Data Review Friday, October 12, 2001
Site Name: Allied Paper (MI)
Case Number: 29602 Laboratory: Southwest Laboratory
SDG: E03A9

US EPA RECORDS CENTER REGION 5
560059

PCBs

Samples:

Sample No	Station Location	Matrix	Date Collected	Date Extracted	Date Analyzed
E03A9	AP-SD030-34-07	Soil	08/16/01	08/22/01	09/16/01
E03B0	AP-SD036-25-01	Soil	08/15/01	08/22/01	09/16/01
E03B1	AP-SD036-25-02	Soil	08/15/01	08/22/01	09/16/01
E03B2	AP-SD036-25-03	Soil	08/15/01	08/22/01	09/16/01
E03B3	AP-SD036-25-04	Soil	08/15/01	08/22/01	09/16/01
E03B4	AP-SD036-23-01	Soil	08/15/01	08/22/01	09/16/01
E03B5	AP-SD036-23-02	Soil	08/15/01	08/22/01	09/16/01
E03B6	AP-SD036-23-02DP	Soil	08/15/01	08/22/01	09/16/01
E03B7	AP-SD036-23-03	Soil	08/15/01	08/22/01	09/17/01
E03B8	AP-SD036-23-04	Soil	08/15/01	08/22/01	09/17/01
E03B9	AP-SD036-23-05	Soil	08/15/01	08/22/01	09/17/01
E03C0	AP-SD036-19-01	Soil	08/15/01	08/22/01	09/17/01
E03C1	AP-SD036-19-02	Soil	08/15/01	08/22/01	09/17/01
E03C2	AP-SD036-19-03	Soil	08/15/01	08/22/01	09/17/01
E03C3	AP-SD036-19-03DP	Soil	08/15/01	08/22/01	09/17/01
E03C4	AP-SD036-22-01	Soil	08/15/01	08/22/01	09/17/01
E03C5	AP-SD036-22-02	Soil	08/15/01	08/22/01	09/17/01
E03C6	AP-SD036-22-03	Soil	08/15/01	08/22/01	09/17/01
E03C7	AP-SD036-22-03DP	Soil	08/15/01	08/22/01	09/17/01
E03C8	AP-SD036-22-04	Soil	08/15/01	08/22/01	09/17/01

Holding Time:
All samples were extracted and analyzed within the required holding time. The samples arrived in a cooler at 0.9 degrees Celsius.

Method Blank:
The method blank PBLKSB was associated with this SDG. PBLKSB was analyzed on 09/16/01 with (E03A9, E03B0 thru E03B9, E03C0 thru E03C8, 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%).

Matrix Spike/ Matrix Spike Duplicate Recovery:
The matrix spike/ matrix spike duplicate audit was performed on sample E03A9. 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

D67 - 4A - AA4/B

DATE: October 3, 2001

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

RECEIVED
OCT - 5 2001

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

Attn: Tonya Balla

SITE NAME: Allied Paper

CASE NO.	LAB	NO # OF SAMPLES	SDG	MATRIX
29602	SOUTHWEST	20	E03A9	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

SEP 2 1 2001

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME SOUTHWEST LABORATORY OF OKLAHOMA
CITY/STATE BROKEN ARROW, OKLAHOMA
CASE NO. 29602 SDG NO. E0349 SDG NOS. TO FOLLOW
SAS NO.
CONTRACT NO. 68W99079
SOW NO. OLM04.2

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

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

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

CASE NO. 29602 SDG NO. E03A9 SDG NOS. TO FOLLOW _____

SAS NO. _____

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

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

CASE NO. 29602 SDG NO. E03A9 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
6. Pesticides Data (Cont.)				
b. Sample Data	11	78		
TCL Results - Organic Analysis Data Sheet (Form I PEST)			89	
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	79	183		
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	184	206		
Matrix Spke/Matrix Spike Duplicate Data	207	219		

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

CASE NO. 29602 SDG NO. E03A9 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
6. Pesticides Data (Cont.)				
e. Raw GPC Data	220	263	SA	
f. Raw Florisil Data	NA	NA		
7. Miscellaneous Data				
Original preparation and analysis forms or of preparation and analysis logbook pages	264	268		
Internal sample and sample extract transfer chain-of-custody records	269	272		
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)	273	273		
Chain-of-Custody Records	274	276		
Sample Tags	277	296		
Sample Log-in Sheet (Lab & DC1)	297	300		
Miscellaneous Shipping/Receiving Records (describe or list)				
Memos, Analytical Request	301	307		
	NA	NA		
9. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
10. Other Records (describe or list)				
Telephone Communication Log				

11. Comments:

FORM DC-2-4 OLM04.2

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

CASE NO. 29602 SDG NO. E03A9 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	(Signature)	(Printed Name/Title)	(Date)
Completed by: (CLP Lab)	Emma Morton	Emma Morton Data Clerk	9-20-01
Verified by: (CLP Lab)	Sandra Jackett	Sandra Jackett / Data Clerk	9/20/01
Audited by: (EPA)			

SEP 2 1 2001

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

SDG NARRATIVE

September 20, 2001

CONTRACT: 68W99079

CASE NO: 29602

SDG NO: E03A9

SAMPLES: E03A9, E03A9MS, E03A9MSD, E03B0, E03B1, E03B2, E03B3, E03B4, E03B5, E03B6, E03B7, E03B8, E03B9, E03C0, E03C1, E03C2, E03C3, E03C4, E03C5, E03C6, E03C7 and E03C8.

FRACTION: Pesticide/PCB

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

Columns: The soil samples were analyzed on Restek dual analytical columns RTX-PEST (also known as PEST I)(proprietary phase composition, length 30m, id 0.32 mm, film thickness 0.5 um) and RTX-PEST 2 (also known as PEST II) (proprietary phase composition, length 30m, id 0.32 mm, film thickness 0.25 um) columns which were specifically designed for pesticide/PCB separation as required by the EPA's SOW. All applicable manufacturer's instructions were followed for the analysis of pesticides/PCBs. Manufacturer provided information on the performance characteristics of the columns are kept on site. Hydrogen used as the carrier gas.

The sample cooler arrived at 0.9 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.

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 20, 2001

Contract Laboratory Program

Sample Delivery Group (SDG) Cover Sheet

SDG Number E03A9

St 8/21/01

Laboratory Name Southwest Laboratory of Ok. Laboratory Code SWOK

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

Analyses Price 569.00 SDG Turnaround 21

EPA Sample Numbers in SDG (Listed in Numerical Order)

1) E03A9	7) E03B5	13) E03C1	19) E03C7
2) E03B0	8) E03B6	14) E03C2	20) E03C8
3) E03B1	9) E03B7	15) E03C3	21)
4) E03B2	10) E03B8	16) E03C4	22)
5) E03B3	11) E03B9	17) E03C5	23)
6) E03B4	12) E03C0	18) E03C6	24)

8/21/01

E03A9	E03C8
First Sample in SDG	Last Sample in SDG
08/20/2001	08/20/2001
First Sample Receipt Date	Last Sample Receipt Date

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

Signature Harry M. Boy Date 8-21-01

Version 2.0

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

Case No:	29602
DAS No:	
SDG No:	E03A9

L

Date Shipped:	8/17/2001
Carrier Name:	FedEx
Airbill:	821876980400
Shipped to:	Southwest Labs of Oklahoma, Inc. 1700 West Albany Suite C Broken Arrow OK 74012 (918) 251-0545

Chain of Custody Record

Sampler Signature:

Relinquished By	(Date / Time)	Received By	(Date / Time)
1	8.17.01 12:45	2	8-20-01 8:15
2			
3			
4			

For Lab Use Only

Lab Contract No:	68W99079
Unit Price:	$169.00
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 E03A9
E03A4	Sediment/ Joe Ruiz	L/G	PCBs (21)	050618 (Ice Only) (1)	AP-SD030-34-02	S:	8/16/2001	15:40		OK
E03A5	Sediment/ Joe Ruiz	L/G	PCBs (21)	050619 (Ice Only) (1)	AP-SD030-34-03	S:	8/16/2001	15:40		8-20-01
E03A6	Sediment/ Joe Ruiz	L/G	PCBs (21)	050620 (Ice Only) (1)	AP-SD030-34-04	S:	8/16/2001	15:40		
E03A7	Sediment/ Joe Ruiz	L/G	PCBs (21)	050621 (Ice Only) (1)	AP-SD030-34-05	S:	8/16/2001	15:40		
E03A8	Sediment/ Joe Ruiz	L/G	PCBs (21)	050622 (Ice Only) (1)	AP-SD030-34-06	S:	8/16/2001	15:40		original in SDG# E0369
E03A9	Sediment/ Joe Ruiz	L/G	PCBs (21)	050623 (Ice Only) (1)	AP-SD030-34-07	S:	8/16/2001	15:40		
E03B0	Sediment/ Joe Ruiz	L/G	PCBs (21)	050624 (Ice Only) (1)	AP-SD036-25-01	S:	8/15/2001	16:52		
E03B1	Sediment/ Joe Ruiz	L/G	PCBs (21)	050625 (Ice Only) (1)	AP-SD036-25-02	S:	8/15/2001	16:52		
E03B2	Sediment/ Joe Ruiz	L/G	PCBs (21)	050626 (Ice Only) (1)	AP-SD036-25-03	S:	8/15/2001	16:52		
E03B3	Sediment/ Joe Ruiz	L/G	PCBs (21)	050627 (Ice Only) (1)	AP-SD036-25-04	S:	8/15/2001	16:52		

Shipment for Case Complete?	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
N	E0369, E0389, E03A9		0.9°C TB.	177838, 177839

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

R Number: 5-490998136-081701-0001

LABORATORY COPY

t provides preliminary results. Requests for preliminary results will increase analytical costs

nd Copy to: ract Laboratory Analytical Services Support, 2000 Edmund Halley Dr., Rest . 20191-3436 Phone 703/264-9348 Fax 703/264-9222

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

Case No:	29602
DAS No:	
SDG No:	E03A9

L

Date Shipped:	8/17/2001
Carrier Name:	FedEx
Airbill:	821876980400
Shipped to:	Southwest Labs of Oklahoma, Inc. 1700 West Albany Suite C Broken Arrow OK 74012 (918) 251-0545

Chain of Custody Record

Sampler Signature: [illegible]

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

For Lab Use Only

Lab Contract No:	68W99005
Unit Price:	569.00
Transfer To:	
Lab Contract No:	
Unit Price:	

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt E03A9
E03B4	Sediment/ Joe Ruiz	L/G	PCBs (21)	050628 (Ice Only) (1)	AP-SD036-23-01	S: 8/15/2001 18:28		OK
E03B5	Sediment/ Joe Ruiz	L/G	PCBs (21)	050629 (Ice Only) (1)	AP-SD036-23-02	S: 8/15/2001 18:28		8-20-01
E03B6	Sediment/ Joe Ruiz	L/G	PCBs (21)	050630 (Ice Only) (1)	AP-SD036-23-02DP	S: 8/15/2001 18:28		
E03B7	Sediment/ Joe Ruiz	L/G	PCBs (21)	050631 (Ice Only) (1)	AP-SD036-23-03	S: 8/15/2001 18:28		
E03C1	Sediment/ Joe Ruiz	L/G	PCBs (21)	050635 (Ice Only) (1)	AP-SD036-19-02	S: 8/15/2001 17:34		
E03C2	Sediment/ Joe Ruiz	L/G	PCBs (21)	050636 (Ice Only) (1)	AP-SD036-19-03	S: 8/15/2001 17:34		
E03C3	Sediment/ Joe Ruiz	L/G	PCBs (21)	050637 (Ice Only) (1)	AP-SD036-19-03DP	S: 8/15/2001 17:34		
E03C4	Sediment/ Joe Ruiz	L/G	PCBs (21)	050638 (Ice Only) (1)	AP-SD036-22-01	S: 8/15/2001 16:20		
E03C5	Sediment/ Joe Ruiz	L/G	PCBs (21)	050639 (Ice Only) (1)	AP-SD036-22-02	S: 8/15/2001 16:20		
E03C6	Sediment/ Joe Ruiz	L/G	PCBs (21)	050640 (Ice Only) (1)	AP-SD036-22-03	S: 8/15/2001 16:20		

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
	E0369, E0389, E03A9		0.9°C TB	177838, 177839

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

R Number: 5-490998136-081701-0001

LABORATORY COPY

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

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

Case No: 29602
DAS No:
SDG No: E03A9

L

Date Shipped: 8/17/2001
Carrier Name: FedEx
Airbill: 821876980400
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	8-17-01 1245		8-20-01 8:15
2			
3			
4			

Sampler Signature:

For Lab Use Only
Lab Contract No: 68W99019
Unit Price: 569.00
Transfer To:
Lab Contract No:
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION		SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt E03A9
E03C7	Sediment/ Joe Ruiz	L/G	PCBs (21)	050641 (Ice Only) (1)	AP-SD036-22-03DP	S:	8/15/2001	16:20		ok
* E03C8	Sediment/ Joe Ruiz	L/G	PCBs (21)	050642 (Ice Only) (1)	AP-SD036-22-04	S:	8/15/2001	16:20		8-20-01
E03B8	Sediment/ Joe Ruiz	L/G	PCBs (21)	050632 (Ice Only) (1)	AP-SD036-23-04	S:	8/15/2001	18:28		
E03B9	Sediment/ Joe Ruiz	L/G	PCBs (21)	050633 (Ice Only) (1)	AP-SD036-23-05	S:	8/15/2001	18:28		
E03C0	Sediment/ Joe Ruiz	L/G	PCBs (21)	050634 (Ice Only) (1)	AP-SD036-19-01	S:	8/15/2001	17:34		

* SDG Final Sample

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
	E0369, E0389, E03A9		0-4°C EB	177838, 177839

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

R Number: 5-490998136-081701-0001

LABORATORY COPY

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

2F
SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

GC Column(1): RTX-PEST 2 ID: 0.32(mm) GC Column(2): RTX-PEST ID: 0.32(mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	TOT OUT
01	PBLKSB	114	107	96	108	0
02	ELCS1	96	88	86	95	0
03	ELCS2	81	74	70	77	0
04	E03A9	60	53	57	56	0
05	E03A9MS	69	64	67	73	0
06	E03A9MSD	68	64	64	69	0
07	E03B0	69	57	52	55	0
08	E03B1	93	73	66	71	0
09	E03B2	142	115	100	107	0
10	E03B3	73	59	56	61	0
11	E03B4	96	81	81	89	0
12	E03B5	104	89	81	89	0
13	E03B6	109	59	58	64	0
14	E03B7	50	45	52	53	0
15	E03B8	72	65	70	71	0
16	E03B9	67	63	72	73	0
17	E03C0	78	73	72	74	0
18	E03C1	103	101	96	106	0
19	E03C2	78	74	81	88	0
20	E03C3	100	91	88	96	0
21	E03C4	89	82	80	87	0
22	E03C5	60	54	61	61	0
23	E03C6	81	76	79	85	0
24	E03C7	110	102	98	109	0
25	E03C8	93	87	92	100	0
26						
27						
28						
29						
30						

QC LIMITS

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

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

FORM II PCB-1

3H

SOIL AROCLOR LABORATORY CONTROL SPIKE/ DUPLICATE RECOVERY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

LCS Sample NO.: ELCS1

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Aroclor-1254	133	133	100	29-135

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1254	133	108	81	21	50	29-135

Column to be used to flag recovery values

* Values outside of QC limits

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

Comments: _____

3F

SOIL AROCLOR MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix Spike - Client Sample NO.: E03A9

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Aroclor-1254	202	0	142	70	29-135

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1254	204	152	75	7	50	29-135

Column to be used to flag recovery values

* Values outside of QC limits

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

Comments: _____

4C

AROCLOR METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

PBLKSB

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Lab Sample ID: BL0822SB Lab File ID: 16091609

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

Sulfur Cleanup: (Y/N) Y Date Extracted: 08/22/01

Date Analyzed (1): 09/16/01 Date Analyzed (2): 09/16/01

Time Analyzed (1): 1500 Time Analyzed (2): 1500

Instrument ID (1): HP_16A Instrument ID (2): HP_16B

GC Column (1): RTX-PEST 2 ID: 0.32(mm) GC Column (2): RTX-PEST 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	LC0822SB	09/16/01	09/16/01
02	ELCS2	LD0822SB	09/16/01	09/16/01
03	E03A9	47347.01	09/16/01	09/16/01
04	E03A9MS	47347.02MS	09/16/01	09/16/01
05	E03A9MSD	47347.03MSD	09/16/01	09/16/01
06	E03B0	47347.04	09/16/01	09/16/01
07	E03B1	47347.05	09/16/01	09/16/01
08	E03B2	47347.06	09/16/01	09/16/01
09	E03B3	47347.07	09/16/01	09/16/01
10	E03B4	47347.08	09/16/01	09/16/01
11	E03B5	47347.09	09/16/01	09/16/01
12	E03B6	47347.10	09/16/01	09/16/01
13	E03B7	47347.11	09/17/01	09/17/01
14	E03B8	47347.12	09/17/01	09/17/01
15	E03B9	47347.13	09/17/01	09/17/01
16	E03C0	47347.14	09/17/01	09/17/01
17	E03C1	47347.15	09/17/01	09/17/01
18	E03C2	47347.16	09/17/01	09/17/01
19	E03C3	47347.17	09/17/01	09/17/01
20	E03C4	47347.18	09/17/01	09/17/01
21	E03C5	47347.19	09/17/01	09/17/01
22	E03C6	47347.20	09/17/01	09/17/01
23	E03C7	47347.21	09/17/01	09/17/01
24	E03C8	47347.22	09/17/01	09/17/01
25				
26				

Comments: _____

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03A9

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix: (soil/water) SOIL Lab Sample ID: 47347.01

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/22/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/16/01

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	11	J
12672-29-6	Aroclor-1248	50	U
11097-69-1	Aroclor-1254	50	U
11096-82-5	Aroclor-1260	50	U
Surrogate amount spiked		10.12	

FORM I PCB

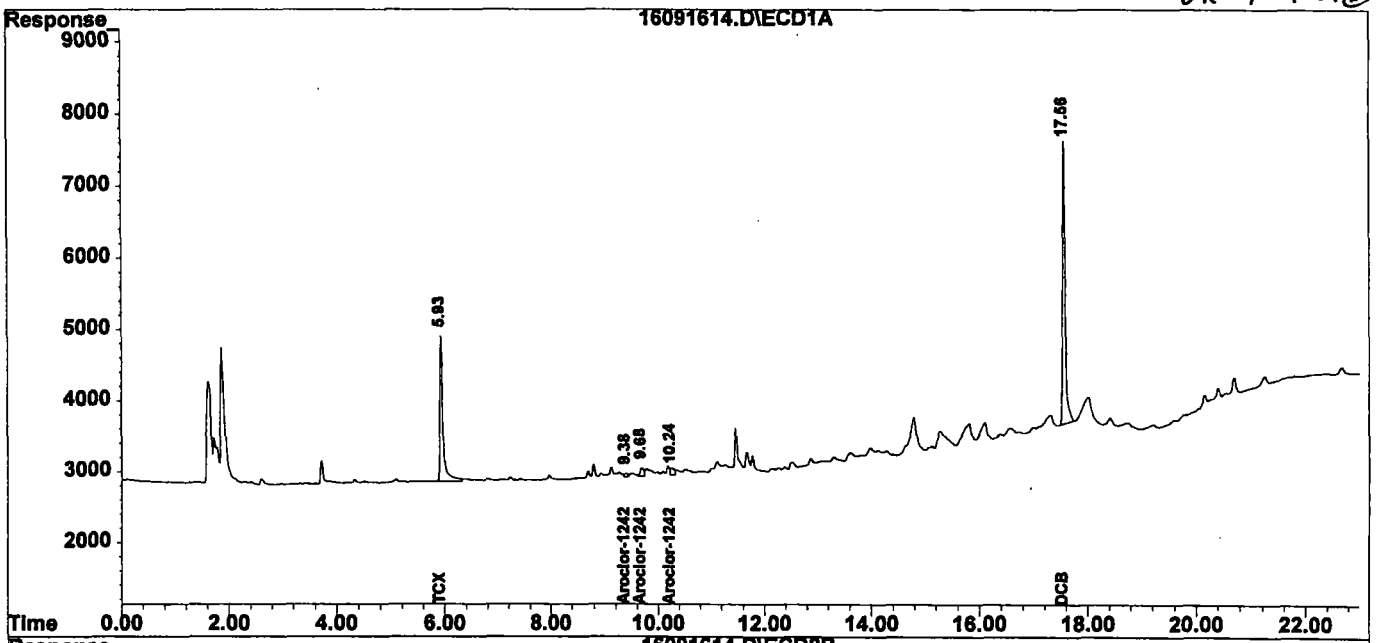
Chromatographic Report

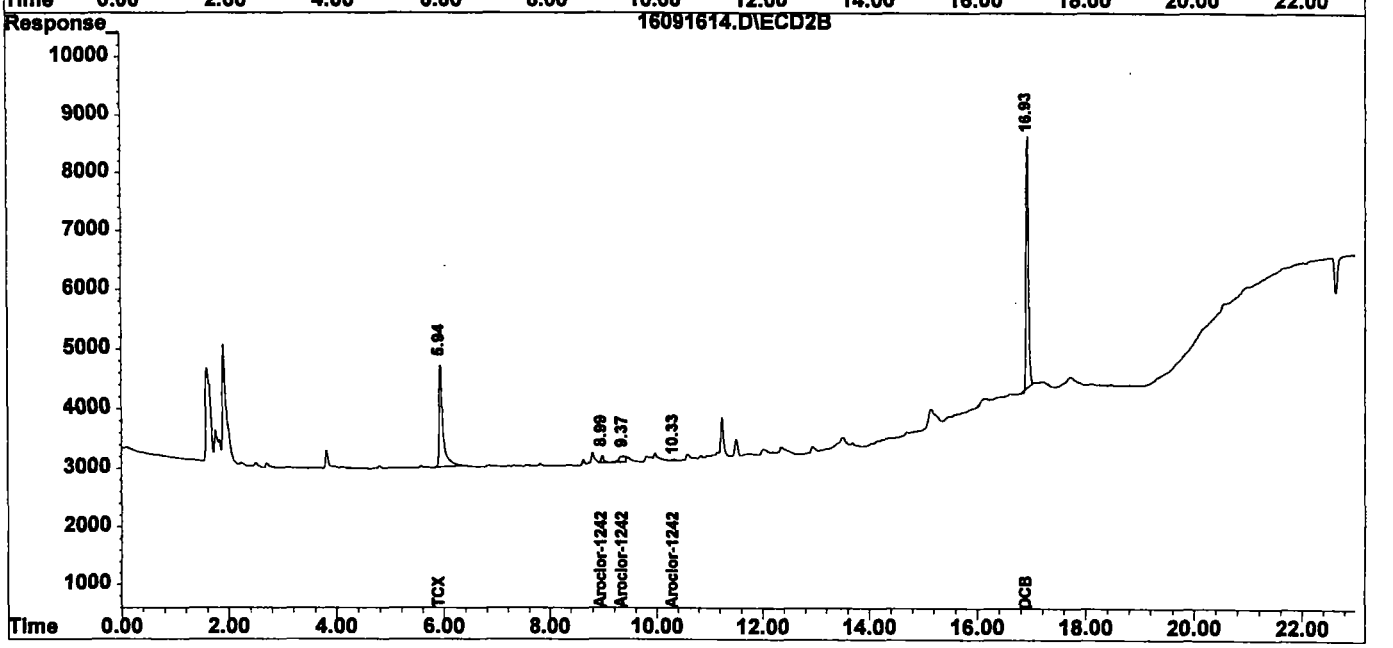
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091614.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091614.D\ECD2B.CH
Acq On : 16 Sep 2001 17:12 Operator: DDC
Sample : 47347.01 *E03A9* Inst : HP_16
Misc : *EPA*30.4G/5.0ML*35 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:40 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

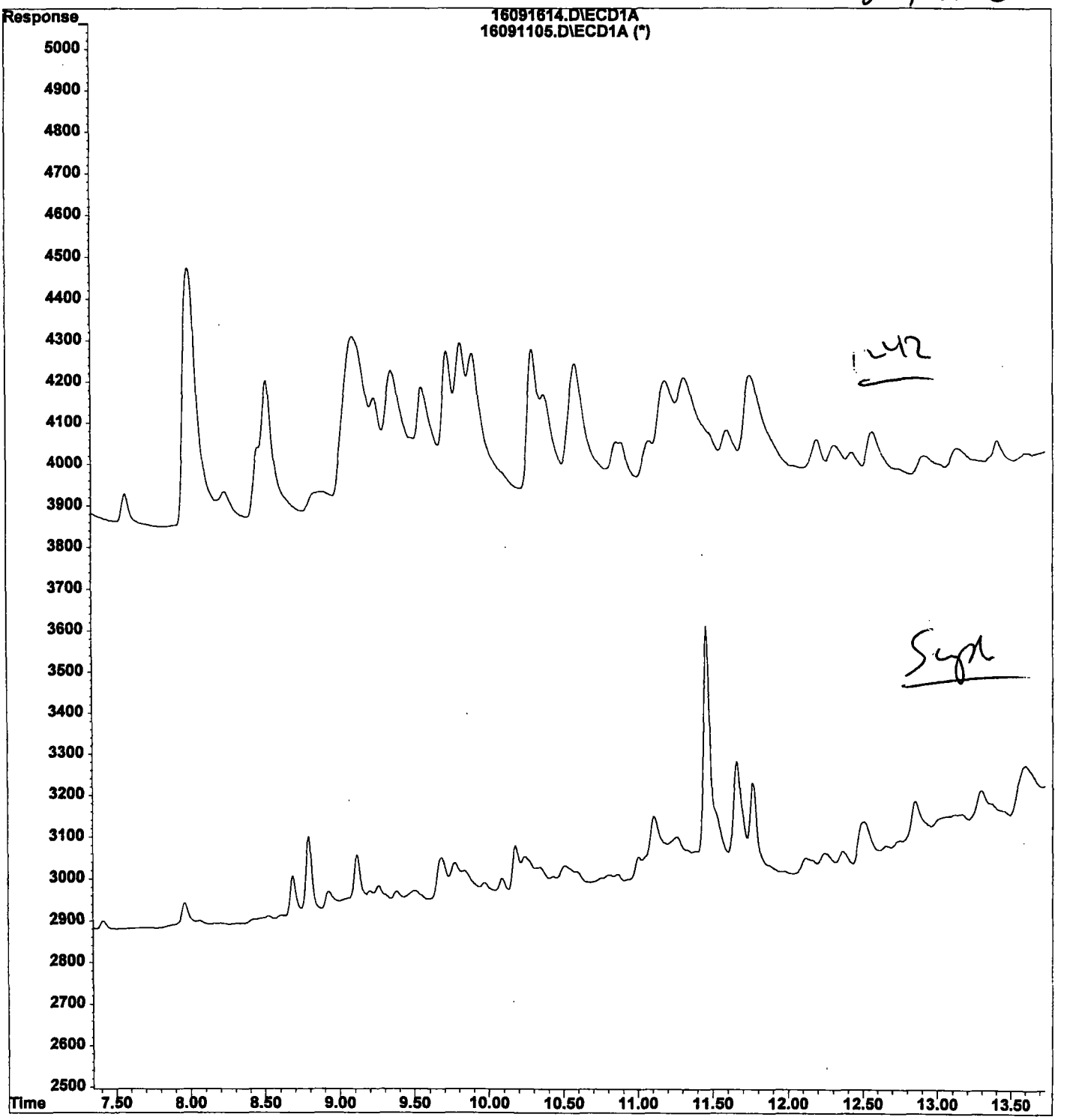
OK 9-19-01





File : F:\HPCHEM\HP\16\DATA\09_16_01\16091614.D
Operator : DDC
Acquired : 16 Sep 2001 17:12 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47347.01
Misc Info :
Vial Number: 14

OK 9-19-01



Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091614.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091614.D\ECD2B.CH
Acq On : 16 Sep 2001 17:12 Operator: DDC
Sample : 47347.01 *E03A9 * Inst : HP_16
Misc : *EPA*30.4G/5.0ML*35 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:40 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

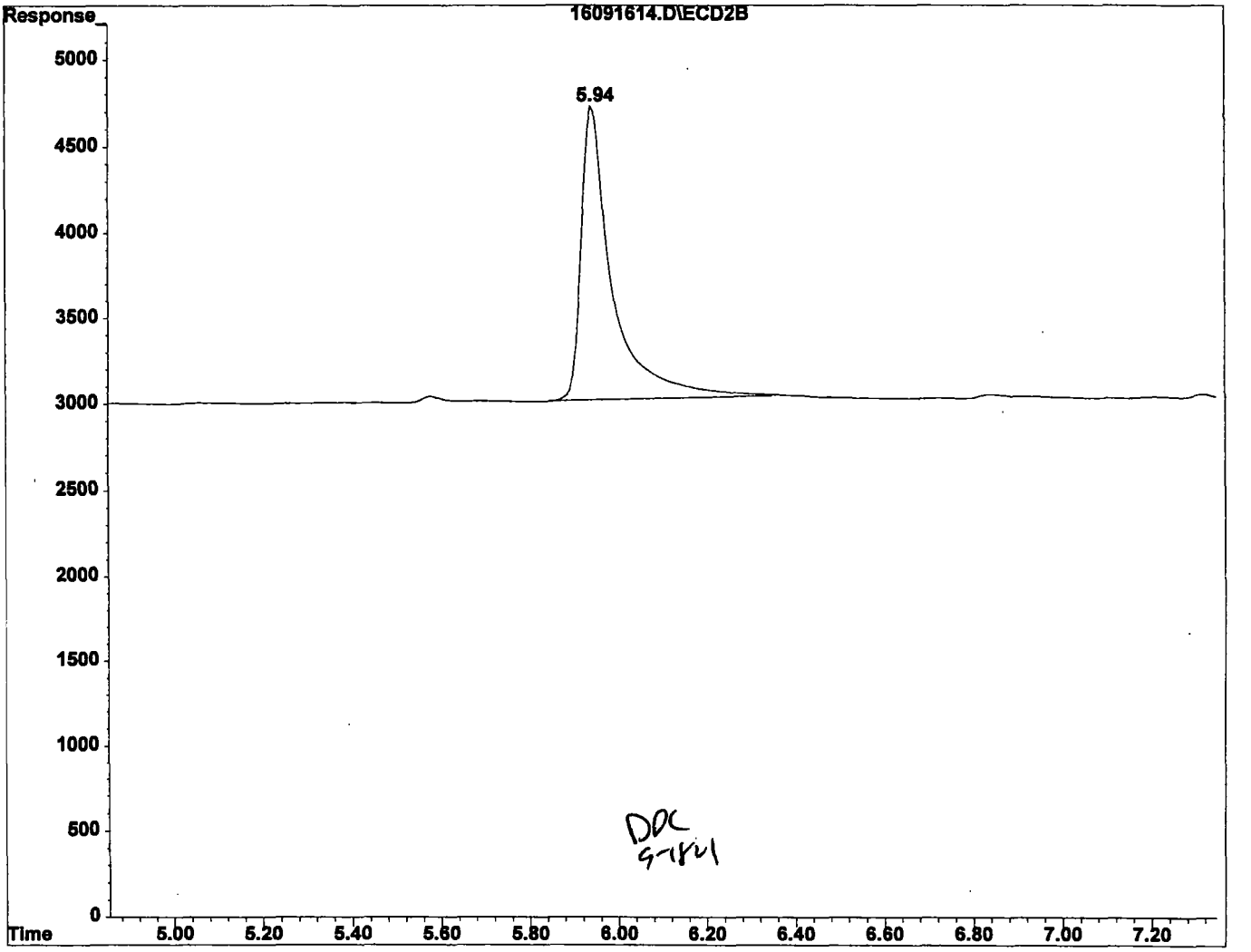
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.94f	5.94f	83382	83344	6.091	5.364m	
	Spiked Amount 10.121			Recovery	=	60.18%	53.00%	
22)	S DCB	17.56f	16.93	131399	127178	5.818	5.705	
	Spiked Amount 10.121			Recovery	=	57.48%	56.37%	
	Target Compounds:							
9)	L4 Aroclor-1242 {3}	9.39f	8.99	1888	4664	3.257	7.450	#
10)	L4 Aroclor-1242 {4}	9.68f	9.37f	5320	7959	17.6	21.2	
11)	L4 Aroclor-1242 {5}	10.24f	10.34	5101	675	15.9	3.324	#
	Sum Aroclor-1242			12310	13298	36.7	32.0	
	Average Aroclor-1242					12.233	10.653	

(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\16\DATA\09_16_01\16091614.D
Date Acquired: 16 Sep 2001 17:12
Inst: HP_16 Operator ID: DDC
Name: 47347.01 *E03A9 *
Misc: *EPA*30.4G/5.0ML*35
Method: F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title: PCB/TOXAPHENE
Quant Time: Sep 18 9:40 2001 Quant Results File: XPCBI11.RES



ok 9-19-01

TCX #2 5.94min area: 83344 m

Integration Time Range: 5.85 - 6.35

F:\HPCHEM\HP\16\DATA\09_16_01\16091614.D
Report generated: Tue Sep 18 09:53:34 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03B0

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix: (soil/water) SOIL Lab Sample ID: 47347.04

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

% Moisture: 68 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/22/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/16/01

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	100	U
11104-28-2	Aroclor-1221	100	U
11141-16-5	Aroclor-1232	100	U
53469-21-9	Aroclor-1242	100	U
12672-29-6	Aroclor-1248	100	U
11097-69-1	Aroclor-1254	6.5	JP
11096-82-5	Aroclor-1260	100	U
	Surrogate amount spiked	20.62	

FORM I PCB

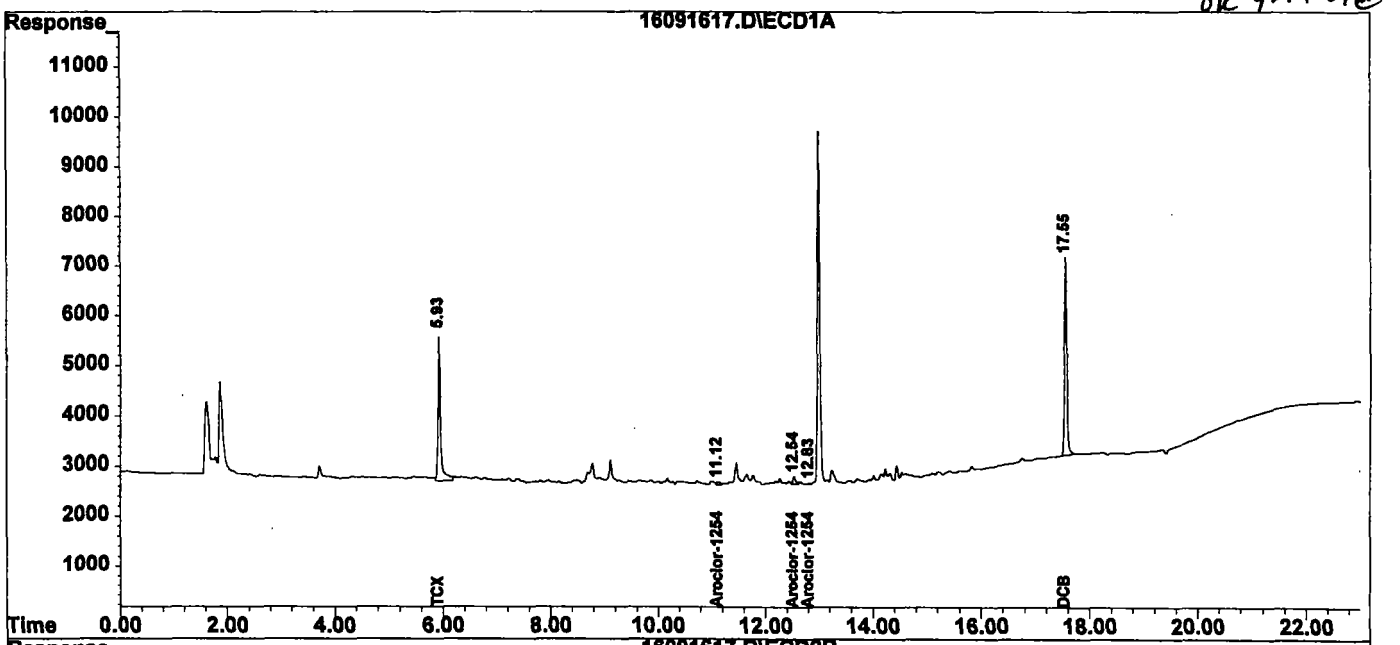
Chromatographic Report

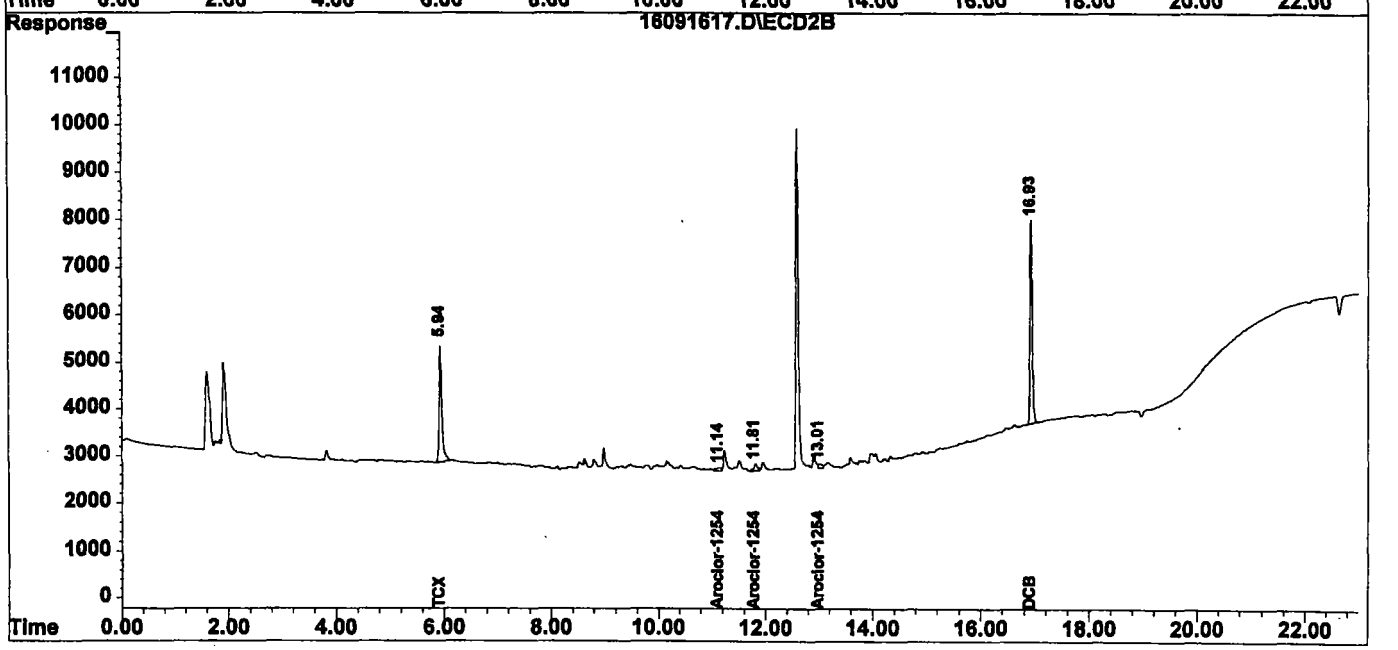
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091617.D\ECD1A.CH Vial: 17
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091617.D\ECD2B.CH
Acq On : 16 Sep 2001 18:31 Operator: DDC
Sample : 47347.04 *E03B0 * Inst : HP_16
Misc : *EPA*30.3G/5.0ML*68 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 10:44 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

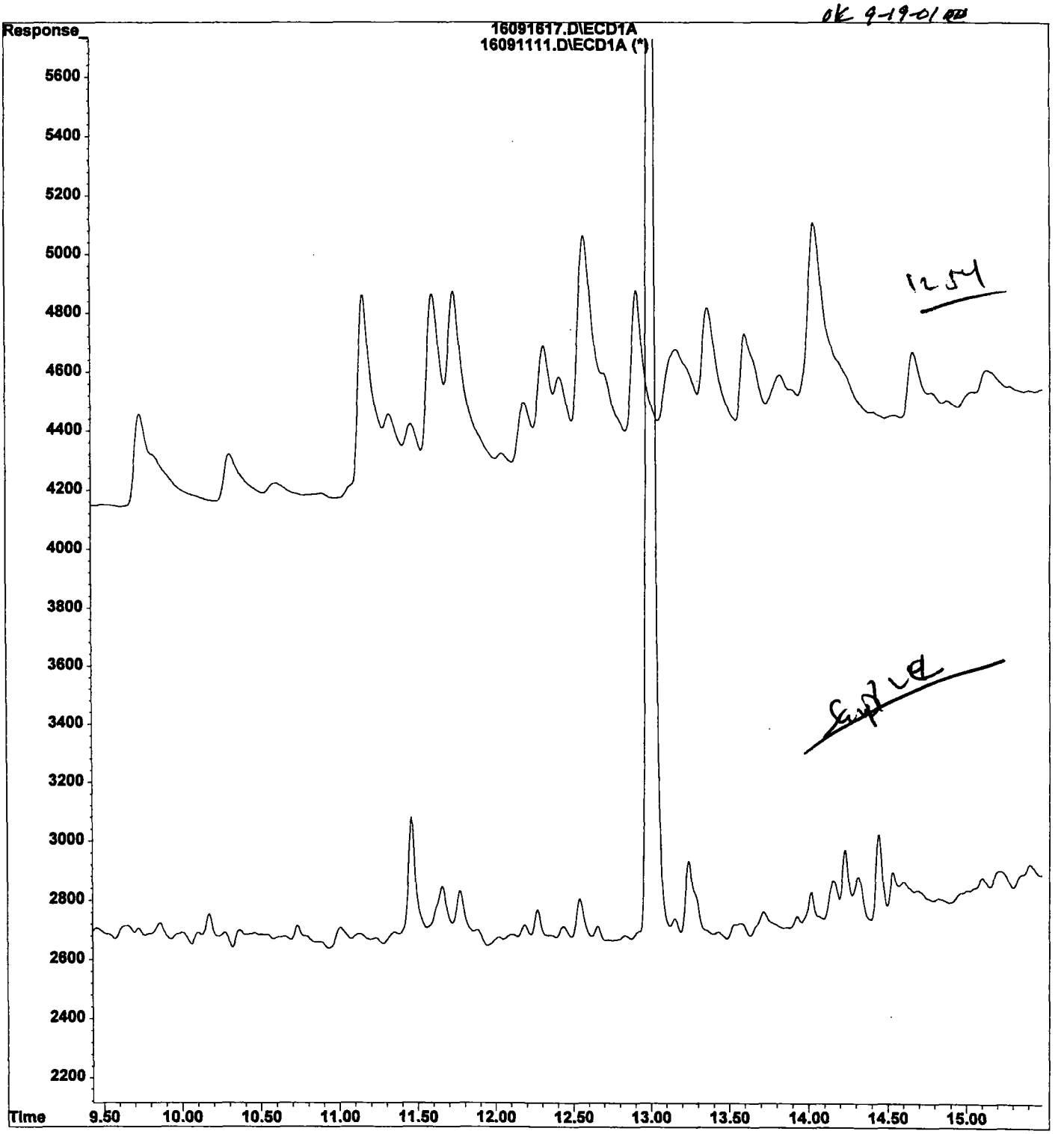
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

OK 9-19-01





File : F:\HPCHEM\HP\16\DATA\09_16_01\16091617.D
Operator : DDC
Acquired : 16 Sep 2001 18:31 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47347.04 *E03B0 *
Misc Info : *EPA*30.3G/5.0ML*68
Vial Number: 17



Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091617.D\ECD1A.CH Vial: 17
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091617.D\ECD2B.CH
Acq On : 16 Sep 2001 18:31 Operator: DDC
Sample : 47347.04 *E03B0 * Inst : HP_16
Misc : *EPA*30.3G/5.0ML*68 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 10:44 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

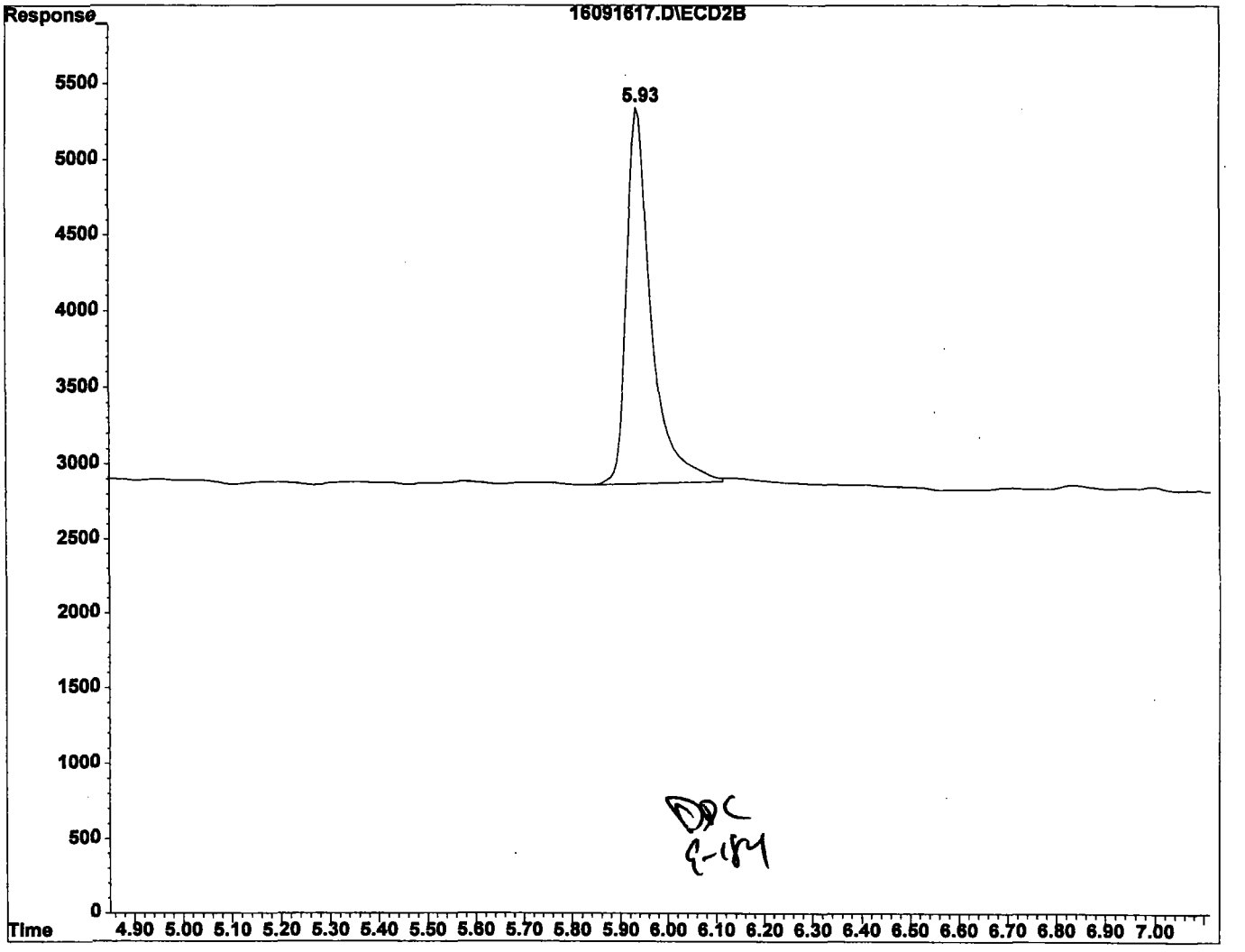
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.93f	5.94f	95869	89000	14.3	11.7m	SDC G-184
	Spiked Amount 20.627			Recovery	=	69.33%	56.72%	
22)	S DCB	17.55f	16.93	118617	123833	10.7	11.3	
	Spiked Amount 20.627			Recovery	=	51.87%	54.78%	
	Target Compounds:							
12)	L6 Aroclor-1254	11.14	0.00	2685	0	6.834	N.D. d	#
13)	L6 Aroclor-1254 {2}	0.00	11.14f	0	4815	N.D.	13.2	#
14)	L6 Aroclor-1254 {3}	12.54	11.81	5615	7723	10.1	30.8	#
15)	L6 Aroclor-1254 {4}	12.84f	0.00	794	0	2.480	N.D. d	#
16)	L6 Aroclor-1254 {5}	0.00	13.02f	0	4301	N.D.	8.100	#
	Sum Aroclor-1254			9094	16839	19.4	52.1	
	Average Aroclor-1254					6.471	17.372	

(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\16\DATA\09_16_01\16091617.D
Date Acquired: 16 Sep 2001 18:31
Inst: HP_16 Operator ID: DDC
Name: 47347.04 *E03B0 *
Misc: *EPA*30.3G/5.0ML*68
Method: F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title: PCB/TOXAPHENE
Quant Time: Sep 18 10:44 2001 Quant Results File: XPCBI11.RES



TCX #2 5.94min area: 89000 m

ok 9-19-01

Integration Time Range: 5.85 - 6.11

F:\HPCHEM\HP\16\DATA\09_16_01\16091617.D
Report generated: Tue Sep 18 10:46:10 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03B1

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix: (soil/water) SOIL Lab Sample ID: 47347.05

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

% Moisture: 70 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/22/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	110	U
11104-28-2	Aroclor-1221	110	U
11141-16-5	Aroclor-1232	110	U
53469-21-9	Aroclor-1242	110	U
12672-29-6	Aroclor-1248	110	U
11097-69-1	Aroclor-1254	110	U
11096-82-5	Aroclor-1260	110	U
	Surrogate amount spiked	21.79	

FORM I PCB

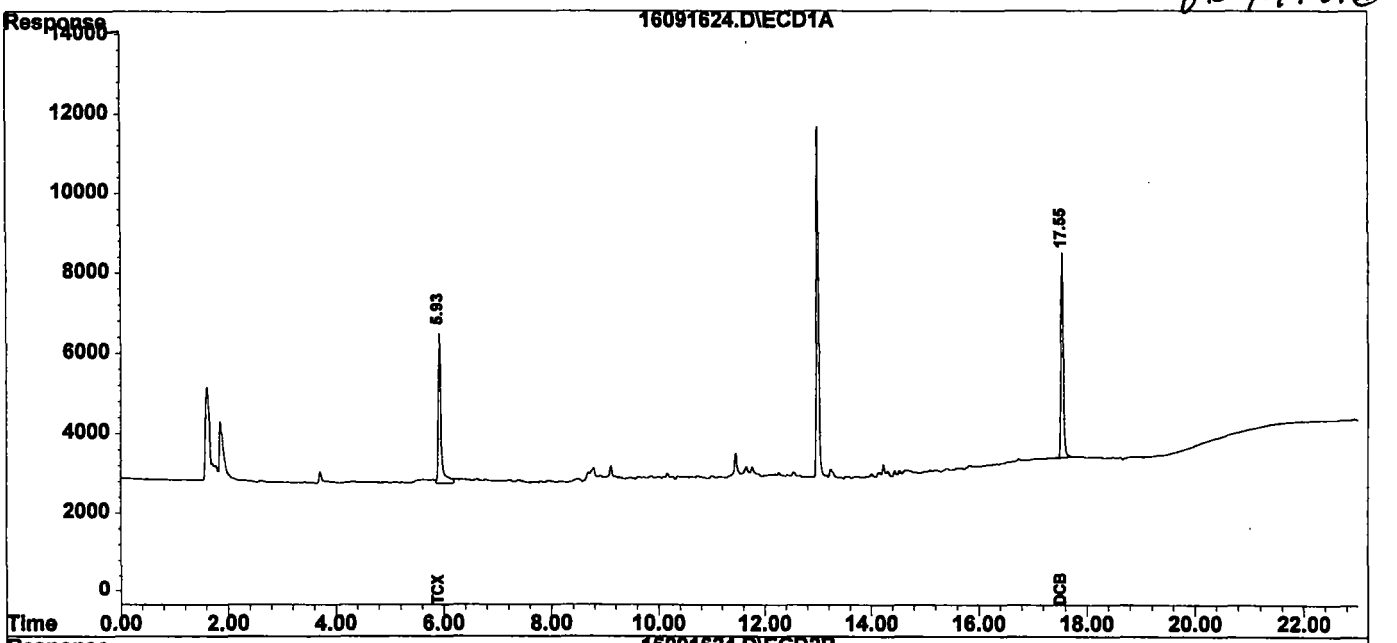
Chromatographic Report

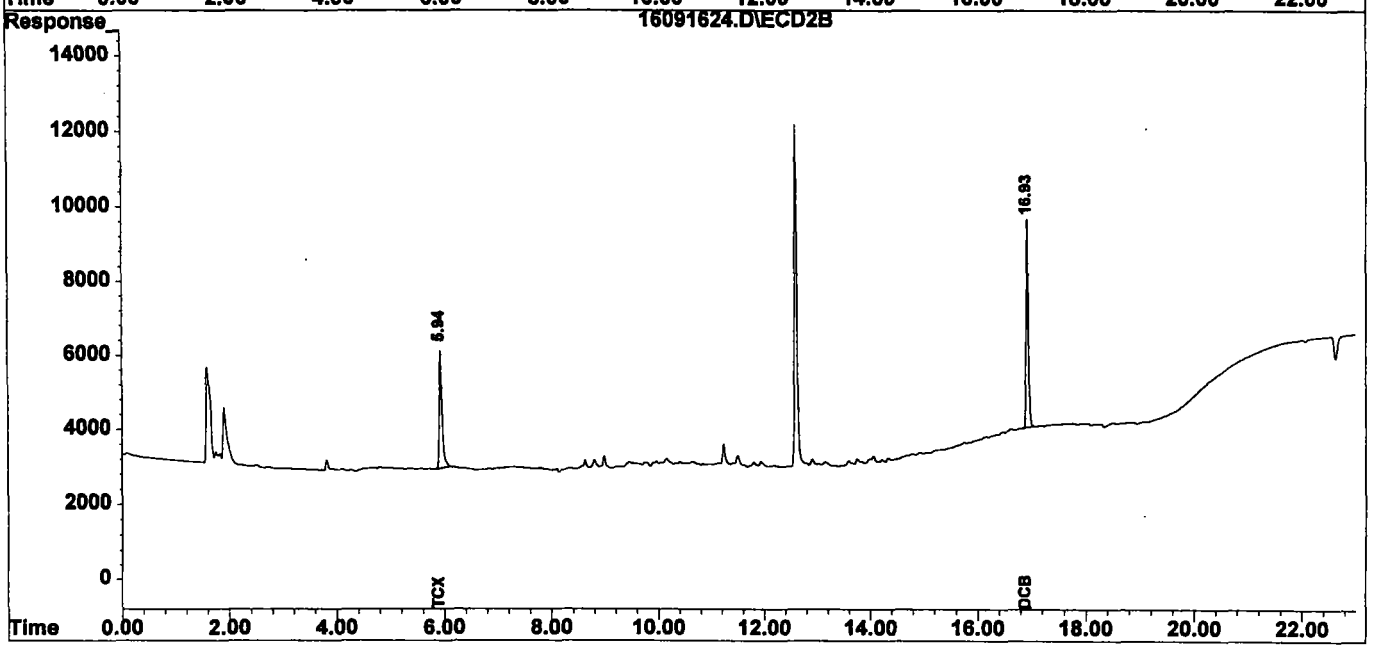
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091624.D\ECD1A.CH Vial: 24
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091624.D\ECD2B.CH
Acq On : 16 Sep 2001 21:36 Operator: DDC
Sample : 47347.05 *E03B1 * Inst : HP_16
Misc : *EPA*30.6G/5.0ML*10 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 10:48 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

DK 9-19-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091624.D\ECD1A.CH Vial: 24
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091624.D\ECD2B.CH
Acq On : 16 Sep 2001 21:36 Operator: DDC
Sample : 47347.05 *E03B1 * Inst : HP_16
Misc : *EPA*30.6G/5.0ML*70 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 10:48 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	5.93f	5.94f	128176	115483	20.2	16.0m
	Spiked Amount 21.786			Recovery	=	92.72%	73.44%
22)	S DCB	17.55f	16.93	151934	160807	14.5	15.5
	Spiked Amount 21.786			Recovery	=	✓66.55%	✓71.15%

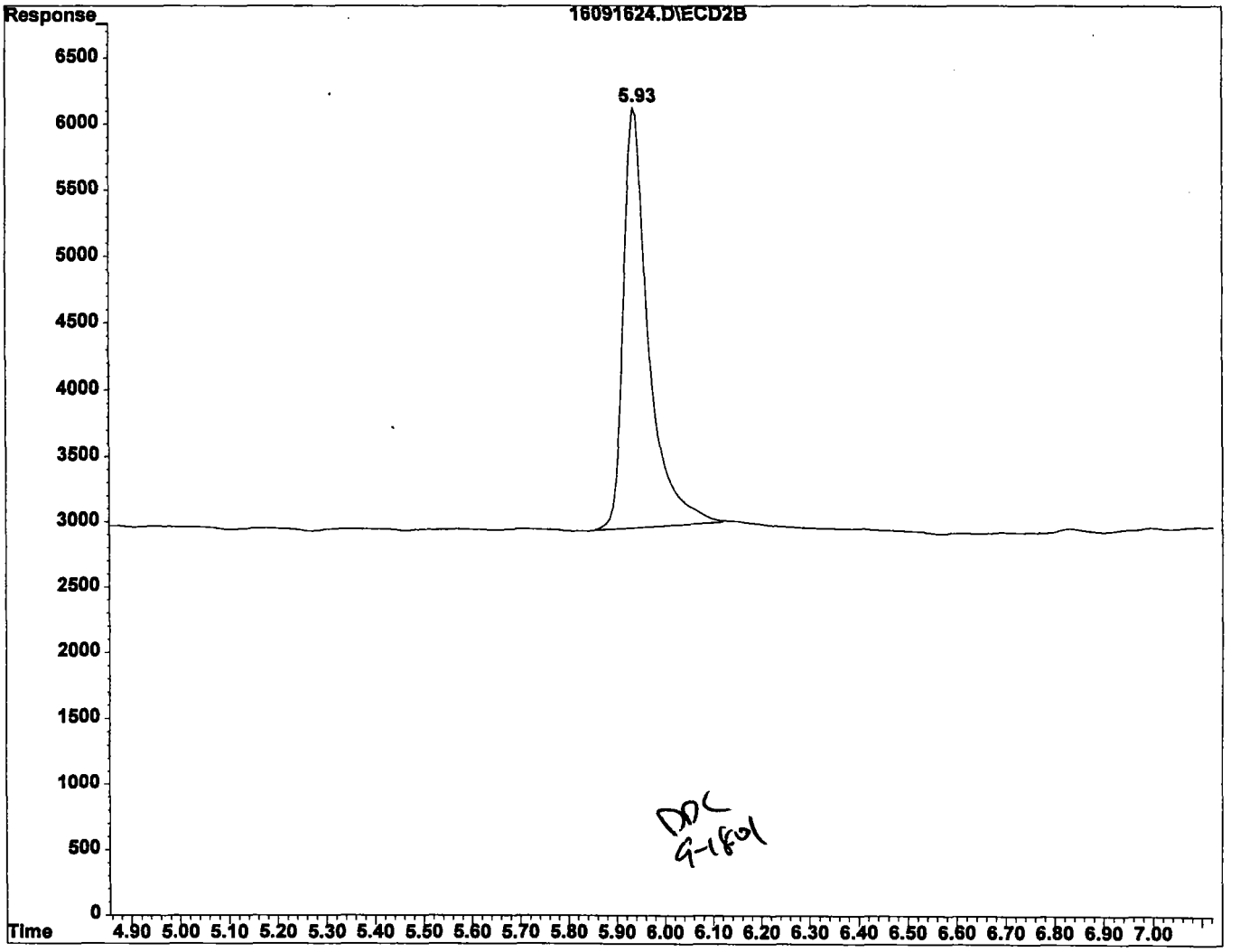
DCa 9-18-01

Target Compounds:

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

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\09_16_01\16091624.D
Date Acquired: 16 Sep 2001 21:36
Inst: HP_16 Operator ID: DDC
Name: 47347.05 *E03B1 *
Misc: *EPA*30.6G/5.0ML*70
Method: F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title: PCB/TOXAPHENE
Quant Time: Sep 18 10:48 2001 Quant Results File: XPCBI11.RES



TCX #2 5.94min area: 115483 m

ok 9-19-01 DH

Integration Time Range: 5.86 - 6.12

F:\HPCHEM\HP\16\DATA\09_16_01\16091624.D
Report generated: Tue Sep 18 10:48:23 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03B2

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix: (soil/water) SOIL Lab Sample ID: 47347.06

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

% Moisture: 67 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/22/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/16/01

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	10	U
11104-28-2	Aroclor-1221	10	U
11141-16-5	Aroclor-1232	10	U
53469-21-9	Aroclor-1242	10	U
12672-29-6	Aroclor-1248	10	U
11097-69-1	Aroclor-1254	10	U
11096-82-5	Aroclor-1260	10	U
	Surrogate amount spiked	20.20	

FORM I PCB

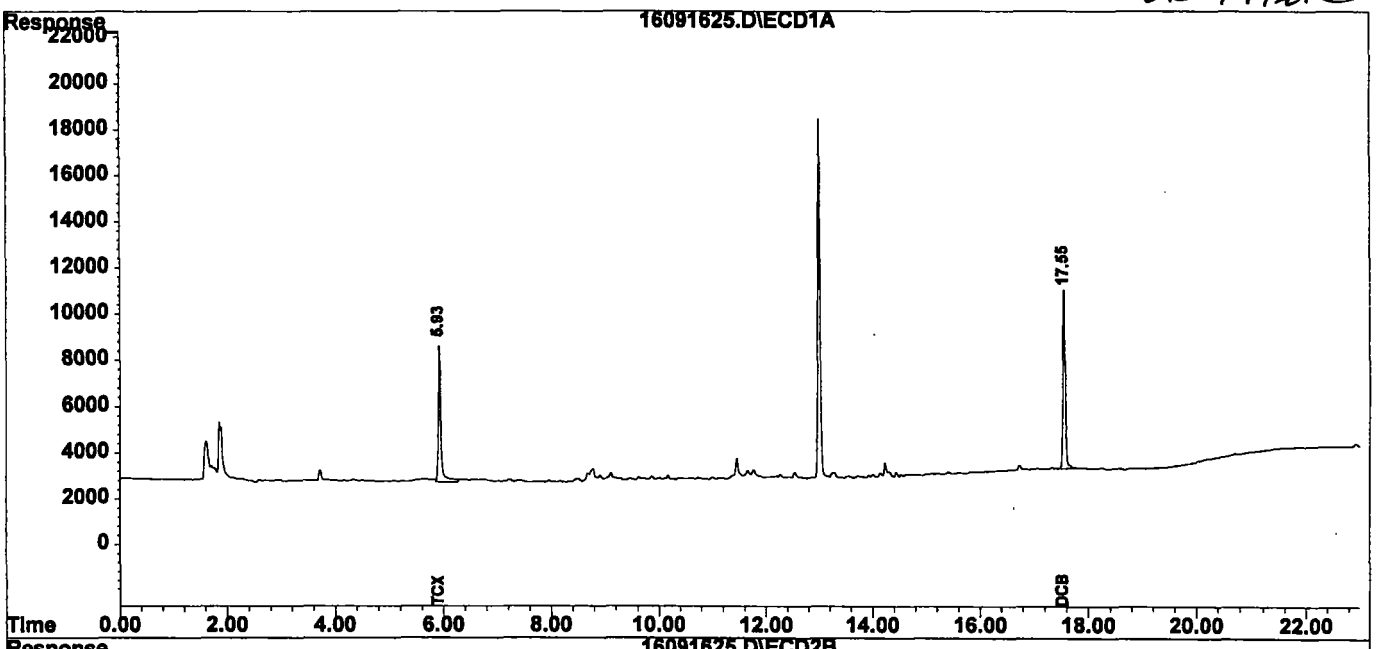
Chromatographic Report

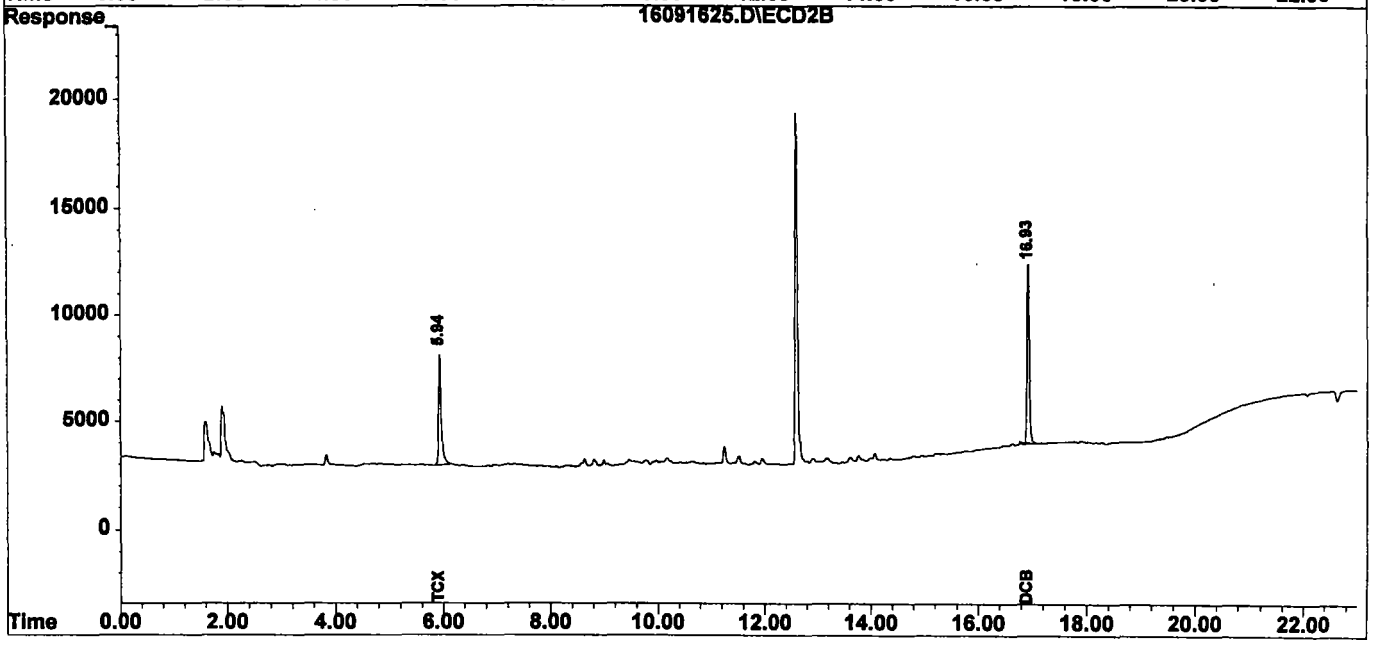
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091625.D\ECD1A.CH Vial: 25
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091625.D\ECD2B.CH
Acq On : 16 Sep 2001 22:03 Operator: DDC
Sample : 47347.06 *E03B2 * Inst : HP_16
Misc : *EPA*30G/5.0ML*67 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 10:10 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

OK 9-19-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091625.D\ECD1A.CH Vial: 25
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091625.D\ECD2B.CH
Acq On : 16 Sep 2001 22:03 Operator: DDC
Sample : 47347.06 *E03B2 * Inst : HP_16
Misc : *EPA*30G/5.0ML*67 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 10:10 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	5.93f	5.94f	197263	180777	28.8	23.2m
	Spiked Amount 20.202			Recovery	=	142.56%	114.84%
22)	S DCB	17.55f	16.93	228432	240643	20.2	21.5
	Spiked Amount 20.202			Recovery	=	99.99%	106.43%

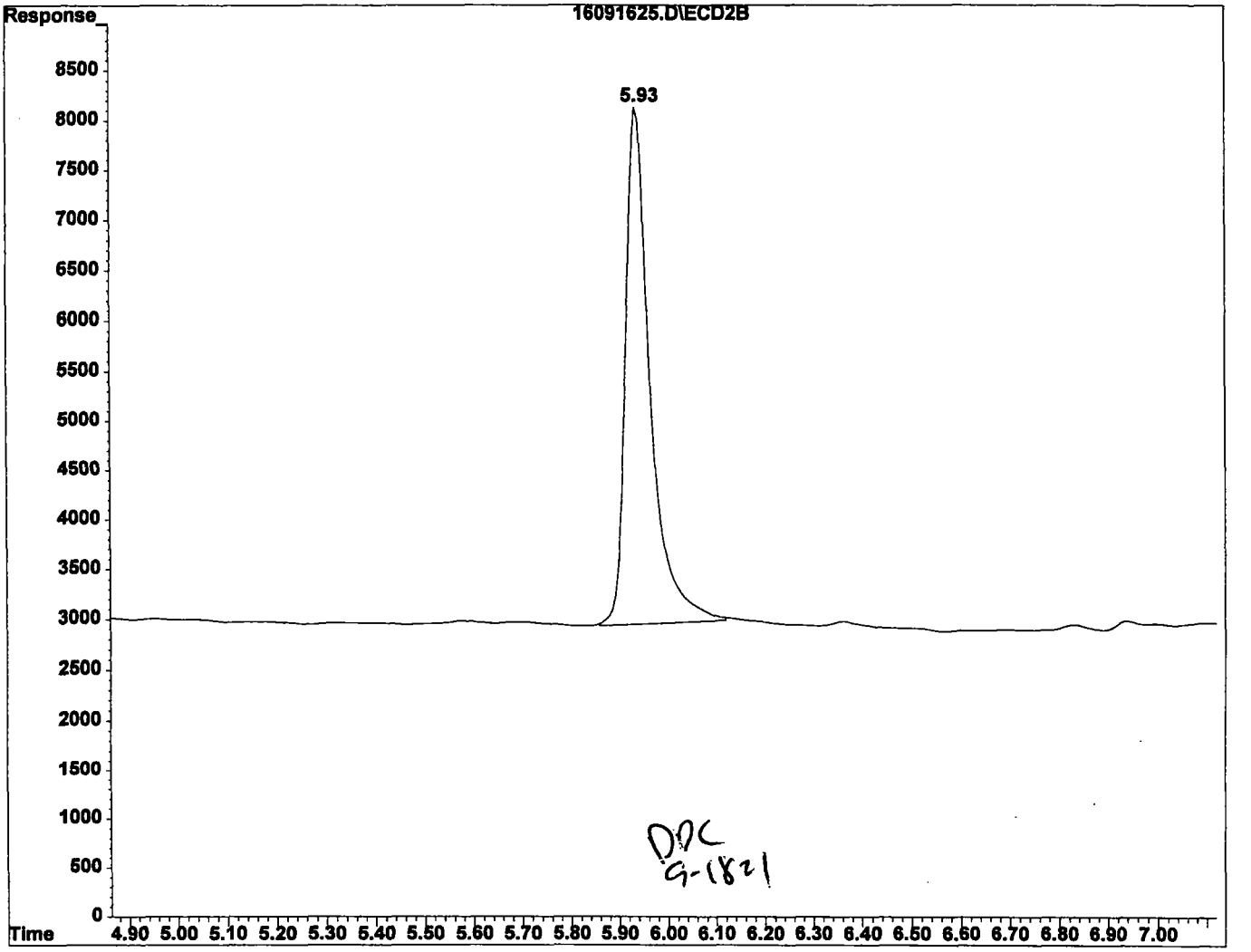
DDC 9/18/01

Target Compounds:

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

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\09_16_01\16091625.D
Date Acquired: 16 Sep 2001 22:03
Inst: HP_16 Operator ID: DDC
Name: 47347.06 *E03B2 *
Misc: *EPA*30G/5.0ML*67
Method: F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title: PCB/TOXAPHENE
Quant Time: Sep 18 10:10 2001 Quant Results File: XPCBI11.RES



TCX #2 5.94min area: 180777 m

OK 9-19-01

Integration Time Range: 5.86 - 6.12

F:\HPCHEM\HP\16\DATA\09_16_01\16091625.D
Report generated: Tue Sep 18 10:11:28 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03B3

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix: (soil/water) SOIL Lab Sample ID: 47347.07

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

% Moisture: 66 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/22/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/16/01

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	95	U
11104-28-2	Aroclor-1221	95	U
11141-16-5	Aroclor-1232	95	U
53469-21-9	Aroclor-1242	95	U
12672-29-6	Aroclor-1248	95	U
11097-69-1	Aroclor-1254	95	U
11096-82-5	Aroclor-1260	95	U
	Surrogate amount spiked	19.17	

FORM I PCB

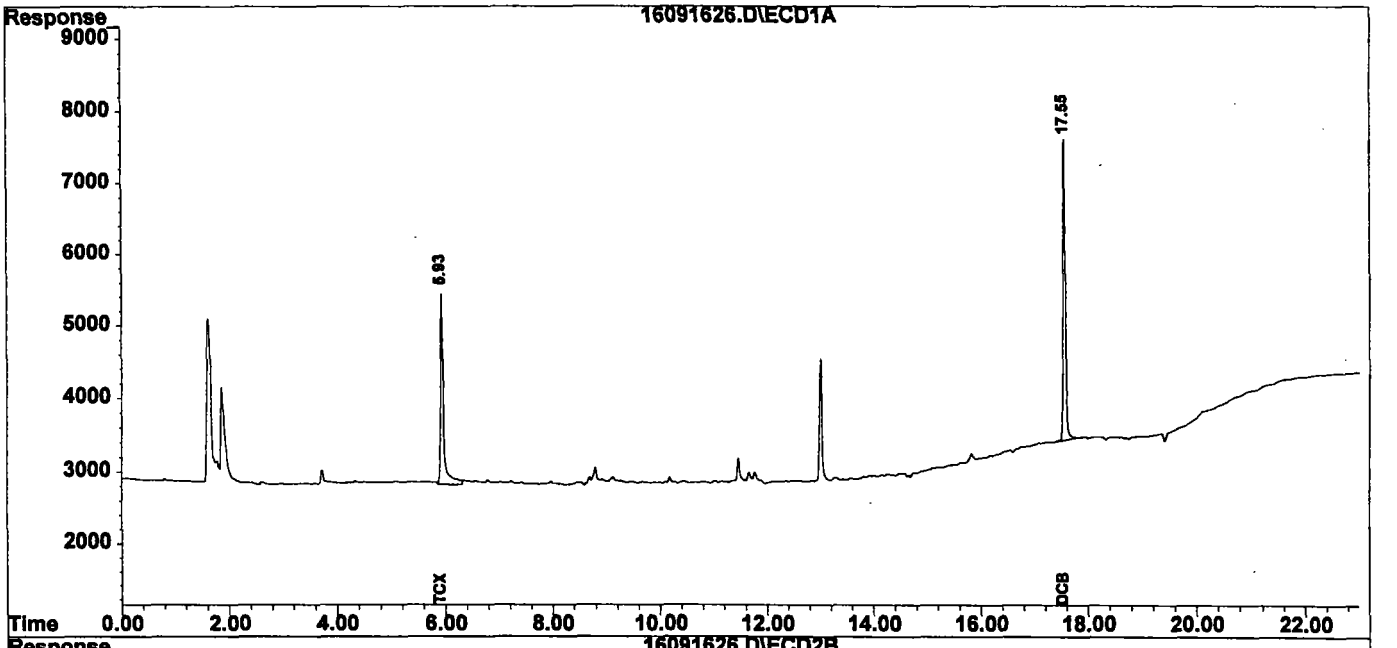
Chromatographic Report

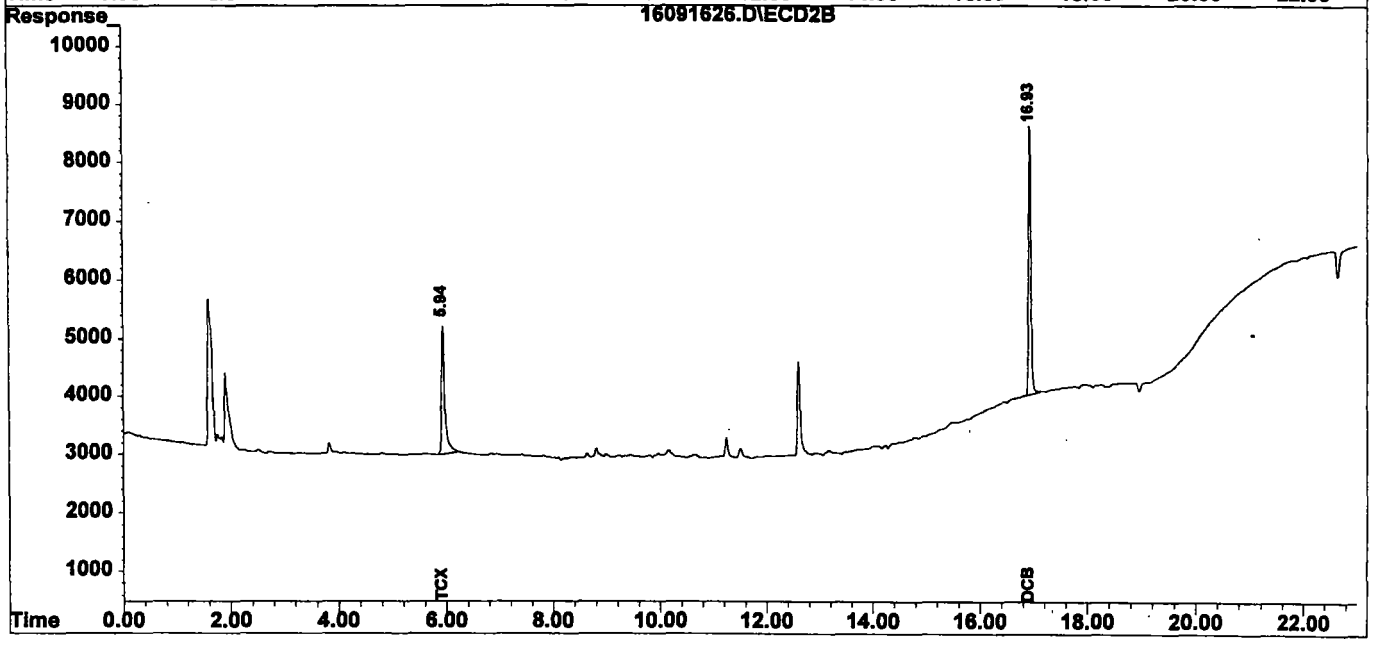
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091626.D\ECD1A.CH Vial: 26
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091626.D\ECD2B.CH
Acq On : 16 Sep 2001 22:29 Operator: DDC
Sample : 47347.07 *E03B3 * Inst : HP_16
Misc : *EPA*30.7G/5.0ML*66 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 10:10 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

OK 9-19-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091626.D\ECD1A.CH Vial: 26
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091626.D\ECD2B.CH
Acq On : 16 Sep 2001 22:29 Operator: DDC
Sample : 47347.07 *E03B3 * Inst : HP_16
Misc : *EPA*30.7G/5.0ML*66 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 10:10 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	5.93f	5.94f	101834	93296	14.1	11.4m
	Spiked Amount 19.161			Recovery	=	73.59%	59.50%
22)	S DCB	17.55f	16.93	128978	136572	10.8	11.6
	Spiked Amount 19.161			Recovery	=	56.37%	60.54%

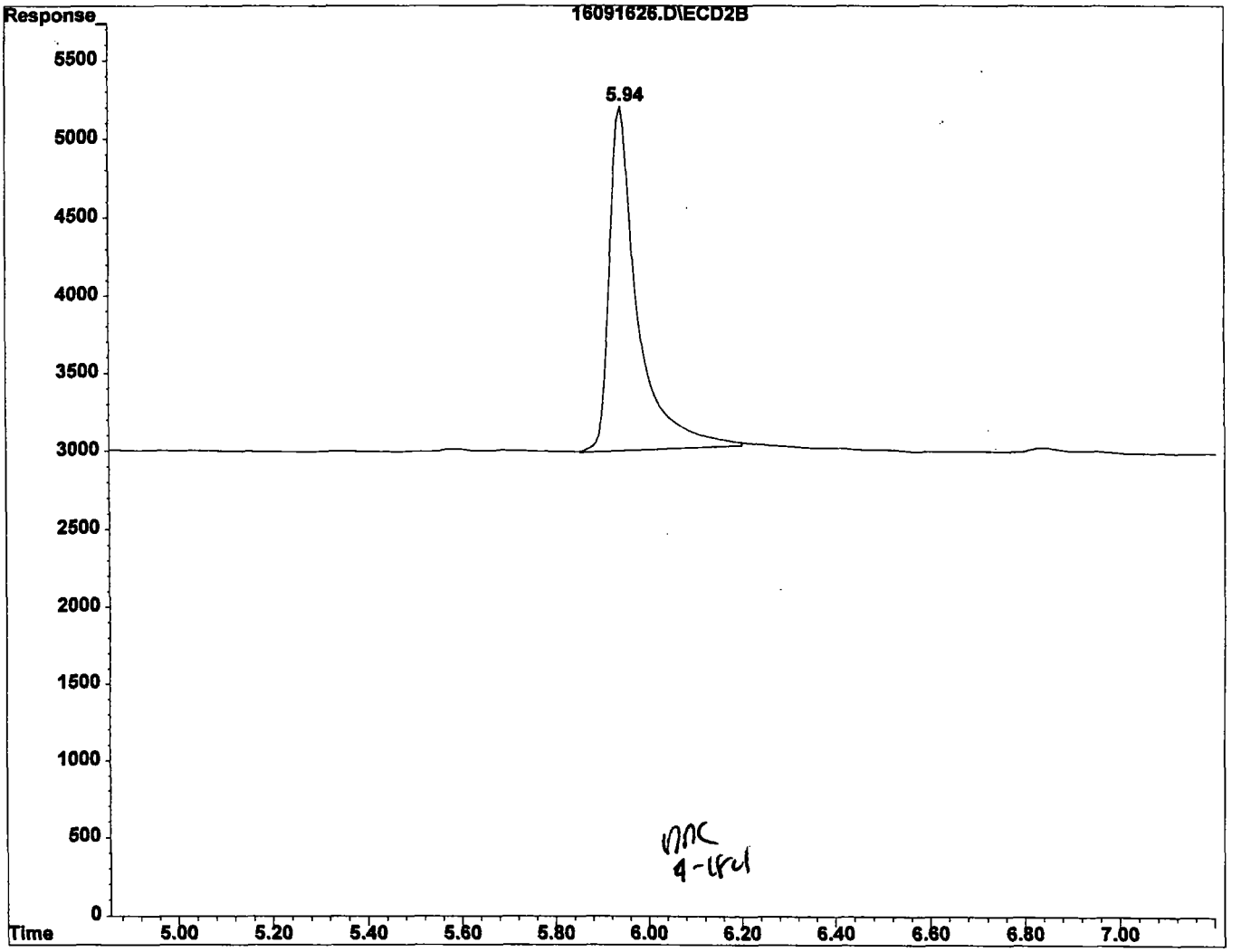
DDC 9-14

Target Compounds:

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

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\09_16_01\16091626.D
Date Acquired: 16 Sep 2001 22:29
Inst: HP_16 Operator ID: DDC
Name: 47347.07 *E03B3 *
Misc: *EPA*30.7G/5.0ML*66
Method: F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title: PCB/TOXAPHENE
Quant Time: Sep 18 10:10 2001 Quant Results File: XPCBI11.RES



TCX #2 5.94min area: 93296 m

OK 9-19-01

Integration Time Range: 5.86 - 6.20

F:\HPCHEM\HP\16\DATA\09_16_01\16091626.D
Report generated: Tue Sep 18 10:11:29 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03B4

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix: (soil/water) SOIL Lab Sample ID: 47347.08

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

% Moisture: 85 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/22/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/16/01

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	220	U
11104-28-2	Aroclor-1221	220	U
11141-16-5	Aroclor-1232	220	U
53469-21-9	Aroclor-1242	220	U
12672-29-6	Aroclor-1248	220	U
11097-69-1	Aroclor-1254	220	U
11096-82-5	Aroclor-1260	220	U
	Surrogate amount spiked	44.16	

FORM I PCB

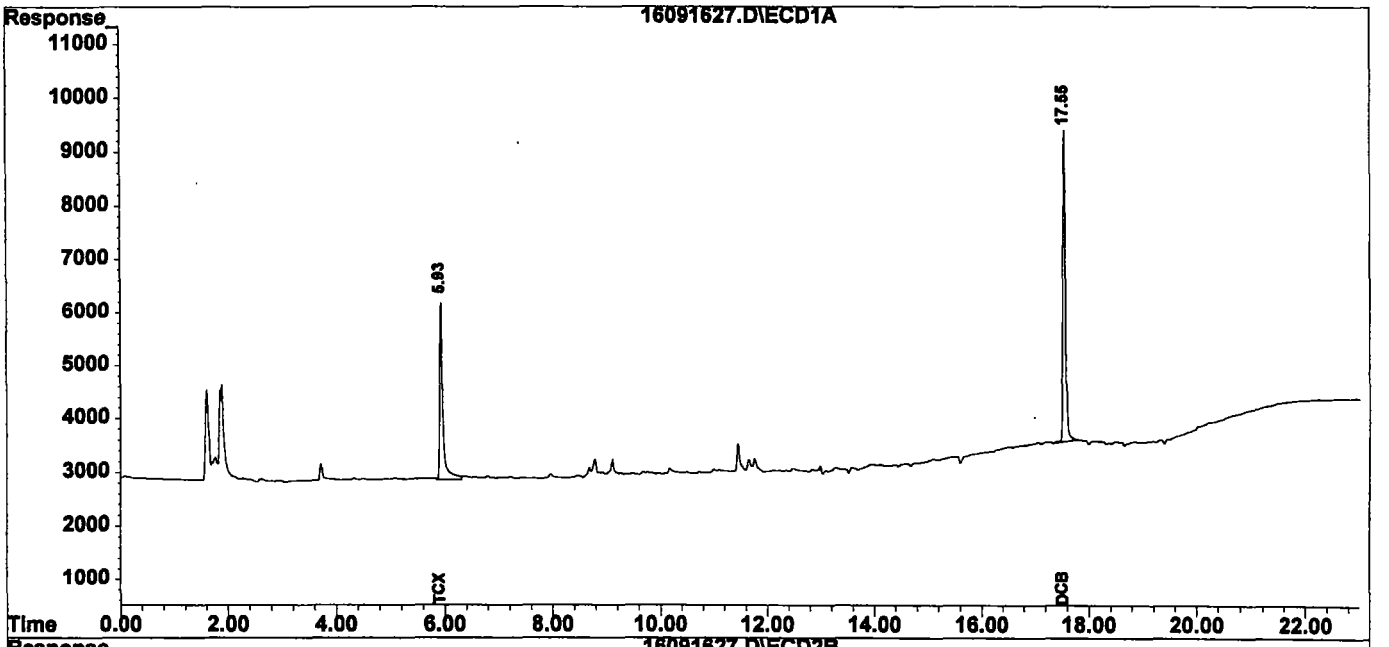
Chromatographic Report

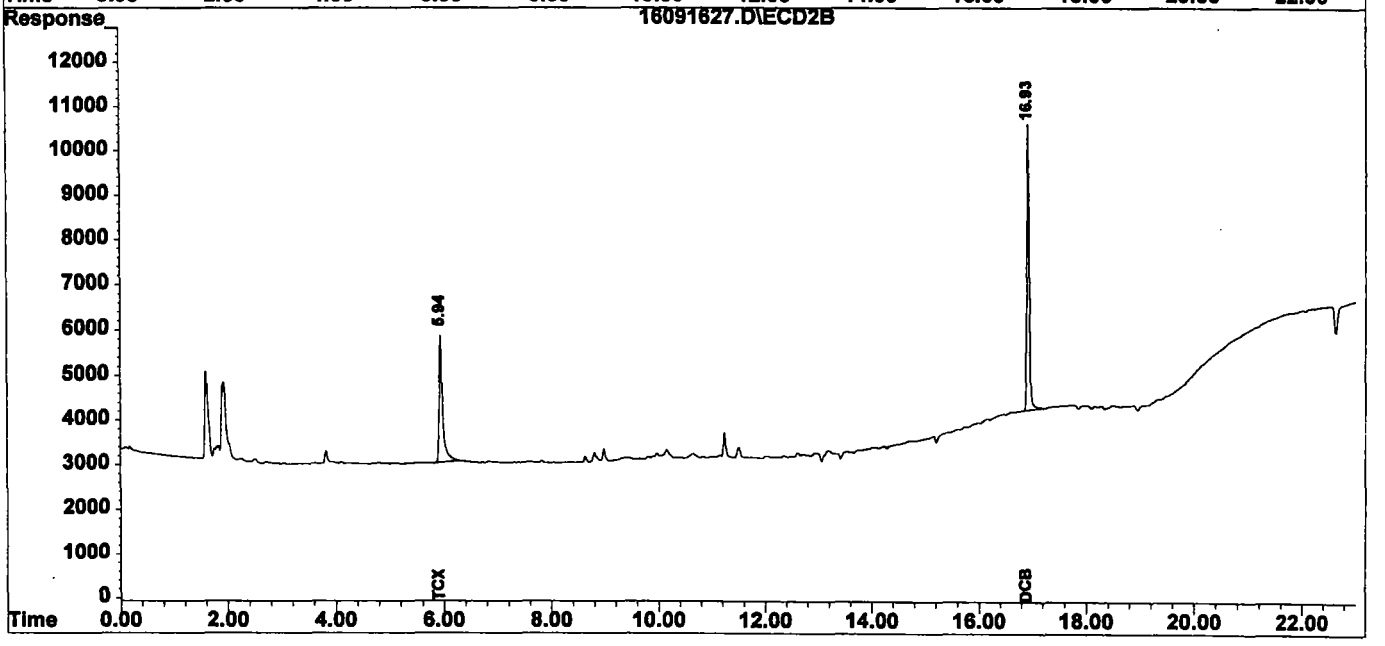
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091627.D\ECD1A.CH Vial: 27
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091627.D\ECD2B.CH
Acq On : 16 Sep 2001 22:56 Operator: DDC
Sample : 47347.08 *E03B4 * Inst : HP_16
Misc : *EPA*30.2G/5.0ML*85 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 10:10 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

OK 9-19-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091627.D\ECD1A.CH Vial: 27
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091627.D\ECD2B.CH
Acq On : 16 Sep 2001 22:56 Operator: DDC
Sample : 47347.08 *E03B4 * Inst : HP_16
Misc : *EPA*30.2G/5.0ML*85 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 10:10 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	5.94f	5.94f	132389	127695	42.2	35.8m
	Spiked Amount 44.150			Recovery	=	95.58%	81.09%
22)	S DCB	17.55f	16.93	185141	199703	35.8	39.1
	Spiked Amount 44.150			Recovery	=	81.09%	88.56%

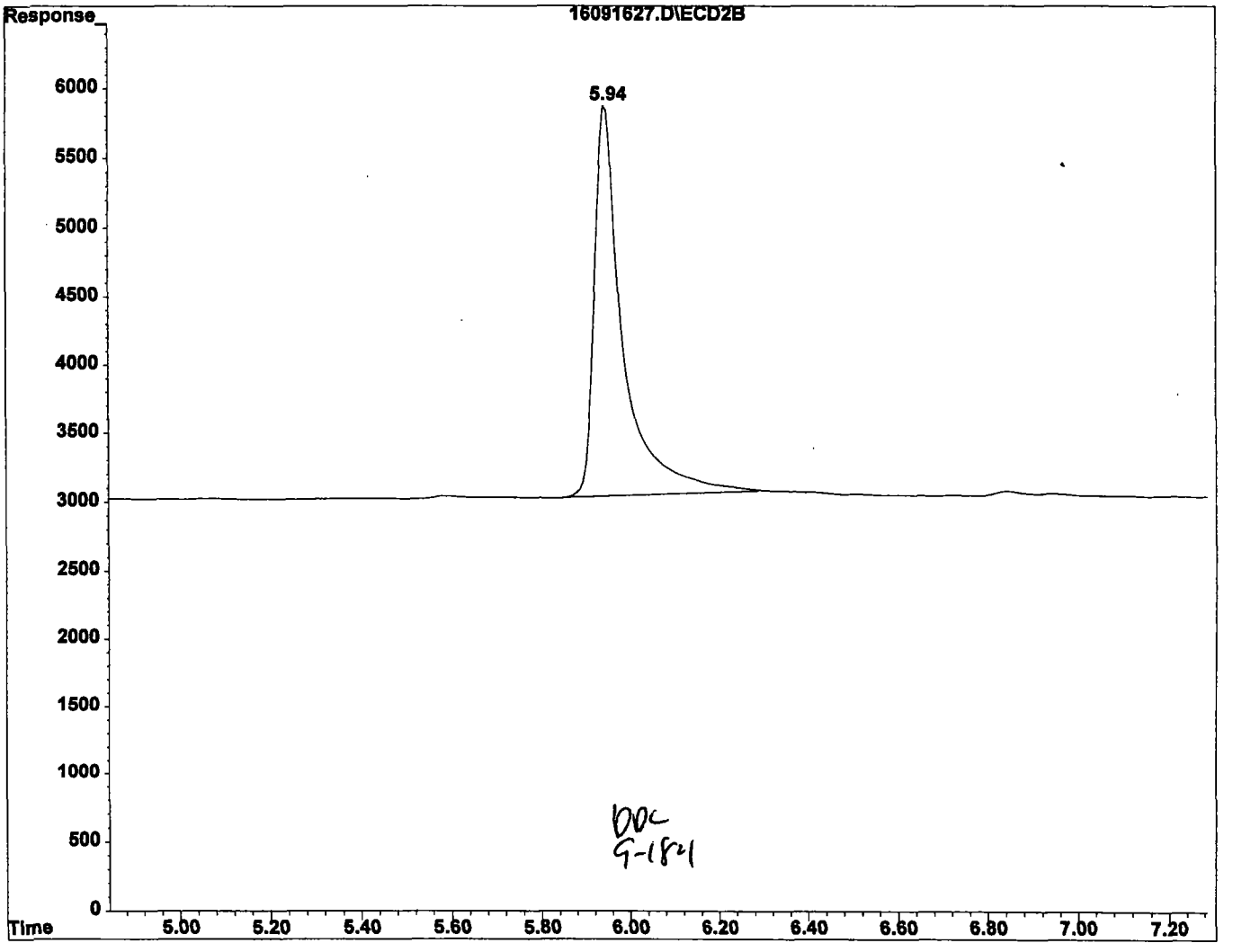
DDC 9-18-01

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
16091627.D XPCBI11.M Tue Sep 18 10:12:18 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\09_16_01\16091627.D
Date Acquired: 16 Sep 2001 22:56
Inst: HP_16 Operator ID: DDC
Name: 47347.08 *E03B4 *
Misc: *EPA*30.2G/5.0ML*85
Method: F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title: PCB/TOXAPHENE
Quant Time: Sep 18 10:10 2001 Quant Results File: XPCBI11.RES



OK 9-19-01

TCX #2 5.94min area: 127695 m

Integration Time Range: 5.84 - 6.28

F:\HPCHEM\HP\16\DATA\09_16_01\16091627.D
Report generated: Tue Sep 18 10:11:31 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03B5

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix: (soil/water) SOIL Lab Sample ID: 47347.09

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

% Moisture: 63 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/22/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/16/01

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	89	U
11104-28-2	Aroclor-1221	89	U
11141-16-5	Aroclor-1232	89	U
53469-21-9	Aroclor-1242	89	U
12672-29-6	Aroclor-1248	89	U
11097-69-1	Aroclor-1254	89	U
11096-82-5	Aroclor-1260	89	U
	Surrogate amount spiked	17.90	

FORM I PCB

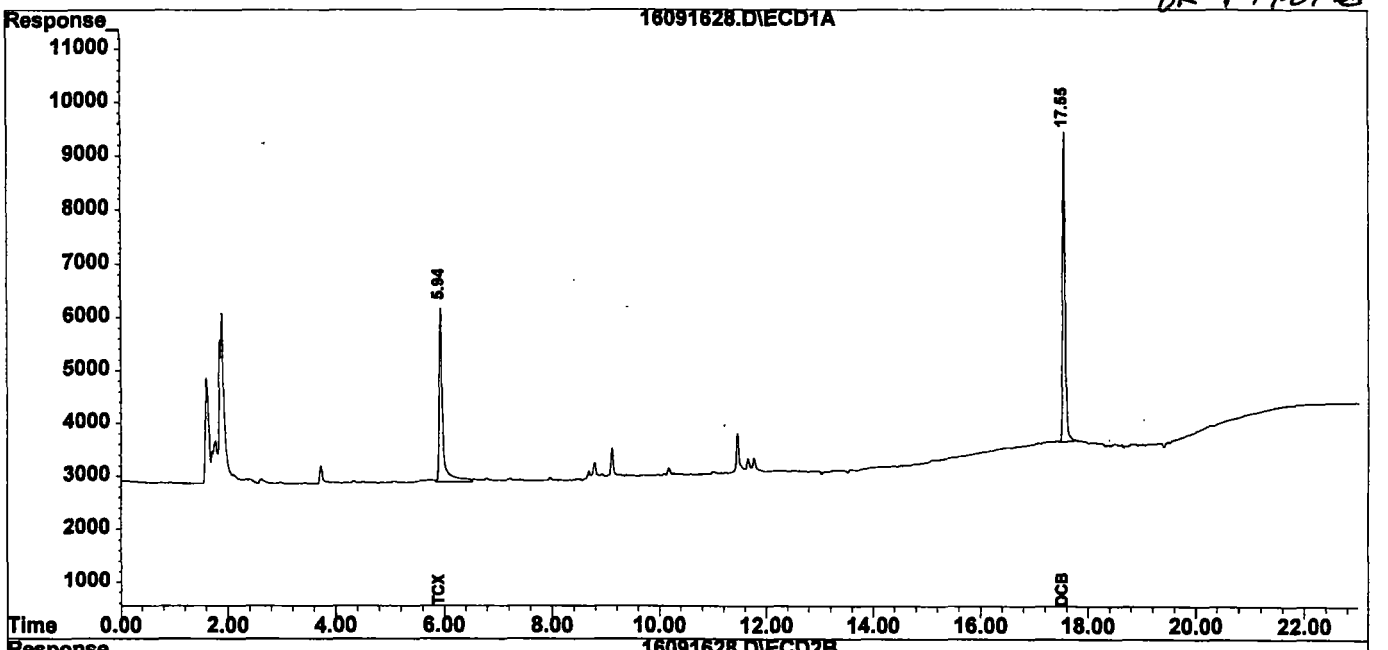
Chromatographic Report

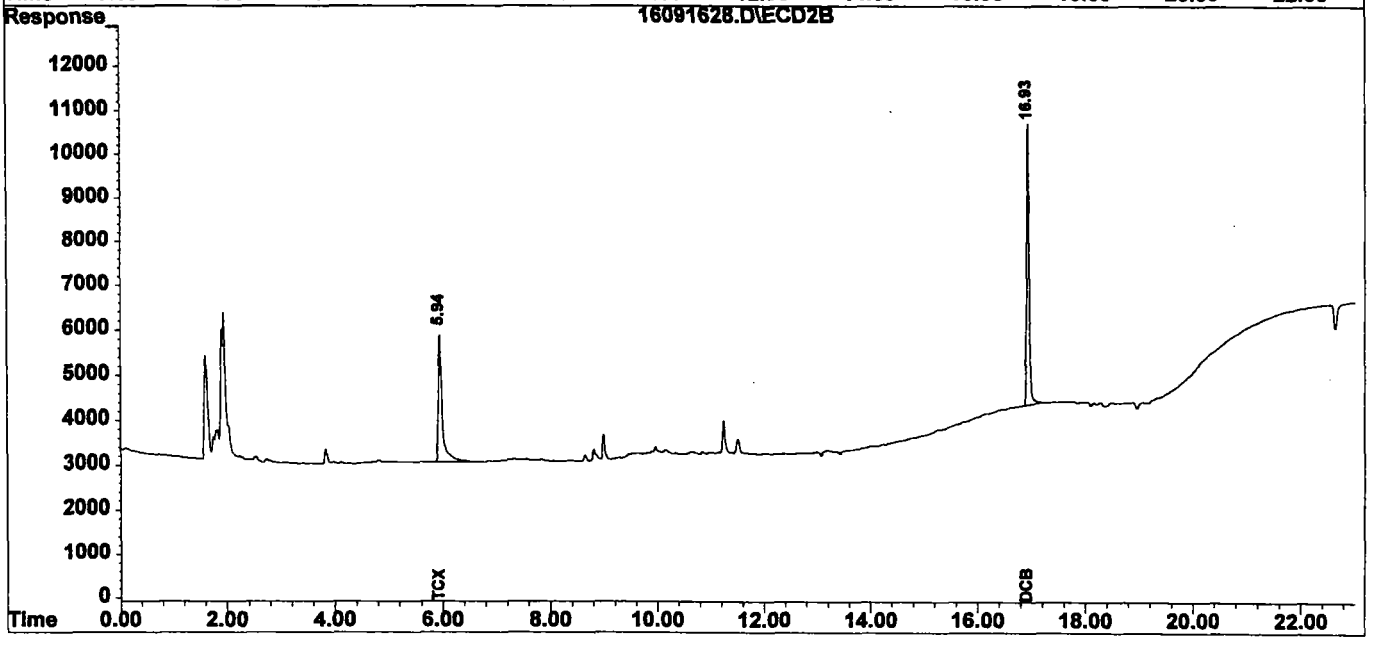
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091628.D\ECD1A.CH Vial: 28
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091628.D\ECD2B.CH
Acq On : 16 Sep 2001 23:22 Operator: DDC
Sample : 47347.09 *E03B5 * Inst : HP_16
Misc : *EPA*30.2G/5.0ML*63 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:45 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

OK 9-19-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091628.D\ECD1A.CH Vial: 28
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091628.D\ECD2B.CH
Acq On : 16 Sep 2001 23:22 Operator: DDC
Sample : 47347.09 *E03B5 * Inst : HP_16
Misc : *EPA*30.2G/5.0ML*63 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:45 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	5.94f	5.95f	144070	140443	18.6	16.0
	Spiked Amount 17.899			Recovery	=	103.92%	89.39%
22)	S DCB	17.56f	16.93	184808	200283	14.5	15.9
	Spiked Amount 17.899			Recovery	=	81.01%	88.83%

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.

