Data Review
Site Name: Allied Paper (MI)
Case Number: 29658 Laboratory: Southwest Laboratory
SDG: E0455

Friday, October 12, 2001

US EPA RECORDS CENTER REGION 5
560081

PCBs

Samples:

Sample No	Station Location	Matrix	Date Collected	Date Extracted	Date Analyzed
E0455	AP-SL012-12-05	Soil	08/22/01	08/28/01	09/19/01
E0456	AP-SL012-07-01	Soil	08/22/01	08/28/01	09/19/01
E0457	AP-SL012-07-02	Soil	08/22/01	08/28/01	09/19/01
E0458	AP-SL012-07-03	Soil	08/22/01	08/28/01	09/19/01
E0459	AP-SL012-08-01	Soil	08/22/01	08/28/01	09/19/01
E0460	AP-SL012-08-02	Soil	08/22/01	08/28/01	09/19/01
E0461	AP-SL012-08-03	Soil	08/22/01	08/28/01	09/19/01
E0462	AP-SL012-08-04	Soil	08/22/01	08/28/01	09/19/01
E0463	AP-SL012-08-05	Soil	08/22/01	08/28/01	09/19/01
E0464	AP-SL012-08-06	Soil	08/22/01	08/28/01	09/19/01
E0465	AP-SL012-08-06DP	Soil	08/22/01	08/28/01	09/19/01
E0466	AP-SL012-04-01	Soil	08/22/01	08/28/01	09/19/01
E0467	AP-SL012-04-02	Soil	08/22/01	08/28/01	09/19/01
E0468	AP-SL012-04-03	Soil	08/22/01	08/28/01	09/19/01
E0469	AP-SL012-04-03DP	Soil	08/22/01	08/28/01	09/19/01

Holding Time:

All samples were extracted and analyzed within the required holding time. The samples arrived in a cooler at 2.8 degrees Celsius.

Method Blank:

The method blank PBLKSB was associated with this SDG. PBLKSB was analyzed on 09/18/01 with (E0455 thru E0469, E0456DL, E0458DL, E0459DL, E0460DL, E0466DL, E0468DL, and MS/MSD). The PBLKSB results were free of contamination. All samples underwent OLMO4.2 cleanup, Silica Gel Cleanup, and sulfuric acid cleanup prior analysis. All instrument blanks associated with this sample set were free of contamination.

Surrogate Recovery:

The method blank and investigated samples had surrogate recoveries within the acceptance quality control limits (30 to 170%), except in E0459DL (DCB2 204D%) was diluted out. However, no action was taken.

Matrix Spike/ Matrix Spike Duplicate Recovery:
The matrix spike/ matrix spike duplicate audit was performed on sample E0455. The matrix spike/ matrix spike duplicate recoveries were within the quality control limits (29-135%). Also, the relative percent difference (RPD %) recovery was acceptable.

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

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

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

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

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

067-4A - AAYH

DATE: October 4, 2001

CC: D. GEERS
J. THOMSEN
R. MEMC
T. BALLA

RECEIVED
OCT - 8 2001

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

Attn: Tonya Balla

SITE NAME: Allied Paper

CASE NO.	LAB	NO # OF SAMPLES	SDG	MATRIX
29658	SOUTHWEST	15	E0455	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

TB

OCT 04 2001

Regional Transmittal Form

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE:

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

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

TO: Data User: WESTON

We have reviewed the data for the following case:

SITE NAME: Allied Paper (MI)

CASE NUMBER: 29658 SDG NUMBER: E0455

Number and Type of Samples: 2 x 15 (Soil)

Sample Numbers: E0455-69

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: E0455 CERCLIS No: MTD006007306

Case No: 29658 Site Name/Location: Allied Paper

Contractor or EPA Lab: SWDR Data User: Weston

No. of Samples: 15 Date Sampled or Date Received: 9/26/01

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

Are basic data forms in? Yes ✓ No ____
No of samples claimed: 15 No. of samples received: 15

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

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

Review started: ____ Reviewer Signature: ____

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

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

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

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

Data received by: ____ Date: ____

Data review received by: ____ Date: ____

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

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

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

INORGANIC/ORGANIC COMPLETE SDG FILE (CSF) INVENTORY CHECKLIST

Case No. 29658 SDG No. E0455 SDG Nos. to Follow _____ _____ _____ SAS No. _____ Date Recvd 9 / 26 / 01

EPA Lab ID: 84 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: Nicola Jackson _____ Nicola Jackson / ESAT _____ Date 9 / 26 / 01

Audited by: _____ _____ Date / /

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

TO BE COMPLETED BY CEAT

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

Entered by: _____ _____

Reviewed by: _____ _____
Signature Printed Name/ Title

ESAT Tracking Log-In Sheet

Data Review Level 1
# of Folders 1

SOW Version # 4.2
Site/Project ID: 059BL400

DATE RECEIVED AT CRL 9/26/01

USER WESTON

SITE NAME Allied Paper (MI)

CASE/SAS NUMBER 29658 SDG. NO. E0455

SAMPLING DATE 8/22/01 DATE SHIPPED 8/23/01

CONTRACT LAB SWOK

NUMBER OF SAMPLES 15 DATE TO ETM

SAMPLES	MATRIX			ANALYSES
E0455-69	(Soil)	Water	Other	PCBs
	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	
	Soil	Water	Other	

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

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

SEP 2 6 2001

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME SOUTHWEST LABORATORY OF OKLAHOMA
CITY/STATE BROKEN ARROW, OKLAHOMA
CASE NO. 29658 SDG NO. E0455 SDG NOS. TO FOLLOW
SAS NO.
CONTRACT NO. 68W00066
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	5		
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. 29658 SDG NO. E0455 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	SA	
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	6	6		
MS/MSD Duplicate Summary (Form III PEST)	7	8		
Method Blank Summary (Form IV PEST)	9	9		

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

CASE NO. 29658 SDG NO. E0455 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
6. Pesticides Data (Cont.)				
b. Sample Data	10	99		
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	100	195		
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	196	222		
Matrix Spke/Matrix Spike Duplicate Data	223	236		

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

CASE NO. 29658 SDG NO. E0455 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
6. Pesticides Data (Cont.)				
e. Raw GPC Data	237	275	✓	
f. Raw Florisil Data	NA	NA		
7. Miscellaneous Data				
Original preparation and analysis forms or of preparation and analysis logbook pages	276	281		
Internal sample and sample extract transfer chain-of-custody records	282	285		
Screening records	NA	NA		
All instrument output, including strip charts from screening activities (describe or list)				
8. EPA Shipping/Receiving Documents				
Airbills (No. of shipments 1)	286	286		
Chain-of-Custody Records	287 ~~286~~	~~286~~ 288		
Sample Tags	288A	288C		
Sample Log-in Sheet (Lab & DC1)	289	291		
Miscellaneous Shipping/Receiving Records (describe or list)				
Memos, Changes, Analytical Request	292	297		
	NA	NA		
9. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
10. Other Records (describe or list)				
Telephone Communication Log				

EW 9-24-01

11. Comments:

FORM DC-2-4 OLM04.2

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

CASE NO. 29658 SDG NO. E0455 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

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

SEP 2 6 2001

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

SDG NARRATIVE

September 24, 2001

CONTRACT: 68W00066

CASE NO: 29658

SDG NO: E0455

SAMPLES: E0455, E0455MS, E0455MSD, E0456, E0456DL, E0457, E0458, E0458DL, E0459, E0459DL, E0460, E0460DL, E0461, E0462, E0463, E0464, E0465, E0466, E0466DL, E0467, E0468, E0468DL, and E0469.

FRACTION: Pesticide/PCB

Fifteen 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. Hydrogen used as the carrier gas.

The following sample in this SDG labeled with a DL is considered billable since this sample was diluted to get target compounds within instruments linear range: E0456DL, E0458DL, E0459DL, E0460DL, E0466DL and E0468DL.

The sample cooler arrived at 2.8 degrees Celsius.

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

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

Surrogates: All surrogates were within QC limits with the following exceptions:

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.

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
Organic Program Manager September 24, 2001

Contract Laboratory Program

Sample Delivery Group (SDG) Cover Sheet

SDG Number E0455

ST 8/27/01

Laboratory Name Southwest Laboratory of Ok. Laboratory Code SWOK

Contract No. 68W00066 Case No. ~~OLM04.2~~ 29653

Analyses Price 570.00 SDG Turnaround 21

EPA Sample Numbers in SDG (Listed in Numerical Order)

1) E0455	7) E0461	13) E0467	19)
2) E0456	8) E0462	14) E0468	20)
3) E0457	9) E0463	15) E0469	21)
4) E0458	10) E0464	16)	22)
5) E0459	11) E0465	17)	23)
6) E0460	12) E0466	18)	24)

ST 8/27/01

ST 8/27/01

E0455	E0469
First Sample in SDG	Last Sample in SDG
08/24/2001	08/24/2001
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 8-27-01

Version 2.0

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

Case No: 29658
DAS No:
SDG No: E0455

L

Date Shipped: 8/23/2001
Carrier Name: FedEx
Airbill: 821876980443
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	8-23-01 1145		8-24-01 8:30
2			
3			
4			

Sampler Signature:

For Lab Use Only
Lab Contract No: 68W00066
Unit Price: 570.00
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
E0452	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099185 (Ice Only) (1)	AP-SL012-12-03	S: 8/22/2001 10:15		
E0453	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099186 (Ice Only) (1)	AP-SL012-12-04	S: 8/22/2001 10:15		
E0454	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099187 (Ice Only) (1)	AP-SL012-12-04DP	S: 8/22/2001 10:15		
E0455	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099188 (Ice Only) (1)	AP-SL012-12-05	S: 8/22/2001 10:15	ORIGINAL IN SDG# E0435 8-24-01 (LHS)	
E0456	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099189 (Ice Only) (1)	AP-SL012-07-01	S: 8/22/2001 10:43		
E0457	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099190 (Ice Only) (1)	AP-SL012-07-02	S: 8/22/2001 10:43		
E0458	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099191 (Ice Only) (1)	AP-SL012-07-03	S: 8/22/2001 10:43		
E0459	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099192 (Ice Only) (1)	AP-SL012-08-01	S: 8/22/2001 11:32		
E0460	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099193 (Ice Only) (1)	AP-SL012-08-02	S: 8/22/2001 11:32		
E0461	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099194 (Ice Only) (1)	AP-SL012-08-03	S: 8/22/2001 11:32		

E0455

Rec OK

Shipment for Case Complete?Y	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
	E0455		2.8°C TB	177848, 177849

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: 5-490998136-082301-0002

LABORATORY COPY

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

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

Case No:	29658
DAS No:	
SDG No:	E0455

L

Date Shipped:	8/23/2001
Carrier Name:	FedEx
Airbill:	821876980443
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]	8.23.01 1140	[illegible]	8-24-01 8:30
2			
3			
4			

Sampler Signature: [illegible]

For Lab Use Only

Lab Contract No:	68W00066
Unit Price:	570.00
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 E0455 Sample Condition On Receipt
E0462	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099195 (Ice Only) (1)	AP-SL012-08-04	S:	8/22/2001	11:32		Ree
E0463	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099196 (Ice Only) (1)	AP-SL012-08-05	S:	8/22/2001	11:32		OK
E0464	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099197 (Ice Only) (1)	AP-SL012-08-06	S:	8/22/2001	11:32		
E0465	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099198 (Ice Only) (1)	AP-SL012-08-06DP	S:	8/22/2001	11:32		
E0466	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099199 (Ice Only) (1)	AP-SL012-04-01	S:	8/22/2001	10:29		
E0467	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099200 (Ice Only) (1)	AP-SL012-04-02	S:	8/22/2001	10:29		
E0468	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099201 (Ice Only) (1)	AP-SL012-04-03	S:	8/22/2001	10:29		
* E0469	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099202 (Ice Only) (1)	AP-SL012-04-03DP	S:	8/22/2001	10:29		

5

* SDG Final Sample

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC: E0455	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 2.8 C TB	Chain of Custody Seal Number: 177848, 177849
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: 5-490998136-082301-0002

LABORATORY COPY

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

2F
SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

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	70	72	76	71	0
02	ELCS1	60	63	67	62	0
03	ELCS2	61	65	67	62	0
04	E0455	109	107	99	84	0
05	E0455MS	83	83	78	68	0
06	E0455MSD	70	73	69	58	0
07	E0456	93	75	87	90	0
08	E0457	61	63	56	53	0
09	E0458	109	107	99	80	0
10	E0459	76	73	95	110	0
11	E0460	80	110	116	89	0
12	E0461	76	78	74	69	0
13	E0462	88	91	87	81	0
14	E0463	82	83	102	88	0
15	E0464	60	67	78	56	0
16	E0465	72	76	84	62	0
17	E0466	90	80	87	86	0
18	E0467	100	103	87	87	0
19	E0468	79	81	91	69	0
20	E0469	84	86	82	67	0
21	E0456DL	143	137	135	160	0
22	E0458DL	141	189	135	123	0
23	E0459DL	115	137	158	204D	0
24	E0460DL	92	112	119	126	0
25	E0466DL	144	144	137	160	0
26	E0468DL	89	110	88	82	0
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

3H

SOIL AROCLOR LABORATORY CONTROL SPIKE/ DUPLICATE RECOVERY

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

LCS Sample NO.: ELCS1

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Aroclor-1254	133	96.8	73	29-135

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1254	133	101	76	4	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: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix Spike - Client Sample NO.: E0455

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Aroclor-1254	201	12.5	127	57	29-135

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1254	199	116	52	9	50	29-135

Column to be used to flag recovery values

* Values outside of QC limits

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

Comments: _____

4C

AROCLOR METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

PBLKSB

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Lab Sample ID: BL0828SB Lab File ID: 15091831

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

Sulfur Cleanup: (Y/N) Y Date Extracted: 08/28/01

Date Analyzed (1): 09/18/01 Date Analyzed (2): 09/18/01

Time Analyzed (1): 2052 Time Analyzed (2): 2052

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

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	LC0828SB	09/18/01	09/18/01
02	ELCS2	LD0828SB	09/18/01	09/18/01
03	E0455	47393.01	09/19/01	09/19/01
04	E0455MS	47393.02MS	09/19/01	09/19/01
05	E0455MSD	47393.03MSD	09/19/01	09/19/01
06	E0456	47393.04	09/19/01	09/19/01
07	E0457	47393.05	09/19/01	09/19/01
08	E0458	47393.06	09/19/01	09/19/01
09	E0459	47393.07	09/19/01	09/19/01
10	E0460	47393.08	09/19/01	09/19/01
11	E0461	47393.09	09/19/01	09/19/01
12	E0462	47393.10	09/19/01	09/19/01
13	E0463	47393.11	09/19/01	09/19/01
14	E0464	47393.12	09/19/01	09/19/01
15	E0465	47393.13	09/19/01	09/19/01
16	E0466	47393.14	09/19/01	09/19/01
17	E0467	47393.15	09/19/01	09/19/01
18	E0468	47393.16	09/19/01	09/19/01
19	E0469	47393.17	09/19/01	09/19/01
20	E0456DL	47393.04DL	09/19/01	09/19/01
21	E0458DL	47393.06DL	09/19/01	09/19/01
22	E0459DL	47393.07DL	09/19/01	09/19/01
23	E0460DL	47393.08DL	09/19/01	09/19/01
24	E0466DL	47393.14DL	09/19/01	09/19/01
25	E0468DL	47393.16DL	09/19/01	09/19/01
26				

Comments: _____

HYDROGEN USED AS CARRIER GAS FOR SAMPLE ANALYSES

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E0455

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) SOIL Lab Sample ID: 47393.01

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

% Moisture: 34 decanted: (Y/N) __ Date Received: 08/24/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/28/01

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

Injection Volume: 0.5(uL) Dilution Factor: 1.0

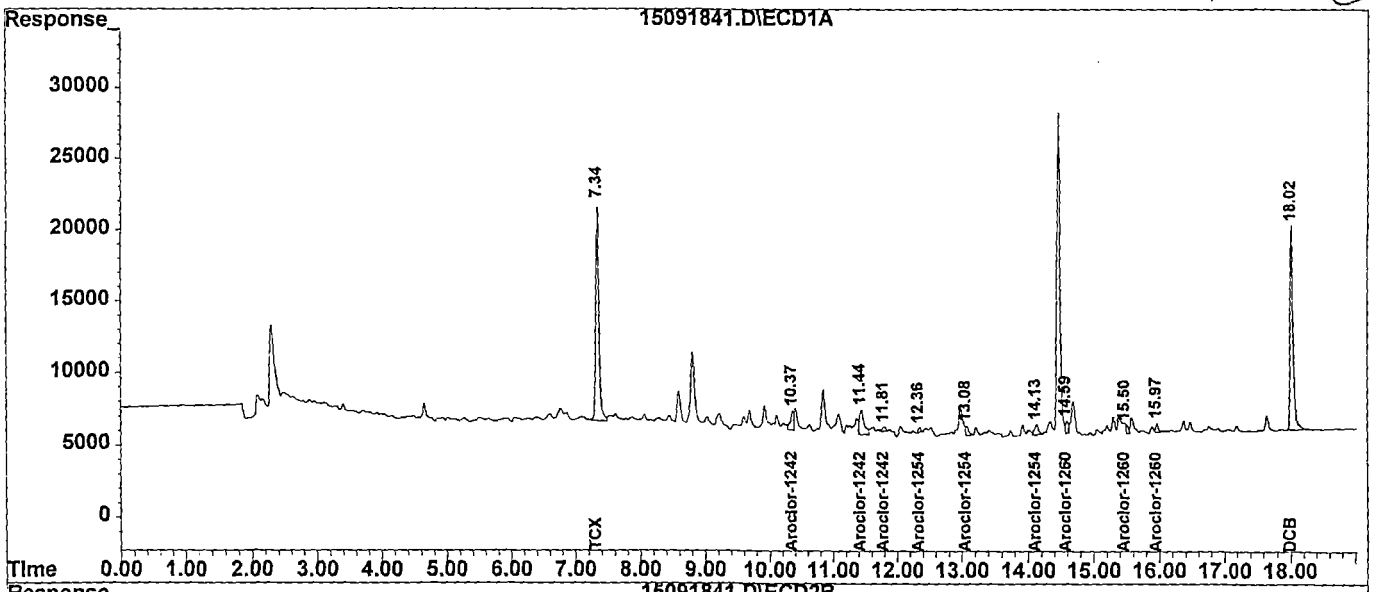
GPC Cleanup: (Y/N) Y pH: 7.1 Sulfur Cleanup: (Y/N) Y

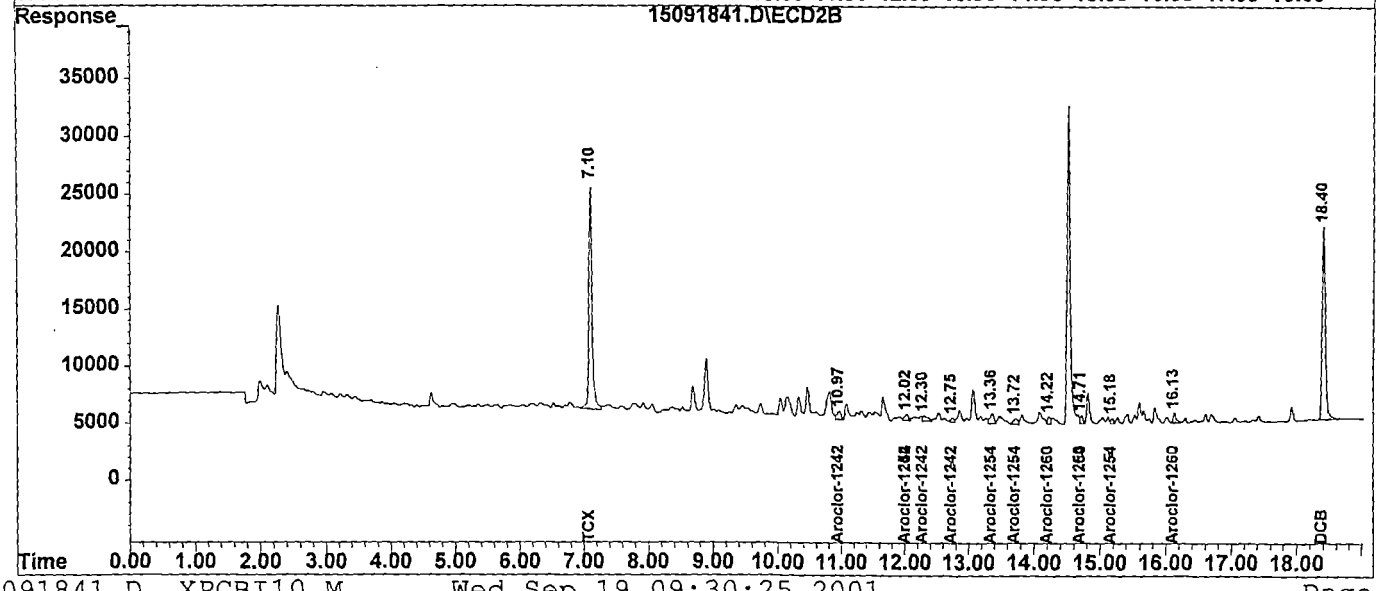
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	50	U
11104-28-2	Aroclor-1221	50	U
11141-16-5	Aroclor-1232	50	U
53469-21-9	Aroclor-1242	21	JP
12672-29-6	Aroclor-1248	50	U
11097-69-1	Aroclor-1254	13	J
11096-82-5	Aroclor-1260	5.1	J
	Surrogate amount spiked	10.07	

Chromatographic Report

```
Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091841.D\ECD1A.CH Vial: 35
Acq On    : 19 Sep 2001  00:44                          Operator: SA
Sample    : 47393.01  *E0455  *                         Inst    : HP_15
Misc      : *EPA*30.1G/5.0ML*34                         Dilution: 1.00
IntFile   : events.e

Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091841.D\ECD2B.CH Vial: 35
Acq On    : 19 Sep 2001  00:44                          Operator: SA
Sample    : 47393.01                                    Inst    : HP_15
Misc      :                                             Dilution: 1.00
IntFile   : events2.e
Quant Time: Sep 19  9:14 2001  Quant Results File: XPCBI10.RES

Method       : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path   : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update  : Fri Sep 07 16:29:03 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_15A           Signal #2 Inst : HP_15B
```

OK 9-22-01





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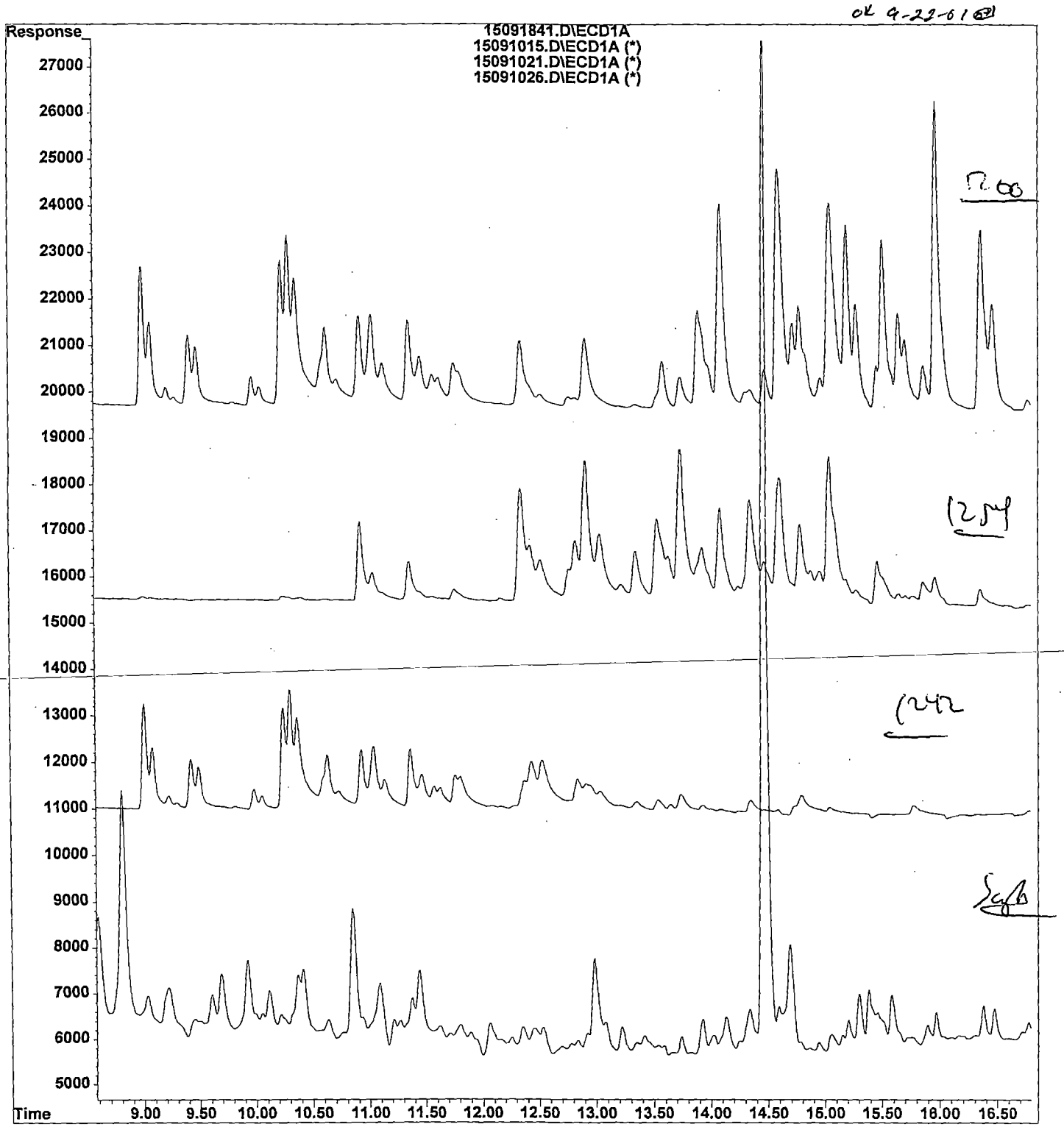
Operator : SA
Acquired : 19 Sep 2001 00:44 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 47393.01
Misc Info :
Vial Number: 35



Quantitation Report

Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091841.D\ECD1A.CH Vial: 35
Acq On : 19 Sep 2001 00:44 Operator: SA
Sample : 47393.01 *E0455 * Inst : HP_15
Misc : *EPA*30.1G/5.0ML*34 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091841.D\ECD2B.CH Vial: 35
Acq On : 19 Sep 2001 00:44 Operator: SA
Sample : 47393.01 Inst : HP_15
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 19 9:14 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 2001
Response via : Initial Calibration

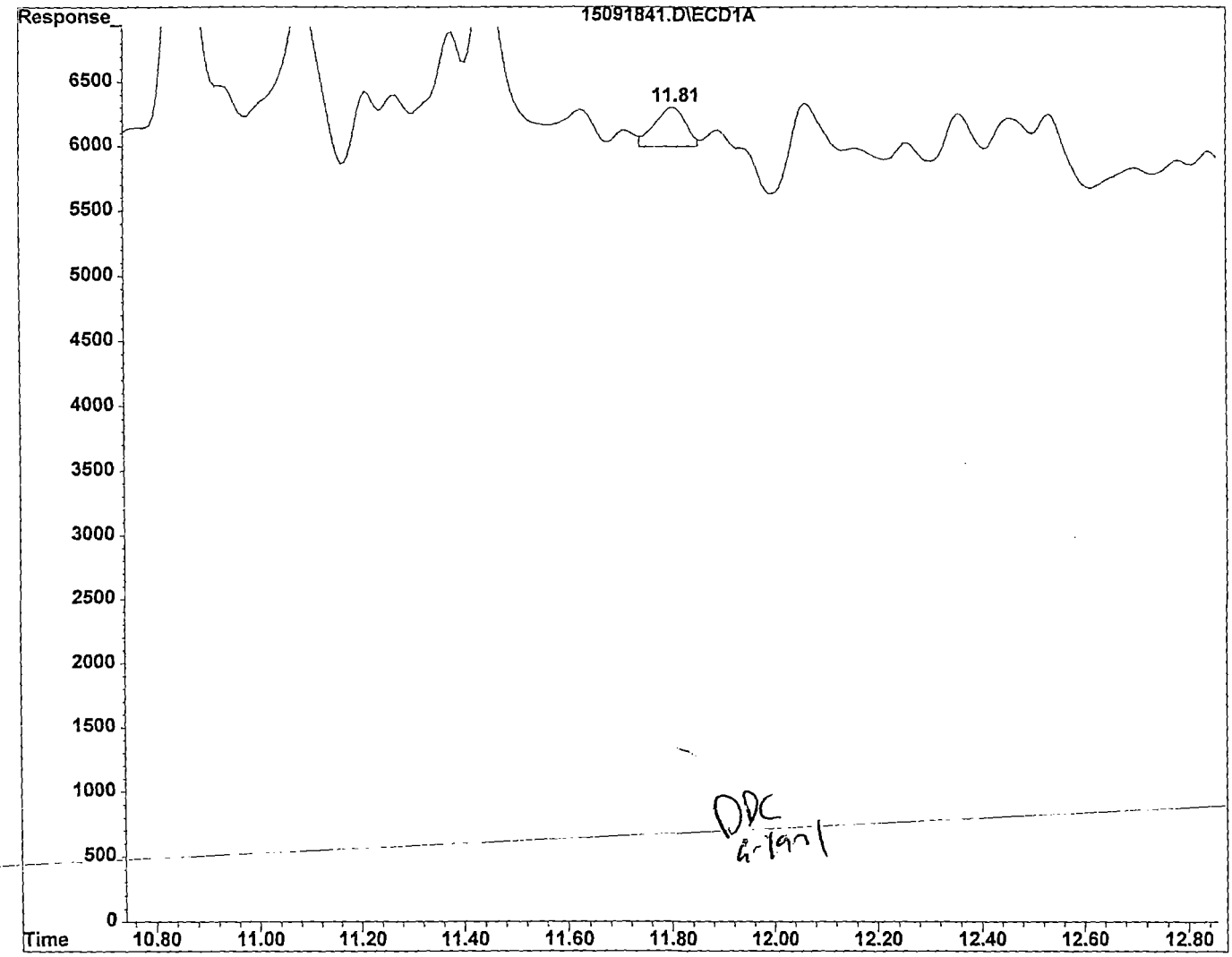
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.34	7.10	497586	678851	11.0	10.8	
	Spiked Amount 10.067			Recovery	=	109.26%	107.28%	
22)	S DCB	18.02	18.40	490309	576924	10.0	8.446	
	Spiked Amount 10.067			Recovery	=	99.33%	83.89%	
	Target Compounds:							
8)	L4 Aroclor-1242 {2}	0.00	10.97f	0	34396	N.D.	27.3	#
9)	L4 Aroclor-1242 {3}	10.37	12.03	48010	23561	25.9	17.0	#
10)	L4 Aroclor-1242 {4}	11.45	12.30f	86435	27360	140.5	32.9	#
11)	L4 Aroclor-1242 {5}	11.81	12.75	12700	12811	16.2m	8.048	#
	Sum Aroclor-1242			147145	98127	182.6	85.2	
	Average Aroclor-1242					60.858	21.310	
12)	L6 Aroclor-1254	12.36	12.03	9195	23561	4.927	23.3	#
13)	L6 Aroclor-1254 {2}	13.08f	13.37f	20523	39826	13.9	24.8	#
14)	L6 Aroclor-1254 {3}	0.00	13.73f	0	20397	N.D.	14.2	#
15)	L6 Aroclor-1254 {4}	14.13f	14.71	32529	20918	18.7	10.3	#
16)	L6 Aroclor-1254 {5}	0.00	15.18	0	13232	N.D.	4.983	#
	Sum Aroclor-1254			62247	117935	37.6	77.5	
	Average Aroclor-1254					12.528	15.507	
7)	L7 Aroclor-1260	0.00	14.22	0	19303	N.D.	7.681	#
8)	L7 Aroclor-1260 {2}	14.60	0.00	24553	0	5.959	N.D. d	#
9)	L7 Aroclor-1260 {3}	0.00	14.71	0	20918	N.D. d	4.216	#
0)	L7 Aroclor-1260 {4}	15.49	0.00	14268	0	5.567m	N.D.	#
1)	L7 Aroclor-1260 {5}	15.98	16.13	17667	26384	3.695	3.746	
	Sum Aroclor-1260			56488	66606	7.662	7.875	
	verage Aroclor-1260					5.073	5.215	

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

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\15\DATA\09_18_01\15091841.D
Date Acquired: 19 Sep 2001 00:44
Inst: HP_15 Operator ID: SA
Name: 47393.01 *E0455 *
Misc: *EPA*30.1G/5.0ML*34
Method: F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 9:14 2001 Quant Results File: XPCBI10.RES



DPC 4-19-1

OK 9-22-01

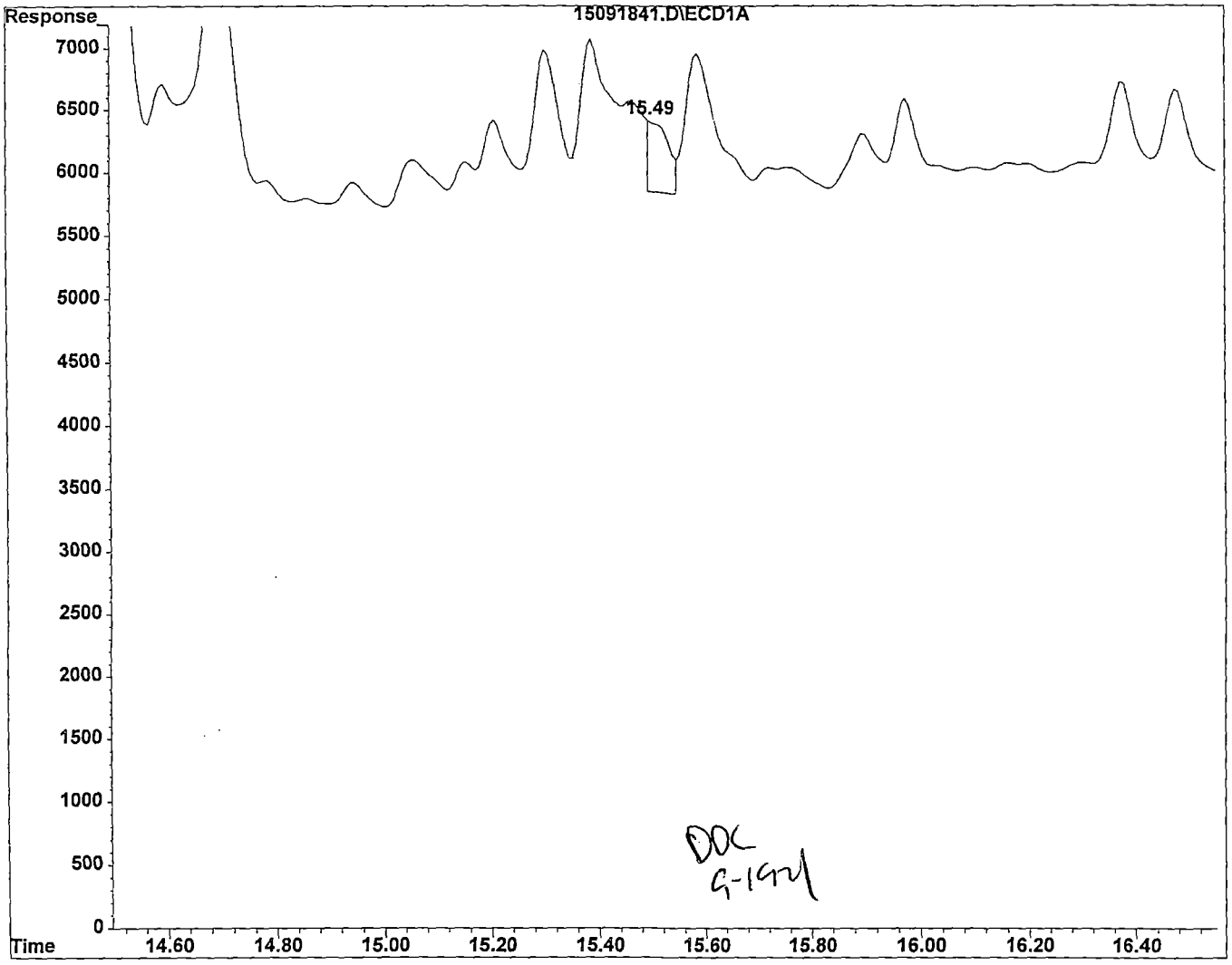
Aroclor-1242 {5} 11.81min area: 12700 m

Integration Time Range: 11.74 - 11.85

F:\HPCHEM\HP\15\DATA\09_18_01\15091841.D
Report generated: Wed Sep 19 09:34:54 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\15\DATA\09_18_01\15091841.D
Date Acquired: 19 Sep 2001 00:44
Inst: HP_15 Operator ID: SA
Name: 47393.01 *E0455 *
Misc: *EPA*30.1G/5.0ML*34
Method: F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 9:14 2001 Quant Results File: XPCBI10.RES



DOC 9-19-01

OK 9-22-01

Aroclor-1260 {4} 15.49min area: 14268 m

Integration Time Range: 15.50 - 15.55

F:\HPCHEM\HP\15\DATA\09_18_01\15091841.D
Report generated: Wed Sep 19 09:34:54 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E0456

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) SOIL Lab Sample ID: 47393.04

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

% Moisture: 63 decanted: (Y/N) __ Date Received: 08/24/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/28/01

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

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

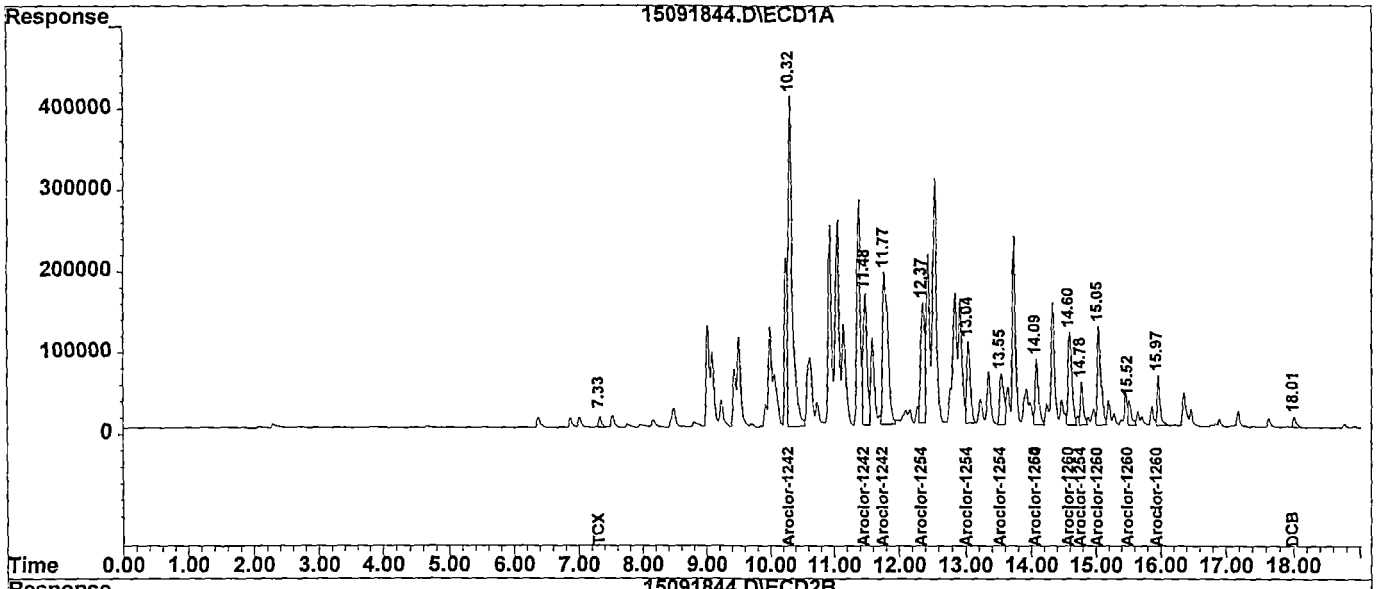
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	89	U
11104-28-2	Aroclor-1221	89	U
11141-16-5	Aroclor-1232	89	U
53469-21-9	Aroclor-1242	~~16000~~	40000 D ~~E~~
12672-29-6	Aroclor-1248	89	U
11097-69-1	Aroclor-1254	~~3600~~	9000 D ~~E~~
11096-82-5	Aroclor-1260	~~1500~~	3500 DJ ~~E~~
	Surrogate amount spiked	18.01	

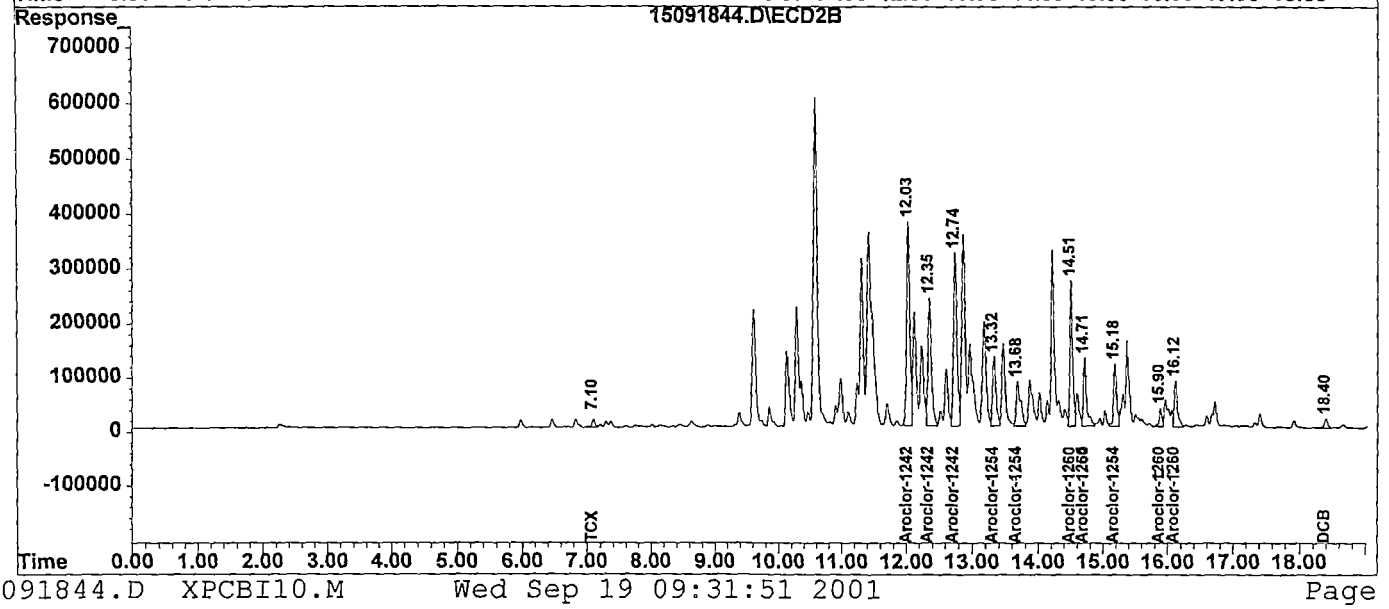
apply this results
TBS 10-12-01

Chromatographic Report

```
Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091844.D\ECD1A.CH Vial: 38
Acq On    : 19 Sep 2001   1:53                          Operator: SA
Sample    : 47393.04   *E0456 *                        Inst    : HP_15
Misc      : *EPA*30G/5.0ML*63                           Dilution: 1.00
IntFile   : events.e

Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091844.D\ECD2B.CH Vial: 38
Acq On    : 19 Sep 2001   1:53                          Operator: SA
Sample    : 47393.04                                    Inst    : HP_15
Misc      :                                             Dilution: 1.00
IntFile   : events2.e
Quant Time: Sep 19  9:18 2001  Quant Results File: XPCBI10.RES

Method        : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path    : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update   : Fri Sep 07 16:29:03 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_15A           Signal #2 Inst : HP_15B
```

OK 9-22-01





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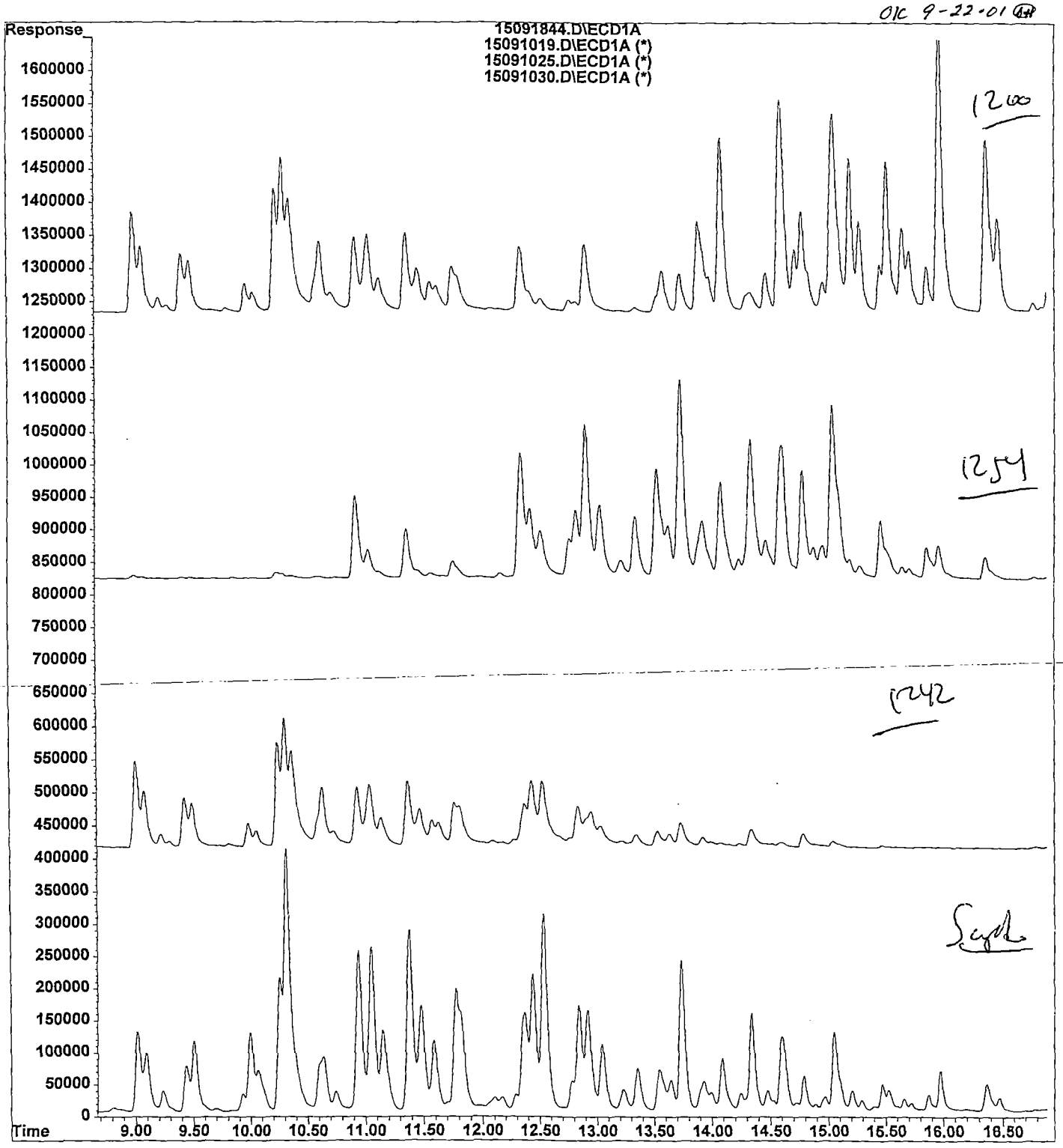
Operator : SA
Acquired : 19 Sep 2001 1:53 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 47393.04
Misc Info :
Vial Number: 38

OK 9-22-01



Quantitation Report

```
Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091844.D\ECD1A.CH Vial: 38
Acq On    : 19 Sep 2001   1:53                          Operator: SA
Sample    : 47393.04  *E0456  *                         Inst    : HP_15
Misc      : *EPA*30G/5.0ML*63                           Dilution: 1.00
IntFile   : events.e

Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091844.D\ECD2B.CH Vial: 38
Acq On    : 19 Sep 2001   1:53                          Operator: SA
Sample    : 47393.04                                    Inst    : HP_15
Misc      :                                             Dilution: 1.00
IntFile   : events2.e
Quant Time: Sep 19  9:18 2001  Quant Results File: XPCBI10.RES

Method       : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path   : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update  : Fri Sep 07 16:29:03 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_15A           Signal #2 Inst : HP_15B
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.34	7.10	422063	473122	16.7	13.5
	Spiked Amount 18.018			Recovery	=	92.69%	74.93%
22)	S DCB	18.02	18.40	428393	621654	15.6	16.3
	Spiked Amount 18.018			Recovery	=	86.58%	90.46%
	Target Compounds:						
9)	L4 Aroclor-1242 {3}	10.32f	12.03	19026360	13464843	18382.0 E	17395.2 E
10)	L4 Aroclor-1242 {4}	11.48	12.36	6398068	8669491	18611.8 E	18647.7 E
11)	L4 Aroclor-1242 {5}	11.78	12.74	10500943	11212280	23927.7 E	12606.9 E#
	Sum Aroclor-1242			35925371	33346614	60921.5	48649.7
	Average Aroclor-1242					20307.171	16216.580
12)	L6 Aroclor-1254	12.37	0.00	5821812	0	5583.6 E	N.D. d #
13)	L6 Aroclor-1254 {2}	13.04	13.33	3784909	4643170	4590.6 E	5168.4 E
14)	L6 Aroclor-1254 {3}	13.55	13.68	2653760	3808227	2636.6 E	4743.5 E#
15)	L6 Aroclor-1254 {4}	14.09	14.72	2966729	4402388	3060.5 E	3861.2 E#
16)	L6 Aroclor-1254 {5}	14.79	15.19	1661600	3701886	2032.6 E	2495.1 E
	Sum Aroclor-1254			16888810	16555671	17903.8	16268.3
	Average Aroclor-1254					3580.769	4067.080
17)	L7 Aroclor-1260	14.09	0.00	2966729	0	1678.9 E	N.D. d #
18)	L7 Aroclor-1260 {2}	14.60	14.51	4743453	8081517	2060.3 E	3573.7 E#
19)	L7 Aroclor-1260 {3}	15.05	14.72	4881593	4402388	2193.9 E	1587.9 E#
20)	L7 Aroclor-1260 {4}	15.52	15.90	1120100	983057	782.2	621.4
21)	L7 Aroclor-1260 {5}	15.97	16.13	1909917	2852086	714.9	724.8
	Sum Aroclor-1260			15621792	16319047	6693.8	5862.9
	Average Aroclor-1260					1486.014	1626.955

(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.

E0456DL

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) SOIL Lab Sample ID: 47393.04DL

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

% Moisture: 63 decanted: (Y/N) __ Date Received: 08/24/01

Extraction: (SepF/Cont/Sonc) N Date Extracted:08/28/01

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

Injection Volume: 0.5(uL) Dilution Factor: 50.0

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	4500	U
11104-28-2	Aroclor-1221	4500	U
11141-16-5	Aroclor-1232	4500	U
53469-21-9	Aroclor-1242	40000	D
12672-29-6	Aroclor-1248	4500	U
11097-69-1	Aroclor-1254	9000	D
11096-82-5	Aroclor-1260	3500	DJ
	Surrogate amount spiked	18.01	

FORM I PCB

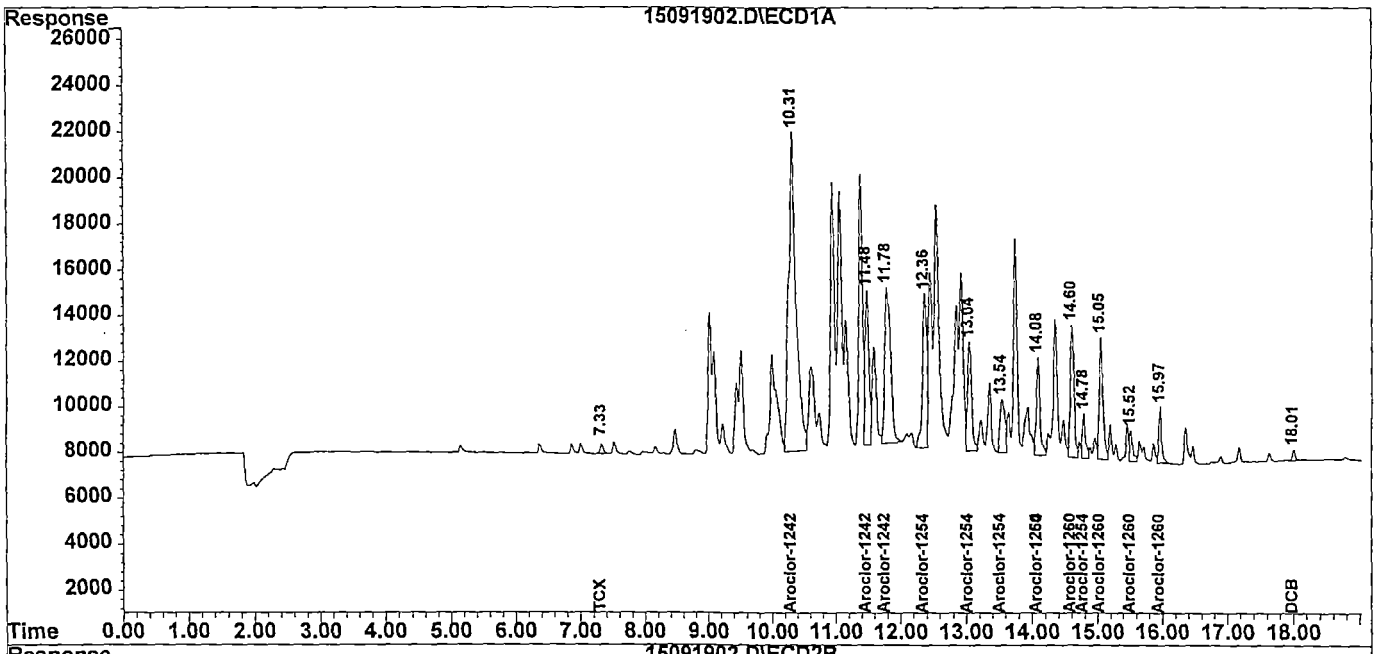
Chromatographic Report

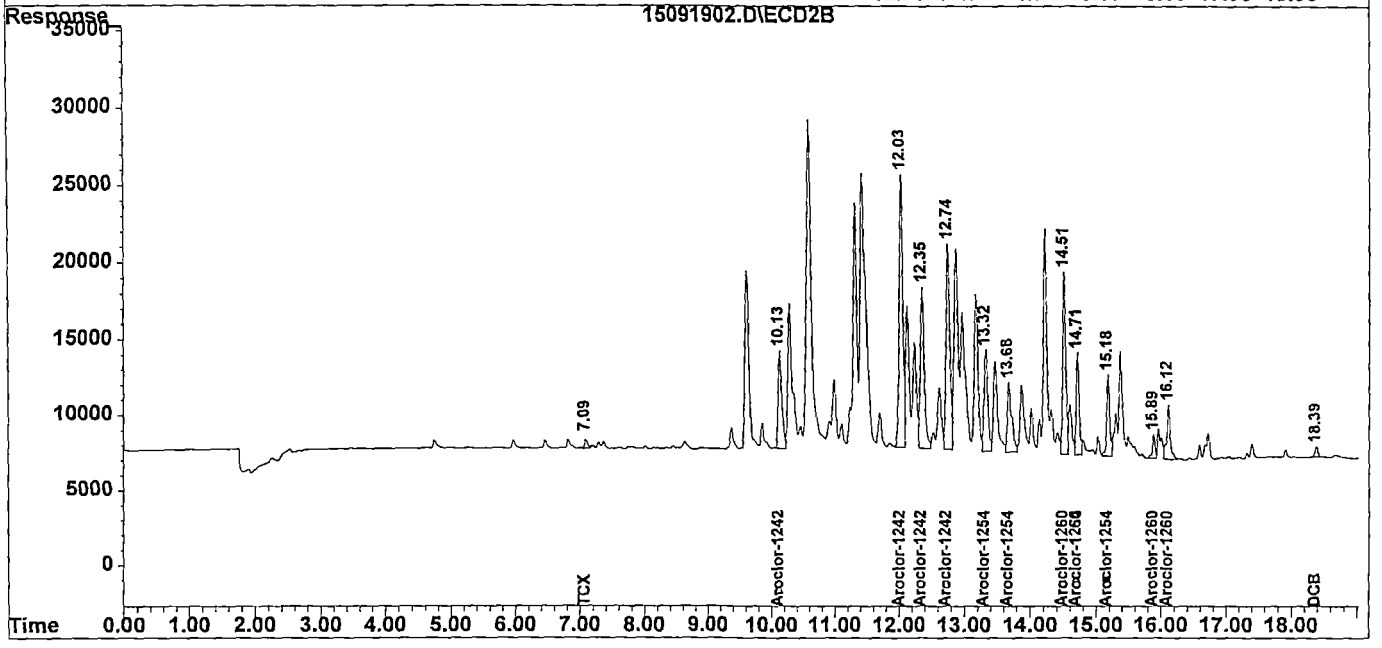
Signal #1 : F:\HPCHEM\HP\15\DATA\09_19_01\15091902.D\ECD1A.CH Vial: 2
Signal #2 : F:\HPCHEM\HP\15\DATA\09_19_01\15091902.D\ECD2B.CH
Acq On : 19 Sep 2001 13:59 Operator: DDC
Sample : 47393.04DL *E0456DL * Inst : HP_15
Misc : *EPA*30.0G/5.0ML*63 Dilution: 50.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 16:13 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_19_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

OK 9-22-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_19_01\15091902.D\ECD1A.CH Vial: 2
Signal #2 : F:\HPCHEM\HP\15\DATA\09_19_01\15091902.D\ECD2B.CH
Acq On : 19 Sep 2001 13:59 Operator: DDC
Sample : 47393.04DL *E0456DL * Inst : HP_15
Misc : *EPA*30.0G/5.0ML*63 Dilution: 50.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 16:13 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_19_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 2001
Response via : Initial Calibration

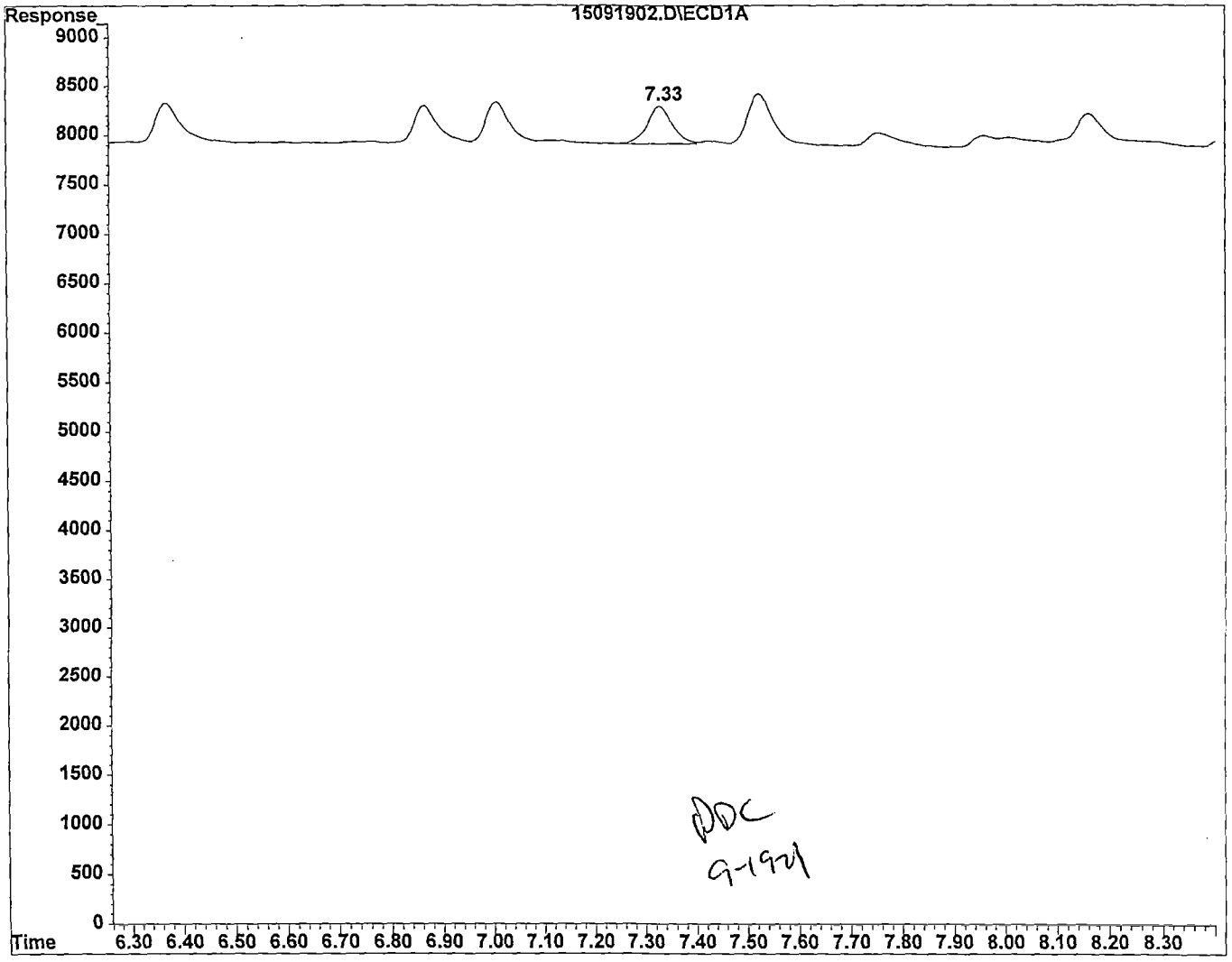
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.09	13061	17288	25.8m	24.6	
	Spiked Amount 18.018			Recovery	=	143.19%	136.53%	
22)	S DCB	18.01	18.39	13308	22048	24.3	28.9	
	Spiked Amount 18.018			Recovery	=	134.87%	160.40%	
	Target Compounds:							
7)	L4 Aroclor-1242	0.00	10.13	0	271228	N.D.	36375.4	#
9)	L4 Aroclor-1242 {3}	10.32f	12.03	1112077	694290	53720.7	44847.5	
10)	L4 Aroclor-1242 {4}	11.48	12.36	293377	435984	42671.3	46889.1	
11)	L4 Aroclor-1242 {5}	11.78	12.74	441328	550318	50281.0	30938.4	#
	Sum Aroclor-1242			1846781	1951820	146673.0	159050.4	
	Average Aroclor-1242					48891.002	39762.599	
12)	L6 Aroclor-1254	12.36	0.00	293500	0	14074.6	N.D.	d #
13)	L6 Aroclor-1254 {2}	13.05	13.33	210066	264178	12739.1	14703.2	
14)	L6 Aroclor-1254 {3}	13.54	13.68	112710	220090	5599.0	13707.1	#
15)	L6 Aroclor-1254 {4}	14.09	14.71	162214	214086	8367.1	9388.5	
16)	L6 Aroclor-1254 {5}	14.79	15.18	70042	175413	4284.0	5911.6	#
	Sum Aroclor-1254			848533	873768	45063.8	43710.4	
	Average Aroclor-1254					9012.758	10927.610	
17)	L7 Aroclor-1260	14.09	0.00	162214	0	4589.9	N.D.	d #
18)	L7 Aroclor-1260 {2}	14.60	14.51	238538	403411	5180.3	8919.5	#
19)	L7 Aroclor-1260 {3}	15.05	14.71	214937	214086	4829.8	3861.0	
20)	L7 Aroclor-1260 {4}	15.52	15.90	48209	43112	1683.3	1362.6	
21)	L7 Aroclor-1260 {5}	15.97	16.12	73877	135142	1382.6	1717.2	
	Sum Aroclor-1260			737775	795751	795759.6	714427.3	
	Average Aroclor-1260					3533.173	3965.072	

(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\15\DATA\09_19_01\15091902.D
Date Acquired: 19 Sep 2001 13:59
Inst: HP_15 Operator ID: DDC
Name: 47393.04DL *E0456DL *
Misc: *EPA*30.0G/5.0ML*63
Method: F:\HPCHEM\HP\15\DATA\09_19_01\XPCBI10.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 16:13 2001 Quant Results File: XPCBI10.RES



TCX 7.33min area: 13061 m

OK 9-22-01

Integration Time Range: 7.26 - 7.40

F:\HPCHEM\HP\15\DATA\09_19_01\15091902.D
Report generated: Wed Sep 19 16:35:34 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E0457

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) SOIL Lab Sample ID: 47393.05

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

% Moisture: 15 decanted: (Y/N) __ Date Received: 08/24/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/28/01

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

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	180	
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	51	
11096-82-5	Aroclor-1260	21	JP
	Surrogate amount spiked	7.64	

FORM I PCB

Chromatographic Report

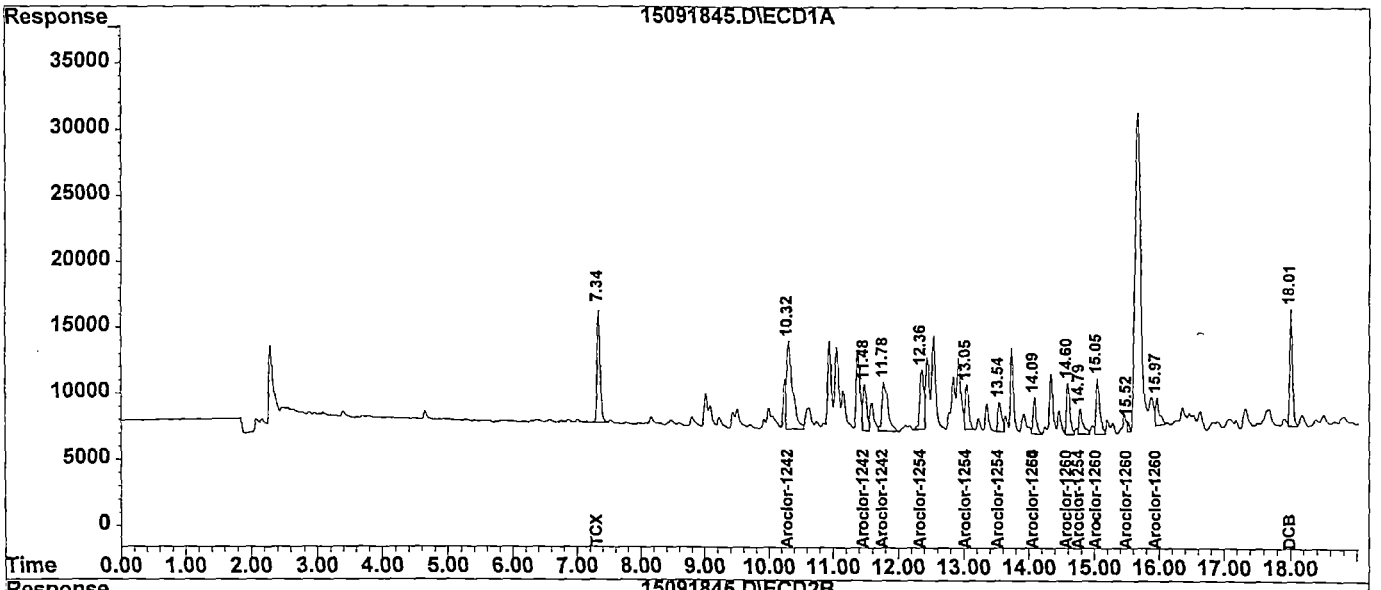
Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091845.D\ECD1A.CH Vial: 39
Acq On : 19 Sep 2001 2:16 Operator: SA
Sample : 47393.05 *E0457 * Inst : HP_15
Misc : *EPA*30.8G/5.0ML*15 Dilution: 1.00
IntFile : events.e

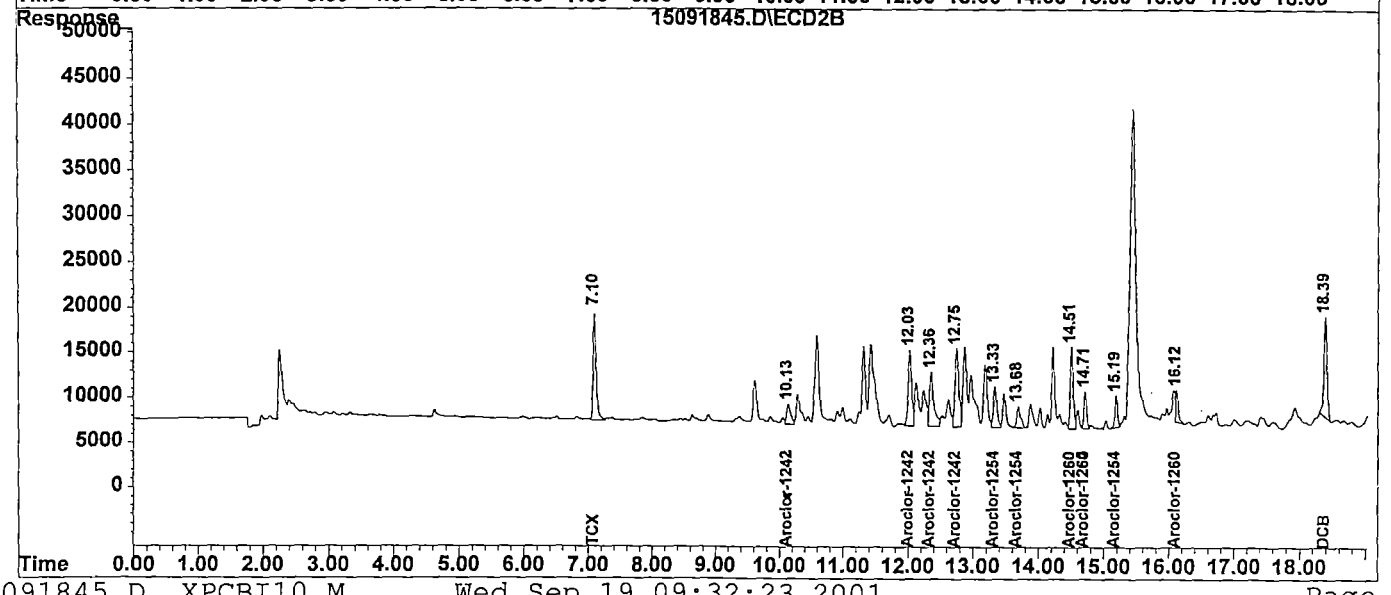
Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091845.D\ECD2B.CH Vial: 39
Acq On : 19 Sep 2001 2:16 Operator: SA
Sample : 47393.05 Inst : HP_15
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 19 9:20 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

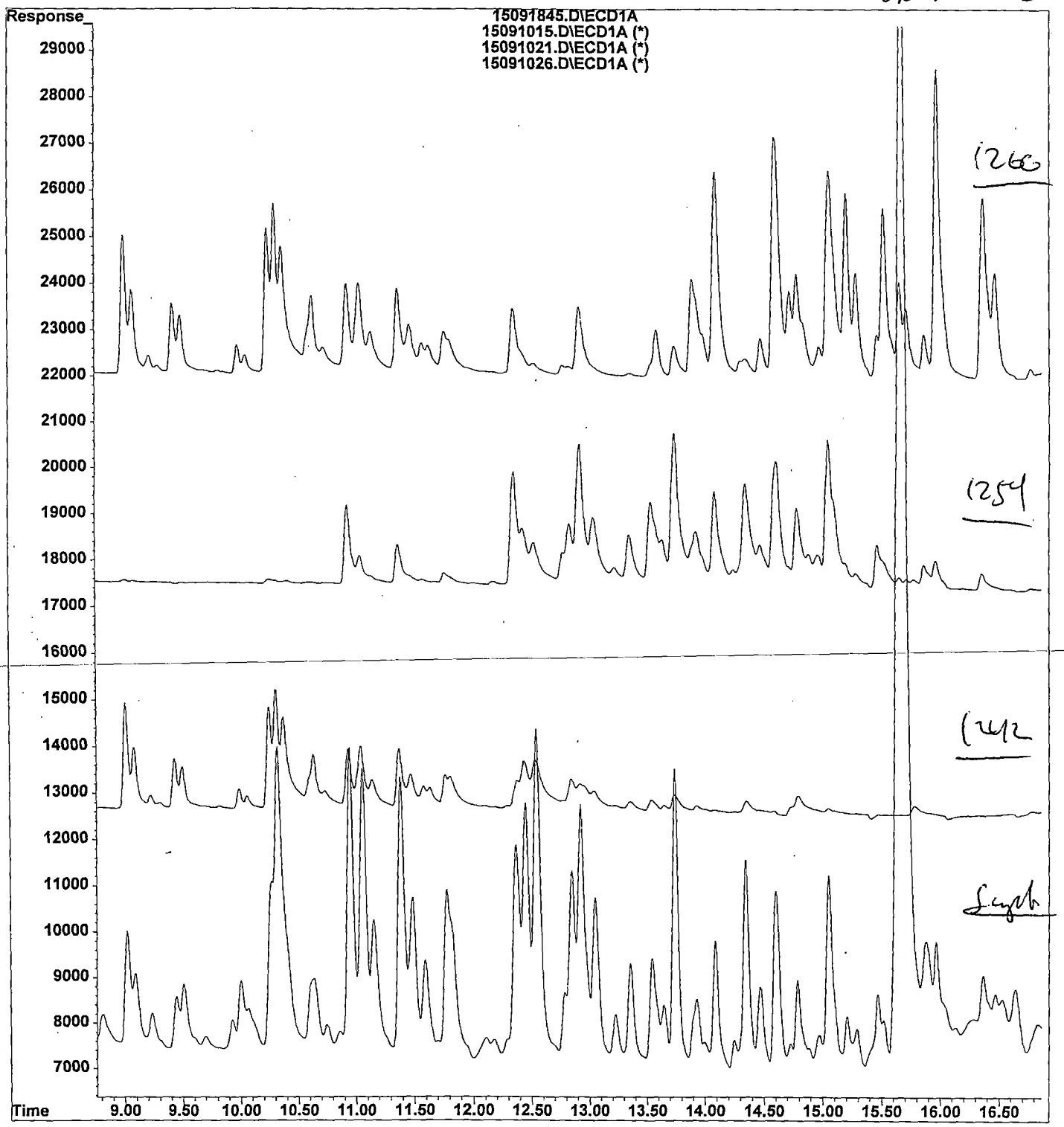
ok 9-22-01





File : F:\HPCHEM\HP\15\DATA\09_18_01\15091845.D
Operator : SA
Acquired : 19 Sep 2001 2:16 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 47393.05
Misc Info :
Vial Number: 39

OK 9-22-01



Quantitation Report

Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091845.D\ECD1A.CH Vial: 39
Acq On : 19 Sep 2001 2:16 Operator: SA
Sample : 47393.05 *E0457 * Inst : HP_15
Misc : *EPA*30.8G/5.0ML*15 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091845.D\ECD2B.CH Vial: 39
Acq On : 19 Sep 2001 2:16 Operator: SA
Sample : 47393.05 Inst : HP_15
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 19 9:20 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.34	7.10	279690	395247	4.686	4.777	
	Spiked Amount 7.639			Recovery	=	61.34%	62.53%	
22)	S DCB	18.01	18.39	277661	365817	4.299	4.064	
	Spiked Amount 7.639			Recovery	=	✓56.27%	✓53.20%	
	Target Compounds:							
7)	L4 Aroclor-1242	0.00	10.14	0	101240	N.D. d	115.1	#
9)	L4 Aroclor-1242 {3}	10.32f	12.03	417496	317865	171.0	174.1	
10)	L4 Aroclor-1242 {4}	11.49	12.36	147522	291281	181.9	265.6	#
11)	L4 Aroclor-1242 {5}	11.78	12.75	239265	356138	231.2	169.8	#
	Sum Aroclor-1242			804284	1066523	584.1	724.7	
	Average Aroclor-1242					194.708	181.167	
12)	L6 Aroclor-1254	12.37	0.00	181263	0	73.7	N.D. d	#
13)	L6 Aroclor-1254 {2}	13.05	13.33	132155	174338	68.0	82.3	
14)	L6 Aroclor-1254 {3}	13.55	13.69	90126	95129	38.0	50.2	#
15)	L6 Aroclor-1254 {4}	14.09	14.72	96068	114996	42.0	42.8	
16)	L6 Aroclor-1254 {5}	14.79	15.19	81721	97031	42.4	27.7	#
	Sum Aroclor-1254			581332	481494	264.0	203.0	
	Average Aroclor-1254					52.807	50.753	
17)	L7 Aroclor-1260	14.09	0.00	96068	0	23.1	N.D. d	#
18)	L7 Aroclor-1260 {2}	14.60	14.51	151095	278329	27.8	52.2	#
19)	L7 Aroclor-1260 {3}	15.05	14.72	172151	114996	32.8	17.6	#
20)	L7 Aroclor-1260 {4}	15.52	0.00	19257	0	5.702	N.D. d	#
21)	L7 Aroclor-1260 {5}	15.97	16.12	87584	99716	13.9	10.7	
	Sum Aroclor-1260			526155	493040	39.4	30.8	
	Average Aroclor-1260					20.656	26.838	

(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.

E0458

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) SOIL Lab Sample ID: 47393.06

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

% Moisture: 60 decanted: (Y/N) __ Date Received: 08/24/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/28/01

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

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	81	U
11104-28-2	Aroclor-1221	81	U
11141-16-5	Aroclor-1232	81	U
53469-21-9	Aroclor-1242	~~1500~~ 2700	DP
12672-29-6	Aroclor-1248	81	U
11097-69-1	Aroclor-1254	360	
11096-82-5	Aroclor-1260	110	P
Surrogate amount spiked		16.44	

apply
this results
TBS 10-12-01

FORM I PCB

Chromatographic Report

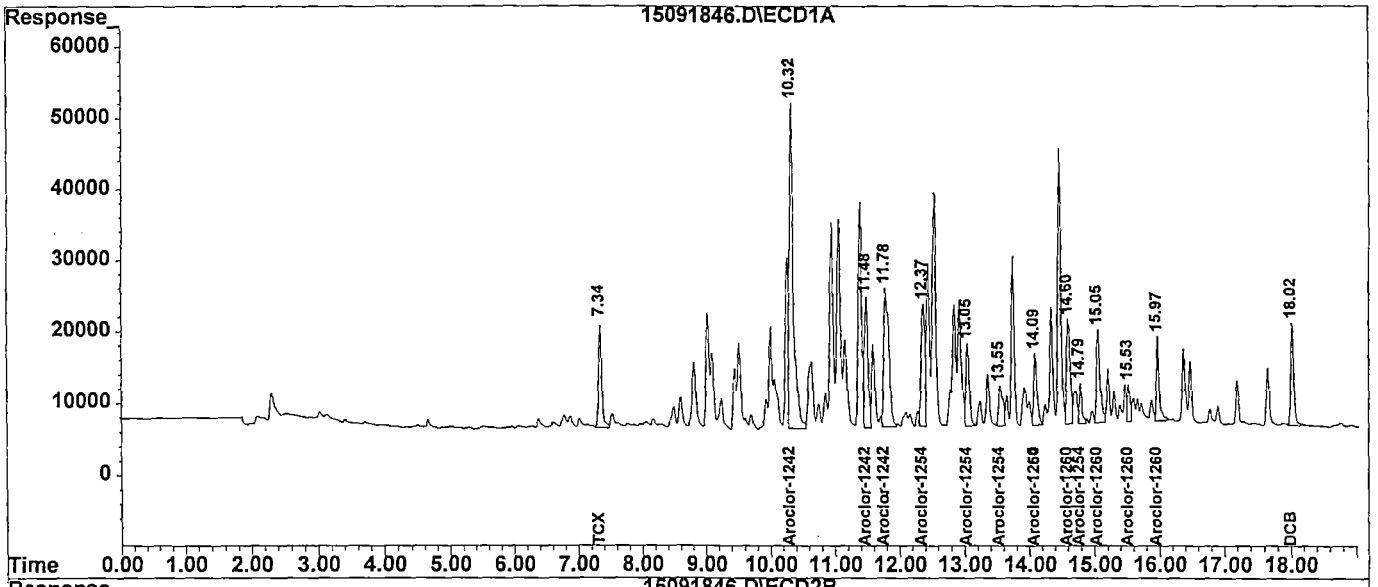
Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091846.D\ECD1A.CH Vial: 40
Acq On : 19 Sep 2001 2:39 Operator: SA
Sample : 47393.06 *E0458 * Inst : HP_15
Misc : *EPA*30.4G/5.0ML*60 Dilution: 1.00
IntFile : events.e

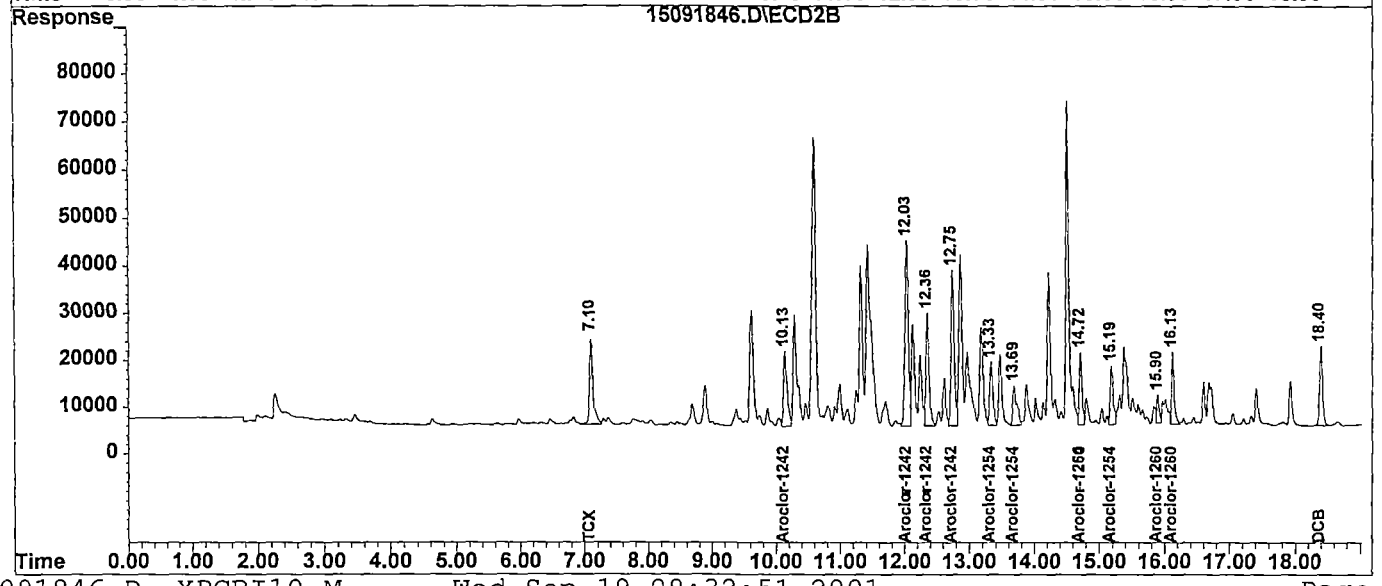
Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091846.D\ECD2B.CH Vial: 40
Acq On : 19 Sep 2001 2:39 Operator: SA
Sample : 47393.06 Inst : HP_15
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 19 9:22 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

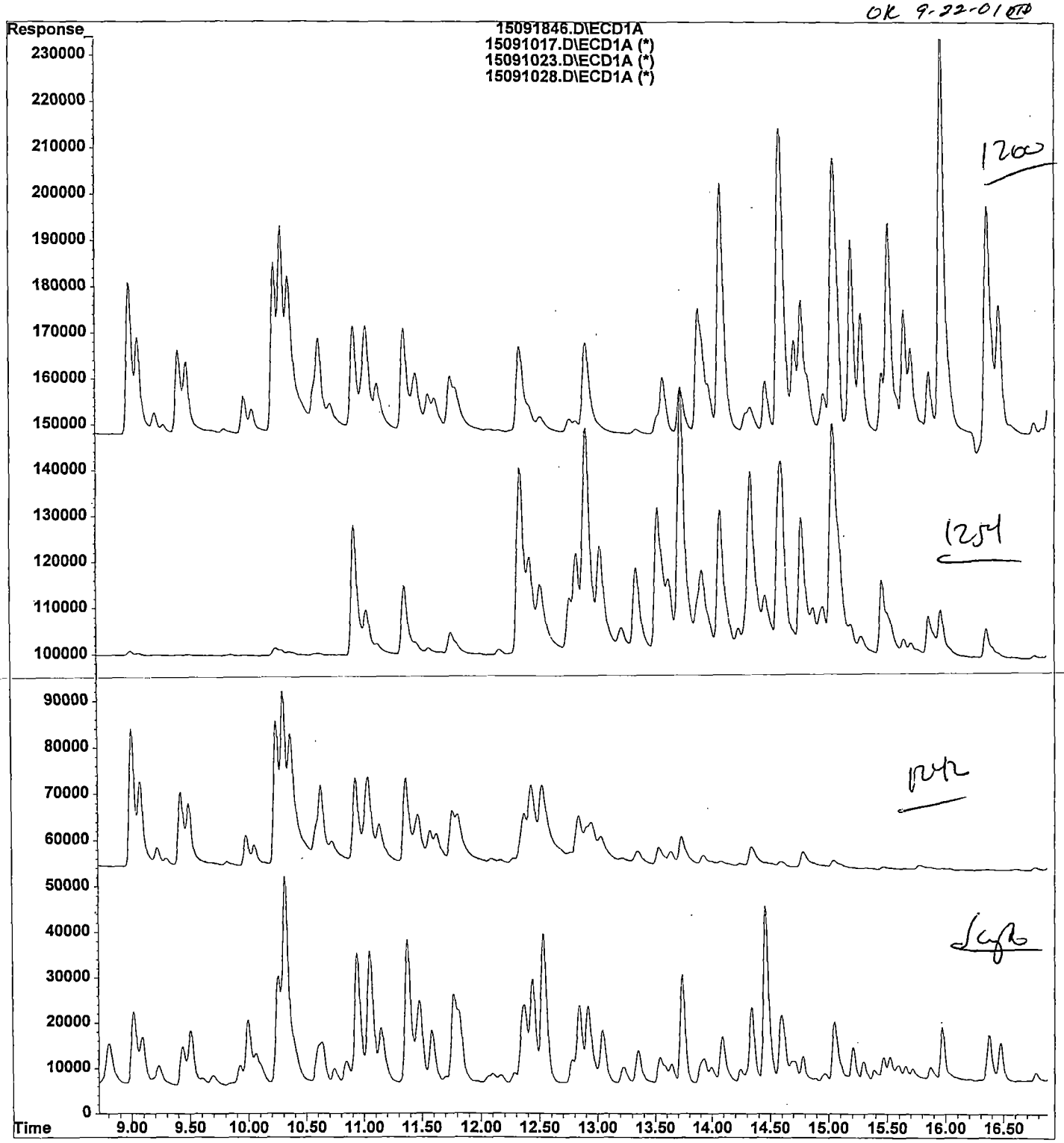
OK 9-22-01





File : F:\HPCHEM\HP\15\DATA\09_18_01\15091846.D
Operator : SA
Acquired : 19 Sep 2001 2:39 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 47393.06
Misc Info :
Vial Number: 40

OK 9-22-01



Quantitation Report

Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091846.D\ECD1A.CH Vial: 40
Acq On : 19 Sep 2001 2:39 Operator: SA
Sample : 47393.06 *E0458 * Inst : HP_15
Misc : *EPA*30.4G/5.0ML*60 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091846.D\ECD2B.CH Vial: 40
Acq On : 19 Sep 2001 2:39 Operator: SA
Sample : 47393.06 Inst : HP_15
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 19 9:22 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.34	7.10	496397	679159	17.9	17.7
	Spiked Amount 16.447			Recovery	=	108.83%	107.62%
22)	S DCB	18.02	18.40	488605	552623	16.3	13.2
	Spiked Amount 16.447			Recovery	=	99.10%	80.26%
	Target Compounds:						
7)	L4 Aroclor-1242	0.00	10.14	0	661725	N.D. d	1620.2 E#
9)	L4 Aroclor-1242 {3}	10.32f	12.03	2094210	1418670	1846.9 E	1673.0 E
10)	L4 Aroclor-1242 {4}	11.48	12.36	718625	834576	1908.2 E	1638.7 E
11)	L4 Aroclor-1242 {5}	11.78	12.75	1098706	1131035	2285.3 E	1160.9 #
	Sum Aroclor-1242			3911541	4046006	6040.4	6092.7
	Average Aroclor-1242					2013.483	1523.181
12)	L6 Aroclor-1254	12.37	0.00	668576	0	585.3	N.D. d #
13)	L6 Aroclor-1254 {2}	13.05	13.33	432587	476038	478.9	483.7
14)	L6 Aroclor-1254 {3}	13.55	13.69	244998	357760	222.2	406.8 #
15)	L6 Aroclor-1254 {4}	14.09	14.72	361554	448304	340.5	358.9
16)	L6 Aroclor-1254 {5}	14.79	15.19	160450	386112	179.2	237.6 #
	Sum Aroclor-1254			1868164	1668214	1806.1	1487.0
	Average Aroclor-1254					361.217	371.740
17)	L7 Aroclor-1260	14.09	0.00	361554	0	186.8	N.D. d #
18)	L7 Aroclor-1260 {2}	14.60	0.00	576340	0	228.5	N.D. d #
19)	L7 Aroclor-1260 {3}	15.06	14.72	493958	448304	202.6	147.6 #
20)	L7 Aroclor-1260 {4}	15.53	15.90	147756	159687	94.2	92.1
21)	L7 Aroclor-1260 {5}	15.98	16.13	350190	440589	119.6	102.2
	Sum Aroclor-1260			1929799	1048579	684.0	281.2
	Average Aroclor-1260					166.350	113.985

(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.

E0458DL

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) SOIL Lab Sample ID: 47393.06DL

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

% Moisture: 60 decanted: (Y/N) __ Date Received: 08/24/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/28/01

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

Injection Volume: 0.5(uL) Dilution Factor: 10.0

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	810	U
11104-28-2	Aroclor-1221	810	U
11141-16-5	Aroclor-1232	810	U
53469-21-9	Aroclor-1242	2700	DP
12672-29-6	Aroclor-1248	810	U
11097-69-1	Aroclor-1254	550	DJ
11096-82-5	Aroclor-1260	160	DJP
Surrogate amount spiked		16.44	

FORM I PCB

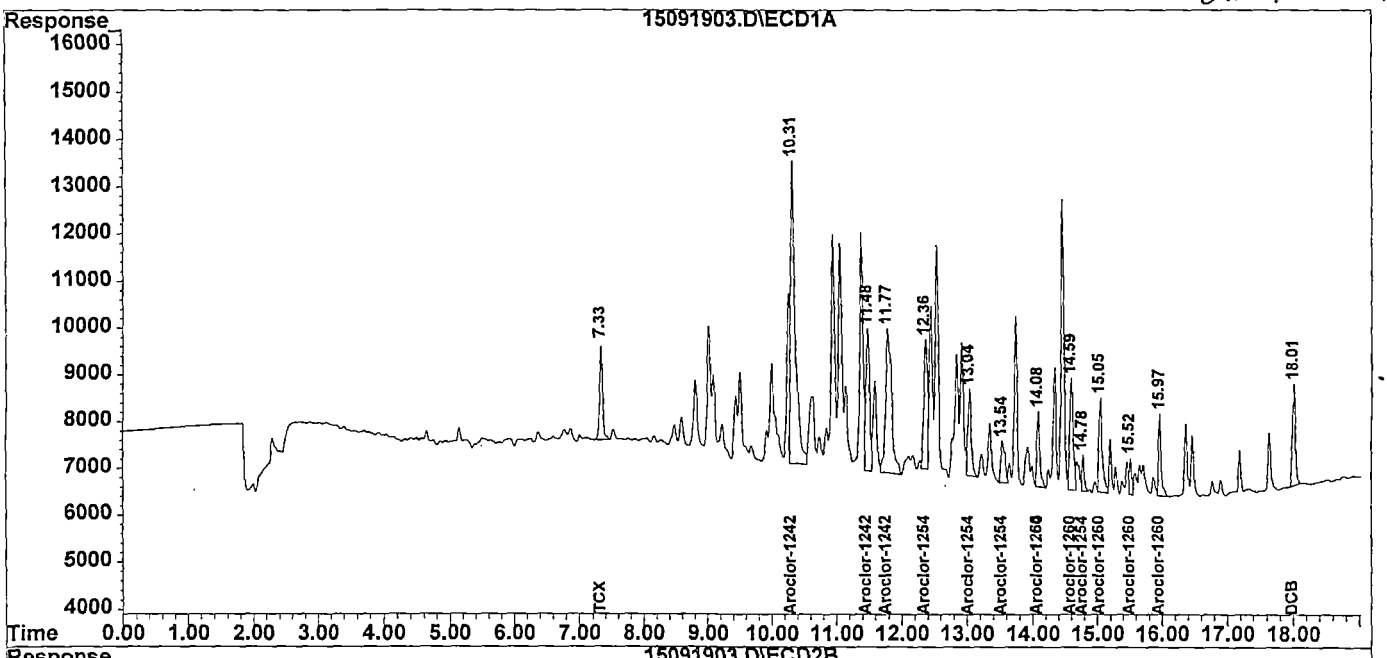
Chromatographic Report

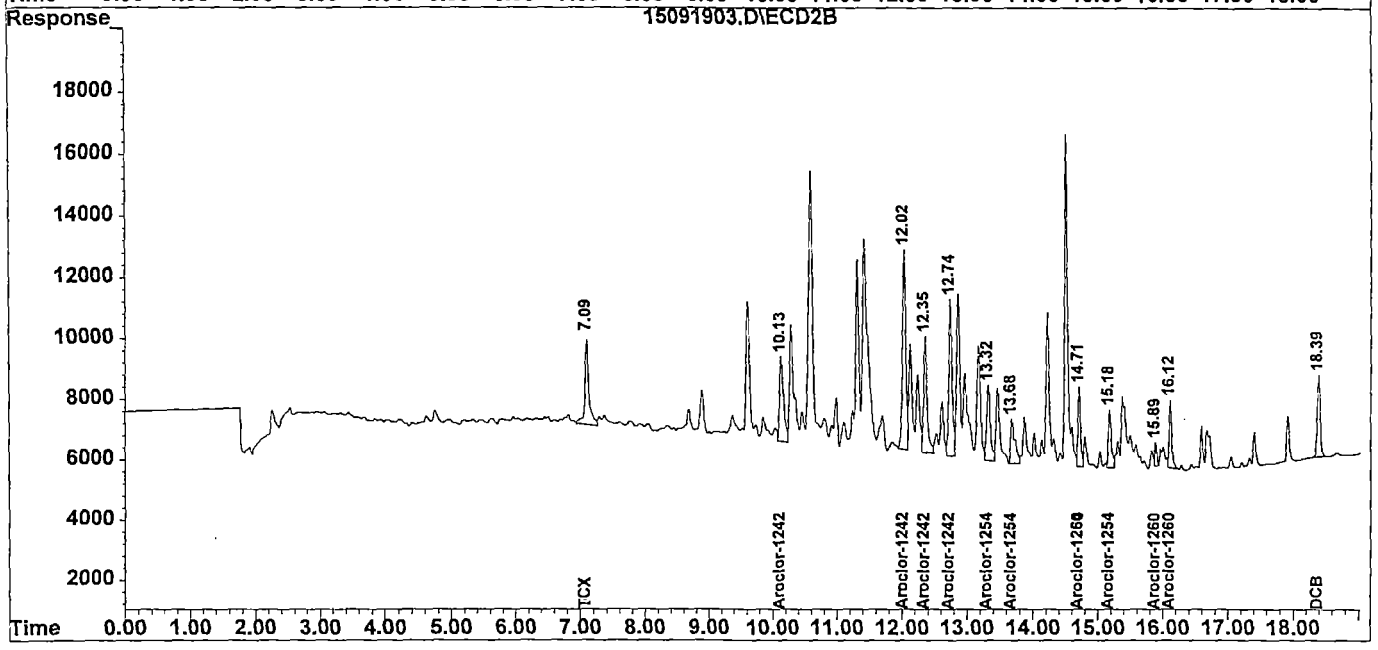
Signal #1 : F:\HPCHEM\HP\15\DATA\09_19_01\15091903.D\ECD1A.CH Vial: 3
Signal #2 : F:\HPCHEM\HP\15\DATA\09_19_01\15091903.D\ECD2B.CH
Acq On : 19 Sep 2001 14:22 Operator: DDC
Sample : 47393.06DL *E0458DL * Inst : HP_15
Misc : *EPA*30.4G/5.0ML*60 Dilution: 10.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 16:15 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_19_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

OK 9-22-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_19_01\15091903.D\ECD1A.CH Vial: 3
Signal #2 : F:\HPCHEM\HP\15\DATA\09_19_01\15091903.D\ECD2B.CH
Acq On : 19 Sep 2001 14:22 Operator: DDC
Sample : 47393.06DL *E0458DL * Inst : HP_15
Misc : *EPA*30.4G/5.0ML*60 Dilution: 10.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 16:15 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_19_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 2001
Response via : Initial Calibration

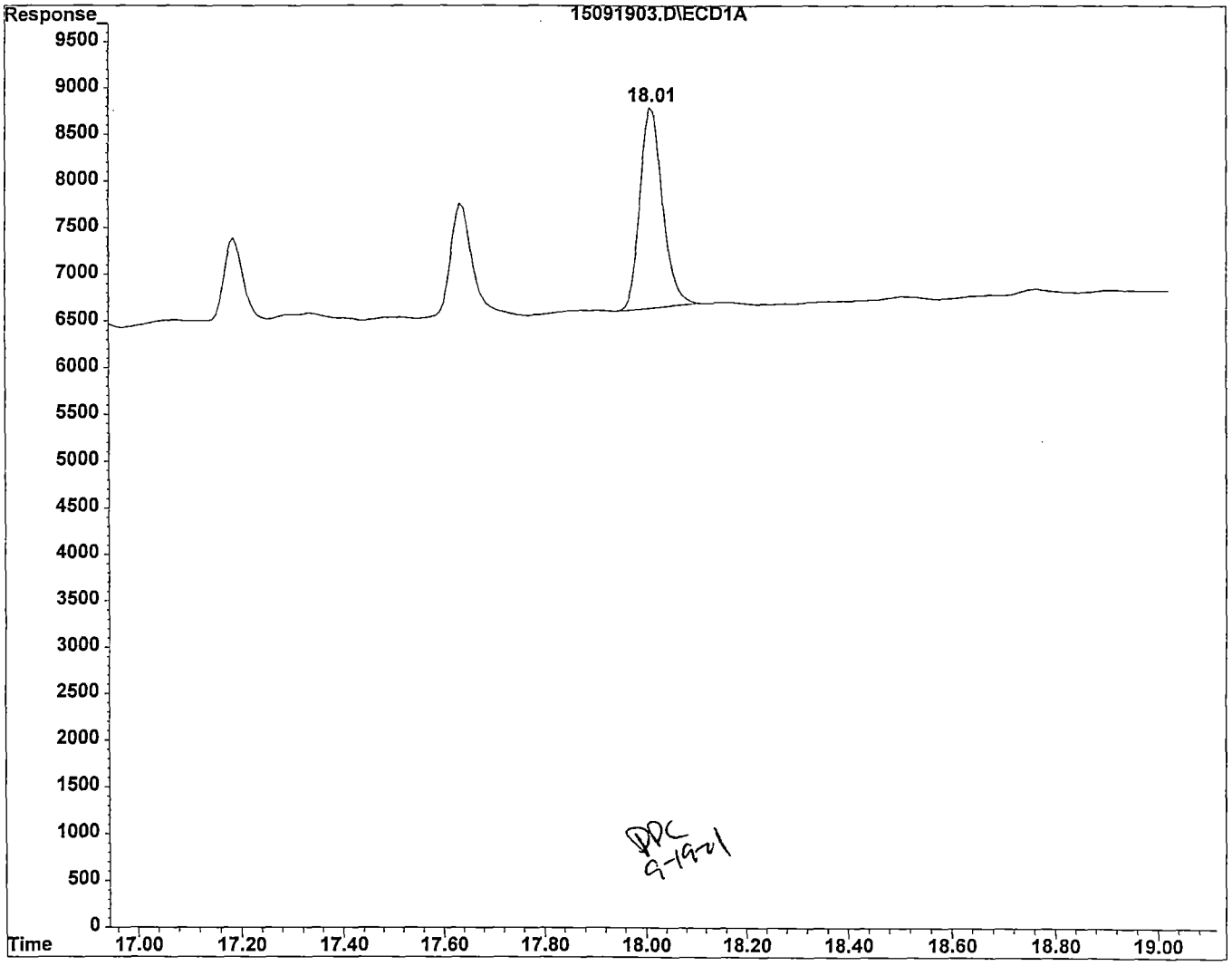
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.10	64507	119769	23.3	31.2	#
	Spiked Amount 16.447			Recovery	=	141.66%	189.70%	
22)	S DCB	18.01	18.39	66816	84885	22.3m DDC 9-19-01	20.3	
	Spiked Amount 16.447			Recovery	=	135.58%	123.42%	
	Target Compounds:							
7)	L4 Aroclor-1242	0.00	10.13	0	124879	N.D.	3057.6	#
9)	L4 Aroclor-1242 {3}	10.32f	12.03	336005	237563	2963.3	2801.5	
10)	L4 Aroclor-1242 {4}	11.48	12.35	124036	146439	3293.7	2875.3	
11)	L4 Aroclor-1242 {5}	11.78	12.74	199913	183261	4158.2	1880.9	#
	Sum Aroclor-1242			659955	692142	10415.1	10615.3	
	Average Aroclor-1242					3471.706	2653.833	
12)	L6 Aroclor-1254	12.36	0.00	106414	0	931.6	N.D. d	#
13)	L6 Aroclor-1254 {2}	13.04	13.32	69167	97507	765.8	990.8	#
14)	L6 Aroclor-1254 {3}	13.54	13.68	37413	66141	339.3	752.0	#
15)	L6 Aroclor-1254 {4}	14.09	14.71	50810	75206	478.5	602.1	#
16)	L6 Aroclor-1254 {5}	14.78	15.18	20072	58224	224.1	358.2	#
	Sum Aroclor-1254			283877	297077	2739.3	2703.1	
	Average Aroclor-1254					547.864	675.784	
17)	L7 Aroclor-1260	14.09	0.00	50810	0	262.5	N.D. d	#
18)	L7 Aroclor-1260 {2}	14.60	0.00	88616	0	351.3	N.D. d	#
19)	L7 Aroclor-1260 {3}	15.05	14.71	72622	75206	297.9	247.6	
20)	L7 Aroclor-1260 {4}	15.52	15.90	20696	17460	131.9	100.7	
21)	L7 Aroclor-1260 {5}	15.97	16.12	48838	61650	166.9	143.0	
	Sum Aroclor-1260			281583	154316	9955.0	4040.9	
	Average Aroclor-1260					242.106	163.793	

(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\15\DATA\09_19_01\15091903.D
Date Acquired: 19 Sep 2001 14:22
Inst: HP_15 Operator ID: DDC
Name: 47393.06DL *E0458DL *
Misc: *EPA*30.4G/5.0ML*60
Method: F:\HPCHEM\HP\15\DATA\09_19_01\XPCBI10.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 16:15 2001 Quant Results File: XPCBI10.RES



OK 9-22-01

DCB 18.01min area: 66816 m

Integration Time Range: 17.94 - 18.11

F:\HPCHEM\HP\15\DATA\09_19_01\15091903.D
Report generated: Wed Sep 19 16:35:36 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E0459

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) SOIL Lab Sample ID: 47393.07

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

% Moisture: 46 decanted: (Y/N) __ Date Received: 08/24/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/28/01

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

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	60	U
11104-28-2	Aroclor-1221	60	U
11141-16-5	Aroclor-1232	60	U
53469-21-9	Aroclor-1242	~~5400~~ 11000D	~~E~~
12672-29-6	Aroclor-1248	60	U
11097-69-1	Aroclor-1254	~~4100~~ 9300D	~~E~~
11096-82-5	Aroclor-1260	~~1900~~ 4200D	~~E~~
Surrogate amount spiked		12.10	

apply this results
TBS 10-12-01

FORM I PCB

Chromatographic Report

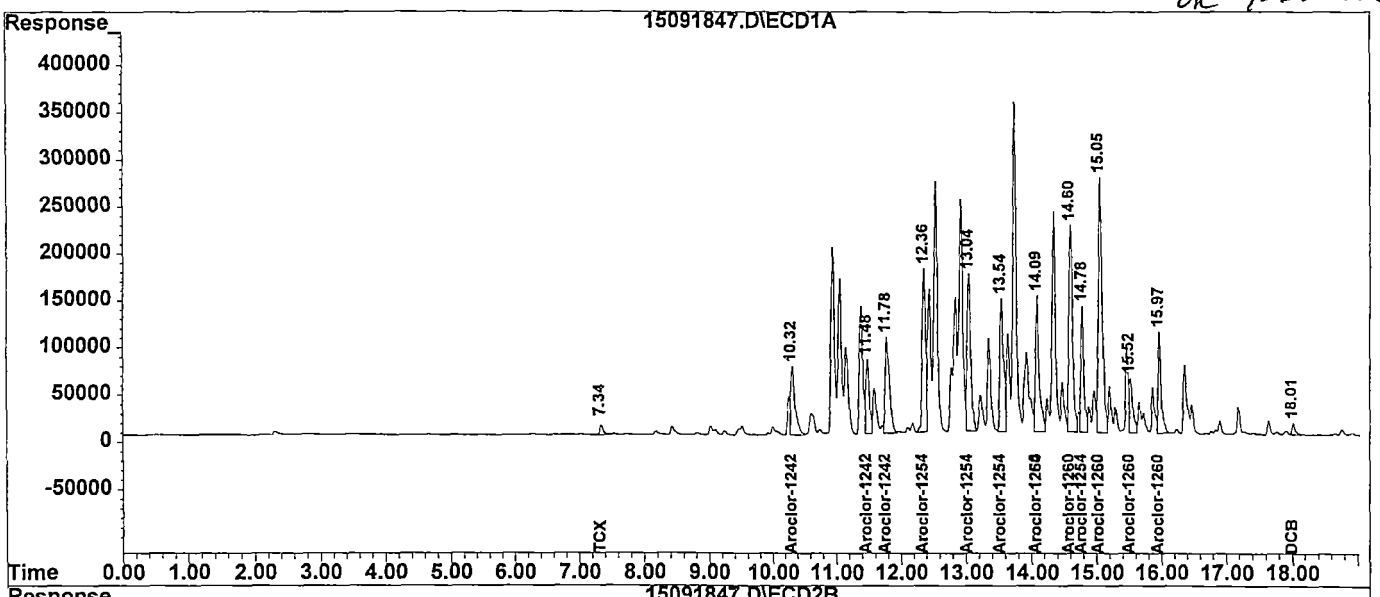
Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091847.D\ECD1A.CH Vial: 41
Acq On : 19 Sep 2001 3:02 Operator: SA
Sample : 47393.07 *E0459 * Inst : HP_15
Misc : *EPA*30.6G/5.0ML*46 Dilution: 1.00
IntFile : events.e

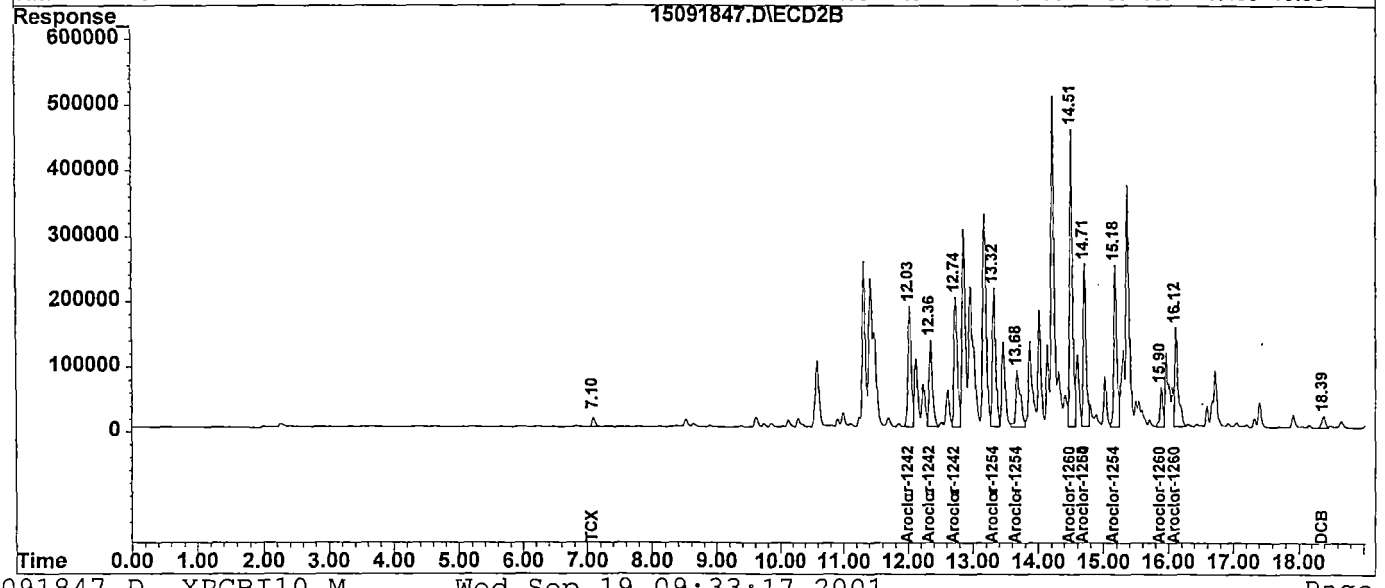
Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091847.D\ECD2B.CH Vial: 41
Acq On : 19 Sep 2001 3:02 Operator: SA
Sample : 47393.07 Inst : HP_15
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 19 9:23 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

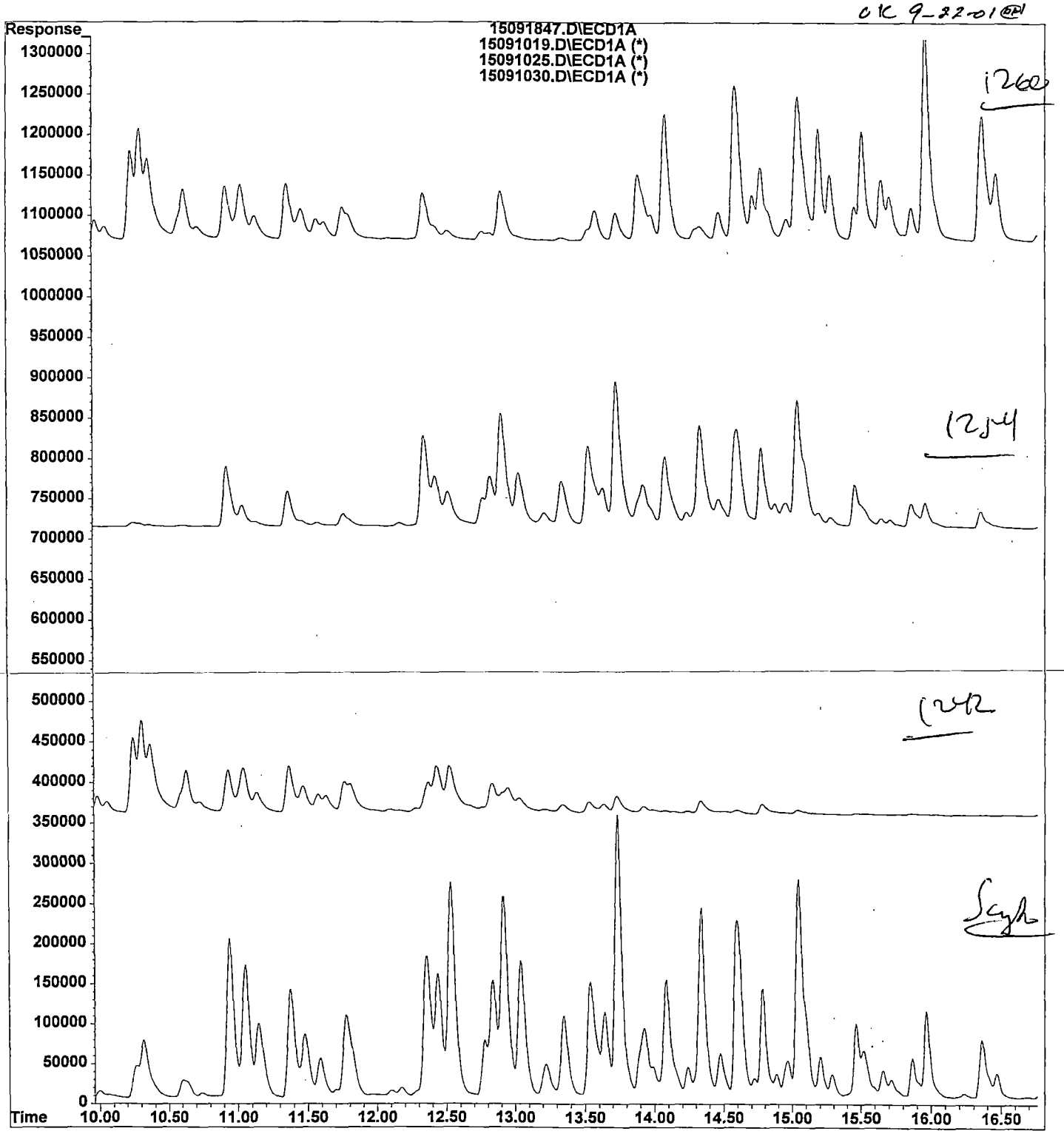
OK 9-22-01





File : F:\HPCHEM\HP\15\DATA\09_18_01\15091847.D
Operator : SA
Acquired : 19 Sep 2001 3:02 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 47393.07
Misc Info :
Vial Number: 41

OK 9-22-01



Quantitation Report

Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091847.D\ECD1A.CH Vial: 41
Acq On : 19 Sep 2001 3:02 Operator: SA
Sample : 47393.07 *E0459 * Inst : HP_15
Misc : *EPA*30.6G/5.0ML*46 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091847.D\ECD2B.CH Vial: 41
Acq On : 19 Sep 2001 3:02 Operator: SA
Sample : 47393.07 Inst : HP_15
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 19 9:23 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.34	7.10	345553	461106	9.172	8.830
	Spiked Amount 12.104			Recovery	=	75.78%	72.95%
22)	S DCB	18.02	18.40	468113	757905	11.5	13.3
	Spiked Amount 12.104			Recovery	=	95.01%	109.88%
	Target Compounds:						
9)	L4 Aroclor-1242 {3}	10.32f	12.03	3566839	6589511	2314.9 E	5718.6 E#
10)	L4 Aroclor-1242 {4}	11.48	12.36	3123045	4909706	6102.8 E	7094.1 E
11)	L4 Aroclor-1242 {5}	11.78	12.74	5021321	7046326	7686.0 E	5322.1 E#
	Sum Aroclor-1242			11711205	18545542	16103.6	18134.8
	Average Aroclor-1242					5367.866	6044.918
12)	L6 Aroclor-1254	12.36	0.00	6552549	0	4221.6 E	N.D. d #
13)	L6 Aroclor-1254 {2}	13.04	13.33	6366788	7662014	5187.3 E	5729.2 E
14)	L6 Aroclor-1254 {3}	13.54	13.68	5555922	4201623	3708.0 E	3515.6 E
15)	L6 Aroclor-1254 {4}	14.09	14.72	5764028	7507004	3994.4 E	4423.0 E
16)	L6 Aroclor-1254 {5}	14.79	15.18	4323830	8023518	3553.0 E	3632.8 E
	Sum Aroclor-1254			28563116	27394159	20664.3	17300.6
	Average Aroclor-1254					4132.855	4325.155
17)	L7 Aroclor-1260	14.09	0.00	5764028	0	2191.2 E	N.D. d #
18)	L7 Aroclor-1260 {2}	14.60	14.51	9065557	14050528	2645.0 E	4173.7 E#
19)	L7 Aroclor-1260 {3}	15.05	14.72	11227167	7507004	3389.4 E	1818.9 E#
20)	L7 Aroclor-1260 {4}	15.52	15.90	2170340	1695468	1018.1 E	719.9 #
21)	L7 Aroclor-1260 {5}	15.97	16.12	3473644	5490408	873.4 E	937.3 E
	Sum Aroclor-1260			31700736	28743407	6122.7	4629.6
	Average Aroclor-1260					2023.423	1912.468

(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.

E0459DL

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) SOIL Lab Sample ID: 47393.07DL

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

% Moisture: 46 decanted: (Y/N) __ Date Received: 08/24/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/28/01

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

Injection Volume: 0.5(uL) Dilution Factor: 20.0

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	1200	U
11104-28-2	Aroclor-1221	1200	U
11141-16-5	Aroclor-1232	1200	U
53469-21-9	Aroclor-1242	11000	D
12672-29-6	Aroclor-1248	1200	U
11097-69-1	Aroclor-1254	9300	D
11096-82-5	Aroclor-1260	4200	D
	Surrogate amount spiked	12.10	

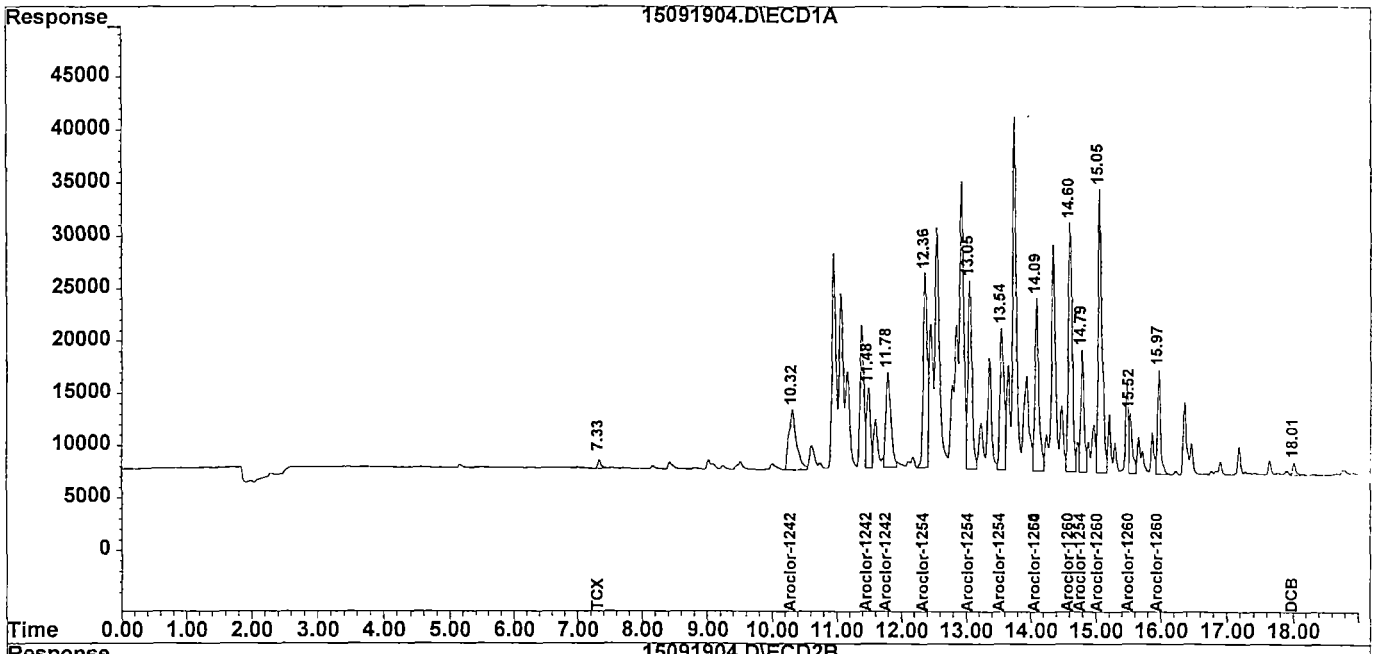
FORM I PCB

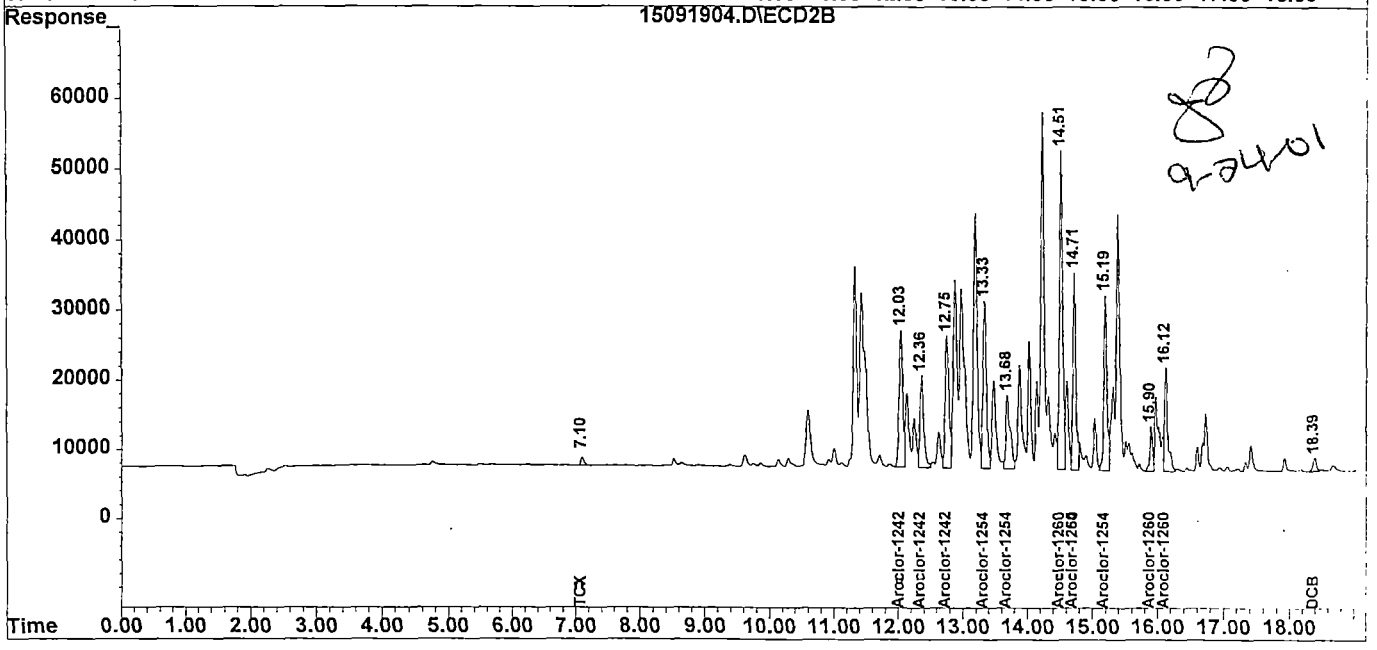
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_19_01\15091904.D\ECD1A.CH Vial: 4
Signal #2 : F:\HPCHEM\HP\15\DATA\09_19_01\15091904.D\ECD2B.CH
Acq On : 19 Sep 2001 14:45 Operator: DDC
Sample : 47393.07DL *E0459DL * Inst : HP_15
Misc : *EPA*30.6G/5.0ML*46 Dilution: 20.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 24 9:38 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_19_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 21 08:58:28 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_15A Signal #2 Inst : HP_15B





9-24-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_19_01\15091904.D\ECD1A.CH Vial: 4
Signal #2 : F:\HPCHEM\HP\15\DATA\09_19_01\15091904.D\ECD2B.CH
Acq On : 19 Sep 2001 14:45 Operator: DDC
Sample : 47393.07DL *E0459DL * Inst : HP_15
Misc : *EPA*30.6G/5.0ML*46 Dilution: 20.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 24 9:38 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_19_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 21 08:58:28 2001
Response via : Initial Calibration

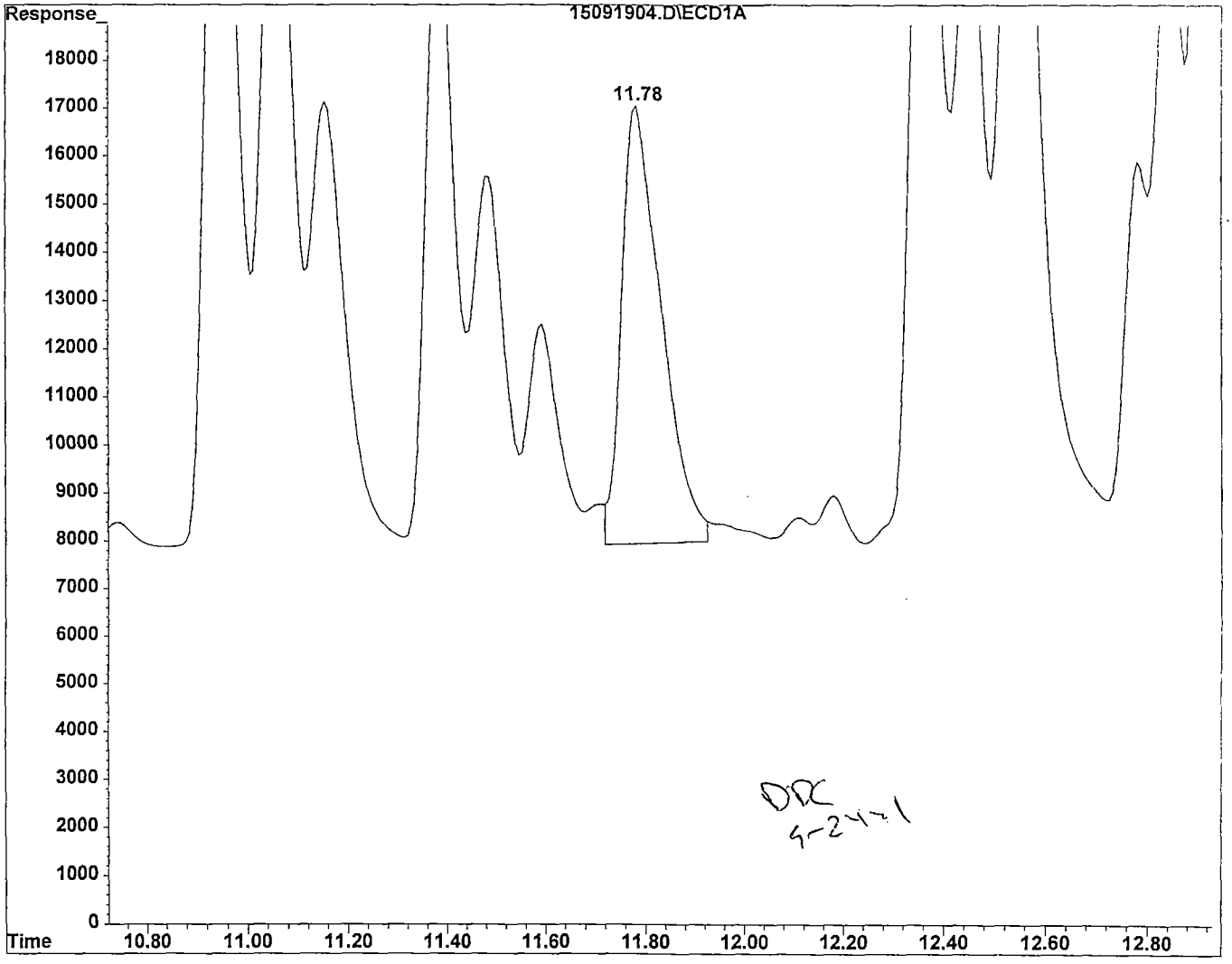
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.34	7.10	26218	43260	13.9	16.6	
	Spiked Amount 12.104			Recovery	=	114.84%	137.15%	
22)	S DCB	18.01	18.39	39010	70053	19.1m DDC 9-24-01	24.7	#
	Spiked Amount 12.104			Recovery	=	157.80%	204.07%	
	Target Compounds:							
9)	L4 Aroclor-1242 {3}	10.32f	12.03	459863	754636	5969.0	13097.9	#
10)	L4 Aroclor-1242 {4}	11.48	12.36	333623	540494	13038.7 DDC 9-24-01	15619.2	
11)	L4 Aroclor-1242 {5}	11.78	12.75	498256	775246	15253.3m	11710.9	
	Sum Aroclor-1242			1291743	2070376	34261.0	40428.1	
	Average Aroclor-1242					11420.333	13476.034	
12)	L6 Aroclor-1254	12.36	0.00	751562	0	9684.1	N.D.	d #
13)	L6 Aroclor-1254 {2}	13.05	13.33	779440	936291	12700.8	14002.1	
14)	L6 Aroclor-1254 {3}	13.54	13.68	585825	512396	7819.6	8574.7	
15)	L6 Aroclor-1254 {4}	14.09	14.72	695189	901493	9635.1	10622.8	
16)	L6 Aroclor-1254 {5}	14.79	15.19	406091	837557	6673.9	7584.5	
	Sum Aroclor-1254			3218106	3187736	46513.6	40784.1	
	Average Aroclor-1254					9302.710	10196.014	
17)	L7 Aroclor-1260	14.09	0.00	695189	0	5285.5	N.D.	d #
18)	L7 Aroclor-1260 {2}	14.60	14.51	1005306	1547580	5866.3	9194.2	#
19)	L7 Aroclor-1260 {3}	15.05	14.72	1113485	901493	6723.1	4368.6	#
20)	L7 Aroclor-1260 {4}	15.52	15.90	216275	178697	2029.1	1517.6	#
21)	L7 Aroclor-1260 {5}	15.97	16.12	322857	537392	1623.5	1834.8	
	Sum Aroclor-1260			3353111	3165162	260560.4	204734.6	
	Average Aroclor-1260					4305.499	4228.793	

(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\15\DATA\09_19_01\15091904.D
Date Acquired: 19 Sep 2001 14:45
Inst: HP_15 Operator ID: DDC
Name: 47393.07DL *E0459DL *
Misc: *EPA*30.6G/5.0ML*46
Method: F:\HPCHEM\HP\15\DATA\09_19_01\XPCBI10.M
Title: PCB/TOXAPHENE
Quant Time: Sep 24 9:38 2001 Quant Results File: XPCBI10.RES



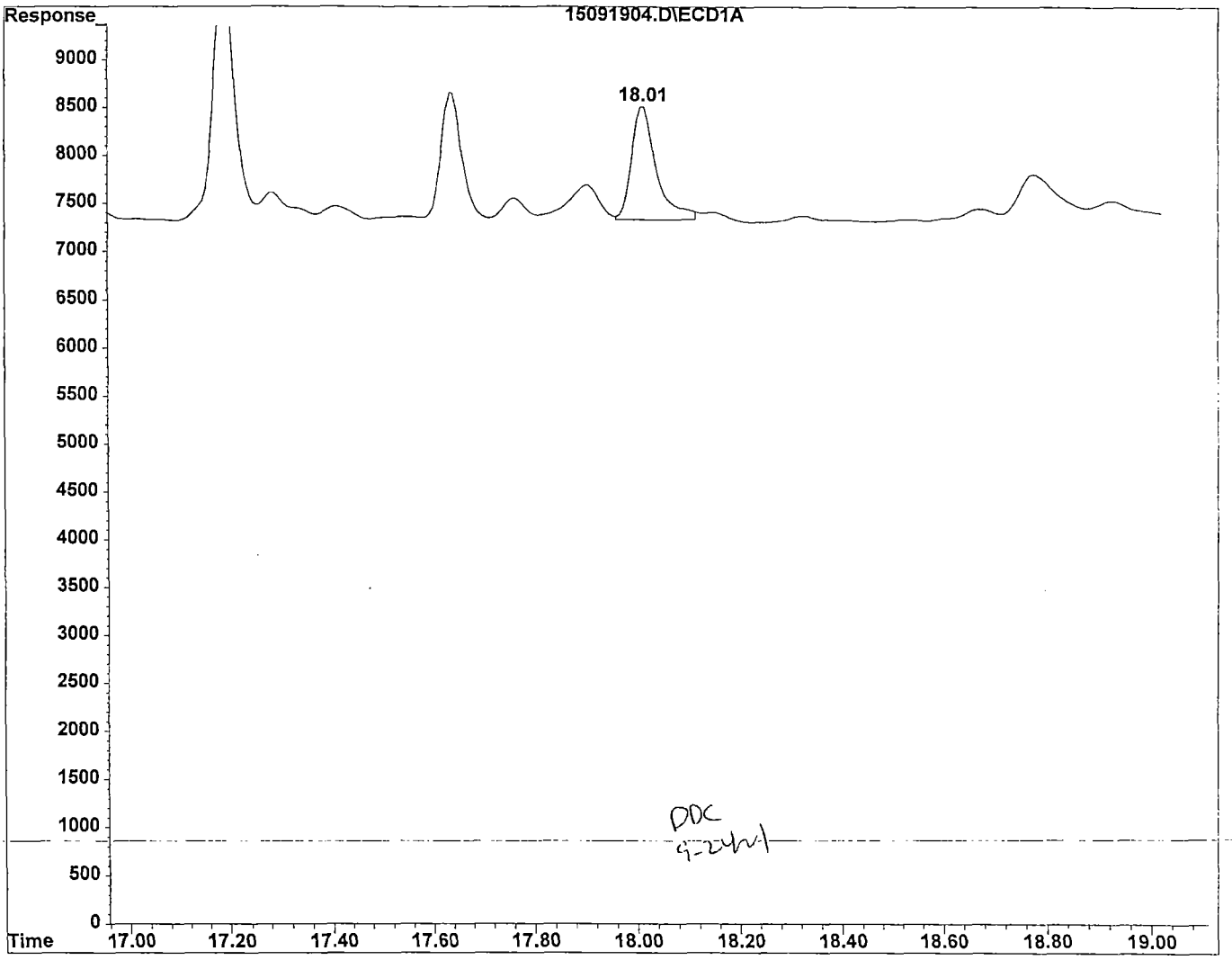
Aroclor-1242 {5} 11.78min area: 498256 m

Integration Time Range: 11.72 - 11.93

F:\HPCHEM\HP\15\DATA\09_19_01\15091904.D
Report generated: Mon Sep 24 09:39:05 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\15\DATA\09_19_01\15091904.D
Date Acquired: 19 Sep 2001 14:45
Inst: HP_15 Operator ID: DDC
Name: 47393.07DL *E0459DL *
Misc: *EPA*30.6G/5.0ML*46
Method: F:\HPCHEM\HP\15\DATA\09_19_01\XPCBI10.M
Title: PCB/TOXAPHENE
Quant Time: Sep 24 9:38 2001 Quant Results File: XPCBI10.RES



DCB 18.01min area: 39010 m

Integration Time Range: 17.96 - 18.11

F:\HPCHEM\HP\15\DATA\09_19_01\15091904.D
Report generated: Mon Sep 24 09:39:06 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E0460

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) SOIL Lab Sample ID: 47393.08

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

% Moisture: 20 decanted: (Y/N) __ Date Received: 08/24/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/28/01

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

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	41	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	~~1600~~	2400 D ~~E~~ P
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	~~1300~~	2400 D ~~E~~
11096-82-5	Aroclor-1260	~~580~~	1000 D ~~E~~
Surrogate amount spiked		8.31	

TBS
10-12-01
apply this results

FORM I PCB

Chromatographic Report

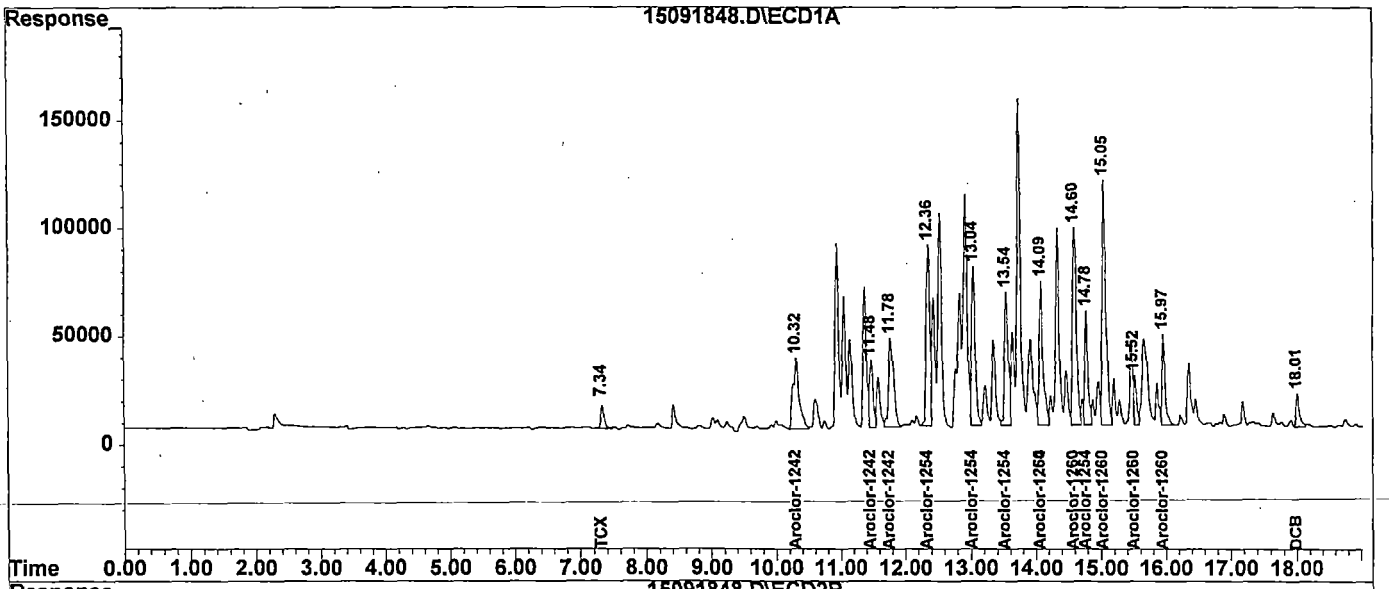
Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091848.D\ECD1A.CH Vial: 42
Acq On : 19 Sep 2001 3:26 Operator: SA
Sample : 47393.08 *E0460 * Inst : HP_15
Misc : *EPA*30.1G/5.0ML*20 Dilution: 1.00
IntFile : events.e

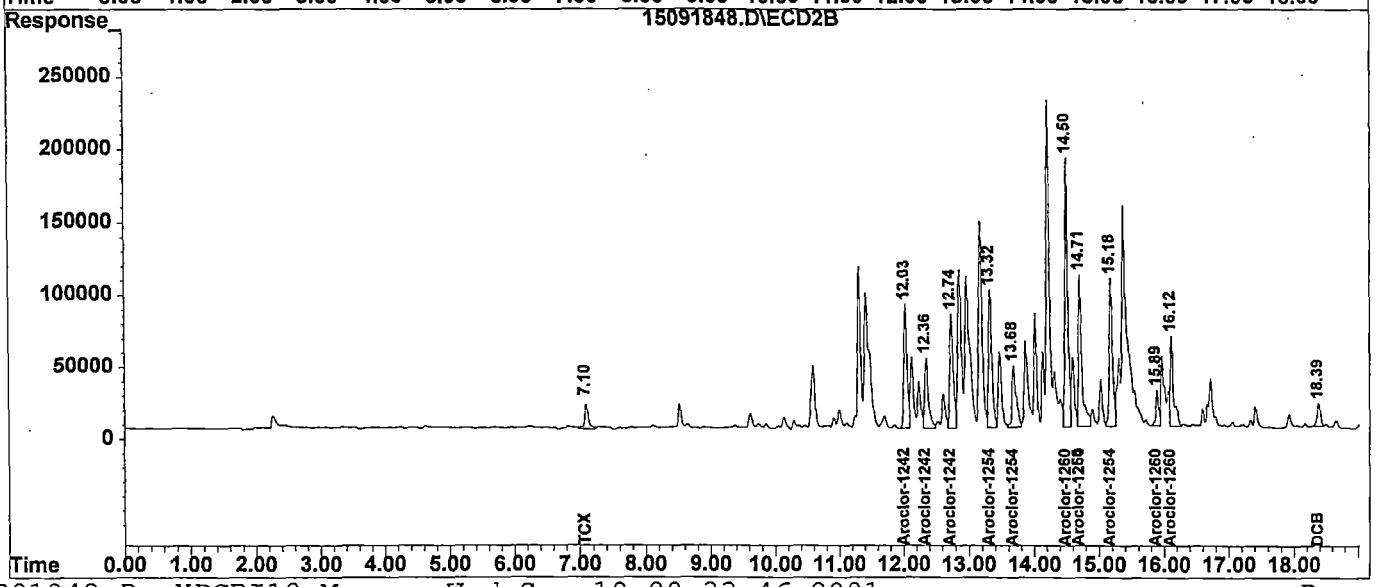
Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091848.D\ECD2B.CH Vial: 42
Acq On : 19 Sep 2001 3:26 Operator: SA
Sample : 47393.08 Inst : HP_15
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 19 9:25 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

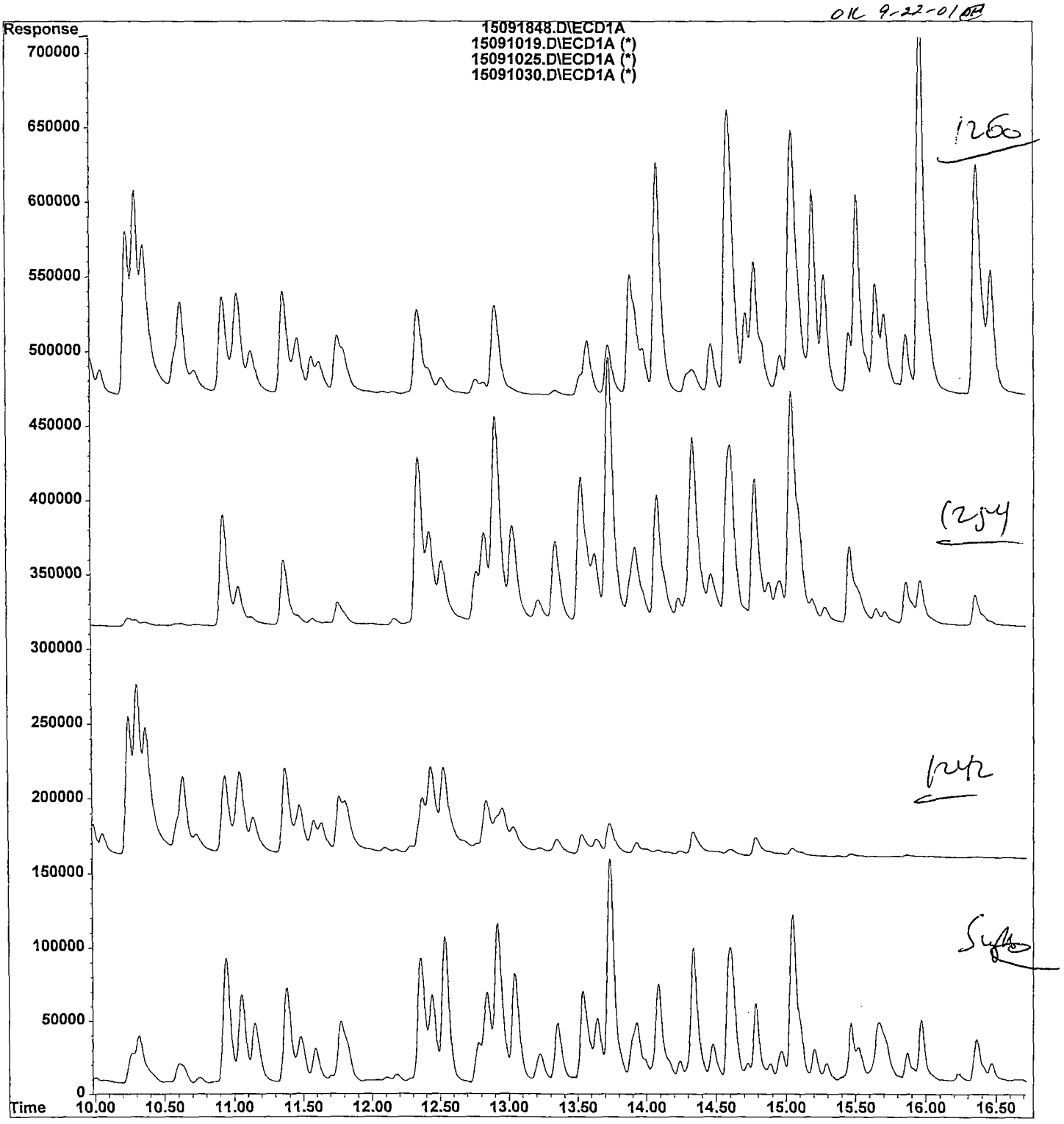
UK 9-22-01





File : F:\HPCHEM\HP\15\DATA\09_18_01\15091848.D
Operator : SA
Acquired : 19 Sep 2001 3:26 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 47393.08
Misc Info :
Vial Number: 42

OK 9-22-01



Quantitation Report

