Data Review
Site Name: Allied Paper (MI)
Case Number: 29294 Laboratory: Southwest Laboratory
SDG: E30S4

Friday, July 13, 2001

US EPA RECORDS CENTER REGION 5
560018

PCBs

Samples:

Sample No	Station Location	Matrix	Date Collected	Date Extracted	Date Analyzed
E30S4	AP-SD026-01	Soil	06/07/01	06/09/01	06/19/01
E30S5	AP-SD026-02	Soil	06/07/01	06/09/01	06/19/01
E30S6	AP-SD026-03	Soil	06/07/01	06/09/01	06/19/01
E30S7	AP-SD026-04	Soil	06/07/01	06/09/01	06/19/01
E30S8	AP-SD026-05	Soil	06/07/01	06/09/01	06/19/01
E30S9	AP-SD045-01	Soil	06/07/01	06/09/01	06/19/01
E30T0	AP-SD045-02	Soil	06/07/01	06/09/01	06/19/01
E30T1	AP-SD045-03	Soil	06/07/01	06/09/01	06/19/01
E30T2	AP-SD045-03DP	Soil	06/07/01	06/09/01	06/19/01
E30T3	AP-SD045-04	Soil	06/07/01	06/09/01	06/19/01
E30T5	AP-SD054-01	Soil	06/07/01	06/09/01	06/19/01
E30T6	AP-SD054-02	Soil	06/07/01	06/09/01	06/19/01
E30T7	AP-SD054-03	Soil	06/07/01	06/09/01	06/19/01
E30T8	AP-SD054-04	Soil	06/07/01	06/09/01	06/19/01
E30T9	AP-SD054-05	Soil	06/07/01	06/09/01	06/19/01
E30W0	AP-SD054-05DP	Soil	06/07/01	06/09/01	06/19/01
E30W1	AP-SD036-01	Soil	06/07/01	06/09/01	06/19/01
E30W2	AP-SD036-02	Soil	06/07/01	06/09/01	06/19/01
E30W3	AP-SD036-03	Soil	06/07/01	06/09/01	06/19/01
E30W4	AP-SD036-04	Soil	06/07/01	06/09/01	06/19/01

Holding Time:
All samples were extracted and analyzed within the required holding time.

Method Blank:
The method blank PBLKSA was associated with SDG. PBLKSA was analyzed on 06/19/01 with all the samples (E30S4 thru E30S9, E30T0 thru E30T3, E30T5 thru E30T9, E30W0 thru E30W4 and MS/MSD). The PBLKSA results were free of contamination. All samples underwent GPC 4.2 cleanup, Silica Gel Cleanup, and sulfuric acid cleanup prior analysis. All instrument blanks associated with this sample set were free of contamination.

Surrogate Recovery:
The method blank and investigated samples had surrogate recoveries within the acceptance quality control limits (30 to 170%), except in E30S5 (*DCB2 381%), E30S6 (DCB2 207%), E30S8 (DCB2 228%), E30T0 (DCB2 179%), E30T1 (DCB2 248%), E30T5 (DCB2 184%), E30T8 (DCB2 264%), E30W0 (DCB2 215%) were outside the quality control limits. Also, the surrogate was diluted out in E30T7DL (*DCB1 320D%, DCB2 418D%). Therefore, qualify the results as (J) for detected values in the following samples: E30S5, E30S6, E30S8, E30T0, E30T1, E30T5, E30T8, E30W0, and E30T7DL.
(DCB = Decachlorobiphenyl)

M Spike/ Matrix Spike Duplicate Recovery:
T trix spike/ matrix spike duplicate audit was performed on sample E30S5. The matrix sp atrix spike duplicate, and relative percent difference (RPD %) recoveries were within the qu control limits (29 to 135%).

L tory Control Sample Recovery:
T ratory control sample recovery was within the quality control limits (29 to 135%).

R ion Time:
T tention time's recovery was within the acceptance limits.

I And Continuing Verifications Calibration:
T al calibrations were analyzed for the arochlor, and the recoveries were within the quality c imit of an average (RSD 20%).
T lti-component calibrations verification was analyzed for arochlor 1016, and 1260. The r s were within the quality control limit of an average (RSD 15%), except in aroclor 1 60 on both columns (PEST, PEST II) were analyzed on 06/19/01 at 0223, 0247 had an a %D's ranging from 15.8% to 24.5% for all five peaks in each column. Also, in aroclor 1 260 on both columns (PEST, PEST II) were analyzed on 06/19/01 at 2005, 2029 had an a %D's ranging from 13.9% to 20.8% for all five peaks in each column. Therefore, all seven a were qualified in the detected/non-detected compounds as (J/UJ) for the following s E30S4, E30S5, E30S6, E30S7, E30S8, E30S9, E30T8, E30T9, E30W0, E30W1, E30W2, 1 E30W4, E30T0DL, E30T5DL, and E30T7DL.

A Analytical Sequence:
T ytical sequence for the blanks, samples, and standards were within the quality control l

D viewed By: Tania Balikji-Shammo Date: 07/13/01

07-4A-RAL

SOUTHWEST LABORATORY OF OKLAHOMA

ANALYTICAL REQUEST FORM, SWL-GA-131

Ref# 5103

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	06/09/2001 Due: 06/15/2001
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 WK OF 6/04: 217 soils , 11 sets QC

Client ID	Type	Matrix	GC699									
E30S9		S	X									
E30T0		S	X									
E30T1		S	X									
E30T2		S	X									
E30T3		S	X									
E30T5		S	X									
E30T6		S	X									
E30T7		S	X									
E30T8		S	X									
E30T9		S	X									
E30W0		S	X									
E30W1		S	X									
E30W2		S	X									
E30W3		S	X									
E30W4		S	X									
E30W5		S	X									
E30T4	N1	S	X									
E30T4MS	MS1	S	X									
E30T4MSD	SD1	S	X									
E30W7		S	X									

Reporting Address: ACCOUNTING OFFICER
Attn:;FINANCIAL MANAGEMENT DIVISION,ACCOUNTING OFFICE MD-32,RESEARCH TRIANGLE P

Billing Address: Same As Reporting Address

Project Officer: HARRY M. BORG

Prepared 06/09/2001

SOUTHWEST LABORATORY OF OKLAHOMA

ANALYTICAL REQUEST FORM, SWL-GA-131

Ref# 5091

Pg 3 of 3

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	06/08/2001 Due: 06/14/2001
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 WK OF 6/04: 145 soils , 8 sets QC

Client ID	Type	Matrix	GC699
E30R5		S	X
E30R6		S	X
E30R7		S	X
E30R9		S	X
E30S0		S	X
E30S1		S	X
E30S2		S	X
E30S3		S	X
E30S4		S	X
E30S5	N3	S	X
E30S5MS	MS3	S	X
E30S5MSD	SD3	S	X
E30S6		S	X
E30S7		S	X
E30S8		S	X

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E30R3
Signature B Jackett
Date 6/11/01

Reporting Address: ACCOUNTING OFFICER
Attn:;FINANCIAL MANAGEMENT DIVISION,ACCOUNTING OFFICE MD-32,RESEARCH TRIANGLE P

Billing Address: Same As Reporting Address

Project Officer: HARRY M. BORG

Prepared 06/08/2001

Contract Laboratory Program

Sample Delivery Group (SDG)
Cover Sheet

SDG Number E30S4

SK 6/11/01

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) E30S4	7) E30T0	13) E30T7	19) E30W3
2) E30S5	8) E30T1	14) E30T8	20) E30W4
3) E30S6	9) E30T2	15) E30T9	21)
4) E30S7	10) E30T3	16) E30W0	22)
5) E30S8	11) E30T5	17) E30W1	23)
6) E30S9	12) E30T6	18) E30W2	24)

SK 6/11/01

E30S4	E30W4
First Sample in SDG	Last Sample in SDG
06/08/2001	06/09/2001
First Sample Receipt Date	Last Sample Receipt Date

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

Signature Harry M Berry Date 6-11-01

Surrogates: All surrogates were within QC limits with the exception of samples E30S5, E30S5MS, E30S5MSD, E30S6, E30S8, E30T0, E30T1, E30T5, E30T8 and E30W0 which had high DCB recovery on one column. This sample was not re-extracted since recovery was within limits on one column. Althought TCX is not being used to control for this modification the MS/MSD had high TCX recoveries also.

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

Matrix Spikes: Arochlor 1254 was used for the matrix spike and matrix spike duplicate. The recoveries were within QC limits for the matrix spike and matrix spike duplicate.

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 of an average 20% RSD per arochlor (this is the average % RSD of all 5 peaks).

Calibration Verifications: Calibration verifications were analyzed for Arochlors 1016 and 1260. All percent differences were within QC limits of an average 15%D per arochlor (this is the average %D of all 5 peaks) with the following exceptions: Arochlor 1016 & 1260 analyzed on 6/19/01 at 0247 hrs on columns PEST (PESTI) & PEST II had average %D's ranging from 11.6% to 24.5%. Arochlor 1016 & 1260 analyzed on 6/19/01 at 2029 hrs on columns PEST (PESTI) & PEST II had average %D's ranging from 13.9% to 20.8%.

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
Organic Program Manager

June 21, 2001

JUN 2 1 2001

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

SDG NARRATIVE

June 21, 2001

CONTRACT: 68W99079

CASE NO: 29294

SDG NO: E30S4

SAMPLES: E30S4, E30S5, E30S5MS, E30S5MSD, E30S6, E30S7, E30S8, E30S9, E30T0, E30T0DL, E30T1, E30T2, E30T3, E30T5, E30T5DL, E30T6, E30T7, E30T7DL, E30T8, E30T9, E30W0, E30W1, E30W2, E30W3 and E30W4.

FRACTION: Pesticide/PCB

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

Columns: The soil samples were analyzed on Restek dual analytical columns, RTX-PEST (also known as RTX-PEST I) (proprietary phase composition, length 30m, id 0.32 mm, film thickness 0.5 um) and RTX-PEST II (proprietary phase composition, length 30m, id 0.32 mm, film thickness 0.25 um). Note: on all raw data columns noted as PEST or PEST I are the same column .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 for all sample analyses.

The following samples in this SDG labeled with a DL are considered billable since these samples had dilutions analyzed to get target compounds within instruments linear range: E30T0DL, E30T5DL and E30T7DL.

Sample E00E0 was undiluted, 10X diluted and 40X diluted. The undiluted and 40X dilutions were submitted in the data package, since the undiluted had surrogates within QC limits. The 10X has been submitted in the misc. section of the data package.

The sample cooler arrived at 4.8 & 5.0 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.

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

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

CASE NO. 29294 SDG NO. E3054 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	(Signature)	(Printed Name/Title)	(Date)
Completed by: (CLP Lab)	Emma Morton	Emma Morton Data Clerk	6-21-01
Verified by: (CLP Lab)	Sandra Jackett	Sandra Jackett Data Clerk	6/21/01
Audited by: (EPA)			

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

CASE NO. 29294 SDG NO. E3054 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
6. **Pesticides Data** (Cont.)				
e. Raw GPC Data	242A	307	✓	
f. Raw Florisil Data	NA	NA		
7. **Miscellaneous Data**				
Original preparation and analysis forms or of preparation and analysis logbook pages	308	312		
Internal sample and sample extract transfer chain-of-custody records	313	320		
Screening records	321	323		
All instrument output, including strip charts from screening activities (describe or list)				
	NA	NA		
8. **EPA Shipping/Receiving Documents**				
Airbills (No. of shipments 2)	324	325		
Chain-of-Custody Records	326	328		
Sample Tags	329	348		
Sample Log-in Sheet (Lab & DC1)	349	355		
Miscellaneous Shipping/Receiving Records (describe or list)				
Memos, Modified Analysis, Analytical Report	356	362		
	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. E3054 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
6. **Pesticides Data** (Cont.)				
b. Sample Data	11	95		
TCL Results - Organic Analysis Data Sheet (Form I PEST)				
Chromatograms (Primary Column)				
Chromatograms from second GC column				
GC Integration report or data system printout				
Manual work sheets				
For pesticides/Aroclors by GC/MS, Copies of raw spectra and copies of background-subtracted mass spectra of target compounds (samples & standards)				
c. Standards Data	96	201		
Initial Calibration of Single Component (Form VI PEST-1 and PEST-2)				
Initial Calibration of Multicomponent Analytes (Form VI PEST-3)				
Analyte Resolution Summary (Form VI PEST-4)				
Performance Evaluation Mixture (Form VI PEST-5)				
Individual Standard Mixture A (FORM VI PEST-6)				
Individual Standard Mixture B (FORM VI PEST-7)				
Calibration Verification Summary (Form VII PEST-1)				
Calibration Verification Summary (Form VII PEST-2)				
Analytical Sequence (Form VIII PEST)				
Florisil Cartridge Check (Form IX PEST-1)				
Pesticide GPC Calibration (Form IX PEST-2)				
Pesticide Identification Summary for Single Component Analytes (Form X PEST-1)				
Pesticide Identification Summary for Multicomponent Analytes (Form X PEST-2)				
Chromatograms and data system printouts A printout of retention times and corresponding peak areas or peak heights				
d. Raw QC Data				
Blank Data	202	225		
Matrix Spke/Matrix Spike Duplicate Data	226	241		

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

CASE NO. 29294 SDG NO. E3054 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

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

JUN 2 1 2001

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME SOUTHWEST LABORATORY OF OKLAHOMA
CITY/STATE BROKEN ARROW, OKLAHOMA
CASE NO. 29294 SDG NO. E3054 SDG NOS. TO FOLLOW
SAS NO.
CONTRACT NO. 68W99079
SOW NO. OLM04.2

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

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

TB 7/16/

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

Case No:	29294
DAS No:	2001ZG07
SDG No:	E30S4

L

Date Shipped:	6/7/01
Carrier Name:	FedEx
Airbill:	821876981998
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 [signature]	6-7-01 1810	[signature]	6-8-01 8:30
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 E30S4
E30S0	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050410 (Ice Only) (1)	AP-SD027-02	S:	6/7/01	11:59		
E30S1	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050412 (Ice Only) (1)	AP-SD027-03	S:	6/7/01	11:59		
E30S2	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050414 (Ice Only) (1)	AP-SD027-03DP	S:	6/7/01	11:59		
E30S3	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050415 (Ice Only) (1)	AP-SD027-04	S:	6/7/01	11:59		
E30S4	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050419 (Ice Only) (1)	AP-SD026-01	S:	6/7/01	10:38		
E30S5	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050421 (Ice Only) (1)	AP-SD026-02	S:	6/7/01	10:38		
E30S6	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050424 (Ice Only) (1)	AP-SD026-03	S:	6/7/01	10:38		
E30S7	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050426 (Ice Only) (1)	AP-SD026-04	S:	6/7/01	10:38		
E30S8	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050428 (Ice Only) (1)	AP-SD026-05	S:	6/7/01	10:38		

COPY
ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E30S3
Signature [signature]
Date 6/11/01

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: E30M9, E30R2, E30S5	Additional Sampler Signature(s): [signature]	Cooler Temperature Upon Receipt: 5.0 C.B.	Chain of Custody Seal Number: 177895, 177896
Analysis Key: PCBs = PCBs	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact?__ Shipment Iced?__

TR Number: 5-201142833-060701-0001

LABORATORY COPY

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

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

Case No:	29294
DAS No:	2001ZG07
SDG No:	E3054

L

Date Shipped:	6/8/01
Carrier Name:	FedEx
Airbill:	821876981976
Shipped to:	Southwest Labs of Oklahoma, Inc. 1700 West Albany Suite C Broken Arrow OK 74012 (918) 251-0545

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
[signature]	060801 1500	[signature]	6-9-01 9:30
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 E3054 Sample Condition On Receipt
E30S9	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050430 (Ice Only) (1)	AP-SD045-01	S: 6/7/01 16:55		
E30T0	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050431 (Ice Only) (1)	AP-SD045-02	S: 6/7/01 16:55		
E30T1	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050433 (Ice Only) (1)	AP-SD045-03	S: 6/7/01 16:55		
E30T2	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050435 (Ice Only) (1)	AP-SD045-03DP	S: 6/7/01 16:55		
E30T3	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050436 (Ice Only) (1)	AP-SD045-04	S: 6/7/01 16:55		
E30T4	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050439 (Ice Only) (1)	AP-SD045-05	S: 6/7/01 16:55		
E30T5	Sediment/ Joe Ruiz	L/G	PCBs (7)	5-050441 (Ice Only) (1)	AP-SD054-01	S: 6/7/01 16:03		
E30T6	Sediment/ Joe Ruiz	L/G	PCBs (7)	5-050443 (Ice Only) (1)	AP-SD054-02	S: 6/7/01 16:03		
E30T7	Sediment/ Joe Ruiz	L/G	PCBs (7)	5-050445 (Ice Only) (1)	AP-SD054-03	S: 6/7/01 16:03		
CT E30T8	Sediment/ Joe Ruiz	L/G	PCBs (7)	5-050447 (Ice Only) (1)	AP-SD054-04	S: 6/7/01 16:03		

Shipment for Case Complete?Y	Sample(s) to be used for laboratory QC: E30T4, E30W6, E30X7, E30Y9	Additional Sampler Signature(s): [signature]	Cooler Temperature Upon Receipt: 4.8°C TB	Chain of Custody Seal Number: 177889, 177890
Analysis Key: PCBs = PCBs	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact?__ Shipment Iced?__

TR Number: 5-201142833-060801-0002

LABORATORY COPY

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

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

Case No:	29294
DAS No:	2001ZG07
SDG No:	E3054

L

Date Shipped:	6/8/01
Carrier Name:	FedEx
Airbill:	821876981976
Shipped to:	Southwest Labs of Oklahoma, Inc. 1700 West Albany Suite C Broken Arrow OK 74012 (918) 251-0545

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
[illegible]	6801 1500	[illegible]	6-9-01
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 E3054
E30T9	Sediment/ Joe Ruiz	L/G	PCBs (7)	5-050449 (Ice Only) (1)	AP-SD054-05	S:	6/7/01	16:03		
E30W0	Sediment/ Joe Ruiz	L/G	PCBs (7)	5-50451 (Ice Only) (1)	AP-SD054-05DP	S:	6/7/01	16:03		
E30W1	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050452 (Ice Only) (1)	AP-SD036-01	S:	6/7/01	15:20		
E30W2	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050455 (Ice Only) (1)	AP-SD036-02	S:	6/7/01	15:20		
E30W3	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050457 (Ice Only) (1)	AP-SD036-03	S:	6/7/01	15:20		
* E30W4	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050459 (Ice Only) (1)	AP-SD036-04	S:	6/7/01	15:20		
E30W5	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050461 (Ice Only) (1)	AP-SD043-01	S:	6/7/01	16:15		
E30W6	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050462 (Ice Only) (1)	AP-SD043-02	S:	6/7/01	16:15		
E30W7	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050463 (Ice Only) (1)	AP-SD043-03	S:	6/7/01	16:15		
E30W8	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050465 (Ice Only) (1)	AP-SD043-03DP	S:	6/7/01	16:15		

*SDG Final Sample

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC: E30T4, E30W6, E30X7, E30Y9	Additional Sampler Signature(s): [illegible]	Cooler Temperature Upon Receipt: 4.8c SB	Chain of Custody Seal Number: 177889, 177890
Analysis Key: PCBs = PCBs	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact?__ Shipment Iced?__

TR Number: 5-201142833-060801-0002

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

2F
SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

GC Column(1): PEST ID: 0.32(mm) GC Column(2): PEST II ID: 0.32(mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	TOT OUT
01	PBLKSA	92	95	149	153	0
02	ELCS1	101	115	142	147	0
03	E30S4	74	82	125	137	0
04	E30S5	237*	211*	166	381*	3
05	E30S5MS	203*	162	149	290*	2
06	E30S5MSD	138	90	91	181*	1
07	E30S6	76	91	82	207*	1
08	E30S7	75	86	106	169	0
09	E30S8	111	93	76	228*	1
10	E30S9	68	78	100	128	0
11	E30T0	102	94	114	179*	1
12	E30T1	92	107	112	248*	1
13	E30T2	60	67	96	135	0
14	E30T3	67	75	101	121	0
15	E30T5	74	90	101	184*	1
16	E30T6	59	65	89	102	0
17	E30T7	59	64	106	167	0
18	E30T8	98	118	152	264*	1
19	E30T9	58	66	78	102	0
20	E30W0	131	154	161	215*	1
21	E30W1	59	66	82	98	0
22	E30W2	69	76	100	119	0
23	E30W3	39	42	60	69	0
24	E30W4	55	62	82	92	0
25	E30T0DL	25	22	27D	54	0
26	E30T5DL	54	59	59	99	0
27	E30T7DL	323D	230D	320D	418D	0
28						
29						
30						

	QC LIMITS
TCX = Tetrachloro-m-xylene	(0-200)
DCB = Decachlorobiphenyl	(30-170)

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

FORM II PCB-1

7A EM 6-21-01

3H

SOIL AROCLOR LABORATORY CONTROL SPIKE/ DUPLICATE RECOVERY

Lab Name: SWL-TULSA Case No.: 29294 SDG No.: E30S4

LCS Sample NO.: ELCS1

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Aroclor-1254	133	156	117	29-135

Column to be used to flag recovery values

* Values outside of QC limits

Spike Recovery: 0 out of 1 outside limits

Comments: _____

3F

SOIL AROCLOR MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Matrix Spike - Client Sample NO.: E30S5

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Aroclor-1254	329	0	436	132	29-135

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1254	329	307	93	35	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.

PBLKSA

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Lab Sample ID: BL0609SA Lab File ID: 7_061834

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

Sulfur Cleanup: (Y/N) N Date Extracted: 06/09/01

Date Analyzed (1): 06/19/01 Date Analyzed (2): 06/19/01

Time Analyzed (1): 0024 Time Analyzed (2): 0024

Instrument ID (1): HP_07A Instrument ID (2): HP_07B

GC Column (1): PEST ID: 0.32(mm) GC Column (2): PEST II ID: 0.32(mm)

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	ELCS1	LC0609SA	06/19/01	06/19/01
02	E30S4	46721.49	06/19/01	06/19/01
03	E30S5	46721.50	06/19/01	06/19/01
04	E30S5MS	46721.51MS	06/19/01	06/19/01
05	E30S5MSD	46721.52MSD	06/19/01	06/19/01
06	E30S6	46721.53	06/19/01	06/19/01
07	E30S7	46721.54	06/19/01	06/19/01
08	E30S8	46721.55	06/19/01	06/19/01
09	E30S9	46732.01	06/19/01	06/19/01
10	E30T0	46732.02	06/19/01	06/19/01
11	E30T1	46732.03	06/19/01	06/19/01
12	E30T2	46732.04	06/19/01	06/19/01
13	E30T3	46732.05	06/19/01	06/19/01
14	E30T5	46732.06	06/19/01	06/19/01
15	E30T6	46732.07	06/19/01	06/19/01
16	E30T7	46732.08	06/19/01	06/19/01
17	E30T8	46732.09	06/19/01	06/19/01
18	E30T9	46732.10	06/19/01	06/19/01
19	E30W0	46732.11	06/19/01	06/19/01
20	E30W1	46732.12	06/19/01	06/19/01
21	E30W2	46732.13	06/19/01	06/19/01
22	E30W3	46732.14	06/19/01	06/19/01
23	E30W4	46732.15	06/19/01	06/19/01
24	E30T0DL	46732.02DL	06/19/01	06/19/01
25	E30T5DL	46732.06DL	06/19/01	06/19/01
26	E30T7DL	46732.08DL	06/19/01	06/19/01

Comments: _____

HYDROGEN USED AS CARRIER GAS FOR SAMPLE ANALYSES

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30S4

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Matrix: (soil/water) SOIL Lab Sample ID: 46721.49

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

% Moisture: 16 decanted: (Y/N) __ Date Received: 06/08/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/09/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	UJ
11104-28-2	Aroclor-1221	38	UJ
11141-16-5	Aroclor-1232	38	UJ
53469-21-9	Aroclor-1242	48	J
12672-29-6	Aroclor-1248	38	UJ
11097-69-1	Aroclor-1254	8.3	J
11096-82-5	Aroclor-1260	38	UJ
	Surrogate amount spiked	7.73	

TBS 7/13/01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061842.D\ECD1A.CH Vial: 42
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061842.D\ECD2B.CH
Acq On : 19 Jun 2001 3:35 Operator: DDC
Sample : 46721.49 *E30S4 * Inst : HP_07
Misc : *EPA*30.8G/5.0ML*16 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 21 7:13 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

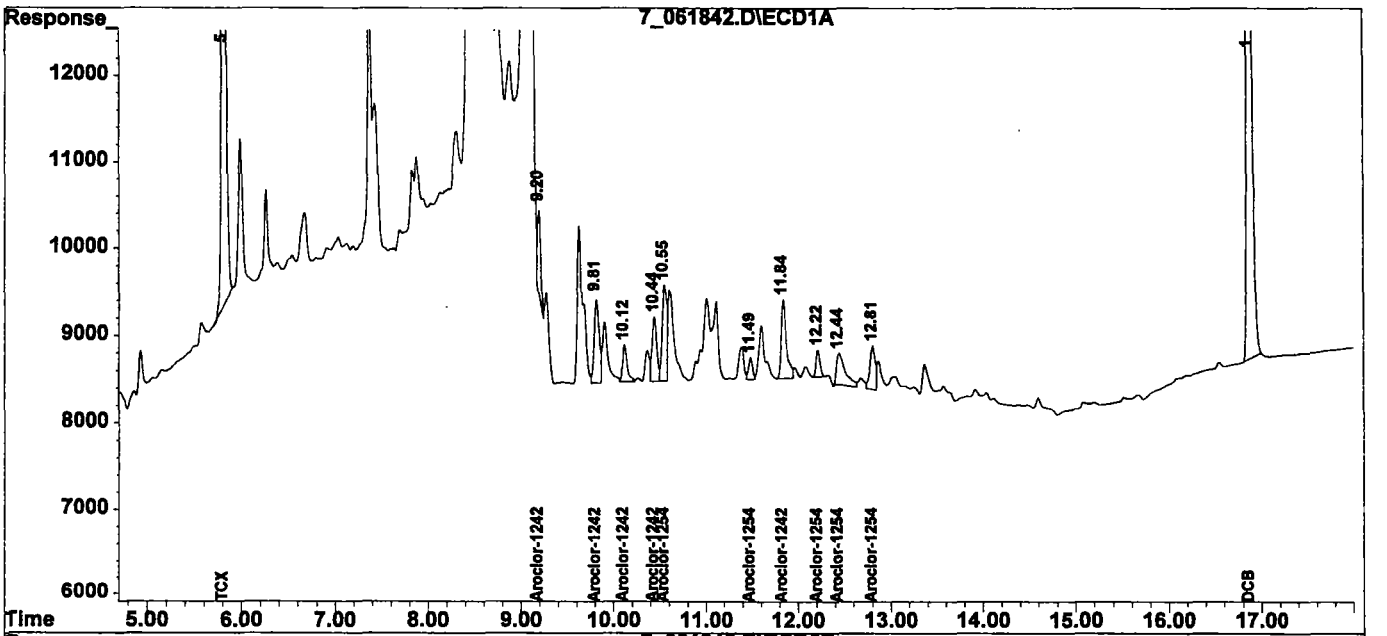
Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

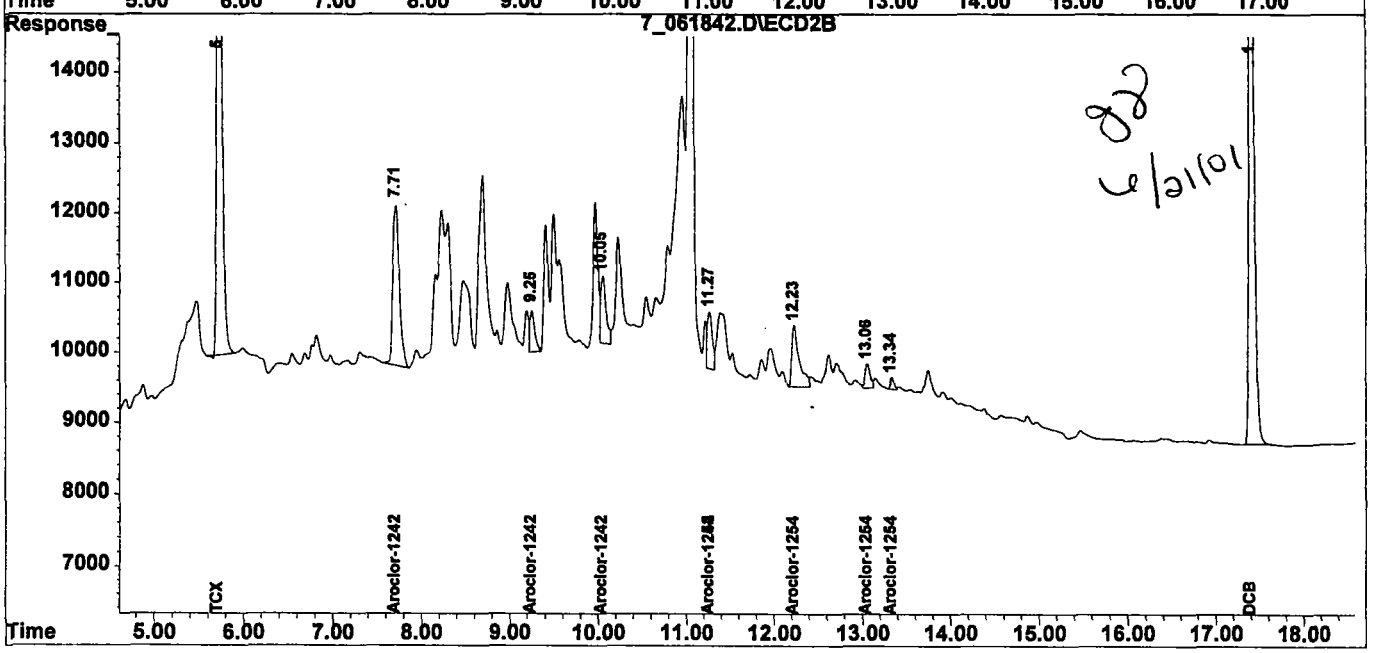
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.81	5.72	303722	405357	5.710	6.310	
	Spiked Amount 7.730			Recovery	=	73.86%	81.63%	
22)	S DCB	16.87	17.40	391418	448088	9.643	10.6	
	Spiked Amount 7.730			Recovery	=	124.74%	137.12%	
	Target Compounds:							
7)	L4 Aroclor-1242	9.19	7.71	23318	119196	22.9	39.9	#
	L4 Aroclor-1242 {2}	9.81	9.25	35199	22621	50.6	22.5	#
	L4 Aroclor-1242 {3}	10.12	10.05	14452	41205	33.5	59.0	#
10)	L4 Aroclor-1242 {4}	10.44	0.00	24887	0	45.5	N.D. d	#
11)	L4 Aroclor-1242 {5}	11.84	11.26	35437	32309	86.2	122.2	#
	Sum Aroclor-1242			133292	215331	238.6	243.6	
	Average Aroclor-1242					47.718	60.905	
12)	L6 Aroclor-1254	10.55	0.00	35677	0	19.7	N.D. d	#
13)	L6 Aroclor-1254 {2}	11.49	11.26	7333	32309	8.226	11.3	#
14)	L6 Aroclor-1254 {3}	12.22	12.23	9291	50420	4.897	13.4	#
15)	L6 Aroclor-1254 {4}	12.44	13.06	23591	14039	10.1	6.324	#
16)	L6 Aroclor-1254 {5}	12.81	13.34	19542	4703	6.682	2.177	#
	Sum Aroclor-1254			95434	101471	49.7	33.2	
	Average Aroclor-1254					9.935	8.290	

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

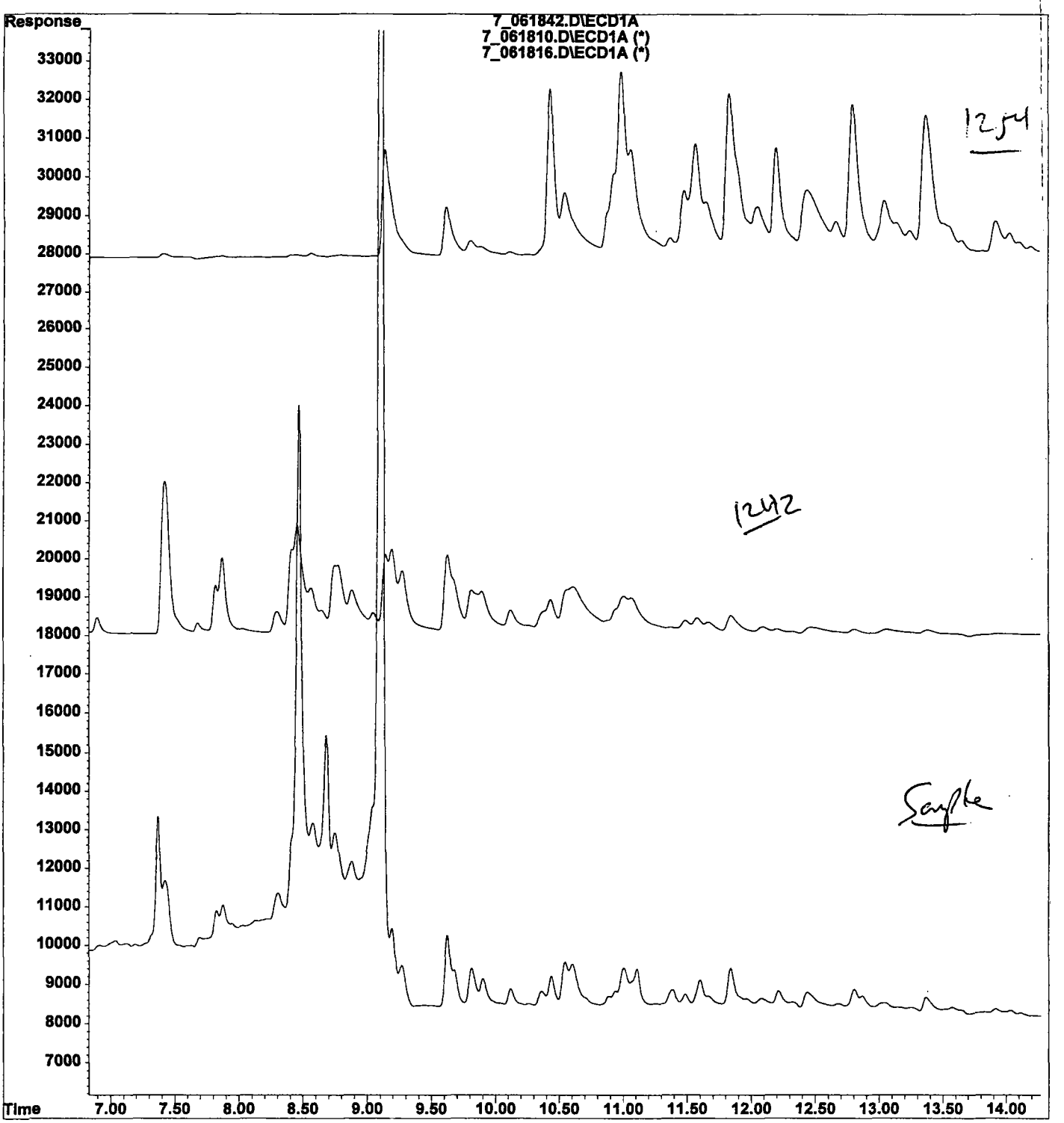
Chromatographic Report

```
Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061842.D\ECD1A.CH Vial: 42
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061842.D\ECD2B.CH
Acq On    : 19 Jun 2001   3:35                        Operator: DDC
Sample    : 46721.49  *E30S4  *                       Inst    : HP_07
Misc      : *EPA*30.8G/5.0ML*16                       Dilution: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e
Quant Time: Jun 21  7:13 2001  Quant Results File: XPCBF18.RES

Method        : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path    : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update   : Wed Jun 06 14:28:40 2001
Response via  : Multiple Level Calibration

Volume Inj.      : 0.5uL
Signal #1 Phase  : PEST                Signal #2 Phase: PEST II
Signal #1 Info   : .32 mm              Signal #2 Info : .32 mm
Signal #1 Inst   : HP_07A              Signal #2 Inst : HP_07B
```

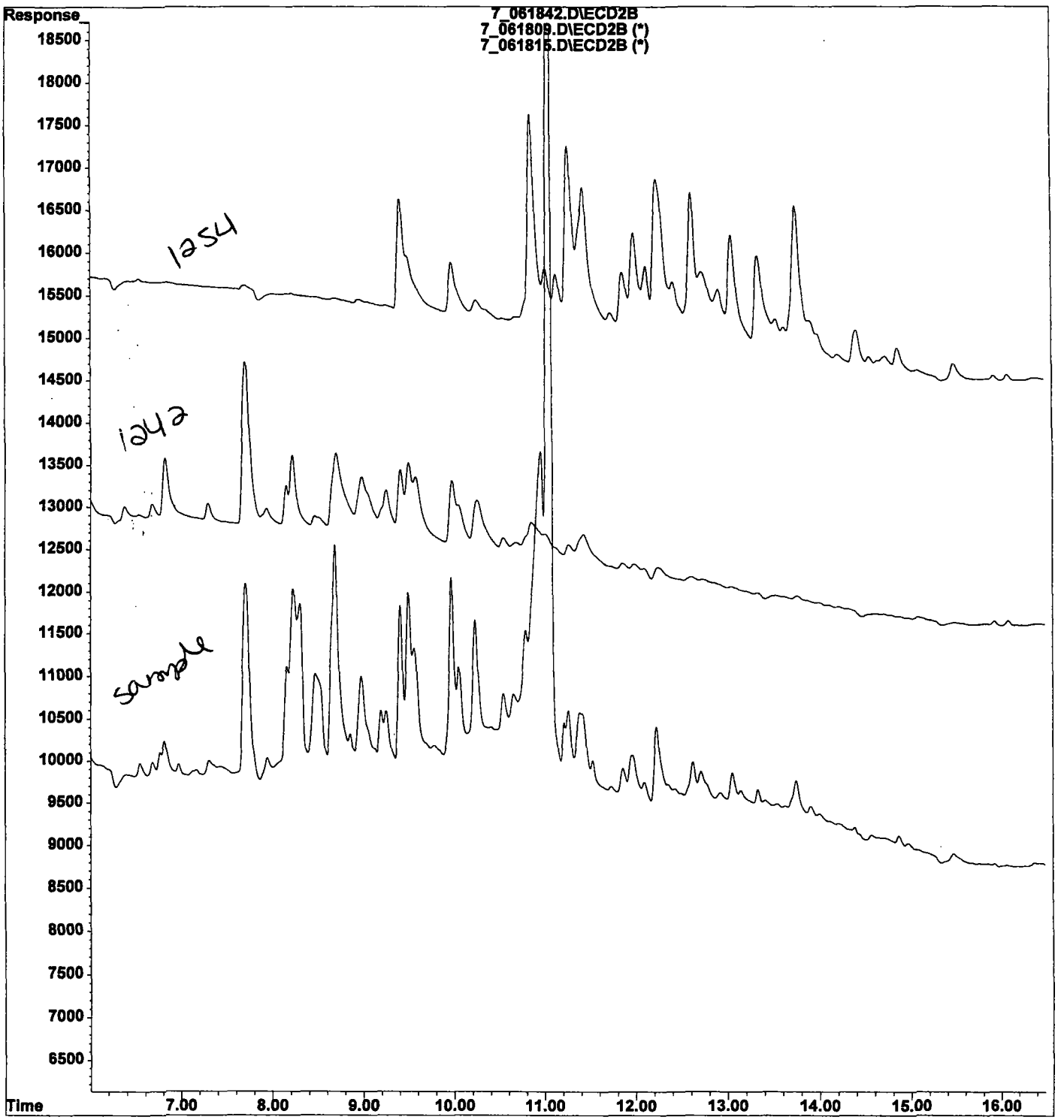




File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061842.D
Operator : DDC
Acquired : 19 Jun 2001 3:35 using AcqMethod OLM03.M
Instrument : HP_07
Sample Name: 46721.49 *E30S4 *
Misc Info : *EPA*30.8G/5.0ML*16
Vial Number: 42



File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061842.D
Operator : DDC
Acquired : 19 Jun 2001 3:35 using AcqMethod OLM03.M
Instrument : HP_07
Sample Name: 46721.49 *E30S4 *
Misc Info : *EPA*30.8G/5.0ML*16
Vial Number: 42



1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30S5

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Matrix: (soil/water) SOIL Lab Sample ID: 46721.50

Sample wt/vol: 31.2 (g/mL) G Lab File ID:_____

% Moisture: 60 decanted: (Y/N) __ Date Received: 06/08/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/09/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	79	U
11104-28-2	Aroclor-1221	79	U
11141-16-5	Aroclor-1232	79	U
53469-21-9	Aroclor-1242	79	U
12672-29-6	Aroclor-1248	79	U
11097-69-1	Aroclor-1254	79	U
11096-82-5	Aroclor-1260	79	U
Surrogate amount spiked		16.02	

TBS
7/16/01

FORM I PCB

Quantitation Report

```
Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061843.D\ECD1A.CH Vial: 43
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061843.D\ECD2B.CH
Acq On    : 19 Jun 2001   3:59                        Operator: DDC
Sample    : 46721.50  *E30S5  *                       Inst    : HP_07
Misc      : *EPA*31.2G/5.0ML*60                       Dilution: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e
Quant Time: Jun 19 10:14 2001  Quant Results File: XPCBF18.RES

Method       : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path   : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update  : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj.     : 0.5uL
Signal #1 Phase : PEST              Signal #2 Phase: PEST II
Signal #1 Info  : .32 mm            Signal #2 Info : .32 mm
Signal #1 Inst  : HP_07A            Signal #2 Inst : HP_07B
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.81	5.72	973852	1050302	38.0	33.9	
	Spiked Amount 16.026			Recovery	=	237.12%	211.54%	
22)	S DCB	16.87	17.40	520384	1246480	26.6	61.1	#
	Spiked Amount 16.026			Recovery	=	165.98%	381.26%	
	Target Compounds:							

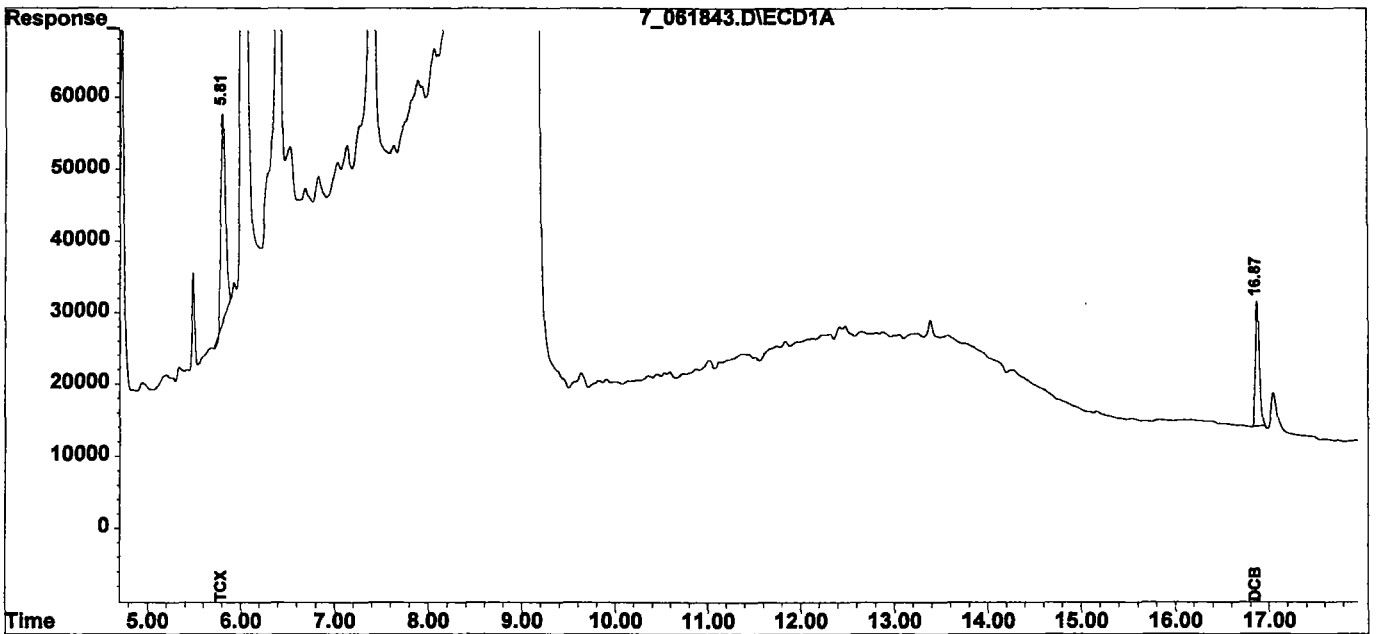
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

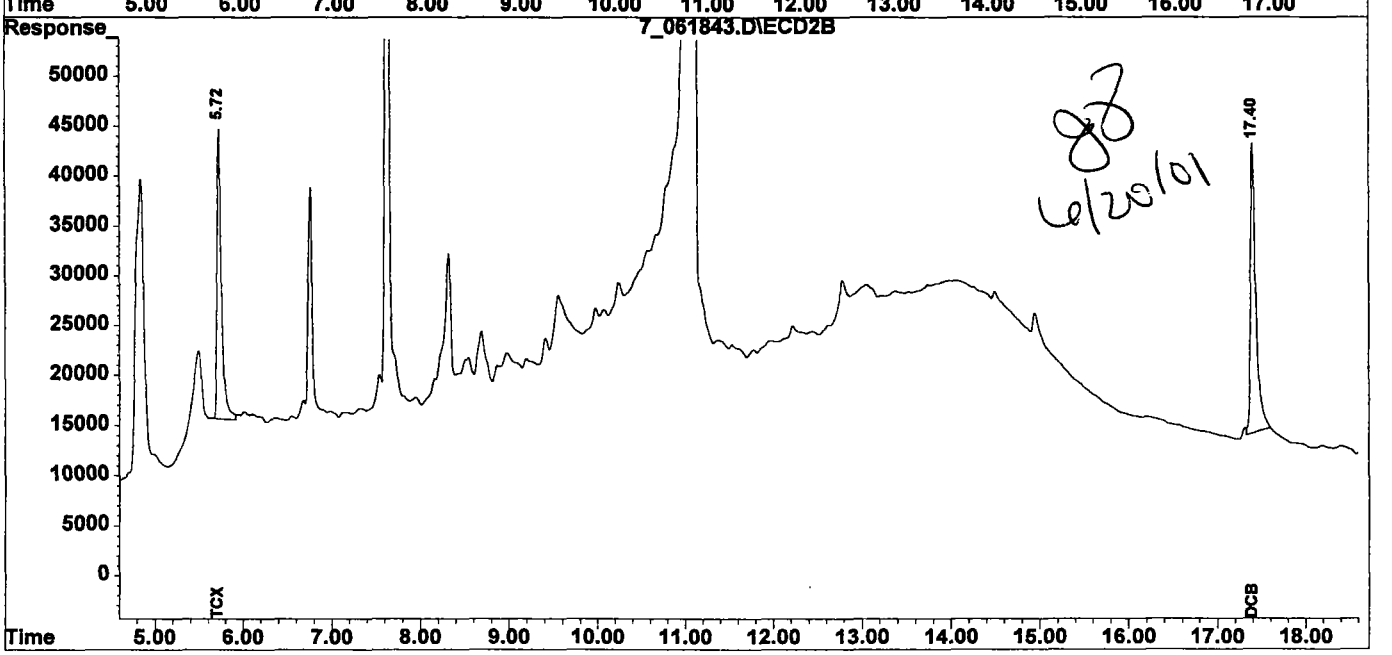
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061843.D\ECD1A.CH Vial: 43
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061843.D\ECD2B.CH
Acq On : 19 Jun 2001 3:59 Operator: DDC
Sample : 46721.50 *E30S5 * Inst : HP_07
Misc : *EPA*31.2G/5.0ML*60 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 10:14 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





8
6/20/01

Quantitation Report

```
Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061843.D\ECD1A.CH Vial: 43
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061843.D\ECD2B.CH
Acq On    : 19 Jun 2001   3:59                        Operator: DDC
Sample    : 46721.50  *E30S5  *                       Inst    : HP_07
Misc      : *EPA*31.2G/5.0ML*60                       Dilution: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e
Quant Time: Jun 19 10:14 2001  Quant Results File: XPCBF18.RES

Method       : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path   : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update  : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj.      : 0.5uL
Signal #1 Phase : PEST              Signal #2 Phase: PEST II
Signal #1 Info  : .32 mm            Signal #2 Info : .32 mm
Signal #1 Inst  : HP_07A            Signal #2 Inst : HP_07B
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.81	5.72	973852	1050302	38.0	33.9	
	Spiked Amount 16.026			Recovery	=	237.12%	211.54%	
22)	S DCB	16.87	17.40	520384	1246480	26.6	61.1	#
	Spiked Amount 16.026			Recovery	=	165.98%	381.26%	
	Target Compounds:							

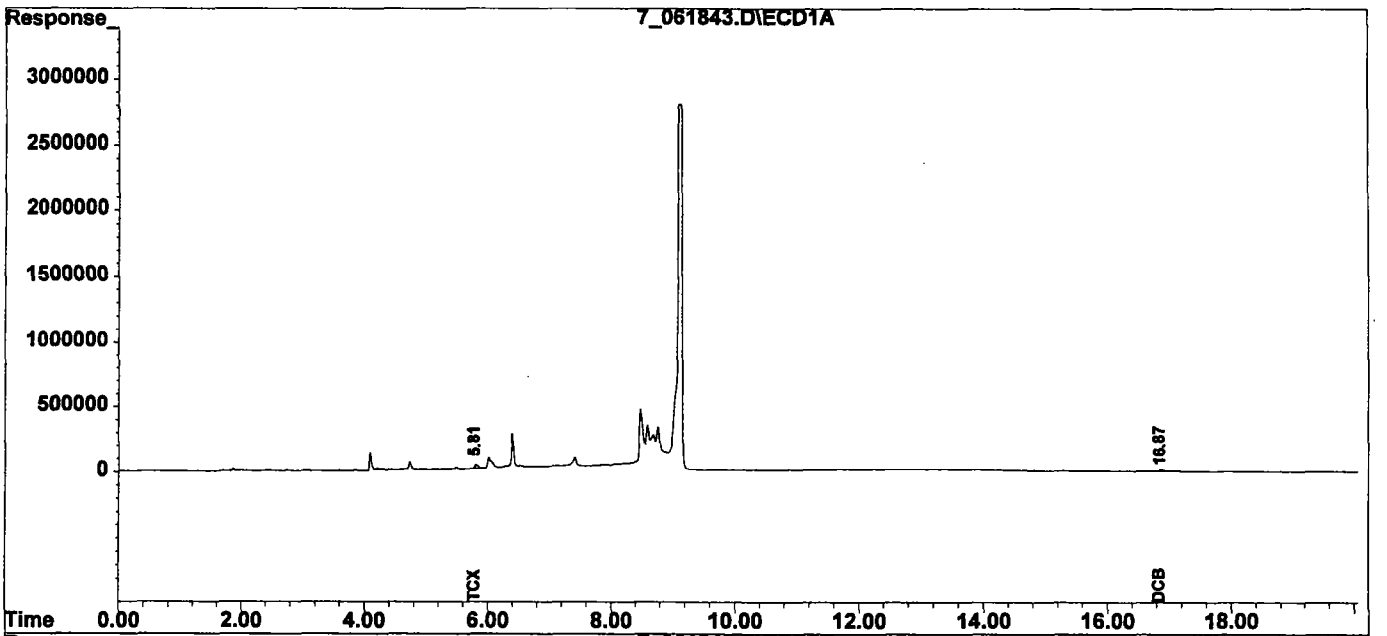
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

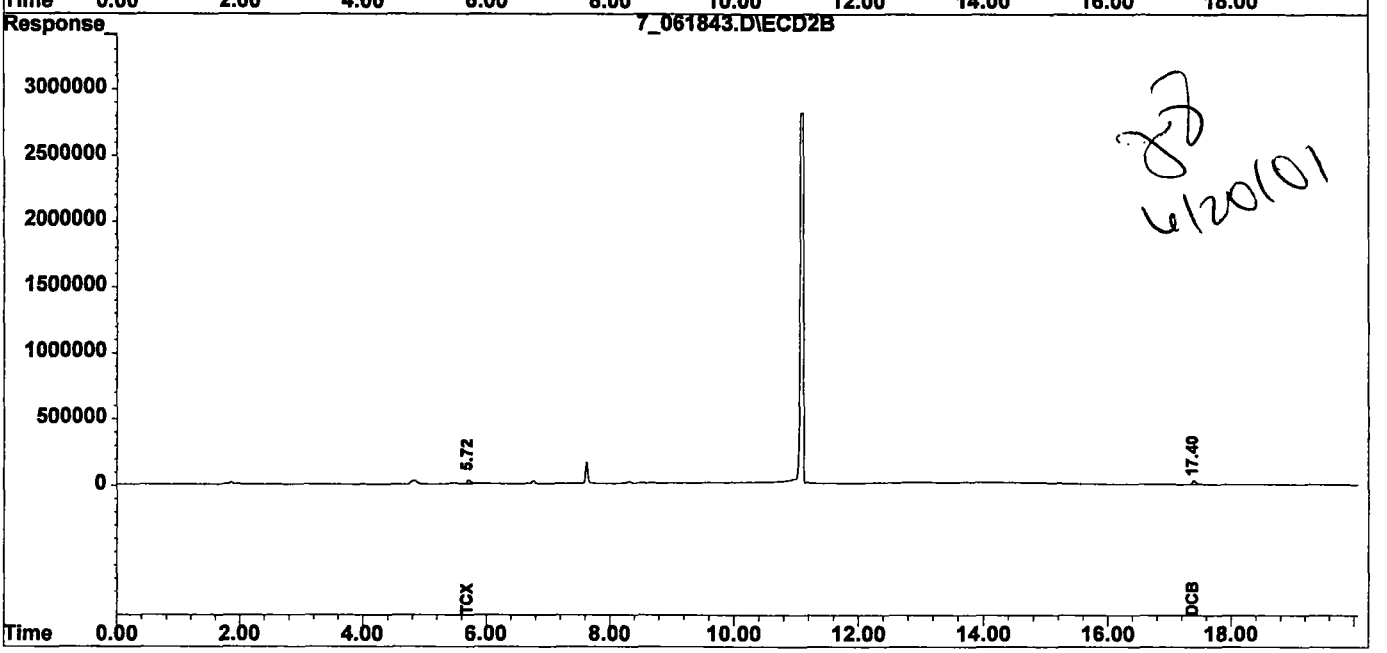
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061843.D\ECD1A.CH Vial: 43
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061843.D\ECD2B.CH
Acq On : 19 Jun 2001 3:59 Operator: DDC
Sample : 46721.50 *E30S5 * Inst : HP_07
Misc : *EPA*31.2G/5.0ML*60 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 10:14 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30S6

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Matrix: (soil/water) SOIL Lab Sample ID: 46721.53

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

% Moisture: 27 decanted: (Y/N) __ Date Received: 06/08/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/09/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	45	U
11104-28-2	Aroclor-1221	45	U
11141-16-5	Aroclor-1232	45	U
53469-21-9	Aroclor-1242	45	U
12672-29-6	Aroclor-1248	45	U
11097-69-1	Aroclor-1254	45	U
11096-82-5	Aroclor-1260	45	U
Surrogate amount spiked		9.01	

TBS
7/16/01

FORM I PCB

Quantitation Report

```
Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061846.D\ECD1A.CH Vial: 46
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061846.D\ECD2B.CH
Acq On    : 19 Jun 2001   5:11                        Operator: DDC
Sample    : 46721.53  *E30S6  *                       Inst    : HP_07
Misc      : *EPA*30.4G/5.0ML*27                       Dilution: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e
Quant Time: Jun 19 10:18 2001  Quant Results File: XPCBF18.RES

Method       : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path   : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update  : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj.      : 0.5uL
Signal #1 Phase : PEST              Signal #2 Phase: PEST II
Signal #1 Info  : .32 mm            Signal #2 Info : .32 mm
Signal #1 Inst  : HP_07A            Signal #2 Inst : HP_07B
```

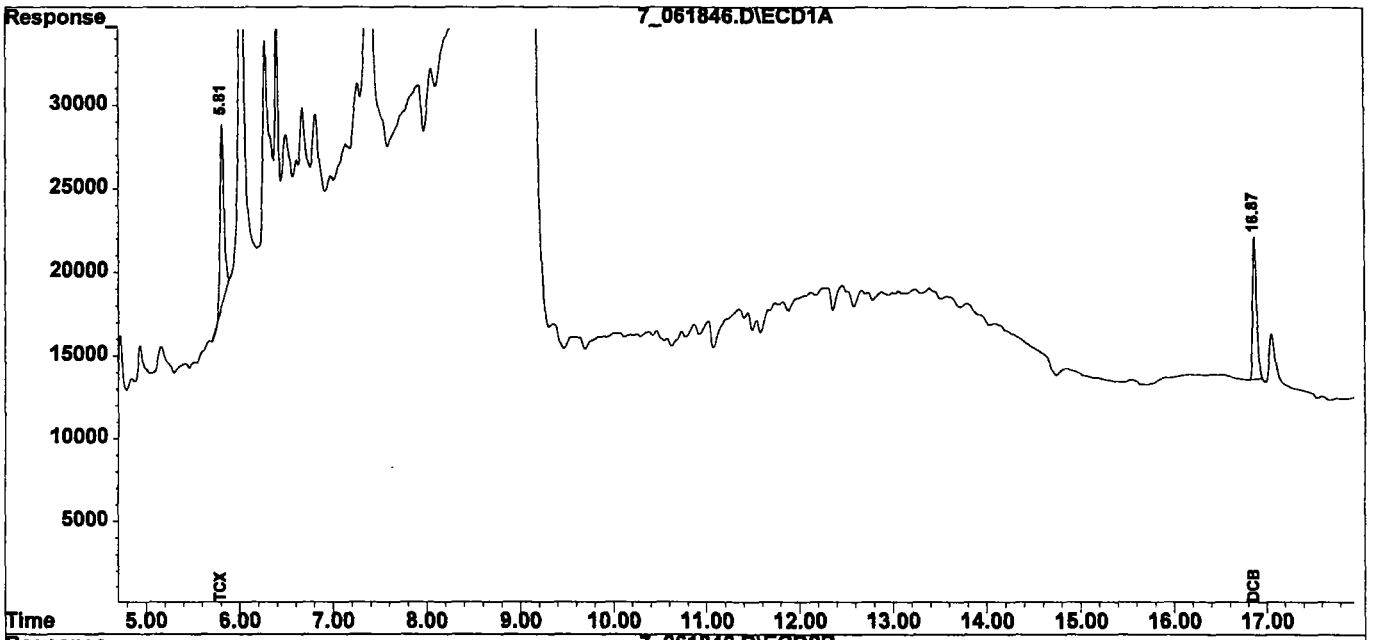
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.81f	5.72	312861	450978	6.857	8.184	
	Spiked Amount 9.012			Recovery	=	76.09%	90.81%	
22)	S DCB	16.87	17.41	255929	677282	7.351	18.7	#
	Spiked Amount 9.012			Recovery	=	81.57%	207.50%	

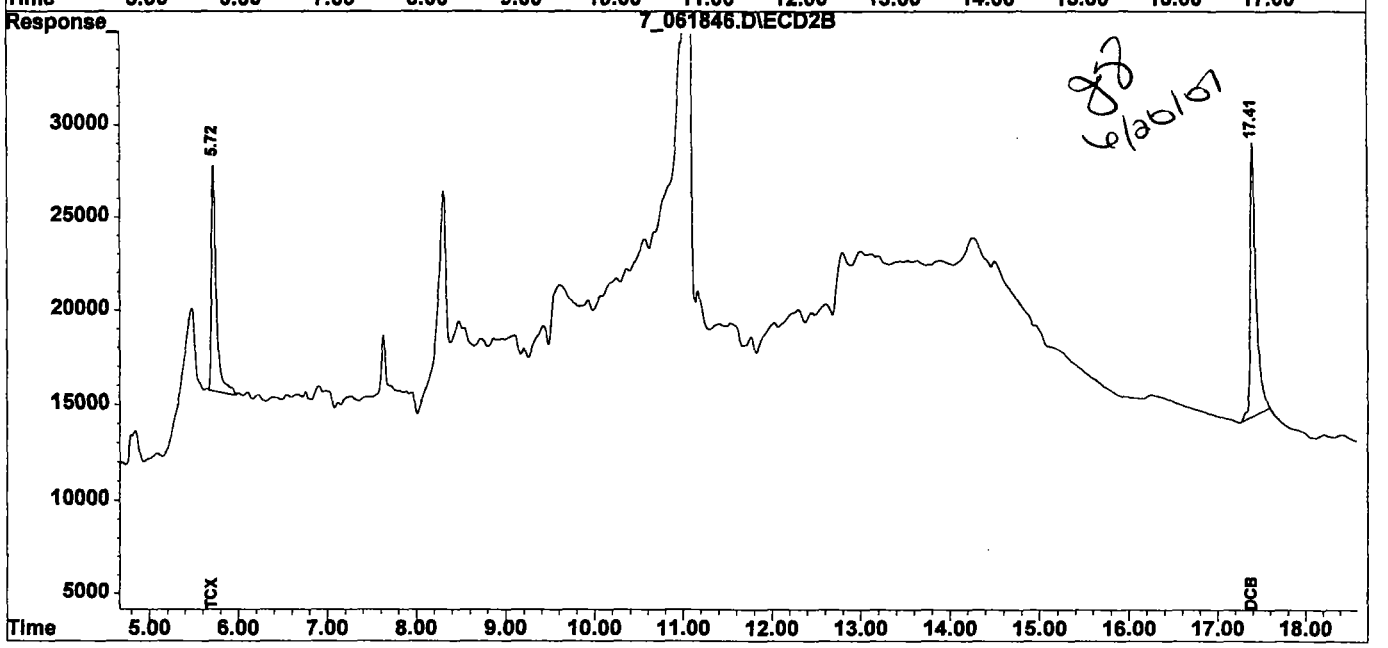
Target Compounds:

(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\7\DATA\06_18_01\7_061846.D\ECD1A.CH Vial: 46
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061846.D\ECD2B.CH
Acq On    : 19 Jun 2001   5:11                        Operator: DDC
Sample    : 46721.53  *E30S6  *                       Inst    : HP_07
Misc      : *EPA*30.4G/5.0ML*27                       Dilution: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e
Quant Time: Jun 19 10:18 2001  Quant Results File: XPCBF18.RES

Method        : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path    : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update   : Wed Jun 06 14:28:40 2001
Response via  : Multiple Level Calibration

Volume Inj.      : 0.5uL
Signal #1 Phase  : PEST              Signal #2 Phase: PEST II
Signal #1 Info   : .32 mm            Signal #2 Info : .32 mm
Signal #1 Inst   : HP_07A            Signal #2 Inst : HP_07B
```





6/20/01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061846.D\ECD1A.CH Vial: 46
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061846.D\ECD2B.CH
Acq On : 19 Jun 2001 5:11 Operator: DDC
Sample : 46721.53 *E30S6 * Inst : HP_07
Misc : *EPA*30.4G/5.0ML*27 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 10:18 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

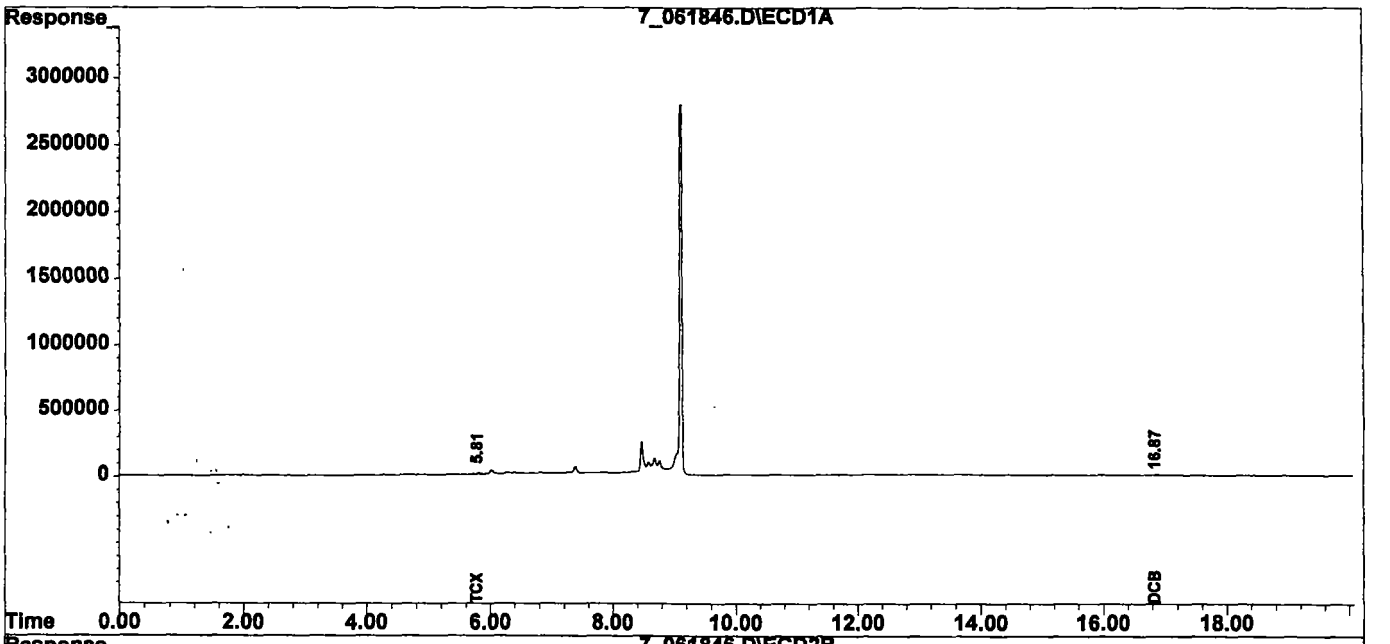
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.81f	5.72	312861	450978	6.857	8.184	
	Spiked Amount 9.012			Recovery	=	76.09%	90.81%	
22)	S DCB	16.87	17.41	255929	677282	7.351	18.7	#
	Spiked Amount 9.012			Recovery	=	81.57%	207.50%	

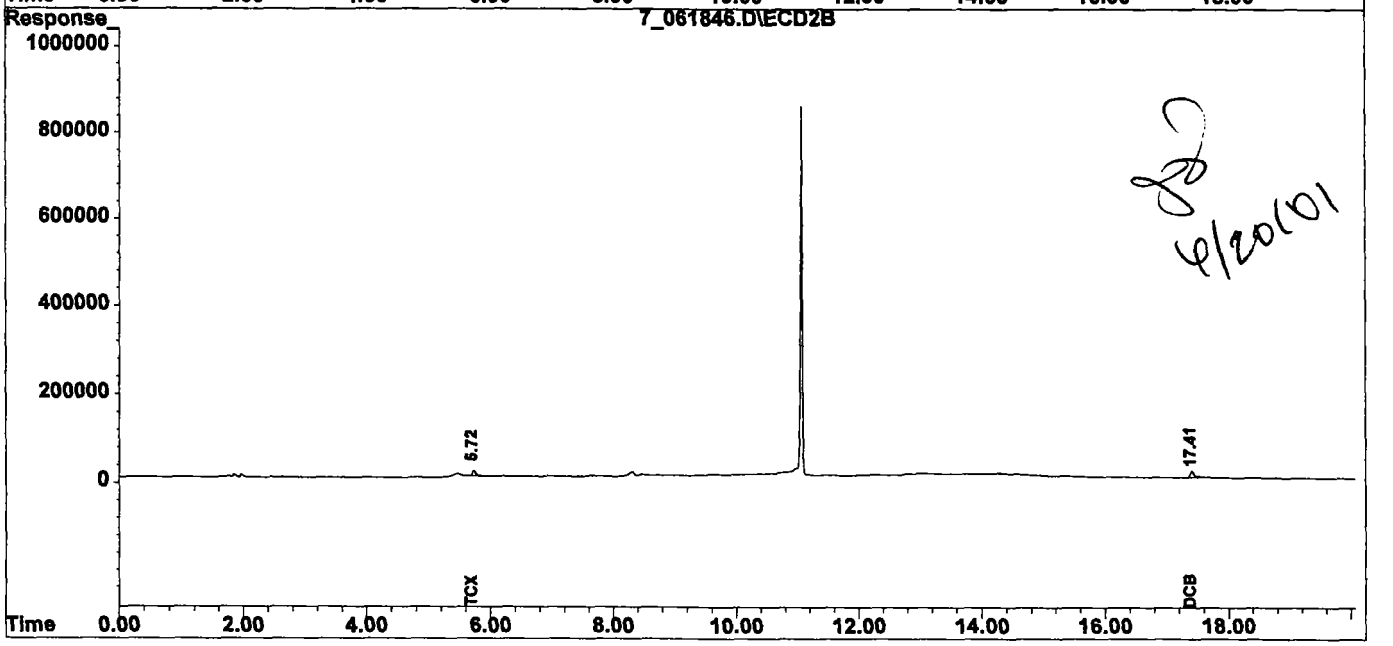
Target Compounds:

(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\7\DATA\06_18_01\7_061846.D\ECD1A.CH Vial: 46
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061846.D\ECD2B.CH
Acq On    : 19 Jun 2001   5:11                        Operator: DDC
Sample    : 46721.53  *E30S6  *                       Inst    : HP_07
Misc      : *EPA*30.4G/5.0ML*27                       Dilution: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e
Quant Time: Jun 19 10:18 2001  Quant Results File: XPCBF18.RES

Method       : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path   : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update  : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj.      : 0.5uL
Signal #1 Phase : PEST              Signal #2 Phase: PEST II
Signal #1 Info  : .32 mm            Signal #2 Info : .32 mm
Signal #1 Inst  : HP_07A            Signal #2 Inst : HP_07B
```





6/20/01

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30S7

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Matrix: (soil/water) SOIL Lab Sample ID: 46721.54

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

% Moisture: 27 decanted: (Y/N) __ Date Received: 06/08/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/09/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	45	U
11104-28-2	Aroclor-1221	45	U
11141-16-5	Aroclor-1232	45	U
53469-21-9	Aroclor-1242	45	U
12672-29-6	Aroclor-1248	45	U
11097-69-1	Aroclor-1254	45	U
11096-82-5	Aroclor-1260	45	U
Surrogate amount spiked		9.04	

TBS
7/16/01

FORM I PCB

Quantitation Report

```
Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061847.D\ECD1A.CH Vial: 47
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061847.D\ECD2B.CH
Acq On    : 19 Jun 2001   5:35                        Operator: DDC
Sample    : 46721.54  *E30S7  *                       Inst    : HP_07
Misc      : *EPA*30.3G/5.0ML*27                       Dilution: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e
Quant Time: Jun 19 10:23 2001  Quant Results File: XPCBF18.RES

Method       : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path   : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update  : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj.     : 0.5uL
Signal #1 Phase : PEST              Signal #2 Phase: PEST II
Signal #1 Info  : .32 mm            Signal #2 Info : .32 mm
Signal #1 Inst  : HP_07A            Signal #2 Inst : HP_07B
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.81f	5.72	309023	429615	6.795	7.822	
	Spiked Amount 9.042			Recovery	=	75.15%	86.51%	
22)	S DCB	16.87	17.41	333608	552373	9.613	15.3	#
	Spiked Amount 9.042			Recovery	=	106.31%	169.21%	

Target Compounds:

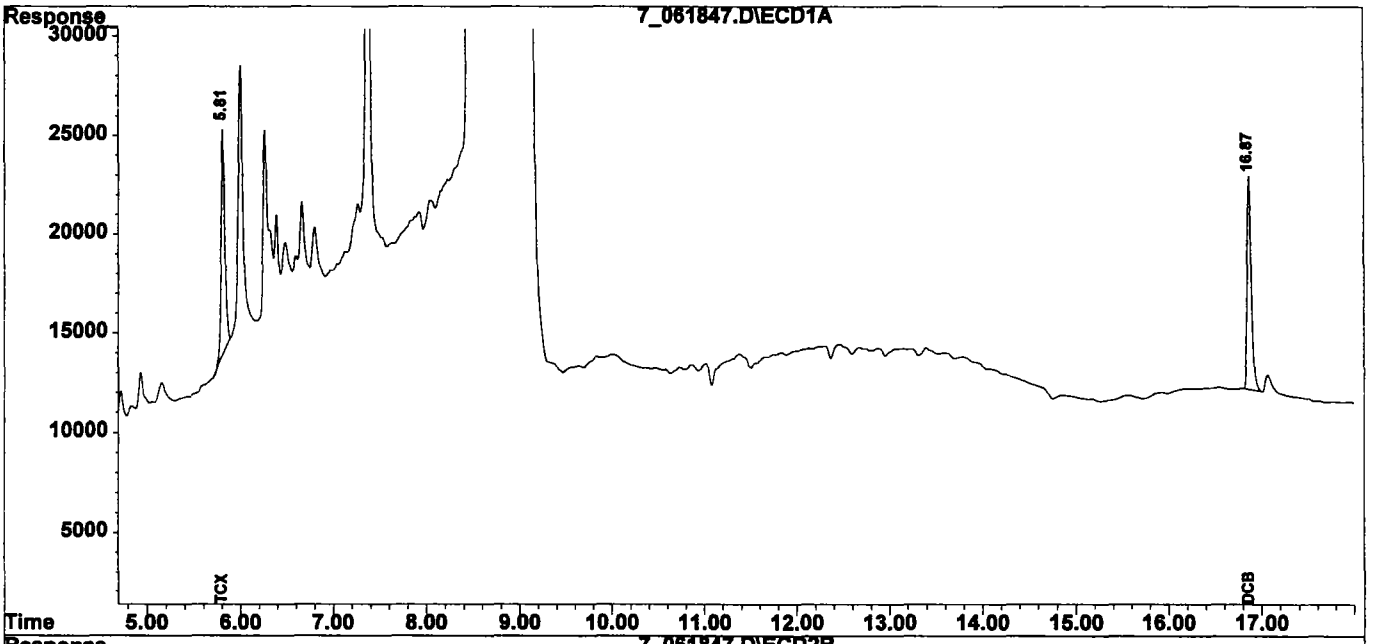
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

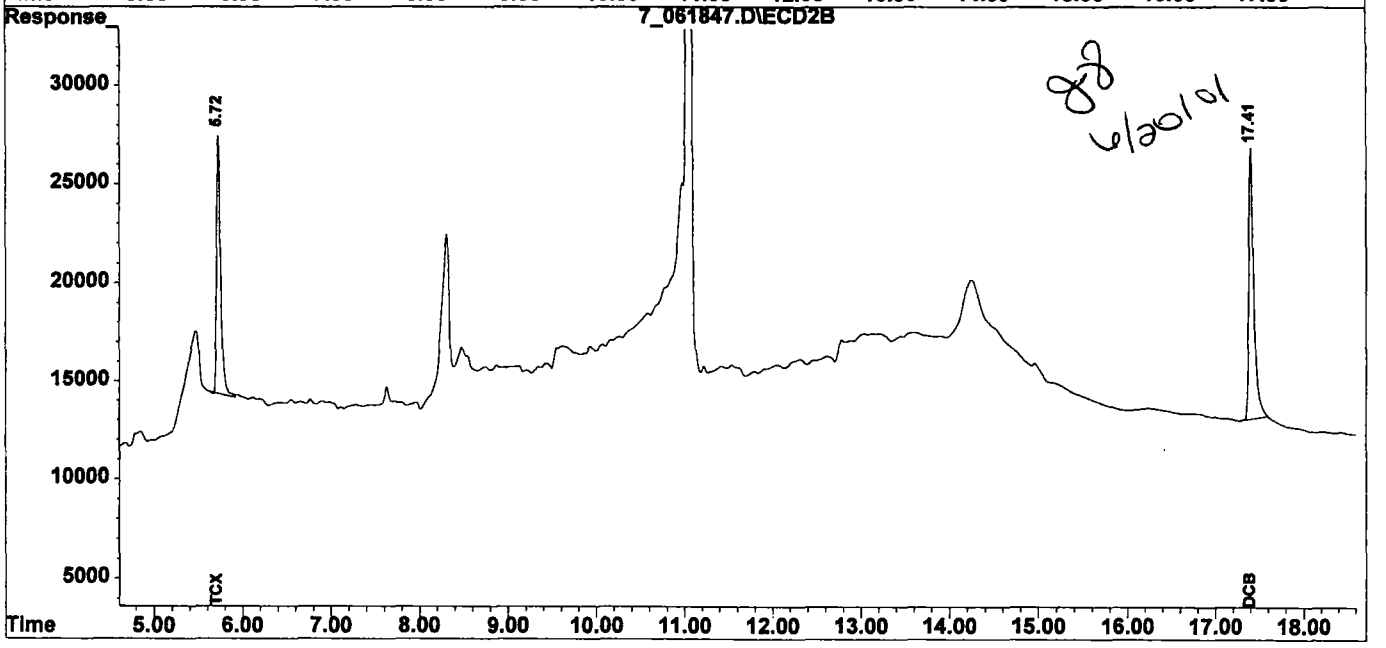
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061847.D\ECD1A.CH Vial: 47
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061847.D\ECD2B.CH
Acq On : 19 Jun 2001 5:35 Operator: DDC
Sample : 46721.54 *E30S7 * Inst : HP_07
Misc : *EPA*30.3G/5.0ML*27 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 10:23 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

Quantitation Report

```
Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061847.D\ECD1A.CH Vial: 47
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061847.D\ECD2B.CH
Acq On    : 19 Jun 2001   5:35                        Operator: DDC
Sample    : 46721.54  *E30S7  *                       Inst    : HP_07
Misc      : *EPA*30.3G/5.0ML*27                       Dilution: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e
Quant Time: Jun 19 10:23 2001  Quant Results File: XPCBF18.RES

Method       : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path   : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update  : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj.      : 0.5uL
Signal #1 Phase : PEST              Signal #2 Phase: PEST II
Signal #1 Info  : .32 mm            Signal #2 Info : .32 mm
Signal #1 Inst  : HP_07A            Signal #2 Inst : HP_07B

   Compound            RT#1    RT#2    Resp#1   Resp#2    ug/Kg      ug/Kg
---------------------------------------------------------------------------

System Monitoring Compounds:
1) S  TCX                 5.81f  5.72    309023   429615    6.795      7.822
Spiked Amount   9.042                     Recovery     =    75.15%    86.51%
22) S  DCB               16.87  17.41    333608   552373    9.613      15.3  #
Spiked Amount   9.042                     Recovery     =   106.31%   169.21%

Target Compounds:
```

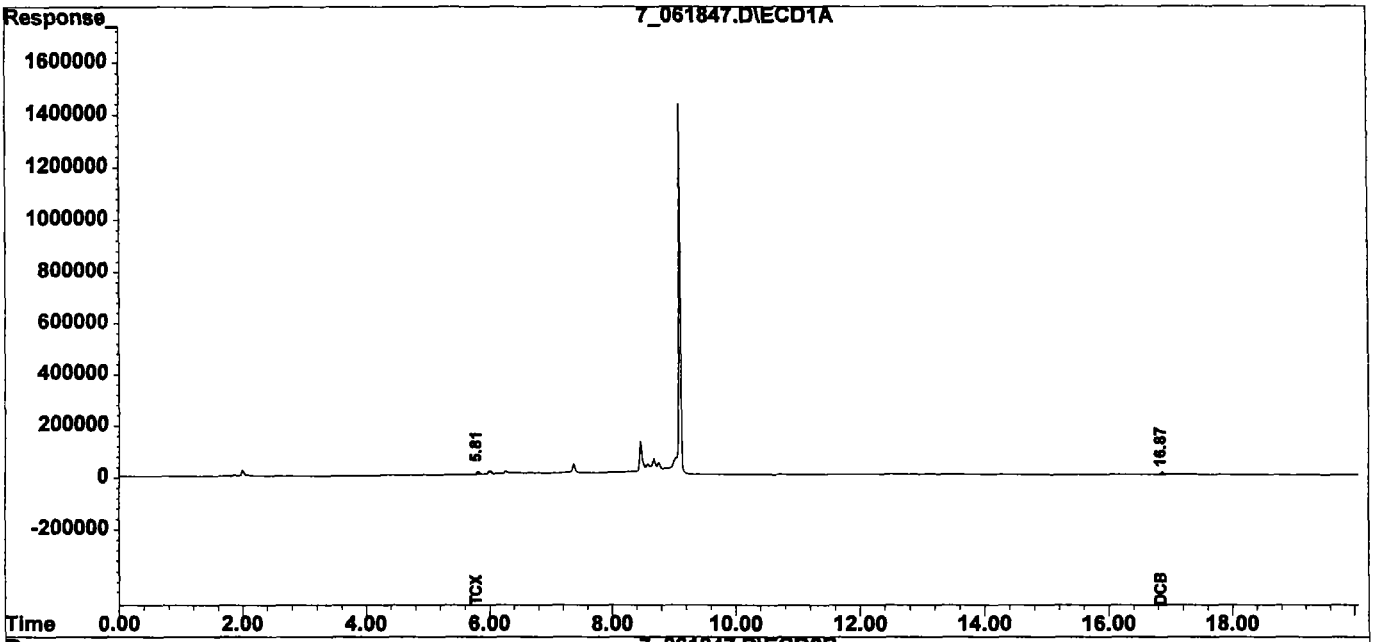
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

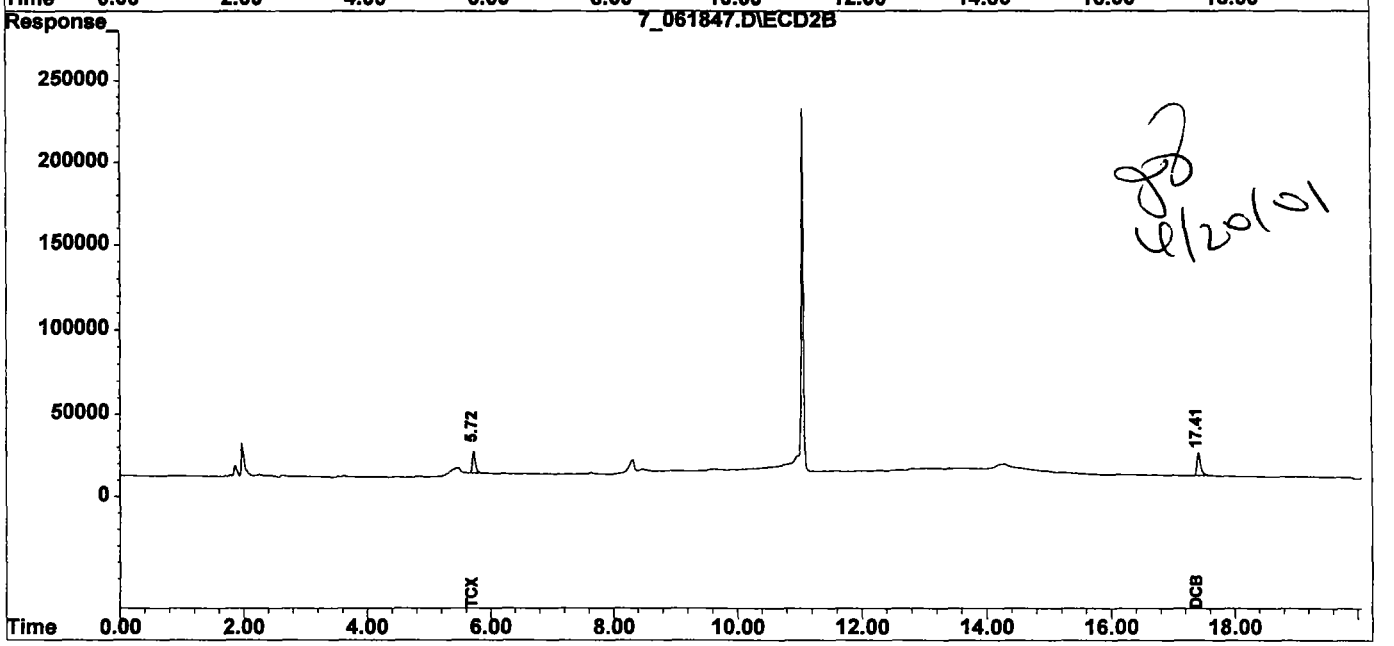
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061847.D\ECD1A.CH Vial: 47
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061847.D\ECD2B.CH
Acq On : 19 Jun 2001 5:35 Operator: DDC
Sample : 46721.54 *E30S7 * Inst : HP_07
Misc : *EPA*30.3G/5.0ML*27 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 10:23 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30S8

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Matrix: (soil/water) SOIL Lab Sample ID: 46721.55

Sample wt/vol: 31.9 (g/mL) G Lab File ID:_____

% Moisture: 46 decanted: (Y/N) __ Date Received: 06/08/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/09/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	57	U
11104-28-2	Aroclor-1221	57	U
11141-16-5	Aroclor-1232	57	U
53469-21-9	Aroclor-1242	57	U
12672-29-6	Aroclor-1248	57	U
11097-69-1	Aroclor-1254	57	U
11096-82-5	Aroclor-1260	57	U
Surrogate amount spiked		11.61	

TBS 7/16/01

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061848.D\ECD1A.CH Vial: 48
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061848.D\ECD2B.CH
Acq On : 19 Jun 2001 5:59 Operator: DDC
Sample : 46721.55 *E30S8 * Inst : HP_07
Misc : *EPA*31.9G/5.0ML*46 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 10:19 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.80	5.72	455114	460547	12.9	10.8	
	Spiked Amount 11.610			Recovery	=	111.11%	93.02%	
22)	S DCB	16.87	17.40	239474	746510	8.861	26.5	#
	Spiked Amount 11.610			Recovery	=	76.32%	228.24%	

Target Compounds:

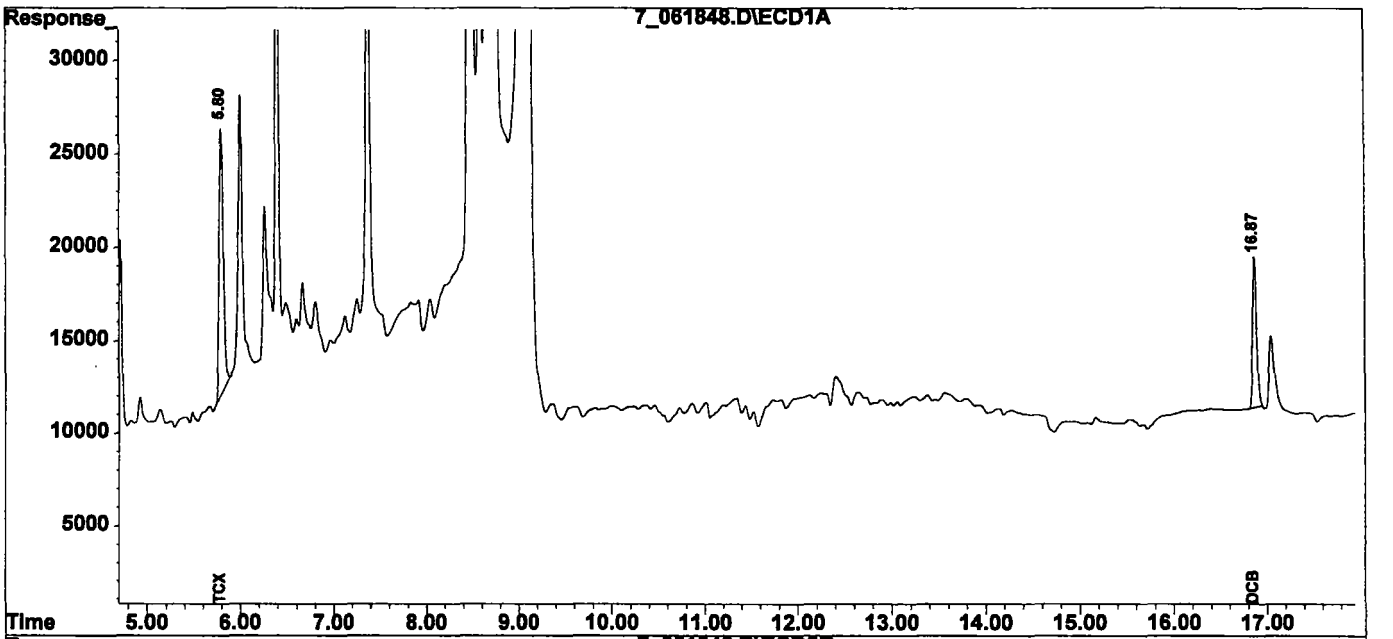
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

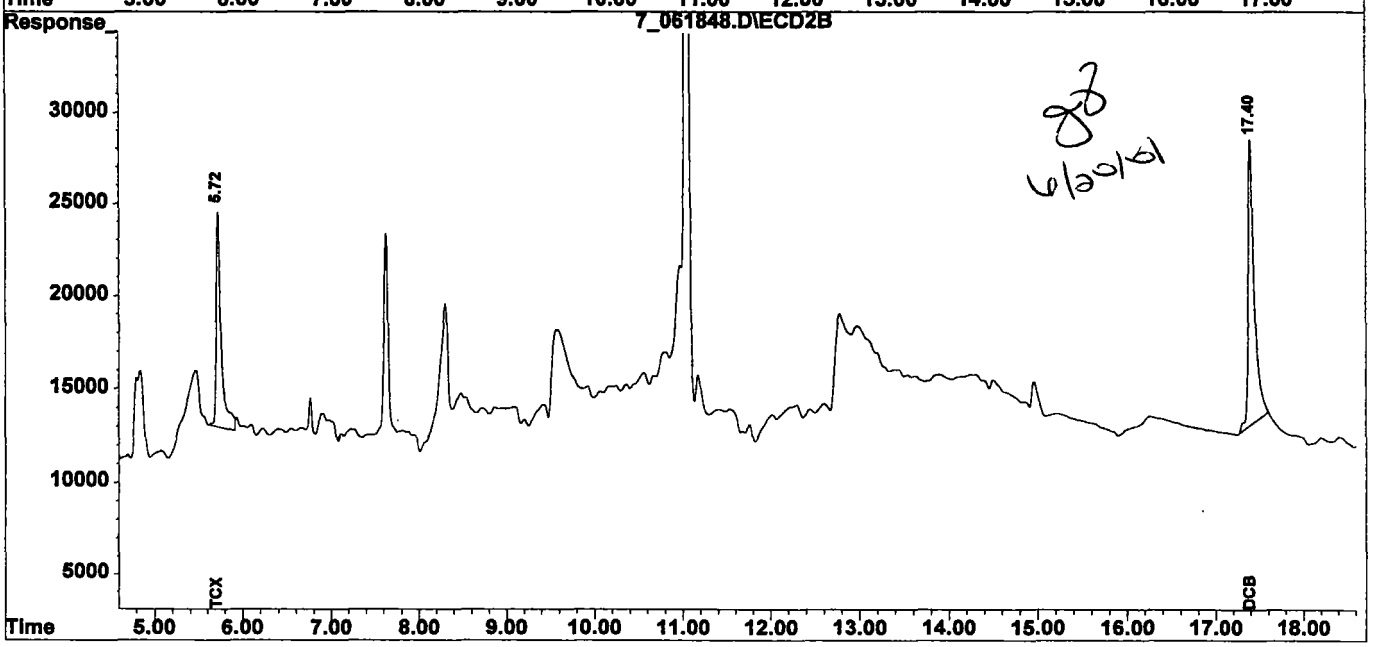
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061848.D\ECD1A.CH Vial: 48
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061848.D\ECD2B.CH
Acq On : 19 Jun 2001 5:59 Operator: DDC
Sample : 46721.55 *E30S8 * Inst : HP_07
Misc : *EPA*31.9G/5.0ML*46 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 10:19 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





Quantitation Report