E03B6

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix: (soil/water) SOIL Lab Sample ID: 47347.10

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

% Moisture: 60 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/22/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/16/01

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	81	U
11104-28-2	Aroclor-1221	81	U
11141-16-5	Aroclor-1232	81	U
53469-21-9	Aroclor-1242	81	U
12672-29-6	Aroclor-1248	81	U
11097-69-1	Aroclor-1254	81	U
11096-82-5	Aroclor-1260	81	U
	Surrogate amount spiked	16.29	

FORM I PCB

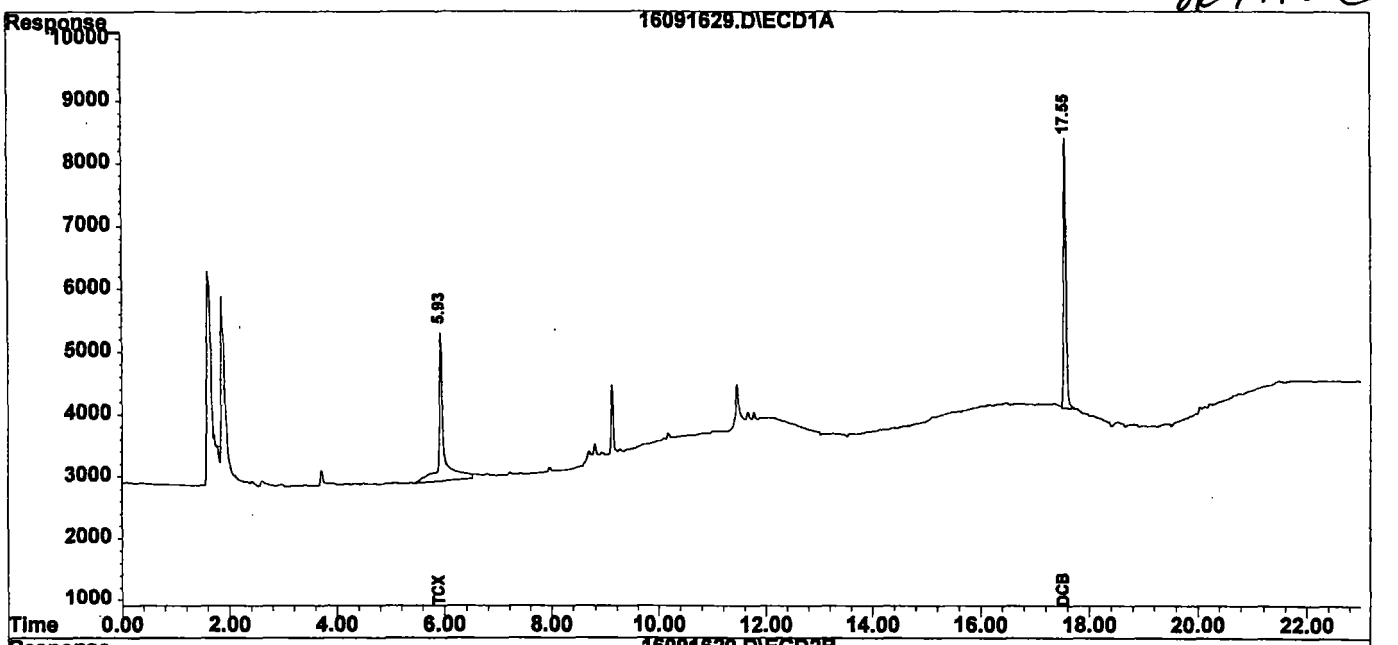
Chromatographic Report

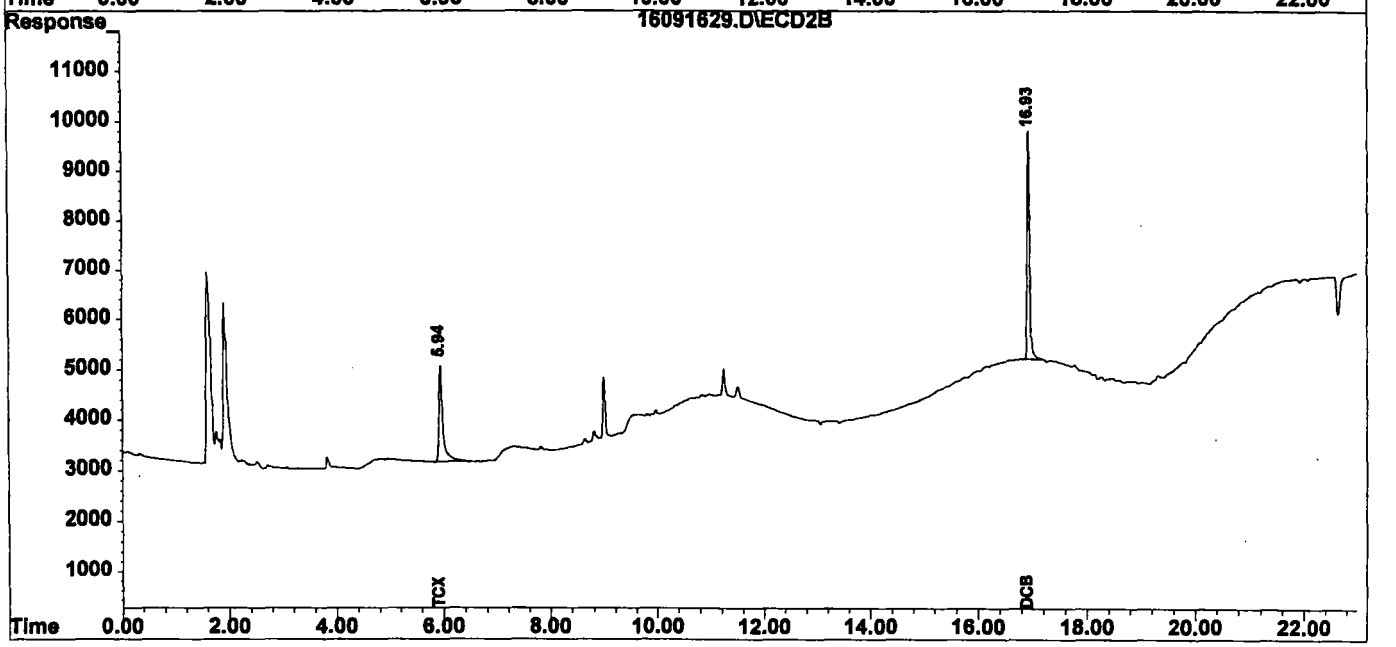
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091629.D\ECD1A.CH Vial: 29
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091629.D\ECD2B.CH
Acq On : 16 Sep 2001 23:49 Operator: DDC
Sample : 47347.10 *E03B6 * Inst : HP_16
Misc : *EPA*30.7G/5.0ML*60 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:46 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

ok 9-19-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091629.D\ECD1A.CH Vial: 29
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091629.D\ECD2B.CH
Acq On : 16 Sep 2001 23:49 Operator: DDC
Sample : 47347.10 *E03B6 * Inst : HP_16
Misc : *EPA*30.7G/5.0ML*60 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:46 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.94f	5.95f	150763	93553	17.7	9.689	#
	Spiked Amount 16.287			Recovery	=	108.68%	59.49%	
22)	S DCB	17.56f	16.93	133237	143928	9.493	10.4	
	Spiked Amount 16.287			Recovery	=	58.29%	63.86%	

Target Compounds:

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16091629.D XPCBI11.M Tue Sep 18 09:57:58 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03B7

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix: (soil/water) SOIL Lab Sample ID: 47347.11

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

% Moisture: 40 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/22/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/17/01

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	54	U
11104-28-2	Aroclor-1221	54	U
11141-16-5	Aroclor-1232	54	U
53469-21-9	Aroclor-1242	54	U
12672-29-6	Aroclor-1248	54	U
11097-69-1	Aroclor-1254	54	U
11096-82-5	Aroclor-1260	54	U
	Surrogate amount spiked	10.97	

FORM I PCB

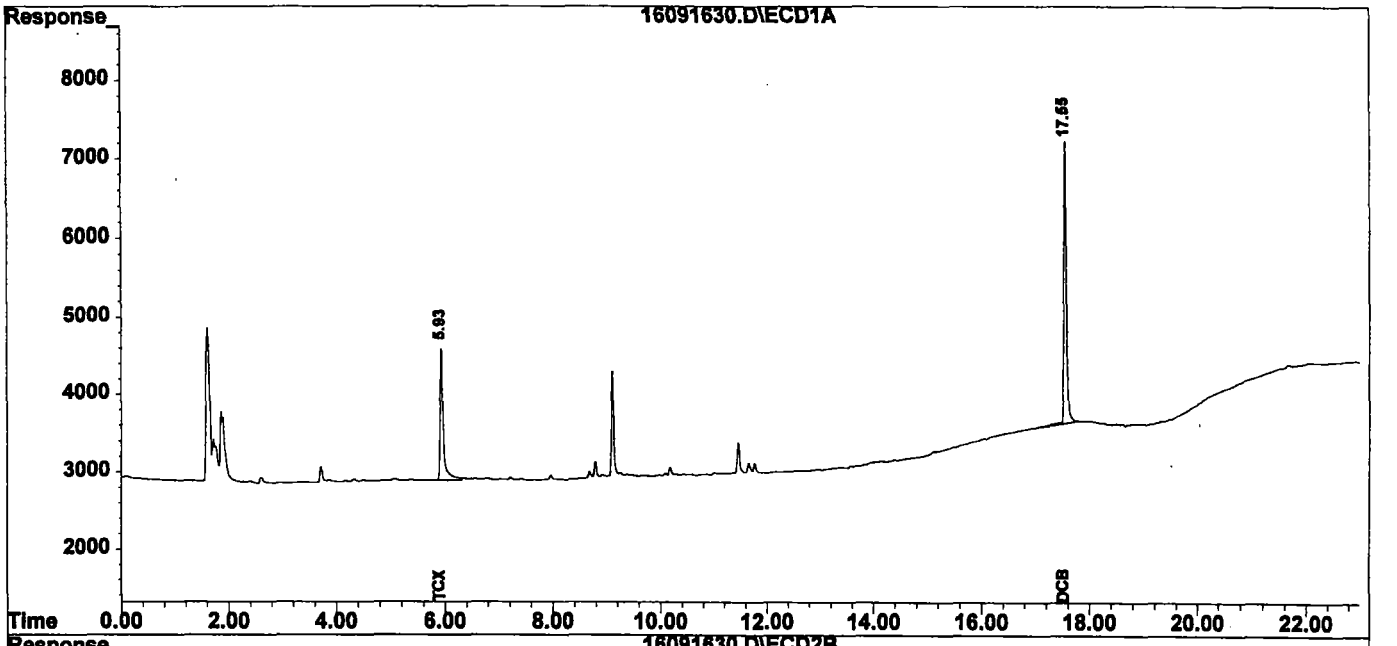
Chromatographic Report

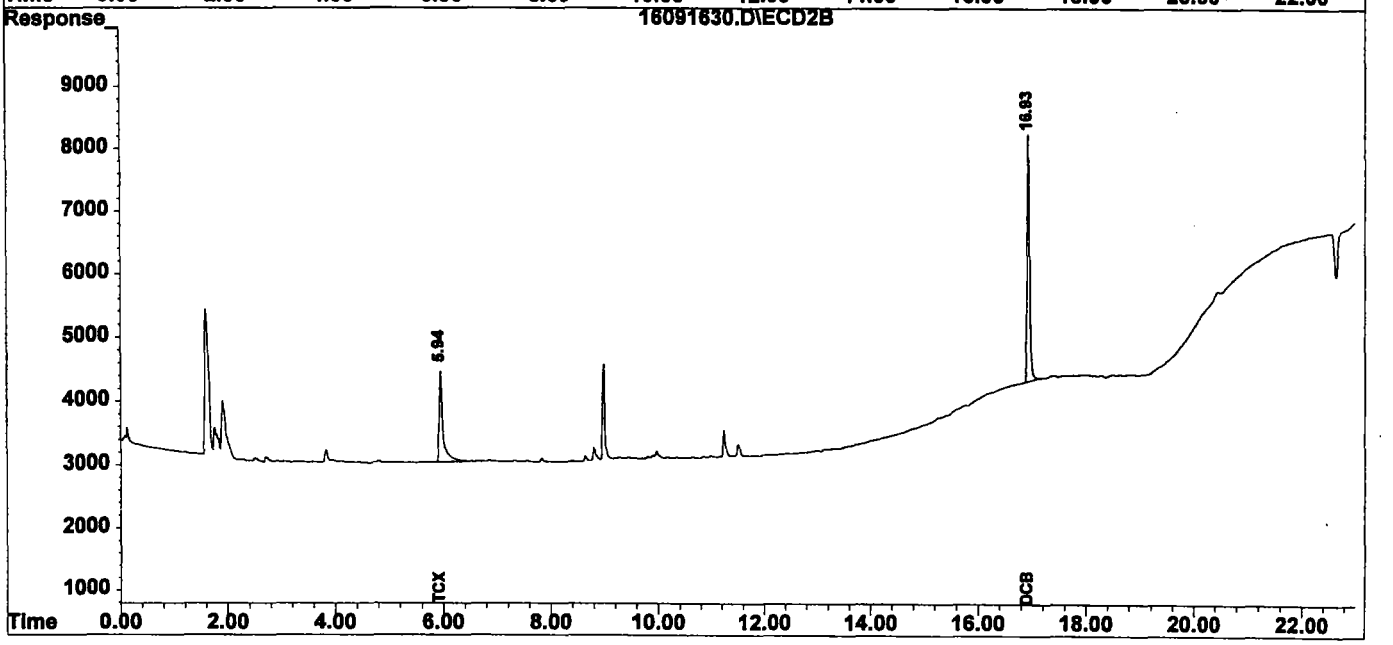
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091630.D\ECD1A.CH Vial: 30
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091630.D\ECD2B.CH
Acq On : 17 Sep 2001 00:15 Operator: DDC
Sample : 47347.11 *E03B7 * Inst : HP_16
Misc : *EPA*30.4G/5.0ML*40 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:46 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

OK 9-19-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091630.D\ECD1A.CH Vial: 30
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091630.D\ECD2B.CH
Acq On : 17 Sep 2001 00:15 Operator: DDC
Sample : 47347.11 *E03B7 * Inst : HP_16
Misc : *EPA*30.4G/5.0ML*40 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:46 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	5.94f	5.95f	68902	71363	5.453	4.976
	Spiked Amount 10.965			Recovery	=	49.73%	45.38%
22)	S DCB	17.56f	16.93	119464	120668	5.730	5.864
	Spiked Amount 10.965			Recovery	=	52.26%	53.48%

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.

E03B8

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix: (soil/water) SOIL Lab Sample ID: 47347.12

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/22/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/17/01

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	50	U
11104-28-2	Aroclor-1221	50	U
11141-16-5	Aroclor-1232	50	U
53469-21-9	Aroclor-1242	50	U
12672-29-6	Aroclor-1248	50	U
11097-69-1	Aroclor-1254	50	U
11096-82-5	Aroclor-1260	50	U
	Surrogate amount spiked	10.09	

FORM I PCB

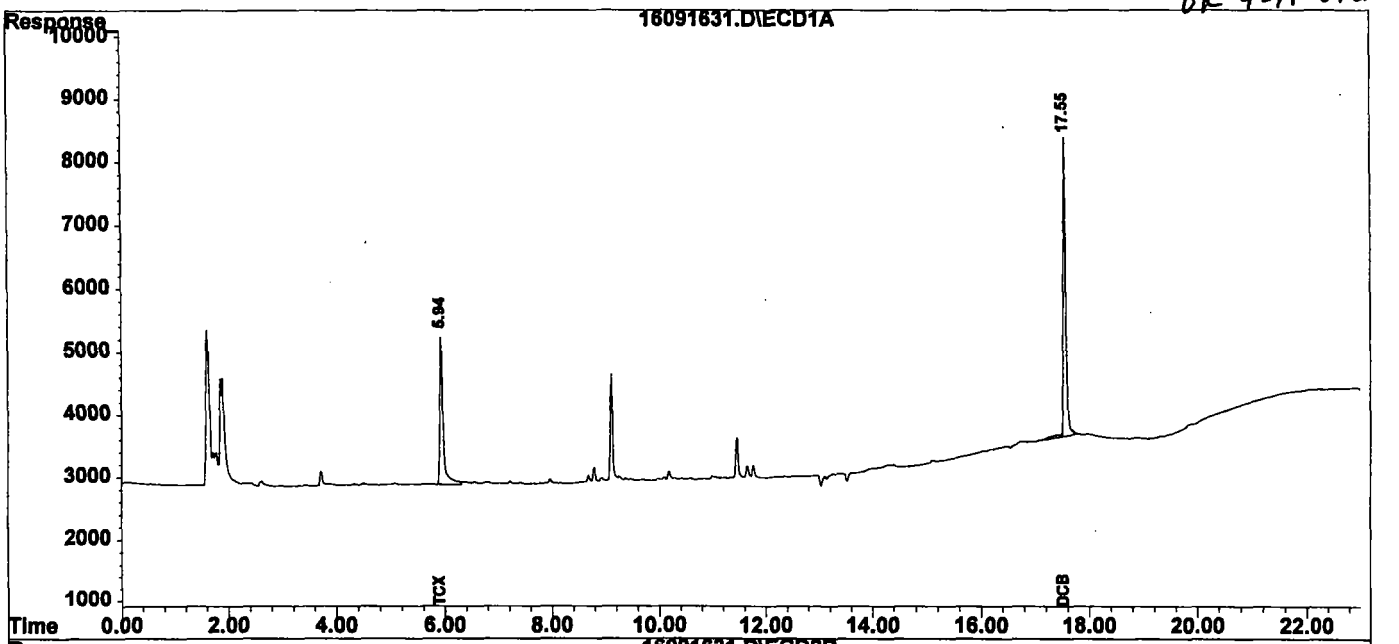
Chromatographic Report

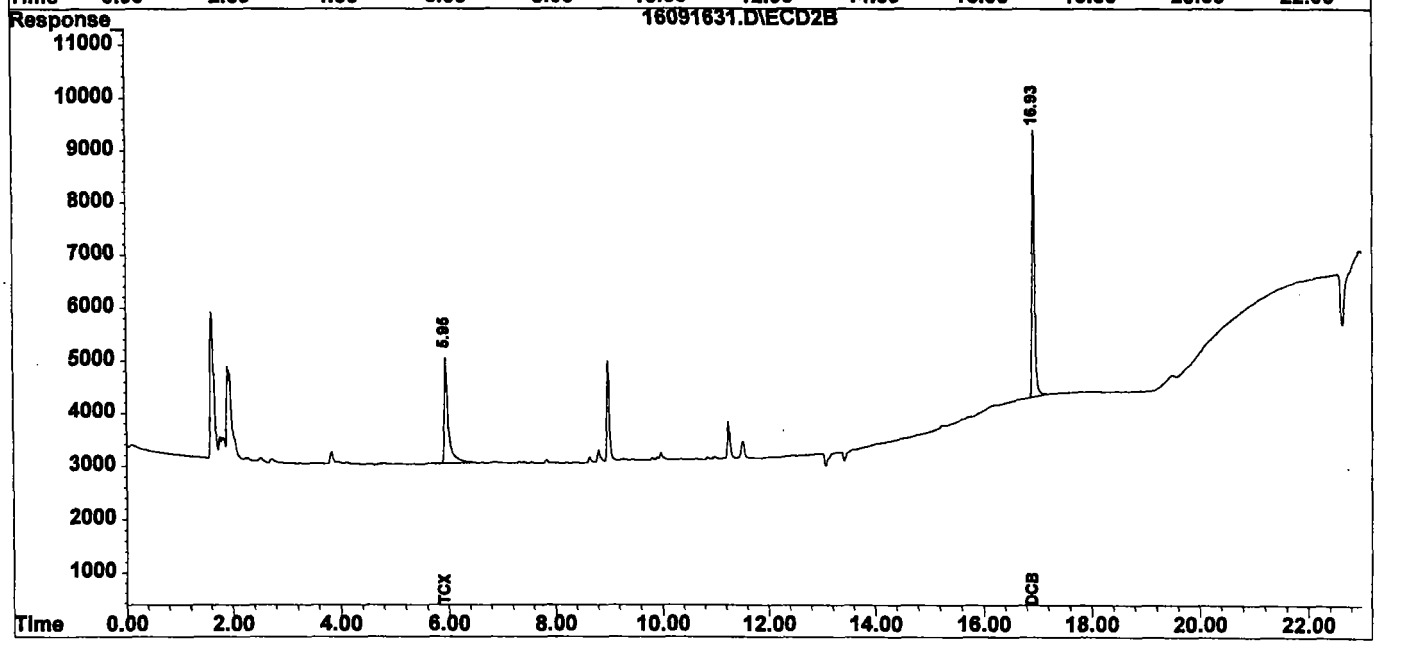
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091631.D\ECD1A.CH Vial: 31
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091631.D\ECD2B.CH
Acq On : 17 Sep 2001 00:41 Operator: DDC
Sample : 47347.12 *E03B8 * Inst : HP_16
Misc : *EPA*31G/50ML*36 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:46 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

ok 9-19-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091631.D\ECD1A.CH Vial: 31
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091631.D\ECD2B.CH
Acq On : 17 Sep 2001 00:41 Operator: DDC
Sample : 47347.12 *E03B8 * Inst : HP_16
Misc : *EPA*31G/5.0ML*36 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:46 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	5.94f	5.95f	99162	102426	7.215	6.566
	Spiked Amount 10.081			Recovery	=	71.57%	65.13%
22)	S DCB	17.56f	16.93	160077	160263	7.059	7.160
	Spiked Amount 10.081			Recovery	=	70.03%	71.03%

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.

E03B9

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix: (soil/water) SOIL Lab Sample ID: 47347.13

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/22/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/17/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	43	U
11104-28-2	Aroclor-1221	43	U
11141-16-5	Aroclor-1232	43	U
53469-21-9	Aroclor-1242	43	U
12672-29-6	Aroclor-1248	43	U
11097-69-1	Aroclor-1254	43	U
11096-82-5	Aroclor-1260	43	U
	Surrogate amount spiked	8.69	

FORM I PCB

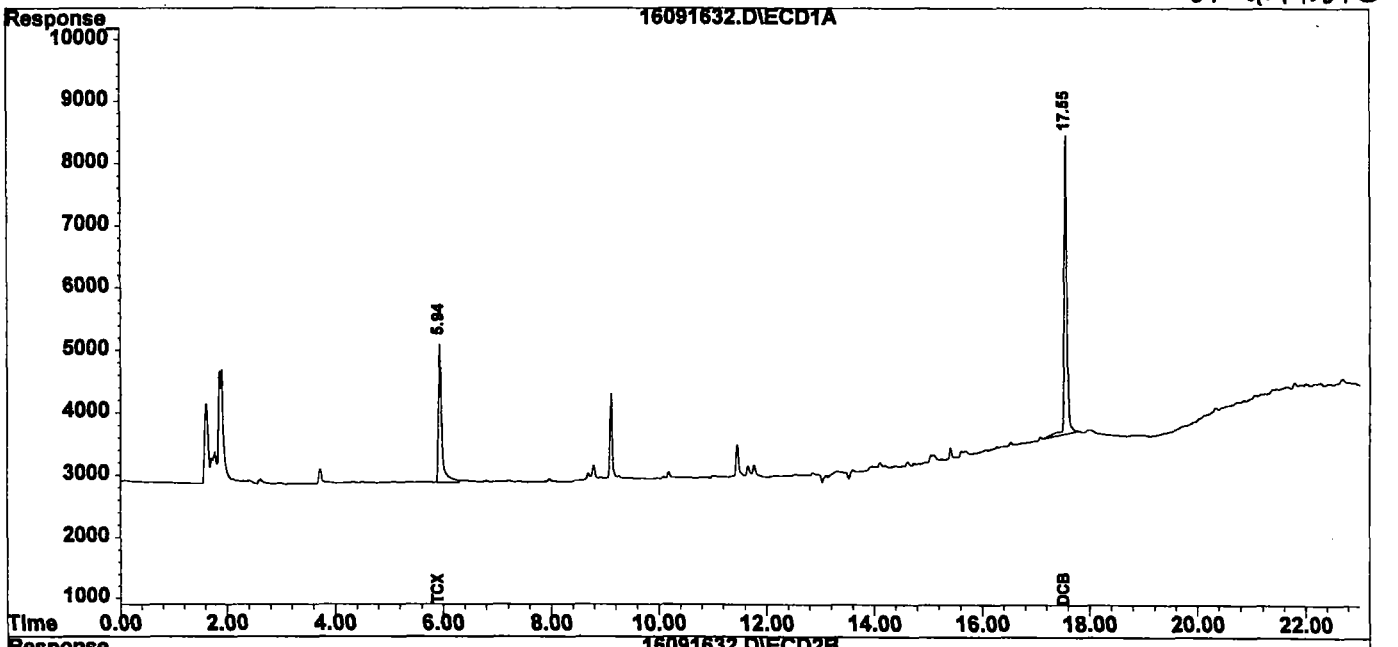
Chromatographic Report

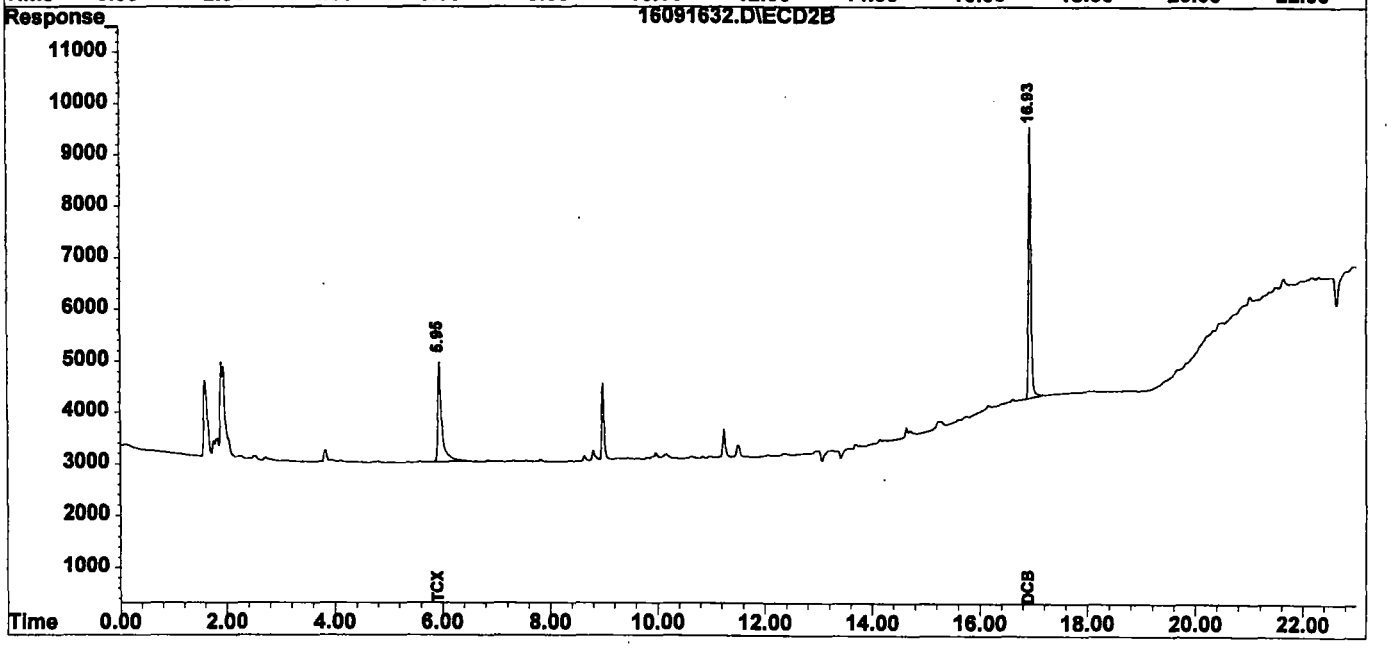
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091632.D\ECD1A.CH Vial: 32
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091632.D\ECD2B.CH
Acq On : 17 Sep 2001 1:08 Operator: DDC
Sample : 47347.13 *E03B9 * Inst : HP_16
Misc : *EPA*30.3G/5.0ML*24 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:46 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

OK 9-19-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091632.D\ECD1A.CH Vial: 32
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091632.D\ECD2B.CH
Acq On : 17 Sep 2001 1:08 Operator: DDC
Sample : 47347.13 *E03B9 * Inst : HP_16
Misc : *EPA*30.3G/5.0ML*24 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:46 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	5.94f	5.95f	93385	98738	5.854	5.453
	Spiked Amount 8.685			Recovery	=	67.40%	62.79%
22)	S DCB	17.56f	16.93	163508	164617	6.212	6.336
	Spiked Amount 8.685			Recovery	=	✓71.52%	✓72.95%

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.

E03C0

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix: (soil/water) SOIL Lab Sample ID: 47347.14

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

% Moisture: 60 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/22/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/17/01

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	81	U
11104-28-2	Aroclor-1221	81	U
11141-16-5	Aroclor-1232	81	U
53469-21-9	Aroclor-1242	81	U
12672-29-6	Aroclor-1248	81	U
11097-69-1	Aroclor-1254	81	U
11096-82-5	Aroclor-1260	81	U
	Surrogate amount spiked	16.29	

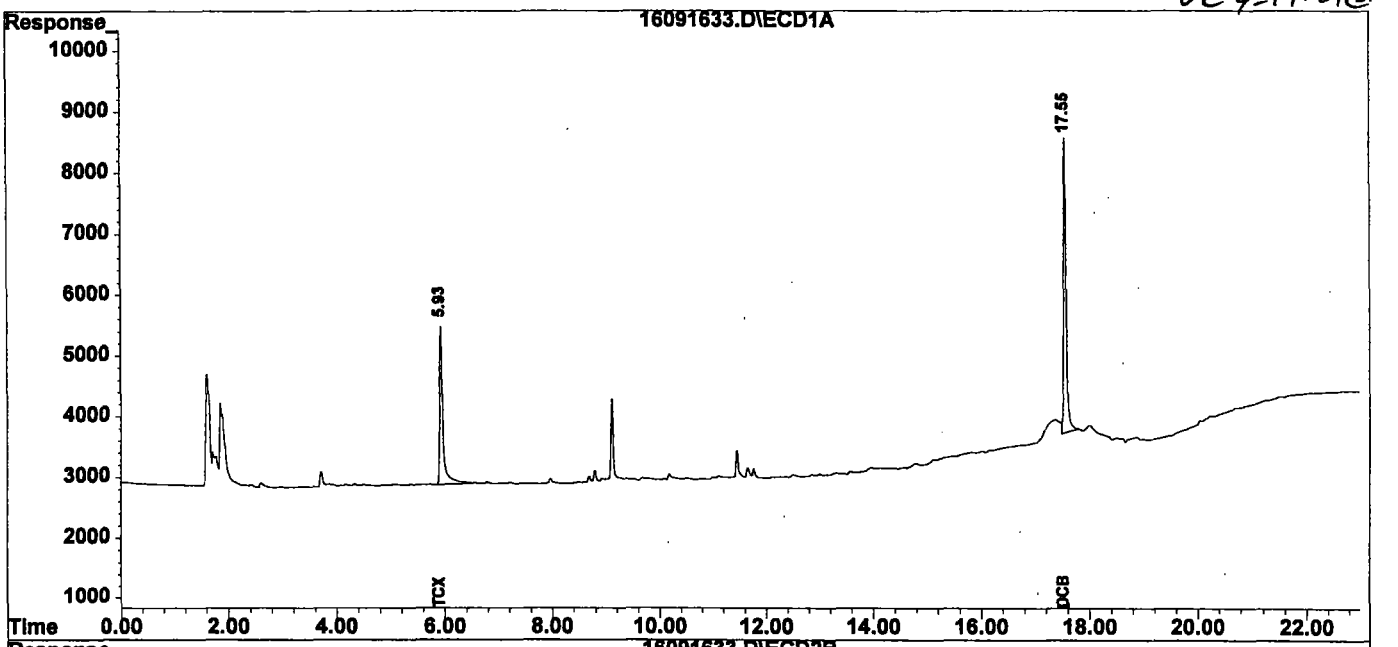
Chromatographic Report

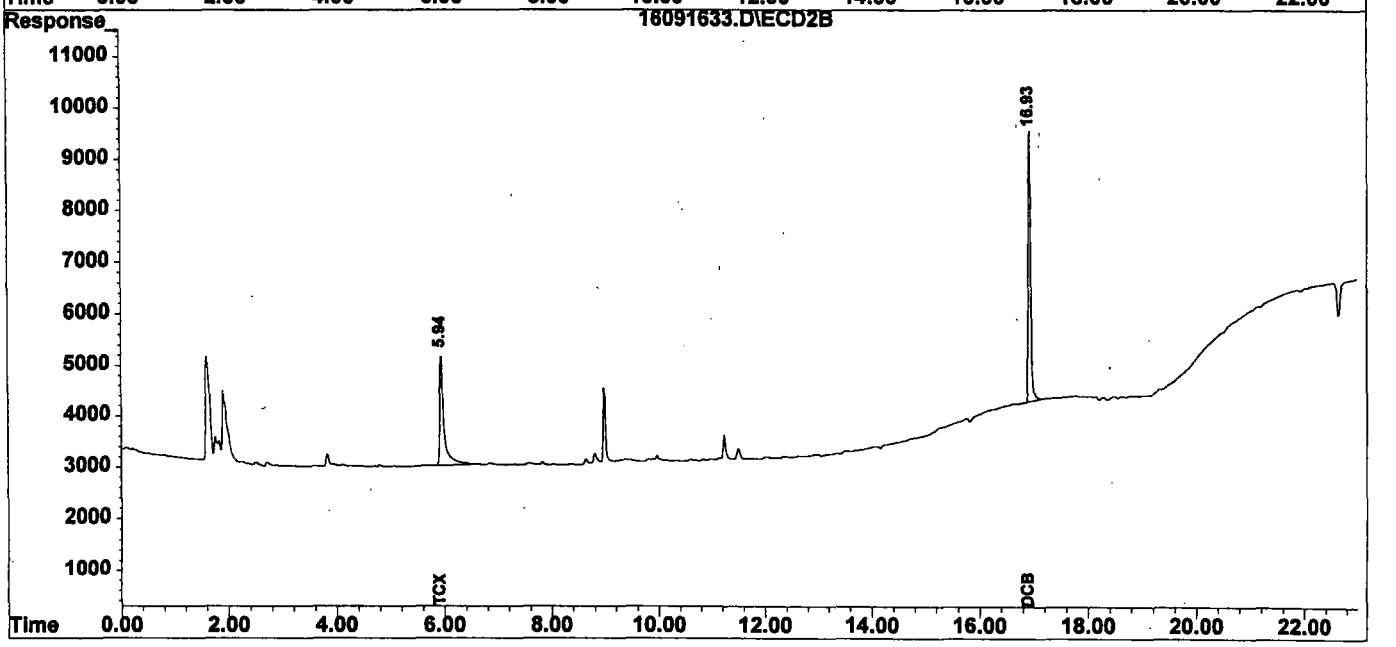
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091633.D\ECD1A.CH Vial: 33
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091633.D\ECD2B.CH
Acq On : 17 Sep 2001 1:34 Operator: DDC
Sample : 47347.14 *E03C0 * Inst : HP_16
Misc : *EPA*30.7G/5.0ML*60 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:47 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

OK 9-19-01 DH





Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091633.D\ECD1A.CH Vial: 33
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091633.D\ECD2B.CH
Acq On : 17 Sep 2001 1:34 Operator: DDC
Sample : 47347.14 *E03C0 * Inst : HP_16
Misc : *EPA*30.7G/5.0ML*60 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:47 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	5.94f	5.95f	108273	114636	12.7	11.9
	Spiked Amount 16.287			Recovery	=	77.98%	73.07%
22)	S DCB	17.56f	16.93	165688	166878	11.8	12.0
	Spiked Amount 16.287			Recovery	=	✓72.45%	✓73.68%

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.

E03C1

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix: (soil/water) SOIL Lab Sample ID: 47347.15

Sample wt/vol: 30.9 (g/mL) G Lab File ID:_____

% Moisture: 66 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/22/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/17/01

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	94	U
11104-28-2	Aroclor-1221	94	U
11141-16-5	Aroclor-1232	94	U
53469-21-9	Aroclor-1242	94	U
12672-29-6	Aroclor-1248	94	U
11097-69-1	Aroclor-1254	94	U
11096-82-5	Aroclor-1260	94	U
	Surrogate amount spiked	19.03	

FORM I PCB

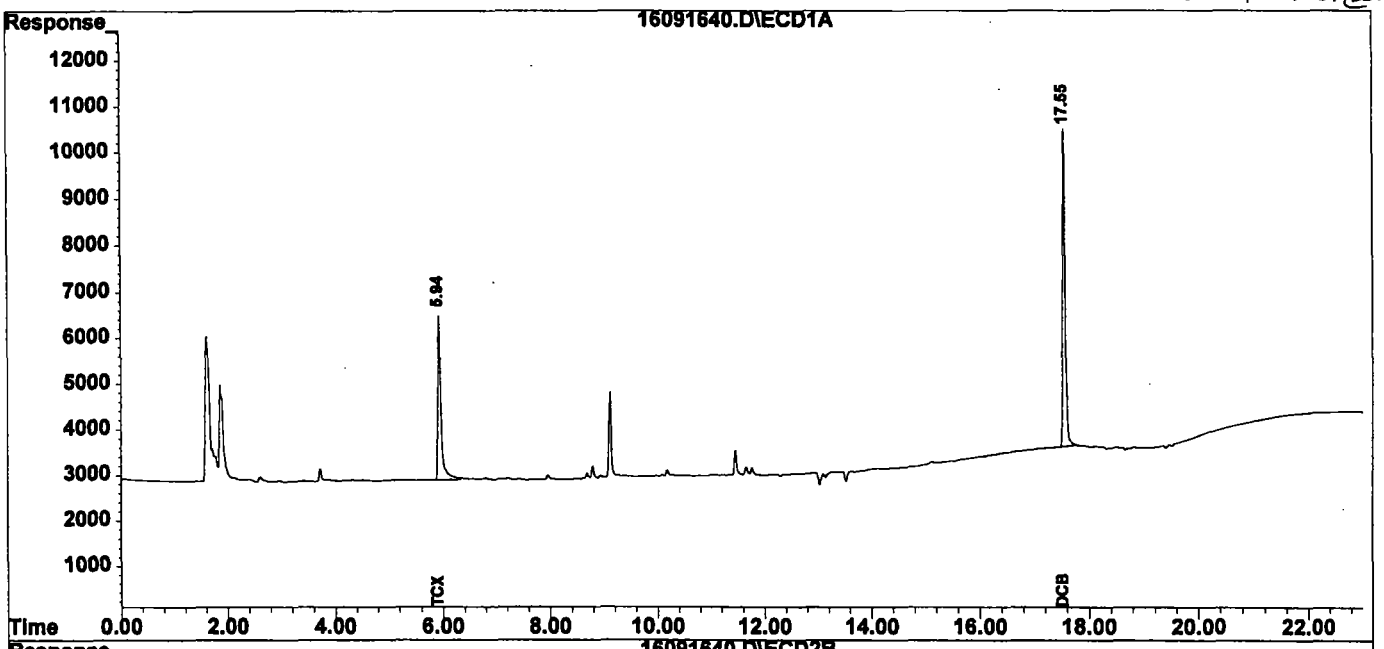
Chromatographic Report

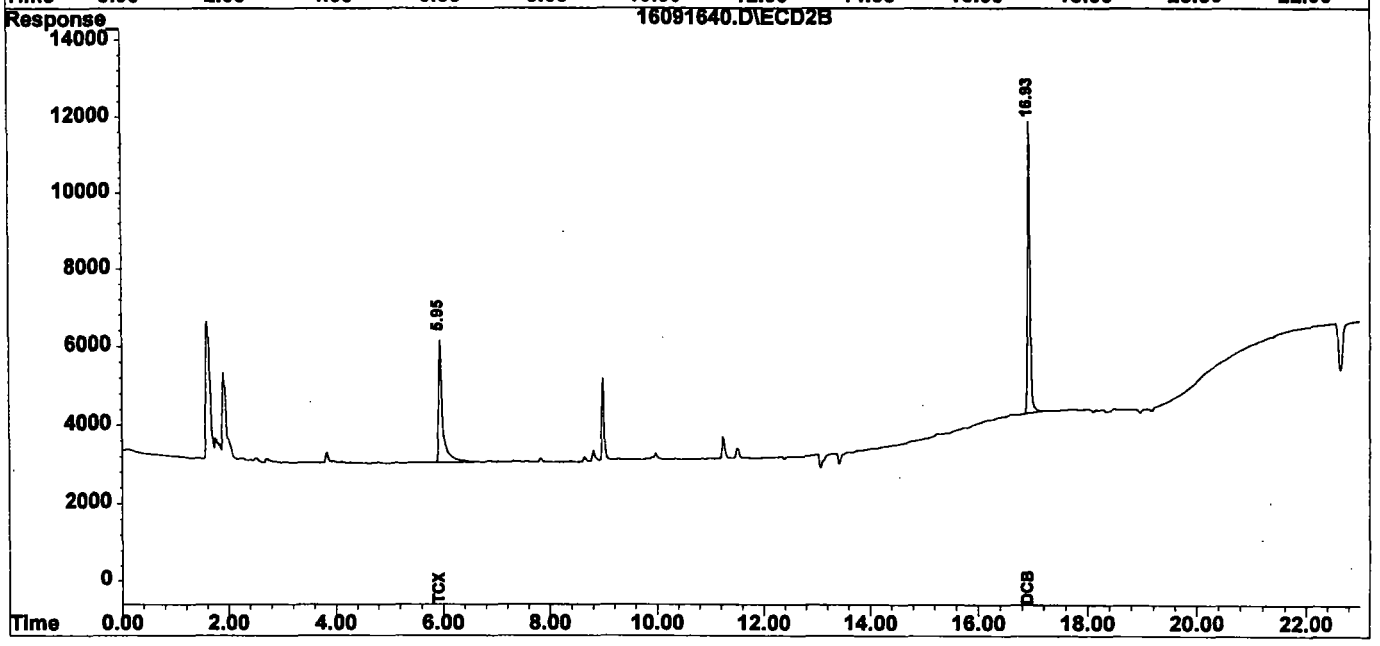
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091640.D\ECD1A.CH Vial: 40
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091640.D\ECD2B.CH
Acq On : 17 Sep 2001 4:39 Operator: DDC
Sample : 47347.15 /*E03C1/ * Inst : HP_16
Misc : *EPA*30.9G/5.0ML*66 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:47 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

OK 9-19-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091640.D\ECD1A.CH Vial: 40
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091640.D\ECD2B.CH
Acq On : 17 Sep 2001 4:39 Operator: DDC
Sample : 47347.15 *E03C1 * Inst : HP_16
Misc : *EPA*30.9G/5.0ML*66 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:47 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	5.94f	5.95f	142679	158588	19.6	19.2
	Spiked Amount 19.037			Recovery	=	102.96%	100.86%
22)	S DCB	17.56f	16.94	218654	238177	18.2	20.1
	Spiked Amount 19.037			Recovery	=	95.60%	105.59%
	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.

E03C2

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix: (soil/water) SOIL Lab Sample ID: 47347.16

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

% Moisture: 26 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/22/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/17/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	44	U
11104-28-2	Aroclor-1221	44	U
11141-16-5	Aroclor-1232	44	U
53469-21-9	Aroclor-1242	44	U
12672-29-6	Aroclor-1248	44	U
11097-69-1	Aroclor-1254	44	U
11096-82-5	Aroclor-1260	44	U
	Surrogate amount spiked	8.92	

FORM I PCB

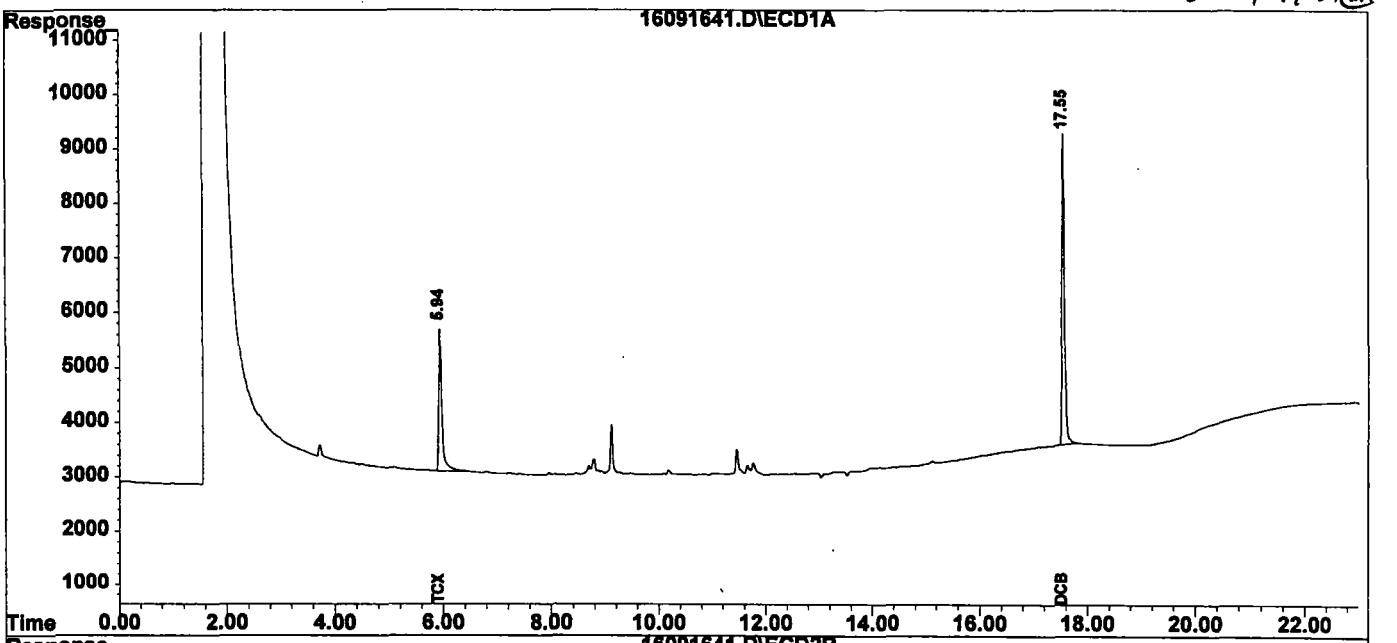
Chromatographic Report

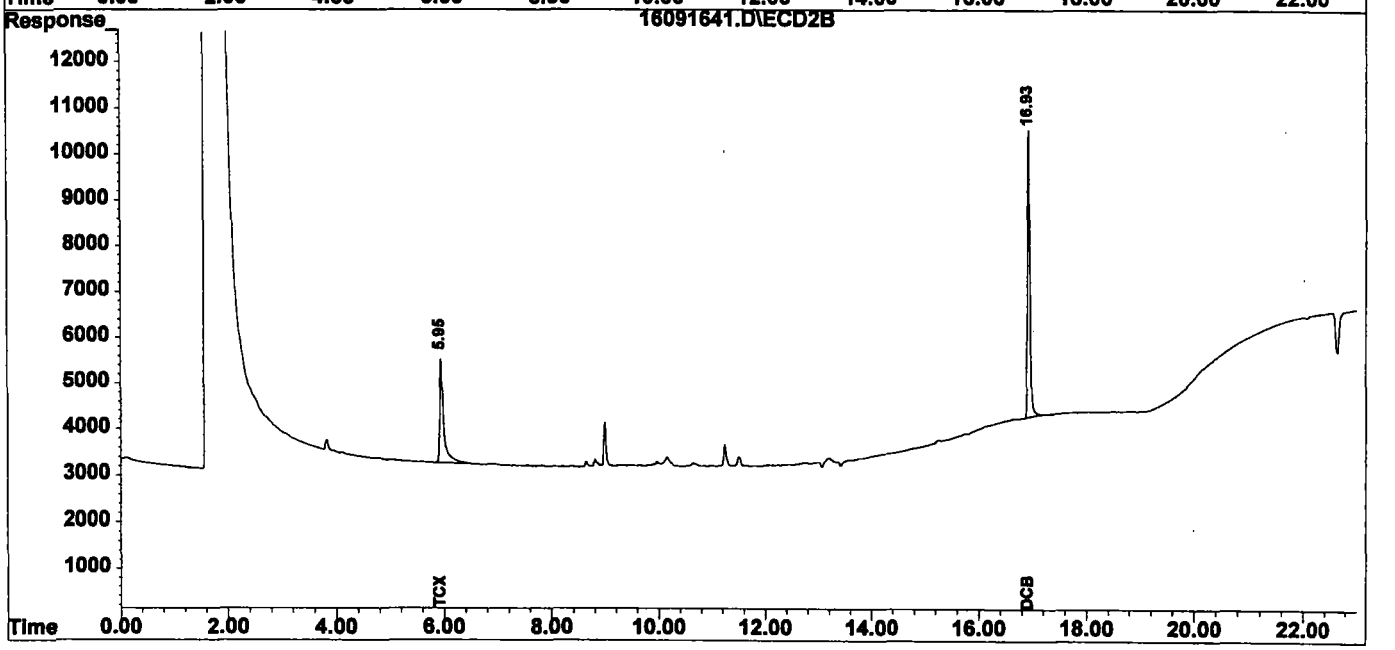
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091641.D\ECD1A.CH Vial: 41
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091641.D\ECD2B.CH
Acq On : 17 Sep 2001 5:06 Operator: DDC
Sample : 47347.16 *E03C2 * Inst : HP_16
Misc : *EPA*30.3G/5.0ML*26 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:47 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

DK 9-19-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091641.D\ECD1A.CH Vial: 41
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091641.D\ECD2B.CH
Acq On : 17 Sep 2001 5:06 Operator: DDC
Sample : 47347.16 *E03C2 * Inst : HP_16
Misc : *EPA*30.3G/5.0ML*26 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:47 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	5.94f	5.95f	107422	115915	6.916	6.575
	Spiked Amount 8.920			Recovery	=	77.54%	73.71%
22)	S DCB	17.56f	16.93	184885	198890	7.214	7.862
	Spiked Amount 8.920			Recovery	=	✓80.88%	✓88.14%

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.

E03C3

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix: (soil/water) SOIL Lab Sample ID: 47347.17

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/22/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/17/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	48	U
11104-28-2	Aroclor-1221	48	U
11141-16-5	Aroclor-1232	48	U
53469-21-9	Aroclor-1242	48	U
12672-29-6	Aroclor-1248	48	U
11097-69-1	Aroclor-1254	48	U
11096-82-5	Aroclor-1260	48	U
	Surrogate amount spiked	9.60	

FORM I PCB

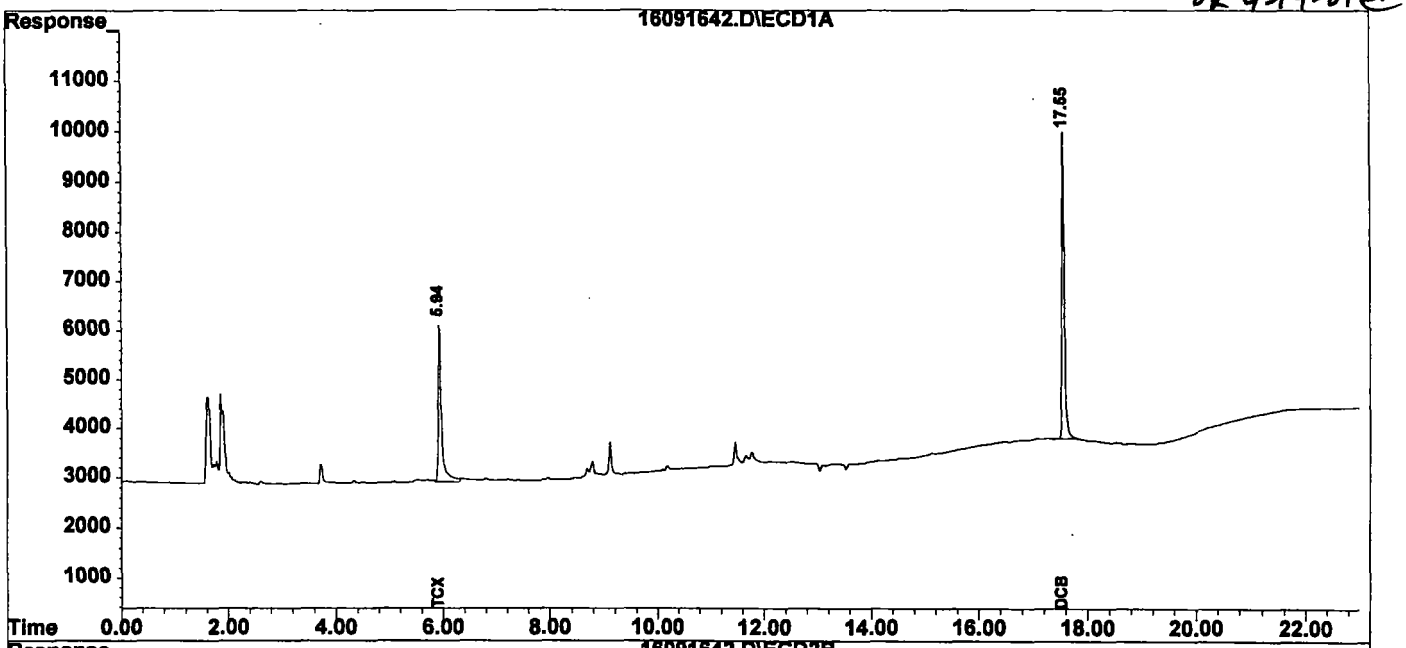
Chromatographic Report

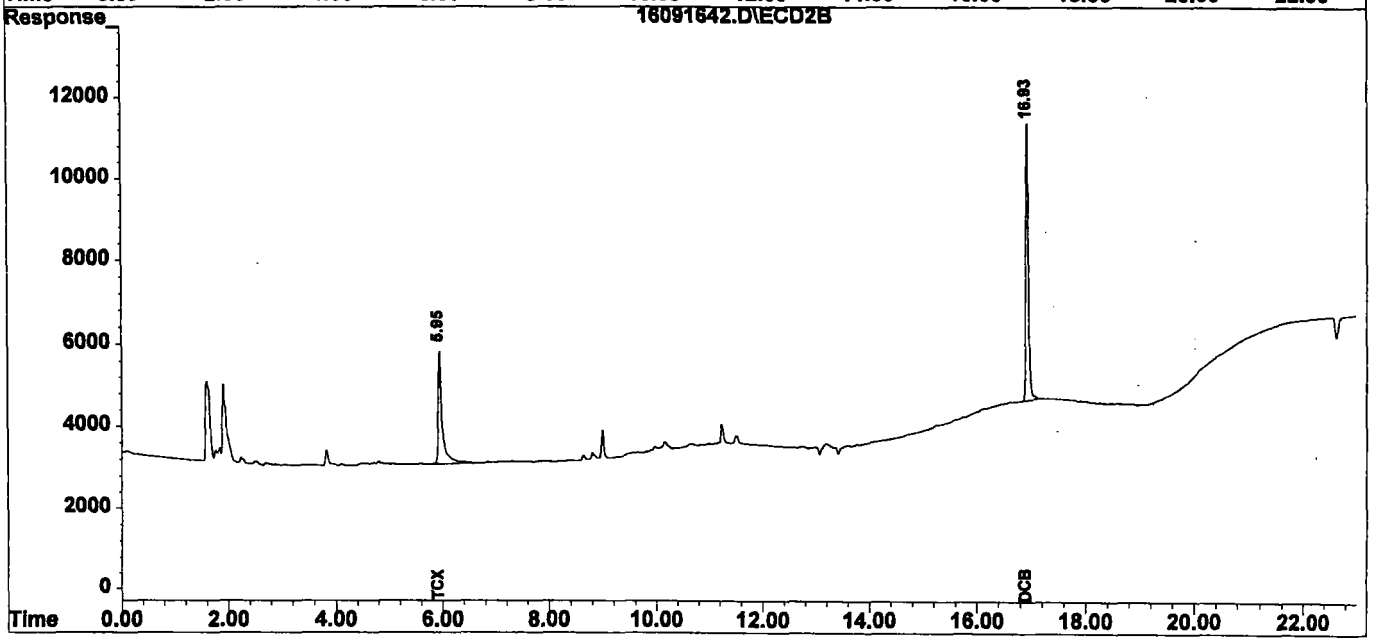
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091642.D\ECD1A.CH Vial: 42
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091642.D\ECD2B.CH
Acq On : 17 Sep 2001 5:32 Operator: DDC
Sample : 47347.17 *E03C3 * Inst : HP_16
Misc : *EPA*30.2G/5.0ML*31 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:48 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

OK 9-19-01 [illegible]





Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091642.D\ECD1A.CH Vial: 42
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091642.D\ECD2B.CH
Acq On : 17 Sep 2001 5:32 Operator: DDC
Sample : 47347.17 *E03C3 * Inst : HP_16
Misc : *EPA*30.2G/5.0ML*31 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:48 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	5.94f	5.95f	138177	143755	9.572	8.774
	Spiked Amount 9.598			Recovery	=	99.73%	91.42%
22)	S DCB	17.56f	16.93	200909	216186	8.435	9.196
	Spiked Amount 9.598			Recovery	=	✓87.88%	✓95.81%

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.

E03C4

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix: (soil/water) SOIL Lab Sample ID: 47347.18

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

% Moisture: 74 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/22/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/17/01

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	130	U
11104-28-2	Aroclor-1221	130	U
11141-16-5	Aroclor-1232	130	U
53469-21-9	Aroclor-1242	130	U
12672-29-6	Aroclor-1248	130	U
11097-69-1	Aroclor-1254	130	U
11096-82-5	Aroclor-1260	130	U
Surrogate amount spiked		25.48	

FORM I PCB

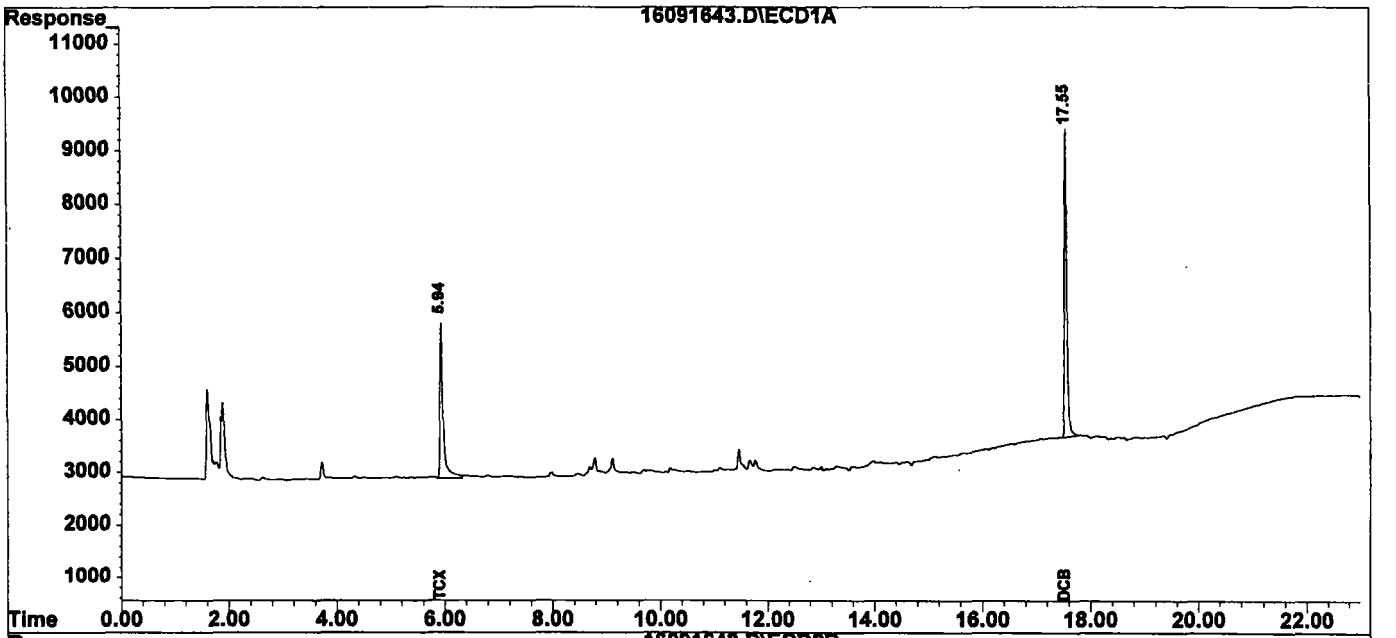
Chromatographic Report

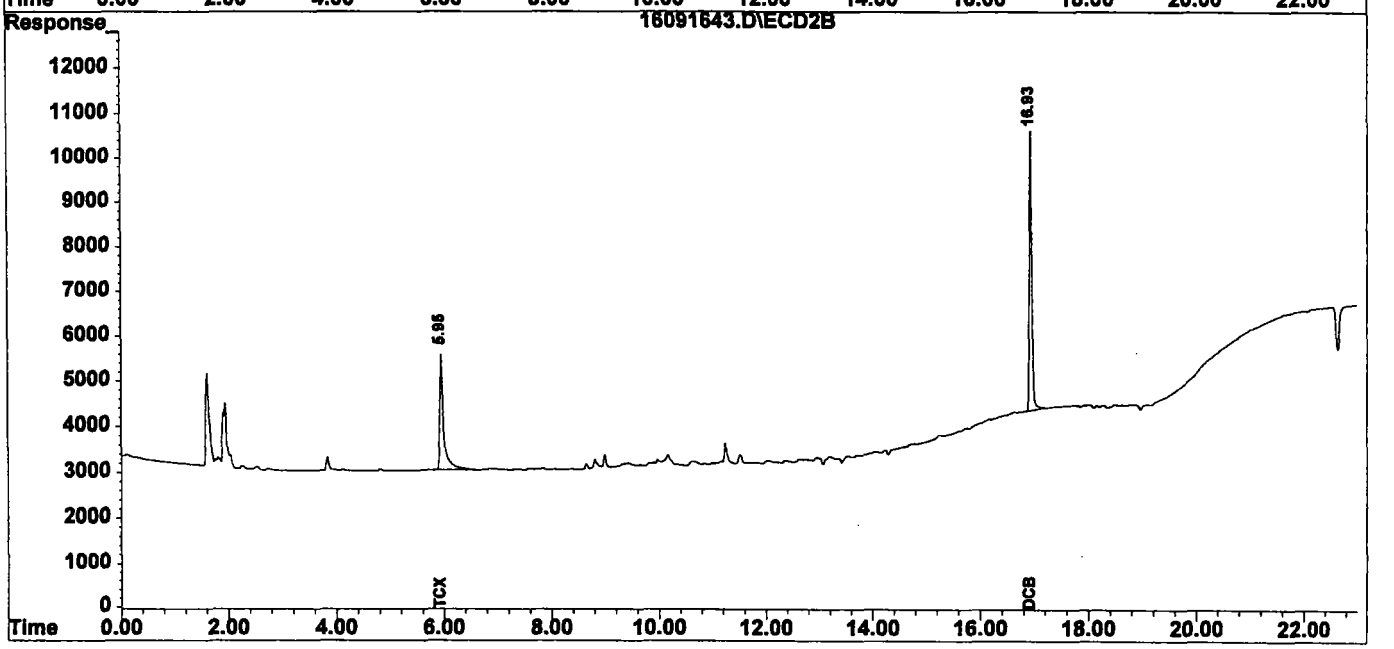
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091643.D\ECD1A.CH Vial: 43
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091643.D\ECD2B.CH
Acq On : 17 Sep 2001 5:59 Operator: DDC
Sample : 47347.18 *E03C4 * Inst : HP_16
Misc : *EPA*30.2G/5.0ML*74 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:48 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

ok 9-19-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091643.D\ECD1A.CH Vial: 43
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091643.D\ECD2B.CH
Acq On : 17 Sep 2001 5:59 Operator: DDC
Sample : 47347.18 *E03C4 * Inst : HP_16
Misc : *EPA*30.2G/5.0ML*74 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:48 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	5.94f	5.95f	123273	128659	22.7	20.8
	Spiked Amount 25.471			Recovery	=	89.12%	81.66%
22)	S DCB	17.55f	16.93	182682	196988	20.4	22.2
	Spiked Amount 25.471			Recovery	=	✓80.09%	✓87.16%
	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
16091643.D XPCBI11.M Tue Sep 18 09:59:32 2001

1D

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03C5

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix: (soil/water) SOIL Lab Sample ID: 47347.19

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

% Moisture: 54 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/22/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/17/01

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	70	U
12672-29-6	Aroclor-1248	70	U
11097-69-1	Aroclor-1254	70	U
11096-82-5	Aroclor-1260	70	U
	Surrogate amount spiked	14.11	

FORM I PCB

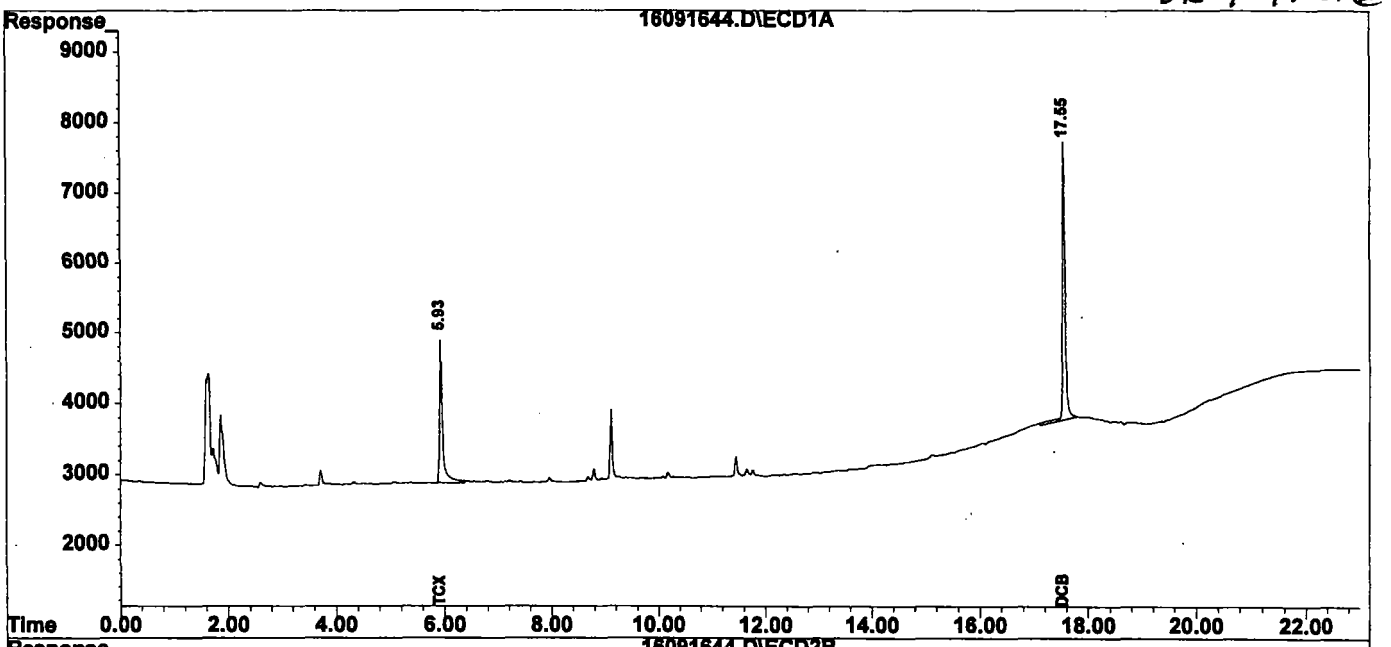
Chromatographic Report

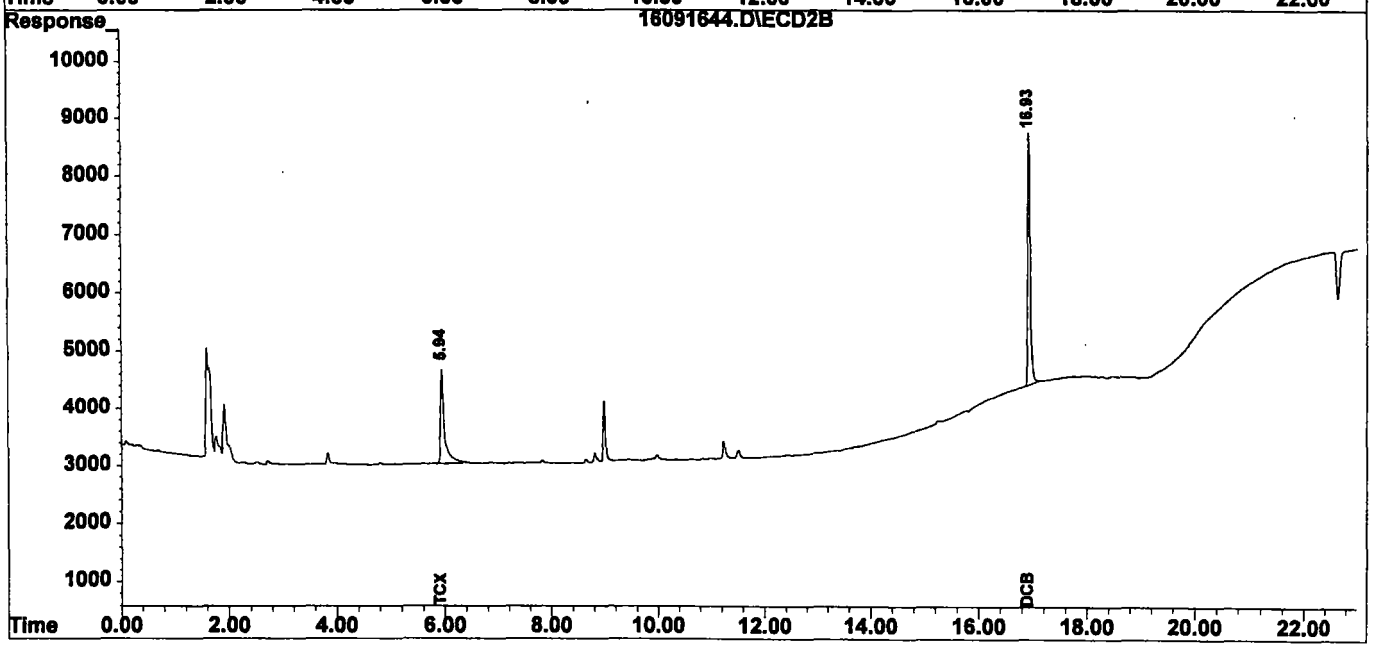
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091644.D\ECD1A.CH Vial: 44
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091644.D\ECD2B.CH
Acq On : 17 Sep 2001 6:25 Operator: DDC
Sample : 47347.19 *E03C5 * Inst : HP_16
Misc : *EPA*30.8G/5.0ML*54 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:48 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

OK 9-19-01





Quantitation Report

```
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091644.D\ECD1A.CH Vial: 44
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091644.D\ECD2B.CH
Acq On    : 17 Sep 2001   6:25                        Operator: DDC
Sample    : 47347.19  *E03C5  *                       Inst    : HP_16
Misc      : *EPA*30.8G/5.0ML*54                       Dilution: 1.00
IntFile Signal #1: events1.e     IntFile Signal #2: events2.e
Quant Time: Sep 18  9:48 2001  Quant Results File: XPCBI11.RES

Method       : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path   : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update  : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj.     : 0.5uL
Signal #1 Phase : RTX-PEST 2        Signal #2 Phase: RTX-PEST
Signal #1 Info  : .32 mm            Signal #2 Info : .32 mm
Signal #1 Inst  : HP_16A            Signal #2 Inst : HP_16B
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	5.94f	5.95f	83243	84891	8.481	7.620
	Spiked Amount 14.116			Recovery	=	60.08%	53.98%
22)	S DCB	17.56f	16.93	139981	136543	8.644	8.542
	Spiked Amount 14.116			Recovery	=	61.23%	60.51%
	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.

E03C6

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix: (soil/water) SOIL Lab Sample ID: 47347.20

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/22/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/17/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

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

FORM I PCB

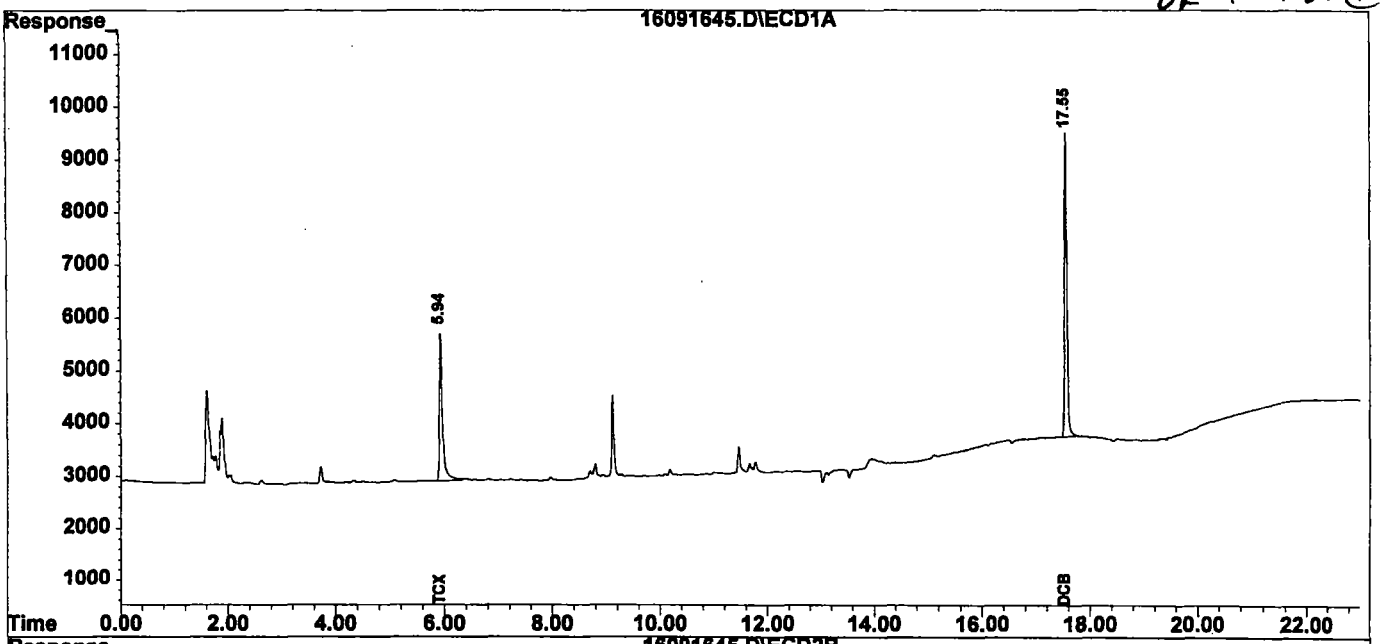
Chromatographic Report

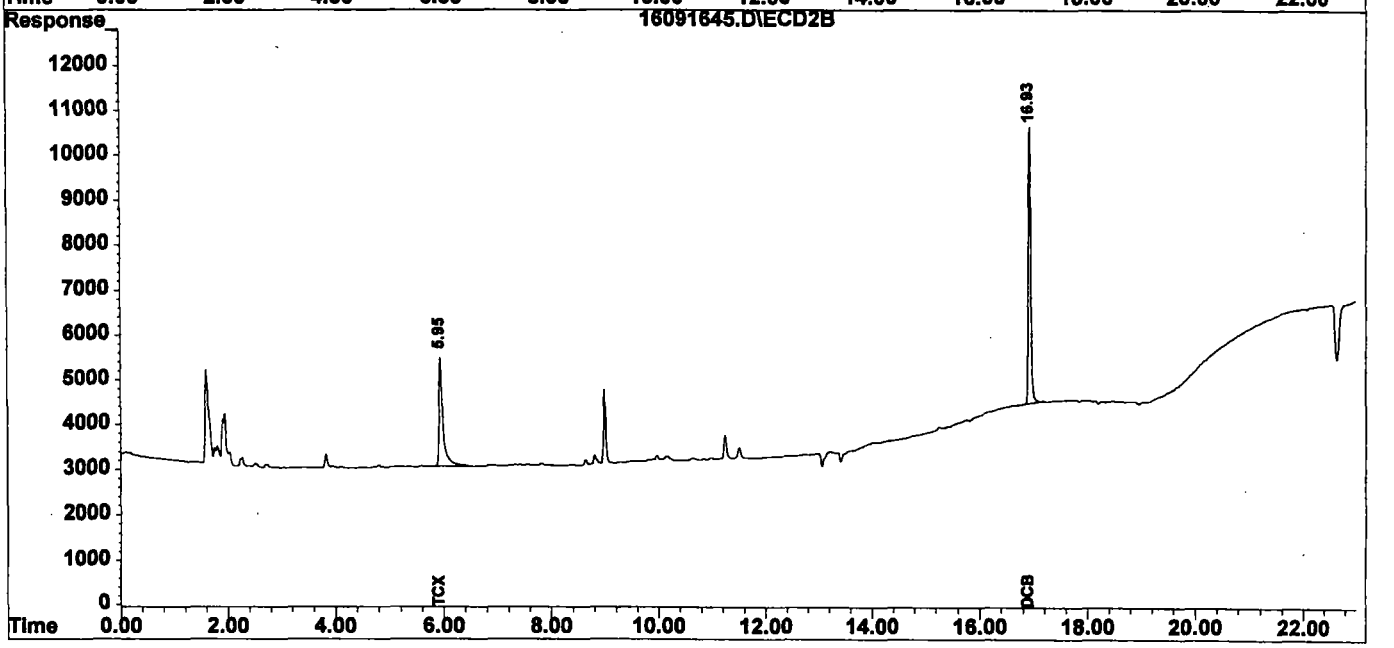
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091645.D\ECD1A.CH Vial: 45
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091645.D\ECD2B.CH
Acq On : 17 Sep 2001 6:51 Operator: DDC
Sample : 47347.20✓,*E03C6✓ * Inst : HP_16
Misc : *EPA*30.5G/5.0ML*33✓ Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:48 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

OK 9-19-01 GP





Quantitation Report

```
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091645.D\ECD1A.CH Vial: 45
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091645.D\ECD2B.CH
Acq On    : 17 Sep 2001   6:51                        Operator: DDC
Sample    : 47347.20  *E03C6  *                       Inst    : HP_16
Misc      : *EPA*30.5G/5.0ML*33                       Dilution: 1.00
IntFile Signal #1: events1.e     IntFile Signal #2: events2.e
Quant Time: Sep 18  9:48 2001  Quant Results File: XPCBI11.RES

Method       : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path   : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update  : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj.      : 0.5uL
Signal #1 Phase : RTX-PEST 2        Signal #2 Phase: RTX-PEST
Signal #1 Info  : .32 mm            Signal #2 Info : .32 mm
Signal #1 Inst  : HP_16A            Signal #2 Inst : HP_16B
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	5.94f	5.95f	111753	120236	7.894	7.483
	Spiked Amount 9.787			Recovery	=	80.66%	76.46%
22)	S DCB	17.55f	16.93	180694	192016	7.736	8.329
	Spiked Amount 9.787			Recovery	=	79.04%	85.10%
	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.