```
Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091848.D\ECD1A.CH Vial: 42
Acq On    : 19 Sep 2001   3:26                        Operator: SA
Sample    : 47393.08  *E0460  *                       Inst    : HP_15
Misc      : *EPA*30.1G/5.0ML*20                       Dilution: 1.00
IntFile   : events.e

Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091848.D\ECD2B.CH Vial: 42
Acq On    : 19 Sep 2001   3:26                        Operator: SA
Sample    : 47393.08                                  Inst    : HP_15
Misc      :                                           Dilution: 1.00
IntFile   : events2.e
Quant Time: Sep 19  9:25 2001  Quant Results File: XPCBI10.RES

Method       : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path   : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update  : Fri Sep 07 16:29:03 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_15A             Signal #2 Inst : HP_15B
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.34	7.10	362514	695348	6.603	9.137 #
	Spiked Amount 8.306			Recovery	=	79.50%	110.01%
22)	S DCB	18.02	18.39	570591	609043	9.604	7.356
	Spiked Amount 8.306			Recovery	=	115.63%	88.57%
	Target Compounds:						
9)	L4 Aroclor-1242 {3}	10.32f	12.03	2157350	3033527	960.8 E	1806.5 E#
10)	L4 Aroclor-1242 {4}	11.48	12.36	1246396	1942215	1671.3 E	1925.7 E
11)	L4 Aroclor-1242 {5}	11.78	12.74	2196708	2963604	2307.3 E	1536.0 E#
	Sum Aroclor-1242			5600454	7939346	4939.5	5268.3
	Average Aroclor-1242					1646.484	1756.092
12)	L6 Aroclor-1254	12.36	0.00	3149040	0	1392.2 E	N.D. d #
13)	L6 Aroclor-1254 {2}	13.04	13.33	2858939	3447670	1598.4 E	1769.0 E
14)	L6 Aroclor-1254 {3}	13.54	13.68	2499787	1936568	1144.8 E	1111.9 E
15)	L6 Aroclor-1254 {4}	14.09	14.72	2776395	3738186	1320.3 E	1511.4 E
16)	L6 Aroclor-1254 {5}	14.79	15.19	1699890	3509507	958.5 E	1090.4 E
	Sum Aroclor-1254			12984052	12631930	6414.2	5482.7
	Average Aroclor-1254					1282.849	1370.678
17)	L7 Aroclor-1260	14.09	0.00	2776395	0	724.3 E	N.D. d #
18)	L7 Aroclor-1260 {2}	14.60	14.51	3895254	5944519	779.9 E	1211.7 E#
19)	L7 Aroclor-1260 {3}	15.05	14.72	4616266	3738186	956.3 E	621.5 E#
20)	L7 Aroclor-1260 {4}	15.52	15.90	716534	685322	230.7	199.7
21)	L7 Aroclor-1260 {5}	15.97	16.12	1339982	2314449	231.2	271.1
	Sum Aroclor-1260			13344431	12682476	1213.6	956.8
	Average Aroclor-1260					584.462	576.022

(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.

E0460DL

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) SOIL Lab Sample ID: 47393.08DL

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

% Moisture: 20 decanted: (Y/N) __ Date Received: 08/24/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/28/01

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

Injection Volume: 0.5(uL) Dilution Factor: 10.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	410	U
11104-28-2	Aroclor-1221	410	U
11141-16-5	Aroclor-1232	410	U
53469-21-9	Aroclor-1242	2400	DP
12672-29-6	Aroclor-1248	410	U
11097-69-1	Aroclor-1254	2400	D
11096-82-5	Aroclor-1260	1000	D
	Surrogate amount spiked	8.31	

FORM I PCB

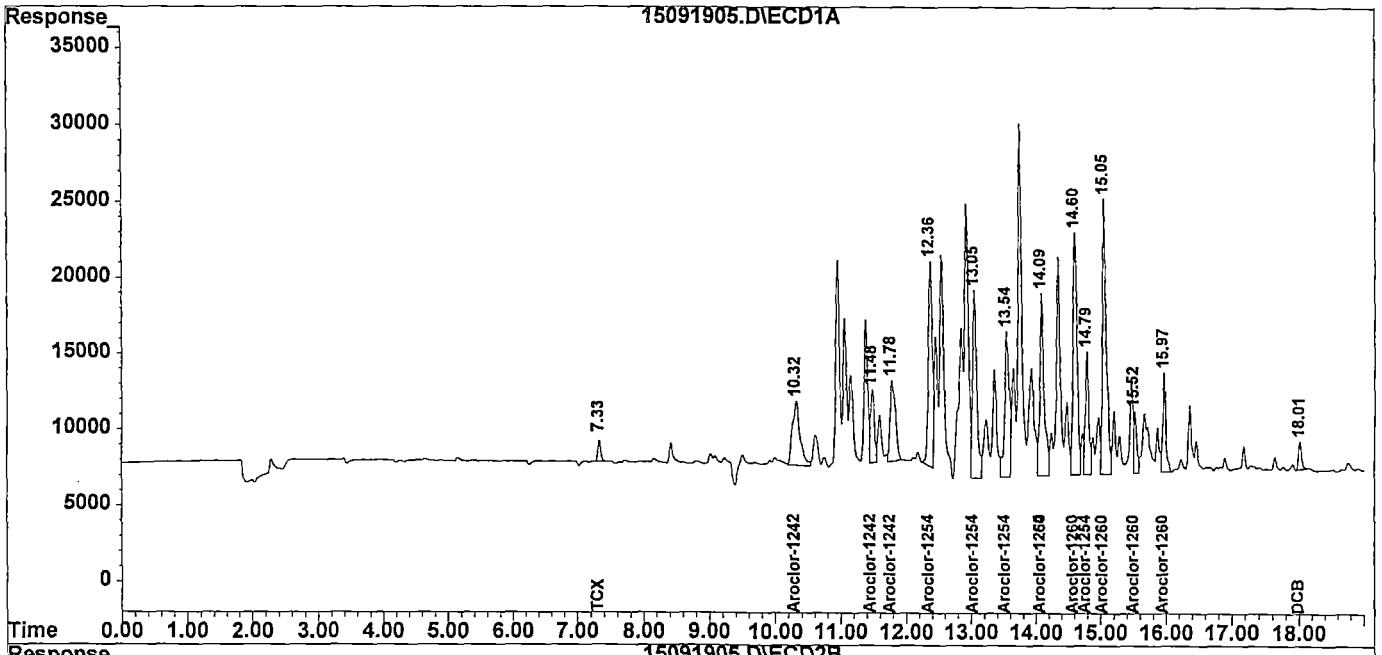
Chromatographic Report

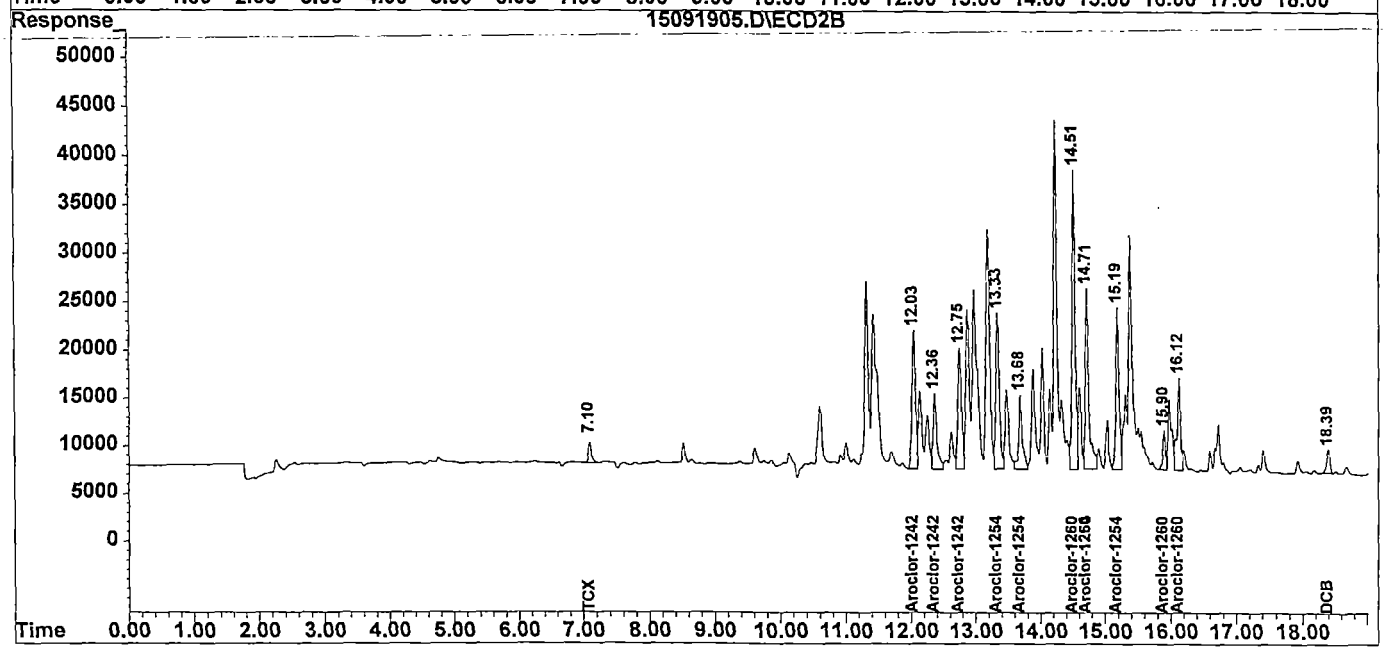
Signal #1 : F:\HPCHEM\HP\15\DATA\09_19_01\15091905.D\ECD1A.CH Vial: 5
Signal #2 : F:\HPCHEM\HP\15\DATA\09_19_01\15091905.D\ECD2B.CH
Acq On : 19 Sep 2001 15:08 Operator: DDC
Sample : 47393.08DL, *E0460DL, * Inst : HP_15
Misc : *EPA*30.1G/5.0ML*20 Dilution: 10.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 16:17 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_19_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

OK 9-22-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_19_01\15091905.D\ECD1A.CH Vial: 5
Signal #2 : F:\HPCHEM\HP\15\DATA\09_19_01\15091905.D\ECD2B.CH
Acq On : 19 Sep 2001 15:08 Operator: DDC
Sample : 47393.08DL *E0460DL * Inst : HP_15
Misc : *EPA*30.1G/5.0ML*20 Dilution: 10.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 16:17 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_19_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 2001
Response via : Initial Calibration

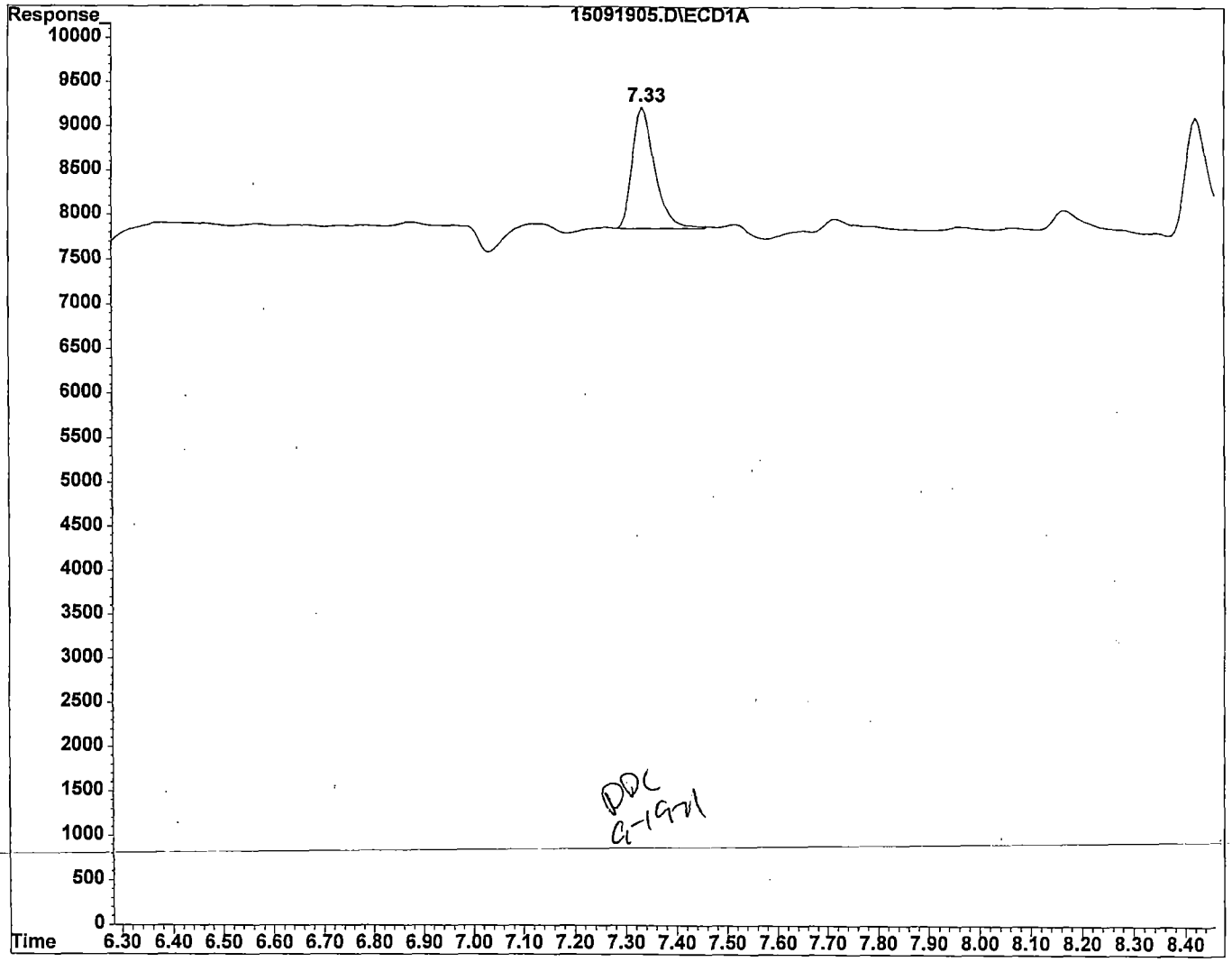
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:					DDC 9-19-01	DDC 9-19-01
1)	S TCX	7.33	7.10	41856	70637	7.624m	9.282m
	Spiked Amount 8.306			Recovery	=	91.79%	111.76%
22)	S DCB	18.02	18.39	58484	86579	9.844	10.5
	Spiked Amount 8.306			Recovery	=	118.52%	126.42%
	Target Compounds:						
9)	L4 Aroclor-1242 {3}	10.32f	12.03	332269	540827	1479.8	3220.7 #
10)	L4 Aroclor-1242 {4}	11.48	12.36	198671	341598	2664.0	3387.0 #
11)	L4 Aroclor-1242 {5}	11.78	12.75	294885	517317	3097.4	2681.3
	Sum Aroclor-1242			825825	1399742	7241.2	9288.9
	Average Aroclor-1242					2413.723	3096.315
12)	L6 Aroclor-1254	12.36	0.00	545538	0	2411.8	N.D. d #
13)	L6 Aroclor-1254 {2}	13.05	13.33	565897	631254	3163.9	3239.0
14)	L6 Aroclor-1254 {3}	13.54	13.68	463370	309924	2122.1	1779.5
15)	L6 Aroclor-1254 {4}	14.09	14.72	554285	700281	2635.8	2831.2
16)	L6 Aroclor-1254 {5}	14.79	15.19	292380	573133	1648.7	1780.7
	Sum Aroclor-1254			2421470	2214593	11982.3	9630.5
	Average Aroclor-1254					2396.463	2407.624
17)	L7 Aroclor-1260	14.09	0.00	554285	0	1445.9	N.D. d #
18)	L7 Aroclor-1260 {2}	14.60	14.51	704353	1045242	1410.2	2130.6 #
19)	L7 Aroclor-1260 {3}	15.05	14.72	754621	700281	1563.3	1164.3 #
20)	L7 Aroclor-1260 {4}	15.52	15.90	134081	114118	431.6	332.5
21)	L7 Aroclor-1260 {5}	15.97	16.13	207686	360724	358.3	422.6
	Sum Aroclor-1260			2355026	2220364	21633.6	16819.2
	Average Aroclor-1260					1041.876	1012.513

(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\15\DATA\09_19_01\15091905.D
Date Acquired: 19 Sep 2001 15:08
Inst: HP_15 Operator ID: DDC
Name: 47393.08DL *E0460DL *
Misc: *EPA*30.1G/5.0ML*20
Method: F:\HPCHEM\HP\15\DATA\09_19_01\XPCBI10.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 16:17 2001 Quant Results File: XPCBI10.RES



OK 9-22-01

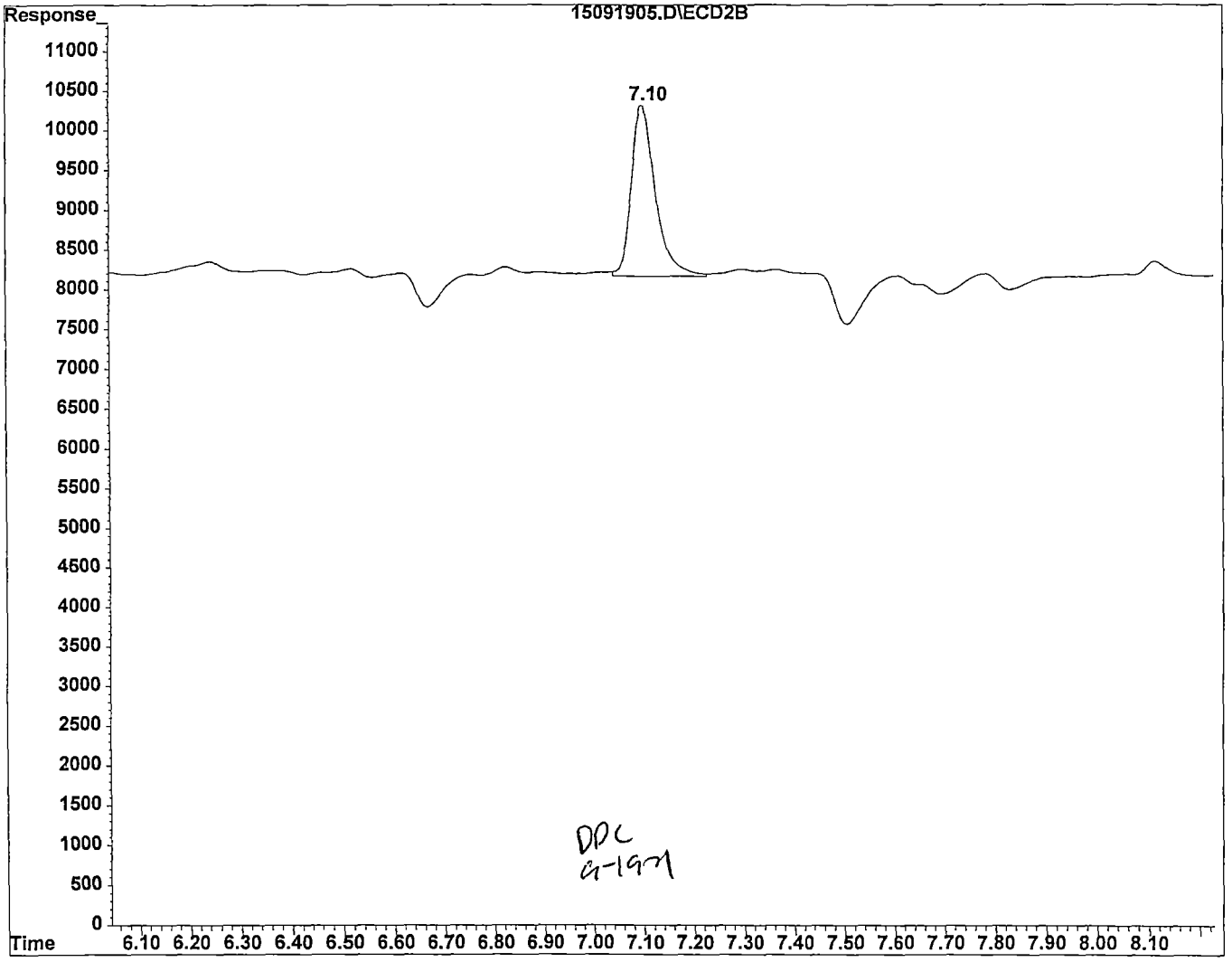
TCX 7.33min area: 41856 m

Integration Time Range: 7.28 - 7.46

F:\HPCHEM\HP\15\DATA\09_19_01\15091905.D
Report generated: Wed Sep 19 16:35:38 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\15\DATA\09_19_01\15091905.D
Date Acquired: 19 Sep 2001 15:08
Inst: HP_15 Operator ID: DDC
Name: 47393.08DL *E0460DL *
Misc: *EPA*30.1G/5.0ML*20
Method: F:\HPCHEM\HP\15\DATA\09_19_01\XPCBI10.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 16:17 2001 Quant Results File: XPCBI10.RES



ok 9-22-01

TCX #2 7.10min area: 70637 m

Integration Time Range: 7.04 - 7.23

F:\HPCHEM\HP\15\DATA\09_19_01\15091905.D
Report generated: Wed Sep 19 16:35:39 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E0461

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) SOIL Lab Sample ID: 47393.09

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

% Moisture: 18 decanted: (Y/N) __ Date Received: 08/24/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/28/01

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

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	40	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	220	P
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	160	
11096-82-5	Aroclor-1260	70	
Surrogate amount spiked		8.10	

FORM I PCB

Chromatographic Report

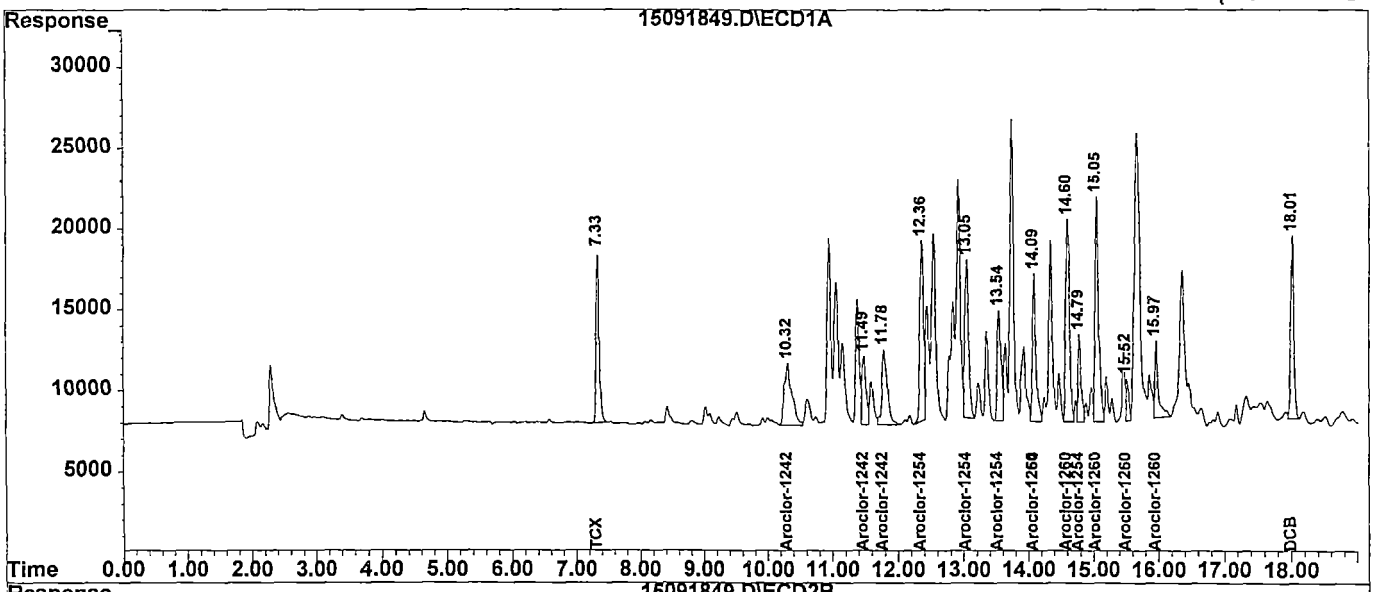
Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091849.D\ECD1A.CH Vial: 43
Acq On : 19 Sep 2001 3:49 Operator: SA
Sample : 47393.09 *E0461 * Inst : HP_15
Misc : *EPA*30.1G/5.0ML*18 Dilution: 1.00
IntFile : events.e

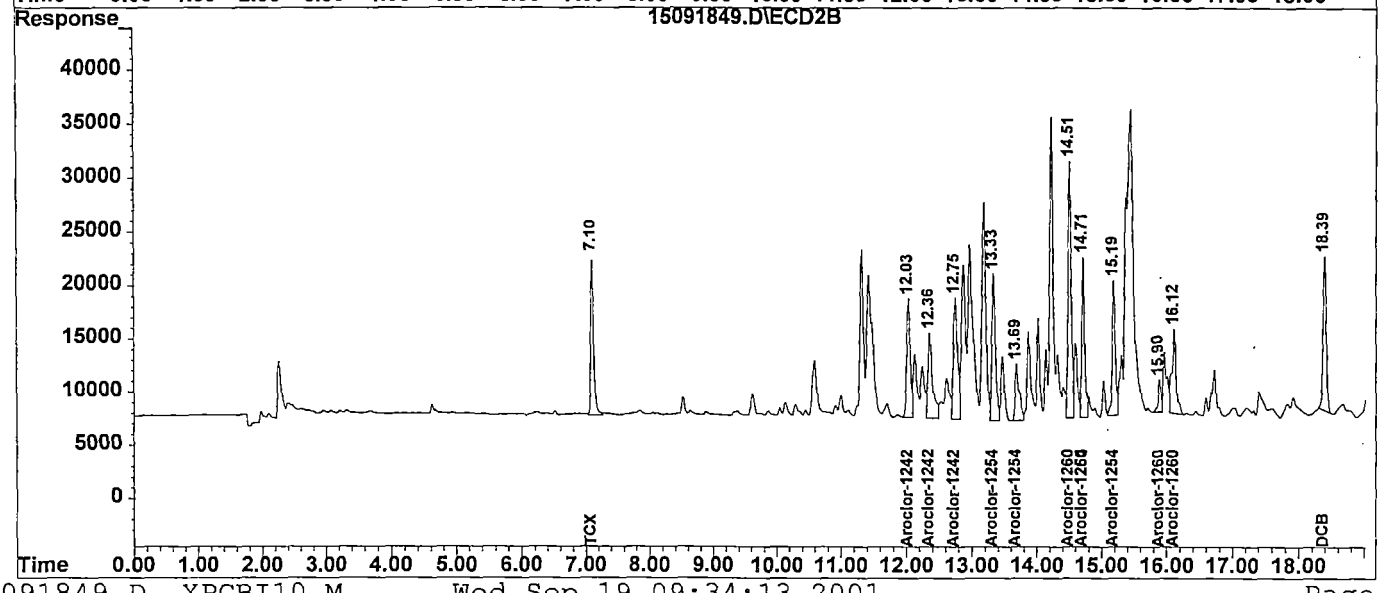
Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091849.D\ECD2B.CH Vial: 43
Acq On : 19 Sep 2001 3:49 Operator: SA
Sample : 47393.09 Inst : HP_15
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 19 9:27 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

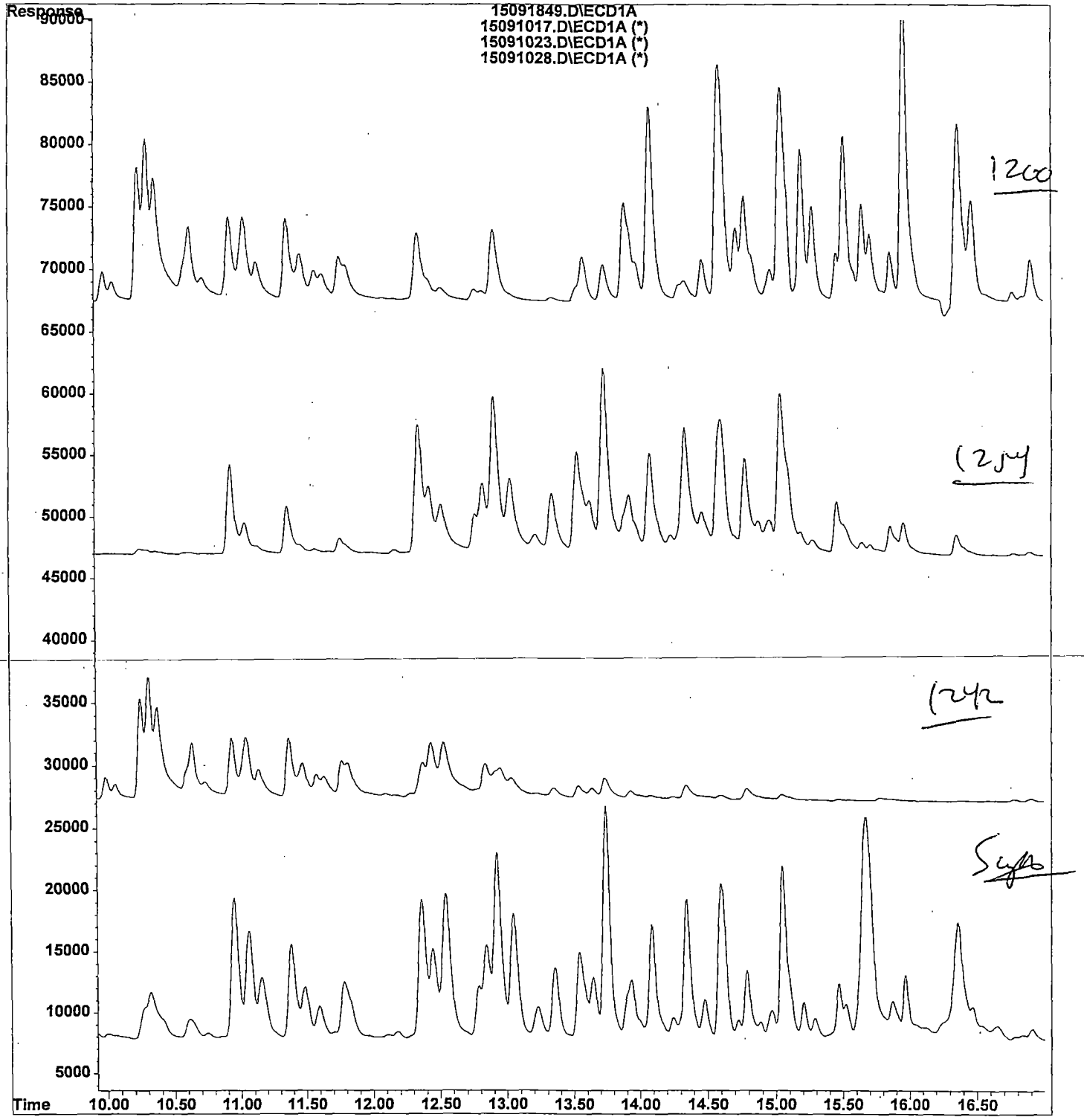
OK 9-22-01





File : F:\HPCHEM\HP\15\DATA\09_18_01\15091849.D
Operator : SA
Acquired : 19 Sep 2001 3:49 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 47393.09
Misc Info :
Vial Number: 43

OK 9-22-01



Quantitation Report

Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091849.D\ECD1A.CH Vial: 43
Acq On : 19 Sep 2001 3:49 Operator: SA
Sample : 47393.09 *E0461 * Inst : HP_15
Misc : *EPA*30.1G/5.0ML*18 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091849.D\ECD2B.CH Vial: 43
Acq On : 19 Sep 2001 3:49 Operator: SA
Sample : 47393.09 Inst : HP_15
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 19 9:27 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.34	7.10	344897	490112	6.129	6.283	
	Spiked Amount 8.103			Recovery	=	75.64%	77.54%	
22)	S DCB	18.01	18.40	364902	477487	5.992	5.626	
	Spiked Amount 8.103			Recovery	=	73.95%	69.43%	
	Target Compounds:							
9)	L4 Aroclor-1242 {3}	10.32f	12.03	318407	418283	138.3	243.0	#
10)	L4 Aroclor-1242 {4}	11.49	12.36	180161	403213	235.7	390.0	#
11)	L4 Aroclor-1242 {5}	11.78	12.75	281844	516339	288.8	261.1	
	Sum Aroclor-1242			780412	1337835	662.9	894.1	
	Average Aroclor-1242					220.951	298.050	
12)	L6 Aroclor-1254	12.36	0.00	433951	0	187.2	N.D. d	#
13)	L6 Aroclor-1254 {2}	13.05	13.33	393006	538850	214.4	269.7	#
14)	L6 Aroclor-1254 {3}	13.55	13.69	285774	235707	127.7	132.0	
15)	L6 Aroclor-1254 {4}	14.09	14.72	340771	472949	158.1	186.5	
16)	L6 Aroclor-1254 {5}	14.79	15.19	179091	413866	98.5	125.5	#
	Sum Aroclor-1254			1632594	1661373	785.8	713.8	
	Average Aroclor-1254					157.168	178.446	
17)	L7 Aroclor-1260	14.09	0.00	340771	0	86.7	N.D. d	#
18)	L7 Aroclor-1260 {2}	14.60	14.51	497862	809940	97.2	161.1	#
19)	L7 Aroclor-1260 {3}	15.05	14.72	549225	472949	111.0	76.7	#
20)	L7 Aroclor-1260 {4}	15.52	15.90	73808	88444	23.2	25.1	
21)	L7 Aroclor-1260 {5}	15.97	16.12	180421	354824	30.4	40.6	#
	Sum Aroclor-1260			1642088	1726157	141.2	123.0	
	Average Aroclor-1260					69.706	75.871	

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

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E0462

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) SOIL Lab Sample ID: 47393.10

Sample wt/vol: 30.7 (g/mL) G Lab File ID:_____

% Moisture: 19 decanted: (Y/N) __ Date Received: 08/24/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/28/01

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

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	40	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	70	
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	46	
11096-82-5	Aroclor-1260	20	J
	Surrogate amount spiked	8.04	

FORM I PCB

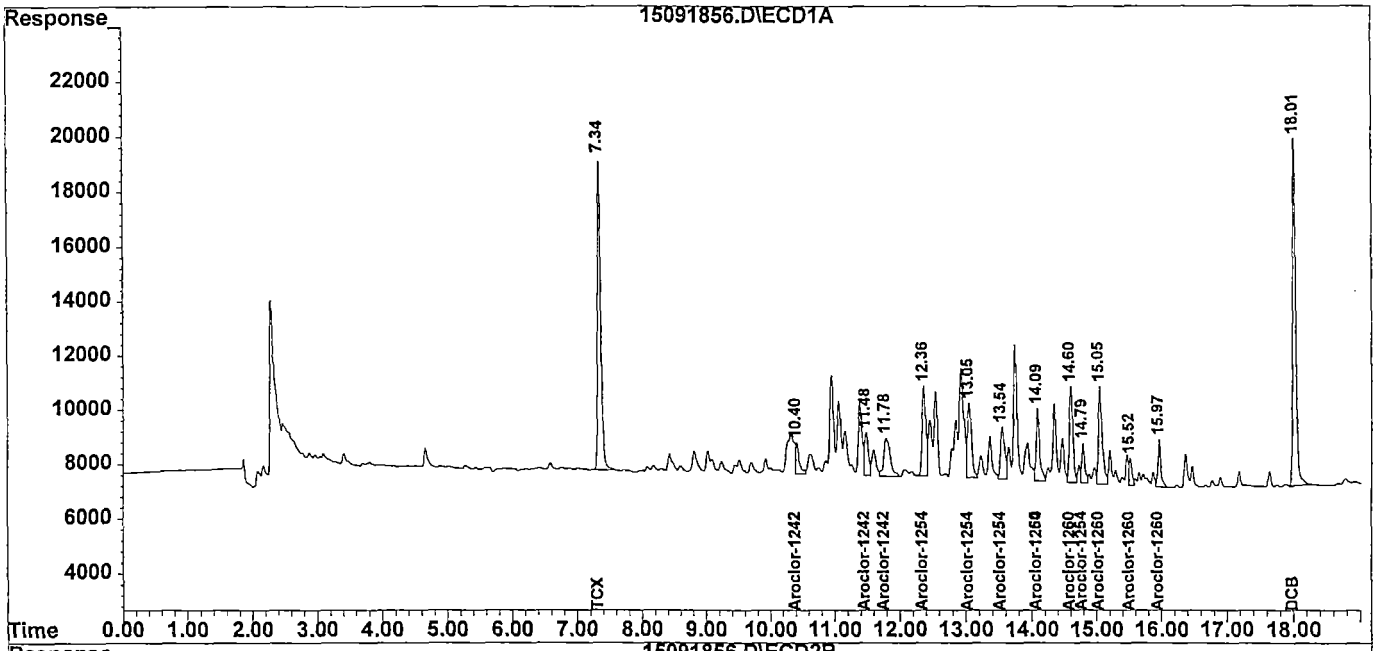
Chromatographic Report

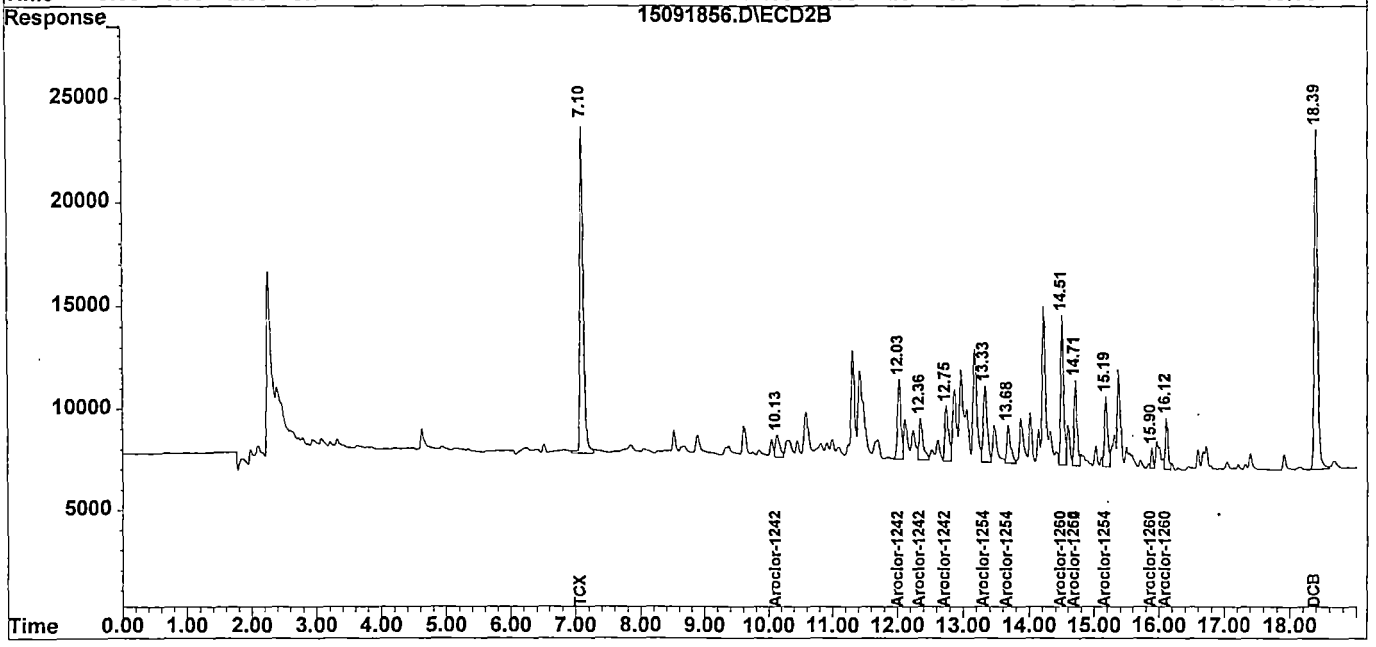
Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091856.D\ECD1A.CH Vial: 50
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091856.D\ECD2B.CH
Acq On : 19 Sep 2001 6:31 Operator: SA
Sample : 47393.10 *E0462 * Inst : HP_15
Misc : *EPA*30.7G/5.0ML*19 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 10:49 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

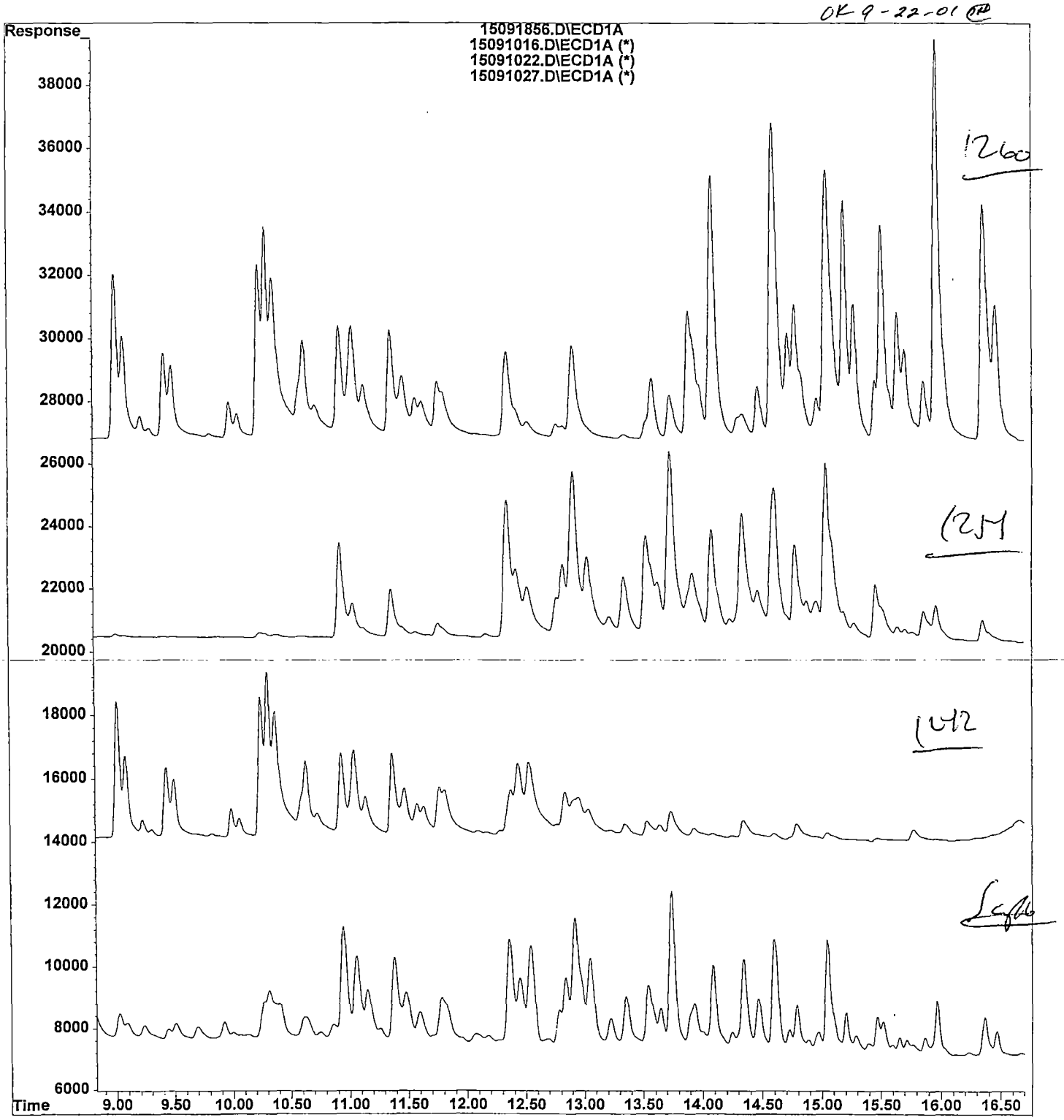
OK 9-22-01





File : F:\HPCHEM\HP\15\DATA\09_18_01\15091856.D
Operator : SA
Acquired : 19 Sep 2001 6:31 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 47393.10
Misc Info :
Vial Number: 50

OK 9-22-01



Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091856.D\ECD1A.CH Vial: 50
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091856.D\ECD2B.CH
Acq On : 19 Sep 2001 6:31 Operator: SA
Sample : 47393.10 *E0462 * Inst : HP_15
Misc : *EPA*30.7G/5.0ML*19 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 10:49 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.34	7.10	400241	576993	7.060	7.342	
	Spiked Amount 8.043			Recovery	=	87.78%	91.29%	
22)	S DCB	18.01	18.39	429408	559986	6.999	6.549	
	Spiked Amount 8.043			Recovery	=	87.02%	81.43%	
	Target Compounds:							
7)	L4 Aroclor-1242	0.00	10.14	0	52342	N.D.	62.7	#
9)	L4 Aroclor-1242 {3}	10.40	12.03	45842	144380	19.8	83.3	#
10)	L4 Aroclor-1242 {4}	11.48	12.36	70771	89488	91.9	85.9	
11)	L4 Aroclor-1242 {5}	11.78	12.75	97389	103307	99.1	51.8	#
	Sum Aroclor-1242			214002	389516	210.7	283.7	
	Average Aroclor-1242					70.240	70.924	
12)	L6 Aroclor-1254	12.36	0.00	126032	0	54.0	N.D. d	#
13)	L6 Aroclor-1254 {2}	13.05	13.33	120044	157167	65.0	78.1	
14)	L6 Aroclor-1254 {3}	13.54	13.68	83070	74676	36.8	41.5	
15)	L6 Aroclor-1254 {4}	14.09	14.72	100611	128746	46.3	50.4	
16)	L6 Aroclor-1254 {5}	14.79	15.19	49666	111319	27.1	33.5	
	Sum Aroclor-1254			479423	471908	229.2	203.5	
	Average Aroclor-1254					45.847	50.877	
17)	L7 Aroclor-1260	14.09	0.00	100611	0	25.4	N.D. d	#
18)	L7 Aroclor-1260 {2}	14.60	14.51	139523	236788	27.1	46.7	#
19)	L7 Aroclor-1260 {3}	15.05	14.72	141154	128746	28.3	20.7	#
20)	L7 Aroclor-1260 {4}	15.52	15.90	30717	24452	9.575	6.899	#
21)	L7 Aroclor-1260 {5}	15.97	16.12	56405	72983	9.424	8.279	
	Sum Aroclor-1260			468409	462969	40.1	33.2	
	Average Aroclor-1260					19.956	20.662	

(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.

E0463

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) SOIL Lab Sample ID: 47393.11

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

% Moisture: 36 decanted: (Y/N) __ Date Received: 08/24/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/28/01

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

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	52	U
11104-28-2	Aroclor-1221	52	U
11141-16-5	Aroclor-1232	52	U
53469-21-9	Aroclor-1242	190	P
12672-29-6	Aroclor-1248	52	U
11097-69-1	Aroclor-1254	150	
11096-82-5	Aroclor-1260	85	
	Surrogate amount spiked	10.41	

FORM I PCB

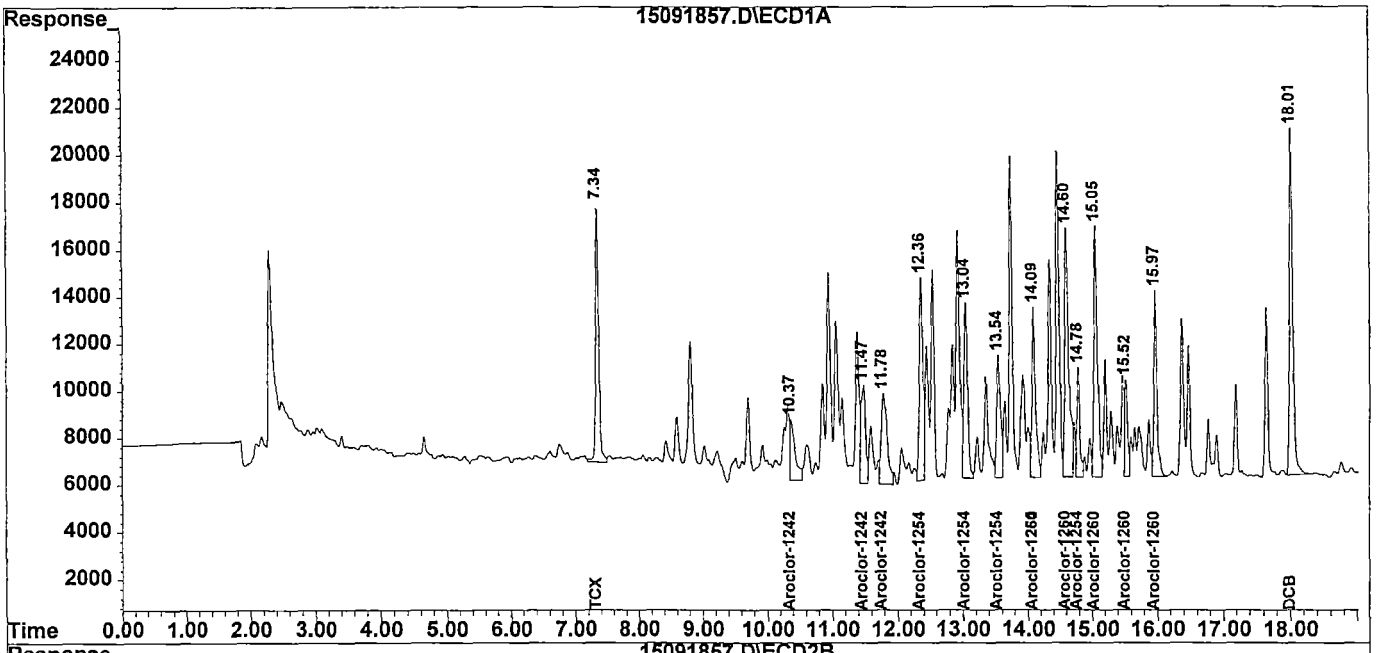
Chromatographic Report

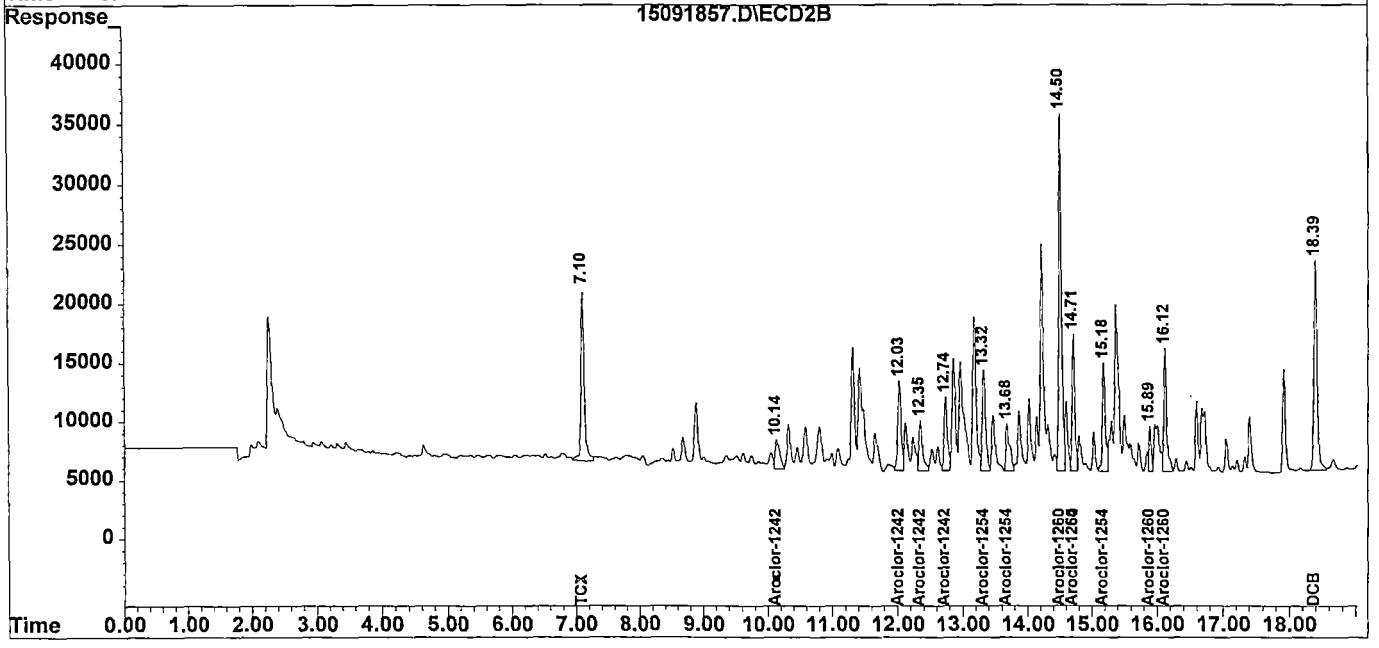
Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091857.D\ECD1A.CH Vial: 51
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091857.D\ECD2B.CH
Acq On : 19 Sep 2001 6:54 Operator: SA
Sample : 47393.11 *E0463 * Inst : HP_15
Misc : *EPA*30G/5.0ML*36 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 10:50 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 2001
Response via : Multiple Level Calibration

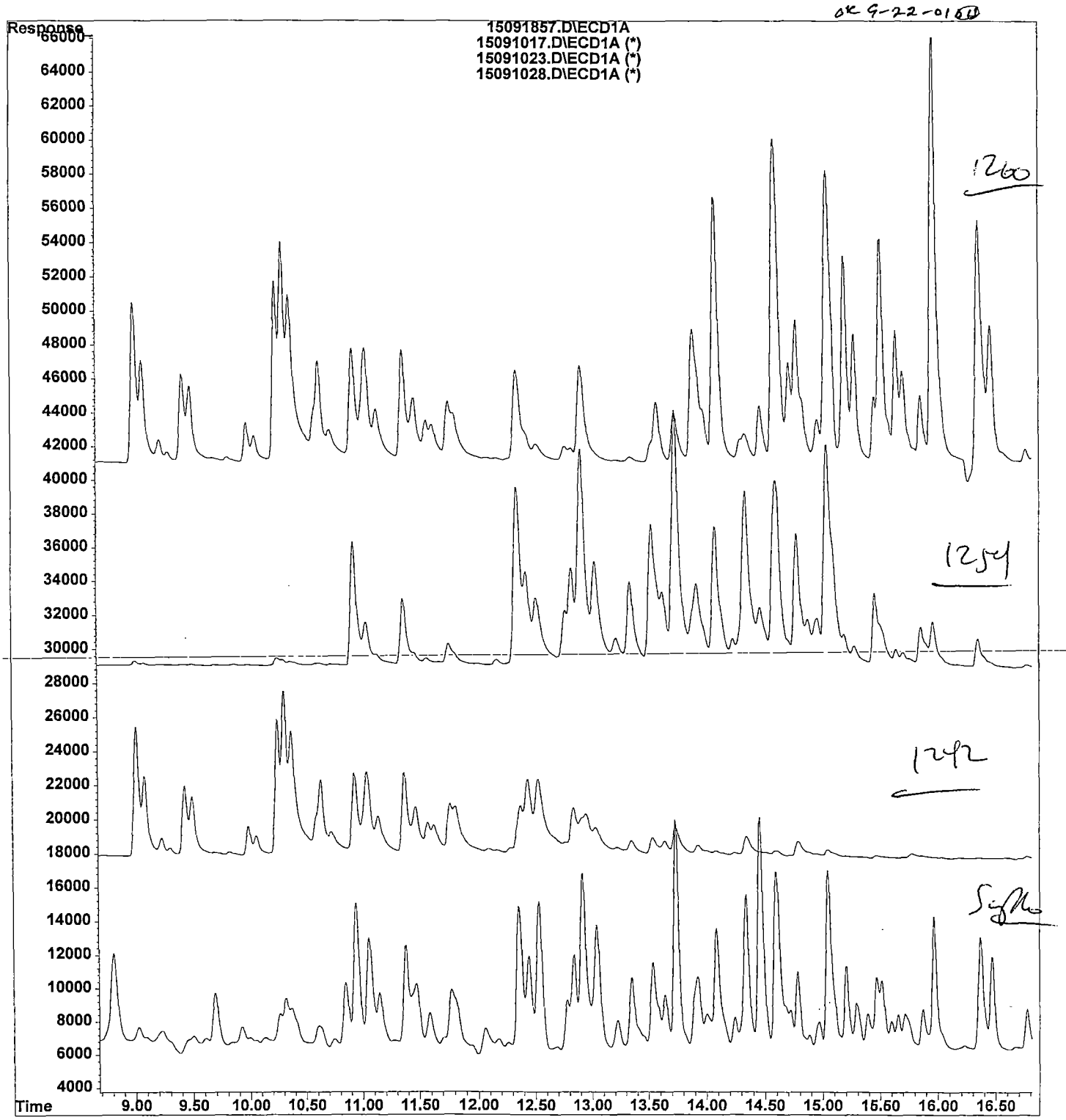
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

OK 9-23-01





File : F:\HPCHEM\HP\15\DATA\09_18_01\15091857.D
Operator : SA
Acquired : 19 Sep 2001 6:54 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 47393.11
Misc Info :
Vial Number: 51



Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091857.D\ECD1A.CH Vial: 51
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091857.D\ECD2B.CH
Acq On : 19 Sep 2001 6:54 Operator: SA
Sample : 47393.11 *E0463 * Inst : HP_15
Misc : *EPA*30G/5.0ML*36 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 10:50 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.34	7.10	372112	525410	8.501	8.659	
	Spiked Amount 10.417			Recovery	=	81.61%	83.13%	
22)	S DCB	18.01	18.40	504875	606062	10.7	9.180	
	Spiked Amount 10.417			Recovery	=	102.72%	88.13%	
	Target Compounds:							
7)	L4 Aroclor-1242	0.00	10.14	0	132693	N.D.	205.8	#
9)	L4 Aroclor-1242 {3}	10.37	12.03	143800	269342	80.3	201.2	#
10)	L4 Aroclor-1242 {4}	11.48	12.36	210045	169251	353.2	210.5	#
11)	L4 Aroclor-1242 {5}	11.78	12.74	243260	220243	320.5	143.2	#
	Sum Aroclor-1242			597105	791530	754.0	760.6	
	Average Aroclor-1242					251.339	190.141	
12)	L6 Aroclor-1254	12.36	0.00	318696	0	176.7	N.D. d	#
13)	L6 Aroclor-1254 {2}	13.04	13.33	308898	314559	216.6	202.4	
14)	L6 Aroclor-1254 {3}	13.54	13.68	213808	168702	122.8	121.5	
15)	L6 Aroclor-1254 {4}	14.09	14.72	294611	346246	175.7	175.6	
16)	L6 Aroclor-1254 {5}	14.79	15.19	143389	302734	101.4	118.0	
	Sum Aroclor-1254			1279402	1132241	793.2	617.4	
	Average Aroclor-1254					158.644	154.361	
17)	L7 Aroclor-1260	14.09	0.00	294611	0	96.4	N.D. d	#
18)	L7 Aroclor-1260 {2}	14.60	14.51	474360	921769	119.1	235.7	#
19)	L7 Aroclor-1260 {3}	15.05	14.72	415497	346246	108.0	72.2	#
20)	L7 Aroclor-1260 {4}	15.52	15.90	126803	99134	51.2	36.2	#
21)	L7 Aroclor-1260 {5}	15.97	16.12	244128	315519	52.8	46.4	
	Sum Aroclor-1260			1555400	1682668	222.6	203.4	
	Average Aroclor-1260					85.494	97.609	

(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.

