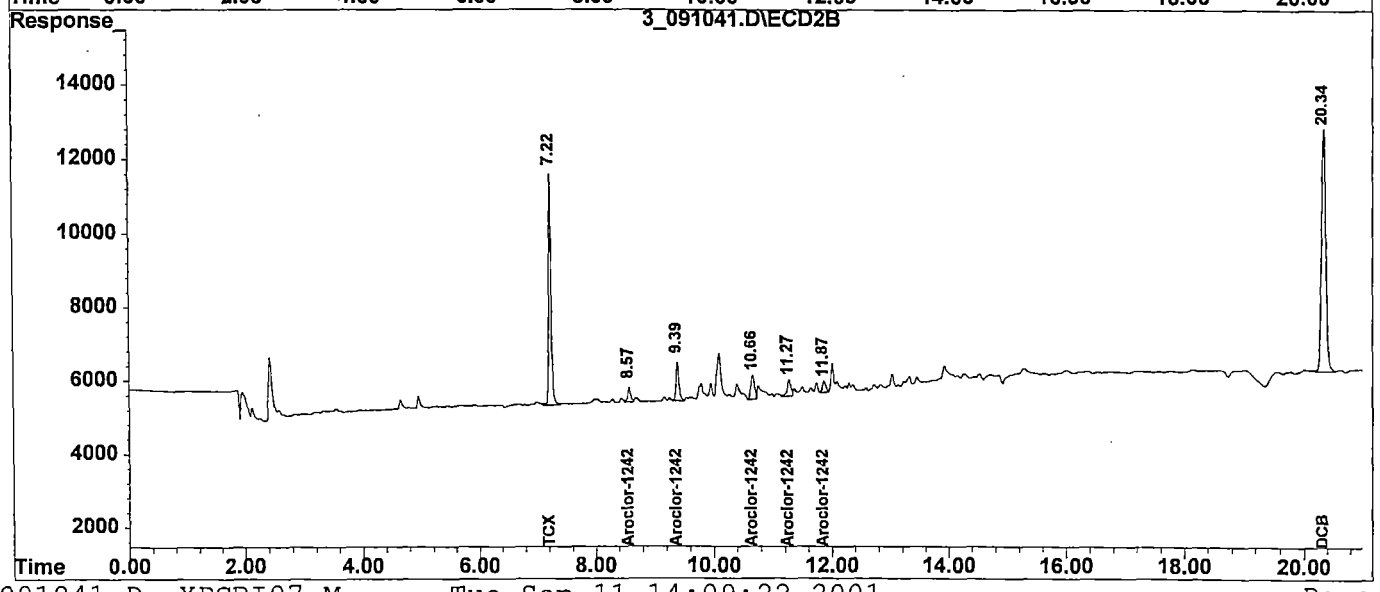
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091041.D\ECD2B.CH Vial: 80
Acq On : 11 Sep 2001 8:20 Operator: BTB
Sample : 47266.19 Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 14:03 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

ok 9-12-01

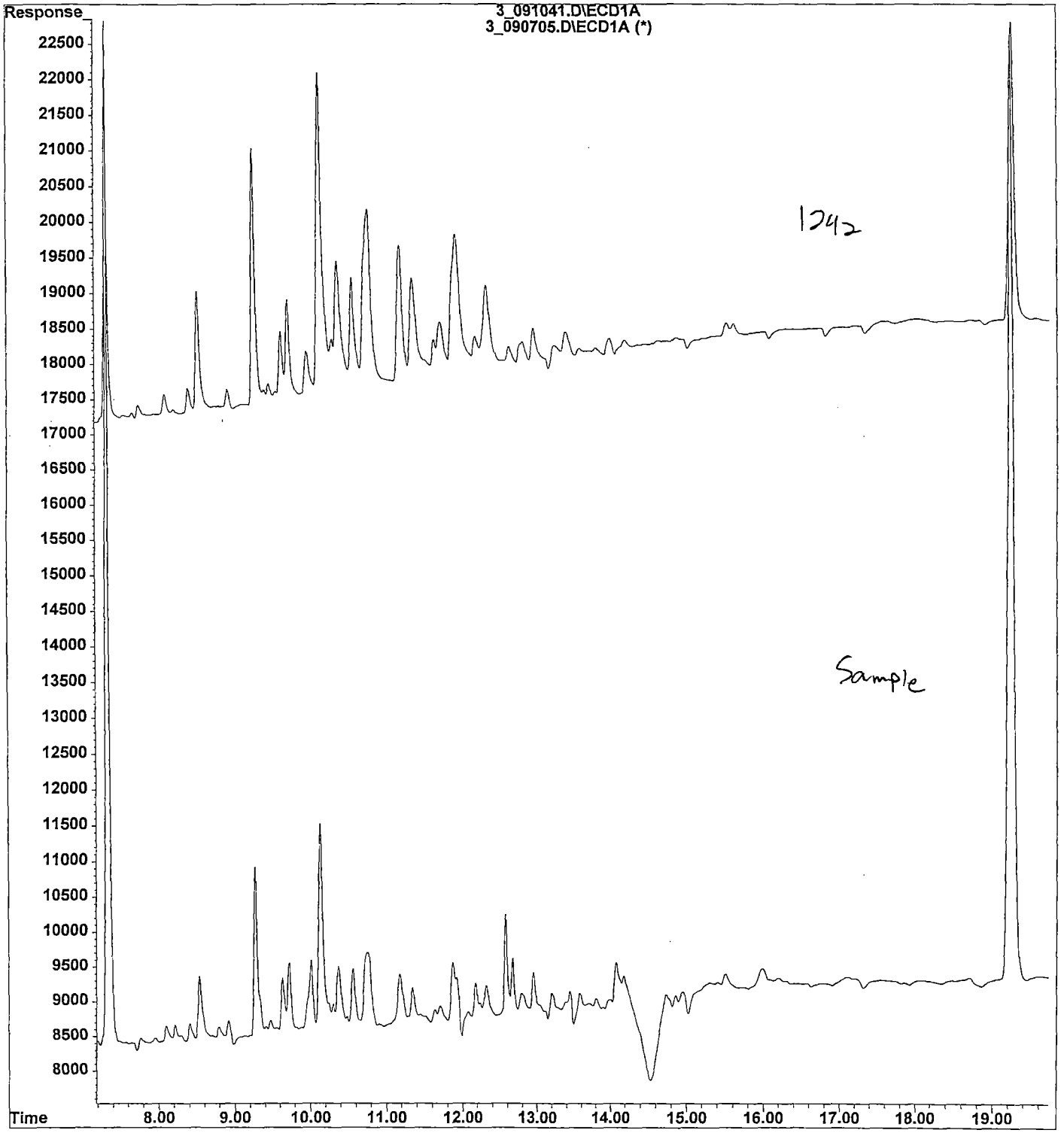
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091041.D
Operator : BTB
Acquired : 11 Sep 2001 8:20 using AcqMethod OLM03.M
Instrument : HP_03
Sample Name: 47266.19
Misc Info :
Vial Number: 80

ok 9-12-01



Quantitation Report

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091041.D\ECD1A.CH Vial: 80
Acq On : 11 Sep 2001 8:20 Operator: BTB
Sample : 47266.19 *E02D1 * Inst : HP_03
Misc : *EPA*30.3G/5.0ML*68 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091041.D\ECD2B.CH Vial: 80
Acq On : 11 Sep 2001 8:20 Operator: BTB
Sample : 47266.19 Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 14:03 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

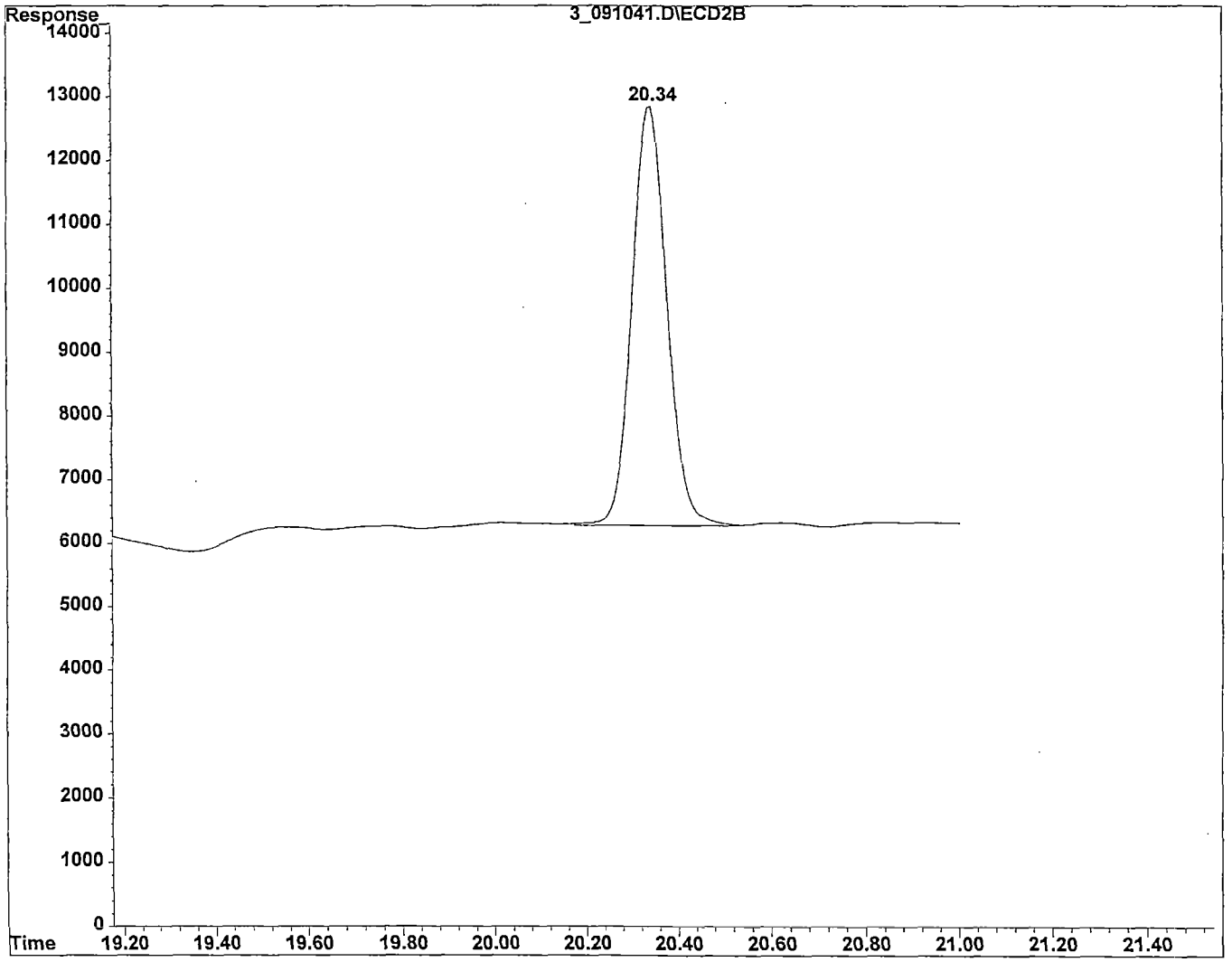
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.22	428194	178012	13.9	15.9	
	Spiked Amount 20.627			Recovery	=	67.39%	77.08%	
22)	S DCB	19.24	20.34	689162	343003	16.9	17.7m	BTB
	Spiked Amount 20.627			Recovery	=	81.93%	85.81%	091101
	Target Compounds:							
7)	L4 Aroclor-1242	8.53	8.57	54306	13955	89.2	66.5	#
8)	L4 Aroclor-1242 {2}	9.27	9.39	100028	36586	86.5	76.6	
9)	L4 Aroclor-1242 {3}	10.37	10.67	43624	27436	45.9	65.8	#
10)	L4 Aroclor-1242 {4}	11.18	11.28	35158	18516	36.3	60.7	#
11)	L4 Aroclor-1242 {5}	0.00	11.87	0	12928	N.D. d	31.8	#
	Sum Aroclor-1242			233116	109421	257.9	301.3	
	Average Aroclor-1242					64.483	60.268	

(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_10_01\3_091041.D
Date Acquired: 11 Sep 2001 8:20
Inst: HP_03 Operator ID: BTB
Name: 47266.19 *E02D1 *
Misc: *EPA*30.3G/5.0ML*68
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 11 14:03 2001 Quant Results File: XPCBI07.RES



DCB #2 20.34min area: 343003 m

BTB 091101

Integration Time Range: 20.18 - 20.54

9-12-01

F:\HPCHEM\HP\3\DATA\09_10_01\3_091041.D
Report generated: Tue Sep 11 14:10:26 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E02D2

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Matrix: (soil/water) SOIL Lab Sample ID: 47266.20

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

% Moisture: 58 decanted: (Y/N) __ Date Received: 08/11/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/14/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/11/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Sulfur Cleanup: (Y/N) Y

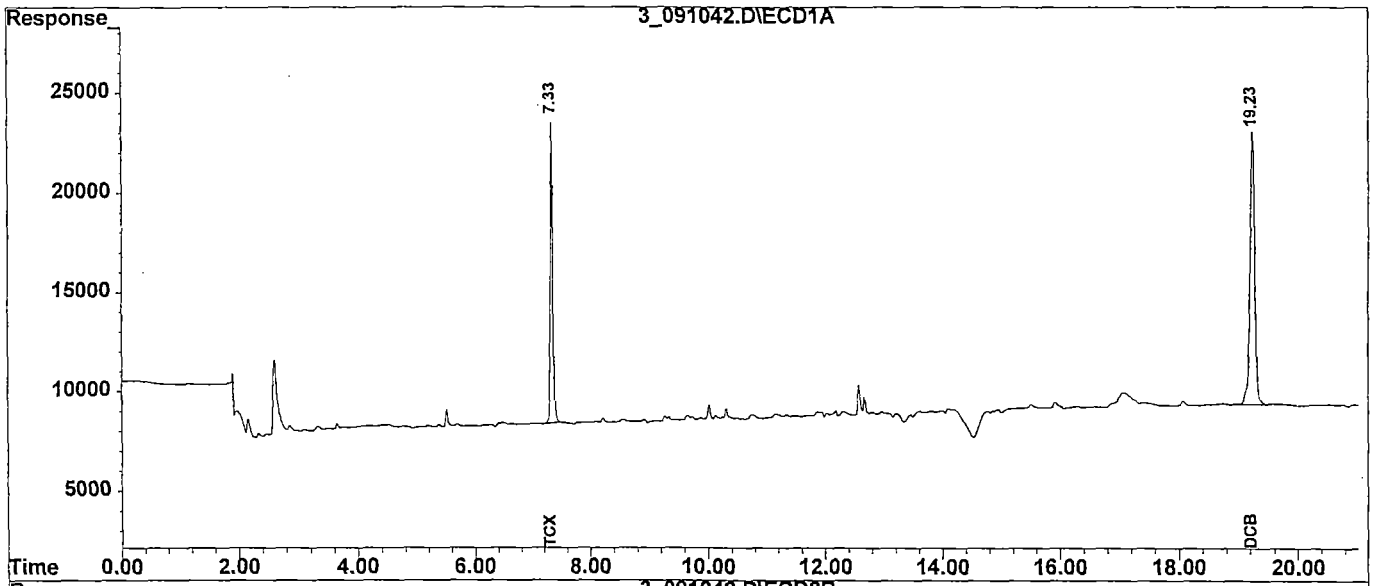
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	78	U
11104-28-2	Aroclor-1221	78	U
11141-16-5	Aroclor-1232	78	U
53469-21-9	Aroclor-1242	78	U
12672-29-6	Aroclor-1248	78	U
11097-69-1	Aroclor-1254	78	U
11096-82-5	Aroclor-1260	78	U
	Surrogate amount spiked	15.82	

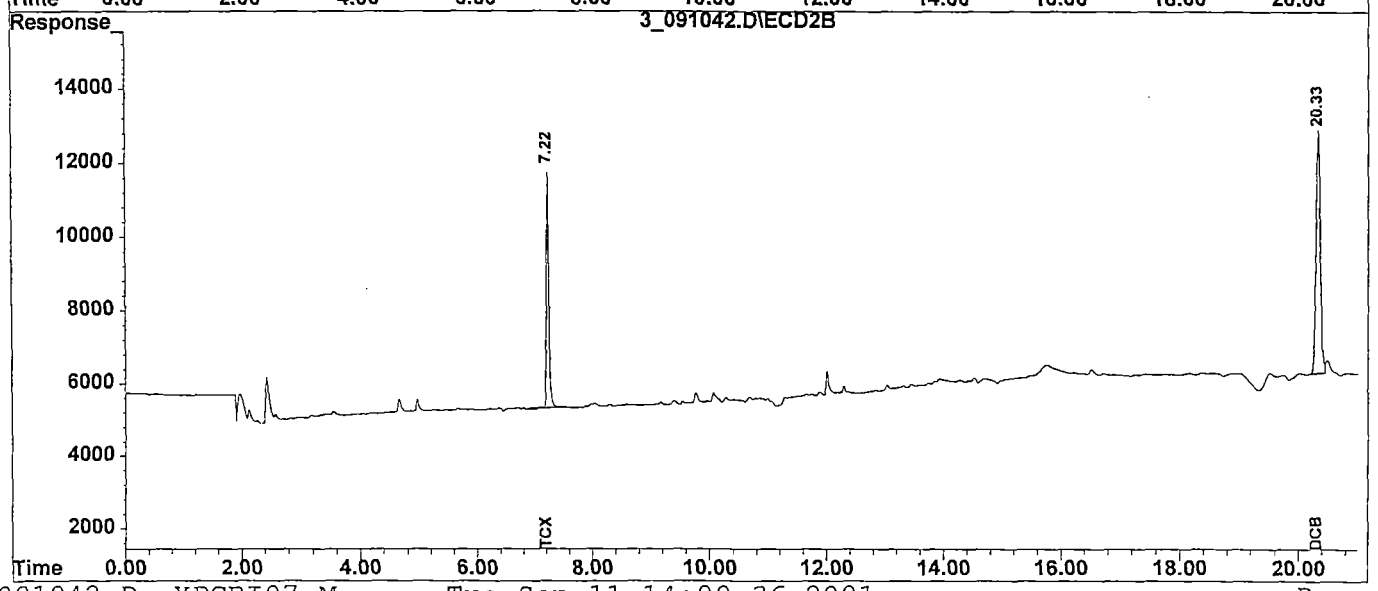
FORM I PCB

Chromatographic Report

```
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091042.D\ECD1A.CH Vial: 81
Acq On    : 11 Sep 2001   8:45                        Operator: BTB
Sample    : 47266.20  *E02D2  *                       Inst    : HP_03
Misc      : *EPA*30.1G/5.0ML*58                       Dilution: 1.00
IntFile   : events.e

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091042.D\ECD2B.CH Vial: 81
Acq On    : 11 Sep 2001   8:45                        Operator: BTB
Sample    : 47266.20                                  Inst    : HP_03
Misc      :                                           Dilution: 1.00
IntFile   : events2.e
Quant Time: Sep 11 14:05 2001  Quant Results File: XPCBI07.RES

Method        : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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
```

ok 9-12-01





Quantitation Report

```
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091042.D\ECD1A.CH Vial: 81
Acq On    : 11 Sep 2001   8:45                          Operator: BTB
Sample    : 47266.20  *E02D2  *                         Inst    : HP_03
Misc      : *EPA*30.1G/5.0ML*58                         Dilution: 1.00
IntFile   : events.e

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091042.D\ECD2B.CH Vial: 81
Acq On    : 11 Sep 2001   8:45                          Operator: BTB
Sample    : 47266.20                                    Inst    : HP_03
Misc      :                                             Dilution: 1.00
IntFile   : events2.e
Quant Time: Sep 11 14:05 2001  Quant Results File: XPCBI07.RES

Method       : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	449586	189479	11.2	13.0
	Spiked Amount 15.820			Recovery	=	70.80%	82.17%
22)	S DCB	19.23	20.33	735893	341346	13.9	13.5m
	Spiked Amount 15.820			Recovery	=	87.86%	85.33%

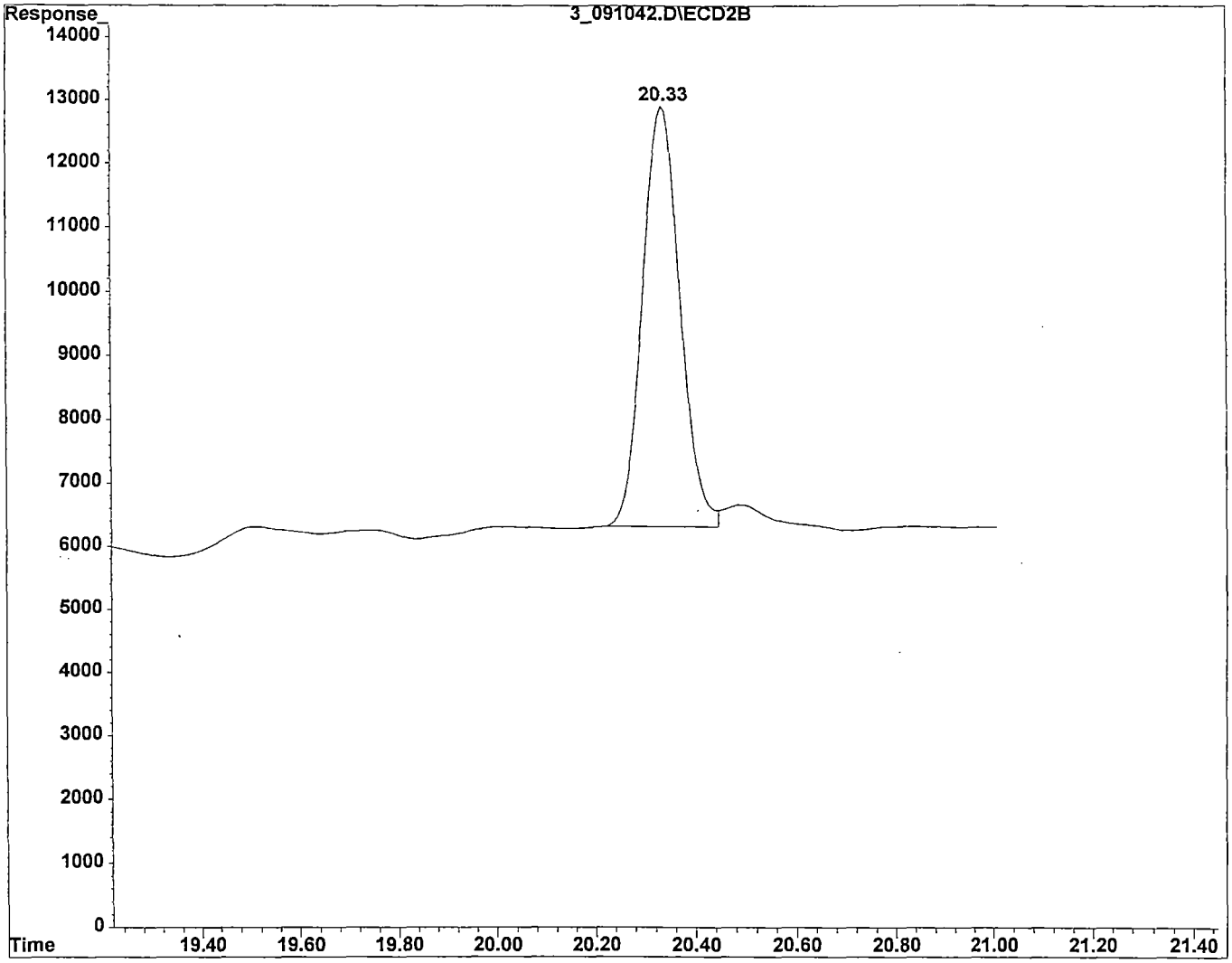
BTB 091101

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

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_10_01\3_091042.D
Date Acquired: 11 Sep 2001 8:45
Inst: HP_03 Operator ID: BTB
Name: 47266.20 *E02D2 *
Misc: *EPA*30.1G/5.0ML*58
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 11 14:05 2001 Quant Results File: XPCBI07.RES



DCB #2 20.33min area: 341346 m BTB 09/11/01

Integration Time Range: 20.22 - 20.45

ok 9-12-01 BB

F:\HPCHEM\HP\3\DATA\09_10_01\3_091042.D
Report generated: Tue Sep 11 14:10:27 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E02D3

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Matrix: (soil/water) SOIL Lab Sample ID: 47266.21

Sample wt/vol: 30.5 (g/mL) G Lab File ID:_____

% Moisture: 53 decanted: (Y/N) __ Date Received: 08/11/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/14/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/11/01

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	69	U
11104-28-2	Aroclor-1221	69	U
11141-16-5	Aroclor-1232	69	U
53469-21-9	Aroclor-1242	69	U
12672-29-6	Aroclor-1248	69	U
11097-69-1	Aroclor-1254	69	U
11096-82-5	Aroclor-1260	69	U
Surrogate amount spiked		13.96	

FORM I PCB

Chromatographic Report

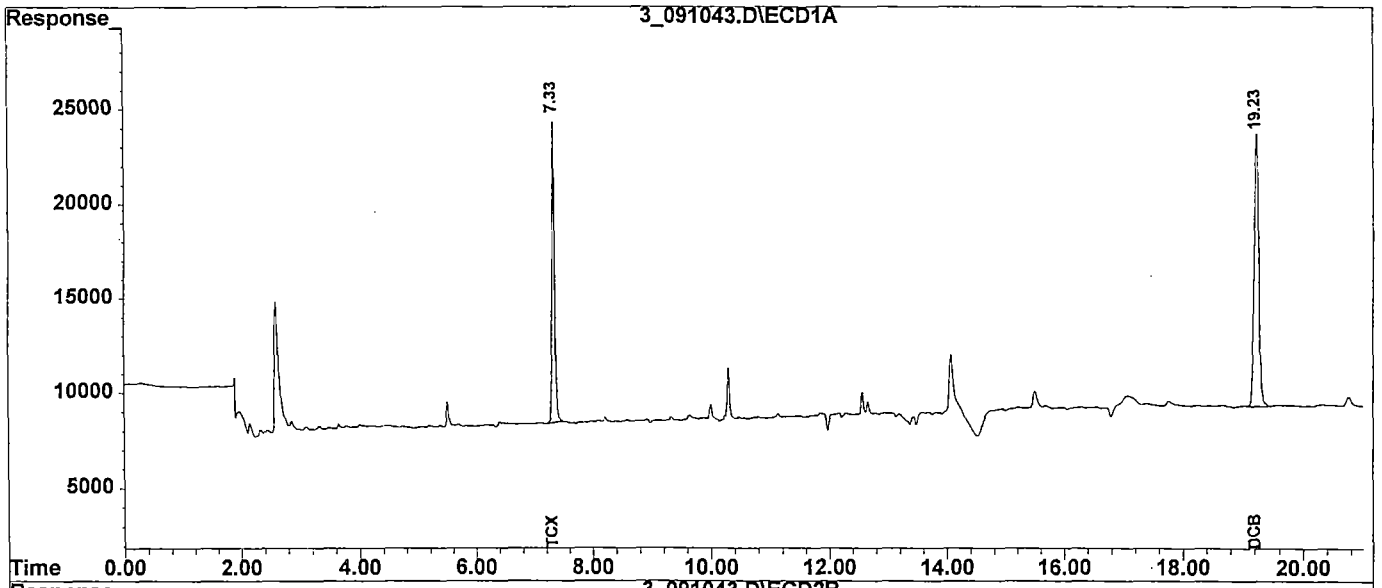
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091043.D\ECD1A.CH Vial: 82
Acq On : 11 Sep 2001 9:11 Operator: BTB
Sample : 47266.21 *E02D3 * Inst : HP_03
Misc : *EPA*30.5G/5.0ML*53 Dilution: 1.00
IntFile : events.e

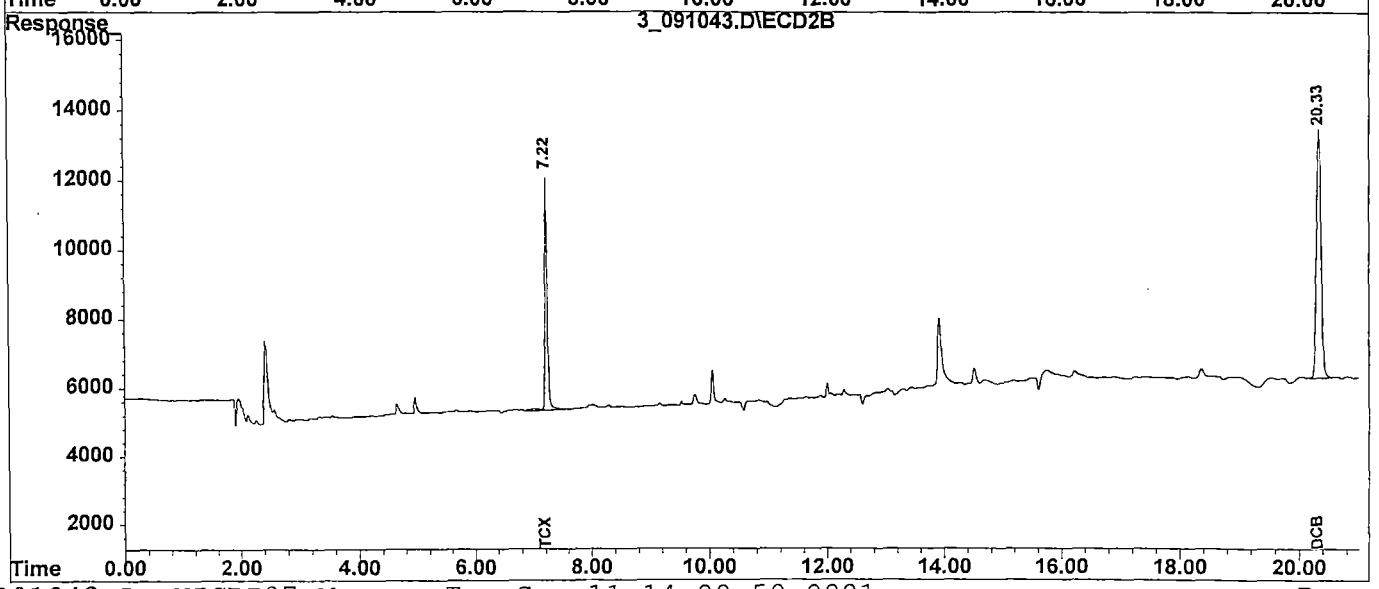
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091043.D\ECD2B.CH Vial: 82
Acq On : 11 Sep 2001 9:11 Operator: BTB
Sample : 47266.21 Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 14:07 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

ok 9-12-01

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

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091043.D\ECD1A.CH Vial: 82
Acq On : 11 Sep 2001 9:11 Operator: BTB
Sample : 47266.21 *E02D3 * Inst : HP_03
Misc : *EPA*30.5G/5.0ML*53 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091043.D\ECD2B.CH Vial: 82
Acq On : 11 Sep 2001 9:11 Operator: BTB
Sample : 47266.21 Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 14:07 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	484550	208555	10.7	12.6
	Spiked Amount 13.952			Recovery	=	76.69%	90.31%
22)	S DCB	19.24	20.33	747674	374728	12.4	13.1m
	Spiked Amount 13.952			Recovery	=	88.88%	93.89%

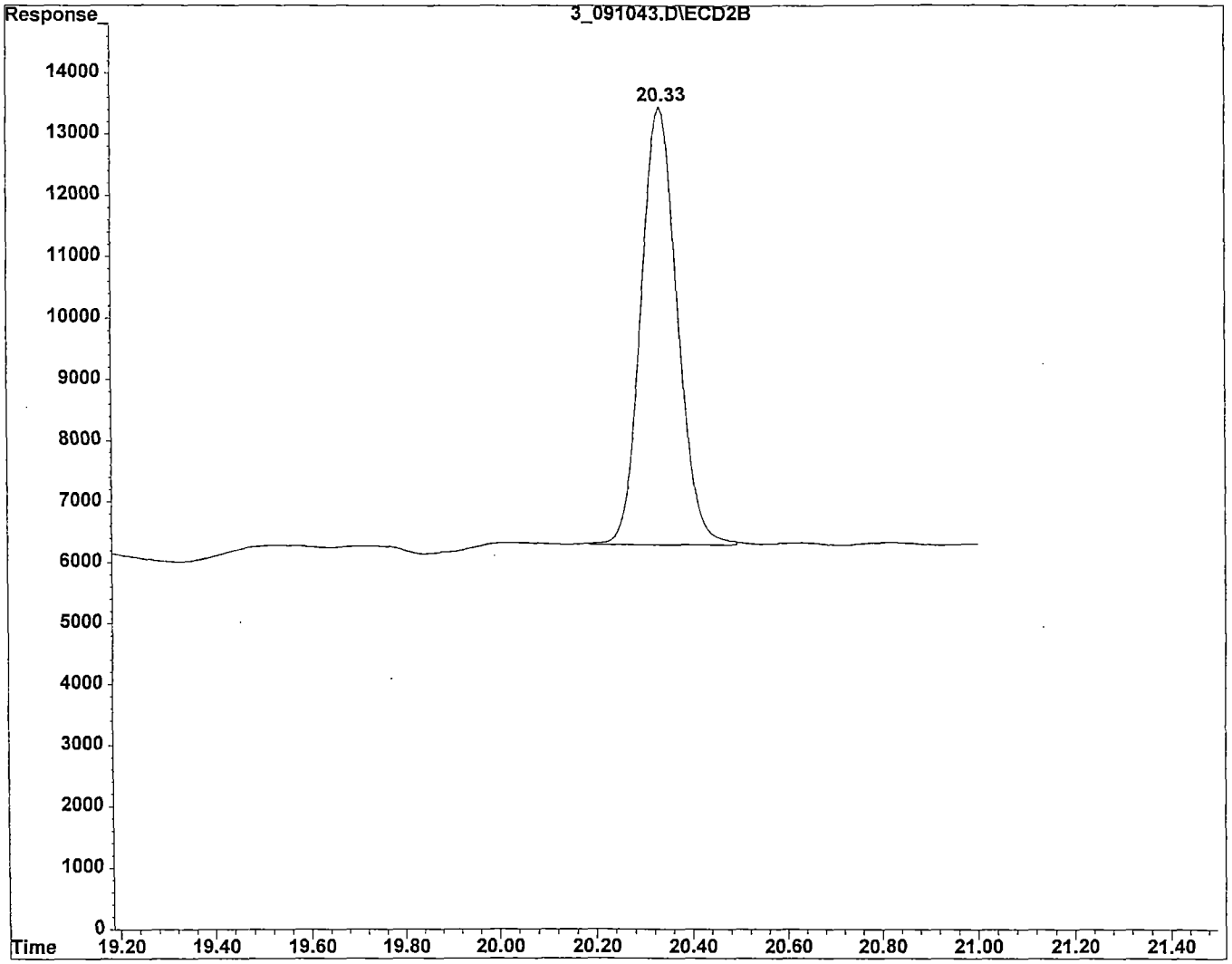
BTB 091101

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

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_10_01\3_091043.D
Date Acquired: 11 Sep 2001 9:11
Inst: HP_03 Operator ID: BTB
Name: 47266.21 *E02D3 *
Misc: *EPA*30.5G/5.0ML*53
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 11 14:07 2001 Quant Results File: XPCBI07.RES



DCB #2 20.33min area: 374728 m

BTB 091101

Integration Time Range: 20.18 - 20.50

ok 9-12-01

F:\HPCHEM\HP\3\DATA\09_10_01\3_091043.D
Report generated: Tue Sep 11 14:10:28 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E02D4

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Matrix: (soil/water) SOIL Lab Sample ID: 47266.22

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

% Moisture: 29 decanted: (Y/N) __ Date Received: 08/11/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/14/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/11/01

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	46	U
11104-28-2	Aroclor-1221	46	U
11141-16-5	Aroclor-1232	46	U
53469-21-9	Aroclor-1242	46	U
12672-29-6	Aroclor-1248	46	U
11097-69-1	Aroclor-1254	46	U
11096-82-5	Aroclor-1260	46	U
	Surrogate amount spiked	9.36	

FORM I PCB

Chromatographic Report

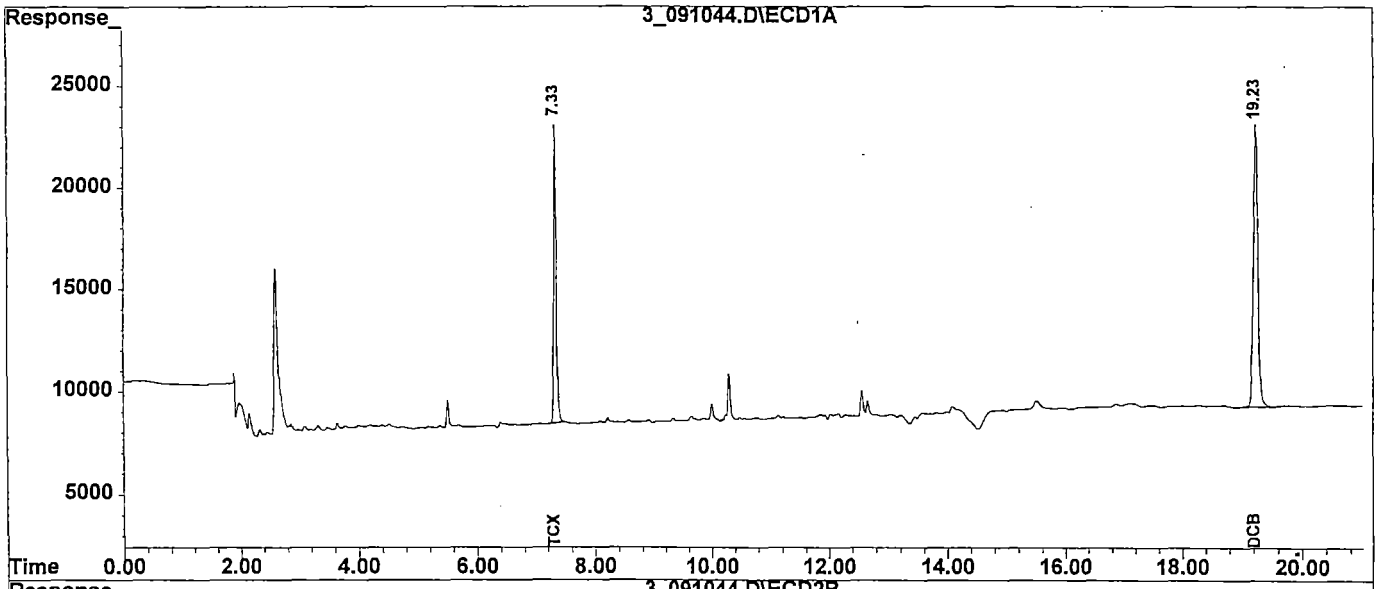
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091044.D\ECD1A.CH Vial: 83
Acq On : 11 Sep 2001 9:37 Operator: BTB
Sample : 47266.22 *E02D4 * Inst : HP_03
Misc : *EPA*30.1G/5.0ML*29 Dilution: 1.00
IntFile : events.e

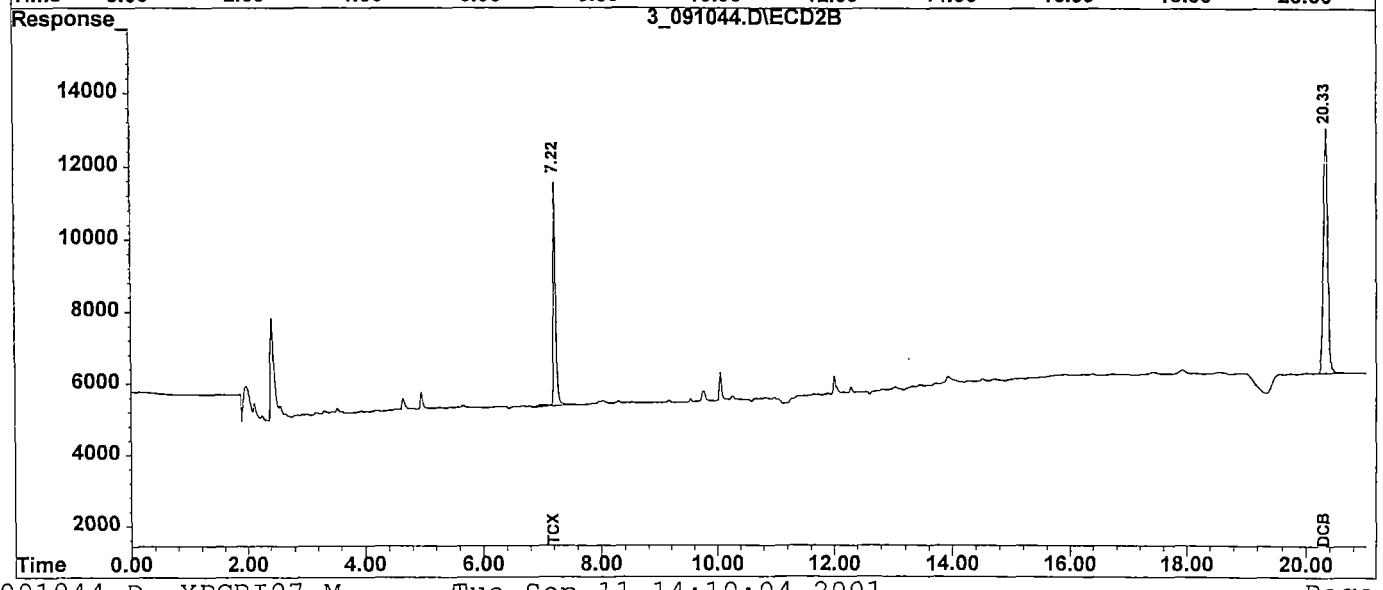
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091044.D\ECD2B.CH Vial: 83
Acq On : 11 Sep 2001 9:37 Operator: BTB
Sample : 47266.22 Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 14:07 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

ok 9-12-01

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

```
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091044.D\ECD1A.CH Vial: 83
Acq On    : 11 Sep 2001   9:37                        Operator: BTB
Sample    : 47266.22  *E02D4  *                       Inst    : HP_03
Misc      : *EPA*30.1G/5.0ML*29                       Dilution: 1.00
IntFile   : events.e

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091044.D\ECD2B.CH Vial: 83
Acq On    : 11 Sep 2001   9:37                        Operator: BTB
Sample    : 47266.22                                  Inst    : HP_03
Misc      :                                           Dilution: 1.00
IntFile   : events2.e
Quant Time: Sep 11 14:07 2001  Quant Results File: XPCBI07.RES

Method       : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	429940	183587	6.340	7.440
	Spiked Amount 9.358			Recovery	=	67.75%	79.50%
22)	S DCB	19.24	20.34	709426	345895	7.913	8.108
	Spiked Amount 9.358			Recovery	=	84.55%	86.64%

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.: E02B5

Instrument ID: HP_03A Date(s) Analyzed: 09/07/01 09/07/01

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	645360	MEAN
		2	9.27	1336090	
		3	10.37	1100520	
		4	11.18	1060780	
		5	11.72	547020	
Aroclor 1242 L2	0.20	1	8.53	701790	MEAN
		2	9.27	1268365	
		3	10.37	1014005	
		4	11.18	1011475	
		5	11.72	527630	
Aroclor 1242 L3	0.40	1	8.53	662630	MEAN
		2	9.26	1232468	
		3	10.37	1000343	
		4	11.18	1031200	
		5	11.71	528053	
Aroclor 1242 L4	0.80	1	8.53	590933	MEAN
		2	9.26	1118454	
		3	10.37	931093	
		4	11.18	977956	
		5	11.71	510890	
Aroclor 1242 L5	1.60	1	8.53	537877	MEAN
		2	9.26	1008668	
		3	10.36	854528	
		4	11.18	911469	
		5	11.70	479163	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1242 MEAN	1	8.53	8.48	8.58	627718	10.2
	2	9.26	9.21	9.31	1192809	10.9
	3	10.37	10.32	10.42	980098	9.4
	4	11.18	11.13	11.23	998576	5.7
	5	11.71	11.66	11.76	518551	4.9

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.: E02B5

Instrument ID: HP_03B Date(s) Analyzed: 09/07/01 09/07/01

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	225690	MEAN
		2	9.39	530110	
		3	10.67	427230	
		4	11.28	289120	
		5	11.88	429130	
Aroclor 1242 L2	0.20	1	8.57	218495	MEAN
		2	9.39	504565	
		3	10.67	419830	
		4	11.28	299455	
		5	11.87	406640	
Aroclor 1242 L3	0.40	1	8.57	228883	MEAN
		2	9.39	519893	
		3	10.67	462713	
		4	11.28	338260	
		5	11.87	449040	
Aroclor 1242 L4	0.80	1	8.57	212746	MEAN
		2	9.39	473535	
		3	10.66	431443	
		4	11.27	328144	
		5	11.86	418310	
Aroclor 1242 L5	1.60	1	8.57	196357	MEAN
		2	9.39	434205	
		3	10.66	410451	
		4	11.27	318728	
		5	11.86	393872	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1242 MEAN	1	8.57	8.52	8.62	216434	5.9
	2	9.39	9.34	9.44	492462	7.9
	3	10.67	10.62	10.72	430333	4.6
	4	11.28	11.23	11.33	314741	6.4
	5	11.87	11.82	11.92	419398	5.0

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.: E02B5

Instrument ID: HP_03A Date(s) Analyzed: 09/07/01 09/07/01

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	1216660	MEAN
		2	11.87	2297230	
		3	12.18	2299790	
		4	12.96	2601470	
		5	13.40	1903450	
Aroclor 1254 L2	0.20	1	10.72	1150660	MEAN
		2	11.86	2248230	
		3	12.18	2280530	
		4	12.96	2648885	
		5	13.40	1969100	
Aroclor 1254 L3	0.40	1	10.72	1193260	MEAN
		2	11.86	2352930	
		3	12.18	2356875	
		4	12.96	2692083	
		5	13.39	1985063	
Aroclor 1254 L4	0.80	1	10.72	1030624	MEAN
		2	11.86	2048830	
		3	12.17	2030181	
		4	12.95	2393024	
		5	13.38	1772716	
Aroclor 1254 L5	1.60	1	10.71	1021648	MEAN
		2	11.86	2074589	
		3	12.17	2050680	
		4	12.95	2467346	
		5	13.38	1826810	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1254 MEAN	1	10.72	10.67	10.77	1122570	8.1
	2	11.86	11.81	11.91	2204362	6.2
	3	12.18	12.13	12.23	2203611	6.9
	4	12.96	12.91	13.01	2560562	4.9
	5	13.39	13.34	13.44	1891428	4.8

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Instrument ID: HP_03B Date(s) Analyzed: 09/07/01 09/07/01

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	10.67	348880	MEAN
		2	12.10	942730	
		3	13.04	1408820	
		4	13.47	771380	
		5	14.26	956990	
Aroclor 1254 L2	0.20	1	10.67	340950	MEAN
		2	12.10	924385	
		3	13.03	1260855	
		4	13.46	760625	
		5	14.26	966050	
Aroclor 1254 L3	0.40	1	10.67	363540	MEAN
		2	12.10	936583	
		3	13.03	1271610	
		4	13.46	680958	
		5	14.25	919085	
Aroclor 1254 L4	0.80	1	10.67	318935	MEAN
		2	12.09	812351	
		3	13.02	1132514	
		4	13.46	603636	
		5	14.25	837679	
Aroclor 1254 L5	1.60	1	10.66	322155	MEAN
		2	12.09	816136	
		3	13.02	1058961	
		4	13.45	611186	
		5	14.24	862271	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1254 MEAN	1	10.67	10.62	10.72	338892	5.5
	2	12.10	12.05	12.15	886437	7.5
	3	13.03	12.98	13.08	1226552	11.0
	4	13.46	13.41	13.51	685557	11.6
	5	14.25	14.20	14.30	908415	6.3

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.: E02B5

Instrument ID: HP_03A Date(s) Analyzed: 09/07/01 09/07/01

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	946720	MEAN
		2	10.13	3175220	
		3	10.56	1055710	
		4	10.77	2754690	
		5	11.86	976310	
Aroclor 1016 L2	0.20	1	8.53	907265	MEAN
		2	10.13	3240960	
		3	10.56	1039250	
		4	10.77	2603190	
		5	11.86	975260	
Aroclor 1016 L3	0.40	1	8.53	857708	MEAN
		2	10.13	3246060	
		3	10.56	1026203	
		4	10.77	2458018	
		5	11.86	985248	
Aroclor 1016 L4	0.80	1	8.53	767946	MEAN
		2	10.13	2943070	
		3	10.56	955624	
		4	10.77	2187168	
		5	11.86	919699	
Aroclor 1016 L5	1.60	1	8.53	705203	MEAN
		2	10.12	2735007	
		3	10.55	907554	
		4	10.76	1966553	
		5	11.86	854876	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1016 MEAN	1	8.53	8.48	8.58	836968	11.9
	2	10.13	10.08	10.18	3068063	7.3
	3	10.56	10.51	10.61	996868	6.3
	4	10.77	10.72	10.82	2393924	13.3
	5	11.86	11.81	11.91	942279	5.9

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.: E02B5

Instrument ID: HP_03A Date(s) Analyzed: 09/07/01 09/07/01

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	1285240	MEAN
		2	13.20	1928270	
		3	14.84	1397130	
		4	15.42	3538280	
		5	16.23	2735590	
Aroclor 1260 L2	0.20	1	12.95	1295815	MEAN
		2	13.20	1924040	
		3	14.84	1373000	
		4	15.41	3269420	
		5	16.22	2382805	
Aroclor 1260 L3	0.40	1	12.95	1322555	MEAN
		2	13.20	1913455	
		3	14.84	1410118	
		4	15.41	3359270	
		5	16.22	2527110	
Aroclor 1260 L4	0.80	1	12.95	1231041	MEAN
		2	13.20	1694669	
		3	14.84	1327108	
		4	15.41	3174419	
		5	16.23	2423271	
Aroclor 1260 L5	1.60	1	12.95	1150466	MEAN
		2	13.19	1550087	
		3	14.83	1231796	
		4	15.41	2929601	
		5	16.22	2270638	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1260 MEAN	1	12.95	12.90	13.00	1257023	5.4
	2	13.20	13.15	13.25	1802104	9.5
	3	14.84	14.79	14.89	1347830	5.4
	4	15.41	15.36	15.46	3254198	6.9
	5	16.22	16.17	16.27	2467883	7.1

FORM VI PCB-3

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Instrument ID: HP_03B Date(s) Analyzed: 09/07/01 09/07/01

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	9.39	686420	MEAN
		2	10.09	1391070	
		3	10.40	397030	
		4	11.50	295120	
		5	12.10	399560	
Aroclor 1016 L2	0.20	1	9.39	711865	MEAN
		2	10.09	1432115	
		3	10.40	430750	
		4	11.50	299060	
		5	12.10	401010	
Aroclor 1016 L3	0.40	1	9.39	703268	MEAN
		2	10.08	1444133	
		3	10.39	460885	
		4	11.50	321038	
		5	12.10	426715	
Aroclor 1016 L4	0.80	1	9.39	639254	MEAN
		2	10.08	1309576	
		3	10.39	433901	
		4	11.50	302865	
		5	12.09	374428	
Aroclor 1016 L5	1.60	1	9.38	590603	MEAN
		2	10.08	1207252	
		3	10.39	417804	
		4	11.50	292989	
		5	12.09	348131	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1016 MEAN	1	9.39	9.34	9.44	666282	7.6
	2	10.08	10.03	10.13	1356829	7.3
	3	10.39	10.34	10.44	428074	5.5
	4	11.50	11.45	11.55	302214	3.7
	5	12.10	12.05	12.15	389969	7.6

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.: E02B5

Instrument ID: HP_03B Date(s) Analyzed: 09/07/01 09/07/01

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	1135320	MEAN
		2	13.46	1289270	
		3	14.08	693390	
		4	14.29	1144360	
		5	15.31	2126930	
Aroclor 1260 L2	0.20	1	13.33	1106230	MEAN
		2	13.46	1245085	
		3	14.08	699250	
		4	14.30	1094260	
		5	15.30	1978010	
Aroclor 1260 L3	0.40	1	13.32	1098458	MEAN
		2	13.46	1254855	
		3	14.08	690753	
		4	14.30	1098960	
		5	15.30	2102168	
Aroclor 1260 L4	0.80	1	13.32	974480	MEAN
		2	13.46	1122898	
		3	14.08	620255	
		4	14.30	978553	
		5	15.30	1996364	
Aroclor 1260 L5	1.60	1	13.32	879783	MEAN
		2	13.45	1023322	
		3	14.07	562526	
		4	14.29	889303	
		5	15.30	1894221	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1260 MEAN	1	13.32	13.27	13.37	1038854	10.4
	2	13.46	13.41	13.51	1187086	9.4
	3	14.08	14.03	14.13	653235	9.2
	4	14.30	14.25	14.35	1041087	10.1
	5	15.30	15.25	15.35	2019538	4.7

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Instrument ID: HP_03A Date(s) Analyzed: 09/07/01 09/07/01

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	401530	SINGLE
		2	8.41	277418	POINT
		3	8.54	1134583	
		4			
		5			
Aroclor 1232	0.40	1	8.41	217430	SINGLE
		2	9.27	737245	POINT
		3	9.72	326438	
		4	10.56	392783	
		5			
Aroclor 1248	0.40	1	9.72	186128	SINGLE
		2	10.56	519155	POINT
		3	11.71	893668	
		4	12.63	445005	
		5	13.98	437190	

FORM VI PCB-3

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Instrument ID: HP_03B Date(s) Analyzed: 09/07/01 09/07/01

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	166945	SINGLE
		2	8.45	110140	POINT
		3	8.58	371275	
		4			
		5			
Aroclor 1232	0.40	1	8.45	84148	SINGLE
		2	9.96	131708	POINT
		3	10.77	162865	
		4	11.51	139315	
		5			
Aroclor 1248	0.40	1	9.96	71790	SINGLE
		2	10.40	149730	POINT
		3	12.23	182610	
		4	12.60	175198	
		5	13.46	140608	

FORM VI PCB-3

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MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 09/07/01 09/07/01

Client Sample No.(PIBLK): PIBLK1H Date Analyzed : 09/10/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 1539

Client Sample No.: AR1660L31K Date Analyzed : 09/10/01

Lab Sample ID : 5-128-7 Time Analyzed : 1604

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.54	8.48	8.58	788545	836968	5.8
Aroclor 1016 #2	10.14	10.08	10.18	2982898	3068063	2.8
Aroclor 1016 #3	10.56	10.51	10.61	930495	996868	6.7
Aroclor 1016 #4	10.77	10.72	10.82	2247715	2393924	6.1
Aroclor 1016 #5	11.87	11.81	11.91	886510	942279	5.9
Aroclor 1260 #1	12.96	12.90	13.00	1280305	1257023	1.9
Aroclor 1260 #2	13.20	13.15	13.25	1758258	1802104	2.4
Aroclor 1260 #3	14.84	14.79	14.89	1375000	1347830	2.0
Aroclor 1260 #4	15.41	15.36	15.46	3216920	3254198	1.2
Aroclor 1260 #5	16.23	16.17	16.27	2407100	2467883	2.5

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.: E02B5

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 09/07/01 09/07/01

Client Sample No.(PIBLK): PIBLK1H Date Analyzed : 09/10/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 1539

Client Sample No.: AR1660L31K Date Analyzed : 09/10/01

Lab Sample ID : 5-128-7 Time Analyzed : 1604

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	9.40	9.34	9.44	703483	666282	5.6
Aroclor 1016 #2	10.09	10.03	10.13	1415035	1356829	4.3
Aroclor 1016 #3	10.40	10.34	10.44	451720	428074	5.5
Aroclor 1016 #4	11.51	11.45	11.55	308663	302214	2.1
Aroclor 1016 #5	12.10	12.05	12.15	412550	389969	5.8
Aroclor 1260 #1	13.33	13.27	13.37	1003890	1038854	3.4
Aroclor 1260 #2	13.46	13.41	13.51	1159340	1187086	2.3
Aroclor 1260 #3	14.09	14.03	14.13	526230	653235	19.4*
Aroclor 1260 #4	14.30	14.25	14.35	986620	1041087	5.2
Aroclor 1260 #5	15.31	15.25	15.35	2072400	2019538	2.6

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.: E02B5

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 09/07/01 09/07/01

Client Sample No.(PIBLK): PIBLK1I Date Analyzed : 09/10/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 2229

Client Sample No.: AR1660L31M Date Analyzed : 09/10/01

Lab Sample ID : 5-128-7 Time Analyzed : 2255

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.53	8.48	8.58	829510	836968	0.9
Aroclor 1016 #2	10.13	10.08	10.18	3036030	3068063	1.0
Aroclor 1016 #3	10.56	10.51	10.61	963328	996868	3.4
Aroclor 1016 #4	10.77	10.72	10.82	2323000	2393924	3.0
Aroclor 1016 #5	11.86	11.81	11.91	884035	942279	6.2
Aroclor 1260 #1	12.95	12.90	13.00	1288055	1257023	2.5
Aroclor 1260 #2	13.20	13.15	13.25	1757705	1802104	2.5
Aroclor 1260 #3	14.83	14.79	14.89	1547600	1347830	14.8
Aroclor 1260 #4	15.41	15.36	15.46	3114470	3254198	4.3
Aroclor 1260 #5	16.22	16.17	16.27	2377930	2467883	3.6

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.: E02B5

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 09/07/01 09/07/01

Client Sample No.(PIBLK): PIBLK1I Date Analyzed : 09/10/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 2229

Client Sample No.: AR1660L31M Date Analyzed : 09/10/01

Lab Sample ID : 5-128-7 Time Analyzed : 2255

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	9.39	9.34	9.44	715640	666282	7.4
Aroclor 1016 #2	10.09	10.03	10.13	1461090	1356829	7.7
Aroclor 1016 #3	10.40	10.34	10.44	458125	428074	7.0
Aroclor 1016 #4	11.50	11.45	11.55	316103	302214	4.6
Aroclor 1016 #5	12.10	12.05	12.15	413503	389969	6.0
Aroclor 1260 #1	13.33	13.27	13.37	1114650	1038854	7.3
Aroclor 1260 #2	13.46	13.41	13.51	1331580	1187086	12.2
Aroclor 1260 #3	14.08	14.03	14.13	551830	653235	15.5*
Aroclor 1260 #4	14.30	14.25	14.35	1127535	1041087	8.3
Aroclor 1260 #5	15.30	15.25	15.35	2071848	2019538	2.6

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.: E02B5

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 09/07/01 09/07/01

Client Sample No.(PIBLK): PIBLK1J Date Analyzed : 09/11/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 0520

Client Sample No.: AR1660L31O Date Analyzed : 09/11/01

Lab Sample ID : 5-128-7 Time Analyzed : 0545

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.53	8.48	8.58	806230	836968	3.7
Aroclor 1016 #2	10.13	10.08	10.18	3012265	3068063	1.8
Aroclor 1016 #3	10.56	10.51	10.61	958003	996868	3.9
Aroclor 1016 #4	10.77	10.72	10.82	2302148	2393924	3.8
Aroclor 1016 #5	11.86	11.81	11.91	886013	942279	6.0
Aroclor 1260 #1	12.95	12.90	13.00	1306605	1257023	3.9
Aroclor 1260 #2	13.20	13.15	13.25	1780630	1802104	1.2
Aroclor 1260 #3	14.83	14.79	14.89	1547563	1347830	14.8
Aroclor 1260 #4	15.41	15.36	15.46	3686290	3254198	13.3
Aroclor 1260 #5	16.22	16.17	16.27	2855550	2467883	15.7*

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.: E02B5

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 09/07/01 09/07/01

Client Sample No.(PIBLK): PIBLK1J Date Analyzed : 09/11/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 0520

Client Sample No.: AR1660L31O Date Analyzed : 09/11/01

Lab Sample ID : 5-128-7 Time Analyzed : 0545

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	9.39	9.34	9.44	708833	666282	6.4
Aroclor 1016 #2	10.09	10.03	10.13	1457968	1356829	7.5
Aroclor 1016 #3	10.40	10.34	10.44	458310	428074	7.1
Aroclor 1016 #4	11.50	11.45	11.55	316503	302214	4.7
Aroclor 1016 #5	12.10	12.05	12.15	421000	389969	8.0
Aroclor 1260 #1	13.33	13.27	13.37	1132820	1038854	9.1
Aroclor 1260 #2	13.46	13.41	13.51	1298520	1187086	9.4
Aroclor 1260 #3	14.08	14.03	14.13	553920	653235	15.2*
Aroclor 1260 #4	14.30	14.25	14.35	1154848	1041087	10.9
Aroclor 1260 #5	15.30	15.25	15.35	2142020	2019538	6.1

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.: E02B5

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 09/07/01 09/07/01

Client Sample No.(PIBLK): PIBLK1K Date Analyzed : 09/11/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 1119

Client Sample No.: AR1660L31Q Date Analyzed : 09/11/01

Lab Sample ID : 5-128-7 Time Analyzed : 1145

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.53	8.48	8.58	815665	836968	2.6
Aroclor 1016 #2	10.13	10.08	10.18	3060355	3068063	0.3
Aroclor 1016 #3	10.56	10.51	10.61	966893	996868	3.0
Aroclor 1016 #4	10.77	10.72	10.82	2322980	2393924	3.0
Aroclor 1016 #5	11.86	11.81	11.91	889308	942279	5.6
Aroclor 1260 #1	12.95	12.90	13.00	1298193	1257023	3.3
Aroclor 1260 #2	13.20	13.15	13.25	1801728	1802104	0.0
Aroclor 1260 #3	14.83	14.79	14.89	1459350	1347830	8.3
Aroclor 1260 #4	15.41	15.36	15.46	3341760	3254198	2.7
Aroclor 1260 #5	16.22	16.17	16.27	2536410	2467883	2.8

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.: E02B5

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 09/07/01 09/07/01

Client Sample No.(PIBLK): PIBLK1K Date Analyzed : 09/11/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 1119

Client Sample No.: AR1660L31Q Date Analyzed : 09/11/01

Lab Sample ID : 5-128-7 Time Analyzed : 1145

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	9.39	9.34	9.44	700570	666282	5.2
Aroclor 1016 #2	10.09	10.03	10.13	1432280	1356829	5.6
Aroclor 1016 #3	10.40	10.34	10.44	447115	428074	4.5
Aroclor 1016 #4	11.50	11.45	11.55	311840	302214	3.2
Aroclor 1016 #5	12.10	12.05	12.15	412410	389969	5.8
Aroclor 1260 #1	13.33	13.27	13.37	1163190	1038854	12.0
Aroclor 1260 #2	13.46	13.41	13.51	1342980	1187086	13.1
Aroclor 1260 #3	14.08	14.03	14.13	518835	653235	20.6*
Aroclor 1260 #4	14.30	14.25	14.35	1144245	1041087	9.9
Aroclor 1260 #5	15.30	15.25	15.35	2100728	2019538	4.0

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.: E02B5

GC Column: DB-17MS ID: 0.32(mm) Init. Calib. Date(s): 09/07/01

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	RESC1D	5-171-7	09/07/01	0953	7.34	19.28
02	AR1221L31D	5-420-6	09/07/01	1018	7.34	19.26
03	AR1232L31D	5-422-6	09/07/01	1044	7.33	19.26
04	AR1242L11D	5-11-7	09/07/01	1110	7.33	19.25
05	AR1242L21D	5-10-7	09/07/01	1135	7.33	19.25
06	AR1242L31D	5-9-7	09/07/01	1201	7.33	19.25
07	AR1242L41D	5-8-7	09/07/01	1227	7.33	19.25
08	AR1242L51D	5-7-7	09/07/01	1252	7.33	19.24
09	AR1248L31D	5-424-6	09/07/01	1318	7.33	19.24
10	AR1254L11D	5-6-7	09/07/01	1344	7.33	19.25
11	AR1254L21D	5-5-7	09/07/01	1410	7.33	19.25
12	AR1254L31D	5-4-7	09/07/01	1435	7.33	19.24
13	AR1254L41D	5-3-7	09/07/01	1501	7.33	19.24
14	AR1254L51D	5-2-7	09/07/01	1527	7.33	19.24
15	AR1660L11D	5-212-7	09/07/01	1552	7.33	19.24
16	AR1660L21D	5-211-7	09/07/01	1618	7.33	19.24
17	AR1660L31D	5-210-7	09/07/01	1644	7.33	19.24
18	AR1660L41D	5-209-7	09/07/01	1710	7.33	19.24
19	AR1660L51D	5-208-7	09/07/01	1735	7.33	19.24
20	PIBLK1D	5-131-7	09/07/01	1801	7.33	19.24
21	PIBLK1H	5-131-7	09/10/01	1539	7.35	19.29
22	AR1660L31K	5-128-7	09/10/01	1604	7.33	19.25
23	PBLKSB	BL0814SB	09/10/01	1747	7.33	19.23
24	ELCS1	LC0814SB	09/10/01	1838	7.33	19.23
25	ELCS2	LD0814SB	09/10/01	1904	7.33	19.24
26	E02B5	47266.01	09/10/01	1930	7.33	19.24
27	E02B6	47266.02	09/10/01	1955	7.33	19.23
28	E02B7	47266.03	09/10/01	2021	7.33	19.24
29	E02B8	47266.04	09/10/01	2047	7.33	19.23
30	PIBLK1I	5-131-7	09/10/01	2229	7.33	19.24
31	AR1660L31M	5-128-7	09/10/01	2255	7.33	19.24
32	E02B9	47266.05	09/10/01	2346	7.33	19.23
33	E02C0	47266.06	09/11/01	0012	7.33	19.23
34	E02C1	47266.07	09/11/01	0038	7.33	19.24
35	E02C2	47266.08	09/11/01	0103	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.: E02B5

GC Column: DB-17MS ID: 0.32(mm) Init. Calib. Date(s): 09/07/01

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	E02C3	47266.09	09/11/01	0129	7.33	19.24
02	E02C4	47266.10	09/11/01	0154	7.33	19.24
03	E02C5	47266.11	09/11/01	0220	7.33	19.23
04	E02C6	47266.12	09/11/01	0246	7.33	19.24
05	E02C7	47266.13	09/11/01	0312	7.33	19.24
06	E02C8	47266.14	09/11/01	0337	7.33	19.24
07	PIBLK1J	5-131-7	09/11/01	0520	7.33	19.24
08	AR1660L31O	5-128-7	09/11/01	0545	7.33	19.24
09	E02C9	47266.15	09/11/01	0637	7.33	19.24
10	E02D0	47266.16	09/11/01	0703	7.33	19.24
11	E02D0MS	47266.17MS	09/11/01	0728	7.33	19.24
12	E02D0MSD	47266.18MSD	09/11/01	0754	7.33	19.24
13	E02D1	47266.19	09/11/01	0820	7.33	19.24
14	E02D2	47266.20	09/11/01	0845	7.33	19.23
15	E02D3	47266.21	09/11/01	0911	7.33	19.24
16	E02D4	47266.22	09/11/01	0937	7.33	19.24
17	PIBLK1K	5-131-7	09/11/01	1119	7.33	19.24
18	AR1660L31Q	5-128-7	09/11/01	1145	7.33	19.23
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						

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.: E02B5

GC Column: DB-XLB ID: 0.32(mm) Init. Calib. Date(s): 09/07/01

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	RESC1D	5-171-7	09/07/01	0953	7.24	20.37
02	AR1221L31D	5-420-6	09/07/01	1018	7.23	20.36
03	AR1232L31D	5-422-6	09/07/01	1044	7.22	20.35
04	AR1242L11D	5-11-7	09/07/01	1110	7.22	20.35
05	AR1242L21D	5-10-7	09/07/01	1135	7.22	20.34
06	AR1242L31D	5-9-7	09/07/01	1201	7.22	20.35
07	AR1242L41D	5-8-7	09/07/01	1227	7.22	20.34
08	AR1242L51D	5-7-7	09/07/01	1252	7.22	20.34
09	AR1248L31D	5-424-6	09/07/01	1318	7.22	20.34
10	AR1254L11D	5-6-7	09/07/01	1344	7.22	20.34
11	AR1254L21D	5-5-7	09/07/01	1410	7.22	20.34
12	AR1254L31D	5-4-7	09/07/01	1435	7.22	20.34
13	AR1254L41D	5-3-7	09/07/01	1501	7.22	20.34
14	AR1254L51D	5-2-7	09/07/01	1527	7.22	20.33
15	AR1660L11D	5-212-7	09/07/01	1552	7.22	20.34
16	AR1660L21D	5-211-7	09/07/01	1618	7.22	20.33
17	AR1660L31D	5-210-7	09/07/01	1644	7.22	20.33
18	AR1660L41D	5-209-7	09/07/01	1710	7.22	20.34
19	AR1660L51D	5-208-7	09/07/01	1735	7.22	20.33
20	PIBLK1D	5-131-7	09/07/01	1801	7.22	20.34
21	PIBLK1H	5-131-7	09/10/01	1539	7.24	20.38
22	AR1660L31K	5-128-7	09/10/01	1604	7.23	20.35
23	PBLKSB	BL0814SB	09/10/01	1747	7.22	20.33
24	ELCS1	LC0814SB	09/10/01	1838	7.22	20.33
25	ELCS2	LD0814SB	09/10/01	1904	7.22	20.34
26	E02B5	47266.01	09/10/01	1930	7.22	20.34
27	E02B6	47266.02	09/10/01	1955	7.22	20.33
28	E02B7	47266.03	09/10/01	2021	7.22	20.34
29	E02B8	47266.04	09/10/01	2047	7.22	20.33
30	PIBLK1I	5-131-7	09/10/01	2229	7.22	20.34
31	AR1660L31M	5-128-7	09/10/01	2255	7.22	20.34
32	E02B9	47266.05	09/10/01	2346	7.22	20.34
33	E02C0	47266.06	09/11/01	0012	7.22	20.34
34	E02C1	47266.07	09/11/01	0038	7.22	20.34
35	E02C2	47266.08	09/11/01	0103	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.: E02B5

GC Column: DB-XLB ID: 0.32(mm) Init. Calib. Date(s): 09/07/01

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	E02C3	47266.09	09/11/01	0129	7.22	20.34
02	E02C4	47266.10	09/11/01	0154	7.22	20.34
03	E02C5	47266.11	09/11/01	0220	7.22	20.34
04	E02C6	47266.12	09/11/01	0246	7.22	20.34
05	E02C7	47266.13	09/11/01	0312	7.22	20.34
06	E02C8	47266.14	09/11/01	0337	7.22	20.34
07	PIBLK1J	5-131-7	09/11/01	0520	7.22	20.34
08	AR1660L31O	5-128-7	09/11/01	0545	7.22	20.34
09	E02C9	47266.15	09/11/01	0637	7.22	20.34
10	E02D0	47266.16	09/11/01	0703	7.22	20.34
11	E02D0MS	47266.17MS	09/11/01	0728	7.22	20.34
12	E02D0MSD	47266.18MSD	09/11/01	0754	7.22	20.34
13	E02D1	47266.19	09/11/01	0820	7.22	20.34
14	E02D2	47266.20	09/11/01	0845	7.22	20.33
15	E02D3	47266.21	09/11/01	0911	7.22	20.33
16	E02D4	47266.22	09/11/01	0937	7.22	20.34
17	PIBLK1K	5-131-7	09/11/01	1119	7.22	20.34
18	AR1660L31Q	5-128-7	09/11/01	1145	7.22	20.34
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						

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.: E02B5

Lab Sample ID: LC0814SB Date(s) Analyzed: 09/10/01 09/10/01

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	102		
Aroclor-1254	2	11.86	11.81	11.91	104		
	3	12.17	12.13	12.23	109		
COLUMN 1	4	12.95	12.91	13.01	98.0		
	5	13.38	13.34	13.44	99.8	100	
	1	10.67	10.62	10.72	106		
	2	12.09	12.05	12.15	104		
	3	13.03	12.98	13.08	101		
COLUMN 2	4	13.46	13.41	13.51	101		
	5	14.25	14.20	14.30	103	100	0.0
	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

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IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

ELCS2

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Lab Sample ID: LD0814SB Date(s) Analyzed: 09/10/01 09/10/01

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	110		
Aroclor-1254	2	11.86	11.81	11.91	111		
	3	12.17	12.13	12.23	112		
COLUMN 1	4	12.95	12.91	13.01	105		
	5	13.38	13.34	13.44	104	110	
	1	10.67	10.62	10.72	115		
	2	12.09	12.05	12.15	109		
	3	13.03	12.98	13.08	109		
COLUMN 2	4	13.46	13.41	13.51	107		
	5	14.25	14.20	14.30	110	110	0.0
	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.

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E02B6

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Lab Sample ID: 47266.02 Date(s) Analyzed: 09/10/01 09/10/01

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						
	3	10.30	10.32	10.42	27.7		
COLUMN 1	4	11.18	11.13	11.23	23.3		
	5	11.71	11.66	11.76	18.9	23	
	1						
	2						
	3	10.67	10.62	10.72	22.6		
COLUMN 2	4	11.28	11.23	11.33	31.3		
	5	11.87	11.82	11.92	26.7	27	17.4
	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

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E02B7

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Lab Sample ID: 47266.03 Date(s) Analyzed: 09/10/01 09/10/01

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	9.5		
Aroclor-1254	2	11.86	11.81	11.91	10.3		
	3	12.18	12.13	12.23	8.4		
COLUMN 1	4	12.95	12.91	13.01	8.8		
	5	13.39	13.34	13.44	4.2	8.2	
	1	10.67	10.62	10.72	9.6		
	2						
	3	13.03	12.98	13.08	4.5		
COLUMN 2	4	13.46	13.41	13.51	4.9		
	5	14.25	14.20	14.30	4.2	5.8	41.4
	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

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E02B9

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Lab Sample ID: 47266.05 Date(s) Analyzed: 09/10/01 09/10/01

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	17.4		
Aroclor-1242	2	9.26	9.21	9.31	47.8		
	3	10.36	10.32	10.42	36.2		
COLUMN 1	4	11.18	11.13	11.23	69.3		
	5	11.71	11.66	11.76	29.2	40	
	1	8.57	8.52	8.62	13.8		
	2	9.39	9.34	9.44	43.5		
	3	10.67	10.62	10.72	67.7		
COLUMN 2	4	11.28	11.23	11.33	77.1		
	5	11.86	11.82	11.92	61.6	53	32.5
	1						
Aroclor-1254	2	11.87	11.81	11.91	17.2		
	3	12.18	12.13	12.23	10.4		
COLUMN 1	4	12.95	12.91	13.01	15.4		
	5	13.38	13.34	13.44	13.2	14	
	1						
	2	12.09	12.05	12.15	14.1		
	3	13.03	12.98	13.08	16.6		
COLUMN 2	4	13.46	13.41	13.51	13.4		
	5	14.25	14.20	14.30	10.5	14	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

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E02C0

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Lab Sample ID: 47266.06 Date(s) Analyzed: 09/11/01 09/11/01

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	8.53	8.48	8.58	40.1		
	2	9.26	9.21	9.31	59.6		
	3	10.37	10.32	10.42	35.8		
	4	11.17	11.13	11.23	69.0		
	5	11.70	11.66	11.76	28.9	47	
Aroclor-1242 COLUMN 2	1	8.57	8.52	8.62	25.4		
	2	9.39	9.34	9.44	54.9		
	3	10.67	10.62	10.72	67.4		
	4	11.27	11.23	11.33	73.7		
	5	11.86	11.82	11.92	59.8	56	19.1
Aroclor-1254 COLUMN 1	1	10.75	10.67	10.77	115		
	2	11.87	11.81	11.91	22.5		
	3	12.18	12.13	12.23	17.8		
	4	12.95	12.91	13.01	26.5		
	5	13.38	13.34	13.44	15.9	40	
Aroclor-1254 COLUMN 2	1	10.67	10.62	10.72	87.2		
	2	12.09	12.05	12.15	29.4		
	3	13.03	12.98	13.08	26.8		
	4	13.46	13.41	13.51	28.1		
	5	14.25	14.20	14.30	25.1	39	2.6
_____ 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

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E02C5

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Lab Sample ID: 47266.11 Date(s) Analyzed: 09/11/01 09/11/01

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						
	3	10.30	10.32	10.42	63.9		
COLUMN 1	4	11.18	11.13	11.23	35.5		
	5	11.71	11.66	11.76	23.5	41	
	1						
	2						
	3	10.67	10.62	10.72	34.7		
COLUMN 2	4	11.28	11.23	11.33	43.2		
	5	11.87	11.82	11.92	36.2	38	7.9
	1	10.75	10.67	10.77	56.7		
Aroclor-1254	2	11.87	11.81	11.91	13.5		
	3	12.18	12.13	12.23	15.2		
COLUMN 1	4	12.95	12.91	13.01	17.0		
	5	13.38	13.34	13.44	14.4	23	
	1	10.67	10.62	10.72	44.0		
	2	12.09	12.05	12.15	14.9		
	3	13.03	12.98	13.08	16.4		
COLUMN 2	4	13.46	13.41	13.51	17.0		
	5	14.25	14.20	14.30	17.7	22	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

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FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E02D0

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Lab Sample ID: 47266.16 Date(s) Analyzed: 09/11/01 09/11/01

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	22.2		
Aroclor-1242	2	9.26	9.21	9.31	54.9		
	3	10.36	10.32	10.42	37.6		
COLUMN 1	4	11.17	11.13	11.23	91.5		
	5	11.70	11.66	11.76	34.7	48	
	1	8.57	8.52	8.62	22.4		
	2	9.39	9.34	9.44	59.8		
	3	10.67	10.62	10.72	88.1		
COLUMN 2	4	11.28	11.23	11.33	97.7		
	5	11.86	11.82	11.92	73.1	68	41.7
	1						
Aroclor-1254	2	11.87	11.81	11.91	21.8		
	3	12.18	12.13	12.23	12.3		
COLUMN 1	4	12.95	12.91	13.01	19.6		
	5	13.38	13.34	13.44	10.5	16	
	1						
	2	12.09	12.05	12.15	19.0		
	3	13.03	12.98	13.08	20.3		
COLUMN 2	4	13.46	13.41	13.51	16.8		
	5	14.25	14.20	14.30	15.2	18	12.5
	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.

E02D0MS

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Lab Sample ID: 47266.17MS Date(s) Analyzed: 09/11/01 09/11/01

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	17.9		
Aroclor-1242	2	9.27	9.21	9.31	27.5		
	3	10.36	10.32	10.42	17.1		
COLUMN 1	4	11.18	11.13	11.23	75.3		
	5	11.71	11.66	11.76	40.6	36	
	1	8.57	8.52	8.62	8.4		
	2	9.39	9.34	9.44	23.9		
	3						
COLUMN 2	4	11.28	11.23	11.33	90.6		
	5	11.86	11.82	11.92	58.8	45	25.0
	1	10.72	10.67	10.77	140		
Aroclor-1254	2	11.86	11.81	11.91	100		
	3	12.17	12.13	12.23	87.1		
COLUMN 1	4	12.95	12.91	13.01	79.7		
	5	13.38	13.34	13.44	77.8	97	
	1	10.67	10.62	10.72	126		
	2	12.09	12.05	12.15	86.9		
	3	13.02	12.98	13.08	77.1		
COLUMN 2	4	13.46	13.41	13.51	82.9		
	5	14.25	14.20	14.30	84.5	91	6.6
	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

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FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E02D0MSD

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Lab Sample ID: 47266.18MSD Date(s) Analyzed: 09/11/01 09/11/01

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	31.0		
Aroclor-1242	2	9.27	9.21	9.31	38.2		
	3	10.30	10.32	10.42	60.5		
COLUMN 1	4	11.17	11.13	11.23	113		
	5	11.70	11.66	11.76	75.4	64	
	1	8.57	8.52	8.62	12.9		
	2	9.39	9.34	9.44	28.9		
	3	10.67	10.62	10.72	166		
COLUMN 2	4	11.27	11.23	11.33	142		
	5	11.86	11.82	11.92	92.9	89	39.1
	1	10.72	10.67	10.77	224		
Aroclor-1254	2	11.86	11.81	11.91	174		
	3	12.17	12.13	12.23	155		
COLUMN 1	4	12.95	12.91	13.01	146		
	5	13.37	13.34	13.44	145	170	
	1	10.67	10.62	10.72	211		
	2	12.09	12.05	12.15	157		
	3	13.02	12.98	13.08	139		
COLUMN 2	4	13.46	13.41	13.51	146		
	5	14.25	14.20	14.30	150	160	6.3
	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.

E02D1

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Lab Sample ID: 47266.19 Date(s) Analyzed: 09/11/01 09/11/01

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	8.53	8.48	8.58	89.2		
	2	9.27	9.21	9.31	86.5		
	3	10.37	10.32	10.42	45.9		
	4	11.18	11.13	11.23	36.3		
	5					64	
COLUMN 2	1	8.57	8.52	8.62	66.5		
	2	9.39	9.34	9.44	76.6		
	3	10.67	10.62	10.72	65.8		
	4	11.28	11.23	11.33	60.7		
	5	11.87	11.82	11.92	31.8	60	6.7
_____ 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

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FORM X PCB

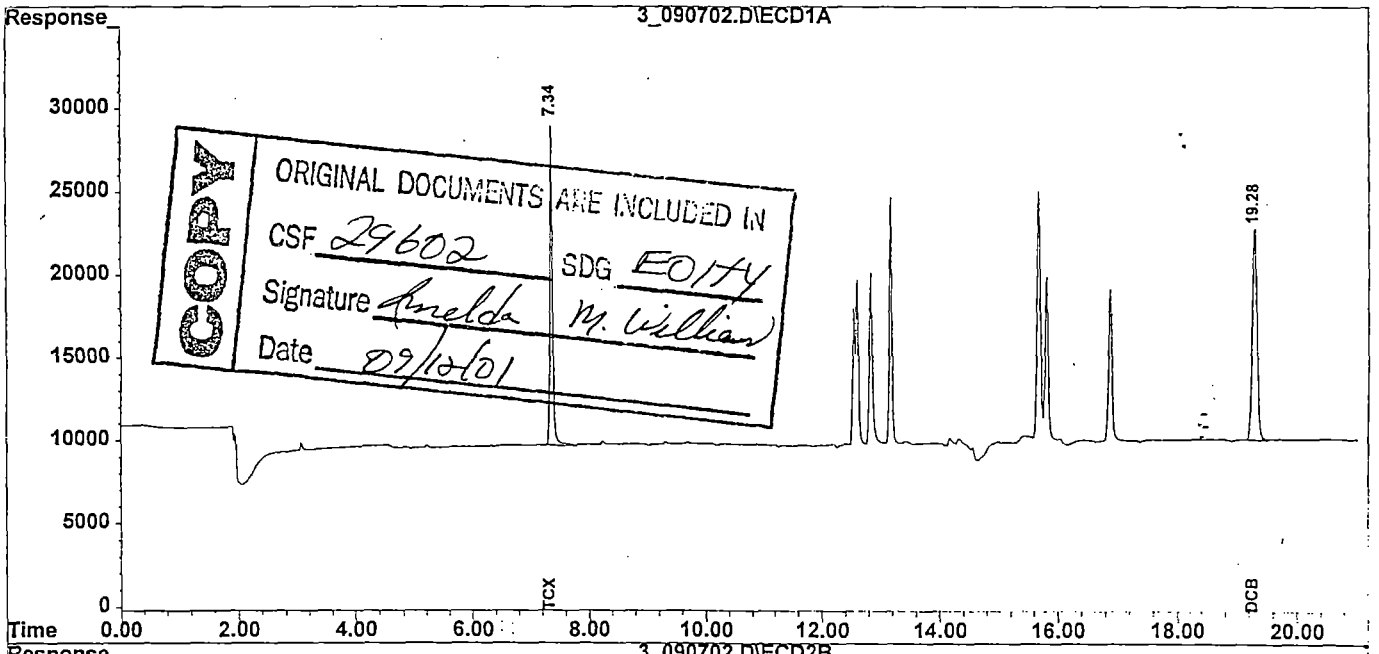
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090702.D\ECD1A.CH Vial: 2
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090702.D\ECD2B.CH
Acq On : 07 Sep 2001 9:53 Operator: DDC
Sample : RESC1D Inst : HP_03
Misc : 5-171-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:30 2001 Quant Results File: XPCBI07.RES

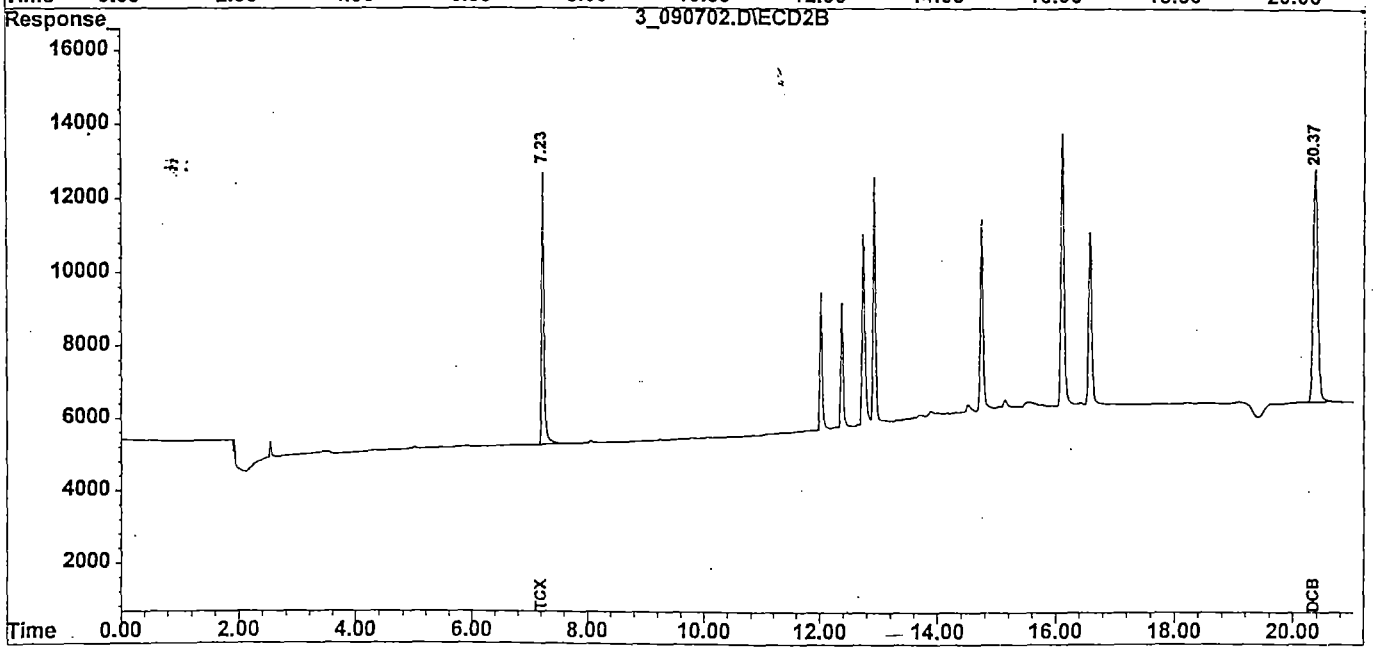
Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

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

ok 9-10-01



ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29602 SDG E0174
Signature Amelda M. Williams
Date 09/10/01



Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090702.D\ECD1A.CH Vial: 2
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090702.D\ECD2B.CH
Acq On : 07 Sep 2001 9:53 Operator: DDC
Sample : RESC1D Inst : HP_03
Misc : 5-171-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:30 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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	7.34f	7.24	602277	211380	19.0	18.3
22)	S DCB	19.28f	20.37f	694891	345350	16.6	17.3
	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

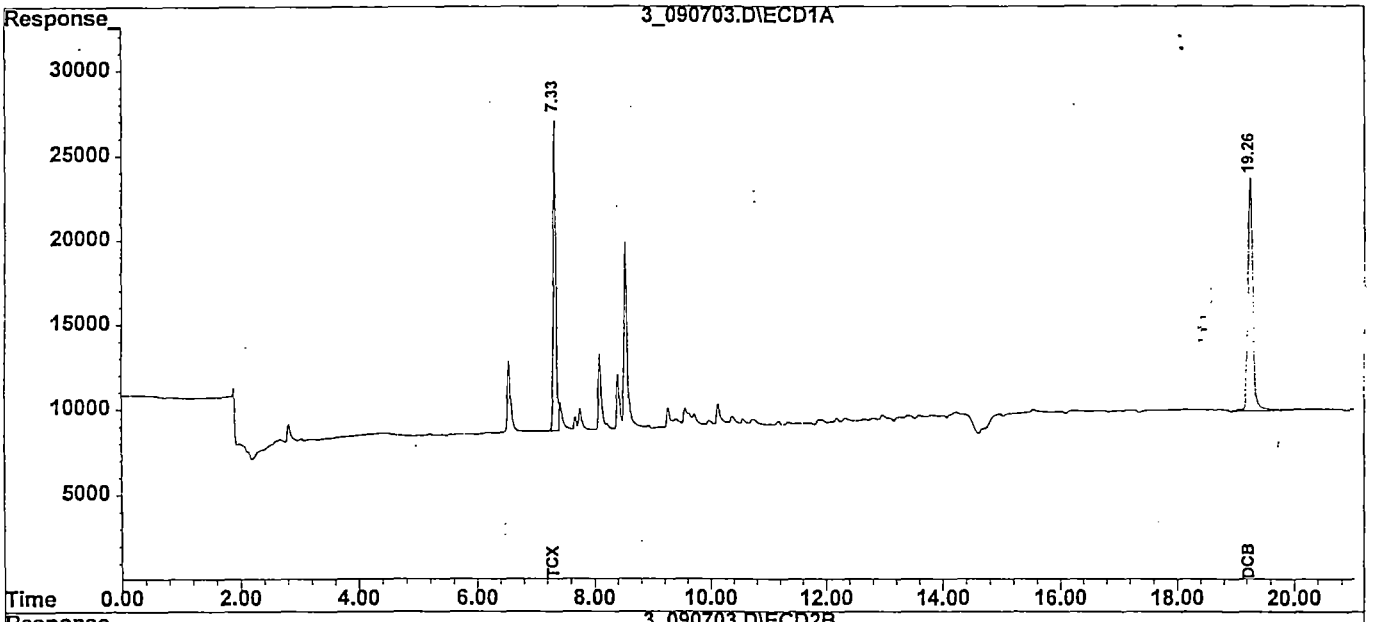
Chromatographic Report

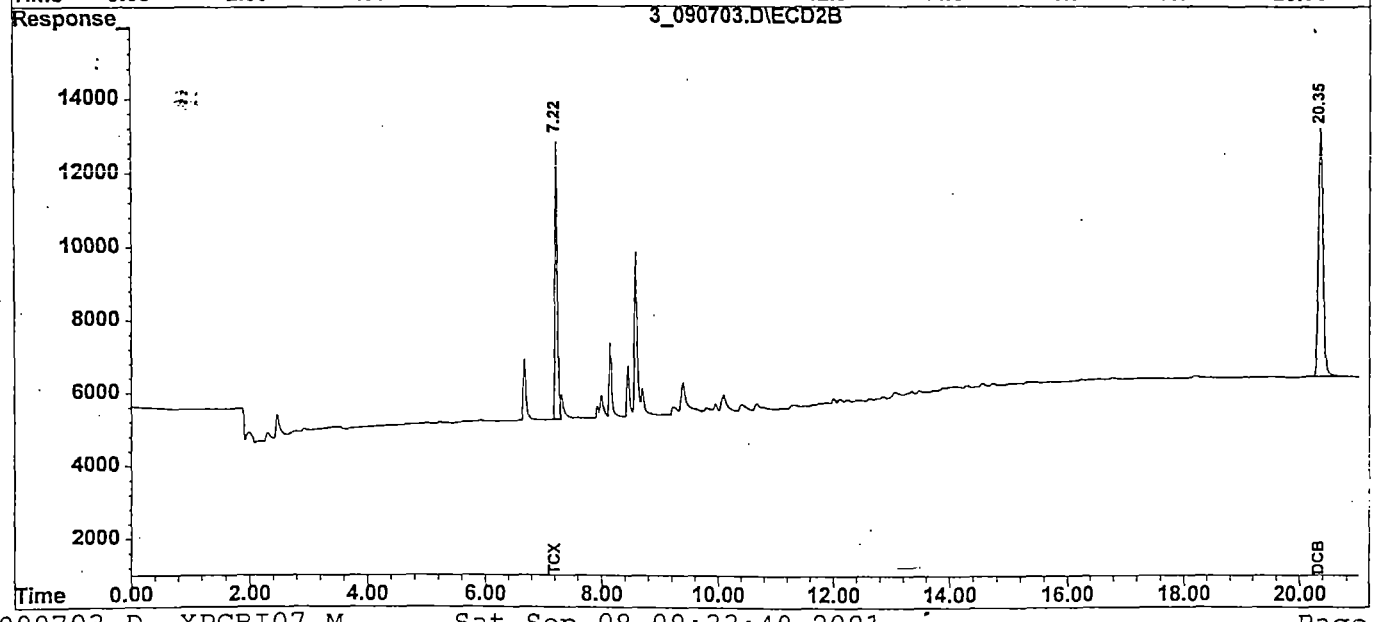
Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090703.D\ECD1A.CH Vial: 3
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090703.D\ECD2B.CH
Acq On : 07 Sep 2001 10:18 Operator: DDC
Sample : AR1221L31D Inst : HP_03
Misc : 5-420-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:30 2001 Quant Results File: XPCBI07.RES
Quant Time: Sep 8 9:30 2001 Quant Results File: xspcbi07.RES