E03C7

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix: (soil/water) SOIL Lab Sample ID: 47347.21

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/22/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/17/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	48	U
11104-28-2	Aroclor-1221	48	U
11141-16-5	Aroclor-1232	48	U
53469-21-9	Aroclor-1242	48	U
12672-29-6	Aroclor-1248	48	U
11097-69-1	Aroclor-1254	48	U
11096-82-5	Aroclor-1260	48	U
	Surrogate amount spiked	9.63	

FORM I PCB

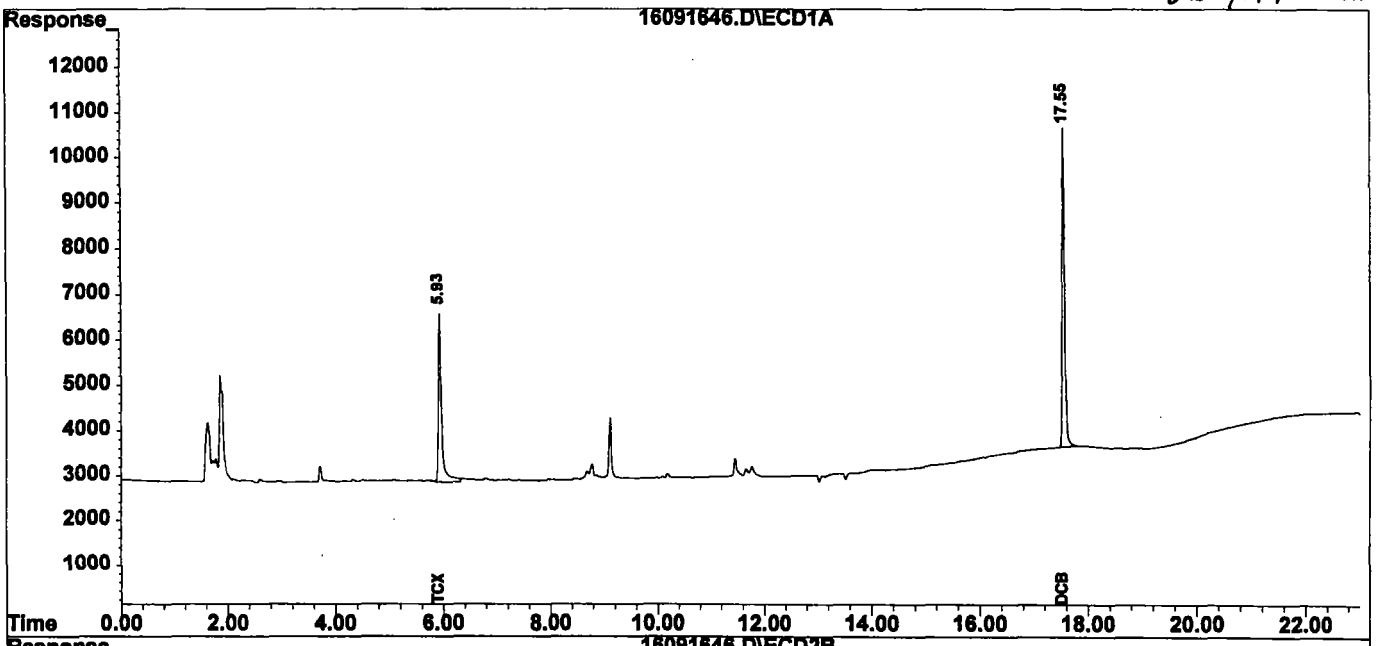
Chromatographic Report

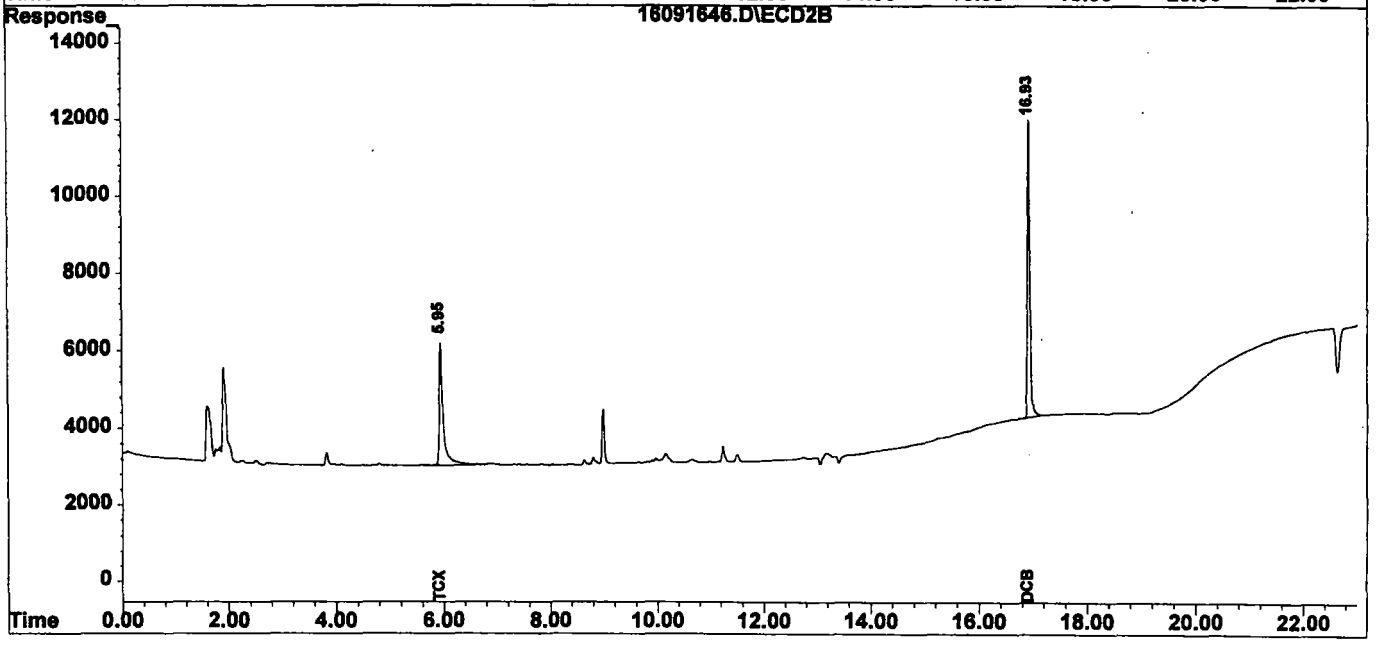
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091646.D\ECD1A.CH Vial: 46
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091646.D\ECD2B.CH
Acq On : 17 Sep 2001 7:18 Operator: DDC
Sample : 47347.21, *E03C7 * Inst : HP_16
Misc : *EPA*30.1G/5.0ML*31 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:49 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

