W.O. # 12634.001.001.0067

U.S. EPA Region V START
Allied Paper
DATA VALIDATION

US EPA RECORDS CENTER REGION 5
560015

SDG # E00A9
Case # 29294

PCBs in soil by SW-846 Method 8082.

1.

Samples	Station Location	Matrix	Date Collected	Date Extracted	Date Analyzed
E00A9	AP-SL040-01	Soil	5/25/01	5/27/01	6/05/01
E00B0	AP-SL040-02	Soil	5/25/01	5/27/01	6/05/01
E00B1	AP-SL040-03	Soil	5/25/01	5/27/01	6/05/01
E00B2	AP-SL040-03DP	Soil	5/25/01	5/27/01	6/05/01
E00B3	AP-SL040-04	Soil	5/25/01	5/27/01	6/05/01
E00B5	AP-SL043-01	Soil	5/25/01	5/27/01	6/05/01
E00B6	AP-SL043-02	Soil	5/25/01	5/27/01	6/05/01
E00B7	AP-SL043-03	Soil	5/25/01	5/27/01	6/05/01
E00B8	AP-SL043-04	Soil	5/25/01	5/27/01	6/05/01

2. Holding Times

All samples were analyzed within the required holding time. Samples E00A4, E00A5, E00A6, E00A7 and E00A8 were listed on the chain of custody record, but PCB data for these samples were not included in the data package.

3. Method Blank

No method blank was associated with the investigative samples was presented in the data package. Four extraction and cleanup blanks were associated with these samples. All extraction and cleanup blanks were free of contamination.

4. Surrogates

The surrogate recoveries were acceptable for all samples.

5. Matrix Spike/Matrix Spike Duplicates

The matrix spike/matrix spike duplicate audit was performed on sample E00B6. The matrix spike/matrix spike duplicate recoveries and RPD values were within quality control limits.

6. Laboratory Control Sample

All laboratory control sample results were acceptable.

7. Initial Calibration Verification

The arochlor initial calibration associated with these samples was performed on 5/30/01. All % RSD values for all compounds were acceptable.

8. Continuing Calibration Verification

The continuing calibration verification results were acceptable.

67-4A - APAKF

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

DATE: June 8, 2001

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

RECEIVED JUN 11 2001

Attn: Tonya Balla

SITE NAME: ALLIED PAPER

CASE NO.	LAB	NO # OF SAMPLES	SDG	MATRIX
29294	SOUTHWEST	9	E00A9	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

JUN 07 2001

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME SOUTHWEST LABORATORY OF OKLAHOMA
CITY/STATE BROKEN ARROW, OKLAHOMA
CASE NO. 29294 SDG NO. E00A9 SDG NOS. TO FOLLOW
SAS NO.
CONTRACT NO. 68 W 99 079
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)			EM	
2. SDG Case Narrative	1	2		
3. SDG Cover Sheet/Traffic Report	3	5		
4. Volatiles Data				
a. QC Summary				
System Monitoring Compound Summary (Form II	NA	NA		
Matrix Spike/Matrix Spike Duplicate Summary (Form III VOA)				
Method Blank Summary (Form IV VOA)				
GC/MS Instrument Performance Check (Form V VOA)				
Internal Standard Area and RT Summary (Form VIII VOA)				
b. Sample Data				
TCL Results - (Form I VOA-1, VOA-2)				
Tentatively Identified Compounds (Form I VOA-				
Reconstructed total ion chromatograms (RIC) for each sample				
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds identified				
Quantitation reports				
Mass Spectra of all reported TICs with three best library matches				
c. Standards Data (All Instruments)				
Initial Calibration Data (Form VI VOA-1, VOA-2)				
RICs and Quan Reports for all Standards				
Continuing Calibration Data (Form VII VOA-1, VOA-2)				
RICs and Quantitation Reports for all Standards				
d. Raw QC Data				
BFB				
Blank Data				
Martix Spike/Matrix Spike Duplicate Data				

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

CASE NO. 29394 SDG NO. EL00A9 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	EM	
MS/MSD Summary (Form III SV)				
Method Blank Summary (Form IV SV)				
GC/MS Instrument Performance Check (Form V SV)				
Internal Standard Area and RT Summary (Form VIII SV)				
b. Sample Data				
TCL Results - (Form I SV-1, SV-2)				
Tentatively Identified Compounds (Form I SV-				
Reconstructed total ion chromatograms (RIC) for each sample				
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds				
Quantitation reports				
Mass Spectra of TICs with three best library matches				
GPC chromatograms (if GPC is required)				
c. Standards Data (All Instruments)				
Initial Calibration Data (Form VI SV-1, SV-2)				
RICs and Quan Reports for all Standards				
Continuing Calibration Data (Form VII SV-1, SV-				
RICs and Quantitation Reports for all Standards				
d. Raw QC Data				
DFTPP				
Blank Data				
Matrix Spike/Matrix Spike Duplicate Data				
e. Raw GPC Data				
6. **Pesticides Data**				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II	6	6		
MS/MSD Duplicate Summary (Form III PEST)	7	8		
Method Blank Summary (Form IV PEST)	9	9		

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

CASE NO. 29294 SDG NO. E0149 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
6. **Pesticides Data** (Cont.)				
b. Sample Data	10	37		
TCL Results - Organic Analysis Data Sheet (Form I PEST)			EM	
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	38	124		
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	125	140		
Matrix Spke/Matrix Spike Duplicate Data	141	153		

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

CASE NO. 29294 SDG NO. EMX49 SDG NOS. TO FOLLOW _____
SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
6. **Pesticides Data** (Cont.)				
e. Raw GPC Data	154	200	EM	
f. Raw Florisil Data	NA	NA		
7. **Miscellaneous Data**				
Original preparation and analysis forms or of preparation and analysis logbook pages	201	206		
Internal sample and sample extract transfer chain-of-custody records	207	210		
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)	211	211		
Chain-of-Custody Records	212	213		
Sample Tags	214	222		
Sample Log-in Sheet (Lab & DC1)	223	226		
Miscellaneous Shipping/Receiving Records (describe or list)				
Request for Modified Analysis &	227	231		
Analytical Request Forms	NA	NA		
9. **Internal Lab Sample Transfer Records and Tracking Sheets** (describe or list)				
10. **Other Records** (describe or list)				
Telephone Communication Log				

11. **Comments:**

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

CASE NO. 29294 SDG NO. EDOA9 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

Completed by: (CLP Lab)	Tonia Holt (Signature)	Tonia Holt/Data Clerk (Printed Name/Title)	4/6/01 (Date)
Verified by: (CLP Lab)	Emma Morton (Signature)	Emma Morton/Clerk (Printed Name/Title)	4/6/01 (Date)
Audited by: (EPA)	(Signature)	(Printed Name/Title)	(Date)

JUN 07 2001

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

SDG NARRATIVE

June 6, 2001

CONTRACT: 68W99079

CASE NO: 29294

SDG NO: E00A9

SAMPLES: E00A9, E00B0, E00B1, E00B2, E00B3, E00B5, E00B6, E00B6MS, E00B6MSD, E00B7 and E300B8.

FRACTION: Pesticide/PCB

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

Columns: The soil samples were analyzed on J&W (agilent technologies) dual analytical columns, DB17MS, length 30m, id 0.32 mm, film thickness 0.25 um) and DBXLB, length 30m, id 0.32 mm, film thickness 0.25 um) These columns were specifically designed for pesticide/PCB separation as required by the EPA's SOW. All applicable manufacturer's instructions were followed for the analysis of pesticides/PCBs. Manufacturer provided information on the performance characteristics of the columns are kept on site. HYDROGEN was used as the carrier gas.

The sample cooler arrived at 5.7 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.

Surrogates: All surrogates within QC limits .

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

Retention Times: All retention times were within QC limits.

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

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

Initial Calibrations: Initial calibrations were analyzed for Arochlor 1016, 1242, 1254 and 1260 and all percent RSDs were within QC limits.

Calibration Verifications: Calibration verifications were analyzed for Arochlors 1016 and 1260. All percent differences were within QC limits with the following exceptions: Arochlor 1016 &1260 analyzed on 6/04/01 at 2138 hrs on column DB-XLB had 1 out of the 5 peaks with %Ds at 18.0% and 15.5%, respectively, with an average of all peaks at less than 15% D. Arochlor 1016 &1260 analyzed on 6/05/01 at 0607 hrs on column DB-XLB had 1 out of the 5 peaks with %Ds at 16.3% and 15.9%, respectively, with an average of all peaks at less than 15% D. Arochlor 1260 analyzed on 6/05/01 at 1307 hrs on column DB-17MS had one peak with a high %D at 24.8% with the average at less than 15%. Arochlor 1260 analyzed on 6/05/01 at 1745 hrs on column DB-17MShad one peak with a high %D at 23.3% with the average at less than 15%.

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

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 designee, as verified by the following signature.

Harry M. Borg

Harry M. Borg
Organic Program Manager

June 6, 2001

Contract Laboratory Program

Sample Delivery Group (SDG) Cover Sheet

SDG Number E00A9

ST 5/30/01

Laboratory Name Southwest Laboratory of Ok. Laboratory Code SWOK

Contract No. 68W99079 Case No. ~~OLM04.2~~ 29294

Analyses Price 910.40 SDG Turnaround 7

EPA Sample Numbers in SDG (Listed in Numerical Order)

1) E00A9	7) E00B6	13)	19)
2) E00B0	8) E00B7	14)	20)
3) E00B1	9) E00B8	15)	21)
4) E00B2	10)	16)	22)
5) E00B3	11)	17)	23)
6) E00B5	12)	18)	24)

ST 5/30/01

ST 5/30/01

ST 5/30/01

E00A9	E00B8
First Sample in SDG	Last Sample in SDG
05/26/2001	05/26/2001
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 Hang M Bay Date 5-30-01

JUN 08 2001

Regional Transmittal Form

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE:

SUBJECT: Review of Data
Received for Review on 6-7-01

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

TO: Data User: Weston

We have reviewed the data for the following case:

SITE NAME: ALLIED PAPER (MI)

CASE NUMBER: 29294 SDG NUMBER: E00A9

Number and Type of Samples: 9 (SOIL)

Sample Numbers: E00A9, E00B0-3, E00B5-8

Laboratory: SOUTHWEST Hrs for Review:

Following are our findings:

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

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

Case No:	29294
DAS No:	2001ZG07
SDG No:	E00A9

L

Date Shipped:	5/25/2001
Carrier Name:	FedEx
Airbill:	821876982148
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 Tonya Ballu	5/25/01 1515		5-26-01 8:00
2			
3			
4			

Sampler Signature:

For Lab Use Only

Lab Contract No:	68W29079
Unit Price:	910.40
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 E00A9
E00A4	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119178 (Ice Only) (1)	AP-SL050-02	S:	5/25/2001	10:15		
E00A5	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119179 (Ice Only) (1)	AP-SL050-03	S:	5/25/2001	10:15		
E00A6	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119181 (Ice Only) (1)	AP-SL039-01	S:	5/25/2001	11:30		
E00A7	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119182 (Ice Only) (1)	AP-SL039-02	S:	5/25/2001	11:30		
E00A8	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119184 (Ice Only) (1)	AP-SL039-03	S:	5/25/2001	11:30		
E00A9	Soil/Sediment/ JOE RUIZ	L/G	PCBs (7)	5-119185 (Ice Only) (1)	AP-SL040-01	S:	5/25/2001	11:00		
E00B0	Soil/Sediment/ JOE RUIZ	L/G	PCBs (7)	5-119187 (Ice Only) (1)	AP-SL040-02	S:	5/25/2001	11:00		
E00B1	Soil/Sediment/ JOE RUIZ	L/G	PCBs (7)	5-119189 (Ice Only) (1)	AP-SL040-03	S:	5/25/2001	11:00		
E00B2	Soil/Sediment/ JOE RUIZ	L/G	PCBs (7)	5-119191 (Ice Only) (1)	AP-SL040-03DP	S:	5/25/2001	11:00		
E00B3	Soil/Sediment/ JOE RUIZ	L/G	PCBs (7)	5-119192 (Ice Only) (1)	AP-SL040-04	S:	5/25/2001	11:00		

COPY

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E8074
Signature S. Jackson
Date 5/30/01

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC: E0094, E00B6	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 5.7°C T.B.	Chain of Custody Seal Number: 80903, 80904
Analysis Key: PCBs = PCBs	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact?__ Shipment Iced?__

R Number: 5-154097651-052501-0002

LABORATORY COPY

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

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

Case No:	29294
DAS No:	2001ZG07
SDG No:	E00A9

L

Date Shipped:	5/25/2001
Carrier Name:	FedEx
Airbill:	821876982148
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 Tonya Ballu	5/25/01 1545	[signature]	5-26-01 9:00
2			
3			
4			

Sampler Signature:

For Lab Use Only

Lab Contract No:	1086W99079
Unit Price:	910.40
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 E00A9
E00B5	Soil/Sediment/ JOE RUIZ	L/G	PCBs (7)	5-119196 (Ice Only) (1)	AP-SL043-01	S: 5/25/2001 10:15		
E00B6	Soil/Sediment/ JOE RUIZ	L/G	PCBs (7)	5-119197 (Ice Only) (1)	AP-SL043-02	S: 5/25/2001 10:15		
E00B7	Soil/Sediment/ JOE RUIZ	L/G	PCBs (7)	5-119198 (Ice Only) (1)	AP-SL043-03	S: 5/25/2001 10:15		
* E00B8	Soil/Sediment/ JOE RUIZ	L/G	PCBs (7)	5-119200 (Ice Only) (1)	AP-SL043-04	S: 5/25/2001 10:15		

*SDG Final Sample

Shipment for Case Complete?N CJ	Sample(s) to be used for laboratory QC: E0094	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 5.7° T.B.	Chain of Custody Seal Number: 80902, 80904
Analysis Key: PCBs = PCBs	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact?___ Shipment Iced?___

R Number: 5-154097651-052501-0002

LABORATORY COPY

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

2F
SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

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

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	TOT OUT
01	PBLKSB	66	50	66	53	0
02	LC0527SB	88	68	87	71	0
03	LD0527SB	72	55	68	56	0
04	E00A9	105	86	116	97	0
05	E00B0	80	64	87	73	0
06	E00B1	80	63	89	74	0
07	E00B2	40	30	43	35	0
08	E00B3	98	81	108	95	0
09	E00B5	98	87	108	101	0
10	E00B6	65	57	72	66	0
11	E00B6MS	97	87	106	100	0
12	E00B6MSD	81	72	94	85	0
13	E00B7	98	88	107	94	0
14	E00B8	79	70	92	82	0
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

QC LIMITS

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

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

3H

SOIL AROCLOR LABORATORY CONTROL SPIKE/ DUPLICATE RECOVERY

Lab Name: SWL-TULSA Case No.: 29294 SDG No.: E00A9

LCS Sample NO.: LC0527SB

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Aroclor-1254	133	78.5	59	29-135

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1254	133	66.3	50	17	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

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Matrix Spike - Client Sample NO.: E00B6

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Aroclor-1254	1290	0	856	66	29-135

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1254	1020	632	62	30	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

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Lab Sample ID: BL0527SB Lab File ID: 15060445

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

Sulfur Cleanup: (Y/N) N Date Extracted: 05/27/01

Date Analyzed (1): 06/05/01 Date Analyzed (2): 06/05/01

Time Analyzed (1): 0349 Time Analyzed (2): 0349

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

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	LC0527SB	LC0527SB	06/05/01	06/05/01
02	LD0527SB	LD0527SB	06/05/01	06/05/01
03	E00A9	46634.18	06/05/01	06/05/01
04	E00B0	46634.19	06/05/01	06/05/01
05	E00B1	46634.20	06/05/01	06/05/01
06	E00B2	46634.21	06/05/01	06/05/01
07	E00B3	46634.22	06/05/01	06/05/01
08	E00B5	46634.23	06/05/01	06/05/01
09	E00B6	46634.24	06/05/01	06/05/01
10	E00B6MS	46634.25MS	06/05/01	06/05/01
11	E00B6MSD	46634.26MSD	06/05/01	06/05/01
12	E00B7	46634.27	06/05/01	06/05/01
13	E00B8	46634.28	06/05/01	06/05/01
14				
15				
16				
17				
18				
19				
20				
21				
22				
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Comments: _____

page 1 of 1

HYDROGEN USED AS CARRIER GAS FOR SAMPLE ANALYSES

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00A9

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Matrix: (soil/water) SOIL Lab Sample ID: 46634.18

Sample wt/vol: 31.3 (g/mL) G Lab File ID:_____

% Moisture: 87 decanted: (Y/N) __ Date Received: 05/26/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:05/27/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/05/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	240	U
11104-28-2	Aroclor-1221	240	U
11141-16-5	Aroclor-1232	240	U
53469-21-9	Aroclor-1242	240	U
12672-29-6	Aroclor-1248	240	U
11097-69-1	Aroclor-1254	240	U
11096-82-5	Aroclor-1260	240	U
	Surrogate amount spiked	49.16	

7/13/01

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060454.D\ECD1A.CH Vial: 54
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060454.D\ECD2B.CH
Acq On : 05 Jun 2001 7:17 Operator: DDC
Sample : 46634.18 *E00A9 * Inst : HP_15
Misc : *EPA*31.3G/5.0ML*87 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 9:40 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	435029	345146	51.7	42.5
	Spiked Amount 49.152			Recovery	=	105.18%	86.47%
22)	S DCB	18.29	18.68	466690	394342	57.2	47.9
	Spiked Amount 49.152			Recovery	=	116.37%	97.45%

Target Compounds:

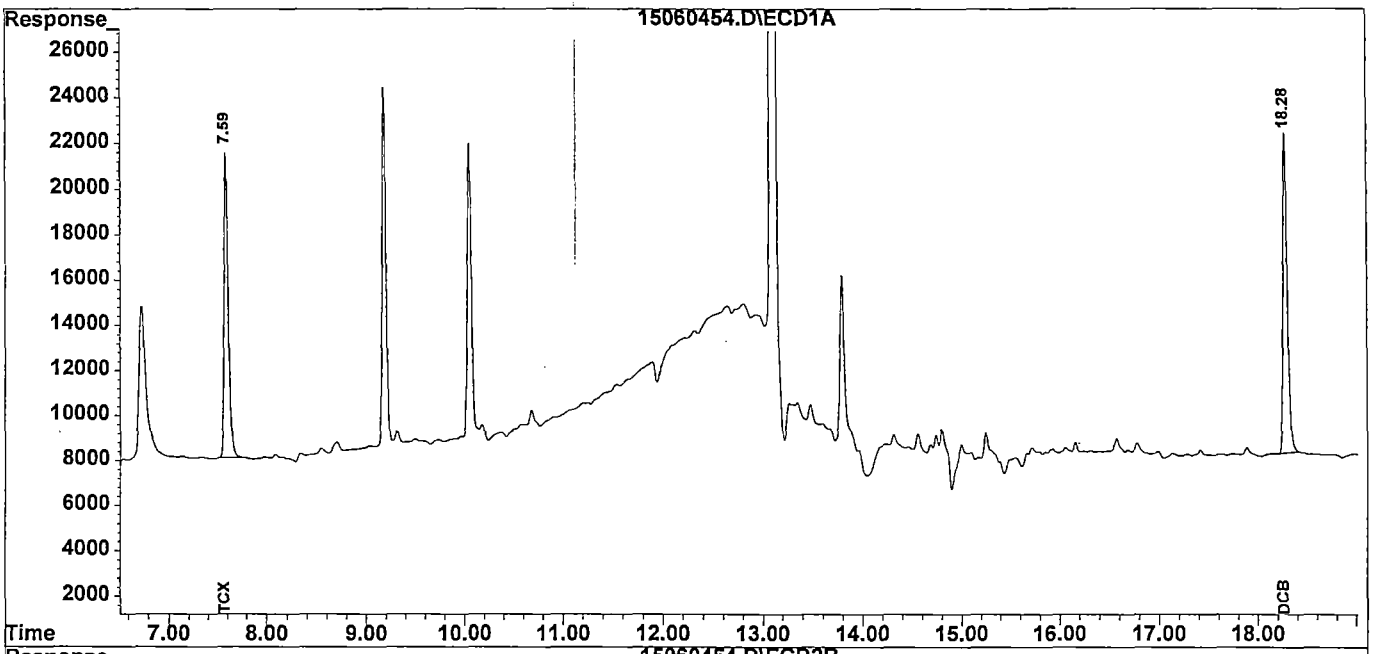
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

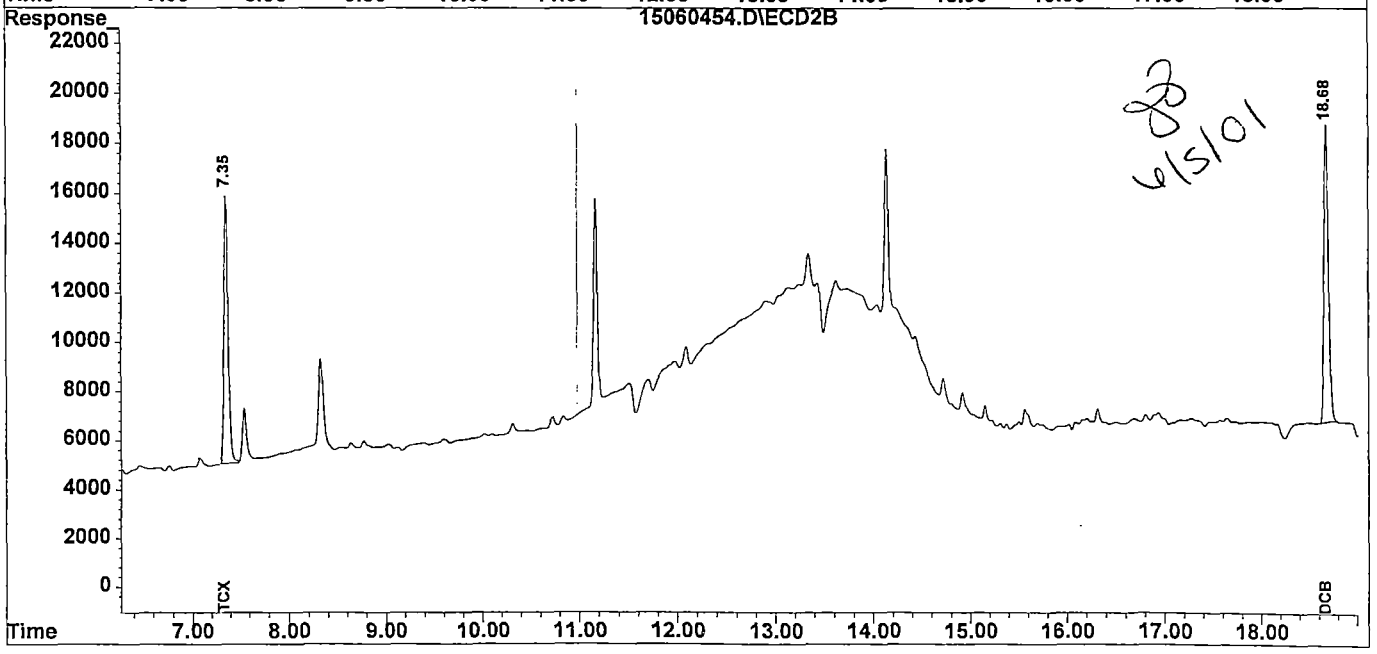
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060454.D\ECD1A.CH Vial: 54
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060454.D\ECD2B.CH
Acq On : 05 Jun 2001 7:17 Operator: DDC
Sample : 46634.18 *E00A9 * Inst : HP_15
Misc : *EPA*31.3G/5.0ML*87 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 9:40 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Multiple Level Calibration

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





83
6/5/01

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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00B0

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Matrix: (soil/water) SOIL Lab Sample ID: 46634.19

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

% Moisture: 84 decanted: (Y/N) __ Date Received: 05/26/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:05/27/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/05/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	210	U
11104-28-2	Aroclor-1221	210	U
11141-16-5	Aroclor-1232	210	U
53469-21-9	Aroclor-1242	210	U
12672-29-6	Aroclor-1248	210	U
11097-69-1	Aroclor-1254	210	U
11096-82-5	Aroclor-1260	210	U
Surrogate amount spiked		41.67	

7/3/01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060455.D\ECD1A.CH Vial: 55
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060455.D\ECD2B.CH
Acq On : 05 Jun 2001 7:40 Operator: DDC
Sample : 46634.19 *E00B0 * Inst : HP_15
Misc : *EPA*30G/5.0ML*84 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 9:41 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	332479	254323	33.5	26.5
	Spiked Amount 41.667			Recovery	=	80.40%	63.60%
22)	S DCB	18.28	18.68	350212	294503	36.4	30.3
	Spiked Amount 41.667			Recovery	=	87.36%	72.72%
	Target Compounds:						

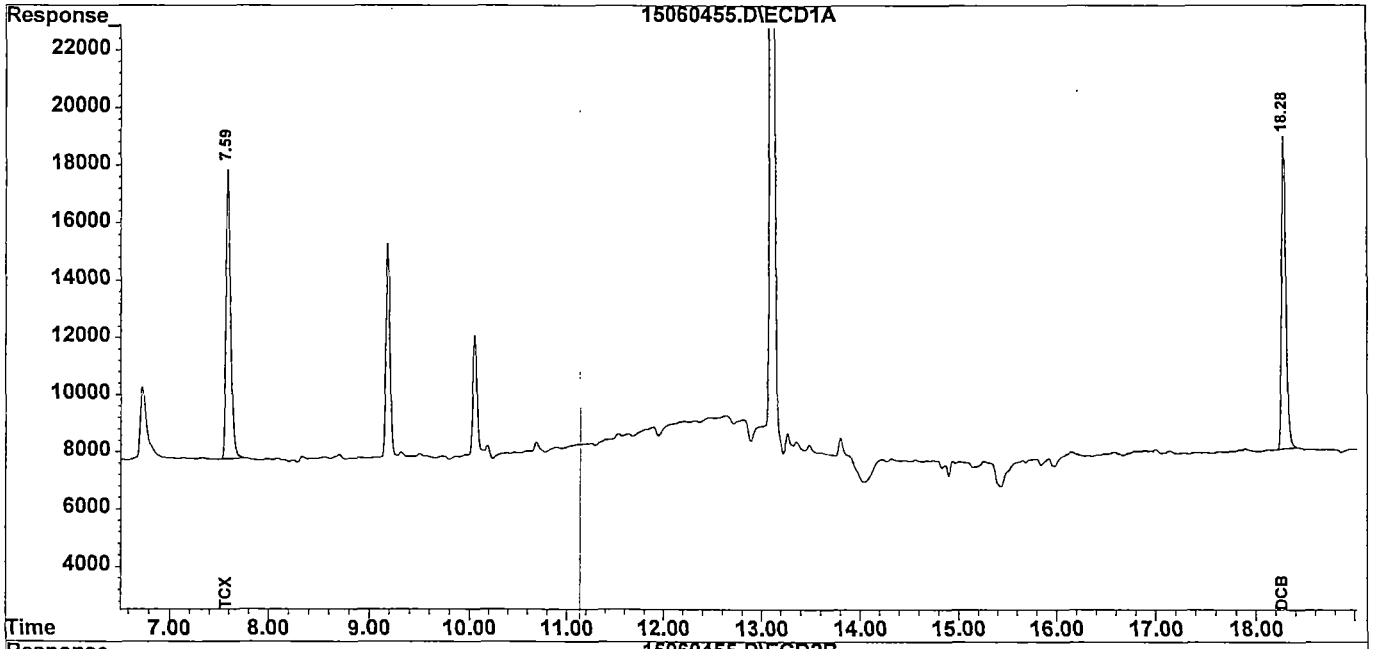
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

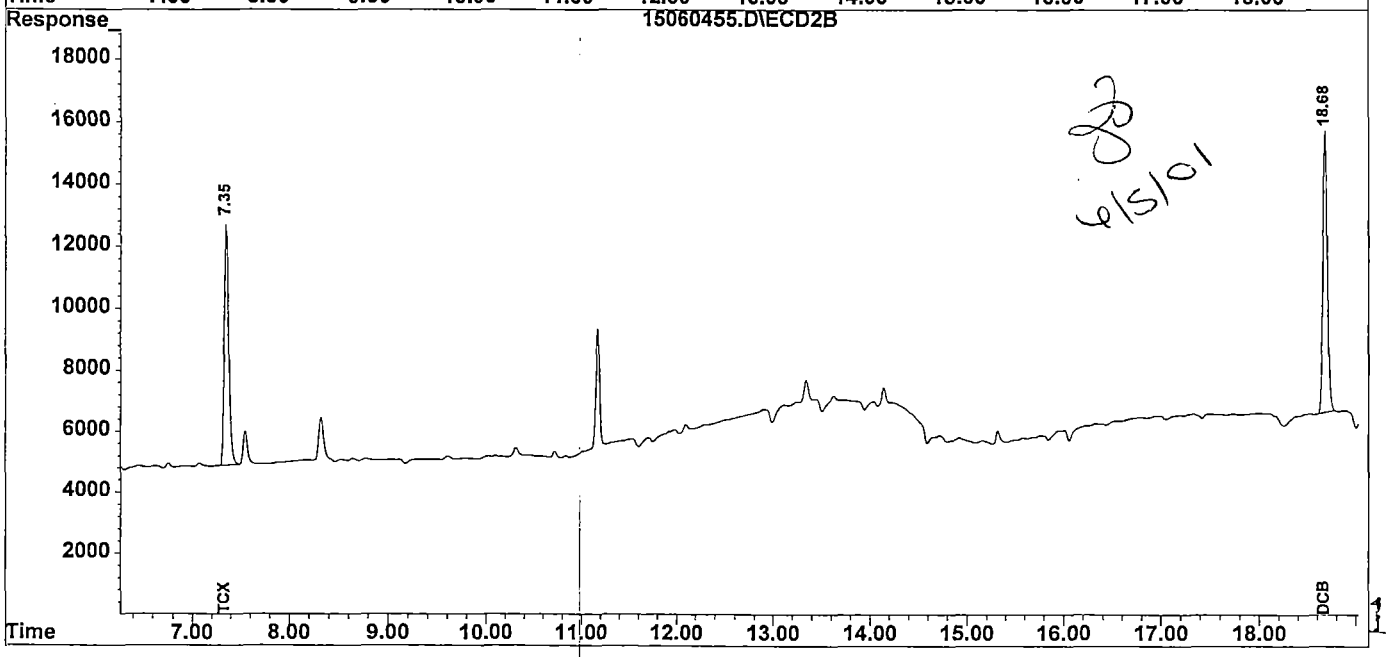
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060455.D\ECD1A.CH Vial: 55
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060455.D\ECD2B.CH
Acq On : 05 Jun 2001 7:40 Operator: DDC
Sample : 46634.19 *E00B0 * Inst : HP_15
Misc : *EPA*30G/5.0ML*84 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 9:41 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Multiple Level Calibration

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





6/5/01

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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00B1

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Matrix: (soil/water) SOIL Lab Sample ID: 46634.20

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

% Moisture: 82 decanted: (Y/N) __ Date Received: 05/26/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:05/27/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/05/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	180	U
11104-28-2	Aroclor-1221	180	U
11141-16-5	Aroclor-1232	180	U
53469-21-9	Aroclor-1242	180	U
12672-29-6	Aroclor-1248	180	U
11097-69-1	Aroclor-1254	180	U
11096-82-5	Aroclor-1260	180	U
	Surrogate amount spiked	35.84	

7/3/01

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060456.D\ECD1A.CH Vial: 56
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060456.D\ECD2B.CH
Acq On : 05 Jun 2001 8:03 Operator: DDC
Sample : 46634.20 *E00B1 * Inst : HP_15
Misc : *EPA*31G/5.0ML*82 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 9:41 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	331738	253382	28.8	22.7
	Spiked Amount 35.842			Recovery	=	80.35%	63.33%
22)	S DCB	18.28	18.68	355685	297965	31.8	26.4
	Spiked Amount 35.842			Recovery	=	88.72%	73.66%
	Target Compounds:						

18

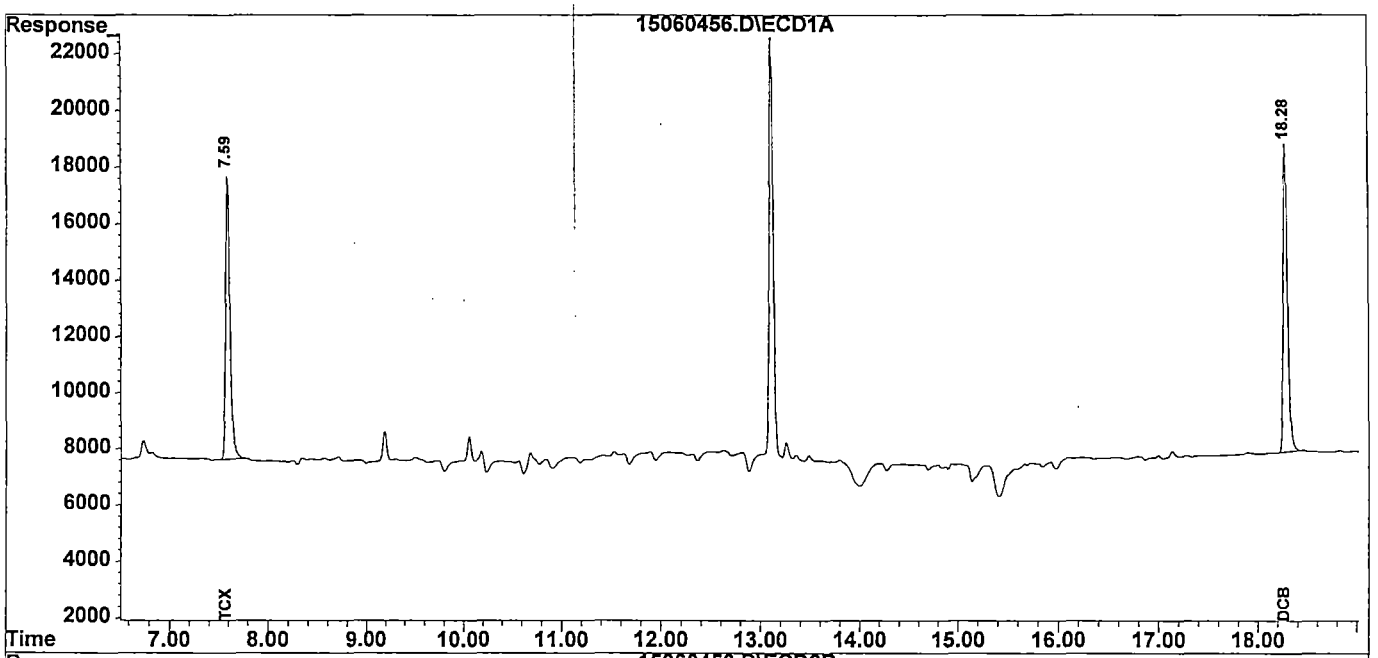
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

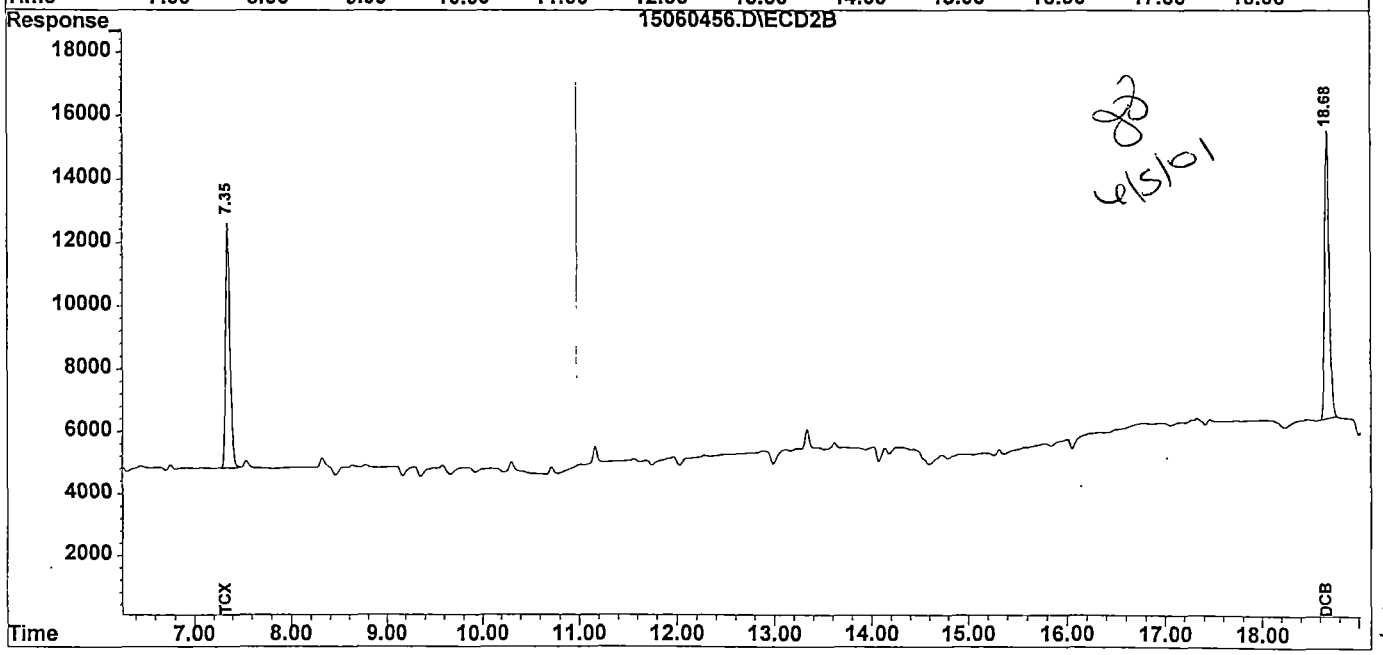
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060456.D\ECD1A.CH Vial: 56
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060456.D\ECD2B.CH
Acq On : 05 Jun 2001 8:03 Operator: DDC
Sample : 46634.20 *E00B1 * Inst : HP_15
Misc : *EPA*31G/5.0ML*82 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 9:41 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Multiple Level Calibration

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





6/5/01

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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00B2

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Matrix: (soil/water) SOIL Lab Sample ID: 46634.21

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

% Moisture: 84 decanted: (Y/N) __ Date Received: 05/26/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:05/27/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/05/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	200	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	200	U
53469-21-9	Aroclor-1242	200	U
12672-29-6	Aroclor-1248	200	U
11097-69-1	Aroclor-1254	200	U
11096-82-5	Aroclor-1260	200	U
Surrogate amount spiked		40.59	

7/3/01

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060457.D\ECD1A.CH Vial: 57
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060457.D\ECD2B.CH
Acq On : 05 Jun 2001 8:26 Operator: DDC
Sample : 46634.21 *E00B2 * Inst : HP_15
Misc : *EPA*30.8G/5.0ML*84 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 9:41 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	163756	121933	16.1	12.4
	Spiked Amount 40.584			Recovery	=	39.67%	30.55%
22)	S DCB	18.28	18.68	172130	143700	17.4	14.4
	Spiked Amount 40.584			Recovery	=	42.87%	35.48%

Target Compounds:

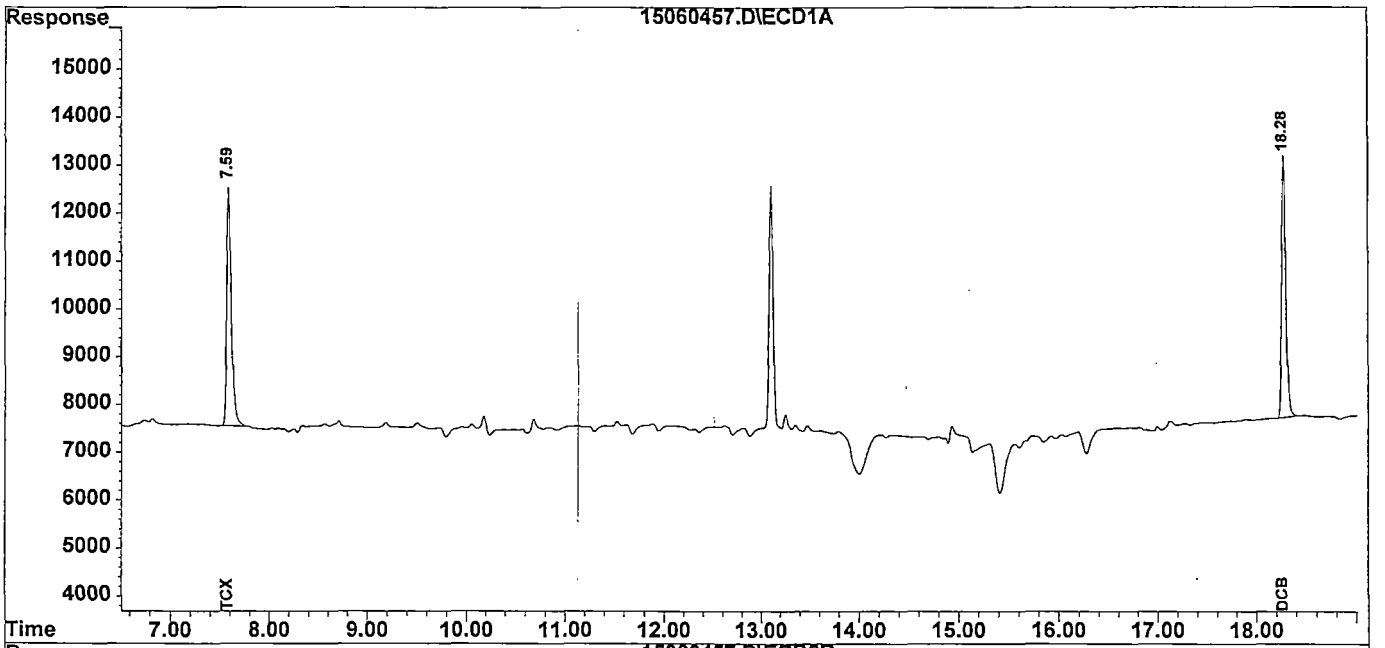
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

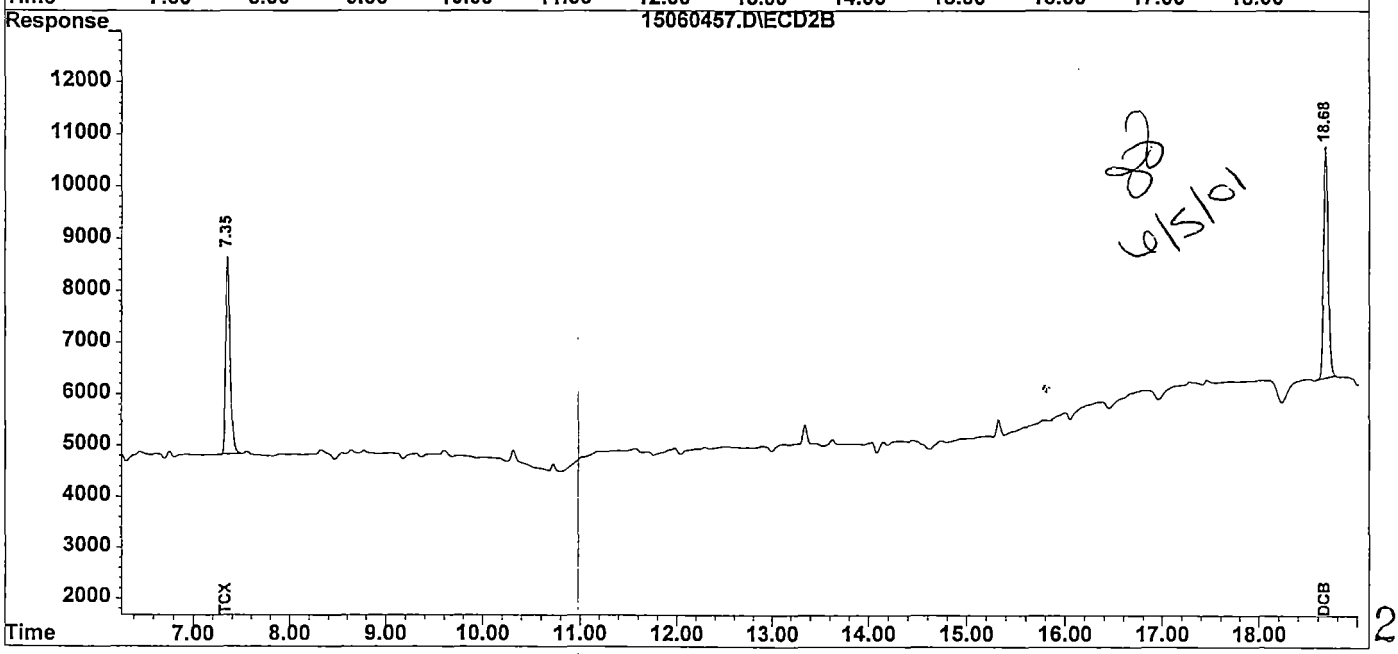
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060457.D\ECD1A.CH Vial: 57
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060457.D\ECD2B.CH
Acq On : 05 Jun 2001 8:26 Operator: DDC
Sample : 46634.21 *E00B2 * Inst : HP_15
Misc : *EPA*30.8G/5.0ML*84 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 9:41 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Multiple Level Calibration

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





6/5/01

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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00B3

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Matrix: (soil/water) SOIL Lab Sample ID: 46634.22

Sample wt/vol: 31.5 (g/mL) G Lab File ID:_____

% Moisture: 86 decanted: (Y/N) __ Date Received: 05/26/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:05/27/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/05/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

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	45.36	

7/3/01

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060458.D\ECD1A.CH Vial: 58
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060458.D\ECD2B.CH
Acq On : 05 Jun 2001 8:49 Operator: DDC
Sample : 46634.22 *E00B3 * Inst : HP_15
Misc : *EPA*31.5G/5.0ML*86 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 9:41 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	404412	322063	44.4	36.6
	Spiked Amount 45.351			Recovery	=	97.90%	80.70%
22)	S DCB	18.28	18.68	433152	386081	49.0	43.2
	Spiked Amount 45.351			Recovery	=	108.05%	95.26%

Target Compounds:

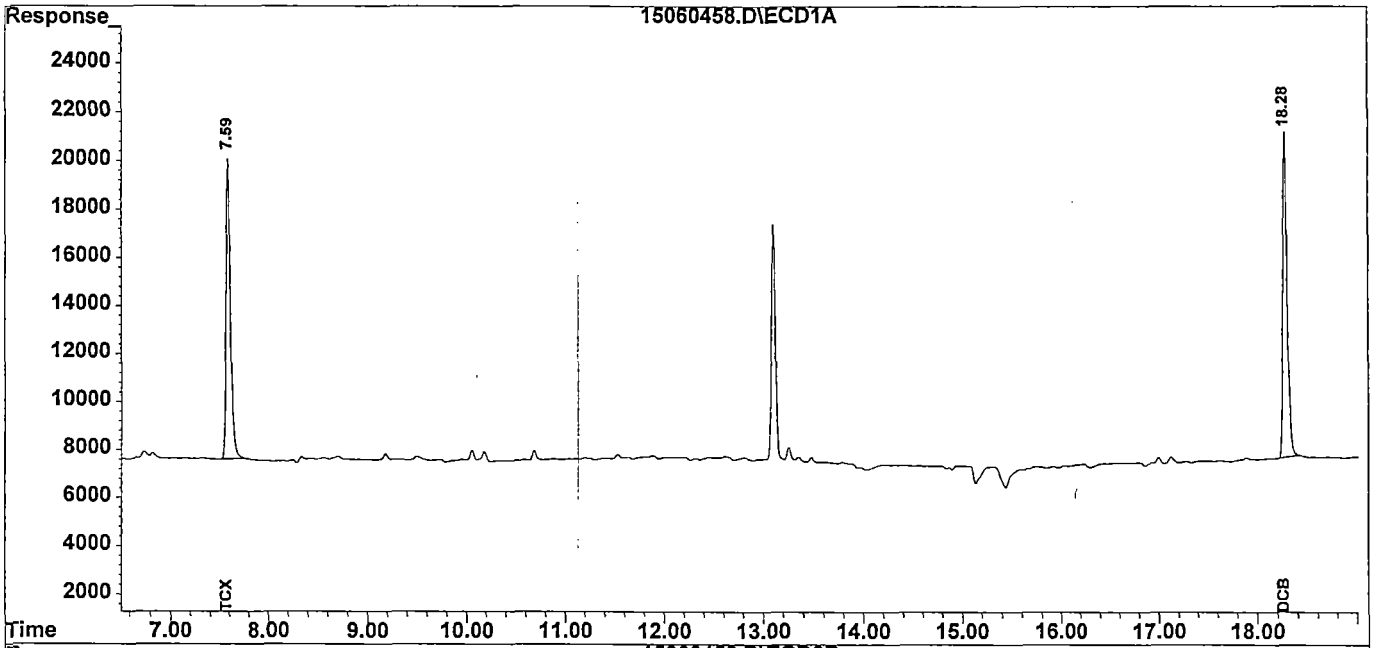
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

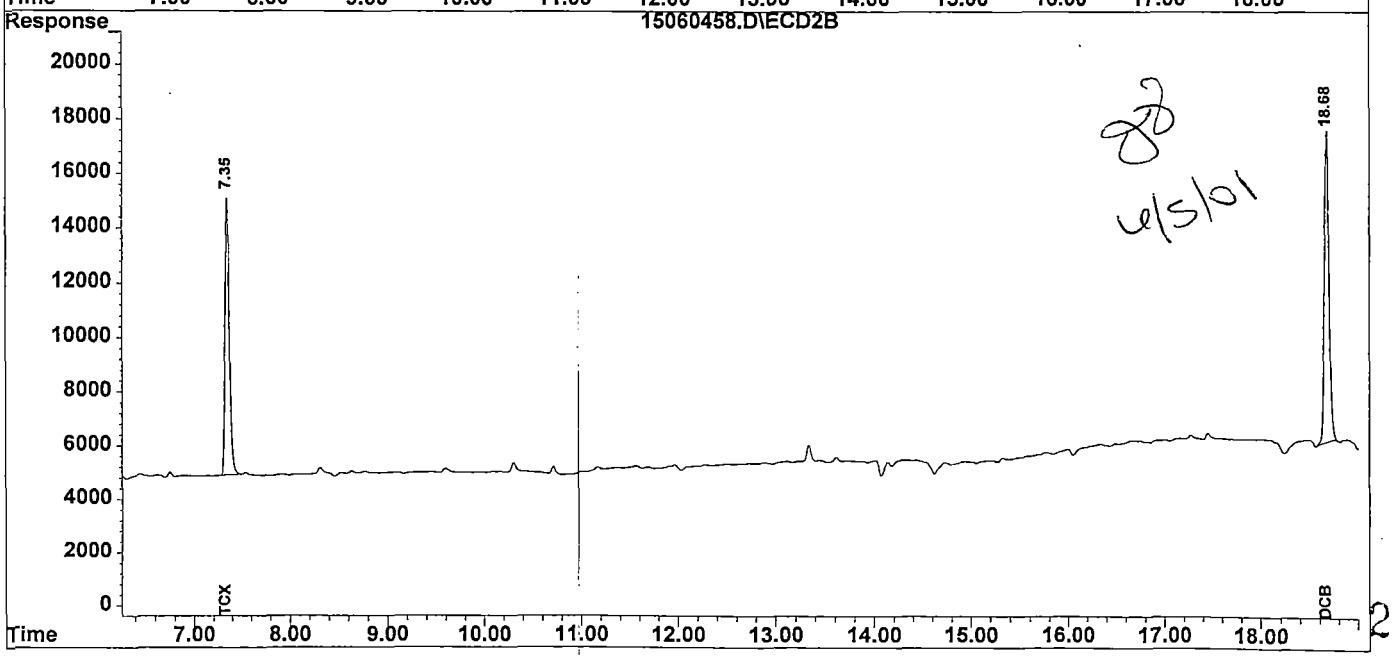
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060458.D\ECD1A.CH Vial: 58
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060458.D\ECD2B.CH
Acq On : 05 Jun 2001 8:49 Operator: DDC
Sample : 46634.22 *E00B3 * Inst : HP_15
Misc : *EPA*31.5G/5.0ML*86 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 9:41 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Multiple Level Calibration

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





6/5/01

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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00B5

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Matrix: (soil/water) SOIL Lab Sample ID: 46634.23

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

% Moisture: 90 decanted: (Y/N) __ Date Received: 05/26/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:05/27/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/05/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	320	U
11104-28-2	Aroclor-1221	320	U
11141-16-5	Aroclor-1232	320	U
53469-21-9	Aroclor-1242	320	U
12672-29-6	Aroclor-1248	320	U
11097-69-1	Aroclor-1254	320	U
11096-82-5	Aroclor-1260	320	U
Surrogate amount spiked		65.14	

7/13/01

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060470.D\ECD1A.CH Vial: 70
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060470.D\ECD2B.CH
Acq On : 05 Jun 2001 13:53 Operator: DDC
Sample : 46634.23 *E00B5 * Inst : HP_15
Misc : *EPA*30.7G/5.0ML*90 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 16:57 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	403821	346388	63.6	56.5
	Spiked Amount 65.147			Recovery	=	97.63%	86.73%
22)	S DCB	18.28	18.68	432678	407505	70.2	65.6
	Spiked Amount 65.147			Recovery	=	107.76%	100.70%

Target Compounds:

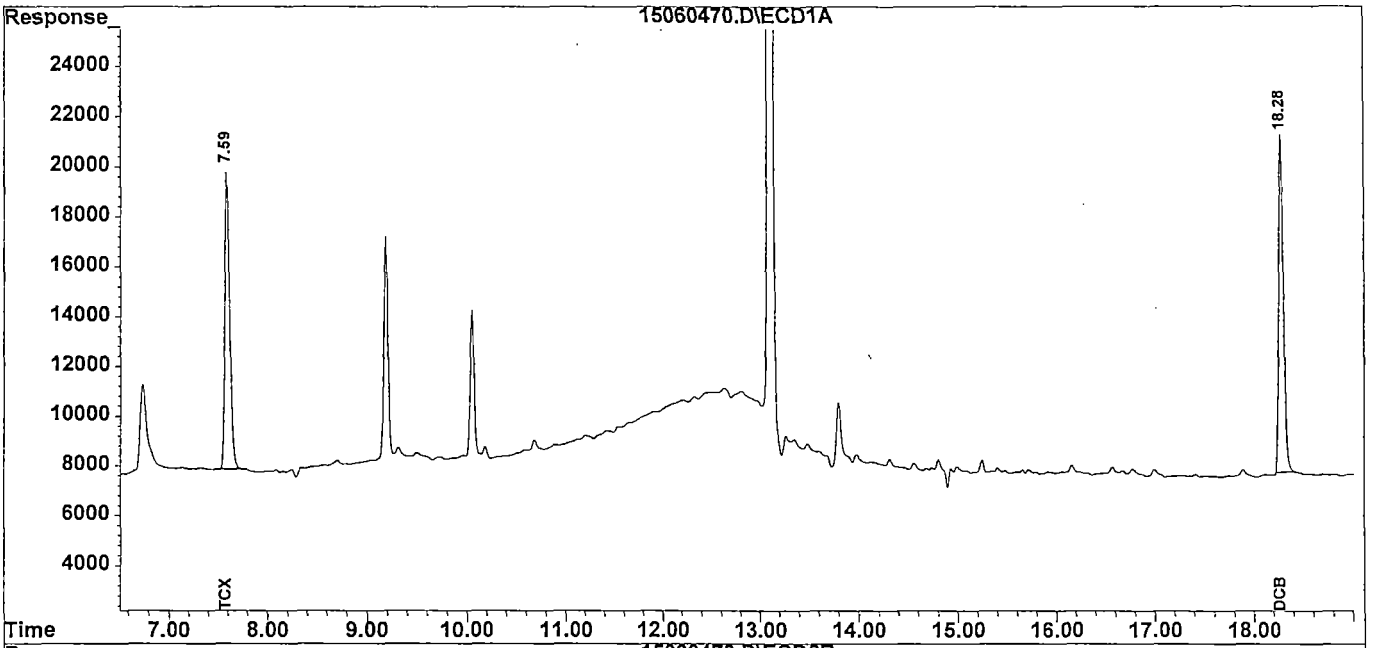
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

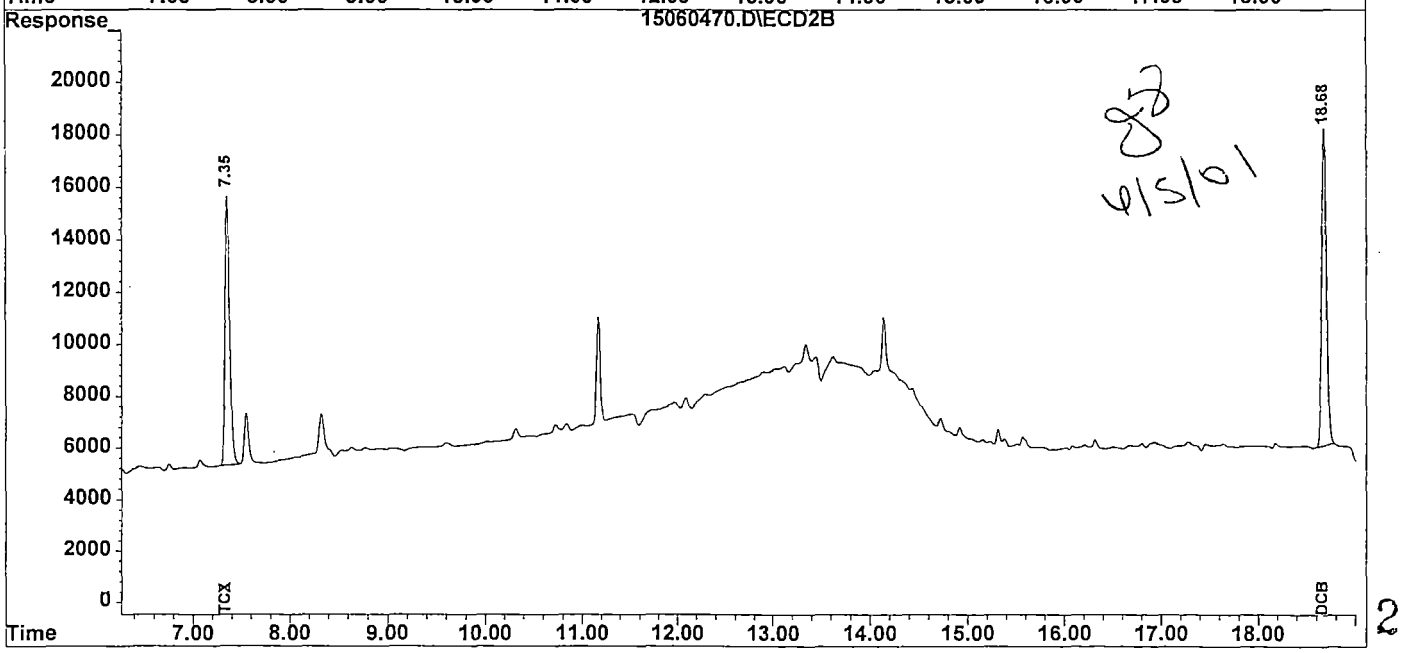
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060470.D\ECD1A.CH Vial: 70
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060470.D\ECD2B.CH
Acq On : 05 Jun 2001 13:53 Operator: DDC
Sample : 46634.23 *E00B5 * Inst : HP_15
Misc : *EPA*30.7G/5.0ML*90 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 16:57 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Multiple Level Calibration

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





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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00B6

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Matrix: (soil/water) SOIL Lab Sample ID: 46634.24

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

% Moisture: 90 decanted: (Y/N) __ Date Received: 05/26/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 05/27/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/05/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	320	U
11104-28-2	Aroclor-1221	320	U
11141-16-5	Aroclor-1232	320	U
53469-21-9	Aroclor-1242	320	U
12672-29-6	Aroclor-1248	320	U
11097-69-1	Aroclor-1254	320	U
11096-82-5	Aroclor-1260	320	U
	Surrogate amount spiked	65.58	

2/13/01

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060471.D\ECD1A.CH Vial: 71
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060471.D\ECD2B.CH
Acq On : 05 Jun 2001 14:17 Operator: DDC
Sample : 46634.24 *E00B6 * Inst : HP_15
Misc : *EPA*30.5G/5.0ML*90 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 16:57 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	270721	228174	42.9	37.5
	Spiked Amount 65.574			Recovery	=	65.42%	57.19%
22)	S DCB	18.29	18.68	290633	265944	47.5	43.1
	Spiked Amount 65.574			Recovery	=	72.44%	65.73%

Target Compounds:

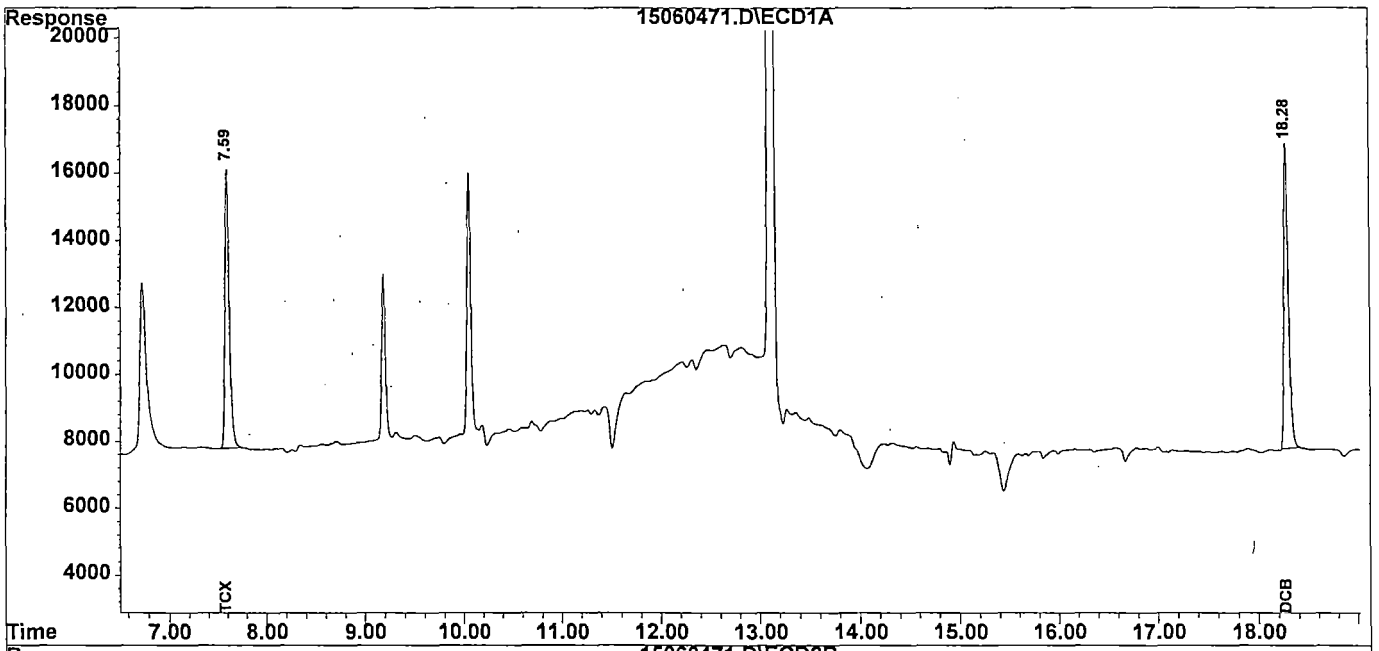
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

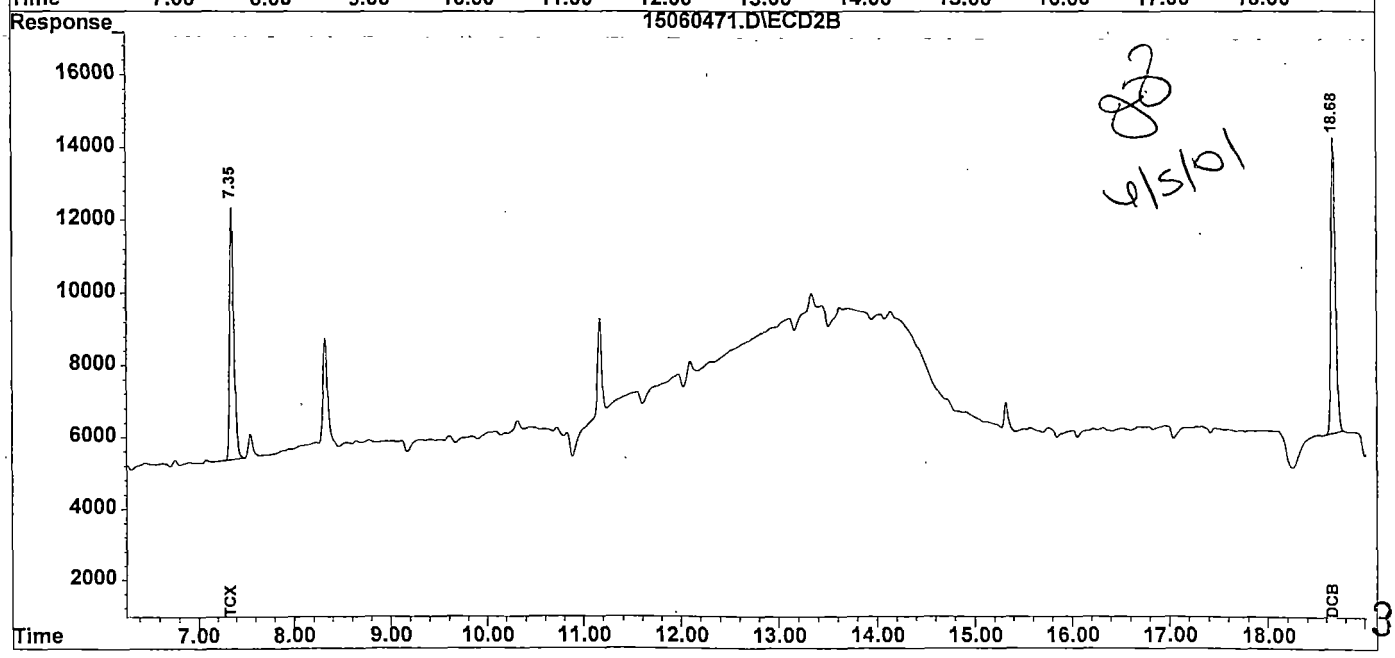
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060471.D\ECD1A.CH Vial: 71
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060471.D\ECD2B.CH
Acq On : 05 Jun 2001 14:17 Operator: DDC
Sample : 46634.24 *E00B6 * Inst : HP_15
Misc : *EPA*30.5G/5.0ML*90 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 16:57 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Multiple Level Calibration

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





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6/5/01

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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00B7

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Matrix: (soil/water) SOIL Lab Sample ID: 46634.27

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

% Moisture: 85 decanted: (Y/N) __ Date Received: 05/26/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:05/27/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/05/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	210	U
11104-28-2	Aroclor-1221	210	U
11141-16-5	Aroclor-1232	210	U
53469-21-9	Aroclor-1242	210	U
12672-29-6	Aroclor-1248	210	U
11097-69-1	Aroclor-1254	210	U
11096-82-5	Aroclor-1260	210	U
Surrogate amount spiked		43.30	

7/3/01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060474.D\ECD1A.CH Vial: 74
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060474.D\ECD2B.CH
Acq On : 05 Jun 2001 15:26 Operator: DDC
Sample : 46634.27 *E00B7 * Inst : HP_15
Misc : *EPA*30.8G/5.0ML*85 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 17:00 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	406404	352676	42.5	38.2
	Spiked Amount 43.290			Recovery	=	98.18%	88.24%
22)	S DCB	18.29	18.68	430936	381363	46.5	40.8
	Spiked Amount 43.290			Recovery	=	107.42%	94.25%
	Target Compounds:						

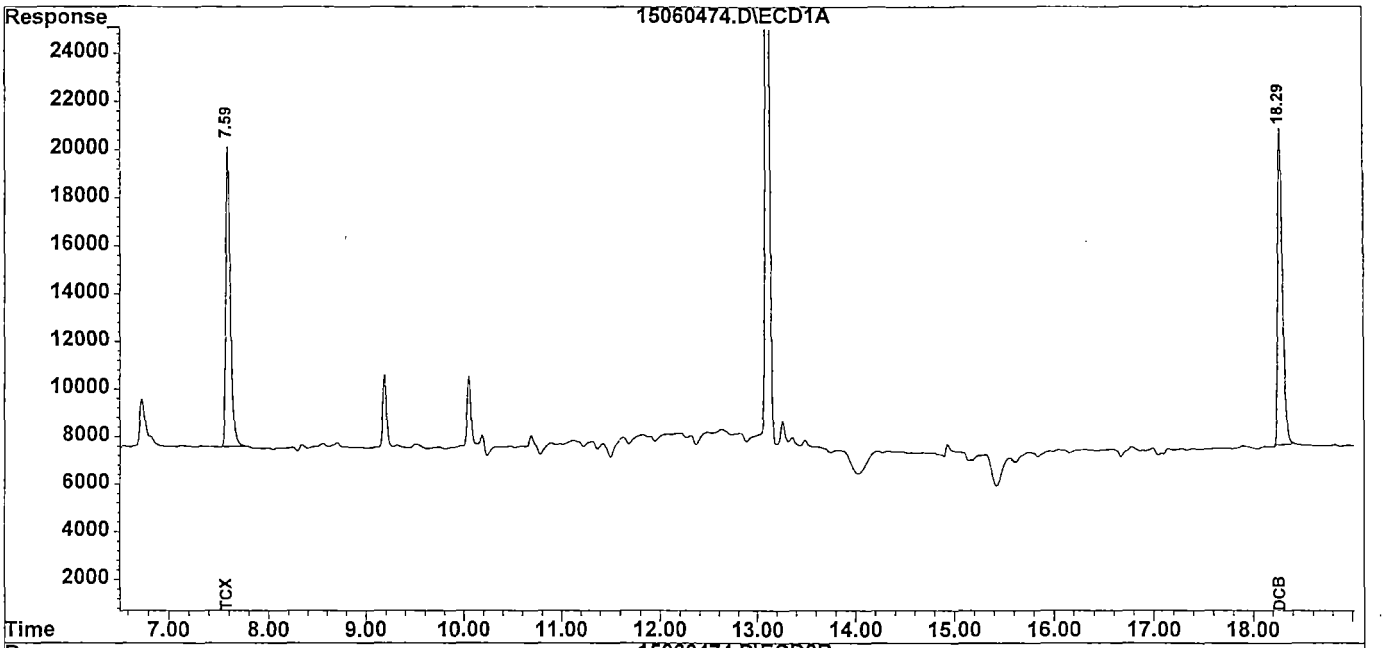
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

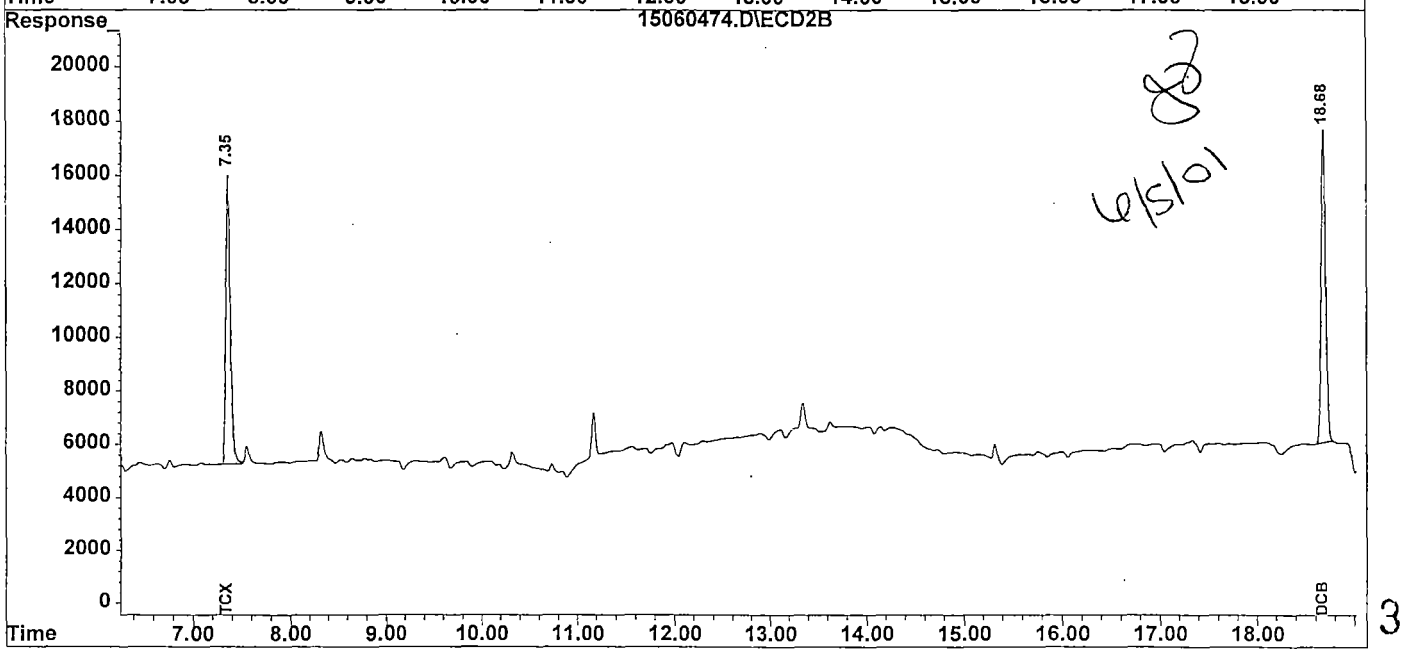
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060474.D\ECD1A.CH Vial: 74
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060474.D\ECD2B.CH
Acq On : 05 Jun 2001 15:26 Operator: DDC
Sample : 46634.27 *E00B7 * Inst : HP_15
Misc : *EPA*30.8G/5.0ML*85 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 17:00 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Multiple Level Calibration