```
Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061848.D\ECD1A.CH Vial: 48
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061848.D\ECD2B.CH
Acq On    : 19 Jun 2001   5:59                        Operator: DDC
Sample    : 46721.55  *E30S8  *                       Inst    : HP_07
Misc      : *EPA*31.9G/5.0ML*46                       Dilution: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e
Quant Time: Jun 19 10:19 2001  Quant Results File: XPCBF18.RES

Method       : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path   : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update  : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj.     : 0.5uL
Signal #1 Phase : PEST              Signal #2 Phase: PEST II
Signal #1 Info  : .32 mm            Signal #2 Info : .32 mm
Signal #1 Inst  : HP_07A            Signal #2 Inst : HP_07B
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.80	5.72	455114	460547	12.9	10.8	
	Spiked Amount 11.610			Recovery	=	111.11%	93.02%	
22)	S DCB	16.87	17.40	239474	746510	8.861	26.5	#
	Spiked Amount 11.610			Recovery	=	76.32%	228.24%	
	Target Compounds:							

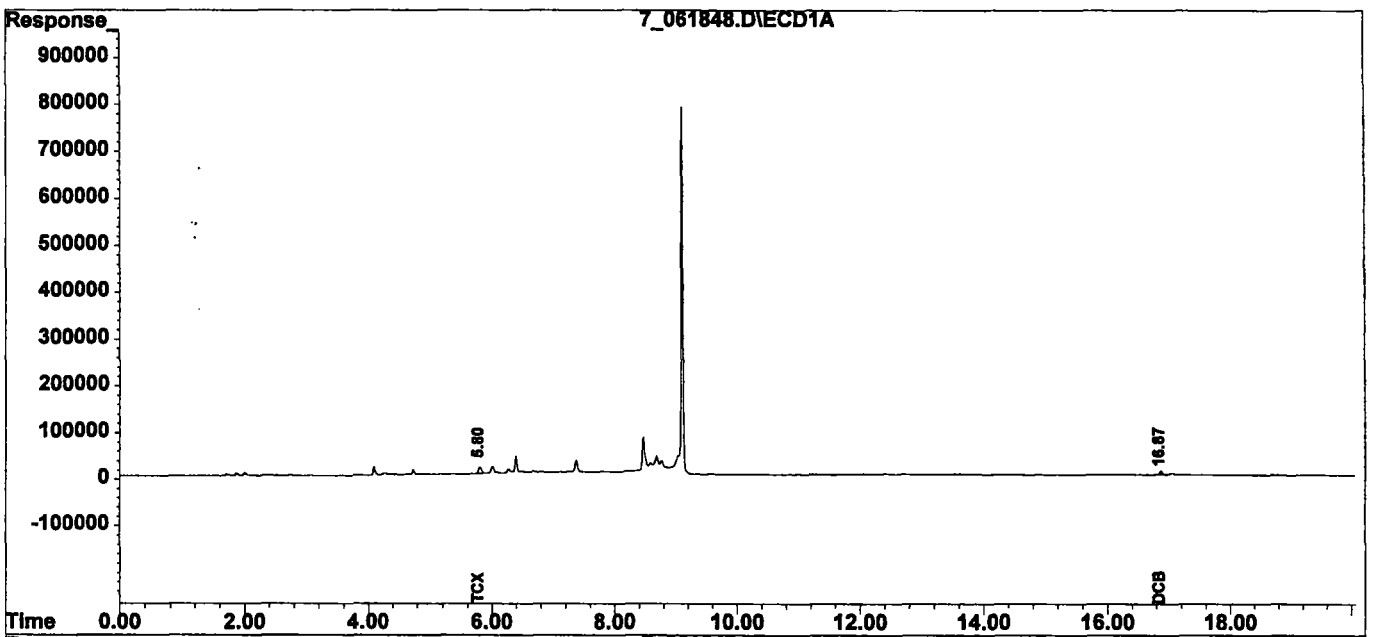
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

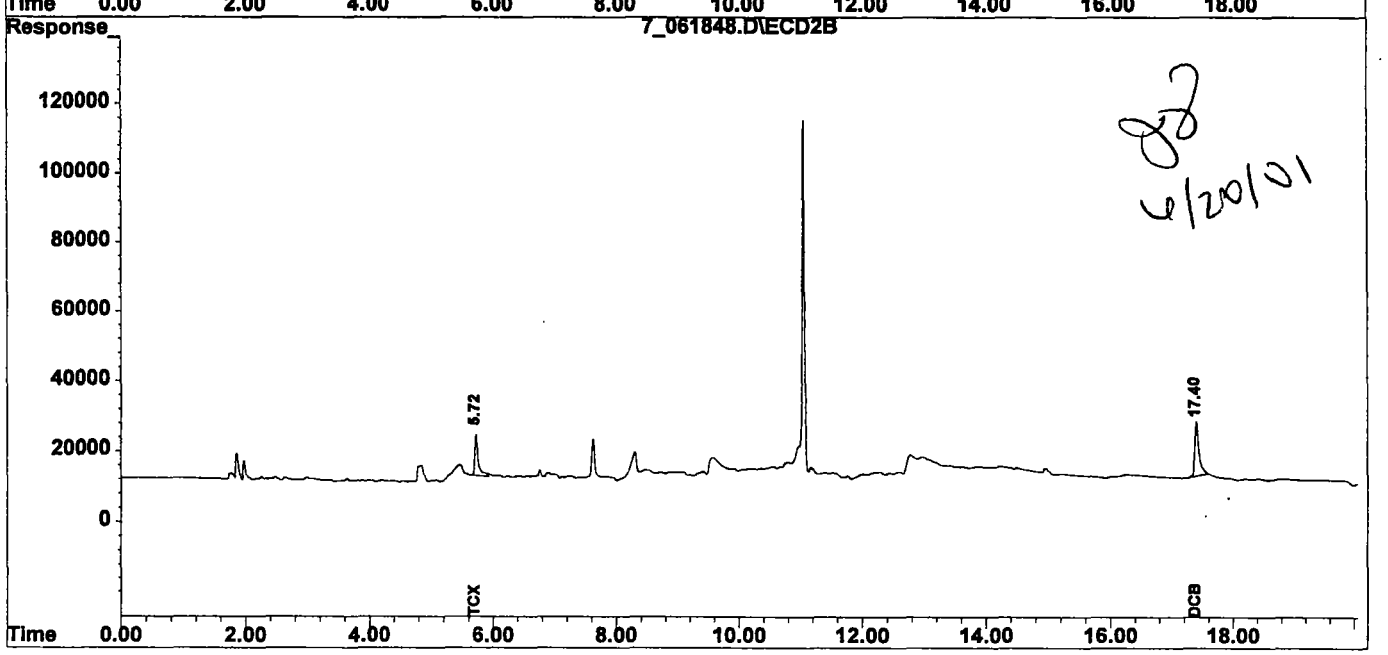
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061848.D\ECD1A.CH Vial: 48
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061848.D\ECD2B.CH
Acq On : 19 Jun 2001 5:59 Operator: DDC
Sample : 46721.55 *E30S8 * Inst : HP_07
Misc : *EPA*31.9G/5.0ML*46 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 10:19 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30S9

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Matrix: (soil/water) SOIL Lab Sample ID: 46732.01

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

% Moisture: 8 decanted: (Y/N) __ Date Received: 06/09/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/09/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	35	UJ
11104-28-2	Aroclor-1221	35	UJ
11141-16-5	Aroclor-1232	35	UJ
53469-21-9	Aroclor-1242	44	PJ
12672-29-6	Aroclor-1248	35	UJ
11097-69-1	Aroclor-1254	13	J
11096-82-5	Aroclor-1260	35	UJ
Surrogate amount spiked		7.06	

TBS
7/13/01

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061849.D\ECD1A.CH Vial: 49
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061849.D\ECD2B.CH
Acq On : 19 Jun 2001 6:23 Operator: DDC
Sample : 46732.01 *E30S9 * Inst : HP_07
Misc : *EPA*30.8G/5.0ML*8 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 10:23 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.81f	5.72	279743	386944	4.802	5.500	
	Spiked Amount 7.058			Recovery	=	68.03%	77.92%	
22)	S DCB	16.87	17.41	315384	417397	7.094	9.010	#
	Spiked Amount 7.058			Recovery	=	100.51%	127.65%	
	Target Compounds:							
7)	L4 Aroclor-1242	9.20	7.72	65594	104198	58.8	31.9	#
	L4 Aroclor-1242 {2}	0.00	9.26	0	29339	N.D. d	26.7	#
	L4 Aroclor-1242 {3}	0.00	10.05	0	42170	N.D. d	55.2	#
10)	L4 Aroclor-1242 {4}	10.44	10.55	27404	18666	45.7	62.3	#
11)	L4 Aroclor-1242 {5}	11.84	0.00	57307	0	127.2	N.D. d	#
	Sum Aroclor-1242			150305	194372	231.8	176.0	
	Average Aroclor-1242					77.256	43.991	
12)	L6 Aroclor-1254	10.55	0.00	40566	0	20.5	N.D. d	#
13)	L6 Aroclor-1254 {2}	11.49	11.26	12540	48230	12.8	15.3	
14)	L6 Aroclor-1254 {3}	12.22	12.23	19677	74031	9.469	18.0	#
15)	L6 Aroclor-1254 {4}	12.44	13.06	29515	48102	11.6	19.8	#
16)	L6 Aroclor-1254 {5}	12.81	0.00	37926	0	11.8	N.D. d	#
	Sum Aroclor-1254			140224	170363	66.2	53.1	
	Average Aroclor-1254					13.243	17.698	

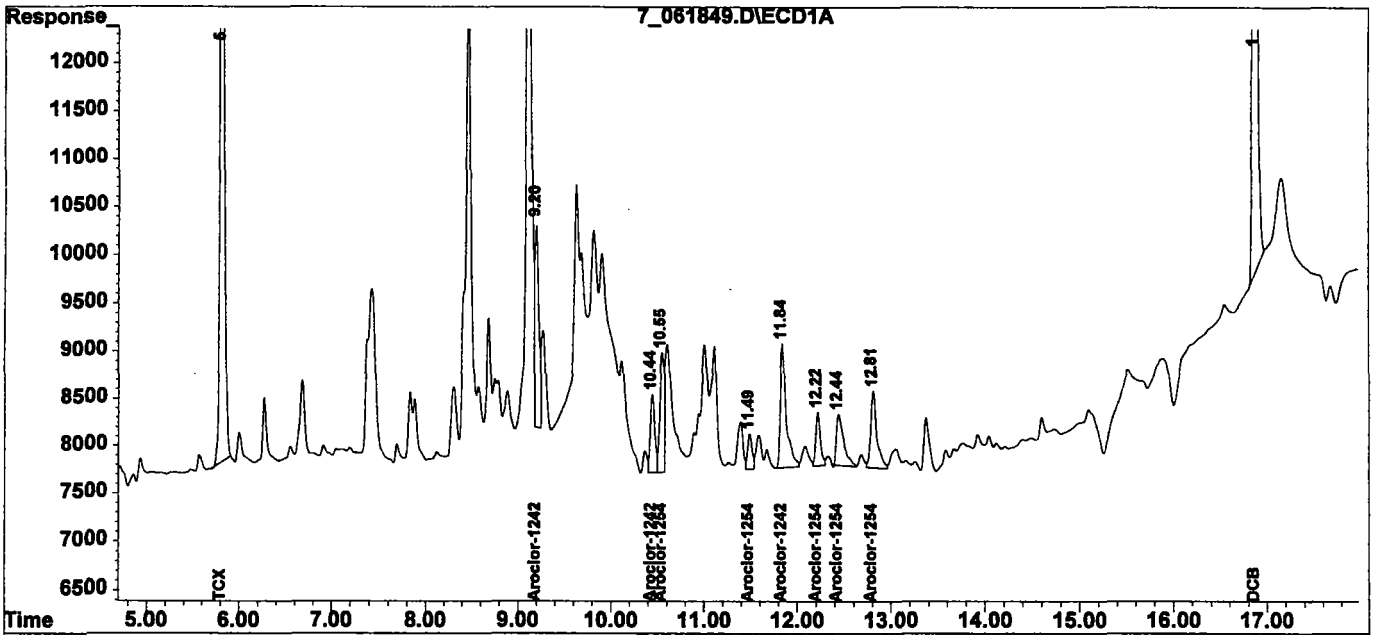
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

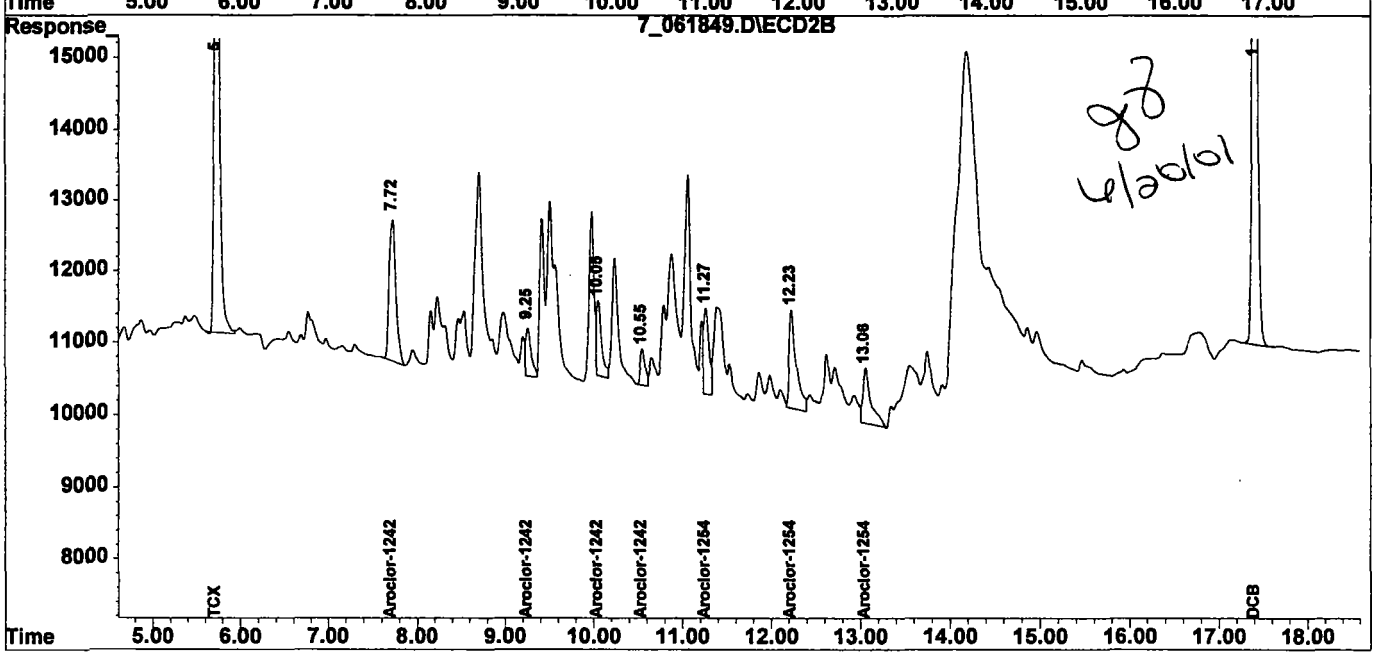
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061849.D\ECD1A.CH Vial: 49
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061849.D\ECD2B.CH
Acq On : 19 Jun 2001 6:23 Operator: DDC
Sample : 46732.01 *E30S9 * Inst : HP_07
Misc : *EPA*30.8G/5.0ML*8 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 10:23 2001 Quant Results File: XPCBF18.RES

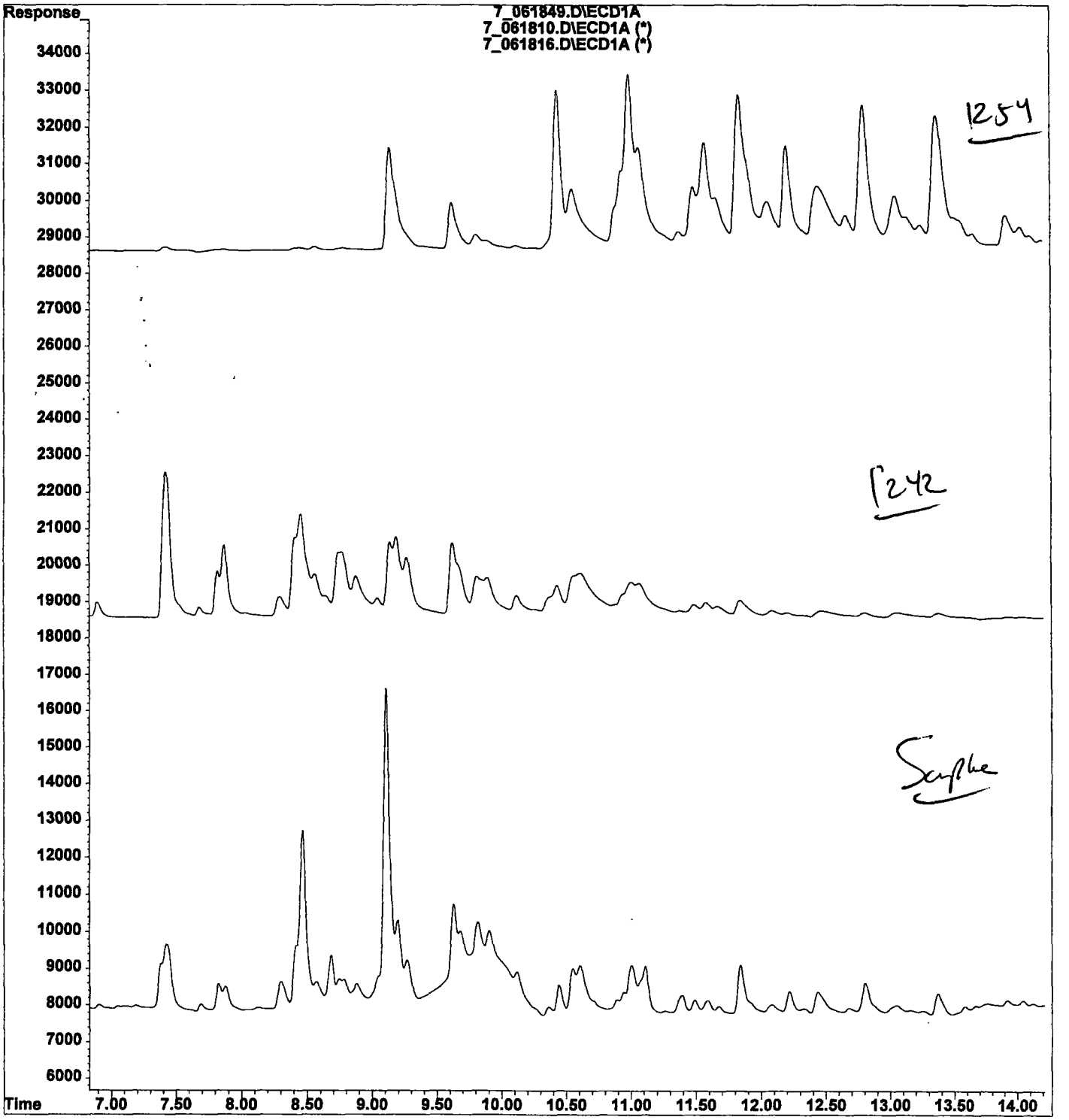
Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061849.D
Operator : DDC
Acquired : 19 Jun 2001 6:23 using AcqMethod OLM03.M
Instrument : HP_07
Sample Name: 46732.01 *E30S9 *
Misc Info : *EPA*30.8G/5.0ML*8
Vial Number: 49



1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30T0

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Matrix: (soil/water) SOIL Lab Sample ID: 46732.02

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

% Moisture: 44 decanted: (Y/N) __ Date Received: 06/09/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/09/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/19/01

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	58	U ~~J~~
11104-28-2	Aroclor-1221	58	U ~~J~~
11141-16-5	Aroclor-1232	58	U ~~J~~
53469-21-9	Aroclor-1242	~~2600~~	2700DJ ~~E~~
12672-29-6	Aroclor-1248	58	U ~~J~~
11097-69-1	Aroclor-1254	~~560~~	~~800DJ~~ ~~E~~ 560 J
11096-82-5	Aroclor-1260	~~190~~	~~300 J~~ ~~E~~ 190 J 7/16/01
Surrogate amount spiked		11.63	

TBS 7/13/01 apply this results

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061856.D\ECD1A.CH Vial: 56
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061856.D\ECD2B.CH
Acq On : 19 Jun 2001 9:11 Operator: DDC
Sample : 46732.02 *E30T0 * Inst : HP_07
Misc : *EPA*30.7G/5.0ML*44 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 12:47 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.81	5.72	418742	466187	11.8	10.9	
	Spiked Amount 11.633			Recovery	=	101.43%	93.70%	
22)	S DCB	16.86	17.40	356293	586092	13.2	20.9	#
	Spiked Amount 11.633			Recovery	=	113.47%	179.66%	
	Target Compounds:							
7)	L4 Aroclor-1242	9.19	7.71	1972953	7102297	2915.6 E	3579.8 E	
	L4 Aroclor-1242 {2}	9.80	9.25	1186284	1050744	2564.4 E	1573.2 E#	
	L4 Aroclor-1242 {3}	10.11	10.04	637579	2820539	2222.8 E	6081.5 E#	
10)	L4 Aroclor-1242 {4}	10.43	0.00	972552	0	2674.4 E	N.D. d	#
	Sum Aroclor-1242			4769368	10973580	10377.2	11234.6	
	Average Aroclor-1242					2594.288	3744.853	
13)	L6 Aroclor-1254 {2}	11.48	11.25	440880	1778845	744.3	932.2	#
14)	L6 Aroclor-1254 {3}	12.21	12.21	469055	3044668	372.0	1218.5 E#	
15)	L6 Aroclor-1254 {4}	12.41	13.04	966841	1035880	624.2	702.2	
16)	L6 Aroclor-1254 {5}	12.79	13.38f	973575	1155451	501.0	804.8	#
	Sum Aroclor-1254			2850351	7014845	2241.5	3657.8	
	Average Aroclor-1254					560.386	914.440	
17)	L7 Aroclor-1260	12.21	12.61	469055	1050505	210.1	375.5	#
18)	L7 Aroclor-1260 {2}	12.79	13.04	973575	1035880	262.9	395.6	#
19)	L7 Aroclor-1260 {3}	13.35f	0.00	934076	0	322.9	N.D. d	#
20)	L7 Aroclor-1260 {4}	14.03	14.43	100349	326182	72.9	204.1	#
21)	L7 Aroclor-1260 {5}	14.59	14.86	290938	536368	95.0	199.3	#
	Sum Aroclor-1260			2767994	2948936	560.6	683.2	
	Average Aroclor-1260					192.751	293.626	

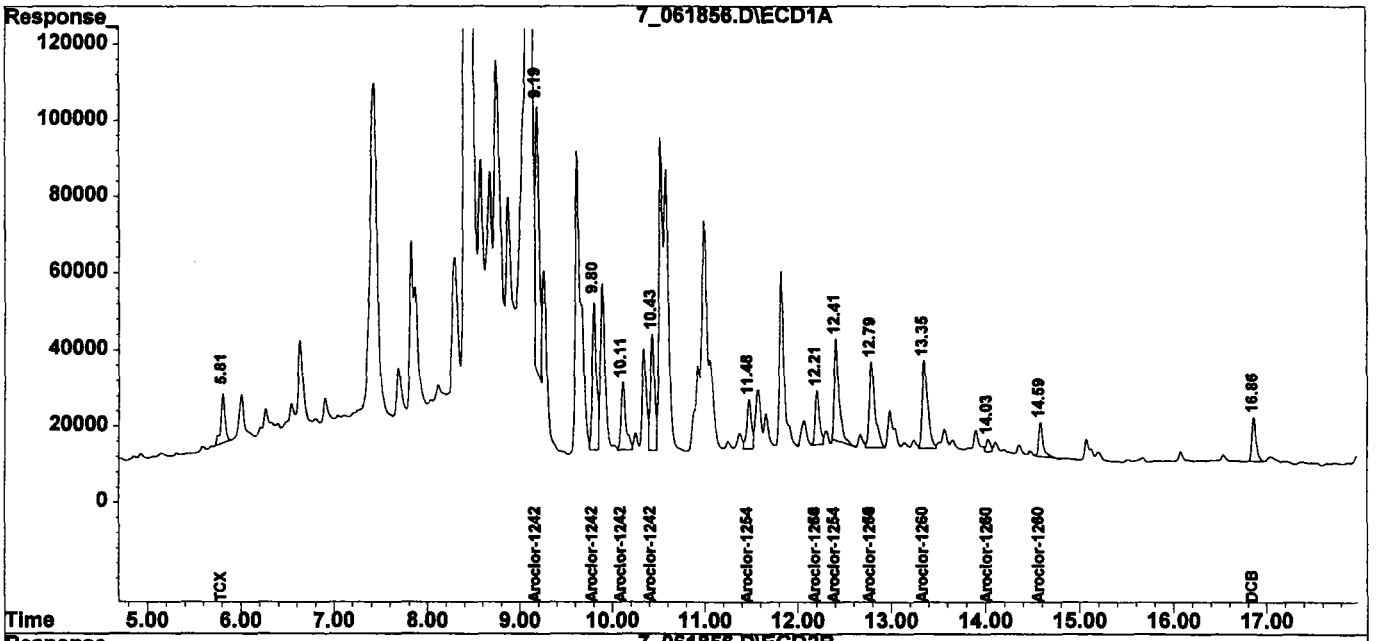
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

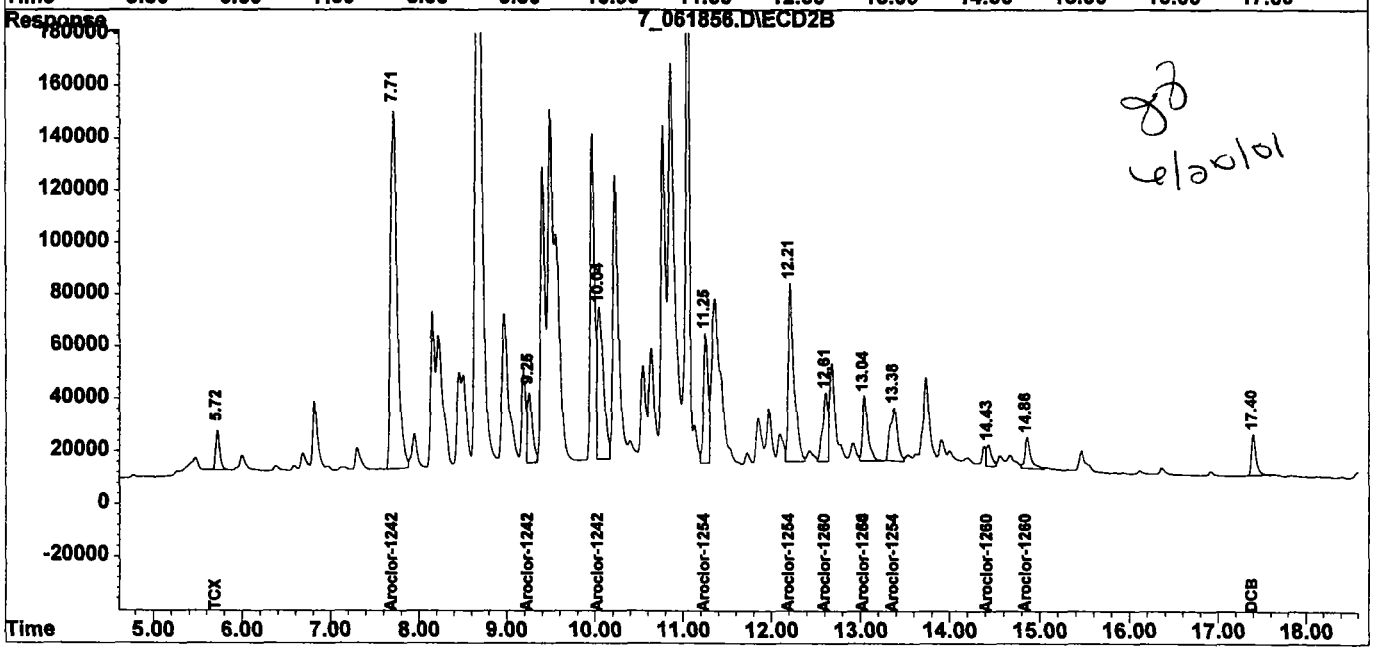
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061856.D\ECD1A.CH Vial: 56
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061856.D\ECD2B.CH
Acq On : 19 Jun 2001 9:11 Operator: DDC
Sample : 46732.02 *E30T0 * Inst : HP_07
Misc : *EPA*30.7G/5.0ML*44 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 12:47 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

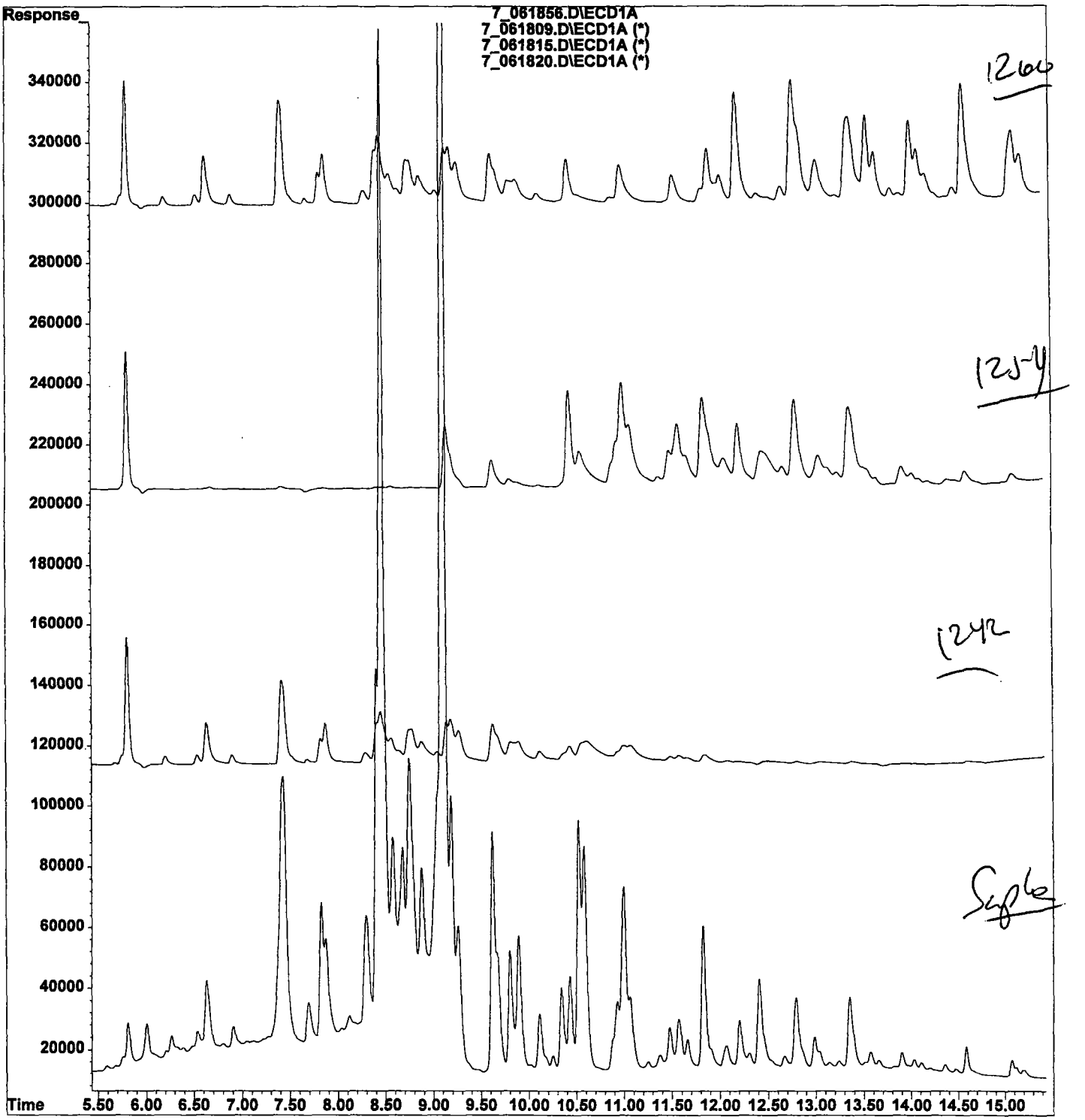
Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061856.D
Operator : DDC
Acquired : 19 Jun 2001 9:11 using AcqMethod OLM03.M
Instrument : HP_07
Sample Name: 46732.02 *E30T0 *
Misc Info : *EPA*30.7G/5.0ML*44
Vial Number: 56



1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30T0DL

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Matrix: (soil/water) SOIL Lab Sample ID: 46732.02DL

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

% Moisture: 44 decanted: (Y/N) __ Date Received: 06/09/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/09/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/19/01

Injection Volume: 0.5(uL) Dilution Factor: 10.0

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	580	UJ
11104-28-2	Aroclor-1221	580	UJ
11141-16-5	Aroclor-1232	580	UJ
53469-21-9	Aroclor-1242	2700	DJ
12672-29-6	Aroclor-1248	580	UJ
11097-69-1	Aroclor-1254	800	DJ
11096-82-5	Aroclor-1260	300	DJ
Surrogate amount spiked		11.63	

TBS 7/13/01

FORM I PCB

Quantitation Report

Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061876.D\ECD1A.CH Vial: 76
Acq On : 19 Jun 2001 17:15 Operator: DDC
Sample : 46732.02DL *E30T0DL * Inst : HP_07
Misc : *EPA*30.7G/5.0ML*44 Dilution: 10.00
IntFile : events.e

Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061876.D\ECD2B.CH Vial: 76
Acq On : 19 Jun 2001 17:15 Operator: DDC
Sample : 46732.02DL Inst : HP_07
Misc : Dilution: 10.00
IntFile : events2.e
Quant Time: Jun 20 9:05 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.81	5.71	10215	10769	2.890	2.523	
	Spiked Amount 11.633			Recovery	=	24.84%	21.69%	
	S DCB	16.87	17.40	8385	17644	3.109	6.277	#
	Spiked Amount 11.633			Recovery	=	26.72%	53.96%	
	Target Compounds:							
7)	L4 Aroclor-1242	9.19	7.71	253694	497367	3749.0	2506.9	#
8)	L4 Aroclor-1242 {2}	9.81	9.25	114008	90181	2464.6	1350.2	#
9)	L4 Aroclor-1242 {3}	10.12	10.05	63346	146865	2208.4	3166.6	#
10)	L4 Aroclor-1242 {4}	10.44	10.54	124833	70475	3432.7	3875.8	
	Sum Aroclor-1242			555881	804888	11854.7	10899.6	
	Average Aroclor-1242					2963.677	2724.909	
12)	L6 Aroclor-1254	10.54	0.00	116349	0	969.2	N.D. d	#
13)	L6 Aroclor-1254 {2}	11.48	11.26	44711	158494	754.8	830.6	
14)	L6 Aroclor-1254 {3}	12.21	12.22	72264	236403	573.2	946.1	#
15)	L6 Aroclor-1254 {4}	12.42	13.05	142509	113757	920.1	771.2	
16)	L6 Aroclor-1254 {5}	12.80	13.34	148599	92348	764.7	643.3	
	Sum Aroclor-1254			524432	601003	3981.9	3191.1	
	Average Aroclor-1254					796.379	797.778	
17)	L7 Aroclor-1260	12.21	12.62	72264	116857	323.7	417.7	#
18)	L7 Aroclor-1260 {2}	12.80	13.05	148599	113757	401.3	434.4	
19)	L7 Aroclor-1260 {3}	13.36	13.74	125088	140629	432.4	523.9	
20)	L7 Aroclor-1260 {4}	14.04	14.43	26894	31641	195.3	198.0	
21)	L7 Aroclor-1260 {5}	14.59	14.86	43688	54739	142.7	203.4	#
	Sum Aroclor-1260			416534	457623	8697.7	10338.6	
	Average Aroclor-1260					299.063	355.484	

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

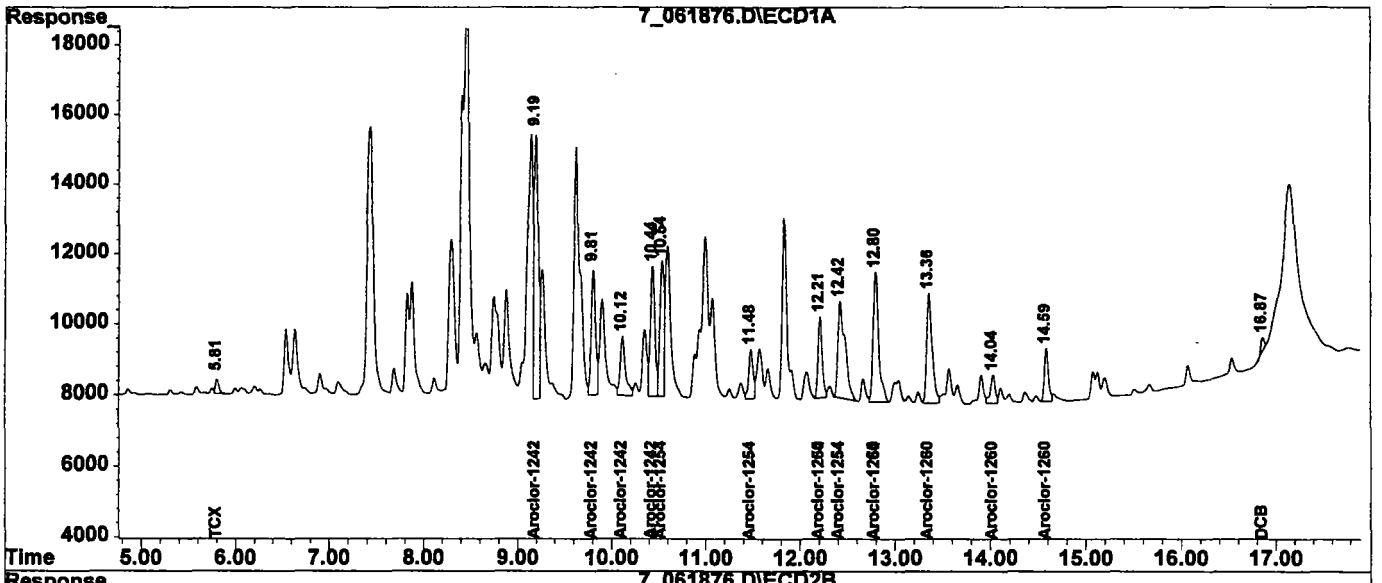
Chromatographic Report

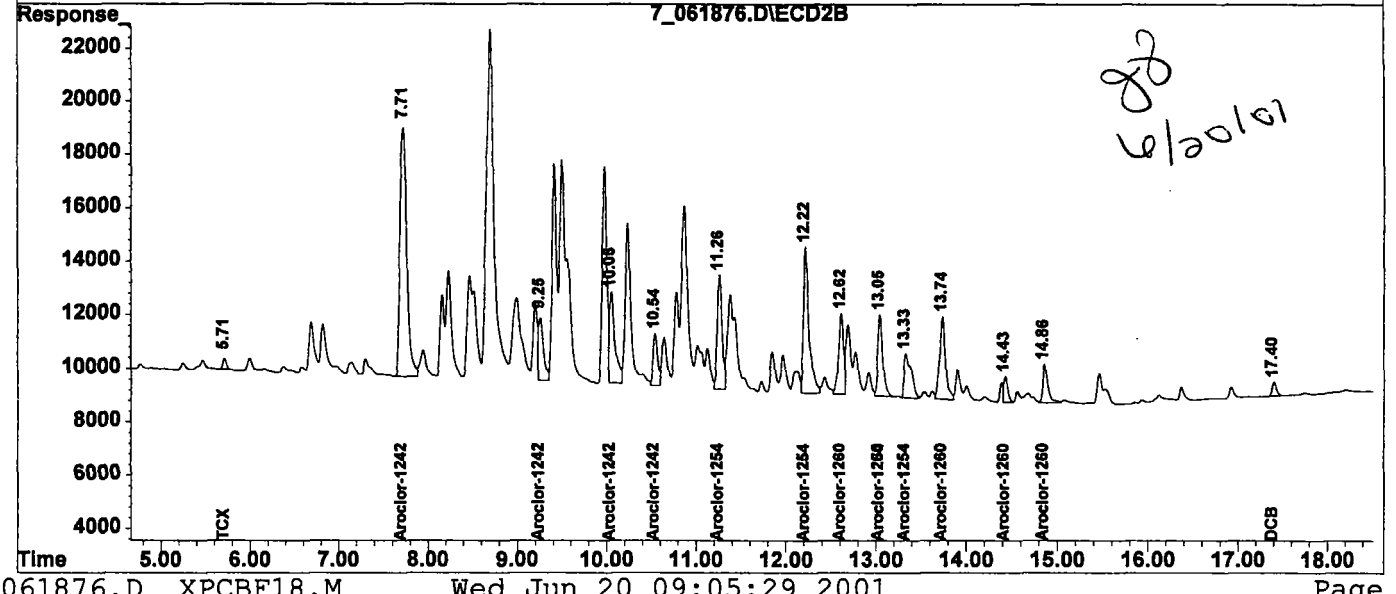
Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061876.D\ECD1A.CH Vial: 76
Acq On : 19 Jun 2001 17:15 Operator: DDC
Sample : 46732.02DL *E30T0DL * Inst : HP_07
Misc : *EPA*30.7G/5.0ML*44 Dilution: 10.00
IntFile : events.e

Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061876.D\ECD2B.CH Vial: 76
Acq On : 19 Jun 2001 17:15 Operator: DDC
Sample : 46732.02DL Inst : HP_07
Misc : Dilution: 10.00
IntFile : events2.e
Quant Time: Jun 20 9:05 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





8
6/20/01

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30T1

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Matrix: (soil/water) SOIL Lab Sample ID: 46732.03

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

% Moisture: 30 decanted: (Y/N) __ Date Received: 06/09/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/09/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	47	U
11104-28-2	Aroclor-1221	47	U
11141-16-5	Aroclor-1232	47	U
53469-21-9	Aroclor-1242	47	U
12672-29-6	Aroclor-1248	47	U
11097-69-1	Aroclor-1254	47	U
11096-82-5	Aroclor-1260	47	U
	Surrogate amount spiked	9.46	

FORM I PCB

Quantitation Report

```
Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061857.D\ECD1A.CH Vial: 57
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061857.D\ECD2B.CH
Acq On    : 19 Jun 2001   9:35                        Operator: DDC
Sample    : 46732.03  *E30T1  *                       Inst    : HP_07
Misc      : *EPA*30.2G/5.0ML*30                       Dilution: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e
Quant Time: Jun 19 12:36 2001  Quant Results File: XPCBF18.RES

Method       : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path   : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update  : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj.     : 0.5uL
Signal #1 Phase : PEST              Signal #2 Phase: PEST II
Signal #1 Info  : .32 mm            Signal #2 Info : .32 mm
Signal #1 Inst  : HP_07A            Signal #2 Inst : HP_07B
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.81	5.72	377694	531269	8.690	10.1	
	Spiked Amount 9.461			Recovery	=	91.85%	106.76%	
22)	S DCB	16.87	17.40	350563	809643	10.6	23.4	#
	Spiked Amount 9.461			Recovery	=	112.04%	247.34%	
	Target Compounds:							

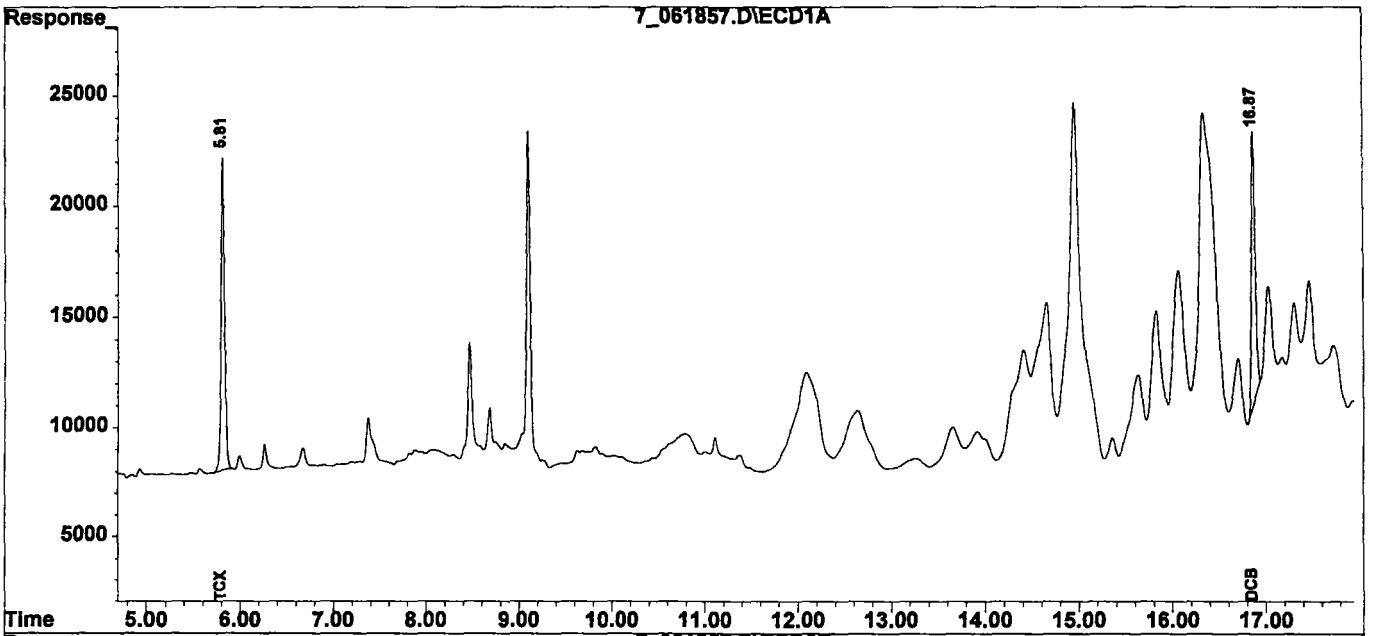
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

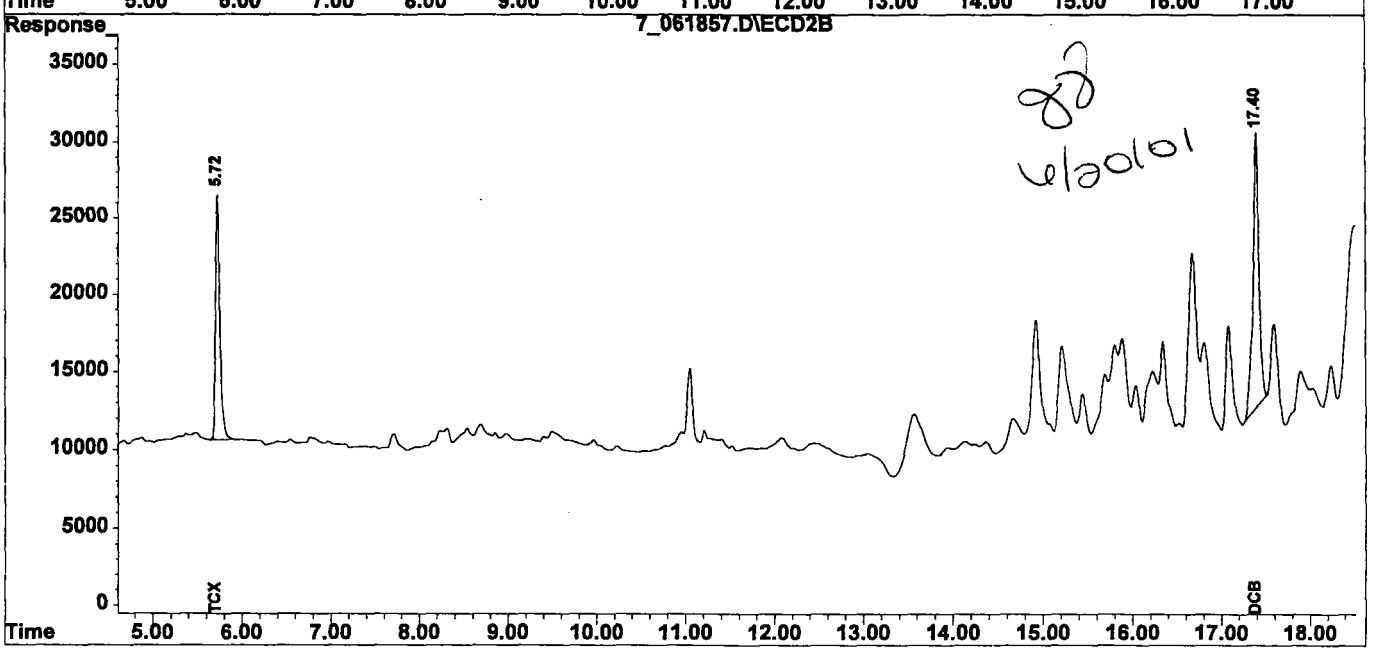
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061857.D\ECD1A.CH Vial: 57
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061857.D\ECD2B.CH
Acq On : 19 Jun 2001 9:35 Operator: DDC
Sample : 46732.03 *E30T1 * Inst : HP_07
Misc : *EPA*30.2G/5.0ML*30 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 12:36 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30T2

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Matrix: (soil/water) SOIL Lab Sample ID: 46732.04

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

% Moisture: 32 decanted: (Y/N) __ Date Received: 06/09/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/09/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	47	U
11104-28-2	Aroclor-1221	47	U
11141-16-5	Aroclor-1232	47	U
53469-21-9	Aroclor-1242	47	U
12672-29-6	Aroclor-1248	47	U
11097-69-1	Aroclor-1254	47	U
11096-82-5	Aroclor-1260	47	U
	Surrogate amount spiked	9.55	

FORM I PCB

Quantitation Report

```
Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061858.D\ECD1A.CH Vial: 58
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061858.D\ECD2B.CH
Acq On    : 19 Jun 2001   9:59                        Operator: DDC
Sample    : 46732.04  *E30T2  *                       Inst    : HP_07
Misc      : *EPA*30.8G/5.0ML*32                       Dilution: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e
Quant Time: Jun 19 12:37 2001  Quant Results File: XPCBF18.RES

Method       : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path   : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update  : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj.      : 0.5uL
Signal #1 Phase : PEST              Signal #2 Phase: PEST II
Signal #1 Info  : .32 mm            Signal #2 Info : .32 mm
Signal #1 Inst  : HP_07A            Signal #2 Inst : HP_07B
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.81	5.72	248746	335036	5.777	6.442	
	Spiked Amount 9.549			Recovery	=	60.50%	67.46%	
22)	S DCB	16.87	17.40	299763	441223	9.123	12.9	#
	Spiked Amount 9.549			Recovery	=	95.54%	135.09%	
	Target Compounds:							

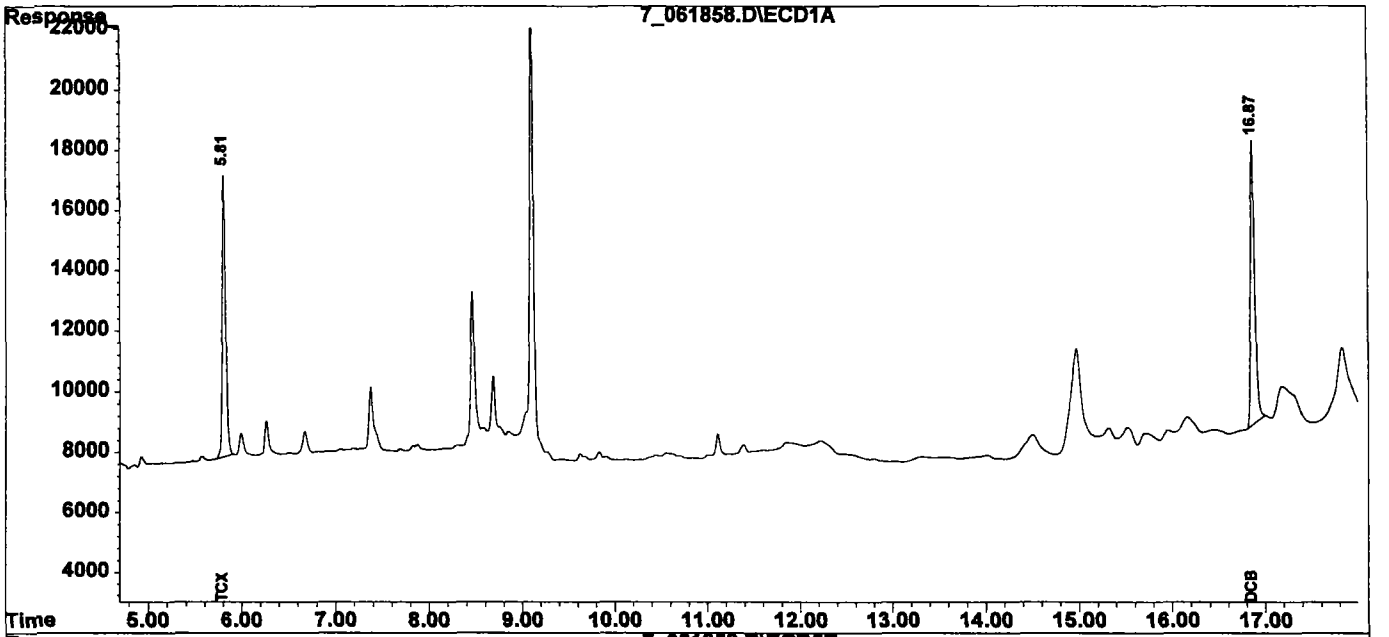
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

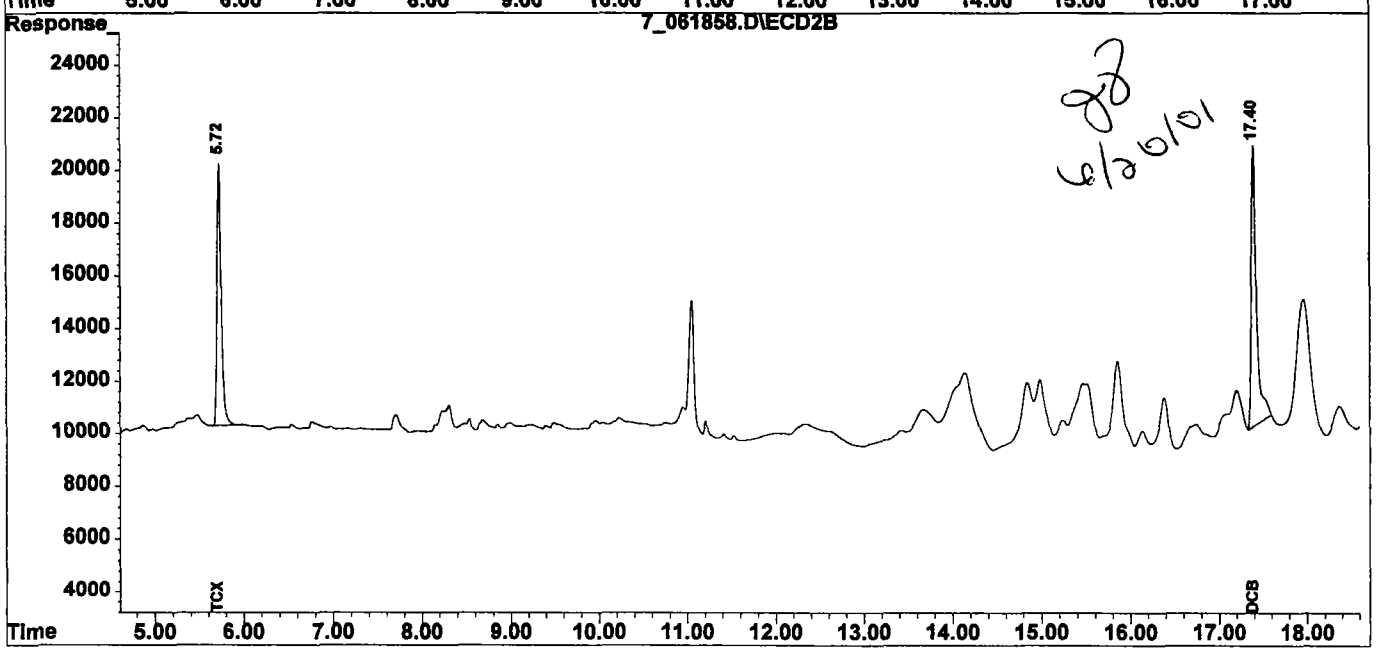
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061858.D\ECD1A.CH Vial: 58
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061858.D\ECD2B.CH
Acq On : 19 Jun 2001 9:59 Operator: DDC
Sample : 46732.04 *E30T2 * Inst : HP_07
Misc : *EPA*30.8G/5.0ML*32 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 12:37 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30T3

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Matrix: (soil/water) SOIL Lab Sample ID: 46732.05

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

% Moisture: 28 decanted: (Y/N) __ Date Received: 06/09/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/09/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/19/01

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	45	U
11104-28-2	Aroclor-1221	45	U
11141-16-5	Aroclor-1232	45	U
53469-21-9	Aroclor-1242	45	U
12672-29-6	Aroclor-1248	45	U
11097-69-1	Aroclor-1254	45	U
11096-82-5	Aroclor-1260	45	U
Surrogate amount spiked		9.11	

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061859.D\ECD1A.CH Vial: 59
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061859.D\ECD2B.CH
Acq On : 19 Jun 2001 10:23 Operator: DDC
Sample : 46732.05 *E30T3 * Inst : HP_07
Misc : *EPA*30.5G/5.0ML*28 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 12:38 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	5.81	5.72	275568	370901	6.104	6.802
	Spiked Amount 9.107			Recovery	=	67.02%	74.69%
22)	S DCB	16.86	17.40	316999	394821	9.201	11.0
	Spiked Amount 9.107			Recovery	=	101.03%	120.78%

Target Compounds:

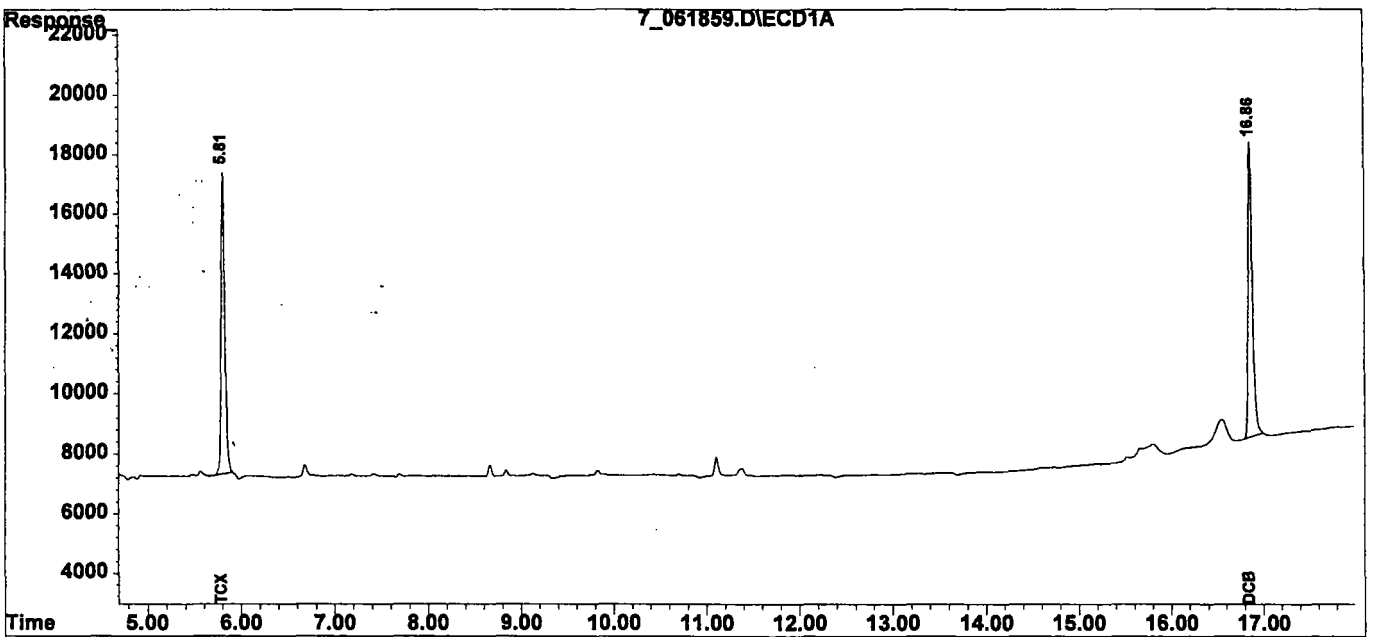
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

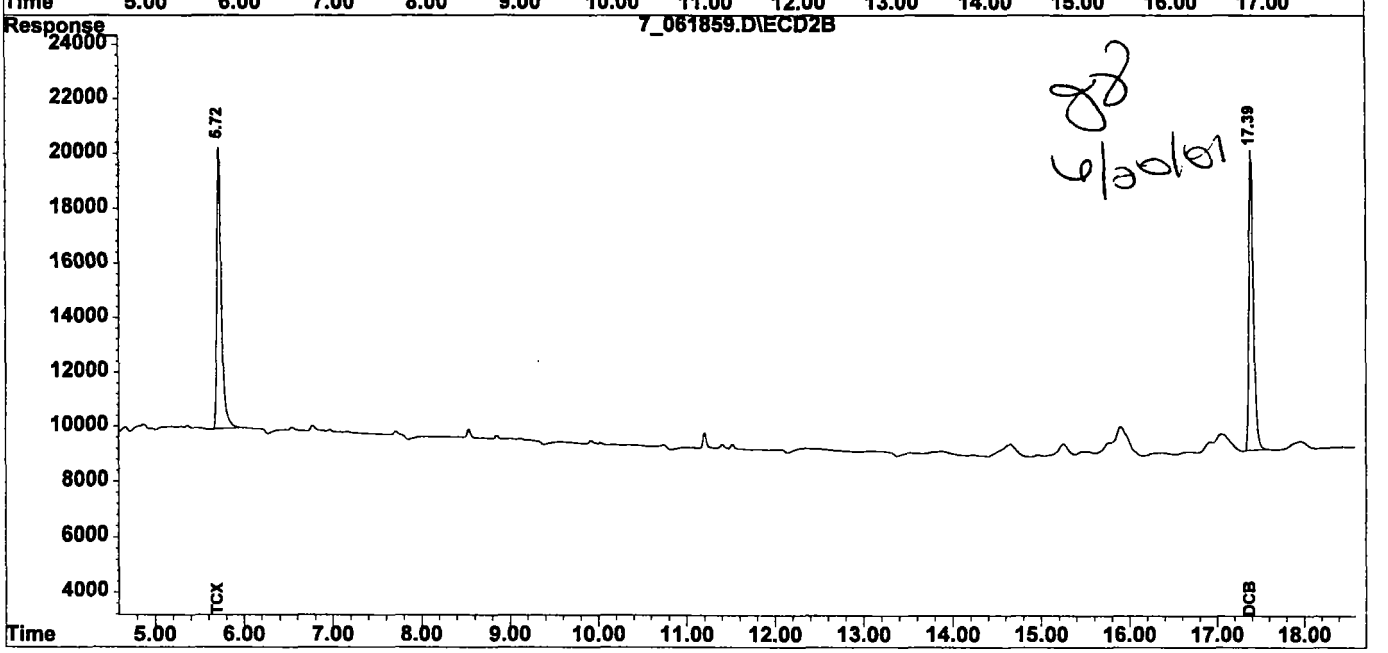
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061859.D\ECD1A.CH Vial: 59
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061859.D\ECD2B.CH
Acq On : 19 Jun 2001 10:23 Operator: DDC
Sample : 46732.05 *E30T3 * Inst : HP_07
Misc : *EPA*30.5G/5.0ML*28 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 12:38 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30T5

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Matrix: (soil/water) SOIL Lab Sample ID: 46732.06

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

% Moisture: 41 decanted: (Y/N) __ Date Received: 06/09/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/09/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	54	U
11104-28-2	Aroclor-1221	54	U
11141-16-5	Aroclor-1232	54	U
53469-21-9	Aroclor-1242	~~1100~~	390 D ~~EJ~~
12672-29-6	Aroclor-1248	54	U
11097-69-1	Aroclor-1254	~~250~~	~~200 DJ~~ 250 J
11096-82-5	Aroclor-1260	~~110~~	~~95 DJ~~ 110 J TBS 7/16/01
Surrogate amount spiked		11.00	

apply this results TBS 7/13/01

FORM I PCB

Quantitation Report

```
Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061860.D\ECD1A.CH Vial: 60
Acq On    : 19 Jun 2001  10:47                        Operator: DDC
Sample    : 46732.06  *E30T5  *                       Inst    : HP_07
Misc      : *EPA*30.8G/5.0ML*41                       Dilution: 1.00
IntFile   : events.e

Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061860.D\ECD2B.CH Vial: 60
Acq On    : 19 Jun 2001  10:47                        Operator: DDC
Sample    : 46732.06                                  Inst    : HP_07
Misc      :                                           Dilution: 1.00
IntFile   : events2.e
Quant Time: Jun 19 14:30 2001  Quant Results File: XPCBF18.RES

Method       : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path   : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update  : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj.     : 0.5uL
Signal #1 Phase : PEST                Signal #2 Phase: PEST II
Signal #1 Info  : .32 mm              Signal #2 Info : .32 mm
Signal #1 Inst  : HP_07A              Signal #2 Inst : HP_07B
```

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
System Monitoring Compounds:						
1) S TCX	5.80	5.71	305751	447173	8.184	9.910
Spiked Amount 11.006			Recovery	=	74.36%	90.04%
S DCB	16.86	17.39	316367	603445	11.1	20.3 #
Spiked Amount 11.006			Recovery	=	100.85%	184.45%
Target Compounds:						
7) L4 Aroclor-1242	9.18	0.00	473889	0	662.5	N.D. d #
9) L4 Aroclor-1242 {3}	0.00	10.04	0	271768	N.D. d	554.4 #
10) L4 Aroclor-1242 {4}	10.43	10.53	331950	115824	863.6 E	602.6 #
11) L4 Aroclor-1242 {5}	11.82	11.24	526861	523181	1824.0 E	2816.2 E#
Sum Aroclor-1242			1332700	910773	3350.2	3973.2
Average Aroclor-1242					1116.721	1324.401
12) L6 Aroclor-1254	10.52	0.00	344251	0	271.3	N.D. d #
13) L6 Aroclor-1254 {2}	11.47	0.00	142362	0	227.4	N.D. d #
14) L6 Aroclor-1254 {3}	12.20	12.20	280976	822197	210.8	311.3 #
15) L6 Aroclor-1254 {4}	0.00	13.03	0	544009	N.D. d	348.9 #
16) L6 Aroclor-1254 {5}	12.78	13.33	587629	166003	286.1	109.4 #
Sum Aroclor-1254			1355219	1532209	995.6	769.6
Average Aroclor-1254					248.895	256.532
17) L7 Aroclor-1260	12.20	12.60	280976	390452	119.1	132.1
18) L7 Aroclor-1260 {2}	12.78	13.03	587629	544009	150.1	196.5 #
19) L7 Aroclor-1260 {3}	13.35f	13.73	550148	654623	179.9	230.7 #
20) L7 Aroclor-1260 {4}	14.02	14.42	81983	133178	56.3	78.8 #
21) L7 Aroclor-1260 {5}	14.58	14.85	206604	232773	63.8	81.8 #
Sum Aroclor-1260			1707340	1955035	313.3	396.2
Average Aroclor-1260					113.852	143.995

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

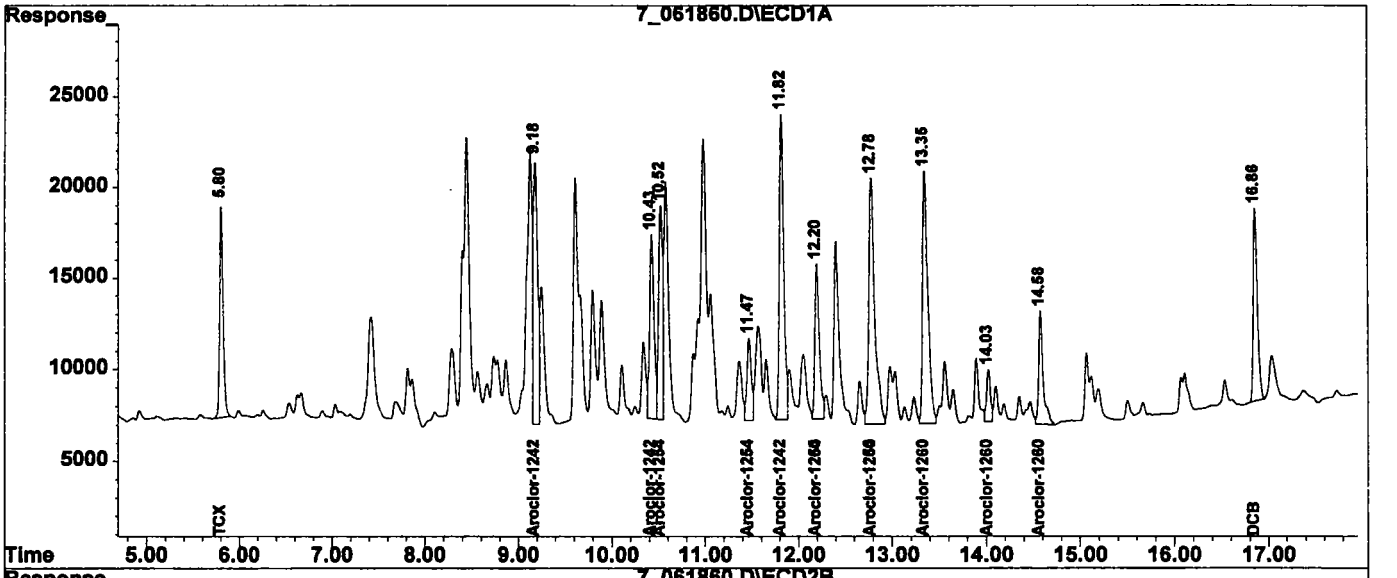
Chromatographic Report

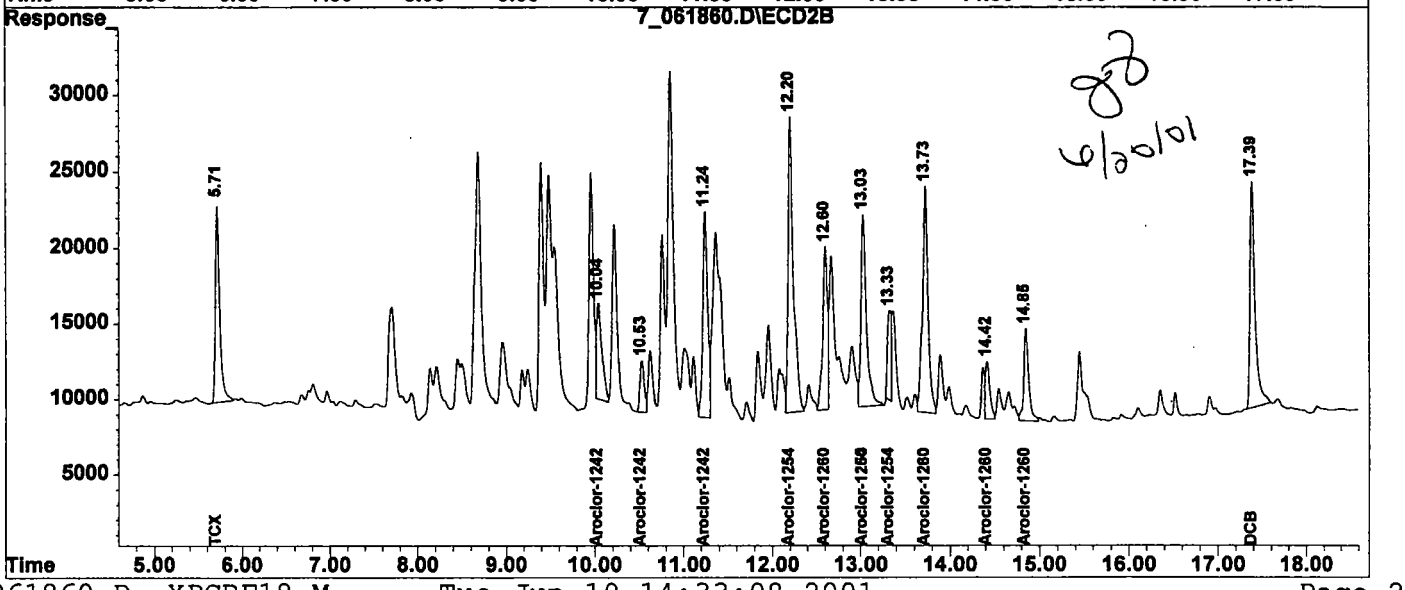
Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061860.D\ECD1A.CH Vial: 60
Acq On : 19 Jun 2001 10:47 Operator: DDC
Sample : 46732.06 *E30T5 * Inst : HP_07
Misc : *EPA*30.8G/5.0ML*41 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061860.D\ECD2B.CH Vial: 60
Acq On : 19 Jun 2001 10:47 Operator: DDC
Sample : 46732.06 Inst : HP_07
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Jun 19 14:30 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

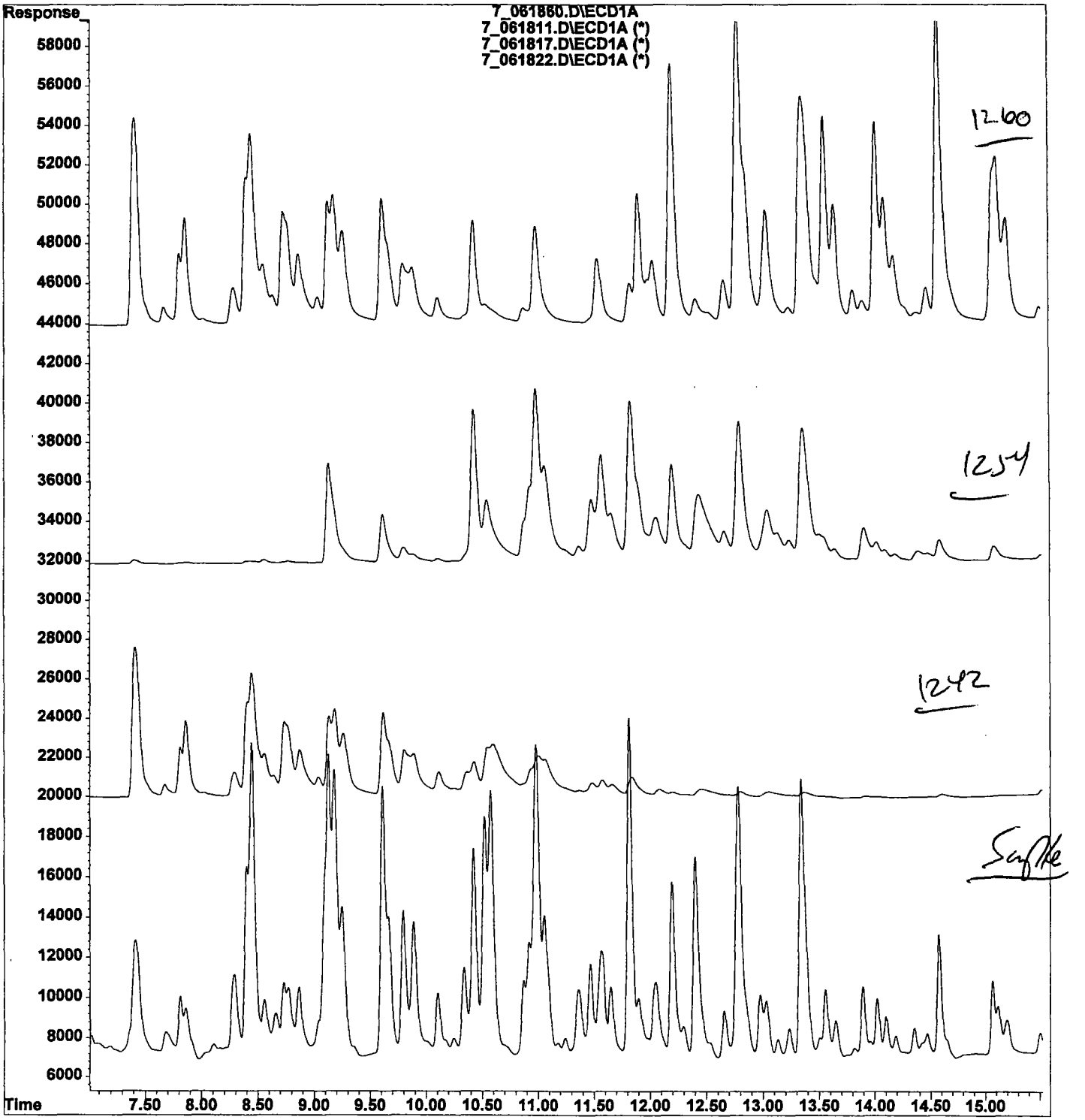
Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061860.D
Operator : DDC
Acquired : 19 Jun 2001 10:47 using AcqMethod OLM03.M
Instrument : HP_07
Sample Name: 46732.06
Misc Info :
Vial Number: 60



1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30T5DL

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Matrix: (soil/water) SOIL Lab Sample ID: 46732.06DL

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

% Moisture: 41 decanted: (Y/N) __ Date Received: 06/09/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/09/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/19/01

Injection Volume: 0.5(uL) Dilution Factor: 5.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	270	UJ
11104-28-2	Aroclor-1221	270	UJ
11141-16-5	Aroclor-1232	270	UJ
53469-21-9	Aroclor-1242	390	DJ
12672-29-6	Aroclor-1248	270	UJ
11097-69-1	Aroclor-1254	200	DJ
11096-82-5	Aroclor-1260	95	DJ
Surrogate amount spiked		11.00	

TBS
7/13/01

FORM I PCB

Quantitation Report

Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061877.D\ECD1A.CH Vial: 77
Acq On : 19 Jun 2001 17:40 Operator: DDC
Sample : 46732.06DL *E30T5DL * Inst : HP_07
Misc : *EPA*30.8G/5.0ML*41 Dilution: 5.00
IntFile : events.e

Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061877.D\ECD2B.CH Vial: 77
Acq On : 19 Jun 2001 17:40 Operator: DDC
Sample : 46732.06DL Inst : HP_07
Misc : Dilution: 5.00
IntFile : events2.e
Quant Time: Jun 20 9:06 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

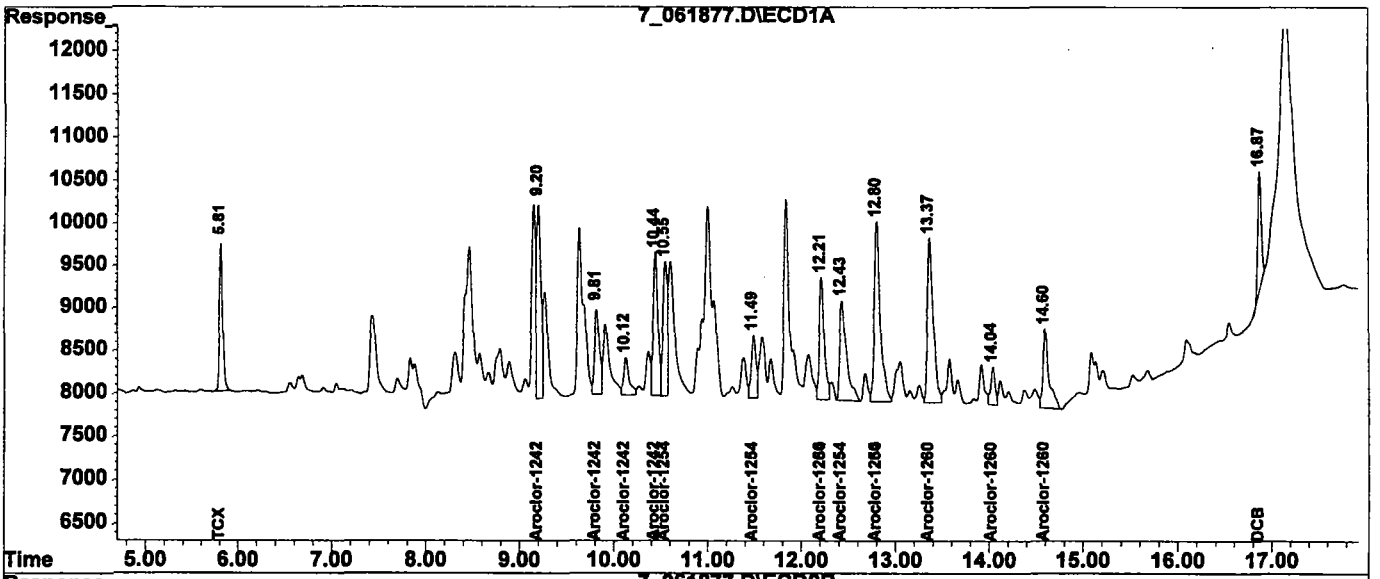
Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