OK 9-19-01





Quantitation Report

```
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091646.D\ECD1A.CH Vial: 46
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091646.D\ECD2B.CH
Acq On    : 17 Sep 2001   7:18                        Operator: DDC
Sample    : 47347.21  *E03C7  *                       Inst    : HP_16
Misc      : *EPA*30.1G/5.0ML*31                       Dilution: 1.00
IntFile Signal #1: events1.e     IntFile Signal #2: events2.e
Quant Time: Sep 18  9:49 2001  Quant Results File: XPCBI11.RES

Method       : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path   : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update  : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj.     : 0.5uL
Signal #1 Phase : RTX-PEST 2        Signal #2 Phase: RTX-PEST
Signal #1 Info  : .32 mm            Signal #2 Info : .32 mm
Signal #1 Inst  : HP_16A            Signal #2 Inst : HP_16B
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	5.94f	5.95f	152611	159956	10.6	9.795
	Spiked Amount 9.630			Recovery	=	110.08%	101.72%
22)	S DCB	17.55f	16.93	225149	245561	9.484	10.5
	Spiked Amount 9.630			Recovery	=	98.49%	109.04%
	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.

E03C8

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix: (soil/water) SOIL Lab Sample ID: 47347.22

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

% Moisture: 21 decanted: (Y/N) __ Date Received: 08/20/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/22/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/17/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	41	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	41	U
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	41	U
11096-82-5	Aroclor-1260	41	U
	Surrogate amount spiked	8.27	

FORM I PCB

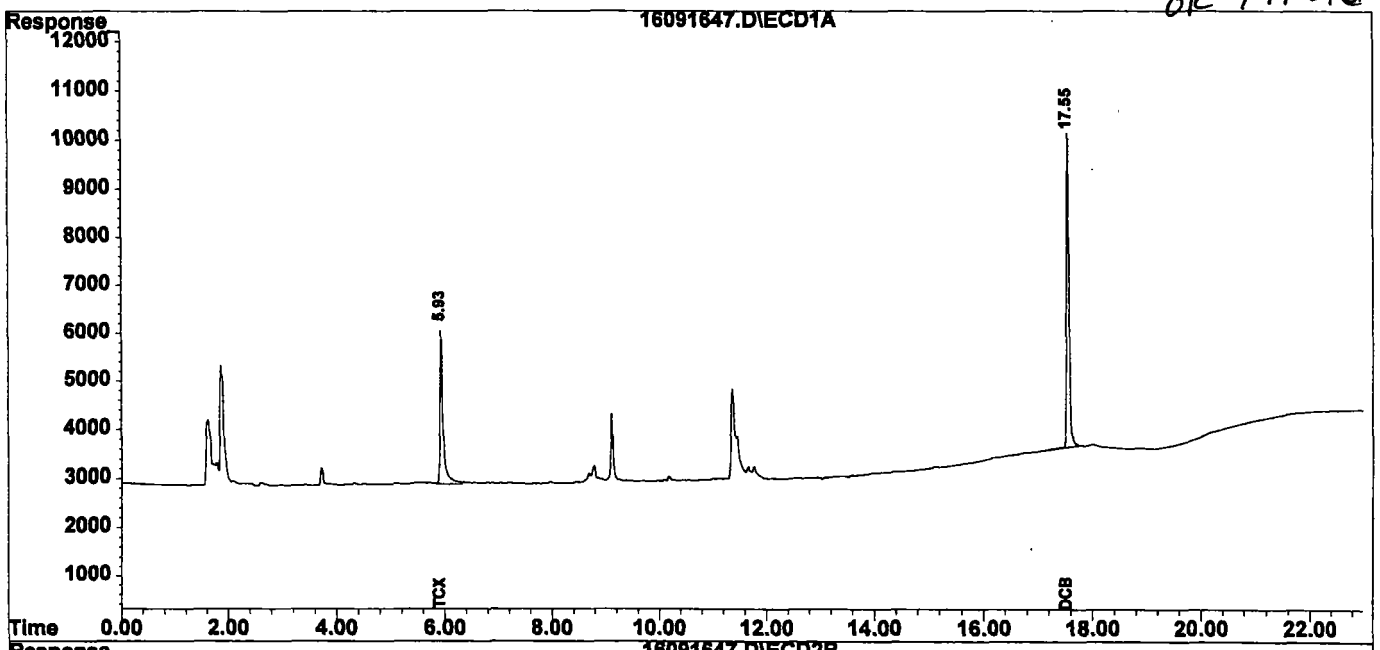
Chromatographic Report

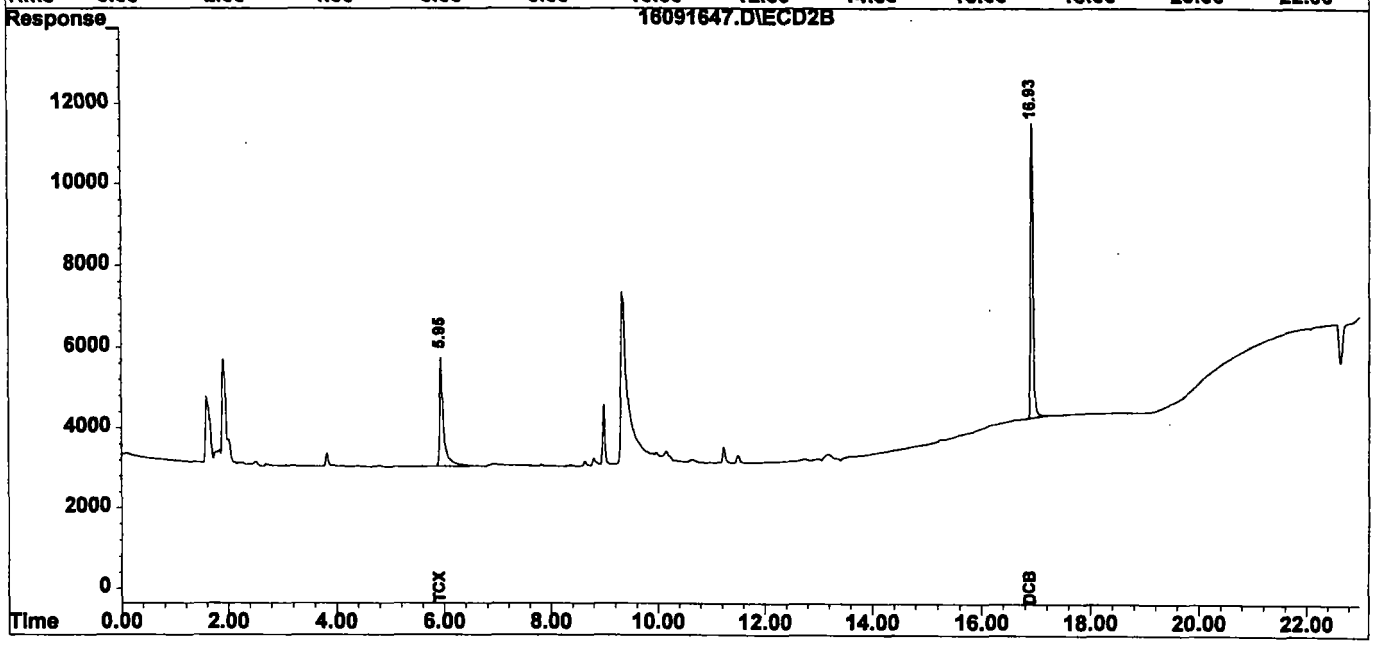
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091647.D\ECD1A.CH Vial: 47
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091647.D\ECD2B.CH
Acq On : 17 Sep 2001 7:44 Operator: DDC
Sample : 47347.22 *E03C8 * Inst : HP_16
Misc : *EPA*30.6G/5.0ML*21 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:49 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

OK 9-19-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091647.D\ECD1A.CH Vial: 47
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091647.D\ECD2B.CH
Acq On : 17 Sep 2001 7:44 Operator: DDC
Sample : 47347.22 *E03C8 * Inst : HP_16
Misc : *EPA*30.6G/5.0ML*21 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:49 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	5.94f	5.95f	129337	136327	7.723	7.172
	Spiked Amount 8.273			Recovery	=	93.35%	86.69%
22)	S DCB	17.55f	16.93	210580	226674	7.621	8.311
	Spiked Amount 8.273			Recovery	=	92.12%	100.46%

Target Compounds:

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

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Instrument ID: HP_16A Date(s) Analyzed: 09/11/01 09/11/01

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

GC Column: RTX-PEST 2 ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1242 L1	0.10	1	7.14	229080	MEAN
		2	8.00	399610	
		3	9.36	310390	
		4	9.73	174990	
		5	10.30	176630	
Aroclor 1242 L2	0.20	1	7.13	194075	MEAN
		2	7.99	348540	
		3	9.34	284805	
		4	9.72	157860	
		5	10.29	161120	
Aroclor 1242 L3	0.40	1	7.12	177158	MEAN
		2	7.99	327478	
		3	9.33	270253	
		4	9.71	152128	
		5	10.28	159778	
Aroclor 1242 L4	0.80	1	7.11	169014	MEAN
		2	7.98	304746	
		3	9.30	310601	
		4	9.70	143469	
		5	10.27	155915	
Aroclor 1242 L5	1.60	1	7.10	164506	MEAN
		2	7.97	292005	
		3	9.28	290879	
		4	9.69	137588	
		5	10.26	159944	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1242 MEAN	1	7.11	7.06	7.16	186766	14.0
	2	7.99	7.94	8.04	334476	12.7
	3	9.32	9.27	9.37	293386	5.9
	4	9.71	9.66	9.76	153207	9.4
	5	10.28	10.23	10.33	162677	4.9

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Instrument ID: HP_16B Date(s) Analyzed: 09/11/01 09/11/01

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

GC Column: RTX-PEST ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1242 L1	0.10	1	7.64	417700	MEAN
		2	8.08	259810	
		3	8.99	386020	
		4	9.41	233920	
		5	10.34	106840	
Aroclor 1242 L2	0.20	1	7.63	383175	MEAN
		2	8.08	247855	
		3	8.99	335600	
		4	9.41	204480	
		5	10.33	83685	
Aroclor 1242 L3	0.40	1	7.63	361013	MEAN
		2	8.08	243630	
		3	8.99	316068	
		4	9.40	181053	
		5	10.33	102885	
Aroclor 1242 L4	0.80	1	7.62	346484	MEAN
		2	8.07	256186	
		3	8.99	279989	
		4	9.40	168558	
		5	10.32	109284	
Aroclor 1242 L5	1.60	1	7.61	342332	MEAN
		2	8.06	267231	
		3	8.98	266584	
		4	9.39	162638	
		5	10.32	110989	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1242 MEAN	1	7.62	7.57	7.67	370141	8.4
	2	8.07	8.02	8.12	254943	3.7
	3	8.99	8.94	9.04	316852	15.0
	4	9.40	9.35	9.45	190130	15.4
	5	10.33	10.28	10.38	102737	10.8

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Instrument ID: HP_16A Date(s) Analyzed: 09/11/01 09/11/01

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

GC Column: RTX-PEST 2 ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1254 L1	0.10	1	11.16	421700	MEAN
		2	11.60	383210	
		3	12.57	722340	
		4	12.91	343840	
		5	13.36	355210	
Aroclor 1254 L2	0.20	1	11.15	480780	MEAN
		2	11.58	431400	
		3	12.55	644880	
		4	12.90	406885	
		5	13.35	430570	
Aroclor 1254 L3	0.40	1	11.15	304410	MEAN
		2	11.58	271418	
		3	12.54	410240	
		4	12.90	260653	
		5	13.34	276545	
Aroclor 1254 L4	0.80	1	11.14	400184	MEAN
		2	11.55	347484	
		3	12.52	541973	
		4	12.88	328251	
		5	13.32	360825	
Aroclor 1254 L5	1.60	1	11.13	419044	MEAN
		2	11.54	343576	
		3	12.50	547561	
		4	12.88	311757	
		5	13.31	356749	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1254 MEAN	1	11.14	11.09	11.19	405224	15.8
	2	11.57	11.52	11.62	355418	16.5
	3	12.54	12.49	12.59	573399	20.6
	4	12.89	12.84	12.94	330277	16.1
	5	13.34	13.29	13.39	355980	15.3

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Instrument ID: HP_16B Date(s) Analyzed: 09/11/01 09/11/01

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

GC Column: RTX-PEST ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1254 L1	0.10	1	10.63	344990	MEAN
		2	11.21	410680	
		3	11.79	232600	
		4	12.38	314380	
		5	12.99	558950	
Aroclor 1254 L2	0.20	1	10.62	378450	MEAN
		2	11.19	437600	
		3	11.79	286360	
		4	12.38	383705	
		5	12.98	663795	
Aroclor 1254 L3	0.40	1	10.62	236778	MEAN
		2	11.19	280680	
		3	11.78	194600	
		4	12.38	249108	
		5	12.98	421203	
Aroclor 1254 L4	0.80	1	10.61	302796	MEAN
		2	11.18	371364	
		3	11.77	282454	
		4	12.37	324899	
		5	12.97	553518	
Aroclor 1254 L5	1.60	1	10.61	301492	MEAN
		2	11.17	375074	
		3	11.76	297896	
		4	12.37	314563	
		5	12.96	541123	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1254 MEAN	1	10.61	10.56	10.66	312901	17.0
	2	11.19	11.14	11.24	375080	15.8
	3	11.78	11.73	11.83	258782	16.9
	4	12.38	12.33	12.43	317331	15.1
	5	12.98	12.93	13.03	547718	15.7

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Instrument ID: HP_16A Date(s) Analyzed: 09/11/01 09/11/01

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

GC Column: RTX-PEST 2 ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1016 L1	0.10	1	8.01	416140	MEAN
		2	8.52	261710	
		3	9.56	230300	
		4	9.83	204370	
		5	10.60	286730	
Aroclor 1016 L2	0.20	1	8.00	475095	MEAN
		2	8.52	325290	
		3	9.56	277030	
		4	9.82	239700	
		5	10.59	356715	
Aroclor 1016 L3	0.40	1	7.99	368460	MEAN
		2	8.51	263050	
		3	9.55	214093	
		4	9.80	188208	
		5	10.58	284563	
Aroclor 1016 L4	0.80	1	7.98	357768	MEAN
		2	8.51	260041	
		3	9.54	219653	
		4	9.79	180840	
		5	10.56	281151	
Aroclor 1016 L5	1.60	1	7.97	361444	MEAN
		2	8.50	193254	
		3	9.53	239688	
		4	9.78	185614	
		5	10.54	292282	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1016 MEAN	1	7.98	7.93	8.03	395781	12.7
	2	8.51	8.46	8.56	260669	17.9
	3	9.55	9.50	9.60	236153	10.5
	4	9.80	9.75	9.85	199746	12.0
	5	10.57	10.52	10.62	300288	10.6

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Instrument ID: HP_16A Date(s) Analyzed: 09/11/01 09/11/01

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

GC Column: RTX-PEST 2 ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1260 L1	0.10	1	13.37	521830	MEAN
		2	13.64	468340	
		3	14.15	429540	
		4	14.66	321450	
		5	15.12	838590	
Aroclor 1260 L2	0.20	1	13.35	658330	MEAN
		2	13.64	586175	
		3	14.14	502305	
		4	14.66	408035	
		5	15.11	1049765	
Aroclor 1260 L3	0.40	1	13.33	536670	MEAN
		2	13.63	475070	
		3	14.13	367660	
		4	14.65	340153	
		5	15.08	806103	
Aroclor 1260 L4	0.80	1	13.32	525266	MEAN
		2	13.62	475629	
		3	14.12	370283	
		4	14.64	342770	
		5	15.08	695971	
Aroclor 1260 L5	1.60	1	13.30	544962	MEAN
		2	13.61	500279	
		3	14.12	371447	
		4	14.63	376142	
		5	15.06	767963	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1260 MEAN	1	13.32	13.27	13.37	557412	10.3
	2	13.63	13.58	13.68	501099	9.8
	3	14.13	14.08	14.18	408247	14.4
	4	14.65	14.60	14.70	357710	9.6
	5	15.09	15.04	15.14	831678	16.0

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Instrument ID: HP_16B Date(s) Analyzed: 09/11/01 09/11/01

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

GC Column: RTX-PEST ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1016 L1	0.10	1	7.64	424590	MEAN
		2	8.96	199480	
		3	9.42	243640	
		4	9.86	376720	
		5	10.63	240270	
Aroclor 1016 L2	0.20	1	7.64	489370	MEAN
		2	8.97	208680	
		3	9.41	259740	
		4	9.85	436335	
		5	10.63	308420	
Aroclor 1016 L3	0.40	1	7.63	399910	MEAN
		2	8.97	154210	
		3	9.41	208623	
		4	9.84	352808	
		5	10.62	270548	
Aroclor 1016 L4	0.80	1	7.62	402024	MEAN
		2	8.98	186790	
		3	9.40	197563	
		4	9.83	351261	
		5	10.62	276105	
Aroclor 1016 L5	1.60	1	7.60	414413	MEAN
		2	8.97	179235	
		3	9.38	200345	
		4	9.82	361871	
		5	10.61	278951	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1016 MEAN	1	7.62	7.57	7.67	426061	8.6
	2	8.97	8.92	9.02	185679	11.3
	3	9.40	9.35	9.45	221982	12.6
	4	9.84	9.79	9.89	375799	9.4
	5	10.62	10.57	10.67	274859	8.8

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Instrument ID: HP_16B Date(s) Analyzed: 09/11/01 09/11/01

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

GC Column: RTX-PEST ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1260 L1	0.10	1	12.39	578490	MEAN
		2	13.57	546990	
		3	14.18	327880	
		4	14.75	861240	
		5	15.33	437260	
Aroclor 1260 L2	0.20	1	12.38	659040	MEAN
		2	13.56	703195	
		3	14.17	416855	
		4	14.74	1060415	
		5	15.32	526140	
Aroclor 1260 L3	0.40	1	12.38	509970	MEAN
		2	13.55	602523	
		3	14.17	307708	
		4	14.73	855838	
		5	15.32	364438	
Aroclor 1260 L4	0.80	1	12.37	502728	MEAN
		2	13.54	635106	
		3	14.16	329978	
		4	14.72	903675	
		5	15.32	415954	
Aroclor 1260 L5	1.60	1	12.36	513362	MEAN
		2	13.52	727558	
		3	14.16	363371	
		4	14.71	988857	
		5	15.31	417209	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1260 MEAN	1	12.37	12.32	12.42	552718	12.1
	2	13.55	13.50	13.60	643074	11.5
	3	14.17	14.12	14.22	349158	12.3
	4	14.73	14.68	14.78	934005	9.5
	5	15.32	15.27	15.37	432200	13.7

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Instrument ID: HP_16A Date(s) Analyzed: 09/11/01 09/11/01

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

GC Column: RTX-PEST 2 ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1221	0.40	1	6.65	98305	SINGLE
		2	6.97	65388	POINT
		3	7.11	299185	
		4			
		5			
Aroclor 1232	0.40	1	7.98	217240	SINGLE
		2	8.51	113303	POINT
		3	9.03	300198	
		4	9.31	172743	
		5			
Aroclor 1248	0.40	1	9.71	240968	SINGLE
		2	9.80	237265	POINT
		3	10.27	277390	
		4	10.56	434973	
		5	11.57	187688	

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Instrument ID: HP_16B Date(s) Analyzed: 09/11/01 09/11/01

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

GC Column: RTX-PEST ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1221	0.40	1	6.48	74955	SINGLE
		2	6.83	35980	POINT
		3	6.90	330660	
		4			
		5			
Aroclor 1232	0.40	1	7.63	220203	SINGLE
		2	8.08	126843	POINT
		3	9.02	179313	
		4	9.41	179693	
		5			
Aroclor 1248	0.40	1	9.24	99030	SINGLE
		2	9.40	262758	POINT
		3	9.83	502305	
		4	10.10	522038	
		5	10.92	522990	

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

GC Column: RTX-PEST 2 ID: 0.32(mm) Init. Calib Date(s): 09/11/01 09/11/01

Client Sample No.(PIBLK): PIBLKCJ Date Analyzed : 09/16/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 1248

Client Sample No.: AR1660L3CO Date Analyzed : 09/16/01

Lab Sample ID : 5-210-7 Time Analyzed : 1314

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	7.96	7.93	8.03	375433	395781	5.1
Aroclor 1016 #2	8.48	8.46	8.56	199025	260669	23.6*
Aroclor 1016 #3	9.52	9.50	9.60	223090	236153	5.5
Aroclor 1016 #4	9.76	9.75	9.85	194215	199746	2.8
Aroclor 1016 #5	10.52	10.52	10.62	289115	300288	3.7
Aroclor 1260 #1	13.29	13.27	13.37	527238	557412	5.4
Aroclor 1260 #2	13.60	13.58	13.68	482835	501099	3.6
Aroclor 1260 #3	14.10	14.08	14.18	377070	408247	7.6
Aroclor 1260 #4	14.62	14.60	14.70	351830	357710	1.6
Aroclor 1260 #5	15.05	15.04	15.14	701345	831678	15.7*

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

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

GC Column: RTX-PEST ID: 0.32(mm) Init. Calib Date(s): 09/11/01 09/11/01

Client Sample No.(PIBLK): PIBLKCJ Date Analyzed : 09/16/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 1248

Client Sample No.: AR1660L3CO Date Analyzed : 09/16/01

Lab Sample ID : 5-210-7 Time Analyzed : 1314

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	7.60	7.57	7.67	422018	426061	0.9
Aroclor 1016 #2	8.95	8.92	9.02	179480	185679	3.3
Aroclor 1016 #3	9.37	9.35	9.45	214420	221982	3.4
Aroclor 1016 #4	9.80	9.79	9.89	361610	375799	3.8
Aroclor 1016 #5	10.60	10.57	10.67	284708	274859	3.6
Aroclor 1260 #1	12.35	12.32	12.42	524218	552718	5.2
Aroclor 1260 #2	13.51	13.50	13.60	670710	643074	4.3
Aroclor 1260 #3	14.15	14.12	14.22	346233	349158	0.8
Aroclor 1260 #4	14.70	14.68	14.78	861365	934005	7.8
Aroclor 1260 #5	15.30	15.27	15.37	339888	432200	21.4*

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

FORM VII PCB

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

GC Column: RTX-PEST 2 ID: 0.32(mm) Init. Calib Date(s): 09/11/01 09/11/01

Client Sample No.(PIBLK): PIBLKCK Date Analyzed : 09/16/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 2017

Client Sample No.: AR1660L3CP Date Analyzed : 09/16/01

Lab Sample ID : 5-210-7 Time Analyzed : 2043

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	7.96	7.93	8.03	359955	395781	9.1
Aroclor 1016 #2	8.48	8.46	8.56	192418	260669	26.2*
Aroclor 1016 #3	9.51	9.50	9.60	214140	236153	9.3
Aroclor 1016 #4	9.76	9.75	9.85	187005	199746	6.4
Aroclor 1016 #5	10.52	10.52	10.62	279565	300288	6.9
Aroclor 1260 #1	13.29	13.27	13.37	510223	557412	8.5
Aroclor 1260 #2	13.59	13.58	13.68	465963	501099	7.0
Aroclor 1260 #3	14.10	14.08	14.18	368383	408247	9.8
Aroclor 1260 #4	14.62	14.60	14.70	340855	357710	4.7
Aroclor 1260 #5	15.05	15.04	15.14	683570	831678	17.8*

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

FORM VII PCB

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

GC Column: RTX-PEST ID: 0.32(mm) Init. Calib Date(s): 09/11/01 09/11/01

Client Sample No.(PIBLK): PIBLKCK Date Analyzed : 09/16/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 2017

Client Sample No.: AR1660L3CP Date Analyzed : 09/16/01

Lab Sample ID : 5-210-7 Time Analyzed : 2043

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	7.60	7.57	7.67	399353	426061	6.3
Aroclor 1016 #2	8.95	8.92	9.02	176520	185679	4.9
Aroclor 1016 #3	9.37	9.35	9.45	205690	221982	7.3
Aroclor 1016 #4	9.80	9.79	9.89	349240	375799	7.1
Aroclor 1016 #5	10.59	10.57	10.67	267023	274859	2.9
Aroclor 1260 #1	12.35	12.32	12.42	506830	552718	8.3
Aroclor 1260 #2	13.51	13.50	13.60	639033	643074	0.6
Aroclor 1260 #3	14.14	14.12	14.22	332313	349158	4.8
Aroclor 1260 #4	14.70	14.68	14.78	827850	934005	11.4
Aroclor 1260 #5	15.30	15.27	15.37	333230	432200	22.9*

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: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

GC Column: RTX-PEST 2 ID: 0.32(mm) Init. Calib Date(s): 09/11/01 09/11/01

Client Sample No.(PIBLK): PIBLKCL Date Analyzed : 09/17/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 0320

Client Sample No.: AR1660L3CR Date Analyzed : 09/17/01

Lab Sample ID : 5-210-7 Time Analyzed : 0346

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	7.97	7.93	8.03	408040	395781	3.1
Aroclor 1016 #2	8.49	8.46	8.56	287048	260669	10.1
Aroclor 1016 #3	9.52	9.50	9.60	231500	236153	2.0
Aroclor 1016 #4	9.77	9.75	9.85	215320	199746	7.8
Aroclor 1016 #5	10.52	10.52	10.62	316208	300288	5.3
Aroclor 1260 #1	13.29	13.27	13.37	581880	557412	4.4
Aroclor 1260 #2	13.60	13.58	13.68	536930	501099	7.2
Aroclor 1260 #3	14.10	14.08	14.18	418620	408247	2.5
Aroclor 1260 #4	14.62	14.60	14.70	391005	357710	9.3
Aroclor 1260 #5	15.06	15.04	15.14	908883	831678	9.3

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

FORM VII PCB

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

GC Column: RTX-PEST ID: 0.32(mm) Init. Calib Date(s): 09/11/01 09/11/01

Client Sample No.(PIBLK): PIBLKCL Date Analyzed : 09/17/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 0320

Client Sample No.: AR1660L3CR Date Analyzed : 09/17/01

Lab Sample ID : 5-210-7 Time Analyzed : 0346

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	7.60	7.57	7.67	450728	426061	5.8
Aroclor 1016 #2	8.95	8.92	9.02	217060	185679	16.9*
Aroclor 1016 #3	9.37	9.35	9.45	234530	221982	5.7
Aroclor 1016 #4	9.81	9.79	9.89	396785	375799	5.6
Aroclor 1016 #5	10.60	10.57	10.67	307070	274859	11.7
Aroclor 1260 #1	12.35	12.32	12.42	576418	552718	4.3
Aroclor 1260 #2	13.52	13.50	13.60	717995	643074	11.7
Aroclor 1260 #3	14.15	14.12	14.22	375908	349158	7.7
Aroclor 1260 #4	14.70	14.68	14.78	942625	934005	0.9
Aroclor 1260 #5	15.30	15.27	15.37	387633	432200	10.3

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

FORM VII PCB

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

GC Column: RTX-PEST 2 ID: 0.32(mm) Init. Calib Date(s): 09/11/01 09/11/01

Client Sample No.(PIBLK): PIBLKCM Date Analyzed : 09/17/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 0930

Client Sample No.: AR1660L3CT Date Analyzed : 09/17/01

Lab Sample ID : 5-210-7 Time Analyzed : 0956

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	7.96	7.93	8.03	376608	395781	4.8
Aroclor 1016 #2	8.48	8.46	8.56	208835	260669	19.9*
Aroclor 1016 #3	9.52	9.50	9.60	216335	236153	8.4
Aroclor 1016 #4	9.76	9.75	9.85	196193	199746	1.8
Aroclor 1016 #5	10.52	10.52	10.62	294410	300288	2.0
Aroclor 1260 #1	13.29	13.27	13.37	526090	557412	5.6
Aroclor 1260 #2	13.60	13.58	13.68	485955	501099	3.0
Aroclor 1260 #3	14.10	14.08	14.18	386960	408247	5.2
Aroclor 1260 #4	14.62	14.60	14.70	351758	357710	1.7
Aroclor 1260 #5	15.05	15.04	15.14	701715	831678	15.6*

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

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

GC Column: RTX-PEST ID: 0.32(mm) Init. Calib Date(s): 09/11/01 09/11/01

Client Sample No.(PIBLK): PIBLKCM Date Analyzed : 09/17/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 0930

Client Sample No.: AR1660L3CT Date Analyzed : 09/17/01

Lab Sample ID : 5-210-7 Time Analyzed : 0956

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	7.60	7.57	7.67	417670	426061	2.0
Aroclor 1016 #2	8.95	8.92	9.02	204570	185679	10.2
Aroclor 1016 #3	9.37	9.35	9.45	217313	221982	2.1
Aroclor 1016 #4	9.81	9.79	9.89	366878	375799	2.4
Aroclor 1016 #5	10.59	10.57	10.67	287328	274859	4.5
Aroclor 1260 #1	12.35	12.32	12.42	529705	552718	4.2
Aroclor 1260 #2	13.52	13.50	13.60	645163	643074	0.3
Aroclor 1260 #3	14.14	14.12	14.22	342950	349158	1.8
Aroclor 1260 #4	14.70	14.68	14.78	861893	934005	7.7
Aroclor 1260 #5	15.30	15.27	15.37	360915	432200	16.5*

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

FORM VII PCB

8D
AROCLOR ANALYTICAL SEQUENCE

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SAS No.: SDG No.: E03A9

GC Column: RTX-PEST 2 ID: 0.32(mm) Init. Calib. Date(s): 09/11/01

Instrument ID: HP_16A

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	RESCCI	5-171-7	09/11/01	1151	5.96	17.60
02	AR1221L3CI	5-420-6	09/11/01	1218	5.96	17.60
03	AR1232L3CI	5-422-6	09/11/01	1315	5.95	17.59
04	AR1242L1CI	5-11-7	09/11/01	1341	5.96	17.60
05	AR1242L2CI	5-10-7	09/11/01	1408	5.96	17.59
06	AR1242L3CI	5-9-7	09/11/01	1434	5.96	17.59
07	AR1242L4CI	5-8-7	09/11/01	1501	5.96	17.59
08	AR1242L5CI	5-7-7	09/11/01	1528	5.95	17.59
09	AR1248L3CI	5-424-6	09/11/01	1555	5.96	17.59
10	AR1254L1CI	5-6-7	09/11/01	1621	5.96	17.60
11	AR1254L2CI	5-5-7	09/11/01	1648	5.96	17.59
12	AR1254L3CI	5-4-7	09/11/01	1714	5.96	17.60
13	AR1254L4CI	5-3-7	09/11/01	1741	5.95	17.59
14	AR1254L5CI	5-2-7	09/11/01	1807	5.95	17.59
15	AR1660L1CI	5-212-7	09/11/01	1834	5.96	17.60
16	AR1660L2CI	5-211-7	09/11/01	1900	5.96	17.60
17	AR1660L3CN	5-210-7	09/11/01	1927	5.96	17.59
18	AR1660L4CI	5-209-7	09/11/01	1953	5.95	17.59
19	AR1660L5CI	5-208-7	09/11/01	2019	5.95	17.58
20	PIBLKCW	5-131-7	09/11/01	2046	5.96	17.59
21	PIBLKCJ	5-131-7	09/16/01	1248	5.94	17.57
22	AR1660L3CO	5-210-7	09/16/01	1314	5.94	17.56
23	PBLKSB	BL0822SB	09/16/01	1500	5.94	17.56
24	ELCS1	LC0822SB	09/16/01	1553	5.94	17.56
25	ELCS2	LD0822SB	09/16/01	1619	5.94	17.56
26	E03A9	47347.01	09/16/01	1712	5.94	17.56
27	E03A9MS	47347.02MS	09/16/01	1738	5.94	17.56
28	E03A9MSD	47347.03MSD	09/16/01	1805	5.94	17.56
29	E03B0	47347.04	09/16/01	1831	5.93	17.55
30	PIBLKCK	5-131-7	09/16/01	2017	5.94	17.56
31	AR1660L3CP	5-210-7	09/16/01	2043	5.94	17.56
32	E03B1	47347.05	09/16/01	2136	5.93	17.55
33	E03B2	47347.06	09/16/01	2203	5.93	17.55
34	E03B3	47347.07	09/16/01	2229	5.93	17.55
35	E03B4	47347.08	09/16/01	2256	5.94	17.55

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

8D
AROCLOR ANALYTICAL SEQUENCE

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SAS No.: SDG No.: E03A9

GC Column: RTX-PEST 2 ID: 0.32(mm) Init. Calib. Date(s): 09/11/01

Instrument ID: HP_16A

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	E03B5	47347.09	09/16/01	2322	5.94	17.56
02	E03B6	47347.10	09/16/01	2349	5.94	17.56
03	E03B7	47347.11	09/17/01	0015	5.94	17.56
04	E03B8	47347.12	09/17/01	0041	5.94	17.56
05	E03B9	47347.13	09/17/01	0108	5.94	17.56
06	E03C0	47347.14	09/17/01	0134	5.94	17.56
07	PIBLKCL	5-131-7	09/17/01	0320	5.94	17.56
08	AR1660L3CR	5-210-7	09/17/01	0346	5.94	17.56
09	E03C1	47347.15	09/17/01	0439	5.94	17.56
10	E03C2	47347.16	09/17/01	0506	5.94	17.56
11	E03C3	47347.17	09/17/01	0532	5.94	17.56
12	E03C4	47347.18	09/17/01	0559	5.94	17.55
13	E03C5	47347.19	09/17/01	0625	5.94	17.56
14	E03C6	47347.20	09/17/01	0651	5.94	17.55
15	E03C7	47347.21	09/17/01	0718	5.94	17.55
16	E03C8	47347.22	09/17/01	0744	5.94	17.55
17	PIBLKCM	5-131-7	09/17/01	0930	5.94	17.56
18	AR1660L3CT	5-210-7	09/17/01	0956	5.94	17.56
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						

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

8D
AROCLOR ANALYTICAL SEQUENCE

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SAS No.: SDG No.: E03A9

GC Column: RTX-PEST ID: 0.32(mm) Init. Calib. Date(s): 09/11/01

Instrument ID: HP_16B

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	RESCCI	5-171-7	09/11/01	1151	5.96	16.96
02	AR1221L3CI	5-420-6	09/11/01	1218	5.97	16.96
03	AR1232L3CI	5-422-6	09/11/01	1315	5.97	16.96
04	AR1242L1CI	5-11-7	09/11/01	1341	5.98	16.97
05	AR1242L2CI	5-10-7	09/11/01	1408	5.97	16.96
06	AR1242L3CI	5-9-7	09/11/01	1434	5.97	16.96
07	AR1242L4CI	5-8-7	09/11/01	1501	5.97	16.96
08	AR1242L5CI	5-7-7	09/11/01	1528	5.96	16.95
09	AR1248L3CI	5-424-6	09/11/01	1555	5.97	16.96
10	AR1254L1CI	5-6-7	09/11/01	1621	5.98	16.96
11	AR1254L2CI	5-5-7	09/11/01	1648	5.97	16.96
12	AR1254L3CI	5-4-7	09/11/01	1714	5.97	16.96
13	AR1254L4CI	5-3-7	09/11/01	1741	5.96	16.95
14	AR1254L5CI	5-2-7	09/11/01	1807	5.96	16.95
15	AR1660L1CI	5-212-7	09/11/01	1834	5.98	16.96
16	AR1660L2CI	5-211-7	09/11/01	1900	5.98	16.96
17	AR1660L3CN	5-210-7	09/11/01	1927	5.97	16.95
18	AR1660L4CI	5-209-7	09/11/01	1953	5.97	16.95
19	AR1660L5CI	5-208-7	09/11/01	2019	5.96	16.95
20	PIBLKCW	5-131-7	09/11/01	2046	5.97	16.95
21	PIBLKCJ	5-131-7	09/16/01	1248	5.95	16.94
22	AR1660L3CO	5-210-7	09/16/01	1314	5.95	16.94
23	PBLKSB	BL0822SB	09/16/01	1500	5.95	16.94
24	ELCS1	LC0822SB	09/16/01	1553	5.95	16.94
25	ELCS2	LD0822SB	09/16/01	1619	5.95	16.94
26	E03A9	47347.01	09/16/01	1712	5.94	16.93
27	E03A9MS	47347.02MS	09/16/01	1738	5.95	16.94
28	E03A9MSD	47347.03MSD	09/16/01	1805	5.95	16.94
29	E03B0	47347.04	09/16/01	1831	5.94	16.93
30	PIBLKCK	5-131-7	09/16/01	2017	5.95	16.94
31	AR1660L3CP	5-210-7	09/16/01	2043	5.95	16.94
32	E03B1	47347.05	09/16/01	2136	5.94	16.93
33	E03B2	47347.06	09/16/01	2203	5.94	16.93
34	E03B3	47347.07	09/16/01	2229	5.94	16.93
35	E03B4	47347.08	09/16/01	2256	5.94	16.93

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

8D
AROCLOR ANALYTICAL SEQUENCE

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SAS No.: SDG No.: E03A9

GC Column: RTX-PEST ID: 0.32(mm) Init. Calib. Date(s): 09/11/01

Instrument ID: HP_16B

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	E03B5	47347.09	09/16/01	2322	5.95	16.93
02	E03B6	47347.10	09/16/01	2349	5.95	16.93
03	E03B7	47347.11	09/17/01	0015	5.95	16.93
04	E03B8	47347.12	09/17/01	0041	5.95	16.93
05	E03B9	47347.13	09/17/01	0108	5.95	16.93
06	E03C0	47347.14	09/17/01	0134	5.95	16.93
07	PIBLKCL	5-131-7	09/17/01	0320	5.95	16.94
08	AR1660L3CR	5-210-7	09/17/01	0346	5.95	16.94
09	E03C1	47347.15	09/17/01	0439	5.95	16.94
10	E03C2	47347.16	09/17/01	0506	5.95	16.93
11	E03C3	47347.17	09/17/01	0532	5.95	16.93
12	E03C4	47347.18	09/17/01	0559	5.95	16.93
13	E03C5	47347.19	09/17/01	0625	5.95	16.93
14	E03C6	47347.20	09/17/01	0651	5.95	16.93
15	E03C7	47347.21	09/17/01	0718	5.95	16.93
16	E03C8	47347.22	09/17/01	0744	5.95	16.93
17	PIBLKCM	5-131-7	09/17/01	0930	5.95	16.94
18	AR1660L3CT	5-210-7	09/17/01	0956	5.95	16.93
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						

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

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

ELCS1

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Lab Sample ID: LC0822SB Date(s) Analyzed: 09/16/01 09/16/01

Instrument ID (1): HP_16A Instrument ID (2): HP_16B

GC Column (1): RTX-PEST 2 ID: 0.32(mm) GC Column (2): RTX-PEST ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	11.11	11.09	11.19	131		
Aroclor-1254	2	11.52	11.52	11.62	151		
	3	12.48	12.49	12.59	124		
COLUMN 1	4	12.85	12.84	12.94	125		
	5	13.28	13.29	13.39	132	130	