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





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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00B8

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Matrix: (soil/water) SOIL Lab Sample ID: 46634.28

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

% Moisture: 51 decanted: (Y/N) __ Date Received: 05/26/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:05/27/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/05/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	66	U
11104-28-2	Aroclor-1221	66	U
11141-16-5	Aroclor-1232	66	U
53469-21-9	Aroclor-1242	66	U
12672-29-6	Aroclor-1248	66	U
11097-69-1	Aroclor-1254	66	U
11096-82-5	Aroclor-1260	66	U
	Surrogate amount spiked	13.33	

7/3/01

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060475.D\ECD1A.CH Vial: 75
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060475.D\ECD2B.CH
Acq On : 05 Jun 2001 15:49 Operator: DDC
Sample : 46634.28 *E00B8 * Inst : HP_15
Misc : *EPA*30.6G/5.0ML*51 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 17:00 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.60	7.36	326668	280250	10.5	9.361
	Spiked Amount 13.339			Recovery	=	78.72%	70.18%
22)	S DCB	18.29	18.68	368618	332683	12.3	11.0
	Spiked Amount 13.339			Recovery	=	92.21%	82.47%

Target Compounds:

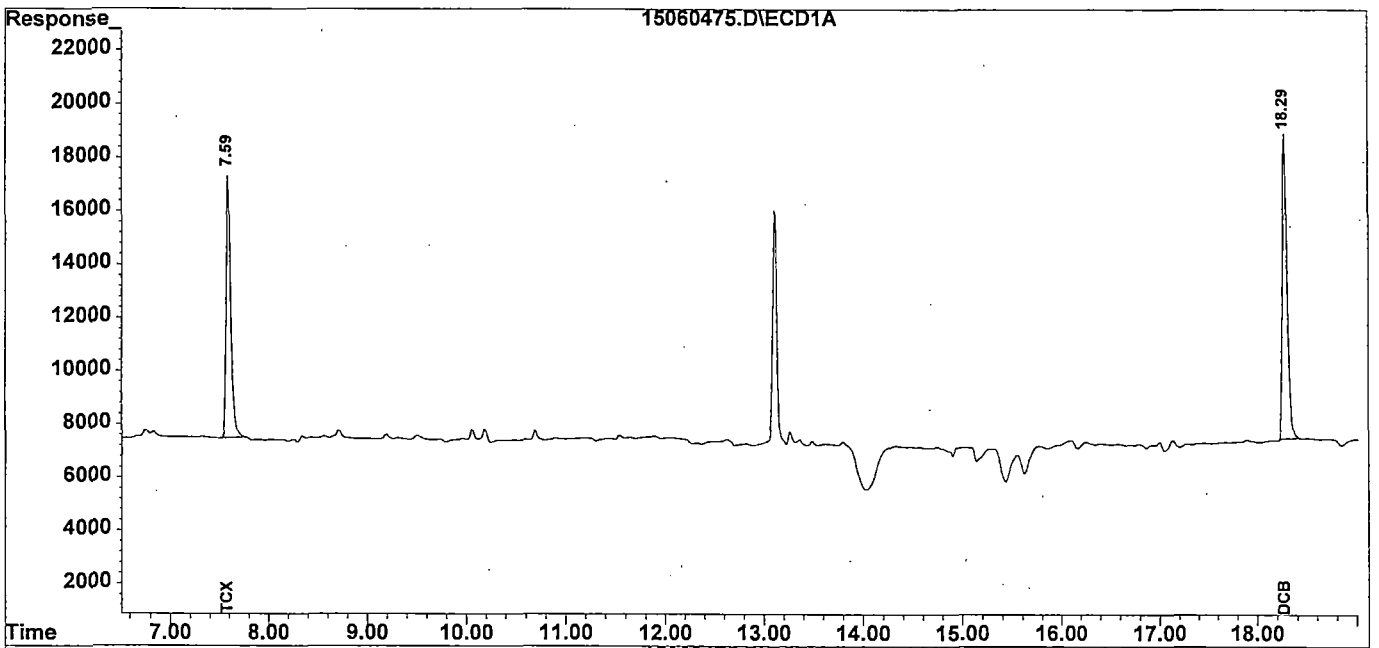
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

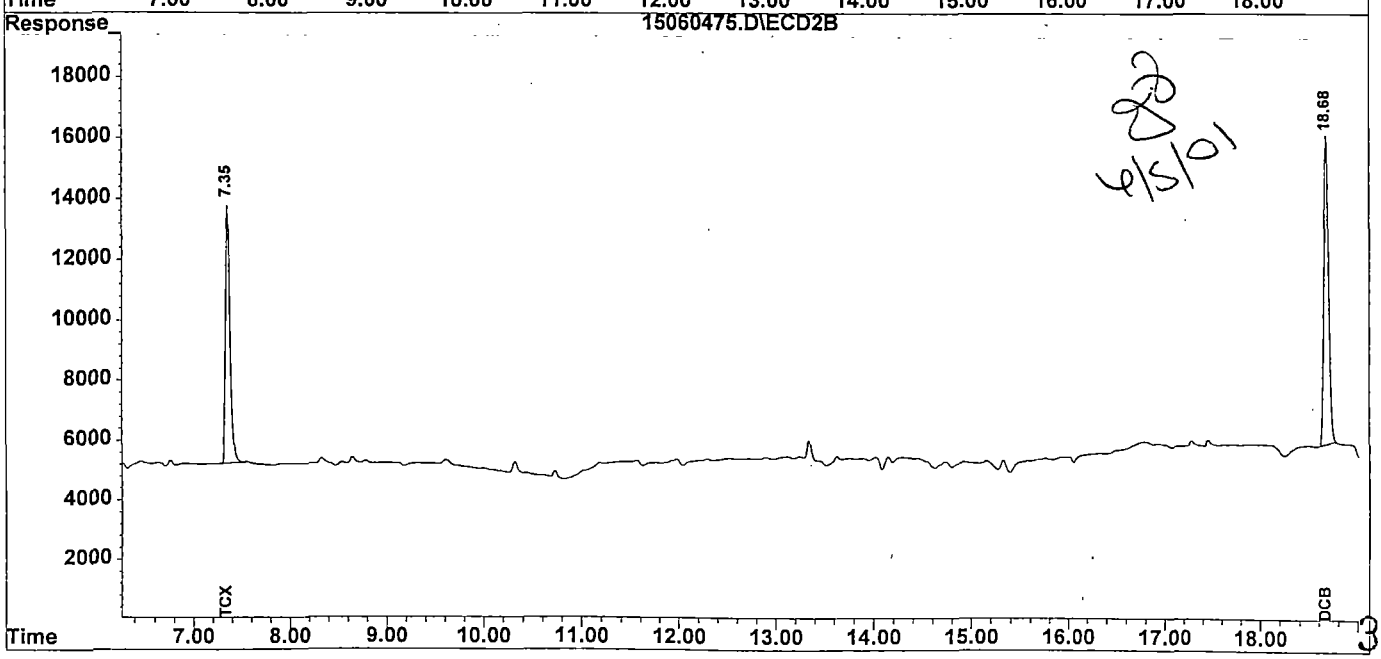
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060475.D\ECD1A.CH Vial: 75
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060475.D\ECD2B.CH
Acq On : 05 Jun 2001 15:49 Operator: DDC
Sample : 46634.28 *E00B8 * Inst : HP_15
Misc : *EPA*30.6G/5.0ML*51 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 17:00 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Multiple Level Calibration

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





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6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Instrument ID: HP_15A Date(s) Analyzed: 05/30/01 05/30/01

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

GC Column: DB-17 ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1242 L1	0.10	1	8.42	601130	MEAN
		2	9.70	435880	
		3	10.64	947460	
		4	11.64	622150	
		5	12.80	751440	
Aroclor 1242 L2	0.20	1	8.42	546130	MEAN
		2	9.70	392985	
		3	10.64	895810	
		4	11.64	589055	
		5	12.80	717510	
Aroclor 1242 L3	0.40	1	8.42	503050	MEAN
		2	9.70	359753	
		3	10.64	830180	
		4	11.64	554193	
		5	12.80	663188	
Aroclor 1242 L4	0.80	1	8.42	432904	MEAN
		2	9.70	308001	
		3	10.64	696500	
		4	11.64	469978	
		5	12.80	569503	
Aroclor 1242 L5	1.60	1	8.42	384040	MEAN
		2	9.70	275690	
		3	10.64	631061	
		4	11.64	429548	
		5	12.80	524770	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1242 MEAN	1	8.42	8.37	8.47	493451	17.6
	2	9.70	9.65	9.75	354462	18.1
	3	10.64	10.59	10.69	800202	16.7
	4	11.64	11.59	11.69	532985	15.2
	5	12.80	12.75	12.85	645282	14.9

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Instrument ID: HP_15B Date(s) Analyzed: 05/30/01 05/30/01

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

GC Column: DB-1701 ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1242 L1	0.10	1	10.39	273210	MEAN
		2	11.17	557320	
		3	12.39	347430	
		4	12.62	359610	
		5	13.13	571130	
Aroclor 1242 L2	0.20	1	10.39	266595	MEAN
		2	11.17	541325	
		3	12.39	336645	
		4	12.62	334780	
		5	13.13	505235	
Aroclor 1242 L3	0.40	1	10.39	259853	MEAN
		2	11.17	516140	
		3	12.40	331345	
		4	12.62	328848	
		5	13.13	496238	
Aroclor 1242 L4	0.80	1	10.39	226978	MEAN
		2	11.17	460031	
		3	12.40	295439	
		4	12.62	292011	
		5	13.13	438076	
Aroclor 1242 L5	1.60	1	10.39	216079	MEAN
		2	11.17	439303	
		3	12.40	286113	
		4	12.62	283236	
		5	13.13	428750	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1242 MEAN	1	10.39	10.34	10.44	248543	10.2
	2	11.17	11.12	11.22	502824	10.2
	3	12.40	12.35	12.45	319394	8.4
	4	12.62	12.57	12.67	319697	9.9
	5	13.13	13.08	13.18	487886	11.8

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Instrument ID: HP_15A Date(s) Analyzed: 05/30/01 05/30/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1254 L1	0.10	1	12.63	1236120	MEAN
		2	13.32	628900	
		3	13.79	1004110	
		4	14.32	783880	
		5	15.00	746900	
Aroclor 1254 L2	0.20	1	12.62	1175250	MEAN
		2	13.32	617840	
		3	13.78	985495	
		4	14.31	766290	
		5	15.00	753540	
Aroclor 1254 L3	0.40	1	12.62	1147818	MEAN
		2	13.31	619368	
		3	13.78	998130	
		4	14.31	764535	
		5	14.99	775680	
Aroclor 1254 L4	0.80	1	12.63	903116	MEAN
		2	13.31	486773	
		3	13.78	787726	
		4	14.31	590501	
		5	14.99	601353	
Aroclor 1254 L5	1.60	1	12.63	815771	MEAN
		2	13.31	448910	
		3	13.78	742860	
		4	14.31	601276	
		5	14.99	642459	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1254 MEAN	1	12.63	12.58	12.68	1055615	17.5
	2	13.31	13.26	13.36	560358	15.3
	3	13.78	13.73	13.83	903664	14.1
	4	14.31	14.26	14.36	701296	13.8
	5	14.99	14.94	15.04	703986	10.9

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Instrument ID: HP_15B Date(s) Analyzed: 05/30/01 05/30/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1254 L1	0.10	1	12.30	361030	MEAN
		2	13.01	557130	
		3	13.93	547980	
		4	14.92	761130	
		5	15.39	1031840	
Aroclor 1254 L2	0.20	1	12.29	357595	MEAN
		2	13.01	552270	
		3	13.92	530780	
		4	14.92	763525	
		5	15.38	1047650	
Aroclor 1254 L3	0.40	1	12.29	381878	MEAN
		2	13.01	620250	
		3	13.92	603450	
		4	14.92	852378	
		5	15.38	1183630	
Aroclor 1254 L4	0.80	1	12.30	297730	MEAN
		2	13.01	461306	
		3	13.92	438933	
		4	14.92	613241	
		5	15.38	877648	
Aroclor 1254 L5	1.60	1	12.29	285577	MEAN
		2	13.01	445271	
		3	13.92	411342	
		4	14.92	568363	
		5	15.38	843178	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1254 MEAN	1	12.29	12.24	12.34	336762	12.6
	2	13.01	12.96	13.06	527245	13.8
	3	13.92	13.87	13.97	506497	15.7
	4	14.92	14.87	14.97	711727	16.5
	5	15.38	15.33	15.43	996789	13.9

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Instrument ID: HP_15A Date(s) Analyzed: 05/30/01 05/30/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1260 L1	0.10	1	14.31	1624660	MEAN
		2	14.80	2100440	
		3	15.25	1867400	
		4	15.72	702010	
		5	16.16	1830860	
Aroclor 1260 L2	0.20	1	14.31	1361665	MEAN
		2	14.80	1876445	
		3	15.25	1710690	
		4	15.72	866495	
		5	16.16	1760375	
Aroclor 1260 L3	0.40	1	14.31	1251775	MEAN
		2	14.80	1724938	
		3	15.25	1595073	
		4	15.72	806313	
		5	16.16	1642008	
Aroclor 1260 L4	0.80	1	14.31	1048550	MEAN
		2	14.80	1450098	
		3	15.25	1366805	
		4	15.72	735414	
		5	16.16	1422536	
Aroclor 1260 L5	1.60	1	14.31	959239	MEAN
		2	14.80	1347235	
		3	15.25	1307398	
		4	15.72	702031	
		5	16.16	1385209	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1260 MEAN	1	14.31	14.26	14.36	1249178	21.1
	2	14.80	14.75	14.85	1699831	18.1
	3	15.25	15.20	15.30	1569473	14.9
	4	15.72	15.67	15.77	762453	9.5
	5	16.16	16.11	16.21	1608198	12.4

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Instrument ID: HP_15A Date(s) Analyzed: 05/30/01 05/30/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1016 L1	0.10	1	8.42	671410	MEAN
		2	9.28	907150	
		3	10.58	1322300	
		4	11.20	760950	
		5	11.64	736490	
Aroclor 1016 L2	0.20	1	8.42	615200	MEAN
		2	9.28	828580	
		3	10.58	1231240	
		4	11.20	698055	
		5	11.64	684880	
Aroclor 1016 L3	0.40	1	8.42	566818	MEAN
		2	9.28	746900	
		3	10.58	1169683	
		4	11.20	646470	
		5	11.64	649205	
Aroclor 1016 L4	0.80	1	8.42	486519	MEAN
		2	9.28	628614	
		3	10.58	1024433	
		4	11.20	547654	
		5	11.64	561601	
Aroclor 1016 L5	1.60	1	8.42	438824	MEAN
		2	9.28	552864	
		3	10.58	959311	
		4	11.20	494656	
		5	11.64	520862	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1016 MEAN	1	8.42	8.37	8.47	555754	17.0
	2	9.28	9.23	9.33	732822	19.7
	3	10.58	10.53	10.63	1141393	13.0
	4	11.20	11.15	11.25	629557	17.2
	5	11.64	11.59	11.69	630608	14.0

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Instrument ID: HP_15B Date(s) Analyzed: 05/30/01 05/30/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1016 L1	0.10	1	8.89	523100	MEAN
		2	9.87	1291880	
		3	10.85	2148320	
		4	11.17	667680	
		5	12.29	730710	
Aroclor 1016 L2	0.20	1	8.89	525925	MEAN
		2	9.87	1232485	
		3	10.85	1940715	
		4	11.17	675370	
		5	12.29	701150	
Aroclor 1016 L3	0.40	1	8.89	486043	MEAN
		2	9.87	1128540	
		3	10.85	1905878	
		4	11.17	651448	
		5	12.29	678145	
Aroclor 1016 L4	0.80	1	8.89	424413	MEAN
		2	9.87	963605	
		3	10.85	1723228	
		4	11.17	574036	
		5	12.29	601629	
Aroclor 1016 L5	1.60	1	8.89	389047	MEAN
		2	9.87	869275	
		3	10.85	1658299	
		4	11.17	550129	
		5	12.29	573356	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1016 MEAN	1	8.89	8.84	8.94	469705	13.0
	2	9.87	9.82	9.92	1097157	16.2
	3	10.85	10.80	10.90	1875288	10.3
	4	11.17	11.12	11.22	623733	9.2
	5	12.29	12.24	12.34	656998	10.2

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Instrument ID: HP_15B Date(s) Analyzed: 05/30/01 05/30/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1260 L1	0.10	1	14.43	815480	MEAN
		2	14.72	1379240	
		3	14.92	1506990	
		4	16.09	888340	
		5	16.32	2052290	
Aroclor 1260 L2	0.20	1	14.43	775265	MEAN
		2	14.72	1315235	
		3	14.92	1515505	
		4	16.09	855895	
		5	16.32	2016615	
Aroclor 1260 L3	0.40	1	14.43	743195	MEAN
		2	14.72	1230088	
		3	14.92	1423533	
		4	16.09	809575	
		5	16.32	1914743	
Aroclor 1260 L4	0.80	1	14.43	651408	MEAN
		2	14.72	1045794	
		3	14.92	1214591	
		4	16.08	698351	
		5	16.32	1684898	
Aroclor 1260 L5	1.60	1	14.43	626698	MEAN
		2	14.72	975288	
		3	14.92	1149826	
		4	16.08	679950	
		5	16.32	1670518	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1260 MEAN	1	14.43	14.38	14.48	722409	11.2
	2	14.72	14.67	14.77	1189129	14.6
	3	14.92	14.87	14.97	1362089	12.5
	4	16.09	16.04	16.14	786422	11.9
	5	16.32	16.27	16.37	1867813	9.7

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Instrument ID: HP_15A Date(s) Analyzed: 05/30/01 05/30/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1221	0.40	1	8.04	332215	SINGLE
		2	8.21	218200	POINT
		3	8.42	825493	
		4			
		5			
Aroclor 1232	0.40	1	8.42	714145	SINGLE
		2	9.28	374243	POINT
		3	9.70	261018	
		4	10.52	442973	
		5			
Aroclor 1248	0.40	1	9.28	357310	SINGLE
		2	10.52	598470	POINT
		3	11.42	317913	
		4	11.75	398980	
		5	13.12	657333	

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Instrument ID: HP_15B Date(s) Analyzed: 05/30/01 05/30/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1221	0.40	1	8.36	285263	SINGLE
		2	8.70	210353	POINT
		3	8.88	629308	
		4			
		5			
Aroclor 1232	0.40	1	8.89	560615	SINGLE
		2	10.54	255253	POINT
		3	11.17	291893	
		4	12.39	171190	
		5			
Aroclor 1248	0.40	1	9.87	450093	SINGLE
		2	11.57	790330	POINT
		3	12.51	299578	
		4	13.24	442375	
		5	13.58	236850	

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 05/30/01 05/30/01

Client Sample No.(PIBLK): PIBLKV Date Analyzed : 06/04/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 2115

Client Sample No.: AR1660L3AN Date Analyzed : 06/04/01

Lab Sample ID : 5-445-6 Time Analyzed : 2138

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.42	8.37	8.47	560700	555754	0.9
Aroclor 1016 #2	9.28	9.23	9.33	775448	732822	5.8
Aroclor 1016 #3	10.58	10.53	10.63	1167555	1141390	2.3
Aroclor 1016 #4	11.21	11.15	11.25	633775	629557	0.7
Aroclor 1016 #5	11.65	11.59	11.69	653338	630608	3.6
Aroclor 1260 #1	14.32	14.26	14.36	1319710	1249180	5.7
Aroclor 1260 #2	14.81	14.75	14.85	1762705	1699830	3.7
Aroclor 1260 #3	15.26	15.20	15.30	1617770	1569470	3.1
Aroclor 1260 #4	15.72	15.67	15.77	869753	762453	14.1
Aroclor 1260 #5	16.17	16.11	16.21	1604383	1608200	0.2

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

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 05/30/01 05/30/01

Client Sample No.(PIBLK): PIBLKV Date Analyzed : 06/04/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 2115

Client Sample No.: AR1660L3AN Date Analyzed : 06/04/01

Lab Sample ID : 5-445-6 Time Analyzed : 2138

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.89	8.84	8.94	428140	469705	8.9
Aroclor 1016 #2	9.87	9.82	9.92	961373	1097160	12.4
Aroclor 1016 #3	10.85	10.80	10.90	1604860	1875290	14.4
Aroclor 1016 #4	11.18	11.12	11.22	511750	623733	18.0*
Aroclor 1016 #5	12.30	12.24	12.34	564250	656998	14.1
Aroclor 1260 #1	14.44	14.38	14.48	629475	722409	12.9
Aroclor 1260 #2	14.73	14.67	14.77	1040888	1189130	12.5
Aroclor 1260 #3	14.93	14.87	14.97	1192733	1362090	12.4
Aroclor 1260 #4	16.09	16.04	16.14	680610	786422	13.4
Aroclor 1260 #5	16.32	16.27	16.37	1577395	1867810	15.5*

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

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 05/30/01 05/30/01

Client Sample No.(PIBLK): PIBLKX Date Analyzed : 06/05/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 0544

Client Sample No.: AR1660L3AR Date Analyzed : 06/05/01

Lab Sample ID : 5-445-6 Time Analyzed : 0607

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.42	8.37	8.47	567553	555754	2.1
Aroclor 1016 #2	9.28	9.23	9.33	788165	732822	7.6
Aroclor 1016 #3	10.58	10.53	10.63	1158583	1141390	1.5
Aroclor 1016 #4	11.20	11.15	11.25	636895	629557	1.2
Aroclor 1016 #5	11.65	11.59	11.69	664950	630608	5.4
Aroclor 1260 #1	14.32	14.26	14.36	1336668	1249180	7.0
Aroclor 1260 #2	14.81	14.75	14.85	1782715	1699830	4.9
Aroclor 1260 #3	15.26	15.20	15.30	1612985	1569470	2.8
Aroclor 1260 #4	15.72	15.67	15.77	855260	762453	12.2
Aroclor 1260 #5	16.16	16.11	16.21	1593423	1608200	0.9

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

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 05/30/01 05/30/01

Client Sample No.(PIBLK): PIBLKX Date Analyzed : 06/05/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 0544

Client Sample No.: AR1660L3AR Date Analyzed : 06/05/01

Lab Sample ID : 5-445-6 Time Analyzed : 0607

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.89	8.84	8.94	431623	469705	8.1
Aroclor 1016 #2	9.87	9.82	9.92	1007188	1097160	8.2
Aroclor 1016 #3	10.85	10.80	10.90	1662325	1875290	11.4
Aroclor 1016 #4	11.17	11.12	11.22	521903	623733	16.3*
Aroclor 1016 #5	12.30	12.24	12.34	569078	656998	13.4
Aroclor 1260 #1	14.44	14.38	14.48	624135	722409	13.6
Aroclor 1260 #2	14.72	14.67	14.77	1041675	1189130	12.4
Aroclor 1260 #3	14.92	14.87	14.97	1180543	1362090	13.3
Aroclor 1260 #4	16.09	16.04	16.14	671030	786422	14.7
Aroclor 1260 #5	16.32	16.27	16.37	1570185	1867810	15.9*

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

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 05/30/01 05/30/01

Client Sample No.(PIBLK): PIBLKY Date Analyzed : 06/05/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1244

Client Sample No.: AR1660L3AT Date Analyzed : 06/05/01

Lab Sample ID : 5-445-6 Time Analyzed : 1307

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.42	8.37	8.47	579575	555754	4.3
Aroclor 1016 #2	9.28	9.23	9.33	799400	732822	9.1
Aroclor 1016 #3	10.58	10.53	10.63	1173623	1141390	2.8
Aroclor 1016 #4	11.21	11.15	11.25	647955	629557	2.9
Aroclor 1016 #5	11.65	11.59	11.69	657558	630608	4.3
Aroclor 1260 #1	14.32	14.26	14.36	1429613	1249180	14.4
Aroclor 1260 #2	14.81	14.75	14.85	1907380	1699830	12.2
Aroclor 1260 #3	15.26	15.20	15.30	1764170	1569470	12.4
Aroclor 1260 #4	15.72	15.67	15.77	951570	762453	24.8*
Aroclor 1260 #5	16.16	16.11	16.21	1750705	1608200	8.9

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

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 05/30/01 05/30/01

Client Sample No.(PIBLK): PIBLKY Date Analyzed : 06/05/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1244

Client Sample No.: AR1660L3AT Date Analyzed : 06/05/01

Lab Sample ID : 5-445-6 Time Analyzed : 1307

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.89	8.84	8.94	485928	469705	3.5
Aroclor 1016 #2	9.87	9.82	9.92	1125068	1097160	2.5
Aroclor 1016 #3	10.85	10.80	10.90	1889788	1875290	0.8
Aroclor 1016 #4	11.18	11.12	11.22	586518	623733	6.0
Aroclor 1016 #5	12.30	12.24	12.34	636033	656998	3.2
Aroclor 1260 #1	14.44	14.38	14.48	733165	722409	1.5
Aroclor 1260 #2	14.72	14.67	14.77	1223548	1189130	2.9
Aroclor 1260 #3	14.92	14.87	14.97	1393698	1362090	2.3
Aroclor 1260 #4	16.09	16.04	16.14	818925	786422	4.1
Aroclor 1260 #5	16.32	16.27	16.37	1886045	1867810	1.0

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

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MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 05/30/01 05/30/01

Client Sample No.(PIBLK): PIBLKZ Date Analyzed : 06/05/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1722

Client Sample No.: AR1660L3AV Date Analyzed : 06/05/01

Lab Sample ID : 5-445-6 Time Analyzed : 1745

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.42	8.37	8.47	587408	555754	5.7
Aroclor 1016 #2	9.28	9.23	9.33	793920	732822	8.3
Aroclor 1016 #3	10.58	10.53	10.63	1131508	1141390	0.9
Aroclor 1016 #4	11.21	11.15	11.25	630055	629557	0.1
Aroclor 1016 #5	11.65	11.59	11.69	650238	630608	3.1
Aroclor 1260 #1	14.33	14.26	14.36	1421920	1249180	13.8
Aroclor 1260 #2	14.82	14.75	14.85	1864393	1699830	9.7
Aroclor 1260 #3	15.26	15.20	15.30	1716300	1569470	9.4
Aroclor 1260 #4	15.73	15.67	15.77	940250	762453	23.3*
Aroclor 1260 #5	16.17	16.11	16.21	1670848	1608200	3.9

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

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 05/30/01 05/30/01

Client Sample No.(PIBLK): PIBLKZ Date Analyzed : 06/05/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1722

Client Sample No.: AR1660L3AV Date Analyzed : 06/05/01

Lab Sample ID : 5-445-6 Time Analyzed : 1745

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.89	8.84	8.94	490365	469705	4.4
Aroclor 1016 #2	9.88	9.82	9.92	1130383	1097160	3.0
Aroclor 1016 #3	10.86	10.80	10.90	1877503	1875290	0.1
Aroclor 1016 #4	11.18	11.12	11.22	565505	623733	9.3
Aroclor 1016 #5	12.30	12.24	12.34	642623	656998	2.2
Aroclor 1260 #1	14.44	14.38	14.48	738893	722409	2.3
Aroclor 1260 #2	14.73	14.67	14.77	1230270	1189130	3.5
Aroclor 1260 #3	14.93	14.87	14.97	1383100	1362090	1.5
Aroclor 1260 #4	16.09	16.04	16.14	818705	786422	4.1
Aroclor 1260 #5	16.32	16.27	16.37	1836618	1867810	1.7

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

8D
AROCLOR ANALYTICAL SEQUENCE

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29294 SAS No.: SDG No.: E00A9

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

Instrument ID: HP_15A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	RESC15A	5-441-6	05/30/01	1109	7.59	18.28
02	AR1221L3A	5-420-6	05/30/01	1132	7.59	18.28
03	AR1232L3A	5-422-6	05/30/01	1155	7.59	18.28
04	AR1242L1A	5-11-7	05/30/01	1218	7.59	18.28
05	AR1242L2A	5-10-7	05/30/01	1241	7.59	18.28
06	AR1242L3A	5-9-7	05/30/01	1304	7.59	18.28
07	AR1242L4A	5-8-7	05/30/01	1327	7.59	18.28
08	AR1242L5A	5-7-7	05/30/01	1351	7.59	18.28
09	AR1248L3A	5-424-6	05/30/01	1414	7.59	18.28
10	AR1254L1A	5-6-7	05/30/01	1437	7.59	18.28
11	AR1254L2A	5-5-7	05/30/01	1500	7.59	18.28
12	AR1254L3A	5-4-7	05/30/01	1523	7.59	18.28
13	AR1254L4A	5-3-7	05/30/01	1546	7.59	18.28
14	AR1254L5A	5-2-7	05/30/01	1609	7.59	18.28
15	AR1660L1A	5-447-6	05/30/01	1632	7.59	18.28
16	AR1660L2A	5-446-6	05/30/01	1656	7.59	18.28
17	AR1660L3A	5-445-6	05/30/01	1719	7.59	18.28
18	AR1660L4A	5-444-6	05/30/01	1742	7.59	18.28
19	AR1660L5A	5-443-6	05/30/01	1805	7.59	18.28
20	PIBLKV	5-414-6	06/04/01	2115	7.60	18.29
21	AR1660L3AN	5-445-6	06/04/01	2138	7.60	18.29
22	PBLKSB	BL0527SB	06/05/01	0349	7.59	18.28
23	LC0527SB	LC0527SB	06/05/01	0435	7.59	18.28
24	LD0527SB	LD0527SB	06/05/01	0458	7.59	18.28
25	PIBLKX	5-414-6	06/05/01	0544	7.59	18.29
26	AR1660L3AR	5-445-6	06/05/01	0607	7.59	18.28
27	E00A9	46634.18	06/05/01	0717	7.59	18.29
28	E00B0	46634.19	06/05/01	0740	7.59	18.28
29	E00B1	46634.20	06/05/01	0803	7.59	18.28
30	E00B2	46634.21	06/05/01	0826	7.59	18.28
31	E00B3	46634.22	06/05/01	0849	7.59	18.28
32	PIBLKY	5-414-6	06/05/01	1244	7.59	18.29
33	AR1660L3AT	5-445-6	06/05/01	1307	7.59	18.29
34	E00B5	46634.23	06/05/01	1353	7.59	18.28
35	E00B6	46634.24	06/05/01	1417	7.59	18.29

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.: 29294 SAS No.: SDG No.: E00A9

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

Instrument ID: HP_15A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	E00B6MS	46634.25MS	06/05/01	1440	7.59	18.29
02	E00B6MSD	46634.26MSD	06/05/01	1503	7.59	18.29
03	E00B7	46634.27	06/05/01	1526	7.59	18.29
04	E00B8	46634.28	06/05/01	1549	7.60	18.29
05	PIBLKZ	5-414-6	06/05/01	1722	7.60	18.29
06	AR1660L3AV	5-445-6	06/05/01	1745	7.60	18.29
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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.: 29294 SAS No.: SDG No.: E00A9

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

Instrument ID: HP_15B

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	RESC15A	5-441-6	05/30/01	1109	7.35	18.68
02	AR1221L3A	5-420-6	05/30/01	1132	7.35	18.68
03	AR1232L3A	5-422-6	05/30/01	1155	7.35	18.68
04	AR1242L1A	5-11-7	05/30/01	1218	7.35	18.68
05	AR1242L2A	5-10-7	05/30/01	1241	7.35	18.68
06	AR1242L3A	5-9-7	05/30/01	1304	7.35	18.68
07	AR1242L4A	5-8-7	05/30/01	1327	7.35	18.68
08	AR1242L5A	5-7-7	05/30/01	1351	7.35	18.68
09	AR1248L3A	5-424-6	05/30/01	1414	7.35	18.68
10	AR1254L1A	5-6-7	05/30/01	1437	7.35	18.68
11	AR1254L2A	5-5-7	05/30/01	1500	7.35	18.68
12	AR1254L3A	5-4-7	05/30/01	1523	7.35	18.68
13	AR1254L4A	5-3-7	05/30/01	1546	7.35	18.68
14	AR1254L5A	5-2-7	05/30/01	1609	7.35	18.68
15	AR1660L1A	5-447-6	05/30/01	1632	7.35	18.68
16	AR1660L2A	5-446-6	05/30/01	1656	7.35	18.68
17	AR1660L3A	5-445-6	05/30/01	1719	7.35	18.68
18	AR1660L4A	5-444-6	05/30/01	1742	7.35	18.68
19	AR1660L5A	5-443-6	05/30/01	1805	7.35	18.68
20	PIBLKV	5-414-6	06/04/01	2115	7.36	18.69
21	AR1660L3AN	5-445-6	06/04/01	2138	7.35	18.69
22	PBLKSB	BL0527SB	06/05/01	0349	7.35	18.68
23	LC0527SB	LC0527SB	06/05/01	0435	7.35	18.68
24	LD0527SB	LD0527SB	06/05/01	0458	7.35	18.68
25	PIBLKX	5-414-6	06/05/01	0544	7.35	18.68
26	AR1660L3AR	5-445-6	06/05/01	0607	7.35	18.68
27	E00A9	46634.18	06/05/01	0717	7.35	18.68
28	E00B0	46634.19	06/05/01	0740	7.35	18.68
29	E00B1	46634.20	06/05/01	0803	7.35	18.68
30	E00B2	46634.21	06/05/01	0826	7.35	18.68
31	E00B3	46634.22	06/05/01	0849	7.35	18.68
32	PIBLKY	5-414-6	06/05/01	1244	7.35	18.68
33	AR1660L3AT	5-445-6	06/05/01	1307	7.35	18.68
34	E00B5	46634.23	06/05/01	1353	7.35	18.68
35	E00B6	46634.24	06/05/01	1417	7.35	18.68

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.: 29294 SAS No.: SDG No.: E00A9

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

Instrument ID: HP_15B

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	E00B6MS	46634.25MS	06/05/01	1440	7.35	18.68
02	E00B6MSD	46634.26MSD	06/05/01	1503	7.35	18.68
03	E00B7	46634.27	06/05/01	1526	7.35	18.68
04	E00B8	46634.28	06/05/01	1549	7.36	18.68
05	PIBLKZ	5-414-6	06/05/01	1722	7.36	18.69
06	AR1660L3AV	5-445-6	06/05/01	1745	7.36	18.69
07						
08						
09						
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35						

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

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

LC0527SB

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Lab Sample ID: LC0527SB Date(s) Analyzed: 06/05/01 06/05/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	12.63	12.58	12.68	108		
Aroclor-1254	2	13.32	13.26	13.36	122		
	3	13.79	13.73	13.83	108		
COLUMN 1	4	14.32	14.26	14.36	116		
	5	15.00	14.94	15.04	104	112	
	1	12.30	12.24	12.34	83.5		
	2	13.02	12.96	13.06	78.7		
	3	13.93	13.87	13.97	71.8		
COLUMN 2	4	14.92	14.87	14.97	82.8		
	5	15.39	15.33	15.43	75.4	78.4	35.3
	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

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

LD0527SB

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Lab Sample ID: LD0527SB Date(s) Analyzed: 06/05/01 06/05/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	12.63	12.58	12.68	93.6		
Aroclor-1254	2	13.32	13.26	13.36	108		
	3	13.79	13.73	13.83	93.2		
COLUMN 1	4	14.32	14.26	14.36	101		
	5	15.00	14.94	15.04	91.0	97.4	
	1	12.30	12.24	12.34	65.9		
	2	13.02	12.96	13.06	68.0		
	3	13.93	13.87	13.97	61.3		
COLUMN 2	4	14.92	14.87	14.97	72.3		
	5	15.39	15.33	15.43	64.0	66.3	38.0
	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.

E00B6MS

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Lab Sample ID: 46634.25MS Date(s) Analyzed: 06/05/01 06/05/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	12.63	12.58	12.68	1160		
Aroclor-1254	2	13.32	13.26	13.36	922		
	3	13.79	13.73	13.83	1120		
COLUMN 1	4	14.32	14.26	14.36	1400		
	5	15.00	14.94	15.04	1180	1160	
	1	12.30	12.24	12.34	1010		
	2	13.02	12.96	13.06	710		
	3	13.93	13.87	13.97	738		
COLUMN 2	4	14.92	14.87	14.97	950		
	5	15.39	15.33	15.43	871	856	30.2
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

page 1 of 1

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00B6MSD

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Lab Sample ID: 46634.26MSD Date(s) Analyzed: 06/05/01 06/05/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	12.63	12.58	12.68	886		
Aroclor-1254	2	13.32	13.26	13.36	707		
	3	13.79	13.73	13.83	787		
COLUMN 1	4	14.32	14.26	14.36	1040		
	5	15.00	14.94	15.04	967	877	
	1	12.30	12.24	12.34	706		
	2	13.02	12.96	13.06	546		
	3	13.93	13.87	13.97	534		
COLUMN 2	4	14.92	14.87	14.97	709		
	5	15.39	15.33	15.43	665	632	32.5
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

page 1 of 1

HYDROGEN USED AS CARRIER GAS FOR SAMPLE ANALYSES

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053006.D\ECD1A.CH Vial: 6
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053006.D\ECD2B.CH
Acq On : 30 May 2001 11:09 Operator: DDC
Sample : RESC15A Inst : HP_15
Misc : 5-441-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:59 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Thu May 31 08:44:39 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	389439	341772	18.8	17.1
22)	S DCB	18.28	18.68	375589	357461	18.7	17.7

Target Compounds:

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E3050
Signature Imelda M. William
Date 06/05/01

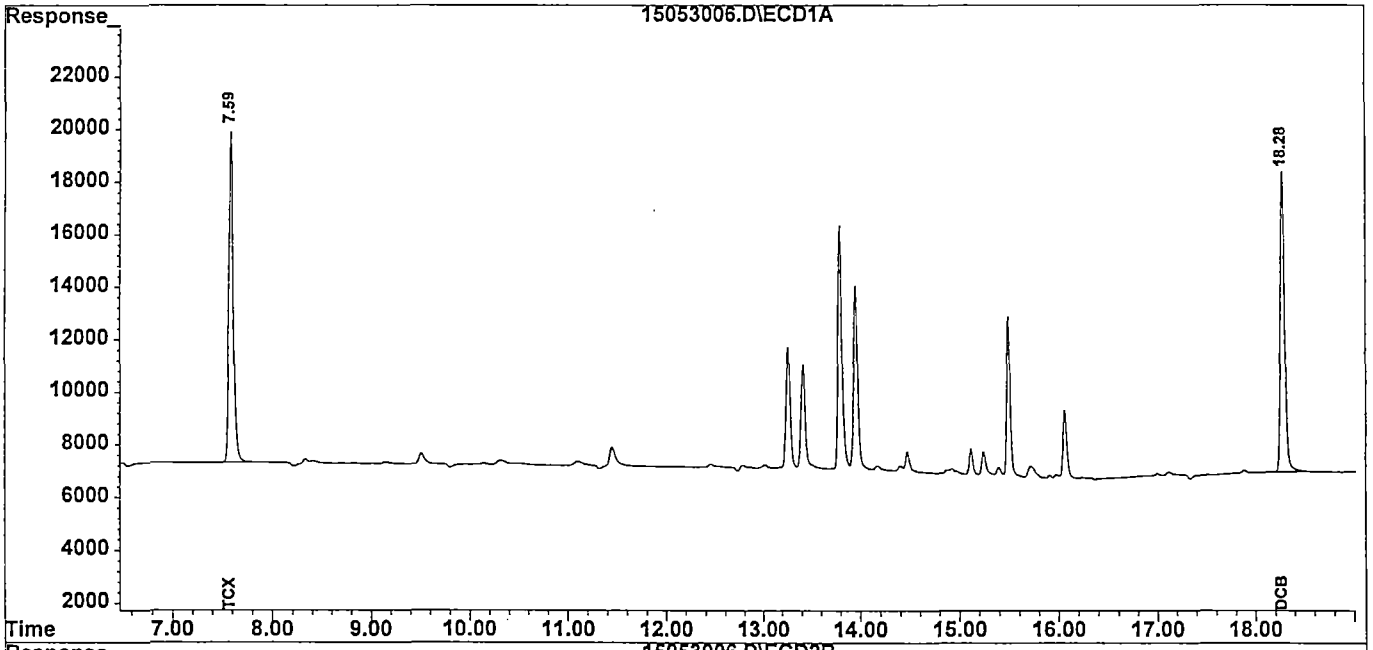
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

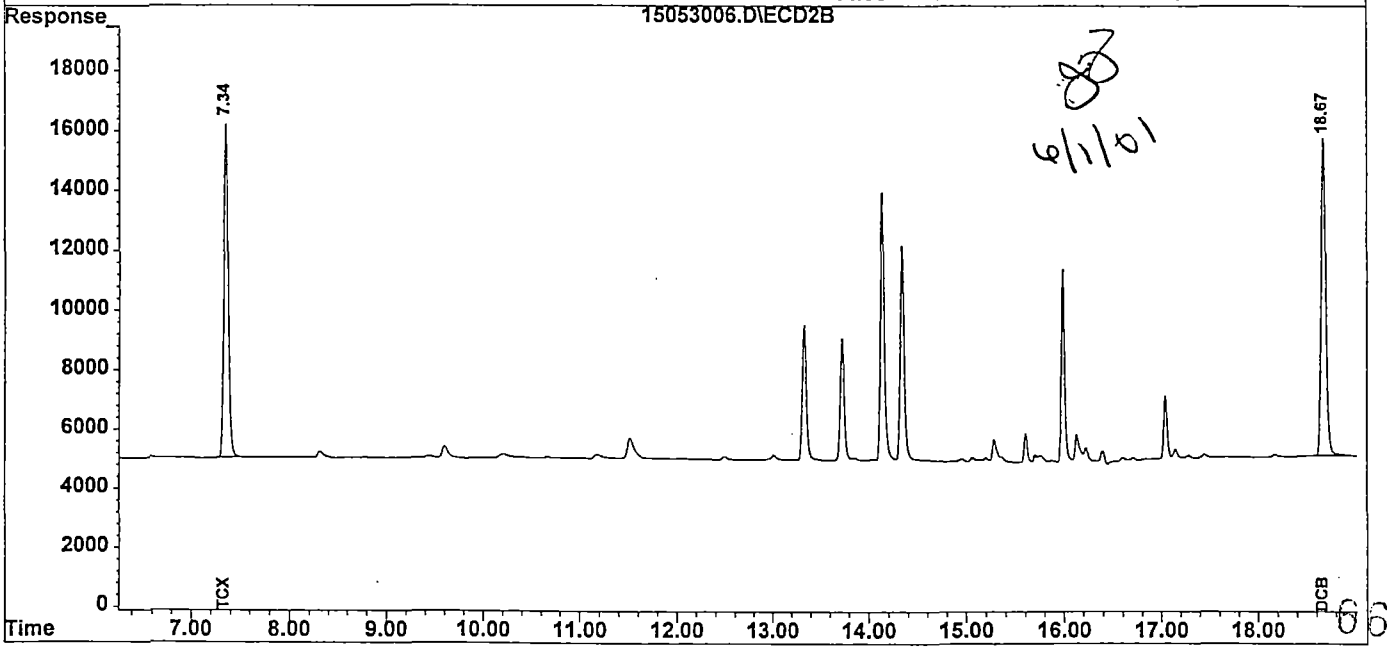
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053006.D\ECD1A.CH Vial: 6
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053006.D\ECD2B.CH
Acq On : 30 May 2001 11:09 Operator: DDC
Sample : RESC15A Inst : HP_15
Misc : 5-441-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:59 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Multiple Level Calibration

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053007.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053007.D\ECD2B.CH
Acq On : 30 May 2001 11:32 Operator: DDC
Sample : AR1221L3A Inst : HP_15
Misc : 5-420-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:59 2001 Quant Results File: XPCBE30.RES
Multi Time: May 31 8:01 2001 Quant Results File: xspcbe30.RES

Pesticide Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001

Multi-Component Method : f:\hpchem\hp\15\data\05_30_01\xspcbe30.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	432370	379900	20.9	19.0
22)	S DCB	18.28	18.68	418713	406731	20.9	20.1
	Target Compounds:						
	Multi-Component Compounds:						
2)	L2 Aroclor-1221	8.04	8.36	132886	114105	441.8	396.1
3)	L2 Aroclor-1221 {2}	8.21	8.70	87280	84141	412.0	401.7
4)	L2 Aroclor-1221 {3}	8.42	8.88	330197	251723	443.4	410.1
	Sum Aroclor-1221			550362	449969	1297.2	1208.0
	Average Aroclor-1221					432.387	402.655

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E3050
Signature Arnelda M. William
Date 06/05/01

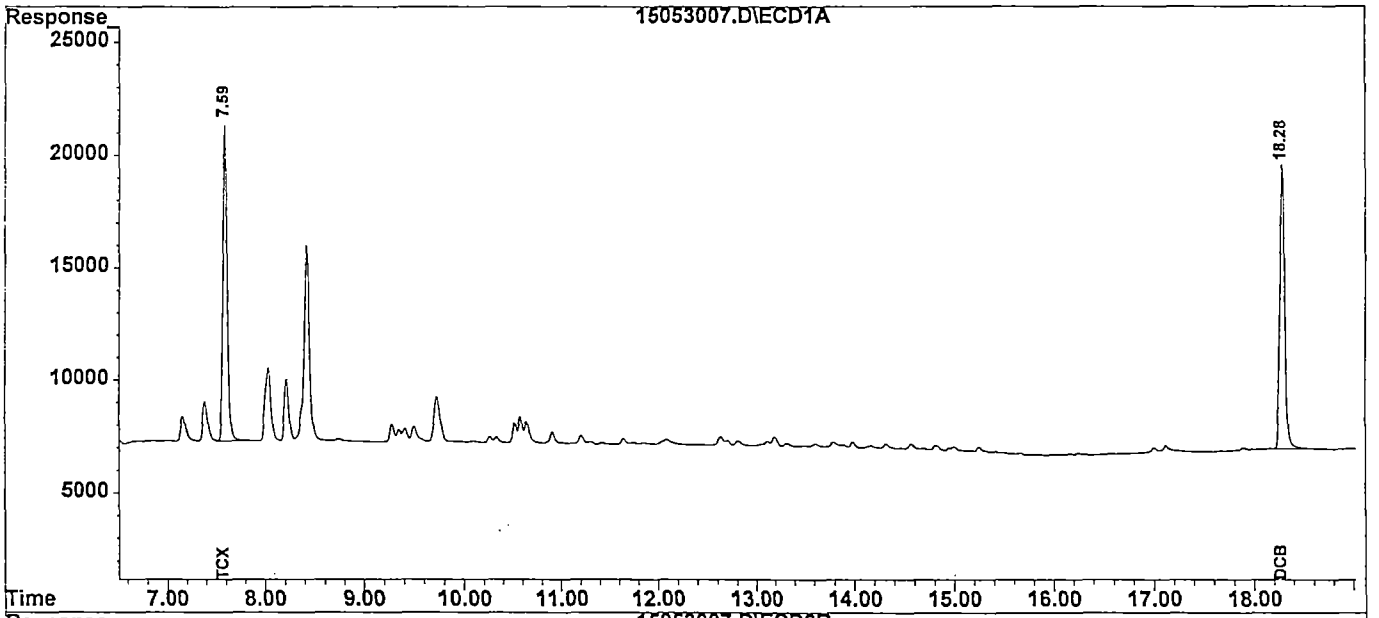
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

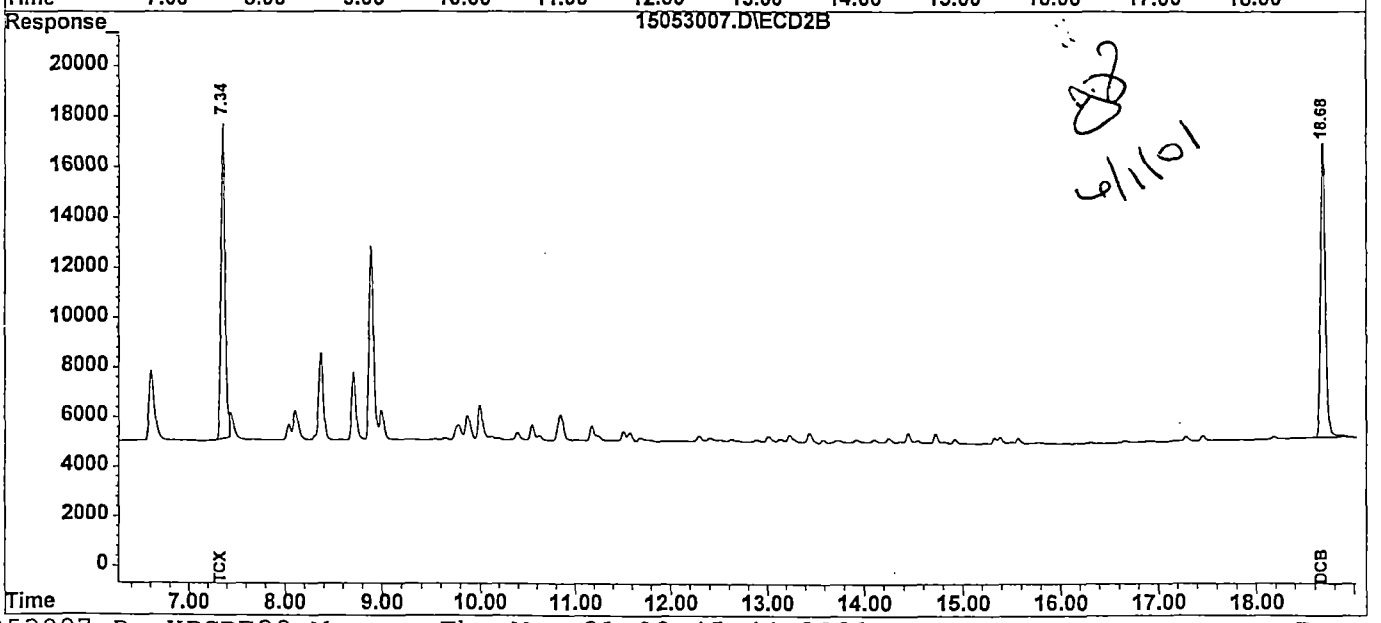
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053007.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053007.D\ECD2B.CH
Acq On : 30 May 2001 11:32 Operator: DDC
Sample : AR1221L3A Inst : HP_15
Misc : 5-420-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:59 2001 Quant Results File: XPCBE30.RES
Quant Time: May 31 8:01 2001 Quant Results File: xspcbe30.RES

Pesticide Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001

Multi-Component Method : f:\hpchem\hp\15\data\05_30_01\xspcbe30.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B





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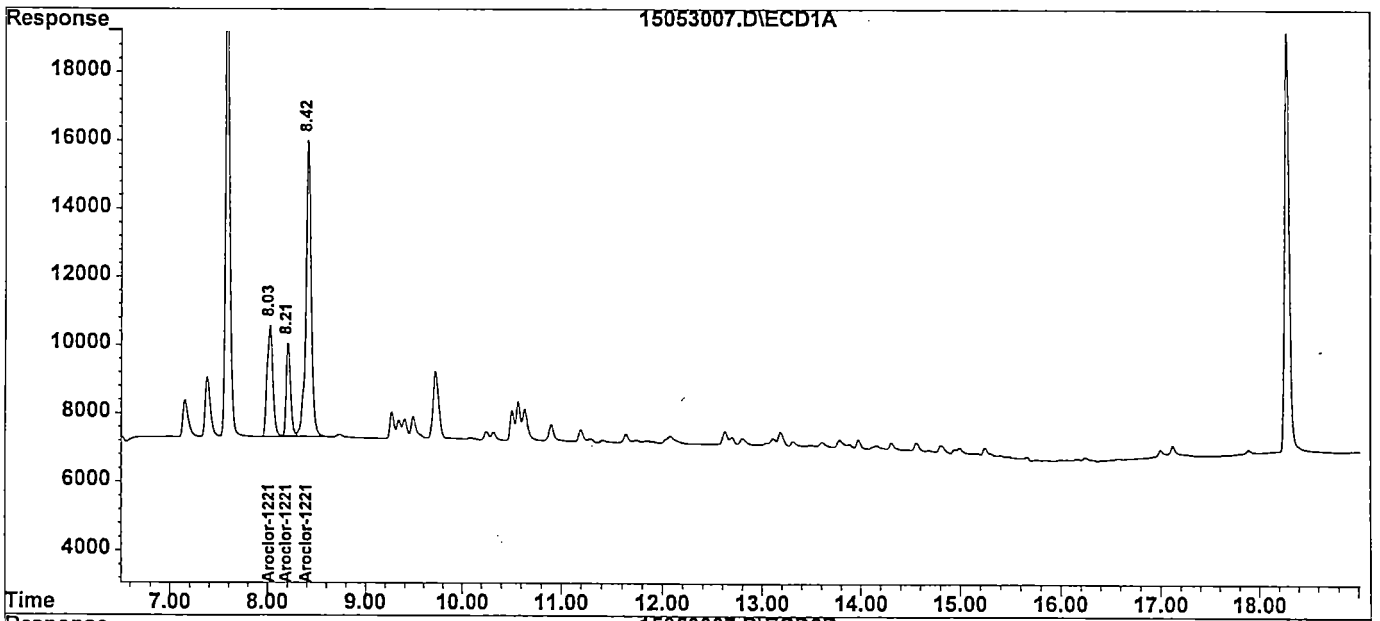
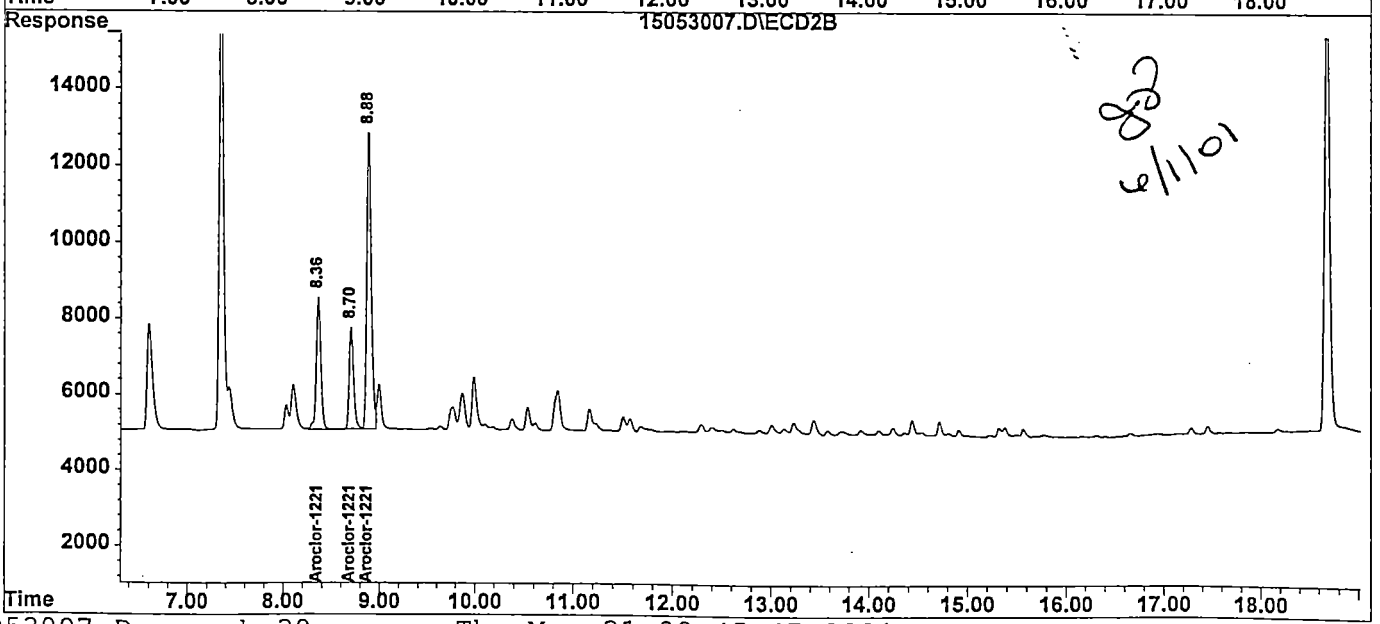
Chromatographic Report

```
Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053007.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053007.D\ECD2B.CH
Acq On    : 30 May 2001  11:32                        Operator: DDC
Sample    : AR1221L3A                                 Inst    : HP_15
Misc      : 5-420-6                                   Dilution: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e
Quant Time: May 31  8:01 2001  Quant Results File: xspcbe30.RES
Quant Time: May 31  8:01 2001  Quant Results File: xspcbe30.RES

Pesticide Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-ICAL Path  : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update      : Sun May 27 09:05:10 2001

Multi-Component Method : f:\hpchem\hp\15\data\05_30_01\xspcbe30.m
Title                  : PCB/TOXAPHENE
Last Update            : Fri May 18 09:02:00 2001
Volume Inj.     : 0.5uL
Signal #1 Phase : DB-MS              Signal #2 Phase: DB-XLB
Signal #1 Info  : .32                Signal #2 Info : .32
Signal #1 Inst  : HP_15A             Signal #2 Inst : HP_15B
```





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053008.D\ECD1A.CH Vial: 8
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053008.D\ECD2B.CH
Acq On : 30 May 2001 11:55 Operator: DDC
Sample : AR1232L3A Inst : HP_15
Misc : 5-422-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 8:00 2001 Quant Results File: XPCBE30.RES
Multi Time: May 31 8:01 2001 Quant Results File: xspcbe30.RES

Pesticide Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001

Multi-Component Method : f:\hpchem\hp\15\data\05_30_01\xspcbe30.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	415390	385252	20.1	19.3
22)	S DCB	18.28	18.68	397282	383375	19.8	18.9
	Target Compounds:						
	Multi-Component Compounds:						
5)	L3 Aroclor-1232	8.42	8.89	285658	224246	453.8	425.9
6)	L3 Aroclor-1232 {2}	9.28	10.54	149697	102101	451.6	406.4
7)	L3 Aroclor-1232 {3}	9.70	11.17	104407	116757	450.7	405.2
8)	L3 Aroclor-1232 {4}	10.52	12.39	177189	68476	485.4	369.8
	Sum Aroclor-1232			716951	511580	1841.4	1607.4
	Average Aroclor-1232					460.358	401.841

COPY

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E3050
Signature Imelda M. William
Date 06/05/01

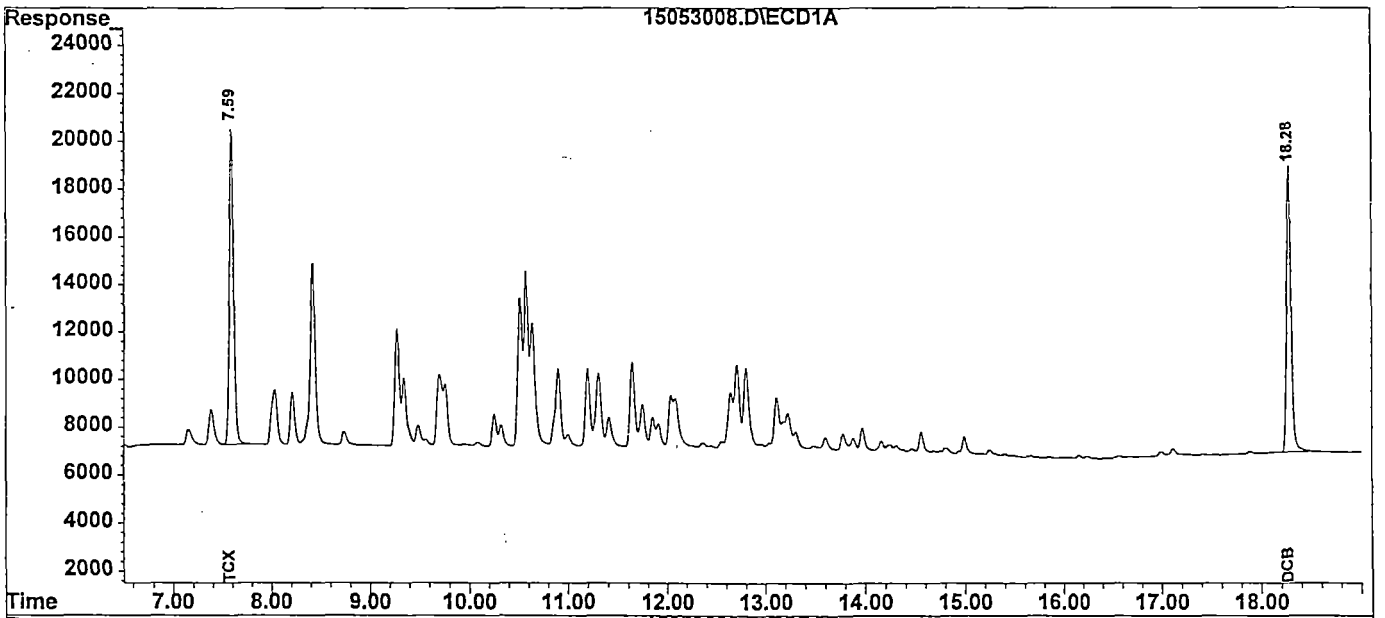
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

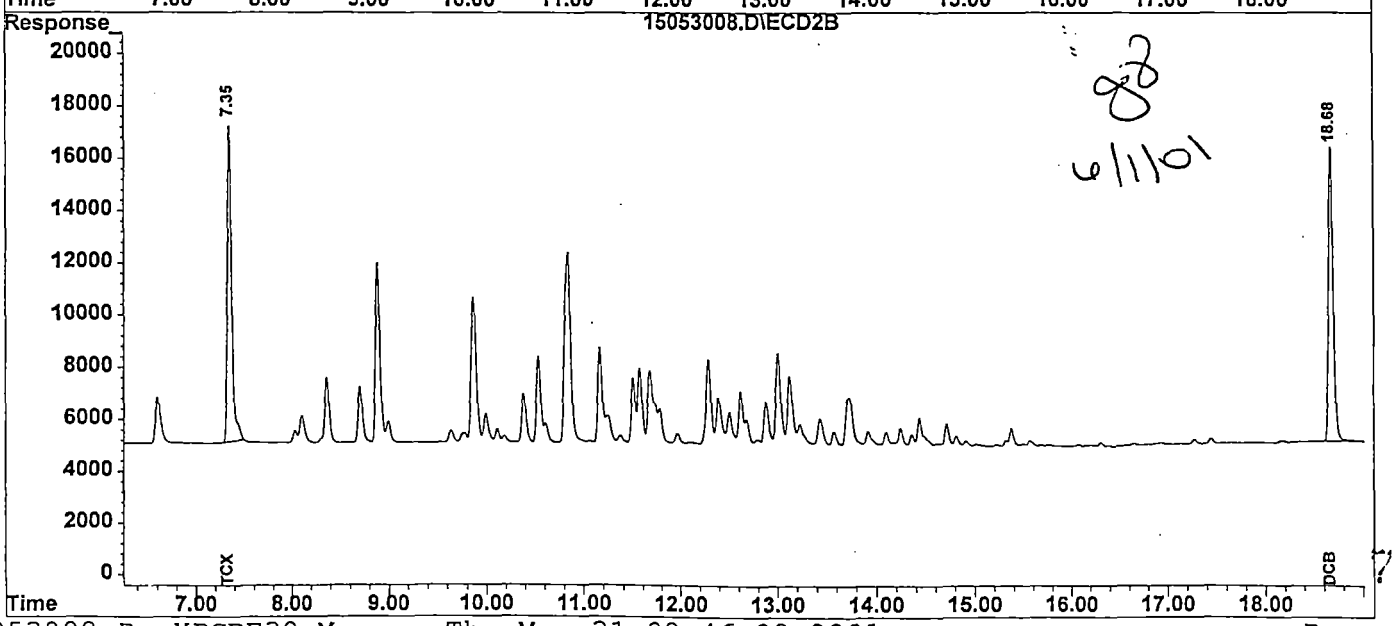
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053008.D\ECD1A.CH Vial: 8
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053008.D\ECD2B.CH
Acq On : 30 May 2001 11:55 Operator: DDC
Sample : AR1232L3A Inst : HP_15
Misc : 5-422-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 8:00 2001 Quant Results File: XPCBE30.RES
Quant Time: May 31 8:01 2001 Quant Results File: xspcbe30.RES

Pesticide Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001

Multi-Component Method : f:\hpchem\hp\15\data\05_30_01\xspcbe30.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B





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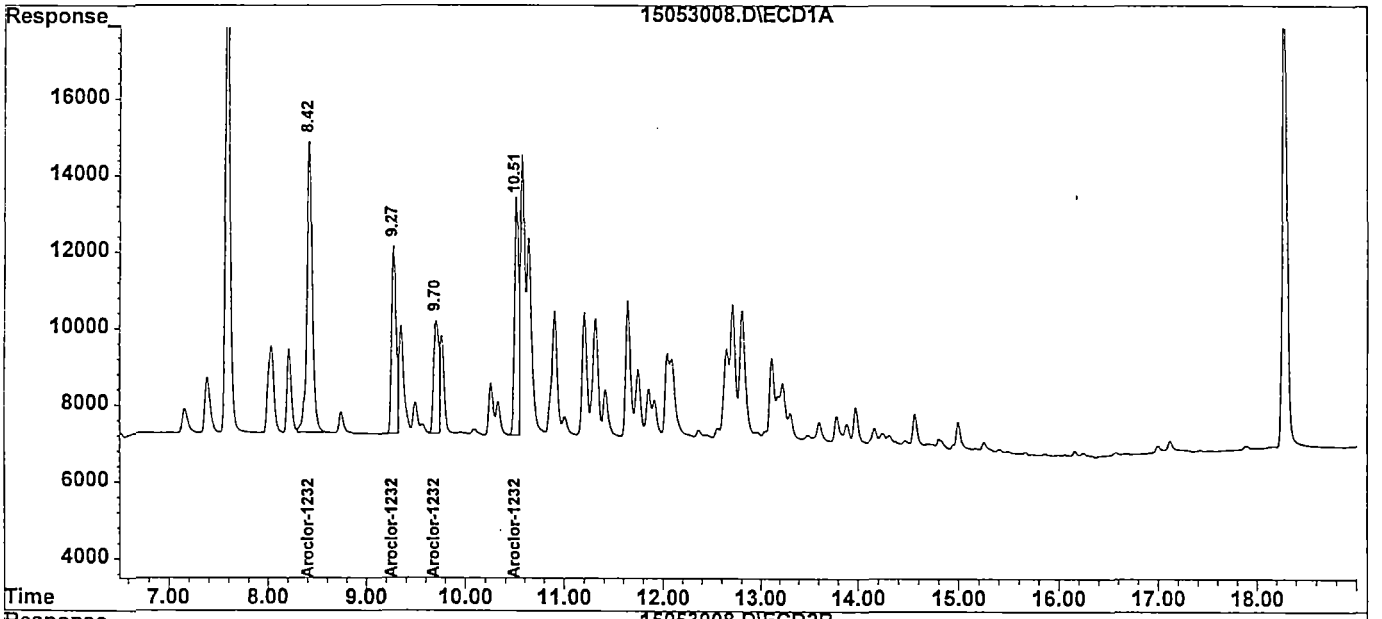
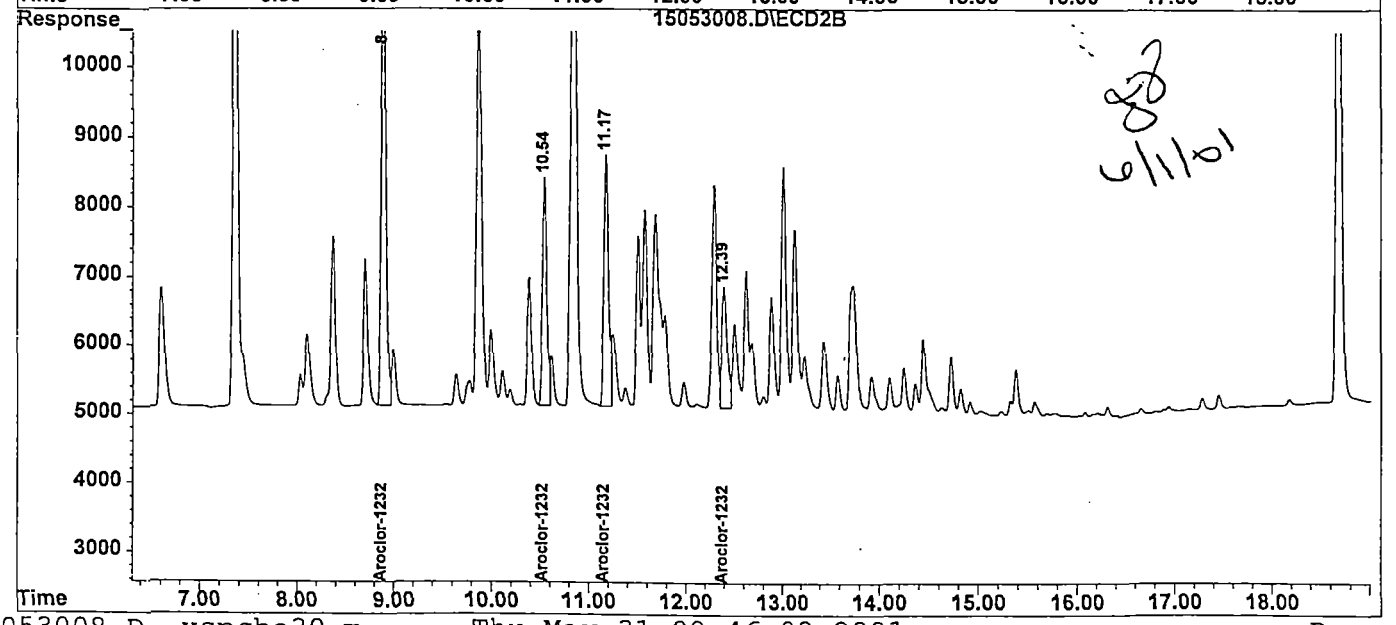
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053008.D\ECD1A.CH Vial: 8
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053008.D\ECD2B.CH
Acq On : 30 May 2001 11:55 Operator: DDC
Sample : AR1232L3A Inst : HP_15
Misc : 5-422-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 8:01 2001 Quant Results File: xspcbe30.RES
Quant Time: May 31 8:01 2001 Quant Results File: xspcbe30.RES

Pesticide Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001

Multi-Component Method : f:\hpchem\hp\15\data\05_30_01\xspcbe30.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : DB-MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 Signal #2 Info : .32
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B





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Response Factor Report HP_15

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Initial Calibration

Calibration Files
L1 =15053009.D L2 =15053010.D L3 =15053011.D
L4 =15053012.D L5 =15053013.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
7) Aroclor-1242	601.1	546.1	503.0	432.9	384.0	493.5	17.58
8) Aroclor-1242 {2}	435.9	393.0	359.8	308.0	275.7	354.5	18.12
9) Aroclor-1242 {3}	947.5	895.8	830.2	696.5	631.1	800.2	16.66
10) Aroclor-1242 {4}	622.1	589.1	554.2	470.0	429.5	533.0	15.19
11) Aroclor-1242 {5}	751.4	717.5	663.2	569.5	524.8	645.3	14.92

Signal #2 Calibration Files
L1 =15053009.D L2 =15053010.D L3 =15053011.D
L4 =15053012.D L5 =15053013.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
30) Aroclor-1242 #2	273.2	266.6	259.9	227.0	216.1	248.5	10.22
31) Aroclor-1242 {2} #2	557.3	541.3	516.1	460.0	439.3	502.8	10.19
32) Aroclor-1242 {3} #2	347.4	336.6	331.3	295.4	286.1	319.4	8.44
33) Aroclor-1242 {4} #2	359.6	334.8	328.8	292.0	283.2	319.7	9.89
34) Aroclor-1242 {5} #2	571.1	505.2	496.2	438.1	428.7	487.9	11.81

*) = Out of Range

XPCBE30.M Thu May 31 07:52:04 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053009.D\ECD1A.CH Vial: 9
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053009.D\ECD2B.CH
Acq On : 30 May 2001 12:18 Operator: DDC
Sample : AR1242L1A Inst : HP_15
Misc : 5-11-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:51 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	120290	103811	5.767	4.905
22)	S DCB	18.28	18.68	126050	121129	6.644	6.138
	Target Compounds:						
7)	L4 Aroclor-1242	8.42	10.39	60113	27321	134.1	118.2
8)	L4 Aroclor-1242 {2}	9.70	11.17	43588	55732	135.1	122.4
9)	L4 Aroclor-1242 {3}	10.64	12.39	94746	34743	140.0	116.2
1[illegible]	L4 Aroclor-1242 {4}	11.64	12.62	62215	35961	142.6	132.4
[illegible]	L4 Aroclor-1242 {5}	12.80	13.13	75144	57113	150.7	135.7
	Sum Aroclor-1242			335806	210870	702.5	624.9
	Average Aroclor-1242					140.508	124.979