Pesticide Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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_07_01\xspcbi07.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

ok 9-10-01





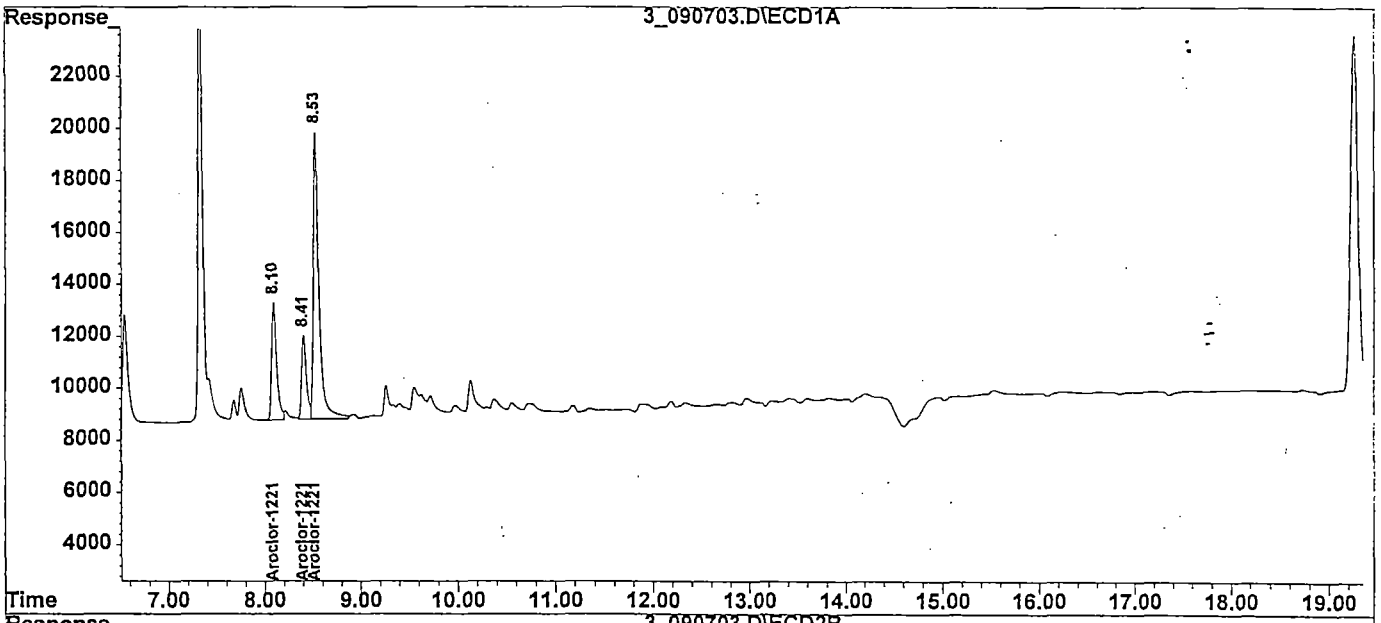
Chromatographic Report

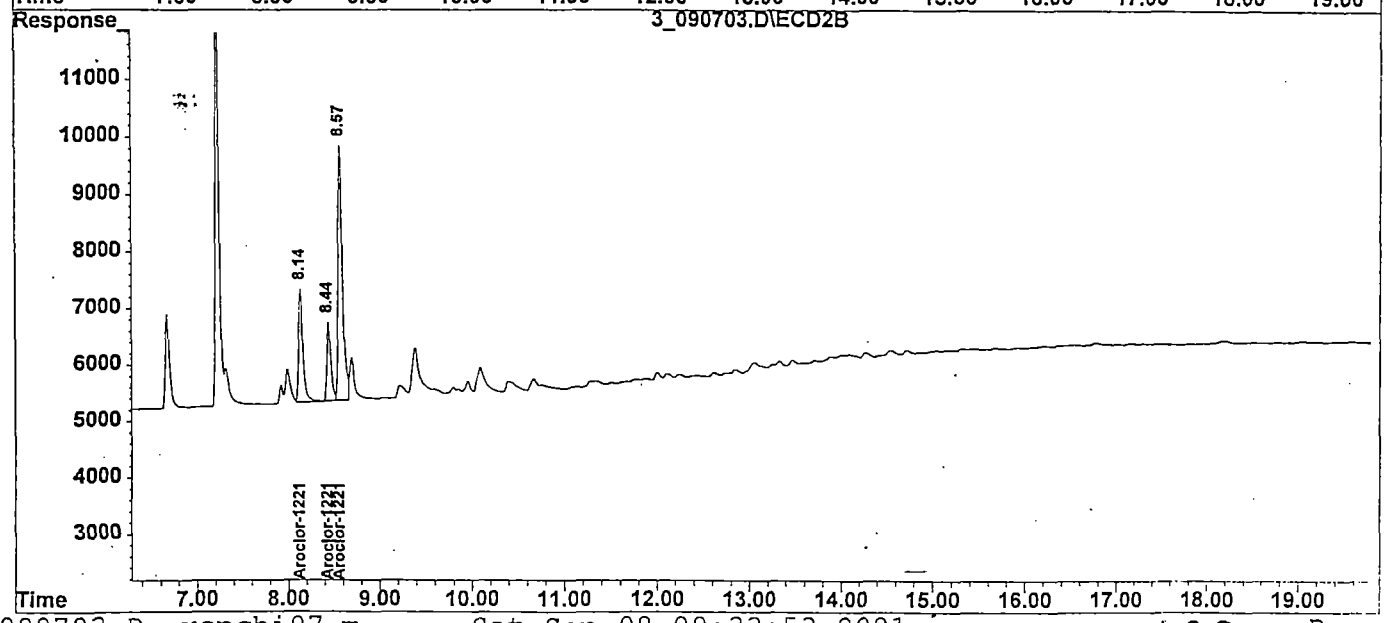
Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090703.D\ECD1A.CH Vial: 3
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090703.D\ECD2B.CH
Acq On : 07 Sep 2001 10:18 Operator: DDC
Sample : AR1221L31D Inst : HP_03
Misc : 5-420-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:30 2001 Quant Results File: xspcbi07.RES
Quant Time: Sep 8 9:30 2001 Quant Results File: xspcbi07.RES

Pesticide Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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_07_01\xspcbi07.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

ok 9-10-01





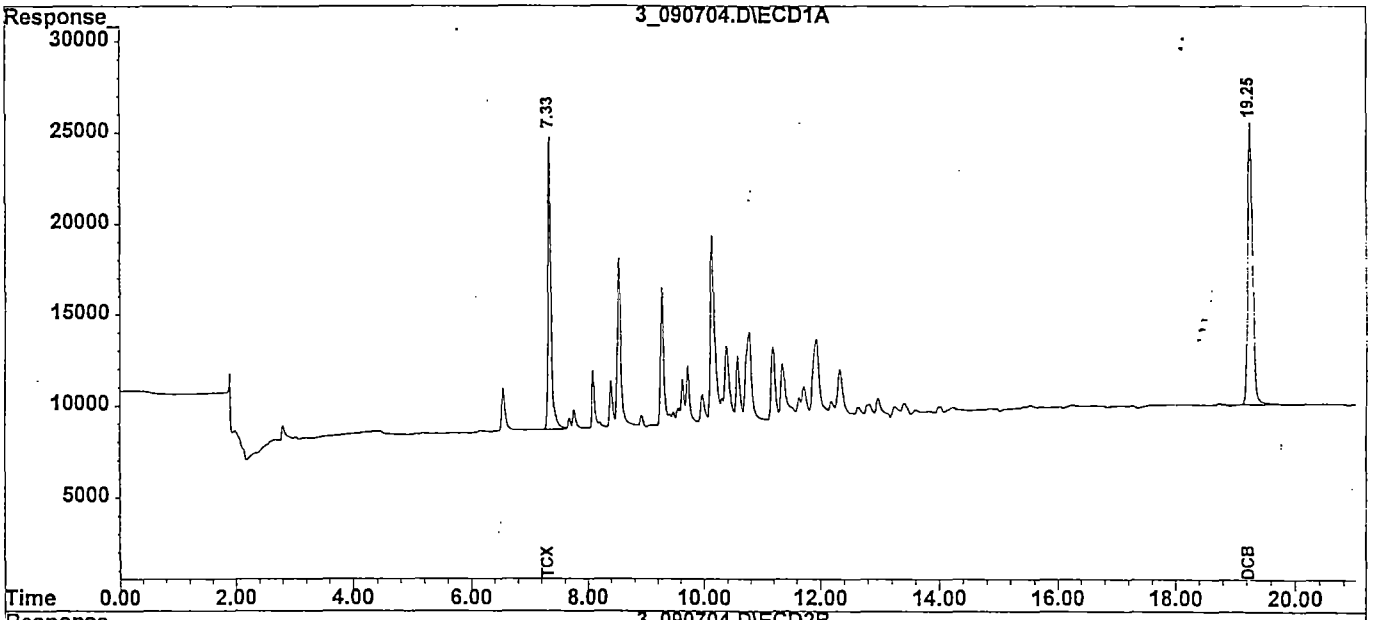
Chromatographic Report

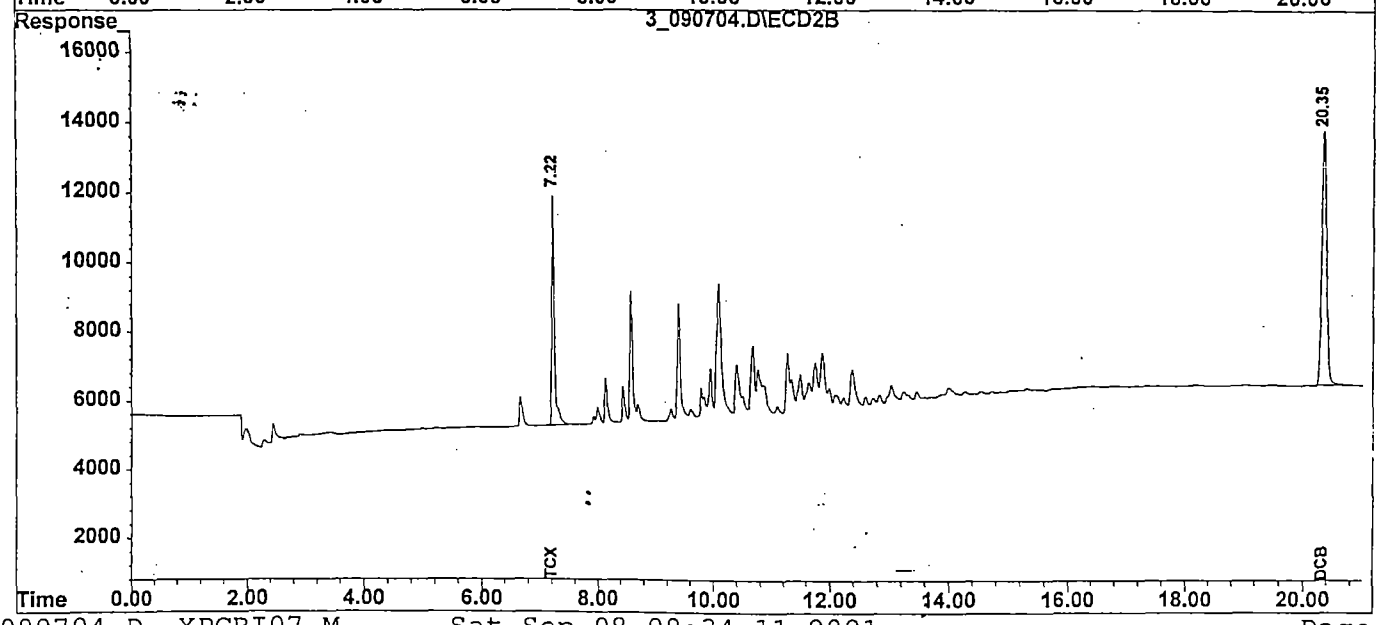
Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090704.D\ECD1A.CH Vial: 4
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090704.D\ECD2B.CH
Acq On : 07 Sep 2001 10:44 Operator: DDC
Sample : AR1232L31D Inst : HP_03
Misc : 5-422-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:31 2001 Quant Results File: XPCBI07.RES
Quant Time: Sep 8 9:31 2001 Quant Results File: xspcbi07.RES

Pesticide Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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_07_01\xspcbi07.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

ok 9-10-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090703.D\ECD1A.CH Vial: 3
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090703.D\ECD2B.CH
Acq On : 07 Sep 2001 10:18 Operator: DDC
Sample : AR1221L31D Inst : HP_03
Misc : 5-420-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:30 2001 Quant Results File: XPCBI07.RES
Multi Time: Sep 8 9:30 2001 Quant Results File: xspcbi07.RES

Pesticide Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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_07_01\xspcbi07.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	7.34	7.23	553684	212586	17.4	18.4
22)	S DCB	19.26	20.36	783952	364516	18.7	18.3
	Target Compounds:						
	Multi-Component Compounds:						
2)	L2 Aroclor-1221	8.10	8.14	160612	66778	390.9	409.9
3)	L2 Aroclor-1221 {2}	8.41	8.45	110967	44056	384.2	389.7
4)	L2 Aroclor-1221 {3}	8.54	8.58	453833	148510	400.0	396.1
	Sum Aroclor-1221			725412	259344	1175.0	1195.7
	Average Aroclor-1221					391.680	398.576

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

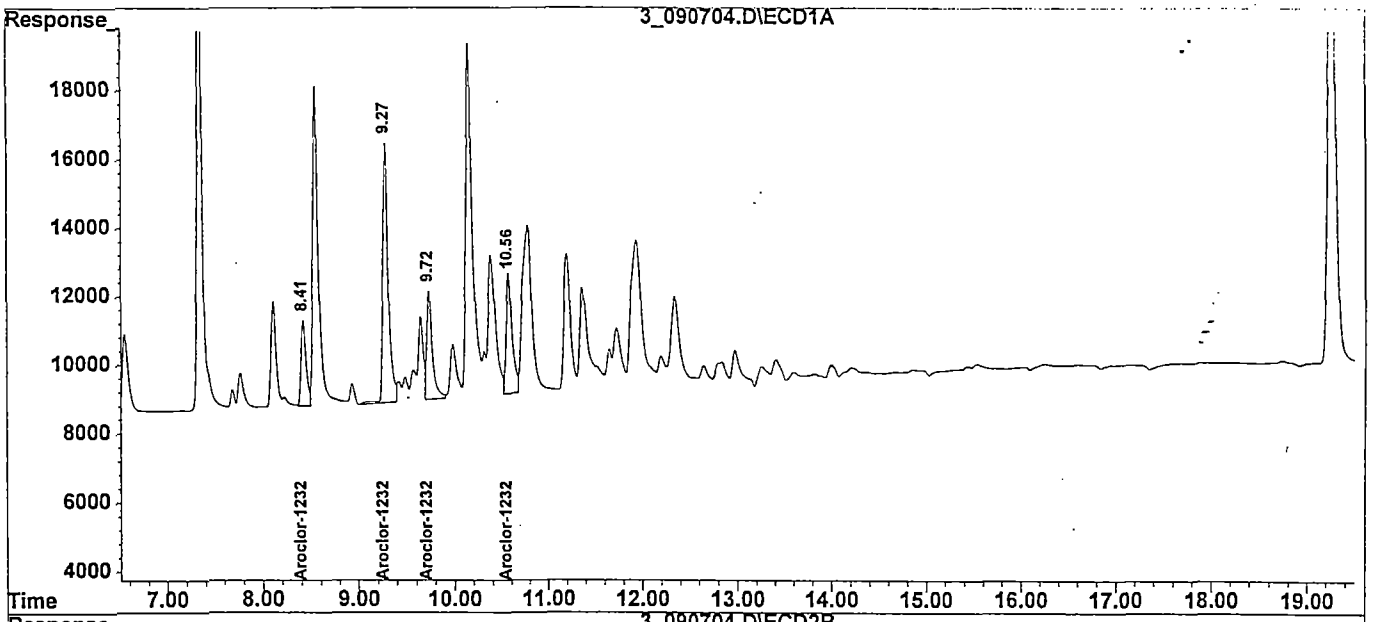
Chromatographic Report

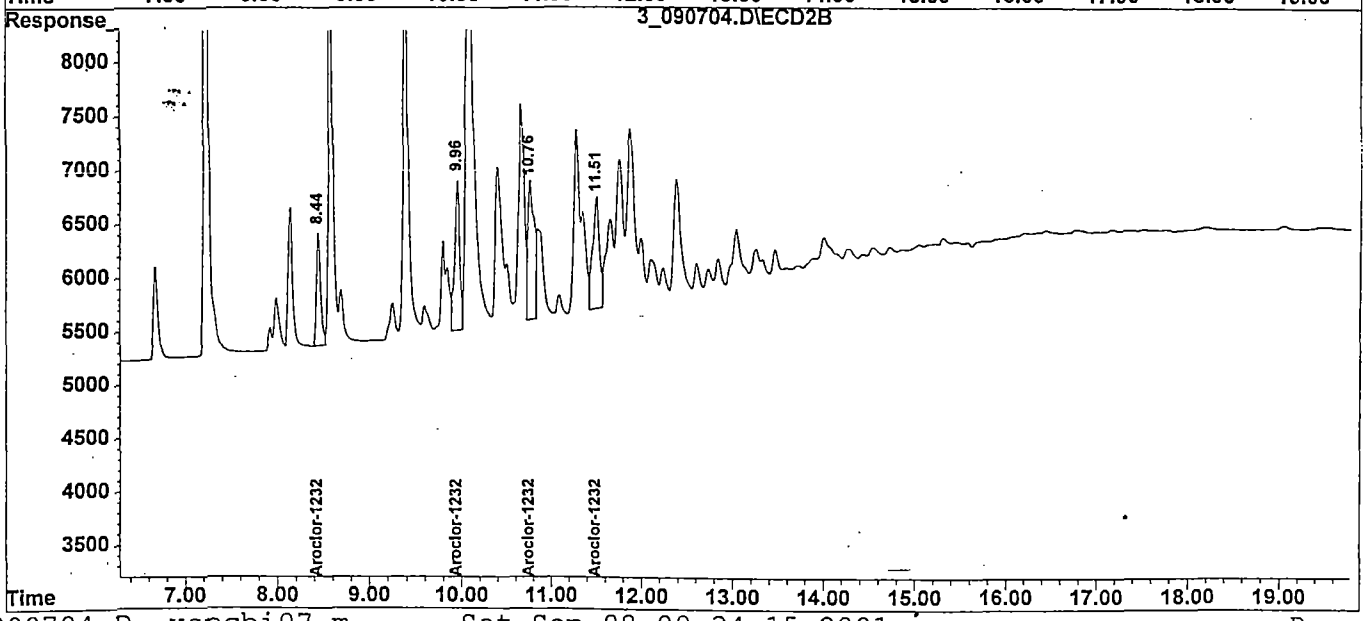
Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090704.D\ECD1A.CH Vial: 4
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090704.D\ECD2B.CH
Acq On : 07 Sep 2001 10:44 Operator: DDC
Sample : AR1232L31D Inst : HP_03
Misc : 5-422-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:31 2001 Quant Results File: xspcbi07.RES
Quant Time: Sep 8 9:31 2001 Quant Results File: xspcbi07.RES

Pesticide Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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_07_01\xspcbi07.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

ok 9-10-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090704.D\ECD1A.CH Vial: 4
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090704.D\ECD2B.CH
Acq On : 07 Sep 2001 10:44 Operator: DDC
Sample : AR1232L31D Inst : HP_03
Misc : 5-422-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:31 2001 Quant Results File: XPCBI07.RES
Multi Time: Sep 8 9:31 2001 Quant Results File: xspcbi07.RES

Pesticide Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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_07_01\xspcbi07.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	570550	217291	18.0	18.8
22)	S DCB	19.26	20.35	839935	400554	20.0	20.1
	Target Compounds:						
	Multi-Component Compounds:						
5)	L3 Aroclor-1232	8.41	8.45	86972	33659	381.3	379.0
6)	L3 Aroclor-1232 {2}	9.27	9.96	294898	52683	392.1	407.7
7)	L3 Aroclor-1232 {3}	9.72	10.77	130575	65146	408.3	420.8
8)	L3 Aroclor-1232 {4}	10.56	11.51	157113	55726	383.1	429.1
	Sum Aroclor-1232			669558	207214	1564.8	1636.5
	Average Aroclor-1232					391.212	409.134

(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_07_01\XPCBI07.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

ok
9-10-01

Calibration Files
L1 =3_090705.D L2 =3_090706.D L3 =3_090707.D
L4 =3_090708.D L5 =3_090709.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
7) Aroclor-1242	645.4	701.8	662.6	590.9	537.9	627.7	10.21
8) Aroclor-1242 {2}	1.3	1.3	1.2	1.1	1.0	1.2 E3	10.87
9) Aroclor-1242 {3}	1.1	1.0	1.0	0.9	0.9	1.0 E3	9.44
10) Aroclor-1242 {4}	1.1	1.0	1.0	1.0	0.9	1.0 E3	5.73
11) Aroclor-1242 {5}	547.0	527.6	528.1	510.9	479.2	518.6	4.91

Signal #2 Calibration Files
L1 =3_090705.D L2 =3_090706.D L3 =3_090707.D
L4 =3_090708.D L5 =3_090709.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
30) Aroclor-1242 #2	225.7	218.5	228.9	212.7	196.4	216.4	5.94
31) Aroclor-1242 {2} #2	530.1	504.6	519.9	473.5	434.2	492.5	7.91
32) Aroclor-1242 {3} #2	427.2	419.8	462.7	431.4	410.5	430.3	4.60
33) Aroclor-1242 {4} #2	289.1	299.5	338.3	328.1	318.7	314.7	6.43
34) Aroclor-1242 {5} #2	429.1	406.6	449.0	418.3	393.9	419.4	5.04

(#) = Out of Range

XPCBI07.M Sat Sep 08 09:18:06 2001

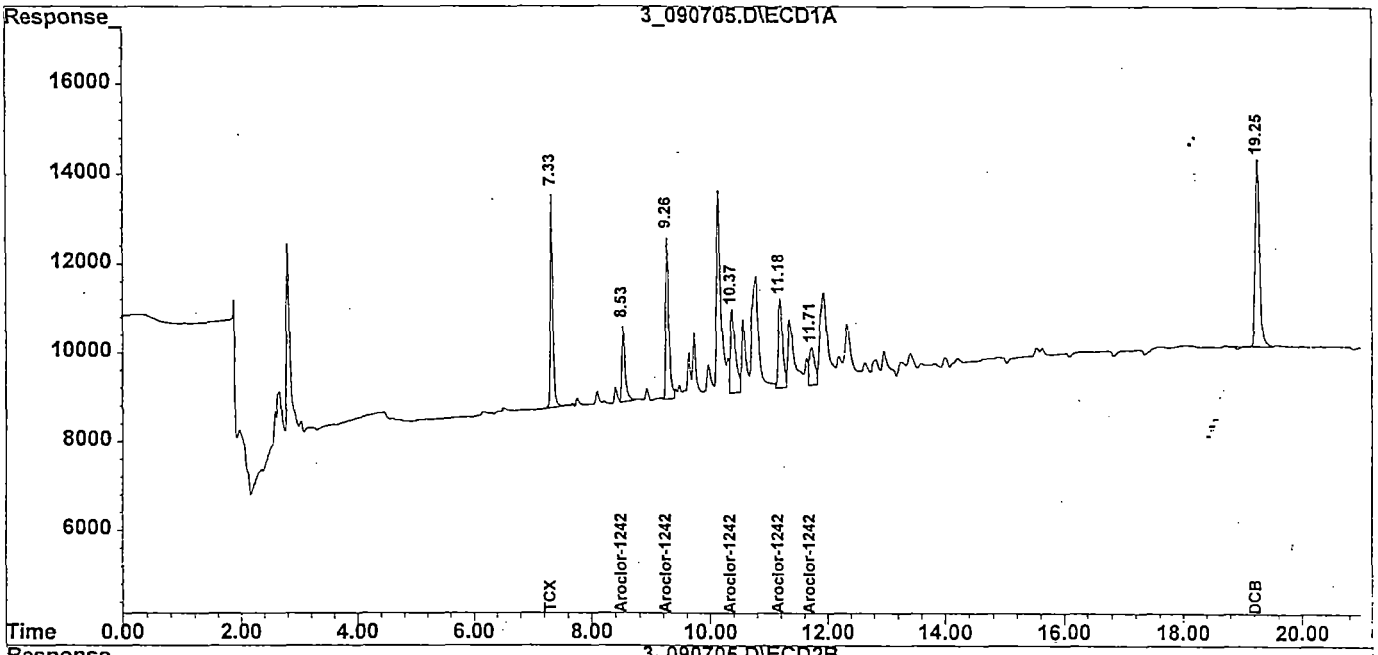
Chromatographic Report

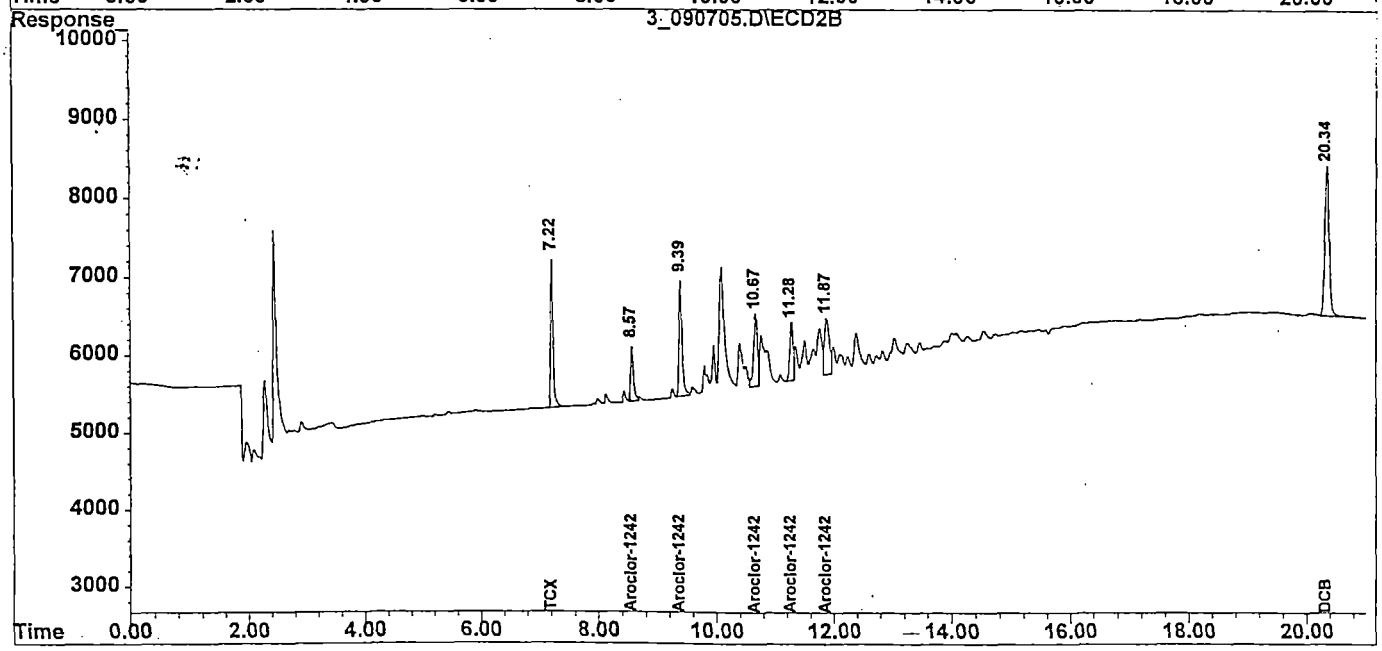
Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090705.D\ECD1A.CH Vial: 5
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090705.D\ECD2B.CH
Acq On : 07 Sep 2001 11:10 Operator: DDC
Sample : AR1242L11D Inst : HP_03
Misc : 5-11-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:16 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_05_01\
Last Update : Thu Sep 06 08:09:33 2001
Response via : Multiple Level Calibration

Ok 9-10-01

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_07_01\3_090705.D\ECD1A.CH Vial: 5
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090705.D\ECD2B.CH
Acq On : 07 Sep 2001 11:10 Operator: DDC
Sample : AR1242L11D Inst : HP_03
Misc : 5-11-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:16 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_05_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	143798	55001	5.265	5.253
22)	S DCB	19.25	20.35	217286	103112	5.979	5.639
	Target Compounds:						
7)	L4 Aroclor-1242	8.53	8.57	64536	22569	104.5	104.7
8)	L4 Aroclor-1242 {2}	9.27	9.39	133609	53011	114.4	110.3
9)	L4 Aroclor-1242 {3}	10.37	10.67	110052	42723	121.4	100.6
10)	L4 Aroclor-1242 {4}	11.18	11.28	106078	28912	112.9	90.3
11)	L4 Aroclor-1242 {5}	11.72	11.88	54702	42913	119.0	114.0
	Sum Aroclor-1242			468977	190128	572.1	519.9
	Average Aroclor-1242					114.423	103.982

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

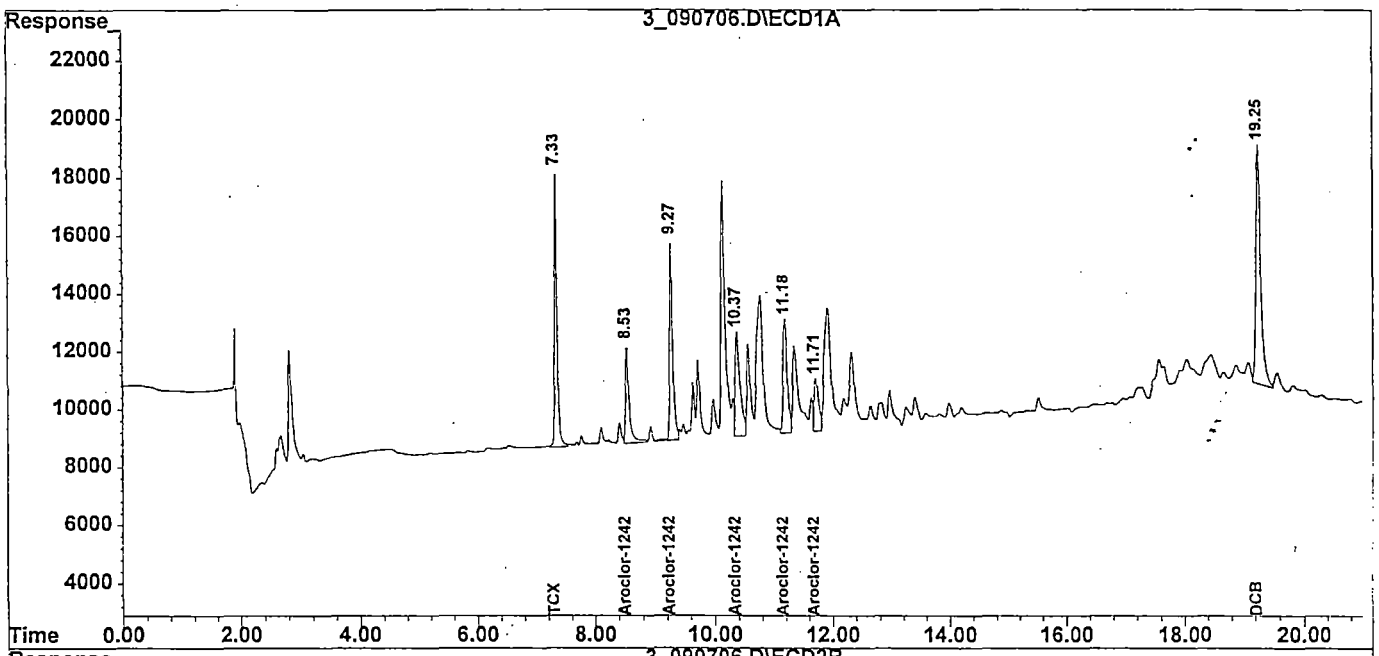
Chromatographic Report

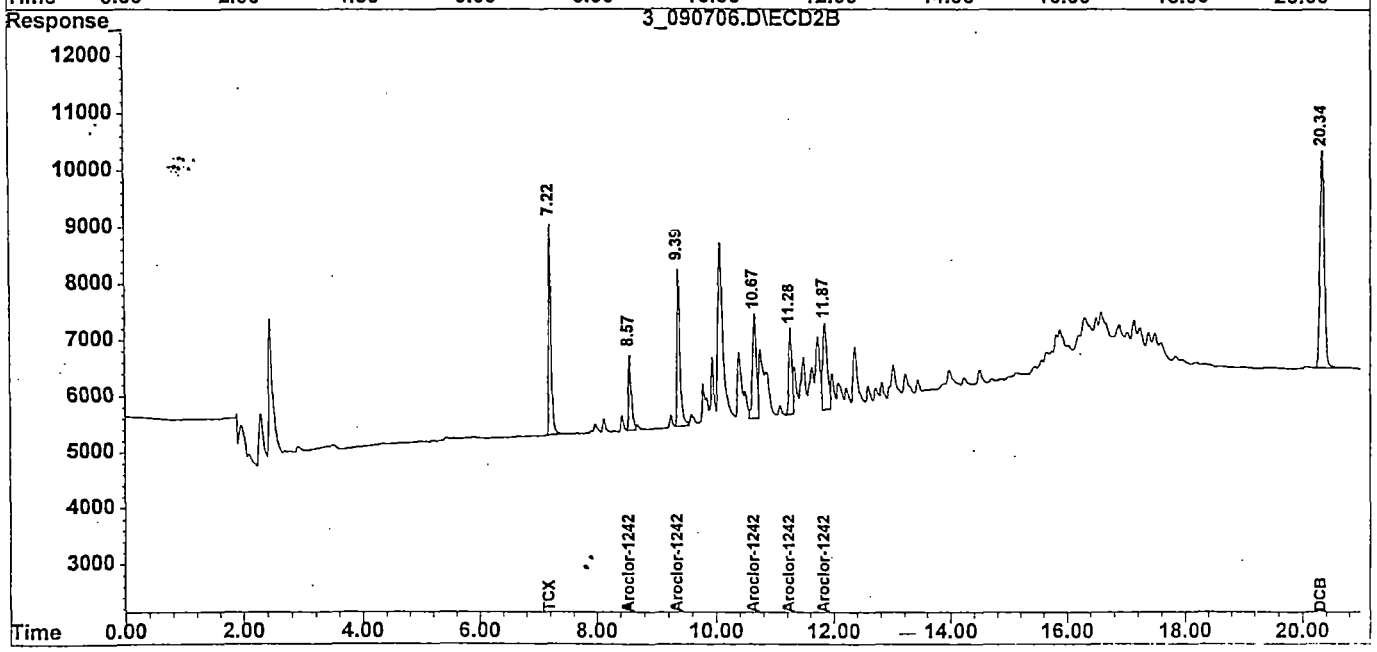
Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090706.D\ECD1A.CH Vial: 6
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090706.D\ECD2B.CH
Acq On : 07 Sep 2001 11:35 Operator: DDC
Sample : AR1242L21D Inst : HP_03
Misc : 5-10-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:16 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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

ok 9-10-01

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_07_01\3_090706.D\ECD1A.CH Vial: 6
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090706.D\ECD2B.CH
Acq On : 07 Sep 2001 11:35 Operator: DDC
Sample : AR1242L21D Inst : HP_03
Misc : 5-10-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:16 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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	293365	106441	10.5	9.831
22)	S DCB	19.25	20.34	473310	199486	12.7	10.7
	Target Compounds:						
7)	L4 Aroclor-1242	8.53	8.57	140358	43699	227.3	200.7
8)	L4 Aroclor-1242 {2}	9.27	9.39	253673	100913	214.4	206.7
9)	L4 Aroclor-1242 {3}	10.37	10.67	202801	83966	216.4	196.7
10)	L4 Aroclor-1242 {4}	11.18	11.28	202295	59891	210.3	188.1
11)	L4 Aroclor-1242 {5}	11.72	11.87	105526	81328	220.2	209.8
	Sum Aroclor-1242			904652	369796	1088.7	1002.1
	Average Aroclor-1242					217.745	200.418

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

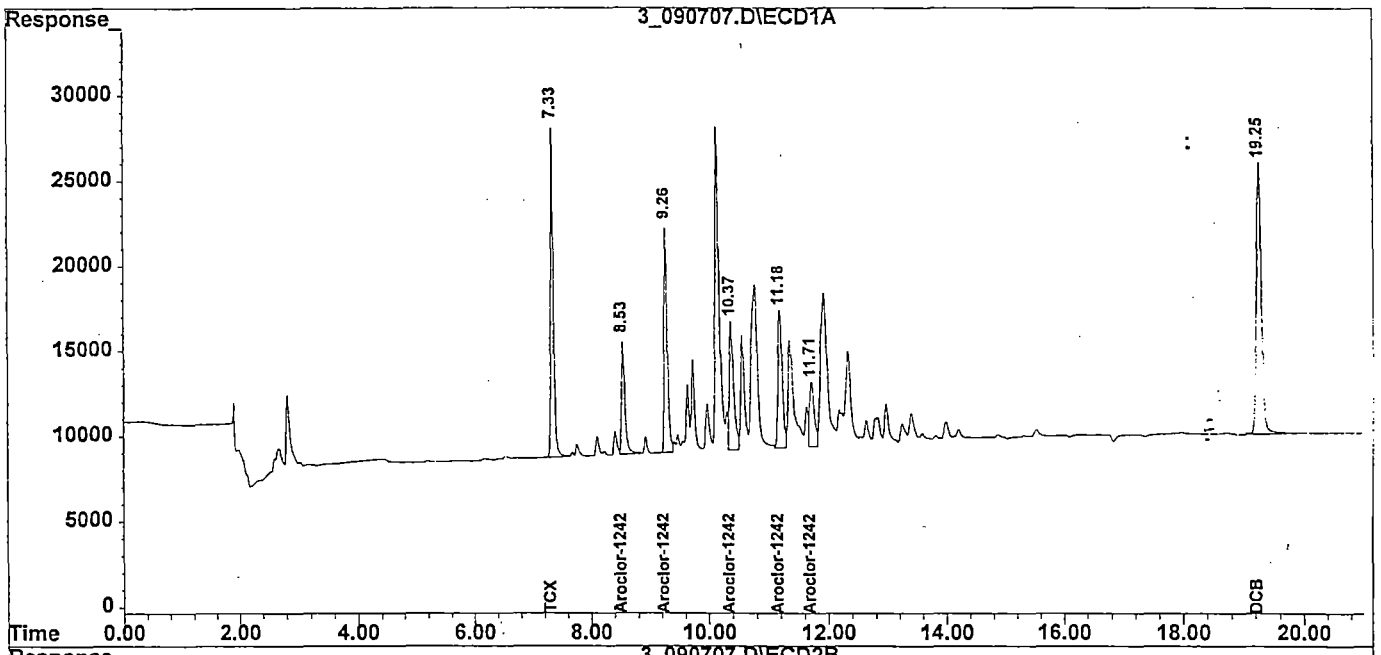
Chromatographic Report

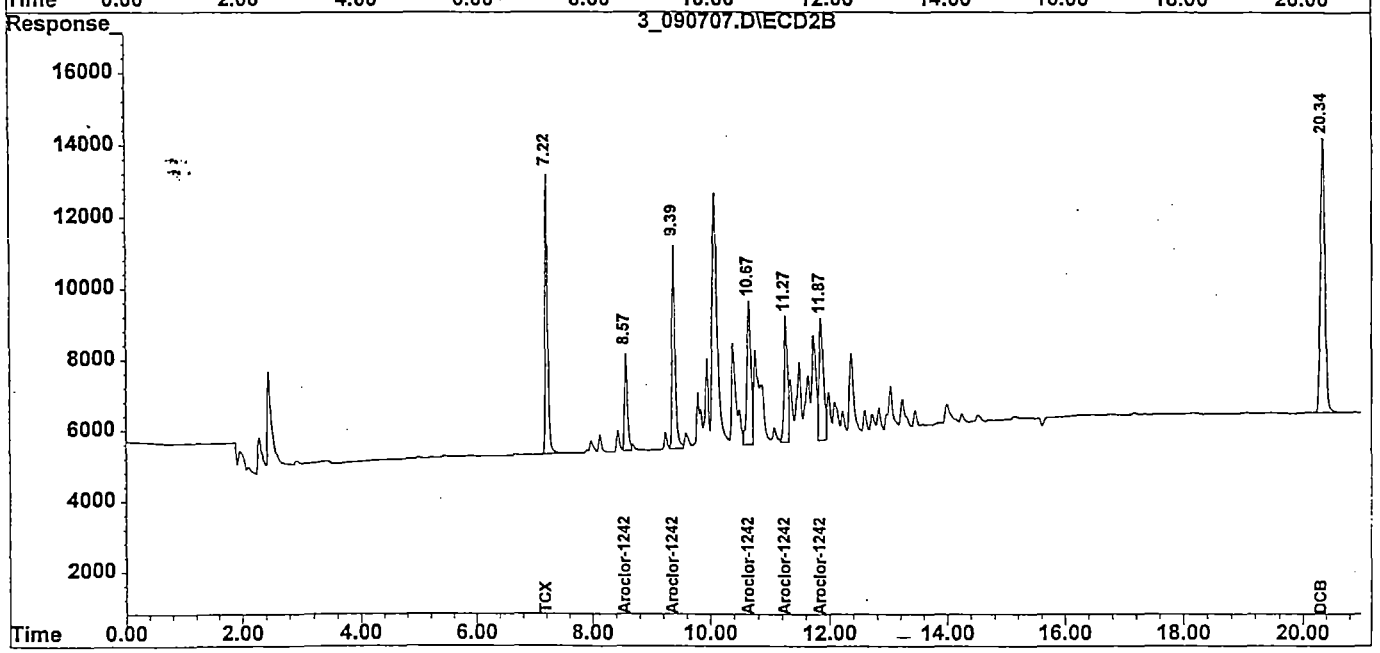
Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090707.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090707.D\ECD2B.CH
Acq On : 07 Sep 2001 12:01 Operator: DDC
Sample : AR1242L31D✓ Inst : HP_03
Misc : 5-9-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:17 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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

ok 9-10-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090707.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090707.D\ECD2B.CH
Acq On : 07 Sep 2001 12:01 Operator: DDC
Sample : AR1242L31D Inst : HP_03
Misc : 5-9-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:17 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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	624255	234119	21.4	20.9
22)	S DCB	19.25	20.35	886076	407525	22.4	21.4
	Target Compounds:						
7)	L4 Aroclor-1242	8.53	8.57	265052	91553	429.7	421.7
8)	L4 Aroclor-1242 {2}	9.26	9.39	492987	207957	419.8	424.5
9)	L4 Aroclor-1242 {3}	10.37	10.67	400137	185085	424.4	436.7
10)	L4 Aroclor-1242 {4}	11.18	11.28	412480	135304	430.1	431.2
11)	L4 Aroclor-1242 {5}	11.71	11.87	211221	179616	434.2	457.3
	Sum Aroclor-1242			1781878	799515	2138.1	2171.5
	Average Aroclor-1242					427.626	434.293

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

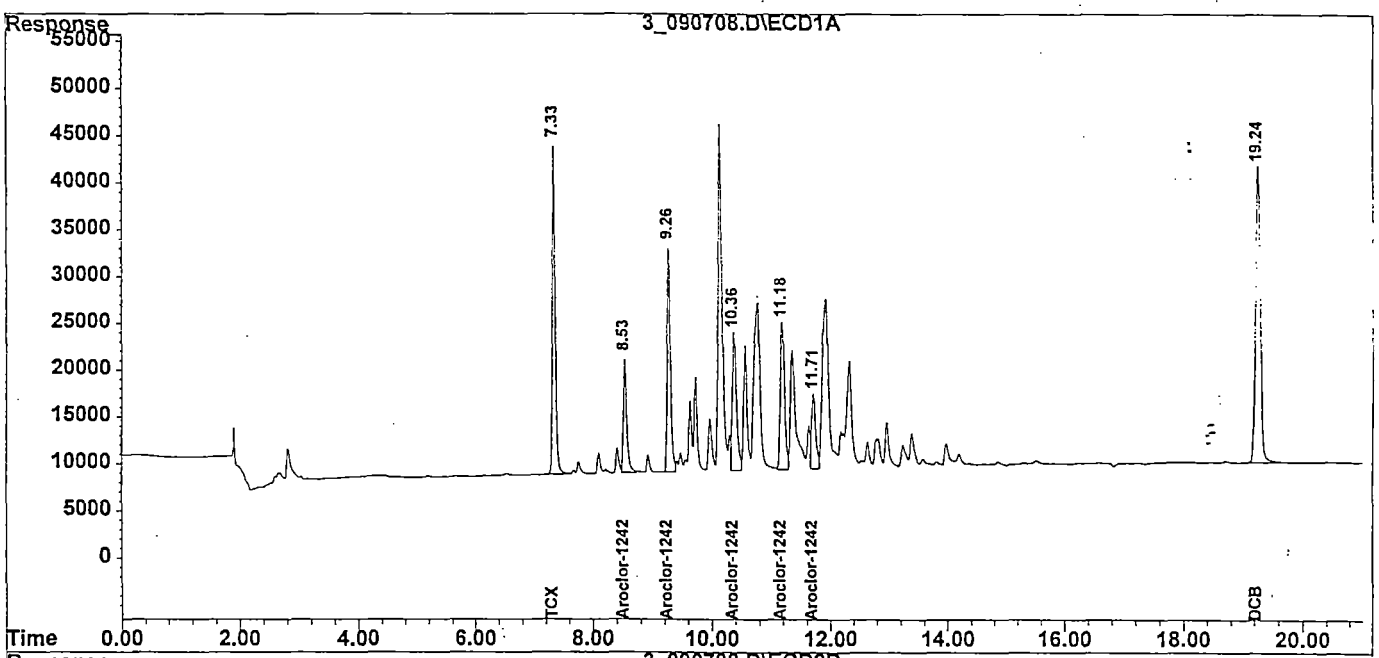
Chromatographic Report

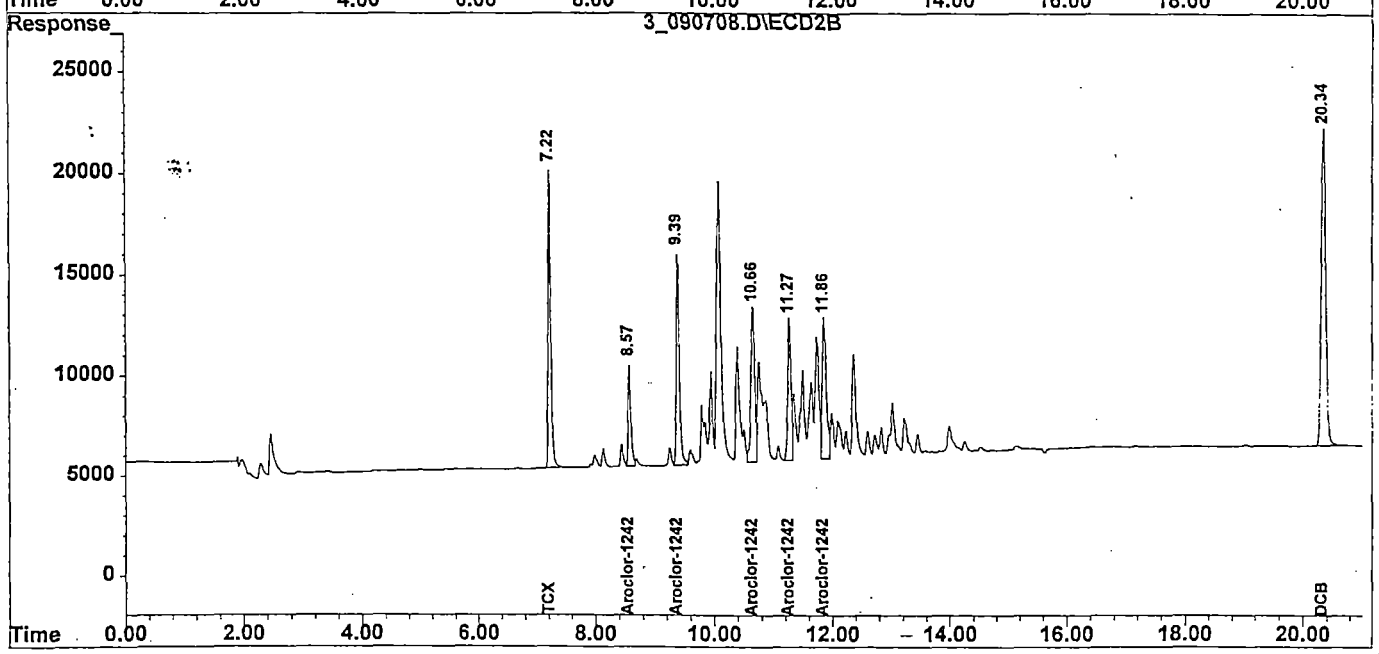
Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090708.D\ECD1A.CH Vial: 8
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090708.D\ECD2B.CH
Acq On : 07 Sep 2001 12:27 Operator: DDC
Sample : AR1242L41D ✓ Inst : HP_03
Misc : 5-8-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:17 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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

ok 9-10-01

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_07_01\3_090708.D\ECD1A.CH Vial: 8
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090708.D\ECD2B.CH
Acq On : 07 Sep 2001 12:27 Operator: DDC
Sample : AR1242L41D Inst : HP_03
Misc : 5-8-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:17 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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	1202383	453507	40.4	39.9
22)	S DCB	19.25	20.34	1771863	856231	43.4	44.4
	Target Compounds:						
7)	L4 Aroclor-1242	8.53	8.57	472746	170197	755.2	779.7
8)	L4 Aroclor-1242 {2}	9.26	9.39	894763	378828	754.4	767.3
9)	L4 Aroclor-1242 {3}	10.37	10.66	744874	345154	777.0	806.7
10)	L4 Aroclor-1242 {4}	11.18	11.27	782365	262515	803.9	833.6
11)	L4 Aroclor-1242 {5}	11.71	11.86	408712	334648	821.3	827.1
	Sum Aroclor-1242			3303461	1491343	3911.8	4014.5
	Average Aroclor-1242					782.356	802.893

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

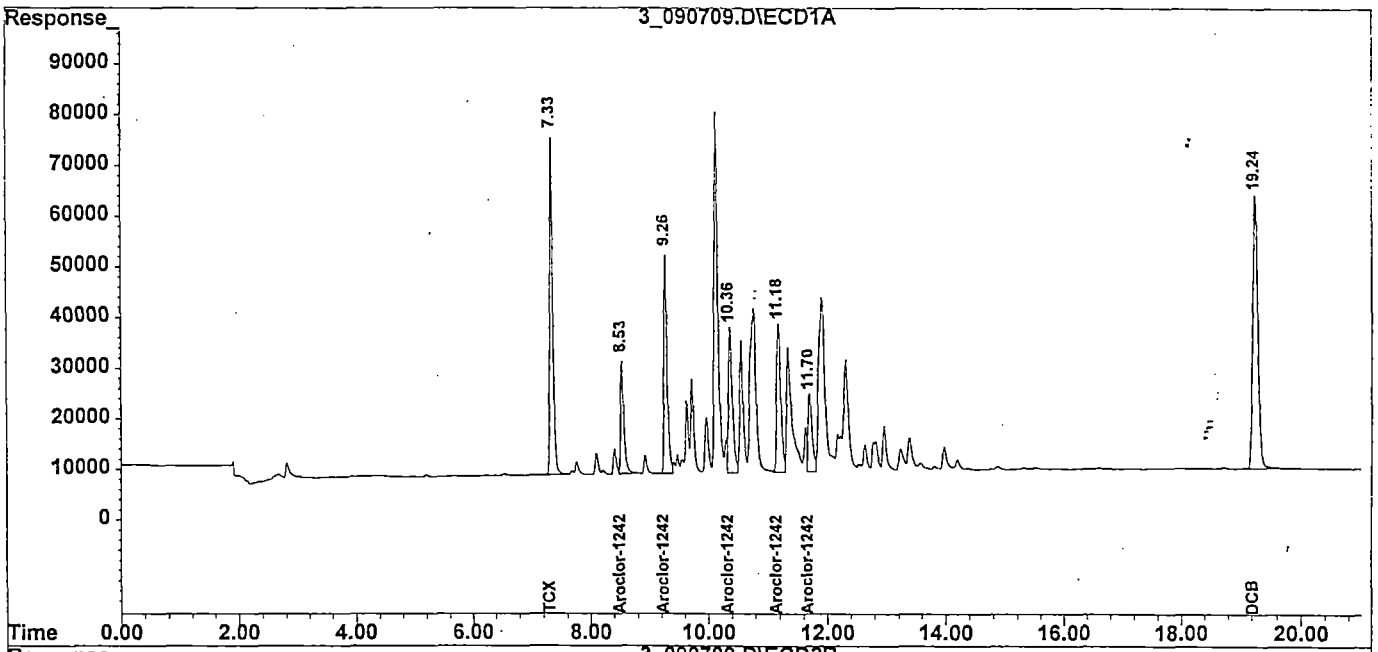
Chromatographic Report

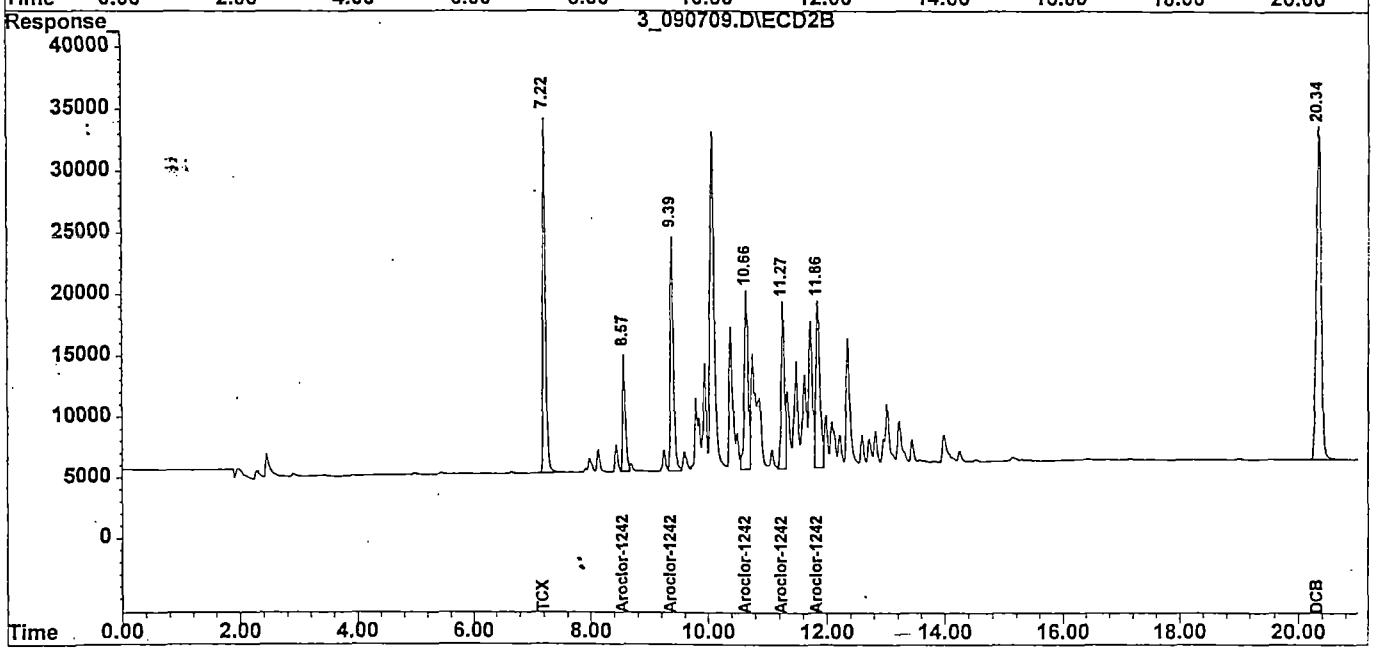
Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090709.D\ECD1A.CH Vial: 9
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090709.D\ECD2B.CH
Acq On : 07 Sep 2001 12:52 Operator: DDC
Sample : AR1242L51D Inst : HP_03
Misc : 5-7-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:17 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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

ok 9-10-01

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_07_01\3_090709.D\ECD1A.CH Vial: 9
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090709.D\ECD2B.CH
Acq On : 07 Sep 2001 12:52 Operator: DDC
Sample : AR1242L51D Inst : HP_03
Misc : 5-7-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:17 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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	2347376	910035	78.4	80.2
22)	S DCB	19.24	20.34	3078014	1530329	72.2 E	76.6 E
	Target Compounds:						
7)	L4 Aroclor-1242	8.53	8.57	860603	314171	1379.9 E	1453.2 E
8)	L4 Aroclor-1242 {2}	9.26	9.39	1613869	694728	1362.7 E	1414.4 E
9)	L4 Aroclor-1242 {3}	10.36	10.66	1367244	656722	1414.9 E	1538.1 E
10)	L4 Aroclor-1242 {4}	11.18	11.27	1458351	509965	1483.3 E	1628.6 E
11)	L4 Aroclor-1242 {5}	11.70	11.86	766660	630195	1512.3 E	1531.8 E
	Sum Aroclor-1242			6066726	2805782	7153.0	7566.1
	Average Aroclor-1242					1430.595	1513.215

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

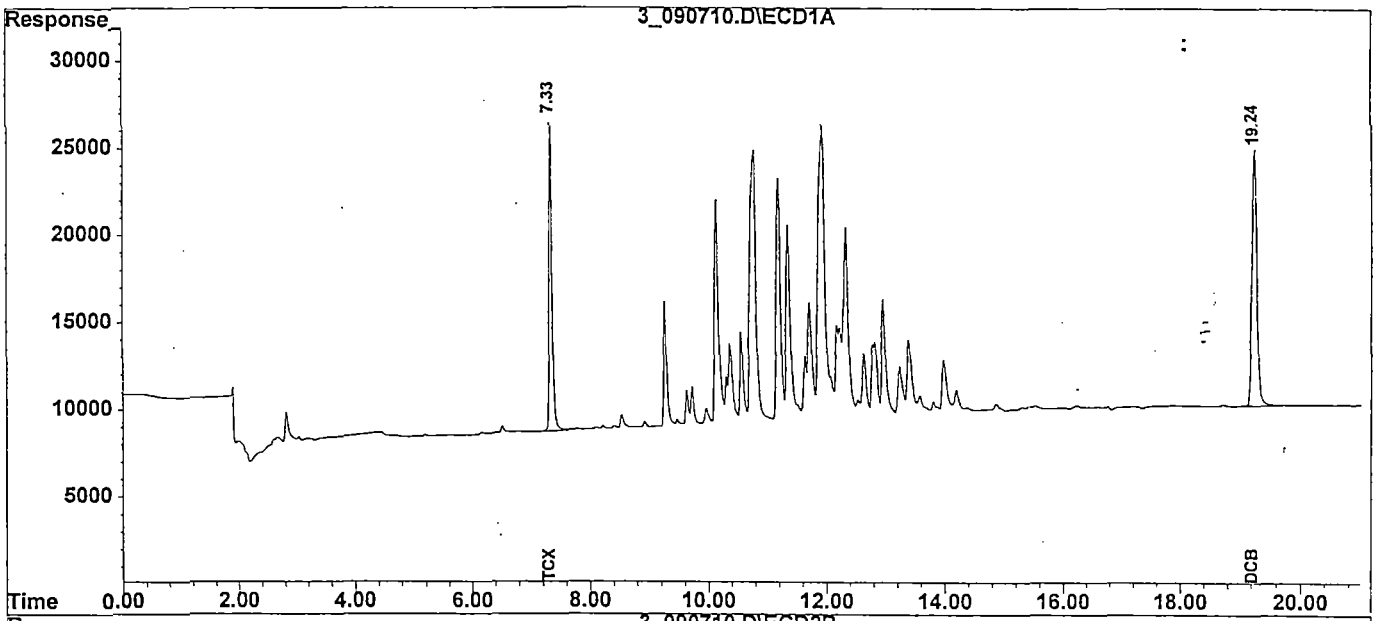
Chromatographic Report

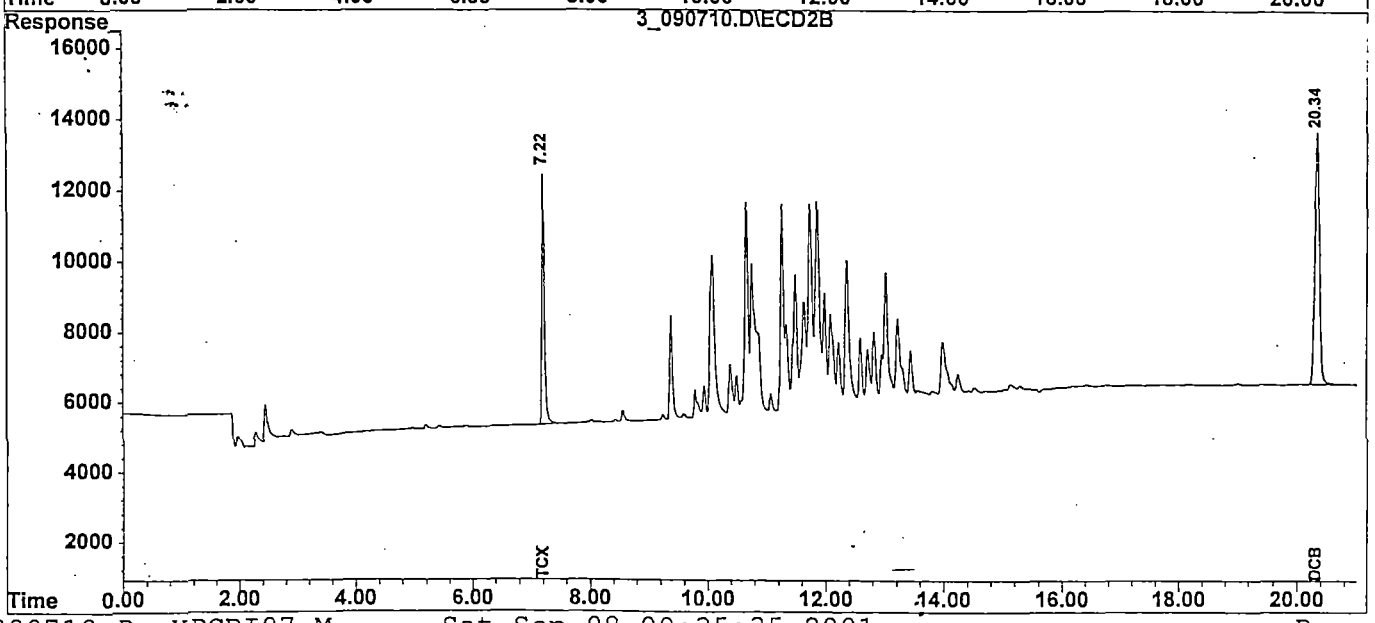
Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090710.D\ECD1A.CH Vial: 10
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090710.D\ECD2B.CH
Acq On : 07 Sep 2001 13:18 Operator: DDC
Sample : AR1248L31D ✓ Inst : HP_03
Misc : 5-424-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:32 2001 Quant Results File: XPCBI07.RES
Quant Time: Sep 8 9:32 2001 Quant Results File: xspcbi07.RES

Pesticide Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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_07_01\xspcbi07.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

ok 9-10-01





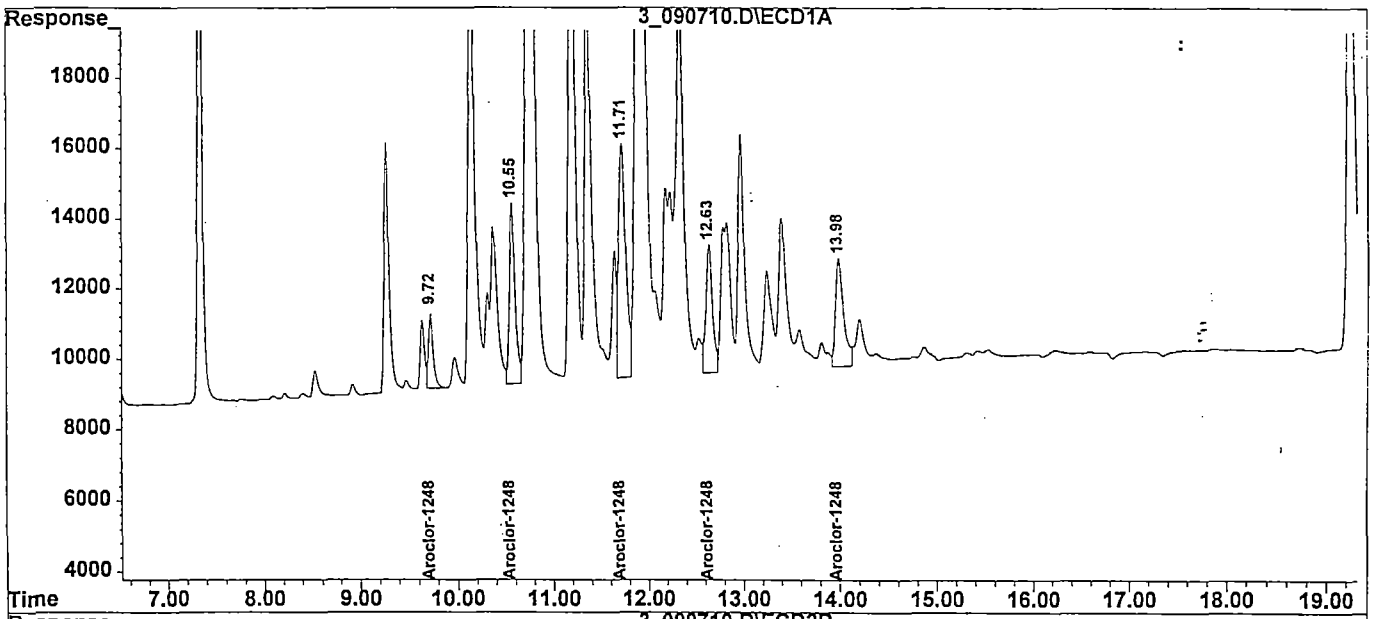
Chromatographic Report

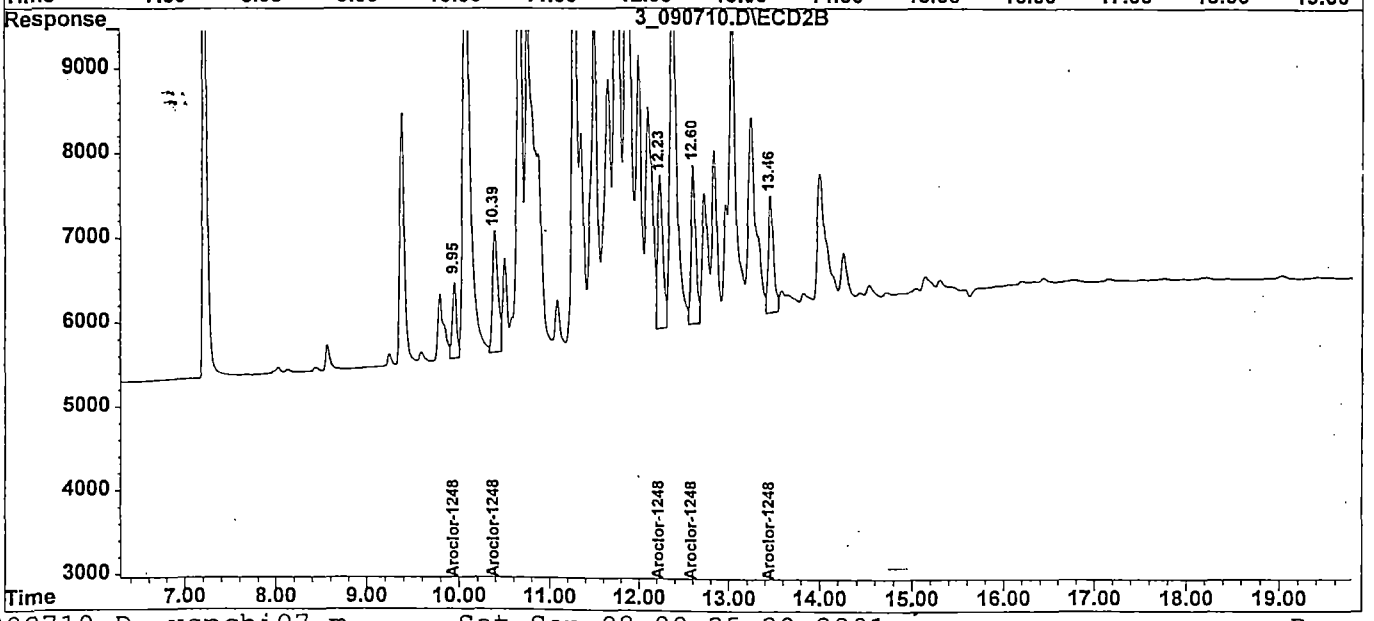
Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090710.D\ECD1A.CH Vial: 10
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090710.D\ECD2B.CH
Acq On : 07 Sep 2001 13:18 Operator: DDC
Sample : AR1248L31D Inst : HP_03
Misc : 5-424-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:32 2001 Quant Results File: xspcbi07.RES
Quant Time: Sep 8 9:32 2001 Quant Results File: xspcbi07.RES

Pesticide Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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_07_01\xspcbi07.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

ok 9-10-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090710.D\ECD1A.CH Vial: 10
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090710.D\ECD2B.CH
Acq On : 07 Sep 2001 13:18 Operator: DDC
Sample : AR1248L31D Inst : HP_03
Misc : 5-424-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:32 2001 Quant Results File: XPCBI07.RES
Multi Time: Sep 8 9:32 2001 Quant Results File: xspcbi07.RES

Pesticide Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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_07_01\xspcbi07.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	583954	214889	18.4	18.6
22)	S DCB	19.24	20.34	805610	380734	19.2	19.1
	Target Compounds:						
	Multi-Component Compounds:						
14)	L5 Aroclor-1248	9.72	9.96	74451	28716	417.9	413.1
15)	L5 Aroclor-1248 {2}	10.56	10.40	207662	59892	432.8	393.0
16)	L5 Aroclor-1248 {3}	11.71	12.23	357467	73044	431.1	459.5
17)	L5 Aroclor-1248 {4}	12.63	12.60	178002	70079	492.5	481.0
18)	L5 Aroclor-1248 {5}	13.98	13.46	174876	56243	511.7	551.5
	Sum Aroclor-1248			992459	287975	2286.0	2298.0
	Average Aroclor-1248					457.204	459.604

(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_07_01\XPCBI07.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

ok 9-10-01 EA

Calibration Files
L1 =3_090711.D L2 =3_090712.D L3 =3_090713.D
L4 =3_090714.D L5 =3_090715.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
12) Aroclor-1254	1.2	1.2	1.2	1.0	1.0	1.1 E3	8.13
13) Aroclor-1254 {2}	2.3	2.2	2.4	2.0	2.1	2.2 E3	6.16
14) Aroclor-1254 {3}	2.3	2.3	2.4	2.0	2.1	2.2 E3	6.89
15) Aroclor-1254 {4}	2.6	2.6	2.7	2.4	2.5	2.6 E3	4.92
16) Aroclor-1254 {5}	1.9	2.0	2.0	1.8	1.8	1.9 E3	4.82

Signal #2 Calibration Files
L1 =3_090711.D L2 =3_090712.D L3 =3_090713.D
L4 =3_090714.D L5 =3_090715.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
35) Aroclor-1254 #2	348.9	341.0	363.5	318.9	322.2	338.9	5.50
36) Aroclor-1254 {2} #2	942.7	924.4	936.6	812.4	816.1	886.4	7.47
37) Aroclor-1254 {3} #2	1.4	1.3	1.3	1.1	1.1	1.2 E3	11.04
38) Aroclor-1254 {4} #2	771.4	760.6	681.0	603.6	611.2	685.6	11.59
39) Aroclor-1254 {5} #2	957.0	966.1	919.1	837.7	862.3	908.4	6.26

(#) = Out of Range

XPCBI07.M Sat Sep 08 09:20:37 2001

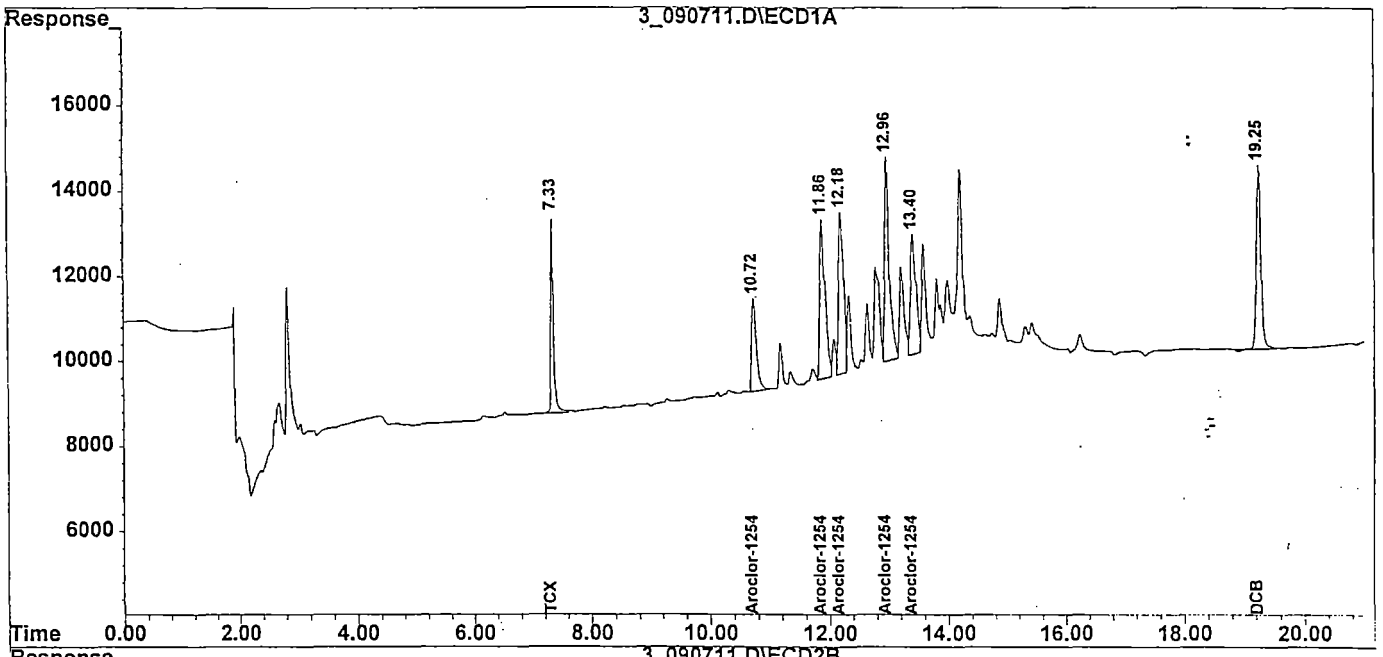
Chromatographic Report

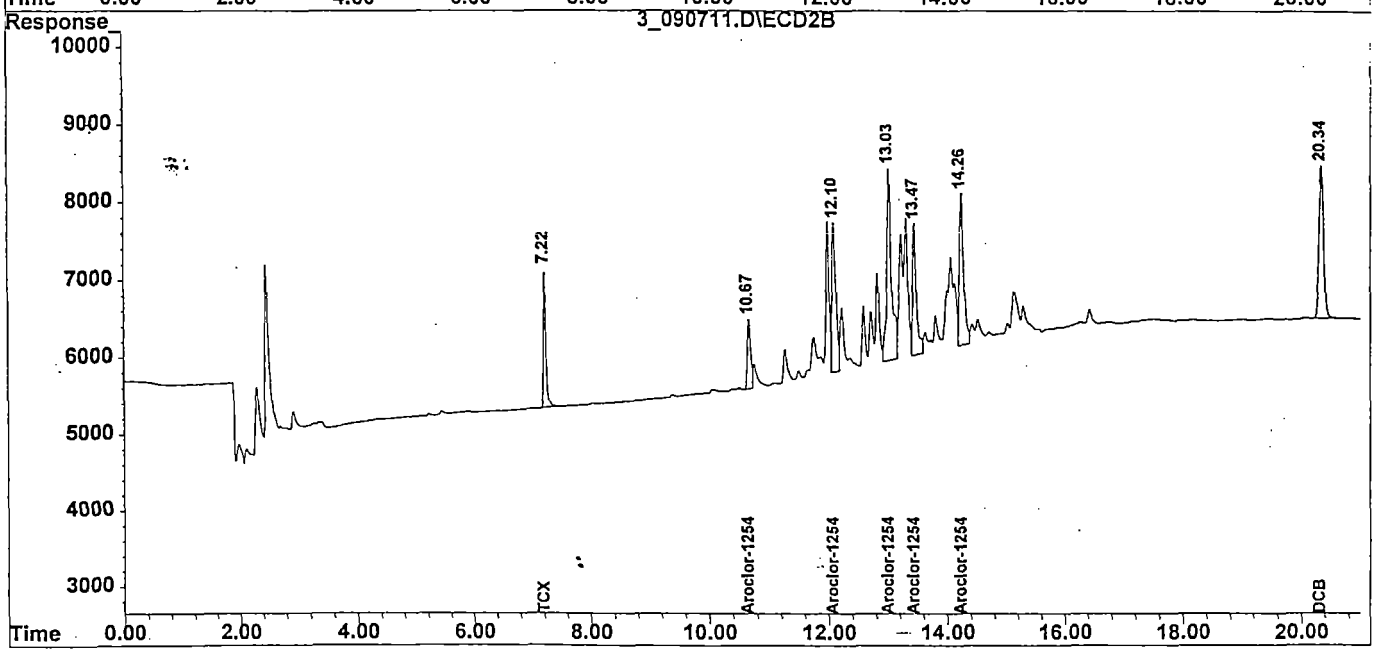
Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090711.D\ECD1A.CH Vial: 11
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090711.D\ECD2B.CH
Acq On : 07 Sep 2001 13:44 Operator: DDC
Sample : AR1254L11D Inst : HP_03
Misc : 5-6-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:18 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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

ok 9-10-01

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_07_01\3_090711.D\ECD1A.CH Vial: 11
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090711.D\ECD2B.CH
Acq On : 07 Sep 2001 13:44 Operator: DDC
Sample : AR1254L11D Inst : HP_03
Misc : 5-6-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:18 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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	149693	52249	5.033	4.660	
22)	S DCB	19.25	20.34	227700	105197	5.226	5.183	
	Target Compounds:							
12)	L6 Aroclor-1254	10.72	10.67	121666	34888	105.7	100.1	
13)	L6 Aroclor-1254 {2}	11.87	12.10	229723	94273	106.1	111.1	
14)	L6 Aroclor-1254 {3}	12.18	13.04	229979	140882	107.8	130.5	
15)	L6 Aroclor-1254 {4}	12.96	13.47	260147	77138	106.6	138.2	#
16)	L6 Aroclor-1254 {5}	13.40	14.26	190345	95699	105.6	124.7	
	Sum Aroclor-1254			1031860	442880	531.9	604.6	
	Average Aroclor-1254					106.374	120.929	

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

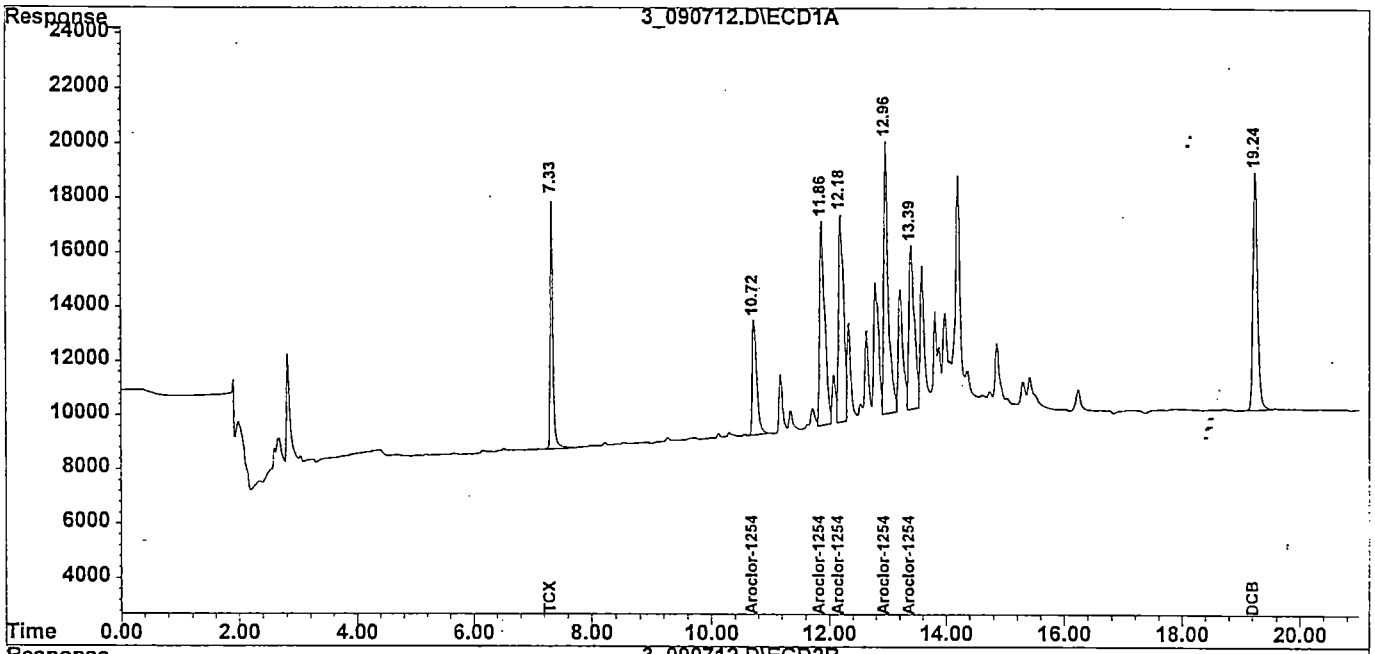
Chromatographic Report

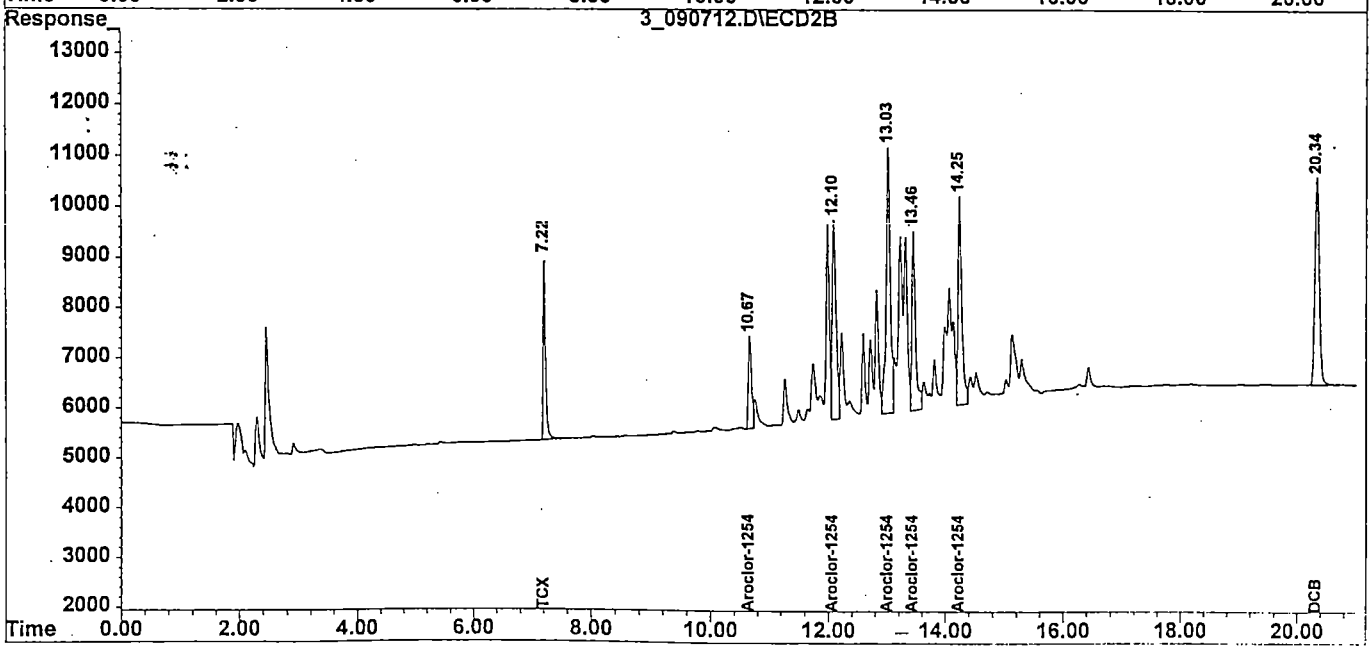
Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090712.D\ECD1A.CH Vial: 12
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090712.D\ECD2B.CH
Acq On : 07 Sep 2001 14:10 Operator: DDC
Sample : AR1254L21D Inst : HP_03
Misc : 5-5-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:19 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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

ok 9-10-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090712.D\ECD1A.CH Vial: 12
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090712.D\ECD2B.CH
Acq On : 07 Sep 2001 14:10 Operator: DDC
Sample : AR1254L21D Inst : HP_03
Misc : 5-5-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:19 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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	290749	104545	9.699	9.416
22)	S DCB	19.25	20.34	467666	218736	10.6	10.7
	Target Compounds:						
12)	L6 Aroclor-1254	10.72	10.67	230132	68190	204.1	197.4
13)	L6 Aroclor-1254 {2}	11.86	12.10	449646	184877	209.6	216.1
14)	L6 Aroclor-1254 {3}	12.18	13.03	456106	252171	215.0	223.2
15)	L6 Aroclor-1254 {4}	12.96	13.46	529777	152125	219.4	254.5
16)	L6 Aroclor-1254 {5}	13.40	14.26	393820	193210	221.7	240.1
	Sum Aroclor-1254			2059482	850574	1069.8	1131.2
	Average Aroclor-1254					213.966	226.240

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

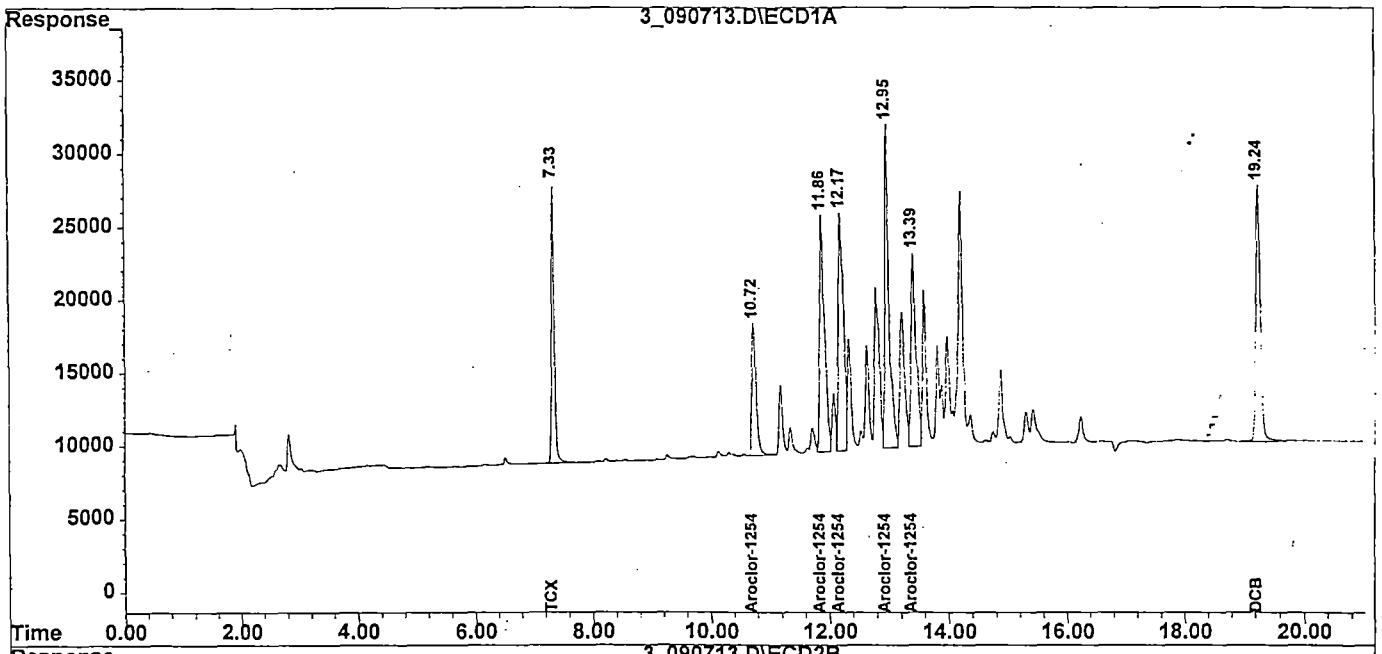
Chromatographic Report

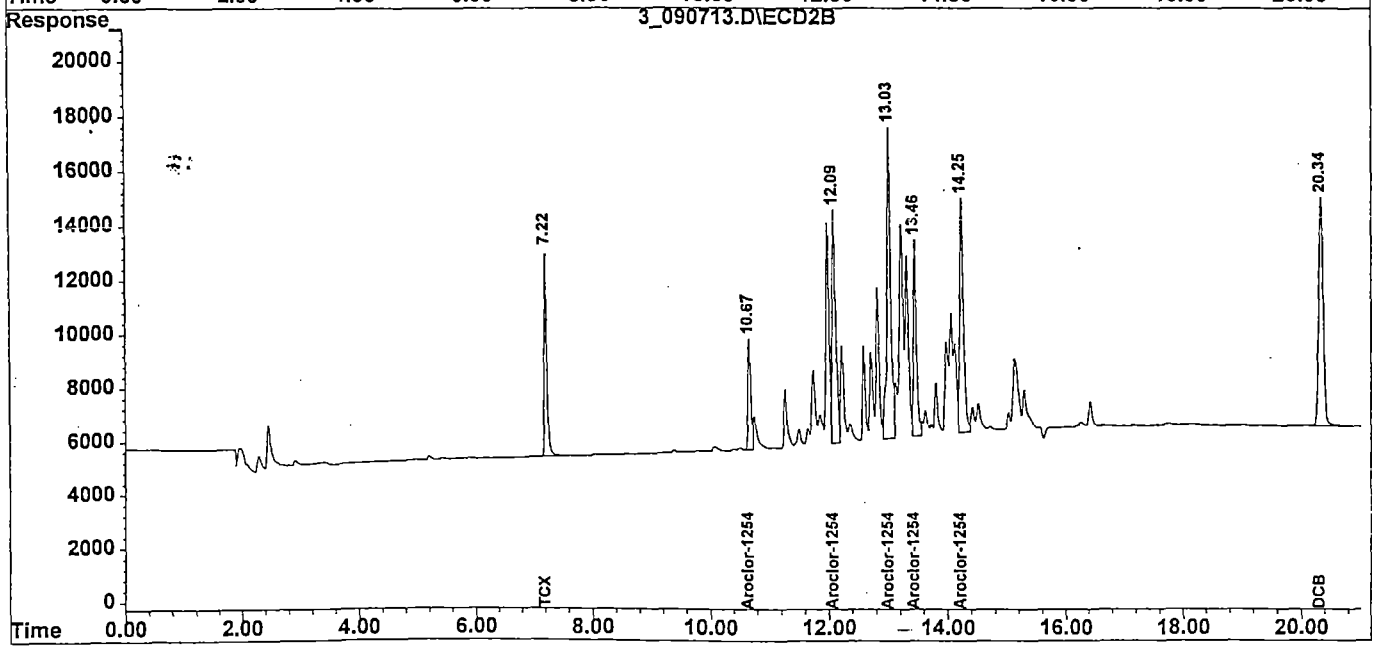
Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090713.D\ECD1A.CH Vial: 13
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090713.D\ECD2B.CH
Acq On : 07 Sep 2001 14:35 Operator: DDC
Sample : AR1254L31D ✓ Inst : HP_03
Misc : 5-4-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:19 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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

ok 9-10-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090713.D\ECD1A.CH Vial: 13
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090713.D\ECD2B.CH
Acq On : 07 Sep 2001 14:35 Operator: DDC
Sample : AR1254L31D Inst : HP_03
Misc : 5-4-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:19 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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	628362	233070	21.0	21.1
22)	S DCB	19.24	20.34	966945	451036	22.0	21.7
	Target Compounds:						
12)	L6 Aroclor-1254	10.72	10.67	477304	145416	434.9	433.1
13)	L6 Aroclor-1254 {2}	11.86	12.10	941172	374633	446.1	440.1
14)	L6 Aroclor-1254 {3}	12.18	13.03	942750	508644	449.9	447.1
15)	L6 Aroclor-1254 {4}	12.96	13.46	1076833	272383	448.0	434.5
16)	L6 Aroclor-1254 {5}	13.39	14.25	794025	367634	449.6	440.9
	Sum Aroclor-1254			4232084	1668710	2228.6	2195.6
	Average Aroclor-1254					445.718	439.123

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

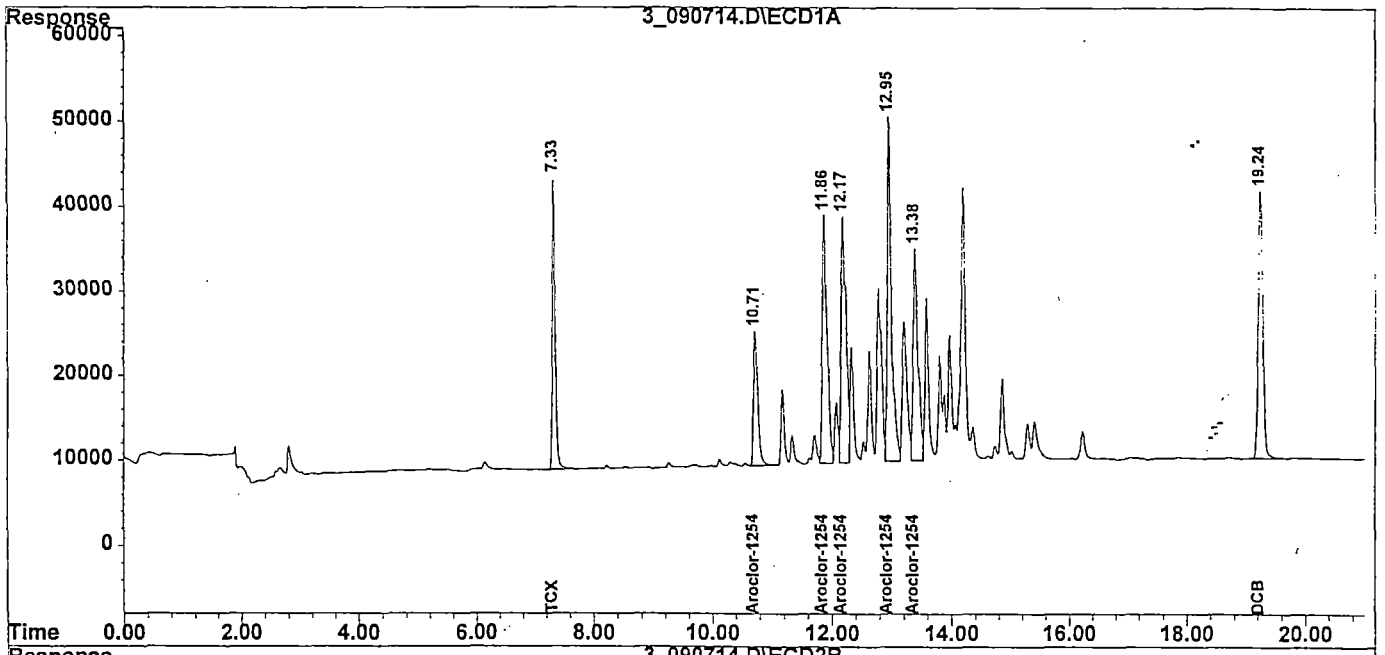
Chromatographic Report

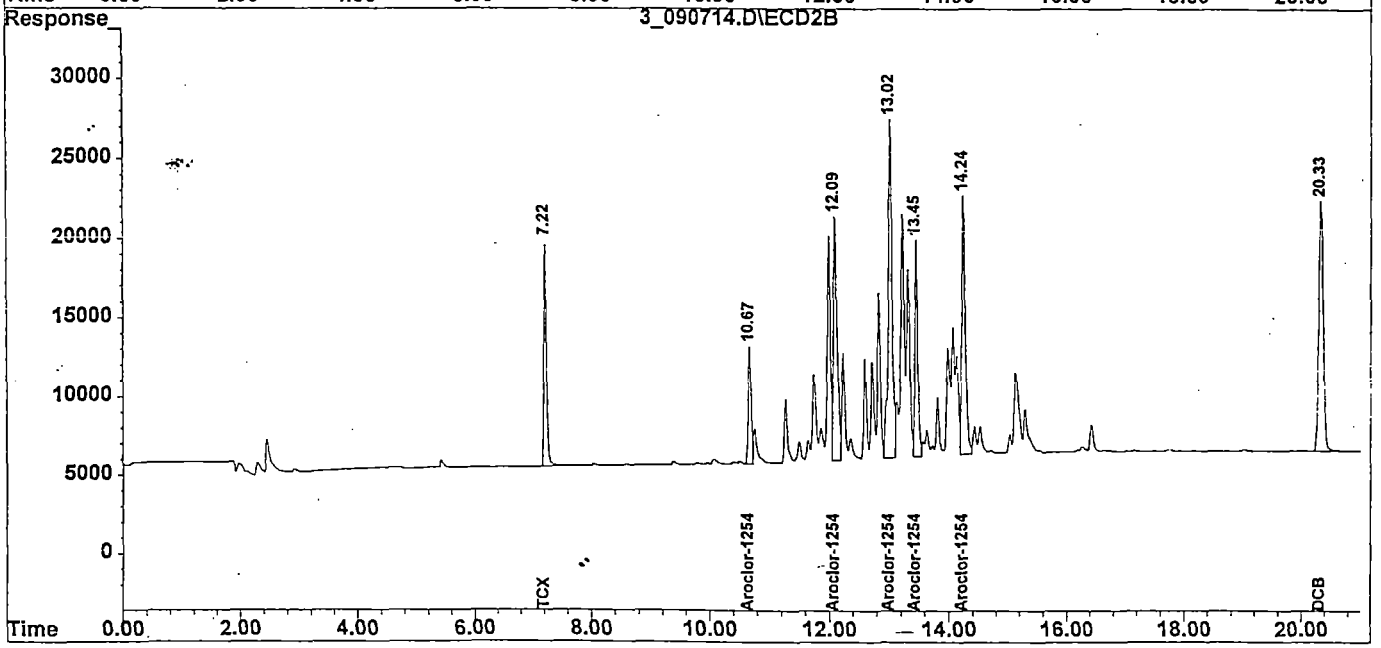
Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090714.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090714.D\ECD2B.CH
Acq On : 07 Sep 2001 15:01 Operator: DDC
Sample : AR1254L41D✓ Inst : HP_03
Misc : 5-3-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:19 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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

ok 9-10-01

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_07_01\3_090714.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090714.D\ECD2B.CH
Acq On : 07 Sep 2001 15:01 Operator: DDC
Sample : AR1254L41D Inst : HP_03
Misc : 5-3-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:19 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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	1167857	434889	39.0	39.3
22)	S DCB	19.24	20.34	1754234	857881	39.3	40.5
	Target Compounds:						
12)	L6 Aroclor-1254	10.72	10.67	824499	255148	749.8	760.0
13)	L6 Aroclor-1254 {2}	11.86	12.09	1639064	649881	765.9	752.7
14)	L6 Aroclor-1254 {3}	12.17	13.02	1624145	906011	761.5	779.1
15)	L6 Aroclor-1254 {4}	12.95	13.46	1914419	482909	780.8	745.0
16)	L6 Aroclor-1254 {5}	13.38	14.25	1418173	670143	785.4	777.9
	Sum Aroclor-1254			7420300	2964091	3843.4	3814.8
	Average Aroclor-1254					768.677	762.958