	1	10.59	10.56	10.66	135		
	2	11.16	11.14	11.24	134		
	3	11.74	11.73	11.83	144		
COLUMN 2	4	12.35	12.33	12.43	128		
	5	12.94	12.93	13.03	131	130	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.

ELCS2

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Lab Sample ID: LD0822SB Date(s) Analyzed: 09/16/01 09/16/01

Instrument ID (1): HP_16A Instrument ID (2): HP_16B

GC Column (1): RTX-PEST 2 ID: 0.32(mm) GC Column (2): RTX-PEST ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	11.11	11.09	11.19	106		
Aroclor-1254	2	11.52	11.52	11.62	123		
	3	12.48	12.49	12.59	99.5		
COLUMN 1	4	12.85	12.84	12.94	102		
	5	13.29	13.29	13.39	108	110	
	1	10.59	10.56	10.66	109		
	2	11.16	11.14	11.24	108		
	3	11.74	11.73	11.83	175		
COLUMN 2	4	12.35	12.33	12.43	103		
	5	12.94	12.93	13.03	106	120	9.1
	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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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03A9

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Lab Sample ID: 47347.01 Date(s) Analyzed: 09/16/01 09/16/01

Instrument ID (1): HP_16A Instrument ID (2): HP_16B

GC Column (1): RTX-PEST 2 ID: 0.32(mm) GC Column (2): RTX-PEST ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1						
Aroclor-1242	2						
	3	9.39	9.27	9.37	3.3		
COLUMN 1	4	9.68	9.66	9.76	17.6		
	5	10.24	10.23	10.33	15.9	12	
	1						
	2						
	3	8.99	8.94	9.04	7.5		
COLUMN 2	4	9.37	9.35	9.45	21.2		
	5	10.34	10.28	10.38	3.3	11	9.1
	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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FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03A9MS

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Lab Sample ID: 47347.02MS Date(s) Analyzed: 09/16/01 09/16/01

Instrument ID (1): HP_16A Instrument ID (2): HP_16B

GC Column (1): RTX-PEST 2 ID: 0.32(mm) GC Column (2): RTX-PEST ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	7.12	7.06	7.16	3.2		
Aroclor-1242	2	7.97	7.94	8.04	7.2		
	3	9.38	9.27	9.37	2.7		
COLUMN 1	4						
	5					4.4	
	1	7.60	7.57	7.67	3.0		
	2	8.06	8.02	8.12	1.4		
	3	8.99	8.94	9.04	8.9		
COLUMN 2	4						
	5					4.4	0.0
	1	11.11	11.09	11.19	145		
Aroclor-1254	2	11.52	11.52	11.62	177		
	3	12.48	12.49	12.59	134		
COLUMN 1	4	12.85	12.84	12.94	136		
	5	13.29	13.29	13.39	143	150	
	1	10.59	10.56	10.66	148		
	2	11.16	11.14	11.24	148		
	3	11.74	11.73	11.83	142		
COLUMN 2	4	12.35	12.33	12.43	132		
	5	12.94	12.93	13.03	140	140	7.1
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

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FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03A9MSD

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Lab Sample ID: 47347.03MSD Date(s) Analyzed: 09/16/01 09/16/01

Instrument ID (1): HP_16A Instrument ID (2): HP_16B

GC Column (1): RTX-PEST 2 ID: 0.32(mm) GC Column (2): RTX-PEST ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
Aroclor-1242 COLUMN 1	1	7.12	7.06	7.16	1.7		
	2	7.97	7.94	8.04	6.6		
	3	9.38	9.27	9.37	2.1		
	4						
	5					3.5	
COLUMN 2	1	7.60	7.57	7.67	3.4		
	2	8.04	8.02	8.12	2.2		
	3	8.99	8.94	9.04	6.3		
	4						
	5	10.30	10.28	10.38	18.1	7.5	114
Aroclor-1254 COLUMN 1	1	11.11	11.09	11.19	153		
	2	11.52	11.52	11.62	179		
	3	12.48	12.49	12.59	141		
	4	12.85	12.84	12.94	143		
	5	13.29	13.29	13.39	150	150	
COLUMN 2	1	10.59	10.56	10.66	156		
	2	11.16	11.14	11.24	153		
	3	11.74	11.73	11.83	158		
	4	12.35	12.33	12.43	143		
	5	12.94	12.93	13.03	148	150	0.0
_____ COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

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FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E03B0

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Lab Sample ID: 47347.04 Date(s) Analyzed: 09/16/01 09/16/01

Instrument ID (1): HP_16A Instrument ID (2): HP_16B

GC Column (1): RTX-PEST 2 ID: 0.32(mm) GC Column (2): RTX-PEST ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
Aroclor-1254 COLUMN 1	1	11.14	11.09	11.19	6.8		
	2						
	3	12.54	12.49	12.59	10.1		
	4	12.84	12.84	12.94	2.5		
	5					6.5	
COLUMN 2	1						
	2	11.14	11.14	11.24	13.2		
	3	11.81	11.73	11.83	30.8		
	4						
	5	13.02	12.93	13.03	8.1	17	162
_____ COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						
_____ COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

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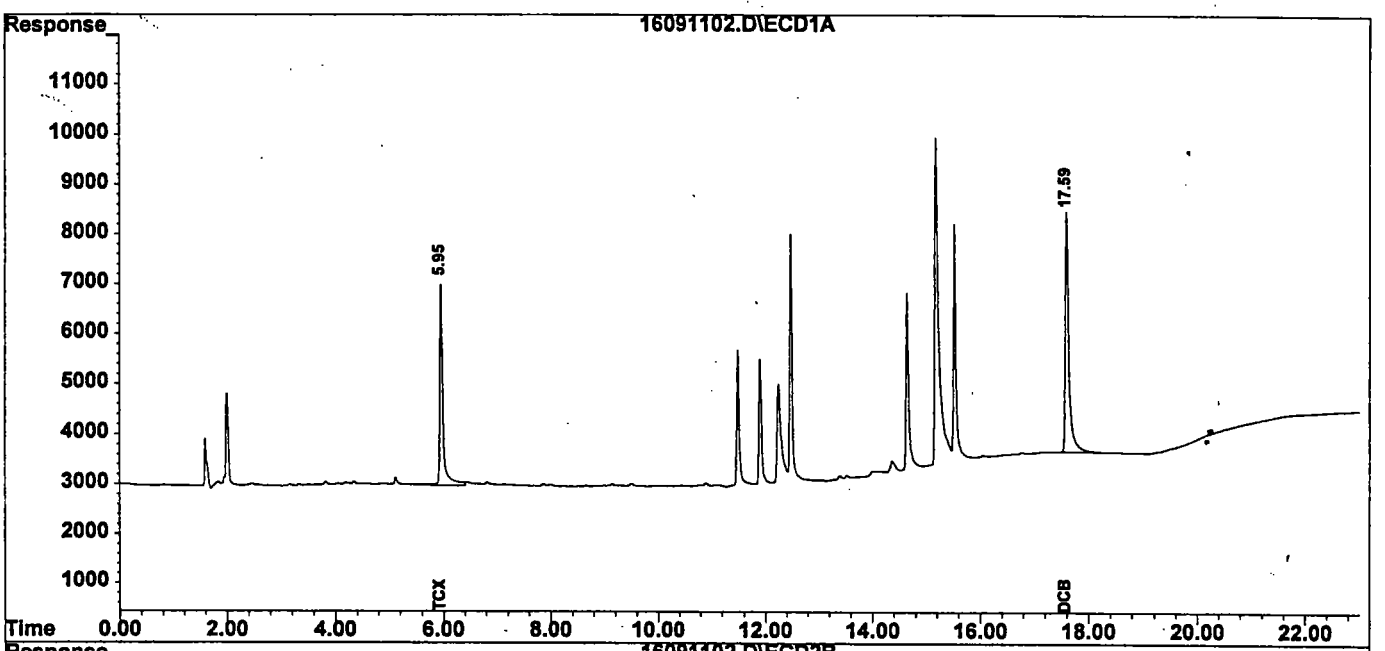
FORM X PCB

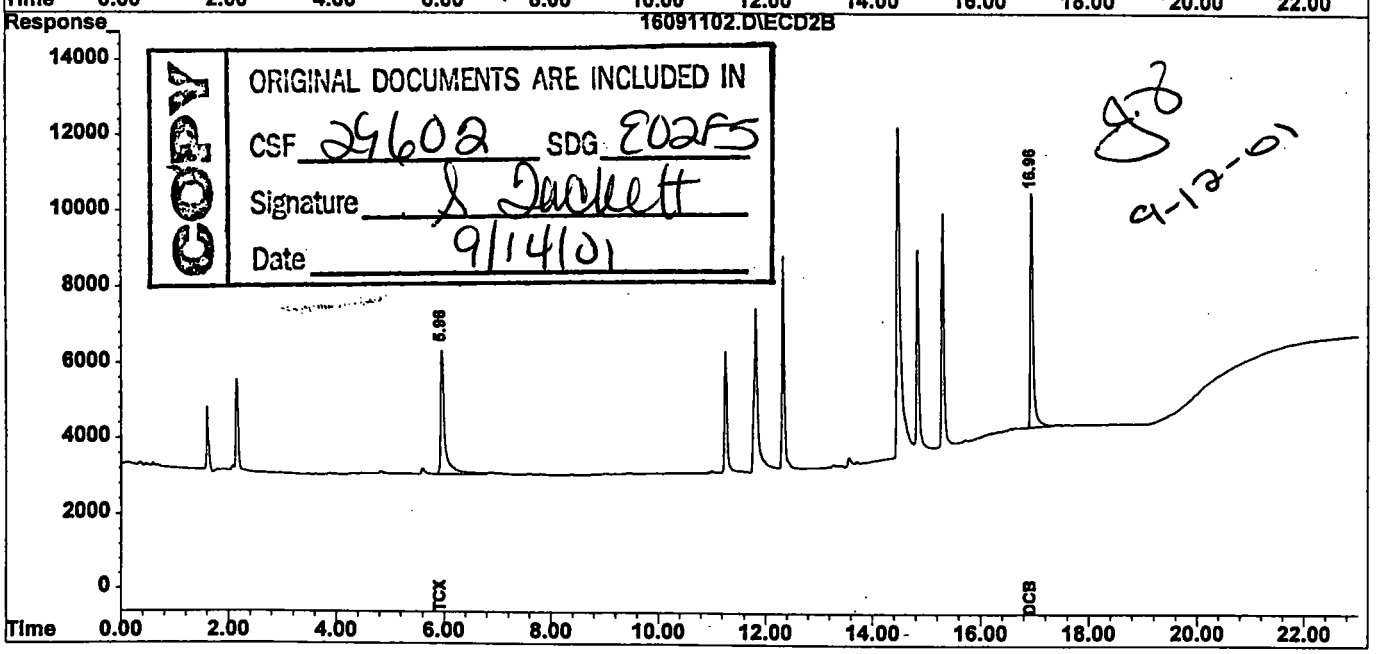
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091102.D\ECD1A.CH Vial: 6
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091102.D\ECD2B.CH
Acq On : 11 Sep 2001 11:51 Operator: DDC
Sample : RESCCI Inst : HP_16
Misc : 5-171-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 12 10:56 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





COPY
ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29602 SDG E02F5
Signature S Jackett
Date 9/14/01

9-12-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091102.D\ECD1A.CH Vial: 6
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091102.D\ECD2B.CH
Acq On : 11 Sep 2001 11:51 Operator: DDC
Sample : RESCCI Inst : HP_16
Misc : 5-171-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 12 10:56 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.96	5.96	157415	170412	22.7	21.7
22)	S DCB	17.60	16.96	221193	227187	19.4	20.1
	Target Compounds:						

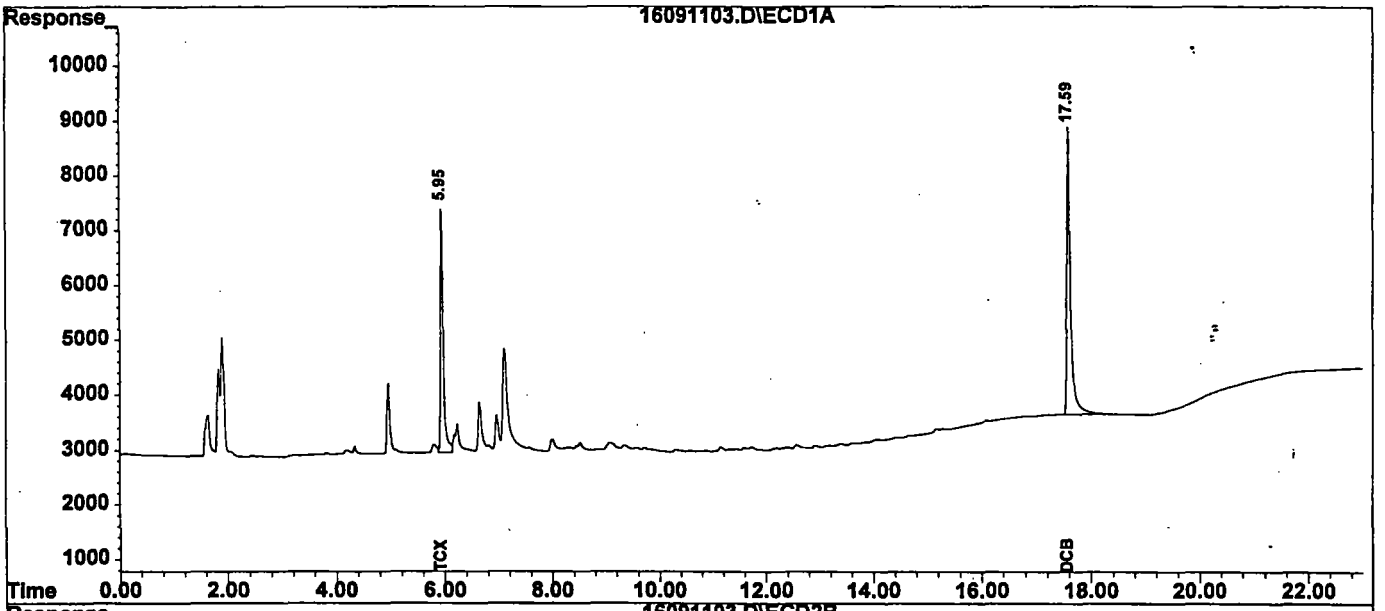
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

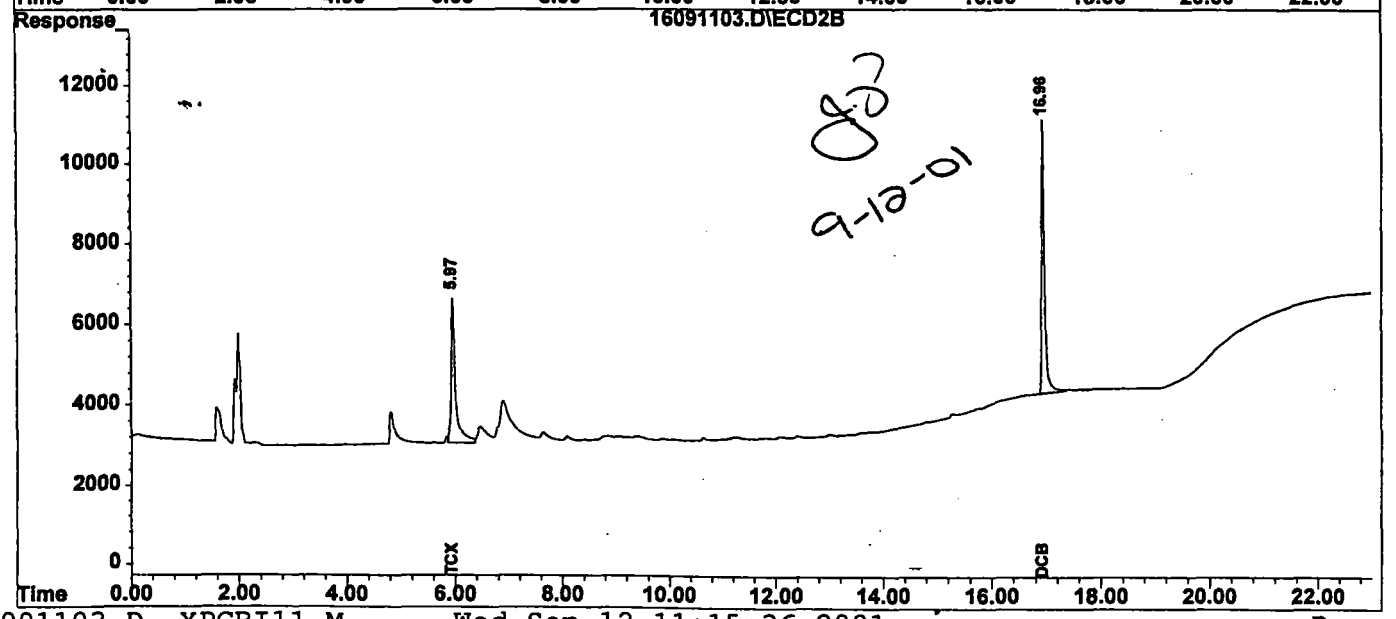
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091103.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091103.D\ECD2B.CH
Acq On : 11 Sep 2001 12:18 Operator: DDC
Sample : AR1221L3CI Inst : HP_16
Misc : 5-420-6 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 12 10:56 2001 Quant Results File: XPCBI11.RES
Quant Time: Sep 12 10:59 2001 Quant Results File: xspcbi11.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001

Multi-Component Method : f:\hpchem\hp\16\data\09_11_01\xspcbi11.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





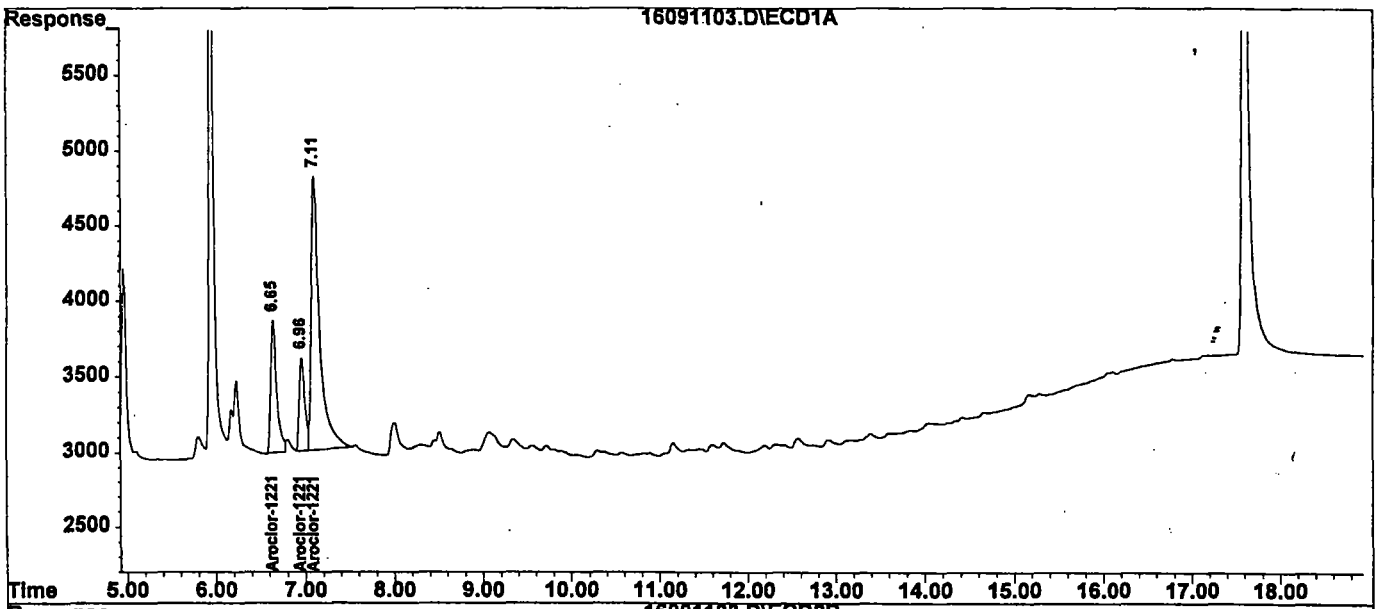
8?
9-12-01

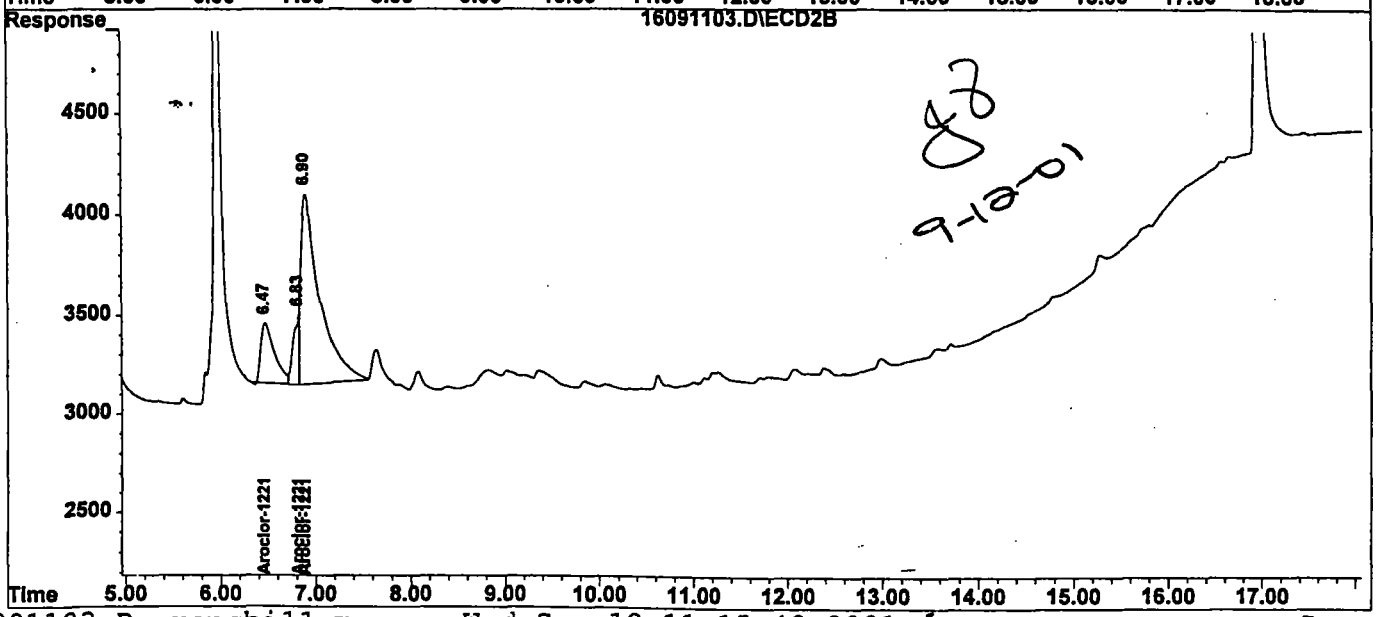
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091103.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091103.D\ECD2B.CH
Acq On : 11 Sep 2001 12:18 Operator: DDC
Sample : AR1221L3CI Inst : HP_16
Misc : 5-420-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 12 10:59 2001 Quant Results File: xspcbi11.RES
Quant Time: Sep 12 10:59 2001 Quant Results File: xspcbi11.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001

Multi-Component Method : f:\hpchem\hp\16\data\09_11_01\xspcbi11.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 Signal #2 Info : .32
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





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9-12-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091103.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091103.D\ECD2B.CH
Acq On : 11 Sep 2001 12:18 Operator: DDC
Sample : AR1221L3CI Inst : HP_16
Misc : 5-420-6 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 12 10:56 2001 Quant Results File: XPCBI11.RES
Multi Time: Sep 12 10:59 2001 Quant Results File: xspcbi11.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001

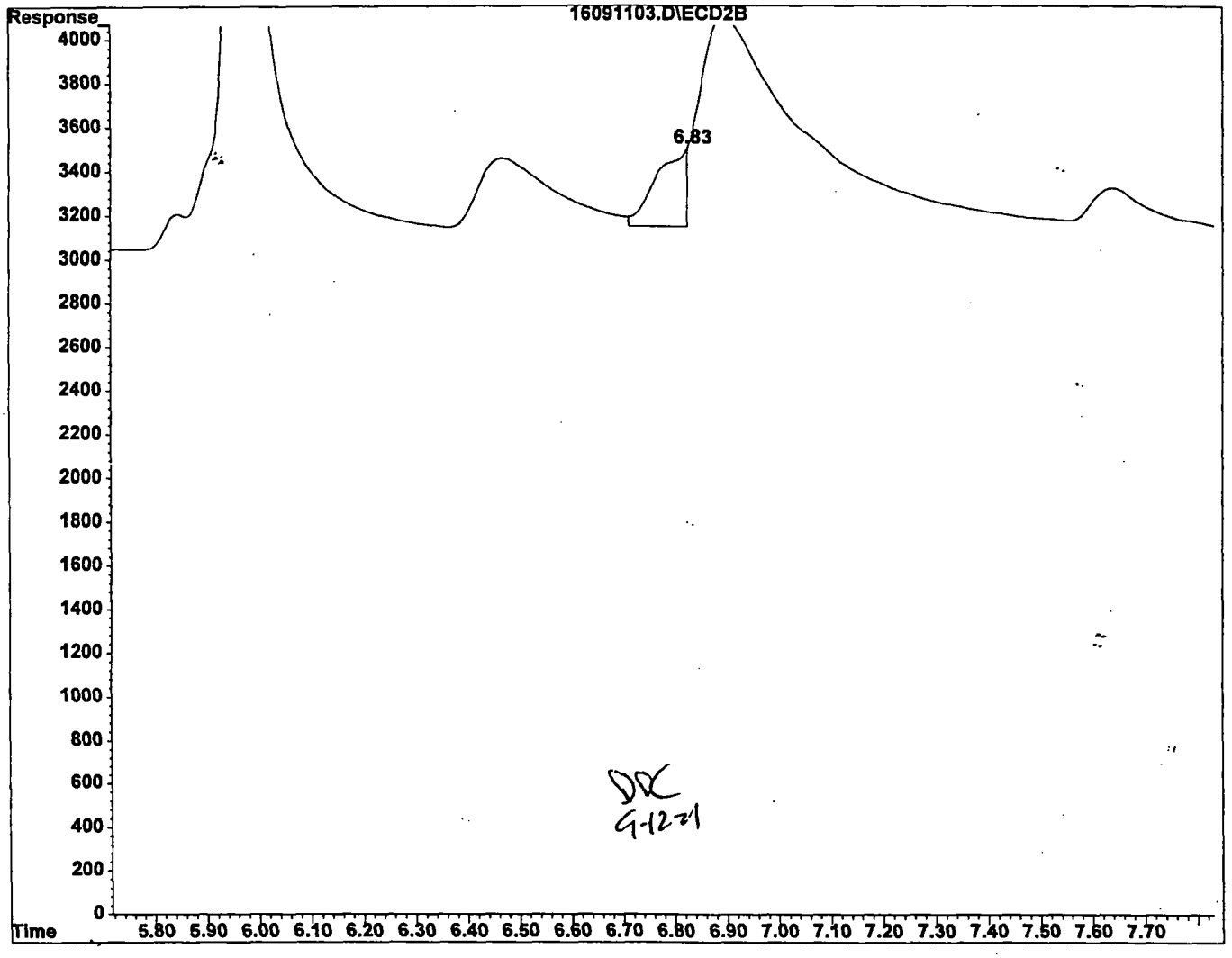
Multi-Component Method : f:\hpchem\hp\16\data\09_11_01\xspcbi11.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.96	5.97	158926	198579	22.9	25.3
22)	S DCB	17.60	16.96	246612	255803	21.6	22.7
	Target Compounds:						
	Multi-Component Compounds:						
2)	L2 Aroclor-1221	6.65f	6.48	39322	29982	419.4	398.3 DDC
3)	L2 Aroclor-1221 {2}	6.97f	6.83f	26155	14392	409.7	450.9m 9-12-01
4)	L2 Aroclor-1221 {3}	7.11f	6.90	119674	132264	437.6	431.9m
	Sum Aroclor-1221			185151	176638	1266.6	1281.2
	Average Aroclor-1221					422.213	427.053

(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\16\DATA\09_11_01\16091103.D
Date Acquired: 11 Sep 2001 12:18
Inst: HP_16 Operator ID: DDC
Name: AR1221L3CI
Misc: 5-420-6
Method: f:\hpchem\hp\16\data\09_11_01\xspcbi11.m
Title:
Quant Time: Sep 12 10:59 2001 Quant Results File: xspcbi11.RES



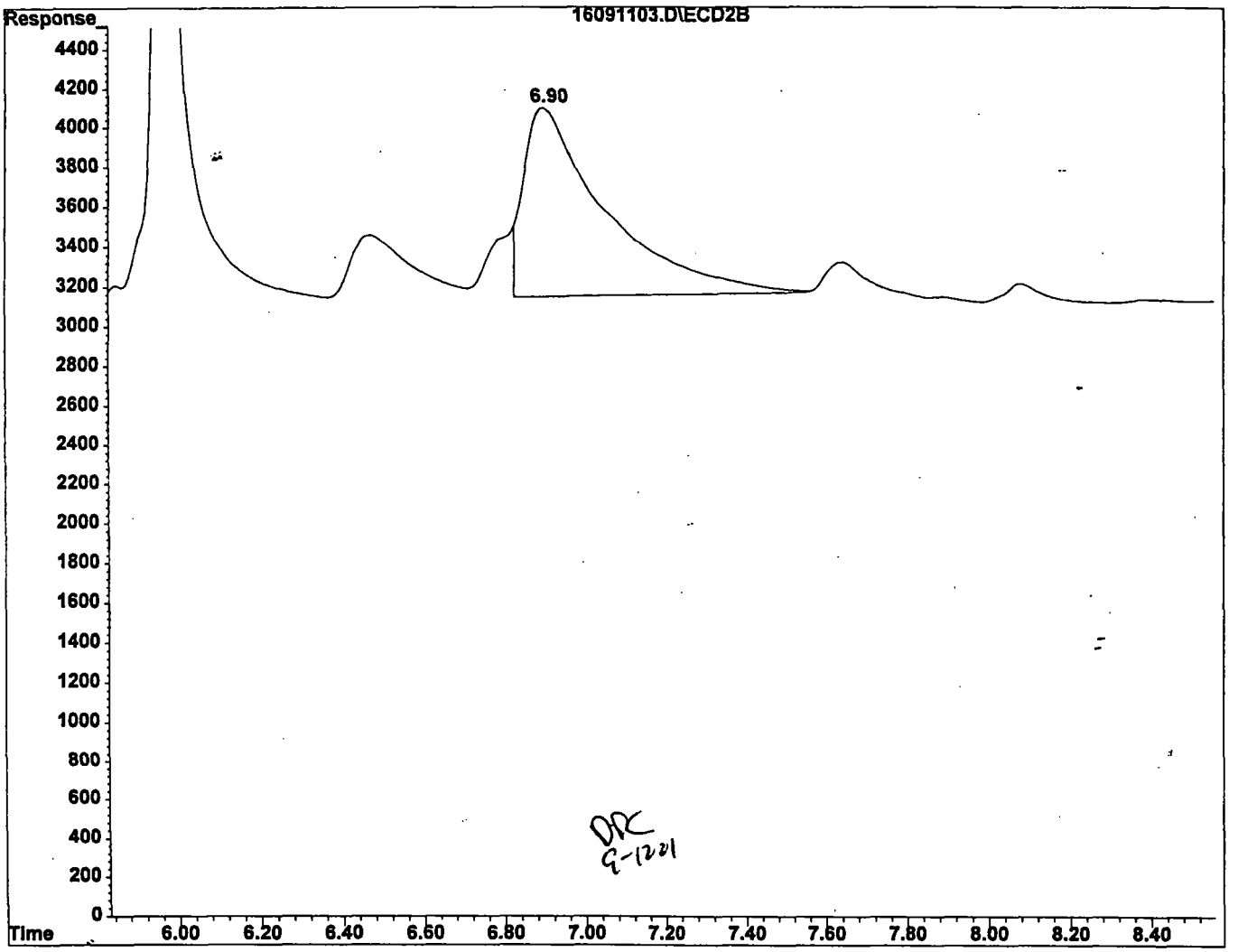
Aroclor-1221 {2} #2 6.83min area: 14392 m

Integration Time Range: 6.72 - 6.83

F:\HPCHEM\HP\16\DATA\09_11_01\16091103.D
Report generated: Wed Sep 12 11:14:28 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\09_11_01\16091103.D
Date Acquired: 11 Sep 2001 12:18
Inst: HP_16 Operator ID: DDC
Name: AR1221L3CI
Misc: 5-420-6
Method: f:\hpchem\hp\16\data\09_11_01\xspcbi11.m
Title:
Quant Time: Sep 12 10:59 2001 Quant Results File: xspcbi11.RES



Aroclor-1221 {3} #2 6.90min area: 132264 m

Integration Time Range: 6.83 - 7.56

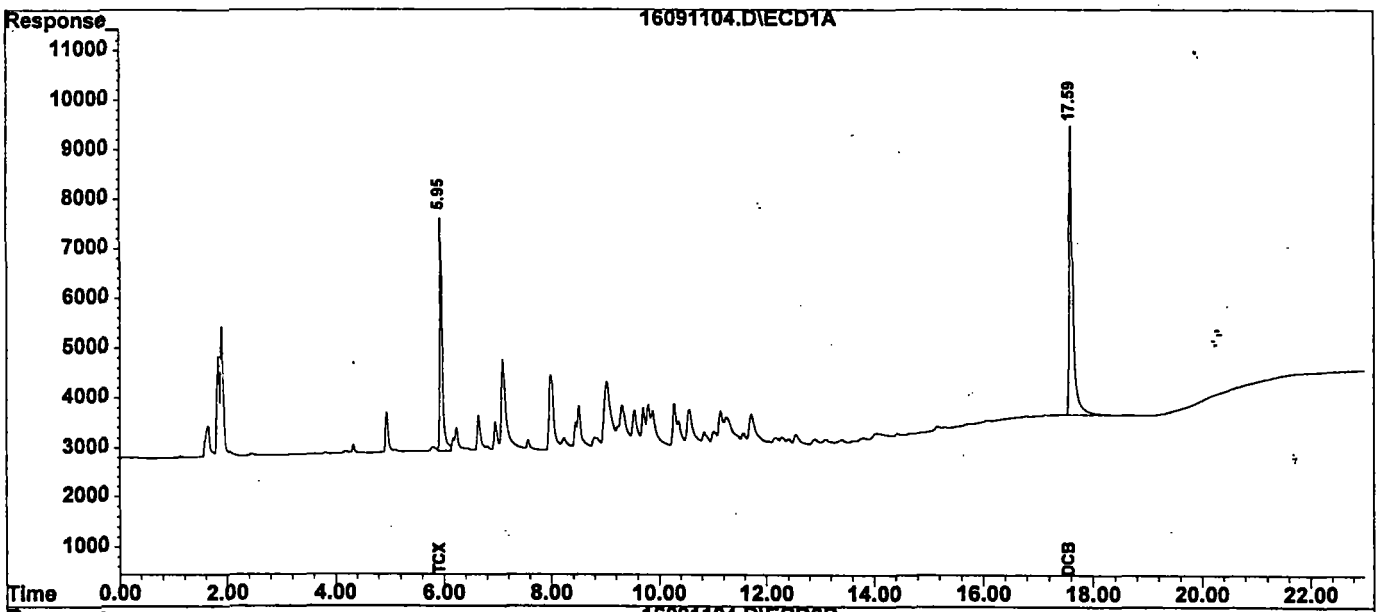
F:\HPCHEM\HP\16\DATA\09_11_01\16091103.D
Report generated: Wed Sep 12 11:14:29 2001

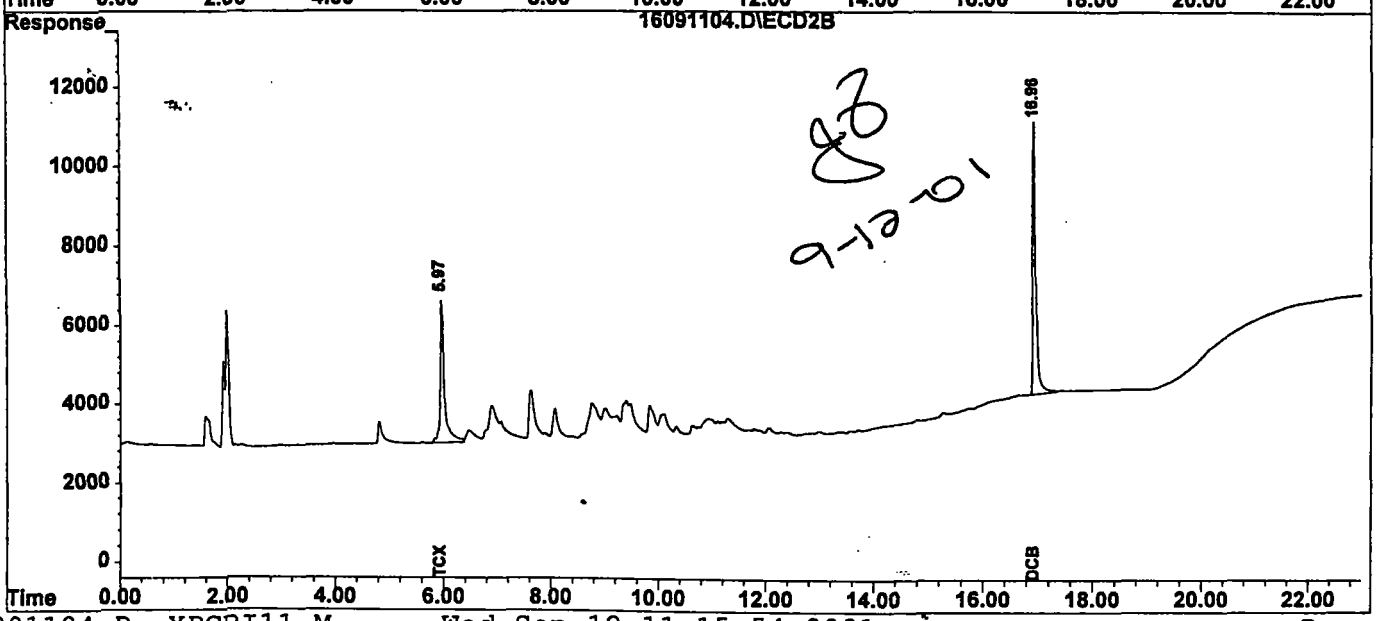
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091104.D\ECD1A.CH Vial: 8
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091104.D\ECD2B.CH
Acq On : 11 Sep 2001 13:15 Operator: DDC
Sample : AR1232L3CI Inst : HP_16
Misc : 5-422-6 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 12 10:59 2001 Quant Results File: XPCBI11.RES
Quant Time: Sep 12 11:00 2001 Quant Results File: xspcbi11.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001

Multi-Component Method : f:\hpchem\hp\16\data\09_11_01\xspcbi11.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





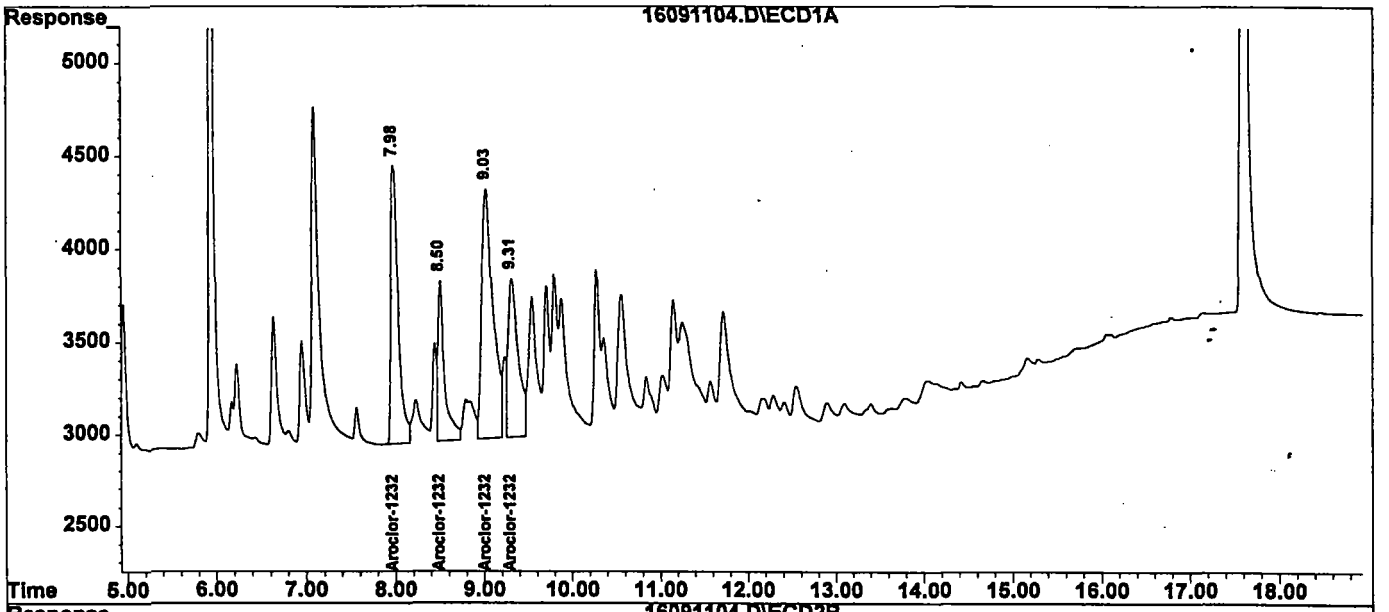
9-12-01

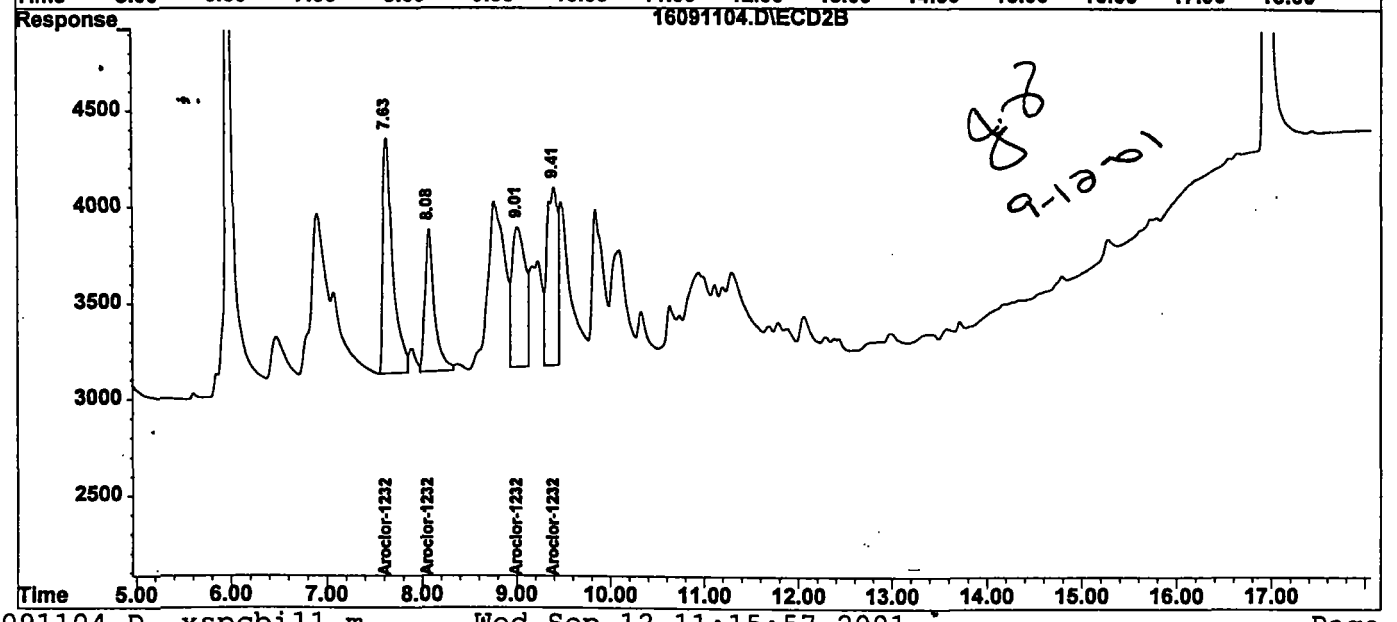
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091104.D\ECD1A.CH Vial: 8
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091104.D\ECD2B.CH
Acq On : 11 Sep 2001 13:15 Operator: DDC
Sample : AR1232L3CI Inst : HP_16
Misc : 5-422-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 12 11:00 2001 Quant Results File: xspcbi11.RES
Quant Time: Sep 12 11:00 2001 Quant Results File: xspcbi11.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001

Multi-Component Method : f:\hpchem\hp\16\data\09_11_01\xspcbi11.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 Signal #2 Info : .32
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





8.8
9-12-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091104.D\ECD1A.CH Vial: 8
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091104.D\ECD2B.CH
Acq On : 11 Sep 2001 13:15 Operator: DDC
Sample : AR1232L3CI Inst : HP_16
Misc : 5-422-6 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 12 10:59 2001 Quant Results File: XPCBI11.RES
Multi Time: Sep 12 11:00 2001 Quant Results File: xspcbi11.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001

Multi-Component Method : f:\hpchem\hp\16\data\09_11_01\xspcbi11.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	5.95	5.97	153667	193861	22.2	24.7	
22)	S DCB	17.59	16.96	263730	256158	23.1	22.7	
	Target Compounds:							
	Multi-Component Compounds:							
5)	L3 Aroclor-1232	7.98f	7.63	86896	88081	607.8	631.2	
6)	L3 Aroclor-1232 {2}	8.51f	8.08	45321	50737	728.7	575.8	
7)	L3 Aroclor-1232 {3}	9.03	9.02	120079	71725	636.5	765.6	
8)	L3 Aroclor-1232 {4}	9.31	9.41	69097	71877	576.0	1218.8	#
	Sum Aroclor-1232			321394	282420	2549.0	3191.4	
	Average Aroclor-1232					637.253	797.851	

(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_16

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Calibration Files
L1 =16091105.D L2 =16091106.D L3 =16091107.D
L4 =16091108.D L5 =16091109.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
7) Aroclor-1242	229.1	194.1	177.2	169.0	164.5	186.8	14.03
8) Aroclor-1242 {2}	399.6	348.5	327.5	304.7	292.0	334.5	12.66
9) Aroclor-1242 {3}	310.4	284.8	270.3	310.6	290.9	293.4	5.91
10) Aroclor-1242 {4}	175.0	157.9	152.1	143.5	137.6	153.2	9.44
11) Aroclor-1242 {5}	176.6	161.1	159.8	155.9	159.9	162.7	4.94

Signal #2 Calibration Files
L1 =16091105.D L2 =16091106.D L3 =16091107.D
L4 =16091108.D L5 =16091109.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
30) Aroclor-1242 #2	417.7	383.2	361.0	346.5	342.3	370.1	8.38
31) Aroclor-1242 {2} #2	259.8	247.9	243.6	256.2	267.2	254.9	3.69
32) Aroclor-1242 {3} #2	386.0	335.6	316.1	280.0	266.6	316.9	14.99
33) Aroclor-1242 {4} #2	233.9	204.5	181.1	168.6	162.6	190.1	15.40
34) Aroclor-1242 {5} #2	106.8	83.7	102.9	109.3	111.0	102.7	10.78

(#) = Out of Range

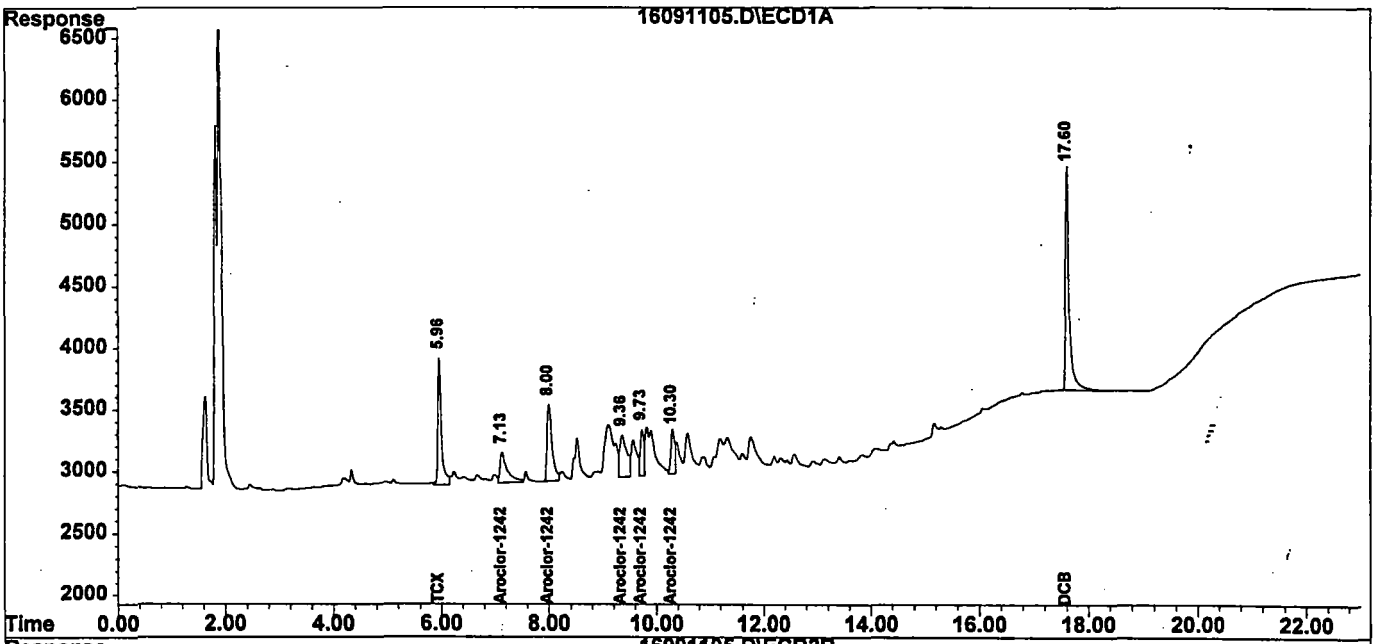
XPCBI11.M Tue Sep 11 19:09:39 2001

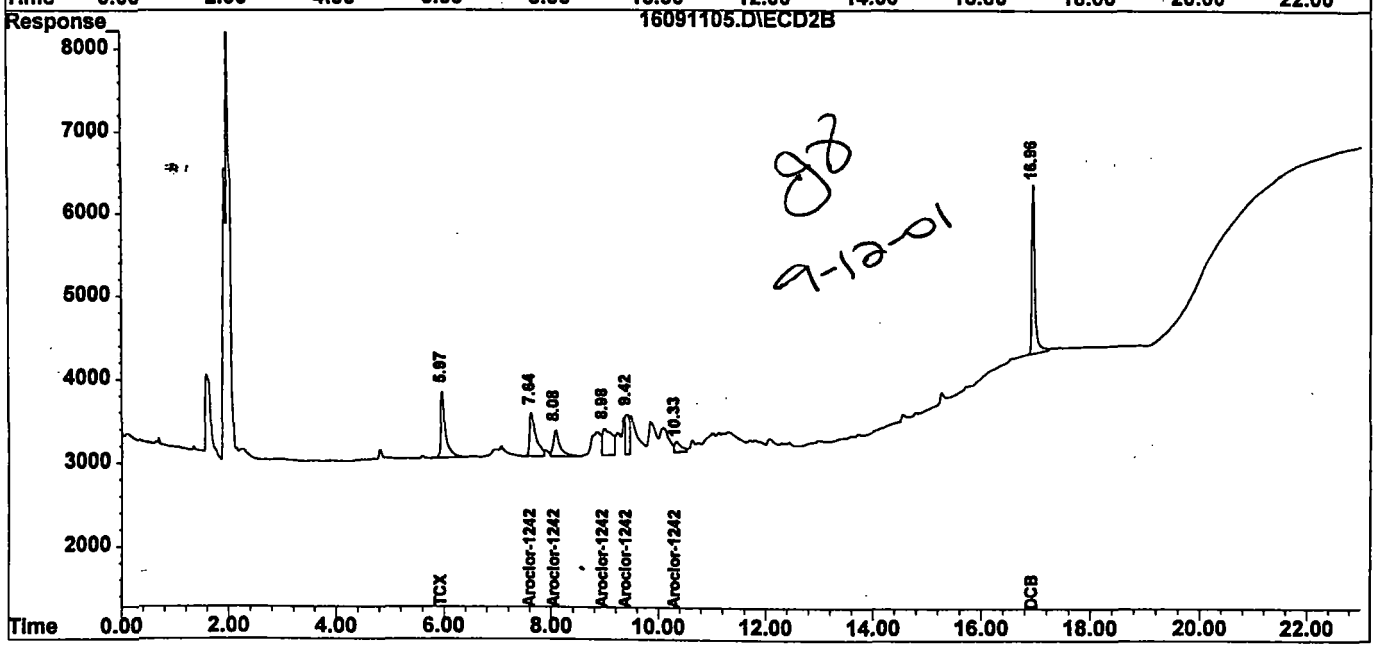
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091105.D\ECD1A.CH Vial: 9
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091105.D\ECD2B.CH
Acq On : 11 Sep 2001 13:41 Operator: DDC
Sample : AR1242L1CI Inst : HP_16
Misc : 5-11-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 11 19:08 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_05_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





88
9-12-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091105.D\ECD1A.CH Vial: 9
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091105.D\ECD2B.CH
Acq On : 11 Sep 2001 13:41 Operator: DDC
Sample : AR1242L1CI Inst : HP_16
Misc : 5-11-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 11 19:08 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_05_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

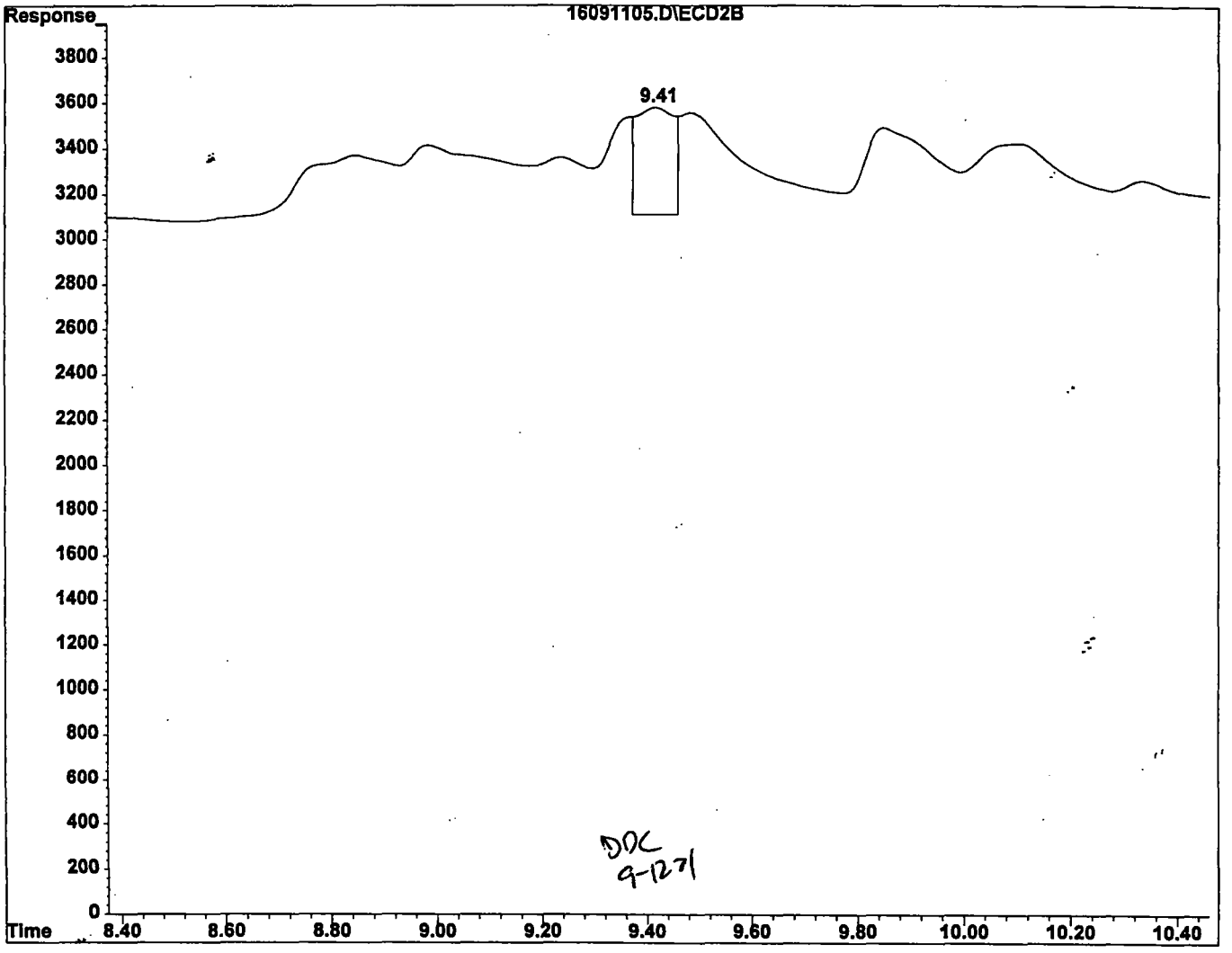
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	5.96	5.98	46082	46057	7.602	7.359	
22)	S DCB	17.60	16.97	85648	77562	8.864	8.647	
	Target Compounds:							
7)	L4 Aroclor-1242	7.14	7.64	22908	41770	183.5	146.7	
8)	L4 Aroclor-1242 {2}	8.00	8.08	39961	25981	141.3	144.3	
9)	L4 Aroclor-1242 {3}	9.36	8.99	31039	38602	121.8	196.5	# DDC
10)	L4 Aroclor-1242 {4}	9.73	9.41	17499	23392	142.1	238.4m	# 9-12-01
11)	L4 Aroclor-1242 {5}	10.30	10.34	17663	10684	130.1	347.2	#
	Sum Aroclor-1242			129071	140428	718.8	1073.2	
	Average Aroclor-1242					143.760	214.639	

(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\16\DATA\09_11_01\16091105.D
Date Acquired: 11 Sep 2001 13:41
Inst: HP_16 Operator ID: DDC
Name: AR1242L1CI
Misc: 5-11-7
Method: F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title: PCB/TOXAPHENE
Quant Time: Sep 11 19:08 2001 Quant Results File: XPCBI11.RES



Aroclor-1242 {4} #2 9.41min area: 23392 m

Integration Time Range: 9.37 - 9.46

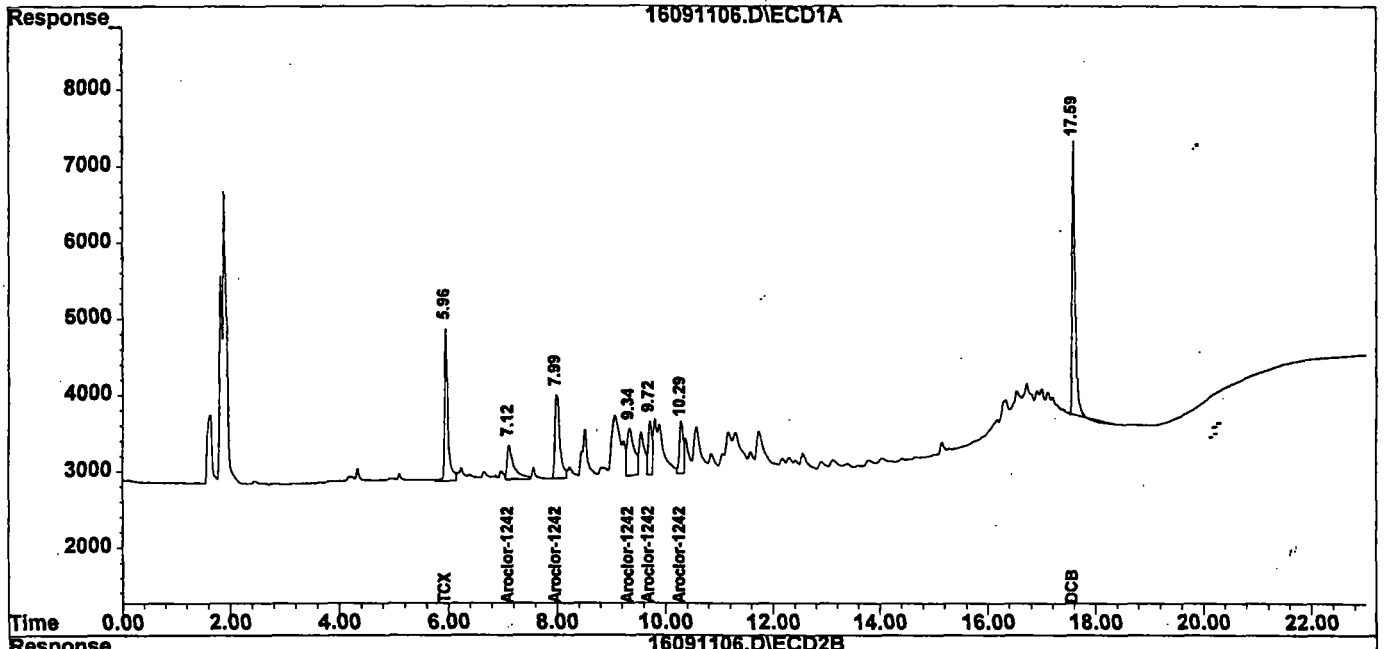
F:\HPCHEM\HP\16\DATA\09_11_01\16091105.D
Report generated: Wed Sep 12 11:14:33 2001

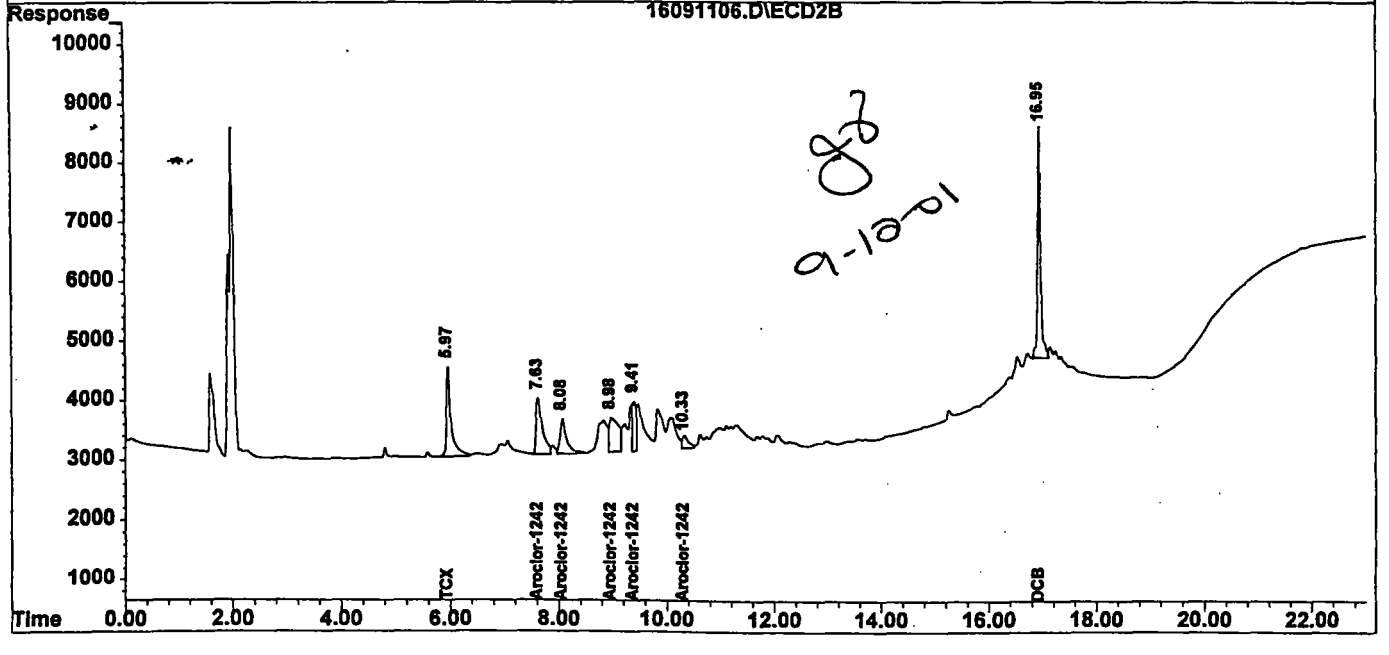
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091106.D\ECD1A.CH Vial: 10
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091106.D\ECD2B.CH
Acq On : 11 Sep 2001 14:08 Operator: DDC
Sample : AR1242L2CI Inst : HP_16
Misc : 5-10-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 11 19:09 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





gg
9-12-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091106.D\ECD1A.CH Vial: 10
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091106.D\ECD2B.CH
Acq On : 11 Sep 2001 14:08 Operator: DDC
Sample : AR1242L2CI Inst : HP_16
Misc : 5-10-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 11 19:09 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

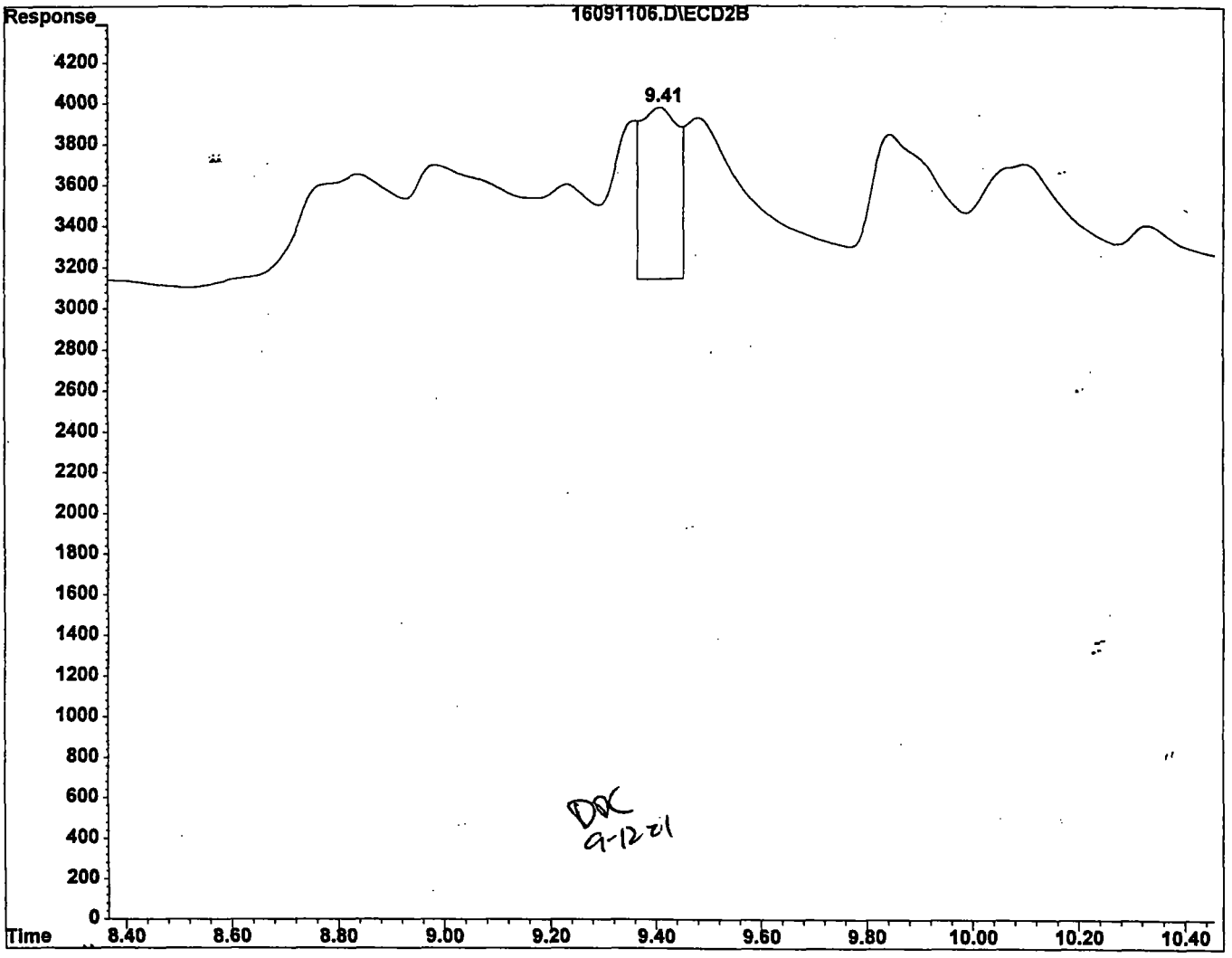
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	5.96	5.97	82857	89952	12.5	13.2	
22)	S DCB	17.59	16.96	127727	144355	11.8	14.2	
	Target Compounds:							
7)	L4 Aroclor-1242	7.13	7.63	38815	76635	268.1	249.5	
8)	L4 Aroclor-1242 {2}	7.99	8.08	69708	49571	231.4	250.3	
9)	L4 Aroclor-1242 {3}	9.34	8.99	56961	67120	213.9	288.1	# DDC 9-12-01
10)	L4 Aroclor-1242 {4}	9.72	9.41	31572	40896	235.7	267.4m	
11)	L4 Aroclor-1242 {5}	10.29	10.33	32224	16737	221.5	353.0	#
	Sum Aroclor-1242			229280	250960	1170.6	1408.3	
	Average Aroclor-1242					234.119	281.652	

(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\16\DATA\09_11_01\16091106.D
Date Acquired: 11 Sep 2001 14:08
Inst: HP_16 Operator ID: DDC
Name: AR1242L2CI
Misc: 5-10-7
Method: F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title: PCB/TOXAPHENE
Quant Time: Sep 11 19:09 2001 Quant Results File: XPCBI11.RES



Aroclor-1242 {4} #2 9.41min area: 40896 m

Integration Time Range: 9.37 - 9.45

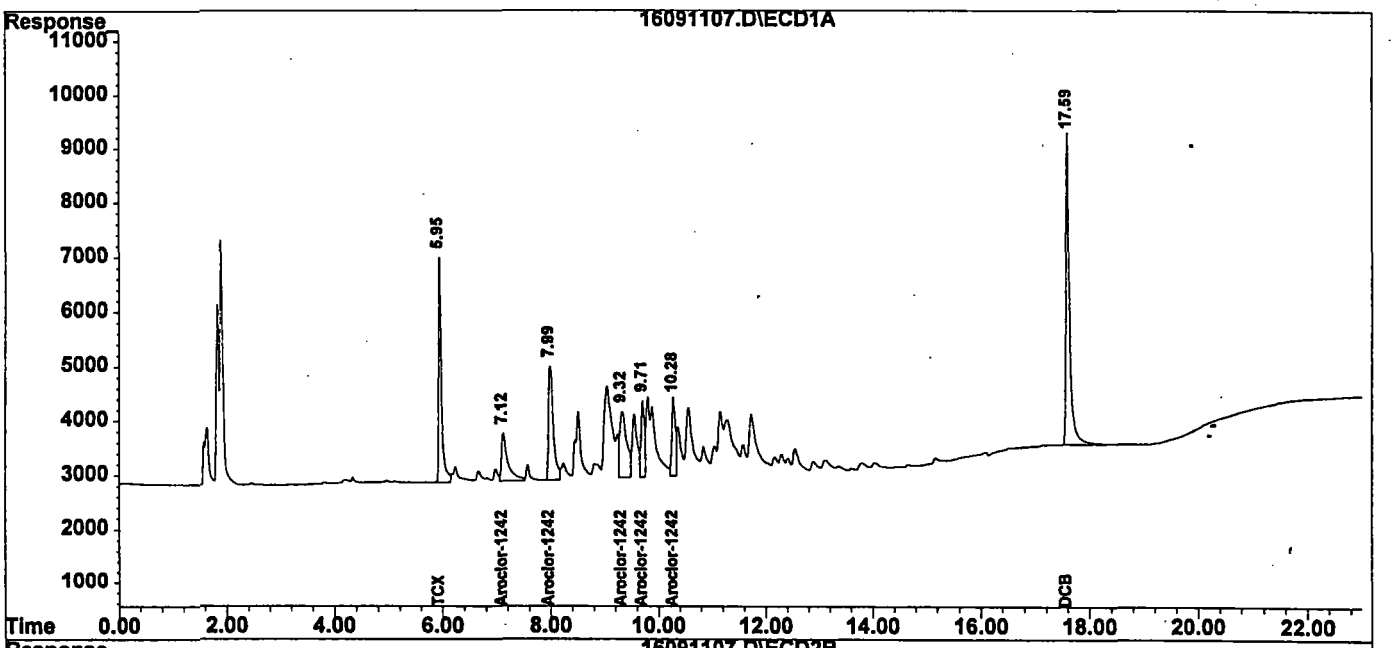
F:\HPCHEM\HP\16\DATA\09_11_01\16091106.D
Report generated: Wed Sep 12 11:14:34 2001

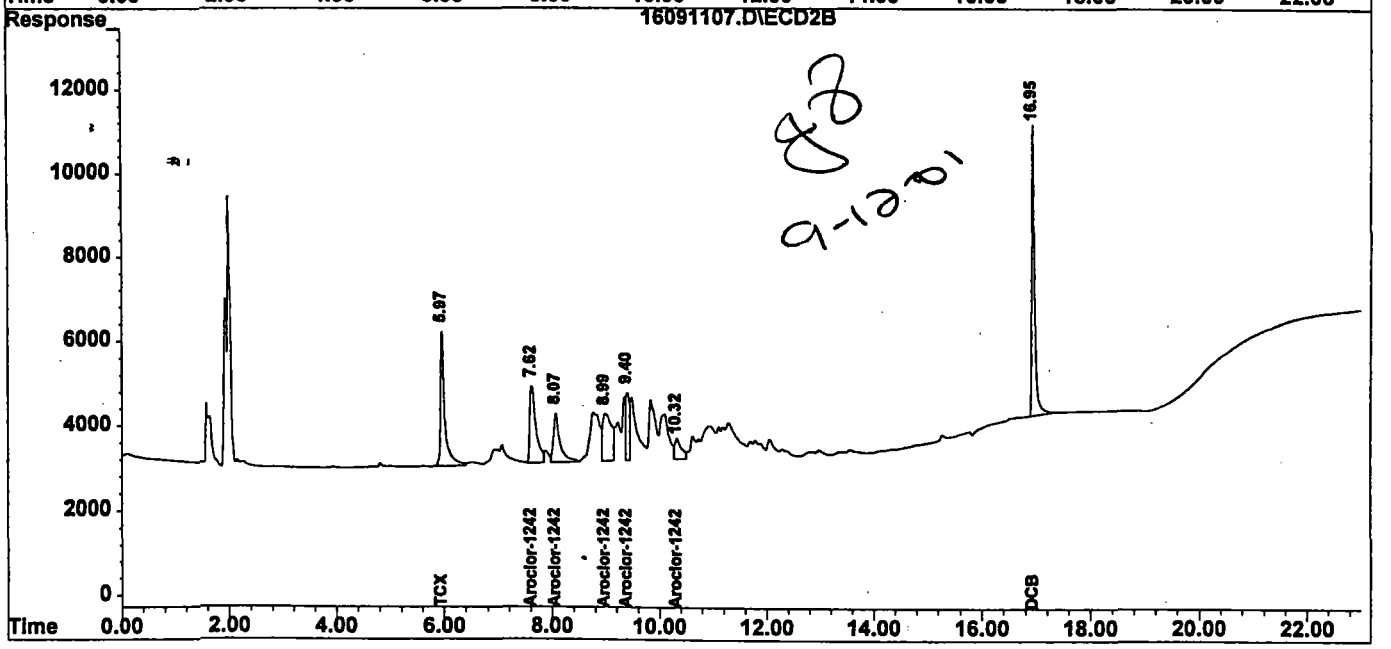
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091107.D\ECD1A.CH Vial: 11
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091107.D\ECD2B.CH
Acq On : 11 Sep 2001 14:34 Operator: DDC
Sample : AR1242L3CI Inst : HP_16
Misc : 5-9-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 11 19:07 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





8
9-12-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091107.D\ECD1A.CH Vial: 11
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091107.D\ECD2B.CH
Acq On : 11 Sep 2001 14:34 Operator: DDC
Sample : AR1242L3CI Inst : HP_16
Misc : 5-9-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 11 19:07 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	5.96	5.97	151931	175280	21.3	23.3	
22)	S DCB	17.59	16.96	260388	253516	22.6	22.3	
	Target Compounds:							
7)	L4 Aroclor-1242	7.12	7.63	70863	144405	443.5	439.6	
8)	L4 Aroclor-1242 {2}	7.99	8.08	130991	97452	415.2	458.3	
9)	L4 Aroclor-1242 {3}	9.33	8.99	108101	126427	393.6	483.4	
10)	L4 Aroclor-1242 {4}	9.71	9.40	60851	72421	428.1	363.6	
11)	L4 Aroclor-1242 {5}	10.28	10.33	63911	41154	417.7	710.5	#
	Sum Aroclor-1242			434717	481859	2098.1	2455.3	
	Average Aroclor-1242					419.628	491.066	

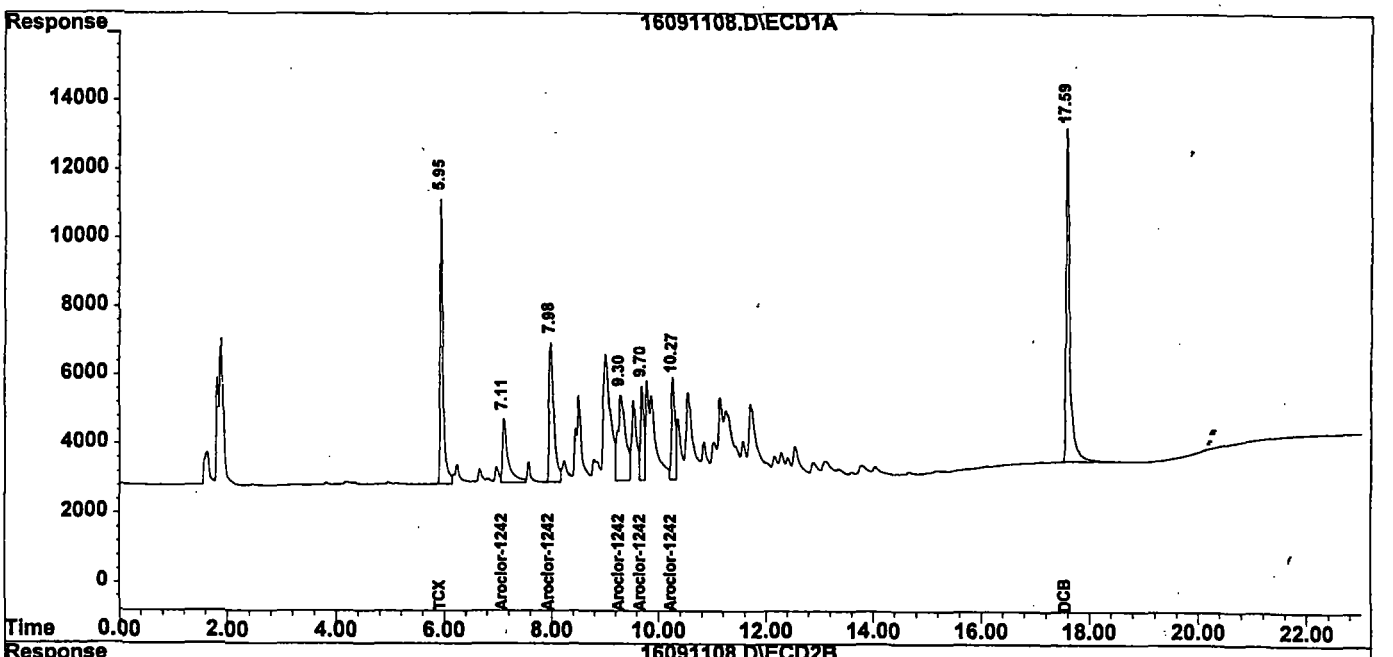
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

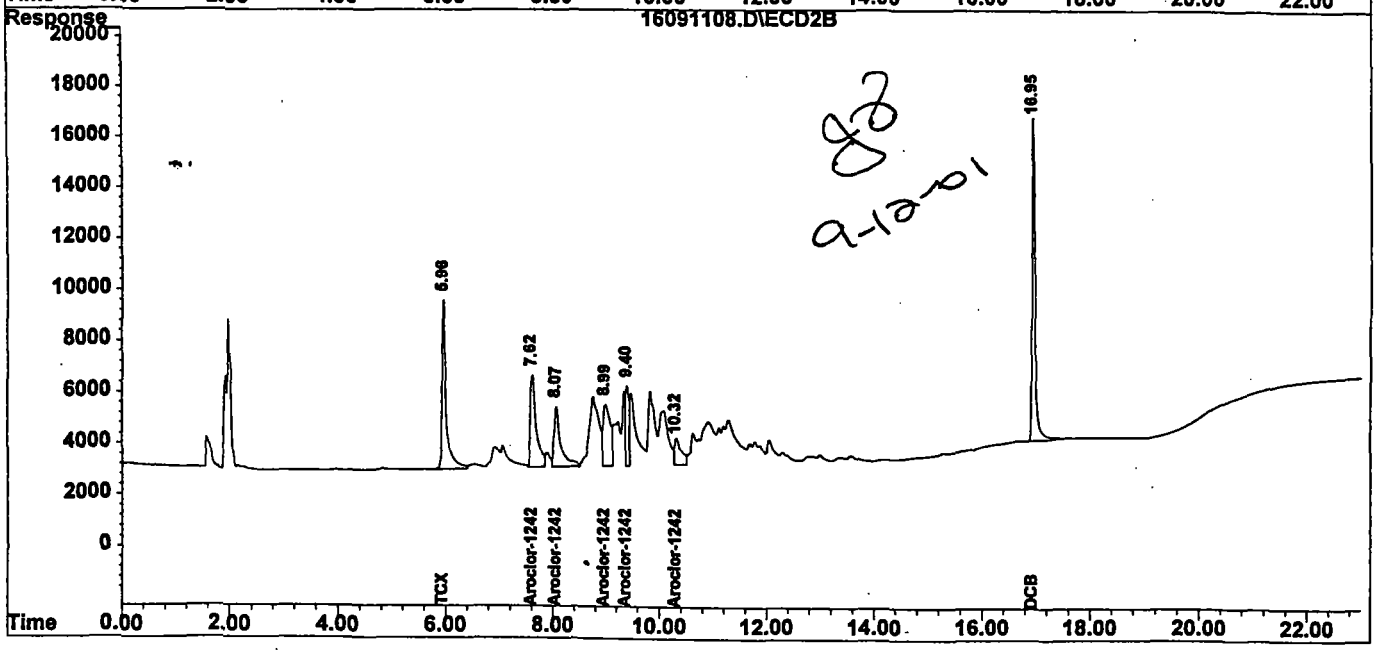
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091108.D\ECD1A.CH Vial: 12
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091108.D\ECD2B.CH
Acq On : 11 Sep 2001 15:01 Operator: DDC
Sample : AR1242L4CI Inst : HP_16
Misc : 5-8-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 11 19:07 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





gg
9-12-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091108.D\ECD1A.CH Vial: 12
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091108.D\ECD2B.CH
Acq On : 11 Sep 2001 15:01 Operator: DDC
Sample : AR1242L4CI Inst : HP_16
Misc : 5-8-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 11 19:07 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	5.96	5.97	301456	349582	41.0	44.3	
22)	S DCB	17.59	16.96	460304	479121	38.4	40.4	
	Target Compounds:							
7)	L4 Aroclor-1242	7.11	7.62	135211	277187	789.4	801.6	
8)	L4 Aroclor-1242 {2}	7.98	8.07	243797	204949	747.5	905.9	
9)	L4 Aroclor-1242 {3}	9.30	8.99	248481	223991	890.9	780.3	
10)	L4 Aroclor-1242 {4}	9.70	9.40	114775	134846	772.3	622.9	
11)	L4 Aroclor-1242 {5}	10.27	10.32	124732	87427	783.6	1212.9	#
	Sum Aroclor-1242			866996	928400	3983.6	4323.6	
	Average Aroclor-1242					796.722	864.724	

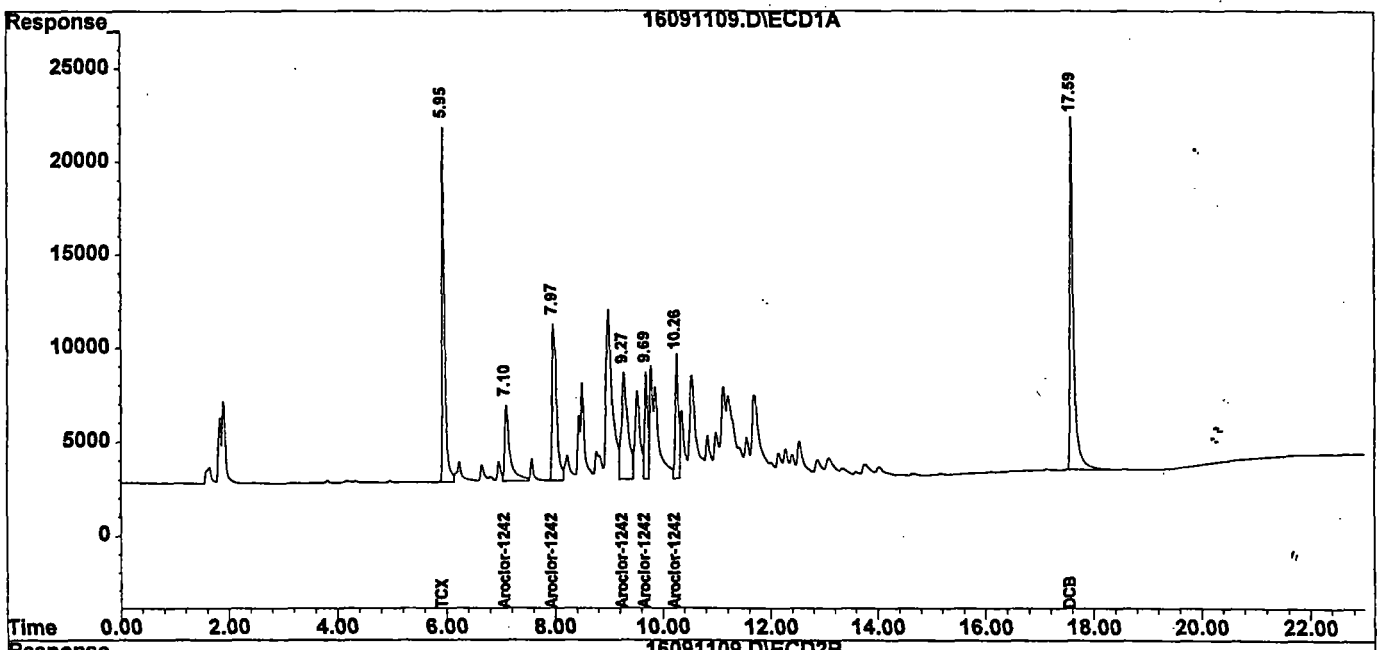
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

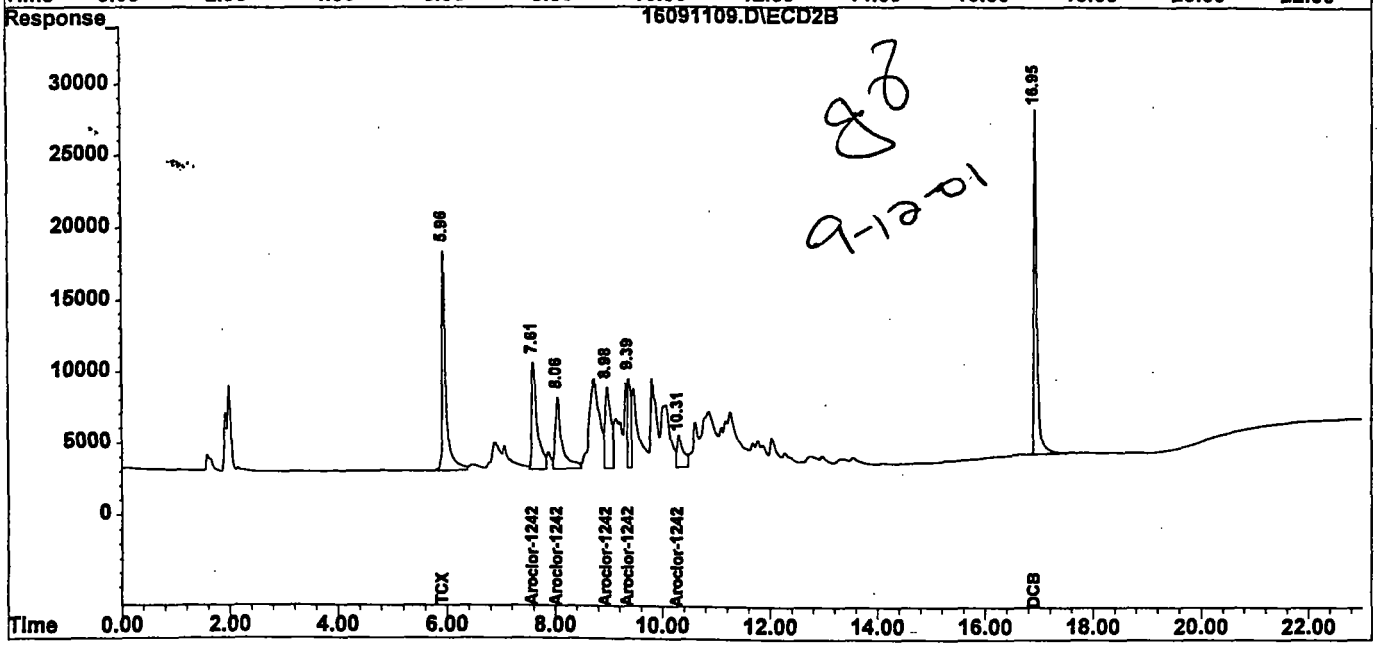
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091109.D\ECD1A.CH Vial: 13
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091109.D\ECD2B.CH
Acq On : 11 Sep 2001 15:28 Operator: DDC
Sample : AR1242L5CI Inst : HP_16
Misc : 5-7-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 11 19:07 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





gb
9-12-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091109.D\ECD1A.CH Vial: 13
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091109.D\ECD2B.CH
Acq On : 11 Sep 2001 15:28 Operator: DDC
Sample : AR1242L5CI Inst : HP_16
Misc : 5-7-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 11 19:07 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.95	5.96	624679	737475	82.4 E	89.1 E
22)	S DCB	17.59	16.95	873273	911177	70.7 E	73.6 E
	Target Compounds:						
7)	L4 Aroclor-1242	7.10	7.61	263209	547731	1478.9	1544.6 E
8)	L4 Aroclor-1242 {2}	7.97	8.06	467208	427570	1425.5 E	1800.9 E#
9)	L4 Aroclor-1242 {3}	9.28	8.98	465407	426534	1634.1	1417.6 E
10)	L4 Aroclor-1242 {4}	9.69	9.39	220140	260220	1470.1	1137.0
11)	L4 Aroclor-1242 {5}	10.26	10.32	255911	177583	1609.5 E	2047.3 E#
	Sum Aroclor-1242			1671875	1839639	7618.1	7947.4
	Average Aroclor-1242					1523.624	1589.480

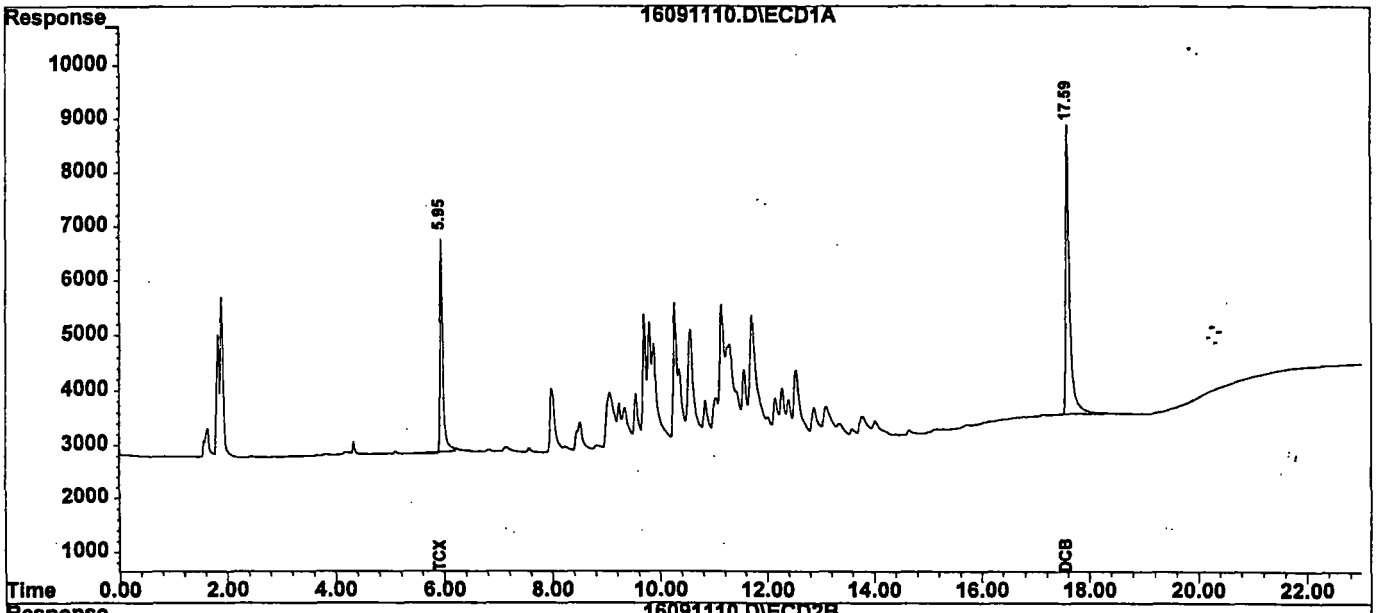
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

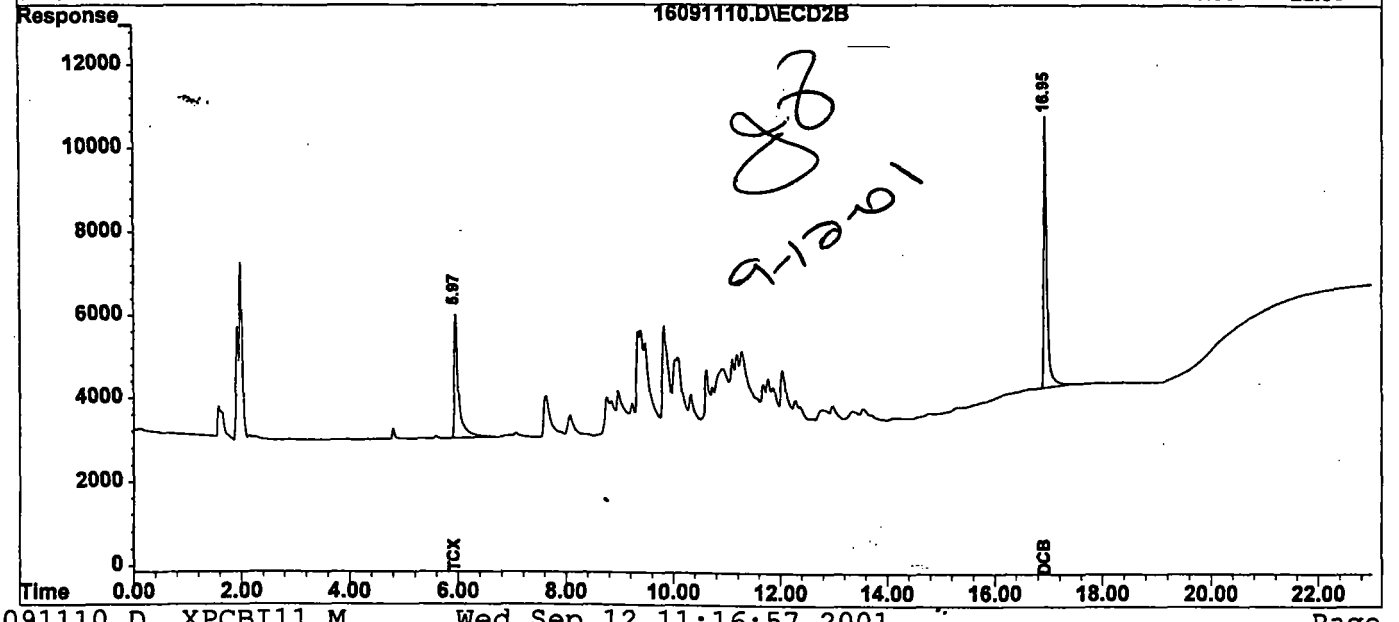
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091110.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091110.D\ECD2B.CH
Acq On : 11 Sep 2001 15:55 Operator: DDC
Sample : AR1248L3CI Inst : HP_16
Misc : 5-424-6 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 12 11:01 2001 Quant Results File: XPCBI11.RES
Quant Time: Sep 12 11:02 2001 Quant Results File: xspcbi11.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001

Multi-Component Method : f:\hpchem\hp\16\data\09_11_01\xspcbi11.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





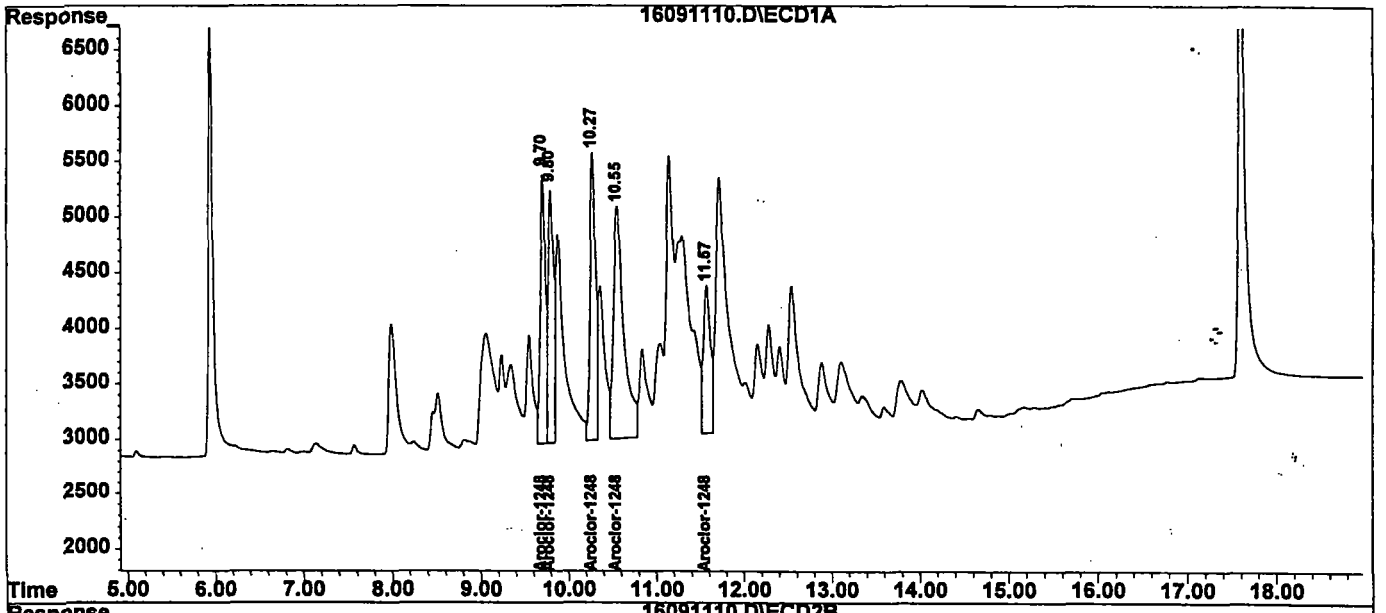
8
9-12-01

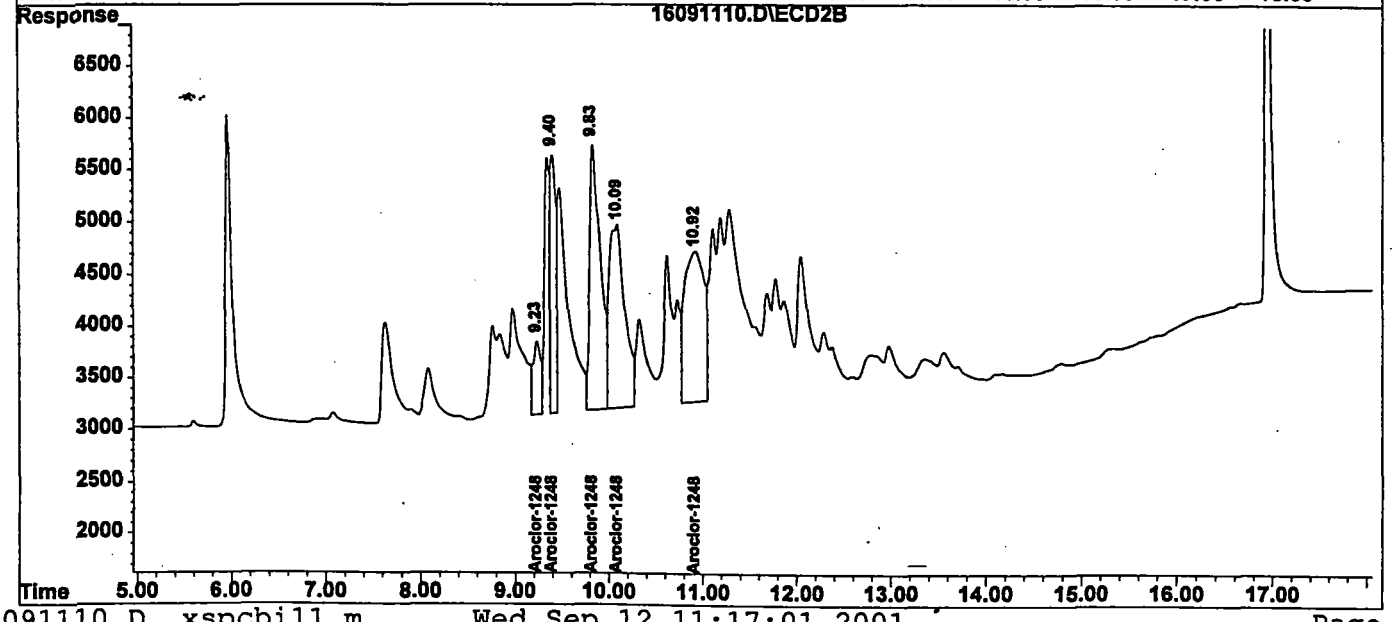
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091110.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091110.D\ECD2B.CH
Acq On : 11 Sep 2001 15:55 Operator: DDC
Sample : AR1248L3CI Inst : HP_16
Misc : 5-424-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 12 11:02 2001 Quant Results File: xspcbi11.RES
Quant Time: Sep 12 11:02 2001 Quant Results File: xspcbi11.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001

Multi-Component Method : f:\hpchem\hp\16\data\09_11_01\xspcbi11.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 Signal #2 Info : .32
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091110.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091110.D\ECD2B.CH
Acq On : 11 Sep 2001 15:55 Operator: DDC
Sample : AR1248L3CI Inst : HP_16
Misc : 5-424-6 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 12 11:01 2001 Quant Results File: XPCBI11.RES
Multi Time: Sep 12 11:02 2001 Quant Results File: xspcbi11.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001

Multi-Component Method : f:\hpchem\hp\16\data\09_11_01\xspcbi11.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	5.96	5.97	135270	164157	19.5	20.9	
22)	S DCB	17.59	16.96	260242	251123	22.8	22.3	
	Target Compounds:							
	Multi-Component Compounds:							
14)	L5 Aroclor-1248	9.71	9.24	96387	39612	470.9	198.6	#
15)	L5 Aroclor-1248 {2}	9.80	9.40	94906	105103	476.0	527.1	
16)	L5 Aroclor-1248 {3}	10.27	9.83	110956	200922	480.4	550.0	
17)	L5 Aroclor-1248 {4}	10.56	10.10	173989	208815	494.6	987.8	#
18)	L5 Aroclor-1248 {5}	11.57	10.92	75075	209196	544.6	442.5	
	Sum Aroclor-1248			551311	763648	2466.4	2706.0	
	Average Aroclor-1248					493.284	541.194	

(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_16

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Calibration Files
L1 =16091111.D L2 =16091112.D L3 =16091113.D
L4 =16091114.D L5 =16091115.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
12) Aroclor-1254	421.7	480.8	304.4	400.2	419.0	405.2	15.78
13) Aroclor-1254 {2}	383.2	431.4	271.4	347.5	343.6	355.4	16.53
14) Aroclor-1254 {3}	722.3	644.9	410.2	542.0	547.6	573.4	20.56
15) Aroclor-1254 {4}	343.8	406.9	260.7	328.3	311.8	330.3	16.06
16) Aroclor-1254 {5}	355.2	430.6	276.5	360.8	356.7	356.0	15.32

Signal #2 Calibration Files
L1 =16091111.D L2 =16091112.D L3 =16091113.D
L4 =16091114.D L5 =16091115.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
35) Aroclor-1254 #2	345.0	378.5	236.8	302.8	301.5	312.9	17.03
36) Aroclor-1254 {2} #2	410.7	437.6	280.7	371.4	375.1	375.1	15.83
37) Aroclor-1254 {3} #2	232.6	286.4	194.6	282.5	297.9	258.8	16.91
38) Aroclor-1254 {4} #2	314.4	383.7	249.1	324.9	314.6	317.3	15.06
39) Aroclor-1254 {5} #2	558.9	663.8	421.2	553.5	541.1	547.7	15.73

(#) = Out of Range

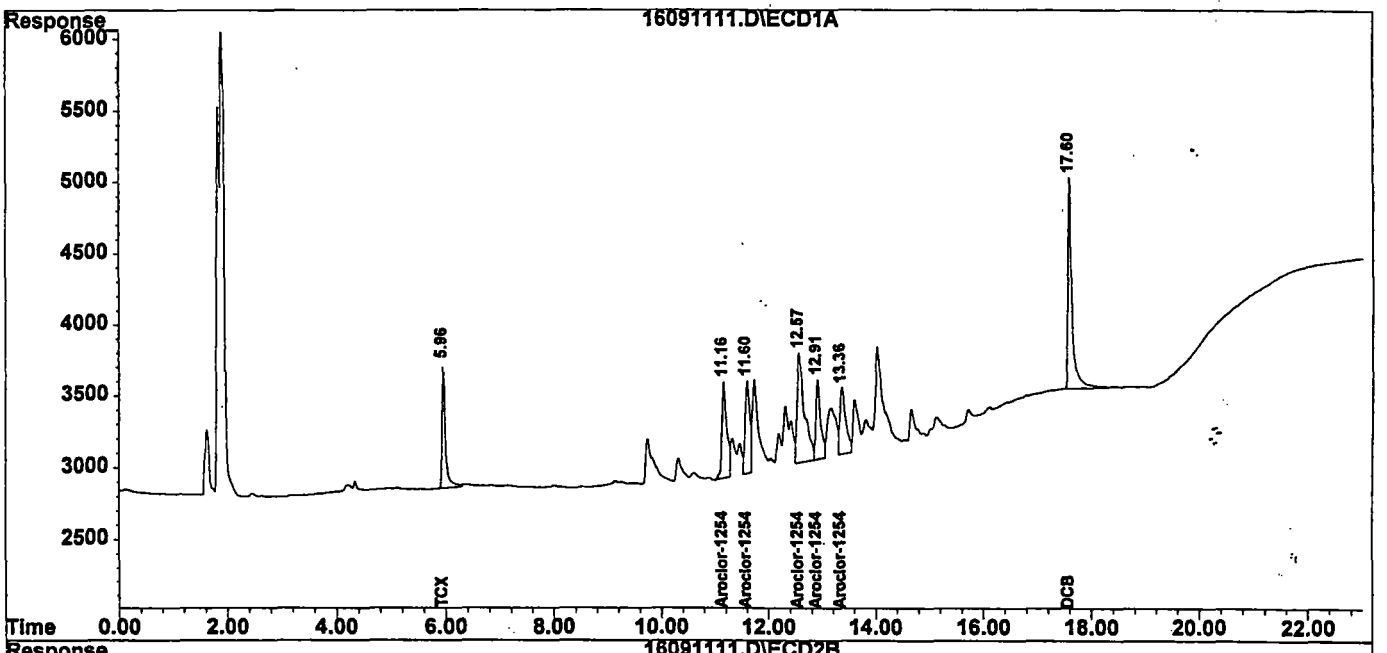
XPCBI11.M Tue Sep 11 19:16:13 2001

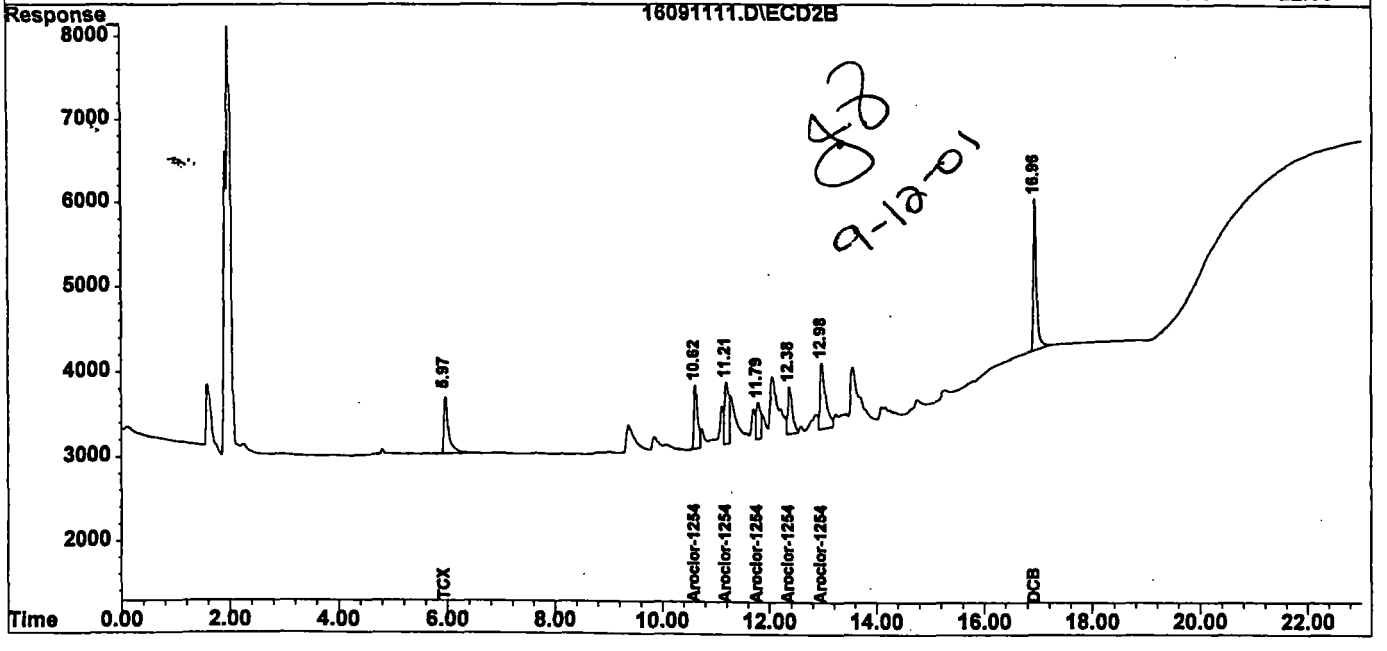
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091111.D\ECD1A.CH Vial: 15
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091111.D\ECD2B.CH
Acq On : 11 Sep 2001 16:21 Operator: DDC
Sample : AR1254L1CI Inst : HP_16
Misc : 5-6-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 11 19:15 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





8-8
9-12-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091111.D\ECD1A.CH Vial: 15
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091111.D\ECD2B.CH
Acq On : 11 Sep 2001 16:21 Operator: DDC
Sample : AR1254L1CI Inst : HP_16
Misc : 5-6-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 11 19:15 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

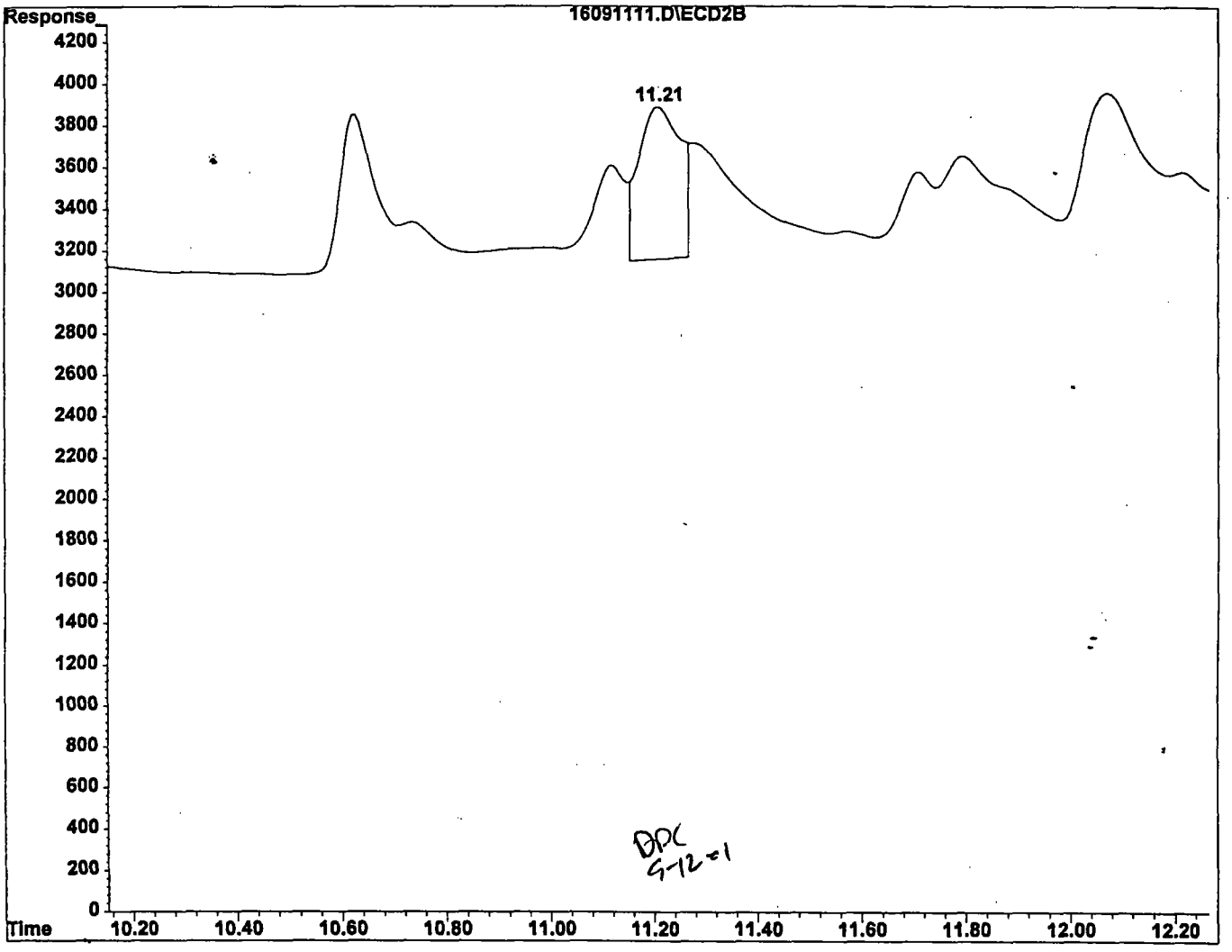
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.96	5.98	36955	38695	4.569	4.306
22)	S DCB	17.60	16.96	76811	68117	5.877	5.161
	Target Compounds:						
12)	L6 Aroclor-1254	11.16	10.63	42170	34499	105.5	124.5
13)	L6 Aroclor-1254 {2}	11.60	11.21	38321	41068	115.2	124.6m
14)	L6 Aroclor-1254 {3}	12.57f	11.79	72234	23260	141.8	91.2m #
15)	L6 Aroclor-1254 {4}	12.91	12.38	34384	31438	121.6	125.8
16)	L6 Aroclor-1254 {5}	13.36	12.99	35521	55895	111.0	129.9
	Sum Aroclor-1254			222630	186160	595.0	596.0
	Average Aroclor-1254					119.002	119.203

JPC 9-12-01

(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\16\DATA\09_11_01\16091111.D
Date Acquired: 11 Sep 2001 16:21
Inst: HP_16 Operator ID: DDC
Name: AR1254L1CI
Misc: 5-6-7
Method: F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title: PCB/TOXAPHENE
Quant Time: Sep 11 19:15 2001 Quant Results File: XPCBI11.RES



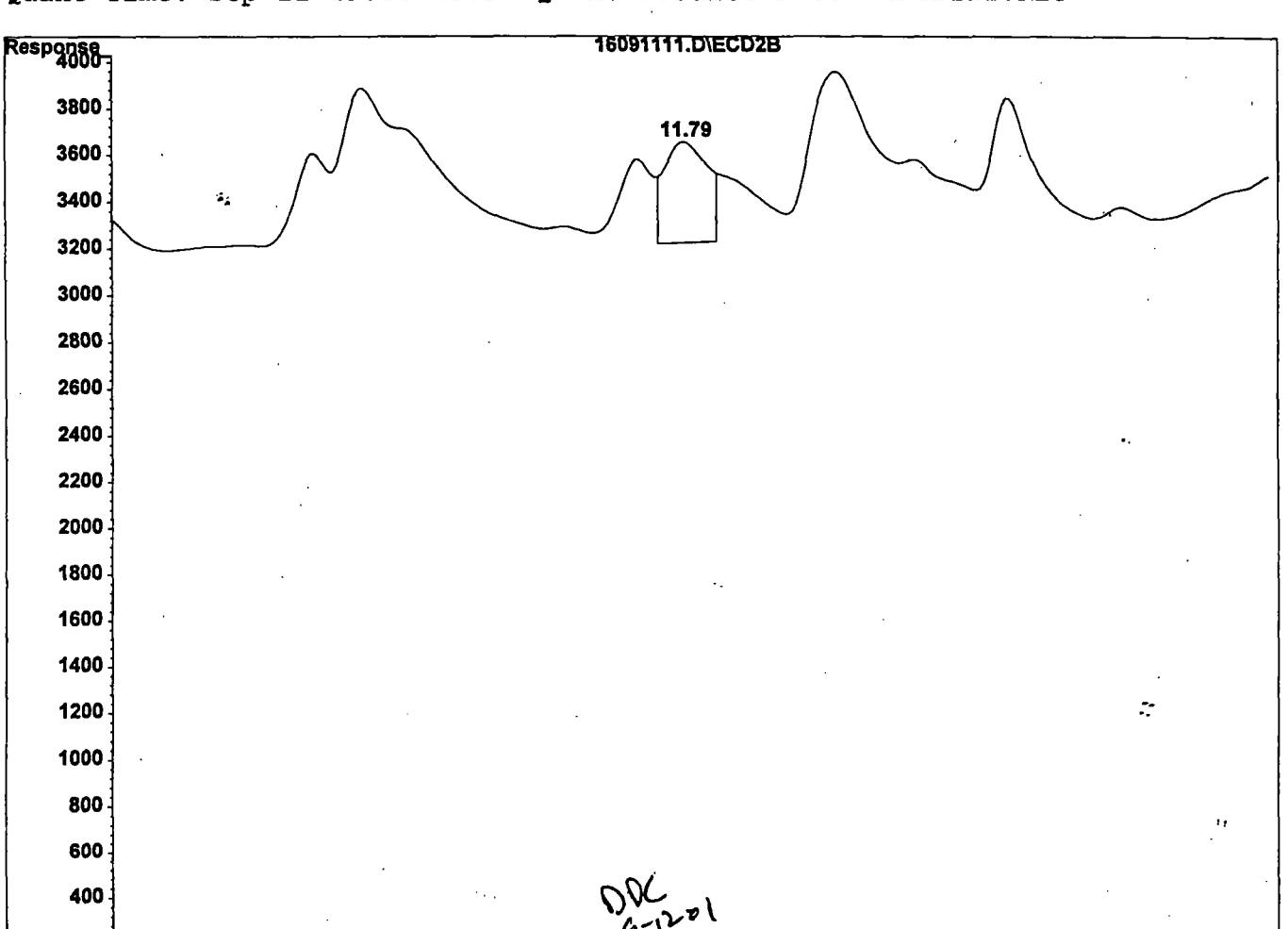
Aroclor-1254 {2} #2 11.21min area: 41068 m

Integration Time Range: 11.15 - 11.26

F:\HPCHEM\HP\16\DATA\09_11_01\16091111.D
Report generated: Wed Sep 12 11:14:40 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\09_11_01\16091111.D
Date Acquired: 11 Sep 2001 16:21
Inst: HP_16 Operator ID: DDC
Name: AR1254L1CI
Misc: 5-6-7
Method: F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title: PCB/TOXAPHENE
Quant Time: Sep 11 19:15 2001 Quant Results File: XPCBI11.RES



Aroclor-1254 {3} #2 11.79min area: 23260 m

Integration Time Range: 11.75 - 11.85

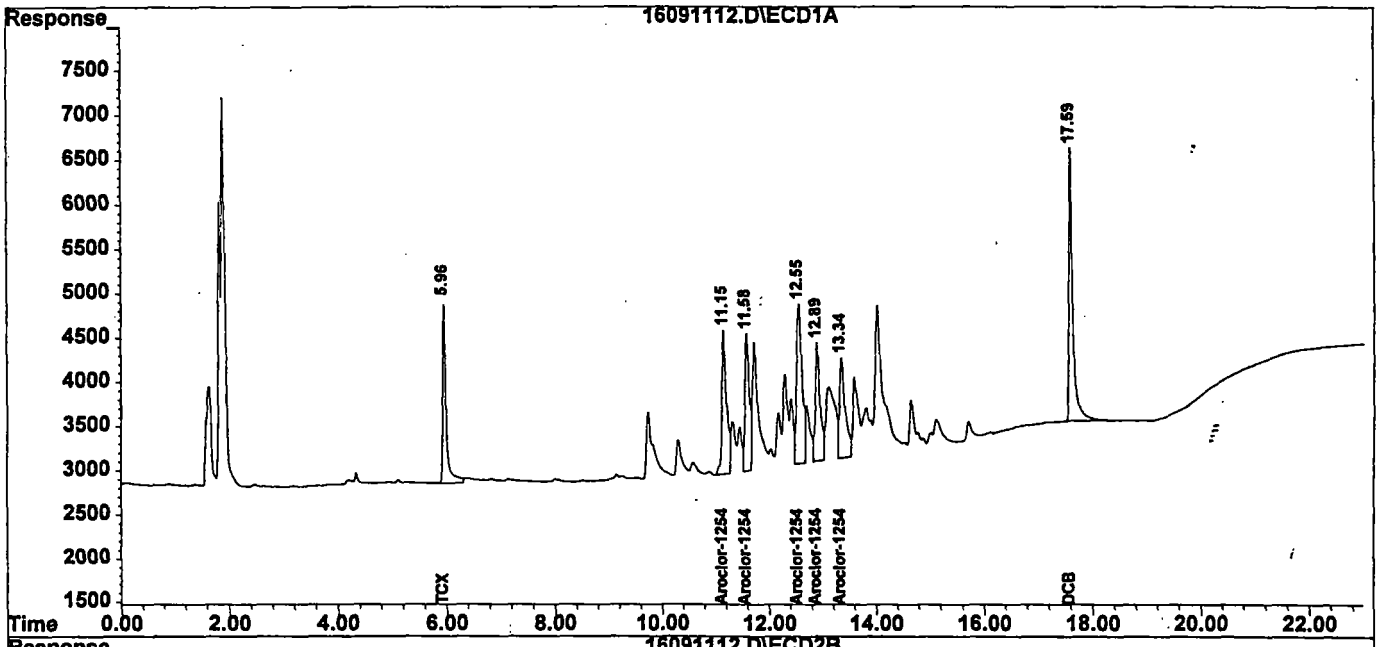
F:\HPCHEM\HP\16\DATA\09_11_01\16091111.D
Report generated: Wed Sep 12 11:14:41 2001

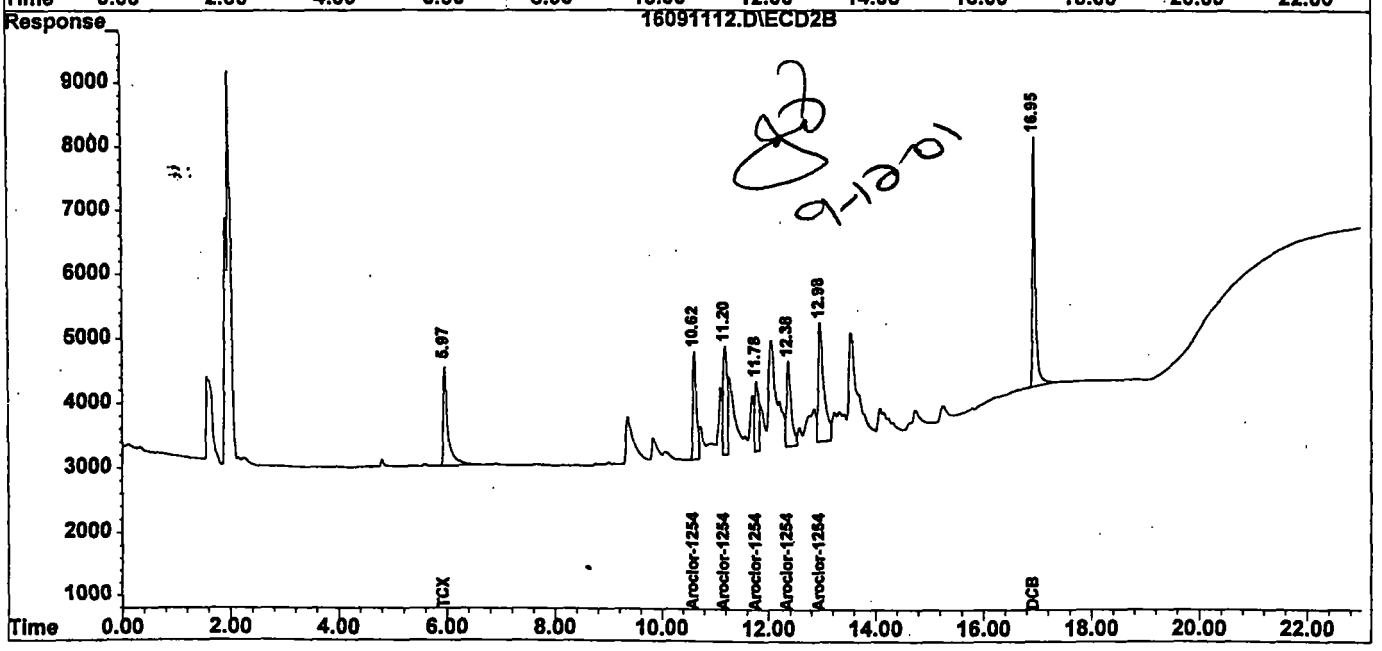