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E3050
Signature Arnelda M. Williams
Date 06/05/01

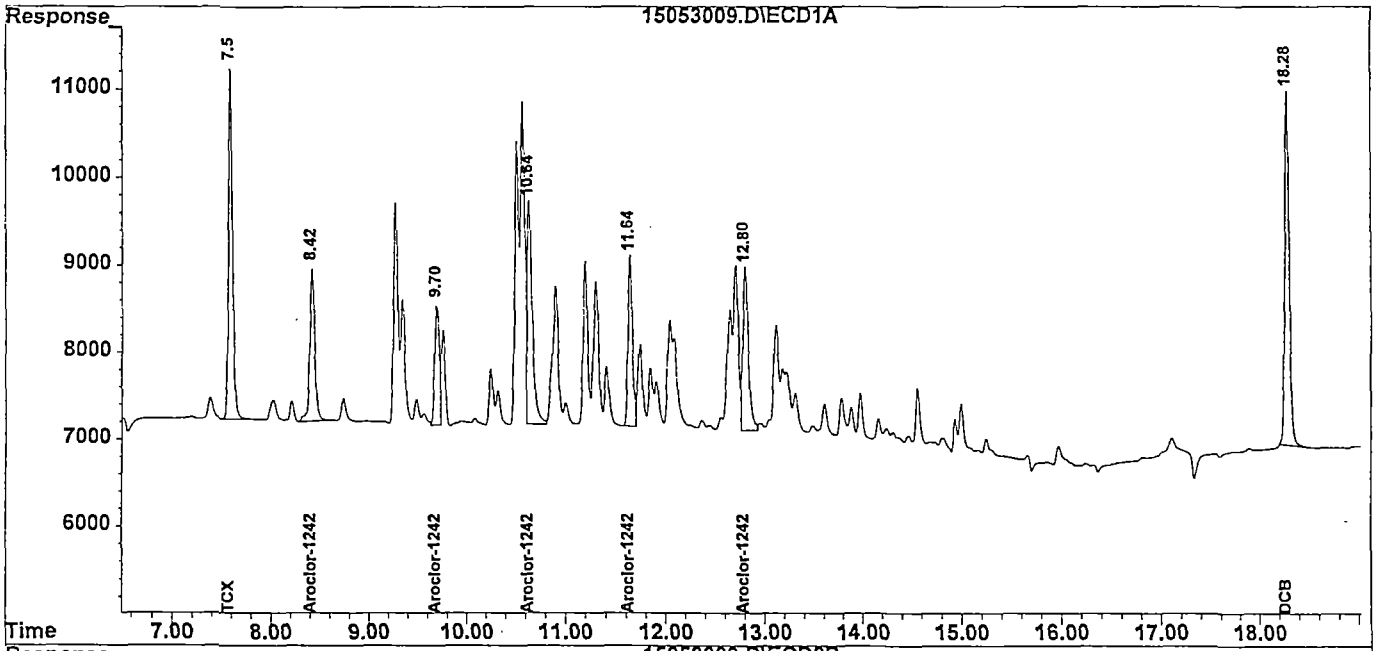
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

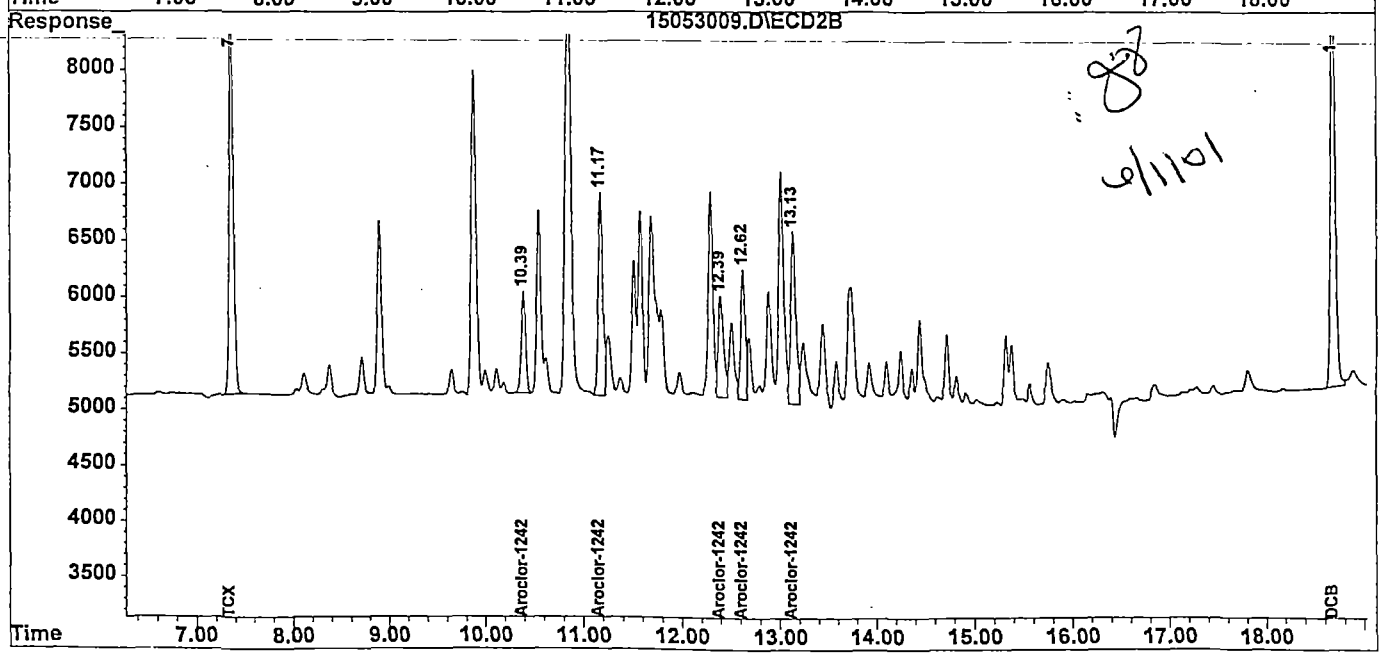
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053009.D\ECD1A.CH Vial: 9
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053009.D\ECD2B.CH
Acq On : 30 May 2001 12:18 Operator: DDC
Sample : AR1242L1A Inst : HP_15
Misc : 5-11-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:51 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Multiple Level Calibration

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053010.D\ECD1A.CH Vial: 10
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053010.D\ECD2B.CH
Acq On : 30 May 2001 12:41 Operator: DDC
Sample : AR1242L2A Inst : HP_15
Misc : 5-10-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:51 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	232297	205865	10.8	9.762
22)	S DCB	18.28	18.68	225781	218400	11.3	10.7
	Target Compounds:						
7)	L4 Aroclor-1242	8.42	10.39	109226	53319	238.5	225.9
8)	L4 Aroclor-1242 {2}	9.70	11.17	78597	108265	238.6	231.9
9)	L4 Aroclor-1242 {3}	10.64	12.39	179162	67329	251.2	223.0
10)	L4 Aroclor-1242 {4}	11.64	12.62	117811	66956	253.6	234.7
	L4 Aroclor-1242 {5}	12.80	13.13	143502	101047	262.7	229.3
	Sum Aroclor-1242			628297	396915	1244.5	1144.7
	Average Aroclor-1242					248.891	228.935

COPY

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E3050
Signature Amelda M. Villian
Date 06/05/01

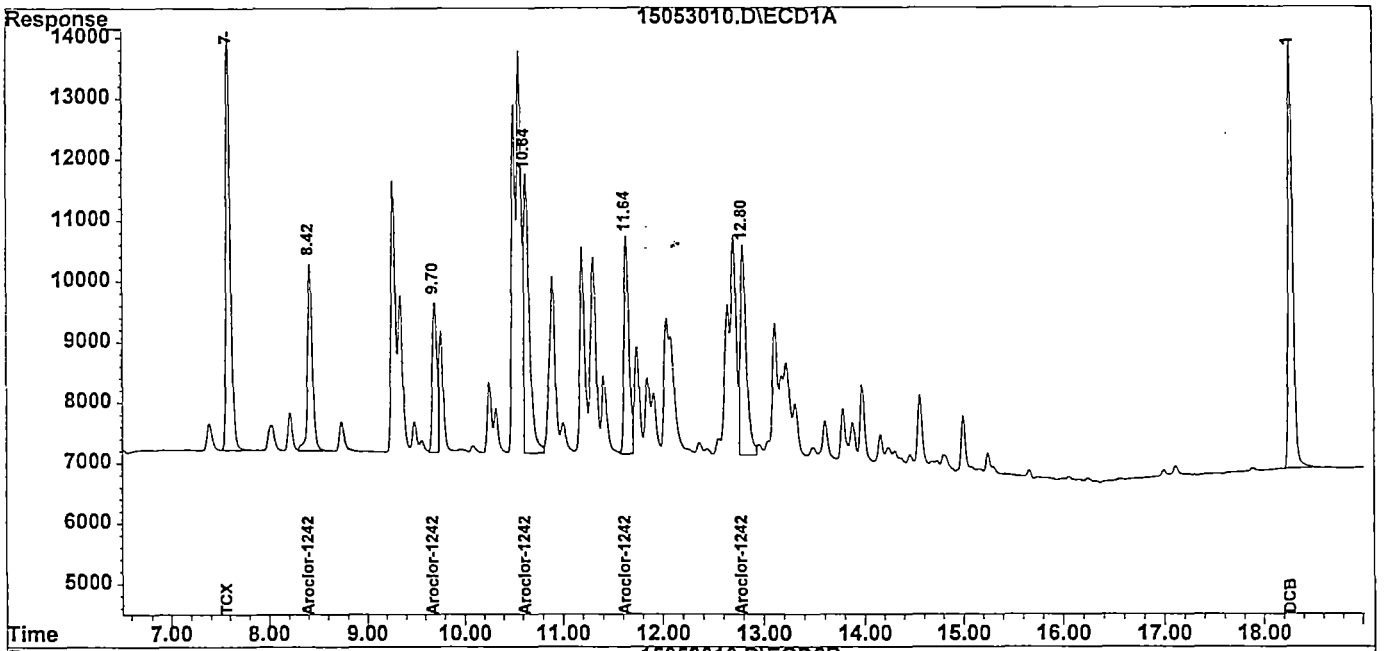
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

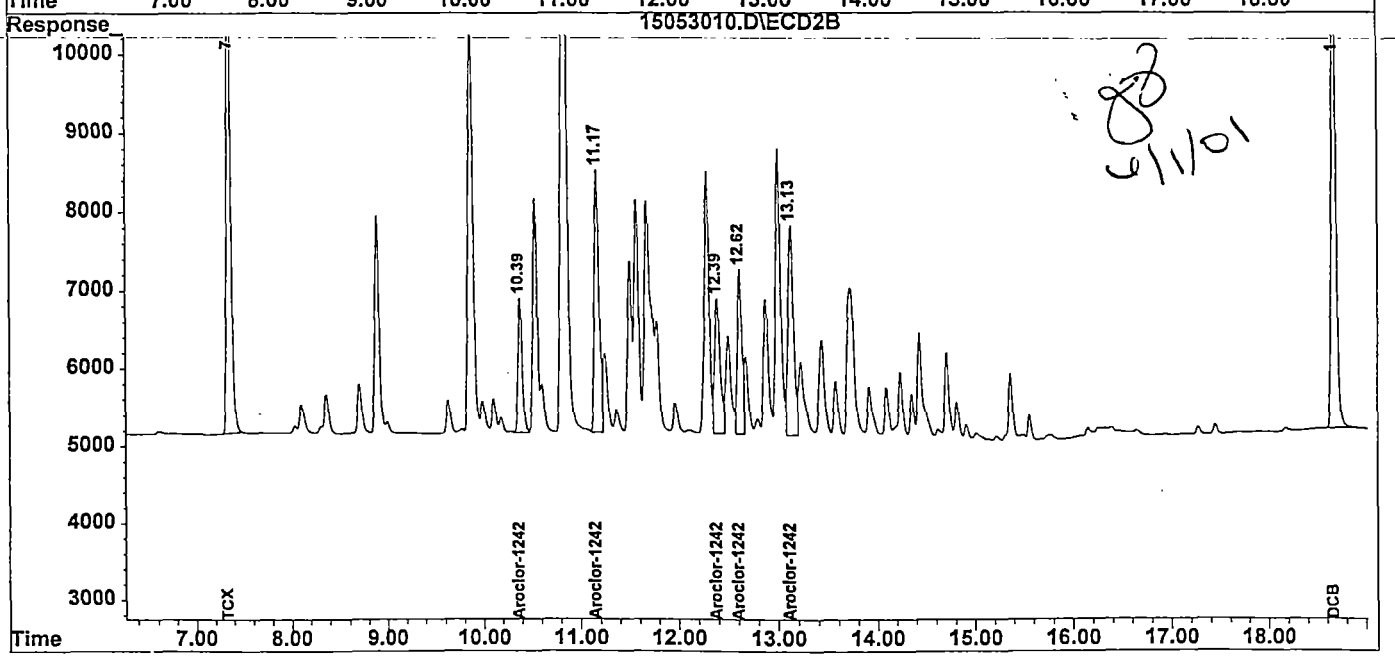
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053010.D\ECD1A.CH Vial: 10
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053010.D\ECD2B.CH
Acq On : 30 May 2001 12:41 Operator: DDC
Sample : AR1242L2A Inst : HP_15
Misc : 5-10-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:51 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Multiple Level Calibration

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053011.D\ECD1A.CH Vial: 11
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053011.D\ECD2B.CH
Acq On : 30 May 2001 13:04 Operator: DDC
Sample : AR1242L3A Inst : HP_15
Misc : 5-9-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:51 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	442354	404508	20.0	19.0
22)	S DCB	18.28	18.68	402750	394026	19.3	18.9
	Target Compounds:						
7)	L4 Aroclor-1242	8.42	10.39	201220	103941	429.2	430.5
8)	L4 Aroclor-1242 {2}	9.70	11.17	143901	206456	426.4	431.0
9)	L4 Aroclor-1242 {3}	10.64	12.40	332072	132538	445.8	432.4
	L4 Aroclor-1242 {4}	11.64	12.62	221677	131539	453.5	444.2
	L4 Aroclor-1242 {5}	12.80	13.13	265275	198495	454.7	437.7
	Sum Aroclor-1242			1164144	772969	2209.6	2175.9
	Average Aroclor-1242					441.919	435.171

XPCBE

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E3050
Signature Janelle M. Williams
Date 06/05/01

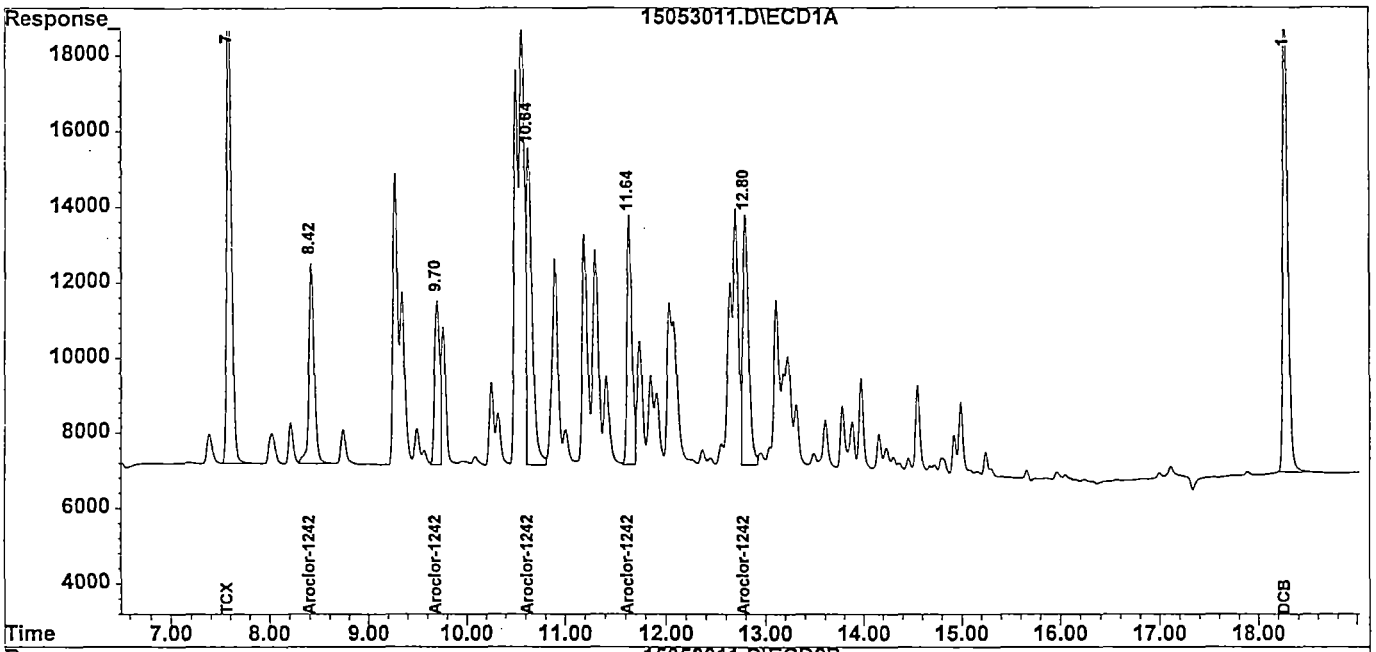
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

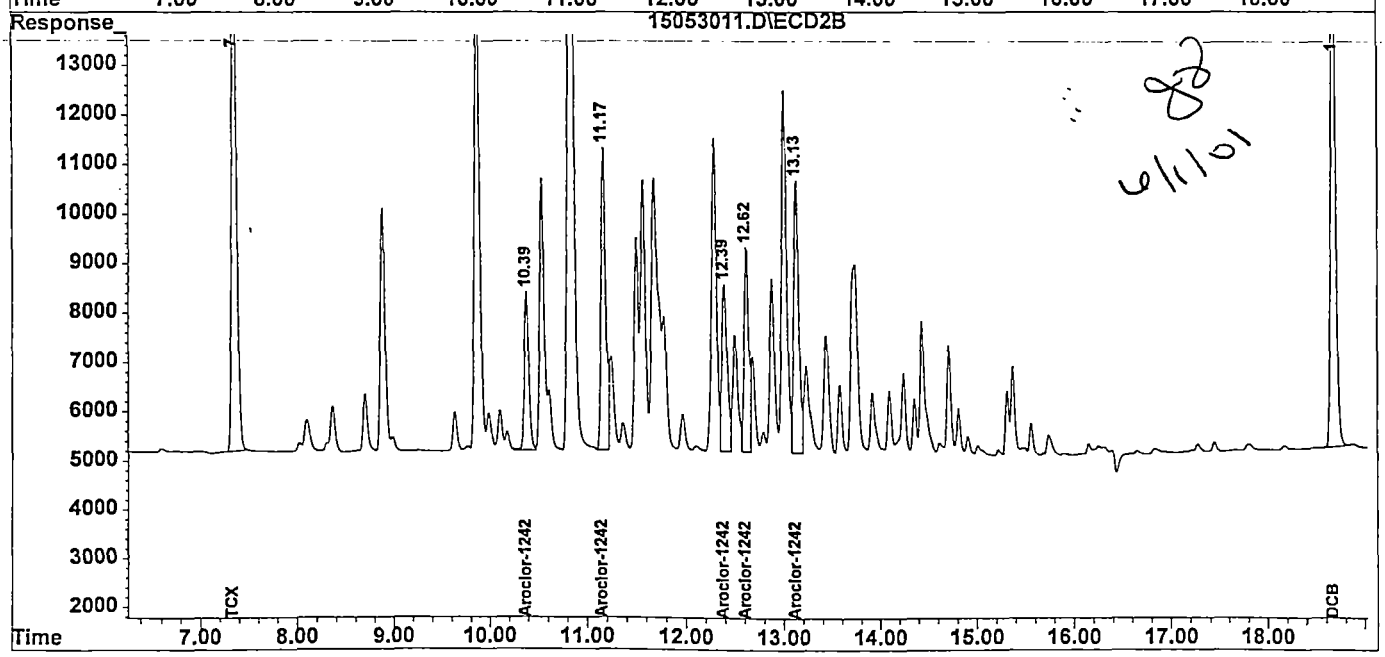
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053011.D\ECD1A.CH Vial: 11
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053011.D\ECD2B.CH
Acq On : 30 May 2001 13:04 Operator: DDC
Sample : AR1242L3A Inst : HP_15
Misc : 5-9-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:51 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Multiple Level Calibration

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





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6/1/01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053012.D\ECD1A.CH Vial: 12
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053012.D\ECD2B.CH
Acq On : 30 May 2001 13:27 Operator: DDC
Sample : AR1242L4A Inst : HP_15
Misc : 5-8-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:51 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	826912	782816	37.1	37.1
22)	S DCB	18.28	18.68	705774	694959	33.9	33.7
	Target Compounds:						
7)	L4 Aroclor-1242	8.42	10.39	346323	181582	716.3	735.5
8)	L4 Aroclor-1242 {2}	9.70	11.17	246401	368025	708.6	747.6
9)	L4 Aroclor-1242 {3}	10.64	12.40	557200	236351	717.4	753.9
1[illegible]	L4 Aroclor-1242 {4}	11.64	12.62	375982	233609	732.5	757.7
1[illegible]	L4 Aroclor-1242 {5}	12.80	13.13	455602	350461	742.4	744.1
	Sum Aroclor-1242			1981508	1370028	3617.2	3738.8
	Average Aroclor-1242					723.439	747.756

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E3050
Signature Arnetta M. Williams
Date 06/05/01

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
15053012.D XPCBE30.M Thu May 31 08:46:37 2001 Page 1

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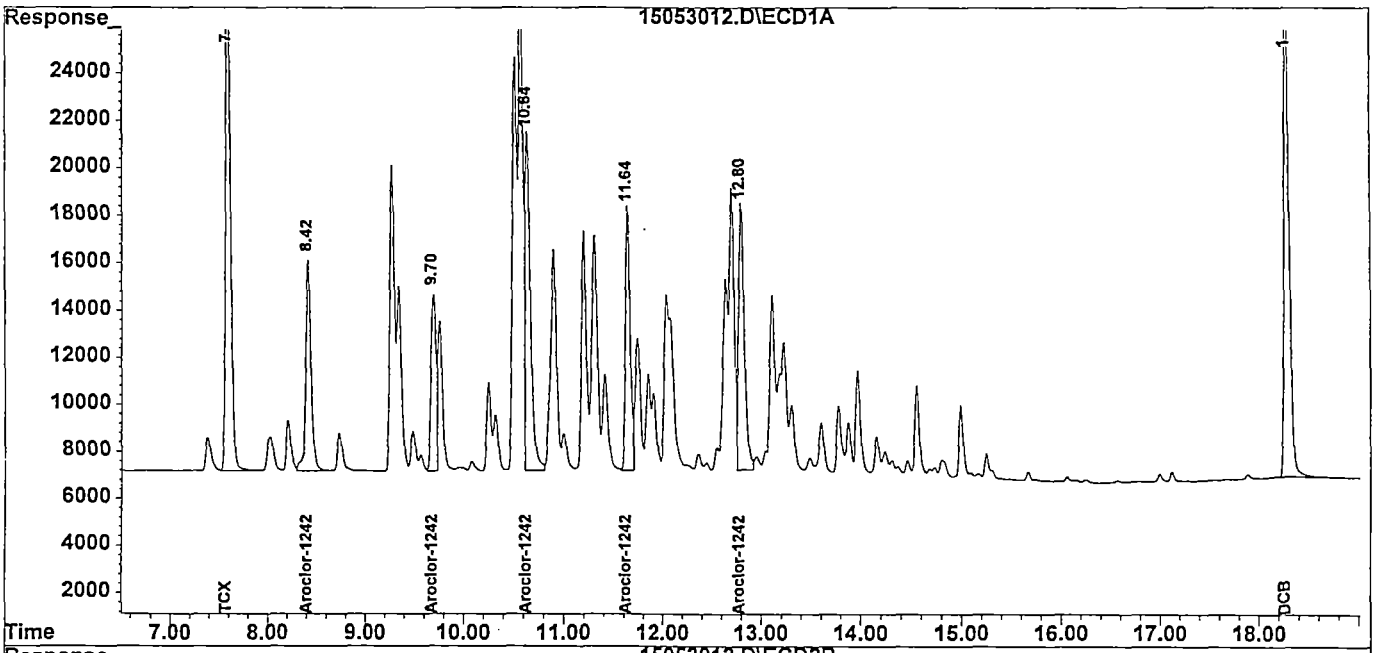
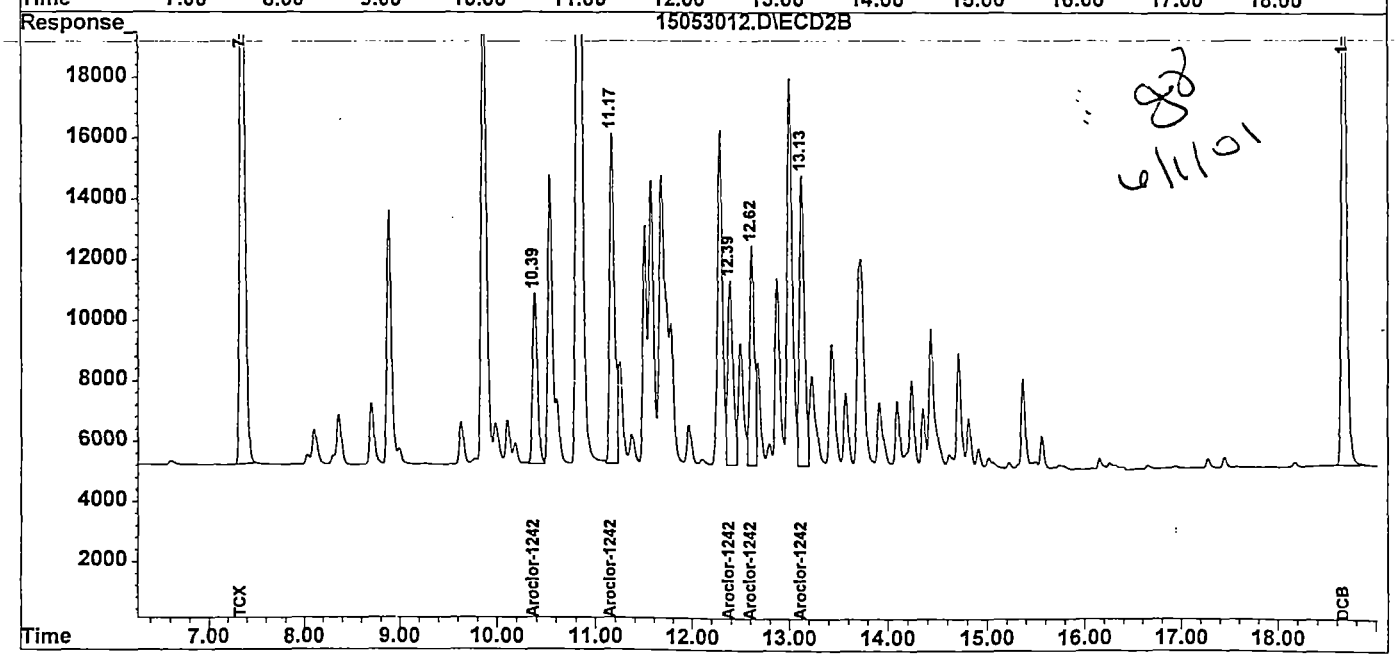
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053012.D\ECD1A.CH Vial: 12
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053012.D\ECD2B.CH
Acq On : 30 May 2001 13:27 Operator: DDC
Sample : AR1242L4A Inst : HP_15
Misc : 5-8-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:51 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Multiple Level Calibration

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





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6/1/01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053013.D\ECD1A.CH Vial: 13
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053013.D\ECD2B.CH
Acq On : 30 May 2001 13:51 Operator: DDC
Sample : AR1242L5A Inst : HP_15
Misc : 5-7-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:51 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	1596596	1575611	72.9 E	77.4
22)	S DCB	18.28	18.68	1342356	1345260	65.4 E	66.8
	Target Compounds:						
7)	L4 Aroclor-1242	8.42	10.39	614464	345727	1258.2 E	1399.1
8)	L4 Aroclor-1242 {2}	9.70	11.17	441104	702885	1257.5	1417.8
9)	L4 Aroclor-1242 {3}	10.64	12.40	1009698	457780	1282.1	1454.8
1[illegible]	L4 Aroclor-1242 {4}	11.64	12.62	687277	453178	1315.0	1448.7 E
	L4 Aroclor-1242 {5}	12.80	13.13	839632	686000	1339.4	1438.5
	Sum Aroclor-1242			3592175	2645569	6452.3	7158.9
	Average Aroclor-1242					1290.452	1431.775

COPY

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E3050
Signature Arnelda M. William
Date 06/05/01

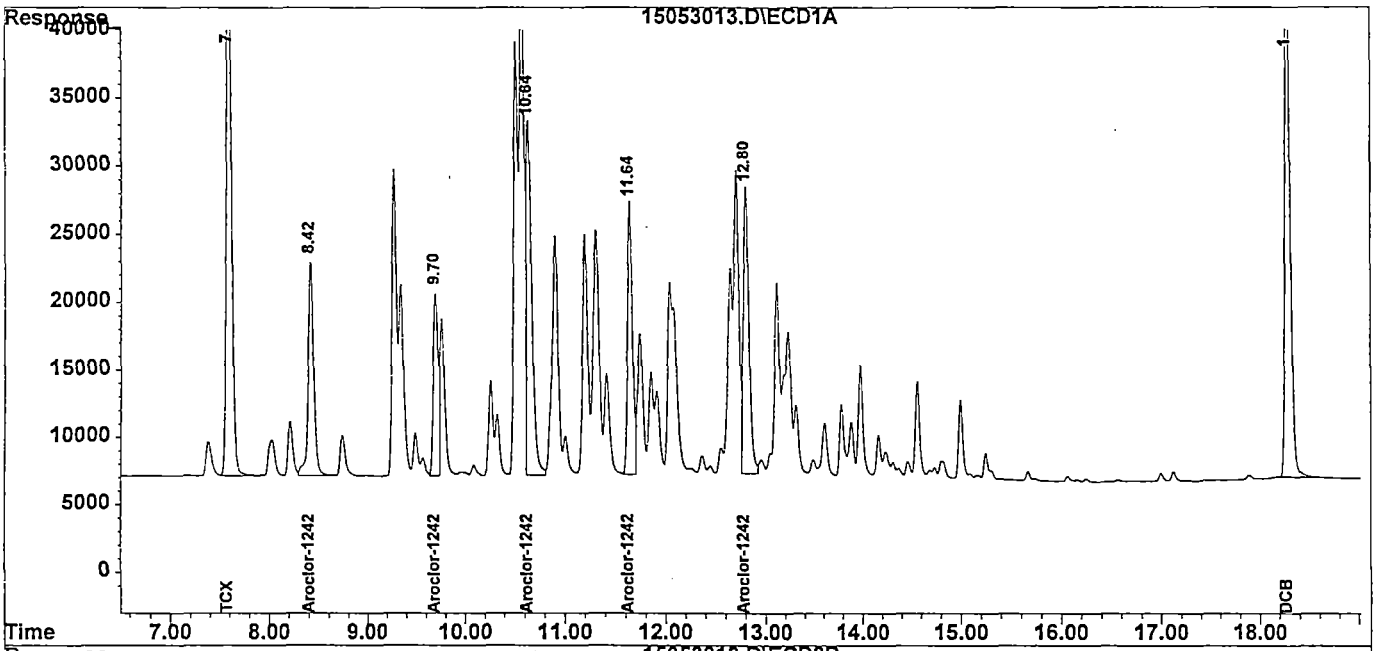
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

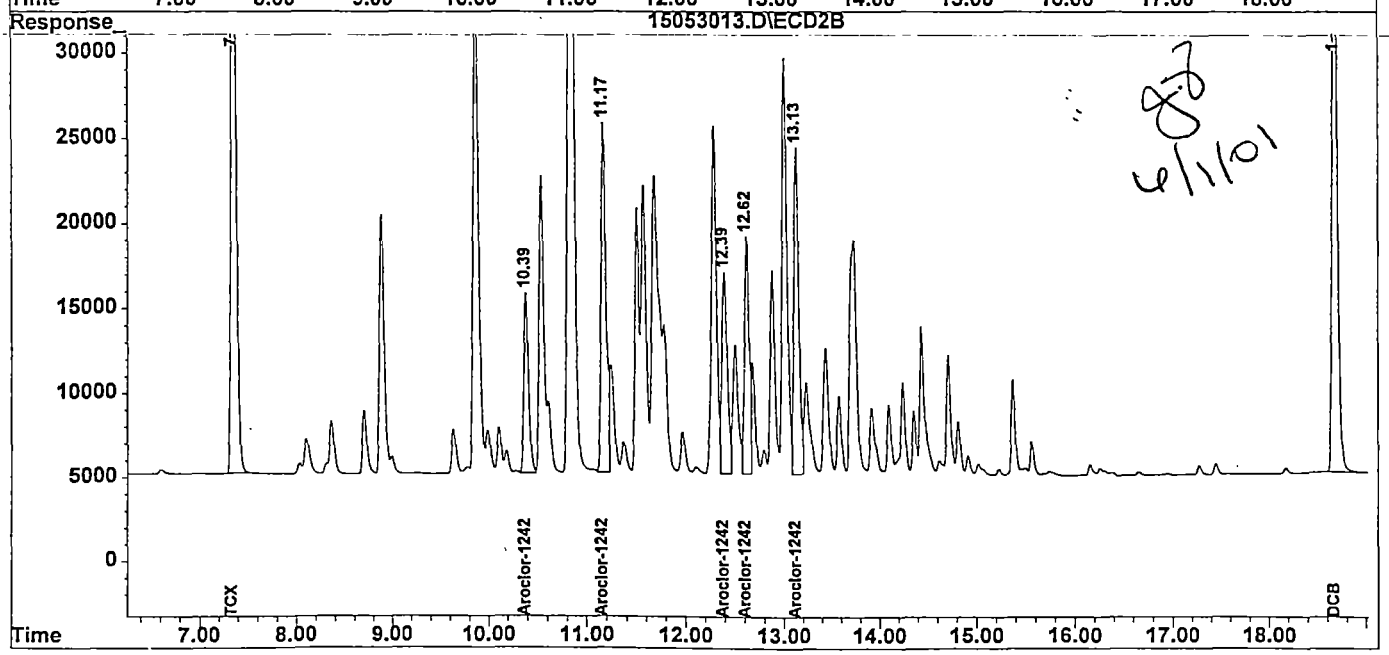
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053013.D\ECD1A.CH Vial: 13
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053013.D\ECD2B.CH
Acq On : 30 May 2001 13:51 Operator: DDC
Sample : AR1242L5A Inst : HP_15
Misc : 5-7-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:51 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Multiple Level Calibration

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053014.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053014.D\ECD2B.CH
Acq On : 30 May 2001 14:14 Operator: DDC
Sample : AR1248L3A Inst : HP_15
Misc : 5-424-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 8:00 2001 Quant Results File: XPCBE30.RES
Multi Time: May 31 8:02 2001 Quant Results File: xspcbe30.RES

Pesticide Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001

Multi-Component Method : f:\hpchem\hp\15\data\05_30_01\xspcbe30.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	374796	347615	18.1	17.4
22)	S DCB	18.28	18.68	347820	345977	17.3	17.1
	Target Compounds:						
	Multi-Component Compounds:						
14)	L5 Aroclor-1248	9.28	9.87	142924	180037	397.2	375.3
15)	L5 Aroclor-1248 {2}	10.52	11.57	239388	316132	405.0	394.0
16)	L5 Aroclor-1248 {3}	11.42	12.51	127165	119831	429.9	389.1
17)	L5 Aroclor-1248 {4}	11.75	13.24	159592	176950	415.9	394.7
18)	L5 Aroclor-1248 {5}	13.12	13.58	262933	94740	422.3	376.6
	Sum Aroclor-1248			932002	887690	2070.3	1929.8
	Average Aroclor-1248					414.065	385.957

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E3050
Signature Arnelda M Williams
Date 06/05/01

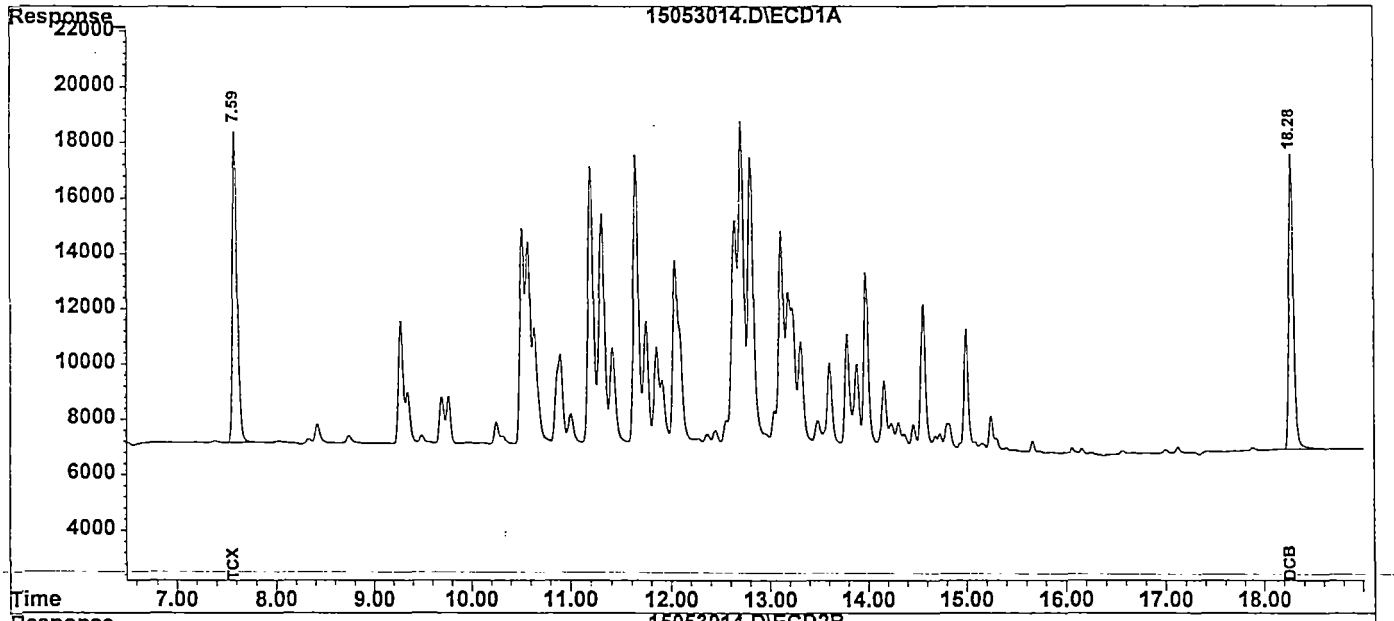
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

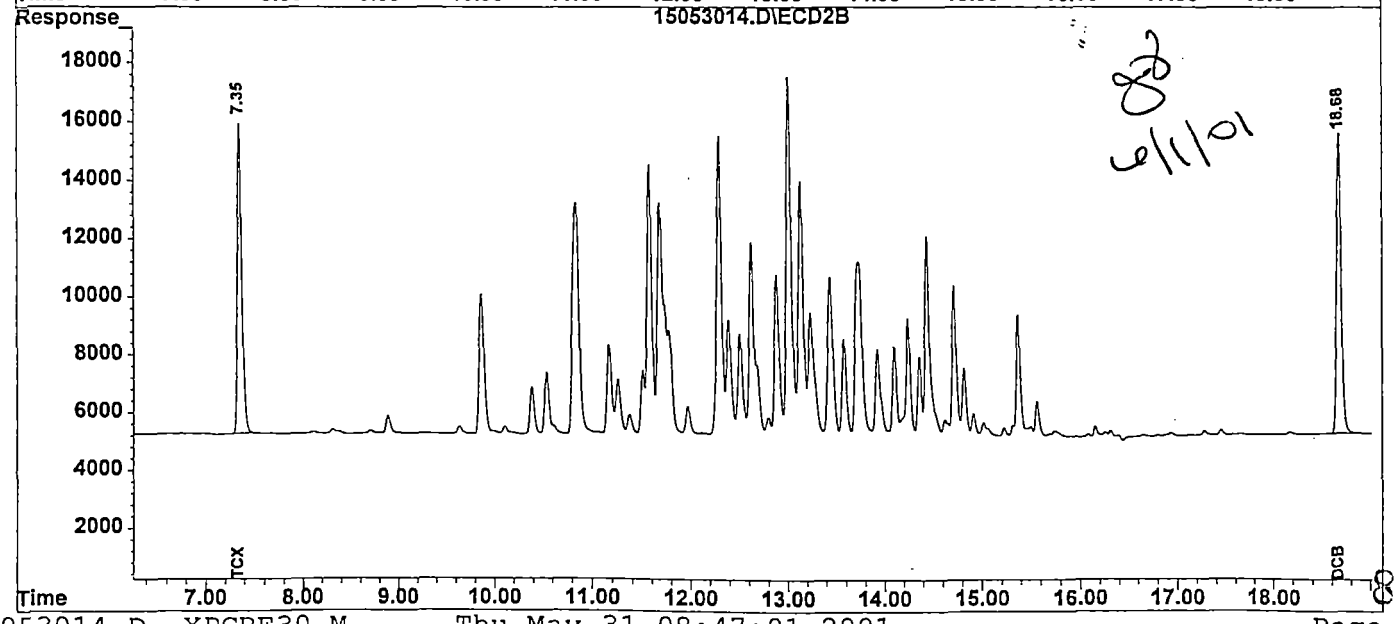
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053014.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053014.D\ECD2B.CH
Acq On : 30 May 2001 14:14 Operator: DDC
Sample : AR1248L3A Inst : HP_15
Misc : 5-424-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 8:00 2001 Quant Results File: XPCBE30.RES
Quant Time: May 31 8:02 2001 Quant Results File: xspcbe30.RES

Pesticide Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001

Multi-Component Method : f:\hpchem\hp\15\data\05_30_01\xspcbe30.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B





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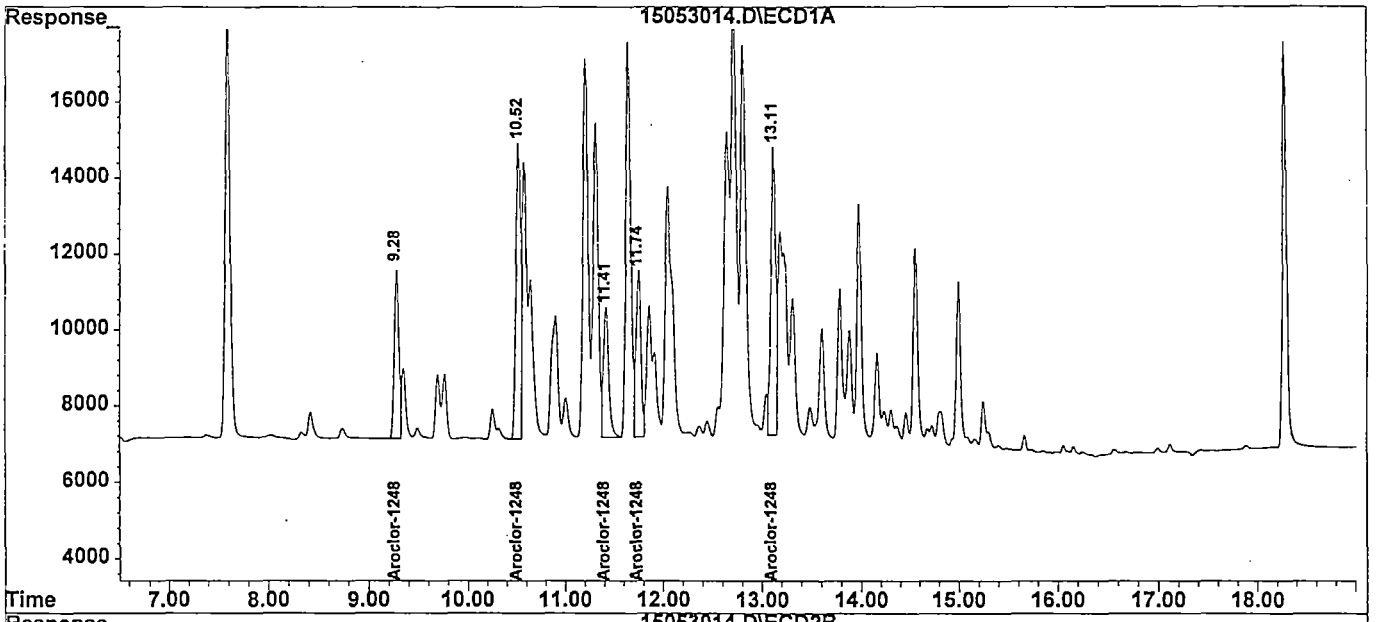
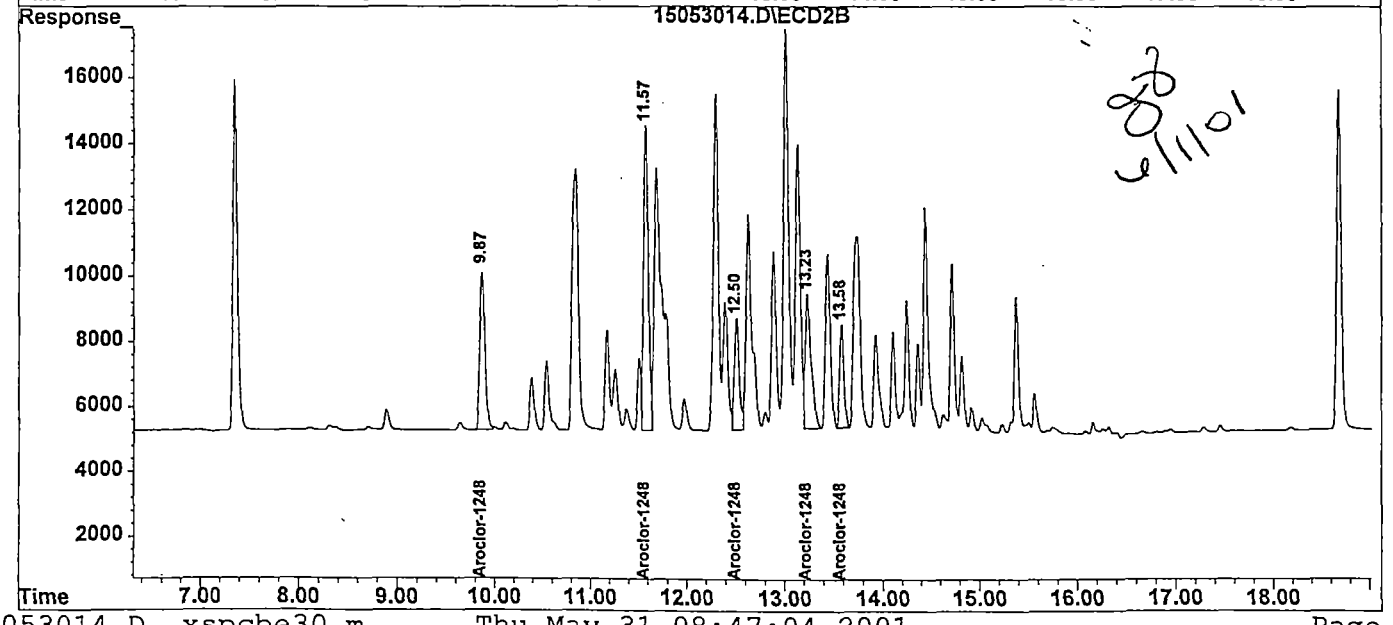
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053014.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053014.D\ECD2B.CH
Acq On : 30 May 2001 14:14 Operator: DDC
Sample : AR1248L3A Inst : HP_15
Misc : 5-424-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 8:02 2001 Quant Results File: xspcbe30.RES
Quant Time: May 31 8:02 2001 Quant Results File: xspcbe30.RES

Pesticide Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001

Multi-Component Method : f:\hpchem\hp\15\data\05_30_01\xspcbe30.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : DB-MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 Signal #2 Info : .32
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B





6/11/01

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Response Factor Report HP_15

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Initial Calibration

Calibration Files
L1 =15053015.D L2 =15053016.D L3 =15053017.D
L4 =15053018.D L5 =15053019.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
12) Aroclor-1254	1.2	1.2	1.1	0.9	0.8	1.1 E3	17.48
13) Aroclor-1254 {2}	628.9	617.8	619.4	486.8	448.9	560.4	15.28
14) Aroclor-1254 {3}	1.0	1.0	1.0	0.8	0.7	0.9 E3	14.11
15) Aroclor-1254 {4}	783.9	766.3	764.5	590.5	601.3	701.3	13.77
16) Aroclor-1254 {5}	746.9	753.5	775.7	601.4	642.5	704.0	10.95

Signal #2 Calibration Files
L1 =15053015.D L2 =15053016.D L3 =15053017.D
L4 =15053018.D L5 =15053019.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
35) Aroclor-1254 #2	361.0	357.6	381.9	297.7	285.6	336.8	12.60
36) Aroclor-1254 {2} #2	557.1	552.3	620.2	461.3	445.3	527.2	13.82
37) Aroclor-1254 {3} #2	548.0	530.8	603.5	438.9	411.3	506.5	15.71
38) Aroclor-1254 {4} #2	761.1	763.5	852.4	613.2	568.4	711.7	16.50
39) Aroclor-1254 {5} #2	1.0	1.0	1.2	0.9	0.8	1.0 E3	13.88

= Out of Range

XPCBE30.M Thu May 31 07:55:13 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053015.D\ECD1A.CH Vial: 15
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053015.D\ECD2B.CH
Acq On : 30 May 2001 14:37 Operator: DDC
Sample : AR1254L1A Inst : HP_15
Misc : 5-6-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:52 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	111105	99025	5.049	4.910
22)	S DCB	18.28	18.68	100836	99331	4.926	4.969
	Target Compounds:						
12)	L6 Aroclor-1254	12.63	12.30	123612	36103	134.6	116.2
13)	L6 Aroclor-1254 {2}	13.32	13.01	62890	55713	124.8	118.6
14)	L6 Aroclor-1254 {3}	13.79	13.93	100411	54798	128.3	124.8
1[illegible]	L6 Aroclor-1254 {4}	14.32	14.92	78388	76113	124.1	126.7
[illegible]	L6 Aroclor-1254 {5}	15.00	15.39	74690	103184	120.2	119.5
	Sum Aroclor-1254			439991	325911	632.0	605.8
	Average Aroclor-1254					126.402	121.166

COPY
ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E3050
Signature Amelda M. Williams
Date 06/05/01

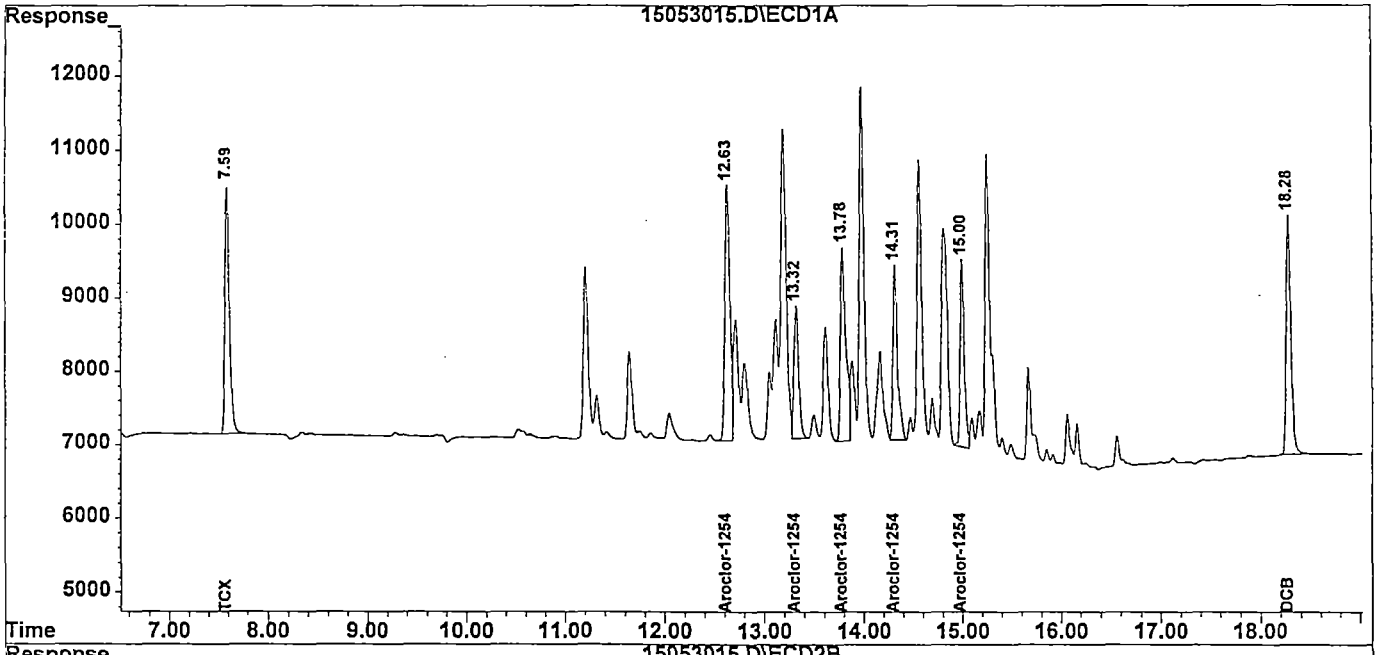
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

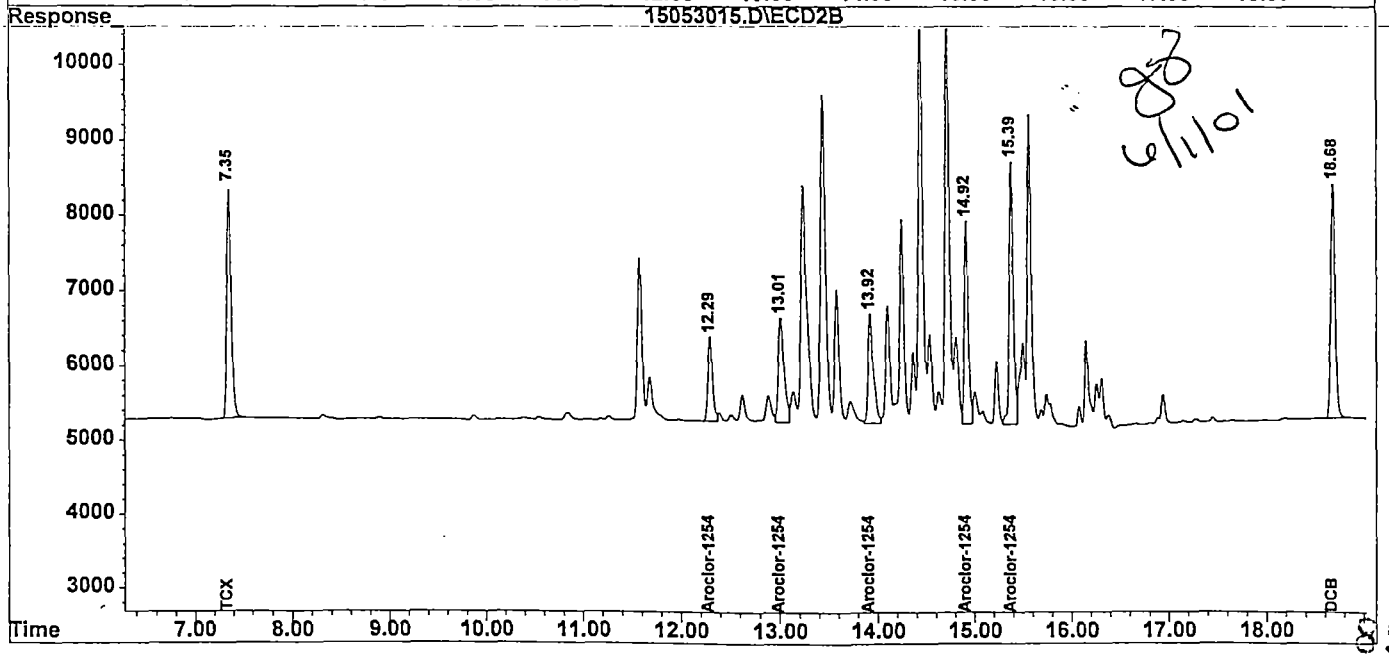
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053015.D\ECD1A.CH Vial: 15
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053015.D\ECD2B.CH
Acq On : 30 May 2001 14:37 Operator: DDC
Sample : AR1254L1A Inst : HP_15
Misc : 5-6-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:52 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Multiple Level Calibration

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





6/1/01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053016.D\ECD1A.CH Vial: 16
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053016.D\ECD2B.CH
Acq On : 30 May 2001 15:00 Operator: DDC
Sample : AR1254L2A Inst : HP_15
Misc : 5-5-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:53 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	227813	209137	10.5	10.5
22)	S DCB	18.28	18.68	218544	215554	11.2	11.3
	Target Compounds:						
12)	L6 Aroclor-1254	12.62	12.29	235050	71519	245.0	224.9
13)	L6 Aroclor-1254 {2}	13.32	13.01	123568	110454	237.4	227.1
14)	L6 Aroclor-1254 {3}	13.78	13.92	197099	106156	241.6	231.2
1[illegible]	L6 Aroclor-1254 {4}	14.31	14.92	153258	152705	232.5	239.5
	L6 Aroclor-1254 {5}	15.00	15.38	150708	209530	230.4	235.0
	Sum Aroclor-1254			859681	650364	1186.9	1157.6
	Average Aroclor-1254					237.385	231.526

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E3050
Signature Amelda M. Williams
Date 06/05/01

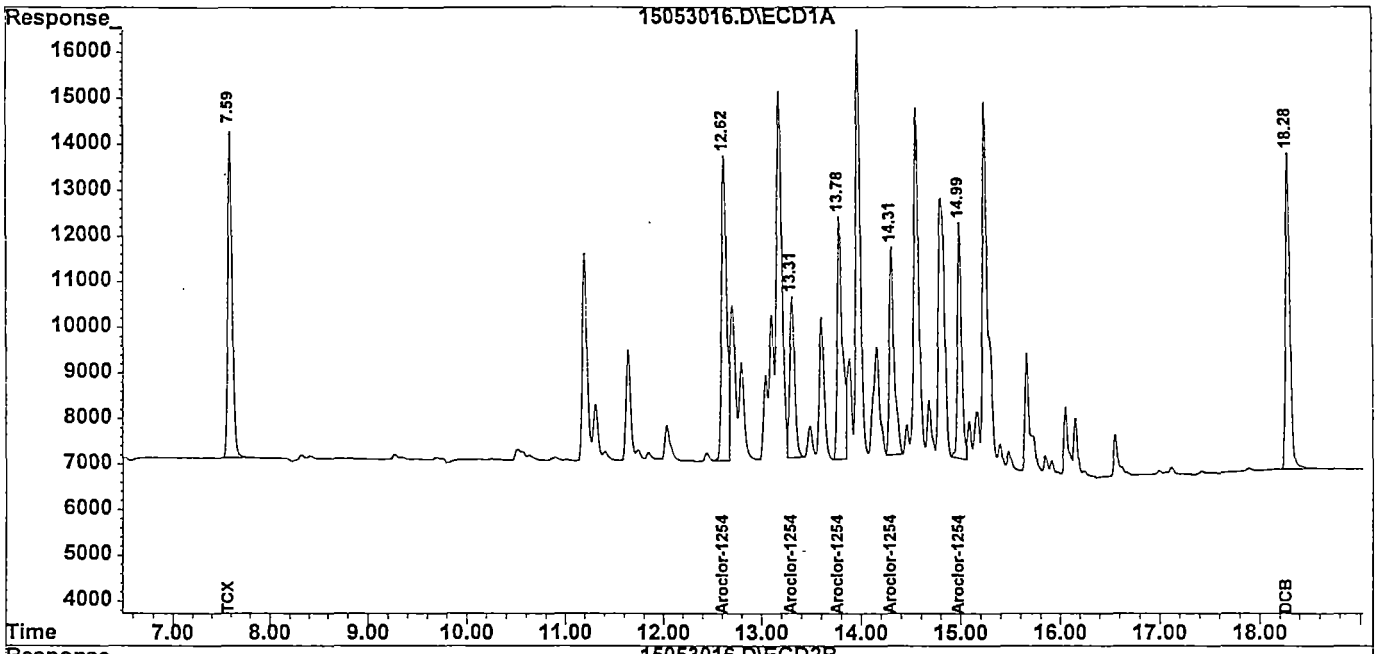
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

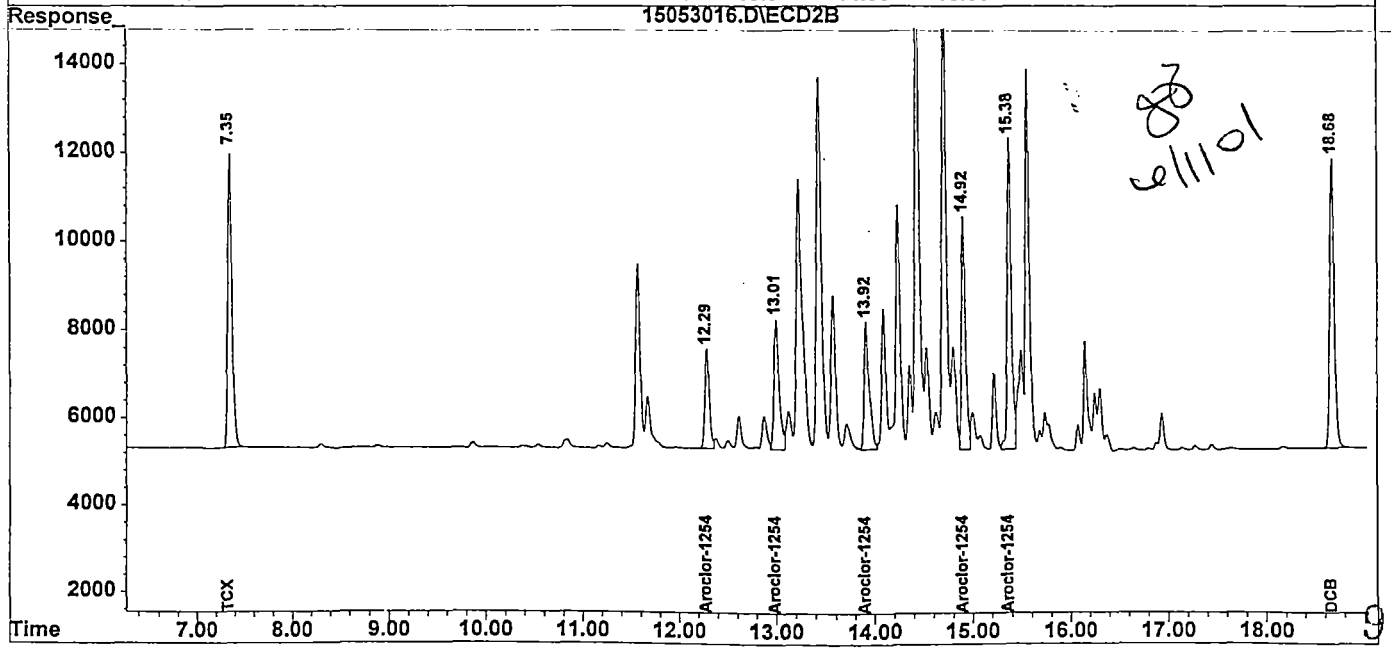
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053016.D\ECD1A.CH Vial: 16
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053016.D\ECD2B.CH
Acq On : 30 May 2001 15:00 Operator: DDC
Sample : AR1254L2A Inst : HP_15
Misc : 5-5-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:53 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Multiple Level Calibration

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053017.D\ECD1A.CH Vial: 17
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053017.D\ECD2B.CH
Acq On : 30 May 2001 15:23 Operator: DDC
Sample : AR1254L3A Inst : HP_15
Misc : 5-4-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:53 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	474470	457954	22.0	22.8
22)	S DCB	18.28	18.68	479552	484053	24.8	25.4
	Target Compounds:						
12)	L6 Aroclor-1254	12.62	12.29	459127	152751	457.9	467.2
13)	L6 Aroclor-1254 {2}	13.31	13.01	247747	248100	458.0	494.5
14)	L6 Aroclor-1254 {3}	13.78	13.92	399252	241380	466.8	508.7
1[illegible]	L6 Aroclor-1254 {4}	14.31	14.92	305814	340951	444.4	514.0
[illegible]	L6 Aroclor-1254 {5}	14.99	15.38	310272	473452	450.3	508.8
	Sum Aroclor-1254			1722212	1456634	2277.3	2493.3
	Average Aroclor-1254					455.463	498.653

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E3050
Signature Amelda M. Williams
Date 06/05/01

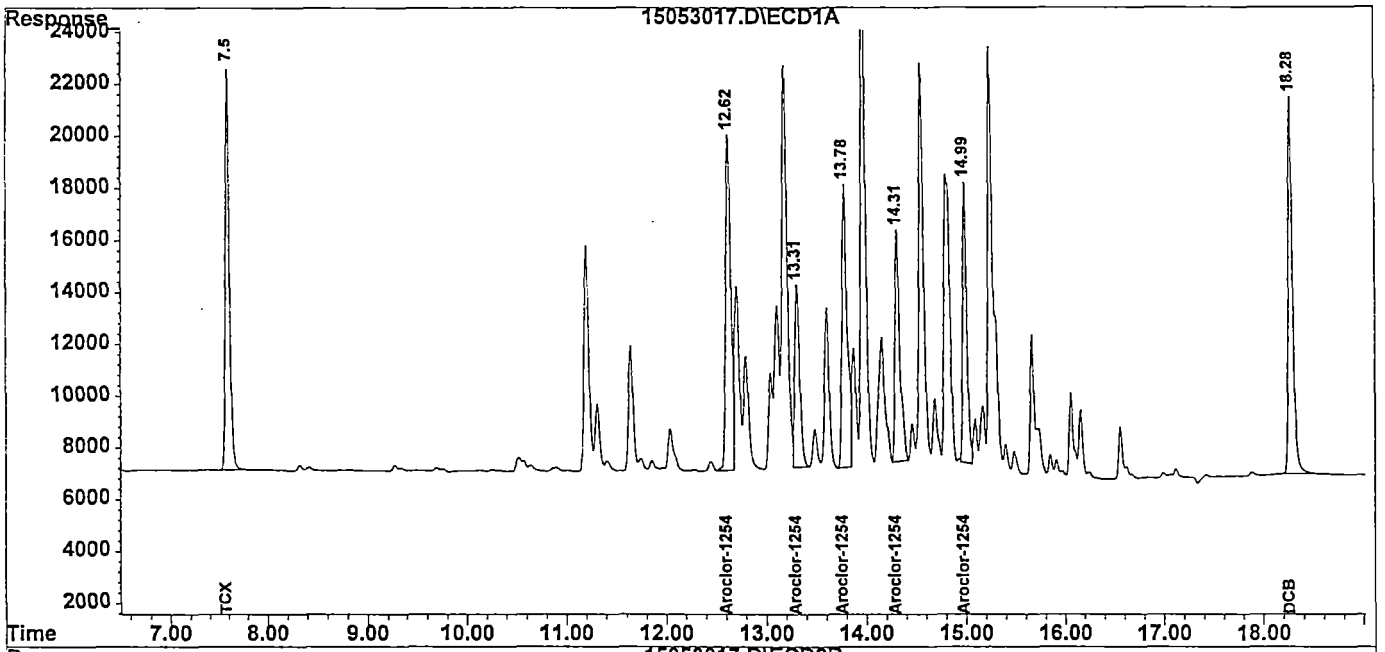
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

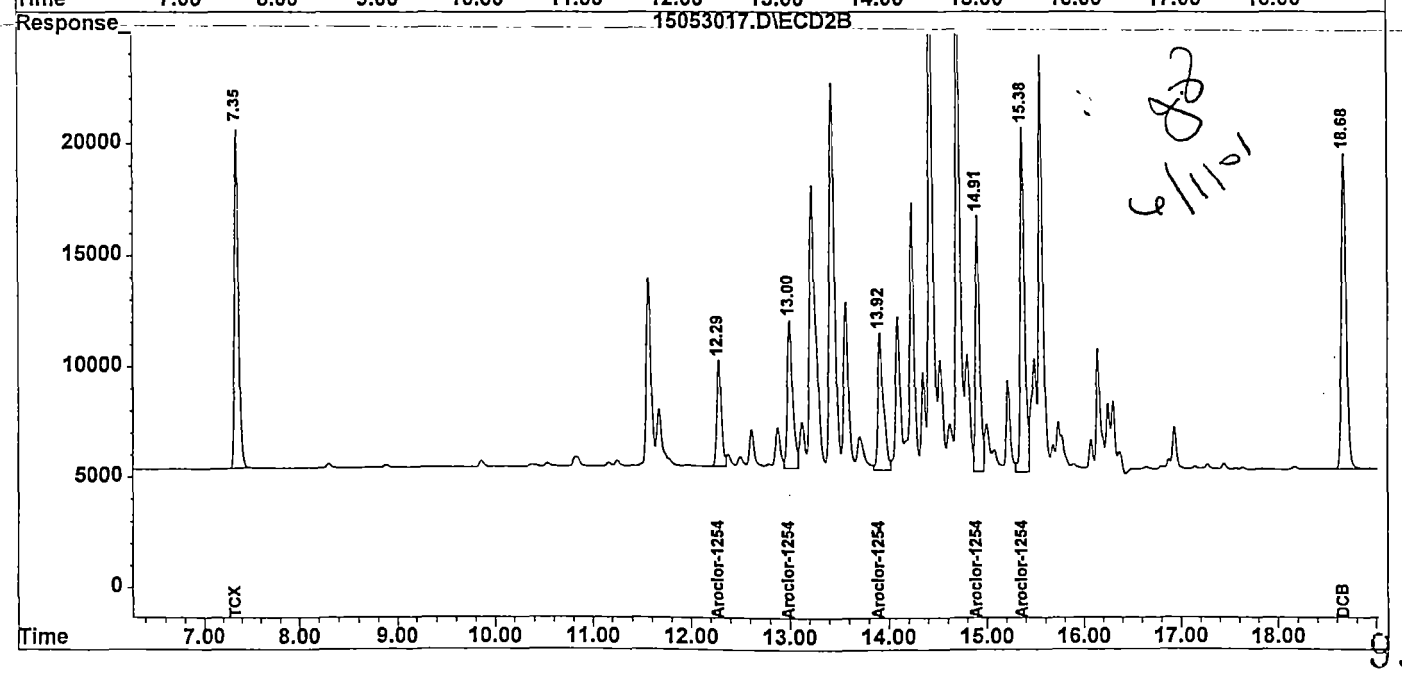
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053017.D\ECD1A.CH Vial: 17
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053017.D\ECD2B.CH
Acq On : 30 May 2001 15:23 Operator: DDC
Sample : AR1254L3A Inst : HP_15
Misc : 5-4-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:53 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Multiple Level Calibration

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053018.D\ECD1A.CH Vial: 18
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053018.D\ECD2B.CH
Acq On : 30 May 2001 15:46 Operator: DDC
Sample : AR1254L4A Inst : HP_15
Misc : 5-3-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:53 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	792751	772047	36.2	37.5
22)	S DCB	18.28	18.68	674803	681920	33.6	34.2
	Target Compounds:						
12)	L6 Aroclor-1254	12.63	12.30	722493	238184	687.5	695.3
13)	L6 Aroclor-1254 {2}	13.31	13.01	389418	369045	688.1	691.5
14)	L6 Aroclor-1254 {3}	13.78	13.92	630181	351146	698.8	690.8
	L6 Aroclor-1254 {4}	14.31	14.92	472401	490593	662.5	688.5
	L6 Aroclor-1254 {5}	14.99	15.38	481082	702118	671.0	702.4
	Sum Aroclor-1254			2695577	2151085	3407.9	3468.5
	Average Aroclor-1254					681.582	693.698

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ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 79294 SDG E3050
Signature Pmelda M. Williams
Date 06/05/01