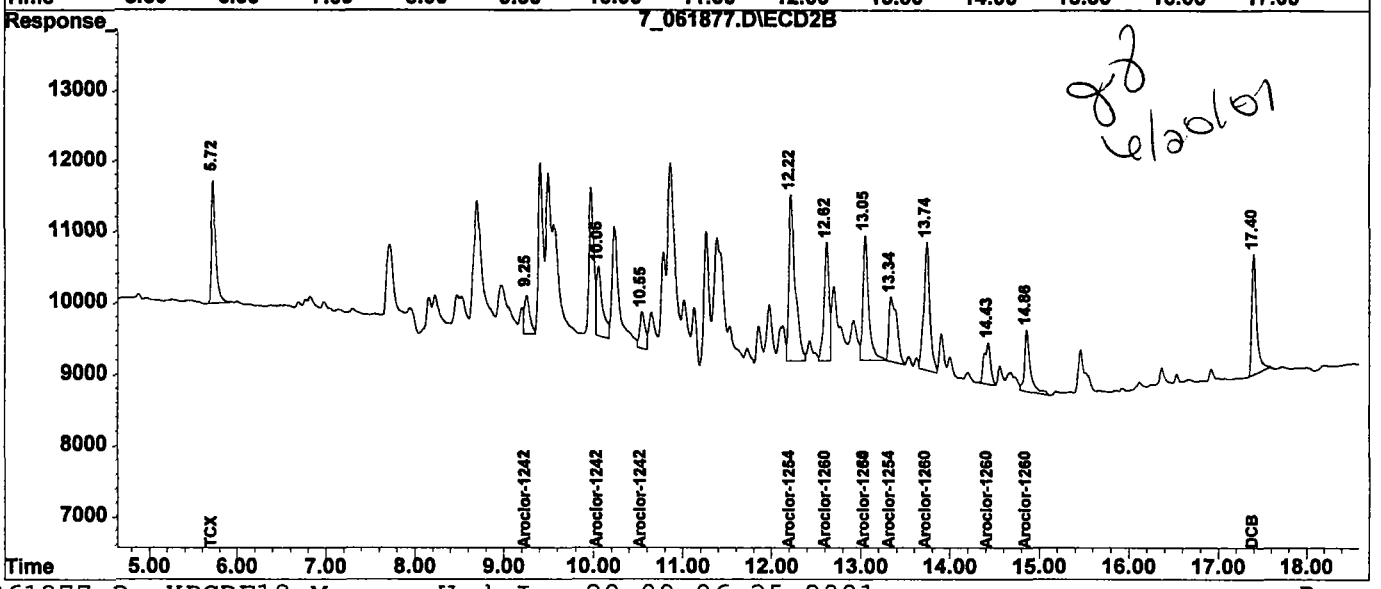
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.81	5.72	44469	58276	5.951	6.458	
	Spiked Amount 11.006			Recovery	=	54.07%	58.68%	
)	S DCB	16.87	17.40	37322	65063	6.545	10.9	#
	Spiked Amount 11.006			Recovery	=	59.47%	99.04%	
	Target Compounds:							
7)	L4 Aroclor-1242	9.20	0.00	77987	0	545.2	N.D. d	#
8)	L4 Aroclor-1242 {2}	9.82	9.25	34939	22962	357.3	162.6	#
9)	L4 Aroclor-1242 {3}	10.12	10.06	17960	45287	296.2	461.9	#
10)	L4 Aroclor-1242 {4}	10.44	10.54	59707	21176	776.7	550.9	#
	Sum Aroclor-1242			190593	89424	1975.3	1175.4	
	Average Aroclor-1242					493.819	391.802	
12)	L6 Aroclor-1254	10.55	0.00	50895	0	200.5	N.D. d	#
13)	L6 Aroclor-1254 {2}	11.49	0.00	25285	0	201.9	N.D. d	#
14)	L6 Aroclor-1254 {3}	12.22	12.22	51839	112195	194.5	212.4	
15)	L6 Aroclor-1254 {4}	12.43	13.05	57855	77434	176.7	248.3	#
16)	L6 Aroclor-1254 {5}	12.80	13.34	92754	55233	225.8	182.0	
	Sum Aroclor-1254			278628	244862	999.4	642.7	
	Average Aroclor-1254					199.885	214.234	
17)	L7 Aroclor-1260	12.22	12.62	51839	62671	109.8	106.0	
18)	L7 Aroclor-1260 {2}	12.80	13.05	92754	77434	118.5	139.9	
19)	L7 Aroclor-1260 {3}	13.37	13.74	83805	83362	137.0	146.9	
20)	L7 Aroclor-1260 {4}	14.04	14.43	14300	28511	49.1	84.4	#
21)	L7 Aroclor-1260 {5}	14.60	14.86	40270	38524	62.2	67.7	
	Sum Aroclor-1260			282968	290504	1311.6	1499.2	
	Average Aroclor-1260					95.337	108.972	

(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

```
Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061877.D\ECD1A.CH Vial: 77
Acq On    : 19 Jun 2001  17:40                        Operator: DDC
Sample    : 46732.06DL  *E30T5DL  *                   Inst    : HP_07
Misc      : *EPA*30.8G/5.0ML*41                       Dilution: 5.00
IntFile   : events.e

Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061877.D\ECD2B.CH Vial: 77
Acq On    : 19 Jun 2001  17:40                        Operator: DDC
Sample    : 46732.06DL                                Inst    : HP_07
Misc      :                                           Dilution: 5.00
IntFile   : events2.e
Quant Time: Jun 20  9:06 2001  Quant Results File: XPCBF18.RES

Method       : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path   : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update  : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj.      : 0.5uL
Signal #1 Phase  : PEST                Signal #2 Phase: PEST II
Signal #1 Info   : .32 mm              Signal #2 Info : .32 mm
Signal #1 Inst   : HP_07A              Signal #2 Inst : HP_07B
```





gg 6/20/01

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30T6

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Matrix: (soil/water) SOIL Lab Sample ID: 46732.07

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

% Moisture: 10 decanted: (Y/N) __ Date Received: 06/09/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/09/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	36	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	46	P J
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	19	J
11096-82-5	Aroclor-1260	8.9	J
	Surrogate amount spiked	7.26	

TBS 7/13/01

FORM I PCB

Quantitation Report

Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061861.D\ECD1A.CH Vial: 61
Acq On : 19 Jun 2001 11:11 Operator: DDC
Sample : 46732.07 *E30T6 * Inst : HP_07
Misc : *EPA*30.6G/5.0ML*10 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061861.D\ECD2B.CH Vial: 61
Acq On : 19 Jun 2001 11:11 Operator: DDC
Sample : 46732.07 Inst : HP_07
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Jun 19 14:32 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

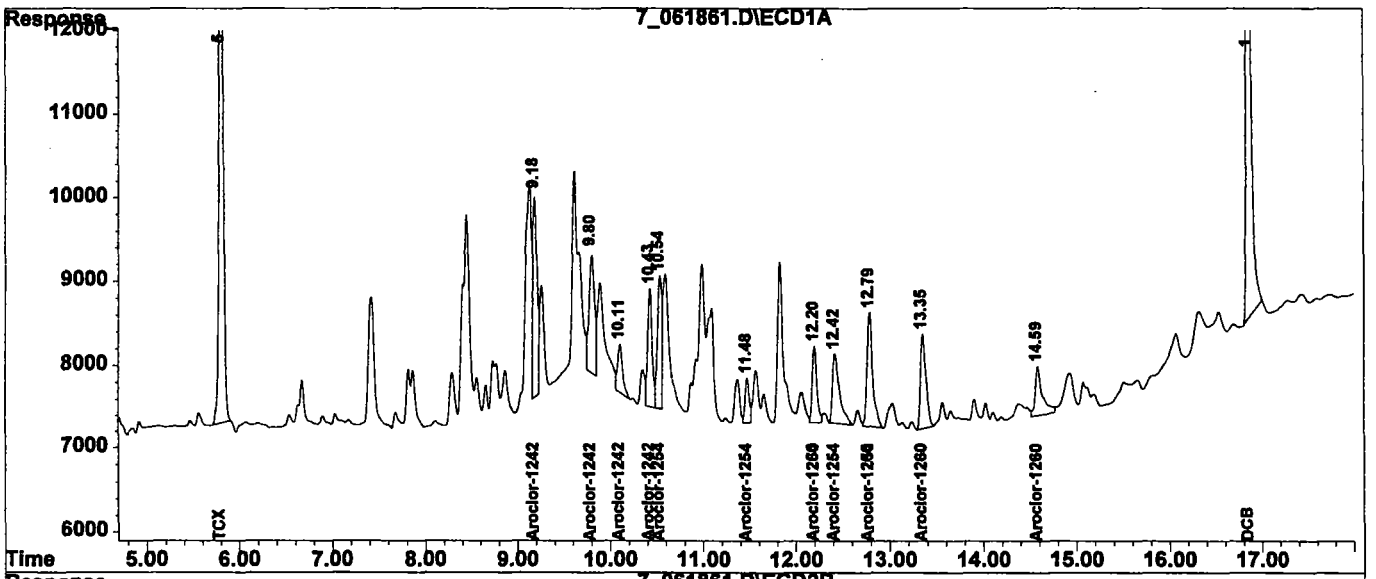
Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

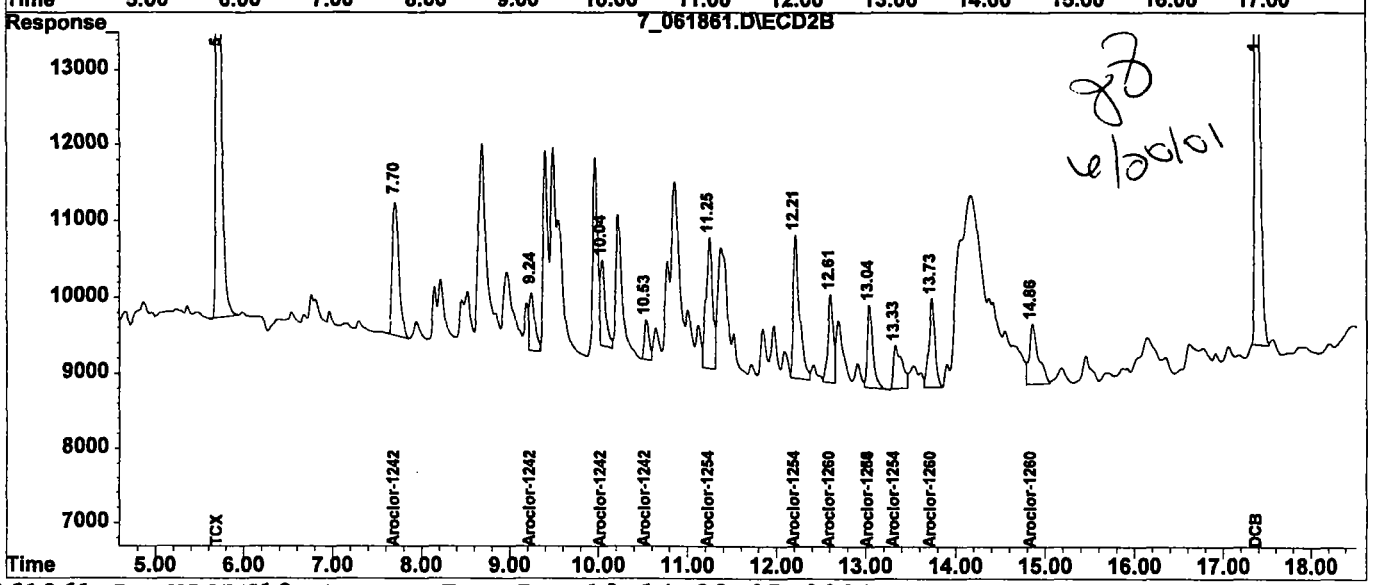
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.80	5.71	241030	321784	4.257	4.706	
	Spiked Amount 7.262			Recovery	=	58.62%	64.80%	
	S DCB	16.86	17.39	278223	333906	6.439	7.416	
	Spiked Amount 7.262			Recovery	=	88.67%	102.12%	
	Target Compounds:							
7)	L4 Aroclor-1242	9.18	7.70	77544	90862	71.5	28.6	#
8)	L4 Aroclor-1242 {2}	9.80	9.24	58902	33807	79.5	31.6	#
9)	L4 Aroclor-1242 {3}	10.11	10.04	21098	44709	45.9	60.2	#
10)	L4 Aroclor-1242 {4}	10.43	10.53	47774	19055	82.0	65.4	
	Sum Aroclor-1242			205318	188434	278.9	185.8	
	Average Aroclor-1242					69.737	46.446	
12)	L6 Aroclor-1254	10.54	0.00	50440	0	26.2	N.D. d	#
13)	L6 Aroclor-1254 {2}	11.48	11.25	17229	87576	18.2	28.6	#
14)	L6 Aroclor-1254 {3}	12.20	12.21	31689	91447	15.7	22.8	#
15)	L6 Aroclor-1254 {4}	12.42	13.04	44139	46240	17.8	19.6	
16)	L6 Aroclor-1254 {5}	12.79	13.33	58883	37727	18.9	16.4	
	Sum Aroclor-1254			202380	262991	96.8	87.5	
	Average Aroclor-1254					19.356	21.867	
17)	L7 Aroclor-1260	12.20	12.61	31689	46541	8.860	10.4	
18)	L7 Aroclor-1260 {2}	12.79	13.04	58883	46240	9.926	11.0	
19)	L7 Aroclor-1260 {3}	13.36f	13.74	47271	55585	10.2	12.9	#
21)	L7 Aroclor-1260 {5}	14.59	14.86	32583	56030	6.644	13.0	#
	Sum Aroclor-1260			170425	204396	12.9	17.2	
	Average Aroclor-1260					8.908	11.833	

(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

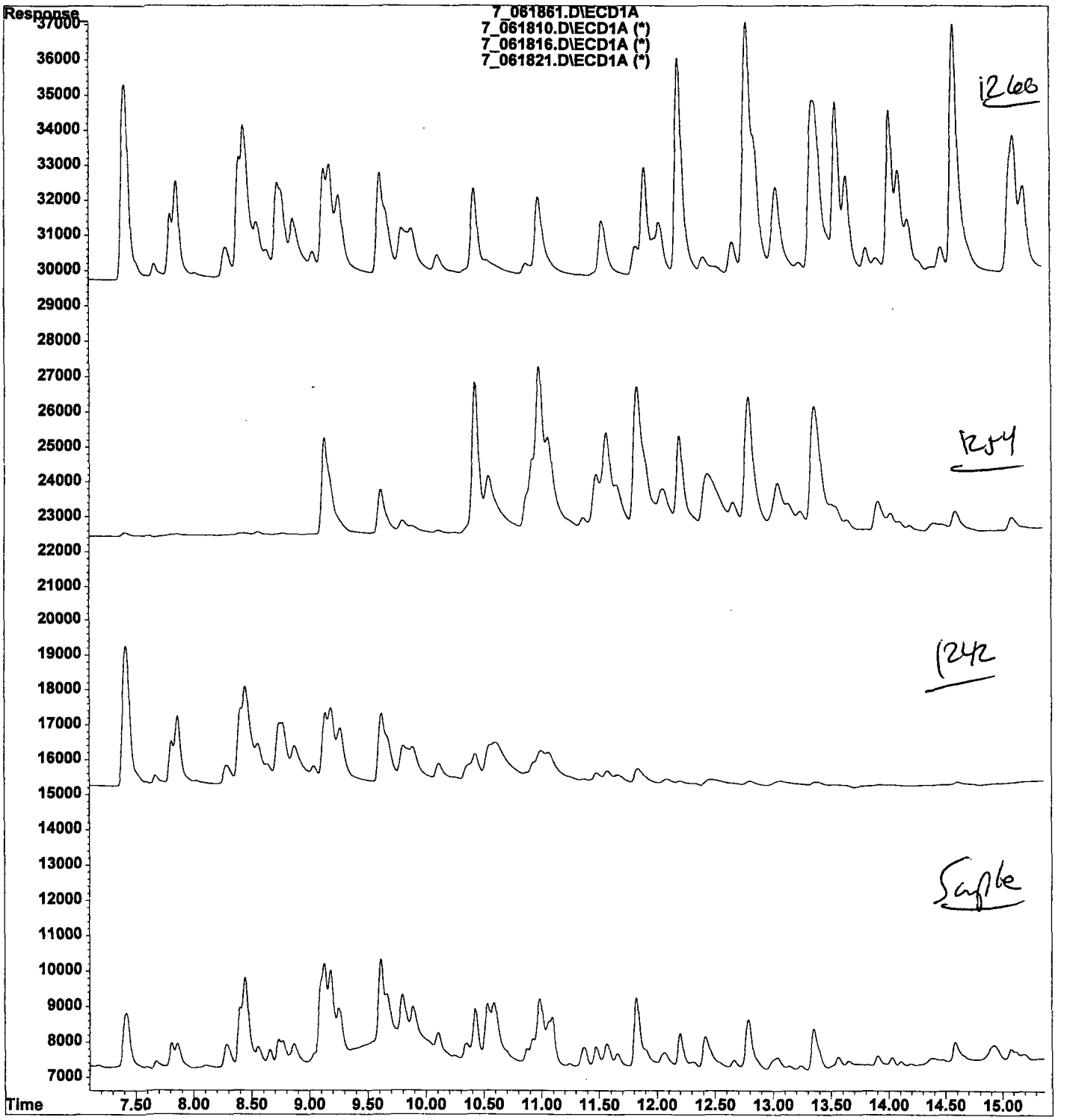
```
Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061861.D\ECD1A.CH Vial: 61
Acq On    : 19 Jun 2001  11:11                        Operator: DDC
Sample    : 46732.07  *E30T6  *                       Inst    : HP_07
Misc      : *EPA*30.6G/5.0ML*10                       Dilution: 1.00
IntFile   : events.e

Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061861.D\ECD2B.CH Vial: 61
Acq On    : 19 Jun 2001  11:11                        Operator: DDC
Sample    : 46732.07                                  Inst    : HP_07
Misc      :                                           Dilution: 1.00
IntFile   : events2.e
Quant Time: Jun 19 14:32 2001  Quant Results File: XPCBF18.RES

Method       : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path   : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update  : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj.      : 0.5uL
Signal #1 Phase  : PEST                Signal #2 Phase: PEST II
Signal #1 Info   : .32 mm              Signal #2 Info : .32 mm
Signal #1 Inst   : HP_07A              Signal #2 Inst : HP_07B
```





gb 6/20/01

File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061861.D
Operator : DDC
Acquired : 19 Jun 2001 11:11 using AcqMethod OLM03.M
Instrument : HP_07
Sample Name: 46732.07
Misc Info :
Vial Number: 61



1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30T7

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Matrix: (soil/water) SOIL Lab Sample ID: 46732.08

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

% Moisture: 58 decanted: (Y/N) __ Date Received: 06/09/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/09/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/19/01

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	77	U~~J~~
11104-28-2	Aroclor-1221	77	U~~J~~
11141-16-5	Aroclor-1232	77	U~~J~~
53469-21-9	Aroclor-1242	~~7900~~	~~17000JDEP~~ 17000DJ
12672-29-6	Aroclor-1248	77	U~~J~~
11097-69-1	Aroclor-1254	~~2100~~	3200D~~J~~E J
11096-82-5	Aroclor-1260	~~850~~	1400D~~J~~E J
Surrogate amount spiked		15.57	

TBS
7/13/01
apply this results

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061862.D\ECD1A.CH Vial: 62
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061862.D\ECD2B.CH
Acq On : 19 Jun 2001 11:35 Operator: DDC
Sample : 46732.08 *E30T7 * Inst : HP_07
Misc : *EPA*30.6G/5.0ML*58 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 12:40 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	5.80	5.71	242521	316231	9.179	9.910
	Spiked Amount 15.562			Recovery	=	58.98%	63.68%
22)	S DCB	16.86	17.39	332492	544881	16.5	25.9 #
	Spiked Amount 15.562			Recovery	=	106.03%	166.43%
	Target Compounds:						
7)	L4 Aroclor-1242	9.18	7.70	4631474	13117503	9155.5 E	8844.5 E
	L4 Aroclor-1242 {2}	9.79	0.00	2268194	0	6559.0 E	N.D. #
	L4 Aroclor-1242 {3}	0.00	10.04	0	5474449	N.D. d	15789.7 E#
10)	L4 Aroclor-1242 {4}	10.42	10.53	2203320	2011078	8104.8 E	14795.0 E#
	Sum Aroclor-1242			9102987	20603031	23819.3	39429.1
	Average Aroclor-1242					7939.772	13143.045
12)	L6 Aroclor-1254	10.52	0.00	2731978	0	3044.1 E	N.D. d #
13)	L6 Aroclor-1254 {2}	11.47	11.24	904977	4235844	2043.7 E	2969.4 E#
14)	L6 Aroclor-1254 {3}	12.20	0.00	1296433	0	1375.5 E	N.D. d #
15)	L6 Aroclor-1254 {4}	0.00	13.03	0	3361812	N.D. d	3048.7 E#
16)	L6 Aroclor-1254 {5}	12.78	13.36	3011824	2883818	2073.2 E	2687.1 E#
	Sum Aroclor-1254			7945212	10481474	8536.6	8705.2
	Average Aroclor-1254					2134.144	2901.727
17)	L7 Aroclor-1260	12.20	12.60	1296433	2758837	776.8	1319.3 E#
18)	L7 Aroclor-1260 {2}	12.78	0.00	3011824	0	1087.9	N.D. d #
19)	L7 Aroclor-1260 {3}	13.34f	0.00	3018401	0	1395.6 E	N.D. d #
20)	L7 Aroclor-1260 {4}	14.02	14.42	492918	1040042	478.8	870.5 #
21)	L7 Aroclor-1260 {5}	14.58	14.85	1192623	1867443	521.1	928.3 #
	Sum Aroclor-1260			9012199	5666322	3314.9	2426.1
	Average Aroclor-1260					852.055	1039.350

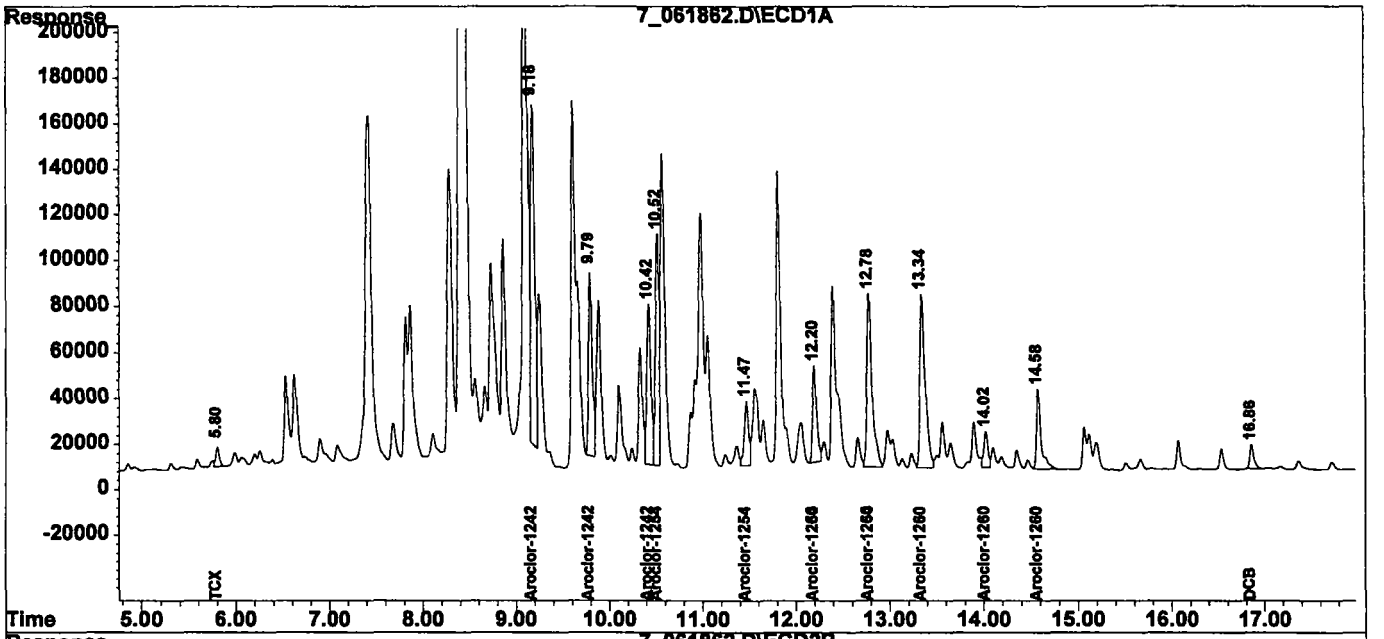
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

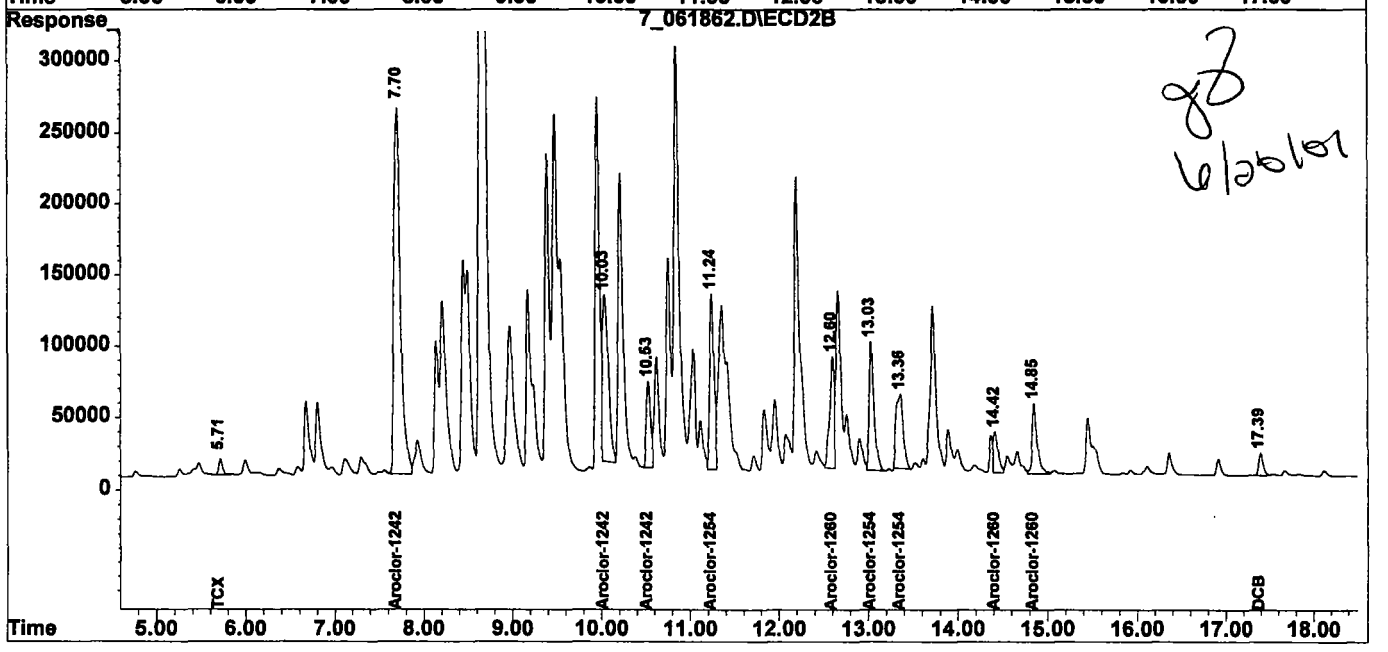
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061862.D\ECD1A.CH Vial: 62
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061862.D\ECD2B.CH
Acq On : 19 Jun 2001 11:35 Operator: DDC
Sample : 46732.08 *E30T7 * Inst : HP_07
Misc : *EPA*30.6G/5.0ML*58 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 12:40 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

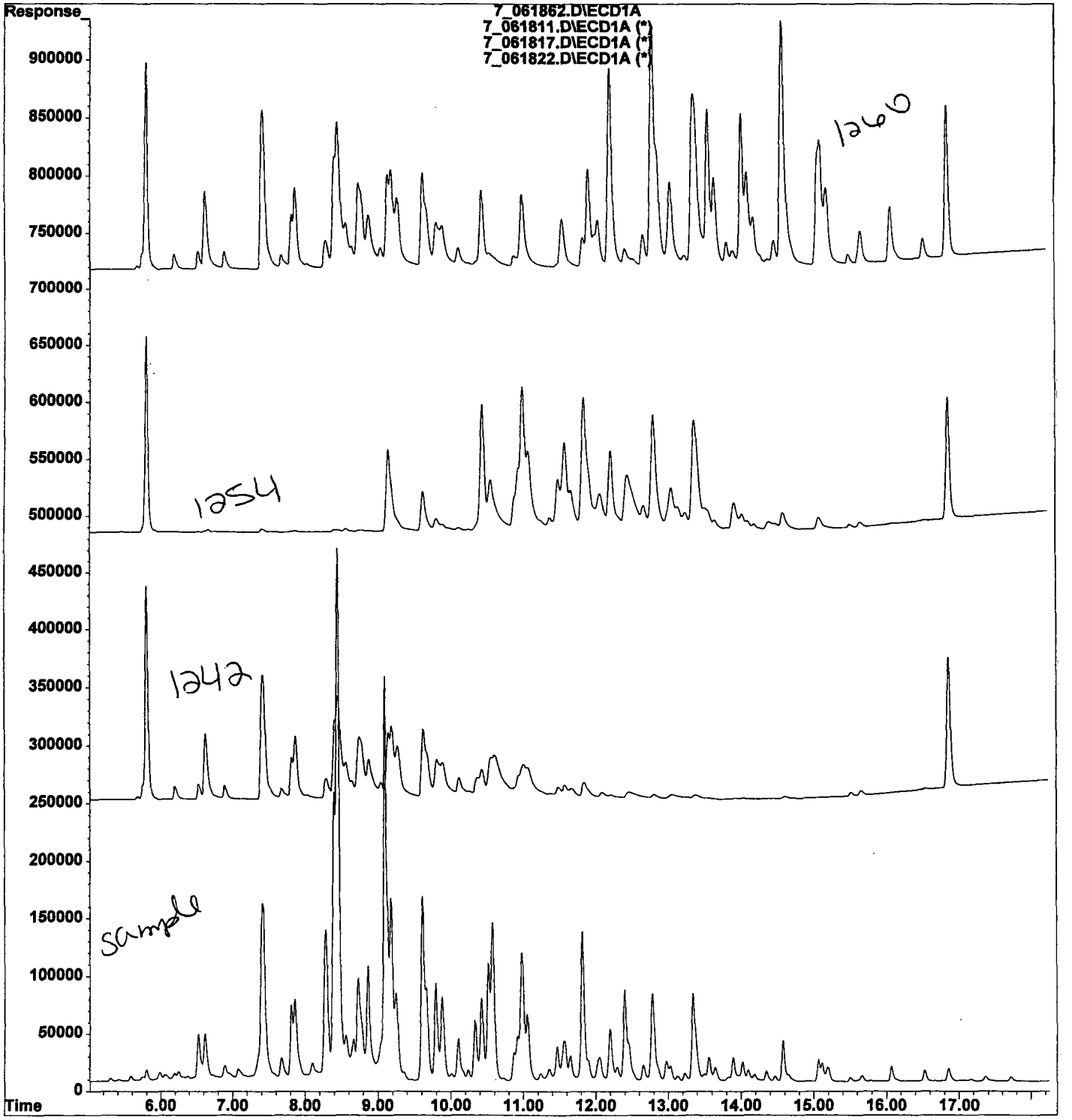
Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





gB
6/20/01

File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061862.D
Operator : DDC
Acquired : 19 Jun 2001 11:35 using AcqMethod OLM03.M
Instrument : HP_07
Sample Name: 46732.08 *E30T7 *
Misc Info : *EPA*30.6G/5.0ML*58
Vial Number: 62



1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30T7DL

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Matrix: (soil/water) SOIL Lab Sample ID: 46732.08DL

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

% Moisture: 58 decanted: (Y/N) __ Date Received: 06/09/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/09/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/19/01

Injection Volume: 0.5(uL) Dilution Factor: 40.0

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	3100		UJ
11104-28-2	Aroclor-1221	3100		UJ
11141-16-5	Aroclor-1232	3100		UJ
53469-21-9	Aroclor-1242	17000	J	D
12672-29-6	Aroclor-1248	3100		UJ
11097-69-1	Aroclor-1254	3200	J	D
11096-82-5	Aroclor-1260	1400		DJ
Surrogate amount spiked		15.57		

TBS
7/13/01

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061879.D\ECD1A.CH Vial: 79
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061879.D\ECD2B.CH
Acq On : 19 Jun 2001 18:28 Operator: DDC
Sample : 46732.08DL *E30T7DL * Inst : HP_07
Misc : *EPA*30.6G/5.0ML*58 Dilution: 40.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 20 9:09 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.81	5.72	33189	28624	50.2	35.9	#
	Spiked Amount 15.562			Recovery	=	322.59%	230.69%	
22)	S DCB	16.87	17.40	25142	34160	49.9	65.0	#
	Spiked Amount 15.562			Recovery	=	320.66%	417.69%	
	Target Compounds:							
7)	L4 Aroclor-1242	0.00	7.71	0	568124	N.D. d	15322.3	#
	L4 Aroclor-1242 {2}	9.81	9.25	108994	95399	12607.3	7642.9	#
	L4 Aroclor-1242 {3}	10.12	10.05	66954	156607	12489.7	18067.7	#
10)	L4 Aroclor-1242 {4}	10.44	10.54	108641	96636	15985.3	28437.0	#
11)	L4 Aroclor-1242 {5}	11.84	0.00	165783	0	32461.7	N.D. d	#
	Sum Aroclor-1242			450372	916766	73544.1	69469.9	
	Average Aroclor-1242					18386.017	17367.484	
13)	L6 Aroclor-1254 {2}	11.49	11.26	48513	140698	4382.4	3945.3	
14)	L6 Aroclor-1254 {3}	12.22	12.22	56091	180333	2380.4	3861.5	#
15)	L6 Aroclor-1254 {4}	12.43	13.05	97191	71732	3357.6	2602.0	
16)	L6 Aroclor-1254 {5}	12.80	0.00	94901	0	2613.0	N.D. d	#
	Sum Aroclor-1254			296695	392763	12733.4	10408.9	
	Average Aroclor-1254					3183.342	3469.619	
17)	L7 Aroclor-1260	12.22	12.62	56091	83487	1344.3	1596.9	
18)	L7 Aroclor-1260 {2}	12.80	13.05	94901	71732	1371.2	1465.7	
19)	L7 Aroclor-1260 {3}	13.37	13.74	79997	103801	1479.5	2069.1	#
20)	L7 Aroclor-1260 {4}	0.00	14.43	0	41205	N.D. d	1379.6	#
	Sum Aroclor-1260			230989	300225	130563.4	202655.0	
	Average Aroclor-1260					1398.334	1627.826	

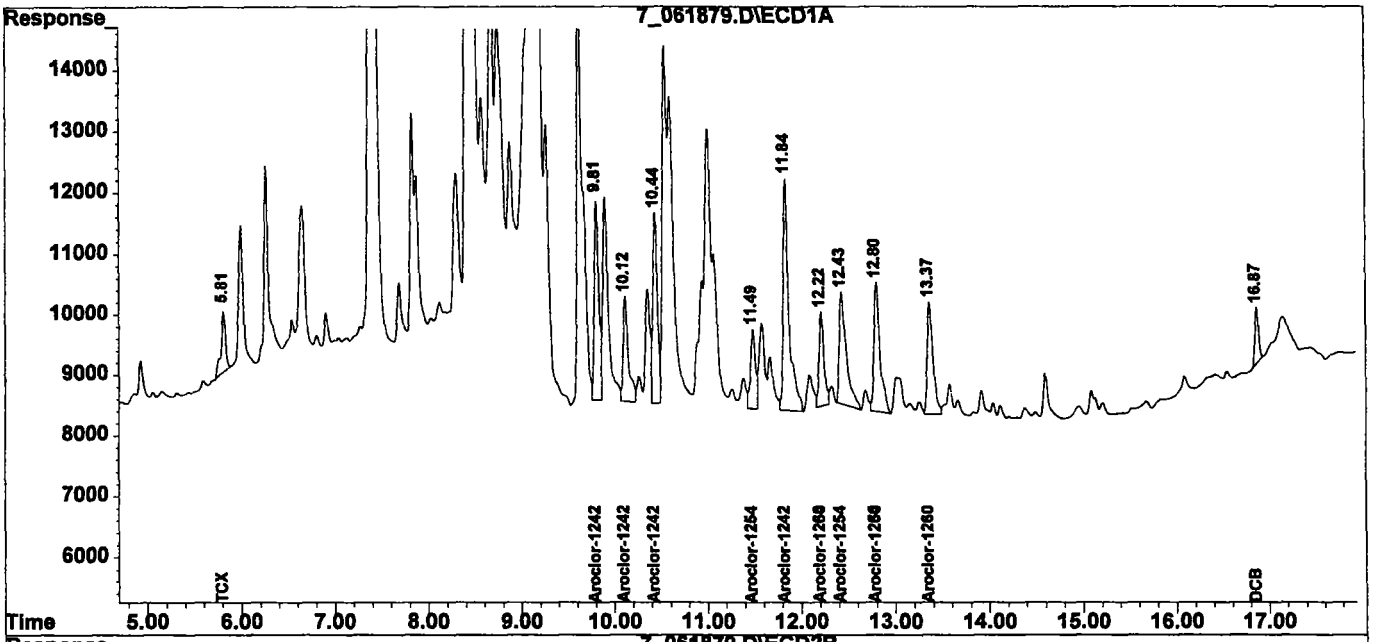
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

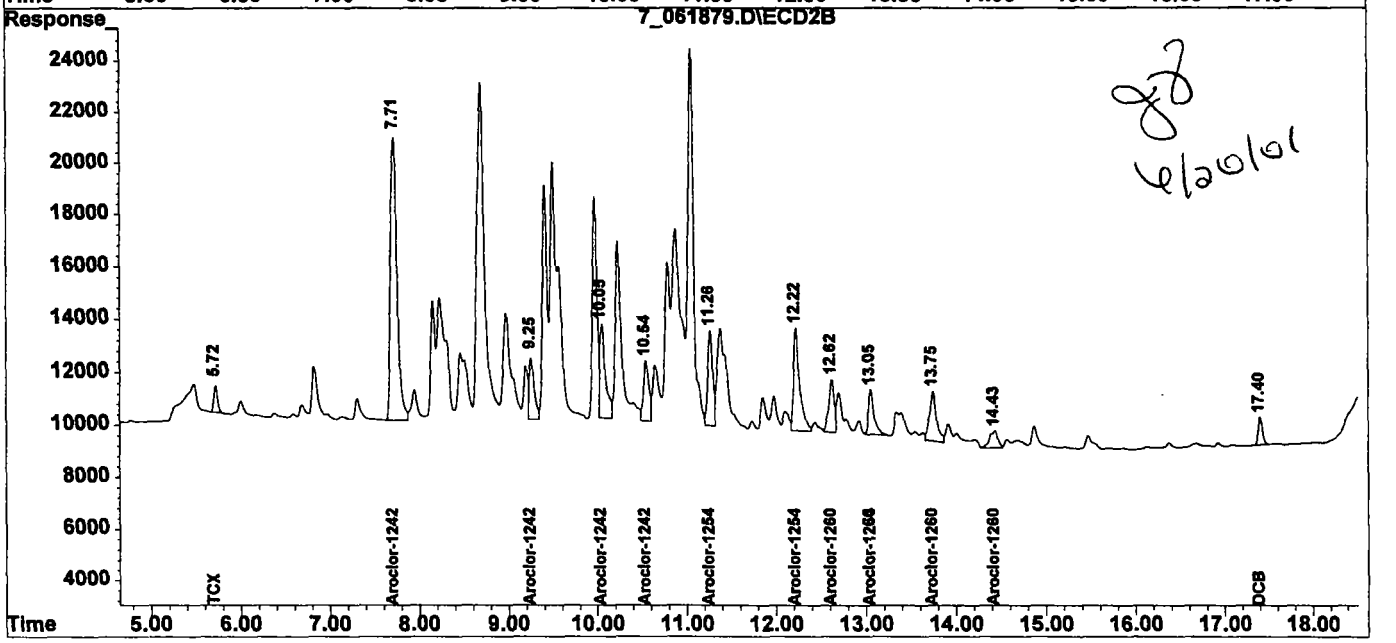
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061879.D\ECD1A.CH Vial: 79
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061879.D\ECD2B.CH
Acq On : 19 Jun 2001 18:28 Operator: DDC
Sample : 46732.08DL *E30T7DL * Inst : HP_07
Misc : *EPA*30.6G/5.0ML*58 Dilution: 40.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 20 9:09 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





gg
6/20/01

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30T8

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Matrix: (soil/water) SOIL Lab Sample ID: 46732.09

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

% Moisture: 58 decanted: (Y/N) __ Date Received: 06/09/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/09/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/19/01

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	78	UJ
11104-28-2	Aroclor-1221	78	UJ
11141-16-5	Aroclor-1232	78	UJ
53469-21-9	Aroclor-1242	78	UJ
12672-29-6	Aroclor-1248	78	UJ
11097-69-1	Aroclor-1254	78	UJ
11096-82-5	Aroclor-1260	52	J
Surrogate amount spiked		15.82	

TBS
7/13/01

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061869.D\ECD1A.CH Vial: 69
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061869.D\ECD2B.CH
Acq On : 19 Jun 2001 14:24 Operator: DDC
Sample : 46732.09 *E30T8 * Inst : HP_07
Misc : *EPA*30.1G/5.0ML*58 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 20 8:59 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.81f	5.72	402370	585196	15.5	18.6	
	Spiked Amount 15.820			Recovery	=	97.98%	117.57%	
22)	S DCB	16.87	17.40	475837	861714	24.0	41.7	#
	Spiked Amount 15.820			Recovery	=	151.70%	263.59%	
	Target Compounds:							
17)	L7 Aroclor-1260	12.21	12.62	41276	62686	25.1	30.5	
18)	L7 Aroclor-1260 {2}	12.79	0.00	163744	0	60.1	N.D. d	#
	L7 Aroclor-1260 {3}	13.36	13.73	112467	121495	52.9	61.6	
20)	L7 Aroclor-1260 {4}	14.03	14.44	72798	145824	71.9	124.1	#
21)	L7 Aroclor-1260 {5}	14.59	14.86	109691	183860	48.7	92.9	#
	Sum Aroclor-1260			499976	513865	204.7	244.4	
	Average Aroclor-1260					51.752	77.255	

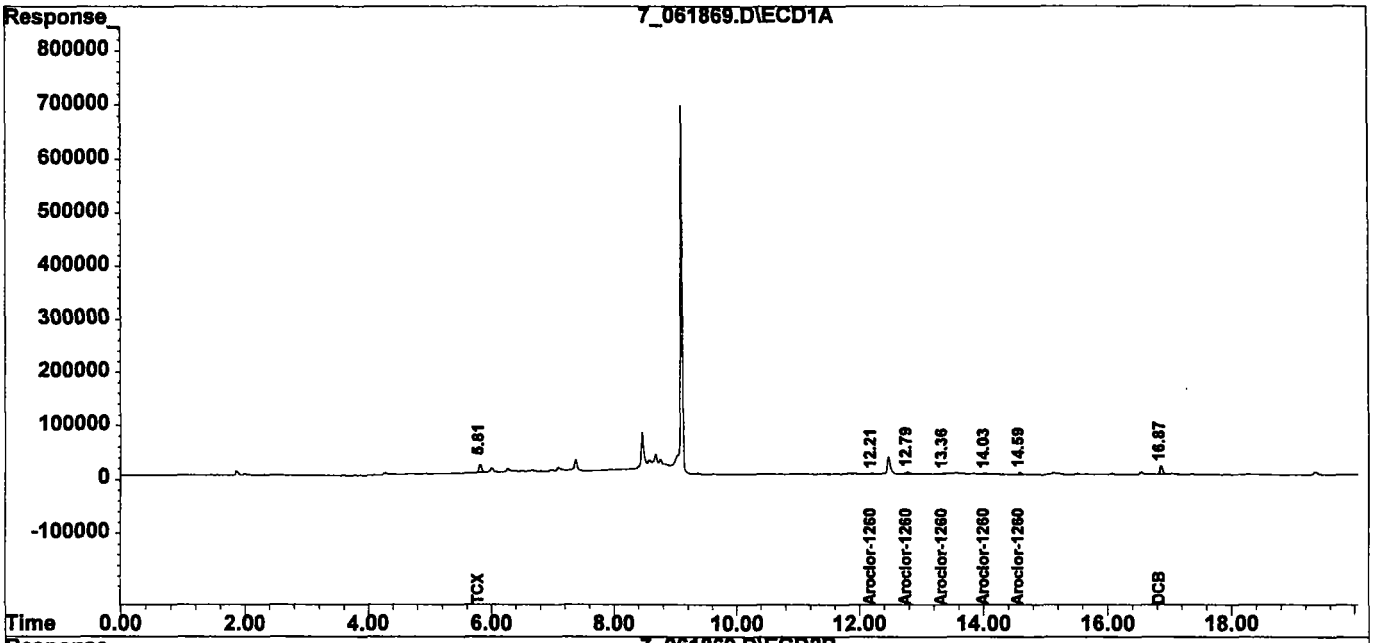
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

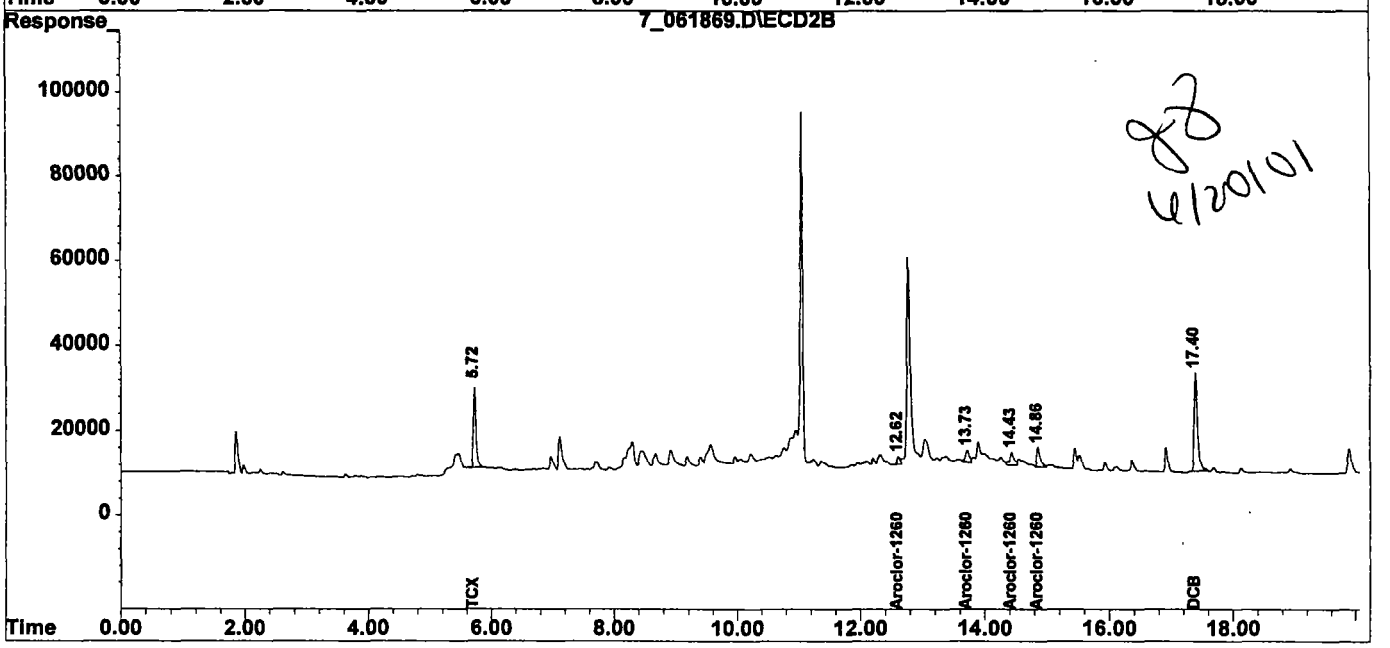
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061869.D\ECD1A.CH Vial: 69
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061869.D\ECD2B.CH
Acq On : 19 Jun 2001 14:24 Operator: DDC
Sample : 46732.09 *E30T8 * Inst : HP_07
Misc : *EPA*30.1G/5.0ML*58 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 20 8:59 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





JB
6/20/01

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30T9

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Matrix: (soil/water) SOIL Lab Sample ID: 46732.10

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

% Moisture: 40 decanted: (Y/N) __ Date Received: 06/09/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/09/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	55	U
11104-28-2	Aroclor-1221	55	U
11141-16-5	Aroclor-1232	55	U
53469-21-9	Aroclor-1242	55	U
12672-29-6	Aroclor-1248	55	U
11097-69-1	Aroclor-1254	55	U
11096-82-5	Aroclor-1260	55	U
	Surrogate amount spiked	11.03	

TBS
7/16/01

FORM I PCB

Quantitation Report

```
Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061870.D\ECD1A.CH Vial: 70
Acq On    : 19 Jun 2001  14:49                        Operator: DDC
Sample    : 46732.10  *E30T9  *                       Inst    : HP_07
Misc      : *EPA*30.2G/5.0ML*40                       Dilution: 1.00
IntFile   : events.e

Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061870.D\ECD2B.CH Vial: 70
Acq On    : 19 Jun 2001  14:49                        Operator: DDC
Sample    : 46732.10                                  Inst    : HP_07
Misc      :                                           Dilution: 1.00
IntFile   : events2.e
Quant Time: Jun 20  8:59 2001  Quant Results File: XPCBF18.RES

Method       : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path   : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update  : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj.      : 0.5uL
Signal #1 Phase : PEST              Signal #2 Phase: PEST II
Signal #1 Info  : .32 mm            Signal #2 Info : .32 mm
Signal #1 Inst  : HP_07A            Signal #2 Inst : HP_07B
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.81f	5.72	237187	326783	6.367	7.263	
	Spiked Amount 11.038			Recovery	=	57.69%	65.80%	
	S DCB	16.87	17.40	244945	331975	8.616	11.2	#
	Spiked Amount 11.038			Recovery	=	78.06%	101.47%	
	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

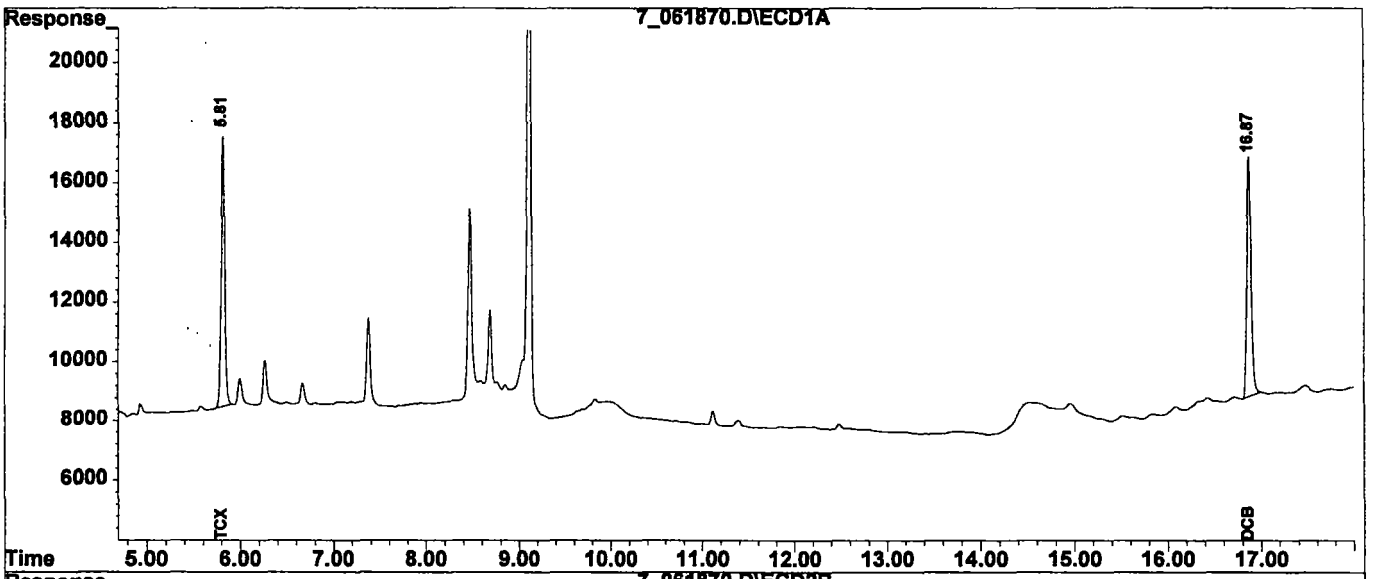
Chromatographic Report

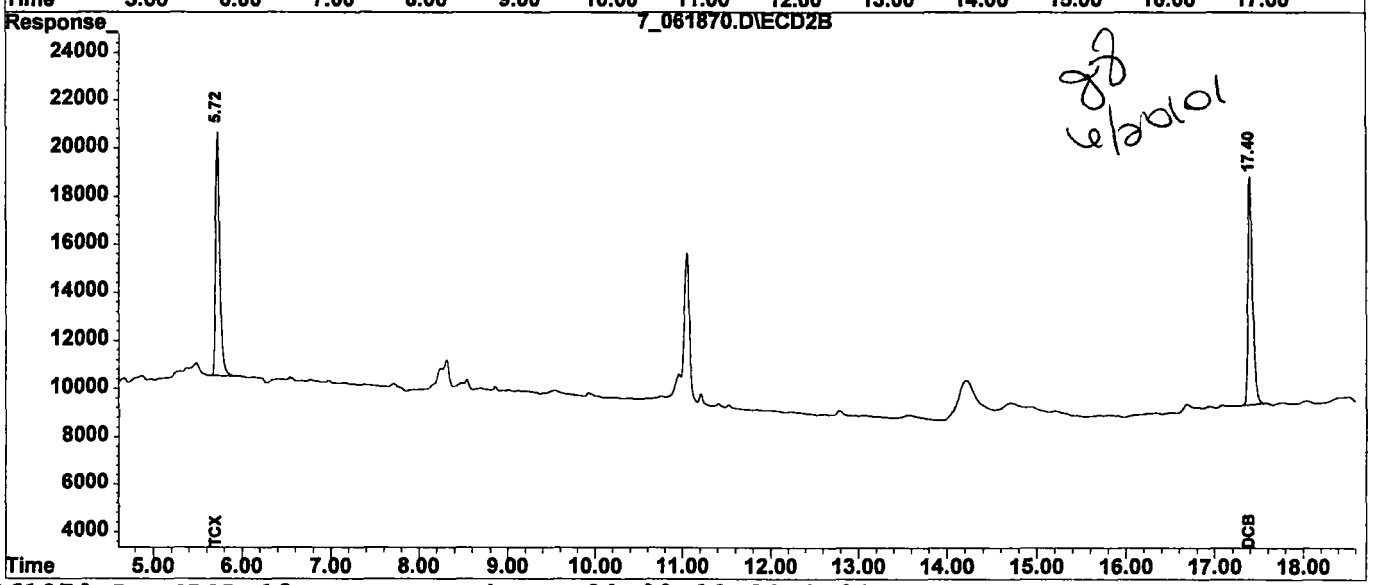
Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061870.D\ECD1A.CH Vial: 70
Acq On : 19 Jun 2001 14:49 Operator: DDC
Sample : 46732.10 *E30T9 * Inst : HP_07
Misc : *EPA*30.2G/5.0ML*40 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061870.D\ECD2B.CH Vial: 70
Acq On : 19 Jun 2001 14:49 Operator: DDC
Sample : 46732.10 Inst : HP_07
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Jun 20 8:59 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30W0

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Matrix: (soil/water) SOIL Lab Sample ID: 46732.11

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

% Moisture: 60 decanted: (Y/N) __ Date Received: 06/09/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/09/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/19/01

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	82	U
11104-28-2	Aroclor-1221	82	U
11141-16-5	Aroclor-1232	82	U
53469-21-9	Aroclor-1242	82	U
12672-29-6	Aroclor-1248	82	U
11097-69-1	Aroclor-1254	82	U
11096-82-5	Aroclor-1260	82	U
Surrogate amount spiked		16.61	

TBS
7/16/01

FORM I PCB

Quantitation Report

```
Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061871.D\ECD1A.CH Vial: 71
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061871.D\ECD2B.CH
Acq On    : 19 Jun 2001  15:13                        Operator: DDC
Sample    : 46732.11  *E30W0  *                       Inst    : HP_07
Misc      : *EPA*30.1G/5.0ML*60                       Dilution: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e
Quant Time: Jun 20  9:01 2001  Quant Results File: XPCBF18.RES

Method       : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path   : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update  : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj.     : 0.5uL
Signal #1 Phase : PEST              Signal #2 Phase: PEST II
Signal #1 Info  : .32 mm            Signal #2 Info : .32 mm
Signal #1 Inst  : HP_07A            Signal #2 Inst : HP_07B
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.81f	5.72	537855	764733	21.7	25.6	
	Spiked Amount 16.611			Recovery	=	130.63%	154.11%	
22)	S DCB	16.87	17.40	505378	703406	26.8	35.7	#
	Spiked Amount 16.611			Recovery	=	161.34%	214.91%	
	Target Compounds:							

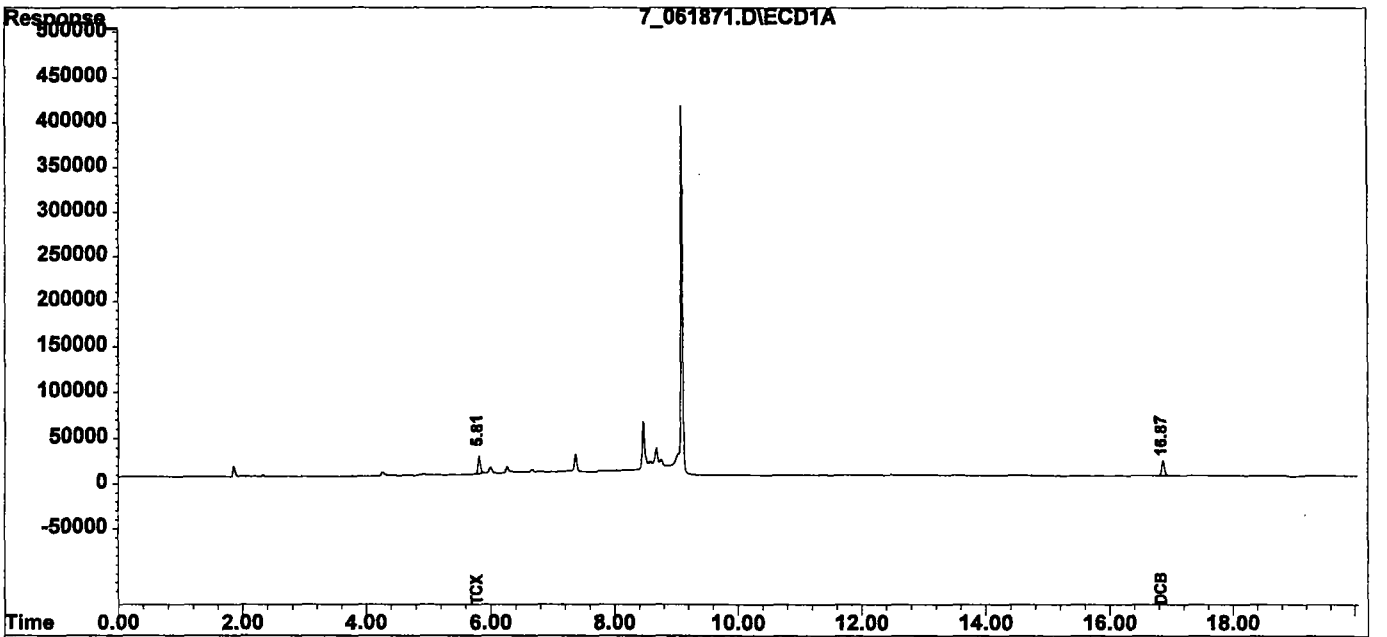
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

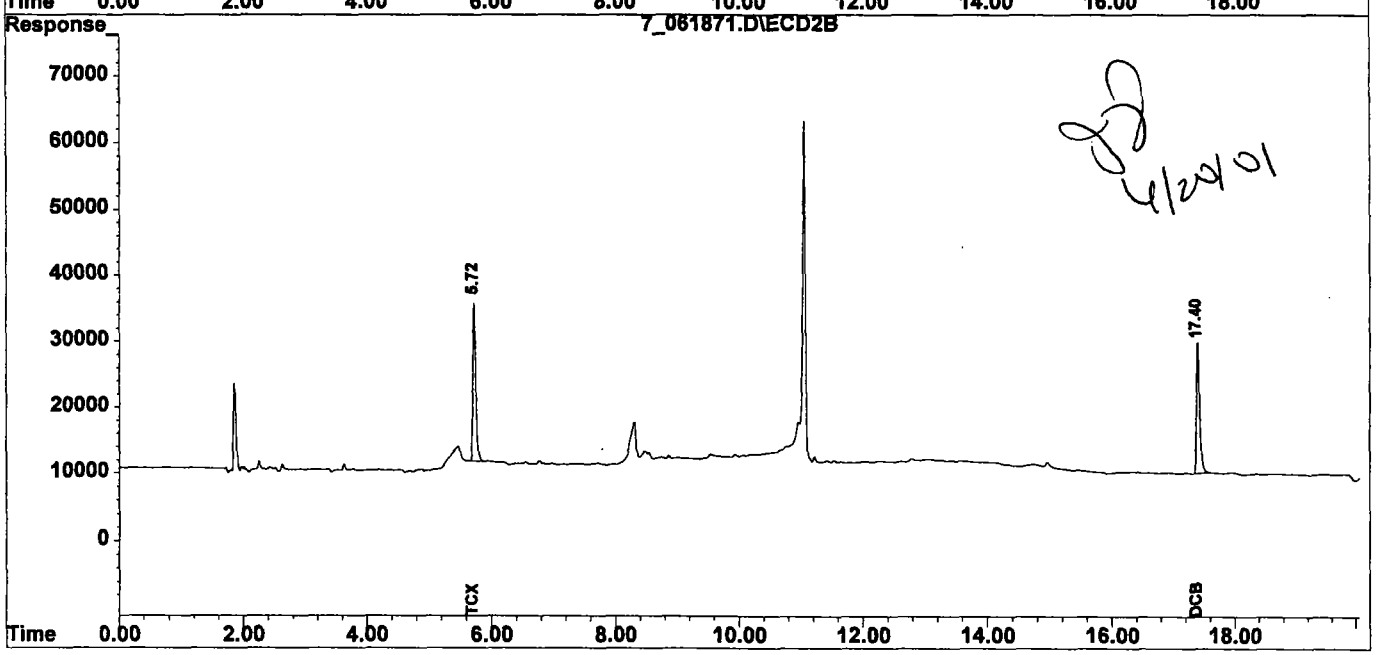
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061871.D\ECD1A.CH Vial: 71
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061871.D\ECD2B.CH
Acq On : 19 Jun 2001 15:13 Operator: DDC
Sample : 46732.11 *E30W0 * Inst : HP_07
Misc : *EPA*30.1G/5.0ML*60 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 20 9:01 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30W1

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Matrix: (soil/water) SOIL Lab Sample ID: 46732.12

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

% Moisture: 76 decanted: (Y/N) __ Date Received: 06/09/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/09/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/19/01

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	130	UJ
11104-28-2	Aroclor-1221	130	UJ
11141-16-5	Aroclor-1232	130	UJ
53469-21-9	Aroclor-1242	130	UJ
12672-29-6	Aroclor-1248	130	UJ
11097-69-1	Aroclor-1254	130	UJ
11096-82-5	Aroclor-1260	130	UJ
Surrogate amount spiked		27.14	