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

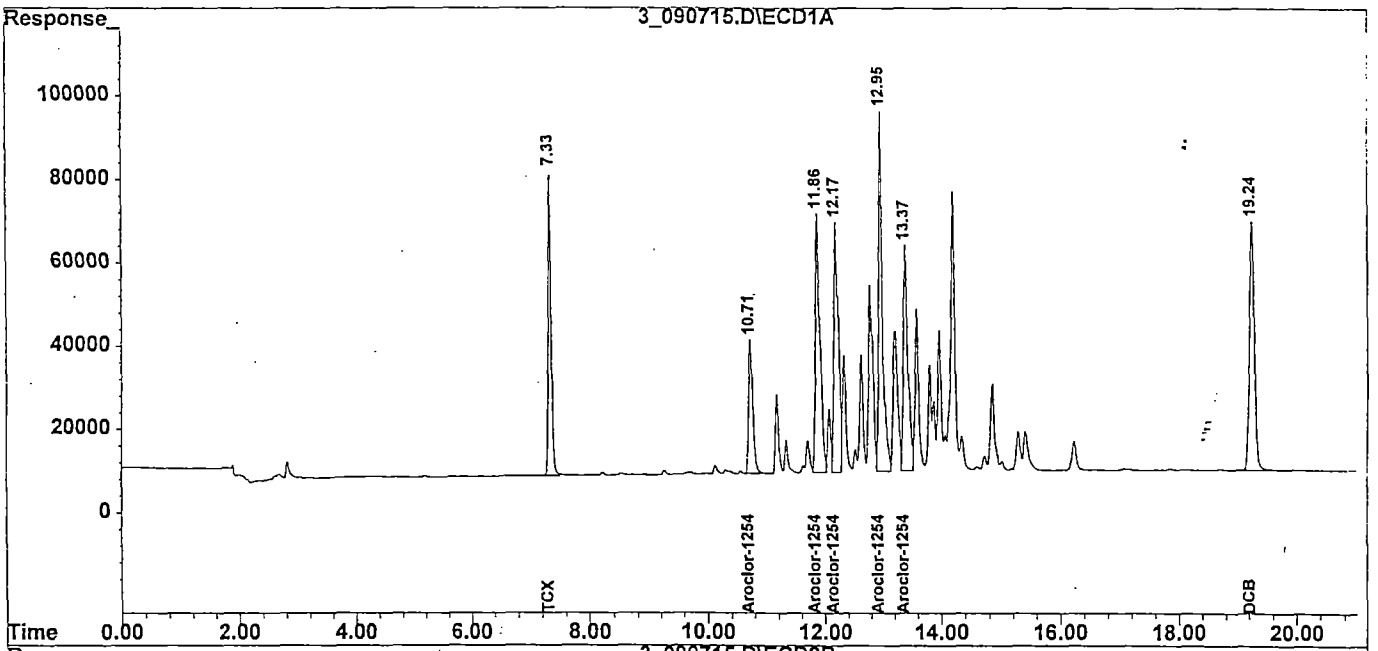
Chromatographic Report

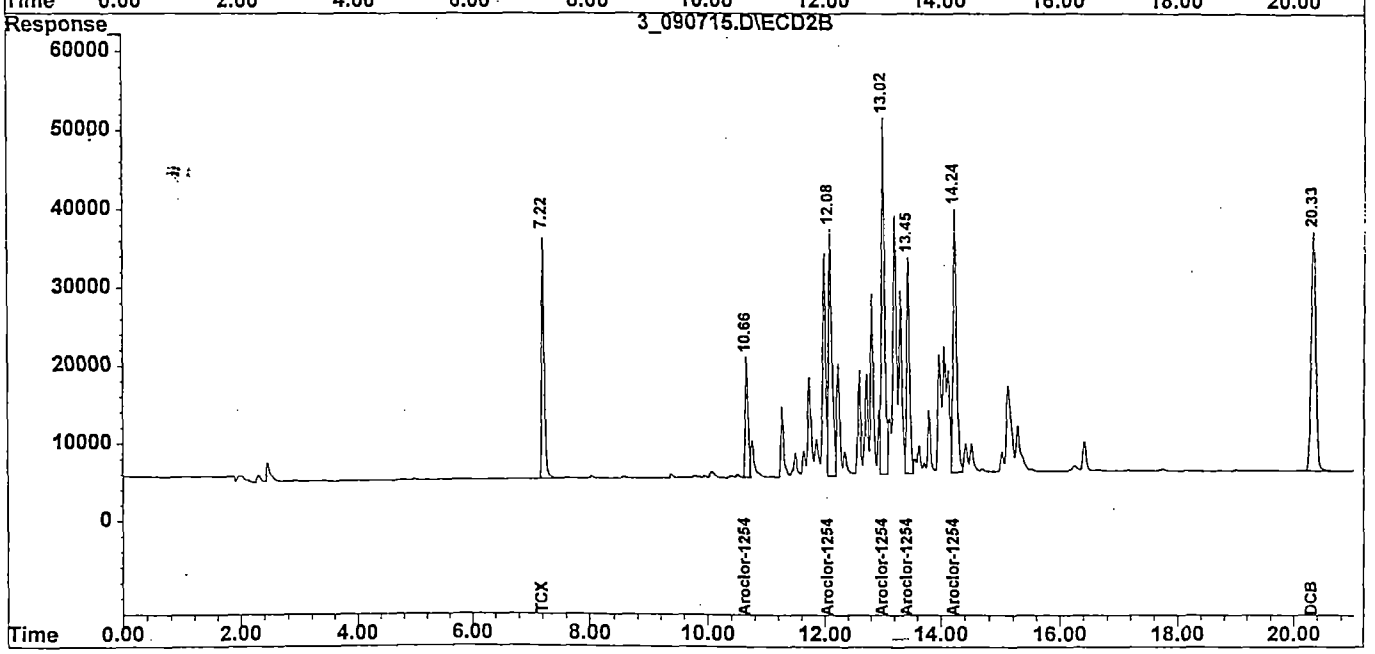
Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090715.D\ECD1A.CH Vial: 15
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090715.D\ECD2B.CH
Acq On : 07 Sep 2001 15:27 Operator: DDC
Sample : AR1254L51D Inst : HP_03
Misc : 5-2-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:20 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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

ok 9-10-01

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_07_01\3_090715.D\ECD1A.CH Vial: 15
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090715.D\ECD2B.CH
Acq On : 07 Sep 2001 15:27 Operator: DDC
Sample : AR1254L51D Inst : HP_03
Misc : 5-2-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:20 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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	2484907	961787	83.4 E	87.7 E
22)	S DCB	19.24	20.33	3421551	1709284	76.7 E	80.6 E
	Target Compounds:						
12)	L6 Aroclor-1254	10.71	10.66	1634637	515448	1477.5 E	1539.5 E
13)	L6 Aroclor-1254 {2}	11.86	12.09	3319343	1305818	1534.6 E	1499.4 E
14)	L6 Aroclor-1254 {3}	12.17	13.02	3281088	1694337	1519.2 E	1411.3 E
15)	L6 Aroclor-1254 {4}	12.95	13.45	3947754	977898	1579.4 E	1468.0 E
16)	L6 Aroclor-1254 {5}	13.38	14.24	2922896	1379633	1583.9 E	1559.5 E
	Sum Aroclor-1254			15105718	5873135	7694.6	7477.8
	Average Aroclor-1254					1538.930	1495.561

(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_07_01\XPCBI07.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

ok 9-10-01

Calibration Files
L1 =3_090716.D L2 =3_090717.D L3 =3_090718.D
L4 =3_090719.D L5 =3_090720.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
1) TCX	29.7	33.6	32.3	31.5	31.4	31.7 E3	4.42
2) Aroclor-1016	946.7	907.3	857.7	767.9	705.2	837.0	11.88
3) Aroclor-1016 {2}	3.2	3.2	3.2	2.9	2.7	3.1 E3	7.28
4) Aroclor-1016 {3}	1.1	1.0	1.0	1.0	0.9	1.0 E3	6.30
5) Aroclor-1016 {4}	2.8	2.6	2.5	2.2	2.0	2.4 E3	13.27
6) Aroclor-1016 {5}	976.3	975.3	985.2	919.7	854.9	942.3	5.87
17) Aroclor-1260	1.3	1.3	1.3	1.2	1.2	1.3 E3	5.43
18) Aroclor-1260 {2}	1.9	1.9	1.9	1.7	1.6	1.8 E3	9.54
19) Aroclor-1260 {3}	1.4	1.4	1.4	1.3	1.2	1.3 E3	5.35
20) Aroclor-1260 {4}	3.5	3.3	3.4	3.2	2.9	3.3 E3	6.93
21) Aroclor-1260 {5}	2.7	2.4	2.5	2.4	2.3	2.5 E3	7.11
22) DCB	45.8	42.2	43.5	40.9	37.3	42.0 E3	7.48

Signal #2 Calibration Files
L1 =3_090716.D L2 =3_090717.D L3 =3_090718.D
L4 =3_090719.D L5 =3_090720.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
24) TCX #2	10.6	11.4	11.9	11.8	12.0	11.5 E3	4.80
25) Aroclor-1016 #2	686.4	711.9	703.3	639.3	590.6	666.3	7.62
26) Aroclor-1016 {2} #2	1.4	1.4	1.4	1.3	1.2	1.4 E3	7.28
27) Aroclor-1016 {3} #2	397.0	430.7	460.9	433.9	417.8	428.1	5.46
28) Aroclor-1016 {4} #2	295.1	299.1	321.0	302.9	293.0	302.2	3.70
29) Aroclor-1016 {5} #2	399.6	401.0	426.7	374.4	348.1	390.0	7.65
40) Aroclor-1260 #2	1.1	1.1	1.1	1.0	0.9	1.0 E3	10.42
41) Aroclor-1260 {2} #2	1.3	1.2	1.3	1.1	1.0	1.2 E3	9.36
42) Aroclor-1260 {3} #2	693.4	699.3	690.8	620.3	562.5	653.2	9.20
43) Aroclor-1260 {4} #2	1.1	1.1	1.1	1.0	0.9	1.0 E3	10.05
44) Aroclor-1260 {5} #2	2.1	2.0	2.1	2.0	1.9	2.0 E3	4.72
45) DCB #2	20.5	19.9	20.8	20.0	18.7	20.0 E3	3.95

(#) = Out of Range

XPCBI07.M Sat Sep 08 09:29:14 2001

COPY
ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 2962 SDG E0144
Signature Arnelda M. Williams
Date 09/12/01

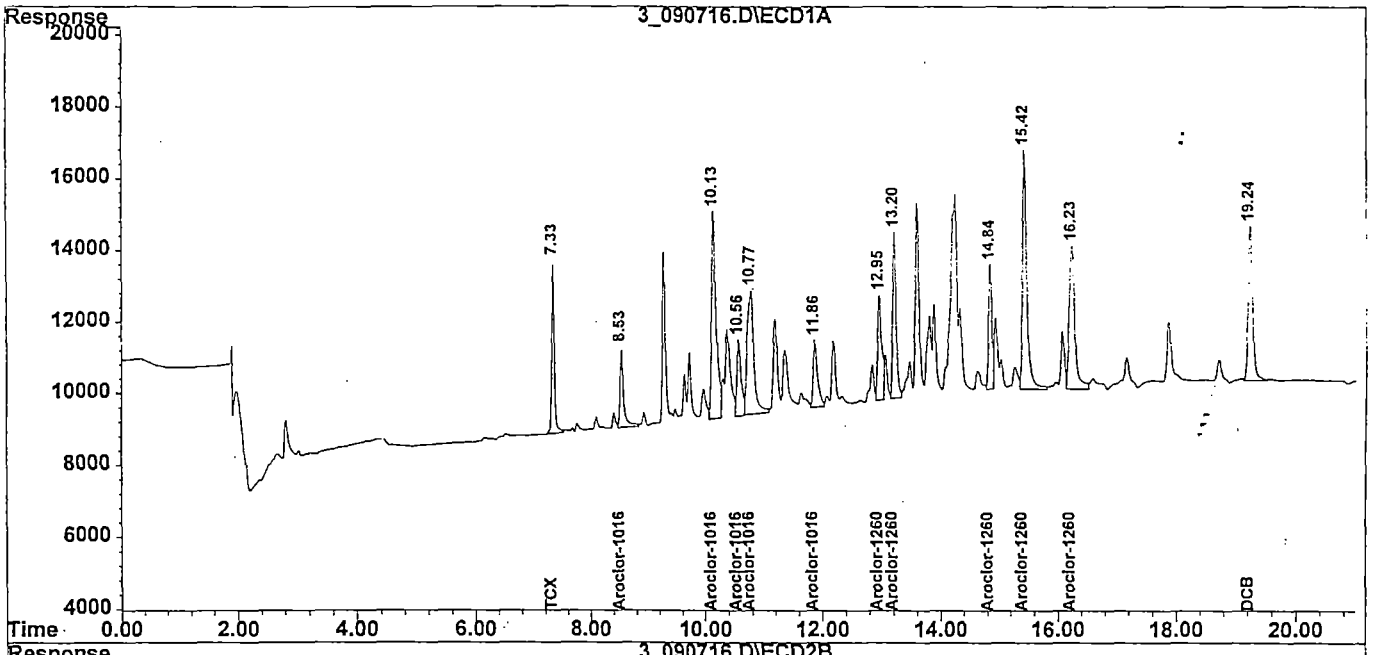
Chromatographic Report

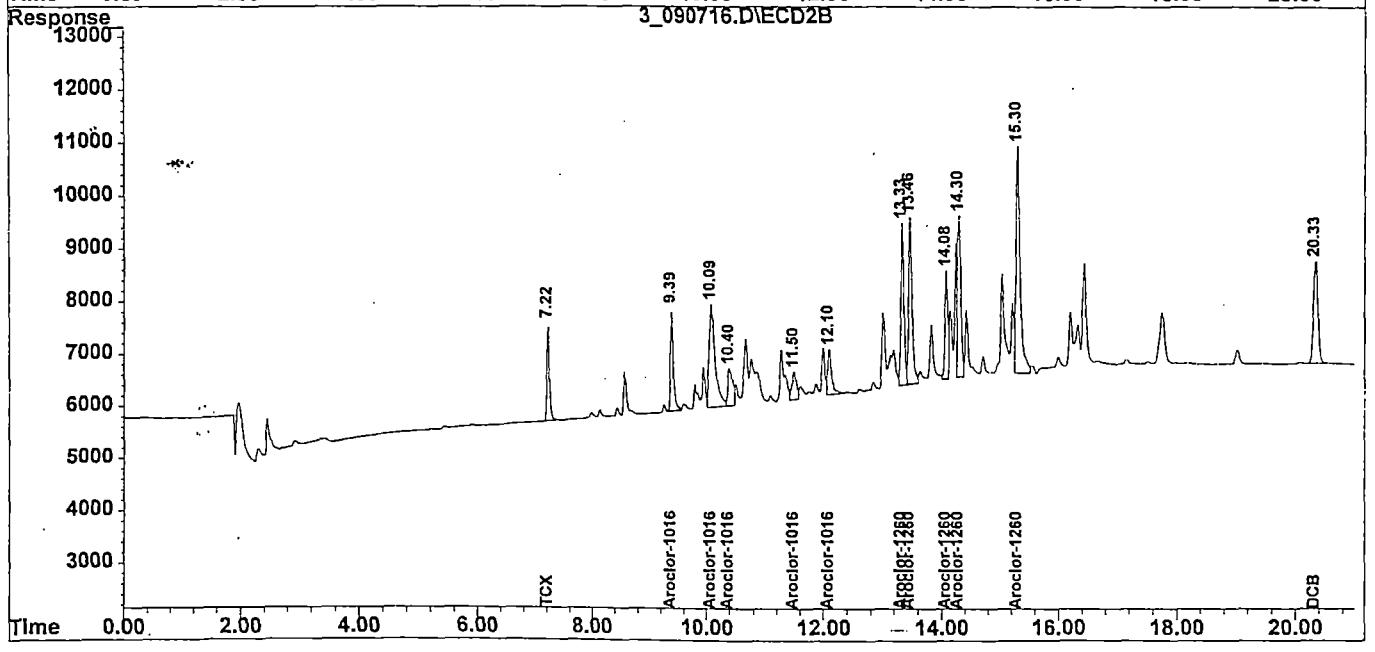
Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090716.D\ECD1A.CH Vial: 16
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090716.D\ECD2B.CH
Acq On : 07 Sep 2001 15:52 Operator: DDC
Sample : AR1660L11D Inst : HP_03
Misc : 5-212-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:28 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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

ok 9-10-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090716.D\ECD1A.CH Vial: 16
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090716.D\ECD2B.CH
Acq On : 07 Sep 2001 15:52 Operator: DDC
Sample : AR1660L11D Inst : HP_03
Misc : 5-212-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:28 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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

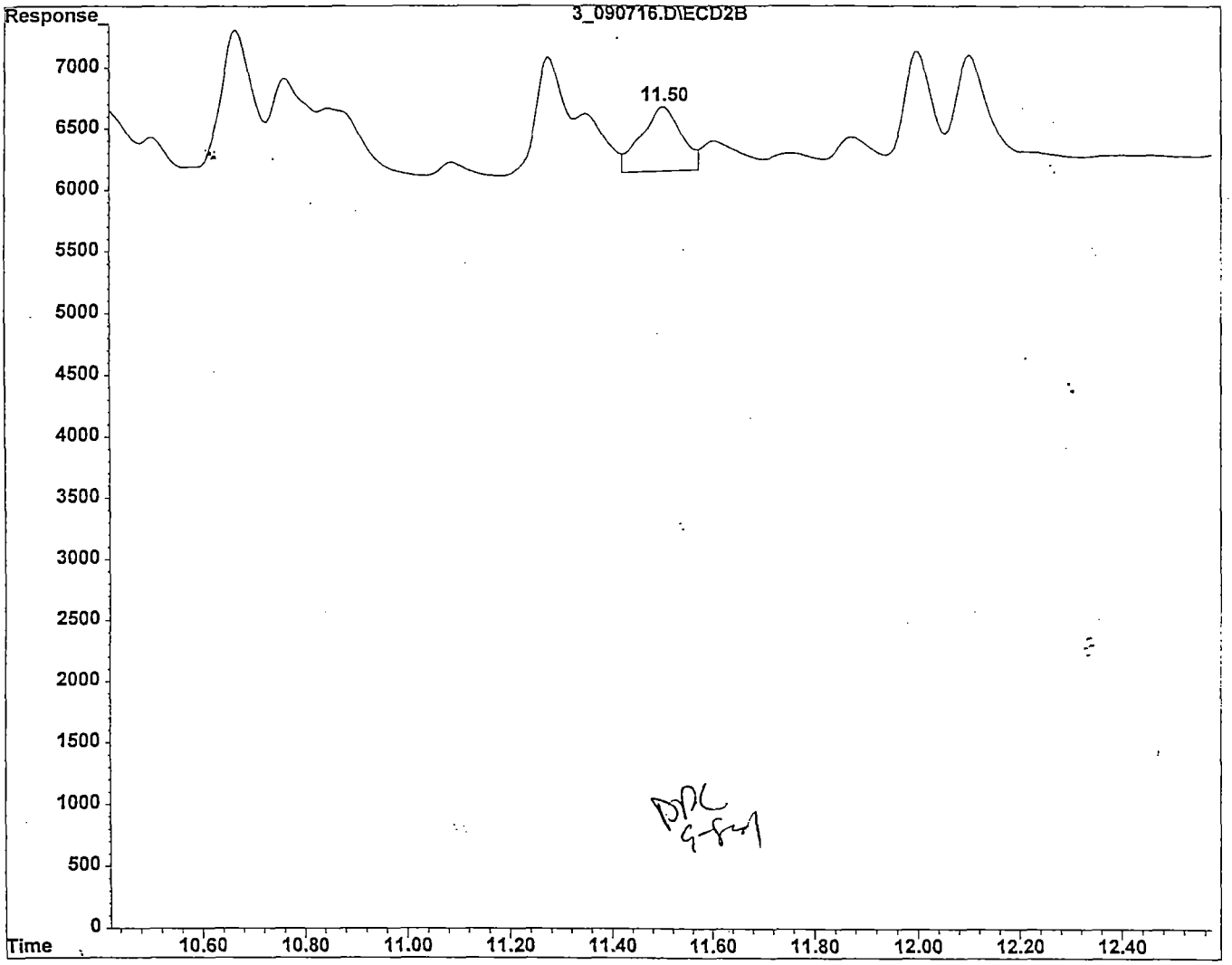
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
System Monitoring Compounds:						
1) S TCX	7.33	7.22	148712	53148	4.934	4.792
22) S DCB	19.24	20.34	228848	102439	5.035	4.730
Target Compounds:						
2) L1 Aroclor-1016	8.53	9.39	94672	68642	132.3	112.5
3) L1 Aroclor-1016 {2}	10.13	10.09	317522	139107	118.5	112.7
4) L1 Aroclor-1016 {3}	10.56	10.40	105571	39703	126.4	98.5
5) L1 Aroclor-1016 {4}	10.77	11.50	275469	29512	140.1	110.2m
6) L1 Aroclor-1016 {5}	11.86	12.10	97631	39956	126.5	119.9
Sum Aroclor-1016			890865	316920	643.8	553.8
Average Aroclor-1016					128.757	110.755
17) L7 Aroclor-1260	12.96	13.33	128524	113532	120.5	121.0
18) L7 Aroclor-1260 {2}	13.20	13.46	192827	128927	127.0	119.9
19) L7 Aroclor-1260 {3}	14.84	14.08	139713	69339	120.7	115.6
20) L7 Aroclor-1260 {4}	15.42	14.29	353828	114436	126.2	126.7m
21) L7 Aroclor-1260 {5}	16.23	15.31	273559	212693	130.8	119.1
Sum Aroclor-1260			1088449	638928	625.3	602.2
Average Aroclor-1260					125.055	120.449

(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_07_01\3_090716.D
Date Acquired: 07 Sep 2001 15:52
Inst: HP_03 Operator ID: DDC
Name: AR1660L11D
Misc: 5-212-7
Method: F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 8 9:28 2001 Quant Results File: XPCBI07.RES



DDC 9-8-01

Aroclor-1016 {4} #2 11.50min area: 29512 m

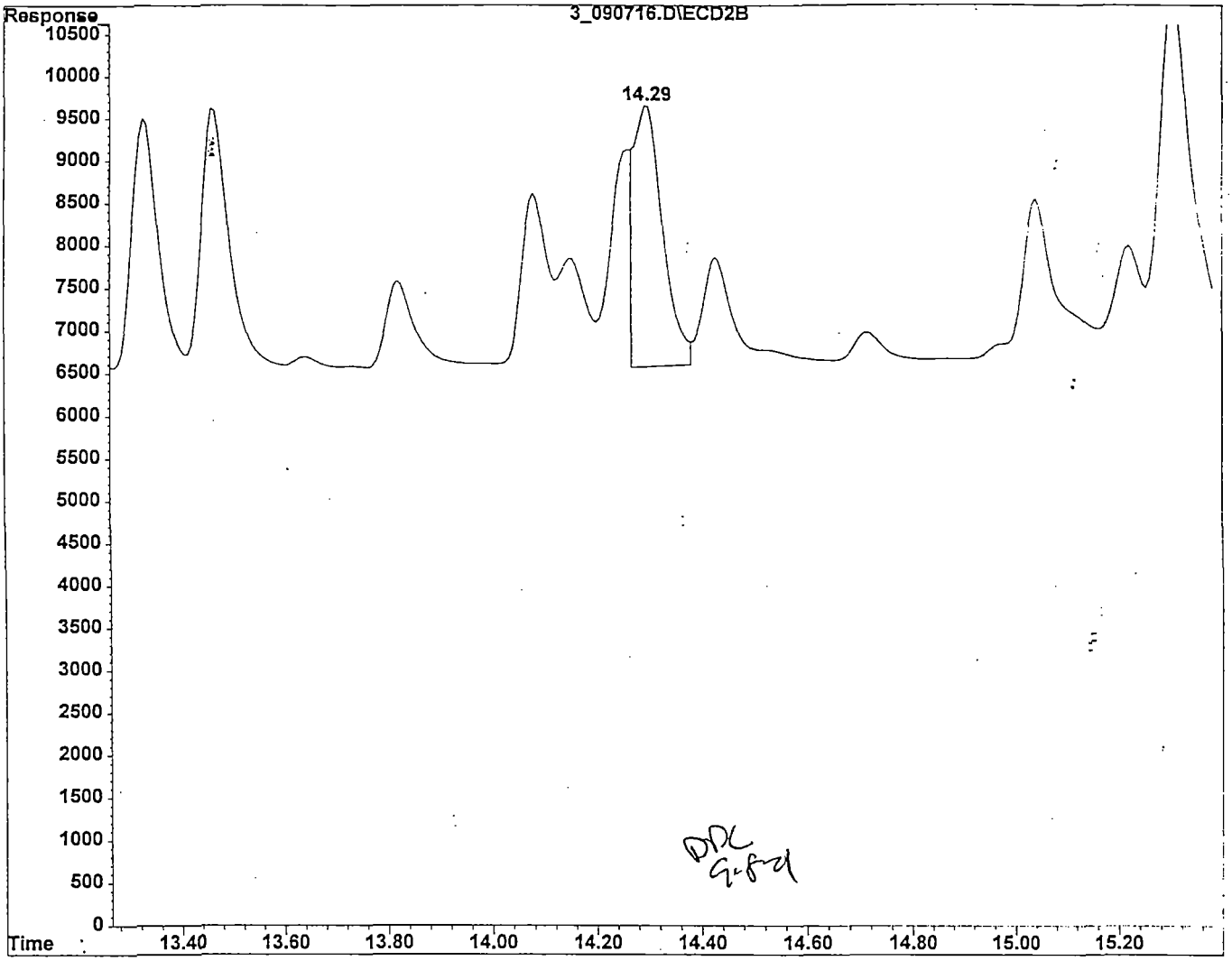
Integration Time Range: 11.42 - 11.57

ok 9-10-01 ED

F:\HPCHEM\HP\3\DATA\09_07_01\3_090716.D
Report generated: Sat Sep 08 09:32:57 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_07_01\3_090716.D
Date Acquired: 07 Sep 2001 15:52
Inst: HP_03 Operator ID: DDC
Name: AR1660L11D
Misc: 5-212-7
Method: F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 8 9:28 2001 Quant Results File: XPCBI07.RES



Aroclor-1260 {4} #2 14.29min area: 114436 m

Integration Time Range: 14.26 - 14.38

ok 9-10-01

F:\HPCHEM\HP\3\DATA\09_07_01\3_090716.D
Report generated: Sat Sep 08 09:32:58 2001

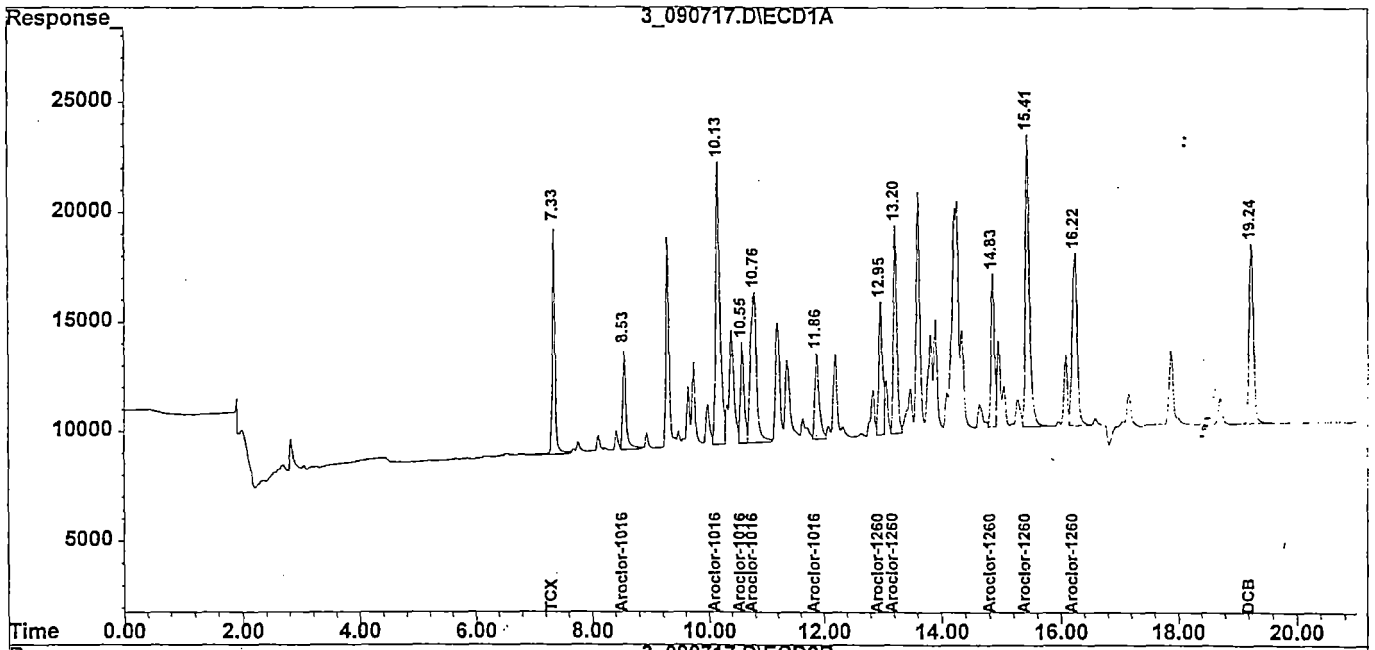
Chromatographic Report

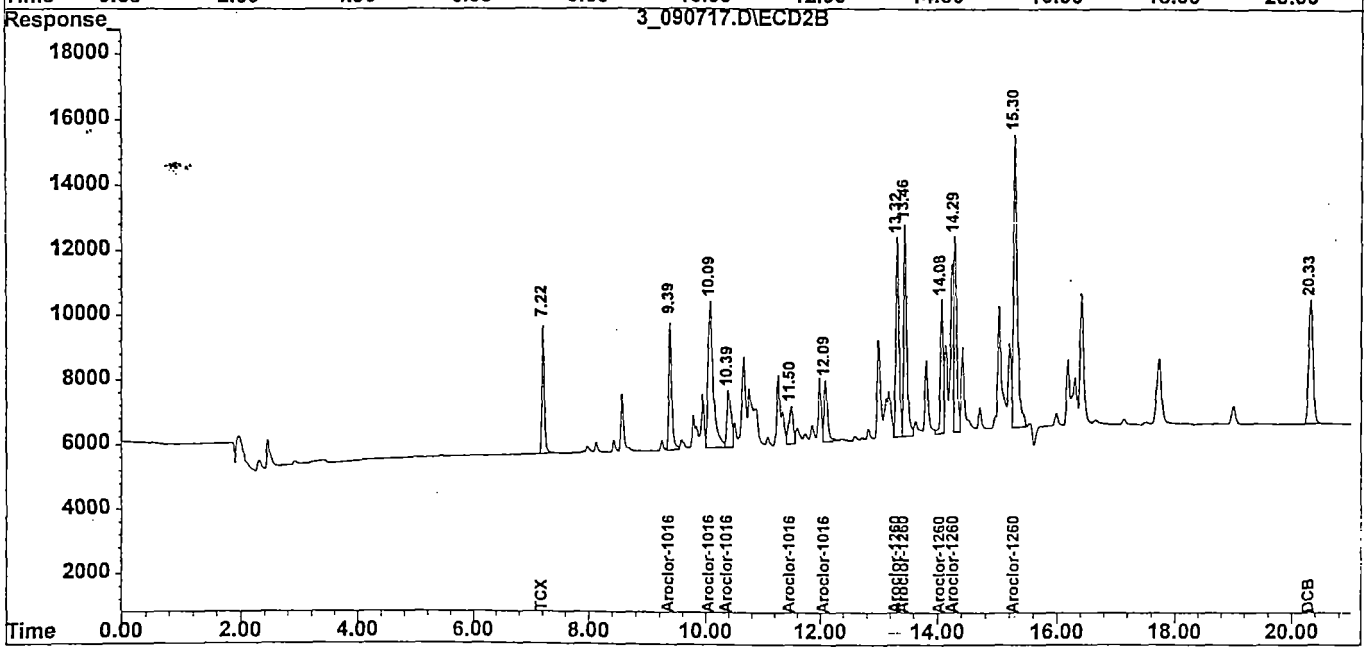
Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090717.D\ECD1A.CH Vial: 17
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090717.D\ECD2B.CH
Acq On : 07 Sep 2001 16:18 Operator: DDC
Sample : AR1660L21D ✓ Inst : HP_03
Misc : 5-211-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:25 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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

ok 9-10-01 ✓





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090717.D\ECD1A.CH Vial: 17
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090717.D\ECD2B.CH
Acq On : 07 Sep 2001 16:18 Operator: DDC
Sample : AR1660L21D Inst : HP_03
Misc : 5-211-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:25 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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	335827	114466	10.6	9.913
22)	S DCB	19.24	20.33	422282	198507	10.1	9.934
	Target Compounds:						
2)	L1 Aroclor-1016	8.53	9.39	181453	142373	216.8	213.7
3)	L1 Aroclor-1016 {2}	10.13	10.09	648192	286423	211.3	211.1
4)	L1 Aroclor-1016 {3}	10.56	10.40	207850	86150	208.5	201.3
5)	L1 Aroclor-1016 {4}	10.77	11.50	520638	59812	217.5	199.0
6)	L1 Aroclor-1016 {5}	11.86	12.10	195052	80202	207.0	205.7
	Sum Aroclor-1016			1753185	654960	1061.1	1030.7
	Average Aroclor-1016					212.211	206.144
17)	L7 Aroclor-1260	12.95	13.33	259163	221246	206.2	210.4
18)	L7 Aroclor-1260 {2}	13.20	13.46	384808	249017	213.5	206.2
19)	L7 Aroclor-1260 {3}	14.84	14.08	274600	139850	202.5	205.8
20)	L7 Aroclor-1260 {4}	15.41	14.30	653884	218852	193.4	181.8
21)	L7 Aroclor-1260 {5}	16.22	15.30	476561	395602	181.5	188.2
	Sum Aroclor-1260			2049016	1224567	997.0	992.4
	Average Aroclor-1260					199.409	198.475

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

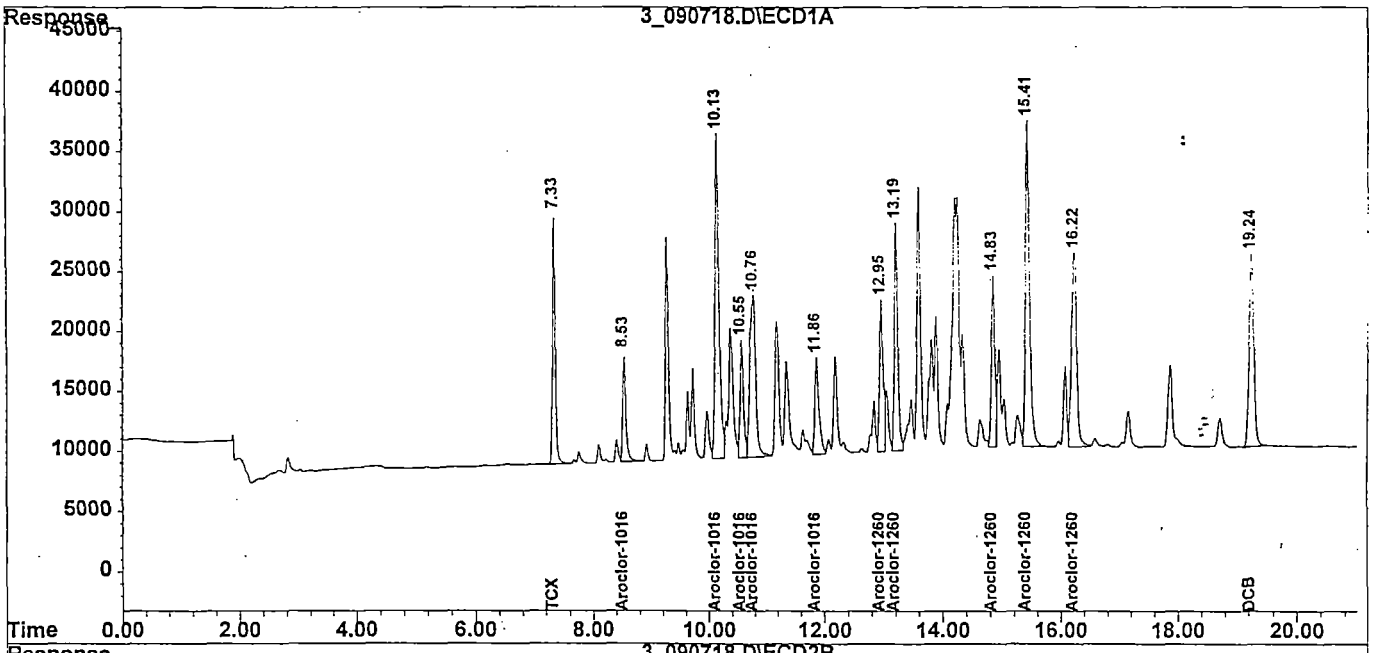
Chromatographic Report

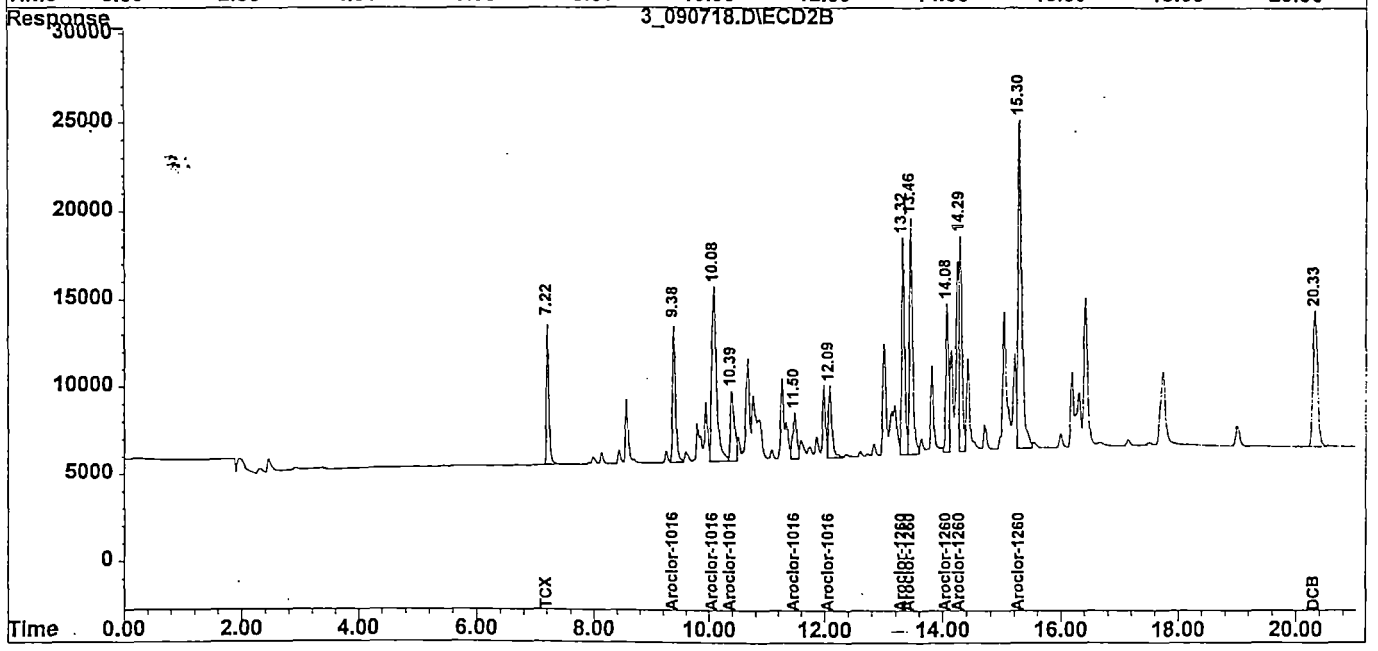
Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090718.D\ECD1A.CH Vial: 18
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090718.D\ECD2B.CH
Acq On : 07 Sep 2001 16:44 Operator: DDC
Sample : AR1660L31D ✓ Inst : HP_03
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:26 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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

ok 9-10-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090718.D\ECD1A.CH Vial: 18
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090718.D\ECD2B.CH
Acq On : 07 Sep 2001 16:44 Operator: DDC
Sample : AR1660L31D Inst : HP_03
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:26 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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

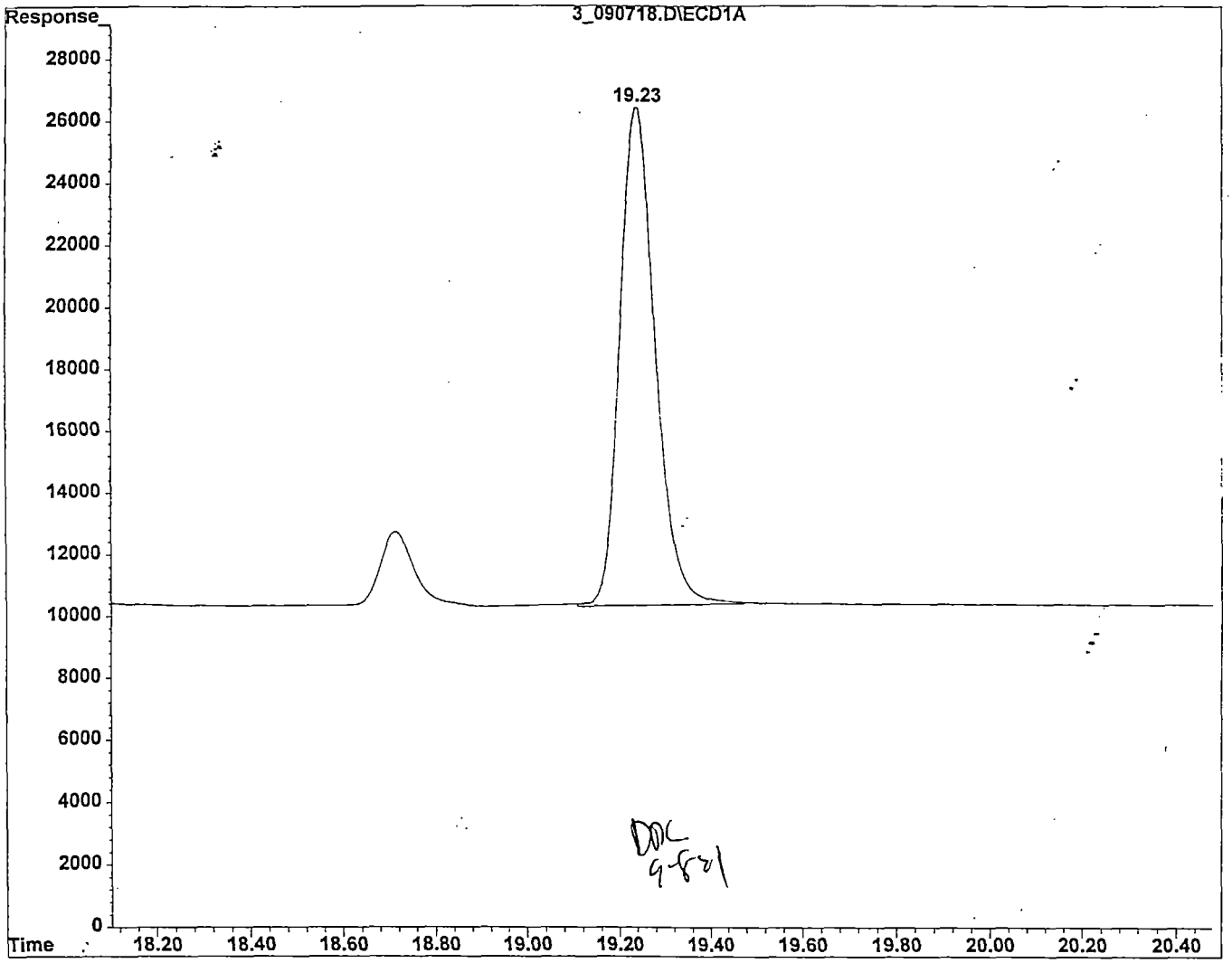
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	646825	237054	20.9	20.9
22)	S DCB	19.24	20.33	869700	415596	19.5m DDC 9-8-01	19.6
	Target Compounds:						
2)	L1 Aroclor-1016	8.53	9.39	343083	281307	427.5	430.7
3)	L1 Aroclor-1016 {2}	10.13	10.08	1298424	577653	443.3	436.1
4)	L1 Aroclor-1016 {3}	10.56	10.39	410481	184354	438.2	436.5
5)	L1 Aroclor-1016 {4}	10.77	11.50	983207	128415	438.0	442.7
6)	L1 Aroclor-1016 {5}	11.86	12.10	394099	170686	457.5	457.6
	Sum Aroclor-1016			3429294	1342414	2204.5	2203.6
	Average Aroclor-1016					440.905	440.729
17)	L7 Aroclor-1260	12.95	13.32	529022	439383	451.8	433.9
18)	L7 Aroclor-1260 {2}	13.20	13.46	765382	501942	456.5	431.7
19)	L7 Aroclor-1260 {3}	14.84	14.08	564047	276301	446.9	421.6
20)	L7 Aroclor-1260 {4}	15.41	14.30	1343708	439584	426.2	385.1
21)	L7 Aroclor-1260 {5}	16.22	15.30	1010844	840867	414.4	417.8
	Sum Aroclor-1260			4213003	2498078	2195.9	2090.2
	Average Aroclor-1260					439.173	418.041

(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_07_01\3_090718.D
Date Acquired: 07 Sep 2001 16:44
Inst: HP_03 Operator ID: DDC
Name: AR1660L31D
Misc: 5-210-7
Method: F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 8 9:26 2001 Quant Results File: XPCBI07.RES



DCB 19.24min area: 869700 m

Integration Time Range: 19.10 - 19.47

ok
9-10-01 DD

F:\HPCHEM\HP\3\DATA\09_07_01\3_090718.D
Report generated: Sat Sep 08 09:33:00 2001

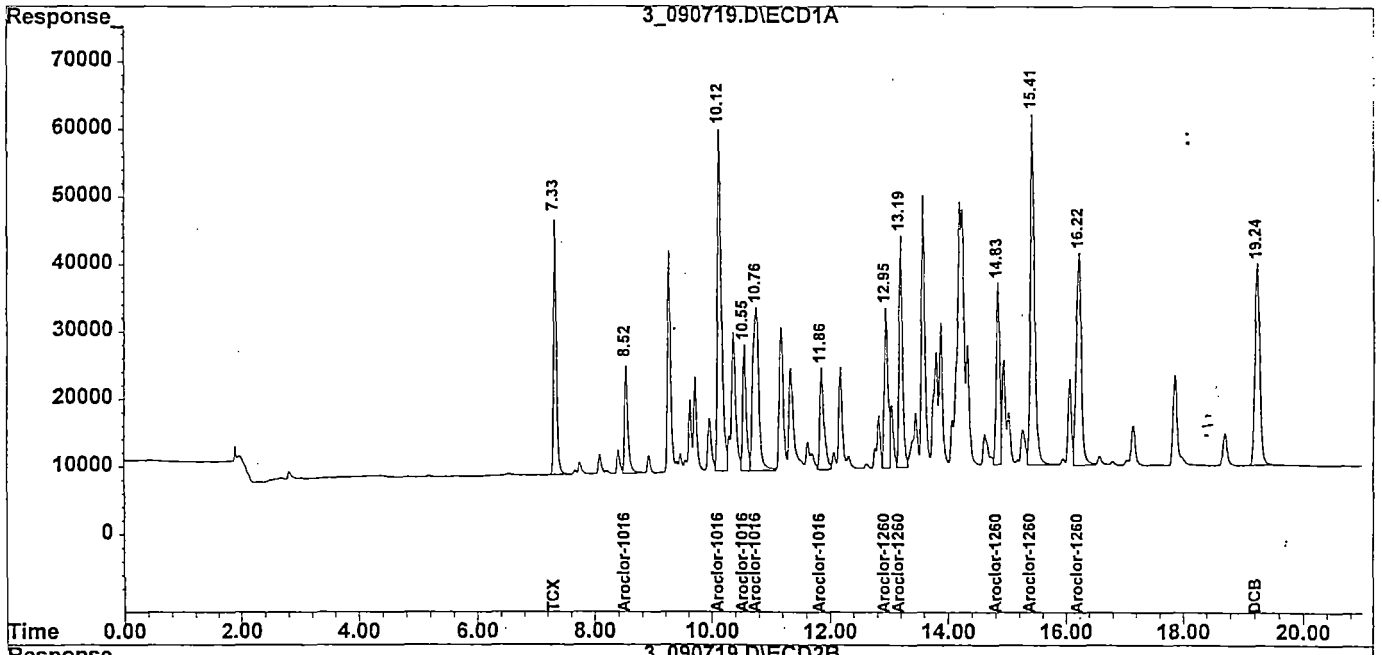
Chromatographic Report

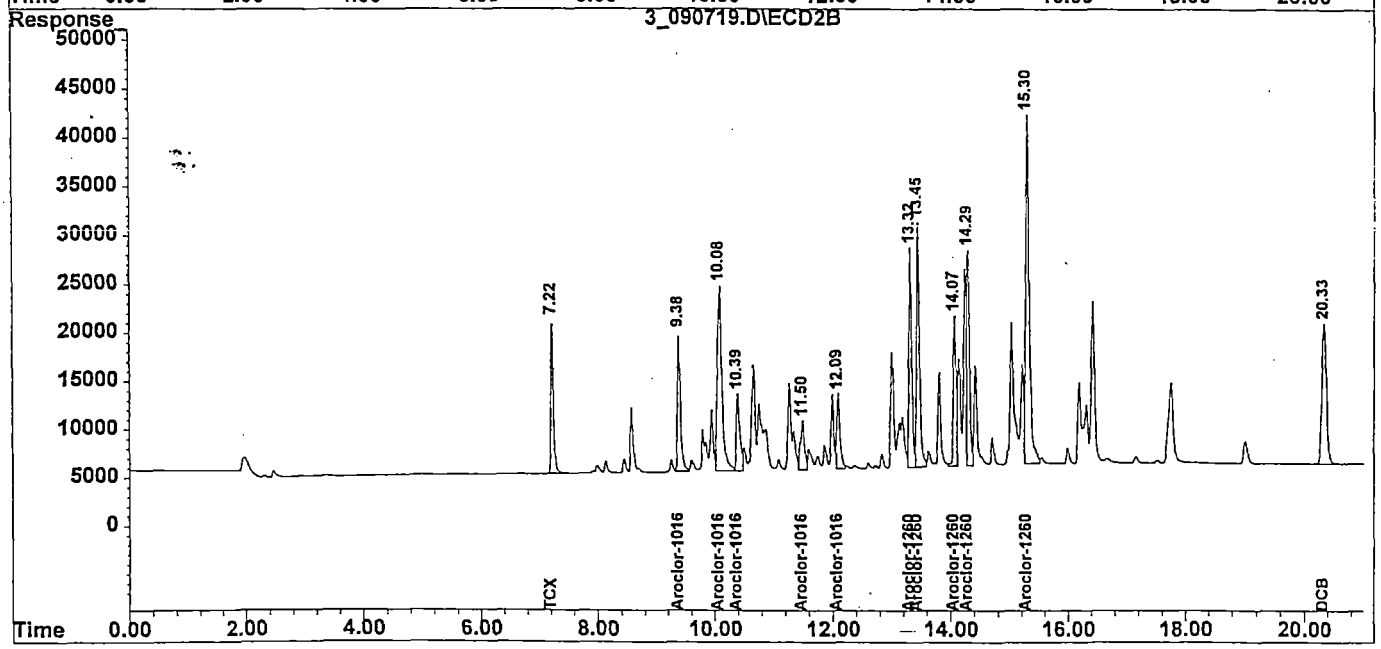
Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090719.D\ECD1A.CH Vial: 19
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090719.D\ECD2B.CH
Acq On : 07 Sep 2001 17:10 Operator: DDC
Sample : AR1660L41D ✓ Inst : HP_03
Misc : 5-209-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:22 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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

ofe 9-10-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090719.D\ECD1A.CH Vial: 19
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090719.D\ECD2B.CH
Acq On : 07 Sep 2001 17:10 Operator: DDC
Sample : AR1660L41D Inst : HP_03
Misc : 5-209-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:22 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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	1261577	471324	40.5	41.5
22)	S DCB	19.24	20.34	1637844	798415	37.8	38.4
	Target Compounds:						
2)	L1 Aroclor-1016	8.53	9.39	614357	511403	748.1	771.0
3)	L1 Aroclor-1016 {2}	10.13	10.08	2354456	1047661	783.3	777.3
4)	L1 Aroclor-1016 {3}	10.56	10.39	764499	347121	791.1	811.2
5)	L1 Aroclor-1016 {4}	10.77	11.50	1749734	242292	754.5	817.0
6)	L1 Aroclor-1016 {5}	11.86	12.09	735759	299542	820.7	778.6
	Sum Aroclor-1016			6218805	2448019	3897.7	3955.2
	Average Aroclor-1016					779.531	791.042
17)	L7 Aroclor-1260	12.95	13.32	984833	779584	813.9	753.4
18)	L7 Aroclor-1260 {2}	13.20	13.46	1355735	898318	779.1	755.6
19)	L7 Aroclor-1260 {3}	14.84	14.08	1061686	496204	816.2	741.0
20)	L7 Aroclor-1260 {4}	15.41	14.30	2539535	782842	783.0	667.1
21)	L7 Aroclor-1260 {5}	16.23	15.30	1938617	1597091	772.2	776.9
	Sum Aroclor-1260			7880406	4554039	3964.4	3694.0
	Average Aroclor-1260					792.875	738.791

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

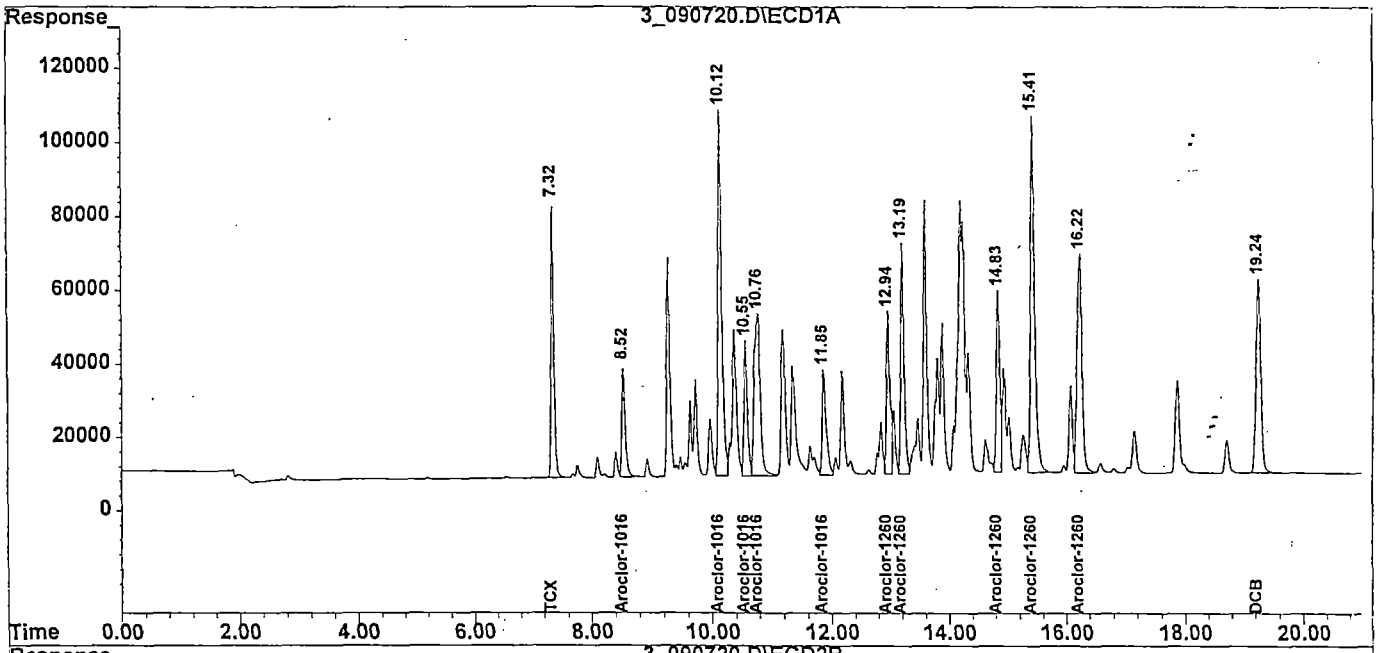
Chromatographic Report

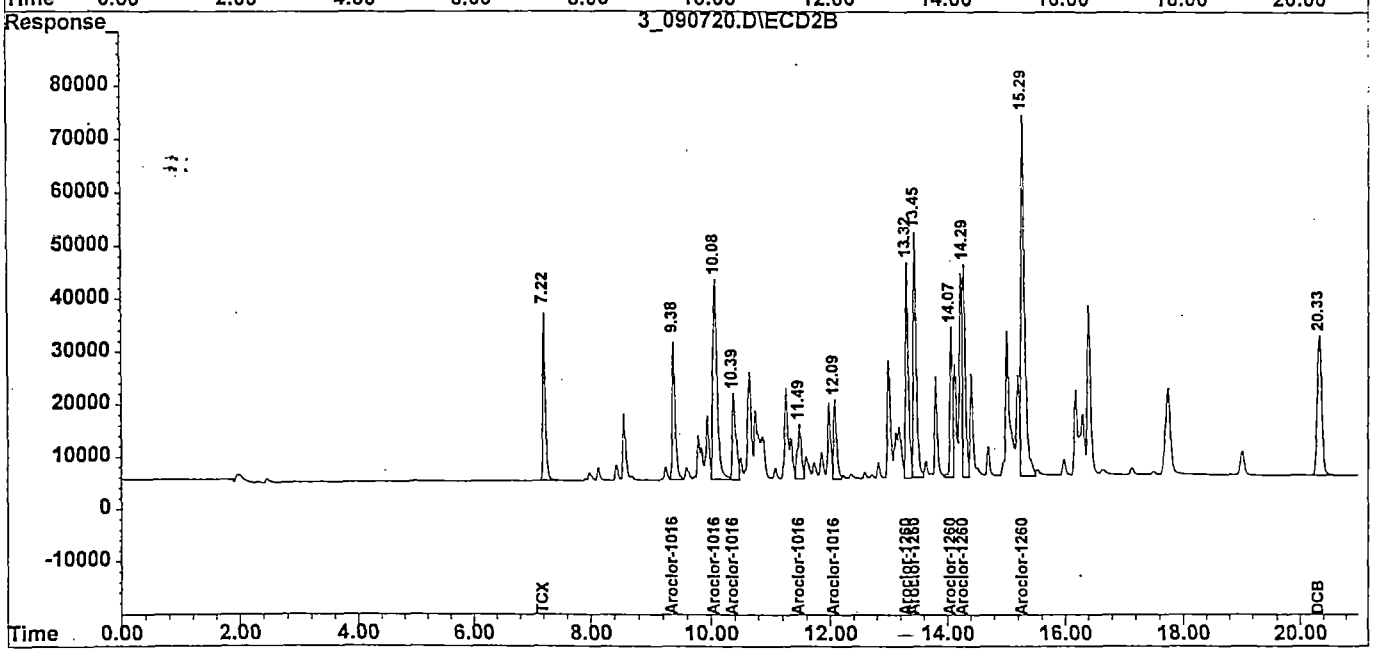
Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090720.D\ECD1A.CH Vial: 20
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090720.D\ECD2B.CH
Acq On : 07 Sep 2001 17:35 Operator: DDC
Sample : AR1660L51D✓ Inst : HP_03
Misc : 5-208-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:23 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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

ok 9-10-01 EP





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090720.D\ECD1A.CH Vial: 20
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090720.D\ECD2B.CH
Acq On : 07 Sep 2001 17:35 Operator: DDC
Sample : AR1660L51D Inst : HP_03
Misc : 5-208-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:23 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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	2515483	961817	79.5 E	83.3 E
22)	S DCB	19.24	20.33	2985898	1498156	69.8	73.0
	Target Compounds:						
2)	L1 Aroclor-1016	8.53	9.38	1128324	944965	1355.3 E	1417.7
3)	L1 Aroclor-1016 {2}	10.12	10.08	4376011	1931603	1437.6 E	1422.5
4)	L1 Aroclor-1016 {3}	10.55	10.39	1452087	668486	1472.3 E	1558.2
5)	L1 Aroclor-1016 {4}	10.76	11.50	3146484	468783	1328.6 E	1563.2 E
6)	L1 Aroclor-1016 {5}	11.86	12.09	1367802	557009	1480.6 E	1433.9 E
	Sum Aroclor-1016			11470708	4570845	7074.3	7395.6
	Average Aroclor-1016					1414.862	1479.111
17)	L7 Aroclor-1260	12.95	13.32	1840745	1407652	1486.2 E	1344.5 E
18)	L7 Aroclor-1260 {2}	13.19	13.45	2480139	1637315	1397.2 E	1360.7 E
19)	L7 Aroclor-1260 {3}	14.83	14.07	1970873	900042	1475.1 E	1332.0 E
20)	L7 Aroclor-1260 {4}	15.41	14.29	4687361	1422884	1407.0 E	1190.8 E
21)	L7 Aroclor-1260 {5}	16.22	15.30	3633020	3030753	1407.2 E	1452.5 E
	Sum Aroclor-1260			14612138	8398647	7172.7	6680.4
	Average Aroclor-1260					1434.541	1336.084

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

Continuing Calibration Report HP_03

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Mon Sep 10 17:11:19 2001
Response via : Initial Calibration

Continuing Calibration File: 3_091003.D

9-12-01

Min. RRF : 0.000 Min. Rel. Area : 50%
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	31.730	28.559	E3	10.0	88
2	L1	Aroclor-1016	836.969	788.546		5.8	92
3	L1	Aroclor-1016 {2}	3.068	2.983	E3	2.8	92
4	L1	Aroclor-1016 {3}	0.997	0.930	E3	6.7	91
5	L1	Aroclor-1016 {4}	2.394	2.248	E3	6.1	91
6	L1	Aroclor-1016 {5}	942.278	886.511		5.9	90
17	L7	Aroclor-1260	1.257	1.280	E3	-1.9	97
18	L7	Aroclor-1260 {2}	1.802	1.758	E3	2.4	92
19	L7	Aroclor-1260 {3}	1.348	1.375	E3	-2.0	98
20	L7	Aroclor-1260 {4}	3.254	3.217	E3	1.1	96
21	L7	Aroclor-1260 {5}	2.468	2.407	E3	2.5	95
22	S	DCB	41.951	43.028	E3	-2.6	99

Signal #2
Continuing Calibration File: 3_091003.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	11.547	11.609	E3	-0.5	98
2	L1	Aroclor-1016	666.283	703.482		-5.6	100
3	L1	Aroclor-1016 {2}	1.357	1.415	E3	-4.3	98
4	L1	Aroclor-1016 {3}	428.074	451.720		-5.5	98
5	L1	Aroclor-1016 {4}	302.214	308.662		-2.1	96
6	L1	Aroclor-1016 {5}	389.969	412.551		-5.8	97
17	L7	Aroclor-1260	1.039	1.004	E3	3.4	91
18	L7	Aroclor-1260 {2}	1.187	1.159	E3	2.3	92
19	L7	Aroclor-1260 {3}	653.235	526.230		19.4#	76
20	L7	Aroclor-1260 {4}	1.041	0.987	E3	5.2	90
21	L7	Aroclor-1260 {5}	2.020	2.072	E3	-2.6	99
22	S	DCB	19.961	21.399	E3	-7.2	103

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3_091003.D XPCBI07.M Mon Sep 10 17:11:28 2001

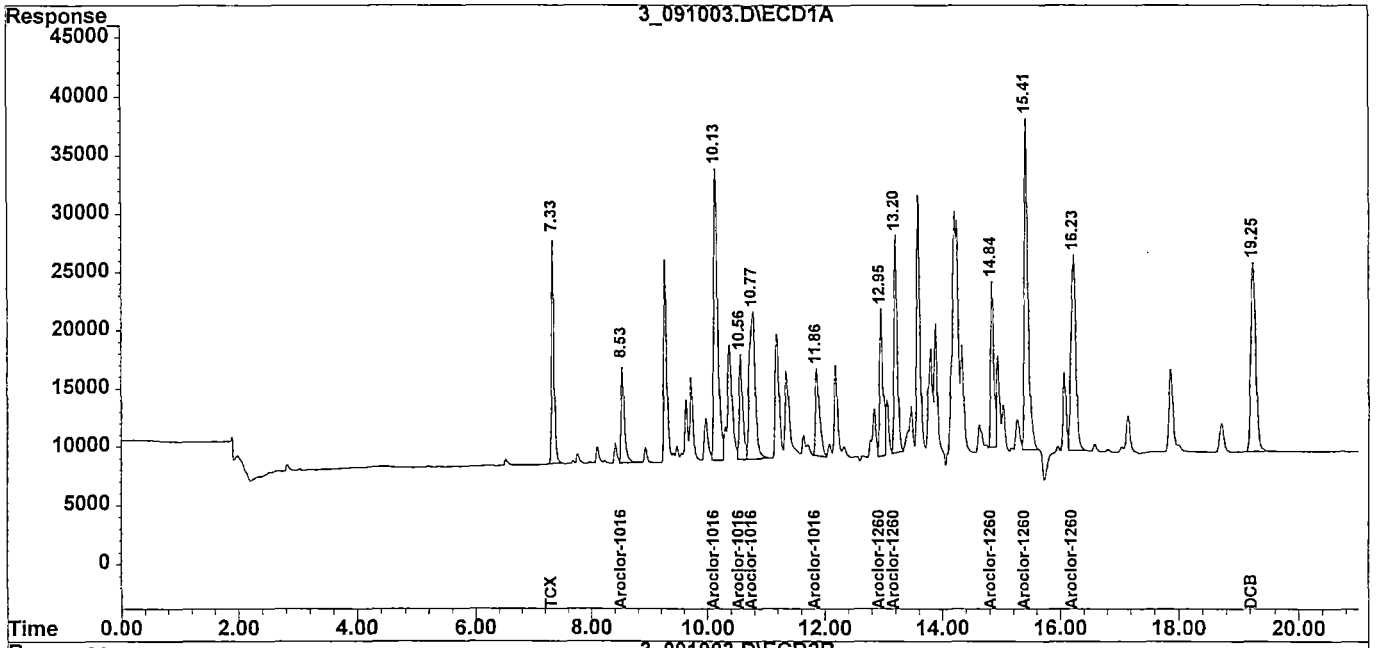
Chromatographic Report

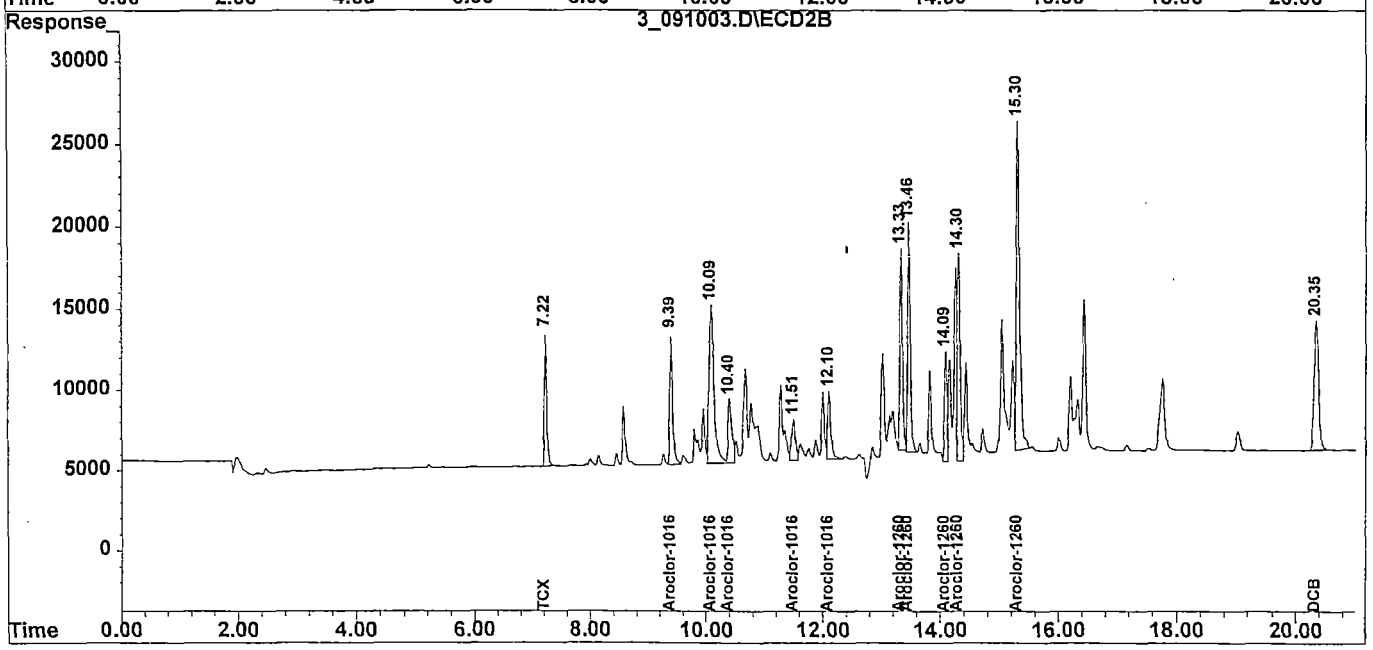
Signal #1 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091003.D\ECD1A.CH Vial: 42
Signal #2 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091003.D\ECD2B.CH
Acq On : 10 Sep 2001 16:04 Operator: BTB
Sample : AR1660L31K Inst : HP_03
Misc : 5-128-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 10 16:31 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

ok 9-12-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091003.D\ECD1A.CH Vial: 42
Signal #2 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091003.D\ECD2B.CH
Acq On : 10 Sep 2001 16:04 Operator: BTB
Sample : AR1660L31K Inst : HP_03
Misc : 5-128-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 10 16:31 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

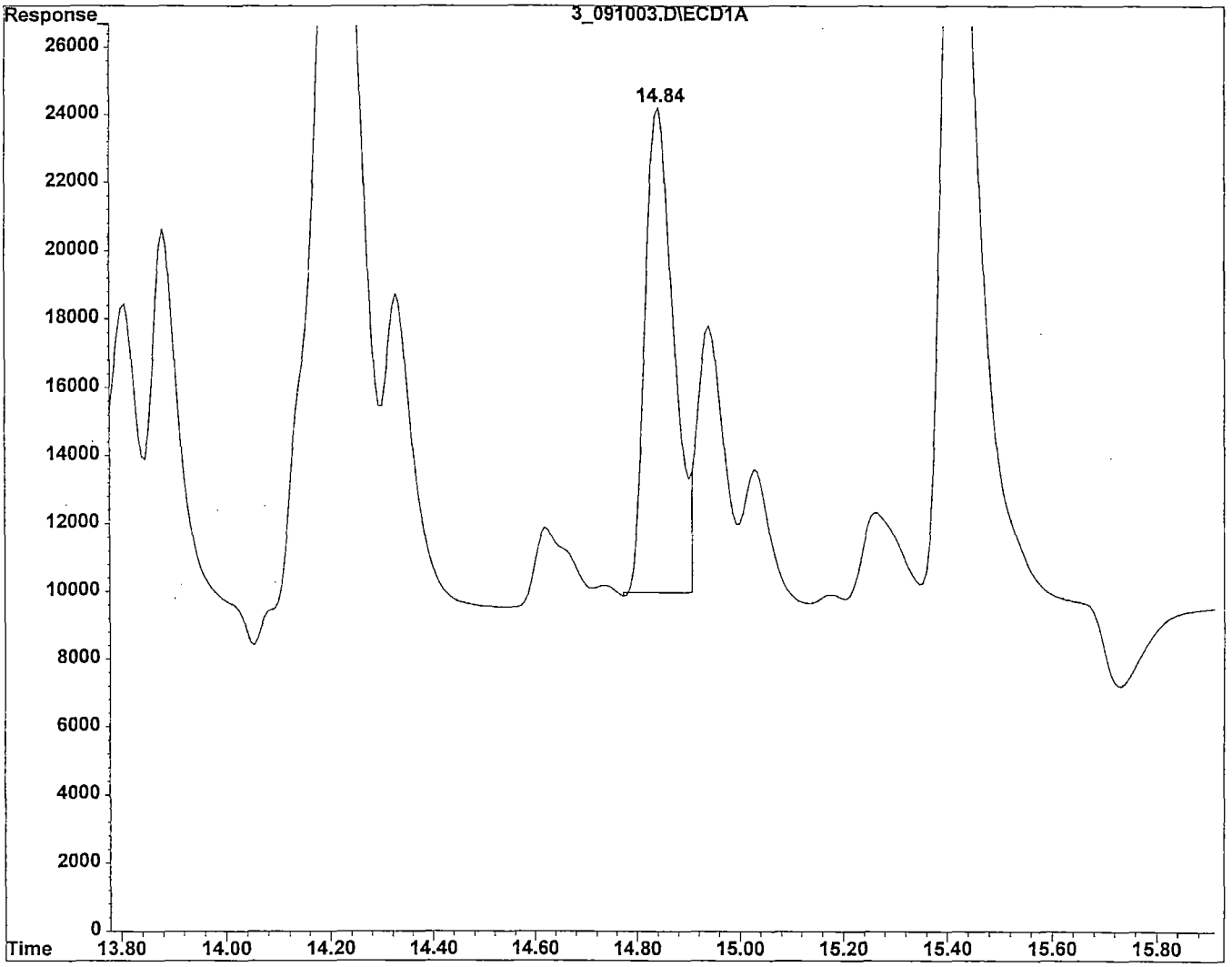
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.23	571178	232171	18.0	20.1
22)	S DCB	19.25	20.35	860564	427974	20.5	21.4
	Target Compounds:						
2)	L1 Aroclor-1016	8.54	9.40	315418	281393	376.9	422.3
3)	L1 Aroclor-1016 {2}	10.14	10.09	1193159	566014	388.9	417.2
4)	L1 Aroclor-1016 {3}	10.56	10.40	372198	180688	373.4	422.1
5)	L1 Aroclor-1016 {4}	10.77	11.51	899086	123465	375.6	408.5
6)	L1 Aroclor-1016 {5}	11.87	12.10	354604	165020	376.3	423.2
	Sum Aroclor-1016			3134466	1316580	1891.0	2093.3
	Average Aroclor-1016					378.204	418.657
17)	L7 Aroclor-1260	12.96	13.33	512122	401556	407.4	386.5m BTB 091001
18)	L7 Aroclor-1260 {2}	13.20	13.46	703303	463736	390.3 BTB 091001	390.7m
19)	L7 Aroclor-1260 {3}	14.84	14.09	550000	210492	408.1m	322.2m
20)	L7 Aroclor-1260 {4}	15.41	14.30	1286768	394648	395.4m	379.1m
21)	L7 Aroclor-1260 {5}	16.23	15.31	962840	828960	390.1m	410.5
	Sum Aroclor-1260			4015033	2299392	1991.3	1889.0
	Average Aroclor-1260					398.261	377.792

(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_10_01\3_091003.D
Date Acquired: 10 Sep 2001 16:04
Inst: HP_03 Operator ID: BTB
Name: AR1660L31K
Misc: 5-128-7
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 10 16:31 2001 Quant Results File: XPCBI07.RES



Aroclor-1260 {3} 14.84min area: 550000 m BTB 091001

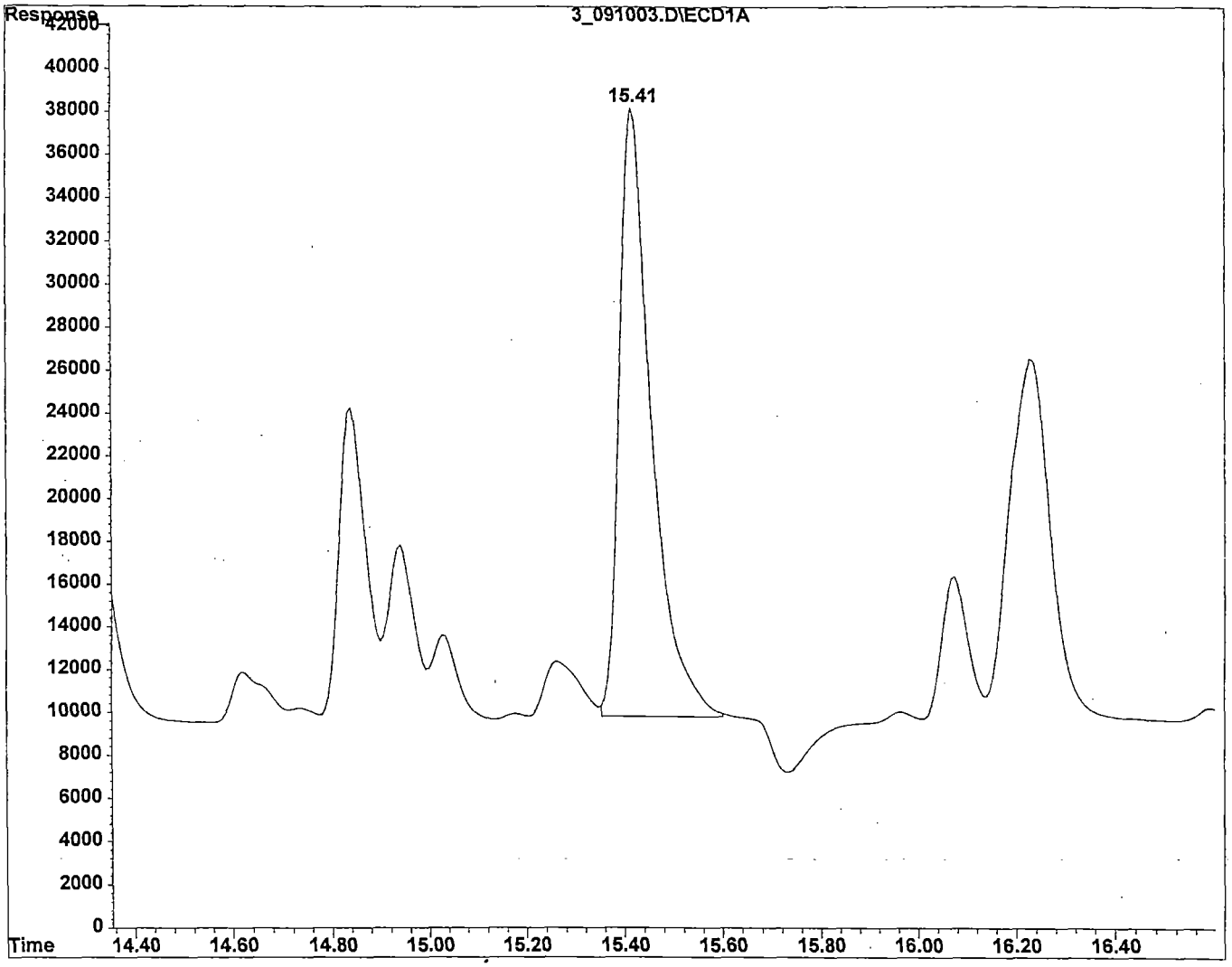
Integration Time Range: 14.78 - 14.91

ok 9-12-01

F:\HPCHEM\HP\3\DATA\09_10_01\3_091003.D
Report generated: Mon Sep 10 17:12:55 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_10_01\3_091003.D
Date Acquired: 10 Sep 2001 16:04
Inst: HP_03 Operator ID: BTB
Name: AR1660L31K
Misc: 5-128-7
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 10 16:31 2001 Quant Results File: XPCBI07.RES



Aroclor-1260 {4} 15.41min area: 1286768 m BTB 091001

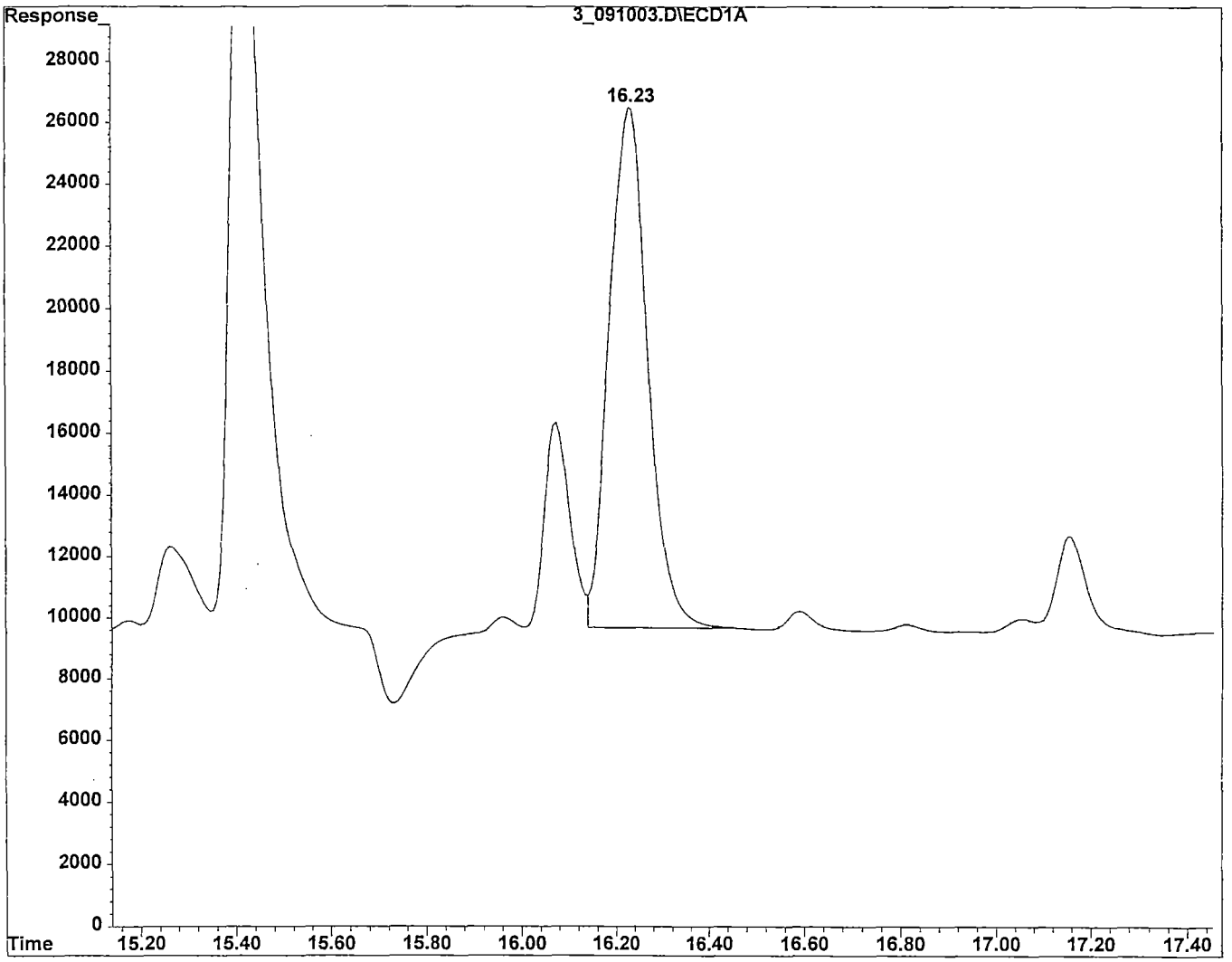
Integration Time Range: 15.35 - 15.60

ok 9-12-01

F:\HPCHEM\HP\3\DATA\09_10_01\3_091003.D
Report generated: Mon Sep 10 17:12:56 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_10_01\3_091003.D
Date Acquired: 10 Sep 2001 16:04
Inst: HP_03 Operator ID: BTB
Name: AR1660L31K
Misc: 5-128-7
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 10 16:31 2001 Quant Results File: XPCBI07.RES



Aroclor-1260 {5} 16.23min area: 962840 m BTB 091001

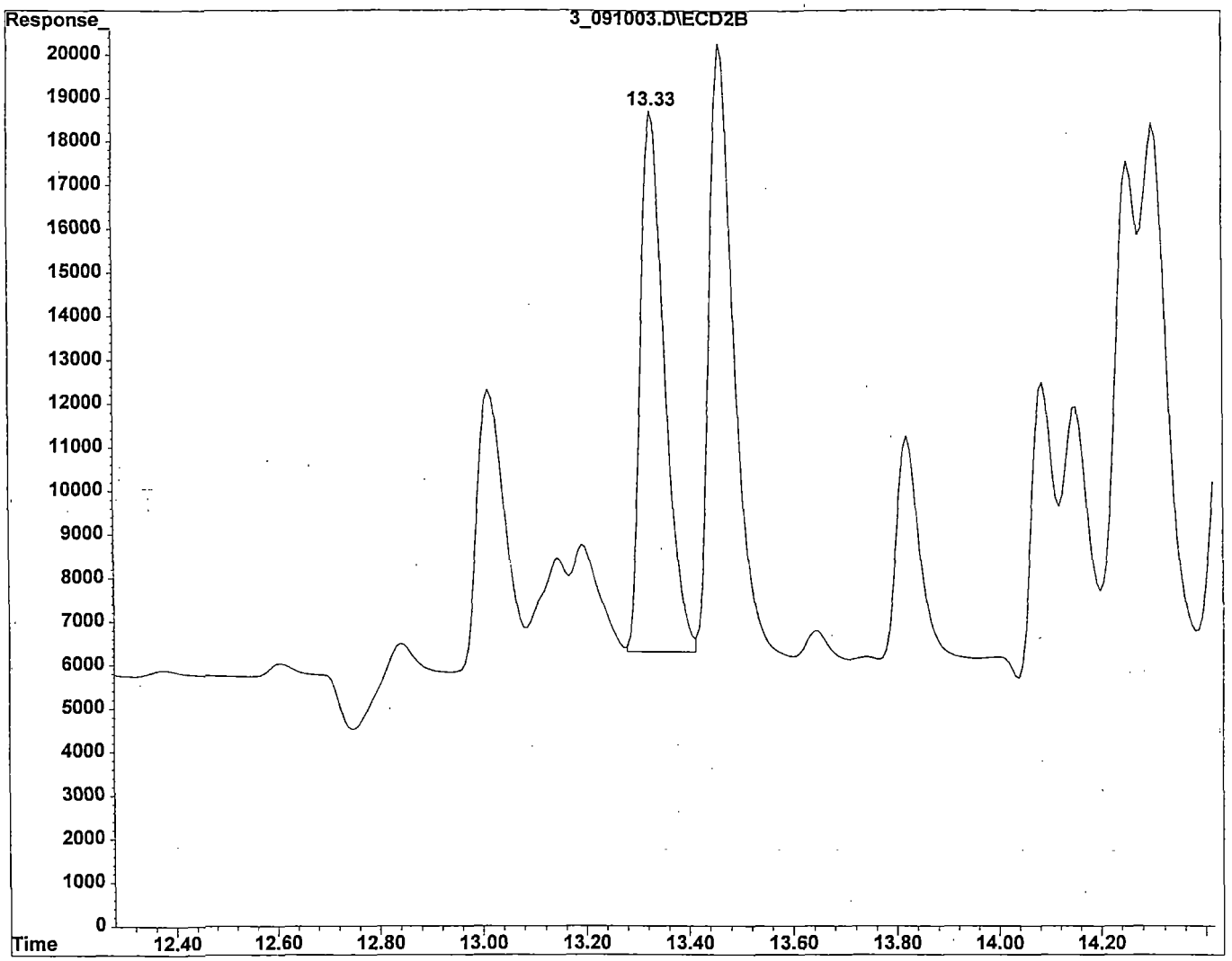
Integration Time Range: 16.14 - 16.45

ok 9-12-01

F:\HPCHEM\HP\3\DATA\09_10_01\3_091003.D
Report generated: Mon Sep 10 17:12:56 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_10_01\3_091003.D
Date Acquired: 10 Sep 2001 16:04
Inst: HP_03 Operator ID: BTB
Name: AR1660L31K
Misc: 5-128-7
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 10 16:31 2001 Quant Results File: XPCBI07.RES



Aroclor-1260 #2 13.33min area: 401556 m BTB 091001

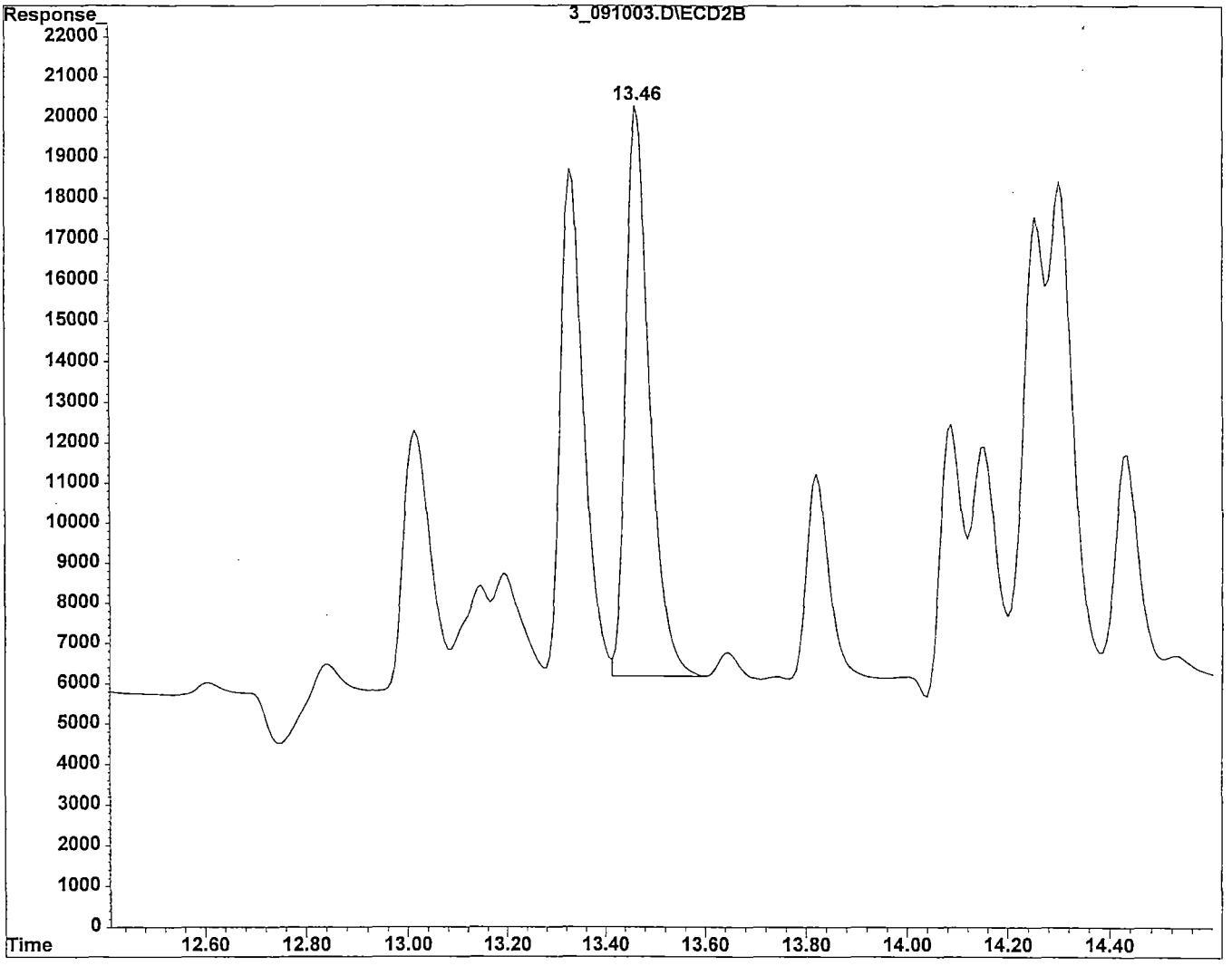
Integration Time Range: 13.28 - 13.42

ok 9-12-01

F:\HPCHEM\HP\3\DATA\09_10_01\3_091003.D
Report generated: Mon Sep 10 17:12:57 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_10_01\3_091003.D
Date Acquired: 10 Sep 2001 16:04
Inst: HP_03 Operator ID: BTB
Name: AR1660L31K
Misc: 5-128-7
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 10 16:31 2001 Quant Results File: XPCBI07.RES