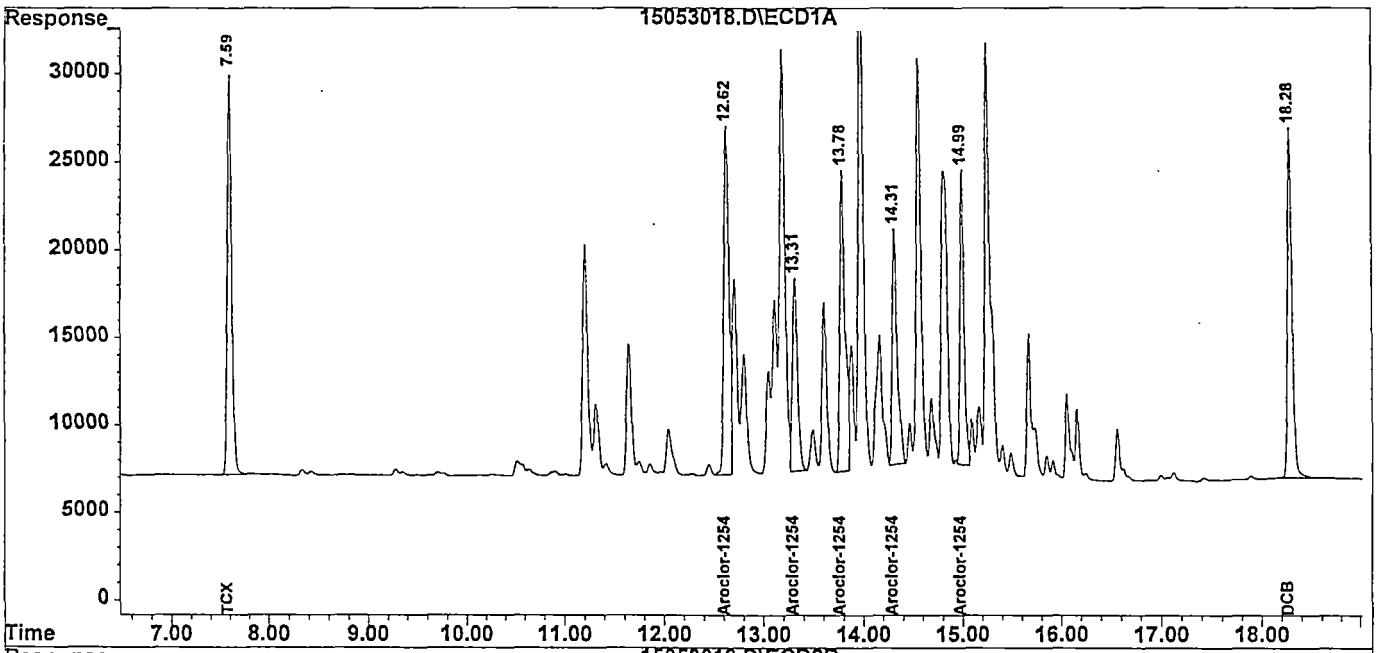
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

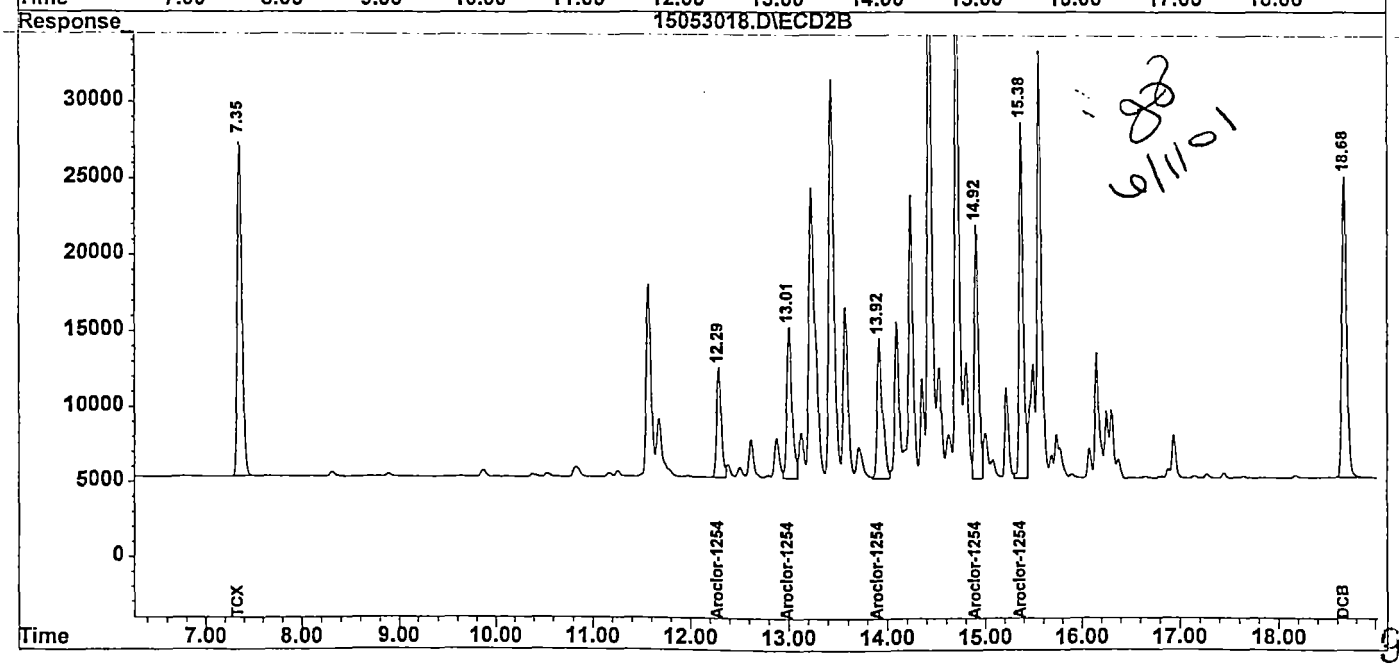
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053018.D\ECD1A.CH Vial: 18
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053018.D\ECD2B.CH
Acq On : 30 May 2001 15:46 Operator: DDC
Sample : AR1254L4A Inst : HP_15
Misc : 5-3-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:53 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Multiple Level Calibration

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053019.D\ECD1A.CH Vial: 19
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053019.D\ECD2B.CH
Acq On : 30 May 2001 16:09 Operator: DDC
Sample : AR1254L5A Inst : HP_15
Misc : 5-2-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:54 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	1572748	1588559	72.7 E	77.3 E
22)	S DCB	18.28	18.68	1209206	1233991	61.7	62.9
	Target Compounds:						
12)	L6 Aroclor-1254	12.63	12.29	1305234	456923	1236.5 E	1356.8
13)	L6 Aroclor-1254 {2}	13.31	13.01	718256	712433	1281.8 E	1351.2 E
14)	L6 Aroclor-1254 {3}	13.78	13.92	1188576	658147	1317.0	1299.4
[illegible]	L6 Aroclor-1254 {4}	14.31	14.92	962041	909380	1398.3 E	1277.7 E
[illegible]	L6 Aroclor-1254 {5}	14.99	15.38	1027935	1349085	1488.9	1353.4
	Sum Aroclor-1254			5202043	4085967	6722.4	6638.6
	Average Aroclor-1254					1344.480	1327.719

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ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E3050
Signature Amelda M. Williams
Date 06/05/01

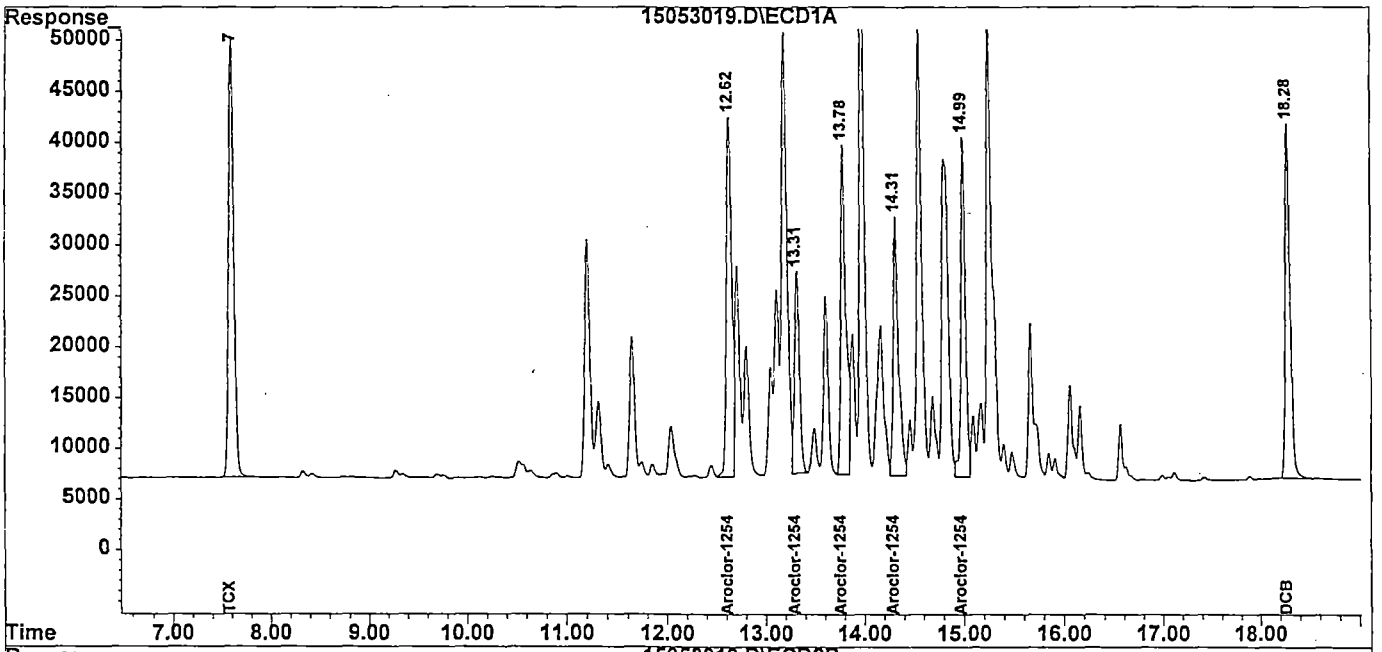
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

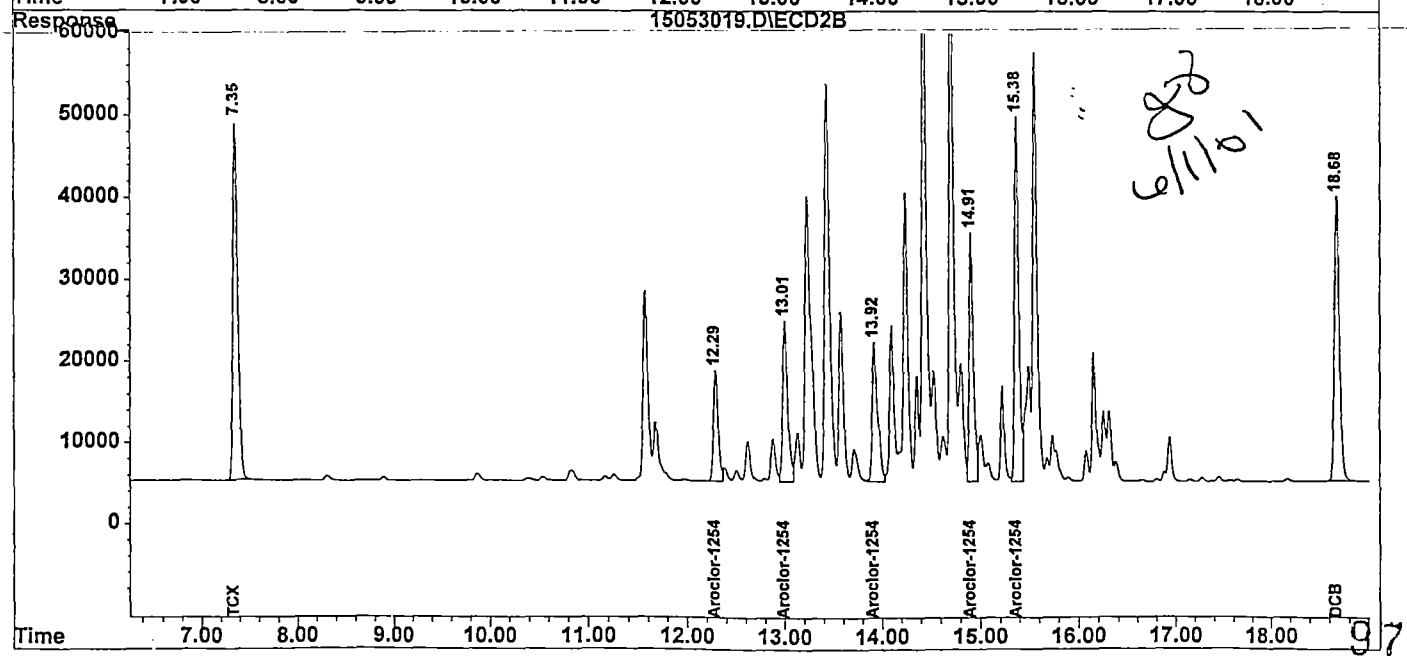
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053019.D\ECD1A.CH Vial: 19
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053019.D\ECD2B.CH
Acq On : 30 May 2001 16:09 Operator: DDC
Sample : AR1254L5A Inst : HP_15
Misc : 5-2-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:54 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Multiple Level Calibration

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





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Response Factor Report HP_15

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Initial Calibration

Calibration Files
L1 =15053020.D L2 =15053021.D L3 =15053022.D
L4 =15053023.D L5 =15053024.D

	Compound	L1	L2	L3	L4	L5	Avg	%RSD
1)	TCX	21.9	21.8	20.9	19.4	19.3	20.7 E3	6.12
2)	Aroclor-1016	671.4	615.2	566.8	486.5	438.8	555.8	16.95
3)	Aroclor-1016 {2}	907.2	828.6	746.9	628.6	552.9	732.8	19.66
4)	Aroclor-1016 {3}	1.3	1.2	1.2	1.0	1.0	1.1 E3	13.03
5)	Aroclor-1016 {4}	761.0	698.1	646.5	547.7	494.7	629.6	17.25
6)	Aroclor-1016 {5}	736.5	684.9	649.2	561.6	520.9	630.6	14.03
17)	Aroclor-1260	1.6	1.4	1.3	1.0	1.0	1.2 E3	21.10
18)	Aroclor-1260 {2}	2.1	1.9	1.7	1.5	1.3	1.7 E3	18.11
19)	Aroclor-1260 {3}	1.9	1.7	1.6	1.4	1.3	1.6 E3	14.91
20)	Aroclor-1260 {4}	702.0	866.5	806.3	735.4	702.0	762.5	9.45
21)	Aroclor-1260 {5}	1.8	1.8	1.6	1.4	1.4	1.6 E3	12.36
22)	DCB	23.2	22.6	20.3	17.6	16.7	20.1 E3	14.35

Signal #2 Calibration Files
L1 =15053020.D L2 =15053021.D L3 =15053022.D
L4 =15053023.D L5 =15053024.D

	Compound	L1	L2	L3	L4	L5	Avg	%RSD
)	TCX #2	20.3	20.4	20.1	19.3	19.7	20.0 E3	2.21
25)	Aroclor-1016 #2	523.1	525.9	486.0	424.4	389.0	469.7	12.97
26)	Aroclor-1016 {2} #2	1.3	1.2	1.1	1.0	0.9	1.1 E3	16.24
27)	Aroclor-1016 {3} #2	2.1	1.9	1.9	1.7	1.7	1.9 E3	10.33
28)	Aroclor-1016 {4} #2	667.7	675.4	651.4	574.0	550.1	623.7	9.23
29)	Aroclor-1016 {5} #2	730.7	701.1	678.1	601.6	573.4	657.0	10.18
40)	Aroclor-1260 #2	815.5	775.3	743.2	651.4	626.7	722.4	11.18
41)	Aroclor-1260 {2} #2	1.4	1.3	1.2	1.0	1.0	1.2 E3	14.57
42)	Aroclor-1260 {3} #2	1.5	1.5	1.4	1.2	1.1	1.4 E3	12.45
43)	Aroclor-1260 {4} #2	888.3	855.9	809.6	698.4	680.0	786.4	11.87
44)	Aroclor-1260 {5} #2	2.1	2.0	1.9	1.7	1.7	1.9 E3	9.68
45)	DCB #2	22.6	22.7	20.7	17.9	17.3	20.2 E3	12.55

(#) = Out of Range

XPCBE30.M Thu May 31 07:58:09 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053020.D\ECD1A.CH Vial: 20
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053020.D\ECD2B.CH
Acq On : 30 May 2001 16:32 Operator: DDC
Sample : AR1660L1A Inst : HP_15
Misc : 5-447-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:57 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	7.59	7.35	109649	101612	5.067	4.943	
22)	S DCB	18.28	18.68	115807	113067	5.909	5.763	
	Target Compounds:							
2)	L1 Aroclor-1016	8.42	8.89	67141	52310	125.0	112.3	
3)	L1 Aroclor-1016 {2}	9.28	9.87	90715	129188	128.8	117.2	
4)	L1 Aroclor-1016 {3}	10.58	10.85	132230	214832	126.6	120.5	
	L1 Aroclor-1016 {4}	11.20	11.17	76095	66768	135.2	107.9	
	L1 Aroclor-1016 {5}	11.64	12.29	73649	73071	129.7	118.4	
	Sum Aroclor-1016			439830	536169	645.2	576.3	
	Average Aroclor-1016					129.042	115.258	
17)	L7 Aroclor-1260	14.31	14.43	162466	81548	152.4	128.2	
18)	L7 Aroclor-1260 {2}	14.80	14.72	210044	137924	140.7	133.2	
19)	L7 Aroclor-1260 {3}	15.25	14.92	186740	150699	134.0	129.7	
20)	L7 Aroclor-1260 {4}	15.72	16.09	70201	88834	97.2	129.0	#
21)	L7 Aroclor-1260 {5}	16.16	16.32	183086	205229	119.4	122.4	
	Sum Aroclor-1260			812536	664235	643.8	642.5	
	Average Aroclor-1260					128.753	128.500	

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ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E3050
Signature Amelia M. William
Date 06/05/01

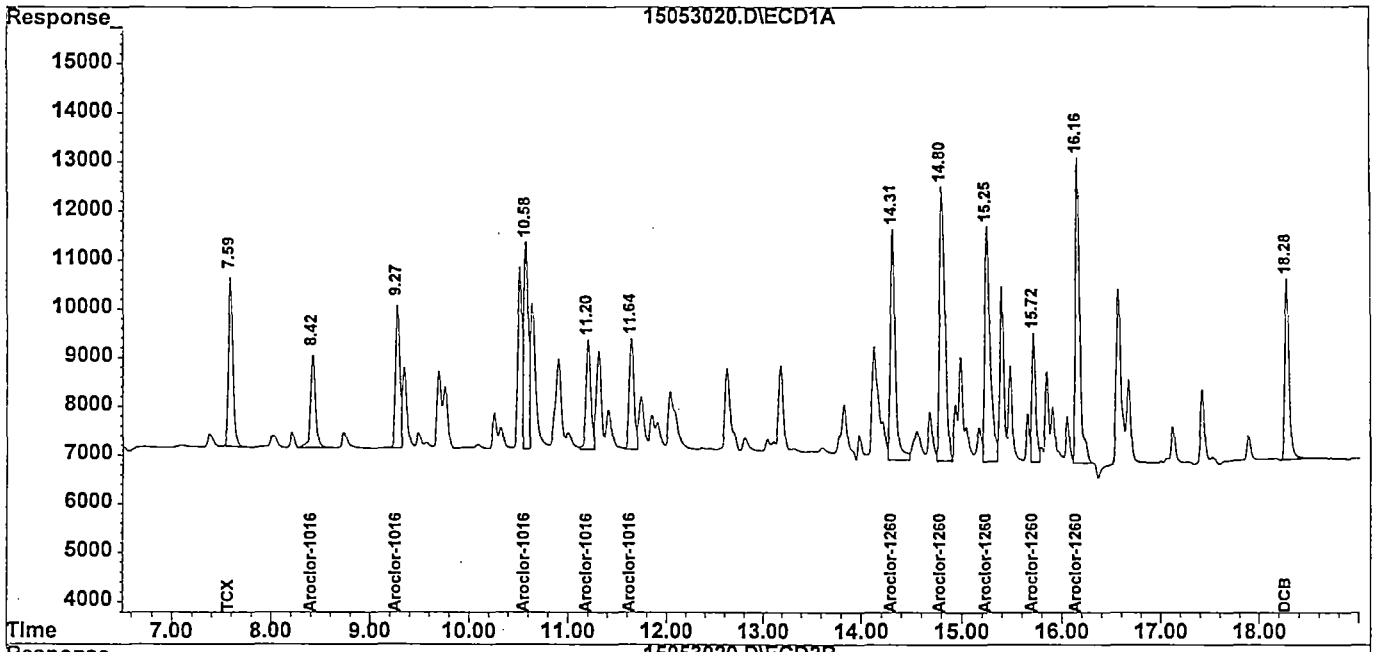
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

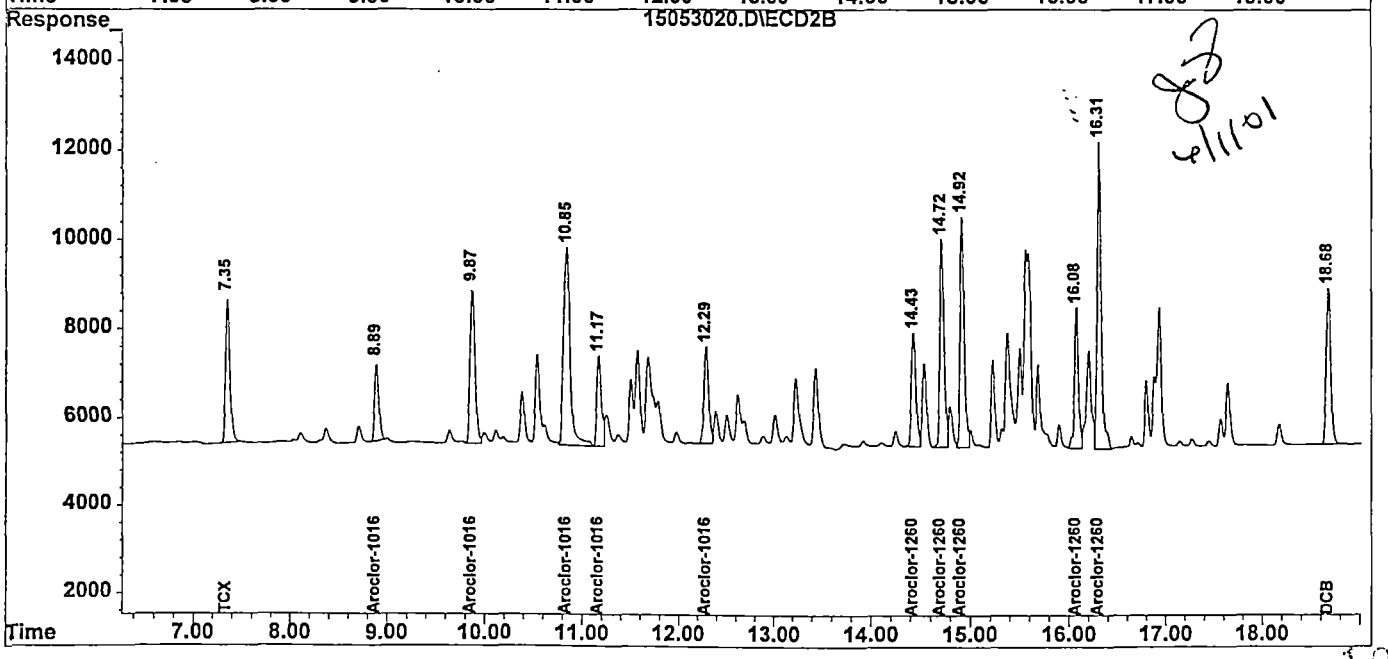
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053020.D\ECD1A.CH Vial: 20
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053020.D\ECD2B.CH
Acq On : 30 May 2001 16:32 Operator: DDC
Sample : AR1660L1A Inst : HP_15
Misc : 5-447-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:57 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Multiple Level Calibration

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





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100

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053021.D\ECD1A.CH Vial: 21
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053021.D\ECD2B.CH
Acq On : 30 May 2001 16:56 Operator: DDC
Sample : AR1660L2A Inst : HP_15
Misc : 5-446-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:57 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	218006	203559	10.1	9.854
22)	S DCB	18.28	18.68	225528	227058	11.2	11.3
	Target Compounds:						
2)	L1 Aroclor-1016	8.42	8.89	123040	105185	224.6	226.5
3)	L1 Aroclor-1016 {2}	9.28	9.87	165716	246497	230.3	223.5
4)	L1 Aroclor-1016 {3}	10.58	10.85	246248	388143	228.0	213.7
	L1 Aroclor-1016 {4}	11.20	11.17	139611	135074	236.3	219.7
	L1 Aroclor-1016 {5}	11.64	12.29	136976	140230	231.4	222.7
	Sum Aroclor-1016			811592	1015129	1150.5	1106.0
	Average Aroclor-1016					230.106	221.201
17)	L7 Aroclor-1260	14.31	14.43	272333	155053	235.9	235.1
18)	L7 Aroclor-1260 {2}	14.80	14.72	375289	263047	237.8	244.4
19)	L7 Aroclor-1260 {3}	15.25	14.92	342138	303101	233.6	246.2
20)	L7 Aroclor-1260 {4}	15.72	16.09	173299	171179	243.5	238.8
21)	L7 Aroclor-1260 {5}	16.16	16.32	352075	403323	222.7	232.9
	Sum Aroclor-1260			1515135	1295703	1173.5	1197.4
	Average Aroclor-1260					234.691	239.474

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E3050
Signature Freda M. William
Date 06/05/01

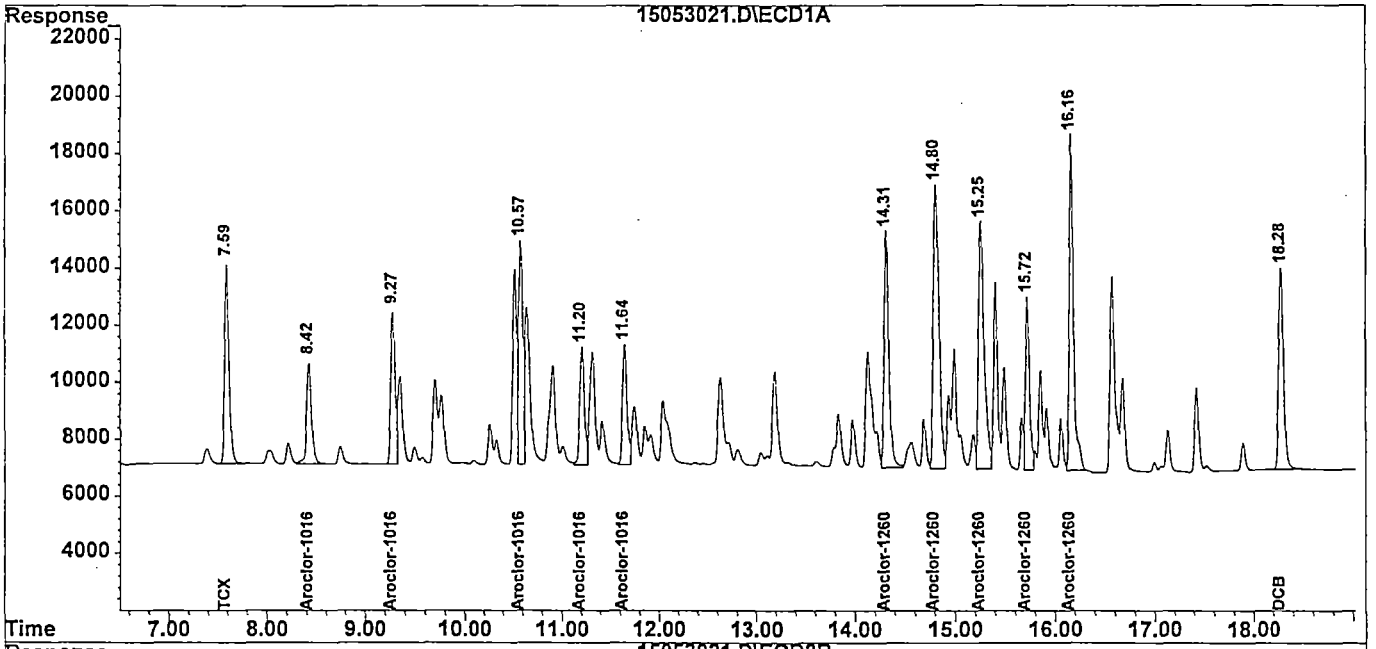
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

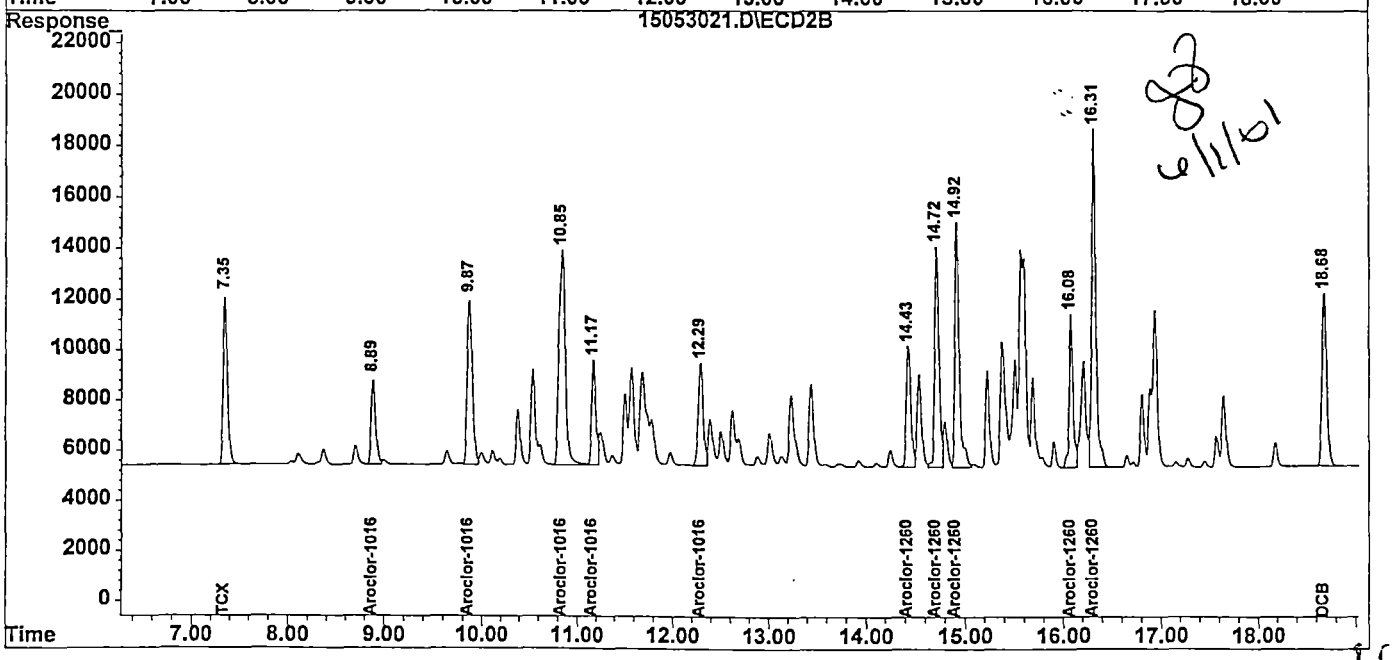
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053021.D\ECD1A.CH Vial: 21
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053021.D\ECD2B.CH
Acq On : 30 May 2001 16:56 Operator: DDC
Sample : AR1660L2A Inst : HP_15
Misc : 5-446-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:57 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Multiple Level Calibration

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





6/1/01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053022.D\ECD1A.CH Vial: 22
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053022.D\ECD2B.CH
Acq On : 30 May 2001 17:19 Operator: DDC
Sample : AR1660L3A Inst : HP_15
Misc : 5-445-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:57 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	418644	402437	19.6	19.6
22)	S DCB	18.28	18.68	405959	413708	20.0	20.3
	Target Compounds:						
2)	L1 Aroclor-1016	8.42	8.89	226727	194417	405.8	405.9
3)	L1 Aroclor-1016 {2}	9.28	9.87	298760	451416	405.5	402.2
4)	L1 Aroclor-1016 {3}	10.58	10.85	467873	762351	417.8	407.8
	L1 Aroclor-1016 {4}	11.20	11.17	258588	260579	418.7	413.2
	L1 Aroclor-1016 {5}	11.64	12.29	259682	271258	421.0	417.5
	Sum Aroclor-1016			1511629	1940021	2068.8	2046.6
	Average Aroclor-1016					413.755	409.311
17)	L7 Aroclor-1260	14.31	14.43	500710	297278	414.4	430.1
18)	L7 Aroclor-1260 {2}	14.80	14.72	689975	492035	417.3	434.2
19)	L7 Aroclor-1260 {3}	15.25	14.92	638029	569413	416.0	437.7
20)	L7 Aroclor-1260 {4}	15.72	16.09	322525	323830	432.4	429.1
21)	L7 Aroclor-1260 {5}	16.16	16.32	656803	765897	402.6	421.5
	Sum Aroclor-1260			2808043	2448453	2082.8	2152.7
	Average Aroclor-1260					416.551	430.540

COPY
ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E3050
Signature Amelda M. Williams
Date 06/05/01

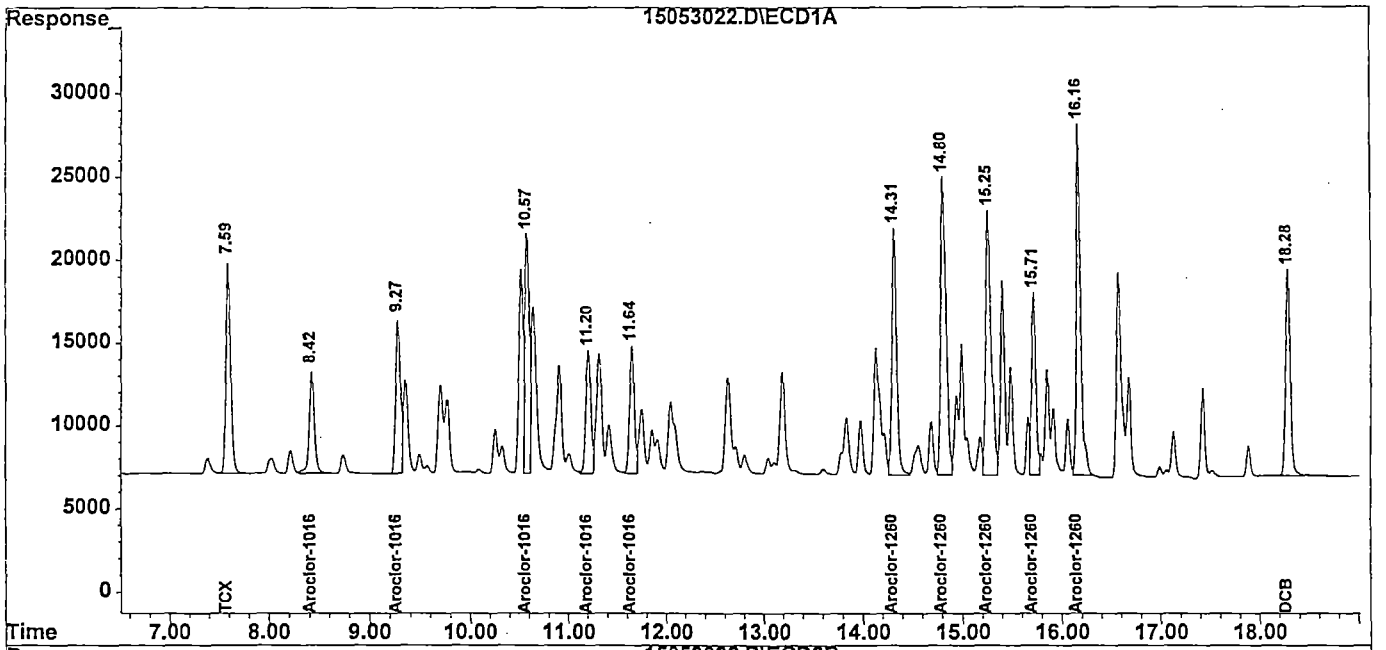
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

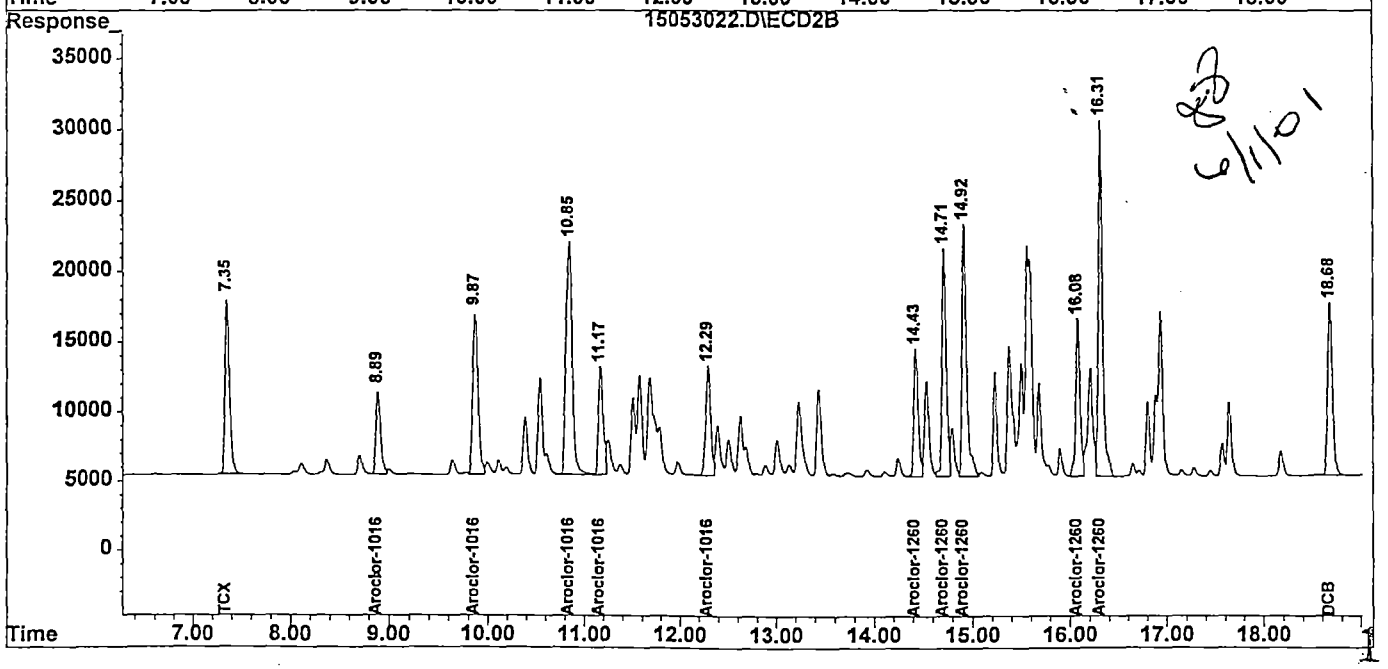
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053022.D\ECD1A.CH Vial: 22
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053022.D\ECD2B.CH
Acq On : 30 May 2001 17:19 Operator: DDC
Sample : AR1660L3A Inst : HP_15
Misc : 5-445-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:57 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Multiple Level Calibration

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053023.D\ECD1A.CH Vial: 23
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053023.D\ECD2B.CH
Acq On : 30 May 2001 17:42 Operator: DDC
Sample : AR1660L4A Inst : HP_15
Misc : 5-444-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:57 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	777969	773206	37.4	38.7
22)	S DCB	18.28	18.68	704824	716843	36.0	36.4
	Target Compounds:						
2)	L1 Aroclor-1016	8.42	8.89	389215	339530	693.0	708.8
3)	L1 Aroclor-1016 {2}	9.28	9.87	502891	770884	679.2	687.3
4)	L1 Aroclor-1016 {3}	10.58	10.85	819546	1378582	720.9	731.2
	L1 Aroclor-1016 {4}	11.20	11.17	438123	459229	697.9	725.0
	L1 Aroclor-1016 {5}	11.64	12.29	449281	481303	715.7	731.5
	Sum Aroclor-1016			2599056	3429528	3506.8	3583.7
	Average Aroclor-1016					701.355	716.747
17)	L7 Aroclor-1260	14.31	14.43	838840	521126	679.2	736.7
18)	L7 Aroclor-1260 {2}	14.80	14.72	1160078	836635	688.1	719.8
19)	L7 Aroclor-1260 {3}	15.25	14.92	1093444	971673	700.8	728.9
20)	L7 Aroclor-1260 {4}	15.72	16.08	588331	558681	777.4	723.5
21)	L7 Aroclor-1260 {5}	16.16	16.32	1138029	1347918	695.9	729.3
	Sum Aroclor-1260			4818722	4236032	3541.4	3638.1
	Average Aroclor-1260					708.277	727.628

COPY
ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E3050
Signature Amelia M. Williams
Date 06/05/01

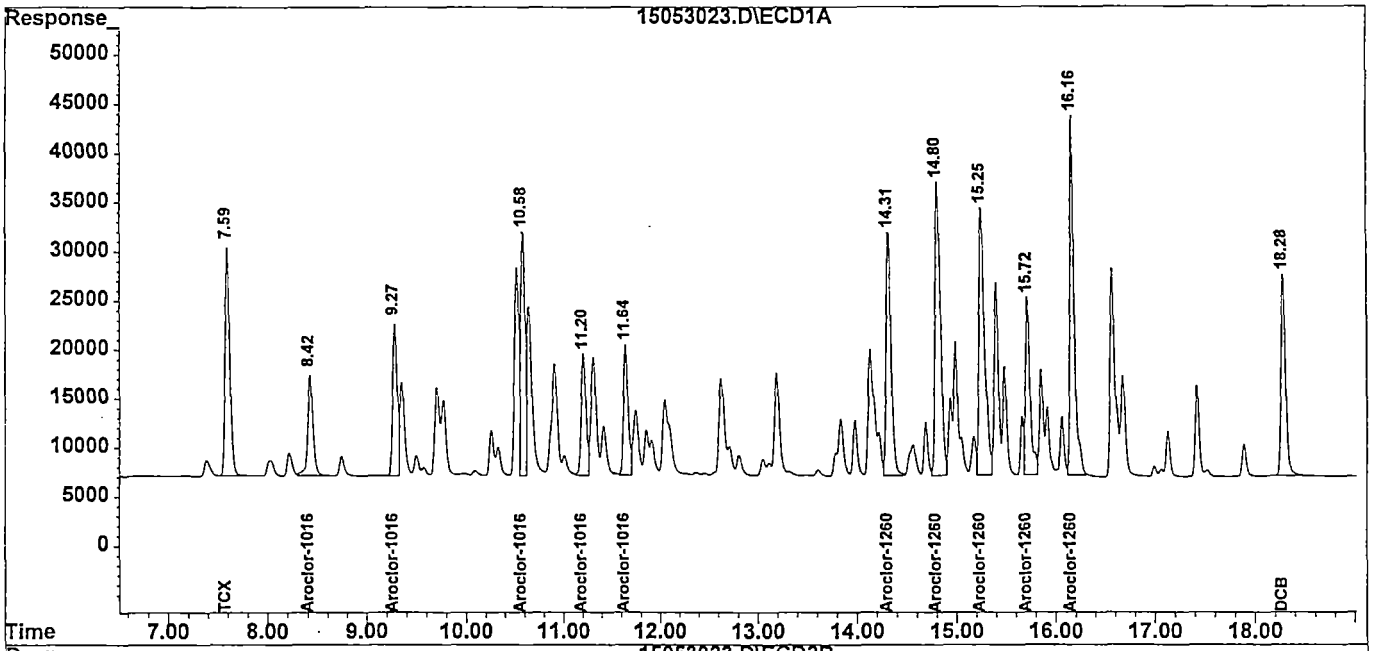
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

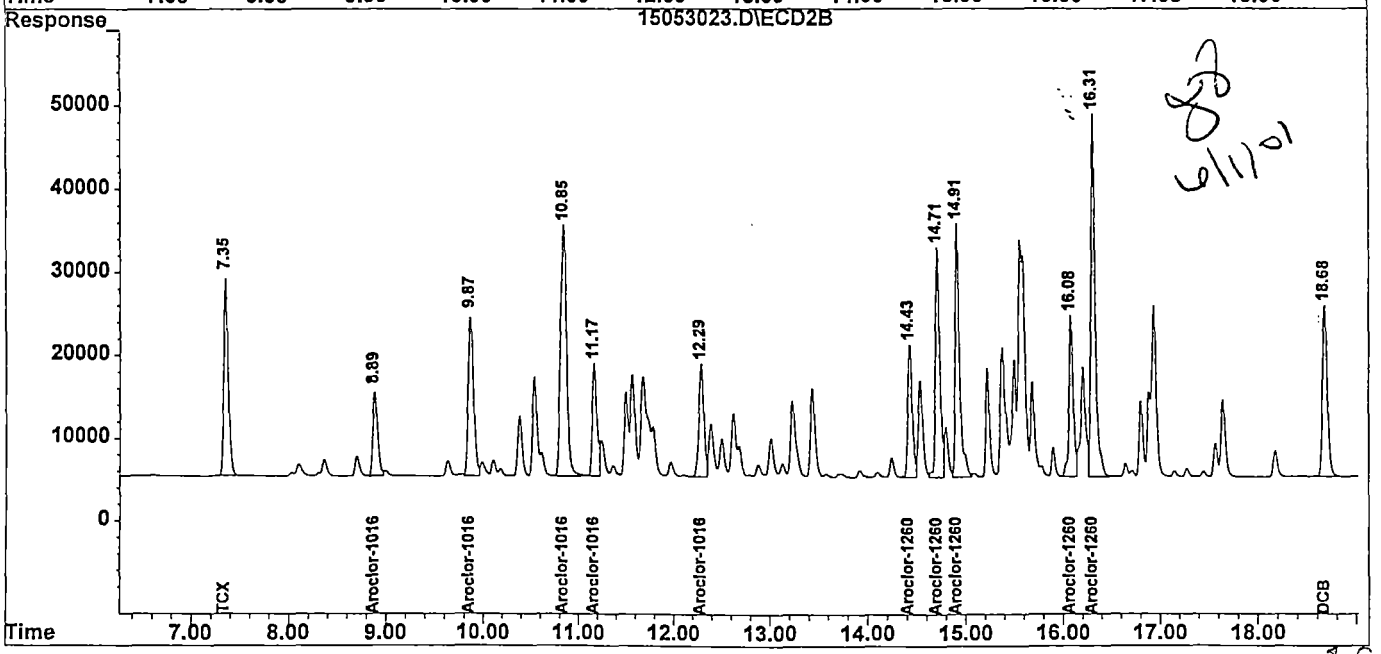
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053023.D\ECD1A.CH Vial: 23
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053023.D\ECD2B.CH
Acq On : 30 May 2001 17:42 Operator: DDC
Sample : AR1660L4A Inst : HP_15
Misc : 5-444-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:57 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Multiple Level Calibration

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





6/1/01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053024.D\ECD1A.CH Vial: 24
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053024.D\ECD2B.CH
Acq On : 30 May 2001 18:05 Operator: DDC
Sample : AR1660L5A Inst : HP_15
Misc : 5-443-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:57 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	1540813	1575938	74.2 E	78.8
22)	S DCB	18.28	18.68	1335355	1385312	67.6	69.7 E
	Target Compounds:						
2)	L1 Aroclor-1016	8.42	8.89	702119	622475	1269.5	1326.1 E
3)	L1 Aroclor-1016 {2}	9.28	9.87	884582	1390840	1211.5 E	1266.3 E
4)	L1 Aroclor-1016 {3}	10.58	10.85	1534897	2653279	1359.2	1425.3
	L1 Aroclor-1016 {4}	11.20	11.17	791449	880207	1268.6	1415.2 E
	L1 Aroclor-1016 {5}	11.64	12.29	833379	917369	1335.9	1408.9
	Sum Aroclor-1016			4746425	6464170	6444.7	6842.0
	Average Aroclor-1016					1288.949	1368.395
17)	L7 Aroclor-1260	14.31	14.43	1534783	1002716	1242.7 E	1414.6
18)	L7 Aroclor-1260 {2}	14.80	14.72	2155576	1560460	1281.9	1337.1 E
19)	L7 Aroclor-1260 {3}	15.25	14.92	2091836	1839722	1346.6	1376.2 E
20)	L7 Aroclor-1260 {4}	15.72	16.08	1123250	1087920	1480.7 E	1408.7 E
21)	L7 Aroclor-1260 {5}	16.16	16.32	2216334	2672828	1376.9 E	1452.4
	Sum Aroclor-1260			9121778	8163647	6728.8	6989.0
	Average Aroclor-1260					1345.756	1397.802

COPY

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E3050
Signature Gonella M. Williams
Date 06/05/01

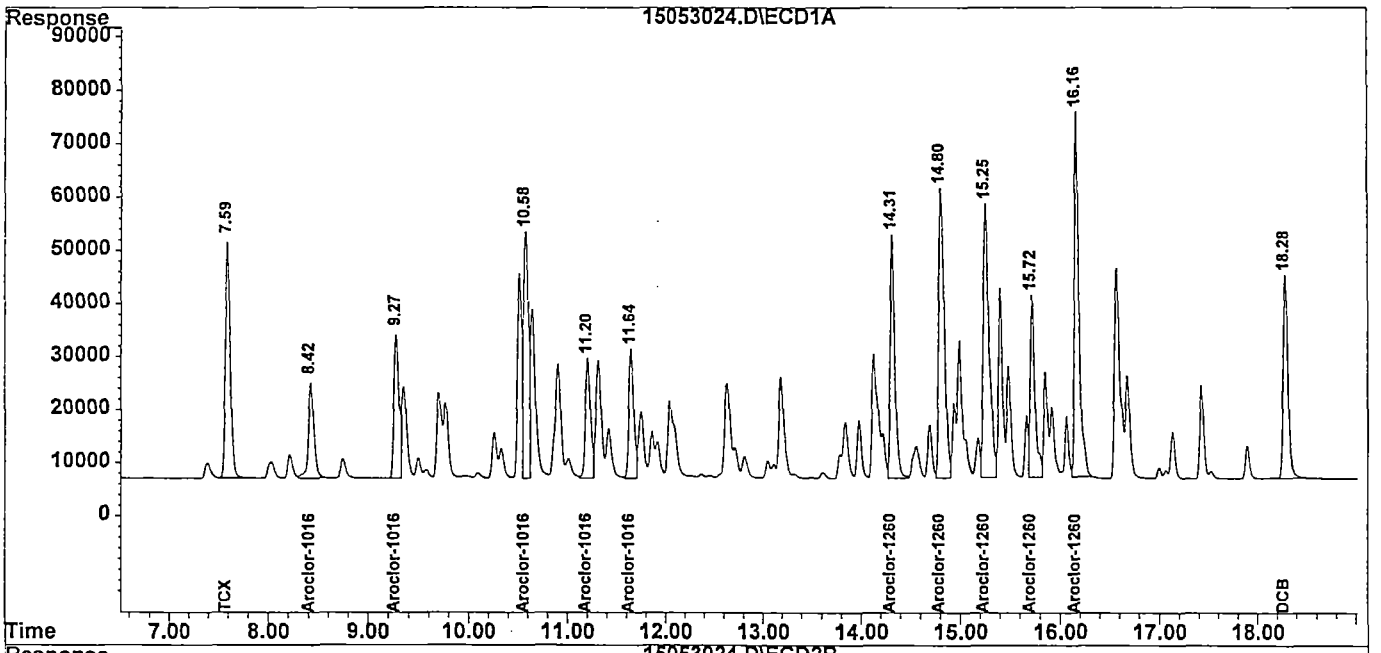
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

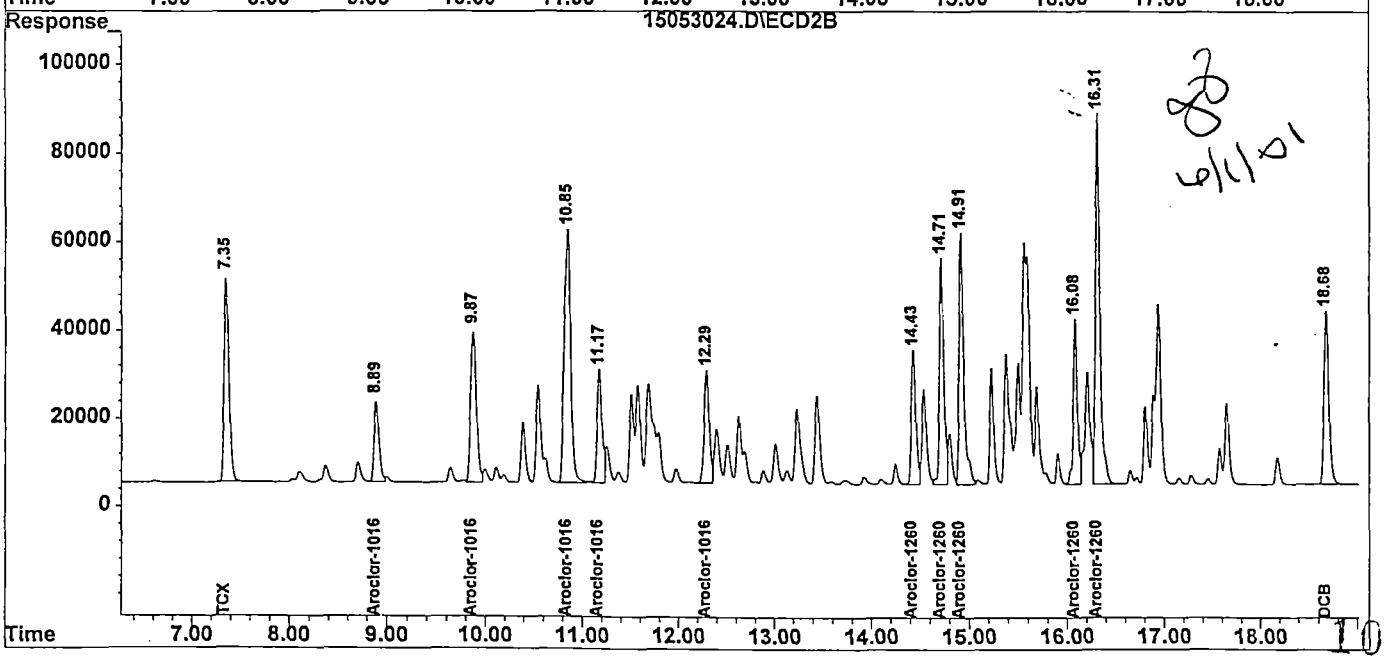
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\05_30_01\15053024.D\ECD1A.CH Vial: 24
Signal #2 : F:\HPCHEM\HP\15\DATA\05_30_01\15053024.D\ECD2B.CH
Acq On : 30 May 2001 18:05 Operator: DDC
Sample : AR1660L5A Inst : HP_15
Misc : 5-443-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 31 7:57 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\05_30_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Sun May 27 09:05:10 2001
Response via : Multiple Level Calibration

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





6/1/01

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Continuing Calibration Report HP_15

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Tue Jun 05 07:53:11 2001
esponse via : Initial Calibration

Continuing Calibration File: 15060429.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	20.674	22.830	E3	-10.4	109
2	L1	Aroclor-1016	555.754	560.701		-0.9	99
3	L1	Aroclor-1016 {2}	732.822	775.447		-5.8	104
4	L1	Aroclor-1016 {3}	1.141	1.168	E3	-2.3	100
5	L1	Aroclor-1016 {4}	629.557	633.775		-0.7	98
6	L1	Aroclor-1016 {5}	630.607	653.337		-3.6	101
17	L7	Aroclor-1260	1.249	1.320	E3	-5.6	105
18	L7	Aroclor-1260 {2}	1.700	1.763	E3	-3.7	102
19	L7	Aroclor-1260 {3}	1.569	1.618	E3	-3.1	101
20	L7	Aroclor-1260 {4}	762.452	869.751		-14.1	108
21	L7	Aroclor-1260 {5}	1.608	1.604	E3	0.2	98
22	S	DCB	20.065	18.934	E3	5.6	93

Signal #2
Continuing Calibration File: 15060429.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	19.966	17.111	E3	14.3	85
2	L1	Aroclor-1016	469.705	428.141		8.8	88
3	L1	Aroclor-1016 {2}	1.097	0.961	E3	12.4	85
4	L1	Aroclor-1016 {3}	1.875	1.605	E3	14.4	84
5	L1	Aroclor-1016 {4}	623.733	511.751		18.0#	79
6	L1	Aroclor-1016 {5}	656.997	564.249		14.1	83
17	L7	Aroclor-1260	722.409	629.475		12.9	85
18	L7	Aroclor-1260 {2}	1.189	1.041	E3	12.5	85
19	L7	Aroclor-1260 {3}	1.362	1.193	E3	12.4	84
20	L7	Aroclor-1260 {4}	786.423	680.610		13.5	84
21	L7	Aroclor-1260 {5}	1.868	1.577	E3	15.5#	82
22	S	DCB	20.248	16.297	E3	19.5#	79

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

15060429.D XPCBE30.M Tue Jun 05 07:53:17 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060429.D\ECD1A.CH Vial: 29
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060429.D\ECD2B.CH
Acq On : 04 Jun 2001 21:38 Operator: DDC
Sample : AR1660L3AN Inst : HP_15
Misc : 5-445-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 7:53 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Initial Calibration

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

Signal #2 Phase: DB-XLB
Signal #2 Info : .32 mm
Signal #2 Inst : HP_15B

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
System Monitoring Compounds:						
1) S TCX	7.60	7.35	456608	342219	22.1	17.1
22) S DCB	18.29	18.69	378678	325942	18.9	16.1
Target Compounds:						
2) L1 Aroclor-1016	8.42	8.89	224280	171256	403.6	364.6
3) L1 Aroclor-1016 {2}	9.28	9.87	310179	384549	423.3	350.5
4) L1 Aroclor-1016 {3}	10.58	10.85	467022	641944	409.2	342.3
L1 Aroclor-1016 {4}	11.21	11.18	253510	204700	402.7	328.2
L1 Aroclor-1016 {5}	11.65	12.30	261335	225700	414.4	343.5
Sum Aroclor-1016			1516326	1628150	2053.1	1729.1
Average Aroclor-1016					410.619	345.827
17) L7 Aroclor-1260	14.32	14.44	527884	251790	422.6	348.5
18) L7 Aroclor-1260 {2}	14.81	14.73	705082	416355	414.8	350.1
19) L7 Aroclor-1260 {3}	15.26	14.93	647108	477093	412.3	350.3
20) L7 Aroclor-1260 {4}	15.72	16.09	347901	272244	456.3	346.2
21) L7 Aroclor-1260 {5}	16.17	16.32	641753	630958	399.1	337.8
Sum Aroclor-1260			2869727	2048440	2105.0	1732.9
Average Aroclor-1260					421.006	346.586

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E0041
Signature Freddie M. Williams
Date 06/05/01

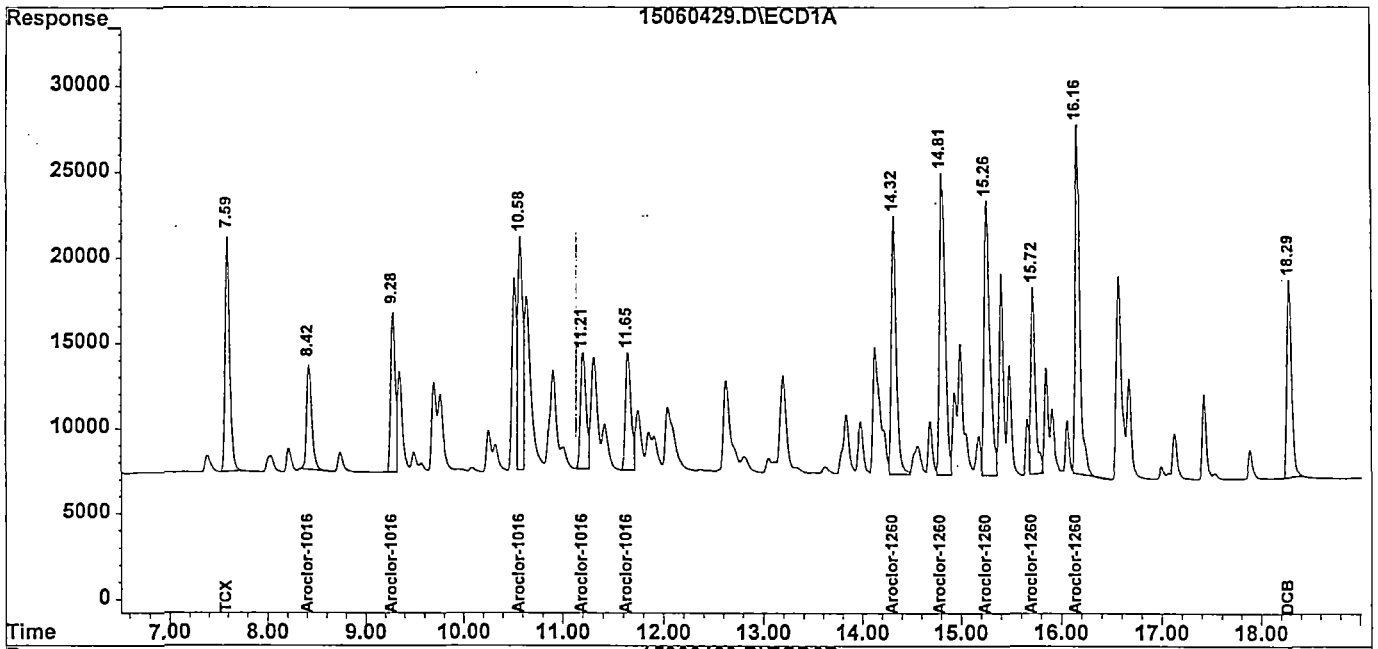
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

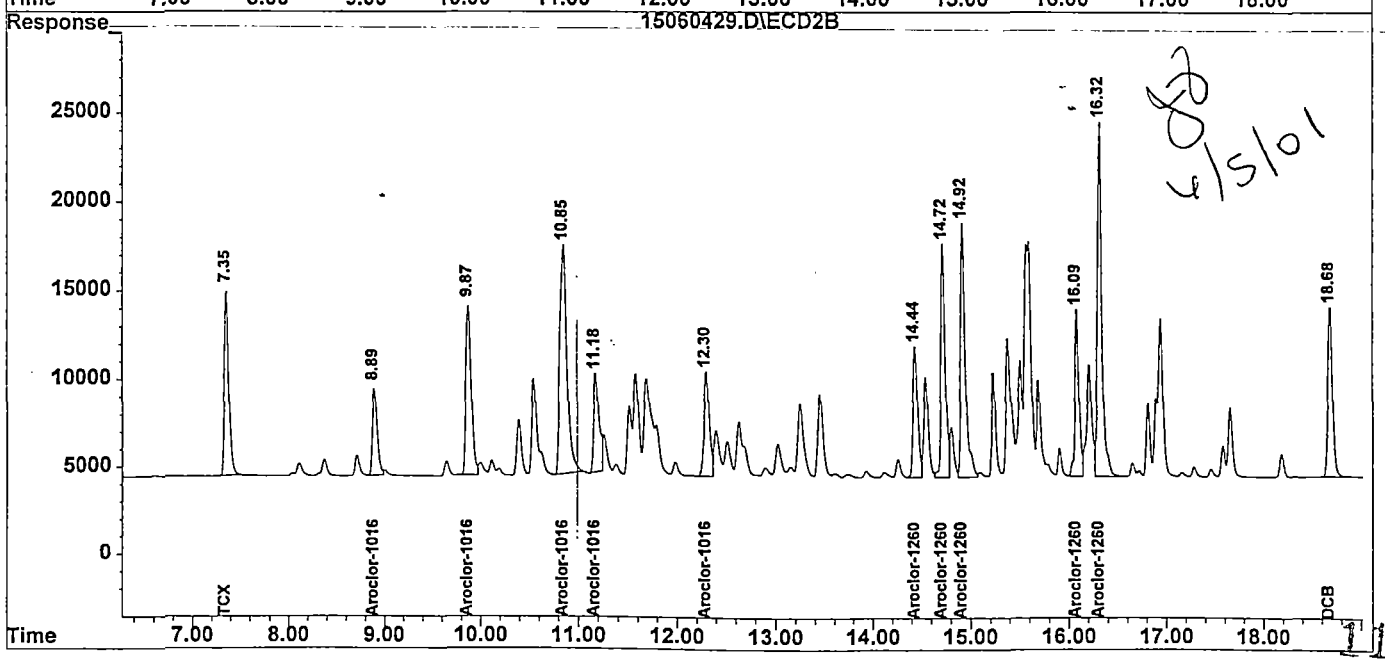
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060429.D\ECD1A.CH Vial: 29
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060429.D\ECD2B.CH
Acq On : 04 Jun 2001 21:38 Operator: DDC
Sample : AR1660L3AN Inst : HP_15
Misc : 5-445-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 7:53 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Multiple Level Calibration

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





6/5/01

Continuing Calibration Report HP_15

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Tue Jun 05 07:56:31 2001
esponse via : Initial Calibration

Continuing Calibration File: 15060451.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	20.674	23.431	E3	-13.3	112
2	L1	Aroclor-1016	555.754	567.552		-2.1	100
3	L1	Aroclor-1016 {2}	732.822	788.166		-7.6	106
4	L1	Aroclor-1016 {3}	1.141	1.159	E3	-1.5	99
5	L1	Aroclor-1016 {4}	629.557	636.896		-1.2	99
6	L1	Aroclor-1016 {5}	630.607	664.949		-5.4	102
17	L7	Aroclor-1260	1.249	1.337	E3	-7.0	107
18	L7	Aroclor-1260 {2}	1.700	1.783	E3	-4.9	103
19	L7	Aroclor-1260 {3}	1.569	1.613	E3	-2.8	101
20	L7	Aroclor-1260 {4}	762.452	855.261		-12.2	106
21	L7	Aroclor-1260 {5}	1.608	1.593	E3	0.9	97
22	S	DCB	20.065	20.233	E3	-0.8	100

Signal #2
Continuing Calibration File: 15060451.D

		Compound	AvgRF	CCRF		%Dev	Area%
	S	TCX	19.966	18.124	E3	9.2	90
2	L1	Aroclor-1016	469.705	431.623		8.1	89
3	L1	Aroclor-1016 {2}	1.097	1.007	E3	8.2	89
4	L1	Aroclor-1016 {3}	1.875	1.662	E3	11.4	87
5	L1	Aroclor-1016 {4}	623.733	521.902		16.3#	80
6	L1	Aroclor-1016 {5}	656.997	569.078		13.4	84
17	L7	Aroclor-1260	722.409	624.134		13.6	84
18	L7	Aroclor-1260 {2}	1.189	1.042	E3	12.4	85
19	L7	Aroclor-1260 {3}	1.362	1.181	E3	13.3	83
20	L7	Aroclor-1260 {4}	786.423	671.029		14.7	83
21	L7	Aroclor-1260 {5}	1.868	1.570	E3	15.9#	82
22	S	DCB	20.248	17.386	E3	14.1	84

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

15060451.D XPCBE30.M Tue Jun 05 07:56:37 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060451.D\ECD1A.CH Vial: 51
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060451.D\ECD2B.CH
Acq On : 05 Jun 2001 6:07 Operator: DDC
Sample : AR1660L3AR Inst : HP_15
Misc : 5-445-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 7:56 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	468610	362488	22.7	18.2
22)	S DCB	18.28	18.68	404661	347714	20.2	17.2
	Target Compounds:						
2)	L1 Aroclor-1016	8.42	8.89	227021	172649	408.5	367.6
3)	L1 Aroclor-1016 {2}	9.28	9.87	315266	402875	430.2	367.2
4)	L1 Aroclor-1016 {3}	10.58	10.85	463433	664930	406.0	354.6
	L1 Aroclor-1016 {4}	11.20	11.17	254758	208761	404.7	334.7
	L1 Aroclor-1016 {5}	11.65	12.30	265980	227631	421.8	346.5
	Sum Aroclor-1016			1526458	1676847	2071.2	1770.5
	Average Aroclor-1016					414.234	354.102
17)	L7 Aroclor-1260	14.32	14.44	534667	249654	428.0	345.6
18)	L7 Aroclor-1260 {2}	14.81	14.72	713086	416670	419.5	350.4
19)	L7 Aroclor-1260 {3}	15.26	14.92	645194	472217	411.1	346.7
20)	L7 Aroclor-1260 {4}	15.72	16.09	342104	268412	448.7	341.3
21)	L7 Aroclor-1260 {5}	16.16	16.32	637369	628074	396.3	336.3
	Sum Aroclor-1260			2872420	2035026	2103.6	1720.2
	Average Aroclor-1260					420.725	344.048

COPY
ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E0041
Signature [signature]
Date 06/07/01

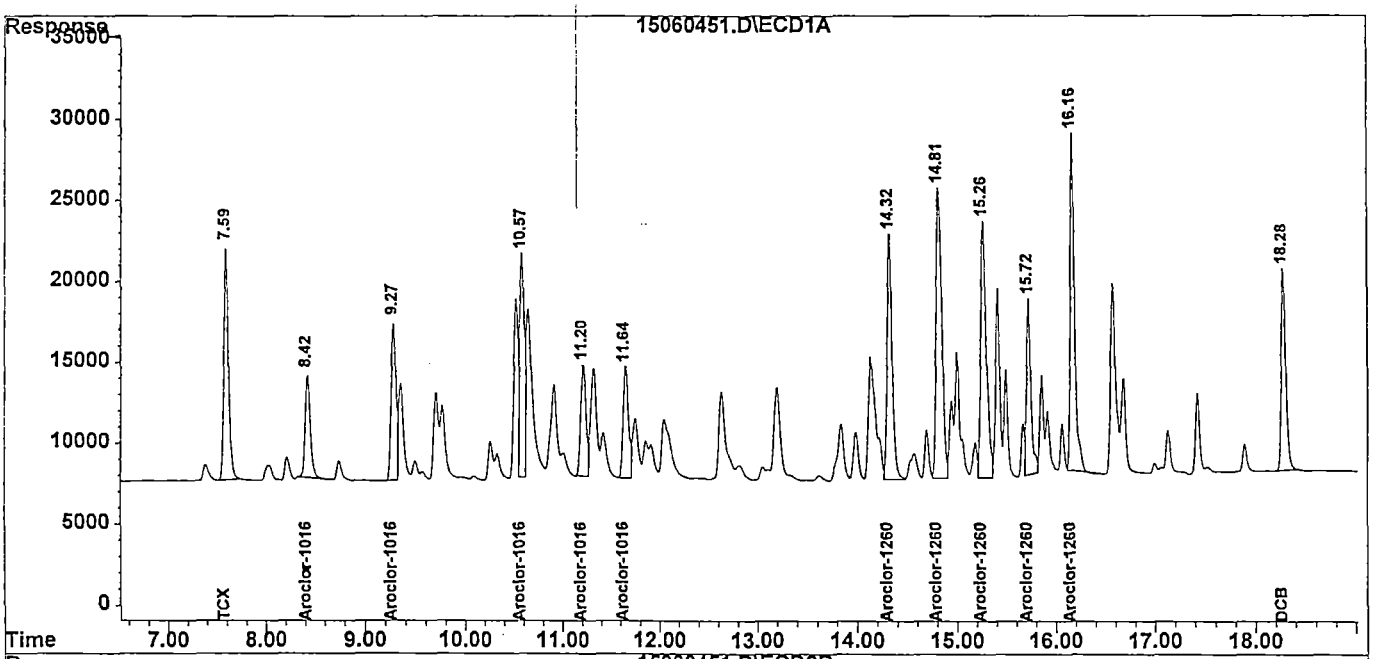
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