TBS
7/16/01

Quantitation Report

```
Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061872.D\ECD1A.CH Vial: 72
Acq On    : 19 Jun 2001  15:38                        Operator: DDC
Sample    : 46732.12  *E30W1  *                       Inst    : HP_07
Misc      : *EPA*30.7G/5.0ML*76                       Dilution: 1.00
IntFile   : events.e

Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061872.D\ECD2B.CH Vial: 72
Acq On    : 19 Jun 2001  15:38                        Operator: DDC
Sample    : 46732.12                                  Inst    : HP_07
Misc      :                                           Dilution: 1.00
IntFile   : events2.e
Quant Time: Jun 20  9:02 2001  Quant Results File: XPCBF18.RES

Method       : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path   : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update  : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj.      : 0.5uL
Signal #1 Phase : PEST              Signal #2 Phase: PEST II
Signal #1 Info  : .32 mm            Signal #2 Info : .32 mm
Signal #1 Inst  : HP_07A            Signal #2 Inst : HP_07B
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	5.81f	5.72	242381	327215	16.0	17.9
	Spiked Amount 27.144			Recovery	=	58.94%	65.94%
	S DCB	16.87	17.40	255924	321291	22.1	26.7
	Spiked Amount 27.144			Recovery	=	81.42%	98.36%
	Target Compounds:						

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

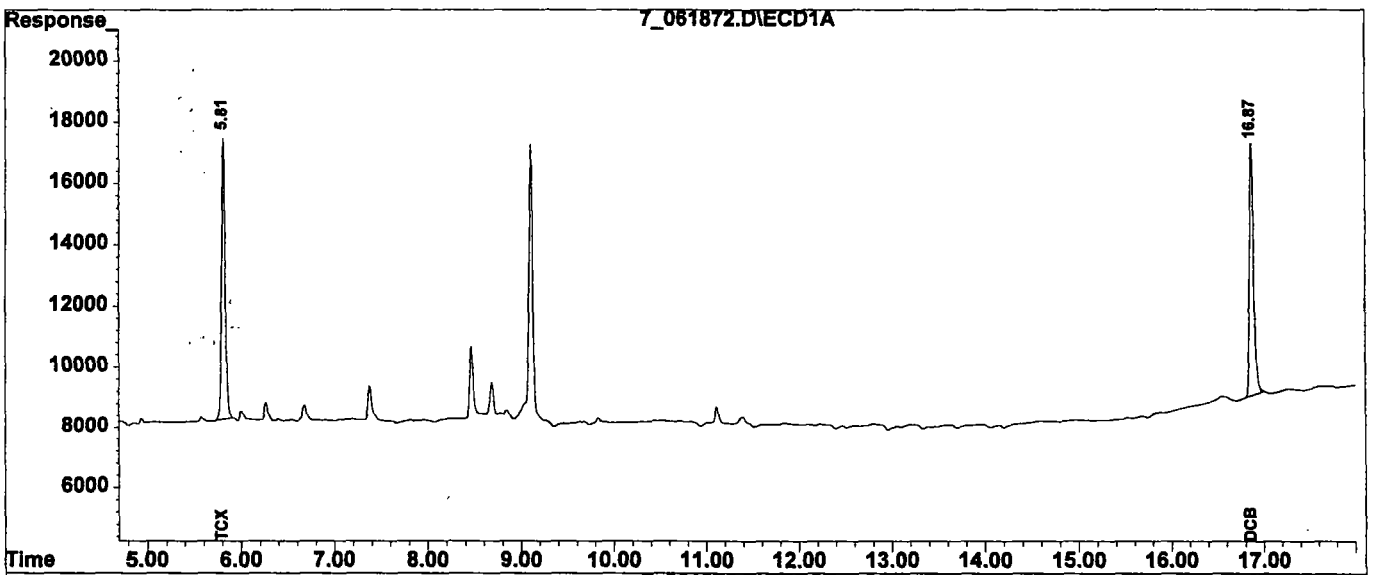
Chromatographic Report

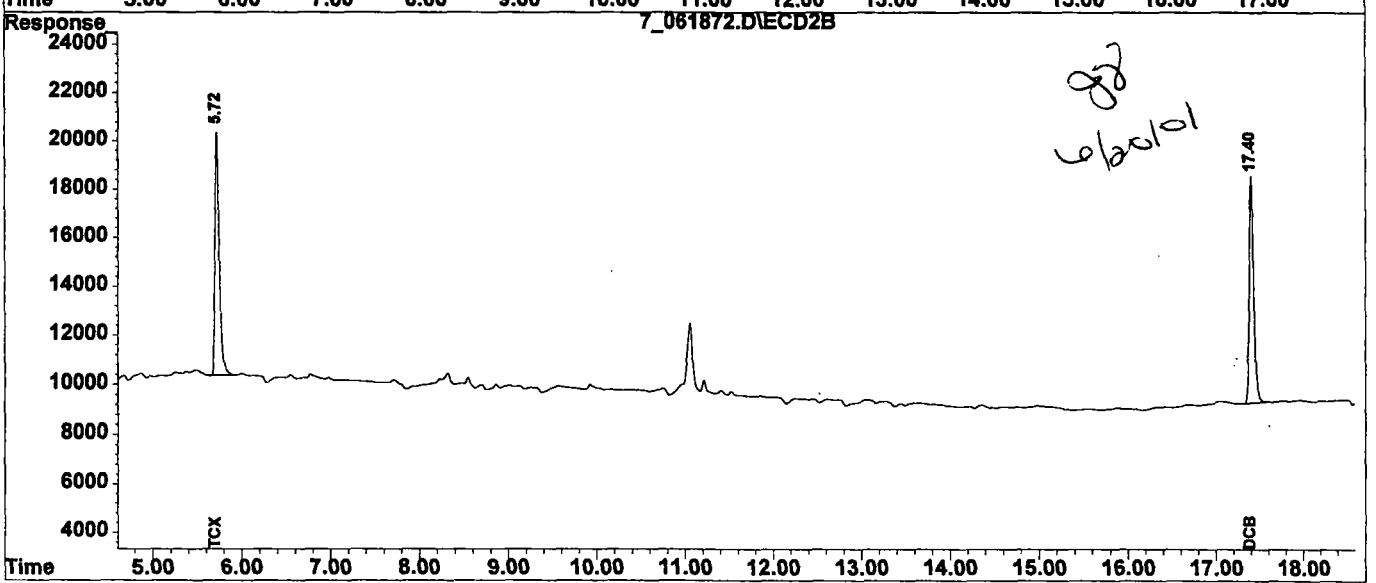
Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061872.D\ECD1A.CH Vial: 72
Acq On : 19 Jun 2001 15:38 Operator: DDC
Sample : 46732.12 *E30W1 * Inst : HP_07
Misc : *EPA*30.7G/5.0ML*76 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061872.D\ECD2B.CH Vial: 72
Acq On : 19 Jun 2001 15:38 Operator: DDC
Sample : 46732.12 Inst : HP_07
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Jun 20 9:02 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





88
6/20/01

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30W2

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Matrix: (soil/water) SOIL Lab Sample ID: 46732.13

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

% Moisture: 70 decanted: (Y/N) __ Date Received: 06/09/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/09/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	110	U
11104-28-2	Aroclor-1221	110	U
11141-16-5	Aroclor-1232	110	U
53469-21-9	Aroclor-1242	110	U
12672-29-6	Aroclor-1248	110	U
11097-69-1	Aroclor-1254	110	U
11096-82-5	Aroclor-1260	110	U
Surrogate amount spiked		22.14	

TBS
7/16/01

FORM I PCB

Quantitation Report

Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061873.D\ECD1A.CH Vial: 73
Acq On : 19 Jun 2001 16:02 Operator: DDC
Sample : 46732.13 *E30W2 * Inst : HP_07
Misc : *EPA*30.1G/5.0ML*70 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061873.D\ECD2B.CH Vial: 73
Acq On : 19 Jun 2001 16:02 Operator: DDC
Sample : 46732.13 Inst : HP_07
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Jun 20 9:02 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	5.81f	5.72	283151	375765	15.3	16.8
	Spiked Amount 22.148			Recovery	=	69.08%	75.85%
	S DCB	16.87	17.40	315125	389115	22.2	26.4
	Spiked Amount 22.148			Recovery	=	100.23%	119.20%

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

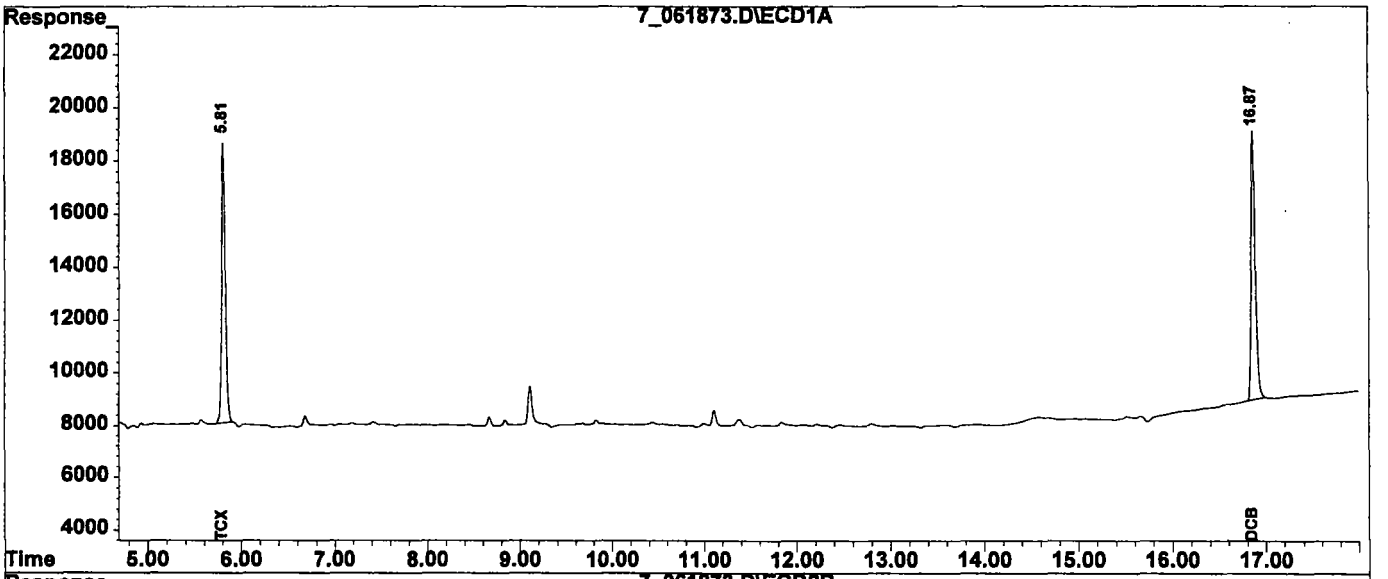
Chromatographic Report

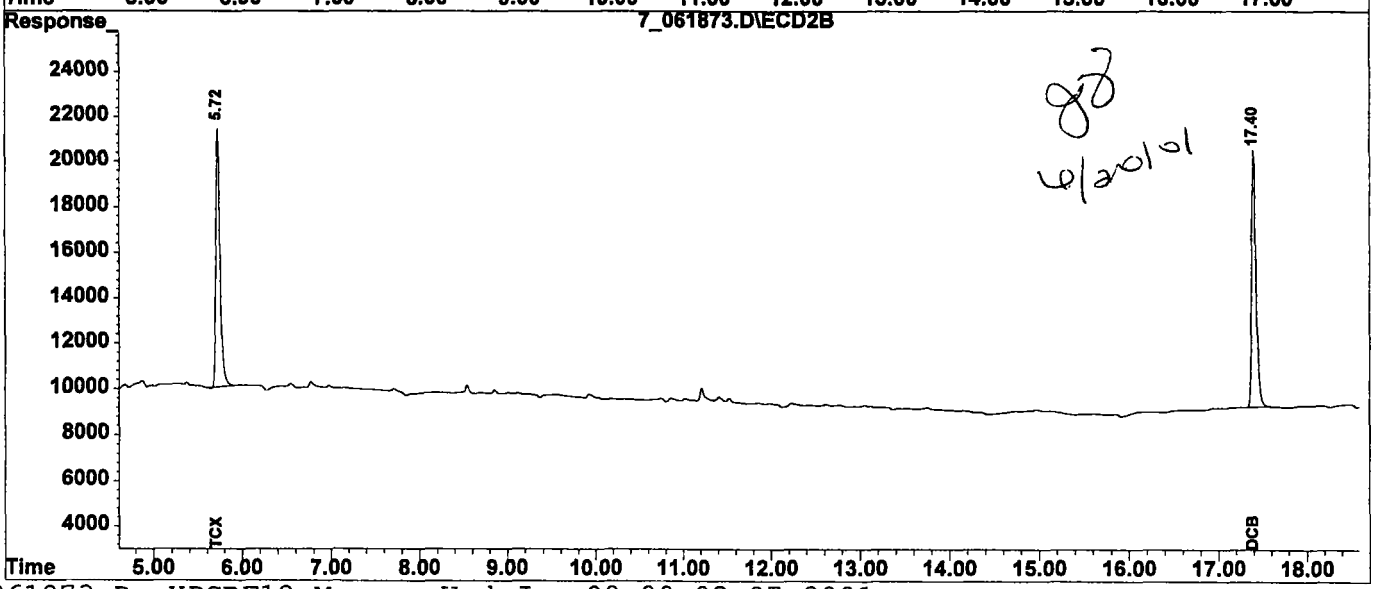
Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061873.D\ECD1A.CH Vial: 73
Acq On : 19 Jun 2001 16:02 Operator: DDC
Sample : 46732.13 *E30W2 * Inst : HP_07
Misc : *EPA*30.1G/5.0ML*70 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061873.D\ECD2B.CH Vial: 73
Acq On : 19 Jun 2001 16:02 Operator: DDC
Sample : 46732.13 Inst : HP_07
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Jun 20 9:02 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30W3

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Matrix: (soil/water) SOIL Lab Sample ID: 46732.14

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

% Moisture: 72 decanted: (Y/N) __ Date Received: 06/09/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/09/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	120	U
11104-28-2	Aroclor-1221	120	U
11141-16-5	Aroclor-1232	120	U
53469-21-9	Aroclor-1242	120	U
12672-29-6	Aroclor-1248	120	U
11097-69-1	Aroclor-1254	120	U
11096-82-5	Aroclor-1260	120	U
	Surrogate amount spiked	23.41	

TBS
7/16/01

FORM I PCB

Quantitation Report

Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061874.D\ECD1A.CH Vial: 74
Acq On : 19 Jun 2001 16:27 Operator: DDC
Sample : 46732.14 *E30W3 * Inst : HP_07
Misc : *EPA*30.5G/5.0ML*72 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061874.D\ECD2B.CH Vial: 74
Acq On : 19 Jun 2001 16:27 Operator: DDC
Sample : 46732.14 Inst : HP_07
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Jun 20 9:03 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	5.81	5.72	162145	210079	9.235	9.907
	Spiked Amount 23.419			Recovery	=	39.43%	42.30%
2)	S DCB	16.87	17.40	189898	224379	14.2	16.1
	Spiked Amount 23.419			Recovery	=	60.63%	68.75%

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

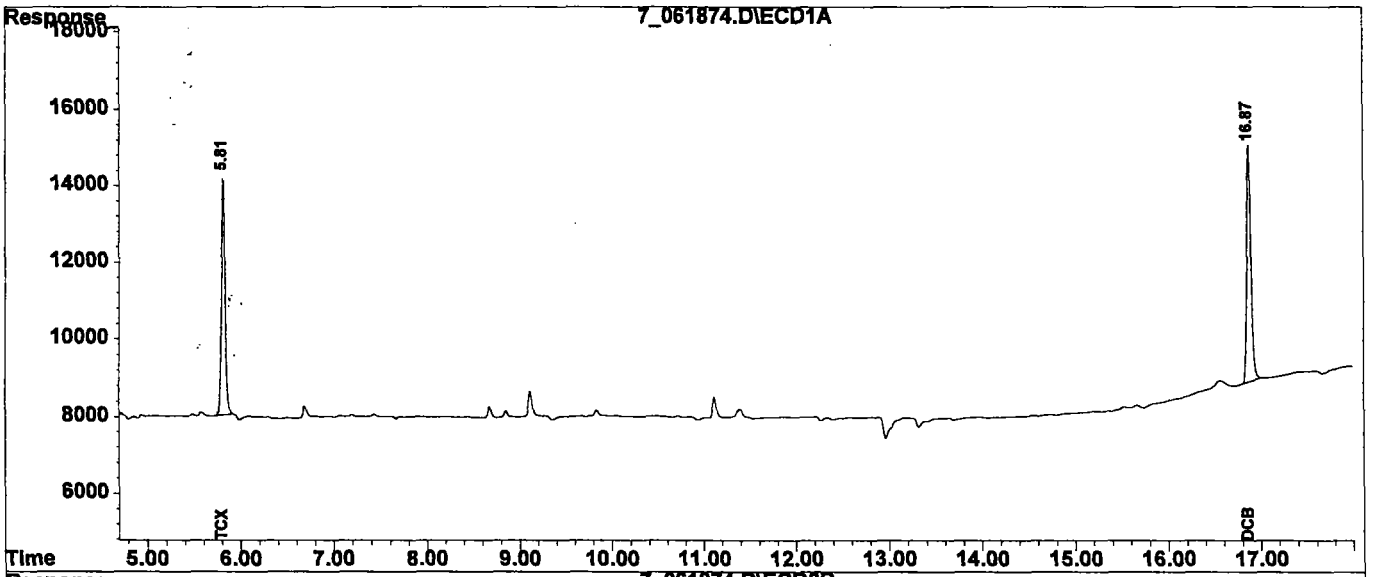
Chromatographic Report

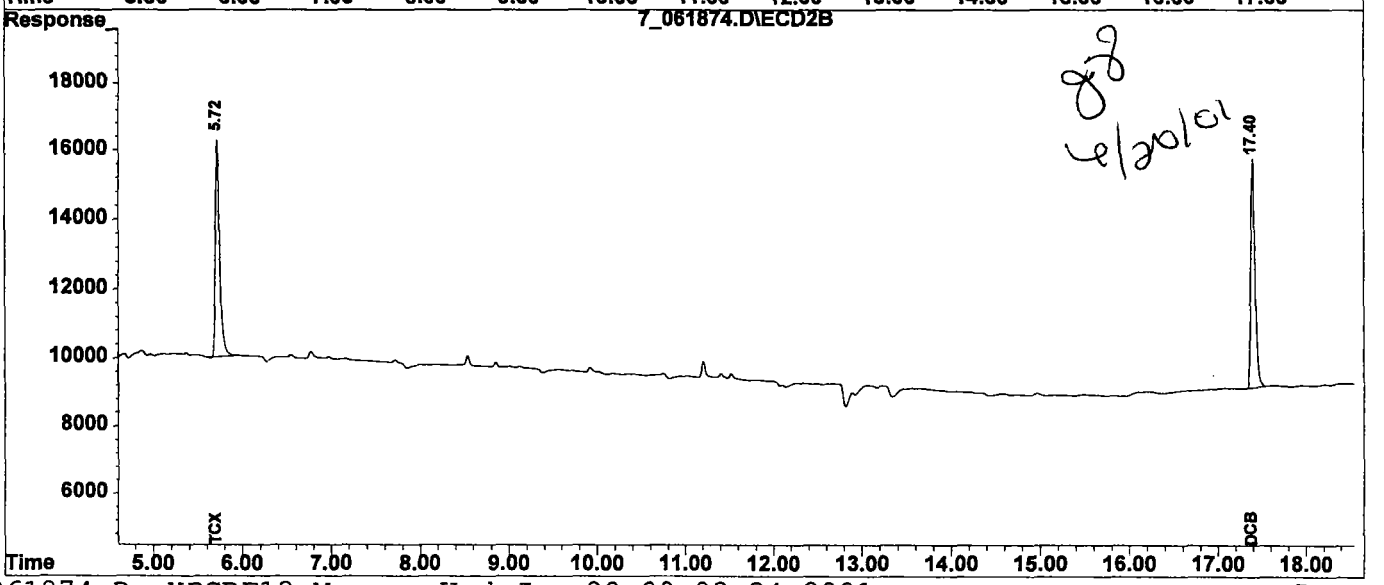
Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061874.D\ECD1A.CH Vial: 74
Acq On : 19 Jun 2001 16:27 Operator: DDC
Sample : 46732.14 *E30W3 * Inst : HP_07
Misc : *EPA*30.5G/5.0ML*72 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061874.D\ECD2B.CH Vial: 74
Acq On : 19 Jun 2001 16:27 Operator: DDC
Sample : 46732.14 Inst : HP_07
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Jun 20 9:03 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





gg
6/20/01

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30W4

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Matrix: (soil/water) SOIL Lab Sample ID: 46732.15

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

% Moisture: 31 decanted: (Y/N) __ Date Received: 06/09/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/09/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/19/01

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	46	U
11104-28-2	Aroclor-1221	46	U
11141-16-5	Aroclor-1232	46	U
53469-21-9	Aroclor-1242	46	U
12672-29-6	Aroclor-1248	46	U
11097-69-1	Aroclor-1254	46	U
11096-82-5	Aroclor-1260	46	U
Surrogate amount spiked		9.41	

TBS
7/16/01

FORM I PCB

Quantitation Report

Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061875.D\ECD1A.CH Vial: 75
Acq On : 19 Jun 2001 16:51 Operator: DDC
Sample : 46732.15 *E30W4 * Inst : HP_07
Misc : *EPA*30.8G/5.0ML*31 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061875.D\ECD2B.CH Vial: 75
Acq On : 19 Jun 2001 16:51 Operator: DDC
Sample : 46732.15 Inst : HP_07
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Jun 20 9:03 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	5.81f	5.72	227936	307741	5.217	5.832
	Spiked Amount 9.411			Recovery	=	55.44%	61.97%
2)	S DCB	16.87	17.40	257840	301772	7.733	8.685
	Spiked Amount 9.411			Recovery	=	82.17%	92.29%

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

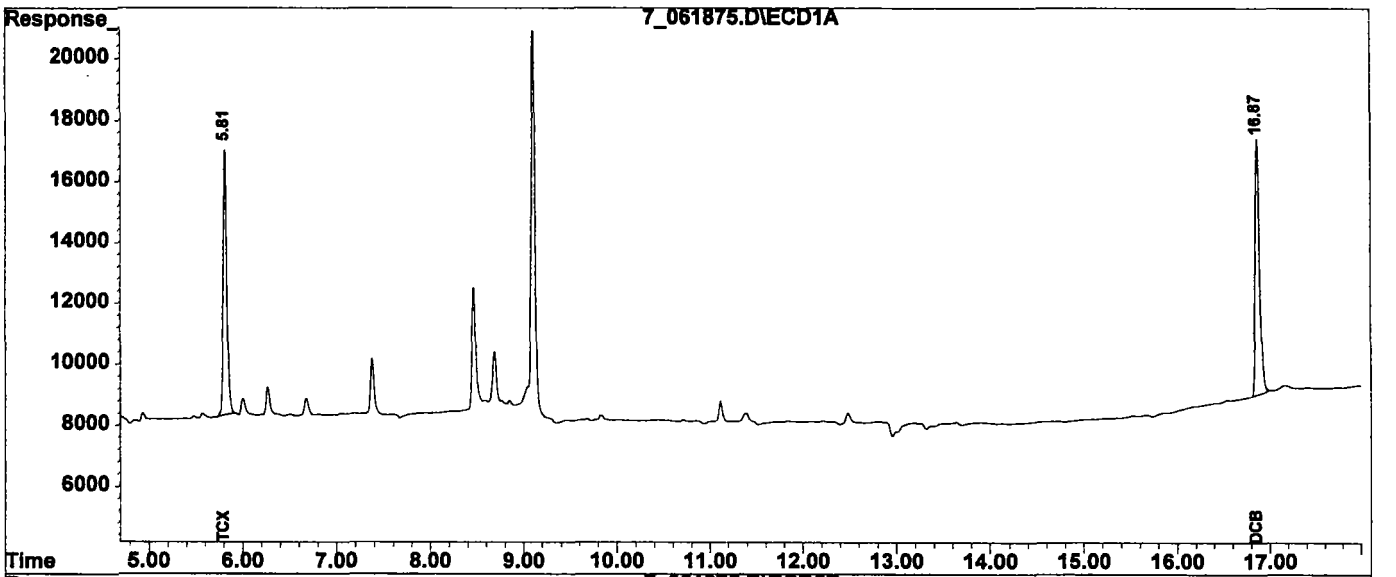
Chromatographic Report

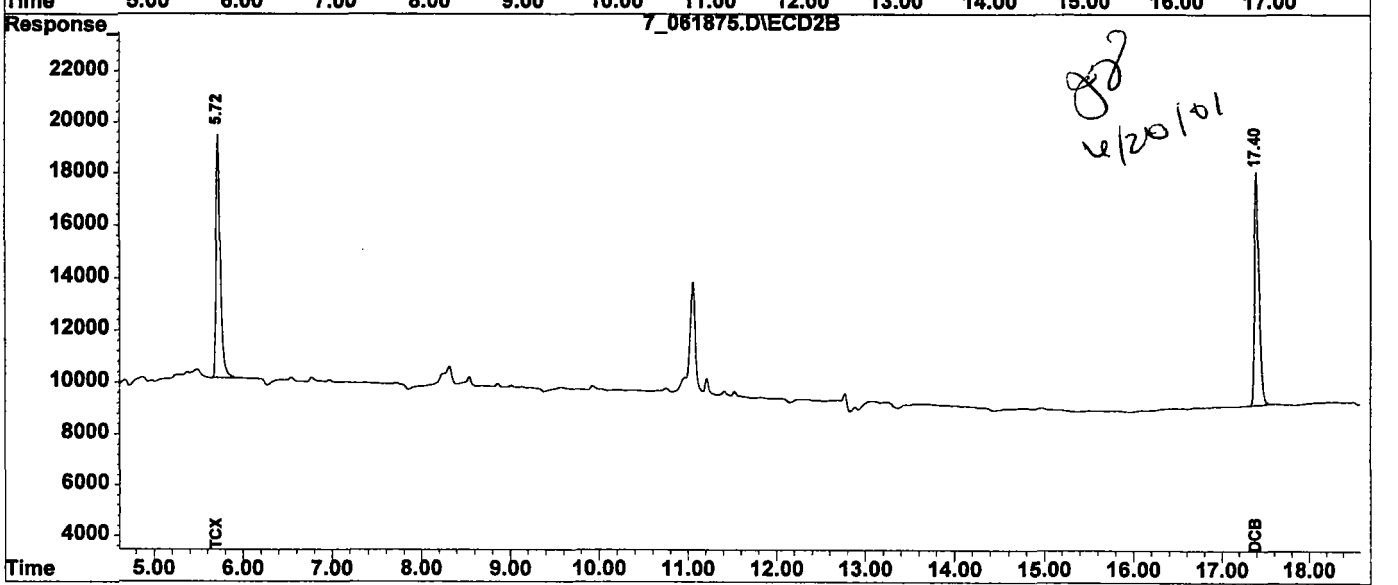
Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061875.D\ECD1A.CH Vial: 75
Acq On : 19 Jun 2001 16:51 Operator: DDC
Sample : 46732.15 *E30W4 * Inst : HP_07
Misc : *EPA*30.8G/5.0ML*31 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061875.D\ECD2B.CH Vial: 75
Acq On : 19 Jun 2001 16:51 Operator: DDC
Sample : 46732.15 Inst : HP_07
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Jun 20 9:03 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Instrument ID: HP_07A Date(s) Analyzed: 06/18/01 06/18/01

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

GC Column: PEST ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1242 L1	0.10	1	9.19	388020	MEAN
		2	9.81	236570	
		3	10.12	173800	
		4	10.44	260780	
		5	11.85	163130	
Aroclor 1242 L2	0.20	1	9.19	400505	MEAN
		2	9.81	251830	
		3	10.12	173545	
		4	10.43	273680	
		5	11.85	159225	
Aroclor 1242 L3	0.40	1	9.18	405510	MEAN
		2	9.81	268685	
		3	10.12	146075	
		4	10.43	184670	
		5	11.84	127895	
Aroclor 1242 L4	0.80	1	9.18	420900	MEAN
		2	9.81	314324	
		3	10.12	187293	
		4	10.43	190550	
		5	11.84	189545	
Aroclor 1242 L5	1.60	1	9.18	353128	MEAN
		2	9.80	273952	
		3	10.11	153509	
		4	10.43	147947	
		5	11.83	154948	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1242 MEAN	1	9.18	9.13	9.23	393613	6.5
	2	9.81	9.76	9.86	269072	10.9
	3	10.12	10.07	10.17	166844	10.0
	4	10.43	10.38	10.48	211525	25.3
	5	11.84	11.79	11.89	158949	13.8

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Instrument ID: HP_07B Date(s) Analyzed: 06/18/01 06/18/01

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

GC Column: PEST II ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1242 L1	0.10	1	7.70	1139580	MEAN
		2	9.25	454630	
		3	10.02	308320	
		4	10.55	98180	
		5	11.27	106250	
Aroclor 1242 L2	0.20	1	7.70	1178930	MEAN
		2	9.25	460600	
		3	10.05	267530	
		4	10.54	107170	
		5	11.27	104640	
Aroclor 1242 L3	0.40	1	7.70	1212365	MEAN
		2	9.25	468318	
		3	10.05	269693	
		4	10.54	112130	
		5	11.27	105675	
Aroclor 1242 L4	0.80	1	7.70	1205883	MEAN
		2	9.24	310435	
		3	10.04	270641	
		4	10.54	112625	
		5	11.26	106251	
Aroclor 1242 L5	1.60	1	7.70	1033279	MEAN
		2	9.24	248459	
		3	10.04	232677	
		4	10.54	98722	
		5	11.26	88345	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1242 MEAN	1	7.70	7.65	7.75	1154007	6.4
	2	9.25	9.20	9.30	388488	26.3
	3	10.04	9.99	10.09	269772	9.9
	4	10.54	10.49	10.59	105765	6.6
	5	11.27	11.22	11.32	102232	7.6

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Instrument ID: HP_07A Date(s) Analyzed: 06/18/01 06/18/01

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

GC Column: PEST ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1254 L1	0.10	1	10.55	790140	MEAN
		2	11.49	345450	
		3	12.21	865700	
		4	12.46	923420	
		5	12.81	1321550	
Aroclor 1254 L2	0.20	1	10.55	678230	MEAN
		2	11.49	319220	
		3	12.21	743855	
		4	12.45	840170	
		5	12.80	1131270	
Aroclor 1254 L3	0.40	1	10.55	605683	MEAN
		2	11.48	301695	
		3	12.20	643738	
		4	12.44	776780	
		5	12.80	984845	
Aroclor 1254 L4	0.80	1	10.54	706025	MEAN
		2	11.48	371919	
		3	12.20	721996	
		4	12.43	958745	
		5	12.79	1123184	
Aroclor 1254 L5	1.60	1	10.54	711416	MEAN
		2	11.47	384414	
		3	12.20	691583	
		4	12.42	1005518	
		5	12.79	1090968	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1254 MEAN	1	10.54	10.49	10.59	698299	9.5
	2	11.48	11.43	11.53	344540	10.1
	3	12.20	12.15	12.25	733374	11.3
	4	12.44	12.39	12.49	900927	10.2
	5	12.80	12.75	12.85	1130363	10.8

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Instrument ID: HP_07B Date(s) Analyzed: 06/18/01 06/18/01

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

GC Column: PEST II ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1254 L1	0.10	1	10.85	1414980	MEAN
		2	11.27	1194770	
		3	12.24	1541550	
		4	13.06	1037970	
		5	13.34	902410	
Aroclor 1254 L2	0.20	1	10.85	1318685	MEAN
		2	11.26	1064290	
		3	12.23	1378210	
		4	13.05	879395	
		5	13.34	812905	
Aroclor 1254 L3	0.40	1	10.85	1207648	MEAN
		2	11.26	961175	
		3	12.22	1239770	
		4	13.05	745083	
		5	13.34	717530	
Aroclor 1254 L4	0.80	1	10.84	1443353	MEAN
		2	11.25	1149229	
		3	12.22	1510094	
		4	13.04	826260	
		5	13.34	851978	
Aroclor 1254 L5	1.60	1	10.84	1484249	MEAN
		2	11.25	1180229	
		3	12.21	1597673	
		4	13.04	801351	
		5	13.34	890423	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1254 MEAN	1	10.84	10.79	10.89	1373783	8.1
	2	11.26	11.21	11.31	1109939	8.8
	3	12.22	12.17	12.27	1453459	9.9
	4	13.05	13.00	13.10	858012	13.0
	5	13.34	13.29	13.39	835049	8.9

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Instrument ID: HP_07A Date(s) Analyzed: 06/18/01 06/18/01

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

GC Column: PEST ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1016 L1	0.10	1	6.62	480720	MEAN
		2	7.41	1182990	
		3	8.44	1112400	
		4	8.73	684040	
		5	9.26	621370	
Aroclor 1016 L2	0.20	1	6.62	542670	MEAN
		2	7.41	1305590	
		3	8.44	1373885	
		4	8.73	779825	
		5	9.26	571980	
Aroclor 1016 L3	0.40	1	6.62	526300	MEAN
		2	7.41	1251635	
		3	8.44	1489878	
		4	8.73	794575	
		5	9.26	561285	
Aroclor 1016 L4	0.80	1	6.62	473421	MEAN
		2	7.41	1105698	
		3	8.44	1101828	
		4	8.73	731163	
		5	9.26	490046	
Aroclor 1016 L5	1.60	1	6.62	429348	MEAN
		2	7.41	1001766	
		3	8.44	1555239	
		4	8.73	709753	
		5	9.26	455658	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1016 MEAN	1	6.62	6.57	6.67	490492	9.2
	2	7.41	7.36	7.46	1169536	10.3
	3	8.44	8.39	8.49	1326646	15.9
	4	8.73	8.68	8.78	739871	6.3
	5	9.26	9.21	9.31	540068	12.3

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Instrument ID: HP_07A Date(s) Analyzed: 06/18/01 06/18/01

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

GC Column: PEST ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1260 L1	0.10	1	12.20	1240680	MEAN
		2	12.80	1964790	
		3	13.38	1406200	
		4	14.03	693180	
		5	14.60	1477710	
Aroclor 1260 L2	0.20	1	12.20	1407540	MEAN
		2	12.80	2281940	
		3	13.37	1699585	
		4	14.03	839040	
		5	14.59	1803735	
Aroclor 1260 L3	0.40	1	12.20	1423805	MEAN
		2	12.79	2365873	
		3	13.36	1843713	
		4	14.03	883643	
		5	14.59	1952905	
Aroclor 1260 L4	0.80	1	12.20	1242455	MEAN
		2	12.79	2107924	
		3	13.36	1712229	
		4	14.03	795289	
		5	14.59	1805933	
Aroclor 1260 L5	1.60	1	12.20	1178765	MEAN
		2	12.79	2049591	
		3	13.36	1752580	
		4	14.03	793665	
		5	14.59	1863074	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1260 MEAN	1	12.20	12.15	12.25	1298649	8.5
	2	12.79	12.74	12.84	2154024	7.7
	3	13.37	13.32	13.42	1682861	9.8
	4	14.03	13.98	14.08	800963	8.8
	5	14.59	14.54	14.64	1780671	10.1

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Instrument ID: HP_07B Date(s) Analyzed: 06/18/01 06/18/01

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

GC Column: PEST II ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1016 L1	0.10	1	6.81	462370	MEAN
		2	7.70	1452690	
		3	8.69	1250280	
		4	8.97	964070	
		5	9.97	920010	
Aroclor 1016 L2	0.20	1	6.81	835970	MEAN
		2	7.70	1801380	
		3	8.68	1673035	
		4	8.97	1192315	
		5	9.97	659465	
Aroclor 1016 L3	0.40	1	6.81	739835	MEAN
		2	7.70	1746320	
		3	8.68	1743860	
		4	8.97	1136803	
		5	9.97	678308	
Aroclor 1016 L4	0.80	1	6.81	656876	MEAN
		2	7.70	1592675	
		3	8.68	1736938	
		4	8.97	1012483	
		5	9.96	622784	
Aroclor 1016 L5	1.60	1	6.81	602495	MEAN
		2	7.70	1515749	
		3	8.68	1882149	
		4	8.96	970907	
		5	9.96	634815	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1016 MEAN	1	6.81	6.76	6.86	659509	21.4
	2	7.70	7.65	7.75	1621763	9.2
	3	8.68	8.63	8.73	1657252	14.5
	4	8.97	8.92	9.02	1055315	9.8
	5	9.97	9.92	10.02	703076	17.5

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Instrument ID: HP_07B Date(s) Analyzed: 06/18/01 06/18/01

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

GC Column: PEST II ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1260 L1	0.10	1	12.62	1533110	MEAN
		2	13.06	1384000	
		3	13.75	1299900	
		4	14.43	802800	
		5	14.87	1312640	
Aroclor 1260 L2	0.20	1	12.62	1744060	MEAN
		2	13.05	1598580	
		3	13.74	1545995	
		4	14.43	963640	
		5	14.87	1560125	
Aroclor 1260 L3	0.40	1	12.61	1755285	MEAN
		2	13.05	1638425	
		3	13.74	1662385	
		4	14.43	1004853	
		5	14.86	1675008	
Aroclor 1260 L4	0.80	1	12.61	1562303	MEAN
		2	13.05	1489404	
		3	13.74	1587546	
		4	14.43	924825	
		5	14.86	1582063	
Aroclor 1260 L5	1.60	1	12.61	1540895	MEAN
		2	13.04	1505774	
		3	13.73	1710948	
		4	14.43	951892	
		5	14.86	1696884	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1260 MEAN	1	12.61	12.56	12.66	1627131	6.9
	2	13.05	13.00	13.10	1523237	6.5
	3	13.74	13.69	13.79	1561355	10.2
	4	14.43	14.38	14.48	929602	8.2
	5	14.86	14.81	14.91	1565344	9.8

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Instrument ID: HP_07A Date(s) Analyzed: 06/18/01 06/18/01

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

GC Column: PEST ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1221	0.40	1	6.20	242303	SINGLE
		2	6.54	147283	POINT
		3	6.63	616920	
		4			
		5			
Aroclor 1232	0.40	1	7.82	88768	SINGLE
		2	8.29	74673	POINT
		3	8.88	205673	
		4	9.27	234490	
		5			
Aroclor 1248	0.40	1	7.86	150843	SINGLE
		2	9.18	667310	POINT
		3	9.81	484928	
		4	10.39	161048	
		5	11.06	709678	

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Instrument ID: HP_07B Date(s) Analyzed: 06/18/01 06/18/01

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

GC Column: PEST II ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1221	0.40	1	6.37	259653	SINGLE
		2	6.68	180870	POINT
		3	6.82	782138	
		4			
		5			
Aroclor 1232	0.40	1	8.22	304575	SINGLE
		2	9.25	272100	POINT
		3	9.40	212283	
		4	9.57	336503	
		5			
Aroclor 1248	0.40	1	8.69	721990	SINGLE
		2	8.96	574803	POINT
		3	9.40	763660	
		4	10.54	224448	
		5	11.26	376028	

FORM VI PCB-3

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

GC Column: PEST ID: 0.32(mm) Init. Calib Date(s): 06/18/01 06/18/01

Client Sample No.(PIBLK): PIBLKK7 Date Analyzed : 06/19/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 0223

Client Sample No.: AR1660L37L Date Analyzed : 06/19/01

Lab Sample ID : 5-29-7 Time Analyzed : 0247

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	6.64	6.57	6.67	609145	490492	24.2*
Aroclor 1016 #2	7.43	7.36	7.46	1407250	1169540	20.3*
Aroclor 1016 #3	8.46	8.39	8.49	1793330	1326650	35.2*
Aroclor 1016 #4	8.75	8.68	8.78	921293	739871	24.5*
Aroclor 1016 #5	9.28	9.21	9.31	620743	540068	14.9
Aroclor 1260 #1	12.22	12.15	12.25	1588998	1298650	22.4*
Aroclor 1260 #2	12.81	12.74	12.84	2671640	2154020	24.0*
Aroclor 1260 #3	13.38	13.32	13.42	2102798	1682860	25.0*
Aroclor 1260 #4	14.05	13.98	14.08	990830	800963	23.7*
Aroclor 1260 #5	14.60	14.54	14.64	2271830	1780670	27.6*

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

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

GC Column: PEST II ID: 0.32(mm) Init. Calib Date(s): 06/18/01 06/18/01

Client Sample No.(PIBLK): PIBLKK7 Date Analyzed : 06/19/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 0223

Client Sample No.: AR1660L37L Date Analyzed : 06/19/01

Lab Sample ID : 5-29-7 Time Analyzed : 0247

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	6.82	6.76	6.86	798463	659509	21.1*
Aroclor 1016 #2	7.71	7.65	7.75	1933475	1621760	19.2*
Aroclor 1016 #3	8.70	8.63	8.73	2028008	1657250	22.4*
Aroclor 1016 #4	8.98	8.92	9.02	1205908	1055320	14.3
Aroclor 1016 #5	9.98	9.92	10.02	717520	703076	2.1
Aroclor 1260 #1	12.63	12.56	12.66	1886240	1627130	15.9*
Aroclor 1260 #2	13.06	13.00	13.10	1756808	1523240	15.3*
Aroclor 1260 #3	13.75	13.69	13.79	1992253	1561350	27.6*
Aroclor 1260 #4	14.44	14.38	14.48	1177608	929602	26.7*
Aroclor 1260 #5	14.88	14.81	14.91	2124033	1565340	35.7*

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

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

GC Column: PEST ID: 0.32(mm) Init. Calib Date(s): 06/18/01 06/18/01

Client Sample No.(PIBLK): PIBLKK7 Date Analyzed : 06/19/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 0223

Client Sample No.: AR1660L37M Date Analyzed : 06/19/01

Lab Sample ID : 5-29-7 Time Analyzed : 0311

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	6.64	6.57	6.67	558958	490492	14.0
Aroclor 1016 #2	7.43	7.36	7.46	1291863	1169540	10.4
Aroclor 1016 #3	8.46	8.39	8.49	1585863	1326650	19.5*
Aroclor 1016 #4	8.75	8.68	8.78	830995	739871	12.3
Aroclor 1016 #5	9.28	9.21	9.31	570373	540068	5.6
Aroclor 1260 #1	12.22	12.15	12.25	1427070	1298650	9.9
Aroclor 1260 #2	12.81	12.74	12.84	2386858	2154020	10.8
Aroclor 1260 #3	13.38	13.32	13.42	1856080	1682860	10.3
Aroclor 1260 #4	14.05	13.98	14.08	879765	800963	9.8
Aroclor 1260 #5	14.61	14.54	14.64	2005653	1780670	12.6

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

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

GC Column: PEST II ID: 0.32(mm) Init. Calib Date(s): 06/18/01 06/18/01

Client Sample No.(PIBLK): PIBLKK7 Date Analyzed : 06/19/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 0223

Client Sample No.: AR1660L37M Date Analyzed : 06/19/01

Lab Sample ID : 5-29-7 Time Analyzed : 0311

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	6.82	6.76	6.86	727063	659509	10.2
Aroclor 1016 #2	7.72	7.65	7.75	1756383	1621760	8.3
Aroclor 1016 #3	8.70	8.63	8.73	1786533	1657250	7.8
Aroclor 1016 #4	8.99	8.92	9.02	1087035	1055320	3.0
Aroclor 1016 #5	9.98	9.92	10.02	636775	703076	9.4
Aroclor 1260 #1	12.63	12.56	12.66	1681025	1627130	3.3
Aroclor 1260 #2	13.06	13.00	13.10	1557843	1523240	2.3
Aroclor 1260 #3	13.75	13.69	13.79	1742910	1561350	11.6
Aroclor 1260 #4	14.44	14.38	14.48	1042798	929602	12.2
Aroclor 1260 #5	14.88	14.81	14.91	1851690	1565340	18.3*

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

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

GC Column: PEST ID: 0.32(mm) Init. Calib Date(s): 06/18/01 06/18/01

Client Sample No.(PIBLK): PIBLKL7 Date Analyzed : 06/19/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 0759

Client Sample No.: AR1660L37N Date Analyzed : 06/19/01

Lab Sample ID : 5-29-7 Time Analyzed : 0823

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	6.64	6.57	6.67	502988	490492	2.6
Aroclor 1016 #2	7.43	7.36	7.46	1158365	1169540	1.0
Aroclor 1016 #3	8.46	8.39	8.49	1351143	1326650	1.9
Aroclor 1016 #4	8.75	8.68	8.78	721928	739871	2.4
Aroclor 1016 #5	9.28	9.21	9.31	494355	540068	8.5
Aroclor 1260 #1	12.22	12.15	12.25	1247128	1298650	4.0
Aroclor 1260 #2	12.81	12.74	12.84	2046328	2154020	5.0
Aroclor 1260 #3	13.38	13.32	13.42	1556760	1682860	7.5
Aroclor 1260 #4	14.05	13.98	14.08	755445	800963	5.7
Aroclor 1260 #5	14.61	14.54	14.64	1675293	1780670	5.9

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.: E30S4

GC Column: PEST II ID: 0.32(mm) Init. Calib Date(s): 06/18/01 06/18/01

Client Sample No.(PIBLK): PIBLKL7 Date Analyzed : 06/19/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 0759

Client Sample No.: AR1660L37N Date Analyzed : 06/19/01

Lab Sample ID : 5-29-7 Time Analyzed : 0823

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	6.83	6.76	6.86	679725	659509	3.1
Aroclor 1016 #2	7.72	7.65	7.75	1639365	1621760	1.1
Aroclor 1016 #3	8.70	8.63	8.73	1746448	1657250	5.4
Aroclor 1016 #4	8.99	8.92	9.02	1070075	1055320	1.4
Aroclor 1016 #5	9.98	9.92	10.02	609455	703076	13.3
Aroclor 1260 #1	12.63	12.56	12.66	1651825	1627130	1.5
Aroclor 1260 #2	13.07	13.00	13.10	1529463	1523240	0.4
Aroclor 1260 #3	13.76	13.69	13.79	1683040	1561350	7.8
Aroclor 1260 #4	14.45	14.38	14.48	1001318	929602	7.7
Aroclor 1260 #5	14.88	14.81	14.91	1747955	1565340	11.7

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

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

GC Column: PEST ID: 0.32(mm) Init. Calib Date(s): 06/18/01 06/18/01

Client Sample No.(PIBLK): PIBLKM7 Date Analyzed : 06/19/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1311

Client Sample No.: AR1660L37P Date Analyzed : 06/19/01

Lab Sample ID : 5-29-7 Time Analyzed : 1336

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	6.64	6.57	6.67	511625	490492	4.3
Aroclor 1016 #2	7.42	7.36	7.46	1211220	1169540	3.6
Aroclor 1016 #3	8.46	8.39	8.49	1482813	1326650	11.8
Aroclor 1016 #4	8.75	8.68	8.78	772700	739871	4.4
Aroclor 1016 #5	9.28	9.21	9.31	510963	540068	5.4
Aroclor 1260 #1	12.22	12.15	12.25	1282008	1298650	1.3
Aroclor 1260 #2	12.81	12.74	12.84	2217248	2154020	2.9
Aroclor 1260 #3	13.38	13.32	13.42	1715130	1682860	1.9
Aroclor 1260 #4	14.04	13.98	14.08	812013	800963	1.4
Aroclor 1260 #5	14.60	14.54	14.64	1817685	1780670	2.1

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

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

GC Column: PEST II ID: 0.32(mm) Init. Calib Date(s): 06/18/01 06/18/01

Client Sample No.(PIBLK): PIBLKM7 Date Analyzed : 06/19/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1311

Client Sample No.: AR1660L37P Date Analyzed : 06/19/01

Lab Sample ID : 5-29-7 Time Analyzed : 1336

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	6.82	6.76	6.86	708610	659509	7.4
Aroclor 1016 #2	7.71	7.65	7.75	1649455	1621760	1.7
Aroclor 1016 #3	8.69	8.63	8.73	1786558	1657250	7.8
Aroclor 1016 #4	8.98	8.92	9.02	1064245	1055320	0.8
Aroclor 1016 #5	9.98	9.92	10.02	628865	703076	10.6
Aroclor 1260 #1	12.63	12.56	12.66	1635225	1627130	0.5
Aroclor 1260 #2	13.06	13.00	13.10	1552675	1523240	1.9
Aroclor 1260 #3	13.75	13.69	13.79	1726208	1561350	10.6
Aroclor 1260 #4	14.44	14.38	14.48	996555	929602	7.2
Aroclor 1260 #5	14.87	14.81	14.91	1736913	1565340	11.0

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

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

GC Column: PEST ID: 0.32(mm) Init. Calib Date(s): 06/18/01 06/18/01

Client Sample No.(PIBLK): PIBLKN7 Date Analyzed : 06/19/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 2005

Client Sample No.: AR1660L37R Date Analyzed : 06/19/01

Lab Sample ID : 5-29-7 Time Analyzed : 2029

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	6.64	6.57	6.67	576118	490492	17.4*
Aroclor 1016 #2	7.43	7.36	7.46	1370648	1169540	17.2*
Aroclor 1016 #3	8.46	8.39	8.49	1670090	1326650	25.9*
Aroclor 1016 #4	8.76	8.68	8.78	875948	739871	18.4*
Aroclor 1016 #5	9.28	9.21	9.31	606795	540068	12.4
Aroclor 1260 #1	12.22	12.15	12.25	1443700	1298650	11.2
Aroclor 1260 #2	12.81	12.74	12.84	2535858	2154020	17.7*
Aroclor 1260 #3	13.38	13.32	13.42	1958828	1682860	16.4*
Aroclor 1260 #4	14.05	13.98	14.08	938478	800963	17.2*
Aroclor 1260 #5	14.61	14.54	14.64	2119680	1780670	19.0*

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

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

GC Column: PEST II ID: 0.32(mm) Init. Calib Date(s): 06/18/01 06/18/01

Client Sample No.(PIBLK): PIBLKN7 Date Analyzed : 06/19/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 2005

Client Sample No.: AR1660L37R Date Analyzed : 06/19/01

Lab Sample ID : 5-29-7 Time Analyzed : 2029

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	6.83	6.76	6.86	755380	659509	14.5
Aroclor 1016 #2	7.72	7.65	7.75	1889640	1621760	16.5*
Aroclor 1016 #3	8.70	8.63	8.73	2023103	1657250	22.1*
Aroclor 1016 #4	8.99	8.92	9.02	1214500	1055320	15.1*
Aroclor 1016 #5	9.98	9.92	10.02	710563	703076	1.1
Aroclor 1260 #1	12.63	12.56	12.66	1850138	1627130	13.7
Aroclor 1260 #2	13.07	13.00	13.10	1739168	1523240	14.2
Aroclor 1260 #3	13.76	13.69	13.79	1942123	1561350	24.4*
Aroclor 1260 #4	14.45	14.38	14.48	1144178	929602	23.1*
Aroclor 1260 #5	14.88	14.81	14.91	2011075	1565340	28.5*

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.: E30S4

GC Column: PEST ID: 0.32(mm) Init. Calib Date(s): 06/18/01 06/18/01

Client Sample No.(PIBLK): PIBLKN7 Date Analyzed : 06/19/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 2005

Client Sample No.: AR1660L37S Date Analyzed : 06/19/01

Lab Sample ID : 5-29-7 Time Analyzed : 2053

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	6.64	6.57	6.67	488115	490492	0.5
Aroclor 1016 #2	7.43	7.36	7.46	1151000	1169540	1.6
Aroclor 1016 #3	8.46	8.39	8.49	1725195	1326650	30.0*
Aroclor 1016 #4	8.76	8.68	8.78	721160	739871	2.5
Aroclor 1016 #5	9.28	9.21	9.31	498760	540068	7.7
Aroclor 1260 #1	12.23	12.15	12.25	1201375	1298650	7.5
Aroclor 1260 #2	12.82	12.74	12.84	2099290	2154020	2.5
Aroclor 1260 #3	13.39	13.32	13.42	1614148	1682860	4.1
Aroclor 1260 #4	14.05	13.98	14.08	784570	800963	2.1
Aroclor 1260 #5	14.61	14.54	14.64	1742345	1780670	2.2

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.: E30S4

GC Column: PEST II ID: 0.32(mm) Init. Calib Date(s): 06/18/01 06/18/01

Client Sample No.(PIBLK): PIBLKN7 Date Analyzed : 06/19/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 2005

Client Sample No.: AR1660L37S Date Analyzed : 06/19/01

Lab Sample ID : 5-29-7 Time Analyzed : 2053

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	6.83	6.76	6.86	645128	659509	2.2
Aroclor 1016 #2	7.72	7.65	7.75	1566488	1621760	3.4
Aroclor 1016 #3	8.70	8.63	8.73	1624410	1657250	2.0
Aroclor 1016 #4	8.99	8.92	9.02	996093	1055320	5.6
Aroclor 1016 #5	9.99	9.92	10.02	575110	703076	18.2*
Aroclor 1260 #1	12.63	12.56	12.66	1518055	1627130	6.7
Aroclor 1260 #2	13.07	13.00	13.10	1415418	1523240	7.1
Aroclor 1260 #3	13.76	13.69	13.79	1573460	1561350	0.8
Aroclor 1260 #4	14.45	14.38	14.48	939510	929602	1.1
Aroclor 1260 #5	14.88	14.81	14.91	1636890	1565340	4.6

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.: E30S4

GC Column: PEST ID: 0.32(mm) Init. Calib. Date(s):

Instrument ID: HP_07A

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	RESC7G	5-441-6	06/18/01	1312	5.80	16.87
02	AR1221L37G	5-420-6	06/18/01	1336	5.80	16.87
03	AR1232L37G	5-422-6	06/18/01	1400	5.80	16.87
04	AR1242L17G	5-11-7	06/18/01	1424	5.80	16.87
05	AR1242L27G	5-10-7	06/18/01	1448	5.80	16.87
06	AR1242L37G	5-9-7	06/18/01	1512	5.80	16.87
07	AR1242L47G	5-8-7	06/18/01	1536	5.80	16.87
08	AR1242L57G	5-7-7	06/18/01	1600	5.80	16.86
09	AR1248L37G	5-424-6	06/18/01	1624	5.80	16.86
10	AR1254L17G	5-6-7	06/18/01	1648	5.80	16.86
11	AR1254L27G	5-5-7	06/18/01	1712	5.80	16.86
12	AR1254L37G	5-4-7	06/18/01	1736	5.80	16.86
13	AR1254L47G	5-3-7	06/18/01	1800	5.80	16.86
14	AR1254L57G	5-2-7	06/18/01	1824	5.80	16.86
15	AR1660L17G	5-31-7	06/18/01	1848	5.80	16.86
16	AR1660L27G	5-30-7	06/18/01	1912	5.80	16.86
17	AR1660L37K	5-29-7	06/18/01	1936	5.80	16.86
18	AR1660L47G	5-28-7	06/18/01	2000	5.80	16.86
19	AR1660L57G	5-27-7	06/18/01	2024	5.80	16.86
20	PIBLKJ7	5-414-6	06/18/01	2048	5.80	16.87
21	PBLKSA	BL0609SA	06/19/01	0024	5.81	16.87
22	ELCS1	LC0609SA	06/19/01	0111	5.81	16.87
23	PIBLKK7	5-414-6	06/19/01	0223	5.81	16.88
24	AR1660L37L	5-29-7	06/19/01	0247	5.81	16.88
25	AR1660L37M	5-29-7	06/19/01	0311	5.81	16.88
26	E30S4	46721.49	06/19/01	0335	5.81	16.87
27	E30S5	46721.50	06/19/01	0359	5.81	16.87
28	E30S5MS	46721.51MS	06/19/01	0423	5.81	16.87
29	E30S5MSD	46721.52MSD	06/19/01	0447	5.80	16.87
30	E30S6	46721.53	06/19/01	0511	5.81	16.87
31	E30S7	46721.54	06/19/01	0535	5.81	16.87
32	E30S8	46721.55	06/19/01	0559	5.80	16.87
33	E30S9	46732.01	06/19/01	0623	5.81	16.87
34	PIBLKL7	5-414-6	06/19/01	0759	5.81	16.88
35	AR1660L37N	5-29-7	06/19/01	0823	5.81	16.88

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.: E30S4

GC Column: PEST ID: 0.32(mm) Init. Calib. Date(s):

Instrument ID: HP_07A

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	E30T0	46732.02	06/19/01	0911	5.81	16.86
02	E30T1	46732.03	06/19/01	0935	5.81	16.87
03	E30T2	46732.04	06/19/01	0959	5.81	16.87
04	E30T3	46732.05	06/19/01	1023	5.81	16.86
05	E30T5	46732.06	06/19/01	1047	5.80	16.86
06	E30T6	46732.07	06/19/01	1111	5.80	16.86
07	E30T7	46732.08	06/19/01	1135	5.80	16.86
08	PIBLKM7	5-414-6	06/19/01	1311	5.81	16.87
09	AR1660L37P	5-29-7	06/19/01	1336	5.81	16.87
10	E30T8	46732.09	06/19/01	1424	5.81	16.87
11	E30T9	46732.10	06/19/01	1449	5.81	16.87
12	E30W0	46732.11	06/19/01	1513	5.81	16.87
13	E30W1	46732.12	06/19/01	1538	5.81	16.87
14	E30W2	46732.13	06/19/01	1602	5.81	16.87
15	E30W3	46732.14	06/19/01	1627	5.81	16.87
16	E30W4	46732.15	06/19/01	1651	5.81	16.87
17	E30T0DL	46732.02DL	06/19/01	1715	5.81	16.87
18	E30T5DL	46732.06DL	06/19/01	1740	5.81	16.87
19	E30T7DL	46732.08DL	06/19/01	1828	5.81	16.87
20	PIBLKN7	5-414-6	06/19/01	2005	5.81	16.88
21	AR1660L37R	5-29-7	06/19/01	2029	5.81	16.88
22	AR1660L37S	5-29-7	06/19/01	2053	5.82	16.88
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						

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

8D
AROCLOR ANALYTICAL SEQUENCE

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29294 SAS No.: SDG No.: E30S4

GC Column: PEST II ID: 0.32(mm) Init. Calib. Date(s):

Instrument ID: HP_07B

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	RESC7G	5-441-6	06/18/01	1312	5.72	17.40
02	AR1221L37G	5-420-6	06/18/01	1336	5.72	17.40
03	AR1232L37G	5-422-6	06/18/01	1400	5.72	17.40
04	AR1242L17G	5-11-7	06/18/01	1424	5.71	17.40
05	AR1242L27G	5-10-7	06/18/01	1448	5.71	17.40
06	AR1242L37G	5-9-7	06/18/01	1512	5.72	17.40
07	AR1242L47G	5-8-7	06/18/01	1536	5.72	17.40
08	AR1242L57G	5-7-7	06/18/01	1600	5.71	17.39
09	AR1248L37G	5-424-6	06/18/01	1624	5.71	17.40
10	AR1254L17G	5-6-7	06/18/01	1648	5.71	17.39
11	AR1254L27G	5-5-7	06/18/01	1712	5.71	17.39
12	AR1254L37G	5-4-7	06/18/01	1736	5.71	17.39
13	AR1254L47G	5-3-7	06/18/01	1800	5.71	17.39
14	AR1254L57G	5-2-7	06/18/01	1824	5.71	17.39
15	AR1660L17G	5-31-7	06/18/01	1848	5.71	17.39
16	AR1660L27G	5-30-7	06/18/01	1912	5.71	17.39
17	AR1660L37K	5-29-7	06/18/01	1936	5.71	17.39
18	AR1660L47G	5-28-7	06/18/01	2000	5.71	17.39
19	AR1660L57G	5-27-7	06/18/01	2024	5.71	17.39
20	PIBLKJ7	5-414-6	06/18/01	2048	5.71	17.40
21	PBLKSA	BL0609SA	06/19/01	0024	5.72	17.40
22	ELCS1	LC0609SA	06/19/01	0111	5.72	17.40
23	PIBLKK7	5-414-6	06/19/01	0223	5.72	17.41
24	AR1660L37L	5-29-7	06/19/01	0247	5.72	17.41
25	AR1660L37M	5-29-7	06/19/01	0311	5.72	17.41
26	E30S4	46721.49	06/19/01	0335	5.72	17.40
27	E30S5	46721.50	06/19/01	0359	5.72	17.40
28	E30S5MS	46721.51MS	06/19/01	0423	5.72	17.40
29	E30S5MSD	46721.52MSD	06/19/01	0447	5.72	17.40
30	E30S6	46721.53	06/19/01	0511	5.72	17.41
31	E30S7	46721.54	06/19/01	0535	5.72	17.41
32	E30S8	46721.55	06/19/01	0559	5.72	17.40
33	E30S9	46732.01	06/19/01	0623	5.72	17.41
34	PIBLKL7	5-414-6	06/19/01	0759	5.72	17.41
35	AR1660L37N	5-29-7	06/19/01	0823	5.72	17.41

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.: E30S4

GC Column: PEST II ID: 0.32(mm) Init. Calib. Date(s):

Instrument ID: HP_07B

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	E30T0	46732.02	06/19/01	0911	5.72	17.40
02	E30T1	46732.03	06/19/01	0935	5.72	17.40
03	E30T2	46732.04	06/19/01	0959	5.72	17.40
04	E30T3	46732.05	06/19/01	1023	5.72	17.40
05	E30T5	46732.06	06/19/01	1047	5.71	17.39
06	E30T6	46732.07	06/19/01	1111	5.71	17.39
07	E30T7	46732.08	06/19/01	1135	5.71	17.39
08	PIBLKM7	5-414-6	06/19/01	1311	5.72	17.40
09	AR1660L37P	5-29-7	06/19/01	1336	5.72	17.40
10	E30T8	46732.09	06/19/01	1424	5.72	17.40
11	E30T9	46732.10	06/19/01	1449	5.72	17.40
12	E30W0	46732.11	06/19/01	1513	5.72	17.40
13	E30W1	46732.12	06/19/01	1538	5.72	17.40
14	E30W2	46732.13	06/19/01	1602	5.72	17.40
15	E30W3	46732.14	06/19/01	1627	5.72	17.40
16	E30W4	46732.15	06/19/01	1651	5.72	17.40
17	E30T0DL	46732.02DL	06/19/01	1715	5.71	17.40
18	E30T5DL	46732.06DL	06/19/01	1740	5.72	17.40
19	E30T7DL	46732.08DL	06/19/01	1828	5.72	17.40
20	PIBLKN7	5-414-6	06/19/01	2005	5.72	17.41
21	AR1660L37R	5-29-7	06/19/01	2029	5.72	17.41
22	AR1660L37S	5-29-7	06/19/01	2053	5.72	17.41
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						

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

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

ELCS1

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Lab Sample ID: LC0609SA Date(s) Analyzed: 06/19/01 06/19/01

Instrument ID (1): HP_07A Instrument ID (2): HP_07B

GC Column (1): PEST ID: 0.32(mm) GC Column (2): PEST II ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	10.55	10.49	10.59	159		
Aroclor-1254	2	11.49	11.43	11.53	177		
	3	12.21	12.15	12.25	129		
COLUMN 1	4	12.44	12.39	12.49	162		
	5	12.80	12.75	12.85	152	156	
	1	10.86	10.79	10.89	184		
	2	11.26	11.21	11.31	195		
	3	12.23	12.17	12.27	182		
COLUMN 2	4	13.05	13.00	13.10	155		
	5	13.34	13.29	13.39	185	180	14.3
	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

page 1 of 1

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30S4

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Lab Sample ID: 46721.49 Date(s) Analyzed: 06/19/01 06/19/01

Instrument ID (1): HP_07A Instrument ID (2): HP_07B

GC Column (1): PEST ID: 0.32(mm) GC Column (2): PEST II ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	9.19	9.13	9.23	22.9		
Aroclor-1242	2	9.81	9.76	9.86	50.6		
	3	10.12	10.07	10.17	33.5		
COLUMN 1	4	10.44	10.38	10.48	45.5		
	5	11.84	11.79	11.89	86.2	47.7	
	1	7.71	7.65	7.75	39.9		
	2	9.25	9.20	9.30	22.5		
	3	10.05	9.99	10.09	59.0		
COLUMN 2	4						
	5	11.26	11.22	11.32	122	60.8	24.1
	1	10.55	10.49	10.59	19.7		
Aroclor-1254	2	11.49	11.43	11.53	8.2		
	3	12.22	12.15	12.25	4.9		
COLUMN 1	4	12.44	12.39	12.49	10.1		
	5	12.81	12.75	12.85	6.7	9.9	
	1						
	2	11.26	11.21	11.31	11.2		
	3	12.23	12.17	12.27	13.4		
COLUMN 2	4	13.06	13.00	13.10	6.3		
	5	13.34	13.29	13.39	2.2	8.3	18.0
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

page 1 of 1

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30S5MS

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Lab Sample ID: 46721.51MS Date(s) Analyzed: 06/19/01 06/19/01

Instrument ID (1): HP_07A Instrument ID (2): HP_07B

GC Column (1): PEST ID: 0.32(mm) GC Column (2): PEST II ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	10.53	10.49	10.59	402		
Aroclor-1254	2	11.48	11.43	11.53	468		
	3	12.21	12.15	12.25	345		
COLUMN 1	4	12.42	12.39	12.49	528		
	5	12.80	12.75	12.85	436	436	
	1						
	2	11.26	11.21	11.31	842		
	3	12.22	12.17	12.27	847		
COLUMN 2	4	13.05	13.00	13.10	664		
	5					784	79.8
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

page 1 of 1

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30S5MSD

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Lab Sample ID: 46721.52MSD Date(s) Analyzed: 06/19/01 06/19/01

Instrument ID (1): HP_07A Instrument ID (2): HP_07B

GC Column (1): PEST ID: 0.32(mm) GC Column (2): PEST II ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	10.53	10.49	10.59	274		
Aroclor-1254	2	11.48	11.43	11.53	342		
	3	12.21	12.15	12.25	252		
COLUMN 1	4	12.42	12.39	12.49	366		
	5	12.80	12.75	12.85	303	307	
	1						
	2	11.26	11.21	11.31	525		
	3	12.22	12.17	12.27	528		
COLUMN 2	4	13.05	13.00	13.10	421		
	5	13.39	13.29	13.39	639	528	52.9
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

page 1 of 1

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30S9

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Lab Sample ID: 46732.01 Date(s) Analyzed: 06/19/01 06/19/01

Instrument ID (1): HP_07A Instrument ID (2): HP_07B

GC Column (1): PEST ID: 0.32(mm) GC Column (2): PEST II ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	9.20	9.13	9.23	58.8		
Aroclor-1242	2						
	3						
COLUMN 1	4	10.44	10.38	10.48	45.7		
	5	11.84	11.79	11.89	127	77.2	
	1	7.72	7.65	7.75	31.9		
	2	9.26	9.20	9.30	26.6		
	3	10.05	9.99	10.09	55.2		
COLUMN 2	4	10.55	10.49	10.59	62.3		
	5					44.0	75.5
	1	10.55	10.49	10.59	20.5		
Aroclor-1254	2	11.49	11.43	11.53	12.8		
	3	12.22	12.15	12.25	9.5		
COLUMN 1	4	12.44	12.39	12.49	11.6		
	5	12.81	12.75	12.85	11.8	13.2	
	1						
	2	11.26	11.21	11.31	15.3		
	3	12.23	12.17	12.27	18.0		
COLUMN 2	4	13.06	13.00	13.10	19.8		
	5					17.7	34.1
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

page 1 of 1

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30T0

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Lab Sample ID: 46732.02 Date(s) Analyzed: 06/19/01 06/19/01

Instrument ID (1): HP_07A Instrument ID (2): HP_07B

GC Column (1): PEST ID: 0.32(mm) GC Column (2): PEST II ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	9.19	9.13	9.23	2920		
Aroclor-1242	2	9.80	9.76	9.86	2560		
	3	10.11	10.07	10.17	2220		
COLUMN 1	4	10.43	10.38	10.48	2670		
	5					2590	
	1	7.71	7.65	7.75	3580		
	2	9.25	9.20	9.30	1570		
	3	10.04	9.99	10.09	6080		
COLUMN 2	4						
	5					3740	44.4
	1						
Aroclor-1254	2	11.48	11.43	11.53	744		
	3	12.21	12.15	12.25	372		
COLUMN 1	4	12.41	12.39	12.49	624		
	5	12.79	12.75	12.85	501	560	
	1						
	2	11.25	11.21	11.31	932		
	3	12.21	12.17	12.27	1220		
COLUMN 2	4	13.04	13.00	13.10	702		
	5	13.38	13.29	13.39	805	915	48.1
	1	12.21	12.15	12.25	210		
Aroclor-1260	2	12.79	12.74	12.84	263		
	3	13.35	13.32	13.42	323		
COLUMN 1	4	14.03	13.98	14.08	72.9		
	5	14.59	14.54	14.64	95.0	193	
	1	12.61	12.56	12.66	376		
	2	13.04	13.00	13.10	396		
	3						
COLUMN 2	4	14.43	14.38	14.48	204		
	5	14.86	14.81	14.91	199	294	41.5

At least 3 peaks are required for identification of multicomponent analytes

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30T0DL

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Lab Sample ID: 46732.02DL Date(s) Analyzed: 06/19/01 06/19/01

Instrument ID (1): HP_07A Instrument ID (2): HP_07B

GC Column (1): PEST ID: 0.32(mm) GC Column (2): PEST II ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	9.19	9.13	9.23	3750		
Aroclor-1242	2	9.81	9.76	9.86	2460		
	3	10.12	10.07	10.17	2210		
COLUMN 1	4	10.44	10.38	10.48	3430		
	5					2960	
	1	7.71	7.65	7.75	2510		
	2	9.25	9.20	9.30	1350		
	3	10.05	9.99	10.09	3170		
COLUMN 2	4	10.54	10.49	10.59	3880		
	5					2730	8.4
	1	10.54	10.49	10.59	969		
Aroclor-1254	2	11.48	11.43	11.53	755		
	3	12.21	12.15	12.25	573		
COLUMN 1	4	12.42	12.39	12.49	920		
	5	12.80	12.75	12.85	765	796	
	1						
	2	11.26	11.21	11.31	830		
	3	12.22	12.17	12.27	946		
COLUMN 2	4	13.05	13.00	13.10	771		
	5	13.34	13.29	13.39	643	798	0.3
	1	12.21	12.15	12.25	324		
Aroclor-1260	2	12.80	12.74	12.84	401		
	3	13.36	13.32	13.42	432		
COLUMN 1	4	14.04	13.98	14.08	195		
	5	14.59	14.54	14.64	143	299	
	1	12.62	12.56	12.66	418		
	2	13.05	13.00	13.10	434		
	3	13.74	13.69	13.79	524		
COLUMN 2	4	14.43	14.38	14.48	198		
	5	14.86	14.81	14.91	203	355	17.1

At least 3 peaks are required for identification of multicomponent analytes

page 1 of 1

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30T5

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Lab Sample ID: 46732.06 Date(s) Analyzed: 06/19/01 06/19/01

Instrument ID (1): HP_07A Instrument ID (2): HP_07B

GC Column (1): PEST ID: 0.32(mm) GC Column (2): PEST II ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	9.18	9.13	9.23	662		
Aroclor-1242	2						
	3						
COLUMN 1	4	10.43	10.38	10.48	864		
	5	11.82	11.79	11.89	1820	1120	
	1						
	2						
	3	10.04	9.99	10.09	554		
COLUMN 2	4	10.53	10.49	10.59	603		
	5	11.24	11.22	11.32	2820	1320	16.4
	1	10.52	10.49	10.59	271		
Aroclor-1254	2	11.47	11.43	11.53	227		
	3	12.20	12.15	12.25	211		
COLUMN 1	4						
	5	12.78	12.75	12.85	286	249	
	1						
	2						
	3	12.20	12.17	12.27	311		
COLUMN 2	4	13.03	13.00	13.10	349		
	5	13.33	13.29	13.39	109	256	2.8
	1	12.20	12.15	12.25	119		
Aroclor-1260	2	12.78	12.74	12.84	150		
	3	13.35	13.32	13.42	180		
COLUMN 1	4	14.02	13.98	14.08	56.3		
	5	14.58	14.54	14.64	63.8	114	
	1	12.60	12.56	12.66	132		
	2	13.03	13.00	13.10	196		
	3	13.73	13.69	13.79	231		
COLUMN 2	4	14.42	14.38	14.48	78.8		
	5	14.85	14.81	14.91	81.8	144	23.3

At least 3 peaks are required for identification of multicomponent analytes

page 1 of 1

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30T5DL

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Lab Sample ID: 46732.06DL Date(s) Analyzed: 06/19/01 06/19/01

Instrument ID (1): HP_07A Instrument ID (2): HP_07B

GC Column (1): PEST ID: 0.32(mm) GC Column (2): PEST II ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	9.20	9.13	9.23	545		
Aroclor-1242	2	9.82	9.76	9.86	357		
	3	10.12	10.07	10.17	296		
COLUMN 1	4	10.44	10.38	10.48	777		
	5					494	
	1						
	2	9.25	9.20	9.30	163		
	3	10.06	9.99	10.09	462		
COLUMN 2	4	10.54	10.49	10.59	551		
	5					392	26.0
	1	10.55	10.49	10.59	200		
Aroclor-1254	2	11.49	11.43	11.53	202		
	3	12.22	12.15	12.25	194		
COLUMN 1	4	12.43	12.39	12.49	177		
	5	12.80	12.75	12.85	226	200	
	1						
	2						
	3	12.22	12.17	12.27	212		
COLUMN 2	4	13.05	13.00	13.10	248		
	5	13.34	13.29	13.39	182	214	6.8
	1	12.22	12.15	12.25	110		
Aroclor-1260	2	12.80	12.74	12.84	118		
	3	13.37	13.32	13.42	137		
COLUMN 1	4	14.04	13.98	14.08	49.1		
	5	14.60	14.54	14.64	62.2	95.3	
	1	12.62	12.56	12.66	106		
	2	13.05	13.00	13.10	140		
	3	13.74	13.69	13.79	147		
COLUMN 2	4	14.43	14.38	14.48	84.4		
	5	14.86	14.81	14.91	67.7	109	13.4

At least 3 peaks are required for identification of multicomponent analytes

page 1 of 1

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30T6

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Lab Sample ID: 46732.07 Date(s) Analyzed: 06/19/01 06/19/01

Instrument ID (1): HP_07A Instrument ID (2): HP_07B

GC Column (1): PEST ID: 0.32(mm) GC Column (2): PEST II ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
Aroclor-1242 COLUMN 1	1	9.18	9.13	9.23	71.5		
	2	9.80	9.76	9.86	79.5		
	3	10.11	10.07	10.17	45.9		
	4	10.43	10.38	10.48	82.0		
	5					69.7	
Aroclor-1242 COLUMN 2	1	7.70	7.65	7.75	28.6		
	2	9.24	9.20	9.30	31.6		
	3	10.04	9.99	10.09	60.2		
	4	10.53	10.49	10.59	65.4		
	5					46.4	50.2
Aroclor-1254 COLUMN 1	1	10.54	10.49	10.59	26.2		
	2	11.48	11.43	11.53	18.2		
	3	12.20	12.15	12.25	15.7		
	4	12.42	12.39	12.49	17.8		
	5	12.79	12.75	12.85	18.9	19.4	
Aroclor-1254 COLUMN 2	1						
	2	11.25	11.21	11.31	28.6		
	3	12.21	12.17	12.27	22.8		
	4	13.04	13.00	13.10	19.6		
	5	13.33	13.29	13.39	16.4	21.8	11.7
Aroclor-1260 COLUMN 1	1	12.20	12.15	12.25	8.9		
	2	12.79	12.74	12.84	9.9		
	3	13.36	13.32	13.42	10.2		
	4						
	5	14.59	14.54	14.64	6.6	8.9	
Aroclor-1260 COLUMN 2	1	12.61	12.56	12.66	10.4		
	2	13.04	13.00	13.10	11.0		
	3	13.74	13.69	13.79	12.9		
	4						
	5	14.86	14.81	14.91	13.0	11.8	27.9

At least 3 peaks are required for identification of multicomponent analytes

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30T7

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Lab Sample ID: 46732.08 Date(s) Analyzed: 06/19/01 06/19/01

Instrument ID (1): HP_07A Instrument ID (2): HP_07B

GC Column (1): PEST ID: 0.32(mm) GC Column (2): PEST II ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	9.18	9.13	9.23	9160		
Aroclor-1242	2	9.79	9.76	9.86	6560		
	3						
COLUMN 1	4	10.42	10.38	10.48	8100		
	5					7940	
	1	7.70	7.65	7.75	8840		
	2						
	3	10.04	9.99	10.09	15800		
COLUMN 2	4	10.53	10.49	10.59	14800		
	5					13100	65.0
	1	10.52	10.49	10.59	3040		
Aroclor-1254	2	11.47	11.43	11.53	2040		
	3	12.20	12.15	12.25	1380		
COLUMN 1	4						
	5	12.78	12.75	12.85	2070	2130	
	1						
	2	11.24	11.21	11.31	2970		
	3						
COLUMN 2	4	13.03	13.00	13.10	3050		
	5	13.36	13.29	13.39	2690	2900	30.6
	1	12.20	12.15	12.25	777		
Aroclor-1260	2	12.78	12.74	12.84	1090		
	3	13.34	13.32	13.42	1400		
COLUMN 1	4	14.02	13.98	14.08	479		
	5	14.58	14.54	14.64	521	853	
	1	12.60	12.56	12.66	1320		
	2						
	3						
COLUMN 2	4	14.42	14.38	14.48	870		
	5	14.85	14.81	14.91	928	1040	19.8

At least 3 peaks are required for identification of multicomponent analytes

page 1 of 1

FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30T7DL

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Lab Sample ID: 46732.08DL Date(s) Analyzed: 06/19/01 06/19/01

Instrument ID (1): HP_07A Instrument ID (2): HP_07B

GC Column (1): PEST ID: 0.32(mm) GC Column (2): PEST II ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1						
Aroclor-1242	2	9.81	9.76	9.86	12600		
	3	10.12	10.07	10.17	12500		
COLUMN 1	4	10.44	10.38	10.48	16000		
	5	11.84	11.79	11.89	32500	18400	
	1	7.71	7.65	7.75	15300		
	2	9.25	9.20	9.30	7640		
	3	10.05	9.99	10.09	18100		
COLUMN 2	4	10.54	10.49	10.59	28400		
	5					17400	5.7
	1						
Aroclor-1254	2	11.49	11.43	11.53	4380		
	3	12.22	12.15	12.25	2380		
COLUMN 1	4	12.43	12.39	12.49	3360		
	5	12.80	12.75	12.85	2610	3180	
	1						
	2	11.26	11.21	11.31	3940		
	3	12.22	12.17	12.27	3860		
COLUMN 2	4	13.05	13.00	13.10	2600		
	5					3470	9.1
	1	12.22	12.15	12.25	1340		
Aroclor-1260	2	12.80	12.74	12.84	1370		
	3	13.37	13.32	13.42	1480		
COLUMN 1	4						
	5					1400	
	1	12.62	12.56	12.66	1600		
	2	13.05	13.00	13.10	1460		
	3	13.74	13.69	13.79	2070		
COLUMN 2	4	14.43	14.38	14.48	1380		
	5					1630	16.4

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30T8

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Lab Sample ID: 46732.09 Date(s) Analyzed: 06/19/01 06/19/01

Instrument ID (1): HP_07A Instrument ID (2): HP_07B

GC Column (1): PEST ID: 0.32(mm) GC Column (2): PEST II ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	12.21	12.15	12.25	25.1		
Aroclor-1260	2	12.79	12.74	12.84	60.1		
	3	13.36	13.32	13.42	52.9		
COLUMN 1	4	14.03	13.98	14.08	71.9		
	5	14.59	14.54	14.64	48.7	51.7	
	1	12.62	12.56	12.66	30.5		
	2						
	3	13.73	13.69	13.79	61.6		
COLUMN 2	4	14.44	14.38	14.48	124		
	5	14.86	14.81	14.91	92.9	77.2	39.6
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

page 1 of 1

FORM X PCB

HYDROGEN USED AS CARRIER GAS FOR SAMPLE ANALYSES

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061806.D\ECD1A.CH Vial: 6
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061806.D\ECD2B.CH
Acq On : 18 Jun 2001 13:12 Operator: DDC
Sample : RESC7G Inst : HP_07
Misc : 5-441-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:35 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.80	5.72	332388	420705	16.2	16.9
22)	S DCB	16.87	17.40	260415	262705	16.6	16.1
	Target Compounds:						

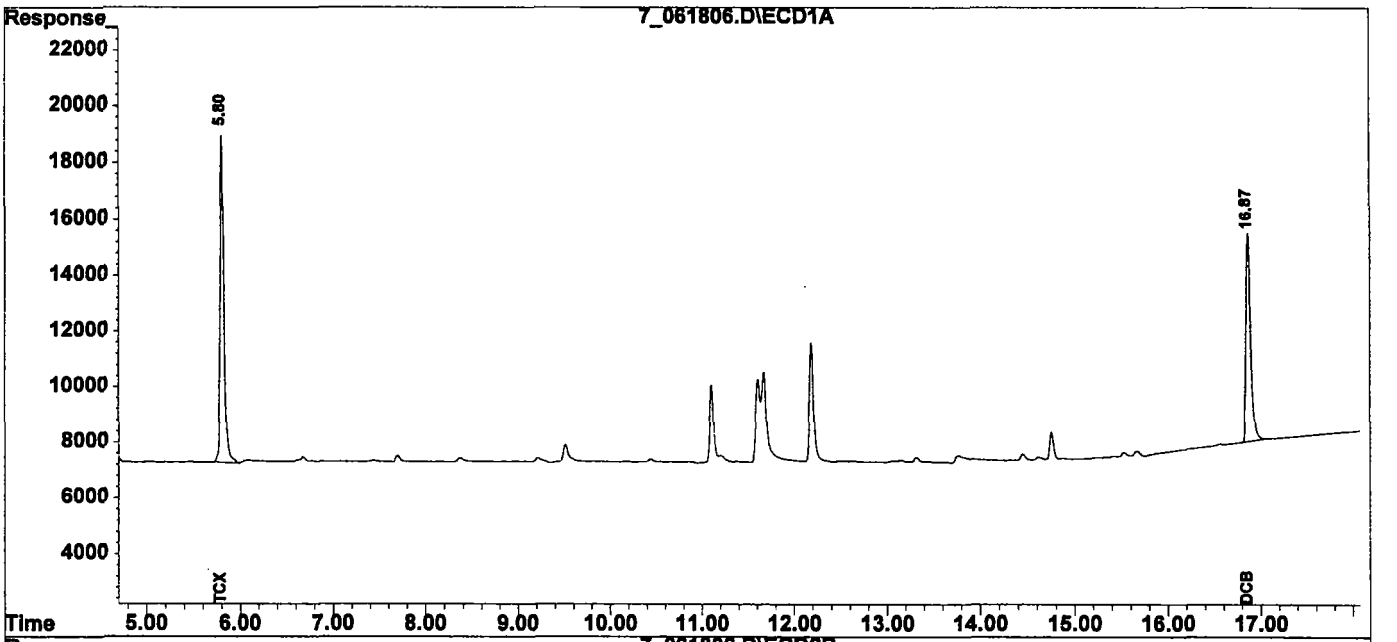
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

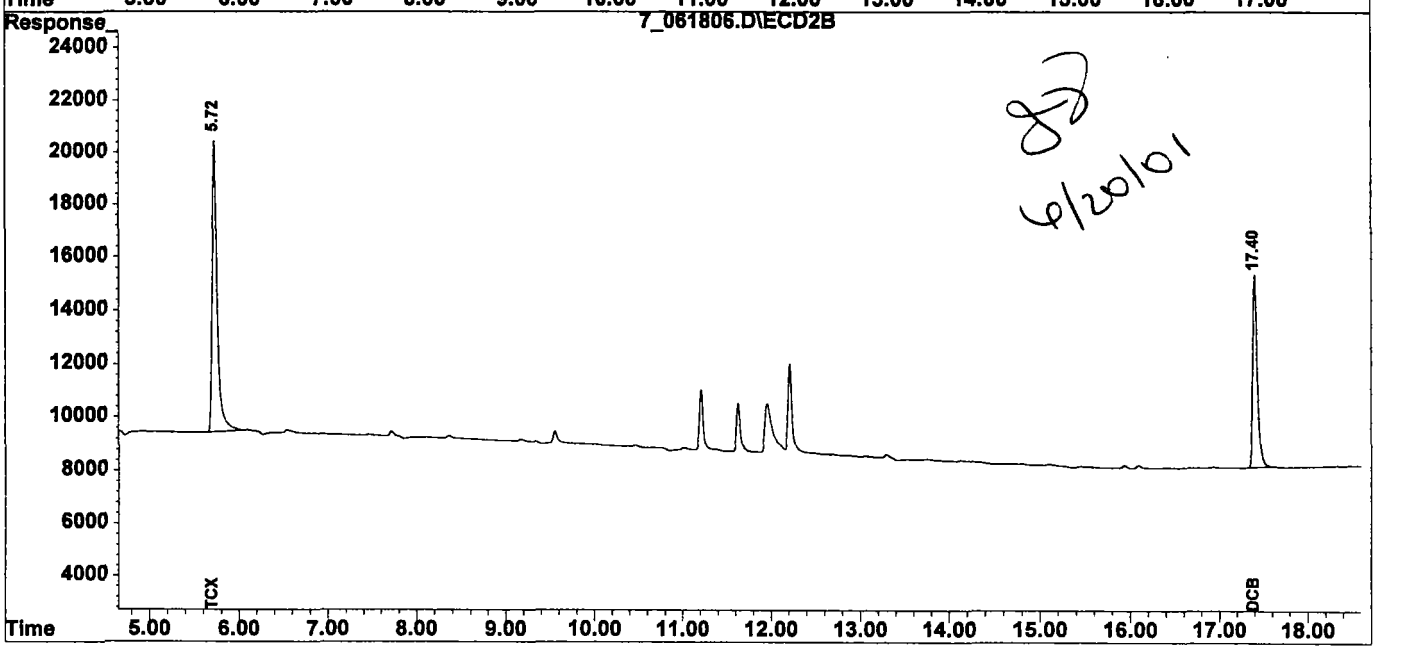
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061806.D\ECD1A.CH Vial: 6
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061806.D\ECD2B.CH
Acq On : 18 Jun 2001 13:12 Operator: DDC
Sample : RESC7G Inst : HP_07
Misc : 5-441-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:35 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061807.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061807.D\ECD2B.CH
Acq On : 18 Jun 2001 13:36 Operator: DDC
Sample : AR1221L37G Inst : HP_07
Misc : 5-420-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:42 2001 Quant Results File: XPCBF18.RES
Multi Time: Jun 19 9:44 2001 Quant Results File: xspcbf18.RES

Pesticide Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001

Multi-Component Method : f:\hpchem\hp\7\data\06_18_01\xspcbf18.m
Title : PCB/TOXAPHENE
Last Update : Wed May 30 11:44:17 2001
Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.80	5.72	349081	425084	17.0	17.1
22)	S DCB	16.87	17.40	261997	268277	16.7	16.4
	Target Compounds:						
	Multi-Component Compounds:						
2)	L2 Aroclor-1221	6.20	6.37	96921	103861	412.7	385.3
3)	L2 Aroclor-1221 {2}	6.54	6.68	58913	72348	386.1	382.5
4)	L2 Aroclor-1221 {3}	6.63	6.82	246768	312855	386.7	380.5
	Sum Aroclor-1221			402602	489065	1185.6	1148.3
	Average Aroclor-1221					395.184	382.770

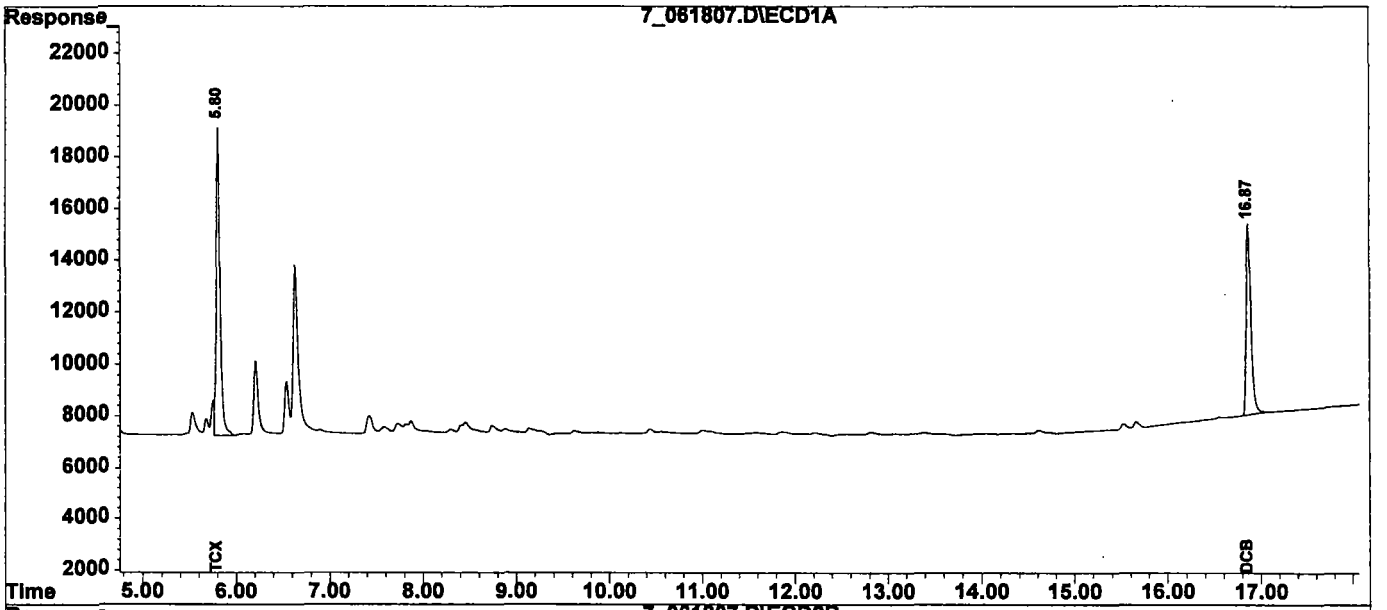
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

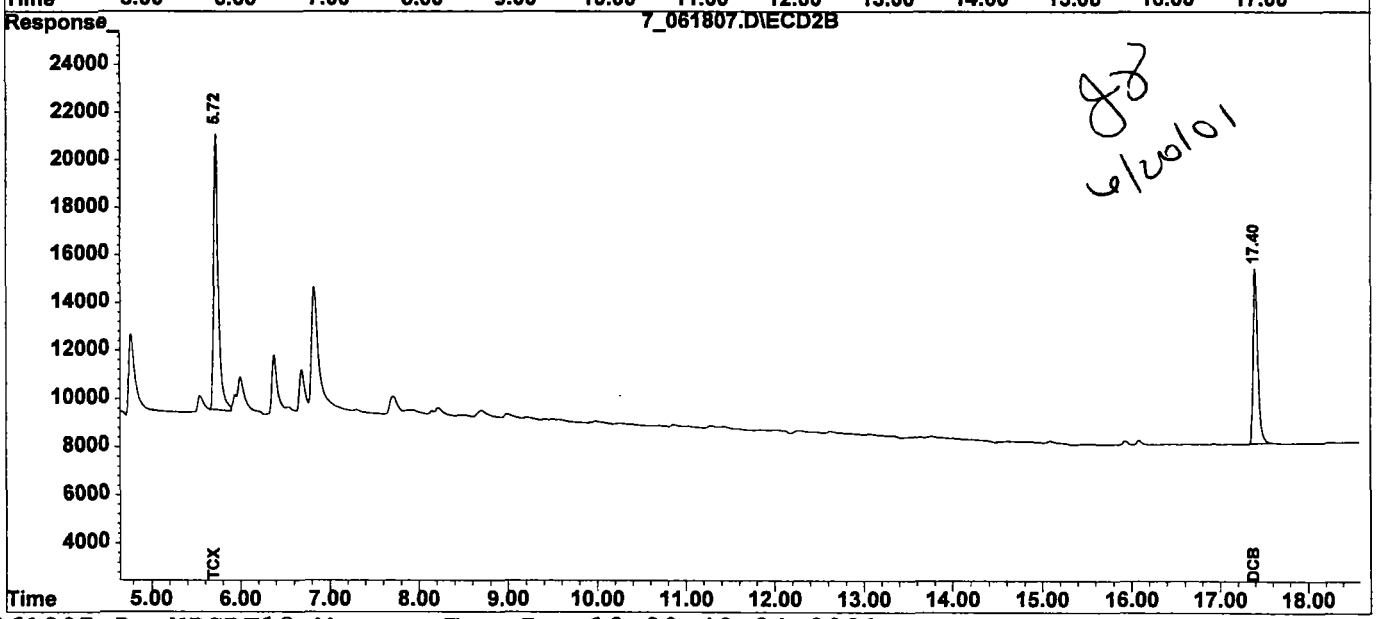
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061807.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061807.D\ECD2B.CH
Acq On : 18 Jun 2001 13:36 Operator: DDC
Sample : AR1221L37G Inst : HP_07
Misc : 5-420-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:42 2001 Quant Results File: XPCBF18.RES
Quant Time: Jun 19 9:44 2001 Quant Results File: xspcbf18.RES

Pesticide Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001

Multi-Component Method : f:\hpchem\hp\7\data\06_18_01\xspcbf18.m
Title : PCB/TOXAPHENE
Last Update : Wed May 30 11:44:17 2001
Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

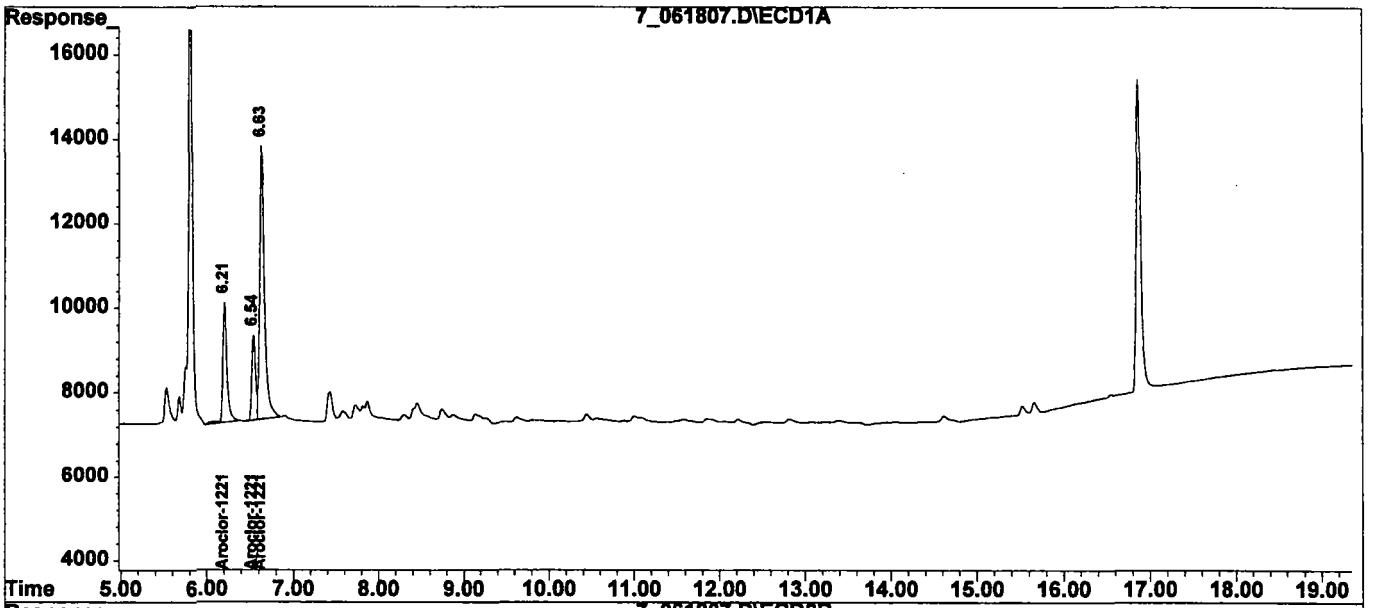


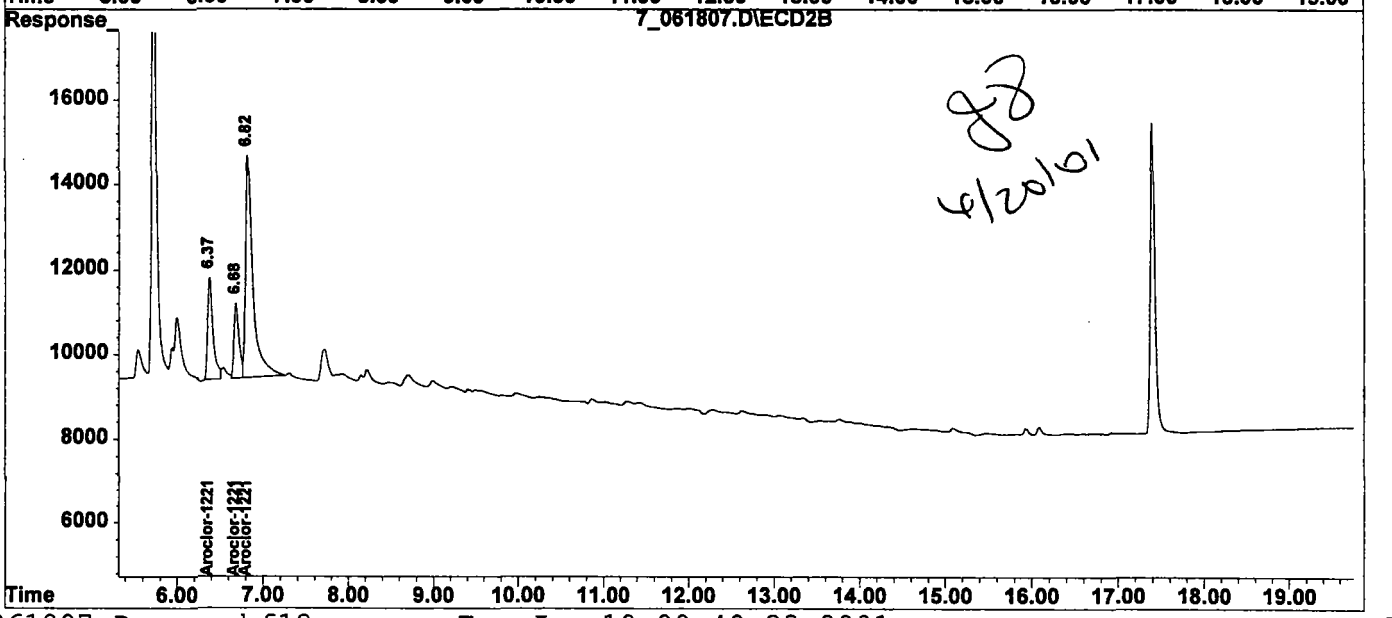


JB
6/20/01

Chromatographic Report

```
Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061807.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061807.D\ECD2B.CH
Acq On    : 18 Jun 2001  13:36                        Operator: DDC
Sample    : AR1221L37G                                Inst    : HP_07
Misc      : 5-420-6                                   Dilution: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e
Quant Time: Jun 19  9:44 2001  Quant Results File: xspcbf18.RES
Quant Time: Jun 19  9:44 2001  Quant Results File: xspcbf18.RES

Pesticide Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-ICAL Path  : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update      : Wed Jun 06 14:28:40 2001

Multi-Component Method : f:\hpchem\hp\7\data\06_18_01\xspcbf18.m
Title                  : PCB/TOXAPHENE
Last Update            : Wed May 30 11:44:17 2001
Volume Inj.      : 0.5uL
Signal #1 Phase : PEST I            Signal #2 Phase: PEST II
Signal #1 Info  : .32               Signal #2 Info : .32
Signal #1 Inst  : HP_07A            Signal #2 Inst : HP_07B
```





JB
6/20/01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061808.D\ECD1A.CH Vial: 8
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061808.D\ECD2B.CH
Acq On : 18 Jun 2001 14:00 Operator: DDC
Sample : AR1232L37G Inst : HP_07
Misc : 5-422-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:44 2001 Quant Results File: XPCBF18.RES
Multi Time: Jun 19 9:45 2001 Quant Results File: xspcbf18.RES

Pesticide Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001

Multi-Component Method : f:\hpchem\hp\7\data\06_18_01\xspcbf18.m
Title : PCB/TOXAPHENE
Last Update : Wed May 30 11:44:17 2001
Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.80	5.72	383264	441333	18.6	17.8
22)	S DCB	16.87	17.40	269285	275716	17.2	16.9
	Target Compounds:						
	Multi-Component Compounds:						
5)	L3 Aroclor-1232	7.82	8.22	35507	121830	481.7	483.8
6)	L3 Aroclor-1232 {2}	8.29	9.25	29869	108840	472.7	475.4
7)	L3 Aroclor-1232 {3}	8.88	9.40	82269	84913	506.6	465.3
8)	L3 Aroclor-1232 {4}	9.27	9.57	93796	134601	563.8	511.9
	Sum Aroclor-1232			241441	450184	2024.8	1936.4
	Average Aroclor-1232					506.203	484.101

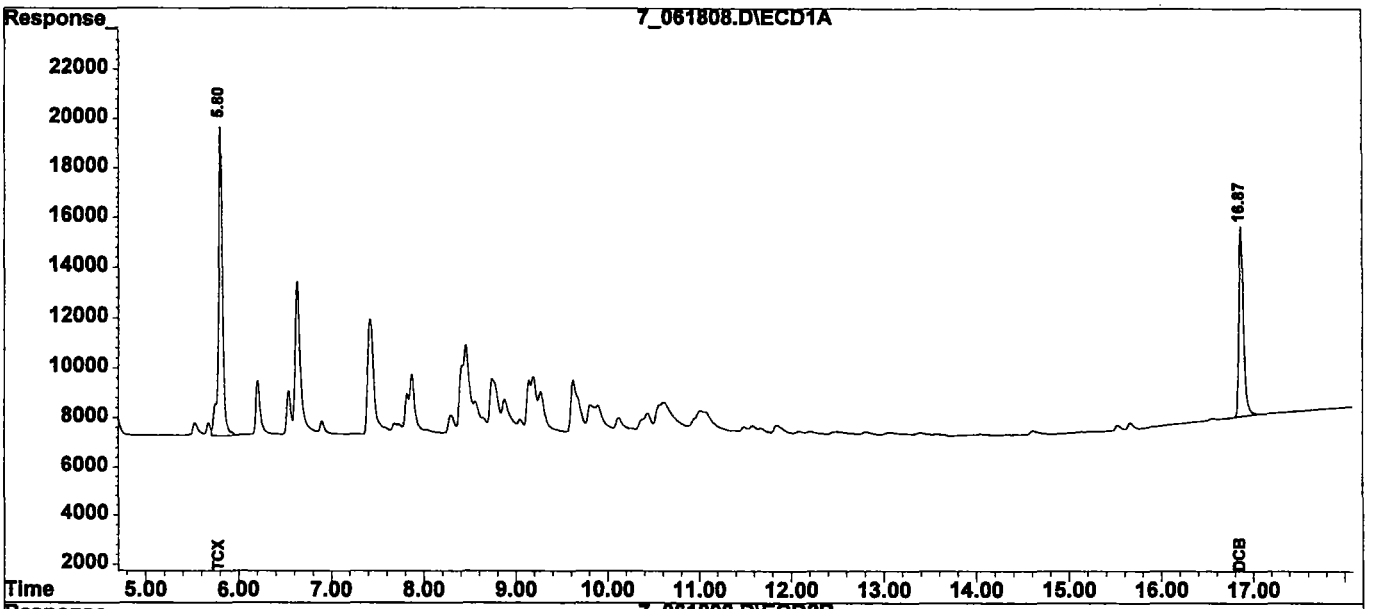
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

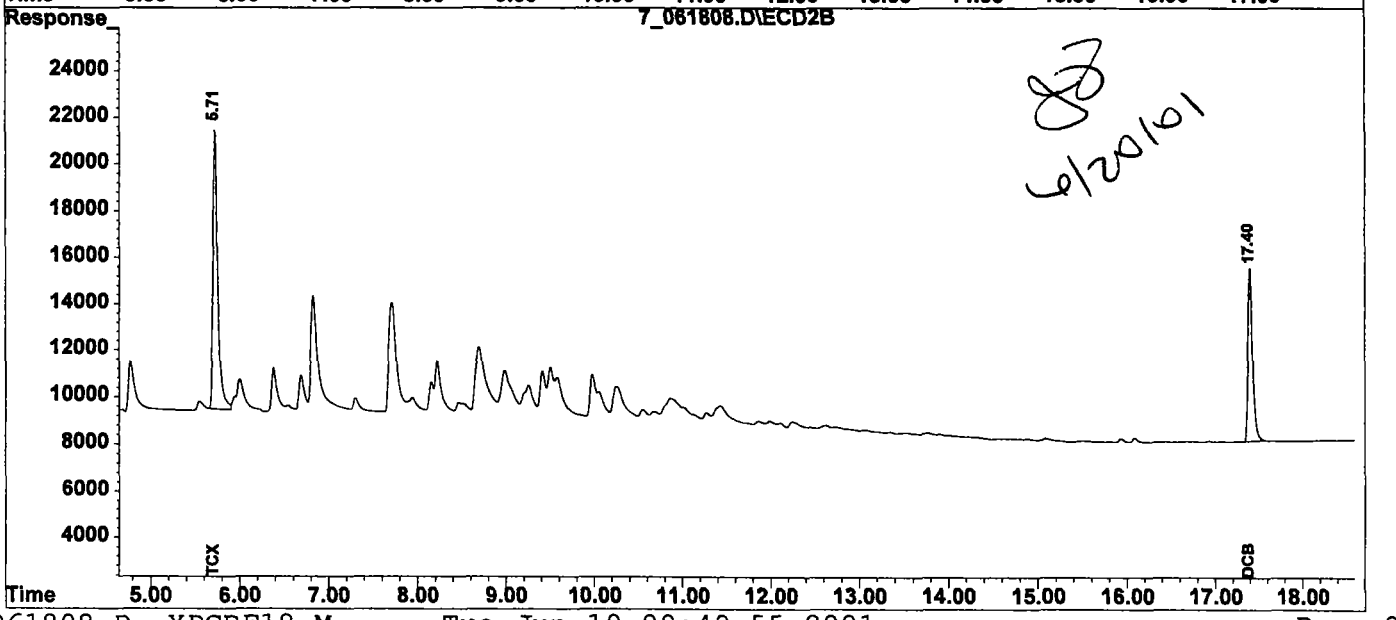
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061808.D\ECD1A.CH Vial: 8
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061808.D\ECD2B.CH
Acq On : 18 Jun 2001 14:00 Operator: DDC
Sample : AR1232L37G Inst : HP_07
Misc : 5-422-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:44 2001 Quant Results File: XPCBF18.RES
Quant Time: Jun 19 9:45 2001 Quant Results File: xspcbf18.RES

Pesticide Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001

Multi-Component Method : f:\hpchem\hp\7\data\06_18_01\xspcbf18.m
Title : PCB/TOXAPHENE
Last Update : Wed May 30 11:44:17 2001
Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

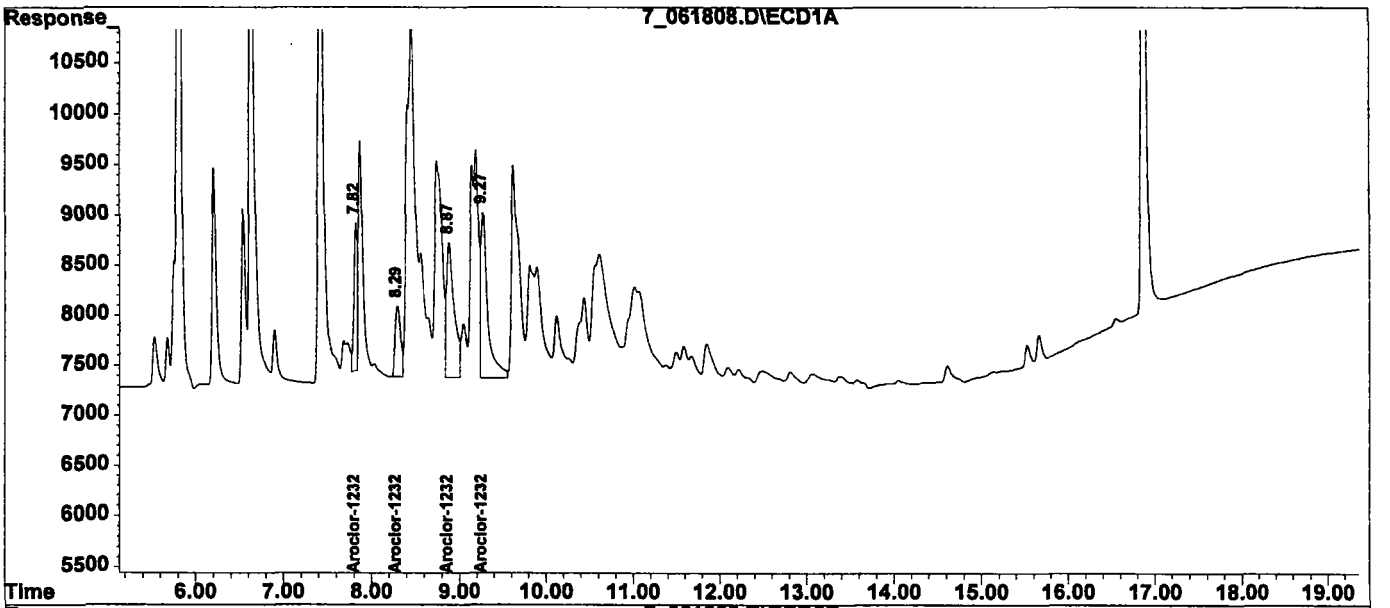


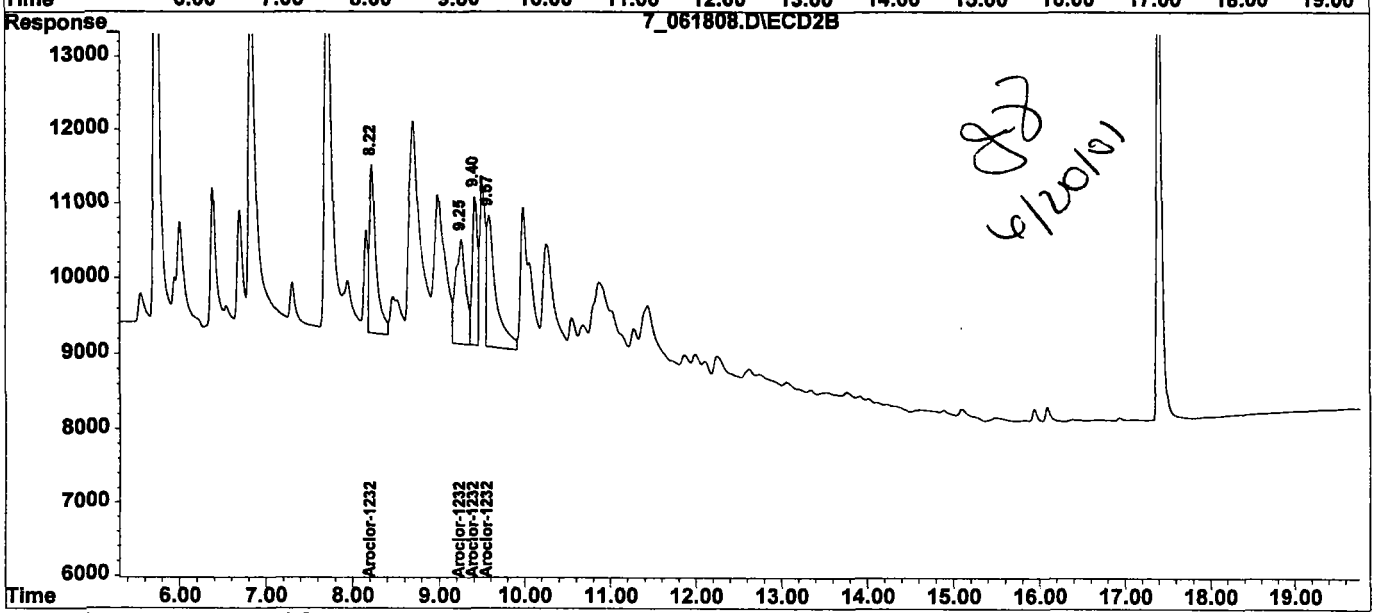


6/20/01

Chromatographic Report