Aroclor-1260 {2} #2 13.46min area: 463736 m

BTB 091001

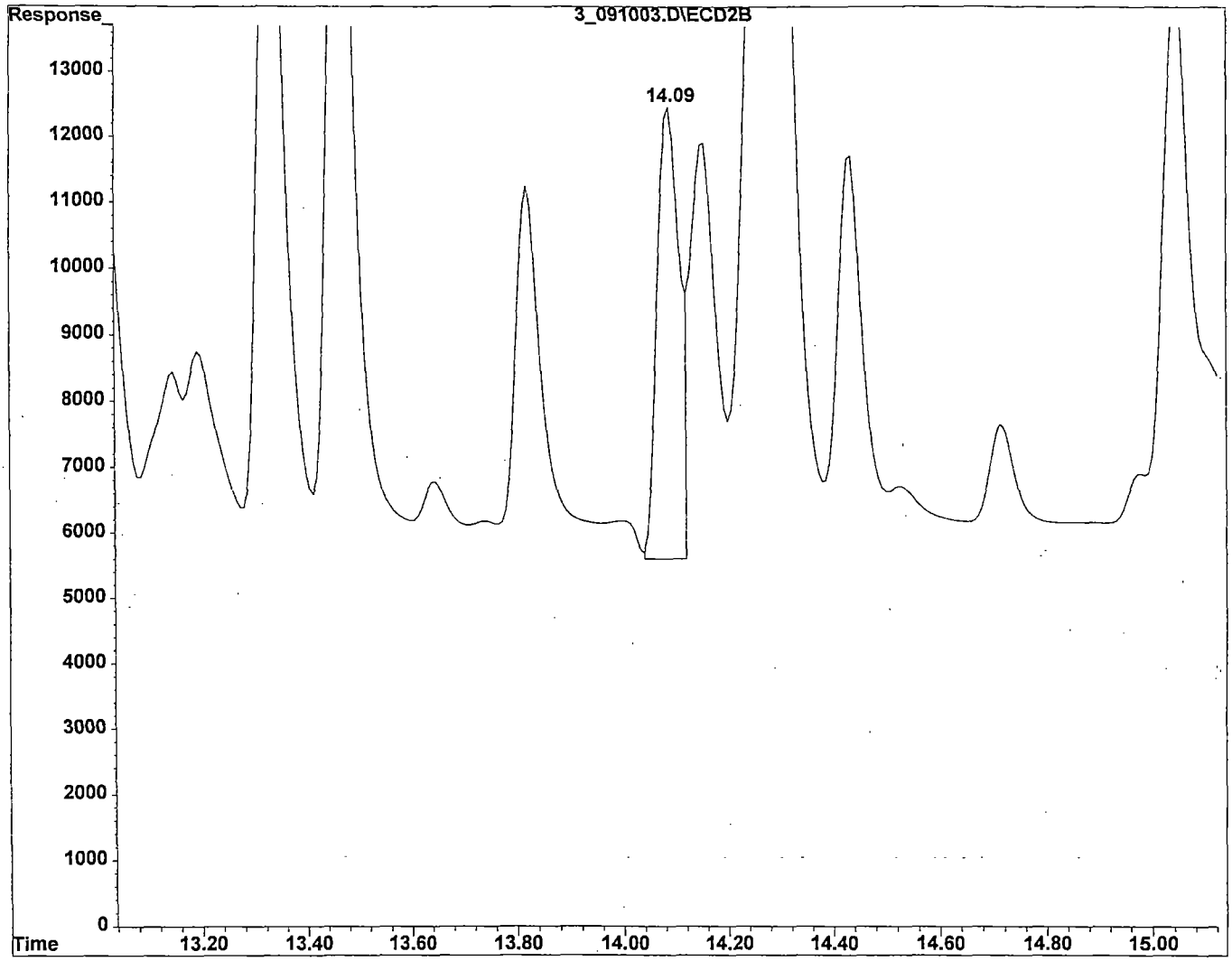
Integration Time Range: 13.41 - 13.60

ok 9-12-01

F:\HPCHEM\HP\3\DATA\09_10_01\3_091003.D
Report generated: Mon Sep 10 17:12:57 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_10_01\3_091003.D
Date Acquired: 10 Sep 2001 16:04
Inst: HP_03 Operator ID: BTB
Name: AR1660L31K
Misc: 5-128-7
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 10 16:31 2001 Quant Results File: XPCBI07.RES



Aroclor-1260 {3} #2 14.09min area: 210492 m BTB 091001

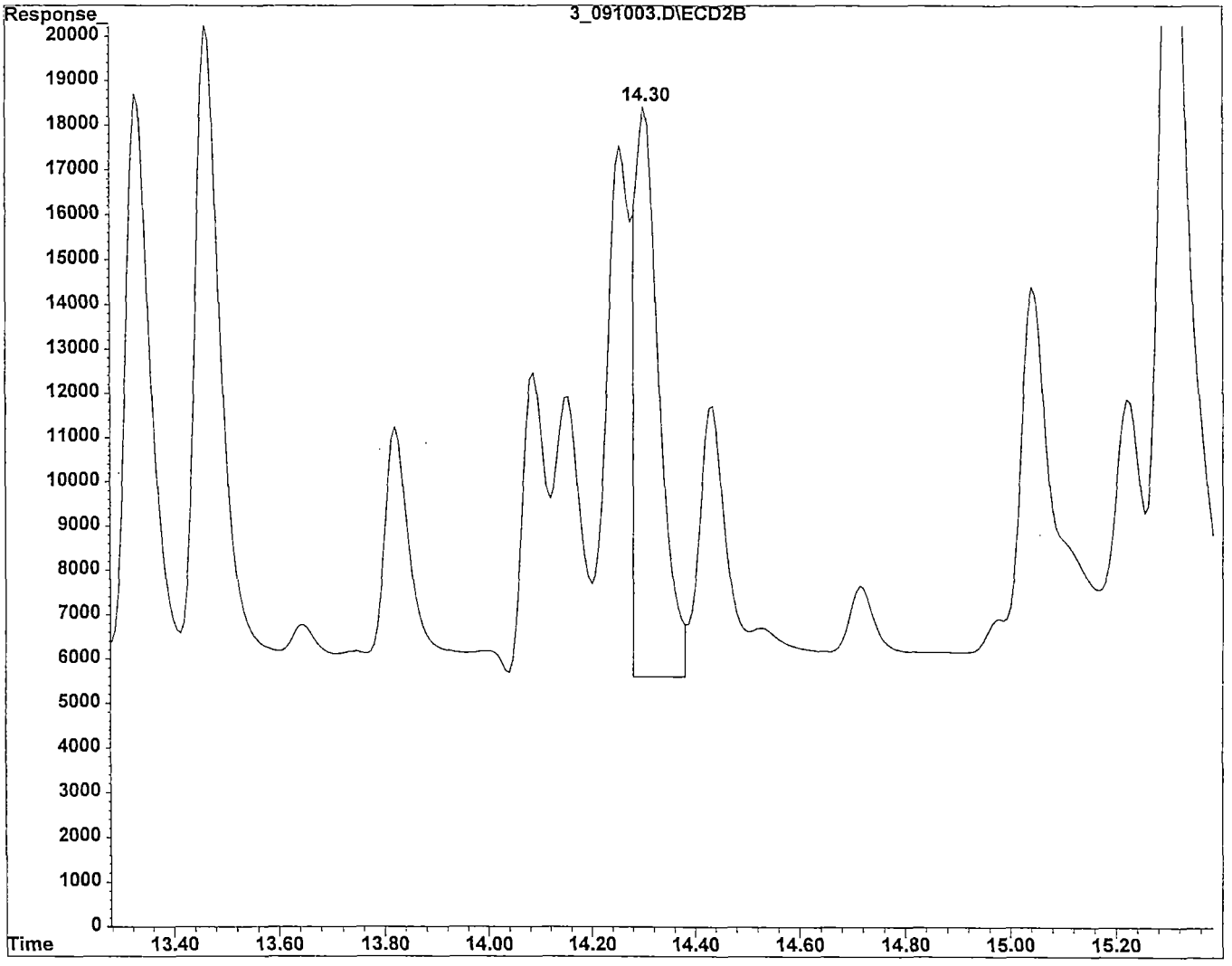
Integration Time Range: 14.04 - 14.12

ok 9-12-01

F:\HPCHEM\HP\3\DATA\09_10_01\3_091003.D
Report generated: Mon Sep 10 17:12:58 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_10_01\3_091003.D
Date Acquired: 10 Sep 2001 16:04
Inst: HP_03 Operator ID: BTB
Name: AR1660L31K
Misc: 5-128-7
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 10 16:31 2001 Quant Results File: XPCBI07.RES



Aroclor-1260 {4} #2 14.30min area: 394648 m

Integration Time Range: 14.28 - 14.38

BTB 091001

ok 9-12-01

F:\HPCHEM\HP\3\DATA\09_10_01\3_091003.D
Report generated: Mon Sep 10 17:12:58 2001

Continuing Calibration Report HP_03

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Wed Sep 12 12:07:29 2001
Response via : Initial Calibration

Continuing Calibration File: 3_091019.D

ok 9-12-01 [illegible]

Min. RRF : 0.000 Min. Rel. Area : 50%
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	31.730	30.641	E3	3.4	95
2	L1	Aroclor-1016	836.969	829.510		0.9	97
3	L1	Aroclor-1016 {2}	3.068	3.036	E3	1.0	94
4	L1	Aroclor-1016 {3}	0.997	0.963	E3	3.4	94
5	L1	Aroclor-1016 {4}	2.394	2.323	E3	3.0	95
6	L1	Aroclor-1016 {5}	942.278	884.036		6.2	90
17	L7	Aroclor-1260	1.257	1.288	E3	-2.5	97
18	L7	Aroclor-1260 {2}	1.802	1.758	E3	2.5	92
19	L7	Aroclor-1260 {3}	1.348	1.548	E3	-14.8	110
20	L7	Aroclor-1260 {4}	3.254	3.114	E3	4.3	93
21	L7	Aroclor-1260 {5}	2.468	2.378	E3	3.6	94
22	S	DCB	41.951	42.639	E3	-1.6	98

Signal #2
Continuing Calibration File: 3_091019.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	11.547	12.214	E3	-5.8	103
2	L1	Aroclor-1016	666.283	715.640		-7.4	102
3	L1	Aroclor-1016 {2}	1.357	1.461	E3	-7.7	101
4	L1	Aroclor-1016 {3}	428.074	458.125		-7.0	99
5	L1	Aroclor-1016 {4}	302.214	316.103		-4.6	98
6	L1	Aroclor-1016 {5}	389.969	413.502		-6.0	97
17	L7	Aroclor-1260	1.039	1.115	E3	-7.3	101
18	L7	Aroclor-1260 {2}	1.187	1.332	E3	-12.2	106
19	L7	Aroclor-1260 {3}	653.235	551.830		15.5#	80
20	L7	Aroclor-1260 {4}	1.041	1.128	E3	-8.3	103
21	L7	Aroclor-1260 {5}	2.020	2.072	E3	-2.6	99
22	S	DCB	19.961	21.268	E3	-6.5	102

(#) = Out of Range SPCC's out = 0 CCC's out = 0

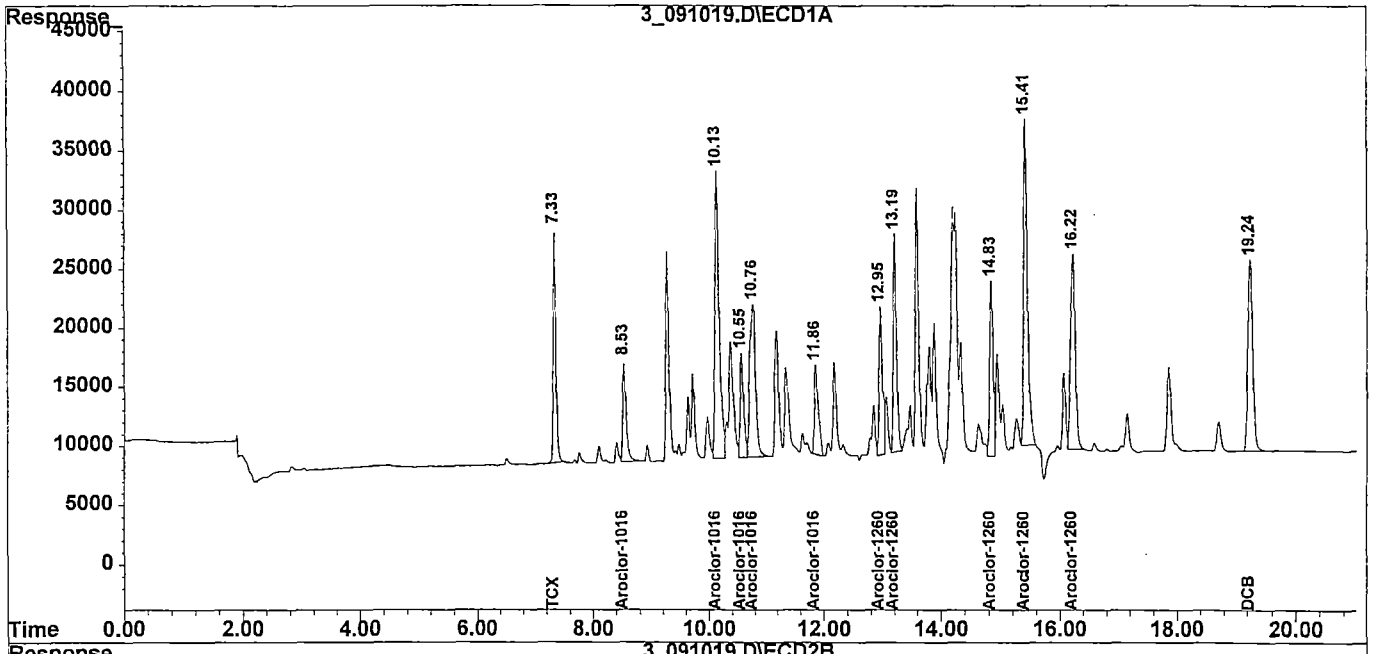
3_091019.D XPCBI07.M Wed Sep 12 12:07:41 2001

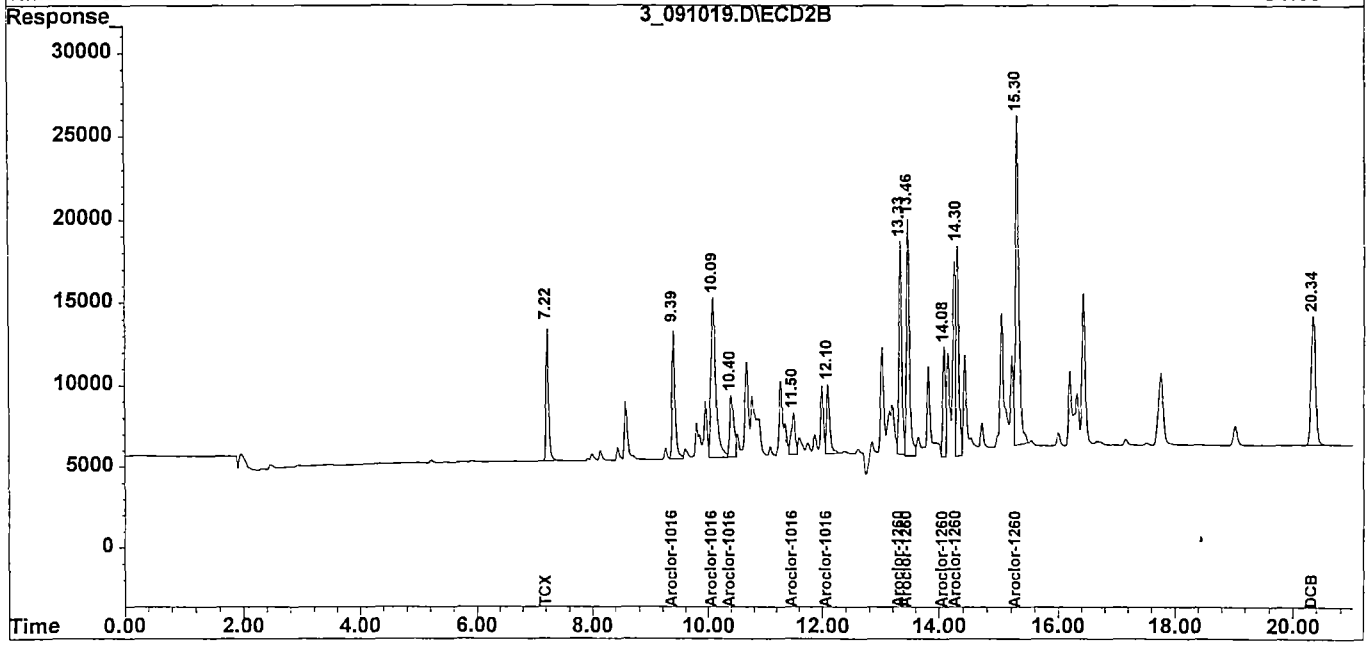
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091019.D\ECD1A.CH Vial: 58
Signal #2 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091019.D\ECD2B.CH
Acq On : 10 Sep 2001 22:55 Operator: BTB
Sample : AR1660L31M Inst : HP_03
Misc : 5-128-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 12 12:07 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091019.D\ECD1A.CH Vial: 58
Signal #2 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091019.D\ECD2B.CH
Acq On : 10 Sep 2001 22:55 Operator: BTB
Sample : AR1660L31M Inst : HP_03
Misc : 5-128-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 12 12:07 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

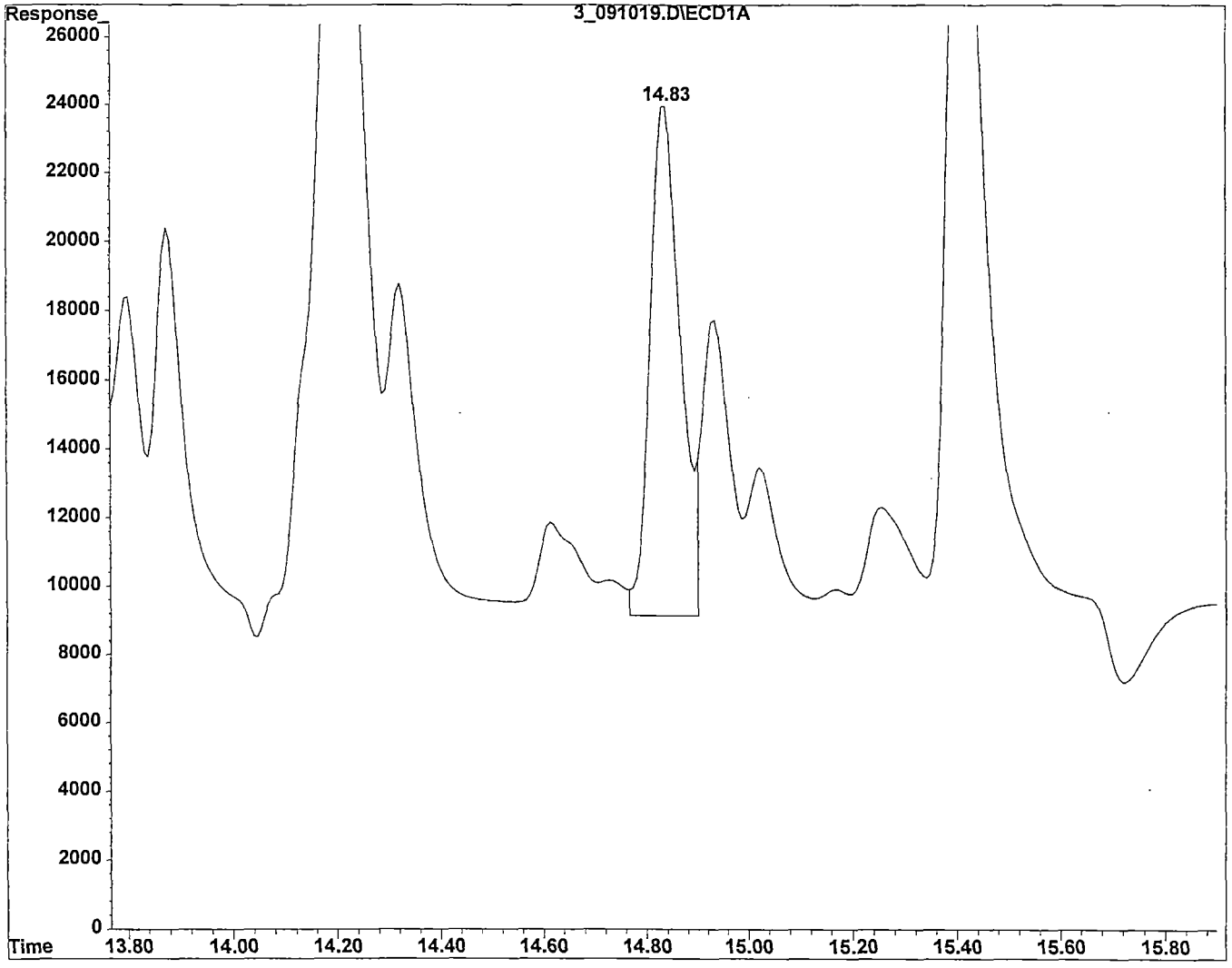
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	612813	244285	19.3	21.2
22)	S DCB	19.24	20.34	852773	425368	20.3	21.3
	Target Compounds:						
2)	L1 Aroclor-1016	8.53	9.39	331804	286256	396.4	429.6
3)	L1 Aroclor-1016 {2}	10.13	10.09	1214412	584436	395.8	430.7
4)	L1 Aroclor-1016 {3}	10.56	10.40	385331	183250	386.5	428.1
5)	L1 Aroclor-1016 {4}	10.77	11.50	929200	126441	388.1	418.4
6)	L1 Aroclor-1016 {5}	11.86	12.10	353614	165401	375.3	424.1
	Sum Aroclor-1016			3214362	1345784	1942.2	2131.0
	Average Aroclor-1016					388.445	426.194
17)	L7 Aroclor-1260	12.95	13.33	515222	445860	409.9	429.2m BTB 091201
18)	L7 Aroclor-1260 {2}	13.20	13.46	703082	532632	390.1	448.7m
19)	L7 Aroclor-1260 {3}	14.83	14.08	619040	220732	459.3m BTB 091201	337.9m #
20)	L7 Aroclor-1260 {4}	15.41	14.30	1245788	451014	382.8m	433.2
21)	L7 Aroclor-1260 {5}	16.22	15.30	951172	828739	385.4m	410.4
	Sum Aroclor-1260			4034304	2478978	2027.6	2059.4
	Average Aroclor-1260					405.510	411.871

(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_10_01\3_091019.D
Date Acquired: 10 Sep 2001 22:55
Inst: HP_03 Operator ID: BTB
Name: AR1660L31M
Misc: 5-128-7
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 12 12:07 2001 Quant Results File: XPCBI07.RES



Aroclor-1260 {3} 14.83min area: 619040 m

Integration Time Range: 14.77 - 14.90

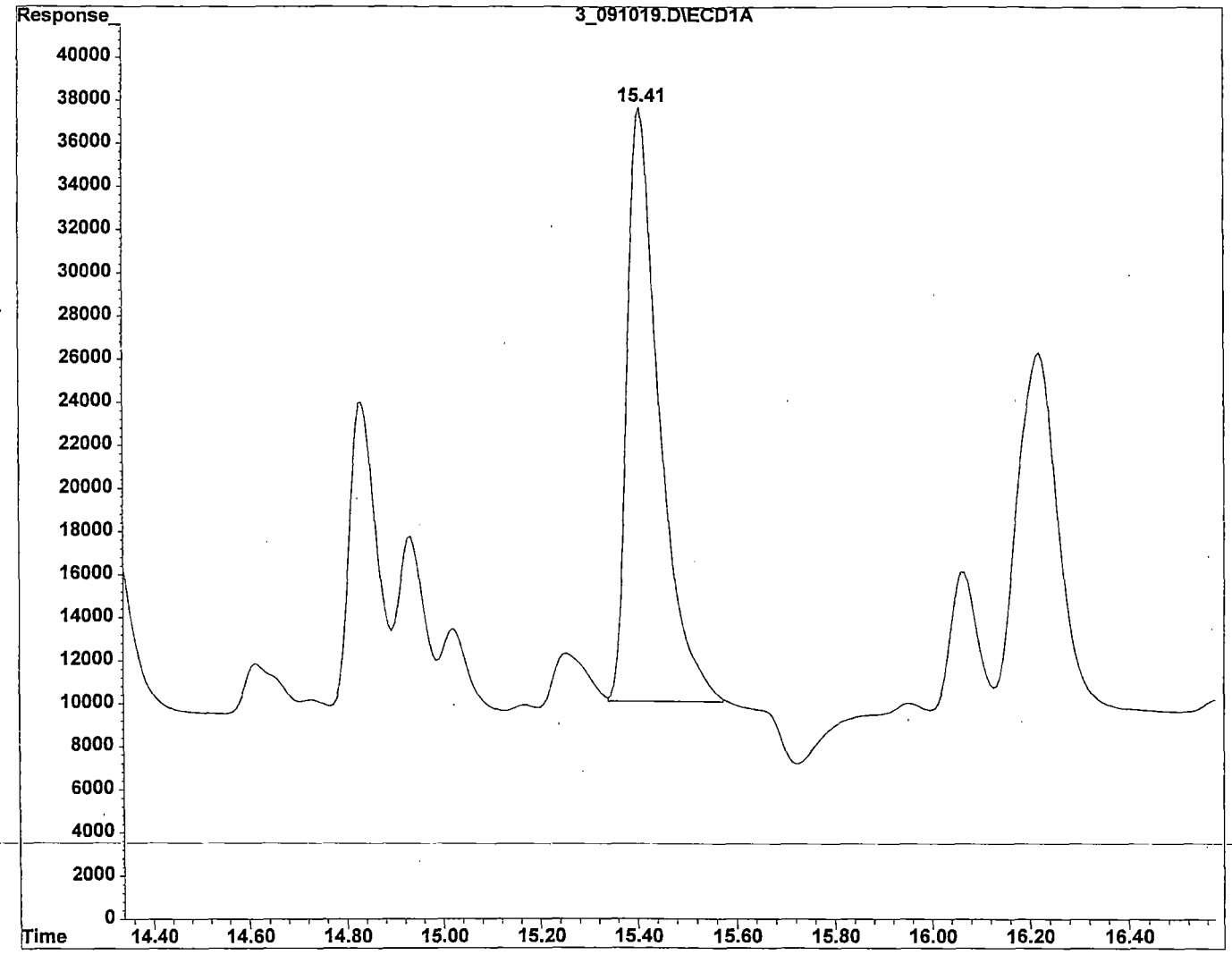
BTB 091201

OK 9-12-01

F:\HPCHEM\HP\3\DATA\09_10_01\3_091019.D
Report generated: Wed Sep 12 12:09:13 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_10_01\3_091019.D
Date Acquired: 10 Sep 2001 22:55
Inst: HP_03 Operator ID: BTB
Name: ARI660L31M
Misc: 5-128-7
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 12 12:07 2001 Quant Results File: XPCBI07.RES



Aroclor-1260 {4} 15.41min area: 1245788 m

Integration Time Range: 15.34 - 15.58

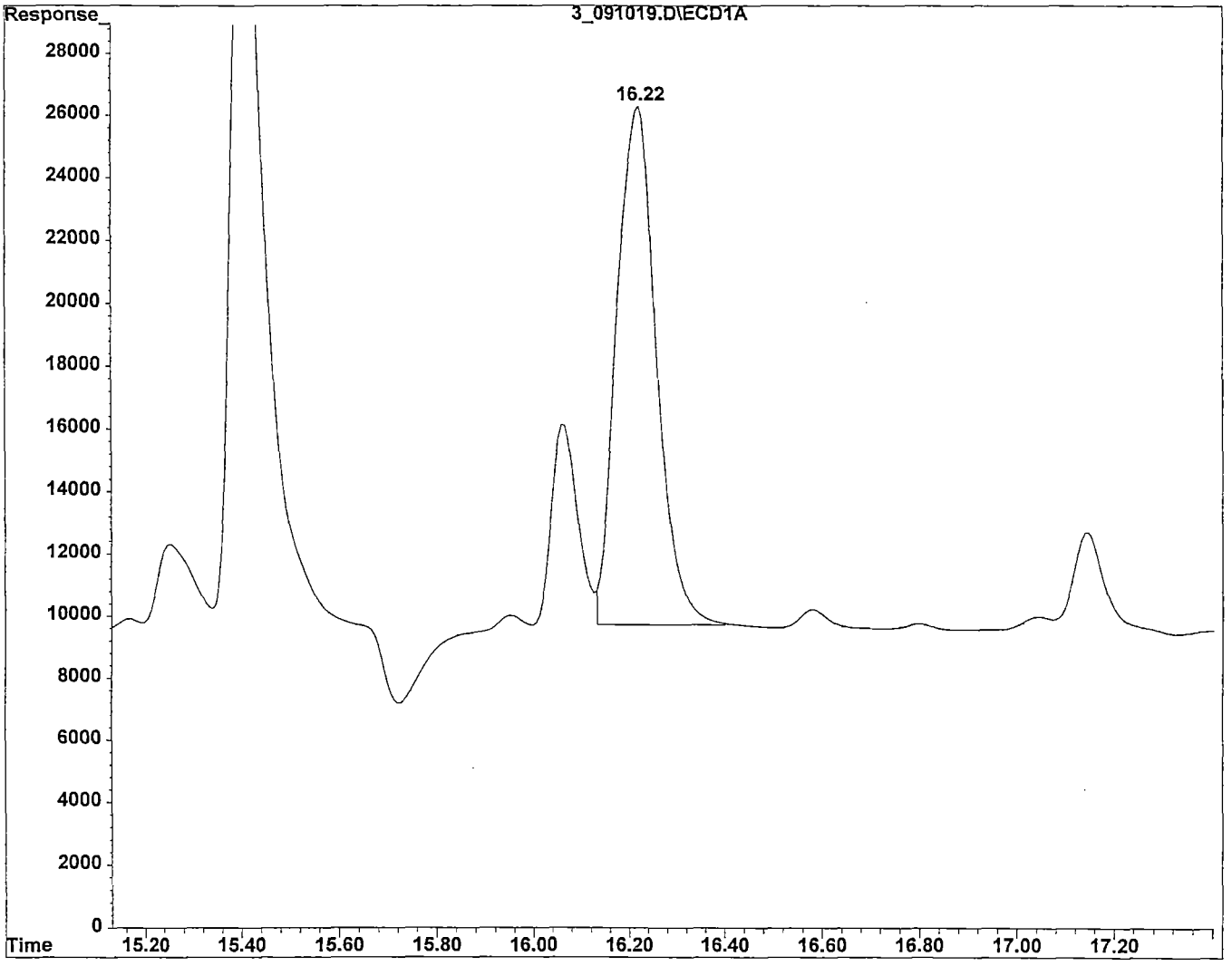
BTB 091201

OK 9-12-01 [illegible]

F:\HPCHEM\HP\3\DATA\09_10_01\3_091019.D
Report generated: Wed Sep 12 12:09:13 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_10_01\3_091019.D
Date Acquired: 10 Sep 2001 22:55
Inst: HP_03 Operator ID: BTB
Name: AR1660L31M
Misc: 5-128-7
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 12 12:07 2001 Quant Results File: XPCBI07.RES



Aroclor-1260 {5} 16.22min area: 951172 m

Integration Time Range: 16.13 - 16.40

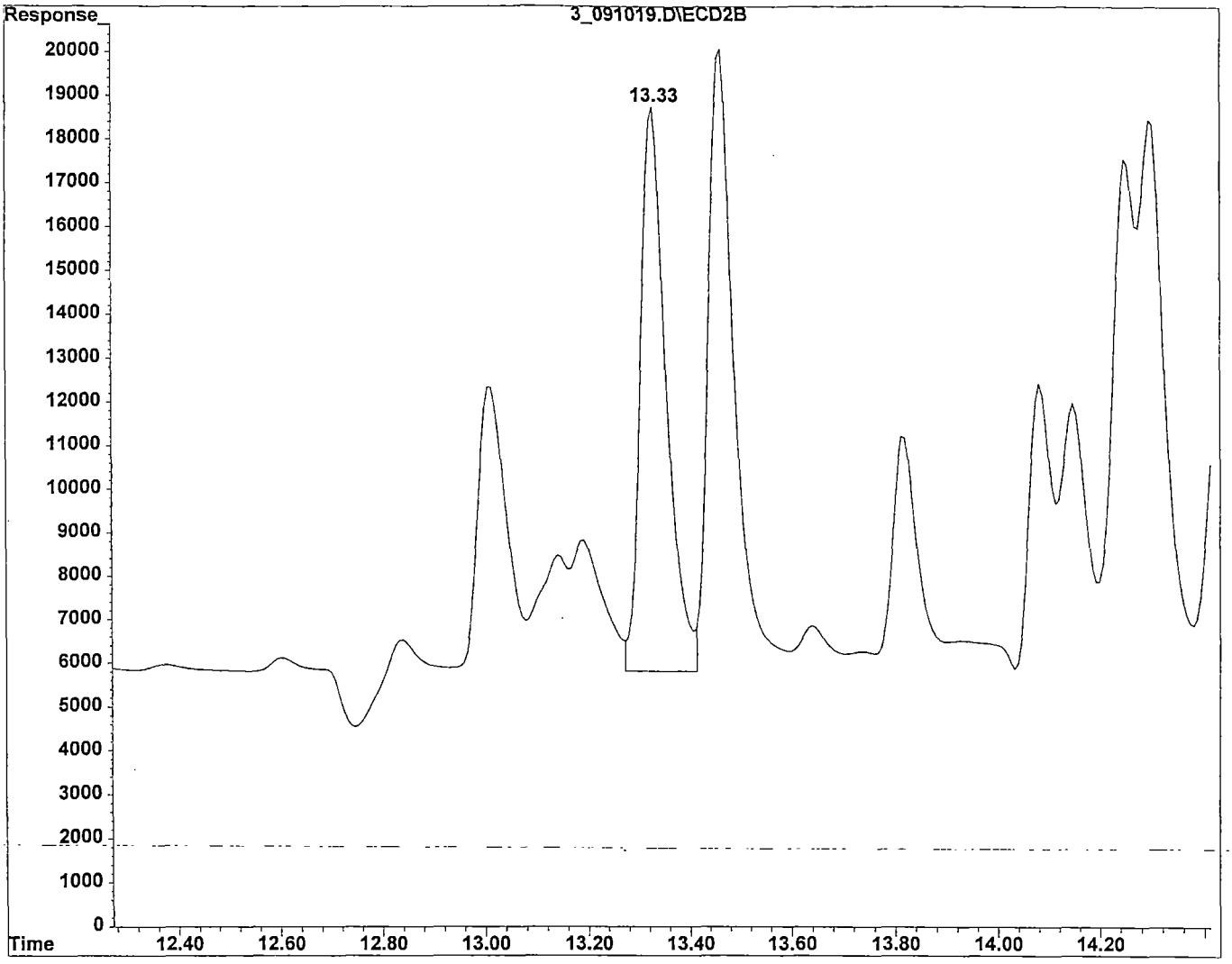
BTB
091201

ok
9-12-01

F:\HPCHEM\HP\3\DATA\09_10_01\3_091019.D
Report generated: Wed Sep 12 12:09:14 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_10_01\3_091019.D
Date Acquired: 10 Sep 2001 22:55
Inst: HP_03 Operator ID: BTB
Name: AR1660L31M
Misc: 5-128-7
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 12 12:07 2001 Quant Results File: XPCBI07.RES



Aroclor-1260 #2 13.33min area: 445860 m BTB 091201

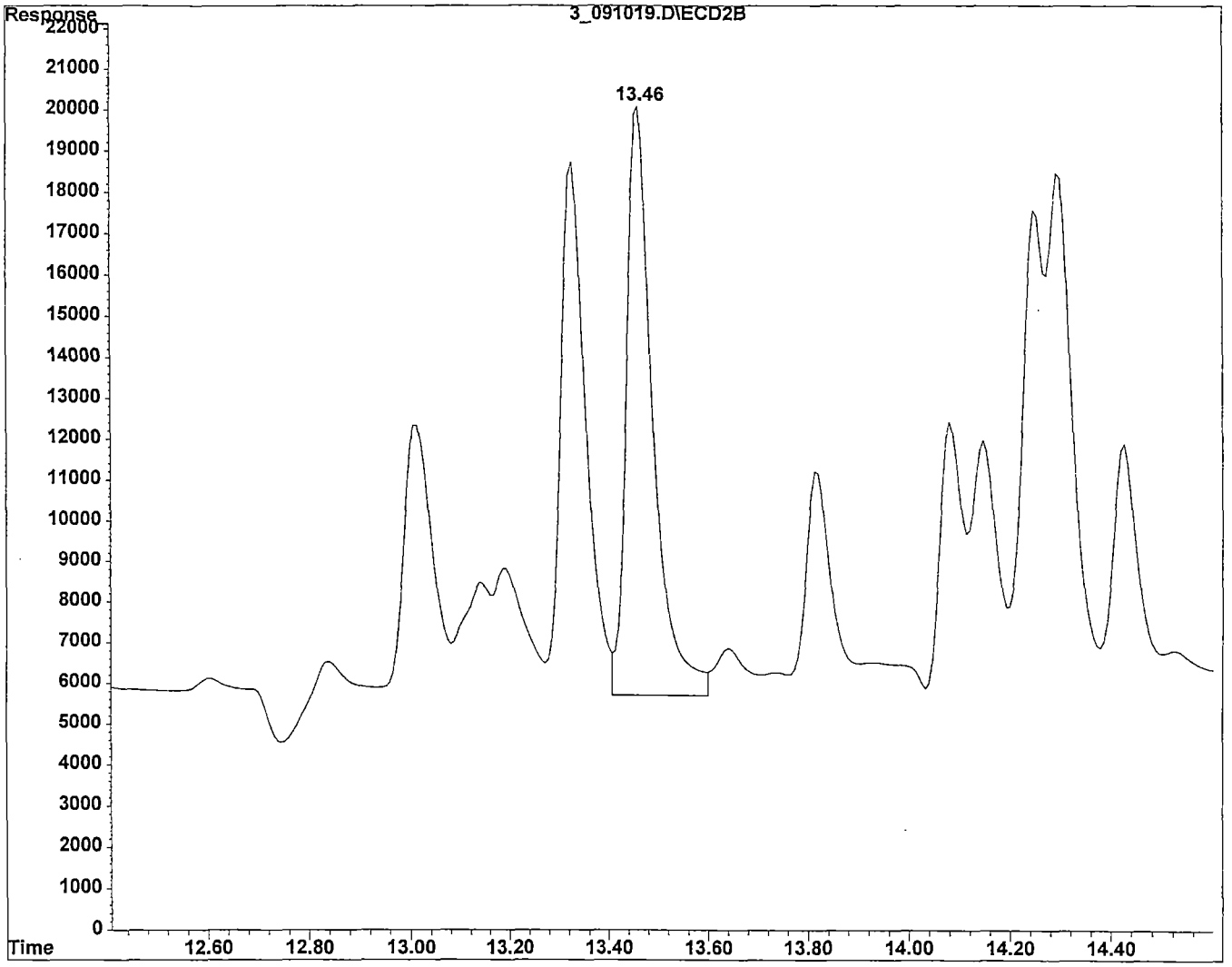
Integration Time Range: 13.27 - 13.41

OK 9-12-01 BR

F:\HPCHEM\HP\3\DATA\09_10_01\3_091019.D
Report generated: Wed Sep 12 12:09:14 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_10_01\3_091019.D
Date Acquired: 10 Sep 2001 22:55
Inst: HP_03 Operator ID: BTB
Name: AR1660L31M
Misc: 5-128-7
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 12 12:07 2001 Quant Results File: XPCBI07.RES



Aroclor-1260 {2} #2 13.46min area: 532632 m

Integration Time Range: 13.41 - 13.60

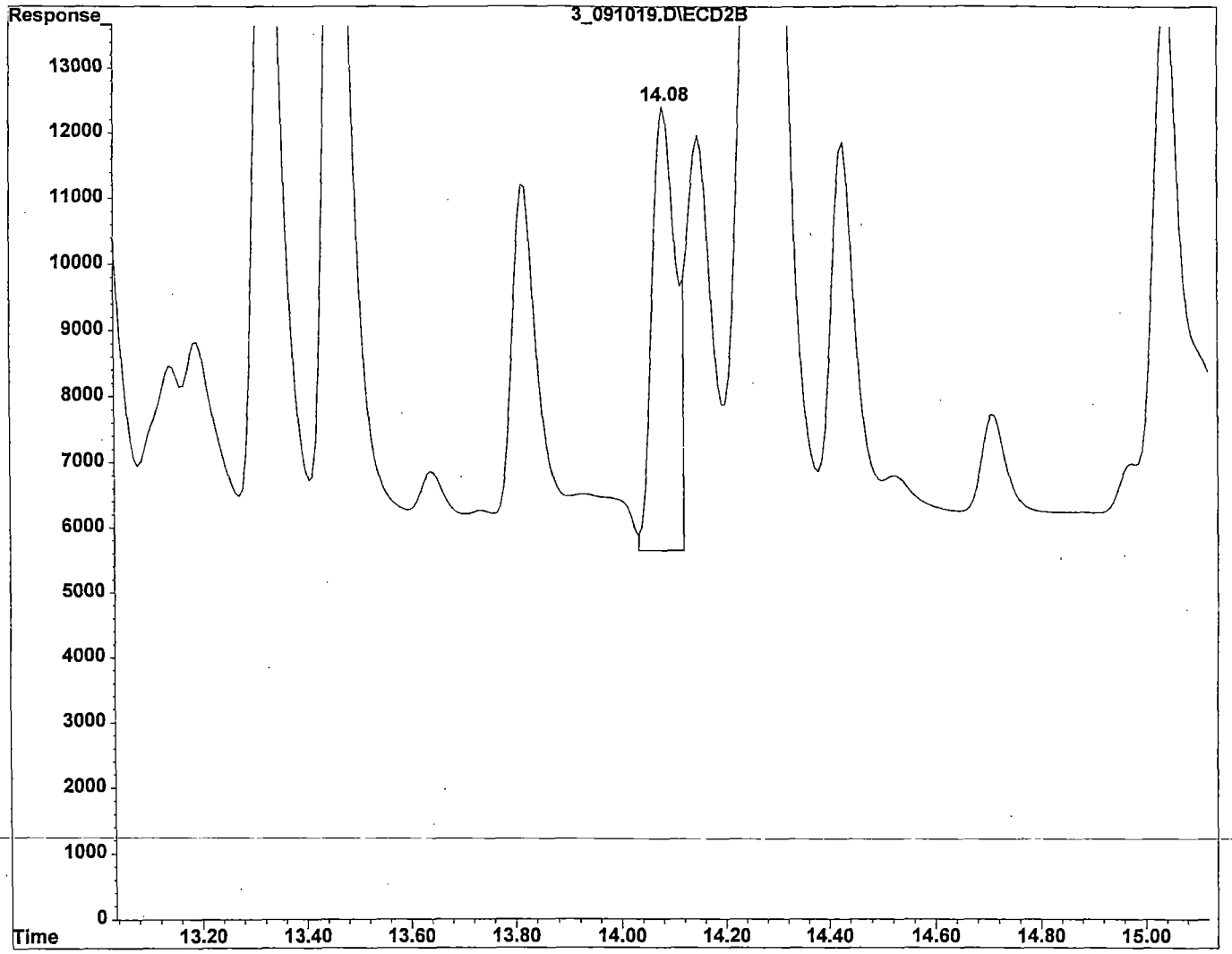
BTB
091201

OK
9-12-01

F:\HPCHEM\HP\3\DATA\09_10_01\3_091019.D
Report generated: Wed Sep 12 12:09:15 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_10_01\3_091019.D
Date Acquired: 10 Sep 2001 22:55
Inst: HP_03 Operator ID: BTB
Name: AR1660L31M
Misc: 5-128-7
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 12 12:07 2001 Quant Results File: XPCBI07.RES



Aroclor-1260 {3} #2 14.08min area: 220732 m

Integration Time Range: 14.04 - 14.12

BTB 091209

ok 9-12-01

F:\HPCHEM\HP\3\DATA\09_10_01\3_091019.D
Report generated: Wed Sep 12 12:09:15 2001

Continuing Calibration Report HP_03

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Wed Sep 12 12:13:49 2001
Response via : Initial Calibration

Continuing Calibration File: 3_091035.D

ok 9-12-01

Min. RRF : 0.000 Min. Rel. Area : 50%
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	31.730	29.701	E3	6.4	92
2	L1	Aroclor-1016	836.969	806.230		3.7	94
3	L1	Aroclor-1016 {2}	3.068	3.012	E3	1.8	93
4	L1	Aroclor-1016 {3}	0.997	0.958	E3	3.9	93
5	L1	Aroclor-1016 {4}	2.394	2.302	E3	3.8	94
6	L1	Aroclor-1016 {5}	942.278	886.013		6.0	90
17	L7	Aroclor-1260	1.257	1.307	E3	-3.9	99
18	L7	Aroclor-1260 {2}	1.802	1.781	E3	1.2	93
19	L7	Aroclor-1260 {3}	1.348	1.548	E3	-14.8	110
20	L7	Aroclor-1260 {4}	3.254	3.686	E3	-13.3	110
21	L7	Aroclor-1260 {5}	2.468	2.856	E3	-15.7#	113
22	S	DCB	41.951	43.261	E3	-3.1	99

Signal #2
Continuing Calibration File: 3_091035.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	11.547	11.912	E3	-3.2	101
2	L1	Aroclor-1016	666.283	708.833		-6.4	101
3	L1	Aroclor-1016 {2}	1.357	1.458	E3	-7.5	101
4	L1	Aroclor-1016 {3}	428.074	458.309		-7.1	99
5	L1	Aroclor-1016 {4}	302.214	316.504		-4.7	99
6	L1	Aroclor-1016 {5}	389.969	421.001		-8.0	99
17	L7	Aroclor-1260	1.039	1.133	E3	-9.0	103
18	L7	Aroclor-1260 {2}	1.187	1.299	E3	-9.4	103
19	L7	Aroclor-1260 {3}	653.235	553.920		15.2#	80
20	L7	Aroclor-1260 {4}	1.041	1.155	E3	-10.9	105
21	L7	Aroclor-1260 {5}	2.020	2.142	E3	-6.1	102
22	S	DCB	19.961	21.978	E3	-10.1	106

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3_091035.D XPCBI07.M Wed Sep 12 12:14:02 2001

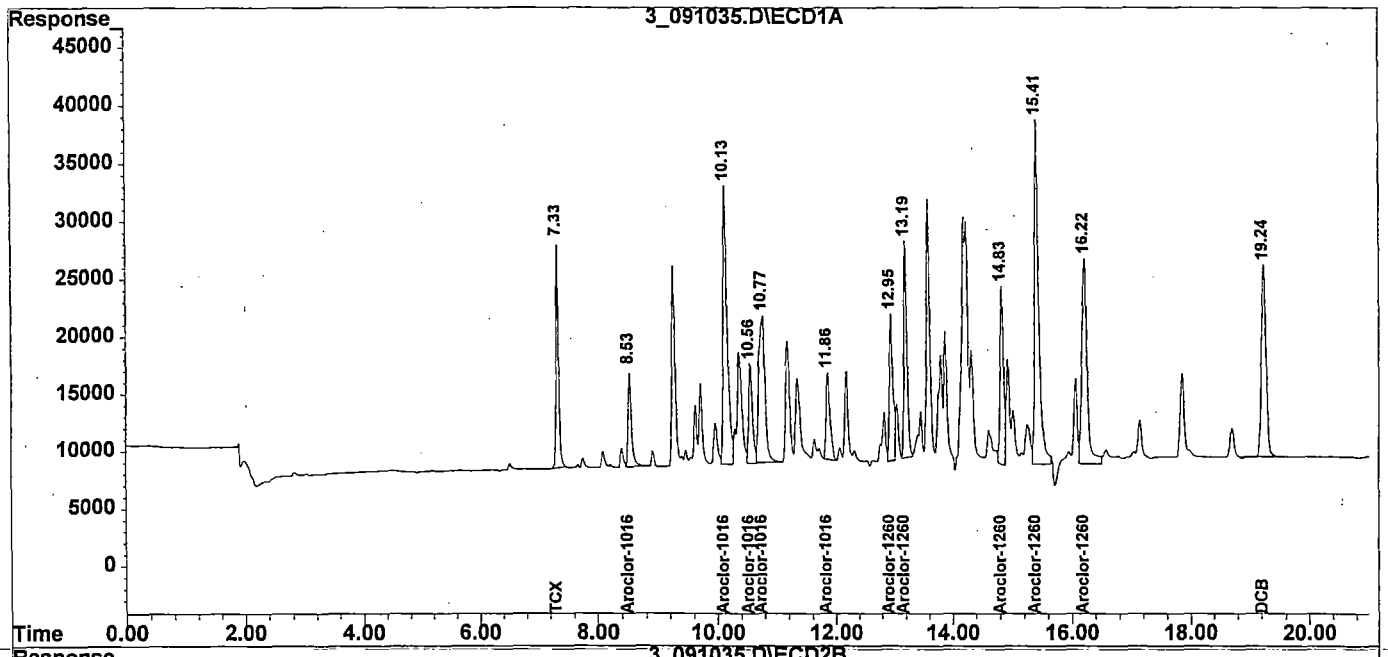
Chromatographic Report

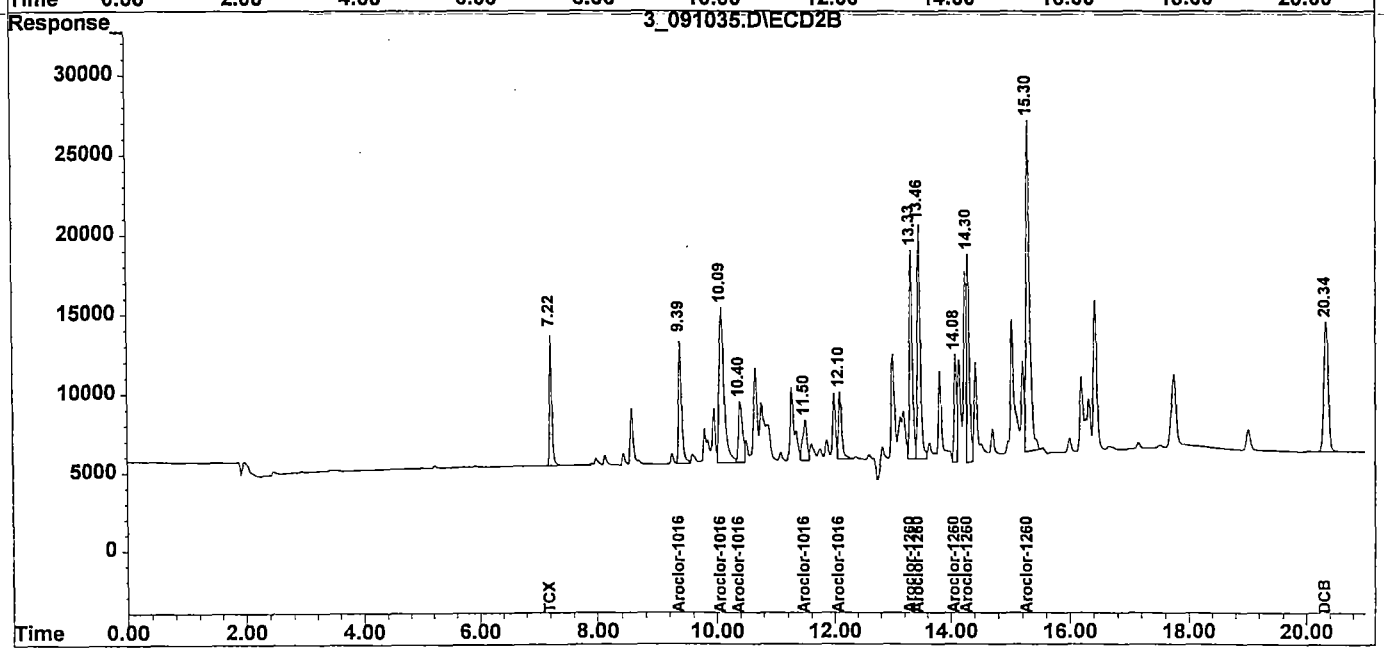
Signal #1 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091035.D\ECD1A.CH Vial: 74
Signal #2 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091035.D\ECD2B.CH
Acq On : 11 Sep 2001 5:45 Operator: BTB
Sample : AR1660L31O Inst : HP_03
Misc : 5-128-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 12 12:13 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

ok 9-12-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091035.D\ECD1A.CH Vial: 74
Signal #2 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091035.D\ECD2B.CH
Acq On : 11 Sep 2001 5:45 Operator: BTB
Sample : AR1660L31O Inst : HP_03
Misc : 5-128-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 12 12:13 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

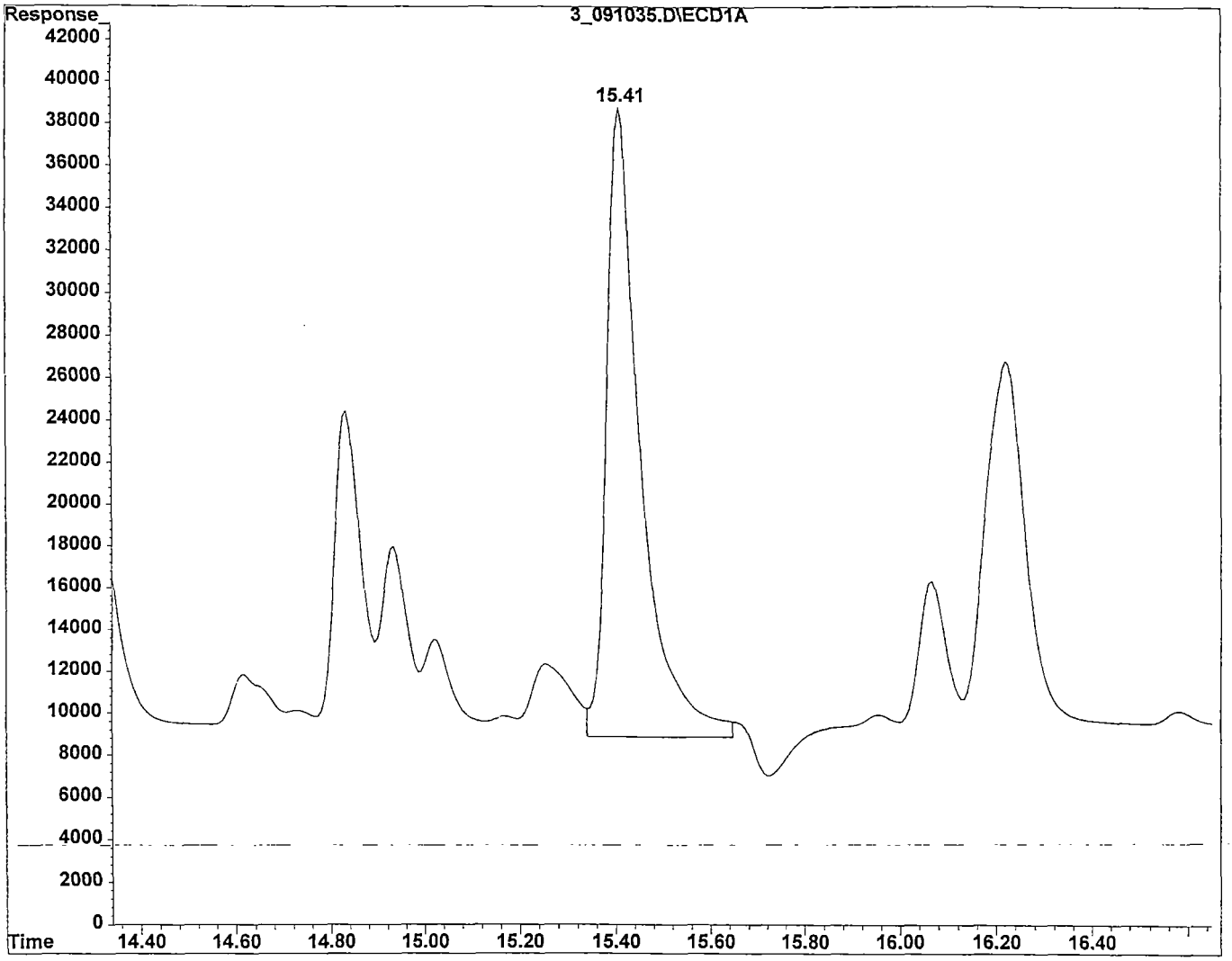
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	594025	238245	18.7	20.6
22)	S DCB	19.24	20.34	865217	439561	20.6	22.0
	Target Compounds:						
2)	L1 Aroclor-1016	8.53	9.39	322492	283533	385.3	425.5
3)	L1 Aroclor-1016 {2}	10.13	10.09	1204906	583187	392.7	429.8
4)	L1 Aroclor-1016 {3}	10.56	10.40	383201	183324	384.4	428.3
5)	L1 Aroclor-1016 {4}	10.77	11.50	920859	126601	384.7	418.9
6)	L1 Aroclor-1016 {5}	11.86	12.10	354405	168400	376.1	431.8
	Sum Aroclor-1016			3185863	1345045	1923.2	2134.4
	Average Aroclor-1016					384.644	426.871
17)	L7 Aroclor-1260	12.95	13.33	522642	453128	415.8	436.2m BTB
18)	L7 Aroclor-1260 {2}	13.20	13.46	712252	519408	395.2	437.5m 091201
19)	L7 Aroclor-1260 {3}	14.83	14.08	619025	221568	459.3	339.2m #
20)	L7 Aroclor-1260 {4}	15.41	14.30	1474516	461939	453.1m BTB	443.7
21)	L7 Aroclor-1260 {5}	16.22	15.30	1142220	856808	462.8m 091201	424.3
	Sum Aroclor-1260			4470655	2512851	2186.2	2080.9
	Average Aroclor-1260					437.247	416.176

(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_10_01\3_091035.D
Date Acquired: 11 Sep 2001 5:45
Inst: HP_03 Operator ID: BTB
Name: AR1660L31O
Misc: 5-128-7
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 12 12:13 2001 Quant Results File: XPCBI07.RES



Aroclor-1260 {4} 15.41min area: 1474516 m BTB 091201

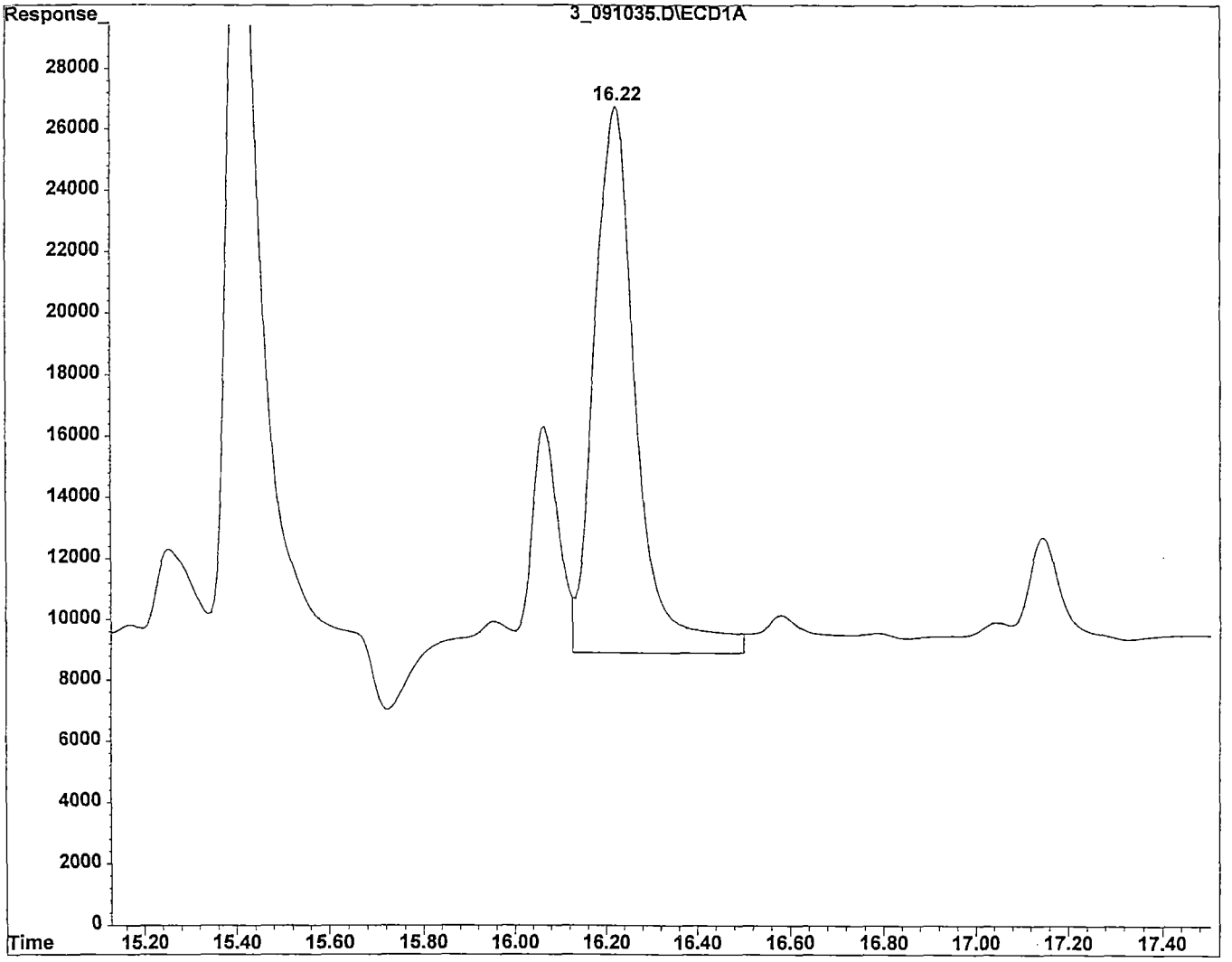
Integration Time Range: 15.34 - 15.65

OK 9-12-01 BTB

F:\HPCHEM\HP\3\DATA\09_10_01\3_091035.D
Report generated: Wed Sep 12 12:15:25 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_10_01\3_091035.D
Date Acquired: 11 Sep 2001 5:45
Inst: HP_03 Operator ID: BTB
Name: AR1660L31O
Misc: 5-128-7
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 12 12:13 2001 Quant Results File: XPCBI07.RES



Aroclor-1260 {5} 16.22min area: 1142220 m

Integration Time Range: 16.13 - 16.50

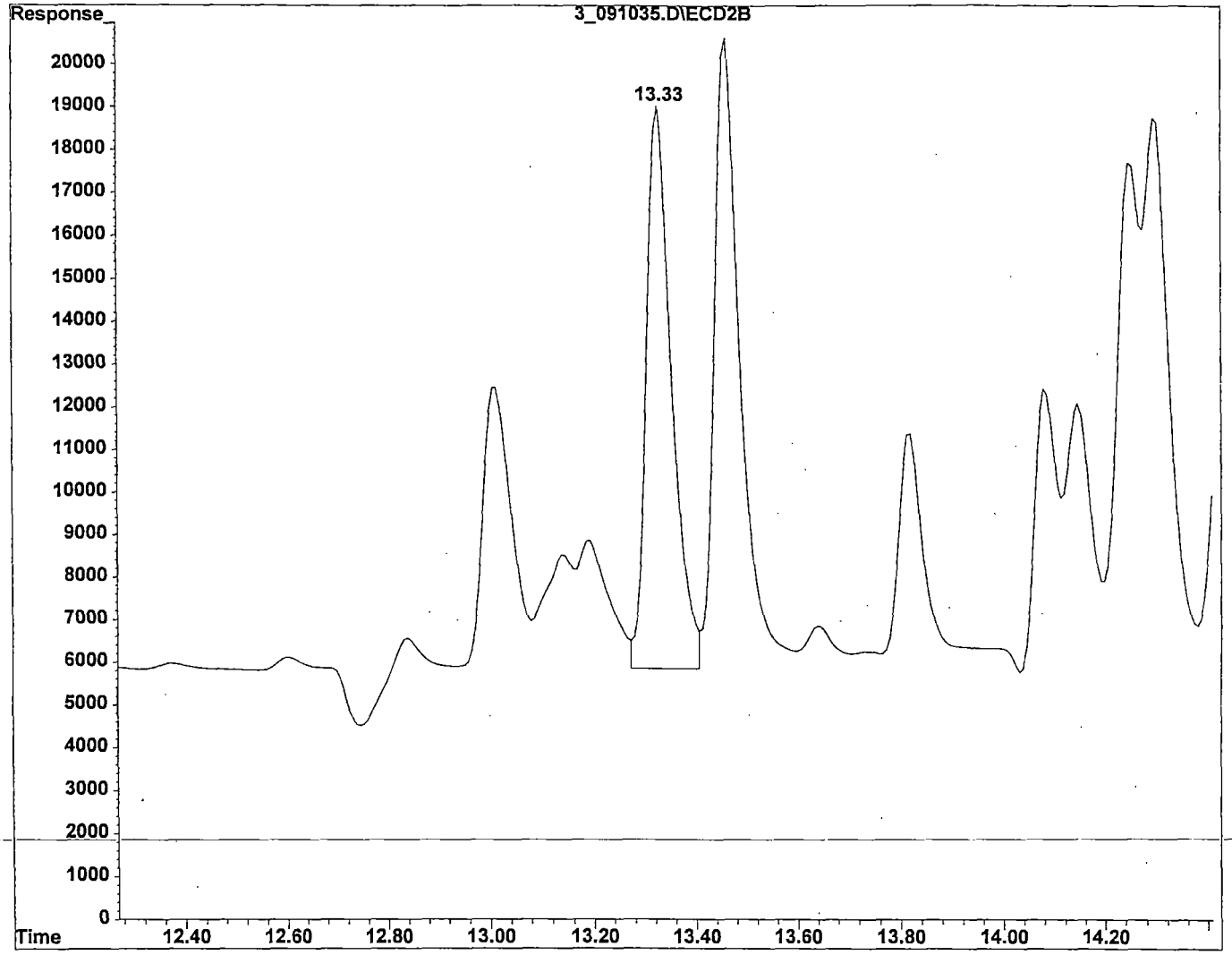
BTB
091201

ok
9-12-01

F:\HPCHEM\HP\3\DATA\09_10_01\3_091035.D
Report generated: Wed Sep 12 12:15:25 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_10_01\3_091035.D
Date Acquired: 11 Sep 2001 5:45
Inst: HP_03 Operator ID: BTB
Name: AR1660L31O
Misc: 5-128-7
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 12 12:13 2001 Quant Results File: XPCBI07.RES



Aroclor-1260 #2 13.33min area: 453128 m

Integration Time Range: 13.27 - 13.41

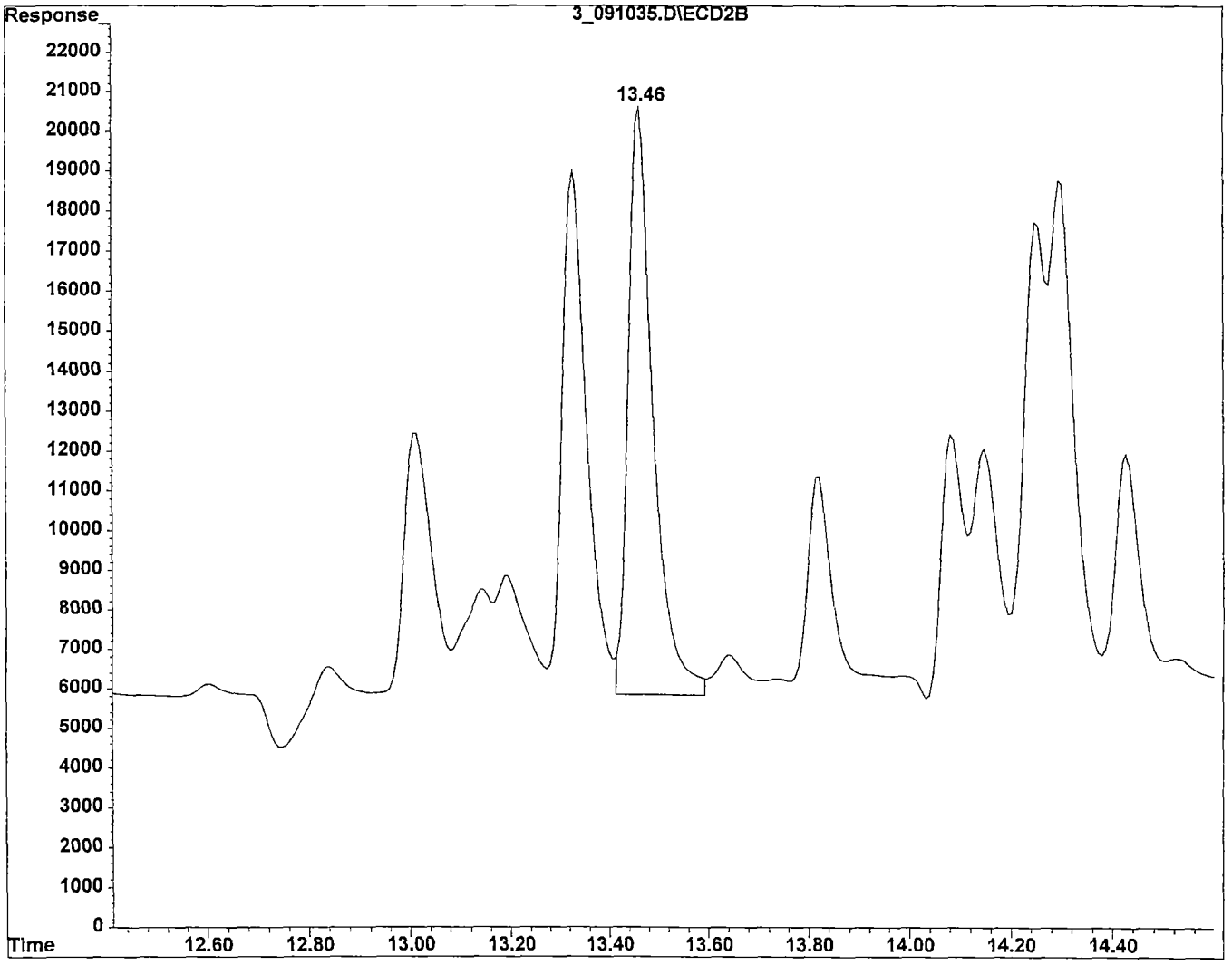
BTB
091201

OK
9-12-01

F:\HPCHEM\HP\3\DATA\09_10_01\3_091035.D
Report generated: Wed Sep 12 12:15:26 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_10_01\3_091035.D
Date Acquired: 11 Sep 2001 5:45
Inst: HP_03 Operator ID: BTB
Name: AR1660L31O
Misc: 5-128-7
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 12 12:13 2001 Quant Results File: XPCBI07.RES



Aroclor-1260 {2} #2 13.46min area: 519408 m
BTB
091201

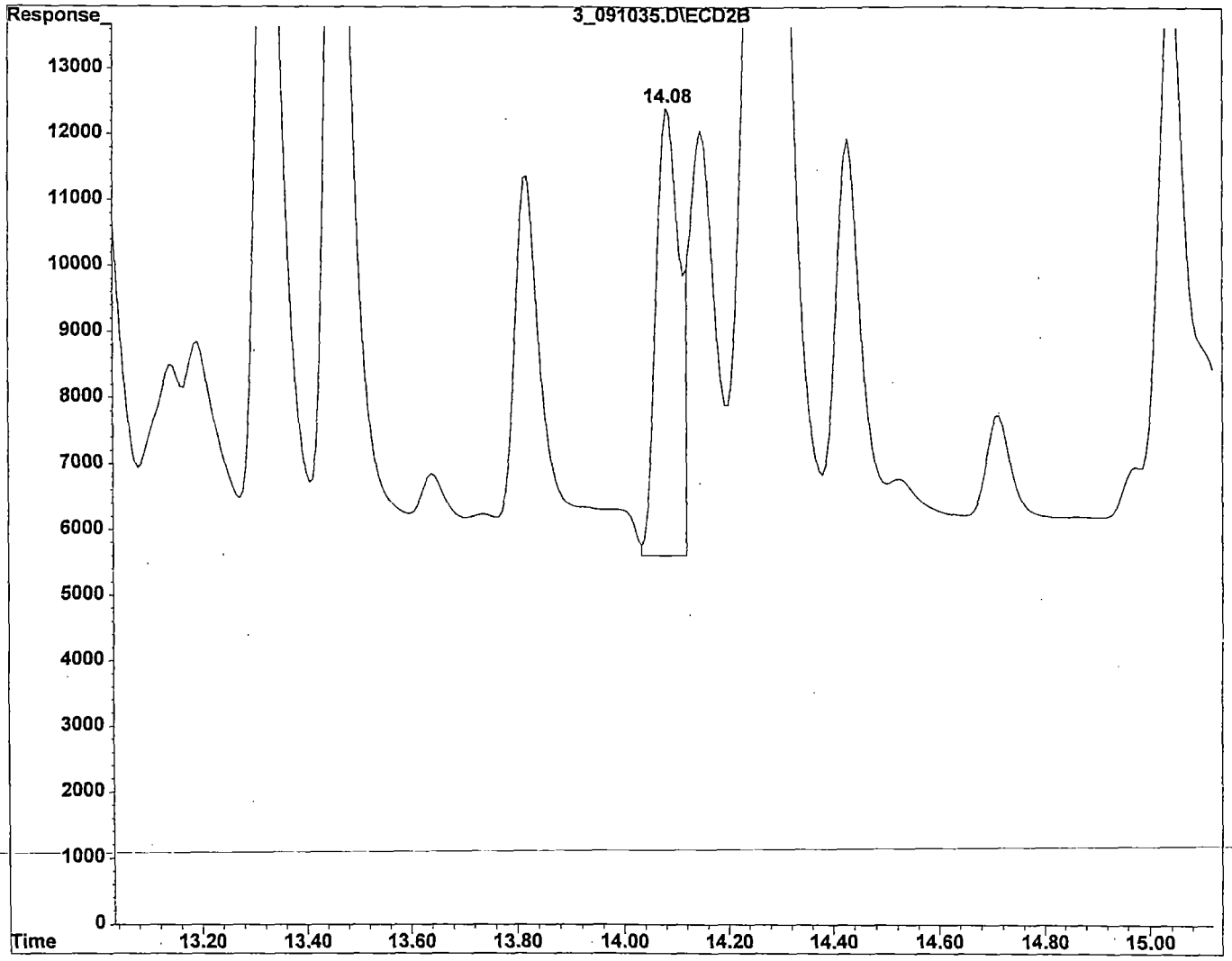
Integration Time Range: 13.41 - 13.60

ok
9-12-01 BTB

F:\HPCHEM\HP\3\DATA\09_10_01\3_091035.D
Report generated: Wed Sep 12 12:15:27 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_10_01\3_091035.D
Date Acquired: 11 Sep 2001 5:45
Inst: HP_03 Operator ID: BTB
Name: AR1660L31O
Misc: 5-128-7
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 12 12:13 2001 Quant Results File: XPCBI07.RES



Aroclor-1260 {3} #2 14.08min area: 221568 m

BTB 091201

Integration Time Range: 14.03 - 14.12

ok 9-12-01

F:\HPCHEM\HP\3\DATA\09_10_01\3_091035.D
Report generated: Wed Sep 12 12:15:27 2001

Continuing Calibration Report HP_03

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\09_07_01\
Last Update : Tue Sep 11 13:41:36 2001
Response via : Initial Calibration

Continuing Calibration File: 3_091049.D

ok 9-12-01

Min. RRF : 0.000 Min. Rel. Area : 50%
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	31.730	30.079	E3	5.2	93
2	L1	Aroclor-1016	836.969	815.665		2.5	95
3	L1	Aroclor-1016 {2}	3.068	3.060	E3	0.3	94
4	L1	Aroclor-1016 {3}	0.997	0.967	E3	3.0	94
5	L1	Aroclor-1016 {4}	2.394	2.323	E3	3.0	95
6	L1	Aroclor-1016 {5}	942.278	889.308		5.6	90
17	L7	Aroclor-1260	1.257	1.298	E3	-3.3	98
18	L7	Aroclor-1260 {2}	1.802	1.802	E3	0.0	94
19	L7	Aroclor-1260 {3}	1.348	1.459	E3	-8.3	103
20	L7	Aroclor-1260 {4}	3.254	3.342	E3	-2.7	99
21	L7	Aroclor-1260 {5}	2.468	2.536	E3	-2.8	100
22	S	DCB	41.951	43.059	E3	-2.6	99

Signal #2
Continuing Calibration File: 3_091049.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	11.547	11.835	E3	-2.5	100
2	L1	Aroclor-1016	666.283	700.569		-5.1	100
3	L1	Aroclor-1016 {2}	1.357	1.432	E3	-5.6	99
4	L1	Aroclor-1016 {3}	428.074	447.116		-4.4	97
5	L1	Aroclor-1016 {4}	302.214	311.839		-3.2	97
6	L1	Aroclor-1016 {5}	389.969	412.410		-5.8	97
17	L7	Aroclor-1260	1.039	1.163	E3	-12.0	106
18	L7	Aroclor-1260 {2}	1.187	1.343	E3	-13.1	107
19	L7	Aroclor-1260 {3}	653.235	518.835		20.6#	75
20	L7	Aroclor-1260 {4}	1.041	1.144	E3	-9.9	104
21	L7	Aroclor-1260 {5}	2.020	2.101	E3	-4.0	100
22	S	DCB	19.961	21.468	E3	-7.5	103

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3_091049.D XPCBI07.M Tue Sep 11 13:41:48 2001

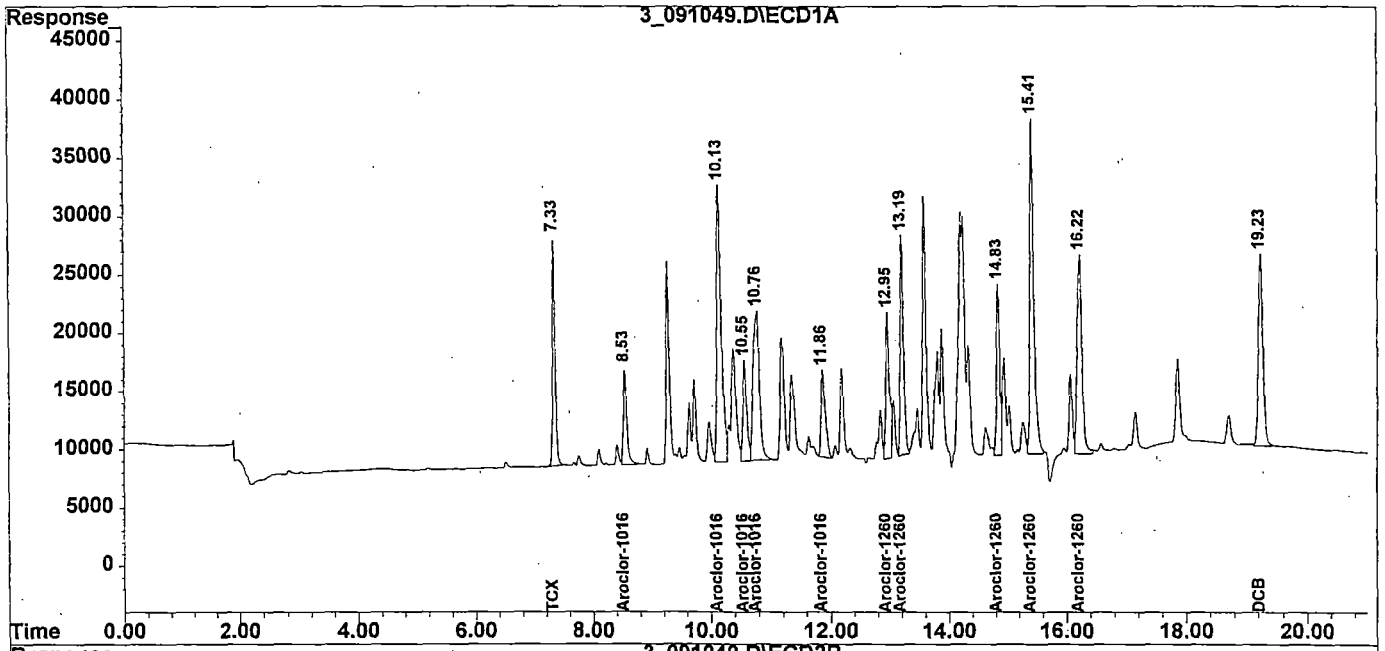
Chromatographic Report

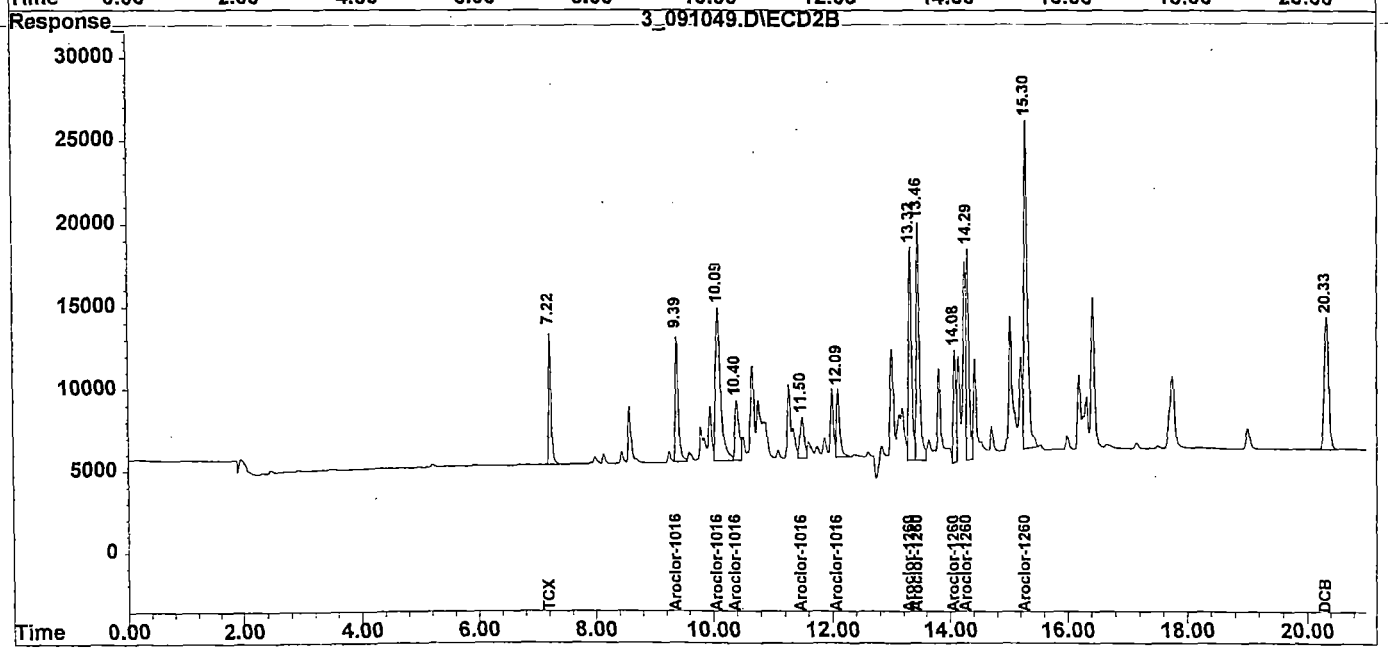
Signal #1 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091049.D\ECD1A.CH Vial: 88
Signal #2 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091049.D\ECD2B.CH
Acq On : 11 Sep 2001 11:45 Operator: BTB
Sample : AR1660L31Q Inst : HP_03
Misc : 5-128-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 13:41 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

ok 9-12-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091049.D\ECD1A.CH Vial: 88
Signal #2 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091049.D\ECD2B.CH
Acq On : 11 Sep 2001 11:45 Operator: BTB
Sample : AR1660L31Q Inst : HP_03
Misc : 5-128-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 13:41 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

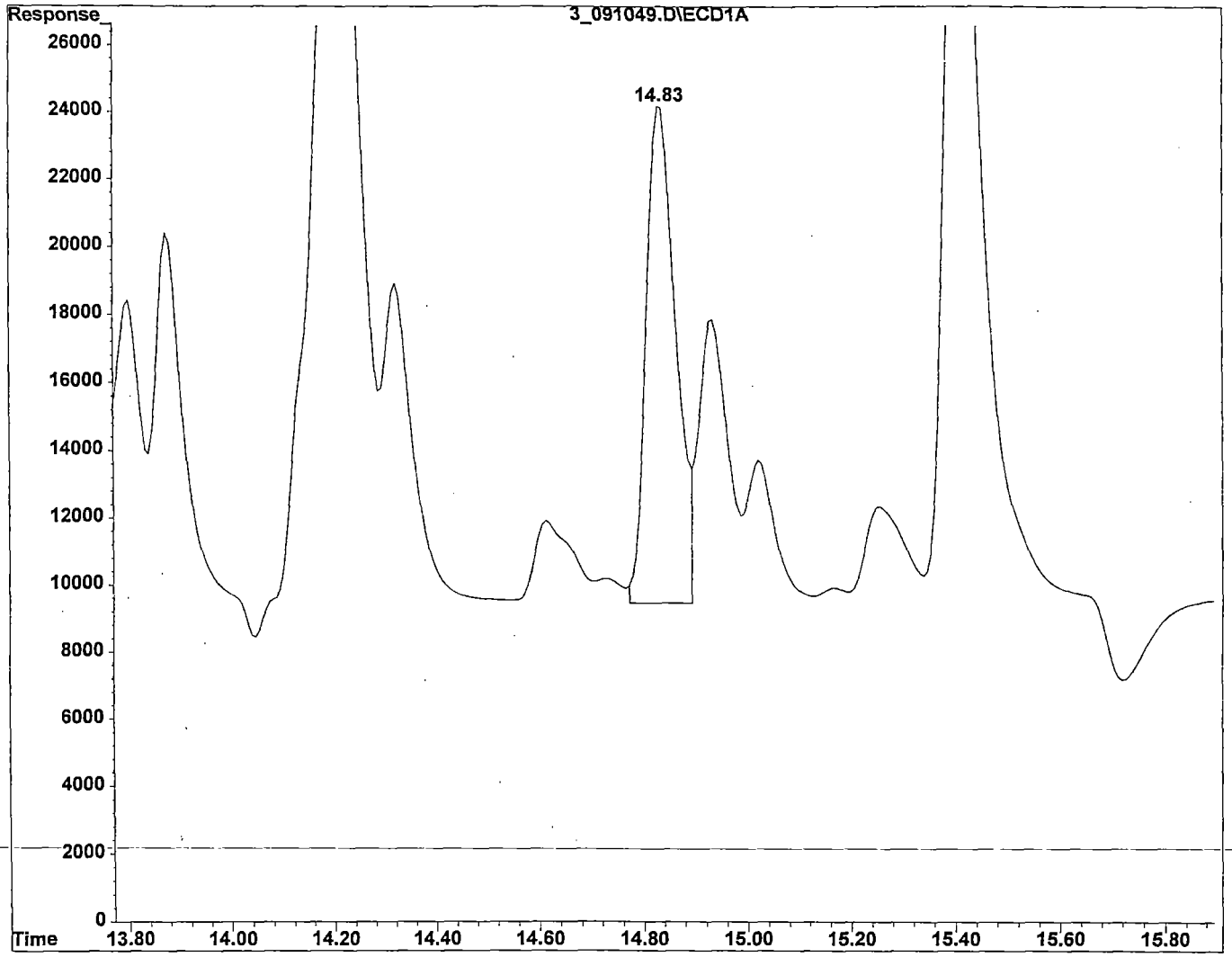
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	601585	236705	19.0	20.5
22)	S DCB	19.23	20.34	861186	429354	20.5m BTB 09/10/01	21.5
	Target Compounds:						
2)	L1 Aroclor-1016	8.53	9.39	326266	280228	389.8	420.6
3)	L1 Aroclor-1016 {2}	10.13	10.09	1224142	572912	399.0	422.2
4)	L1 Aroclor-1016 {3}	10.56	10.40	386757	178846	388.0	417.8
5)	L1 Aroclor-1016 {4}	10.77	11.50	929192	124736	388.1	412.7
6)	L1 Aroclor-1016 {5}	11.86	12.10	355723	164964	377.5	423.0
	Sum Aroclor-1016			3222081	1321685	1942.4	2096.4
	Average Aroclor-1016					388.489	419.276
17)	L7 Aroclor-1260	12.95	13.33	519277	465276	413.1	447.9m
18)	L7 Aroclor-1260 {2}	13.20	13.46	720691	537192	399.9	452.5m BTB 09/10/01
19)	L7 Aroclor-1260 {3}	14.83	14.08	583740	207534	433.1m	317.7 #
20)	L7 Aroclor-1260 {4}	15.41	14.30	1336704	457698	410.8m	439.6
21)	L7 Aroclor-1260 {5}	16.22	15.30	1014564	840291	411.1m	416.1
	Sum Aroclor-1260			4174976	2507992	2068.0	2073.8
	Average Aroclor-1260					413.597	414.764

(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_10_01\3_091049.D
Date Acquired: 11 Sep 2001 11:45
Inst: HP_03 Operator ID: BTB
Name: AR1660L31Q
Misc: 5-128-7
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 11 13:41 2001 Quant Results File: XPCBI07.RES



Aroclor-1260 {3} 14.83min area: 583740 m BTB 091101

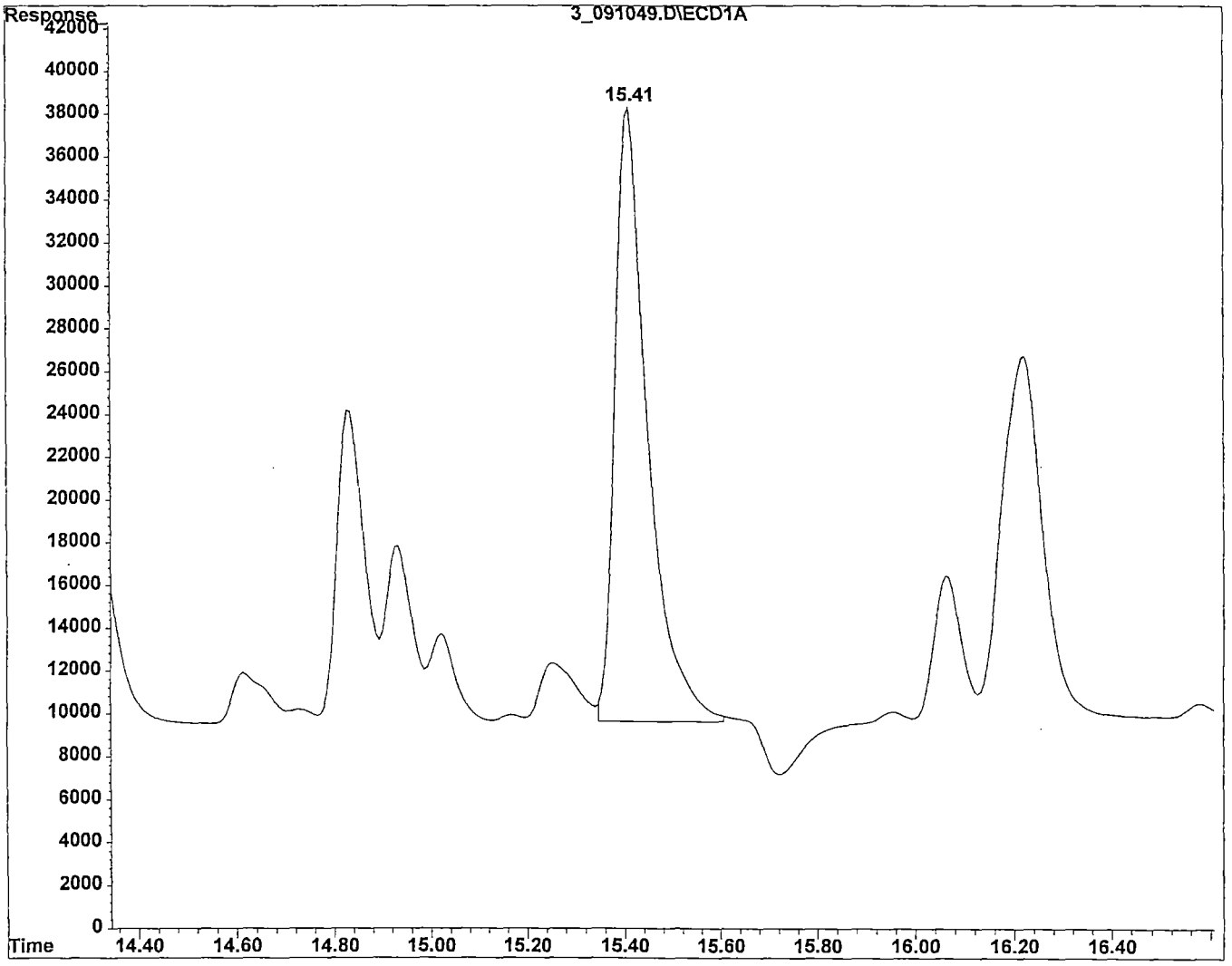
Integration Time Range: 14.77 - 14.89

ok 9-12-01

F:\HPCHEM\HP\3\DATA\09_10_01\3_091049.D
Report generated: Tue Sep 11 13:45:44 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_10_01\3_091049.D
Date Acquired: 11 Sep 2001 11:45
Inst: HP_03 Operator ID: BTB
Name: AR1660L31Q
Misc: 5-128-7
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 11 13:41 2001 Quant Results File: XPCBI07.RES



Aroclor-1260 {4} 15.41min area: 1336704 m BTB 091101

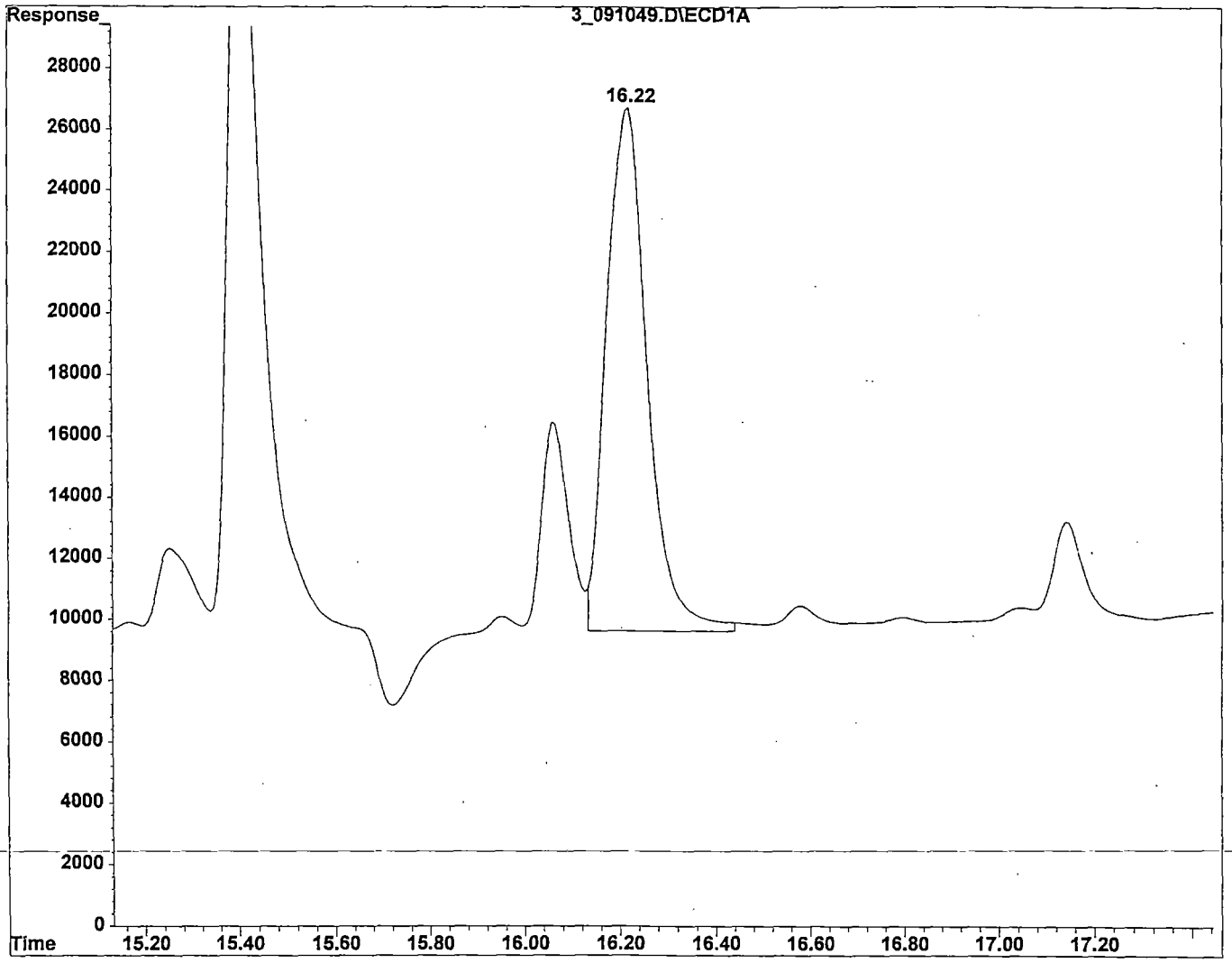
Integration Time Range: 15.34 - 15.61

ok 9-12-01 BH

F:\HPCHEM\HP\3\DATA\09_10_01\3_091049.D
Report generated: Tue Sep 11 13:45:45 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_10_01\3_091049.D
Date Acquired: 11 Sep 2001 11:45
Inst: HP_03 Operator ID: BTB
Name: AR1660L31Q
Misc: 5-128-7
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 11 13:41 2001 Quant Results File: XPCBI07.RES