E0464

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) SOIL Lab Sample ID: 47393.12

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

% Moisture: 53 decanted: (Y/N) __ Date Received: 08/24/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/28/01

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

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	70	U
11104-28-2	Aroclor-1221	70	U
11141-16-5	Aroclor-1232	70	U
53469-21-9	Aroclor-1242	69	JP
12672-29-6	Aroclor-1248	70	U
11097-69-1	Aroclor-1254	54	J
11096-82-5	Aroclor-1260	25	JP
Surrogate amount spiked		14.04	

FORM I PCB

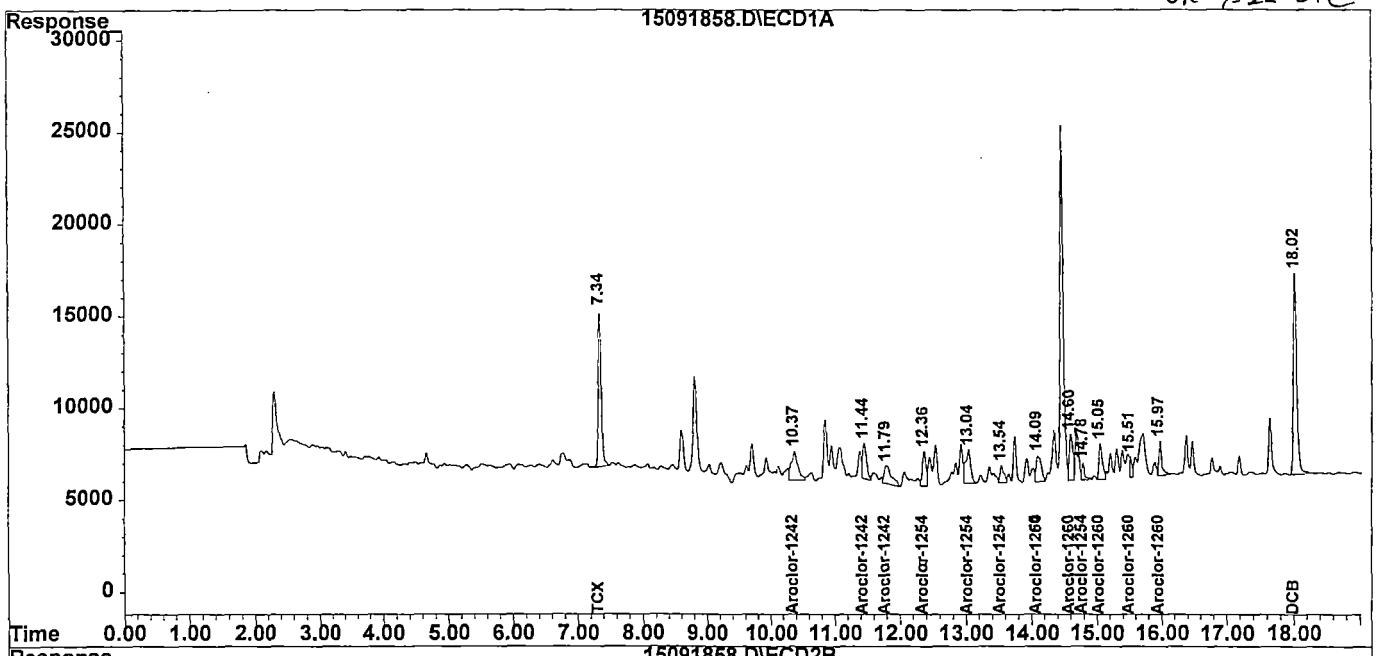
Chromatographic Report

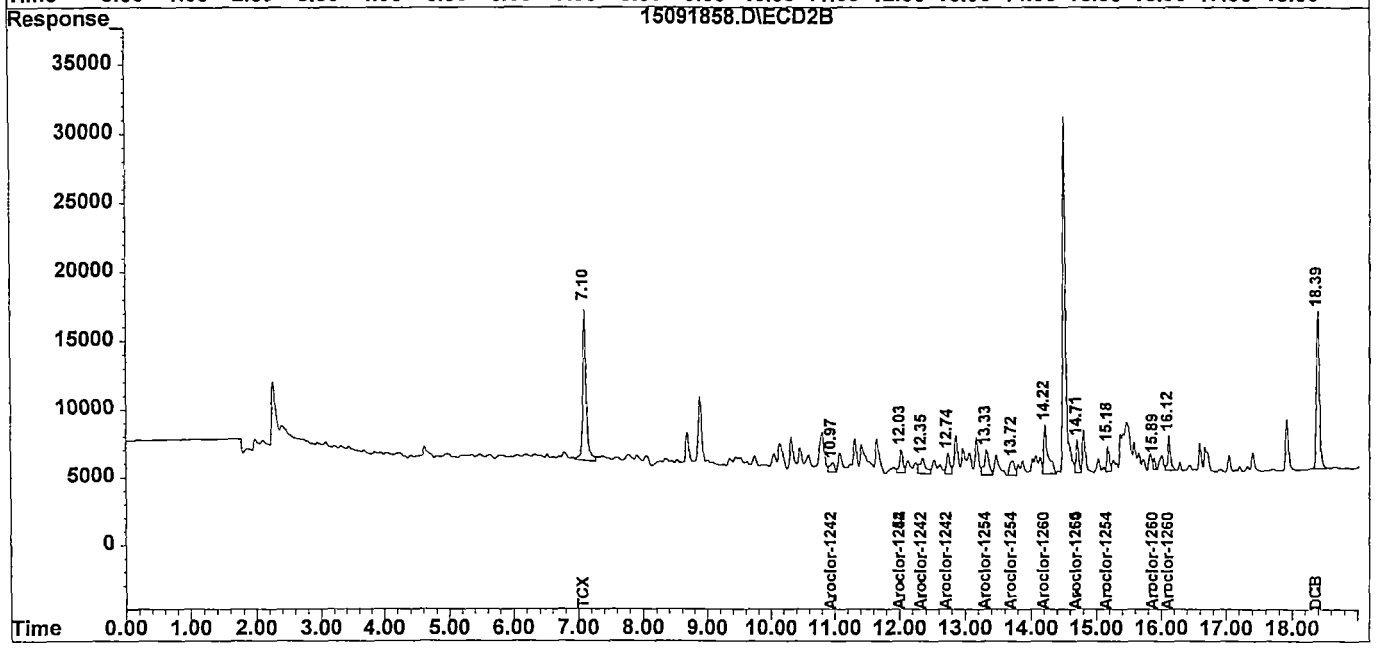
Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091858.D\ECD1A.CH Vial: 52
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091858.D\ECD2B.CH
Acq On : 19 Sep 2001 7:17 Operator: SA
Sample : 47393.12 *E0464 * Inst : HP_15
Misc : *EPA*30.3G/5.0ML*53 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 10:52 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

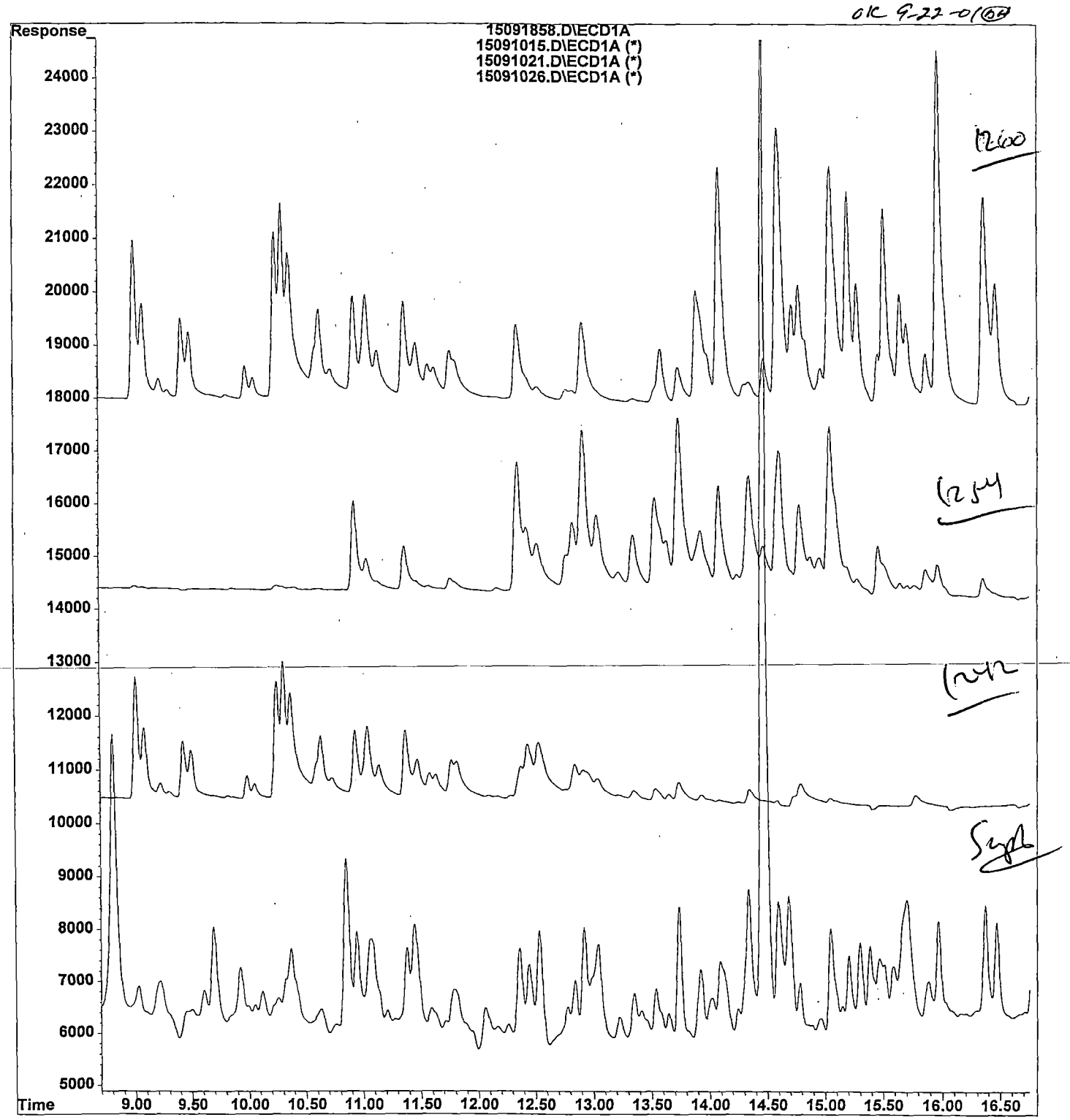
ok 9-22-01





File : F:\HPCHEM\HP\15\DATA\09_18_01\15091858.D
Operator : SA
Acquired : 19 Sep 2001 7:17 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 47393.12
Misc Info :
Vial Number: 52

OK 9-22-01



Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091858.D\ECD1A.CH Vial: 52
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091858.D\ECD2B.CH
Acq On : 19 Sep 2001 7:17 Operator: SA
Sample : 47393.12 *E0464 * Inst : HP_15
Misc : *EPA*30.3G/5.0ML*53 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 10:52 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.34	7.10	273757	426340	8.432	9.473	
	Spiked Amount 14.044			Recovery	=	60.04%	67.45%	
22)	S DCB	18.02	18.40	383258	383049	10.9	7.823	#
	Spiked Amount 14.044			Recovery	=	✓77.61%	✓55.70%	
	Target Compounds:							
8)	L4 Aroclor-1242 {2}	0.00	10.97f	0	36769	N.D. d	40.7	#
9)	L4 Aroclor-1242 {3}	10.37	12.03	113547	63997	85.5	64.4	
10)	L4 Aroclor-1242 {4}	11.45	12.36	86608	72174	196.4	121.0	#
11)	L4 Aroclor-1242 {5}	11.79	12.74	78641	55044	139.7	48.2	#
	Sum Aroclor-1242			278796	227983	421.5	274.4	
	Average Aroclor-1242					140.516	68.600	
12)	L6 Aroclor-1254	12.36	12.03	71379	63997	53.4	88.4	#
13)	L6 Aroclor-1254 {2}	13.04	13.33	102885	88661	97.3	76.9	
14)	L6 Aroclor-1254 {3}	13.54	13.72f	38297	55410	29.7	53.8	#
15)	L6 Aroclor-1254 {4}	14.09	14.72	79394	70560	63.8	48.2	
16)	L6 Aroclor-1254 {5}	14.79	15.18	26872	53009	25.6	27.8	
	Sum Aroclor-1254			318827	331637	269.7	295.2	
	Average Aroclor-1254					53.948	59.044	
17)	L7 Aroclor-1260	14.09	14.22	79394	163719	35.0	90.9	#
18)	L7 Aroclor-1260 {2}	14.60	0.00	97260	0	32.9	N.D. d	#
19)	L7 Aroclor-1260 {3}	15.05	14.72	71535	70560	25.1	19.8	
20)	L7 Aroclor-1260 {4}	15.52	15.90	27683	18322	15.1	9.028	#
21)	L7 Aroclor-1260 {5}	15.97	16.13	61190	75861	17.9	15.0	
	Sum Aroclor-1260			337062	328462	88.4	94.6	
	Average Aroclor-1260					25.185	33.693	

(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.

E0465

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) SOIL Lab Sample ID: 47393.13

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

% Moisture: 53 decanted: (Y/N) __ Date Received: 08/24/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/28/01

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

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	70	U
11104-28-2	Aroclor-1221	70	U
11141-16-5	Aroclor-1232	70	U
53469-21-9	Aroclor-1242	85	P
12672-29-6	Aroclor-1248	70	U
11097-69-1	Aroclor-1254	33	JP
11096-82-5	Aroclor-1260	15	JP
	Surrogate amount spiked	14.04	

FORM I PCB

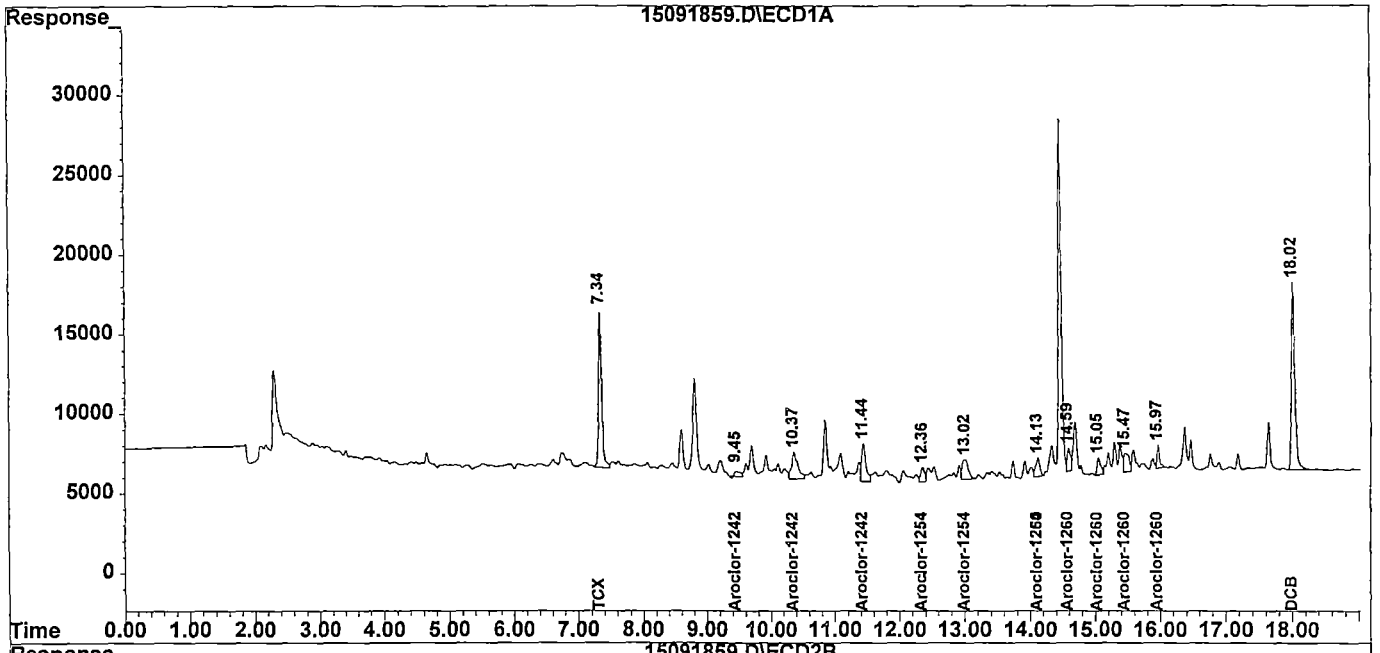
Chromatographic Report

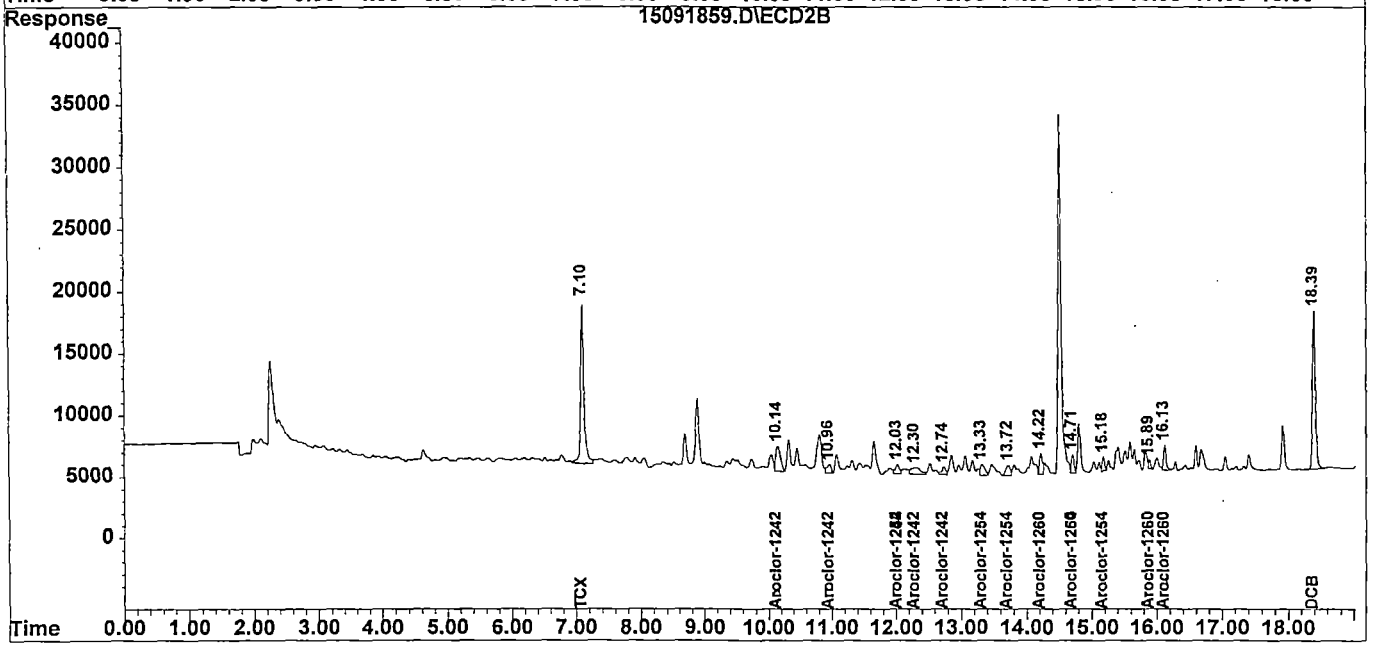
Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091859.D\ECD1A.CH Vial: 53
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091859.D\ECD2B.CH
Acq On : 19 Sep 2001 7:40 Operator: SA
Sample : 47393.13 *E0465 * Inst : HP_15
Misc : *EPA*30.3G/5.0ML*53 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 10:54 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 2001
Response via : Multiple Level Calibration

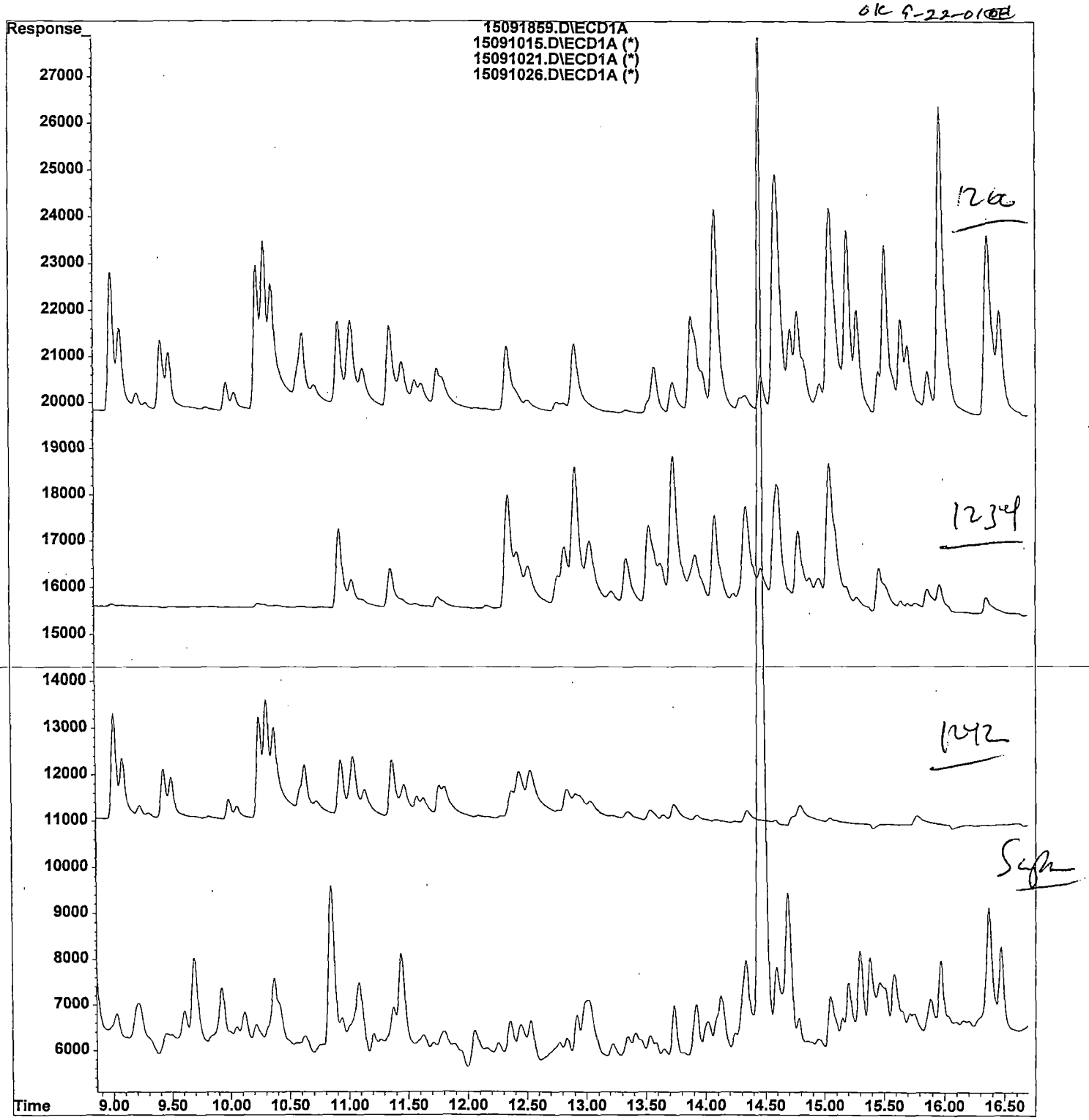
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

OK 9-22-01





File : F:\HPCHEM\HP\15\DATA\09_18_01\15091859.D
Operator : SA
Acquired : 19 Sep 2001 7:40 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 47393.13
Misc Info :
Vial Number: 53



Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091859.D\ECD1A.CH Vial: 53
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091859.D\ECD2B.CH
Acq On : 19 Sep 2001 7:40 Operator: SA
Sample : 47393.13 *E0465 * Inst : HP_15
Misc : *EPA*30.3G/5.0ML*53 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 10:54 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.34	7.10	328061	477935	10.1	10.6	
	Spiked Amount 14.044			Recovery	=	71.92%	75.48%	
22)	S DCB	18.02	18.40	414416	424227	11.8	8.664	#
	Spiked Amount 14.044			Recovery	=	84.02%	61.69%	
	Target Compounds:							
7)	L4 Aroclor-1242	0.00	10.15	0	115268	N.D.	241.0	#
8)	L4 Aroclor-1242 {2}	9.46	10.97f	18344	32957	46.6	36.5	
9)	L4 Aroclor-1242 {3}	10.37	12.03	116191	31520	87.5	31.7	#
10)	L4 Aroclor-1242 {4}	11.44	12.31f	111147	55528	252.0	93.1	#
11)	L4 Aroclor-1242 {5}	0.00	12.74	0	26732	N.D.	23.4	#
	Sum Aroclor-1242			245682	262005	386.1	425.7	
	Average Aroclor-1242					128.713	85.149	
12)	L6 Aroclor-1254	12.36	12.03	36528	31520	27.3	43.5	#
13)	L6 Aroclor-1254 {2}	13.02	13.33	82209	43775	77.7	38.0	#
14)	L6 Aroclor-1254 {3}	0.00	13.72f	0	38052	N.D.	36.9	#
15)	L6 Aroclor-1254 {4}	14.13f	14.72	54704	44691	44.0	30.6	#
16)	L6 Aroclor-1254 {5}	0.00	15.18	0	31935	N.D.	16.8	#
	Sum Aroclor-1254			173442	189973	149.0	165.8	
	Average Aroclor-1254					49.670	33.160	
17)	L7 Aroclor-1260	14.13f	14.22	54704	54923	24.1	30.5	#
18)	L7 Aroclor-1260 {2}	14.60	0.00	49804	0	16.9	N.D. d	#
19)	L7 Aroclor-1260 {3}	15.05	14.72	41511	44691	14.5	12.6	
20)	L7 Aroclor-1260 {4}	15.47f	15.89	65942	15282	35.9	7.529	#
21)	L7 Aroclor-1260 {5}	15.97	16.13	40784	53246	11.9	10.5	
	Sum Aroclor-1260			252744	168142	72.6	42.9	
	Average Aroclor-1260					20.664	15.282	

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

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E0466

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) SOIL Lab Sample ID: 47393.14

Sample wt/vol: 30.7 (g/mL) G Lab File ID:_____

% Moisture: 59 decanted: (Y/N) __ Date Received: 08/24/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/28/01

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

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	79	U
11104-28-2	Aroclor-1221	79	U
11141-16-5	Aroclor-1232	79	U
53469-21-9	Aroclor-1242	~~12000~~	33000D~~E~~
12672-29-6	Aroclor-1248	79	U
11097-69-1	Aroclor-1254	~~3900~~	11000DP~~E~~
11096-82-5	Aroclor-1260	~~1700~~	4400D~~E~~
Surrogate amount spiked		15.89	

apply this results
TBS 10-12-01

FORM I PCB

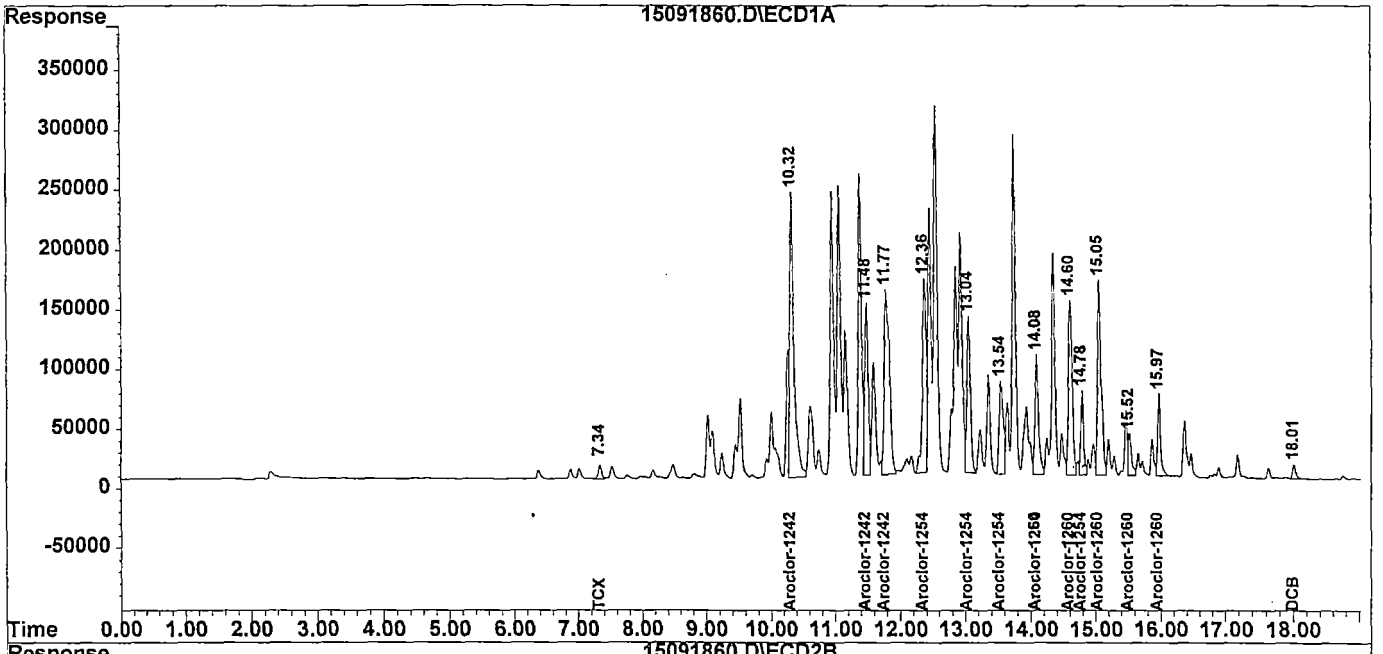
Chromatographic Report

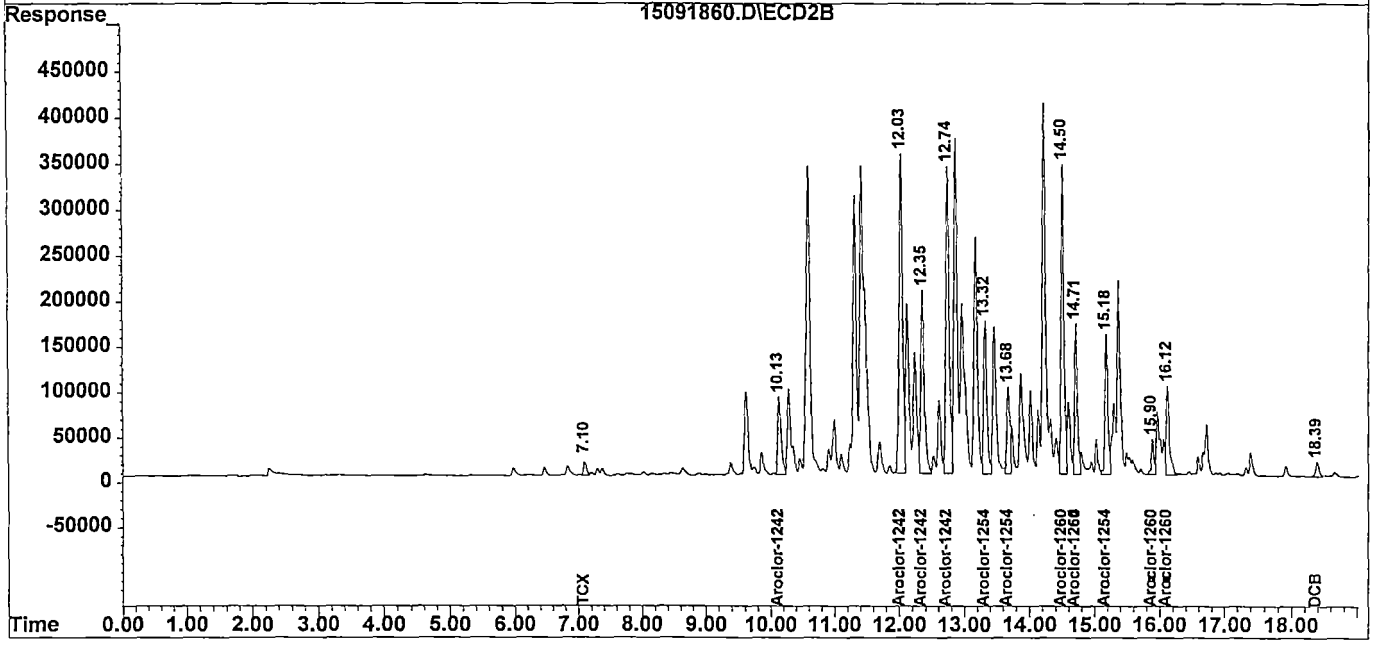
Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091860.D\ECD1A.CH Vial: 54
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091860.D\ECD2B.CH
Acq On : 19 Sep 2001 8:03 Operator: SA
Sample : 47393.14 *E0466 * Inst : HP_15
Misc : *EPA*30.7G/5.0ML*59 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 10:57 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

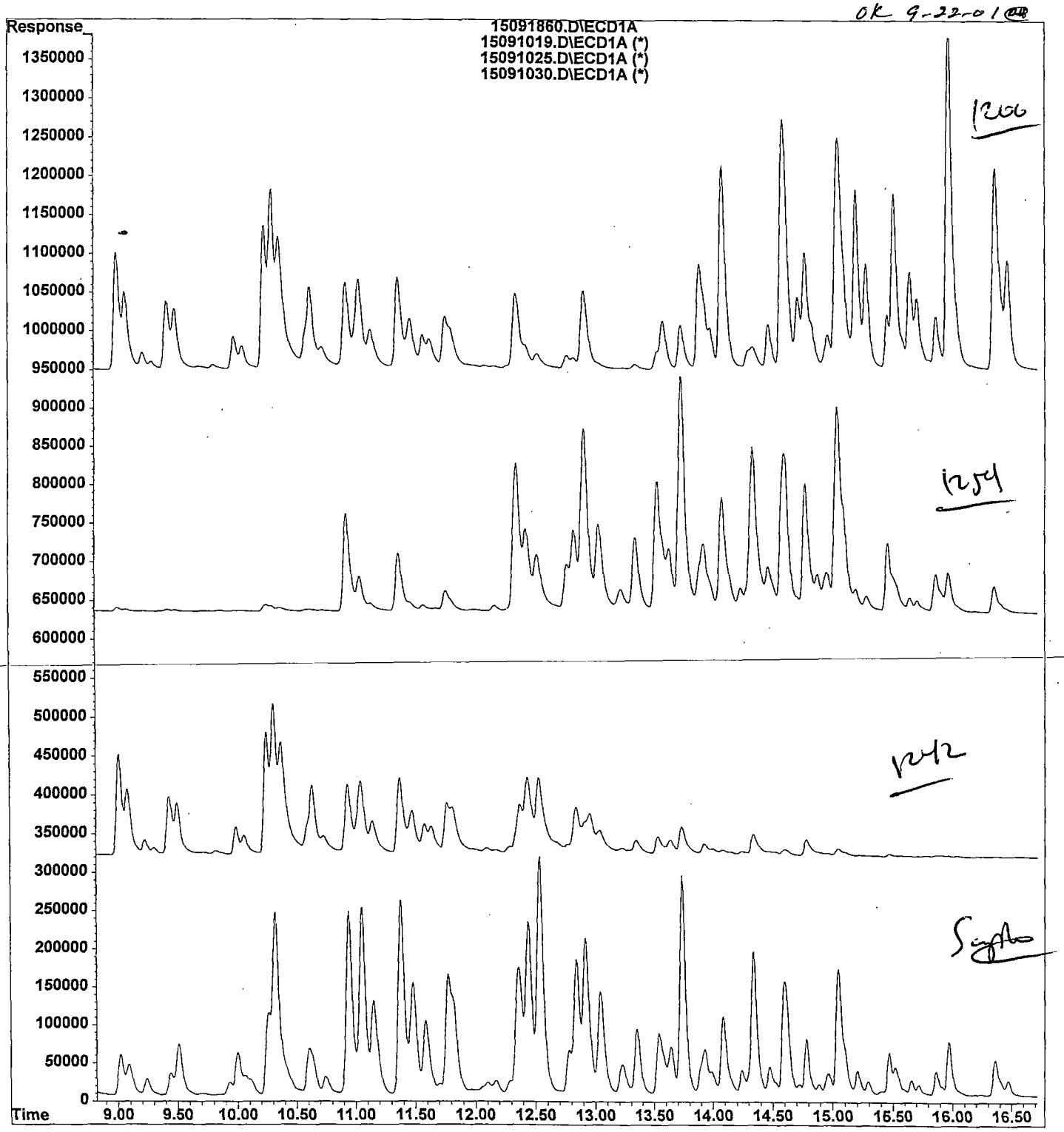
OK 9-22-01





File : F:\HPCHEM\HP\15\DATA\09_18_01\15091860.D
Operator : SA
Acquired : 19 Sep 2001 8:03 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 47393.14
Misc Info :
Vial Number: 54

OK 9-22-01



Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091860.D\ECD1A.CH Vial: 54
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091860.D\ECD2B.CH
Acq On : 19 Sep 2001 8:03 Operator: SA
Sample : 47393.14 *E0466 * Inst : HP_15
Misc : *EPA*30.7G/5.0ML*59 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 10:57 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.34	7.10	409352	502892	14.3	12.6
	Spiked Amount 15.889			Recovery	=	90.00%	79.30%
22)	S DCB	18.02	18.40	427005	589605	13.7	13.6
	Spiked Amount 15.889			Recovery	=	✓86.22%	✓85.59%
	Target Compounds:						
7)	L4 Aroclor-1242	0.00	10.13	0	3524036	N.D. d	8335.7 E#
9)	L4 Aroclor-1242 {3}	10.32f	12.03	11524922	12416620	9819.2 E	14145.9 E#
10)	L4 Aroclor-1242 {4}	11.48	12.36	5707601	7575108	14641.8 E	14368.8 E
11)	L4 Aroclor-1242 {5}	11.78	12.74	8772272	11832625	17627.3 E	11732.6 E#
	Sum Aroclor-1242			26004795	35348390	42088.3	48583.1
	Average Aroclor-1242					14029.424	12145.779
12)	L6 Aroclor-1254	12.36	0.00	6452813	0	5457.7 E	N.D. d #
13)	L6 Aroclor-1254 {2}	13.04	13.33	5036350	6168990	5386.8 E	6055.6 E
14)	L6 Aroclor-1254 {3}	13.54	13.68	3301994	2972060	2893.0 E	3264.6 E
15)	L6 Aroclor-1254 {4}	14.09	14.71	3761644	5038405	3422.1 E	3897.0 E
16)	L6 Aroclor-1254 {5}	14.78	15.18	2225461	4852639	2400.7 E	2884.4 E
	Sum Aroclor-1254			20778263	19032094	19560.3	16101.7
	Average Aroclor-1254					3912.062	4025.414
17)	L7 Aroclor-1260	14.09	0.00	3761644	0	1877.3 E	N.D. d #
18)	L7 Aroclor-1260 {2}	14.60	14.51	6185354	10281152	2369.2 E	4009.3 E#
19)	L7 Aroclor-1260 {3}	15.05	14.71	6623806	5038405	2625.2 E	1602.6 E#
20)	L7 Aroclor-1260 {4}	15.52	15.90	1306638	1091023	804.7	608.2
21)	L7 Aroclor-1260 {5}	15.97	16.12	2180886	3326268	719.8	745.4
	Sum Aroclor-1260			20058328	19736848	6670.4	5533.9
	Average Aroclor-1260					1679.216	1741.384

(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.

E0466DL

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) SOIL Lab Sample ID: 47393.14DL

Sample wt/vol: 30.7 (g/mL) G Lab File ID:_____

% Moisture: 59 decanted: (Y/N) __ Date Received: 08/24/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/28/01

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

Injection Volume: 0.5(uL) Dilution Factor: 50.0

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	3900	U
11104-28-2	Aroclor-1221	3900	U
11141-16-5	Aroclor-1232	3900	U
53469-21-9	Aroclor-1242	33000	D
12672-29-6	Aroclor-1248	3900	U
11097-69-1	Aroclor-1254	11000	DP
11096-82-5	Aroclor-1260	4400	D
	Surrogate amount spiked	15.89	

FORM I PCB

Chromatographic Report

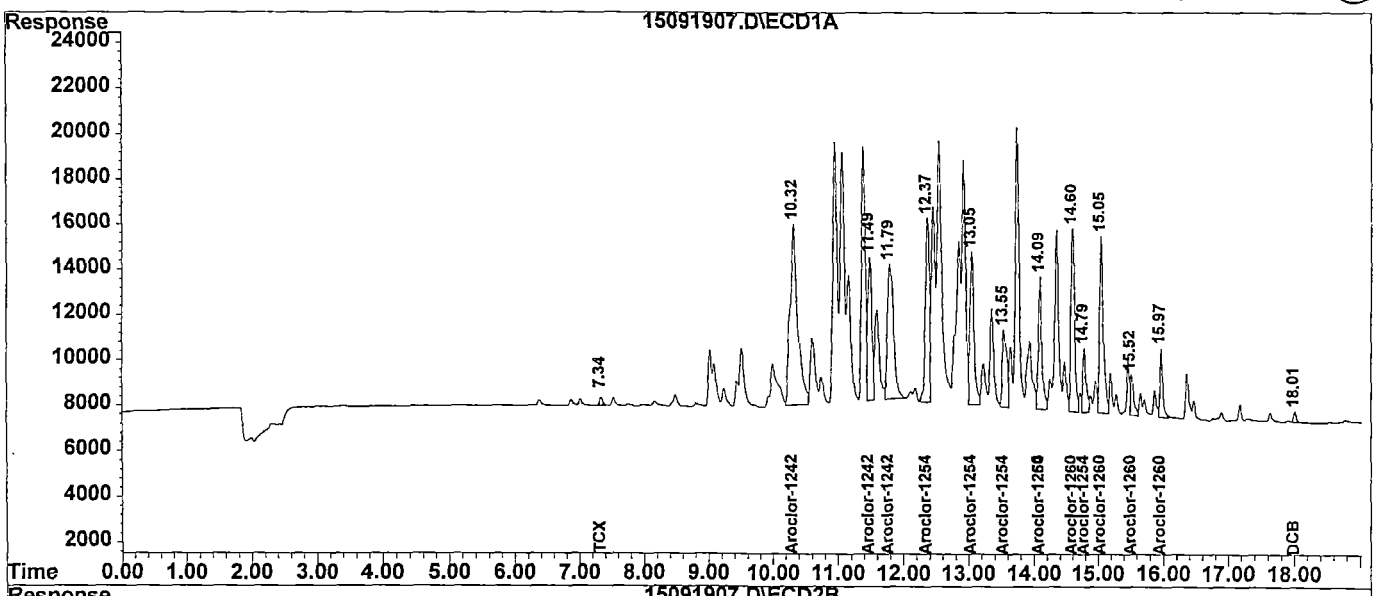
Data File : F:\HPCHEM\HP\15\DATA\09_19_01\15091907.D\ECD1A.CH Vial: 7
Acq On : 19 Sep 2001 15:55 Operator: DDC
Sample : 47393.14DL *E0466DL * Inst : HP_15
Misc : *EPA*30.7G/5.0ML*59 Dilution: 50.00
IntFile : events.e

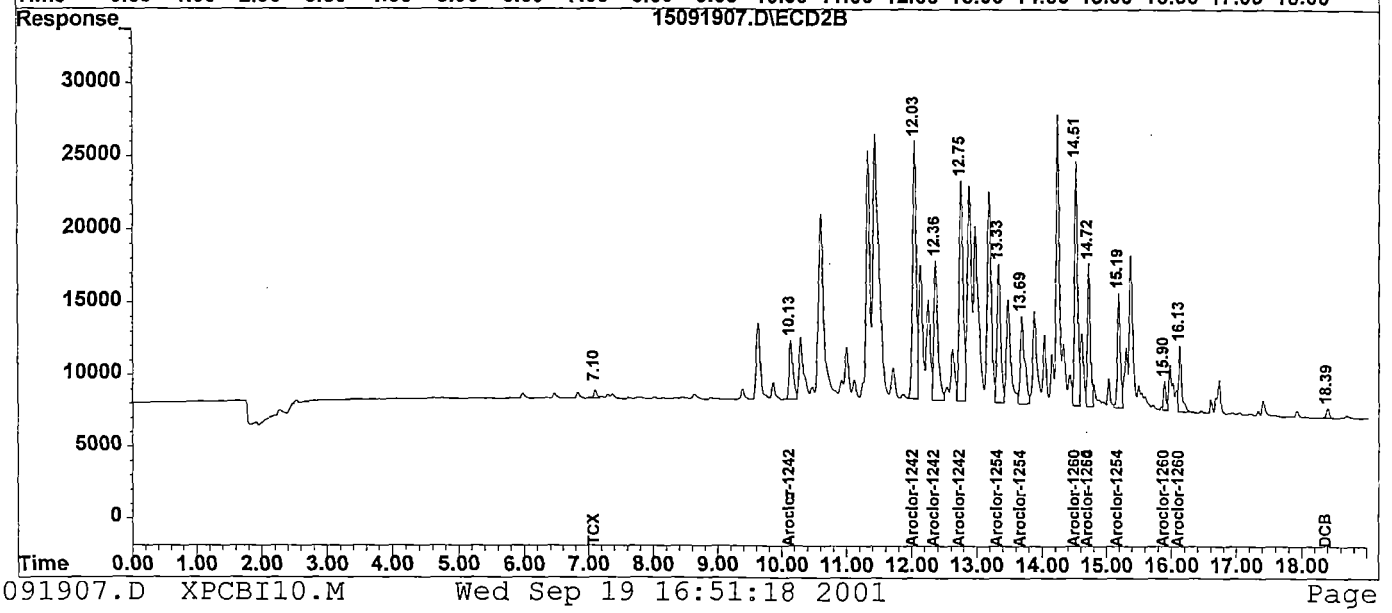
Data File : F:\HPCHEM\HP\15\DATA\09_19_01\15091907.D\ECD2B.CH Vial: 7
Acq On : 19 Sep 2001 15:55 Operator: DDC
Sample : 47393.14DL Inst : HP_15
Misc : Dilution: 50.00
IntFile : events2.e
Quant Time: Sep 19 16:44 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_19_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

ok 9-22-01 EH





Quantitation Report

Data File : F:\HPCHEM\HP\15\DATA\09_19_01\15091907.D\ECD1A.CH Vial: 7
Acq On : 19 Sep 2001 15:55 Operator: DDC
Sample : 47393.14DL *E0466DL * Inst : HP_15
Misc : *EPA*30.7G/5.0ML*59 Dilution: 50.00
IntFile : events.e

Data File : F:\HPCHEM\HP\15\DATA\09_19_01\15091907.D\ECD2B.CH Vial: 7
Acq On : 19 Sep 2001 15:55 Operator: DDC
Sample : 47393.14DL Inst : HP_15
Misc : Dilution: 50.00
IntFile : events2.e
Quant Time: Sep 19 16:44 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_19_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 2001
Response via : Initial Calibration

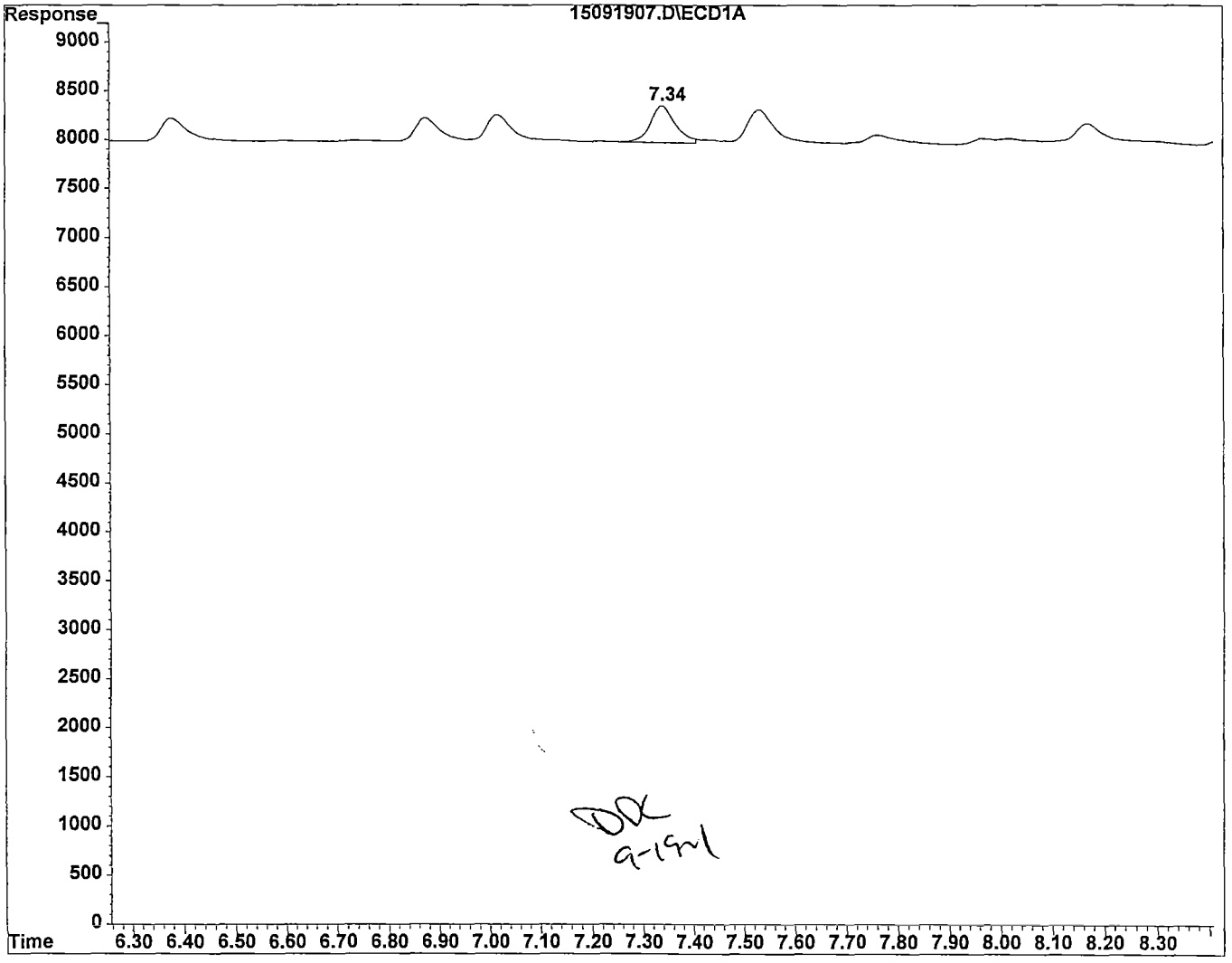
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.34	7.10	13147	18197	22.9m DDC 9-1	22.9	
	Spiked Amount 15.889			Recovery	=	144.12%	144.12%	
22)	S DCB	18.02	18.40	13557	21957	21.8	25.4	
	Spiked Amount 15.889			Recovery	=	137.20%	159.85%	
	Target Compounds:							
7)	L4 Aroclor-1242	0.00	10.14	0	173038	N.D.	20465.1	#
9)	L4 Aroclor-1242 {3}	10.32f	12.04	649785	697060	27680.7	39707.1	#
10)	L4 Aroclor-1242 {4}	11.49	12.36	277795	412123	35631.6	39086.7	
11)	L4 Aroclor-1242 {5}	11.79	12.75	392625	637042	39447.7	31583.0	
	Sum Aroclor-1242			1320206	1919262	102760.0	130841.8	
	Average Aroclor-1242					34253.346	32710.452	
12)	L6 Aroclor-1254	12.37	0.00	332646	0	14067.3	N.D. d	#
13)	L6 Aroclor-1254 {2}	13.06	13.33	299541	385299	16019.2	18911.0	
14)	L6 Aroclor-1254 {3}	13.55	13.69	162314	283565	7110.6	15574.0	#
15)	L6 Aroclor-1254 {4}	14.10	14.72	226110	319587	10285.1	12359.4	
16)	L6 Aroclor-1254 {5}	14.79	15.19	103497	254459	5582.4	7562.4	#
	Sum Aroclor-1254			1124109	1242910	53064.5	54406.8	
	Average Aroclor-1254					10612.896	13601.695	
17)	L7 Aroclor-1260	14.10	0.00	226110	0	5642.0	N.D. d	#
18)	L7 Aroclor-1260 {2}	14.61	14.52	342936	573905	6567.7	11190.1	#
19)	L7 Aroclor-1260 {3}	15.06	14.72	320003	319587	6341.2	5082.8	
20)	L7 Aroclor-1260 {4}	15.53	15.90	62767	50042	1932.6	1394.8	#
21)	L7 Aroclor-1260 {5}	15.98	16.13	92667	154842	1529.3	1735.1	
	Sum Aroclor-1260			1044483	1098377	874431.7	770745.2	
	Average Aroclor-1260					4402.589	4850.685	

(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\15\DATA\09_19_01\15091907.D
Date Acquired: 19 Sep 2001 15:55
Inst: HP_15 Operator ID: DDC
Name: 47393.14DL *E0466DL *
Misc: *EPA*30.7G/5.0ML*59
Method: F:\HPCHEM\HP\15\DATA\09_19_01\XPCBI10.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 16:44 2001 Quant Results File: XPCBI10.RES



DDC 9-19-1

OK 9-22-01

TCX 7.34min area: 13147 m

Integration Time Range: 7.26 - 7.41

F:\HPCHEM\HP\15\DATA\09_19_01\15091907.D
Report generated: Wed Sep 19 16:51:49 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E0467

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) SOIL Lab Sample ID: 47393.15

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

% Moisture: 16 decanted: (Y/N) __ Date Received: 08/24/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/28/01

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

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	260	
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	99	
11096-82-5	Aroclor-1260	43	
	Surrogate amount spiked	7.91	

FORM I PCB

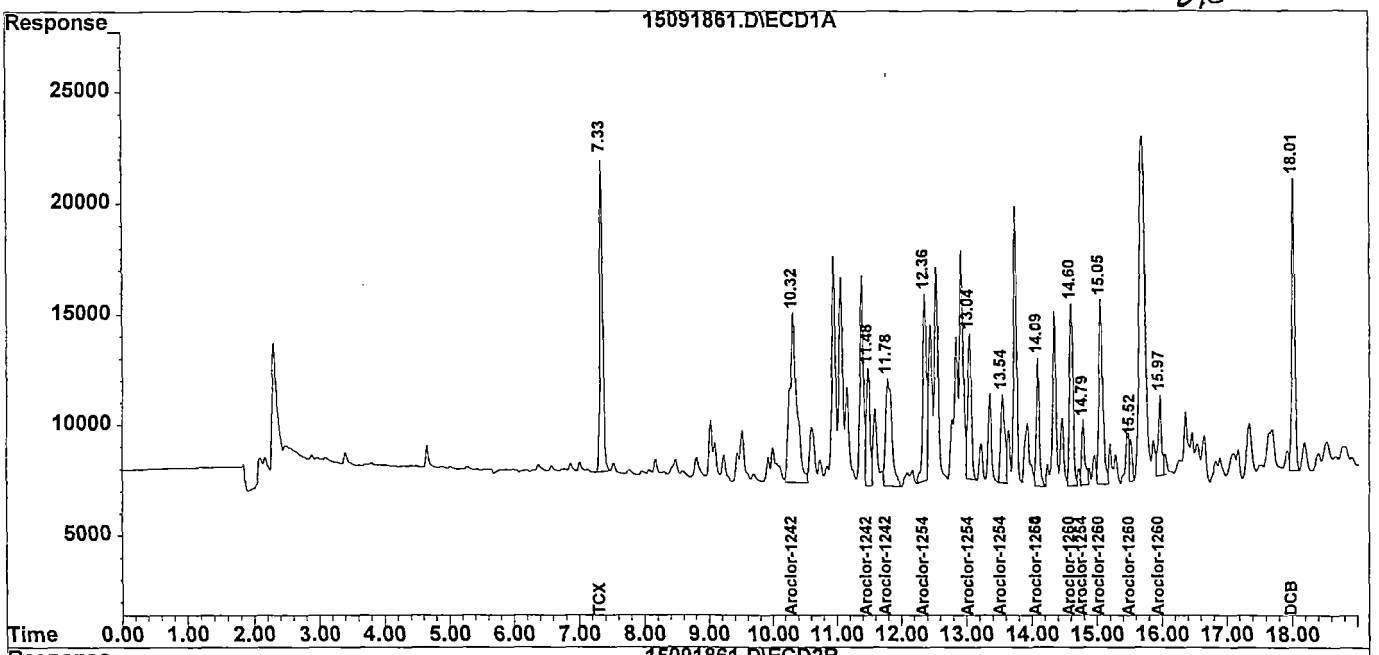
Chromatographic Report

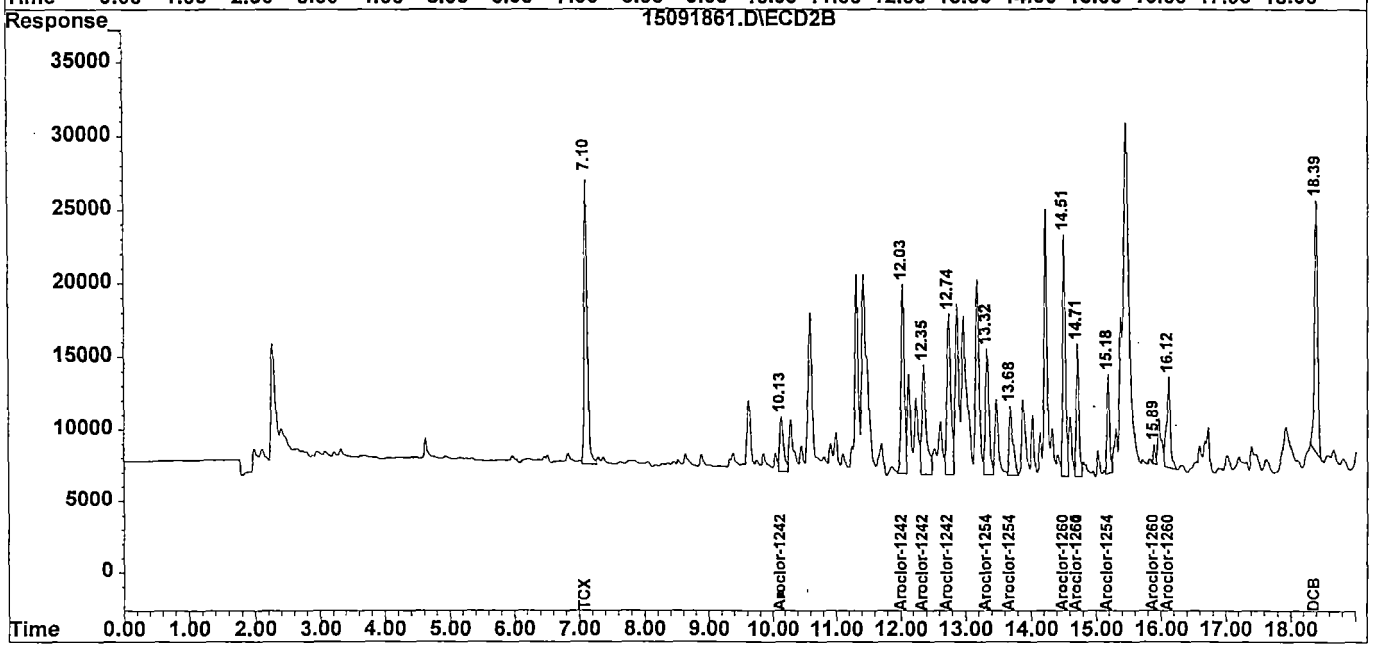
Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091861.D\ECD1A.CH Vial: 55
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091861.D\ECD2B.CH
Acq On : 19 Sep 2001 8:26 Operator: SA
Sample : 47393.15 *E0467 * Inst : HP_15
Misc : *EPA*30.1g/5.0ML*16 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 10:58 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 2001
Response via : Multiple Level Calibration

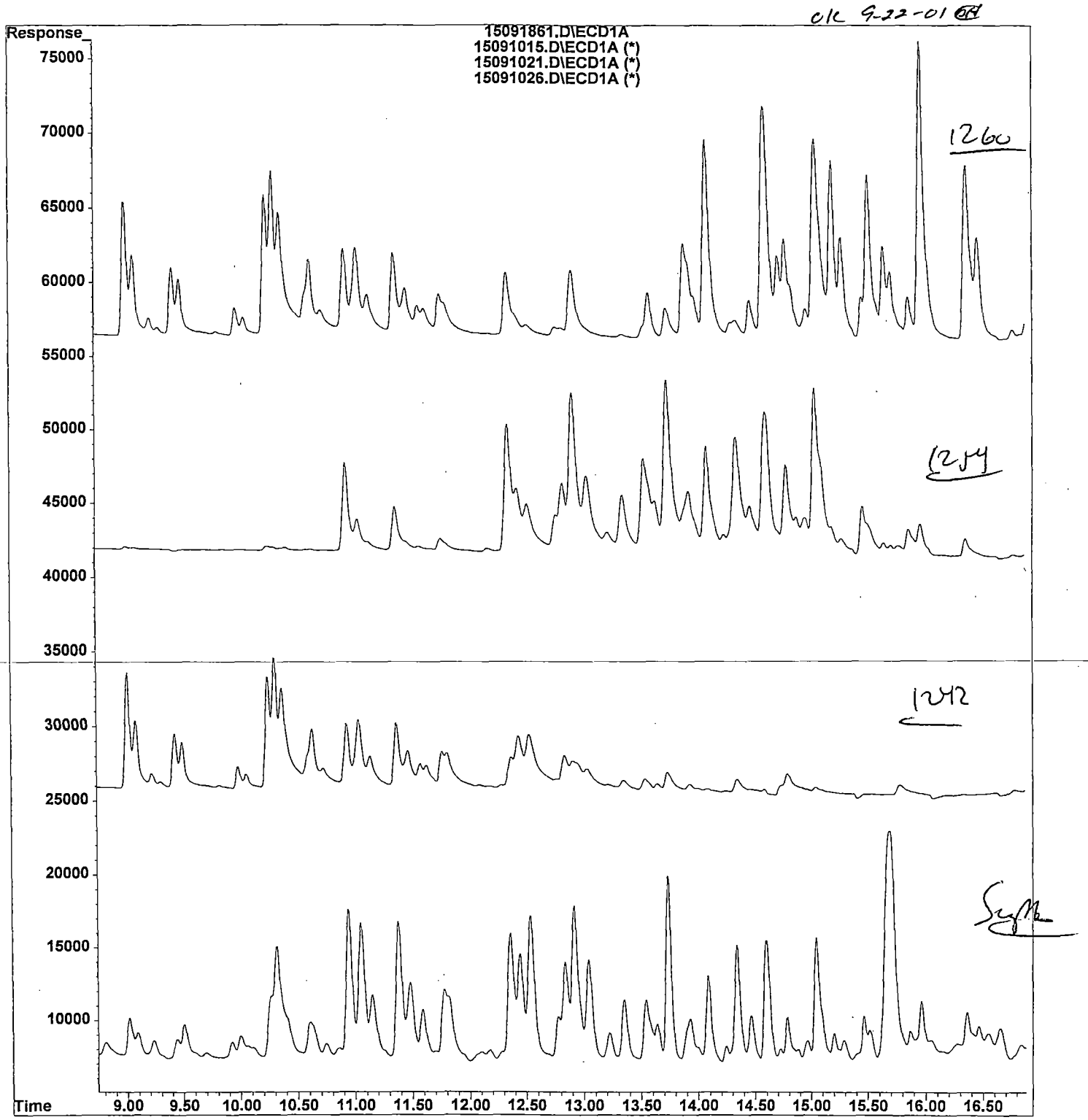
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

JK 9-22-01





File : F:\HPCHEM\HP\15\DATA\09_18_01\15091861.D
Operator : SA
Acquired : 19 Sep 2001 8:26 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 47393.15
Misc Info :
Vial Number: 55



Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091861.D\ECD1A.CH Vial: 55
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091861.D\ECD2B.CH
Acq On : 19 Sep 2001 8:26 Operator: SA
Sample : 47393.15 *E0467 * Inst : HP_15
Misc : *EPA*30.1G/5.0ML*16 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 10:58 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.34	7.10	456530	651254	7.920	8.150	
	Spiked Amount 7.910			Recovery	=	100.12%	103.03%	
22)	S DCB	18.01	18.39	428213	594936	6.864	6.843	
	Spiked Amount 7.910			Recovery	=	86.77%	86.51%	
	Target Compounds:							
7)	L4 Aroclor-1242	0.00	10.13	0	175011	N.D. d	206.1	#
9)	L4 Aroclor-1242 {3}	10.32f	12.03	587512	473051	249.2	268.3	
10)	L4 Aroclor-1242 {4}	11.48	12.36	220441	360511	281.5	340.4	
11)	L4 Aroclor-1242 {5}	11.78	12.75	334159	437353	334.3	215.9	#
	Sum Aroclor-1242			1142112	1445925	865.0	1030.7	
	Average Aroclor-1242					288.328	257.673	
12)	L6 Aroclor-1254	12.36	0.00	334275	0	140.7	N.D. d	#
13)	L6 Aroclor-1254 {2}	13.05	13.33	254620	333690	135.6	163.1	
14)	L6 Aroclor-1254 {3}	13.54	13.68	171641	196966	74.9	107.7	#
15)	L6 Aroclor-1254 {4}	14.09	14.72	195357	264247	88.5	101.7	
16)	L6 Aroclor-1254 {5}	14.79	15.19	100855	194052	54.2	57.4	
	Sum Aroclor-1254			1056748	988955	493.8	429.9	
	Average Aroclor-1254					98.765	107.486	
17)	L7 Aroclor-1260	14.09	0.00	195357	0	48.5	N.D. d	#
18)	L7 Aroclor-1260 {2}	14.60	14.51	320364	506288	61.1	98.3	#
19)	L7 Aroclor-1260 {3}	15.05	14.72	346861	264247	68.4	41.8	#
20)	L7 Aroclor-1260 {4}	15.52	15.90	54736	29285	16.8	8.127	#
21)	L7 Aroclor-1260 {5}	15.97	16.12	130798	260940	21.5	29.1	#
	Sum Aroclor-1260			1048116	1060760	85.6	70.2	
	Average Aroclor-1260					43.266	44.342	

(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.

E0468

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) SOIL Lab Sample ID: 47393.16

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

% Moisture: 51 decanted: (Y/N) __ Date Received: 08/24/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/28/01

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

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	66	U
11104-28-2	Aroclor-1221	66	U
11141-16-5	Aroclor-1232	66	U
53469-21-9	Aroclor-1242	~~690~~ 1300D	~~E~~
12672-29-6	Aroclor-1248	66	U
11097-69-1	Aroclor-1254	290	P
11096-82-5	Aroclor-1260	120	P
Surrogate amount spiked		13.42	

apply this results
TBS 10-12-01

FORM I PCB

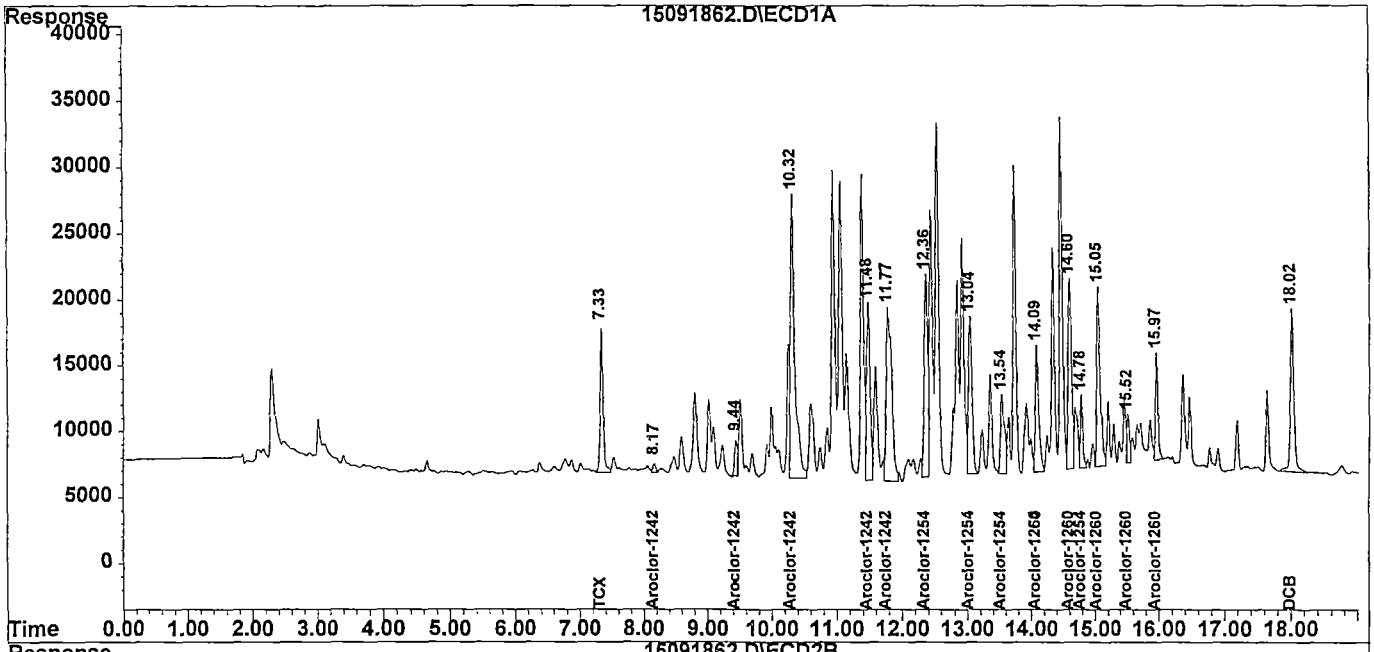
Chromatographic Report

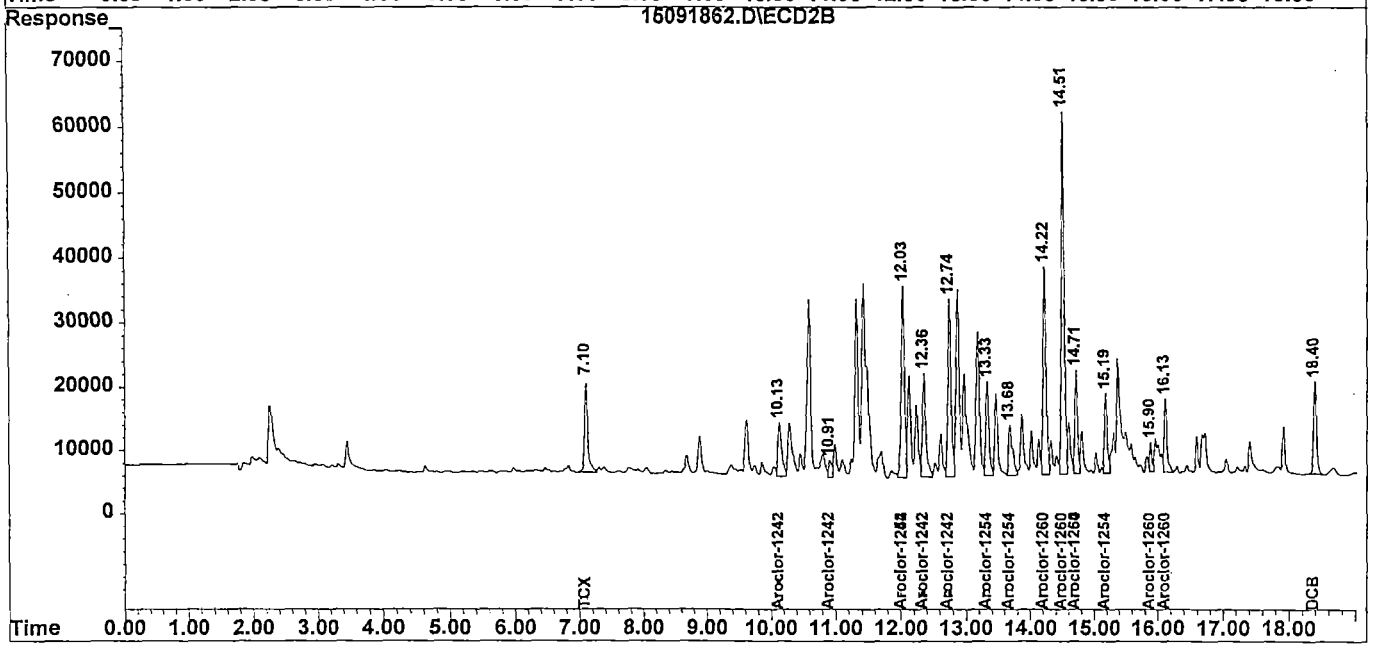
Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091862.D\ECD1A.CH Vial: 56
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091862.D\ECD2B.CH
Acq On : 19 Sep 2001 8:49 Operator: SA
Sample : 47393.16 *E0468 * Inst : HP_15
Misc : *EPA*30.4G/5.0ML*51 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 11:07 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

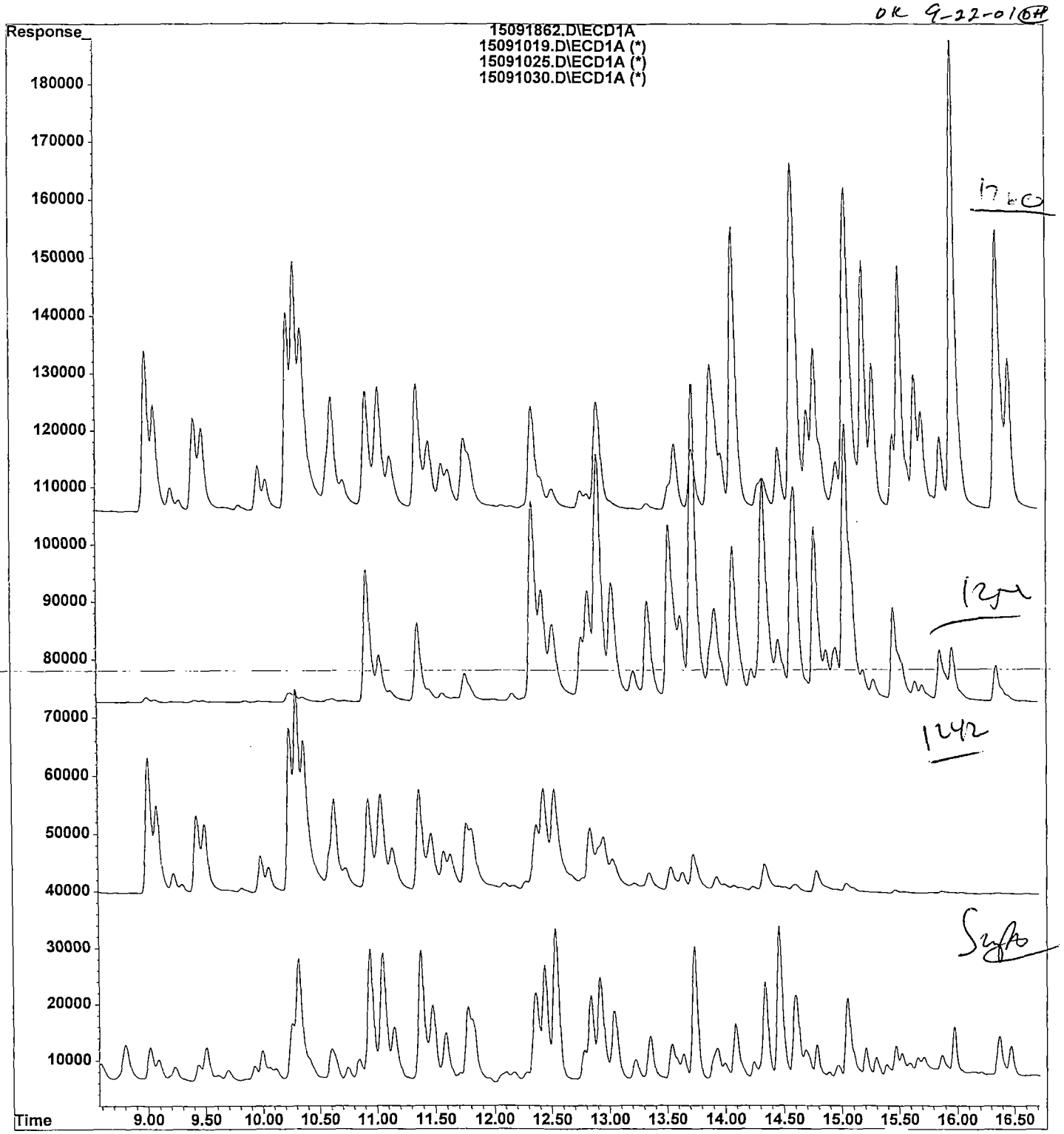
ok 9-22-01





File : F:\HPCHEM\HP\15\DATA\09_18_01\15091862.D
Operator : SA
Acquired : 19 Sep 2001 8:49 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 47393.16
Misc Info :
Vial Number: 56

OK 9-22-01 CH



Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091862.D\ECD1A.CH Vial: 56
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091862.D\ECD2B.CH
Acq On : 19 Sep 2001 8:49 Operator: SA
Sample : 47393.16 *E0468 * Inst : HP_15
Misc : *EPA*30.4G/5.0ML*51 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 11:07 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.34	7.10	359638	512046	10.6	10.9	
	Spiked Amount 13.426			Recovery	=	78.95%	81.18%	
22)	S DCB	18.02	18.40	446819	474320	12.2	9.261	
	Spiked Amount 13.426			Recovery	=	90.87%	68.98%	
	Target Compounds:							
7)	L4 Aroclor-1242	8.17	10.13	21707	372045	28.6	743.6	#
8)	L4 Aroclor-1242 {2}	9.44	10.92	74503	89062	181.1	94.3	#
9)	L4 Aroclor-1242 {3}	10.32f	12.03	1040388	1069360	749.0	1029.4	E#
10)	L4 Aroclor-1242 {4}	11.48	12.36	532653	600671	1154.6 E	962.8	
11)	L4 Aroclor-1242 {5}	11.78	12.74	780566	952386	1325.4 E	798.0	#
	Sum Aroclor-1242			2449818	3083524	3438.6	3628.1	
	Average Aroclor-1242					687.723	725.616	
12)	L6 Aroclor-1254	12.36	12.03	585390	1069360	418.4	1412.4	E#
13)	L6 Aroclor-1254 {2}	13.05	13.33	463223	521884	418.7	432.9	
14)	L6 Aroclor-1254 {3}	13.54	13.69	251695	341815	186.3	317.3	#
15)	L6 Aroclor-1254 {4}	14.09	14.72	349688	479090	268.8	313.1	
16)	L6 Aroclor-1254 {5}	14.79	15.19	153288	376670	139.7	189.2	#
	Sum Aroclor-1254			1803284	2788819	1431.9	2664.8	
	Average Aroclor-1254					286.380	532.967	
17)	L7 Aroclor-1260	14.09	14.22	349688	1045247	147.5	554.7	#
18)	L7 Aroclor-1260 {2}	14.60	14.51	555484	1701862	179.8	560.8	#
19)	L7 Aroclor-1260 {3}	15.05	14.72	511133	479090	171.2	128.8	
20)	L7 Aroclor-1260 {4}	15.53	15.90	105418	120141	54.9	56.6	
21)	L7 Aroclor-1260 {5}	15.97	16.13	216267	339093	60.3	64.2	
	Sum Aroclor-1260			1737990	3685432	411.9	916.4	
	Average Aroclor-1260					122.719	273.016	

(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.

E0468DL

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) SOIL Lab Sample ID: 47393.16DL

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

% Moisture: 51 decanted: (Y/N) __ Date Received: 08/24/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/28/01

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

Injection Volume: 0.5(uL) Dilution Factor: 5.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	330	U
11104-28-2	Aroclor-1221	330	U
11141-16-5	Aroclor-1232	330	U
53469-21-9	Aroclor-1242	1300	D
12672-29-6	Aroclor-1248	330	U
11097-69-1	Aroclor-1254	390	D
11096-82-5	Aroclor-1260	100	DJP
	Surrogate amount spiked	13.42	

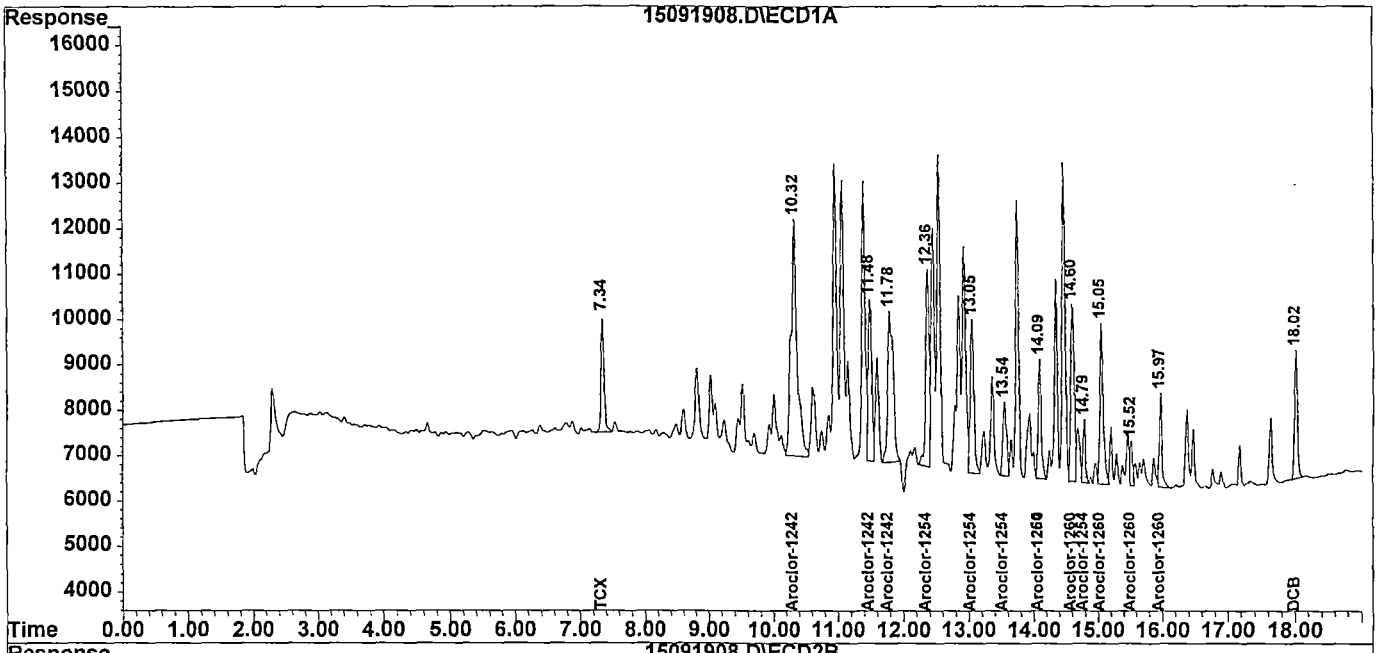
Chromatographic Report

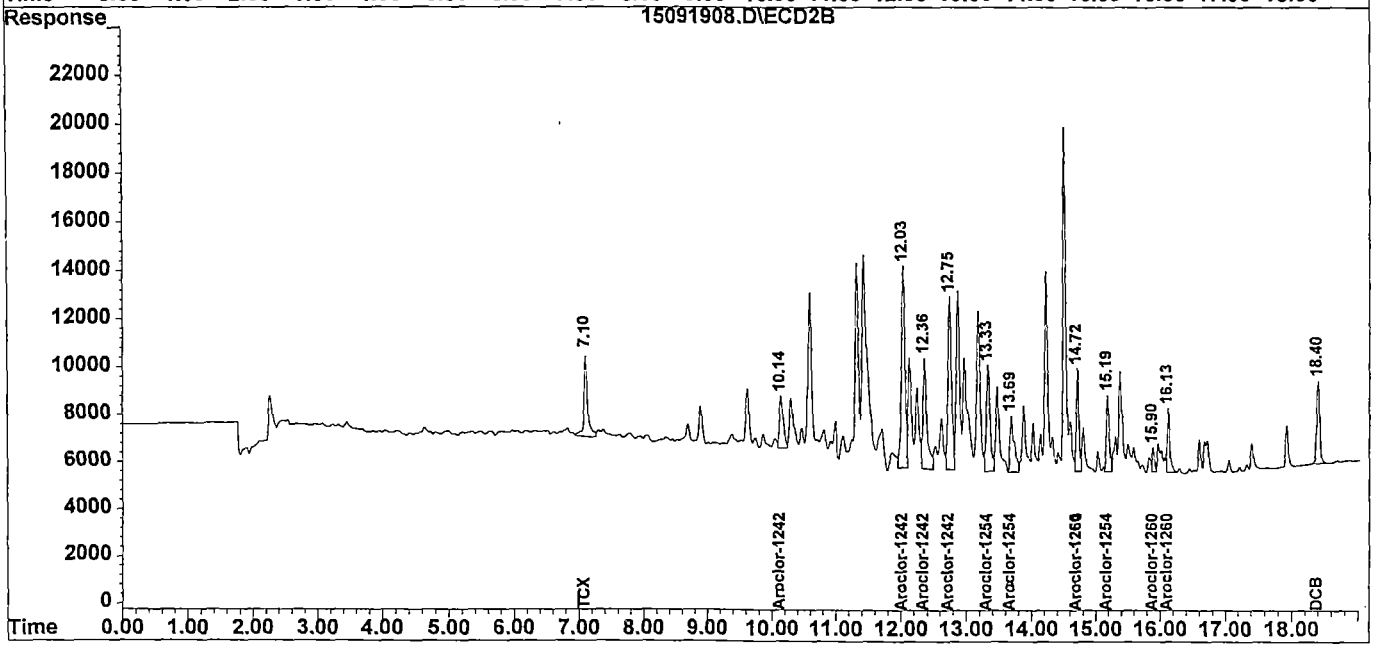
Signal #1 : F:\HPCHEM\HP\15\DATA\09_19_01\15091908.D\ECD1A.CH Vial: 8
Signal #2 : F:\HPCHEM\HP\15\DATA\09_19_01\15091908.D\ECD2B.CH
Acq On : 19 Sep 2001 16:18 Operator: DDC
Sample : 47393.16DL *E0468DL * Inst : HP_15
Misc : *EPA*30.4G/5.0ML*51 Dilution: 5.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 16:46 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_19_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

OK 9-22-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_19_01\15091908.D\ECD1A.CH Vial: 8
Signal #2 : F:\HPCHEM\HP\15\DATA\09_19_01\15091908.D\ECD2B.CH
Acq On : 19 Sep 2001 16:18 Operator: DDC
Sample : 47393.16DL *E0468DL * Inst : HP_15
Misc : *EPA*30.4G/5.0ML*51 Dilution: 5.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 16:46 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_19_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 2001
Response via : Initial Calibration

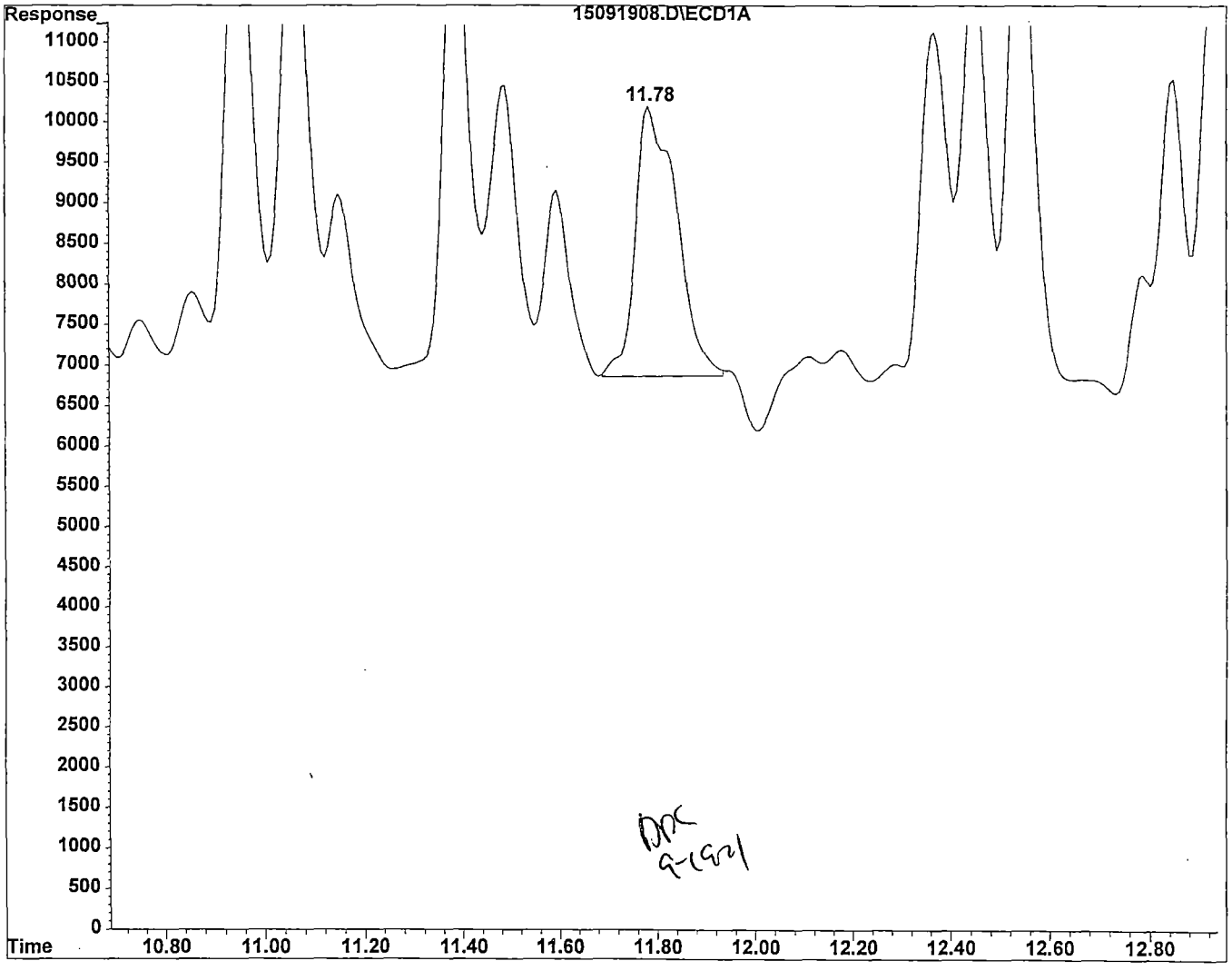
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.34	7.10	81138	139247	11.9	14.8	
	Spiked Amount 13.426			Recovery	=	88.63%	110.23%	
22)	S DCB	18.02	18.40	86899	112392	11.8m	11.0	
	Spiked Amount 13.426			Recovery	=	87.89%	81.93%	
	Target Compounds:							
7)	L4 Aroclor-1242	0.00	10.14	0	95377	N.D.	953.2	#
9)	L4 Aroclor-1242 {3}	10.32f	12.04	341577	322069	1229.6	1550.2	#
10)	L4 Aroclor-1242 {4}	11.49	12.36	141995	200486	1539.0	1606.7	
11)	L4 Aroclor-1242 {5}	11.78	12.75	196256	269219	1666.2m	1127.8	#
	Sum Aroclor-1242			679828	887150	4434.7	5238.0	
	Average Aroclor-1242					1478.240	1309.488	
12)	L6 Aroclor-1254	12.37	0.00	165561	0	591.6	N.D. d	#
13)	L6 Aroclor-1254 {2}	13.05	13.33	133885	173919	605.0	721.3	
14)	L6 Aroclor-1254 {3}	13.55	13.69	64820	107064	239.9	496.9	#
15)	L6 Aroclor-1254 {4}	14.09	14.72	86105	125272	331.0	409.4	
16)	L6 Aroclor-1254 {5}	14.79	15.19	37332	94936	170.1	238.4	#
	Sum Aroclor-1254			487704	501192	1937.7	1866.0	
	Average Aroclor-1254					387.536	466.488	
17)	L7 Aroclor-1260	14.09	0.00	86105	0	181.6	N.D. d	#
18)	L7 Aroclor-1260 {2}	14.60	0.00	145912	0	236.1	N.D. d	#
19)	L7 Aroclor-1260 {3}	15.05	14.72	130986	125272	219.3	168.4	
20)	L7 Aroclor-1260 {4}	15.53	15.90	28122	24787	73.2	58.4	
21)	L7 Aroclor-1260 {5}	15.97	16.13	58230	78777	81.2	74.6	
	Sum Aroclor-1260			449356	228836	2656.3	1011.4	
	Average Aroclor-1260					158.276	100.440	

(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\15\DATA\09_19_01\15091908.D
Date Acquired: 19 Sep 2001 16:18
Inst: HP_15 Operator ID: DDC
Name: 47393.16DL *E0468DL *
Misc: *EPA*30.4G/5.0ML*51
Method: F:\HPCHEM\HP\15\DATA\09_19_01\XPCBI10.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 16:46 2001 Quant Results File: XPCBI10.RES



ok 9-22-01

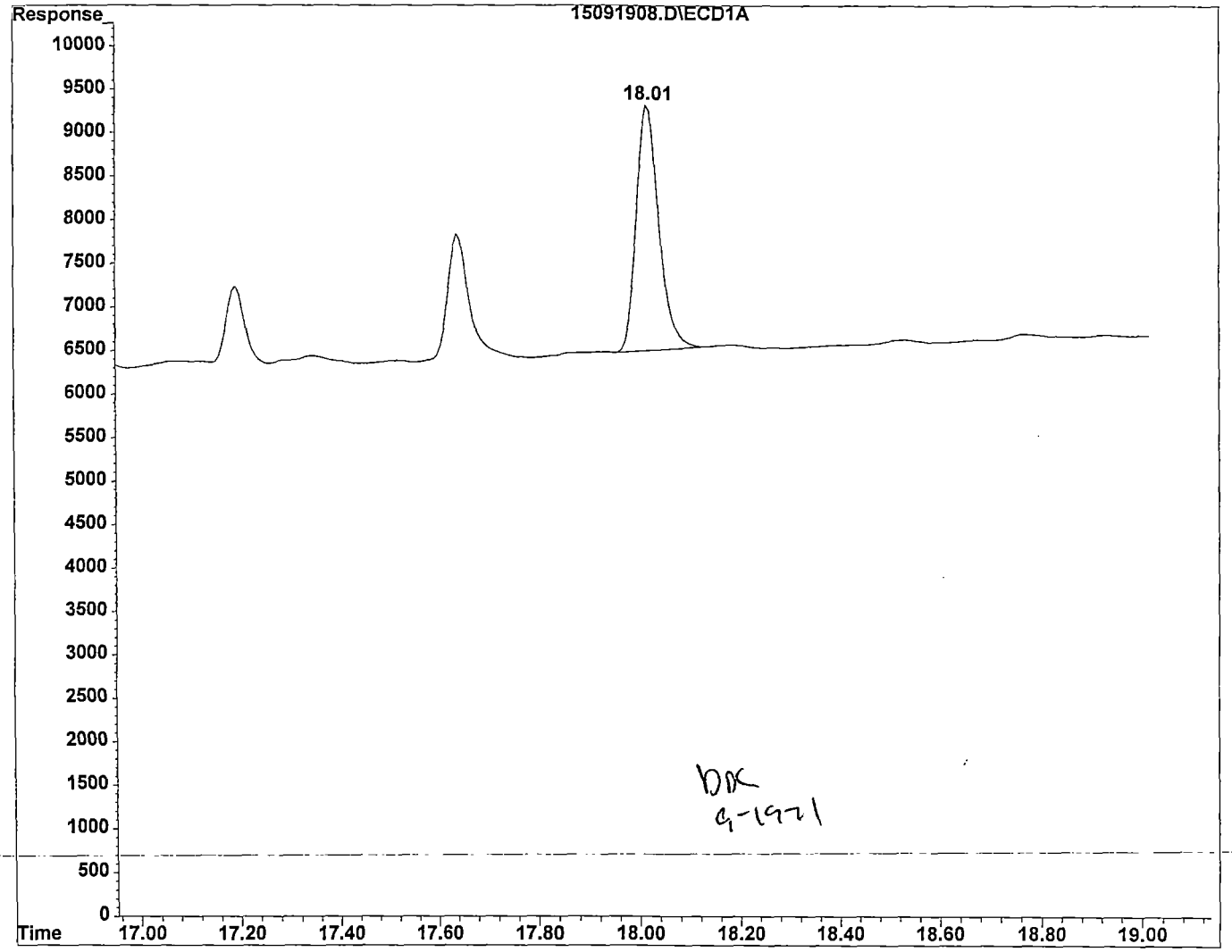
Aroclor-1242 {5} 11.78min area: 196256 m

Integration Time Range: 11.69 - 11.93

F:\HPCHEM\HP\15\DATA\09_19_01\15091908.D
Report generated: Wed Sep 19 16:51:51 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\15\DATA\09_19_01\15091908.D
Date Acquired: 19 Sep 2001 16:18
Inst: HP_15 Operator ID: DDC
Name: 47393.16DL *E0468DL *
Misc: *EPA*30.4G/5.0ML*51
Method: F:\HPCHEM\HP\15\DATA\09_19_01\XPCBI10.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 16:46 2001 Quant Results File: XPCBI10.RES



DK 9-22-01 OA

DCB 18.02min area: 86899 m

Integration Time Range: 17.95 - 18.13

F:\HPCHEM\HP\15\DATA\09_19_01\15091908.D
Report generated: Wed Sep 19 16:51:51 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E0469

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) SOIL Lab Sample ID: 47393.17

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

% Moisture: 46 decanted: (Y/N) __ Date Received: 08/24/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/28/01

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

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	60	U
11104-28-2	Aroclor-1221	60	U
11141-16-5	Aroclor-1232	60	U
53469-21-9	Aroclor-1242	110	
12672-29-6	Aroclor-1248	60	U
11097-69-1	Aroclor-1254	48	J
11096-82-5	Aroclor-1260	32	J
	Surrogate amount spiked	12.19	

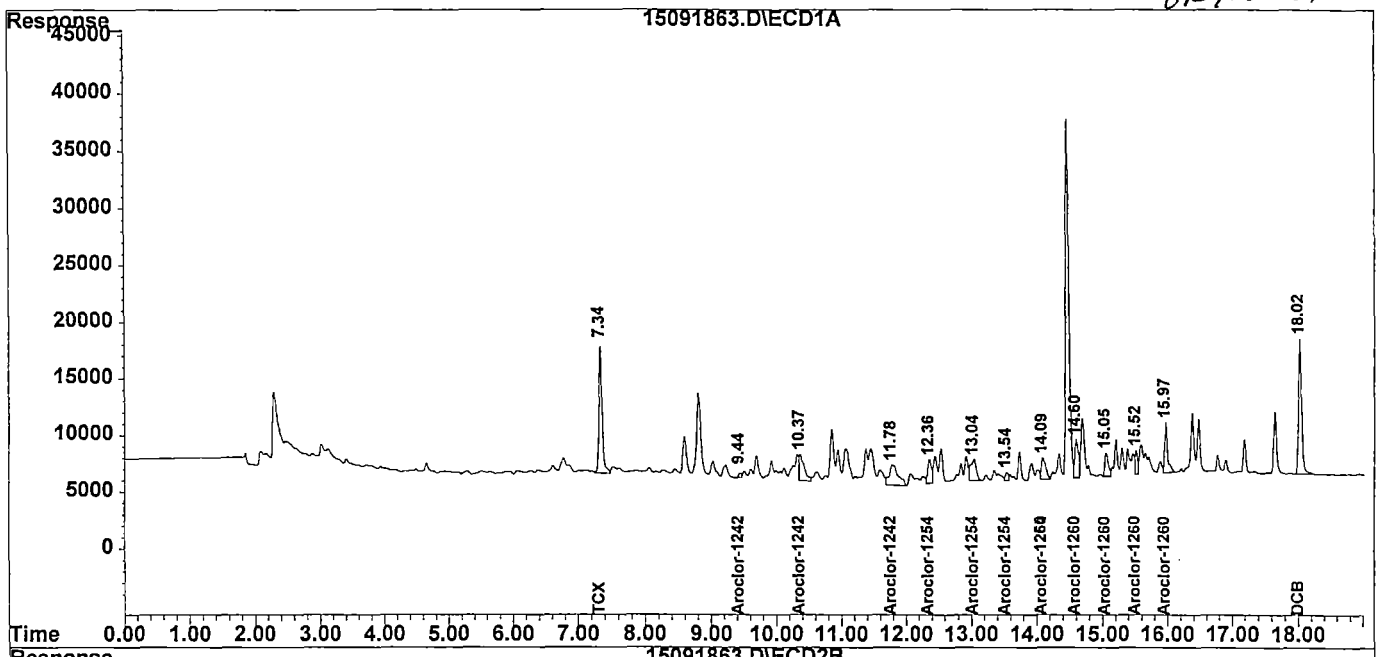
Chromatographic Report

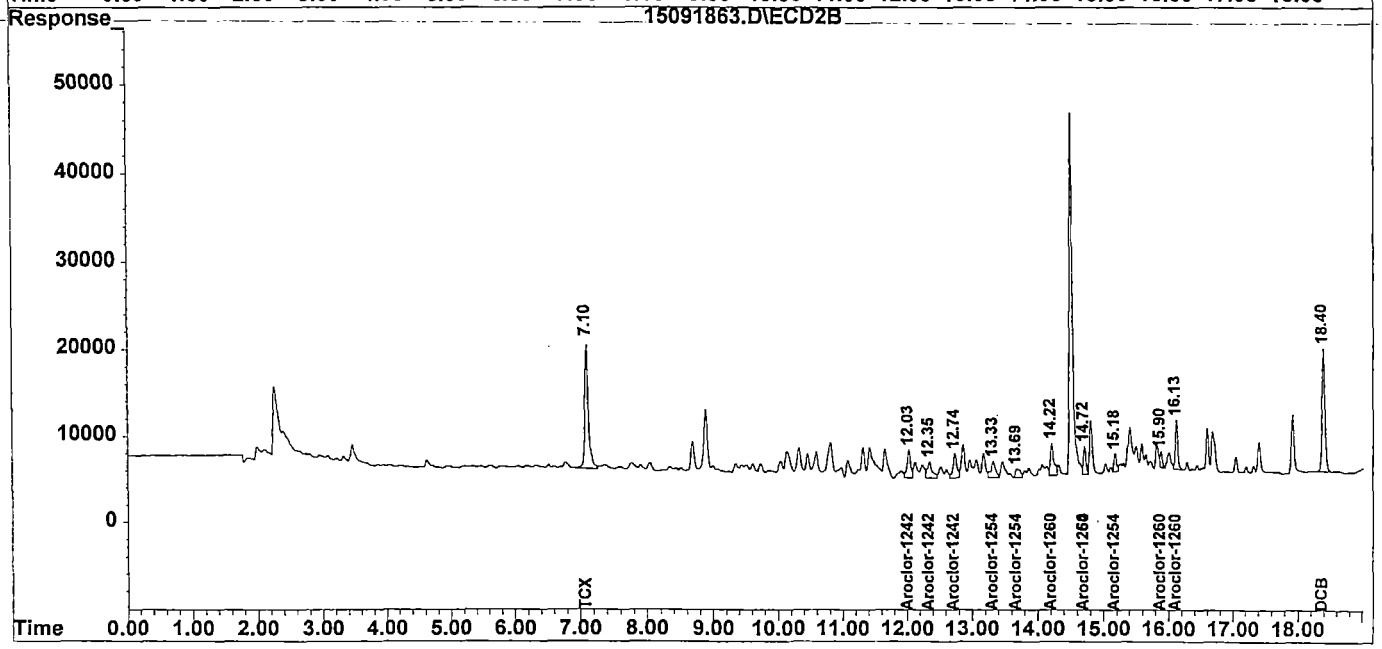
Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091863.D\ECD1A.CH Vial: 57
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091863.D\ECD2B.CH
Acq On : 19 Sep 2001 9:12 Operator: SA
Sample : 47393.17 *E0469 * Inst : HP_15
Misc : *EPA*30.4G/5.0ML*46 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 11:02 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