```
Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061808.D\ECD1A.CH Vial: 8
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061808.D\ECD2B.CH
Acq On    : 18 Jun 2001  14:00                        Operator: DDC
Sample    : AR1232L37G                                Inst    : HP_07
Misc      : 5-422-6                                   Dilution: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e
Quant Time: Jun 19  9:45 2001  Quant Results File: xspcbf18.RES
Quant Time: Jun 19  9:45 2001  Quant Results File: xspcbf18.RES

Pesticide Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-ICAL Path  : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update      : Wed Jun 06 14:28:40 2001

Multi-Component Method : f:\hpchem\hp\7\data\06_18_01\xspcbf18.m
Title                  : PCB/TOXAPHENE
Last Update            : Wed May 30 11:44:17 2001
Volume Inj.      : 0.5uL
Signal #1 Phase : PEST I            Signal #2 Phase: PEST II
Signal #1 Info  : .32               Signal #2 Info : .32
Signal #1 Inst  : HP_07A            Signal #2 Inst : HP_07B
```





8/8
6/20/01

Response Factor Report HP_07

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_16_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Calibration Files
L1 =7_061809.D L2 =7_061810.D L3 =7_061811.D
L4 =7_061812.D L5 =7_061813.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
7) Aroclor-1242	388.0	400.5	405.5	420.9	353.1	393.6	6.48
8) Aroclor-1242 {2}	236.6	251.8	268.7	314.3	274.0	269.1	10.88
9) Aroclor-1242 {3}	173.8	173.5	146.1	187.3	153.5	166.8	10.03
10) Aroclor-1242 {4}	260.8	273.7	184.7	190.5	147.9	211.5	25.34
11) Aroclor-1242 {5}	163.1	159.2	127.9	189.5	154.9	158.9	13.83

Signal #2 Calibration Files
L1 =7_061809.D L2 =7_061810.D L3 =7_061811.D
L4 =7_061812.D L5 =7_061813.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
30) Aroclor-1242 #2	1.1	1.2	1.2	1.2	1.0	1.2 E3	6.35
31) Aroclor-1242 {2} #2	454.6	460.6	468.3	310.4	248.5	388.5	26.27
32) Aroclor-1242 {3} #2	308.3	267.5	269.7	270.6	232.7	269.8	9.93
33) Aroclor-1242 {4} #2	98.2	107.2	112.1	112.6	98.7	105.8	6.63
34) Aroclor-1242 {5} #2	106.2	104.6	105.7	106.3	88.3	102.2	7.62

4) = Out of Range

XPCBF18.M Tue Jun 19 09:18:12 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061809.D\ECD1A.CH Vial: 9
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061809.D\ECD2B.CH
Acq On : 18 Jun 2001 14:24 Operator: DDC
Sample : AR1242L17G Inst : HP_07
Misc : 5-11-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:17 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_16_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.80	5.71	96809	98611	4.911	4.134
22)	S DCB	16.87	17.40	63972	69732	4.659	4.897
	Target Compounds:						
7)	L4 Aroclor-1242	9.19	7.70	38802	113958	97.6	98.8
8)	L4 Aroclor-1242 {2}	9.81	9.25	23657	45463	85.8	117.0 # DDC 6-19-01
9)	L4 Aroclor-1242 {3}	10.12	10.02	17380	30832	96.4	113.4m
[illegible]	L4 Aroclor-1242 {4}	10.44	10.55	26078	9818	118.0	92.8
[illegible]	L4 Aroclor-1242 {5}	11.85	11.27	16313	10625	100.7	103.9
	Sum Aroclor-1242			122230	210696	498.5	525.9
	Average Aroclor-1242					99.709	105.183

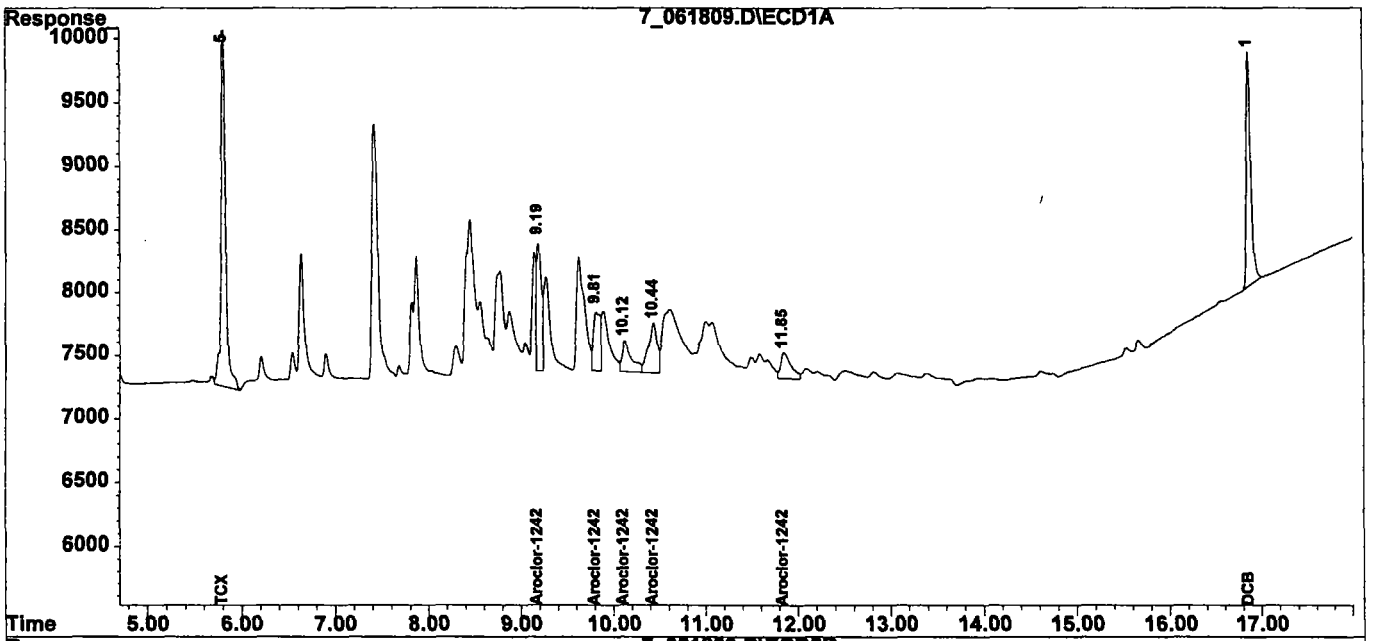
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

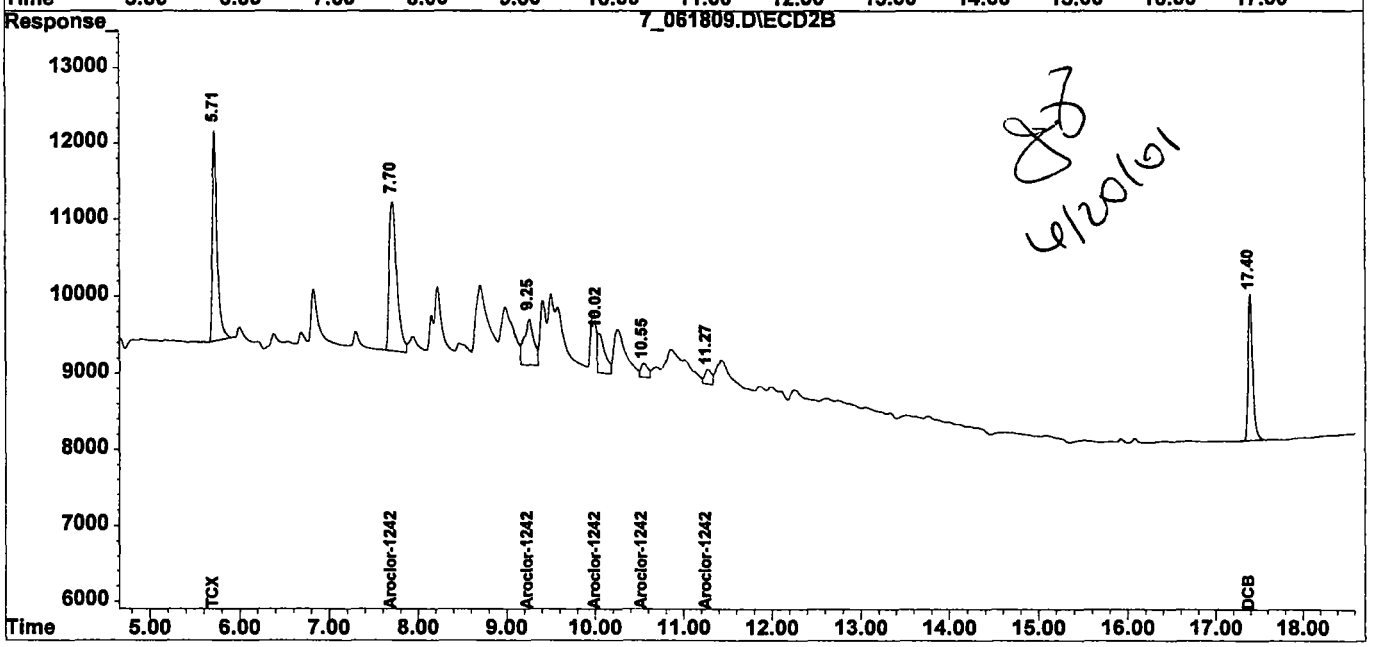
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061809.D\ECD1A.CH Vial: 9
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061809.D\ECD2B.CH
Acq On : 18 Jun 2001 14:24 Operator: DDC
Sample : AR1242L17G Inst : HP_07
Misc : 5-11-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:17 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_16_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

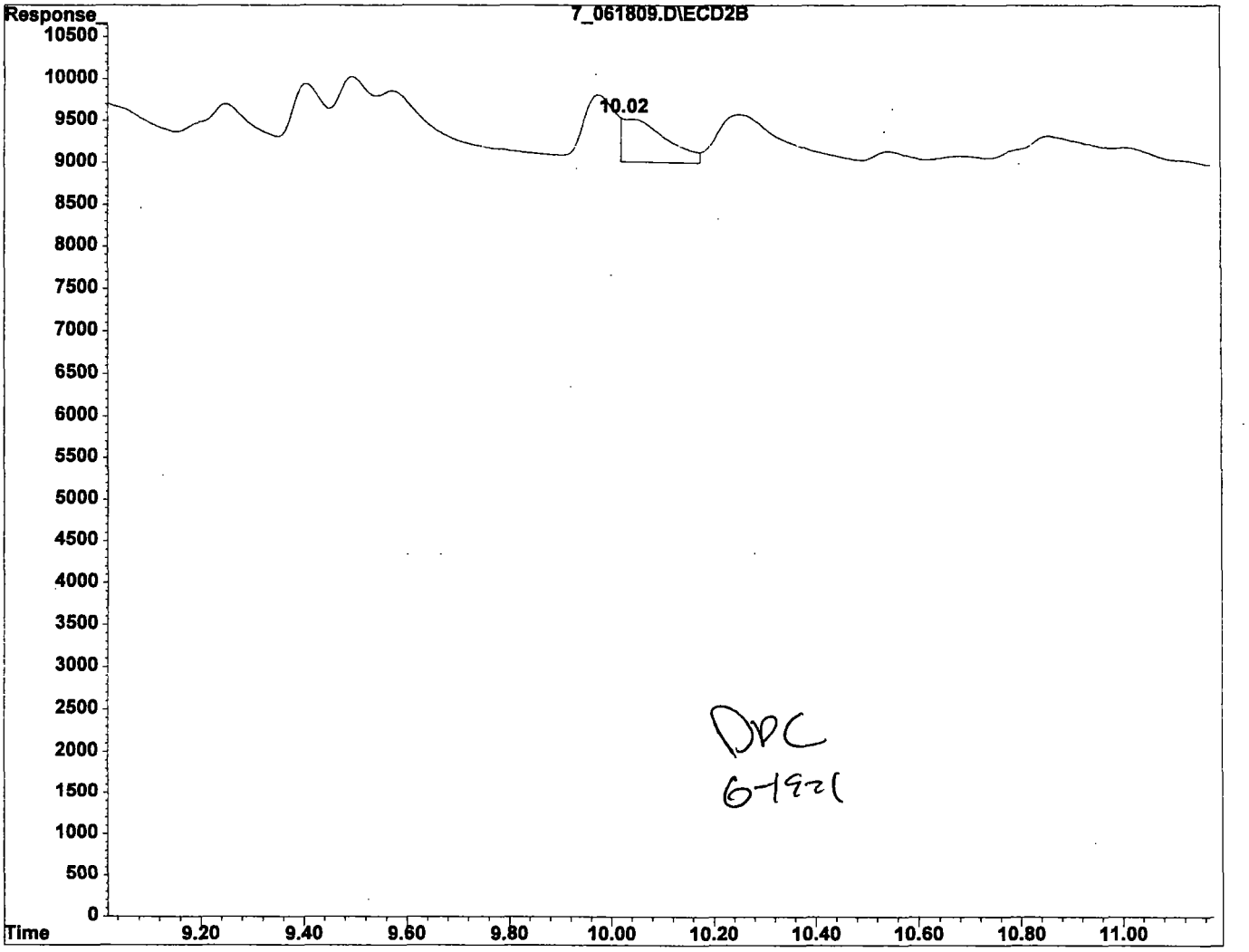




6/20/01

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\7\DATA\06_18_01\7_061809.D
Date Acquired: 18 Jun 2001 14:24
Inst: HP_07 Operator ID: DDC
Name: ARI242L17G
Misc: 5-11-7
Method: F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title: PCB/TOXAPHENE
Quant Time: Jun 19 9:17 2001 Quant Results File: XPCBF18.RES



Aroclor-1242 {3} #2 10.02min area: 30832 m

Integration Time Range: 10.02 - 10.18

F:\HPCHEM\HP\7\DATA\06_18_01\7_061809.D
Report generated: Tue Jun 19 09:20:32 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061810.D\ECD1A.CH Vial: 10
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061810.D\ECD2B.CH
Acq On : 18 Jun 2001 14:48 Operator: DDC
Sample : AR1242L27G Inst : HP_07
Misc : 5-10-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:14 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	5.80	5.71	195630	220111	9.922	9.228	
22)	S DCB	16.87	17.40	132705	140599	9.661	9.873	
	Target Compounds:							
7)	L4 Aroclor-1242	9.19	7.70	80101	235786	199.7	204.3	
8)	L4 Aroclor-1242 {2}	9.81	9.25	50366	92120	180.3	237.1	#
9)	L4 Aroclor-1242 {3}	10.12	10.05	34709	53506	192.0	197.8	
10)	L4 Aroclor-1242 {4}	10.43	10.54	54736	21434	251.4	202.7	
	L4 Aroclor-1242 {5}	11.85	11.27	31845	20928	205.4	204.7	
	Sum Aroclor-1242			251758	423774	1028.7	1046.6	
	Average Aroclor-1242					205.749	209.322	

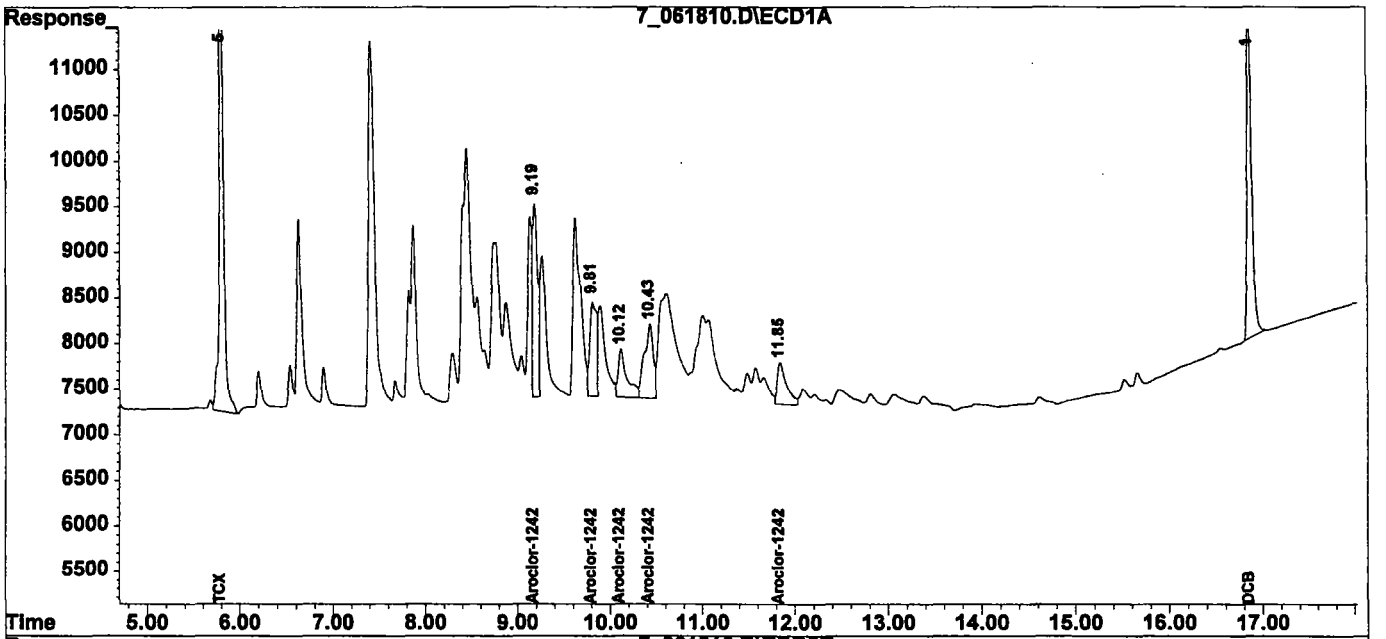
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

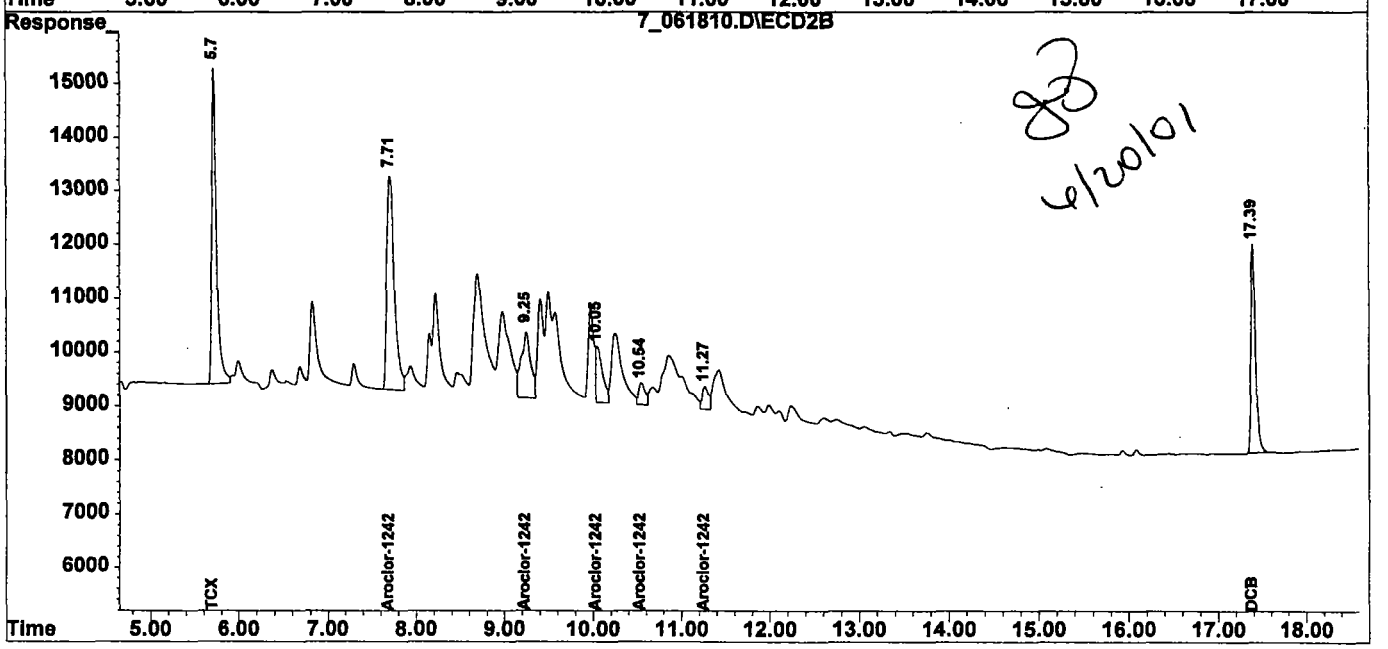
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061810.D\ECD1A.CH Vial: 10
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061810.D\ECD2B.CH
Acq On : 18 Jun 2001 14:48 Operator: DDC
Sample : AR1242L27G Inst : HP_07
Misc : 5-10-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:14 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





83
6/20/01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061811.D\ECD1A.CH Vial: 11
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061811.D\ECD2B.CH
Acq On : 18 Jun 2001 15:12 Operator: DDC
Sample : AR1242L37G Inst : HP_07
Misc : 5-9-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:15 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.80	5.72	399296	480704	20.3	20.2
22)	S DCB	16.87	17.40	289478	295844	21.1	20.8
	Target Compounds:						
7)	L4 Aroclor-1242	9.18	7.70	162204	484946	409.6	420.2
8)	L4 Aroclor-1242 {2}	9.81	9.25	107474	187327	395.9	482.2
9)	L4 Aroclor-1242 {3}	10.12	10.05	58430	107877	356.0	398.8
[illegible]	L4 Aroclor-1242 {4}	10.43	10.54	73868	44852	359.0	424.1
[illegible]	L4 Aroclor-1242 {5}	11.84	11.27	51158	42270	349.3	413.5
	Sum Aroclor-1242			453135	867270	1869.8	2138.7
	Average Aroclor-1242					373.960	427.748

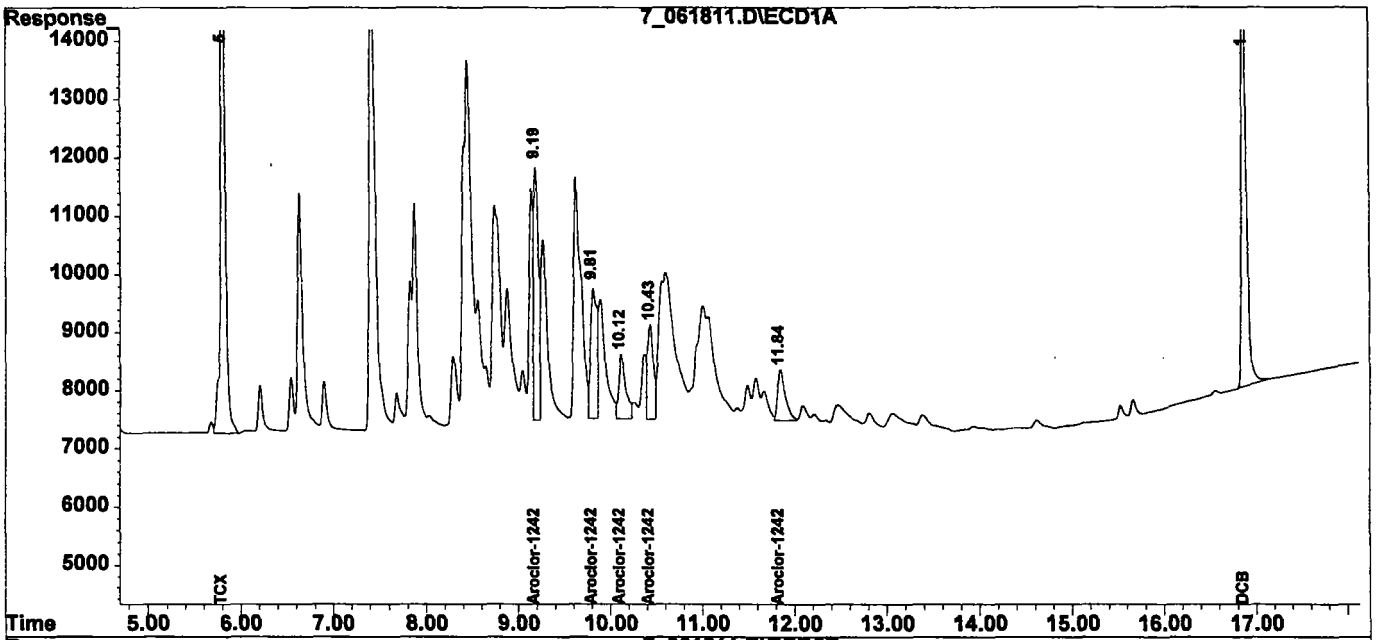
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

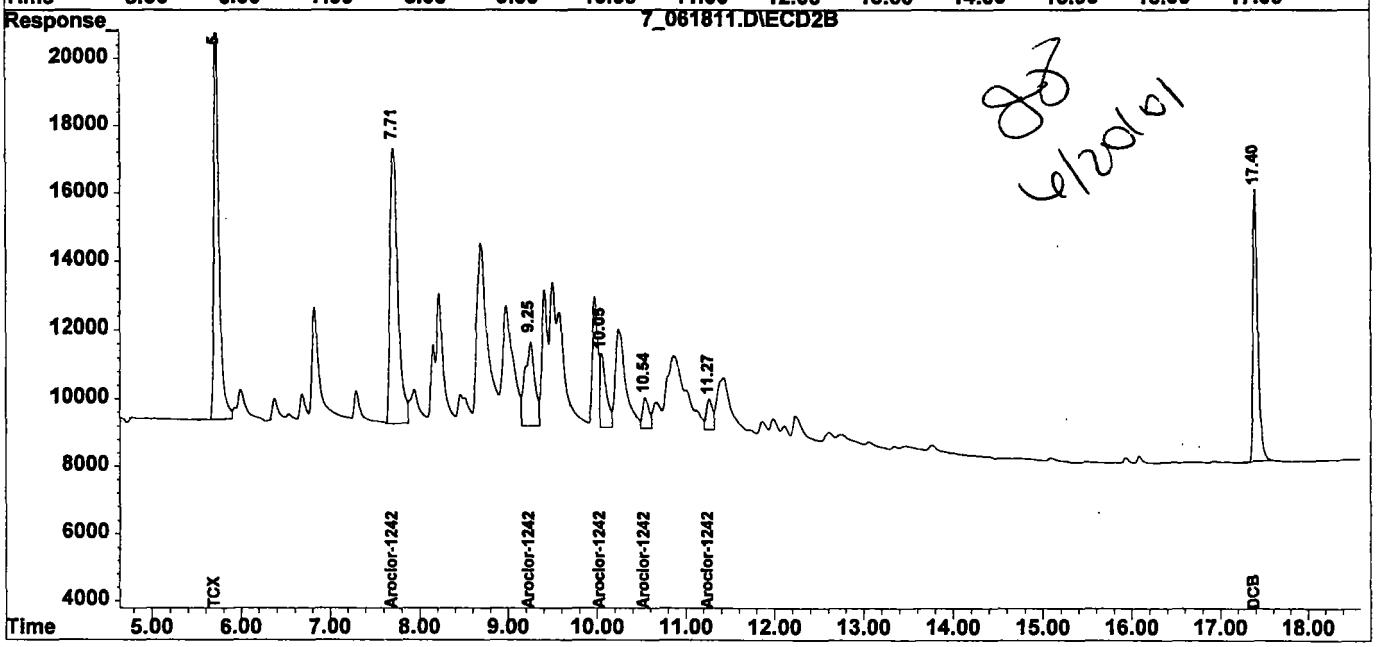
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061811.D\ECD1A.CH Vial: 11
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061811.D\ECD2B.CH
Acq On : 18 Jun 2001 15:12 Operator: DDC
Sample : AR1242L37G Inst : HP_07
Misc : 5-9-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:15 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





8/3
6/20/01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061812.D\ECD1A.CH Vial: 12
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061812.D\ECD2B.CH
Acq On : 18 Jun 2001 15:36 Operator: DDC
Sample : AR1242L47G Inst : HP_07
Misc : 5-8-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:06 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	5.80	5.72	838155	1095772	45.9	50.2	
22)	S DCB	16.87	17.40	607595	613225	46.5	44.9	
	Target Compounds:							
7)	L4 Aroclor-1242	9.18	7.70	336720	964706	866.0	847.4	
8)	L4 Aroclor-1242 {2}	9.81	9.24	251459	248348	918.3	650.8	#
9)	L4 Aroclor-1242 {3}	10.12	10.04	149834	216513	853.4	804.6	
	L4 Aroclor-1242 {4}	10.43	10.54	152440	90100	728.4	772.1	
	L4 Aroclor-1242 {5}	11.84	11.26	151636	85001	1023.2	746.3	#
	Sum Aroclor-1242			1042088	1604668	4389.3	3821.1	
	Average Aroclor-1242					877.863	764.224	

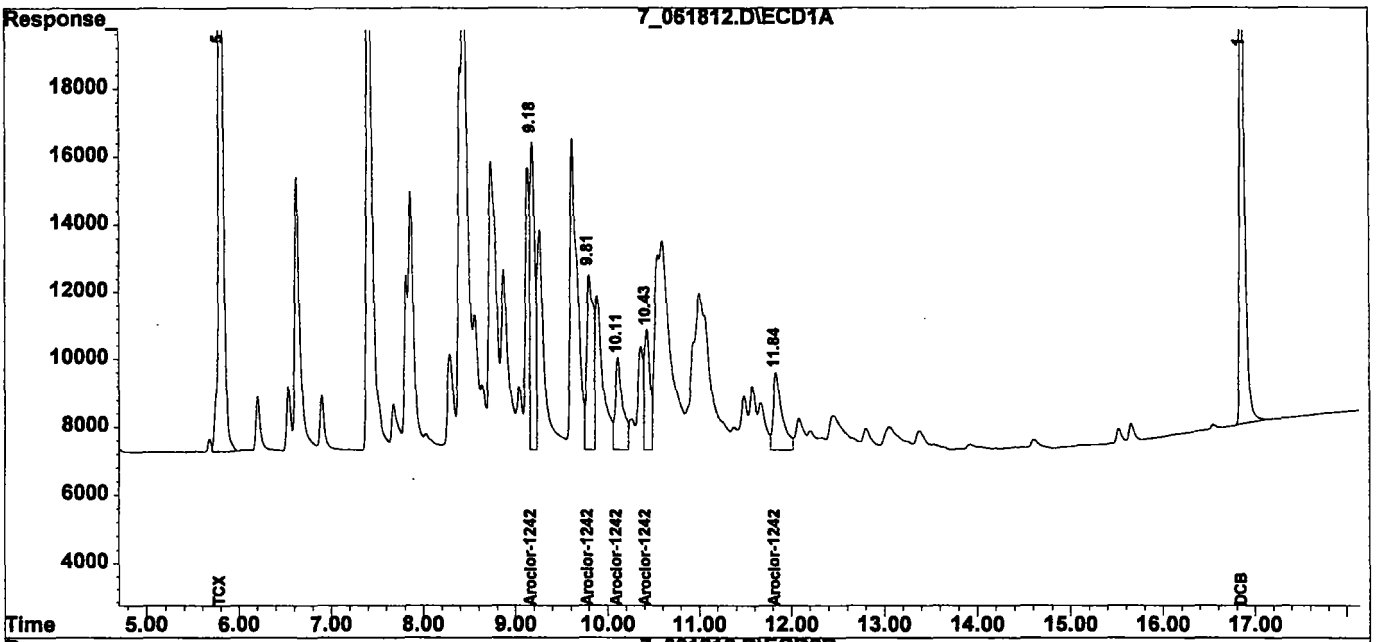
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

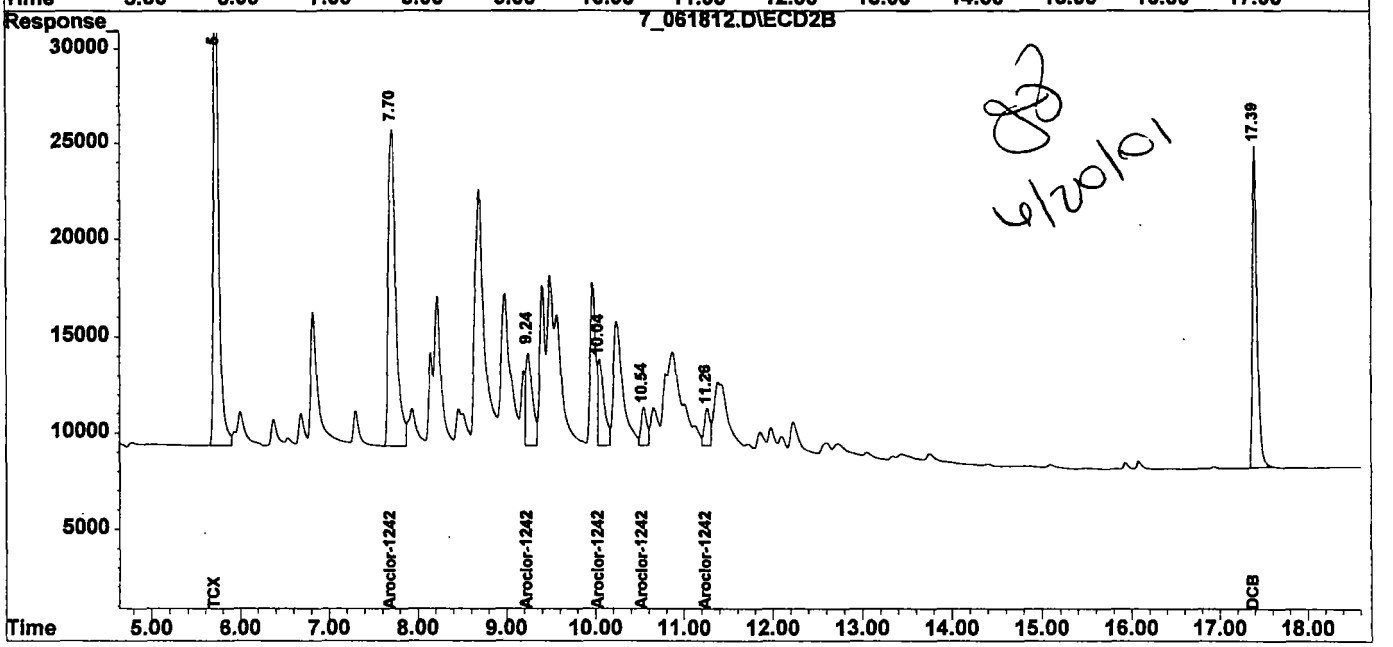
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061812.D\ECD1A.CH Vial: 12
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061812.D\ECD2B.CH
Acq On : 18 Jun 2001 15:36 Operator: DDC
Sample : AR1242L47G Inst : HP_07
Misc : 5-8-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:06 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061813.D\ECD1A.CH Vial: 13
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061813.D\ECD2B.CH
Acq On : 18 Jun 2001 16:00 Operator: DDC
Sample : AR1242L57G Inst : HP_07
Misc : 5-7-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:06 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	5.80	5.71	1498265	2088482	77.5	89.5	E
22)	S DCB	16.86	17.39	1033995	1046144	75.5	73.5	E
	Target Compounds:							
7)	L4 Aroclor-1242	9.18	7.70	565005	1653246	1399.9 E	1416.9	
8)	L4 Aroclor-1242 {2}	9.80	9.24	438323	397534	1547.8 E	1021.3	E#
9)	L4 Aroclor-1242 {3}	10.11	10.04	245615	372283	1343.3	1380.2	
[illegible]	L4 Aroclor-1242 {4}	10.43	10.54	236715	157955	1087.9 E	1404.4	#
[illegible]	L4 Aroclor-1242 {5}	11.83	11.26	247916	141352	1597.9	1295.7	E
	Sum Aroclor-1242			1733574	2722370	6976.8	6518.5	
	Average Aroclor-1242					1395.362	1303.692	

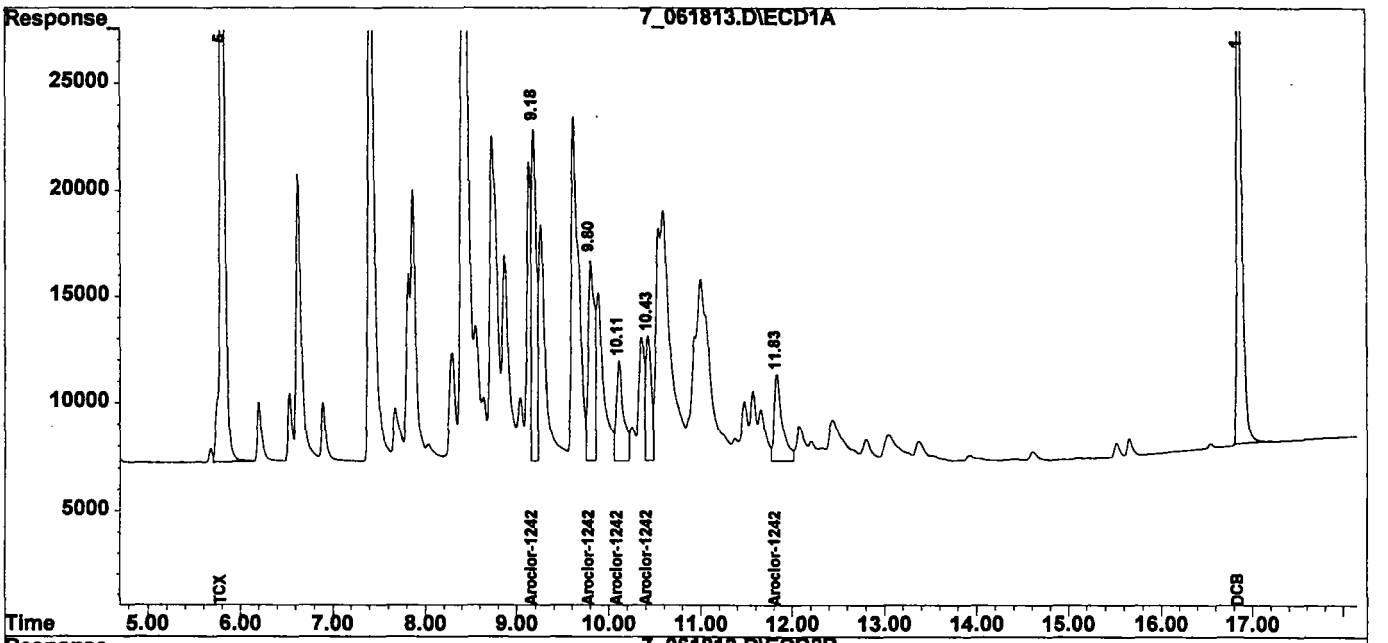
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

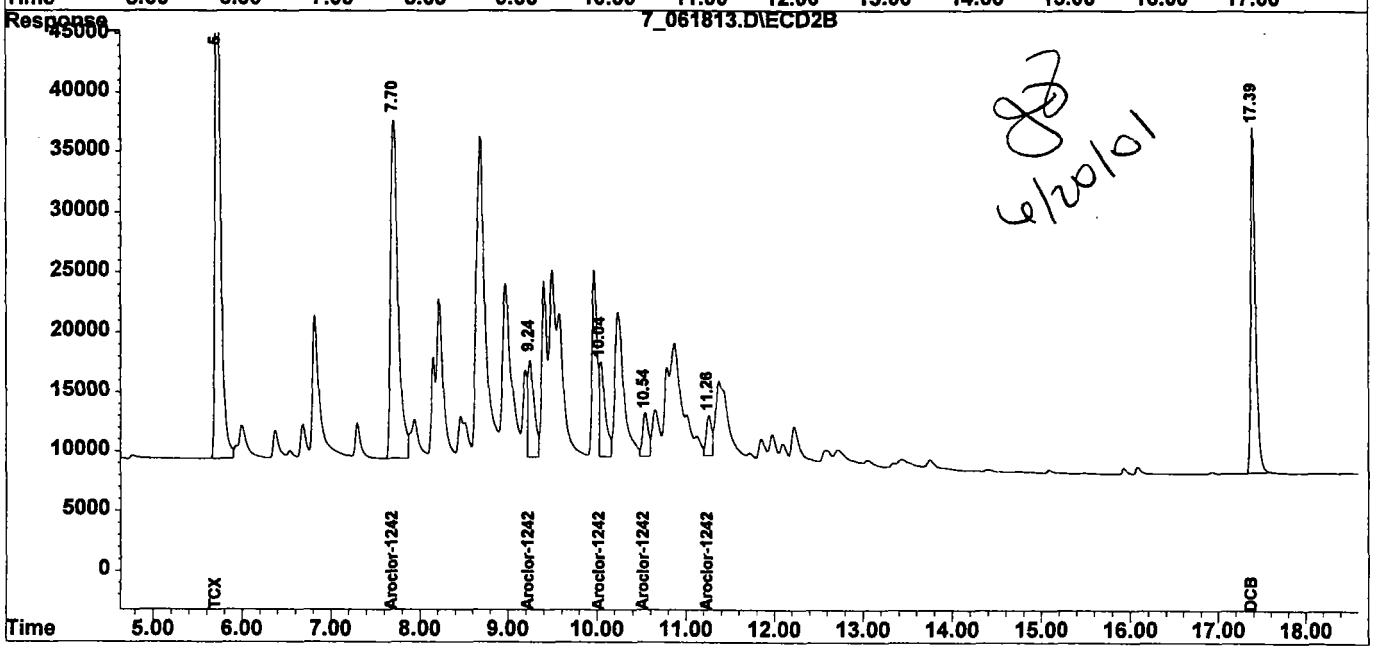
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061813.D\ECD1A.CH Vial: 13
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061813.D\ECD2B.CH
Acq On : 18 Jun 2001 16:00 Operator: DDC
Sample : AR1242L57G Inst : HP_07
Misc : 5-7-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:06 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061814.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061814.D\ECD2B.CH
Acq On : 18 Jun 2001 16:24 Operator: DDC
Sample : AR1248L37G Inst : HP_07
Misc : 5-424-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:46 2001 Quant Results File: XPCBF18.RES
Multi Time: Jun 21 7:08 2001 Quant Results File: xspcbf18.RES

Pesticide Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001

Multi-Component Method : f:\hpchem\hp\7\data\06_18_01\xspcbf18.m
Title : PCB/TOXAPHENE
Last Update : Wed May 30 11:44:17 2001
Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	5.80	5.71	339819	419376	16.5	16.9	
22)	S DCB	16.86	17.40	261735	268863	16.7	16.4	
	Target Compounds:							
	Multi-Component Compounds:							
14)	L5 Aroclor-1248	7.86	8.69	60337	288796	471.7	429.3	
15)	L5 Aroclor-1248 {2}	9.18	8.96	266924	229921	456.3	456.3	
16)	L5 Aroclor-1248 {3}	9.81	9.40	193971	305464	439.6 DPC	433.1	
17)	L5 Aroclor-1248 {4}	10.39f	10.54	64419	89779	312.3m 6-24-01	469.9	#
18)	L5 Aroclor-1248 {5}	11.06	11.26	283871	150411	495.9	457.9	
	Sum Aroclor-1248			869522	1064372	2175.8	2246.5	
	Average Aroclor-1248					435.161	449.306	

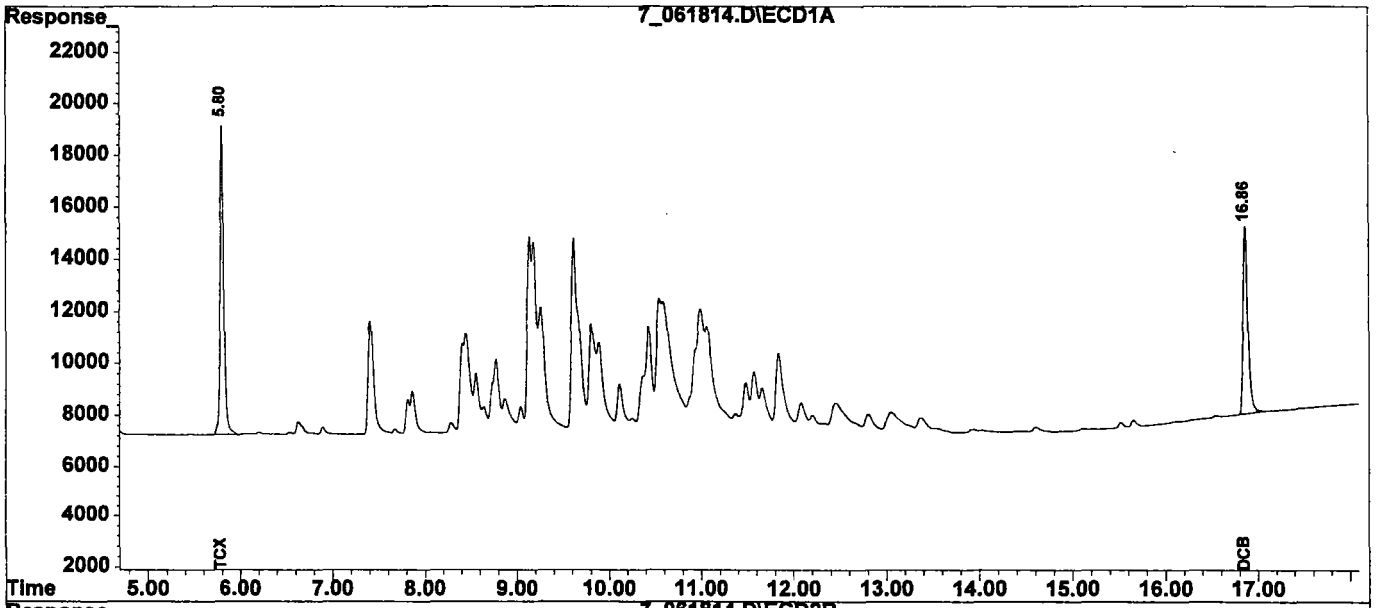
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

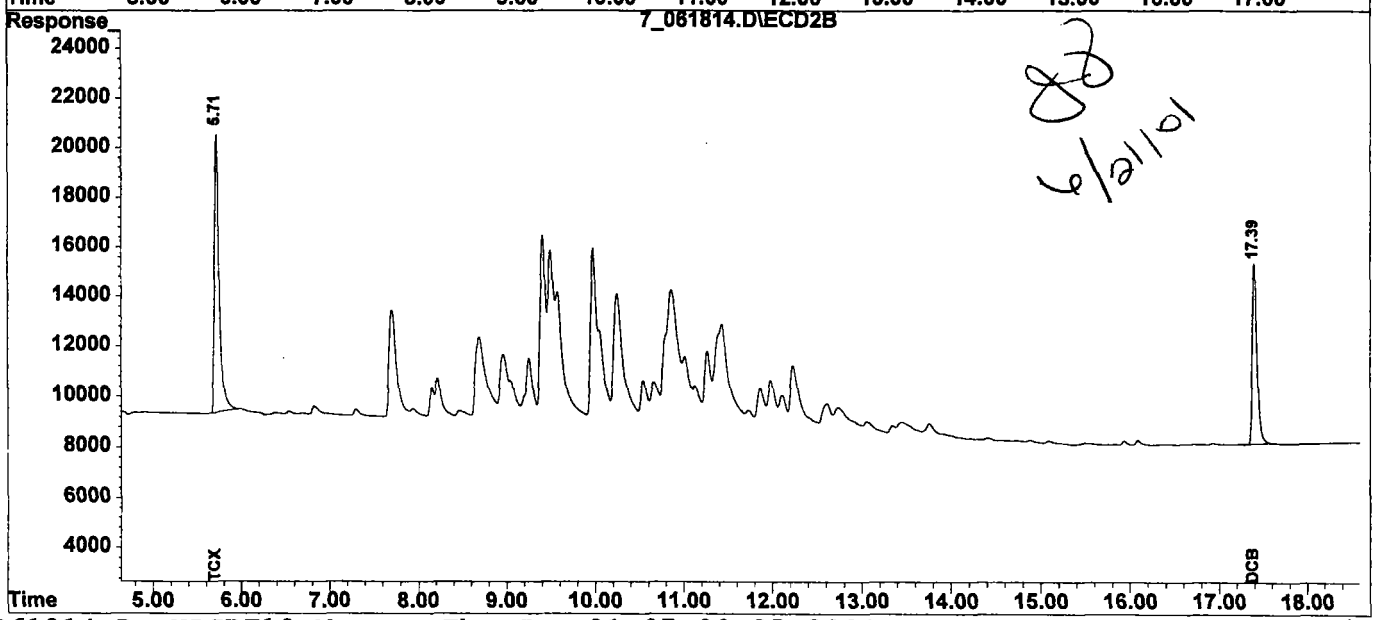
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061814.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061814.D\ECD2B.CH
Acq On : 18 Jun 2001 16:24 Operator: DDC
Sample : AR1248L37G Inst : HP_07
Misc : 5-424-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:46 2001 Quant Results File: XPCBF18.RES
Quant Time: Jun 21 7:08 2001 Quant Results File: xspcbf18.RES

Pesticide Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001

Multi-Component Method : f:\hpchem\hp\7\data\06_18_01\xspcbf18.m
Title : PCB/TOXAPHENE
Last Update : Wed May 30 11:44:17 2001
Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





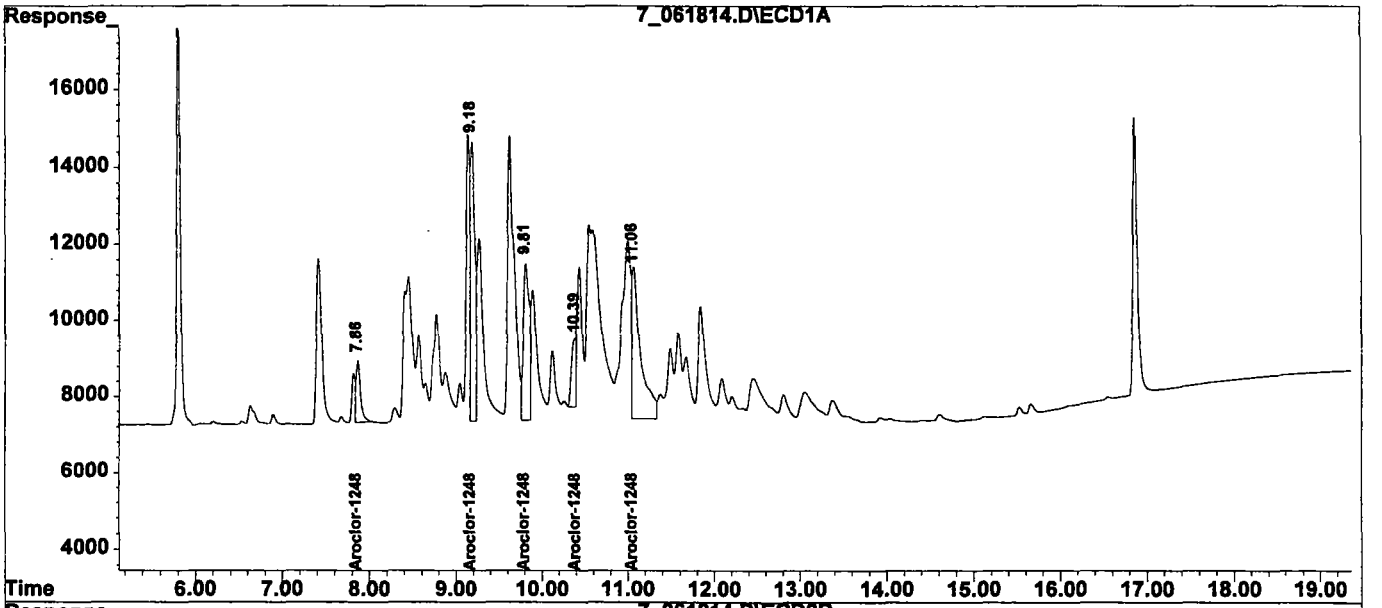
6/21/01

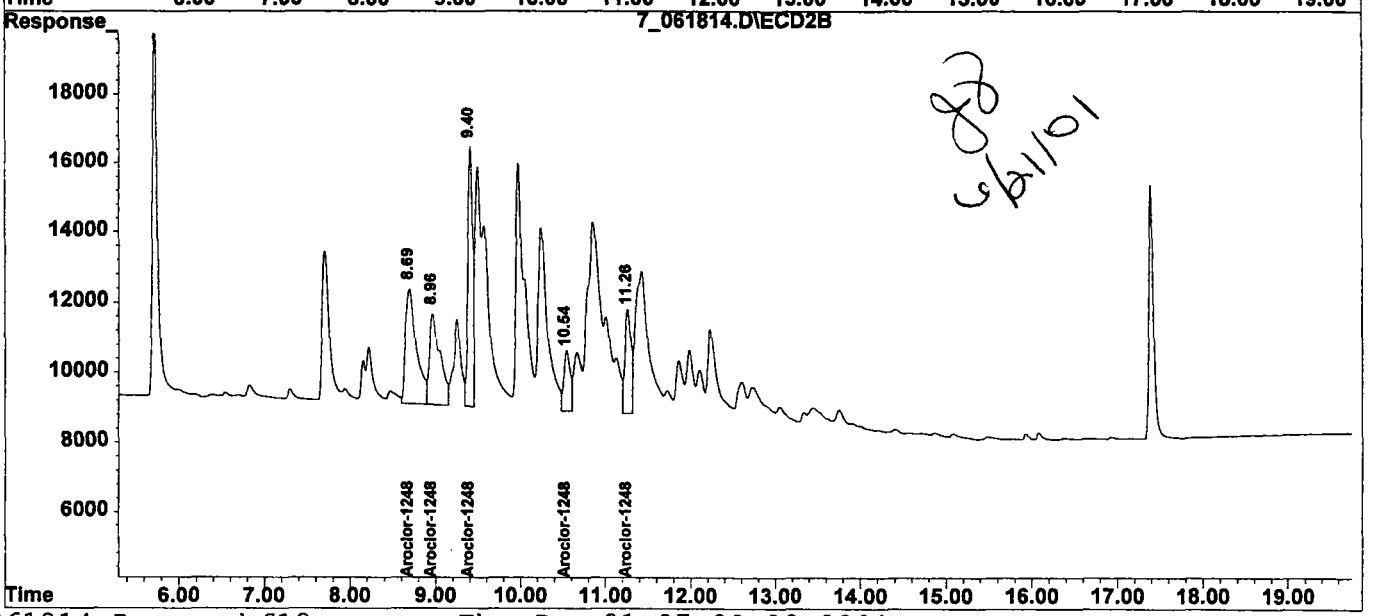
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061814.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061814.D\ECD2B.CH
Acq On : 18 Jun 2001 16:24 Operator: DDC
Sample : AR1248L37G Inst : HP_07
Misc : 5-424-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 21 7:08 2001 Quant Results File: xspcbf18.RES
Quant Time: Jun 21 7:08 2001 Quant Results File: xspcbf18.RES

Pesticide Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001

Multi-Component Method : f:\hpchem\hp\7\data\06_18_01\xspcbf18.m
Title : PCB/TOXAPHENE
Last Update : Wed May 30 11:44:17 2001
Volume Inj. : 0.5uL
Signal #1 Phase : PEST I Signal #2 Phase: PEST II
Signal #1 Info : .32 Signal #2 Info : .32
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

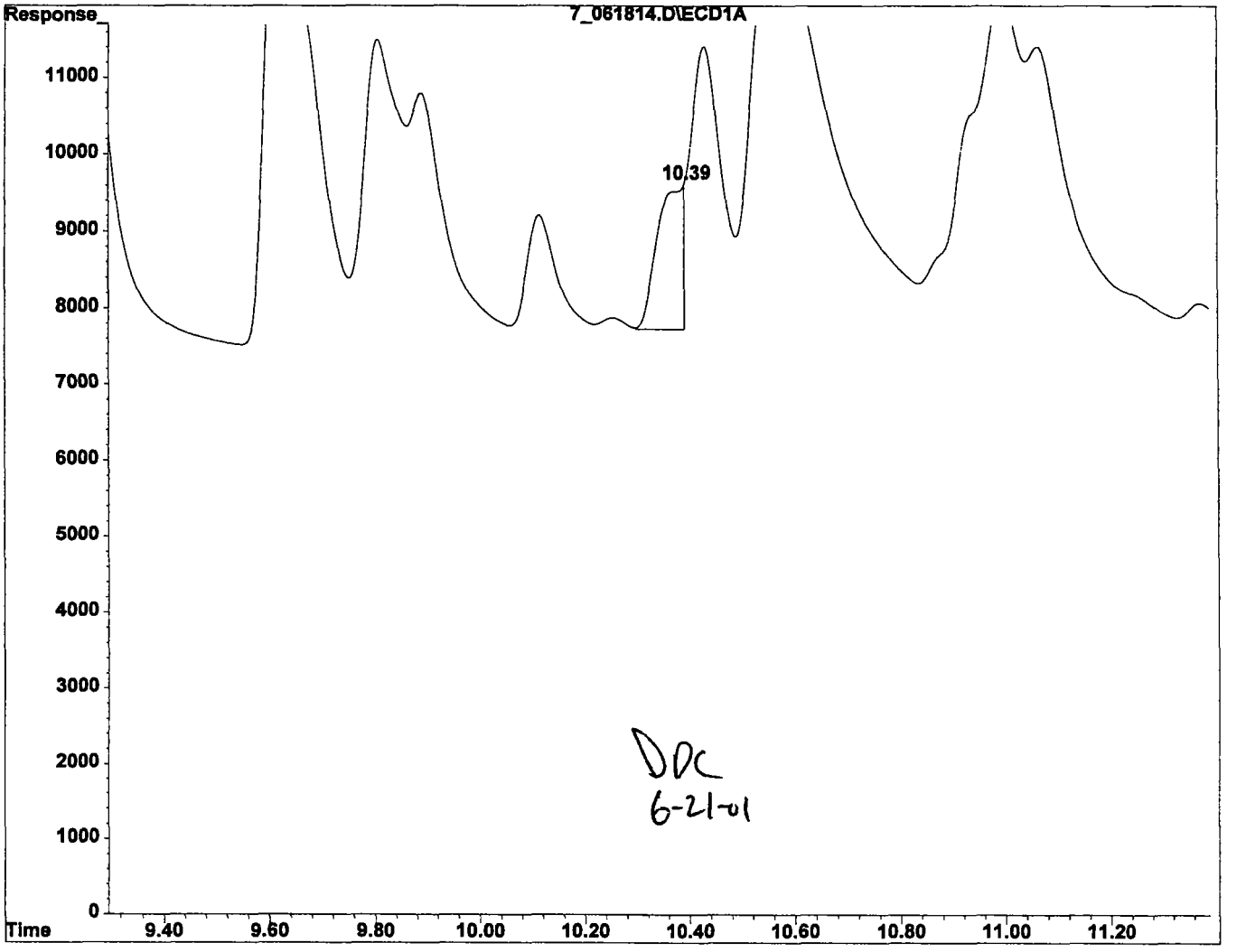




8
6/21/01

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\7\DATA\06_18_01\7_061814.D
Date Acquired: 18 Jun 2001 16:24
Inst: HP_07 Operator ID: DDC
Name: AR1248L37G
Misc: 5-424-6
Method: f:\hpchem\hp\7\data\06_18_01\xspcbf18.m
Title:
Quant Time: Jun 21 7:08 2001 Quant Results File: xspcbf18.RES



Aroclor-1248 {4} 10.39min area: 64419 m

Integration Time Range: 10.30 - 10.39

F:\HPCHEM\HP\7\DATA\06_18_01\7_061814.D
Report generated: Thu Jun 21 07:09:09 2001

Response Factor Report HP_07

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Calibration Files
L1 =7_061815.D L2 =7_061816.D L3 =7_061817.D
L4 =7_061818.D L5 =7_061819.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
12) Aroclor-1254	790.1	678.2	605.7	706.0	711.4	698.3	9.51
13) Aroclor-1254 {2}	345.5	319.2	301.7	371.9	384.4	344.5	10.07
14) Aroclor-1254 {3}	865.7	743.9	643.7	722.0	691.6	733.4	11.31
15) Aroclor-1254 {4}	923.4	840.2	776.8	958.7	1005.5	900.9	10.22
16) Aroclor-1254 {5}	1.3	1.1	1.0	1.1	1.1	1.1 E3	10.77

Signal #2 Calibration Files
L1 =7_061815.D L2 =7_061816.D L3 =7_061817.D
L4 =7_061818.D L5 =7_061819.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
35) Aroclor-1254 #2	1.4	1.3	1.2	1.4	1.5	1.4 E3	8.09
36) Aroclor-1254 {2} #2	1.2	1.1	1.0	1.1	1.2	1.1 E3	8.77
37) Aroclor-1254 {3} #2	1.5	1.4	1.2	1.5	1.6	1.5 E3	9.92
38) Aroclor-1254 {4} #2	1.0	0.9	0.7	0.8	0.8	0.9 E3	13.01
39) Aroclor-1254 {5} #2	902.4	812.9	717.5	852.0	890.4	835.0	8.92

(#) = Out of Range

XPCBF18.M Tue Jun 19 09:24:05 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061815.D\ECD1A.CH Vial: 15
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061815.D\ECD2B.CH
Acq On : 18 Jun 2001 16:48 Operator: DDC
Sample : AR1254L17G Inst : HP_07
Misc : 5-6-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:22 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	5.80	5.71	105275	117759	5.340	4.937	
22)	S DCB	16.86	17.39	85015	91164	6.192	6.401	
	Target Compounds:							
12)	L6 Aroclor-1254	10.55	10.85	79014	141498	123.4	118.0	
13)	L6 Aroclor-1254 {2}	11.49	11.27	34545	119477	103.0	123.1	
14)	L6 Aroclor-1254 {3}	12.21	12.24	86570	154155	133.4	126.5	
[illegible]	L6 Aroclor-1254 {4}	12.46	13.06	92342	103797	107.0	157.7	#
[illegible]	L6 Aroclor-1254 {5}	12.81	13.34	132155	90241	132.0	126.3	
	Sum Aroclor-1254			424625	609169	598.8	651.6	
	Average Aroclor-1254					119.766	130.318	

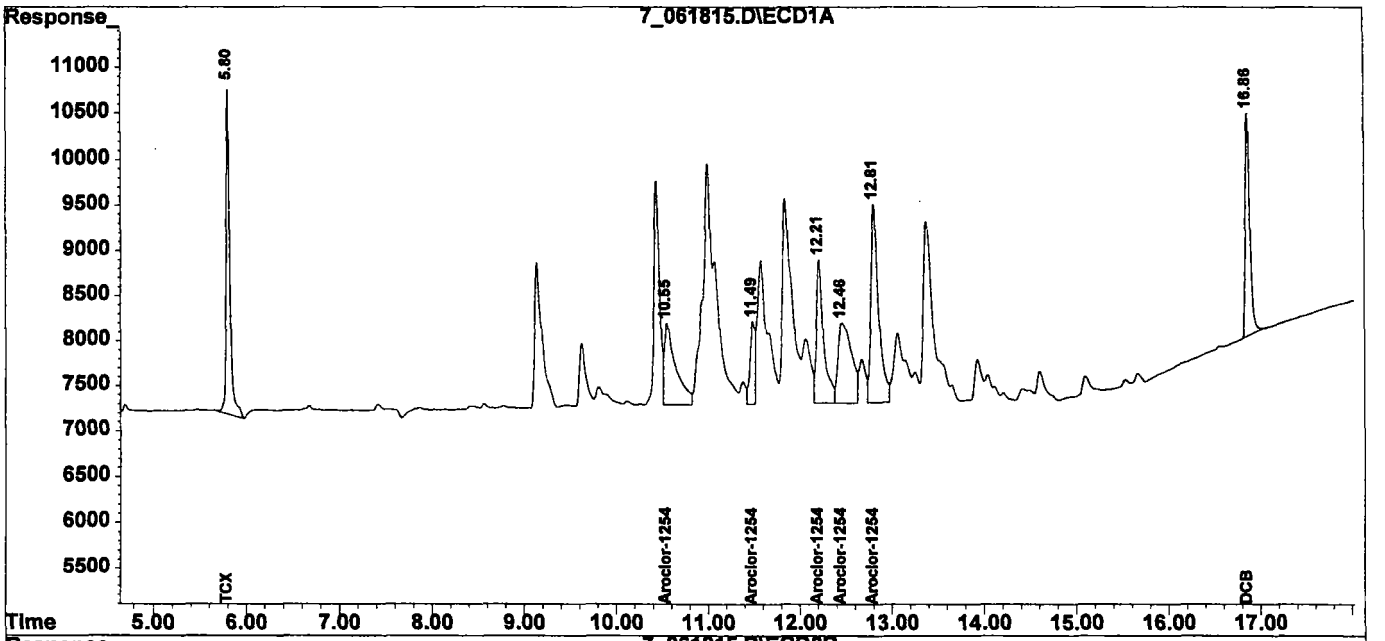
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

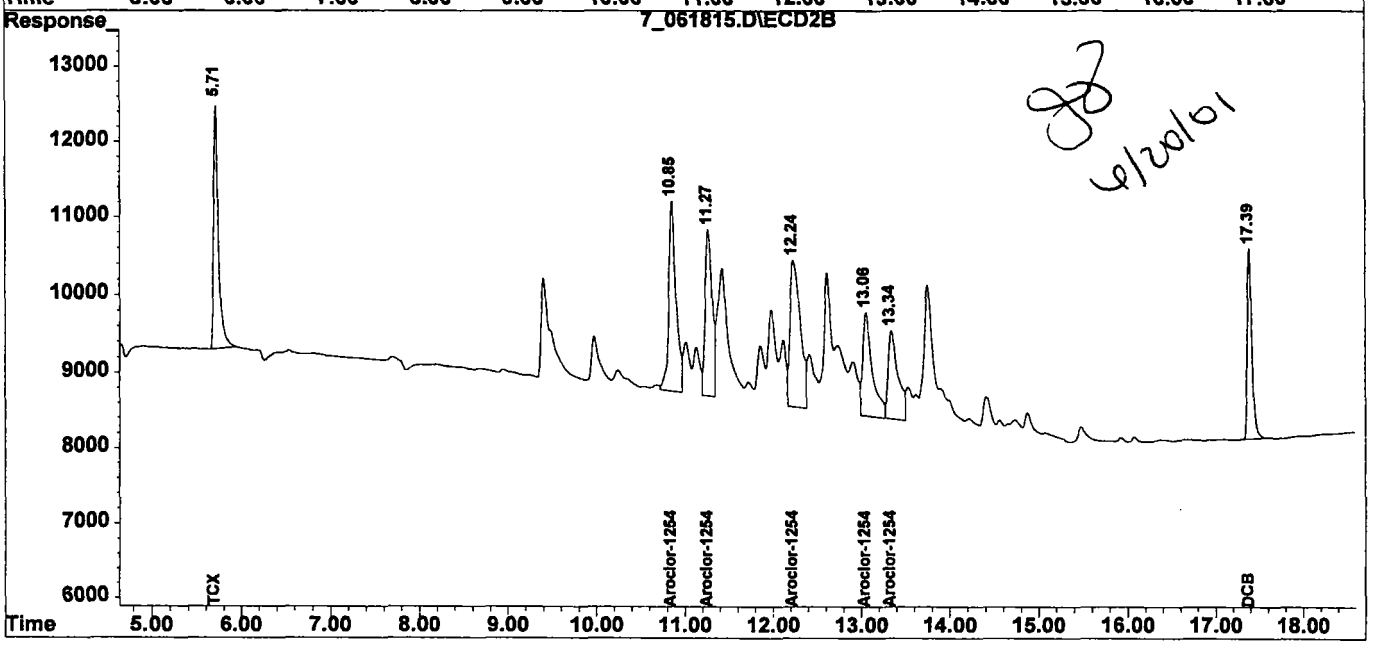
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061815.D\ECD1A.CH Vial: 15
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061815.D\ECD2B.CH
Acq On : 18 Jun 2001 16:48 Operator: DDC
Sample : AR1254L17G Inst : HP_07
Misc : 5-6-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:22 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061816.D\ECD1A.CH Vial: 16
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061816.D\ECD2B.CH
Acq On : 18 Jun 2001 17:12 Operator: DDC
Sample : AR1254L27G Inst : HP_07
Misc : 5-5-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:23 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	5.80	5.71	184965	224453	9.224	9.117	
22)	S DCB	16.86	17.39	148172	156122	10.2	10.3	
	Target Compounds:							
12)	L6 Aroclor-1254	10.55	10.85	135646	263737	204.6	214.7	
13)	L6 Aroclor-1254 {2}	11.49	11.26	63844	212858	189.2	211.4	
14)	L6 Aroclor-1254 {3}	12.21	12.23	148771	275642	219.6	215.8	
[illegible]	L6 Aroclor-1254 {4}	12.45	13.05	168034	175879	192.0	246.4	#
[illegible]	L6 Aroclor-1254 {5}	12.80	13.34	226254	162581	216.9	217.8	
	Sum Aroclor-1254			742548	1090697	1022.4	1106.0	
	Average Aroclor-1254					204.471	221.208	

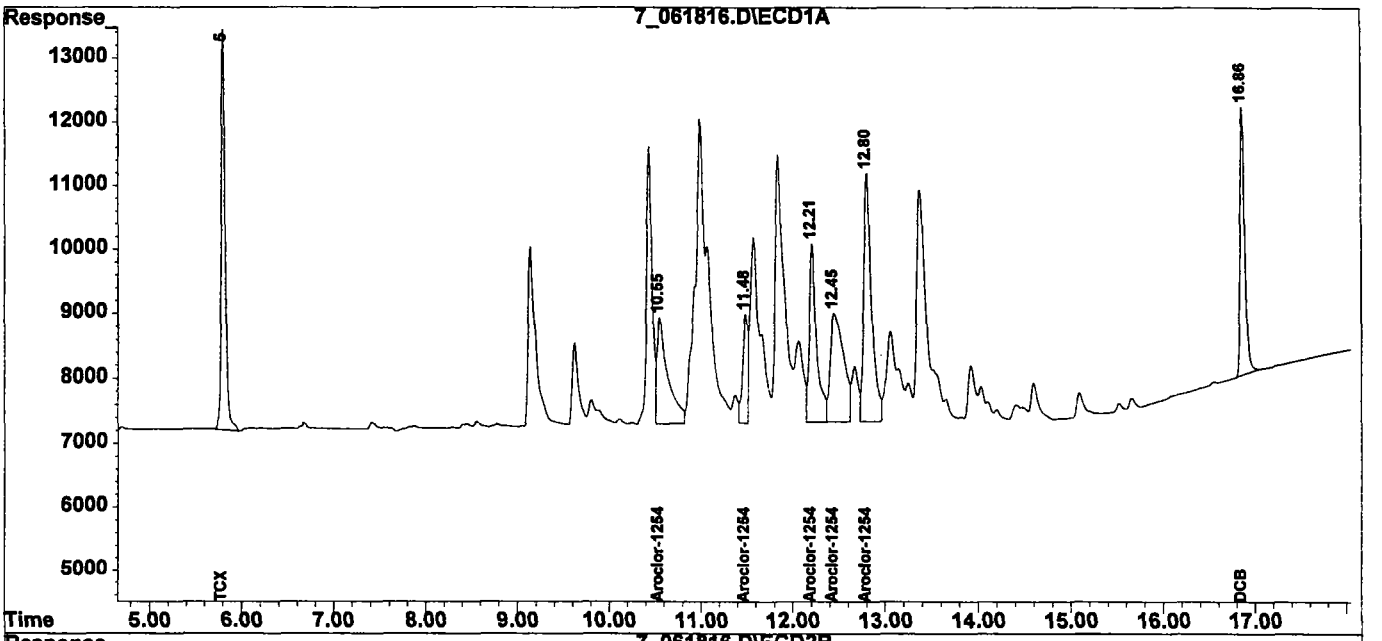
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

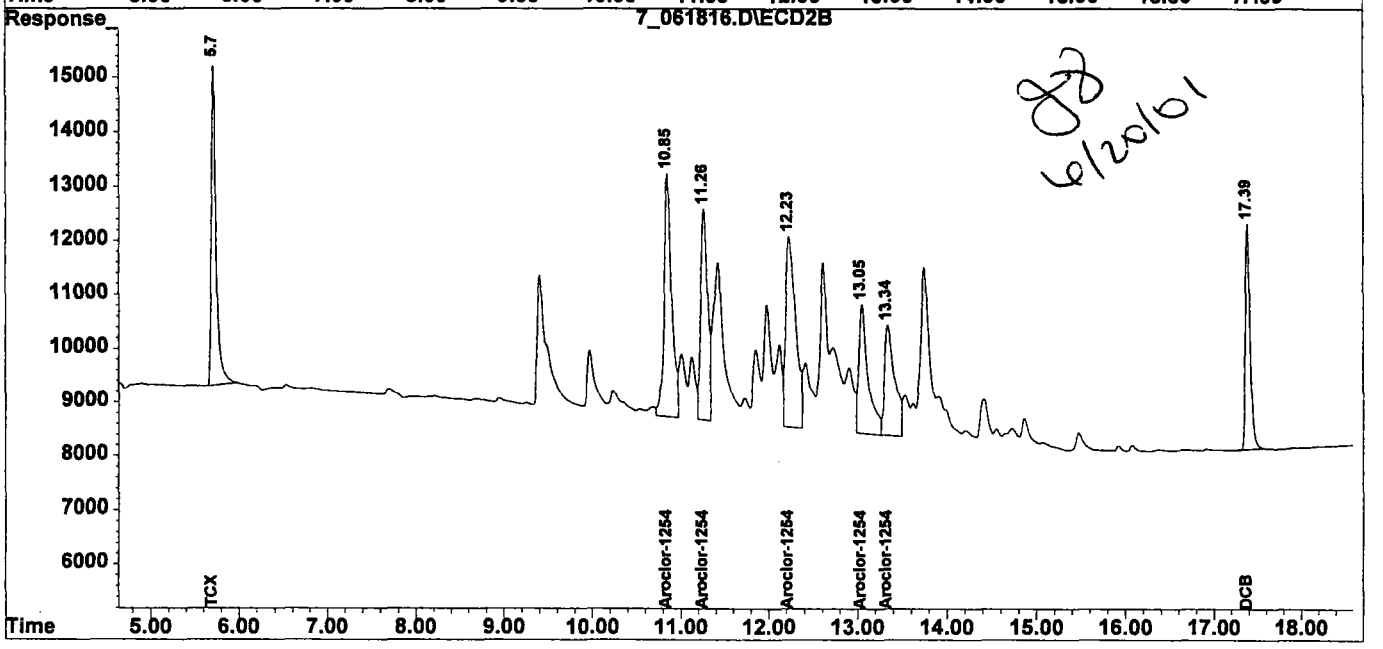
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061816.D\ECD1A.CH Vial: 16
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061816.D\ECD2B.CH
Acq On : 18 Jun 2001 17:12 Operator: DDC
Sample : AR1254L27G Inst : HP_07
Misc : 5-5-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:23 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061817.D\ECD1A.CH Vial: 17
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061817.D\ECD2B.CH
Acq On : 18 Jun 2001 17:36 Operator: DDC
Sample : AR1254L37G Inst : HP_07
Misc : 5-4-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:23 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.80	5.71	340068	438866	17.1	17.8
22)	S DCB	16.86	17.39	261640	271590	17.6	17.6
	Target Compounds:						
12)	L6 Aroclor-1254	10.55	10.85	242273	483059	366.2	390.0
13)	L6 Aroclor-1254 {2}	11.48	11.26	120678	384470	363.1	376.7
14)	L6 Aroclor-1254 {3}	12.20	12.22	257495	495908	375.8	379.3
[illegible]	L6 Aroclor-1254 {4}	12.44	13.05	310712	298033	357.7	398.1
[illegible]	L6 Aroclor-1254 {5}	12.80	13.34	393938	287012	373.8	375.7
	Sum Aroclor-1254			1325097	1948482	1836.6	1919.8
	Average Aroclor-1254					367.314	383.953

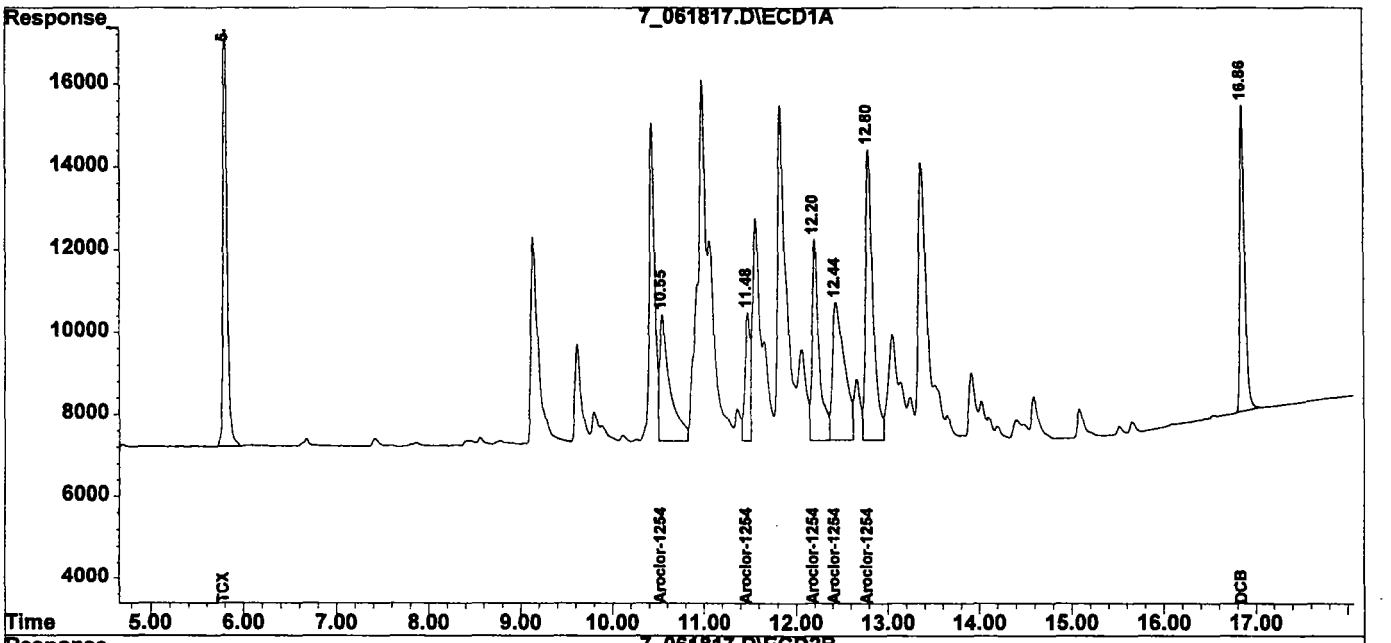
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

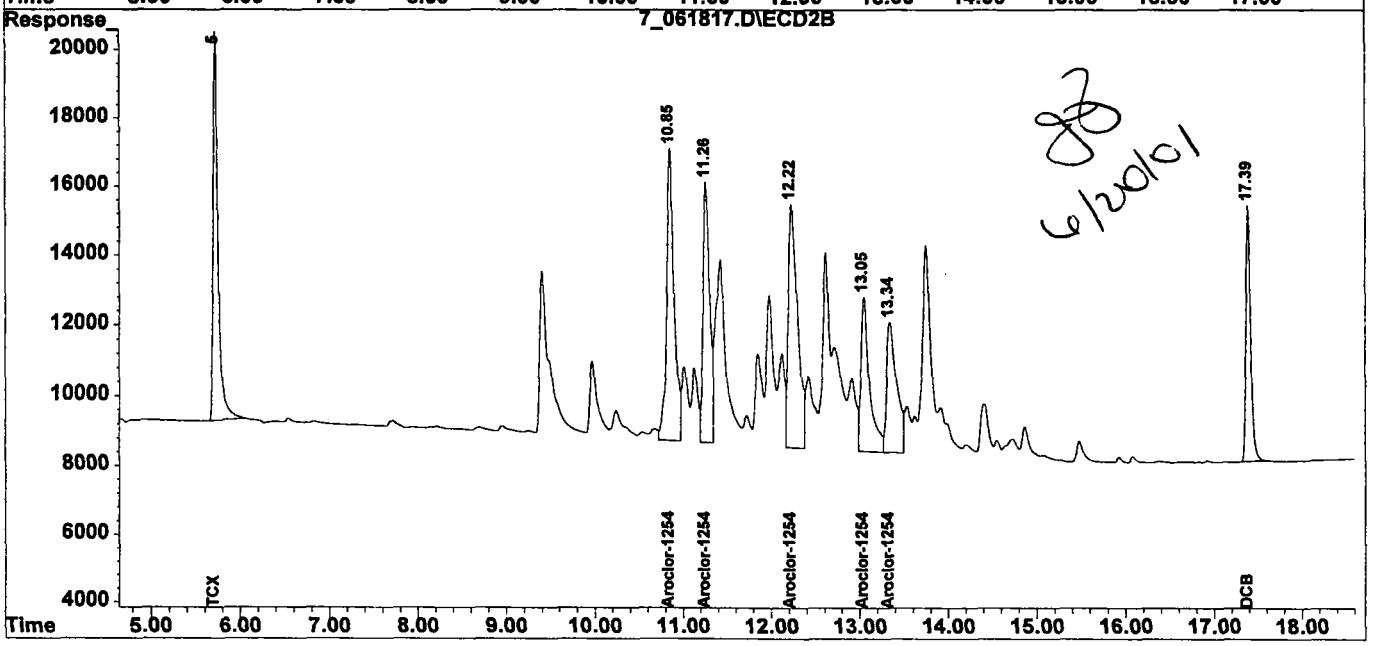
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061817.D\ECD1A.CH Vial: 17
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061817.D\ECD2B.CH
Acq On : 18 Jun 2001 17:36 Operator: DDC
Sample : AR1254L37G Inst : HP_07
Misc : 5-4-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:23 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061818.D\ECD1A.CH Vial: 18
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061818.D\ECD2B.CH
Acq On : 18 Jun 2001 18:00 Operator: DDC
Sample : AR1254L47G Inst : HP_07
Misc : 5-3-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:23 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.80	5.71	807878	1127357	42.0	46.4
22)	S DCB	16.86	17.39	633956	644590	43.4	42.5
	Target Compounds:						
12)	L6 Aroclor-1254	10.54	10.84	564820	1154682	859.5	930.8
13)	L6 Aroclor-1254 {2}	11.48	11.25	297535	919383	913.8	898.6
14)	L6 Aroclor-1254 {3}	12.20	12.22	577597	1208075	842.7	915.3
[illegible]	L6 Aroclor-1254 {4}	12.43	13.04	766996	661008	901.8	858.8
[illegible]	L6 Aroclor-1254 {5}	12.79	13.34	898547	681582	853.2	888.4
	Sum Aroclor-1254			3105494	4624730	4371.1	4492.0
	Average Aroclor-1254					874.213	898.391

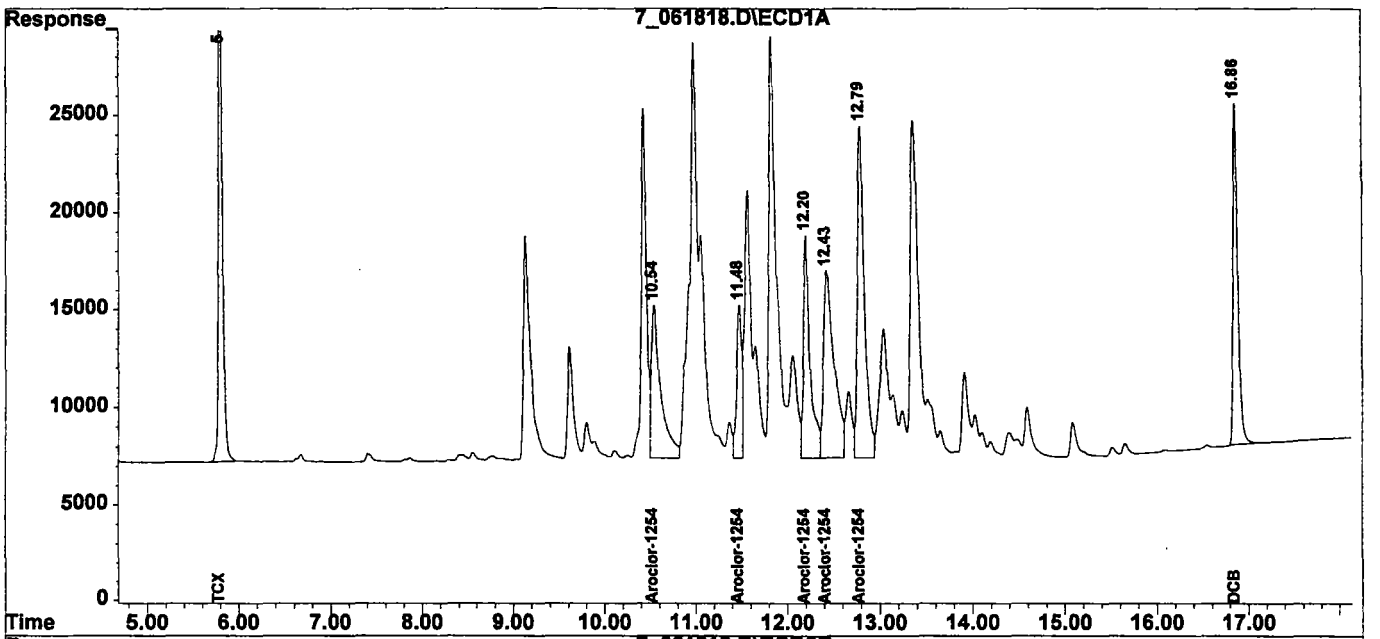
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

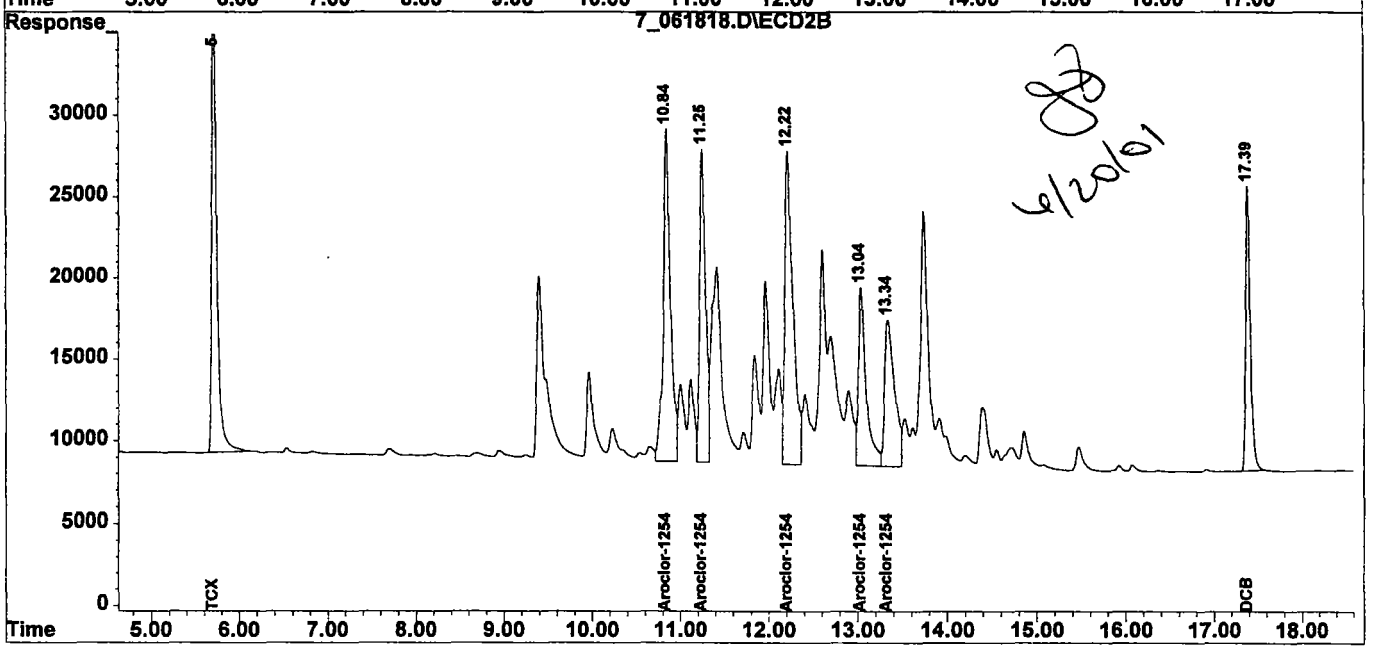
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061818.D\ECD1A.CH Vial: 18