Aroclor-1260 {5} 16.22min area: 1014564 m

Integration Time Range: 16.13 - 16.44

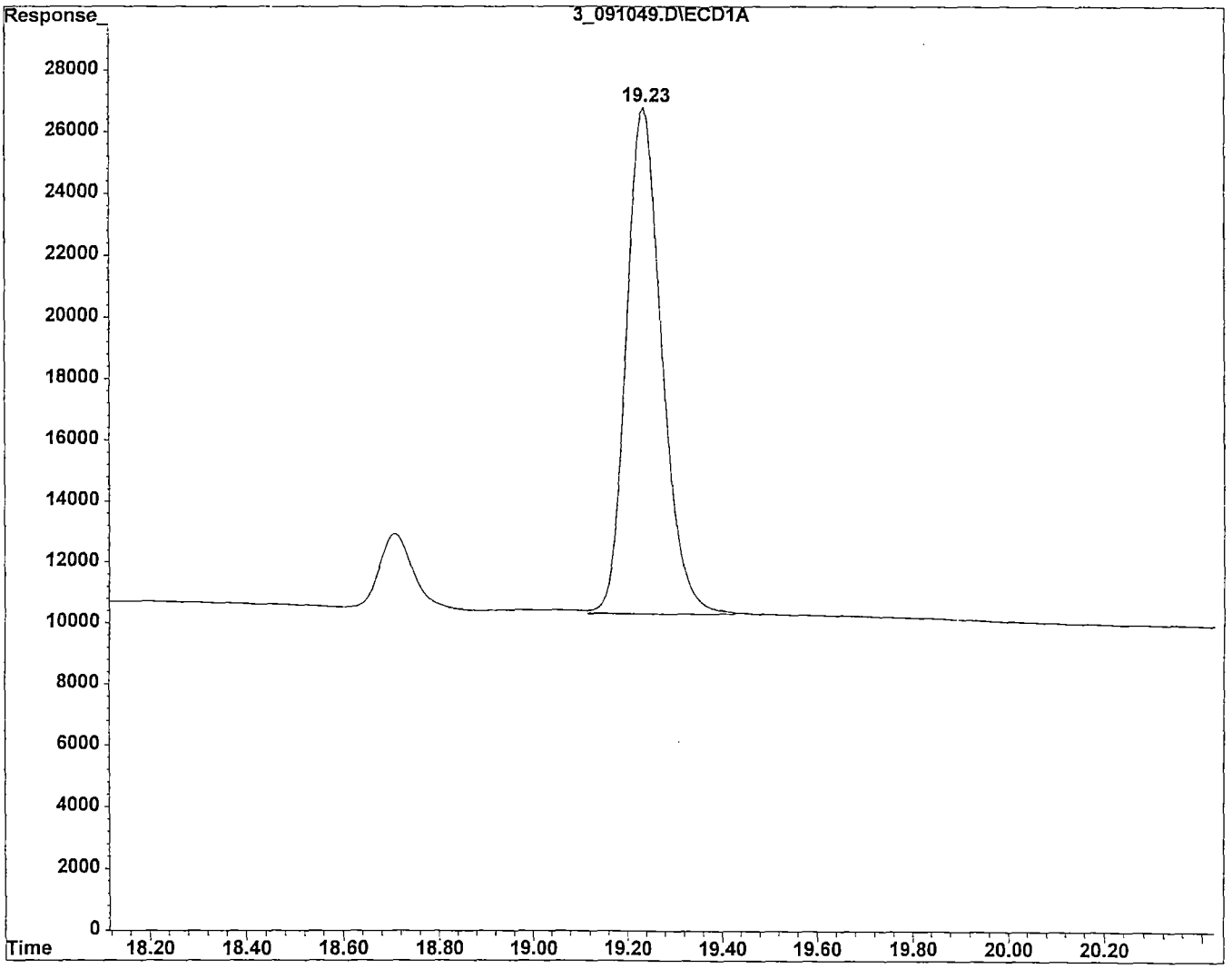
BTB
091101

ok
9-12-01

F:\HPCHEM\HP\3\DATA\09_10_01\3_091049.D
Report generated: Tue Sep 11 13:45:45 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_10_01\3_091049.D
Date Acquired: 11 Sep 2001 11:45
Inst: HP_03 Operator ID: BTB
Name: AR1660L31Q
Misc: 5-128-7
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 11 13:41 2001 Quant Results File: XPCBI07.RES



DCB 19.23min area: 861186 m BTB 091101

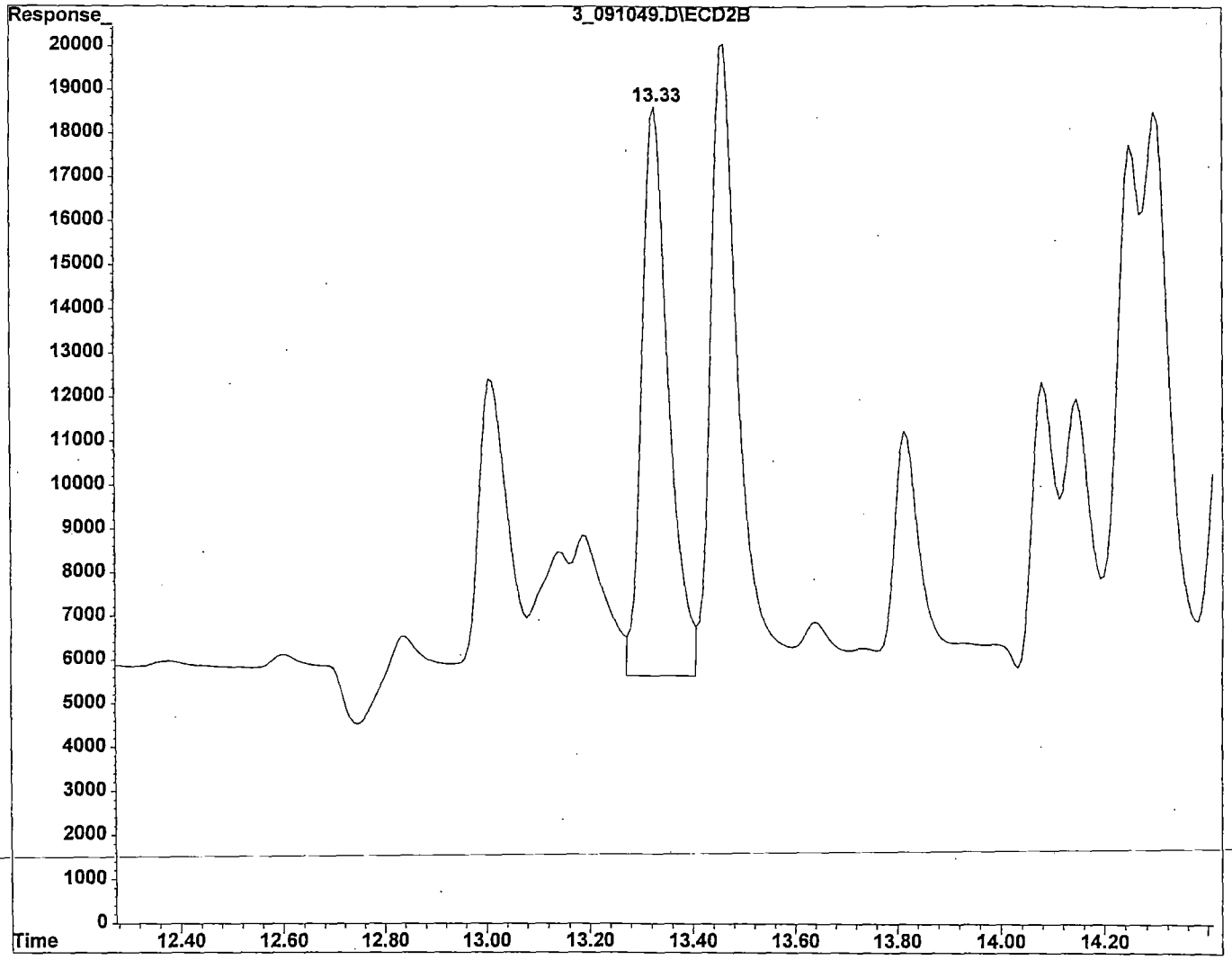
Integration Time Range: 19.12 - 19.43

ok 9-12-01

F:\HPCHEM\HP\3\DATA\09_10_01\3_091049.D
Report generated: Tue Sep 11 13:45:46 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_10_01\3_091049.D
Date Acquired: 11 Sep 2001 11:45
Inst: HP_03 Operator ID: BTB
Name: AR1660L31Q
Misc: 5-128-7
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 11 13:41 2001 Quant Results File: XPCBI07.RES



Aroclor-1260 #2 13.33min area: 465276 m
BTB 091101

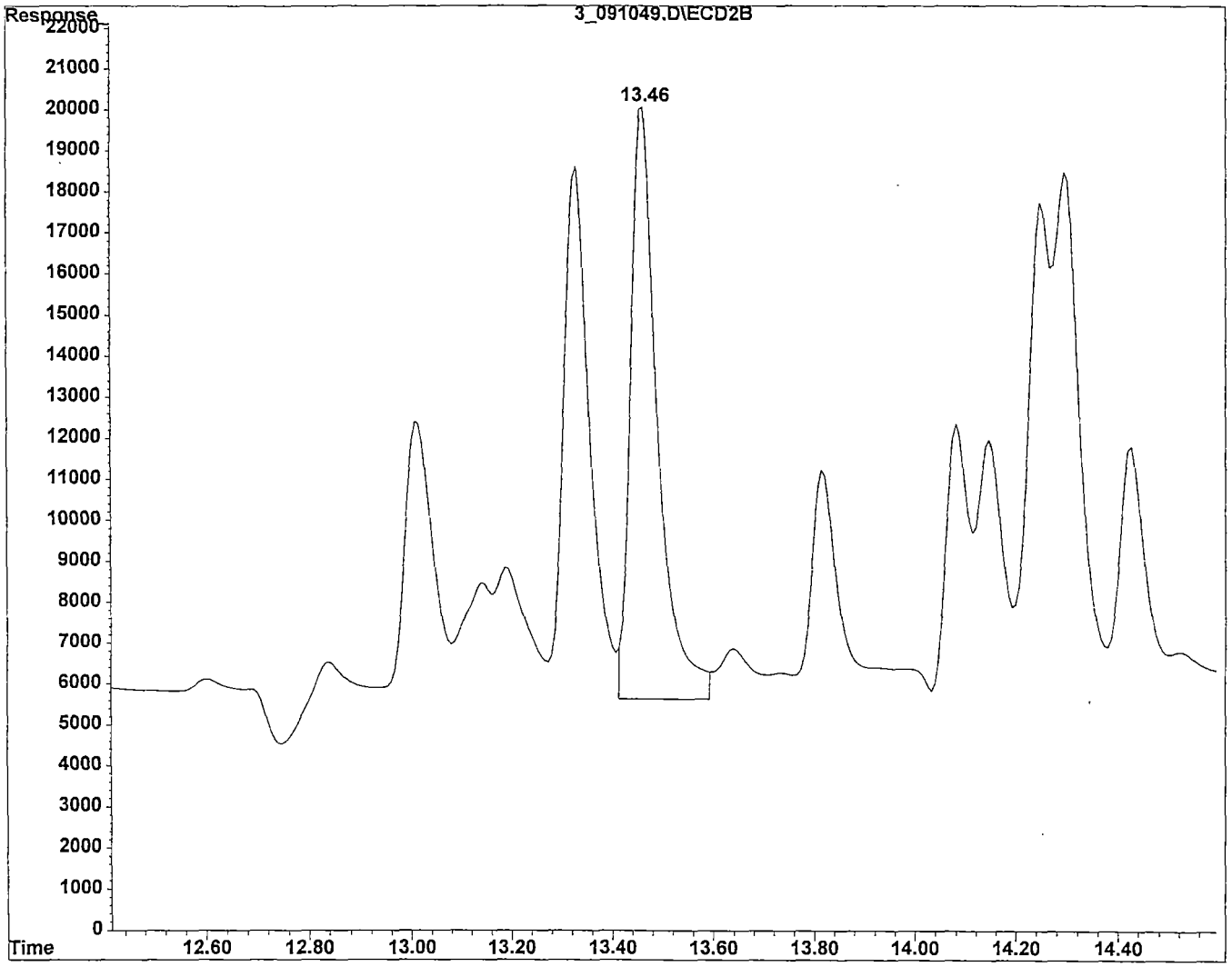
Integration Time Range: 13.27 - 13.41

ok 9-12-01 [illegible]

F:\HPCHEM\HP\3\DATA\09_10_01\3_091049.D
Report generated: Tue Sep 11 13:45:47 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_10_01\3_091049.D
Date Acquired: 11 Sep 2001 11:45
Inst: HP_03 Operator ID: BTB
Name: AR1660L31Q
Misc: 5-128-7
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 11 13:41 2001 Quant Results File: XPCBI07.RES



Aroclor-1260 {2} #2 13.46min area: 537192 m

Integration Time Range: 13.41 - 13.59

BTB 091101

9-12-01

F:\HPCHEM\HP\3\DATA\09_10_01\3_091049.D
Report generated: Tue Sep 11 13:45:47 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.: E02B5

Matrix: (soil/water) SOIL Lab Sample ID: BL0814SB

Sample wt/vol: 30.0 (g/mL) G Lab File ID:_____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/14/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/10/01

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

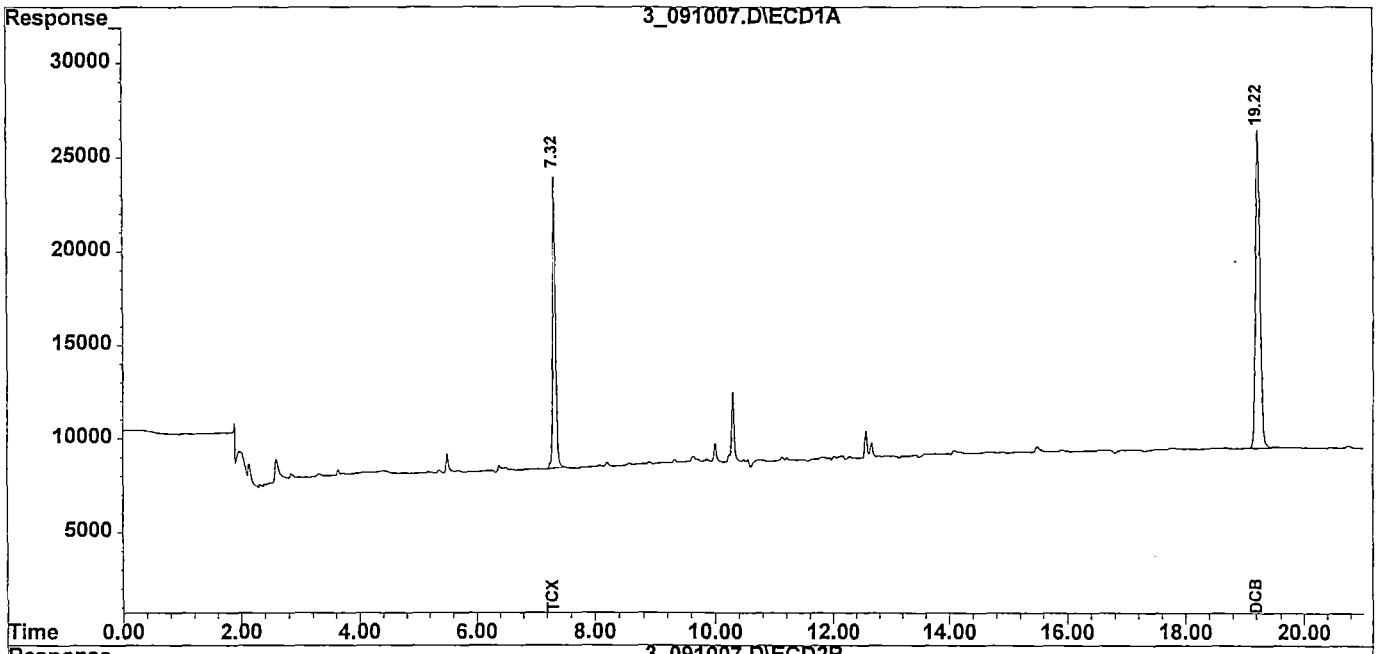
Chromatographic Report

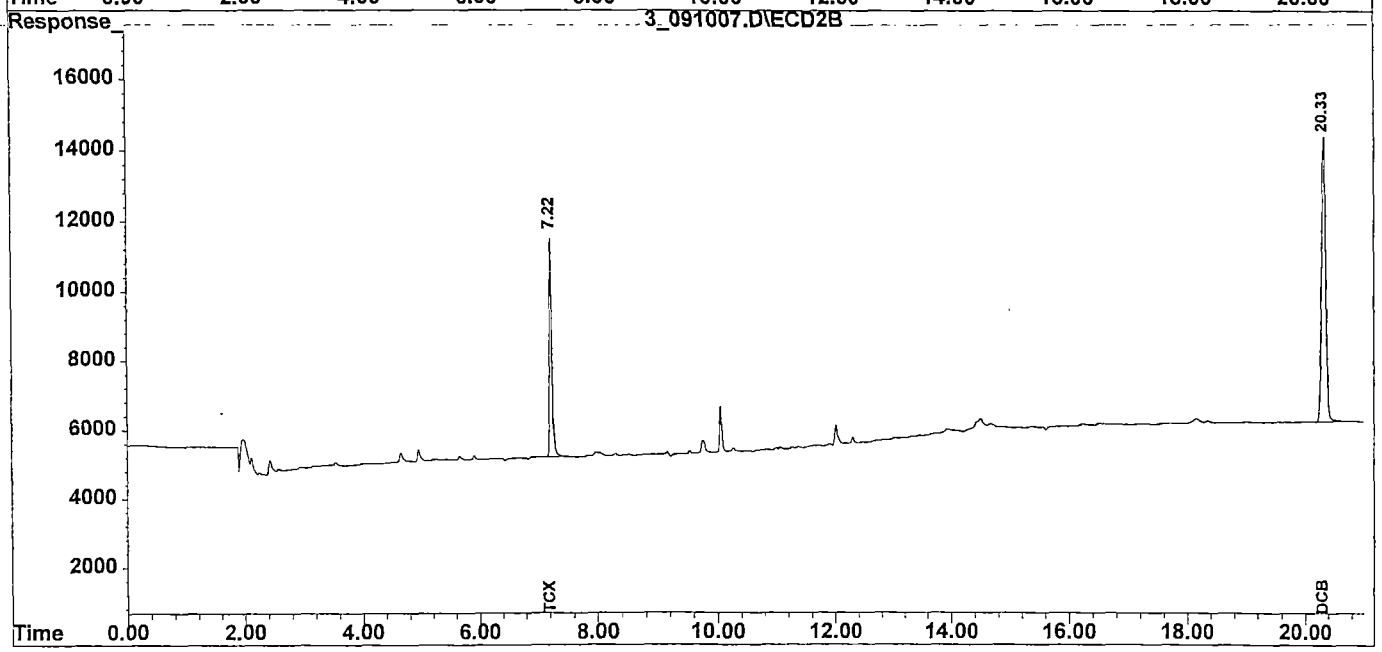
Signal #1 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091007.D\ECD1A.CH Vial: 46
Signal #2 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091007.D\ECD2B.CH
Acq On : 10 Sep 2001 17:47 Operator: BTB
Sample : BL0814SB *PBLKSB * Inst : HP_03
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:50 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

ok 9-12-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091007.D\ECD1A.CH Vial: 46
Signal #2 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091007.D\ECD2B.CH
Acq On : 10 Sep 2001 17:47 Operator: BTB
Sample : BL0814SB *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 11 8:50 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	505592	195587	5.311	5.646
	Spiked Amount 6.667			Recovery	=	79.67%	84.69%
22)	S DCB	19.23	20.33	868114	424054	6.898	7.081
	Spiked Amount 6.667			Recovery	=	✓103.47%	✓106.22%

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.

PIBLK1D

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

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: 09/07/01

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.

PIBLK1D

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

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: 09/07/01

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

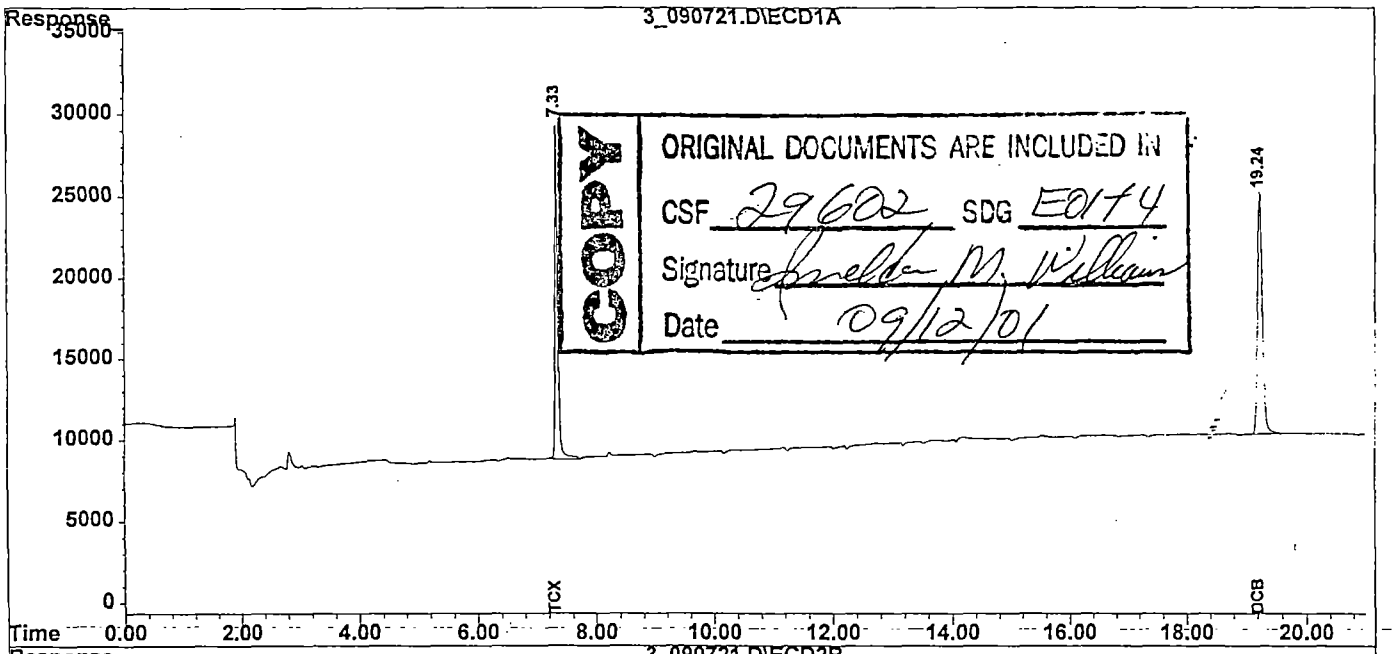
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090721.D\ECD1A.CH Vial: 21
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090721.D\ECD2B.CH
Acq On : 07 Sep 2001 18:01 Operator: DDC
Sample : PIBLK1D ✓ Inst : HP_03
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:29 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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

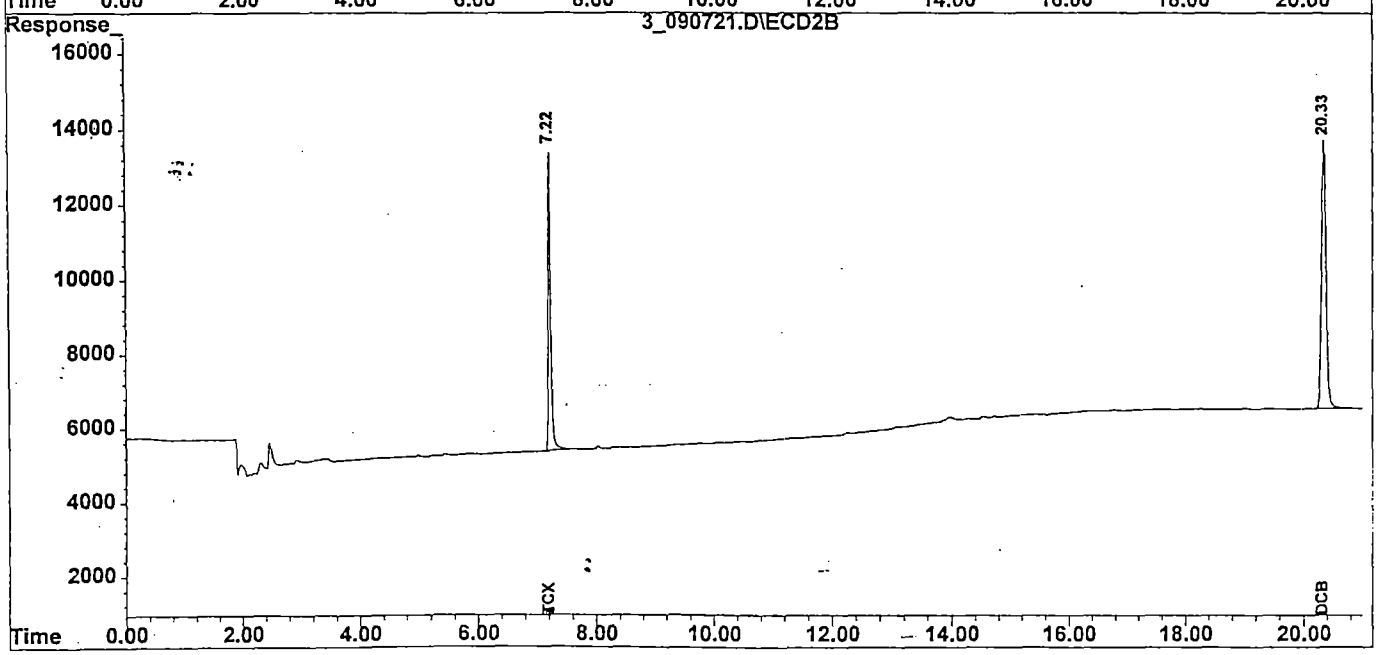
ok 9-10-01

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 E0174
Signature Sonella M. William
Date 09/12/01



Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090721.D\ECD1A.CH Vial: 21
Signal #2 : F:\HPCHEM\HP\3\DATA\09_07_01\3_090721.D\ECD2B.CH
Acq On : 07 Sep 2001 18:01 Operator: DDC
Sample : PIBLK1D Inst : HP_03
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 8 9:29 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_07_01\XPCBI07.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	674670	237221	21.3	20.5
22)	S DCB	19.24	20.34	830529	392487	19.8	19.7

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.

PIBLK1H

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

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: 09/10/01

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.

PIBLK1H

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

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: 09/10/01

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

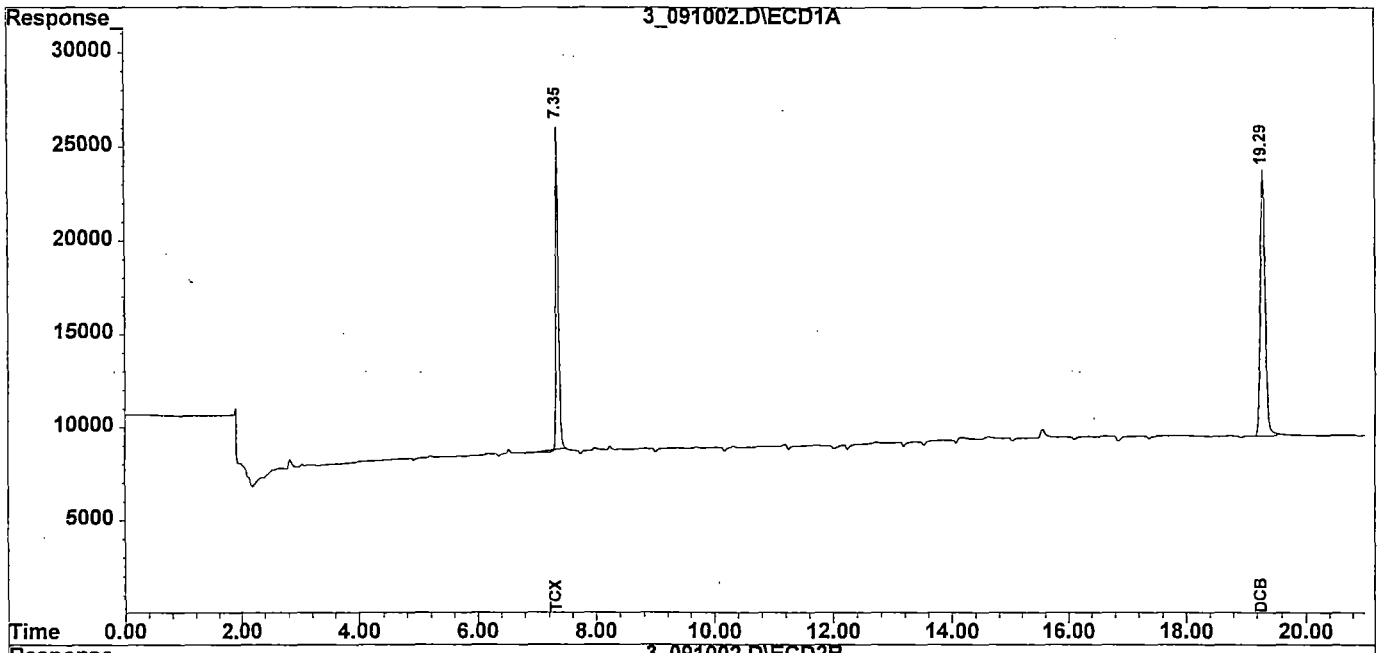
Chromatographic Report

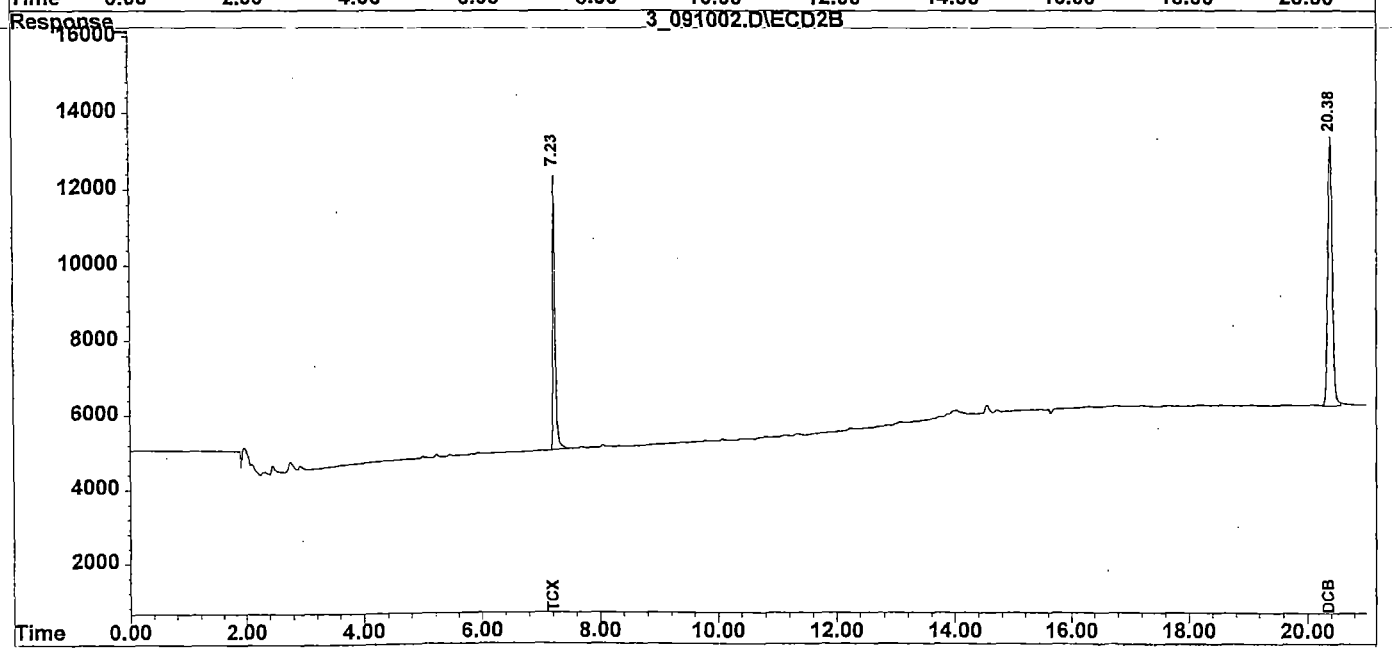
Signal #1 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091002.D\ECD1A.CH Vial: 41
Signal #2 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091002.D\ECD2B.CH
Acq On : 10 Sep 2001 15:39 Operator: BTB
Sample : PIBLK1H Inst : HP_03
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 10 16:29 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

ok 9-12-01

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_10_01\3_091002.D\ECD1A.CH Vial: 41
Signal #2 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091002.D\ECD2B.CH
Acq On : 10 Sep 2001 15:39 Operator: BTB
Sample : PIBLK1H Inst : HP_03
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 10 16:29 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

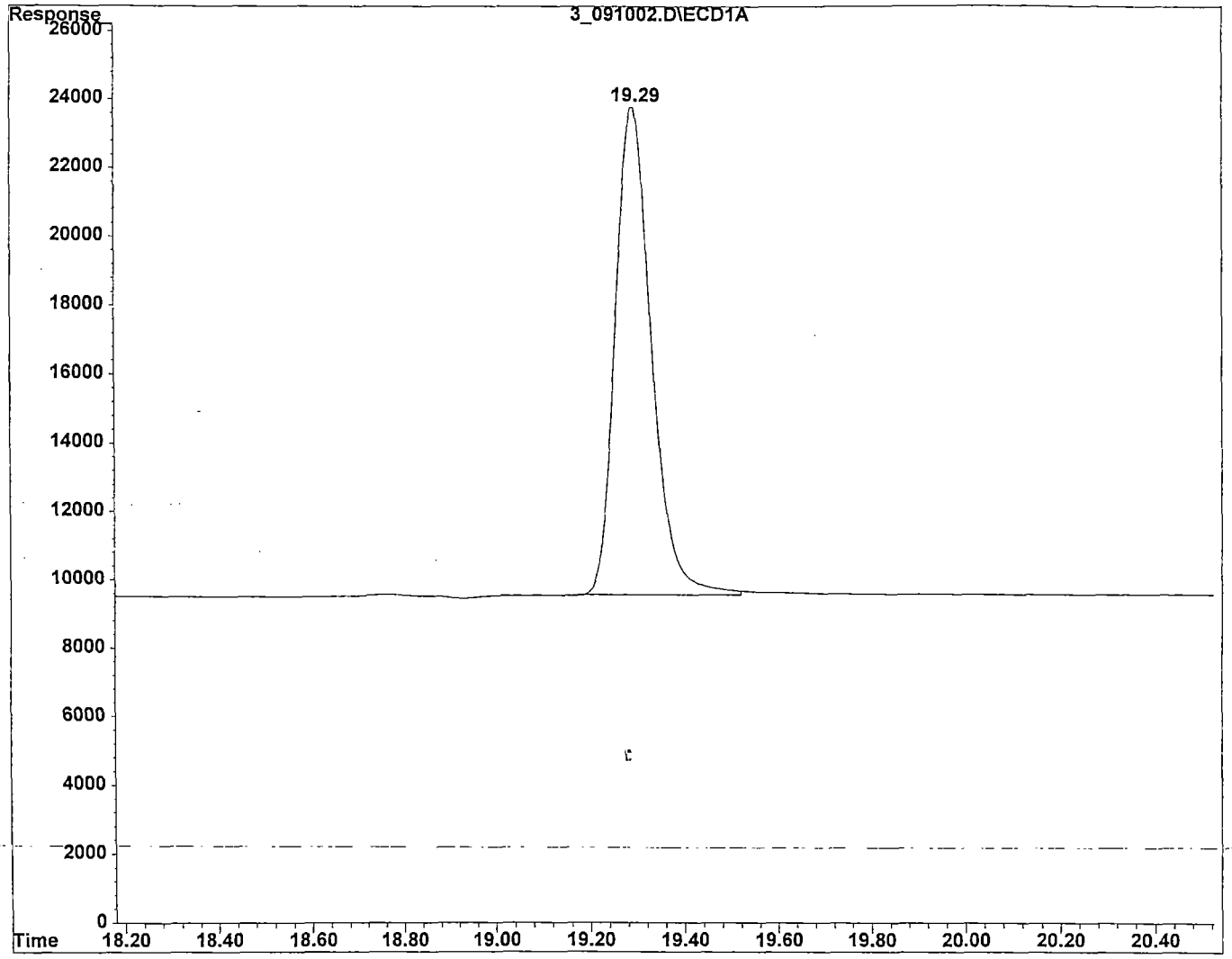
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.35f	7.24	502068	206894	15.8	17.9
22)	S DCB	19.29f	20.38f	755819	383125	18.0m	19.2m
	Target Compounds:						

BTB 091001 BTB 091001

(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_10_01\3_091002.D
Date Acquired: 10 Sep 2001 15:39
Inst: HP_03 Operator ID: BTB
Name: PIBLK1H
Misc: 5-131-7
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 10 16:29 2001 Quant Results File: XPCBI07.RES



DCB 19.29min area: 755819 m BTB 09/10/1

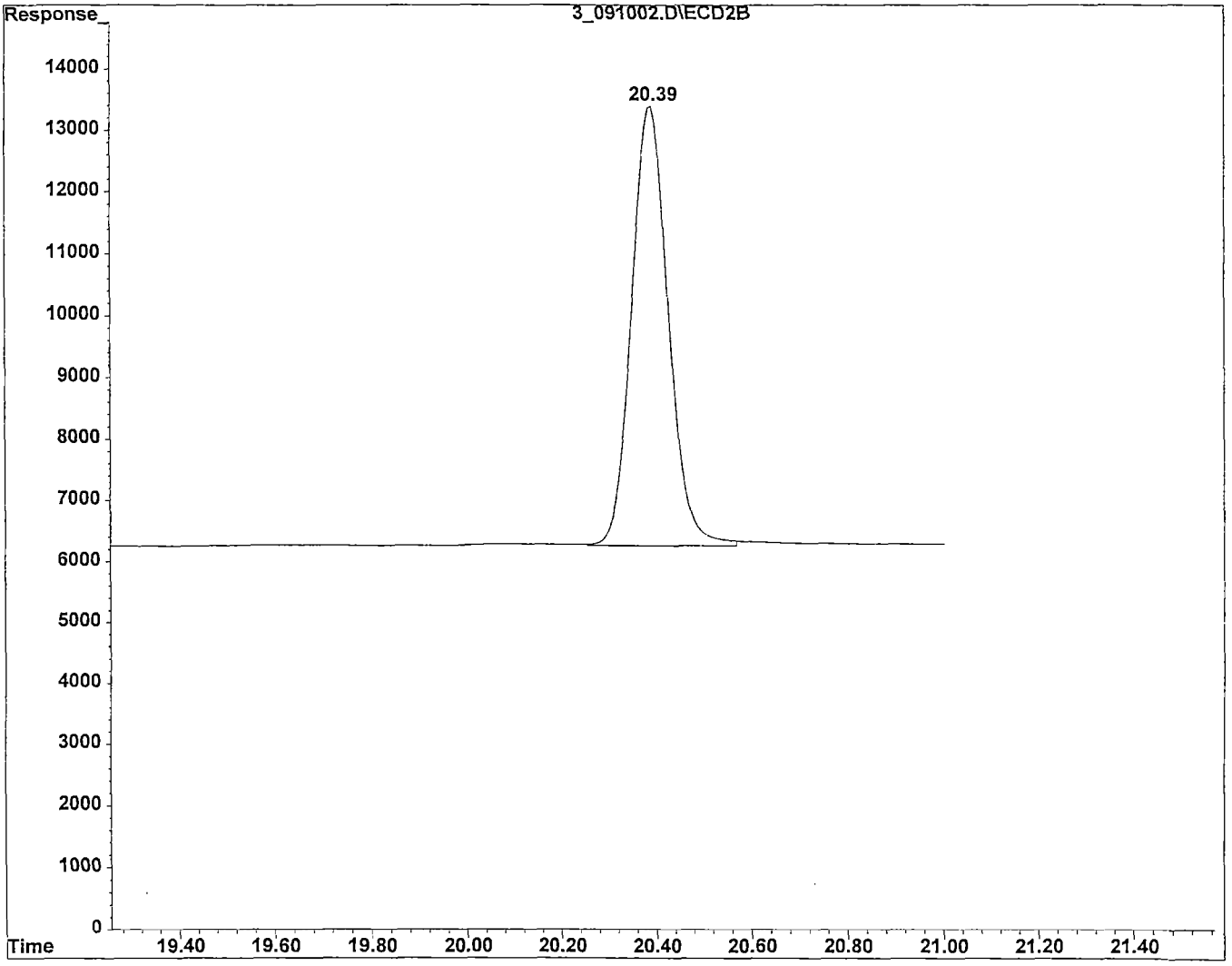
Integration Time Range: 19.18 - 19.52

ok 9-13-01

F:\HPCHEM\HP\3\DATA\09_10_01\3_091002.D
Report generated: Mon Sep 10 17:14:49 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\09_10_01\3_091002.D
Date Acquired: 10 Sep 2001 15:39
Inst: HP_03 Operator ID: BTB
Name: PIBLK1H
Misc: 5-131-7
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 10 16:29 2001 Quant Results File: XPCBI07.RES



DCB #2 20.38min area: 383125 m

BTB 091001

Integration Time Range: 20.25 - 20.56

ok 9-12-01

F:\HPCHEM\HP\3\DATA\09_10_01\3_091002.D
Report generated: Mon Sep 10 17:14:50 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK1I

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

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: 09/10/01

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.

PIBLK1I

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

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: 09/10/01

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

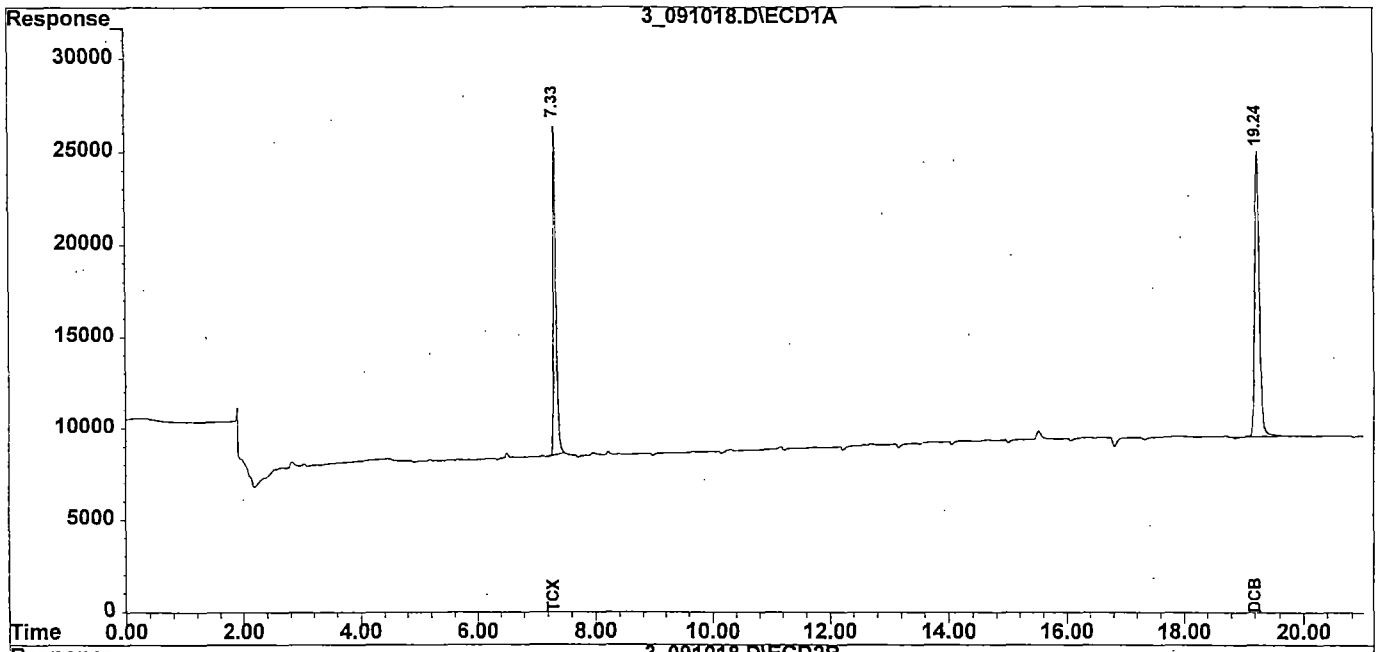
Chromatographic Report

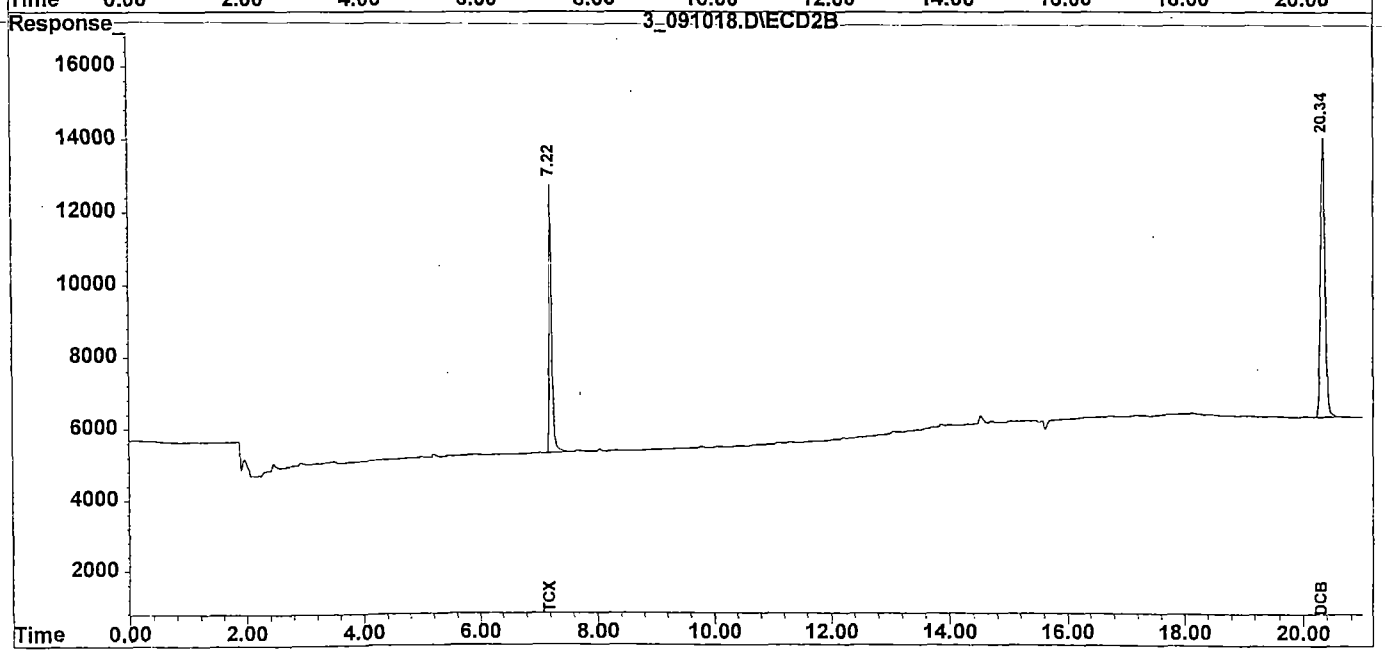
Signal #1 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091018.D\ECD1A.CH Vial: 57
Signal #2 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091018.D\ECD2B.CH
Acq On : 10 Sep 2001 22:29 Operator: BTB
Sample : PIBLK1I Inst : HP_03
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 9:09 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

ok 9-12-01

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_10_01\3_091018.D\ECD1A.CH Vial: 57
Signal #2 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091018.D\ECD2B.CH
Acq On : 10 Sep 2001 22:29 Operator: BTB
Sample : PIBLK1I Inst : HP_03
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 9:09 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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	558215	227066	17.6	19.7
22)	S DCB	19.24	20.34	838927	407947	20.0	20.4

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.

PIBLK1J

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

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: 09/11/01

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.

PIBLK1J

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

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: 09/11/01

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

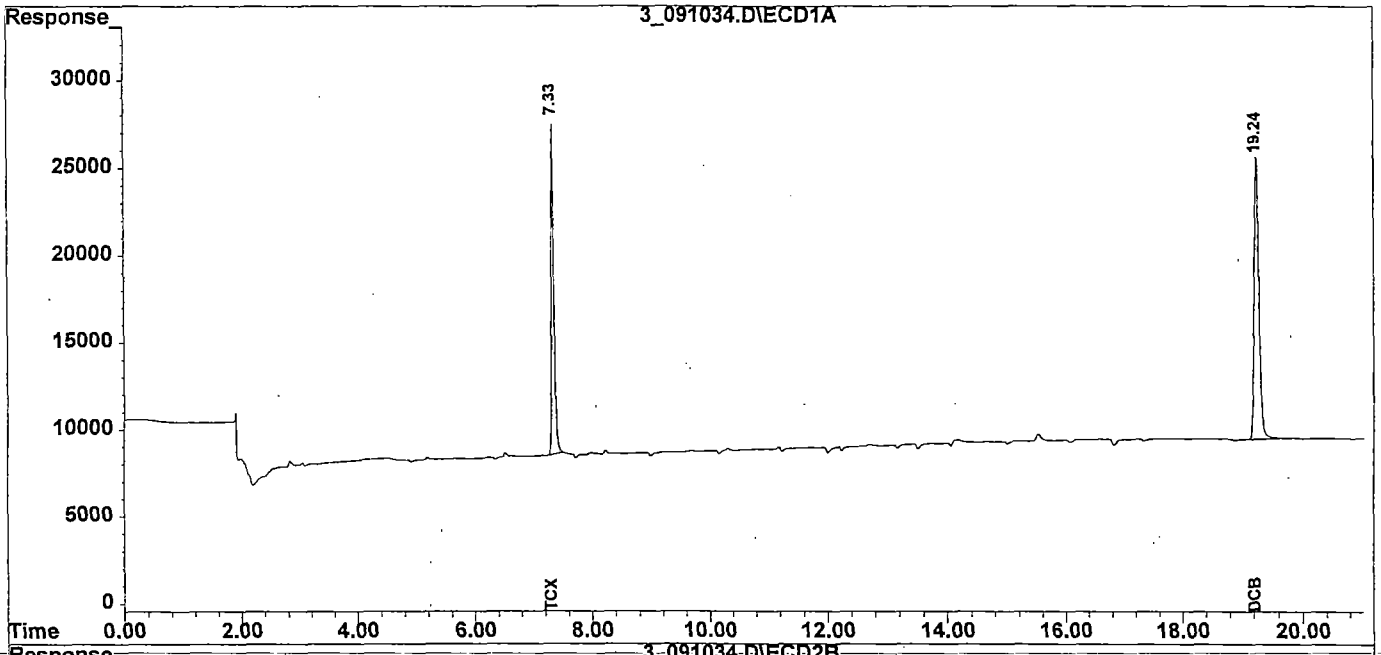
Chromatographic Report

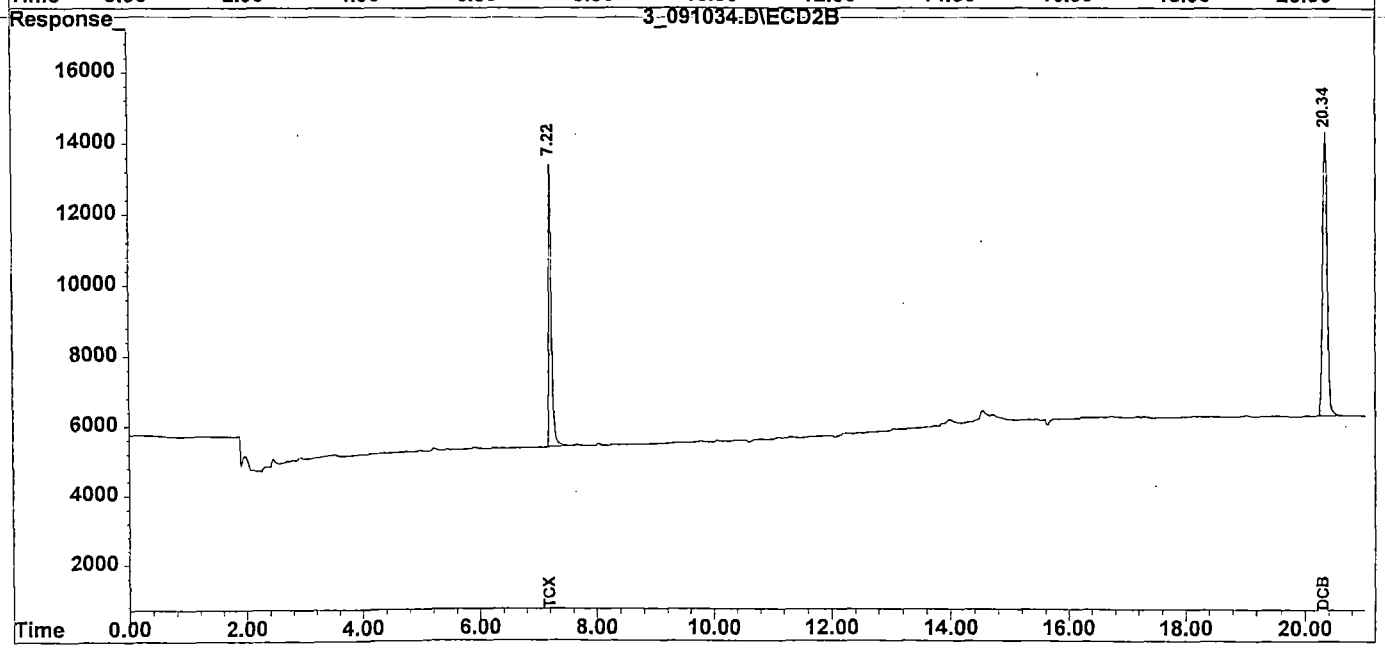
Signal #1 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091034.D\ECD1A.CH Vial: 73
Signal #2 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091034.D\ECD2B.CH
Acq On : 11 Sep 2001 5:20 Operator: BTB
Sample : PIBLK1J Inst : HP_03
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 9:16 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

ok 9-12-01 [illegible]





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091034.D\ECD1A.CH Vial: 73
Signal #2 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091034.D\ECD2B.CH
Acq On : 11 Sep 2001 5:20 Operator: BTB
Sample : PIBLK1J Inst : HP_03
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 9:16 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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	592682	240615	18.7	20.8
22)	S DCB	19.24	20.34	879988	430684	21.0	21.6

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.

PIBLK1K

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

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: 09/11/01

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.

PIBLK1K

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

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: 09/11/01

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

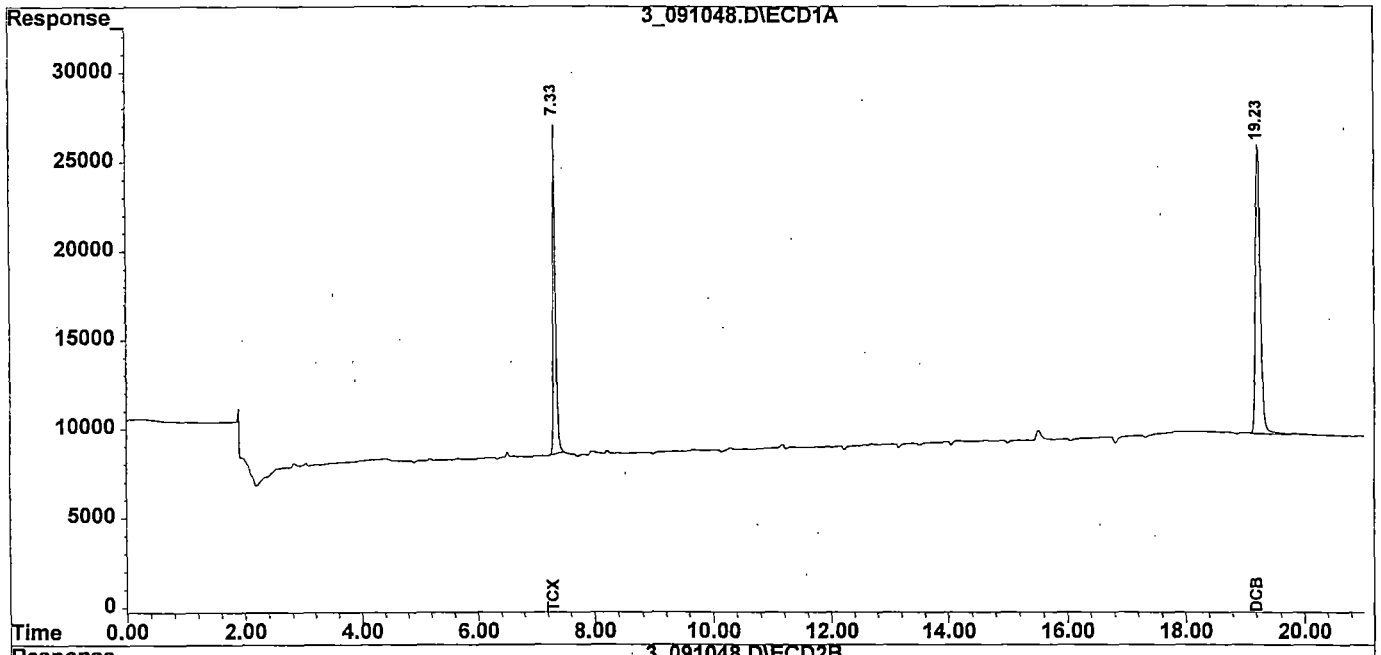
Chromatographic Report

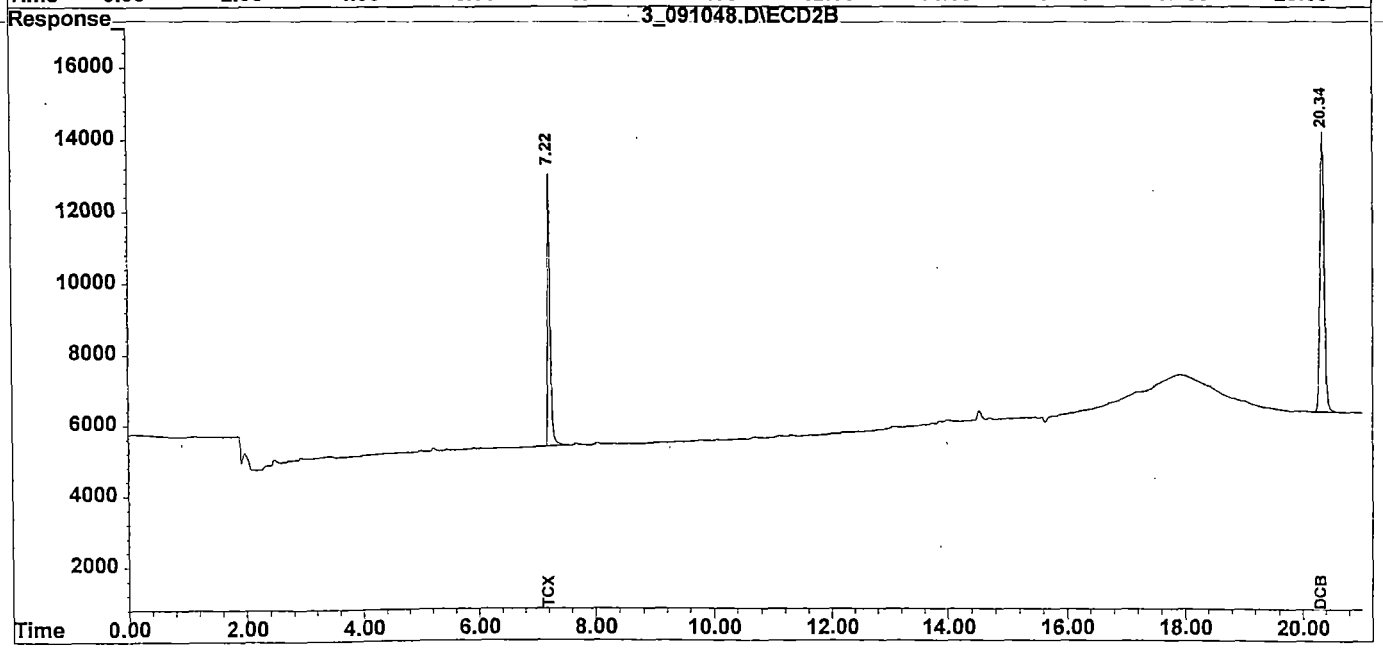
Signal #1 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091048.D\ECD1A.CH Vial: 87
Signal #2 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091048.D\ECD2B.CH
Acq On : 11 Sep 2001 11:19 Operator: BTB
Sample : PIBLK1K Inst : HP_03
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 13:39 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

ok
9-12-01

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_10_01\3_091048.D\ECD1A.CH Vial: 87
Signal #2 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091048.D\ECD2B.CH
Acq On : 11 Sep 2001 11:19 Operator: BTB
Sample : PIBLK1K Inst : HP_03
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 13:39 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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	574417	229379	18.1	19.9
22)	S DCB	19.24	20.34	890505	423190	21.2	21.2
	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.: E02B5

Matrix: (soil/water) SOIL Lab Sample ID: LC0814SB

Sample wt/vol: 30.0 (g/mL) G Lab File ID:_____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/14/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/10/01

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	100	
11096-82-5	Aroclor-1260	33	U
	Surrogate amount spiked	6.67	

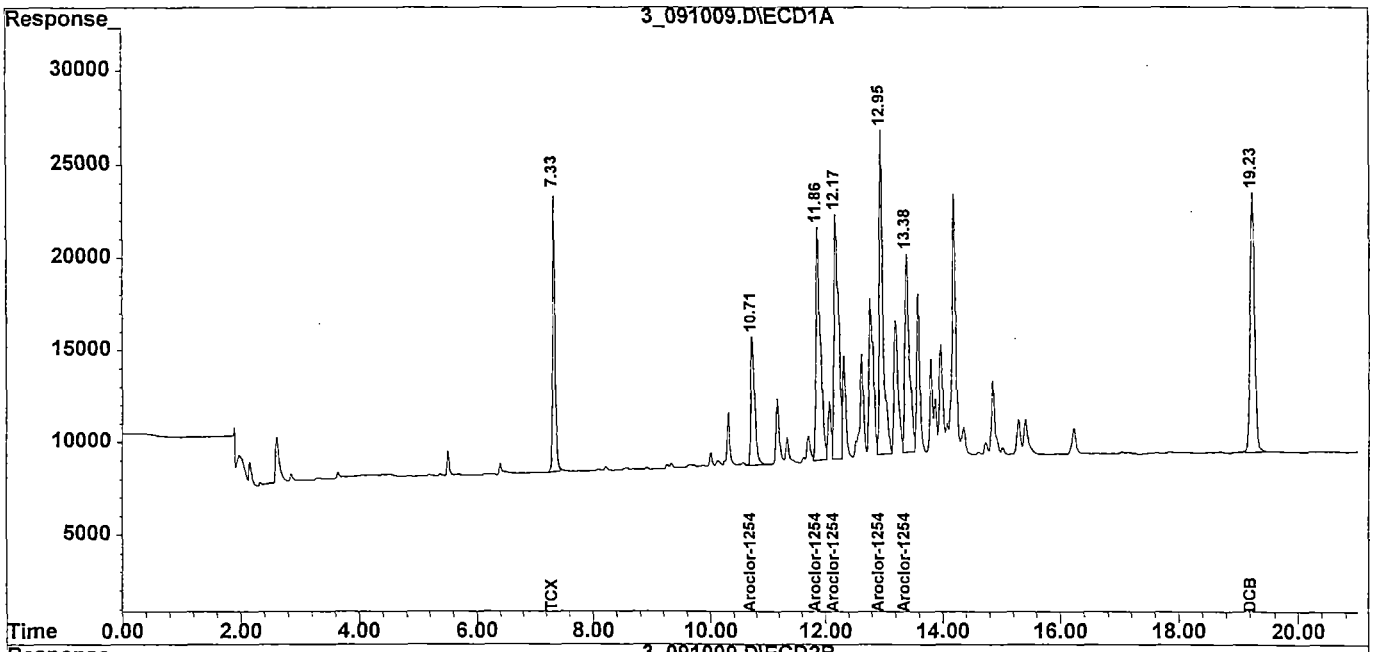
Chromatographic Report

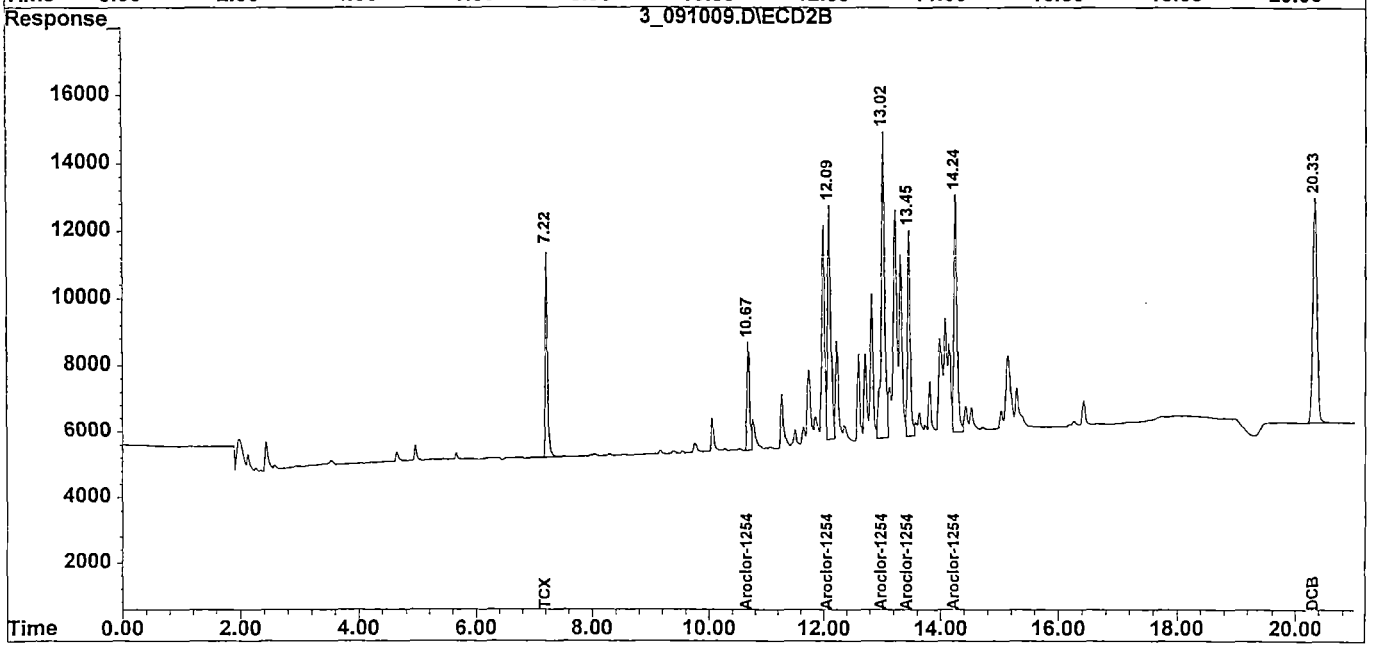
Signal #1 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091009.D\ECD1A.CH Vial: 48
Signal #2 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091009.D\ECD2B.CH
Acq On : 10 Sep 2001 18:38 Operator: BTB
Sample : LC0814SB *ELCS1 * Inst : HP_03
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:53 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

ok 9-12-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091009.D\ECD1A.CH Vial: 48
Signal #2 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091009.D\ECD2B.CH
Acq On : 10 Sep 2001 18:38 Operator: BTB
Sample : LC0814SB *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 11 8:53 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	444441	179536	4.669	5.183
	Spiked Amount 6.667			Recovery	=	70.04%	77.75%
22)	S DCB	19.23	20.33	725103	350434	5.762	5.852
	Spiked Amount 6.667			Recovery	=	86.43%	87.78%
	Target Compounds:						
12)	L6 Aroclor-1254	10.72	10.67	344018	107403	102.2	105.6
13)	L6 Aroclor-1254 {2}	11.86	12.09	687176	277537	103.9	104.4
14)	L6 Aroclor-1254 {3}	12.17	13.03	720760	373302	109.0	101.5
15)	L6 Aroclor-1254 {4}	12.95	13.46	752702	208209	98.0	101.2
16)	L6 Aroclor-1254 {5}	13.38	14.25	566400	281808	99.8	103.4
	Sum Aroclor-1254			3071057	1248260	512.9	516.1
	Average Aroclor-1254					102.579	103.220
						77%	78%

(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.: E02B5

Matrix: (soil/water) SOIL Lab Sample ID: LD0814SB

Sample wt/vol: 30.0 (g/mL) G Lab File ID:_____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/14/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/10/01

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	110	
11096-82-5	Aroclor-1260	33	U
	Surrogate amount spiked	6.67	

FORM I PCB

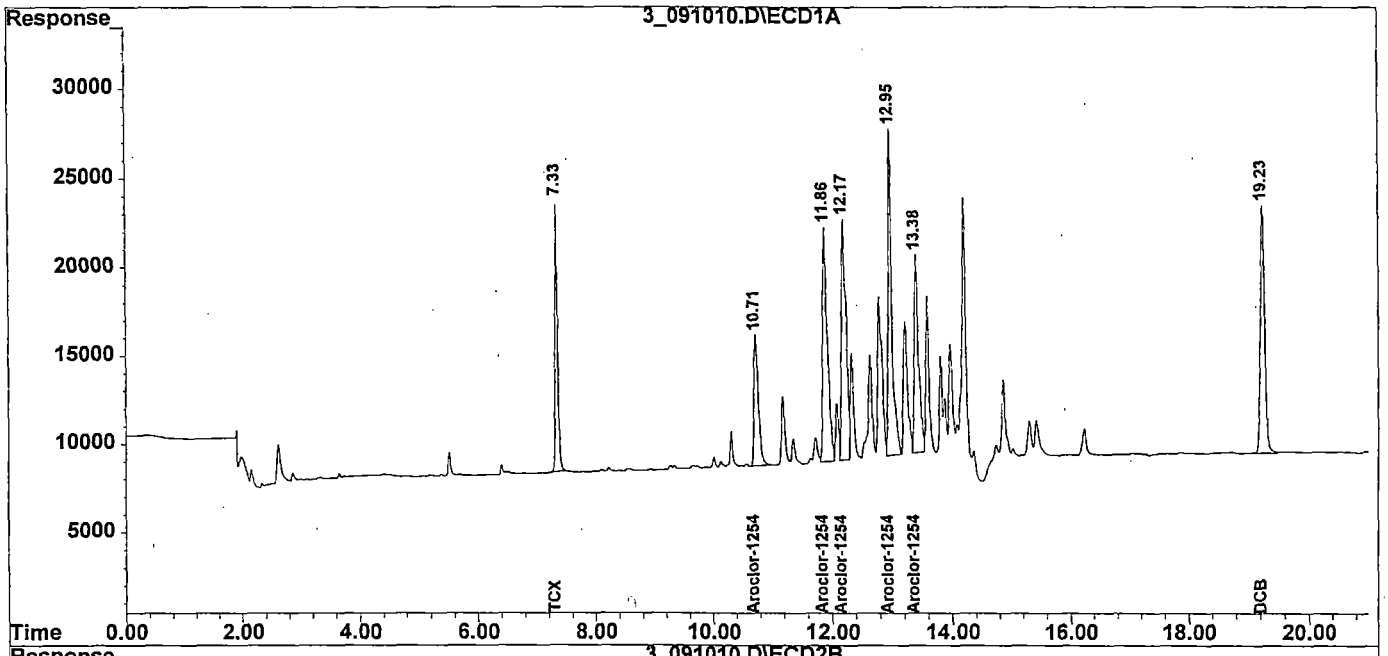
Chromatographic Report

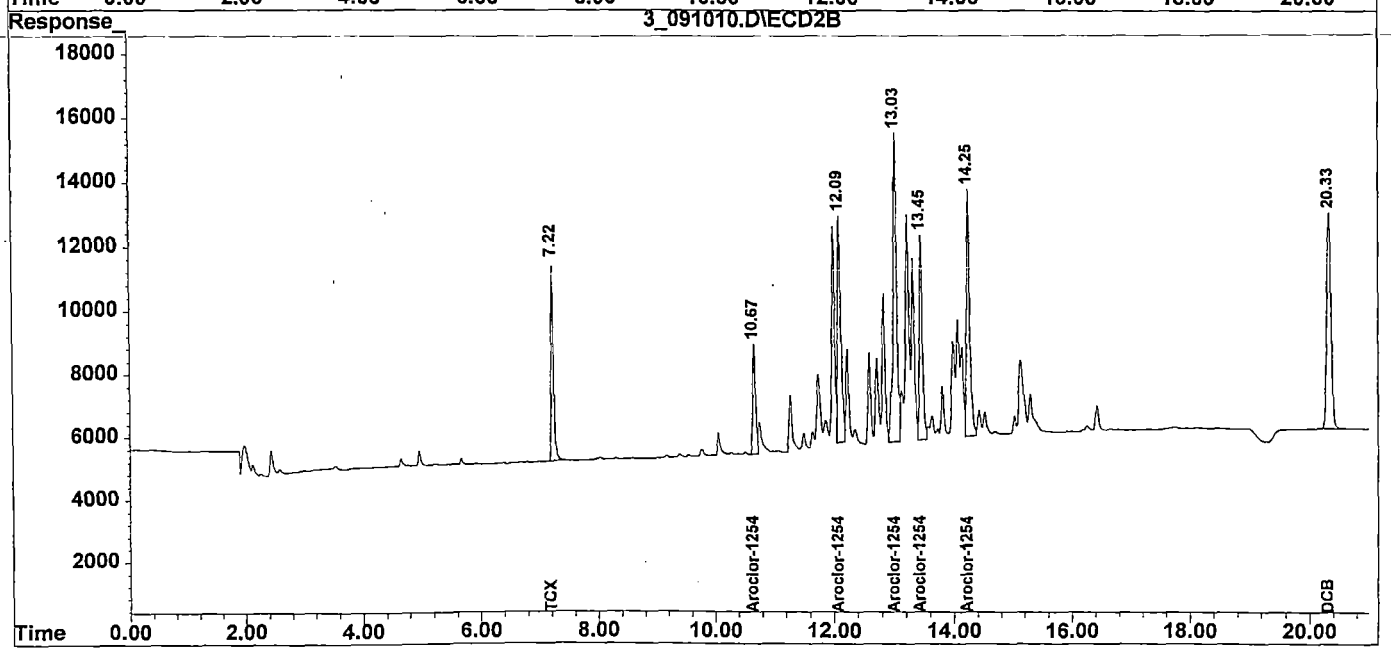
Signal #1 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091010.D\ECD1A.CH Vial: 49
Signal #2 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091010.D\ECD2B.CH
Acq On : 10 Sep 2001 19:04 Operator: BTB
Sample : LD0814SB' *ELCS2' * Inst : HP_03
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:54 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

ok 9-12-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091010.D\ECD1A.CH Vial: 49
Signal #2 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091010.D\ECD2B.CH
Acq On : 10 Sep 2001 19:04 Operator: BTB
Sample : LD0814SB *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 11 8:54 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.33	7.22	453629	178003	4.766	5.139
	Spiked Amount 6.667			Recovery	=	71.49%	77.09%
22)	S DCB	19.24	20.34	714788	350360	5.680	5.851
	Spiked Amount 6.667			Recovery	=	✓85.20%	✓87.77%
	Target Compounds:						
12)	L6 Aroclor-1254	10.72	10.67	371231	116795	110.2	114.9
13)	L6 Aroclor-1254 {2}	11.86	12.09	730743	290091	110.5	109.1
14)	L6 Aroclor-1254 {3}	12.17	13.03	742735	399480	112.4	108.6
15)	L6 Aroclor-1254 {4}	12.95	13.46	803622	219445	104.6	106.7
16)	L6 Aroclor-1254 {5}	13.38	14.25	590186	300932	104.0	110.4
	Sum Aroclor-1254			3238517	1326742	541.7	549.7
	Average Aroclor-1254					108.342	109.930
						81%	83%

(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.

E02D0MS

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Matrix: (soil/water) SOIL Lab Sample ID: 47266.17MS

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

% Moisture: 13 decanted: (Y/N) __ Date Received: 08/11/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/14/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/11/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.4 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	36	J
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	91	
11096-82-5	Aroclor-1260	38	U
	Surrogate amount spiked	7.59	

FORM I PCB

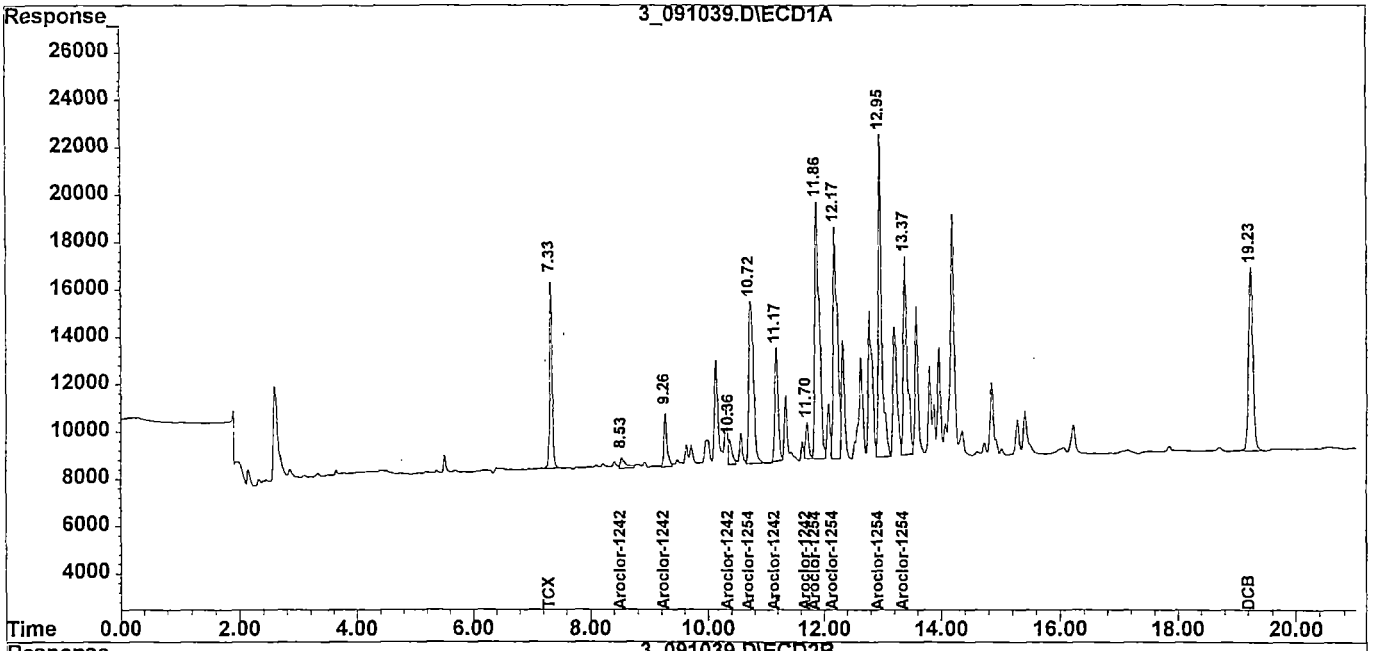
Chromatographic Report

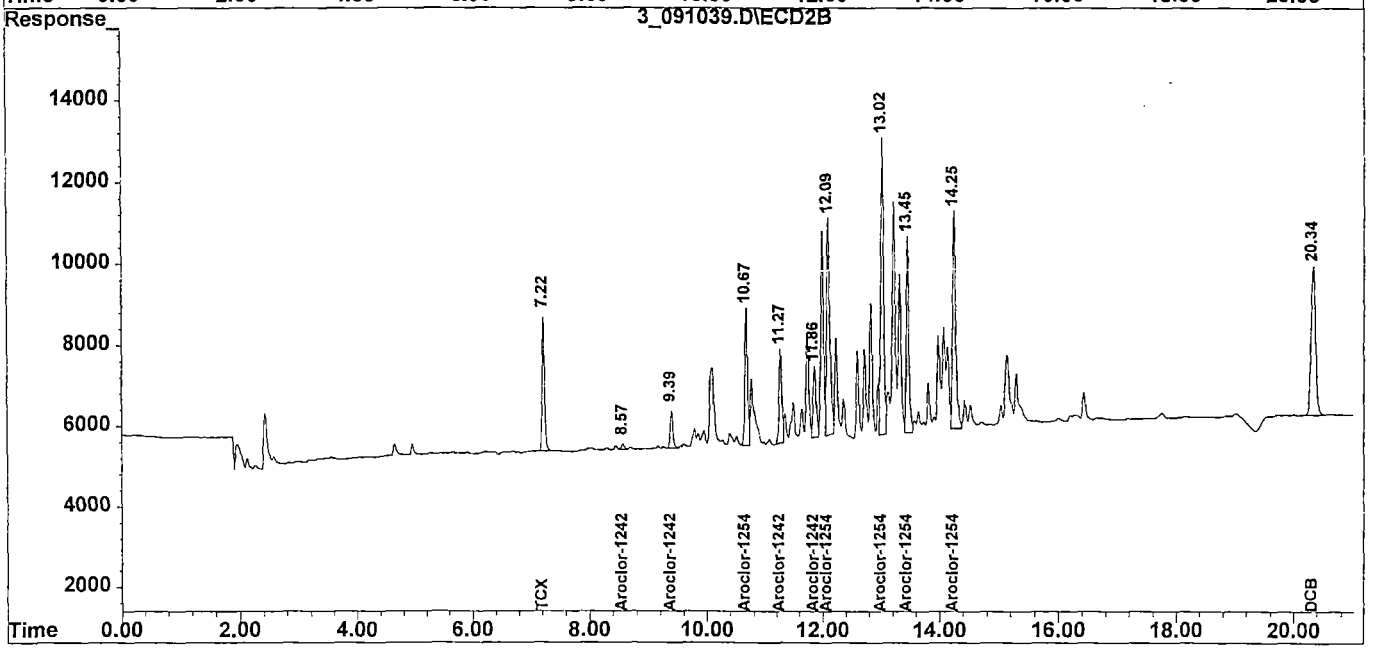
Signal #1 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091039.D\ECD1A.CH Vial: 78
Signal #2 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091039.D\ECD2B.CH
Acq On : 11 Sep 2001 7:28 Operator: BTB
Sample : 47266.17MS *E02D0MS * Inst : HP_03
Misc : *EPA*30.3G/5.0ML*13 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 13:57 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

ok 9-12-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091039.D\ECD1A.CH Vial: 78
Signal #2 : F:\HPCHEM\HP\3\DATA\09_10_01\3_091039.D\ECD2B.CH
Acq On : 11 Sep 2001 7:28 Operator: BTB
Sample : 47266.17MS *E02D0MS * Inst : HP_03
Misc : *EPA*30.3G/5.0ML*13 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 13:57 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

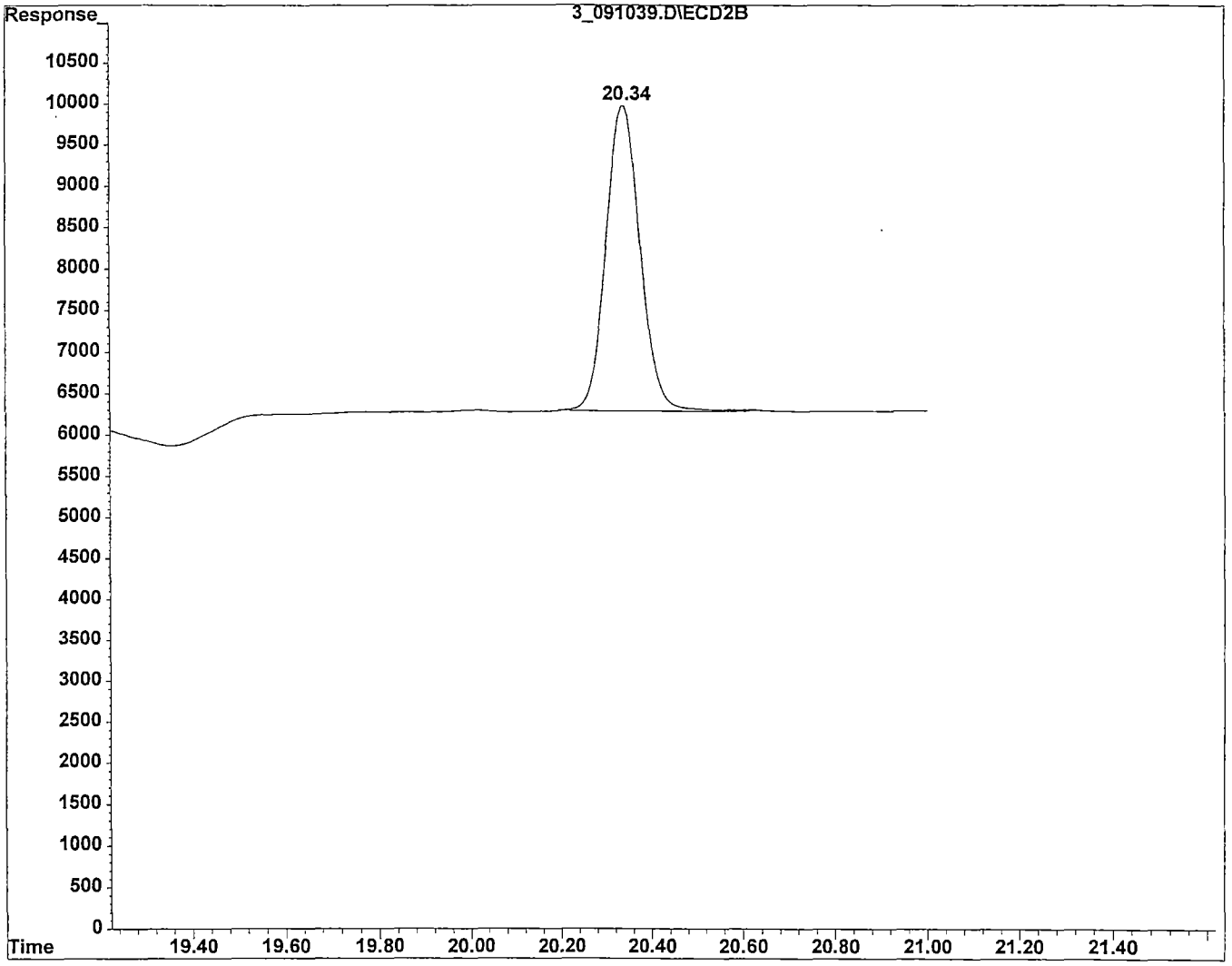
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.22	236514	94890	2.828	3.117	
	Spiked Amount 7.587			Recovery	=	37.27%	41.08%	
22)	S DCB	19.24	20.34	386967	191484	3.499	3.639m	BTB 091101
	Spiked Amount 7.587			Recovery	=	46.12%	47.96%	
	Target Compounds:							
7)	L4 Aroclor-1242	8.54	8.57	29625	4762	17.9	8.347	#
8)	L4 Aroclor-1242 {2}	9.27	9.39	86332	31009	27.5	23.9	
9)	L4 Aroclor-1242 {3}	10.36	0.00	44233	0	17.1	N.D. d	#
10)	L4 Aroclor-1242 {4}	11.18	11.28	198088	75196	75.3	90.6	
11)	L4 Aroclor-1242 {5}	11.71	11.86	55525	64994	40.6	58.8	#
	Sum Aroclor-1242			413802	175961	178.4	181.7	
	Average Aroclor-1242					35.670	45.413	
12)	L6 Aroclor-1254	10.72	10.67	413221	112206	139.6	125.6	
13)	L6 Aroclor-1254 {2}	11.86	12.09	582504	202962	100.2	86.9	
14)	L6 Aroclor-1254 {3}	12.17	13.02	506149	249278	87.1	77.1	
15)	L6 Aroclor-1254 {4}	12.95	13.46	537754	149804	79.7	82.9	
16)	L6 Aroclor-1254 {5}	13.38	14.25	387680	202235	77.8	84.5	
	Sum Aroclor-1254			2427308	916485	484.4	456.9	
	Average Aroclor-1254					96.887	91.380	

(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_10_01\3_091039.D
Date Acquired: 11 Sep 2001 7:28
Inst: HP_03 Operator ID: BTB
Name: 47266.17MS *E02D0MS *
Misc: *EPA*30.3G/5.0ML*13
Method: F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.M
Title: PCB/TOXAPHENE
Quant Time: Sep 11 13:57 2001 Quant Results File: XPCBI07.RES



DCB #2 20.34min area: 191484 m BTB 091101

Integration Time Range: 20.22 - 20.62

ok 9-12-01

F:\HPCHEM\HP\3\DATA\09_10_01\3_091039.D
Report generated: Tue Sep 11 14:10:24 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E02D0MSD

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E02B5

Matrix: (soil/water) SOIL Lab Sample ID: 47266.18MSD

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

% Moisture: 13 decanted: (Y/N) __ Date Received: 08/11/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/14/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/11/01

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	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	64	P
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	160	
11096-82-5	Aroclor-1260	38	U
	Surrogate amount spiked	7.61	

FORM I PCB

Chromatographic Report

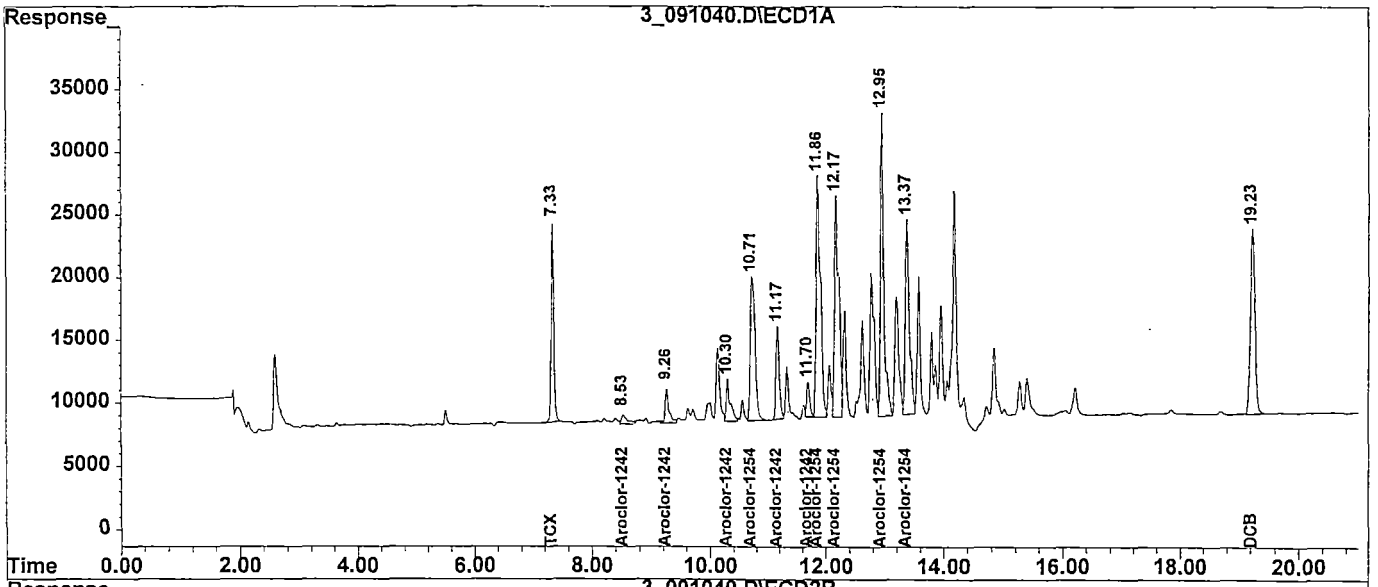
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091040.D\ECD1A.CH Vial: 79
Acq On : 11 Sep 2001 7:54 Operator: BTB
Sample : 47266.18MSD *E02D0MSD * Inst : HP_03
Misc : *EPA*30.2G/5.0ML*13 Dilution: 1.00
IntFile : events.e

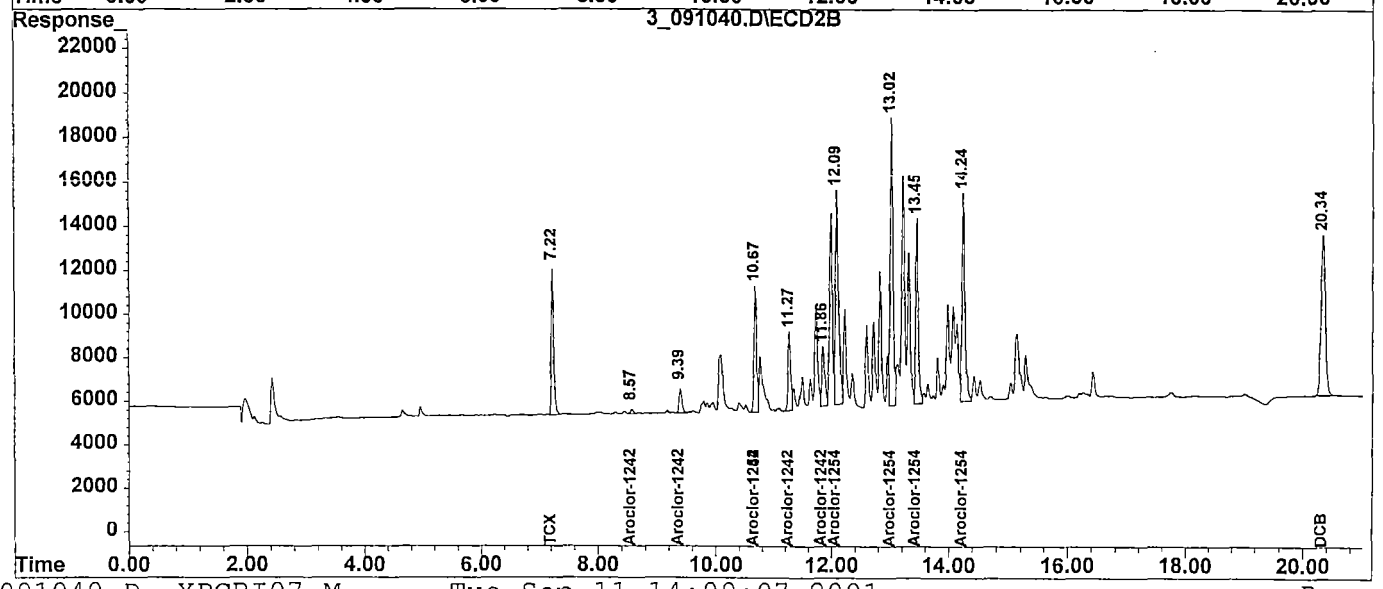
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091040.D\ECD2B.CH Vial: 79
Acq On : 11 Sep 2001 7:54 Operator: BTB
Sample : 47266.18MSD Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 14:00 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

ok 9-12-01





Quantitation Report

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091040.D\ECD1A.CH Vial: 79
Acq On : 11 Sep 2001 7:54 Operator: BTB
Sample : 47266.18MSD *E02D0MSD * Inst : HP_03
Misc : *EPA*30.2G/5.0ML*13 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091040.D\ECD2B.CH Vial: 79
Acq On : 11 Sep 2001 7:54 Operator: BTB
Sample : 47266.18MSD Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 14:00 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.22	484948	194152	5.817	6.400	
	Spiked Amount 7.612			Recovery	=	76.42%	84.08%	
22)	S DCB	19.24	20.34	754402	381765	6.844	7.279	
	Spiked Amount 7.612			Recovery	=	89.91%	95.62%	
	Target Compounds:							
7)	L4 Aroclor-1242	8.53	8.57	51122	7308	31.0	12.9	#
8)	L4 Aroclor-1242 {2}	9.27	9.39	119617	37444	38.2	28.9	
9)	L4 Aroclor-1242 {3}	10.30f	10.67	155738	187523	60.5	165.9	#
10)	L4 Aroclor-1242 {4}	11.17	11.27	296977	117415	113.2	142.0	#
11)	L4 Aroclor-1242 {5}	11.70	11.86	102791	102334	75.4	92.9	
	Sum Aroclor-1242			726246	452024	318.3	442.5	
	Average Aroclor-1242					63.656	88.499	
12)	L6 Aroclor-1254	10.72	10.67	660122	187523	223.8	210.6	
13)	L6 Aroclor-1254 {2}	11.86	12.09	1009547	365643	174.3	157.0	
14)	L6 Aroclor-1254 {3}	12.17	13.02	897558	447227	155.0	138.8	
15)	L6 Aroclor-1254 {4}	12.95	13.46	978916	263770	145.5	146.4	
16)	L6 Aroclor-1254 {5}	13.37	14.25	721335	358487	145.2	150.2	
	Sum Aroclor-1254			4267478	1622649	843.8	803.0	
	Average Aroclor-1254					168.761	160.602	