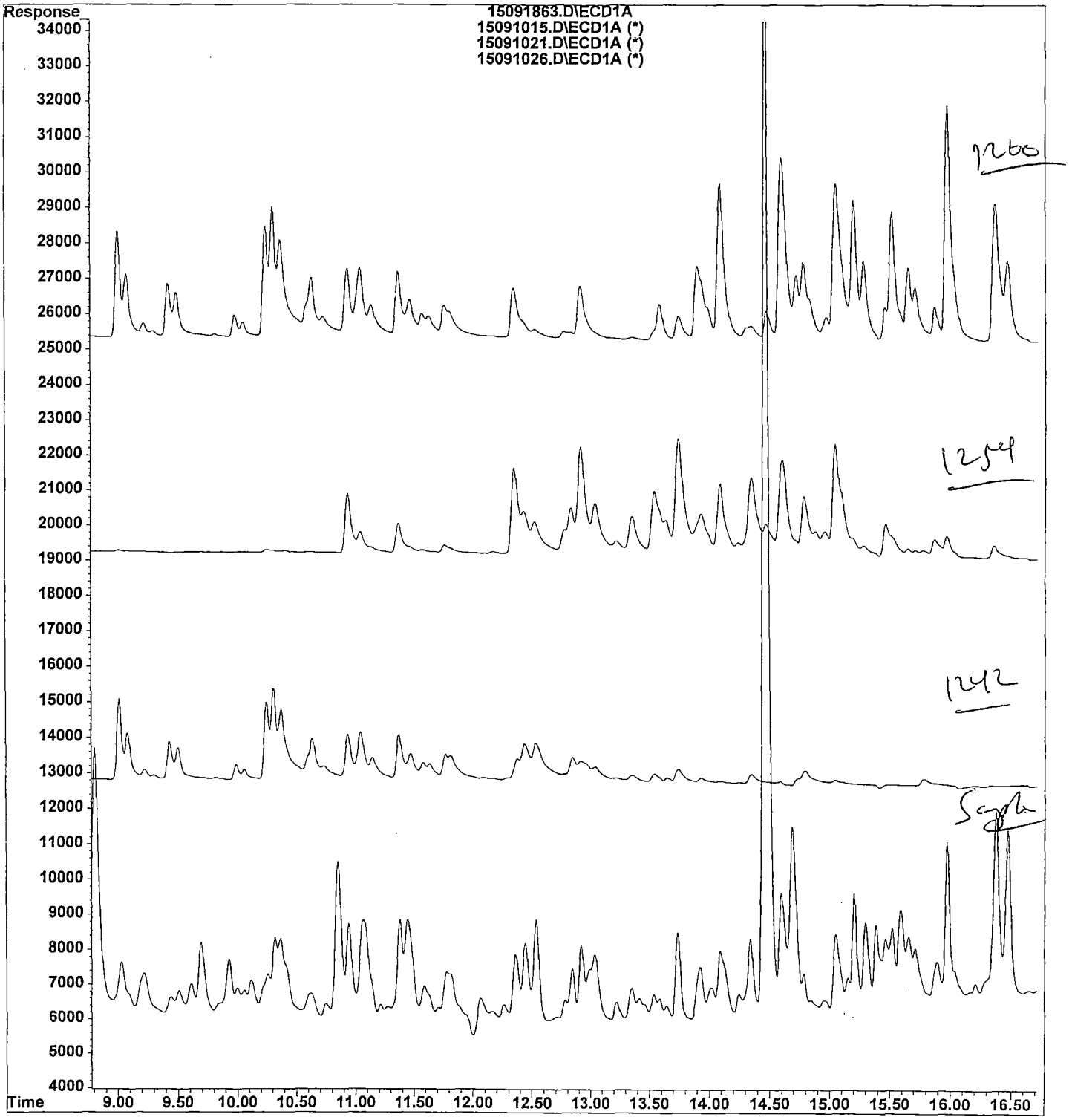
OK 9-22-01





File : F:\HPCHEM\HP\15\DATA\09_18_01\15091863.D
Operator : SA
Acquired : 19 Sep 2001 9:12 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 47393.17
Misc Info :
Vial Number: 57

OK 9-22-01



Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091863.D\ECD1A.CH Vial: 57
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091863.D\ECD2B.CH
Acq On : 19 Sep 2001 9:12 Operator: SA
Sample : 47393.17 *E0469 * Inst : HP_15
Misc : *EPA*30.4G/5.0ML*46 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 11:02 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.34	7.10	381755	542222	10.2	10.5	
	Spiked Amount 12.183			Recovery	=	83.72%	86.18%	
22)	S DCB	18.02	18.40	405878	463525	10.0	8.212	
	Spiked Amount 12.183			Recovery	=	✓82.08%	✓67.40%	
	Target Compounds:							
8)	L4 Aroclor-1242 {2}	9.44	0.00	11036	0	24.3	N.D.	#
9)	L4 Aroclor-1242 {3}	10.37	12.03	131015	124806	85.6	109.0	#
10)	L4 Aroclor-1242 {4}	0.00	12.36	0	99951	N.D. d	145.4	#
11)	L4 Aroclor-1242 {5}	11.78	12.75	176168	107280	271.4	81.6	#
	Sum Aroclor-1242			318220	332036	381.4	336.0	
	Average Aroclor-1242					127.118	111.985	
12)	L6 Aroclor-1254	12.36	0.00	81857	0	53.1	N.D. d	#
13)	L6 Aroclor-1254 {2}	13.04	13.33	116623	90807	95.6	68.3	#
14)	L6 Aroclor-1254 {3}	13.54	13.69	21703	48431	14.6	40.8	#
15)	L6 Aroclor-1254 {4}	14.09	14.72	93778	92460	65.4	54.8	
16)	L6 Aroclor-1254 {5}	0.00	15.18	0	59194	N.D.	27.0	#
	Sum Aroclor-1254			313961	290892	228.7	190.9	
	Average Aroclor-1254					57.180	47.737	
17)	L7 Aroclor-1260	14.09	14.22	93778	141479	35.9	68.1	#
18)	L7 Aroclor-1260 {2}	14.60	0.00	127946	0	37.6	N.D. d	#
19)	L7 Aroclor-1260 {3}	15.06	14.72	79193	92460	24.1	22.6	
20)	L7 Aroclor-1260 {4}	15.52	15.90	59376	40802	28.0	17.4	#
21)	L7 Aroclor-1260 {5}	15.97	16.13	137723	145162	34.9	24.9	#
	Sum Aroclor-1260			498016	419903	97.7	81.1	
	Average Aroclor-1260					32.083	33.266	

(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: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Instrument ID: HP_15A Date(s) Analyzed: 09/10/01 09/10/01

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	8.16	601890	MEAN
		2	9.43	286340	
		3	10.37	1053950	
		4	11.47	345610	
		5	11.81	452440	
Aroclor 1242 L2	0.20	1	8.16	563145	MEAN
		2	9.43	296550	
		3	10.37	1032775	
		4	11.48	337925	
		5	11.81	436850	
Aroclor 1242 L3	0.40	1	8.16	499925	MEAN
		2	9.43	288288	
		3	10.37	932023	
		4	11.48	310013	
		5	11.81	397940	
Aroclor 1242 L4	0.80	1	8.16	456738	MEAN
		2	9.43	265396	
		3	10.37	856286	
		4	11.47	288946	
		5	11.81	360479	
Aroclor 1242 L5	1.60	1	8.16	429081	MEAN
		2	9.44	244609	
		3	10.37	787373	
		4	11.48	265990	
		5	11.81	329146	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1242 MEAN	1	8.16	8.11	8.21	510156	14.1
	2	9.43	9.38	9.48	276237	7.6
	3	10.37	10.32	10.42	932481	12.2
	4	11.48	11.43	11.53	309697	10.7
	5	11.81	11.76	11.86	395371	13.0

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Instrument ID: HP_15B Date(s) Analyzed: 09/10/01 09/10/01

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	10.13	340570	MEAN
		2	10.91	659110	
		3	12.03	769970	
		4	12.36	444870	
		5	12.75	861970	
Aroclor 1242 L2	0.20	1	10.13	352750	MEAN
		2	10.91	682270	
		3	12.03	744940	
		4	12.36	440620	
		5	12.74	853325	
Aroclor 1242 L3	0.40	1	10.13	344225	MEAN
		2	10.91	638920	
		3	12.03	689583	
		4	12.36	412780	
		5	12.74	787650	
Aroclor 1242 L4	0.80	1	10.13	328426	MEAN
		2	10.91	610869	
		3	12.03	656301	
		4	12.35	400300	
		5	12.74	764580	
Aroclor 1242 L5	1.60	1	10.13	313390	MEAN
		2	10.91	579546	
		3	12.03	625944	
		4	12.35	395623	
		5	12.74	738675	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1242 MEAN	1	10.13	10.08	10.18	335872	4.6
	2	10.91	10.86	10.96	634143	6.3
	3	12.03	11.98	12.08	697348	8.6
	4	12.36	12.31	12.41	418839	5.4
	5	12.74	12.69	12.79	801240	6.8

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Instrument ID: HP_15A Date(s) Analyzed: 09/10/01 09/10/01

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	12.36	981980	MEAN
		2	13.04	866920	
		3	13.54	943340	
		4	14.09	978880	
		5	14.79	767120	
Aroclor 1254 L2	0.20	1	12.35	880400	MEAN
		2	13.04	748295	
		3	13.54	835040	
		4	14.09	848530	
		5	14.79	663575	
Aroclor 1254 L3	0.40	1	12.35	1033068	MEAN
		2	13.04	797595	
		3	13.54	975778	
		4	14.08	942393	
		5	14.78	783983	
Aroclor 1254 L4	0.80	1	12.35	961154	MEAN
		2	13.04	705360	
		3	13.53	932723	
		4	14.08	853021	
		5	14.78	755575	
Aroclor 1254 L5	1.60	1	12.35	840064	MEAN
		2	13.04	595768	
		3	13.53	846998	
		4	14.08	743633	
		5	14.78	712129	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1254 MEAN	1	12.35	12.30	12.40	939333	8.3
	2	13.04	12.99	13.09	742788	13.7
	3	13.54	13.49	13.59	906776	6.9
	4	14.08	14.03	14.13	873291	10.5
	5	14.78	14.73	14.83	736476	6.6

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Instrument ID: HP_15B Date(s) Analyzed: 09/10/01 09/10/01

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	12.03	604310	MEAN
		2	13.33	910950	
		3	13.68	795860	
		4	14.72	1151340	
		5	15.19	1414120	
Aroclor 1254 L2	0.20	1	12.03	511015	MEAN
		2	13.32	774700	
		3	13.68	674645	
		4	14.71	980145	
		5	15.19	1198005	
Aroclor 1254 L3	0.40	1	12.03	511885	MEAN
		2	13.32	862075	
		3	13.68	768833	
		4	14.71	1086525	
		5	15.18	1401128	
Aroclor 1254 L4	0.80	1	12.03	484211	MEAN
		2	13.32	800086	
		3	13.68	734575	
		4	14.71	1021810	
		5	15.18	1387411	
Aroclor 1254 L5	1.60	1	12.02	429967	MEAN
		2	13.32	698891	
		3	13.68	642447	
		4	14.71	895995	
		5	15.18	1282378	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1254 MEAN	1	12.03	11.98	12.08	508278	12.4
	2	13.32	13.27	13.37	809340	10.1
	3	13.68	13.63	13.73	723272	8.8
	4	14.71	14.66	14.76	1027163	9.5
	5	15.18	15.13	15.23	1336608	7.0

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Instrument ID: HP_15A Date(s) Analyzed: 09/10/01 09/10/01

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	8.16	729730	MEAN
		2	9.01	867530	
		3	10.25	857620	
		4	10.93	710860	
		5	11.63	272950	
Aroclor 1016 L2	0.20	1	8.16	676755	MEAN
		2	9.01	781985	
		3	10.25	775960	
		4	10.93	666770	
		5	11.64	254230	
Aroclor 1016 L3	0.40	1	8.16	621423	MEAN
		2	9.01	717388	
		3	10.25	747893	
		4	10.93	637078	
		5	11.63	251185	
Aroclor 1016 L4	0.80	1	8.16	555729	MEAN
		2	9.01	651074	
		3	10.25	719878	
		4	10.93	579720	
		5	11.63	213498	
Aroclor 1016 L5	1.60	1	8.16	488578	MEAN
		2	9.01	546019	
		3	10.25	615673	
		4	10.93	496811	
		5	11.63	177977	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1016 MEAN	1	8.16	8.11	8.21	614443	15.5
	2	9.01	8.96	9.06	712799	17.2
	3	10.25	10.20	10.30	743405	11.8
	4	10.93	10.88	10.98	618248	13.4
	5	11.63	11.58	11.68	233968	16.2

FORM VI PCB-3

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Instrument ID: HP_15A Date(s) Analyzed: 09/10/01 09/10/01

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	14.09	1908450	MEAN
		2	14.60	2375020	
		3	15.06	2273020	
		4	15.52	1408380	
		5	15.97	2639200	
Aroclor 1260 L2	0.20	1	14.09	1753195	MEAN
		2	14.60	2232420	
		3	15.05	2157070	
		4	15.52	1326110	
		5	15.97	2502280	
Aroclor 1260 L3	0.40	1	14.09	1675678	MEAN
		2	14.60	2176225	
		3	15.05	1953895	
		4	15.52	1562638	
		5	15.97	2623278	
Aroclor 1260 L4	0.80	1	14.08	1454009	MEAN
		2	14.59	1972355	
		3	15.05	1994074	
		4	15.52	1187549	
		5	15.97	2346480	
Aroclor 1260 L5	1.60	1	14.08	1168436	MEAN
		2	14.59	1614928	
		3	15.05	1644972	
		4	15.52	965847	
		5	15.96	1923607	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1260 MEAN	1	14.08	14.03	14.13	1591954	18.1
	2	14.60	14.55	14.65	2074190	14.2
	3	15.05	15.00	15.10	2004606	11.9
	4	15.52	15.47	15.57	1290105	17.6
	5	15.97	15.92	16.02	2406969	12.2

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Instrument ID: HP_15B Date(s) Analyzed: 09/10/01 09/10/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-XLB ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1016 L1	0.10	1	8.63	812970	MEAN
		2	9.61	1966990	
		3	10.58	2960230	
		4	10.91	981710	
		5	12.02	1094950	
Aroclor 1016 L2	0.20	1	8.63	734590	MEAN
		2	9.61	1755405	
		3	10.59	2772095	
		4	10.91	912055	
		5	12.02	1005410	
Aroclor 1016 L3	0.40	1	8.63	725043	MEAN
		2	9.61	1647388	
		3	10.58	2970730	
		4	10.90	963703	
		5	12.02	1178568	
Aroclor 1016 L4	0.80	1	8.63	676405	MEAN
		2	9.61	1481334	
		3	10.58	2736414	
		4	10.90	889149	
		5	12.02	957941	
Aroclor 1016 L5	1.60	1	8.63	566677	MEAN
		2	9.61	1220486	
		3	10.58	2363411	
		4	10.90	760932	
		5	12.02	815973	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1016 MEAN	1	8.63	8.58	8.68	703137	12.9
	2	9.61	9.56	9.66	1614320	17.5
	3	10.58	10.53	10.63	2760576	8.9
	4	10.90	10.85	10.95	901510	9.7
	5	12.02	11.97	12.07	1010568	13.6

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Instrument ID: HP_15B Date(s) Analyzed: 09/10/01 09/10/01

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	14.21	1346740	MEAN
		2	14.50	2319190	
		3	14.71	2912550	
		4	15.90	1594150	
		5	16.12	3916370	
Aroclor 1260 L2	0.20	1	14.21	1268070	MEAN
		2	14.50	2135760	
		3	14.71	2678270	
		4	15.90	1527135	
		5	16.12	3747495	
Aroclor 1260 L3	0.40	1	14.21	1549540	MEAN
		2	14.50	2337633	
		3	14.71	2772548	
		4	15.89	1457185	
		5	16.12	3625813	
Aroclor 1260 L4	0.80	1	14.21	1177588	MEAN
		2	14.50	1875590	
		3	14.71	2287748	
		4	15.89	1402828	
		5	16.12	3535643	
Aroclor 1260 L5	1.60	1	14.21	982895	MEAN
		2	14.50	1518291	
		3	14.71	1837279	
		4	15.89	1144664	
		5	16.12	2900001	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1260 MEAN	1	14.21	14.16	14.26	1264967	16.5
	2	14.50	14.45	14.55	2037293	16.9
	3	14.71	14.66	14.76	2497679	17.5
	4	15.89	15.84	15.94	1425192	12.1
	5	16.12	16.07	16.17	3545064	10.9

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Instrument ID: HP_15A Date(s) Analyzed: 09/10/01 09/10/01

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	7.78	324555	SINGLE
		2	7.96	232573	POINT
		3	8.16	860738	
		4			
		5			
Aroclor 1232	0.40	1	8.16	736493	SINGLE
		2	9.02	337788	POINT
		3	9.44	211940	
		4	10.31	443523	
		5			
Aroclor 1248	0.40	1	9.01	337825	SINGLE
		2	10.25	491133	POINT
		3	11.04	865598	
		4	11.63	267808	
		5	12.53	1398443	

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Instrument ID: HP_15B Date(s) Analyzed: 09/10/01 09/10/01

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	8.11	426260	SINGLE
		2	8.45	299163	POINT
		3	8.63	846453	
		4			
		5			
Aroclor 1232	0.40	1	8.63	742888	SINGLE
		2	10.28	358878	POINT
		3	10.91	394470	
		4	12.24	182653	
		5			
Aroclor 1248	0.40	1	9.61	680318	SINGLE
		2	11.31	1115798	POINT
		3	12.24	499005	
		4	12.96	992385	
		5	13.32	501213	

FORM VI PCB-3

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 09/10/01 09/10/01

Client Sample No.(PIBLK): PIBLKBV Date Analyzed : 09/18/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 1857

Client Sample No.: AR1660L3B4 Date Analyzed : 09/18/01

Lab Sample ID : 5-210-7 Time Analyzed : 1920

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.17	8.11	8.21	623833	614443	1.5
Aroclor 1016 #2	9.03	8.96	9.06	644493	712799	9.6
Aroclor 1016 #3	10.27	10.20	10.30	524578	743405	29.4*
Aroclor 1016 #4	10.96	10.88	10.98	653233	618248	5.7
Aroclor 1016 #5	11.65	11.58	11.68	211398	233968	9.7
Aroclor 1260 #1	14.10	14.03	14.13	1521173	1591954	4.5
Aroclor 1260 #2	14.61	14.55	14.65	2060013	2074190	0.7
Aroclor 1260 #3	15.06	15.00	15.10	1991963	2004606	0.6
Aroclor 1260 #4	15.53	15.47	15.57	1129045	1290105	12.5
Aroclor 1260 #5	15.98	15.92	16.02	2071780	2406969	13.9

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: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 09/10/01 09/10/01

Client Sample No.(PIBLK): PIBLKBV Date Analyzed : 09/18/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 1857

Client Sample No.: AR1660L3B4 Date Analyzed : 09/18/01

Lab Sample ID : 5-210-7 Time Analyzed : 1920

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.64	8.58	8.68	711185	703137	1.1
Aroclor 1016 #2	9.62	9.56	9.66	1653098	1614320	2.4
Aroclor 1016 #3	10.60	10.53	10.63	3003320	2760576	8.8
Aroclor 1016 #4	10.92	10.85	10.95	938370	901510	4.1
Aroclor 1016 #5	12.04	11.97	12.07	1037668	1010568	2.7
Aroclor 1260 #1	14.22	14.16	14.26	1214830	1264967	4.0
Aroclor 1260 #2	14.51	14.45	14.55	1958463	2037293	3.9
Aroclor 1260 #3	14.72	14.66	14.76	2319985	2497679	7.1
Aroclor 1260 #4	15.90	15.84	15.94	1328315	1425192	6.8
Aroclor 1260 #5	16.13	16.07	16.17	3106205	3545064	12.4

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 09/10/01 09/10/01

Client Sample No.(PIBLK): PIBLKBW Date Analyzed : 09/18/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 2334

Client Sample No.: AR1660L3B6 Date Analyzed : 09/18/01

Lab Sample ID : 5-210-7 Time Analyzed : 2357

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.17	8.11	8.21	625373	614443	1.8
Aroclor 1016 #2	9.02	8.96	9.06	642165	712799	9.9
Aroclor 1016 #3	10.27	10.20	10.30	510388	743405	31.3*
Aroclor 1016 #4	10.95	10.88	10.98	656278	618248	6.2
Aroclor 1016 #5	11.64	11.58	11.68	222645	233968	4.8
Aroclor 1260 #1	14.10	14.03	14.13	1537860	1591954	3.4
Aroclor 1260 #2	14.60	14.55	14.65	2098188	2074190	1.2
Aroclor 1260 #3	15.06	15.00	15.10	2026675	2004606	1.1
Aroclor 1260 #4	15.53	15.47	15.57	1165480	1290105	9.7
Aroclor 1260 #5	15.98	15.92	16.02	2160635	2406969	10.2

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 09/10/01 09/10/01

Client Sample No.(PIBLK): PIBLKBW Date Analyzed : 09/18/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 2334

Client Sample No.: AR1660L3B6 Date Analyzed : 09/18/01

Lab Sample ID : 5-210-7 Time Analyzed : 2357

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.64	8.58	8.68	709833	703137	1.0
Aroclor 1016 #2	9.62	9.56	9.66	1814140	1614320	12.4
Aroclor 1016 #3	10.60	10.53	10.63	2893390	2760576	4.8
Aroclor 1016 #4	10.92	10.85	10.95	932100	901510	3.4
Aroclor 1016 #5	12.04	11.97	12.07	1021130	1010568	1.1
Aroclor 1260 #1	14.22	14.16	14.26	1211660	1264967	4.2
Aroclor 1260 #2	14.51	14.45	14.55	1970128	2037293	3.3
Aroclor 1260 #3	14.72	14.66	14.76	2353575	2497679	5.8
Aroclor 1260 #4	15.90	15.84	15.94	1433645	1425192	0.6
Aroclor 1260 #5	16.13	16.07	16.17	3312998	3545064	6.6

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 09/10/01 09/10/01

Client Sample No.(PIBLK): PIBLKBX Date Analyzed : 09/19/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 0521

Client Sample No.: AR1660L3B8 Date Analyzed : 09/19/01

Lab Sample ID : 5-210-7 Time Analyzed : 0544

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.17	8.11	8.21	638990	614443	4.0
Aroclor 1016 #2	9.02	8.96	9.06	666245	712799	6.5
Aroclor 1016 #3	10.26	10.20	10.30	549293	743405	26.1*
Aroclor 1016 #4	10.95	10.88	10.98	662678	618248	7.2
Aroclor 1016 #5	11.64	11.58	11.68	218735	233968	6.5
Aroclor 1260 #1	14.09	14.03	14.13	1578918	1591954	0.8
Aroclor 1260 #2	14.60	14.55	14.65	2142475	2074190	3.3
Aroclor 1260 #3	15.06	15.00	15.10	2058743	2004606	2.7
Aroclor 1260 #4	15.53	15.47	15.57	1163005	1290105	9.9
Aroclor 1260 #5	15.98	15.92	16.02	2189278	2406969	9.0

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 09/10/01 09/10/01

Client Sample No.(PIBLK): PIBLKBX Date Analyzed : 09/19/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 0521

Client Sample No.: AR1660L3B8 Date Analyzed : 09/19/01

Lab Sample ID : 5-210-7 Time Analyzed : 0544

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.64	8.58	8.68	741920	703137	5.5
Aroclor 1016 #2	9.62	9.56	9.66	1899118	1614320	17.6*
Aroclor 1016 #3	10.59	10.53	10.63	3041845	2760576	10.2
Aroclor 1016 #4	10.91	10.85	10.95	957330	901510	6.2
Aroclor 1016 #5	12.04	11.97	12.07	1078570	1010568	6.7
Aroclor 1260 #1	14.22	14.16	14.26	1265113	1264967	0.0
Aroclor 1260 #2	14.51	14.45	14.55	2042725	2037293	0.3
Aroclor 1260 #3	14.72	14.66	14.76	2422300	2497679	3.0
Aroclor 1260 #4	15.90	15.84	15.94	1398938	1425192	1.8
Aroclor 1260 #5	16.13	16.07	16.17	3270198	3545064	7.8

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: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 09/10/01 09/10/01

Client Sample No.(PIBLK): PIBLKBY Date Analyzed : 09/19/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 1045

Client Sample No.: AR1660L3BA Date Analyzed : 09/19/01

Lab Sample ID : 5-210-7 Time Analyzed : 1108

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.17	8.11	8.21	651925	614443	6.1
Aroclor 1016 #2	9.02	8.96	9.06	688955	712799	3.4
Aroclor 1016 #3	10.27	10.20	10.30	550663	743405	25.9*
Aroclor 1016 #4	10.95	10.88	10.98	677813	618248	9.6
Aroclor 1016 #5	11.64	11.58	11.68	213073	233968	8.9
Aroclor 1260 #1	14.10	14.03	14.13	1559895	1591954	2.0
Aroclor 1260 #2	14.60	14.55	14.65	2088285	2074190	0.7
Aroclor 1260 #3	15.06	15.00	15.10	1974710	2004606	1.5
Aroclor 1260 #4	15.53	15.47	15.57	1102100	1290105	14.6
Aroclor 1260 #5	15.98	15.92	16.02	2042370	2406969	15.1*

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: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 09/10/01 09/10/01

Client Sample No.(PIBLK): PIBLKBY Date Analyzed : 09/19/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 1045

Client Sample No.: AR1660L3BA Date Analyzed : 09/19/01

Lab Sample ID : 5-210-7 Time Analyzed : 1108

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.64	8.58	8.68	773783	703137	10.0
Aroclor 1016 #2	9.62	9.56	9.66	1746465	1614320	8.2
Aroclor 1016 #3	10.60	10.53	10.63	3104803	2760576	12.5
Aroclor 1016 #4	10.92	10.85	10.95	973470	901510	8.0
Aroclor 1016 #5	12.04	11.97	12.07	1022190	1010568	1.2
Aroclor 1260 #1	14.22	14.16	14.26	1217165	1264967	3.8
Aroclor 1260 #2	14.51	14.45	14.55	1946888	2037293	4.4
Aroclor 1260 #3	14.72	14.66	14.76	2292775	2497679	8.2
Aroclor 1260 #4	15.90	15.84	15.94	1161555	1425192	18.5*
Aroclor 1260 #5	16.13	16.07	16.17	2918023	3545064	17.7*

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: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 09/10/01 09/10/01

Client Sample No.(PIBLK): PIBLKBP Date Analyzed : 09/19/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 1750

Client Sample No.: AR1660L3BR Date Analyzed : 09/19/01

Lab Sample ID : 5-210-7 Time Analyzed : 1814

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.17	8.11	8.21	724168	614443	17.9*
Aroclor 1016 #2	9.03	8.96	9.06	778360	712799	9.2
Aroclor 1016 #3	10.29	10.20	10.30	808290	743405	8.7
Aroclor 1016 #4	10.96	10.88	10.98	766400	618248	24.0*
Aroclor 1016 #5	11.65	11.58	11.68	248263	233968	6.1
Aroclor 1260 #1	14.10	14.03	14.13	1730880	1591954	8.7
Aroclor 1260 #2	14.61	14.55	14.65	2370908	2074190	14.3
Aroclor 1260 #3	15.06	15.00	15.10	2283348	2004606	13.9
Aroclor 1260 #4	15.53	15.47	15.57	1295185	1290105	0.4
Aroclor 1260 #5	15.98	15.92	16.02	2415100	2406969	0.3

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 09/10/01 09/10/01

Client Sample No.(PIBLK): PIBLKBP Date Analyzed : 09/19/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 1750

Client Sample No.: AR1660L3BR Date Analyzed : 09/19/01

Lab Sample ID : 5-210-7 Time Analyzed : 1814

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.64	8.58	8.68	785320	703137	11.7
Aroclor 1016 #2	9.62	9.56	9.66	1965910	1614320	21.8*
Aroclor 1016 #3	10.60	10.53	10.63	3149970	2760576	14.1
Aroclor 1016 #4	10.92	10.85	10.95	914460	901510	1.4
Aroclor 1016 #5	12.04	11.97	12.07	1068370	1010568	5.7
Aroclor 1260 #1	14.22	14.16	14.26	1299913	1264967	2.8
Aroclor 1260 #2	14.52	14.45	14.55	2121758	2037293	4.2
Aroclor 1260 #3	14.72	14.66	14.76	2511625	2497679	0.6
Aroclor 1260 #4	15.90	15.84	15.94	1430523	1425192	0.4
Aroclor 1260 #5	16.13	16.07	16.17	3447783	3545064	2.7

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: 68W00066

Lab Code: SWOK Case No.: 29658 SAS No.: SDG No.: E0455

GC Column: DB-17MS ID: 0.32(mm) Init. Calib. Date(s): 09/10/01

Instrument ID: HP_15A

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	RESCBH	5-171-7	09/10/01	1819	7.34	18.01
02	AR1221L3BH	5-420-6	09/10/01	1842	7.33	18.01
03	AR1232L3BH	5-422-6	09/10/01	1905	7.33	18.01
04	AR1242L1BH	5-11-7	09/10/01	1928	7.33	18.01
05	AR1242L2BH	5-10-7	09/10/01	1951	7.33	18.01
06	AR1242L3BH	5-9-7	09/10/01	2014	7.33	18.01
07	AR1242L4BH	5-8-7	09/10/01	2037	7.33	18.01
08	AR1242L5BH	5-7-7	09/10/01	2100	7.33	18.01
09	AR1248L3BH	5-424-6	09/10/01	2123	7.33	18.01
10	AR1254L1BH	5-6-7	09/10/01	2146	7.33	18.01
11	AR1254L2BH	5-5-7	09/10/01	2209	7.33	18.01
12	AR1254L3BH	5-4-7	09/10/01	2232	7.33	18.01
13	AR1254L4BH	5-3-7	09/10/01	2256	7.33	18.01
14	AR1254L5BH	5-2-7	09/10/01	2319	7.33	18.01
15	AR1660L1BH	5-212-7	09/10/01	2342	7.33	18.01
16	AR1660L2BH	5-211-7	09/11/01	0005	7.33	18.01
17	AR1660L3BQ	5-210-7	09/11/01	0028	7.33	18.01
18	AR1660L4BH	5-209-7	09/11/01	0051	7.33	18.01
19	AR1660L5BH	5-208-7	09/11/01	0114	7.33	18.00
20	PIBLKBO	5-131-7	09/11/01	0137	7.33	18.01
21	PIBLKBV	5-131-7	09/18/01	1857	7.34	18.02
22	AR1660L3B4	5-210-7	09/18/01	1920	7.34	18.02
23	PBLKSB	BL0828SB	09/18/01	2052	7.34	18.02
24	ELCS1	LC0828SB	09/18/01	2139	7.34	18.02
25	ELCS2	LD0828SB	09/18/01	2202	7.34	18.02
26	PIBLKBW	5-131-7	09/18/01	2334	7.34	18.02
27	AR1660L3B6	5-210-7	09/18/01	2357	7.34	18.02
28	E0455	47393.01	09/19/01	0044	7.34	18.02
29	E0455MS	47393.02MS	09/19/01	0107	7.34	18.02
30	E0455MSD	47393.03MSD	09/19/01	0130	7.34	18.02
31	E0456	47393.04	09/19/01	0153	7.34	18.02
32	E0457	47393.05	09/19/01	0216	7.34	18.01
33	E0458	47393.06	09/19/01	0239	7.34	18.02
34	E0459	47393.07	09/19/01	0302	7.34	18.02
35	E0460	47393.08	09/19/01	0326	7.34	18.02

TCX = Tetrachloro-m-xylene (+/- 0.05 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

8D
AROCLOR ANALYTICAL SEQUENCE

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SAS No.: SDG No.: E0455

GC Column: DB-17MS ID: 0.32(mm) Init. Calib. Date(s): 09/10/01

Instrument ID: HP_15A

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	E0461	47393.09	09/19/01	0349	7.34	18.01
02	PIBLKBX	5-131-7	09/19/01	0521	7.34	18.02
03	AR1660L3B8	5-210-7	09/19/01	0544	7.34	18.01
04	E0462	47393.10	09/19/01	0631	7.34	18.01
05	E0463	47393.11	09/19/01	0654	7.34	18.01
06	E0464	47393.12	09/19/01	0717	7.34	18.02
07	E0465	47393.13	09/19/01	0740	7.34	18.02
08	E0466	47393.14	09/19/01	0803	7.34	18.02
09	E0467	47393.15	09/19/01	0826	7.34	18.01
10	E0468	47393.16	09/19/01	0849	7.34	18.02
11	E0469	47393.17	09/19/01	0912	7.34	18.02
12	PIBLKBY	5-131-7	09/19/01	1045	7.34	18.02
13	AR1660L3BA	5-210-7	09/19/01	1108	7.34	18.02
14	E0456DL	47393.04DL	09/19/01	1359	7.33	18.01
15	E0458DL	47393.06DL	09/19/01	1422	7.33	18.01
16	E0459DL	47393.07DL	09/19/01	1445	7.34	18.01
17	E0460DL	47393.08DL	09/19/01	1508	7.33	18.02
18	E0466DL	47393.14DL	09/19/01	1555	7.34	18.02
19	E0468DL	47393.16DL	09/19/01	1618	7.34	18.02
20	PIBLKBP	5-131-7	09/19/01	1750	7.34	18.02
21	AR1660L3BR	5-210-7	09/19/01	1814	7.34	18.02
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: 68W00066

Lab Code: SWOK Case No.: 29658 SAS No.: SDG No.: E0455

GC Column: DB-XLB ID: 0.32(mm) Init. Calib. Date(s): 09/10/01

Instrument ID: HP_15B

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	RESCBH	5-171-7	09/10/01	1819	7.10	18.40
02	AR1221L3BH	5-420-6	09/10/01	1842	7.10	18.40
03	AR1232L3BH	5-422-6	09/10/01	1905	7.10	18.40
04	AR1242L1BH	5-11-7	09/10/01	1928	7.10	18.40
05	AR1242L2BH	5-10-7	09/10/01	1951	7.10	18.40
06	AR1242L3BH	5-9-7	09/10/01	2014	7.10	18.40
07	AR1242L4BH	5-8-7	09/10/01	2037	7.10	18.39
08	AR1242L5BH	5-7-7	09/10/01	2100	7.10	18.39
09	AR1248L3BH	5-424-6	09/10/01	2123	7.10	18.39
10	AR1254L1BH	5-6-7	09/10/01	2146	7.09	18.39
11	AR1254L2BH	5-5-7	09/10/01	2209	7.09	18.39
12	AR1254L3BH	5-4-7	09/10/01	2232	7.09	18.39
13	AR1254L4BH	5-3-7	09/10/01	2256	7.10	18.39
14	AR1254L5BH	5-2-7	09/10/01	2319	7.09	18.39
15	AR1660L1BH	5-212-7	09/10/01	2342	7.09	18.39
16	AR1660L2BH	5-211-7	09/11/01	0005	7.09	18.39
17	AR1660L3BQ	5-210-7	09/11/01	0028	7.09	18.39
18	AR1660L4BH	5-209-7	09/11/01	0051	7.09	18.39
19	AR1660L5BH	5-208-7	09/11/01	0114	7.09	18.39
20	PIBLKBO	5-131-7	09/11/01	0137	7.09	18.39
21	PIBLKBV	5-131-7	09/18/01	1857	7.10	18.40
22	AR1660L3B4	5-210-7	09/18/01	1920	7.10	18.40
23	PBLKSB	BL0828SB	09/18/01	2052	7.10	18.40
24	ELCS1	LC0828SB	09/18/01	2139	7.10	18.40
25	ELCS2	LD0828SB	09/18/01	2202	7.10	18.40
26	PIBLKBW	5-131-7	09/18/01	2334	7.10	18.40
27	AR1660L3B6	5-210-7	09/18/01	2357	7.10	18.40
28	E0455	47393.01	09/19/01	0044	7.10	18.40
29	E0455MS	47393.02MS	09/19/01	0107	7.10	18.40
30	E0455MSD	47393.03MSD	09/19/01	0130	7.10	18.40
31	E0456	47393.04	09/19/01	0153	7.10	18.40
32	E0457	47393.05	09/19/01	0216	7.10	18.39
33	E0458	47393.06	09/19/01	0239	7.10	18.40
34	E0459	47393.07	09/19/01	0302	7.10	18.40
35	E0460	47393.08	09/19/01	0326	7.10	18.39

TCX = Tetrachloro-m-xylene (+/- 0.05 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

8D
AROCLOR ANALYTICAL SEQUENCE

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SAS No.: SDG No.: E0455

GC Column: DB-XLB ID: 0.32(mm) Init. Calib. Date(s): 09/10/01

Instrument ID: HP_15B

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	E0461	47393.09	09/19/01	0349	7.10	18.40
02	PIBLKBX	5-131-7	09/19/01	0521	7.10	18.40
03	AR1660L3B8	5-210-7	09/19/01	0544	7.10	18.40
04	E0462	47393.10	09/19/01	0631	7.10	18.39
05	E0463	47393.11	09/19/01	0654	7.10	18.40
06	E0464	47393.12	09/19/01	0717	7.10	18.40
07	E0465	47393.13	09/19/01	0740	7.10	18.40
08	E0466	47393.14	09/19/01	0803	7.10	18.40
09	E0467	47393.15	09/19/01	0826	7.10	18.39
10	E0468	47393.16	09/19/01	0849	7.10	18.40
11	E0469	47393.17	09/19/01	0912	7.10	18.40
12	PIBLKBY	5-131-7	09/19/01	1045	7.10	18.40
13	AR1660L3BA	5-210-7	09/19/01	1108	7.10	18.40
14	E0456DL	47393.04DL	09/19/01	1359	7.09	18.39
15	E0458DL	47393.06DL	09/19/01	1422	7.10	18.39
16	E0459DL	47393.07DL	09/19/01	1445	7.10	18.39
17	E0460DL	47393.08DL	09/19/01	1508	7.10	18.39
18	E0466DL	47393.14DL	09/19/01	1555	7.10	18.40
19	E0468DL	47393.16DL	09/19/01	1618	7.10	18.40
20	PIBLKBP	5-131-7	09/19/01	1750	7.10	18.40
21	AR1660L3BR	5-210-7	09/19/01	1814	7.11	18.40
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: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Lab Sample ID: LC0828SB Date(s) Analyzed: 09/18/01 09/18/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

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	12.37	12.30	12.40	105		
Aroclor-1254	2	13.06	12.99	13.09	85.6		
	3	13.55	13.49	13.59	98.1		
COLUMN 1	4	14.10	14.03	14.13	92.9		
	5	14.80	14.73	14.83	102	97	
	1	12.04	11.98	12.08	97.1		
	2	13.34	13.27	13.37	102		
	3	13.69	13.63	13.73	89.8		
COLUMN 2	4	14.72	14.66	14.76	106		
	5	15.19	15.13	15.23	101	99	2.1
	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: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Lab Sample ID: LD0828SB Date(s) Analyzed: 09/18/01 09/18/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

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	12.37	12.30	12.40	106		
Aroclor-1254	2	13.06	12.99	13.09	85.3		
	3	13.55	13.49	13.59	101		
COLUMN 1	4	14.10	14.03	14.13	95.0		
	5	14.80	14.73	14.83	116	100	
	1	12.04	11.98	12.08	101		
	2	13.34	13.27	13.37	103		
	3	13.69	13.63	13.73	94.6		
COLUMN 2	4	14.72	14.66	14.76	107		
	5	15.19	15.13	15.23	111	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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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E0455

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Lab Sample ID: 47393.01 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

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						
	2						
	3	10.37	10.32	10.42	25.9		
	4	11.45	11.43	11.53	140		
	5	11.81	11.76	11.86	16.2	61	
Aroclor-1242 COLUMN 2	1						
	2	10.97	10.86	10.96	27.3		
	3	12.03	11.98	12.08	17.0		
	4	12.30	12.31	12.41	32.9		
	5	12.75	12.69	12.79	8.1	21	190
Aroclor-1254 COLUMN 1	1	12.36	12.30	12.40	4.9		
	2	13.08	12.99	13.09	13.9		
	3						
	4	14.13	14.03	14.13	18.7		
	5					13	
Aroclor-1254 COLUMN 2	1	12.03	11.98	12.08	23.3		
	2	13.37	13.27	13.37	24.8		
	3	13.73	13.63	13.73	14.2		
	4	14.71	14.66	14.76	10.3		
	5	15.18	15.13	15.23	5.0	16	23.1
Aroclor-1260 COLUMN 1	1						
	2	14.60	14.55	14.65	6.0		
	3						
	4	15.49	15.47	15.57	5.6		
	5	15.98	15.92	16.02	3.7	5.1	
Aroclor-1260 COLUMN 2	1	14.22	14.16	14.26	7.7		
	2						
	3	14.71	14.66	14.76	4.2		
	4						
	5	16.13	16.07	16.17	3.8	5.2	2.0

At least 3 peaks are required for identification of multicomponent analytes

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IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E0455MS

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Lab Sample ID: 47393.02MS Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
Aroclor-1242	1						
	2						
	3	10.37	10.32	10.42	28.9		
COLUMN 1	4	11.42	11.43	11.53	87.2		
	5	11.78	11.76	11.86	91.8	69	
	1	10.16	10.08	10.18	131		
	2	10.97	10.86	10.96	26.2		
	3	12.03	11.98	12.08	96.0		
COLUMN 2	4	12.36	12.31	12.41	69.4		
	5	12.74	12.69	12.79	123	89	29.0
Aroclor-1254	1	12.36	12.30	12.40	172		
	2	13.05	12.99	13.09	132		
	3	13.54	13.49	13.59	143		
COLUMN 1	4	14.09	14.03	14.13	134		
	5	14.79	14.73	14.83	149	150	
	1	12.03	11.98	12.08	132		
	2	13.33	13.27	13.37	134		
	3	13.69	13.63	13.73	117		
COLUMN 2	4	14.72	14.66	14.76	124		
	5	15.19	15.13	15.23	130	130	15.4
Aroclor-1260	1	14.09	14.03	14.13	73.2		
	2	14.60	14.55	14.65	83.3		
	3						
COLUMN 1	4	15.47	15.47	15.57	57.5		
	5	15.97	15.92	16.02	13.2	57	
	1						
	2						
	3	14.72	14.66	14.76	50.8		
COLUMN 2	4	15.90	15.84	15.94	9.5		
	5	16.13	16.07	16.17	13.6	25	128

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E0455MSD

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Lab Sample ID: 47393.03MSD Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

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						
	2						
	3	10.37	10.32	10.42	25.6		
	4	11.42	11.43	11.53	72.8		
	5	11.78	11.76	11.86	117	72	
Aroclor-1242 COLUMN 2	1	10.16	10.08	10.18	114		
	2	10.97	10.86	10.96	23.5		
	3	12.03	11.98	12.08	87.9		
	4	12.36	12.31	12.41	64.8		
	5	12.74	12.69	12.79	113	81	12.5
Aroclor-1254 COLUMN 1	1	12.36	12.30	12.40	158		
	2	13.05	12.99	13.09	122		
	3	13.54	13.49	13.59	132		
	4	14.09	14.03	14.13	120		
	5	14.79	14.73	14.83	133	130	
Aroclor-1254 COLUMN 2	1	12.03	11.98	12.08	121		
	2	13.33	13.27	13.37	123		
	3	13.69	13.63	13.73	108		
	4	14.72	14.66	14.76	112		
	5	15.19	15.13	15.23	116	120	8.3
Aroclor-1260 COLUMN 1	1	14.09	14.03	14.13	65.6		
	2	14.60	14.55	14.65	76.1		
	3	15.05	15.00	15.10	94.7		
	4	15.47	15.47	15.57	50.6		
	5	15.97	15.92	16.02	11.0	60	
Aroclor-1260 COLUMN 2	1						
	2						
	3	14.72	14.66	14.76	46.0		
	4	15.90	15.84	15.94	7.8		
	5	16.13	16.07	16.17	9.2	21	186

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E0456

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Lab Sample ID: 47393.04 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
Aroclor-1242	1						
	2						
	3	10.32	10.32	10.42	18400		
COLUMN 1	4	11.48	11.43	11.53	18600		
	5	11.78	11.76	11.86	23900	20000	
	1						
	2						
	3	12.03	11.98	12.08	17400		
COLUMN 2	4	12.36	12.31	12.41	18600		
	5	12.74	12.69	12.79	12600	16000	25.0
Aroclor-1254	1	12.37	12.30	12.40	5580		
	2	13.04	12.99	13.09	4590		
	3	13.55	13.49	13.59	2640		
COLUMN 1	4	14.09	14.03	14.13	3060		
	5	14.79	14.73	14.83	2030	3600	
	1						
	2	13.33	13.27	13.37	5170		
	3	13.68	13.63	13.73	4740		
COLUMN 2	4	14.72	14.66	14.76	3860		
	5	15.19	15.13	15.23	2500	4100	13.9
Aroclor-1260	1	14.09	14.03	14.13	1680		
	2	14.60	14.55	14.65	2060		
	3	15.05	15.00	15.10	2190		
COLUMN 1	4	15.52	15.47	15.57	782		
	5	15.97	15.92	16.02	715	1500	
	1						
	2	14.51	14.45	14.55	3570		
	3	14.72	14.66	14.76	1590		
COLUMN 2	4	15.90	15.84	15.94	621		
	5	16.13	16.07	16.17	725	1600	6.7

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E0456DL

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Lab Sample ID: 47393.04DL Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
Aroclor-1242	1						
	2						
COLUMN 1	3	10.32	10.32	10.42	53700		
	4	11.48	11.43	11.53	42700		
	5	11.78	11.76	11.86	50300	49000	
	1	10.13	10.08	10.18	36400		
	2						
COLUMN 2	3	12.03	11.98	12.08	44800		
	4	12.36	12.31	12.41	46900		
	5	12.74	12.69	12.79	30900	40000	22.5
Aroclor-1254	1	12.36	12.30	12.40	14100		
	2	13.05	12.99	13.09	12700		
COLUMN 1	3	13.54	13.49	13.59	5600		
	4	14.09	14.03	14.13	8370		
	5	14.79	14.73	14.83	4280	9000	
	1						
	2	13.33	13.27	13.37	14700		
COLUMN 2	3	13.68	13.63	13.73	13700		
	4	14.71	14.66	14.76	9390		
	5	15.18	15.13	15.23	5910	11000	22.2
Aroclor-1260	1	14.09	14.03	14.13	4590		
	2	14.60	14.55	14.65	5180		
COLUMN 1	3	15.05	15.00	15.10	4830		
	4	15.52	15.47	15.57	1680		
	5	15.97	15.92	16.02	1380	3500	
	1						
	2	14.51	14.45	14.55	8920		
COLUMN 2	3	14.71	14.66	14.76	3860		
	4	15.90	15.84	15.94	1360		
	5	16.12	16.07	16.17	1720	4000	14.3

At least 3 peaks are required for identification of multicomponent analytes

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E0457

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Lab Sample ID: 47393.05 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

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	10.32	10.32	10.42	171		
COLUMN 1	4	11.49	11.43	11.53	182		
	5	11.78	11.76	11.86	231	190	
	1	10.14	10.08	10.18	115		
	2						
	3	12.03	11.98	12.08	174		
COLUMN 2	4	12.36	12.31	12.41	266		
	5	12.75	12.69	12.79	170	180	5.6
	1	12.37	12.30	12.40	73.7		
Aroclor-1254	2	13.05	12.99	13.09	68.0		
	3	13.55	13.49	13.59	38.0		
COLUMN 1	4	14.09	14.03	14.13	42.0		
	5	14.79	14.73	14.83	42.4	53	
	1						
	2	13.33	13.27	13.37	82.3		
	3	13.69	13.63	13.73	50.2		
COLUMN 2	4	14.72	14.66	14.76	42.8		
	5	15.19	15.13	15.23	27.7	51	3.9
	1	14.09	14.03	14.13	23.1		
Aroclor-1260	2	14.60	14.55	14.65	27.8		
	3	15.05	15.00	15.10	32.8		
COLUMN 1	4	15.52	15.47	15.57	5.7		
	5	15.97	15.92	16.02	13.9	21	
	1						
	2	14.51	14.45	14.55	52.2		
	3	14.72	14.66	14.76	17.6		
COLUMN 2	4						
	5	16.12	16.07	16.17	10.7	27	28.6

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.

E0458

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Lab Sample ID: 47393.06 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

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	10.32	10.32	10.42	1850		
COLUMN 1	4	11.48	11.43	11.53	1910		
	5	11.78	11.76	11.86	2290	2000	
	1	10.14	10.08	10.18	1620		
	2						
	3	12.03	11.98	12.08	1670		
COLUMN 2	4	12.36	12.31	12.41	1640		
	5	12.75	12.69	12.79	1160	1500	33.3
	1	12.37	12.30	12.40	585		
Aroclor-1254	2	13.05	12.99	13.09	479		
	3	13.55	13.49	13.59	222		
COLUMN 1	4	14.09	14.03	14.13	340		
	5	14.79	14.73	14.83	179	360	
	1						
	2	13.33	13.27	13.37	484		
	3	13.69	13.63	13.73	407		
COLUMN 2	4	14.72	14.66	14.76	359		
	5	15.19	15.13	15.23	238	370	2.8
	1	14.09	14.03	14.13	187		
Aroclor-1260	2	14.60	14.55	14.65	229		
	3	15.06	15.00	15.10	203		
COLUMN 1	4	15.53	15.47	15.57	94.2		
	5	15.98	15.92	16.02	120	170	
	1						
	2						
	3	14.72	14.66	14.76	148		
COLUMN 2	4	15.90	15.84	15.94	92.1		
	5	16.13	16.07	16.17	102	110	54.5

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.

E0458DL

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Lab Sample ID: 47393.06DL Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
Aroclor-1242	1						
	2						
COLUMN 1	3	10.32	10.32	10.42	2960		
	4	11.48	11.43	11.53	3290		
	5	11.78	11.76	11.86	4160	3500	
	1	10.13	10.08	10.18	3060		
	2						
COLUMN 2	3	12.03	11.98	12.08	2800		
	4	12.35	12.31	12.41	2880		
	5	12.74	12.69	12.79	1880	2700	29.6
Aroclor-1254	1	12.36	12.30	12.40	932		
	2	13.04	12.99	13.09	766		
COLUMN 1	3	13.54	13.49	13.59	339		
	4	14.09	14.03	14.13	478		
	5	14.78	14.73	14.83	224	550	
	1						
	2	13.32	13.27	13.37	991		
COLUMN 2	3	13.68	13.63	13.73	752		
	4	14.71	14.66	14.76	602		
	5	15.18	15.13	15.23	358	680	23.6
Aroclor-1260	1	14.09	14.03	14.13	262		
	2	14.60	14.55	14.65	351		
COLUMN 1	3	15.05	15.00	15.10	298		
	4	15.52	15.47	15.57	132		
	5	15.97	15.92	16.02	167	240	
	1						
	2						
COLUMN 2	3	14.71	14.66	14.76	248		
	4	15.90	15.84	15.94	101		
	5	16.12	16.07	16.17	143	160	50.0

At least 3 peaks are required for identification of multicomponent analytes

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E0459

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Lab Sample ID: 47393.07 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

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	10.32	10.32	10.42	2310		
COLUMN 1	4	11.48	11.43	11.53	6100		
	5	11.78	11.76	11.86	7690	5400	
	1						
	2						
	3	12.03	11.98	12.08	5720		
COLUMN 2	4	12.36	12.31	12.41	7090		
	5	12.74	12.69	12.79	5320	6000	11.1
	1	12.36	12.30	12.40	4220		
Aroclor-1254	2	13.04	12.99	13.09	5190		
	3	13.54	13.49	13.59	3710		
COLUMN 1	4	14.09	14.03	14.13	3990		
	5	14.79	14.73	14.83	3550	4100	
	1						
	2	13.33	13.27	13.37	5730		
	3	13.68	13.63	13.73	3520		
COLUMN 2	4	14.72	14.66	14.76	4420		
	5	15.18	15.13	15.23	3630	4300	4.9
	1	14.09	14.03	14.13	2190		
Aroclor-1260	2	14.60	14.55	14.65	2650		
	3	15.05	15.00	15.10	3390		
COLUMN 1	4	15.52	15.47	15.57	1020		
	5	15.97	15.92	16.02	873	2000	
	1						
	2	14.51	14.45	14.55	4170		
	3	14.72	14.66	14.76	1820		
COLUMN 2	4	15.90	15.84	15.94	720		
	5	16.12	16.07	16.17	937	1900	5.3

At least 3 peaks are required for identification of multicomponent analytes

FORM X PCB

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IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E0459DL

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Lab Sample ID: 47393.07DL Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

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						
	2						
	3	10.32	10.32	10.42	5970		
	4	11.48	11.43	11.53	13000		
	5	11.78	11.76	11.86	15300	11000	
Aroclor-1242 COLUMN 2	1						
	2						
	3	12.03	11.98	12.08	13100		
	4	12.36	12.31	12.41	15600		
	5	12.75	12.69	12.79	11700	13000	18.2
Aroclor-1254 COLUMN 1	1	12.36	12.30	12.40	9680		
	2	13.05	12.99	13.09	12700		
	3	13.54	13.49	13.59	7820		
	4	14.09	14.03	14.13	9640		
	5	14.79	14.73	14.83	6670	9300	
Aroclor-1254 COLUMN 2	1						
	2	13.33	13.27	13.37	14000		
	3	13.68	13.63	13.73	8570		
	4	14.72	14.66	14.76	10600		
	5	15.19	15.13	15.23	7580	10000	7.5
Aroclor-1260 COLUMN 1	1	14.09	14.03	14.13	5290		
	2	14.60	14.55	14.65	5870		
	3	15.05	15.00	15.10	6720		
	4	15.52	15.47	15.57	2030		
	5	15.97	15.92	16.02	1620	4300	
Aroclor-1260 COLUMN 2	1						
	2	14.51	14.45	14.55	9190		
	3	14.72	14.66	14.76	4370		
	4	15.90	15.84	15.94	1520		
	5	16.12	16.07	16.17	1830	4200	2.4

At least 3 peaks are required for identification of multicomponent analytes

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IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E0460

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Lab Sample ID: 47393.08 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
Aroclor-1242	1						
	2						
	3	10.32	10.32	10.42	961		
COLUMN 1	4	11.48	11.43	11.53	1670		
	5	11.78	11.76	11.86	2310	1600	
	1						
	2						
	3	12.03	11.98	12.08	1810		
COLUMN 2	4	12.36	12.31	12.41	1930		
	5	12.74	12.69	12.79	1540	1800	12.5
Aroclor-1254	1	12.36	12.30	12.40	1390		
	2	13.04	12.99	13.09	1600		
	3	13.54	13.49	13.59	1140		
COLUMN 1	4	14.09	14.03	14.13	1320		
	5	14.79	14.73	14.83	959	1300	
	1						
	2	13.33	13.27	13.37	1770		
	3	13.68	13.63	13.73	1110		
COLUMN 2	4	14.72	14.66	14.76	1510		
	5	15.19	15.13	15.23	1090	1400	7.7
Aroclor-1260	1	14.09	14.03	14.13	724		
	2	14.60	14.55	14.65	780		
	3	15.05	15.00	15.10	956		
COLUMN 1	4	15.52	15.47	15.57	231		
	5	15.97	15.92	16.02	231	580	
	1						
	2	14.51	14.45	14.55	1210		
	3	14.72	14.66	14.76	622		
COLUMN 2	4	15.90	15.84	15.94	200		
	5	16.12	16.07	16.17	271	580	0.0

At least 3 peaks are required for identification of multicomponent analytes

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IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E0460DL

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Lab Sample ID: 47393.08DL Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
Aroclor-1242	1						
	2						
	3	10.32	10.32	10.42	1480		
COLUMN 1	4	11.48	11.43	11.53	2660		
	5	11.78	11.76	11.86	3100	2400	
	1						
	2						
	3	12.03	11.98	12.08	3220		
COLUMN 2	4	12.36	12.31	12.41	3390		
	5	12.75	12.69	12.79	2680	3100	29.2
Aroclor-1254	1	12.36	12.30	12.40	2410		
	2	13.05	12.99	13.09	3160		
	3	13.54	13.49	13.59	2120		
COLUMN 1	4	14.09	14.03	14.13	2640		
	5	14.79	14.73	14.83	1650	2400	
	1						
	2	13.33	13.27	13.37	3240		
	3	13.68	13.63	13.73	1780		
COLUMN 2	4	14.72	14.66	14.76	2830		
	5	15.19	15.13	15.23	1780	2400	0.0
Aroclor-1260	1	14.09	14.03	14.13	1450		
	2	14.60	14.55	14.65	1410		
	3	15.05	15.00	15.10	1560		
COLUMN 1	4	15.52	15.47	15.57	432		
	5	15.97	15.92	16.02	358	1000	
	1						
	2	14.51	14.45	14.55	2130		
	3	14.72	14.66	14.76	1160		
COLUMN 2	4	15.90	15.84	15.94	333		
	5	16.13	16.07	16.17	423	1000	0.0

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.

E0461

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Lab Sample ID: 47393.09 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
Aroclor-1242	1						
	2						
	3	10.32	10.32	10.42	138		
COLUMN 1	4	11.49	11.43	11.53	236		
	5	11.78	11.76	11.86	289	220	
	1						
	2						
	3	12.03	11.98	12.08	243		
COLUMN 2	4	12.36	12.31	12.41	390		
	5	12.75	12.69	12.79	261	300	36.4
Aroclor-1254	1	12.36	12.30	12.40	187		
	2	13.05	12.99	13.09	214		
	3	13.55	13.49	13.59	128		
COLUMN 1	4	14.09	14.03	14.13	158		
	5	14.79	14.73	14.83	98.5	160	
	1						
	2	13.33	13.27	13.37	270		
	3	13.69	13.63	13.73	132		
COLUMN 2	4	14.72	14.66	14.76	187		
	5	15.19	15.13	15.23	125	180	12.5
Aroclor-1260	1	14.09	14.03	14.13	86.7		
	2	14.60	14.55	14.65	97.2		
	3	15.05	15.00	15.10	111		
COLUMN 1	4	15.52	15.47	15.57	23.2		
	5	15.97	15.92	16.02	30.4	70	
	1						
	2	14.51	14.45	14.55	161		
	3	14.72	14.66	14.76	76.7		
COLUMN 2	4	15.90	15.84	15.94	25.1		
	5	16.12	16.07	16.17	40.6	76	8.6

At least 3 peaks are required for identification of multicomponent analytes

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E0462

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Lab Sample ID: 47393.10 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

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						
	2						
	3	10.40	10.32	10.42	19.8		
	4	11.48	11.43	11.53	91.9		
	5	11.78	11.76	11.86	99.1	70	
Aroclor-1242 COLUMN 2	1	10.14	10.08	10.18	62.7		
	2						
	3	12.03	11.98	12.08	83.3		
	4	12.36	12.31	12.41	85.9		
	5	12.75	12.69	12.79	51.8	71	1.4
Aroclor-1254 COLUMN 1	1	12.36	12.30	12.40	54.0		
	2	13.05	12.99	13.09	65.0		
	3	13.54	13.49	13.59	36.8		
	4	14.09	14.03	14.13	46.3		
	5	14.79	14.73	14.83	27.1	46	
Aroclor-1254 COLUMN 2	1						
	2	13.33	13.27	13.37	78.1		
	3	13.68	13.63	13.73	41.5		
	4	14.72	14.66	14.76	50.4		
	5	15.19	15.13	15.23	33.5	51	10.9
Aroclor-1260 COLUMN 1	1	14.09	14.03	14.13	25.4		
	2	14.60	14.55	14.65	27.1		
	3	15.05	15.00	15.10	28.3		
	4	15.52	15.47	15.57	9.6		
	5	15.97	15.92	16.02	9.4	20	
Aroclor-1260 COLUMN 2	1						
	2	14.51	14.45	14.55	46.7		
	3	14.72	14.66	14.76	20.7		
	4	15.90	15.84	15.94	6.9		
	5	16.12	16.07	16.17	8.3	21	5.0

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.

E0463

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Lab Sample ID: 47393.11 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

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						
	2						
	3	10.37	10.32	10.42	80.3		
	4	11.48	11.43	11.53	353		
	5	11.78	11.76	11.86	320	250	
Aroclor-1242 COLUMN 2	1	10.14	10.08	10.18	206		
	2						
	3	12.03	11.98	12.08	201		
	4	12.36	12.31	12.41	210		
	5	12.74	12.69	12.79	143	190	31.6
Aroclor-1254 COLUMN 1	1	12.36	12.30	12.40	177		
	2	13.04	12.99	13.09	217		
	3	13.54	13.49	13.59	123		
	4	14.09	14.03	14.13	176		
	5	14.79	14.73	14.83	101	160	
Aroclor-1254 COLUMN 2	1						
	2	13.33	13.27	13.37	202		
	3	13.68	13.63	13.73	121		
	4	14.72	14.66	14.76	176		
	5	15.19	15.13	15.23	118	150	6.7
Aroclor-1260 COLUMN 1	1	14.09	14.03	14.13	96.4		
	2	14.60	14.55	14.65	119		
	3	15.05	15.00	15.10	108		
	4	15.52	15.47	15.57	51.2		
	5	15.97	15.92	16.02	52.8	85	
Aroclor-1260 COLUMN 2	1						
	2	14.51	14.45	14.55	236		
	3	14.72	14.66	14.76	72.2		
	4	15.90	15.84	15.94	36.2		
	5	16.12	16.07	16.17	46.4	98	15.3

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E0464

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Lab Sample ID: 47393.12 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

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	10.37	10.32	10.42	85.5		
COLUMN 1	4	11.45	11.43	11.53	196		
	5	11.79	11.76	11.86	140	140	
	1						
	2	10.97	10.86	10.96	40.7		
	3	12.03	11.98	12.08	64.4		
COLUMN 2	4	12.36	12.31	12.41	121		
	5	12.74	12.69	12.79	48.2	69	103
	1	12.36	12.30	12.40	53.4		
Aroclor-1254	2	13.04	12.99	13.09	97.3		
	3	13.54	13.49	13.59	29.7		
COLUMN 1	4	14.09	14.03	14.13	63.8		
	5	14.79	14.73	14.83	25.6	54	
	1	12.03	11.98	12.08	88.4		
	2	13.33	13.27	13.37	76.9		
	3	13.72	13.63	13.73	53.8		
COLUMN 2	4	14.72	14.66	14.76	48.2		
	5	15.18	15.13	15.23	27.8	59	9.3
	1	14.09	14.03	14.13	35.0		
Aroclor-1260	2	14.60	14.55	14.65	32.9		
	3	15.05	15.00	15.10	25.1		
COLUMN 1	4	15.52	15.47	15.57	15.1		
	5	15.97	15.92	16.02	17.9	25	
	1	14.22	14.16	14.26	90.9		
	2						
	3	14.72	14.66	14.76	19.8		
COLUMN 2	4	15.90	15.84	15.94	9.0		
	5	16.13	16.07	16.17	15.0	34	36.0

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.

E0465

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Lab Sample ID: 47393.13 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1						
Aroclor-1242	2	9.46	9.38	9.48	46.6		
	3	10.37	10.32	10.42	87.5		
COLUMN 1	4	11.44	11.43	11.53	252		
	5					130	
	1	10.15	10.08	10.18	241		
	2	10.97	10.86	10.96	36.5		
	3	12.03	11.98	12.08	31.7		
COLUMN 2	4	12.31	12.31	12.41	93.1		
	5	12.74	12.69	12.79	23.4	85	52.9
	1	12.36	12.30	12.40	27.3		
Aroclor-1254	2	13.02	12.99	13.09	77.7		
	3						
COLUMN 1	4	14.13	14.03	14.13	44.0		
	5					50	
	1	12.03	11.98	12.08	43.5		
	2	13.33	13.27	13.37	38.0		
	3	13.72	13.63	13.73	36.9		
COLUMN 2	4	14.72	14.66	14.76	30.6		
	5	15.18	15.13	15.23	16.8	33	51.5
	1	14.13	14.03	14.13	24.1		
Aroclor-1260	2	14.60	14.55	14.65	16.9		
	3	15.05	15.00	15.10	14.5		
COLUMN 1	4	15.47	15.47	15.57	35.9		
	5	15.97	15.92	16.02	11.9	21	
	1	14.22	14.16	14.26	30.5		
	2						
	3	14.72	14.66	14.76	12.6		
COLUMN 2	4	15.89	15.84	15.94	7.5		
	5	16.13	16.07	16.17	10.5	15	40.0

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.

E0466

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Lab Sample ID: 47393.14 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

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	10.32	10.32	10.42	9820		
COLUMN 1	4	11.48	11.43	11.53	14600		
	5	11.78	11.76	11.86	17600	14000	
	1	10.13	10.08	10.18	8340		
	2						
	3	12.03	11.98	12.08	14100		
COLUMN 2	4	12.36	12.31	12.41	14400		
	5	12.74	12.69	12.79	11700	12000	16.7
	1	12.36	12.30	12.40	5460		
Aroclor-1254	2	13.04	12.99	13.09	5390		
	3	13.54	13.49	13.59	2890		
COLUMN 1	4	14.09	14.03	14.13	3420		
	5	14.78	14.73	14.83	2400	3900	
	1						
	2	13.33	13.27	13.37	6060		
	3	13.68	13.63	13.73	3260		
COLUMN 2	4	14.71	14.66	14.76	3900		
	5	15.18	15.13	15.23	2880	4000	2.6
	1	14.09	14.03	14.13	1880		
Aroclor-1260	2	14.60	14.55	14.65	2370		
	3	15.05	15.00	15.10	2630		
COLUMN 1	4	15.52	15.47	15.57	805		
	5	15.97	15.92	16.02	720	1700	
	1						
	2	14.51	14.45	14.55	4010		
	3	14.71	14.66	14.76	1600		
COLUMN 2	4	15.90	15.84	15.94	608		
	5	16.12	16.07	16.17	745	1700	0.0

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.

E0466DL

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Lab Sample ID: 47393.14DL Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

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	10.32	10.32	10.42	27700		
COLUMN 1	4	11.49	11.43	11.53	35600		
	5	11.79	11.76	11.86	39400	34000	
	1	10.14	10.08	10.18	20500		
	2						
	3	12.04	11.98	12.08	39700		
COLUMN 2	4	12.36	12.31	12.41	39100		
	5	12.75	12.69	12.79	31600	33000	3.0
	1	12.37	12.30	12.40	14100		
Aroclor-1254	2	13.06	12.99	13.09	16000		
	3	13.55	13.49	13.59	7110		
COLUMN 1	4	14.10	14.03	14.13	10300		
	5	14.79	14.73	14.83	5580	11000	
	1						
	2	13.33	13.27	13.37	18900		
	3	13.69	13.63	13.73	15600		
COLUMN 2	4	14.72	14.66	14.76	12400		
	5	15.19	15.13	15.23	7560	14000	27.3
	1	14.10	14.03	14.13	5640		
Aroclor-1260	2	14.61	14.55	14.65	6570		
	3	15.06	15.00	15.10	6340		
COLUMN 1	4	15.53	15.47	15.57	1930		
	5	15.98	15.92	16.02	1530	4400	
	1						
	2	14.52	14.45	14.55	11200		
	3	14.72	14.66	14.76	5080		
COLUMN 2	4	15.90	15.84	15.94	1390		
	5	16.13	16.07	16.17	1740	4900	11.4

At least 3 peaks are required for identification of multicomponent analytes

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E0467

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Lab Sample ID: 47393.15 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

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						
	2						
	3	10.32	10.32	10.42	249		
	4	11.48	11.43	11.53	282		
	5	11.78	11.76	11.86	334	290	
Aroclor-1242 COLUMN 2	1	10.13	10.08	10.18	206		
	2						
	3	12.03	11.98	12.08	268		
	4	12.36	12.31	12.41	340		
	5	12.75	12.69	12.79	216	260	11.5
Aroclor-1254 COLUMN 1	1	12.36	12.30	12.40	141		
	2	13.05	12.99	13.09	136		
	3	13.54	13.49	13.59	74.9		
	4	14.09	14.03	14.13	88.5		
	5	14.79	14.73	14.83	54.2	99	
Aroclor-1254 COLUMN 2	1						
	2	13.33	13.27	13.37	163		
	3	13.68	13.63	13.73	108		
	4	14.72	14.66	14.76	102		
	5	15.19	15.13	15.23	57.4	110	11.1
Aroclor-1260 COLUMN 1	1	14.09	14.03	14.13	48.5		
	2	14.60	14.55	14.65	61.1		
	3	15.05	15.00	15.10	68.4		
	4	15.52	15.47	15.57	16.8		
	5	15.97	15.92	16.02	21.5	43	
Aroclor-1260 COLUMN 2	1						
	2	14.51	14.45	14.55	98.3		
	3	14.72	14.66	14.76	41.8		
	4	15.90	15.84	15.94	8.1		
	5	16.12	16.07	16.17	29.1	44	2.3

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E0468

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Lab Sample ID: 47393.16 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

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	8.17	8.11	8.21	28.6		
Aroclor-1242	2	9.44	9.38	9.48	181		
	3	10.32	10.32	10.42	749		
COLUMN 1	4	11.48	11.43	11.53	1150		
	5	11.78	11.76	11.86	1330	690	
	1	10.13	10.08	10.18	744		
	2	10.92	10.86	10.96	94.3		
	3	12.03	11.98	12.08	1030		
COLUMN 2	4	12.36	12.31	12.41	963		
	5	12.74	12.69	12.79	798	730	5.8
	1	12.36	12.30	12.40	418		
Aroclor-1254	2	13.05	12.99	13.09	419		
	3	13.54	13.49	13.59	186		
COLUMN 1	4	14.09	14.03	14.13	269		
	5	14.79	14.73	14.83	140	290	
	1	12.03	11.98	12.08	1410		
	2	13.33	13.27	13.37	433		
	3	13.69	13.63	13.73	317		
COLUMN 2	4	14.72	14.66	14.76	313		
	5	15.19	15.13	15.23	189	530	82.8
	1	14.09	14.03	14.13	147		
Aroclor-1260	2	14.60	14.55	14.65	180		
	3	15.05	15.00	15.10	171		
COLUMN 1	4	15.53	15.47	15.57	54.9		
	5	15.97	15.92	16.02	60.3	120	
	1	14.22	14.16	14.26	555		
	2	14.51	14.45	14.55	561		
	3	14.72	14.66	14.76	129		
COLUMN 2	4	15.90	15.84	15.94	56.6		
	5	16.13	16.07	16.17	64.2	270	125

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E0468DL

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Lab Sample ID: 47393.16DL Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
Aroclor-1242	1						
	2						
	3	10.32	10.32	10.42	1230		
COLUMN 1	4	11.49	11.43	11.53	1540		
	5	11.78	11.76	11.86	1670	1500	
	1	10.14	10.08	10.18	953		
	2						
	3	12.04	11.98	12.08	1550		
COLUMN 2	4	12.36	12.31	12.41	1610		
	5	12.75	12.69	12.79	1130	1300	15.4
Aroclor-1254	1	12.37	12.30	12.40	592		
	2	13.05	12.99	13.09	605		
	3	13.55	13.49	13.59	240		
COLUMN 1	4	14.09	14.03	14.13	331		
	5	14.79	14.73	14.83	170	390	
	1						
	2	13.33	13.27	13.37	721		
	3	13.69	13.63	13.73	497		
COLUMN 2	4	14.72	14.66	14.76	409		
	5	15.19	15.13	15.23	238	470	20.5
Aroclor-1260	1	14.09	14.03	14.13	182		
	2	14.60	14.55	14.65	236		
	3	15.05	15.00	15.10	219		
COLUMN 1	4	15.53	15.47	15.57	73.2		
	5	15.97	15.92	16.02	81.2	160	
	1						
	2						
	3	14.72	14.66	14.76	168		
COLUMN 2	4	15.90	15.84	15.94	58.4		
	5	16.13	16.07	16.17	74.6	100	60.0

At least 3 peaks are required for identification of multicomponent analytes

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E0469

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Lab Sample ID: 47393.17 Date(s) Analyzed: 09/19/01 09/19/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1						
Aroclor-1242	2	9.44	9.38	9.48	24.3		
	3	10.37	10.32	10.42	85.6		
COLUMN 1	4						
	5	11.78	11.76	11.86	271	130	
	1						
	2						
	3	12.03	11.98	12.08	109		
COLUMN 2	4	12.36	12.31	12.41	145		
	5	12.75	12.69	12.79	81.6	110	18.2
	1	12.36	12.30	12.40	53.1		
Aroclor-1254	2	13.04	12.99	13.09	95.6		
	3	13.54	13.49	13.59	14.6		
COLUMN 1	4	14.09	14.03	14.13	65.4		
	5					57	
	1						
	2	13.33	13.27	13.37	68.3		
	3	13.69	13.63	13.73	40.8		
COLUMN 2	4	14.72	14.66	14.76	54.8		
	5	15.18	15.13	15.23	27.0	48	18.8
	1	14.09	14.03	14.13	35.9		
Aroclor-1260	2	14.60	14.55	14.65	37.6		
	3	15.06	15.00	15.10	24.1		
COLUMN 1	4	15.52	15.47	15.57	28.0		
	5	15.97	15.92	16.02	34.9	32	
	1	14.22	14.16	14.26	68.1		
	2						
	3	14.72	14.66	14.76	22.6		
COLUMN 2	4	15.90	15.84	15.94	17.4		
	5	16.13	16.07	16.17	24.9	33	3.1

At least 3 peaks are required for identification of multicomponent analytes

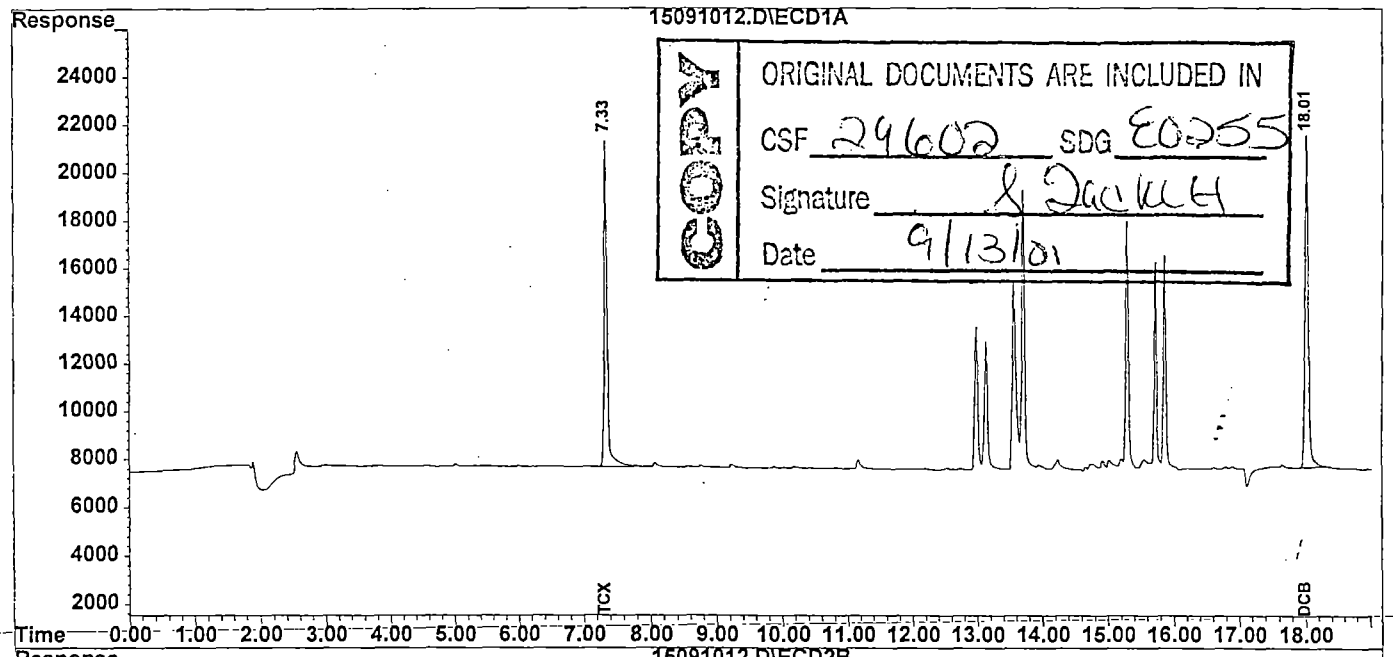
FORM X PCB

Chromatographic Report

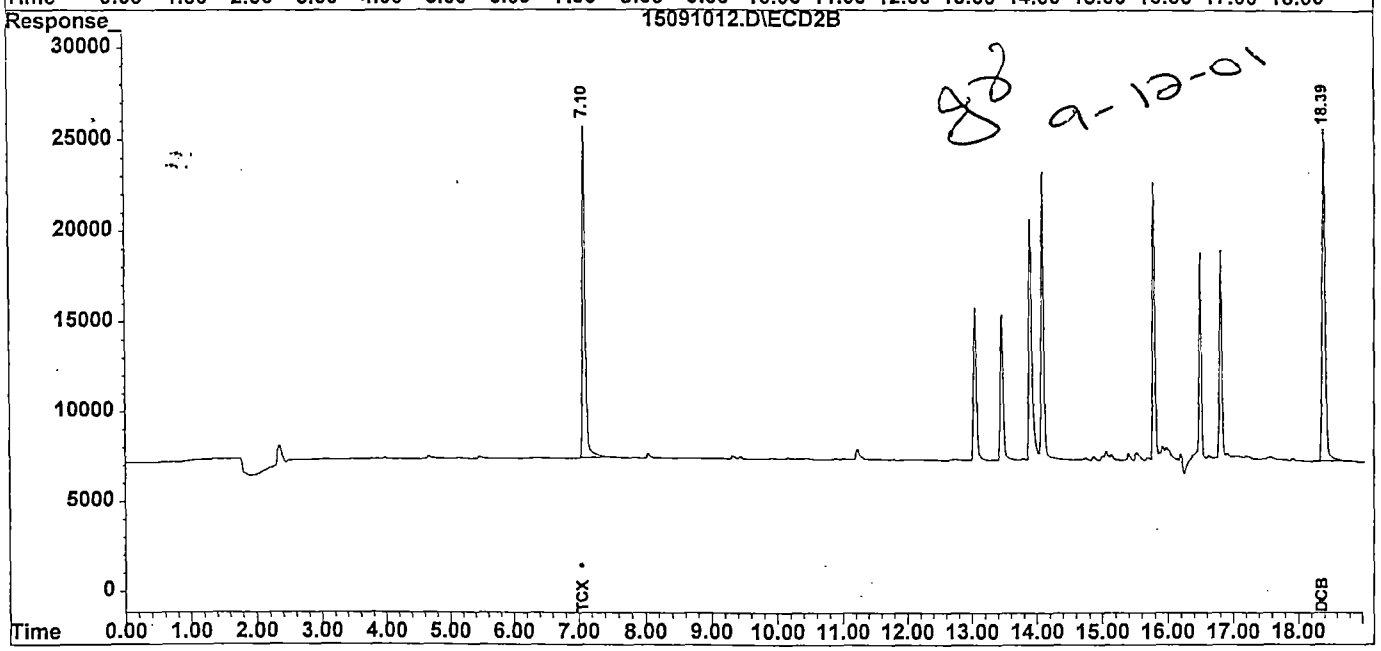
Signal #1 : F:\HPCHEM\HP\15\DATA\09_10_01\15091012.D\ECD1A.CH Vial: 6
Signal #2 : F:\HPCHEM\HP\15\DATA\09_10_01\15091012.D\ECD2B.CH
Acq On : 10 Sep 2001 18:19 Operator: DDC
Sample : RESCBH Inst : HP_15
Misc : 5-171-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:18 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_10_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B



ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 24602 SDG E0255
Signature
Date 9/13/01



9-12-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_10_01\15091012.D\ECD1A.CH Vial: 6
Signal #2 : F:\HPCHEM\HP\15\DATA\09_10_01\15091012.D\ECD2B.CH
Acq On : 10 Sep 2001 18:19 Operator: DDC
Sample : RESCBH Inst : HP_15
Misc : 5-171-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:18 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_10_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.34	7.10	432474	555520	19.0	17.6
22)	S DCB	18.01	18.40	488377	621426	19.8	18.1
	Target Compounds:						

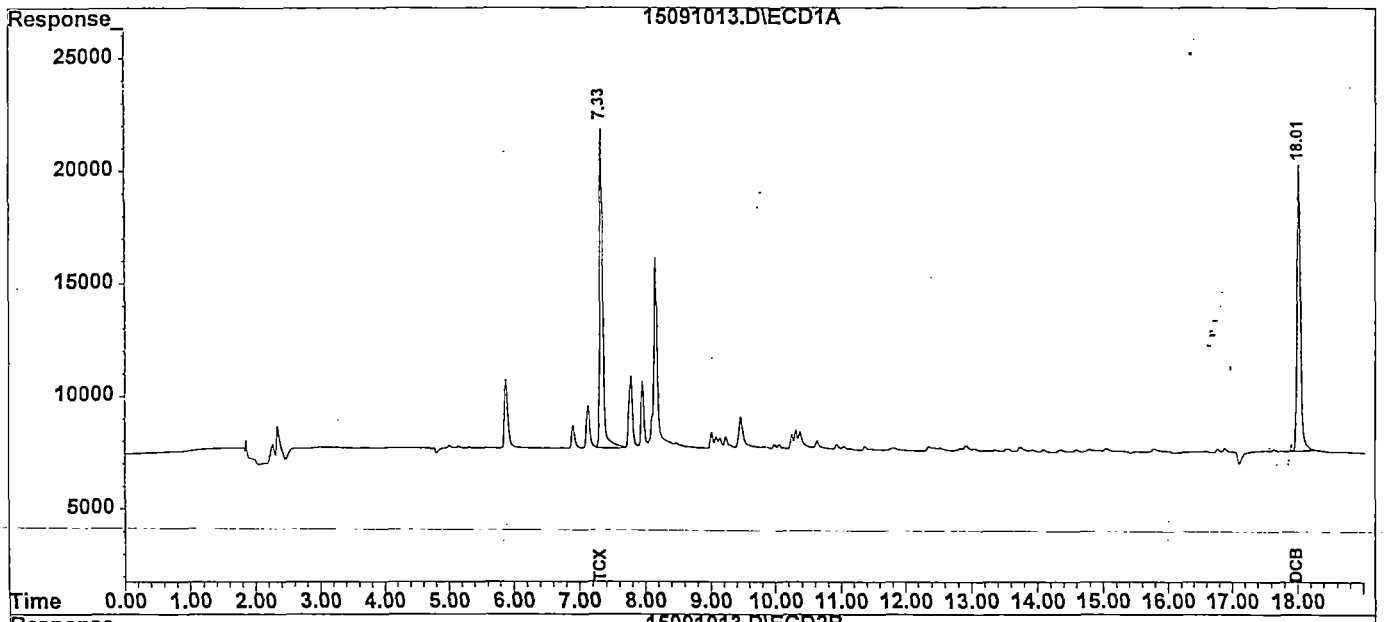
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

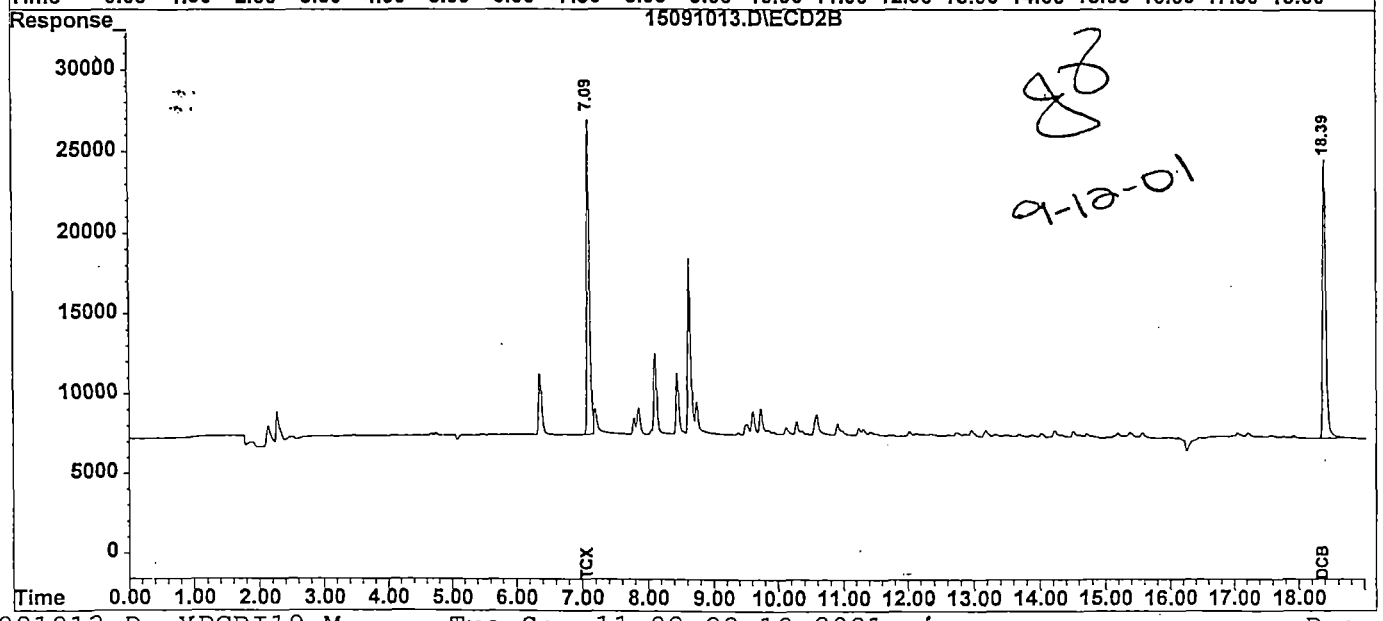
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_10_01\15091013.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\15\DATA\09_10_01\15091013.D\ECD2B.CH
Acq On : 10 Sep 2001 18:42 Operator: DDC
Sample : AR1221L3BH Inst : HP_15
Misc : 5-420-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:18 2001 Quant Results File: XPCBI10.RES
Quant Time: Sep 11 8:18 2001 Quant Results File: xspcbi10.RES

Pesticide Method : F:\HPCHEM\HP\15\DATA\09_10_01\XPCBI10.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 2001

Multi-Component Method : f:\hpchem\hp\15\data\09_10_01\xspcbi10.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_15A Signal #2 Inst : HP_15B





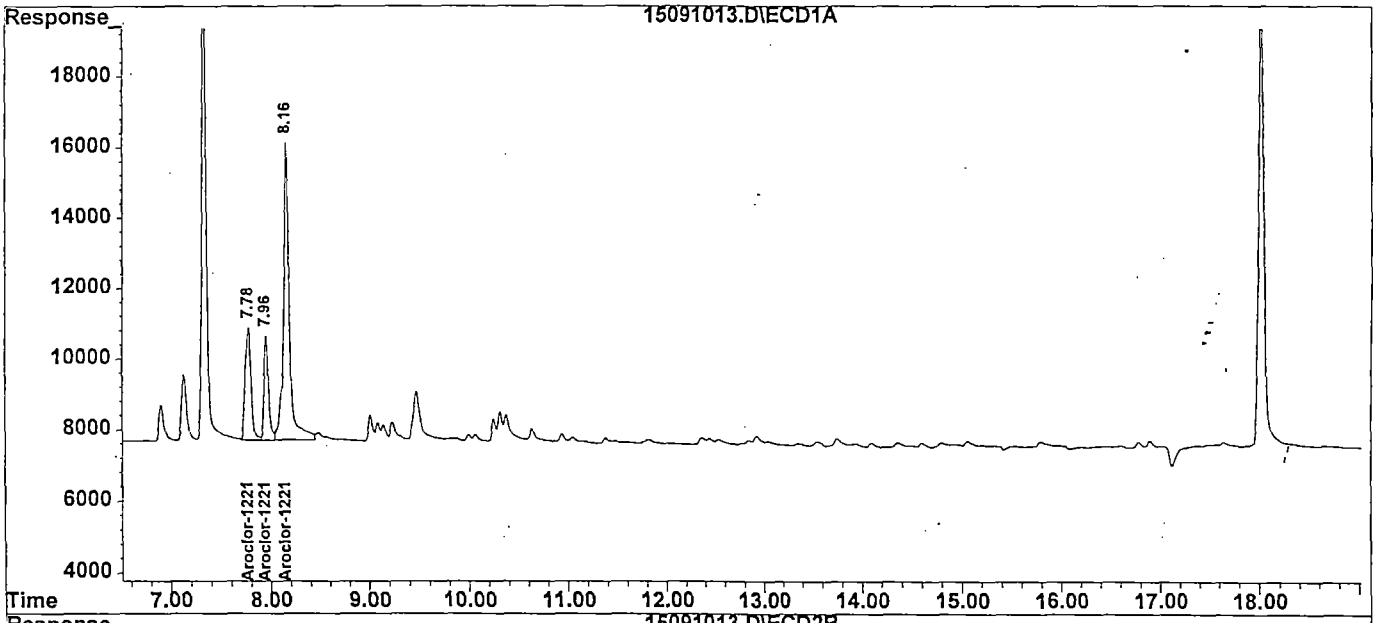
9-12-01

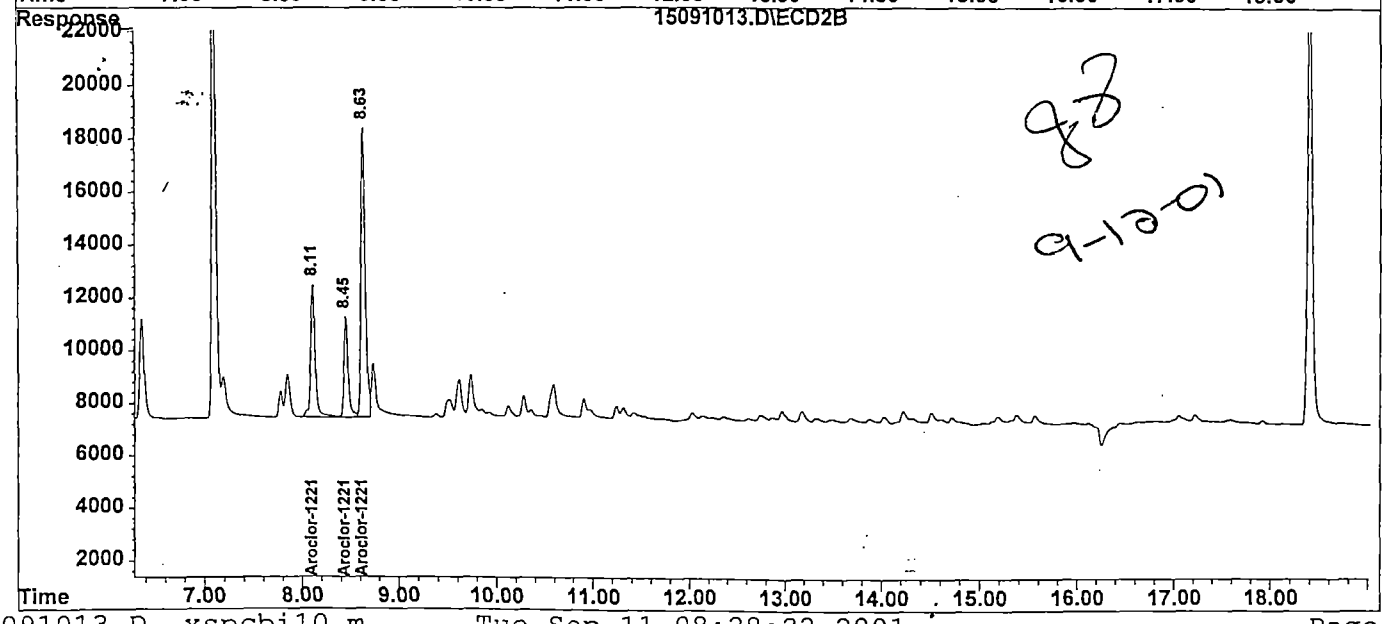
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_10_01\15091013.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\15\DATA\09_10_01\15091013.D\ECD2B.CH
Acq On : 10 Sep 2001 18:42 Operator: DDC
Sample : AR1221L3BH Inst : HP_15
Misc : 5-420-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:18 2001 Quant Results File: xspcbi10.RES
Quant Time: Sep 11 8:18 2001 Quant Results File: xspcbi10.RES

Pesticide Method : F:\HPCHEM\HP\15\DATA\09_10_01\XPCBI10.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 2001

Multi-Component Method : f:\hpchem\hp\15\data\09_10_01\xspcbi10.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_15A Signal #2 Inst : HP_15B





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9-10-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_10_01\15091013.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\15\DATA\09_10_01\15091013.D\ECD2B.CH
Acq On : 10 Sep 2001 18:42 Operator: DDC
Sample : AR1221L3BH Inst : HP_15
Misc : 5-420-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:18 2001 Quant Results File: XPCBI10.RES
Multi Time: Sep 11 8:18 2001 Quant Results File: xspcbi10.RES

Pesticide Method : F:\HPCHEM\HP\15\DATA\09_10_01\XPCBI10.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 2001

Multi-Component Method : f:\hpchem\hp\15\data\09_10_01\xspcbi10.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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.10	450608	553897	19.8	17.5	
22)	S DCB	18.01	18.40	456718	591986	18.5	17.2	
	Target Compounds:							
	Multi-Component Compounds:							
2)	L2 Aroclor-1221	7.78	8.11	129822	170504	421.8	529.8	#
3)	L2 Aroclor-1221 {2}	7.96	8.45	93029	119665	429.7	534.5	
4)	L2 Aroclor-1221 {3}	8.16	8.63	344295	338581	429.8	509.1	
	Sum Aroclor-1221			567147	628750	1281.3	1573.3	
	Average Aroclor-1221					427.100	524.435	

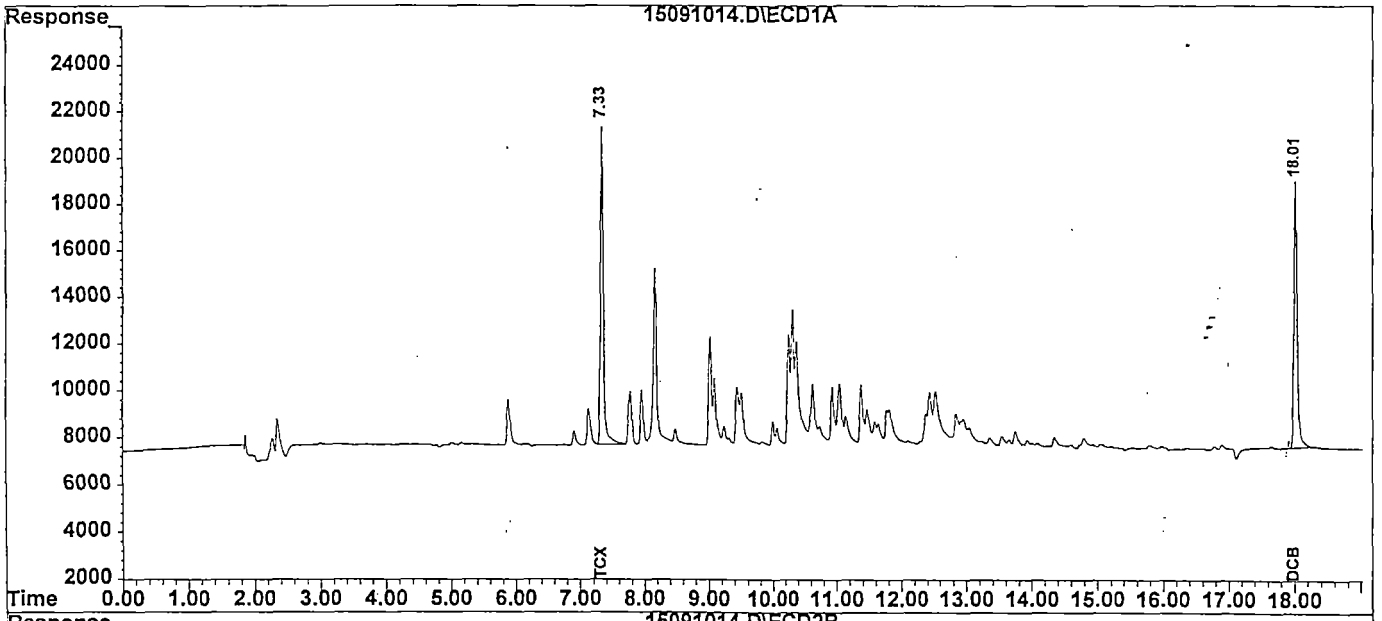
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

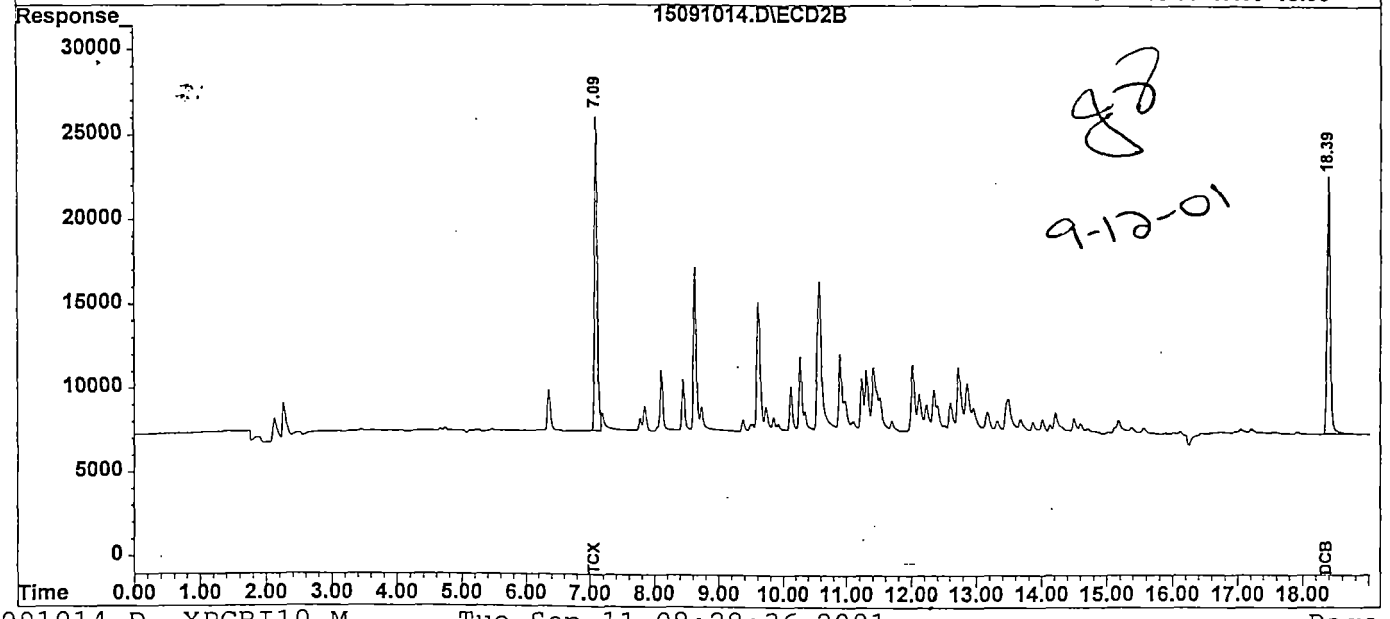
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_10_01\15091014.D\ECD1A.CH Vial: 8
Signal #2 : F:\HPCHEM\HP\15\DATA\09_10_01\15091014.D\ECD2B.CH
Acq On : 10 Sep 2001 19:05 Operator: DDC
Sample : AR1232L3BH Inst : HP_15
Misc : 5-422-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:19 2001 Quant Results File: XPCBI10.RES
Quant Time: Sep 11 8:19 2001 Quant Results File: xspcbi10.RES

Pesticide Method : F:\HPCHEM\HP\15\DATA\09_10_01\XPCBI10.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 2001

Multi-Component Method : f:\hpchem\hp\15\data\09_10_01\xspcbi10.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_15A Signal #2 Inst : HP_15B