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061818.D\ECD2B.CH
Acq On : 18 Jun 2001 18:00 Operator: DDC
Sample : AR1254L47G Inst : HP_07
Misc : 5-3-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:23 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061819.D\ECD1A.CH Vial: 19
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061819.D\ECD2B.CH
Acq On : 18 Jun 2001 18:24 Operator: DDC
Sample : AR1254L57G Inst : HP_07
Misc : 5-2-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:23 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.80	5.71	1686849	2569377	88.3 E	105.1 E
22)	S DCB	16.86	17.39	1295854	1320314	87.9 E	86.2 E
	Target Compounds:						
12)	L6 Aroclor-1254	10.54	10.84	1138266	2374799	1688.7 E	1843.9 E
13)	L6 Aroclor-1254 {2}	11.47	11.25	615063	1888367	1848.7 E	1777.8 E
14)	L6 Aroclor-1254 {3}	12.20	12.21	1106532	2556277	1561.8 E	1850.9 E
[illegible]	L6 Aroclor-1254 {4}	12.42	13.04	1608829	1282161	1849.3 E	1576.1 E
[illegible]	L6 Aroclor-1254 {5}	12.79	13.34	1745548	1424676	1601.8 E	1785.1 E
	Sum Aroclor-1254			6214238	9526279	8550.3	8833.8
	Average Aroclor-1254					1710.054	1766.759

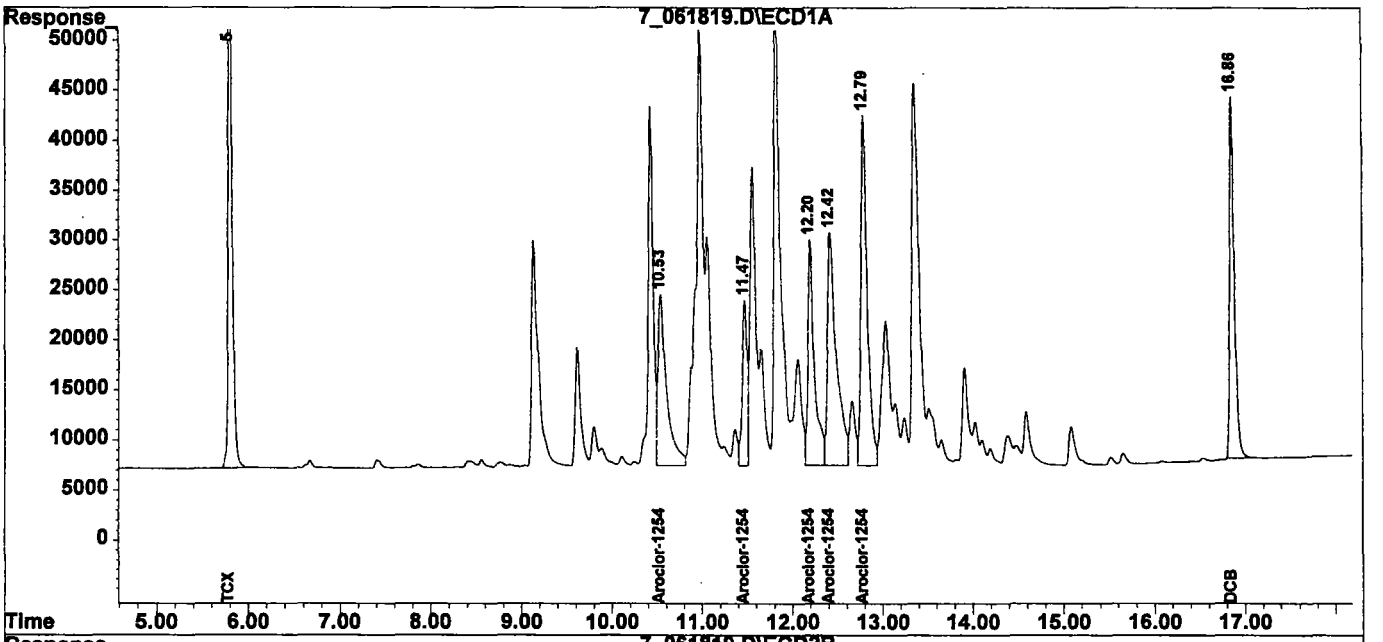
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

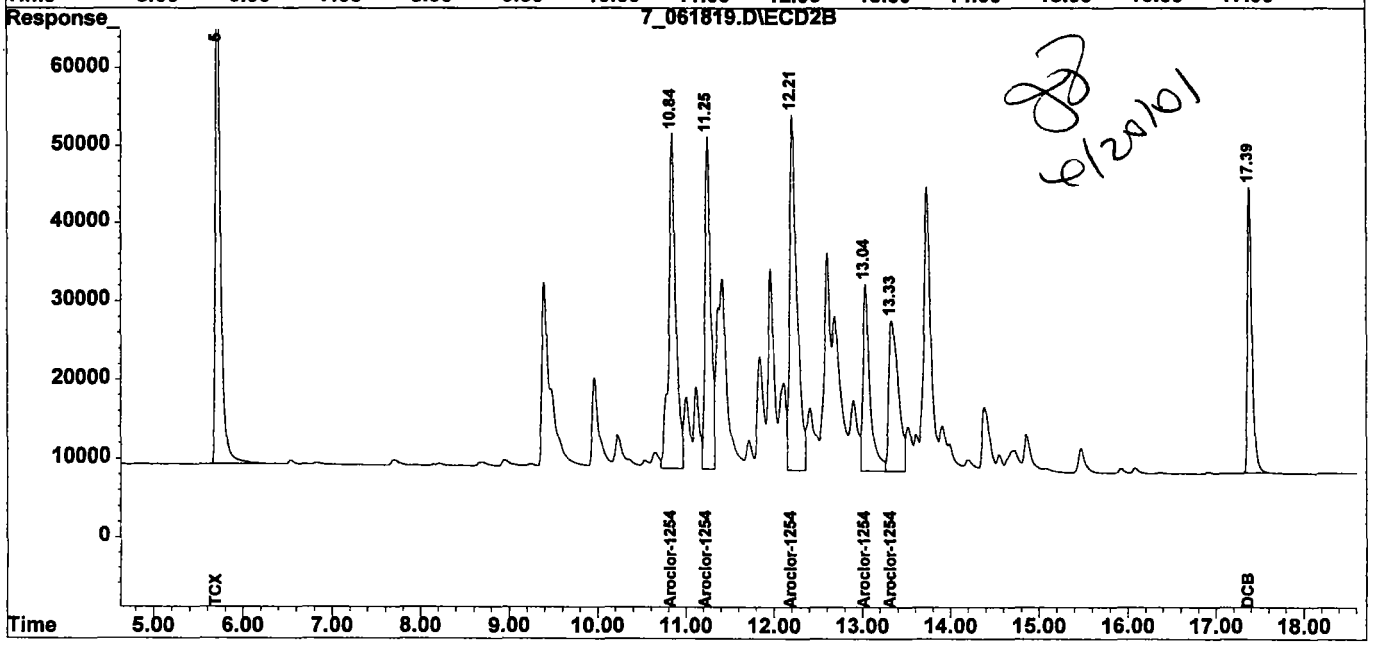
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061819.D\ECD1A.CH Vial: 19
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061819.D\ECD2B.CH
Acq On : 18 Jun 2001 18:24 Operator: DDC
Sample : AR1254L57G Inst : HP_07
Misc : 5-2-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:23 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

Response Factor Report HP_07

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Calibration Files
L1 =7_061820.D L2 =7_061821.D L3 =7_061822.D
L4 =7_061823.D L5 =7_061824.D

	Compound	L1	L2	L3	L4	L5	Avg		%RSD
1)	TCX	19.0	21.4	21.2	20.8	20.4	20.6	E3	4.65
2)	Aroclor-1016	480.7	542.7	526.3	473.4	429.3	490.5		9.19
3)	Aroclor-1016 {2}	1.2	1.3	1.3	1.1	1.0	1.2	E3	10.27
4)	Aroclor-1016 {3}	1.1	1.4	1.5	1.1	1.6	1.3	E3	15.88
5)	Aroclor-1016 {4}	684.0	779.8	794.6	731.2	709.8	739.9		6.30
6)	Aroclor-1016 {5}	621.4	572.0	561.3	490.0	455.7	540.1		12.32
17)	Aroclor-1260	1.2	1.4	1.4	1.2	1.2	1.3	E3	8.47
18)	Aroclor-1260 {2}	2.0	2.3	2.4	2.1	2.0	2.2	E3	7.70
19)	Aroclor-1260 {3}	1.4	1.7	1.8	1.7	1.8	1.7	E3	9.78
20)	Aroclor-1260 {4}	693.2	839.0	883.6	795.3	793.7	801.0		8.83
21)	Aroclor-1260 {5}	1.5	1.8	2.0	1.8	1.9	1.8	E3	10.10
22)	DCB	13.2	16.2	17.2	15.8	16.0	15.7	E3	9.40

Signal #2 Calibration Files
L1 =7_061820.D L2 =7_061821.D L3 =7_061822.D
L4 =7_061823.D L5 =7_061824.D

	Compound	L1	L2	L3	L4	L5	Avg		%RSD
24)	TCX #2	19.4	24.0	25.4	26.8	28.7	24.8	E3	14.14
25)	Aroclor-1016 #2	462.4	836.0	739.8	656.9	602.5	659.5		21.40
26)	Aroclor-1016 {2} #2	1.5	1.8	1.7	1.6	1.5	1.6	E3	9.17
27)	Aroclor-1016 {3} #2	1.3	1.7	1.7	1.7	1.9	1.7	E3	14.48
28)	Aroclor-1016 {4} #2	964.1	1192.3	1136.8	1012.5	970.9	1055.3		9.79
29)	Aroclor-1016 {5} #2	920.0	659.5	678.3	622.8	634.8	703.1		17.52
40)	Aroclor-1260 #2	1.5	1.7	1.8	1.6	1.5	1.6	E3	6.91
41)	Aroclor-1260 {2} #2	1.4	1.6	1.6	1.5	1.5	1.5	E3	6.55
42)	Aroclor-1260 {3} #2	1.3	1.5	1.7	1.6	1.7	1.6	E3	10.22
43)	Aroclor-1260 {4} #2	802.8	963.6	1004.9	924.8	951.9	929.6		8.23
44)	Aroclor-1260 {5} #2	1.3	1.6	1.7	1.6	1.7	1.6	E3	9.77
45)	DCB #2	14.5	17.0	17.8	16.1	16.3	16.3	E3	7.61

(#) = Out of Range

XPCBF18.M Tue Jun 19 09:32:56 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061820.D\ECD1A.CH Vial: 20
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061820.D\ECD2B.CH
Acq On : 18 Jun 2001 18:48 Operator: DDC
Sample : AR1660L17G Inst : HP_07
Misc : 5-31-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:32 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	5.80	5.71	95030	96939	4.621	3.904	
22)	S DCB	16.86	17.39	66245	72295	4.222	4.422	
	Target Compounds:							
2)	L1 Aroclor-1016	6.62	6.81	48072	46237	98.1	70.1	#
3)	L1 Aroclor-1016 {2}	7.41	7.70	118299	145269	101.6	89.6	
4)	L1 Aroclor-1016 {3}	8.44	8.69	111240	125028	88.1m	75.4	
	L1 Aroclor-1016 {4}	8.73	8.97	68404	96407	103.0m	91.4	
	L1 Aroclor-1016 {5}	9.26	9.97	62137	92001	116.0	130.9	
	Sum Aroclor-1016			408153	504942	506.8	457.3	
	Average Aroclor-1016					101.368	91.467	
17)	L7 Aroclor-1260	12.20	12.62	124068	153311	95.5	94.2	
18)	L7 Aroclor-1260 {2}	12.80	13.06	196479	138400	91.2	90.9	
19)	L7 Aroclor-1260 {3}	13.38	13.75	140620	129990	83.6	83.3	
20)	L7 Aroclor-1260 {4}	14.03	14.43	69318	80280	86.5	86.4	
21)	L7 Aroclor-1260 {5}	14.60	14.87	147771	131264	83.0	83.9	
	Sum Aroclor-1260			678256	633245	439.8	438.6	
	Average Aroclor-1260					87.968	87.710	

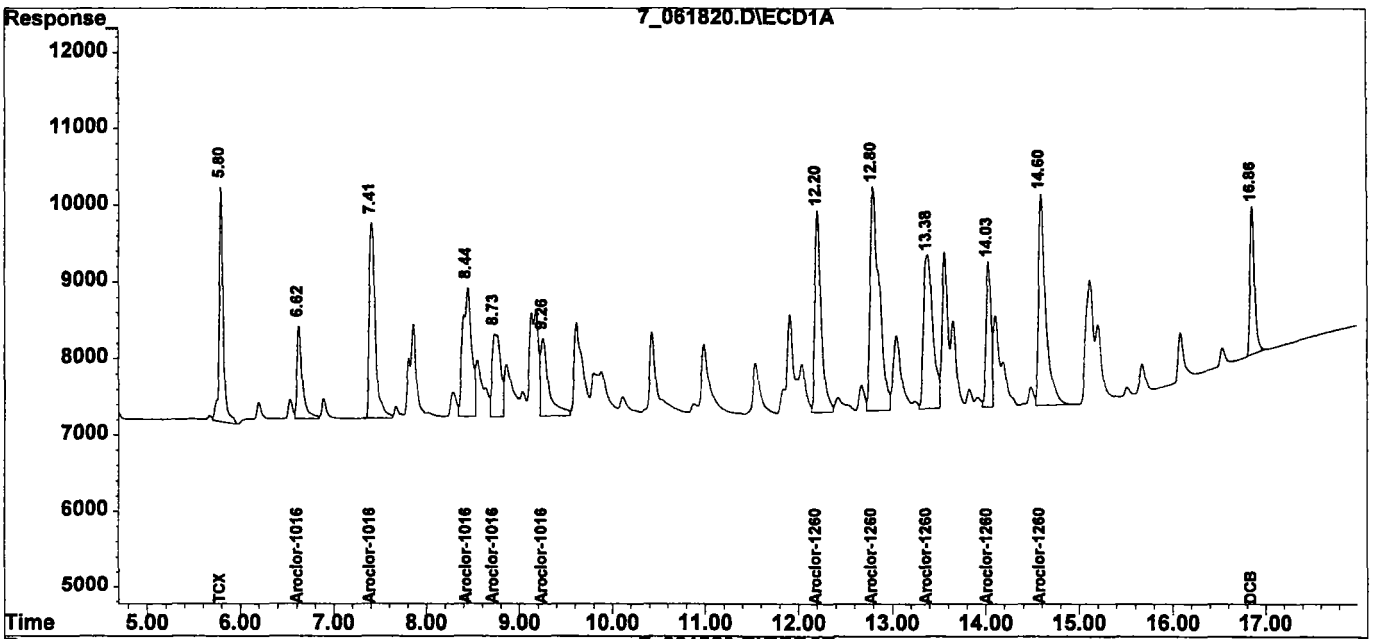
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

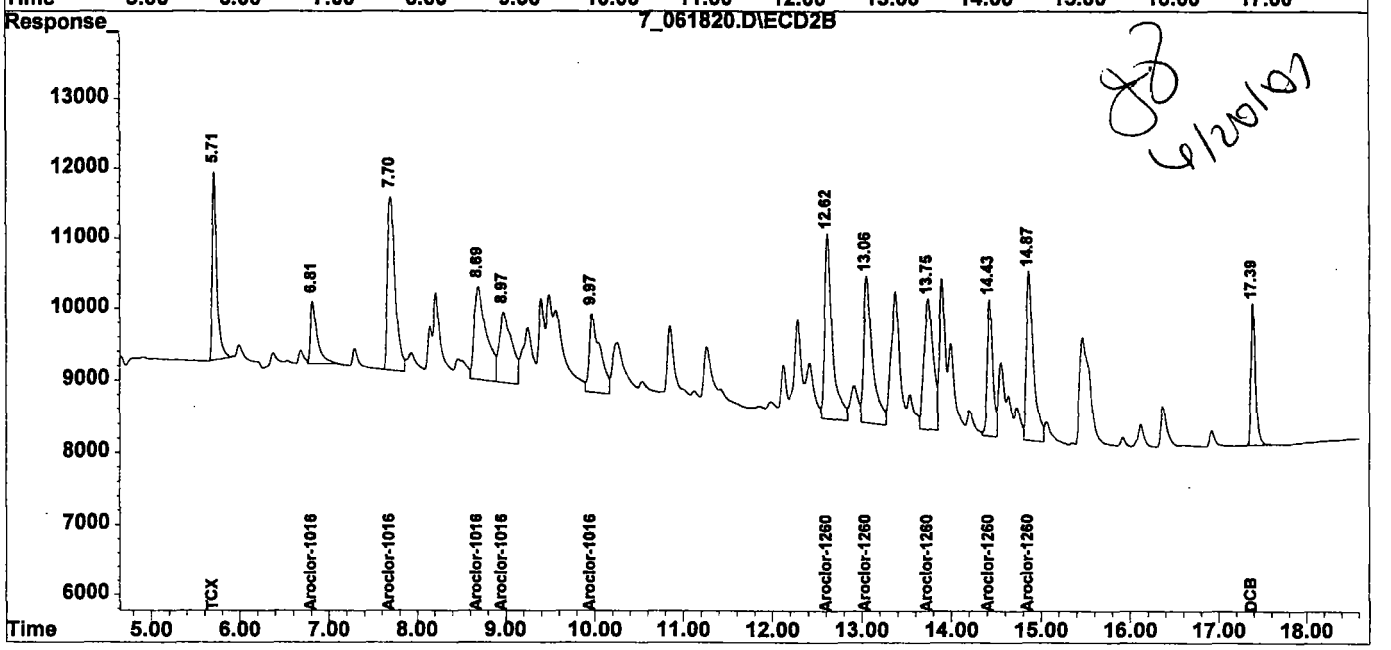
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061820.D\ECD1A.CH Vial: 20
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061820.D\ECD2B.CH
Acq On : 18 Jun 2001 18:48 Operator: DDC
Sample : AR1660L17G Inst : HP_07
Misc : 5-31-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:32 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

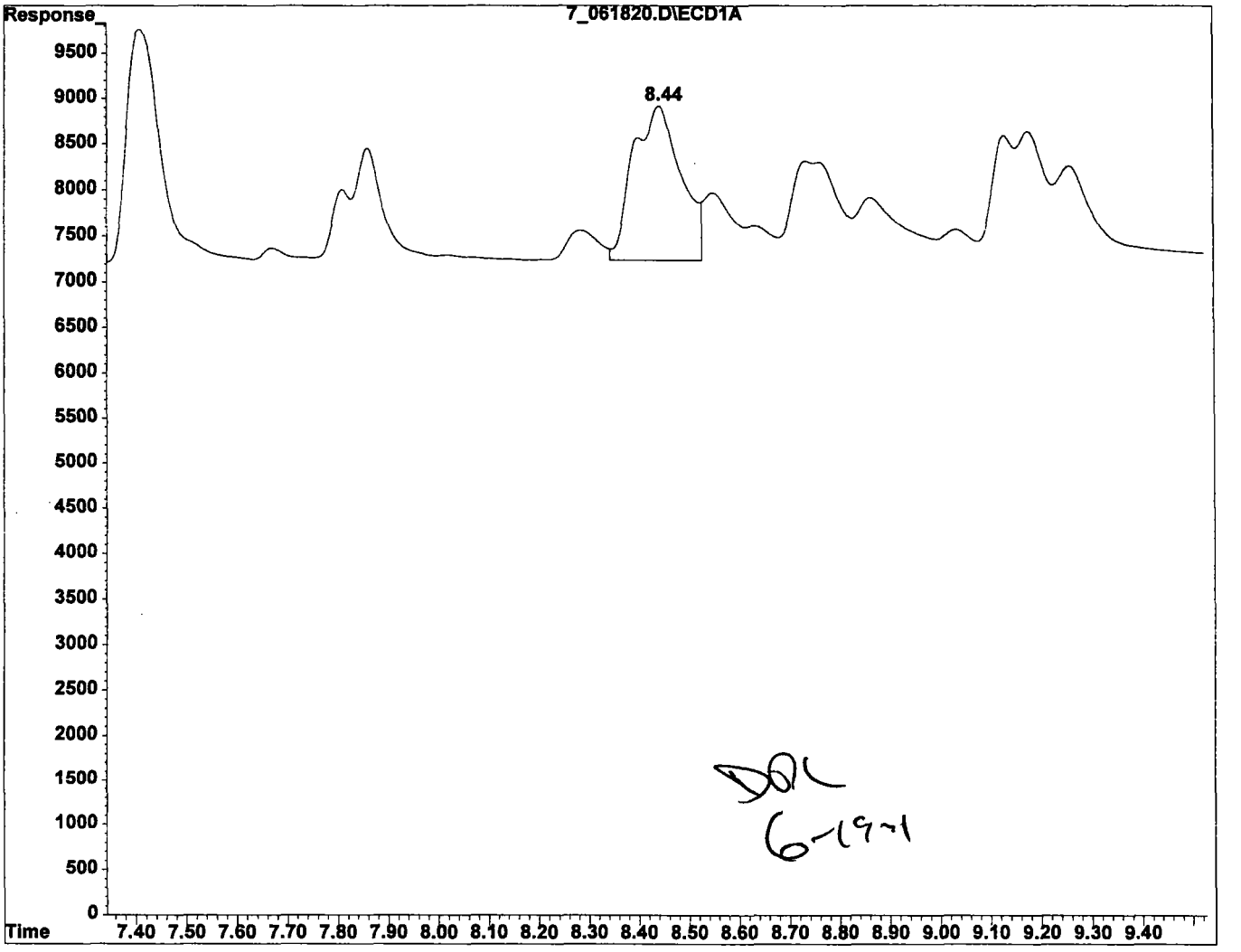




6/20/01

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\7\DATA\06_18_01\7_061820.D
Date Acquired: 18 Jun 2001 18:48
Inst: HP_07 Operator ID: DDC
Name: AR1660L17G
Misc: 5-31-7
Method: F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title: PCB/TOXAPHENE
Quant Time: Jun 19 9:32 2001 Quant Results File: XPCBF18.RES



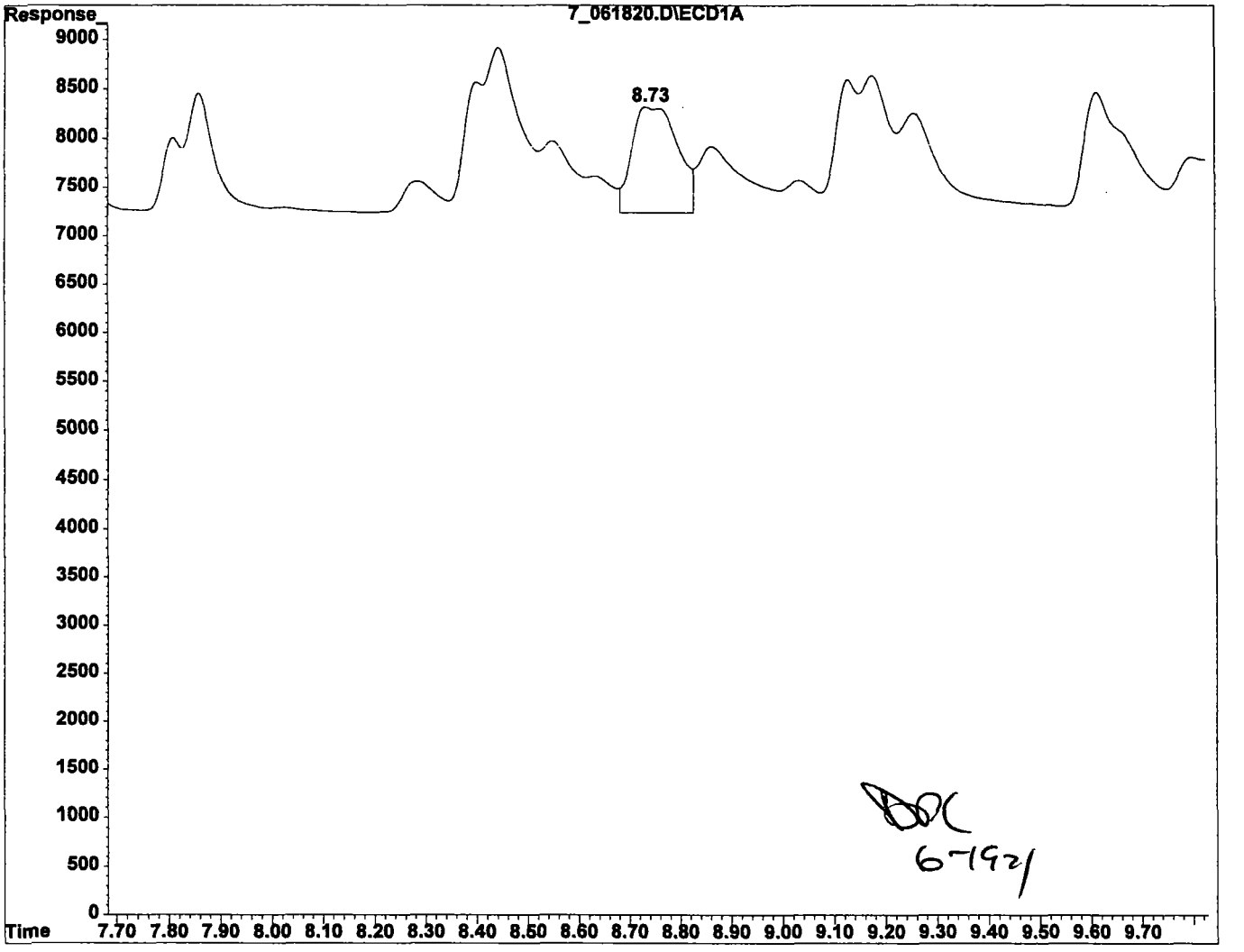
Aroclor-1016 {3} 8.44min area: 111240 m

Integration Time Range: 8.34 - 8.53

F:\HPCHEM\HP\7\DATA\06_18_01\7_061820.D
Report generated: Tue Jun 19 09:34:01 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\7\DATA\06_18_01\7_061820.D
Date Acquired: 18 Jun 2001 18:48
Inst: HP_07 Operator ID: DDC
Name: AR1660L17G
Misc: 5-31-7
Method: F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title: PCB/TOXAPHENE
Quant Time: Jun 19 9:32 2001 Quant Results File: XPCBF18.RES



Aroclor-1016 {4} 8.73min area: 68404 m

Integration Time Range: 8.68 - 8.83

F:\HPCHEM\HP\7\DATA\06_18_01\7_061820.D
Report generated: Tue Jun 19 09:34:01 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061821.D\ECD1A.CH Vial: 21
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061821.D\ECD2B.CH
Acq On : 18 Jun 2001 19:12 Operator: DDC
Sample : AR1660L27G Inst : HP_07
Misc : 5-30-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:26 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.80	5.71	214150	239551	11.2	9.653
22)	S DCB	16.86	17.39	162091	170033	11.1	11.1
	Target Compounds:						
2)	L1 Aroclor-1016	6.62	6.81	108534	167194	267.5	330.0
3)	L1 Aroclor-1016 {2}	7.41	7.70	261118	360276	270.3	274.0
4)	L1 Aroclor-1016 {3}	8.44	8.68	274777	334607	253.2	254.1
	L1 Aroclor-1016 {4}	8.73f	8.97	155965	238463	280.6	287.8
	L1 Aroclor-1016 {5}	9.26	9.97	114396	131893	249.4	229.5
	Sum Aroclor-1016			914790	1232433	1321.1	1375.5
	Average Aroclor-1016					264.217	275.104
17)	L7 Aroclor-1260	12.20	12.62	281508	348812	268.6	272.5
18)	L7 Aroclor-1260 {2}	12.80	13.05	456388	319716	262.0	266.1
19)	L7 Aroclor-1260 {3}	13.37	13.74	339917	309199	249.7	245.9
20)	L7 Aroclor-1260 {4}	14.03	14.43	167808	192728	260.1	258.9
21)	L7 Aroclor-1260 {5}	14.59	14.87	360747	312025	254.6	250.1
	Sum Aroclor-1260			1606367	1482480	1295.0	1293.5
	Average Aroclor-1260					259.009	258.698

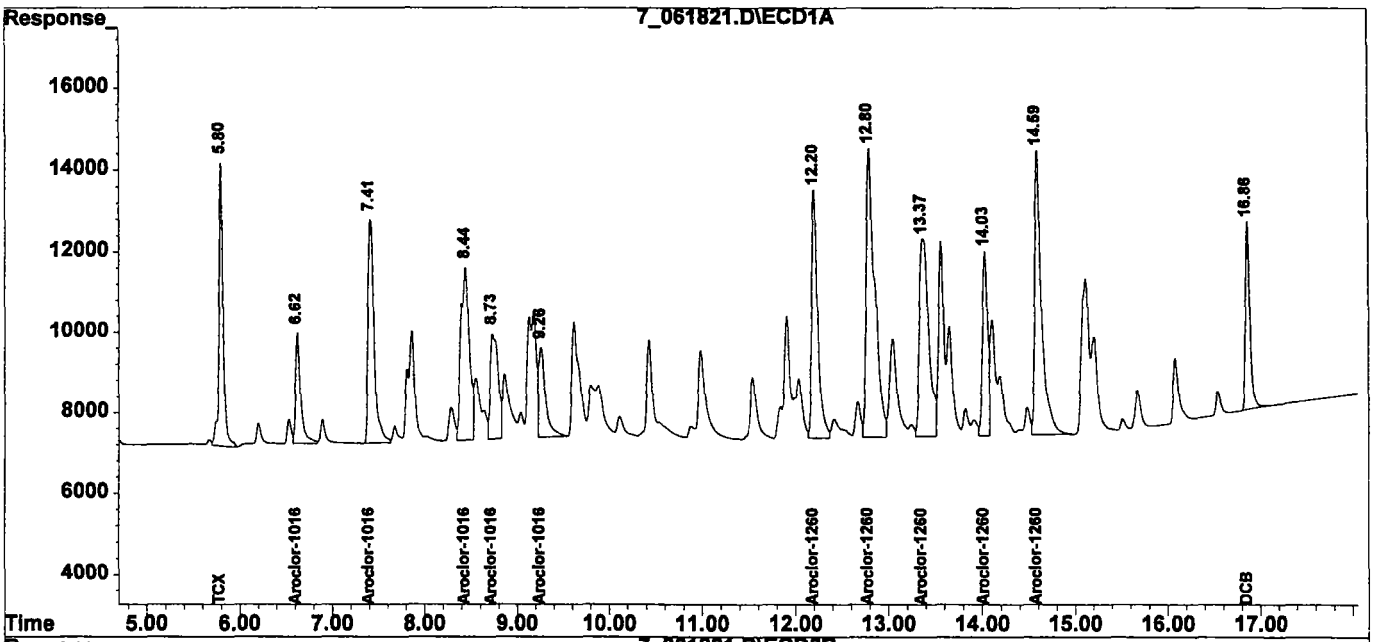
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

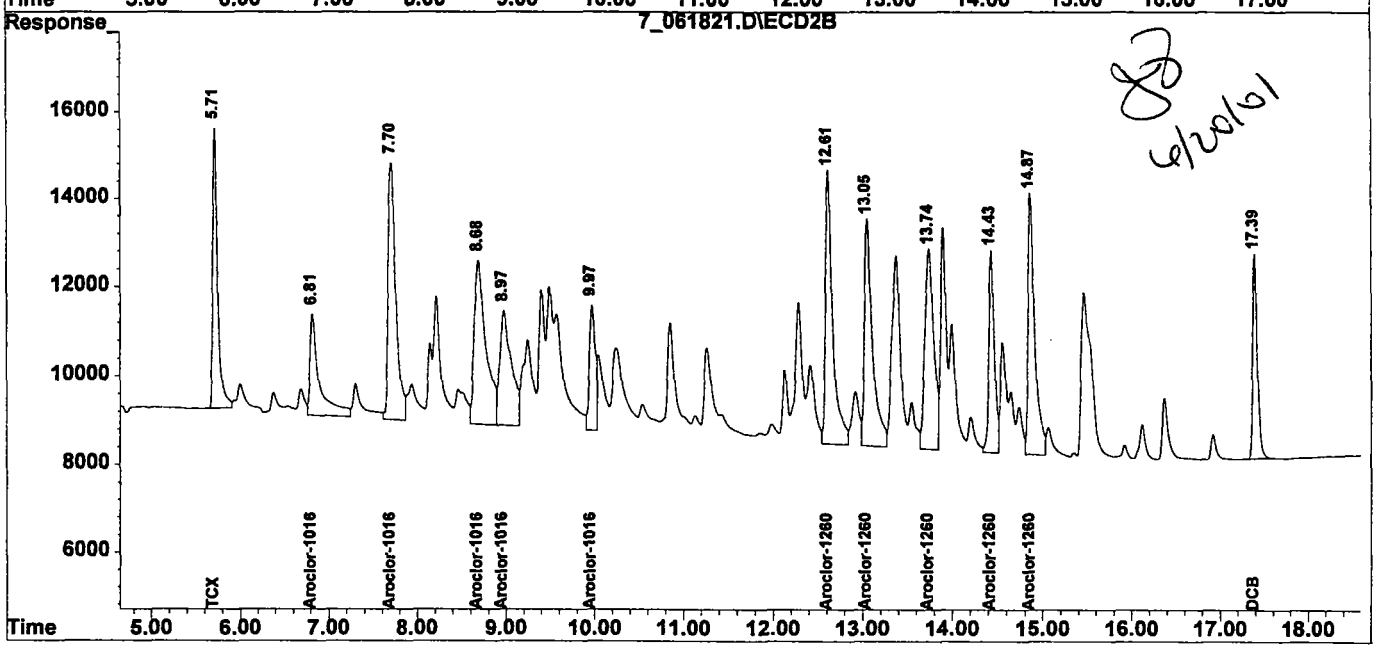
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061821.D\ECD1A.CH Vial: 21
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061821.D\ECD2B.CH
Acq On : 18 Jun 2001 19:12 Operator: DDC
Sample : AR1660L27G Inst : HP_07
Misc : 5-30-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:26 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





87
6/20/01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061822.D\ECD1A.CH Vial: 22
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061822.D\ECD2B.CH
Acq On : 18 Jun 2001 19:36 Operator: DDC
Sample : AR1660L37K Inst : HP_07
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:26 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.80	5.71	424475	507218	21.5	20.2
22)	S DCB	16.86	17.39	344669	356241	23.1	22.9
	Target Compounds:						
2)	L1 Aroclor-1016	6.62	6.81	210520	295934	490.5	518.4
3)	L1 Aroclor-1016 {2}	7.41	7.70	500654	698528	489.6	496.4
4)	L1 Aroclor-1016 {3}	8.44	8.68	595951	697544	522.6	497.5
[illegible]	L1 Aroclor-1016 {4}	8.73	8.97	317830	454721	543.2	505.8
[illegible]	L1 Aroclor-1016 {5}	9.26	9.97	224514	271323	475.2	445.7
	Sum Aroclor-1016			1849468	2418050	2521.1	2463.8
	Average Aroclor-1016					504.213	492.763
17)	L7 Aroclor-1260	12.20	12.61	569522	702114	509.5	511.3
18)	L7 Aroclor-1260 {2}	12.79	13.05	946349	655370	511.1	510.6
19)	L7 Aroclor-1260 {3}	13.36	13.74	737485	664954	512.4	501.7
20)	L7 Aroclor-1260 {4}	14.03	14.43	353457	401941	515.1	508.1
21)	L7 Aroclor-1260 {5}	14.59	14.86	781162	670003	518.1	507.5
	Sum Aroclor-1260			3387975	3094382	2566.2	2539.3
	Average Aroclor-1260					513.241	507.854

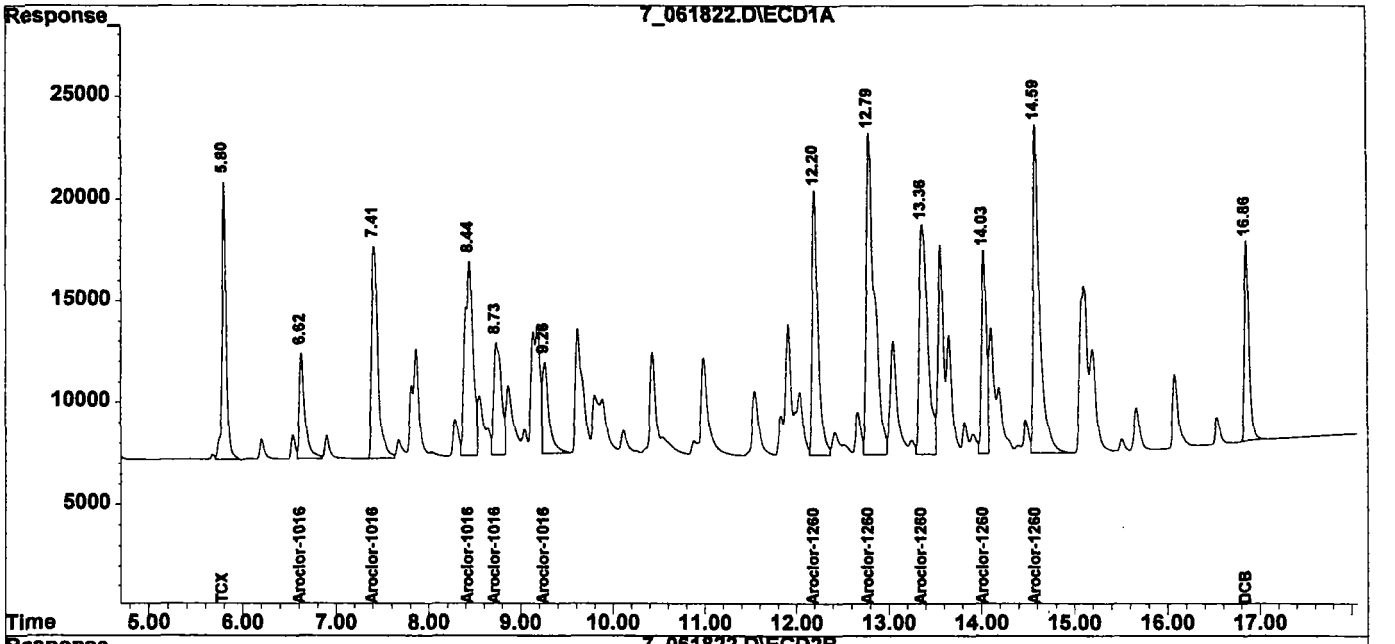
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

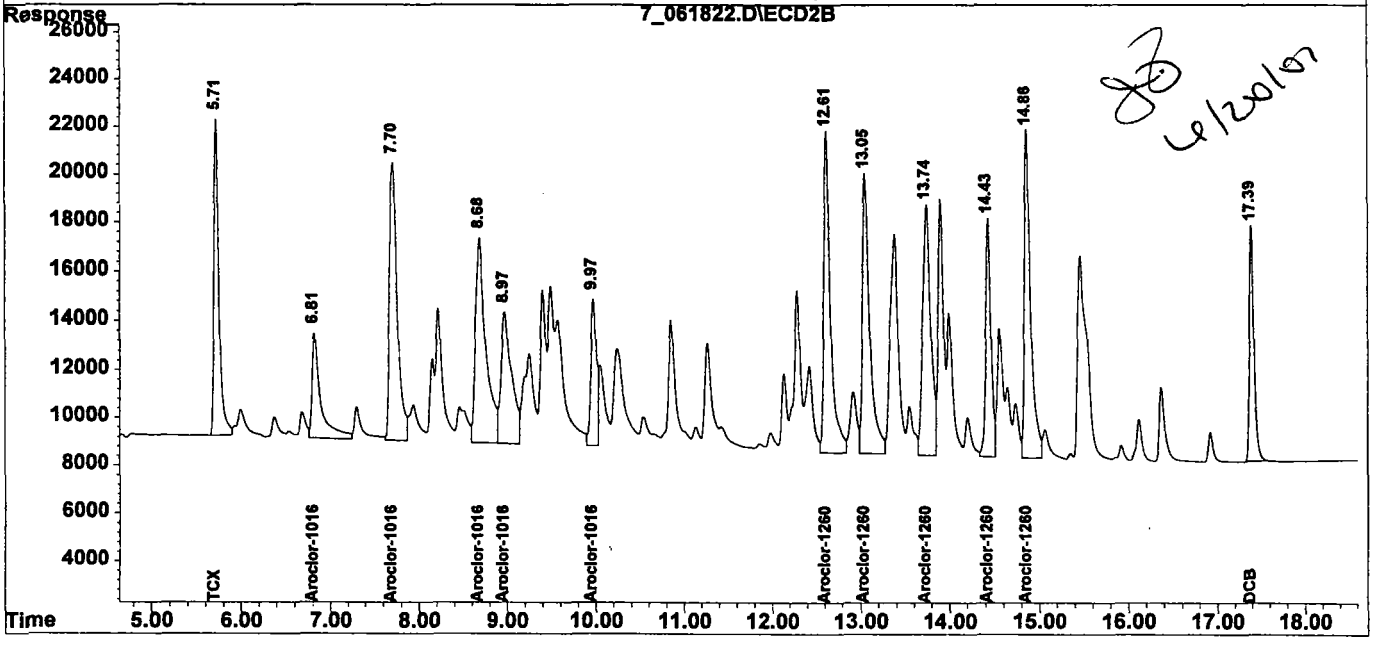
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061822.D\ECD1A.CH Vial: 22
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061822.D\ECD2B.CH
Acq On : 18 Jun 2001 19:36 Operator: DDC
Sample : AR1660L37K Inst : HP_07
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:26 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061823.D\ECD1A.CH Vial: 23
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061823.D\ECD2B.CH
Acq On : 18 Jun 2001 20:00 Operator: DDC
Sample : AR1660L47G Inst : HP_07
Misc : 5-28-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:26 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	5.80	5.71	830012	1070043	40.3	41.5	
22)	S DCB	16.86	17.39	630869	644963	40.1	39.4	
	Target Compounds:							
2)	L1 Aroclor-1016	6.62	6.81	378737	525501	832.0	863.8	
3)	L1 Aroclor-1016 {2}	7.41	7.70	884558	1274140	816.0	852.0	
4)	L1 Aroclor-1016 {3}	8.44	8.68	881462	1389550	725.4	930.2	#
	L1 Aroclor-1016 {4}	8.73	8.97	584930	809986	939.8	840.9	
	L1 Aroclor-1016 {5}	9.26	9.96	392037	498227	796.5	770.0	
	Sum Aroclor-1016			3121724	4497403	4109.8	4256.9	
	Average Aroclor-1016					821.959	851.379	
17)	L7 Aroclor-1260	12.20	12.61	993964	1249842	831.8	847.5	
18)	L7 Aroclor-1260 {2}	12.79	13.05	1686339	1191523	853.1	866.4	
19)	L7 Aroclor-1260 {3}	13.36	13.74	1369783	1270037	892.0	901.0	
20)	L7 Aroclor-1260 {4}	14.03	14.43	636231	739860	868.4	878.3	
21)	L7 Aroclor-1260 {5}	14.59	14.86	1444746	1265650	894.8	898.9	
	Sum Aroclor-1260			6131064	5716912	4340.1	4392.0	
	Average Aroclor-1260					868.027	878.403	

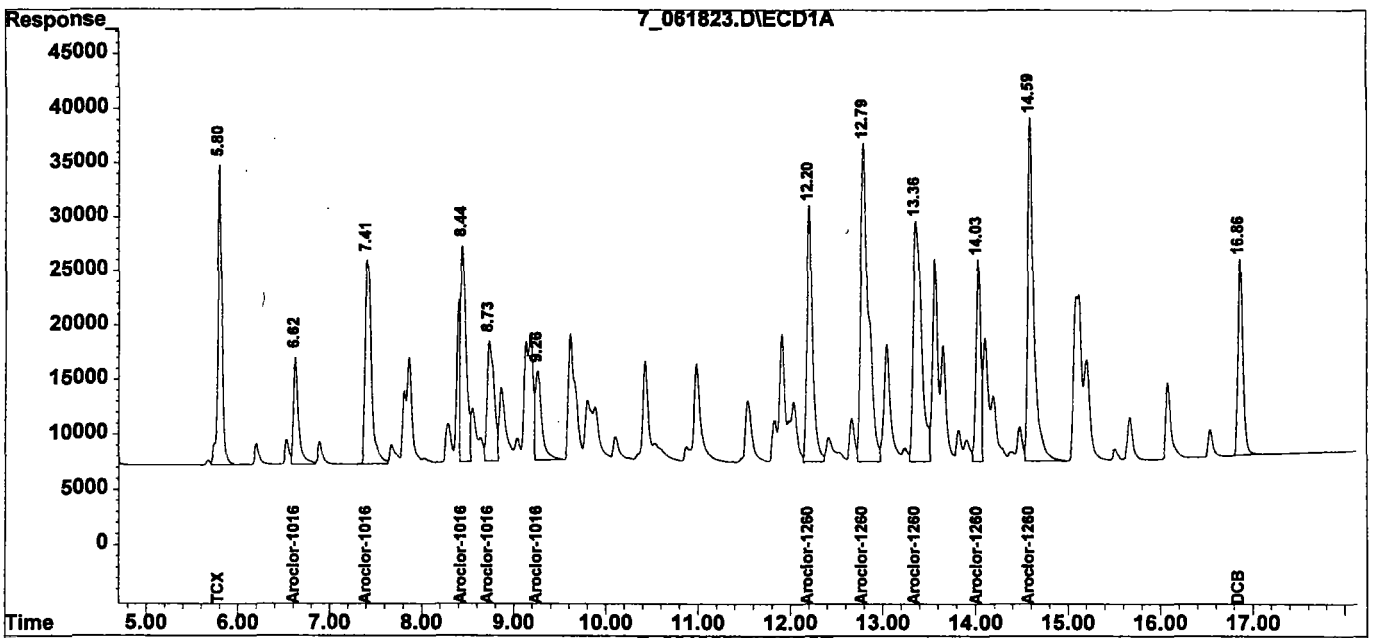
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

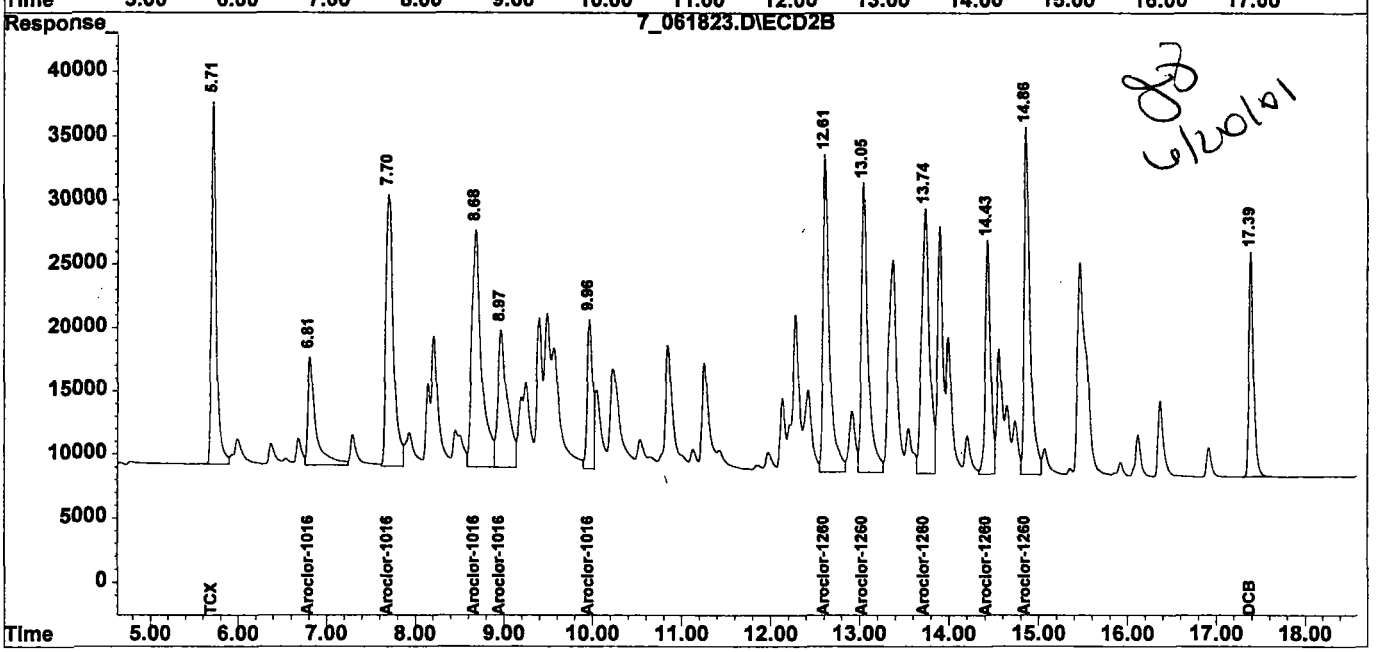
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061823.D\ECD1A.CH Vial: 23
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061823.D\ECD2B.CH
Acq On : 18 Jun 2001 20:00 Operator: DDC
Sample : AR1660L47G Inst : HP_07
Misc : 5-28-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:26 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061824.D\ECD1A.CH Vial: 24
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061824.D\ECD2B.CH
Acq On : 18 Jun 2001 20:24 Operator: DDC
Sample : AR1660L57G Inst : HP_07
Misc : 5-27-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:26 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.80	5.71	1632075	2295666	78.8	90.0
22)	S DCB	16.86	17.39	1278604	1307794	81.3	79.8
	Target Compounds:						
2)	L1 Aroclor-1016	6.62	6.81	686957	963992	1442.5 E	1510.6 E
3)	L1 Aroclor-1016 {2}	7.41	7.70	1602826	2425198	1416.2 E	1547.2 E
4)	L1 Aroclor-1016 {3}	8.44	8.68	2488383	3011439	2065.9 E	1908.2 E
[illegible]	L1 Aroclor-1016 {4}	8.73	8.96	1135604	1553451	1741.4 E	1531.6 E
[illegible]	L1 Aroclor-1016 {5}	9.26	9.96	729052	1015704	1437.2 E	1500.8 E
	Sum Aroclor-1016			6642822	8969784	8103.2	7998.4
	Average Aroclor-1016					1620.638	1599.679
17)	L7 Aroclor-1260	12.20	12.61	1886024	2465432	1505.5 E	1584.7 E
18)	L7 Aroclor-1260 {2}	12.79	13.04	3279346	2409238	1581.5 E	1659.0 E
19)	L7 Aroclor-1260 {3}	13.36	13.73	2804128	2737516	1737.8 E	1843.2 E
20)	L7 Aroclor-1260 {4}	14.03	14.43	1269864	1523027	1651.3 E	1717.3 E
21)	L7 Aroclor-1260 {5}	14.59	14.86	2980918	2715014	1751.9 E	1826.4 E
	Sum Aroclor-1260			12220281	11850227	8227.9	8630.5
	Average Aroclor-1260					1645.585	1726.105

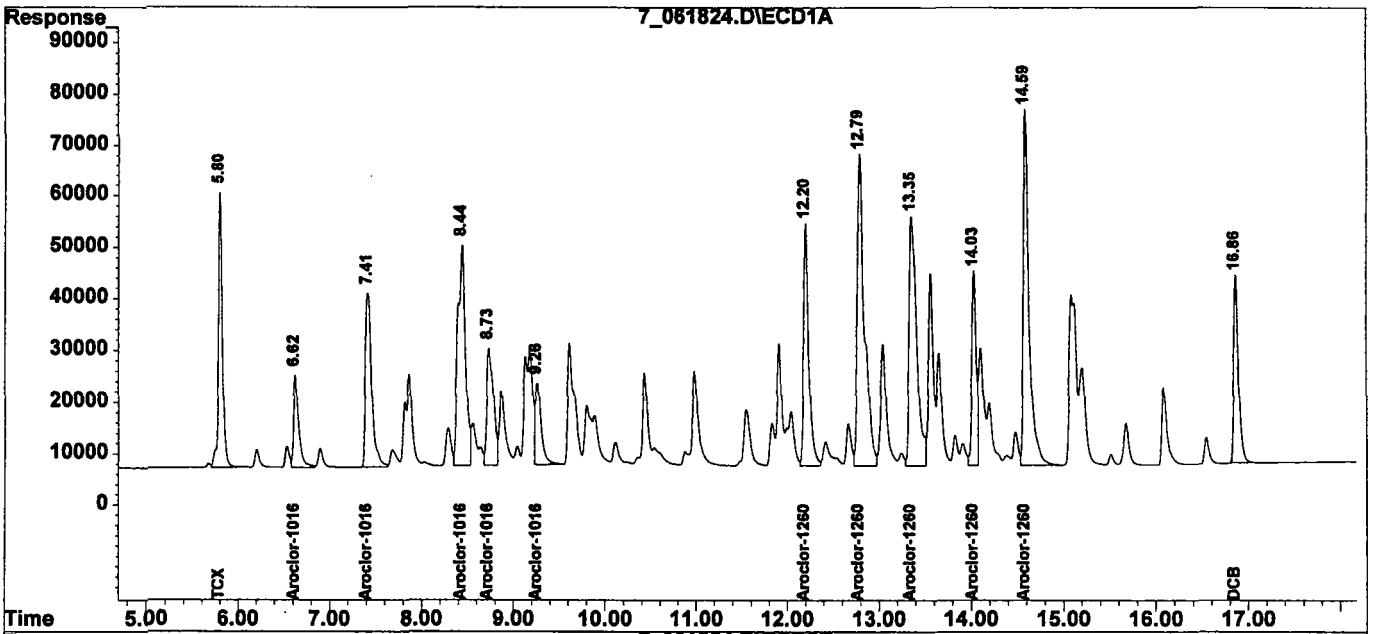
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

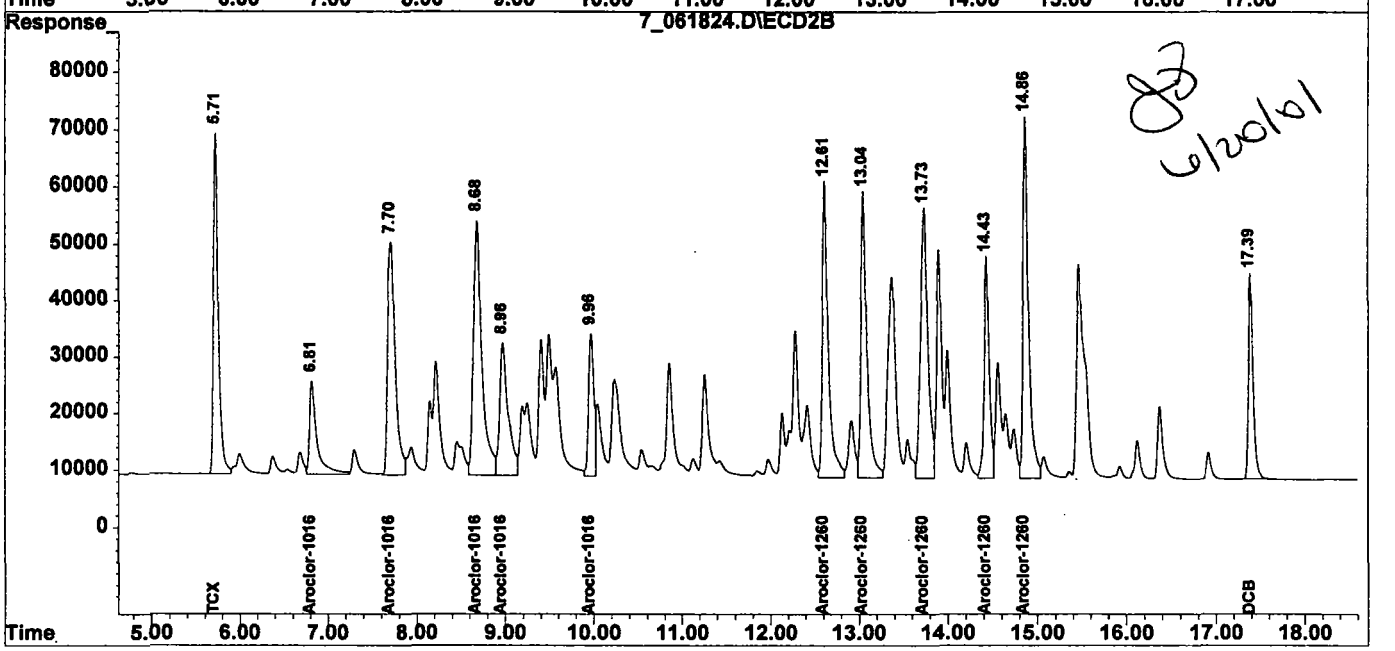
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061824.D\ECD1A.CH Vial: 24
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061824.D\ECD2B.CH
Acq On : 18 Jun 2001 20:24 Operator: DDC
Sample : AR1660L57G Inst : HP_07
Misc : 5-27-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:26 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

Continuing Calibration Report HP_07

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Tue Jun 19 09:39:44 2001
Response via : Initial Calibration

Continuing Calibration File: 7_061840.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	20.559	24.342	E3	-18.4#	115
2	L1	Aroclor-1016	490.492	609.146		-24.2#	116
3	L1	Aroclor-1016 {2}	1.170	1.407	E3	-20.3#	112
4	L1	Aroclor-1016 {3}	1.327	1.793	E3	-35.2#	120
5	L1	Aroclor-1016 {4}	739.871	921.294		-24.5#	116
6	L1	Aroclor-1016 {5}	540.069	620.743		-14.9	111
17	L7	Aroclor-1260	1.299	1.589	E3	-22.4#	112
18	L7	Aroclor-1260 {2}	2.154	2.672	E3	-24.0#	113
19	L7	Aroclor-1260 {3}	1.683	2.103	E3	-25.0#	114
20	L7	Aroclor-1260 {4}	800.964	990.830		-23.7#	112
21	L7	Aroclor-1260 {5}	1.781	2.272	E3	-27.6#	116
22	S	DCB	15.689	20.693	E3	-31.9#	120

Signal #2
Continuing Calibration File: 7_061840.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	24.830	29.446	E3	-18.6#	116
2	L1	Aroclor-1016	659.509	798.461		-21.1#	108
3	L1	Aroclor-1016 {2}	1.622	1.933	E3	-19.2#	111
4	L1	Aroclor-1016 {3}	1.657	2.028	E3	-22.4#	116
5	L1	Aroclor-1016 {4}	1055.315	1205.907		-14.3	106
6	L1	Aroclor-1016 {5}	703.075	717.521		-2.1	106
17	L7	Aroclor-1260	1.627	1.886	E3	-15.9#	107
18	L7	Aroclor-1260 {2}	1.523	1.757	E3	-15.3#	107
19	L7	Aroclor-1260 {3}	1.561	1.992	E3	-27.6#	120
20	L7	Aroclor-1260 {4}	929.601	1177.609		-26.7#	117
21	L7	Aroclor-1260 {5}	1.565	2.124	E3	-35.7#	127
22	S	DCB	16.349	21.716	E3	-32.8#	122

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

7_061840.D XPCBF18.M Tue Jun 19 09:39:51 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061840.D\ECD1A.CH Vial: 40
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061840.D\ECD2B.CH
Acq On : 19 Jun 2001 2:47 Operator: DDC
Sample : AR1660L37L Inst : HP_07
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:39 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
System Monitoring Compounds:						
1) S TCX	5.81f	5.72f	486830	588913	23.7	23.7
22) S DCB	16.88	17.41	413861	434329	26.4	26.6
Target Compounds:						
2) L1 Aroclor-1016	6.64	6.82	243658	319385	496.8	484.3
3) L1 Aroclor-1016 {2}	7.43	7.71	562900	773390	481.3	476.9
4) L1 Aroclor-1016 {3}	8.46	8.70	717332	811203	540.7	489.5
L1 Aroclor-1016 {4}	8.75	8.98	368517	482363	498.1	457.1
L1 Aroclor-1016 {5}	9.28	9.98	248297	287008	459.8	408.2
Sum Aroclor-1016			2140705	2673348	2476.6	2315.9
Average Aroclor-1016					495.322	463.189
17) L7 Aroclor-1260	12.22	12.63	635599	754496	489.4	463.7
18) L7 Aroclor-1260 {2}	12.81	13.06	1068656	702723	496.1	461.3
19) L7 Aroclor-1260 {3}	13.38	13.75	841119	796901	499.8	510.4
20) L7 Aroclor-1260 {4}	14.05	14.44	396332	471043	494.8	506.7
21) L7 Aroclor-1260 {5}	14.60	14.88	908732	849613	510.3	542.8
Sum Aroclor-1260			3850438	3574776	2490.5	2484.9
Average Aroclor-1260					498.103	496.981

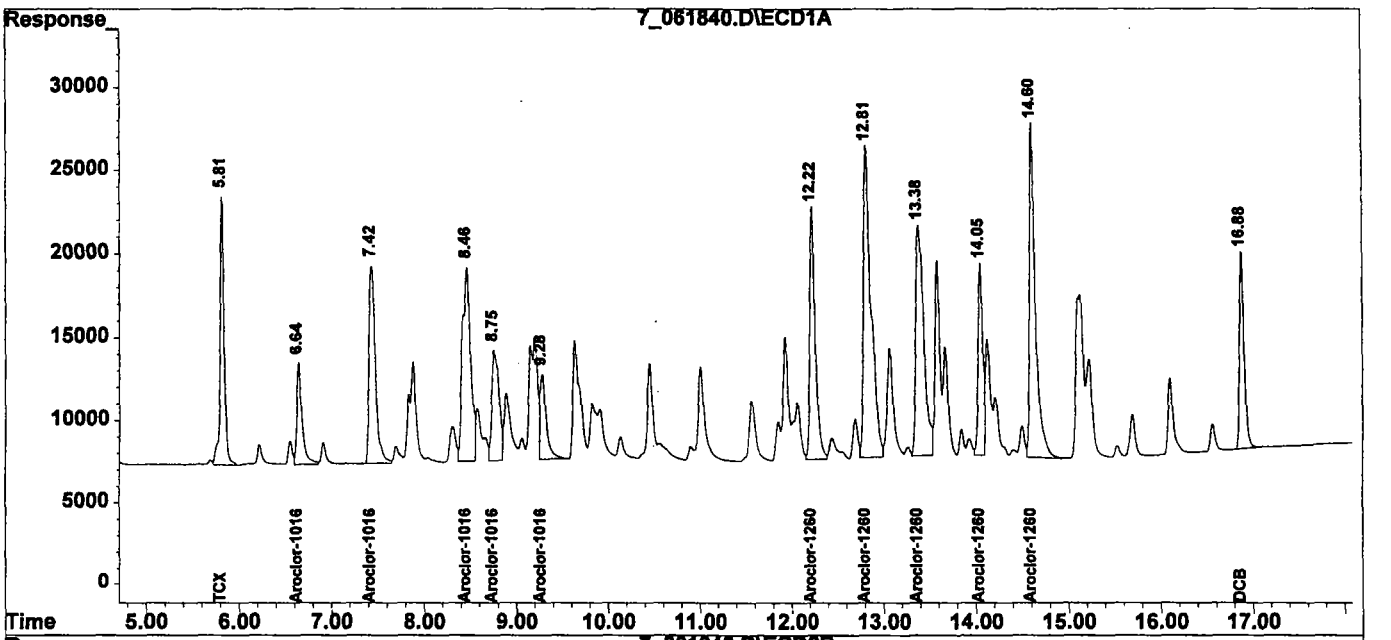
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

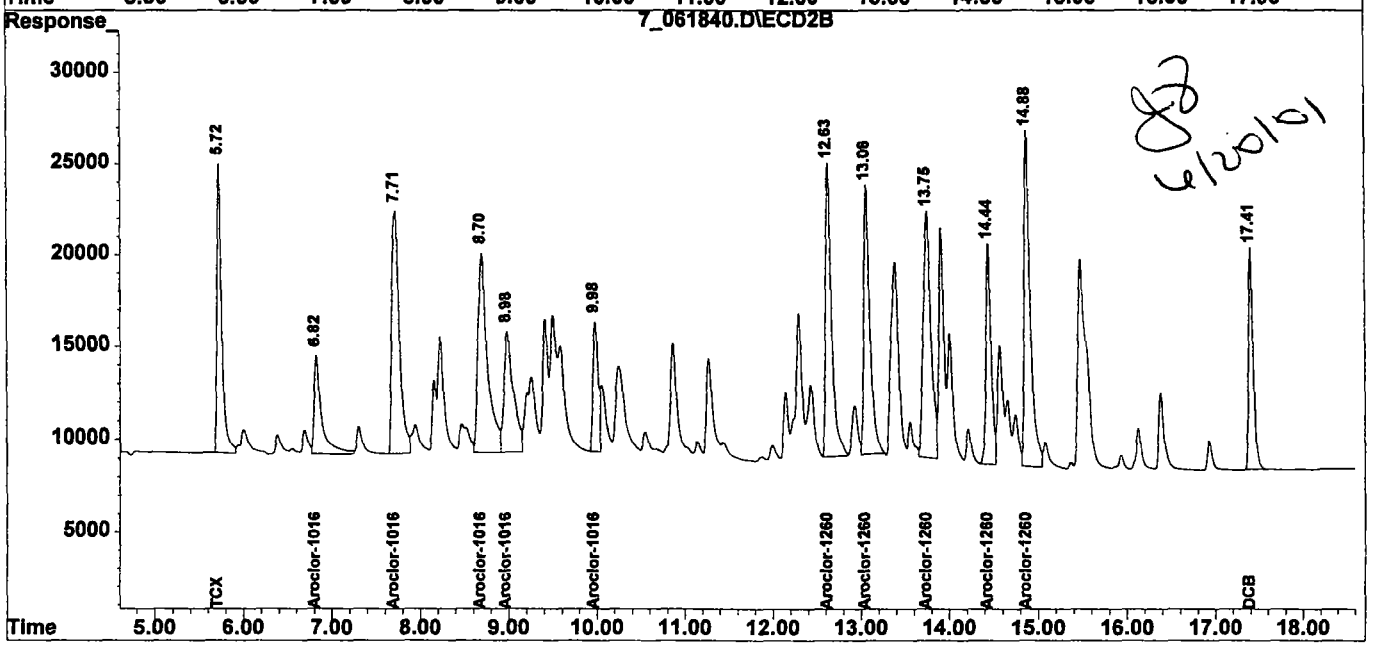
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061840.D\ECD1A.CH Vial: 40
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061840.D\ECD2B.CH
Acq On : 19 Jun 2001 2:47 Operator: DDC
Sample : AR1660L37L Inst : HP_07
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:39 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

Continuing Calibration Report HP_07

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Tue Jun 19 09:39:04 2001
Response via : Initial Calibration

Continuing Calibration File: 7_061841.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	20.559	22.292	E3	-8.4	105
2	L1	Aroclor-1016	490.492	558.959		-14.0	106
3	L1	Aroclor-1016 {2}	1.170	1.292	E3	-10.5	103
4	L1	Aroclor-1016 {3}	1.327	1.586	E3	-19.5#	106
5	L1	Aroclor-1016 {4}	739.871	830.994		-12.3	105
6	L1	Aroclor-1016 {5}	540.069	570.373		-5.6	102
17	L7	Aroclor-1260	1.299	1.427	E3	-9.9	100
18	L7	Aroclor-1260 {2}	2.154	2.387	E3	-10.8	101
19	L7	Aroclor-1260 {3}	1.683	1.856	E3	-10.3	101
20	L7	Aroclor-1260 {4}	800.964	879.766		-9.8	100
21	L7	Aroclor-1260 {5}	1.781	2.006	E3	-12.6	103
22	S	DCB	15.689	18.262	E3	-16.4#	106

Continuing Calibration File: 7_061841.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	24.830	26.747	E3	-7.7	105
2	L1	Aroclor-1016	659.509	727.063		-10.2	98
3	L1	Aroclor-1016 {2}	1.622	1.756	E3	-8.3	101
4	L1	Aroclor-1016 {3}	1.657	1.787	E3	-7.8	102
5	L1	Aroclor-1016 {4}	1055.315	1087.035		-3.0	96
6	L1	Aroclor-1016 {5}	703.075	636.775		9.4	94
17	L7	Aroclor-1260	1.627	1.681	E3	-3.3	96
18	L7	Aroclor-1260 {2}	1.523	1.558	E3	-2.3	95
19	L7	Aroclor-1260 {3}	1.561	1.743	E3	-11.6	105
20	L7	Aroclor-1260 {4}	929.601	1042.799		-12.2	104
21	L7	Aroclor-1260 {5}	1.565	1.852	E3	-18.3#	111
22	S	DCB	16.349	19.074	E3	-16.7#	107

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

7_061841.D XPCBF18.M Tue Jun 19 09:39:10 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061841.D\ECD1A.CH Vial: 41
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061841.D\ECD2B.CH
Acq On : 19 Jun 2001 3:11 Operator: DDC
Sample : AR1660L37M Inst : HP_07
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:39 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.81f	5.72f	445833	534949	21.7	21.5
22)	S DCB	16.88	17.41	365236	381471	23.3	23.3
	Target Compounds:						
2)	L1 Aroclor-1016	6.64	6.82	223583	290825	455.8	441.0
3)	L1 Aroclor-1016 {2}	7.43	7.72	516745	702553	441.8	433.2
4)	L1 Aroclor-1016 {3}	8.46	8.70	634345	714613	478.2	431.2
	L1 Aroclor-1016 {4}	8.75	8.99	332398	434814	449.3	412.0
	L1 Aroclor-1016 {5}	9.28	9.98	228149	254710	422.4	362.3
	Sum Aroclor-1016			1935221	2397515	2247.5	2079.7
	Average Aroclor-1016					449.508	415.936
17)	L7 Aroclor-1260	12.22	12.63	570828	672410	439.6	413.2
18)	L7 Aroclor-1260 {2}	12.81	13.06	954743	623137	443.2	409.1
19)	L7 Aroclor-1260 {3}	13.38	13.75	742432	697164	441.2	446.5
20)	L7 Aroclor-1260 {4}	14.05	14.44	351906	417119	439.4	448.7