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091112.D\ECD1A.CH Vial: 16
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091112.D\ECD2B.CH
Acq On : 11 Sep 2001 16:48 Operator: DDC
Sample : AR1254L2CI Inst : HP_16
Misc : 5-5-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 11 19:15 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





9-12-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091112.D\ECD1A.CH Vial: 16
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091112.D\ECD2B.CH
Acq On : 11 Sep 2001 16:48 Operator: DDC
Sample : AR1254L2CI Inst : HP_16
Misc : 5-5-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 11 19:15 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

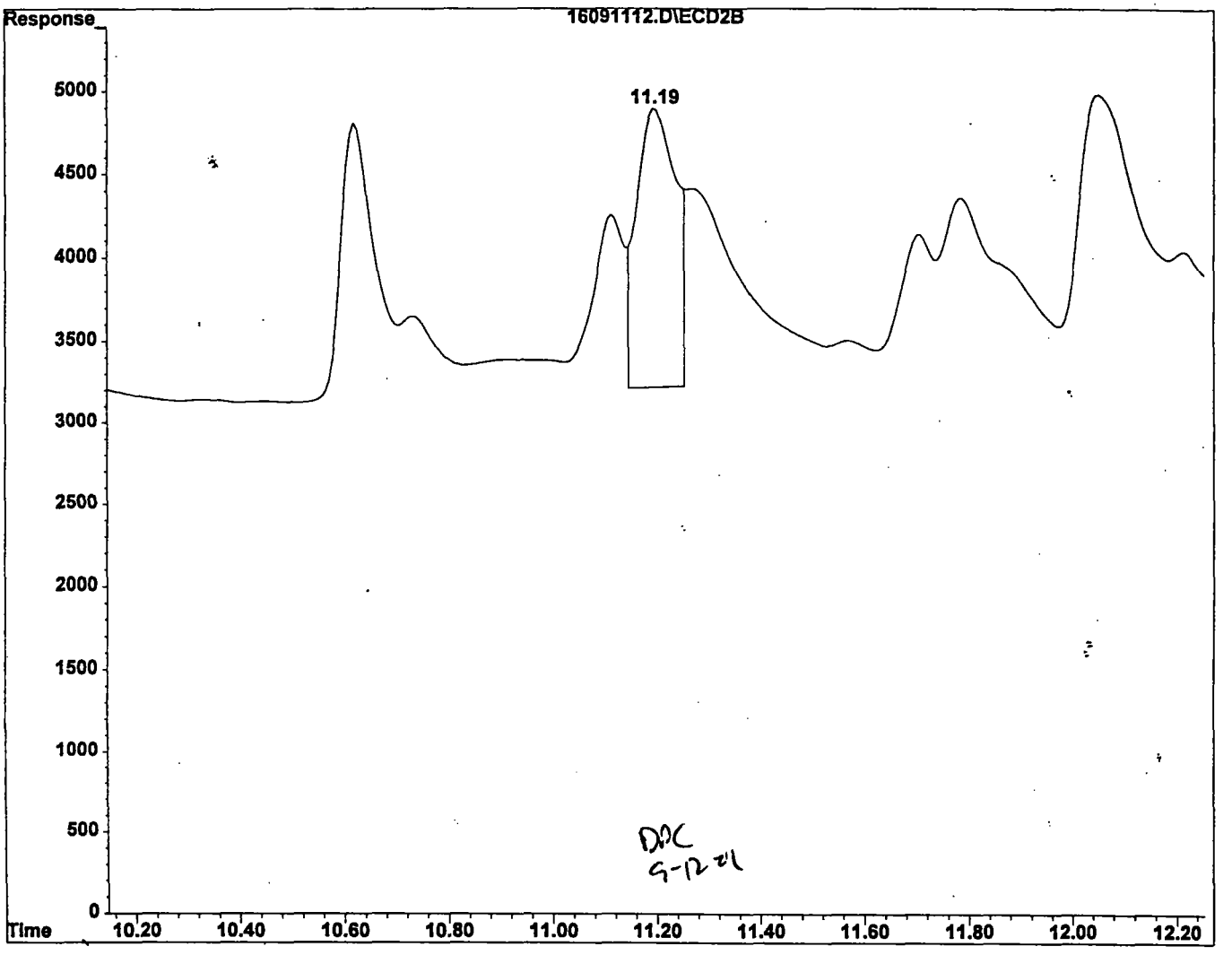
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.96	5.97	90319	90636	11.7	10.4
22)	S DCB	17.59	16.96	152251	146555	12.0	11.4
	Target Compounds:						
12)	L6 Aroclor-1254	11.15	10.62	96156	75690	239.3	258.1
13)	L6 Aroclor-1254 {2}	11.58	11.19	86280	87520	254.2	200.6m
14)	L6 Aroclor-1254 {3}	12.55	11.79	128976	57272	233.7	195.6m
15)	L6 Aroclor-1254 {4}	12.90	12.38	81377	76741	276.3	282.7
16)	L6 Aroclor-1254 {5}	13.35	12.98	86114	132759	260.4	286.1
	Sum Aroclor-1254			478903	429982	1263.9	1223.1
	Average Aroclor-1254					252.784	244.616

DDC 9-12-01

(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\16\DATA\09_11_01\16091112.D
Date Acquired: 11 Sep 2001 16:48
Inst: HP_16 Operator ID: DDC
Name: AR1254L2CI
Misc: 5-5-7
Method: F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title: PCB/TOXAPHENE
Quant Time: Sep 11 19:15 2001 Quant Results File: XPCBI11.RES



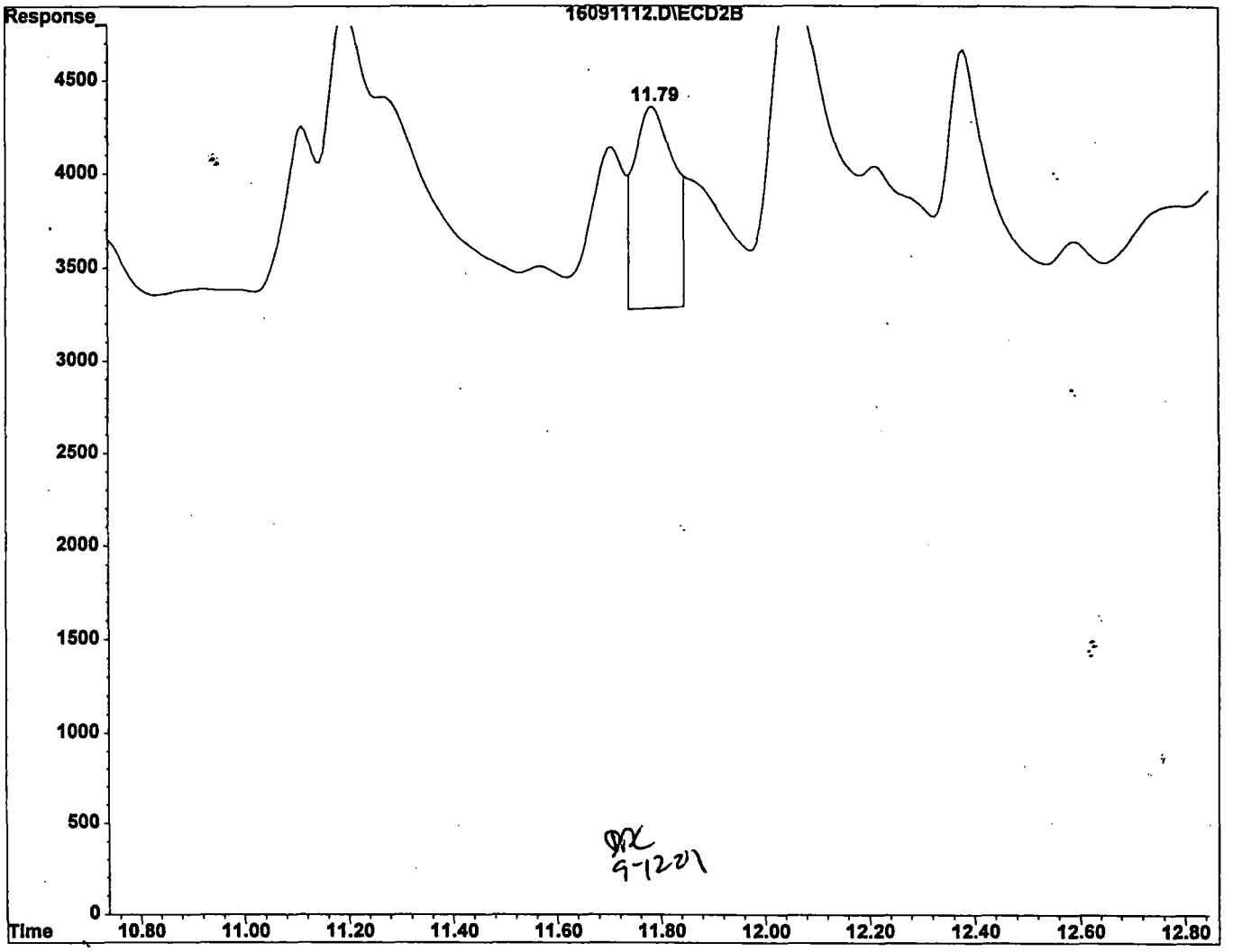
Aroclor-1254 {2} #2 11.19min area: 87520 m

Integration Time Range: 11.15 - 11.25

F:\HPCHEM\HP\16\DATA\09_11_01\16091112.D
Report generated: Wed Sep 12 11:14:42 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\09_11_01\16091112.D
Date Acquired: 11 Sep 2001 16:48
Inst: HP_16 Operator ID: DDC
Name: AR1254L2CI
Misc: 5-5-7
Method: F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title: PCB/TOXAPHENE
Quant Time: Sep 11 19:15 2001 Quant Results File: XPCBI11.RES



Aroclor-1254 {3} #2 11.79min area: 57272 m

Integration Time Range: 11.74 - 11.85

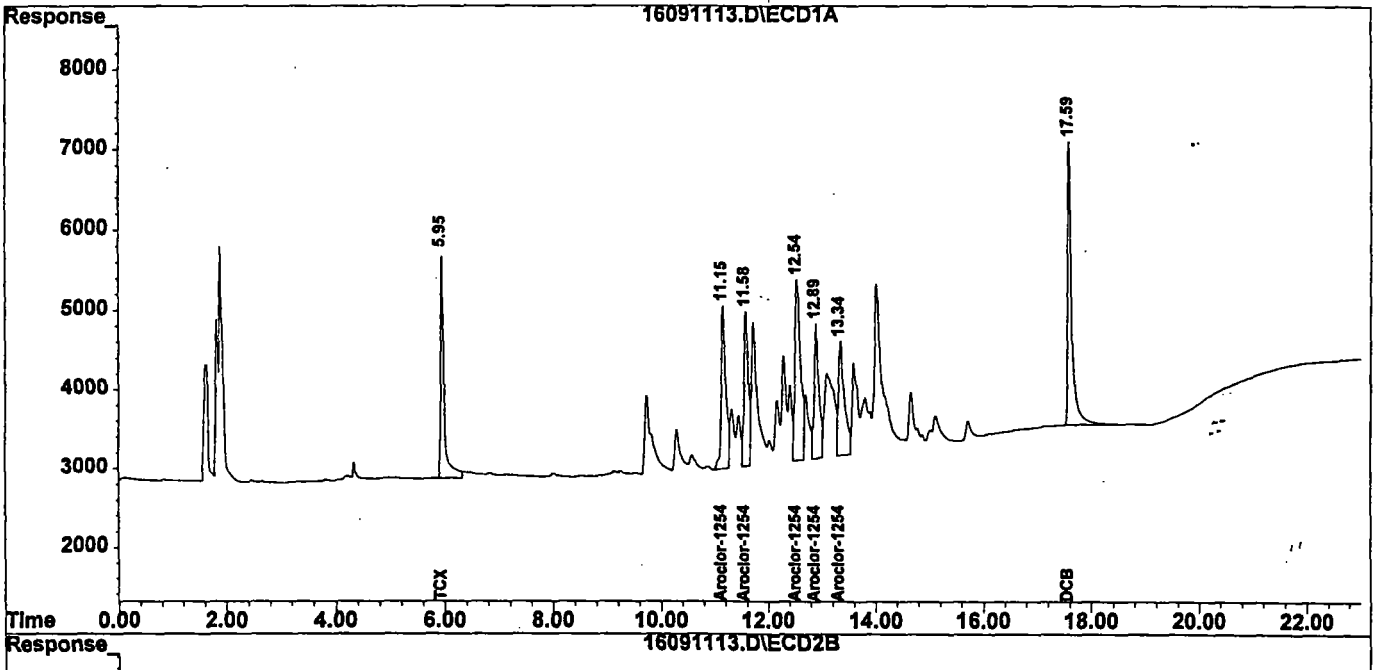
F:\HPCHEM\HP\16\DATA\09_11_01\16091112.D
Report generated: Wed Sep 12 11:14:43 2001

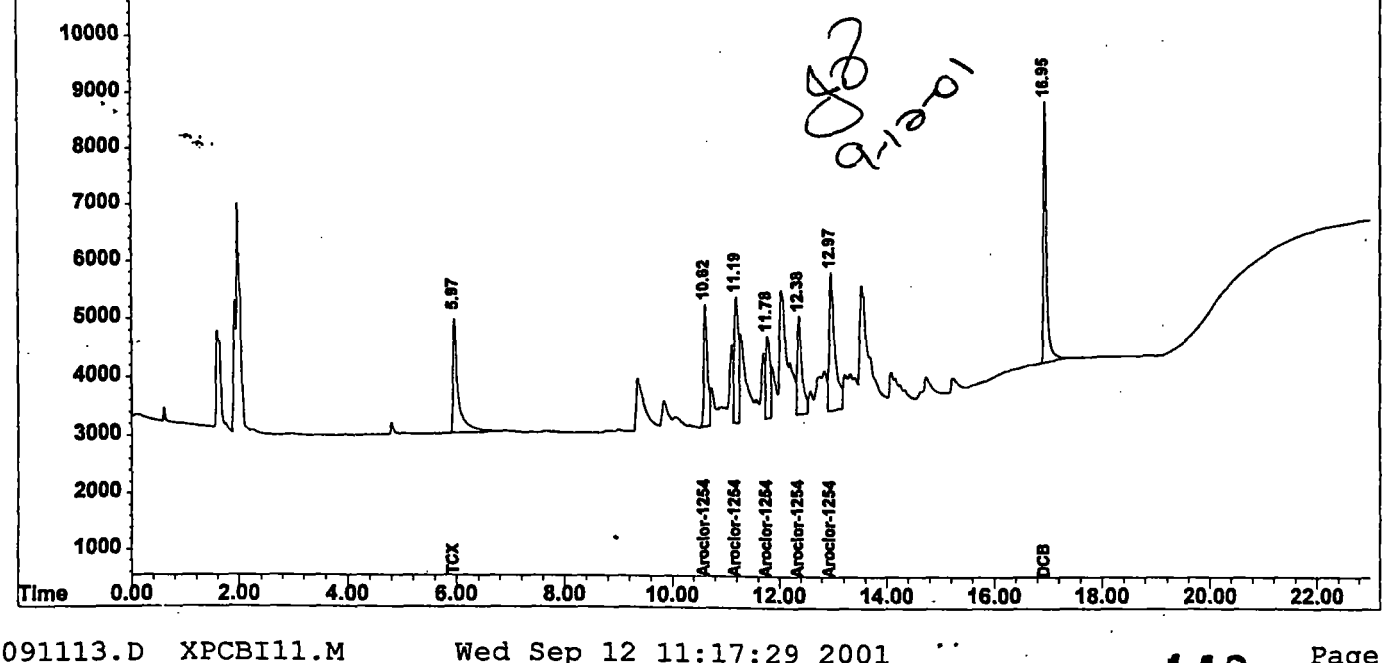
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091113.D\ECD1A.CH Vial: 17
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091113.D\ECD2B.CH
Acq On : 11 Sep 2001 17:14 Operator: DDC
Sample : AR1254L3CI Inst : HP_16
Misc : 5-4-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 11 19:15 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





9-13-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091113.D\ECD1A.CH Vial: 17
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091113.D\ECD2B.CH
Acq On : 11 Sep 2001 17:14 Operator: DDC
Sample : AR1254L3CI Inst : HP_16
Misc : 5-4-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 11 19:15 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

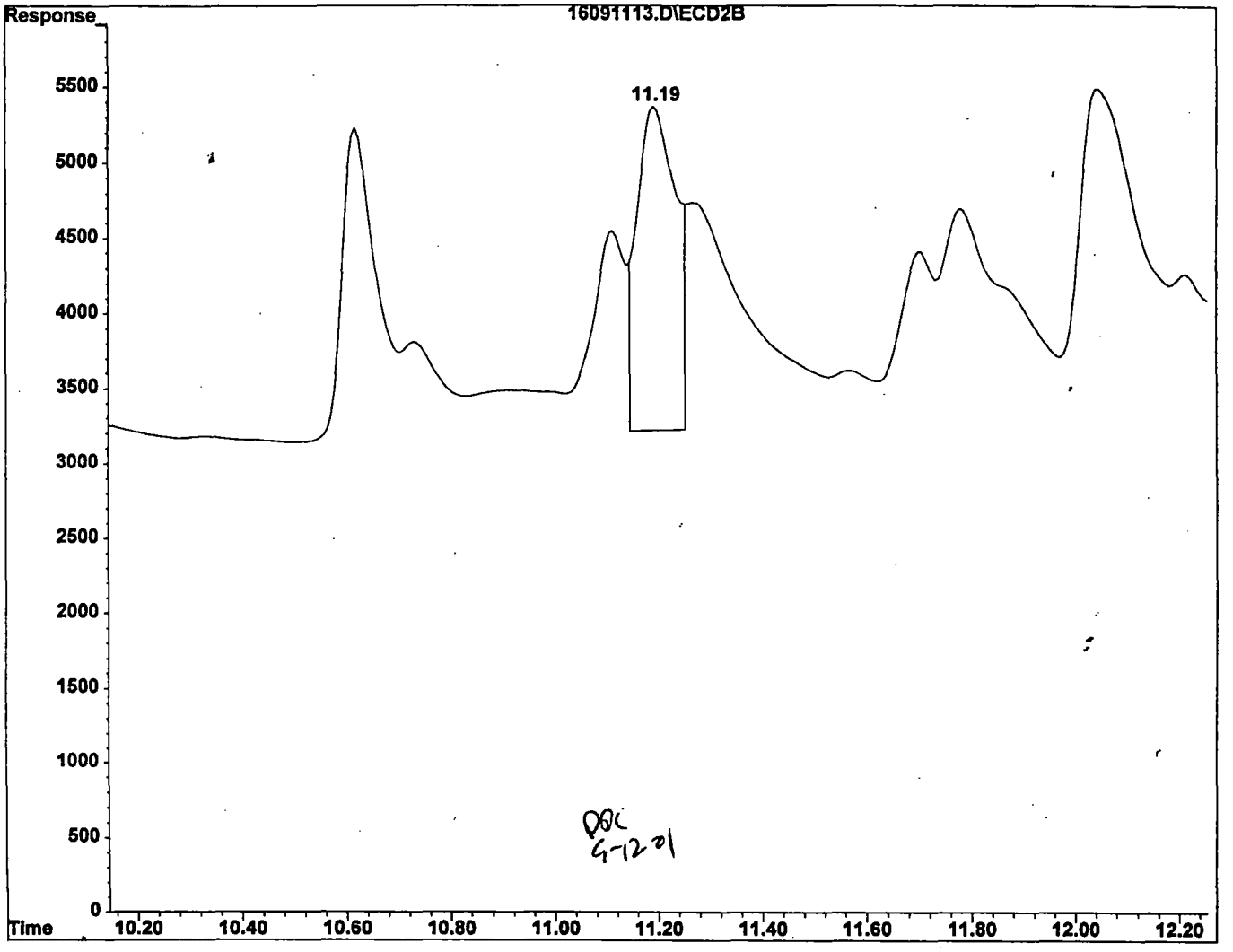
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.96	5.97	122588	127292	15.6	14.6
22)	S DCB	17.60	16.96	183162	179910	13.9	14.0
	Target Compounds:						
12)	L6 Aroclor-1254	11.15	10.62	121764	94711	290.3	302.7
13)	L6 Aroclor-1254 {2}	11.58	11.19	108567	112272	302.2	199.7m #
14)	L6 Aroclor-1254 {3}	12.54	11.78	164096	77840	282.2	225.6m
15)	L6 Aroclor-1254 {4}	12.90	12.38	104261	99643	325.8	329.9
16)	L6 Aroclor-1254 {5}	13.34	12.98	110618	168481	311.5	326.5
	Sum Aroclor-1254			609306	552947	1512.1	1384.3
	Average Aroclor-1254					302.411	276.862

DDC green

(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\16\DATA\09_11_01\16091113.D
Date Acquired: 11 Sep 2001 17:14
Inst: HP_16 Operator ID: DDC
Name: AR1254L3CI
Misc: 5-4-7
Method: F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title: PCB/TOXAPHENE
Quant Time: Sep 11 19:15 2001 Quant Results File: XPCBI11.RES



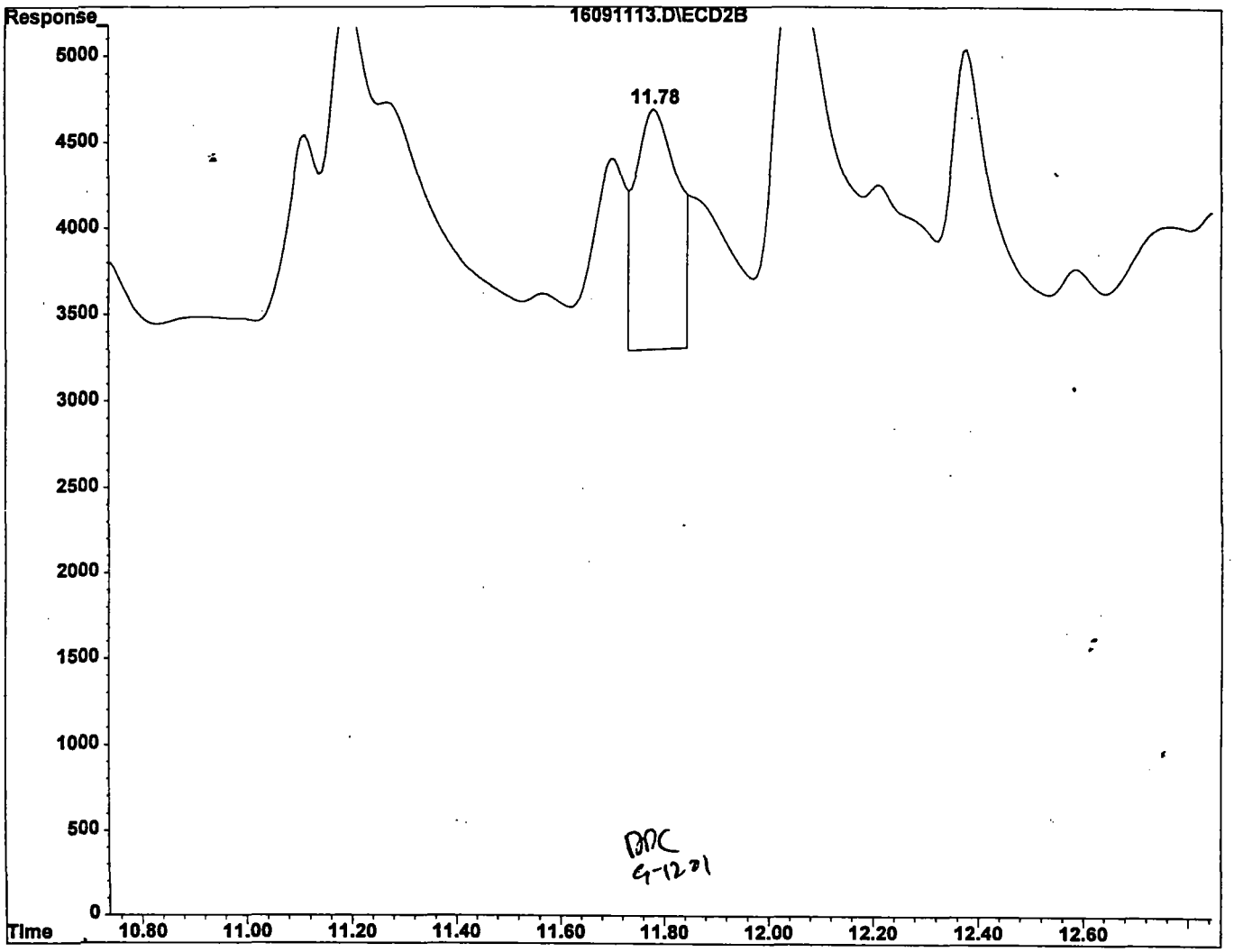
Aroclor-1254 {2} #2 11.19min area: 112272 m

Integration Time Range: 11.14 - 11.25

F:\HPCHEM\HP\16\DATA\09_11_01\16091113.D
Report generated: Wed Sep 12 11:14:44 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\09_11_01\16091113.D
Date Acquired: 11 Sep 2001 17:14
Inst: HP_16 Operator ID: DDC
Name: AR1254L3CI
Misc: 5-4-7
Method: F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title: PCB/TOXAPHENE
Quant Time: Sep 11 19:15 2001 Quant Results File: XPCBI11.RES



Aroclor-1254 {3} #2 11.78min area: 77840 m

Integration Time Range: 11.74 - 11.84

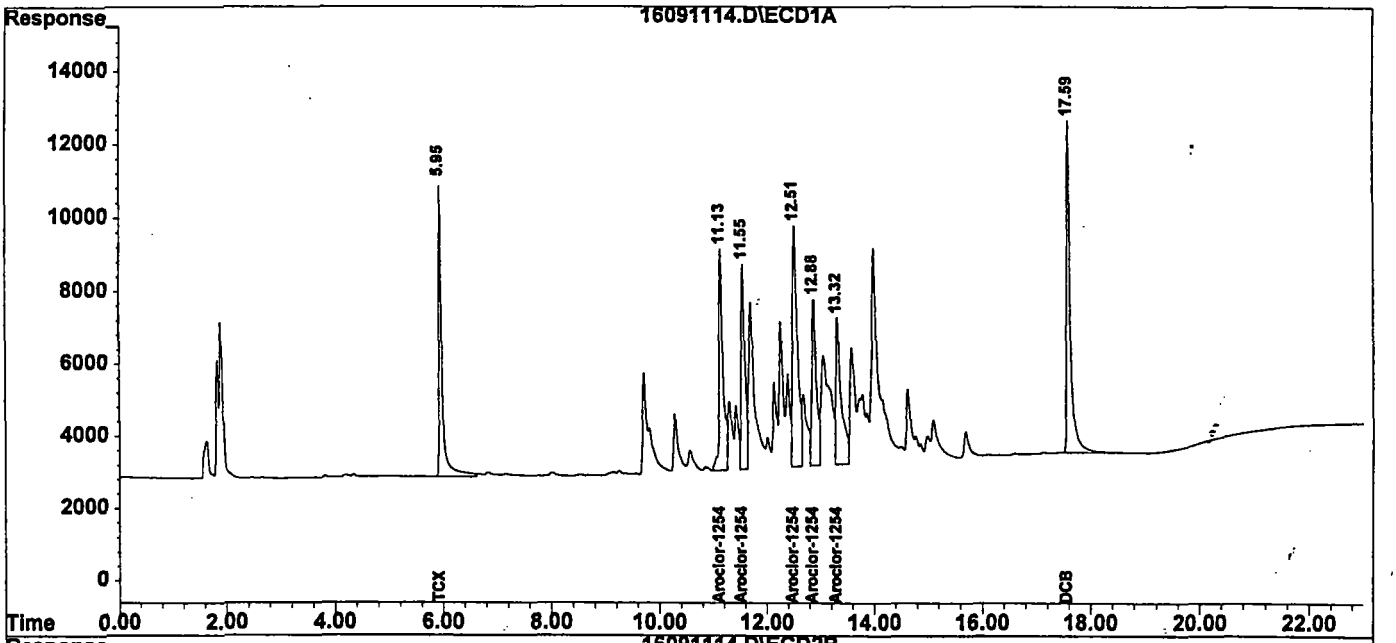
F:\HPCHEM\HP\16\DATA\09_11_01\16091113.D
Report generated: Wed Sep 12 11:14:44 2001

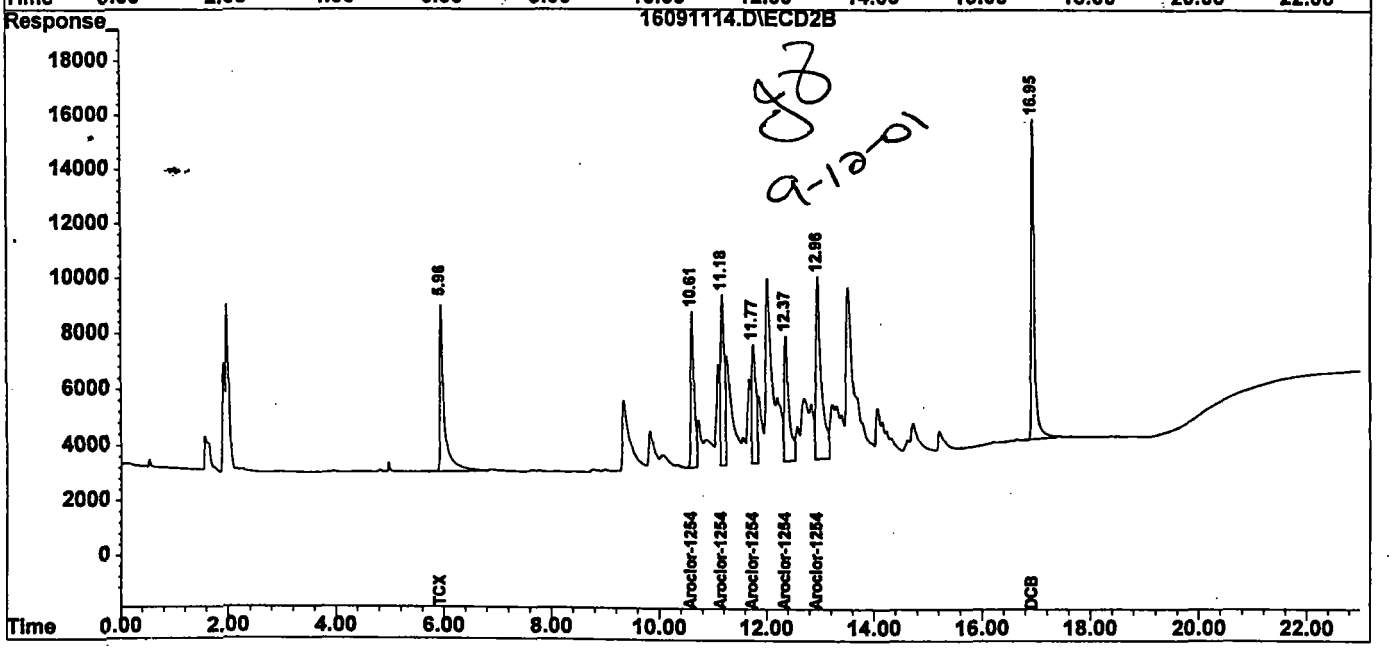
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091114.D\ECD1A.CH Vial: 18
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091114.D\ECD2B.CH
Acq On : 11 Sep 2001 17:41 Operator: DDC
Sample : AR1254L4CI Inst : HP_16
Misc : 5-3-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 11 19:11 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





9-12-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091114.D\ECD1A.CH Vial: 18
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091114.D\ECD2B.CH
Acq On : 11 Sep 2001 17:41 Operator: DDC
Sample : AR1254L4CI Inst : HP_16
Misc : 5-3-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 11 19:11 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	5.95	5.96	326521	336604	43.1	40.9	
22)	S DCB	17.59	16.95	439879	452673	35.4	37.3	
	Target Compounds:							
12)	L6 Aroclor-1254	11.14	10.61	320147	242237	805.8	803.9	
13)	L6 Aroclor-1254 {2}	11.55	11.18	277987	297091	806.1	482.9	#
14)	L6 Aroclor-1254 {3}	12.52	11.77	433578	225963	777.4	650.4	
15)	L6 Aroclor-1254 {4}	12.88	12.37	262601	259919	843.3	874.6	
16)	L6 Aroclor-1254 {5}	13.32	12.97	288660	442814	844.9	873.2	
	Sum Aroclor-1254			1582972	1468024	4077.5	3685.1	
	Average Aroclor-1254					815.496	737.012	

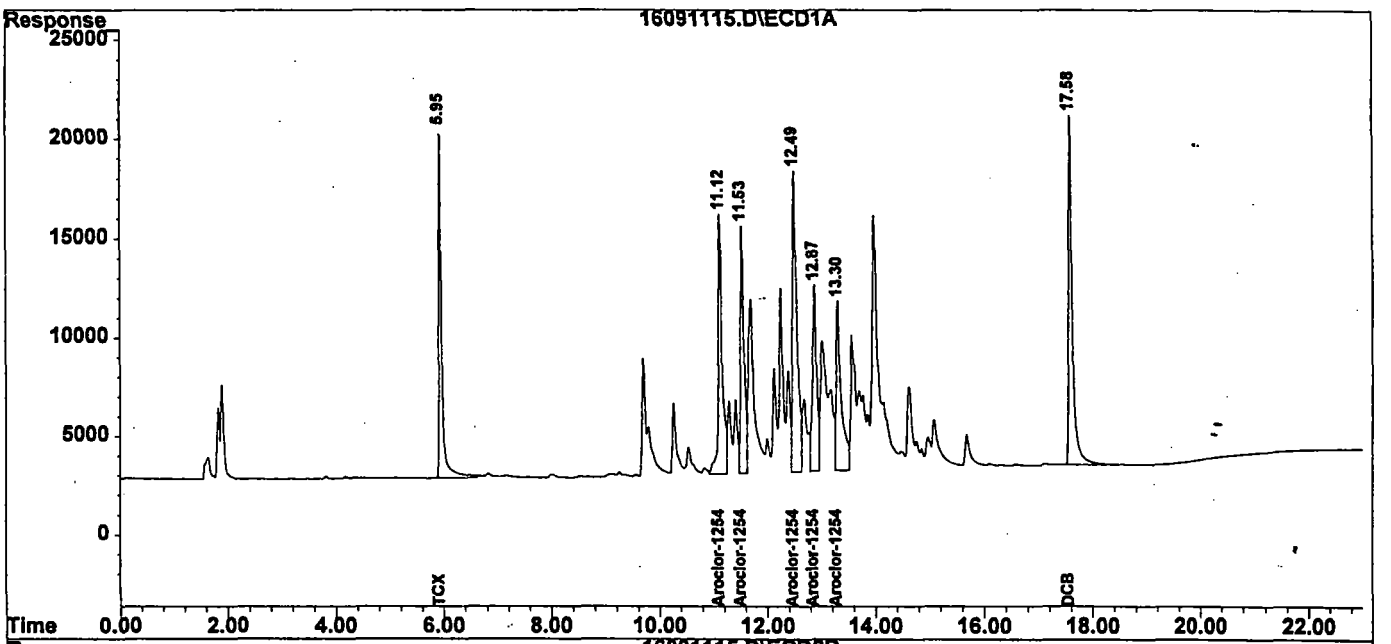
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

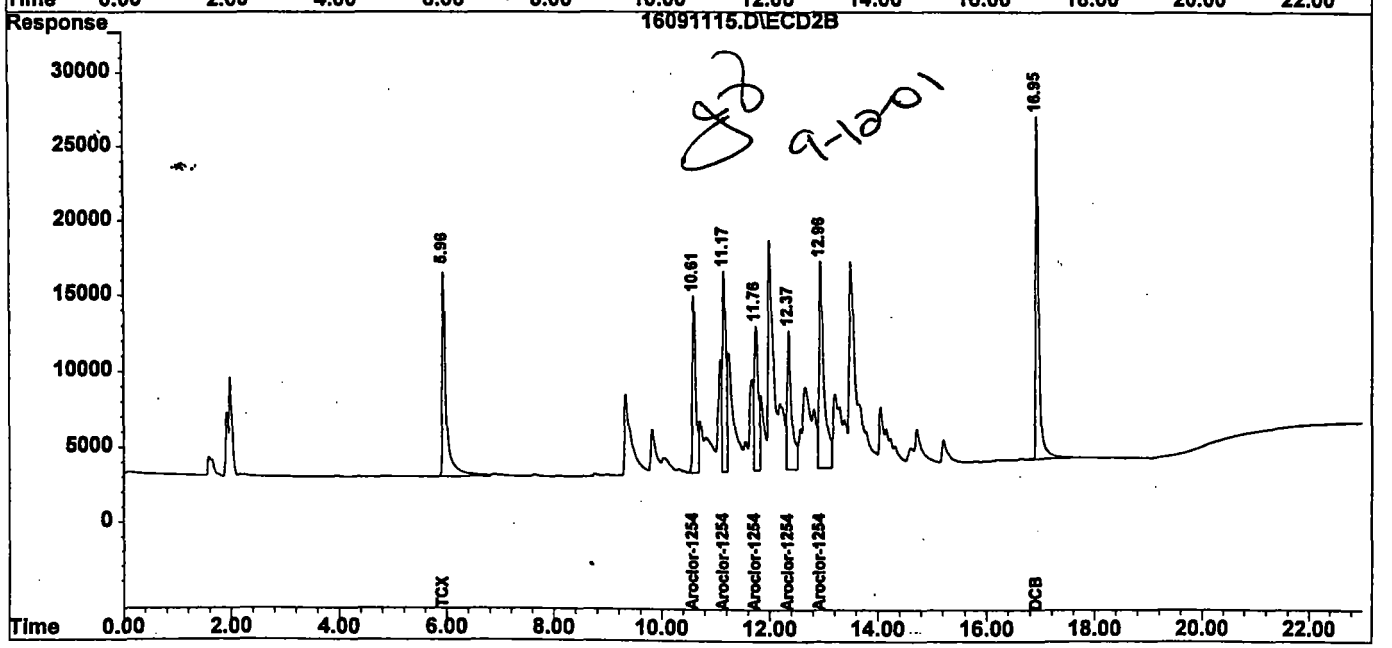
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091115.D\ECD1A.CH Vial: 19
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091115.D\ECD2B.CH
Acq On : 11 Sep 2001 18:07 Operator: DDC
Sample : AR1254L5CI Inst : HP_16
Misc : 5-2-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 11 19:11 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





9-12-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091115.D\ECD1A.CH Vial: 19
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091115.D\ECD2B.CH
Acq On : 11 Sep 2001 18:07 Operator: DDC
Sample : AR1254L5CI Inst : HP_16
Misc : 5-2-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 11 19:11 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.95	5.96	652942	707910	84.7 E	86.8 E
22)	S DCB	17.59	16.95	847789	884561	68.7 E	73.7 E
	Target Compounds:						
12)	L6 Aroclor-1254	11.13	10.61	670471	482387	1661.5	1561.3
13)	L6 Aroclor-1254 {2}	11.54	11.17	549722	600118	1557.7	958.2 E#
14)	L6 Aroclor-1254 {3}	12.50	11.76	876098	476634	1537.2	1351.7 E
15)	L6 Aroclor-1254 {4}	12.88	12.37	498811	503300	1542.0 E	1621.6
16)	L6 Aroclor-1254 {5}	13.31	12.96	570799	865797	1626.5 E	1629.5 E
	Sum Aroclor-1254			3165901	2928237	7925.1	7122.4
	Average Aroclor-1254					1585.018	1424.484

(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_16

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Calibration Files
L1 =16091116.D L2 =16091117.D L3 =16091118.D
L4 =16091119.D L5 =16091120.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
1) TCX	6.6	7.8	6.3	6.5	7.4	6.9 E3	9.36
2) Aroclor-1016	416.1	475.1	368.5	357.8	361.4	395.8	12.68
3) Aroclor-1016 {2}	261.7	325.3	263.0	260.0	193.3	260.7	17.92
4) Aroclor-1016 {3}	230.3	277.0	214.1	219.7	239.7	236.2	10.54
5) Aroclor-1016 {4}	204.4	239.7	188.2	180.8	185.6	199.7	12.03
6) Aroclor-1016 {5}	286.7	356.7	284.6	281.2	292.3	300.3	10.59
17) Aroclor-1260	521.8	658.3	536.7	525.3	545.0	557.4	10.25
18) Aroclor-1260 {2}	468.3	586.2	475.1	475.6	500.3	501.1	9.80
19) Aroclor-1260 {3}	429.5	502.3	367.7	370.3	371.4	408.2	14.36
20) Aroclor-1260 {4}	321.5	408.0	340.2	342.8	376.1	357.7	9.60
21) Aroclor-1260 {5}	838.6	1049.8	806.1	696.0	768.0	831.7	15.99
22) DCB	12.1	13.9	10.5	10.3	10.2	11.4 E3	13.99

Signal #2 Calibration Files
L1 =16091116.D L2 =16091117.D L3 =16091118.D
L4 =16091119.D L5 =16091120.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
24) TCX #2	7.0	8.6	7.3	7.7	8.7	7.9 E3	9.52
25) Aroclor-1016 #2	424.6	489.4	399.9	402.0	414.4	426.1	8.63
26) Aroclor-1016 {2} #2	199.5	208.7	154.2	186.8	179.2	185.7	11.27
27) Aroclor-1016 {3} #2	243.6	259.7	208.6	197.6	200.3	222.0	12.62
28) Aroclor-1016 {4} #2	376.7	436.3	352.8	351.3	361.9	375.8	9.40
29) Aroclor-1016 {5} #2	240.3	308.4	270.5	276.1	279.0	274.9	8.84
40) Aroclor-1260 #2	578.5	659.0	510.0	502.7	513.4	552.7	12.08
41) Aroclor-1260 {2} #2	547.0	703.2	602.5	635.1	727.6	643.1	11.45
42) Aroclor-1260 {3} #2	327.9	416.9	307.7	330.0	363.4	349.2	12.26
43) Aroclor-1260 {4} #2	861.2	1060.4	855.8	903.7	988.9	934.0	9.47
44) Aroclor-1260 {5} #2	437.3	526.1	364.4	416.0	417.2	432.2	13.65
45) DCB #2	11.4	13.5	10.5	10.5	10.5	11.3 E3	11.46

(#) = Out of Range

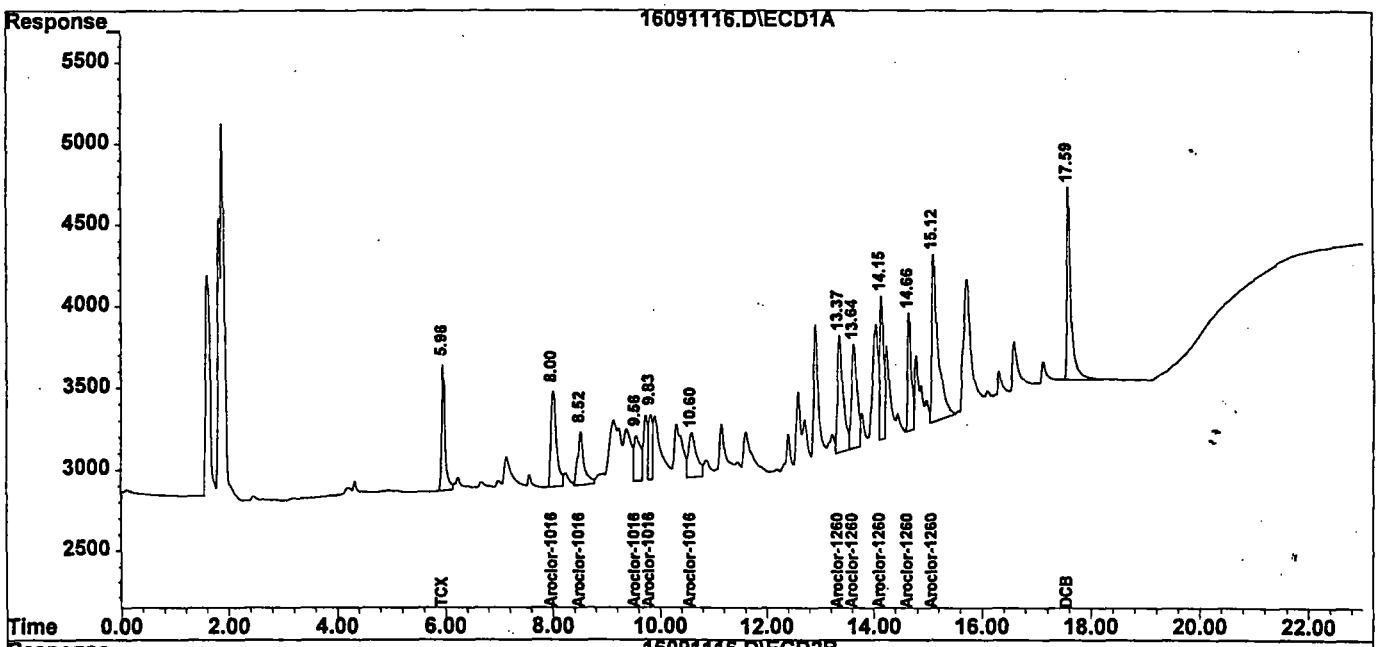
XPCBI11.M Wed Sep 12 10:55:53 2001

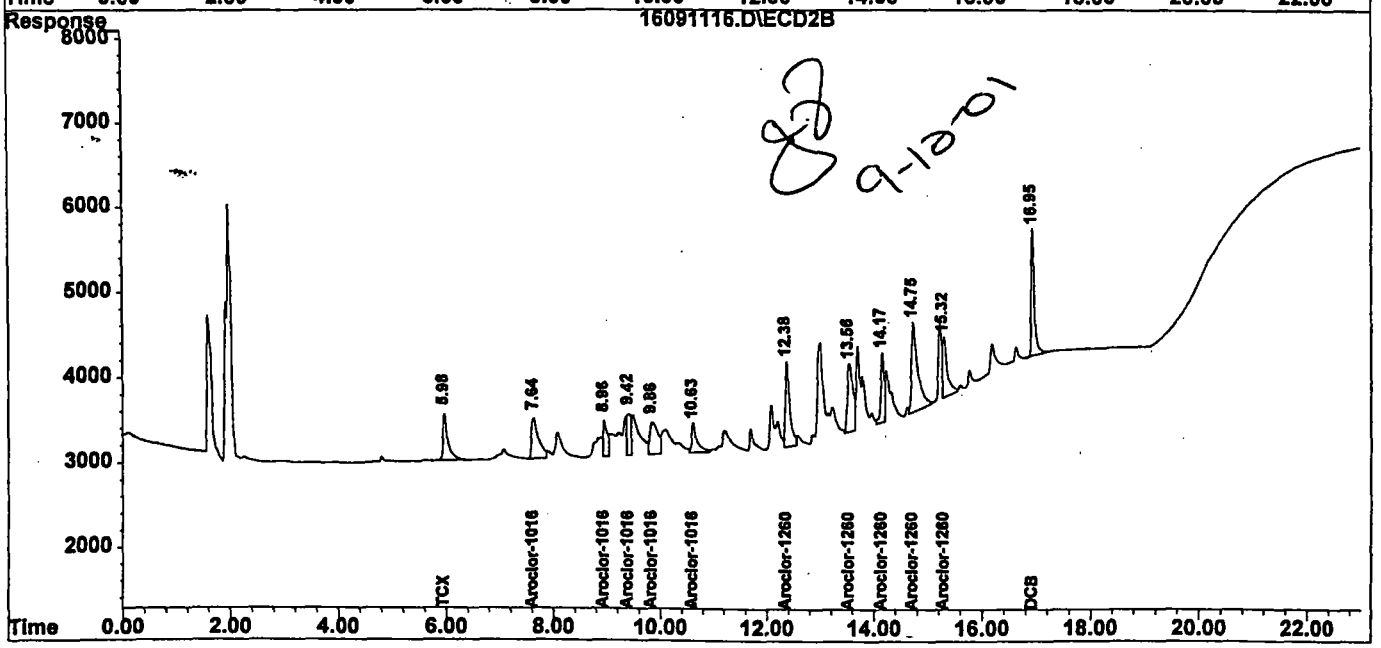
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091116.D\ECD1A.CH Vial: 20
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091116.D\ECD2B.CH
Acq On : 11 Sep 2001 18:34 Operator: DDC
Sample : AR1660L1CI Inst : HP_16
Misc : 5-212-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 12 10:55 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





9-12-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091116.D\ECD1A.CH Vial: 20
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091116.D\ECD2B.CH
Acq On : 11 Sep 2001 18:34 Operator: DDC
Sample : AR1660L1CI Inst : HP_16
Misc : 5-212-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 12 10:55 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

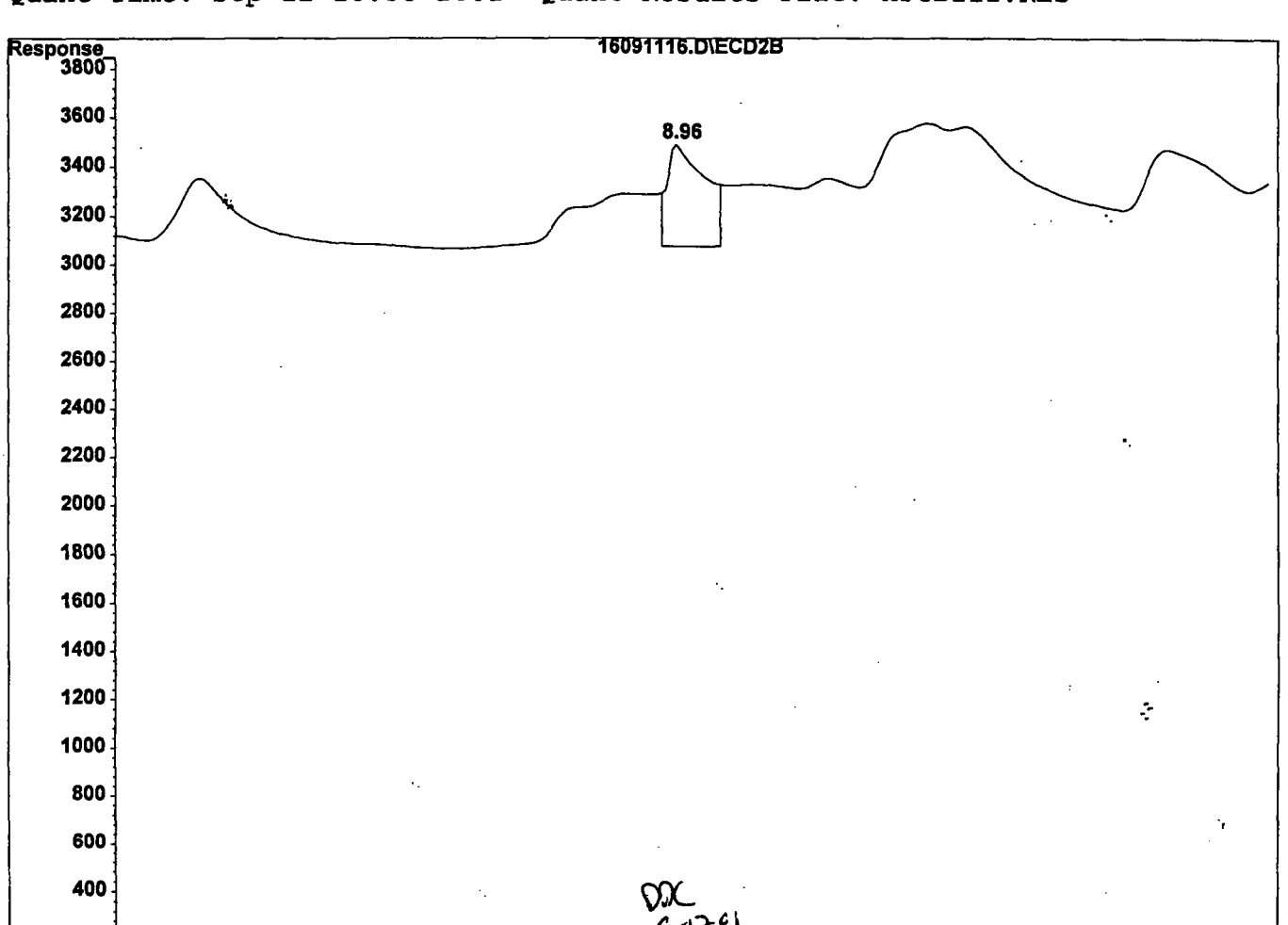
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.96	5.98	32858	34964	4.226	4.324
22)	S DCB	17.60	16.96	60743	56799	4.951	4.761
	Target Compounds:						
2)	L1 Aroclor-1016	8.01	7.64	41614	42459	122.3	124.2
3)	L1 Aroclor-1016 {2}	8.52f	8.96f	26171	19948	153.5	80.5m #
4)	L1 Aroclor-1016 {3}	9.56f	9.42	23030	24364	114.0	141.4m
5)	L1 Aroclor-1016 {4}	9.83	9.86	20437	37672	121.9	129.1
6)	L1 Aroclor-1016 {5}	10.60	10.63	28673	24027	117.6	105.5
	Sum Aroclor-1016			139925	148469	629.4	580.7
	Average Aroclor-1016					125.884	116.134
17)	L7 Aroclor-1260	13.37	12.39f	52183	57849	110.8	133.9
18)	L7 Aroclor-1260 {2}	13.64f	13.57	46834	54699	110.3	102.6
19)	L7 Aroclor-1260 {3}	14.15f	14.18f	42954	32788	129.2	121.5
20)	L7 Aroclor-1260 {4}	14.66f	14.75	32145	86124	107.1	117.5
21)	L7 Aroclor-1260 {5}	15.12	15.33f	83859	43726	122.2	133.2
	Sum Aroclor-1260			257975	275185	579.6	608.6
	Average Aroclor-1260					115.922	121.721

DDC 9-12-01

(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\16\DATA\09_11_01\16091116.D
Date Acquired: 11 Sep 2001 18:34
Inst: HP_16 Operator ID: DDC
Name: AR1660L1CI
Misc: 5-212-7
Method: F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title: PCB/TOXAPHENE
Quant Time: Sep 12 10:55 2001 Quant Results File: XPCBI11.RES



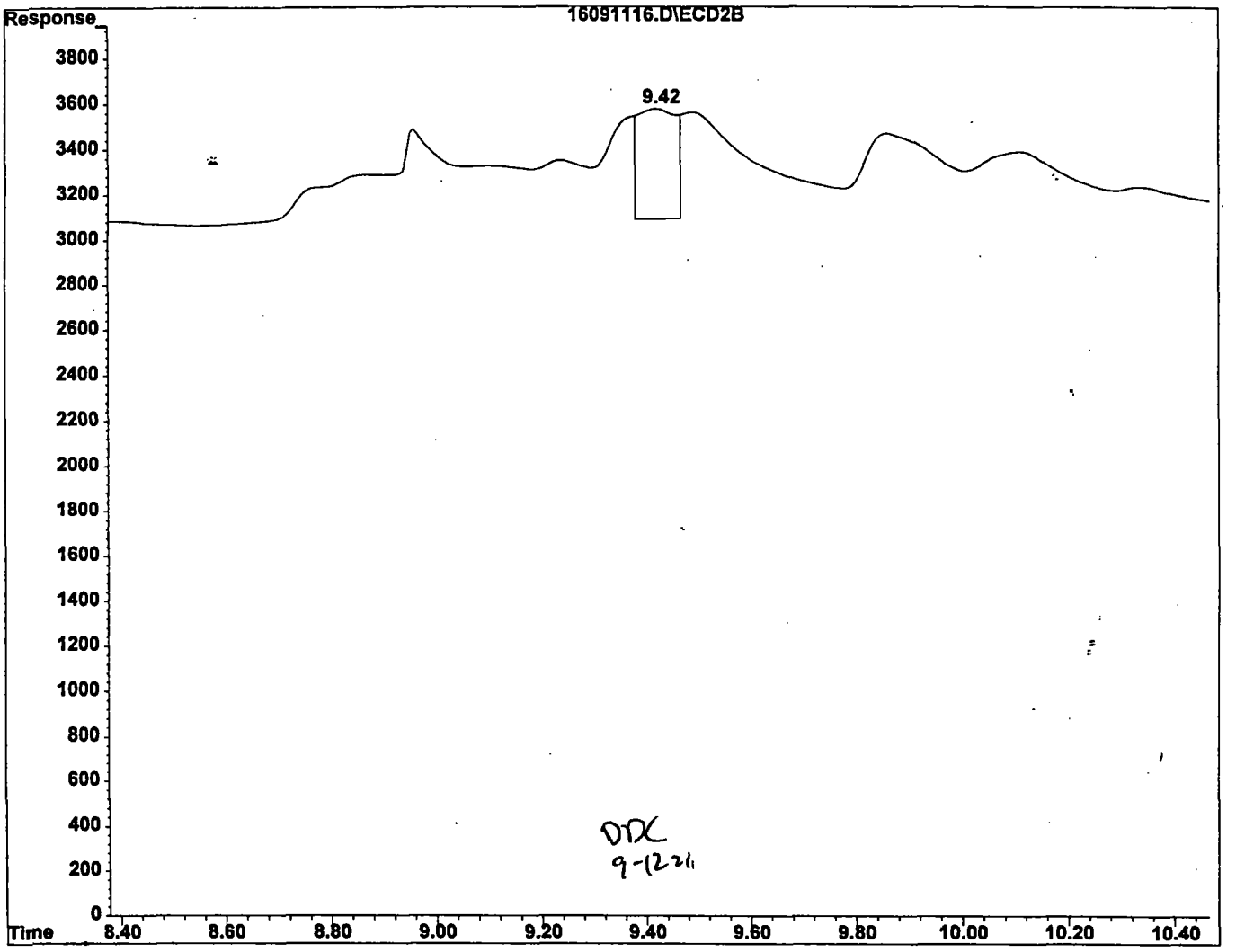
Aroclor-1016 {2} #2 8.96min area: 19948 m

Integration Time Range: 8.93 - 9.04

F:\HPCHEM\HP\16\DATA\09_11_01\16091116.D
Report generated: Wed Sep 12 11:14:47 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\09_11_01\16091116.D
Date Acquired: 11 Sep 2001 18:34
Inst: HP_16 Operator ID: DDC
Name: AR1660L1CI
Misc: 5-212-7
Method: F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title: PCB/TOXAPHENE
Quant Time: Sep 12 10:55 2001 Quant Results File: XPCBI11.RES



Aroclor-1016 {3} #2 9.42min area: 24364 m

Integration Time Range: 9.38 - 9.46

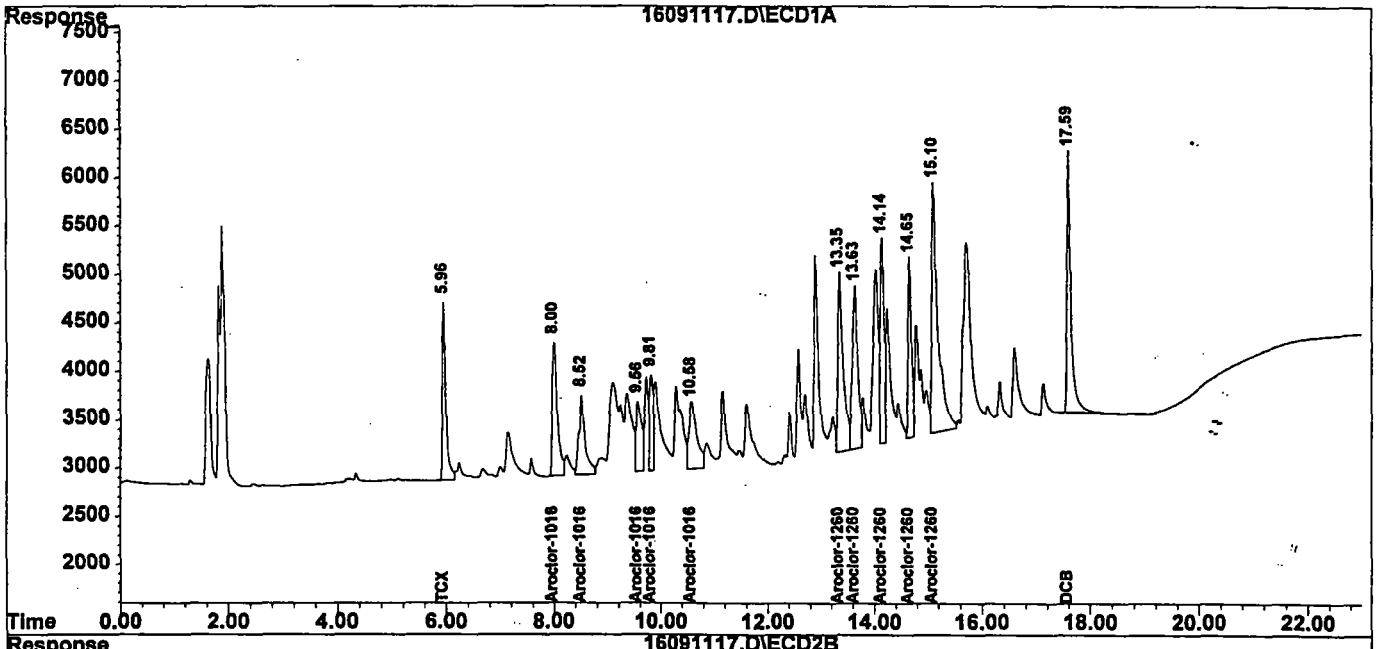
F:\HPCHEM\HP\16\DATA\09_11_01\16091116.D
Report generated: Wed Sep 12 11:14:48 2001

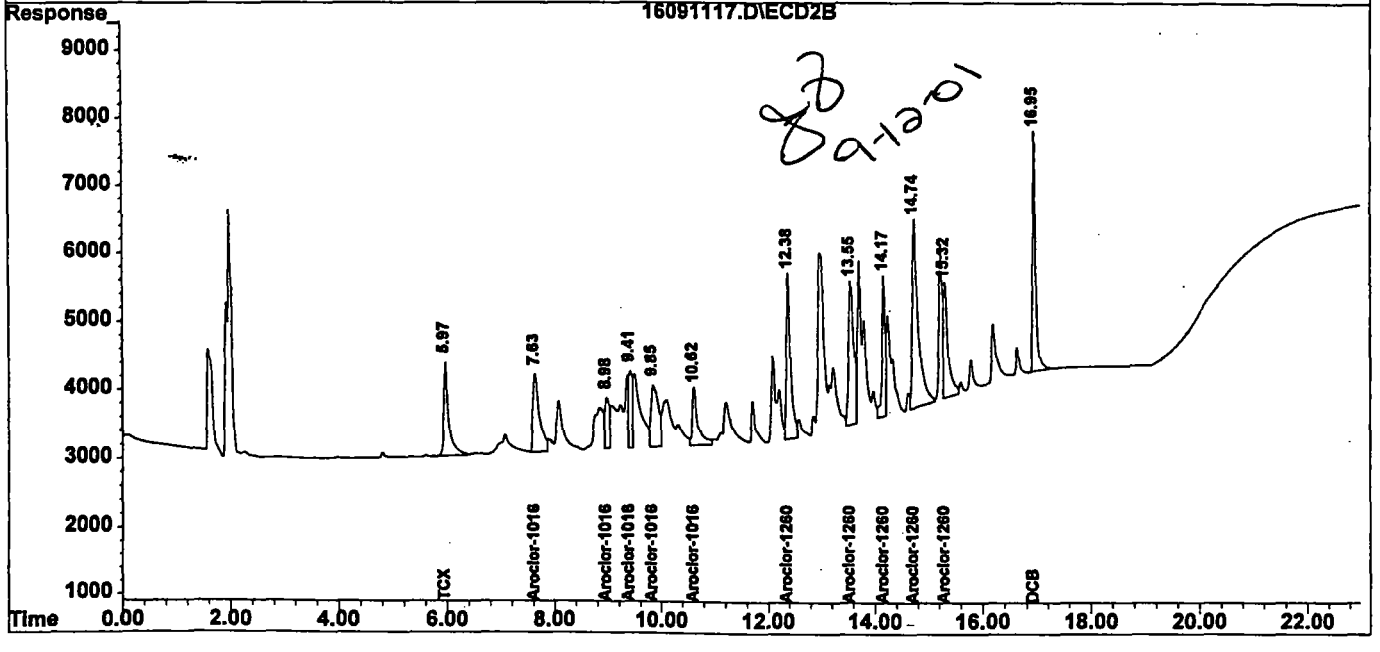
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091117.D\ECD1A.CH Vial: 21
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091117.D\ECD2B.CH
Acq On : 11 Sep 2001 19:00 Operator: DDC
Sample : AR1660L2CI Inst : HP_16
Misc : 5-211-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 12 10:55 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091117.D\ECD1A.CH Vial: 21
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091117.D\ECD2B.CH
Acq On : 11 Sep 2001 19:00 Operator: DDC
Sample : AR1660L2CI Inst : HP_16
Misc : 5-211-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 12 10:55 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

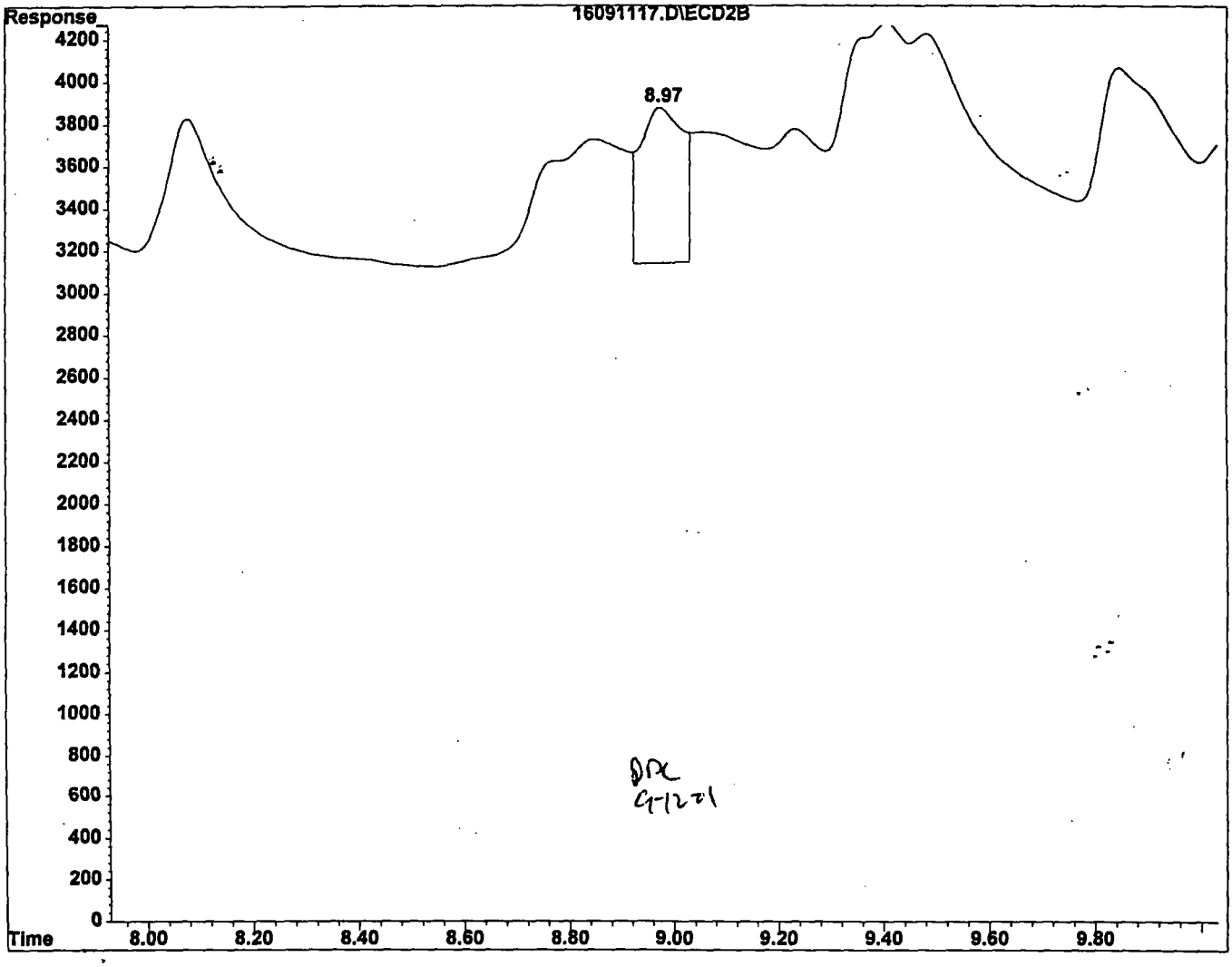
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.96	5.98	78234	85589	10.3	10.8
22)	S DCB	17.60	16.96	139229	135001	12.0	11.8
	Target Compounds:						
2)	L1 Aroclor-1016	8.00	7.64	95019	97874	274.8	278.0
3)	L1 Aroclor-1016 {2}	8.52	8.97	65058	41736	347.2	167.6m #
4)	L1 Aroclor-1016 {3}	9.56	9.41	55406	51948	267.0	242.7m
5)	L1 Aroclor-1016 {4}	9.82	9.85	47940	87267	278.7	287.2
6)	L1 Aroclor-1016 {5}	10.59	10.63	71343	61684	279.0	268.1
	Sum Aroclor-1016			334766	340510	1446.6	1243.6
	Average Aroclor-1016					289.327	248.710
17)	L7 Aroclor-1260	13.35	12.38	131666	131808	276.1	293.7
18)	L7 Aroclor-1260 {2}	13.64	13.56	117235	140639	272.4	261.6
19)	L7 Aroclor-1260 {3}	14.14	14.17	100461	83371	292.1	297.9
20)	L7 Aroclor-1260 {4}	14.66	14.74	81607	212083	269.2	281.5
21)	L7 Aroclor-1260 {5}	15.11	15.32	209953	105228	302.9	303.4
	Sum Aroclor-1260			640921	673130	1412.6	1438.1
	Average Aroclor-1260					282.513	287.622

DX 9-22-01

(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\16\DATA\09_11_01\16091117.D
Date Acquired: 11 Sep 2001 19:00
Inst: HP_16 Operator ID: DDC
Name: AR1660L2CI
Misc: 5-211-7
Method: F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title: PCB/TOXAPHENE
Quant Time: Sep 12 10:55 2001 Quant Results File: XPCBI11.RES



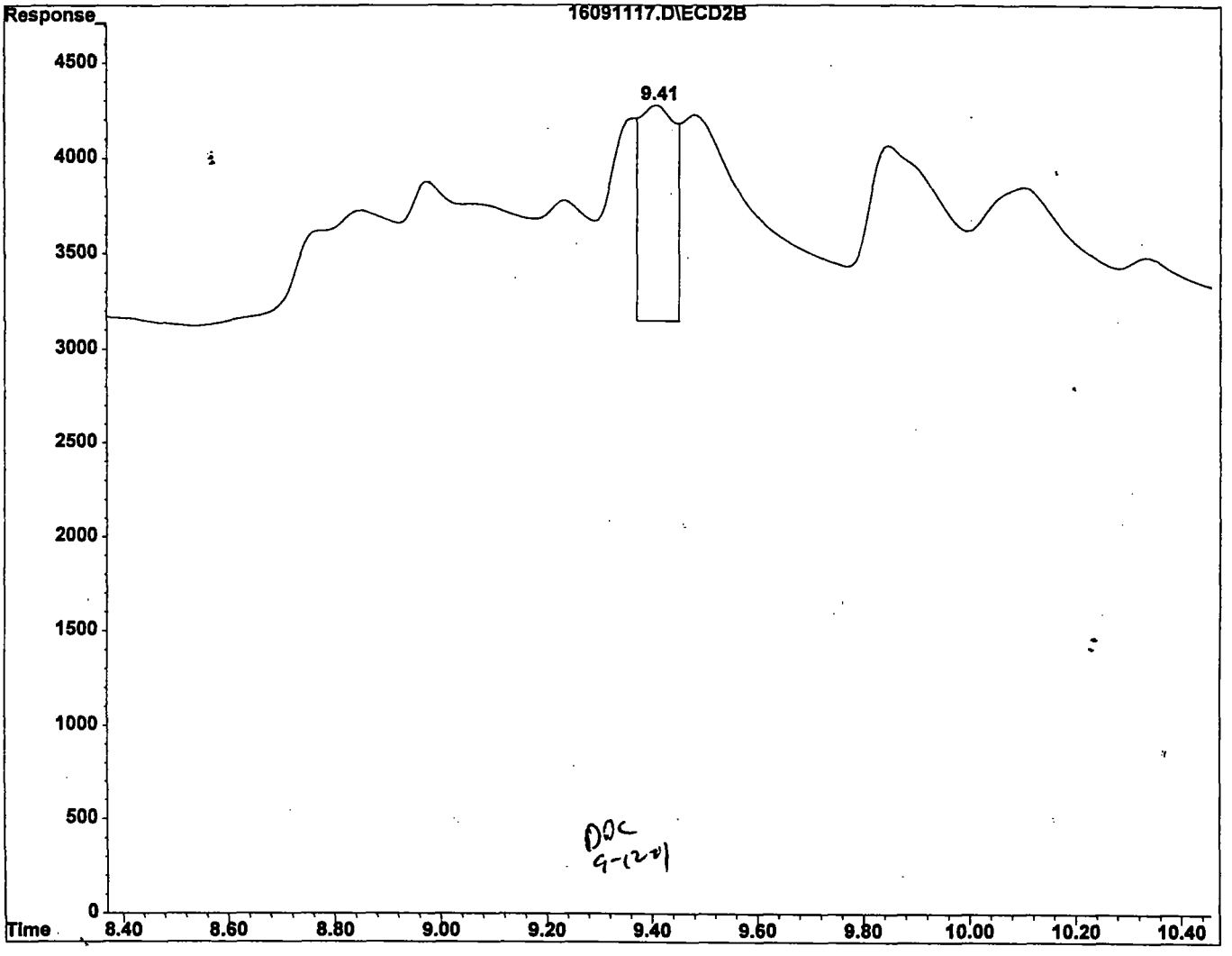
Aroclor-1016 {2} #2 8.97min area: 41736 m

Integration Time Range: 8.93 - 9.03

F:\HPCHEM\HP\16\DATA\09_11_01\16091117.D
Report generated: Wed Sep 12 11:14:49 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\09_11_01\16091117.D
Date Acquired: 11 Sep 2001 19:00
Inst: HP_16 Operator ID: DDC
Name: AR1660L2CI
Misc: 5-211-7
Method: F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title: PCB/TOXAPHENE
Quant Time: Sep 12 10:55 2001 Quant Results File: XPCBI11.RES



Aroclor-1016 {3} #2 9.41min area: 51948 m

Integration Time Range: 9.37 - 9.45

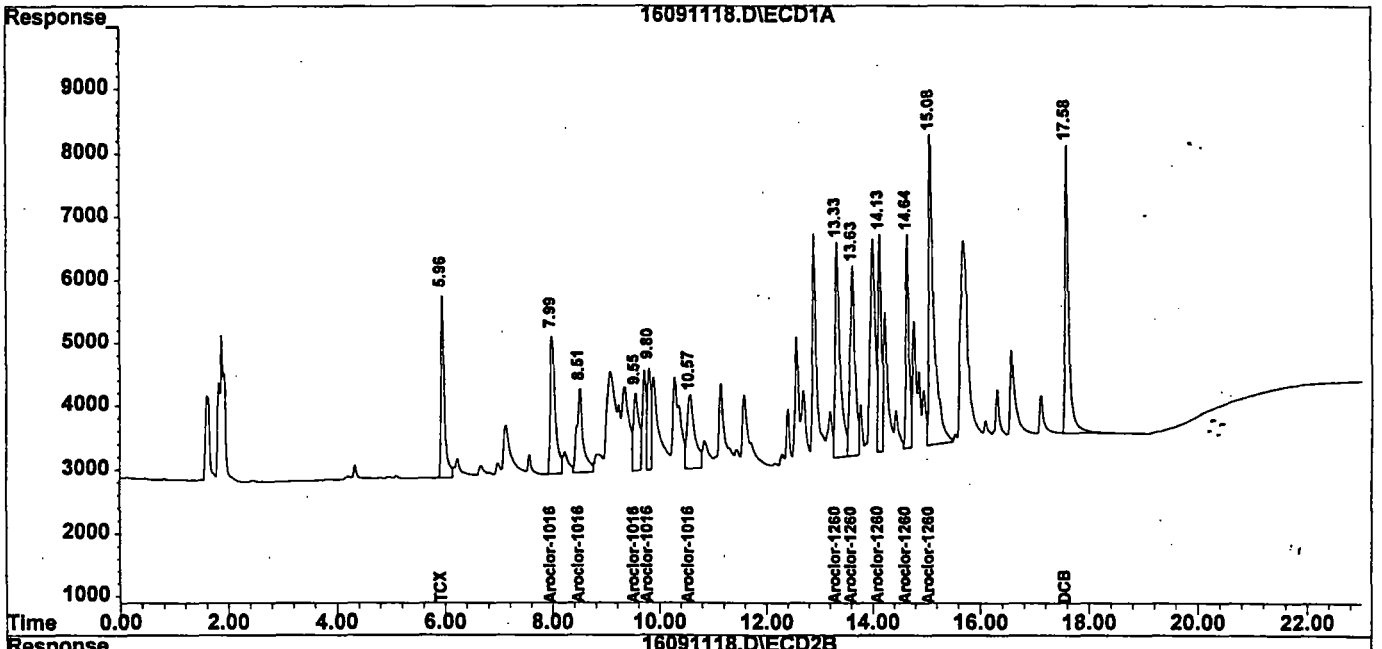
F:\HPCHEM\HP\16\DATA\09_11_01\16091117.D
Report generated: Wed Sep 12 11:14:49 2001

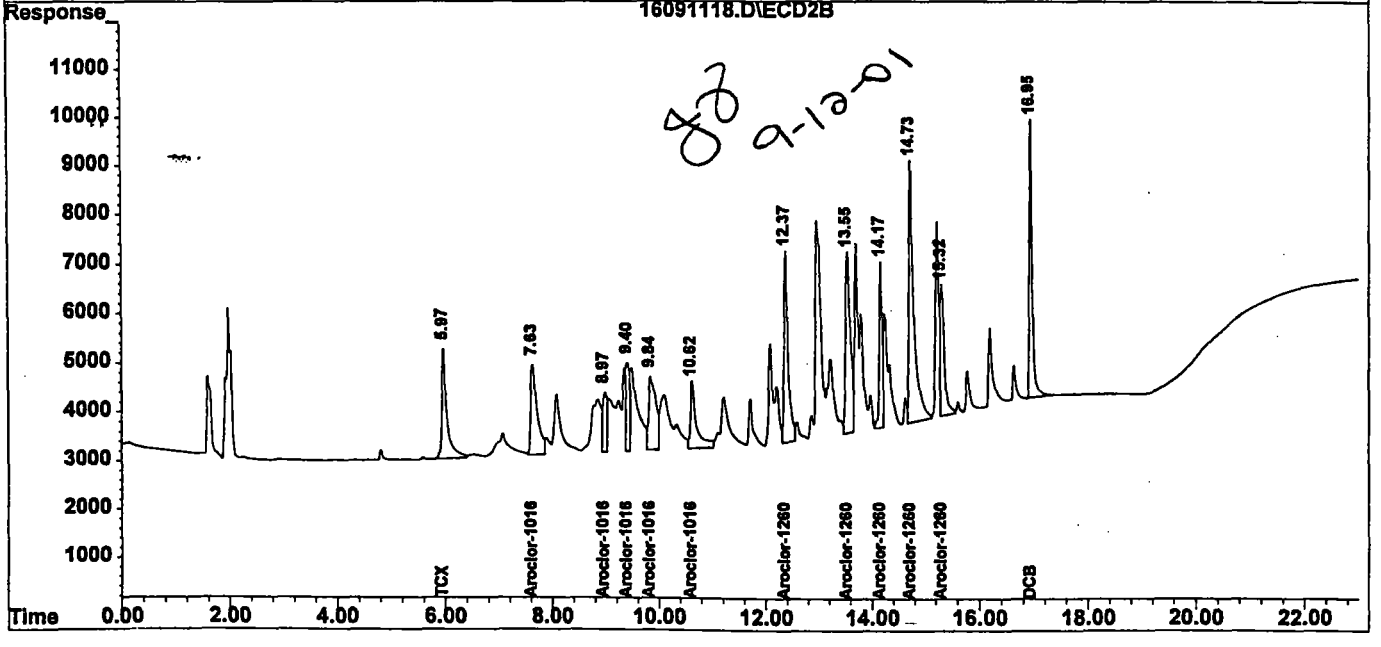
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091118.D\ECD1A.CH Vial: 22
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091118.D\ECD2B.CH
Acq On : 11 Sep 2001 19:27 Operator: DDC
Sample : AR1660L3CN Inst : HP_16
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 12 10:52 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





8-8 9-12-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091118.D\ECD1A.CH Vial: 22
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091118.D\ECD2B.CH
Acq On : 11 Sep 2001 19:27 Operator: DDC
Sample : AR1660L3CN Inst : HP_16
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 12 10:52 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

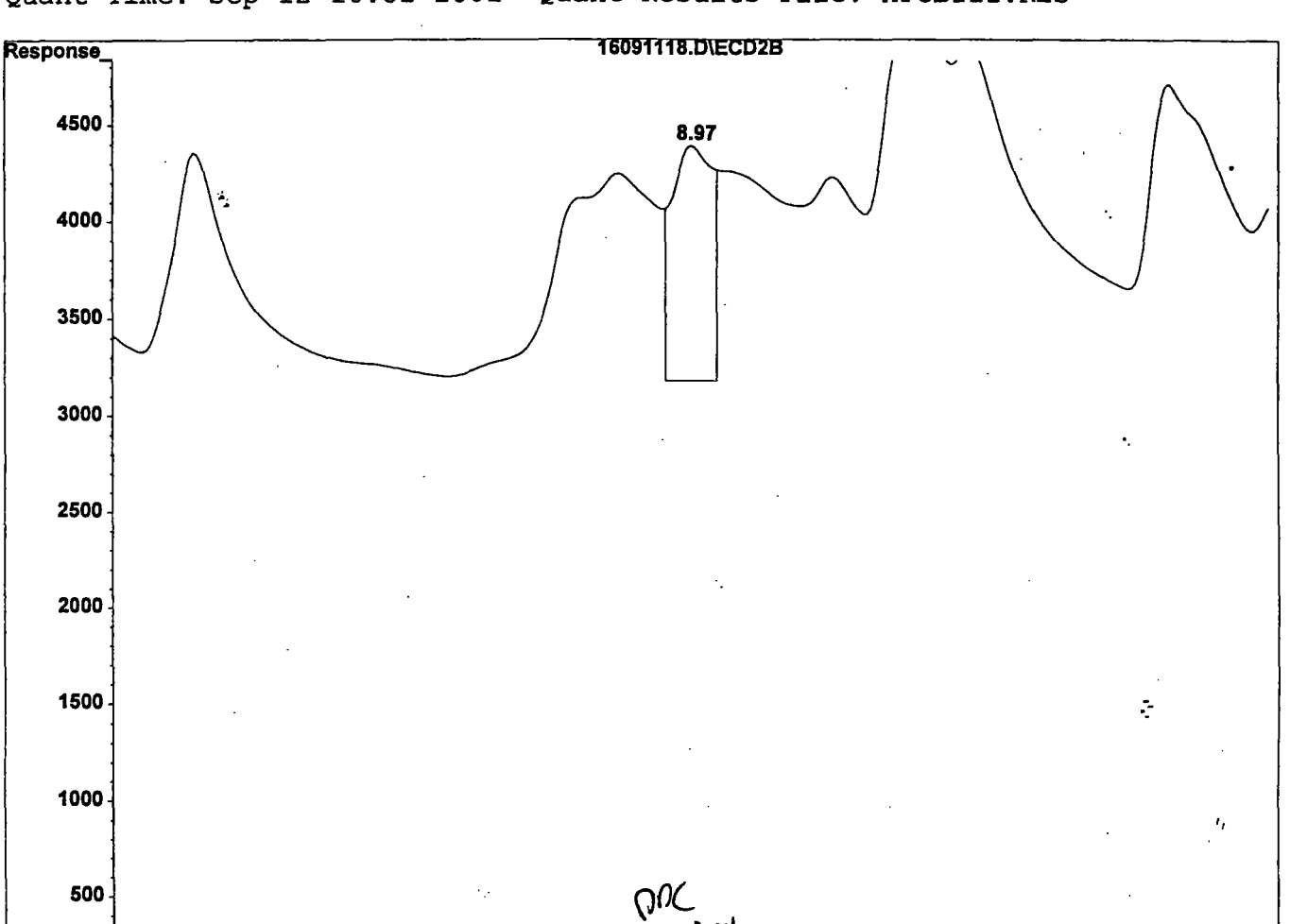
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.96	5.97	126260	146579	17.1	18.7
22)	S DCB	17.59	16.95	210797	210352	18.5	18.7
	Target Compounds:						
2)	L1 Aroclor-1016	7.99	7.63	147384	159964	393.3	414.7
3)	L1 Aroclor-1016 {2}	8.51	8.97	105220	61684	479.4	251.0m #
4)	L1 Aroclor-1016 {3}	9.55	9.41	85637	83449	379.3	307.0
5)	L1 Aroclor-1016 {4}	9.80	9.84	75283	141123	400.4	418.9
6)	L1 Aroclor-1016 {5}	10.58	10.62	113825	108219	404.5	430.7
	Sum Aroclor-1016			527349	554439	2056.9	1822.3
	Average Aroclor-1016					411.372	364.462
17)	L7 Aroclor-1260	13.33	12.38	214668	203988	410.7	409.8
18)	L7 Aroclor-1260 {2}	13.63	13.55	190028	241009	403.9	412.1
19)	L7 Aroclor-1260 {3}	14.13	14.17	147064	123083	385.3	390.8
20)	L7 Aroclor-1260 {4}	14.65	14.73	136061	342335	409.7	410.7
21)	L7 Aroclor-1260 {5}	15.08	15.32	322441	145775	422.2	373.5
	Sum Aroclor-1260			1010263	1056189	2031.7	1996.9
	Average Aroclor-1260					406.348	399.390

DDC 9-12-01

(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\16\DATA\09_11_01\16091118.D
Date Acquired: 11 Sep 2001 19:27
Inst: HP_16 Operator ID: DDC
Name: AR1660L3CN
Misc: 5-210-7
Method: F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title: PCB/TOXAPHENE
Quant Time: Sep 12 10:52 2001 Quant Results File: XPCBI11.RES



Aroclor-1016 {2} #2 8.97min area: 61684 m

Integration Time Range: 8.93 - 9.02

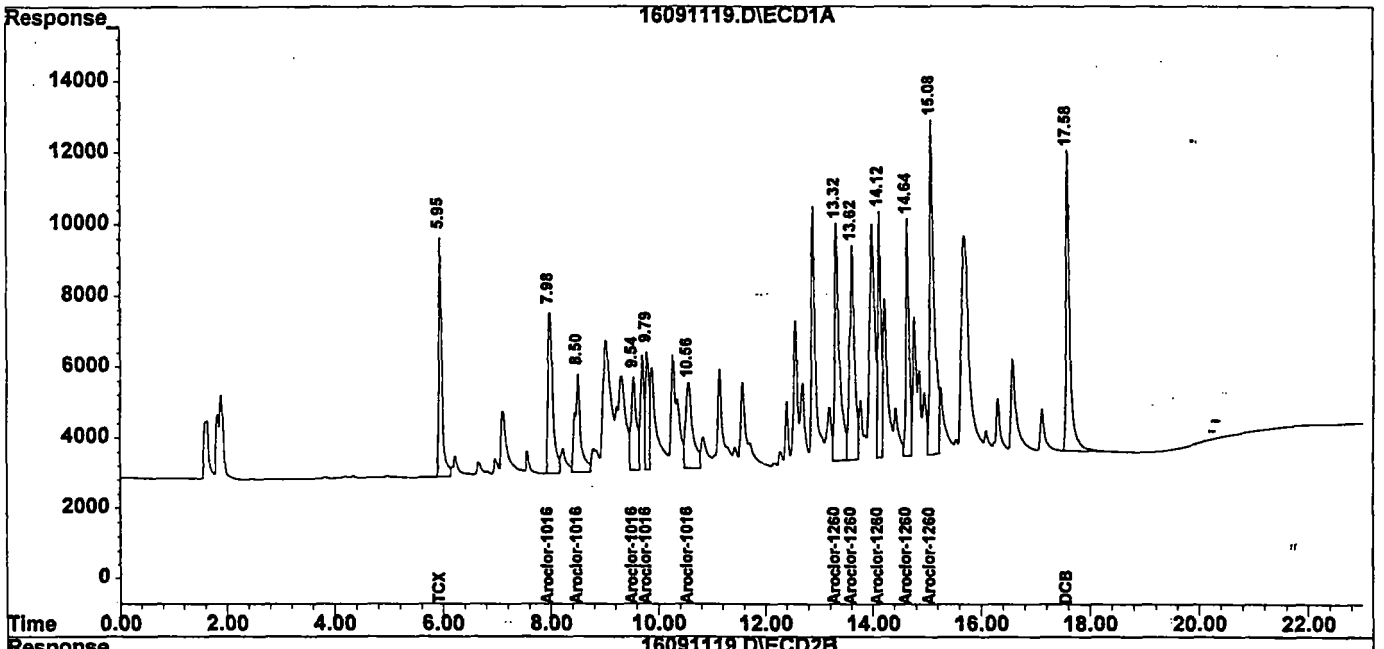
F:\HPCHEM\HP\16\DATA\09_11_01\16091118.D
Report generated: Wed Sep 12 11:14:51 2001

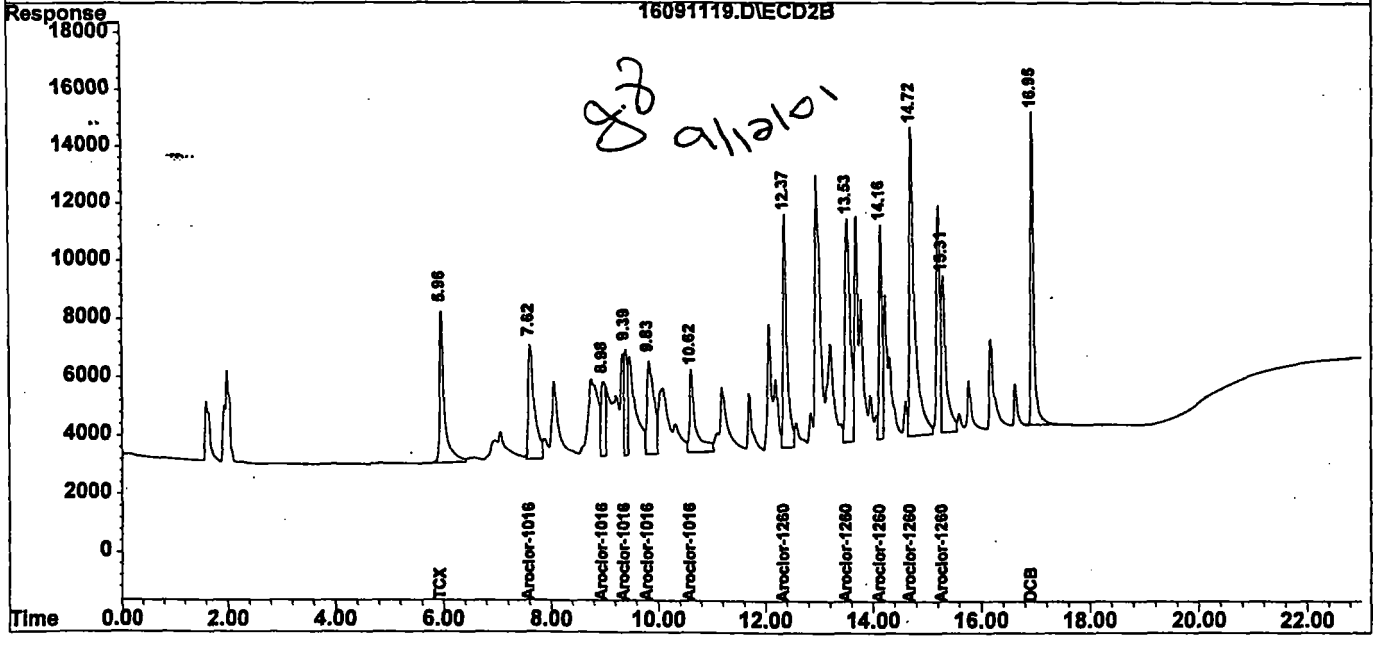
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091119.D\ECD1A.CH Vial: 23
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091119.D\ECD2B.CH
Acq On : 11 Sep 2001 19:53 Operator: DDC
Sample : AR1660L4CI Inst : HP_16
Misc : 5-209-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 12 10:51 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





8.7 9/12/01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091119.D\ECD1A.CH Vial: 23
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091119.D\ECD2B.CH
Acq On : 11 Sep 2001 19:53 Operator: DDC
Sample : AR1660L4CI Inst : HP_16
Misc : 5-209-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 12 10:51 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

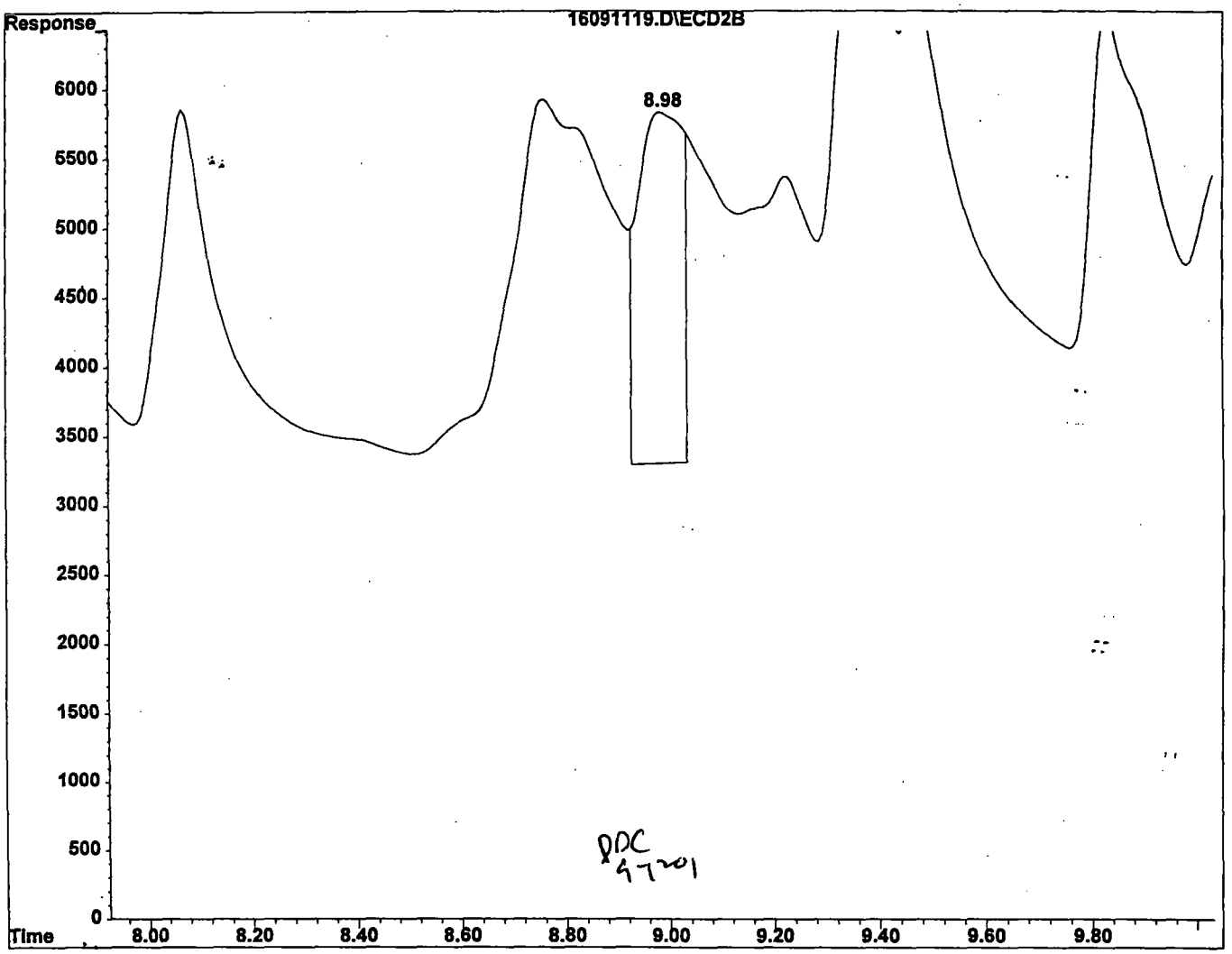
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.95	5.97	261376	309376	35.3	38.5
22)	S DCB	17.59	16.95	412300	419630	35.4	36.3
	Target Compounds:						
2)	L1 Aroclor-1016	7.98	7.62	286214	321619	765.4	823.8
3)	L1 Aroclor-1016 {2}	8.51	8.98	208033	149432	891.5	562.2m #
4)	L1 Aroclor-1016 {3}	9.54	9.40	175722	158050	787.2	573.7 #
5)	L1 Aroclor-1016 {4}	9.79	9.83	144672	281009	768.7	819.6
6)	L1 Aroclor-1016 {5}	10.56	10.62	224921	220884	798.0	870.9
	Sum Aroclor-1016			1039562	1130995	4010.8	3650.2
	Average Aroclor-1016					802.152	730.045
17)	L7 Aroclor-1260	13.32	12.37	420213	402182	803.4	796.0
18)	L7 Aroclor-1260 {2}	13.62	13.54	380503	508085	810.7	865.9
19)	L7 Aroclor-1260 {3}	14.12	14.16	296226	263982	777.6	833.2
20)	L7 Aroclor-1260 {4}	14.64	14.72	274216	722940	825.4	855.8
21)	L7 Aroclor-1260 {5}	15.08	15.32	556777	332763	711.8	851.6
	Sum Aroclor-1260			1927936	2229952	3928.8	4202.4
	Average Aroclor-1260					785.759	840.477

DX 9-12-01

(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\16\DATA\09_11_01\16091119.D
Date Acquired: 11 Sep 2001 19:53
Inst: HP_16 Operator ID: DDC
Name: AR1660L4CI
Misc: 5-209-7
Method: F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title: PCB/TOXAPHENE
Quant Time: Sep 12 10:51 2001 Quant Results File: XPCBI11.RES



Aroclor-1016 {2} #2 8.98min area: 149432 m

Integration Time Range: 8.92 - 9.03

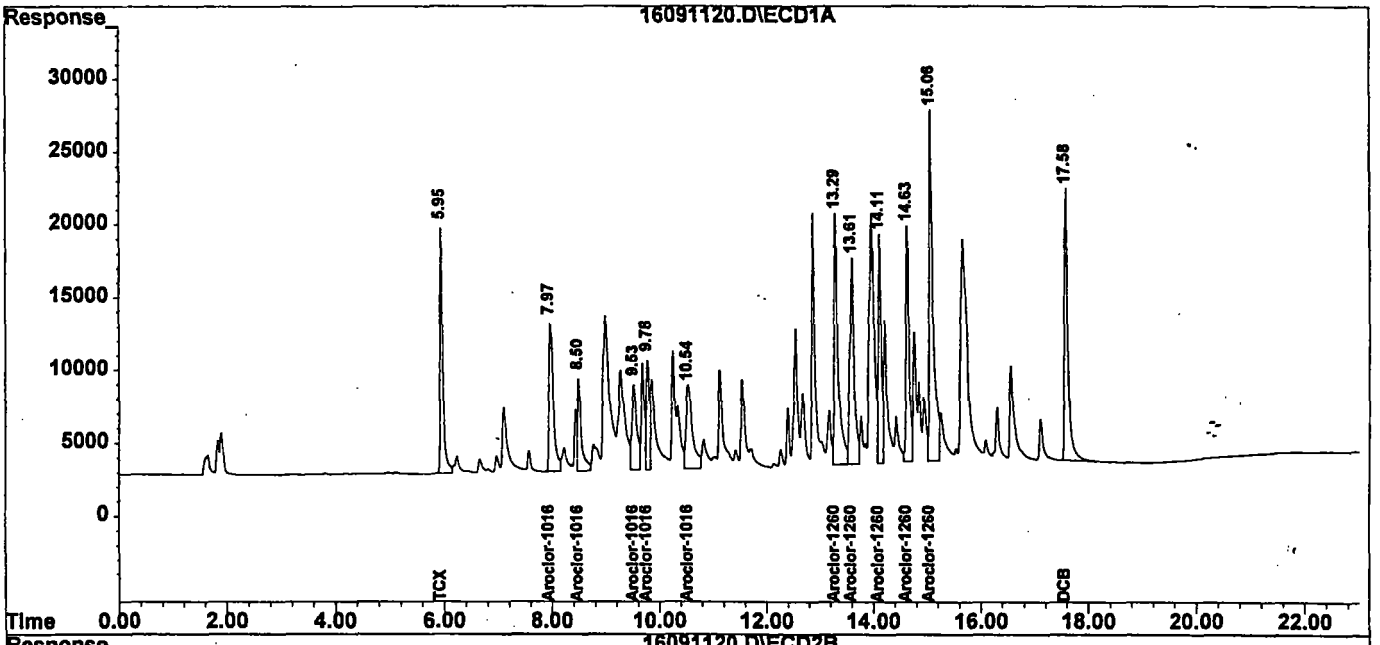
F:\HPCHEM\HP\16\DATA\09_11_01\16091119.D
Report generated: Wed Sep 12 11:14:52 2001

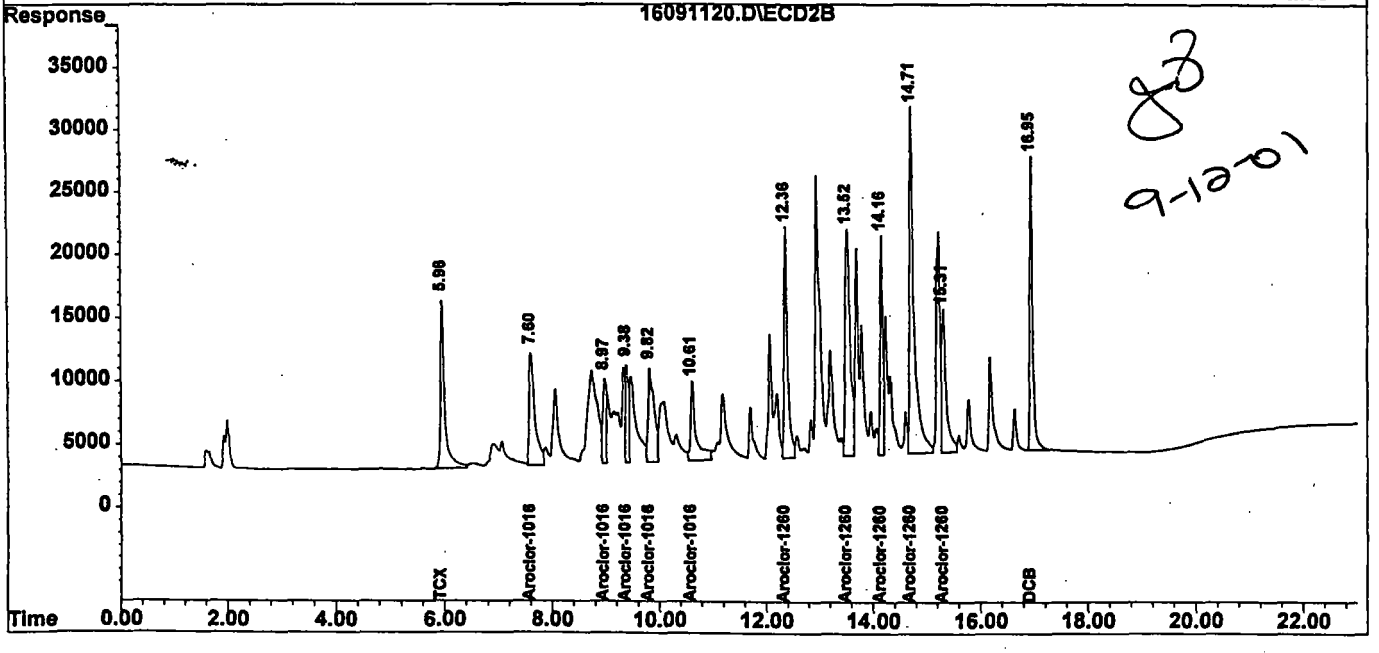
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091120.D\ECD1A.CH Vial: 24
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091120.D\ECD2B.CH
Acq On : 11 Sep 2001 20:19 Operator: DDC
Sample : AR1660L5CI Inst : HP_16
Misc : 5-208-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 12 10:48 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





8
9-12-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091120.D\ECD1A.CH Vial: 24
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091120.D\ECD2B.CH
Acq On : 11 Sep 2001 20:19 Operator: DDC
Sample : AR1660L5CI Inst : HP_16
Misc : 5-208-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 12 10:48 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\09_10_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

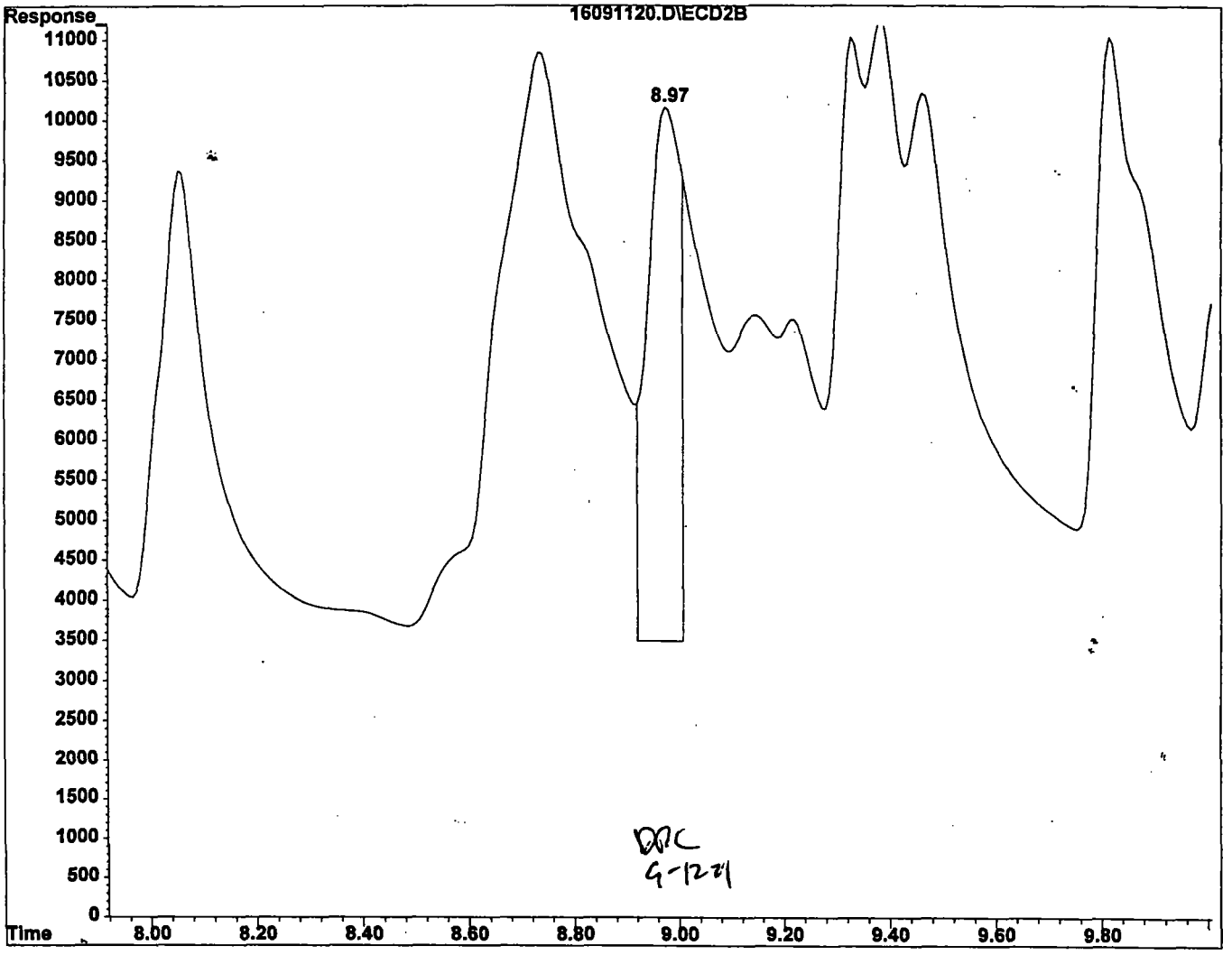
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.95	5.96	591697	695971	83.6	88.2 E
22)	S DCB	17.58	16.95	818457	843324	71.1	74.1
	Target Compounds:						
2)	L1 Aroclor-1016	7.97	7.60	578311	663060	1536.0 E	1661.0
3)	L1 Aroclor-1016 {2}	8.50	8.97	309206	286776	1239.2	1016.7m
4)	L1 Aroclor-1016 {3}	9.53	9.38	383500	320552	1718.2	1146.3 #
5)	L1 Aroclor-1016 {4}	9.78	9.82	296982	578993	1568.1	1647.2
6)	L1 Aroclor-1016 {5}	10.54	10.61	467651	446321	1645.9 E	1726.0
	Sum Aroclor-1016			2035650	2295701	7707.4	7197.2
	Average Aroclor-1016					1541.487	1439.449
17)	L7 Aroclor-1260	13.30	12.36	871939	821379	1656.5	1587.0 E
18)	L7 Aroclor-1260 {2}	13.61	13.52	800447	1164093	1694.1	1958.5 E
19)	L7 Aroclor-1260 {3}	14.12	14.16	594315	581394	1539.0	1796.5 E
20)	L7 Aroclor-1260 {4}	14.63	14.71	601827	1582171	1798.8 E	1829.0 E
21)	L7 Aroclor-1260 {5}	15.06	15.31	1228741	667534	1565.1 E	1652.7 E
	Sum Aroclor-1260			4097269	4816572	8253.6	8823.7
	Average Aroclor-1260					1650.714	1764.748

DDC 9/12/01

(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\16\DATA\09_11_01\16091120.D
Date Acquired: 11 Sep 2001 20:19
Inst: HP_16 Operator ID: DDC
Name: AR1660L5CI
Misc: 5-208-7
Method: F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title: PCB/TOXAPHENE
Quant Time: Sep 12 10:48 2001 Quant Results File: XPCBI11.RES



Aroclor-1016 {2} #2 8.97min area: 286776 m

Integration Time Range: 8.92 - 9.01

F:\HPCHEM\HP\16\DATA\09_11_01\16091120.D
Report generated: Wed Sep 12 11:14:53 2001

Continuing Calibration Report HP_16

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Tue Sep 18 08:28:37 2001
Response via : Initial Calibration

Continuing Calibration File: 16091605.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	6.928	6.387	E3	7.8	101
2	L1	Aroclor-1016	395.782	375.433		5.1	102
3	L1	Aroclor-1016 {2}	260.669	199.026		23.6#	76
4	L1	Aroclor-1016 {3}	236.153	223.090		5.5	104
5	L1	Aroclor-1016 {4}	199.746	194.216		2.8	103
6	L1	Aroclor-1016 {5}	300.287	289.114		3.7	102
17	L7	Aroclor-1260	557.411	527.237		5.4	98
18	L7	Aroclor-1260 {2}	501.098	482.835		3.6	102
19	L7	Aroclor-1260 {3}	408.246	377.069		7.6	103
20	L7	Aroclor-1260 {4}	357.710	351.830		1.6	103
21	L7	Aroclor-1260 {5}	831.679	701.344		15.7#	87
22	S	DCB	11.430	9.296	E3	18.7#	88

Signal #2
Continuing Calibration File: 16091605.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	7.863	7.739	E3	1.6	106
2	L1	Aroclor-1016	426.061	422.019		0.9	106
3	L1	Aroclor-1016 {2}	185.679	179.480		3.3	116
4	L1	Aroclor-1016 {3}	221.982	214.421		3.4	103
5	L1	Aroclor-1016 {4}	375.798	361.611		3.8	102
6	L1	Aroclor-1016 {5}	274.859	284.707		-3.6	105
17	L7	Aroclor-1260	552.718	524.216		5.2	103
18	L7	Aroclor-1260 {2}	643.074	670.709		-4.3	111
19	L7	Aroclor-1260 {3}	349.158	346.233		0.8	113
20	L7	Aroclor-1260 {4}	934.005	861.365		7.8	101
21	L7	Aroclor-1260 {5}	432.199	339.887		21.4#	93
22	S	DCB	11.282	10.246	E3	9.2	97

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

16091605.D XPCBI11.M Tue Sep 18 08:28:43 2001

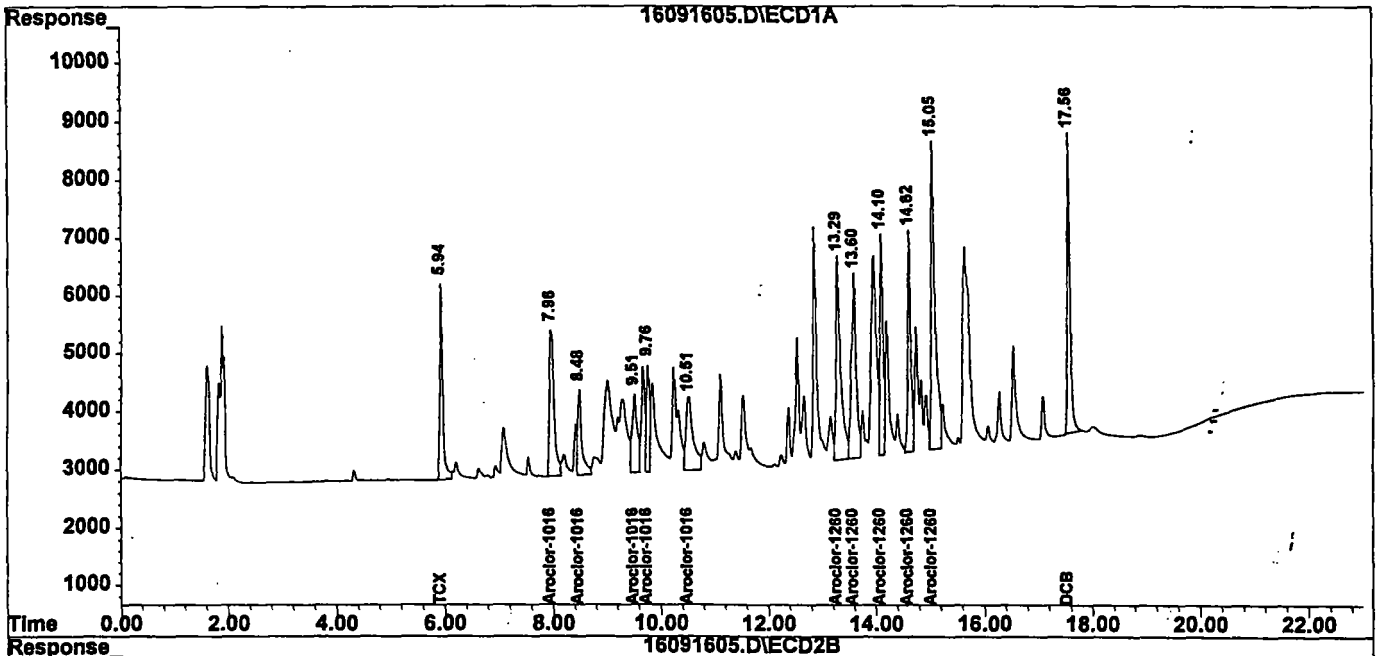
COPY
ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29602 SDG E0249
Signature Amelia M Williams
Date 09/19/01

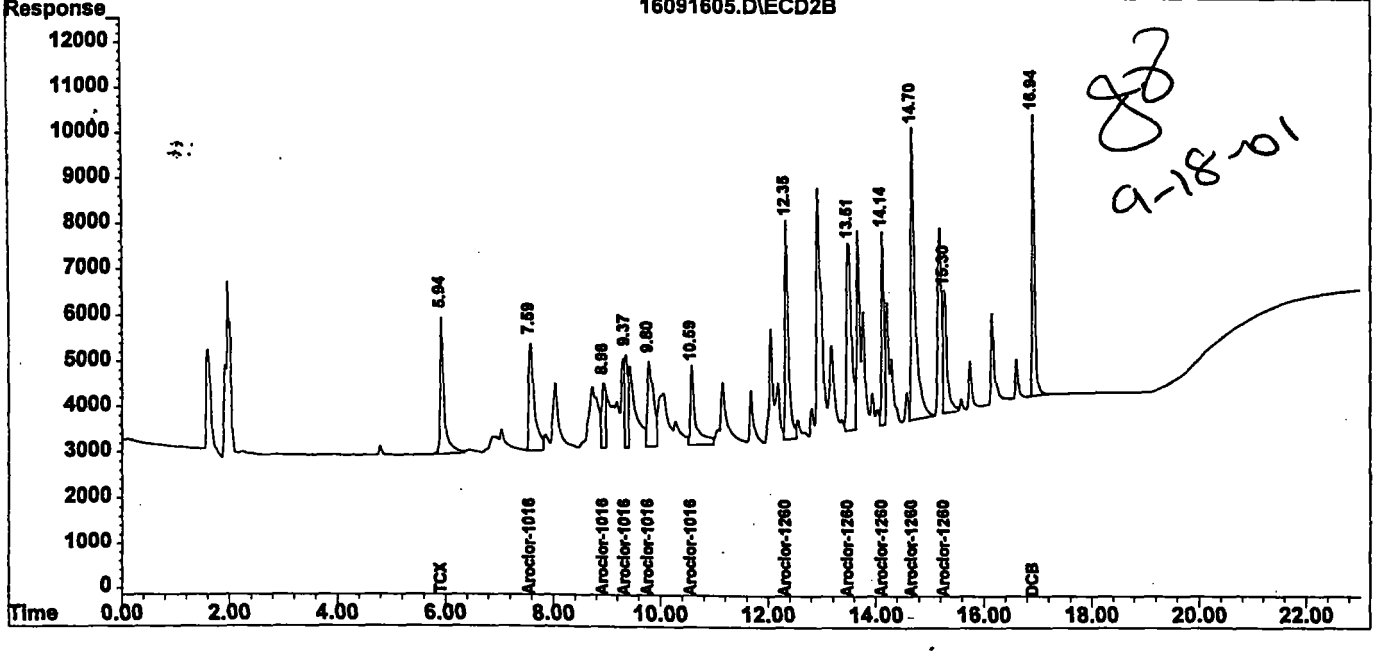
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091605.D\ECD1A.CH Vial: 5
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091605.D\ECD2B.CH
Acq On : 16 Sep 2001 13:14 Operator: DDC
Sample : AR1660L3CN0 Inst : HP_16
Misc : 5-210-7 09/9/01 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 8:28 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





88
9-18-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091605.D\ECD1A.CH Vial: 5
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091605.D\ECD2B.CH
Acq On : 16 Sep 2001 13:14 Operator: DDC
Sample : AR1660L3CN0 Inst : HP_16
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 8:28 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

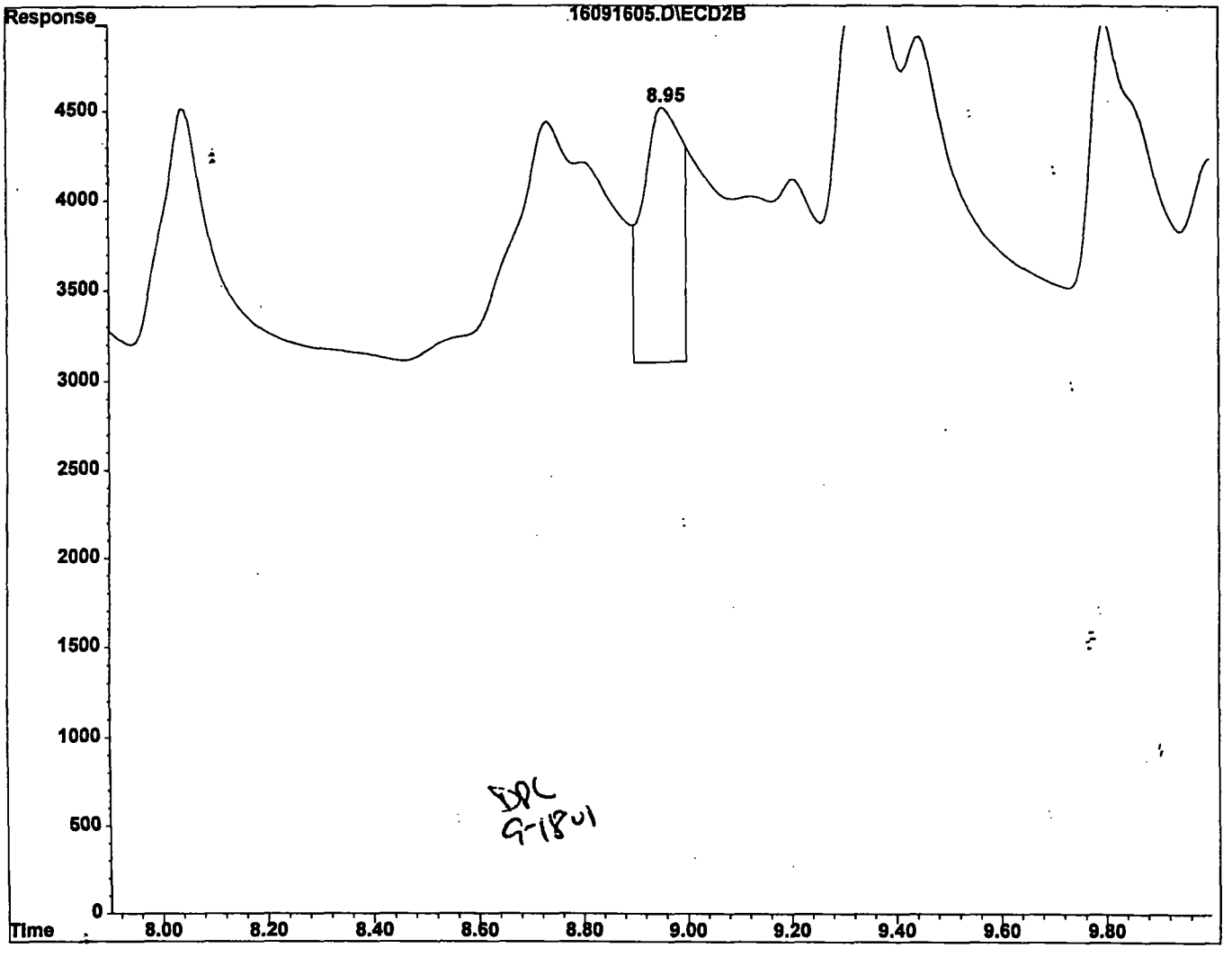
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.94	5.95	127741	154788	18.4	19.7
22)	S DCB	17.56	16.94	185917	204911	16.3	18.2
	Target Compounds:						
2)	L1 Aroclor-1016	7.96	7.60	150173	168807	379.4	396.2
3)	L1 Aroclor-1016 {2}	8.48	8.95	79610	71792	305.4	386.6m #
4)	L1 Aroclor-1016 {3}	9.52	9.37	89236	85768	377.9	386.4
5)	L1 Aroclor-1016 {4}	9.76	9.80	77686	144644	388.9	384.9
6)	L1 Aroclor-1016 {5}	10.52	10.60	115646	113883	385.1	414.3
	Sum Aroclor-1016			512352	584895	1836.8	1968.5
	Average Aroclor-1016					367.352	393.691
17)	L7 Aroclor-1260	13.29	12.35	210895	209687	378.3	379.4
18)	L7 Aroclor-1260 {2}	13.60	13.51	193134	268284	385.4	417.2
19)	L7 Aroclor-1260 {3}	14.10	14.15	150828	138493	369.5	396.6
20)	L7 Aroclor-1260 {4}	14.62	14.70	140732	344546	393.4	368.9
21)	L7 Aroclor-1260 {5}	15.05	15.30	280538	135955	337.3	314.6
	Sum Aroclor-1260			976126	1096964	1864.0	1876.7
	Average Aroclor-1260					372.792	375.333

(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\16\DATA\09_16_01\16091605.D
Date Acquired: 16 Sep 2001 13:14
Inst: HP_16 Operator ID: DDC
Name: AR1660L3C~~N~~O
Misc: 5-210-7 09/19/01
Method: F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title: PCB/TOXAPHENE
Quant Time: Sep 18 8:28 2001 Quant Results File: XPCBI11.RES



Aroclor-1016 {2} #2 8.95min area: 71792 m

Integration Time Range: 8.90 - 9.00

F:\HPCHEM\HP\16\DATA\09_16_01\16091605.D
Report generated: Tue Sep 18 08:34:25 2001

Continuing Calibration Report HP_16

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Tue Sep 18 08:30:19 2001
Response via : Initial Calibration

Continuing Calibration File: 16091622.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	6.928	6.121	E3	11.6	97
2	L1	Aroclor-1016	395.782	359.956		9.1	98
3	L1	Aroclor-1016 {2}	260.669	192.418		26.2#	73
4	L1	Aroclor-1016 {3}	236.153	214.140		9.3	100
5	L1	Aroclor-1016 {4}	199.746	187.005		6.4	99
6	L1	Aroclor-1016 {5}	300.287	279.564		6.9	98
17	L7	Aroclor-1260	557.411	510.222		8.5	95
18	L7	Aroclor-1260 {2}	501.098	465.962		7.0	98