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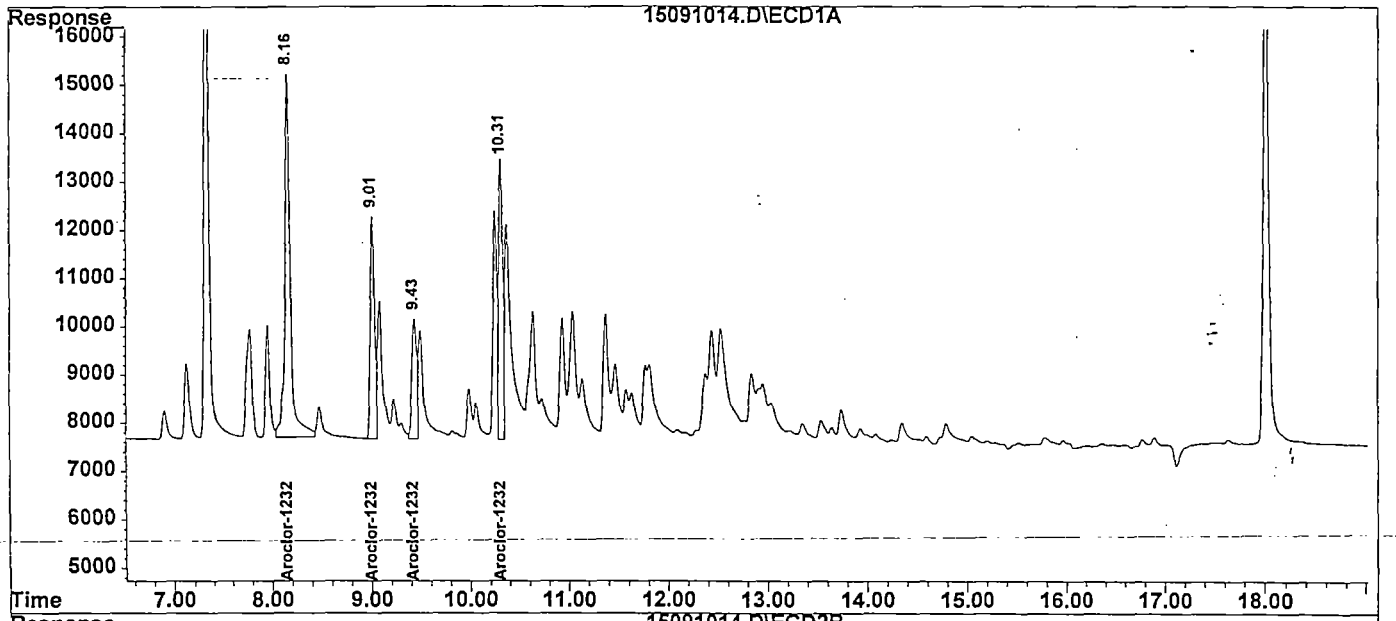
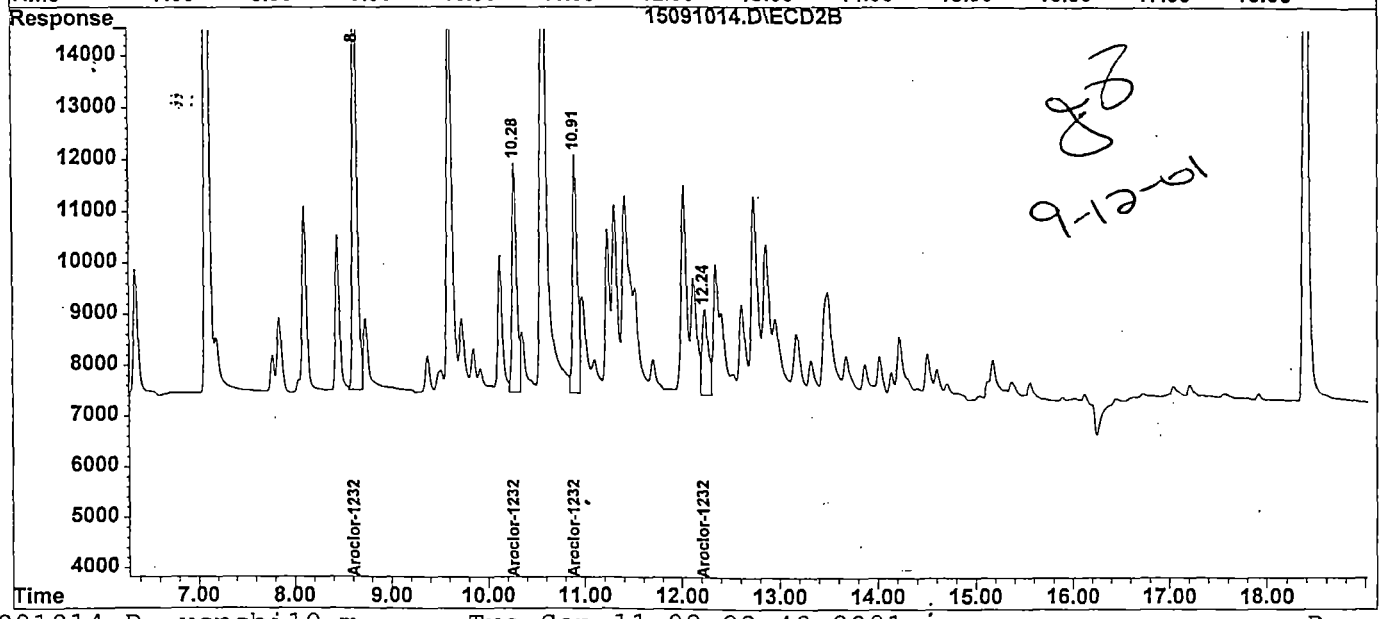
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_10_01\15091014.D\ECD1A.CH Vial: 8
Signal #2 : F:\HPCHEM\HP\15\DATA\09_10_01\15091014.D\ECD2B.CH
Acq On : 10 Sep 2001 19:05 Operator: DDC
Sample : AR1232L3BH Inst : HP_15
Misc : 5-422-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:19 2001 Quant Results File: xspcbi10.RES
Quant Time: Sep 11 8:19 2001 Quant Results File: xspcbi10.RES

Pesticide Method : F:\HPCHEM\HP\15\DATA\09_10_01\XPCBI10.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 2001

Multi-Component Method : f:\hpchem\hp\15\data\09_10_01\xspcbi10.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_15A Signal #2 Inst : HP_15B





9-12-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_10_01\15091014.D\ECD1A.CH Vial: 8
Signal #2 : F:\HPCHEM\HP\15\DATA\09_10_01\15091014.D\ECD2B.CH
Acq On : 10 Sep 2001 19:05 Operator: DDC
Sample : AR1232L3BH Inst : HP_15
Misc : 5-422-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:19 2001 Quant Results File: XPCBI10.RES
Multi Time: Sep 11 8:19 2001 Quant Results File: xspcbi10.RES

Pesticide Method : F:\HPCHEM\HP\15\DATA\09_10_01\XPCBI10.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 2001

Multi-Component Method : f:\hpchem\hp\15\data\09_10_01\xspcbi10.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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.10	428428	531108	18.8	16.8	
22)	S DCB	18.01	18.40	405245	528120	16.4	15.4	
	Target Compounds:							
	Multi-Component Compounds:							
5)	L3 Aroclor-1232	8.16	8.63	294597	297155	438.1	512.7	
6)	L3 Aroclor-1232 {2}	9.02	10.28	135115	143551	452.3	541.3	
7)	L3 Aroclor-1232 {3}	9.44	10.91	84776	157788	448.2	544.3	
8)	L3 Aroclor-1232 {4}	10.31	12.24	177409	73061	445.7	606.6	#
	Sum Aroclor-1232			691898	671555	1784.4	2204.8	
	Average Aroclor-1232					446.089	551.192	

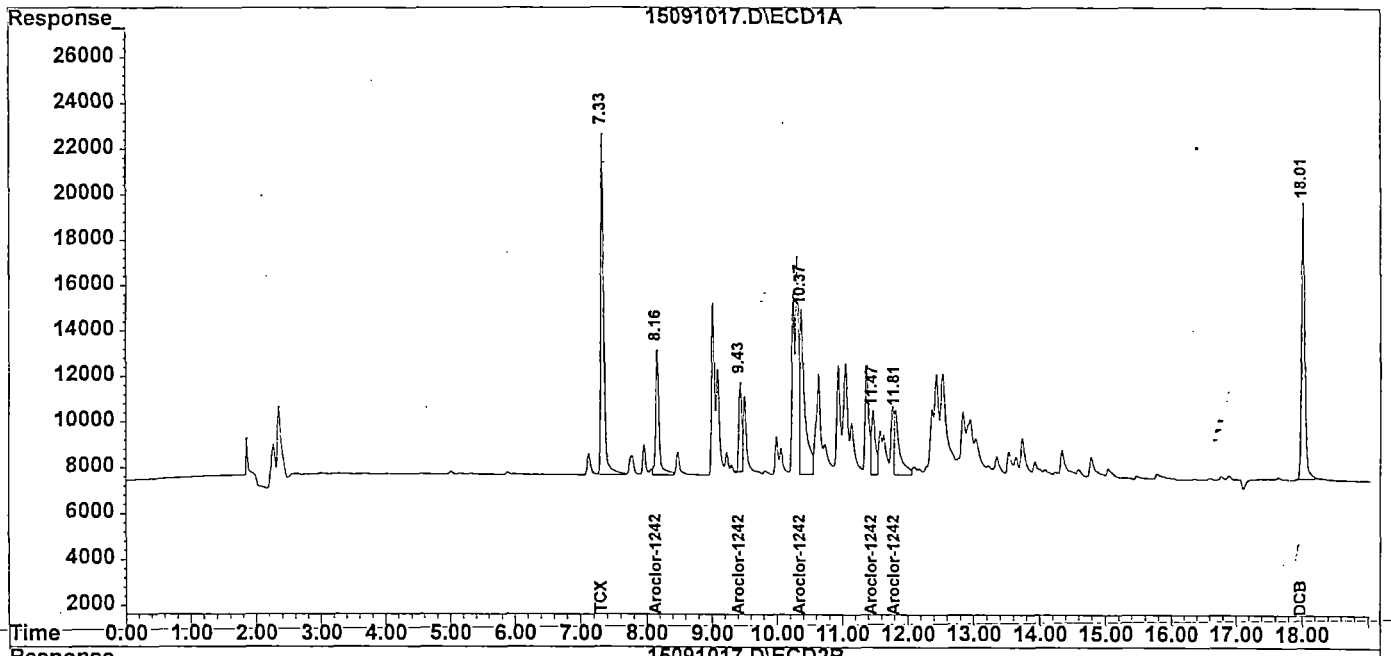
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

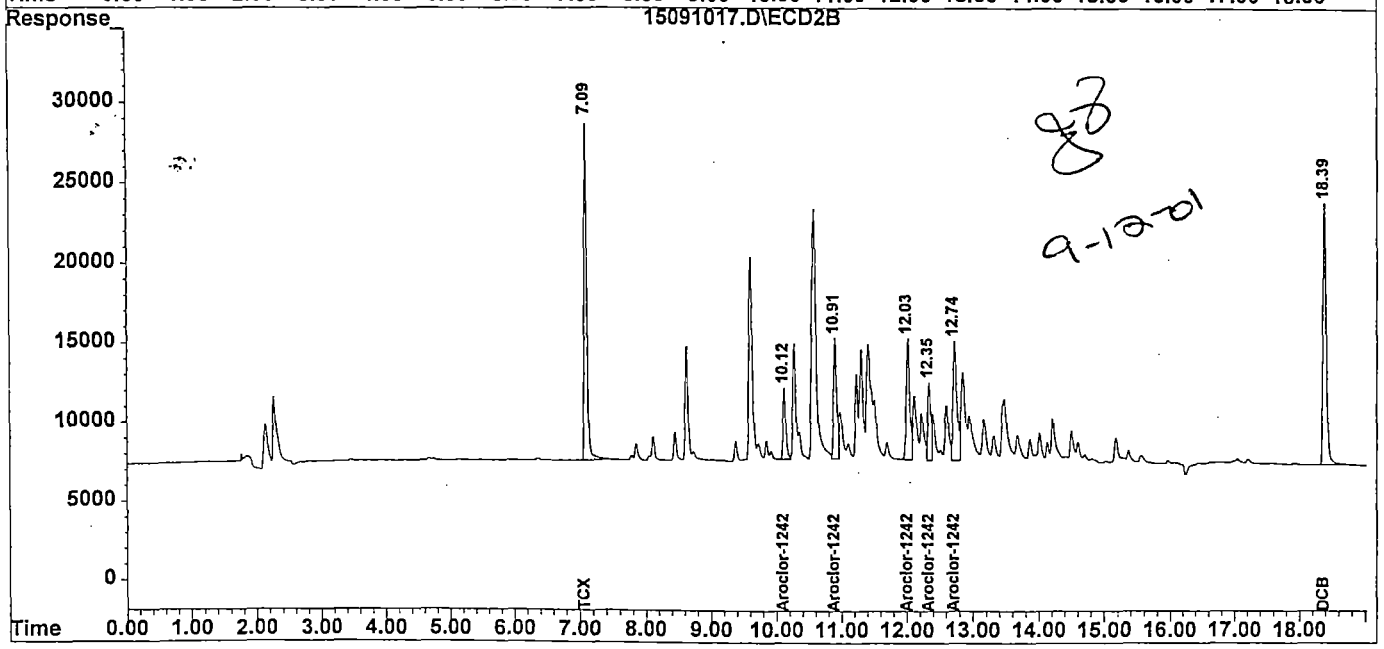
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_10_01\15091017.D\ECD1A.CH Vial: 11
Signal #2 : F:\HPCHEM\HP\15\DATA\09_10_01\15091017.D\ECD2B.CH
Acq On : 10 Sep 2001 20:14 Operator: DDC
Sample : AR1242L3BH Inst : HP_15
Misc : 5-9-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:10 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_10_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B





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9-12-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_10_01\15091017.D\ECD1A.CH Vial: 11
Signal #2 : F:\HPCHEM\HP\15\DATA\09_10_01\15091017.D\ECD2B.CH
Acq On : 10 Sep 2001 20:14 Operator: DDC
Sample : AR1242L3BH Inst : HP_15
Misc : 5-9-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:10 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_10_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.10	470156	629624	19.9	22.1
22)	S DCB	18.01	18.40	424910	564803	18.5	20.5
	Target Compounds:						
7)	L4 Aroclor-1242	8.16	10.13	199970	137690	408.9	450.4
8)	L4 Aroclor-1242 {2}	9.43	10.91	115315	255568	410.2	444.5
9)	L4 Aroclor-1242 {3}	10.37	12.03	372809	275833	408.7	434.1
10)	L4 Aroclor-1242 {4}	11.48	12.36	124005	165112	405.9	437.3
11)	L4 Aroclor-1242 {5}	11.81	12.74	159176	315060	398.8	432.6
	Sum Aroclor-1242			971275	1149263	2032.3	2198.9
	Average Aroclor-1242					406.470	439.774

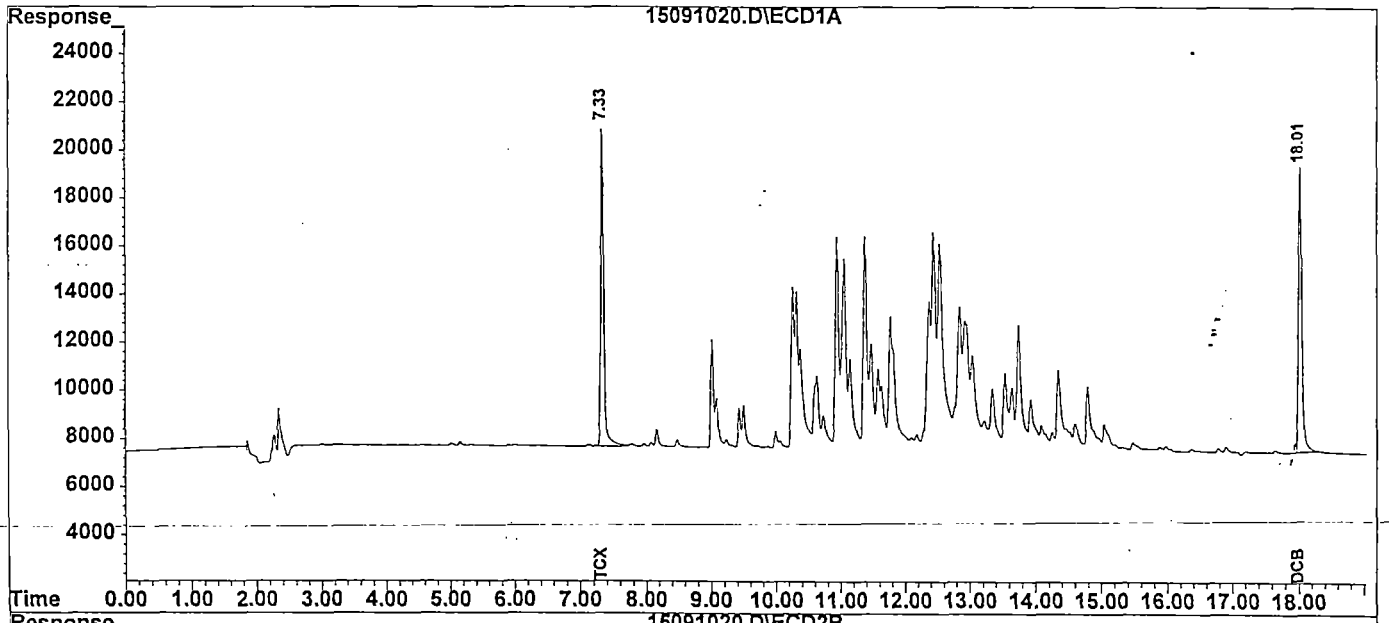
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

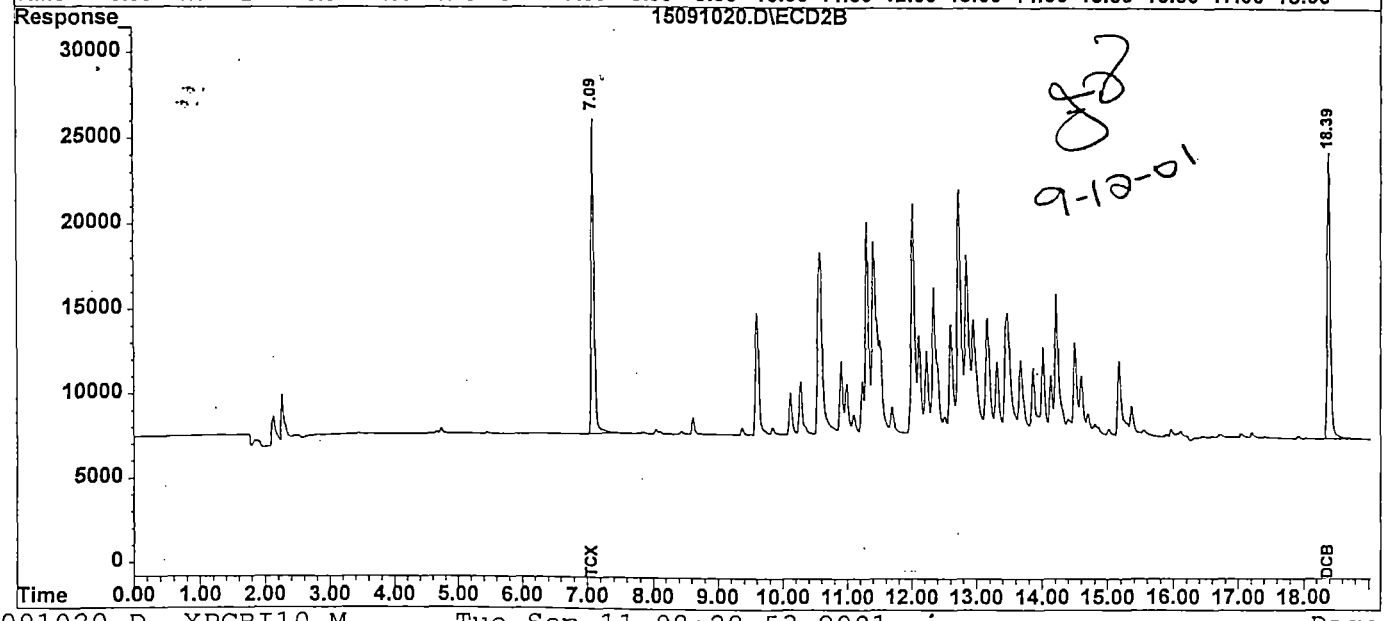
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_10_01\15091020.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\15\DATA\09_10_01\15091020.D\ECD2B.CH
Acq On : 10 Sep 2001 21:23 Operator: DDC
Sample : AR1248L3BH Inst : HP_15
Misc : 5-424-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:20 2001 Quant Results File: XPCBI10.RES
Quant Time: Sep 11 8:22 2001 Quant Results File: xspcbi10.RES

Pesticide Method : F:\HPCHEM\HP\15\DATA\09_10_01\XPCBI10.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 2001

Multi-Component Method : f:\hpchem\hp\15\data\09_10_01\xspcbi10.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_15A Signal #2 Inst : HP_15B





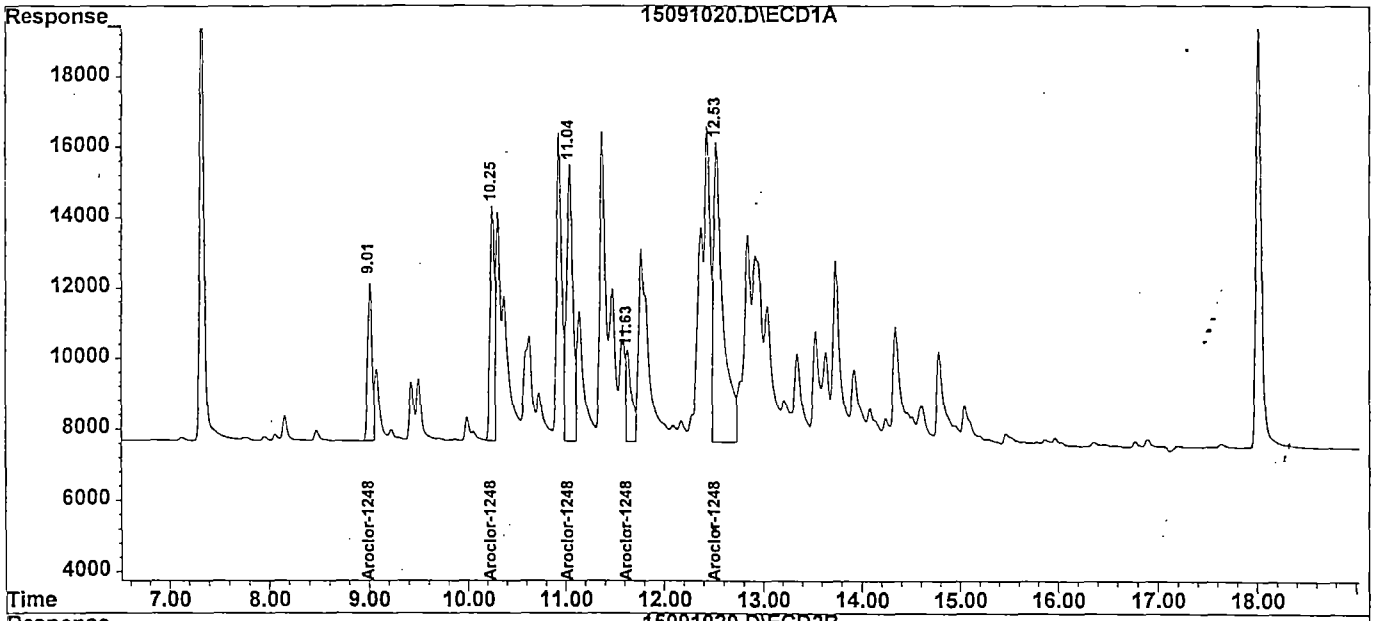
9-12-01

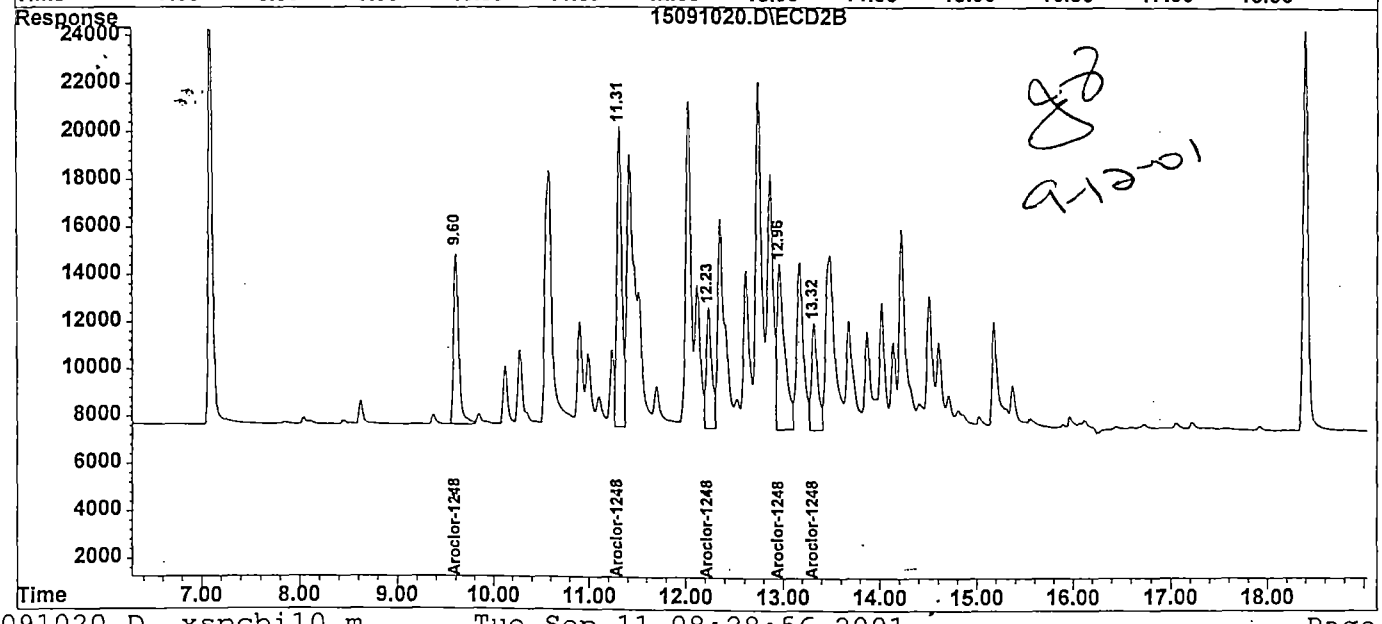
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_10_01\15091020.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\15\DATA\09_10_01\15091020.D\ECD2B.CH
Acq On : 10 Sep 2001 21:23 Operator: DDC
Sample : AR1248L3BH Inst : HP_15
Misc : 5-424-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:22 2001 Quant Results File: xspcbi10.RES
Quant Time: Sep 11 8:22 2001 Quant Results File: xspcbi10.RES

Pesticide Method : F:\HPCHEM\HP\15\DATA\09_10_01\XPCBI10.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 2001

Multi-Component Method : f:\hpchem\hp\15\data\09_10_01\xspcbi10.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_15A Signal #2 Inst : HP_15B





9-12-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_10_01\15091020.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\15\DATA\09_10_01\15091020.D\ECD2B.CH
Acq On : 10 Sep 2001 21:23 Operator: DDC
Sample : AR1248L3BH Inst : HP_15
Misc : 5-424-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:20 2001 Quant Results File: XPCBI10.RES
Multi Time: Sep 11 8:22 2001 Quant Results File: xspcbi10.RES

Pesticide Method : F:\HPCHEM\HP\15\DATA\09_10_01\XPCBI10.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 2001

Multi-Component Method : f:\hpchem\hp\15\data\09_10_01\xspcbi10.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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.10	412243	556406	18.1	17.6
22)	S DCB	18.01	18.39	434542	587750	17.6	17.1
	Target Compounds:						
	Multi-Component Compounds:						
14)	L5 Aroclor-1248	9.01f	9.61	135130	272127	424.4	516.2
15)	L5 Aroclor-1248 {2}	10.25f	11.31f	196453	446319	445.2	510.5
16)	L5 Aroclor-1248 {3}	11.04f	12.24f	346239	199602	440.6	532.7
17)	L5 Aroclor-1248 {4}	11.63f	12.96f	107123	396954	453.0	514.1
18)	L5 Aroclor-1248 {5}	12.53f	13.32f	559377	200485	455.2	539.0
	Sum Aroclor-1248			1344322	1515487	2218.4	2612.6
	Average Aroclor-1248					443.679	522.513

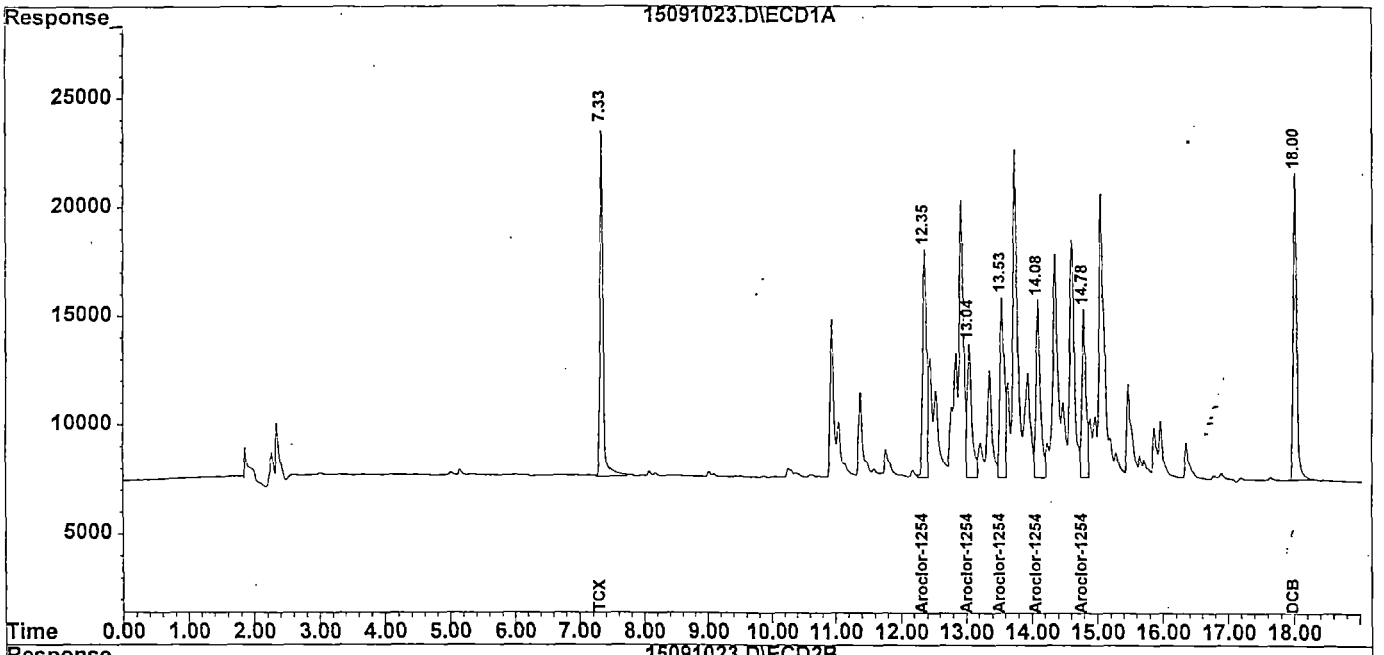
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

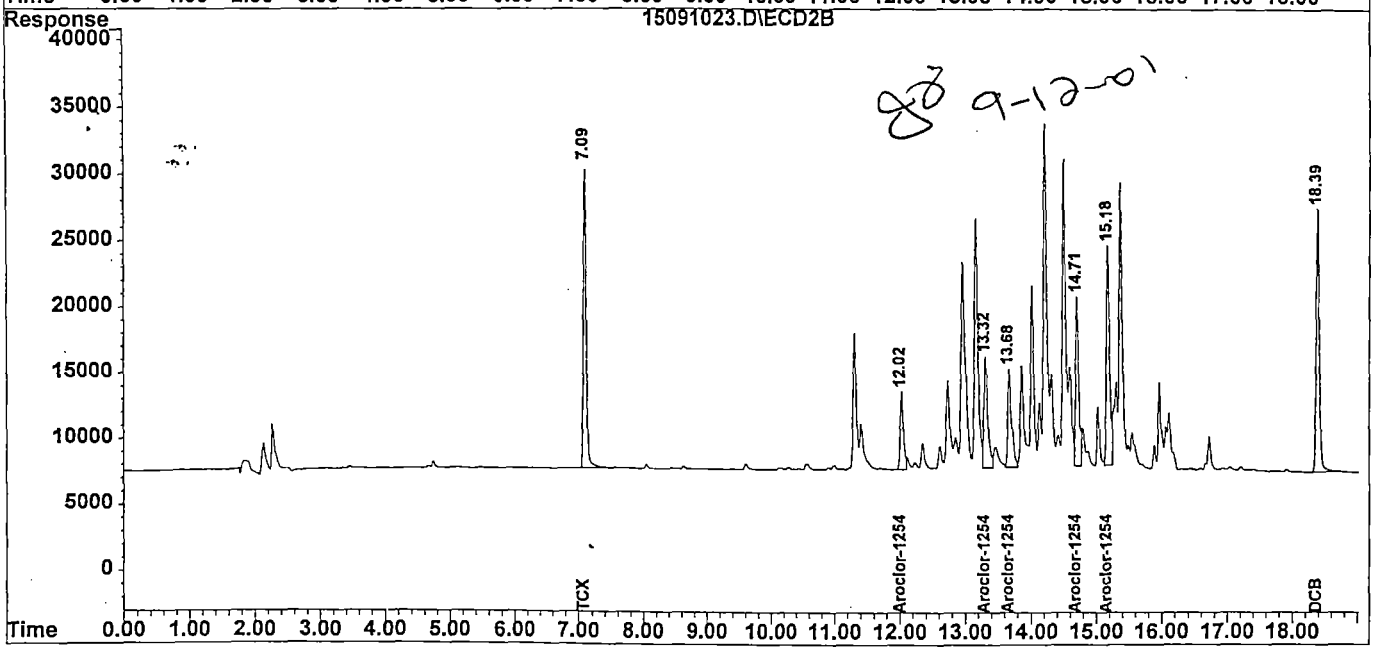
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_10_01\15091023.D\ECD1A.CH Vial: 17
Signal #2 : F:\HPCHEM\HP\15\DATA\09_10_01\15091023.D\ECD2B.CH
Acq On : 10 Sep 2001 22:32 Operator: DDC
Sample : AR1254L3BH Inst : HP_15
Misc : 5-4-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:14 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_10_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B





gb 9-12-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_10_01\15091023.D\ECD1A.CH Vial: 17
Signal #2 : F:\HPCHEM\HP\15\DATA\09_10_01\15091023.D\ECD2B.CH
Acq On : 10 Sep 2001 22:32 Operator: DDC
Sample : AR1254L3BH Inst : HP_15
Misc : 5-4-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:14 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_10_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.09	513628	678319	22.5	22.5
22)	S DCB	18.01	18.39	512080	695414	23.3	23.7
	Target Compounds:						
12)	L6 Aroclor-1254	12.35	12.03	413227	204754	439.5	439.2
13)	L6 Aroclor-1254 {2}	13.04	13.32	319038	344830	434.3	468.3
14)	L6 Aroclor-1254 {3}	13.54	13.68	390311	307533	427.7	461.9
15)	L6 Aroclor-1254 {4}	14.08	14.71	376957	434610	432.1	461.6
16)	L6 Aroclor-1254 {5}	14.78	15.18	313593	560451	422.6	459.9
	Sum Aroclor-1254			1813126	1852178	2156.3	2291.0
	Average Aroclor-1254					431.255	458.199

(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_15

Method : F:\HPCHEM\HP\15\DATA\09_10_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 2001
Response via : Initial Calibration

Calibration Files
L1 =15091026.D L2 =15091027.D L3 =15091028.D
L4 =15091029.D L5 =15091030.D

	Compound	L1	L2	L3	L4	L5	Avg		%RSD
1)	TCX	25.1	23.7	22.5	22.1	20.6	22.8	E3	7.35
2)	Aroclor-1016	729.7	676.8	621.4	555.7	488.6	614.4		15.55
3)	Aroclor-1016 {2}	867.5	782.0	717.4	651.1	546.0	712.8		17.24
4)	Aroclor-1016 {3}	857.6	776.0	747.9	719.9	615.7	743.4		11.84
5)	Aroclor-1016 {4}	710.9	666.8	637.1	579.7	496.8	618.2		13.42
6)	Aroclor-1016 {5}	272.9	254.2	251.2	213.5	178.0	234.0		16.25
17)	Aroclor-1260	1.9	1.8	1.7	1.5	1.2	1.6	E3	18.09
18)	Aroclor-1260 {2}	2.4	2.2	2.2	2.0	1.6	2.1	E3	14.20
19)	Aroclor-1260 {3}	2.3	2.2	2.0	2.0	1.6	2.0	E3	11.89
20)	Aroclor-1260 {4}	1.4	1.3	1.6	1.2	1.0	1.3	E3	17.56
21)	Aroclor-1260 {5}	2.6	2.5	2.6	2.3	1.9	2.4	E3	12.24
22)	DCB	27.9	26.7	25.0	24.2	19.6	24.7	E3	12.94

Signal #2 Calibration Files
L1 =15091026.D L2 =15091027.D L3 =15091028.D
L4 =15091029.D L5 =15091030.D

	Compound	L1	L2	L3	L4	L5	Avg		%RSD
24)	TCX #2	33.2	31.4	31.9	32.1	29.4	31.6	E3	4.39
25)	Aroclor-1016 #2	813.0	734.6	725.0	676.4	566.7	703.1		12.89
26)	Aroclor-1016 {2} #2	2.0	1.8	1.6	1.5	1.2	1.6	E3	17.47
27)	Aroclor-1016 {3} #2	3.0	2.8	3.0	2.7	2.4	2.8	E3	8.92
28)	Aroclor-1016 {4} #2	981.7	912.1	963.7	889.1	760.9	901.5		9.66
29)	Aroclor-1016 {5} #2	1.1	1.0	1.2	1.0	0.8	1.0	E3	13.64
40)	Aroclor-1260 #2	1.3	1.3	1.5	1.2	1.0	1.3	E3	16.53
41)	Aroclor-1260 {2} #2	2.3	2.1	2.3	1.9	1.5	2.0	E3	16.91
42)	Aroclor-1260 {3} #2	2.9	2.7	2.8	2.3	1.8	2.5	E3	17.46
43)	Aroclor-1260 {4} #2	1.6	1.5	1.5	1.4	1.1	1.4	E3	12.11
44)	Aroclor-1260 {5} #2	3.9	3.7	3.6	3.5	2.9	3.5	E3	10.94
45)	DCB #2	38.1	37.0	36.0	33.1	27.8	34.4	E3	12.06

(#) = Out of Range

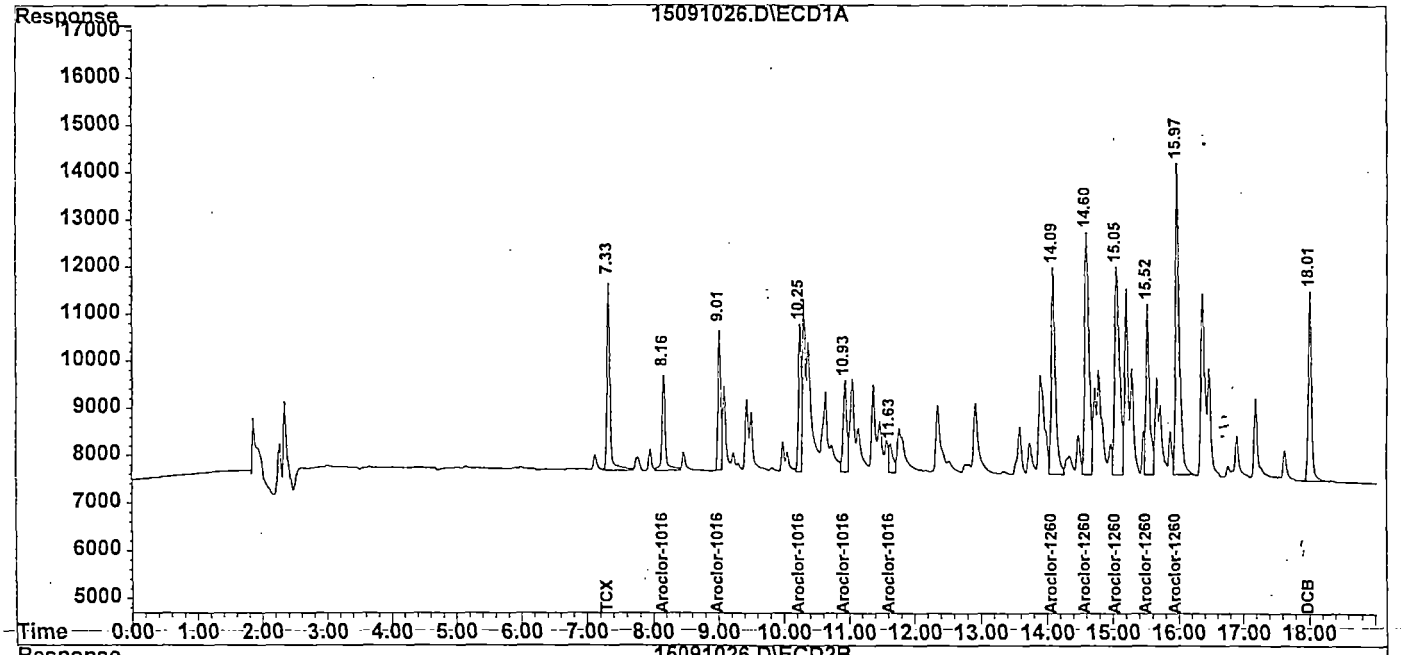
XPCBI10.M Tue Sep 11 08:17:06 2001

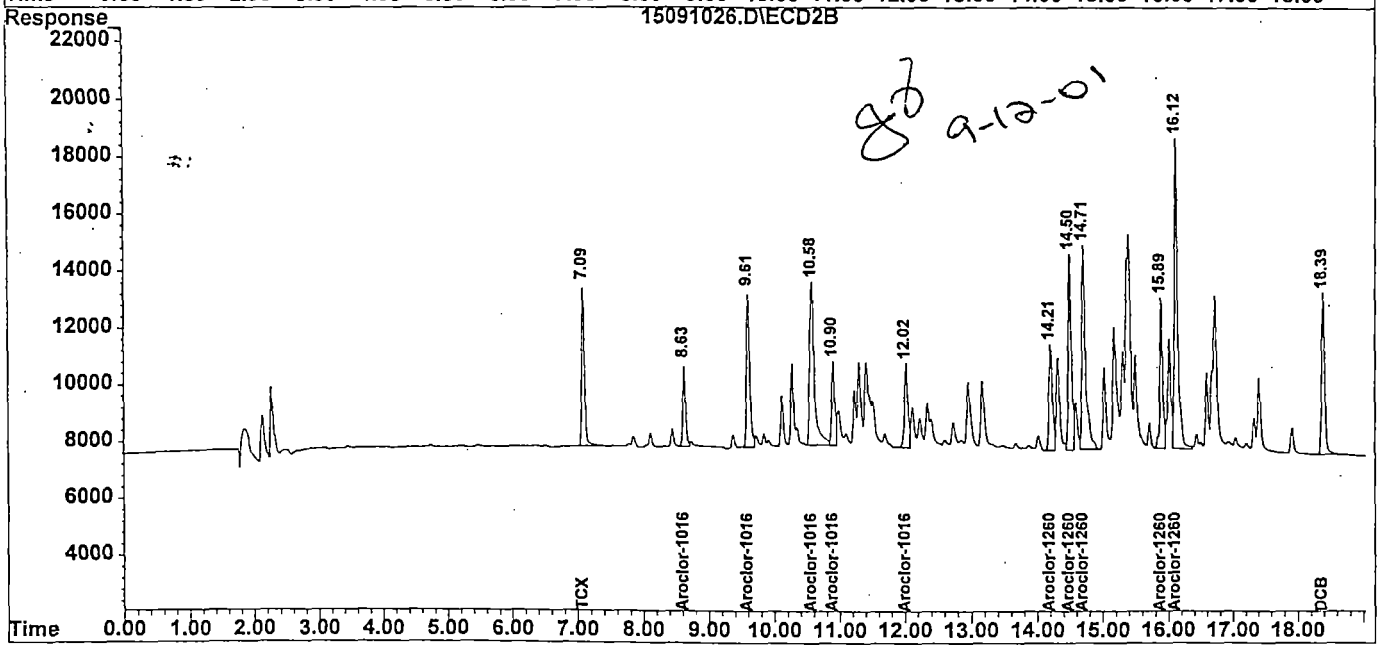
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_10_01\15091026.D\ECD1A.CH Vial: 20
Signal #2 : F:\HPCHEM\HP\15\DATA\09_10_01\15091026.D\ECD2B.CH
Acq On : 10 Sep 2001 23:42 Operator: DDC
Sample : AR1660L1BH Inst : HP_15
Misc : 5-212-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:16 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_10_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B





gd 9-12-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_10_01\15091026.D\ECD1A.CH Vial: 20
Signal #2 : F:\HPCHEM\HP\15\DATA\09_10_01\15091026.D\ECD2B.CH
Acq On : 10 Sep 2001 23:42 Operator: DDC
Sample : AR1660L1BH Inst : HP_15
Misc : 5-212-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:16 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_10_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.09	125448	165987	5.280	5.260
22)	S DCB	18.01	18.39	139605	190378	5.742	5.798
	Target Compounds:						
2)	L1 Aroclor-1016	8.16	8.63	72973	81297	119.8	134.3
3)	L1 Aroclor-1016 {2}	9.01	9.61	86753	196699	118.2	142.2
4)	L1 Aroclor-1016 {3}	10.25	10.58	85762	296023	113.0	117.7
5)	L1 Aroclor-1016 {4}	10.93	10.91	71086	98171	111.3	122.0
6)	L1 Aroclor-1016 {5}	11.63	12.02	27295	109495	113.2	125.4
	Sum Aroclor-1016			343869	781684	575.6	641.7
	Average Aroclor-1016					115.111	128.348
17)	L7 Aroclor-1260	14.09	14.21	190845	134674	117.7	129.4
18)	L7 Aroclor-1260 {2}	14.60	14.50	237502	231919	112.4	135.6
19)	L7 Aroclor-1260 {3}	15.06	14.71	227302	291255	109.2	135.7
20)	L7 Aroclor-1260 {4}	15.52	15.90	140838	159415	109.6	123.0
21)	L7 Aroclor-1260 {5}	15.97	16.12	263920	391637	104.8	124.6
	Sum Aroclor-1260			1060407	1208899	553.7	648.2
	Average Aroclor-1260					110.731	129.640

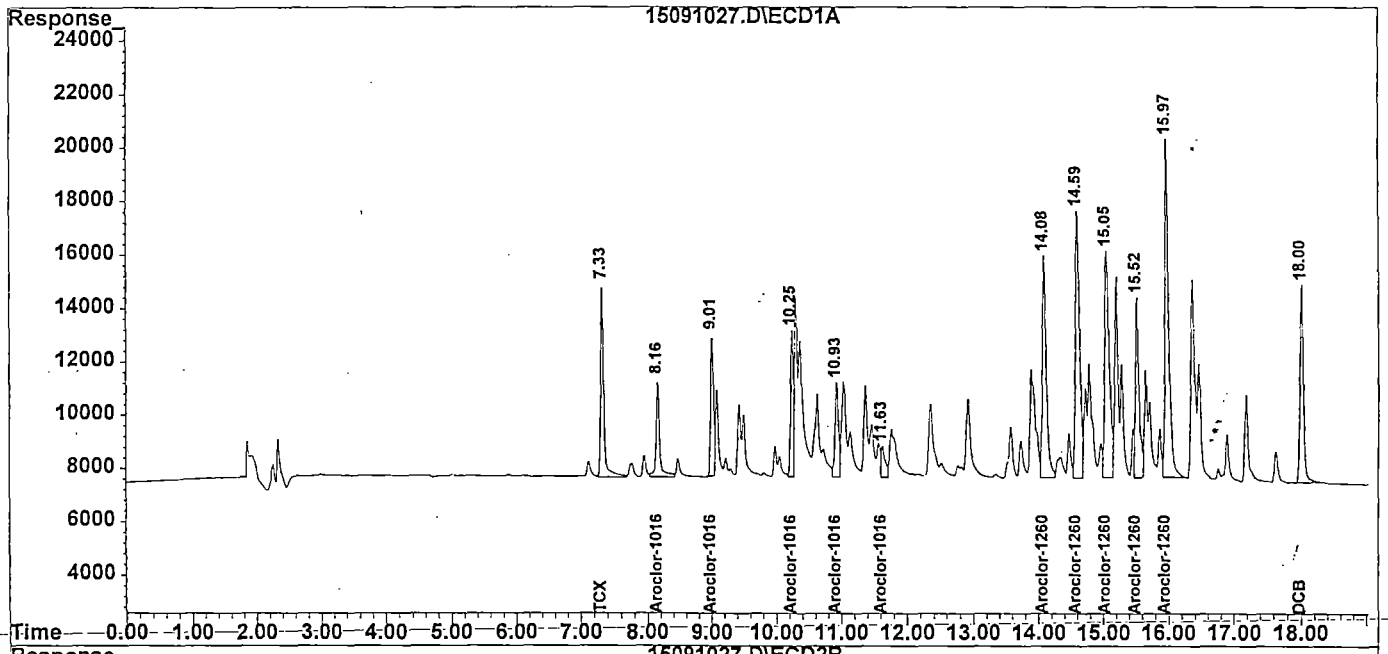
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

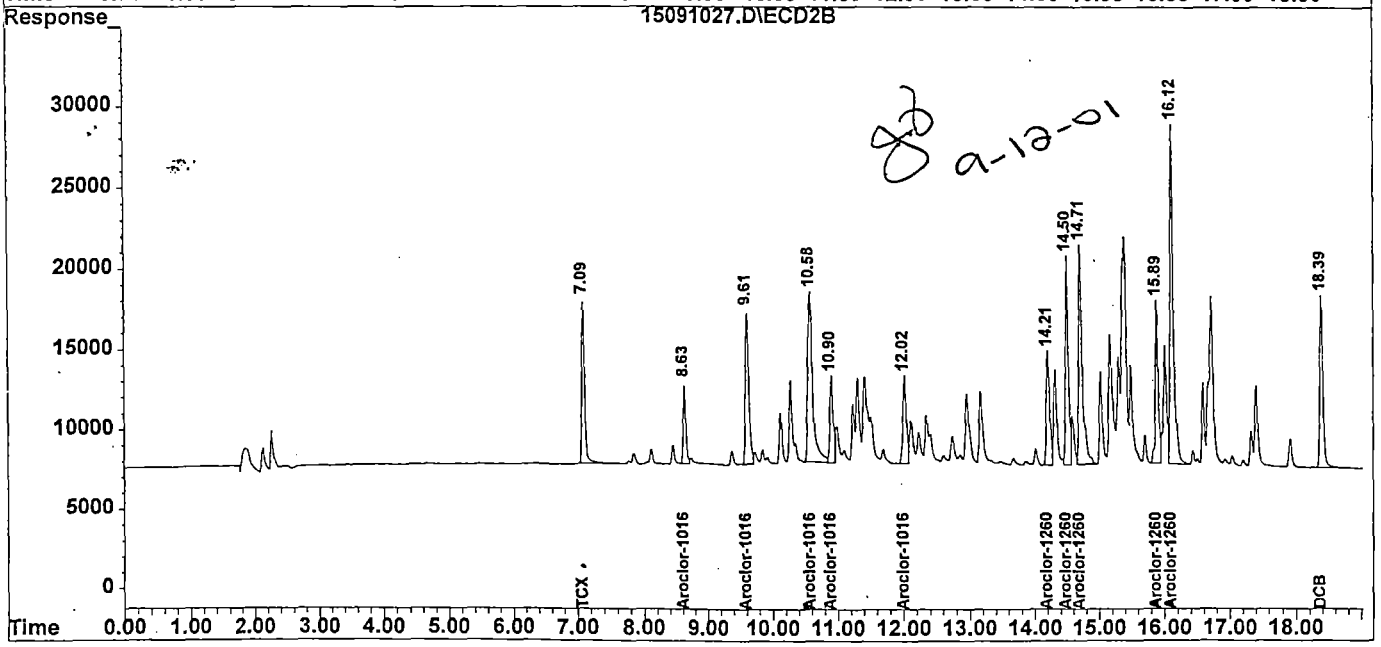
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_10_01\15091027.D\ECD1A.CH Vial: 21
Signal #2 : F:\HPCHEM\HP\15\DATA\09_10_01\15091027.D\ECD2B.CH
Acq On : 11 Sep 2001 00:05 Operator: DDC
Sample : AR1660L2BH Inst : HP_15
Misc : 5-211-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:16 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_10_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B





8 9-12-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_10_01\15091027.D\ECD1A.CH Vial: 21
Signal #2 : F:\HPCHEM\HP\15\DATA\09_10_01\15091027.D\ECD2B.CH
Acq On : 11 Sep 2001 00:05 Operator: DDC
Sample : AR1660L2BH Inst : HP_15
Misc : 5-211-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:16 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_10_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.09	236747	314235	9.898	9.779
22)	S DCB	18.01	18.39	266655	370030	10.8	11.1
	Target Compounds:						
2)	L1 Aroclor-1016	8.16	8.63	135351	146918	220.9	234.4
3)	L1 Aroclor-1016 {2}	9.01	9.61	156397	351081	213.5	243.9
4)	L1 Aroclor-1016 {3}	10.25	10.59	155192	554419	203.2	218.4
5)	L1 Aroclor-1016 {4}	10.93	10.91	133354	182411	208.7	222.0
6)	L1 Aroclor-1016 {5}	11.64	12.02	50846	201082	209.9	226.7
	Sum Aroclor-1016			631141	1435912	1056.1	1145.4
	Average Aroclor-1016					211.226	229.087
17)	L7 Aroclor-1260	14.09	14.21	350639	253614	214.3	235.5
18)	L7 Aroclor-1260 {2}	14.60	14.50	446484	427152	209.3	239.8
19)	L7 Aroclor-1260 {3}	15.05	14.71	431414	535654	204.9	243.2
20)	L7 Aroclor-1260 {4}	15.52	15.90	265222	305427	205.0	231.3
21)	L7 Aroclor-1260 {5}	15.97	16.12	500456	749499	197.4	232.1
	Sum Aroclor-1260			1994216	2271346	1030.9	1182.0
	Average Aroclor-1260					206.172	236.393

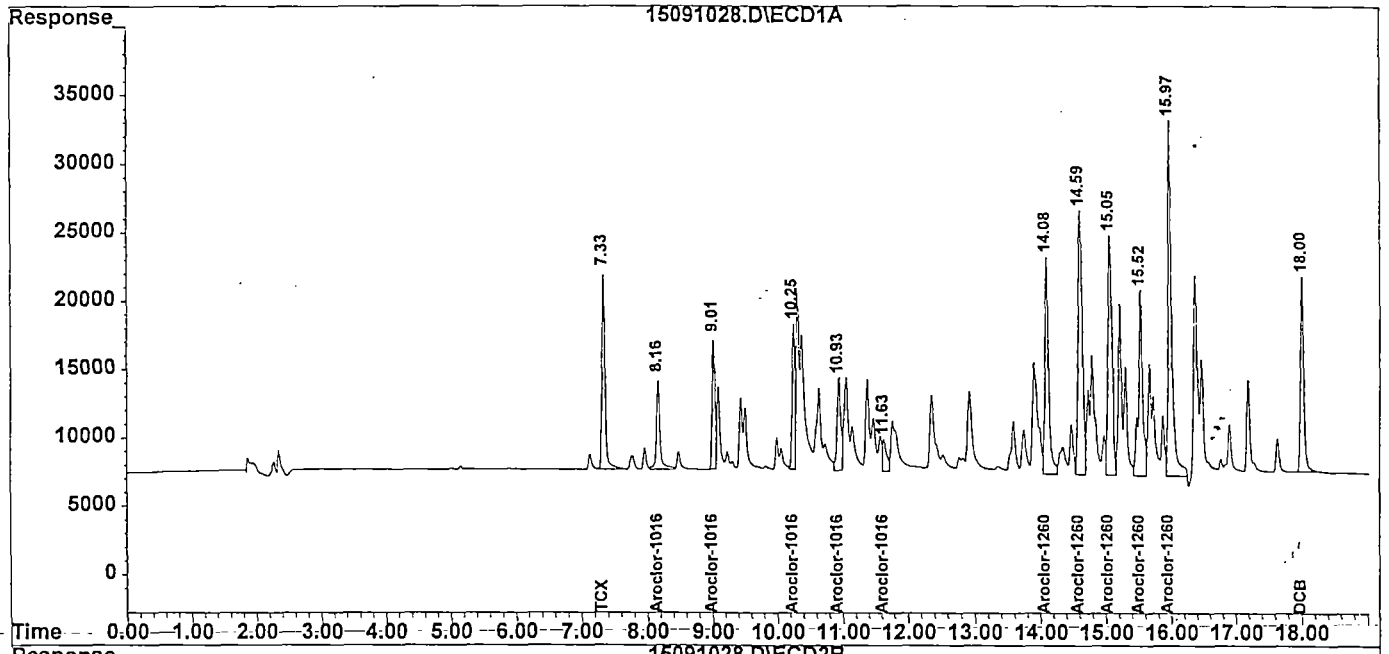
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

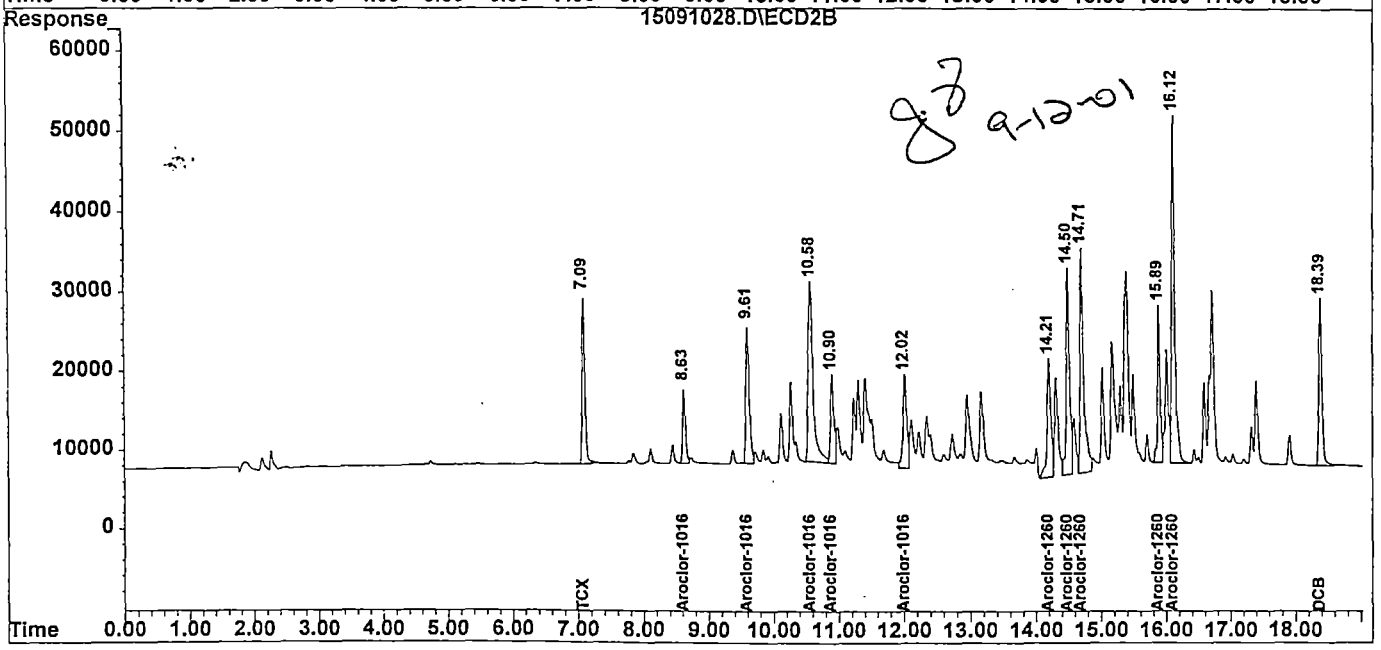
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_10_01\15091028.D\ECD1A.CH Vial: 22
Signal #2 : F:\HPCHEM\HP\15\DATA\09_10_01\15091028.D\ECD2B.CH
Acq On : 11 Sep 2001 00:28 Operator: DDC
Sample : AR1660L3BQ Inst : HP_15
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:16 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_10_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_10_01\15091028.D\ECD1A.CH Vial: 22
Signal #2 : F:\HPCHEM\HP\15\DATA\09_10_01\15091028.D\ECD2B.CH
Acq On : 11 Sep 2001 00:28 Operator: DDC
Sample : AR1660L3BQ Inst : HP_15
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:16 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_10_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	7.33	7.09	449640	637333	18.5	19.5	
22)	S DCB	18.01	18.39	499302	720056	19.7	20.9	
	Target Compounds:							
2)	L1 Aroclor-1016	8.16	8.63	248569	290017	398.9	448.7	
3)	L1 Aroclor-1016 {2}	9.01	9.61	286955	658955	391.1	440.0	
4)	L1 Aroclor-1016 {3}	10.25	10.58	299157	1188292	391.5	460.6	
5)	L1 Aroclor-1016 {4}	10.93	10.90	254831	385481	398.9	458.9	
6)	L1 Aroclor-1016 {5}	11.63	12.02	100474	471427	414.9	517.0	
	Sum Aroclor-1016			1189986	2994172	1995.3	2325.1	
	Average Aroclor-1016					399.059	465.024	
17)	L7 Aroclor-1260	14.09	14.21	670271	619816	410.6	556.1	#
18)	L7 Aroclor-1260 {2}	14.60	14.50	870490	935053	409.5	508.5	
19)	L7 Aroclor-1260 {3}	15.05	14.71	781558	1109019	372.6	489.2	#
20)	L7 Aroclor-1260 {4}	15.52	15.89	625055	582874	488.5	432.0	
21)	L7 Aroclor-1260 {5}	15.97	16.12	1049311	1450325	420.3	438.1	
	Sum Aroclor-1260			3996685	4697088	2101.6	2424.0	
	Average Aroclor-1260					420.311	484.790	

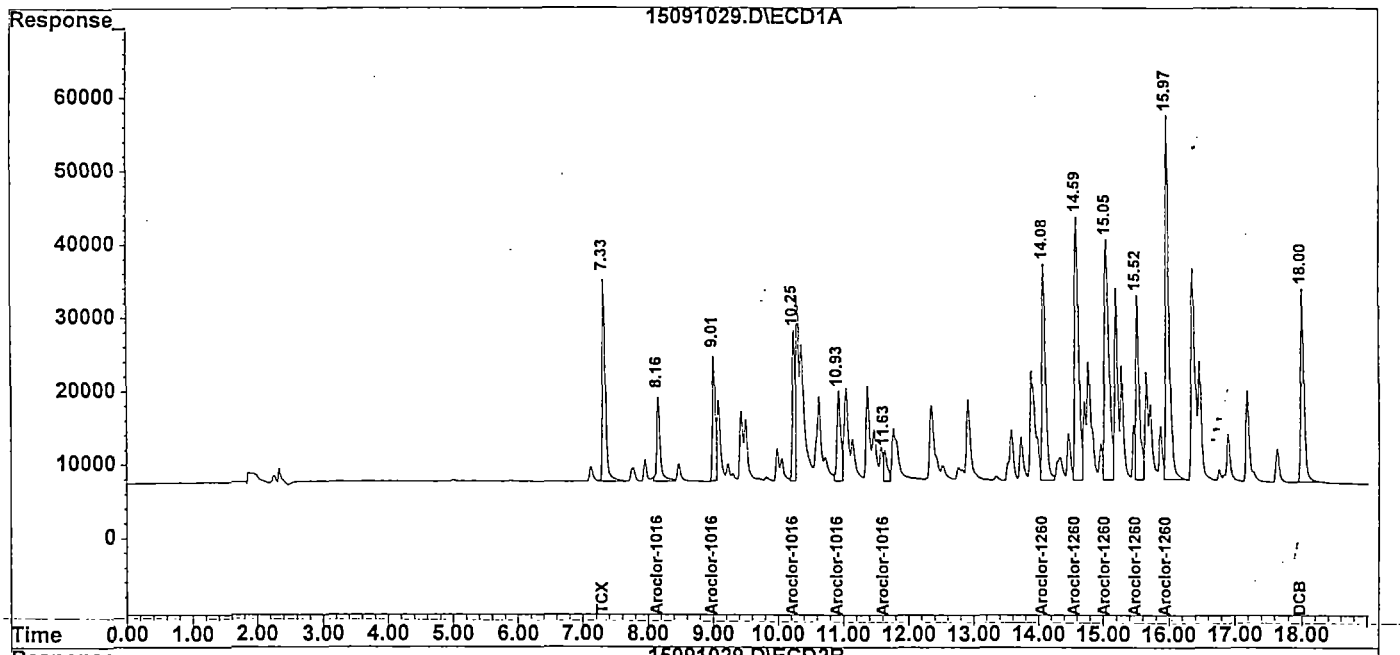
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

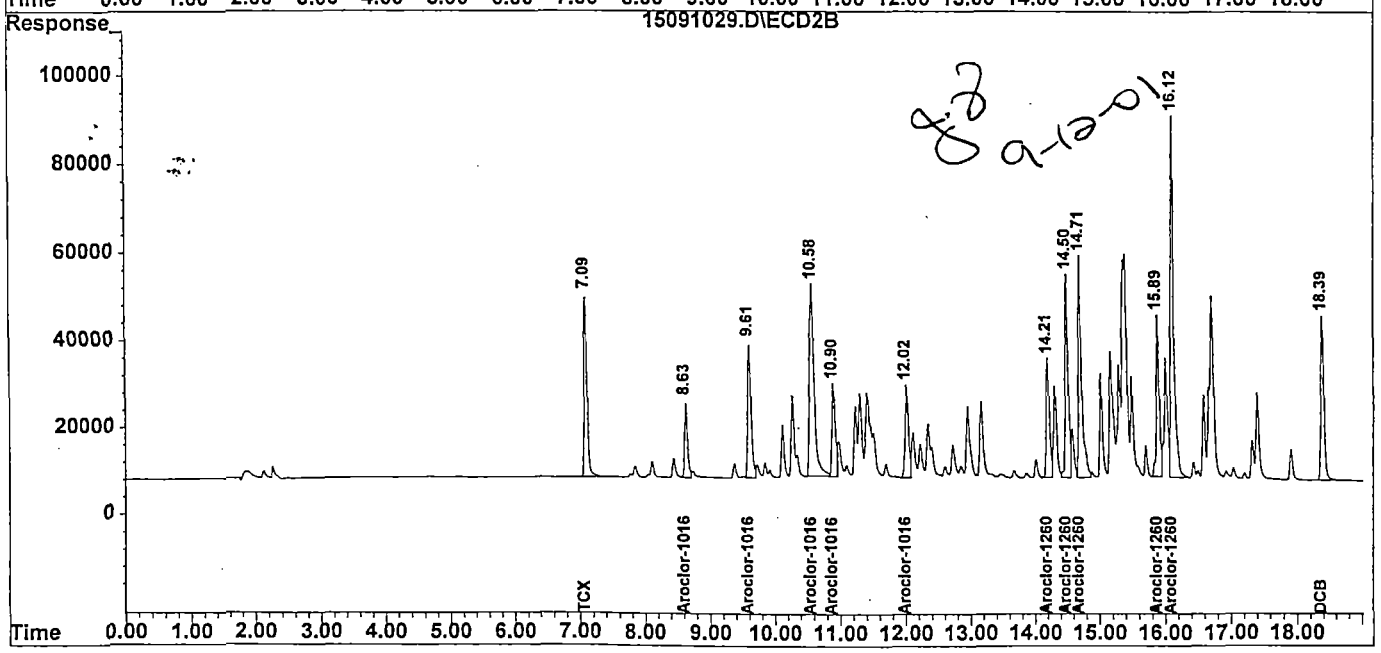
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_10_01\15091029.D\ECD1A.CH Vial: 23
Signal #2 : F:\HPCHEM\HP\15\DATA\09_10_01\15091029.D\ECD2B.CH
Acq On : 11 Sep 2001 00:51 Operator: DDC
Sample : AR1660L4BH Inst : HP_15
Misc : 5-209-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:16 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_10_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B





8.8 9-10-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_10_01\15091029.D\ECD1A.CH Vial: 23
Signal #2 : F:\HPCHEM\HP\15\DATA\09_10_01\15091029.D\ECD2B.CH
Acq On : 11 Sep 2001 00:51 Operator: DDC
Sample : AR1660L4BH Inst : HP_15
Misc : 5-209-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:16 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_10_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.09	884198	1284641	37.3	39.8
22)	S DCB	18.01	18.39	969402	1323382	38.4	38.2
	Target Compounds:						
2)	L1 Aroclor-1016	8.16	8.63	444583	541124	718.9	816.3
3)	L1 Aroclor-1016 {2}	9.01	9.61	520859	1185067	722.1	772.6
4)	L1 Aroclor-1016 {3}	10.25	10.58	575902	2189131	765.9	829.5
5)	L1 Aroclor-1016 {4}	10.93	10.90	463776	711319	736.9	826.0
6)	L1 Aroclor-1016 {5}	11.63	12.02	170798	766353	710.8	795.9
	Sum Aroclor-1016			2175918	5392993	3654.6	4040.3
	Average Aroclor-1016					730.916	808.054
17)	L7 Aroclor-1260	14.08	14.21	1163207	942070	718.2	783.4
18)	L7 Aroclor-1260 {2}	14.59	14.50	1577884	1500472	749.1	773.0
19)	L7 Aroclor-1260 {3}	15.05	14.71	1595259	1830198	783.1	769.8
20)	L7 Aroclor-1260 {4}	15.52	15.89	950039	1122262	722.8	822.2
21)	L7 Aroclor-1260 {5}	15.97	16.12	1877184	2828514	759.1	839.9
	Sum Aroclor-1260			7163574	8223515	3732.3	3988.4
	Average Aroclor-1260					746.457	797.677

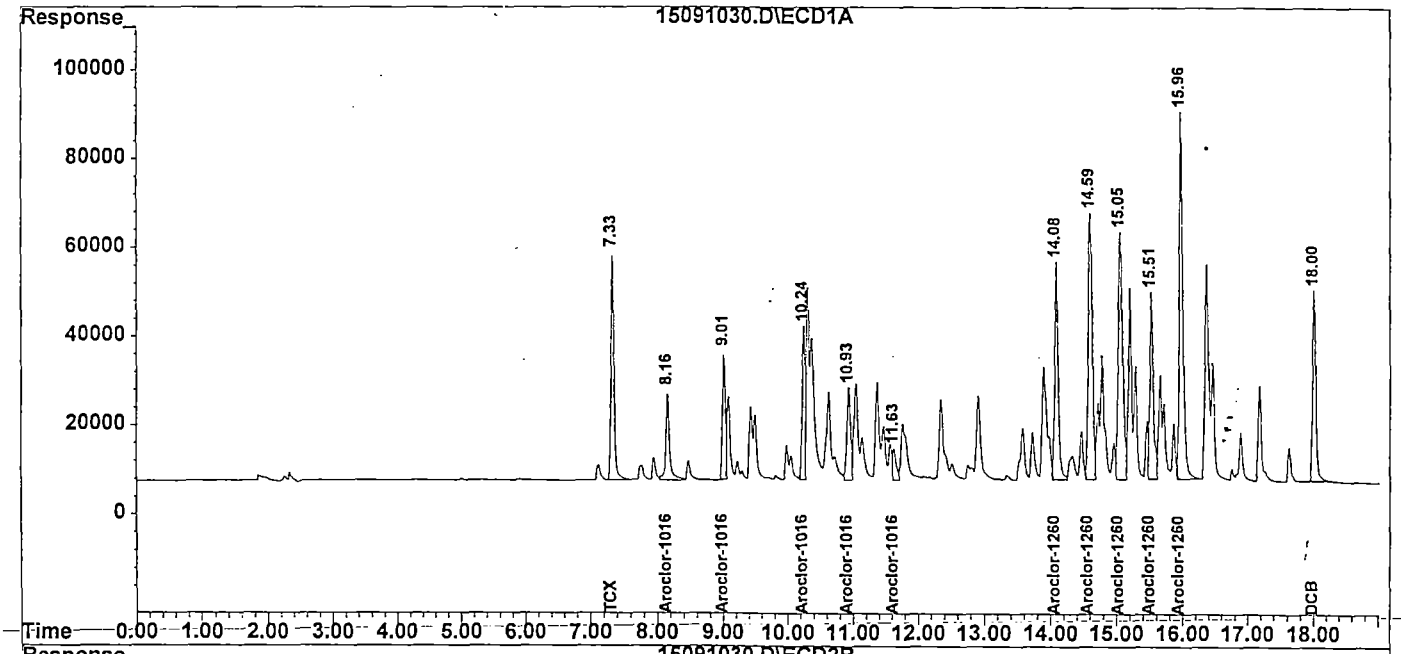
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

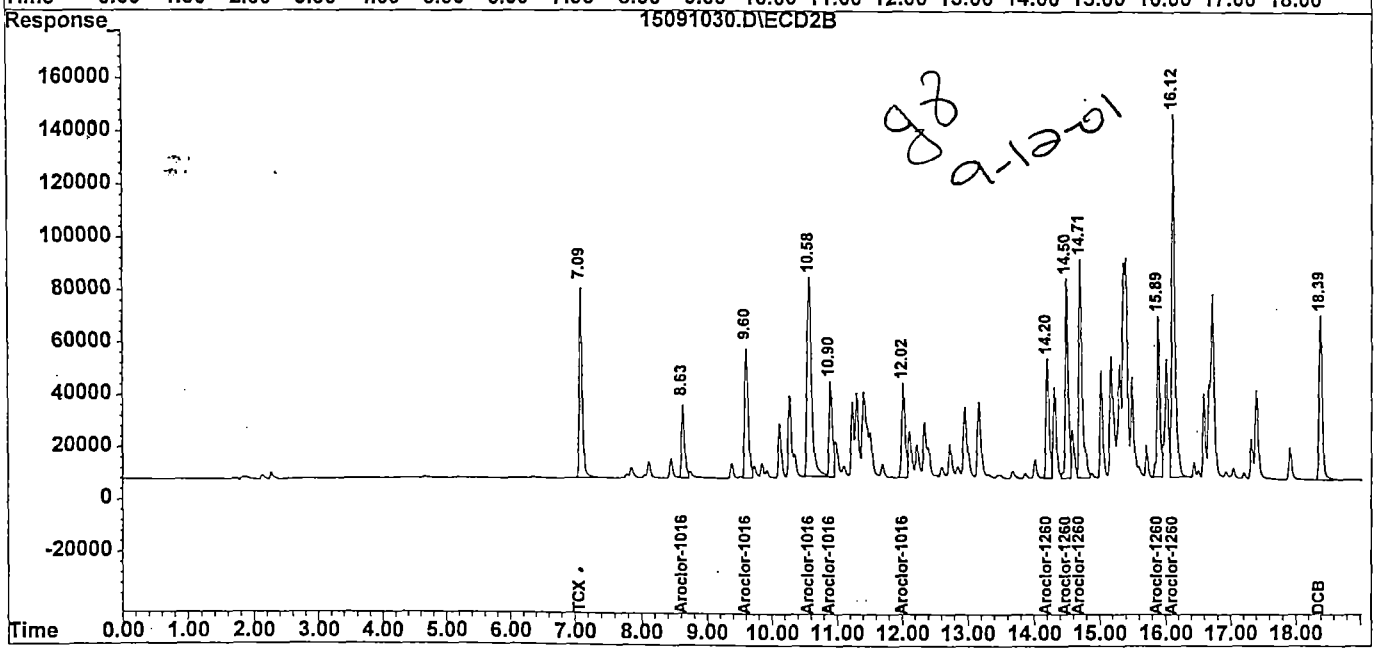
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_10_01\15091030.D\ECD1A.CH Vial: 24
Signal #2 : F:\HPCHEM\HP\15\DATA\09_10_01\15091030.D\ECD2B.CH
Acq On : 11 Sep 2001 1:14 Operator: DDC
Sample : AR1660L5BH Inst : HP_15
Misc : 5-208-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:16 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_10_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B





gg 9-12-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_10_01\15091030.D\ECD1A.CH Vial: 24
Signal #2 : F:\HPCHEM\HP\15\DATA\09_10_01\15091030.D\ECD2B.CH
Acq On : 11 Sep 2001 1:14 Operator: DDC
Sample : AR1660L5BH Inst : HP_15
Misc : 5-208-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:16 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_10_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.09	1651547	2353386	71.1	73.7
22)	S DCB	18.00	18.39	1566003	2220161	62.0	63.9
	Target Compounds:						
2)	L1 Aroclor-1016	8.16	8.63	781725	906683	1266.9	1314.0 E
3)	L1 Aroclor-1016 {2}	9.01	9.61	873630	1952777	1210.1	1229.7 E
4)	L1 Aroclor-1016 {3}	10.25	10.58	985076	3781458	1300.9	1385.2 E
5)	L1 Aroclor-1016 {4}	10.93	10.90	794898	1217491	1263.7	1364.0 E
6)	L1 Aroclor-1016 {5}	11.63	12.02	284763	1305557	1191.0	1307.4 E
	Sum Aroclor-1016			3720091	9163966	6232.6	6600.4
	Average Aroclor-1016					1246.528	1320.070
17)	L7 Aroclor-1260	14.08	14.21	1869498	1572632	1151.2	1256.8 E
18)	L7 Aroclor-1260 {2}	14.59	14.50	2583884	2429266	1219.6	1205.7 E
19)	L7 Aroclor-1260 {3}	15.05	14.71	2631955	2939647	1282.2	1190.2 E
20)	L7 Aroclor-1260 {4}	15.52	15.89	1545355	1831462	1170.6	1294.4 E
21)	L7 Aroclor-1260 {5}	15.96	16.12	3077771	4640001	1243.1	1323.7 E
	Sum Aroclor-1260			11708463	13413008	6066.8	6270.7
	Average Aroclor-1260					1213.353	1254.148

(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_15

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Wed Sep 19 08:09:29 2001
Response via : Initial Calibration

Continuing Calibration File: 15091827.D

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

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	22.799	21.601	E3	5.3	96
2	L1	Aroclor-1016	614.444	623.832		-1.5	100
3	L1	Aroclor-1016 {2}	712.799	644.492		9.6	90
4	L1	Aroclor-1016 {3}	743.404	524.577		29.4#	70
5	L1	Aroclor-1016 {4}	618.248	653.233		-5.7	103
6	L1	Aroclor-1016 {5}	233.968	211.396		9.6	84
17	L7	Aroclor-1260	1.592	1.521	E3	4.4	91
18	L7	Aroclor-1260 {2}	2.074	2.060	E3	0.7	95
19	L7	Aroclor-1260 {3}	2.005	1.992	E3	0.6	102
20	L7	Aroclor-1260 {4}	1.290	1.129	E3	12.5	72
21	L7	Aroclor-1260 {5}	2.407	2.072	E3	13.9	79
22	S	DCB	24.672	19.029	E3	22.9#	76

Signal #2
Continuing Calibration File: 15091827.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	31.604	29.833	E3	5.6	94
2	L1	Aroclor-1016	703.136	711.184		-1.1	98
3	L1	Aroclor-1016 {2}	1.614	1.653	E3	-2.4	100
4	L1	Aroclor-1016 {3}	2.761	3.003	E3	-8.8	101
5	L1	Aroclor-1016 {4}	901.510	938.370		-4.1	97
6	L1	Aroclor-1016 {5}	1.011	1.038	E3	-2.7	88
17	L7	Aroclor-1260	1.265	1.215	E3	4.0	78
18	L7	Aroclor-1260 {2}	2.037	1.958	E3	3.9	84
19	L7	Aroclor-1260 {3}	2.498	2.320	E3	7.1	84
20	L7	Aroclor-1260 {4}	1.425	1.328	E3	6.8	91
21	L7	Aroclor-1260 {5}	3.545	3.106	E3	12.4	86
22	S	DCB	34.384	24.579	E3	28.5#	68

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

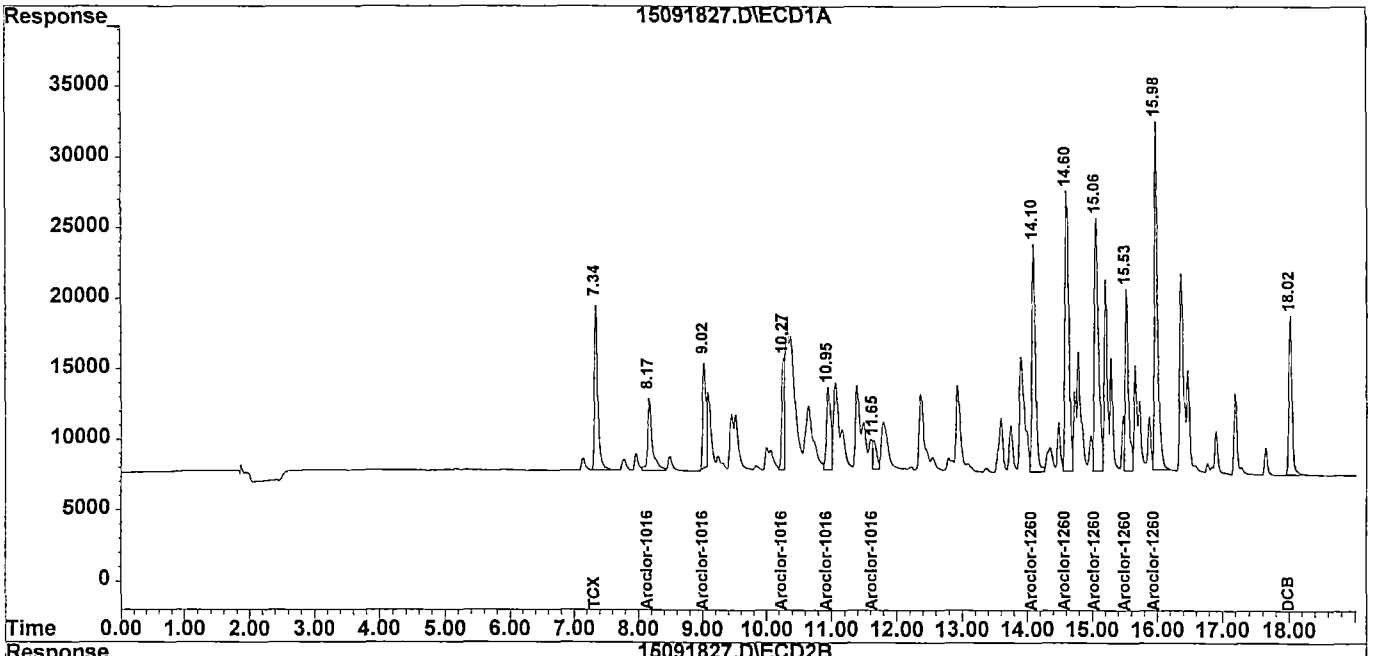
15091827.D XPCBI10.M Wed Sep 19 08:09:35 2001

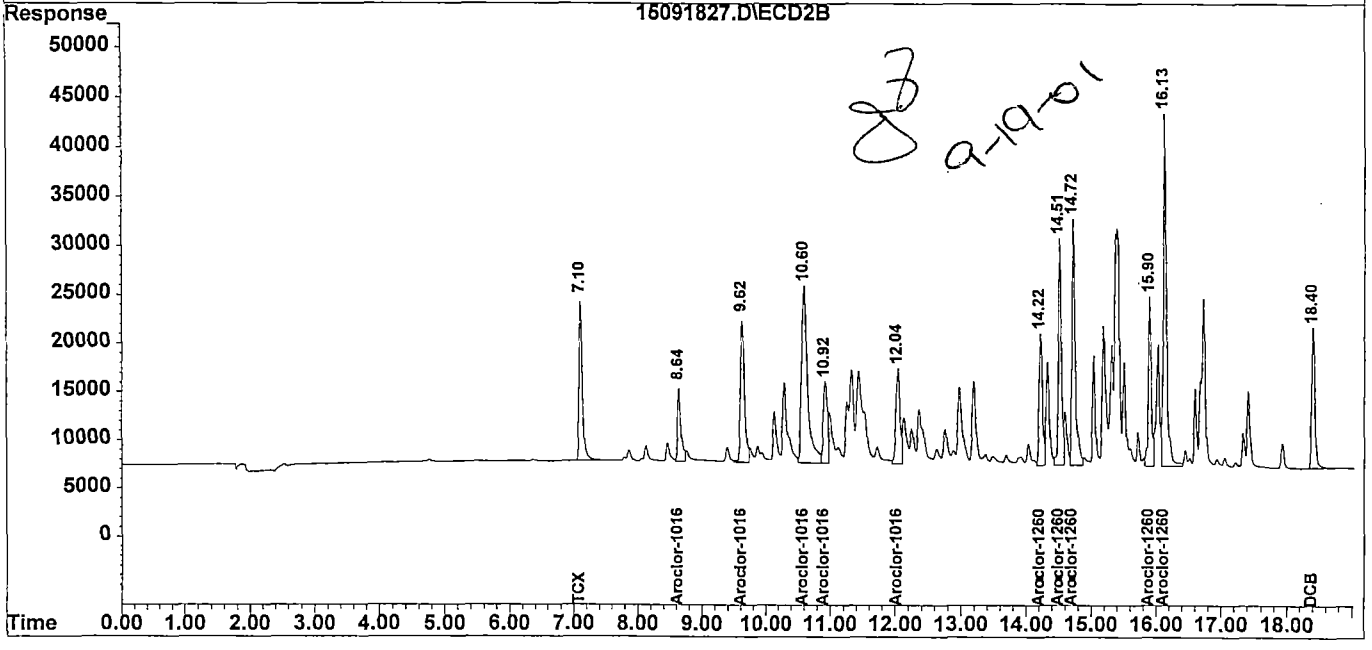
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091827.D\ECD1A.CH Vial: 21
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091827.D\ECD2B.CH
Acq On : 18 Sep 2001 19:20 Operator: SA
Sample : AR1660L3B4 Inst : HP_15
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 8:09 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B





9-19-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091827.D\ECD1A.CH Vial: 21
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091827.D\ECD2B.CH
Acq On : 18 Sep 2001 19:20 Operator: SA
Sample : AR1660L3B4 Inst : HP_15
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 8:09 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

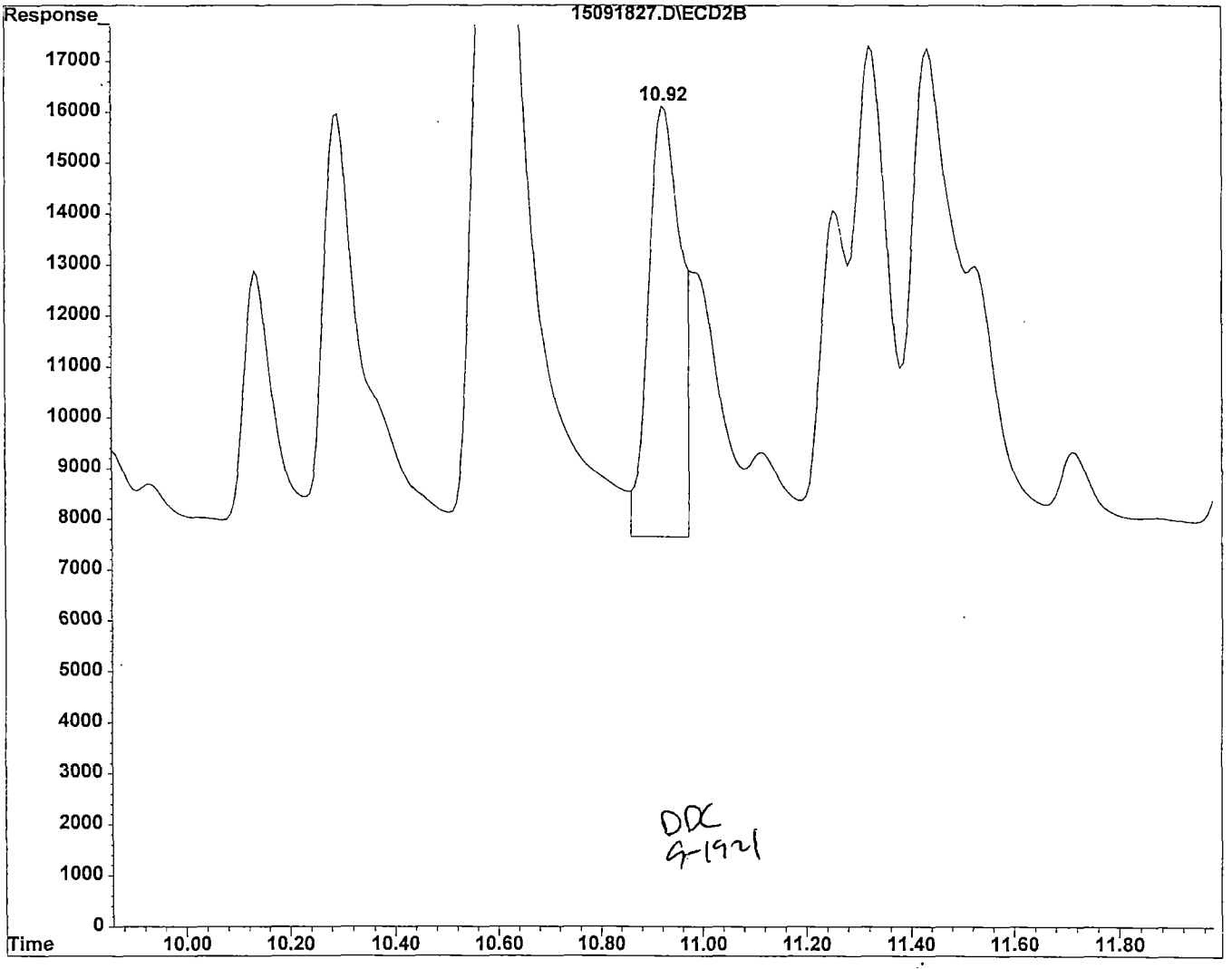
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.34	7.10	432023	596656	18.9	18.9
22)	S DCB	18.02	18.40	380589	491571	15.4	14.3
	Target Compounds:						
2)	L1 Aroclor-1016	8.17	8.64	249533	284474	406.1	404.6
3)	L1 Aroclor-1016 {2}	9.03	9.62	257797	661239	361.7	409.6
4)	L1 Aroclor-1016 {3}	10.27f	10.60	209831	1201328	282.3	435.2 #
5)	L1 Aroclor-1016 {4}	10.96	10.92	261293	375348	422.6	416.4m
6)	L1 Aroclor-1016 {5}	11.65	12.04	84559	415067	361.4	410.7
	Sum Aroclor-1016			1063012	2937456	1834.1	2076.4
	Average Aroclor-1016					366.816	415.288
17)	L7 Aroclor-1260	14.10	14.22	608469	485932	382.2	384.1
18)	L7 Aroclor-1260 {2}	14.61	14.51	824005	783385	397.3	384.5
19)	L7 Aroclor-1260 {3}	15.06	14.72	796785	927994	397.5	371.5
20)	L7 Aroclor-1260 {4}	15.53	15.90	451618	531326	350.1	372.8
21)	L7 Aroclor-1260 {5}	15.98	16.13	828712	1242482	344.3	350.5
	Sum Aroclor-1260			3509588	3971120	1871.3	1863.5
	Average Aroclor-1260					374.264	372.701

DDC 9-19-21

(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\15\DATA\09_18_01\15091827.D
Date Acquired: 18 Sep 2001 19:20
Inst: HP_15 Operator ID: SA
Name: AR1660L3B4
Misc: 5-210-7
Method: F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 8:09 2001 Quant Results File: XPCBI10.RES



Aroclor-1016 {4} #2 10.92min area: 375348 m

Integration Time Range: 10.86 - 10.98

F:\HPCHEM\HP\15\DATA\09_18_01\15091827.D
Report generated: Wed Sep 19 08:14:01 2001

Continuing Calibration Report HP_15

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Wed Sep 19 08:11:06 2001
Response via : Initial Calibration

Continuing Calibration File: 15091839.D

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

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	22.799	21.981	E3	3.6	98
2	L1	Aroclor-1016	614.444	625.372		-1.8	101
3	L1	Aroclor-1016 {2}	712.799	642.165		9.9	90
4	L1	Aroclor-1016 {3}	743.404	510.388		31.3#	68
5	L1	Aroclor-1016 {4}	618.248	656.276		-6.2	103
6	L1	Aroclor-1016 {5}	233.968	222.644		4.8	89
17	L7	Aroclor-1260	1.592	1.538	E3	3.4	92
18	L7	Aroclor-1260 {2}	2.074	2.098	E3	-1.2	96
19	L7	Aroclor-1260 {3}	2.005	2.027	E3	-1.1	104
20	L7	Aroclor-1260 {4}	1.290	1.165	E3	9.7	75
21	L7	Aroclor-1260 {5}	2.407	2.161	E3	10.2	82
22	S	DCB	24.672	20.259	E3	17.9#	81

Signal #2
Continuing Calibration File: 15091839.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	31.604	31.496	E3	0.3	99
2	L1	Aroclor-1016	703.136	709.833		-1.0	98
3	L1	Aroclor-1016 {2}	1.614	1.814	E3	-12.4	110
4	L1	Aroclor-1016 {3}	2.761	2.893	E3	-4.8	97
5	L1	Aroclor-1016 {4}	901.510	932.100		-3.4	97
6	L1	Aroclor-1016 {5}	1.011	1.021	E3	-1.0	87
17	L7	Aroclor-1260	1.265	1.212	E3	4.2	78
18	L7	Aroclor-1260 {2}	2.037	1.970	E3	3.3	84
19	L7	Aroclor-1260 {3}	2.498	2.354	E3	5.8	85
20	L7	Aroclor-1260 {4}	1.425	1.434	E3	-0.6	98
21	L7	Aroclor-1260 {5}	3.545	3.313	E3	6.5	91
22	S	DCB	34.384	26.844	E3	21.9#	75

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

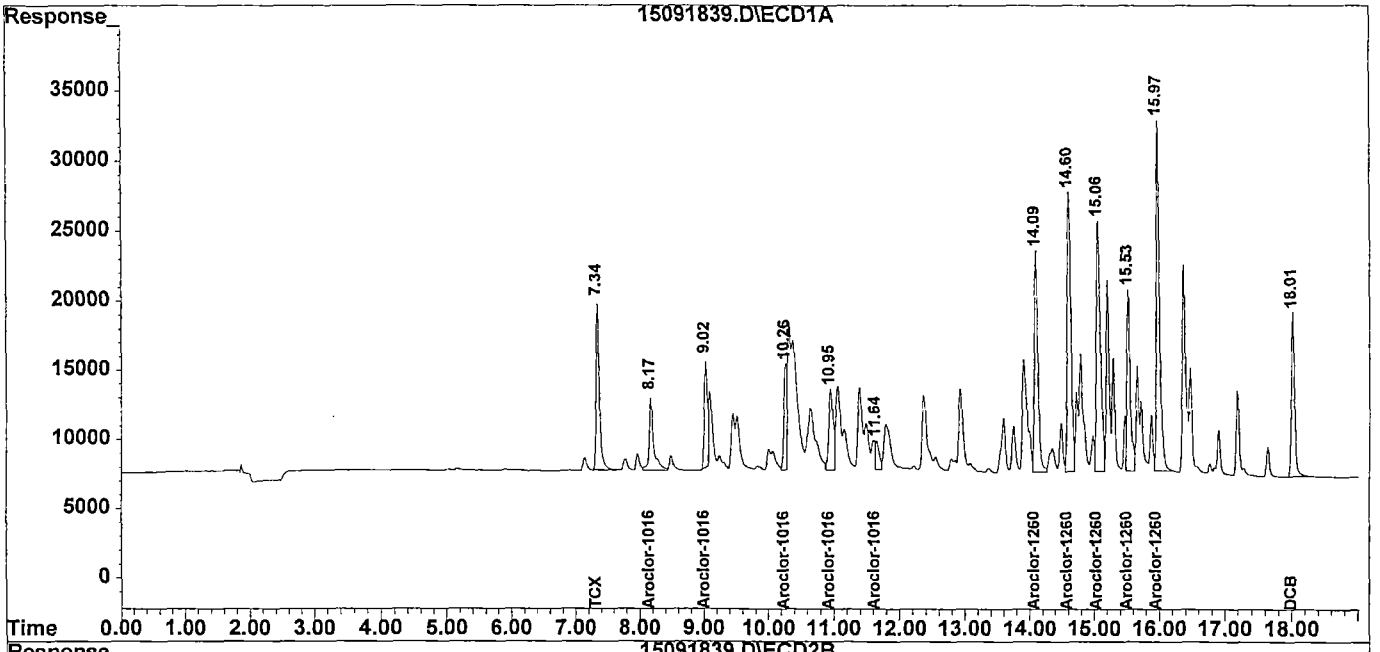
15091839.D XPCBI10.M Wed Sep 19 08:11:13 2001

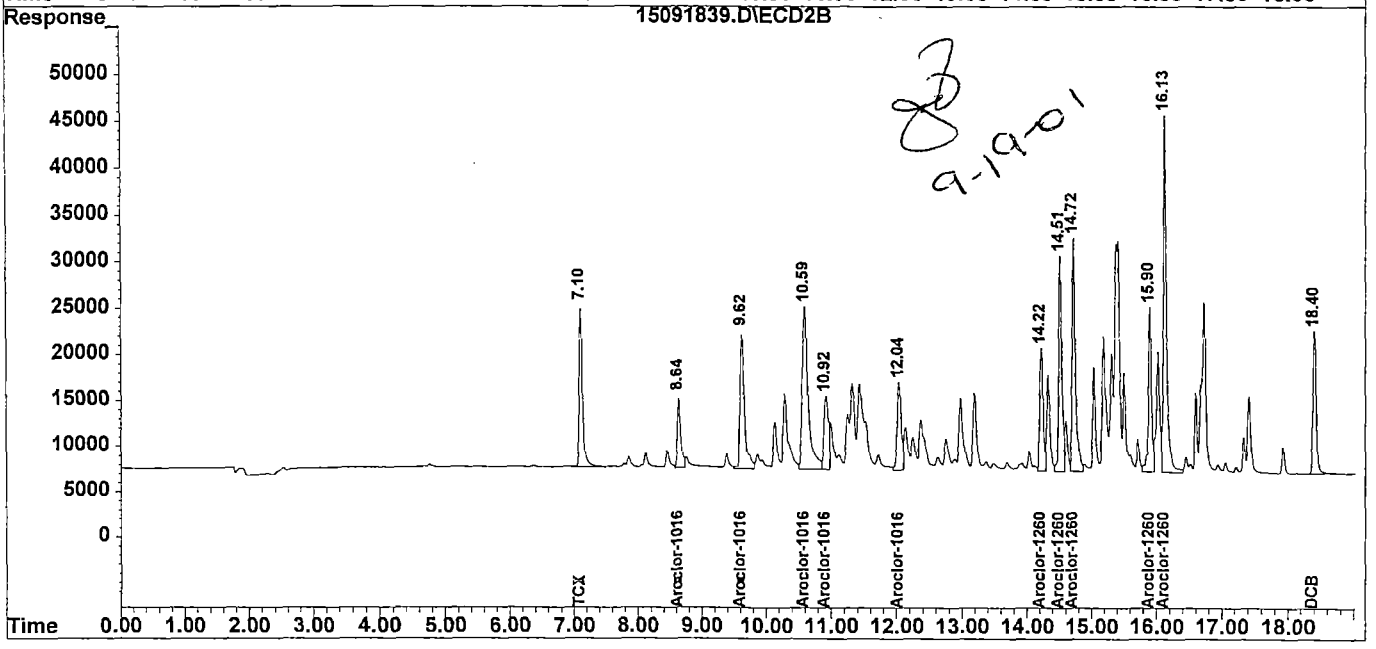
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091839.D\ECD1A.CH Vial: 33
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091839.D\ECD2B.CH
Acq On : 18 Sep 2001 23:57 Operator: SA
Sample : AR1660L3B6 Inst : HP_15
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 8:10 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B





8 9-19-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091839.D\ECD1A.CH Vial: 33
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091839.D\ECD2B.CH
Acq On : 18 Sep 2001 23:57 Operator: SA
Sample : AR1660L3B6 Inst : HP_15
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 8:10 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 2001
Response via : Initial Calibration

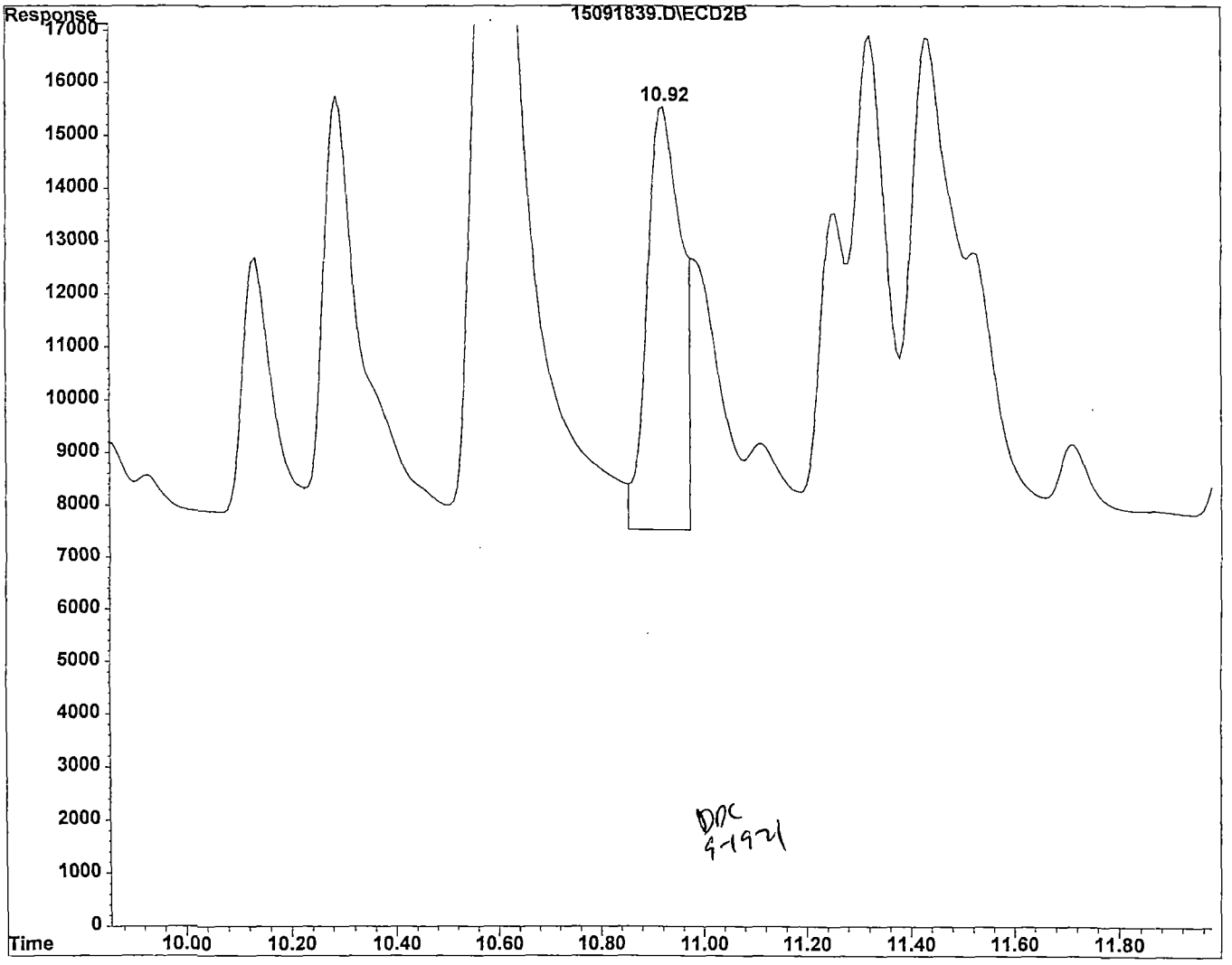
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	7.34	7.10	439622	629924	19.3	19.9	
22)	S DCB	18.02	18.40	405188	536889	16.4	15.6	
	Target Compounds:							
2)	L1 Aroclor-1016	8.17	8.64	250149	283933	407.1	403.8	
3)	L1 Aroclor-1016 {2}	9.02	9.62	256866	725656	360.4	449.5	
4)	L1 Aroclor-1016 {3}	10.27	10.60	204155	1157356	274.6	419.2	# DDC 9-19-01
5)	L1 Aroclor-1016 {4}	10.95	10.92	262511	372840	424.6	413.6m	
6)	L1 Aroclor-1016 {5}	11.64	12.04	89058	408452	380.6	404.2	
	Sum Aroclor-1016			1062738	2948237	1847.3	2090.3	
	Average Aroclor-1016					369.469	418.064	
17)	L7 Aroclor-1260	14.10	14.22	615144	484664	386.4	383.1	
18)	L7 Aroclor-1260 {2}	14.60	14.51	839275	788051	404.6	386.8	
19)	L7 Aroclor-1260 {3}	15.06	14.72	810670	941430	404.4	376.9	
20)	L7 Aroclor-1260 {4}	15.53	15.90	466192	573458	361.4	402.4	
21)	L7 Aroclor-1260 {5}	15.98	16.13	864254	1325199	359.1	373.8	
	Sum Aroclor-1260			3595535	4112802	1915.9	1923.1	
	Average Aroclor-1260					383.173	384.613	