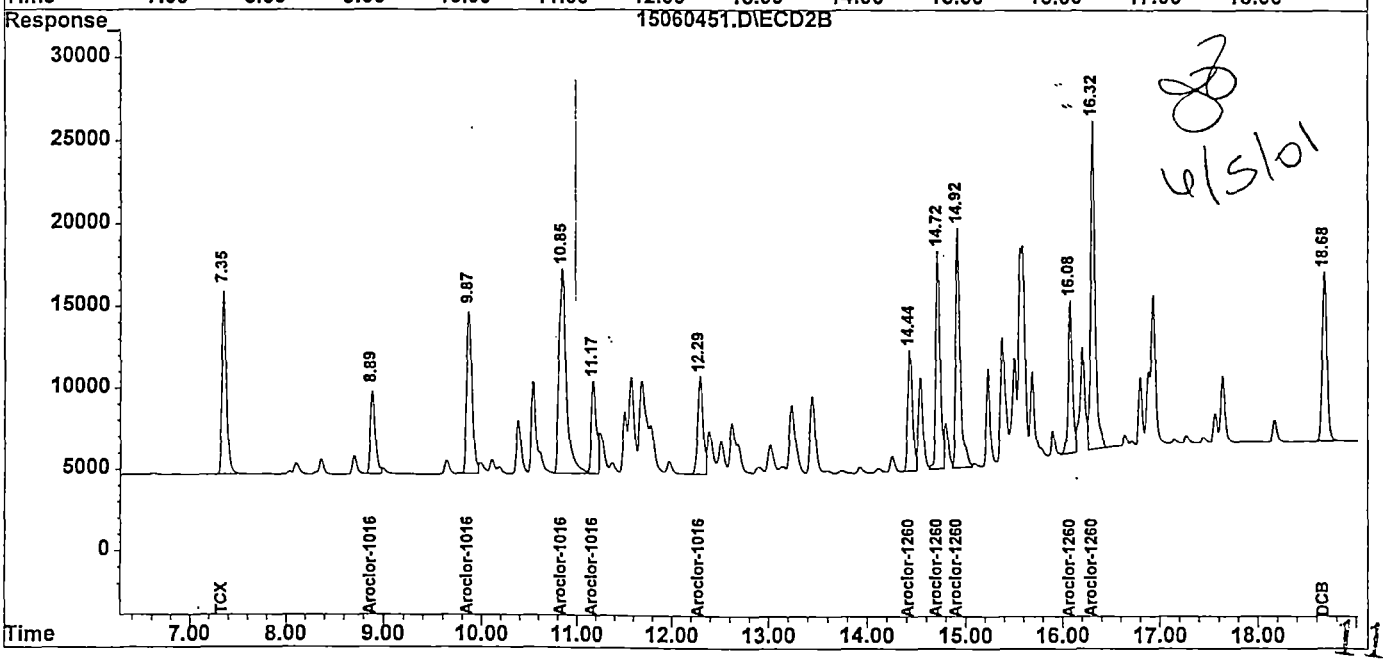
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060451.D\ECD1A.CH Vial: 51
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060451.D\ECD2B.CH
Acq On : 05 Jun 2001 6:07 Operator: DDC
Sample : AR1660L3AR Inst : HP_15
Misc : 5-445-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 7:56 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Multiple Level Calibration

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





6/5/01

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Continuing Calibration Report HP_15

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Tue Jun 05 14:00:11 2001
Response via : Initial Calibration

Continuing Calibration File: 15060468.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	20.674	23.722	E3	-14.7	113
2	L1	Aroclor-1016	555.754	579.576		-4.3	102
3	L1	Aroclor-1016 {2}	732.822	799.399		-9.1	107
4	L1	Aroclor-1016 {3}	1.141	1.174	E3	-2.8	100
5	L1	Aroclor-1016 {4}	629.557	647.955		-2.9	100
6	L1	Aroclor-1016 {5}	630.607	657.557		-4.3	101
17	L7	Aroclor-1260	1.249	1.430	E3	-14.4	114
18	L7	Aroclor-1260 {2}	1.700	1.907	E3	-12.2	111
19	L7	Aroclor-1260 {3}	1.569	1.764	E3	-12.4	111
20	L7	Aroclor-1260 {4}	762.452	951.571		-24.8#	118
21	L7	Aroclor-1260 {5}	1.608	1.751	E3	-8.9	107
22	S	DCB	20.065	21.346	E3	-6.4	105

14.5%

Signal #2
Continuing Calibration File: 15060468.D

		Compound	AvgRF	CCRF		%Dev	Area%
	S	TCX	19.966	20.551	E3	-2.9	102
2	L1	Aroclor-1016	469.705	485.926		-3.5	100
3	L1	Aroclor-1016 {2}	1.097	1.125	E3	-2.5	100
4	L1	Aroclor-1016 {3}	1.875	1.890	E3	-0.8	99
5	L1	Aroclor-1016 {4}	623.733	586.517		6.0	90
6	L1	Aroclor-1016 {5}	656.997	636.031		3.2	94
17	L7	Aroclor-1260	722.409	733.165		-1.5	99
18	L7	Aroclor-1260 {2}	1.189	1.224	E3	-2.9	99
19	L7	Aroclor-1260 {3}	1.362	1.394	E3	-2.3	98
20	L7	Aroclor-1260 {4}	786.423	818.925		-4.1	101
21	L7	Aroclor-1260 {5}	1.868	1.886	E3	-1.0	99
22	S	DCB	20.248	19.630	E3	3.1	95

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

15060468.D XPCBE30.M Tue Jun 05 14:00:17 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060468.D\ECD1A.CH Vial: 68
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060468.D\ECD2B.CH
Acq On : 05 Jun 2001 13:07 Operator: DDC
Sample : AR1660L3AT Inst : HP_15
Misc : 5-445-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 14:00 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	474434	411022	22.9	20.6
22)	S DCB	18.29	18.68	426913	392593	21.3	19.4
	Target Compounds:						
2)	L1 Aroclor-1016	8.42	8.89	231830	194371	417.1	413.8
3)	L1 Aroclor-1016 {2}	9.28	9.87	319760	450027	436.3	410.2
4)	L1 Aroclor-1016 {3}	10.58	10.85	469449	755915	411.3	403.1
	L1 Aroclor-1016 {4}	11.21	11.18	259182	234607	411.7	376.1
	L1 Aroclor-1016 {5}	11.65	12.30	263023	254413	417.1	387.2
	Sum Aroclor-1016			1543244	1889331	2093.6	1990.5
	Average Aroclor-1016					418.713	398.090
17)	L7 Aroclor-1260	14.32	14.44	571845	293266	457.8	406.0
18)	L7 Aroclor-1260 {2}	14.81	14.72	762952	489419	448.8	411.6
19)	L7 Aroclor-1260 {3}	15.26	14.92	705668	557479	449.6	409.3
20)	L7 Aroclor-1260 {4}	15.72	16.09	380628	327570	499.2	416.5
21)	L7 Aroclor-1260 {5}	16.16	16.32	700282	754418	435.4	403.9
	Sum Aroclor-1260			3121375	2422152	2290.9	2047.3
	Average Aroclor-1260					458.180	409.450

COPY
ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29794 SDG E004
Signature Freda M. William
Date 06/05/01

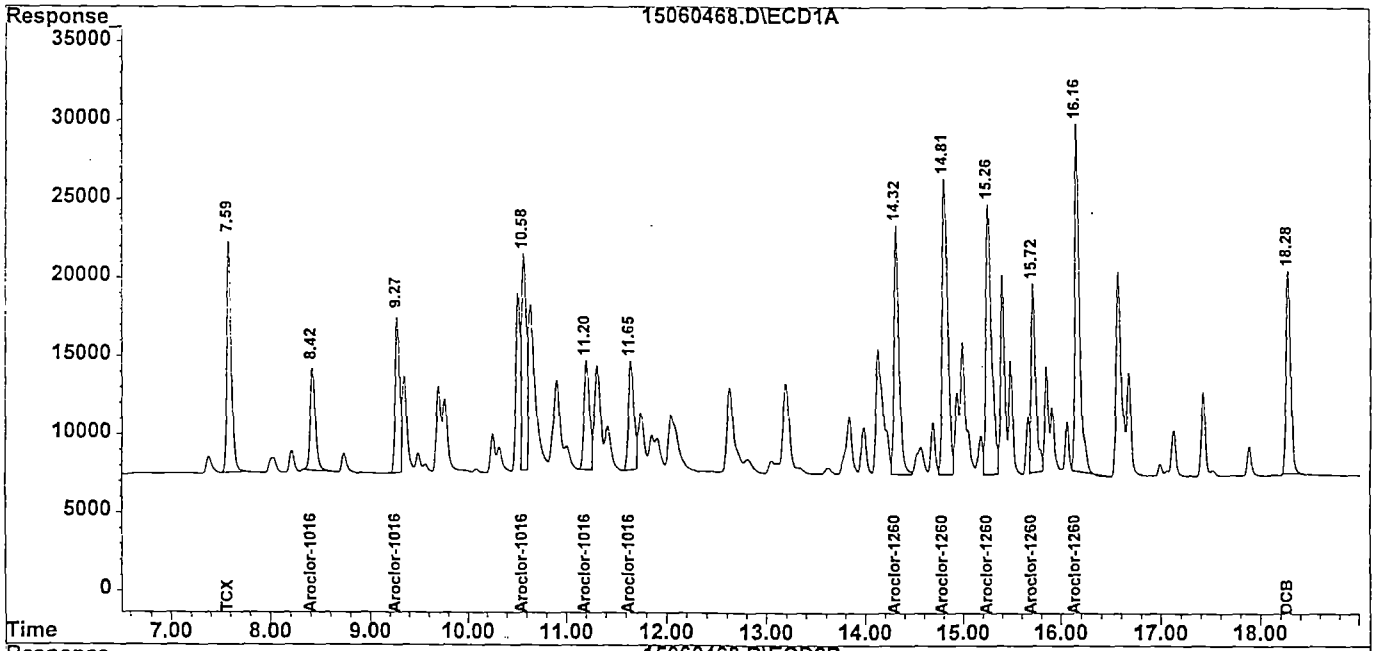
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
15060468.D XPCBE30.M Tue Jun 05 14:01:01 2001

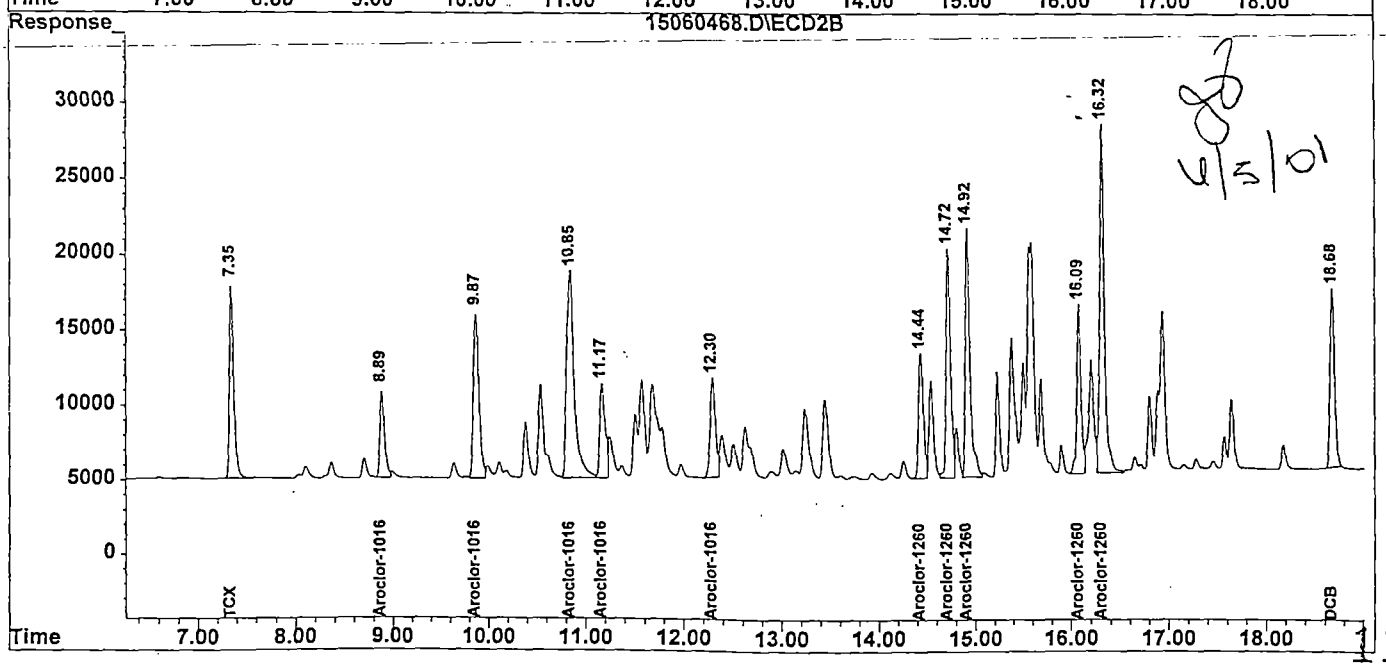
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060468.D\ECD1A.CH Vial: 68
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060468.D\ECD2B.CH
Acq On : 05 Jun 2001 13:07 Operator: DDC
Sample : AR1660L3AT Inst : HP_15
Misc : 5-445-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 14:00 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Multiple Level Calibration

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





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Continuing Calibration Report HP_15

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Tue Jun 05 18:21:45 2001
Response via : Initial Calibration

Continuing Calibration File: 15060480.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	20.674	23.809	E3	-15.2#	114
2	L1	Aroclor-1016	555.754	587.408		-5.7	104
3	L1	Aroclor-1016 {2}	732.822	793.920		-8.3	106
4	L1	Aroclor-1016 {3}	1.141	1.132	E3	0.9	97
5	L1	Aroclor-1016 {4}	629.557	630.054		-0.1	97
6	L1	Aroclor-1016 {5}	630.607	650.237		-3.1	100
17	L7	Aroclor-1260	1.249	1.422	E3	-13.8	114
18	L7	Aroclor-1260 {2}	1.700	1.864	E3	-9.7	108
19	L7	Aroclor-1260 {3}	1.569	1.716	E3	-9.4	108
20	L7	Aroclor-1260 {4}	762.452	940.250		-23.3#	117
21	L7	Aroclor-1260 {5}	1.608	1.671	E3	-3.9	102
22	S	DCB	20.065	19.934	E3	0.7	98

Signal #2
Continuing Calibration File: 15060480.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	19.966	20.881	E3	-4.6	104
2	L1	Aroclor-1016	469.705	490.365		-4.4	101
3	L1	Aroclor-1016 {2}	1.097	1.130	E3	-3.0	100
4	L1	Aroclor-1016 {3}	1.875	1.878	E3	-0.1	99
5	L1	Aroclor-1016 {4}	623.733	565.504		9.3	87
6	L1	Aroclor-1016 {5}	656.997	642.623		2.2	95
17	L7	Aroclor-1260	722.409	738.893		-2.3	99
18	L7	Aroclor-1260 {2}	1.189	1.230	E3	-3.5	100
19	L7	Aroclor-1260 {3}	1.362	1.383	E3	-1.5	97
20	L7	Aroclor-1260 {4}	786.423	818.704		-4.1	101
21	L7	Aroclor-1260 {5}	1.868	1.837	E3	1.7	96
22	S	DCB	20.248	18.371	E3	9.3	89

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

15060480.D XPCBE30.M Tue Jun 05 18:21:51 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060480.D\ECD1A.CH Vial: 80
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060480.D\ECD2B.CH
Acq On : 05 Jun 2001 17:45 Operator: DDC
Sample : AR1660L3AV Inst : HP_15
Misc : 5-445-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 18:21 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.60	7.36	476190	417615	23.0	20.9
22)	S DCB	18.29	18.69	398679	367412	19.9	18.1
	Target Compounds:						
2)	L1 Aroclor-1016	8.42	8.89	234963	196146	422.8	417.6
3)	L1 Aroclor-1016 {2}	9.28	9.88	317568	452153	433.3	412.1
4)	L1 Aroclor-1016 {3}	10.58	10.86	452603	751001	396.5	400.5
[illegible])	L1 Aroclor-1016 {4}	11.21	11.18	252022	226202	400.3	362.7
[illegible])	L1 Aroclor-1016 {5}	11.65	12.30	260095	257049	412.5	391.2
	Sum Aroclor-1016			1517251	1882550	2065.4	1984.1
	Average Aroclor-1016					413.087	396.817
17)	L7 Aroclor-1260	14.33	14.44	568768	295557	455.3	409.1
18)	L7 Aroclor-1260 {2}	14.82	14.73	745757	492108	438.7	413.8
19)	L7 Aroclor-1260 {3}	15.26	14.93	686520	553240	437.4	406.2
20)	L7 Aroclor-1260 {4}	15.73	16.09	376100	327482	493.3	416.4
21)	L7 Aroclor-1260 {5}	16.17	16.32	668339	734647	415.6	393.3
	Sum Aroclor-1260			3045484	2403034	2240.3	2038.9
	Average Aroclor-1260					448.064	407.775

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

HYDROGEN USED AS CARRIER GAS FOR SAMPLE ANALYSES

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PBLKSB

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Matrix: (soil/water) SOIL Lab Sample ID: BL0527SB

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:05/27/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/05/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

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	

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060445.D\ECD1A.CH Vial: 45
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060445.D\ECD2B.CH
Acq On : 05 Jun 2001 3:49 Operator: DDC
Sample : BL0527SB *PBLKSB * Inst : HP_15
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 9:33 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	275211	200674	4.437	3.350
	Spiked Amount 6.667			Recovery	=	66.56%	50.25%
22)	S DCB	18.28	18.68	264510	216187	4.394	3.559
	Spiked Amount 6.667			Recovery	=	65.91%	53.39%

Target Compounds:

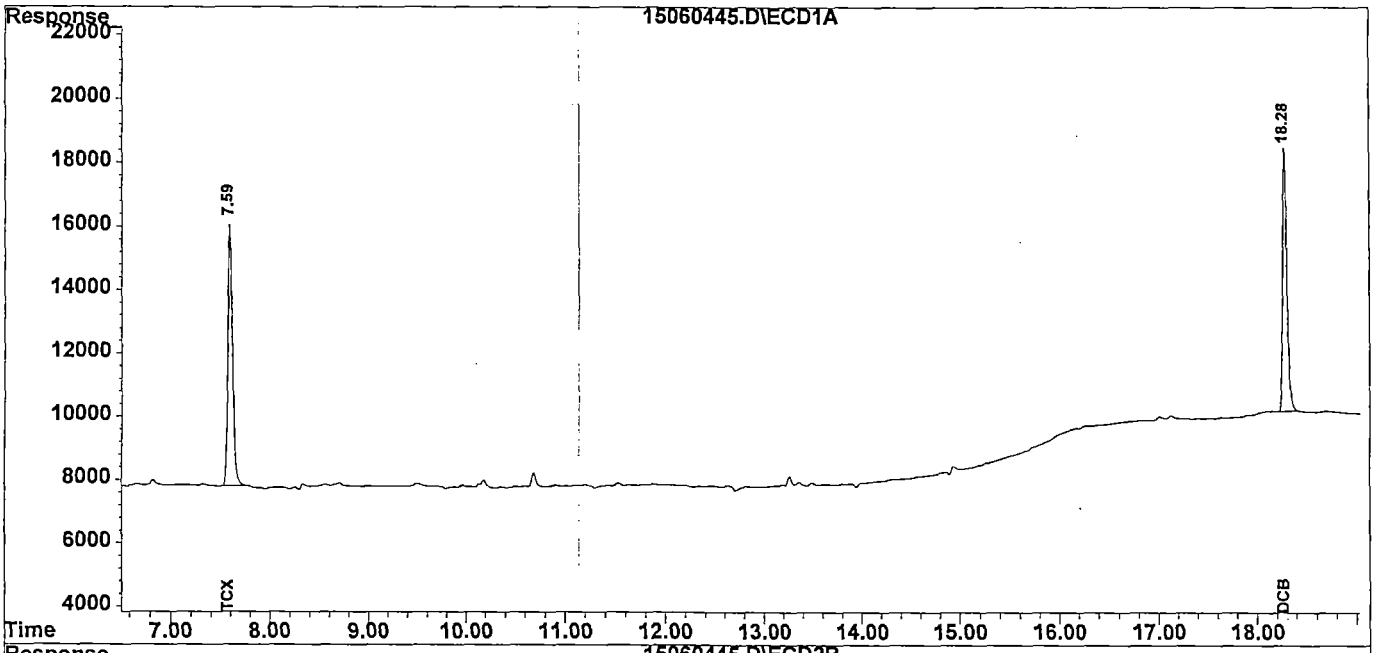
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

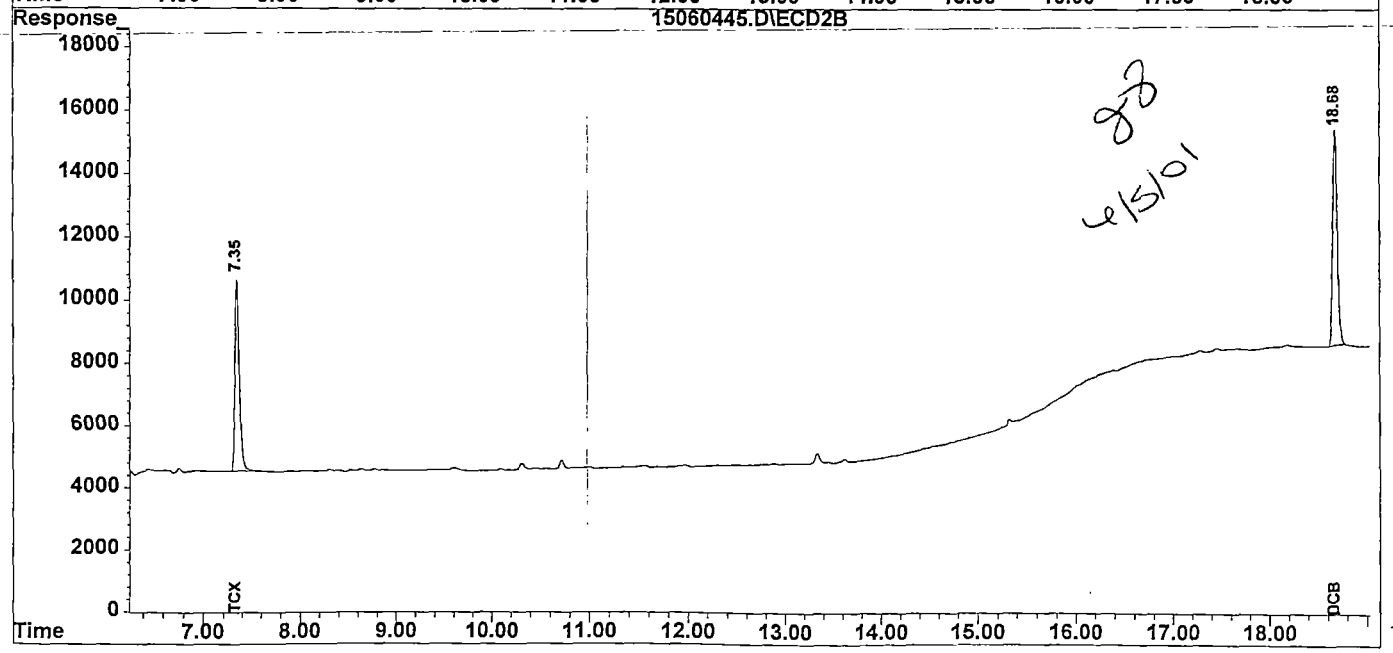
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060445.D\ECD1A.CH Vial: 45
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060445.D\ECD2B.CH
Acq On : 05 Jun 2001 3:49 Operator: DDC
Sample : BL0527SB *PBLKSB * Inst : HP_15
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 9:33 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Multiple Level Calibration

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





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6/5/01

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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKV

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Matrix: (soil/water) WATER Lab Sample ID: 5-414-6

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: 06/04/01

Injection Volume: 1.0(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	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

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKV

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Matrix: (soil/water) WATER Lab Sample ID: 5-414-6

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: 06/04/01

Injection Volume: 1.0(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	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

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060428.D\ECD1A.CH Vial: 28
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060428.D\ECD2B.CH
Acq On : 04 Jun 2001 21:15 Operator: DDC
Sample : PIBLKV Inst : HP_15
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 7:53 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.60	7.36	534989	403006	25.9	20.2
22)	S DCB	18.29	18.69	417547	359410	20.8	17.8
	Target Compounds:						

COPY
ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E0041
Signature Freda M. Williams
Date 06/07/01

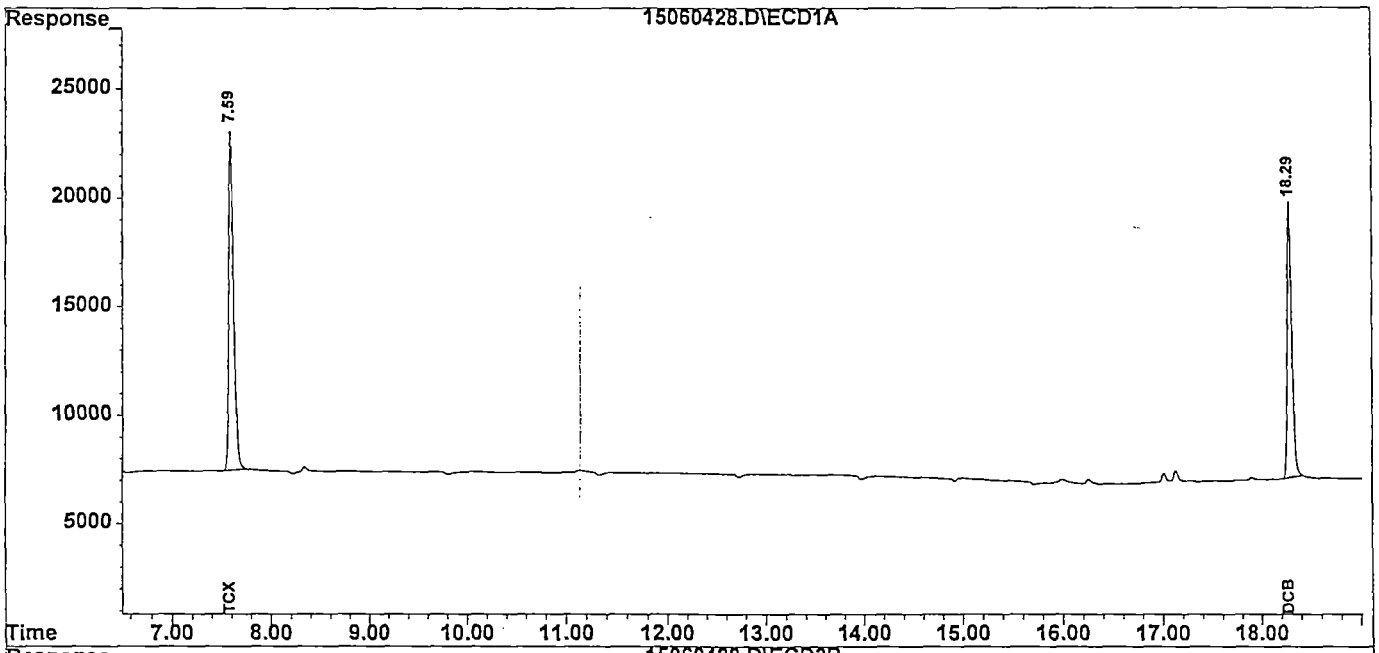
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
15060428.D XPCBE30.M Tue Jun 05 07:57:57 2001

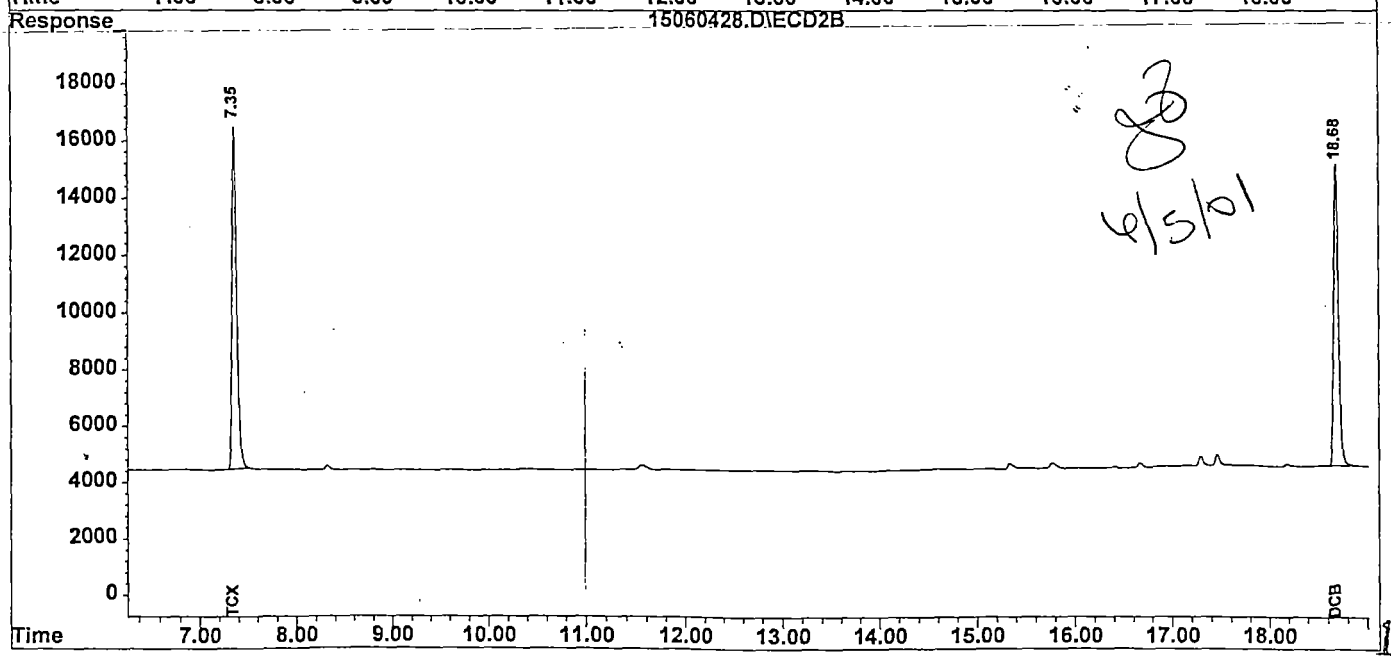
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060428.D\ECD1A.CH Vial: 28
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060428.D\ECD2B.CH
Acq On : 04 Jun 2001 21:15 Operator: DDC
Sample : PIBLKV Inst : HP_15
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 7:53 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Multiple Level Calibration

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





6/5/01

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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKX

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Matrix: (soil/water) WATER Lab Sample ID: 5-414-6

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: 06/05/01

Injection Volume: 1.0(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	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

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKX

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Matrix: (soil/water) WATER Lab Sample ID: 5-414-6

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: 06/05/01

Injection Volume: 1.0(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	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

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060450.D\ECD1A.CH Vial: 50
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060450.D\ECD2B.CH
Acq On : 05 Jun 2001 5:44 Operator: DDC
Sample : PIBLKX Inst : HP_15
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 7:56 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	564922	440029	27.3	22.0
22)	S DCB	18.29	18.68	452123	389188	22.5	19.2
	Target Compounds:						

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E0041
Signature Arelda M. Williams
Date 06/05/01

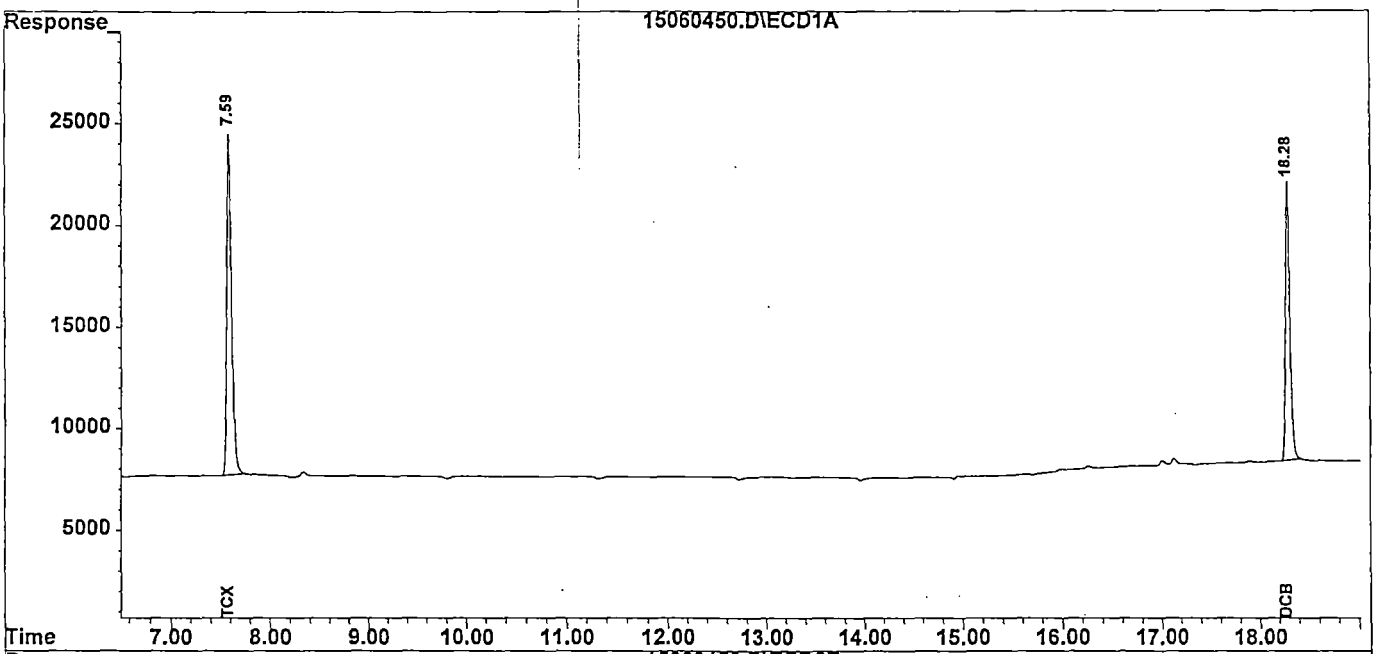
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

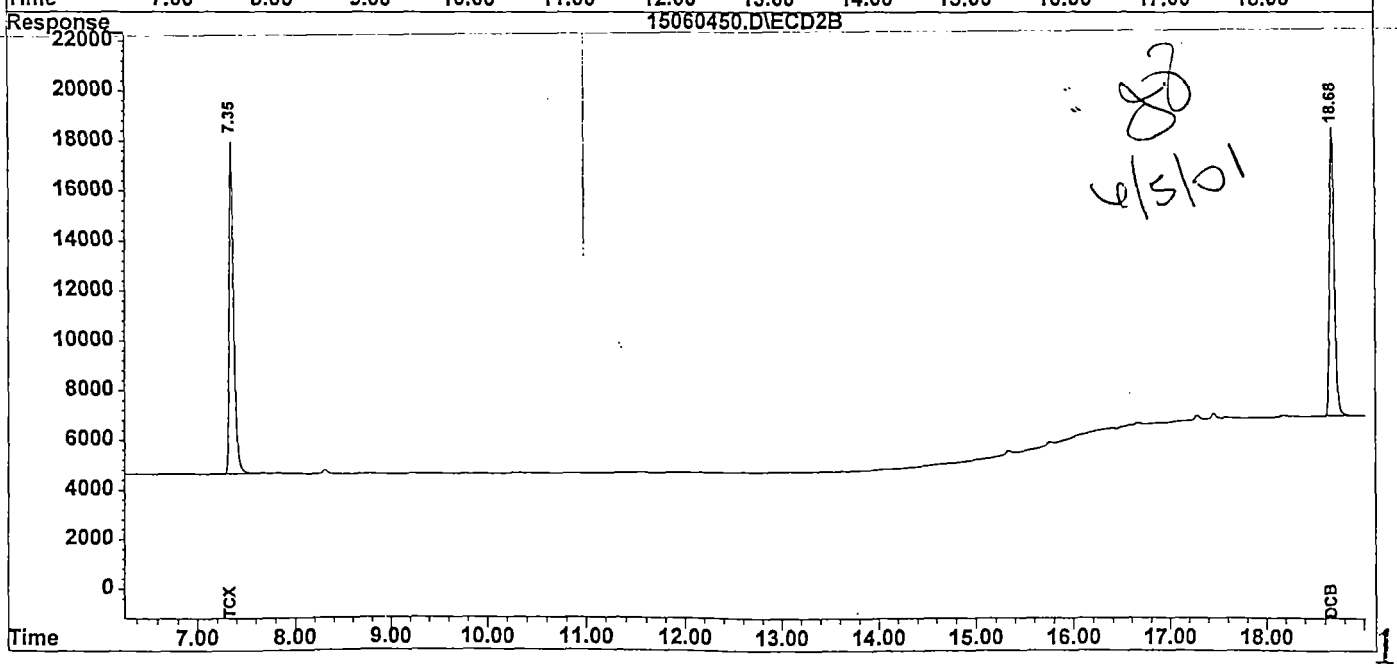
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060450.D\ECD1A.CH Vial: 50
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060450.D\ECD2B.CH
Acq On : 05 Jun 2001 5:44 Operator: DDC
Sample : PIBLKX Inst : HP_15
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 7:56 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Multiple Level Calibration

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





6/5/01

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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Matrix: (soil/water) WATER Lab Sample ID: 5-414-6

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: 06/05/01

Injection Volume: 1.0(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	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

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Matrix: (soil/water) WATER Lab Sample ID: 5-414-6

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: 06/05/01

Injection Volume: 1.0(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	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

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060467.D\ECD1A.CH Vial: 67
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060467.D\ECD2B.CH
Acq On : 05 Jun 2001 12:44 Operator: DDC
Sample : PIBLKY Inst : HP_15
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 13:15 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	552962	479252	26.7	24.0
22)	S DCB	18.29	18.68	454558	417793	22.7	20.6
	Target Compounds:						

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E0041
Signature Arnelda M. Williams
Date 06/05/01

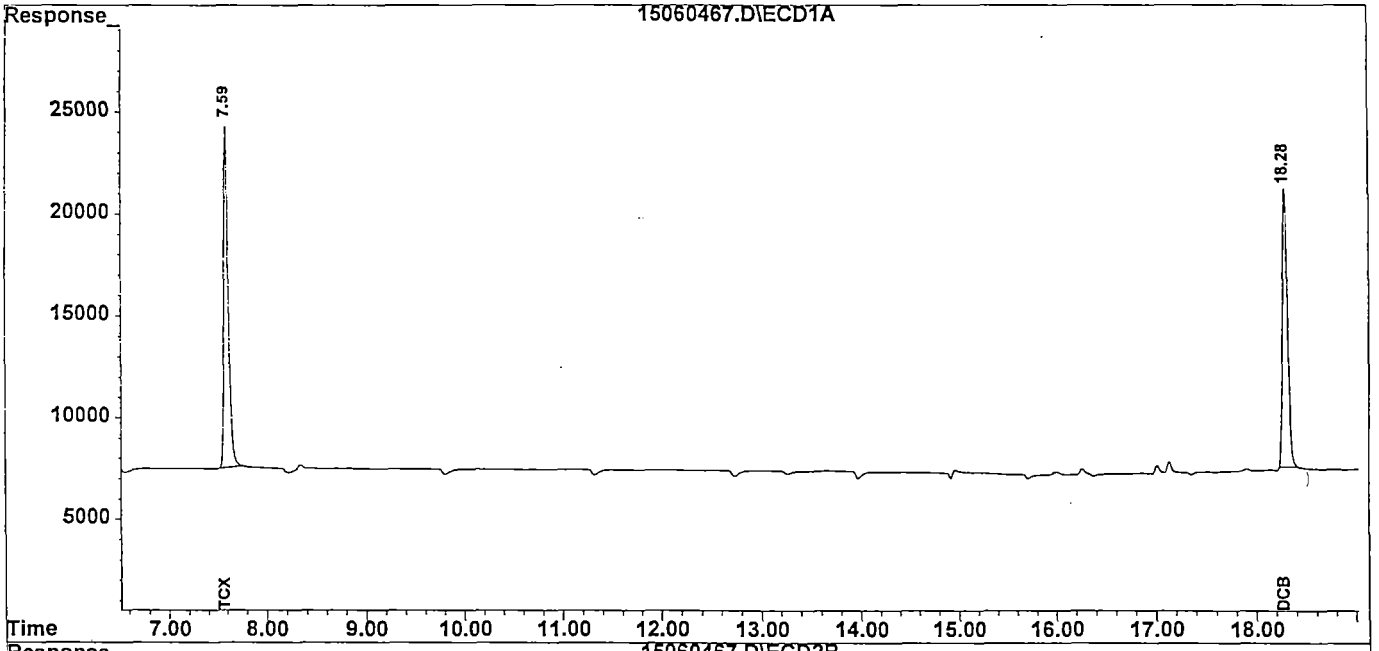
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
15060467.D XPCBE30.M Tue Jun 05 14:01:22 2001

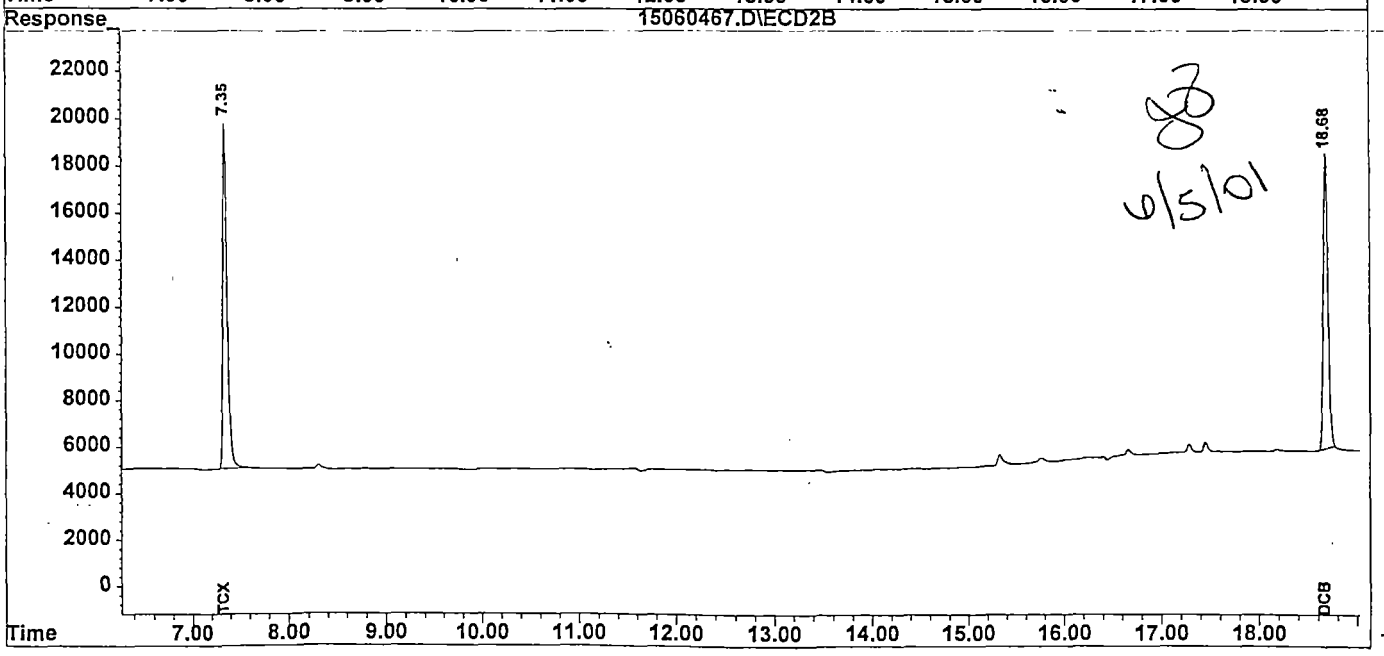
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060467.D\ECD1A.CH Vial: 67
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060467.D\ECD2B.CH
Acq On : 05 Jun 2001 12:44 Operator: DDC
Sample : PIBLKY Inst : HP_15
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 13:15 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Multiple Level Calibration

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





6/5/01

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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKZ

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Matrix: (soil/water) WATER Lab Sample ID: 5-414-6

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: 06/05/01

Injection Volume: 1.0(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	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

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKZ

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Matrix: (soil/water) WATER Lab Sample ID: 5-414-6

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: 06/05/01

Injection Volume: 1.0(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	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

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060479.D\ECD1A.CH Vial: 79
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060479.D\ECD2B.CH
Acq On : 05 Jun 2001 17:22 Operator: DDC
Sample : PIBLKZ Inst : HP_15
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 18:01 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Tue Jun 05 18:16:16 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.60	7.36	524558	463185	25.4	23.2
22)	S DCB	18.29	18.69	398039	362798	19.8	17.9
	Target Compounds:						

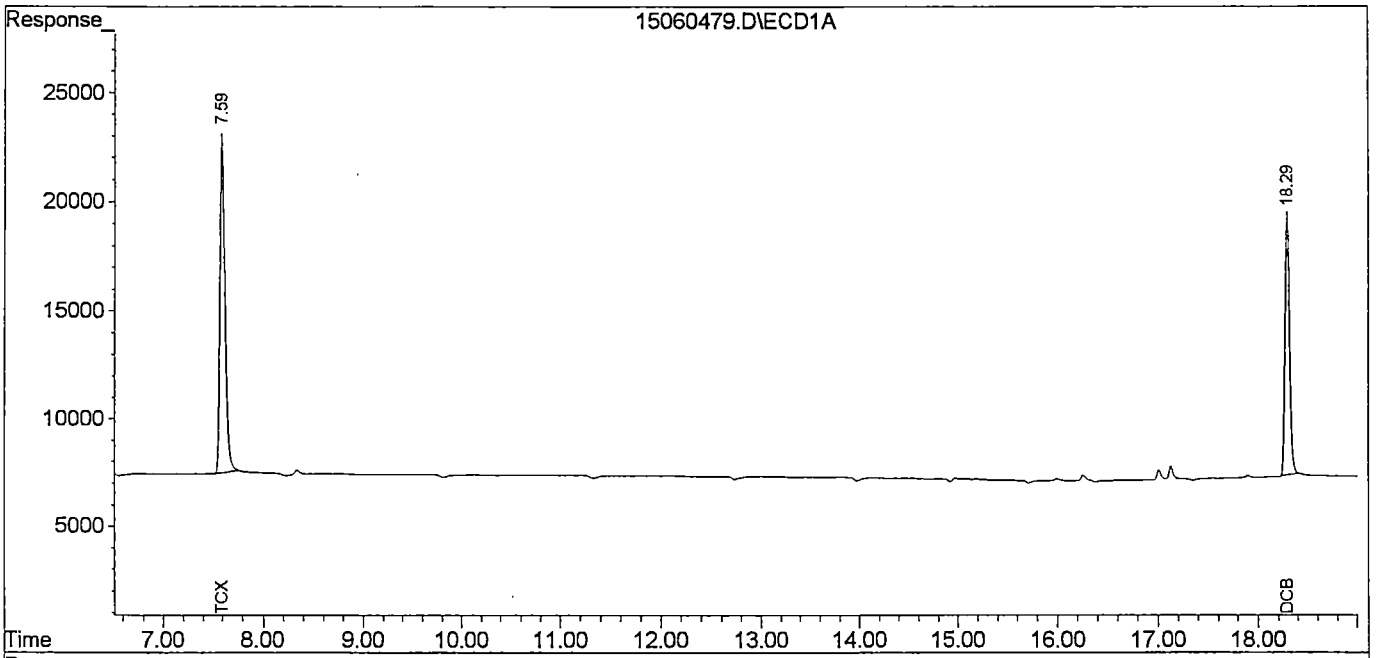
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

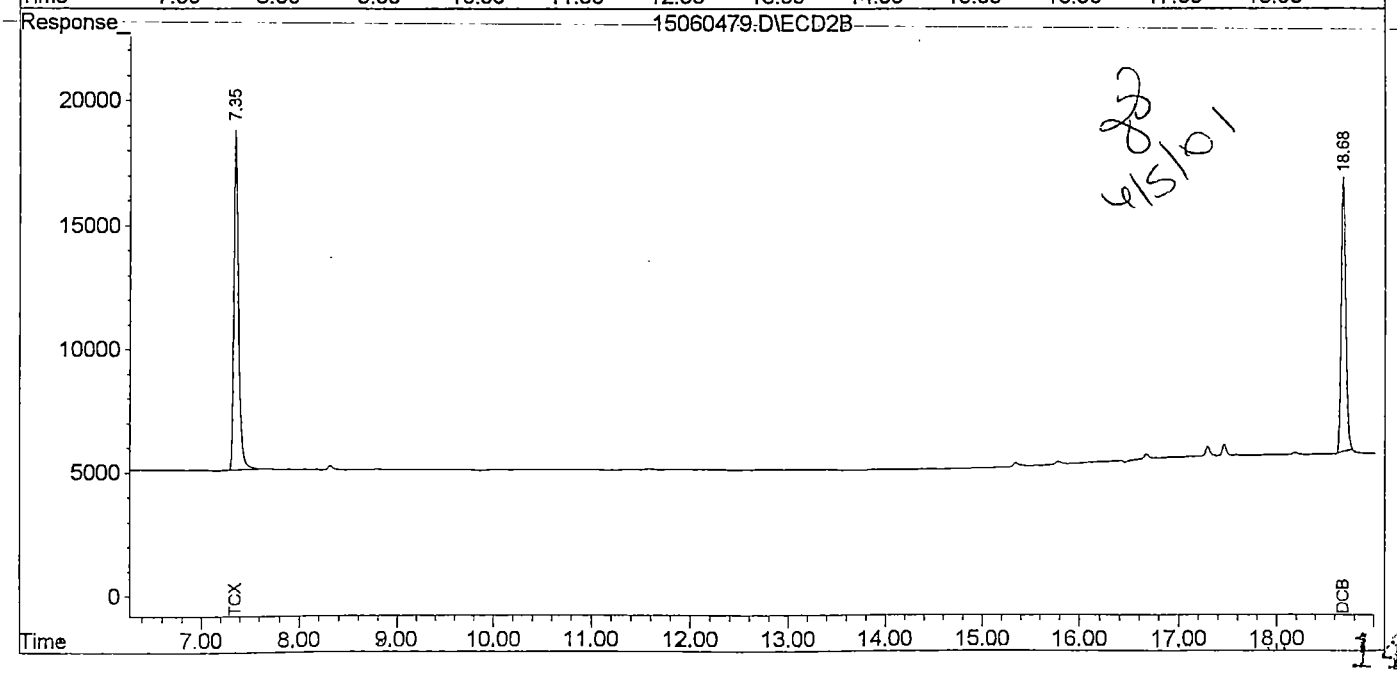
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060479.D\ECD1A.CH Vial: 79
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060479.D\ECD2B.CH
Acq On : 05 Jun 2001 17:22 Operator: DDC
Sample : PIBLKZ Inst : HP_15
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 18:01 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Multiple Level Calibration

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





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HYDROGEN USED AS CARRIER GAS FOR SAMPLE ANALYSES

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00B6MS

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Matrix: (soil/water) SOIL Lab Sample ID: 46634.25MS

Sample wt/vol: 31.1 (g/mL) G Lab File ID:_____

% Moisture: 90 decanted: (Y/N) __ Date Received: 05/26/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:05/27/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/05/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	320	U
11104-28-2	Aroclor-1221	320	U
11141-16-5	Aroclor-1232	320	U
53469-21-9	Aroclor-1242	320	U
12672-29-6	Aroclor-1248	320	U
11097-69-1	Aroclor-1254	860	
11096-82-5	Aroclor-1260	320	U
	Surrogate amount spiked	64.30	

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060472.D\ECD1A.CH Vial: 72
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060472.D\ECD2B.CH
Acq On : 05 Jun 2001 14:40 Operator: DDC
Sample : 46634.25MS *E00B6MS * Inst : HP_15
Misc : *EPA*31.1G/5.0ML*90 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 16:59 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.59	7.35	402595	346652	62.6	55.8	
	Spiked Amount 64.309			Recovery	=	97.34%	86.77%	
22)	S DCB	18.29	18.68	426074	403076	68.3	64.0	
	Spiked Amount 64.309			Recovery	=	106.21%	99.52%	
	Target Compounds:							
12)	L6 Aroclor-1254	12.63	12.30	381659	105768	1162.5	1009.9	
1[illegible])	L6 Aroclor-1254 {2}	13.32	13.02	160771	116509	922.5	710.5	
	L6 Aroclor-1254 {3}	13.79	13.93	315794	116278	1123.7	738.2	#
15)	L6 Aroclor-1254 {4}	14.32	14.92	305650	210405	1401.4	950.6	#
16)	L6 Aroclor-1254 {5}	15.00	15.39	258970	270013	1182.8	871.0	#
	Sum Aroclor-1254			1422845	818972	5793.0	4280.2	
Average Aroclor-1254						1158.597	856.033	

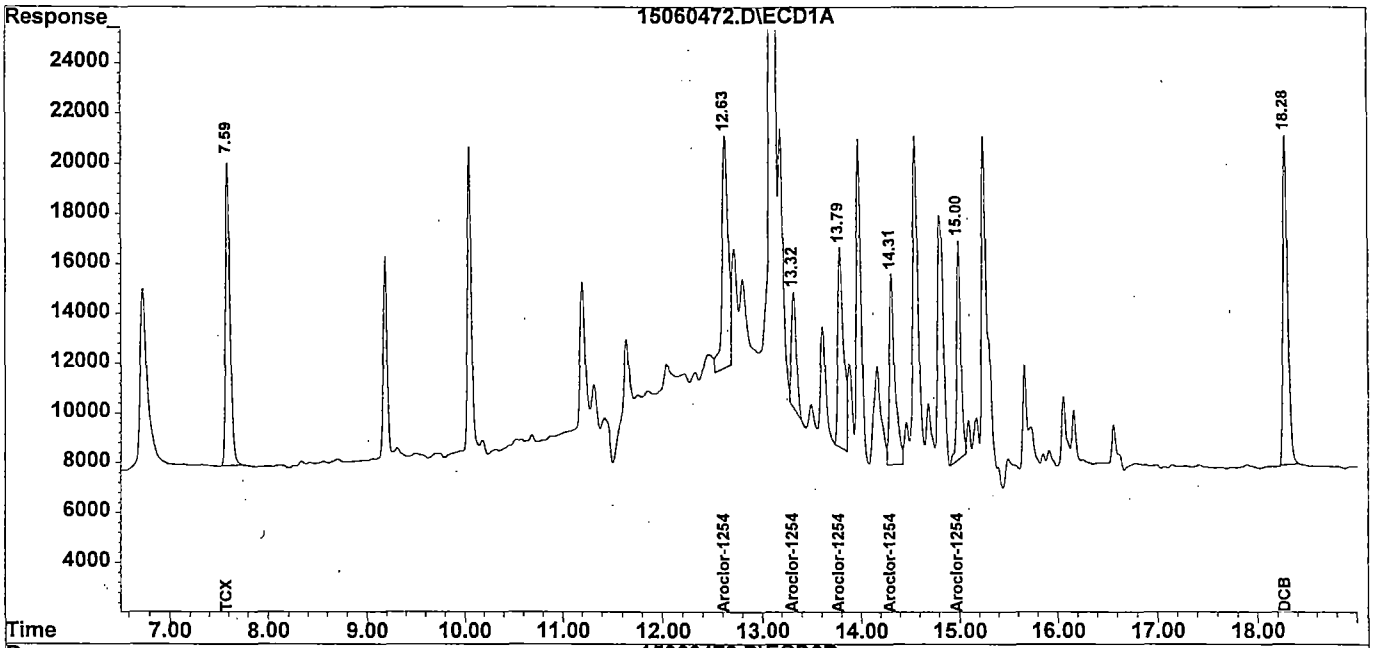
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

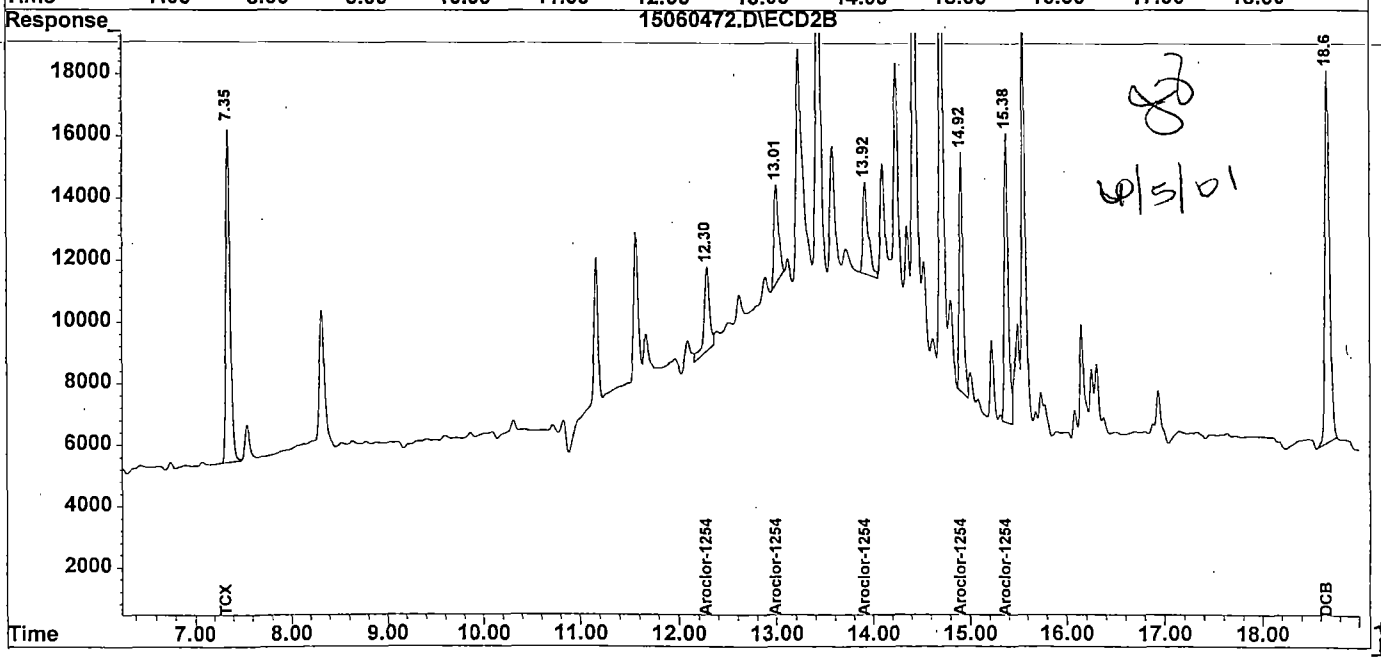
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060472.D\ECD1A.CH Vial: 72
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060472.D\ECD2B.CH
Acq On : 05 Jun 2001 14:40 Operator: DDC
Sample : 46634.25MS *E00B6MS * Inst : HP_15
Misc : *EPA*31.1G/5.0ML*90 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 16:59 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Multiple Level Calibration

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





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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00B6MSD

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Matrix: (soil/water) SOIL Lab Sample ID: 46634.26MSD

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

% Moisture: 87 decanted: (Y/N) __ Date Received: 05/26/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:05/27/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/05/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	250	U
11104-28-2	Aroclor-1221	250	U
11141-16-5	Aroclor-1232	250	U
53469-21-9	Aroclor-1242	250	U
12672-29-6	Aroclor-1248	250	U
11097-69-1	Aroclor-1254	630	
11096-82-5	Aroclor-1260	250	U
	Surrogate amount spiked	51.11	

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060473.D\ECD1A.CH Vial: 73
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060473.D\ECD2B.CH
Acq On : 05 Jun 2001 15:03 Operator: DDC
Sample : 46634.26MSD *E00B6MSD * Inst : HP_15
Misc : *EPA*30.1G/5.0ML*87 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 17:00 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.59	7.35	336792	287471	41.6	36.8	
	Spiked Amount 51.112			Recovery	=	81.39%	72.00%	
22)	S DCB	18.29	18.68	379254	345479	48.3	43.6	
	Spiked Amount 51.112			Recovery	=	94.50%	85.30%	
	Target Compounds:							
12)	L6 Aroclor-1254	12.63	12.30	366210	93105	886.6	706.5	
[illegible]	L6 Aroclor-1254 {2}	13.32	13.02	154951	112702	706.7	546.3	
[illegible]	L6 Aroclor-1254 {3}	13.79	13.93	278336	105741	787.1	533.5	#
15)	L6 Aroclor-1254 {4}	14.32	14.92	285971	197589	1042.1	709.5	#
16)	L6 Aroclor-1254 {5}	15.00	15.39	266291	259295	966.7	664.8	#
	Sum Aroclor-1254			1351758	768431	4389.2	3160.6	
	Average Aroclor-1254					877.834	632.121	

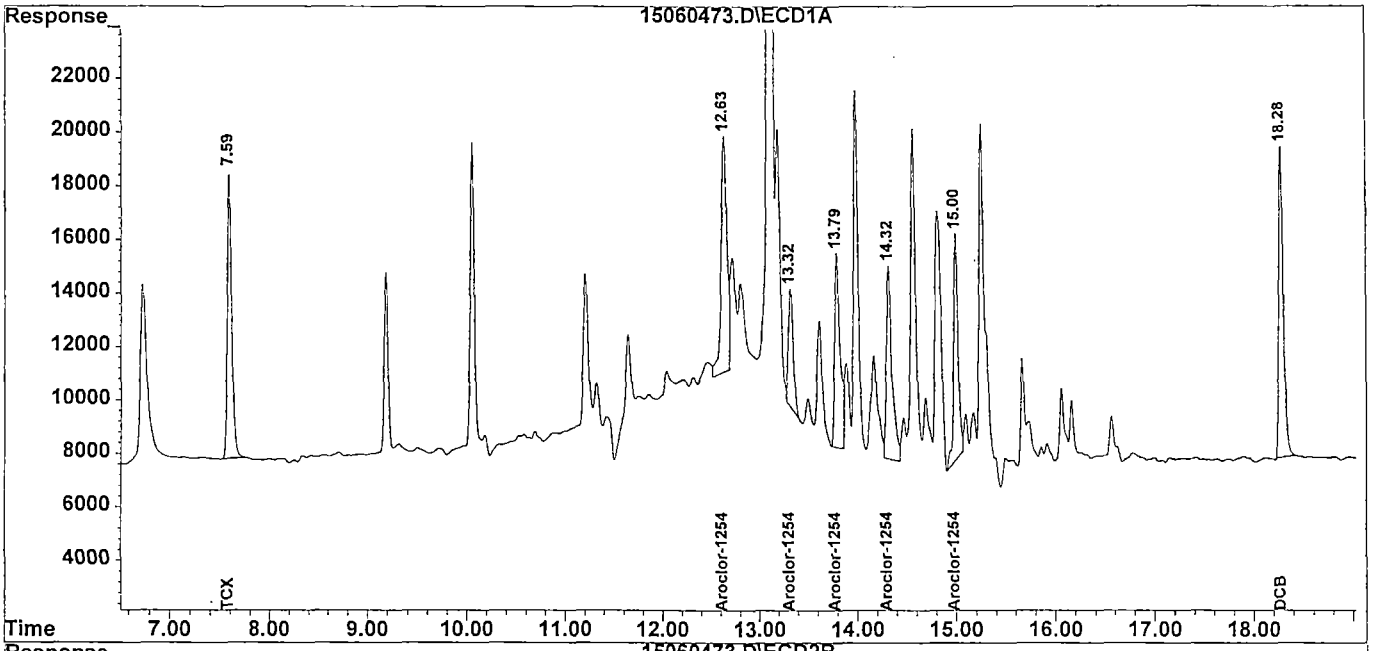
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

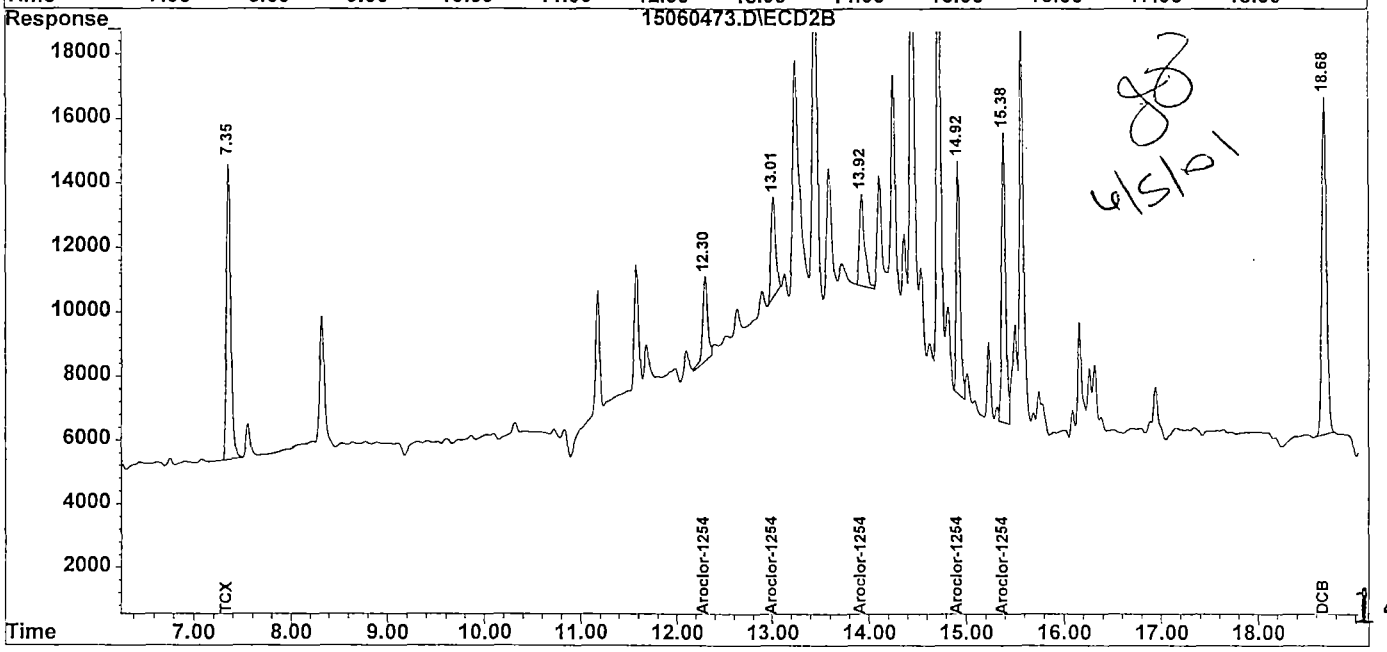
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060473.D\ECD1A.CH Vial: 73
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060473.D\ECD2B.CH
Acq On : 05 Jun 2001 15:03 Operator: DDC
Sample : 46634.26MSD *E00B6MSD * Inst : HP_15
Misc : *EPA*30.1G/5.0ML*87 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 17:00 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Multiple Level Calibration

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





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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LC0527SB

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Matrix: (soil/water) SOIL Lab Sample ID: LC0527SB

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

% Moisture: 0 decanted: (Y/N) __ Date Received: 05/26/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:05/27/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/05/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

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	78	
11096-82-5	Aroclor-1260	33	U
Surrogate amount spiked		6.67	

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060447.D\ECD1A.CH Vial: 47
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060447.D\ECD2B.CH
Acq On : 05 Jun 2001 4:35 Operator: DDC
Sample : LC0527SB *LC0527SB * Inst : HP_15
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 9:33 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.59	7.35	364971	270935	5.884	4.523	
	Spiked Amount 6.667			Recovery	=	88.26%	67.85%	
22)	S DCB	18.28	18.68	350945	289056	5.830	4.759	
	Spiked Amount 6.667			Recovery	=	87.45%	71.39%	
	Target Compounds:							
12)	L6 Aroclor-1254	12.63	12.30	343317	84382	108.4	83.5	
[illegible]	L6 Aroclor-1254 {2}	13.32	13.02	205893	124543	122.5	78.7	#
[illegible]	L6 Aroclor-1254 {3}	13.79	13.93	294114	109140	108.5	71.8	#
15)	L6 Aroclor-1254 {4}	14.32	14.92	243793	176874	115.9	82.8	#
16)	L6 Aroclor-1254 {5}	15.00	15.39	219106	225618	103.7	75.4	#
	Sum Aroclor-1254			1306223	720557	559.0	392.4	
	Average Aroclor-1254					111.800	78.475	

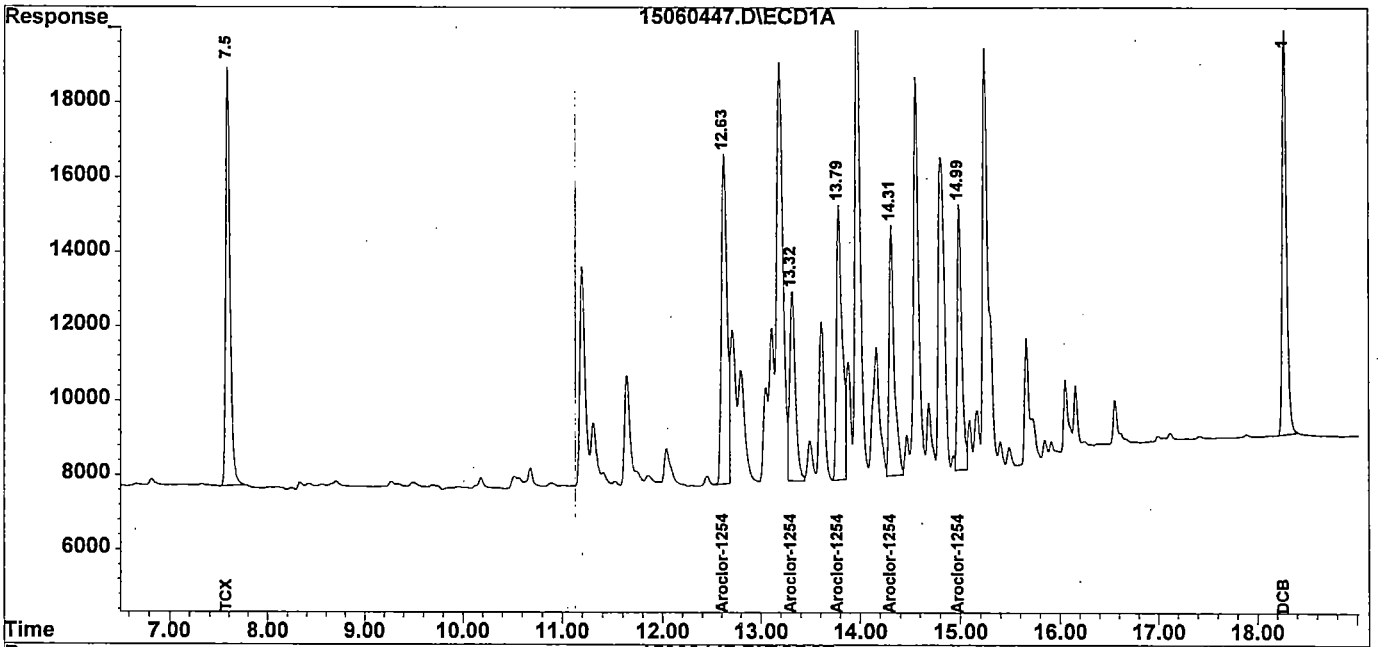
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

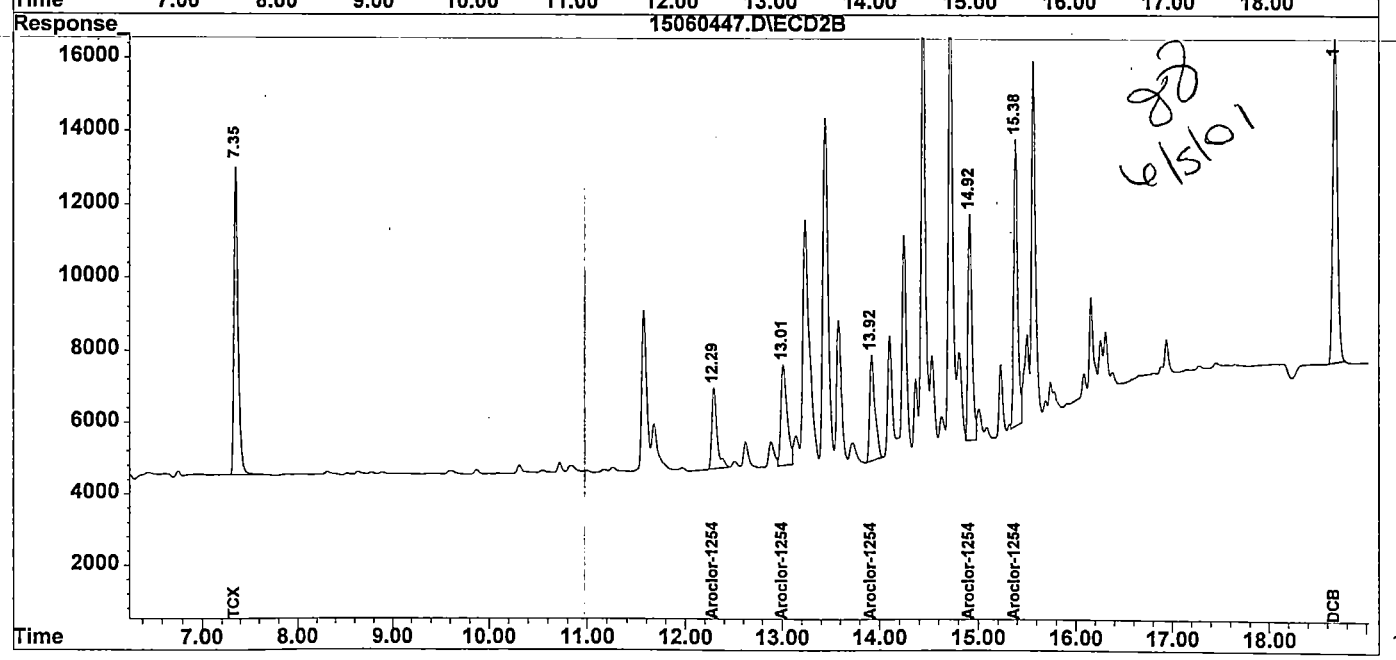
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060447.D\ECD1A.CH Vial: 47
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060447.D\ECD2B.CH
Acq On : 05 Jun 2001 4:35 Operator: DDC
Sample : LC0527SB *LC0527SB * Inst : HP_15
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 9:33 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Multiple Level Calibration