19	L7	Aroclor-1260 {3}	408.246	368.382		9.8	100
20	L7	Aroclor-1260 {4}	357.710	340.856		4.7	100
21	L7	Aroclor-1260 {5}	831.679	683.569		17.8#	85
22	S	DCB	11.430	9.000	E3	21.3#	85

Signal #2
Continuing Calibration File: 16091622.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	7.863	7.299	E3	7.2	100
2	L1	Aroclor-1016	426.061	399.352		6.3	100
3	L1	Aroclor-1016 {2}	185.679	176.520		4.9	114
4	L1	Aroclor-1016 {3}	221.982	205.690		7.3	99
5	L1	Aroclor-1016 {4}	375.798	349.239		7.1	99
6	L1	Aroclor-1016 {5}	274.859	267.022		2.9	99
17	L7	Aroclor-1260	552.718	506.829		8.3	99
18	L7	Aroclor-1260 {2}	643.074	639.033		0.6	106
19	L7	Aroclor-1260 {3}	349.158	332.311		4.8	108
20	L7	Aroclor-1260 {4}	934.005	827.850		11.4	97
21	L7	Aroclor-1260 {5}	432.199	333.230		22.9#	91
22	S	DCB	11.282	9.821	E3	12.9	93

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

16091622.D XPCBI11.M Tue Sep 18 08:30:26 2001

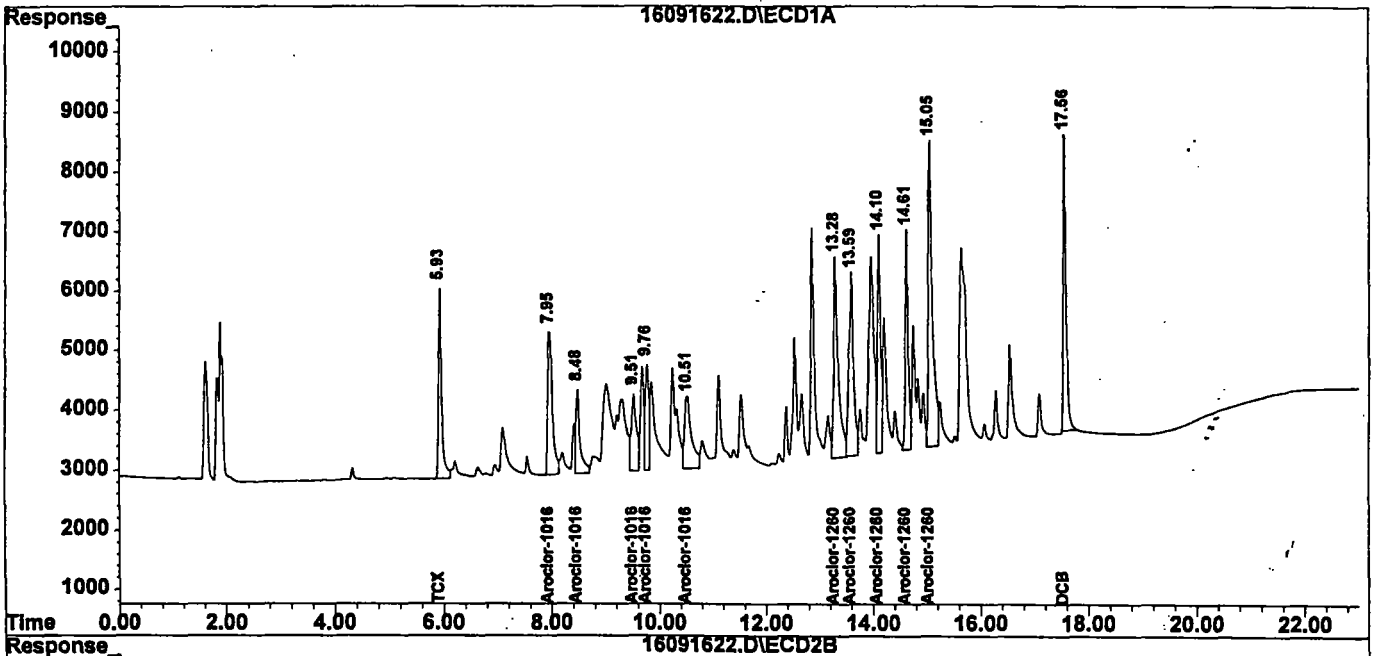
COPY
ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29602 SDG E0249
Signature Michelle M. Williams
Date 09/19/9

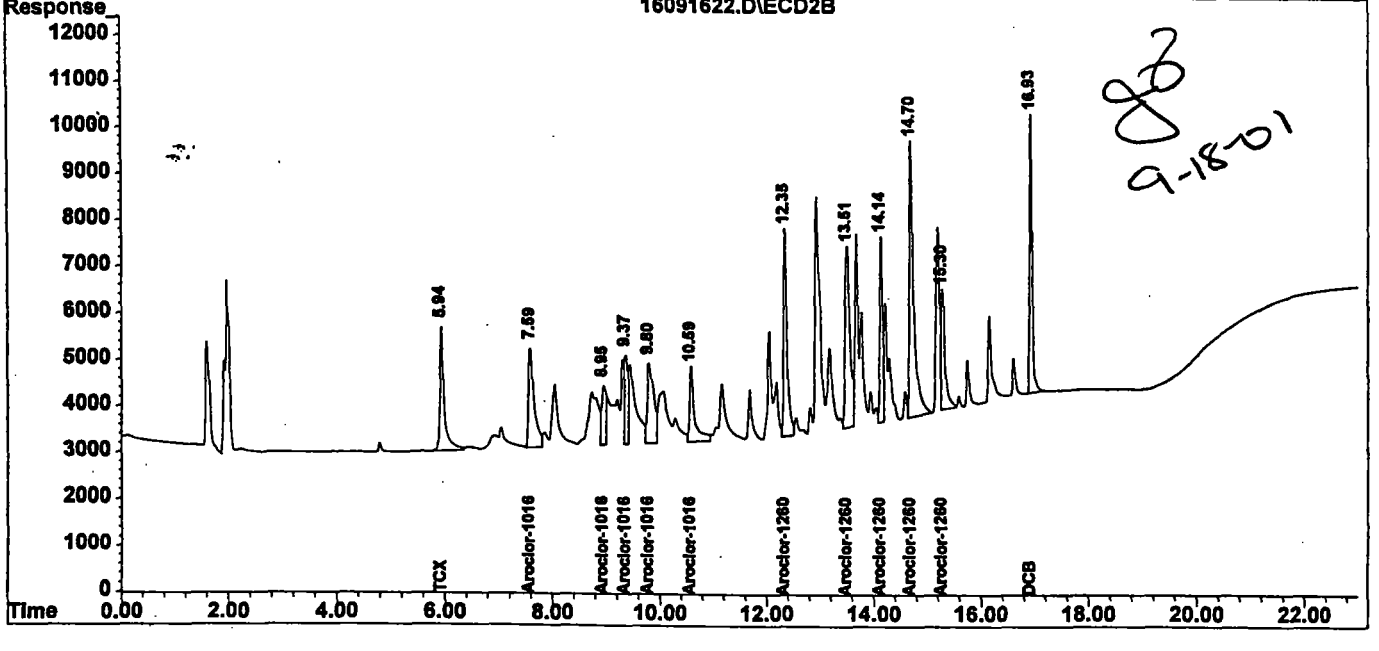
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091622.D\ECD1A.CH Vial: 22
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091622.D\ECD2B.CH
Acq On : 16 Sep 2001 20:43 Operator: DDC
Sample : AR1660L3CP Inst : HP_16
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 8:30 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





9-18-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091622.D\ECD1A.CH Vial: 22
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091622.D\ECD2B.CH
Acq On : 16 Sep 2001 20:43 Operator: DDC
Sample : AR1660L3CP Inst : HP_16
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 8:30 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

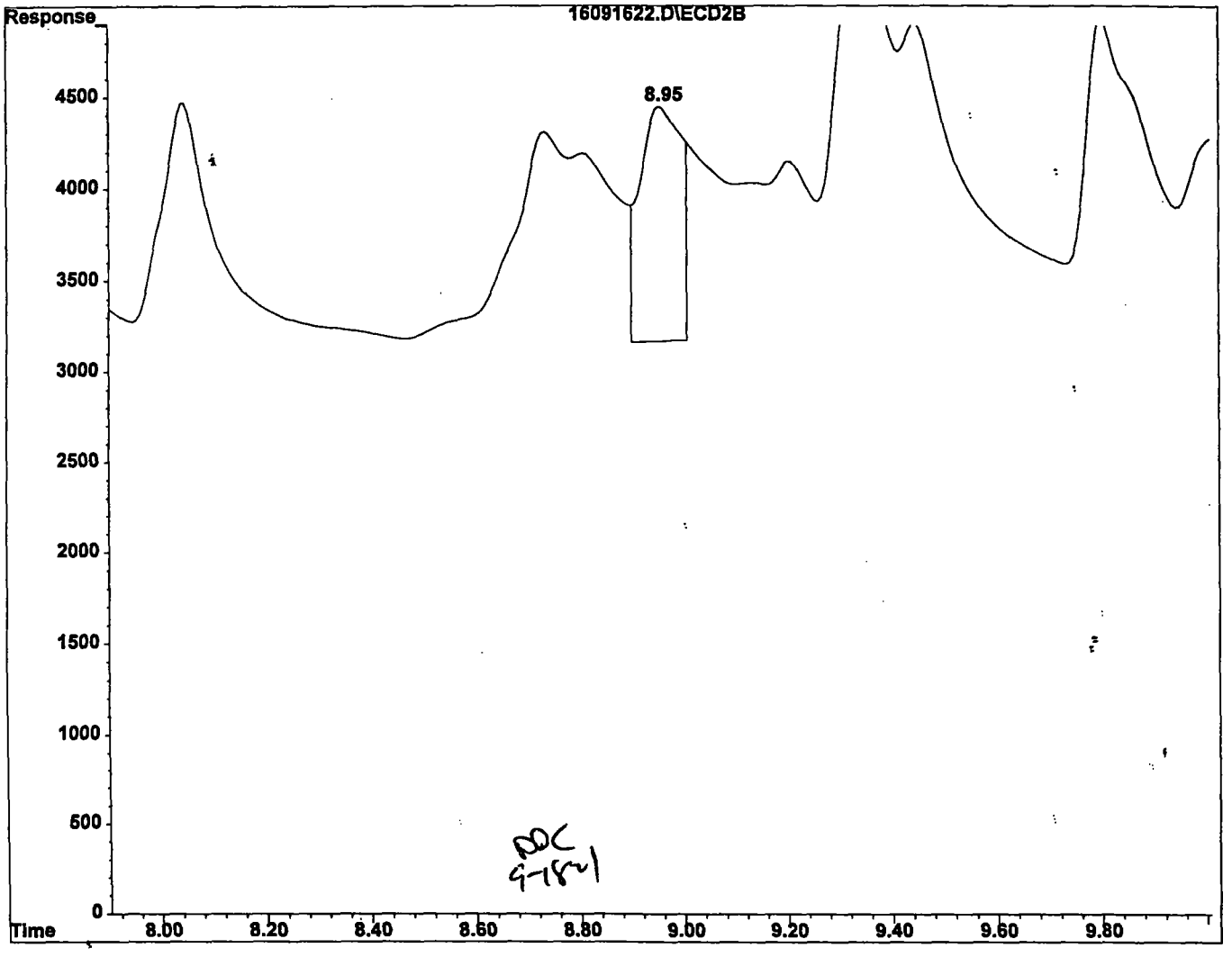
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.94	5.95	122421	145983	17.7	18.6
22)	S DCB	17.56	16.94	180010	196422	15.7	17.4
	Target Compounds:						
2)	L1 Aroclor-1016	7.96	7.60	143982	159741	363.8	374.9
3)	L1 Aroclor-1016 {2}	8.48	8.95	76967	70608	295.3	380.3m #
4)	L1 Aroclor-1016 {3}	9.51	9.37	85656	82276	362.7	370.6
5)	L1 Aroclor-1016 {4}	9.76	9.80	74802	139696	374.5	371.7
6)	L1 Aroclor-1016 {5}	10.52	10.59	111826	106809	372.4	388.6
	Sum Aroclor-1016			493233	559129	1768.7	1886.2
	Average Aroclor-1016					353.731	377.232
17)	L7 Aroclor-1260	13.29	12.35	204089	202732	366.1	366.8
18)	L7 Aroclor-1260 {2}	13.59	13.51	186385	255613	372.0	397.5
19)	L7 Aroclor-1260 {3}	14.10	14.14	147353	132925	360.9	380.7
20)	L7 Aroclor-1260 {4}	14.62	14.70	136342	331140	381.2	354.5
21)	L7 Aroclor-1260 {5}	15.05	15.30	273428	133292	328.8	308.4
	Sum Aroclor-1260			947597	1055701	1809.0	1807.9
	Average Aroclor-1260					361.790	361.584

DC 9-18-01

(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\16\DATA\09_16_01\16091622.D
Date Acquired: 16 Sep 2001 20:43
Inst: HP_16 Operator ID: DDC
Name: AR1660L3CP
Misc: 5-210-7
Method: F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title: PCB/TOXAPHENE
Quant Time: Sep 18 8:30 2001 Quant Results File: XPCBI11.RES



Aroclor-1016 {2} #2 8.95min area: 70608 m

Integration Time Range: 8.90 - 9.01

F:\HPCHEM\HP\16\DATA\09_16_01\16091622.D
Report generated: Tue Sep 18 08:34:26 2001

Continuing Calibration Report HP_16

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Tue Sep 18 08:31:56 2001
Response via : Initial Calibration

Continuing Calibration File: 16091638.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	6.928	7.041	E3	-1.6	112
2	L1	Aroclor-1016	395.782	408.041		-3.1	111
3	L1	Aroclor-1016 {2}	260.669	287.047		-10.1	109
4	L1	Aroclor-1016 {3}	236.153	231.501		2.0	108
5	L1	Aroclor-1016 {4}	199.746	215.321		-7.8	114
6	L1	Aroclor-1016 {5}	300.287	316.208		-5.3	111
17	L7	Aroclor-1260	557.411	581.881		-4.4	108
18	L7	Aroclor-1260 {2}	501.098	536.931		-7.2	113
19	L7	Aroclor-1260 {3}	408.246	418.620		-2.5	114
20	L7	Aroclor-1260 {4}	357.710	391.005		-9.3	115
21	L7	Aroclor-1260 {5}	831.679	908.883		-9.3	113
22	S	DCB	11.430	10.204	E3	10.7	97

Signal #2
Continuing Calibration File: 16091638.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	7.863	8.099	E3	-3.0	111
2	L1	Aroclor-1016	426.061	450.729		-5.8	113
3	L1	Aroclor-1016 {2}	185.679	217.060		-16.9#	141
4	L1	Aroclor-1016 {3}	221.982	234.529		-5.7	112
5	L1	Aroclor-1016 {4}	375.798	396.786		-5.6	112
6	L1	Aroclor-1016 {5}	274.859	307.071		-11.7	114
17	L7	Aroclor-1260	552.718	576.418		-4.3	113
18	L7	Aroclor-1260 {2}	643.074	717.995		-11.7	119
19	L7	Aroclor-1260 {3}	349.158	375.909		-7.7	122
20	L7	Aroclor-1260 {4}	934.005	942.624		-0.9	110
21	L7	Aroclor-1260 {5}	432.199	387.632		10.3	106
22	S	DCB	11.282	11.041	E3	2.1	105

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

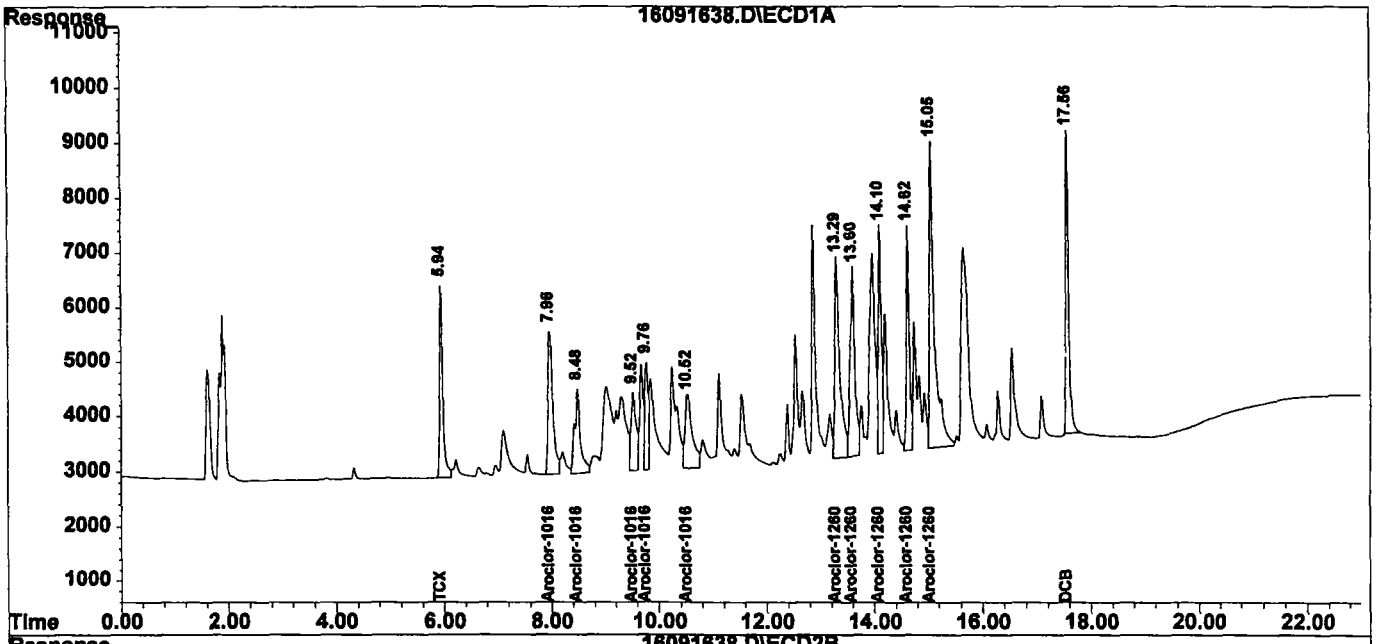
16091638.D XPCBI11.M Tue Sep 18 08:32:03 2001

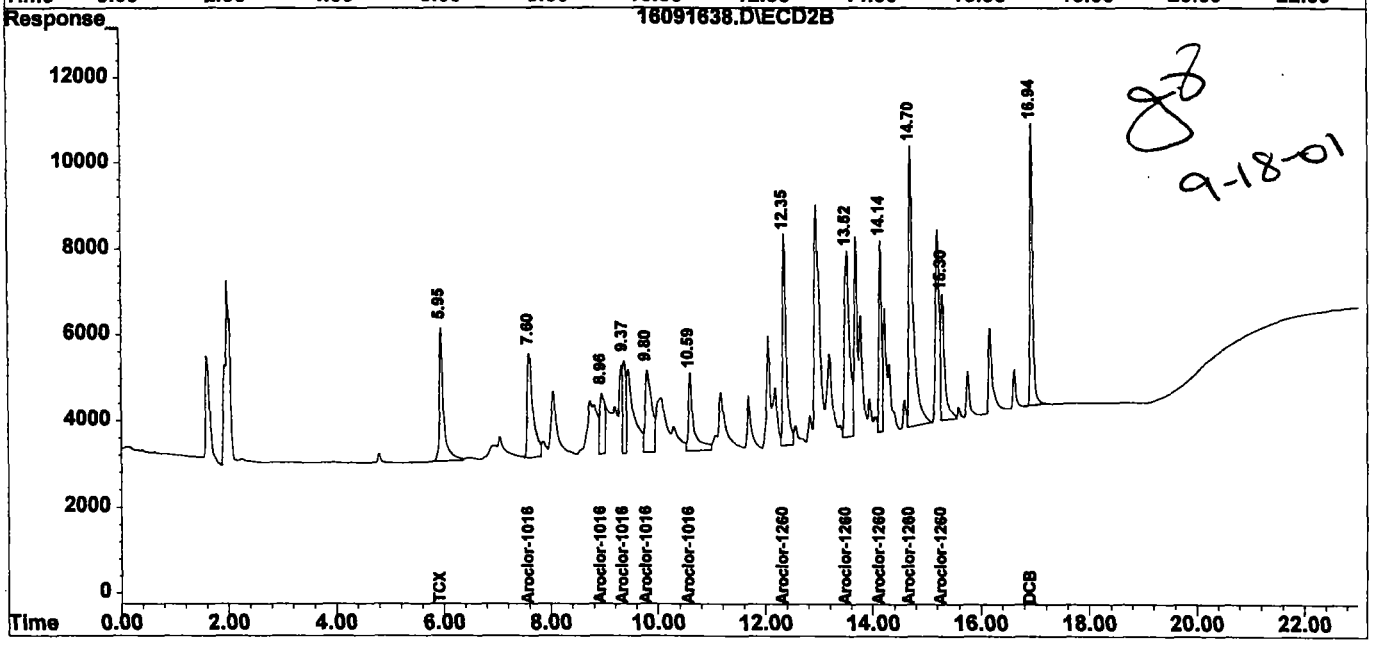
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091638.D\ECD1A.CH Vial: 38
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091638.D\ECD2B.CH
Acq On : 17 Sep 2001 3:46 Operator: DDC
Sample : AR1660L3CR Inst : HP_16
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 8:31 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





9-18-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091638.D\ECD1A.CH Vial: 38
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091638.D\ECD2B.CH
Acq On : 17 Sep 2001 3:46 Operator: DDC
Sample : AR1660L3CR Inst : HP_16
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 8:31 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

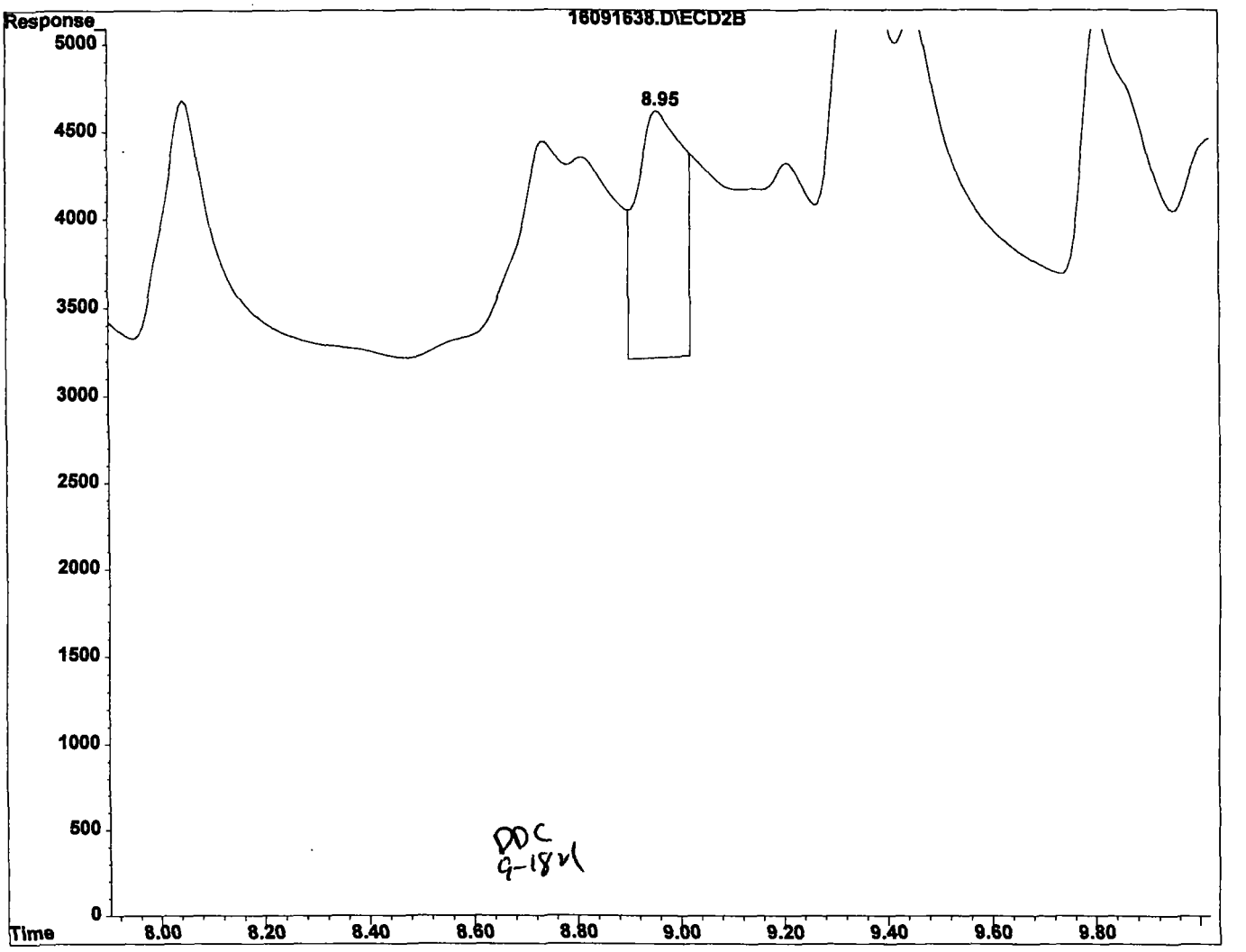
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.94	5.95	140817	161983	20.3	20.6
22)	S DCB	17.56	16.94	204074	220823	17.9	19.6
	Target Compounds:						
2)	L1 Aroclor-1016	7.97	7.60	163216	180291	412.4	423.2
3)	L1 Aroclor-1016 {2}	8.49	8.95	114819	86824	440.5	467.6m
4)	L1 Aroclor-1016 {3}	9.52	9.37	92600	93812	392.1	422.6
5)	L1 Aroclor-1016 {4}	9.77	9.81	86128	158714	431.2	422.3
6)	L1 Aroclor-1016 {5}	10.52	10.60	126483	122828	421.2	446.9
	Sum Aroclor-1016			583247	642470	2097.4	2182.6
	Average Aroclor-1016					419.477	436.518
17)	L7 Aroclor-1260	13.29	12.35	232752	230567	417.6	417.2
18)	L7 Aroclor-1260 {2}	13.60	13.52	214772	287198	428.6	446.6
19)	L7 Aroclor-1260 {3}	14.10	14.15	167448	150363	410.2	430.6
20)	L7 Aroclor-1260 {4}	14.62	14.70	156402	377050	437.2	403.7
21)	L7 Aroclor-1260 {5}	15.06	15.30	363553	155053	437.1	358.8
	Sum Aroclor-1260			1134928	1200231	2130.7	2056.8
	Average Aroclor-1260					426.138	411.369

RPC 4-784

(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\16\DATA\09_16_01\16091638.D
Date Acquired: 17 Sep 2001 3:46
Inst: HP_16 Operator ID: DDC
Name: AR1660L3CR
Misc: 5-210-7
Method: F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title: PCB/TOXAPHENE
Quant Time: Sep 18 8:31 2001 Quant Results File: XPCBI11.RES



Aroclor-1016 {2} #2 8.95min area: 86824 m

Integration Time Range: 8.90 - 9.02

F:\HPCHEM\HP\16\DATA\09_16_01\16091638.D
Report generated: Tue Sep 18 08:34:28 2001

Continuing Calibration Report HP_16

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Tue Sep 18 08:33:21 2001
Response via : Initial Calibration

Continuing Calibration File: 16091652.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	6.928	6.487	E3	6.4	103
2	L1	Aroclor-1016	395.782	376.608		4.8	102
3	L1	Aroclor-1016 {2}	260.669	208.834		19.9#	79
4	L1	Aroclor-1016 {3}	236.153	216.335		8.4	101
5	L1	Aroclor-1016 {4}	199.746	196.191		1.8	104
6	L1	Aroclor-1016 {5}	300.287	294.410		2.0	103
17	L7	Aroclor-1260	557.411	526.091		5.6	98
18	L7	Aroclor-1260 {2}	501.098	485.955		3.0	102
19	L7	Aroclor-1260 {3}	408.246	386.961		5.2	105
20	L7	Aroclor-1260 {4}	357.710	351.757		1.7	103
21	L7	Aroclor-1260 {5}	831.679	701.716		15.6#	87
22	S	DCB	11.430	9.213	E3	19.4#	87

Signal #2
Continuing Calibration File: 16091652.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	7.863	7.716	E3	1.9	105
2	L1	Aroclor-1016	426.061	417.670		2.0	104
3	L1	Aroclor-1016 {2}	185.679	204.570		-10.2	133
4	L1	Aroclor-1016 {3}	221.982	217.311		2.1	104
5	L1	Aroclor-1016 {4}	375.798	366.878		2.4	104
6	L1	Aroclor-1016 {5}	274.859	287.327		-4.5	106
17	L7	Aroclor-1260	552.718	529.705		4.2	104
18	L7	Aroclor-1260 {2}	643.074	645.163		-0.3	107
19	L7	Aroclor-1260 {3}	349.158	342.949		1.8	111
20	L7	Aroclor-1260 {4}	934.005	861.893		7.7	101
21	L7	Aroclor-1260 {5}	432.199	360.916		16.5#	99
22	S	DCB	11.282	10.187	E3	9.7	97

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

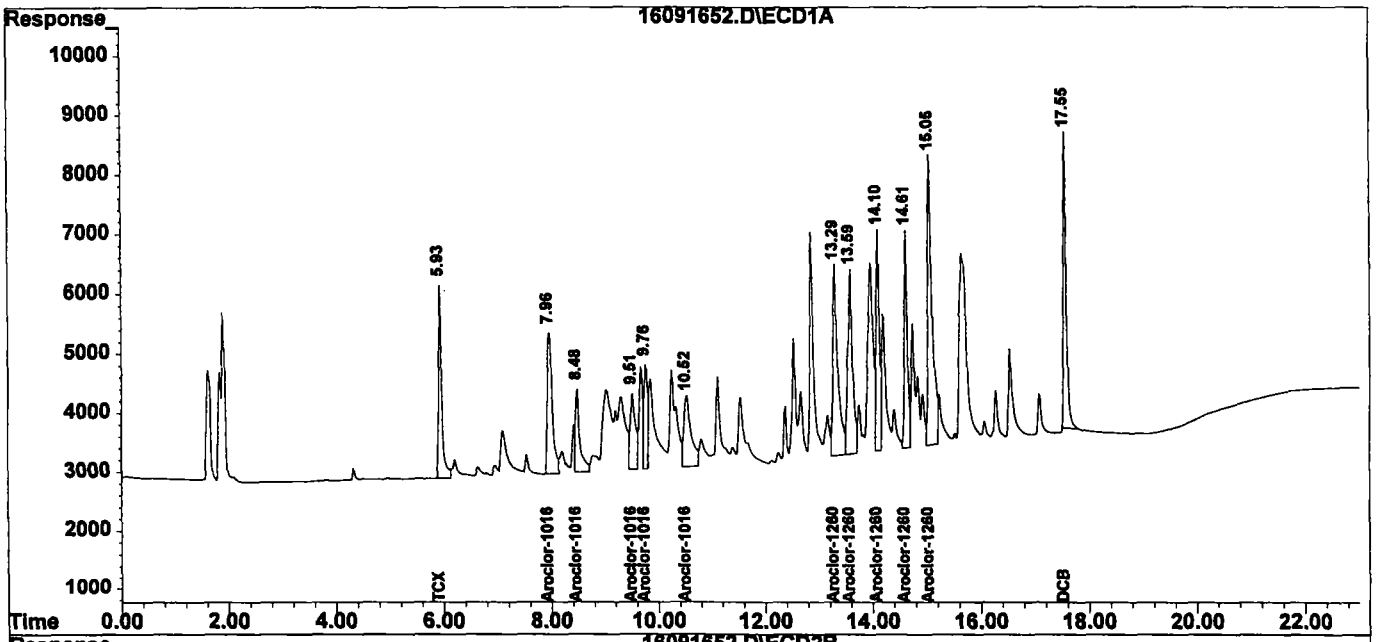
16091652.D XPCBI11.M Tue Sep 18 08:33:28 2001

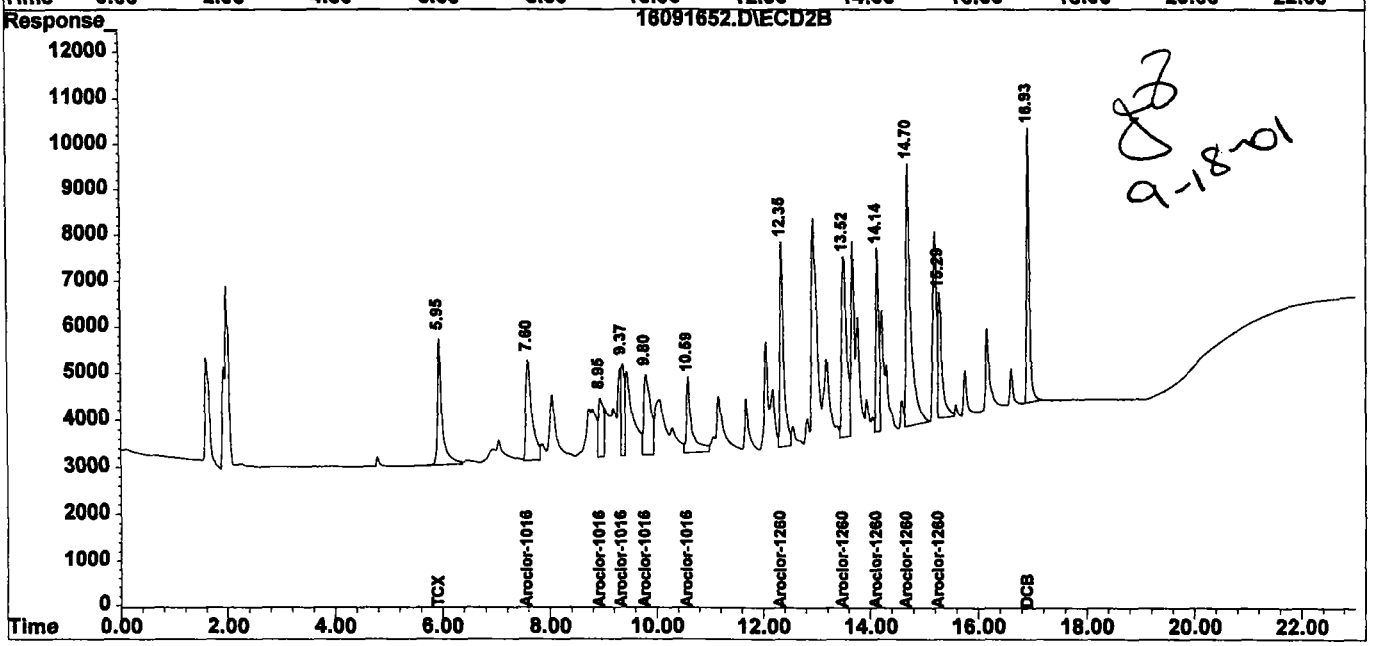
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091652.D\ECD1A.CH Vial: 52
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091652.D\ECD2B.CH
Acq On : 17 Sep 2001 9:56 Operator: DDC
Sample : AR1660L3CT Inst : HP_16
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 8:33 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





9-18-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091652.D\ECD1A.CH Vial: 52
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091652.D\ECD2B.CH
Acq On : 17 Sep 2001 9:56 Operator: DDC
Sample : AR1660L3CT Inst : HP_16
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 8:33 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

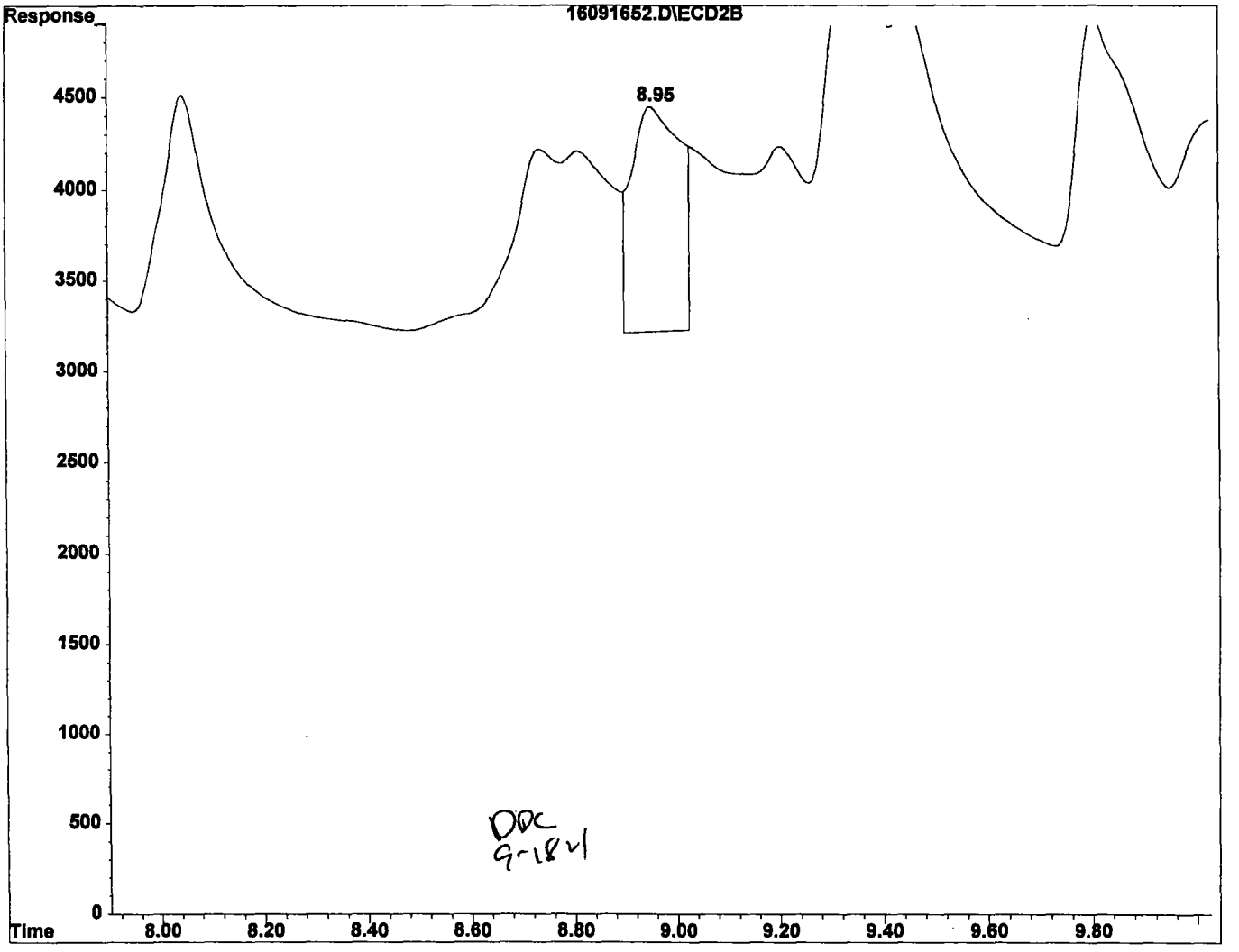
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.94	5.95	129736	154317	18.7	19.6
22)	S DCB	17.56f	16.93	184258	203750	16.1	18.1
	Target Compounds:						
2)	L1 Aroclor-1016	7.96	7.60	150643	167068	380.6	392.1
3)	L1 Aroclor-1016 {2}	8.48	8.95	83534	81828	320.5	440.7m #
4)	L1 Aroclor-1016 {3}	9.52	9.37	86534	86925	366.4	391.6
5)	L1 Aroclor-1016 {4}	9.76	9.81	78477	146751	392.9	390.5
6)	L1 Aroclor-1016 {5}	10.52	10.59	117764	114931	392.2	418.1
	Sum Aroclor-1016			516951	597502	1852.6	2033.1
	Average Aroclor-1016					370.513	406.610
17)	L7 Aroclor-1260	13.29	12.35	210436	211882	377.5	383.3
18)	L7 Aroclor-1260 {2}	13.60	13.52	194382	258065	387.9	401.3
19)	L7 Aroclor-1260 {3}	14.10	14.14	154784	137180	379.1	392.9
20)	L7 Aroclor-1260 {4}	14.62	14.70	140703	344757	393.3	369.1
21)	L7 Aroclor-1260 {5}	15.05	15.30	280686	144366	337.5	334.0
	Sum Aroclor-1260			980992	1096250	1875.4	1880.7
	Average Aroclor-1260					375.084	376.135

DOC 9-18-01

(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\16\DATA\09_16_01\16091652.D
Date Acquired: 17 Sep 2001 9:56
Inst: HP_16 Operator ID: DDC
Name: AR1660L3CT
Misc: 5-210-7
Method: F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title: PCB/TOXAPHENE
Quant Time: Sep 18 8:33 2001 Quant Results File: XPCBI11.RES



Aroclor-1016 {2} #2 8.95min area: 81828 m

Integration Time Range: 8.90 - 9.03

F:\HPCHEM\HP\16\DATA\09_16_01\16091652.D
Report generated: Tue Sep 18 08:34:30 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PBLKSB

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix: (soil/water) SOIL Lab Sample ID: BL0822SB

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/22/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U
	Surrogate amount spiked	6.67	

FORM I PCB

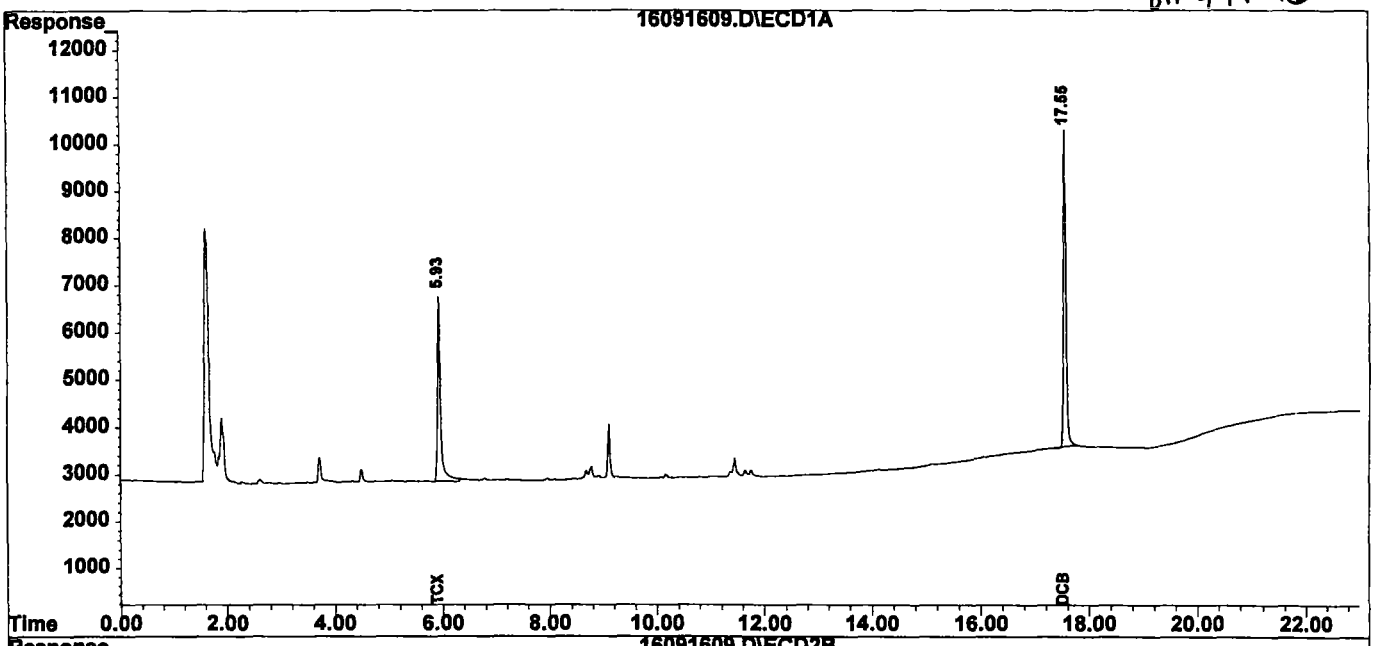
Chromatographic Report

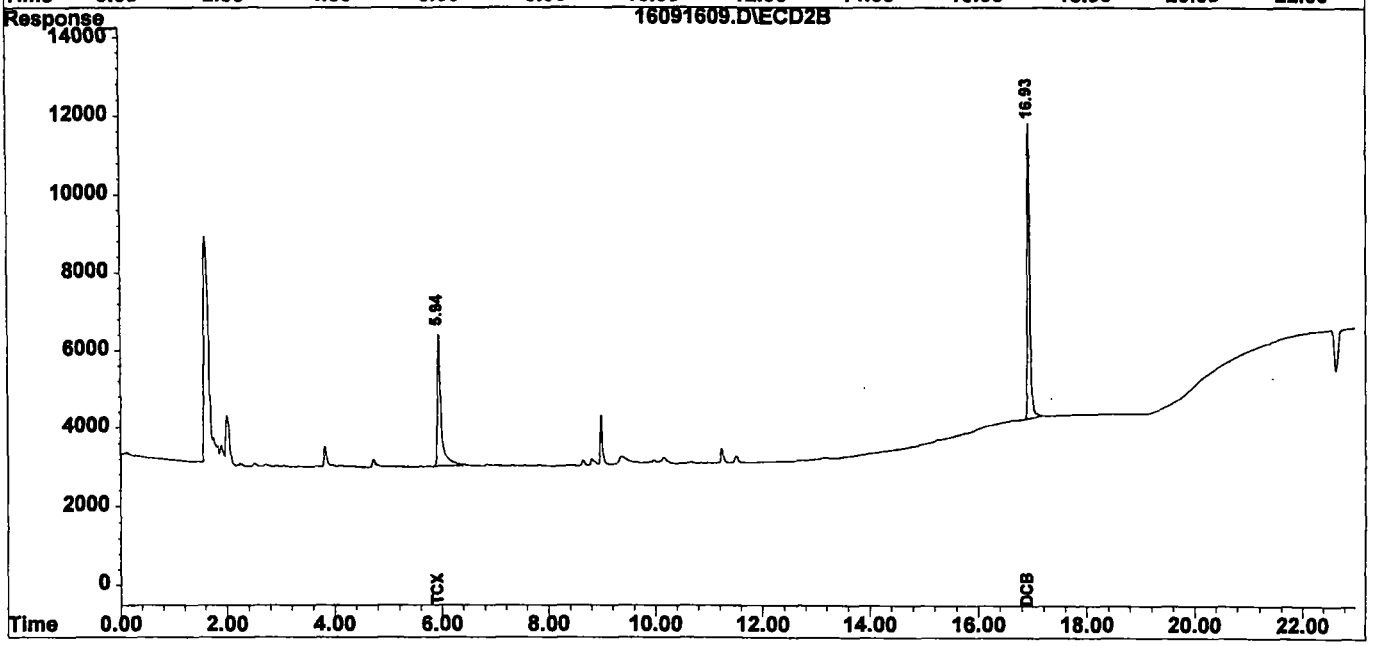
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091609.D\ECD1A.CH Vial: 9
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091609.D\ECD2B.CH
Acq On : 16 Sep 2001 15:00 Operator: DDC
Sample : BL0822SB ✓ *PBLKSB ✓ * Inst : HP_16
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:36 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

GK 9-19-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091609.D\ECD1A.CH Vial: 9
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091609.D\ECD2B.CH
Acq On : 16 Sep 2001 15:00 Operator: DDC
Sample : BL0822SB *PBLKSB * Inst : HP_16
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:36 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	5.94f	5.95f	157644	167763	7.585	7.112
	Spiked Amount 6.667			Recovery	=	113.78%	106.68%
22)	S DCB	17.56f	16.94	219619	243595	6.405	7.197
	Spiked Amount 6.667			Recovery	=	96.08%	107.96%

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.

PIBLKCJ

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 09/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKCJ

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 09/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

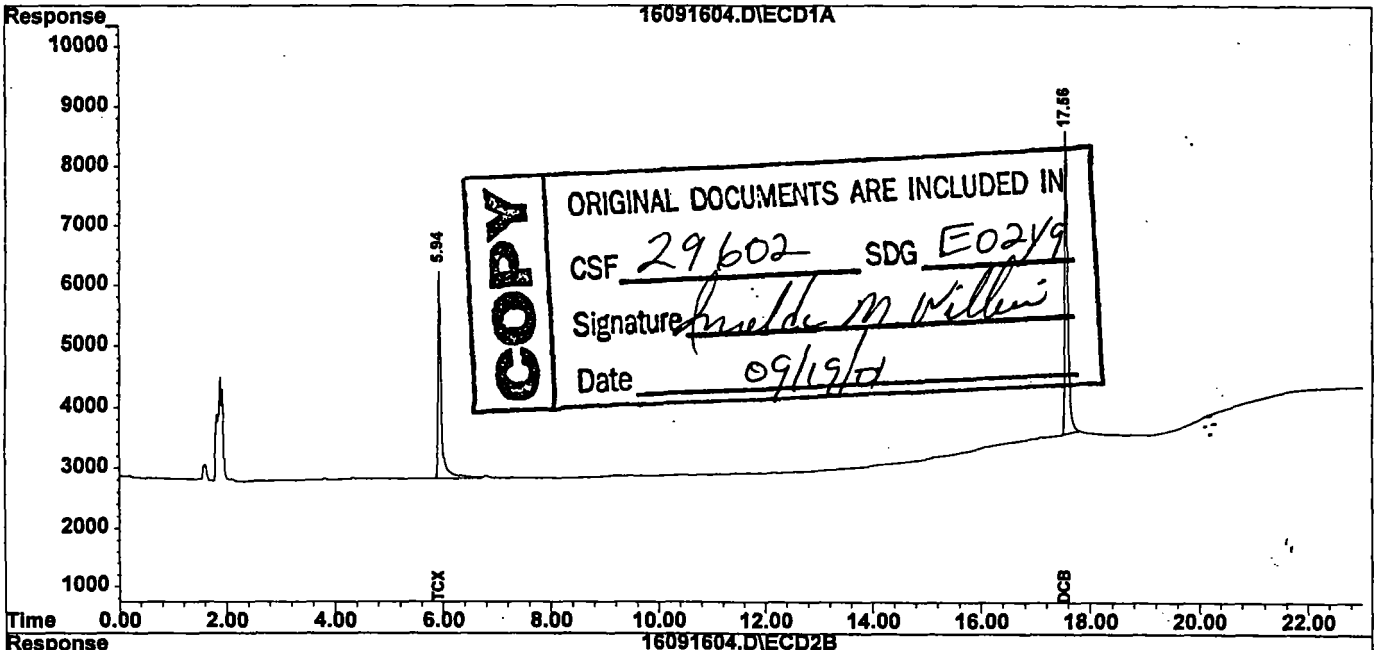
FORM I PCB

Chromatographic Report

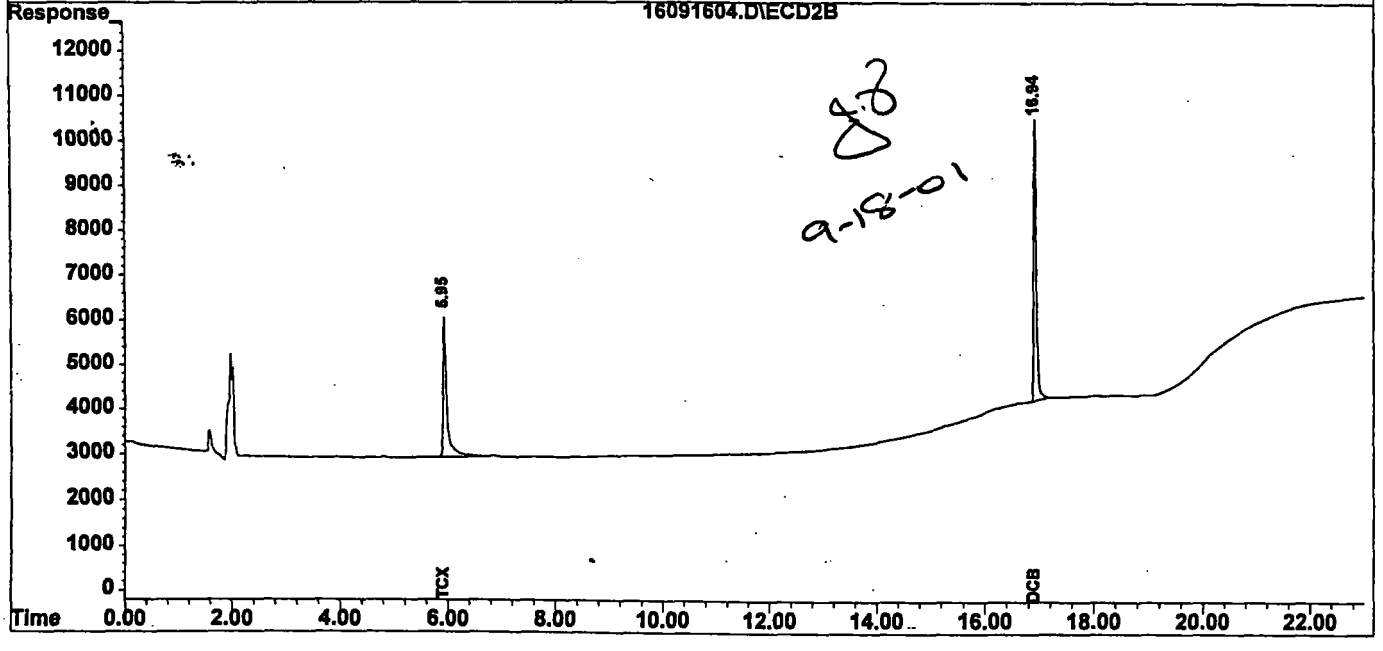
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091604.D\ECD1A.CH Vial: 4
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091604.D\ECD2B.CH
Acq On : 16 Sep 2001 12:48 Operator: DDC
Sample : PIBLKCJ Inst : HP_16
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 8:27 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B



COPY
ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29602 SDG E0219
Signature Gwelda M Williams
Date 09/19/01



8
9-18-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091604.D\ECD1A.CH Vial: 4
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091604.D\ECD2B.CH
Acq On : 16 Sep 2001 12:48 Operator: DDC
Sample : PIBLKCJ Inst : HP_16
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 8:27 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Tue Sep 18 08:33:21 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.94	5.95	146814	157419	21.2	20.0
22)	S DCB	17.57	16.94	189794	208529	16.6	18.5
	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.

PIBLKCK

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 09/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKCK

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 09/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

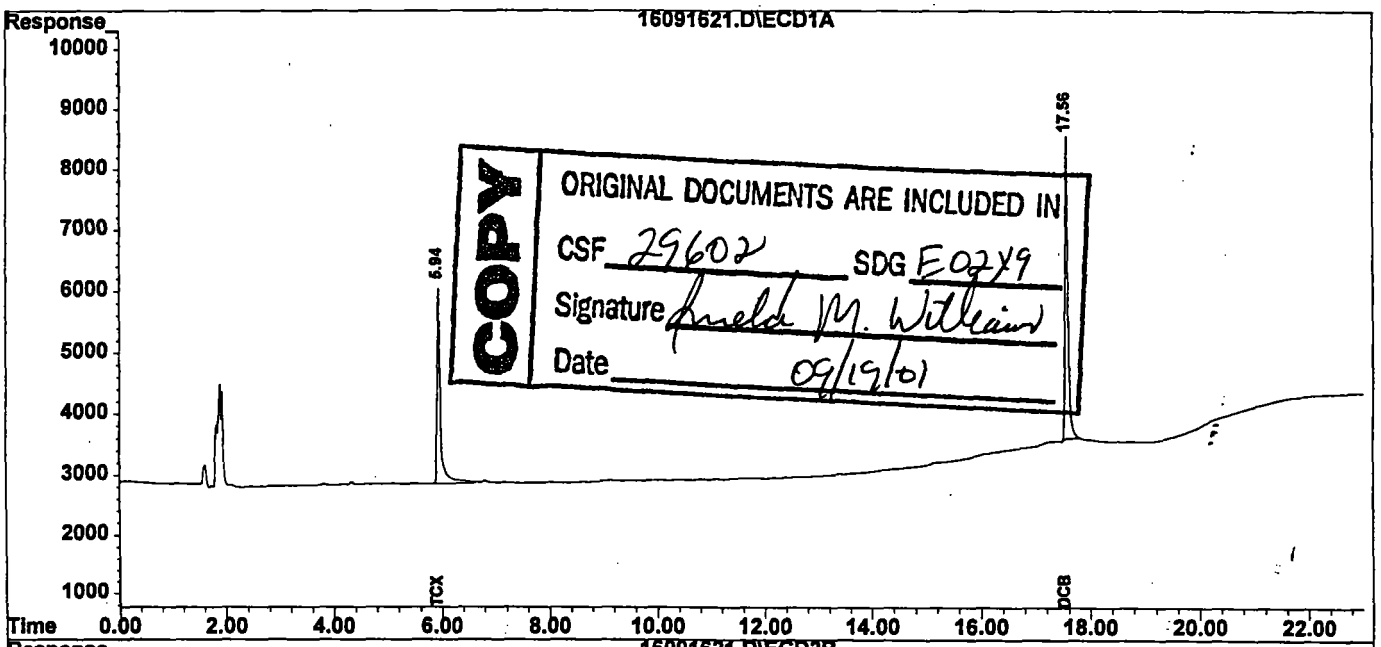
FORM I PCB

Chromatographic Report

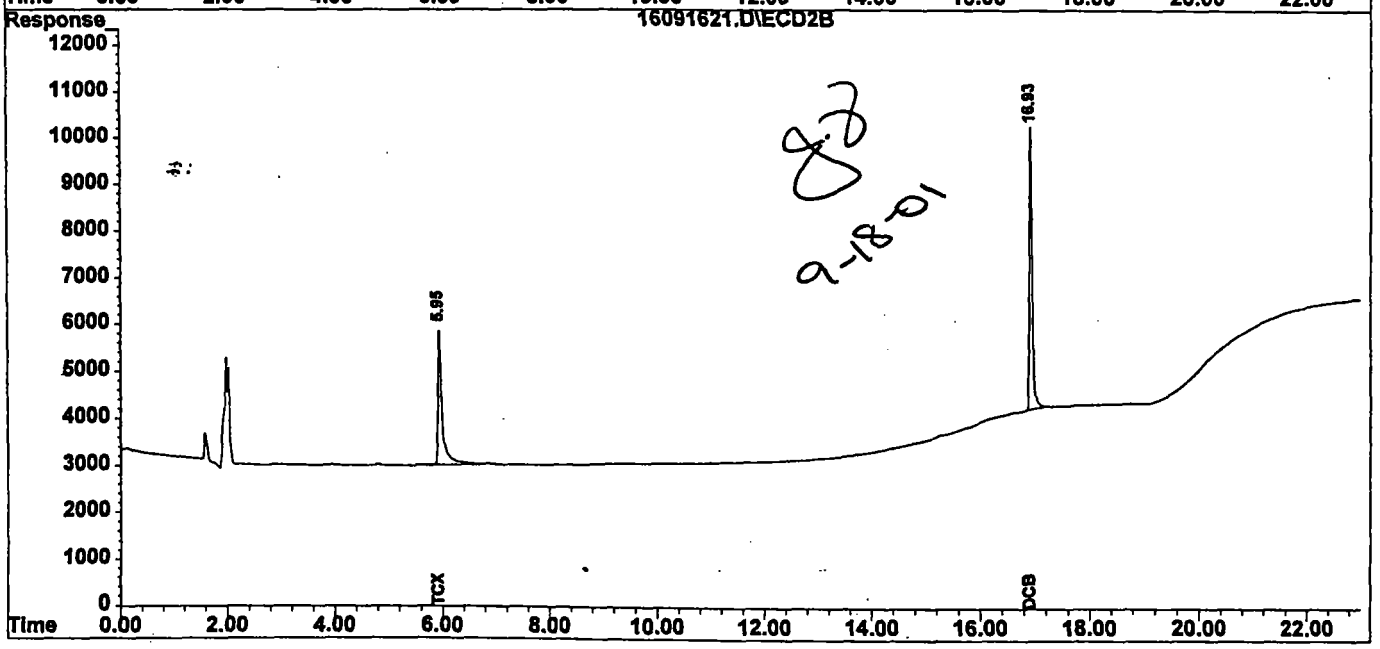
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091621.D\ECD1A.CH Vial: 21
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091621.D\ECD2B.CH
Acq On : 16 Sep 2001 20:17 Operator: DDC
Sample : PIBLKCK Inst : HP_16
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 8:29 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B



COPY
ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29602 SDG E0749
Signature Arnold M. Williams
Date 09/19/01



9-18-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091621.D\ECD1A.CH Vial: 21
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091621.D\ECD2B.CH
Acq On : 16 Sep 2001 20:17 Operator: DDC
Sample : PIBLKCK Inst : HP_16
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 8:29 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.94	5.95	145541	153277	21.0	19.5
22)	S DCB	17.56	16.94	185039	203015	16.2	18.0
	Target Compounds:						

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

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKCL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

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: 09/17/01

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.

PIBLKCL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

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: 09/17/01

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

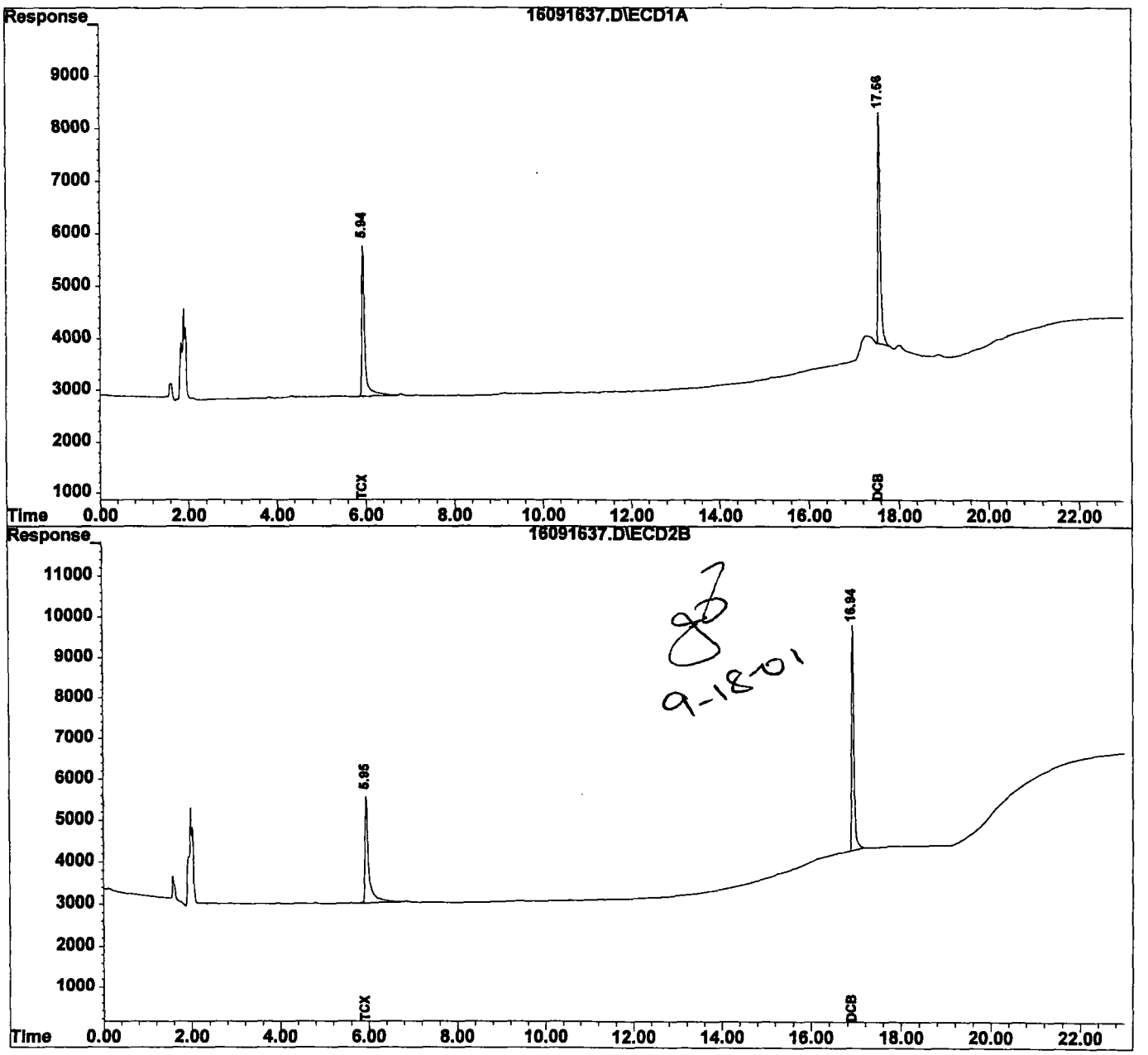
FORM I PCB

Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091637.D\ECD1A.CH Vial: 37
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091637.D\ECD2B.CH
Acq On : 17 Sep 2001 3:20 Operator: DDC
Sample : PIBLKCL Inst : HP_16
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 8:31 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B



Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091637.D\ECD1A.CH Vial: 37
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091637.D\ECD2B.CH
Acq On : 17 Sep 2001 3:20 Operator: DDC
Sample : PIBLKCL Inst : HP_16
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 8:31 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.94	5.95	136519	144576	19.7	18.4
22)	S DCB	17.56	16.94	166691	189292	14.6	16.8
	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.

PIBLKCM

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

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: 09/17/01

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.

PIBLKCM

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

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: 09/17/01

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

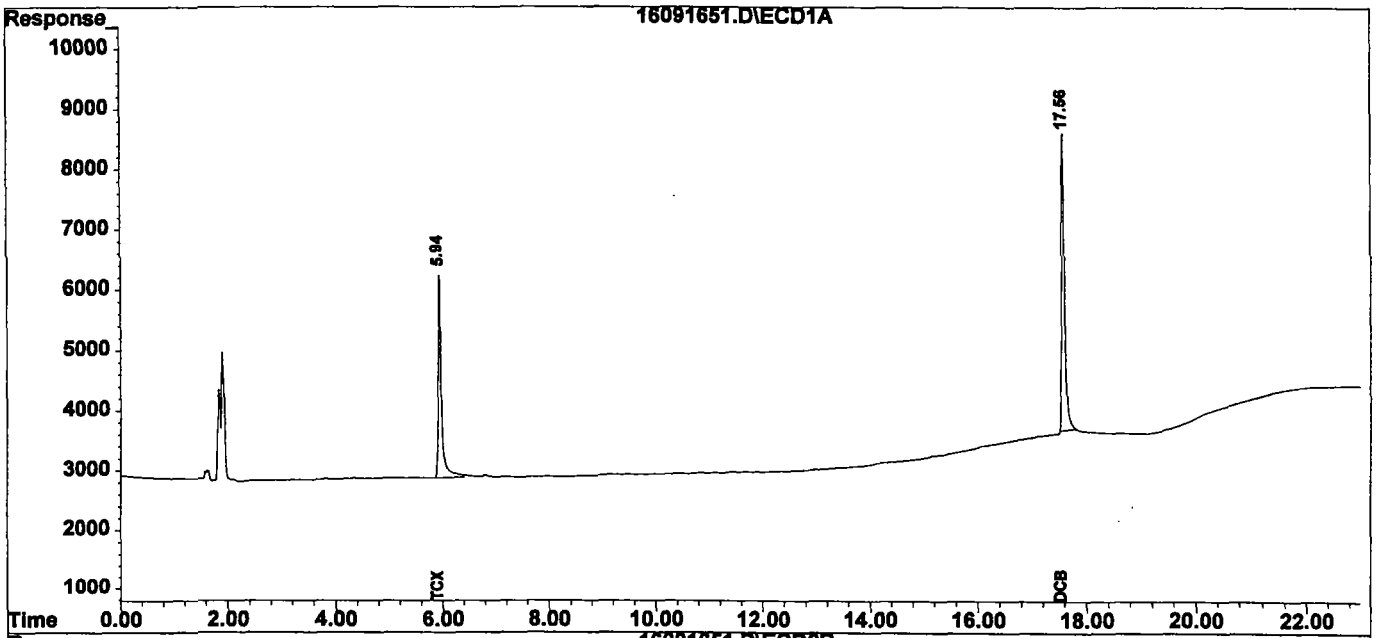
FORM I PCB

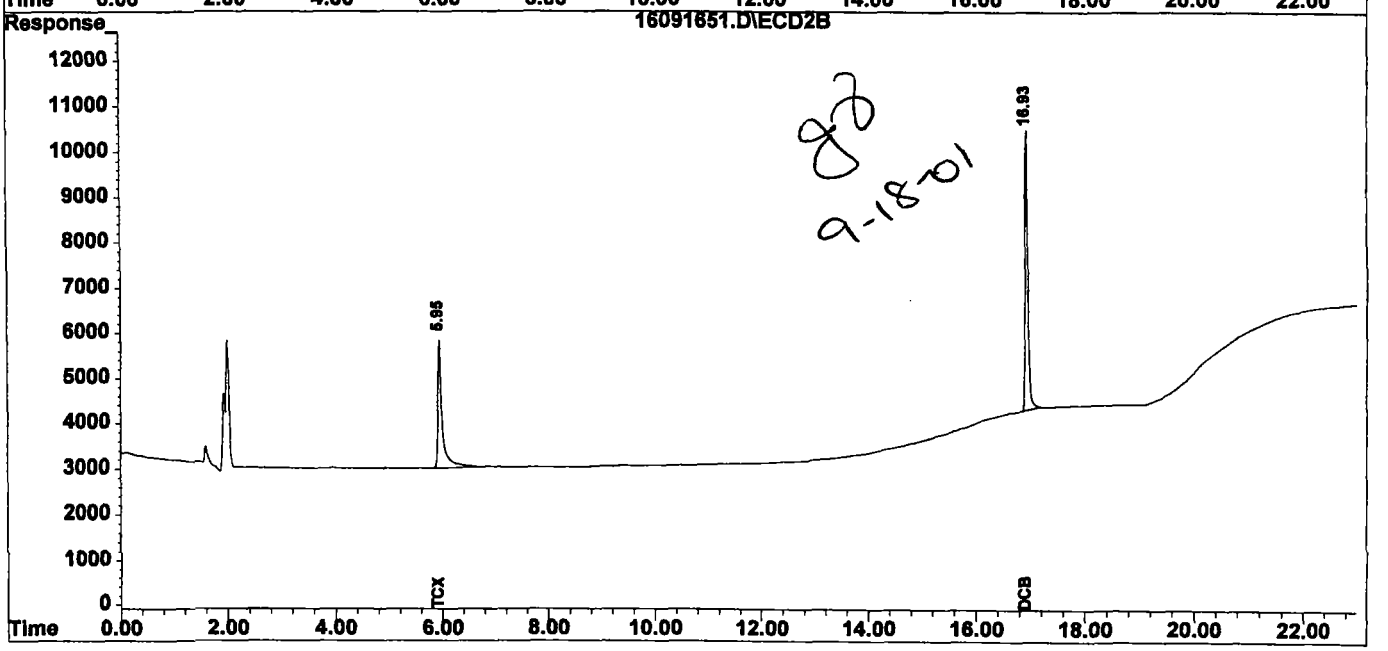
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091651.D\ECD1A.CH Vial: 51
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091651.D\ECD2B.CH
Acq On : 17 Sep 2001 9:30 Operator: DDC
Sample : PIBLKCM Inst : HP_16
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 8:32 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





gd
9-18-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091651.D\ECD1A.CH Vial: 51
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091651.D\ECD2B.CH
Acq On : 17 Sep 2001 9:30 Operator: DDC
Sample : PIBLKCM Inst : HP_16
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 8:32 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.94	5.95	141943	156718	20.5	19.9
22)	S DCB	17.56	16.94	192579	212403	16.8	18.8
	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.

PIBLKCW

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

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.

PIBLKCW

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

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

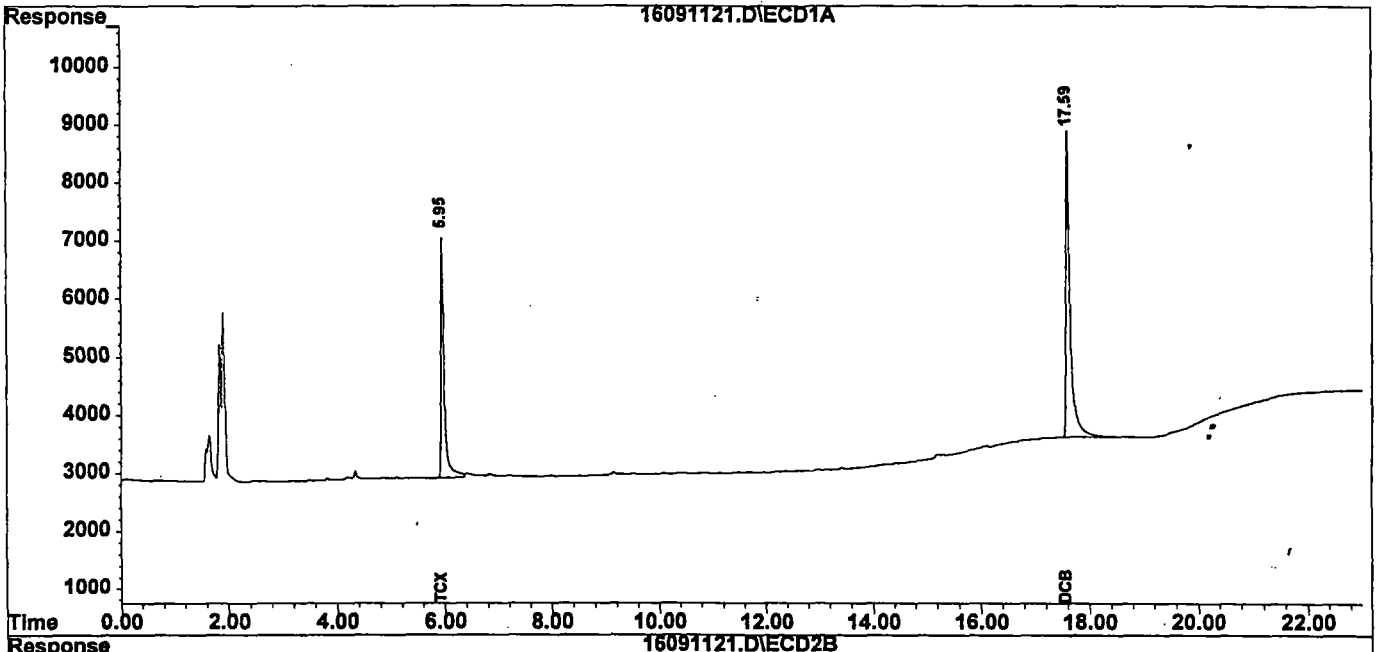
FORM I PCB

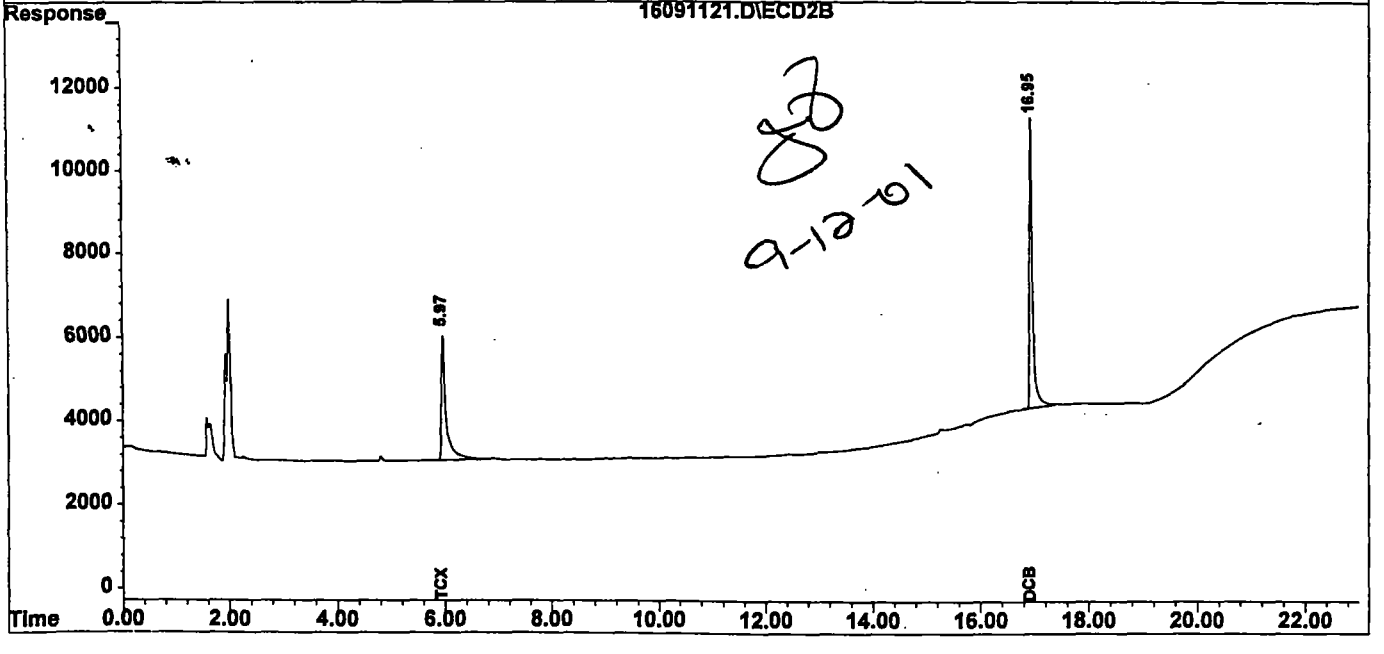
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091121.D\ECD1A.CH Vial: 25
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091121.D\ECD2B.CH
Acq On : 11 Sep 2001 20:46 Operator: DDC
Sample : PIBLKCW Inst : HP_16
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 12 11:03 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





9-12-01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_11_01\16091121.D\ECD1A.CH Vial: 25
Signal #2 : F:\HPCHEM\HP\16\DATA\09_11_01\16091121.D\ECD2B.CH
Acq On : 11 Sep 2001 20:46 Operator: DDC
Sample : PIBLKCW Inst : HP_16
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 12 11:03 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_11_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.96	5.97	172173	181542	24.9	23.1
22)	S DCB	17.59	16.95	278435	279062	24.4	24.7
	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.

ELCS1

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix: (soil/water) SOIL Lab Sample ID: LC0822SB

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/22/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/16/01

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	130	
11096-82-5	Aroclor-1260	33	U
	Surrogate amount spiked	6.67	

FORM I PCB

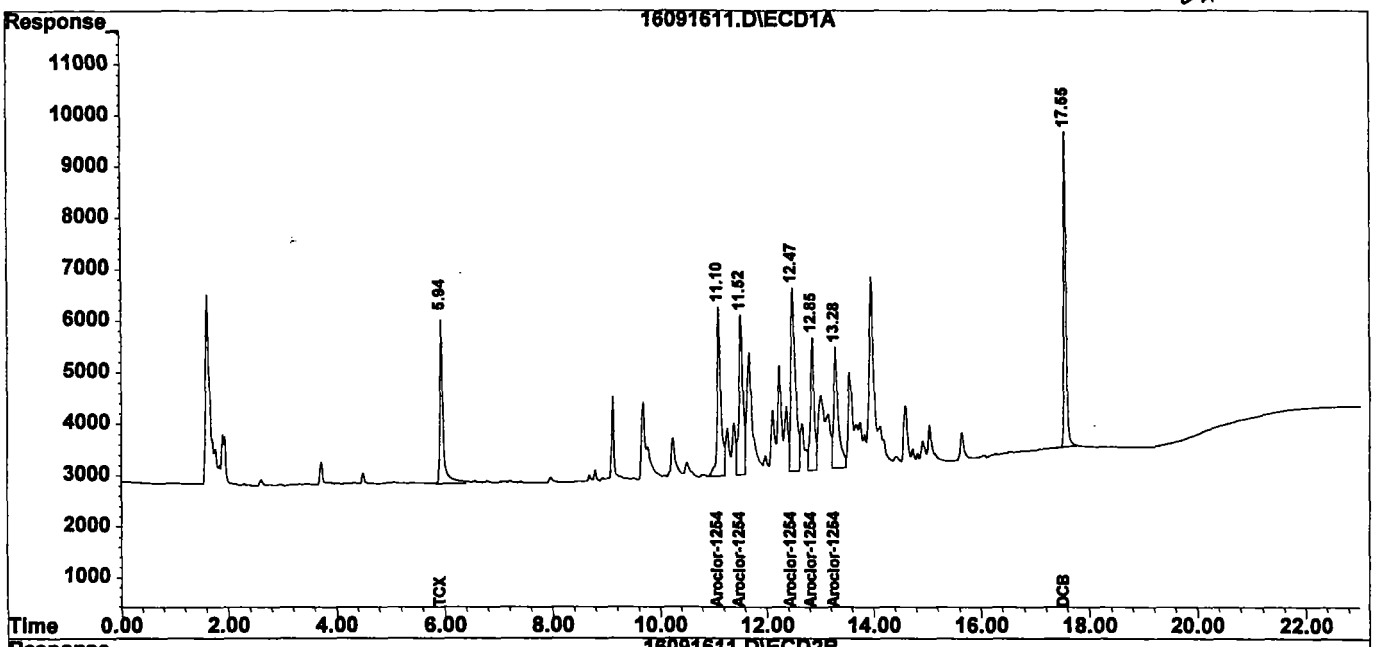
Chromatographic Report

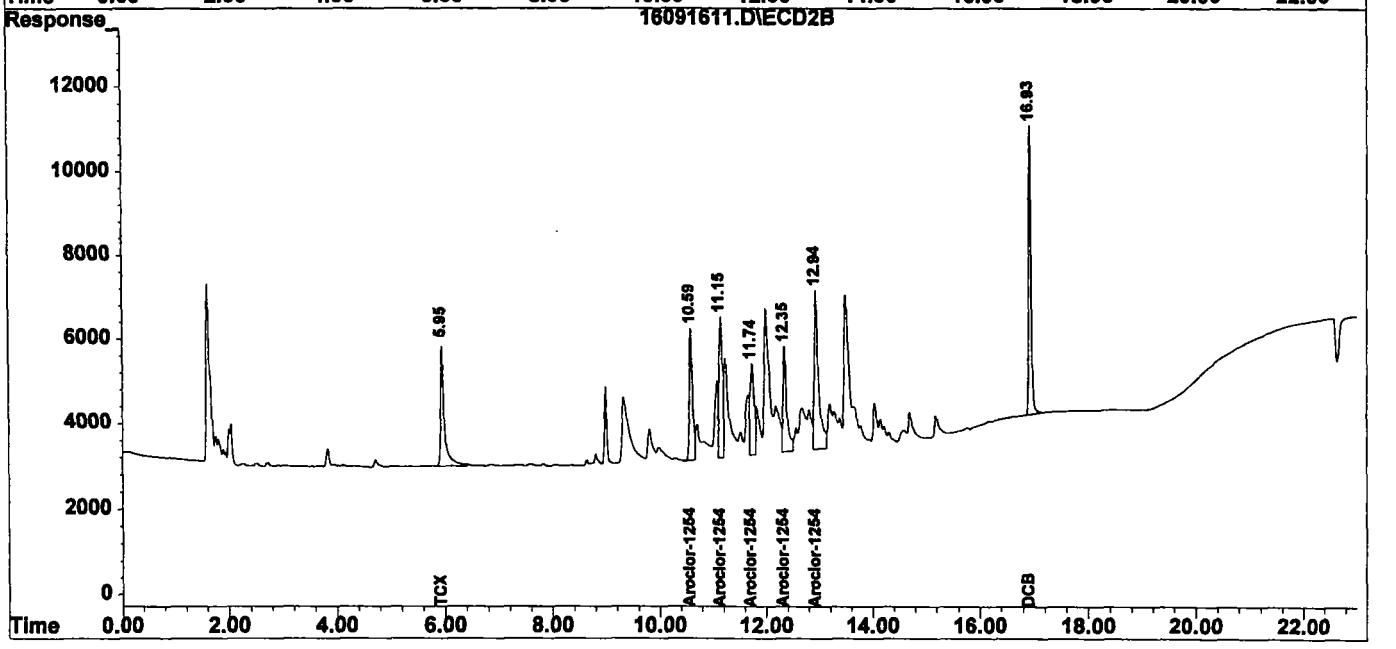
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091611.D\ECD1A.CH Vial: 11
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091611.D\ECD2B.CH
Acq On : 16 Sep 2001 15:53 Operator: DDC
Sample : LC0822SB' *ELCS1' * Inst : HP_16
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 10:06 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

OK 9-19-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091611.D\ECD1A.CH Vial: 11
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091611.D\ECD2B.CH
Acq On : 16 Sep 2001 15:53 Operator: DDC
Sample : LC0822SB *ELCS1 * Inst : HP_16
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 10:06 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	5.94f	5.95f	133143	138993	6.406	5.892
	Spiked Amount 6.667			Recovery	=	96.09%	88.38%
22)	S DCB	17.56f	16.94	195732	213740	5.708	6.315
	Spiked Amount 6.667			Recovery	=	85.62%	94.73%
	Target Compounds:						
12)	L6 Aroclor-1254	11.11f	10.59	159853	126355	131.5	134.6
13)	L6 Aroclor-1254 {2}	11.52f	11.16f	161122	150831	151.1	134.0
14)	L6 Aroclor-1254 {3}	12.48f	11.74f	212537	111413	123.6	143.5
15)	L6 Aroclor-1254 {4}	12.85f	12.35	123777	121445	124.9	127.6
16)	L6 Aroclor-1254 {5}	13.28f	12.94f	141180	216050	132.2	131.5
	Sum Aroclor-1254			798469	726094	663.3	671.2
	Average Aroclor-1254					132.656	134.243
						100%	101%

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

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ELCS2

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix: (soil/water) SOIL Lab Sample ID: LD0822SB

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/22/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	110	
11096-82-5	Aroclor-1260	33	U
	Surrogate amount spiked	6.67	

FORM I PCB

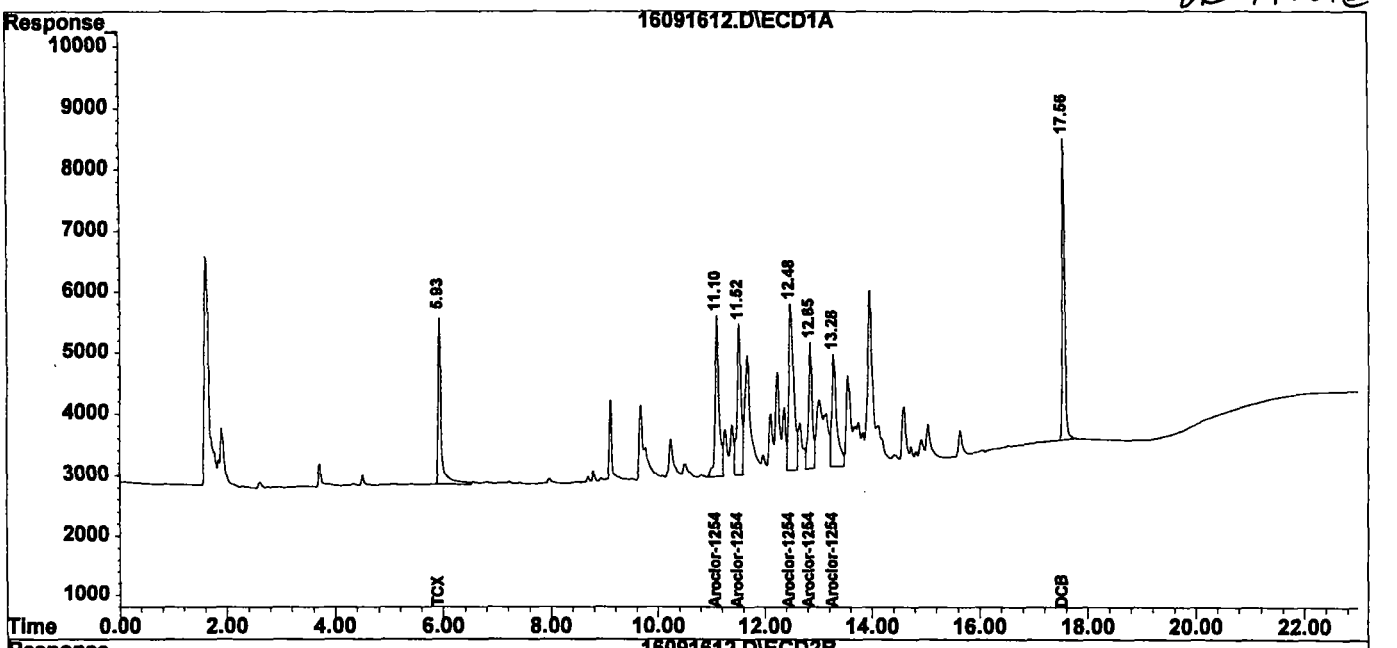
Chromatographic Report

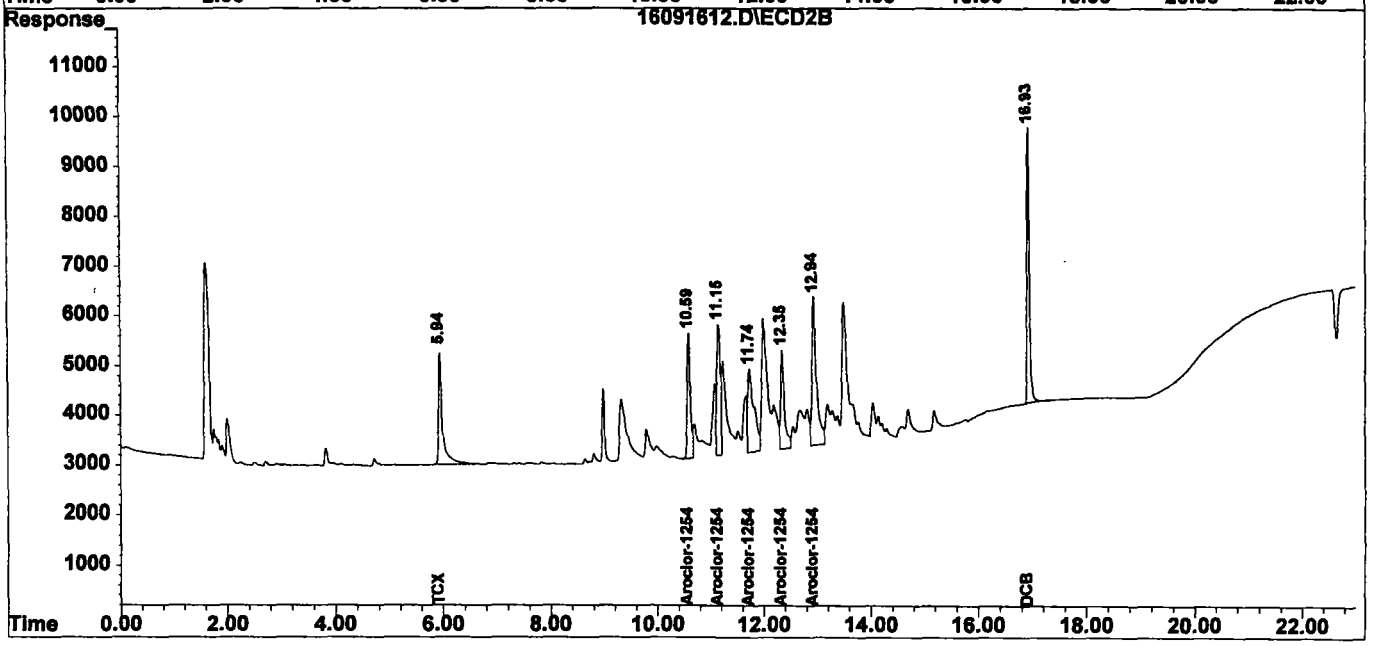
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091612.D\ECD1A.CH Vial: 12
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091612.D\ECD2B.CH
Acq On : 16 Sep 2001 16:19 Operator: DDC
Sample : LD0822SB *ELCS2 * Inst : HP_16
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:35 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

OK 9-19-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091612.D\ECD1A.CH Vial: 12
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091612.D\ECD2B.CH
Acq On : 16 Sep 2001 16:19 Operator: DDC
Sample : LD0822SB *ELCS2 * Inst : HP_16
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:35 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.94f	5.95f	112784	116979	5.427	4.959	
	Spiked Amount 6.667			Recovery	=	81.41%	74.39%	
22)	S DCB	17.56f	16.94	160210	173158	4.672	5.116	
	Spiked Amount 6.667			Recovery	=	70.08%	76.74%	
	Target Compounds:							
12)	L6 Aroclor-1254	11.11f	10.59	128888	102010	106.0	108.7	
13)	L6 Aroclor-1254 {2}	11.52f	11.16f	130779	121263	122.7	107.8	
14)	L6 Aroclor-1254 {3}	12.48f	11.74f	171152	135747	99.5	174.9	#
15)	L6 Aroclor-1254 {4}	12.85f	12.35	101187	98176	102.1	103.1	
16)	L6 Aroclor-1254 {5}	13.29f	12.94f	115315	174119	108.0	106.0	
	Sum Aroclor-1254			647320	631315	538.3	600.4	
	Average Aroclor-1254					107.654	120.077	
						81%	90%	

(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.

E03A9MS

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix: (soil/water) SOIL Lab Sample ID: 47347.02MS

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/22/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/16/01

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	4.4	J
12672-29-6	Aroclor-1248	50	U
11097-69-1	Aroclor-1254	140	
11096-82-5	Aroclor-1260	50	U
Surrogate amount spiked		10.12	

FORM I PCB

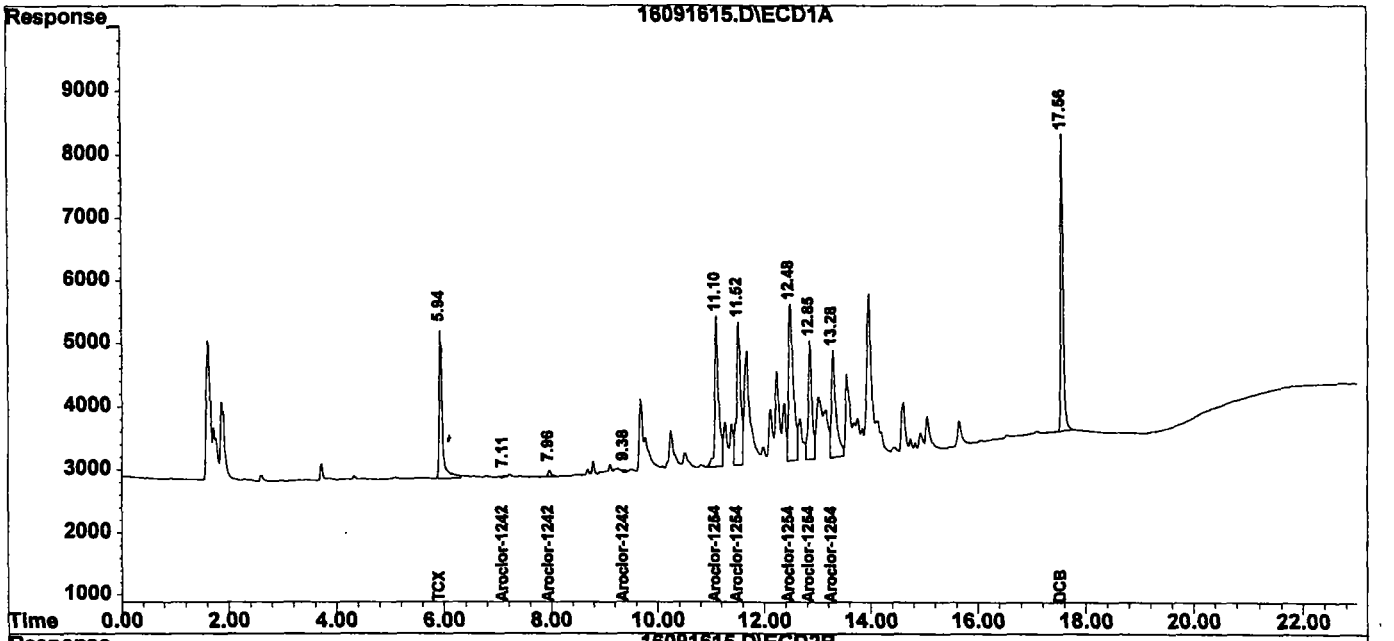
Chromatographic Report

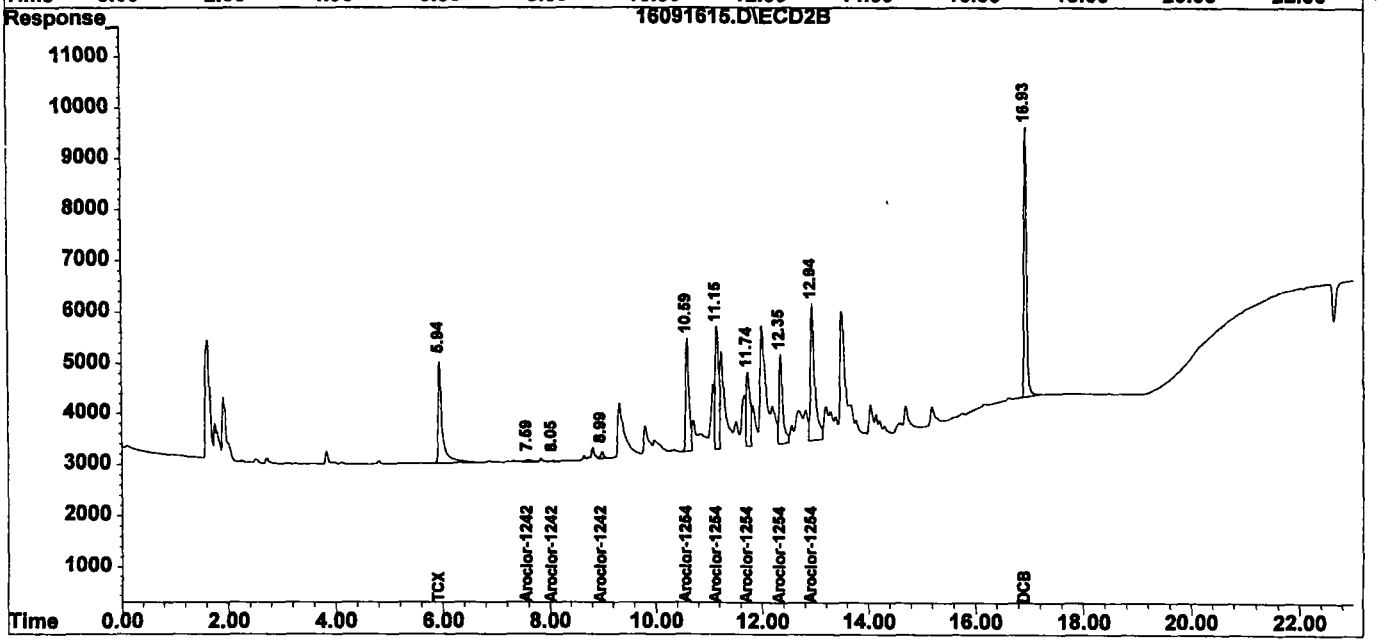
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091615.D\ECD1A.CH Vial: 15
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091615.D\ECD2B.CH
Acq On : 16 Sep 2001 17:38 Operator: DDC
Sample : 47347.02MS *E03A9MS * Inst : HP_16
Misc : *EPA*30.4G/5.0ML*35 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:41 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

OK 9-19-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091615.D\ECD1A.CH Vial: 15
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091615.D\ECD2B.CH
Acq On : 16 Sep 2001 17:38 Operator: DDC
Sample : 47347.02MS *E03A9MS * Inst : HP_16
Misc : *EPA*30.4G/5.0ML*35 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:41 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

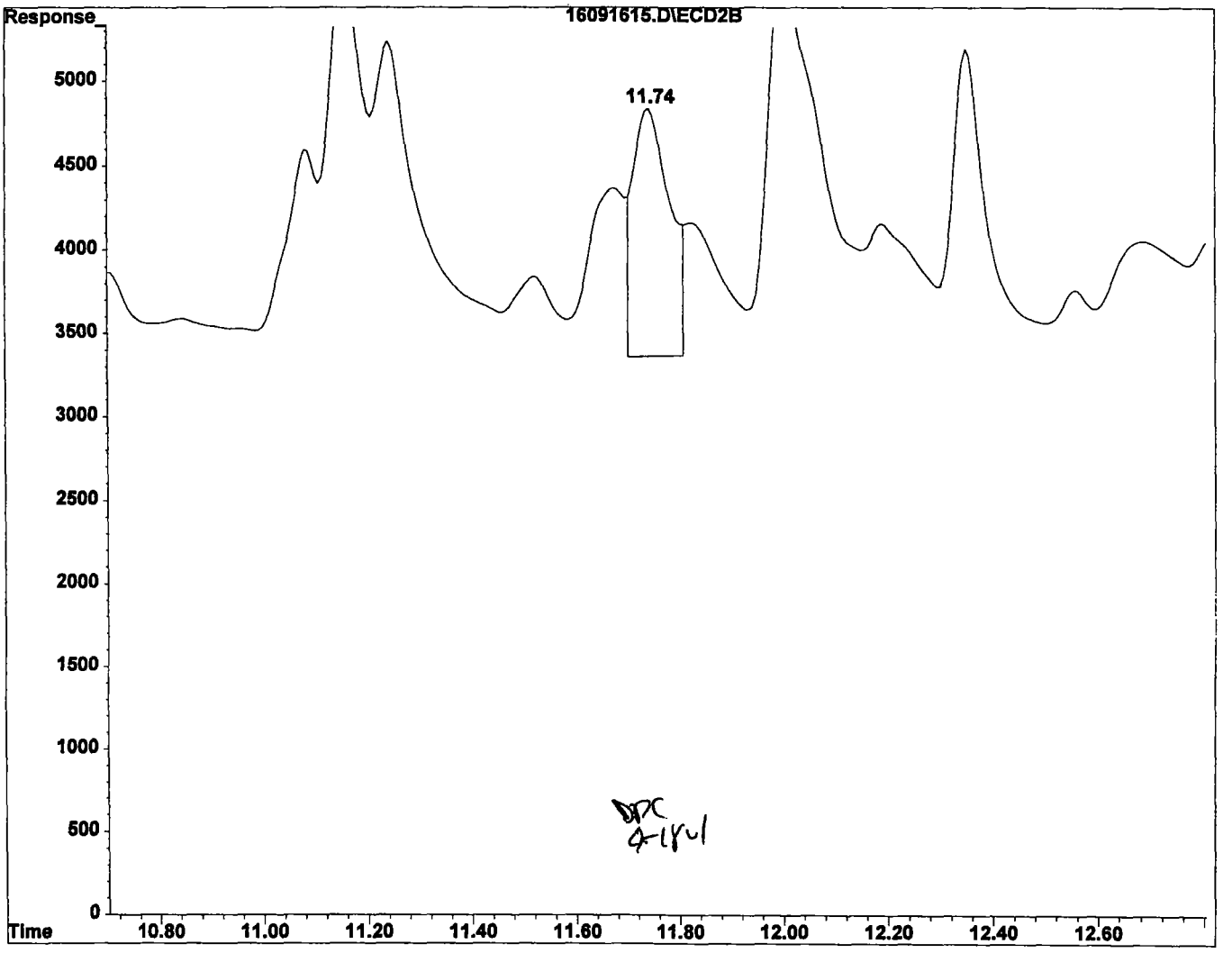
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.94f	5.95f	95750	101113	6.995	6.508	
	Spiked Amount 10.121			Recovery	=	69.11%	64.30%	
22)	S DCB	17.56f	16.94	153822	164699	6.811	7.388	
	Spiked Amount 10.121			Recovery	=	✓67.29%	✓72.99%	
	Target Compounds:							
7)	L4 Aroclor-1242	7.12	7.60f	1195	2163	3.238	2.957	
8)	L4 Aroclor-1242 {2}	7.97	8.06	4744	728	7.177	1.444	#
9)	L4 Aroclor-1242 {3}	9.38f	8.99	1586	5580	2.736	8.912	#
	Sum Aroclor-1242			7525	8470	13.2	13.3	
	Average Aroclor-1242					4.384	4.438	
12)	L6 Aroclor-1254	11.11f	10.59	116201	91401	145.1	147.8	
13)	L6 Aroclor-1254 {2}	11.52f	11.16f	124280	109559	177.0	147.8	DDC 9-18-01
14)	L6 Aroclor-1254 {3}	12.48f	11.74f	151951	72788	134.1	142.3m	
15)	L6 Aroclor-1254 {4}	12.85f	12.35	88597	82864	135.8	132.1	
16)	L6 Aroclor-1254 {5}	13.29f	12.94	100538	151606	142.9	140.1	
	Sum Aroclor-1254			581568	508217	734.9	710.2	
	Average Aroclor-1254					146.975	142.044	

(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\16\DATA\09_16_01\16091615.D
Date Acquired: 16 Sep 2001 17:38
Inst: HP_16 Operator ID: DDC
Name: 47347.02MS *E03A9MS *
Misc: *EPA*30.4G/5.0ML*35
Method: F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title: PCB/TOXAPHENE
Quant Time: Sep 18 9:41 2001 Quant Results File: XPCBI11.RES



Aroclor-1254 {3} #2 11.74min area: 72788 m ok 9-19-01

Integration Time Range: 11.70 - 11.80

F:\HPCHEM\HP\16\DATA\09_16_01\16091615.D
Report generated: Tue Sep 18 09:53:35 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E03A9MSD

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29602 SDG No.: E03A9

Matrix: (soil/water) SOIL Lab Sample ID: 47347.03MSD

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/22/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/16/01

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	51	U
11104-28-2	Aroclor-1221	51	U
11141-16-5	Aroclor-1232	51	U
53469-21-9	Aroclor-1242	3.5	JP
12672-29-6	Aroclor-1248	51	U
11097-69-1	Aroclor-1254	150	
11096-82-5	Aroclor-1260	51	U
	Surrogate amount spiked	10.22	

FORM I PCB

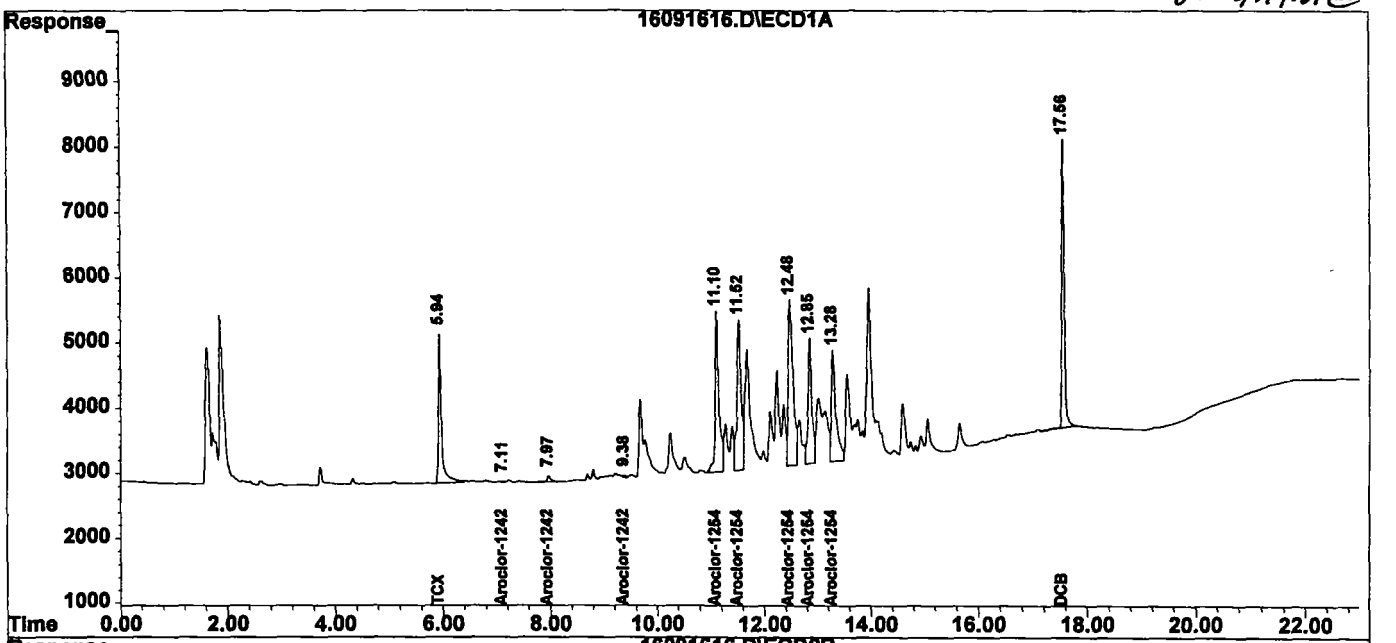
Chromatographic Report

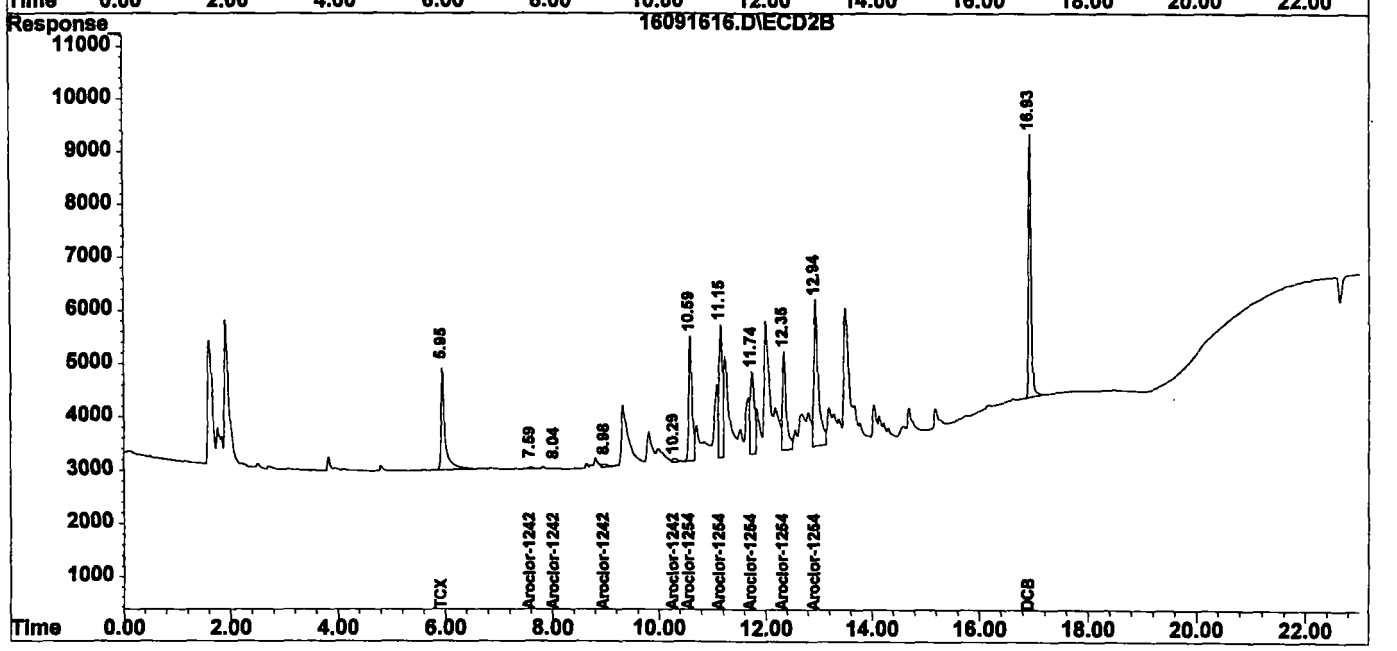
Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091616.D\ECD1A.CH Vial: 16
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091616.D\ECD2B.CH
Acq On : 16 Sep 2001 18:05 Operator: DDC
Sample : 47347.03MSD *E03A9MSD * Inst : HP_16
Misc : *EPA*30.1G/5.0ML*35 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:42 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

OK 9-19-01





Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091616.D\ECD1A.CH Vial: 16
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091616.D\ECD2B.CH
Acq On : 16 Sep 2001 18:05 Operator: DDC