(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\15\DATA\09_18_01\15091839.D
Date Acquired: 18 Sep 2001 23:57
Inst: HP_15 Operator ID: SA
Name: AR1660L3B6
Misc: 5-210-7
Method: F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 8:10 2001 Quant Results File: XPCBI10.RES



Aroclor-1016 {4} #2 10.92min area: 372840 m

Integration Time Range: 10.85 - 10.98

F:\HPCHEM\HP\15\DATA\09_18_01\15091839.D
Report generated: Wed Sep 19 08:14:03 2001

Continuing Calibration Report HP_15

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Wed Sep 19 08:12:38 2001
Response via : Initial Calibration

Continuing Calibration File: 15091854.D

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

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	22.799	22.322	E3	2.1	99
2	L1	Aroclor-1016	614.444	638.990		-4.0	103
3	L1	Aroclor-1016 {2}	712.799	666.244		6.5	93
4	L1	Aroclor-1016 {3}	743.404	549.293		26.1#	73
5	L1	Aroclor-1016 {4}	618.248	662.677		-7.2	104
6	L1	Aroclor-1016 {5}	233.968	218.734		6.5	87
17	L7	Aroclor-1260	1.592	1.579	E3	0.8	94
18	L7	Aroclor-1260 {2}	2.074	2.142	E3	-3.3	98
19	L7	Aroclor-1260 {3}	2.005	2.059	E3	-2.7	105
20	L7	Aroclor-1260 {4}	1.290	1.163	E3	9.9	74
21	L7	Aroclor-1260 {5}	2.407	2.189	E3	9.0	83
22	S	DCB	24.672	21.746	E3	11.9	87

Signal #2
Continuing Calibration File: 15091854.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	31.604	32.559	E3	-3.0	102
2	L1	Aroclor-1016	703.136	741.919		-5.5	102
3	L1	Aroclor-1016 {2}	1.614	1.899	E3	-17.6#	115
4	L1	Aroclor-1016 {3}	2.761	3.042	E3	-10.2	102
5	L1	Aroclor-1016 {4}	901.510	957.330		-6.2	99
6	L1	Aroclor-1016 {5}	1.011	1.079	E3	-6.7	92
17	L7	Aroclor-1260	1.265	1.265	E3	-0.0	82
18	L7	Aroclor-1260 {2}	2.037	2.043	E3	-0.3	87
19	L7	Aroclor-1260 {3}	2.498	2.422	E3	3.0	87
20	L7	Aroclor-1260 {4}	1.425	1.399	E3	1.8	96
21	L7	Aroclor-1260 {5}	3.545	3.270	E3	7.8	90
22	S	DCB	34.384	28.753	E3	16.4#	80

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

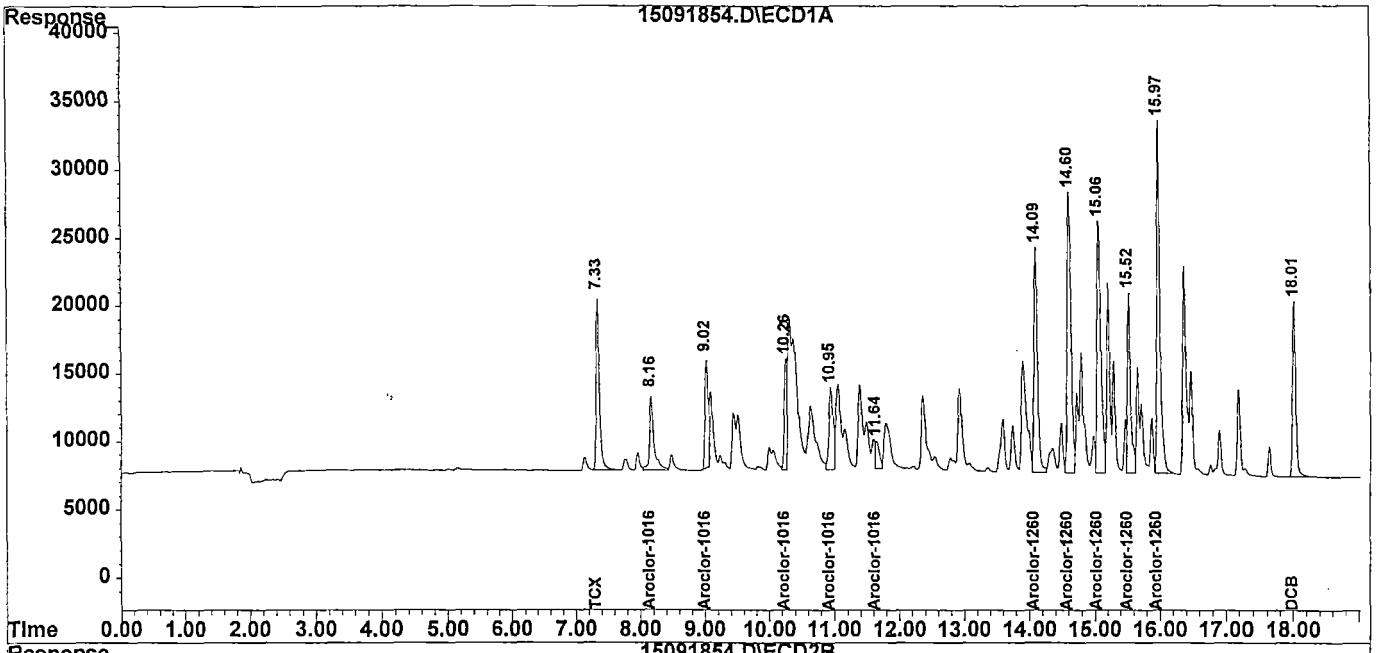
15091854.D XPCBI10.M Wed Sep 19 08:12:44 2001

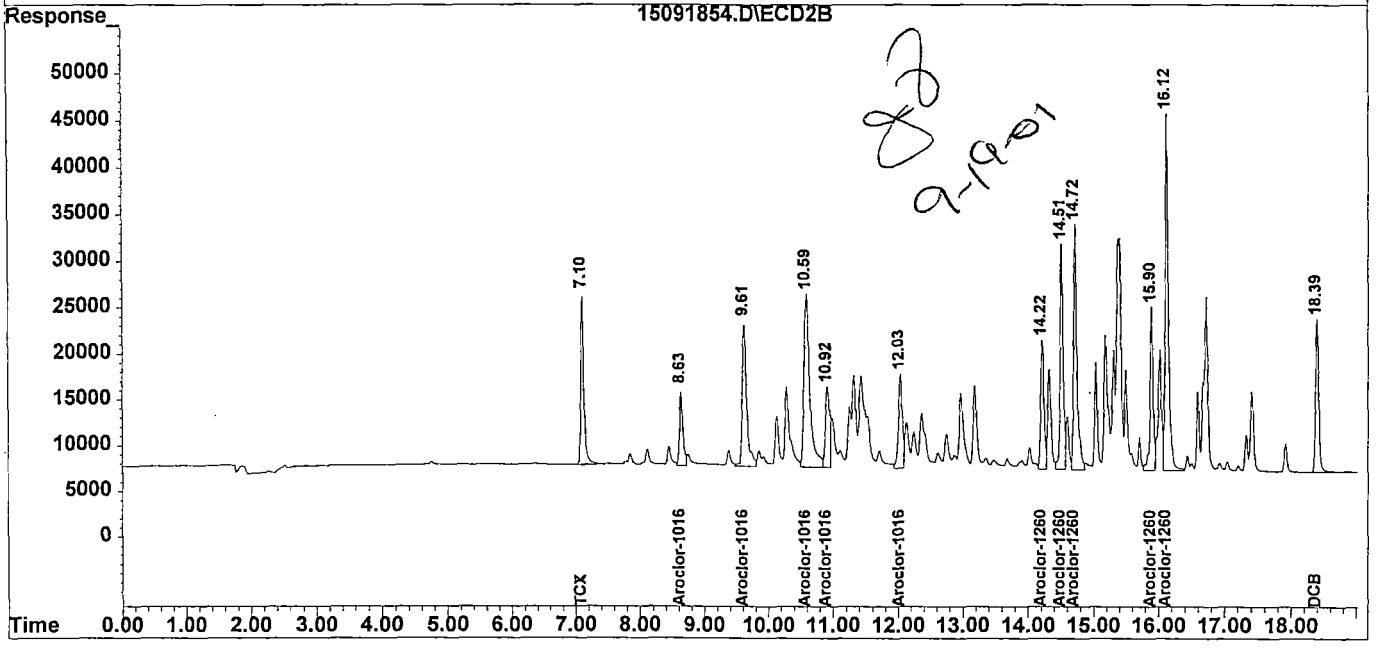
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091854.D\ECD1A.CH Vial: 48
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091854.D\ECD2B.CH
Acq On : 19 Sep 2001 5:44 Operator: SA
Sample : AR1660L3B8 Inst : HP_15
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 8:12 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B





8
9-19-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091854.D\ECD1A.CH Vial: 48
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091854.D\ECD2B.CH
Acq On : 19 Sep 2001 5:44 Operator: SA
Sample : AR1660L3B8 Inst : HP_15
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 8:12 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

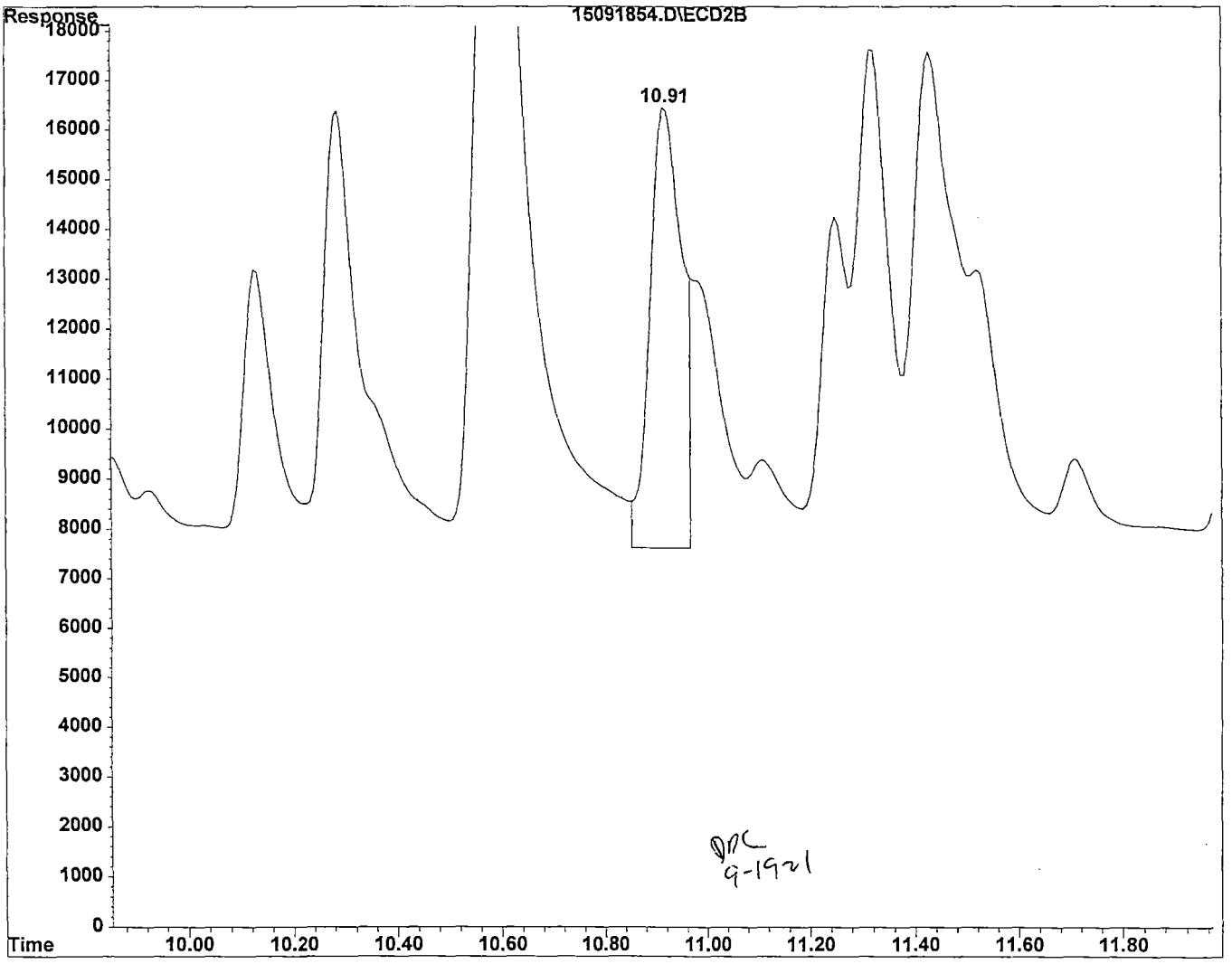
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	7.34	7.10	446447	651189	19.6	20.6	
22)	S DCB	18.01	18.40	434929	575066	17.6	16.7	
	Target Compounds:							
2)	L1 Aroclor-1016	8.17	8.64	255596	296768	416.0	422.1	
3)	L1 Aroclor-1016 {2}	9.02	9.62	266498	759647	373.9	470.6	#
4)	L1 Aroclor-1016 {3}	10.26	10.59	219717	1216738	295.6	440.8	#
5)	L1 Aroclor-1016 {4}	10.95	10.91	265071	382932	428.7	424.8m	
6)	L1 Aroclor-1016 {5}	11.64	12.04	87494	431428	374.0	426.9	
	Sum Aroclor-1016			1094375	3087512	1888.1	2185.1	
	Average Aroclor-1016					377.622	437.014	
17)	L7 Aroclor-1260	14.09	14.22	631567	506045	396.7	400.0	
18)	L7 Aroclor-1260 {2}	14.60	14.51	856990	817090	413.2	401.1	
19)	L7 Aroclor-1260 {3}	15.06	14.72	823497	968920	410.8	387.9	
20)	L7 Aroclor-1260 {4}	15.53	15.90	465202	559575	360.6	392.6	
21)	L7 Aroclor-1260 {5}	15.98	16.13	875711	1308079	363.8	369.0	
	Sum Aroclor-1260			3652967	4159709	1945.1	1950.7	
	Average Aroclor-1260					389.022	390.132	

JK 9-19-01

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

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\15\DATA\09_18_01\15091854.D
Date Acquired: 19 Sep 2001 5:44
Inst: HP_15 Operator ID: SA
Name: AR1660L3B8
Misc: 5-210-7
Method: F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 8:12 2001 Quant Results File: XPCBI10.RES



Aroclor-1016 {4} #2 10.91min area: 382932 m

Integration Time Range: 10.85 - 10.97

F:\HPCHEM\HP\15\DATA\09_18_01\15091854.D
Report generated: Wed Sep 19 08:14:06 2001

Continuing Calibration Report HP_15

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Wed Sep 19 11:38:43 2001
Response via : Initial Calibration

Continuing Calibration File: 15091868.D

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

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	22.799	23.007	E3	-0.9	102
2	L1	Aroclor-1016	614.444	651.925		-6.1	105
3	L1	Aroclor-1016 {2}	712.799	688.955		3.3	96
4	L1	Aroclor-1016 {3}	743.404	550.662		25.9#	74
5	L1	Aroclor-1016 {4}	618.248	677.811		-9.6	106
6	L1	Aroclor-1016 {5}	233.968	213.073		8.9	85
17	L7	Aroclor-1260	1.592	1.560	E3	2.0	93
18	L7	Aroclor-1260 {2}	2.074	2.088	E3	-0.7	96
19	L7	Aroclor-1260 {3}	2.005	1.975	E3	1.5	101
20	L7	Aroclor-1260 {4}	1.290	1.102	E3	14.6	71
21	L7	Aroclor-1260 {5}	2.407	2.042	E3	15.1#	78
22	S	DCB	24.672	19.938	E3	19.2#	80

Signal #2
Continuing Calibration File: 15091868.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	31.604	34.190	E3	-8.2	107
2	L1	Aroclor-1016	703.136	773.783		-10.0	107
3	L1	Aroclor-1016 {2}	1.614	1.746	E3	-8.2	106
4	L1	Aroclor-1016 {3}	2.761	3.105	E3	-12.5	105
5	L1	Aroclor-1016 {4}	901.510	973.470		-8.0	101
6	L1	Aroclor-1016 {5}	1.011	1.022	E3	-1.1	87
17	L7	Aroclor-1260	1.265	1.217	E3	3.8	79
18	L7	Aroclor-1260 {2}	2.037	1.947	E3	4.4	83
19	L7	Aroclor-1260 {3}	2.498	2.293	E3	8.2	83
20	L7	Aroclor-1260 {4}	1.425	1.162	E3	18.5#	80
21	L7	Aroclor-1260 {5}	3.545	2.918	E3	17.7#	80
22	S	DCB	34.384	26.265	E3	23.6#	73

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

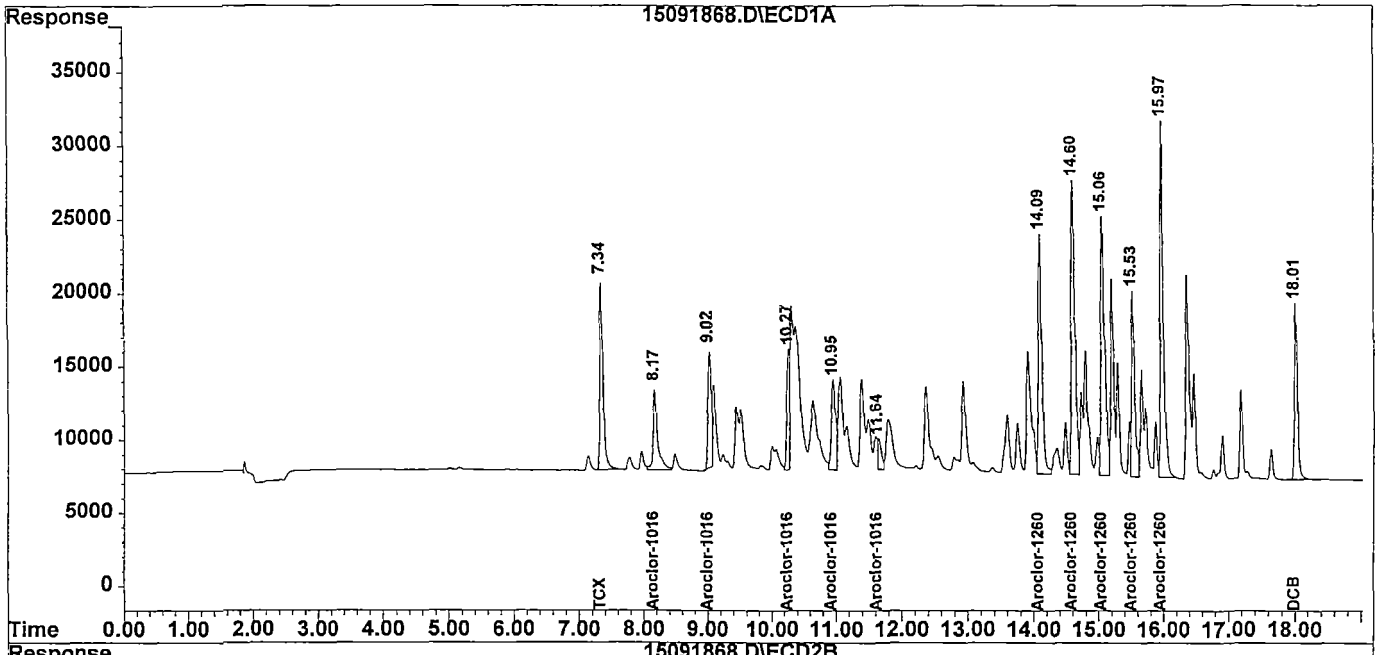
15091868.D XPCBI10.M Wed Sep 19 11:38:49 2001

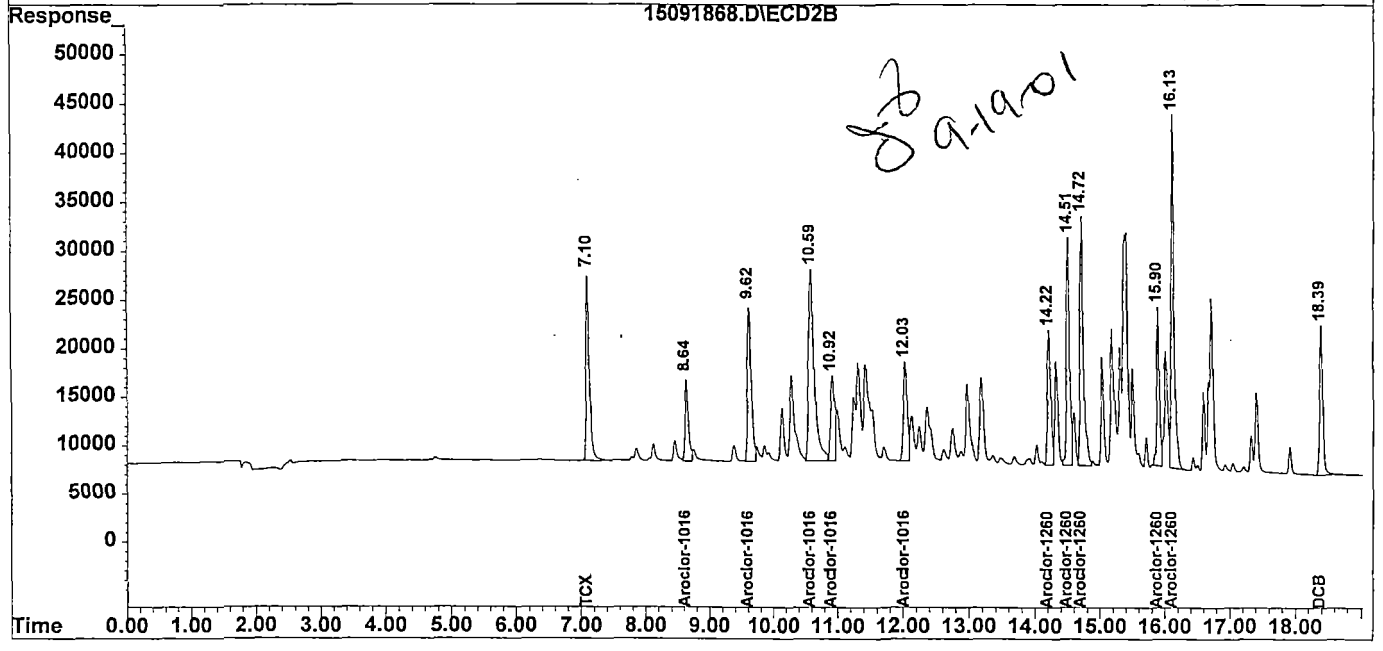
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091868.D\ECD1A.CH Vial: 62
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091868.D\ECD2B.CH
Acq On : 19 Sep 2001 11:08 Operator: SA
Sample : AR1660L3BA Inst : HP_15
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 11:38 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B





9-19-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091868.D\ECD1A.CH Vial: 62
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091868.D\ECD2B.CH
Acq On : 19 Sep 2001 11:08 Operator: SA
Sample : AR1660L3BA Inst : HP_15
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 11:38 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

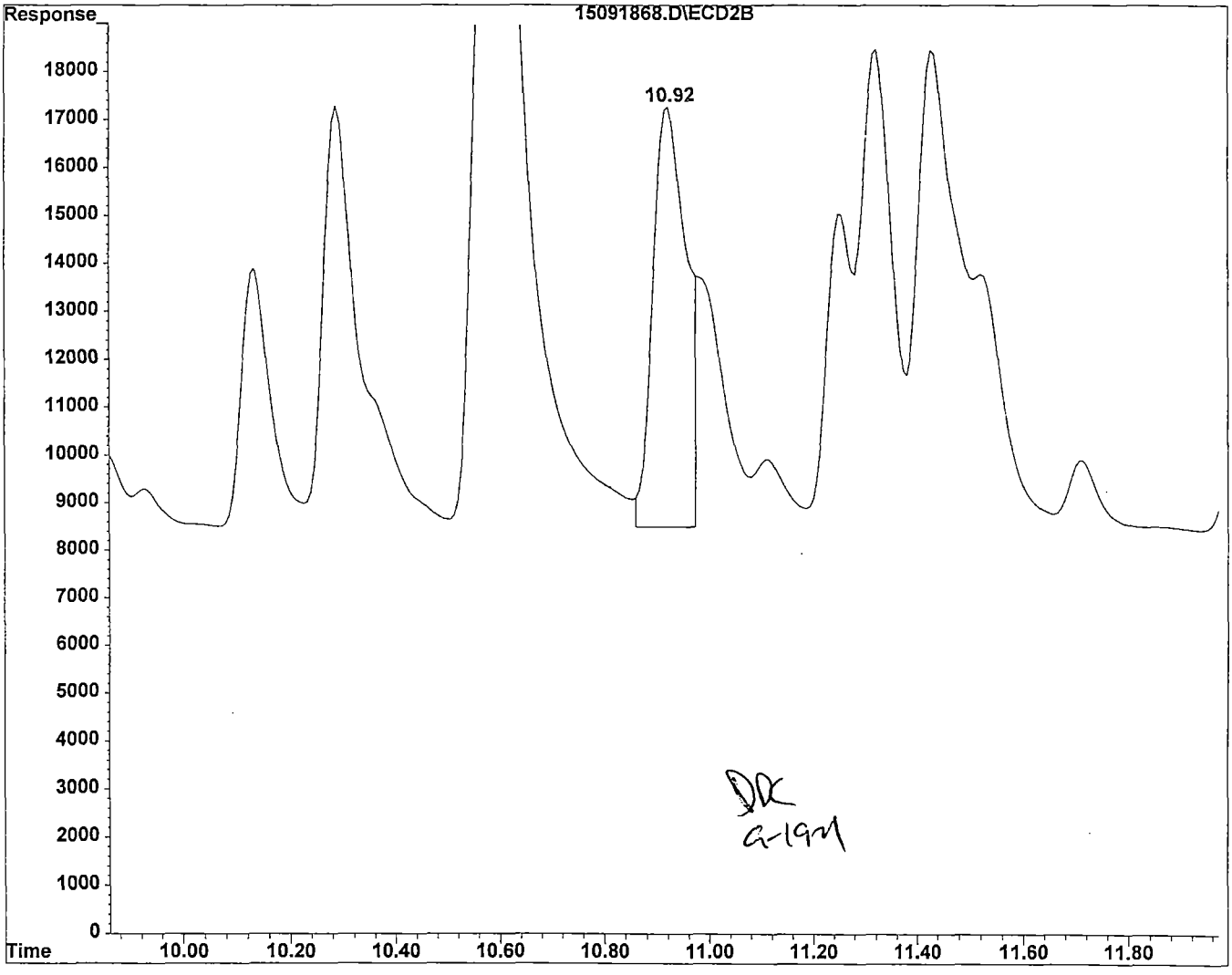
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.34	7.10	460149	683803	20.2	21.6
22)	S DCB	18.02	18.40	398754	525295	16.2	15.3
	Target Compounds:						
2)	L1 Aroclor-1016	8.17	8.64	260770	309513	424.4	440.2
3)	L1 Aroclor-1016 {2}	9.02	9.62	275582	698586	386.6	432.7
4)	L1 Aroclor-1016 {3}	10.27	10.60	220265	1241921	296.3	449.9
5)	L1 Aroclor-1016 {4}	10.95	10.92	271125	389388	438.5	431.9m
6)	L1 Aroclor-1016 {5}	11.64	12.04	85229	408876	364.3	404.6
	Sum Aroclor-1016			1112970	3048285	1910.1	2159.3
	Average Aroclor-1016					382.025	431.868
17)	L7 Aroclor-1260	14.10	14.22	623958	486866	391.9	384.9
18)	L7 Aroclor-1260 {2}	14.60	14.51	835314	778755	402.7	382.2
19)	L7 Aroclor-1260 {3}	15.06	14.72	789884	917110	394.0	367.2
20)	L7 Aroclor-1260 {4}	15.53	15.90	440840	464622	341.7	326.0
21)	L7 Aroclor-1260 {5}	15.98	16.13	816948	1167209	339.4	329.2
	Sum Aroclor-1260			3506945	3814562	1869.8	1789.6
	Average Aroclor-1260					373.963	357.915

#DDK 9-19-01

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

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\15\DATA\09_18_01\15091868.D
Date Acquired: 19 Sep 2001 11:08
Inst: HP_15 Operator ID: SA
Name: AR1660L3BA
Misc: 5-210-7
Method: F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 11:38 2001 Quant Results File: XPCBI10.RES



Aroclor-1016 {4} #2 10.92min area: 389388 m

Integration Time Range: 10.86 - 10.97

F:\HPCHEM\HP\15\DATA\09_18_01\15091868.D
Report generated: Wed Sep 19 11:40:14 2001

Continuing Calibration Report HP_15

Method : F:\HPCHEM\HP\15\DATA\09_19_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Thu Sep 20 08:06:04 2001
Response via : Initial Calibration

Continuing Calibration File: 15091913.D

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

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	22.799	25.557	E3	-12.1	114
2	L1	Aroclor-1016	614.444	724.169		-17.9#	117
3	L1	Aroclor-1016 {2}	712.799	778.359		-9.2	108
4	L1	Aroclor-1016 {3}	743.404	808.290		-8.7	108
5	L1	Aroclor-1016 {4}	618.248	766.401		-24.0#	120
6	L1	Aroclor-1016 {5}	233.968	248.262		-6.1	99
17	L7	Aroclor-1260	1.592	1.731	E3	-8.7	103
18	L7	Aroclor-1260 {2}	2.074	2.371	E3	-14.3	109
19	L7	Aroclor-1260 {3}	2.005	2.283	E3	-13.9	117
20	L7	Aroclor-1260 {4}	1.290	1.295	E3	-0.4	83
21	L7	Aroclor-1260 {5}	2.407	2.415	E3	-0.3	92
22	S	DCB	24.672	22.275	E3	9.7	89

Signal #2
Continuing Calibration File: 15091913.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	31.604	35.175	E3	-11.3	110
2	L1	Aroclor-1016	703.136	785.319		-11.7	108
3	L1	Aroclor-1016 {2}	1.614	1.966	E3	-21.8#	119
4	L1	Aroclor-1016 {3}	2.761	3.150	E3	-14.1	106
5	L1	Aroclor-1016 {4}	901.510	914.460		-1.4	95
6	L1	Aroclor-1016 {5}	1.011	1.068	E3	-5.7	91
17	L7	Aroclor-1260	1.265	1.300	E3	-2.8	84
18	L7	Aroclor-1260 {2}	2.037	2.122	E3	-4.1	91
19	L7	Aroclor-1260 {3}	2.498	2.512	E3	-0.6	91
20	L7	Aroclor-1260 {4}	1.425	1.431	E3	-0.4	98
21	L7	Aroclor-1260 {5}	3.545	3.448	E3	2.7	95
22	S	DCB	34.384	29.221	E3	15.0#	81

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

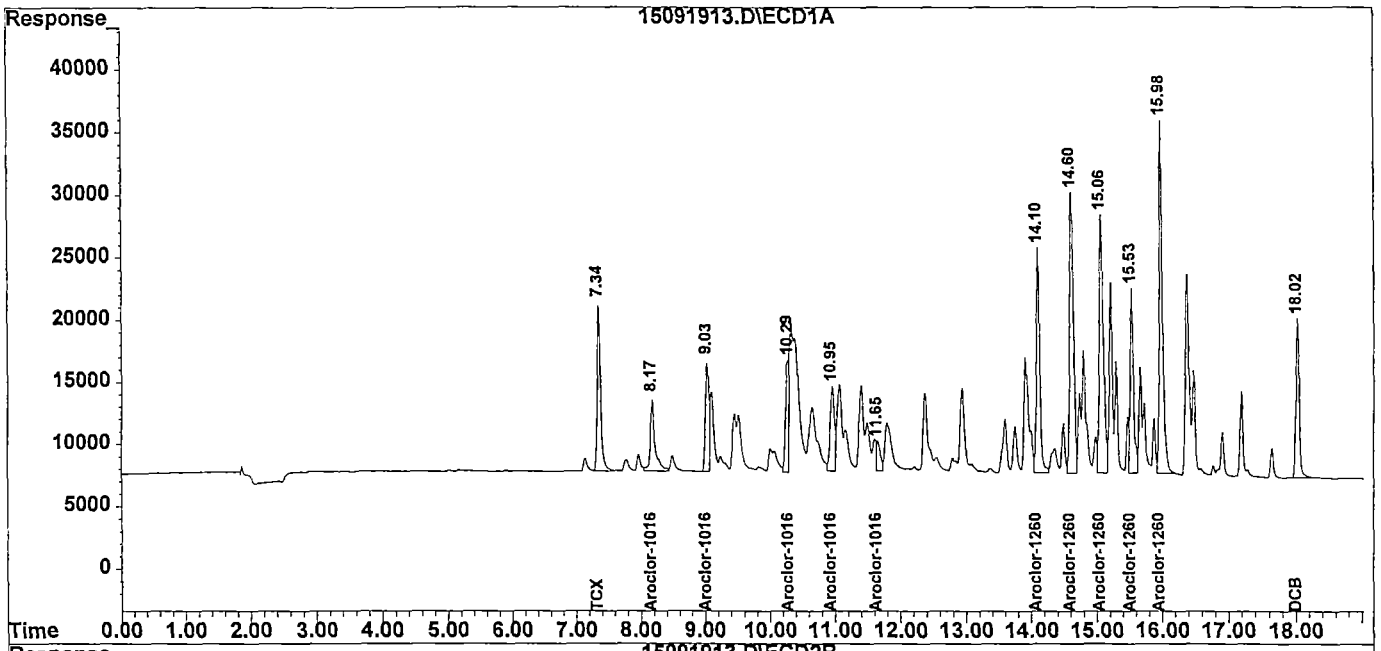
15091913.D XPCBI10.M Thu Sep 20 08:06:10 2001

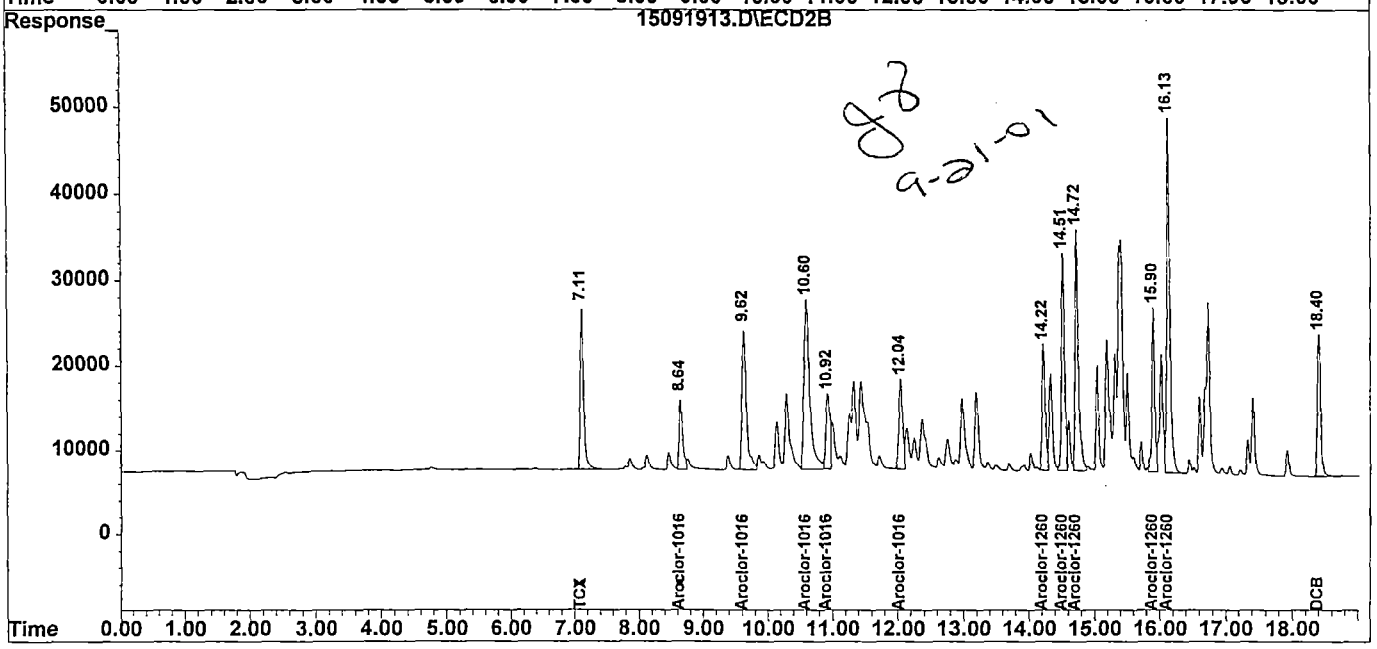
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_19_01\15091913.D\ECD1A.CH Vial: 13
Signal #2 : F:\HPCHEM\HP\15\DATA\09_19_01\15091913.D\ECD2B.CH
Acq On : 19 Sep 2001 18:14 Operator: DDC
Sample : AR1660L3BR Inst : HP_15
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 8:05 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_19_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B





9-21-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_19_01\15091913.D\ECD1A.CH Vial: 13
Signal #2 : F:\HPCHEM\HP\15\DATA\09_19_01\15091913.D\ECD2B.CH
Acq On : 19 Sep 2001 18:14 Operator: DDC
Sample : AR1660L3BR Inst : HP_15
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 8:05 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_19_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 2001
Response via : Initial Calibration

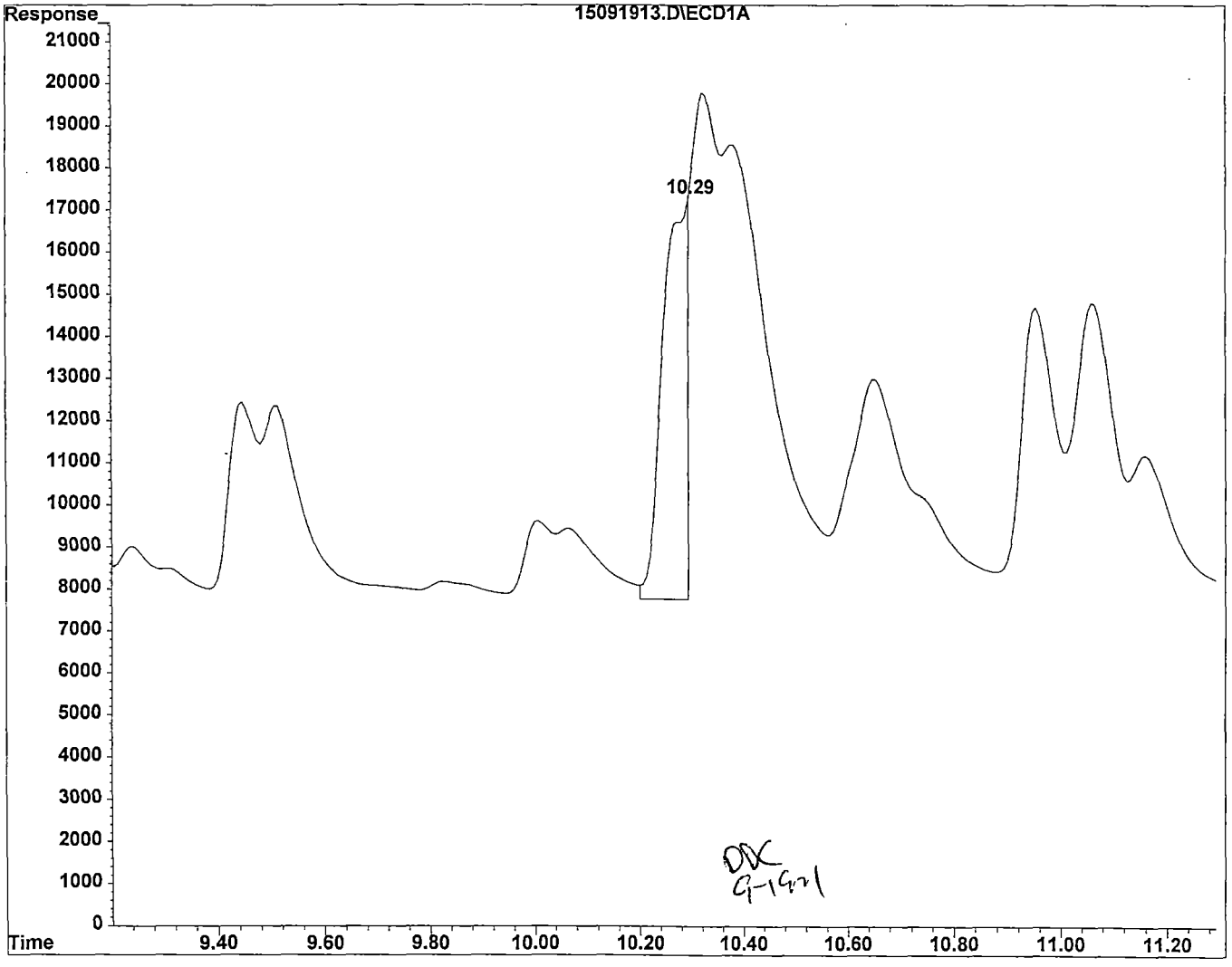
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.34	7.11	511149	703509	22.4	22.3
22)	S DCB	18.02	18.40	445500	584425	18.1	17.0
	Target Compounds:						
2)	L1 Aroclor-1016	8.17	8.64	289667	314128	471.4	446.8
3)	L1 Aroclor-1016 {2}	9.03	9.62	311344	786364	436.8 DDC 9/20/01	487.1
4)	L1 Aroclor-1016 {3}	10.29f	10.60	323316	1259988	434.9m	456.4 DDC 9/20/01
5)	L1 Aroclor-1016 {4}	10.96	10.92	306560	365784	495.9	405.7m
6)	L1 Aroclor-1016 {5}	11.65	12.04	99305	427348	424.4	422.9
	Sum Aroclor-1016			1330192	3153611	2263.4	2218.9
	Average Aroclor-1016					452.685	443.783
17)	L7 Aroclor-1260	14.10	14.22	692352	519965	434.9	411.1
18)	L7 Aroclor-1260 {2}	14.61	14.52	948363	848703	457.2	416.6
19)	L7 Aroclor-1260 {3}	15.06	14.72	913339	1004650	455.6	402.2
20)	L7 Aroclor-1260 {4}	15.53	15.90	518074	572209	401.6	401.5
21)	L7 Aroclor-1260 {5}	15.98	16.13	966040	1379113	401.4	389.0
	Sum Aroclor-1260			4038168	4324638	2150.7	2020.4
	Average Aroclor-1260					430.135	404.077

(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\15\DATA\09_19_01\15091913.D
Date Acquired: 19 Sep 2001 18:14
Inst: HP_15 Operator ID: DDC
Name: AR1660L3BR
Misc: 5-210-7
Method: F:\HPCHEM\HP\15\DATA\09_19_01\XPCBI10.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:05 2001 Quant Results File: XPCBI10.RES



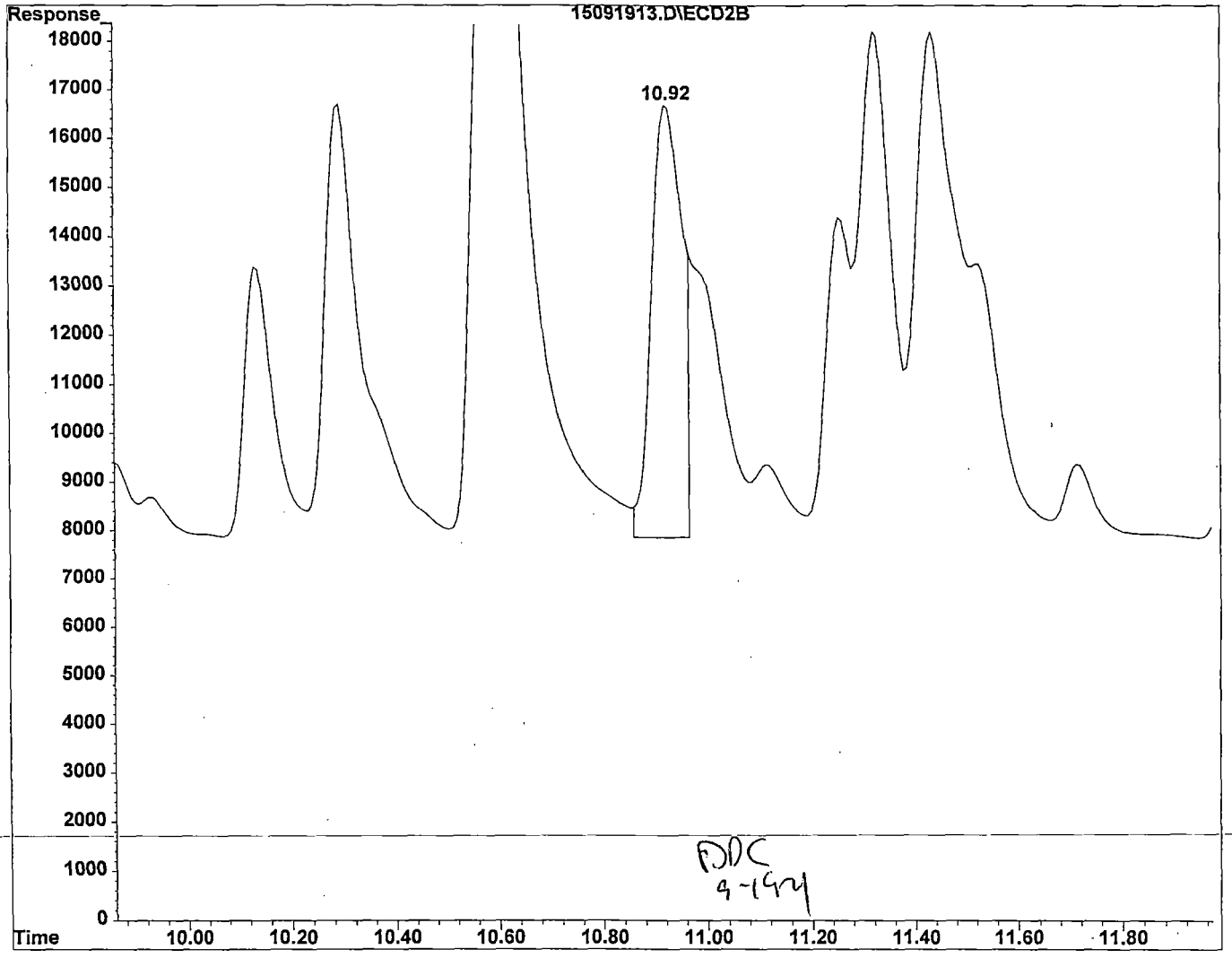
Aroclor-1016 {3} 10.29min area: 323316 m

Integration Time Range: 10.20 - 10.29

F:\HPCHEM\HP\15\DATA\09_19_01\15091913.D
Report generated: Thu Sep 20 08:44:53 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\15\DATA\09_19_01\15091913.D
Date Acquired: 19 Sep 2001 18:14
Inst: HP_15 Operator ID: DDC
Name: AR1660L3BR
Misc: 5-210-7
Method: F:\HPCHEM\HP\15\DATA\09_19_01\XPCBI10.M
Title: PCB/TOXAPHENE
Quant Time: Sep 20 8:05 2001 Quant Results File: XPCBI10.RES



Aroclor-1016 {4} #2 10.92min area: 365784 m

Integration Time Range: 10.86 - 10.97

F:\HPCHEM\HP\15\DATA\09_19_01\15091913.D
Report generated: Thu Sep 20 08:44:54 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PBLKSB

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) SOIL Lab Sample ID: BL0828SB

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/28/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/18/01

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	

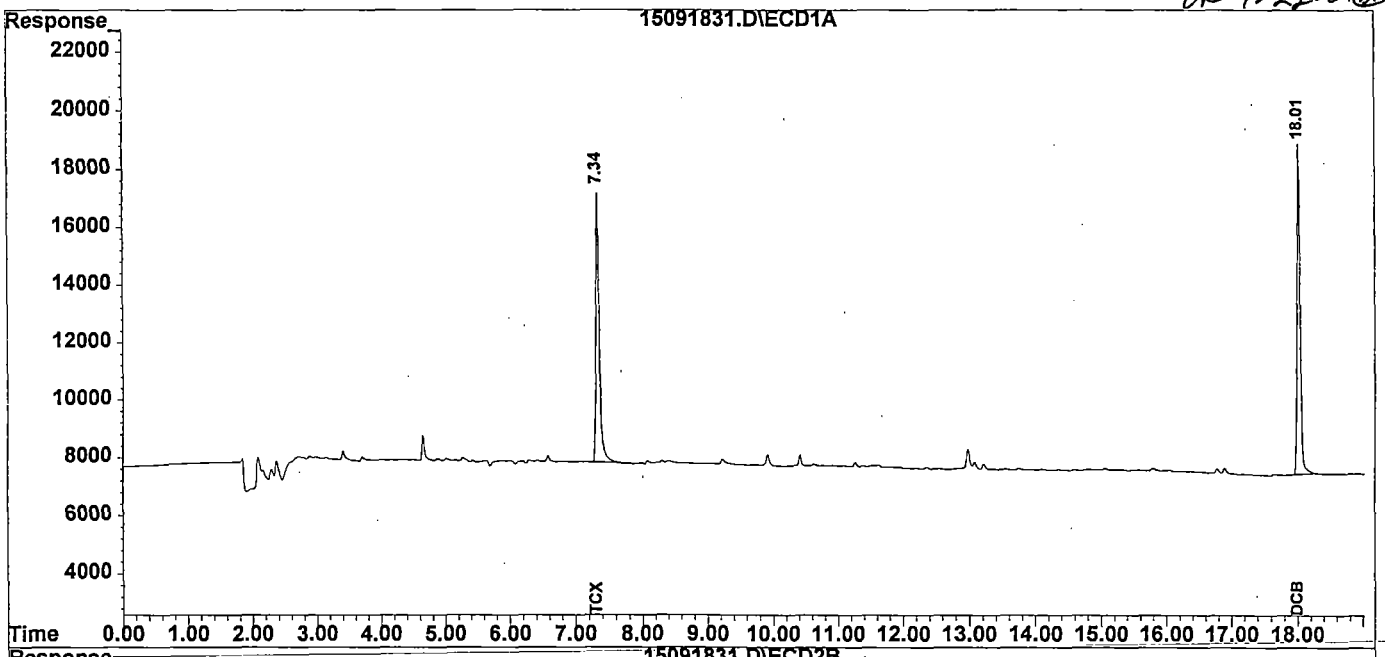
Chromatographic Report

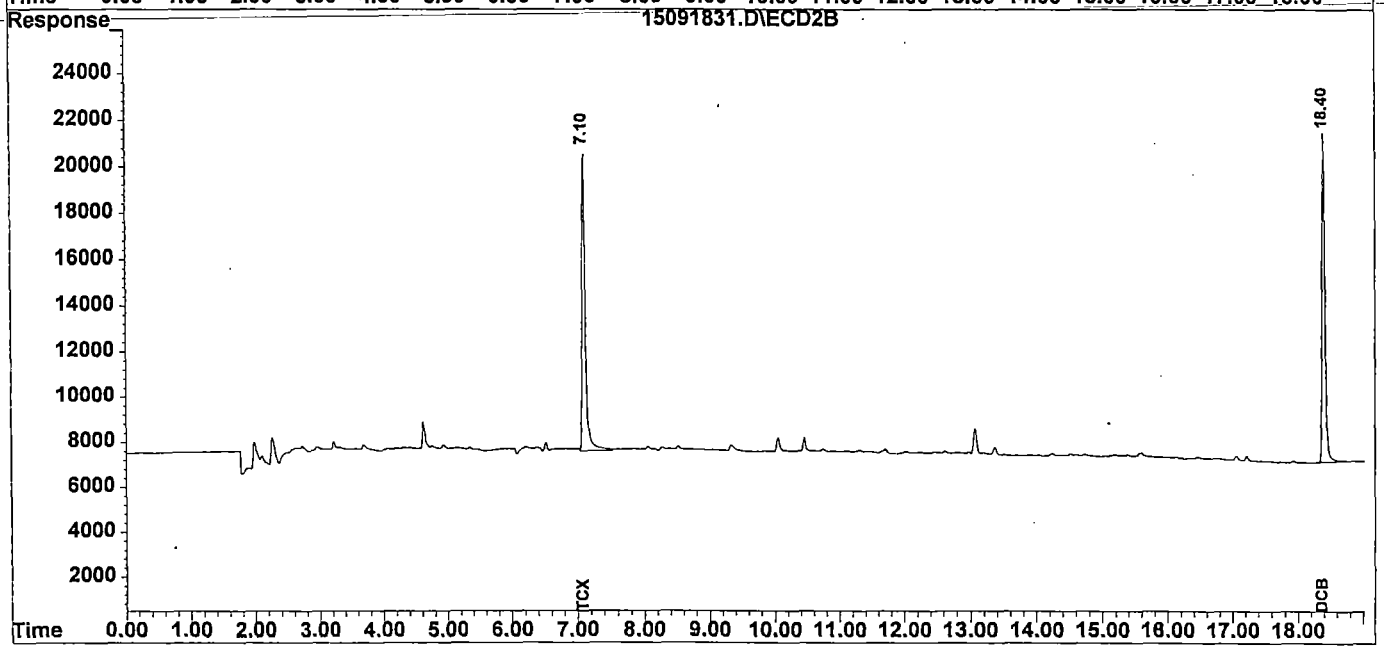
Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091831.D\ECD1A.CH Vial: 25
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091831.D\ECD2B.CH
Acq On : 18 Sep 2001 20:52 Operator: SA
Sample : BL0828SB V *PBLKSB ✓ * Inst : HP_15
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 9:07 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

OK 9-22-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091831.D\ECD1A.CH Vial: 25
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091831.D\ECD2B.CH
Acq On : 18 Sep 2001 20:52 Operator: SA
Sample : BL0828SB *PBLKSB * Inst : HP_15
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 9:07 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.34	7.10	320313	457716	4.683	4.828
	Spiked Amount 6.667			Recovery	=	70.25%	72.42%
22)	S DCB	18.02	18.40	377437	491350	5.099	4.763
	Spiked Amount 6.667			Recovery	=	76.49%	71.45%

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.

PIBLKBO

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

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.

PIBLKBO

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

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

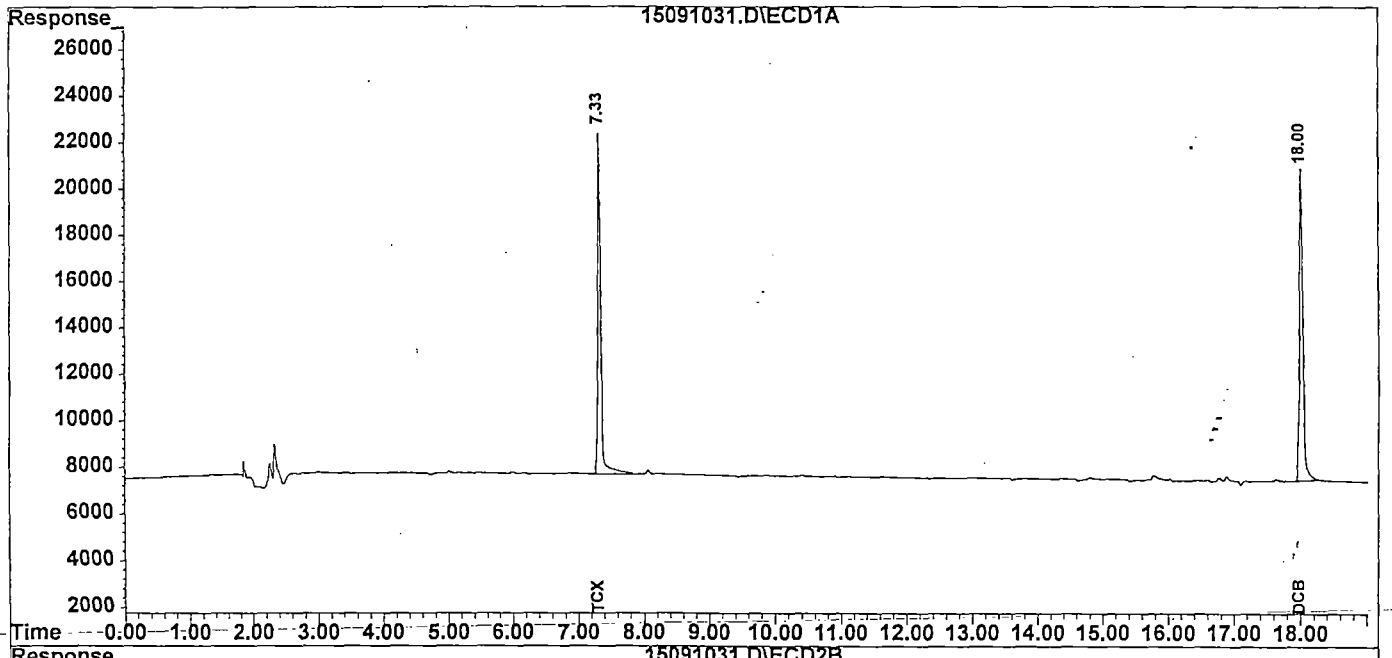
FORM I PCB

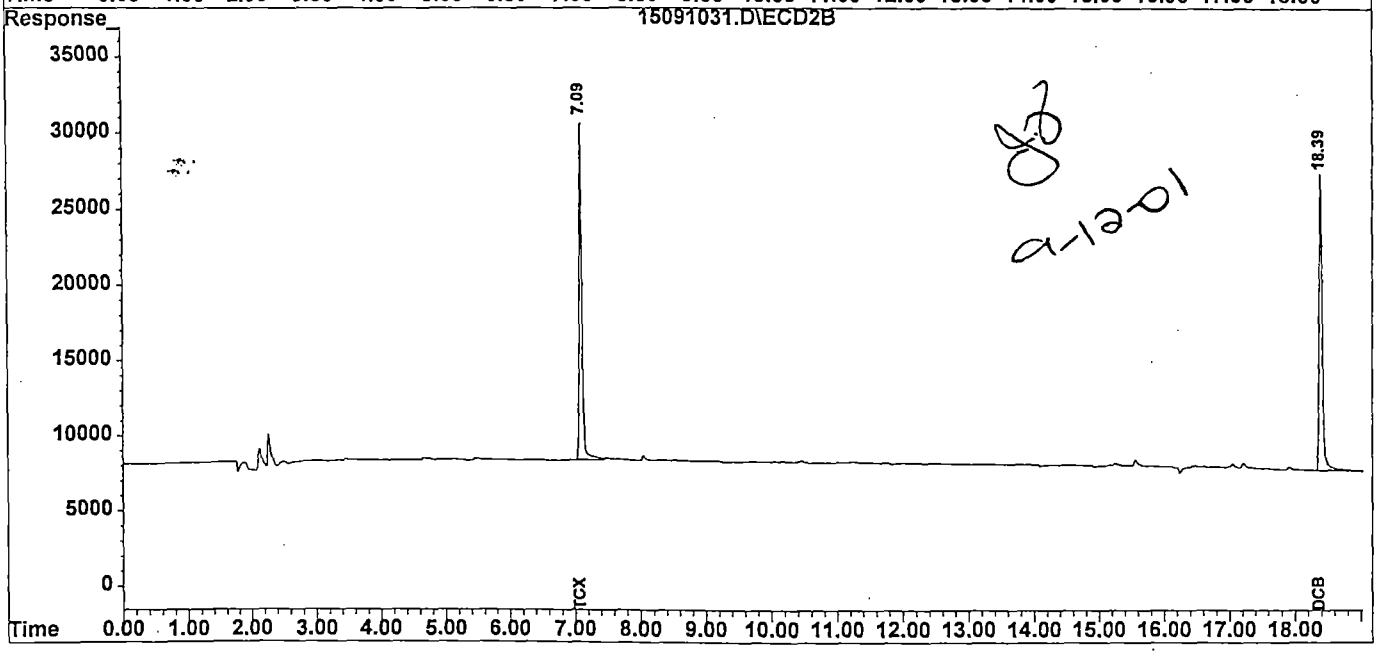
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_10_01\15091031.D\ECD1A.CH Vial: 25
Signal #2 : F:\HPCHEM\HP\15\DATA\09_10_01\15091031.D\ECD2B.CH
Acq On : 11 Sep 2001 1:37 Operator: DDC
Sample : PIBLKBO Inst : HP_15
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:17 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_10_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B





9-12-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_10_01\15091031.D\ECD1A.CH Vial: 25
Signal #2 : F:\HPCHEM\HP\15\DATA\09_10_01\15091031.D\ECD2B.CH
Acq On : 11 Sep 2001 1:37 Operator: DDC
Sample : PIBLKBO Inst : HP_15
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 11 8:17 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_10_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.33	7.09	475674	680414	20.9	21.5
22)	S DCB	18.01	18.39	499146	684380	20.2	19.9

Target Compounds:

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

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKBP

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

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

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKBP

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

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

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

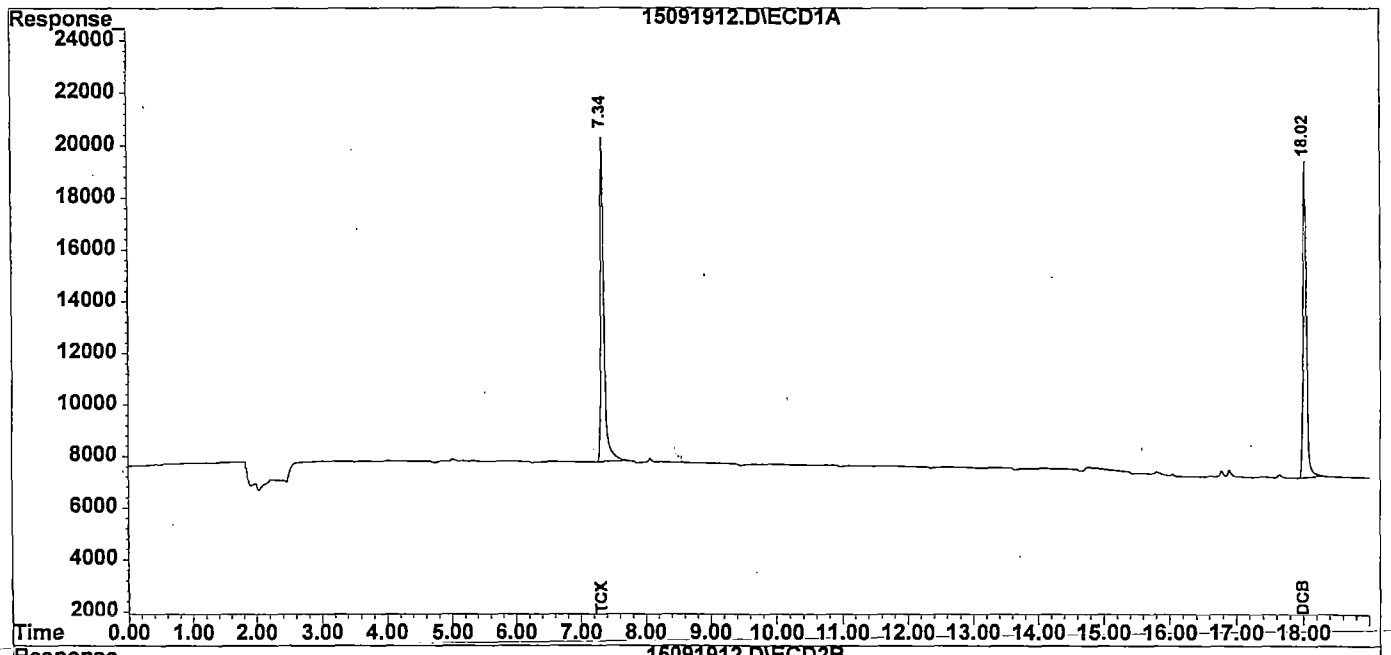
FORM I PCB

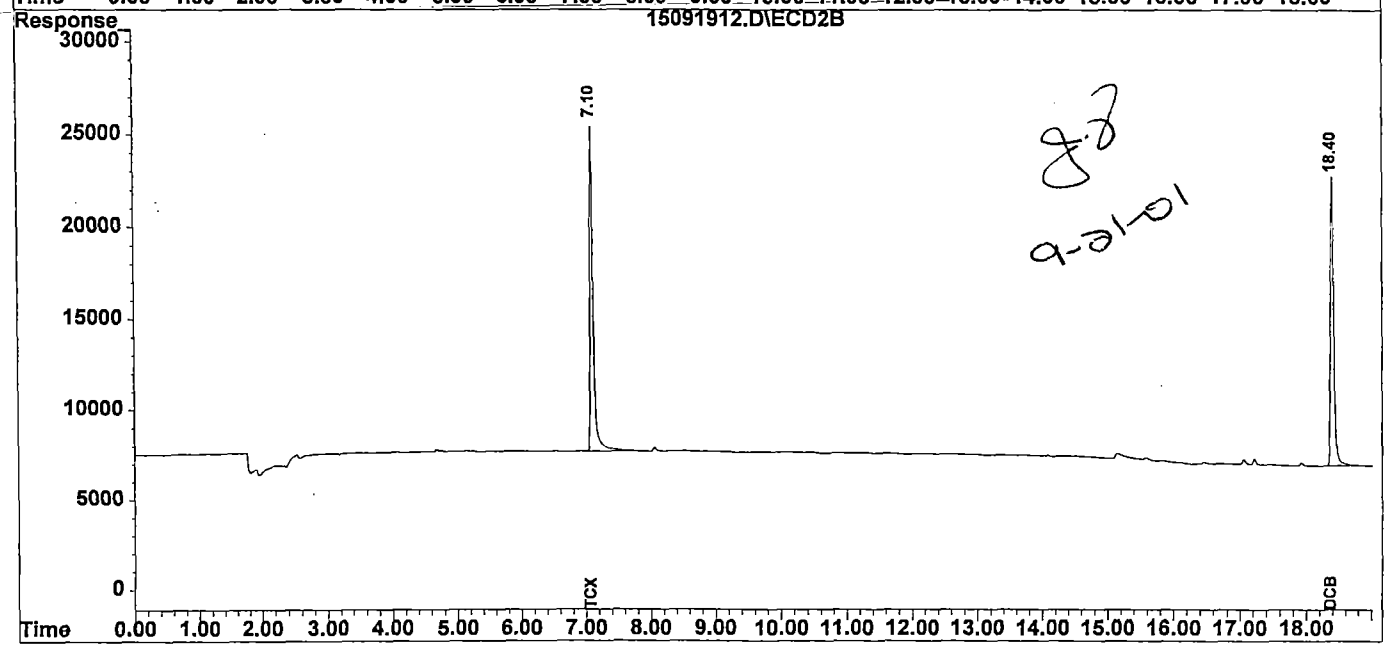
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_19_01\15091912.D\ECD1A.CH Vial: 12
Signal #2 : F:\HPCHEM\HP\15\DATA\09_19_01\15091912.D\ECD2B.CH
Acq On : 19 Sep 2001 17:50 Operator: DDC
Sample : PIBLKBP Inst : HP_15
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 8:02 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_19_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B





gb
9-21-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_19_01\15091912.D\ECD1A.CH Vial: 12
Signal #2 : F:\HPCHEM\HP\15\DATA\09_19_01\15091912.D\ECD2B.CH
Acq On : 19 Sep 2001 17:50 Operator: DDC
Sample : PIBLKBP Inst : HP_15
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 8:02 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_19_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Thu Sep 20 08:14:40 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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.34	7.10	452635	644180	19.9	20.4
22)	S DCB	18.02	18.40	428084	564460	17.4	16.4

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.

PIBLKBV

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 09/18/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKBV

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 09/18/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

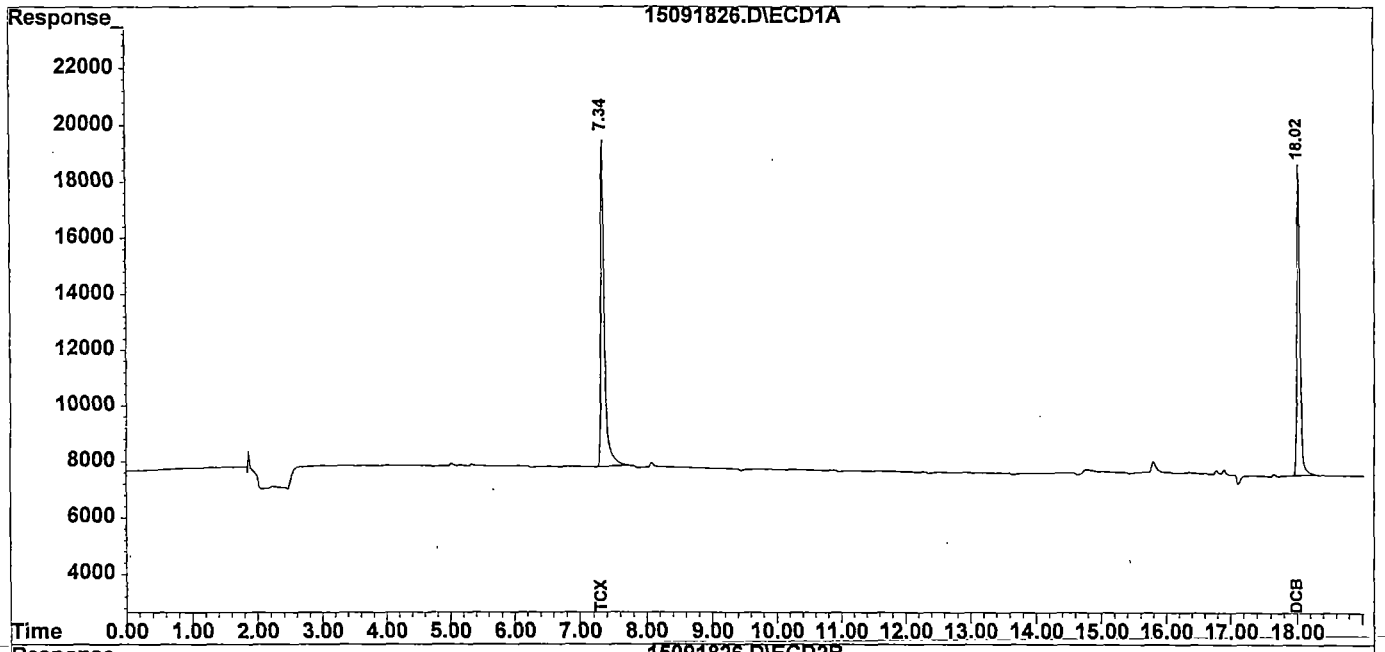
FORM I PCB

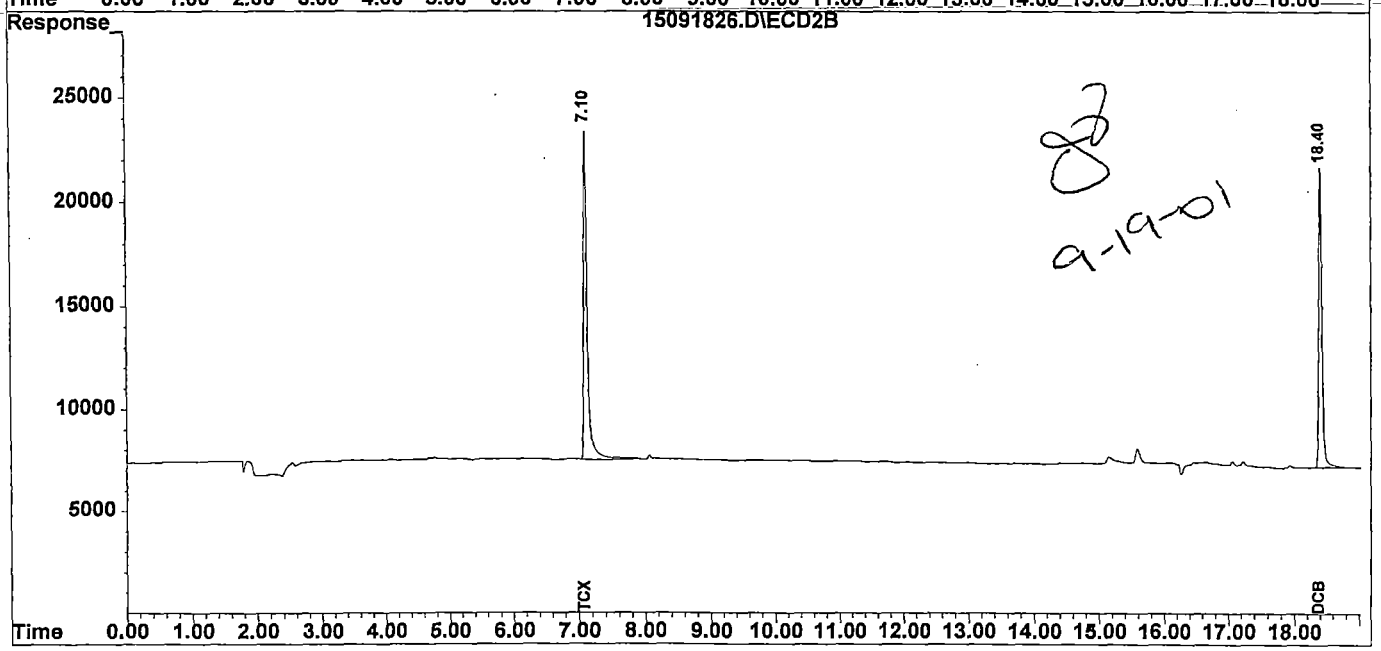
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091826.D\ECD1A.CH Vial: 20
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091826.D\ECD2B.CH
Acq On : 18 Sep 2001 18:57 Operator: SA
Sample : PIBLKBV Inst : HP_15
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 8:08 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B





9-19-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091826.D\ECD1A.CH Vial: 20
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091826.D\ECD2B.CH
Acq On : 18 Sep 2001 18:57 Operator: SA
Sample : PIBLKBV Inst : HP_15
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 8:08 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Wed Sep 19 08:12:38 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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.34	7.10	436463	611941	19.1	19.4
22)	S DCB	18.02	18.40	383190	505084	15.5	14.7

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.

PIBLKBW

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 09/18/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKBW

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 09/18/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

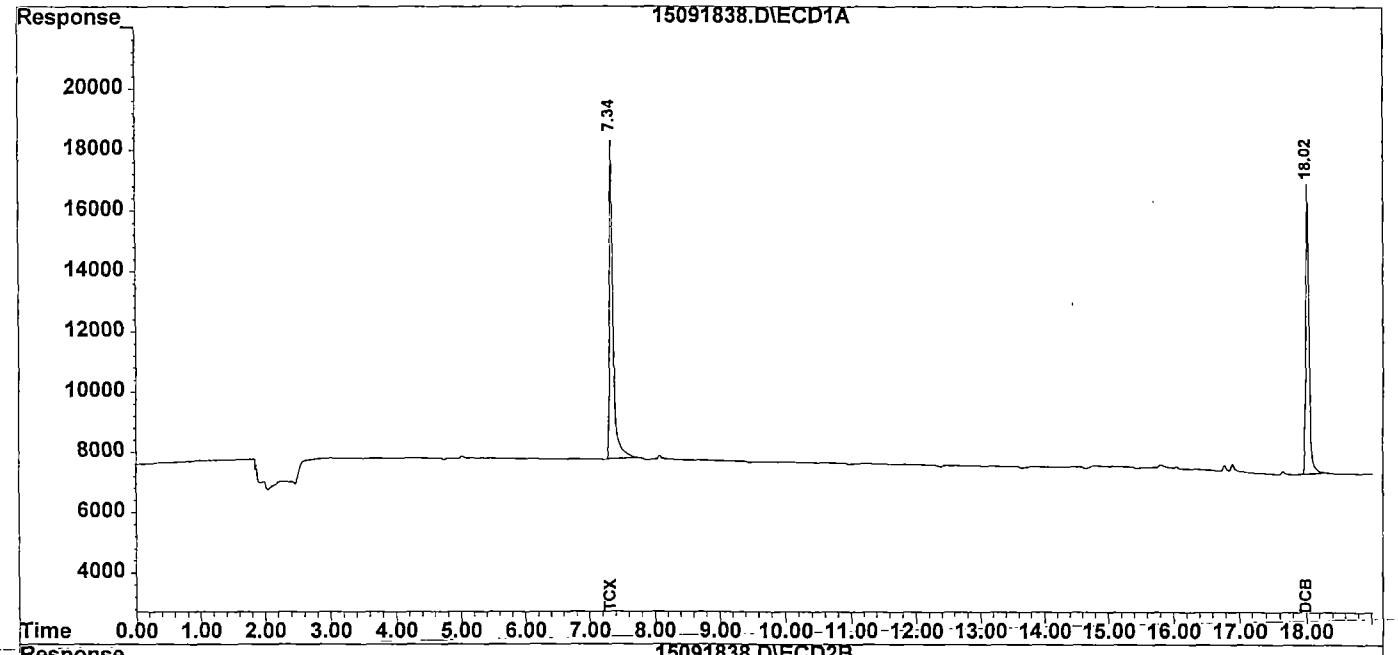
FORM I PCB

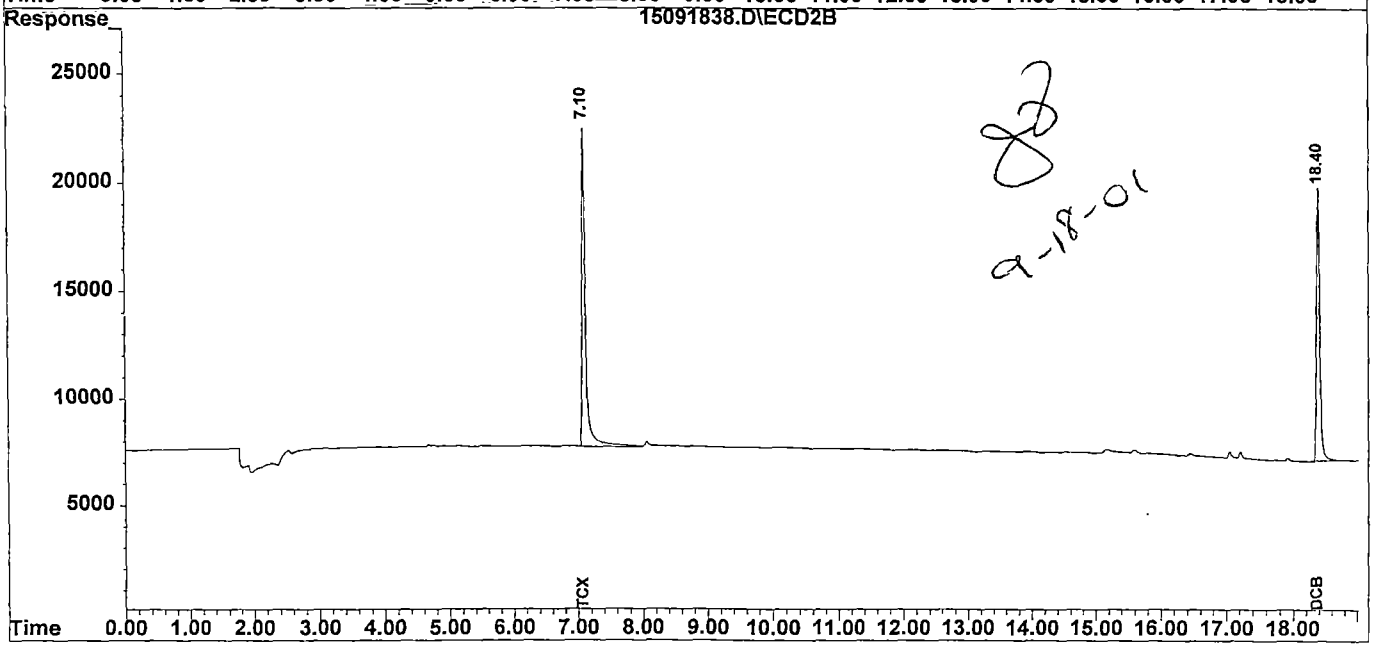
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091838.D\ECD1A.CH Vial: 32
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091838.D\ECD2B.CH
Acq On : 18 Sep 2001 23:34 Operator: SA
Sample : PIBLKBW Inst : HP_15
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 8:10 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B





9-18-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091838.D\ECD1A.CH Vial: 32
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091838.D\ECD2B.CH
Acq On : 18 Sep 2001 23:34 Operator: SA
Sample : PIBLKBW Inst : HP_15
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 8:10 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.34	7.10	403850	595807	17.7	18.9
22)	S DCB	18.02	18.40	338658	454378	13.7	13.2

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.

PIBLKBX

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

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

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKBX

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

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

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

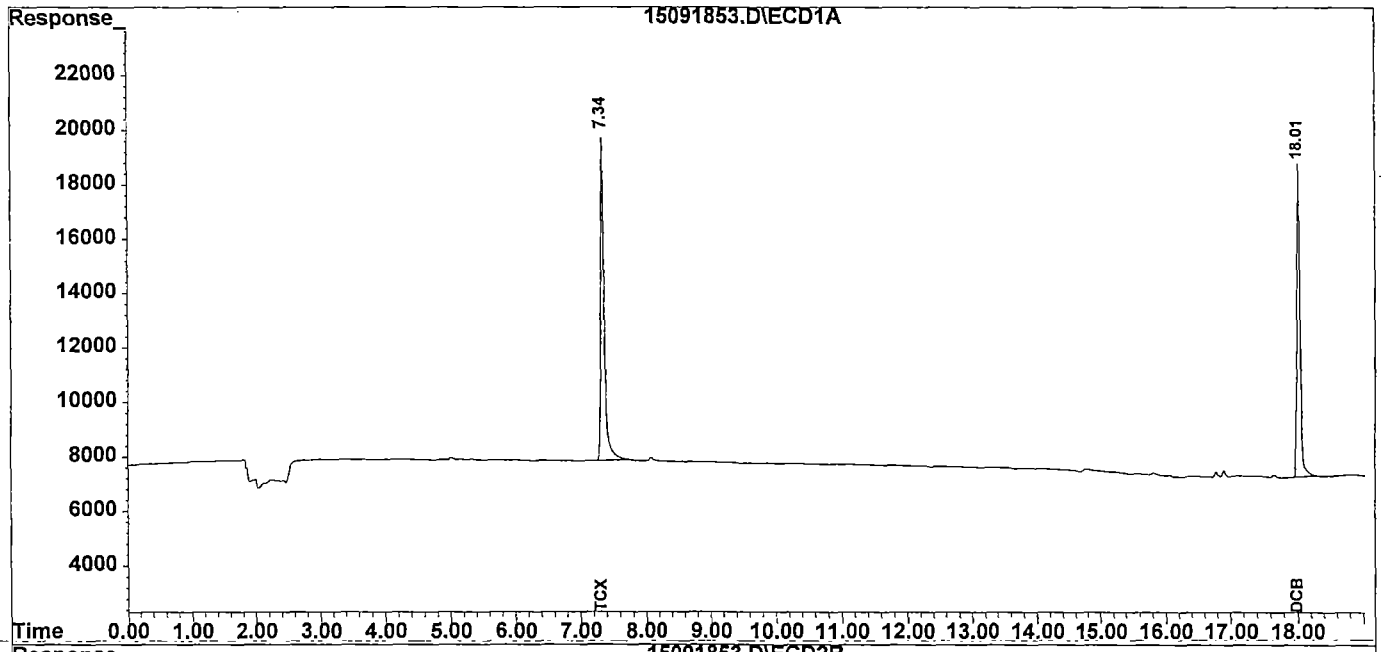
FORM I PCB

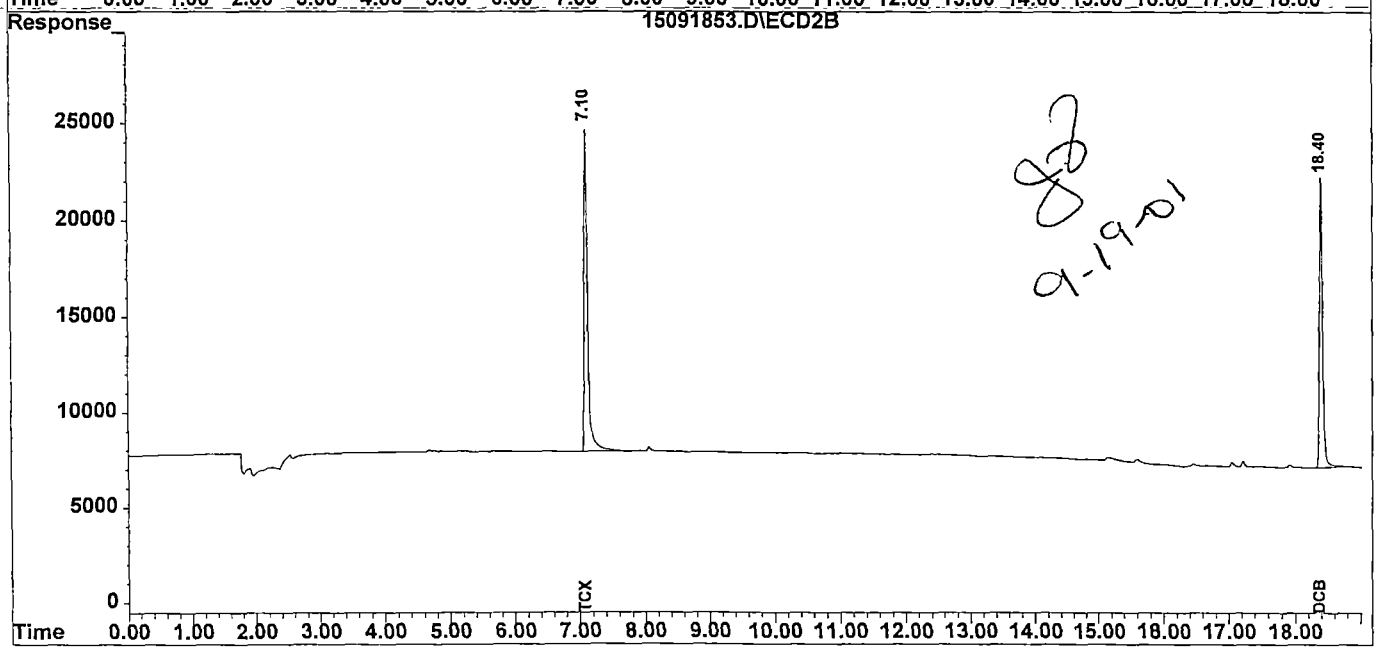
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091853.D\ECD1A.CH Vial: 47
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091853.D\ECD2B.CH
Acq On : 19 Sep 2001 5:21 Operator: SA
Sample : PIBLKBX Inst : HP_15
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 8:11 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B





9-19-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091853.D\ECD1A.CH Vial: 47
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091853.D\ECD2B.CH
Acq On : 19 Sep 2001 5:21 Operator: SA
Sample : PIBLKBX Inst : HP_15
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 8:11 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.34	7.10	432998	622194	19.0	19.7
22)	S DCB	18.02	18.40	407209	531782	16.5	15.5
	Target Compounds:						

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

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKBY

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

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

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKBY

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

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

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

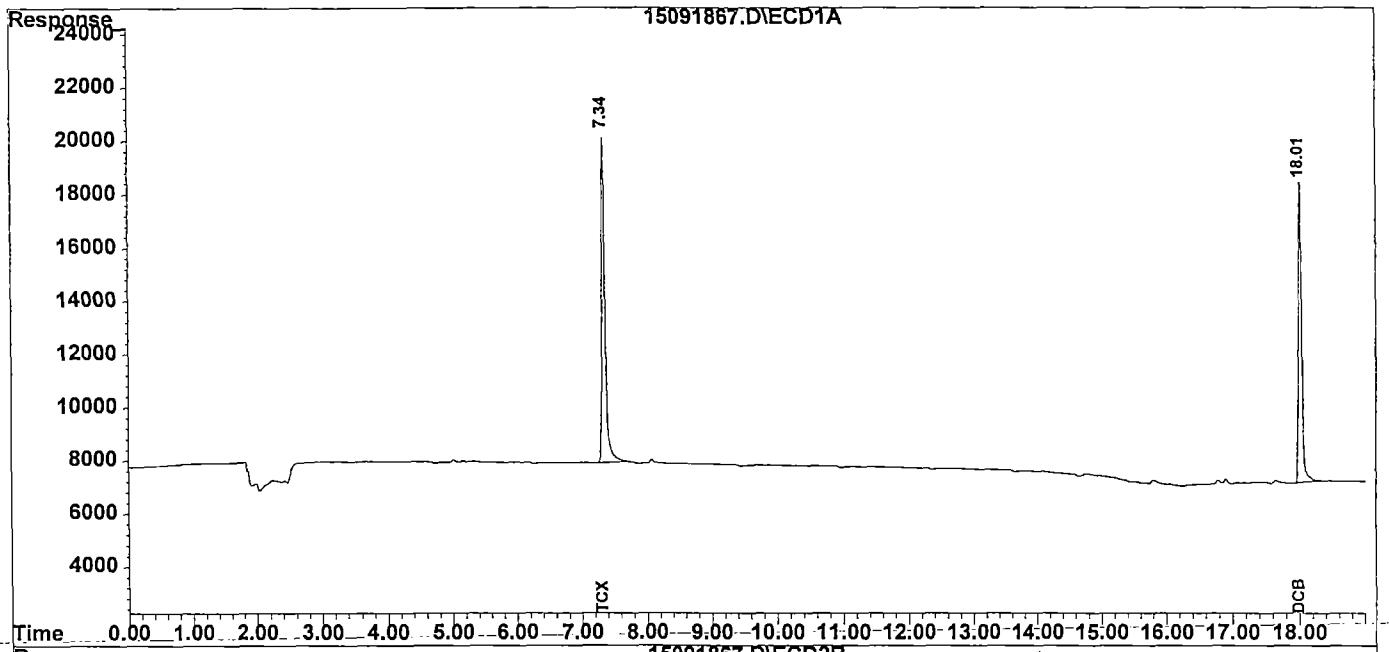
FORM I PCB

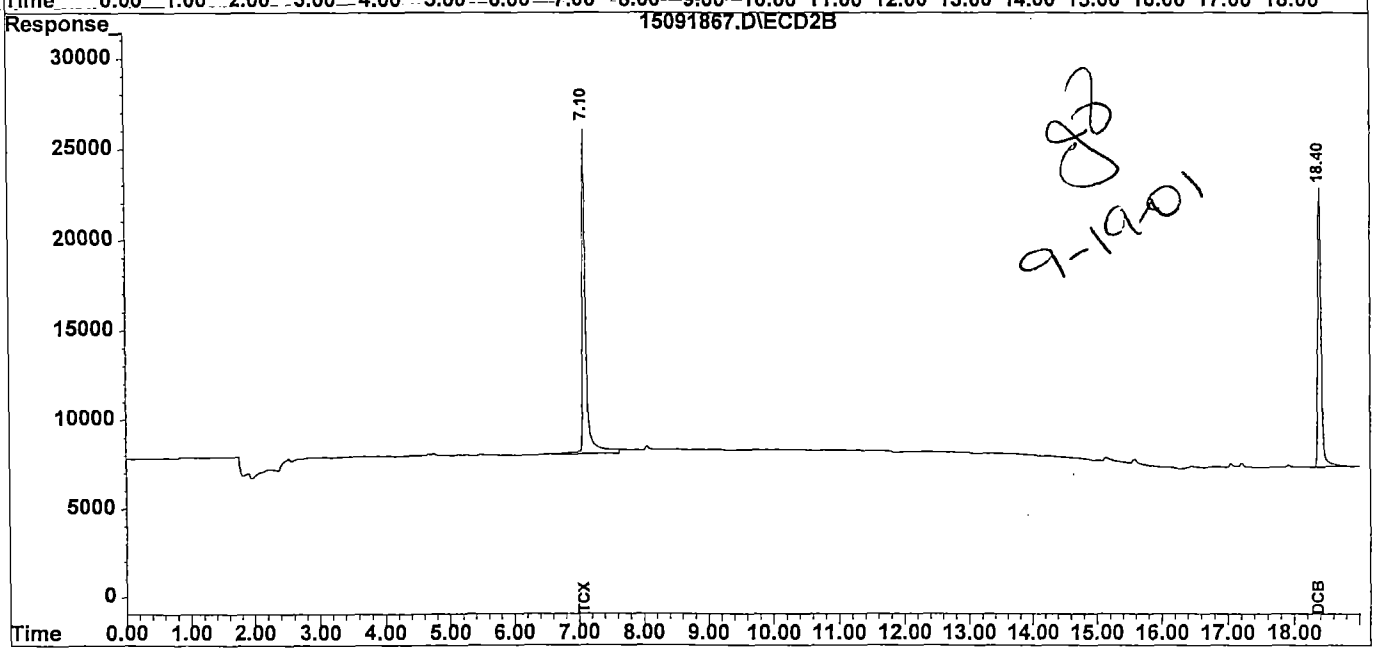
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091867.D\ECD1A.CH Vial: 61
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091867.D\ECD2B.CH
Acq On : 19 Sep 2001 10:45 Operator: SA
Sample : PIBLKBY Inst : HP_15
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 11:37 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B





gg
9-19-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091867.D\ECD1A.CH Vial: 61
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091867.D\ECD2B.CH
Acq On : 19 Sep 2001 10:45 Operator: SA
Sample : PIBLKBY Inst : HP_15
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 11:37 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Wed Sep 19 11:38:43 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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.34	7.10	438185	704539	19.2	22.3
22)	S DCB	18.02	18.40	388988	553604	15.8	16.1

Target Compounds:

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

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ELCS1

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) SOIL Lab Sample ID: LC0828SB

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/28/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/18/01

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	97	
11096-82-5	Aroclor-1260	33	U
Surrogate amount spiked		6.67	

FORM I PCB

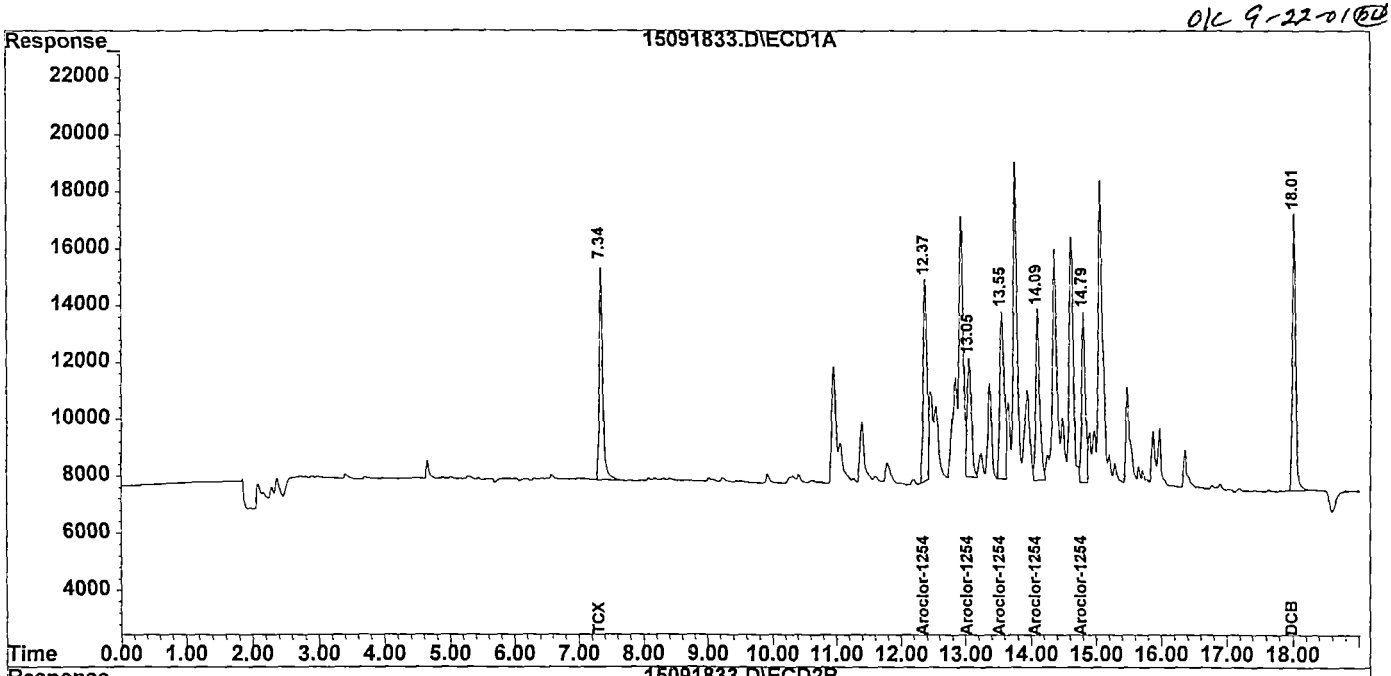
Chromatographic Report

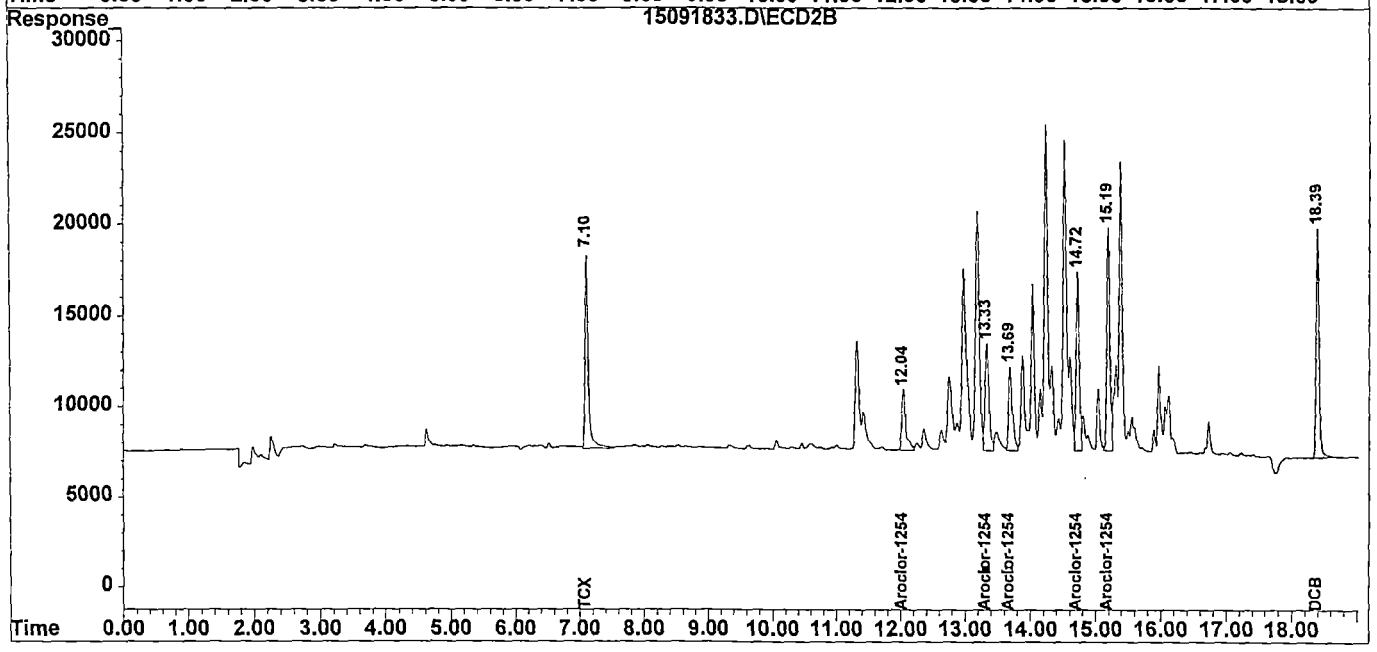
Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091833.D\ECD1A.CH Vial: 27
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091833.D\ECD2B.CH
Acq On : 18 Sep 2001 21:39 Operator: SA
Sample : LC0828SB✓ *ELCS1✓ * Inst : HP_15
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 9:09 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

OK 9-22-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091833.D\ECD1A.CH Vial: 27
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091833.D\ECD2B.CH
Acq On : 18 Sep 2001 21:39 Operator: SA
Sample : LC0828SB *ELCS1 * Inst : HP_15
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 9:09 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.34	7.10	272722	398565	3.987	4.204
	Spiked Amount 6.667			Recovery	=	59.81%	63.06%
22)	S DCB	18.02	18.40	328273	429049	4.435	4.159
	Spiked Amount 6.667			Recovery	=	✓66.53%	✓62.39%
	Target Compounds:						
12)	L6 Aroclor-1254	12.37	12.04	296381	148121	105.2	97.1
13)	L6 Aroclor-1254 {2}	13.06	13.34	190659	248826	85.6	102.5
14)	L6 Aroclor-1254 {3}	13.55	13.69	266804	194892	98.1	89.8
15)	L6 Aroclor-1254 {4}	14.10	14.72	243495	325821	92.9	105.7
16)	L6 Aroclor-1254 {5}	14.80	15.19	225643	404557	102.1	100.9
	Sum Aroclor-1254			1222981	1322217	483.9	496.1
	Average Aroclor-1254					96.776	99.213
						73%	75%

(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: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) SOIL Lab Sample ID: LD0828SB

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/28/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/18/01

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	

FORM I PCB

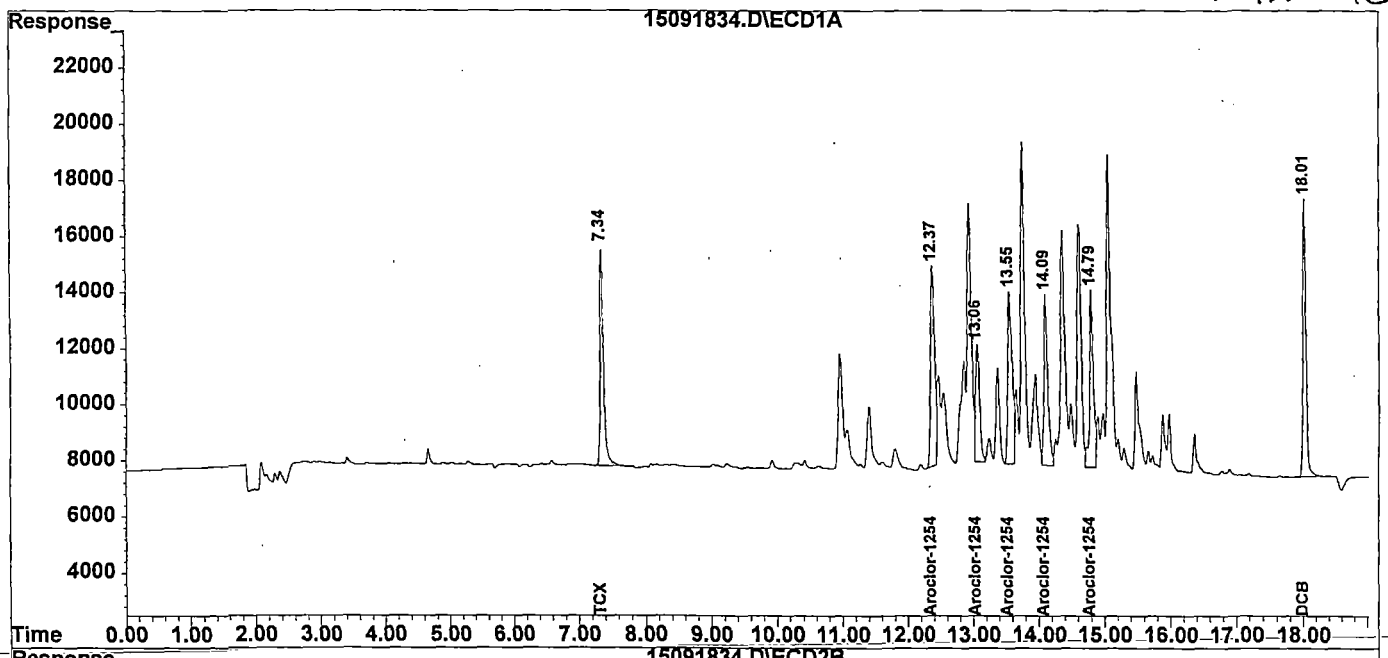
Chromatographic Report

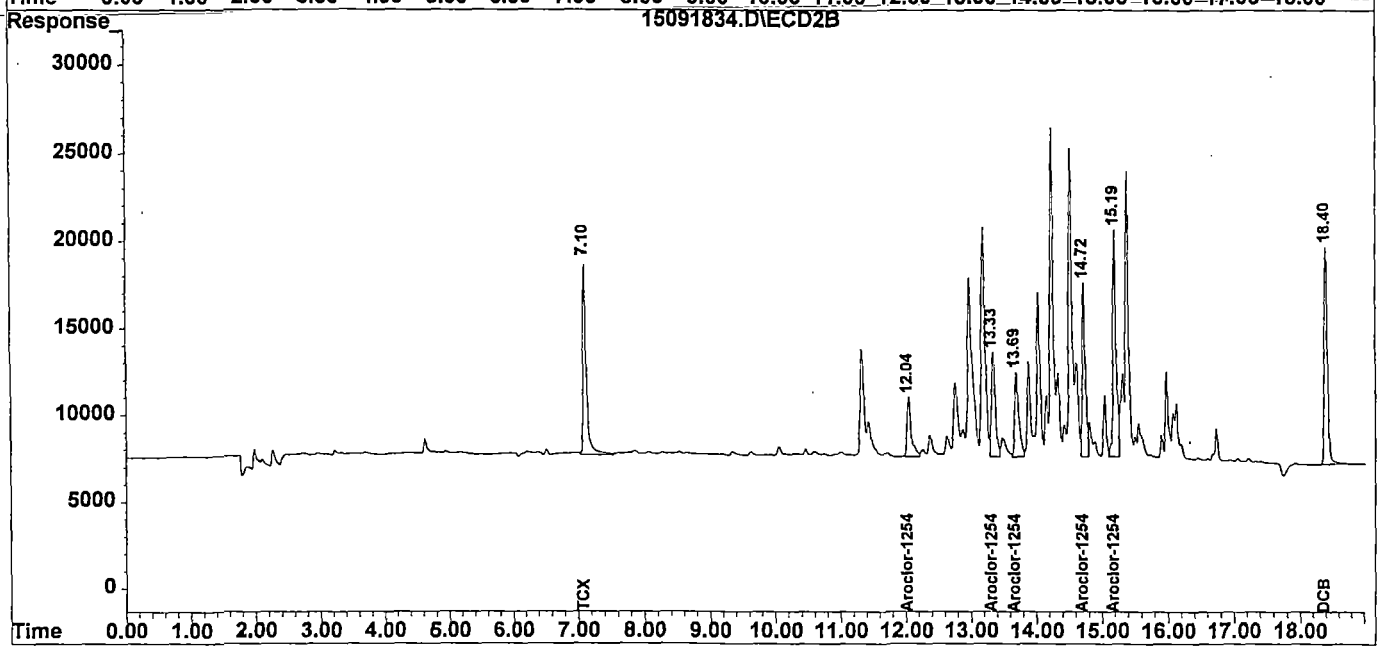
Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091834.D\ECD1A.CH Vial: 28
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091834.D\ECD2B.CH
Acq On : 18 Sep 2001 22:02 Operator: SA
Sample : LD0828SB ✓*ELCS2 * Inst : HP_15
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 9:10 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

ok 9-22-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091834.D\ECD1A.CH Vial: 28
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091834.D\ECD2B.CH
Acq On : 18 Sep 2001 22:02 Operator: SA
Sample : LD0828SB *ELCS2 * Inst : HP_15
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 9:10 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.34	7.10	278321	409017	4.069	4.314
	Spiked Amount 6.667			Recovery	=	61.04%	64.71%
22)	S DCB	18.02	18.40	329546	429270	4.452	4.162
	Spiked Amount 6.667			Recovery	=	✓66.78%	✓62.43%
	Target Compounds:						
12)	L6 Aroclor-1254	12.37	12.04	297320	154681	105.5	101.4
13)	L6 Aroclor-1254 {2}	13.06	13.34	190143	250552	85.3	103.2
14)	L6 Aroclor-1254 {3}	13.55	13.69	273658	205304	100.6	94.6
15)	L6 Aroclor-1254 {4}	14.10	14.72	248881	329755	95.0	107.0
16)	L6 Aroclor-1254 {5}	14.80	15.19	257304	446711	116.5	111.4
	Sum Aroclor-1254			1267305	1387003	502.9	517.7
	Average Aroclor-1254					100.577	103.533
						76%	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.