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





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6/5/01

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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LD0527SB

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00A9

Matrix: (soil/water) SOIL Lab Sample ID: LD0527SB

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

% Moisture: 0 decanted: (Y/N) __ Date Received: 05/26/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:05/27/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/05/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

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	66	
11096-82-5	Aroclor-1260	33	U
	Surrogate amount spiked	6.67	

FORM I PCB

Quantitation Report

```
Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060448.D\ECD1A.CH Vial: 48
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060448.D\ECD2B.CH
Acq On    : 05 Jun 2001   4:58                        Operator: DDC
Sample    : LD0527SB  *LD0527SB  *                    Inst    : HP_15
Misc      : **30G/5.0ML*0                             Dilution: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e
Quant Time: Jun  5  9:33 2001  Quant Results File: XPCBE30.RES

Method       : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path   : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update  : Mon Jun 04 09:06:09 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.59	7.35	298342	220293	4.810	3.678	
	Spiked Amount 6.667			Recovery	=	72.15%	55.17%	
22)	S DCB	18.28	18.68	275164	226187	4.571	3.724	
	Spiked Amount 6.667			Recovery	=	68.57%	55.86%	
	Target Compounds:							
12)	L6 Aroclor-1254	12.63	12.30	296425	66556	93.6	65.9	#
1	L6 Aroclor-1254 {2}	13.32	13.02	181703	107535	108.1	68.0	#
1	L6 Aroclor-1254 {3}	13.79	13.93	252814	93181	93.3	61.3	#
15)	L6 Aroclor-1254 {4}	14.32	14.92	213414	154402	101.4	72.3	#
16)	L6 Aroclor-1254 {5}	15.00	15.39	192219	191446	91.0	64.0	#
	Sum Aroclor-1254			1136576	613121	487.4	331.5	
	Average Aroclor-1254					97.480	66.304	

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

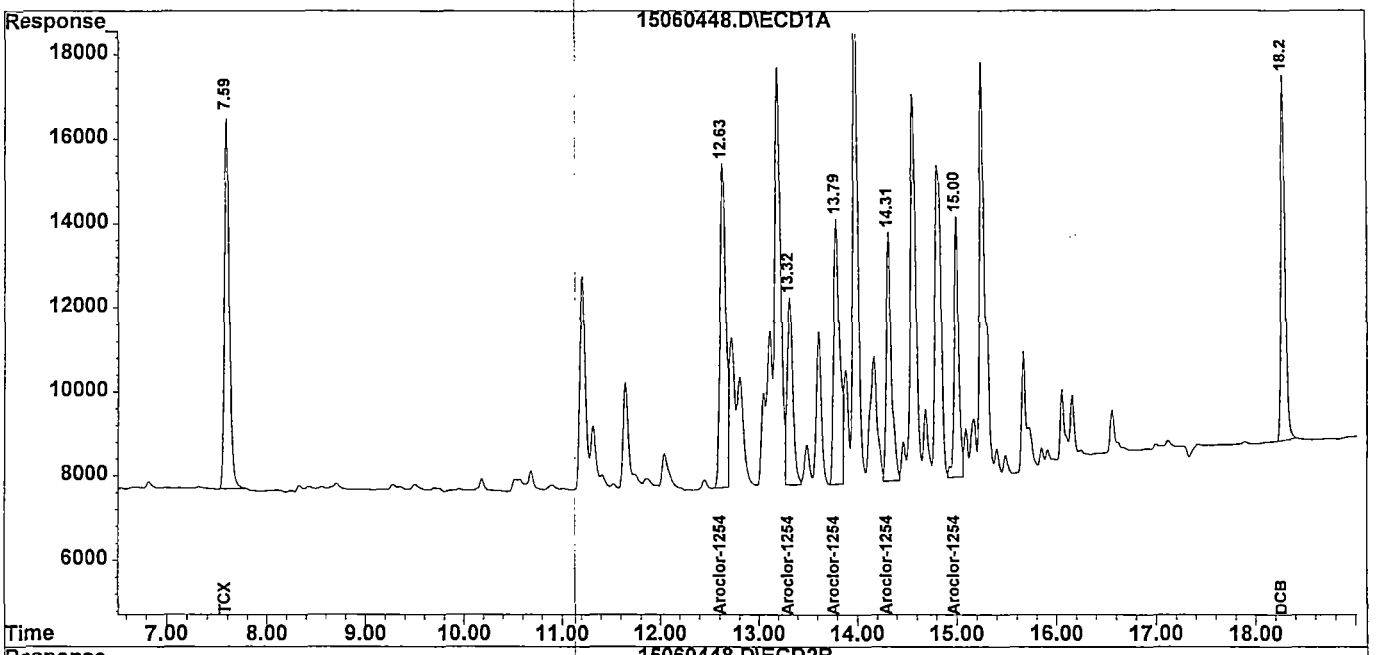
Chromatographic Report

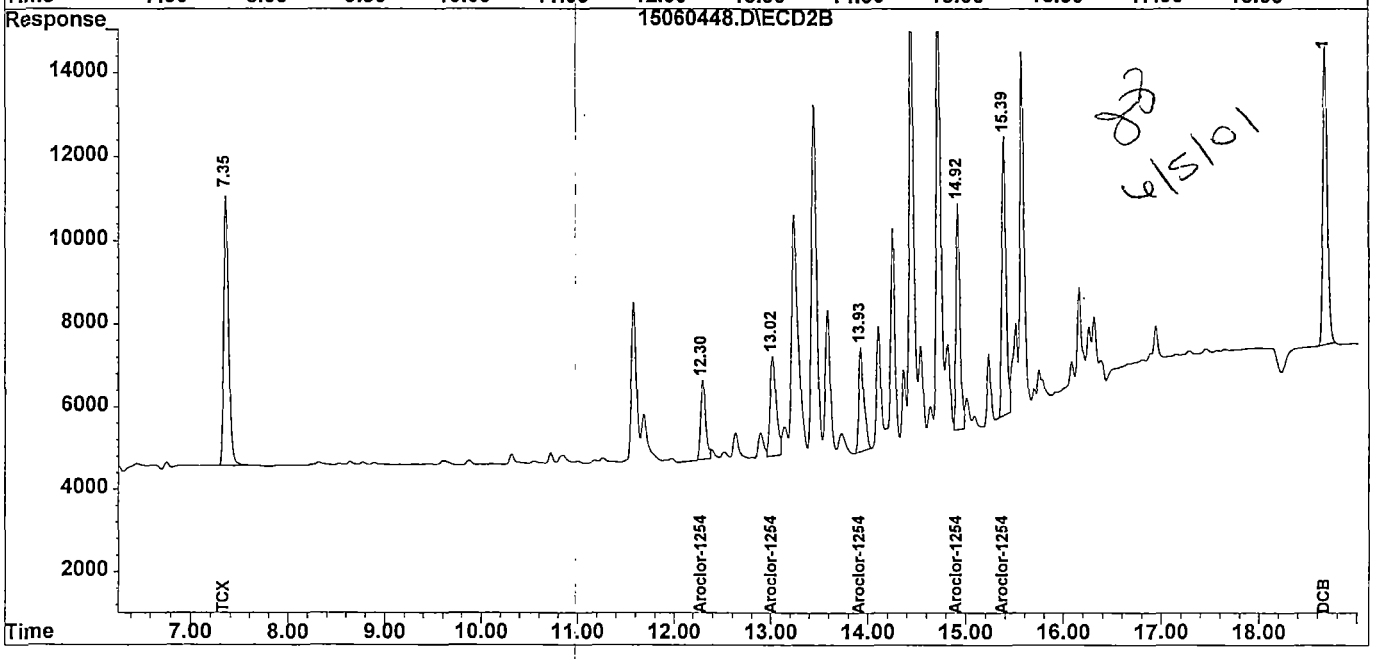
Signal #1 : F:\HPCHEM\HP\15\DATA\06_04_01\15060448.D\ECD1A.CH Vial: 48
Signal #2 : F:\HPCHEM\HP\15\DATA\06_04_01\15060448.D\ECD2B.CH
Acq On : 05 Jun 2001 4:58 Operator: DDC
Sample : LD0527SB *LD0527SB * Inst : HP_15
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 9:33 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_04_01\XPCBE30.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Mon Jun 04 09:06:09 2001
Response via : Multiple Level Calibration

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

Signal #2 Phase: DB-XLB
Signal #2 Info : .32 mm
Signal #2 Inst : HP_15B





6/5/01

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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# 29294

DATE/TIME	POS.	SAMPLE ID	FILE	COMMENT
05/30/01 21:26	1	CAL STD (INITIAL)	1_053001	
05/30/01 21:58	2	SB	1_053002	
05/30/01 22:28	3	SB#053001C	1_053003	
05/30/01 22:59	4	SB#053001D	1_053004	
05/30/01 23:30	5	BL0527SA-EPA	1_053005	
05/31/01 00:01	6	BB0527SA-EPA	1_053006	
05/31/01 00:32	7	BL0527SB-EPA	1_053007	
05/31/01 01:03	8	BB0527SB-EPA	1_053008	
05/31/01 01:33	9	LC0527SA-EPA	1_053009	
05/31/01 02:04	10	LD0527SA-EPA	1_053010	
05/31/01 02:35	11	LC0527SB-EPA	1_053011	
05/31/01 03:06	12	LD0527SB-EPA	1_053012	
05/31/01 03:37	13	46629.34-E3076-EPA	1_053013	
05/31/01 04:08	14	46629.35-E3077-EPA	1_053014	
05/31/01 04:39	15	46629.36-E3078-EPA	1_053015	
05/31/01 05:10	16	46634.01-E0094-EPA	1_053016	
05/31/01 05:41	17	46634.02-MS-E0094-EPA	1_053017	
05/31/01 06:12	18	46634.03-MSD-E0094-EPA	1_053018	
05/31/01 06:42	19	46634.04-E0095-EPA	1_053019	
05/31/01 07:14	20	46634.05-E0096-EPA	1_053020	
05/31/01 07:44	21	46634.06-E0097-EPA	1_053021	

06/06/01
Verification Signature/Date

6/6/01
Analyst Signature/Date

Book: OE-102-16-RUN-18 Page No.: 65

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# 29294

DATE/TIME	POS.	SAMPLE ID	FILE	COMMENT
05/31/01 08:15	22	46634.07-E0098-EPA	1_053022	
05/31/01 08:46	23	46634.08-E0099-EPA	1_053023	
05/31/01 09:17	24	46634.09-E00A0-EPA	1_053024	
05/31/01 09:48	25	46634.10-E00A1-EPA	1_053025	
05/31/01 10:19	26	46634.11-E00A2-EPA	1_053026	
05/31/01 10:49	27	46634.12-E00A3-EPA	1_053027	
05/31/01 11:20	28	46634.13-E00A4-EPA	1_053028	
05/31/01 11:51	29	46634.14-E00A5-EPA	1_053029	
05/31/01 12:22	30	46634.15-E00A6-EPA	1_053030	
05/31/01 12:53	31	46634.16-E00A7-EPA	1_053031	
05/31/01 13:24	32	46634.17-E00A8-EPA	1_053032	
05/31/01 13:55	33	46634.18-E00A9-EPA	1_053033	
05/31/01 14:26	34	46634.19-E00B0-EPA	1_053034	
05/31/01 14:57	35	46634.20-E00B1-EPA	1_053035	
05/31/01 15:28	36	46634.21-E00B2-EPA	1_053036	
05/31/01 15:59	37	46634.22-E00B3-EPA	1_053037	
05/31/01 16:30	38	46634.23-E00B5-EPA	1_053038	
05/31/01 17:01	39	46634.24-E00B6-EPA	1_053039	
05/31/01 17:32	40	46634.25-MS-E00B6-EPA	1_053040	
05/31/01 18:02	41	46634.26-MSD-E00B6-EPA	1_053041	
05/31/01 18:34	42	46634.27-E00B7-EPA	1_053042	

06/06/01
Verification Signature/Date

6/6/01
Analyst Signature/Date

Book: OE-102-16-RUN-18 Page No.: 66

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# 29294

DATE/TIME	POS.	SAMPLE ID	FILE	COMMENT
05/31/01 19:05	43	46634.28-E00B8-EPA	1_053043	
05/31/01 19:35	44	46629.31-E3073-EPA	1_053044	
05/31/01 20:06	45	46629.32-E3074-EPA	1_053045	
05/31/01 20:37	46	46629.33-E3075-EPA	1_053046	
05/31/01 21:08	47	SB	1_053047	
05/31/01 21:39	48	CAL STD (FINAL)	1_053048	

Compound	Initial RT	Final RT	% Difference
Phthalate	14.13	14.09	0.28
Methoxychlor	15.74	15.68	0.38
Perylene	20.49	20.45	0.20

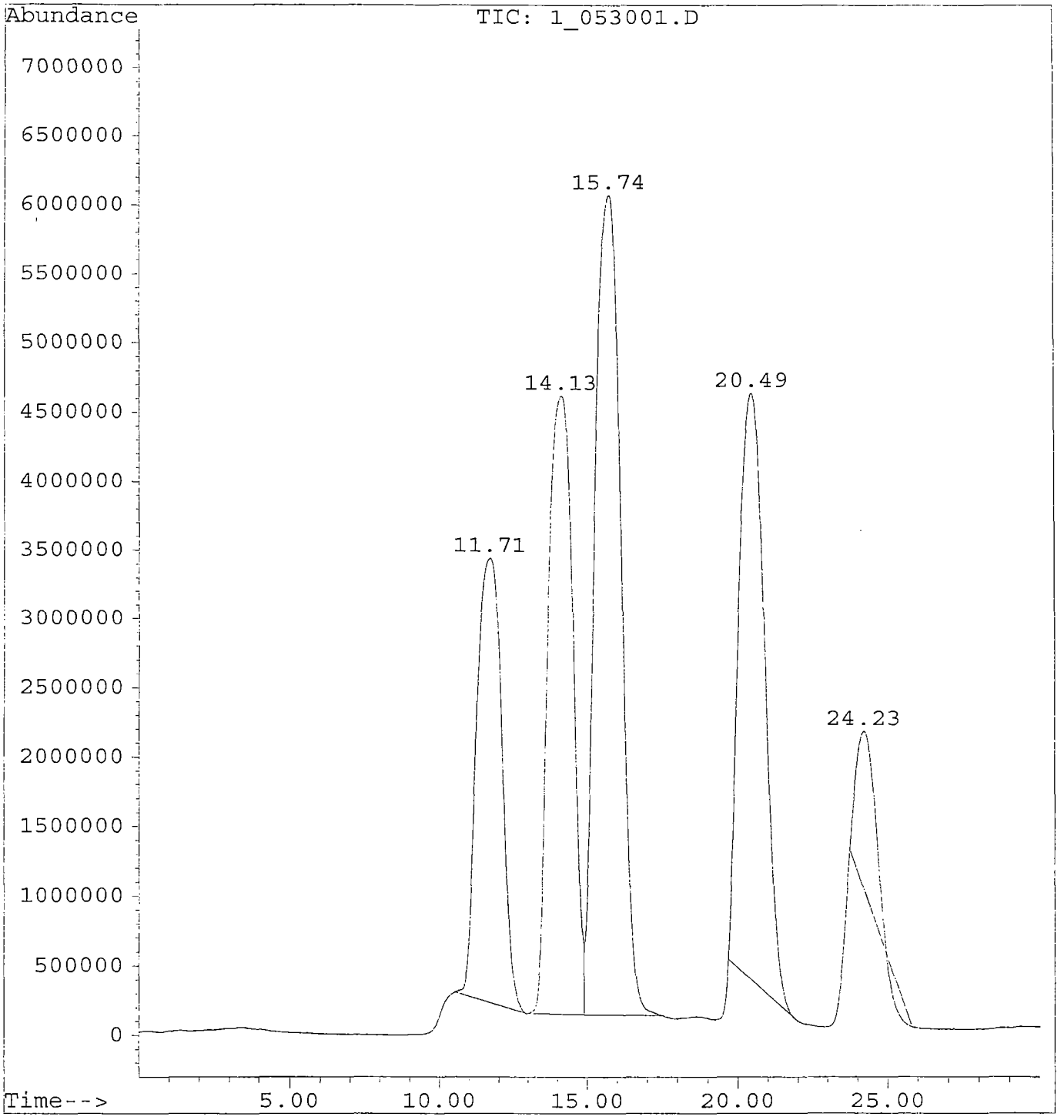
06/06/01
Verification Signature/Date

6/6/01
Analyst Signature/Date

Book: OE-102-16-RUN-18 Page No.: 67

Data File : C:\HPCHEM\5\DATA\053001\1_053001.D
Acq On : 30 May 01 09:26 PM
Sample : CAL STD (INITIAL)
Misc : COL# 418002

Vial: 1
Operator: CD COL#
Inst : GPC1
Multiplr: 1.00



1) 11.71 = Corn Oil

3) 14.13 = Pthalate
4) 15.74 = Methoxychlor
5) 20.49 = Perylene

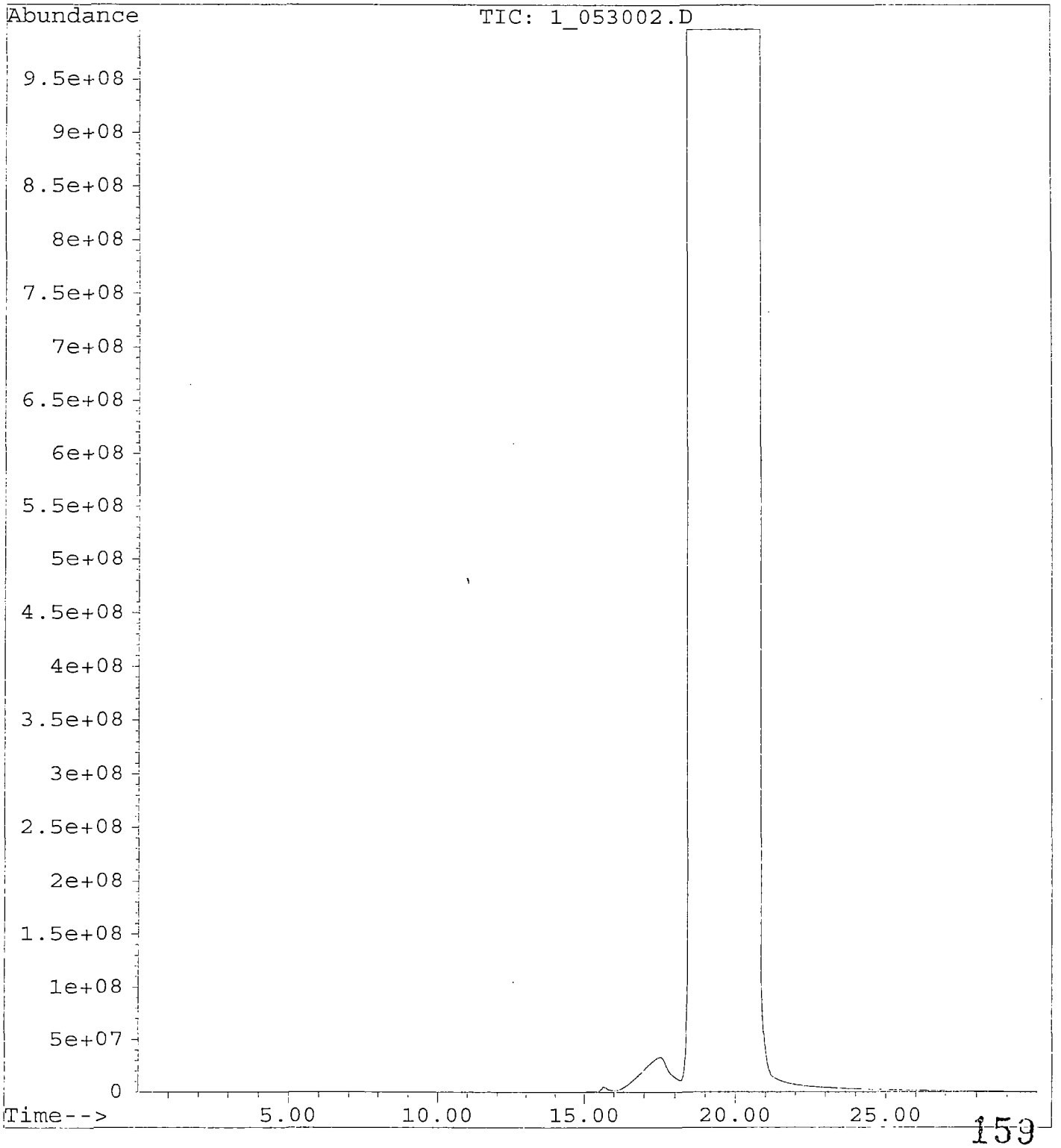
Chromatographic Resolution Report

Data File : C:\HPCHEM\5\DATA\053001\1_053001.D Vial: 1
Acq On : 30 May 01 21:26 Operator: CD COL# 4
Sample : CAL STD (INITIAL) Inst : GPC1
Misc : COL# 418002 Multiplr: 1.00

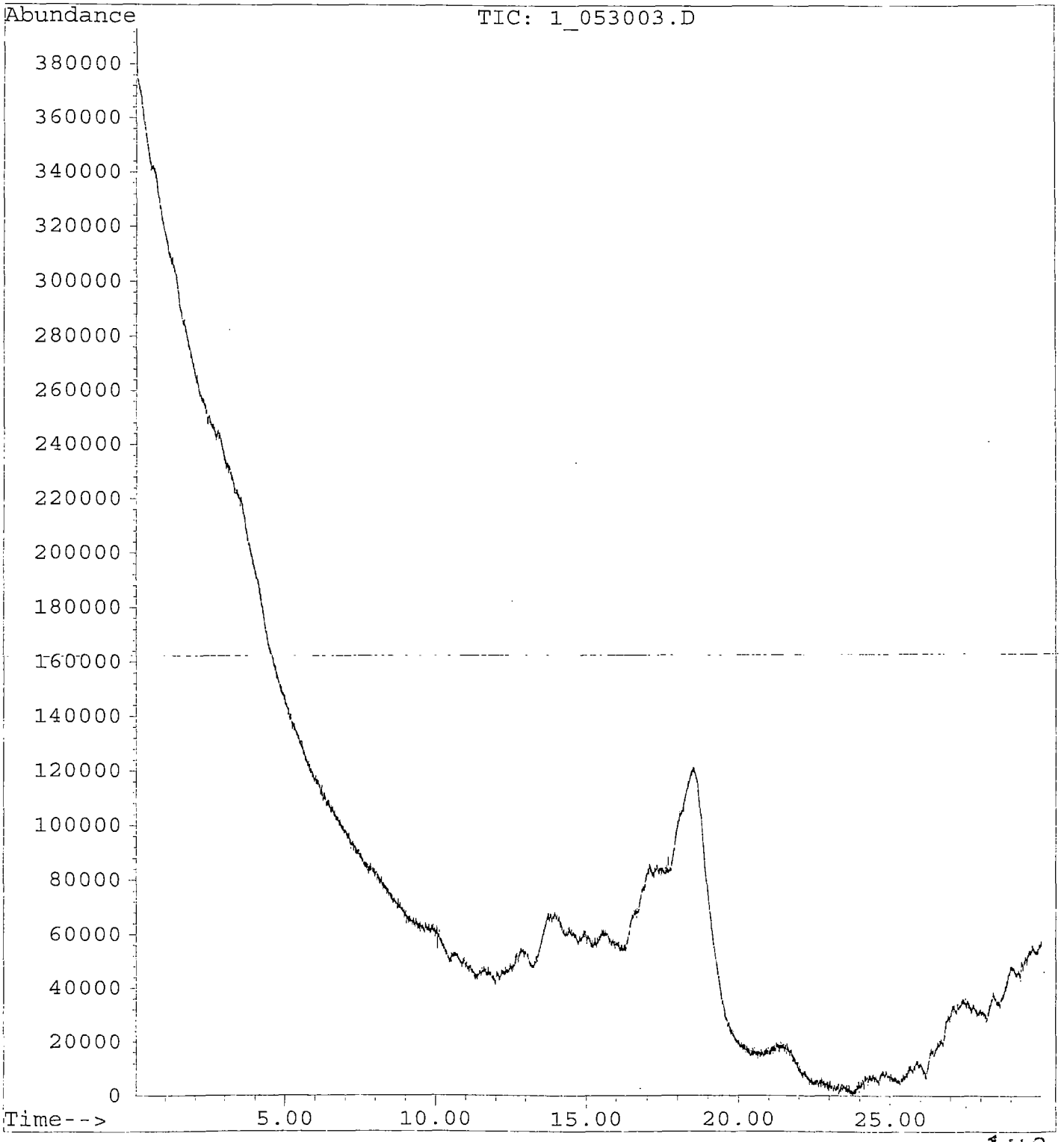
Method : C:\HPCHEM\5\METHODS\GPC.M
Title :

RT#1	RT#2	Resolution
11.706	14.134	100.00
14.134	15.738	88.67
15.738	20.494	100.00
20.494	24.231	100.00

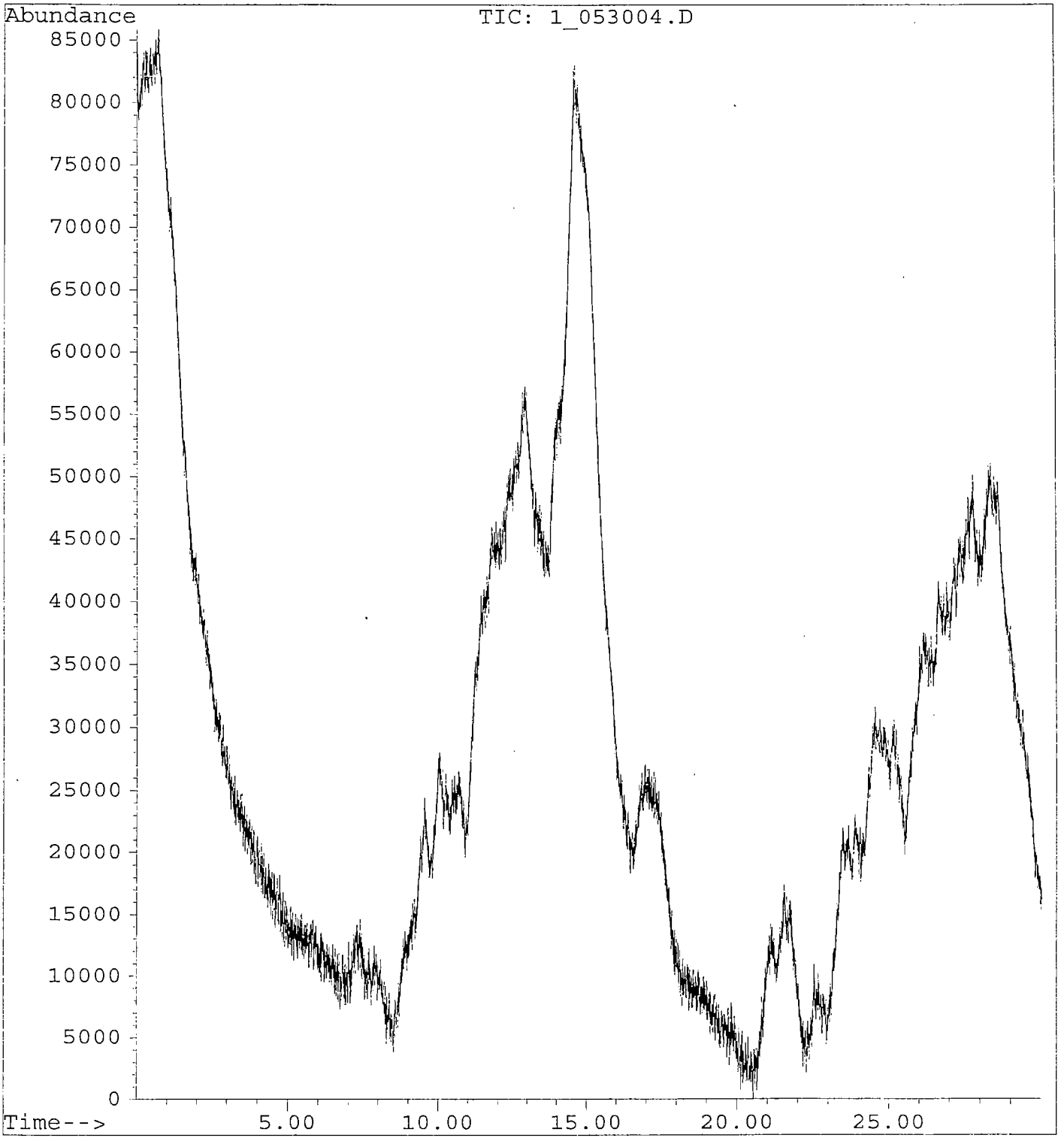
File : C:\HPCHEM\5\DATA\053001\1_053002.D
Operator : CD COL# 418002
Acquired : 30 May 01 21:58 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 2



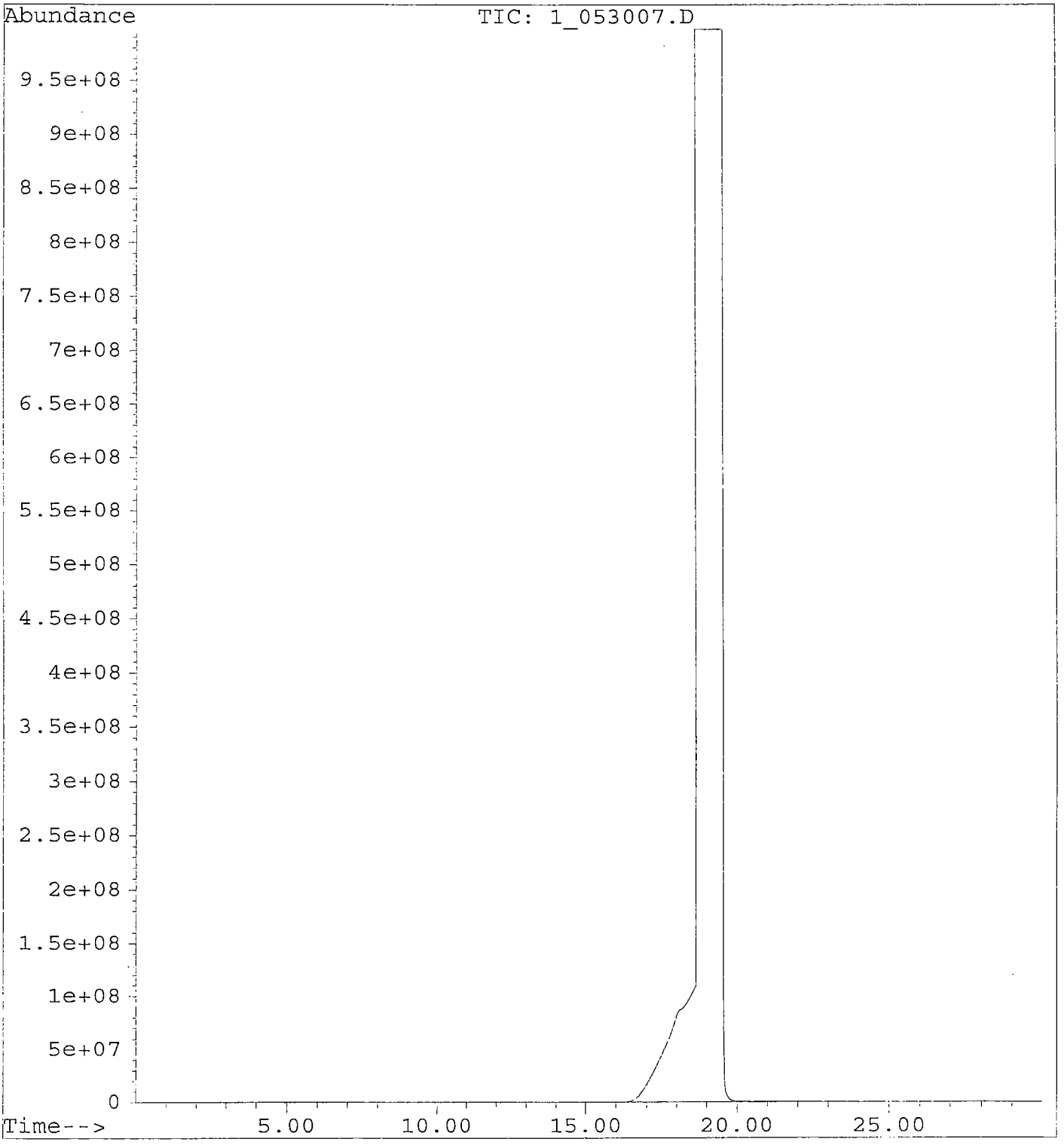
File : C:\HPCHEM\5\DATA\053001\1_053003.D
Operator : CD COL# 418002
Acquired : 30 May 01 22:28 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB#053001C
Misc Info : COL# 418002
Vial Number: 3



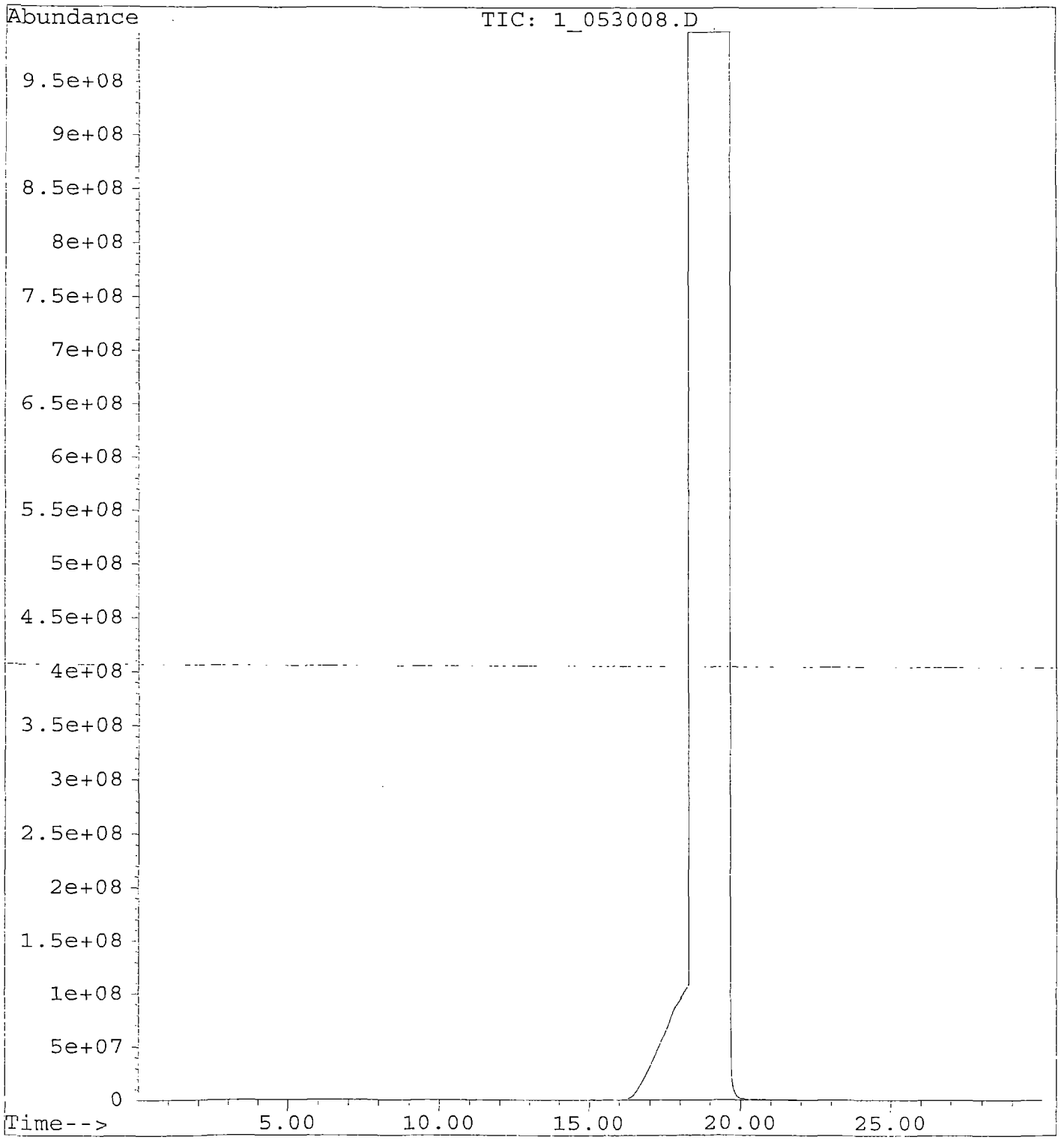
File : C:\HPCHEM\5\DATA\053001\1_053004.D
Operator : CD COL# 418002
Acquired : 30 May 01 22:59 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB#053001D
Misc Info : COL# 418002
Vial Number: 4



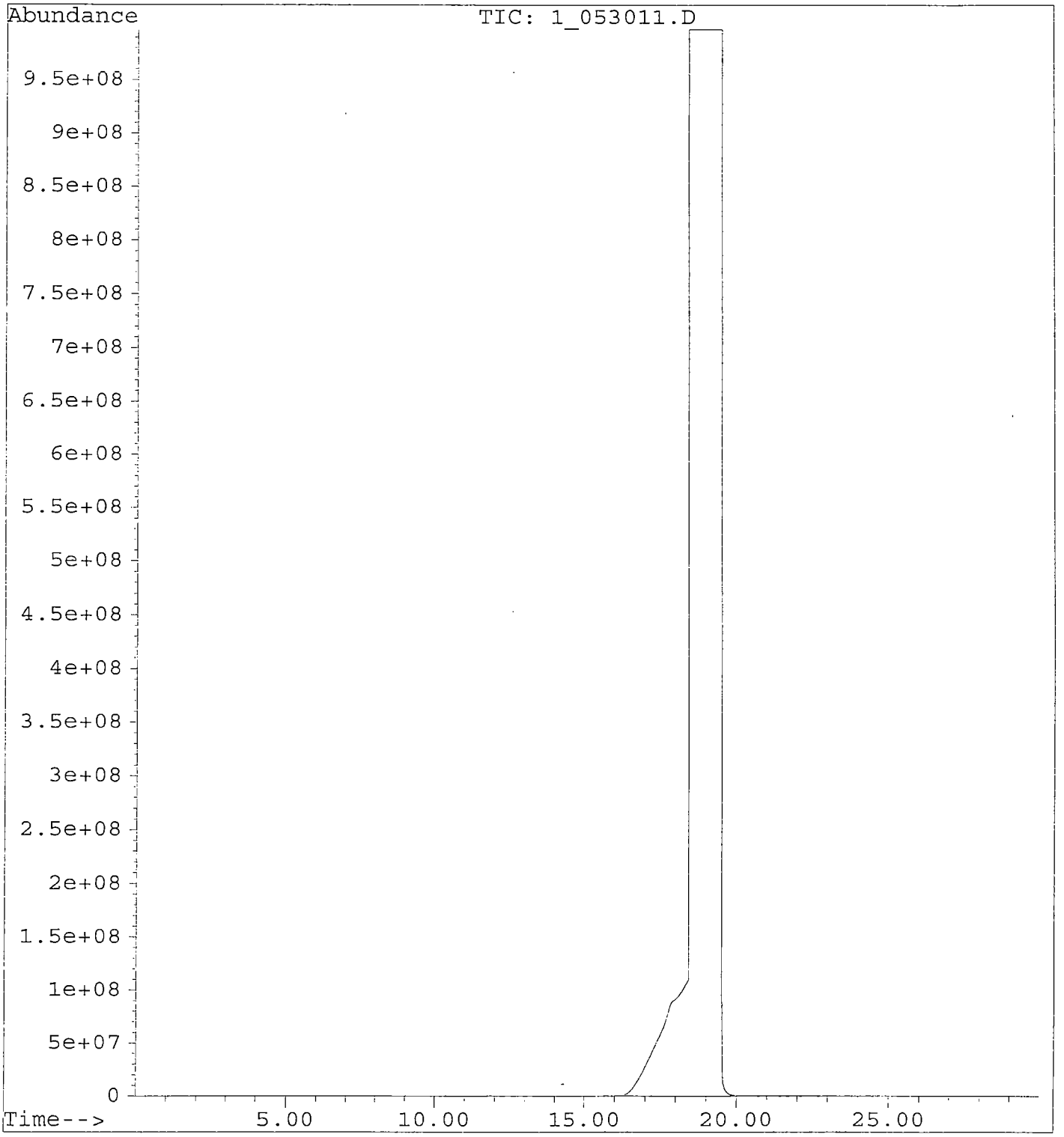
File : C:\HPCHEM\5\DATA\053001\1_053007.D
Operator : CD COL# 418002
Acquired : 31 May 01 00:32 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: BL0527SB-EPA
Misc Info : COL# 418002
Vial Number: 7



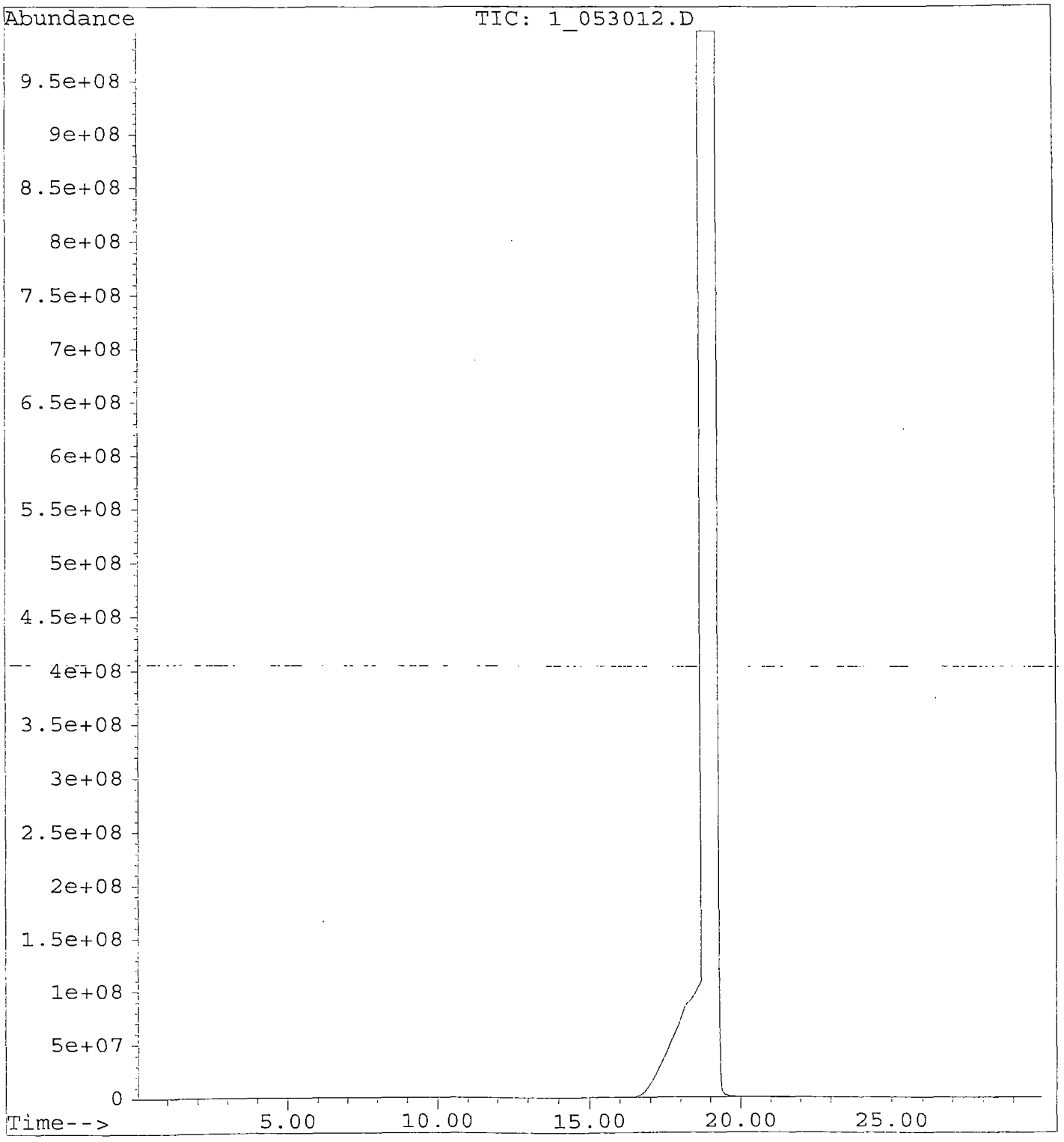
File : C:\HPCHEM\5\DATA\053001\1_053008.D
Operator : CD COL# 418002
Acquired : 31 May 01 01:03 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: BB0527SB-EPA
Misc Info : COL# 418002
Vial Number: 8



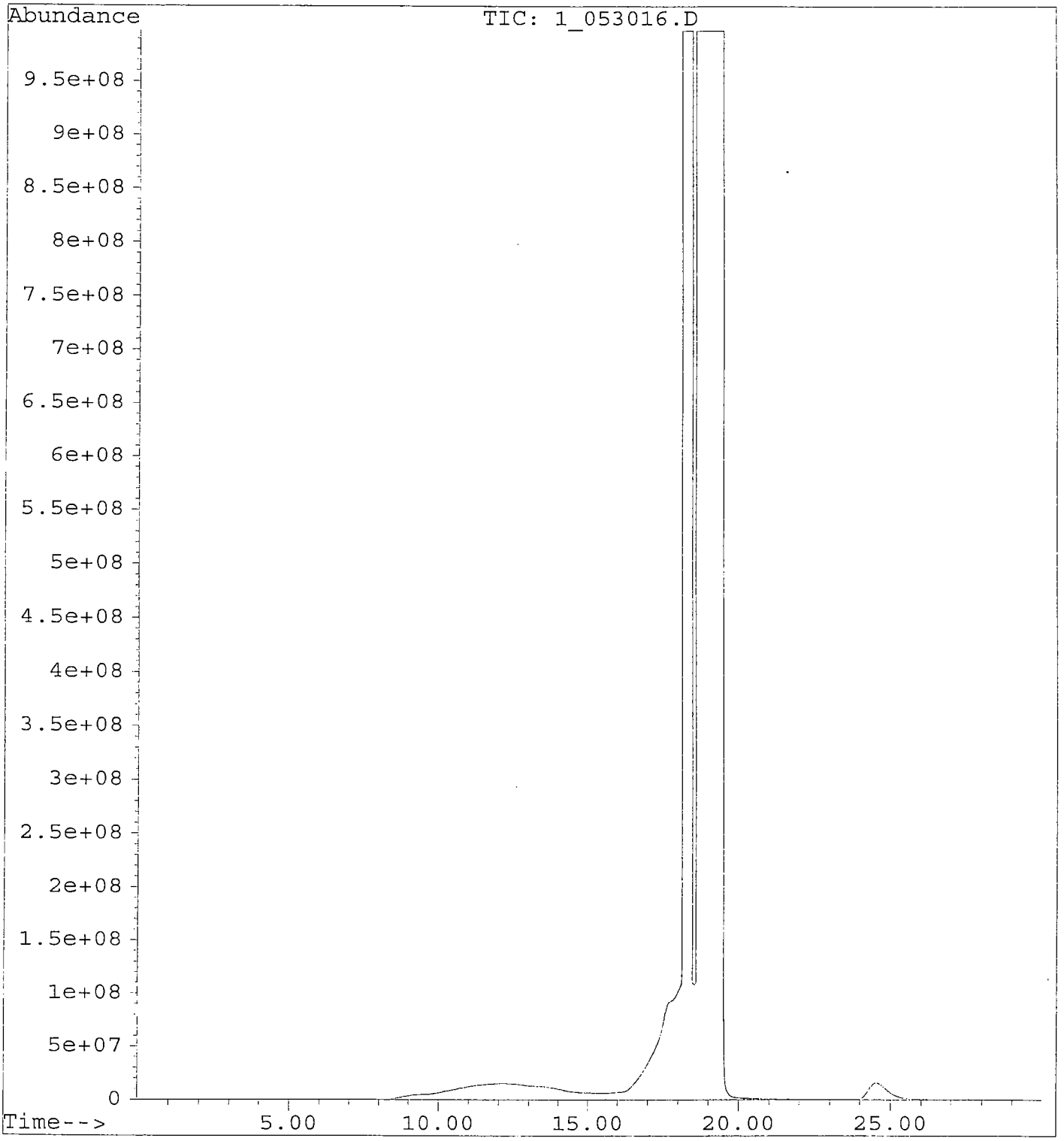
File : C:\HPCHEM\5\DATA\053001\1_053011.D
Operator : CD COL# 418002
Acquired : 31 May 01 02:35 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: LC0527SB-EPA
Misc Info : COL# 418002
Vial Number: 11



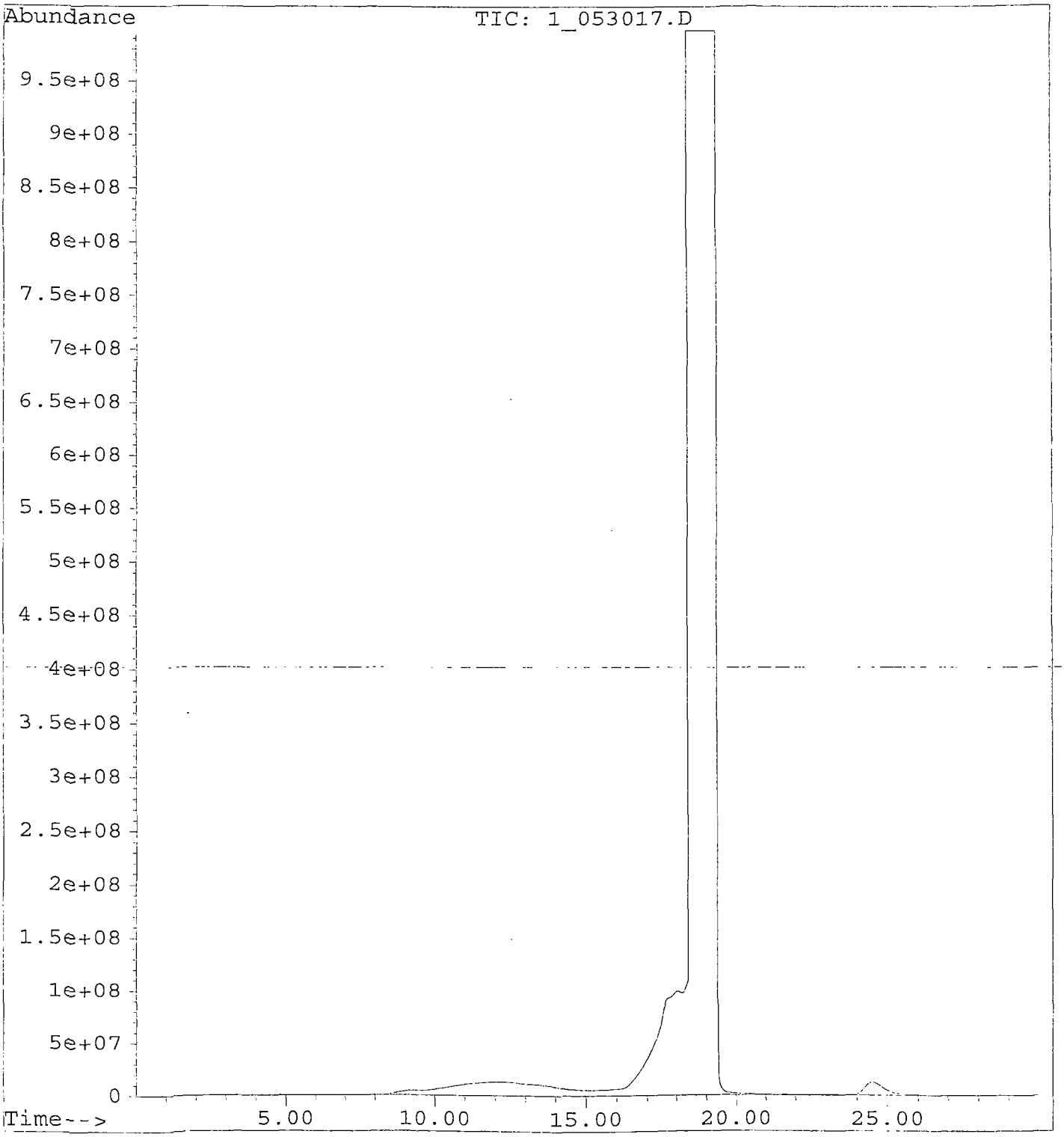
File : C:\HPCHEM\5\DATA\053001\1_053012.D
Operator : CD COL# 418002
Acquired : 31 May 01 03:06 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: LD0527SB-EPA
Misc Info : COL# 418002
Vial Number: 12



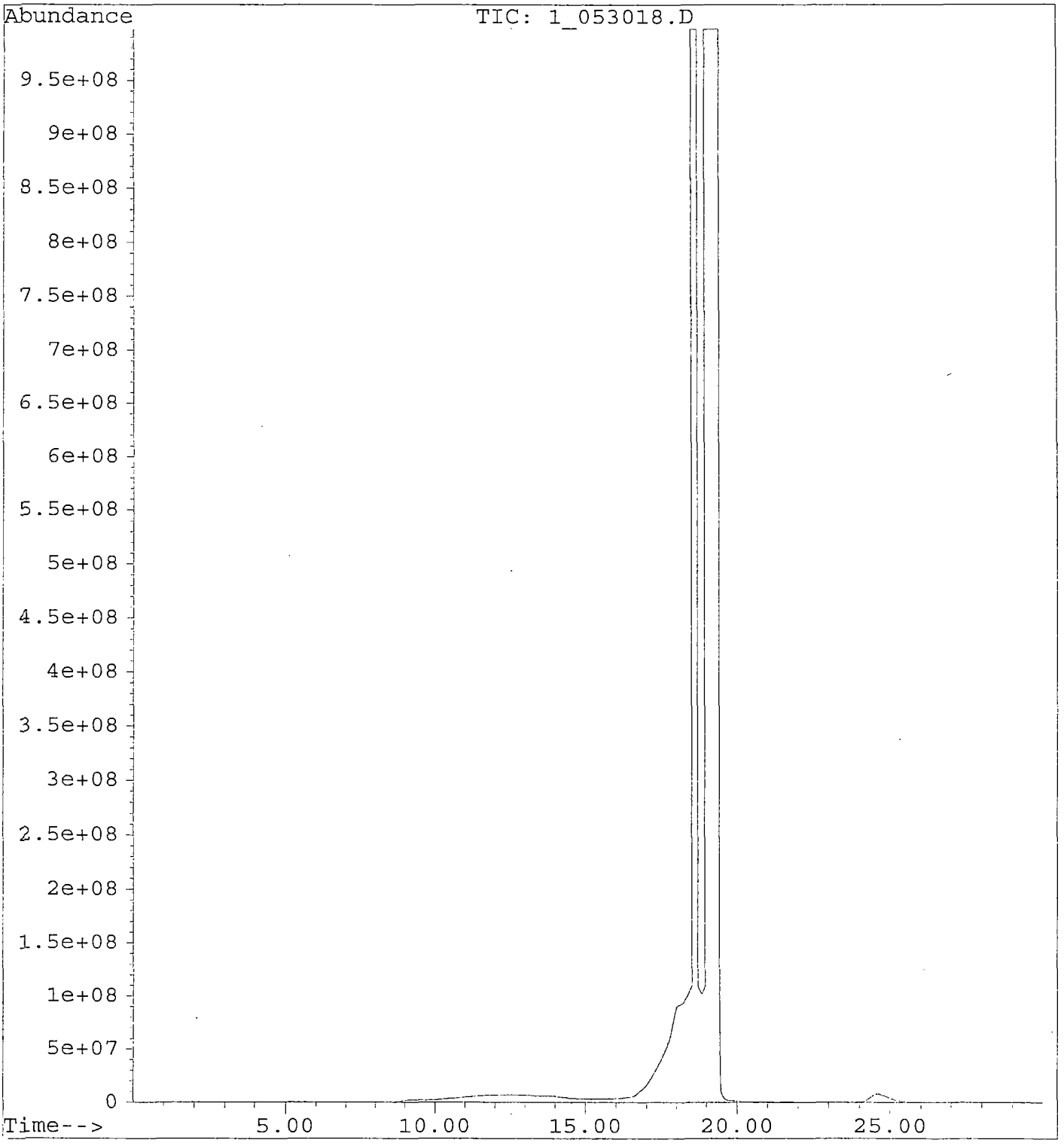
File : C:\HPCHEM\5\DATA\053001\1_053016.D
Operator : CD COL# 418002
Acquired : 31 May 01 05:10 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB 46634.01-E0094
Misc Info : COL# 418002
Vial Number: 16



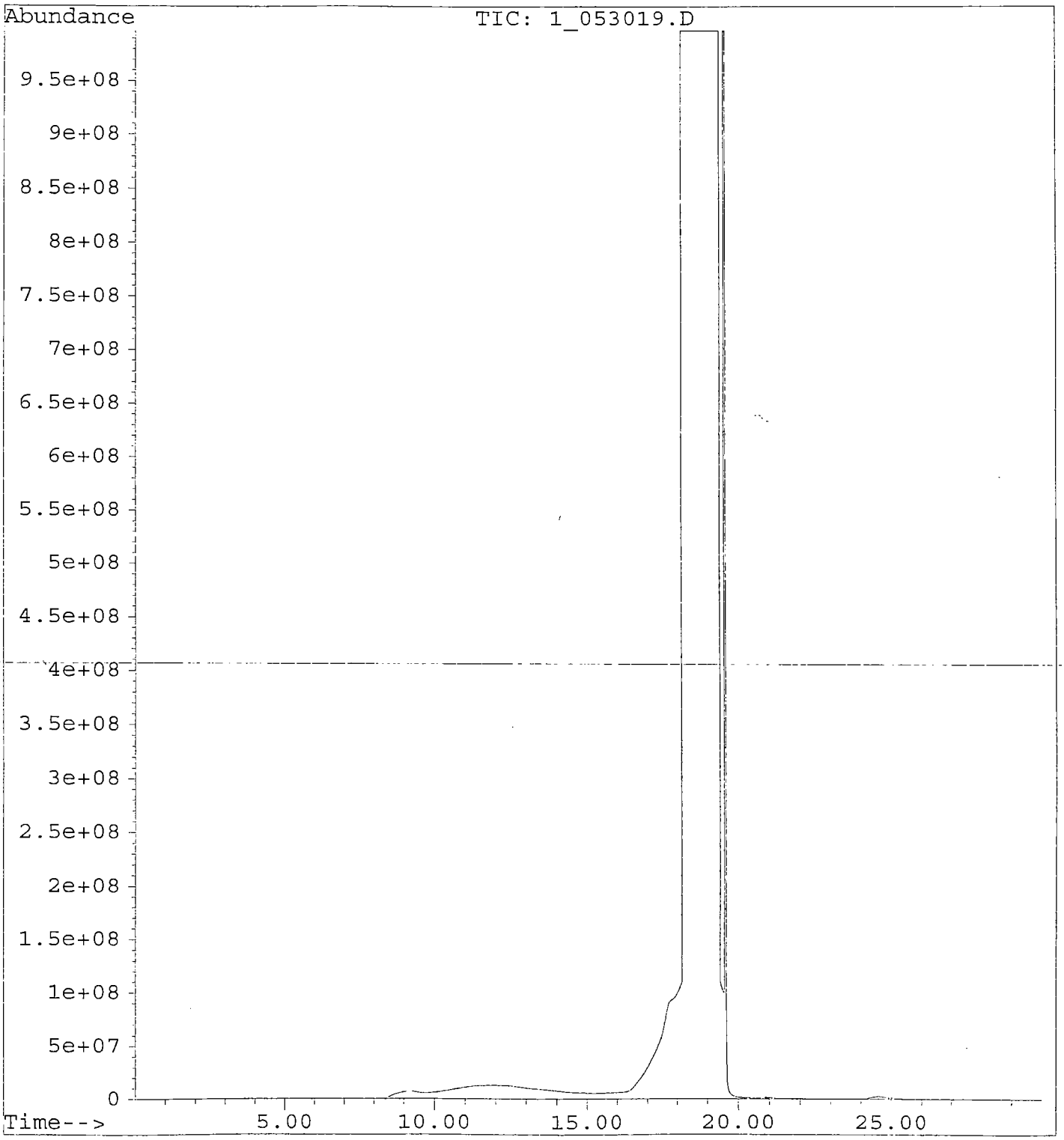
File : C:\HPCHEM\5\DATA\053001\1_053017.D
Operator : CD COL# 418002
Acquired : 31 May 01 05:41 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB 46634.02-MS-E0094
Misc Info : COL# 418002
Vial Number: 17



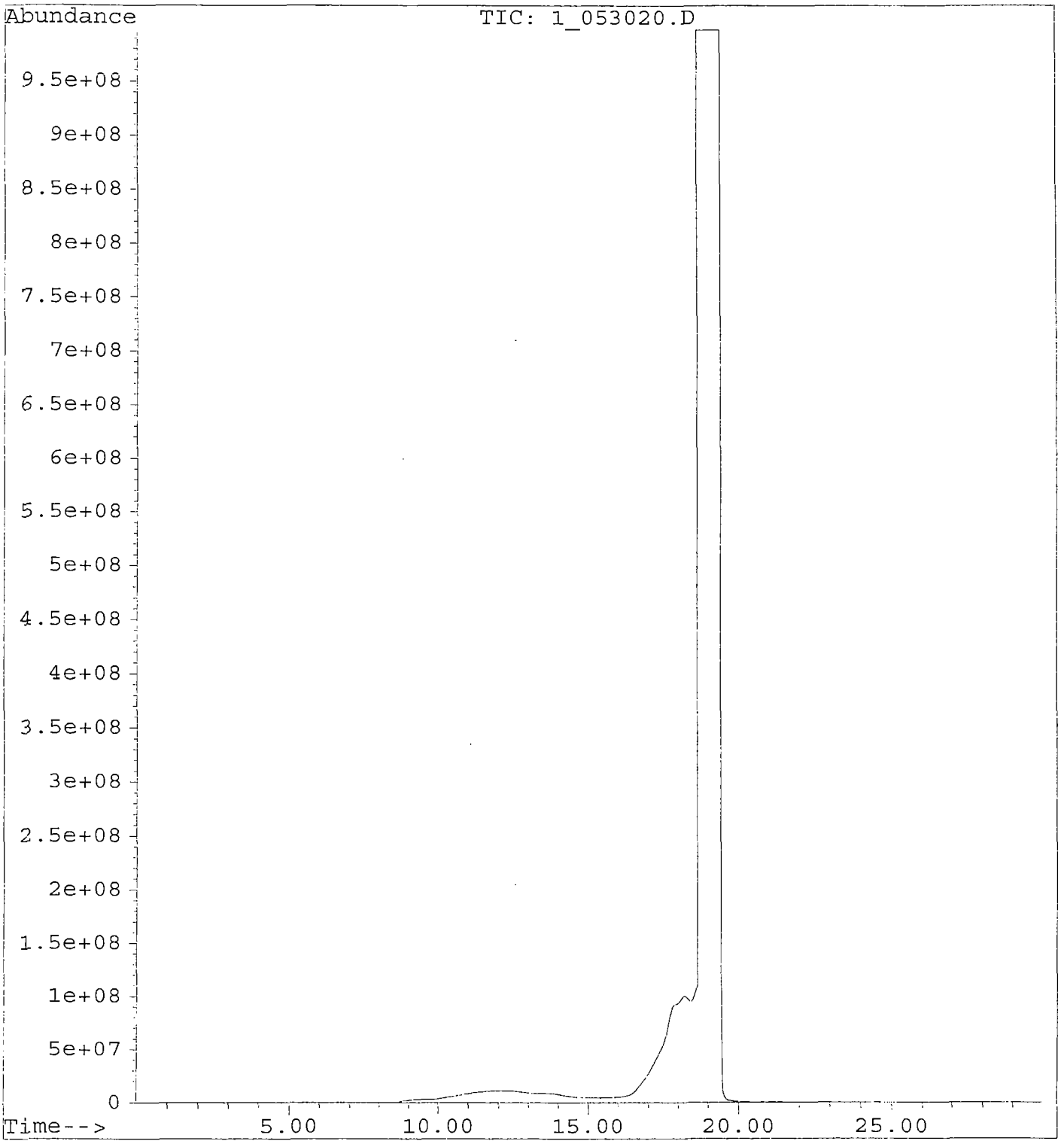
File : C:\HPCHEM\5\DATA\053001\1_053018.D
Operator : CD COL# 418002
Acquired : 31 May 01 06:12 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB 46634.03-MSD-E0094
Misc Info : COL# 418002
Vial Number: 18



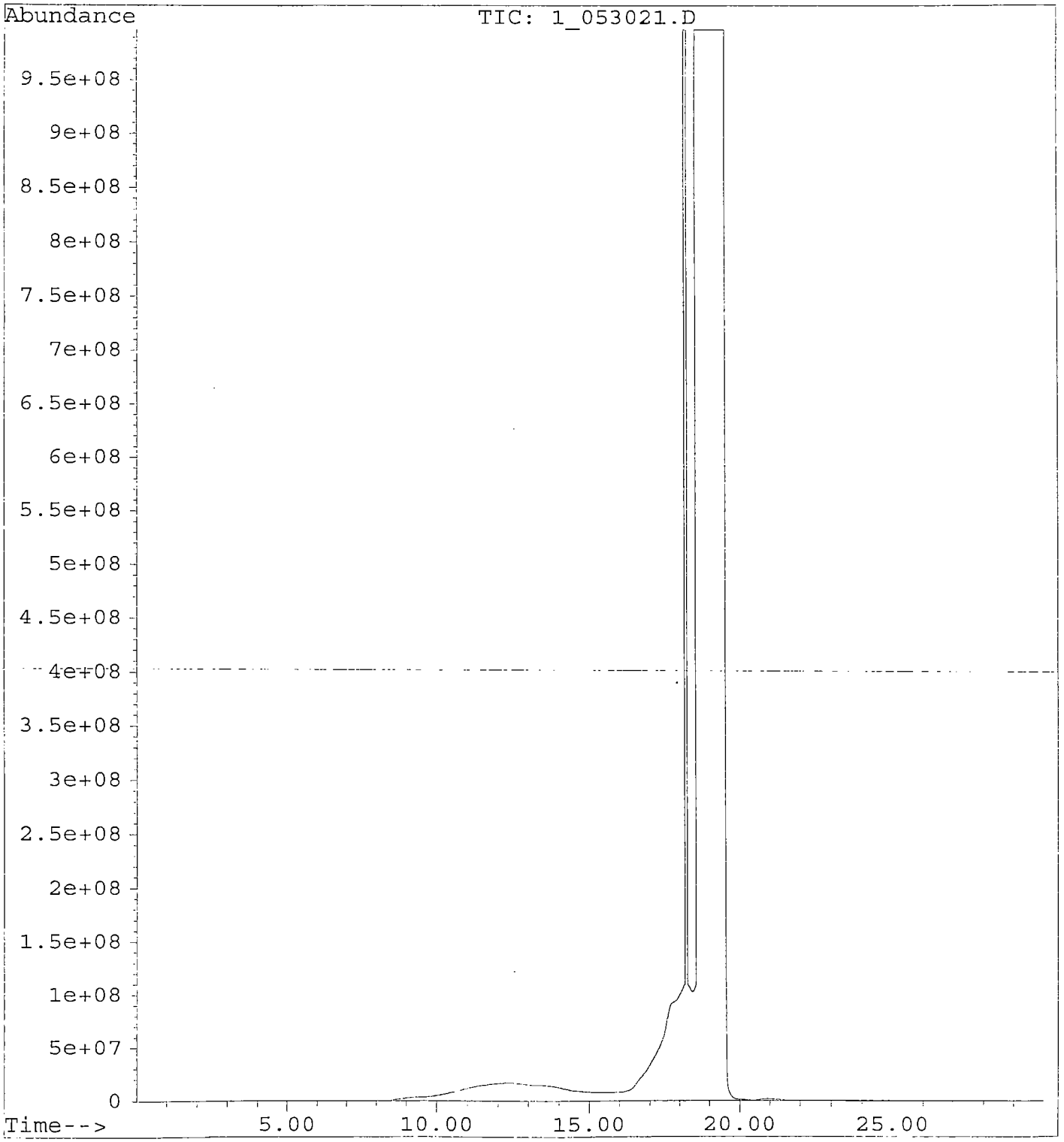
File : C:\HPCHEM\5\DATA\053001\1_053019.D
Operator : CD COL# 418002
Acquired : 31 May 01 06:42 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB 46634.04-E0095
Misc Info : COL# 418002
Vial Number: 19



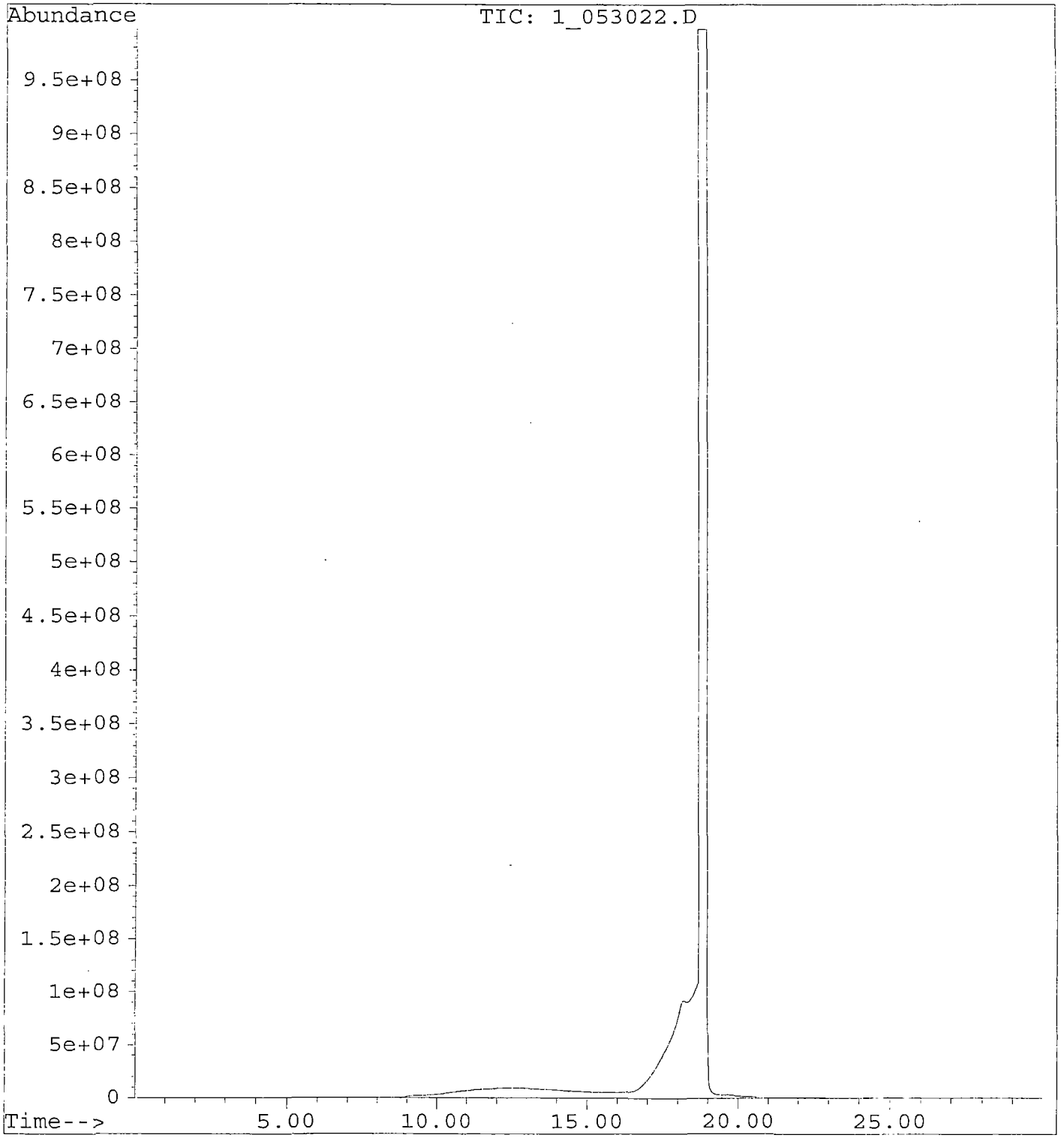
File : C:\HPCHEM\5\DATA\053001\1_053020.D
Operator : CD COL# 418002
Acquired : 31 May 01 07:14 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB 46634.05-E0096
Misc Info : COL# 418002
Vial Number: 20



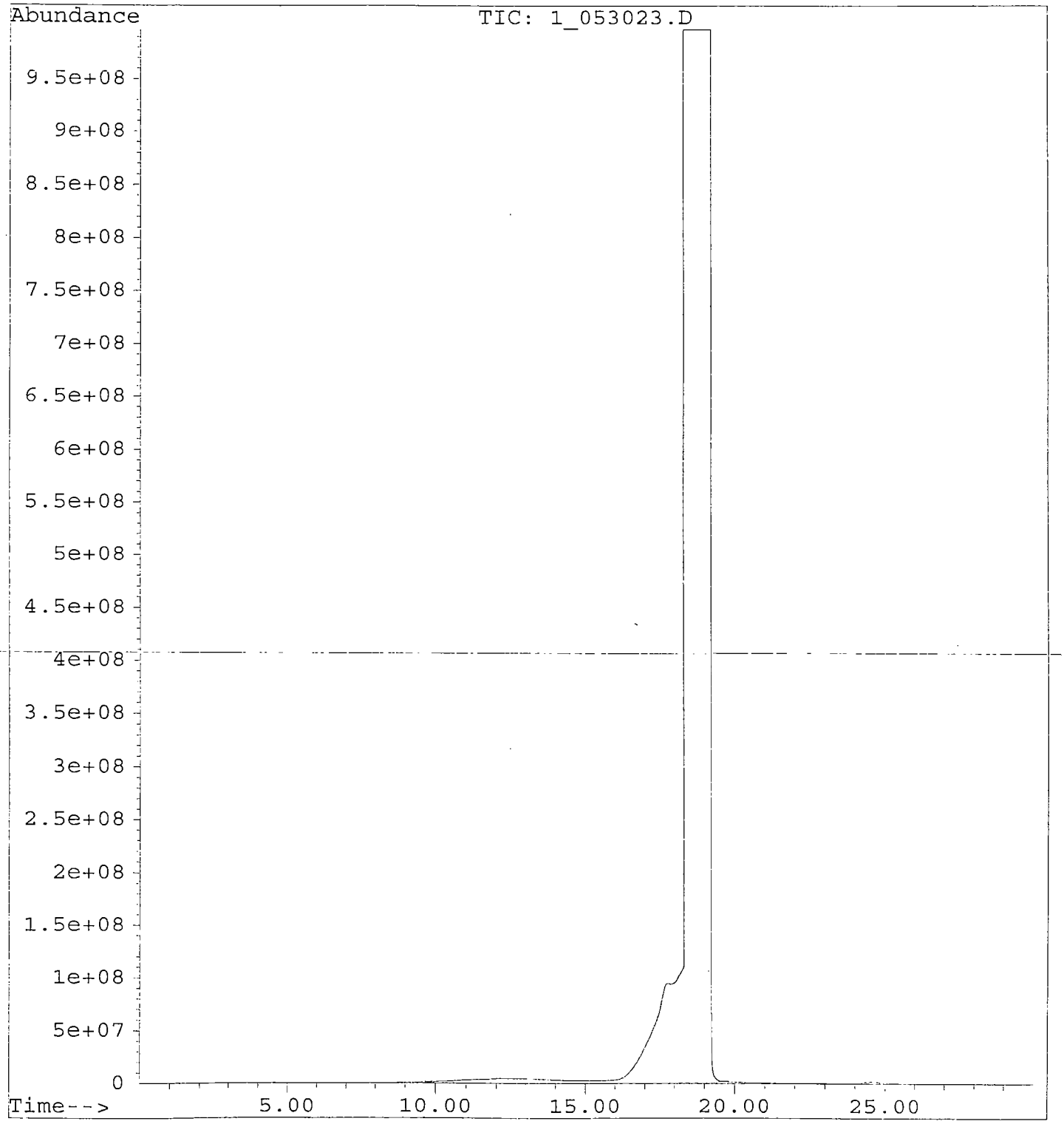
File : C:\HPCHEM\5\DATA\053001\1_053021.D
Operator : CD COL# 418002
Acquired : 31 May 01 07:44 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB 466306 - E0097
Misc Info : COL# 418002
Vial Number: 21



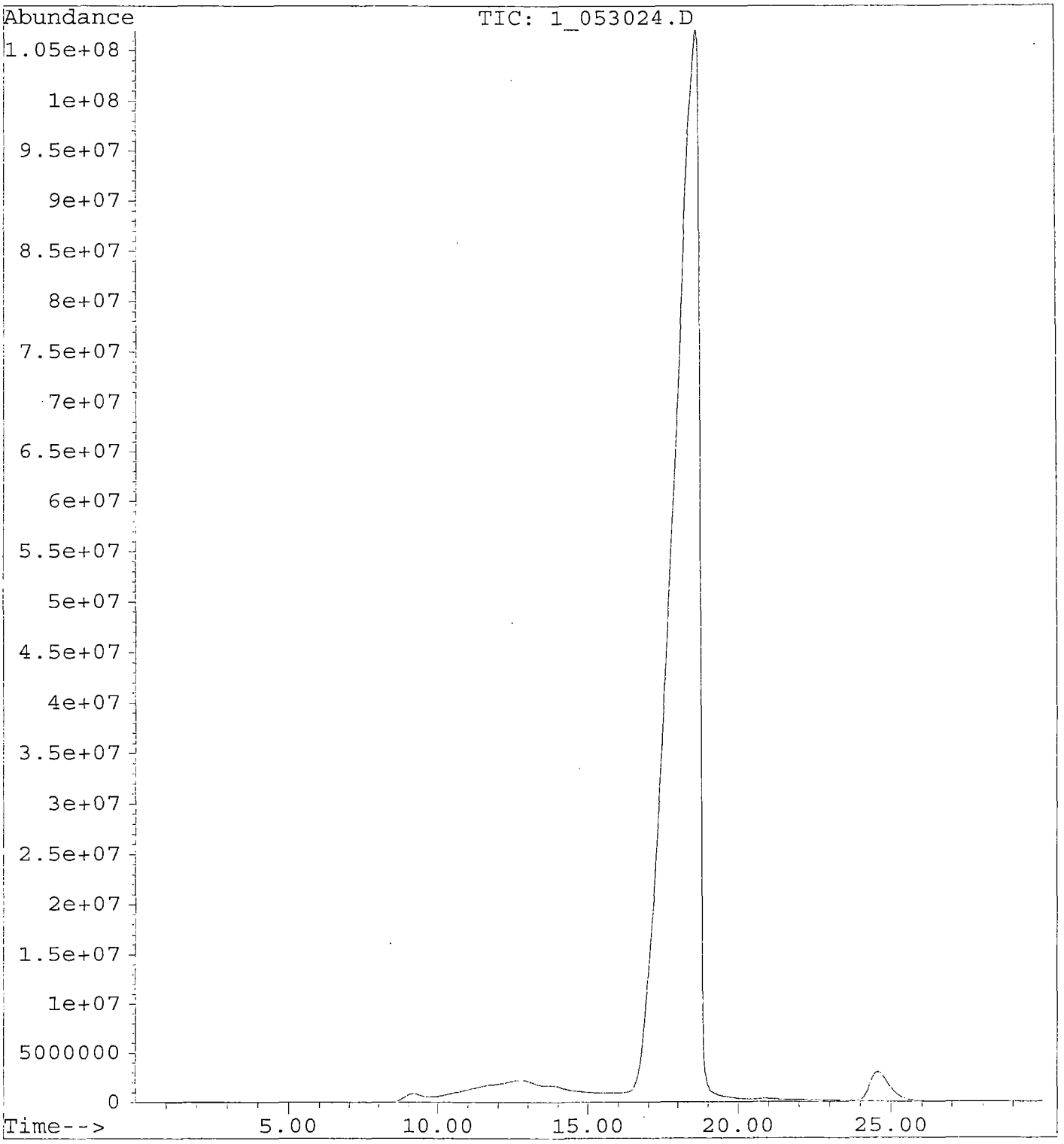
File : C:\HPCHEM\5\DATA\053001\1_053022.D
Operator : CD COL# 418002
Acquired : 31 May 01 08:15 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB 46634.07 - E0098
Misc Info : COL# 418002
Vial Number: 22



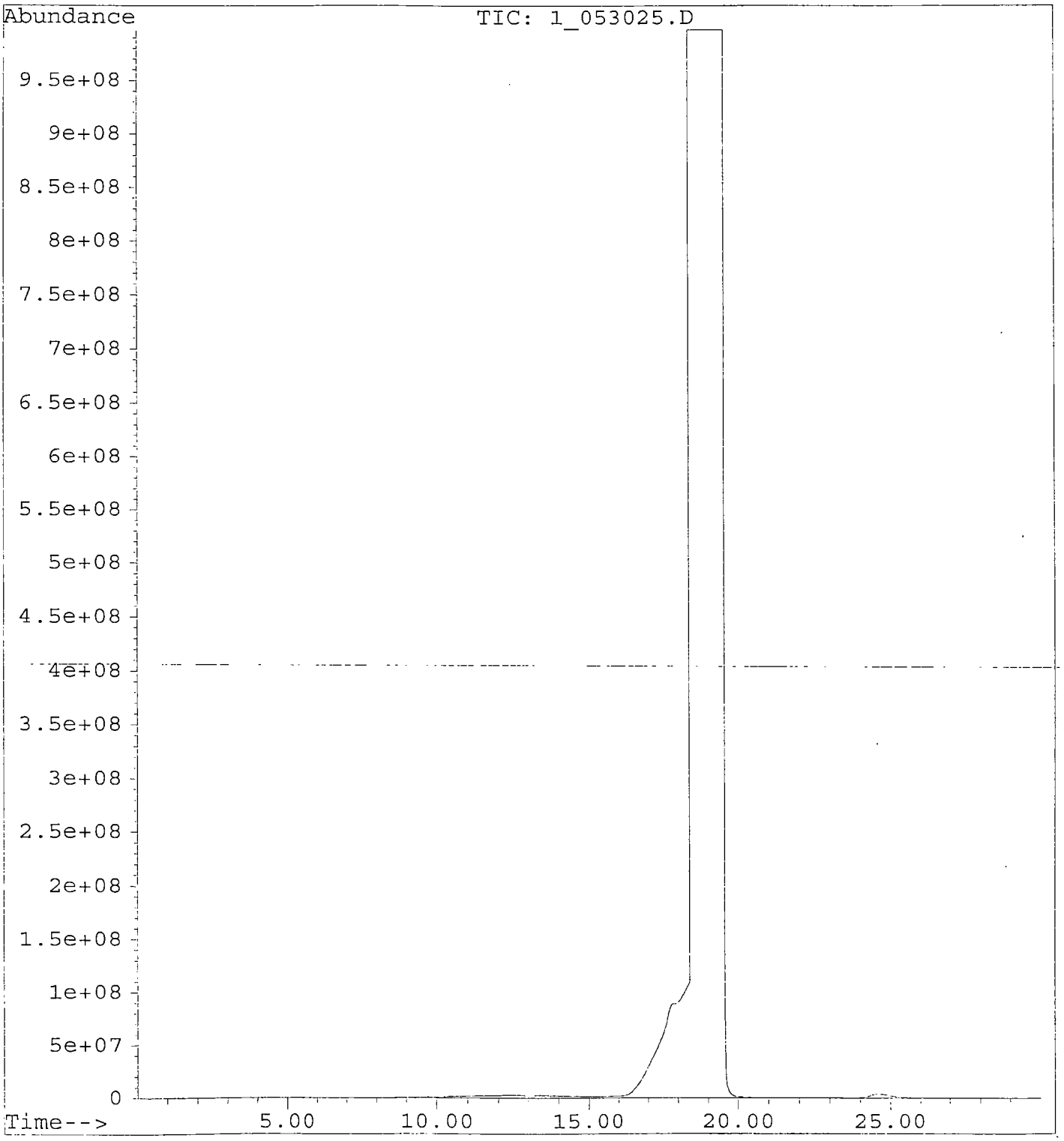
File : C:\HPCHEM\5\DATA\053001\1_053023.D
Operator : CD COL# 418002
Acquired : 31 May 01 08:46 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB 46634 04-E0099
Misc Info : COL# 418002
Vial Number: 23



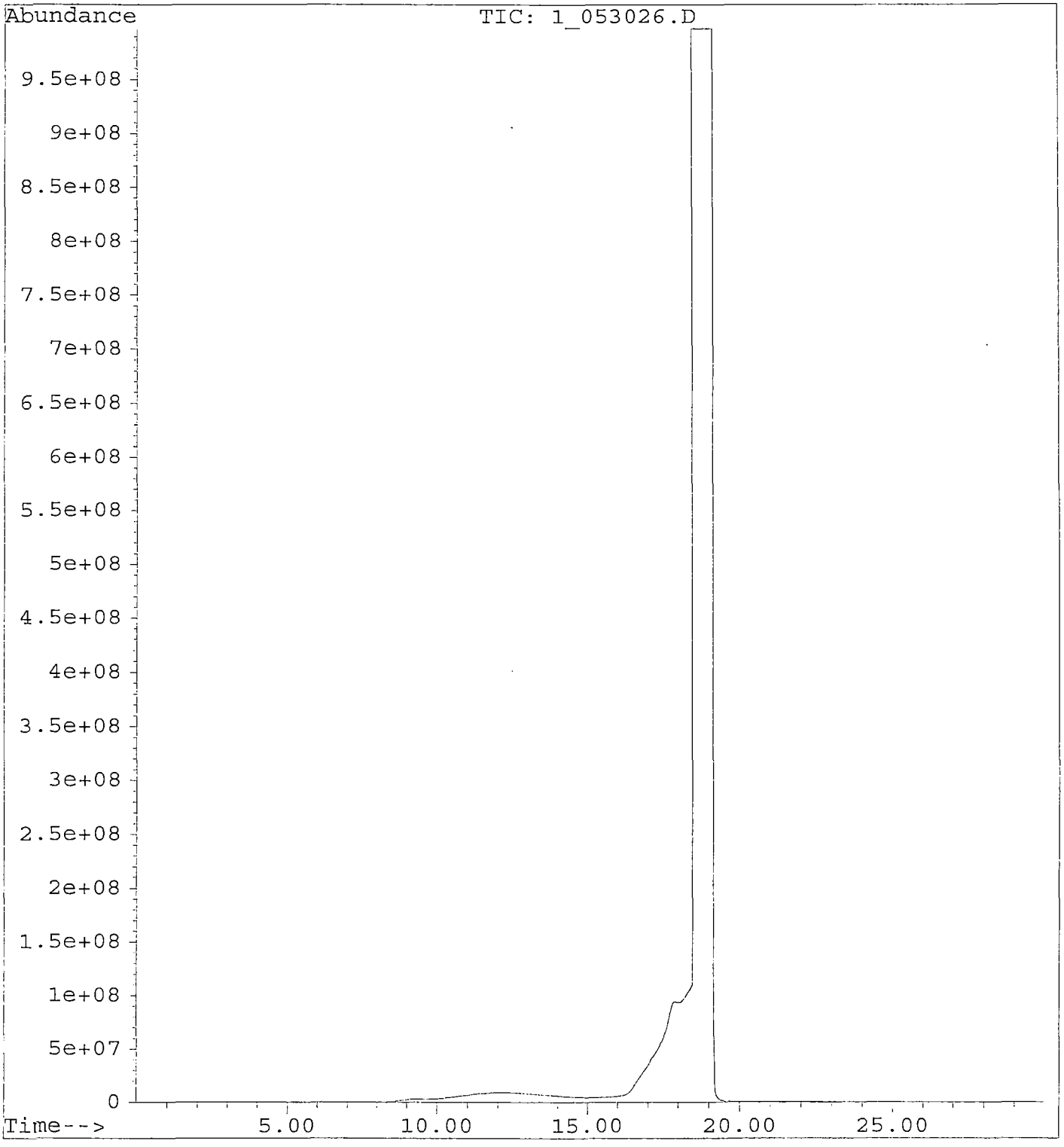
File : C:\HPCHEM\5\DATA\053001\1_053024.D
Operator : CD COL# 418002
Acquired : 31 May 01 09:17 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB 46634.09-E00A0
Misc Info : COL# 418002
Vial Number: 24



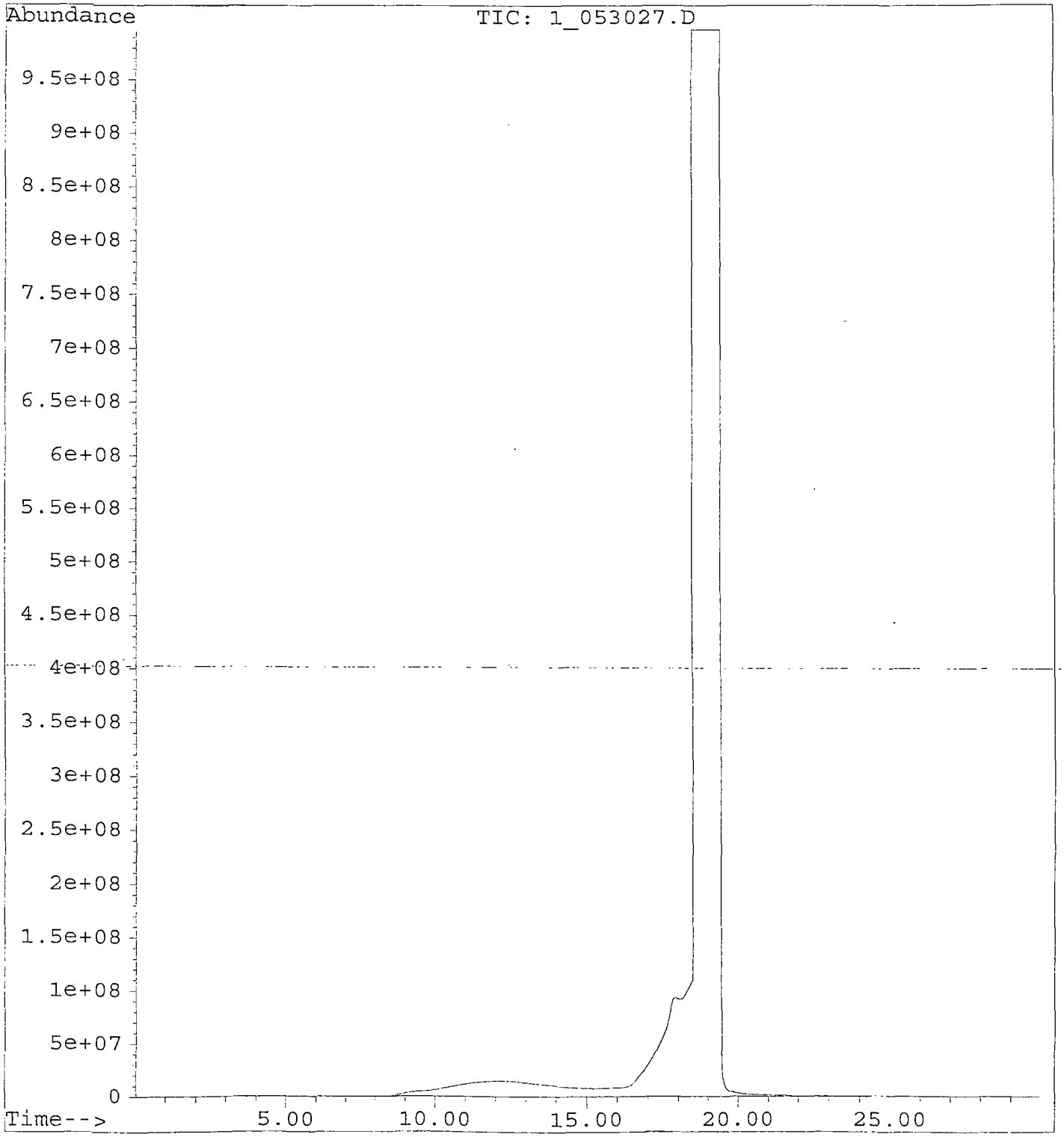
File : C:\HPCHEM\5\DATA\053001\1_053025.D
Operator : CD COL# 418002
Acquired : 31 May 01 09:48 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB 46634.10-E00A1
Misc Info : COL# 418002
Vial Number: 25



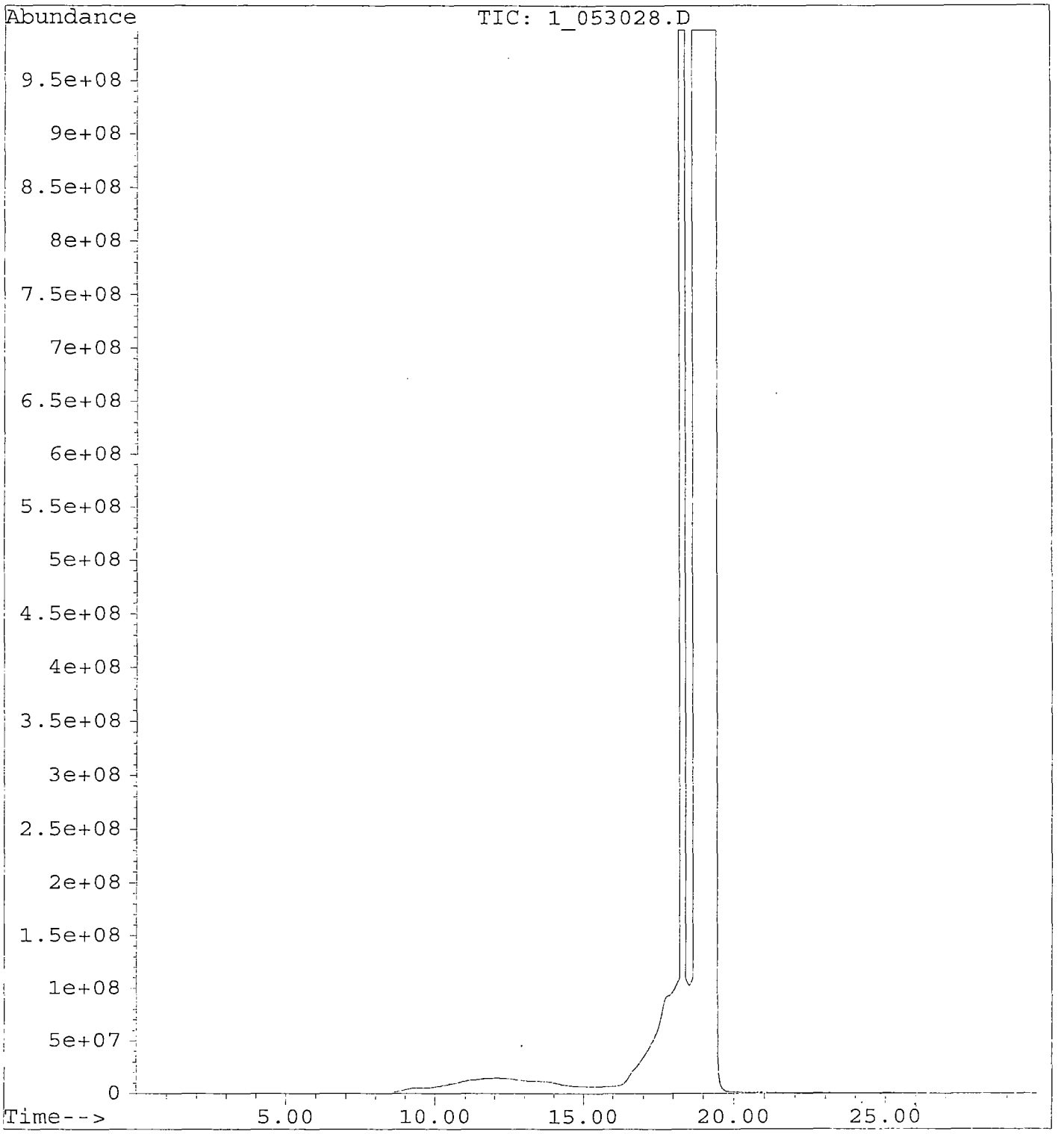
File : C:\HPCHEM\5\DATA\053001\1_053026.D
Operator : CD COL# 418002
Acquired : 31 May 01 10:19 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB 46634.11-E00A2
Misc Info : COL# 418002
Vial Number: 26



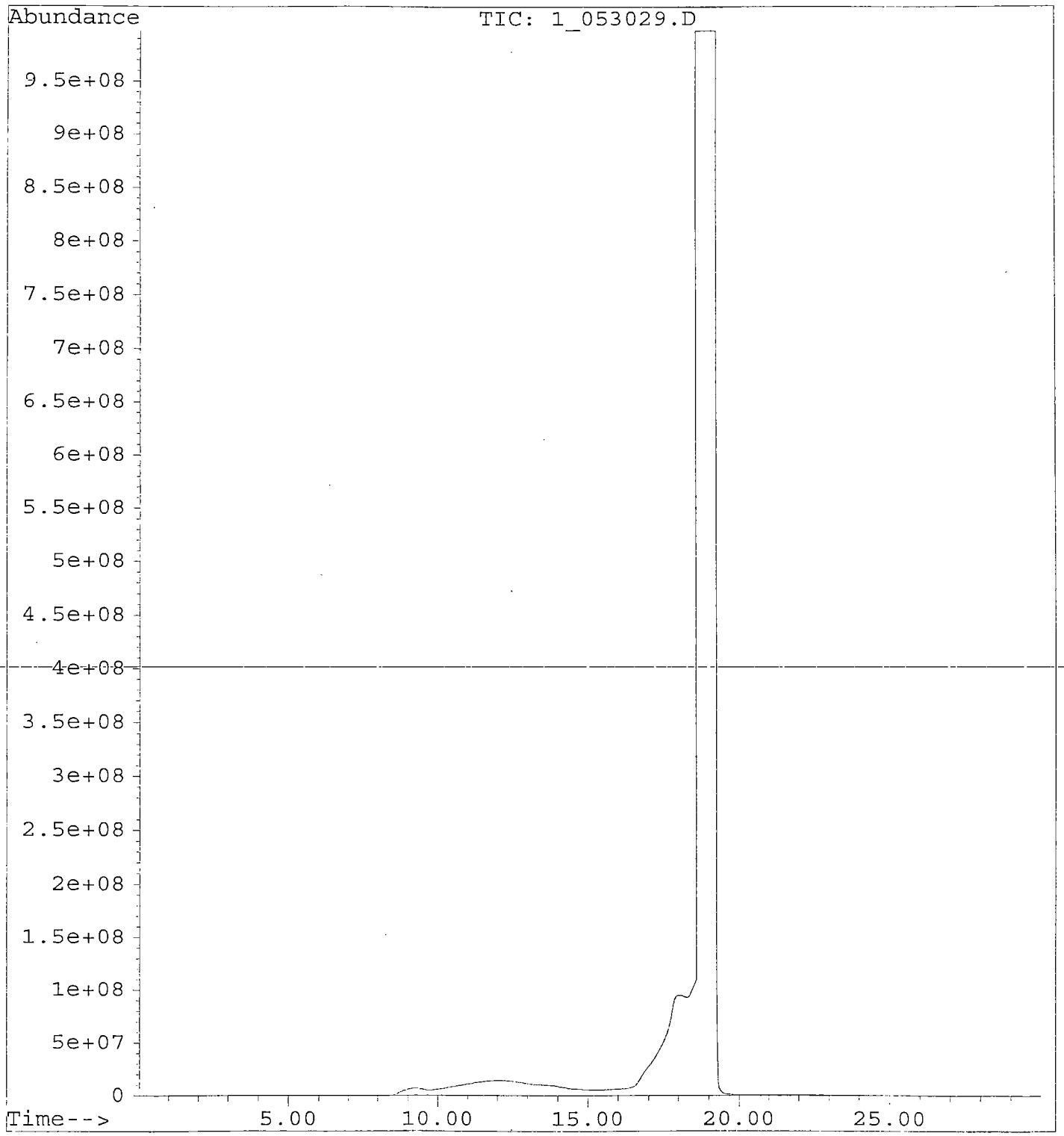
File : C:\HPCHEM\5\DATA\053001\1_053027.D
Operator : CD COL# 418002
Acquired : 31 May 01 10:49 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB 46634 12-E00A3
Misc Info : COL# 418002
Vial Number: 27



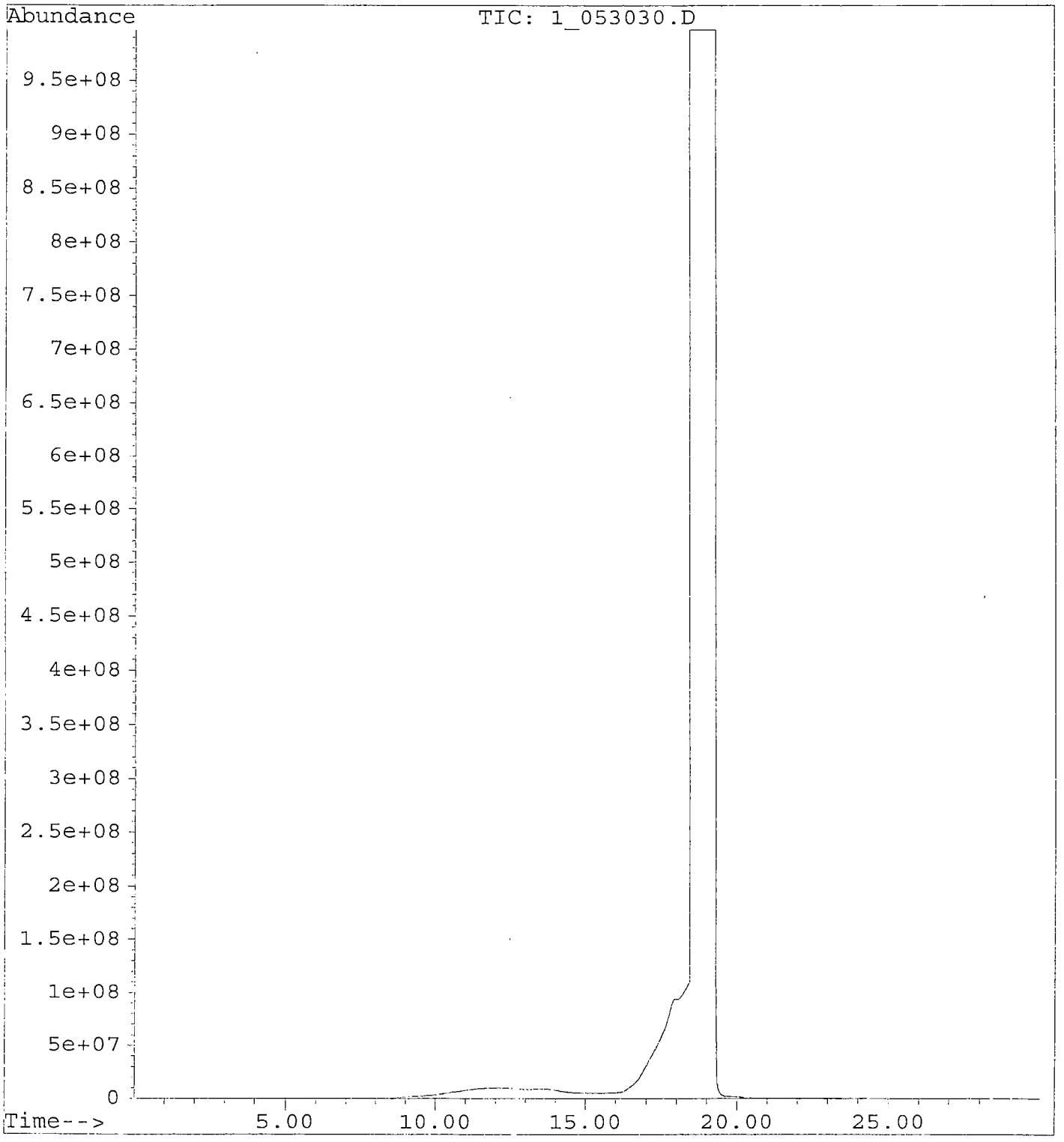
File : C:\HPCHEM\5\DATA\053001\1_053028.D
Operator : CD COL# 418002
Acquired : 31 May 01 11:20 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB 46634.13- E00A4
Misc Info : COL# 418002
Vial Number: 28



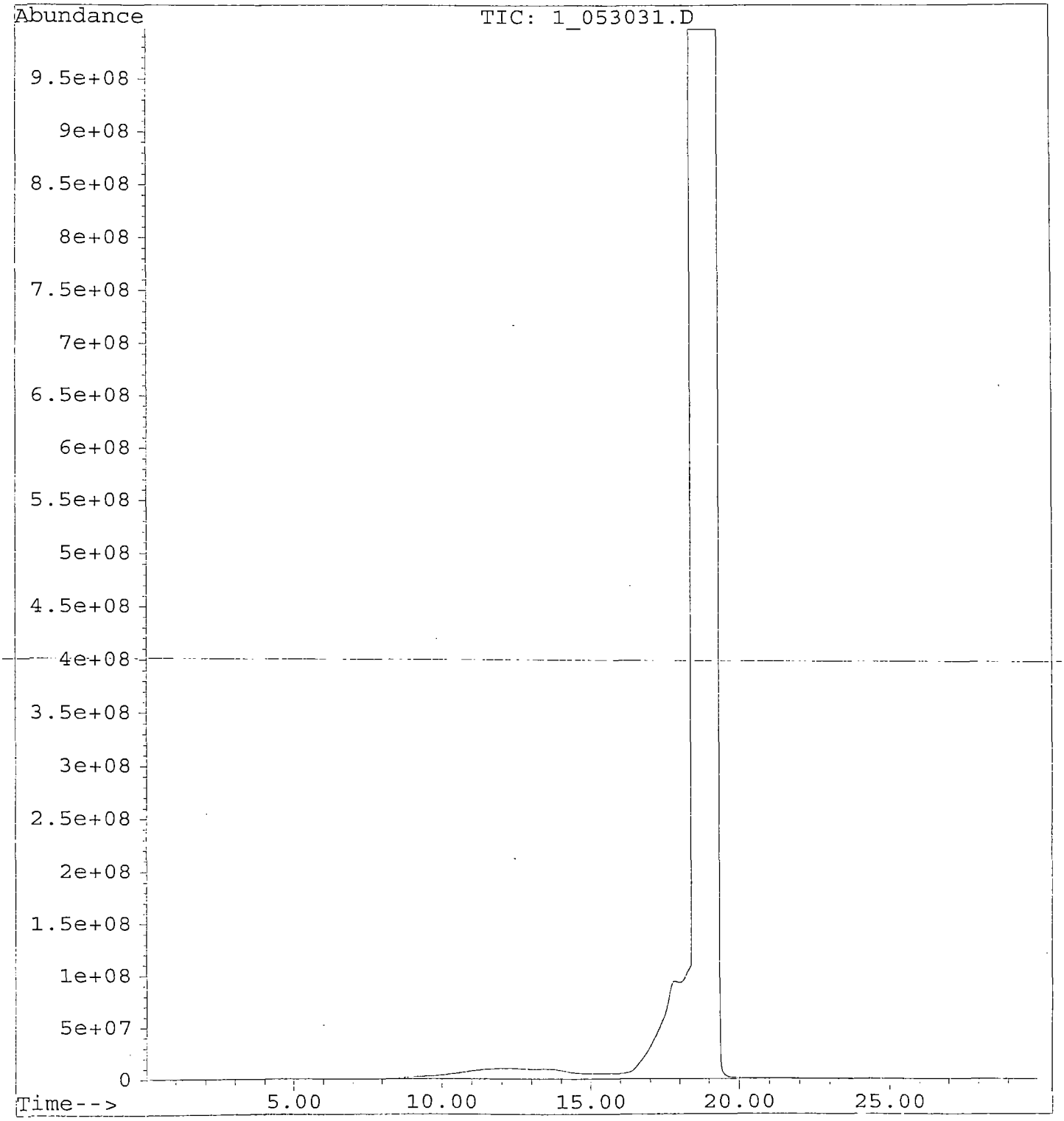
File : C:\HPCHEM\5\DATA\053001\1_053029.D
Operator : CD COL# 418002
Acquired : 31 May 01 11:51 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB 46634.14 - E00A5
Misc Info : COL# 418002
Vial Number: 29



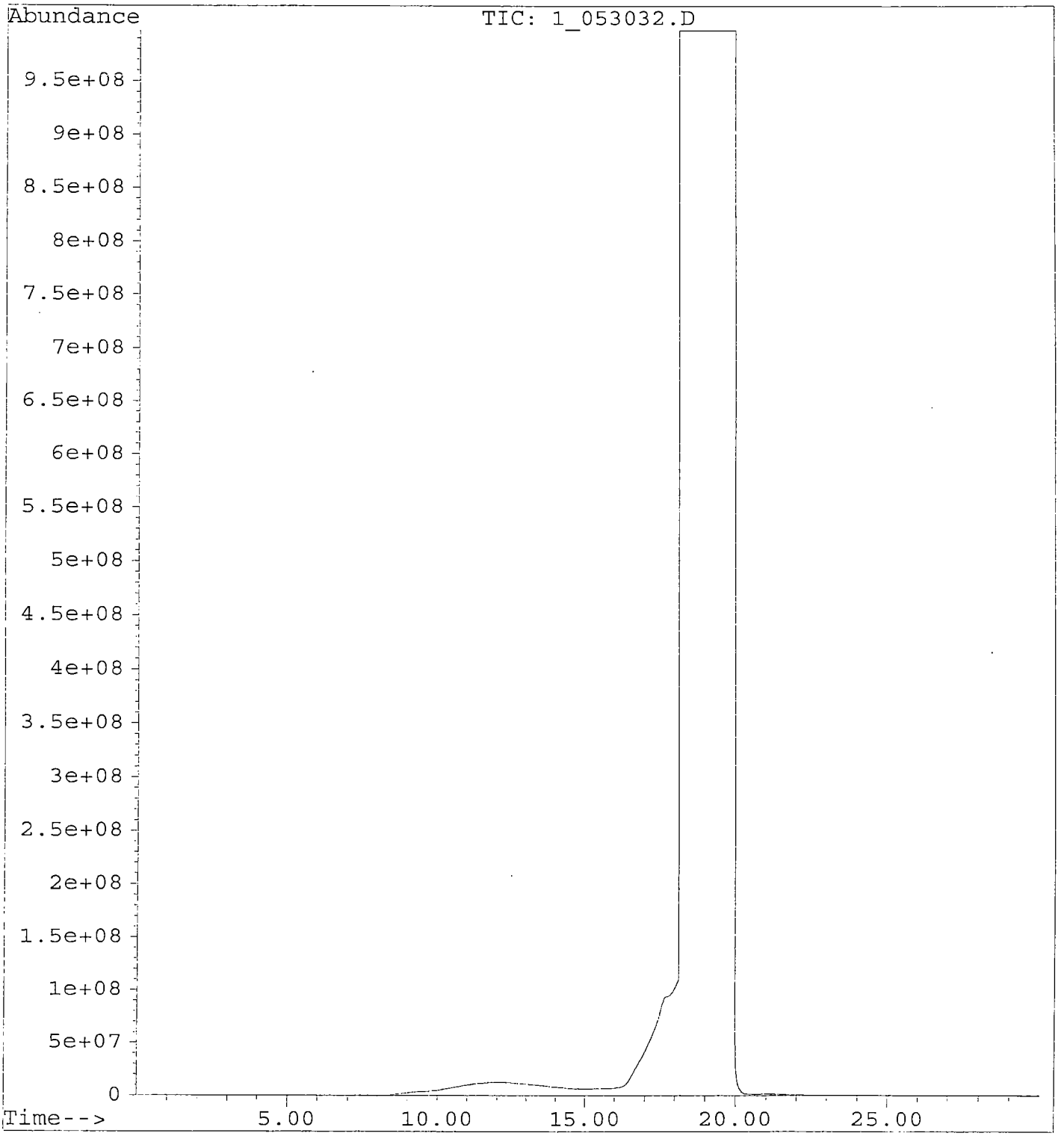
File : C:\HPCHEM\5\DATA\053001\1_053030.D
Operator : CD COL# 418002
Acquired : 31 May 01 12:22 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB 46634.15 - E00AC
Misc Info : COL# 418002
Vial Number: 30



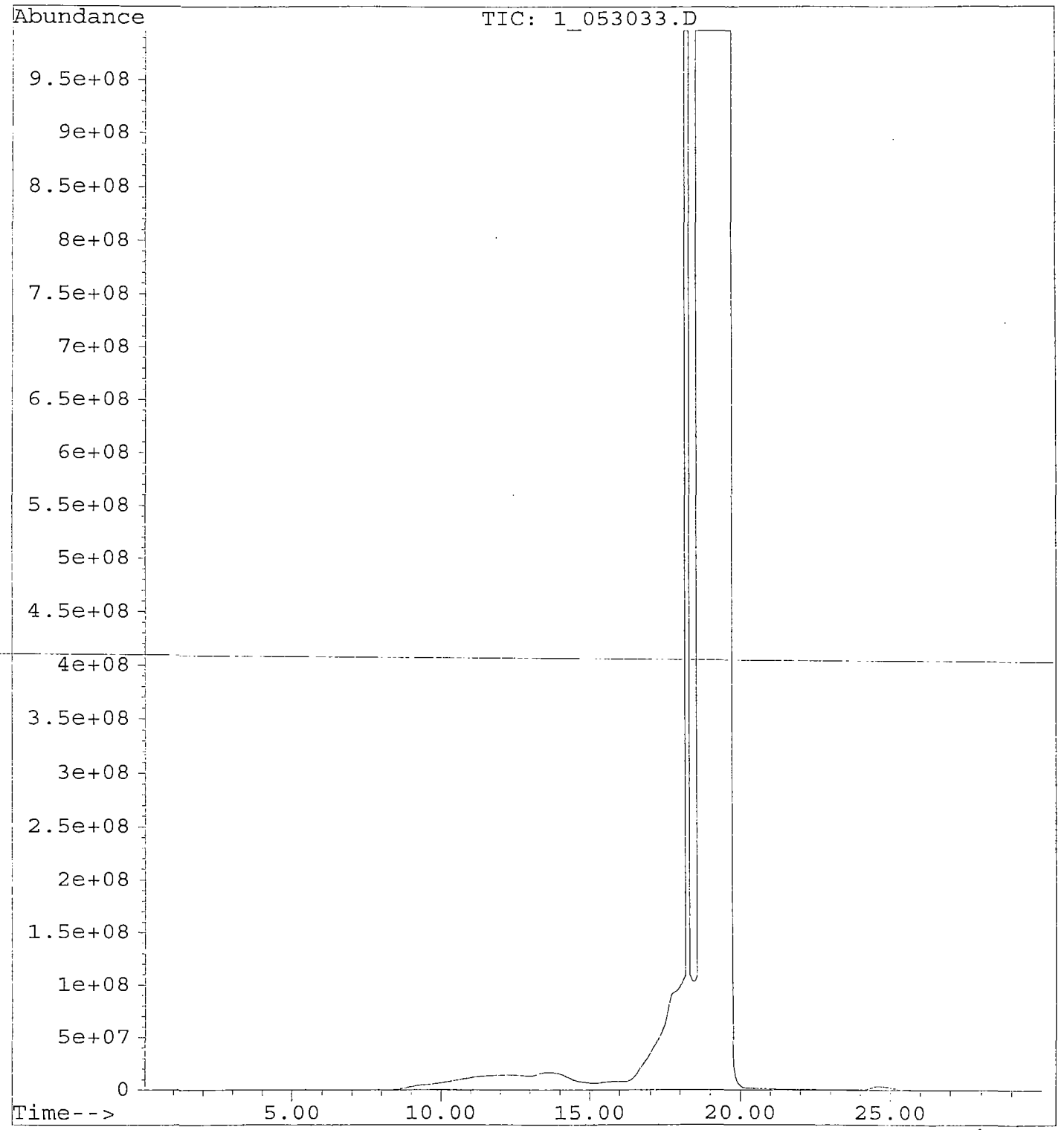
File : C:\HPCHEM\5\DATA\053001\1_053031.D
Operator : CD COL# 418002
Acquired : 31 May 01 12:53 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB 46634.16-E00A7
Misc Info : COL# 418002
Vial Number: 31



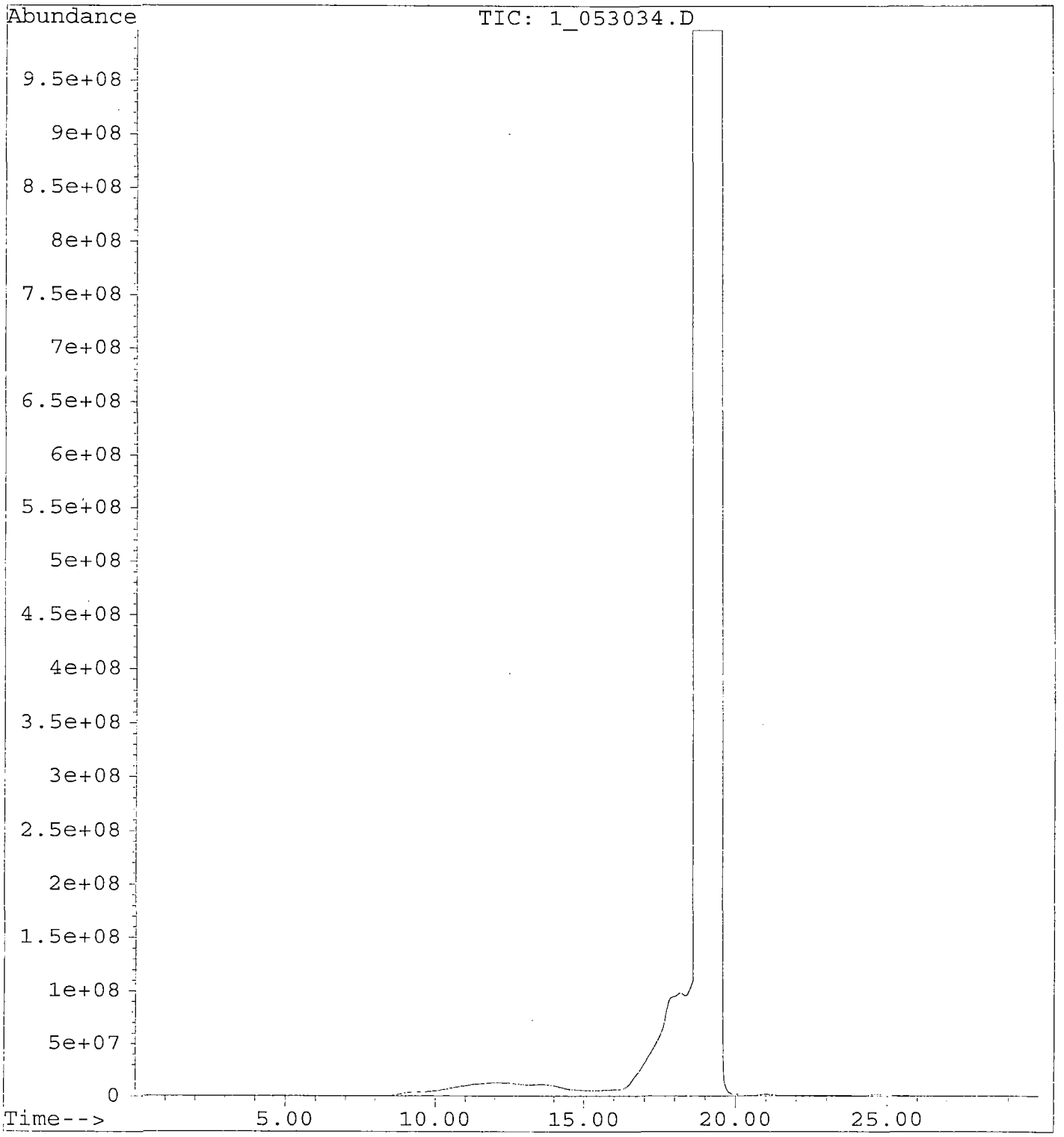
File : C:\HPCHEM\5\DATA\053001\1_053032.D
Operator : CD COL# 418002
Acquired : 31 May 01 13:24 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB 46634.17 - E00A8
Misc Info : COL# 418002
Vial Number: 32



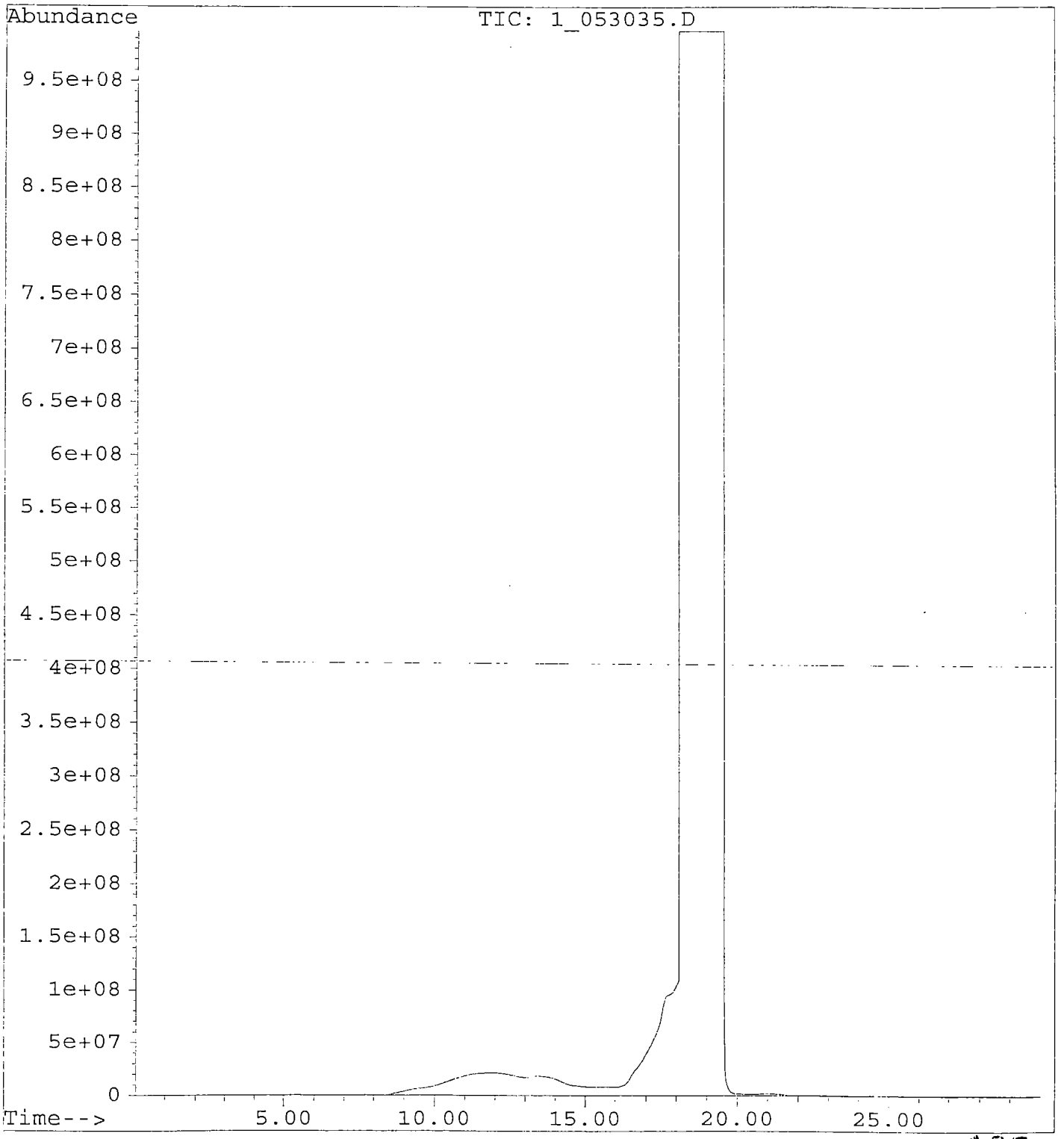
File : C:\HPCHEM\5\DATA\053001\1_053033.D
Operator : CD COL# 418002
Acquired : 31 May 01 13:55 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB 46639.18-E00A9
Misc Info : COL# 418002
Vial Number: 33



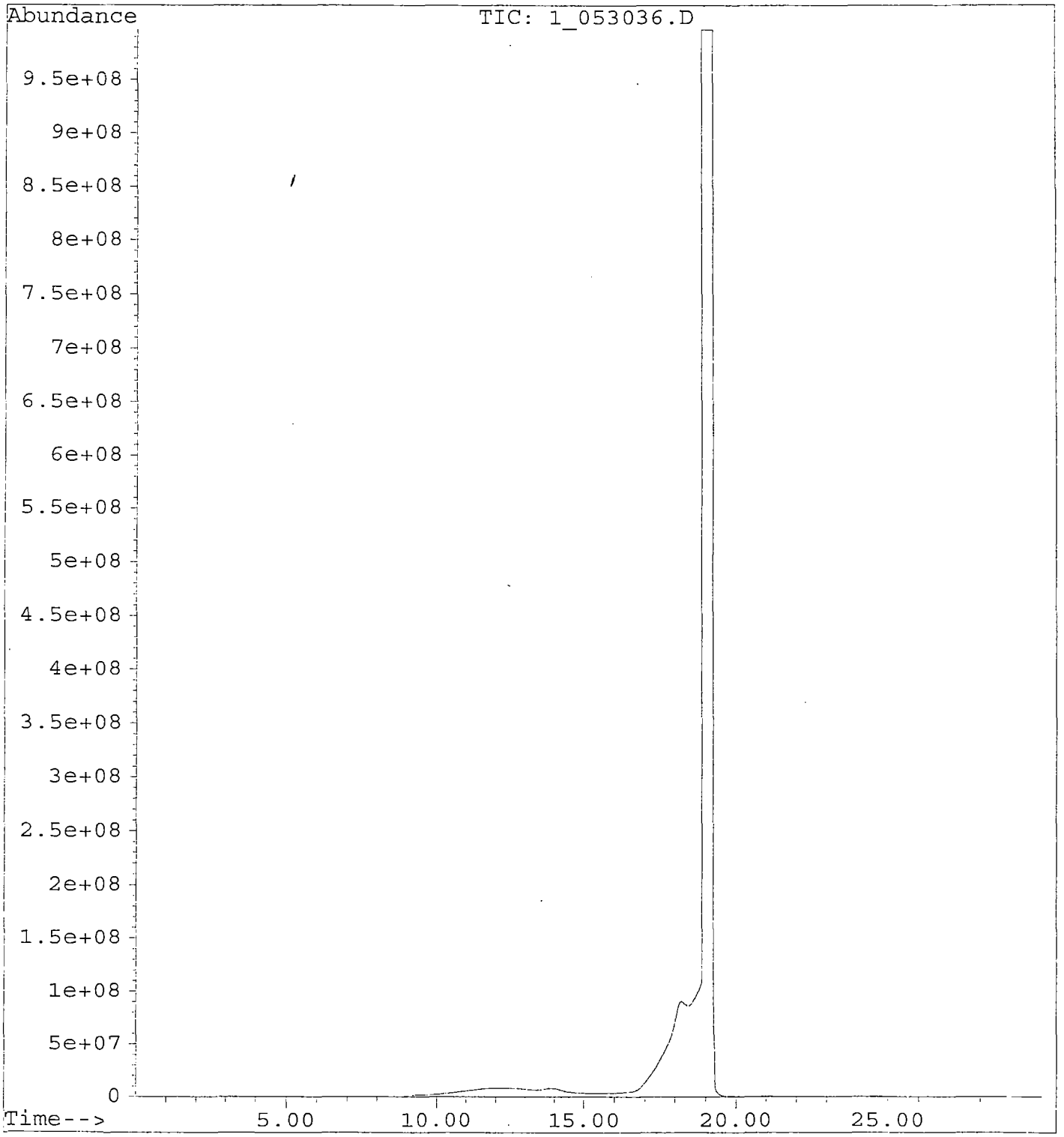
File : C:\HPCHEM\5\DATA\053001\1_053034.D
Operator : CD COL# 418002
Acquired : 31 May 01 14:26 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB 46634 19 - E0080
Misc Info : COL# 418002
Vial Number: 34



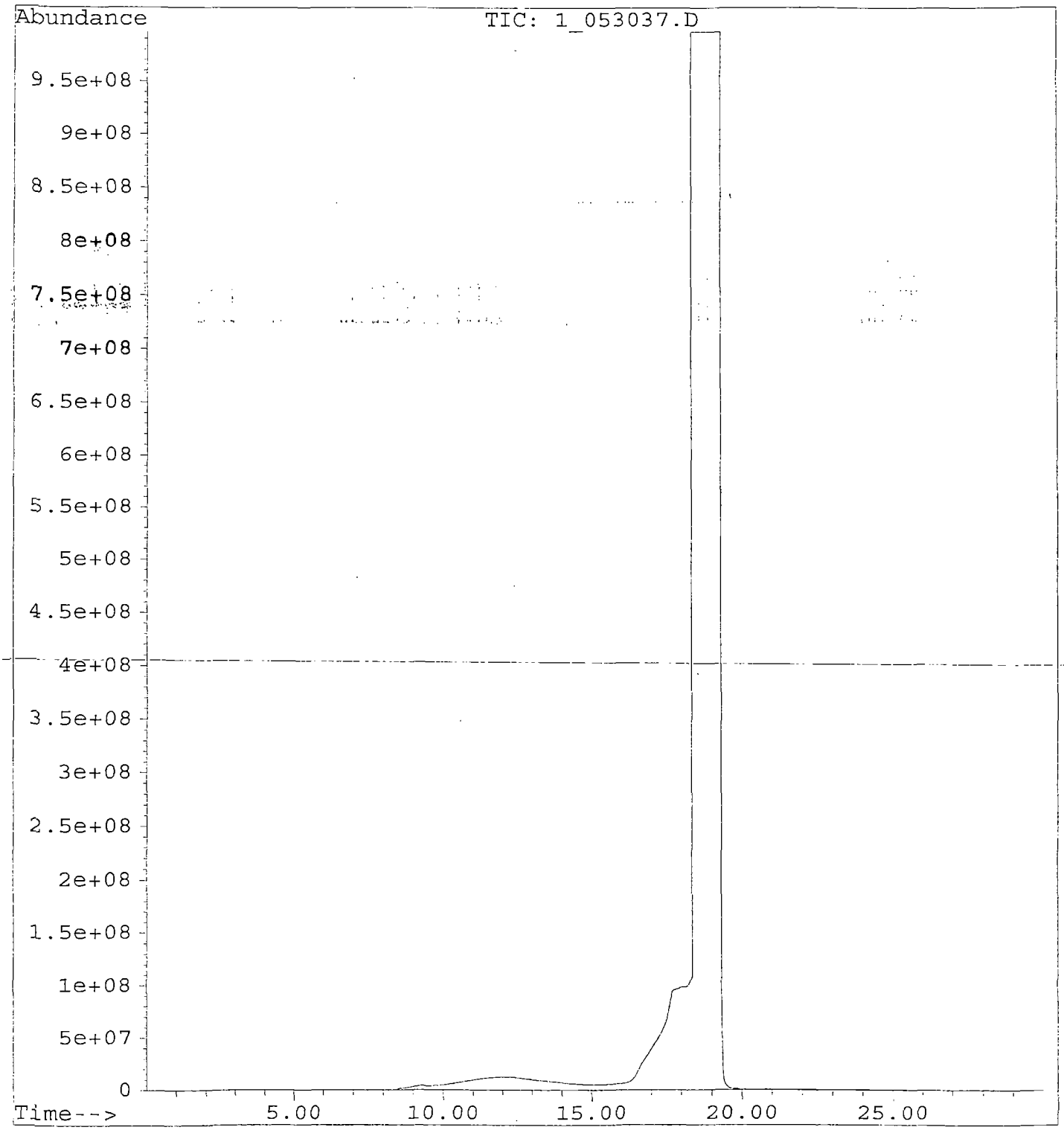
File : C:\HPCHEM\5\DATA\053001\1_053035.D
Operator : CD COL# 418002
Acquired : 31 May 01 14:57 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB 46634 20-E00B1
Misc Info : COL# 418002
Vial Number: 35



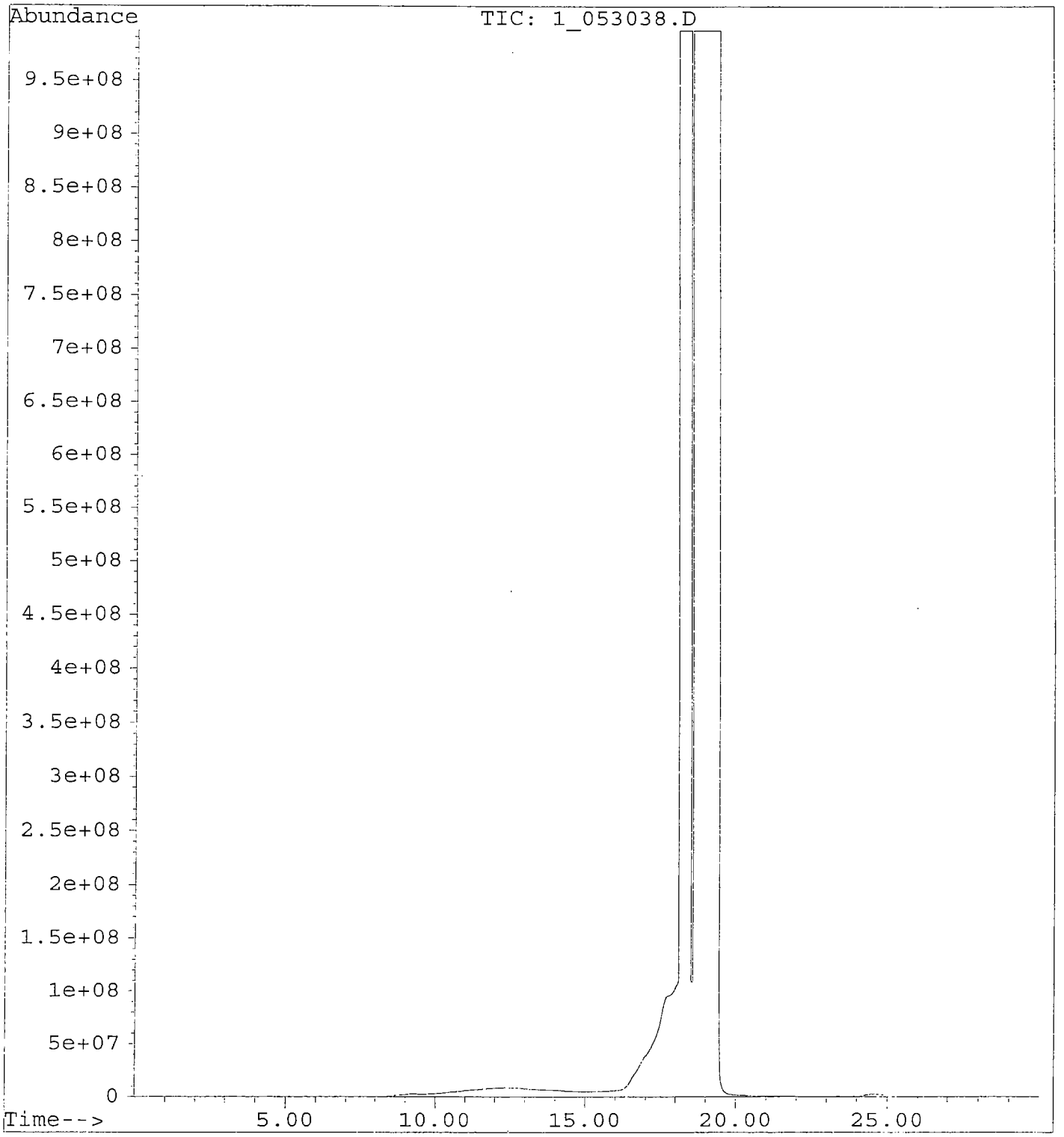
File : C:\HPCHEM\5\DATA\053001\1_053036.D
Operator : CD COL# 418002
Acquired : 31 May 01 15:28 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB 46634.21 - E00D2
Misc Info : COL# 418002
Vial Number: 36



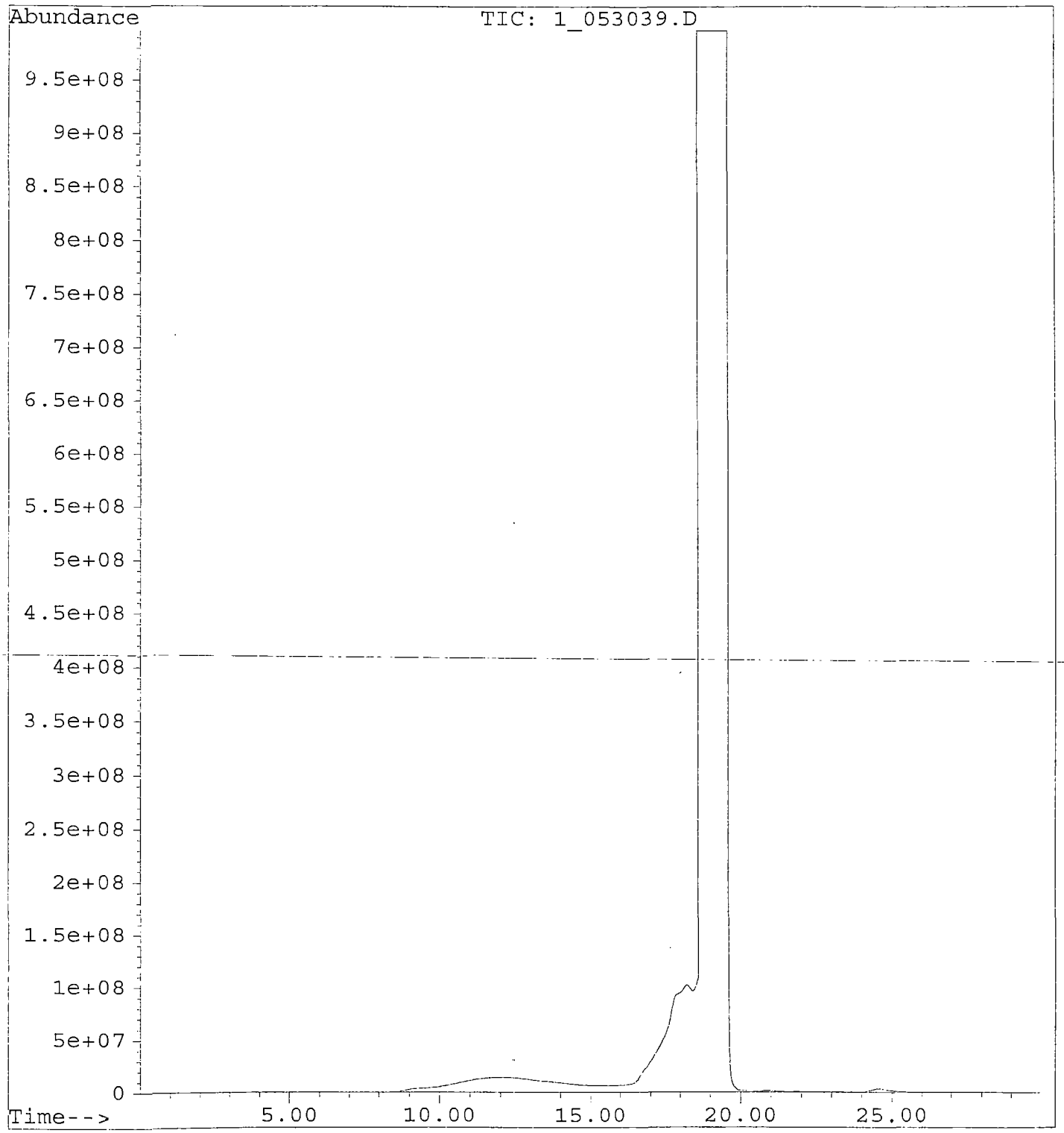
File : C:\HPCHEM\5\DATA\053001\1_053037.D
Operator : CD COL# 418002
Acquired : 31 May 01 15:59 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB 46634.22 -E0083
Misc Info : COL# 418002
Vial Number: 37



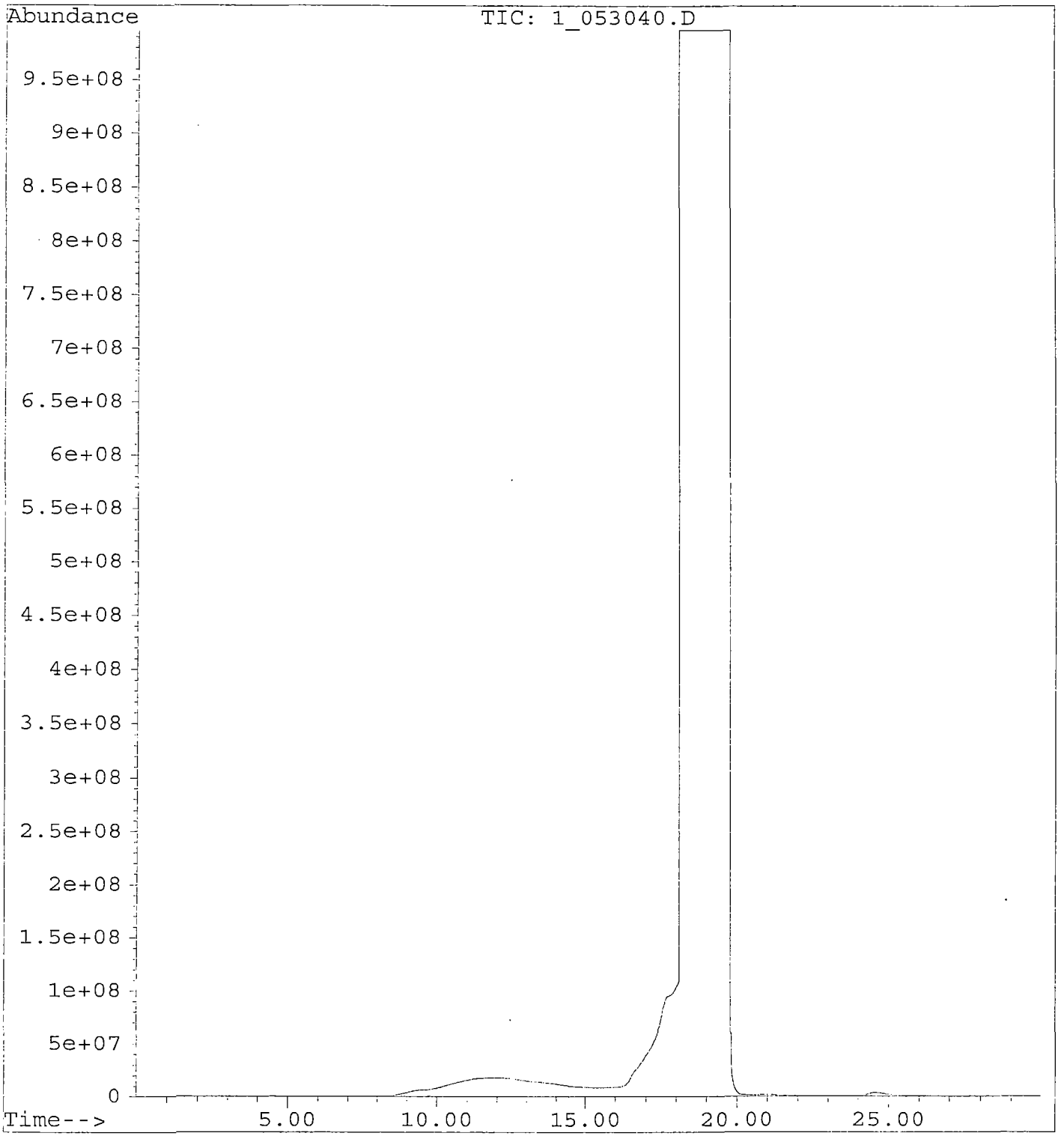
File : C:\HPCHEM\5\DATA\053001\1_053038.D
Operator : CD COL# 418002
Acquired : 31 May 01 16:30 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB 46634.23 - EcoB5
Misc Info : COL# 418002
Vial Number: 38



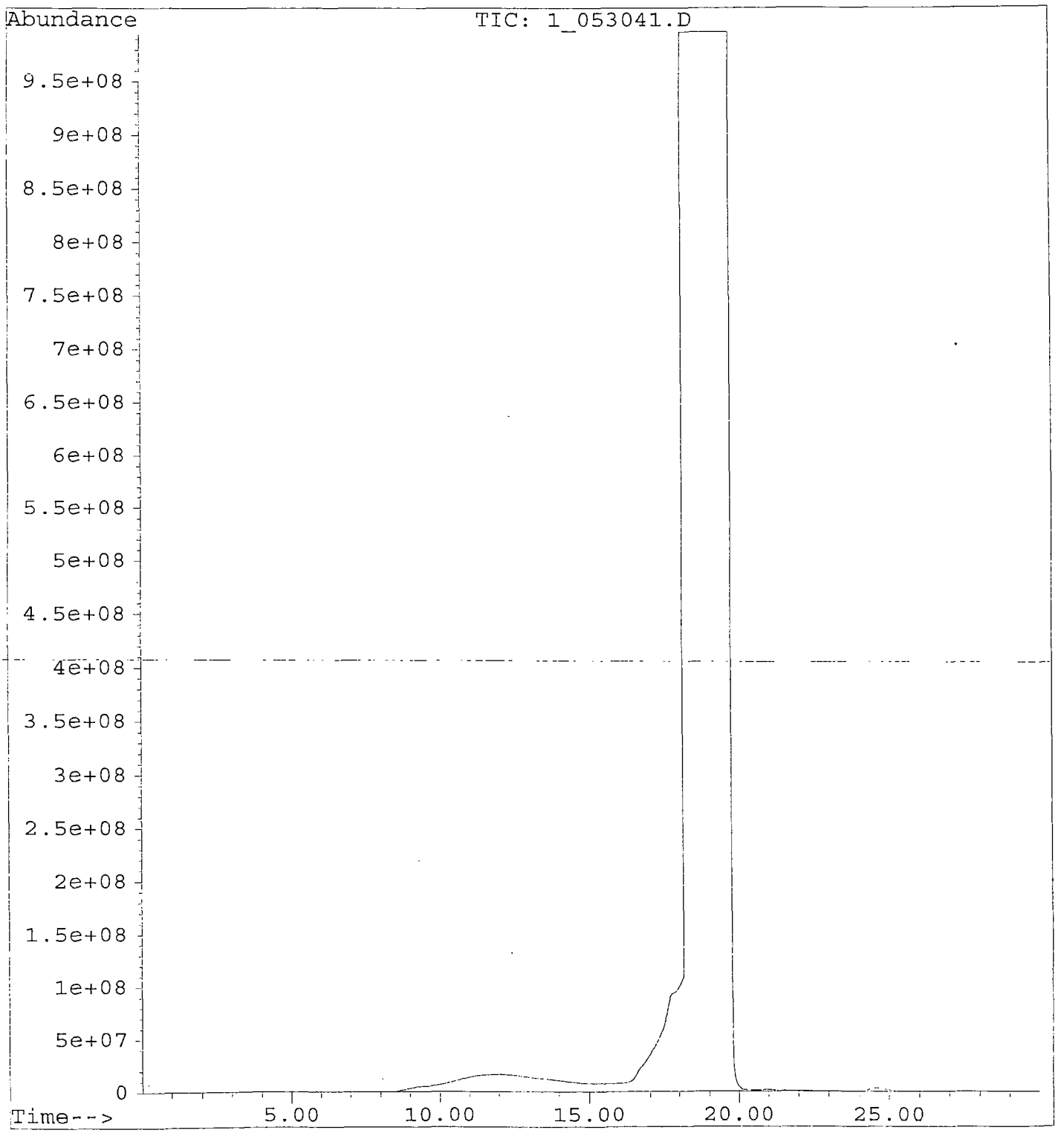
File : C:\HPCHEM\5\DATA\053001\1_053039.D
Operator : CD COL# 418002
Acquired : 31 May 01 17:01 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB 46634 24-E00B6
Misc Info : COL# 418002
Vial Number: 39



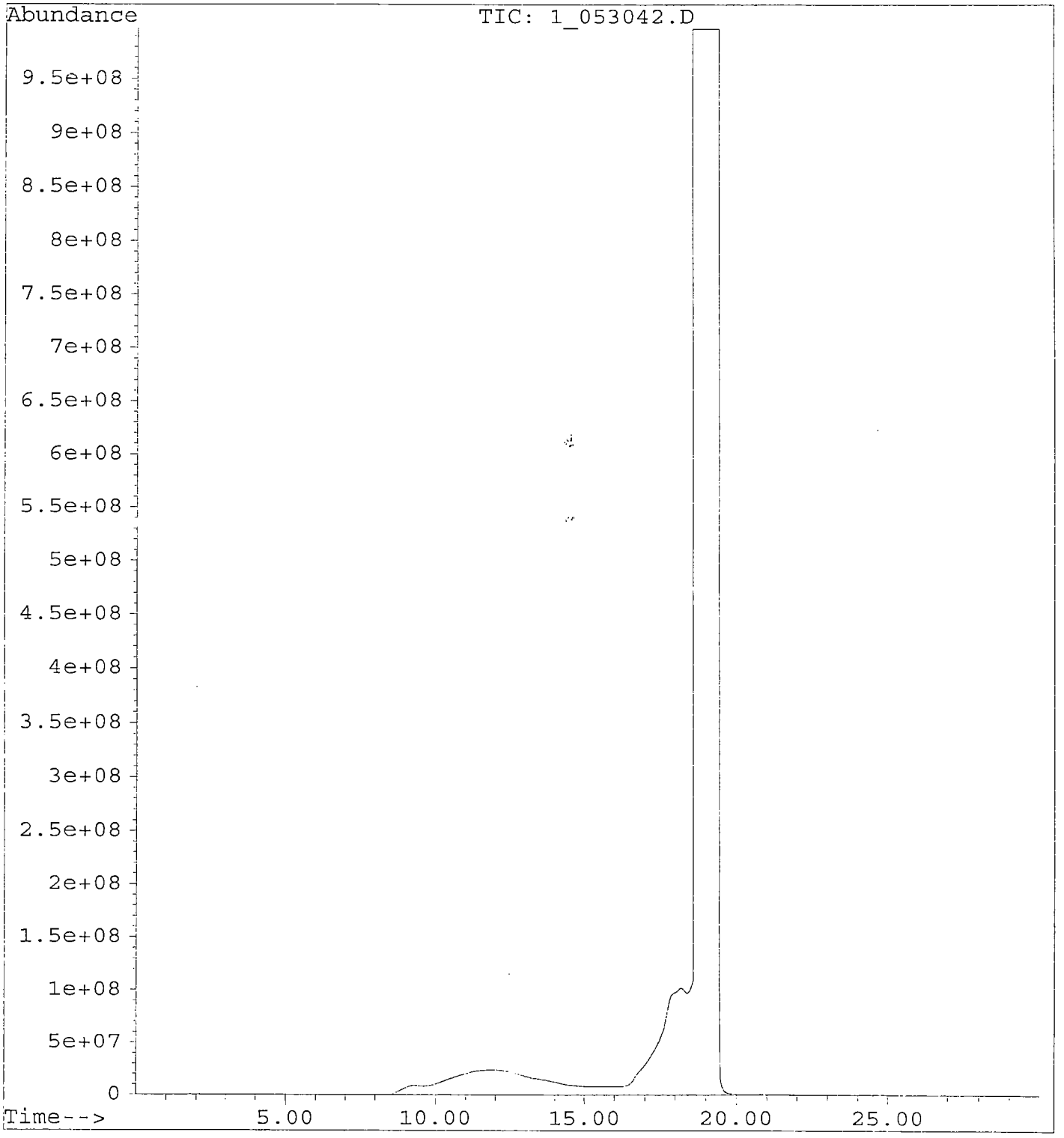
File : C:\HPCHEM\5\DATA\053001\1_053040.D
Operator : CD COL# 418002
Acquired : 31 May 01 17:32 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB 46634.25-MS-E0036
Misc Info : COL# 418002
Vial Number: 40



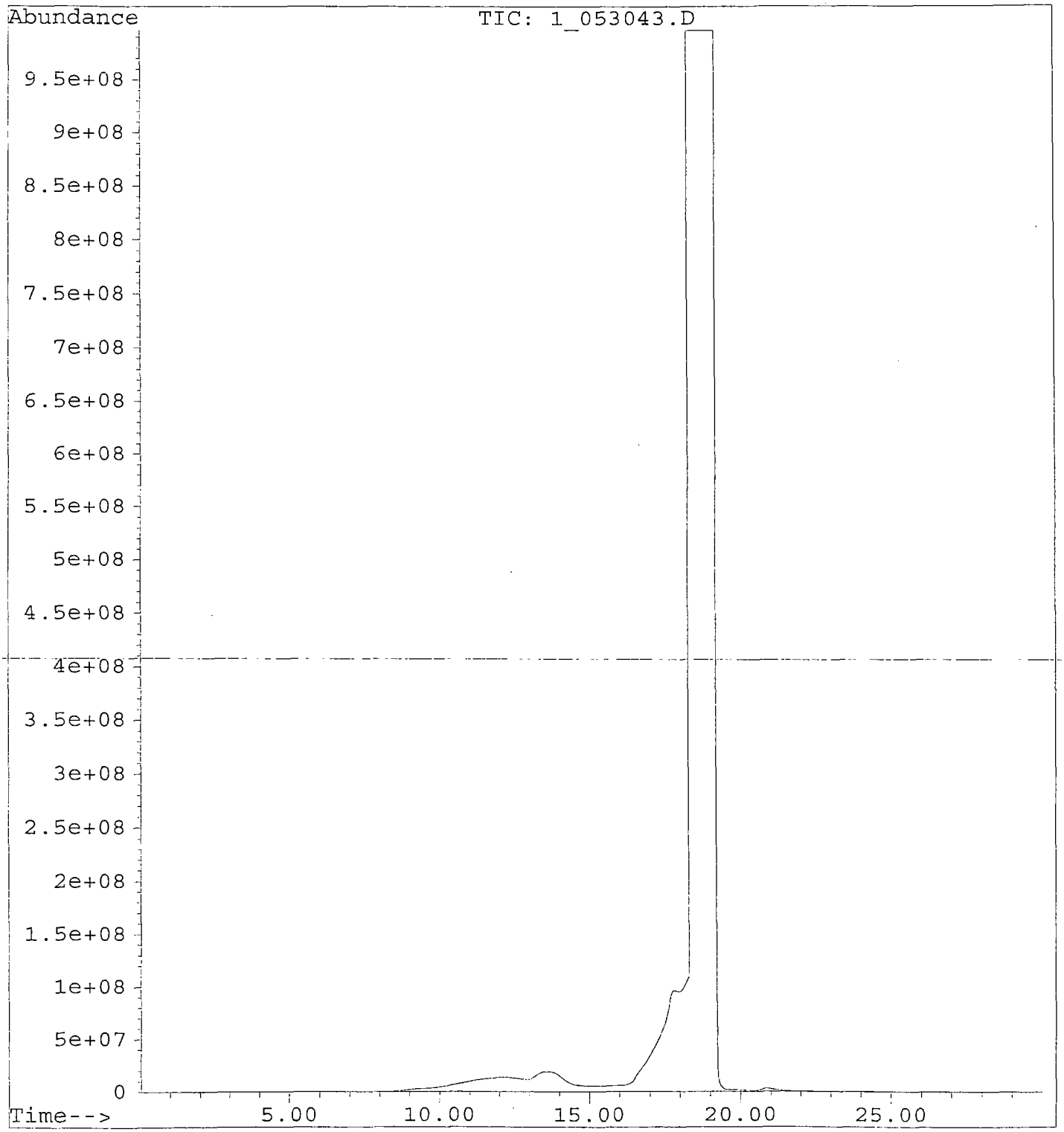
File : C:\HPCHEM\5\DATA\053001\1_053041.D
Operator : CD COL# 418002
Acquired : 31 May 01 18:02 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB 46634.26-MSD-E00BG
Misc Info : COL# 418002
Vial Number: 41



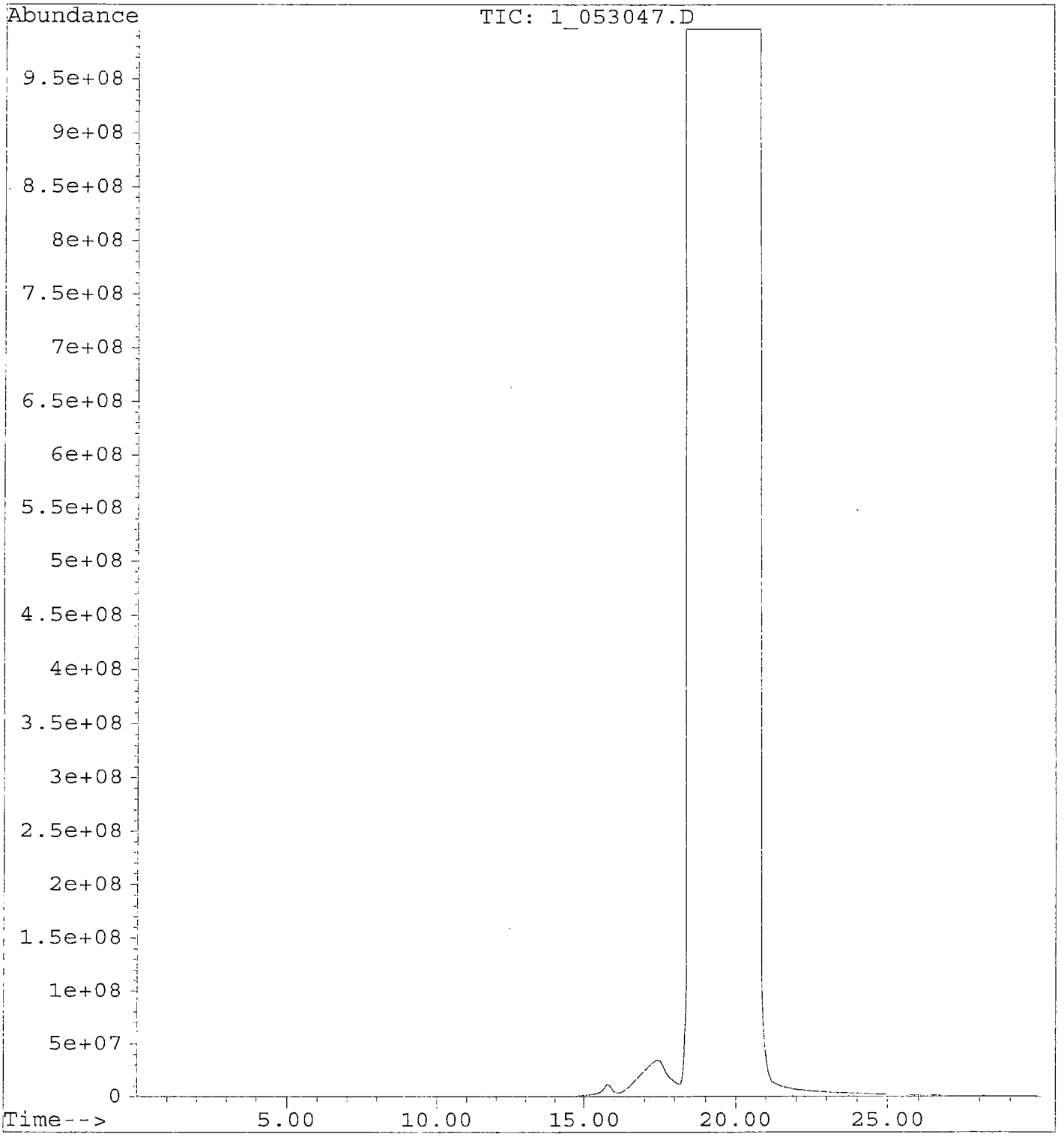
File : C:\HPCHEM\5\DATA\053001\1_053042.D
Operator : CD COL# 418002
Acquired : 31 May 01 18:34 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB 46634-E0087
Misc Info : COL# 418002
Vial Number: 42



File : C:\HPCHEM\5\DATA\053001\1_053043.D
Operator : CD COL# 418002
Acquired : 31 May 01 19:05 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB 46634.28-E0088
Misc Info : COL# 418002
Vial Number: 43

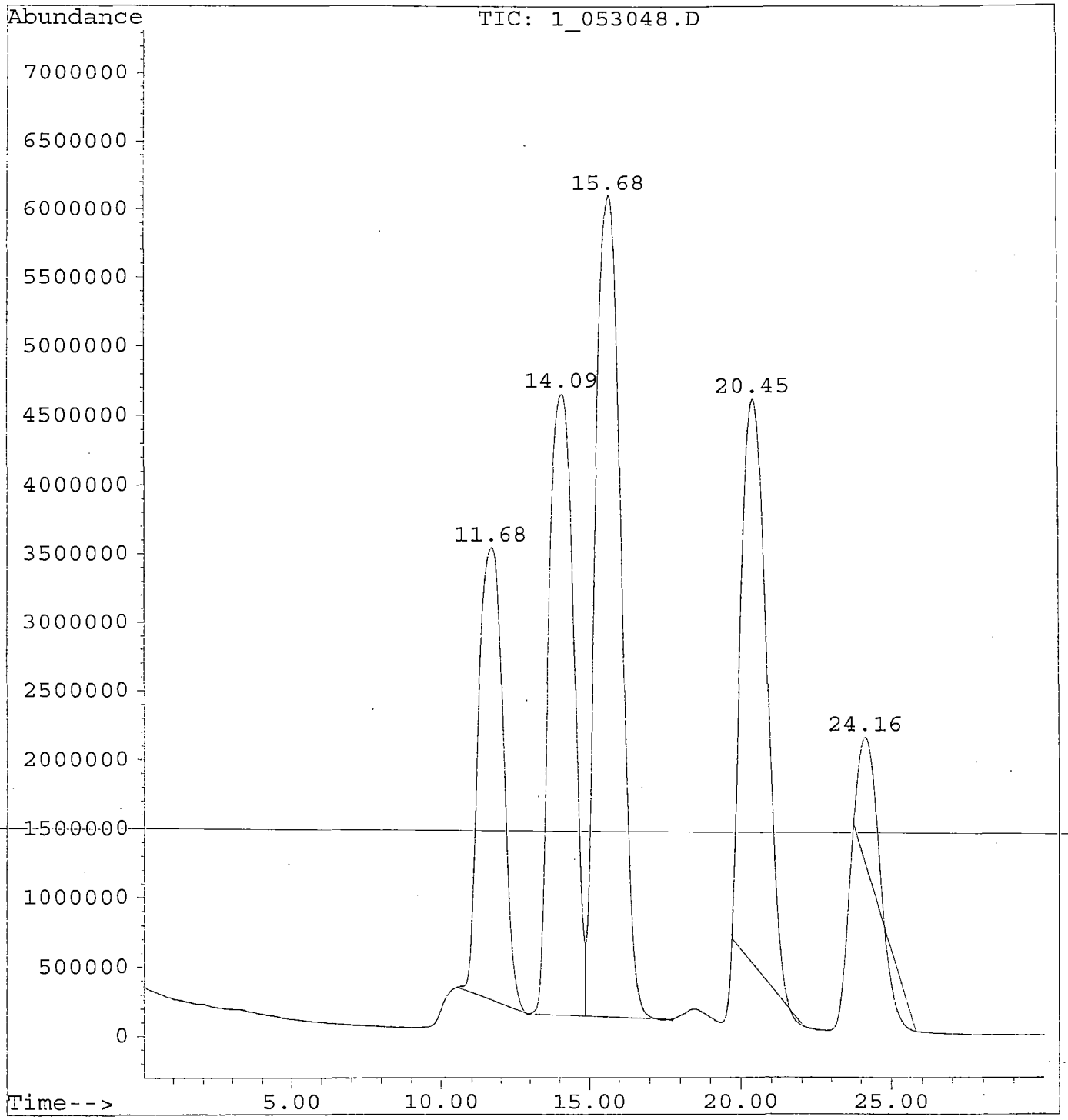


File : C:\HPCHEM\5\DATA\053001\1_053047.D
Operator : CD COL# 418002
Acquired : 31 May 01 21:08 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 47



Data File : C:\HPCHEM\5\DATA\053001\1_053048.D
Acq On : 31 May 01 09:39 PM
Sample : CAL STD (FINAL)
Misc : COL# 418002

Vial: 48
Operator: CD COL#
Inst : GPC1
Multiplr: 1.00



1) 11.68 = Corn Oil

3) 14.09 = Pthalate
4) 15.68 = Methoxychlor
5) 20.45 = Perylene

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Chromatographic Resolution Report

Data File : C:\HPCHEM\5\DATA\053001\1_053048.D Vial: 48
Acq On : 31 May 01 21:39 Operator: CD COL# 4
Sample : CAL STD (FINAL) Inst : GPC1
Misc : COL# 418002 Multiplr: 1.00

Method : C:\HPCHEM\5\METHODS\GPC.M
Title :

RT#1	RT#2	Resolution
11.675	14.092	100.00
14.092	15.681	88.44
15.681	20.450	100.00
20.450	24.155	100.00

Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\06_04_01\3_060433.D\ECD1A.CH Vial: 33
Signal #2 : F:\HPCHEM\HP\3\DATA\06_04_01\3_060433.D\ECD2B.CH
Acq On : 04 Jun 2001 21:32 Operator: DDC
Sample : SB053001C *SB053001C * Inst : HP_03
Misc : **1000ML/10.0ML* Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 13:50 2001 Quant Results File: XPCBF02.RES

Method : F:\HPCHEM\HP\3\DATA\06_04_01\XPCBF02.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\06_02_01\
Last Update : Wed May 30 09:35:39 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L

System Monitoring Compounds:

Target Compounds:

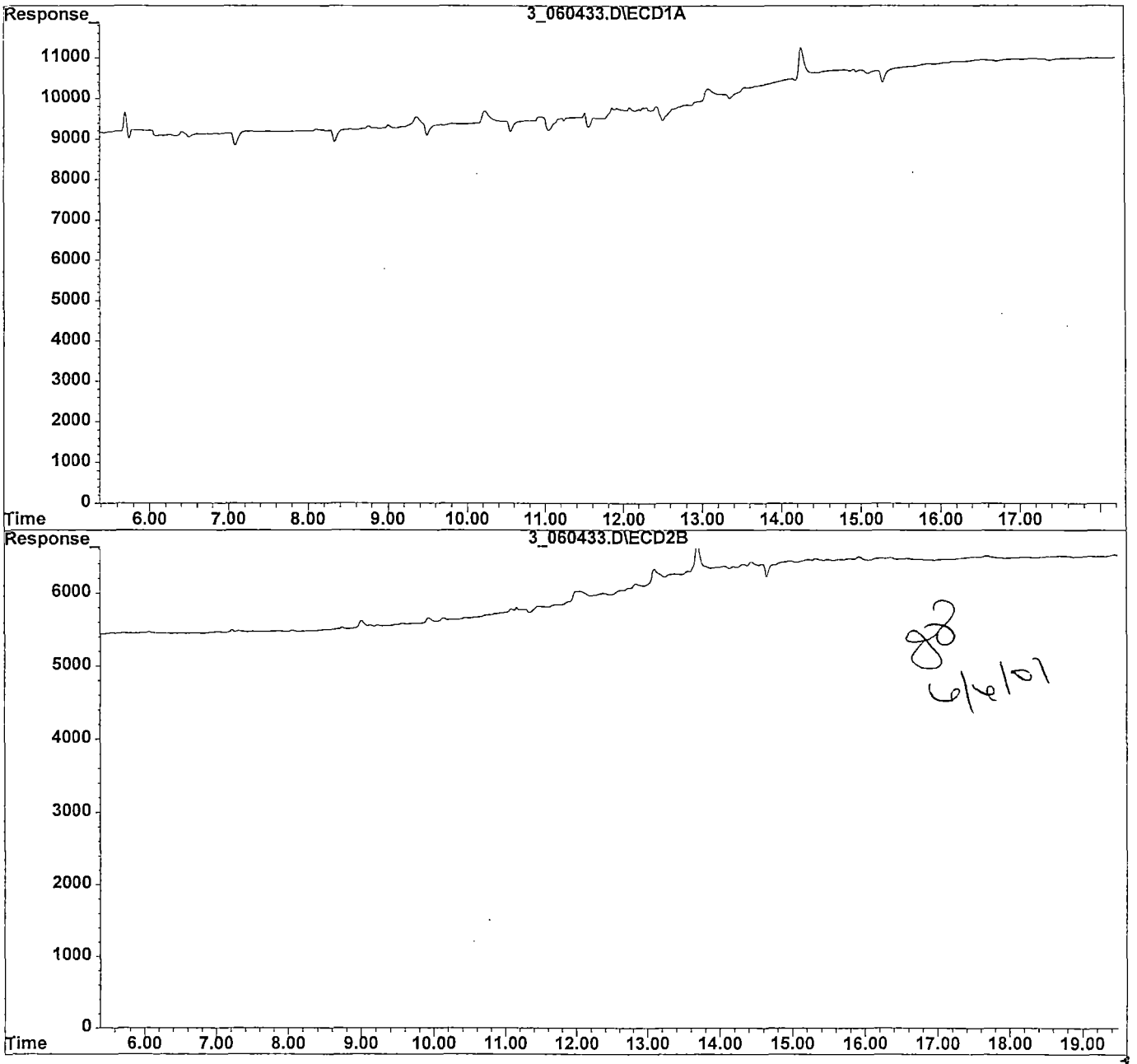
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\06_04_01\3_060433.D\ECD1A.CH Vial: 33
Signal #2 : F:\HPCHEM\HP\3\DATA\06_04_01\3_060433.D\ECD2B.CH
Acq On : 04 Jun 2001 21:32 Operator: DDC
Sample : SB053001C *SB053001C * Inst : HP_03
Misc : **1000ML/10.0ML* Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 13:50 2001 Quant Results File: XPCBF02.RES

Method : F:\HPCHEM\HP\3\DATA\06_04_01\XPCBF02.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\06_02_01\
Last Update : Wed May 30 09:35:39 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B



6/6/01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\06_04_01\3_060434.D\ECD1A.CH Vial: 34
Signal #2 : F:\HPCHEM\HP\3\DATA\06_04_01\3_060434.D\ECD2B.CH
Acq On : 04 Jun 2001 21:57 Operator: DDC