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

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
08/19/01 14:50	1	CAL STD (INITIAL)	1_081901	
08/19/01 15:20	2	SB	1_081902	
08/19/01 15:51	3	SB	1_081903	
08/19/01 16:22	4	SB	1_081904	
08/19/01 16:53	5	SB	1_081905	
08/19/01 17:24	6	SB#081901A (PEST)	1_081906	
08/19/01 17:55	7	SB#081901B (PEST)	1_081907	
08/19/01 18:27	8	BL0814SB-EPA	1_081908	
08/19/01 18:58	9	BB0814SB-EPA	1_081909	
08/19/01 19:29	10	LC0814SB-EPA	1_081910	
08/19/01 20:00	11	LD0814SB-EPA	1_081911	
08/19/01 20:31	12	47266.08-E02C2-EPA	1_081912	
08/19/01 21:02	13	47266.07-E02C1-EPA	1_081913	
08/19/01 21:33	14	47266.01-E02B5-EPA	1_081914	
08/19/01 22:04	15	47266.02-E02B6-EPA	1_081915	
08/19/01 22:35	16	47266.03-E02B7-EPA	1_081916	
08/19/01 23:06	17	47266.05-E02B9-EPA	1_081917	
08/19/01 23:37	18	47266.09-E02C3-EPA	1_081918	
08/20/01 00:08	19	47266.10-E02C4-EPA	1_081919	
08/20/01 00:39	20	47266.22-E02D4-EPA	1_081920	
08/20/01 01:09	21	47266.16-E02D0-EPA	1_081921	

8/21/2001 Verification Signature/Date

8/20/01 Analyst Signature/Date

Book: OE-102-16-RUN-19 Page No.: 100

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
08/20/01 01:41	22	47266.17-MS-E02D0-EPA	1_081922	
08/20/01 02:11	23	47266.18-MSD-E02D0-EPA	1_081923	
08/20/01 02:42	24	47266.06-E02C0-EPA	1_081924	
08/20/01 03:13	25	47266.11-E02C5-EPA	1_081925	
08/20/01 03:44	26	47266.15-E02C9-EPA	1_081926	
08/20/01 04:15	27	47266.20-E02D2-EPA	1_081927	
08/20/01 04:46	28	47266.21-E02D3-EPA	1_081928	
08/20/01 05:17	29	47266.04-E02B8-EPA	1_081929	
08/20/01 05:48	30	47266.12-E02C6-EPA	1_081930	
08/20/01 06:19	31	47266.13-E02C7-EPA	1_081931	
08/20/01 06:50	32	47266.14-E02C8-EPA	1_081932	
08/20/01 07:21	33	47266.19-E02D1-EPA	1_081933	
08/20/01 07:52	34	SB	1_081934	
08/20/01 08:23	35	SB	1_081935	
08/20/01 08:54	36	SB	1_081936	
08/20/01 09:25	37	SB	1_081937	
08/20/01 09:56	38	CAL STD (FINAL)	1_081938	

Compound	Initial RT	Final RT	% Difference
Phthalate	14.13	14.09	0.28
Methoxychlor	15.72	15.66	0.38
Perylene	20.43	20.41	0.10

8/21/01

Verification Signature/Date

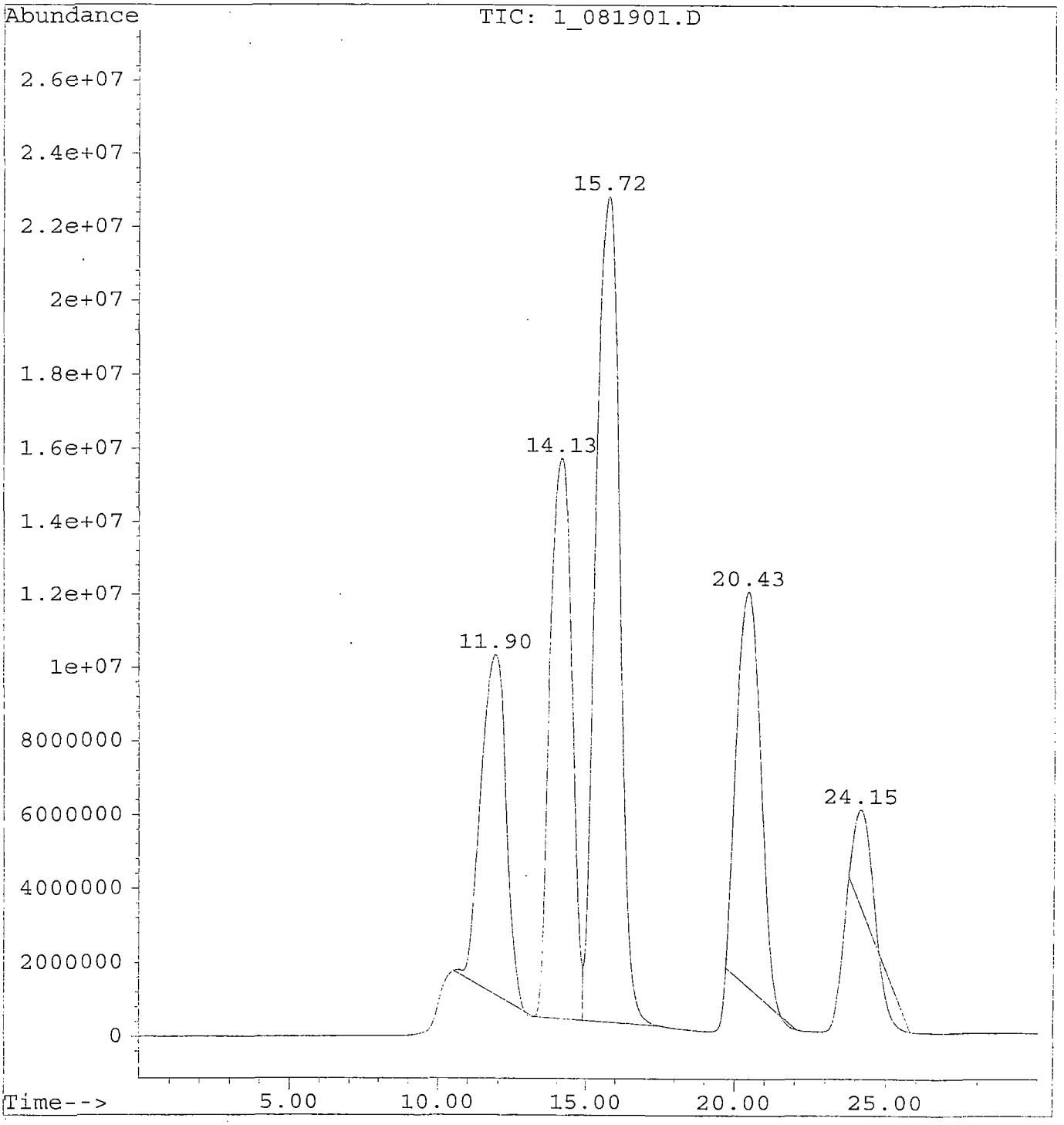
8/20/01

Analyst Signature/Date

Book: OE-102-16-RUN-19 Page No.: 101

Data File : C:\HPCHEM\5\DATA\081901\1_081901.D
Acq On : 19 Aug 01 02:50 PM
Sample : CAL STD (INITIAL)
Misc : COL# 418002

Vial: 1
Operator: CD COL#
Inst : GPC1
Multiplr: 1.00



1) 11.90 = Corn Oil

3) 14.13 = Pthalate
4) 15.72 = Methoxychlor
5) 20.43 = Perylene

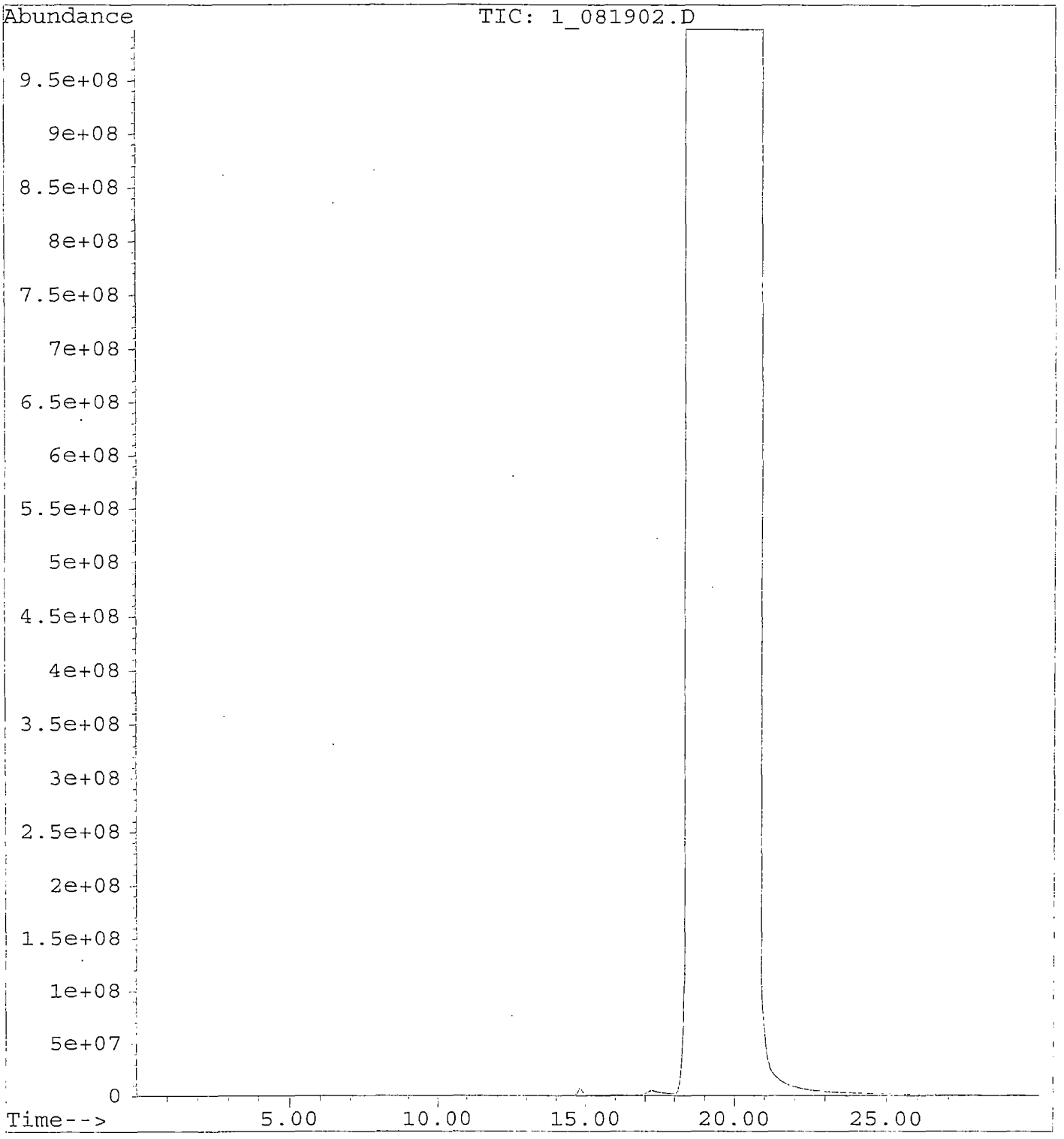
Chromatographic Resolution Report

Data File : C:\HPCHEM\5\DATA\081901\1_081901.D Vial: 1
Acq On : 19 Aug 01 14:50 Operator: CD COL# 41
Sample : CAL STD (INITIAL) Inst : GPC1
Misc : COL# 418002 Multiplr: 1.00

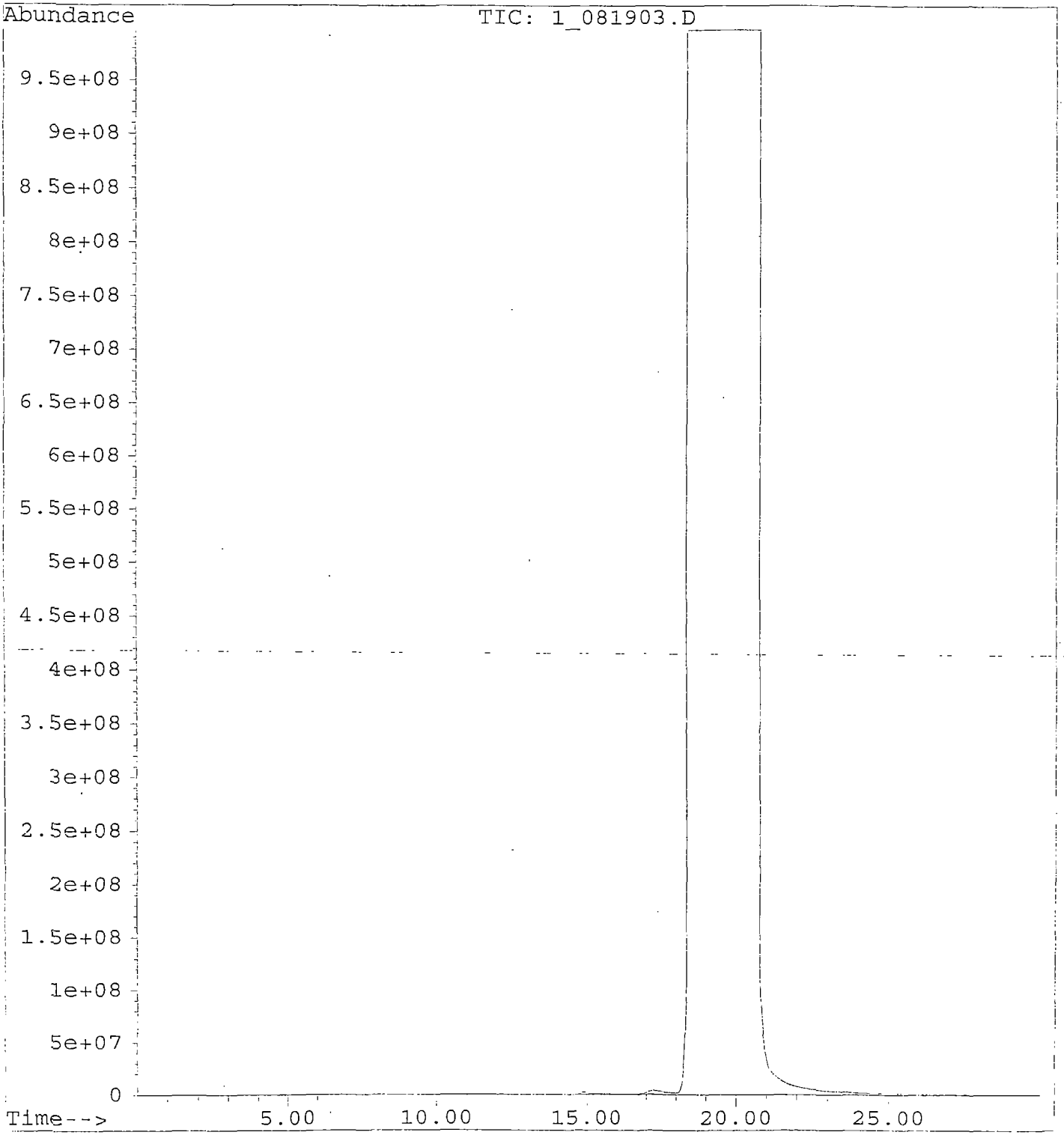
Method : C:\HPCHEM\5\METHODS\GPC.M
Title :

RT#1	RT#2	Resolution
11.899	14.127	100.00
14.127	15.720	90.74
15.720	20.425	100.00
20.425	24.150	100.00

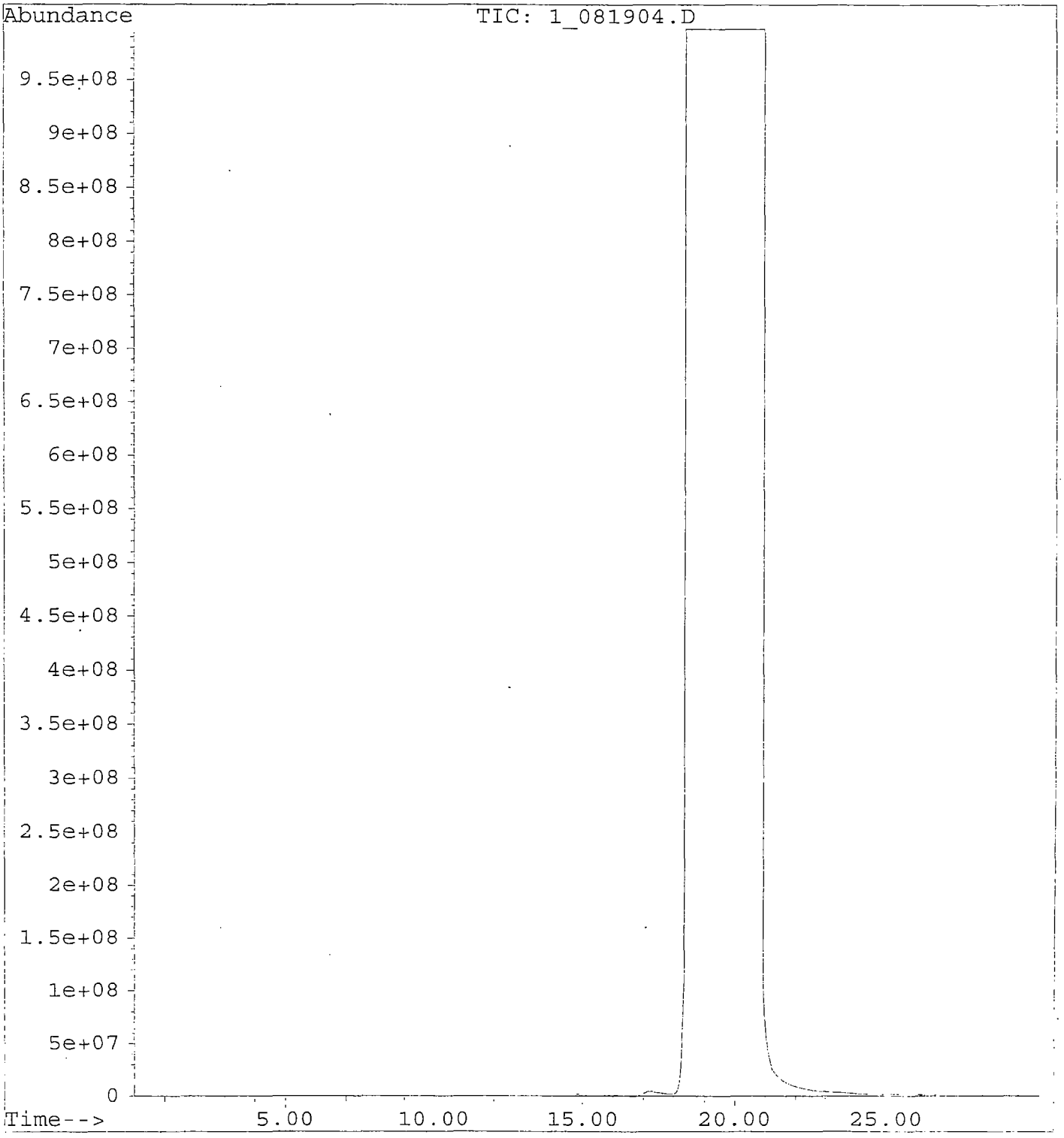
File : C:\HPCHEM\5\DATA\081901\1_081902.D
Operator : CD COL# 418002
Acquired : 19 Aug 01 15:20 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 2



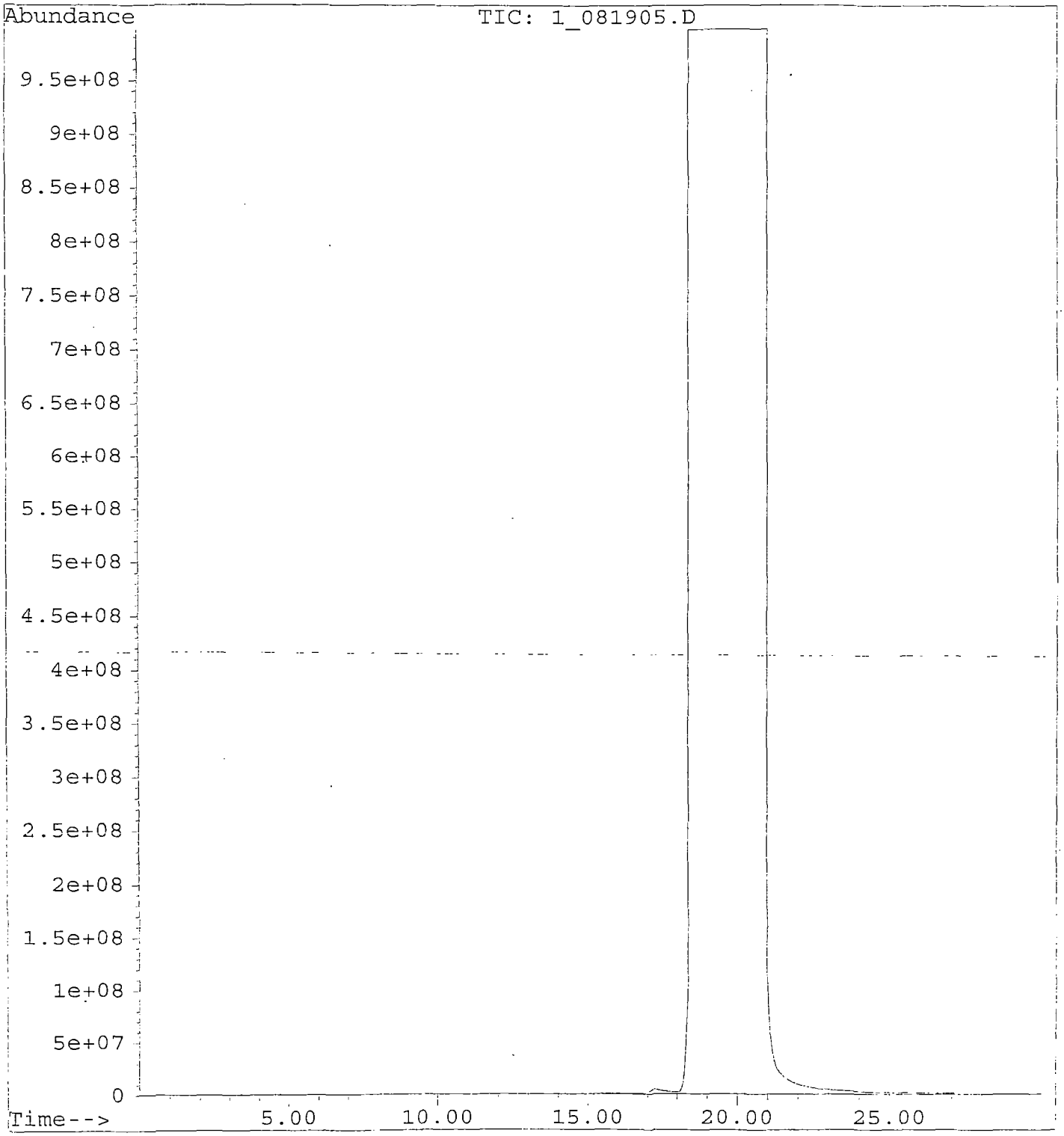
File : C:\HPCHEM\5\DATA\081901\1_081903.D
Operator : CD COL# 418002
Acquired : 19 Aug 01 15:51 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 3



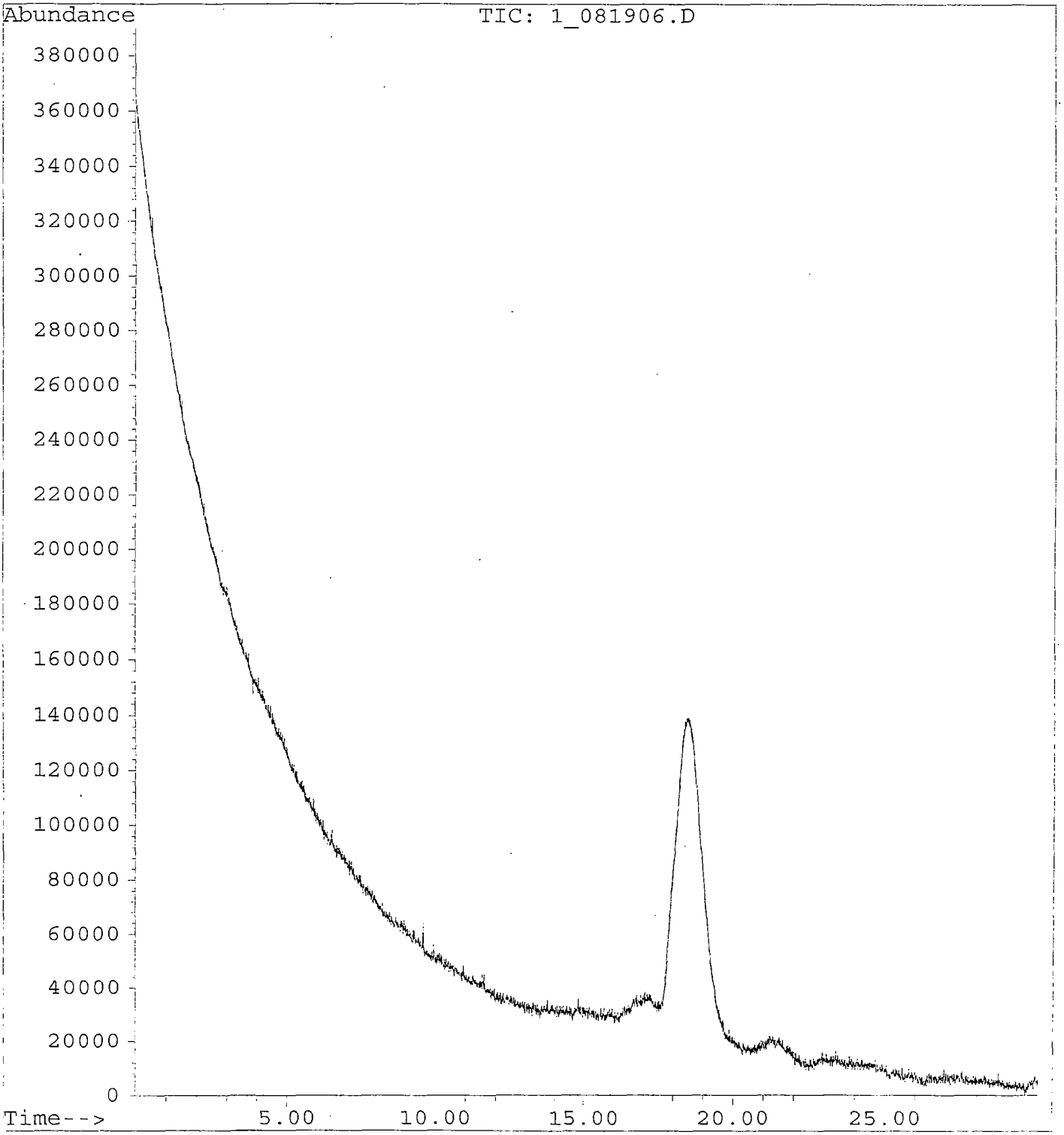
File : C:\HPCHEM\5\DATA\081901\1_081904.D
Operator : CD COL# 418002
Acquired : 19 Aug 01 16:22 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 4



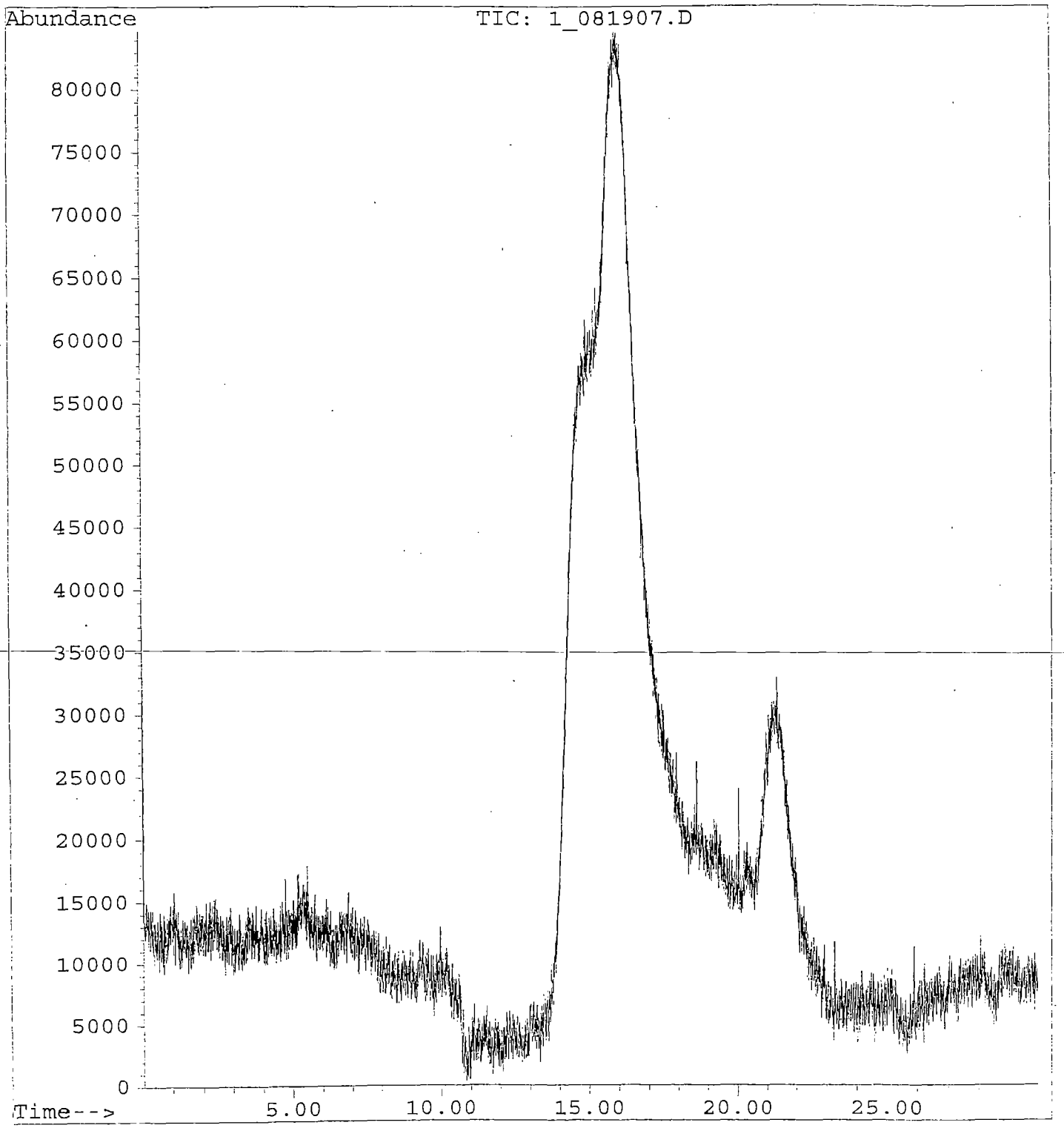
File : C:\HPCHEM\5\DATA\081901\1_081905.D
Operator : CD COL# 418002
Acquired : 19 Aug 01 16:53 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 5



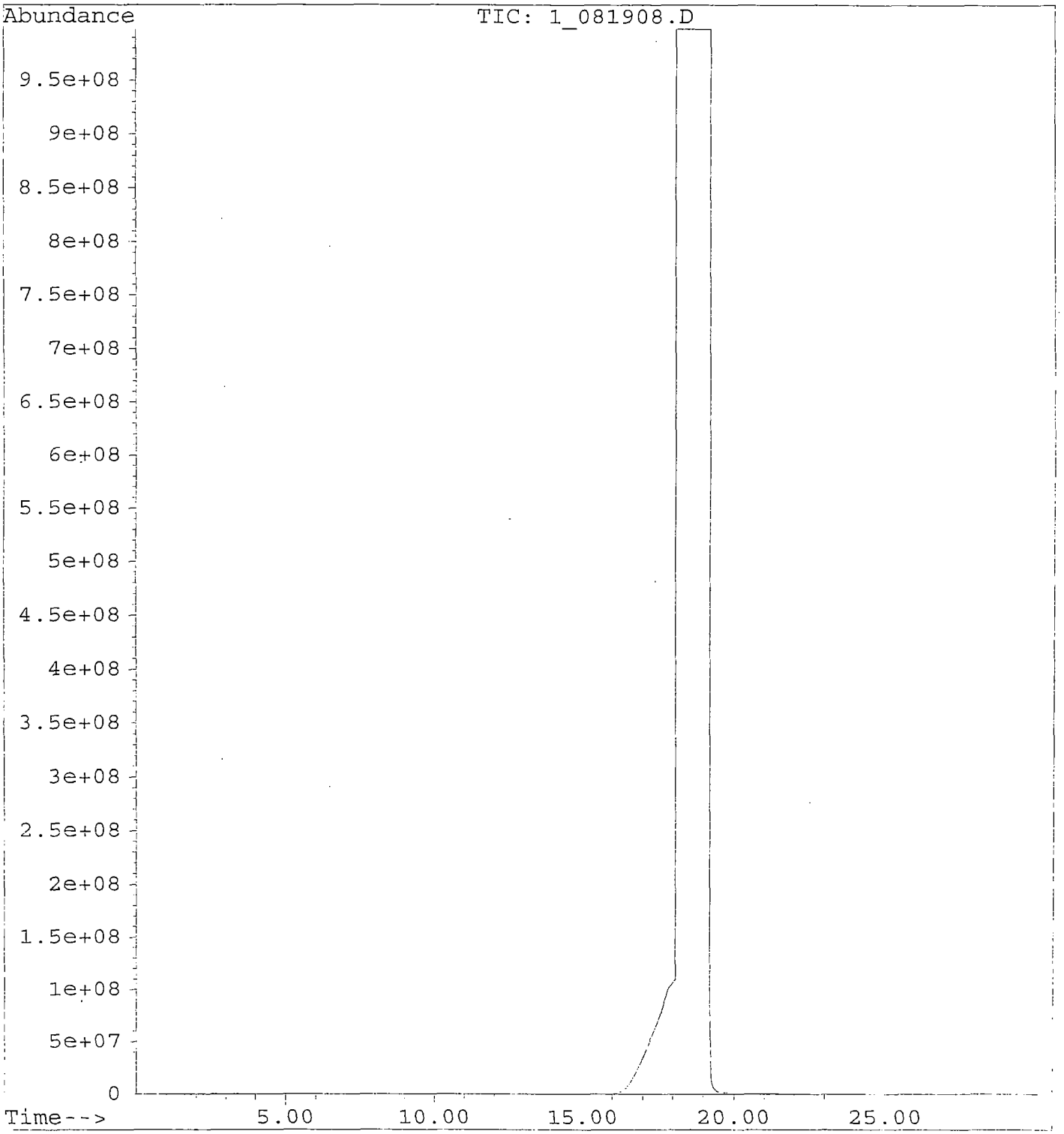
File : C:\HPCHEM\5\DATA\081901\1_081906.D
Operator : CD COL# 418002
Acquired : 19 Aug 01 17:24 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB#081901A (PEST)
Misc Info : COL# 418002
Vial Number: 6



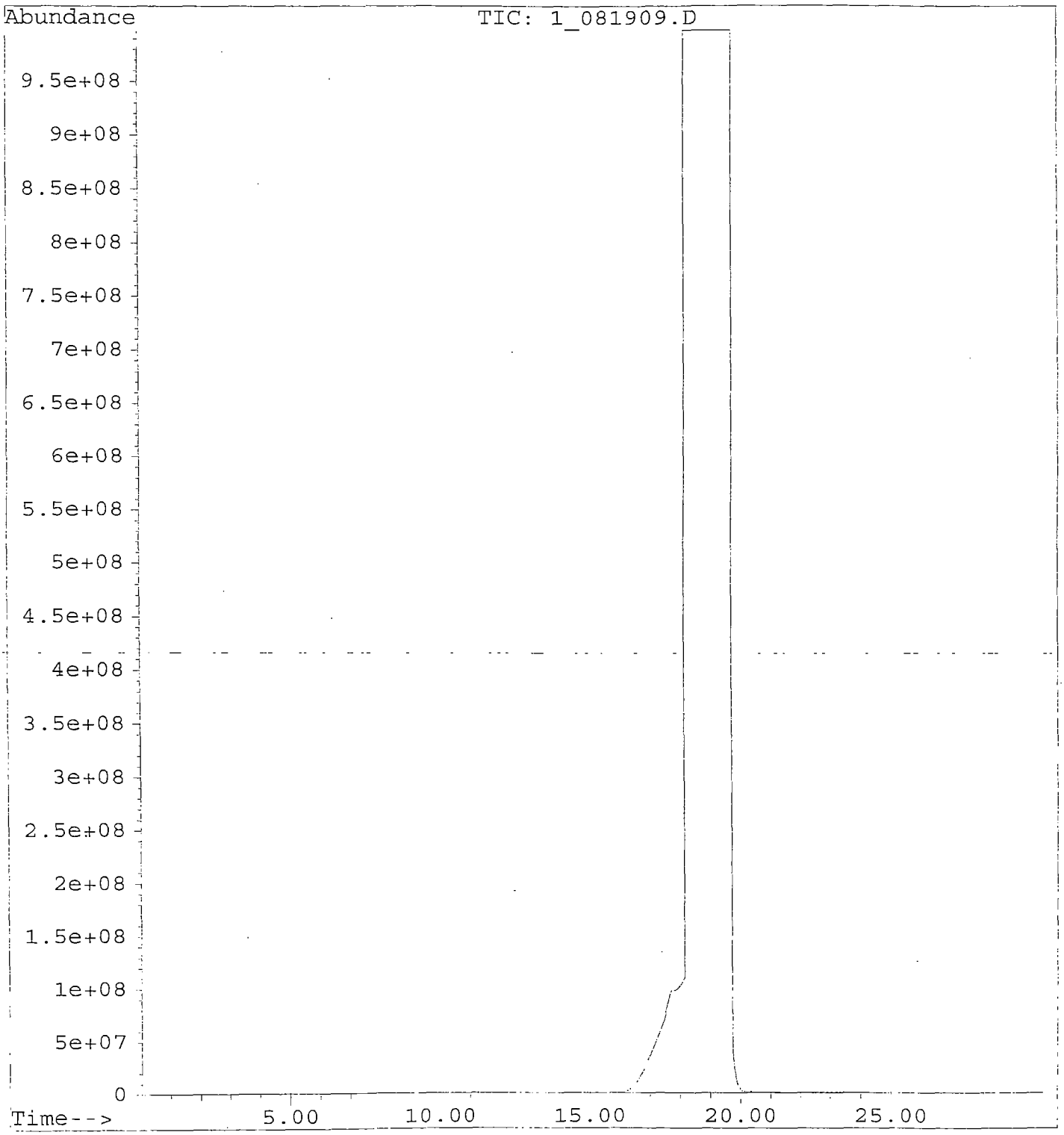
File : C:\HPCHEM\5\DATA\081901\1_081907.D
Operator : CD COL# 418002
Acquired : 19 Aug 01 17:55 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB#081901B (PEST)
Misc Info : COL# 418002
Vial Number: 7



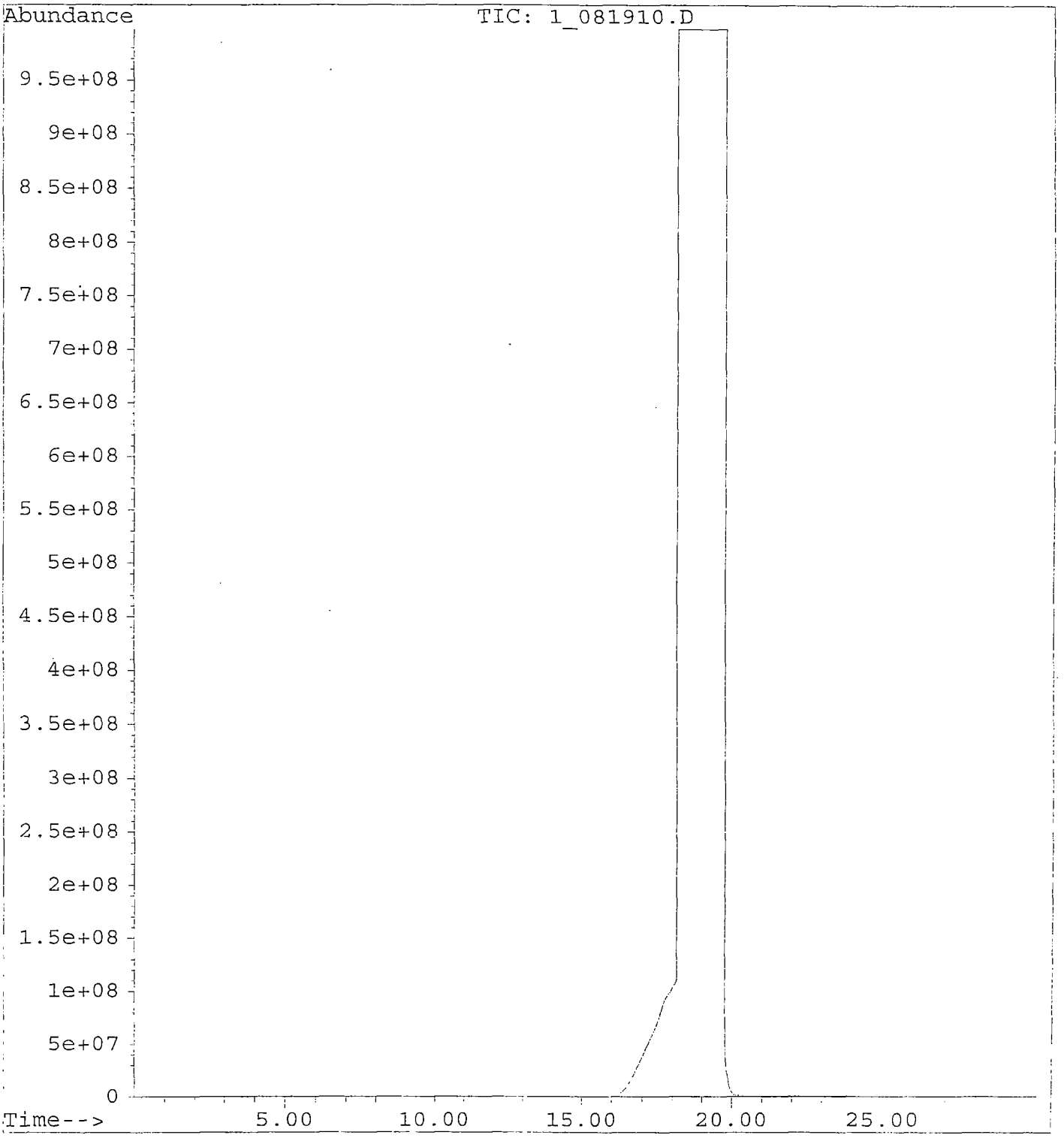
File : C:\HPCHEM\5\DATA\081901\1_081908.D
Operator : CD COL# 418002
Acquired : 19 Aug 01 18:27 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: BL0814SB-EPA
Misc Info : COL# 418002
Vial Number: 8



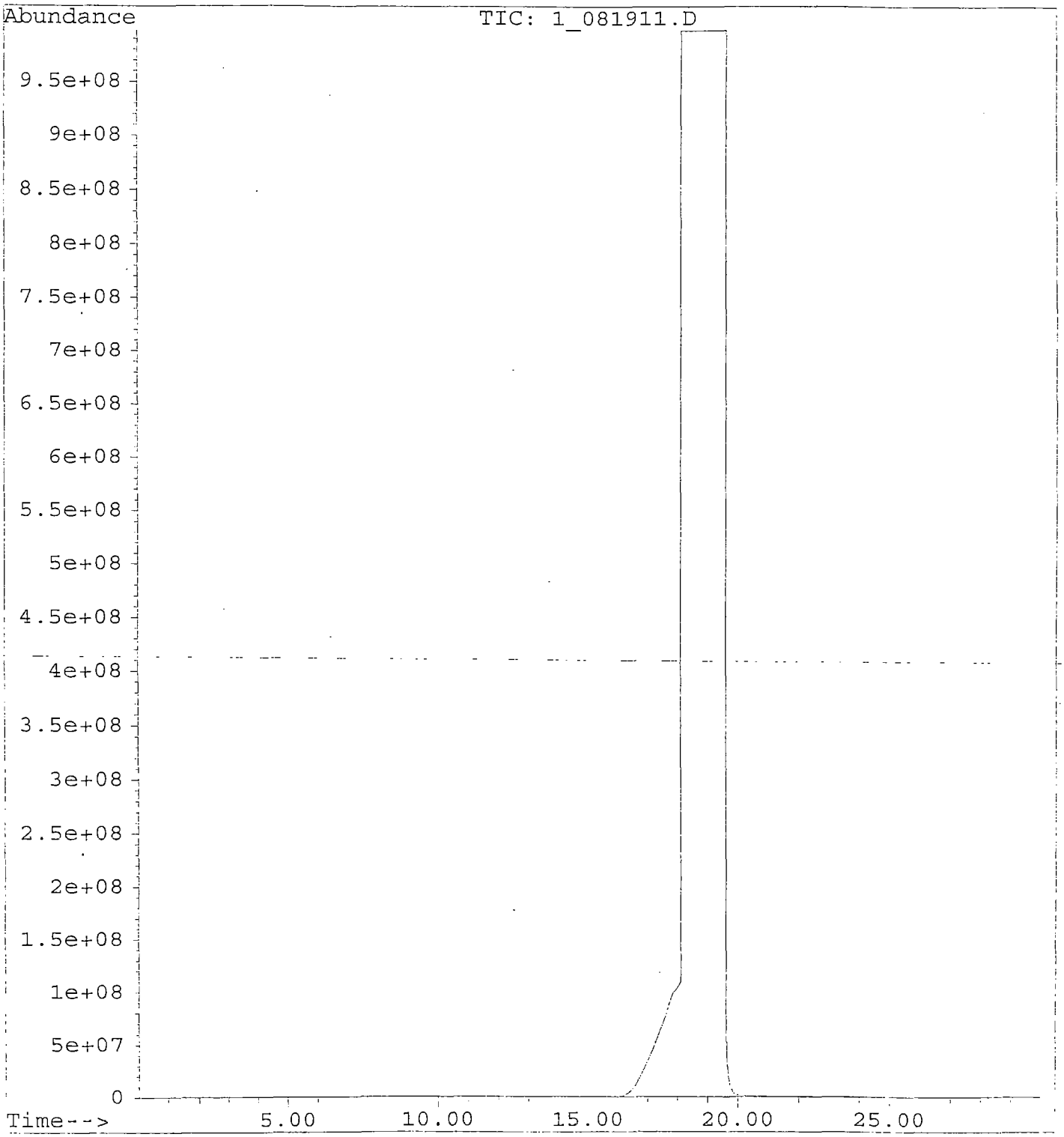
File : C:\HPCHEM\5\DATA\081901\1_081909.D
Operator : CD COL# 418002
Acquired : 19 Aug 01 18:58 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: BB0814SB-EPA
Misc Info : COL# 418002
Vial Number: 9



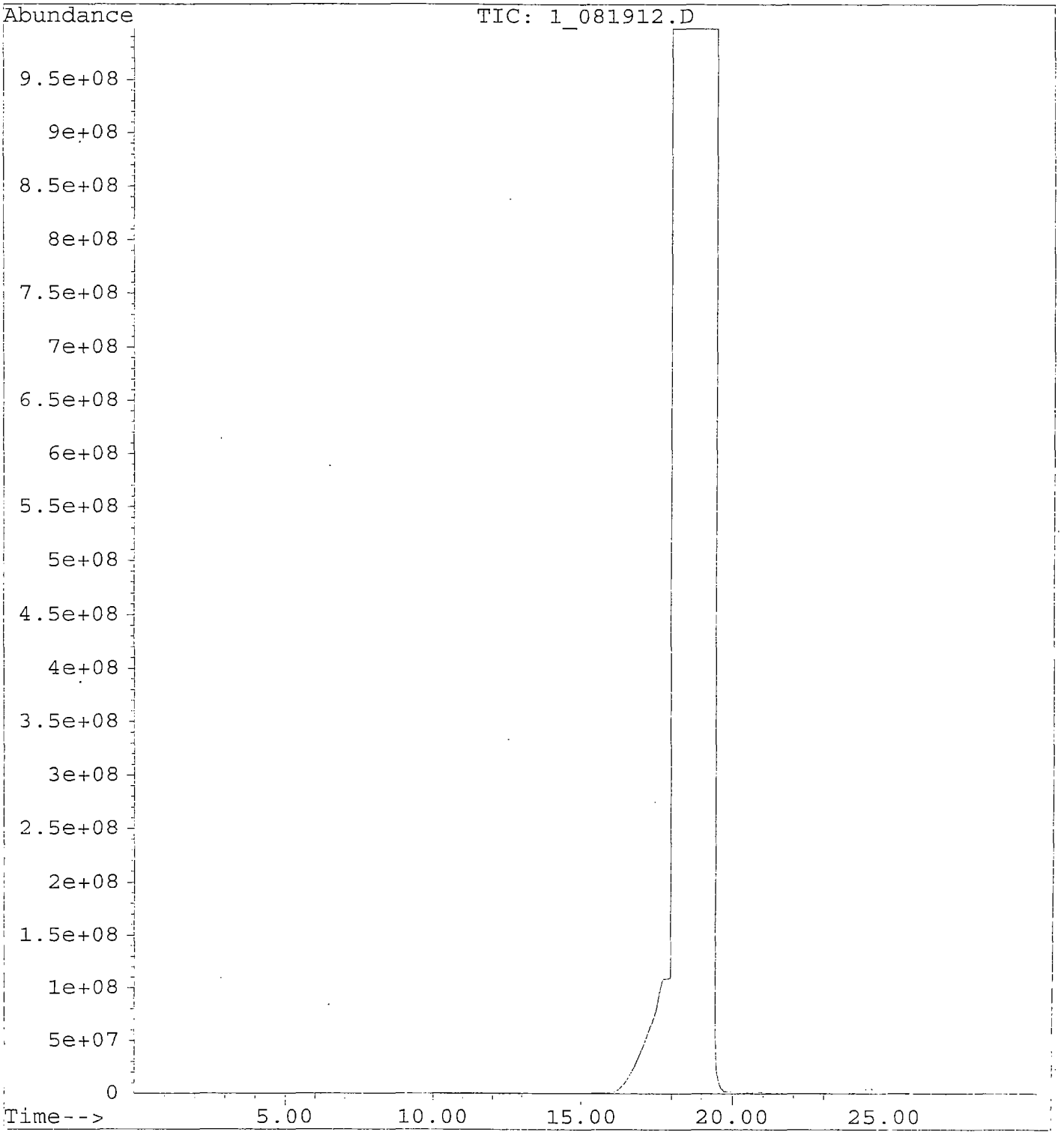
File : C:\HPCHEM\5\DATA\081901\1_081910.D
Operator : CD COL# 418002
Acquired : 19 Aug 01 19:29 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: LC0814SB-EPA
Misc Info : COL# 418002
Vial Number: 10



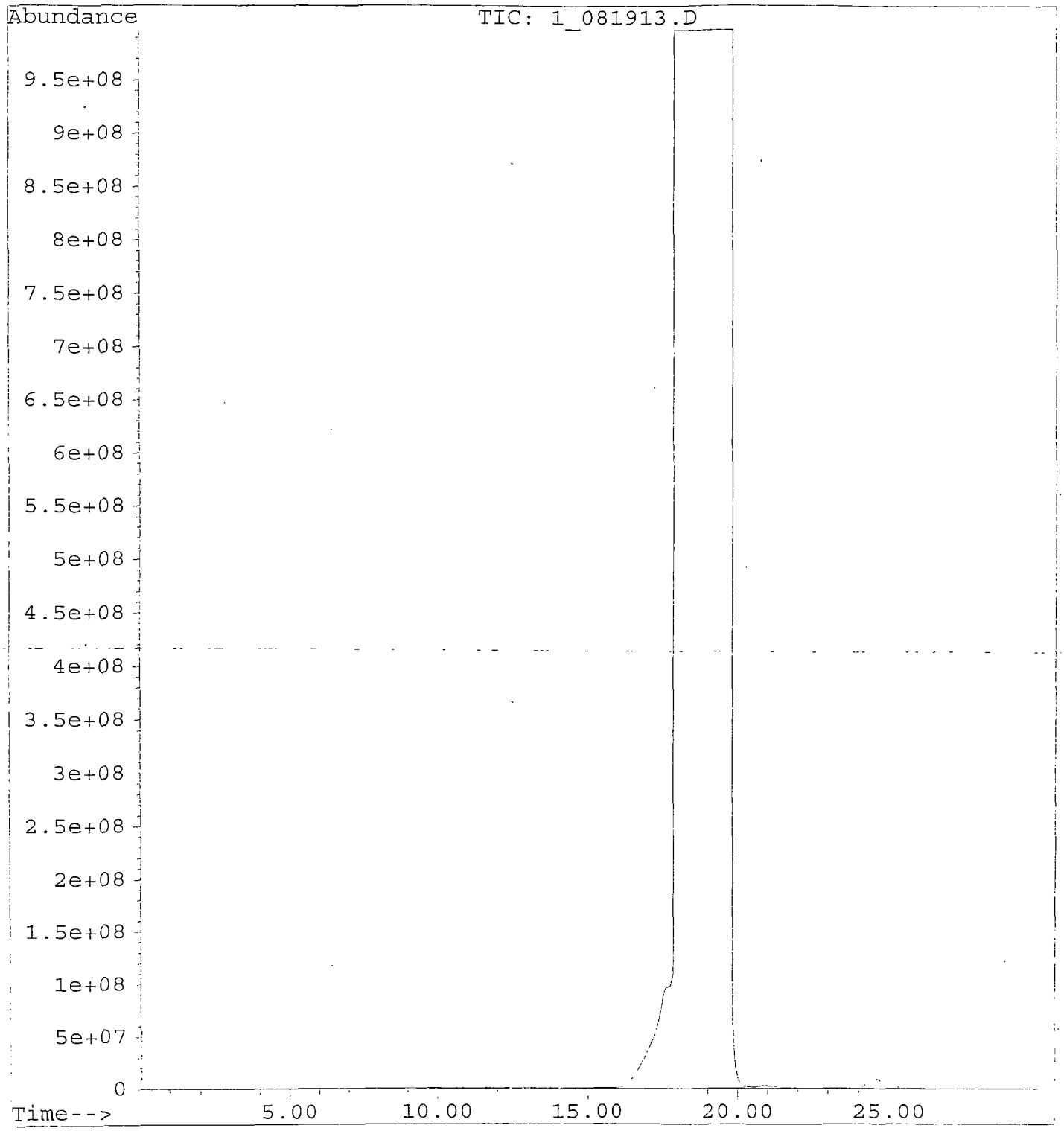
File : C:\HPCHEM\5\DATA\081901\1_081911.D
Operator : CD COL# 418002
Acquired : 19 Aug 01 20:00 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: LD0814SB-EPA
Misc Info : COL# 418002
Vial Number: 11



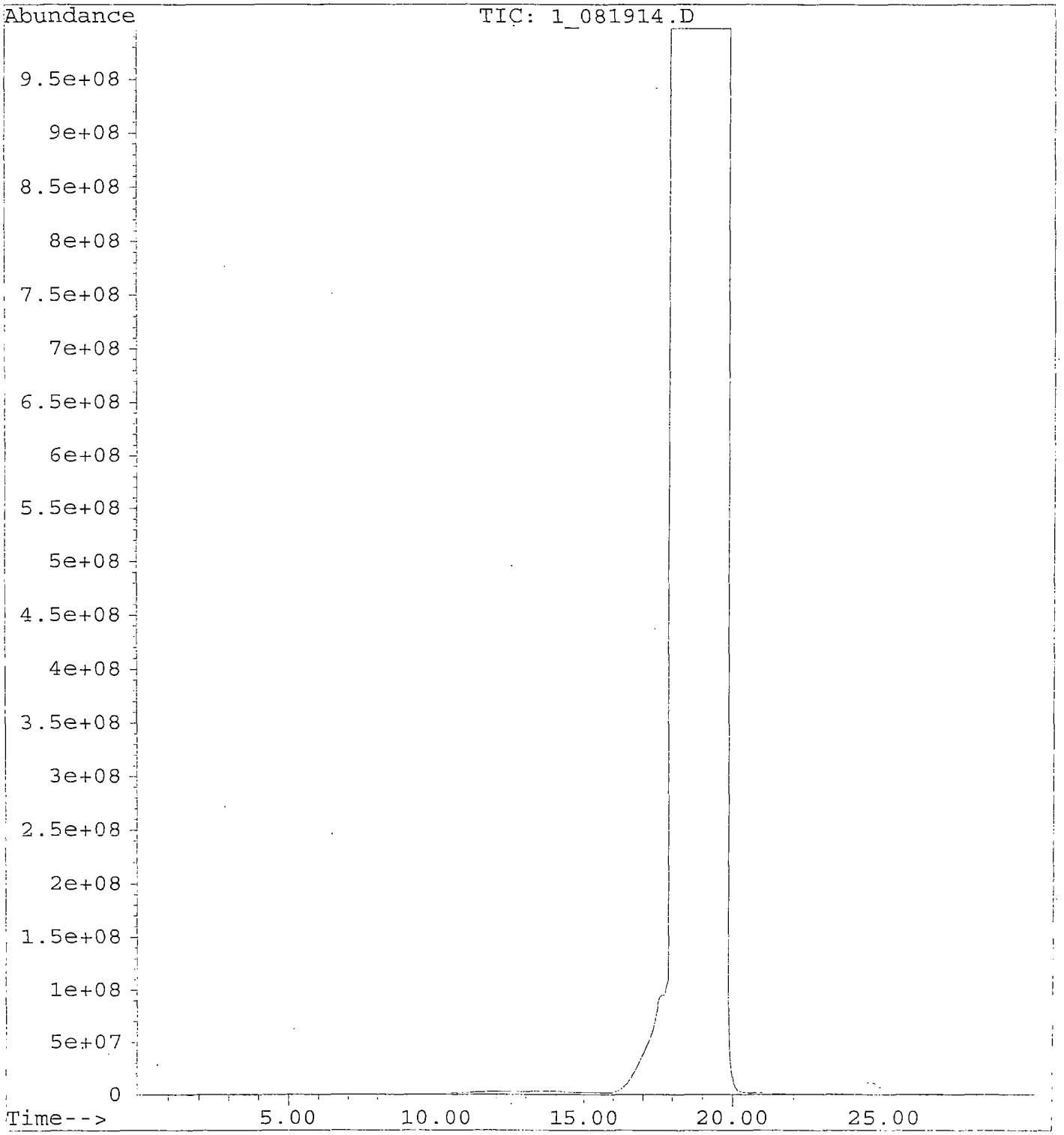
File : C:\HPCHEM\5\DATA\081901\1_081912.D
Operator : CD COL# 418002
Acquired : 19 Aug 01 20:31 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47266.08-E02C2-EPA
Misc Info : COL# 418002
Vial Number: 12



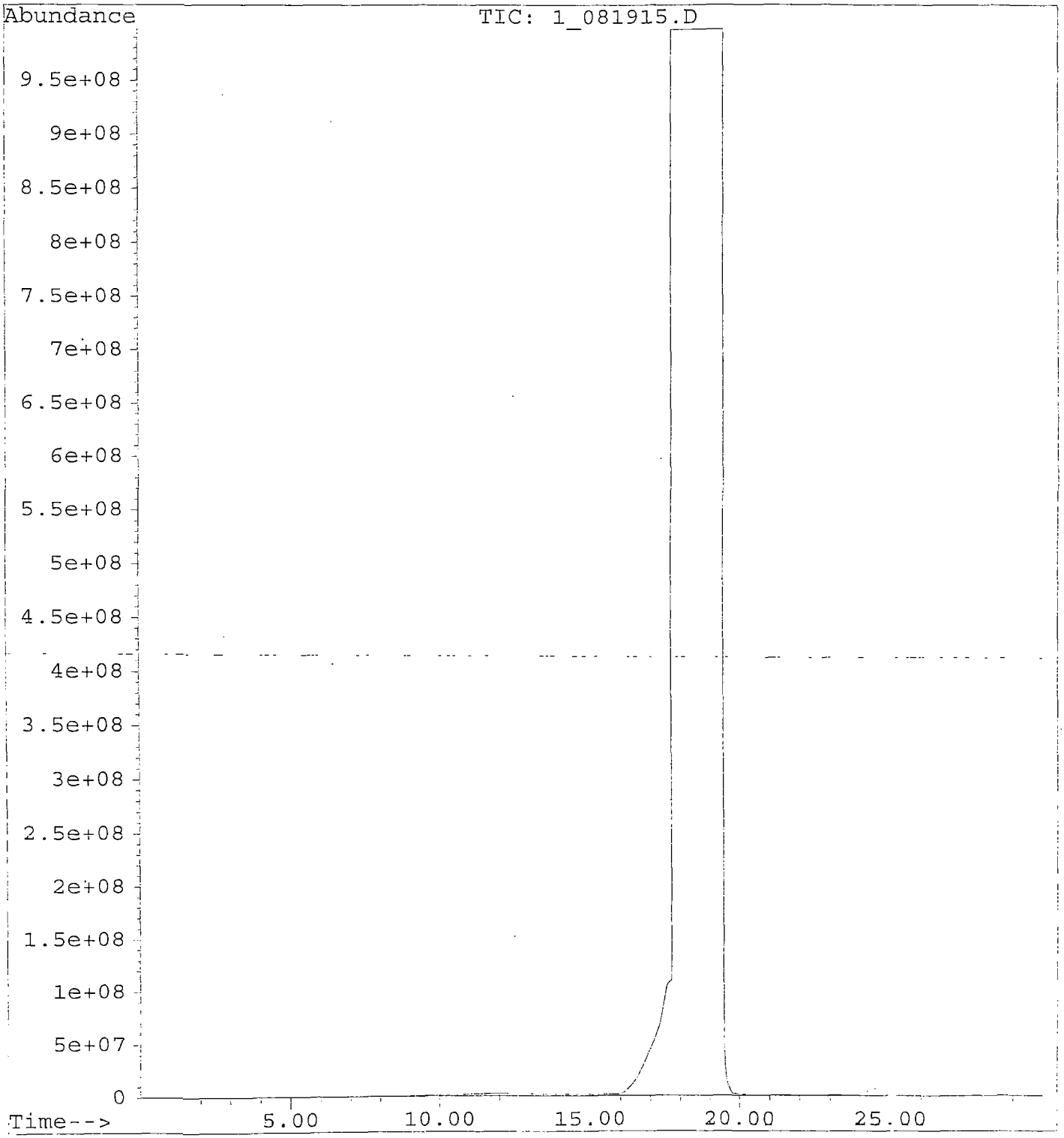
File : C:\HPCHEM\5\DATA\081901\1_081913.D
Operator : CD COL# 418002
Acquired : 19 Aug 01 21:02 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47266.07-E02C1-EPA
Misc Info : COL# 418002
Vial Number: 13



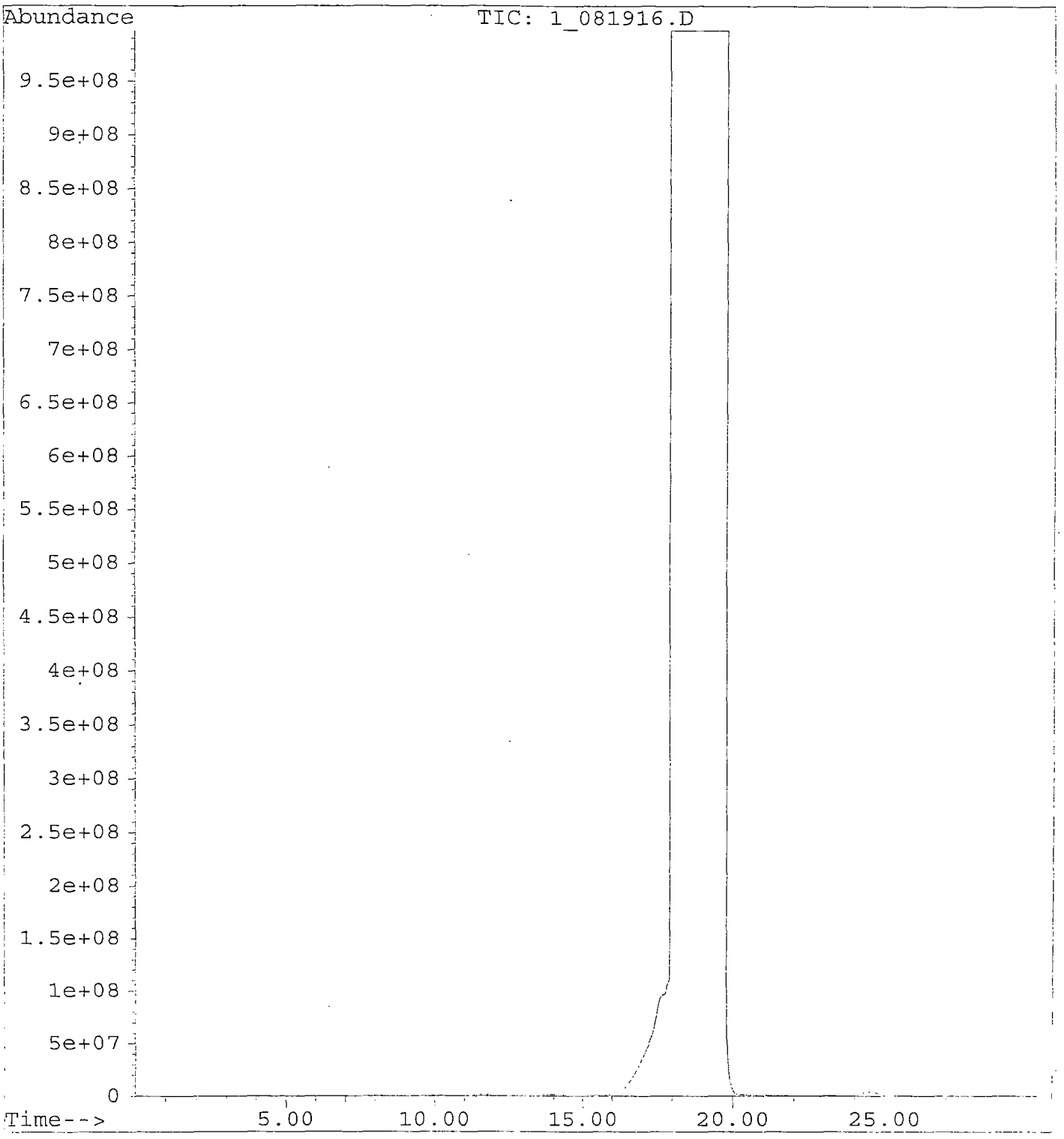
File : C:\HPCHEM\5\DATA\081901\1_081914.D
Operator : CD COL# 418002
Acquired : 19 Aug 01 21:33 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47266.01-E02B5-EPA
Misc Info : COL# 418002
Vial Number: 14



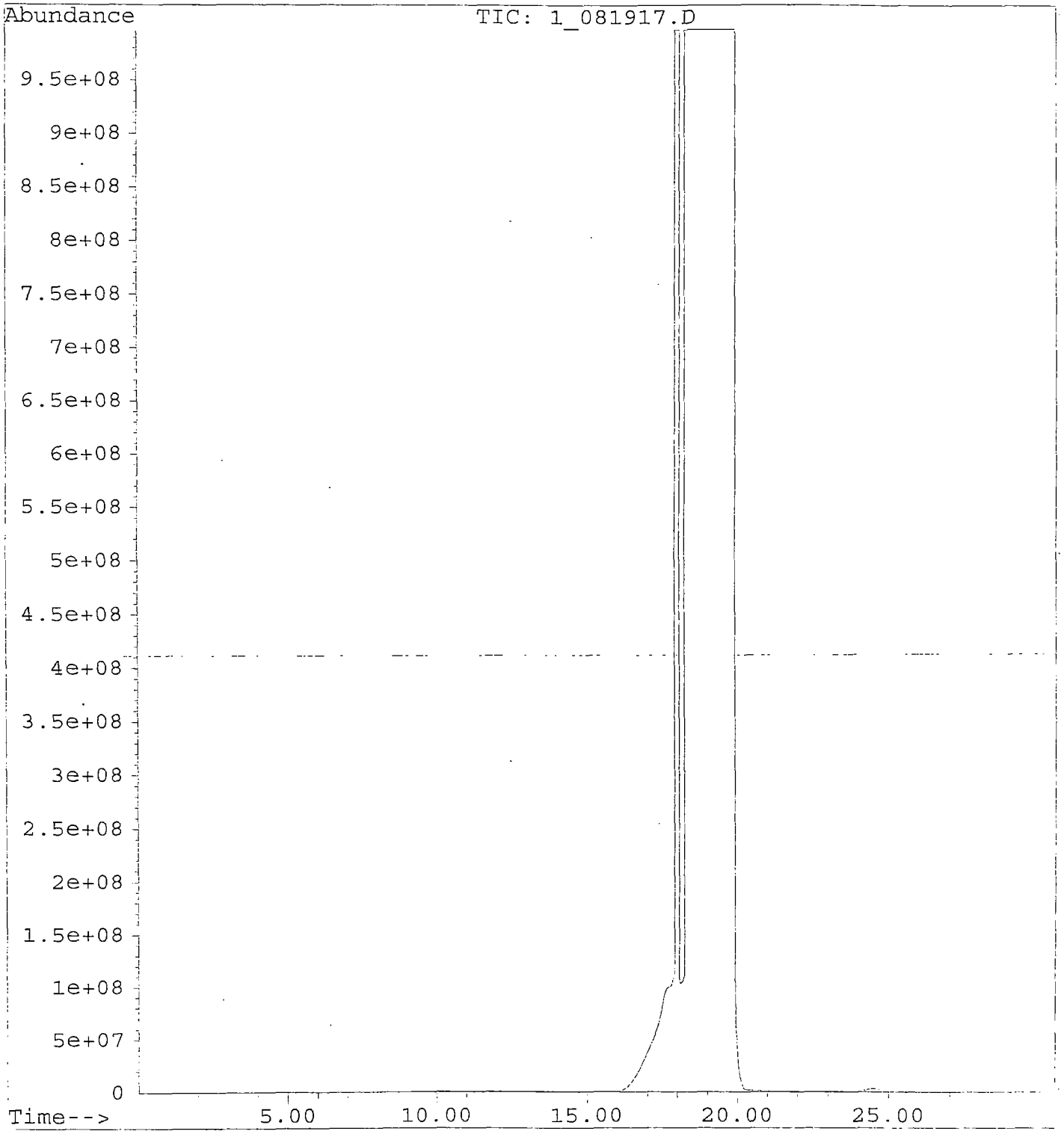
File : C:\HPCHEM\5\DATA\081901\1_081915.D
Operator : CD COL# 418002
Acquired : 19 Aug 01 22:04 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47266.02-E02B6-EPA
Misc Info : COL# 418002
Vial Number: 15



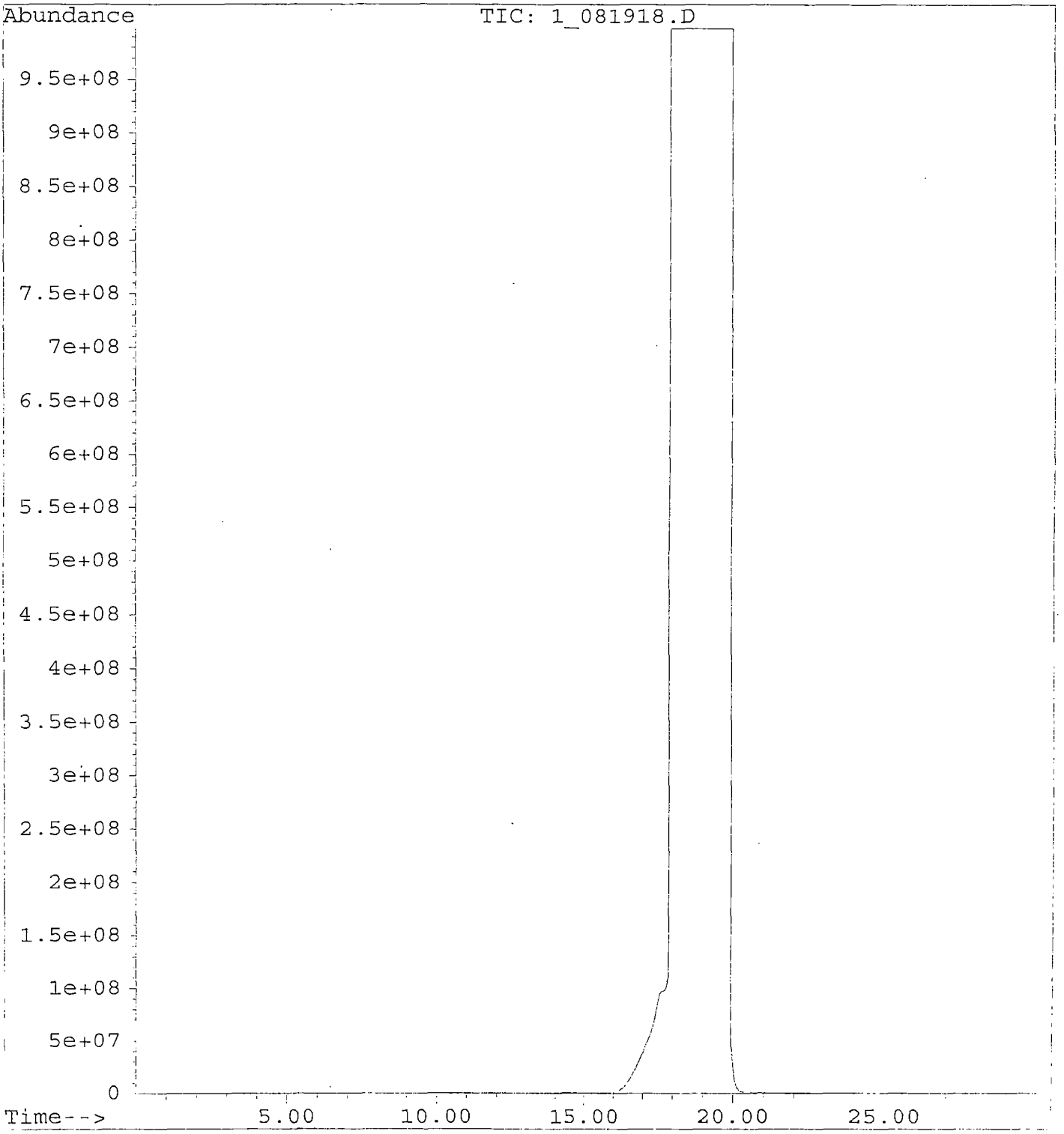
File : C:\HPCHEM\5\DATA\081901\1_081916.D
Operator : CD COL# 418002
Acquired : 19 Aug 01 22:35 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47266.03-E02B7-EPA
Misc Info : COL# 418002
Vial Number: 16



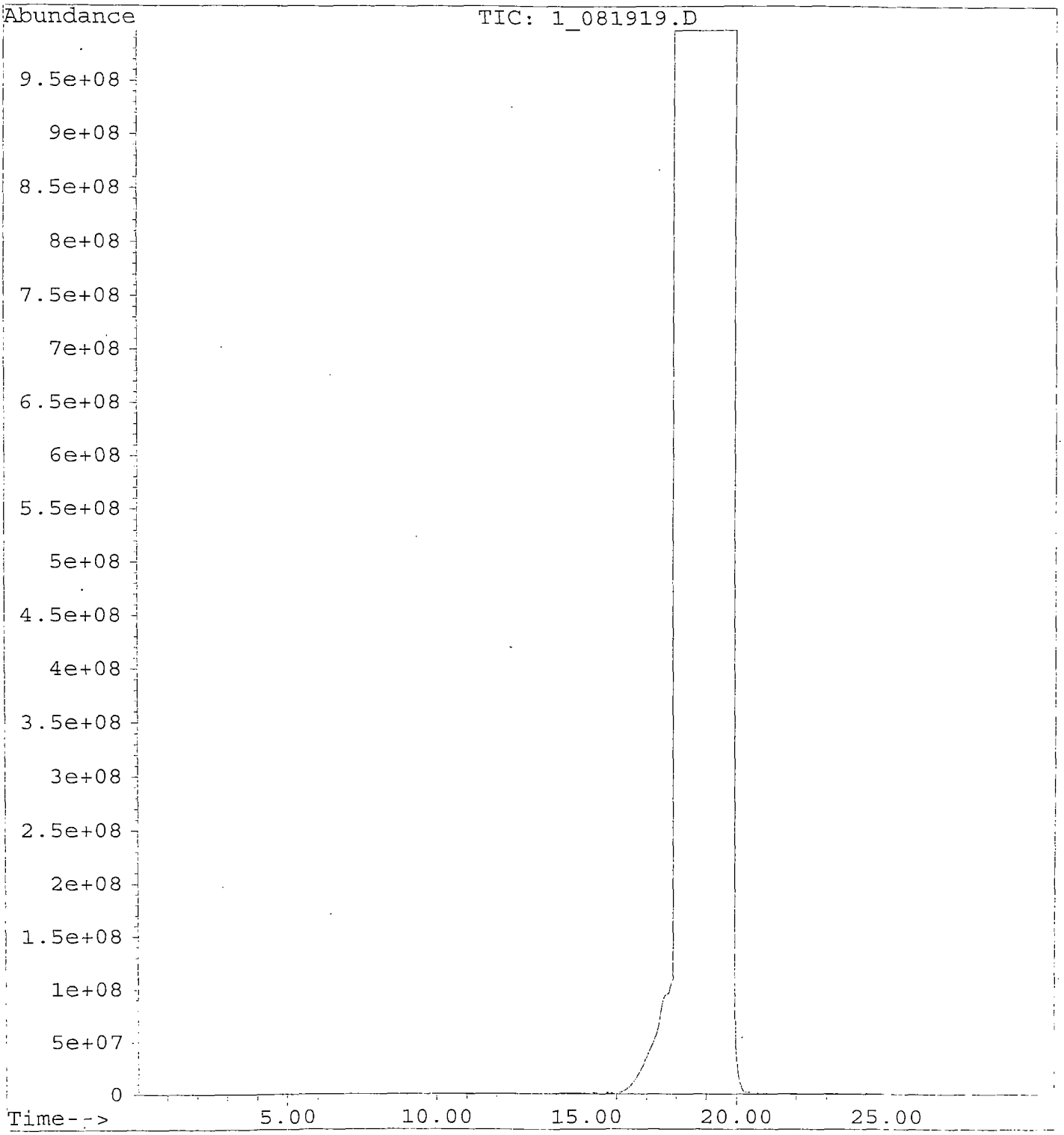
File : C:\HPCHEM\5\DATA\081901\1_081917.D
Operator : CD COL# 418002
Acquired : 19 Aug 01 23:06 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47266.05-E02B9-EPA
Misc Info : COL# 418002
Vial Number: 17



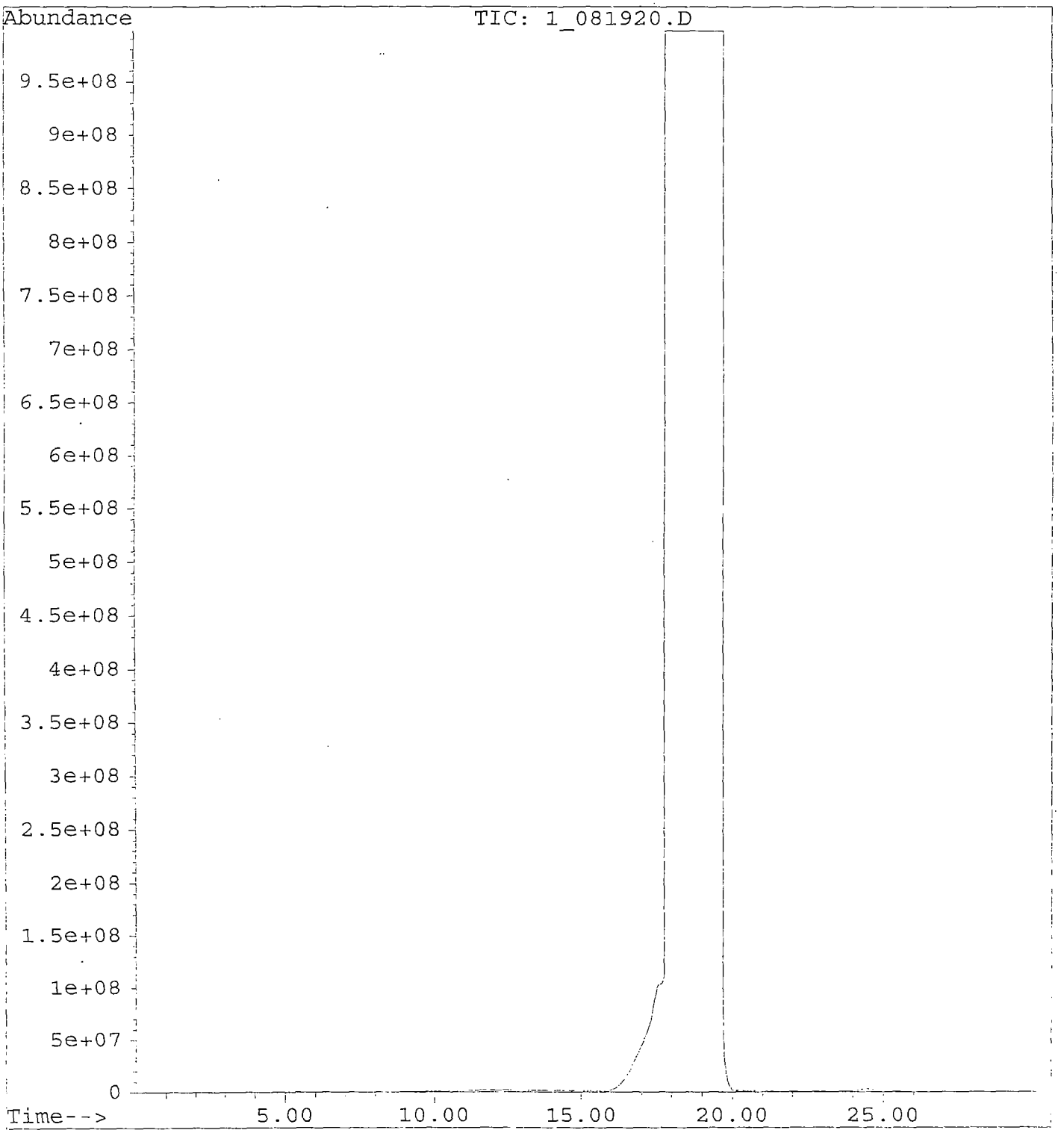
File : C:\HPCHEM\5\DATA\081901\1_081918.D
Operator : CD COL# 418002
Acquired : 19 Aug 01 23:37 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47266.09-E02C3-EPA
Misc Info : COL# 418002
Vial Number: 18



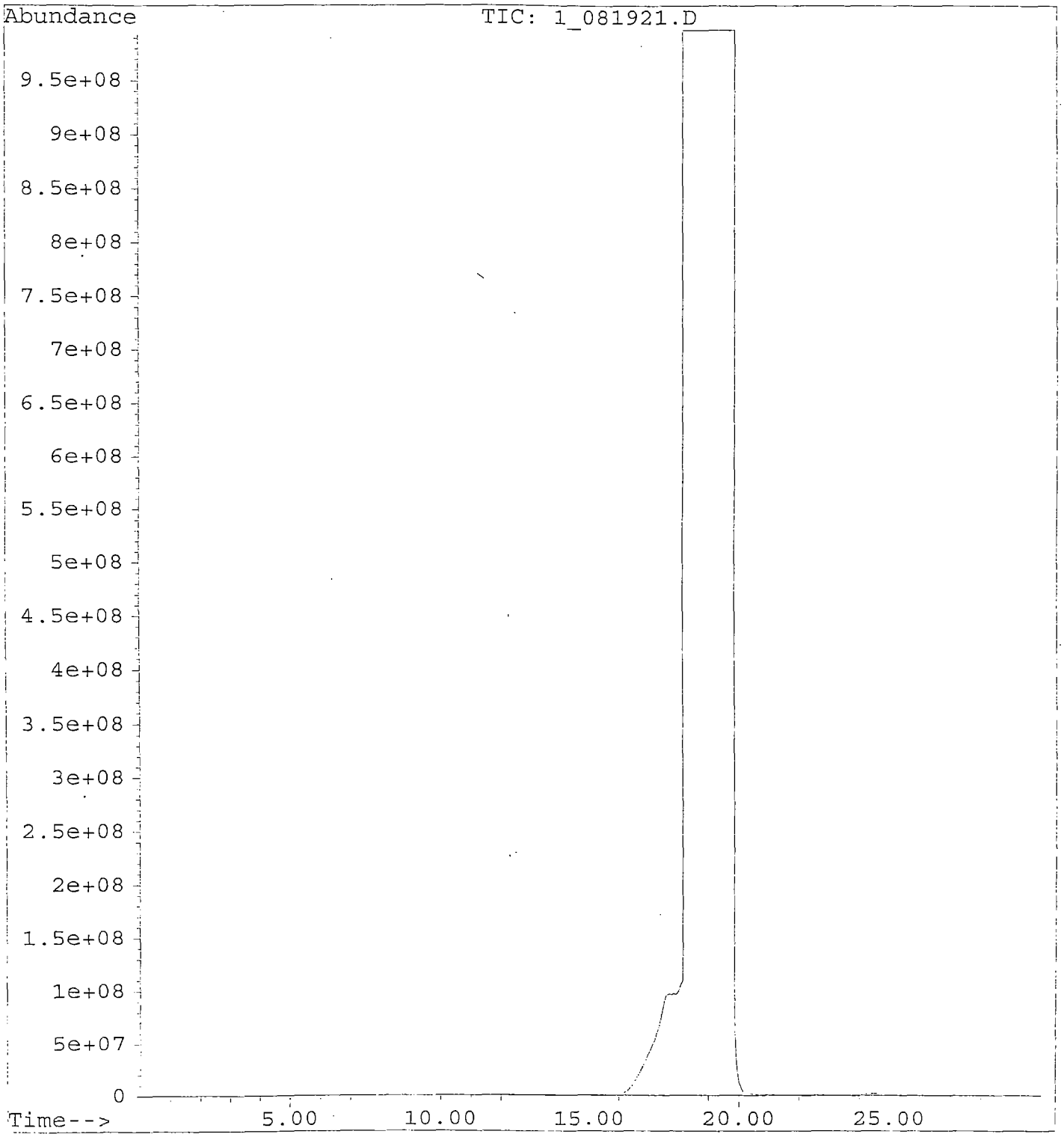
File : C:\HPCHEM\5\DATA\081901\1_081919.D
Operator : CD COL# 418002
Acquired : 20 Aug 01 00:08 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47266.10-E02C4-EPA
Misc Info : COL# 418002
Vial Number: 19



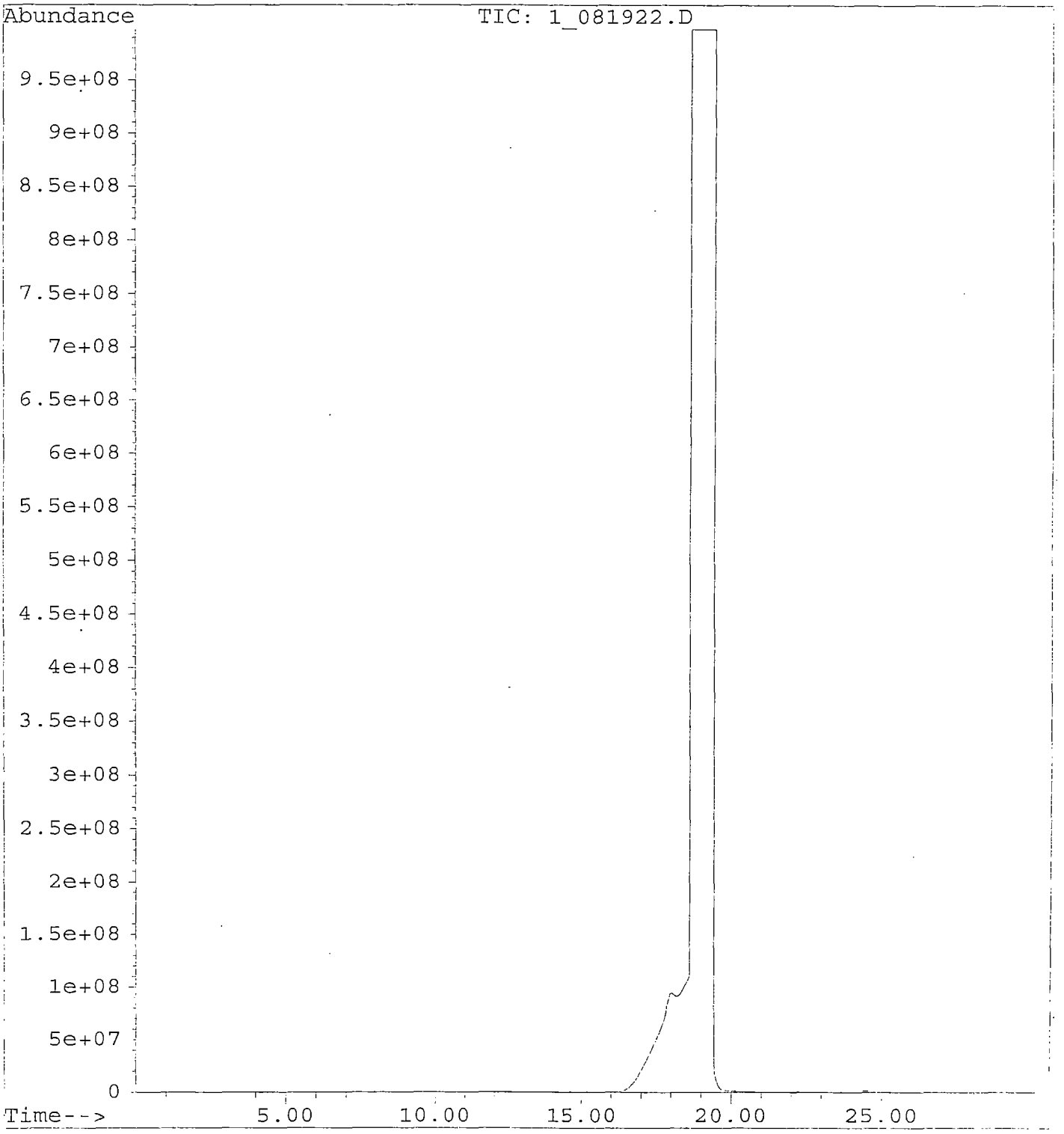
File : C:\HPCHEM\5\DATA\081901\1_081920.D
Operator : CD COL# 418002
Acquired : 20 Aug 01 00:39 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47266.22-E02D4-EPA
Misc Info : COL# 418002
Vial Number: 20



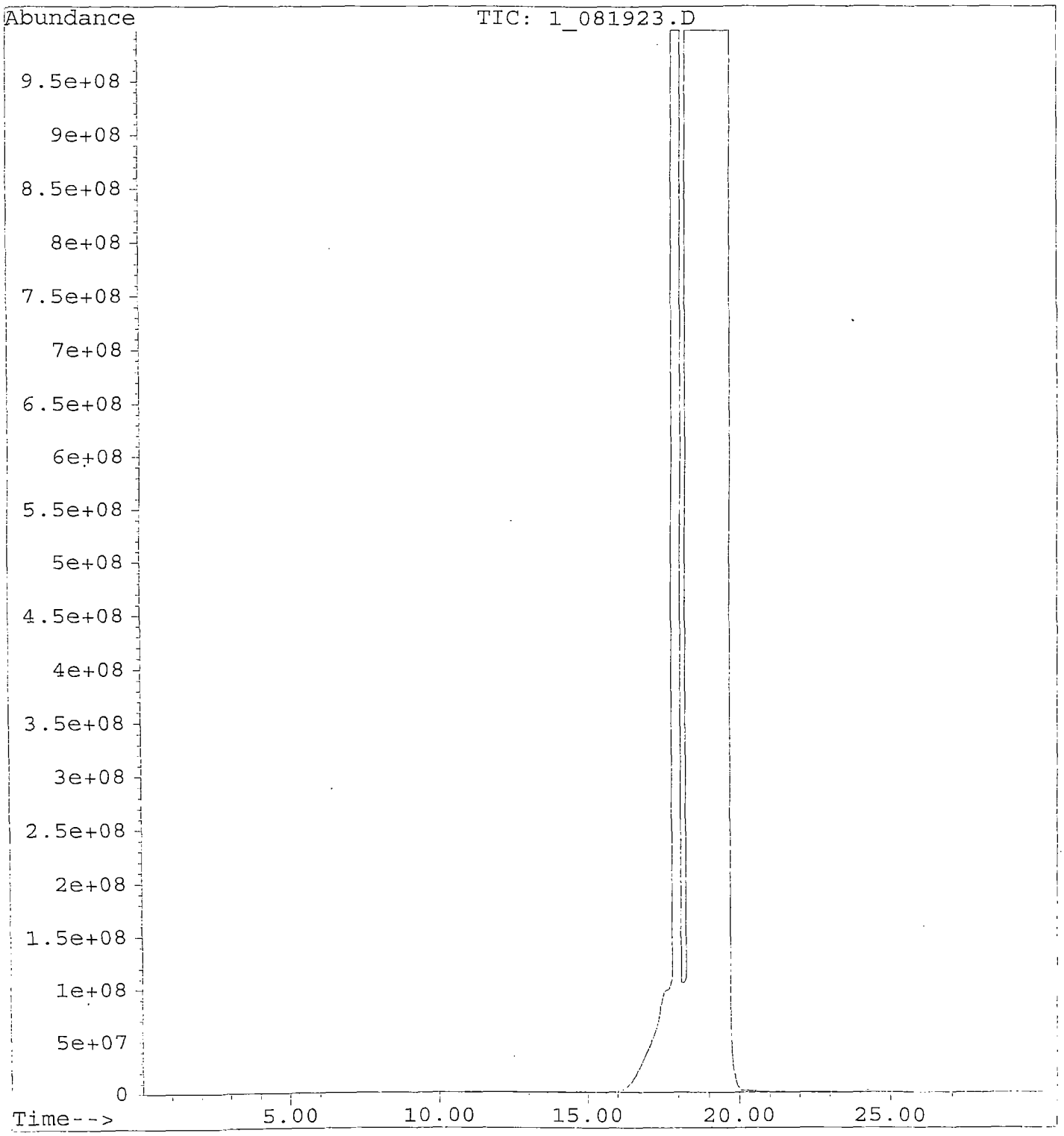
File : C:\HPCHEM\5\DATA\081901\1_081921.D
Operator : CD COL# 418002
Acquired : 20 Aug 01 01:09 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47266.16-E02D0-EPA
Misc Info : COL# 418002
Vial Number: 21