21)	L7 Aroclor-1260 {5}	14.61	14.88	802261	740676	450.5	473.2
	Sum Aroclor-1260			3422170	3150507	2213.9	2190.7
	Average Aroclor-1260					442.771	438.146

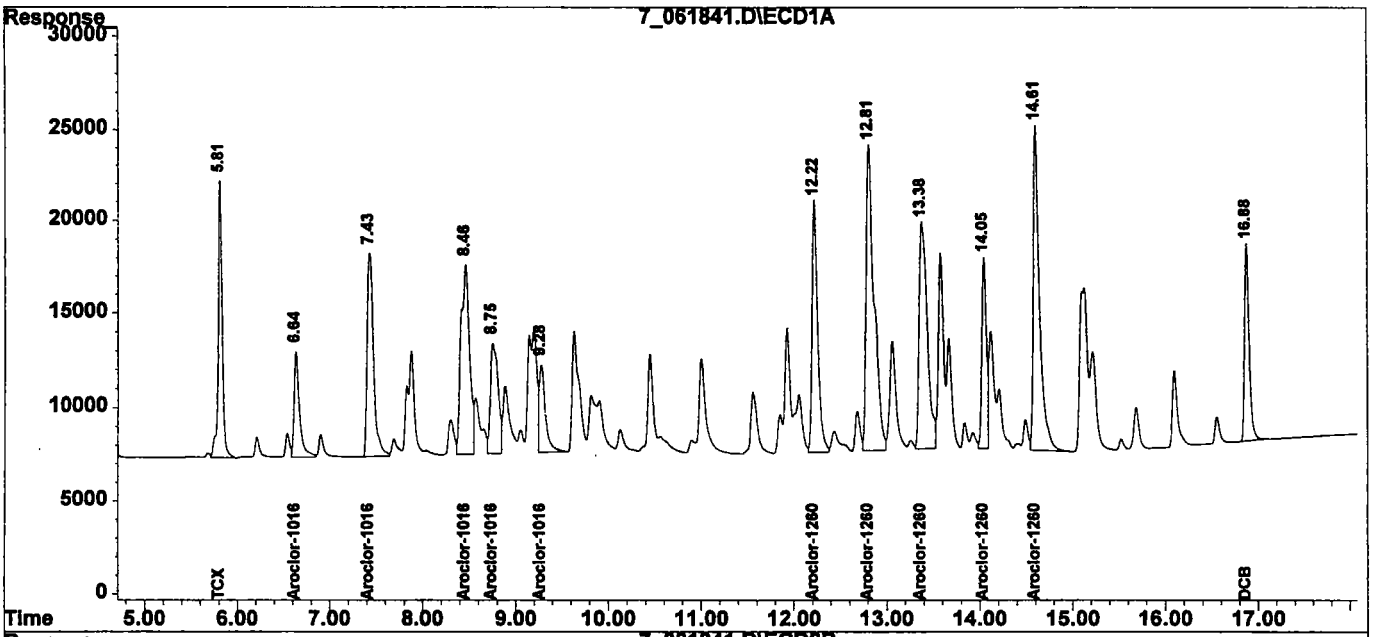
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

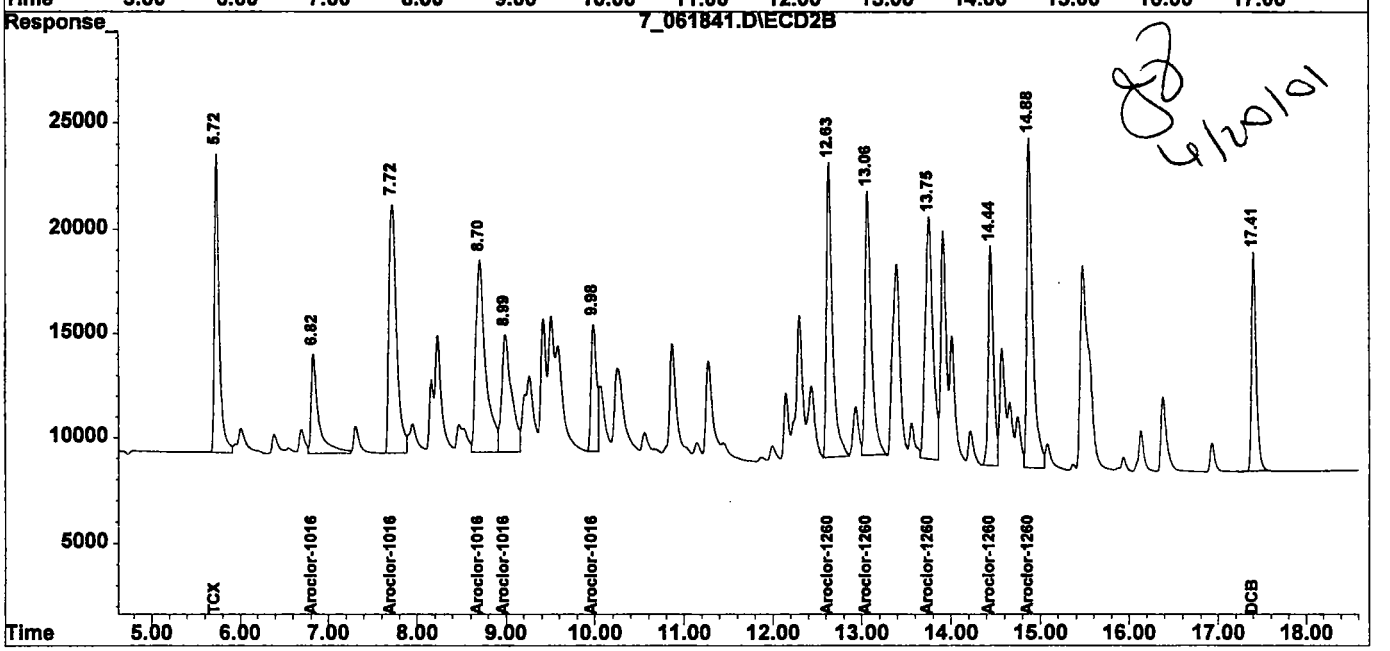
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061841.D\ECD1A.CH Vial: 41
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061841.D\ECD2B.CH
Acq On : 19 Jun 2001 3:11 Operator: DDC
Sample : AR1660L37M Inst : HP_07
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:39 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

Continuing Calibration Report HP_07

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Tue Jun 19 09:42:14 2001
Response via : Initial Calibration

Continuing Calibration File: 7_061854.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	20.559	19.887	E3	3.3	94
2	L1	Aroclor-1016	490.492	502.988		-2.5	96
3	L1	Aroclor-1016 {2}	1.170	1.158	E3	1.0	93
4	L1	Aroclor-1016 {3}	1.327	1.351	E3	-1.8	91
5	L1	Aroclor-1016 {4}	739.871	721.927		2.4	91
6	L1	Aroclor-1016 {5}	540.069	494.356		8.5	88
17	L7	Aroclor-1260	1.299	1.247	E3	4.0	88
18	L7	Aroclor-1260 {2}	2.154	2.046	E3	5.0	86
19	L7	Aroclor-1260 {3}	1.683	1.557	E3	7.5	84
20	L7	Aroclor-1260 {4}	800.964	755.445		5.7	85
21	L7	Aroclor-1260 {5}	1.781	1.675	E3	5.9	86
22	S	DCB	15.689	15.181	E3	3.2	88

Signal #2
Continuing Calibration File: 7_061854.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	24.830	24.258	E3	2.3	96
2	L1	Aroclor-1016	659.509	679.725		-3.1	92
3	L1	Aroclor-1016 {2}	1.622	1.639	E3	-1.1	94
4	L1	Aroclor-1016 {3}	1.657	1.746	E3	-5.4	100
5	L1	Aroclor-1016 {4}	1055.315	1070.075		-1.4	94
6	L1	Aroclor-1016 {5}	703.075	609.454		13.3	90
17	L7	Aroclor-1260	1.627	1.652	E3	-1.5	94
18	L7	Aroclor-1260 {2}	1.523	1.529	E3	-0.4	93
19	L7	Aroclor-1260 {3}	1.561	1.683	E3	-7.8	101
20	L7	Aroclor-1260 {4}	929.601	1001.318		-7.7	100
21	L7	Aroclor-1260 {5}	1.565	1.748	E3	-11.7	104
22	S	DCB	16.349	17.387	E3	-6.3	98

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

7_061854.D XPCBF18.M Tue Jun 19 09:42:20 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061854.D\ECD1A.CH Vial: 54
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061854.D\ECD2B.CH
Acq On : 19 Jun 2001 8:23 Operator: DDC
Sample : AR1660L37N Inst : HP_07
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:42 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.81f	5.72f	397735	485158	19.3	19.5
22)	S DCB	16.88	17.41	303627	347736	19.4	21.3
	Target Compounds:						
2)	L1 Aroclor-1016	6.64	6.83	201195	271890	410.2	412.3
3)	L1 Aroclor-1016 {2}	7.43	7.72	463346	655746	396.2	404.3
4)	L1 Aroclor-1016 {3}	8.46	8.70	540457	698579	407.4	421.5
[illegible]	L1 Aroclor-1016 {4}	8.75	8.99	288771	428030	390.3	405.6
[illegible]	L1 Aroclor-1016 {5}	9.28	9.98	197742	243782	366.1	346.7
	Sum Aroclor-1016			1691512	2298026	1970.2	1990.5
	Average Aroclor-1016					394.040	398.092
17)	L7 Aroclor-1260	12.22	12.63	498851	660730	384.1	406.1
18)	L7 Aroclor-1260 {2}	12.81	13.07	818531	611785	380.0	401.6
19)	L7 Aroclor-1260 {3}	13.38	13.76	622704	673216	370.0	431.2
20)	L7 Aroclor-1260 {4}	14.05	14.45	302178	400527	377.3	430.9
21)	L7 Aroclor-1260 {5}	14.61	14.88	670117	699182	376.3	446.7
	Sum Aroclor-1260			2912382	3045440	1887.8	2116.4
	Average Aroclor-1260					377.551	423.280

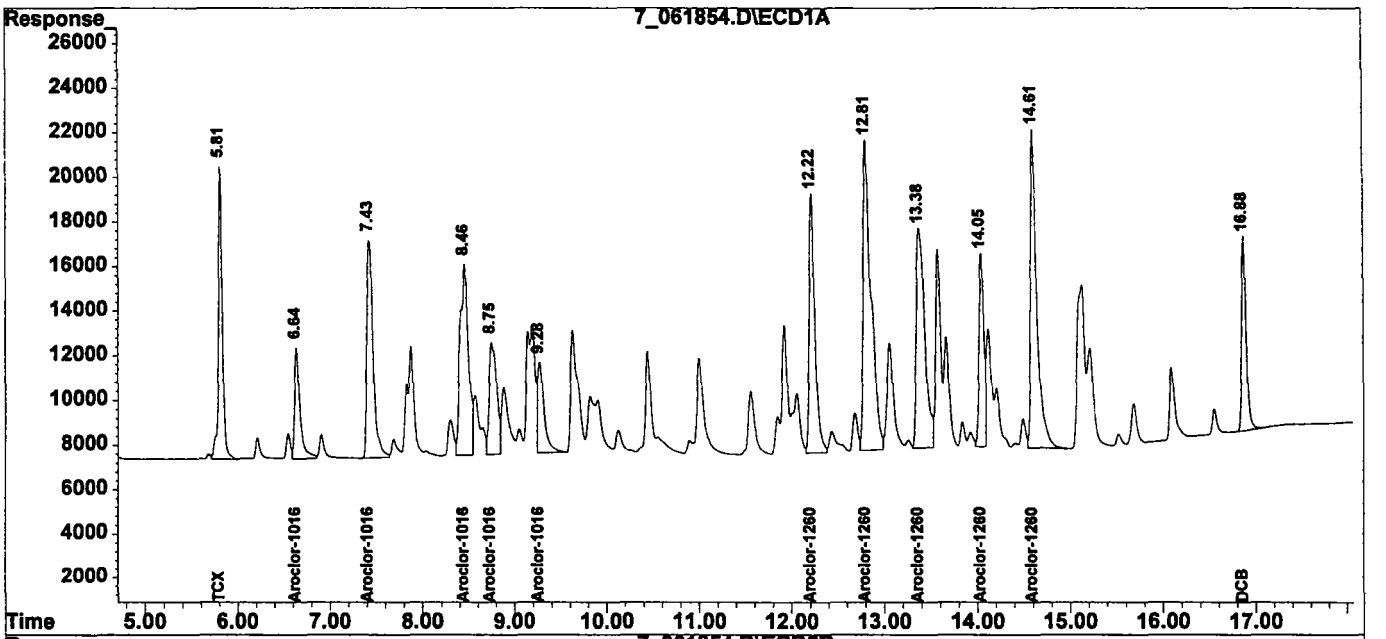
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

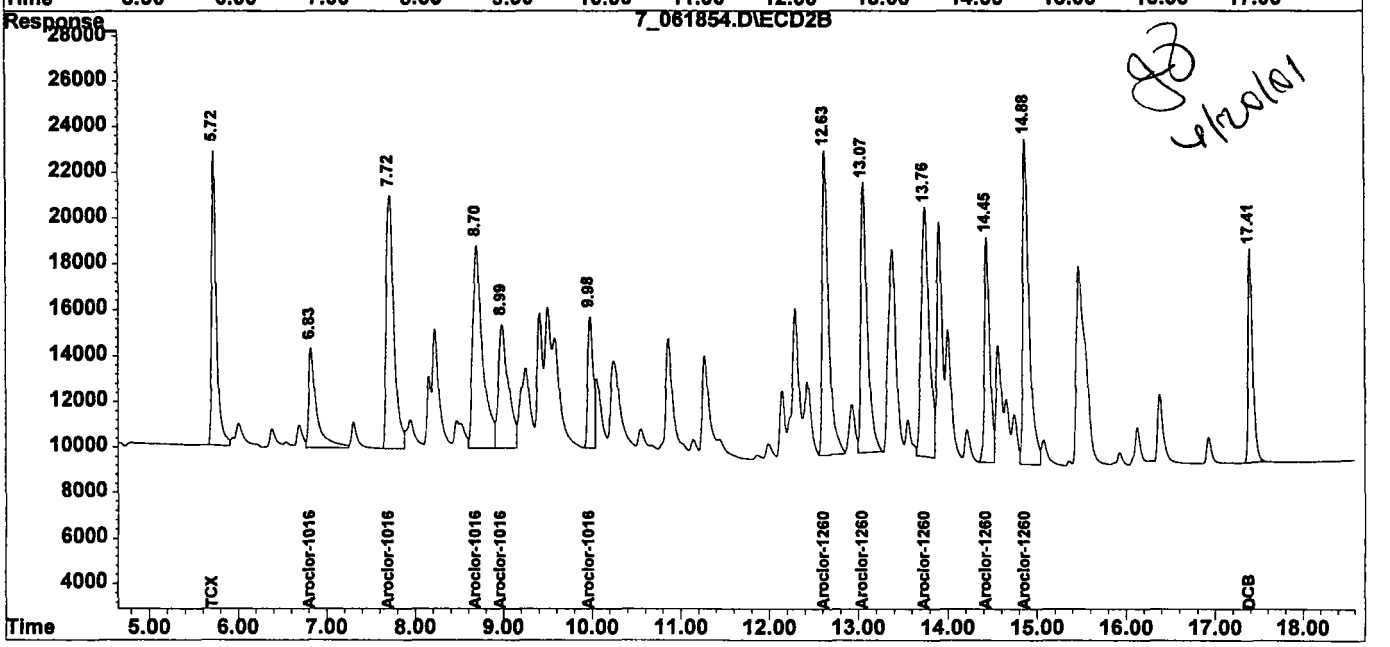
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061854.D\ECD1A.CH Vial: 54
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061854.D\ECD2B.CH
Acq On : 19 Jun 2001 8:23 Operator: DDC
Sample : AR1660L37N Inst : HP_07
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:42 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





4/20/01

Continuing Calibration Report HP_07

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Tue Jun 19 14:23:22 2001
Response via : Initial Calibration

Continuing Calibration File: 7_061867.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	20.559	19.951	E3	3.0	94
2	L1	Aroclor-1016	490.492	511.626		-4.3	97
3	L1	Aroclor-1016 {2}	1.170	1.211	E3	-3.6	97
4	L1	Aroclor-1016 {3}	1.327	1.483	E3	-11.8	100
5	L1	Aroclor-1016 {4}	739.871	772.700		-4.4	97
6	L1	Aroclor-1016 {5}	540.069	510.963		5.4	91
17	L7	Aroclor-1260	1.299	1.282	E3	1.3	90
18	L7	Aroclor-1260 {2}	2.154	2.217	E3	-2.9	94
19	L7	Aroclor-1260 {3}	1.683	1.715	E3	-1.9	93
20	L7	Aroclor-1260 {4}	800.964	812.013		-1.4	92
21	L7	Aroclor-1260 {5}	1.781	1.818	E3	-2.1	93
22	S	DCB	15.689	15.873	E3	-1.2	92

Signal #2
Continuing Calibration File: 7_061867.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	24.830	24.472	E3	1.4	96
2	L1	Aroclor-1016	659.509	708.611		-7.4	96
3	L1	Aroclor-1016 {2}	1.622	1.649	E3	-1.7	94
4	L1	Aroclor-1016 {3}	1.657	1.787	E3	-7.8	102
5	L1	Aroclor-1016 {4}	1055.315	1064.245		-0.8	94
6	L1	Aroclor-1016 {5}	703.075	628.864		10.6	93
17	L7	Aroclor-1260	1.627	1.635	E3	-0.5	93
18	L7	Aroclor-1260 {2}	1.523	1.553	E3	-1.9	95
19	L7	Aroclor-1260 {3}	1.561	1.726	E3	-10.6	104
20	L7	Aroclor-1260 {4}	929.601	996.554		-7.2	99
21	L7	Aroclor-1260 {5}	1.565	1.737	E3	-11.0	104
22	S	DCB	16.349	17.703	E3	-8.3	99

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

7_061867.D XPCBF18.M Tue Jun 19 14:23:28 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061867.D\ECD1A.CH Vial: 67
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061867.D\ECD2B.CH
Acq On : 19 Jun 2001 13:36 Operator: DDC
Sample : AR1660L37P Inst : HP_07
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 14:23 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.81	5.72	399019	489442	19.4	19.7
22)	S DCB	16.87	17.40	317468	354067	20.2	21.7
	Target Compounds:						
2)	L1 Aroclor-1016	6.64	6.82	204650	283444	417.2	429.8
3)	L1 Aroclor-1016 {2}	7.42	7.71	484488	659782	414.3	406.8
4)	L1 Aroclor-1016 {3}	8.46	8.69	593125	714623	447.1	431.2
[illegible]	L1 Aroclor-1016 {4}	8.75	8.98	309080	425698	417.7	403.4
[illegible]	L1 Aroclor-1016 {5}	9.28	9.98	204385	251546	378.4	357.8
	Sum Aroclor-1016			1795727	2335093	2074.8	2029.0
	Average Aroclor-1016					414.954	405.797
17)	L7 Aroclor-1260	12.22	12.63	512803	654090	394.9	402.0
18)	L7 Aroclor-1260 {2}	12.81	13.06	886899	621070	411.7	407.7
19)	L7 Aroclor-1260 {3}	13.38	13.75	686052	690483	407.7	442.2
20)	L7 Aroclor-1260 {4}	14.04	14.44	324805	398622	405.5	428.8
21)	L7 Aroclor-1260 {5}	14.60	14.87	727074	694765	408.3	443.8
	Sum Aroclor-1260			3137632	3059029	2028.1	2124.6
	Average Aroclor-1260					405.623	424.921

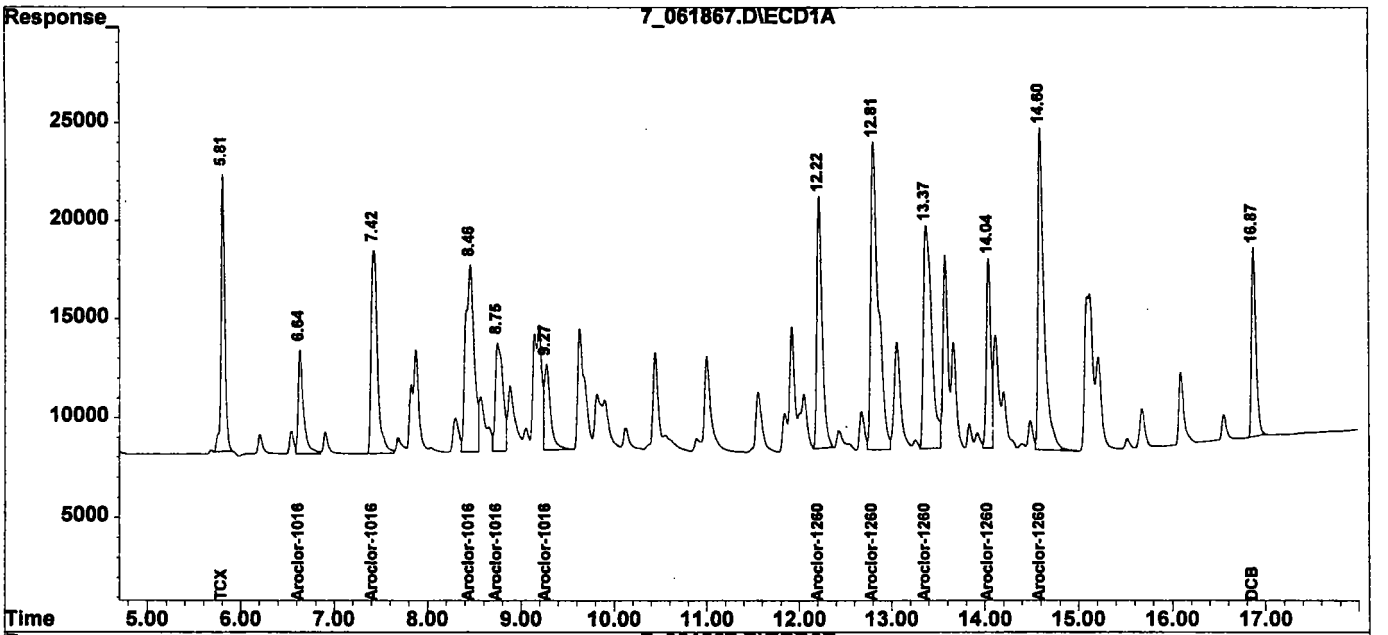
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

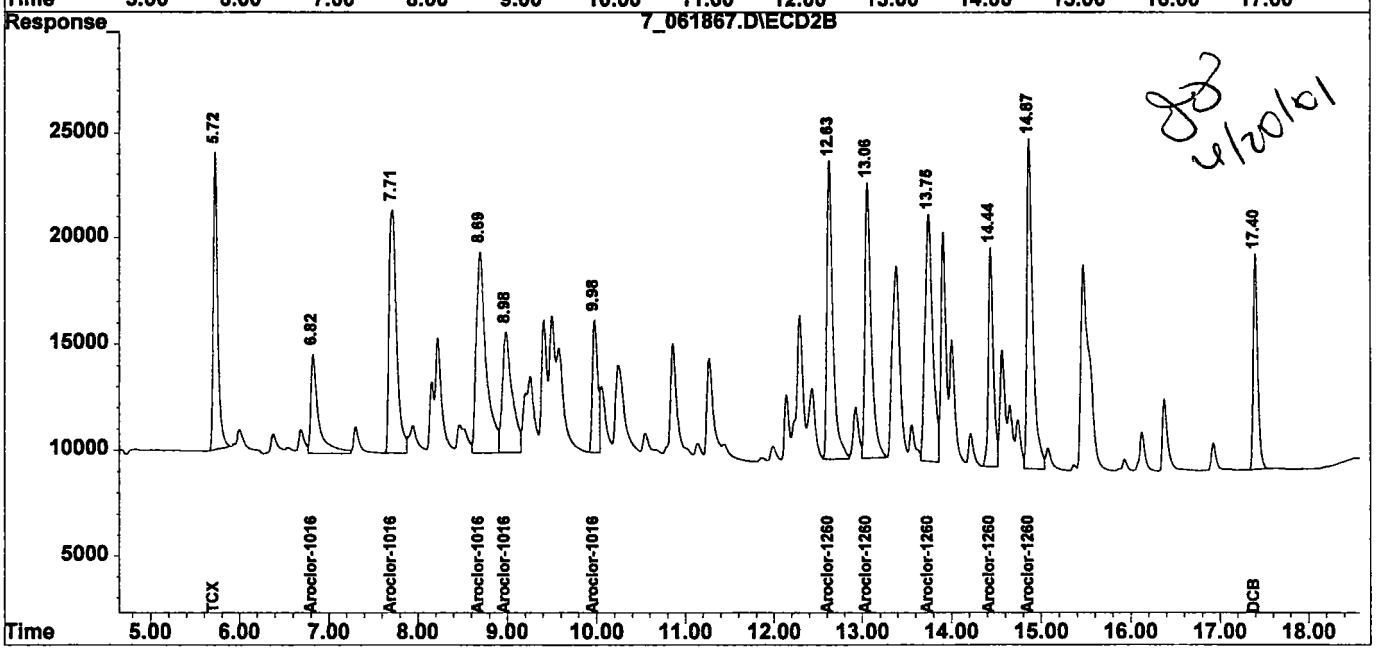
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061867.D\ECD1A.CH Vial: 67
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061867.D\ECD2B.CH
Acq On : 19 Jun 2001 13:36 Operator: DDC
Sample : AR1660L37P Inst : HP_07
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 14:23 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





DB 6/20/01

Continuing Calibration Report HP_07

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 20 08:51:51 2001
Response via : Initial Calibration

Continuing Calibration File: 7_061884.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	20.559	22.549	E3	-9.7	106
2	L1	Aroclor-1016	490.492	576.116		-17.5#	109
3	L1	Aroclor-1016 {2}	1.170	1.371	E3	-17.2#	110
4	L1	Aroclor-1016 {3}	1.327	1.670	E3	-25.9#	112
5	L1	Aroclor-1016 {4}	739.871	875.948		-18.4#	110
6	L1	Aroclor-1016 {5}	540.069	606.795		-12.4	108
17	L7	Aroclor-1260	1.299	1.444	E3	-11.2	101
18	L7	Aroclor-1260 {2}	2.154	2.536	E3	-17.7#	107
19	L7	Aroclor-1260 {3}	1.683	1.959	E3	-16.4#	106
20	L7	Aroclor-1260 {4}	800.964	938.478		-17.2#	106
21	L7	Aroclor-1260 {5}	1.781	2.120	E3	-19.0#	109
22	S	DCB	15.689	18.705	E3	-19.2#	109

Continuing Calibration File: 7_061884.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	24.830	28.356	E3	-14.2	112
2	L1	Aroclor-1016	659.509	755.379		-14.5	102
3	L1	Aroclor-1016 {2}	1.622	1.890	E3	-16.5#	108
4	L1	Aroclor-1016 {3}	1.657	2.023	E3	-22.1#	116
5	L1	Aroclor-1016 {4}	1055.315	1214.500		-15.1#	107
6	L1	Aroclor-1016 {5}	703.075	710.564		-1.1	105
17	L7	Aroclor-1260	1.627	1.850	E3	-13.7	105
18	L7	Aroclor-1260 {2}	1.523	1.739	E3	-14.2	106
19	L7	Aroclor-1260 {3}	1.561	1.942	E3	-24.4#	117
20	L7	Aroclor-1260 {4}	929.601	1144.177		-23.1#	114
21	L7	Aroclor-1260 {5}	1.565	2.011	E3	-28.5#	120
22	S	DCB	16.349	20.477	E3	-25.2#	115

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

7_061884.D XPCBF18.M Wed Jun 20 08:51:57 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061884.D\ECD1A.CH Vial: 84
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061884.D\ECD2B.CH
Acq On : 19 Jun 2001 20:29 Operator: DDC
Sample : AR1660L37R Inst : HP_07
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 20 8:48 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.81f	5.72f	450983	567114	21.9	22.8
22)	S DCB	16.88	17.41	374091	409531	23.8	25.0
	Target Compounds:						
2)	L1 Aroclor-1016	6.64	6.83	230447	302152	469.8	458.1
3)	L1 Aroclor-1016 {2}	7.43	7.72	548259	755856	468.8	466.1
4)	L1 Aroclor-1016 {3}	8.46	8.70	668036	809241	503.6	488.3
[illegible]	L1 Aroclor-1016 {4}	8.76	8.99	350379	485800	473.6	460.3
[illegible]	L1 Aroclor-1016 {5}	9.28	9.98	242718	284225	449.4	404.3
	Sum Aroclor-1016			2039838	2637273	2365.2	2277.1
	Average Aroclor-1016					473.030	455.423
17)	L7 Aroclor-1260	12.22	12.63	577480	740055	444.7	454.8
18)	L7 Aroclor-1260 {2}	12.81	13.07	1014343	695667	470.9	456.7
19)	L7 Aroclor-1260 {3}	13.38	13.76	783531	776849	465.6	497.5
20)	L7 Aroclor-1260 {4}	14.05	14.45	375391	457671	468.7	492.3
21)	L7 Aroclor-1260 {5}	14.61	14.88	847872	804430	476.2	513.9
	Sum Aroclor-1260			3598618	3474672	2326.0	2415.3
	Average Aroclor-1260					465.201	483.061

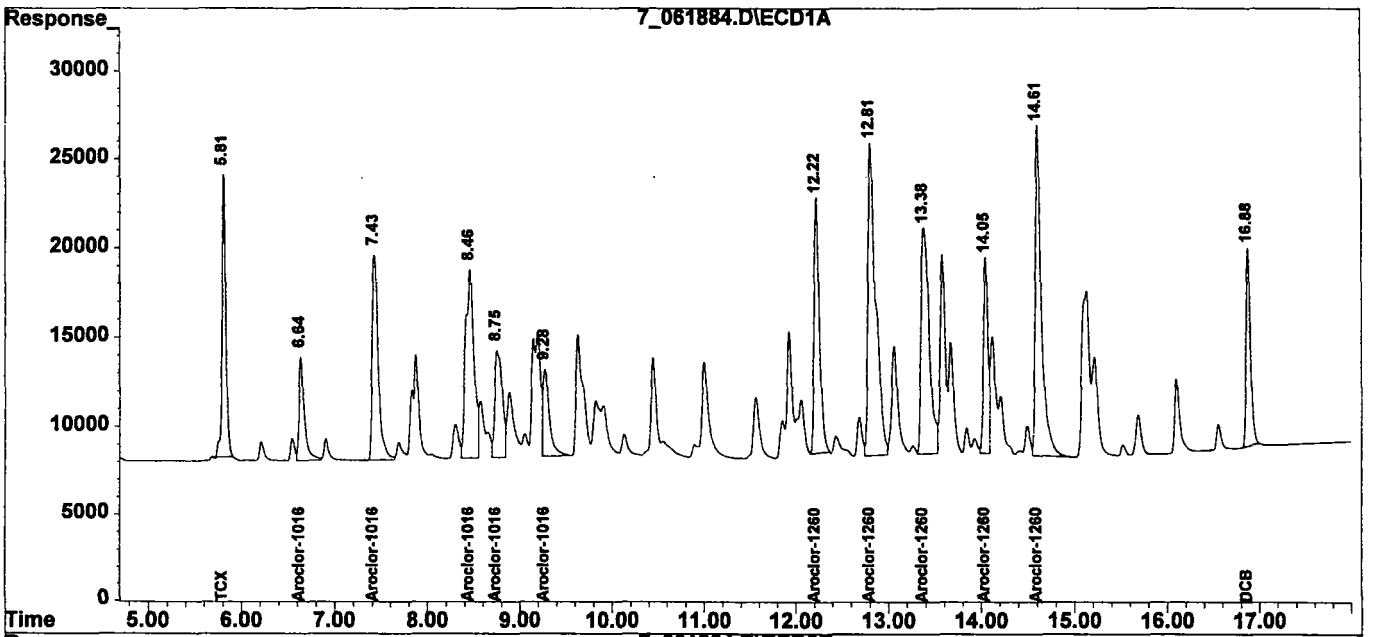
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

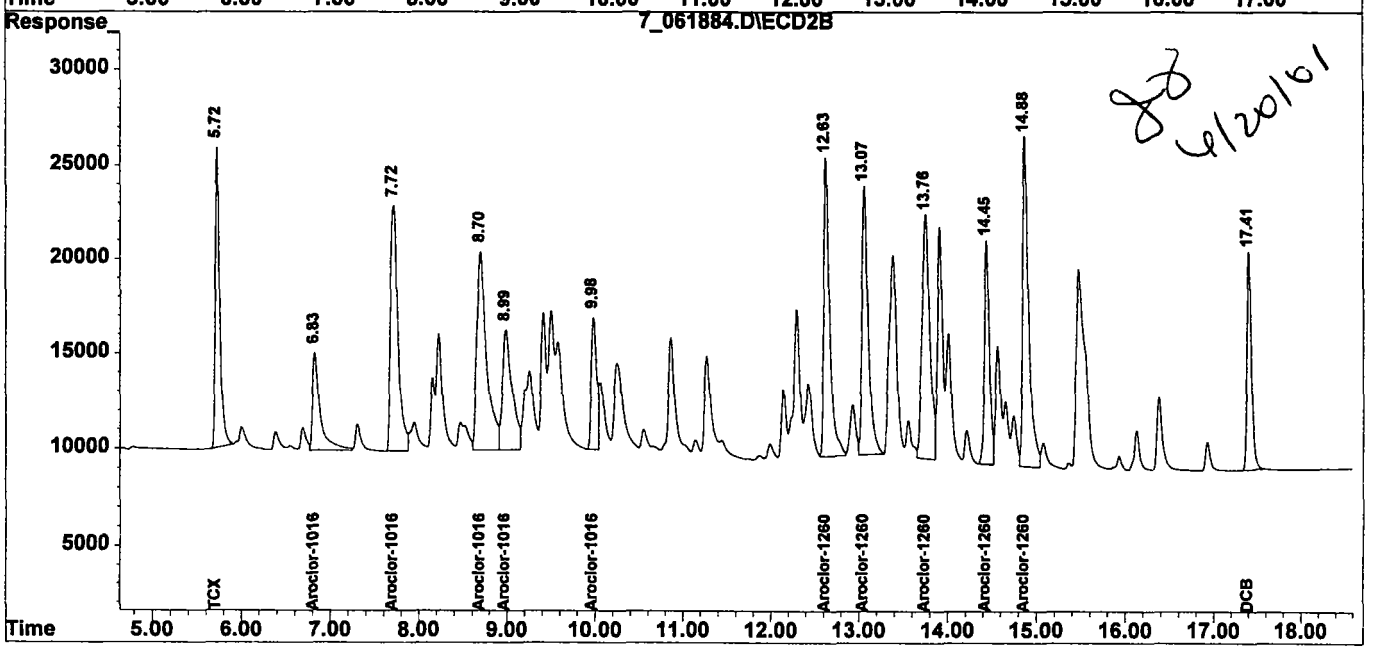
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061884.D\ECD1A.CH Vial: 84
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061884.D\ECD2B.CH
Acq On : 19 Jun 2001 20:29 Operator: DDC
Sample : AR1660L37R Inst : HP_07
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 20 8:48 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





8 6/20/01

Continuing Calibration Report HP_07

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 20 08:49:27 2001
Response via : Initial Calibration

Continuing Calibration File: 7_061885.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	20.559	18.676	E3	9.2	88
2	L1	Aroclor-1016	490.492	488.114		0.5	93
3	L1	Aroclor-1016 {2}	1.170	1.151	E3	1.6	92
4	L1	Aroclor-1016 {3}	1.327	1.725	E3	-30.0#	116
5	L1	Aroclor-1016 {4}	739.871	721.159		2.5	91
6	L1	Aroclor-1016 {5}	540.069	498.760		7.6	89
17	L7	Aroclor-1260	1.299	1.201	E3	7.5	84
18	L7	Aroclor-1260 {2}	2.154	2.099	E3	2.5	89
19	L7	Aroclor-1260 {3}	1.683	1.614	E3	4.1	88
20	L7	Aroclor-1260 {4}	800.964	784.569		2.0	89
21	L7	Aroclor-1260 {5}	1.781	1.742	E3	2.2	89
22	S	DCB	15.689	15.345	E3	2.2	89

Signal #2
Continuing Calibration File: 7_061885.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	24.830	23.169	E3	6.7	91
2	L1	Aroclor-1016	659.509	645.127		2.2	87
3	L1	Aroclor-1016 {2}	1.622	1.566	E3	3.4	90
4	L1	Aroclor-1016 {3}	1.657	1.624	E3	2.0	93
5	L1	Aroclor-1016 {4}	1055.315	996.091		5.6	88
6	L1	Aroclor-1016 {5}	703.075	575.110		18.2#	85
17	L7	Aroclor-1260	1.627	1.518	E3	6.7	86
18	L7	Aroclor-1260 {2}	1.523	1.415	E3	7.1	86
19	L7	Aroclor-1260 {3}	1.561	1.573	E3	-0.8	95
20	L7	Aroclor-1260 {4}	929.601	939.510		-1.1	93
21	L7	Aroclor-1260 {5}	1.565	1.637	E3	-4.6	98
22	S	DCB	16.349	16.766	E3	-2.6	94

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

7_061885.D XPCBF18.M Wed Jun 20 08:49:33 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061885.D\ECD1A.CH Vial: 85
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061885.D\ECD2B.CH
Acq On : 19 Jun 2001 20:53 Operator: DDC
Sample : AR1660L37S Inst : HP_07
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 20 8:49 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.82f	5.72f	373513	463376	18.2	18.7
22)	S DCB	16.88	17.41	306907	335324	19.6	20.5
	Target Compounds:						
2)	L1 Aroclor-1016	6.64	6.83	195246	258051	398.1	391.3
3)	L1 Aroclor-1016 {2}	7.43	7.72	460400	626595	393.7	386.4
4)	L1 Aroclor-1016 {3}	8.46	8.70	690078	649764	520.2	392.1
	L1 Aroclor-1016 {4}	8.76f	8.99	288464	398437	389.9	377.6
	L1 Aroclor-1016 {5}	9.28	9.99	199504	230044	369.4	327.2
	Sum Aroclor-1016			1833691	2162890	2071.2	1874.5
	Average Aroclor-1016					414.235	374.893
17)	L7 Aroclor-1260	12.23	12.63	480550	607222	370.0	373.2
18)	L7 Aroclor-1260 {2}	12.82	13.07	839716	566167	389.8	371.7
19)	L7 Aroclor-1260 {3}	13.39	13.76	645659	629384	383.7	403.1
20)	L7 Aroclor-1260 {4}	14.05	14.45	313828	375804	391.8	404.3
21)	L7 Aroclor-1260 {5}	14.61	14.88	696938	654756	391.4	418.3
	Sum Aroclor-1260			2976690	2833333	1926.7	1970.5
	Average Aroclor-1260					385.349	394.104

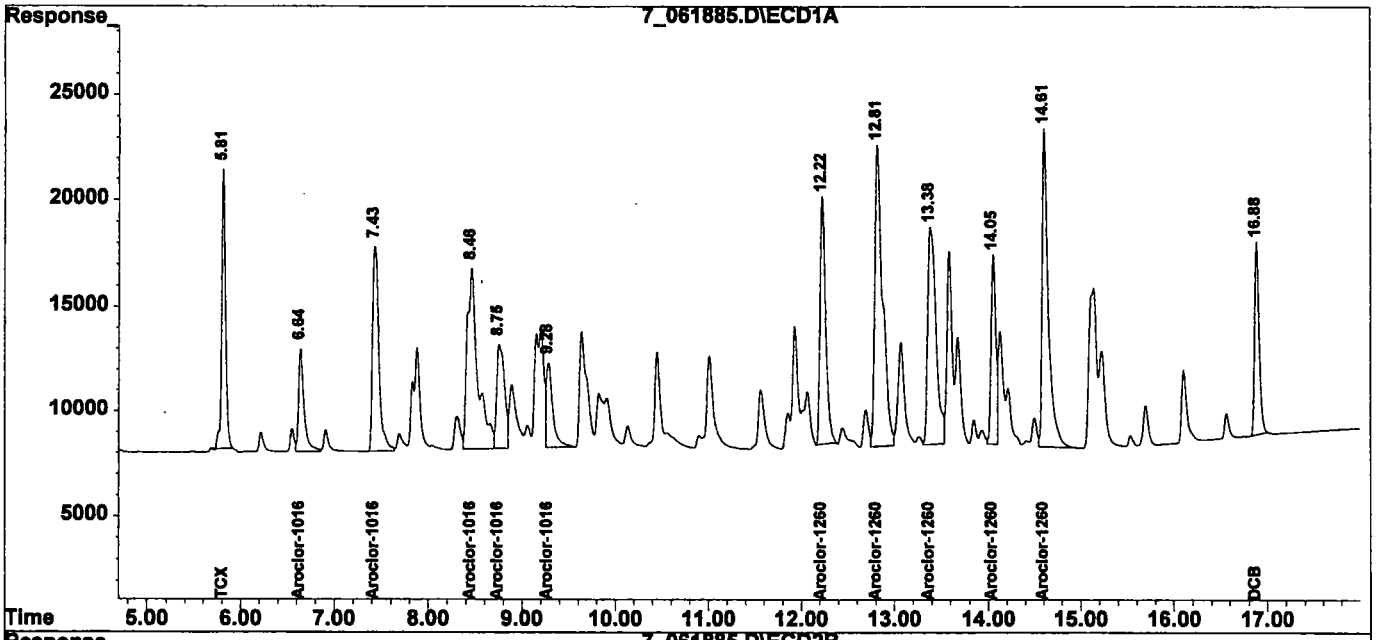
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

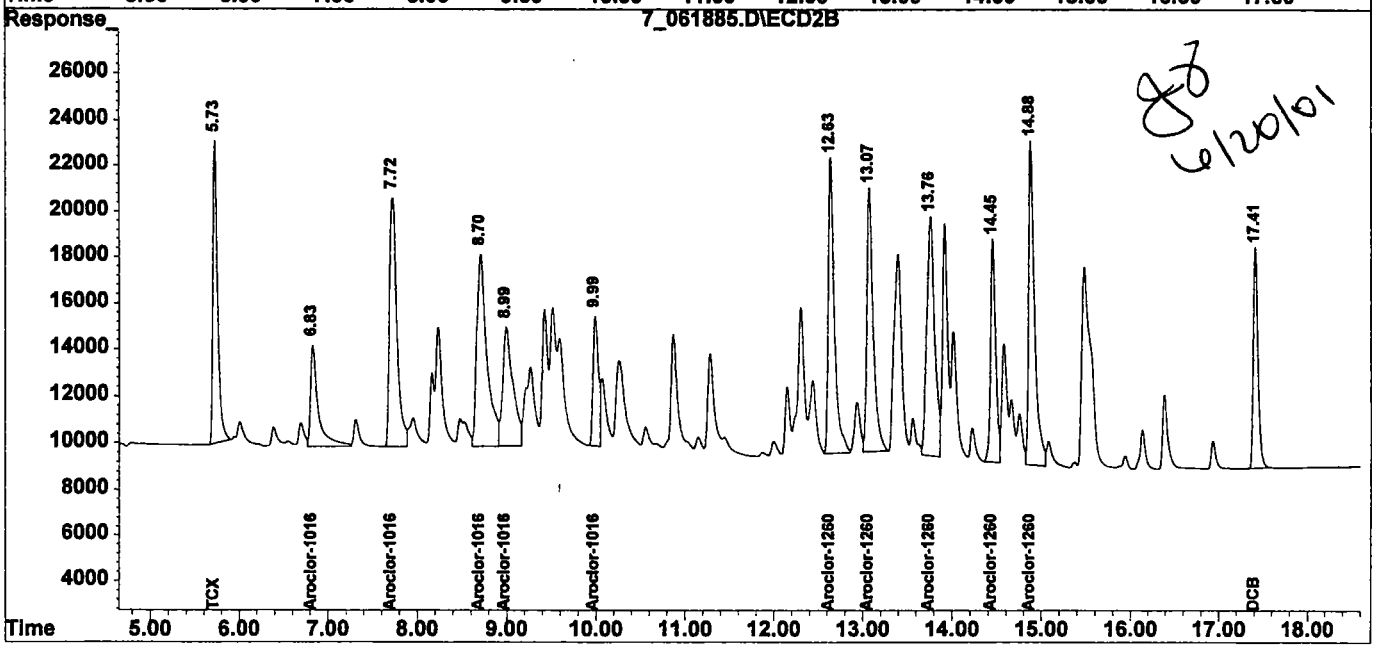
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061885.D\ECD1A.CH Vial: 85
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061885.D\ECD2B.CH
Acq On : 19 Jun 2001 20:53 Operator: DDC
Sample : AR1660L37S Inst : HP_07
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 20 8:49 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





8/8 6/20/01

HYDROGEN USED AS CARRIER GAS FOR SAMPLE ANALYSES

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PBLKSA

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Matrix: (soil/water) SOIL Lab Sample ID: BL0609SA

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

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

Extraction: (SepF/Cont/Sonc) N Date Extracted:06/09/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/19/01

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	

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061834.D\ECD1A.CH Vial: 34
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061834.D\ECD2B.CH
Acq On : 19 Jun 2001 00:24 Operator: DDC
Sample : BL0609SA *PBLKSA * Inst : HP_07
Misc : **30.0G/5.0ML* Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:59 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	5.81	5.72	377206	472035	6.116	6.337
	Spiked Amount 6.667			Recovery	=	91.74%	95.06%
22)	S DCB	16.87	17.40	468239	499115	9.948	10.2
	Spiked Amount 6.667			Recovery	=	149.22%	153.00%

Target Compounds:

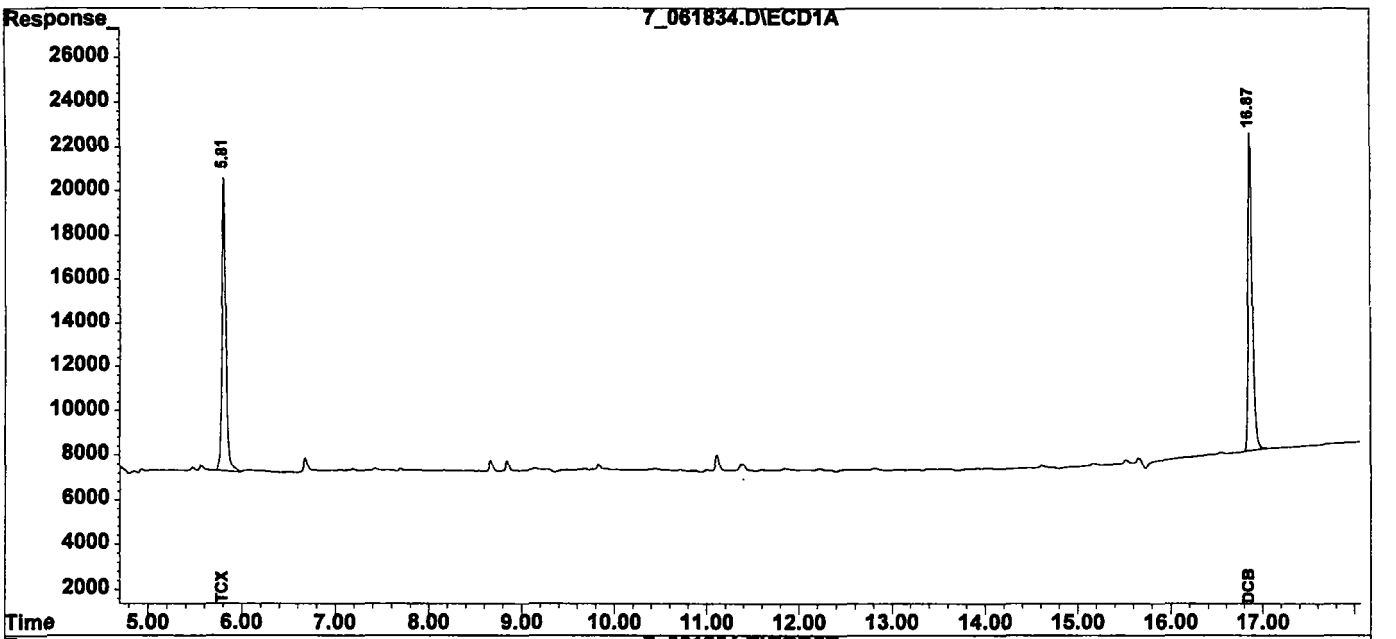
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

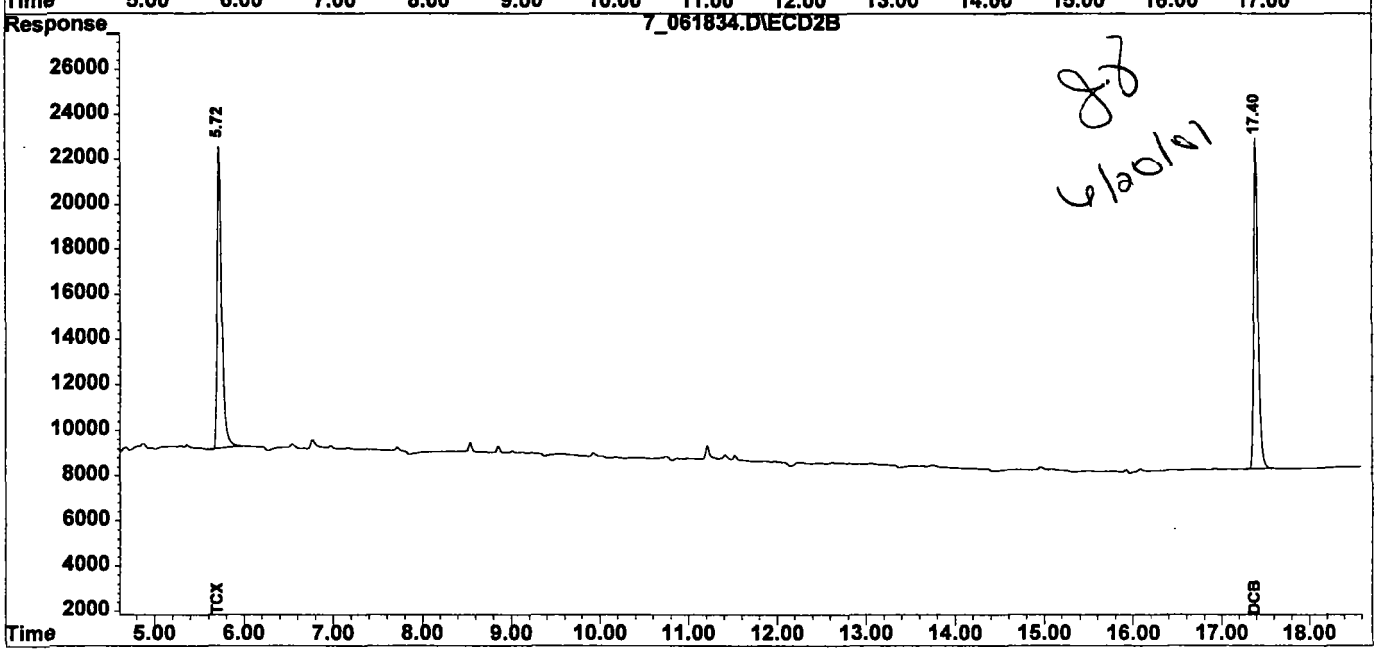
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061834.D\ECD1A.CH Vial: 34
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061834.D\ECD2B.CH
Acq On : 19 Jun 2001 00:24 Operator: DDC
Sample : BL0609SA *PBLKSA * Inst : HP_07
Misc : **30.0G/5.0ML* Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:59 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





JJ
6/20/01

HYDROGEN USED AS CARRIER GAS FOR SAMPLE ANALYSES

206A

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKJ7

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

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: 06/18/01

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	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKJ7

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

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: 06/18/01

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	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061825.D\ECD1A.CH Vial: 25
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061825.D\ECD2B.CH
Acq On : 18 Jun 2001 20:48 Operator: DDC
Sample : PIBLKJ7 Inst : HP_07
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:34 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.80	5.71	378607	489081	18.4	19.7
22)	S DCB	16.87	17.40	301281	316138	19.2	19.3

Target Compounds:

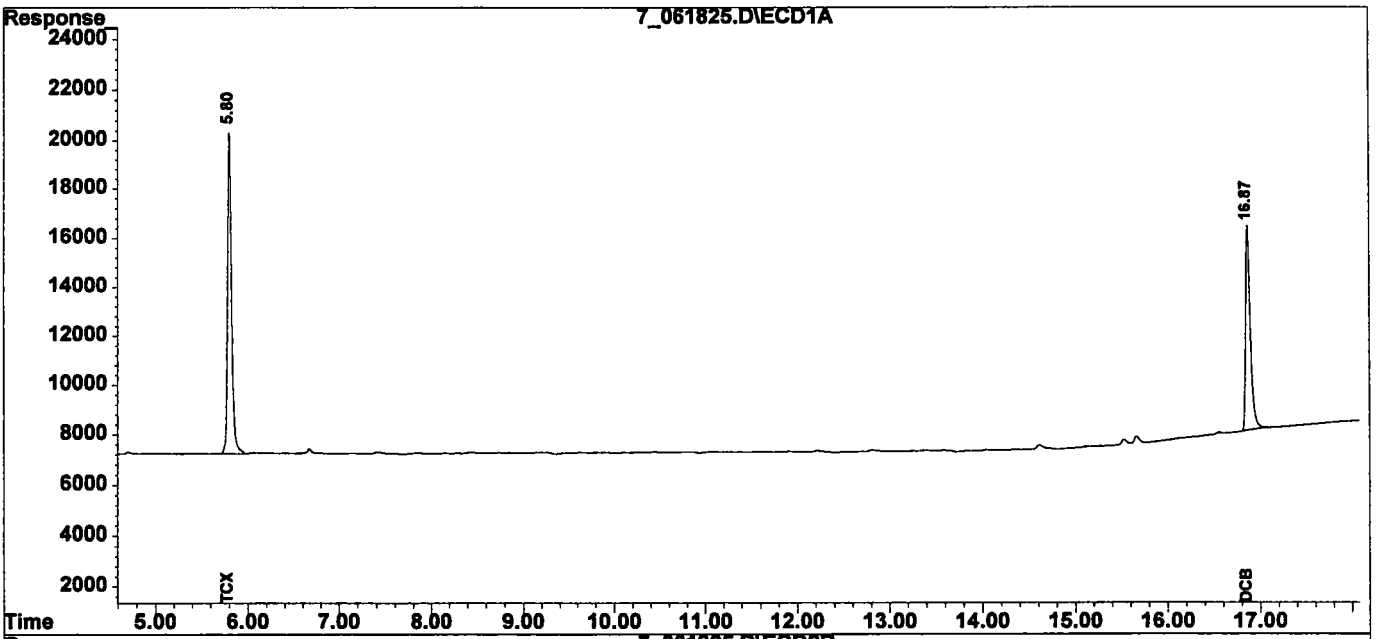
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

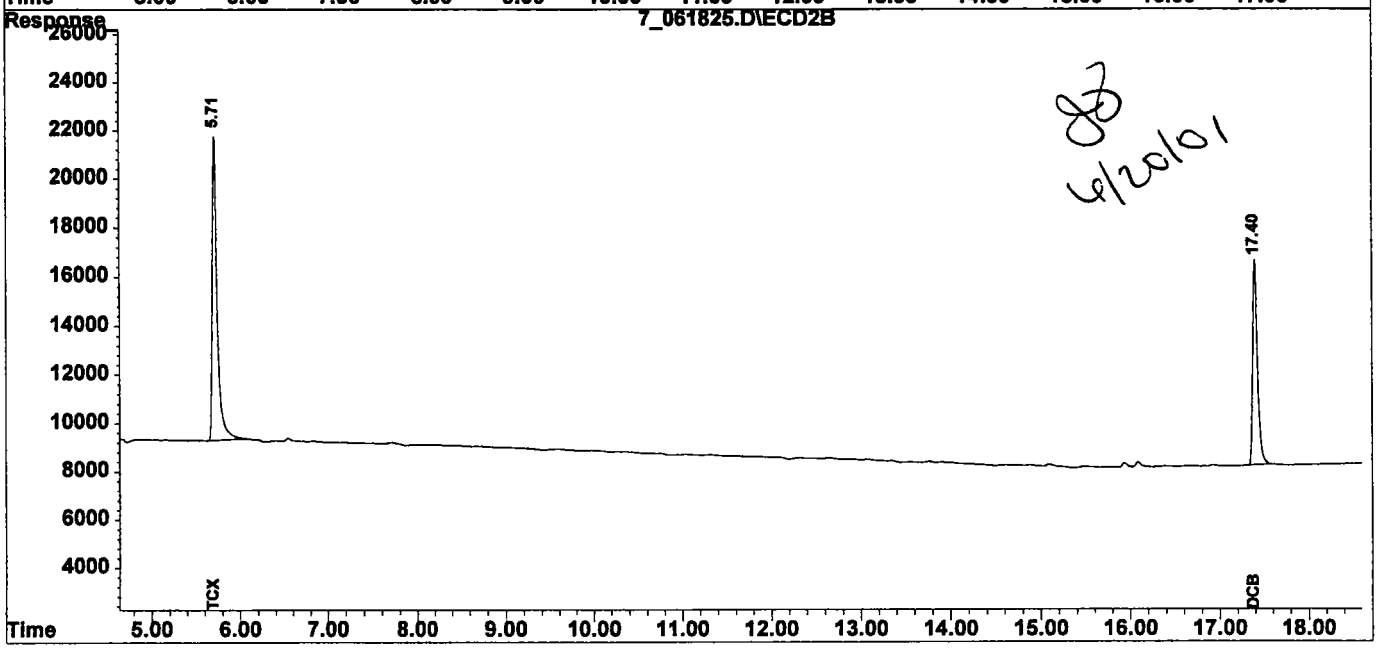
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061825.D\ECD1A.CH Vial: 25
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061825.D\ECD2B.CH
Acq On : 18 Jun 2001 20:48 Operator: DDC
Sample : PIBLKJ7 Inst : HP_07
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:34 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





DB 6/20/01

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKK7

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

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: 06/19/01

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	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKK7

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

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: 06/19/01

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	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061839.D\ECD1A.CH Vial: 39
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061839.D\ECD2B.CH
Acq On : 19 Jun 2001 2:23 Operator: DDC
Sample : PIBLKK7 Inst : HP_07
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:36 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.81f	5.72	440944	572909	21.4	23.1
22)	S DCB	16.88	17.41	376006	401811	24.0	24.6

Target Compounds:

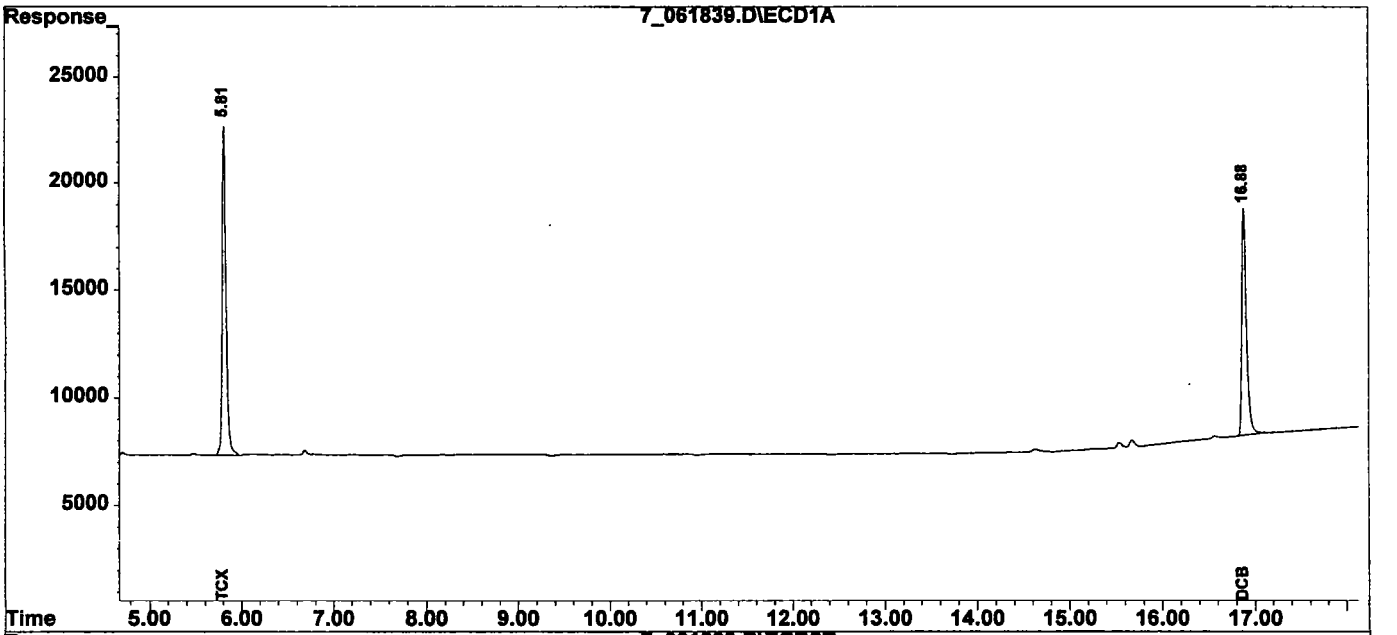
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

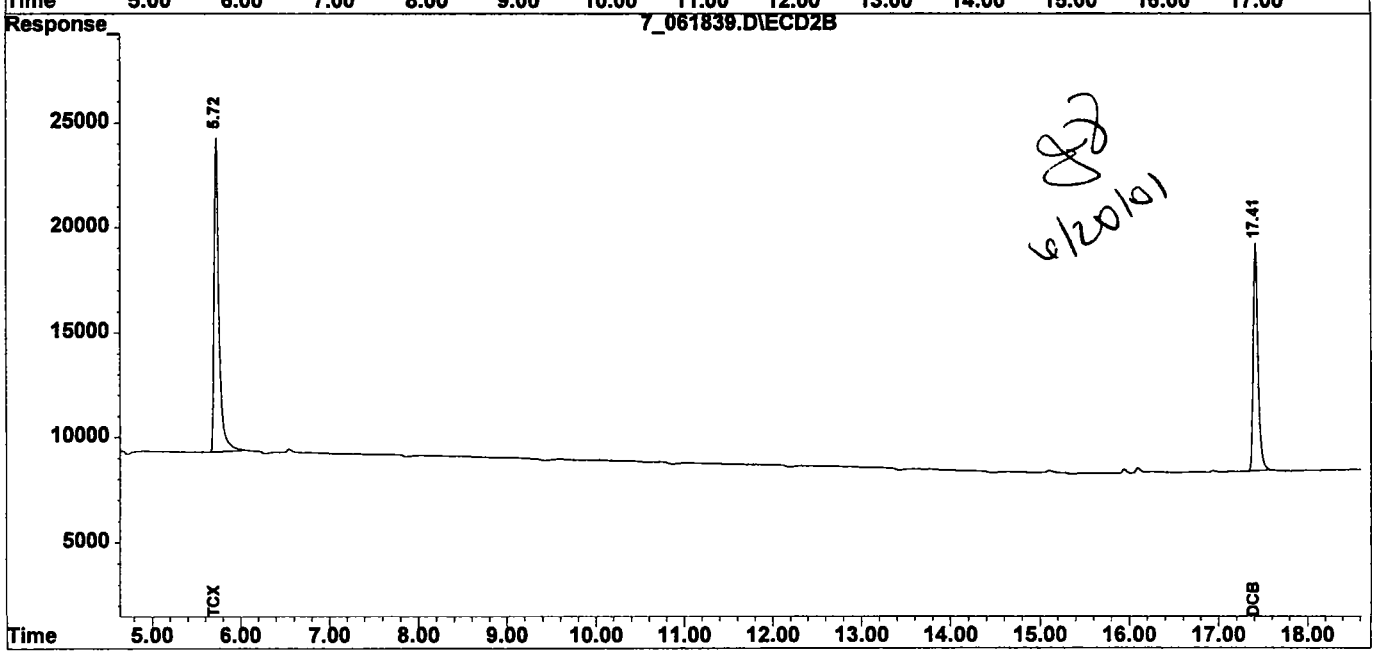
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061839.D\ECD1A.CH Vial: 39
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061839.D\ECD2B.CH
Acq On : 19 Jun 2001 2:23 Operator: DDC
Sample : PIBLKK7 Inst : HP_07
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:36 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKL7

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

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: 06/19/01

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	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKL7

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

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: 06/19/01

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	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061853.D\ECD1A.CH Vial: 53
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061853.D\ECD2B.CH
Acq On : 19 Jun 2001 7:59 Operator: DDC
Sample : PIBLKL7 Inst : HP_07
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:42 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.81f	5.72f	329378	427745	16.0	17.2
22)	S DCB	16.88	17.41	246040	291330	15.7	17.8

Target Compounds:

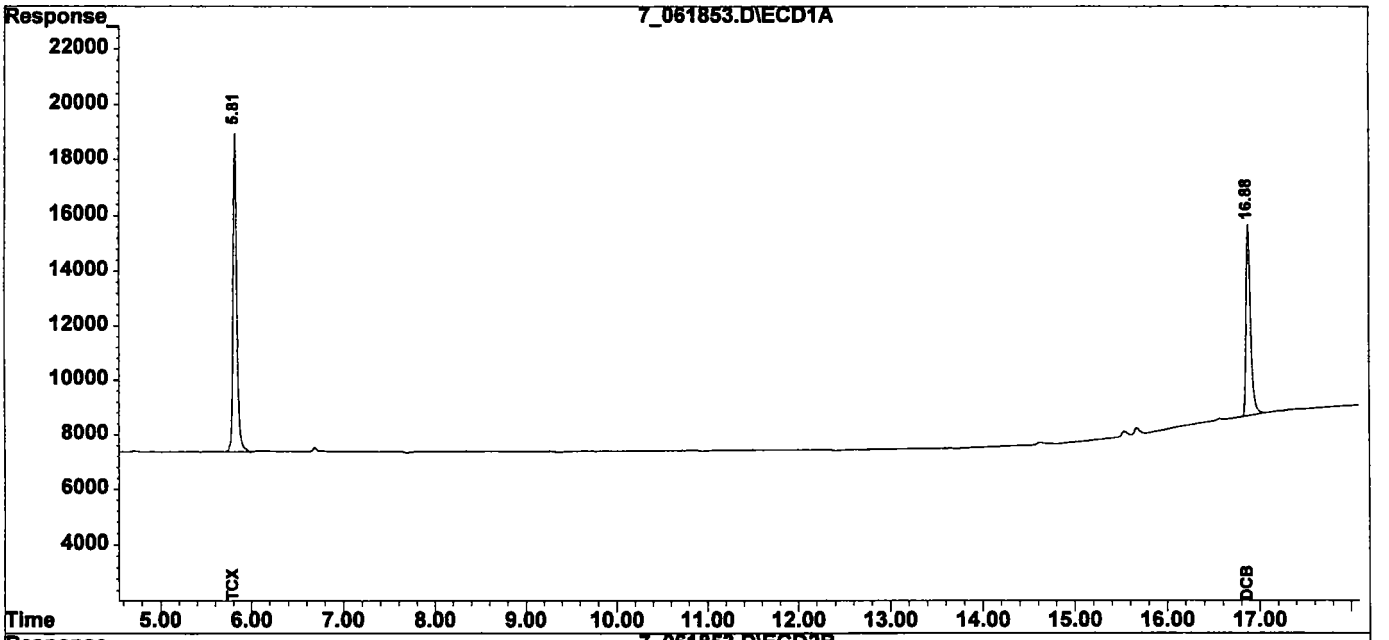
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