E0455MS

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) SOIL Lab Sample ID: 47393.02MS

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

% Moisture: 34 decanted: (Y/N) __ Date Received: 08/24/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/28/01

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

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	50	U
11104-28-2	Aroclor-1221	50	U
11141-16-5	Aroclor-1232	50	U
53469-21-9	Aroclor-1242	69	P
12672-29-6	Aroclor-1248	50	U
11097-69-1	Aroclor-1254	130	
11096-82-5	Aroclor-1260	25	JP
	Surrogate amount spiked	10.03	

FORM I PCB

Chromatographic Report

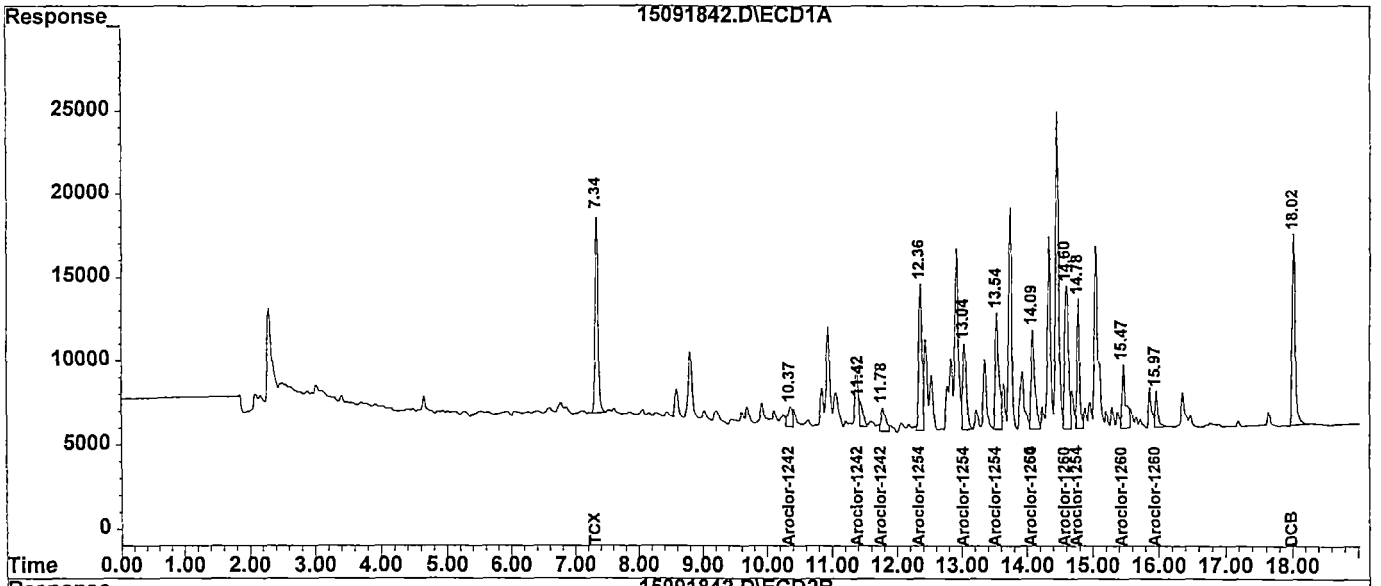
Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091842.D\ECD1A.CH Vial: 36
Acq On : 19 Sep 2001 1:07 Operator: SA
Sample : 47393.02MS *E0455MS * Inst : HP_15
Misc : *EPA*30.2G/5.0ML*34 Dilution: 1.00
IntFile : events.e

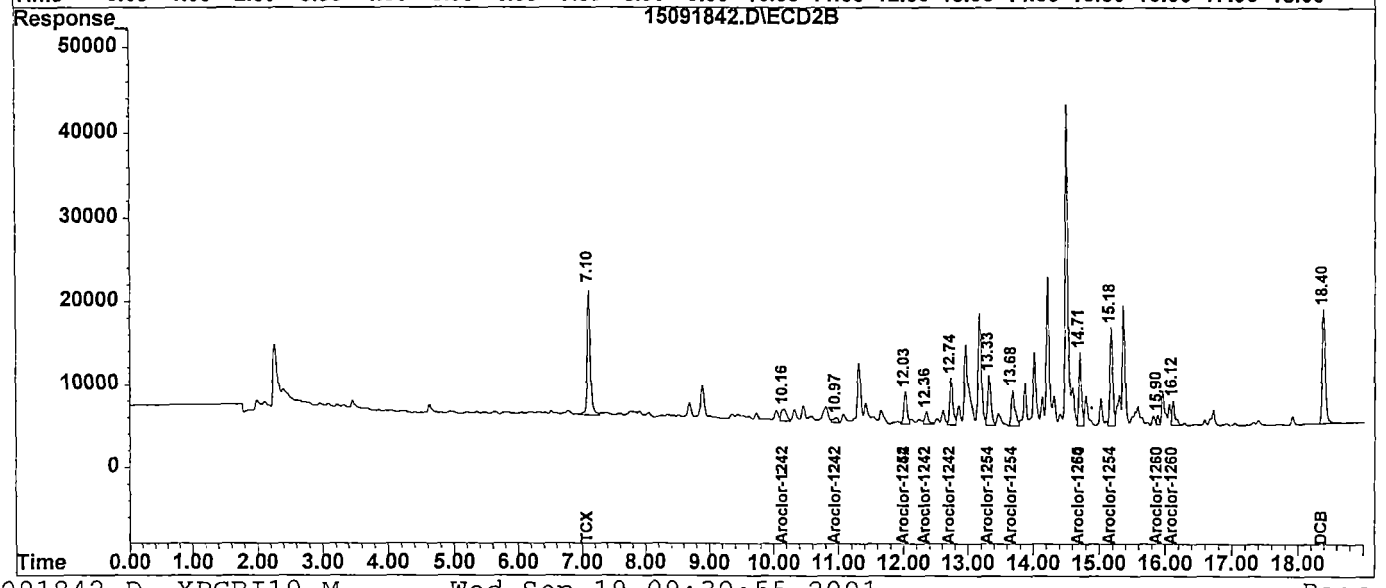
Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091842.D\ECD2B.CH Vial: 36
Acq On : 19 Sep 2001 1:07 Operator: SA
Sample : 47393.02MS Inst : HP_15
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 19 9:15 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

DK 9-22-01





Quantitation Report

Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091842.D\ECD1A.CH Vial: 36
Acq On : 19 Sep 2001 1:07 Operator: SA
Sample : 47393.02MS *E0455MS * Inst : HP_15
Misc : *EPA*30.2G/5.0ML*34 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091842.D\ECD2B.CH Vial: 36
Acq On : 19 Sep 2001 1:07 Operator: SA
Sample : 47393.02MS Inst : HP_15
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 19 9:15 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 2001
Response via : Initial Calibration

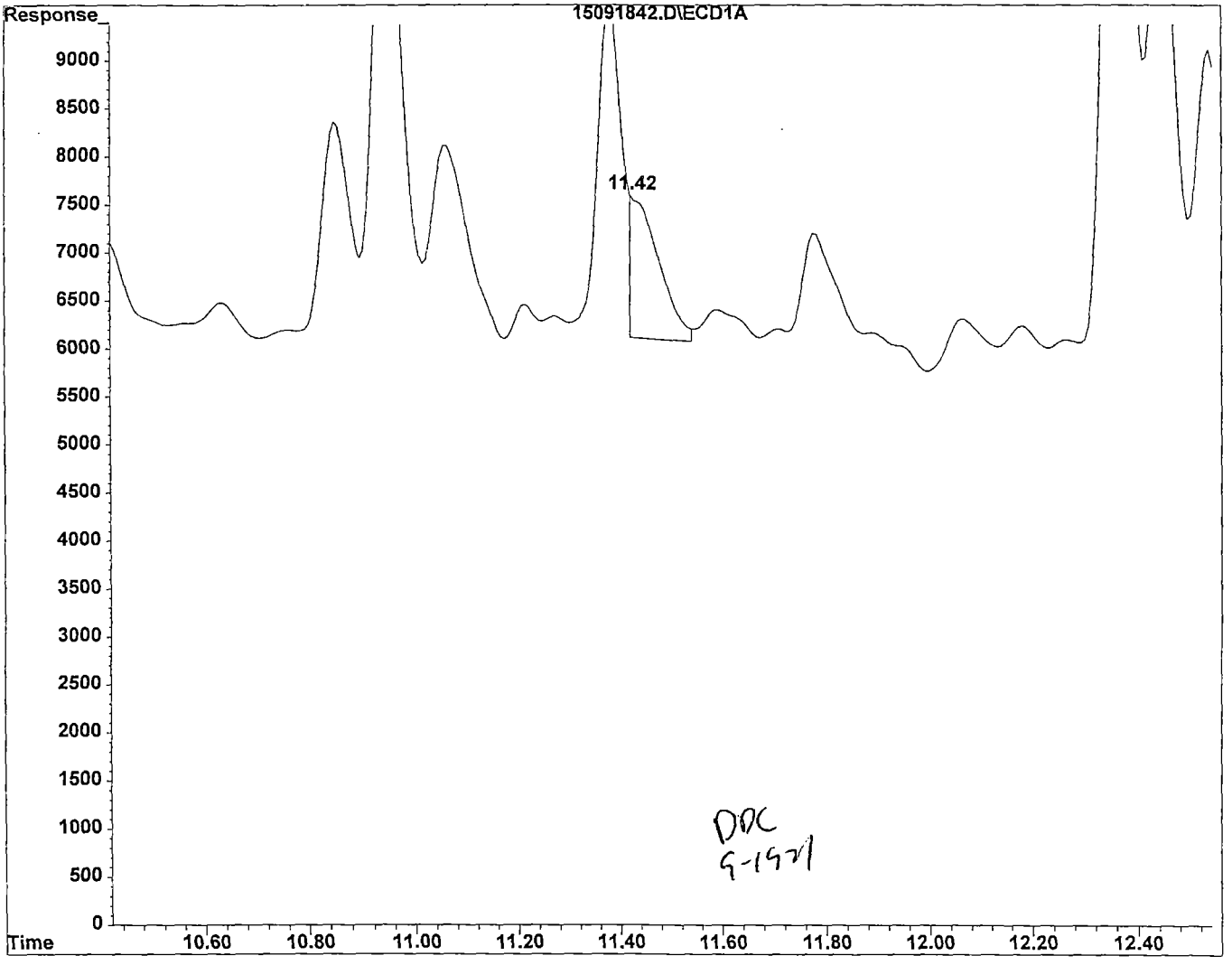
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.34	7.10	376314	527098	8.281	8.368	
	Spiked Amount 10.034			Recovery	=	82.53%	83.40%	
22)	S DCB	18.02	18.40	383431	464463	7.797	6.777	
	Spiked Amount 10.034			Recovery	=	77.70%	67.54%	
	Target Compounds:							
7)	L4 Aroclor-1242	0.00	10.16	0	87452	N.D.	130.6	#
8)	L4 Aroclor-1242 {2}	0.00	10.97f	0	33081	N.D.	26.2	#
9)	L4 Aroclor-1242 {3}	10.37	12.03	53693	133408	28.9 DDC 9-19-01	96.0	#
10)	L4 Aroclor-1242 {4}	11.42f	12.36	53836	57932	87.2m	69.4	
11)	L4 Aroclor-1242 {5}	11.78	12.74	72315	196792	91.8	123.2	#
	Sum Aroclor-1242			179844	508666	207.9	445.4	
	Average Aroclor-1242					69.289	89.080	
12)	L6 Aroclor-1254	12.36	12.03	322751	133408	172.4	131.7	
13)	L6 Aroclor-1254 {2}	13.05	13.33	195281	215466	131.9	133.6	
14)	L6 Aroclor-1254 {3}	13.54	13.69	258760	169202	143.2	117.4	
15)	L6 Aroclor-1254 {4}	14.09	14.72	232379	252895	133.5	123.5	
16)	L6 Aroclor-1254 {5}	14.79	15.19	219328	346083	149.4	129.9	
	Sum Aroclor-1254			1228499	1117055	730.4	636.0	
	Average Aroclor-1254					146.073	127.209	
17)	L7 Aroclor-1260	14.09	0.00	232379	0	73.2	N.D. d	#
18)	L7 Aroclor-1260 {2}	14.60	0.00	344433	0	83.3	N.D. d	#
19)	L7 Aroclor-1260 {3}	0.00	14.72	0	252895	N.D. d	50.8	#
20)	L7 Aroclor-1260 {4}	15.47f	15.90	147730	26884	57.5	9.464	#
21)	L7 Aroclor-1260 {5}	15.97	16.13	63515	96261	13.2	13.6	
	Sum Aroclor-1260			788058	376040	114.0	37.1	
	Average Aroclor-1260					56.809	24.629	

(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\15\DATA\09_18_01\15091842.D
Date Acquired: 19 Sep 2001 1:07
Inst: HP_15 Operator ID: SA
Name: 47393.02MS *E0455MS *
Misc: *EPA*30.2G/5.0ML*34
Method: F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 9:15 2001 Quant Results File: XPCBI10.RES



Aroclor-1242 {4} 11.42min area: 53836 m OK 9-22-01

Integration Time Range: 11.42 - 11.54

F:\HPCHEM\HP\15\DATA\09_18_01\15091842.D
Report generated: Wed Sep 19 09:34:56 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E0455MSD

Lab Name: SWL-TULSA Contract: 68W00066

Lab Code: SWOK Case No.: 29658 SDG No.: E0455

Matrix: (soil/water) SOIL Lab Sample ID: 47393.03MSD

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

% Moisture: 34 decanted: (Y/N) __ Date Received: 08/24/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/28/01

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

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	49	U
11104-28-2	Aroclor-1221	49	U
11141-16-5	Aroclor-1232	49	U
53469-21-9	Aroclor-1242	72	
12672-29-6	Aroclor-1248	49	U
11097-69-1	Aroclor-1254	120	
11096-82-5	Aroclor-1260	21	JP
	Surrogate amount spiked	9.97	

FORM I PCB

Chromatographic Report

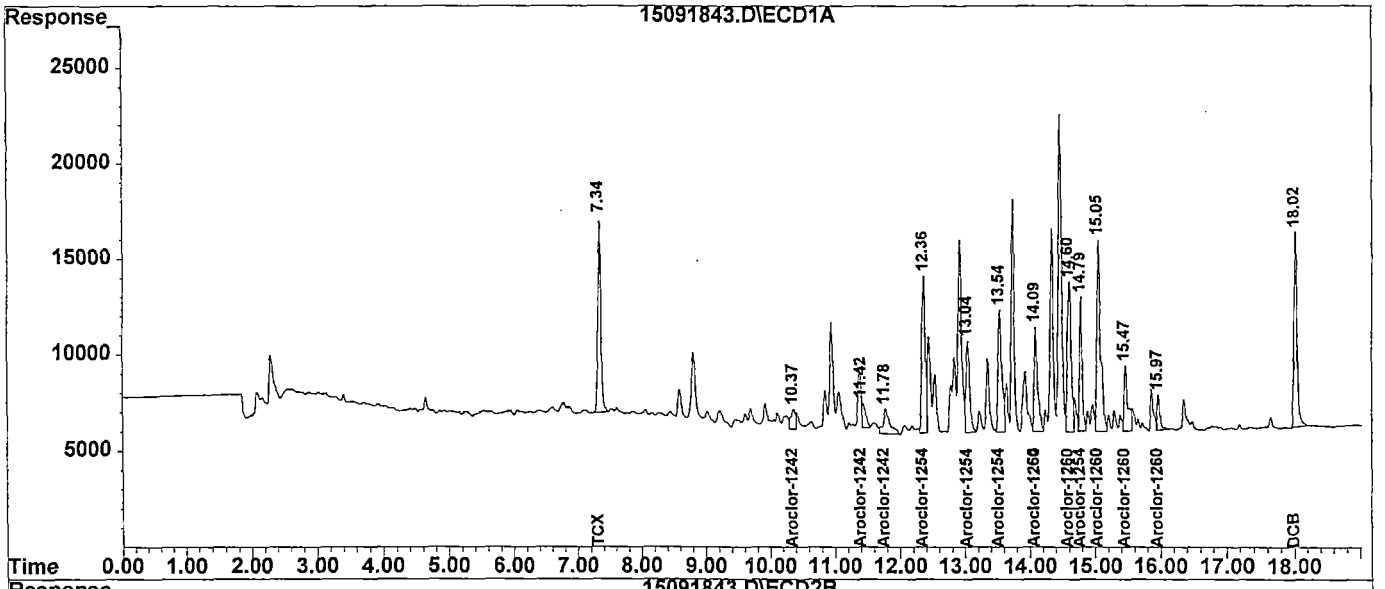
Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091843.D\ECD1A.CH Vial: 37
Acq On : 19 Sep 2001 1:30 Operator: SA
Sample : 47393.03MSD *E0455MSD * Inst : HP_15
Misc : *EPA*30.4G/5.0ML*34 Dilution: 1.00
IntFile : events.e

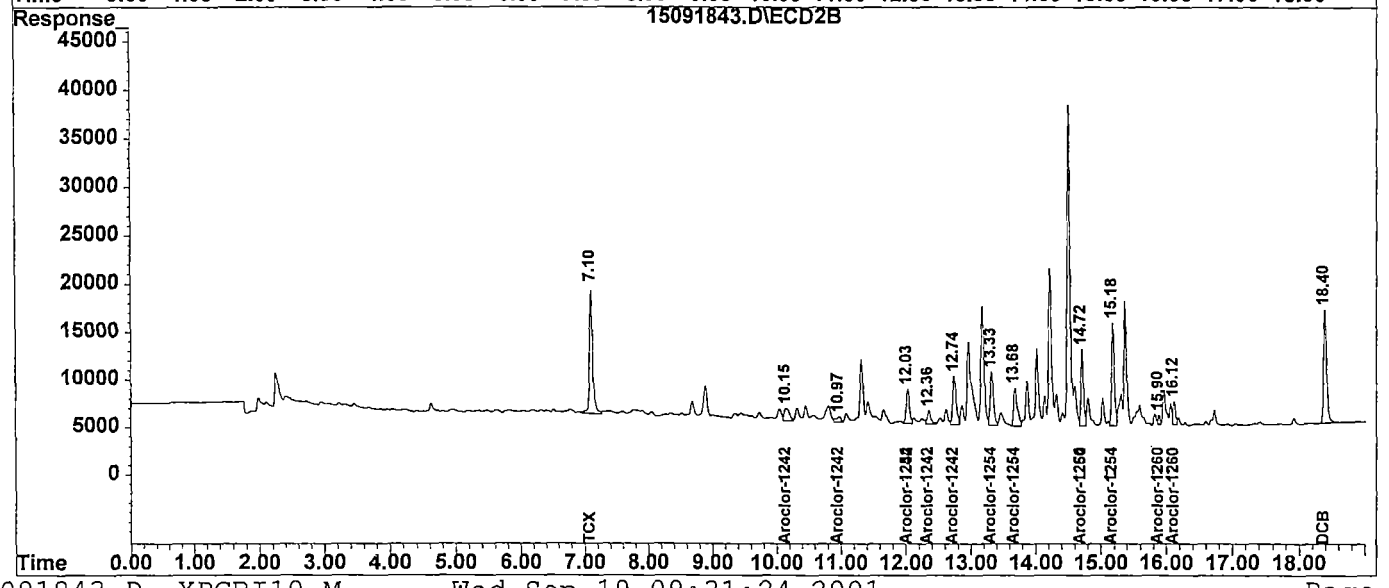
Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091843.D\ECD2B.CH Vial: 37
Acq On : 19 Sep 2001 1:30 Operator: SA
Sample : 47393.03MSD Inst : HP_15
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 19 9:16 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

OK 9-22-01





Quantitation Report

Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091843.D\ECD1A.CH Vial: 37
Acq On : 19 Sep 2001 1:30 Operator: SA
Sample : 47393.03MSD *E0455MSD * Inst : HP_15
Misc : *EPA*30.4G/5.0ML*34 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\15\DATA\09_18_01\15091843.D\ECD2B.CH Vial: 37
Acq On : 19 Sep 2001 1:30 Operator: SA
Sample : 47393.03MSD Inst : HP_15
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Sep 19 9:16 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 2001
Response via : Initial Calibration

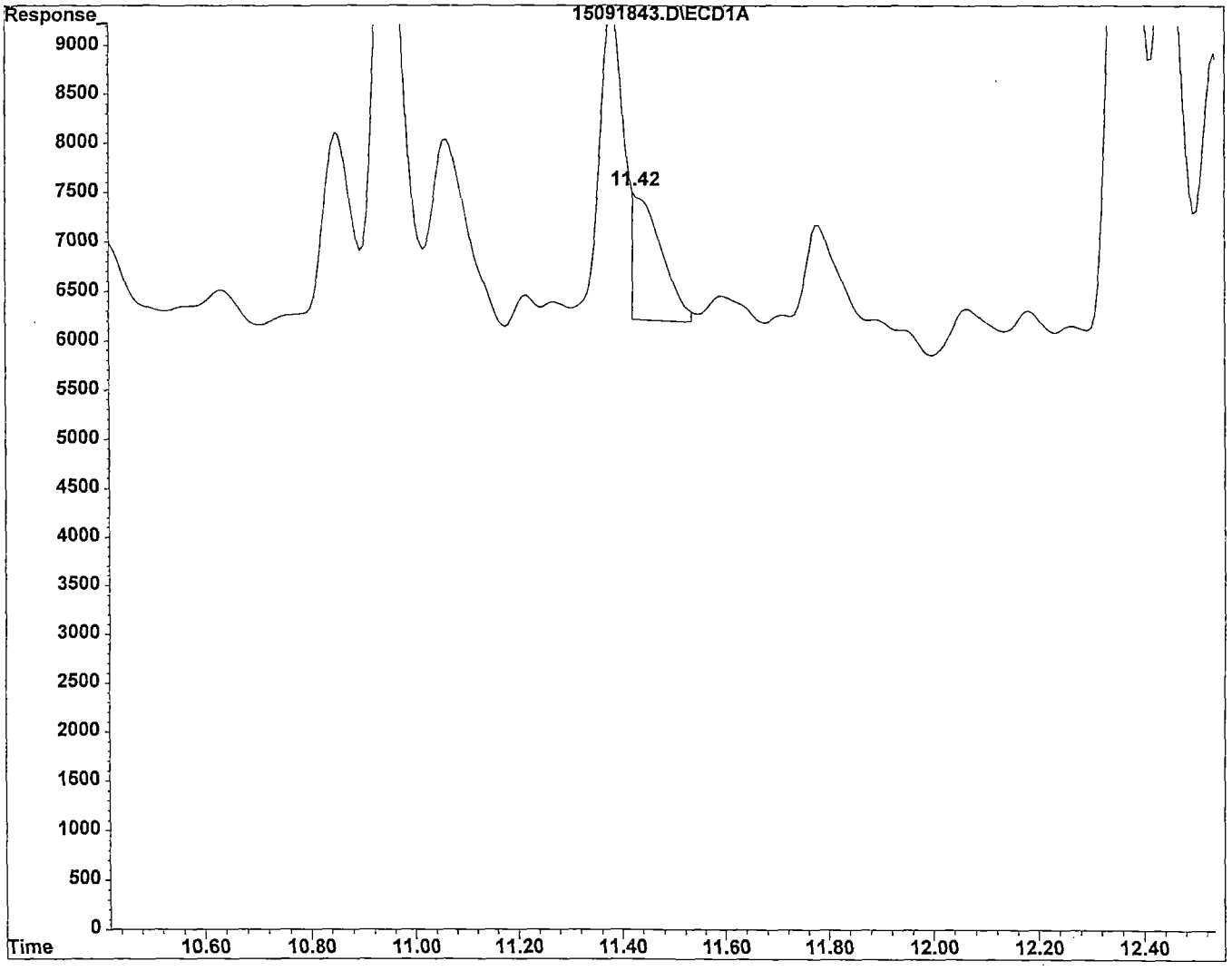
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.34	7.10	321218	459505	7.022	7.247	
	Spiked Amount 9.968			Recovery	=	70.44%	72.70%	
22)	S DCB	18.02	18.40	342668	397647	6.922	5.764	
	Spiked Amount 9.968			Recovery	=	69.44%	57.82%	
	Target Compounds:							
7)	L4 Aroclor-1242	0.00	10.16	0	76538	N.D.	113.6	#
8)	L4 Aroclor-1242 {2}	0.00	10.97f	0	29910	N.D.	23.5	#
9)	L4 Aroclor-1242 {3}	10.37	12.03	47983	123019	25.6	87.9	#
10)	L4 Aroclor-1242 {4}	11.42f	12.36	45216	54426	72.8m	64.8	
11)	L4 Aroclor-1242 {5}	11.78	12.74	92518	181357	116.6	112.8	
	Sum Aroclor-1242			185718	465251	215.0	402.6	
	Average Aroclor-1242					71.681	80.517	
12)	L6 Aroclor-1254	12.36	12.03	298221	123019	158.2	120.6	
13)	L6 Aroclor-1254 {2}	13.05	13.33	181551	199601	121.8	122.9	
14)	L6 Aroclor-1254 {3}	13.54	13.69	239362	156912	131.6	108.1	
15)	L6 Aroclor-1254 {4}	14.09	14.72	209572	230393	119.6	111.8	
16)	L6 Aroclor-1254 {5}	14.79	15.19	196679	312170	133.1	116.4	
	Sum Aroclor-1254			1125385	1022095	664.3	579.9	
	Average Aroclor-1254					132.865	115.974	
17)	L7 Aroclor-1260	14.09	0.00	209572	0	65.6	N.D. d	#
18)	L7 Aroclor-1260 {2}	14.60	0.00	316758	0	76.1	N.D. d	#
19)	L7 Aroclor-1260 {3}	15.05	14.72	380829	230393	94.7	46.0	#
20)	L7 Aroclor-1260 {4}	15.47f	15.90	130849	22375	50.6	7.825	#
21)	L7 Aroclor-1260 {5}	15.97	16.13	53274	65191	11.0	9.165	
	Sum Aroclor-1260			1091282	317959	148.5	31.4	
	Average Aroclor-1260					59.599	20.988	

(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\15\DATA\09_18_01\15091843.D
Date Acquired: 19 Sep 2001 1:30
Inst: HP_15 Operator ID: SA
Name: 47393.03MSD *E0455MSD *
Misc: *EPA*30.4G/5.0ML*34
Method: F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title: PCB/TOXAPHENE
Quant Time: Sep 19 9:16 2001 Quant Results File: XPCBI10.RES



Aroclor-1242 {4} 11.42min area: 45216 m

ok 9-22-01

Integration Time Range: 11.42 - 11.54

F:\HPCHEM\HP\15\DATA\09_18_01\15091843.D
Report generated: Wed Sep 19 09:34:58 2001

Gel Permeation Chromatography (GPC) Run Log - GPC2

SWOK/AATS SWL-OE-102-16 Rev.#: 2.1 Fraction Collected: 45 mLs

Col. ID.: 364134 Protocol: GC699 Fraction: PEST Cycle: 15-9

Cal. Std. Page: Client: EPA Case#

DATE/TIME	POS.	SAMPLE ID	FILE	COMMENT
09/02/01 19:08	1	CAL STD (INITIAL)	2_090201	
09/02/01 19:39	2	SB	2_090202	
09/02/01 20:11	3	SB	2_090203	
09/02/01 20:42	4	SB	2_090204	
09/02/01 21:13	5	SB	2_090205	
09/02/01 21:44	6	SB#090201C (PEST)	2_090206	
09/02/01 22:15	7	SB#090201D (PEST)	2_090207	
09/02/01 22:46	8	BL0828SB-EPA	2_090208	
09/02/01 23:17	9	BB0828SB-EPA	2_090209	
09/02/01 23:48	10	LC0828SB-EPA	2_090210	
09/03/01 00:19	11	LD0828SB-EPA	2_090211	
09/03/01 00:50	12	47393.05-E0457-EPA	2_090212	
09/03/01 01:22	13	47393.09-E0461-EPA	2_090213	
09/03/01 01:53	14	47393.10-E0462-EPA	2_090214	
09/03/01 02:24	15	47393.15-E0467-EPA	2_090215	
09/03/01 02:55	16	47393.08-E0460-EPA	2_090216	
09/03/01 03:26	17	47393.11-E0463-EPA	2_090217	
09/03/01 03:57	18	47393.01-E0455-EPA	2_090218	
09/03/01 04:28	19	47393.02-MS-E0455-EPA	2_090219	
09/03/01 04:59	20	47393.03-MSD-E0455-EPA	2_090220	
09/03/01 05:30	21	47393.04-E0456-EPA	2_090221	

9/7/2001
Verification Signature/Date

9/6/01
Analyst Signature/Date

Book: OE-102-16-RUN- Page No.: 38

Gel Permeation Chromatography (GPC) Run Log - GPC2

SWOK/AATS SWL-OE-102-16 Rev.#: 2.1 Fraction Collected: 45 mLs

Col. ID.: 364134 Protocol: GC699 Fraction: PEST Cycle: 15-9

Cal. Std. Page: Client: EPA Case#

DATE/TIME	POS.	SAMPLE ID	FILE	COMMENT
09/03/01 06:01	22	47393.06-E0458-EPA	2_090222	
09/03/01 06:33	23	47393.07-E0459-EPA	2_090223	
09/03/01 07:04	24	47393.12-E0464-EPA	2_090224	
09/03/01 07:35	25	47393.13-E0465-EPA	2_090225	
09/03/01 08:06	26	47393.14-E0466-EPA	2_090226	
09/03/01 08:37	27	47393.16-E0468-EPA	2_090227	
09/03/01 09:08	28	47393.17-E0469-EPA	2_090228	
09/03/01 09:39	29	SB	2_090229	
09/03/01 10:10	30	SB	2_090230	
09/03/01 10:41	31	SB	2_090231	
09/03/01 11:12	32	SB	2_090232	
09/03/01 11:44	33	CAL STD (FINAL)	2_090233	

Compound	Initial RT	Final RT	% Difference
Phthalate	14.56	14.45	0.75
Methoxychlor	16.21	16.07	0.86
Perylene	21.26	21.16	0.47

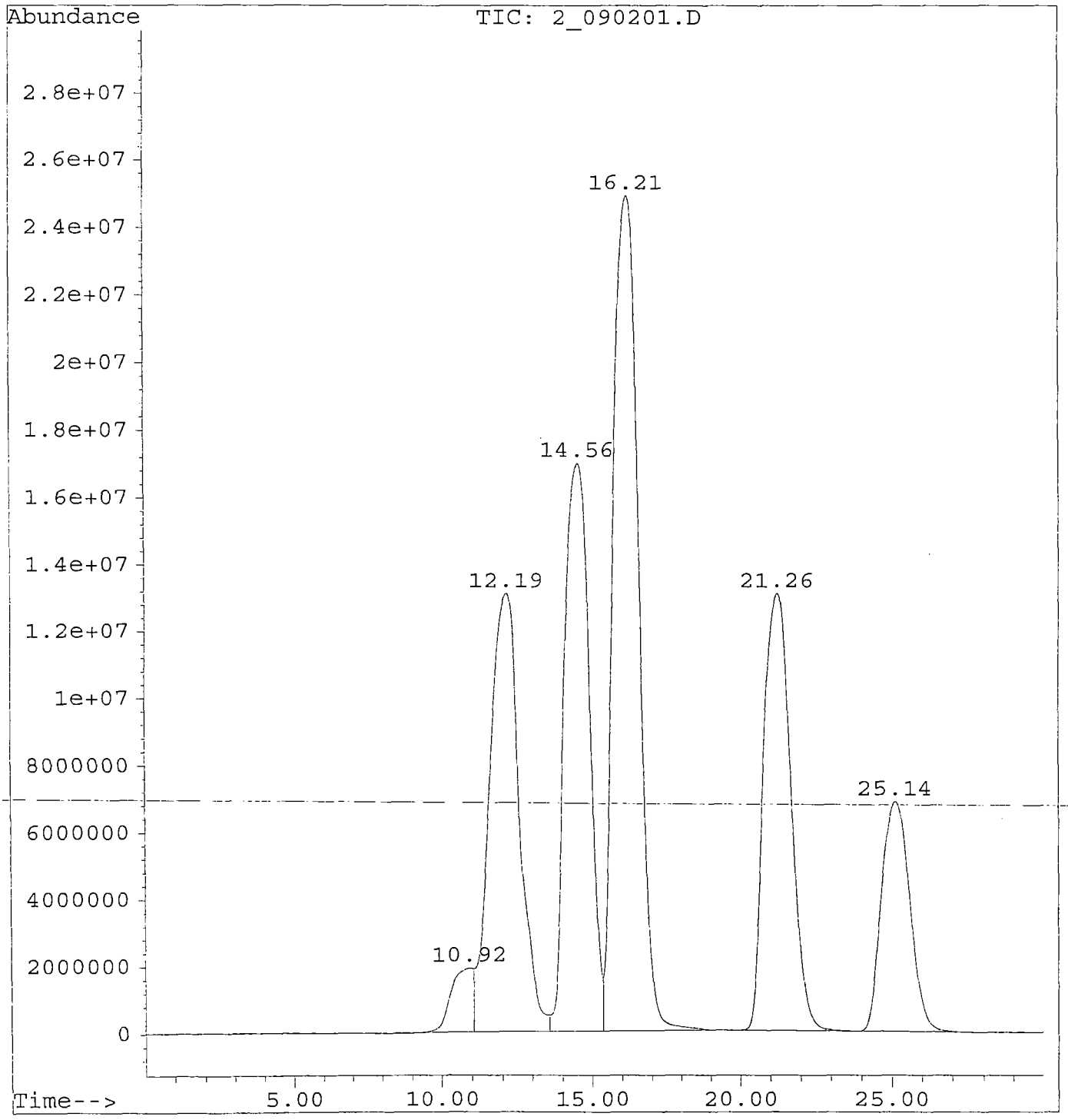
9/7/2001
Verification Signature/Date

9/6/01
Analyst Signature/Date

Book: OE-102-16-RUN- Page No.: 39

Data File : C:\HPCHEM\6\DATA\090201\2_090201.D
Acq On : 02 Sep 01 07:08 PM
Sample : CAL STD (INITIAL)
Misc : COL# 364134

Vial: 1
Operator: CR COL#
Inst : GPC2
Multiplr: 1.00



Chromatographic Resolution Report

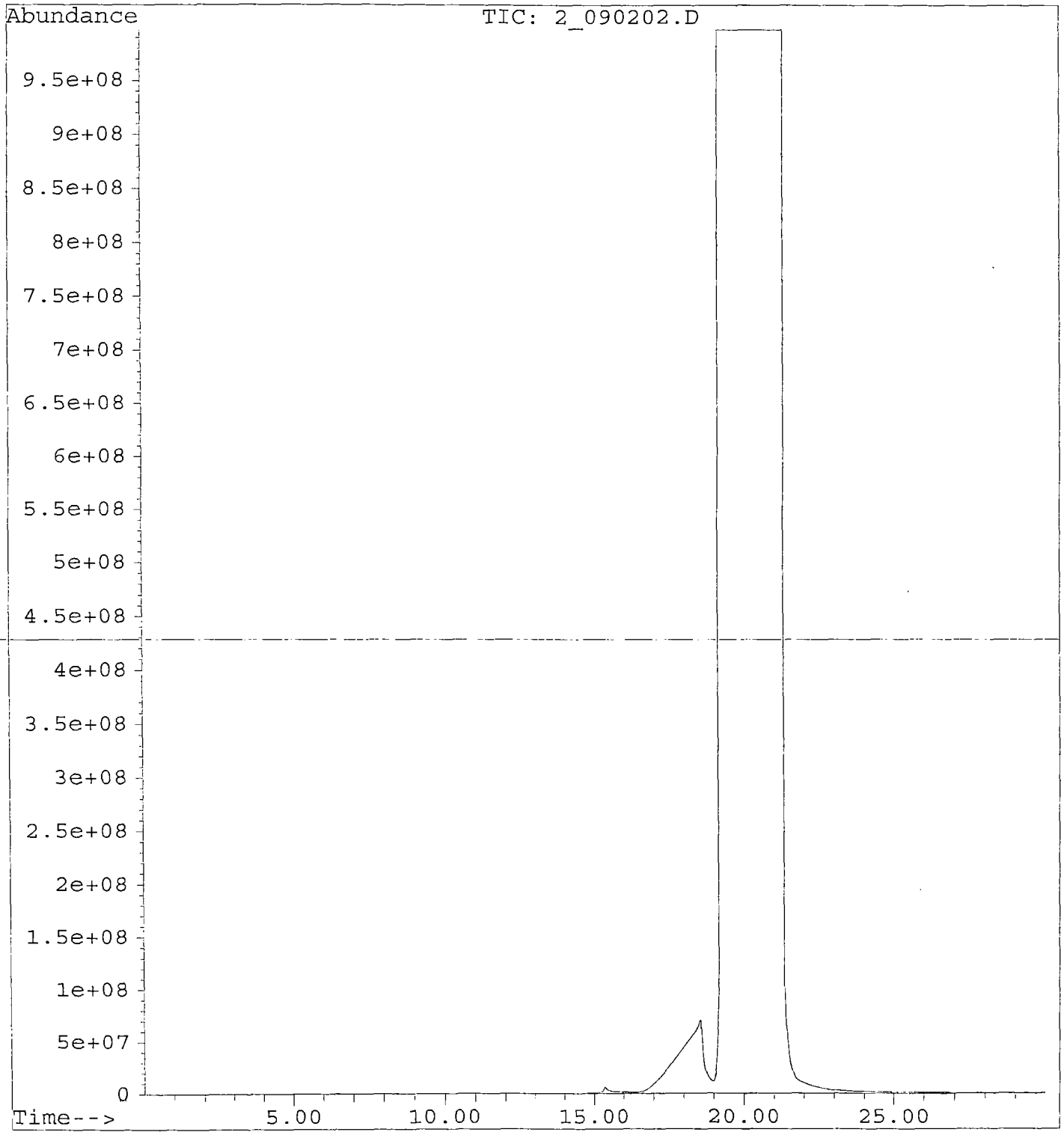
Data File : C:\HPCHEM\6\DATA\090201\2_090201.D
Acq On : 02 Sep 01 19:08
Sample : CAL STD (INITIAL)
Misc : COL# 364134

Vial: 1
Operator: CR COL# 36
Inst : GPC2
Multiplr: 1.00

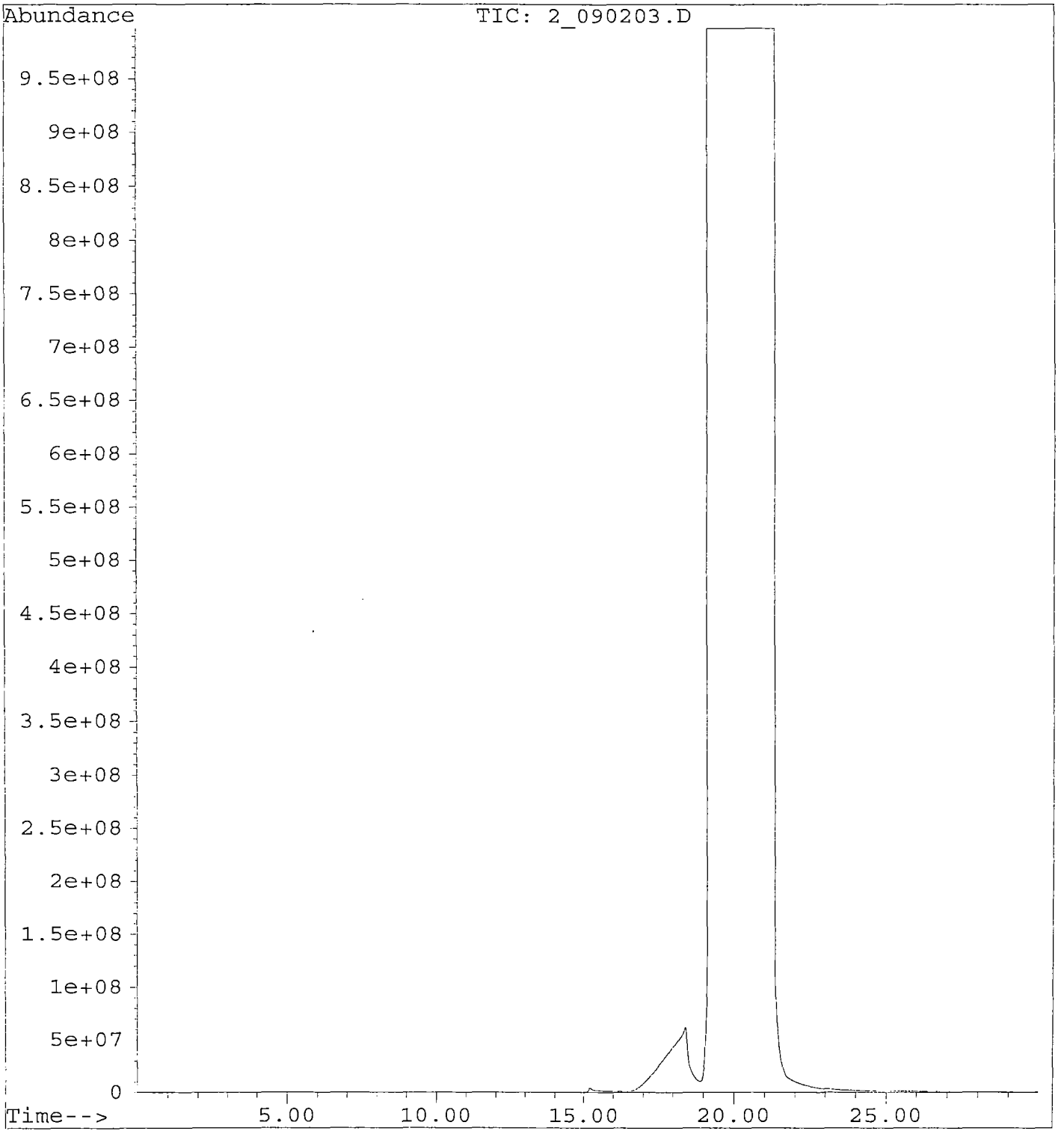
Method : C:\HPCHEM\6\METHODS\GPC.M
Title :

RT#1	RT#2	Resolution
10.918	12.188	1.16
12.188	14.561	96.24
14.561	16.207	90.48
16.207	21.262	100.00
21.262	25.145	99.90

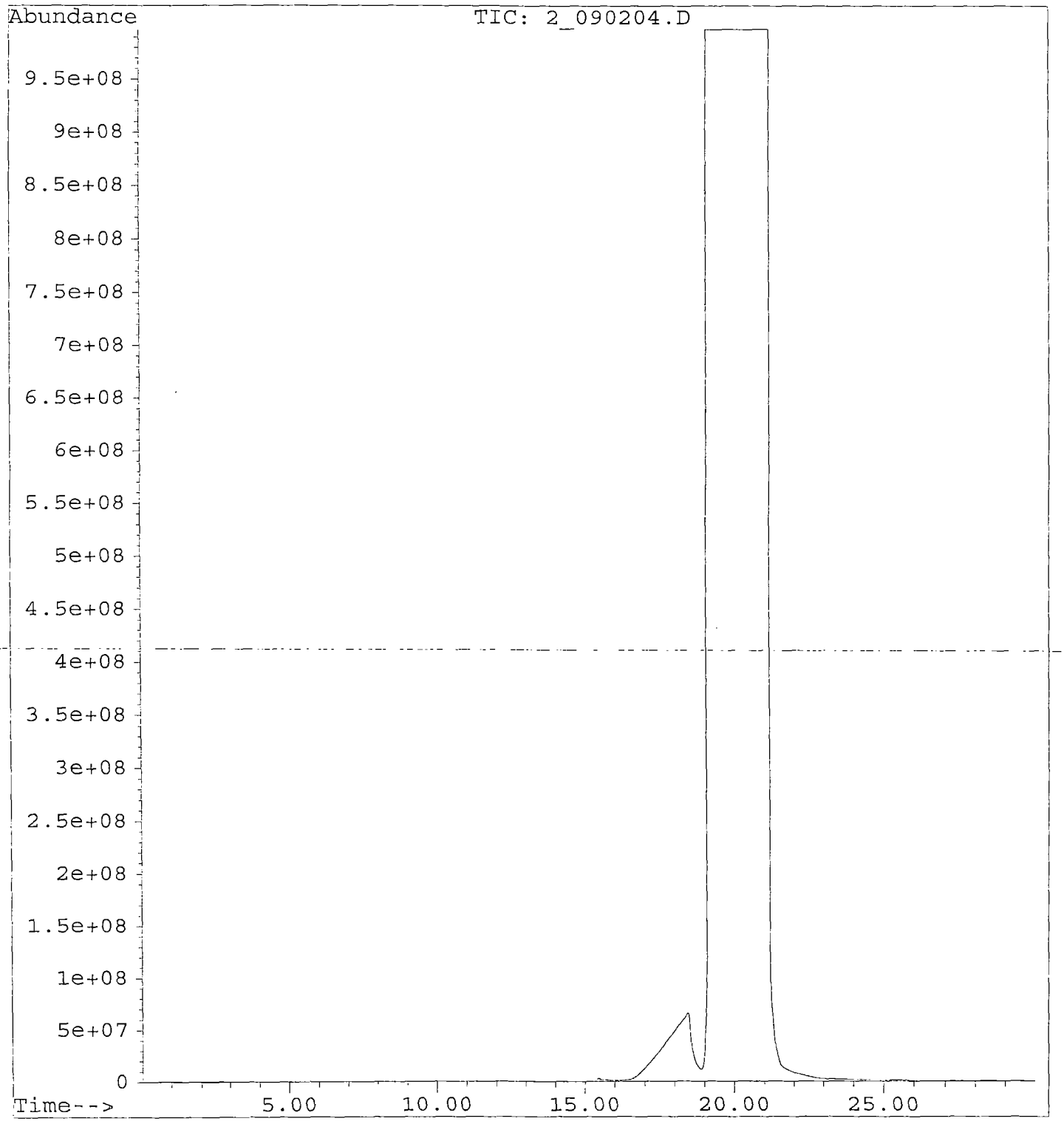
File : C:\HPCHEM\6\DATA\090201\2_090202.D
Operator : CR COL# 364134
Acquired : 02 Sep 01 19:39 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: SB
Misc Info : COL# 364134
Vial Number: 2



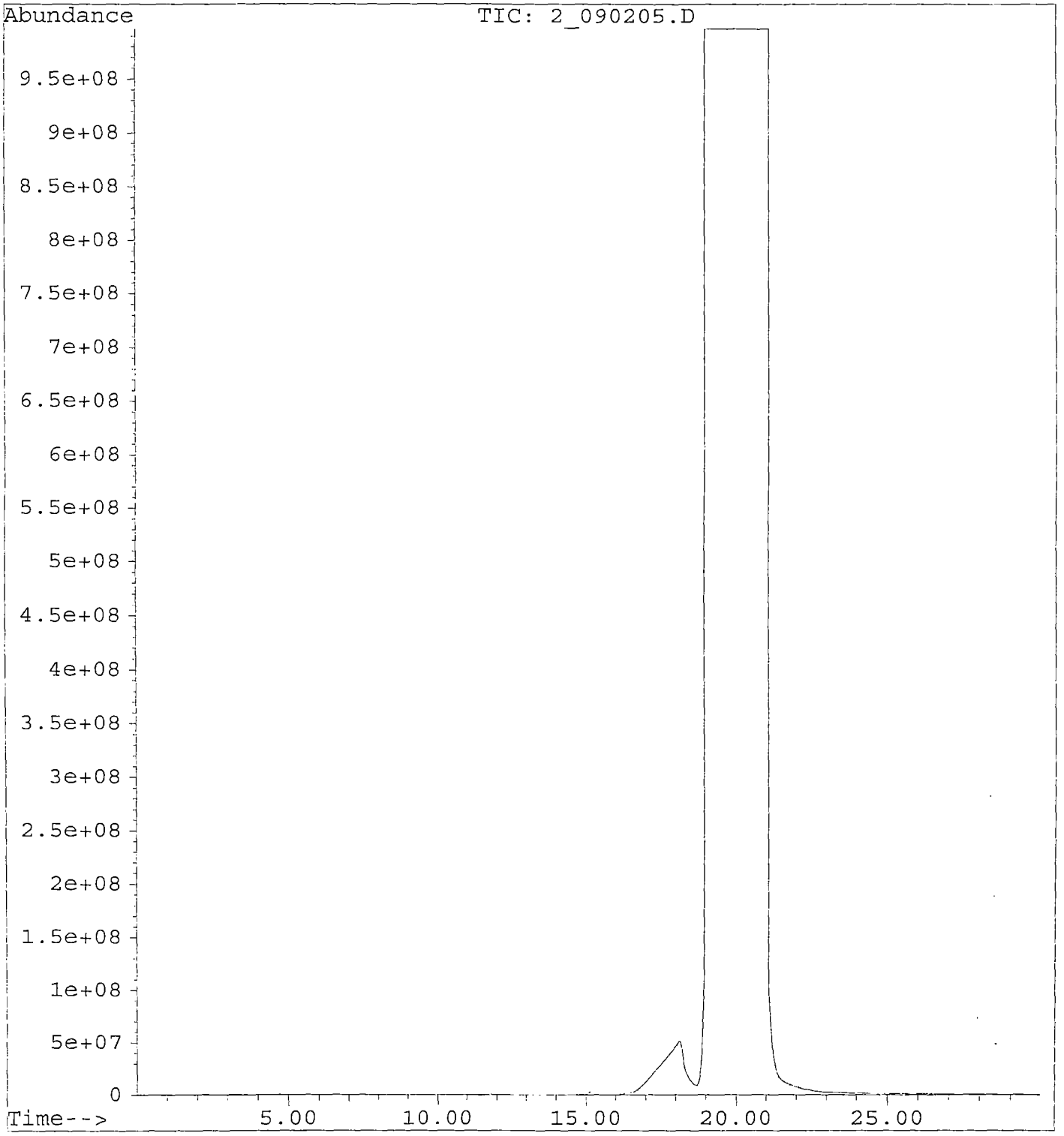
File : C:\HPCHEM\6\DATA\090201\2_090203.D
Operator : CR COL# 364134
Acquired : 02 Sep 01 20:11 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: SB
Misc Info : COL# 364134
Vial Number: 3



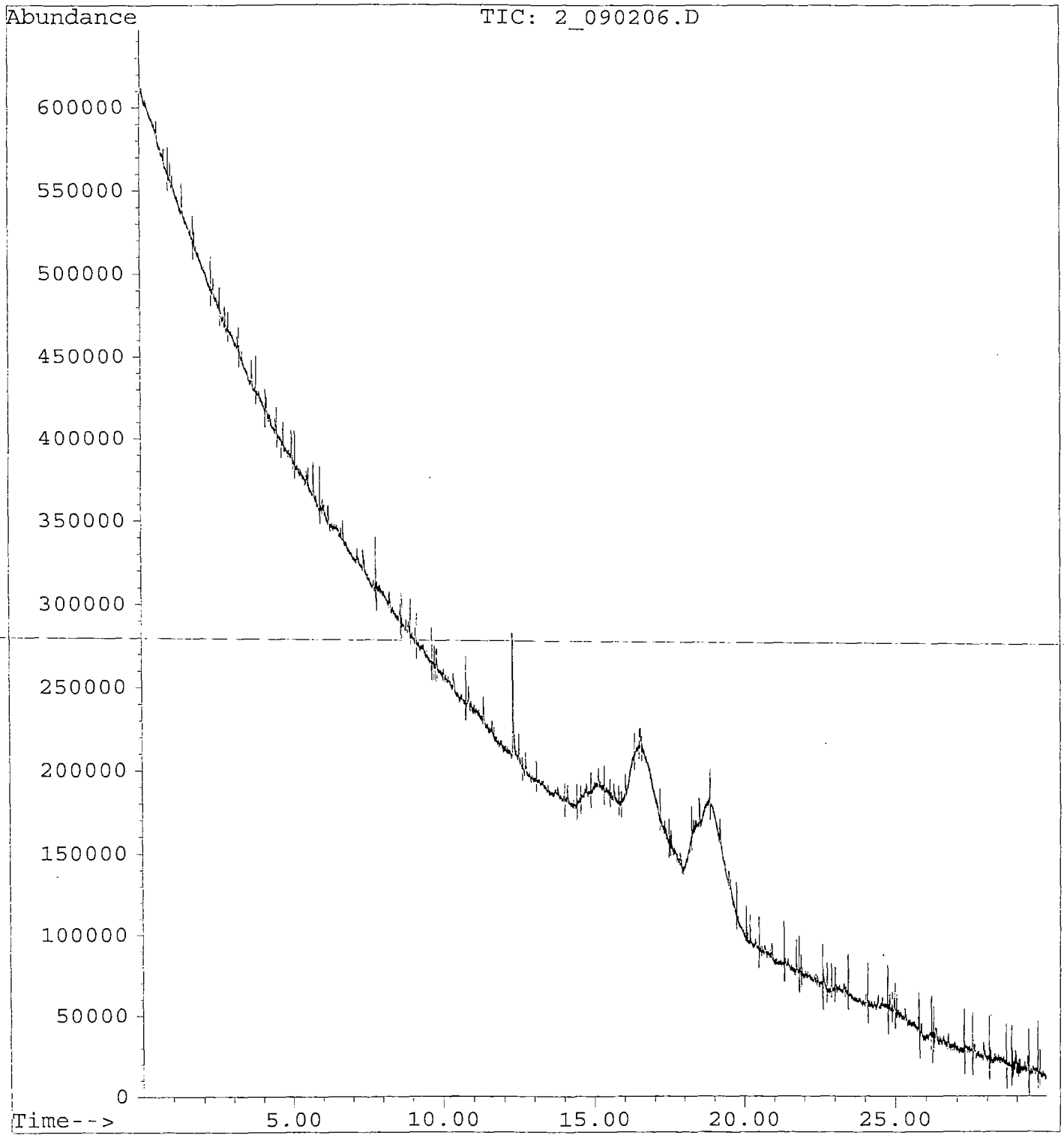
File : C:\HPCHEM\6\DATA\090201\2_090204.D
Operator : CR COL# 364134
Acquired : 02 Sep 01 20:42 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: SB
Misc Info : COL# 364134
Vial Number: 4



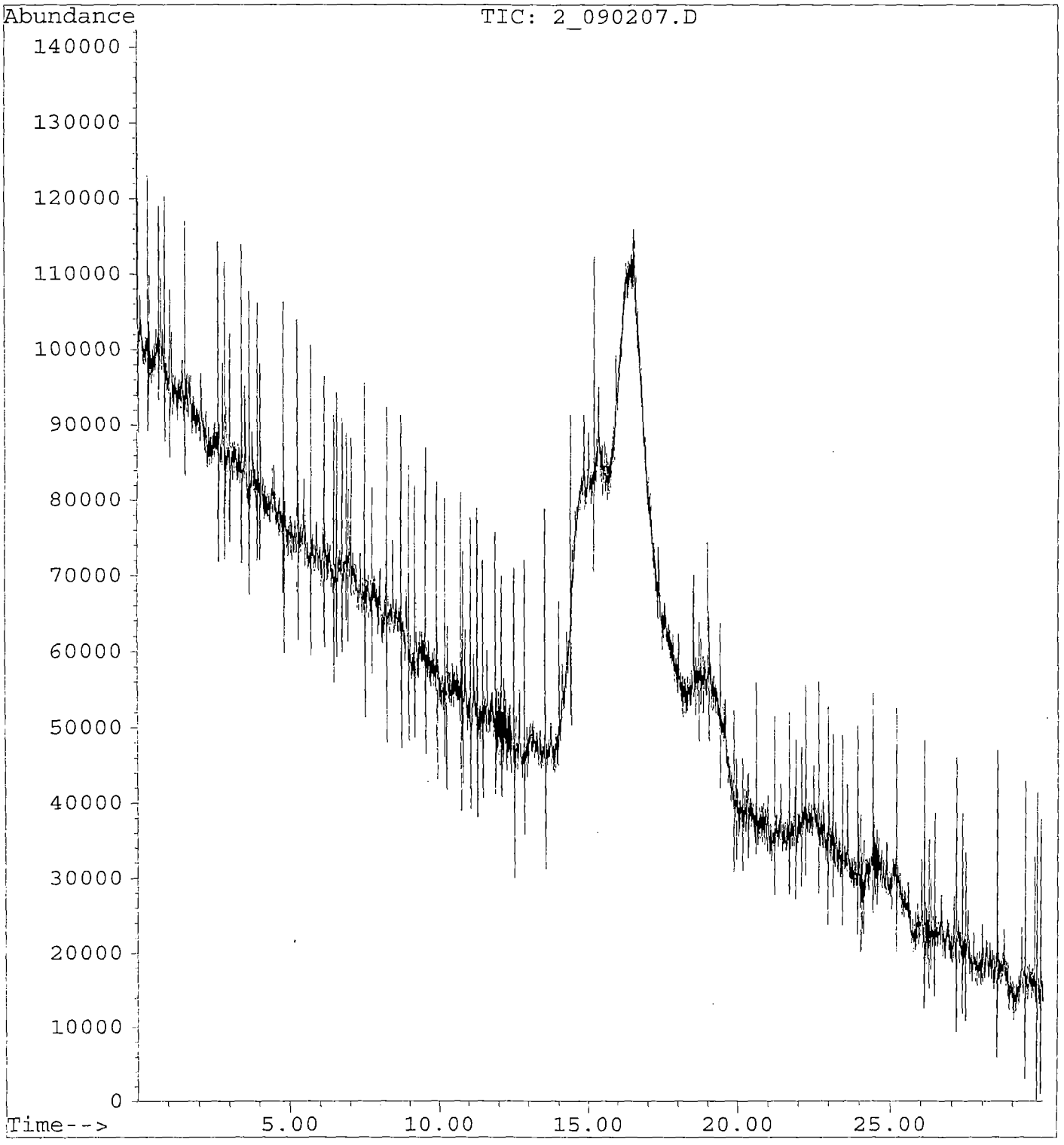
File : C:\HPCHEM\6\DATA\090201\2_090205.D
Operator : CR COL# 364134
Acquired : 02 Sep 01 21:13 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: SB
Misc Info : COL# 364134
Vial Number: 5



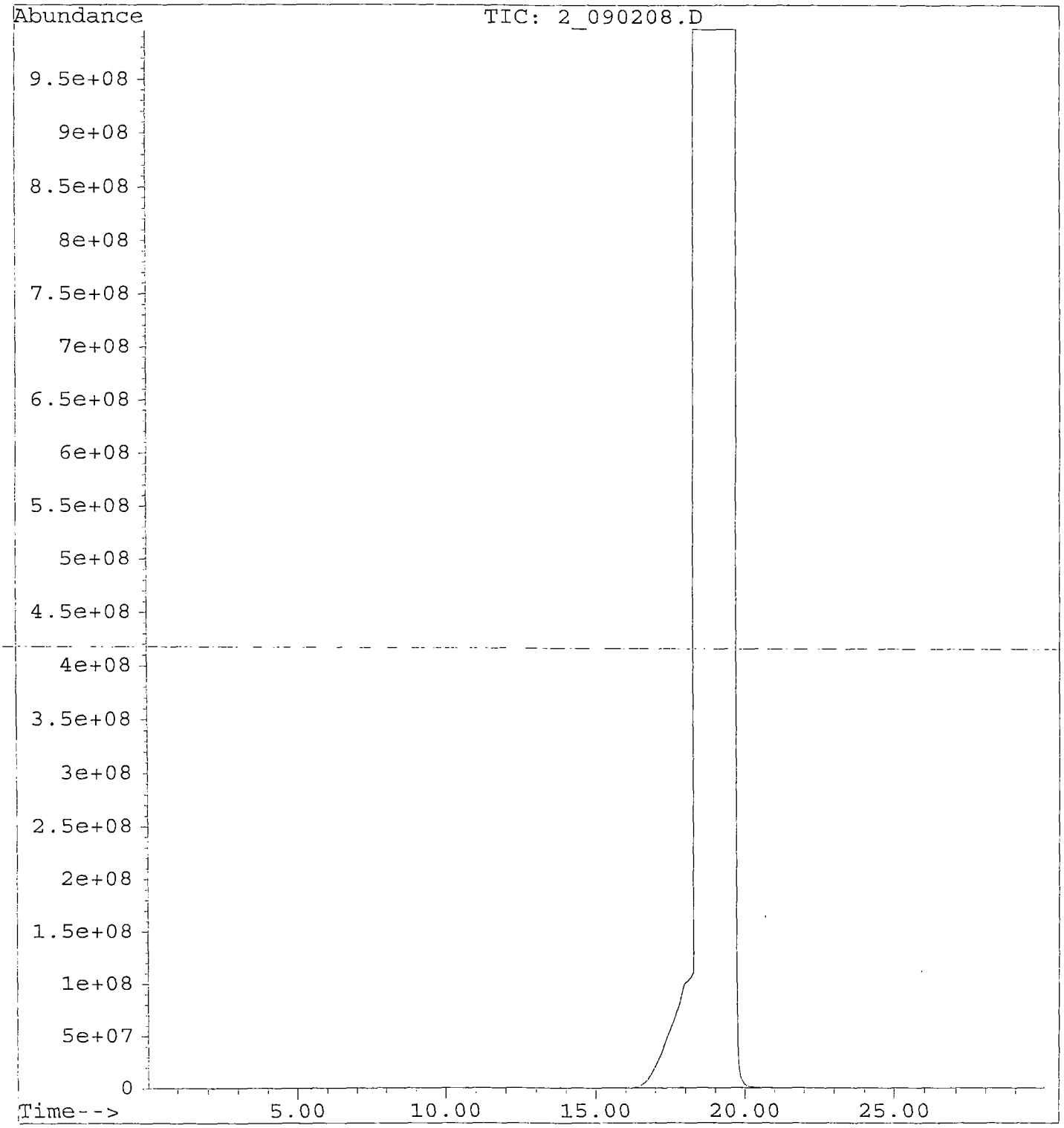
File : C:\HPCHEM\6\DATA\090201\2_090206.D
Operator : CR COL# 364134
Acquired : 02 Sep 01 21:44 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: SB#090201C (PEST)
Misc Info : COL# 364134
Vial Number: 6



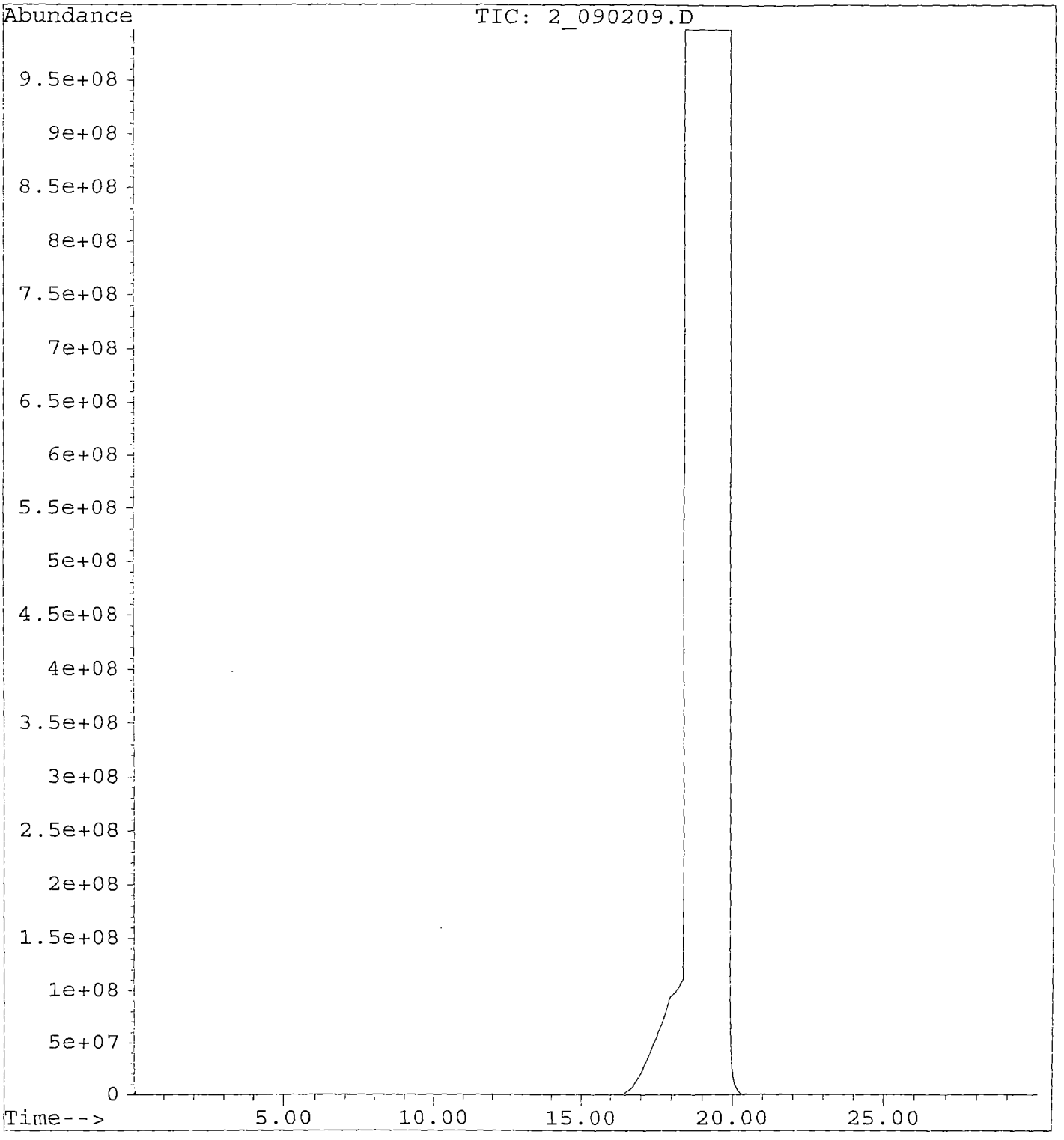
File : C:\HPCHEM\6\DATA\090201\2_090207.D
Operator : CR COL# 364134
Acquired : 02 Sep 01 22:15 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: SB#090201D (PEST)
Misc Info : COL# 364134
Vial Number: 7



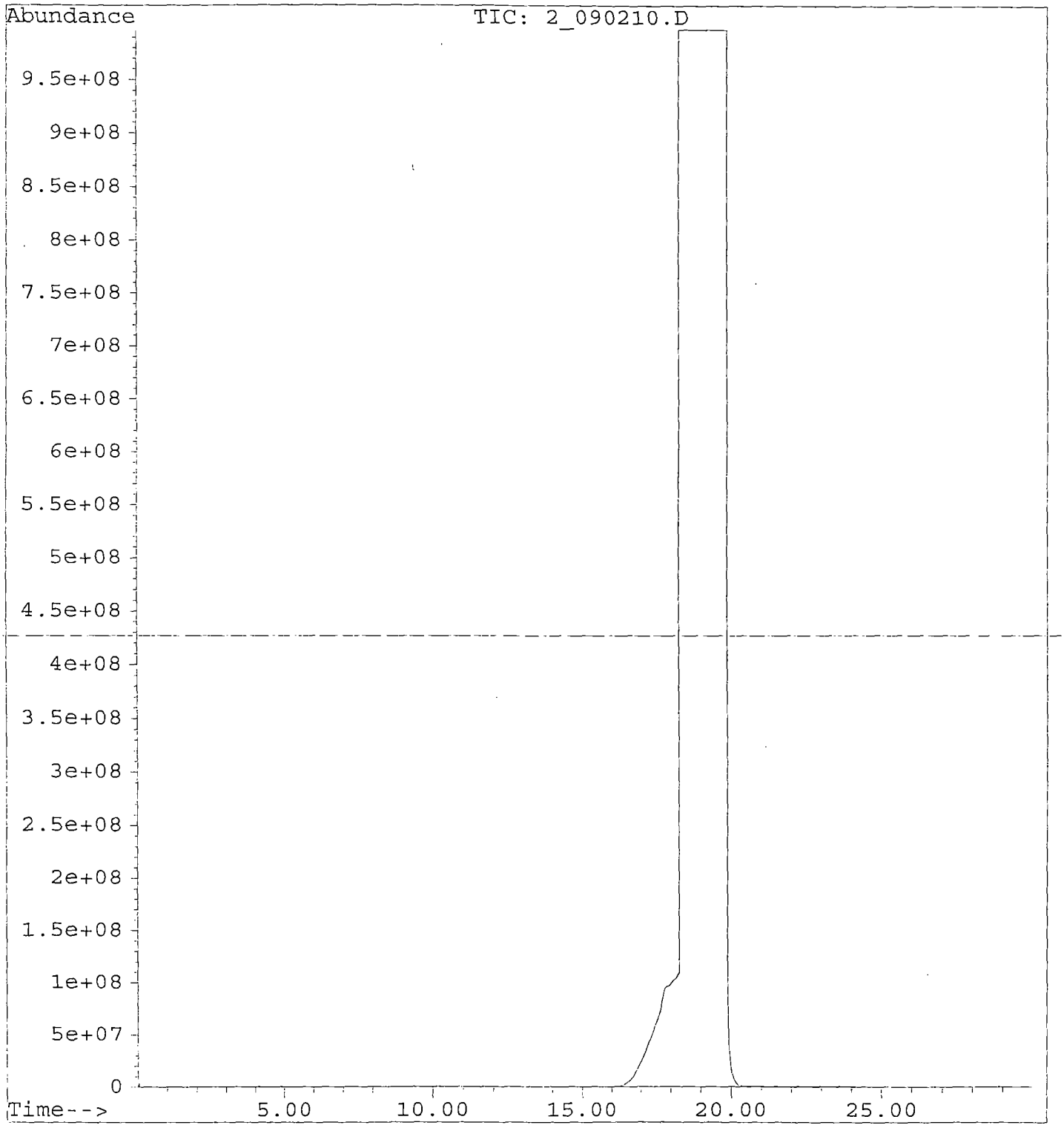
File : C:\HPCHEM\6\DATA\090201\2_090208.D
Operator : CR COL# 364134
Acquired : 02 Sep 01 22:46 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: BL0828SB-EPA
Misc Info : COL# 364134
Vial Number: 8



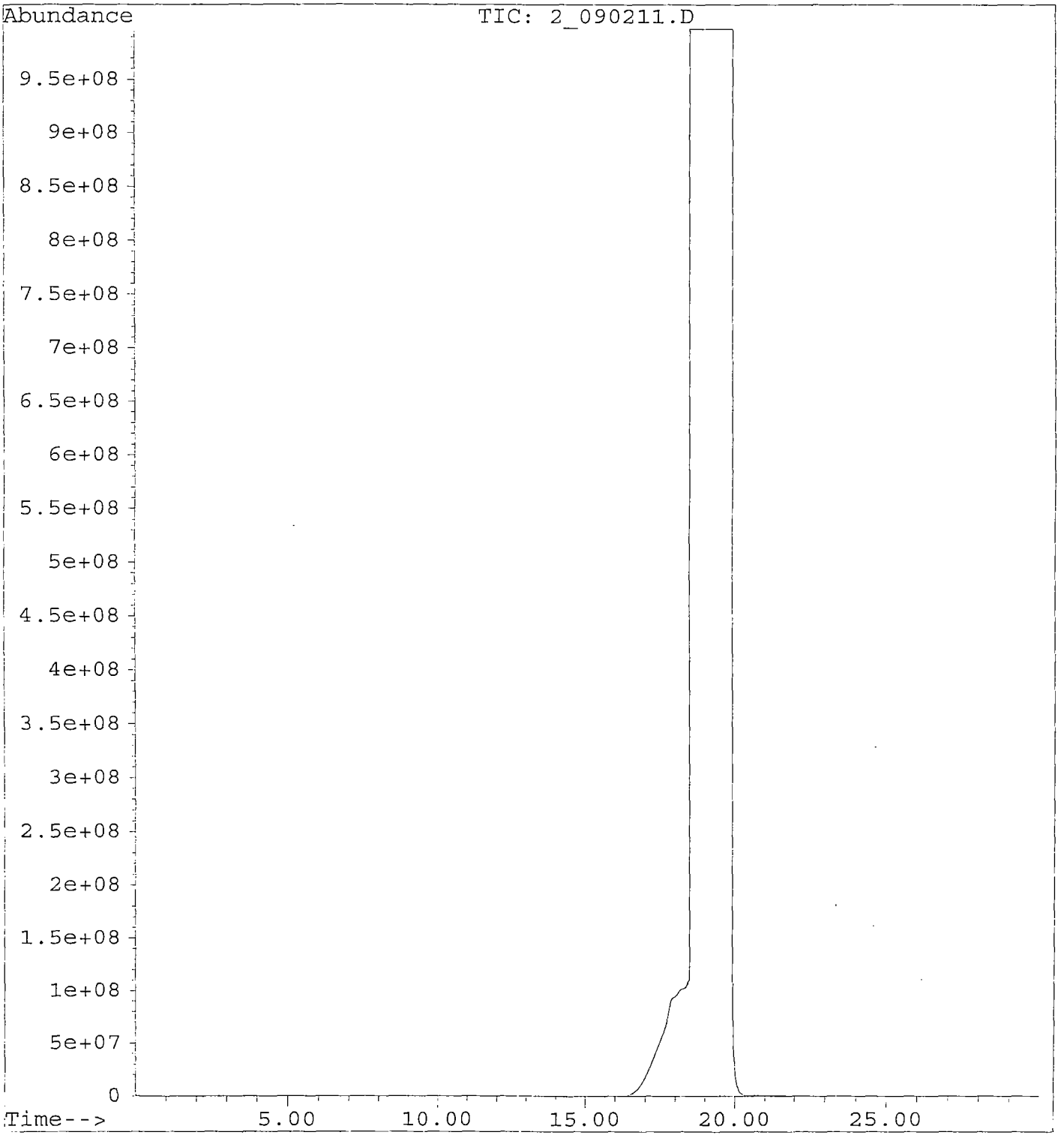
File : C:\HPCHEM\6\DATA\090201\2_090209.D
Operator : CR COL# 364134
Acquired : 02 Sep 01 23:17 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: BB0828SB-EPA
Misc Info : COL# 364134
Vial Number: 9



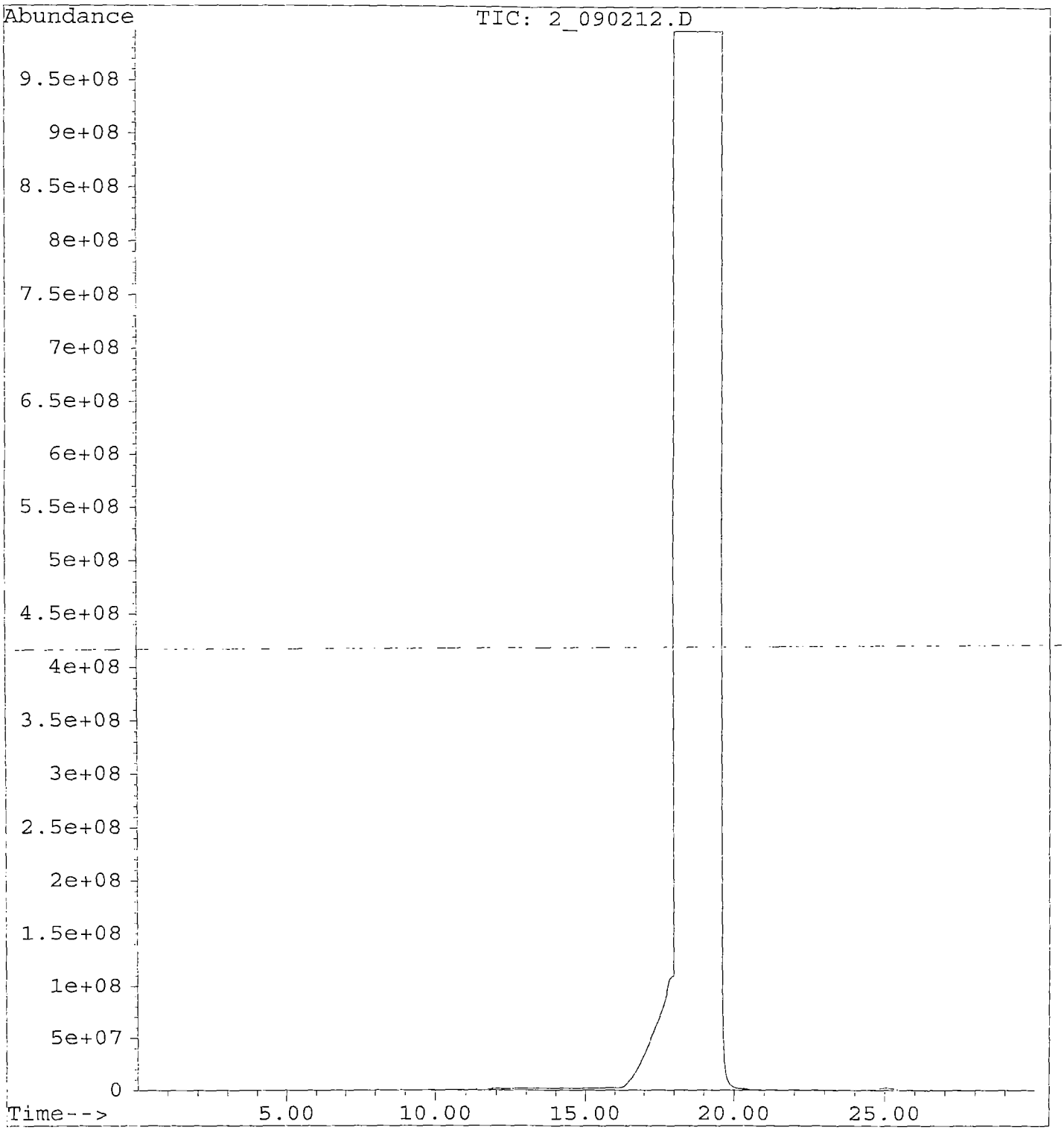
File : C:\HPCHEM\6\DATA\090201\2_090210.D
Operator : CR COL# 364134
Acquired : 02 Sep 01 23:48 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: LC0828SB-EPA
Misc Info : COL# 364134
Vial Number: 10



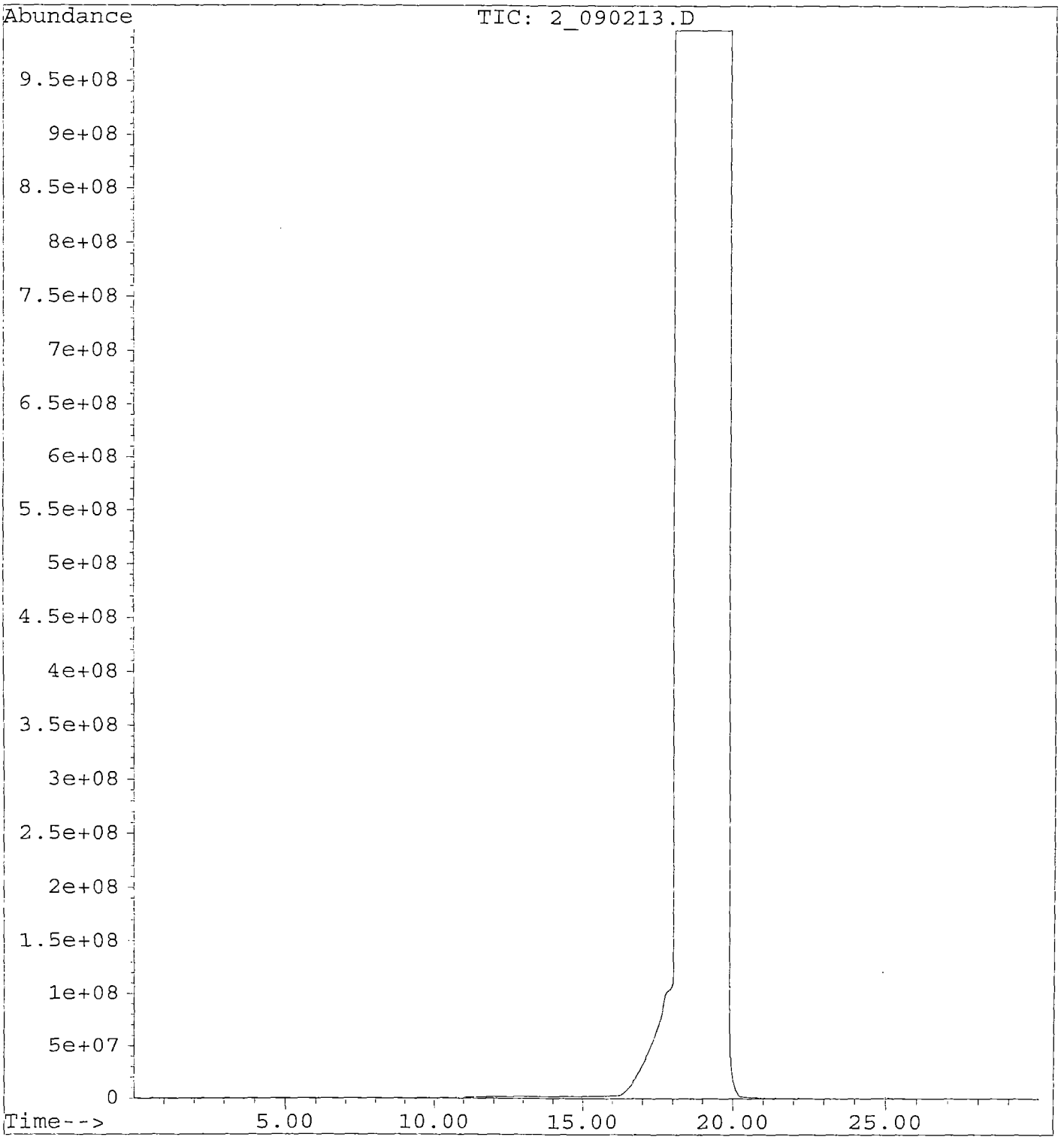
File : C:\HPCHEM\6\DATA\090201\2_090211.D
Operator : CR COL# 364134
Acquired : 03 Sep 01 00:19 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: LD0828SB-EPA
Misc Info : COL# 364134
Vial Number: 11



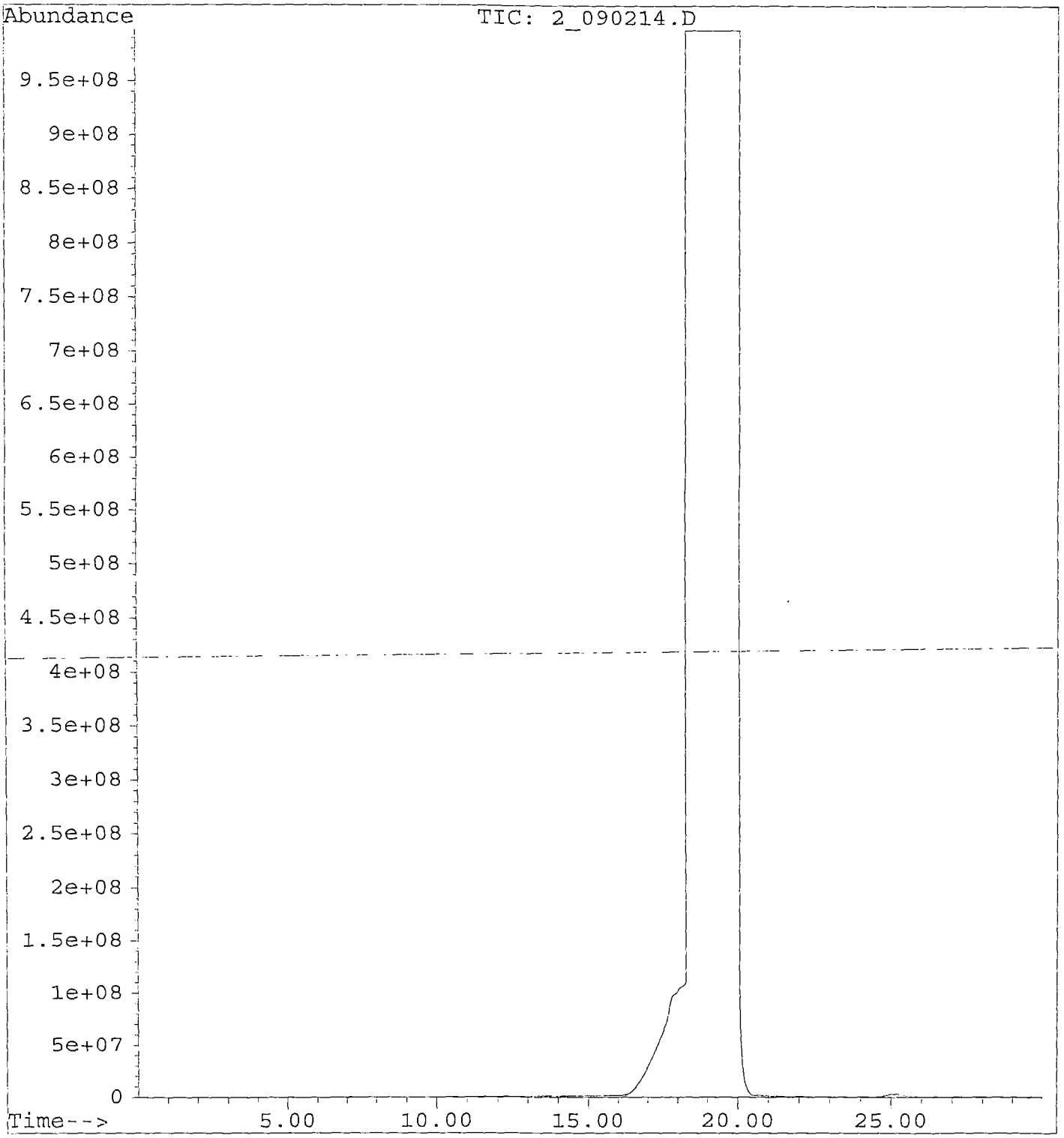
File : C:\HPCHEM\6\DATA\090201\2_090212.D
Operator : CR COL# 364134
Acquired : 03 Sep 01 00:50 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47393.05-E0457-EPA
Misc Info : COL# 364134
Vial Number: 12



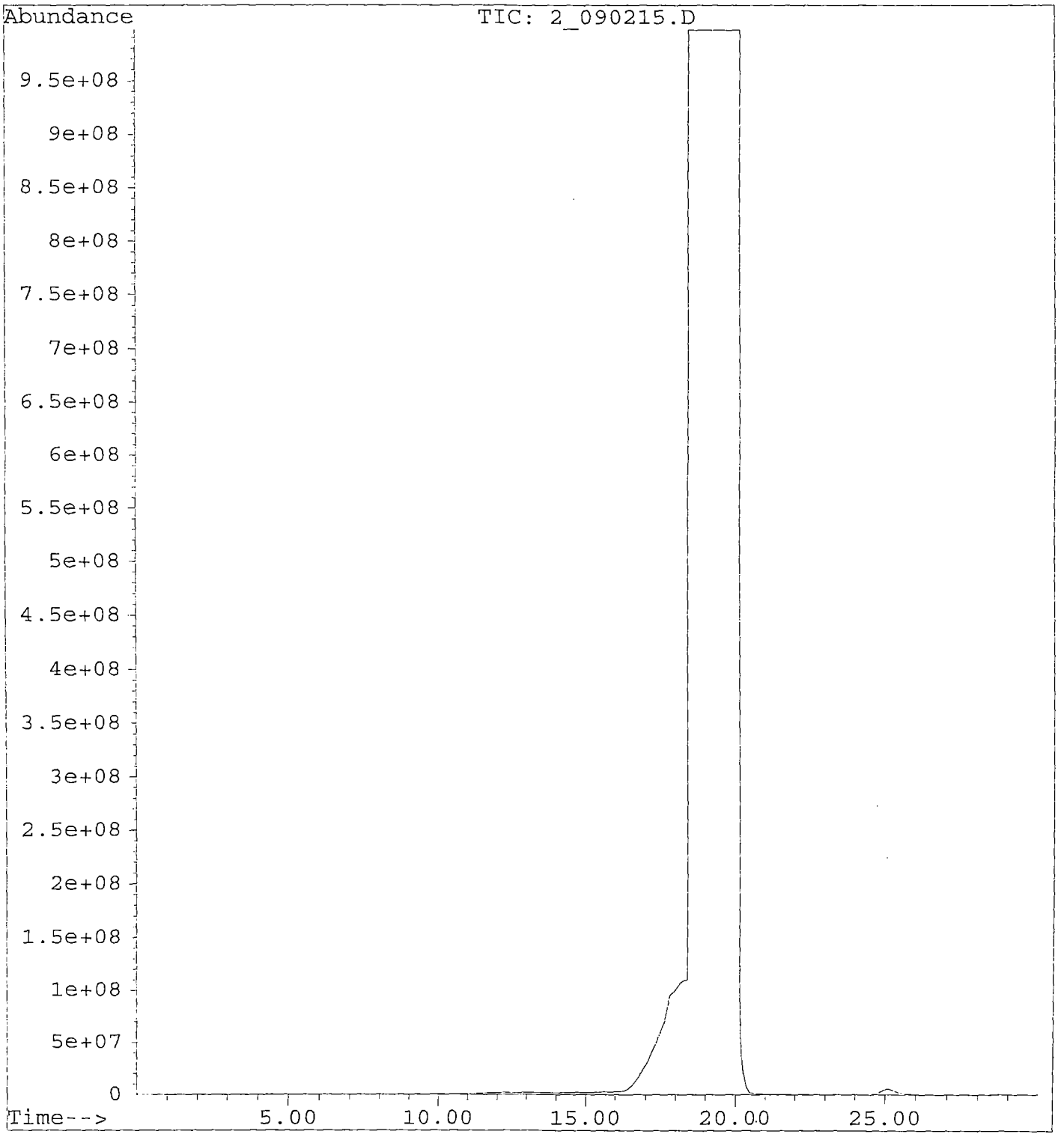
File : C:\HPCHEM\6\DATA\090201\2_090213.D
Operator : CR COL# 364134
Acquired : 03 Sep 01 01:22 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47393.09-E0461-EPA
Misc Info : COL# 364134
Vial Number: 13



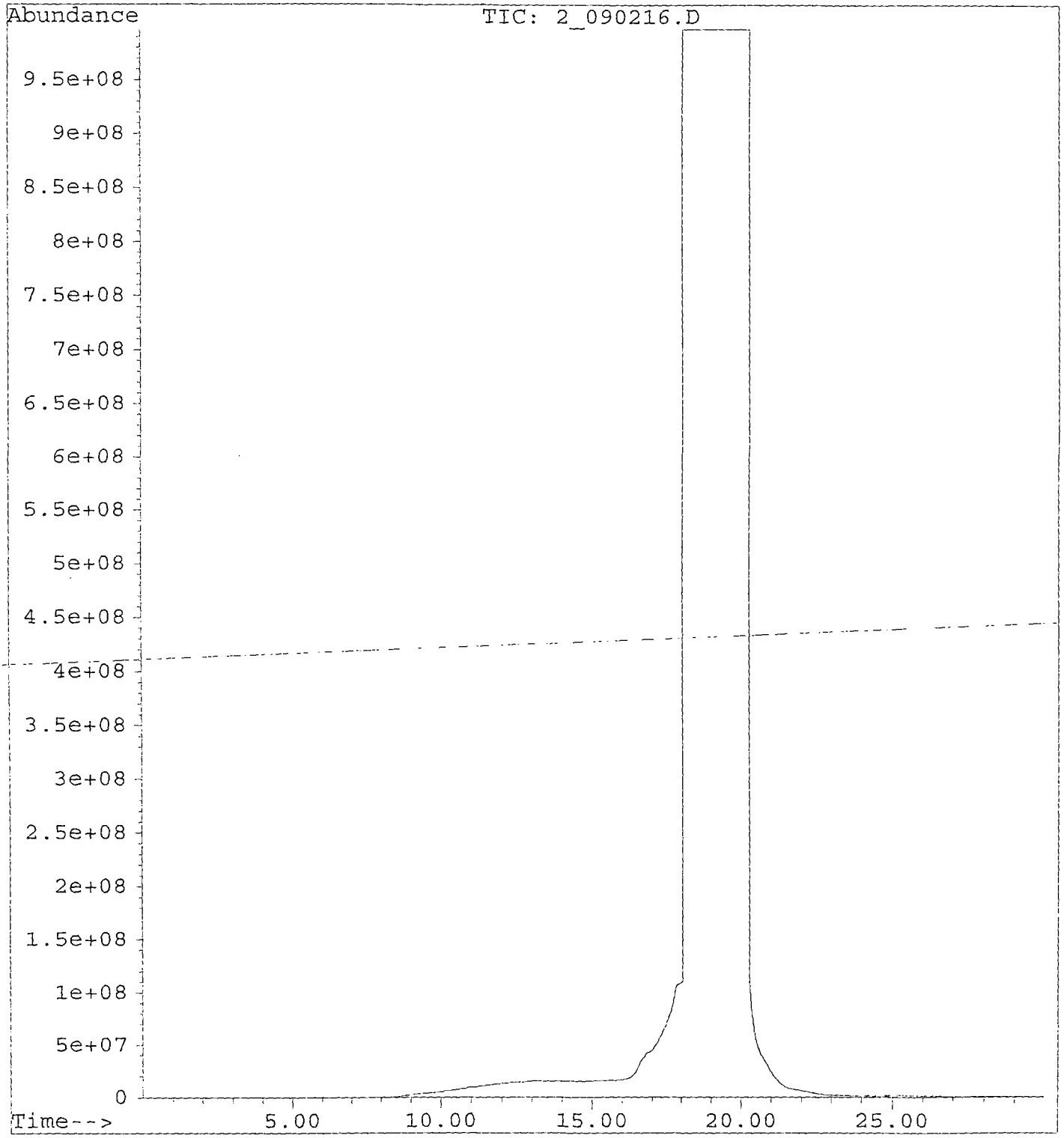
File : C:\HPCHEM\6\DATA\090201\2_090214.D
Operator : CR COL# 364134
Acquired : 03 Sep 01 01:53 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47393.10-E0462-EPA
Misc Info : COL# 364134
Vial Number: 14



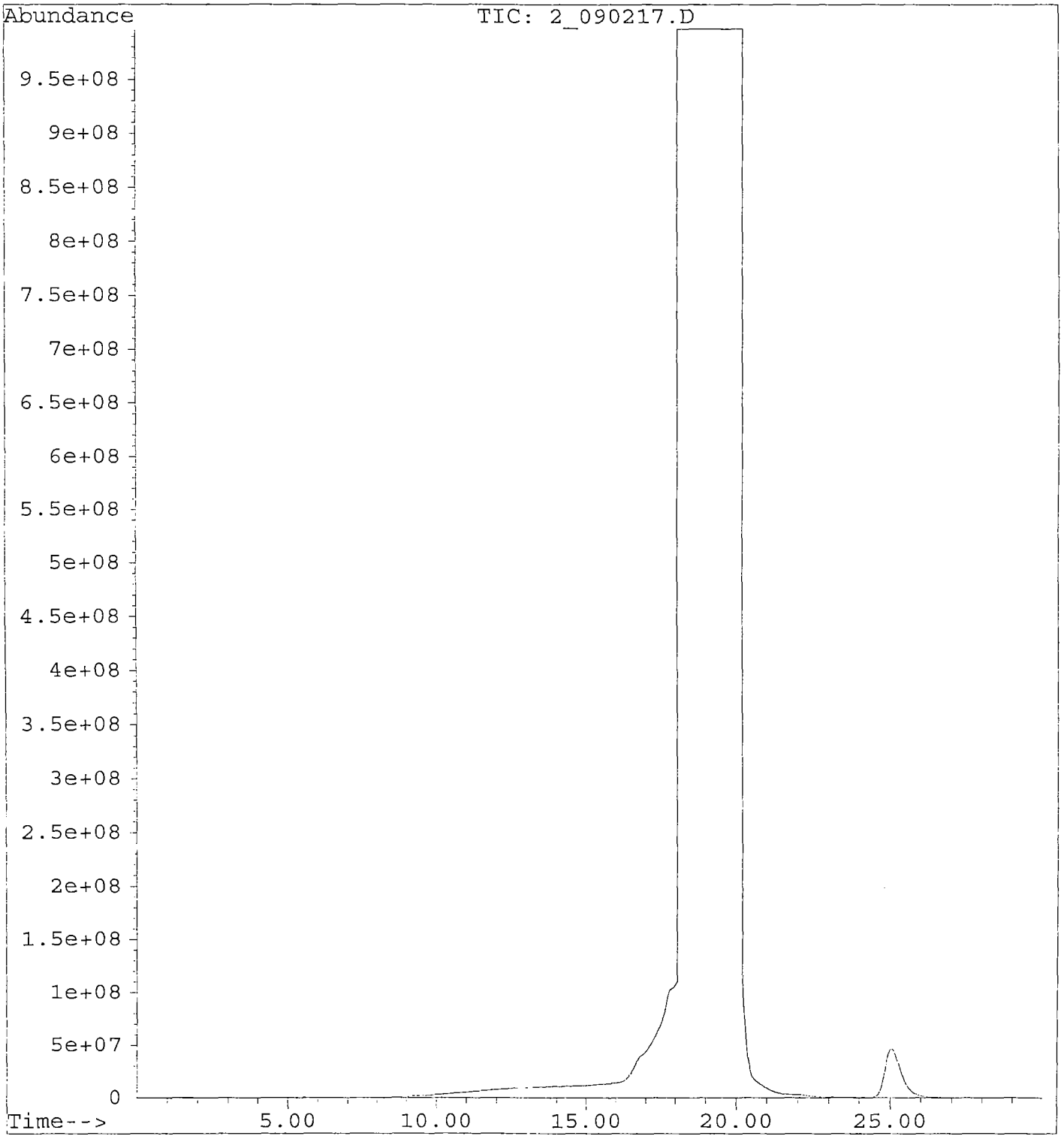
File : C:\HPCHEM\6\DATA\090201\2_090215.D
Operator : CR COL# 364134
Acquired : 03 Sep 01 02:24 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47393.15-E0467-EPA
Misc Info : COL# 364134
Vial Number: 15