Sample : SB053001D *SB053001D * Inst : HP_03
Misc : **1000ML/10.0ML* Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 13:47 2001 Quant Results File: XPCBF02.RES

Method : F:\HPCHEM\HP\3\DATA\06_04_01\XPCBF02.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\06_02_01\
Last Update : Wed May 30 09:35:39 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L

System Monitoring Compounds:

Target Compounds:

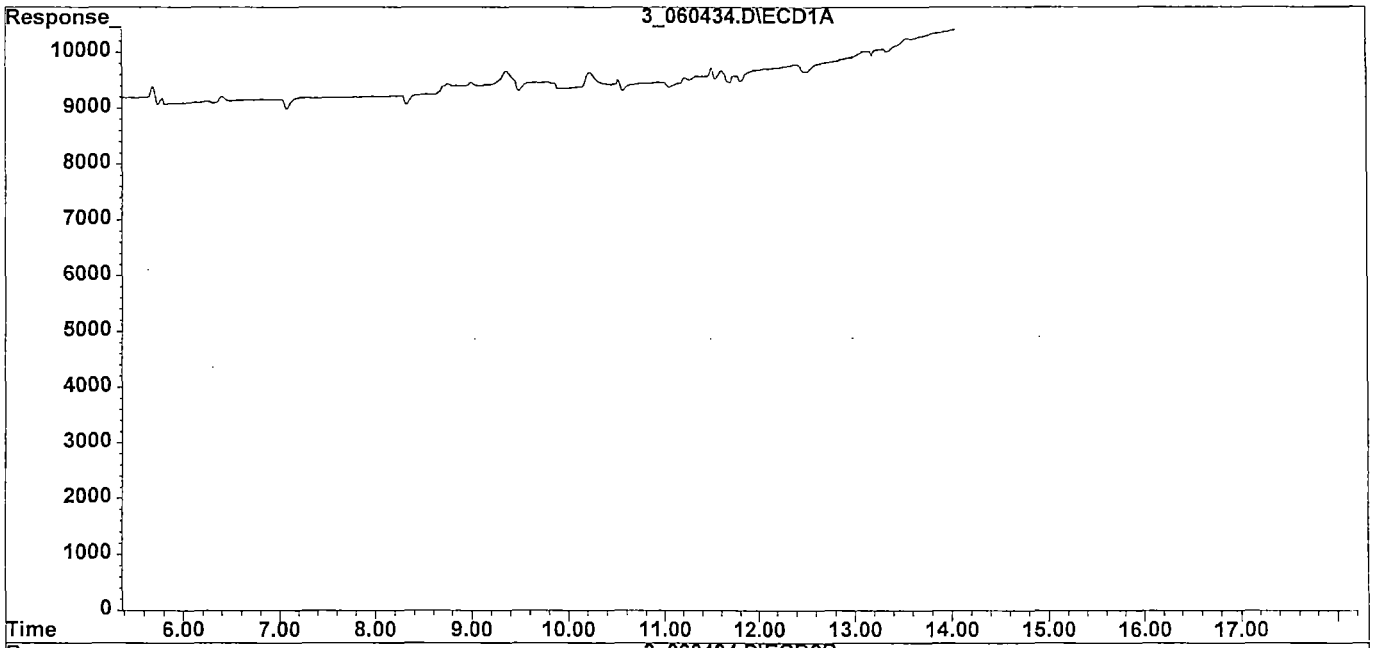
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

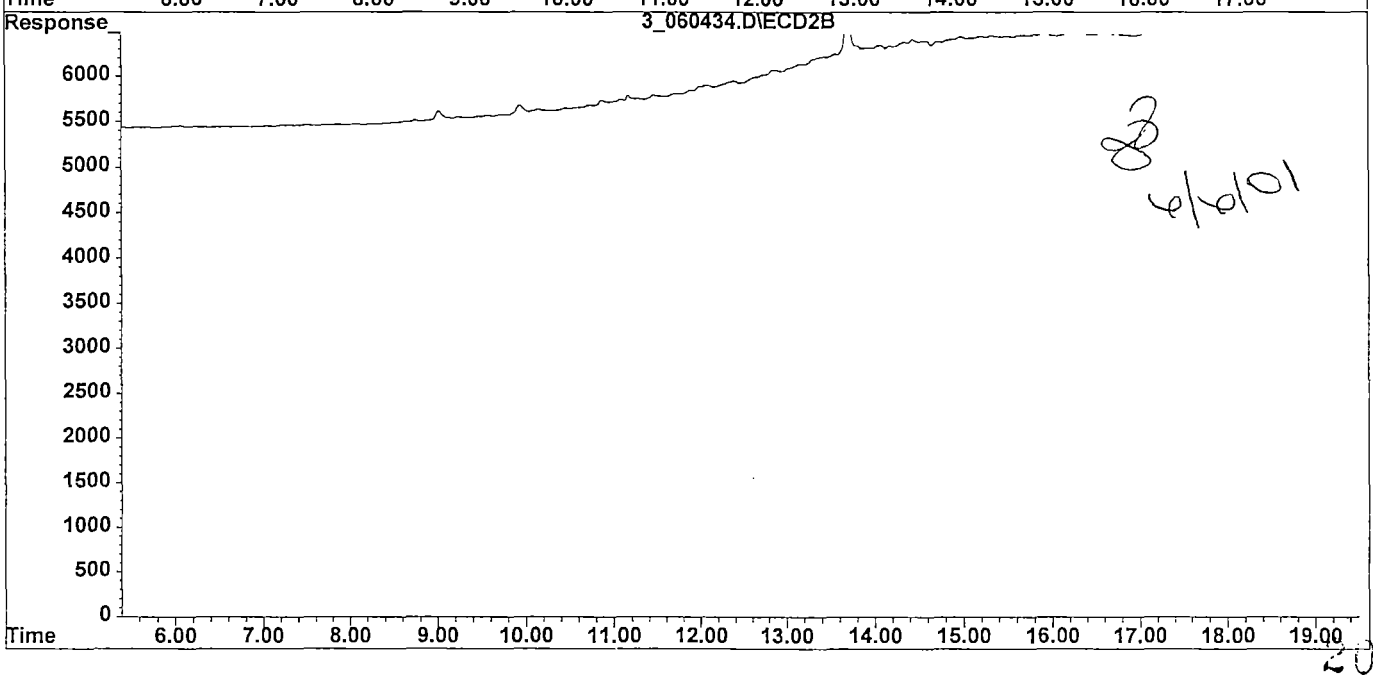
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\06_04_01\3_060434.D\ECD1A.CH Vial: 34
Signal #2 : F:\HPCHEM\HP\3\DATA\06_04_01\3_060434.D\ECD2B.CH
Acq On : 04 Jun 2001 21:57 Operator: DDC
Sample : SB053001D *SB053001D * Inst : HP_03
Misc : **1000ML/10.0ML* Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 5 13:47 2001 Quant Results File: XPCBF02.RES

Method : F:\HPCHEM\HP\3\DATA\06_04_01\XPCBF02.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\06_02_01\
Last Update : Wed May 30 09:35:39 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B





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GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-415 OP-415-RUNLOG-12 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_15
SDG NO. : SWLO METHOD FILE(S): XPCBE30 (8082)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
05/30/01 9:13	HEX	HEX	15053001	Sol
05/30/01 9:36	HEX	HEX	15053002	
05/30/01 10:00	HEX	HEX	15053003	
05/30/01 10:23	HEX	HEX	15053004	
05/30/01 10:46	HEX	HEX	15053005	Sol
05/30/01 11:09	RESC15A	5-441-6	15053006	OK
05/30/01 11:32	AR1221L3A	5-420-6	15053007	
05/30/01 11:55	AR1232L3A	5-422-6	15053008	
05/30/01 12:18	AR1242L1A	5-11-7	15053009	
05/30/01 12:41	AR1242L2A	5-10-7	15053010	
05/30/01 13:04	AR1242L3A	5-9-7	15053011	
05/30/01 13:27	AR1242L4A	5-8-7	15053012	
05/30/01 13:51	AR1242L5A	5-7-7	15053013	
05/30/01 14:14	AR1248L3A	5-424-6	15053014	
05/30/01 14:37	AR1254L1A	5-6-7	15053015	
05/30/01 15:00	AR1254L2A	5-5-7	15053016	
05/30/01 15:23	AR1254L3A	5-4-7	15053017	
05/30/01 15:46	AR1254L4A	5-3-7	15053018	
05/30/01 16:09	AR1254L5A	5-2-7	15053019	
05/30/01 16:32	AR1660L1A	5-447-6	15053020	
05/30/01 16:56	AR1660L2A	5-446-6	15053021	OK

Unless noted, Client Ids are the same for the quant. & confirmation columns

Verification Signature/Date 5/30/01 Analyst Signature/Date 5-31-01

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-415 OP-415-RUNLOG-12 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_15
SDG NO. : SWLO METHOD FILE(S): XPCBE30 (8082)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
05/30/01 17:19	AR1660L3A	5-445-6	15053022	OK
05/30/01 17:42	AR1660L4A	5-444-6	15053023	
05/30/01 18:05	AR1660L5A	5-443-6	15053024	
05/30/01 18:28	PIBLKA	5-414-6	15053025	
05/30/01 18:51	AR1660L3ICVA	5-442-6	15053026	
05/30/01 19:14	AR1221L3ICVA	5-436-6	15053027	
05/30/01 19:37	AR1232L3ICVA	5-437-6	15053028	
05/30/01 20:01	AR1242L3ICVA	5-438-6	15053029	
05/30/01 20:24	AR1248L3ICVA	5-439-6	15053030	
05/30/01 20:47	AR1254L3ICVA	5-440-6	15053031	OK
05/30/01 21:10	E0041	46597.05	15053032	OK
05/30/01 21:33	E0041MSMS	46597.06MS	15053033	
05/30/01 21:56	E0041MSDMSD	46597.07MSD	15053034	
05/30/01 22:19	E0044	46597.08	15053035	
05/30/01 22:42	E0045	46597.09	15053036	
05/30/01 23:05	E0046	46597.10	15053037	
05/30/01 23:28	E0047	46597.11	15053038	
05/30/01 23:52	E0048	46597.12	15053039	OK
05/31/01 00:15	HEX	HEX	15053040	Sd
05/31/01 00:38	HEX	HEX	15053041	Sd
05/31/01 1:01	HEX	HEX	15053042	Sd

Unless noted, Client Ids are the same for the quant. & confirmation columns

Byron Quantitay 5/31/01 — Verification Signature/Date

5-31-01 — Analyst Signature/Date

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-415 OP-415-RUNLOG-12 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_15
SDG NO. : SWLO METHOD FILE(S): XPCBE30 (8082)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
06/04/01 18:56	E0046	46597.10	15060422	OK
06/04/01 19:19	E3001	46597.22	15060423	OK
06/04/01 19:43	E3004	46597.25	15060424	OK
06/04/01 20:06	HEX	HEX	15060425	Sd
06/04/01 20:29	HEX	HEX	15060426	Sd
06/04/01 20:52	HEX	HEX	15060427	Sd
06/04/01 21:15	PIBLKV	5-414-6	15060428	OK
06/04/01 21:38	AR1660L3AN	5-445-6	15060429	OK
06/04/01 22:02	AR1660L3AO	5-445-6	15060430	~
06/04/01 22:25	BL0601SD	BL0601SD	15060431	OK
06/04/01 22:48	BB0601SD	BB0601SD	15060432	↓
06/04/01 23:11	LC0601SD	LC0601SD	15060433	↓
06/04/01 23:34	LD0601SD	LD0601SD	15060434	OK
06/04/01 23:57	K1401-C-FSWEEP	46655.01	15060435	~
06/05/01 00:20	K1401-C-FSWEEPMS	46655.02MS	15060436	↓
06/05/01 00:43	K1401-C-FSWEEPMSD	46655.03MSD	15060437	↓
06/05/01 1:07	BIOBS-002	46659.01	15060438	~
06/05/01 1:30	HEX	HEX	15060439	Sd
06/05/01 1:53	HEX	HEX	15060440	Sd
06/05/01 2:16	HEX	HEX	15060441	Sd
06/05/01 2:39	PIBLKW	5-414-6.	15060442	OK ~ DDL 6-5-01

Unless noted, Client Ids are the same for the quant. & confirmation columns

6-5-01 6-5-01

Verification Signature/Date Analyst Signature/Date

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-415 OP-415-RUNLOG-12 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_15
SDG NO. : SWLO METHOD FILE(S): XPCBE30 (8082)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
06/05/01 3:02	AR1660L3AP	5-445-6	15060443	NV
06/05/01 3:25	AR1660L3AQ	5-445-6	15060444	NV
06/05/01 3:49	PBLKSB	BL0527SB	15060445	OK
06/05/01 4:12	PBLKSB	BB0527SB	~~15060446~~	8 6/5/01
06/05/01 4:35	LC0527SB	LC0527SB	15060447	
06/05/01 4:58	LD0527SB	LD0527SB	15060448	OK
06/05/01 5:21	HEX	HEX	15060449	Sol
06/05/01 5:44	PIBLKX	5-414-6	15060450	OK
06/05/01 6:07	AR1660L3AR	5-445-6	15060451	OK
06/05/01 6:30	AR1660L3AS	5-445-6	15060452	NV
06/05/01 6:54	E00A8	46634.17	15060453	OK
06/05/01 7:17	E00A9	46634.18	15060454	
06/05/01 7:40	E00B0	46634.19	15060455	
06/05/01 8:03	E00B1	46634.20	15060456	
06/05/01 8:26	E00B2	46634.21	15060457	
06/05/01 8:49	E00B3	46634.22	15060458	OK
06/05/01 9:16	PBLKSA	BB0601SA	15060459	OK
06/05/01 9:39	E0046DL	46597.10DL	15060460	NV DOC 6-5-01
06/05/01 10:02	E3001DL	46597.22DL	15060461	OK
06/05/01 10:25	HEX	HEX	15060462	Sol
06/05/01 10:48	HEX	HEX	15060463	Sol

Unless noted, Client Ids are the same for the quant. & confirmation columns.

6-5-01 6-5-01

Verification Signature/Date Analyst Signature/Date

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-415 OP-415-RUNLOG-12 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_15
SDG NO. : SWLO METHOD FILE(S): XPCBE30 (8082)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
06/05/01 11:12	HEX	HEX	15060464	Sul
06/05/01 11:58	E0046DL	46597.10DL	15060465	OK
06/05/01 12:21	HEX	HEX	15060466	Sul
06/05/01 12:44	PIBLKY	5-414-6	15060467	OK
06/05/01 13:07	AR1660L3AT	5-445-6	15060468	OK
06/05/01 13:30	AR1660L3AU	5-445-6	15060469	[illegible]

Unless noted, Client Ids are the same for the quant. & confirmation columns

6-5-01 6-5-01

Verification Signature/Date Analyst Signature/Date

Page No.: 78

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-415 OP-415-RUNLOG-12 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_15
SDG NO. : SWLO METHOD FILE(S): XPCBE30 (8082)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
06/05/01 13:53	E00B5	46634.23	15060470	OK
06/05/01 14:17	E00B6	46634.24	15060471	
06/05/01 14:40	E00B6MS	46634.25MS	15060472	
06/05/01 15:03	E00B6MSD	46634.26MSD	15060473	
06/05/01 15:26	E00B7	46634.27	15060474	
06/05/01 15:49	E00B8	46634.28	15060475	OK
06/05/01 16:12	HEX	HEX	15060476	SI
06/05/01 16:36	HEX	HEX	15060477	SI
06/05/01 16:59	HEX	HEX	15060478	S.C
06/05/01 17:22	PIBLKZ	5-414-6	15060479	OK
06/05/01 17:45	AR1660L3AV	5-445-6	15060480	OK

Unless noted, Client Ids are the same for the quant. & confirmation columns

Jennifer Spurman 6-5-01 6-5-01
Verification Signature/Date Analyst Signature/Date

Page No.: 79

	SV	ST • PCB	OTHER
CONT EX. (3520C)			
SEP-F (3510C)			
SHAKER			
SONC. (3550B)		XXXXX	
SOXHLET			

[X] RUSH [ ] REEXTRACT [ ] TCLP [ ] DXIN

SAMPLE EXTRACTION L(

5/31

BATCH: 010527SB

EXTRACT DATE: 2001-05-27 17:23

002740

Page: 1 of 2

SAMPLE ID (EPISODE #)	CLIENT CASE	DATE RECEIVED CLIENT SAMPLE ID	MATRIX/LEVEL	SAMPLE pH	% MOISTURE	DRY WEIGHT	AMOUNT EXTRACTED	EXTRACTED VOLUME	GPC VOLUME	GPC ELUTE VOL	~~FLORISIL~~ VOL CONC	FLORISIL FIN VOL CONC	VOL SV (P)	FIN PROCESS VOLUME	SCREEN Y/N	MS SV (P)	SURR SV (P)	BASE pH CONFIRMATION	ACID pH CONFIRMATION	
					%	g	g • (ml)	ml	ml	ml	ml	ml	ml	ml	Y/N	µL	µL			Bottle
BL0527SB			S/L				30.00	300	10/5	45	2.0		5.0	5.0	N		1000			
BB0527SB			S/L				30.00	300	10/5	45	2.0		5.0	5.0	N		1000			
LC0527SB			S/L				30.00	300	10/5	45	2.0		5.0	5.0	N	1000	1000			
LD0527SB			S/L				30.00	300	10/5	45	2.0		5.0	5.0	N	1000	1000			
46634.17 GC699	EPA 29294	05/26/2001 09:00 E00A8	S/L	7.21	87.01	4.0	30.58	300	10/5	45	2.0		5.0	5.0	N	1000	1000			A
46634.18 GC699	EPA 29294	05/26/2001 09:00 E00A9	S/L	7.35	87.17	4.0	31.26	300	10/5	45	2.0		5.0	5.0	N		1000			A
46634.19 GC699	EPA 29294	05/26/2001 09:00 E00B0	S/L	7.17	83.94	4.8	30.00	300	10/5	45	2.0		5.0	5.0	N		1000			A
46634.20 GC699	EPA 29294	05/26/2001 09:00 E00B1	S/L	7.38	82.06	5.6	31.04	300	10/5	45	2.0		5.0	5.0	N		1000			A
46634.21 GC699	EPA 29294	05/26/2001 09:00 E00B2	S/L	7.46	83.98	4.9	30.82	300	10/5	45	2.0		5.0	5.0	N		1000			A
46634.22 GC699	EPA 29294	05/26/2001 09:00 E00B3	S/L	7.41	86.32	4.3	31.48	300	10/5	45	2.0		5.0	5.0	N		1000			A
46634.23 GC699	EPA 29294	05/26/2001 09:00 E00B5	S/L	7.26	90.38	3.0	30.74	300	10/5	45	2.0		5.0	5.0	N		1000			A
46634.24 GC699	EPA 29294	05/26/2001 09:00 E00B6	S/L	7.31	90.38	2.9	30.46	300	10/5	45	2.0		5.0	5.0	N		1000			A
46634.25MS GC699	EPA 29294	05/26/2001 09:00 E00B6MS	S/L	7.31	90.38	3.0	31.07	300	10/5	45	2.0		5.0	5.0	N	1000	1000			A
46634.26MSD GC699	EPA 29294	05/26/2001 09:00 E00B6MSD	S/L	7.31	86.82	4.0	30.14	300	10/5	45	2.0		5.0	5.0	N	1000	1000			A
46634.27 GC699	EPA 29294	05/26/2001 09:00 E00B7	S/L	7.24	84.75	4.7	30.78	300	10/5	45	2.0		5.0	5.0	N		1000			A

INITIALS

WEIGHING:	CD	EXTRACTION:	CD	FLORISIL:
CLEANUP:	CD	KD:	GS	CH_2Cl_2
BLOWDOWN:	SA	TV:	GS	acetone
SURROG. SPIKER:	CD	VERIFIER:	GS	Hexane
MATRIX SPIKER:	CD	VERIFIER:	GS	
SUBMITTED BY:	SA	REVIEWED BY:	06/01	

ID NUMBERS

FLORISIL CARTRIDGE #:	
GPC COLUMN #:	418002 (05-30-01) #3640A
SURROGATES ID CONC #:	5-13-7
MATRIX SPIKE SOLID/CONC #(s):	5-1-7
SOP - METHOD # : SWL-OP-	420 Rev. 1.0

COMMENTS

apply SB# 053001C
SB# 053001D

RG 35 Book 1 Page

SAMPLE EXTRACTION L

	SV	DD ST • PCB	OTHER
CONT EX. (3520C)			
SEP-F (3510C)			
SHAKER			
SONC. (3550B)		XXXXX	
SOXHLET			

[X] RUSH [ ] REEXTRACT [ ] TCLP [ ] DXIN

BATCH: 010527SB

EXTRACT DATE: 2001-05-27 17:23

002740

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	Bottle
46634.28 GC699	EPA 29294	05/26/2001 09:00 E00B8	S/L	7.37	50.70	15.1	30.56	300	10/5	45	2.0		5.0	5.0	N		1000			A

Stage

INITIALS					
WEIGHING:	CD	EXTRACTION:	CD	FLORISIL:	
CLEANUP:	CD	KD:	GS		CH2Cl2
BLOWDOWN:	SA	TV:	GS		acetone
SURROG. SPIKER:	CD	VERIFIER:	GS		Hexane
MATRIX SPIKER:	CD	VERIFIER:	GS		06/01
SUBMITTED BY:	SA	REVIEWED BY:			

ID NUMBERS	
FLORISIL CARTRIDGE #:	
GPC COLUMN #:	418002 (05-30-01) #3640A
SURROGATES ID CONC #:	5-13-7
MATRIX SPIKE SOLID/CONC #(s):	5-1-7
SOP - METHOD # : SWL-OP-	420 Rev. 1.0

COMMENTS
apply SB # 053001C
SB # 053001D

Pg 35 Book 1 Reag

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.
05-30	7:20	46521.07-13 ; 07MS/MSD	COMPLINC	MC	N	GC899	7
05-30	7:20	46447.04-06; 11-21MS ; 22MSD	"	MC	N	GC899	15
5/30 8:30p	8:30p	46613.11-24 , MS/MSD	EPA	SA	N	GC699	14
5/30 8:30p	8:30p	46629.01-08	EPA	SA	N	GC699	8
5-31	7:40	46448.04-12 ; 05MS; 06MSD	COMPLINC	MC	N	GC899	10
5-31	7:40	46459.011 ; 12; 13	"	MC	N	GC899	3
5-31	7:40	46484.01-08 ; 02MS ; 03MSD	"	MC	N	GC899	8
5-31	7:50	46428.02-10	AATS-E	MC	N	GC819	9
5-31	12:00p	46645.01, 02,	INEEL	GS	N	GC320	2
05/31	1:20	PEST/AROC/CHK (418002)	SWLO	SA	N	GC819	X
05/31	1:20	PEST/AROC/CHK (364134)	SWLO	SA	N	GC819	X
05/31	4:30	46422.45-48 MS/MSD	EPA	SA	N	GC819	4
06-01	7:35	46629.09-30 ; 15MS; 16MSD	EPA	MC	N	GC699	22
06-01	10:20a	46647.01-19 MS MSD	TOLTEST	GS	N	GC200	19
06-01	11:25	46429.31-41; 35MS; 36MSD 47	WESTONMA	MC	N	GC819	8
06-01	11:25	46431.04-17; 09MS, 10MSD; 29	"	MC	N	GC819	14
06-01	11:45	46422.23-43 MS; 44 MSD	EPA	MC	N	GC819	22
6-01	12:00p	46658.01 MS MSD	Cetco	GS	N	GC 310	1
06/01	3:55	46629.31-36	EPA	SA	N	GC699	6
06/01	3:55	46634.01-16, MS/MSD	EPA	SA	N	GC699	16
06/01	9:40	46612.28-39 MS/MSD	EPA	SA	N	GC699	12
06/01	9:40	46613.01-10	EPA	SA	N	GC699	10
06/01	9:40	46634.17-28	EPA	SA	N	GC699	12
06/01	10:30	46662.01 MS/MSD	N.Sciel.	[illegible]	N	GC610	1

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Southwest Laboratory of Oklahoma
1700 W. Albany Suite C
Broken Arrow, OK 74012-1421

INTERNAL CHAIN OF CUSTODY

Date	05/26/2001
Episode	**46634**
Client	**EPA**
Project	OLM04.2
Received	05/26/01

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	5/28 1:00	GS	5/28 4:00
		22	23	24	25	26	27	28			
IN660	A	1	2	3	4	5	6	7			
		8	9	10	11	12	13	14			
		15	16	17	18	19	20	21			
		22	23	24	25	26	27	28	5/29 4:40	CR	5/29 5:35

481

1000

SPG11

FedEx USA Airbill FedEx Tracking Number 8218 7698 2148

Form I.D. No. 0215

1 From This portion can be removed for Recipient's records.

Date 5/25/01 FedEx Tracking Number 8218 7698 2148

Sender's Name Tonya Bell Phone 847 918-4000

Company ROY F WESTON INC

Address 750 E BUNKER CT STE 500 Dept./Floor/Suite/Room

City VERNON HILLS State IL ZIP 60061

RECIPIENT PEEL HERE

2 Your Internal Billing Reference 1263400100200670D

3 To

Recipient's Name SAMPLE LOG-IN Phone 918-251-0545

Company SOUTHWEST LABS OF OKLAHOMA, INC.

Address 1700 WEST ABBANY, STE. C

To "HOLD" at FedEx location, print FedEx address. We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

City BROKEN ARROW State OK ZIP 74012

8218 7698 2148

0146095931

4a Express Package Service — *Packages up to 150 lbs.* Delivery commitment may be later in some areas.

- [x] FedEx Priority Overnight — Next business morning
- [ ] FedEx Standard Overnight — Next business afternoon
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations
- [ ] FedEx 2Day* — Second business day
- [ ] FedEx Express Saver* — Third business day

* FedEx Envelope/Letter Rate not available. Minimum charge: One-pound rate

4b Express Freight Service — *Packages over 150 lbs.* Delivery commitment may be later in some areas.

- [ ] FedEx 1Day Freight* — Next business day
- [ ] FedEx 2Day Freight — Second business day
- [ ] FedEx 3Day Freight — Third business day

* Call for Confirmation:

5 Packaging

- [ ] FedEx Envelope/Letter*
- [ ] FedEx Pak*
- [x] Other Pkg. — Includes FedEx Box, FedEx Tube, and customer pkg

† Declared value limit $500

6 Special Handling — Include FedEx address in Section 3.

- [x] SATURDAY Delivery — Available for FedEx Priority Overnight and FedEx 2Day to select ZIP codes
- [ ] SUNDAY Delivery — Available for FedEx Priority Overnight to select ZIP codes
- [ ] HOLD Weekday at FedEx Location — Not available with FedEx First Overnight
- [ ] HOLD Saturday at FedEx Location — Available for FedEx Priority Overnight and FedEx 2Day to select locations

Does this shipment contain dangerous goods? One box must be checked.

- [ ] No
- [ ] Yes — As per attached Shipper's Declaration
- [ ] Yes — Shipper's Declaration not required
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous Goods cannot be shipped in FedEx packaging.

- [ ] Cargo Aircraft Only

7 Payment *Bill to:* Enter FedEx Acct. No. or Credit Card No. below.

- [x] Sender — Acct. No. in Section 1 will be billed.
- [ ] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check
- [ ] Obtain Recip. Acct. No.

Total Packages 1 Total Weight 42 Total Charges

Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See the *FedEx Service Guide* for details.

8 Release Signature *Sign to authorize delivery without obtaining signature.*

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

Questions? Call 1·800·Go·FedEx (800-463-3339)

Visit our Web site at www.fedex.com

Rev. Date 3/00 Part #154912 ©1994-2000 FedEx PRINTED IN U.S.A. GBPE 5/00

402

ORIGINAL DOCUMENTS ARE INCLUDED IN

CSF 29294 SDG E3074

Signature S. Jackett

Date 5/30/01

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

Case No: 29294
DAS No: 2001ZG07
SDG No: E00A9

L

Date Shipped: 5/25/2001
Carrier Name: FedEx
Airbill: 821876982148
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 Tonya Ballew	5/25/01 1515	[illegible]	5-26-01 8:00
2			
3			
4			

Sampler Signature:

For Lab Use Only
Lab Contract No: 68W99079
Unit Price: 910.40
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 E00A9
E00A4	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119178 (Ice Only) (1)	AP-SL050-02	S: 5/25/2001 10:15		
E00A5	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119179 (Ice Only) (1)	AP-SL050-03	S: 5/25/2001 10:15		
E00A6	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119181 (Ice Only) (1)	AP-SL039-01	S: 5/25/2001 11:30		
E00A7	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119182 (Ice Only) (1)	AP-SL039-02	S: 5/25/2001 11:30		
E00A8	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119184 (Ice Only) (1)	AP-SL039-03	S: 5/25/2001 11:30		
E00A9	Soil/Sediment/ JOE RUIZ	L/G	PCBs (7)	5-119185 (Ice Only) (1)	AP-SL040-01	S: 5/25/2001 11:00		
E00B0	Soil/Sediment/ JOE RUIZ	L/G	PCBs (7)	5-119187 (Ice Only) (1)	AP-SL040-02	S: 5/25/2001 11:00		
E00B1	Soil/Sediment/ JOE RUIZ	L/G	PCBs (7)	5-119189 (Ice Only) (1)	AP-SL040-03	S: 5/25/2001 11:00		
E00B2	Soil/Sediment/ JOE RUIZ	L/G	PCBs (7)	5-119191 (Ice Only) (1)	AP-SL040-03DP	S: 5/25/2001 11:00		
E00B3	Soil/Sediment/ JOE RUIZ	L/G	PCBs (7)	5-119192 (Ice Only) (1)	AP-SL040-04	S: 5/25/2001 11:00		