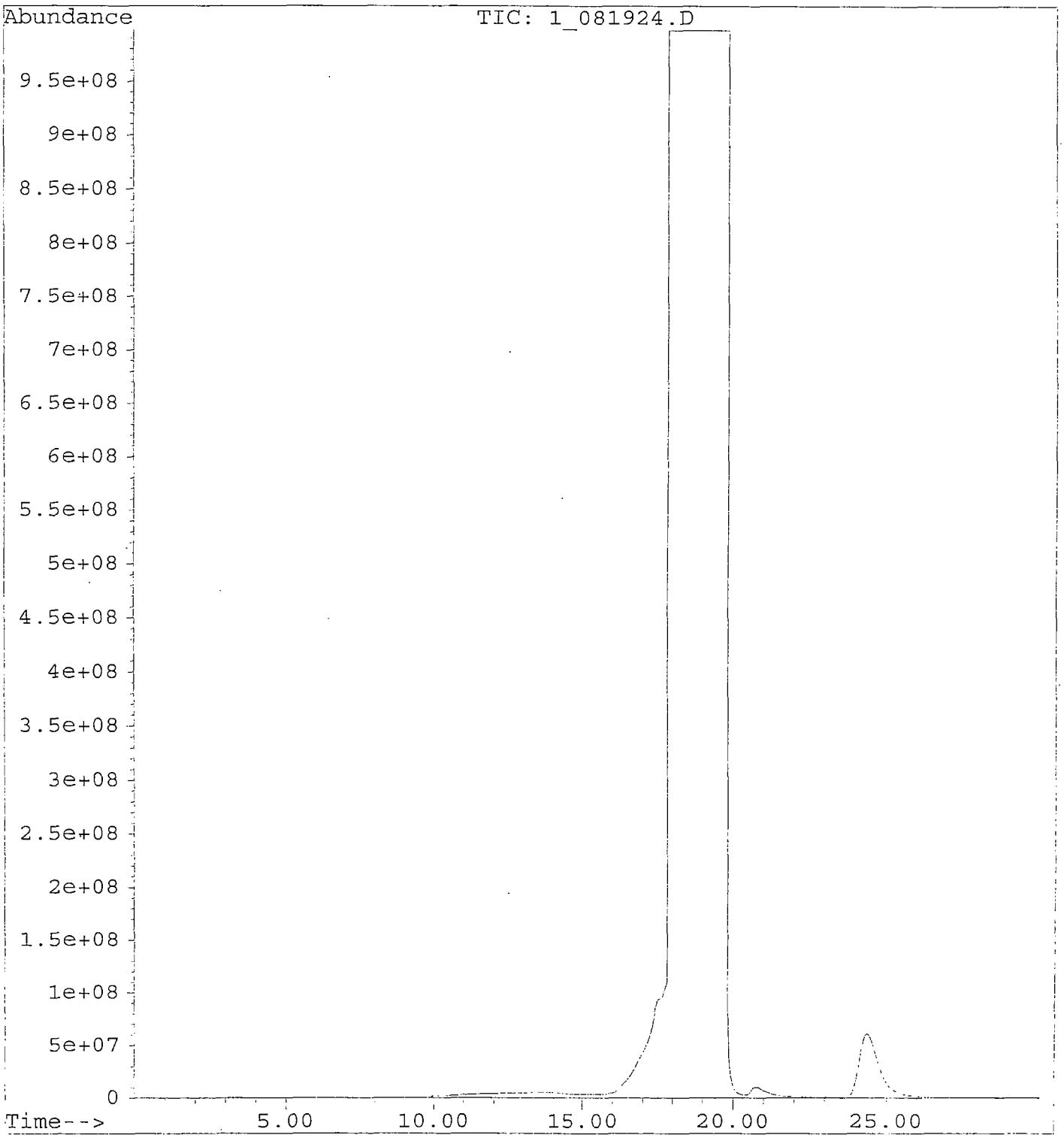
File : C:\HPCHEM\5\DATA\081901\1_081922.D
Operator : CD COL# 418002
Acquired : 20 Aug 01 01:41 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47266.17-MS-E02D0-EPA
Misc Info : COL# 418002
Vial Number: 22



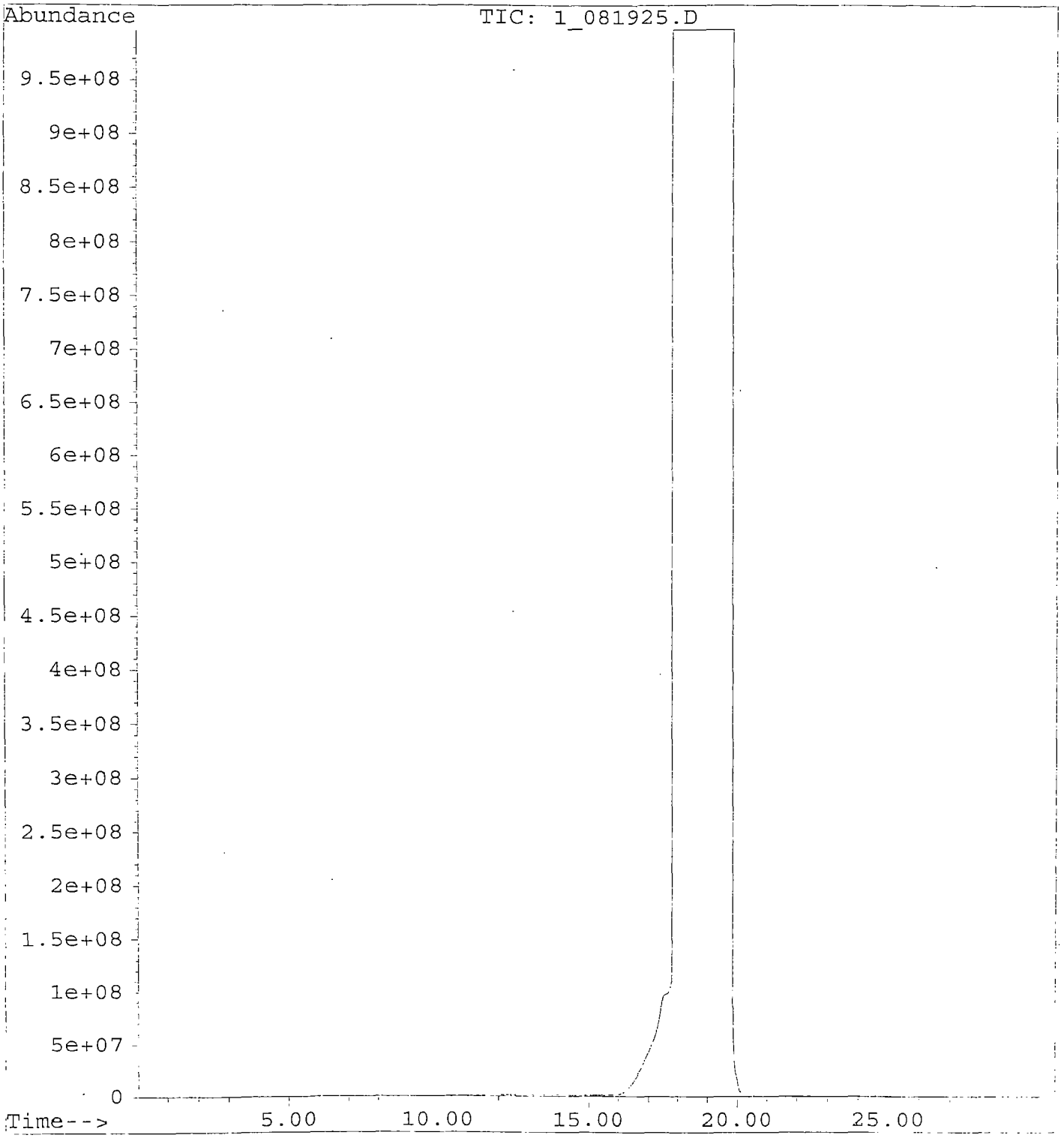
File : C:\HPCHEM\5\DATA\081901\1_081923.D
Operator : CD COL# 418002
Acquired : 20 Aug 01 02:11 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47266.18-MSD-E02D0-EPA
Misc Info : COL# 418002
Vial Number: 23



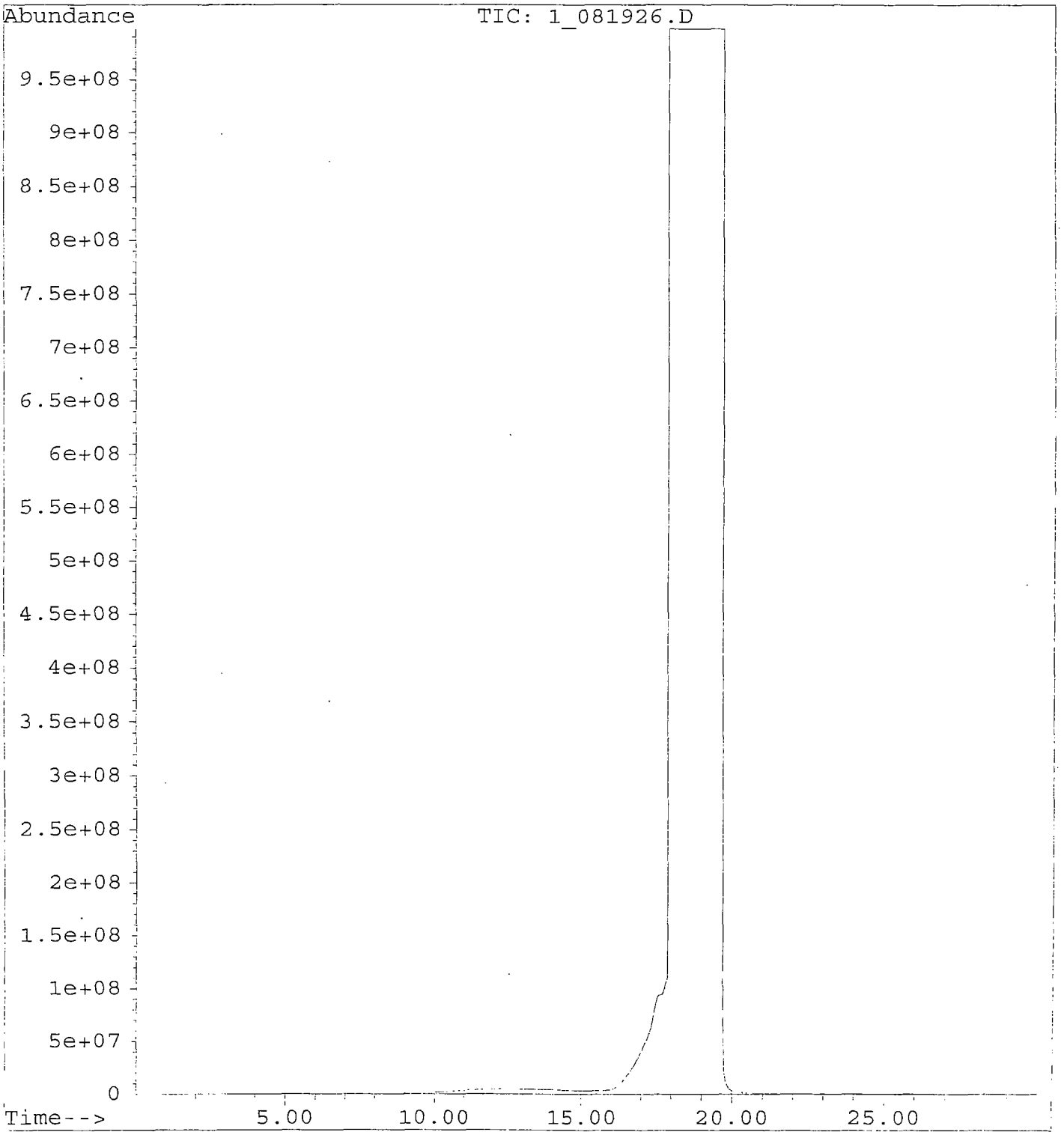
File : C:\HPCHEM\5\DATA\081901\1_081924.D
Operator : CD COL# 418002
Acquired : 20 Aug 01 02:42 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47266.06-E02C0-EPA
Misc Info : COL# 418002
Vial Number: 24



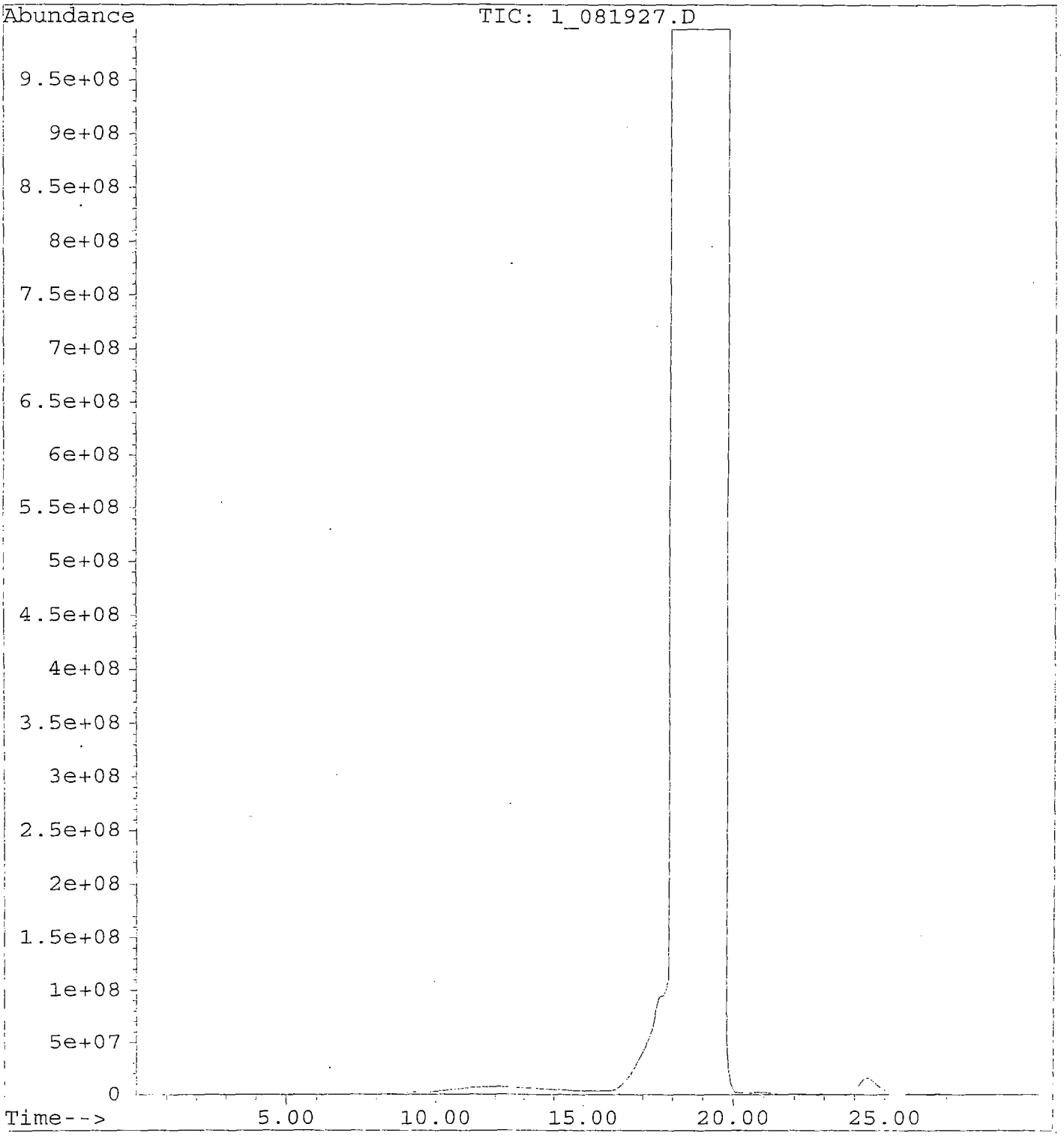
File : C:\HPCHEM\5\DATA\081901\1_081925.D
Operator : CD COL# 418002
Acquired : 20 Aug 01 03:13 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47266.11-E02C5-EPA
Misc Info : COL# 418002
Vial Number: 25



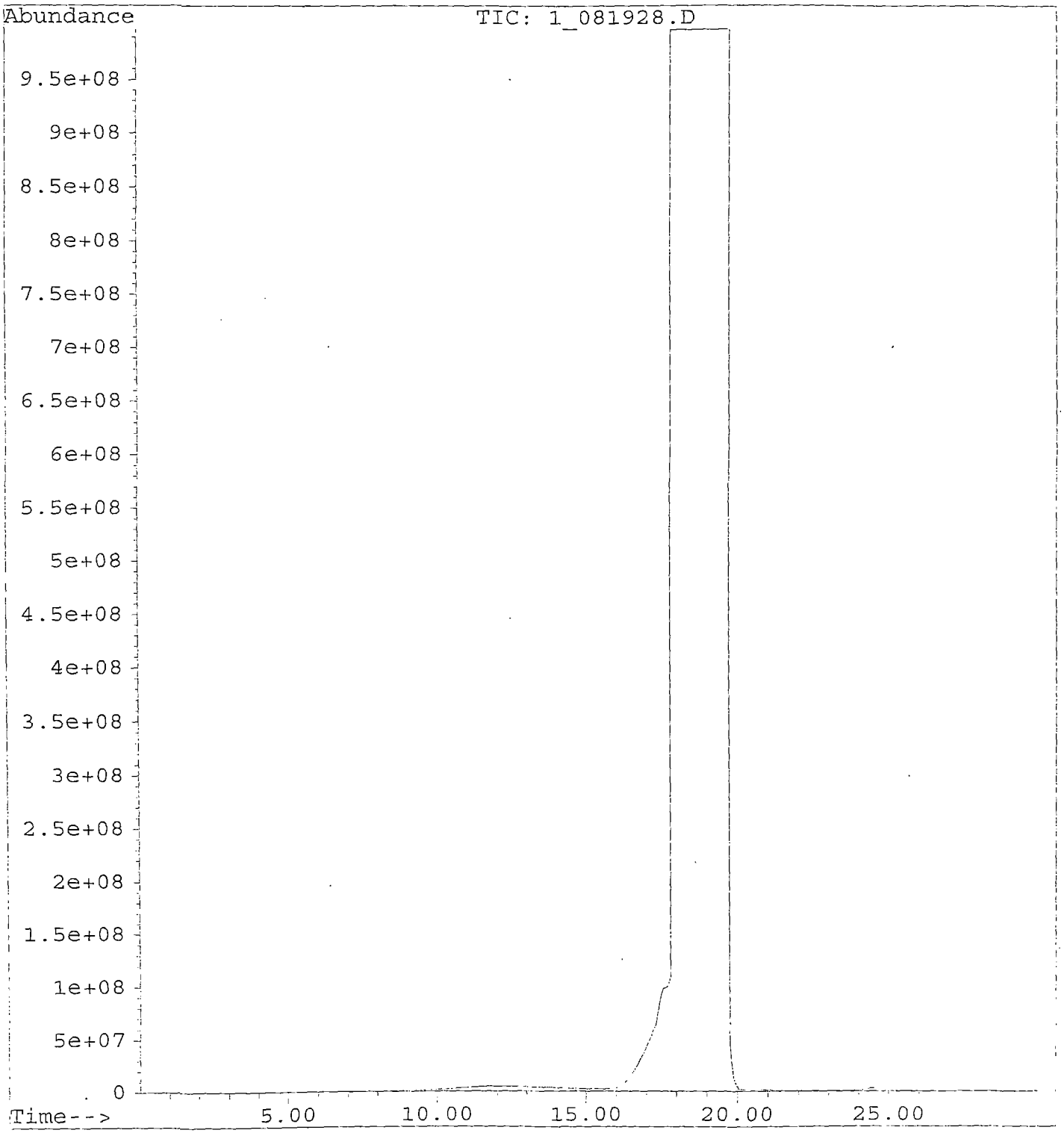
File : C:\HPCHEM\5\DATA\081901\1_081926.D
Operator : CD COL# 418002
Acquired : 20 Aug 01 03:44 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47266.15-E02C9-EPA
Misc Info : COL# 418002
Vial Number: 26



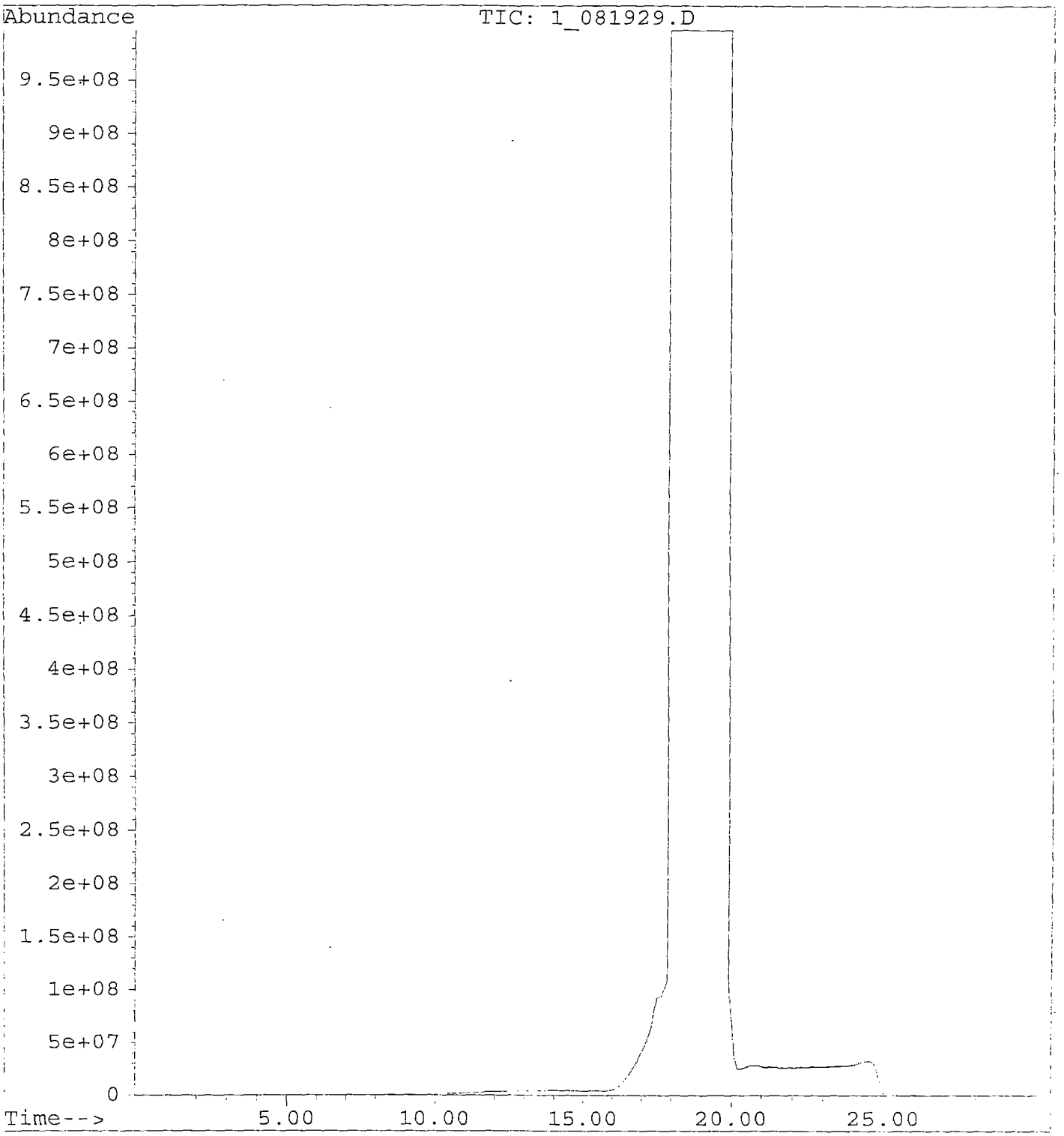
File : C:\HPCHEM\5\DATA\081901\1_081927.D
Operator : CD COL# 418002
Acquired : 20 Aug 01 04:15 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47266.20-E02D2-EPA
Misc Info : COL# 418002
Vial Number: 27



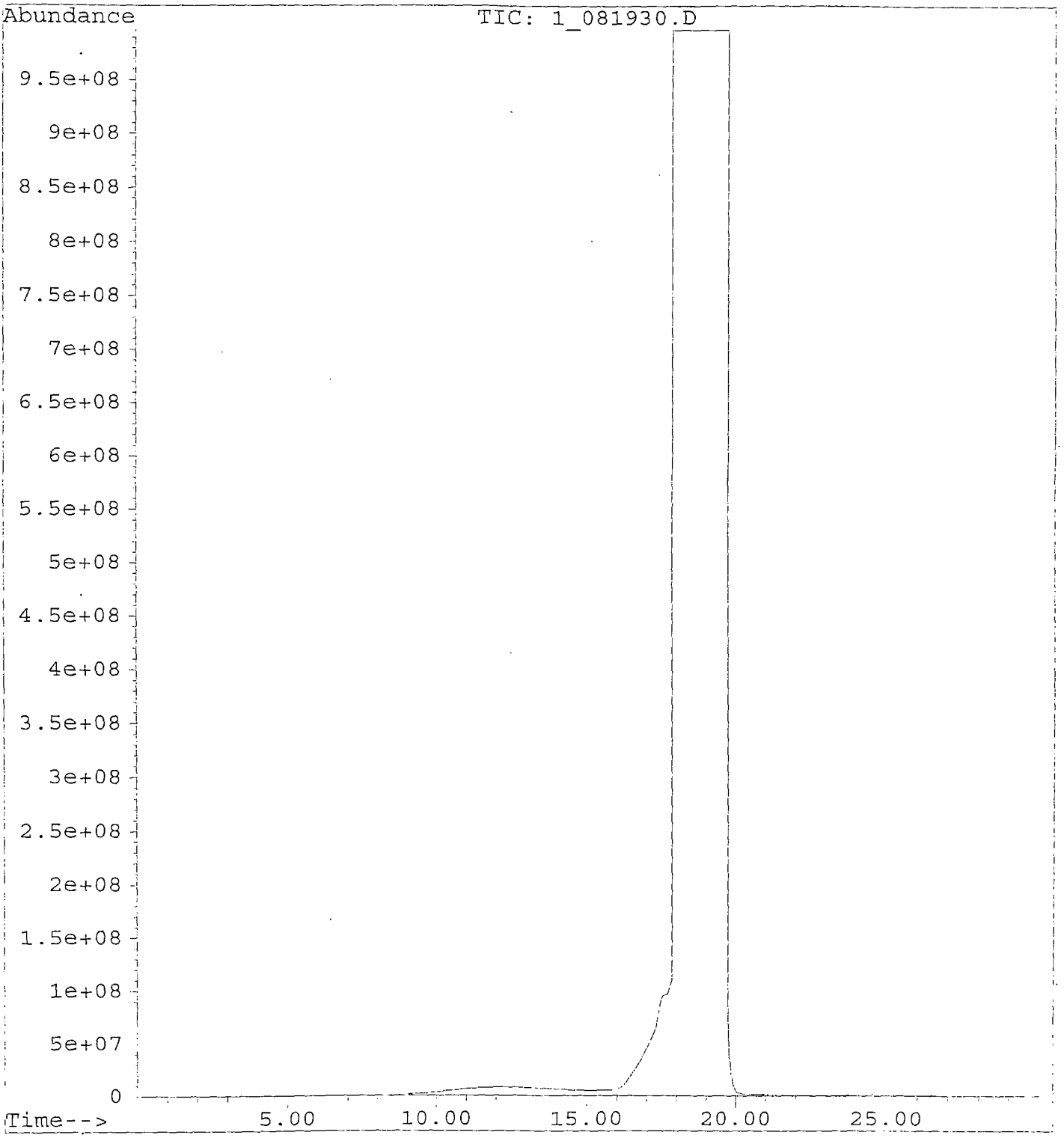
File : C:\HPCHEM\5\DATA\081901\1_081928.D
Operator : CD COL# 418002
Acquired : 20 Aug 01 04:46 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47266.21-E02D3-EPA
Misc Info : COL# 418002
Vial Number: 28



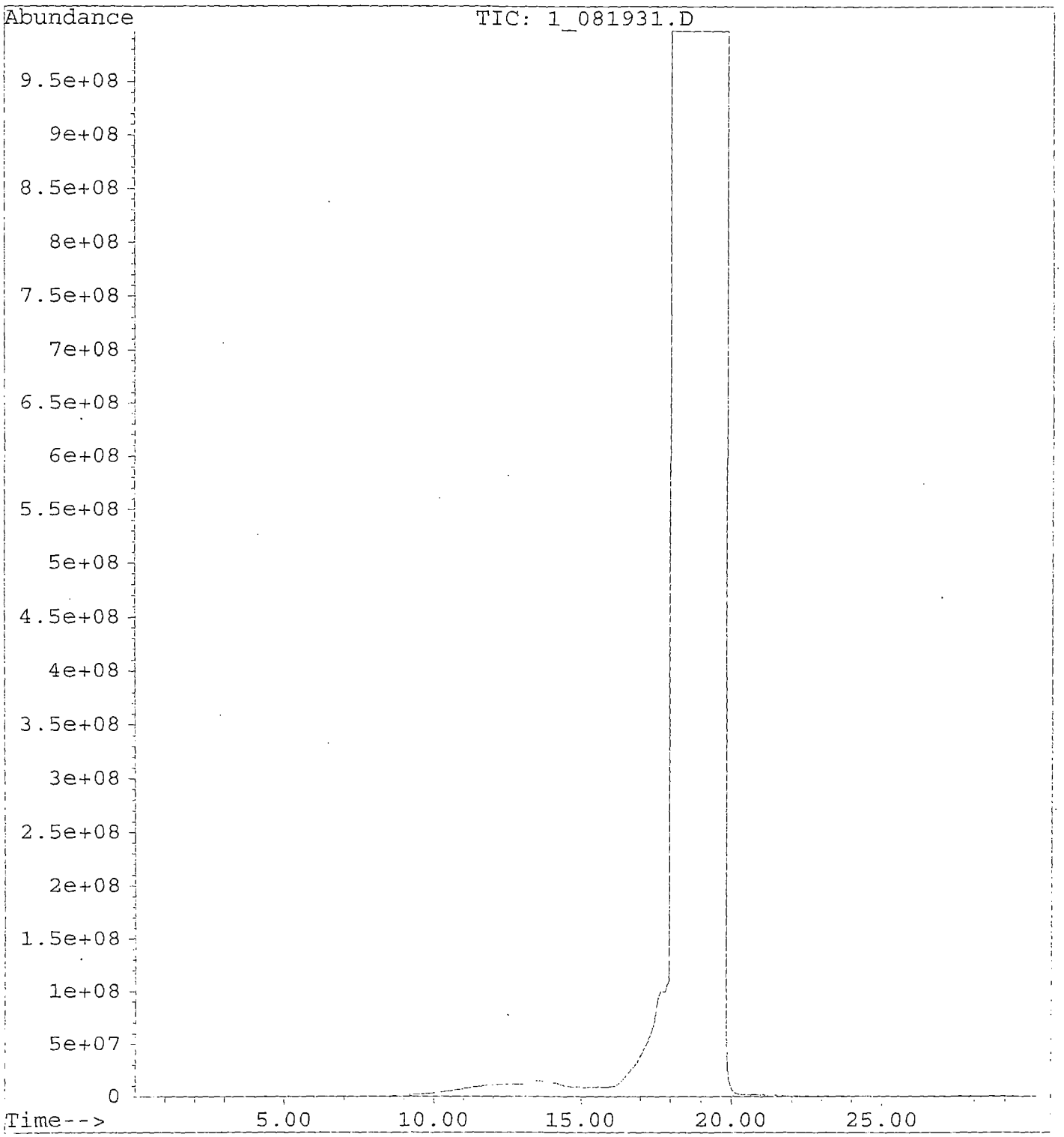
File : C:\HPCHEM\5\DATA\081901\1_081929.D
Operator : CD COL# 418002
Acquired : 20 Aug 01 05:17 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47266.04-E02B8-EPA
Misc Info : COL# 418002
Vial Number: 29



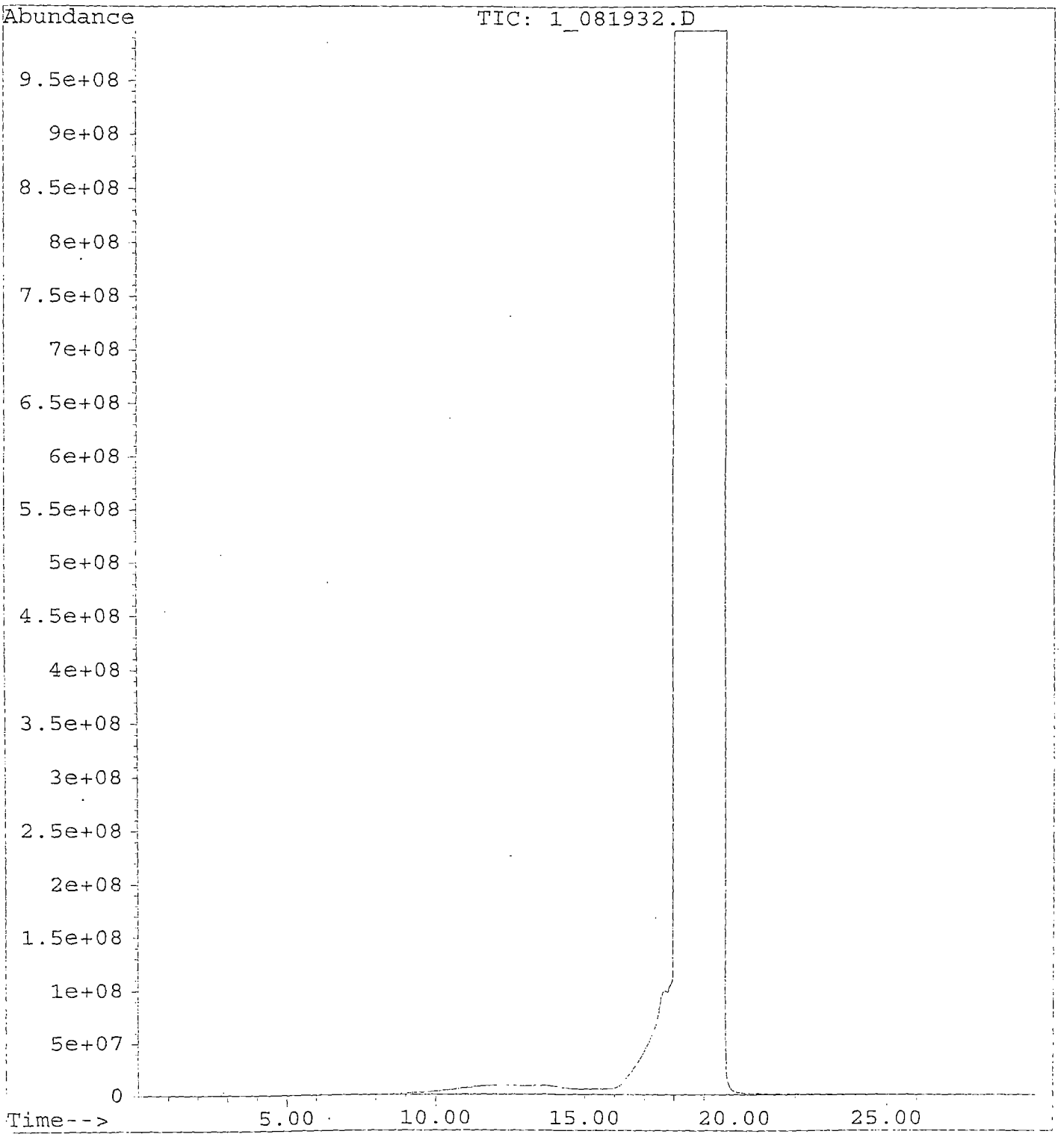
File : C:\HPCHEM\5\DATA\081901\1_081930.D
Operator : CD COL# 418002
Acquired : 20 Aug 01 05:48 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47266.12-E02C6-EPA
Misc Info : COL# 418002
Vial Number: 30



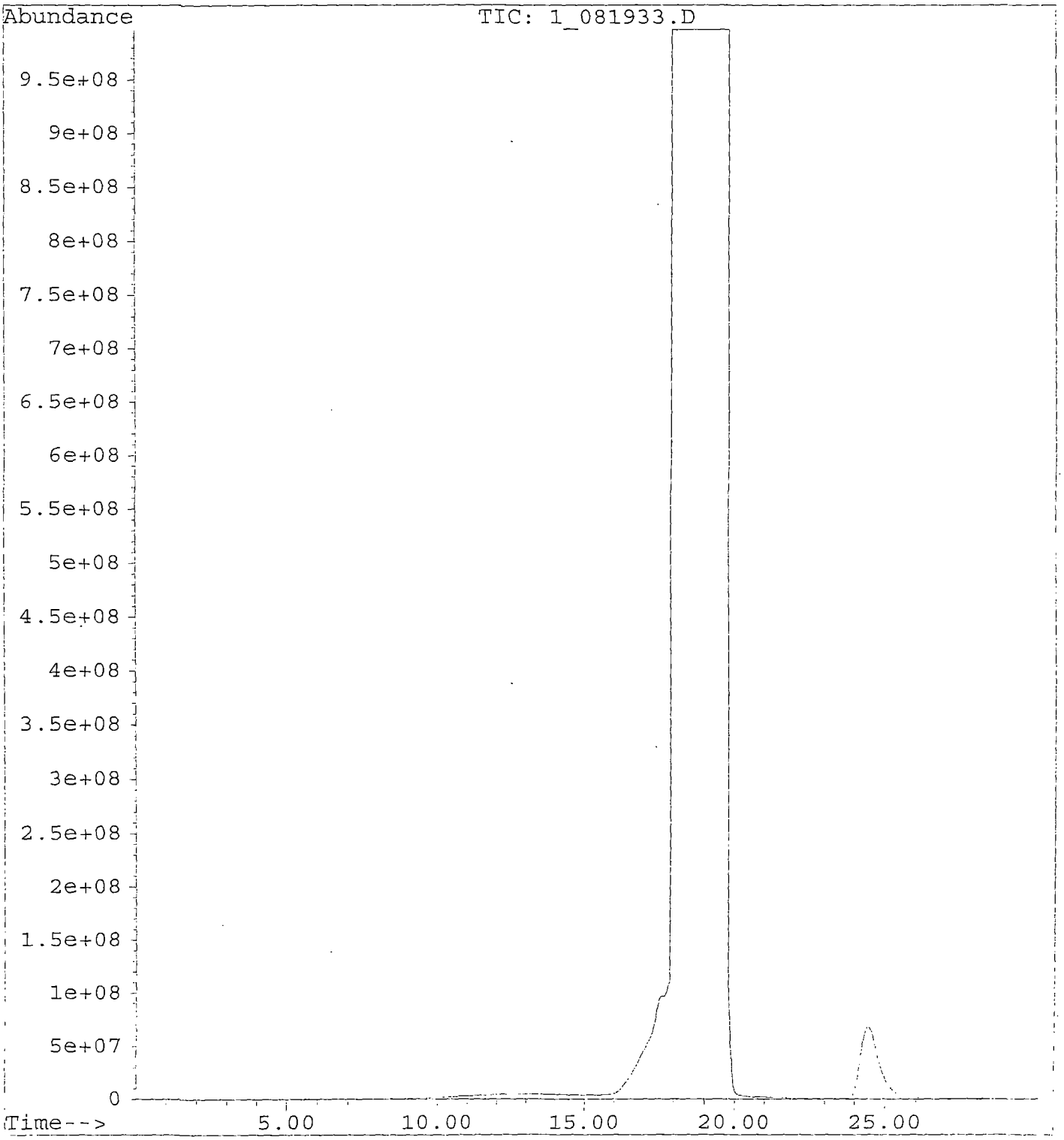
File : C:\HPCHEM\5\DATA\081901\1_081931.D
Operator : CD COL# 418002
Acquired : 20 Aug 01 06:19 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47266.13-E02C7-EPA
Misc Info : COL# 418002
Vial Number: 31



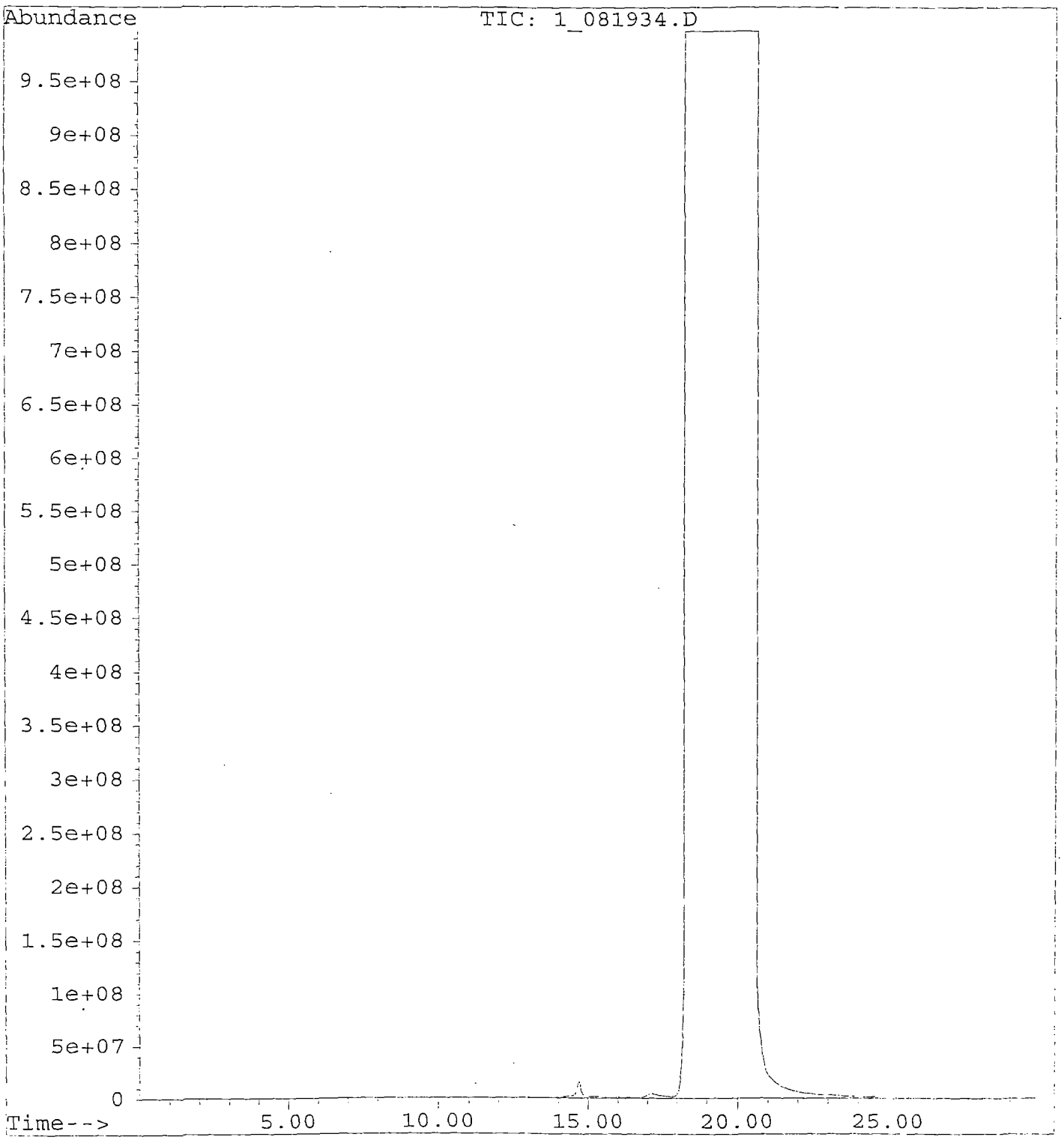
File : C:\HPCHEM\5\DATA\081901\1_081932.D
Operator : CD COL# 418002
Acquired : 20 Aug 01 06:50 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47266.14-E02C8-EPA
Misc Info : COL# 418002
Vial Number: 32



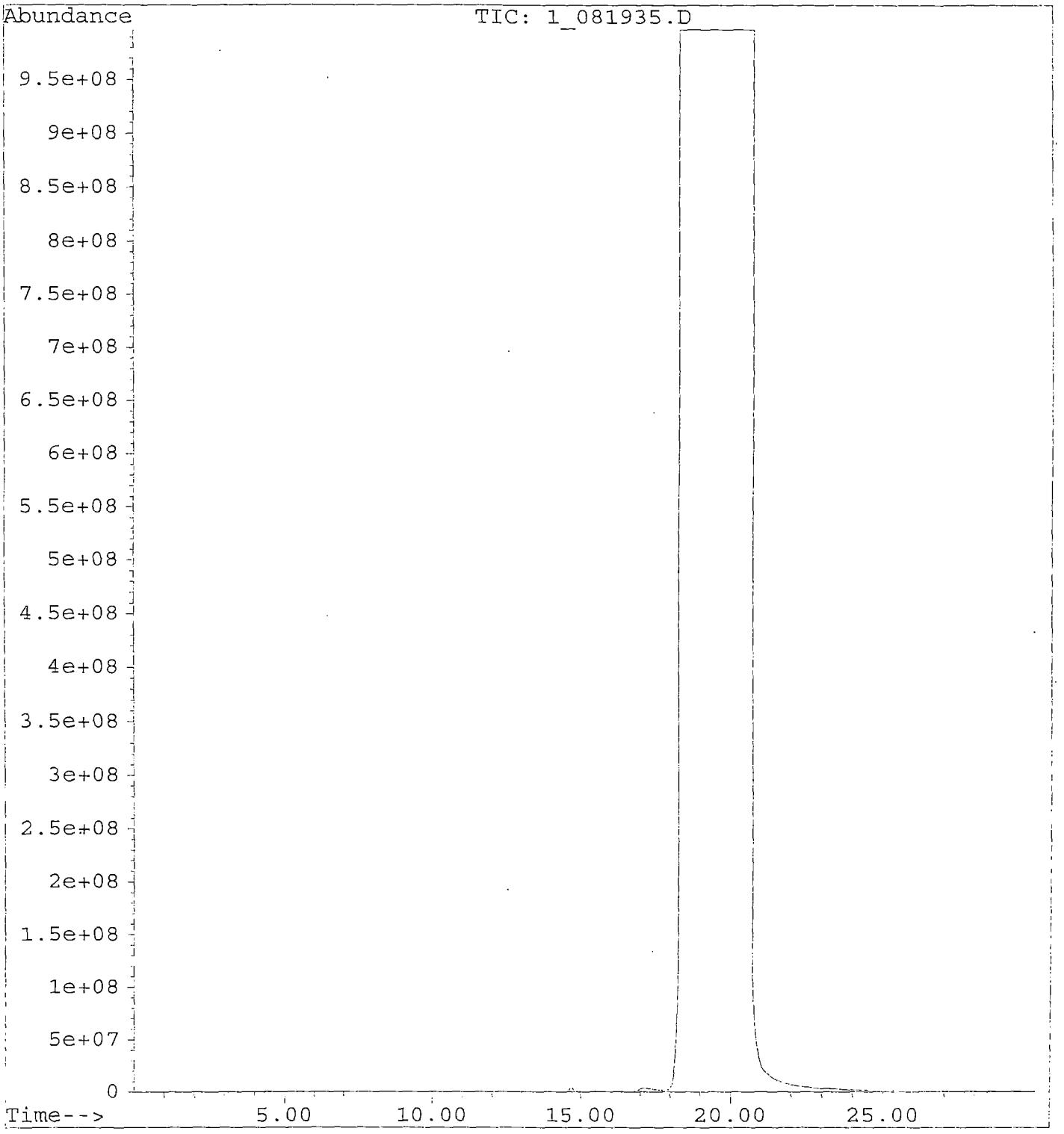
File : C:\HPCHEM\5\DATA\081901\1_081933.D
Operator : CD COL# 418002
Acquired : 20 Aug 01 07:21 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47266.19-E02D1-EPA
Misc Info : COL# 418002
Vial Number: 33



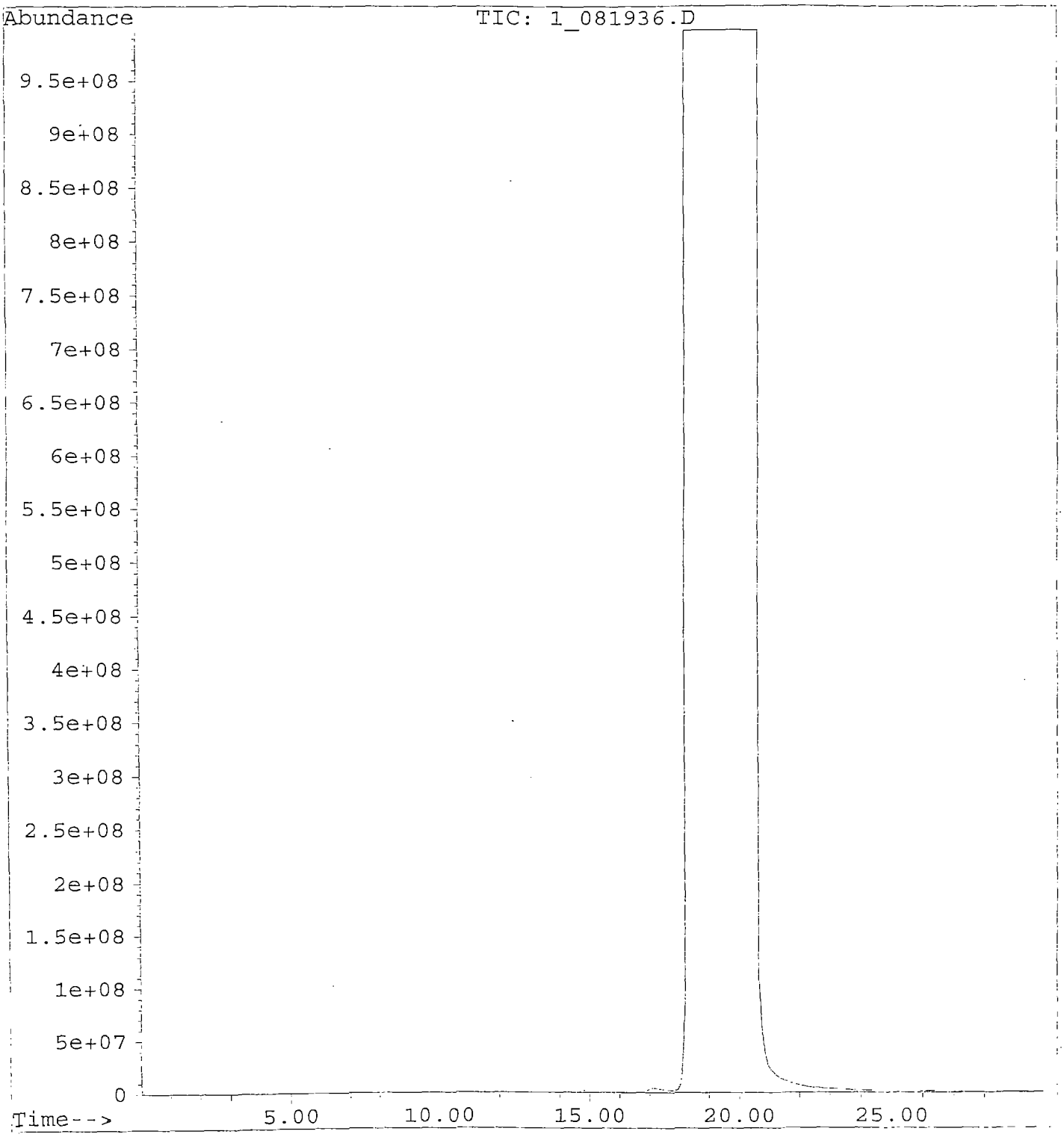
File : C:\HPCHEM\5\DATA\081901\1_081934.D
Operator : CD COL# 418002
Acquired : 20 Aug 01 07:52 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 34



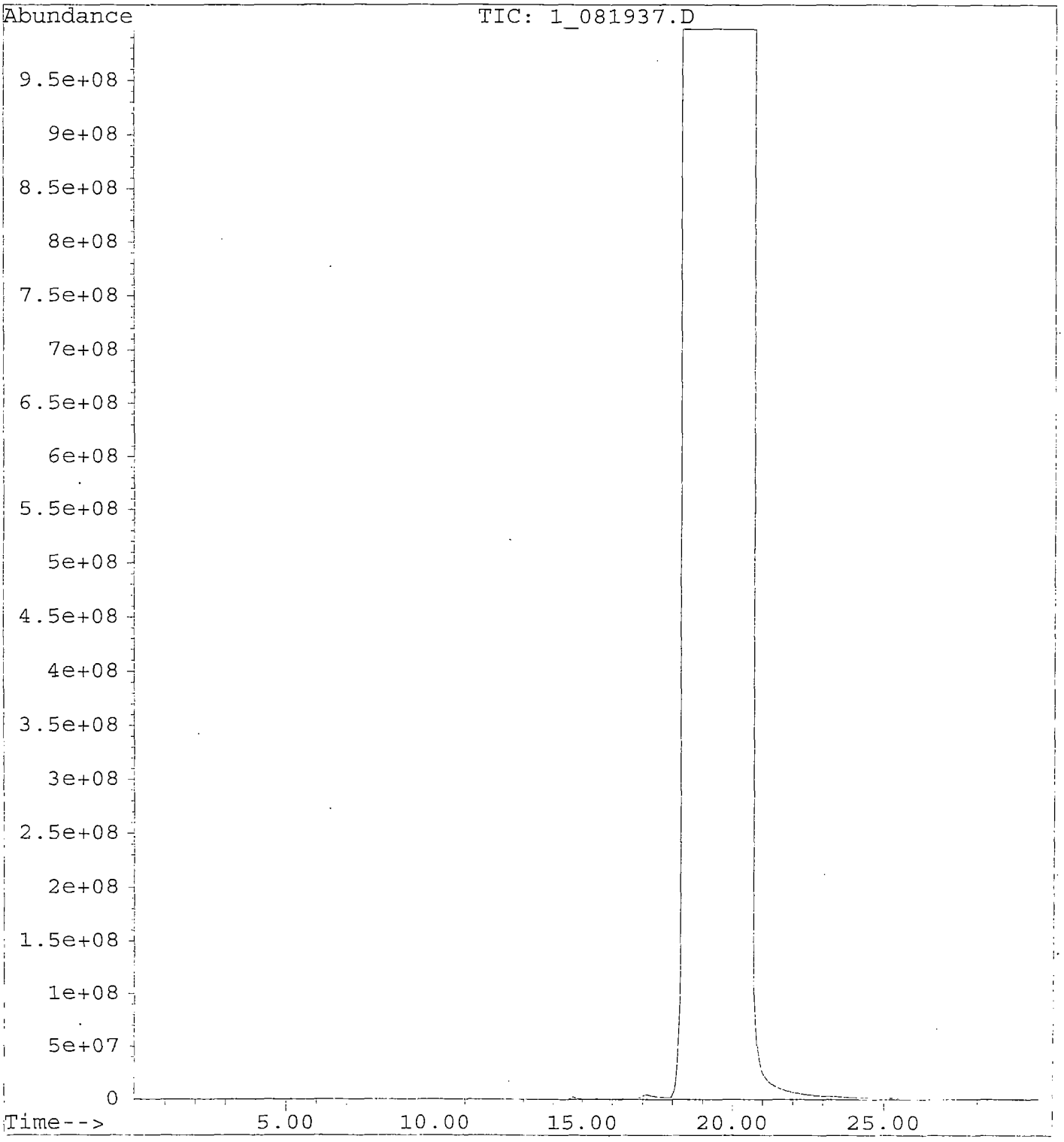
File : C:\HPCHEM\5\DATA\081901\1_081935.D
Operator : CD COL# 418002
Acquired : 20 Aug 01 08:23 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 35



File : C:\HPCHEM\5\DATA\081901\1_081936.D
Operator : CD COL# 418002
Acquired : 20 Aug 01 08:54 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 36

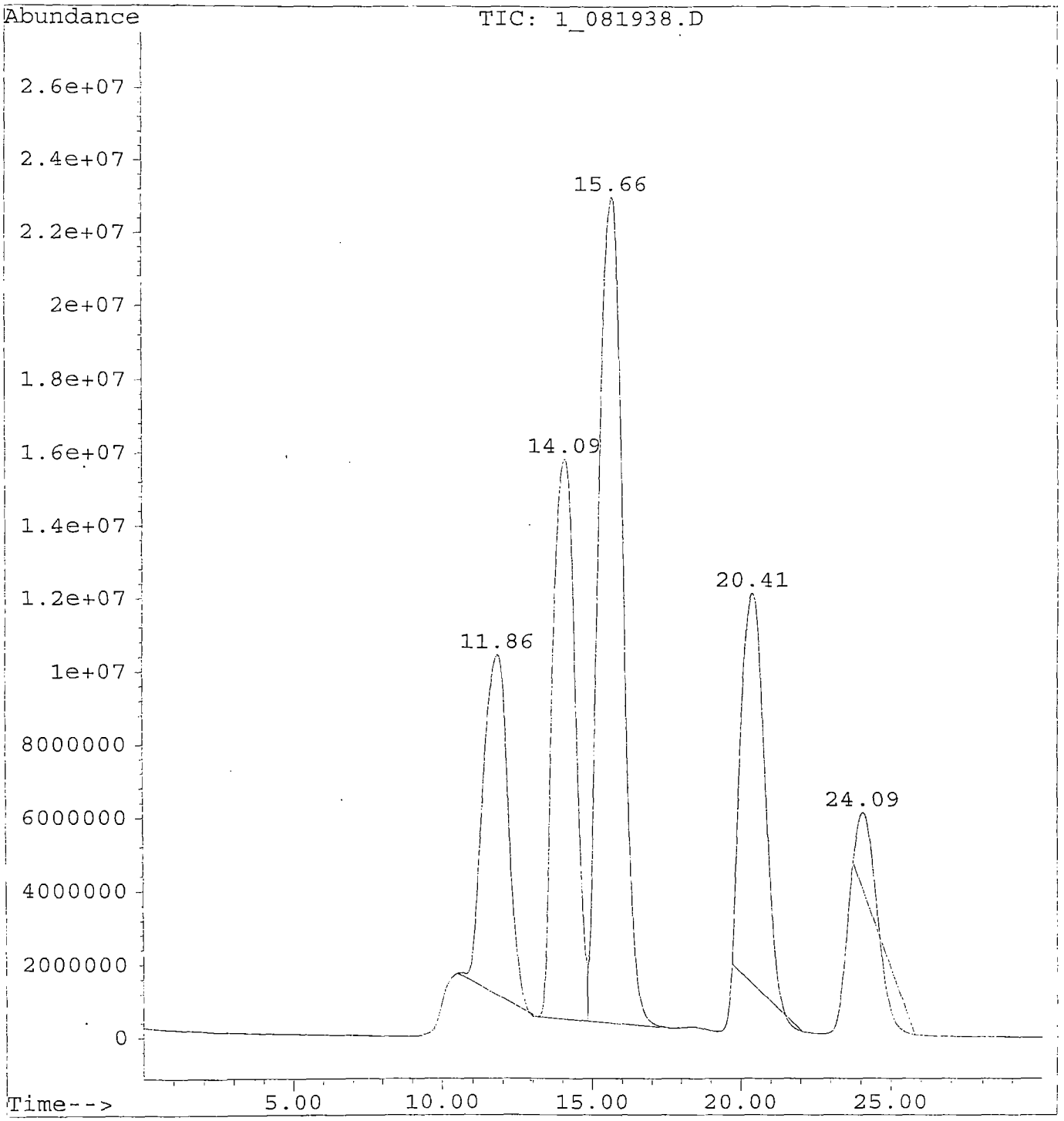


File : C:\HPCHEM\5\DATA\081901\1_081937.D
Operator : CD COL# 418002
Acquired : 20 Aug 01 09:25 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 37



Data File : C:\HPCHEM\5\DATA\081901\1_081938.D
Acq On : 20 Aug 01 09:56 AM
Sample : CAL STD (FINAL)
Misc : COL# 418002

Vial: 38
Operator: CD COL#
Inst : GPC1
Multiplr: 1.00



1) 11.86 = Corn Oil

3) 14.09 = Pthalate
4) 15.66 = Methoxychlor
5) 20.41 = Perylene

Chromatographic Resolution Report

Data File : C:\HPCHEM\5\DATA\081901\1_081938.D
Acq On : 20 Aug 01 09:56
Sample : CAL STD (FINAL)
Misc : COL# 418002

Vial: 38
Operator: CD COL# 41
Inst : GPC1
Multiplr: 1.00

Method : C:\HPCHEM\5\METHODS\GPC.M
Title :

RT#1	RT#2	Resolution
11.861	14.092	100.00
14.092	15.657	90.16
15.657	20.406	100.00
20.406	24.088	100.00

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# 29602

DATE/TIME	POS.	SAMPLE ID	FILE	COMMENT
08/20/01 12:23	1	CAL STD (INITIAL)	1_082001	
08/20/01 12:54	2	SB	1_082002	
08/20/01 13:25	3	SB	1_082003	
08/20/01 13:56	4	SB	1_082004	
08/20/01 14:28	5	SB	1_082005	
08/20/01 14:59	6	SB#082001A (PEST)	1_082006	
08/20/01 15:30	7	SB#082001B (PEST)	1_082007	
08/20/01 16:01	8	BL0815SA-EPA	1_082008	
08/20/01 16:32	9	BB0815SA-EPA	1_082009	
08/20/01 17:03	10	LC0815SA-EPA	1_082010	
08/20/01 17:33	11	LD0815SA-EPA	1_082011	
08/20/01 18:05	12	47266.17-E02D0MS-EPA	1_082012	
08/20/01 18:35	13	47268.06-E02G0-EPA	1_082013	
08/20/01 19:06	14	47268.07-E02G1-EPA	1_082014	
08/20/01 19:37	15	47268.08-E02G2-EPA	1_082015	
08/20/01 20:08	16	47279.01-E02G7-EPA	1_082016	
08/20/01 20:39	17	47279.02-E02G8-EPA	1_082017	
08/20/01 21:10	18	47279.08-E02H4-EPA	1_082018	
08/20/01 21:41	19	47279.03-E02G9-EPA	1_082019	
08/20/01 22:12	20	47279.04-E02H0-EPA	1_082020	
08/20/01 22:43	21	47279.05-E02H1-EPA	1_082021	

8/21/01 Verification Signature/Date

8/21/01 Analyst Signature/Date

Book: OE-102-16-RUN-19 Page No.: 102

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# 29602

DATE/TIME	POS.	SAMPLE ID	FILE	COMMENT
08/20/01 23:14	22	47279.06-E02H2-EPA	1_082022	
08/20/01 23:45	23	47279.07-E02H3-EPA	1_082023	
08/21/01 00:16	24	47268.02-E02F6-EPA	1_082024	
08/21/01 00:47	25	47268.03-E02F7-EPA	1_082025	
08/21/01 01:18	26	47268.04-E02F8-EPA	1_082026	
08/21/01 01:48	27	47268.05-E02F9-EPA	1_082027	
08/21/01 02:20	28	47268.09-E02G3-EPA	1_082028	
08/21/01 02:51	29	47268.10-E02G4-EPA	1_082029	
08/21/01 03:22	30	47268.11-E02G5-EPA	1_082030	
08/21/01 03:52	31	47268.12-E02G6-EPA	1_082031	
08/21/01 04:24	32	47268.13-E02G6MS-EPA	1_082032	
08/21/01 04:55	33	47268.14-E02G6MSD-EPA	1_082033	
08/21/01 05:26	34	47268.01-E02F5-EPA	1_082034	
08/21/01 05:57	35	SB	1_082035	
08/21/01 06:28	36	SB	1_082036	
08/21/01 06:59	37	SB	1_082037	
08/21/01 07:30	38	SB	1_082038	
08/21/01 08:01	39	CAL STD (FINAL)	1_082039	

Compound	Initial RT	Final RT	% Difference
Phthalate	14.14	14.08	0.42
Methoxychlor	15.73	15.66	0.44
Perylene	20.46	20.38	0.39

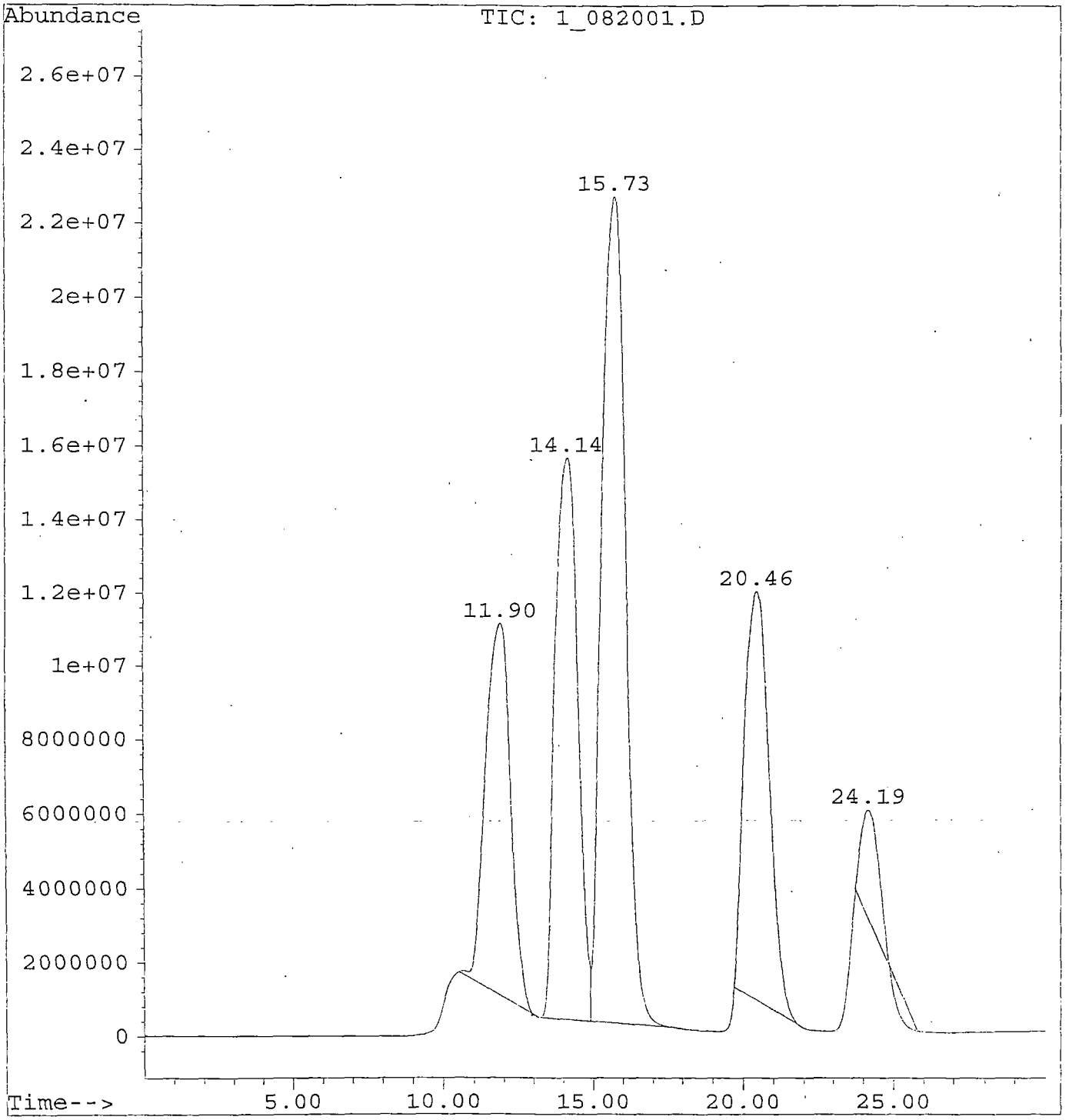
8/21/01
Verification Signature/Date

8/21/01
Analyst Signature/Date

Book: OE-102-16-RUN-19 Page No.: 103

Data File : C:\HPCHEM\5\DATA\082001\1_082001.D
Acq On : 20 Aug 01 12:23
Sample : CAL STD (INITIAL)
Misc : COL# 418002

Vial: 1
Operator: CR COL#
Inst : GPC1
Multiplr: 1.00



1) 11.90 = Corn Oil

3) 14.14 = Pthalate
4) 15.73 = Methoxychlor
5) 20.46 = Perylene

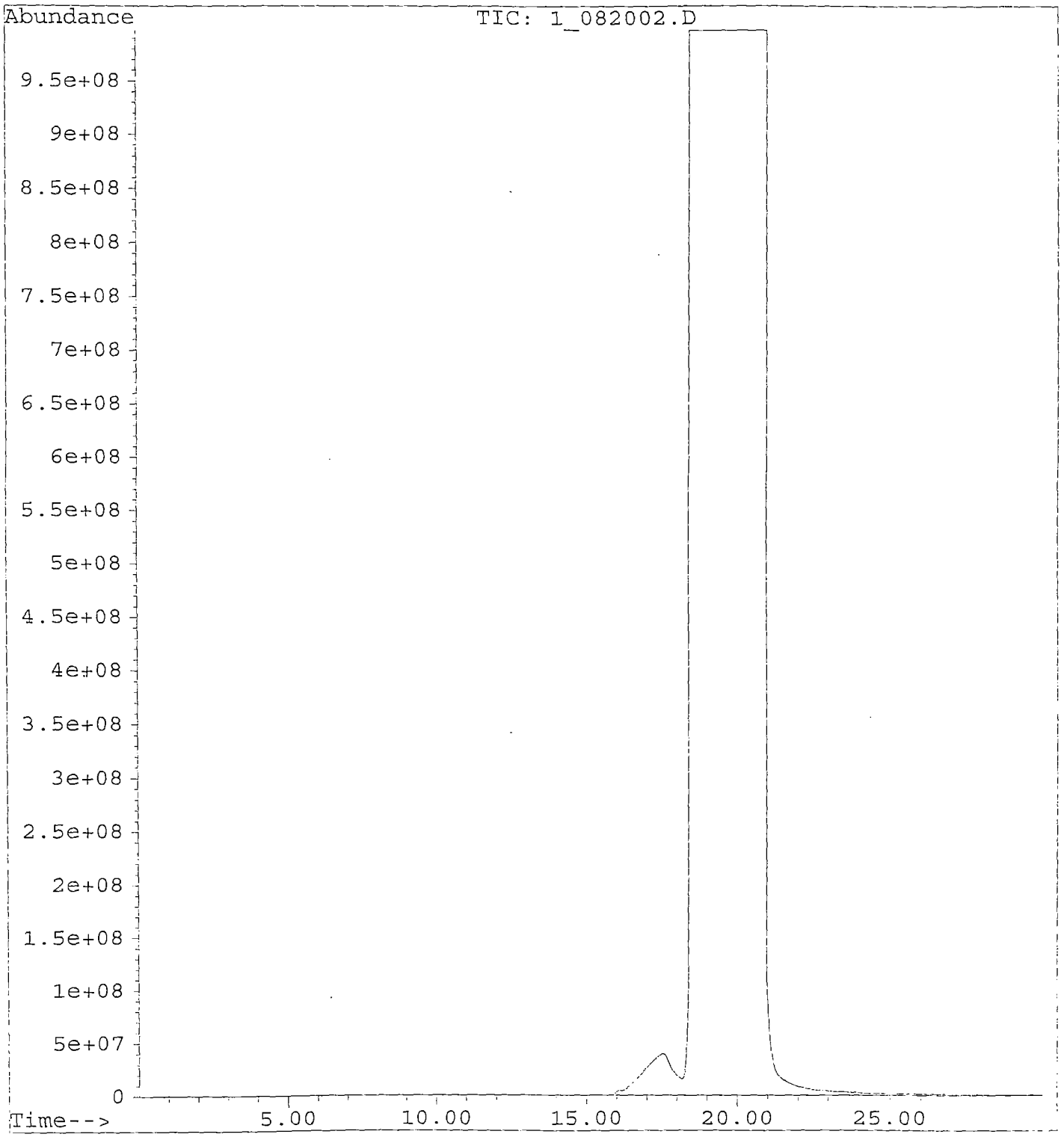
Chromatographic Resolution Report

Data File : C:\HPCHEM\5\DATA\082001\1_082001.D Vial: 1
Acq On : 20 Aug 01 12:23 Operator: CR COL# 41
Sample : CAL STD (INITIAL) Inst : GPC1
Misc : COL# 418002 Multiplr: 1.00

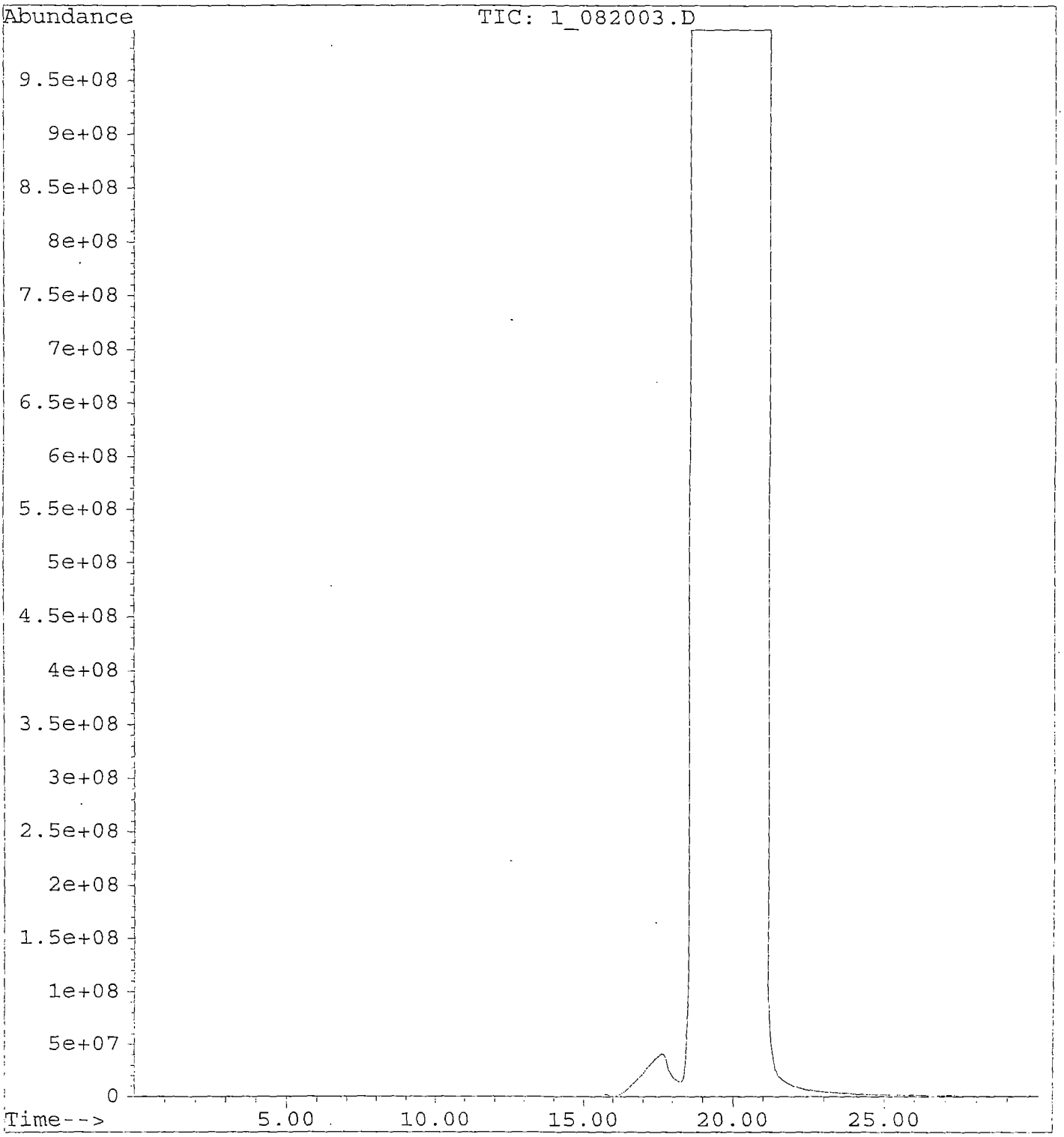
Method : C:\HPCHEM\5\METHODS\GPC.M
Title :

RT#1	RT#2	Resolution
11.900	14.138	100.00
14.138	15.729	90.85
15.729	20.461	100.00
20.461	24.187	100.00

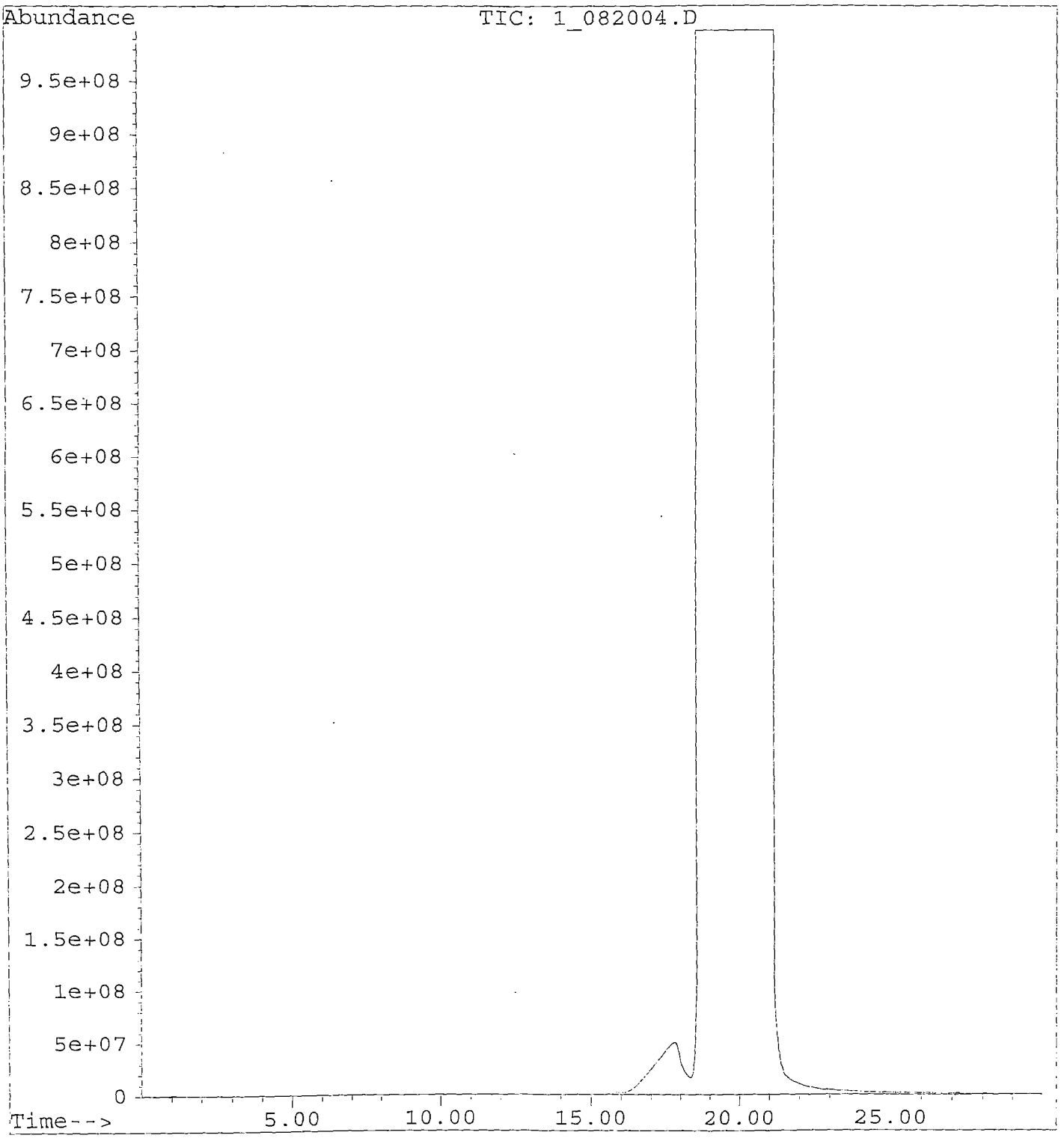
File : C:\HPCHEM\5\DATA\082001\1_082002.D
Operator : CR COL# 418002
Acquired : 20 Aug 01 12:54 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 2



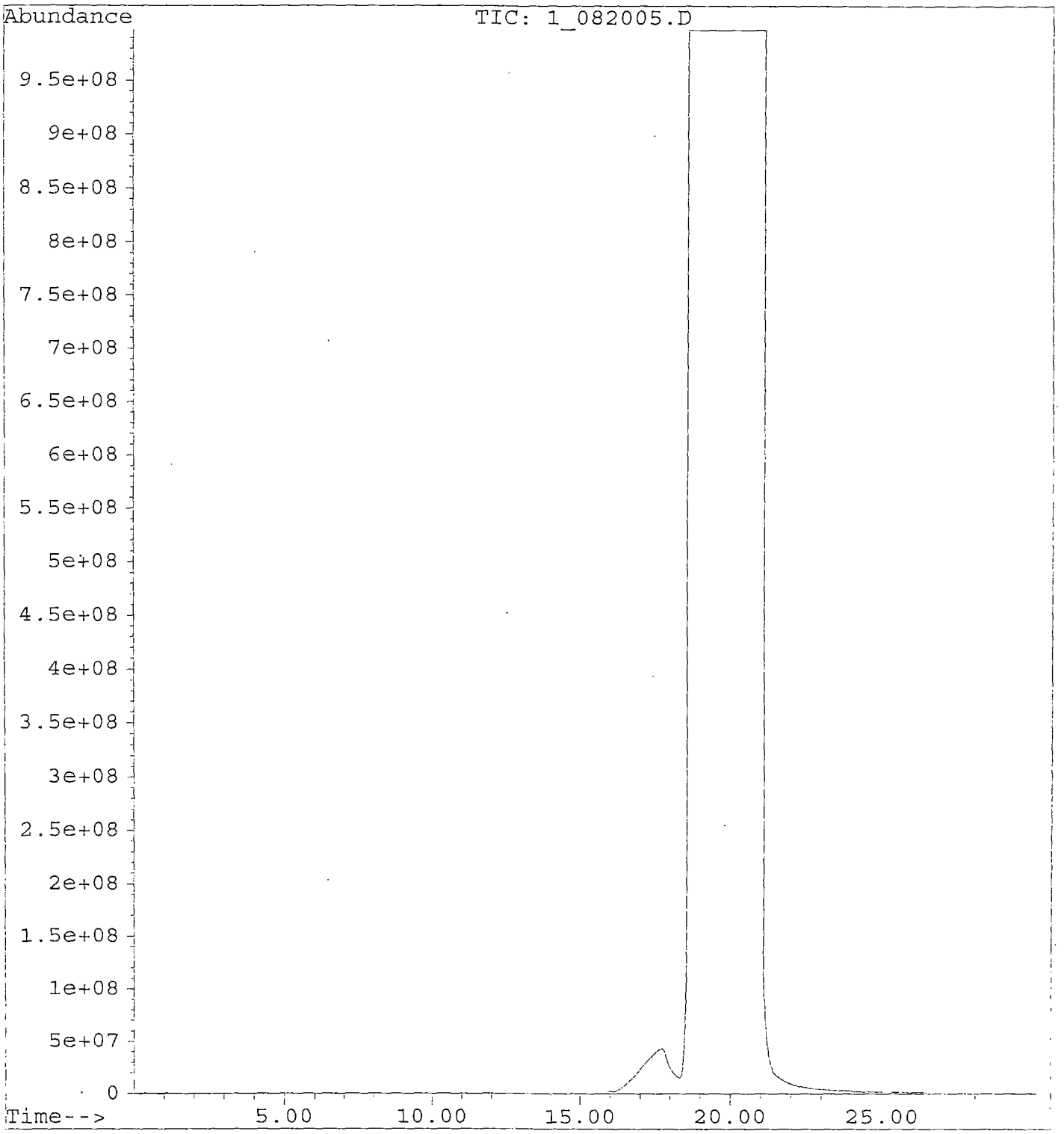
File : C:\HPCHEM\5\DATA\082001\1_082003.D
Operator : CR COL# 418002
Acquired : 20 Aug 01 13:25 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 3



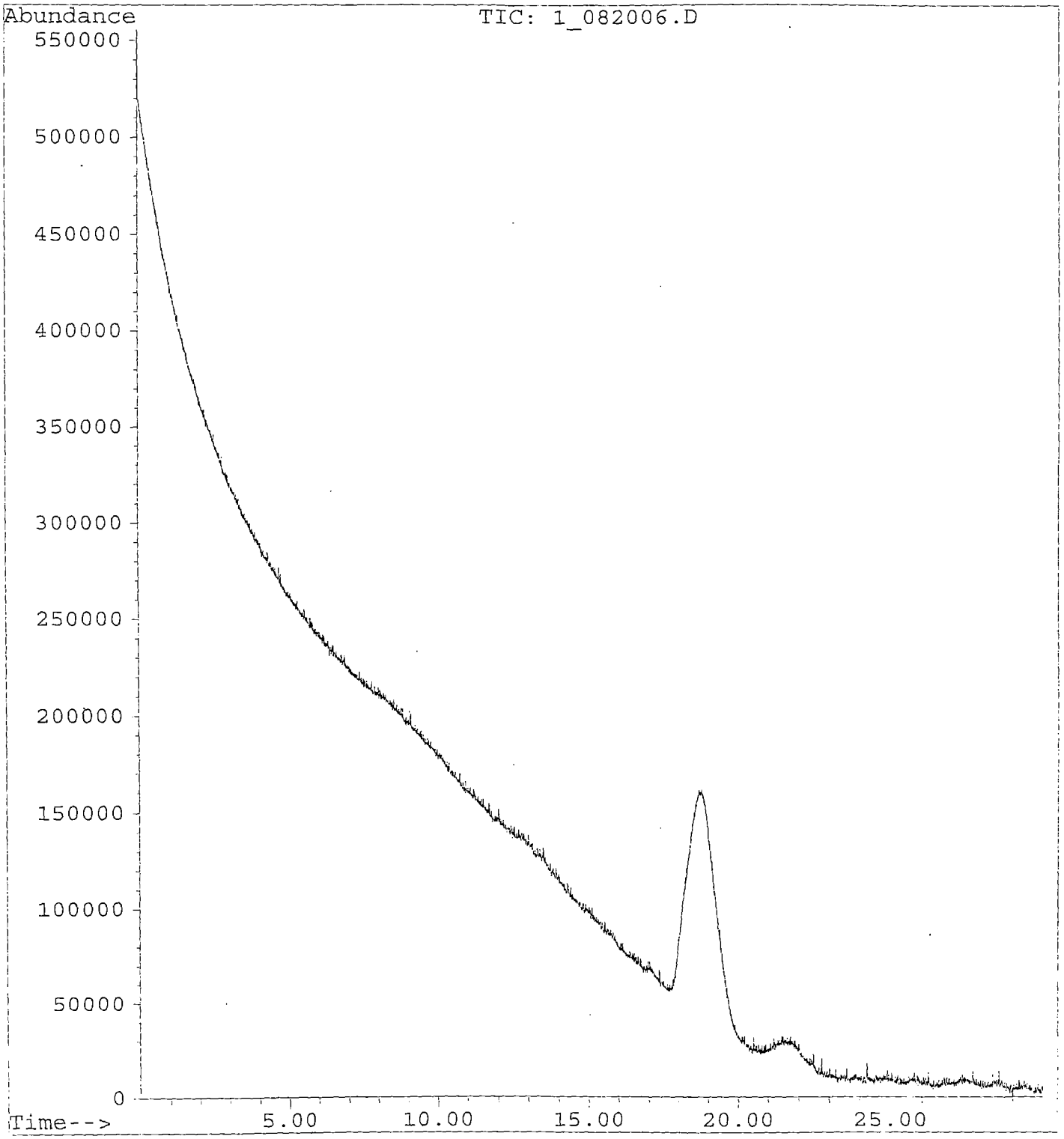
File : C:\HPCHEM\5\DATA\082001\1_082004.D
Operator : CR COL# 418002
Acquired : 20 Aug 01 13:56 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 4



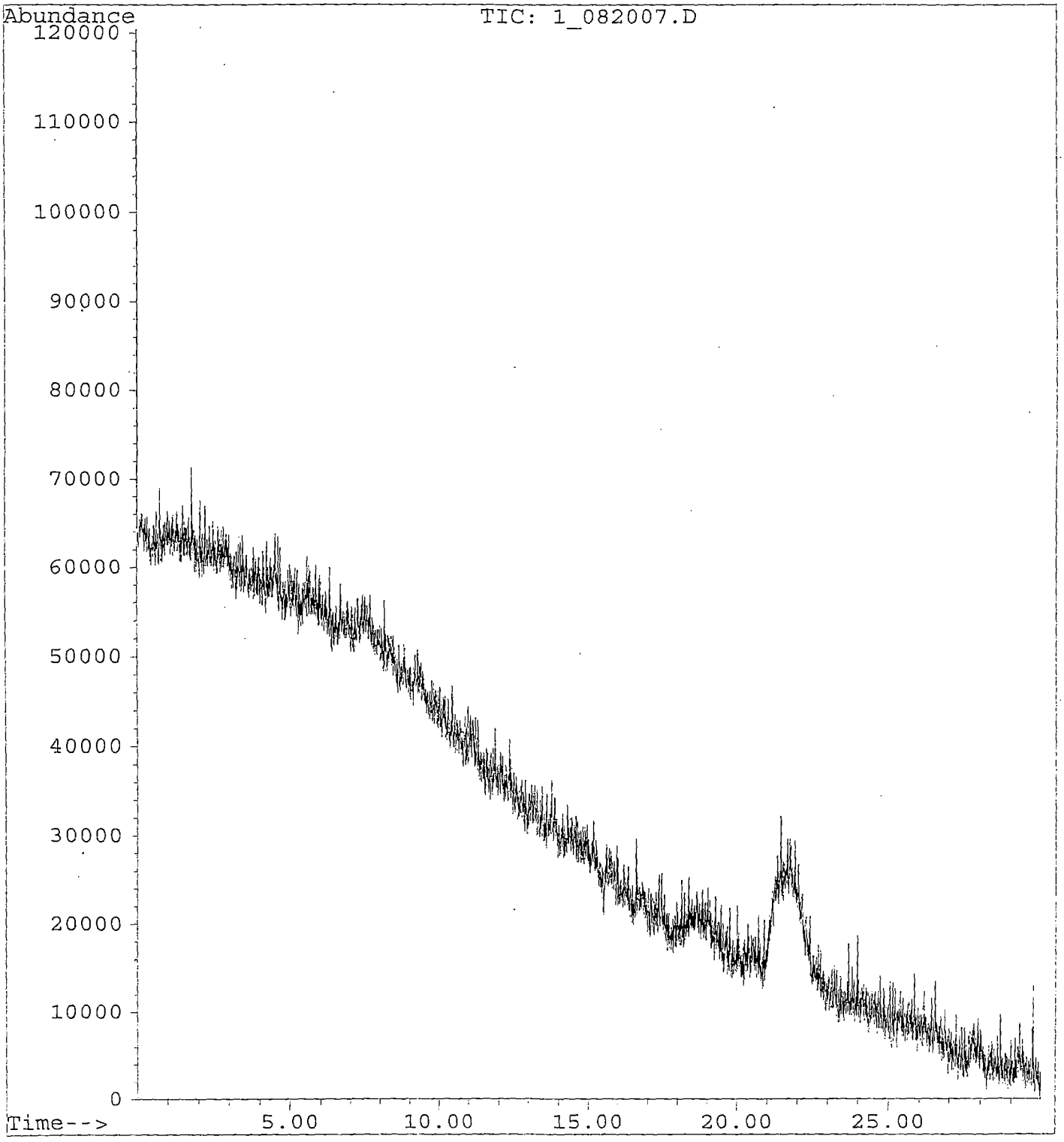
File : C:\HPCHEM\5\DATA\082001\1_082005.D
Operator : CR COL# 418002
Acquired : 20 Aug 01 14:28 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 5



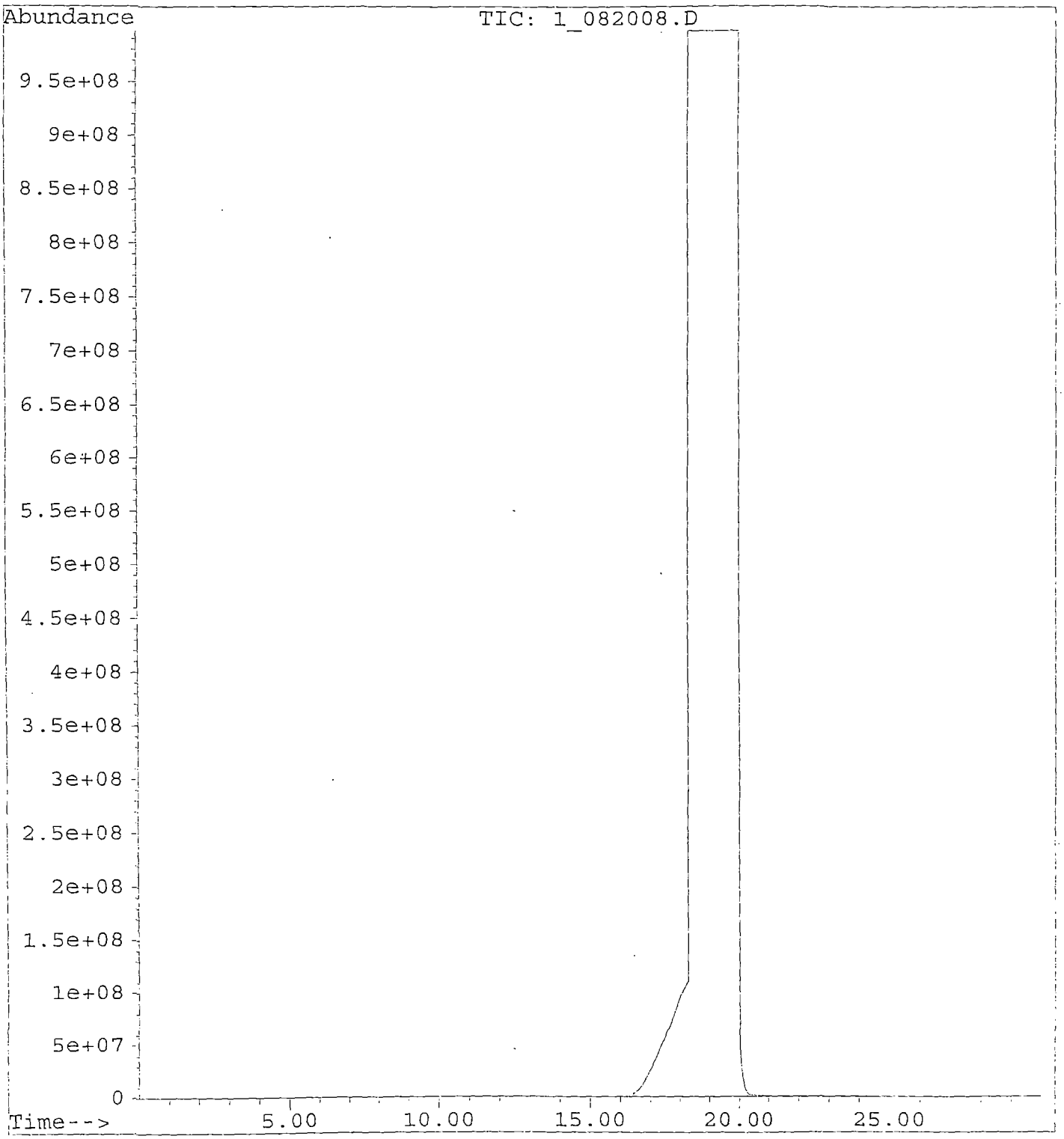
File : C:\HPCHEM\5\DATA\082001\1_082006.D
Operator : CR COL# 418002
Acquired : 20 Aug 01 14:59 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB#082001A (PEST)
Misc Info : COL# 418002
Vial Number: 6