Sample : 47347.03MSD *E03A9MSD * Inst : HP_16
Misc : *EPA*30.1G/5.0ML*35 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:42 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.94f	5.95f	94795	101264	6.994	6.583	
	Spiked Amount 10.222			Recovery	=	68.42%	64.40%	
22)	S DCB	17.56f	16.94	146528	155195	6.552	7.031	
	Spiked Amount 10.222			Recovery	=	64.09%	68.78%	
	Target Compounds:							
7)	L4 Aroclor-1242	7.12	7.60f	628	2488	1.720	3.436	#
8)	L4 Aroclor-1242 {2}	7.97	8.04f	4298	1119	6.568	2.243	#
9)	L4 Aroclor-1242 {3}	9.38f	8.99	1213	3913	2.113	6.312	#
11)	L4 Aroclor-1242 {5}	0.00	10.30f	0	3638	N.D. d	18.1	#
	Sum Aroclor-1242			6140	11157	10.4	30.1	
	Average Aroclor-1242					3.467	7.522	
12)	L6 Aroclor-1254	11.11f	10.59	121424	95620	153.2	156.2	
13)	L6 Aroclor-1254 {2}	11.52f	11.16f	124802	112576	179.5	153.4	
14)	L6 Aroclor-1254 {3}	12.48f	11.74f	157705	80203	140.6	158.4	
15)	L6 Aroclor-1254 {4}	12.85f	12.35	92507	88912	143.2	143.2	
16)	L6 Aroclor-1254 {5}	13.29f	12.94f	104433	158440	149.9	147.9	
	Sum Aroclor-1254			600871	535751	766.3	759.1	
	Average Aroclor-1254					153.262	151.813	

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

Gel Permeation Chromatography (GPC) Run Log - GPC1

SWOK/AATS SWL-OE-102-16 Rev.#: 2.1 Fraction Collected: 45 mLs

Col. ID.: 418002 Protocol: GC699 Fraction: PEST Cycle: 15-9

Cal. Std. Page: Client: EPA Case#

DATE/TIME	POS.	SAMPLE ID	FILE	COMMENT
08/27/01 15:14	1	CAL STD (INITIAL)	1_082701	
08/27/01 15:45	2	SB	1_082702	
08/27/01 16:16	3	SB	1_082703	
08/27/01 16:47	4	SB	1_082704	
08/27/01 17:18	5	SB	1_082705	
08/27/01 17:49	6	SB#082701A (PEST)	1_082706	
08/27/01 18:20	7	SB#082701B (PEST)	1_082707	
08/27/01 18:51	8	BL0822SB-EPA	1_082708	
08/27/01 19:22	9	BB0822SB-EPA	1_082709	
08/27/01 19:53	10	LC0822SB-EPA	1_082710	
08/27/01 20:24	11	LD0822SB-EPA	1_082711	
08/27/01 20:55	12	47347.01-E03A9-EPA	1_082712	
08/27/01 21:26	13	47347.02-MS-E03A9-EPA	1_082713	
08/27/01 21:57	14	47347.03-MSD-E03A9-EPA	1_082714	
08/27/01 22:28	15	47347.22-E03C8-EPA	1_082715	
08/27/01 22:59	16	47347.11-E03B7-EPA	1_082716	
08/27/01 23:30	17	47347.12-E03B8-EPA	1_082717	
08/28/01 00:01	18	47347.13-E03B9-EPA	1_082718	
08/28/01 00:31	19	47347.19-E03C5-EPA	1_082719	
08/28/01 01:03	20	47347.21-E03C7-EPA	1_082720	
08/28/01 01:33	21	47347.16-E03C2-EPA	1_082721	

9/6/2001
Verification Signature/Date

9/5/01
Analyst Signature/Date

Book: OE-102-16-RUN- Page No.: 20

Gel Permeation Chromatography (GPC) Run Log - GPC1

SWOK/AATS SWL-OE-102-16 Rev.#: 2.1 Fraction Collected: 45 mLs

Col. ID.: 418002 Protocol: GC699 Fraction: PEST Cycle: 15-9

Cal. Std. Page: Client: EPA Case#

DATE/TIME	POS.	SAMPLE ID	FILE	COMMENT
08/28/01 02:04	22	47347.14-E03C0-EPA	1_082722	
08/28/01 02:35	23	47347.15-E03C1-EPA	1_082723	
08/28/01 03:06	24	47347.17-E03C3-EPA	1_082724	
08/28/01 03:36	25	47347.20-E03C6-EPA	1_082725	
08/28/01 04:08	26	47347.10-E03B6-EPA	1_082726	
08/28/01 04:38	27	47347.09-E03B5-EPA	1_082727	
08/28/01 05:09	28	47347.18-E03C4-EPA	1_082728	
08/28/01 05:41	29	47347.08-E03B4-EPA	1_082729	
08/28/01 06:12	30	47347.07-E03B3-EPA	1_082730	
08/28/01 06:42	31	47347.05-E03B1-EPA	1_082731	
08/28/01 07:13	32	47347.04-E03B0-EPA	1_082732	
08/28/01 07:44	33	47347.06-E03B2-EPA	1_082733	
08/28/01 08:15	34	SB	1_082734	
08/28/01 08:46	35	SB	1_082735	
08/28/01 09:17	36	SB	1_082736	
08/28/01 09:48	37	SB	1_082737	
08/28/01 10:19	38	CAL STD (FINAL)	1_082738	

Compound	Initial RT	Final RT	% Difference
Phthalate	14.24	14.19	0.35
Methoxychlor	15.85	15.79	0.38
Perylene	20.57	20.53	0.19

9/6/2001

Verification Signature/Date

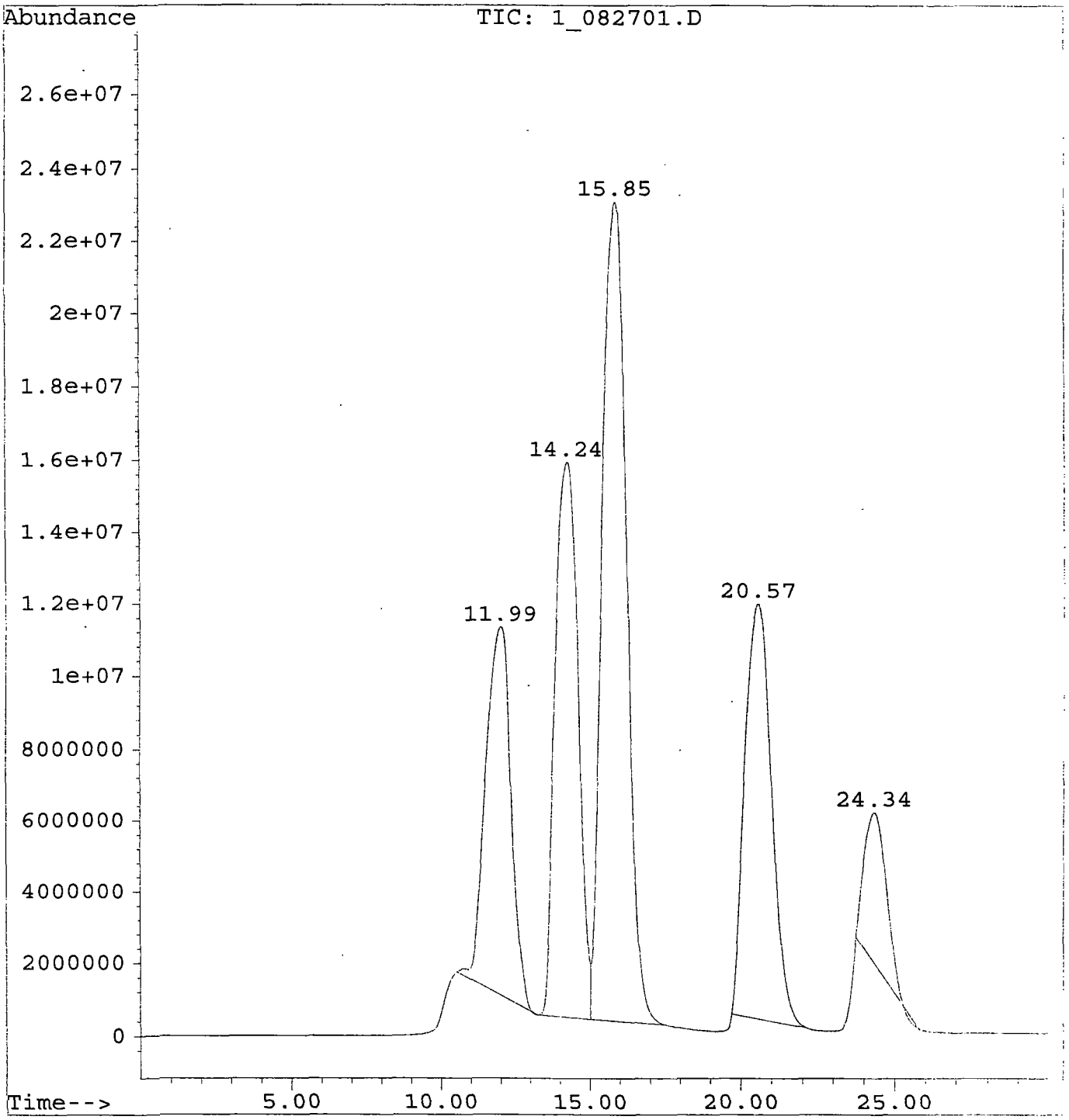
9/5/01

Analyst Signature/Date

Book: OE-102-16-RUN- Page No.: 21

Data File : C:\HPCHEM\5\DATA\082701\1_082701.D
Acq On : 27 Aug 01 03:14 PM
Sample : CAL STD (INITIAL)
Misc : COL# 418002

Vial: 1
Operator: CR COL#
Inst : GPC1
Multiplr: 1.00



1) 11.99 = Corn Oil
2) 14.24 = Pthalate
3) 15.85 = Methoxychlor
4) 20.57 = Perylene
5) 24.34 = Sulfur

Chromatographic Resolution Report

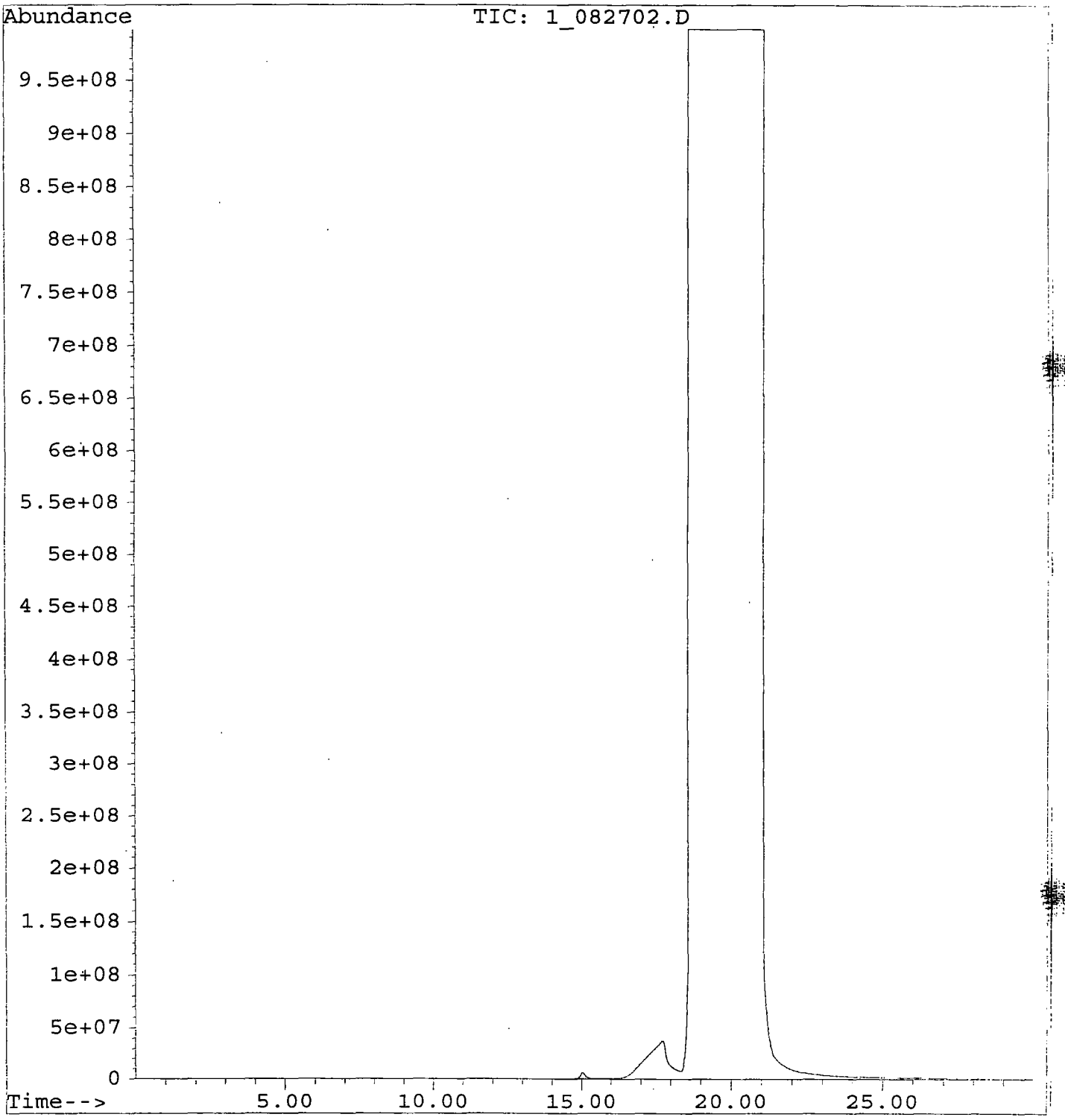
Data File : C:\HPCHEM\5\DATA\082701\1_082701.D
Acq On : 27 Aug 01 15:14
Sample : CAL STD (INITIAL)
Misc : COL# 418002

Vial: 1
Operator: CR COL# 41
Inst : GPC1
Multiplr: 1.00

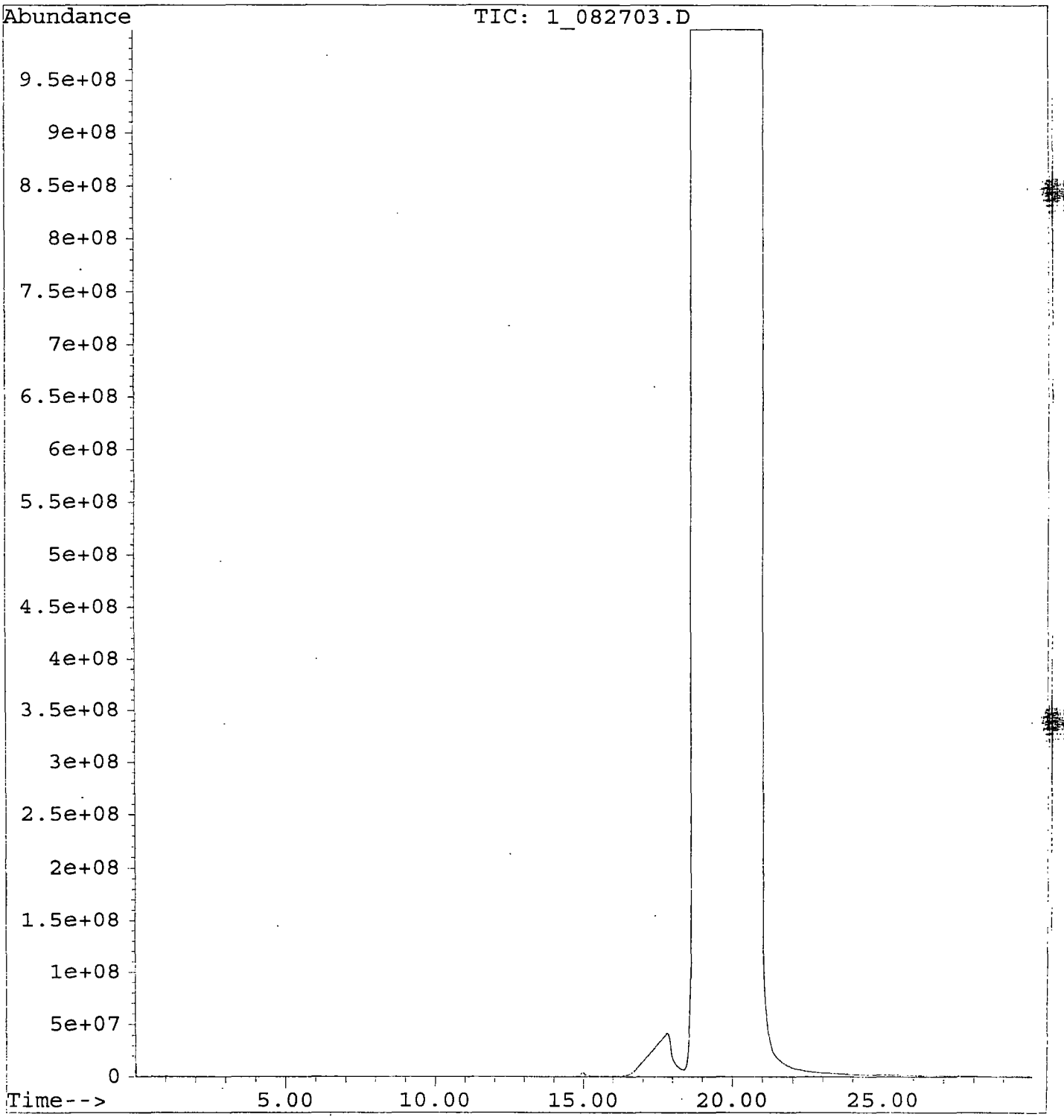
Method : C:\HPCHEM\5\METHODS\GPC.M
Title :

RT#1	RT#2	Resolution
11.992	14.240	100.00
14.240	15.849	90.53
15.849	20.566	100.00
20.566	24.342	100.00

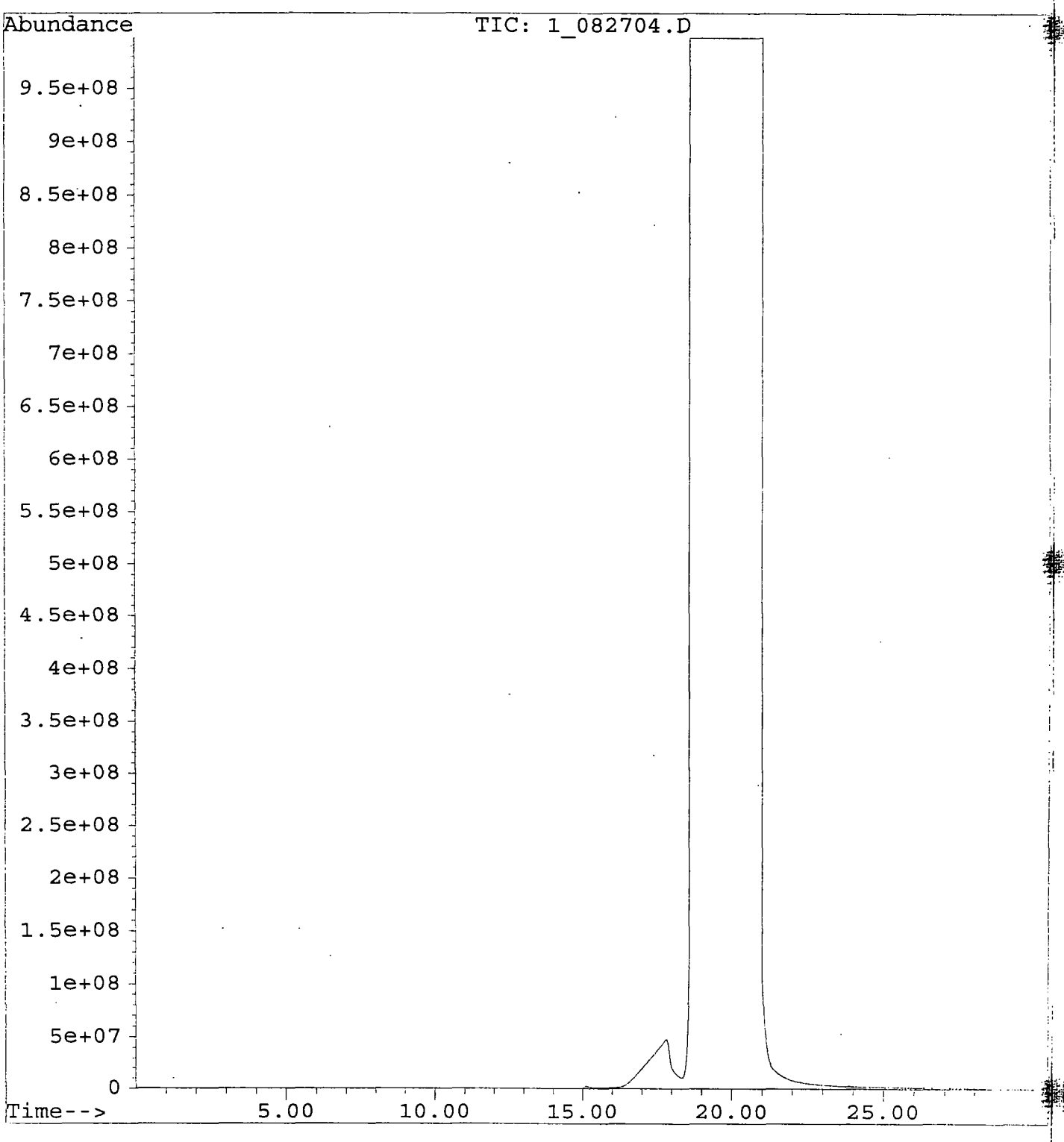
File : C:\HPCHEM\5\DATA\082701\1_082702.D
Operator : CR COL# 418002
Acquired : 27 Aug 01 15:45 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 2



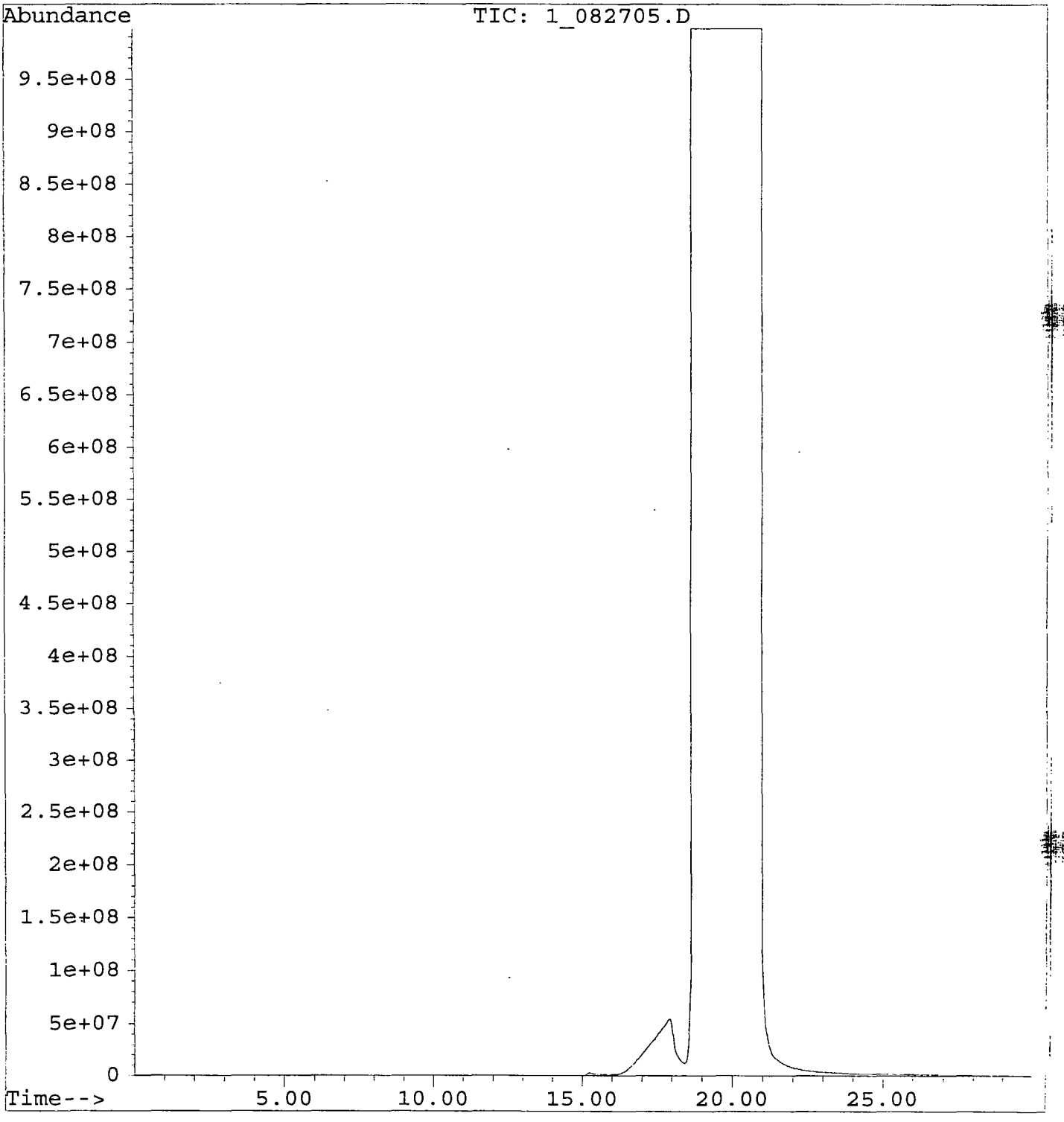
File : C:\HPCHEM\5\DATA\082701\1_082703.D
Operator : CR COL# 418002
Acquired : 27 Aug 01 16:16 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 3



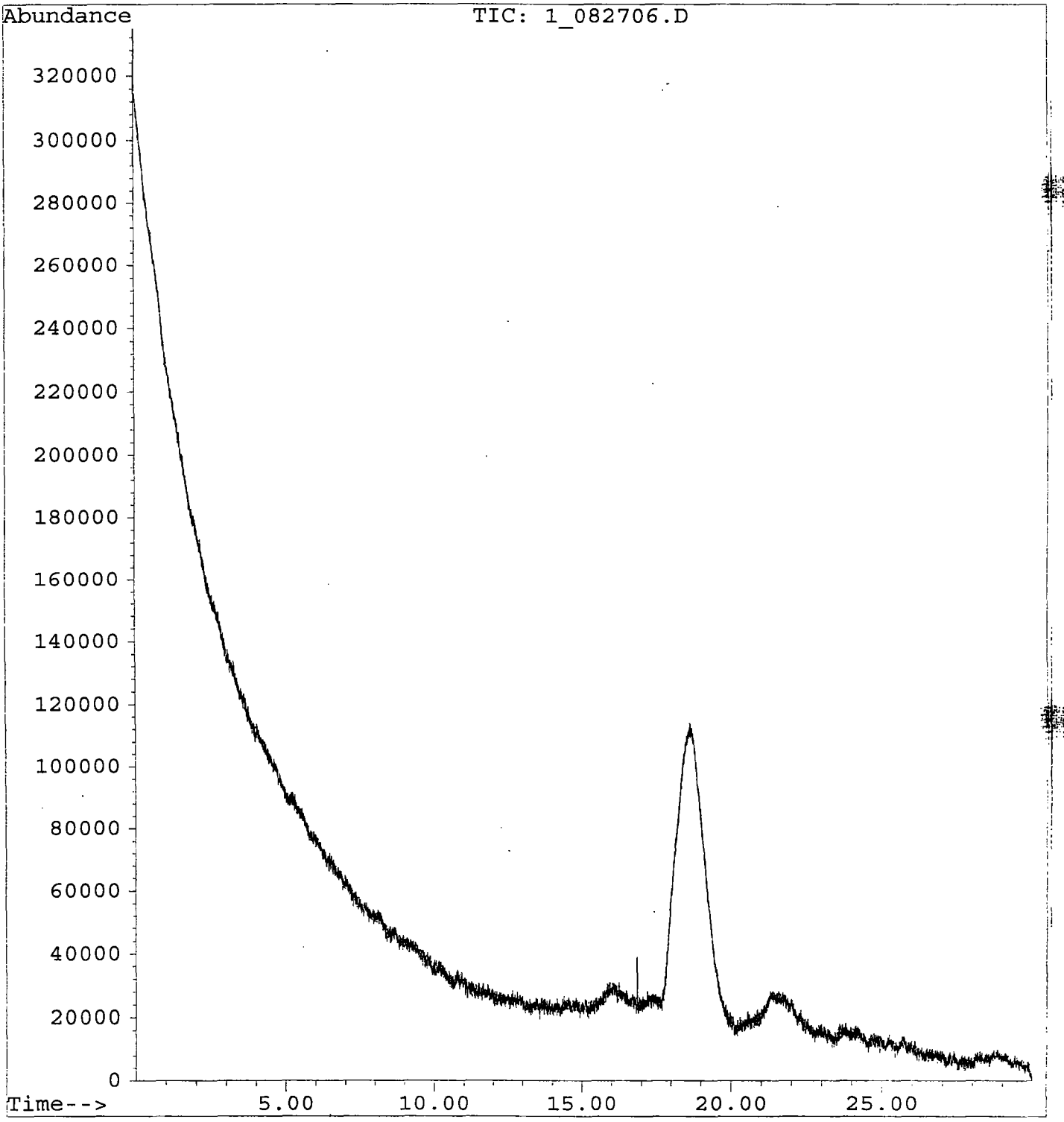
File : C:\HPCHEM\5\DATA\082701\1_082704.D
Operator : CR COL# 418002
Acquired : 27 Aug 01 16:47 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 4



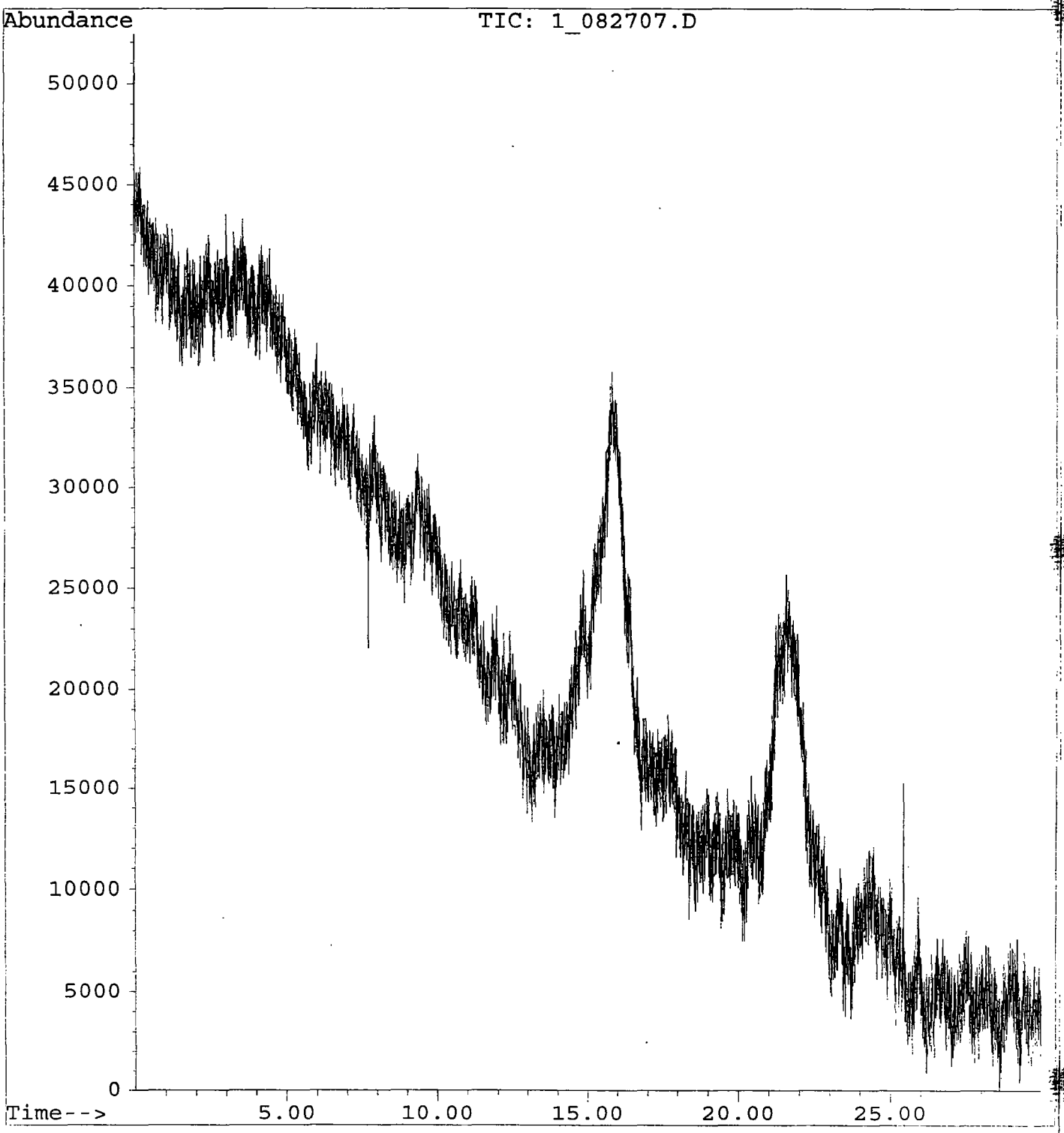
File : C:\HPCHEM\5\DATA\082701\1_082705.D
Operator : CR COL# 418002
Acquired : 27 Aug 01 17:18 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 5



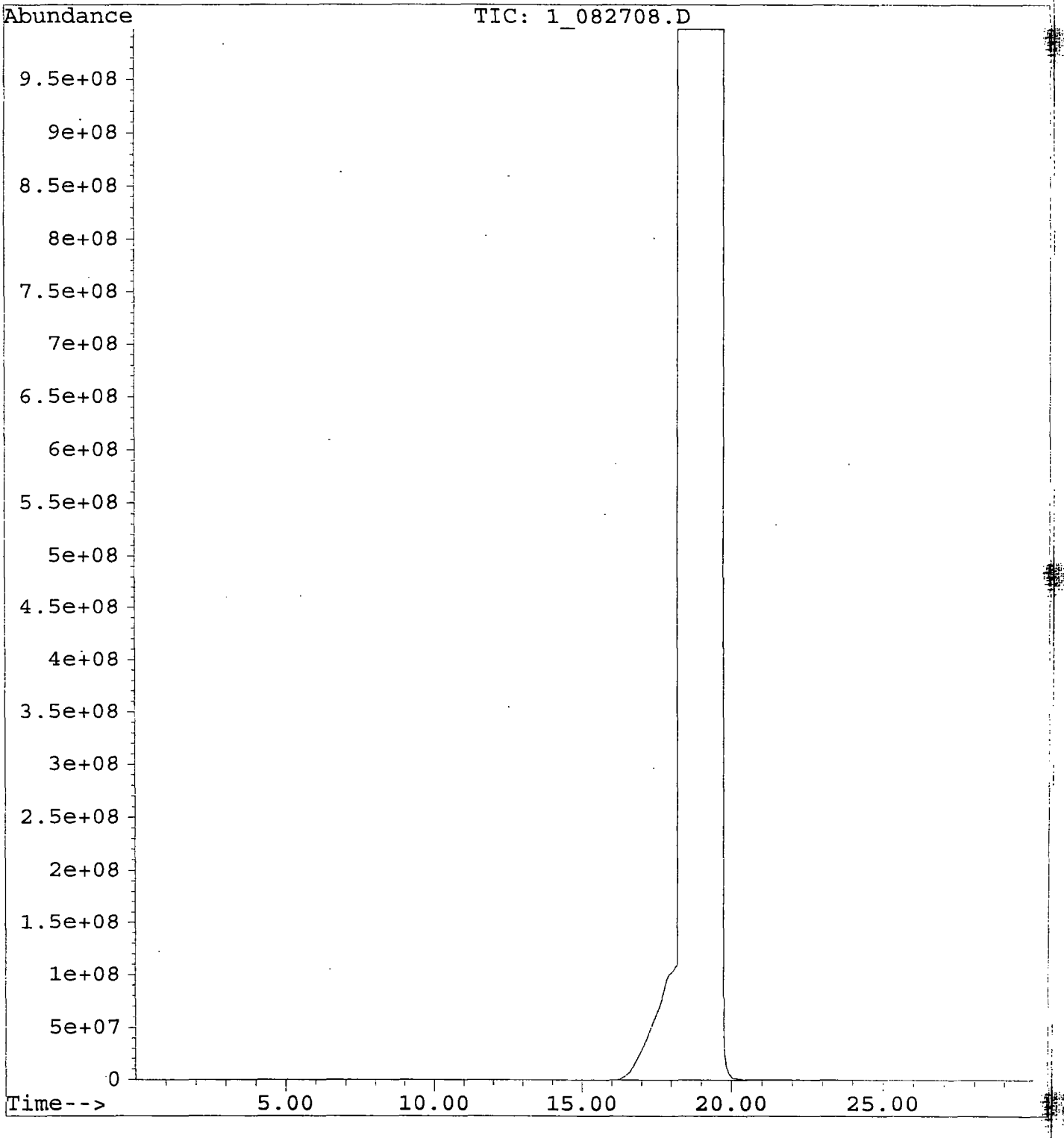
File : C:\HPCHEM\5\DATA\082701\1_082706.D
Operator : CR COL# 418002
Acquired : 27 Aug 01 17:49 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB#082701A (PEST)
Misc Info : COL# 418002
Vial Number: 6



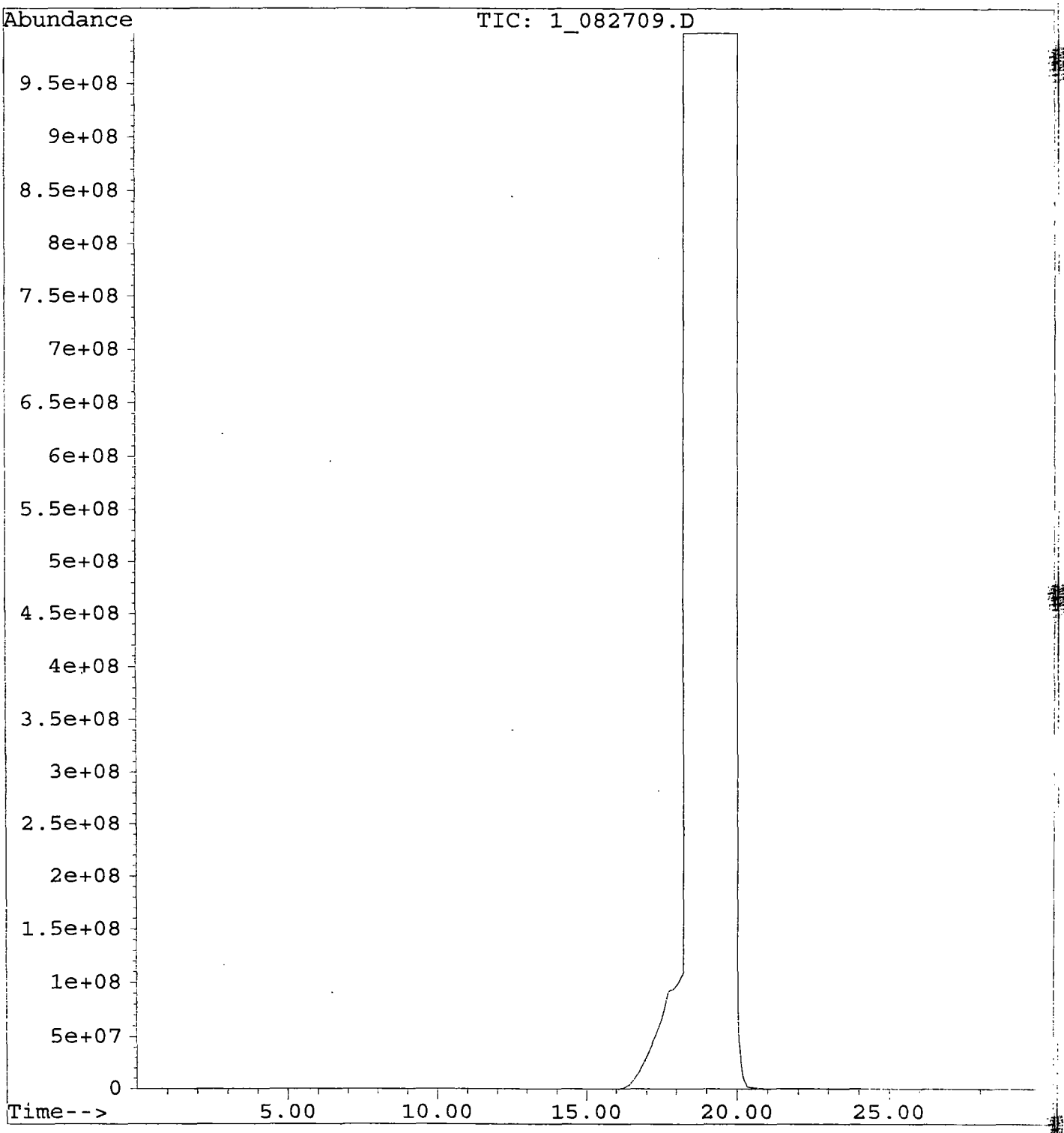
File : C:\HPCHEM\5\DATA\082701\1_082707.D
Operator : CR COL# 418002
Acquired : 27 Aug 01 18:20 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB#082701B (PEST)
Misc Info : COL# 418002
Vial Number: 7



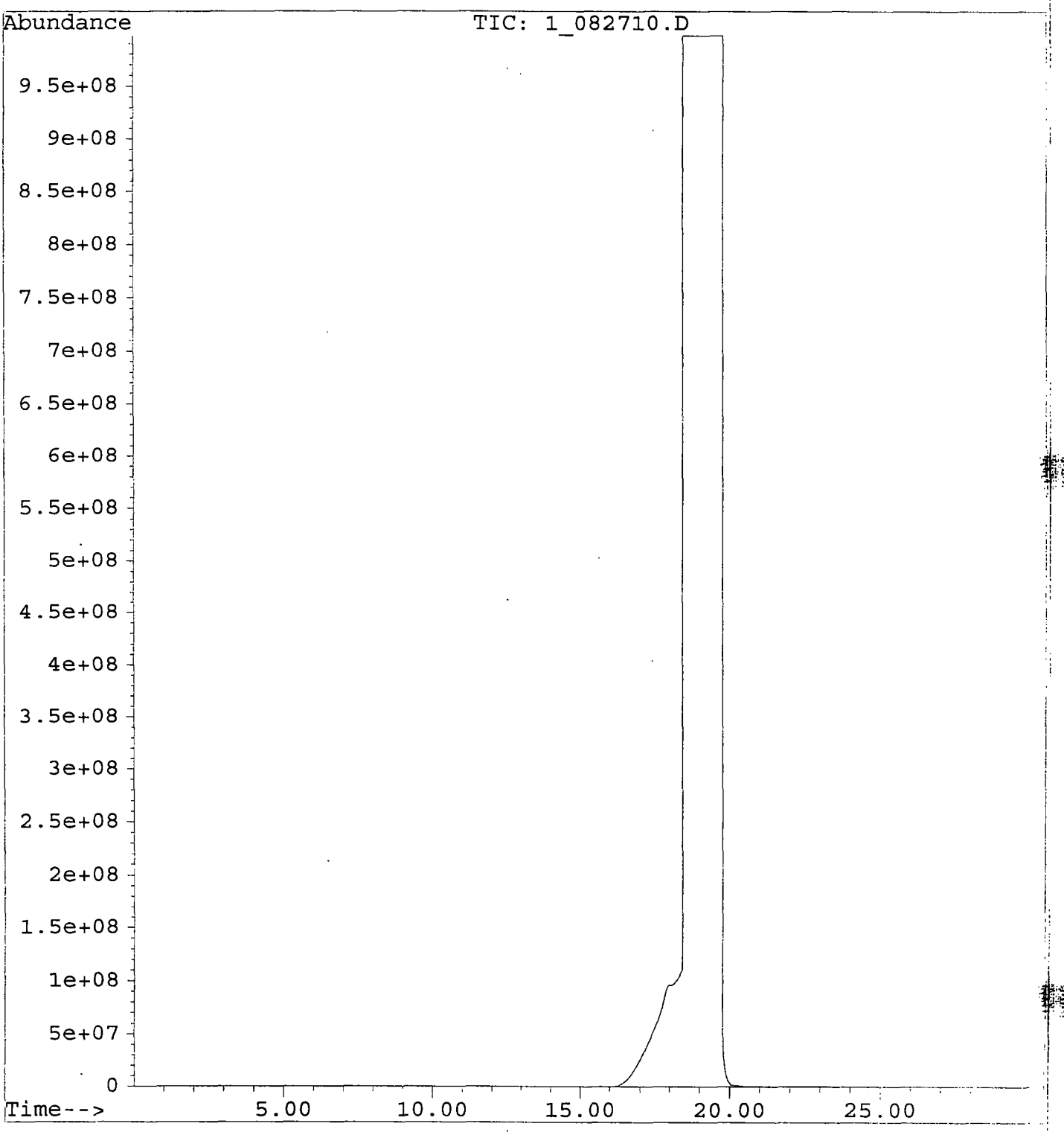
File : C:\HPCHEM\5\DATA\082701\1_082708.D
Operator : CR COL# 418002
Acquired : 27 Aug 01 18:51 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: BL0822SB-EPA
Misc Info : COL# 418002
Vial Number: 8



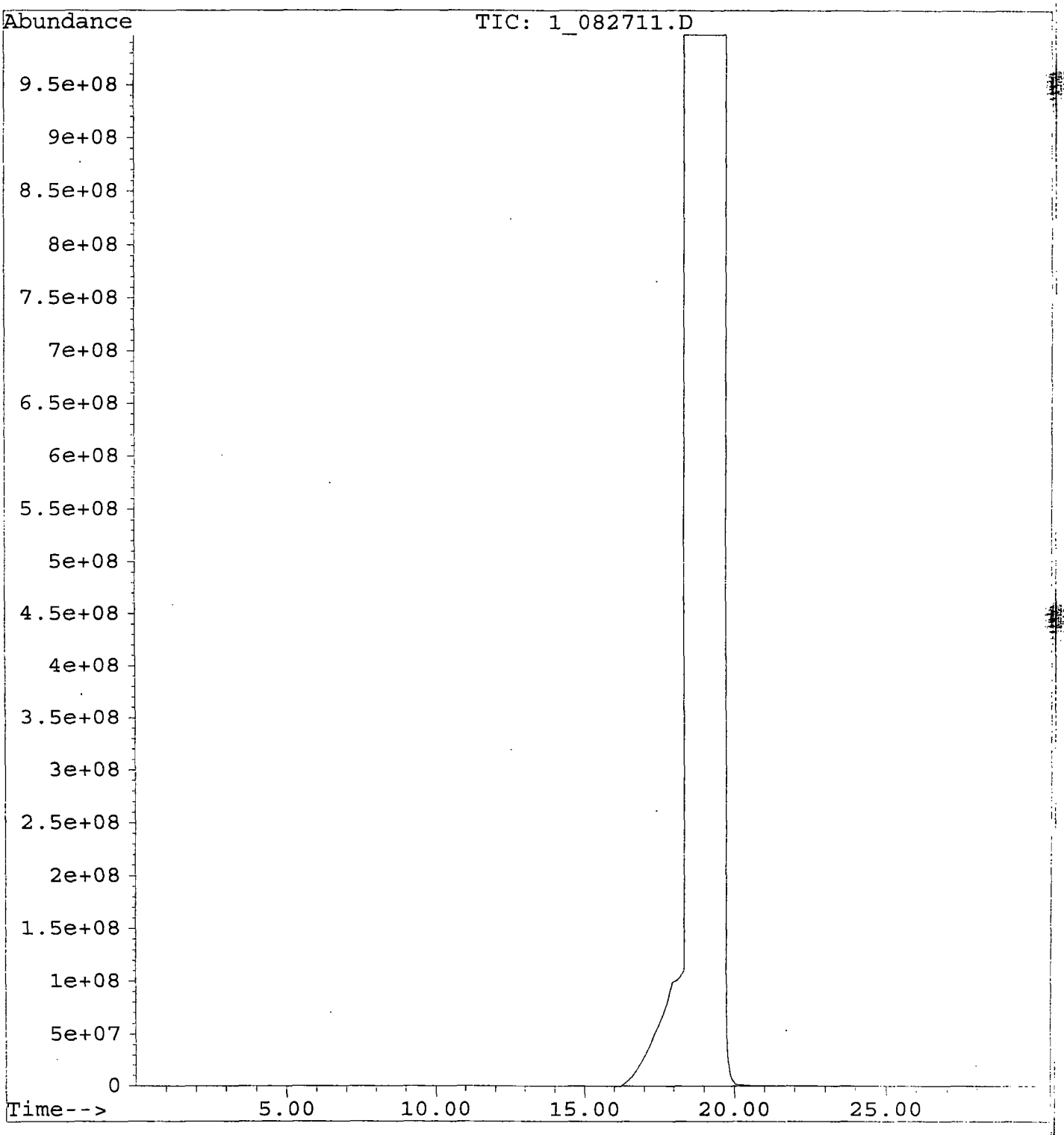
File : C:\HPCHEM\5\DATA\082701\1_082709.D
Operator : CR COL# 418002
Acquired : 27 Aug 01 19:22 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: BB0822SB-EPA
Misc Info : COL# 418002
Vial Number: 9



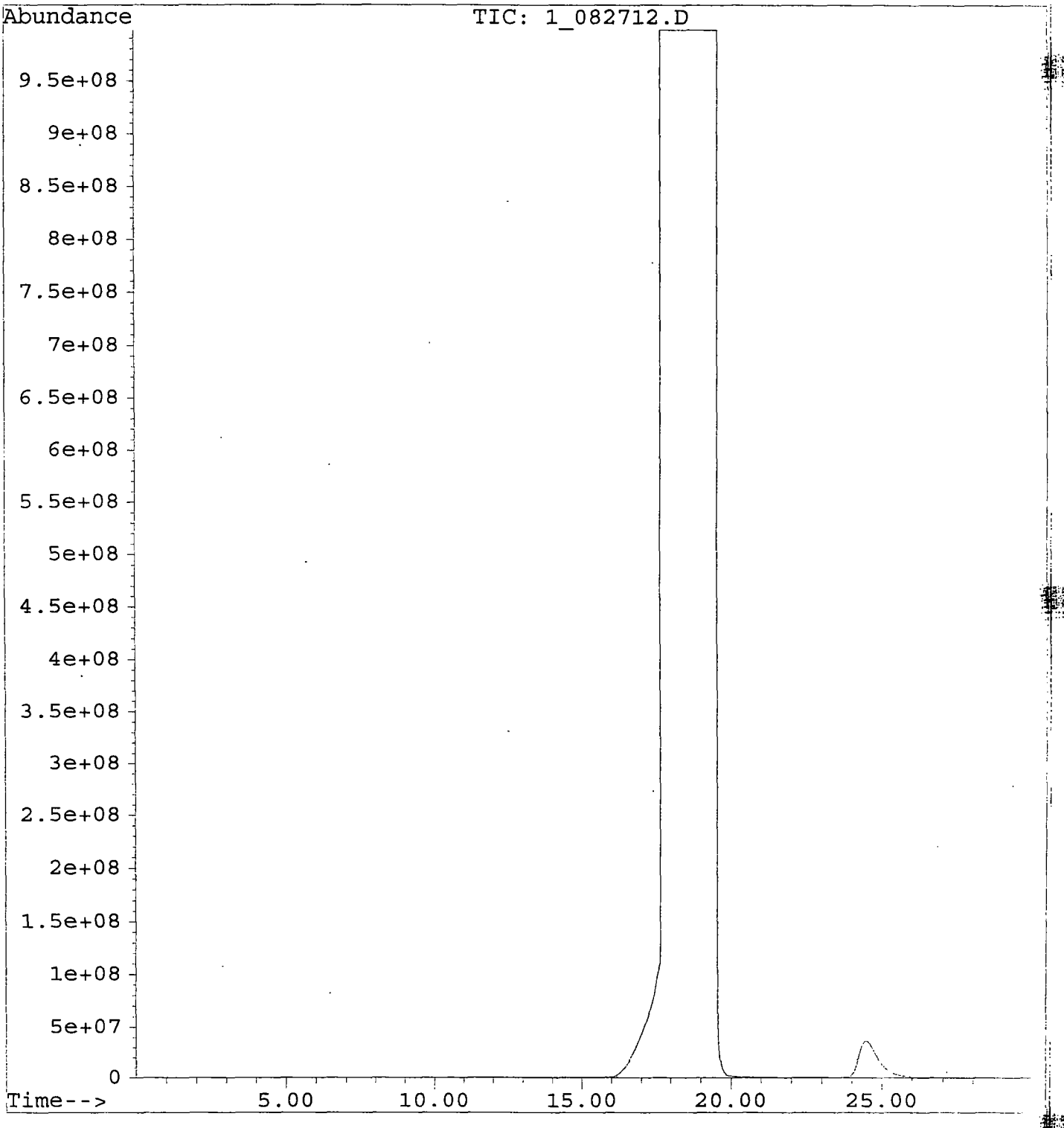
File : C:\HPCHEM\5\DATA\082701\1_082710.D
Operator : CR COL# 418002
Acquired : 27 Aug 01 19:53 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: LC0822SB-EPA
Misc Info : COL# 418002
Vial Number: 10



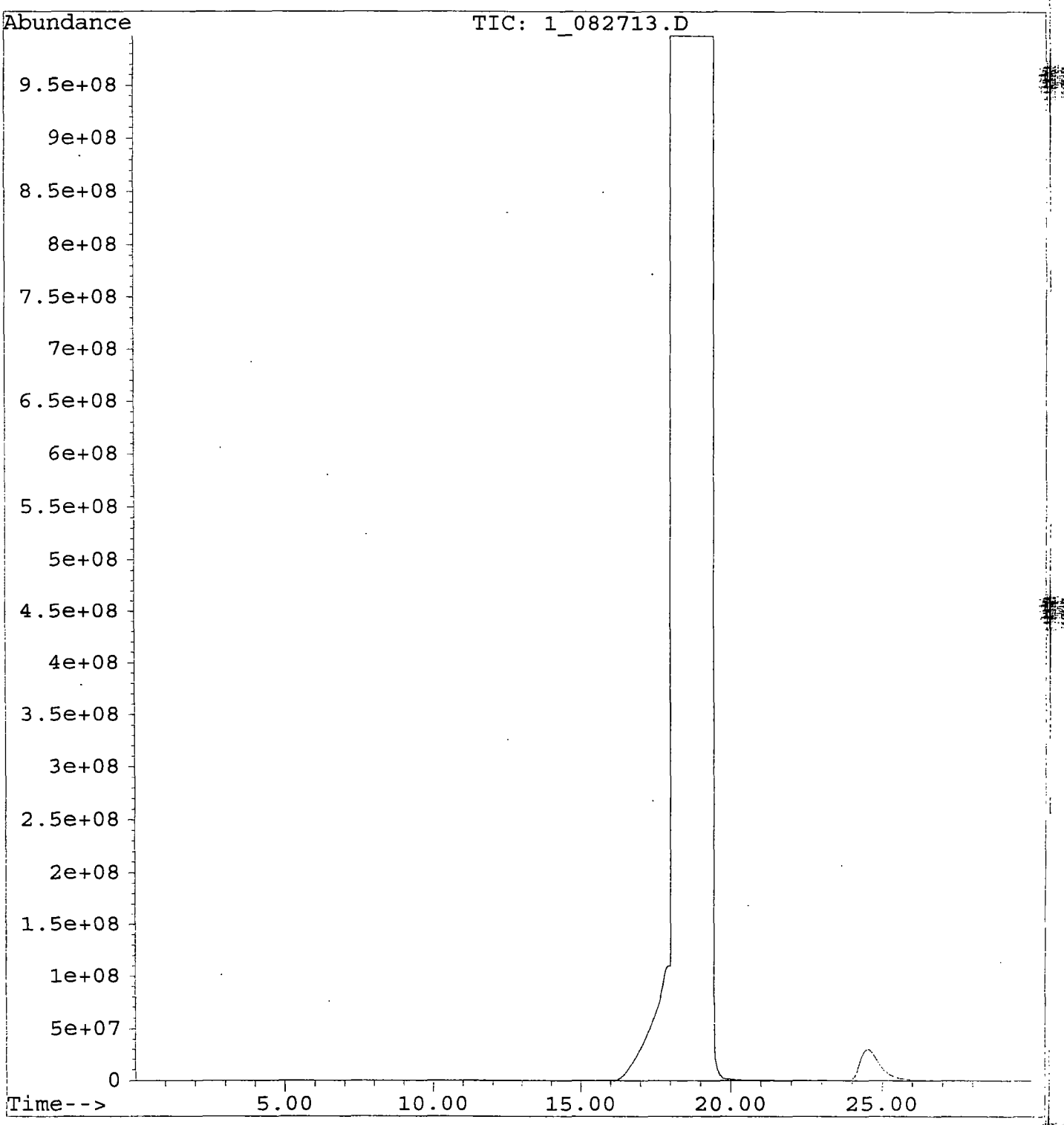
File : C:\HPCHEM\5\DATA\082701\1_082711.D
Operator : CR COL# 418002
Acquired : 27 Aug 01 20:24 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: LD0822SB-EPA
Misc Info : COL# 418002
Vial Number: 11



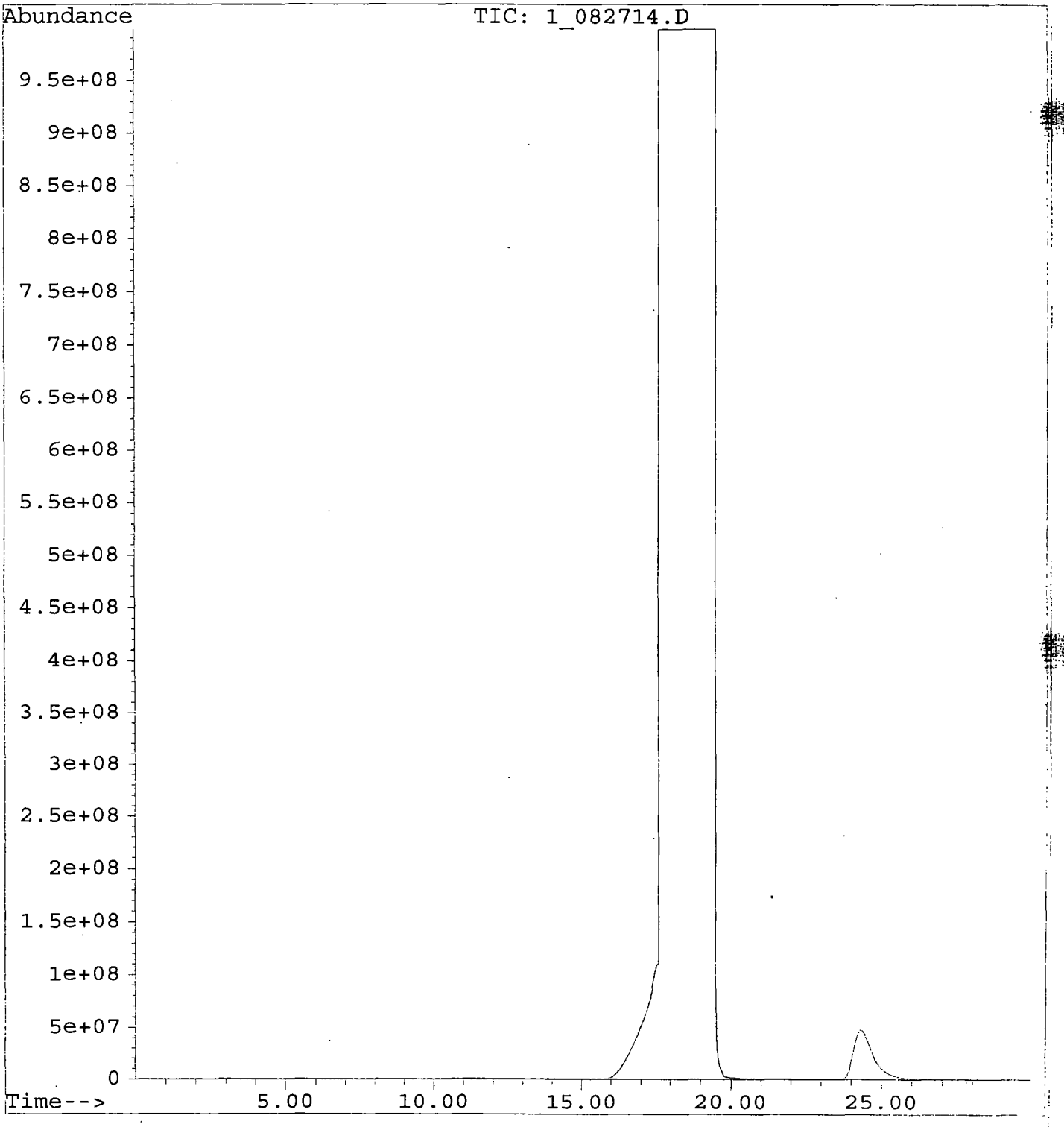
File : C:\HPCHEM\5\DATA\082701\1_082712.D
Operator : CR COL# 418002
Acquired : 27 Aug 01 20:55 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47347.01-E03A9-EPA
Misc Info : COL# 418002
Vial Number: 12



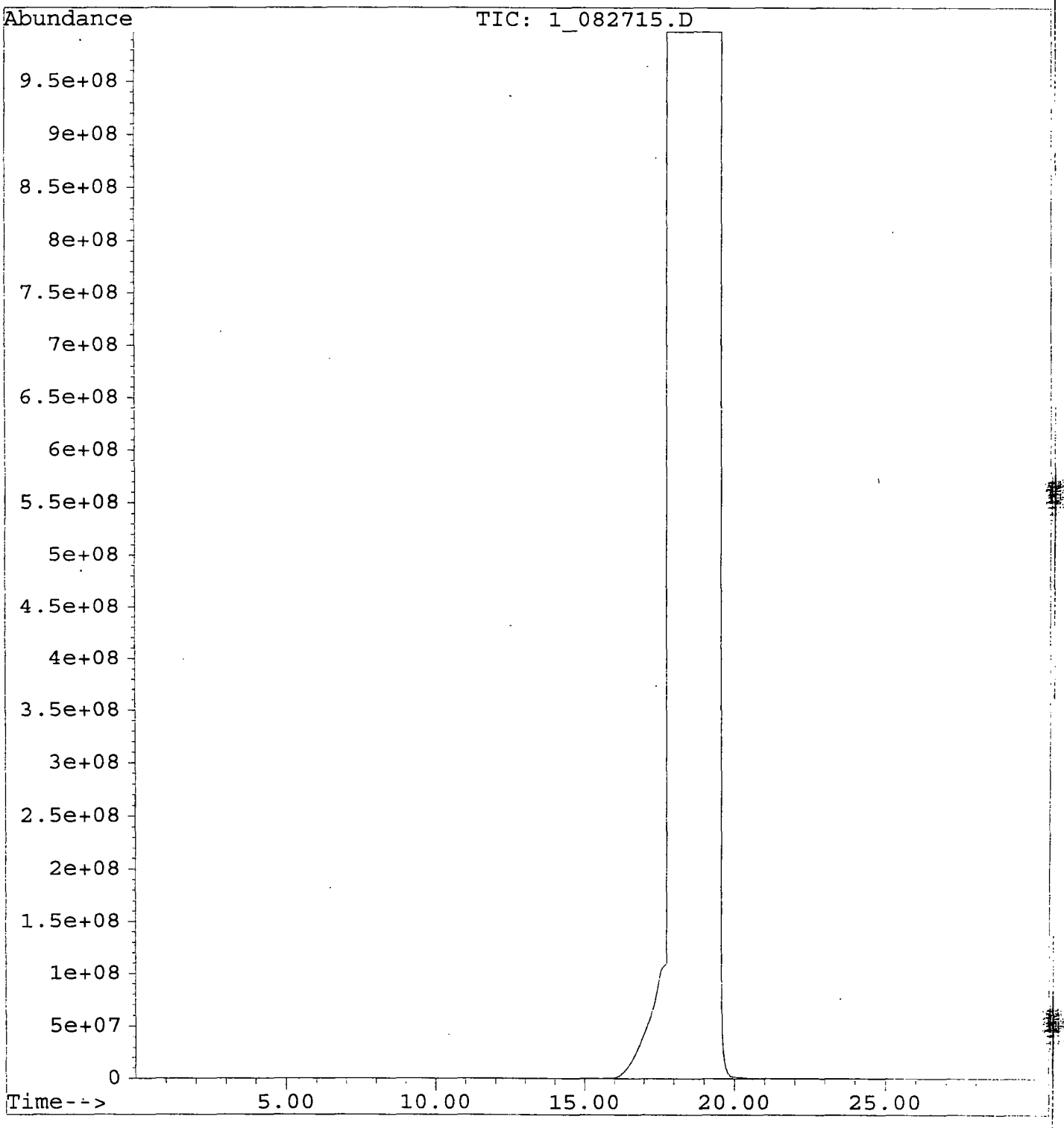
File : C:\HPCHEM\5\DATA\082701\1_082713.D
Operator : CR COL# 418002
Acquired : 27 Aug 01 21:26 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47347.02-MS-E03A9-EPA
Misc Info : COL# 418002
Vial Number: 13



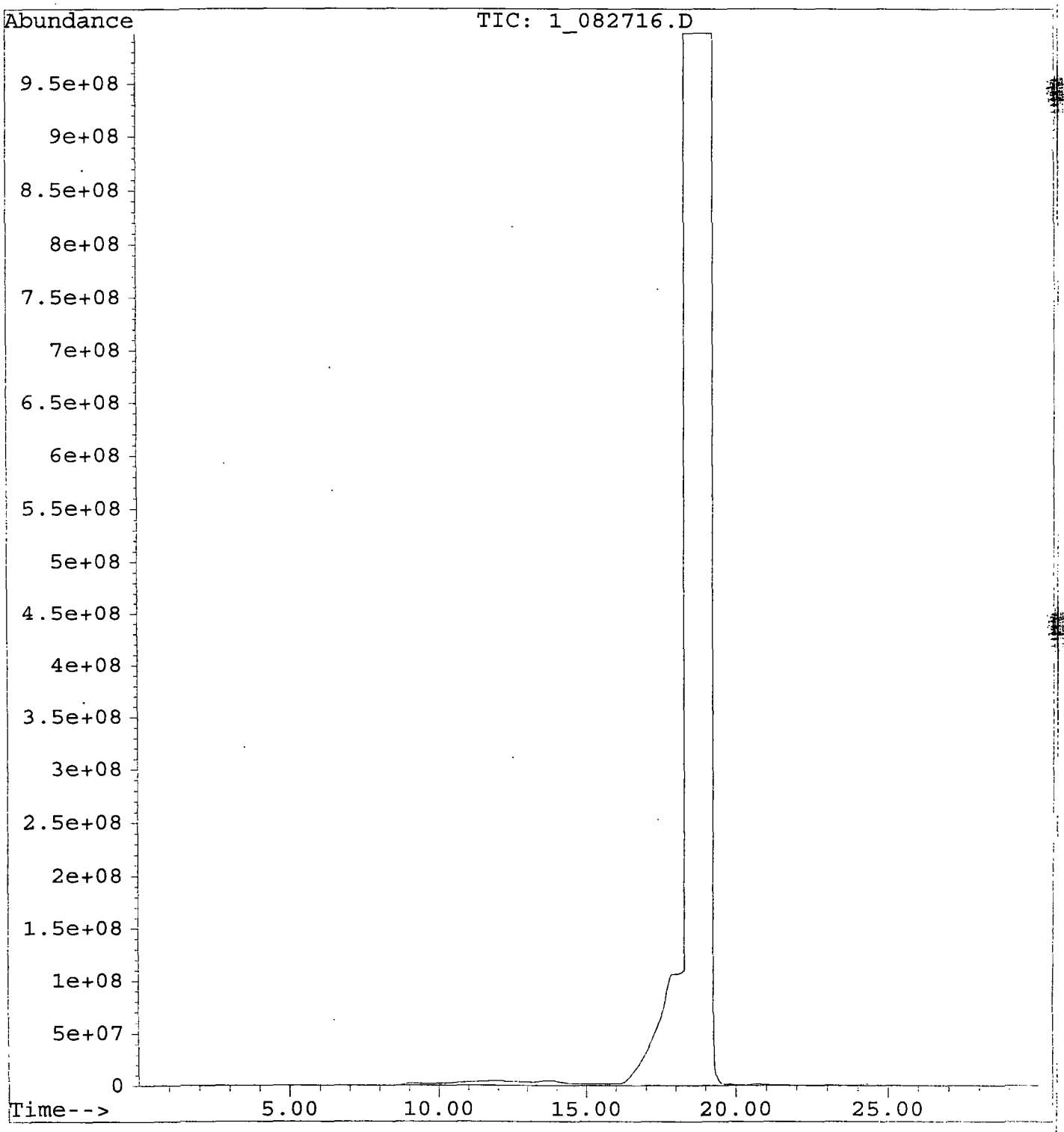
File : C:\HPCHEM\5\DATA\082701\1_082714.D
Operator : CR COL# 418002
Acquired : 27 Aug 01 21:57 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47347.03-MSD-E03A9-EPA
Misc Info : COL# 418002
Vial Number: 14



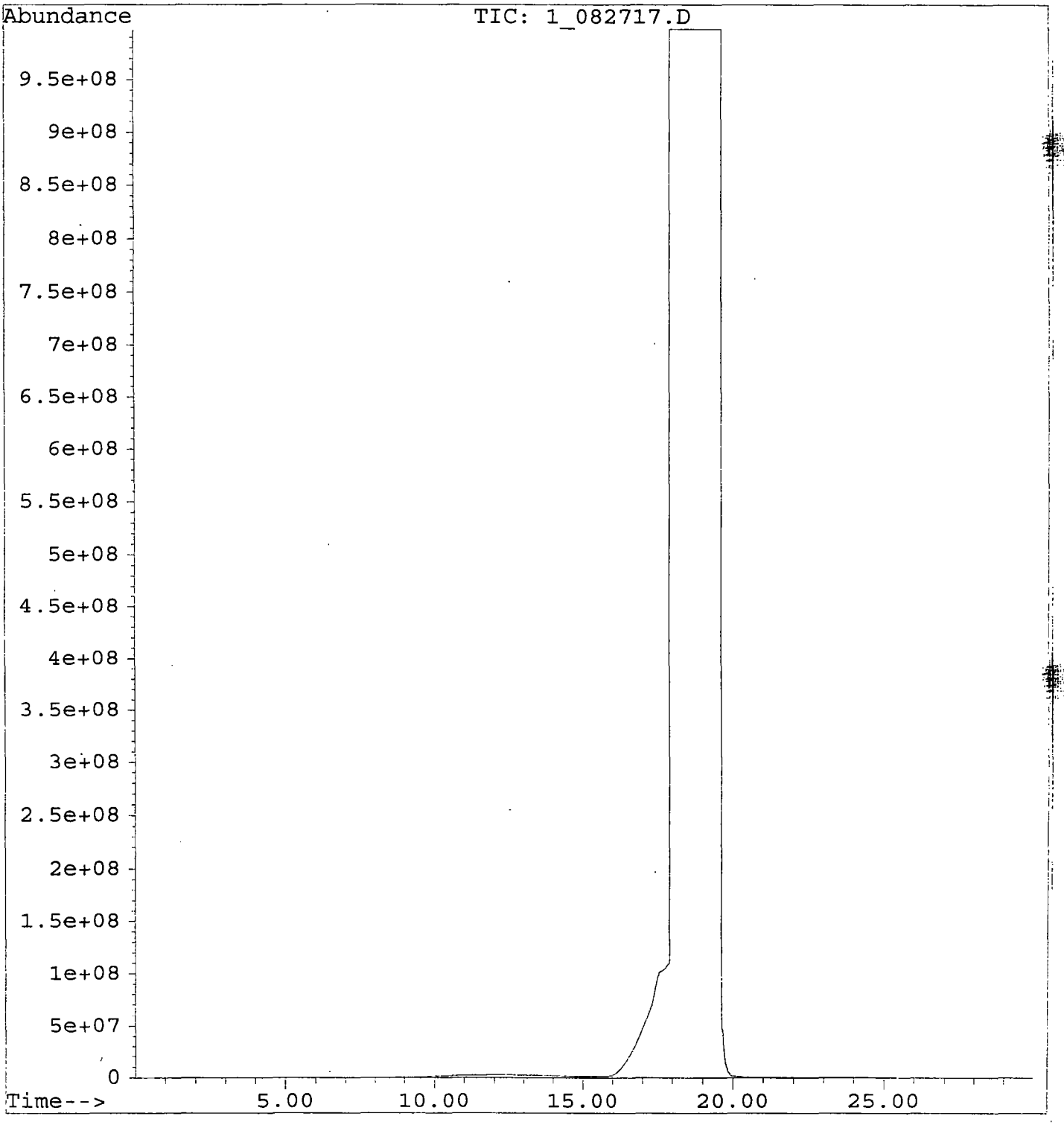
File : C:\HPCHEM\5\DATA\082701\1_082715.D
Operator : CR COL# 418002
Acquired : 27 Aug 01 22:28 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47347.22-E03C8-EPA
Misc Info : COL# 418002
Vial Number: 15



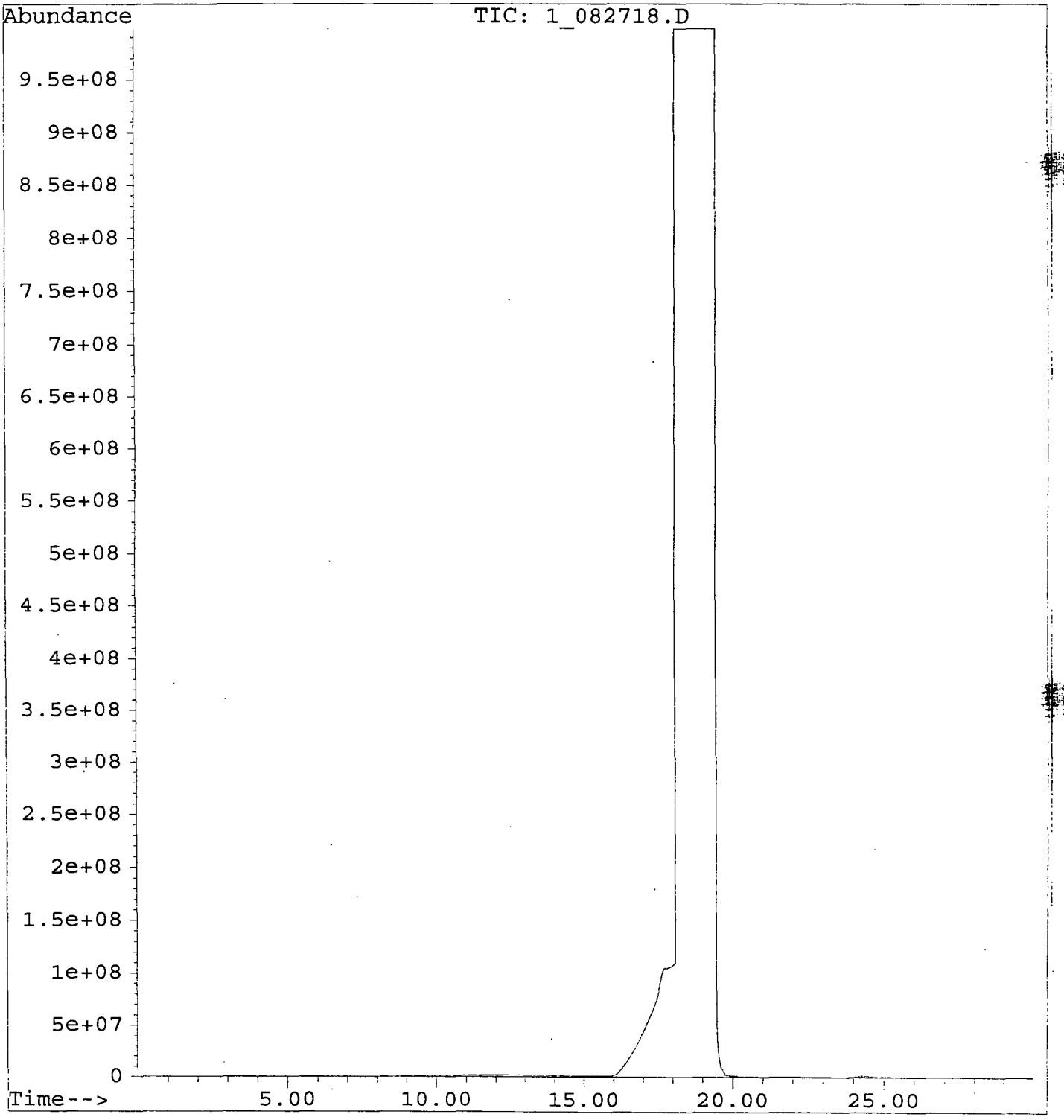
File : C:\HPCHEM\5\DATA\082701\1_082716.D
Operator : CR COL# 418002
Acquired : 27 Aug 01 22:59 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47347.11-E03B7-EPA
Misc Info : COL# 418002
Vial Number: 16



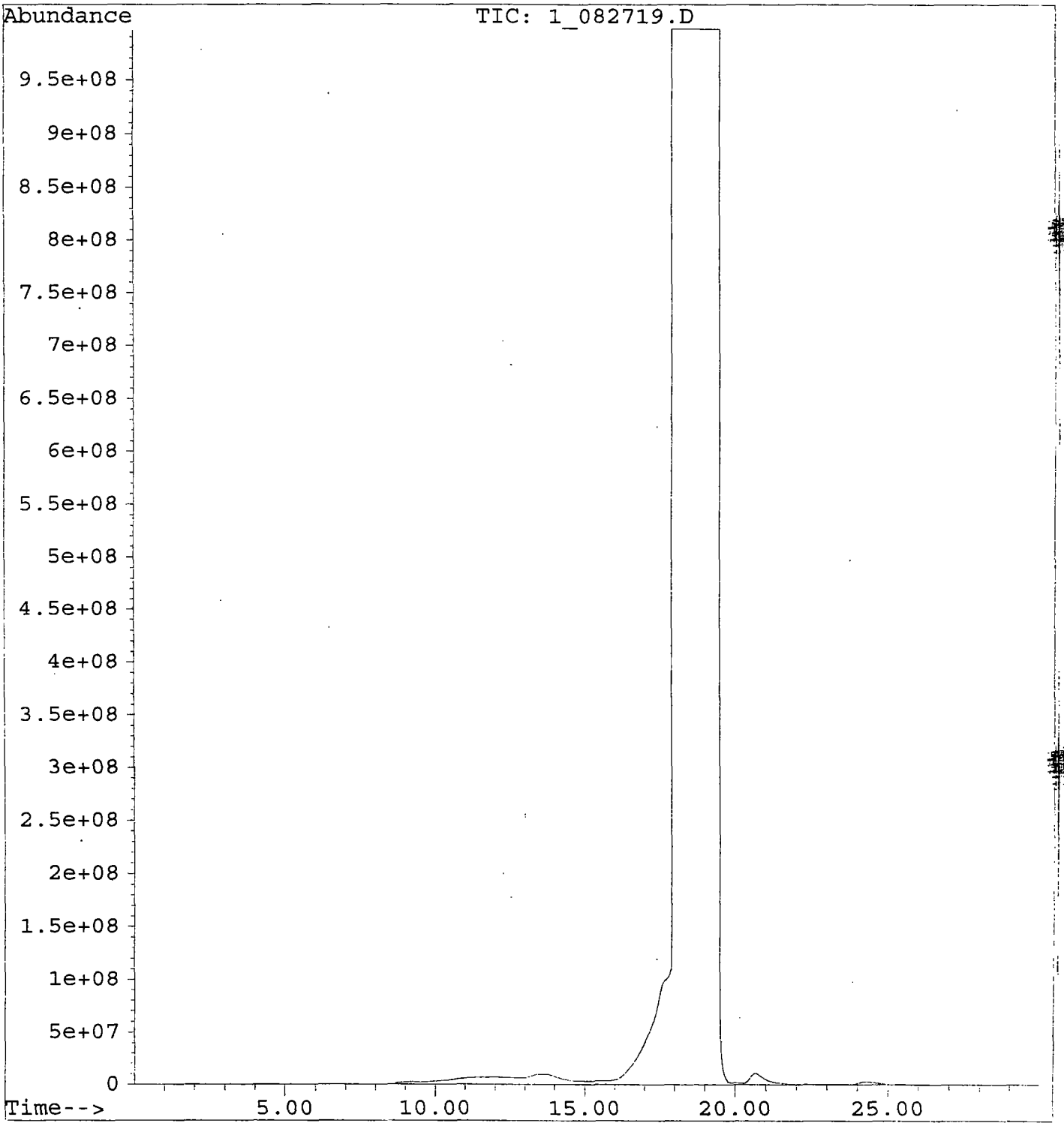
File : C:\HPCHEM\5\DATA\082701\1_082717.D
Operator : CR COL# 418002
Acquired : 27 Aug 01 23:30 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47347.12-E03B8-EPA
Misc Info : COL# 418002
Vial Number: 17



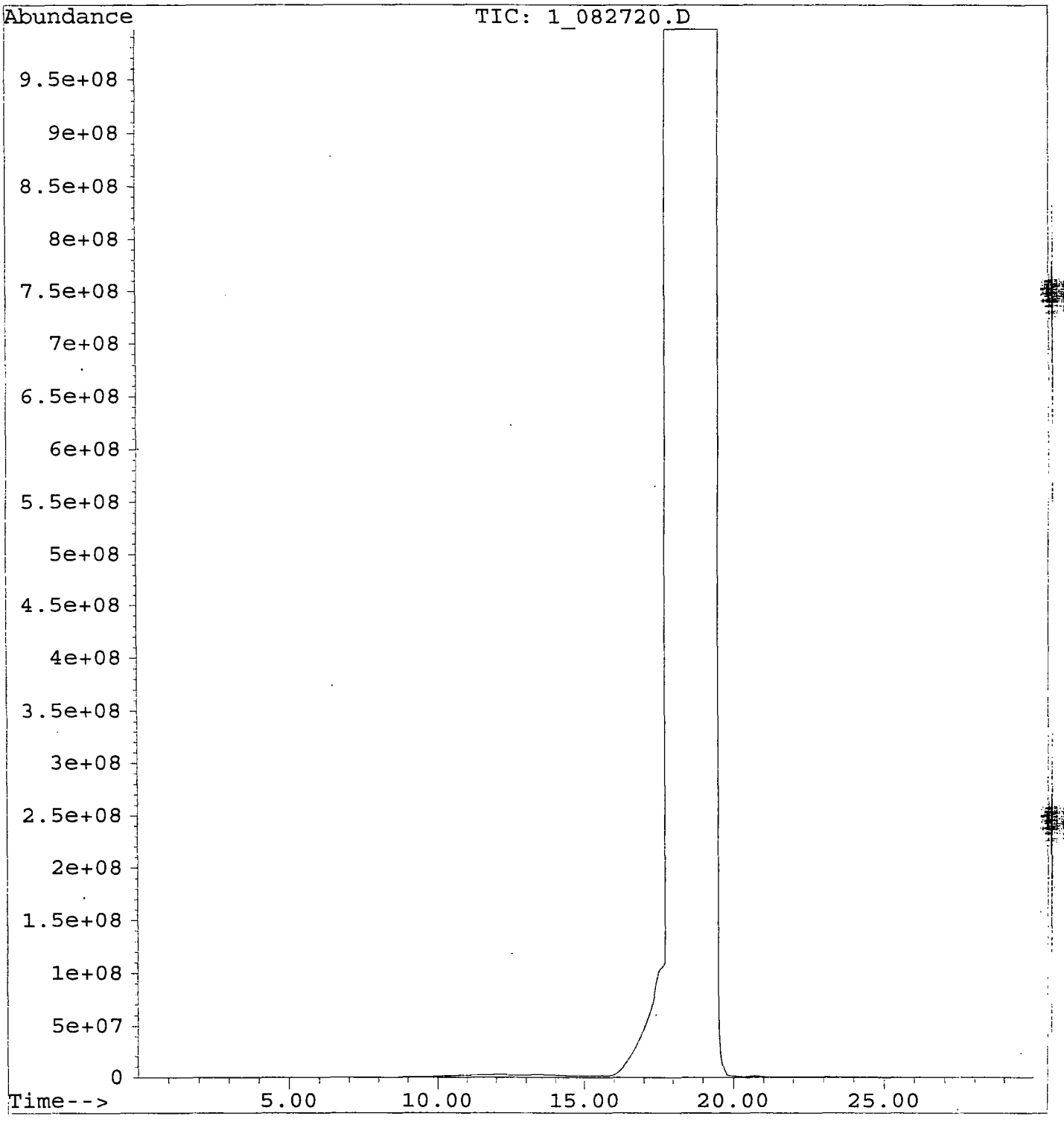
File : C:\HPCHEM\5\DATA\082701\1_082718.D
Operator : CR COL# 418002
Acquired : 28 Aug 01 00:01 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47347.13-E03B9-EPA
Misc Info : COL# 418002
Vial Number: 18



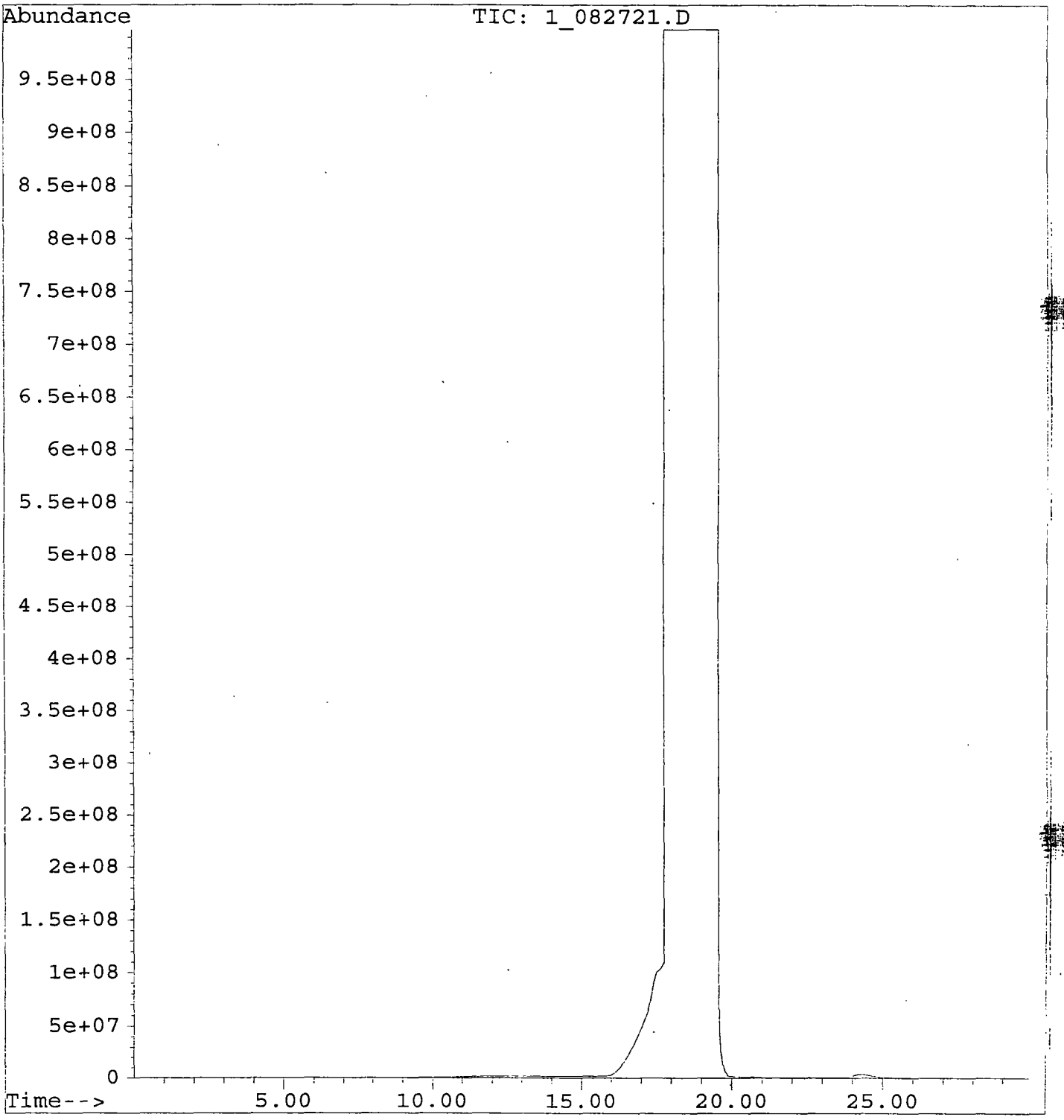
File : C:\HPCHEM\5\DATA\082701\1_082719.D
Operator : CR COL# 418002
Acquired : 28 Aug 01 00:31 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47347.19-E03C5-EPA
Misc Info : COL# 418002
Vial Number: 19



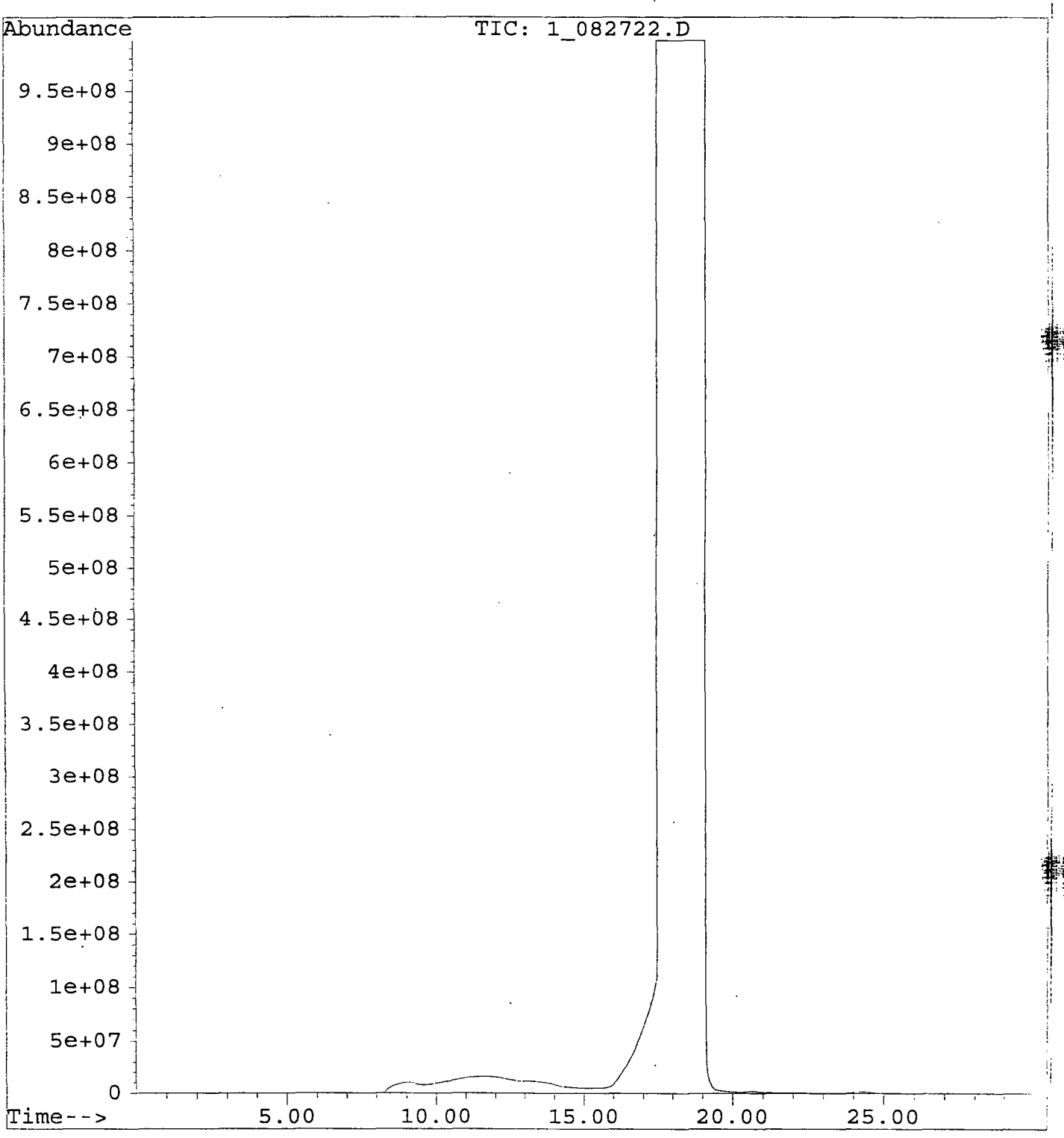
File : C:\HPCHEM\5\DATA\082701\1_082720.D
Operator : CR COL# 418002
Acquired : 28 Aug 01 01:03 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47347.21-E03C7-EPA
Misc Info : COL# 418002
Vial Number: 20



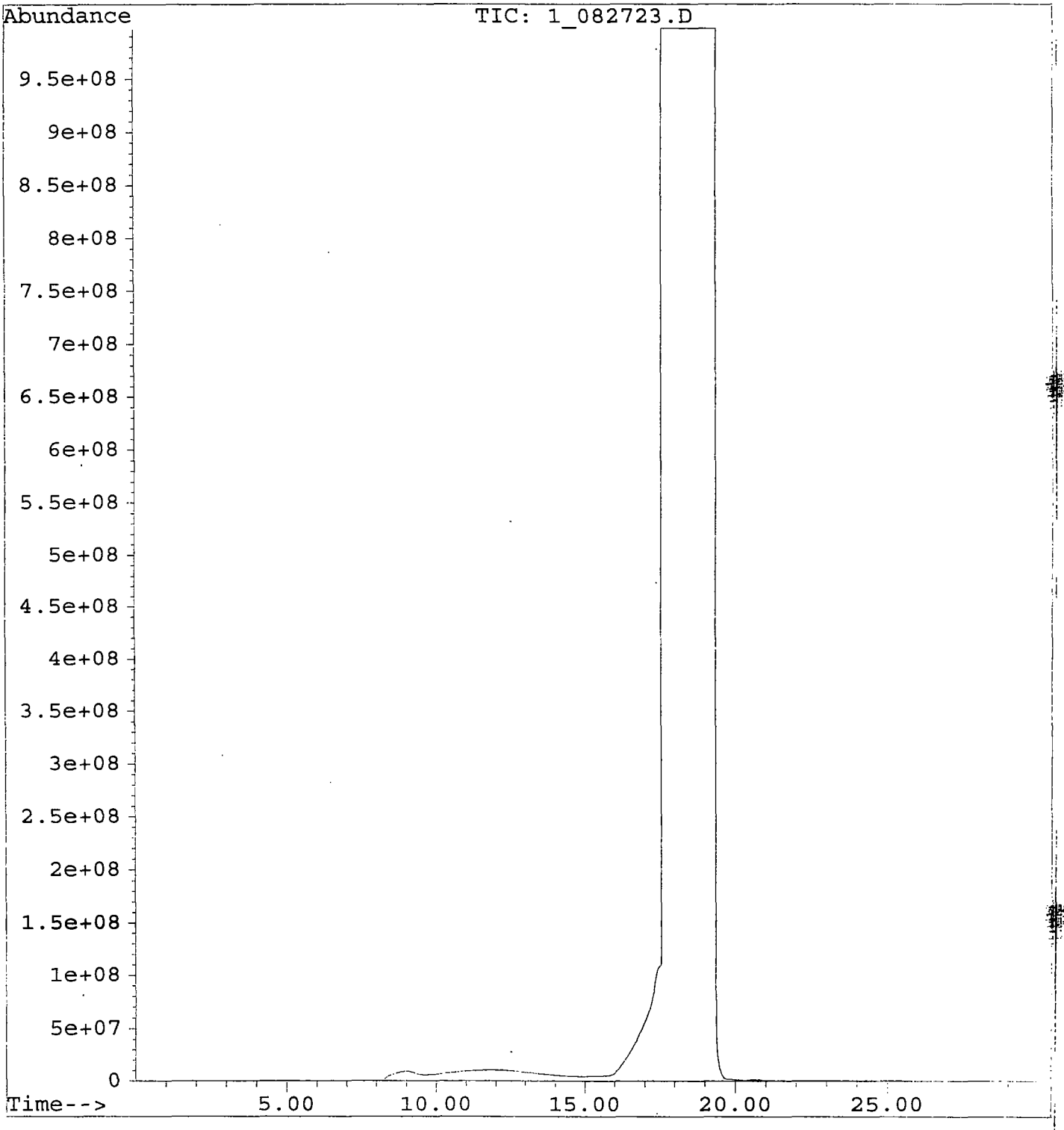
File : C:\HPCHEM\5\DATA\082701\1_082721.D
Operator : CR COL# 418002
Acquired : 28 Aug 01 01:33 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47347.16-E03C2-EPA
Misc Info : COL# 418002
Vial Number: 21



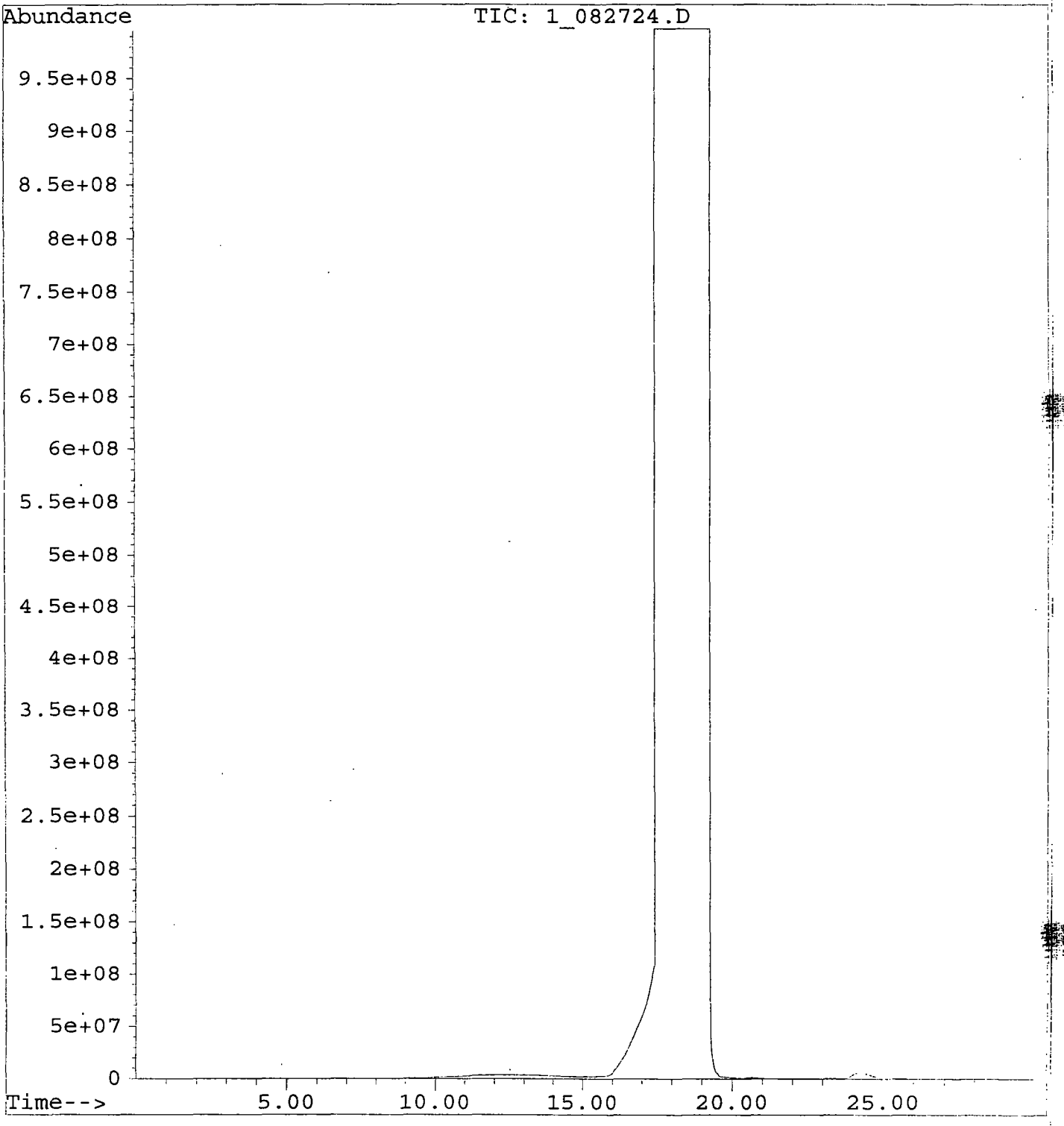
File : C:\HPCHEM\5\DATA\082701\1_082722.D
Operator : CR COL# 418002
Acquired : 28 Aug 01 02:04 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47347.14-E03C0-EPA
Misc Info : COL# 418002
Vial Number: 22



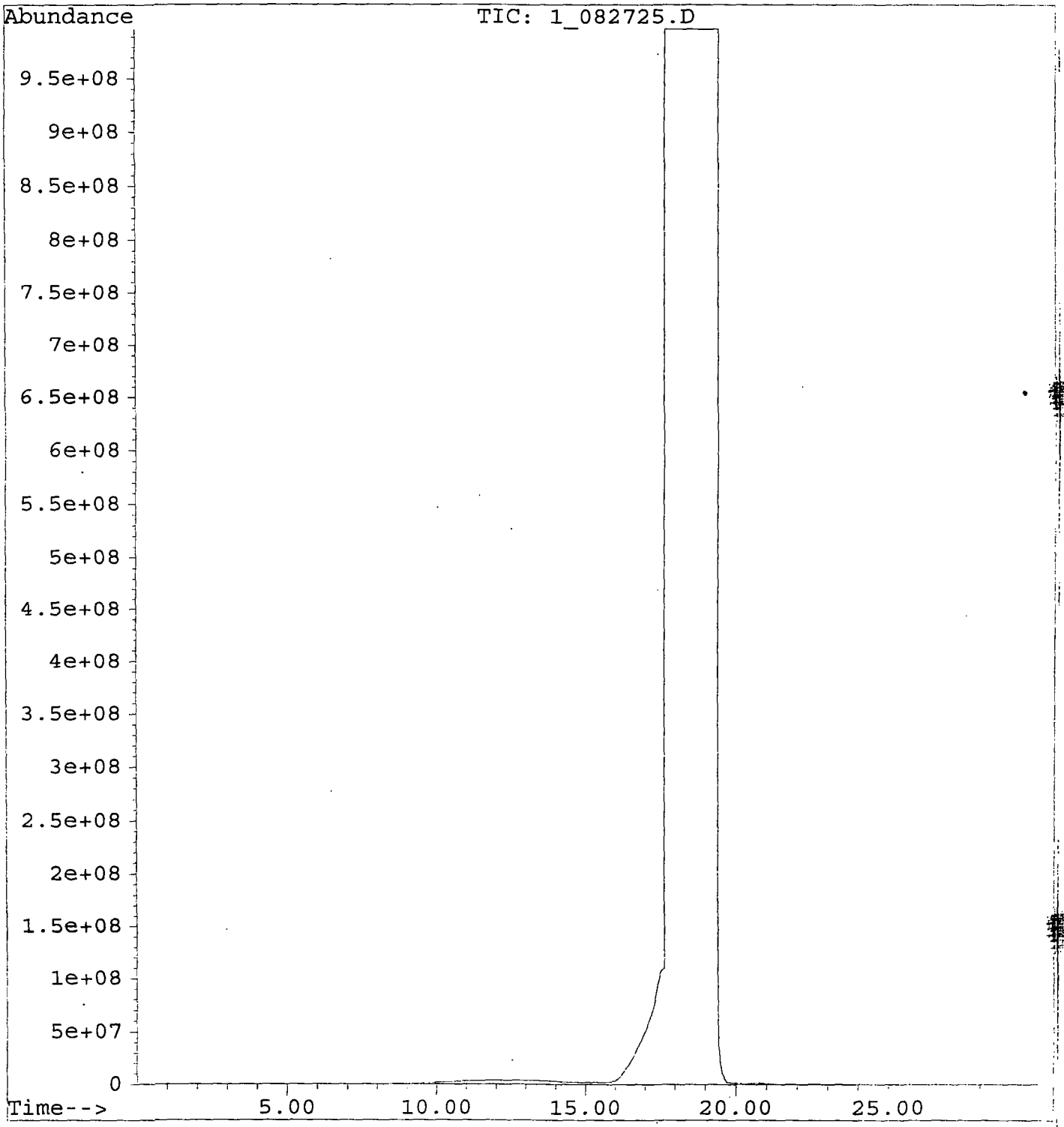
File : C:\HPCHEM\5\DATA\082701\1_082723.D
Operator : CR COL# 418002
Acquired : 28 Aug 01 02:35 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47347.15-E03C1-EPA
Misc Info : COL# 418002
Vial Number: 23



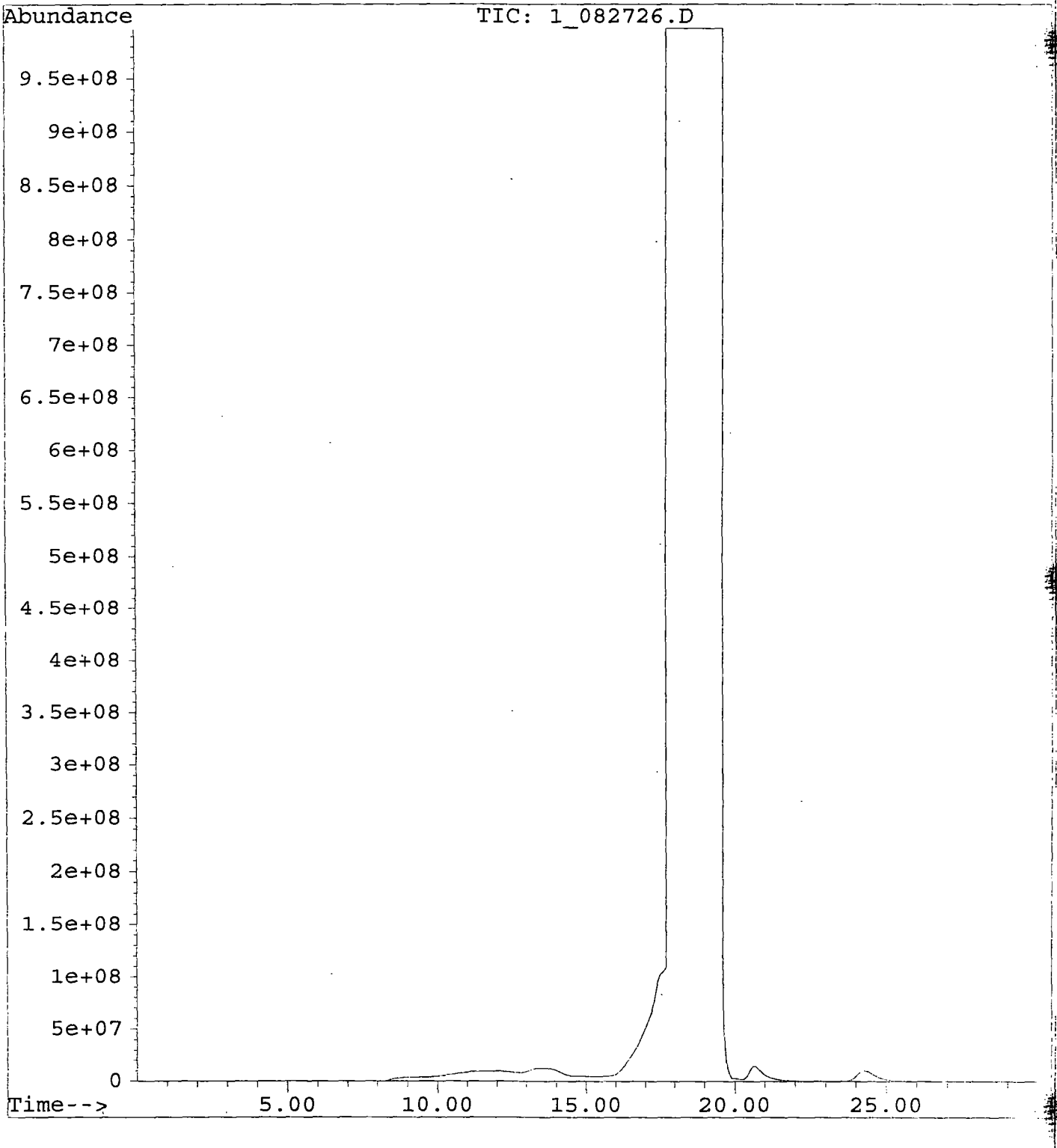
File : C:\HPCHEM\5\DATA\082701\1_082724.D
Operator : CR COL# 418002
Acquired : 28 Aug 01 03:06 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47347.17-E03C3-EPA
Misc Info : COL# 418002
Vial Number: 24



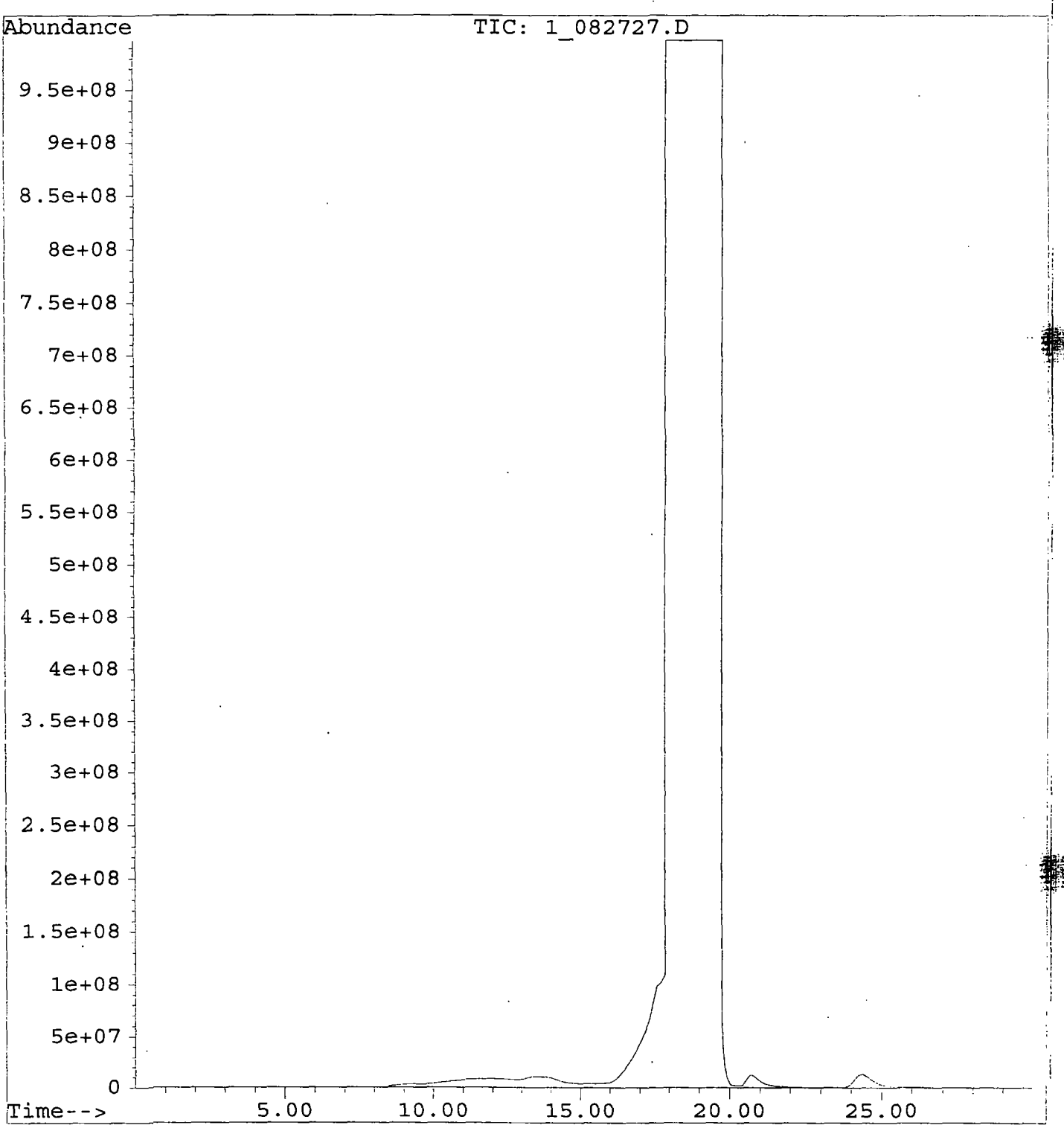
File : C:\HPCHEM\5\DATA\082701\1_082725.D
Operator : CR COL# 418002
Acquired : 28 Aug 01 03:36 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47347.20-E03C6-EPA
Misc Info : COL# 418002
Vial Number: 25



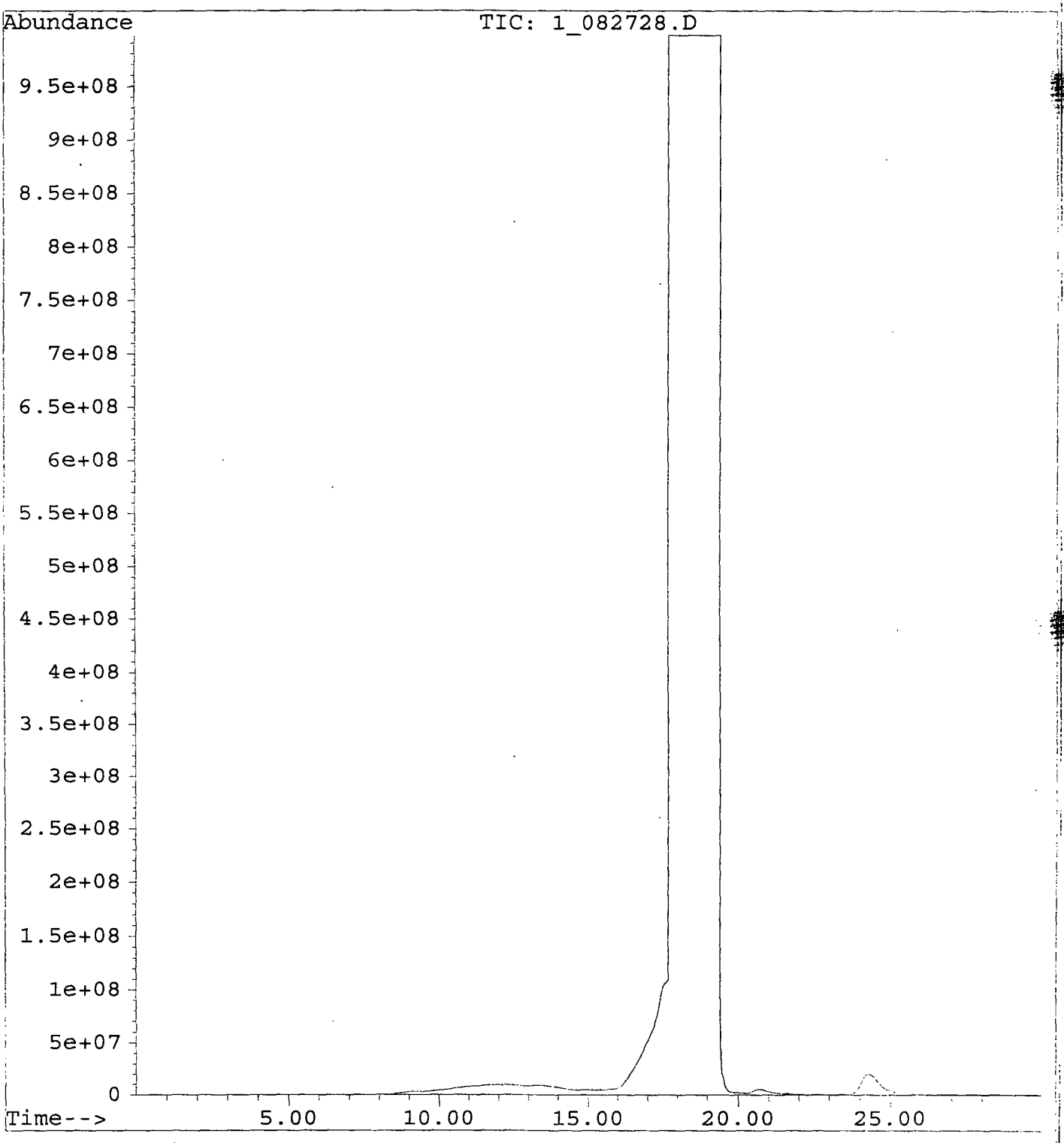
File : C:\HPCHEM\5\DATA\082701\1_082726.D
Operator : CR COL# 418002
Acquired : 28 Aug 01 04:08 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47347.10-E03B6-EPA
Misc Info : COL# 418002
Vial Number: 26



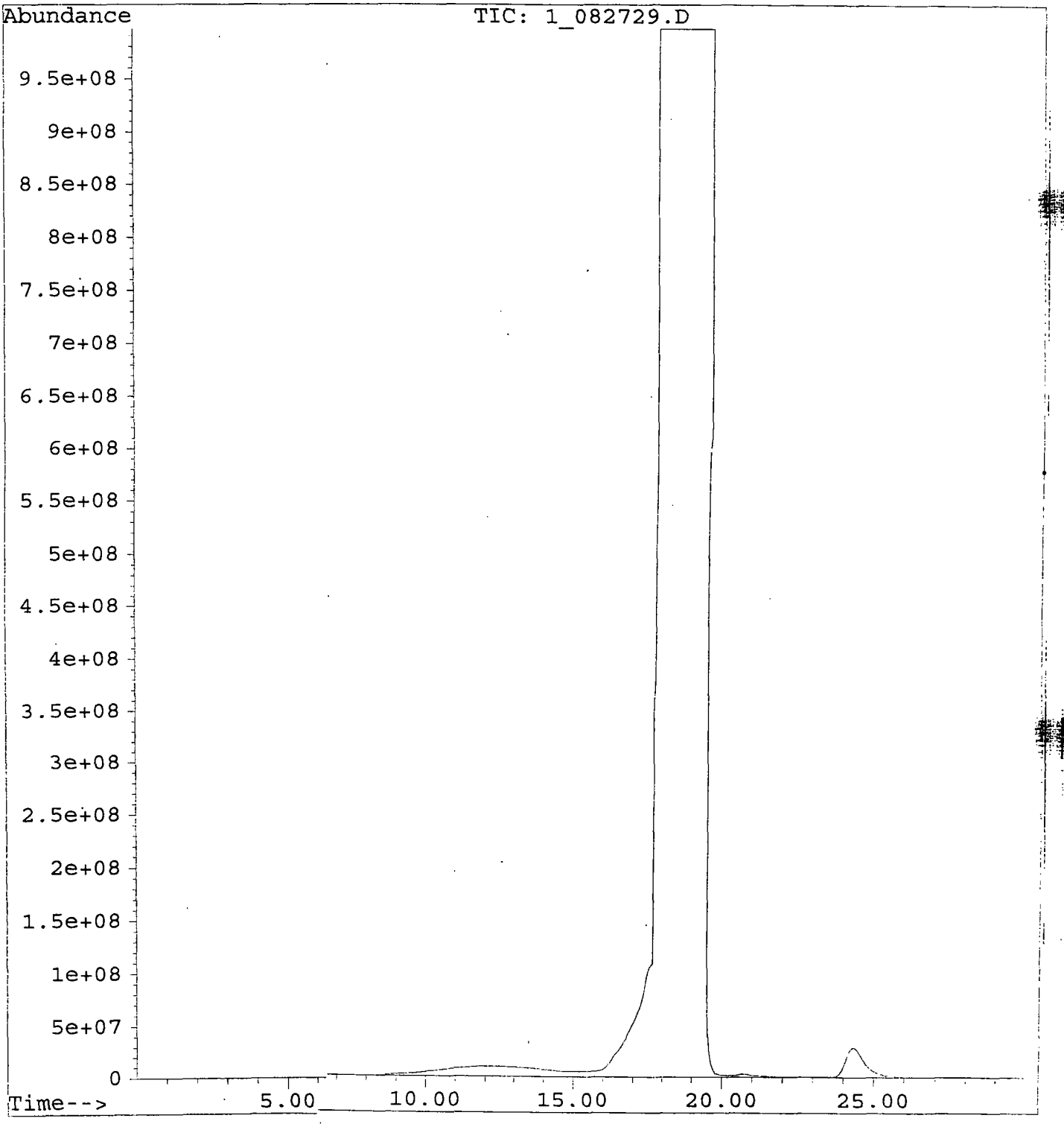
File : C:\HPCHEM\5\DATA\082701\1_082727.D
Operator : CR COL# 418002
Acquired : 28 Aug 01 04:38 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47347.09-E03B5-EPA
Misc Info : COL# 418002
Vial Number: 27



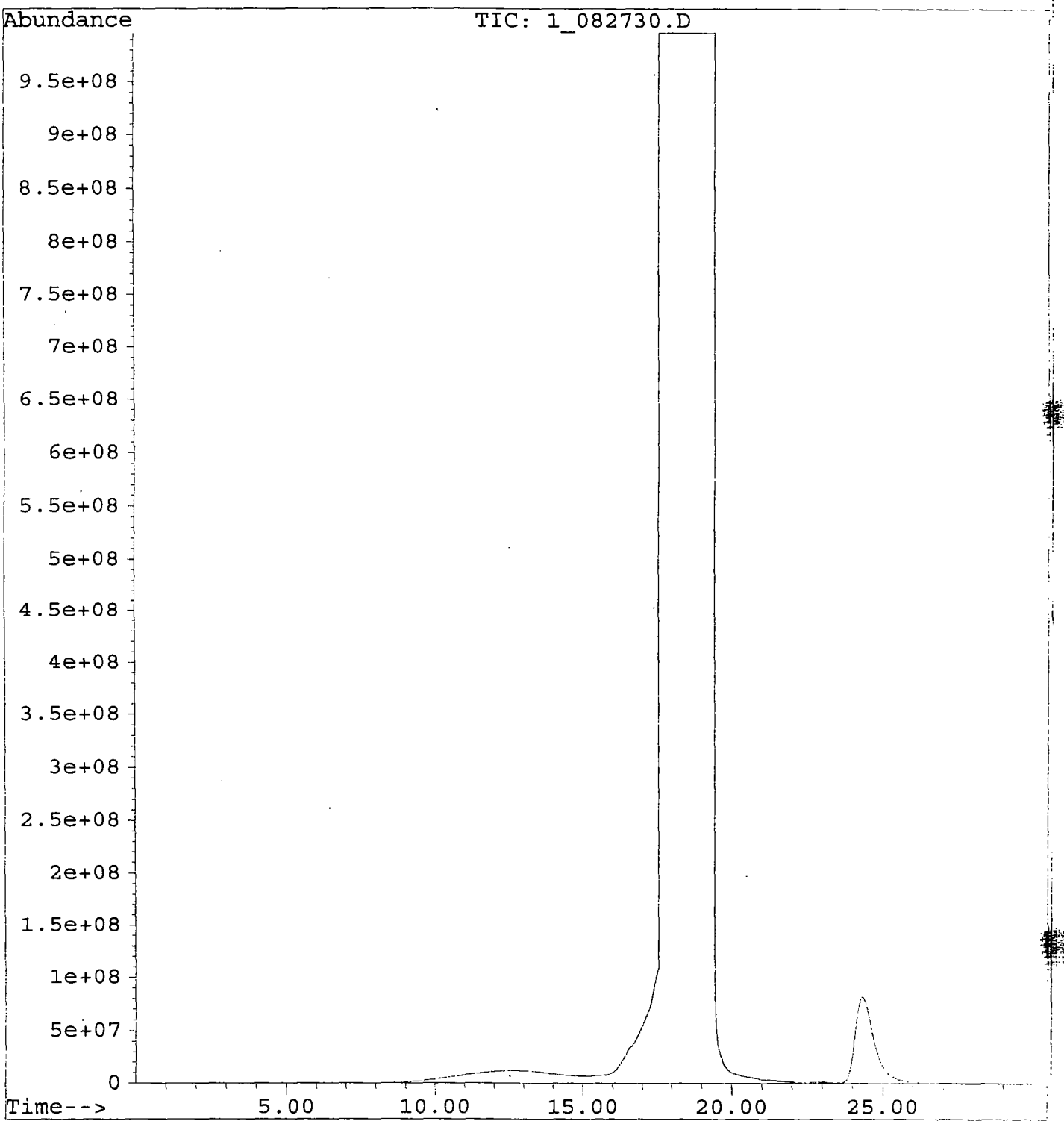
File : C:\HPCHEM\5\DATA\082701\1_082728.D
Operator : CR COL# 418002
Acquired : 28 Aug 01 05:09 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47347.18-E03C4-EPA
Misc Info : COL# 418002
Vial Number: 28



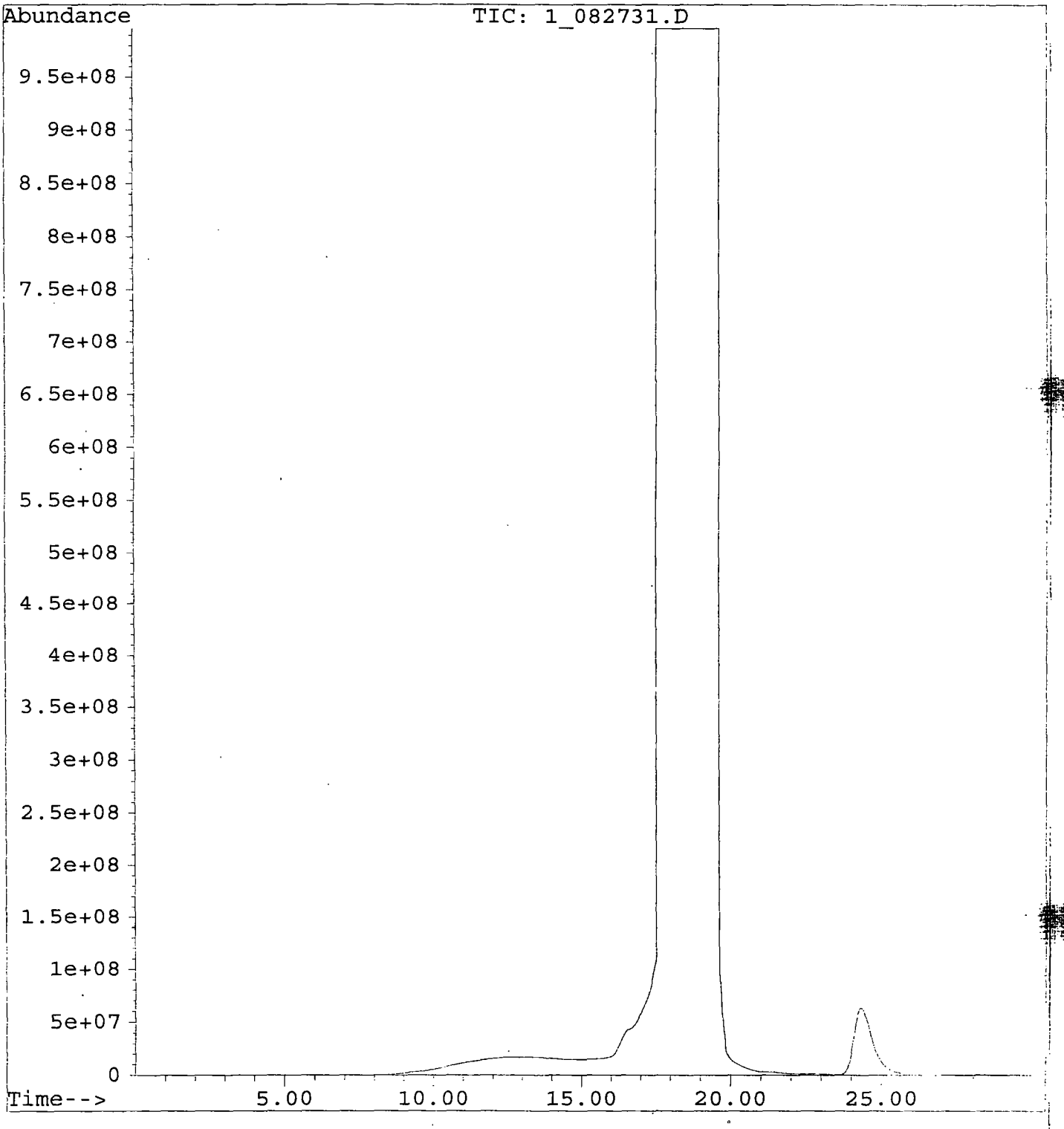
File : C:\HPCHEM\5\DATA\082701\1_082729.D
Operator : CR COL# 418002
Acquired : 28 Aug 01 05:41 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47347.08-E03B4-EPA
Misc Info : COL# 418002
Vial Number: 29



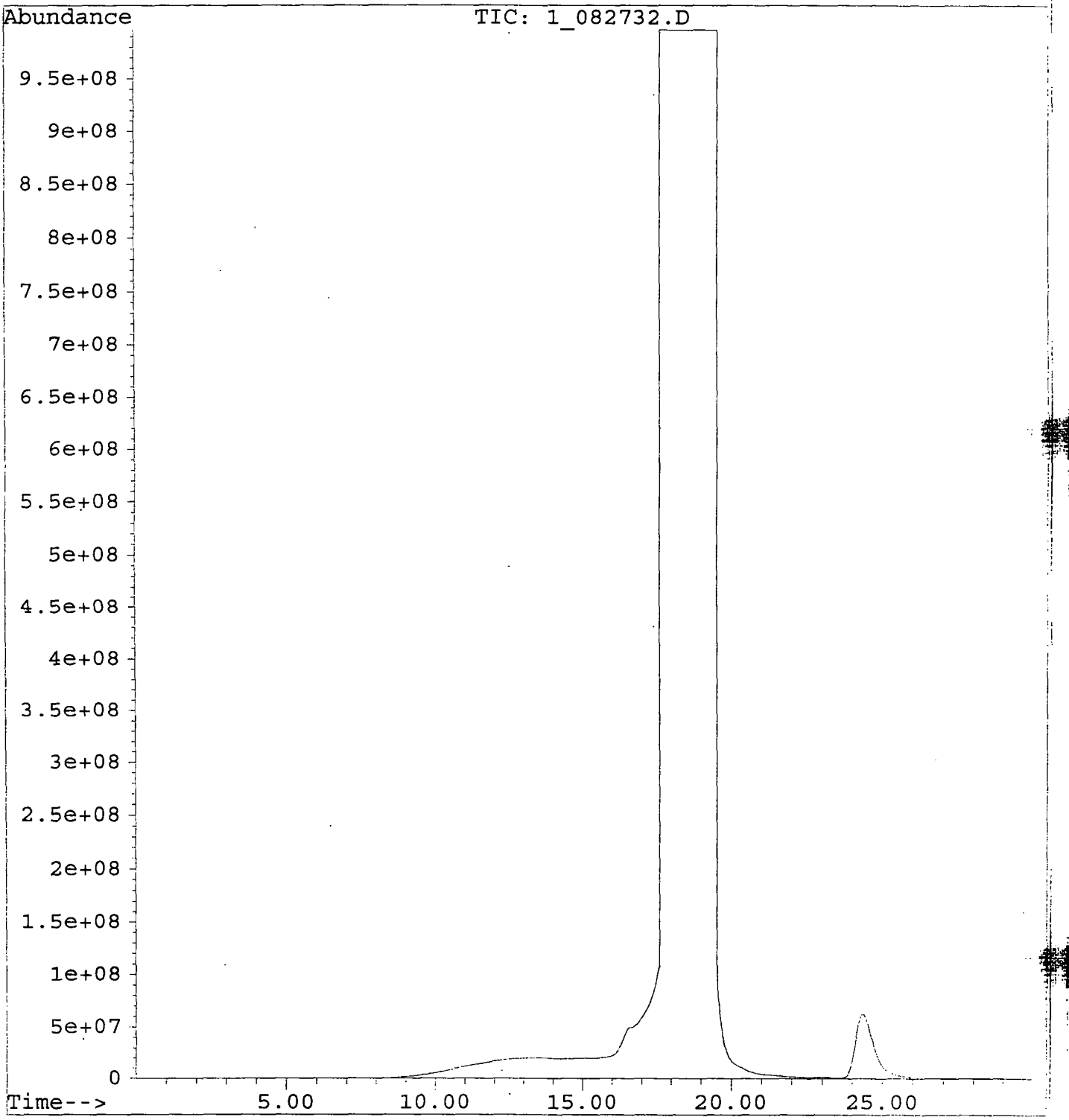
File : C:\HPCHEM\5\DATA\082701\1_082730.D
Operator : CR COL# 418002
Acquired : 28 Aug 01 06:12 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47347.07-E03B3-EPA
Misc Info : COL# 418002
Vial Number: 30



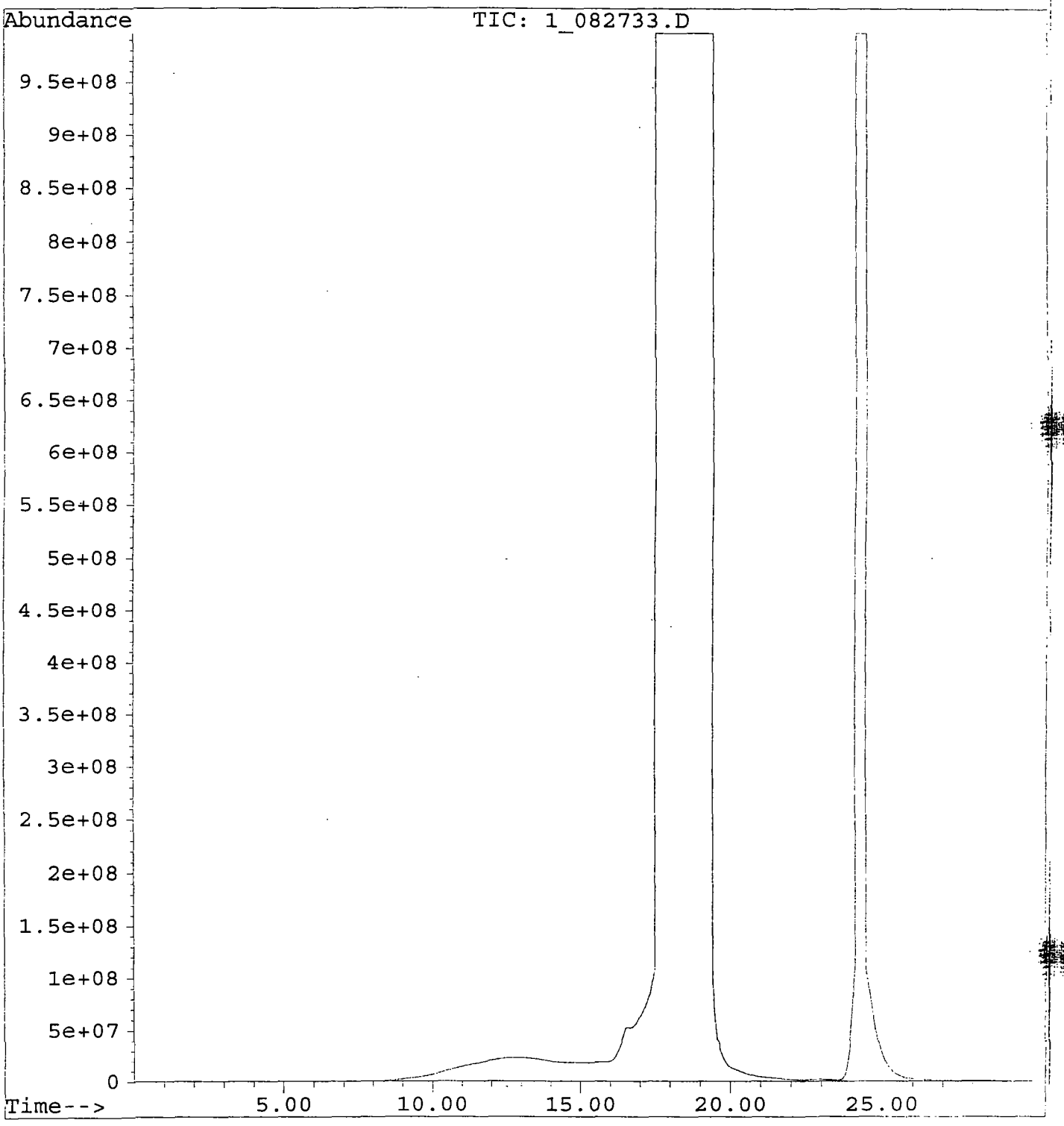
File : C:\HPCHEM\5\DATA\082701\1_082731.D
Operator : CR COL# 418002
Acquired : 28 Aug 01 06:42 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47347.05-E03B1-EPA
Misc Info : COL# 418002
Vial Number: 31



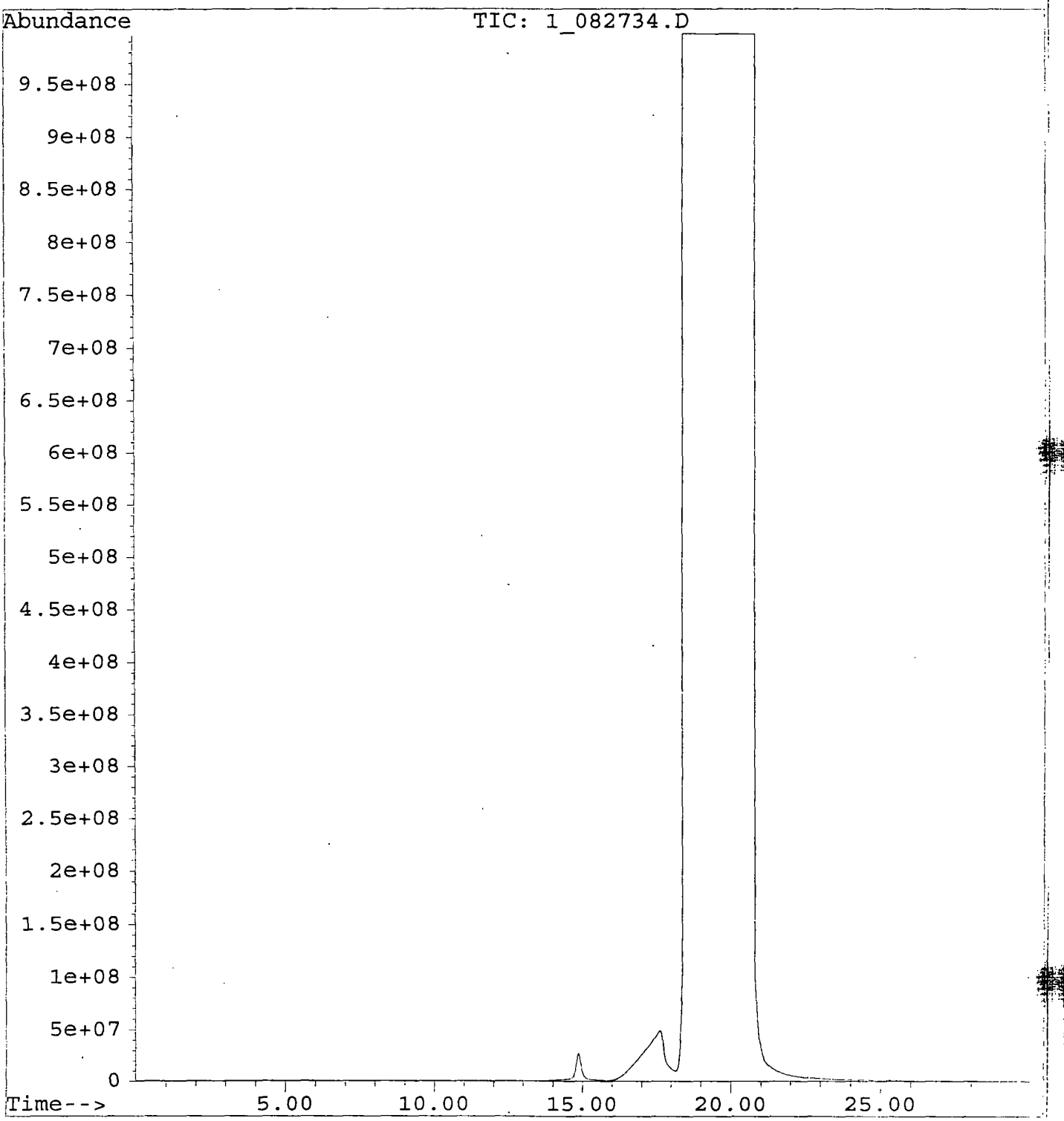
File : C:\HPCHEM\5\DATA\082701\1_082732.D
Operator : CR COL# 418002
Acquired : 28 Aug 01 07:13 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47347.04-E03B0-EPA
Misc Info : COL# 418002
Vial Number: 32



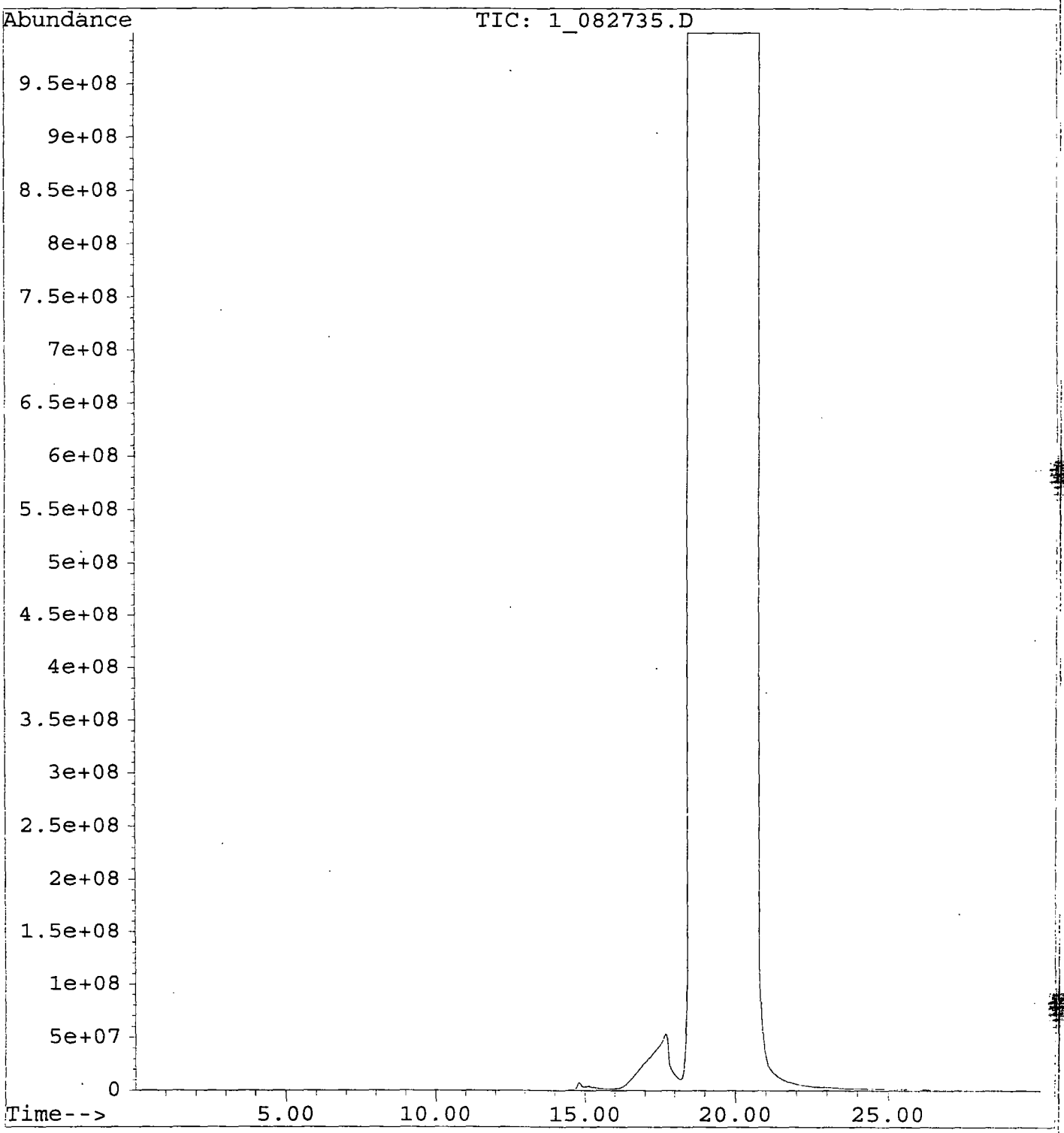
File : C:\HPCHEM\5\DATA\082701\1_082733.D
Operator : CR COL# 418002
Acquired : 28 Aug 01 07:44 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 47347.06-E03B2-EPA
Misc Info : COL# 418002
Vial Number: 33



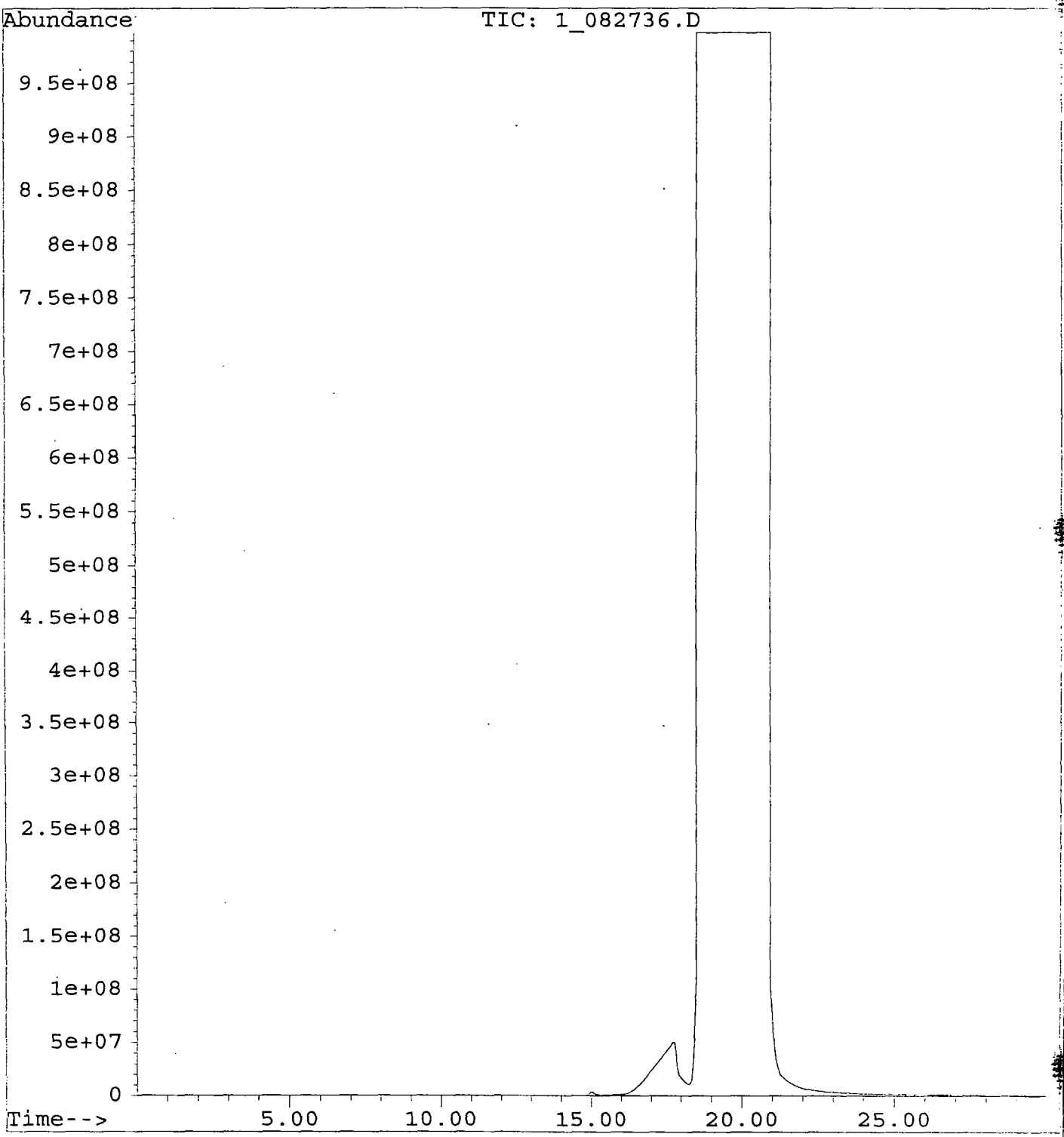
File : C:\HPCHEM\5\DATA\082701\1_082734.D
Operator : CR COL# 418002
Acquired : 28 Aug 01 08:15 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 34



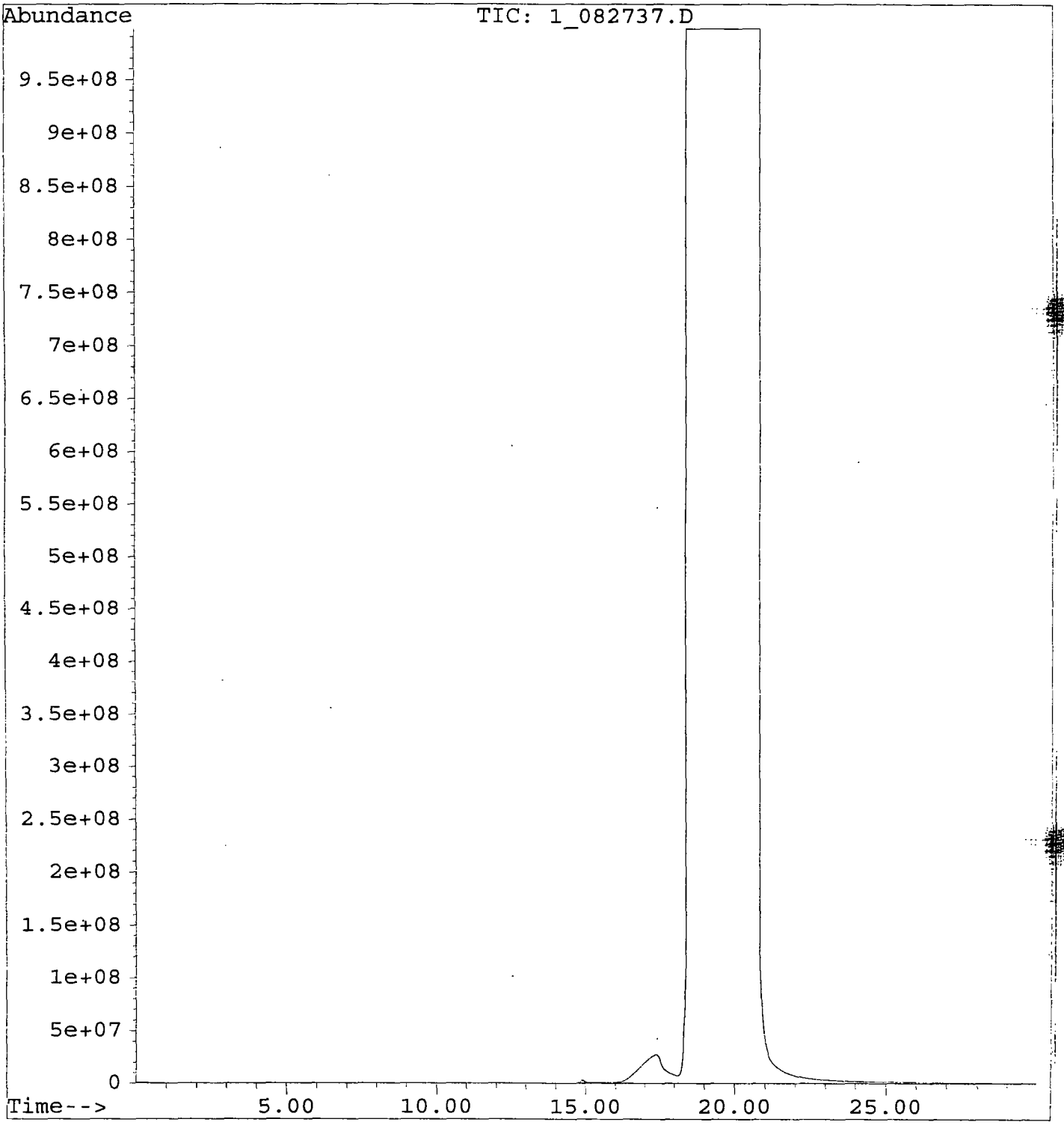
File : C:\HPCHEM\5\DATA\082701\1_082735.D
Operator : CR COL# 418002
Acquired : 28 Aug 01 08:46 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 35



File : C:\HPCHEM\5\DATA\082701\1_082736.D
Operator : CR COL# 418002
Acquired : 28 Aug 01 09:17 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 36

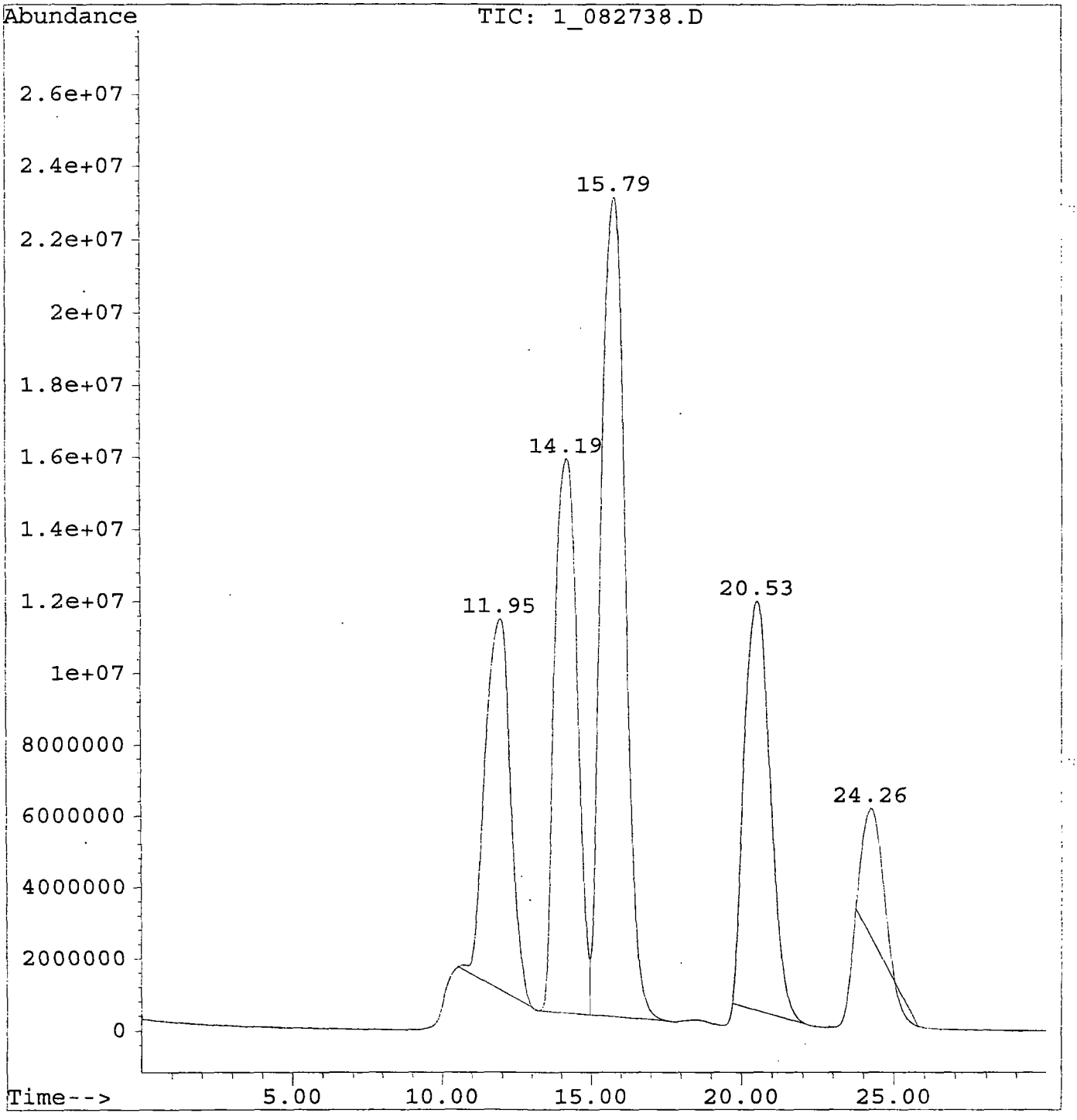


File : C:\HPCHEM\5\DATA\082701\1_082737.D
Operator : CR COL# 418002
Acquired : 28 Aug 01 09:48 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 37



Data File : C:\HPCHEM\5\DATA\082701\1_082738.D
Acq On : 28 Aug 01 10:19 AM
Sample : CAL STD (FINAL)
Misc : COL# 418002

Vial: 38
Operator: CR COL#
Inst : GPC1
Multiplr: 1.00



1) 11.95 = Corn Oil

3) 14.19 = Pthalate
4) 15.79 = Methoxychlor
5) 20.53 = Perylene

Chromatographic Resolution Report

Data File : C:\HPCHEM\5\DATA\082701\1_082738.D
Acq On : 28 Aug 01 10:19
Sample : CAL STD (FINAL)
Misc : COL# 418002

Vial: 38
Operator: CR COL#
Inst : GPC1
Multiplr: 1.00

Method : C:\HPCHEM\5\METHODS\GPC.M
Title :

RT#1	RT#2	Resolution
11.946	14.190	100.00
14.190	15.785	90.26
15.785	20.529	100.00
20.529	24.258	100.00

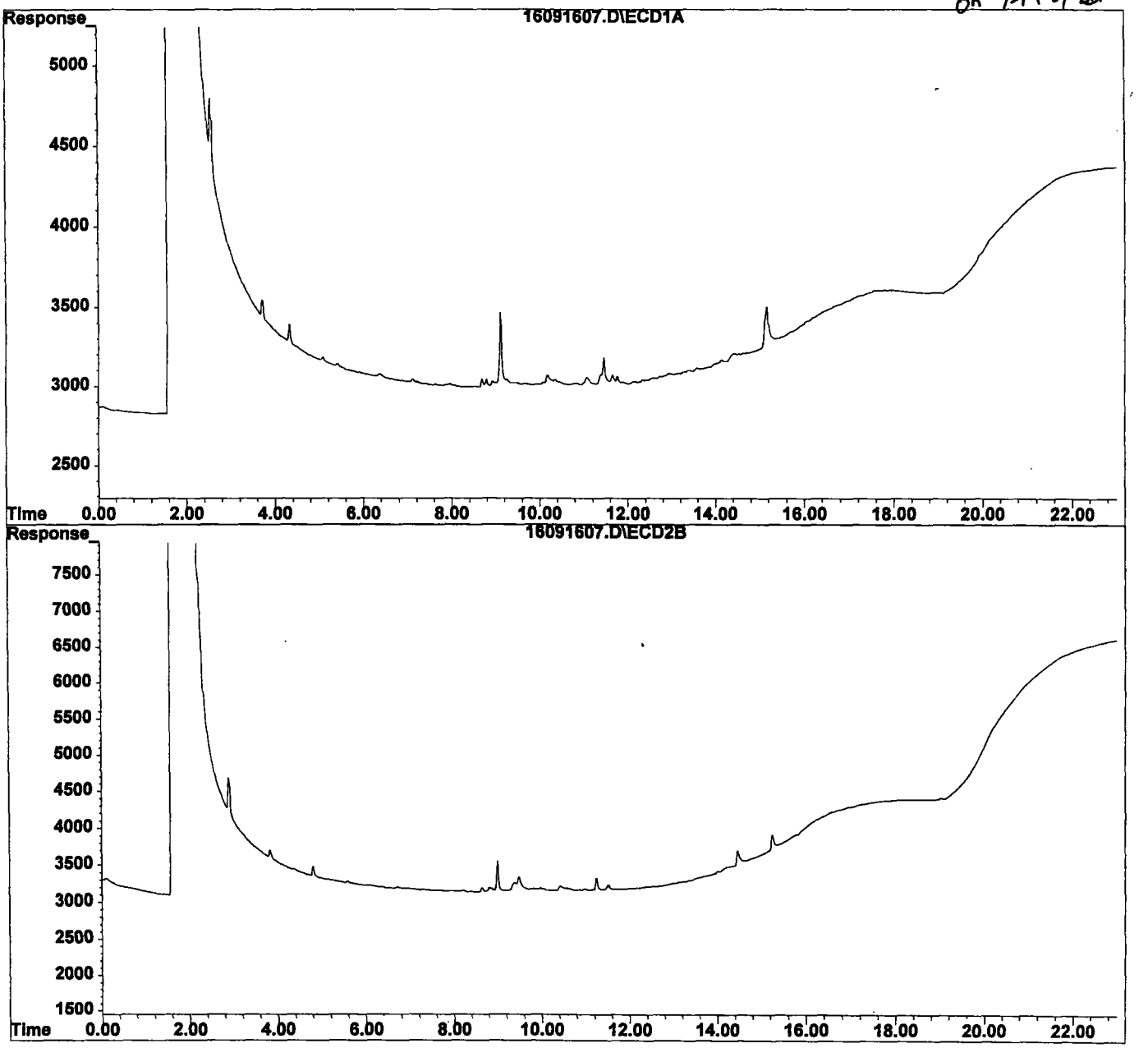
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091607.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091607.D\ECD2B.CH
Acq On : 16 Sep 2001 14:07 Operator: DDC
Sample : SB082701A *SB082701A * Inst : HP_16
Misc : **1000ML/10.0ML* Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:32 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

OK 9-19-01



Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\09_16_01\16091607.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\16\DATA\09_16_01\16091607.D\ECD2B.CH
Acq On : 16 Sep 2001 14:07 Operator: DDC
Sample : SB082701A *SB082701A * Inst : HP_16
Misc : **1000ML/10.0ML* Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 18 9:32 2001 Quant Results File: XPCBI11.RES

Method : F:\HPCHEM\HP\16\DATA\09_16_01\XPCBI11.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\09_11_01\
Last Update : Wed Sep 05 14:36:59 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

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-301 OP-301-RUNLOG-11 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_16
SDG NO. : SWLO METHOD FILE(S): XPCBI11 (OLM4.2)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
09/11/01 8:08	RESCCI	5-171-7	16091006	NU
09/11/01 11:25	HEXANE		16091101	OK
09/11/01 11:51	RESCCI	5-171-7	16091102	OK
09/11/01 12:18	AR1221L3CI	5-420-6	16091103	
09/11/01 13:15	AR1232L3CI	5-422-6	16091104	
09/11/01 13:41	AR1242L1CI	5-11-7	16091105	
09/11/01 14:08	AR1242L2CI	5-10-7	16091106	
09/11/01 14:34	AR1242L3CI	5-9-7	16091107	
09/11/01 15:01	AR1242L4CI	5-8-7	16091108	
09/11/01 15:28	AR1242L5CI	5-7-7	16091109	
09/11/01 15:55	AR1248L3CI	5-424-6	16091110	
09/11/01 16:21	AR1254L1CI	5-6-7	16091111	
09/11/01 16:48	AR1254L2CI	5-5-7	16091112	
09/11/01 17:14	AR1254L3CI	5-4-7	16091113	
09/11/01 17:41	AR1254L4CI	5-3-7	16091114	
09/11/01 18:07	AR1254L5CI	5-2-7	16091115	
09/11/01 18:34	AR1660L1CI	5-212-7	16091116	
09/11/01 19:00	AR1660L2CI	5-211-7	16091117	
09/11/01 19:27	AR1660L3CN	5-210-7	16091118	
09/11/01 19:53	AR1660L4CI	5-209-7	16091119	
09/11/01 20:19	AR1660L5CI	5-208-7	16091120	OK

Unless noted, Client Ids are the same for the quant. & confirmation columns

Blaine Bailey 091301 — 9-13-01
Verification Signature/Date — Analyst Signature/Date

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-301 OP-301-RUNLOG-11 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_16
SDG NO. : SWLO METHOD FILE(S): XPCBI11 (OLM4.2)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
09/11/01 20:46	PIBLKCW	5-131-7	16091121	QC
09/11/01 21:12	SB082001A	SB082001A	16091122	
09/11/01 21:39	SB082001B	SB082001B	16091123	
09/11/01 22:05	PBLKSA	BL0815SA	16091124	
09/11/01 22:32	PBLKSA	BB0815SA	16091125	
09/11/01 22:58	ELCS1	LC0815SA	16091126	
09/11/01 23:25	ELCS2	LD0815SA	16091127	
09/11/01 23:51	E02F5	47268.01	16091128	
09/12/01 00:18	E02F6	47268.02	16091129	OK
09/12/01 00:44	E02F7	47268.03	16091130	DOC 9-13-01 OK
09/12/01 1:11	E02F8	47268.04	16091131	OK
09/12/01 1:37	HEXANE		16091132	SI
09/12/01 2:03	HEXANE		16091133	SI
09/12/01 2:30	HEXANE	HEXANE	16091134	SI
09/12/01 2:56	AR1660L3CO	5-210-7	16091135	
09/12/01 3:23	AR1660L3CP	5-210-7	16091136	
09/12/01 3:49	PIBLKCX	5-131-7	16091137	
09/12/01 4:16	E02F9	47268.05	16091138	OK
09/12/01 4:42	E02G0	47268.06	16091139	
09/12/01 5:08	E02G1	47268.07	16091140	
09/12/01 5:35	E02G2	47268.08	16091141	OK

Unless noted, Client Ids are the same for the quant. & confirmation columns

Verification Signature/Date 09/30/01 Analyst Signature/Date 9-13-01

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-301 OP-301-RUNLOG-12 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_16
SDG NO. : SWLO METHOD FILE(S): XPCBI11 (OLM4.2)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
09/16/01 11:29	HEXANE		16091601	
09/16/01 11:55	HEXANE		16091602	
09/16/01 12:22	HEXANE		16091603	
09/16/01 12:48	PIBLKCJ	5-131-7	16091604	OK
09/16/01 13:14	AR1660L3CN 09/19/01	5-210-7	16091605	OK
09/16/01 13:41	AR1660L3C0	5-210-7	16091606	
09/16/01 14:07	SB082701A	SB082701A	16091607	OK
09/16/01 14:34	SB082701B	SB082701B	16091608	
09/16/01 15:00	PBLKSB	BL0822SB	16091609	
09/16/01 15:26	PBLKSB	BB0822SB	16091610	
09/16/01 15:53	ELCS1	LC0822SB	16091611	
09/16/01 16:19	ELCS2	LD0822SB	16091612	
09/16/01 16:46	E0306DL	47321.20DL	16091613	
09/16/01 17:12	E03A9	47347.01	16091614	
09/16/01 17:38	E03A9MS	47347.02MS	16091615	
09/16/01 18:05	E03A9MSD	47347.03MSD	16091616	
09/16/01 18:31	E03B0	47347.04	16091617	OK
09/16/01 18:58	HEXANE		16091618	
09/16/01 19:24	HEXANE		16091619	
09/16/01 19:51	HEXANE		16091620	
09/16/01 20:17	PIBLKCK	5-131-7	16091621	OK

Unless noted, Client Ids are the same for the quant. & confirmation columns

9-18-01 9-18-01

Verification Signature/Date Analyst Signature/Date

Page No.: 7

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-301 OP-301-RUNLOG-12 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_16
SDG NO. : SWLO METHOD FILE(S): XPCBI11 (OLM4.2)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
09/16/01 20:43	AR1660L3CP	5-210-7	16091622	OK
09/16/01 21:10	AR1660L3CQ	5-210-7	16091623	"
09/16/01 21:36	E03B1	47347.05	16091624	OK
09/16/01 22:03	E03B2	47347.06	16091625	
09/16/01 22:29	E03B3	47347.07	16091626	
09/16/01 22:56	E03B4	47347.08	16091627	
09/16/01 23:22	E03B5	47347.09	16091628	
09/16/01 23:49	E03B6	47347.10	16091629	
09/17/01 00:15	E03B7	47347.11	16091630	
09/17/01 00:41	E03B8	47347.12	16091631	
09/17/01 1:08	E03B9	47347.13	16091632	
09/17/01 1:34	E03C0	47347.14	16091633	ok
09/17/01 2:01	HEXANE		16091634	SJ
09/17/01 2:27	HEXANE		16091635	"
09/17/01 2:53	HEXANE		16091636	SJ
09/17/01 3:20	PIBLKCL	5-131-7	16091637	ok
09/17/01 3:46	AR1660L3CR	5-210-7	16091638	ok
09/17/01 4:13	AR1660L3CS	5-210-7	16091639	"
09/17/01 4:39	E03C1	47347.15	16091640	ok
09/17/01 5:06	E03C2	47347.16	16091641	
09/17/01 5:32	E03C3	47347.17	16091642	ok

Unless noted, Client Ids are the same for the quant. & confirmation columns

Jennifer Zellman 9-18-01 9-18-01

Verification Signature/Date Analyst Signature/Date

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-301 OP-301-RUNLOG-12 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_16
SDG NO. : SWLO METHOD FILE(S): XPCBI11 (OLM4.2)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
09/17/01 5:59	E03C4	47347.18	16091643	OK
09/17/01 6:25	E03C5	47347.19	16091644	
09/17/01 6:51	E03C6	47347.20	16091645	
09/17/01 7:18	E03C7	47347.21	16091646	
09/17/01 7:44	E03C8	47347.22	16091647	OK
09/17/01 8:11	HEXANE		16091648	SJ
09/17/01 8:37	HEXANE		16091649	SJ
09/17/01 9:04	HEXANE		16091650	SJ
09/17/01 9:30	PIBLKCM	5-131-7	16091651	OK
09/17/01 9:56	AR1660L3CT	5-210-7	16091652	OK
09/17/01 10:23	AR1660L3CU	5-210-7	16091653	OK

Unless noted, Client Ids are the same for the quant. & confirmation columns

9-18-01 9/18/01

Verification Signature/Date Analyst Signature/Date

Page No.: 9

	SV	ST • PCB	OTHER
CONT EX. (3520C)			
SEP-F (3510C)			
SHAKER			
SONC. (3550B)		XXXXX	
SOXHLET			

☐ RUSH ☐ REEXTRACT ☐ TCLP ☐ DIOXIN

SAMPLE EXTRACTION L

8/31

BATCH: 010822SB

EXTRACT DATE: 2001-08-22 07:24

003002
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
BL0822SB			S/L				30.00	300	10/5	45	2.0		5.0	5.0	N		1000		
BB0822SB			S/L				30.00	300	10/5	45	2.0		5.0	5.0	N		1000		
LC0822SB			S/L				30.00	300	10/5	45	2.0		5.0	5.0	N	1000	1000		
LD0822SB			S/L				30.00	300	10/5	45	2.0		5.0	5.0	N	1000	1000		
47347.01 GC699	EPA 29602	08/20/2001 08:30 E03A9	S/L	7.11	35.13	19.7	30.43	300	10/5	45	2.0		5.0	5.0	N		1000		
47347.02MS GC699	EPA 29602	08/20/2001 08:30 E03A9MS	S/L	7.11	35.13	19.7	30.40	300	10/5	45	2.0		5.0	5.0	N	1000	1000		
47347.03MSD GC699	EPA 29602	08/20/2001 08:30 E03A9MSD	S/L	7.11	35.13	19.5	30.07	300	10/5	45	2.0		5.0	5.0	N	1000	1000		
47347.04 GC699	EPA 29602	08/20/2001 08:30 E03B0	S/L	7.08	67.65	9.8	30.34	300	10/5	45	2.0		5.0	5.0	N		1000		
47347.05 GC699	EPA 29602	08/20/2001 08:30 E03B1	S/L	6.94	70.12	9.1	30.59	300	10/5	45	2.0		5.0	5.0	N		1000		
47347.06 GC699	EPA 29602	08/20/2001 08:30 E03B2	S/L	7.01	67.29	9.8	30.02	300	10/5	45	2.0		5.0	5.0	N		1000		
47347.07 GC699	EPA 29602	08/20/2001 08:30 E03B3	S/L	7.20	65.69	10.5	30.73	300	10/5	45	2.0		5.0	5.0	N		1000		
47347.08 GC699	EPA 29602	08/20/2001 08:30 E03B4	S/L	7.16	85.29	4.4	30.18	300	10/5	45	2.0		5.0	5.0	N		1000		
47347.09 GC699	EPA 29602	08/20/2001 08:30 E03B5	S/L	7.03	62.74	11.2	30.15	300	10/5	45	2.0		5.0	5.0	N		1000		
47347.10 GC699	EPA 29602	08/20/2001 08:30 E03B6	S/L	7.17	60.35	12.2	30.69	300	10/5	45	2.0		5.0	5.0	N		1000		
47347.11 GC699	EPA 29602	08/20/2001 08:30 E03B7	S/L	7.19	39.69	18.3	30.42	300	10/5	45	2.0		5.0	5.0	N		1000		

INITIALS

WEIGHING:	MC	EXTRACTION:	MC	FLORISIL:	
CLEANUP:	CD	KD:	GS		CH2Cl2
BLOWDOWN:	SA	TV:	GS		acetone
SURROG. SPIKER:	MC	VERIFIER:	BTB		Hexane
MATRIX SPIKER:	MC	VERIFIER:	BTB		
SUBMITTED BY:	SA	REVIEWED BY:			09/07

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ID NUMBERS

FLORISIL CARTRIDGE #:

GPC COLUMN #: 418002 (08-27-01) #3640

SURROGATES ID CONC #: 5-157-7

MATRIX SPIKE SOLID/CONC #(s): 5-146-7

SOP - METHOD # : SWL-OP- 415 Rev. 1-0

COMMENTS

SB#082701A
SB#082701B
Extracts went through Sfel facu
Clean-up.

DB 28 P 2K 1.0

	SV	OD ST • PCB	OTHER
CONT EX. (3520C)			
SEP-F (3510C)			
SHAKER			
SONC. (3550B)		XXXXX	
SOXHLET			

☐ RUSH ☐ REEXTRACT ☐ TCLP ☐ DXIN

SAMPLE EXTRACTION L

BATCH: 010822SB

EXTRACT DATE: 2001-08-22 07:24

003002
Page: 2 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
47347.12 GC699	EPA 29602	08/20/2001 08:30 E03B8	S/L	7.01	35.50	20.0	30.98	300	10/5	45	2.0		5.0	5.0	N		1000		
47347.13 GC699	EPA 29602	08/20/2001 08:30 E03B9	S/L	6.76	24.22	23.0	30.32	300	10/5	45	2.0		5.0	5.0	N		1000		
47347.14 GC699	EPA 29602	08/20/2001 08:30 E03C0	S/L	7.18	60.28	12.2	30.74	300	10/5	45	2.0		5.0	5.0	N		1000		
47347.15 GC699	EPA 29602	08/20/2001 08:30 E03C1	S/L	7.29	66.05	10.5	30.86	300	10/5	45	2.0		5.0	5.0	N		1000		
47347.16 GC699	EPA 29602	08/20/2001 08:30 E03C2	S/L	6.76	26.03	22.4	30.28	300	10/5	45	2.0		5.0	5.0	N		1000		
47347.17 GC699	EPA 29602	08/20/2001 08:30 E03C3	S/L	6.64	31.44	20.7	30.17	300	10/5	45	2.0		5.0	5.0	N		1000		
47347.18 GC699	EPA 29602	08/20/2001 08:30 E03C4	S/L	7.16	74.36	7.7	30.21	300	10/5	45	2.0		5.0	5.0	N		1000		
47347.19 GC699	EPA 29602	08/20/2001 08:30 E03C5	S/L	7.13	54.11	14.1	30.83	300	10/5	45	2.0		5.0	5.0	N		1000		
47347.20 GC699	EPA 29602	08/20/2001 08:30 E03C6	S/L	6.97	32.62	20.6	30.54	300	10/5	45	2.0		5.0	5.0	N		1000		
47347.21 GC699	EPA 29602	08/20/2001 08:30 E03C7	S/L	6.91	30.87	20.8	30.12	300	10/5	45	2.0		5.0	5.0	N		1000		
47347.22 GC699	EPA 29602	08/20/2001 08:30 E03C8	S/L	6.89	20.56	24.3	30.62	300	10/5	45	2.0		5.0	5.0	N		1000		

INITIALS

WEIGHING:	SA	EXTRACTION:	MC	FLORISIL:	
CLEANUP:	CD	KD:	GS		CH2Cl2
BLOWDOWN:	SA	TV:	GS		Acetone
SURROG. SPIKER:	MC	VERIFIER:	BTB		Hexane
MATRIX SPIKER:	MC	VERIFIER:	BTB		
SUBMITTED BY:	SA	REVIEWED BY:			09/07

ID NUMBERS

FLORISIL CARTRIDGE #:

GPC COLUMN #: 418002 (08-27-01) #3640A

SURROGATES ID CONC #: 5-157-7

MATRIX SPIKE SOLID/CONC #(s): 5-146-7

SOP - METHOD # : SWL-OP- 415 Rev. 1-0

COMMENTS

SB # 082701A
SB # 082701B
Extracts went through Stael & Acid Clean-up.

R9 38 Book 10 p.

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.
09/04	9:30p	47183.07,16,17	EPA	SA	Y	GC699	X
09/04	9:30	47184.01, 12	EPA	SA	Y	GC699	X
09/04	9:30	47185.09	EPA	SA	Y	GC699	X
09/04	9:30	47345.01-22 MS,MSD	EPA	SA	N	GC699	22
09/04	9:30	47346.01-22 MS,MSD	EPA	SA	N	GC699	22
09.05	9.01	47458.04,07-10, 12.13.15,	KMFP_SPR	GS	N	GC405	10
↓	↓	17.;21; 47477.01,03-06,08-1	KMFR_SPR	↓	↓	↓	9
09/05	8:00p	47404.09-11,13-14 MS,MSD	TETPITT	SA	N	GC420	13
09/05	8:00p	47405.05-06	TETPITT	SA	N	GC420	6
09/05	8:00p	47431.01-06,08,08MS,08MSD	MONIG-US	SA	N	GC420	7
09.06	10:05	47433.03;04	TETPITT	MC	N	GC899	2
		47434.01-13	"	MC	N	GC899	9
		47435.01-05MS,06MSD	"	MC	N	GC899	6
		47433.03;04		MC	N	GC699	2
		47434.01-13		MC	N	GC699	9
9.06	10:05	47435.01-05MS;06MSD		MC	N	GC699	6
9.06	11:30	47500.01	Hisek	[illegible]	N	GC610	1
09/06	7:55	CH_2Cl_2 test	SWLO	SA	N	GC800	X
09/06	7:55	N_2SO_4 check lot 103	SWLO	SA	N	GC800	X
09/06	9:25	47433.03-05	TETPITT	SA	N	GC420	3
09/06	9:25	47435.01-06,08,09 MS,MSD	TETPITT	SA	N	GC420	8
9/7	11:30	47498.01 ,MS-MSD	TOLTEST	GS	N	GC200	1
09/07	9:15p	47185.15	EPA	SA	Y	GC699	X
09/07	9:15	47199.03	EPA	SA	Y	GC699	X
09/07	9:15	47347.01-22 MS,MSD	EPA	SA	N	GC699	22
09/07	9:15	47348.01-22 MS,MSD	EPA	SA	N	GC699	22

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Southwest Laboratory of Oklahoma
1700 W. Albany Suite C
Broken Arrow, OK 74012-1421

INTERNAL CHAIN OF CUSTODY

Date	8/20/01
Episode	**47347**
Client	**EPA**
Project	OLM04.2
Received	08/20/01

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	18	19	20	21			
		22							08-22/6:30	MC	08-22/9:35
IN660	A	1	2	3	4	5	6	7			
		8	9	10	11	12	13	14			
		15	16	17	18	19	20	21			
		22							08/21 8:00	MZL	08/21 12:01