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COPY
ORIGINAL DOCUMENTS ARE INCLUDED IN
CS: 29294 SDG: E00A9
Signature: [illegible]
Date: 5/30/01

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
	E0094, E00B6	[illegible]	5.7°C TR	80903, 80904

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

R Number: 5-154097651-052501-0002

LABORATORY COPY

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

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

Case No:	29294
DAS No:	2001ZG07
SDG No:	E00A9

L

Date Shipped:	5/25/2001
Carrier Name:	FedEx
Airbill:	821876982148
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 Tonya Galla	5/25/01 1545	[illegible]	5-26-01 9:00
2			
3			
4			

Sampler Signature:

For Lab Use Only

Lab Contract No:	68W99079
Unit Price:	910.40
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 E00A9
E00B5	Soil/Sediment/ JOE RUIZ	L/G	PCBs (7)	5-119196 (Ice Only) (1)	AP-SL043-01	S: 5/25/2001 10:15		
E00B6	Soil/Sediment/ JOE RUIZ	L/G	PCBs (7)	5-119197 (Ice Only) (1)	AP-SL043-02	S: 5/25/2001 10:15		
E00B7	Soil/Sediment/ JOE RUIZ	L/G	PCBs (7)	5-119198 (Ice Only) (1)	AP-SL043-03	S: 5/25/2001 10:15		
* E00B8	Soil/Sediment/ JOE RUIZ	L/G	PCBs (7)	5-119200 (Ice Only) (1)	AP-SL043-04	S: 5/25/2001 10:15		

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*SPC Final Sample

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC: E0094	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 5.7°C T.B	Chain of Custody Seal Number: 80902, 80904
Analysis Key: PCBs = PCBs	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact?__ Shipment Iced?__

R Number: 5-154097651-052501-0002

LABORATORY COPY

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

Southwest Laboratory of Oklahoma
1700 W. Albany Suite C
Broken Arrow, OK 74012-1421

SAMPLE LOG-IN RECORD

Date 05/26/2001 Page2
Episode **46634**
Client **EPA**
Project OLM04.2
Received 05/26/01
Logged In 05/26/01

TEST	PRI	DUE	CONTAINER	DESCRIPTION	EXTRACTED	ANALYST	ANALYZED
IN660	8	05/28/2001	A	% MOISTURE			
Sample: **46634.15**	Sampled:05/25/01 11:30	ID:E00A6			SDG:46634 Matrix: S	Containers: 1	
GC699	6	06/01/2001	A	NON STD PCB			
IN660	8	05/28/2001	A	% MOISTURE			
Sample: **46634.16**	Sampled:05/25/01 11:30	ID:E00A7			SDG:46634 Matrix: S	Containers: 1	
GC699	6	06/01/2001	A	NON STD PCB			
IN660	8	05/28/2001	A	% MOISTURE			
Sample: **46634.17**	Sampled:05/25/01 11:30	ID:E00A8			SDG:46634 Matrix: S	Containers: 1	
GC699	6	06/01/2001	A	NON STD PCB			
IN660	8	05/28/2001	A	% MOISTURE			
Sample: **46634.18**	Sampled:05/25/01 11:00	ID:E00A9			~~SDG:46634 Matrix: S~~	~~Containers: 1~~	
GC699	6	06/01/2001	A	NON STD PCB			
IN660	8	05/28/2001	A	% MOISTURE			
Sample: **46634.19**	Sampled:05/25/01 11:00	ID:E00B0			~~SDG:46634 Matrix: S~~	~~Containers: 1~~	
GC699	6	06/01/2001	A	NON STD PCB			
IN660	8	05/28/2001	A	% MOISTURE			
Sample: **46634.20**	Sampled:05/25/01 11:00	ID:E00B1			~~SDG:46634 Matrix: S~~	~~Containers: 1~~	
GC699	6	06/01/2001	A	NON STD PCB			
IN660	8	05/28/2001	A	% MOISTURE			
Sample: **46634.21**	Sampled:05/25/01 11:00	ID:E00B2			SDG:46634 Matrix: S	Containers: 1	
GC699	6	06/01/2001	A	NON STD PCB			
IN660	8	05/28/2001	A	% MOISTURE			
Sample: **46634.22**	Sampled:05/25/01 11:00	ID:E00B3			SDG:46634 Matrix: S	Containers: 1	
GC699	6	06/01/2001	A	NON STD PCB			
IN660	8	05/28/2001	A	% MOISTURE			
Sample: **46634.23**	Sampled:05/25/01 10:15	ID:E00B5			SDG:46634 Matrix: S	Containers: 1	
GC699	6	06/01/2001	A	NON STD PCB			
IN660	8	05/28/2001	A	% MOISTURE			
Sample: **46634.24N1**	Sampled:05/25/01 10:15	ID:E00B6			SDG:46634 Matrix: S	Containers: 1	
GC699	6	06/01/2001	A	NON STD PCB			
IN660	8	05/28/2001	A	% MOISTURE			
Sample: **46634.25MS1**	Sampled:05/25/01 10:15	ID:E00B6MS			SDG:46634 Matrix: S	Containers: 1	
GC699	6	06/01/2001	A	NON STD PCB			
IN660	8	05/28/2001	A	% MOISTURE			
Sample: **46634.26SD1**	Sampled:05/25/01 10:15	ID:E00B6MSD			SDG:46634 Matrix: S	Containers: 1	
GC699	6	06/01/2001	A	NON STD PCB			
IN660	8	05/28/2001	A	% MOISTURE			
Sample: **46634.27**	Sampled:05/25/01 10:15	ID:E00B7			SDG:46634 Matrix: S	Containers: 1	
GC699	6	06/01/2001	A	NON STD PCB			
IN660	8	05/28/2001	A	% MOISTURE			
Sample: **46634.28**	Sampled:05/25/01 10:15	ID:E00B8			SDG:46634 Matrix: S	Containers: 1	

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG 83024
Signature S. Jackels
Date 6/30/01

Southwest Laboratory of Oklahoma
1700 W. Albany Suite C
Broken Arrow, OK 74012-1421

SAMPLE LOG-IN RECORD

Date	05/26/2001 Page3
Episode	**46634**
Client	**EPA**
Project	OLM04.2
Received	05/26/01
Logged In	05/26/01

TEST	PRI	DUE	CONTAINER	DESCRIPTION	EXTRACTED	ANALYST	ANALYZED
GC699	6	06/01/2001	A	NON STD PCB			
IN660	8	05/28/2001	A	% MOISTURE			

SAMPLE LOG-IN SHEET

Lab Name: SOUTHWEST LABORATORY OF OKLAHOMA	Page 1 of 2
Received by (Print Name): JASON SPRIGGS	Log-In Date: 2001-05-26 12:58
Received by (Signature):	
Case Number: 29294	Sample Delivery Group No.: E00A9
	SAS Number:

Remarks: Cooler: 05/26/01-1

1. Custody Seals(s)	Present/Absent* Intact/ Broken
2. Custody Seal Nos.	80903-04
3. Chain-of Custody Records	Present/Absent*
4. Traffic Reports or Packing Lists	Present/Absent*
5. Airbill	Airbill/ Sticker Present/Absent*
6. Airbill No.	821876982148
7. Sample Tags	Present/Absent*
Sample Tag Numbers	Listed/Not Listed on Chain-of-Custody
8. Sample Condition	Intact/ Broken*/Leaking
Cooler Temperature Indicator Bottle	Present/Absent*
9. Cooler Temperature	5.7c
10. Does Information on Custody records, traffic reports, and sample tags agree?	Yes/ No*
11. Date Received at Lab	05/26/01
12. Time Received	09:00

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment: etc,
E0094	5-119159	46634.01	
E0094MS	5-119159	46634.02	
E0094MSD	5-119159	46634.03	
E0095	5-119161	46634.04	
E0096	5-119163	46634.05	
E0097	5-119165	46634.06	
E0098	5-119167	46634.07	
E0099	5-119169	46634.08	
E00A0	5-119170	46634.09	
E00A1	5-119172	46634.10	
E00A2	5-119173	46634.11	
E00A3	5-119176	46634.12	
E00A4	5-119178	46634.13	
E00A5	5-119179	46634.14	
E00A6	5-119181	46634.15	
E00A7	5-119182	46634.16	
E00A8	5-119184	46634.17	
E00A9	5-119185	46634.18	

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG 23074
Signature S. Jackett
Date 5/30/01

Sample Transfer	
Fraction: PCB	Fraction:
Area #: 9	Area #:
By: JS	By:
On: 5-26-01	On:

* Contact SMO and attach record of resolution.

Reviewed By:	Logbook No.:
Date: 05/26/01	Logbook Page No.:

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SAMPLE LOG-IN SHEET

Lab Name SOUTHWEST LABORATORY OF OKLAHOMA	Page 2 of 2
Received by (Print Name) JASON SPRIGGS	Log-In Date 2001-05-26 12:58
Received by (Signature)	
Case Number 29294	Sample Delivery Group No. E00A9 / SAS Number

Remarks: Cooler: 05/26/01-1

1. Custody Seals(s)	Present/Absent* Intact/ Broken
2. Custody Seal Nos.	80903-04
3. Chain-of Custody Records	Present/Absent*
4. Traffic Reports or Packing Lists	Present/Absent*
5. Airbill	Airbill/ Sticker Present/Absent*
6. Airbill No.	821876982148
7. Sample Tags	Present/Absent*
Sample Tag Numbers	Listed/Not Listed on Chain-of-Custody
8. Sample Condition	Intact/ Broken*/Leaking
Cooler Temperature Indicator Bottle	Present/Absent*
9. Cooler Temperature	5.7c
10. Does Information on Custody records, traffic reports, and sample tags agree?	Yes/ No*
11. Date Received at Lab	05/26/01
12. Time Received	09:00

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment: etc,
E00B0	5-119187	46634.19	
E00B1	5-119189	46634.20	
E00B2	5-119191	46634.21	
E00B3	5-119192	46634.22	
E00B5	5-119196	46634.23	
E00B6	5-119197	46634.24	
E00B6MS	5-119197	46634.25	
E00B6MSD	5-119197	46634.26	
E00B7	5-119198	46634.27	
E00B8	5-119200	46634.28	

Sample Transfer	
Fraction PCB	Fraction
Area # 9	Area #
By JS	By
On 5-26-01	On

* Contact SMO and attach record of resolution.

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Reviewed By	Logbook No.
Date 05/26/01	Logbook Page No.

REQUEST FOR MODIFIED ANALYSIS

EPA's Contract Laboratory Program is seeking current CLP laboratories interested in performing organic analysis through a modified analysis protocol administered through the SOW "flexibility clause" as presented in Section 4.2.2.8 Exhibit A, page A-8 The modifications presented further in this document neither increase or decrease the value of the product (sample analysis and full data deliverables) provided to EPA by the Contractor (as compared to worth of original product previously negotiated in the contract). Therefore, no upward or downward contract adjustments in price are necessary, i.e., the modified analysis will be performed at the same price as that stated in the original contract.

In order to facilitate this modified analysis protocol, and to still ensure quality analytical data, the changes to the SOW listed in the link below will need to be made: Laboratories volunteering to analyze samples by this protocol are requested to review the changes and then acknowledge their desire to participate by signing, dating, and returning the acknowledgment document at the end of the request document.

It is not mandatory that laboratories agree to perform modified analyses, and laboratories will not be adversely affected by not performing modified analyses. All samples that are to be analyzed by the modified protocol will be distributed to the volunteer laboratories according to the sample scheduling Standard Operating Procedure (SOP). Volunteer laboratories are not guaranteed to receive samples under the modified protocol.

MODIFIED ANALYSIS FORM

Modification Reference Number: PCB-REG5

Estimated Number of Samples: 1400

Estimated Sampling Date: 3/21/2001 -

Sample Matrix: Soil and Sediments

Fractions Affected: Pesticides/ PCBs

Specific Modifications: See below:

Required OLM04.2 Changes

OLM04.2 requires contract laboratories to analyze samples for Pesticides and Aroclors through the protocol outlined in Exhibit D, Analytical Methods for Pesticides/Aroclors. Specific target analytes and their associated contract required quantitation limits (CRQL) are listed in Exhibit C, Section 3.0, page C-8 of OLM04.2.

The proposed modified analysis will require the laboratory to use sample cleanup and analysis techniques not currently written into OLM04.2. The cleanup techniques to be used should generally follow guidelines for Silica Gel cleanup as presented in SW 846 Method 3630, followed by Sulfuric acid cleanup as presented in SW 846 method 3665A, and the analytical technique should generally follow PCB GC guidelines presented in SW 846 Method 8082.

Because the particular cleanup technique is destructive to certain pesticide compounds that are target analytes of OLM04.2, isolation, quantitation, and reporting of pesticides compounds for this project is not required. Only the list of Aroclors presented in Exhibit C, Section 3 is to be analyzed and reported. Further, the need to perform the Florisil cleanup technique presented in Exhibit D/Pest is waved. However, the lab is required to still perform the GPC cleanup presented in Exhibit D/Pest.

For calibration purposes the following procedural and Quality Assurance requirements must be followed:

a. A 5-point calibration curve for combined aroclors 1016/1260 and single mid-level points for all other arochlors are to be analyzed prior to any sample analysis. For the 5-point analysis, the low point on the curve ıust reflect the required CRQL.

b. The 5 point curve must meet an average 20 % RSD

c. If other arochlors are suspected, or other arochlors are detected in an analysis, a separate 5-point calibration must be run for the particular arochlor. The 20 % RSD requirement will apply to any other arochlor 5-point analysis performed.

d. A continuing calibration verification standard of arochlors 1016/1260 must be analyzed every 12 hours of analysis and not to exceed 20 samples.

e. The continuing calibration verification analysis must be within 15% of the expected value. If the % difference is greater than 15%, all samples analyzed prior to the continuing calibration verification must be reanalyzed.

f. Each extraction batch must contain method blanks, laboratory control spike and matrix spike/matrix spike duplicate samples (provided sufficient sample is sent for the matrix spike and duplicate analysis).

g. Each field sample and quality control sample must contain Decachlorobiphenyl surrogate (DCB). Samples may be spiked with TMX surrogate as well, but no recovery requirements will be placed on the TMX, as this compound is sensitive to sulfuric acid cleanup.

.. All samples failing to meet DCB recovery limits of 30% to 170% must be re-extracted and re-analyzed.

i. For the laboratory control spike, arochlor 1254 is to be used. The results of the laboratory control sample should fall between the recovery limits of 29 to 135 %. If the recovery falls below 29%, all samples within the

extraction batch must be re-extracted and re-analyzed. If the recovery is above 135% and arochlors are not detected in the batch sample, then no further action is necessary. If the recovery is above 135% and arochlors are present in any of the batch samples, then the samples containing arochlor must be re-extracted and re-analyzed.

j. Arochlor 1254 is to be used for the matrix spike and duplicate analyses. Advisory limits are 29% to 135% are set for the matrix spike and duplicate analysis. As these limit are only advisory, no particular action is required for QC samples outside these limits. However, consistent recovery outside these limits for analysis in which no apparent matrix interference is present may justify a review by EPA personnel, and the laboratory may be requested to repeat certain analyses at no further cost to the government.

k. Some, or all, samples may require a reporting CRQL of 25 ug/Kg (33 ug/Kg is the OLM04.2 required CRQL). For these samples, the laboratory must extract 40 grams of sample, as opposed to the normal 30 grams. Also, extra sodium sulfate may have to be added to the sample in order to dry the sample properly.

l. For reporting purposes, the laboratory is to provide a standard CLP data package at the turnaround time requested by the Region. Modifications to reporting requirements due to the changes presented in this modification request form shall be incorporated into the hard copy deliverables and into the electronic diskette where practical and easily accommodated. All CLP forms associated with florisil cleanup, and GPC check analysis are not required. Any other reporting requirements, not mentioned in this document which the lab believes is affected by the modifications required for this project shall be noted in the case narrative. All hard copy and electronic reporting requirements not affected by these modifications shall be subjected to CCS. The Organic Program Manager will make recommendations to the Contracting Officer as to any disputes concerning CCS defects charged against samples.

While not required in the final data package, the laboratory should keep on file in the lab, the SOPs used to perform the Acid and Silica Gel cleanup techniques. Also, the lab should include copies of this modification request forms in the final hard copy data packages.

SOUTHWEST LABORATORY OF OKLAHOMA

ANALYTICAL REQUEST FORM, SWL-GA-131

Ref# 4997

Pg 1

Client	ACCOUNTING OFFICER	Client Code:	EPA
Contact	Heather Bauer	Phone&Fax#:	703-264-9348 703-264-9222
Project	OLM04.2	PO Number:	
Location	29294	Receipt Date	05/26/2001 Due: 06/01/2001
SDG	Open	Sample TAT: Fax	Rpt 7
Reports			
Data Pkgs	CLP: 2		
EDD			

Special Provisions: Must use arochlor 1254 for LCS/LCSD & MS/MSD
Samples need to be GPCed, silica gel cleaned & Acid cleaned.
Case#29294, to date: 193 soils , 10 sets QC picked.

Client ID	Type	Matrix	GC699									
E0094	N1	S	X									
E0094MS	MS1	S	X									
E0094MSD	SD1	S	X									
E0095		S	X									
E0096		S	X									
E0097		S	X									
E0098		S	X									
E0099		S	X									
E00A0		S	X									
E00A1		S	X									
E00A2		S	X									
E00A3		S	X									
E00A4		S	X									
E00A5		S	X									
E00A6		S	X									
E00A7		S	X									
E00A8		S	X									
E00A9		S	X									
E00B0		S	X									
E00B1		S	X									

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF D9294 SDG 913074
Signature S Jackson
Date 5/30/01

Reporting Address: ACCOUNTING OFFICER
Attn:;FINANCIAL MANAGEMENT DIVISION,ACCOUNTING OFFICE MD-32,RESEARCH TRIANGLE

Billing Address: Same As Reporting Address

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Project Officer: HARRY M. BORG

Prepared 05/26/2001

SOUTHWEST LABORATORY OF OKLAHOMA

ANALYTICAL REQUEST FORM, SWL-GA-131

Ref# 4997

Client	ACCOUNTING OFFICER	Client Code:	EPA
Contact	Heather Bauer	Phone&Fax#:	703-264-9348 703-264-9222
Project	OLM04.2	PO Number:	
Location	29294	Receipt Date	05/26/2001 Due: 06/01/2001
SDG	Open	Sample TAT: Fax	Rpt 7
Reports			
Data Pkgs	CLP: 2		
EDD			

Special Provisions: Must use arochlor 1254 for LCS/LCSD & MS/MSD
Samples need to be GPCed, silica gel cleaned & Acid cleaned.
Case#29294, to date: 193 soils , 10 sets QC picked.

Client ID	Type	Matrix	GC699									
E00B2		S	X									
E00B3		S	X									
E00B5		S	X									
E00B6	N1	S	X									
E00B6MS	MS1	S	X									
E00B6MSD	SD1	S	X									
E00B7		S	X									
E00B8		S	X									

Reporting Address: ACCOUNTING OFFICER
Attn:;FINANCIAL MANAGEMENT DIVISION,ACCOUNTING OFFICE MD-32,RESEARCH TRIANGLE

Billing Address: Same As Reporting Address

Project Officer: HARRY M. BORG

Prepared 05/26/2001