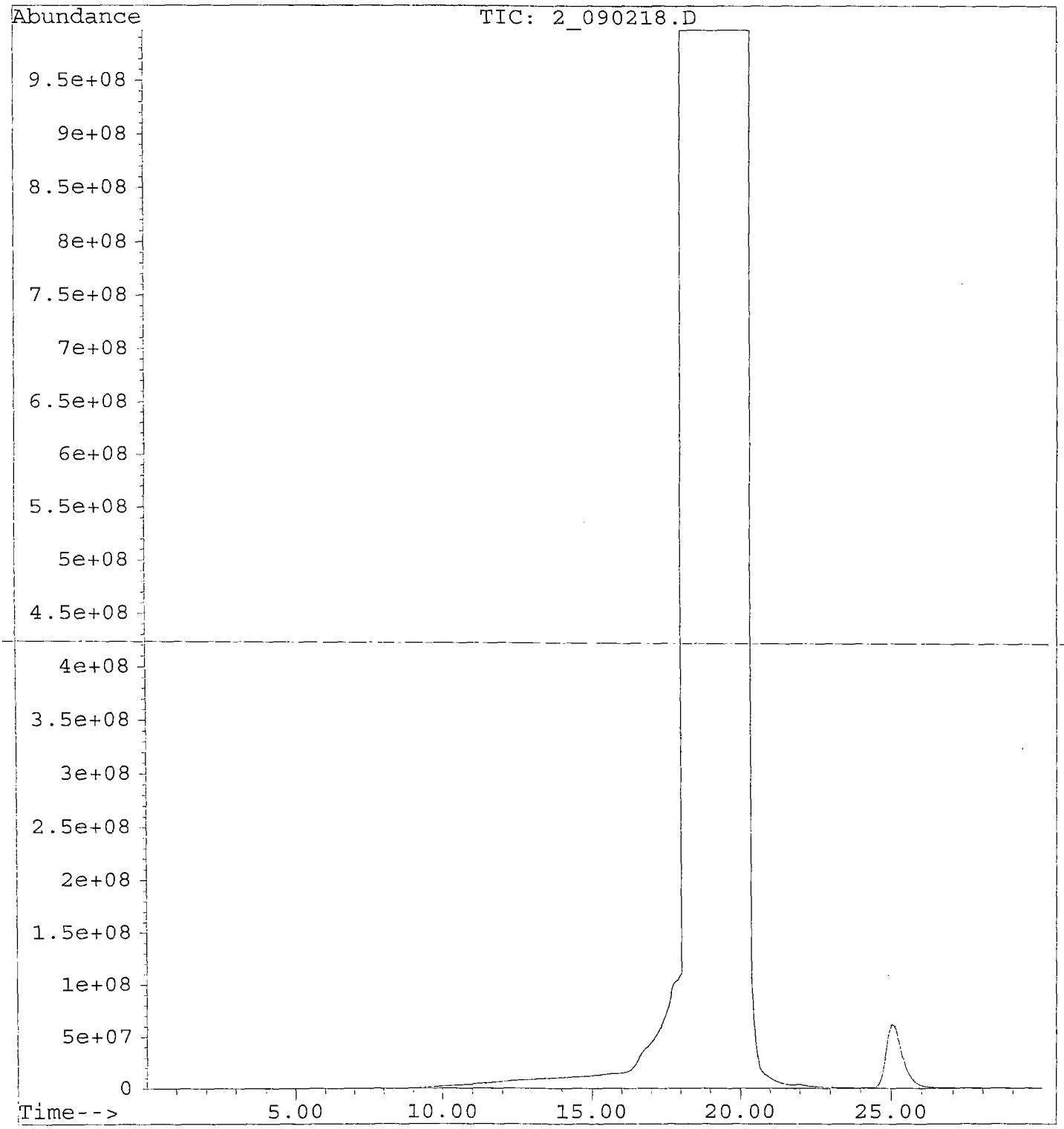
File : C:\HPCHEM\6\DATA\090201\2_090216.D
Operator : CR COL# 364134
Acquired : 03 Sep 01 02:55 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47393.08-E0460-EPA
Misc Info : COL# 364134
Vial Number: 16



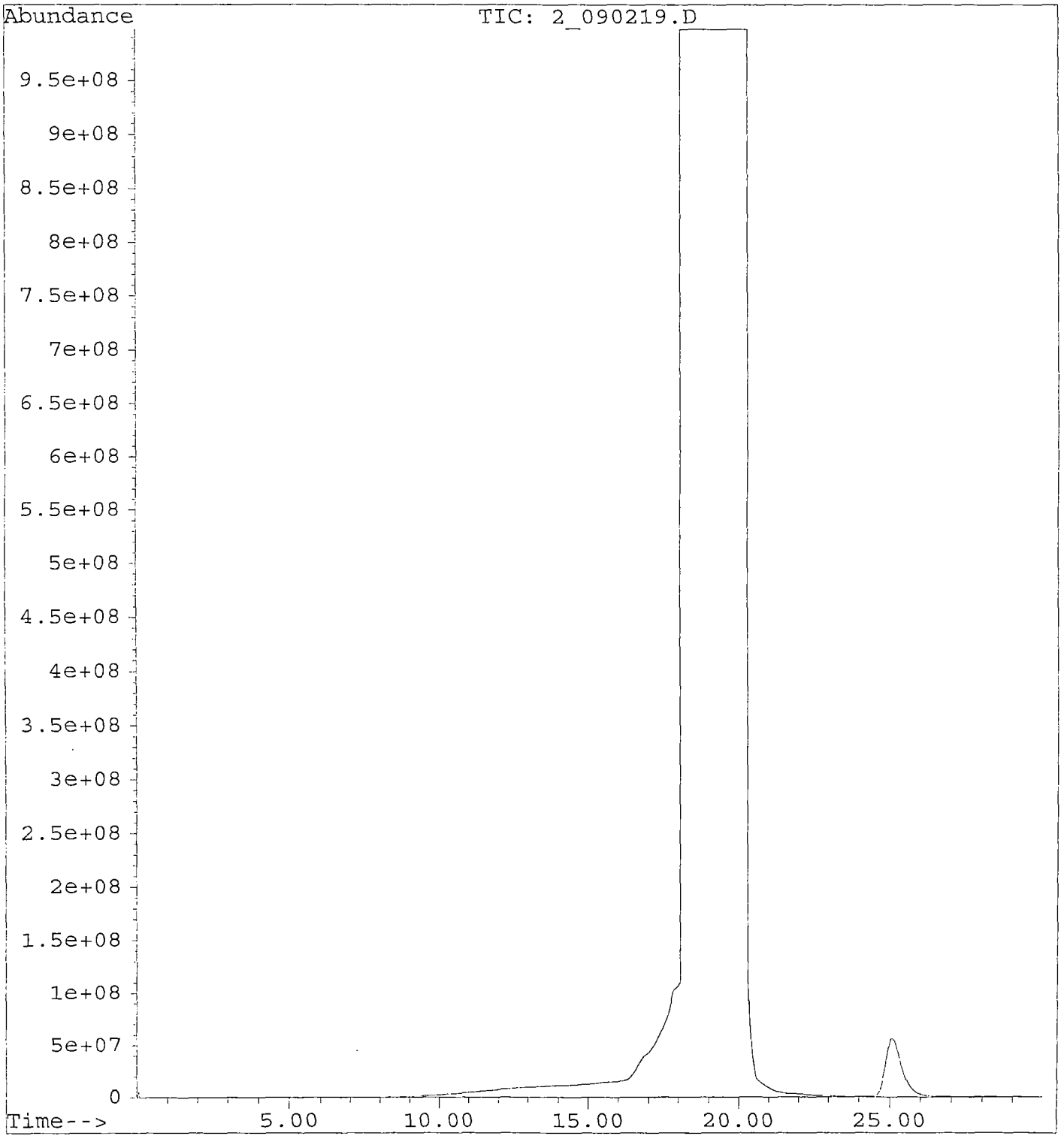
File : C:\HPCHEM\6\DATA\090201\2_090217.D
Operator : CR COL# 364134
Acquired : 03 Sep 01 03:26 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47393.11-E0463-EPA
Misc Info : COL# 364134
Vial Number: 17



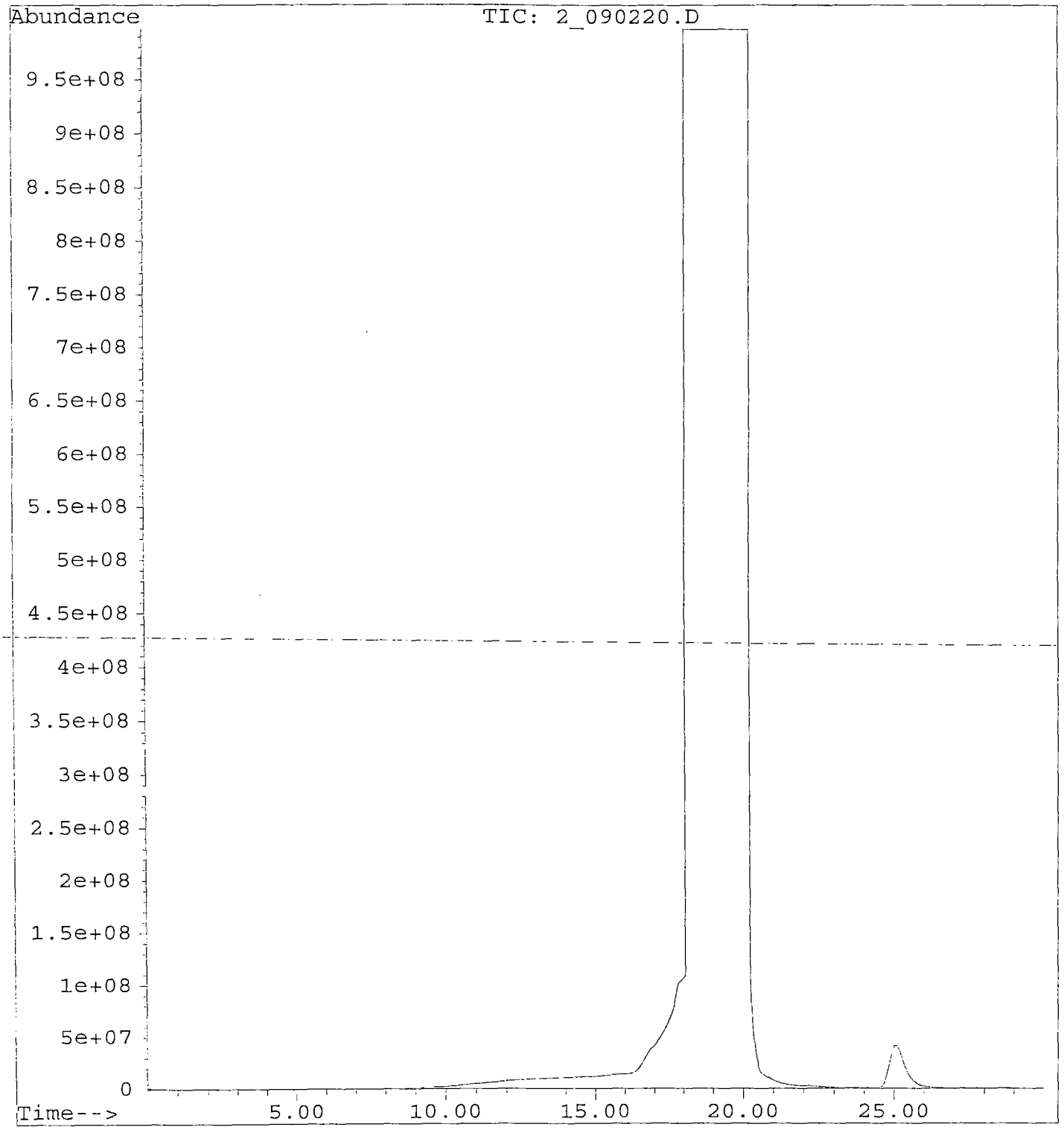
File : C:\HPCHEM\6\DATA\090201\2_090218.D
Operator : CR COL# 364134
Acquired : 03 Sep 01 03:57 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47393.01-E0455-EPA
Misc Info : COL# 364134
Vial Number: 18



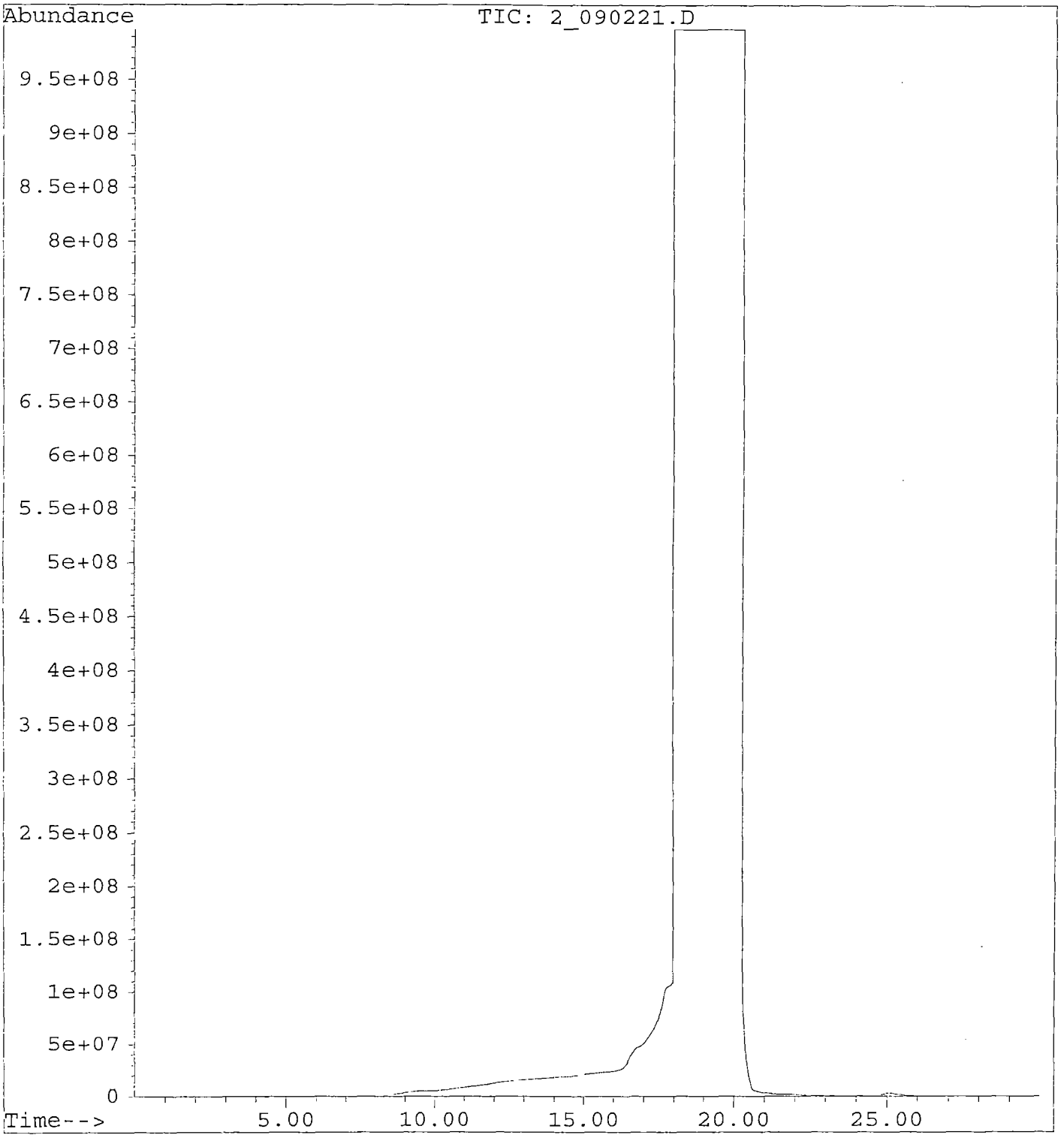
File : C:\HPCHEM\6\DATA\090201\2_090219.D
Operator : CR COL# 364134
Acquired : 03 Sep 01 04:28 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47393.02-MS-E0455-EPA
Misc Info : COL# 364134
Vial Number: 19



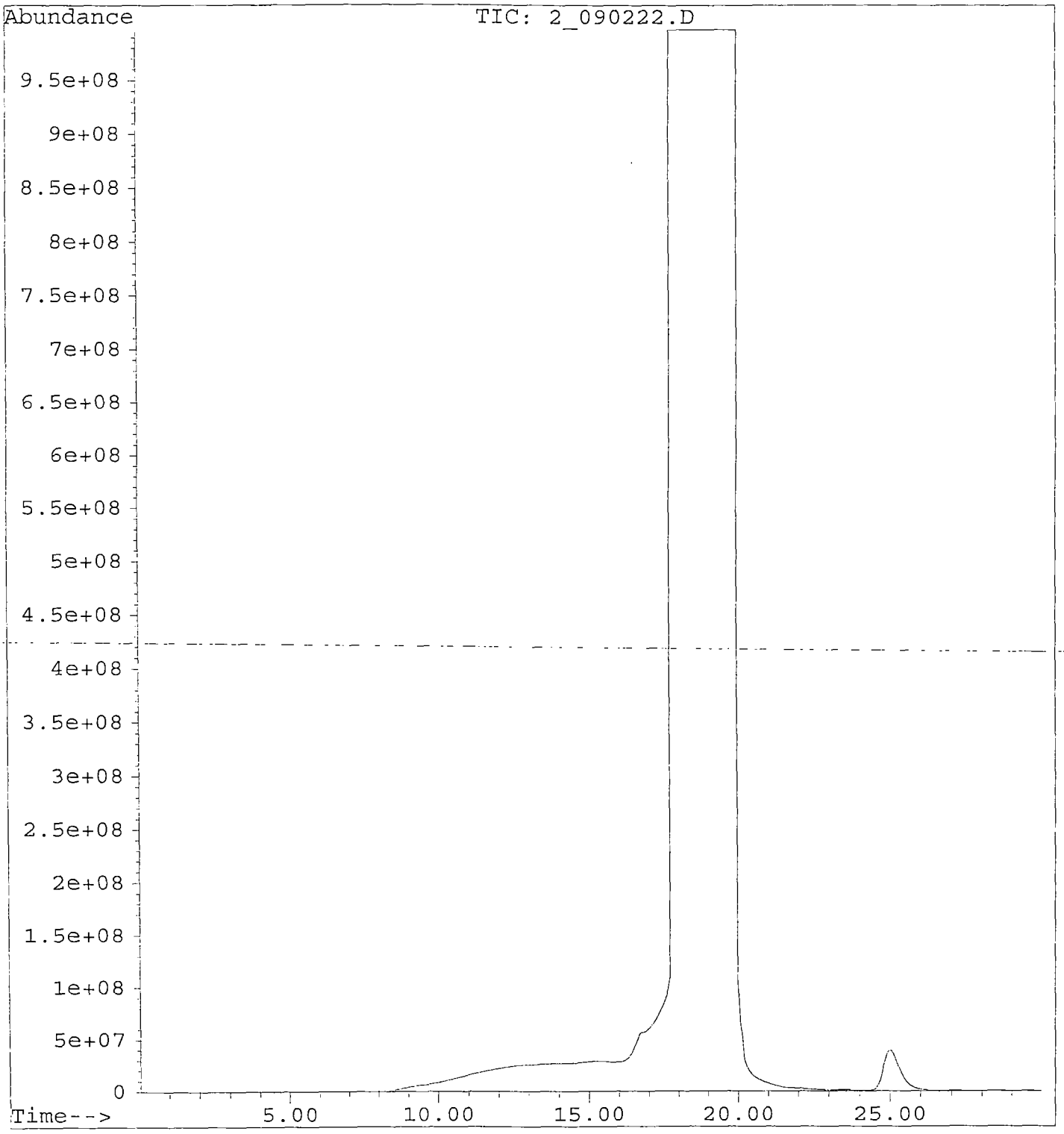
File : C:\HPCHEM\6\DATA\090201\2_090220.D
Operator : CR COL# 364134
Acquired : 03 Sep 01 04:59 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47393.03-MSD-E0455-EPA
Misc Info : COL# 364134
Vial Number: 20



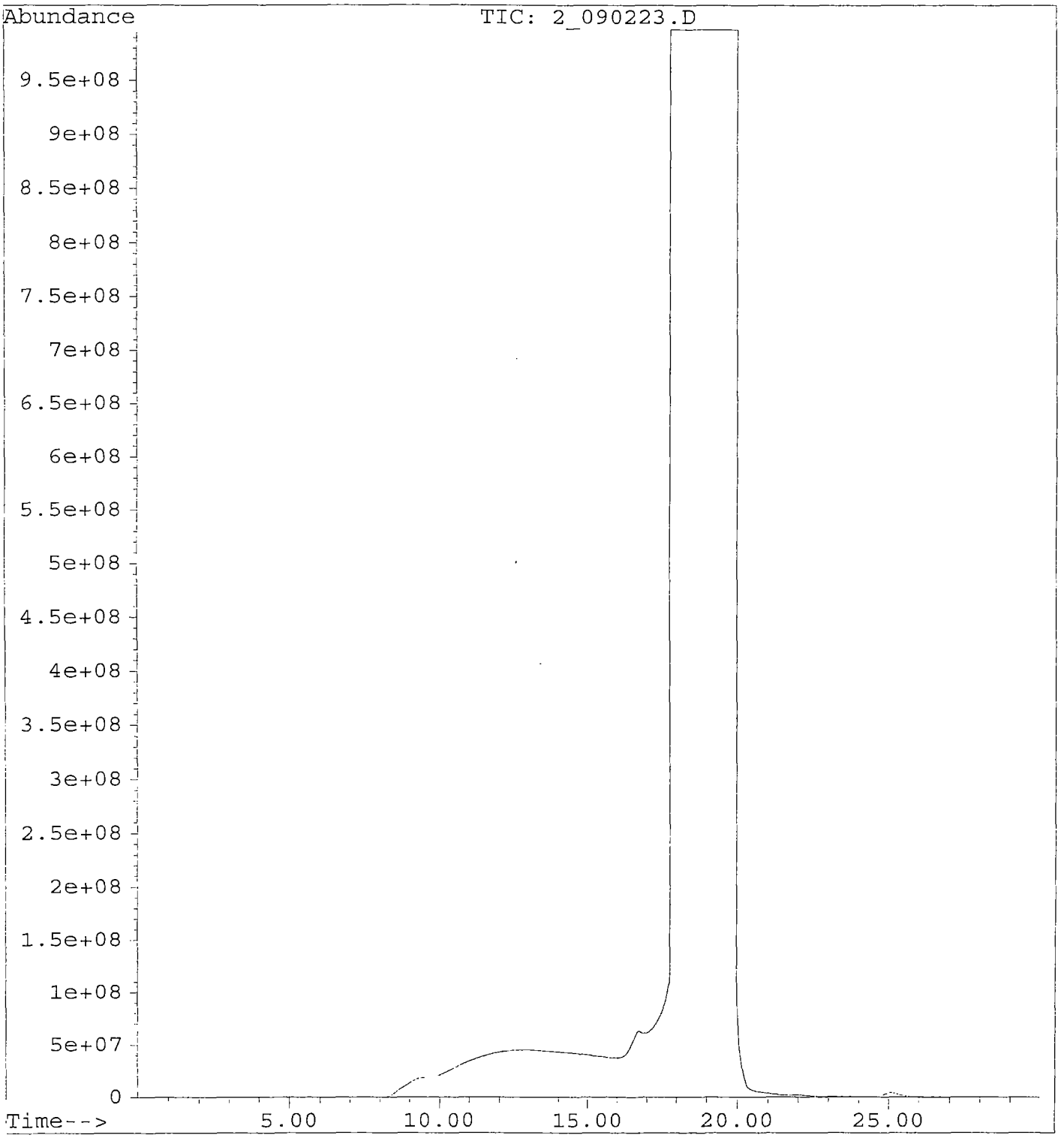
File : C:\HPCHEM\6\DATA\090201\2_090221.D
Operator : CR COL# 364134
Acquired : 03 Sep 01 05:30 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47393.04-E0456-EPA
Misc Info : COL# 364134
Vial Number: 21



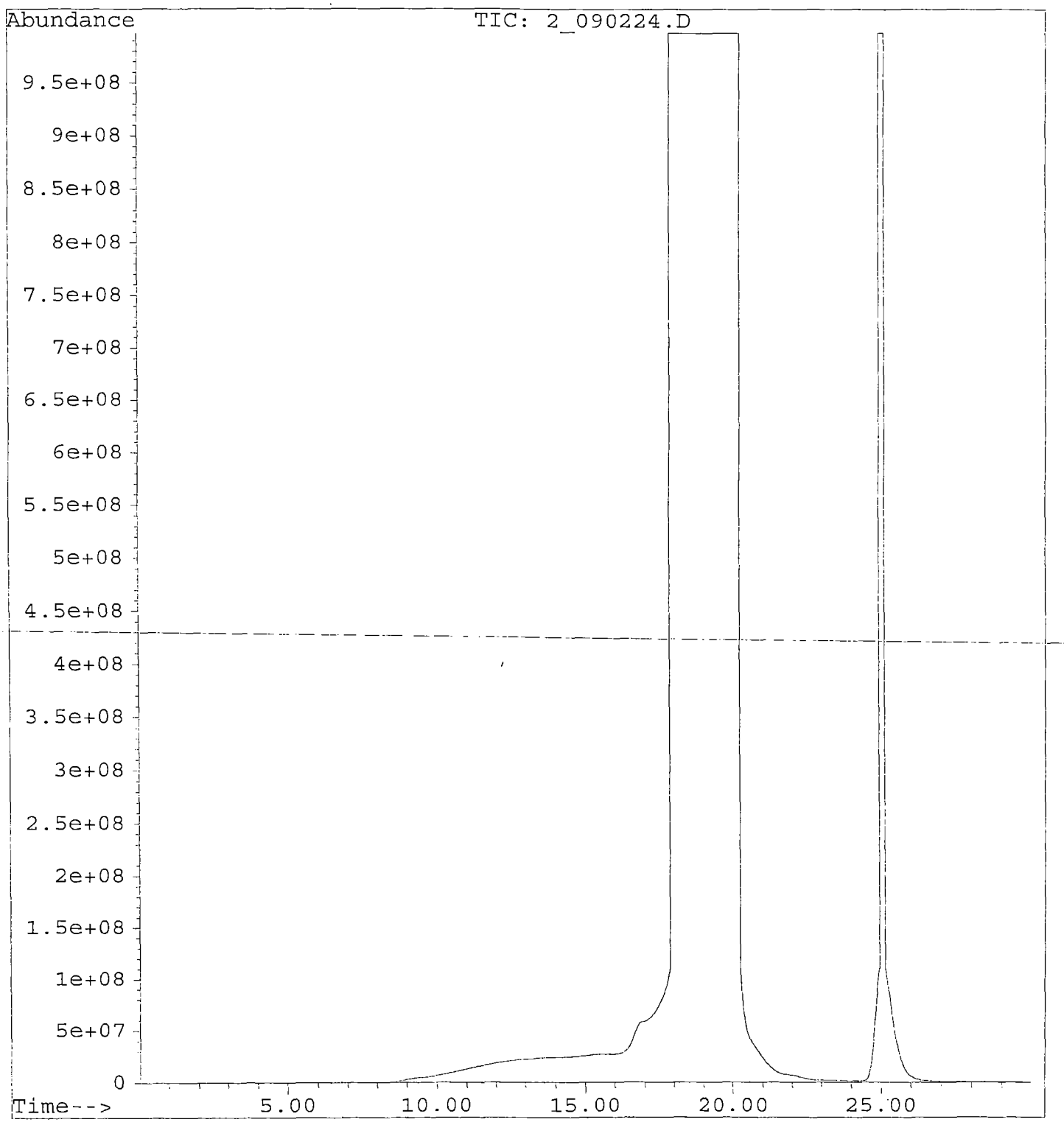
File : C:\HPCHEM\6\DATA\090201\2_090222.D
Operator : CR COL# 364134
Acquired : 03 Sep 01 06:01 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47393.06-E0458-EPA
Misc Info : COL# 364134
Vial Number: 22



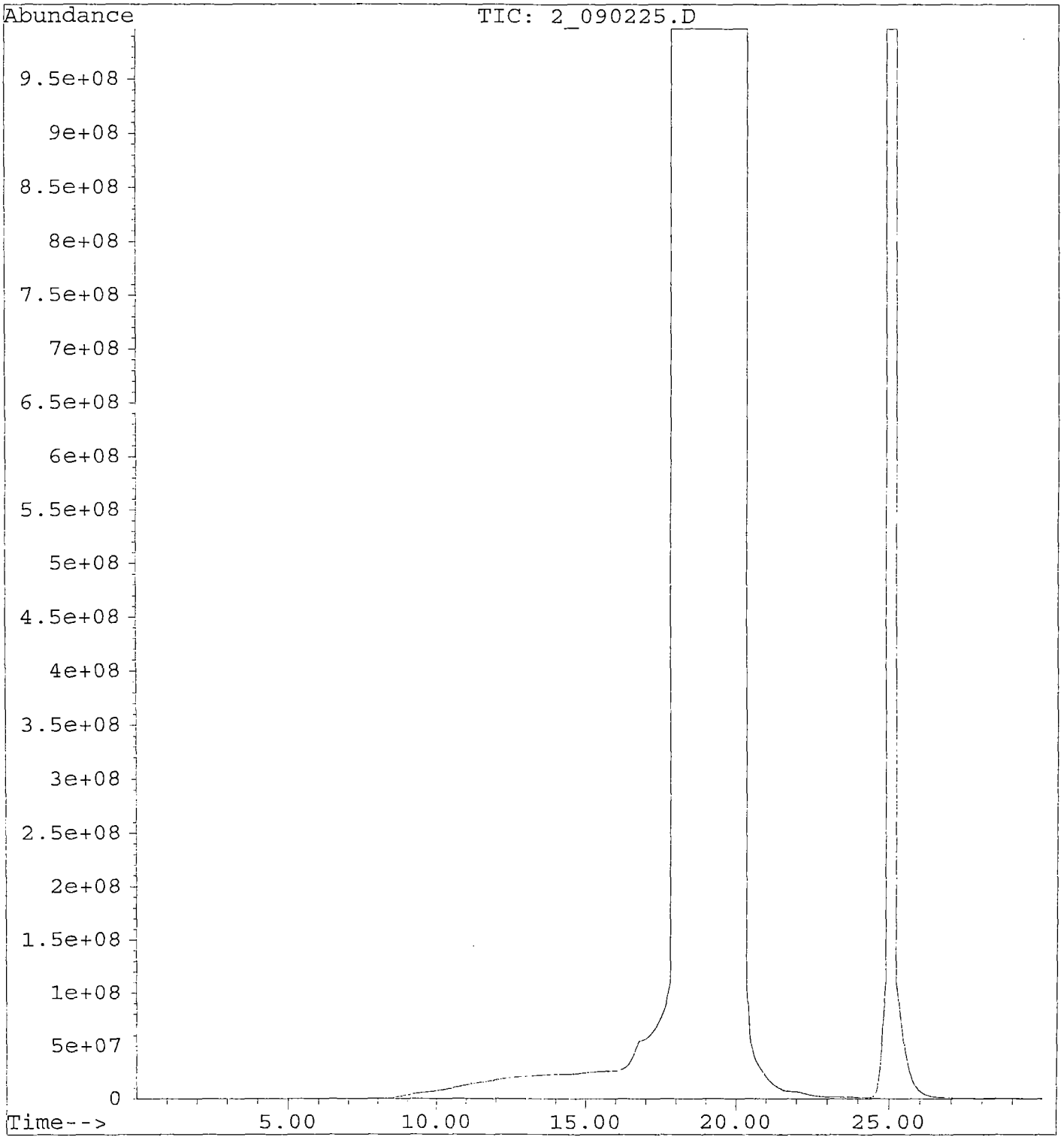
File : C:\HPCHEM\6\DATA\090201\2_090223.D
Operator : CR COL# 364134
Acquired : 03 Sep 01 06:33 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47393.07-E0459-EPA
Misc Info : COL# 364134
Vial Number: 23



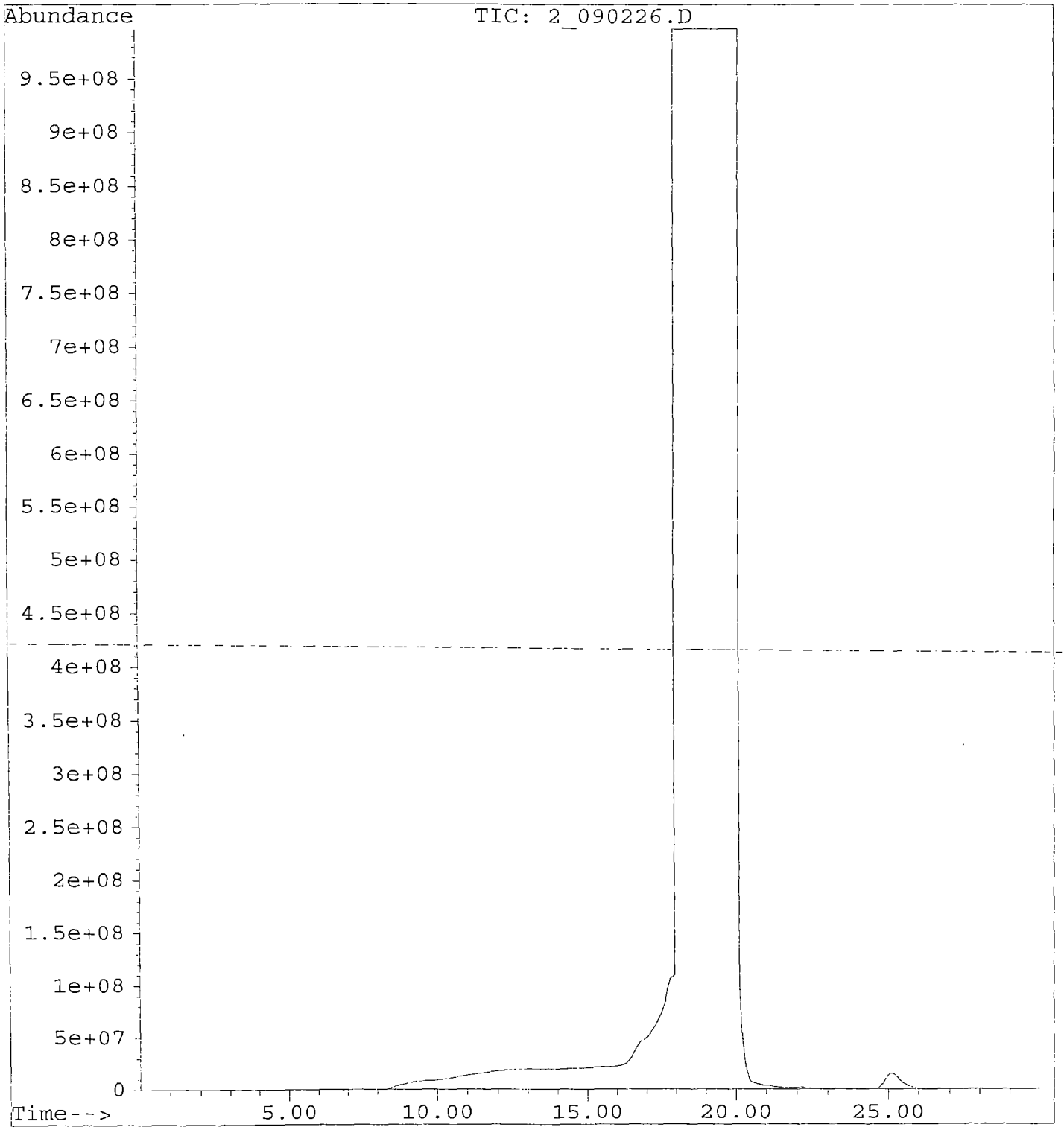
File : C:\HPCHEM\6\DATA\090201\2_090224.D
Operator : CR COL# 364134
Acquired : 03 Sep 01 07:04 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47393.12-E0464-EPA
Misc Info : COL# 364134
Vial Number: 24



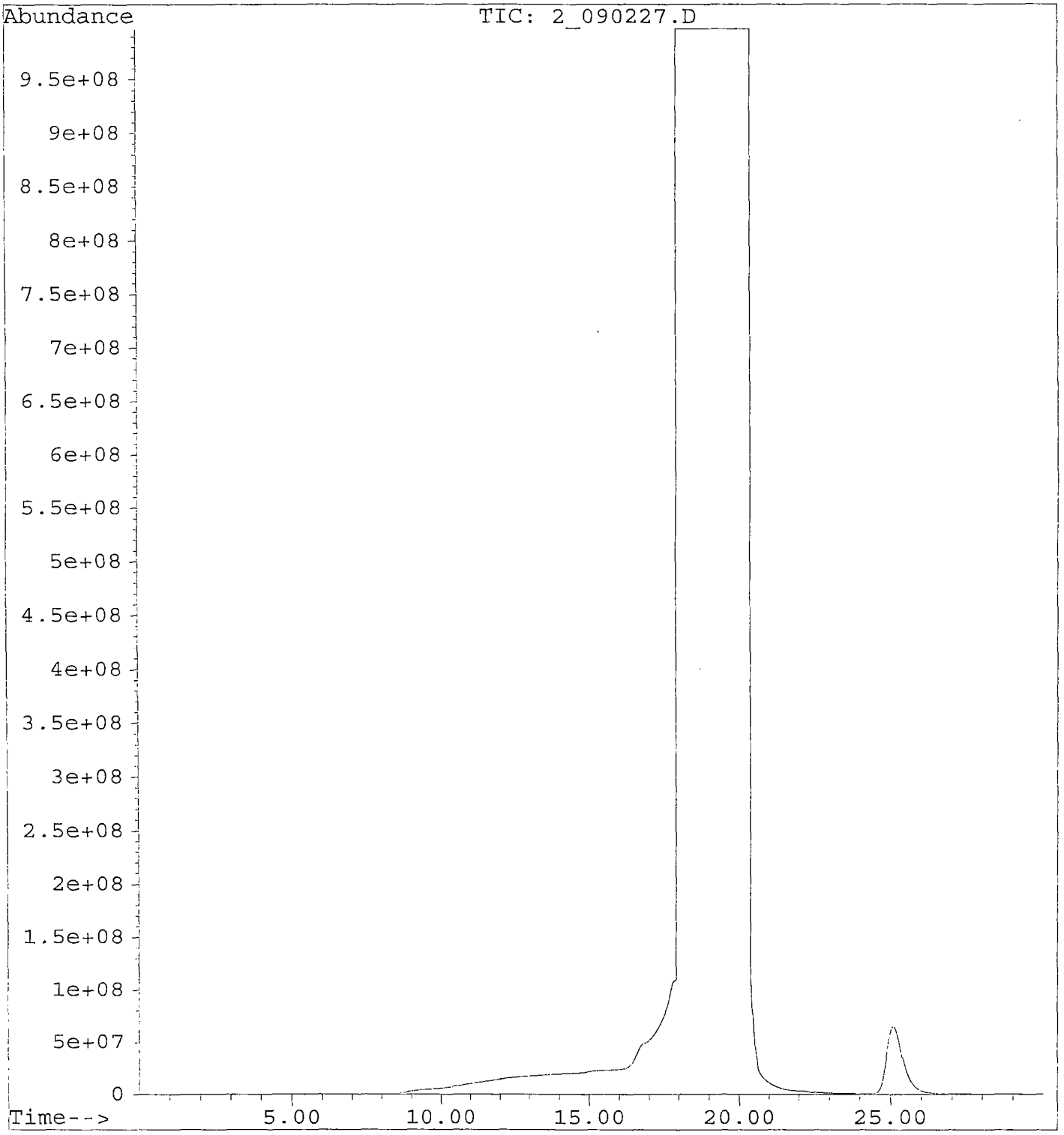
File : C:\HPCHEM\6\DATA\090201\2_090225.D
Operator : CR COL# 364134
Acquired : 03 Sep 01 07:35 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47393.13-E0465-EPA
Misc Info : COL# 364134
Vial Number: 25



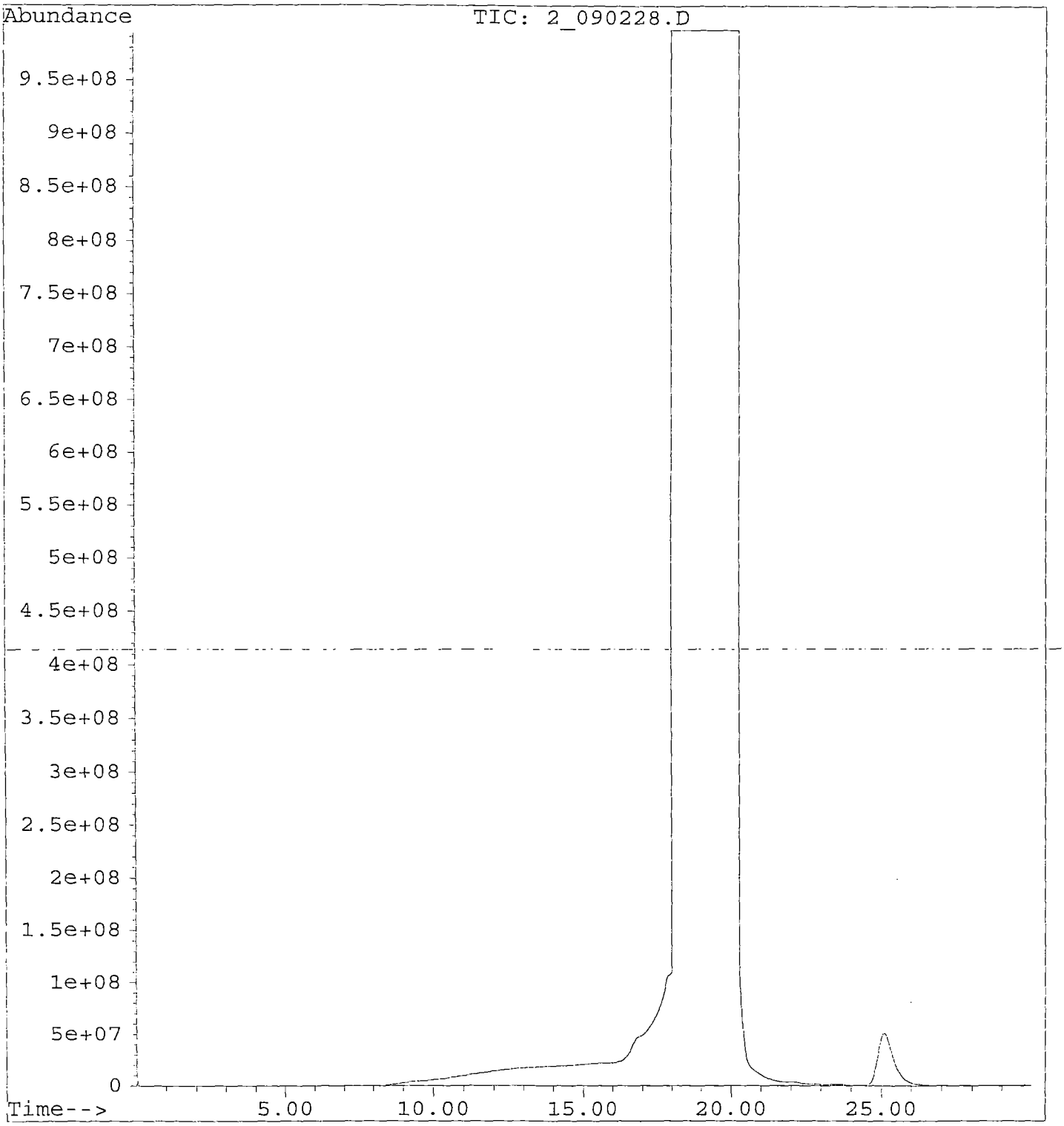
File : C:\HPCHEM\6\DATA\090201\2_090226.D
Operator : CR COL# 364134
Acquired : 03 Sep 01 08:06 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47393.14-E0466-EPA
Misc Info : COL# 364134
Vial Number: 26



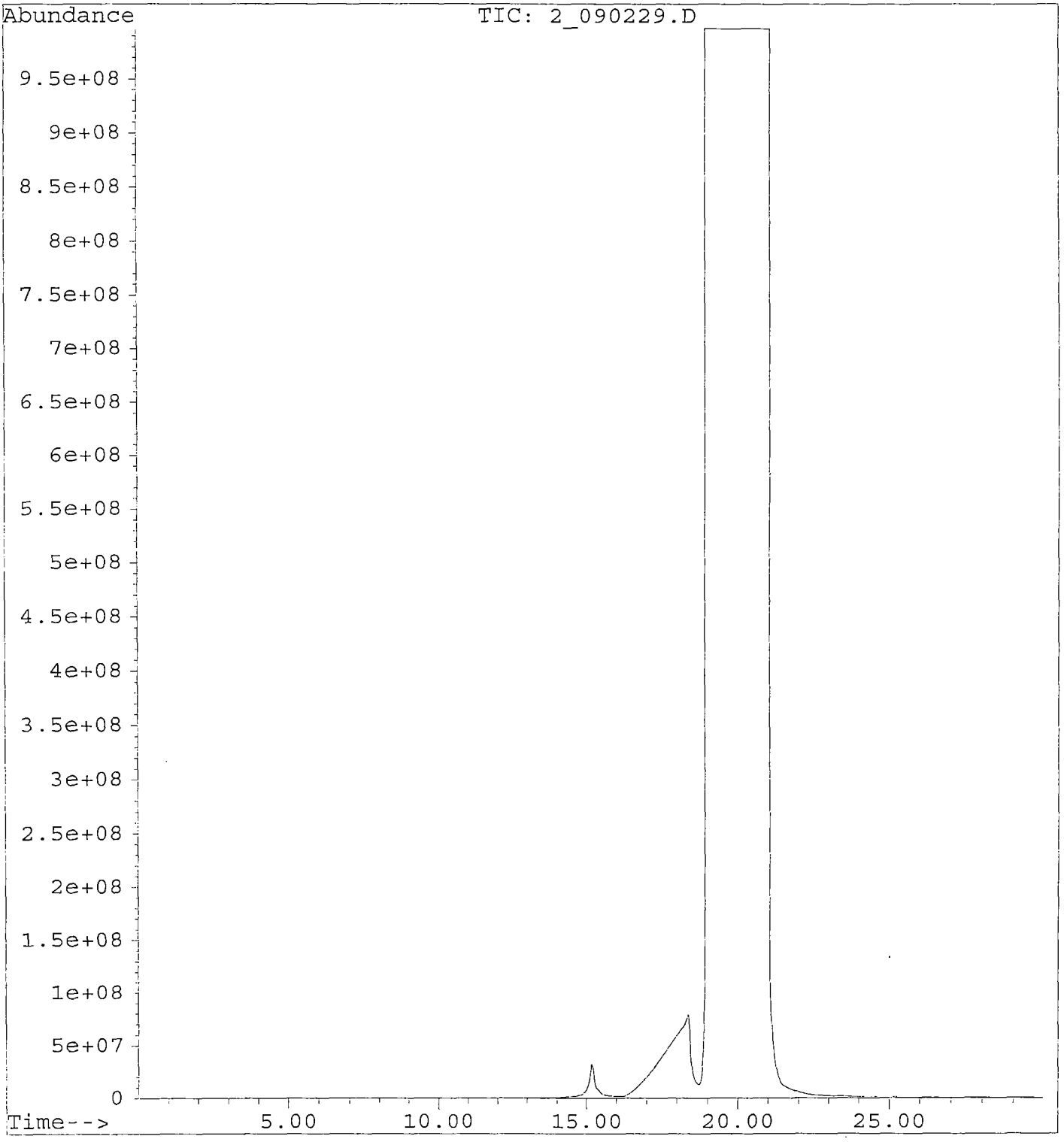
File : C:\HPCHEM\6\DATA\090201\2_090227.D
Operator : CR COL# 364134
Acquired : 03 Sep 01 08:37 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47393.16-E0468-EPA
Misc Info : COL# 364134
Vial Number: 27



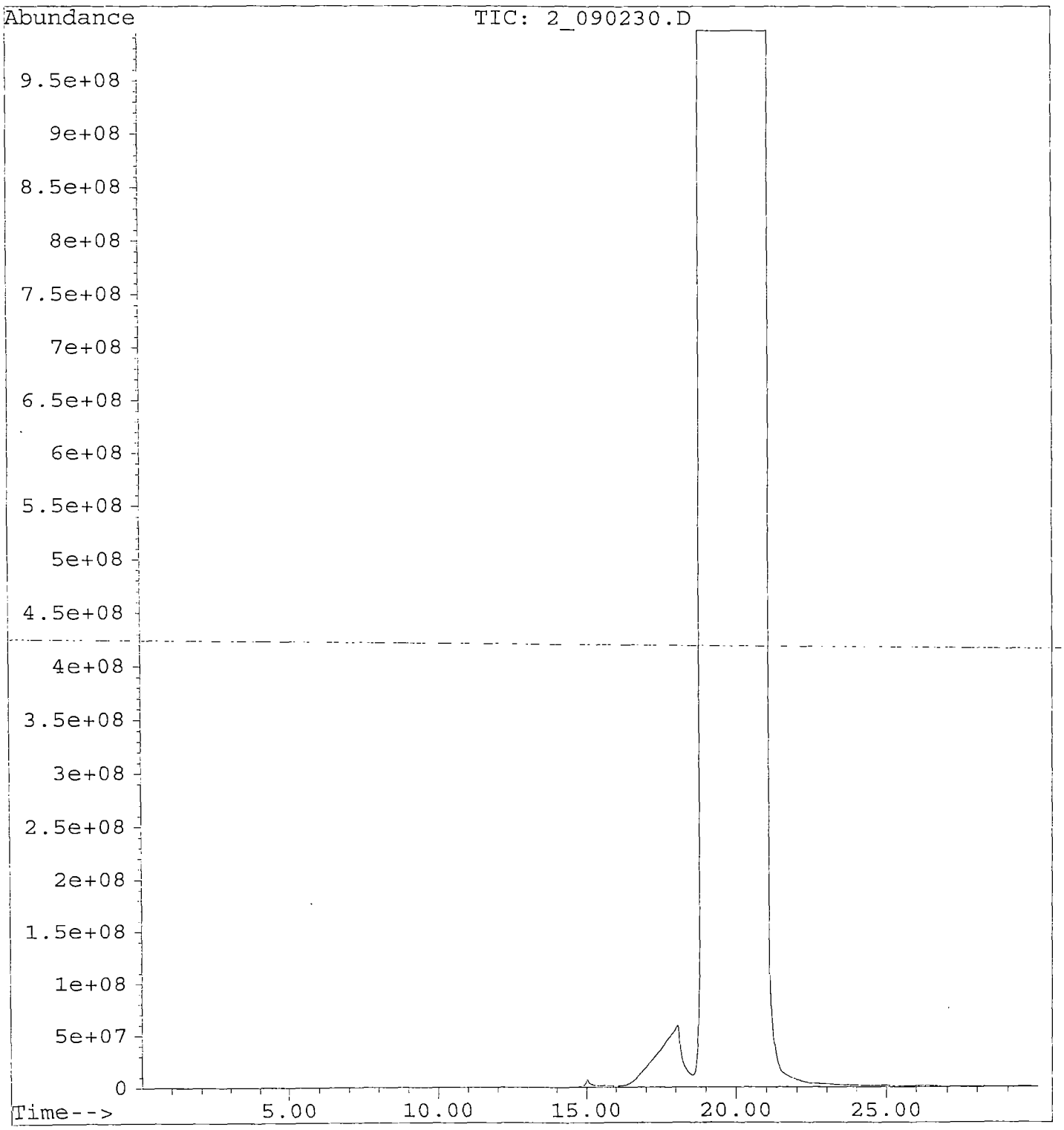
File : C:\HPCHEM\6\DATA\090201\2_090228.D
Operator : CR COL# 364134
Acquired : 03 Sep 01 09:08 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47393.17-E0469-EPA
Misc Info : COL# 364134
Vial Number: 28



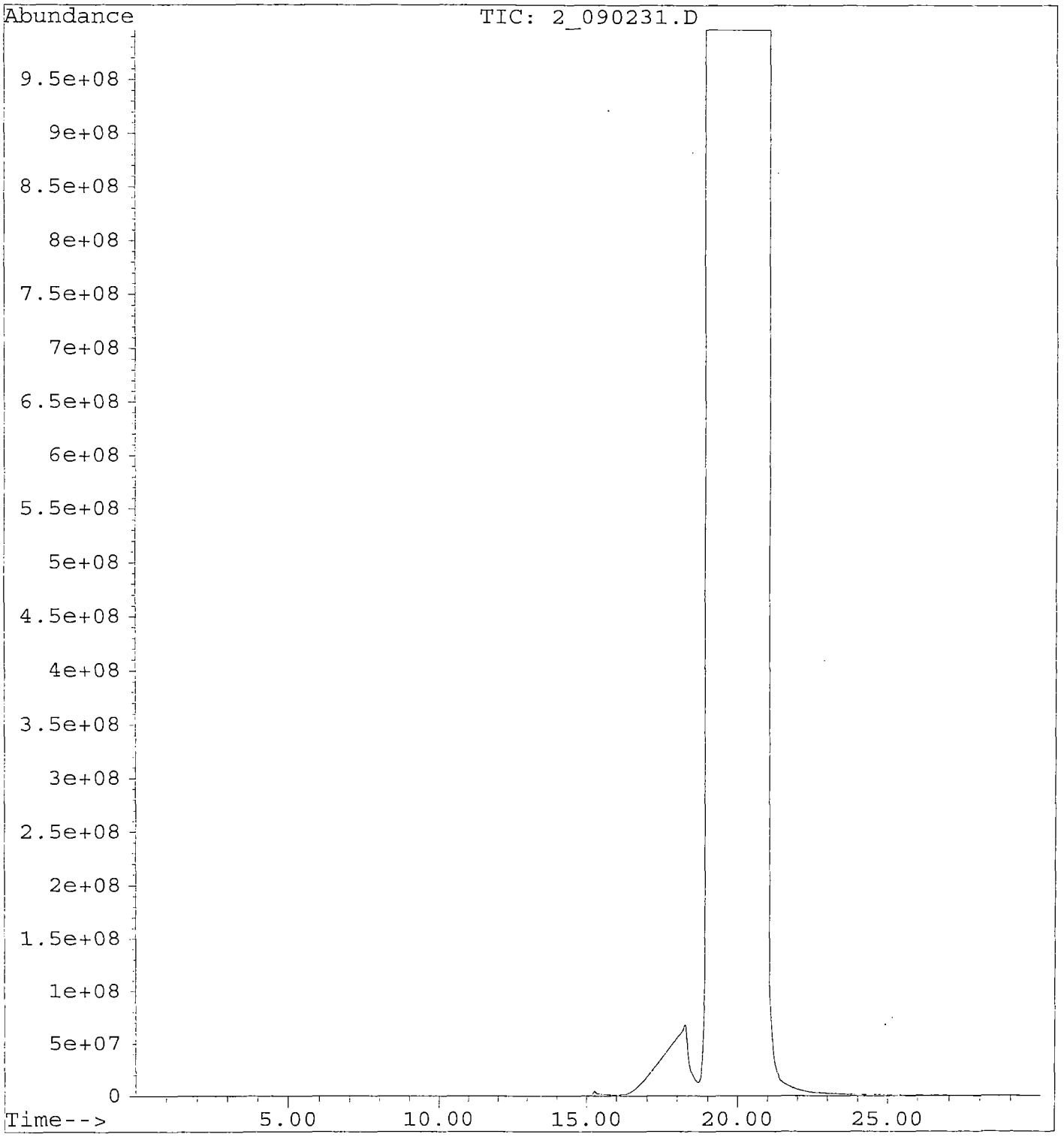
File : C:\HPCHEM\6\DATA\090201\2_090229.D
Operator : CR COL# 364134
Acquired : 03 Sep 01 09:39 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: SB
Misc Info : COL# 364134
Vial Number: 29



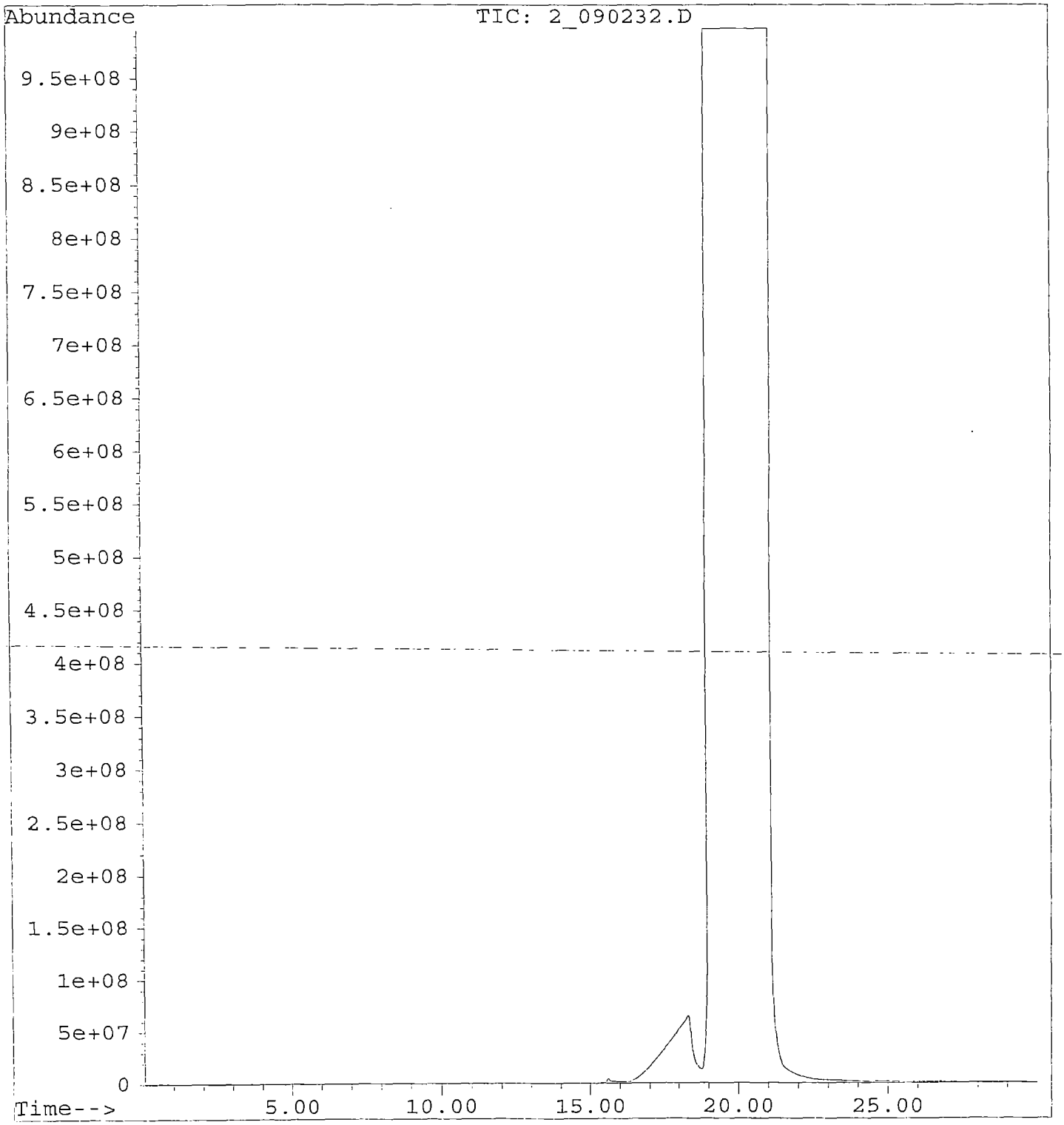
File : C:\HPCHEM\6\DATA\090201\2_090230.D
Operator : CR COL# 364134
Acquired : 03 Sep 01 10:10 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: SB
Misc Info : COL# 364134
Vial Number: 30



File : C:\HPCHEM\6\DATA\090201\2_090231.D
Operator : CR COL# 364134
Acquired : 03 Sep 01 10:41 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: SB
Misc Info : COL# 364134
Vial Number: 31

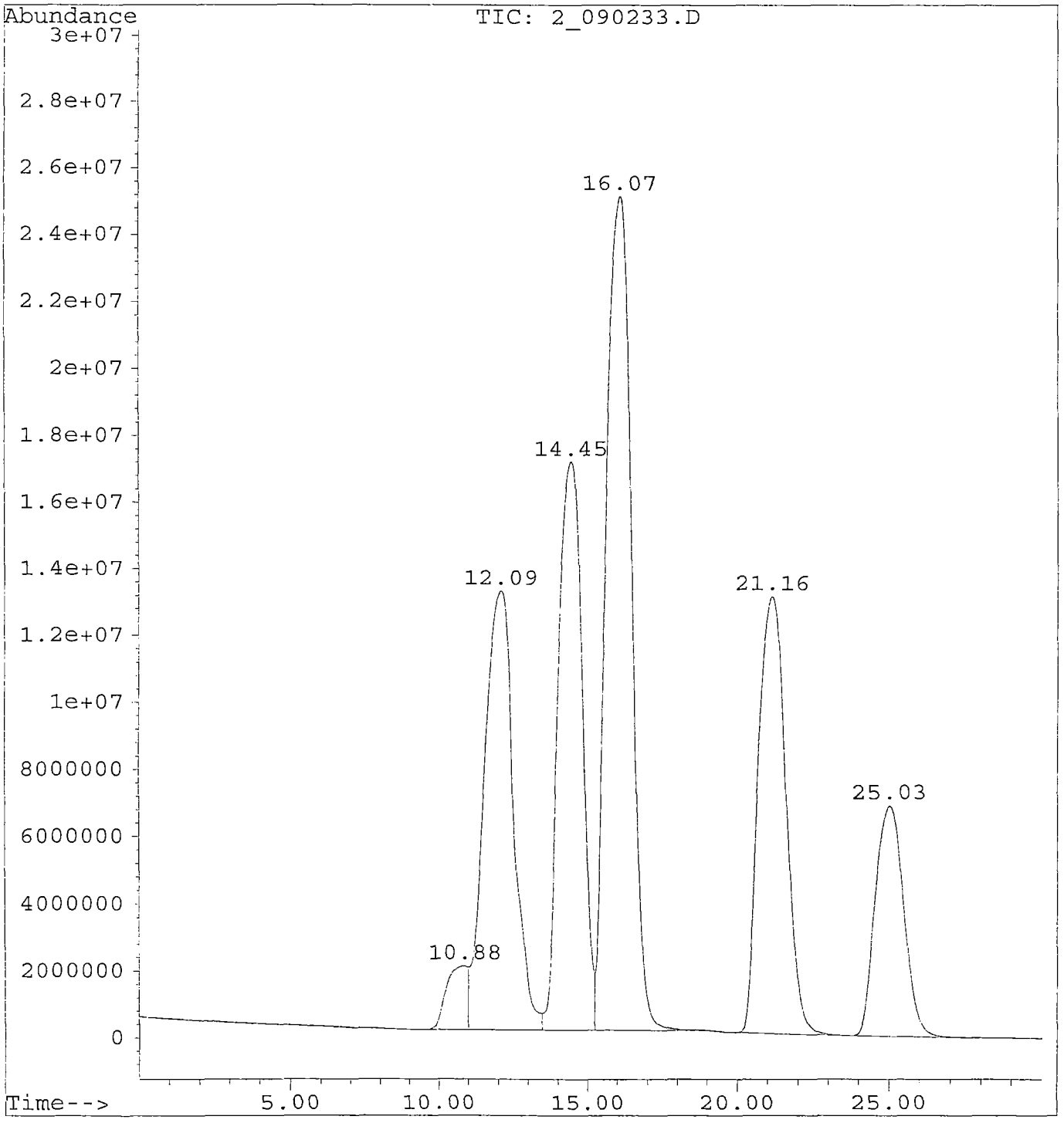


File : C:\HPCHEM\6\DATA\090201\2_090232.D
Operator : CR COL# 364134
Acquired : 03 Sep 01 11:12 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: SB
Misc Info : COL# 364134
Vial Number: 32



Data File : C:\HPCHEM\6\DATA\090201\2_090233.D
Acq On : 03 Sep 01 11:44 AM
Sample : CAL STD (FINAL)
Misc : COL# 364134

Vial: 33
Operator: CR COL#
Inst : GPC2
Multiplr: 1.00



Chromatographic Resolution Report

Data File : C:\HPCHEM\6\DATA\090201\2_090233.D
Acq On : 03 Sep 01 11:44
Sample : CAL STD (FINAL)
Misc : COL# 364134

Vial: 33
Operator: CR COL# 36
Inst : GPC2
Multiplr: 1.00

Method : C:\HPCHEM\6\METHODS\GPC.M
Title :

RT#1	RT#2	Resolution
10.879	12.094	2.44
12.094	14.447	96.16
14.447	16.074	90.01
16.074	21.159	100.00
21.159	25.025	99.96

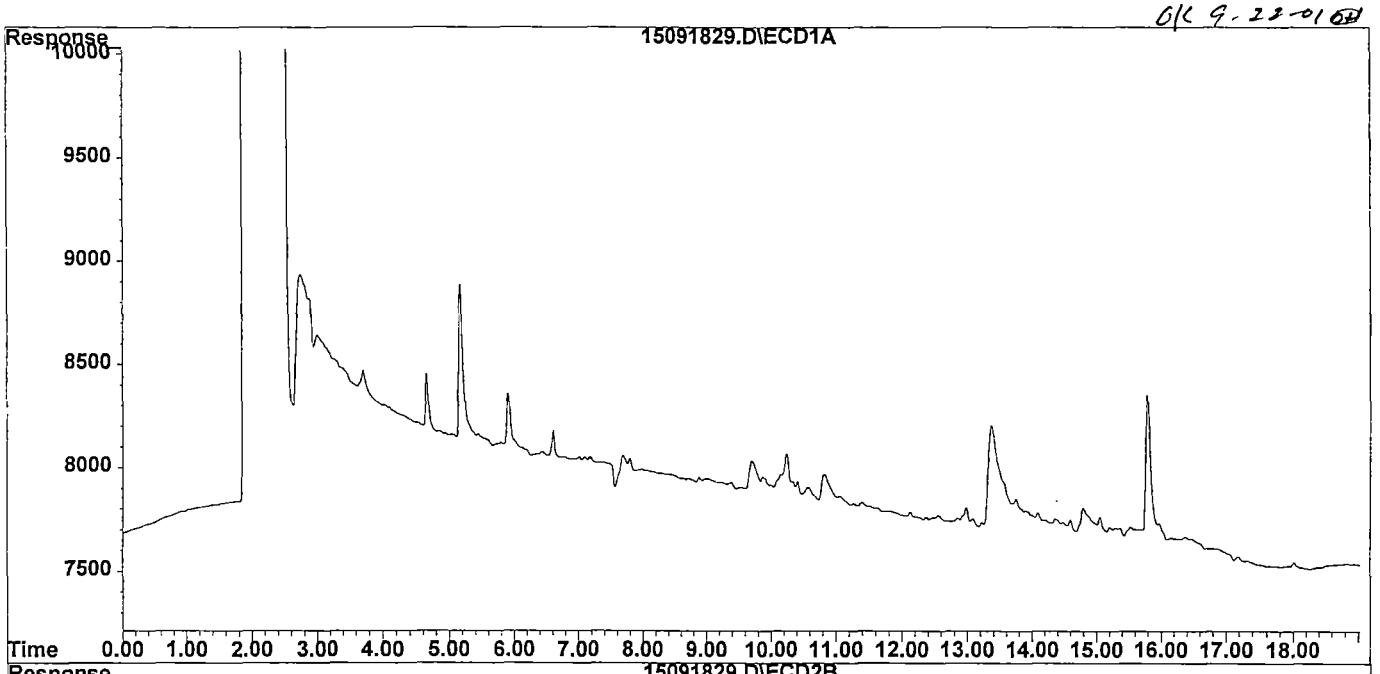
Chromatographic Report

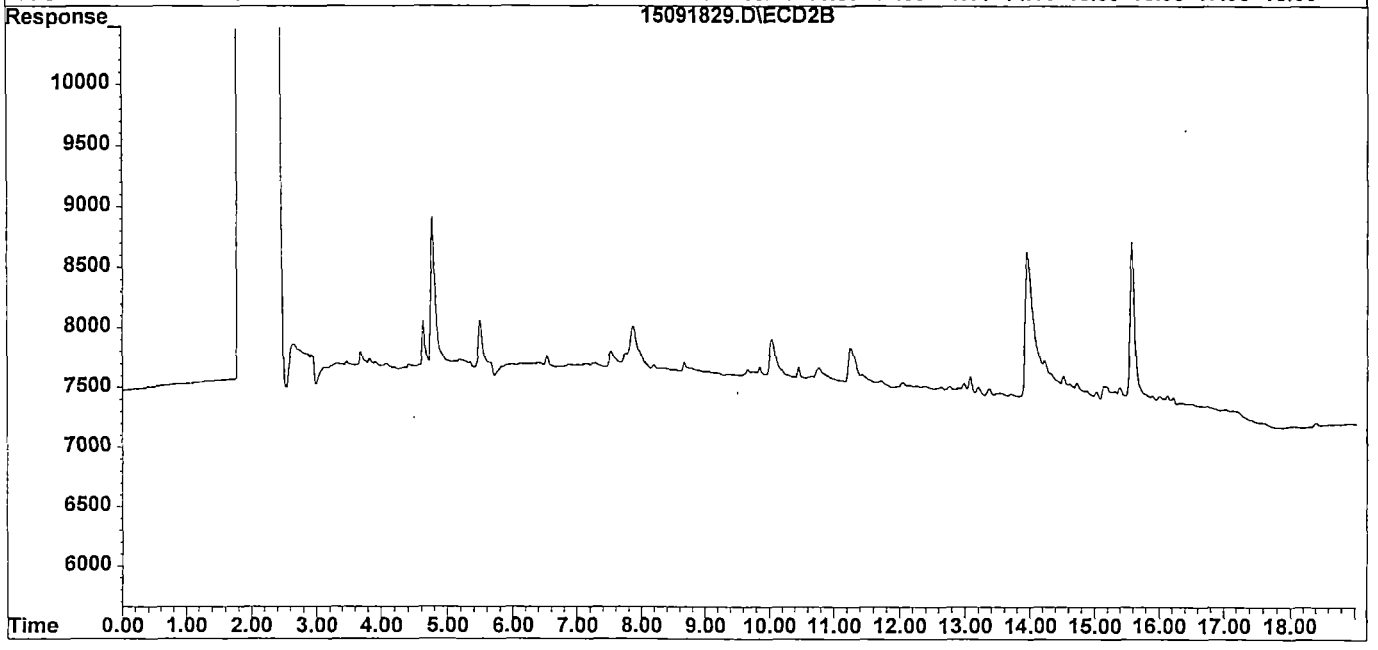
Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091829.D\ECD1A.CH Vial: 23
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091829.D\ECD2B.CH
Acq On : 18 Sep 2001 20:06 Operator: SA
Sample : SB090201C *SB090201C * Inst : HP_15
Misc : **1000ML/10.0ML* Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 9:06 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

GK 9-22-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\09_18_01\15091829.D\ECD1A.CH Vial: 23
Signal #2 : F:\HPCHEM\HP\15\DATA\09_18_01\15091829.D\ECD2B.CH
Acq On : 18 Sep 2001 20:06 Operator: SA
Sample : SB090201C *SB090201C * Inst : HP_15
Misc : **1000ML/10.0ML* Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 9:06 2001 Quant Results File: XPCBI10.RES

Method : F:\HPCHEM\HP\15\DATA\09_18_01\XPCBI10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Fri Sep 07 16:29:03 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_15A Signal #2 Inst : HP_15B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L

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-415 OP-415-RUNLOG-14 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_15
SDG NO. : SWLO METHOD FILE(S): XPCBI10 (8082)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
09/10/01 22:09	AR1254L2BH	5-5-7	15091022	OK
09/10/01 22:32	AR1254L3BH	5-4-7	15091023	
09/10/01 22:56	AR1254L4BH	5-3-7	15091024	
09/10/01 23:19	AR1254L5BH	5-2-7	15091025	
09/10/01 23:42	AR1660L1BH	5-212-7	15091026	
09/11/01 00:05	AR1660L2BH	5-211-7	15091027	
09/11/01 00:28	AR1660L3BQ	5-210-7	15091028	
09/11/01 00:51	AR1660L4BH	5-209-7	15091029	
09/11/01 1:14	AR1660L5BH	5-208-7	15091030	
09/11/01 1:37	PIBLKBO	5-131-7	15091031	OK
09/11/01 2:00	SB081801C	SB081801C	15091032	OK
09/11/01 2:23	SB081801D	SB081801D	15091033	
09/11/01 2:46	PBLKSB	BL0813SB	15091034	
09/11/01 3:09	PBLKSB	BB0813SB	15091035	
09/11/01 3:32	ELCS1	LC0813SB	15091036	
09/11/01 3:55	ELCS2	LD0813SB	15091037	
09/11/01 4:18	E0269	47253.15	15091038	
09/11/01 4:41	E0270	47253.16	15091039	
09/11/01 5:05	E0271	47253.17	15091040	
09/11/01 5:28	E0272	47253.18	15091041	
09/11/01 5:51	E0273	47253.19	15091042	OK

Unless noted, Client Ids are the same for the quant. & confirmation columns

09/12/01 9-12-01

Verification Signature/Date Analyst Signature/Date

GC Laboratory Run Log - PESTICIDE/PCB

SWOR/AATS SWLO-OP-415 OP-415-RUNLOG-14 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_15
SDG NO. : SWLO METHOD FILE(S): XPCBI10 (8082)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
09/10/01 10:47	HEX	HEX	15091001	Sl
09/10/01 11:10	HEX	HEX	15091002	Sl
09/10/01 11:33	HEX	HEX	15091003	Sl
09/10/01 11:56	PIBLKBO	5-131-7	15091004	w
09/10/01 12:19	AR1660L3BQ	5-210-7	15091005	d
09/10/01 12:43	AR1660L3BR	5-210-7	15091006	w
09/10/01 16:24	HEXANE		15091007	Sl
09/10/01 16:47	HEXANE		15091008	Sl
09/10/01 17:10	HEXANE		15091009	Sl
09/10/01 17:33	HEXANE		15091010	Sl
09/10/01 17:56	HEXANE		15091011	Sl
09/10/01 18:19	RESCBH	5-171-7	15091012	OK
09/10/01 18:42	AR1221L3BH	5-420-6	15091013	
09/10/01 19:05	AR1232L3BH	5-422-6	15091014	
09/10/01 19:28	AR1242L1BH	5-11-7	15091015	
09/10/01 19:51	AR1242L2BH	5-10-7	15091016	
09/10/01 20:14	AR1242L3BH	5-9-7	15091017	
09/10/01 20:37	AR1242L4BH	5-8-7	15091018	
09/10/01 21:00	AR1242L5BH	5-7-7	15091019	
09/10/01 21:23	AR1248L3BH	5-424-6	15091020	
09/10/01 21:46	AR1254L1BH	5-6-7	15091021	OK

Unless noted, Client Ids are the same for the quant. & confirmation columns

Blaine Baldy 091201 — Verification Signature/Date

9-12-01 — Analyst Signature/Date

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-415 OP-415-RUNLOG-14 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_15
SDG NO. : SWLO METHOD FILE(S): XPCBI10 (8082)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
09/18/01 15:05	E0396DL	47346.10DL	15091816	OK
09/18/01 15:28	E0397DL	47346.11DL	15091817	
09/18/01 15:51	E0398DL	47346.12DL	15091818	
09/18/01 16:14	E0399DL	47346.13DL	15091819	
09/18/01 16:38	E03A0DL	47346.14DL	15091820	
09/18/01 17:01	E03A1DL	47346.15DL	15091821	
09/18/01 17:24	E03A3DL	47346.17DL	15091822	OK
09/18/01 17:47	HEXANE		15091823	Sd
09/18/01 18:10	HEXANE		15091824	Sd
09/18/01 18:33	HEXANE		15091825	Sd
09/18/01 18:57	PIBLKBV	5-131-7	15091826	OK
09/18/01 19:20	AR1660L3B4	5-210-7	15091827	OK
09/18/01 19:43	AR1660L3B5	5-210-7	15091828	
09/18/01 20:06	SB090201C	SB090201C	15091829	OK
09/18/01 20:29	SB090201D	SB090201D	15091830	
09/18/01 20:52	PBLKSB	BL0828SB	15091831	
09/18/01 21:15	PBLKSB	BB0828SB	15091832	
09/18/01 21:39	ELCS1	LC0828SB	15091833	
09/18/01 22:02	ELCS2	LD0828SB	15091834	
09/18/01 22:25	HEXANE		15091835	Sd
09/18/01 22:48	HEXANE		15091836	Sd

Unless noted, Client Ids are the same for the quant. & confirmation columns

9-19-01 9/19/01

Verification Signature/Date Analyst Signature/Date

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-415 OP-415-RUNLOG-14 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_15
SDG NO. : SWLO METHOD FILE(S): XPCBI10 (8082)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
09/18/01 23:11	HEXANE		15091837	SL
09/18/01 23:34	PIBLKBW	5-131-7	15091838	OK
09/18/01 23:57	AR1660L3B6	5-210-7	15091839	OK
09/19/01 00:20	AR1660L3B7	5-210-7	15091840	"
09/19/01 00:44	E0455	47393.01	15091841	OK
09/19/01 1:07	E0455MS	47393.02MS	15091842	
09/19/01 1:30	E0455MSD	47393.03MSD	15091843	
09/19/01 1:53	E0456	47393.04	15091844	
09/19/01 2:16	E0457	47393.05	15091845	
09/19/01 2:39	E0458	47393.06	15091846	
09/19/01 3:02	E0459	47393.07	15091847	
09/19/01 3:26	E0460	47393.08	15091848	
09/19/01 3:49	E0461	47393.09	15091849	OK
09/19/01 4:12	HEXANE		15091850	SL
09/19/01 4:35	HEXANE		15091851	SL
09/19/01 4:58	HEXANE		15091852	SL
09/19/01 5:21	PIBLKBX	5-131-7	15091853	OK
09/19/01 5:44	AR1660L3B8	5-210-7	15091854	OK
09/19/01 6:07	AR1660L3B9	5-210-7	15091855	"
09/19/01 6:31	E0462	47393.10	15091856	OK
09/19/01 6:54	E0463	47393.11	15091857	OK

Unless noted, Client Ids are the same for the quant. & confirmation columns

9.19.4 9-19-01

Verification Signature/Date Analyst Signature/Date

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-415 OP-415-RUNLOG-14 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_15
SDG NO. : SWLO METHOD FILE(S): XPCBI10 (8082)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
09/19/01 7:17	E0464	47393.12	15091858	OK
09/19/01 7:40	E0465	47393.13	15091859	
09/19/01 8:03	E0466	47393.14	15091860	
09/19/01 8:26	E0467	47393.15	15091861	
09/19/01 8:49	E0468	47393.16	15091862	
09/19/01 9:12	E0469	47393.17	15091863	OK
09/19/01 9:36	HEXANE		15091864	SJ
09/19/01 9:59	HEXANE		15091865	SJ
09/19/01 10:22	HEXANE		15091866	SJ
09/19/01 10:45	PIBLKBY	5-131-7	15091867	OK
09/19/01 11:08	AR1660L3BA	5-210-7	15091868	OK

Unless noted, Client Ids are the same for the quant. & confirmation columns

9-19-01 9-19-01

Verification Signature/Date Analyst Signature/Date

Page No.: 61

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-415 OP-415-RUNLOG-14 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_15
SDG NO. : SWLO METHOD FILE(S): XPCBI10 (8082)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
09/19/01 13:36	E0456DL	47393.04DL	15091901	OK
09/19/01 13:59	E0456DL	47393.04DL	15091902	
09/19/01 14:22	E0458DL	47393.06DL	15091903	
09/19/01 14:45	E0459DL	47393.07DL	15091904	
09/19/01 15:08	E0460DL	47393.08DL	15091905	
09/19/01 15:32	E0466DL	47393.14DL	15091906	
09/19/01 15:55	E0466DL	47393.14DL	15091907	
09/19/01 16:18	E0468DL	47393.16DL	15091908	OK
09/19/01 17:04	HEXANE		15091910	Sol
09/19/01 17:27	HEXANE		15091911	Sol
09/19/01 17:50	PIBLKBP	5-131-7	15091912	OK
09/19/01 18:14	AR1660L3BR	5-210-7	15091913	OK
09/19/01 18:37	AR1660L3BS	5-210-7	15091914	

Unless noted, Client Ids are the same for the quant. & confirmation columns

Verification Signature/Date 092001 Analyst Signature/Date 9-20-01

	SV	OD ST • PCB	OTHER
CONT EX. (3520C)			
SEP-F (3510C)			
SHAKER			
SONC. (3550B)		XXXXX	
SOXHLET			

☐ RUSH ☐ REEXTRACT ☐ TCLP ☐ DXIN

SAMPLE EXTRACTION LO

9/6

BATCH: 010828SB

EXTRACT DATE: 2001-08-28 09:28

003028
Page: 1 of 2

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
BL0828SB			S/L				30.00	300	10/5	45	2.0		5.0	5.0	N		1000		
BB0828SB			S/L				30.00	300	10/5	45	2.0		5.0	5.0	N		1000		
LC0828SB			S/L				30.00	300	10/5	45	2.0		5.0	5.0	N	1000	1000		
LD0828SB			S/L				30.00	300	10/5	45	2.0		5.0	5.0	N	1000	1000		
47393.01 GC699	EPA 29658	08/24/2001 08:30 E0455	S/L	7.06	33.73	19.9	30.10	300	10/5	45	2.0		5.0	5.0	N		1000		
47393.02MS GC699	EPA 29658	08/24/2001 08:30 E0455MS	S/L	7.06	33.73	20.0	30.20	300	10/5	45	2.0		5.0	5.0	N	1000	1000		
47393.03MSD GC699	EPA 29658	08/24/2001 08:30 E0455MSD	S/L	7.06	33.73	20.1	30.40	300	10/5	45	2.0		5.0	5.0	N	1000	1000		
47393.04 GC699	EPA 29658	08/24/2001 08:30 E0456	S/L	7.28	63.18	11.0	30.00	300	10/5	45	2.0		5.0	5.0	N		1000		
47393.05 GC699	EPA 29658	08/24/2001 08:30 E0457	S/L	7.40	14.53	26.3	30.80	300	10/5	45	2.0		5.0	5.0	N		1000		
47393.06 GC699	EPA 29658	08/24/2001 08:30 E0458	S/L	7.10	60.03	12.2	30.40	300	10/5	45	2.0		5.0	5.0	N		1000		
47393.07 GC699	EPA 29658	08/24/2001 08:30 E0459	S/L	6.96	46.25	16.4	30.60	300	10/5	45	2.0		5.0	5.0	N		1000		
47393.08 GC699	EPA 29658	08/24/2001 08:30 E0460	S/L	7.30	20.17	24.0	30.10	300	10/5	45	2.0		5.0	5.0	N		1000		
47393.09 GC699	EPA 29658	08/24/2001 08:30 E0461	S/L	7.63	17.93	24.7	30.10	300	10/5	45	2.0		5.0	5.0	N		1000		
47393.10 GC699	EPA 29658	08/24/2001 08:30 E0462	S/L	7.44	19.40	24.7	30.70	300	10/5	45	2.0		5.0	5.0	N		1000		
47393.11 GC699	EPA 29658	08/24/2001 08:30 E0463	S/L	7.13	36.24	19.1	30.00	300	10/5	45	2.0		5.0	5.0	N		1000		

INITIALS

WEIGHING:	MC	EXTRACTION:	MC	FLORISIL:
CLEANUP:	CD	KD:	MC	ethyl acetone
BLOWDOWN:	SA	TV:	MC	Hexane
SURROG. SPIKER:	MC	VERIFIER:	GS	
MATRIX SPIKER:	MC	VERIFIER:	GS	
SUBMITTED BY:	SA	REVIEWED BY:	09/17	

ID NUMBERS

FLORISIL CARTRIDGE #:

GPC COLUMN #: 364134 (09-02-01) #364014

SURROGATES ID CONC #: 5-199-7

MATRIX SPIKE SOLID/CONC #(s): 5-146-5

SOP - METHOD # : SWL-OP- 415 Rev. 1.0

COMMENTS

SB # 090201 C
SB # 090201 D
Extracts went through silica gel & acid clean-up

	SV	OD ST • PCB	OTHER
CONT EX. (3520C)			
SEP-F (3510C)			
SHAKER			
SONC. (3550B)		XXXXX	
SOXHLET			

☐ RUSH ☐ REEXTRACT ☐ TCLP [DXIN

SAMPLE EXTRACTION LO

BATCH: 010828SB

EXTRACT DATE: 2001-08-28 09:28

003028
Page: 2 of 2

Steel

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		
47393.12 GC699	EPA 29658	08/24/2001 08:30 E0464	S/L	7.25	53.27	14.2	30.30	300	10/5	45	2.0		5.0	5.0	N		1000		
47393.13 GC699	EPA 29658	08/24/2001 08:30 E0465	S/L	7.13	53.25	14.2	30.30	300	10/5	45	2.0		5.0	5.0	N		1000		
47393.14 GC699	EPA 29658	08/24/2001 08:30 E0466	S/L	7.13	59.34	12.5	30.70	300	10/5	45	2.0		5.0	5.0	N		1000		
47393.15 GC699	EPA 29658	08/24/2001 08:30 E0467	S/L	7.49	15.51	25.4	30.10	300	10/5	45	2.0		5.0	5.0	N		1000		
47393.16 GC699	EPA 29658	08/24/2001 08:30 E0468	S/L	7.31	50.58	15.0	30.40	300	10/5	45	2.0		5.0	5.0	N		1000		
47393.17 GC699	EPA 29658	08/24/2001 08:30 E0469	S/L	7.24	45.96	16.4	30.40	300	10/5	45	2.0		5.0	5.0	N		1000		

INITIALS

WEIGHING:	SA	EXTRACTION:	MC	FLORISIL:	
CLEANUP:	CD	KD:	MC		CH2Cl2
BLOWDOWN:	SA	TV:	MC		Acetone
SURROG. SPIKER:	MC	VERIFIER:	GS		Hexane
MATRIX SPIKER:	MC	VERIFIER:	GS		
SUBMITTED BY:	SA	REVIEWED BY:			09/17

ID NUMBERS

FLORISIL CARTRIDGE #:

GPC COLUMN #: 364134 (09-02-01) #3640A

SURROGATES ID CONC #: 5-199-7

MATRIX SPIKE SOLID/CONC #(s): 5-146-5

SOP - METHOD # : SWL-OP- 415 Rev. 1.0

COMMENTS

SB # 090201C
SB # 090201D
Extracts went through steel & acid clean-up.

Pg 38 Book 10

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.
9/15	6:40	47434.15	TETP.IT	[illegible]	N	GC599	1
"	"	47440.09 - 11	"	[illegible]	N	GC599	3
9/16	6:40	47472.02, 03	TETP.IT	[illegible]	N	GC599	2
1.17	6:30	47535.04; 07; 10	"	MC	N	GC420	3
1.17	6:30	47536.04; 07; 10	"	MC	N	GC699	3
1.17	6:30	47536.04; 07; 10	"	MC	N	GC899	3
1.17	6:55	47494.01; 02MS; 03MSD (Mod Samb)	INEEL	MC	N	GC650	3
5/17	5:45	47434.01, 02, 04-05, 07, 08 (10, 11, 13)	TETP.IT	[illegible]	N	GC599	9
	5:45	47435.01, 02, 04-06, 08	TETP.IT	[illegible]	N	GC599	6
05/17	8:35p	47267.03	EPA	SA	Y	GC699	X
05/17	8:35p	47293.01	EPA	SA	Y	GC699	X
05/17	8:35p	47392.01 - 22 MS,MSD	EPA	SA	N	GC699	22
05/17	8:35p	47393.01 - 17 MS,MSD	EPA	SA	N	GC699	17

284

Southwest Laboratory of Oklahoma
1700 W. Albany Suite C
Broken Arrow, OK 74012-1421

INTERNAL CHAIN OF CUSTODY

Date	8/24/01
Episode	**47393**
Client	**EPA**
Project	OLM04.2
Received	08/24/01

Test Code	Cont ID	(Circle the Sample Numbers Checked out) #	#	#	#	#	#	#	Date/Time Out	Analyst	Date/Time In
GC699	A	1	2	3	4	5	6	7			
		8	9	10	11	12	13	14			
		15	16	17					08-28/9:30	MC	08-28/10:40
IN660	A	1	2	3	4	5	6	7			
		8	9	10	11	12	13	14			
		15	16	17					8-27/8:30	M	8-28/8:45

Original in
29658 E0435
8/27/01

311

FedEx. PRIORITY OVERNIGH

emp# 177102 23AUG01

TRK# 8218 7698 0443 FORM 0215

74012 -OK -US

NK RV

FedEx. USA Airbill FedEx Tracking Number 821876980443

Form I.D. No.

1 From This portion can be removed for Recipient's records.

Date 8-23-01 FedEx Tracking Number 821876980443

Sender's Name RICK MEHL Phone 847 918-4000

Company ROY F WESTON INC

Address 450 OLD SKOKIE ROAD

Dept./Floor/Suite/Room

City PARK CITY State IL ZIP 60085

RECIPIENT: PEEL HERE

2 Your Internal Billing Reference 12634.001.001.0067.00

3 To

Recipient's Name MR. HARRY BORG Phone 981 251-0345

Company SOUTHWEST AABS OF OKLAHOMA

Address 1700 WEST ALBANY, SUITE C

To "HOLD" at FedEx location, print FedEx address. We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

City BROKEN ARROW State OK ZIP 74012

4a Express Pack

☒ FedEx Priority Ov — Next business morning

☐ FedEx 2Day* — Second business day

4b Express Freight

Packages over 150 lbs. Delivery commitment may be later in some areas.

☐ FedEx 1Day Freight* — Next business day ☐ FedEx 2Day Freight — Second business day ☐ FedEx 3Day Freight — Third business day

* Call for Confirmation:

5 Packaging

* Declared value limit $500

☐ FedEx Envelope/Letter* ☐ FedEx Pak* ☒ Other Pkg. — Includes FedEx Box, FedEx Tube, and customer pkg.

6 Special Handling

Include FedEx address in Section 3

☐ SATURDAY Delivery — Available for FedEx Priority Overnight and FedEx 2Day to select ZIP codes

☐ SUNDAY Delivery — Available for FedEx Priority Overnight to select ZIP codes

☐ HOLD Weekday at FedEx Location — Not available with FedEx First Overnight

☐ HOLD Saturday at FedEx Location — Available for FedEx Priority Overnight and FedEx 2Day to select locations

Does this shipment contain dangerous goods? One box must be checked.

☐ No ☐ Yes — As per attached Shipper's Declaration ☐ Yes — Shipper's Declaration not required ☐ Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous Goods cannot be shipped in FedEx packaging. ☐ Cargo Aircraft Only

7 Payment Bill to: Enter FedEx Acct. No. or Credit Card No. below. ☐ Obtain Recip. Acct. No.

☒ Sender — Acct. No. in Section 1 will be billed. ☐ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

Total Packages 1 Total Weight 65 Total Charges

Credit Card Auth.

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8 Release Signature Sign to authorize delivery without obtaining signature.

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

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402

8218 7698 0443

0146095931

Align bottom of Airbill Pouch here.
Part # 150454 Rev. 4/00

286

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

Case No: 29658
DAS No:
SDG No: E0455

L

Date Shipped: 8/23/2001
Carrier Name: FedEx
Airbill: 821876980443
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	8-23-01 1145		8-24-01 8:30
2			
3			
4			

Sampler Signature:

For Lab Use Only

Lab Contract No: 68W00066
Unit Price: 510.00
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
E0452	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099185 (Ice Only) (1)	AP-SL012-12-03	S:	8/22/2001	10:15		
E0453	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099186 (Ice Only) (1)	AP-SL012-12-04	S:	8/22/2001	10:15		
E0454	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099187 (Ice Only) (1)	AP-SL012-12-04DP	S:	8/22/2001	10:15		
E0455	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099188 (Ice Only) (1)	AP-SL012-12-05	S:	8/22/2001	10:15	ORIGINAL IN SDG# E0435 8-24-01 LHS	
E0456	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099189 (Ice Only) (1)	AP-SL012-07-01	S:	8/22/2001	10:43		
E0457	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099190 (Ice Only) (1)	AP-SL012-07-02	S:	8/22/2001	10:43		
E0458	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099191 (Ice Only) (1)	AP-SL012-07-03	S:	8/22/2001	10:43		
E0459	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099192 (Ice Only) (1)	AP-SL012-08-01	S:	8/22/2001	11:32		
E0460	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099193 (Ice Only) (1)	AP-SL012-08-02	S:	8/22/2001	11:32		
E0461	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099194 (Ice Only) (1)	AP-SL012-08-03	S:	8/22/2001	11:32		

E0455

Rec OK

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
	E0455		2.8°C TB	177848, 177849
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: 5-490998136-082301-0002

LABORATORY COPY

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

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

Case No:	29658
DAS No:	
SDG No:	E0455

L

Date Shipped:	8/23/2001
Carrier Name:	FedEx
Airbill:	821876980443
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]	8.23.01 1145	[illegible]	8-24-01 8:30
2			
3			
4			

Sampler Signature: [illegible]

For Lab Use Only

Lab Contract No:	68W00066
Unit Price:	570.00
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 E0455
E0462	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099195 (Ice Only) (1)	AP-SL012-08-04	S: 8/22/2001 11:32		
E0463	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099196 (Ice Only) (1)	AP-SL012-08-05	S: 8/22/2001 11:32		
E0464	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099197 (Ice Only) (1)	AP-SL012-08-06	S: 8/22/2001 11:32		
E0465	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099198 (Ice Only) (1)	AP-SL012-08-06DP	S: 8/22/2001 11:32		
E0466	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099199 (Ice Only) (1)	AP-SL012-04-01	S: 8/22/2001 10:29		
E0467	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099200 (Ice Only) (1)	AP-SL012-04-02	S: 8/22/2001 10:29		
E0468	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099201 (Ice Only) (1)	AP-SL012-04-03	S: 8/22/2001 10:29		
* E0469	Soil/Sediment/ Joe Ruiz	L/G	PCBs (21)	099202 (Ice Only) (1)	AP-SL012-04-03DP	S: 8/22/2001 10:29		

Rec
O.K.

* SDG Final Sample

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC: E0455	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 2.8°C TB	Chain of Custody Seal Number: 177848, 177849
Analysis Key: CC	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? Y / Shipment Iced? Y
PCBs = PCBs CC				

R Number: 5-490998136-082301-0002

LABORATORY COPY

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

Southwest Laboratory of Oklahoma
1700 W. Albany Suite C
Broken Arrow, OK 74012-1421

SAMPLE LOG-IN RECORD

REVIEWED
BY Matt Zaub
DATE 8-24-01

Date 8/24/01 Page 1
Episode **47393**
Client **EPA**
Project OLM04.2
Received 08/24/01
Logged In 08/24/01

TEST	PRI	DUE	CONTAINER	DESCRIPTION	EXTRACTED	ANALYST	ANALYZED
Sample: **47393.01N1**	Sampled:08/22/01 10:15			ID:E0455	SDG:E0455	Matrix: S	Containers: 1
GC699	4	09/13/2001	A	NON STD PCB			
IN660	8	08/27/2001	A	% MOISTURE			
Sample: **47393.02MS1**	Sampled:08/22/01 10:15			ID:E0455MS	SDG:E0455	Matrix: S	Containers: 1
GC699	4	09/13/2001	A	NON STD PCB			
IN660	8	08/27/2001	A	% MOISTURE			
Sample: **47393.03SD1**	Sampled:08/22/01 10:15			ID:E0455MSD	SDG:E0455	Matrix: S	Containers: 1
GC699	4	09/13/2001	A	NON STD PCB			
IN660	8	08/27/2001	A	% MOISTURE			
Sample: **47393.04**	Sampled:08/22/01 10:43			ID:E0456	SDG:E0455	Matrix: S	Containers: 1
GC699	4	09/13/2001	A	NON STD PCB			
IN660	8	08/27/2001	A	% MOISTURE			
Sample: **47393.05**	Sampled:08/22/01 10:43			ID:E0457	SDG:E0455	Matrix: S	Containers: 1
GC699	4	09/13/2001	A	NON STD PCB			
IN660	8	08/27/2001	A	% MOISTURE			
Sample: **47393.06**	Sampled:08/22/01 10:43			ID:E0458	SDG:E0455	Matrix: S	Containers: 1
GC699	4	09/13/2001	A	NON STD PCB			
IN660	8	08/27/2001	A	% MOISTURE			
Sample: **47393.07**	Sampled:08/22/01 11:32			ID:E0459	SDG:E0455	Matrix: S	Containers: 1
GC699	4	09/13/2001	A	NON STD PCB			
IN660	8	08/27/2001	A	% MOISTURE			
Sample: **47393.08**	Sampled:08/22/01 11:32			ID:E0460	SDG:E0455	Matrix: S	Containers: 1
GC699	4	09/13/2001	A	NON STD PCB			
IN660	8	08/27/2001	A	% MOISTURE			
Sample: **47393.09**	Sampled:08/22/01 11:32			ID:E0461	SDG:E0455	Matrix: S	Containers: 1
GC699	4	09/13/2001	A	NON STD PCB			
IN660	8	08/27/2001	A	% MOISTURE			
Sample: **47393.10**	Sampled:08/22/01 11:32			ID:E0462	SDG:E0455	Matrix: S	Containers: 1
GC699	4	09/13/2001	A	NON STD PCB			
IN660	8	08/27/2001	A	% MOISTURE			
Sample: **47393.11**	Sampled:08/22/01 11:32			ID:E0463	SDG:E0455	Matrix: S	Containers: 1
GC699	4	09/13/2001	A	NON STD PCB			
IN660	8	08/27/2001	A	% MOISTURE			
Sample: **47393.12**	Sampled:08/22/01 11:32			ID:E0464	SDG:E0455	Matrix: S	Containers: 1
GC699	4	09/13/2001	A	NON STD PCB			
IN660	8	08/27/2001	A	% MOISTURE			
Sample: **47393.13**	Sampled:08/22/01 11:32			ID:E0465	SDG:E0455	Matrix: S	Containers: 1
GC699	4	09/13/2001	A	NON STD PCB			
IN660	8	08/27/2001	A	% MOISTURE			
Sample: **47393.14**	Sampled:08/22/01 10:29			ID:E0466	SDG:E0455	Matrix: S	Containers: 1
GC699	4	09/13/2001	A	NON STD PCB			

Southwest Laboratory of Oklahoma
1700 W. Albany Suite C
Broken Arrow, OK 74012-1421

SAMPLE LOG-IN RECORD

Date	8/24/01	Page2
Episode	**47393**	
Client	**EPA**	
Project	OLM04.2	
Received	08/24/01	
Logged In	08/24/01	

TEST	PRI	DUE	CONTAINER	DESCRIPTION	EXTRACTED	ANALYST	ANALYZED
IN660	8	08/27/2001	A	% MOISTURE			
Sample: **47393.15**		Sampled:08/22/01 10:29		ID:E0467	SDG:E0455	Matrix: S	Containers: 1
GC699	4	09/13/2001	A	NON STD PCB			
IN660	8	08/27/2001	A	% MOISTURE			
Sample: **47393.16**		Sampled:08/22/01 10:29		ID:E0468	SDG:E0455	Matrix: S	Containers: 1
GC699	4	09/13/2001	A	NON STD PCB			
IN660	8	08/27/2001	A	% MOISTURE			
Sample: **47393.17**		Sampled:08/22/01 10:29		ID:E0469	SDG:E0455	Matrix: S	Containers: 1
GC699	4	09/13/2001	A	NON STD PCB			
IN660	8	08/27/2001	A	% MOISTURE			

SAMPLE LOG-IN SHEET

Lab Name: SOUTHWEST LABORATORY OF OKLAHOMA	Page 1 of 1
Received by (Print Name): JASON SPRIGGS	Log-In Date: 2001-08-24 14:51
Received by (Signature):	
Case Number: ~~29658~~	Sample Delivery Group No.: E0455 / SAS Number:

Remarks: Cooler: 08/24/01-1

1. Custody Seals(s)	Present/Absent* Intact/ Broken
2. Custody Seal Nos.	177848-849
3. Chain-of Custody Records	Present/Absent*
4. Traffic Reports or Packing Lists	Present/Absent*
5. Airbill	Airbill/ Sticker Present/Absent*
6. Airbill No.	8218769980443
7. Sample Tags	Present/~~Absent~~ 8-24-01
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	2.8c
10. Does Information on Custody records, traffic reports, and sample tags agree?	Yes/ No*
11. Date Received at Lab	08/24/01
12. Time Received	08:30

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment: etc,
E0455	099188	47393.01	RCC OK
E0455MS	099188	47393.02	
E0455MSD	099188	47393.03	
E0456	099189	47393.04	
E0457	099190	47393.05	
E0458	099191	47393.06	
E0459	099192	47393.07	
E0460	099193	47393.08	
E0461	099194	47393.09	
E0462	099195	47393.10	
E0463	099196	47393.11	
E0464	099197	47393.12	
E0465	099198	47393.13	
E0466	099199	47393.14	
E0467	099200	47393.15	
E0468	099201	47393.16	
E0469	099202	47393.17	

Sample Transfer

Fraction: PCB	Fraction:
Area #: 5	Area #:
By: JS	By:
On: 8-24-01	On:

* Contact SMO and attach record of resolution.

Reviewed By: Matt Janek	Logbook No.
Date: 8/24/01	Logbook Page No.

FORM-DC1 OLM04.2

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 nust 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# 5790

Pg 1

Client	ACCOUNTING OFFICER	Client Code:	EPA
Contact	Heather Bauer	Phone&Fax#:	703-264-9348 703-264-9222
Project	OLM04.2	PO Number:	
Location	29658	Receipt Date	08/24/2001 Due: 09/13/2001
SDG	E0455 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, 2.8C
Case#29658, to date wk 8/22/01: 179 soils , 9sets QC

Client ID	Type	Matrix	GC699									
E0455	N1	S	X									
E0455MS	MS1	S	X									
E0455MSD	SD1	S	X									
E0456		S	X									
E0457		S	X									
E0458		S	X									
E0459		S	X									
E0460		S	X									
E0461		S	X									
E0462		S	X									
E0463		S	X									
E0464		S	X									
E0465		S	X									
E0466		S	X									
E0467		S	X									
E0468		S	X									
E0469		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 08/24/2001