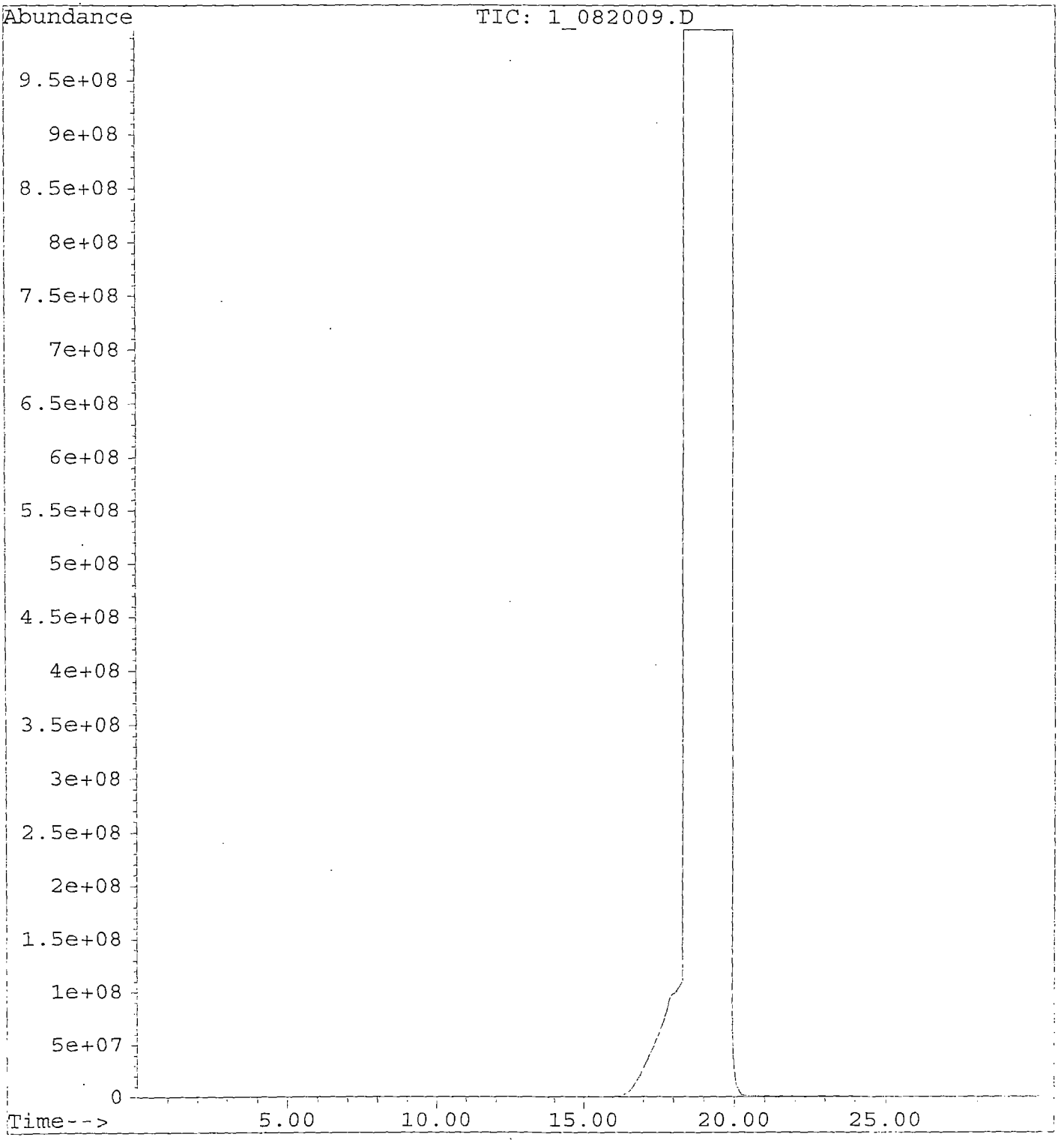
File : C:\HPCHEM\5\DATA\082001\1_082007.D
Operator : CR COL# 418002
Acquired : 20 Aug 01 15:30 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB#082001B (PEST)
Misc Info : COL# 418002
Vial Number: 7



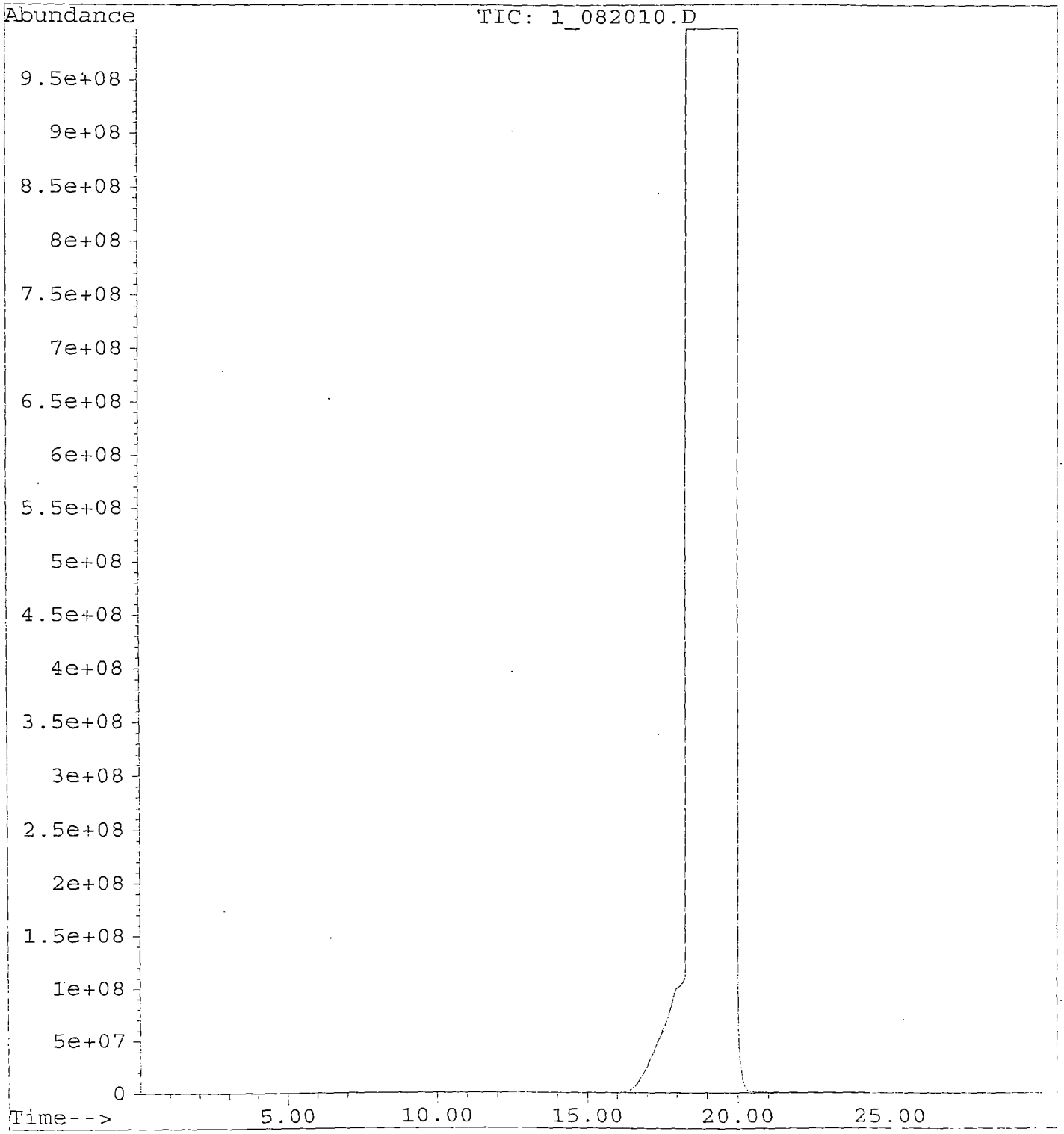
File : C:\HPCHEM\5\DATA\082001\1_082008.D
Operator : CR COL# 418002
Acquired : 20 Aug 01 16:01 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: BL0815SA-EPA
Misc Info : COL# 418002
Vial Number: 8



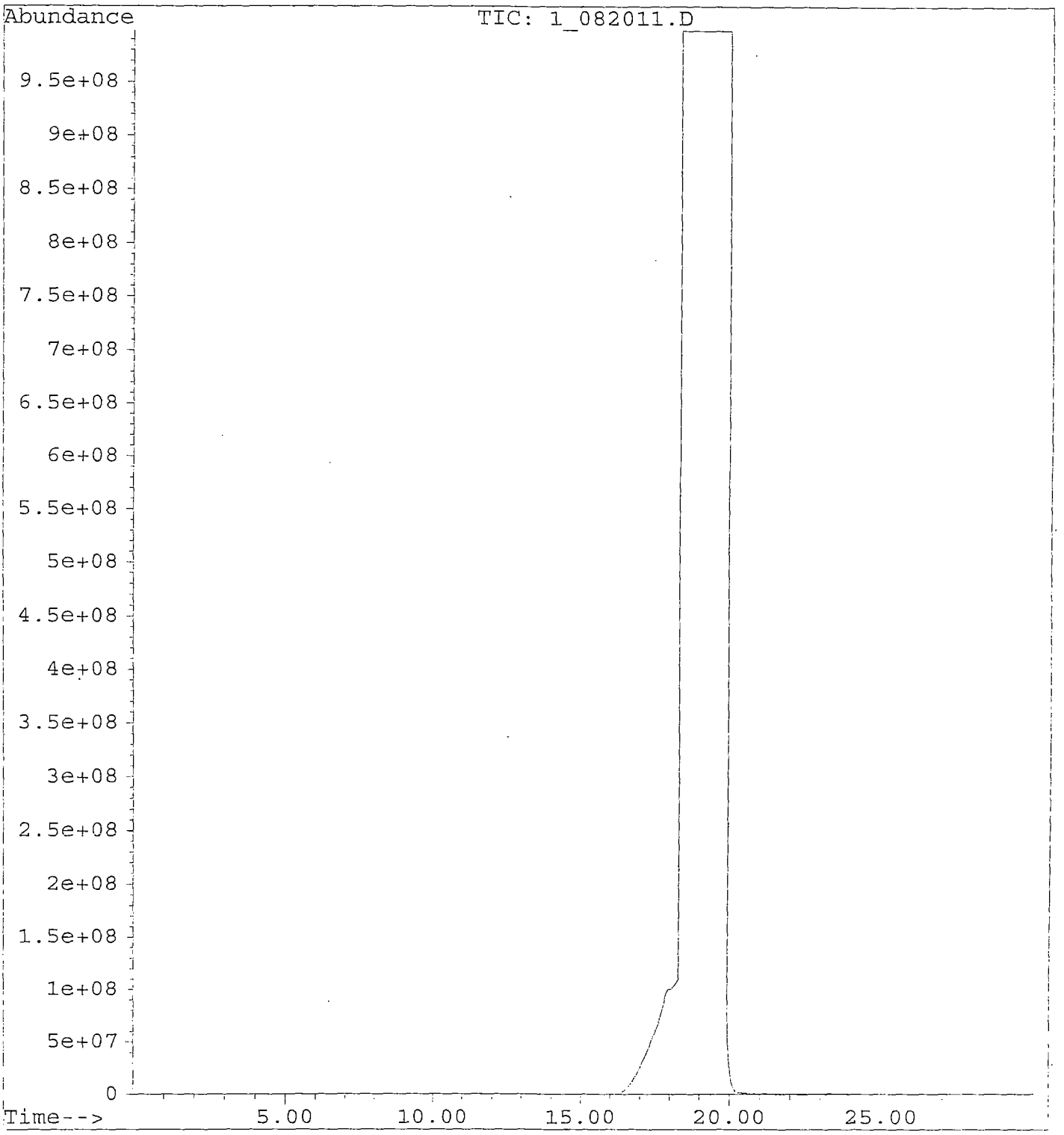
File : C:\HPCHEM\5\DATA\082001\1_082009.D
Operator : CR COL# 418002
Acquired : 20 Aug 01 16:32 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: BB0815SA-EPA
Misc Info : COL# 418002
Vial Number: 9



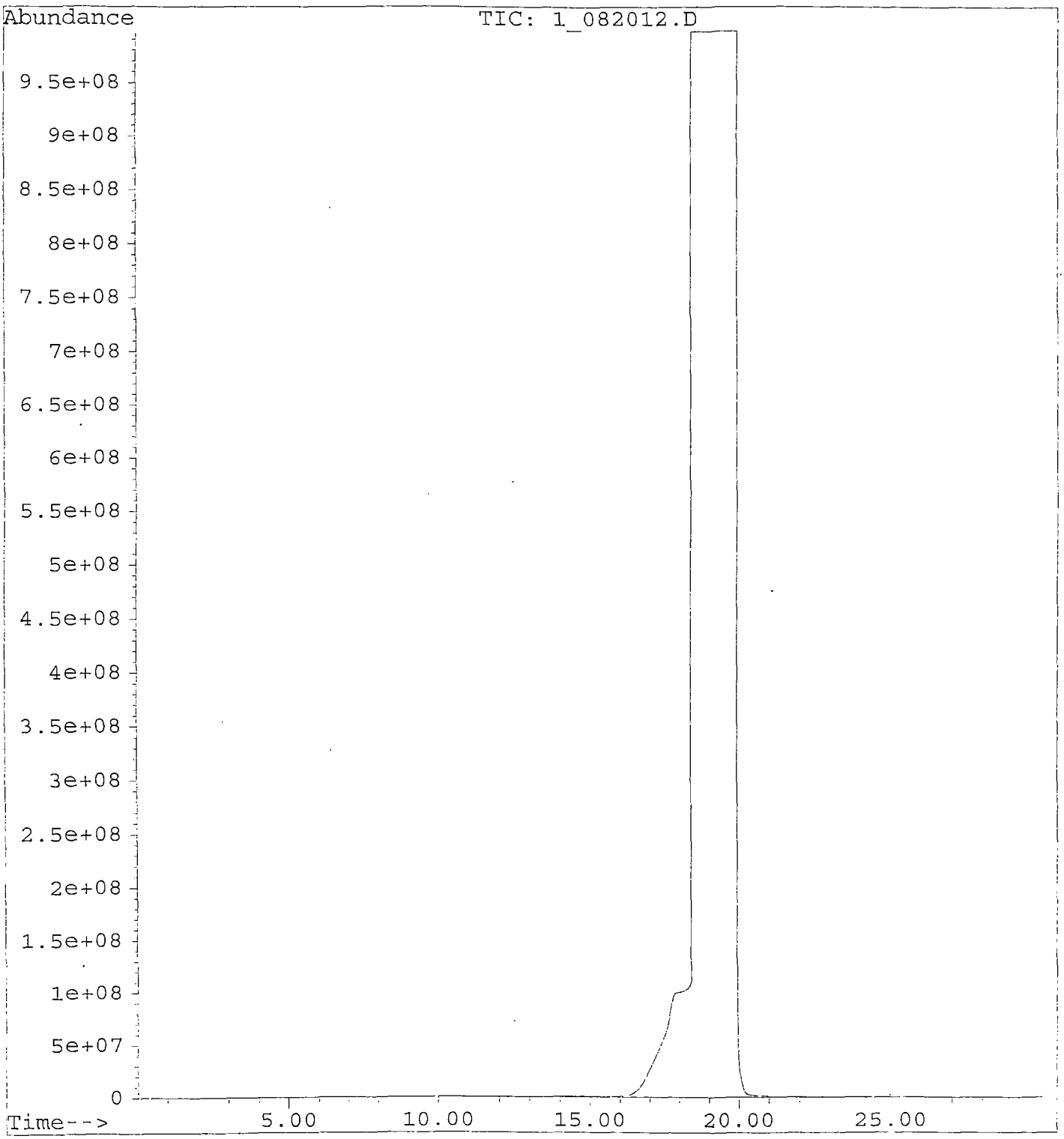
File : C:\HPCHEM\5\DATA\082001\1_082010.D
Operator : CR COL# 418002
Acquired : 20 Aug 01 17:03 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: LC0815SA-EPA
Misc Info : COL# 418002
Vial Number: 10



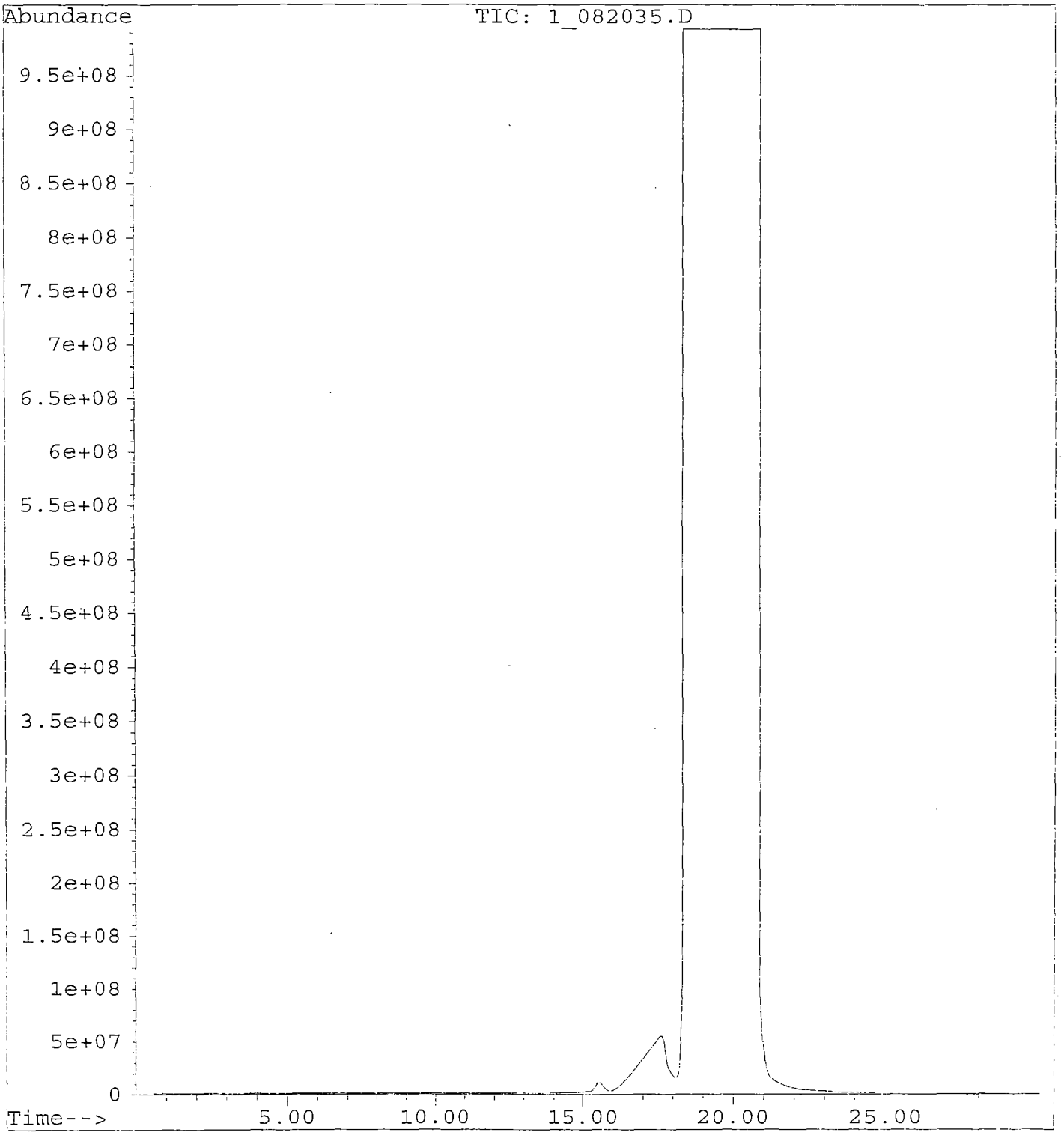
File : C:\HPCHEM\5\DATA\082001\1_082011.D
Operator : CR COL# 418002
Acquired : 20 Aug 01 17:33 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: LD0815SA-EPA
Misc Info : COL# 418002
Vial Number: 11



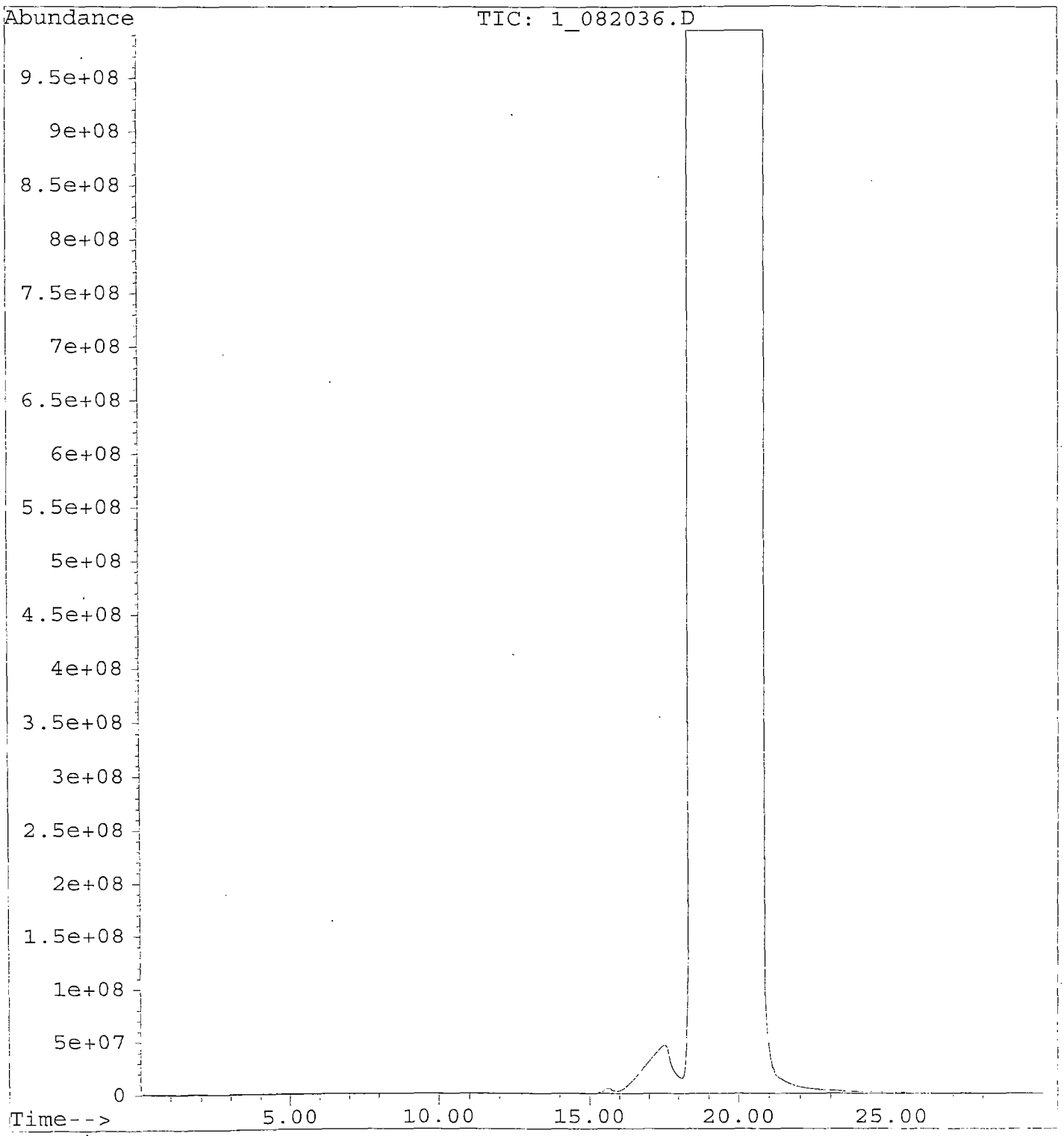
File : C:\HPCHEM\5\DATA\082001\1_082012.D
Operator : CR COL# 418002
Acquired : 20 Aug 01 18:05 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47266.17-E02D0MS-EPA
Misc Info : COL# 418002
Vial Number: 12



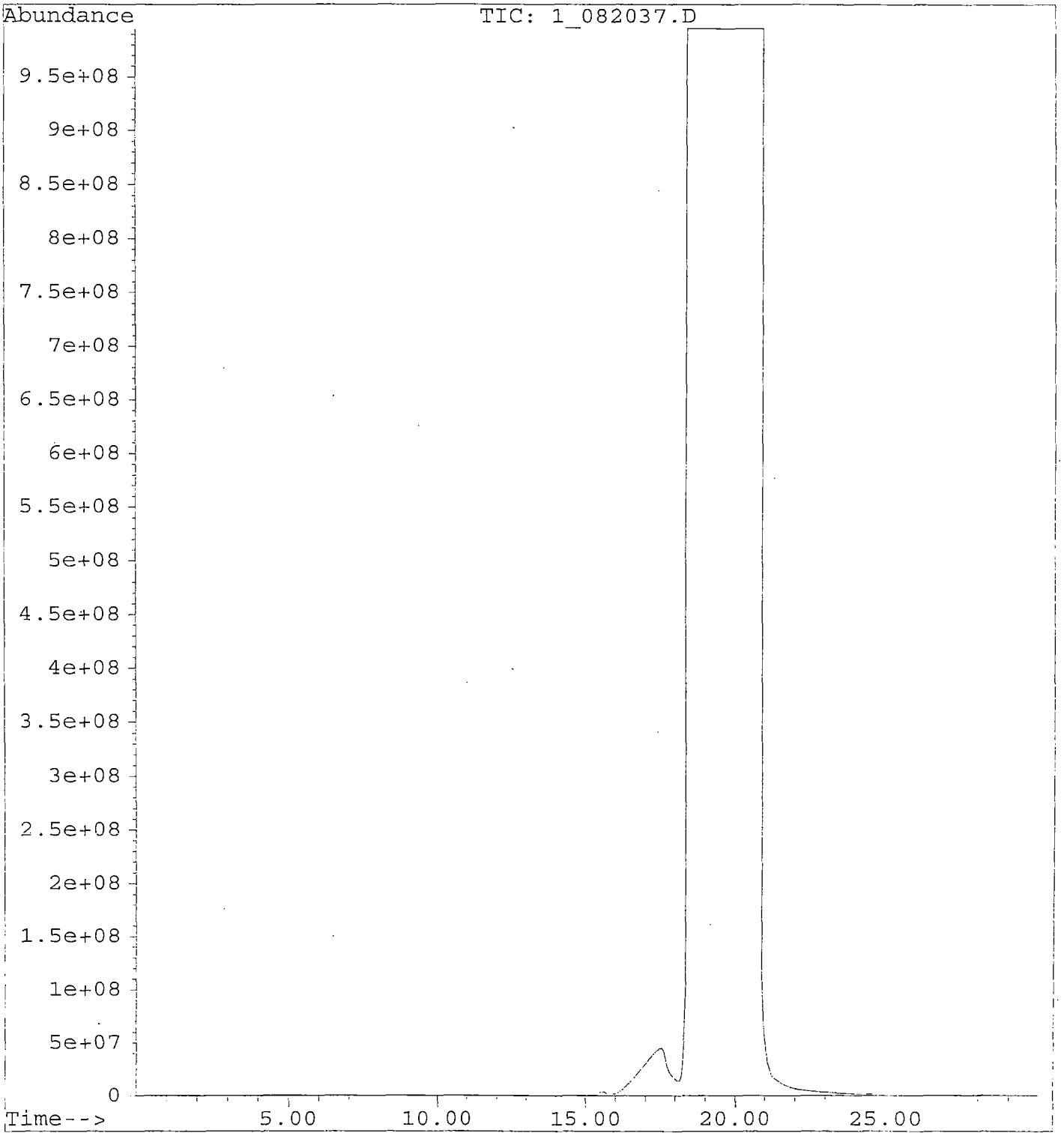
File : C:\HPCHEM\5\DATA\082001\1_082035.D
Operator : CR COL# 418002
Acquired : 21 Aug 01 05:57 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 35



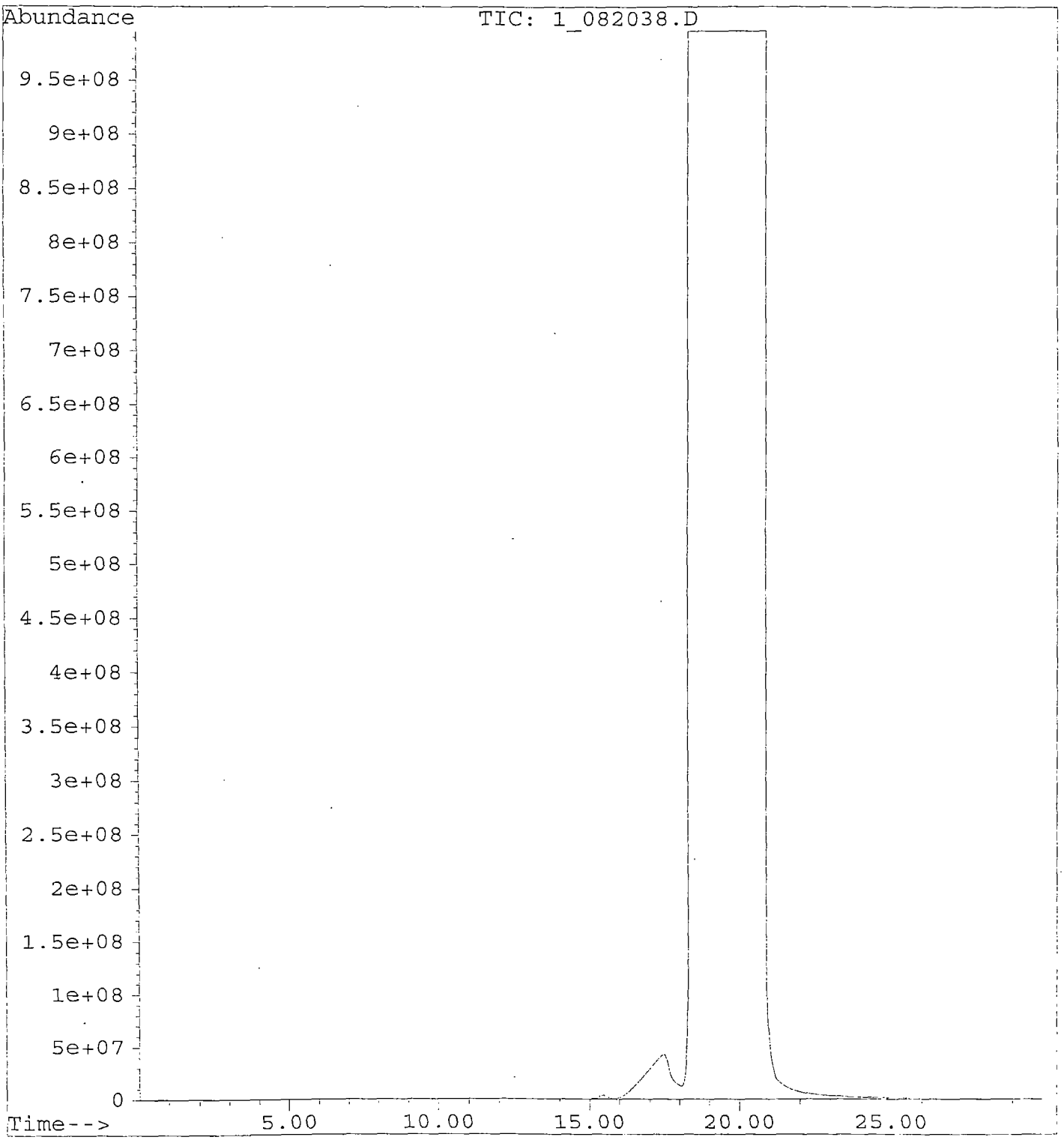
File : C:\HPCHEM\5\DATA\082001\1_082036.D
Operator : CR COL# 418002
Acquired : 21 Aug 01 06:28 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 36



File : C:\HPCHEM\5\DATA\082001\1_082037.D
Operator : CR COL# 418002
Acquired : 21 Aug 01 06:59 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 37

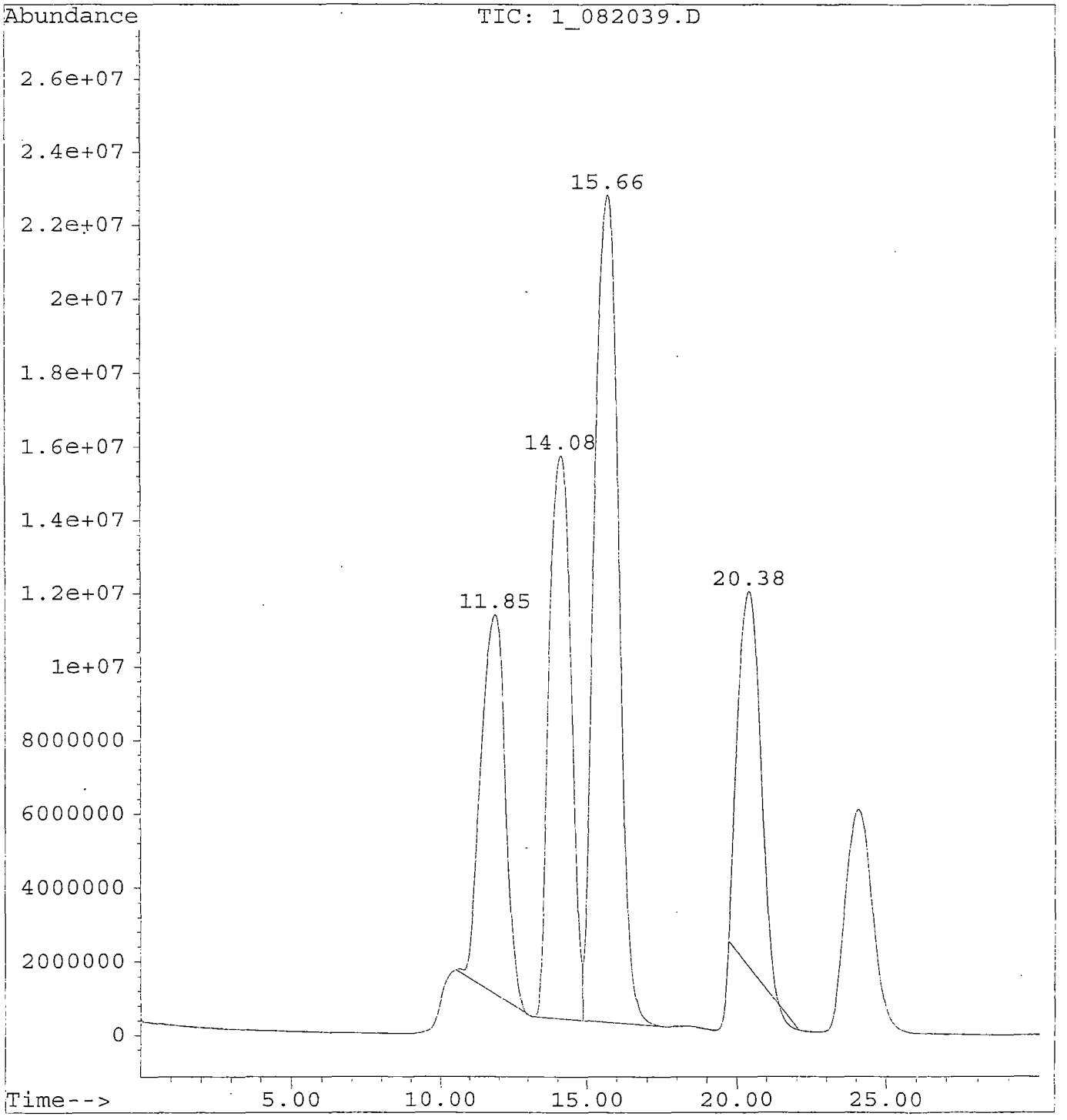


File : C:\HPCHEM\5\DATA\082001\1_082038.D
Operator : CR COL# 418002
Acquired : 21 Aug 01 07:30 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 38



Data File : C:\HPCHEM\5\DATA\082001\1_082039.D
Acq On : 21 Aug 01 08:01
Sample : CAL STD (FINAL)
Misc : COL# 418002

Vial: 39
Operator: CR COL#
Inst : GPC1
Multiplr: 1.00



1) 11.85 = Corn Oil

4) 14.08 = Pthalate
5) 15.66 = Methoxychlor

Chromatographic Resolution Report

Data File : C:\HPCHEM\5\DATA\082001\1_082039.D
Acq On : 21 Aug 01 08:01
Sample : CAL STD (FINAL)
Misc : COL# 418002

Vial: 39
Operator: CR COL# 41
Inst : GPC1
Multiplr: 1.00

Method : C:\HPCHEM\5\METHODS\GPC.M
Title :

RT#1	RT#2	Resolution
11.854	14.083	100.00
14.083	15.660	90.31
15.660	20.376	100.00

Chromatographic Report

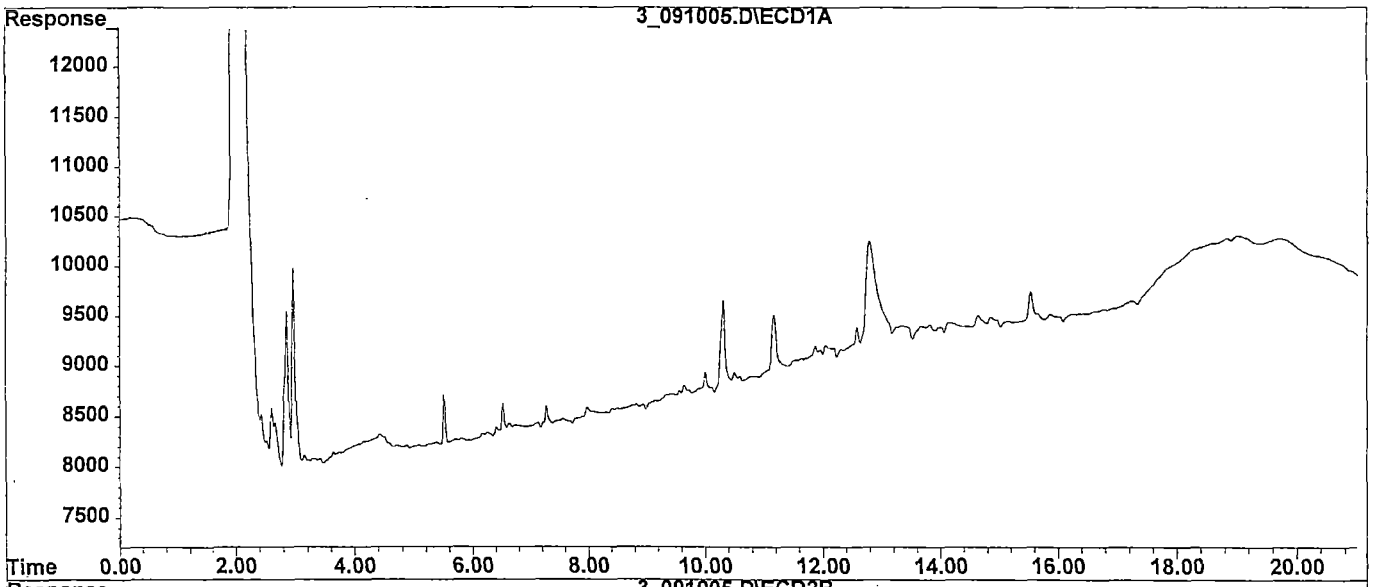
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091005.D\ECD1A.CH Vial: 44
Acq On : 10 Sep 2001 16:56 Operator: BTB
Sample : SB081901A *SB081901A * Inst : HP_03
Misc : **1/0ML* Dilution: 1.00
IntFile : events.e

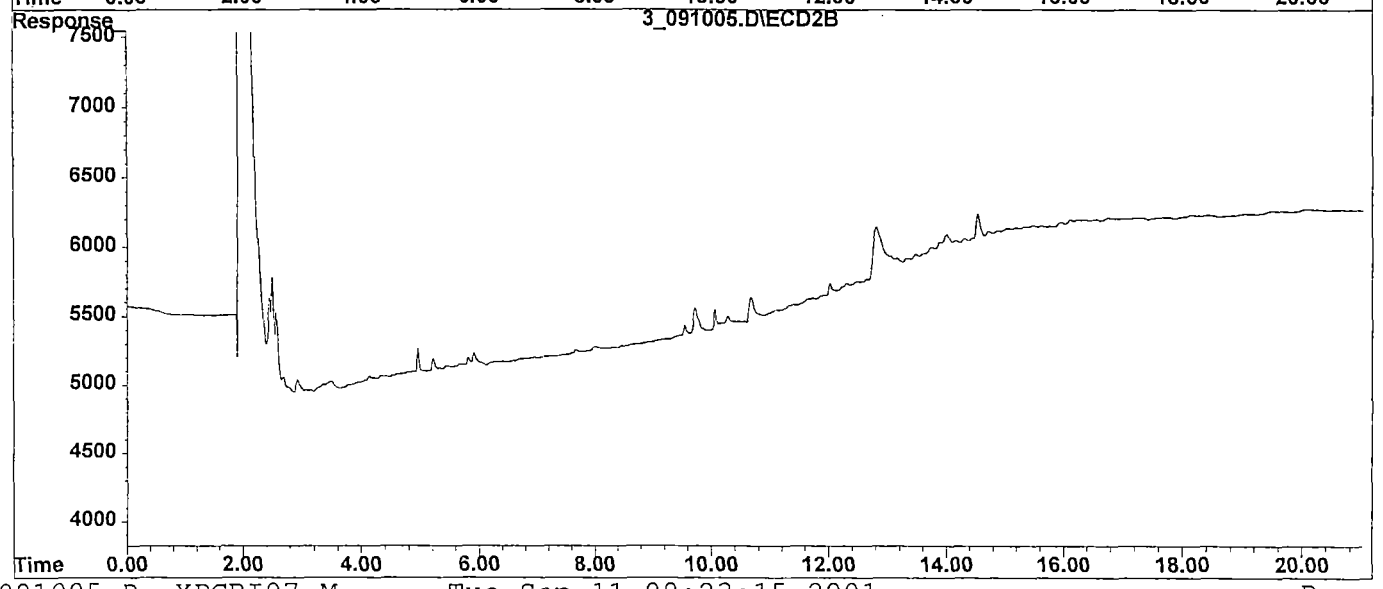
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091005.D\ECD2B.CH Vial: 44
Acq On : 10 Sep 2001 16:56 Operator: BTB
Sample : SB081901A Inst : HP_03
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 11 8:49 2001 Quant Results File: XPCBI07.RES

Method : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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

ok 9-12-01 BP

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

```
Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091005.D\ECD1A.CH Vial: 44
Acq On    : 10 Sep 2001  16:56                        Operator: BTB
Sample    : SB081901A  *SB081901A  *                  Inst    : HP_03
Misc      : **1/0ML*                                  Dilution: 1.00
IntFile   : events.e

Data File : F:\HPCHEM\HP\3\DATA\09_10_01\3_091005.D\ECD2B.CH Vial: 44
Acq On    : 10 Sep 2001  16:56                        Operator: BTB
Sample    : SB081901A                                 Inst    : HP_03
Misc      :                                           Dilution: 1.00
IntFile   : events2.e
Quant Time: Sep 11  8:49 2001  Quant Results File: XPCBI07.RES

Method       : F:\HPCHEM\HP\3\DATA\09_10_01\XPCBI07.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:

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

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-301 OP-301-RUNLOG-13 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_03
SDG NO. : SWLO METHOD FILE(S): XPCBI07

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
09/07/01 9:27	HEX	HEX	3_090701	SOL
09/07/01 9:53	RESC1D	5-171-7	3_090702	OK
09/07/01 10:18	AR1221L31D	5-420-6	3_090703	
09/07/01 10:44	AR1232L31D	5-422-6	3_090704	
09/07/01 11:10	AR1242L11D	5-11-7	3_090705	
09/07/01 11:35	AR1242L21D	5-10-7	3_090706	
09/07/01 12:01	AR1242L31D	5-9-7	3_090707	
09/07/01 12:27	AR1242L41D	5-8-7	3_090708	
09/07/01 12:52	AR1242L51D	5-7-7	3_090709	
09/07/01 13:18	AR1248L31D	5-424-6	3_090710	
09/07/01 13:44	AR1254L11D	5-6-7	3_090711	
09/07/01 14:10	AR1254L21D	5-5-7	3_090712	
09/07/01 14:35	AR1254L31D	5-4-7	3_090713	
09/07/01 15:01	AR1254L41D	5-3-7	3_090714	
09/07/01 15:27	AR1254L51D	5-2-7	3_090715	
09/07/01 15:52	AR1660L11D	5-212-7	3_090716	
09/07/01 16:18	AR1660L21D	5-211-7	3_090717	
09/07/01 16:44	AR1660L31D	5-210-7	3_090718	
09/07/01 17:10	AR1660L41D	5-209-7	3_090719	
09/07/01 17:35	AR1660L51D	5-208-7	3_090720	
09/07/01 18:01	PIBLK1D	5-131-7	3_090721	

Unless noted, Client Ids are the same for the quant. & confirmation columns

Jennifer Allemann 09/10/01 Blaine Bailey 091001
Verification Signature/Date Analyst Signature/Date

EN 9-17-01

~~305~~
305

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-301 OP-301-RUNLOG-13 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_03
SDG NO. : SWLO METHOD FILE(S): XPCBI07

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
09/10/01 14:14	HEX	HEX	3_091001	Sol
09/10/01 15:39	PIBLK1H	5-131-7	3_091002	OK
09/10/01 16:04	AR1660L31K	5-128-7	3_091003	OK
09/10/01 16:30	AR1660L31L	5-128-7	3_091004	NV
09/10/01 16:56	SB081901A	SB081901A	3_091005	OK
09/10/01 17:21	SB081901B	SB081901B	3_091006	
09/10/01 17:47	BL0814SB	BL0814SB	3_091007	
09/10/01 18:13	BB0814SB	BB0814SB	3_091008	
09/10/01 18:38	LC0814SB	LC0814SB	3_091009	
09/10/01 19:04	LD0814SB	LD0814SB	3_091010	
09/10/01 19:30	E02B5	47266.01	3_091011	
09/10/01 19:55	E02B6	47266.02	3_091012	
09/10/01 20:21	E02B7	47266.03	3_091013	
09/10/01 20:47	E02B8	47266.04	3_091014	
09/10/01 21:12	HEX	HEX	3_091015	Sol
09/10/01 21:38	HEX	HEX	3_091016	Sol
09/10/01 22:04	HEX	HEX	3_091017	Sol
09/10/01 22:29	PIBLK1I	5-131-7	3_091018	OK
09/10/01 22:55	AR1660L31M	5-128-7	3_091019	OK
09/10/01 23:20	AR1660L31N	5-128-7	3_091020	NV
09/10/01 23:46	E02B9	47266.05	3_091021	OK

Unless noted, Client Ids are the same for the quant. & confirmation columns

Alan Sewart 9/11/01
Verification Signature/Date

Blaine Baldwin 091101
Analyst Signature/Date

EM 9-17-01
~~310~~ 306

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-301 OP-301-RUNLOG-13 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_03
SDG NO. : SWLO METHOD FILE(S): XPCBI07

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
09/11/01 00:12	E02C0	47266.06	3_091022	OK
09/11/01 00:38	E02C1	47266.07	3_091023	
09/11/01 1:03	E02C2	47266.08	3_091024	
09/11/01 1:29	E02C3	47266.09	3_091025	
09/11/01 1:54	E02C4	47266.10	3_091026	
09/11/01 2:20	E02C5	47266.11	3_091027	
09/11/01 2:46	E02C6	47266.12	3_091028	
09/11/01 3:12	E02C7	47266.13	3_091029	
09/11/01 3:37	E02C8	47266.14	3_091030	
09/11/01 4:03	HEX	HEX	3_091031	Sol
09/11/01 4:28	HEX	HEX	3_091032	Sol
09/11/01 4:54	HEX	HEX	3_091033	Sol
09/11/01 5:20	PIBLK1J	5-131-7	3_091034	OK
09/11/01 5:45	AR1660L31O	5-128-7	3_091035	OK
09/11/01 6:11	AR1660L31P	5-128-7	3_091036	NV
09/11/01 6:37	E02C9	47266.15	3_091037	OK
09/11/01 7:03	E02D0	47266.16	3_091038	
09/11/01 7:28	E02D0MS	47266.17MS	3_091039	
09/11/01 7:54	E02D0MSD	47266.18MSD	3_091040	
09/11/01 8:20	E02D1	47266.19	3_091041	
09/11/01 8:45	E02D2	47266.20	3_091042	

Unless noted, Client Ids are the same for the quant. & confirmation columns

Alan Sweet 9/11/01
Verification Signature/Date

Blaine Bailey 091101
Analyst Signature/Date

EM 9-17-01

~~311~~
307

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-301 OP-301-RUNLOG-13 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_03
SDG NO. : SWLO METHOD FILE(S): XPCBI07

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
09/11/01 9:11	E02D3	47266.21	3_091043	OK
09/11/01 9:37	E02D4	47266.22	3_091044	↓
09/11/01 10:02	HEX	HEX	3_091045	Sol
09/11/01 10:28	HEX	HEX	3_091046	Sol
09/11/01 10:54	HEX	HEX	3_091047	Sol
09/11/01 11:19	PIBLK1K	5-131-7	3_091048	ok
09/11/01 11:45	AR1660L31Q	5-128-7	3_091049	ok
09/11/01 12:11	AR1660L31R	5-128-7	3_091050	NV

Unless noted, Client Ids are the same for the quant. & confirmation columns

Alan Swart 9/11/01
Verification Signature/Date

Blaine Bilds 091101
Analyst Signature/Date

EW 9-17-01

~~312~~
308

	SV	OD ST • PCB	OTHER
CONT EX. (3520C)			
SEP-F (3510C)			
SHAKER			
SONC. (3550B)		XXXXX	
SOXHLET			

[X] RUSH [ ] REEXTRACT [ ] TCLP [ ] DXIN

SAMPLE EXTRACTION L(

8/23

BATCH: 010814SB

EXTRACT DATE: 2001-08-14 07:08

002968
Page: 1 of 2

SAMPLE ID (EPISODE #)	CLIENT CASE	DATE RECEIVED CLIENT SAMPLE ID	MATRIX/LEVEL	SAMPLE pH	% MOISTURE	DRY WEIGHT	AMOUNT EXTRACTED	EXTRACTED VOLUME	GPC VOLUME	GPC ELUTE VOL	FLORISIL VOL CONC	FLORISIL FIN VOL CONC	VOL SV (P)	FIN PROCESS VOLUME	SCREEN Y/N	MS SV (P)	SURR SV (P)	BASE pH CONFIRMATION	ACID pH CONFIRMATION	
					%	g	g • (ml)	ml	ml	ml	ml	ml	ml	ml	Y/N	µL	µL			
BL0814SB			S/L				30.00	300	10/5	45	2.0		5.0	5.0	N		1000			
BB0814SB			S/L				30.00	300	10/5	45	2.0		5.0	5.0	N		1000			
LC0814SB			S/L				30.00	300	10/5	45	2.0		5.0	5.0	N	1000	1000			
LD0814SB			S/L				30.00	300	10/5	45	2.0		5.0	5.0	N	1000	1000			
47266.01 GC699	EPA 29602	08/11/2001 09:30 E02B5	S/L	7.07	44.65	16.7	30.10	300	10/5	45	2.0		5.0	5.0	N		1000			bottle A
47266.02 GC699	EPA 29602	08/11/2001 09:30 E02B6	S/L	6.98	31.45	20.8	30.40	300	10/5	45	2.0		5.0	5.0	N		1000			A
47266.03 GC699	EPA 29602	08/11/2001 09:30 E02B7	S/L	7.03	33.37	20.3	30.50	300	10/5	45	2.0		5.0	5.0	N		1000			A
47266.04 GC699	EPA 29602	08/11/2001 09:30 E02B8	S/L	6.92	43.48	17.0	30.00	300	10/5	45	2.0		5.0	5.0	N		1000			A
47266.05 GC699	EPA 29602	08/11/2001 09:30 E02B9	S/L	7.16	35.53	19.4	30.10	300	10/5	45	2.0		5.0	5.0	N		1000			A
47266.06 GC699	EPA 29602	08/11/2001 09:30 E02C0	S/L	6.80	55.72	13.6	30.80	300	10/5	45	2.0		5.0	5.0	N		1000			A
47266.07 GC699	EPA 29602	08/11/2001 09:30 E02C1	S/L	7.04	29.78	21.3	30.30	300	10/5	45	2.0		5.0	5.0	N		1000			A
47266.08 GC699	EPA 29602	08/11/2001 09:30 E02C2	S/L	7.18	28.46	21.5	30.10	300	10/5	45	2.0		5.0	5.0	N		1000			A
47266.09 GC699	EPA 29602	08/11/2001 09:30 E02C3	S/L	7.01	30.50	20.9	30.10	300	10/5	45	2.0		5.0	5.0	N		1000			A
47266.10 GC699	EPA 29602	08/11/2001 09:30 E02C4	S/L	7.18	33.62	20.0	30.13	300	10/5	45	2.0		5.0	5.0	N		1000			A
47266.11 GC699	EPA 29602	08/11/2001 09:30 E02C5	S/L	7.07	48.92	15.3	30.00	300	10/5	45	2.0		5.0	5.0	N		1000			A

INITIALS

WEIGHING:	MC	EXTRACTOR:	MC	FLORISIL:
CLEANUP:	CR	KD:	GS	
BLOWDOWN:	SA	TV:	GS	
SURROG. SPIKER:	MC	VERIFIER:	GS	
MATRIX SPIKER:	MC	VERIFIER:	GS	
SUBMITTED BY:	SA	REVIEWED BY:		

ID NUMBERS

FLORISIL CARTRIDGE #:

GPC COLUMN #(08-19-01) 418002 Method #3640A

SURROGATES ID CONC #: 5-157-7

MATRIX SPIKE SOLID/CONC #(s): 5-146-7

SOP - METHOD # : SWL-OP- 415 Rev. 1.0

4938 Lot 1 August

COMMENTS

SB4081901 A

SB4081901 B

	SV	OD ST • PCB	OTHER
CONT EX. (3520C)			
SEP-F (3510C)			
SHAKER			
SONC. (3550B)		XXXXX	
SOXHLET			

[X] RUSH [ ] REEXTRACT [ ] TCLP [ ] DIOXIN

SAMPLE EXTRACTION L(

BATCH: 010814SB

EXTRACT DATE: 2001-08-14 07:08

002968

SAMPLE ID (EPISODE #)	CLIENT CASE	DATE RECEIVED CLIENT SAMPLE ID	MATRIX/LEVEL	SAMPLE pH	% MOISTURE %	DRY WEIGHT g	AMOUNT EXTRACTED g •(ml)	EXTRACTED VOLUME ml	GPC VOLUME ml	GPC ELUTE VOL ml	FLORISIL VOL CONC ml	FLORISIL FIN VOL CONC ml	VOL SV (P) ml	FIN PROCESS VOLUME ml	SCREEN Y/N Y/N	MS SV (P) µL	SURR SV (P) µL	BASE pH CONFIRMATION	ACID pH CONFIRMATION	
47266.12 GC699	EPA 29602	08/11/2001 09:30 E02C6	S/L	6.79	80.82	5.8	30.10	300	10/5	45	2.0		5.0	5.0	N		1000			bottle A
47266.13 GC699	EPA 29602	08/11/2001 09:30 E02C7	S/L	6.72	86.09	4.2	30.20	300	10/5	45	2.0		5.0	5.0	N		1000			A
47266.14 GC699	EPA 29602	08/11/2001 09:30 E02C8	S/L	6.69	87.89	3.7	30.50	300	10/5	45	2.0		5.0	5.0	N		1000			A
47266.15 GC699	EPA 29602	08/11/2001 09:30 E02C9	S/L	6.81	88.98	3.3	30.10	300	10/5	45	2.0		5.0	5.0	N		1000			A
47266.16 GC699	EPA 29602	08/11/2001 09:30 E02D0	S/L	7.38	13.43	26.0	30.00	300	10/5	45	2.0		5.0	5.0	N		1000			A
47266.17MS GC699	EPA 29602	08/11/2001 09:30 E02D0MS	S/L	6.38	13.43	26.2	30.30	300	10/5	45	2.0		5.0	5.0	N	1000	1000			A
47266.18MSD GC699	EPA 29602	08/11/2001 09:30 E02D0MSD	S/L	7.38	13.43	26.1	30.20	300	10/5	45	2.0		5.0	5.0	N	1000	1000			A
47266.19 GC699	EPA 29602	08/11/2001 09:30 E02D1	S/L	6.88	67.94	9.7	30.30	300	10/5	45	2.0		5.0	5.0	N		1000			A
47266.20 GC699	EPA 29602	08/11/2001 09:30 E02D2	S/L	6.50	57.90	12.7	30.10	300	10/5	45	2.0		5.0	5.0	N		1000			A
47266.21 GC699	EPA 29602	08/11/2001 09:30 E02D3	S/L	6.86	52.50	14.5	30.50	300	10/5	45	2.0		5.0	5.0	N		1000			A
47266.22 GC699	EPA 29602	08/11/2001 09:30 E02D4	S/L	7.09	28.54	21.5	30.10	300	10/5	45	2.0		5.0	5.0	N		1000			A

INITIALS

WEIGHING:	SA	[illegible]: MC	FLORISIL:
CLEANUP:	CR	KD: GS	
BLOWDOWN:	SA	TV: GS	
SURROG. SPIKED:	MC	VERIFIER: GS	
MATRIX SPIKED:	MC	VERIFIER: GS	
SUBMITTED BY:	SA	REVIEWED BY:	

ID NUMBERS

FLORISIL CARTRIDGE #:

GPC COLUMN #: 418002 method # 3640A

SURROGATES ID CONC #: 5-157-7

MATRIX SPIKE SOLID/CONC #(s): 5-146-7

SOP - METHOD # : SWL-OP- 415 Rev. 1.0

COMMENTS

SB # 081901A

SB # 081901B

4833 book / [illegible]

EXTRACT RECEIPT LOG

SWL-OP-301 REV. NO.: _____
SWL OP-301-EXTRCPT-6
SWOK/AATS
OP301a3.doc

Date	Time	Sample Episode Number(s)	Client	Extr. Chemist Initials	Re-extract? (Y/N)	Comments	No. of Samp.
08/21	9:05	47252.01-22 MS, MSD	EPA	SA	N	GC699	22
08/21	9:05	47254.01-12	EPA	SA	N	GC699	12
08/21	9:05	47264.01-10 MS, MSD	EPA	SA	N	GC699	10
8/22	10:20	47197.01-12	INTERLET	[illegible]	N	GC571	12
~~8/22~~	~~12:00~~	~~47302.12~~	~~TETPITT~~	~~[illegible]~~	~~N~~	~~GC299~~	8-28-01
08/22	2:00p	CH2Cl2 check (10LA012655)	SWLO	SA	N	GC800	X
08/22	2:00p	Acetone check (10LA012929)	SWLO	SA	N	GC800	X
08/22	7:05	47302.01-11 MS, MSD	TETPITT	SA	N	GC899	11
08/22	7:05	47302.01-11 MS, MSD	TETPITT	SA	N	GC698	11
08-23	7:10	47302.12	"	MC	N	GC420	1
08-23	7:10	47302.12	"	MC	N	GC899	1
08-23	7:10	47302.12	"	MC	N	GC699	1
		47197 04.10	Interlet		N	GC571	2
8-23	10:20a	47302.01-11, MS, MSD	Tetpitt	GS	N	GC299=200	11
	10:20a	47323.08	Malpinal	GS	N	GC340	1
8/23	5:00	MDL # 1-10	SWLO	[illegible]	N	GC218	X
"	"	47296.03	Montgut	[illegible]	N	GC218	X
"	"	47296.03	"	[illegible]	N	GC218	1
8/23	3:00	47302.12	TETP.TT	[illegible]	N	GC299	1
8-24	11:20	47265.01-22 17MS 18MSD	EPA	MC	N	GC699	22
8-24	11:20	47266.01-22; 17MS 18MSD	EPA	MC	N	GC699	22
8-24	11:20	47267.01-22; 17MS 18MSD	EPA	MC	N	GC699	22
8-24	12:00	47276.01-19, MS MSD	TOLTEST	GS	N	GC200	19

9-17-01 311

Southwest Laboratory of Oklahoma
1700 W. Albany Suite C
Broken Arrow, OK 74012-1421

INTERNAL CHAIN OF CUSTODY

Date	8/22/01
Episode	**47366**
Client	**EPA**
Project	OLM04.2
Received	08/22/01

Test Code	Cont ID	#	#	#	#	#	#	#	Date/Time Out	Analyst	Date/Time In
		(Circle the Sample Numbers Checked out)									
GC699	A	1	2	3	4	5	6	7			
		8	9	10	11	12	13	14			
		15	16	17	18	19	20	21			
		22							08-14/7:30	MC	08-14/11:20
IN660	A	1	2	3	4	5	6	7			
		8	9	10	11	12	13	14			
		15	16	17	18	19	20	21	8-23/7:45	M	8-23/9:30
		22									

EM 9-17-01

312 ~~308~~

This portion can be removed for Recipient's records.

FedEx Tracking Number 821876980292

Phone 847 918-4000

RICK MEHL

ROY F WESTON INC

450 OLD SKOKIE ROAD

8-11-01 9:30

Dept./Floor/Suite/Room

PARK CITY IL 60085

State ZIP

Internal Billing Reference 12634.0(001.0067.00

This portion can be removed for Recipient's records.

8/10/01

FedEx Tracking Number 821876980281

RICK MEHL

Phone 847 918-4000

Company ROY F WESTON INC

450 OLD SKOKIE ROAD

8-10-01 8:30

Dept./Floor/Suite/Room

PARK CITY IL 60085

State ZIP

Internal Billing Reference 12634.001.001.0067.00

ORIGINAL INV

SOG # E4275

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

Case No: 29602 E02B5
DAS No:
SDG No: E02B5

L

Date Shipped: 8/10/2001
Carrier Name: FedEx
Airbill: 821876980281
Shipped to: Southwest Labs of Oklahoma, Inc. 1700 West Albany Suite C Broken Arrow OK 74012 (918) 251-0545

Chain of Custody Record

Sampler Signature:

Relinquished By	(Date / Time)	Received By	(Date / Time)
1 Maryl Baillg	8/11/01 1100		8-11-01 9:30
2			
3			
4			

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 Sample Condition On Receipt E02B5
E02B4	Soil/Sediment/ Heidi Nemeth	L/G	PCBs (21)	038752 (Ice Only) (1)	AP-SL053-04-05	S:	8/9/2001	15:40		OK
E02B5	Sediment/ Joe Ruiz	L/G	PCBs (21)	038753 (Ice Only) (1)	AP-SD045-20-01	S:	8/9/2001	14:46		ORIGINAL JAR SDG # E0295 8-11-01
E02B6	Sediment/ Joe Ruiz	L/G	PCBs (21)	038754 (Ice Only) (1)	AP-SD045-20-02	S:	8/9/2001	14:46		
E02B7	Sediment/ Joe Ruiz	L/G	PCBs (21)	038755 (Ice Only) (1)	AP-SD045-20-03	S:	8/9/2001	14:46		
E02B8	Sediment/ Joe Ruiz	L/G	PCBs (21)	038756 (Ice Only) (1)	AP-SD045-20-04	S:	8/9/2001	14:46		
E02B9	Sediment/ Joe Ruiz	L/G	PCBs (21)	038757 (Ice Only) (1)	AP-SD045-21-01	S:	8/9/2001	15:02		SAMPLE CONTAINER BROKEN 8-11-01
E02C0	Sediment/ Joe Ruiz	L/G	PCBs (21)	038758 (Ice Only) (1)	AP-SD045-21-02	S:	8/9/2001	15:02		OK
E02C1	Sediment/ Joe Ruiz	L/G	PCBs (21)	038759 (Ice Only) (1)	AP-SD045-21-03	S:	8/9/2001	15:02		
E02C2	Sediment/ Joe Ruiz	L/G	PCBs (21)	038760 (Ice Only) (1)	AP-SD045-21-03DP	S:	8/9/2001	15:02		
E02C3	Sediment/ Joe Ruiz	L/G	PCBs (21)	038761 (Ice Only) (1)	AP-SD045-21-04	S:	8/9/2001	15:02		

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
	E0291, E02B0, E02D0	Heidi Nemeth	1.5 TB.	177883, 177884

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: 5-490998136-081001-0001

R provides p[illegible]inary results. Requests for preliminary results will increase analytical costs
and Copy to [illegible]tract Laboratory Analytical Services Support [illegible]

LABORATORY COPY

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

8/11/01 E02B5

Case No: 29602 E02B5
DAS No:
SDG No: E02B5

L

Date Shipped: 8/10/2001
Carrier Name: FedEx
Airbill: 821876980281
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)
1 [illegible]	8/10/01 1100	[illegible]	8-11-01 9:30
2			
3			
4			

Sampler Signature: [illegible]

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 E02B5 Sample Condition On Receipt
E02C4	Soil/Sediment/ Heidi Nemeth	L/G	PCBs (21)	038762 (Ice Only) (1)	AP-SL053-08-01	S:	8/9/2001	16:13		OK
E02C5	Soil/Sediment/ Heidi Nemeth	L/G	PCBs (21)	038763 (Ice Only) (1)	AP-SL053-08-02	S:	8/9/2001	16:13		
E02C6	Soil/Sediment/ Heidi Nemeth	L/G	PCBs (21)	038764 (Ice Only) (1)	AP-SL053-08-03	S:	8/9/2001	16:13		
E02C7	Soil/Sediment/ Heidi Nemeth	L/G	PCBs (21)	038765 (Ice Only) (1)	AP-SL053-08-04	S:	8/9/2001	16:13		
E02C8	Soil/Sediment/ Heidi Nemeth	L/G	PCBs (21)	038766 (Ice Only) (1)	AP-SL053-08-05	S:	8/9/2001	16:13		8-11-01
E02C9	Soil/Sediment/ Heidi Nemeth	L/G	PCBs (21)	038767 (Ice Only) (1)	AP-SL053-08-06	S:	8/9/2001	16:13		
E02D0	Sediment/ Joe Ruiz	L/G	PCBs (21)	038768 (Ice Only) (1)	AP-SD045-22-01	S:	8/9/2001	15:07		
E02D1	Sediment/ Joe Ruiz	L/G	PCBs (21)	038769 (Ice Only) (1)	AP-SD045-22-02	S:	8/9/2001	15:07		
E02D5	Sediment/ Joe Ruiz	L/G	PCBs (21)	038773 (Ice Only) (1)	AP-SD045-25-01	S:	8/9/2001	15:15		
E02D6	Sediment/ Joe Ruiz	L/G	PCBs (21)	038774 (Ice Only) (1)	AP-SD045-25-02	S:	8/9/2001	15:15		

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
	E0291, E02B0, E02D0	Heidi Nemeth	1.5 TB	177883, 177884

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: 5-490998136-081001-0001

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:	E02B5
SDG No:	E02B5

L

Date Shipped:	8/10/2001
Carrier Name:	FedEx
Airbill:	821876980281
Shipped to:	Southwest Labs of Oklahoma, Inc. 1700 West Albany Suite C Broken Arrow OK 74012 (918) 251-0545

Chain of Custody Record

Sampler Signature:

Relinquished By	(Date / Time)	Received By	(Date / Time)
1 [illegible]	8/10/01 1150	[illegible]	8-11-01 9:32
2			
3			
4			

For Lab Use Only

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

E02B5

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
E0297	Soil/Sediment/ Heidi Nemeth	L/G	PCBs (21)	038735 (Ice Only) (1)	AP-SL053-12-03	S:	8/9/2001	15:08		OK
E0298	Soil/Sediment/ Heidi Nemeth	L/G	PCBs (21)	038736 (Ice Only) (1)	AP-SL053-12-04	S:	8/9/2001	15:08		
E0299	Soil/Sediment/ Heidi Nemeth	L/G	PCBs (21)	038737 (Ice Only) (1)	AP-SL053-12-05	S:	8/9/2001	15:08		
E02A0	Soil/Sediment/ Heidi Nemeth	L/G	PCBs (21)	038738 (Ice Only) (1)	AP-SL053-12-06	S:	8/9/2001	15:08		
E02A1	Soil/Sediment/ Heidi Nemeth	L/G	PCBs (21)	038739 (Ice Only) (1)	AP-SL053-12-07	S:	8/9/2001	15:08		
E02D2	Sediment/ Joe Ruiz	L/G	PCBs (21)	038770 (Ice Only) (1)	AP-SD045-22-03	S:	8/9/2001	15:07	ORIGINAL TAG SDG # E02B5 8-11-01 (#5)	8-11-01 (#2)
E02D3	Sediment/ Joe Ruiz	L/G	PCBs (21)	038771 (Ice Only) (1)	AP-SD045-22-04	S:	8/9/2001	15:07		
* E02D4	Sediment/ Joe Ruiz	L/G	PCBs (21)	038772 (Ice Only) (1)	AP-SD045-22-05	S:	8/9/2001	15:07		
E02A2	Soil/Sediment/ Heidi Nemeth	L/G	PCBs (21)	038740 (Ice Only) (1)	AP-SL053-12-08	S:	8/9/2001	15:08		
E02A3	Soil/Sediment/ Heidi Nemeth	L/G	PCBs (21)	038741 (Ice Only) (1)	AP-SL053-12-09	S:	8/9/2001	15:08		

* SDG Final Samples

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
	E0291, E02B0, E02D0	Heidi Nemeth	1.7 T.B.	177883, 177884

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: 5-490998136-081001-0001

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

LABORATORY COPY

Southwest Laboratory of Oklahoma
1700 W. Albany Suite C
Broken Arrow, OK 74012-1421

SAMPLE LOG-IN RECORD

REVIEWED
BY Hans M. Boy
DATE 8-11-01

Date	8/11/01	Page 1
Episode	**47266**	
Client	**EPA**	
Project	OLM04.2	
Received	08/11/01	
Logged In	08/11/01	

TEST	PRI	DUE	CONTAINER	DESCRIPTION	EXTRACTED		ANALYST	ANALYZED
Sample: **47266.01**		Sampled:08/09/01	14:46	ID:E02B5	SDG:E02B5	Matrix:	S	Containers: 1
GC699	4	08/31/2001	A	NON STD PCB				
IN660	8	08/13/2001	A	% MOISTURE				
Sample: **47266.02**		Sampled:08/09/01	14:46	ID:E02B6	SDG:E02B5	Matrix:	S	Containers: 1
GC699	4	08/31/2001	A	NON STD PCB				
IN660	8	08/13/2001	A	% MOISTURE				
Sample: **47266.03**		Sampled:08/09/01	14:46	ID:E02B7	SDG:E02B5	Matrix:	S	Containers: 1
GC699	4	08/31/2001	A	NON STD PCB				
IN660	8	08/13/2001	A	% MOISTURE				
Sample: **47266.04**		Sampled:08/09/01	14:46	ID:E02B8	SDG:E02B5	Matrix:	S	Containers: 1
GC699	4	08/31/2001	A	NON STD PCB				
IN660	8	08/13/2001	A	% MOISTURE				
Sample: **47266.05**		Sampled:08/09/01	15:02	ID:E02B9	SDG:E02B5	Matrix:	S	Containers: 1
GC699	4	08/31/2001	A	NON STD PCB				
IN660	8	08/13/2001	A	% MOISTURE				
Sample: **47266.06**		Sampled:08/09/01	15:02	ID:E02C0	SDG:E02B5	Matrix:	S	Containers: 1
GC699	4	08/31/2001	A	NON STD PCB				
IN660	8	08/13/2001	A	% MOISTURE				
Sample: **47266.07**		Sampled:08/09/01	15:02	ID:E02C1	SDG:E02B5	Matrix:	S	Containers: 1
GC699	4	08/31/2001	A	NON STD PCB				
IN660	8	08/13/2001	A	% MOISTURE				
Sample: **47266.08**		Sampled:08/09/01	15:02	ID:E02C2	SDG:E02B5	Matrix:	S	Containers: 1
GC699	4	08/31/2001	A	NON STD PCB				
IN660	8	08/13/2001	A	% MOISTURE				
Sample: **47266.09**		Sampled:08/09/01	15:02	ID:E02C3	SDG:E02B5	Matrix:	S	Containers: 1
GC699	4	08/31/2001	A	NON STD PCB				
IN660	8	08/13/2001	A	% MOISTURE				
Sample: **47266.10**		Sampled:08/09/01	16:13	ID:E02C4	SDG:E02B5	Matrix:	S	Containers: 1
GC699	4	08/31/2001	A	NON STD PCB				
IN660	8	08/13/2001	A	% MOISTURE				
Sample: **47266.11**		Sampled:08/09/01	16:13	ID:E02C5	SDG:E02B5	Matrix:	S	Containers: 1
GC699	4	08/31/2001	A	NON STD PCB				
IN660	8	08/13/2001	A	% MOISTURE				
Sample: **47266.12**		Sampled:08/09/01	16:13	ID:E02C6	SDG:E02B5	Matrix:	S	Containers: 1
GC699	4	08/31/2001	A	NON STD PCB				
IN660	8	08/13/2001	A	% MOISTURE				
Sample: **47266.13**		Sampled:08/09/01	16:13	ID:E02C7	SDG:E02B5	Matrix:	S	Containers: 1
GC699	4	08/31/2001	A	NON STD PCB				
IN660	8	08/13/2001	A	% MOISTURE				
Sample: **47266.14**		Sampled:08/09/01	16:13	ID:E02C8	SDG:E02B5	Matrix:	S	Containers: 1
GC699	4	08/31/2001	A	NON STD PCB				

Southwest Laboratory of Oklahoma
1700 W. Albany Suite C
Broken Arrow, OK 74012-1421

SAMPLE LOG-IN RECORD

Date	8/11/01	Page2
Episode	**47266**	
Client	**EPA**	
Project	OLM04.2	
Received	08/11/01	
Logged In	08/11/01	

TEST	PRI	DUE	CONTAINER	DESCRIPTION	EXTRACTED	ANALYST	ANALYZED
IN660	8	08/13/2001	A	% MOISTURE			
Sample: **47266.15**	Sampled:08/09/01 16:13	ID:E02C9			SDG:E02B5	Matrix: S	Containers: 1
GC699	4	08/31/2001	A	NON STD PCB			
IN660	8	08/13/2001	A	% MOISTURE			
Sample: **47266.16N1**	Sampled:08/09/01 15:07	ID:E02D0			SDG:E02B5	Matrix: S	Containers: 1
GC699	4	08/31/2001	A	NON STD PCB			
IN660	8	08/13/2001	A	% MOISTURE			
Sample: **47266.17MS1**	Sampled:08/09/01 15:07	ID:E02D0MS			SDG:E02B5	Matrix: S	Containers: 1
GC699	4	08/31/2001	A	NON STD PCB			
IN660	8	08/13/2001	A	% MOISTURE			
Sample: **47266.18SD1**	Sampled:08/09/01 15:07	ID:E02D0MSD			SDG:E02B5	Matrix: S	Containers: 1
GC699	4	08/31/2001	A	NON STD PCB			
IN660	8	08/13/2001	A	% MOISTURE			
Sample: **47266.19**	Sampled:08/09/01 15:07	ID:E02D1			SDG:E02B5	Matrix: S	Containers: 1
GC699	4	08/31/2001	A	NON STD PCB			
IN660	8	08/13/2001	A	% MOISTURE			
Sample: **47266.20**	Sampled:08/09/01 15:07	ID:E02D2			SDG:E02B5	Matrix: S	Containers: 1
GC699	4	08/31/2001	A	NON STD PCB			
IN660	8	08/13/2001	A	% MOISTURE			
Sample: **47266.21**	Sampled:08/09/01 15:07	ID:E02D3			SDG:E02B5	Matrix: S	Containers: 1
GC699	4	08/31/2001	A	NON STD PCB			
IN660	8	08/13/2001	A	% MOISTURE			
Sample: **47266.22**	Sampled:08/09/01 15:07	ID:E02D4			SDG:E02B5	Matrix: S	Containers: 1
GC699	4	08/31/2001	A	NON STD PCB			
IN660	8	08/13/2001	A	% MOISTURE			

SAMPLE LOG-IN SHEET

Lab Name SOUTHWEST LABORATORY OF OKLAHOMA	Page 1 of 2
Received by (Print Name) JASON SPRIGGS	Log-In Date 2001-08-11 10:37
Received by (Signature)	
Case Number 29602	Sample Delivery Group No. E02B5 / SAS Number

Remarks: Cooler: 08/11/01-1

1. Custody Seals(s)	Present/Absent* Intact/ Broken
2. Custody Seal Nos.	177883-884
3. Chain-of Custody Records	Present/Absent*
4. Traffic Reports or Packing Lists	Present/Absent*
5. Airbill	Airbill/ Sticker Present/Absent*
6. Airbill No.	821876980281
7. Sample Tags	Present/Absent*
Sample Tag Numbers	Listed/Not Listed on Chain-of-Custody
8. Sample Condition	Intact/ Broken*/Leaking
Cooler Temperature Indicator Bottle	Present/Absent*
9. Cooler Temperature	1.9c
10. Does Information on Custody records, traffic reports, and sample tags agree?	Yes/ No*
11. Date Received at Lab	08/11/01
12. Time Received	09:30

Sample Transfer	
Fraction PCB	Fraction
Area # 9	Area #
By JS	By
On 8-11-01	On

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment: etc,
E02B5	038753	47266.01	OK
E02B6	038754	47266.02	
E02B7	038755	47266.03	
E02B8	038756	47266.04	
E02B9	038757	47266.05	SAMPLE BROKEN IN TRANSIT PLACED IN COOLER WITH CONT
E02C0	038758	47266.06	OK
E02C1	038759	47266.07	
E02C2	038760	47266.08	
E02C3	038761	47266.09	
E02C4	038762	47266.10	
E02C5	038763	47266.11	
E02C6	038764	47266.12	
E02C7	038765	47266.13	
E02C8	038766	47266.14	
E02C9	038767	47266.15	
E02D0	038768	47266.16	
E02D0MS	038768	47266.17	
E02D0MSD	038768	47266.18	

* Contact SMO and attach record of resolution.

Reviewed By Hung In Borg	Logbook No.
Date 8-11-01	Logbook Page No.

SAMPLE LOG-IN SHEET

Lab Name SOUTHWEST LABORATORY OF OKLAHOMA	Page 2 of 2
Received by (Print Name) JASON SPRIGGS	Log-In Date 2001-08-11 10:37
Received by (Signature)	
Case Number 29602	Sample Delivery Group No. E02B5 / SAS Number

Remarks: Cooler: 08/11/01-1

1. Custody Seals(s)	Present/Absent* Intact/ Broken
2. Custody Seal Nos.	177883-884
3. Chain-of Custody Records	Present/Absent*
4. Traffic Reports or Packing Lists	Present/Absent*
5. Airbill	Airbill/ Sticker Present/Absent*
6. Airbill No.	821876980281
7. Sample Tags	Present/Absent*
Sample Tag Numbers	Listed/Not Listed on Chain-of-Custody
8. Sample Condition	Intact/ Broken*/Leaking
Cooler Temperature Indicator Bottle	Present/Absent*
9. Cooler Temperature	1.9c
10. Does Information on Custody records, traffic reports, and sample tags agree?	Yes/ No*
11. Date Received at Lab	08/11/01
12. Time Received	09:30

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment: etc,
E02D1	038769	47266.19	OK
E02D2	038770	47266.20	
E02D3	038771	47266.21	
E02D4	038772	47266.22	

Sample Transfer	
Fraction PCB	Fraction
Area # 5	Area #
By JS	By
On 8-11-01	On

* Contact SMO and attach record of resolution.

Reviewed By Hang Zu Song	Logbook No.
Date 8-11-01	Logbook Page No.

FORM-DC1 OLM04.2

Harry Borg

From: Harry Borg
Sent: Monday, August 13, 2001 7:47 AM
To: 'Heather Bauer'
Subject: Region 5, Case # 29602, samples received 8/11/01;broken container

Heather,

Sample E02B9 arrived with a broken container. The laboratory transferred the contents to a new container and will continue with sample analyses unless otherwise instructed from the region.

Harry M. Borg
Organic Program Manager
SWOK

Harry Borg
From: Bauer, Heather [Heather.Bauer@dyncorp.com]
Sent: Monday, August 13, 2001 3:02 PM
To: 'Harry Borg (E-mail)'
Cc: 'Howard Pham (E-mail)'; 'Tonya Balla (E-mail)'
Subject: Region 05 | Case 29602 | Lab SWOK | Issue Broken Sample | FINAL

Harry,
Following is the resolution from Region 5. Per the Region, the lab should note the issue in the case narrative and proceed with the analysis of the sample. Please let me know if you have any other questions or problems.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----

From: H161259@aol.com [mailto:H161259@aol.com]
Sent: Monday, August 13, 2001 3:54 PM
To: Bauer, Heather
Subject: Re: Region 05 | Case 29602 | Lab SWOK | Issue Broken Sample

Hi Heather,

It is fine with Tonya's resolution and a note in the case narrative.

Thanks,

Howard Pham

-----Original Message-----

From: Heather Bauer [mailto:heather.bauer@dyncorp.com]
Sent: Monday, August 13, 2001 12:23 PM
To: 'Howard at home (E-mail)'
Subject: Region 05 | Case 29602 | Lab SWOK | Issue Broken Sample

Howard,

Following is the response from the sampler. Please advise on how the lab should proceed as quickly as possible.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----

From: Heather Bauer [mailto:heather.bauer@dyncorp.com]
Sent: Monday, August 13, 2001 9:22 AM
To: 'Howard Pham (E-mail)'
Subject: Region 05 | Case 29602 | Lab SWOK | Issue Broken Sample

Howard,

Following is the response from the sampler. Please advise on how the lab should proceed as quickly as possible.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----

From: **Balla, Tonya [mailto:ballat@mail.rfweston.com]**
Sent: Monday, August 13, 2001 9:15 AM
To: Bauer, Heather
Subject: RE: Region 05 | Case 29602 | Lab SWOK | Issue Broken Sample

Please have the lab continue with sample analysis.

Thanks
Tonya Balla
Roy F. Weston

-----Original Message-----

From: **Bauer, Heather [mailto:Heather.Bauer@dyncorp.com]**
Sent: Monday, August 13, 2001 8:18 AM
To: Howard Pham (E-mail); Tonya Balla (E-mail)
Subject: Region 05 | Case 29602 | Lab SWOK | Issue Broken Sample

Following Is an e-mail from SWOK regarding Case 29602. Please advise on how the lab should proceed as quickly as possible.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----

From: **hborg@swlab.com [mailto:hborg@swlab.com]**
Sent: Monday, August 13, 2001 8:47 AM
To: Bauer, Heather
Subject: Region 5, Case # 29602, samples received 8/11/01;broken container

Heather,
Sample E02B9 arrived with a broken container. The laboratory transferred the contents to a new container and will continue with sample analyses unless otherwise instructed from the region.

Harry M. Borg
Organic Program Manager
SWOK

Harry Borg
From: Bauer, Heather [Heather.Bauer@dyncorp.com]
Sent: Friday, August 24, 2001 3:53 PM
To: Harry Borg (E-mail)
Cc: Howard Pham (E-mail); Tonya Balla (E-mail)
Subject: Requesting modification for FRACTION: PEST (modification PCB-REG5) a...

Harry,
Following is the resolution from Region 5. Per the Region, the lab should proceed with the dilutions as recommended. However, the lab should continue to re-extract the samples and re-analyze when the DCB surrogate is outside the QC limits as per the analytical method. Please note the issues in the case narrative and let me know if you have any other questions or problems.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----

From: H161259@aol.com [mailto:H161259@aol.com]
Sent: Friday, August 24, 2001 4:08 PM
To: Bauer, Heather
Subject: Re: FW: Requesting modification for FRACTION: PEST (modification PCB-REG5) a...

Hi Heather,

Please ask the proceed the analyses with the dilution as they recommended, however, they should reextraction the sample with DCB is out of the limits as Linda's resolution.

Thanks,

Howard Pham

-----Original Message-----

From: Heather Bauer [mailto:heather.bauer@dyncorp.com]
Sent: Friday, August 24, 2001 2:55 PM
To: 'Howard at home (E-mail)'
Subject: FW: Requesting modification for FRACTION: PEST (modification PCB-REG5) analyses, Case # 29546,29602 & 29658
Importance: High

Howard,

Following is the response from the sampler. Please advise on how the lab should proceed as quickly as possible.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----

From: **Mark and Tonya Balla [mailto:ballamt@voyager.net]**
Sent: Sunday, August 26, 2001 2:35 PM
To: Bauer, Heather; Howard at home (E-mail)
Cc: short.thomas@epamail.epa.gov; mehlr@mail.rfweston.com
Subject: RE: Requesting modifcation for FRACTION: PEST (modification PCB-REG5) analyses, Case # 29546,29602 & 29658
Importance: High

Howard,

I forwarded on the request to our START QA/QC officer/chemist and her thoughts are included below. If the dilution procedure is modified, please ensure that the laboratory includes this in all applicable data package narratives to aid with data validation.

Thanks
Tonya Balla
Roy F. Weston

> ----------
> **From:** **Korobka, Linda**
> Sent: Friday, August 24, 2001 2:13:00 PM
> To: Balla, Tonya
> Cc: Korobka, Linda
> Subject: Modification for PCB analyses for Allied Paper Site samples
> Auto forwarded by a Rule

Tonya,

It is my professional opinion that the modification to the dilution procedure for the PCB analyses performed on the Allied Paper Site samples as described by Harry Borg (SWOK Organic Program Manager) is acceptable and should give WESTON and the U.S. EPA acceptable results.

However, I do not agree with changing the DCB surrogate requirement for

re-extracting when the DCB recovery is outside the QC limits high. I feel

that the lab should continue to re-extract the samples and re-analyze when the DCB surrogate is outside the QC limits as per the analytical method.

Linda Korobka
Roy F. Weston, Inc.
Suite 100
2501 Jolly Road
Okemos, Michigan 48864
Telephone: (517) 381-5936

-----Original Message-----

From: **Bauer, Heather [mailto:Heather.Bauer@dyncorp.com]**
Sent: Friday, August 24, 2001 10:24 AM
To: Howard at home (E-mail); Tonya Balla (E-mail)
Subject: FW: Requesting modifcation for FRACTION: PEST (modification PCB-REG5) analyses, Case # 29546,29602 & 29658

> ----------

From: **Bauer, Heather[SMTP:HEATHER.BAUER@DYNCORP.COM]**
Sent: Friday, August 24, 2001 11:23:43 AM
To: Howard at home (E-mail); Tonya Balla (E-mail)
Subject: FW: Requesting modifcation for FRACTION: PEST (modification PCB-REG5) analyses, Case # 29546,29602 & 29658
Auto forwarded by a Rule

Howard,
Following is an e-mail from SWOK regarding the Allied Paper site. Please advise on how the lab should proceed as quickly as possible.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----

From: **hborg@swlab.com [mailto:hborg@swlab.com]**
Sent: Friday, August 24, 2001 10:41 AM
To: Bauer, Heather
Cc: smith.terry@epa.gov; rharris@swlab.com
Subject: Requesting modifcation for FRACTION: PEST (modification PCB-REG5) analyses, Case # 29546,29602 & 29658

Heather,
Please check with region 5 to see if we can make the following modifications for the analyses of these PCB samples. The majority of the samples analyzed to up to this time are requiring dilutions for PCBs ranging from 10 to 100 fold. Method OLM04.2 requires a minimum of a 10 fold more concentrated extract analyses when dilutions are done. The laboratory is requesting a wavier or modification to forgo this requirement. This will allow the laboratory to do original dilutions on the samples and only run them more concentrated if aroclors are not detected within the instruments calibration range. This will speed up the analytical process and also reduce the cost to the region.

The laboratory would also like the region to review the DCB surrogate requirement for re-extracting when the DCB recovery is outside of QC limits high. To date the majority of all re-extracts taken place for this reason have duplicate the original analyses. At his time the laboratory is only sending the samples back for re-extract when the surrogate is outside of limits on both columns.

This will also help speed up the analytical process and help reduce the cost to the region.

Harry M. Borg
Organic Program Manager
SWOK

Required OLM04.2 Changes

OLM04.2 requires contract laboratories to analyze samples for Pesticides and Aroclors through the protocol outlined in Exhibit D, Analytical Methods for Pesticides/Aroclors. Specific target analytes and their associated contract required quantitation limits (CRQL) are listed in Exhibit C, Section 3.0, page C-8 of OLM04.2.

The proposed modified analysis will require the laboratory to use sample cleanup and analysis techniques not currently written into OLM04.2. The cleanup techniques to be used should generally follow guidelines for Silica Gel cleanup as presented in SW 846 Method 3630, followed by Sulfuric acid cleanup as presented in SW 846 method 3665A, and the analytical technique should generally follow PCB GC guidelines presented in SW 846 Method 8082.

Because the particular cleanup technique is destructive to certain pesticide compounds that are target analytes of OLM04.2, isolation, quantitation, and reporting of pesticides compounds for this project is not required. Only the list of Aroclors presented in Exhibit C, Section 3 is to be analyzed and reported. Further, the need to perform the Florisil cleanup technique presented in Exhibit D/Pest is waved. However, the lab is required to still perform the GPC cleanup presented in Exhibit D/Pest.

For calibration purposes the following procedural and Quality Assurance requirements must be followed:

a. A 5-point calibration curve for combined aroclors 1016/1260 and single mid-level points for all other arochlors are to be analyzed prior to any sample analysis. For the 5-point analysis, the low point on the curve must reflect the required CRQL.

b. The 5 point curve must meet an average 20 % RSD

c. If other arochlors are suspected, or other arochlors are detected in an analysis, a separate 5-point calibration must be run for the particular arochlor. The 20 % RSD requirement will apply to any other arochlor 5-point analysis performed.

d. A continuing calibration verification standard of arochlors 1016/1260 must be analyzed every 12 hours of analysis and not to exceed 20 samples.

e. The continuing calibration verification analysis must be within 15% of the expected value. If the % difference is greater than 15%, all samples analyzed prior to the continuing calibration verification must be reanalyzed.

f. Each extraction batch must contain method blanks, laboratory control spike and matrix spike/matrix spike duplicate samples (provided sufficient sample is sent for the matrix spike and duplicate analysis).

g. Each field sample and quality control sample must contain Decachlorobiphenyl surrogate (DCB). Samples may be spiked with TMX surrogate as well, but no recovery requirements will be placed on the TMX, as this compound is sensitive to sulfuric acid cleanup.

h. All samples failing to meet DCB recovery limits of 30% to 170% must be re-extracted and re-analyzed.

i. For the laboratory control spike, arochlor 1254 is to be used. The results of the laboratory control sample should fall between the recovery limits of 29 to 135 %. If the recovery falls below 29%, all samples within the

extraction batch must be re-extracted and re-analyzed. If the recovery is above 135% and arochlors are not detected in the batch sample, then no further action is necessary. If the recovery is above 135% and arochlors are present in any of the batch samples, then the samples containing arochlor must be re-extracted and re-analyzed.

j. Arochlor 1254 is to be used for the matrix spike and duplicate analyses. Advisory limits are 29% to 135% are set for the matrix spike and duplicate analysis. As these limit are only advisory, no particular action is required for QC samples outside these limits. However, consistent recovery outside these limits for analysis in which no apparent matrix interference is present may justify a review by EPA personnel, and the laboratory may be requested to repeat certain analyses at no further cost to the government.

k. Some, or all, samples may require a reporting CRQL of 25 ug/Kg (33 ug/Kg is the OLM04.2 required CRQL). For these samples, the laboratory must extract 40 grams of sample, as opposed to the normal 30 grams. Also, extra sodium sulfate may have to be added to the sample in order to dry the sample properly.

l. For reporting purposes, the laboratory is to provide a standard CLP data package at the turnaround time requested by the Region. Modifications to reporting requirements due to the changes presented in this modification request form shall be incorporated into the hard copy deliverables and into the electronic diskette where practical and easily accommodated. All CLP forms associated with florisil cleanup, and GPC check analysis are not required. Any other reporting requirements, not mentioned in this document which the lab believes is affected by the modifications required for this project shall be noted in the case narrative. All hard copy and electronic reporting requirements not affected by these modifications shall be subjected to CCS. The Organic Program Manager will make recommendations to the Contracting Officer as to any disputes concerning CCS defects charged against samples.

While not required in the final data package, the laboratory should keep on file in the lab, the SOPs used to perform the Acid and Silica Gel cleanup techniques. Also, the lab should include copies of this modification request forms in the final hard copy data packages.

SOUTHWEST LABORATORY OF OKLAHOMA

ANALYTICAL REQUEST FORM, SWL-GA-131

Ref# 5646

Pg 1 of 2

Client	ACCOUNTING OFFICER	Client Code:	EPA
Contact	Heather Bauer	Phone&Fax#:	703-264-9348 703-264-9222
Project	OLM04.2	PO Number:	
Location	29602	Receipt Date	08/11/2001 Due: 08/31/2001
SDG	E02B5 Closed	Sample TAT:	Fax Rpt 21
Reports			
Data Pkgs	CLP: 2		
EDD			

Special Provisions: Must use arochlor 1254 for LCS/LCSD & MS/MSD
need GPCed, silica gel & Acid cleaned, 1.9 C
Case#29546, to date wk 8/06/01: 200 soils , 10 sets QC

Client ID	Type	Matrix	GC699									
E02B5		S	X									
E02B6		S	X									
E02B7		S	X									
E02B8		S	X									
E02B9		S	X									
E02C0		S	X									
E02C1		S	X									
E02C2		S	X									
E02C3		S	X									
E02C4		S	X									
E02C5		S	X									
E02C6		S	X									
E02C7		S	X									
E02C8		S	X									
E02C9		S	X									
E02D0	N1	S	X									
E02D0MS	MS1	S	X									
E02D0MSD	SD1	S	X									
E02D1		S	X									
E02D2		S	X									

Reporting Address: ACCOUNTING OFFICER
Attn:;FINANCIAL MANAGEMENT DIVISION,ACCOUNTING OFFICE MD-32,RESEARCH TRIANGLE P

Billing Address: Same As Reporting Address

Project Officer: HARRY M. BORG

Prepared 08/11/2001

SOUTHWEST LABORATORY OF OKLAHOMA

ANALYTICAL REQUEST FORM, SWL-GA-131

Ref# 5646

Client	ACCOUNTING OFFICER	Client Code:	EPA
Contact	Heather Bauer	Phone&Fax#:	703-264-9348 703-264-9222
Project	OLM04.2	PO Number:	
Location	29602	Receipt Date	08/11/2001 Due: 08/31/2001
SDG	E02B5 Closed	Sample TAT:	Fax Rpt 21
Reports			
Data Pkgs	CLP: 2		
EDD			

Special Provisions: Must use arochlor 1254 for LCS/LCSD & MS/MSD
need GPCed, silica gel & Acid cleaned, 1.9 C
Case#29546, to date wk 8/06/01: 200 soils , 10 sets QC

Client ID	Type	Matrix	GC699									
E02D3		S	X									
E02D4		S	X									

Reporting Address: ACCOUNTING OFFICER
Attn:;FINANCIAL MANAGEMENT DIVISION,ACCOUNTING OFFICE MD-32,RESEARCH TRIANGLE P

Billing Address: Same As Reporting Address

Project Officer: HARRY M. BORG

Prepared 08/11/2001