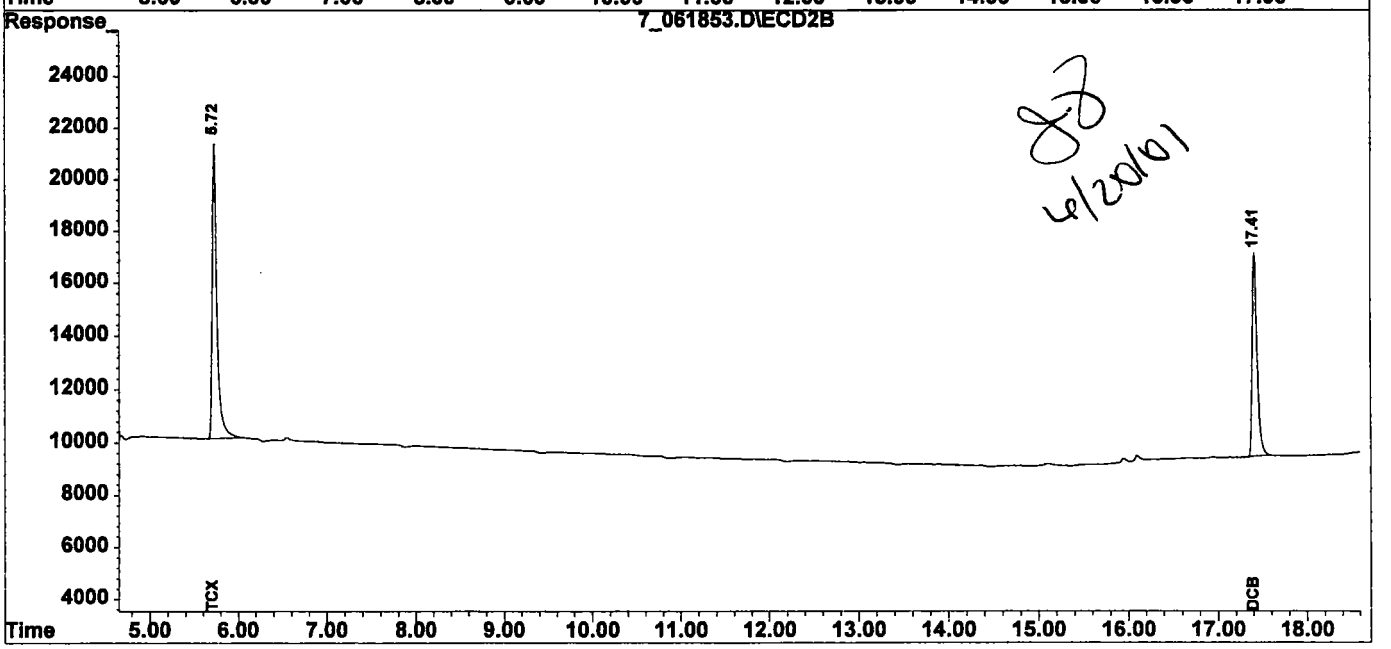
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061853.D\ECD1A.CH Vial: 53
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061853.D\ECD2B.CH
Acq On : 19 Jun 2001 7:59 Operator: DDC
Sample : PIBLKL7 Inst : HP_07
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:42 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKM7

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

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: 06/19/01

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	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKM7

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

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: 06/19/01

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	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061866.D\ECD1A.CH Vial: 66
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061866.D\ECD2B.CH
Acq On : 19 Jun 2001 13:11 Operator: DDC
Sample : PIBLKM7 Inst : HP_07
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 13:49 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Tue Jun 19 14:23:22 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.81	5.72	367939	491695	17.9	19.8
22)	S DCB	16.87	17.40	275831	325588	17.6	19.9

Target Compounds:

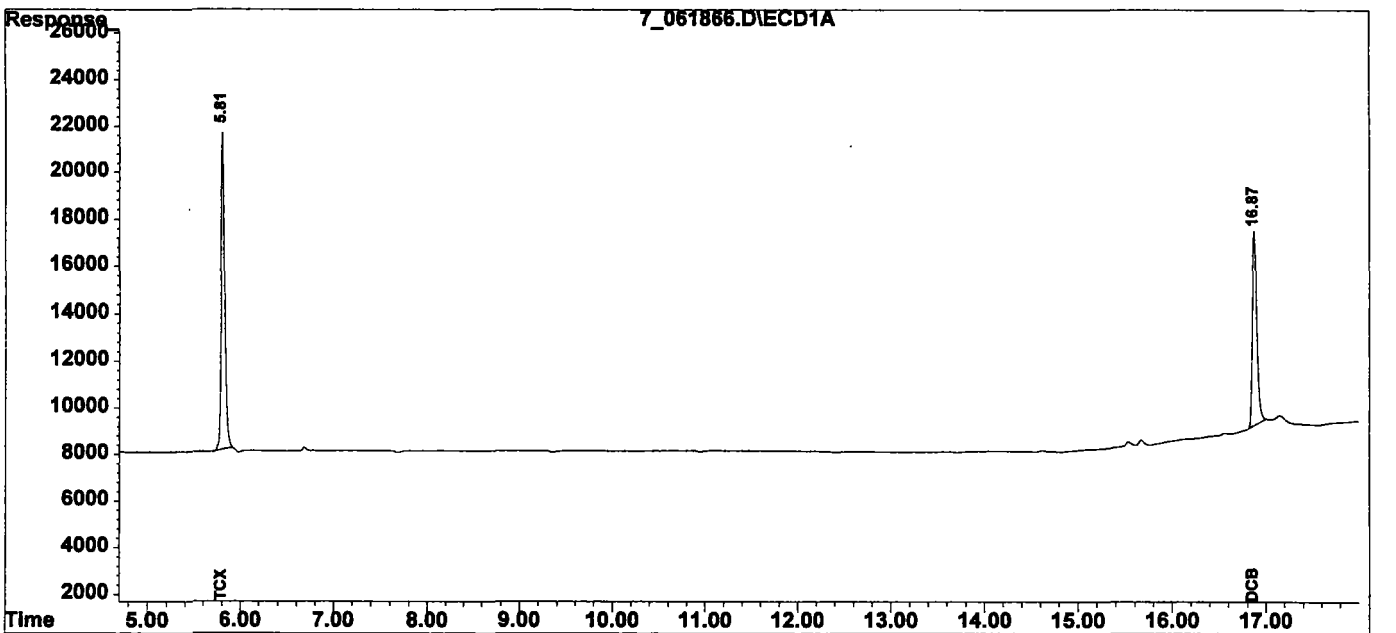
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

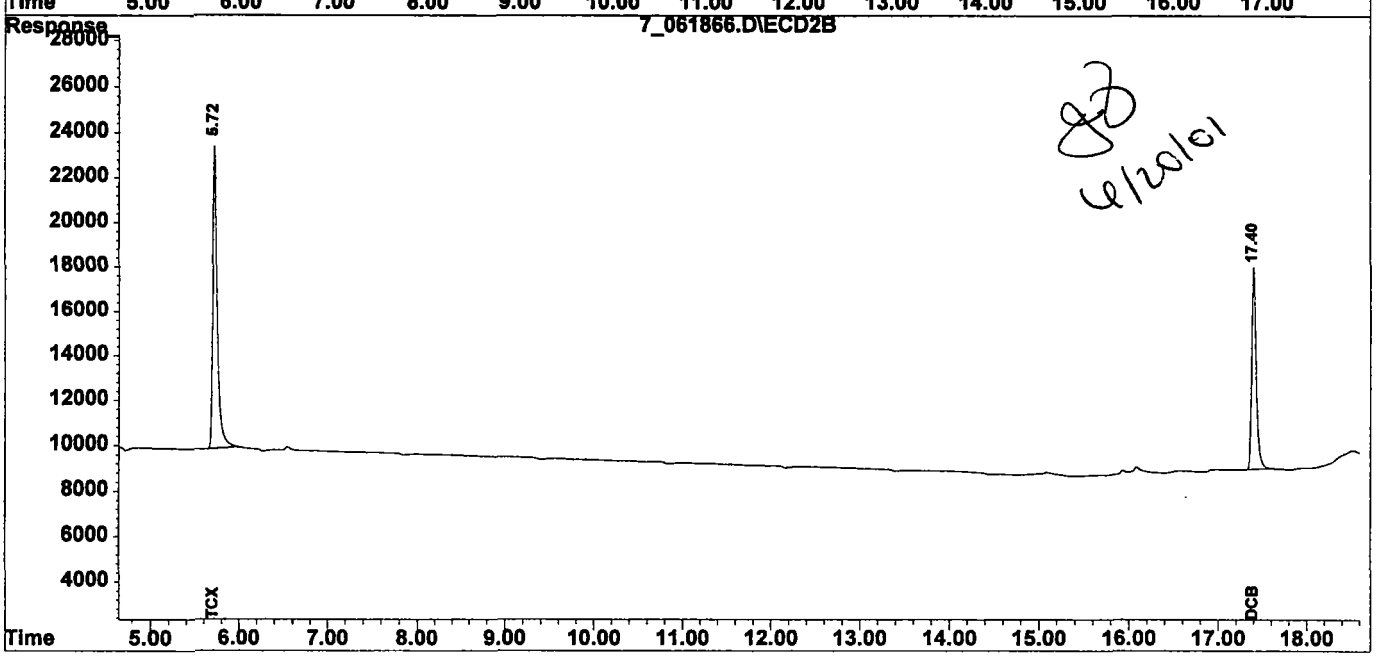
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061866.D\ECD1A.CH Vial: 66
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061866.D\ECD2B.CH
Acq On : 19 Jun 2001 13:11 Operator: DDC
Sample : PIBLKM7 Inst : HP_07
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 13:49 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKN7

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

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: 06/19/01

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	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKN7

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

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: 06/19/01

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	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061883.D\ECD1A.CH Vial: 83
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061883.D\ECD2B.CH
Acq On : 19 Jun 2001 20:05 Operator: DDC
Sample : PIBLKN7 Inst : HP_07
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 20 8:48 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 20 08:49:27 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	5.81f	5.72f	385929	518099	18.8	20.9
22)	S DCB	16.88	17.41	306824	340842	19.6	20.8

Target Compounds:

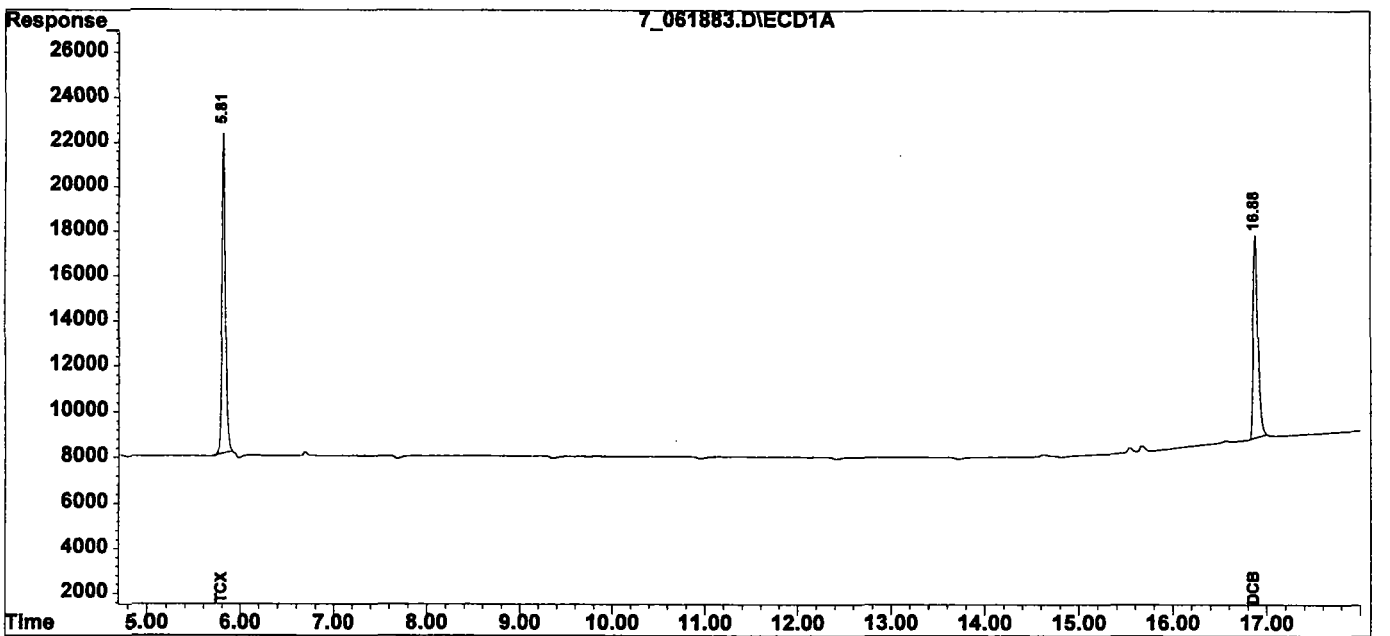
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

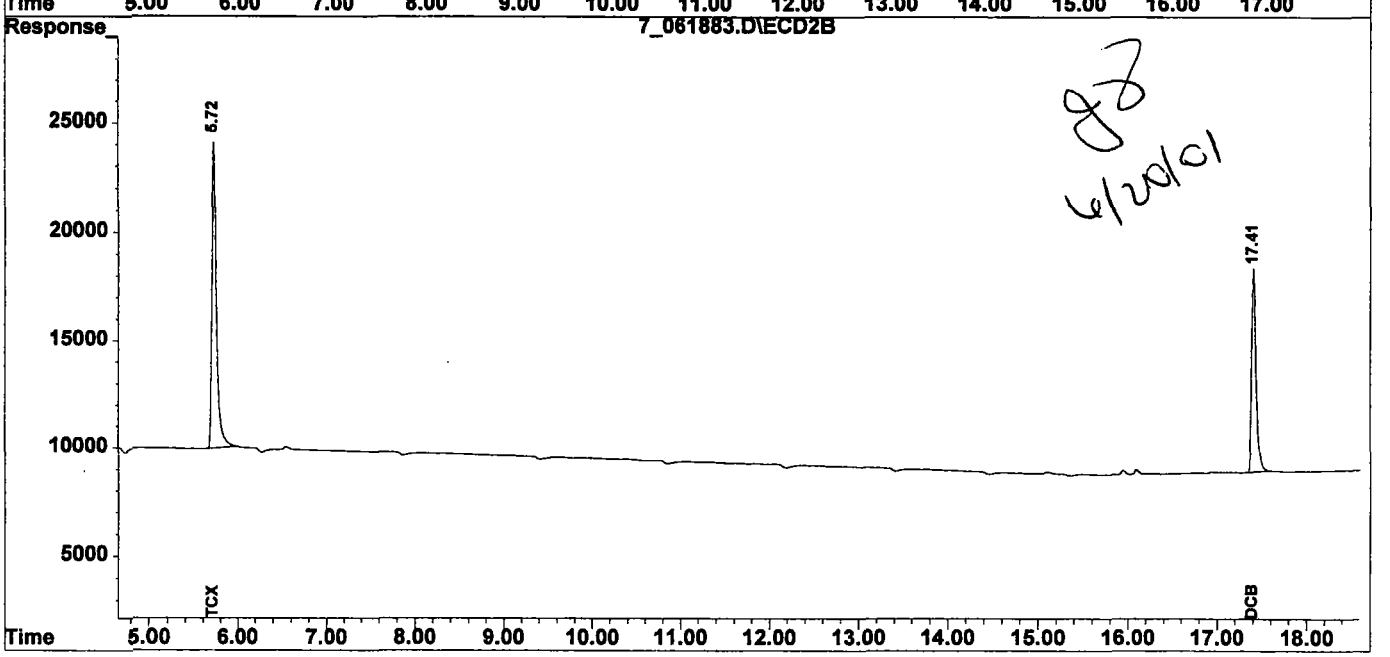
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061883.D\ECD1A.CH Vial: 83
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061883.D\ECD2B.CH
Acq On : 19 Jun 2001 20:05 Operator: DDC
Sample : PIBLKN7 Inst : HP_07
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 20 8:48 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





gs
6/20/01

HYDROGEN USED AS CARRIER GAS FOR SAMPLE ANALYSES

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ELCS1

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Matrix: (soil/water) SOIL Lab Sample ID: LC0609SA

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

% Moisture: 0 decanted: (Y/N) __ Date Received: 06/08/01

Extraction: (SepF/Cont/Sonc) N Date Extracted:06/09/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/19/01

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	160	
11096-82-5	Aroclor-1260	33	U
	Surrogate amount spiked	6.67	

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061836.D\ECD1A.CH Vial: 36
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061836.D\ECD2B.CH
Acq On : 19 Jun 2001 1:11 Operator: DDC
Sample : LC0609SA *ELCS1 * Inst : HP_07
Misc : **30.0G/5.0ML* Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 10:06 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.81	5.72	414816	570209	6.726	7.655	
	Spiked Amount 6.667			Recovery	=	100.89%	114.83%	
22)	S DCB	16.87	17.40	445921	480035	9.474	9.787	
	Spiked Amount 6.667			Recovery	=	142.11%	146.81%	
	Target Compounds:							
12)	L6 Aroclor-1254	10.55	10.86	332470	757938	158.7	183.9	
[illegible]	L6 Aroclor-1254 {2}	11.49	11.26	182933	649005	177.0	194.9	
[illegible]	L6 Aroclor-1254 {3}	12.21	12.23	283174	792026	128.7	181.6	#
15)	L6 Aroclor-1254 {4}	12.44	13.05	437207	398187	161.8	154.7	
16)	L6 Aroclor-1254 {5}	12.80	13.34	516072	462650	152.2	184.7	
	Sum Aroclor-1254			1751856	3059806	778.3	899.8	
	Average Aroclor-1254					155.669	179.965	

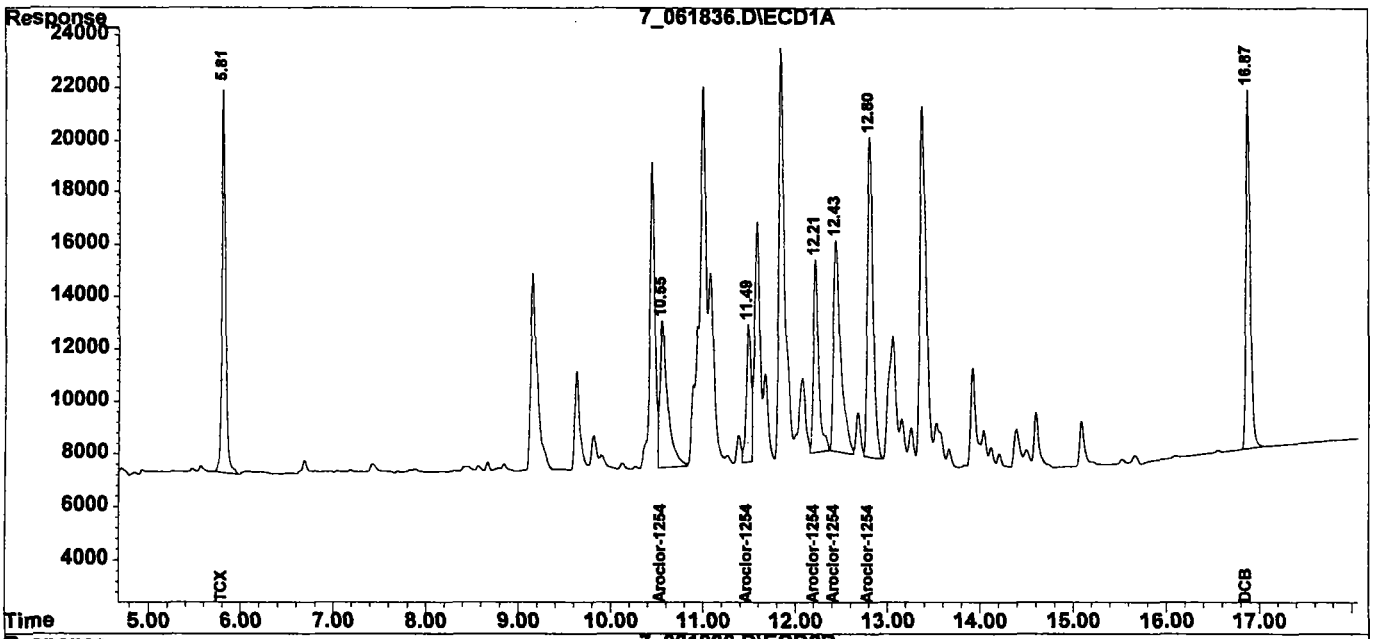
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

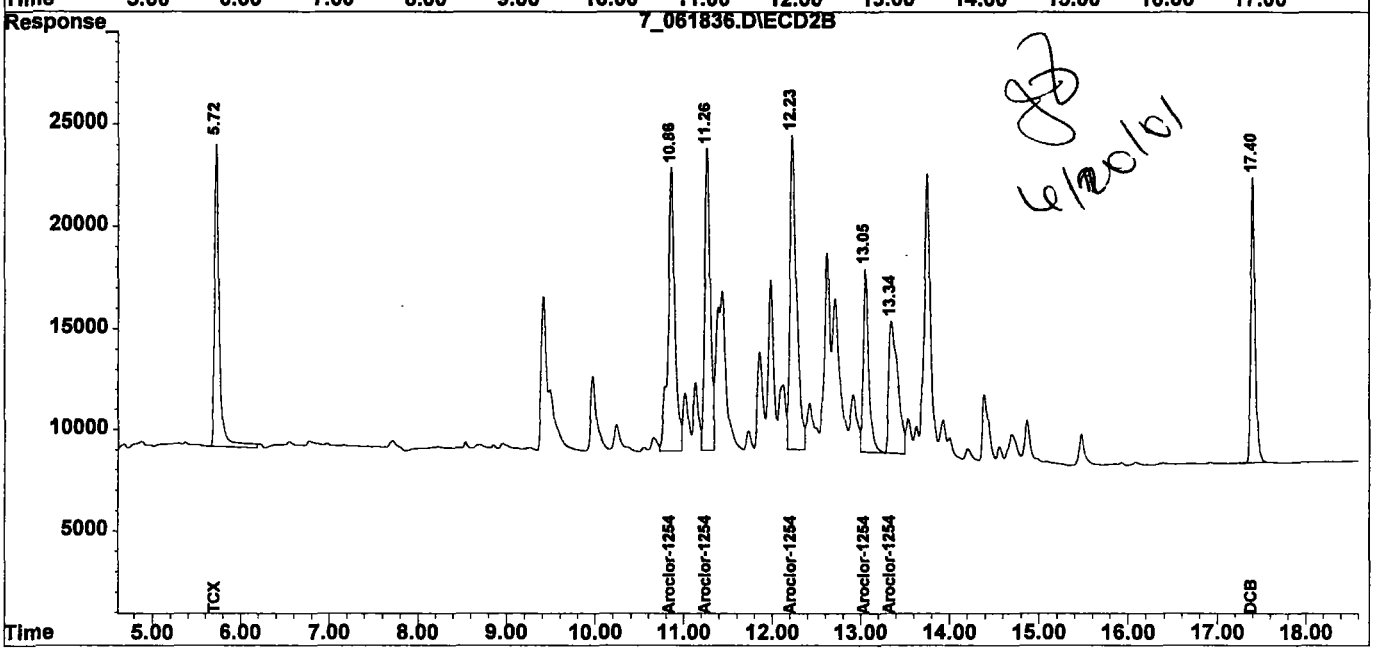
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061836.D\ECD1A.CH Vial: 36
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061836.D\ECD2B.CH
Acq On : 19 Jun 2001 1:11 Operator: DDC
Sample : LC0609SA *ELCS1 * Inst : HP_07
Misc : **30.0G/5.0ML* Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 10:06 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

HYDROGEN USED AS CARRIER GAS FOR SAMPLE ANALYSES

230A

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30S5MS

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Matrix: (soil/water) SOIL Lab Sample ID: 46721.51MS

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

% Moisture: 60 decanted: (Y/N) __ Date Received: 06/08/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/09/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	81	U
11104-28-2	Aroclor-1221	81	U
11141-16-5	Aroclor-1232	81	U
53469-21-9	Aroclor-1242	81	U
12672-29-6	Aroclor-1248	81	U
11097-69-1	Aroclor-1254	440	P
11096-82-5	Aroclor-1260	81	U
	Surrogate amount spiked	16.44	

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061844.D\ECD1A.CH Vial: 44
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061844.D\ECD2B.CH
Acq On : 19 Jun 2001 4:23 Operator: DDC
Sample : 46721.51MS *E30S5MS * Inst : HP_07
Misc : *EPA*30.4G/5.0ML*60 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 10:13 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.81	5.72	833272	806611	33.3m	26.7	
	Spiked Amount 16.447			Recovery	=	202.46%	162.34%	
22)	S DCB	16.87	17.40	468904	948122	24.6	47.7	#
	Spiked Amount 16.447			Recovery	=	149.57%	290.02%	
	Target Compounds:							
12)	L6 Aroclor-1254	10.53	0.00	341571	0	402.3	N.D. d	#
[illegible]	L6 Aroclor-1254 {2}	11.48	11.26	195958	1136364	467.7	841.9	#
[illegible]	L6 Aroclor-1254 {3}	12.21	12.22	307885	1497702	345.2	847.4	#
15)	L6 Aroclor-1254 {4}	12.42	13.05	578615	693181	528.2	664.4	#
16)	L6 Aroclor-1254 {5}	12.80	0.00	600107	0	436.6	N.D. d	#
	Sum Aroclor-1254			2024136	3327246	2180.0	2353.7	
	Average Aroclor-1254					435.997	784.577	

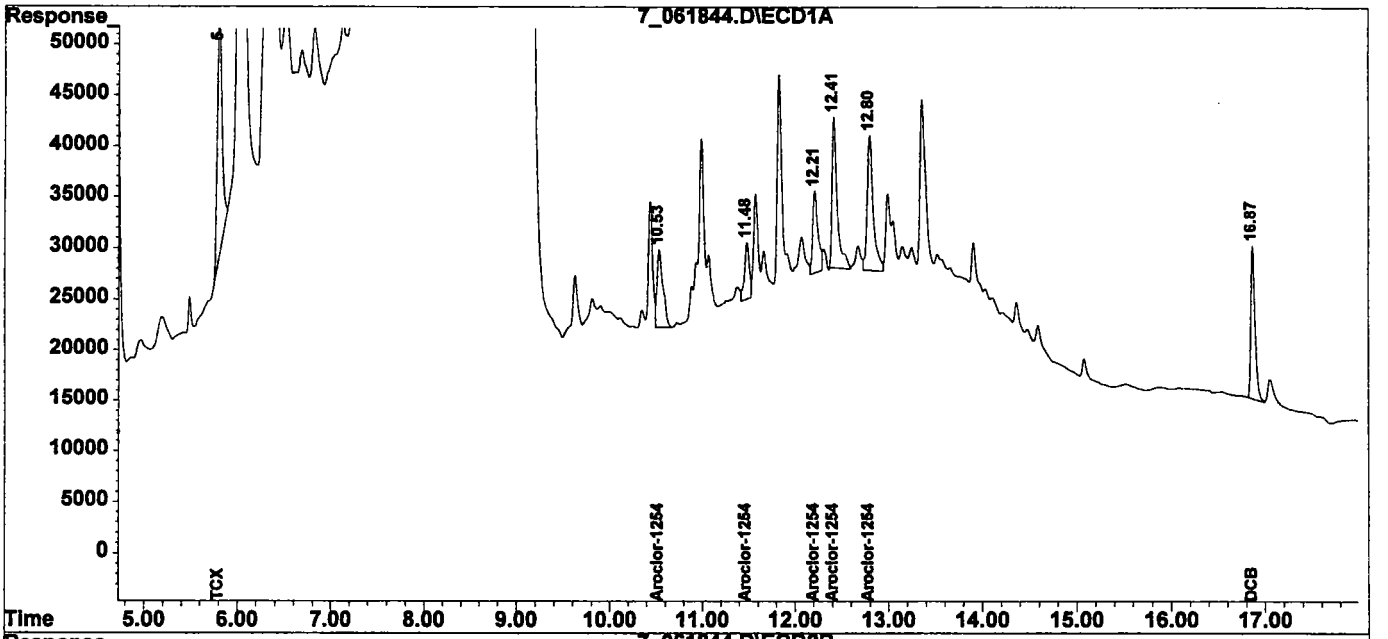
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

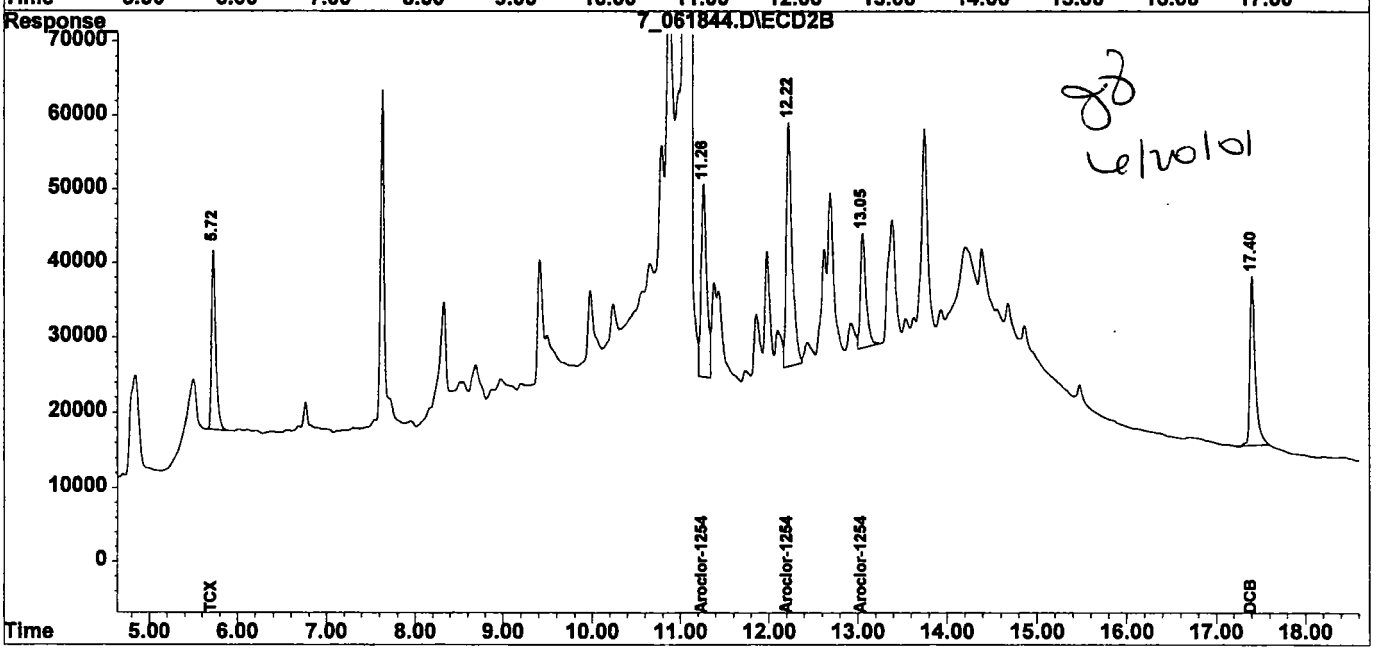
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061844.D\ECD1A.CH Vial: 44
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061844.D\ECD2B.CH
Acq On : 19 Jun 2001 4:23 Operator: DDC
Sample : 46721.51MS *E30S5MS * Inst : HP_07
Misc : *EPA*30.4G/5.0ML*60 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 10:13 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

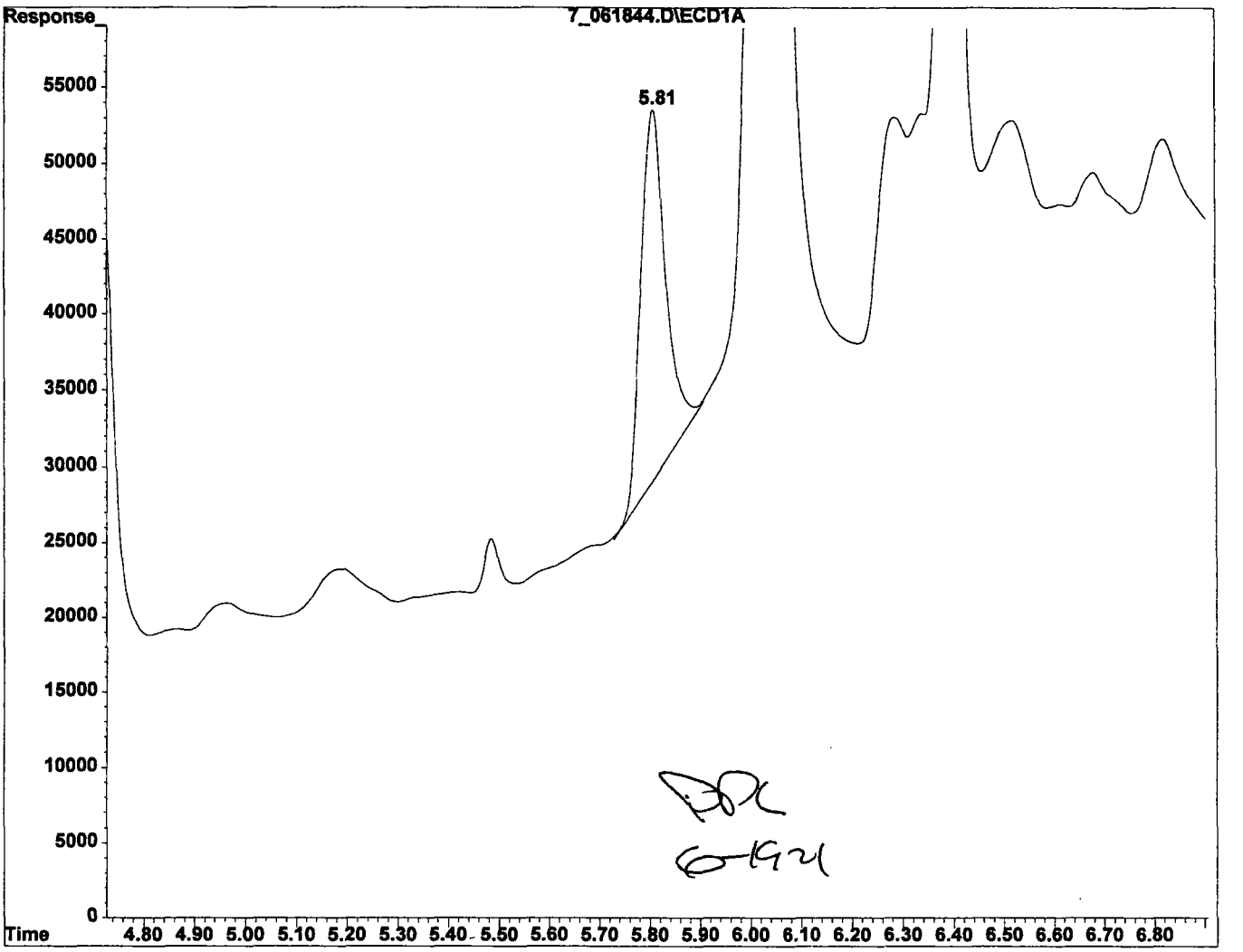




gg
6/20/01

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\7\DATA\06_18_01\7_061844.D
Date Acquired: 19 Jun 2001 4:23
Inst: HP_07 Operator ID: DDC
Name: 46721.51MS *E30S5MS *
Misc: *EPA*30.4G/5.0ML*60
Method: F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title: PCB/TOXAPHENE
Quant Time: Jun 19 10:13 2001 Quant Results File: XPCBF18.RES



TCX 5.81min area: 833272 m

Integration Time Range: 5.73 - 5.91

F:\HPCHEM\HP\7\DATA\06_18_01\7_061844.D
Report generated: Tue Jun 19 10:14:07 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061844.D\ECD1A.CH Vial: 44
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061844.D\ECD2B.CH
Acq On : 19 Jun 2001 4:23 Operator: DDC
Sample : 46721.51MS *E30S5MS * Inst : HP_07
Misc : *EPA*30.4G/5.0ML*60 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 10:13 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.81	5.72	833272	806611	33.3m	26.7	
	Spiked Amount 16.447			Recovery	=	202.46%	162.34%	
22)	S DCB	16.87	17.40	468904	948122	24.6	47.7	#
	Spiked Amount 16.447			Recovery	=	149.57%	290.02%	
	Target Compounds:							
12)	L6 Aroclor-1254	10.53	0.00	341571	0	402.3	N.D. d	#
1[illegible])	L6 Aroclor-1254 {2}	11.48	11.26	195958	1136364	467.7	841.9	#
[illegible])	L6 Aroclor-1254 {3}	12.21	12.22	307885	1497702	345.2	847.4	#
15)	L6 Aroclor-1254 {4}	12.42	13.05	578615	693181	528.2	664.4	#
16)	L6 Aroclor-1254 {5}	12.80	0.00	600107	0	436.6	N.D. d	#
	Sum Aroclor-1254			2024136	3327246	2180.0	2353.7	
	Average Aroclor-1254					435.997	784.577	

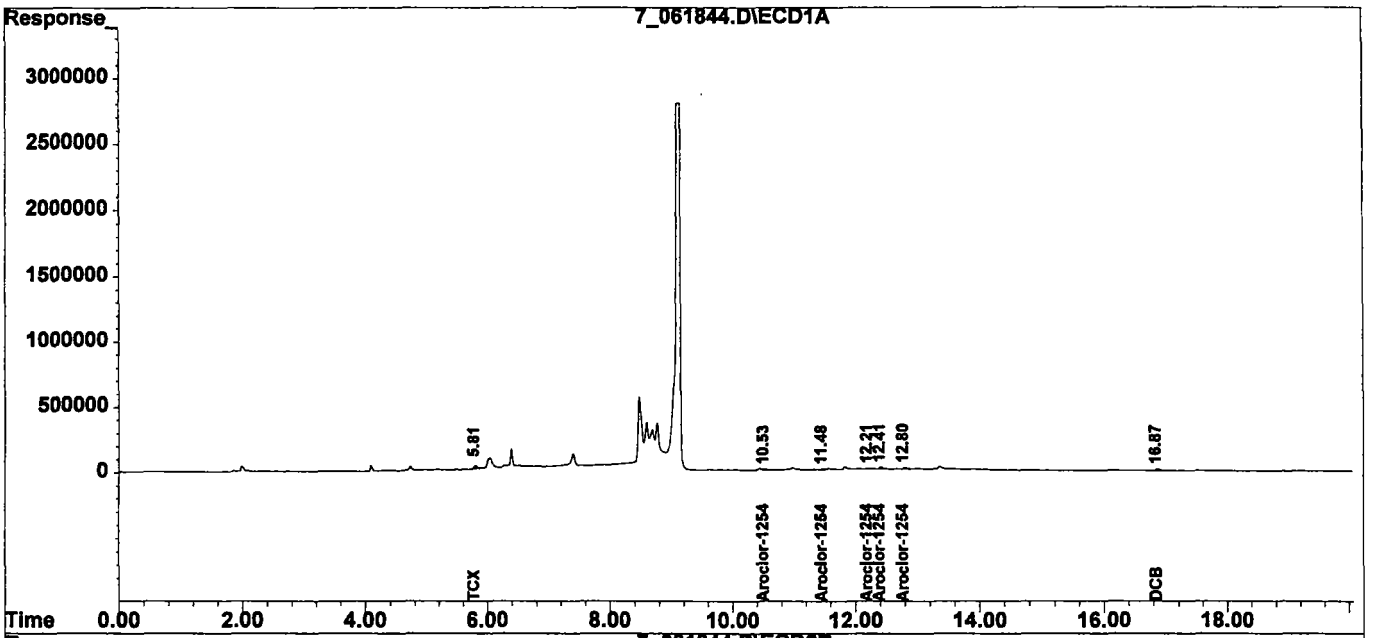
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

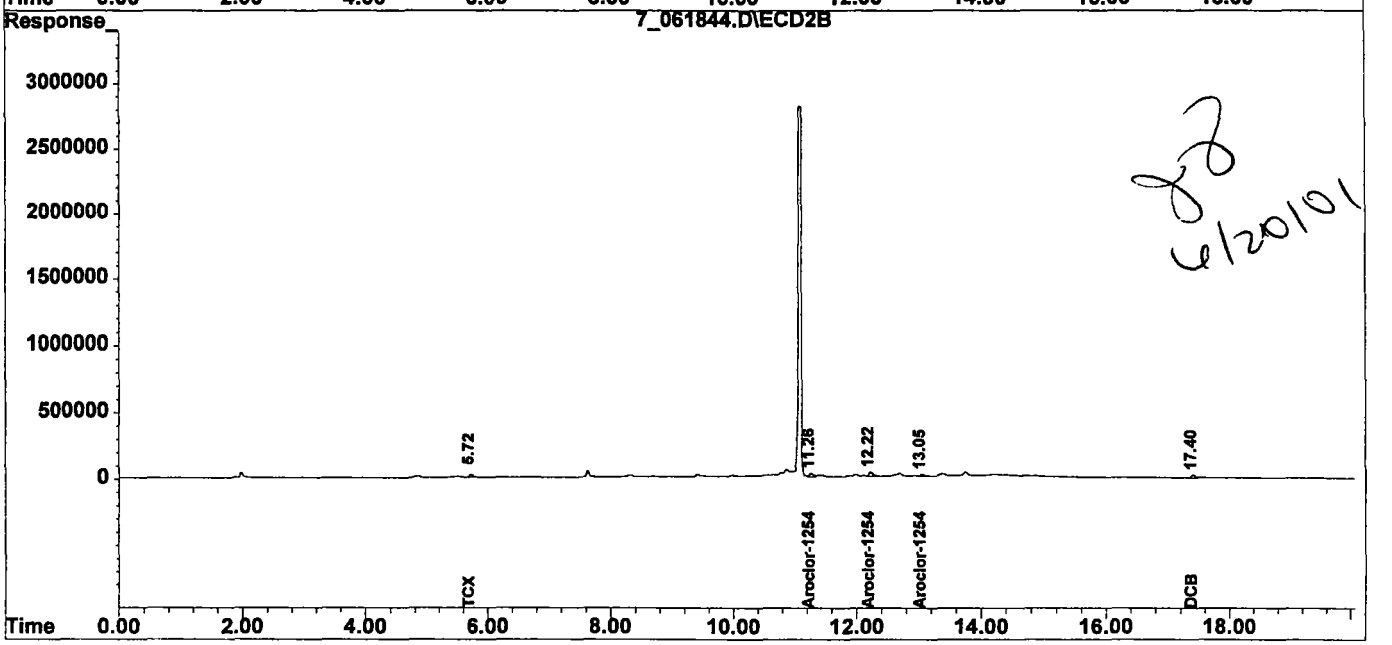
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061844.D\ECD1A.CH Vial: 44
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061844.D\ECD2B.CH
Acq On : 19 Jun 2001 4:23 Operator: DDC
Sample : 46721.51MS *E30S5MS * Inst : HP_07
Misc : *EPA*30.4G/5.0ML*60 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 10:13 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

HYDROGEN USED AS CARRIER GAS FOR SAMPLE ANALYSES

236A

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30S5MSD

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30S4

Matrix: (soil/water) SOIL Lab Sample ID: 46721.52MSD

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

% Moisture: 60 decanted: (Y/N) __ Date Received: 06/08/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/09/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/19/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	81	U
11104-28-2	Aroclor-1221	81	U
11141-16-5	Aroclor-1232	81	U
53469-21-9	Aroclor-1242	81	U
12672-29-6	Aroclor-1248	81	U
11097-69-1	Aroclor-1254	310	P
11096-82-5	Aroclor-1260	81	U
	Surrogate amount spiked	16.44	

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061845.D\ECD1A.CH Vial: 45
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061845.D\ECD2B.CH
Acq On : 19 Jun 2001 4:47 Operator: DDC
Sample : 46721.52MSD *E30S5MSD * Inst : HP_07
Misc : *EPA*30.4G/5.0ML*60 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 10:16 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.80	5.72	567015	445037	22.7m	14.7	#
	Spiked Amount 16.447			Recovery	=	138.02%	89.38%	
22)	S DCB	16.87	17.40	285026	593026	14.9	29.8	#
	Spiked Amount 16.447			Recovery	=	90.59%	181.18%	
	Target Compounds:							
12)	L6 Aroclor-1254	10.53	0.00	233128	0	274.5	N.D. d	#
[illegible]	L6 Aroclor-1254 {2}	11.48	11.26	143136	708068	341.6	524.6	#
[illegible]	L6 Aroclor-1254 {3}	12.21	12.22	224526	933738	251.8	528.3	#
15)	L6 Aroclor-1254 {4}	12.42	13.05	400852	439146	365.9	420.9	
16)	L6 Aroclor-1254 {5}	12.80	13.39f	416144	648816	302.8	639.0	#
	Sum Aroclor-1254			1417786	2729768	1536.6	2112.8	
	Average Aroclor-1254					307.324	528.198	

DDC 6-19-01

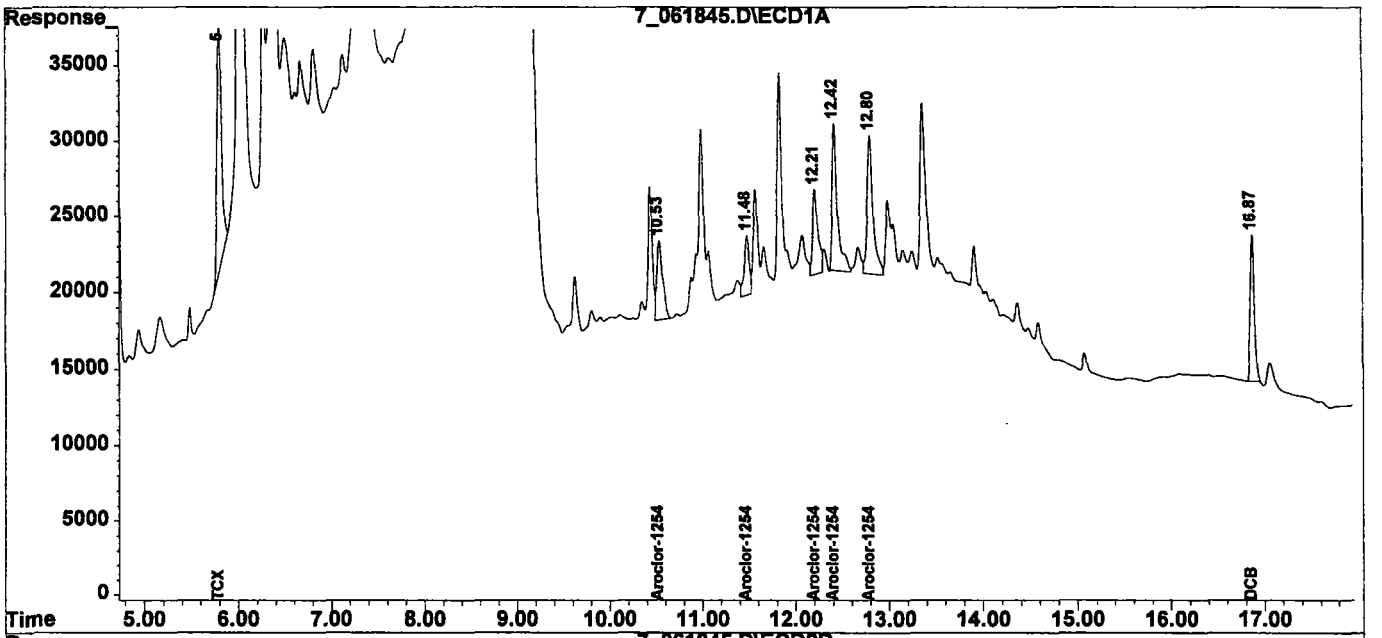
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

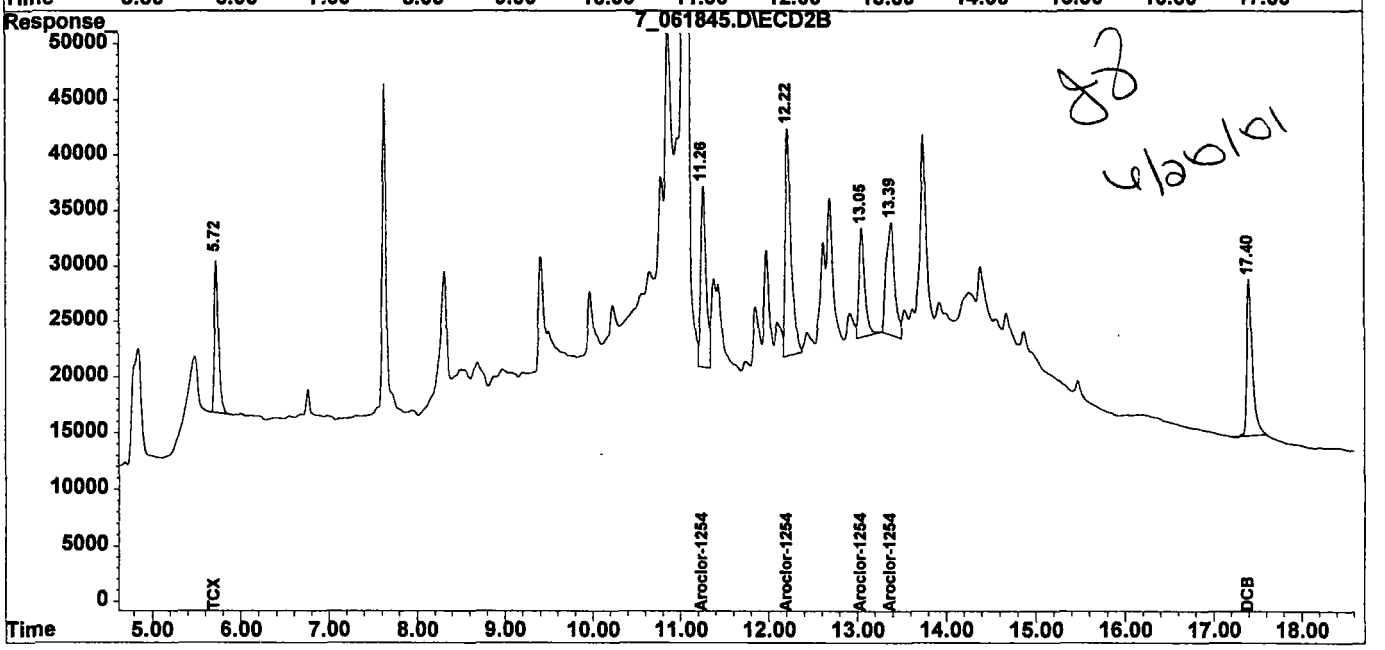
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061845.D\ECD1A.CH Vial: 45
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061845.D\ECD2B.CH
Acq On : 19 Jun 2001 4:47 Operator: DDC
Sample : 46721.52MSD *E30S5MSD * Inst : HP_07
Misc : *EPA*30.4G/5.0ML*60 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 10:16 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

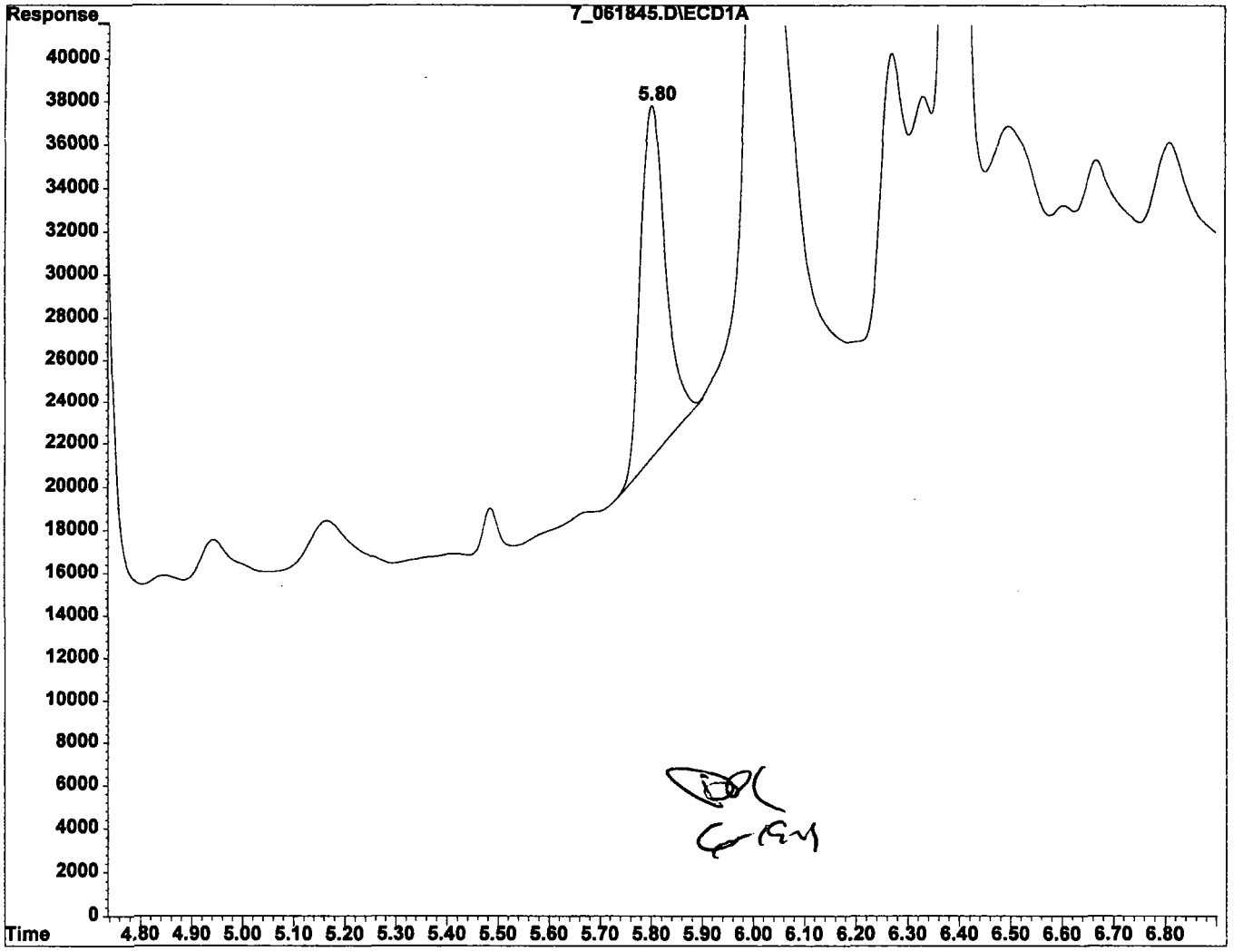




8
6/20/01

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\7\DATA\06_18_01\7_061845.D
Date Acquired: 19 Jun 2001 4:47
Inst: HP_07 Operator ID: DDC
Name: 46721.52MSD *E30S5MSD *
Misc: *EPA*30.4G/5.0ML*60
Method: F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title: PCB/TOXAPHENE
Quant Time: Jun 19 10:16 2001 Quant Results File: XPCBF18.RES



TCX 5.80min area: 567015 m

Integration Time Range: 5.74 - 5.90

F:\HPCHEM\HP\7\DATA\06_18_01\7_061845.D
Report generated: Tue Jun 19 10:17:52 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061845.D\ECD1A.CH Vial: 45
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061845.D\ECD2B.CH
Acq On : 19 Jun 2001 4:47 Operator: DDC
Sample : 46721.52MSD *E30S5MSD * Inst : HP_07
Misc : *EPA*30.4G/5.0ML*60 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 10:16 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	5.80	5.72	567015	445037	22.7m	14.7	#
	Spiked Amount 16.447			Recovery	=	138.02%	89.38%	
22)	S DCB	16.87	17.40	285026	593026	14.9	29.8	#
	Spiked Amount 16.447			Recovery	=	90.59%	181.18%	
	Target Compounds:							
12)	L6 Aroclor-1254	10.53	0.00	233128	0	274.5	N.D. d	#
[illegible]	L6 Aroclor-1254 {2}	11.48	11.26	143136	708068	341.6	524.6	#
[illegible]	L6 Aroclor-1254 {3}	12.21	12.22	224526	933738	251.8	528.3	#
15)	L6 Aroclor-1254 {4}	12.42	13.05	400852	439146	365.9	420.9	
16)	L6 Aroclor-1254 {5}	12.80	13.39f	416144	648816	302.8	639.0	#
	Sum Aroclor-1254			1417786	2729768	1536.6	2112.8	
	Average Aroclor-1254					307.324	528.198	

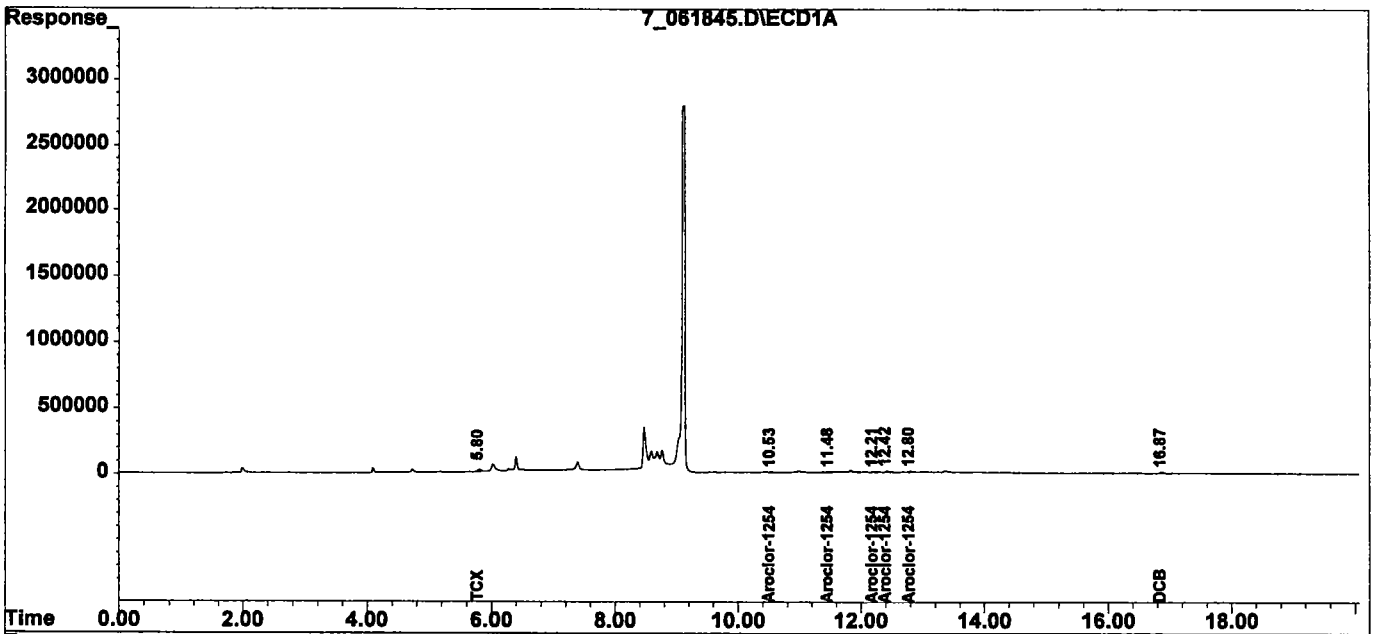
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

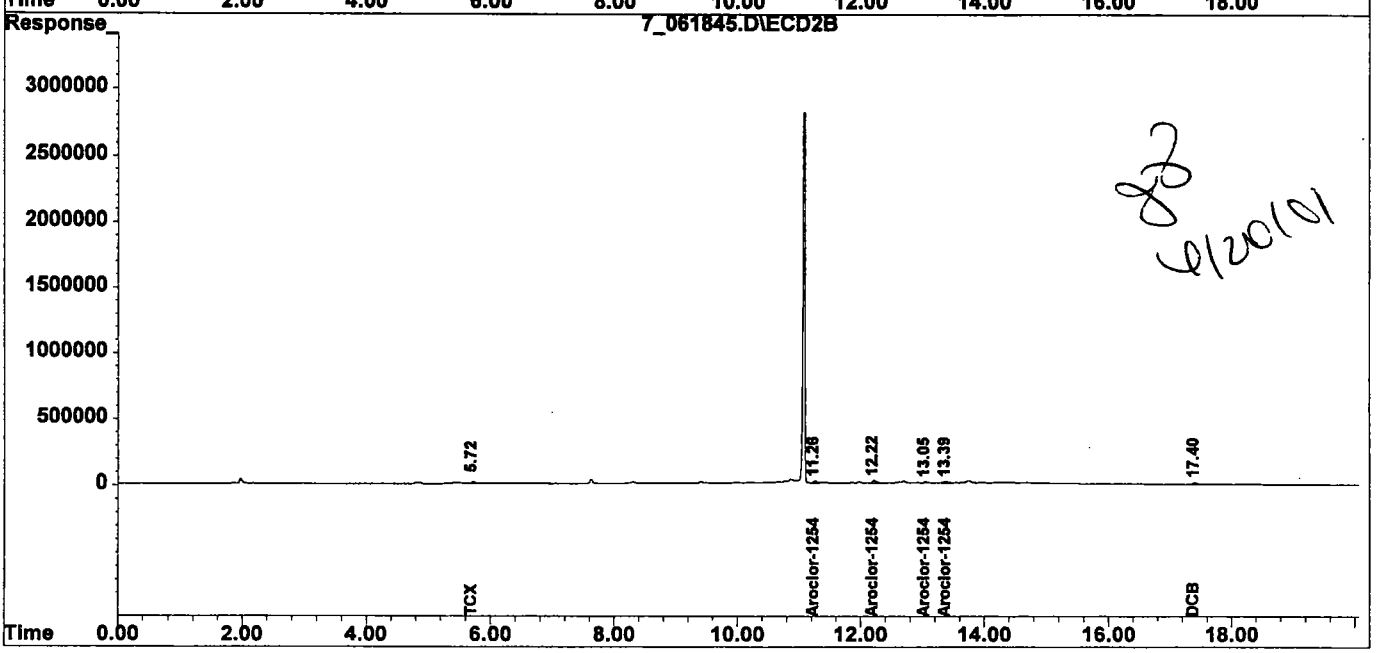
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061845.D\ECD1A.CH Vial: 45
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061845.D\ECD2B.CH
Acq On : 19 Jun 2001 4:47 Operator: DDC
Sample : 46721.52MSD *E30S5MSD * Inst : HP_07
Misc : *EPA*30.4G/5.0ML*60 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 10:16 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





8/20/01

HYDROGEN USED AS CARRIER GAS FOR SAMPLE ANALYSES

242A

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
06/10/01 23:09	1	CAL STD (INITIAL)	1_061001	
06/10/01 23:40	2	SB	1_061002	
06/11/01 00:11	3	SB	1_061003	
06/11/01 00:42	4	SB	1_061004	
06/11/01 01:12	5	SB	1_061005	
06/11/01 01:44	6	SB#061001A (PEST)	1_061006	
06/11/01 02:14	7	SB#061001B (PEST)	1_061007	
06/11/01 02:45	8	BL0609SA EPA 29294	1_061008	
06/11/01 03:16	9	BB0609SA EPA 29294	1_061009	
06/11/01 03:48	10	LC0609SA EPA 29294	1_061010	
06/11/01 04:18	11	LD0609SA EPA 29294	1_061011	
06/11/01 04:49	12	46732.05-E30T3 EPA	1_061012	
06/11/01 05:20	13	46732.03-E30T1 EPA	1_061013	
06/11/01 05:51	14	46732.04-E30T2 EPA	1_061014	
06/11/01 06:22	15	46732.01-E30S9 EPA	1_061015	
06/11/01 06:53	16	46732.07-E30T6 EPA	1_061016	
06/11/01 07:23	17	46732.10-E30T9 EPA	1_061017	
06/11/01 07:54	18	46732.13-E30W2 EPA	1_061018	
06/11/01 08:26	19	46721.49-E30S4 EPA	1_061019	
06/11/01 08:57	20	46732.11-E30W0 EPA	1_061020	
06/11/01 09:27	21	46732.12-E30W1 EPA	1_061021	

06/21

Verification Signature/Date

6/21/01

Analyst Signature/Date

Book: OE-102-16-RUN-18 Page No.: 87

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
06/11/01 09:58	22	46732.14-E30W3 EPA	1_061022	
06/11/01 10:29	23	46732.15-E30W4 EPA	1_061023	
06/11/01 11:00	24	46721.54-E30S7 EPA	1_061024	
06/11/01 11:31	25	46721.53-E30S6 EPA	1_061025	
06/11/01 12:03	26	46732.02-E30T0 EPA	1_061026	
06/11/01 12:33	27	46732.06-E30T5 EPA	1_061027	
06/11/01 13:04	28	46732.08-E30T7 EPA	1_061028	
06/11/01 13:35	29	46732.09-E30T8 EPA	1_061029	
06/11/01 14:06	30	46721.55-E30S8 EPA	1_061030	
06/11/01 14:37	31	46721.50-E30S5 EPA	1_061031	
06/11/01 15:08	32	46721.51-MS-E30S5 EPA	1_061032	
06/11/01 15:40	33	46721.52-MSD-E30S5 EPA	1_061033	
06/11/01 16:11	34	SB	1_061034	
06/11/01 16:42	35	SB	1_061035	
06/11/01 17:13	36	SB	1_061036	
06/11/01 17:44	37	SB	1_061037	
06/11/01 18:15	38	CAL STD (FINAL)	1_061038	

Compound	Initial RT	Final RT	% Difference
Phthalate	14.19	14.31	0.84
Methoxychlor	15.79	15.93	0.89
Perylene	20.59	20.73	0.68

06/21

Verification Signature/Date

6/21/01

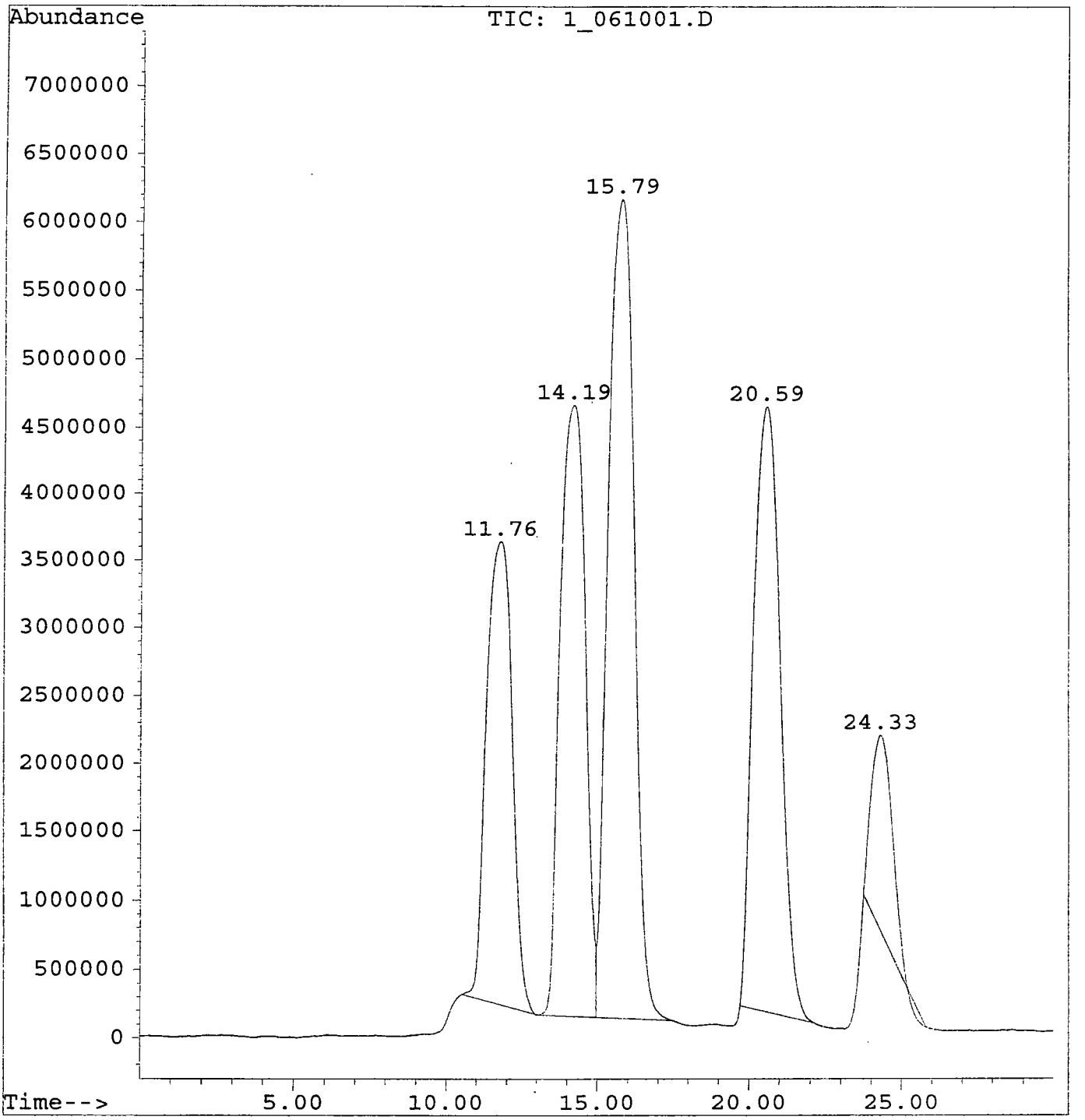
Analyst Signature/Date

Book: OE-102-16-RUN-18

Page No.: 88

Data File : C:\HPCHEM\5\DATA\061001\1_061001.D
Acq On : 10 Jun 01 23:09
Sample : CAL STD (INITIAL)
Misc : COL# 418002

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



1) 11.76 = Corn Oil
2) 14.19 = Pthalate
3) 15.79 = Methoxychlor
4) 20.59 = Perylene
5) 24.33 = Sulfur

Chromatographic Resolution Report

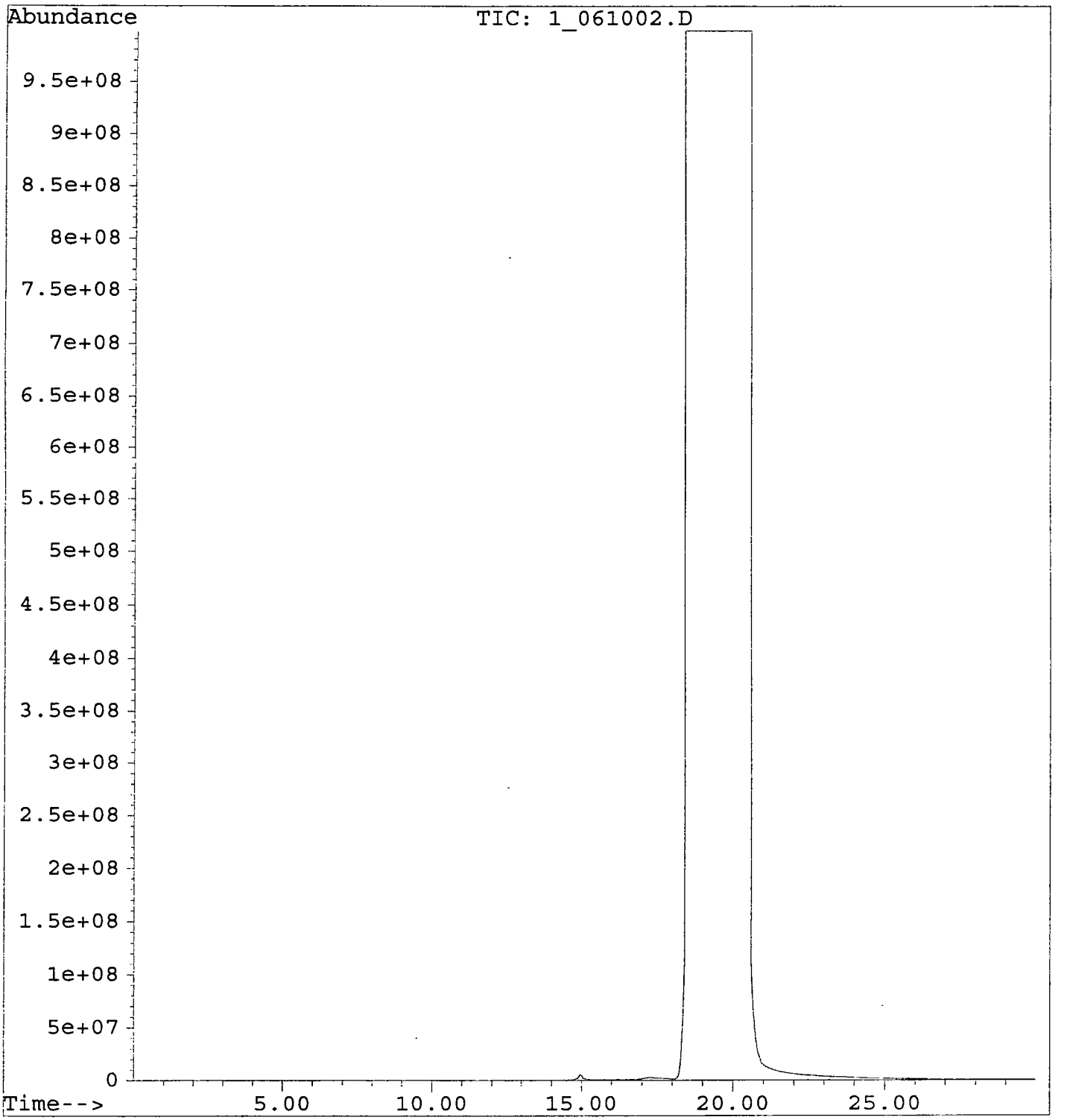
Data File : C:\HPCHEM\5\DATA\061001\1_061001.D
Acq On : 10 Jun 01 23:09
Sample : CAL STD (INITIAL)
Misc : COL# 418002

Vial: 1
Operator: CD COL# 4
Inst : GPC1
Multiplr: 1.00

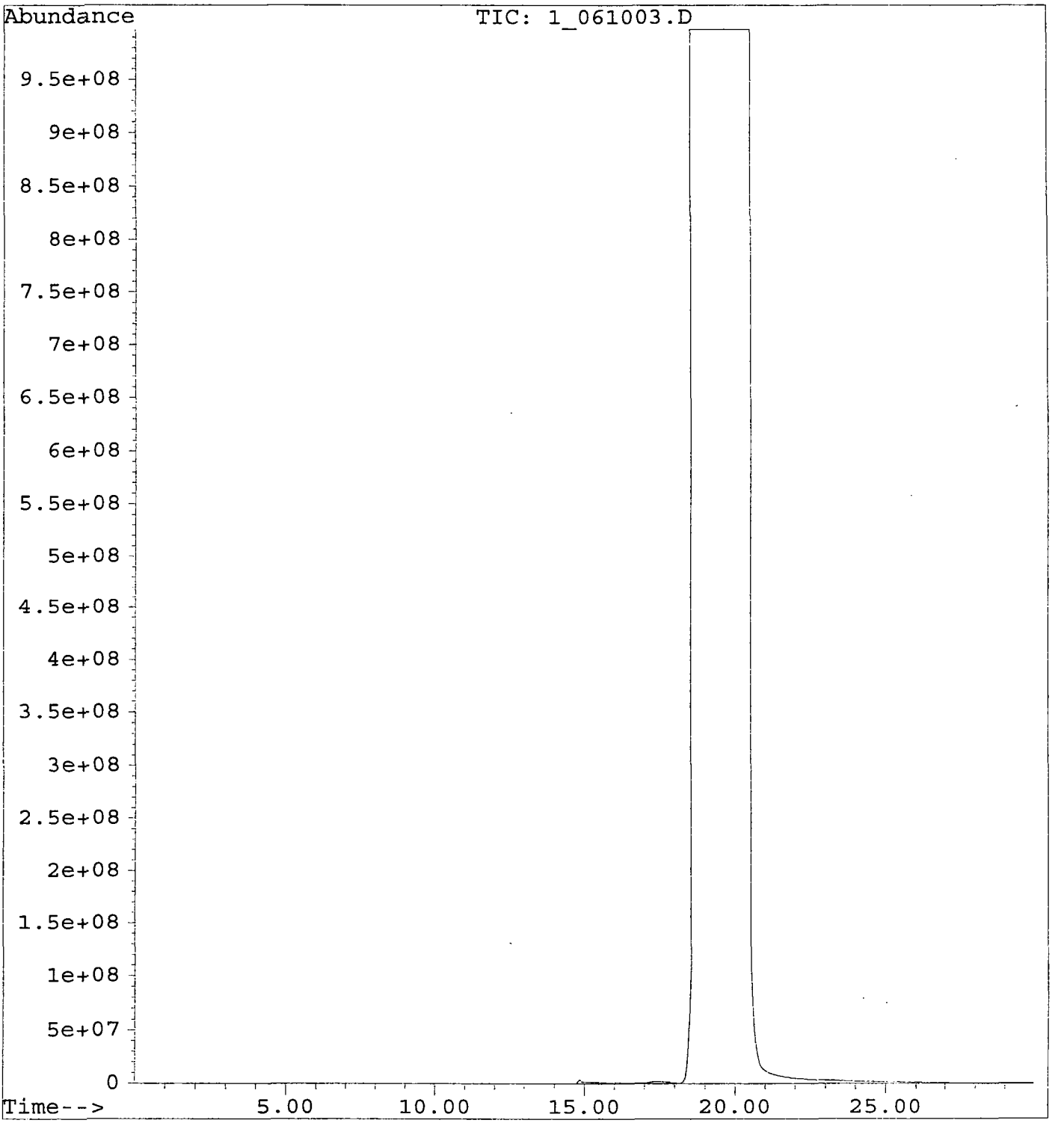
Method : C:\HPCHEM\5\METHODS\GPC.M
Title :

RT#1	RT#2	Resolution
11.759	14.195	100.00
14.195	15.793	88.62
15.793	20.591	100.00
20.591	24.327	100.00

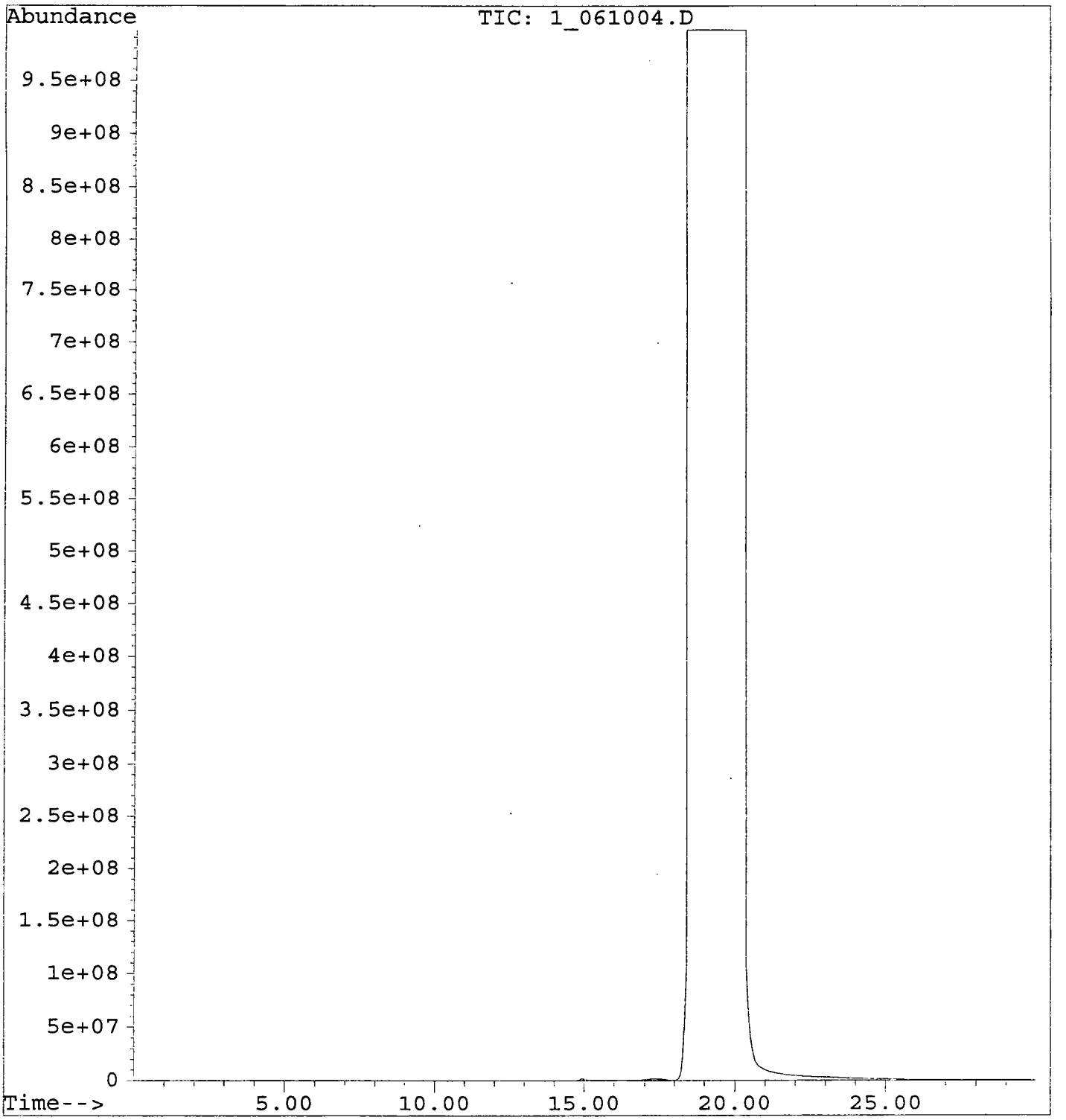
File : C:\HPCHEM\5\DATA\061001\1_061002.D
Operator : CD COL# 418002
Acquired : 10 Jun 01 23:40 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 2



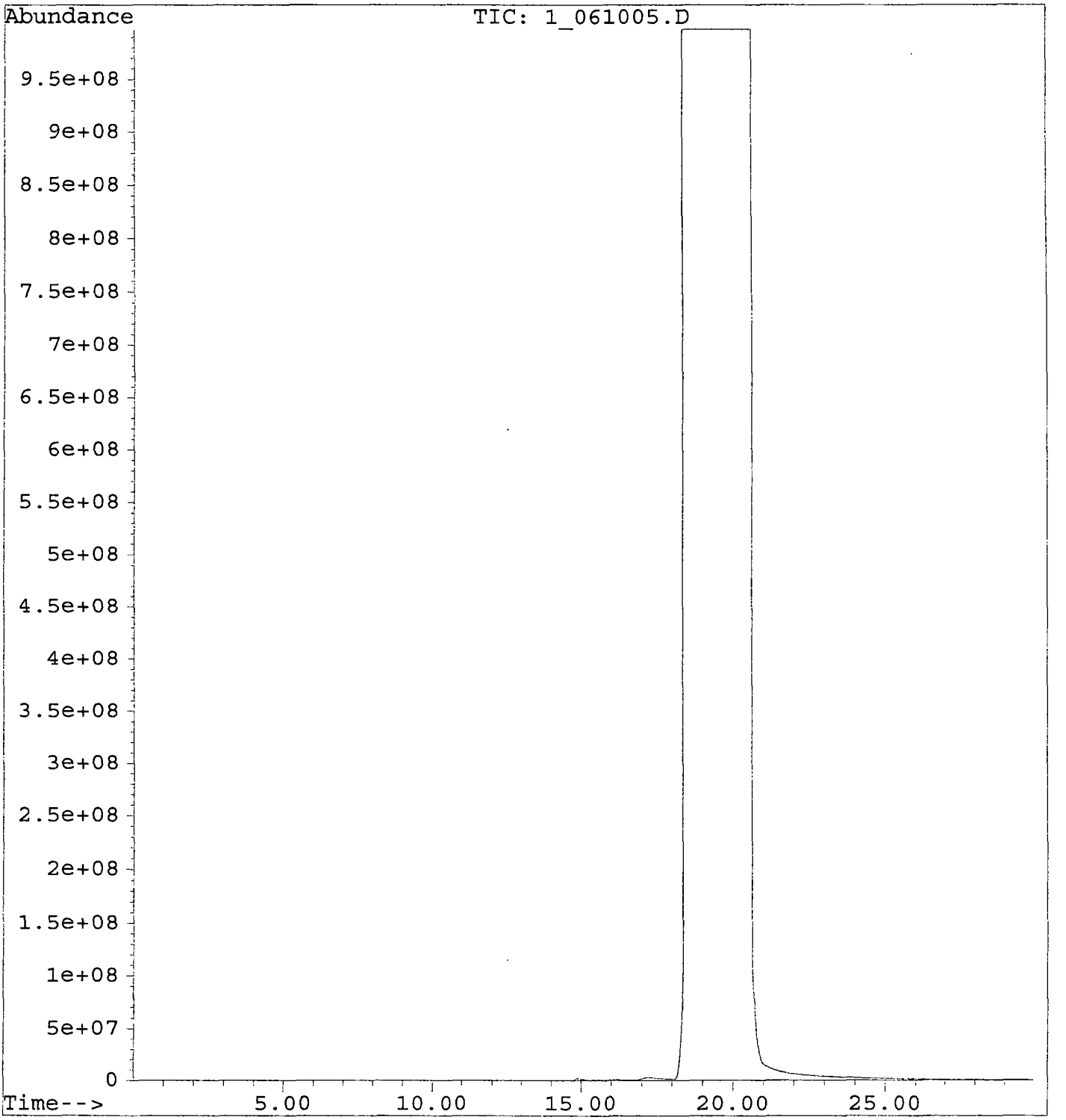
File : C:\HPCHEM\5\DATA\061001\1_061003.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 00:11 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 3



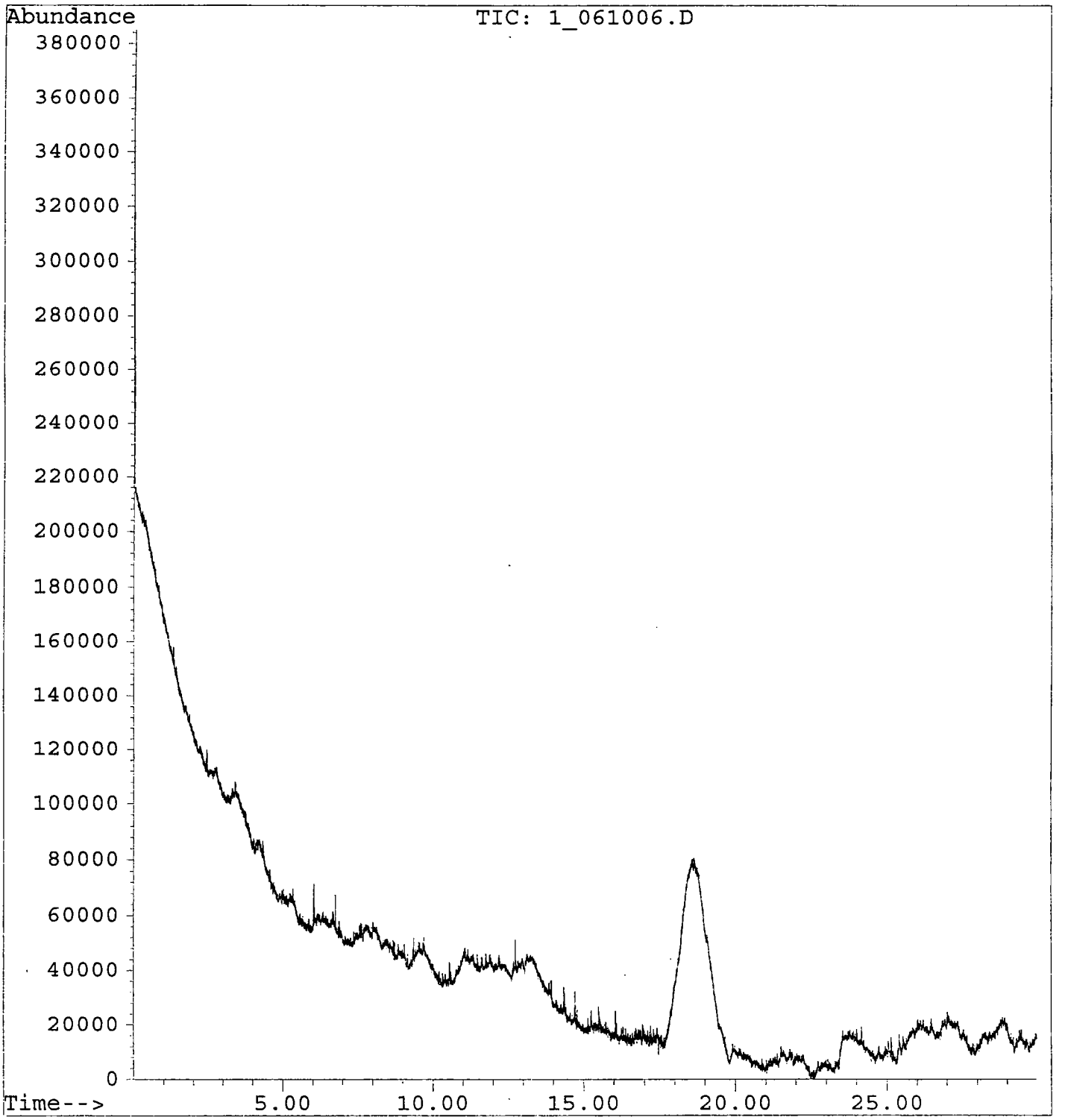
File : C:\HPCHEM\5\DATA\061001\1_061004.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 00:42 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 4



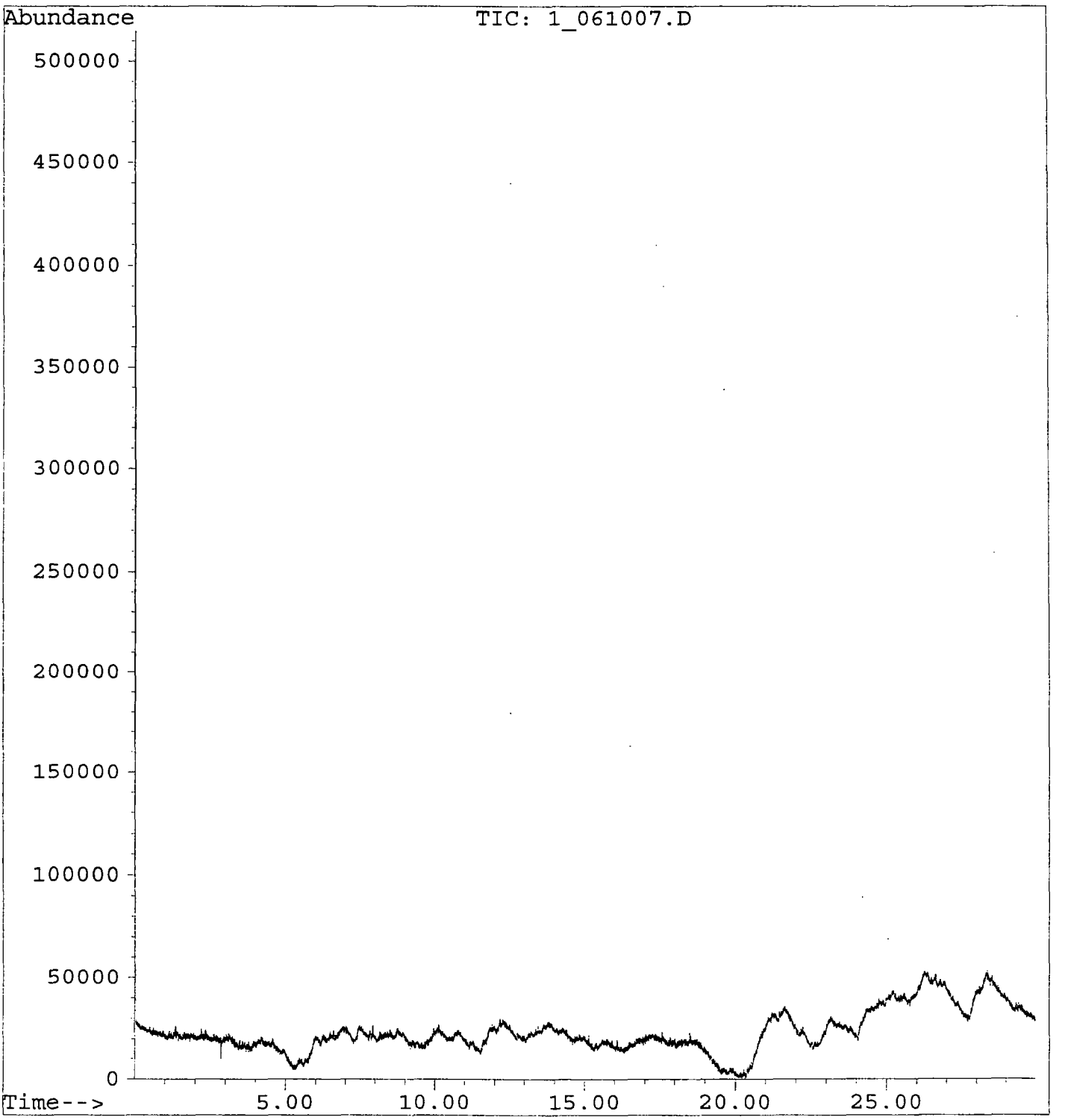
File : C:\HPCHEM\5\DATA\061001\1_061005.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 01:12 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 5



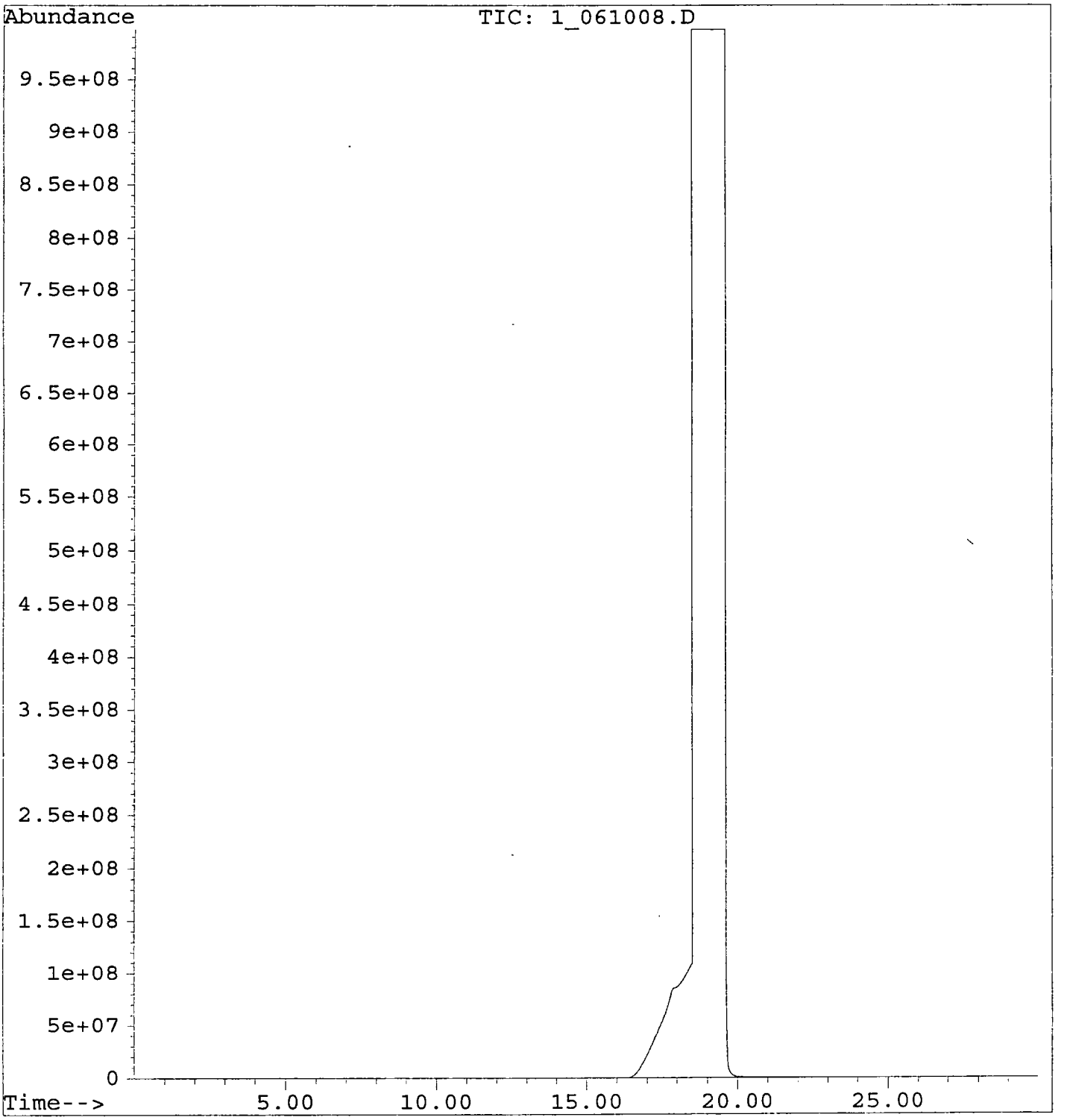
File : C:\HPCHEM\5\DATA\061001\1_061006.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 01:44 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB#061001A (PEST)
Misc Info : COL# 418002
Vial Number: 6



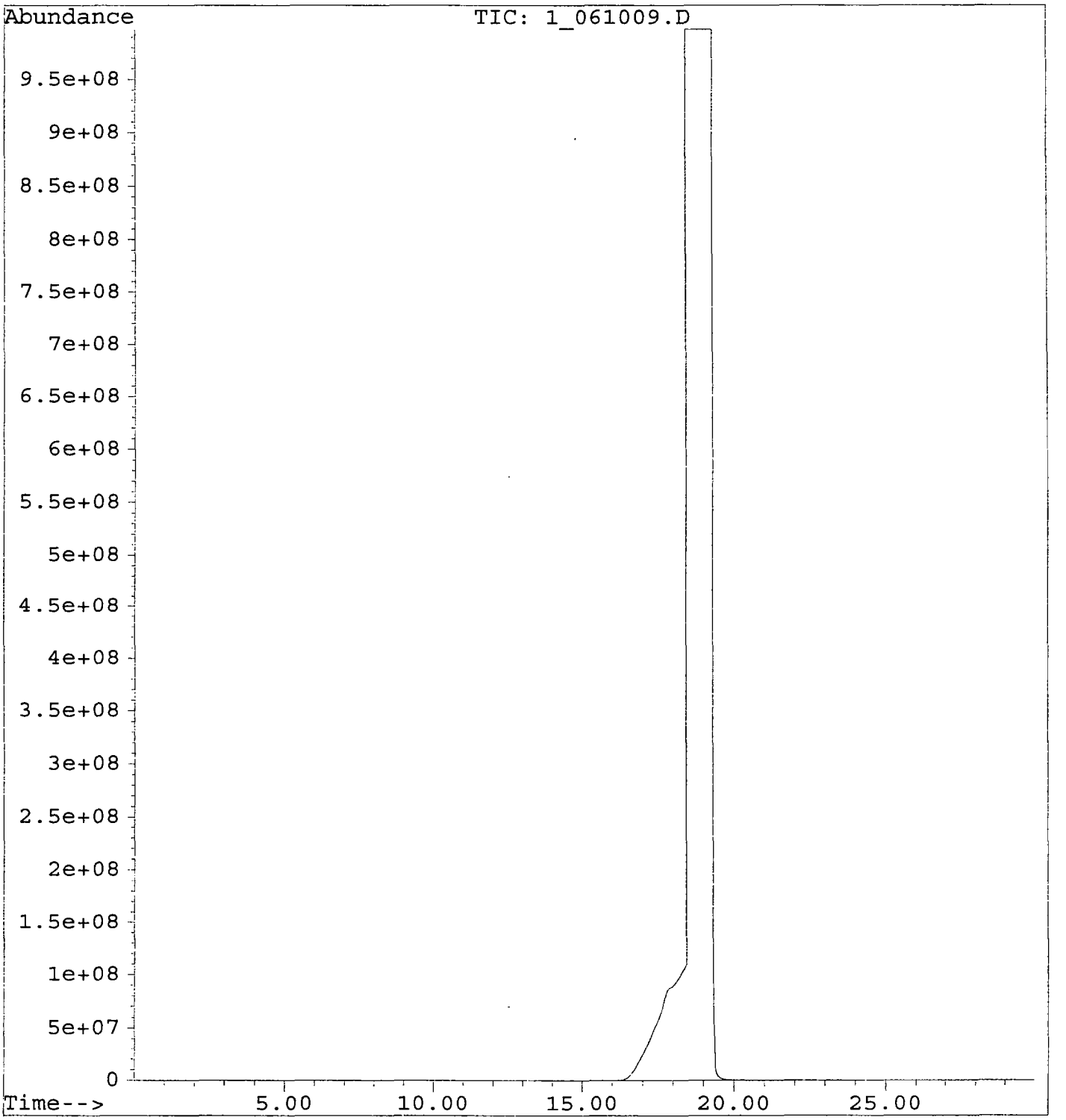
File : C:\HPCHEM\5\DATA\061001\1_061007.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 02:14 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB#061001B (PEST)
Misc Info : COL# 418002
Vial Number: 7



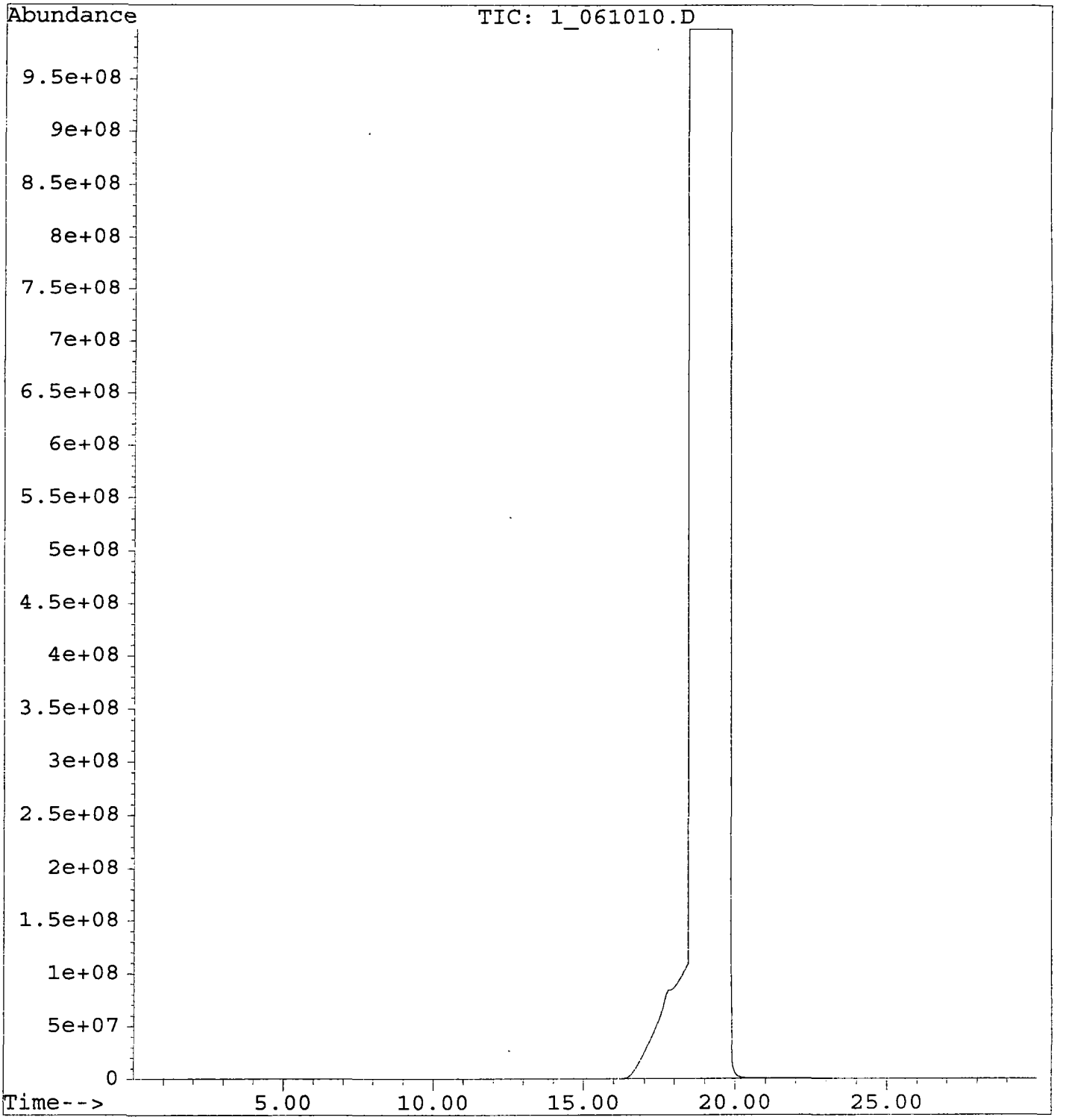
File : C:\HPCHEM\5\DATA\061001\1_061008.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 02:45 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: BL0609SA EPA 29294
Misc Info : COL# 418002
Vial Number: 8



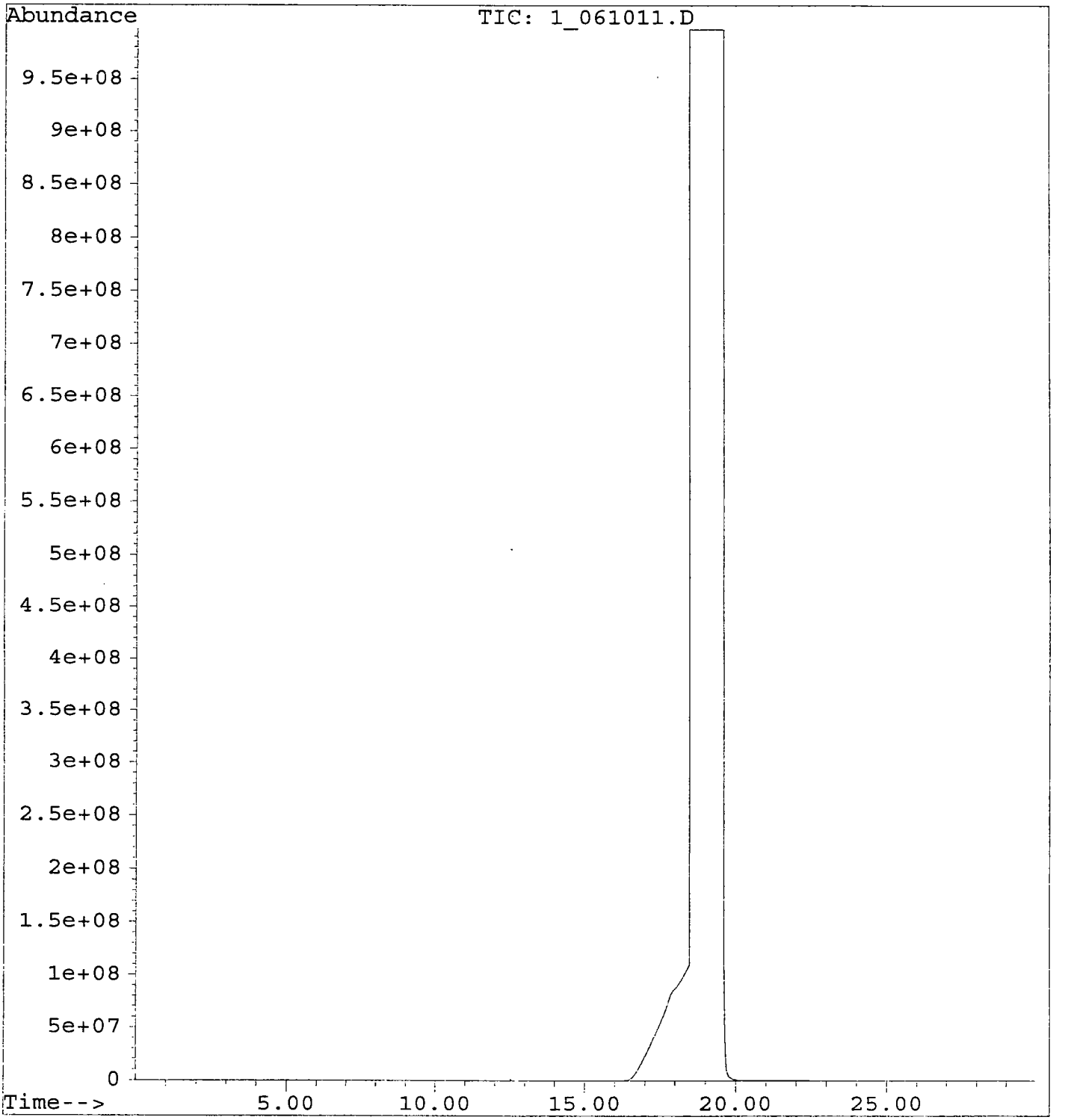
File : C:\HPCHEM\5\DATA\061001\1_061009.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 03:16 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: BB0609SA EPA 29294
Misc Info : COL# 418002
Vial Number: 9



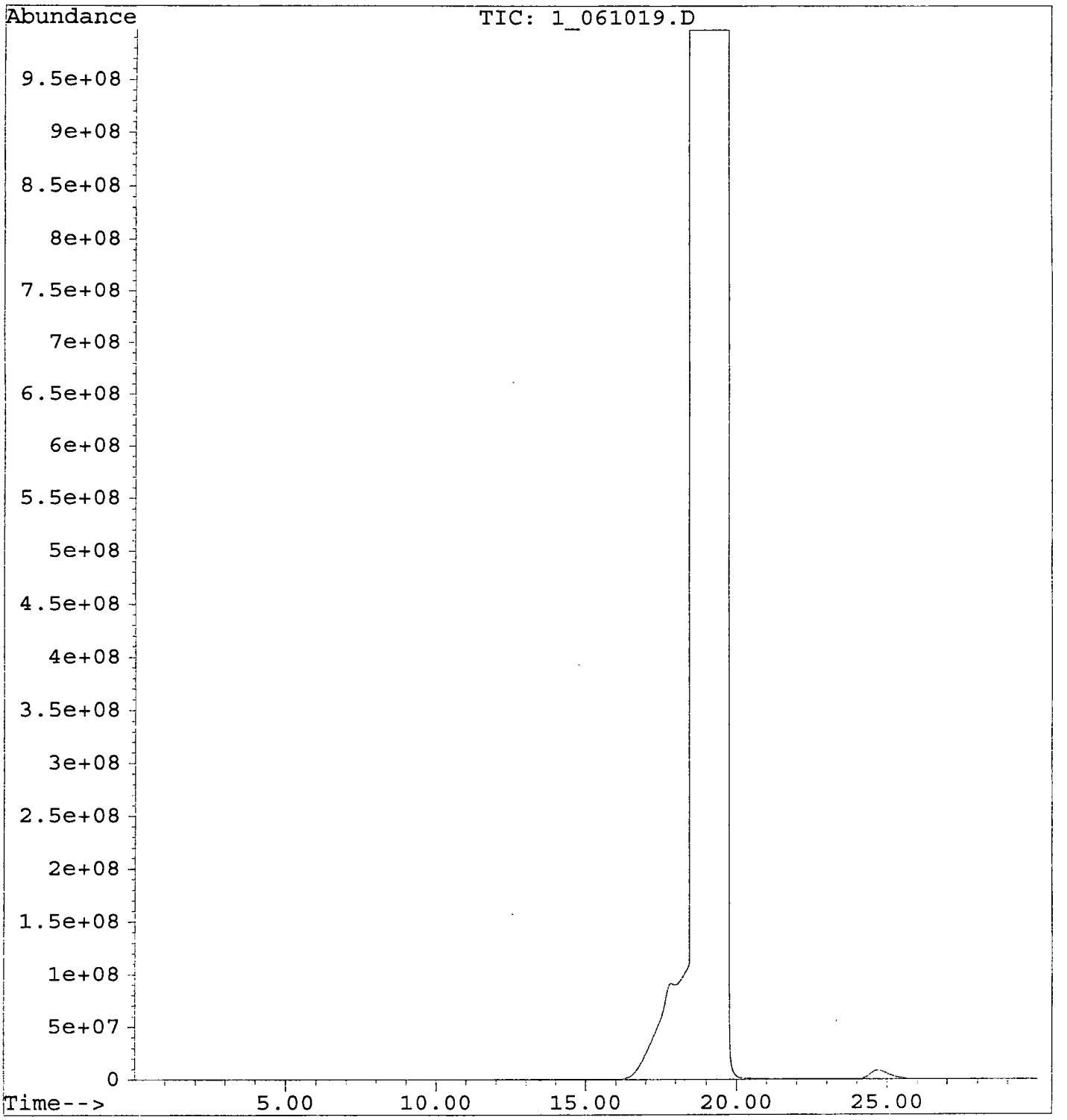
File : C:\HPCHEM\5\DATA\061001\1_061010.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 03:48 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: LC0609SA EPA 29294
Misc Info : COL# 418002
Vial Number: 10



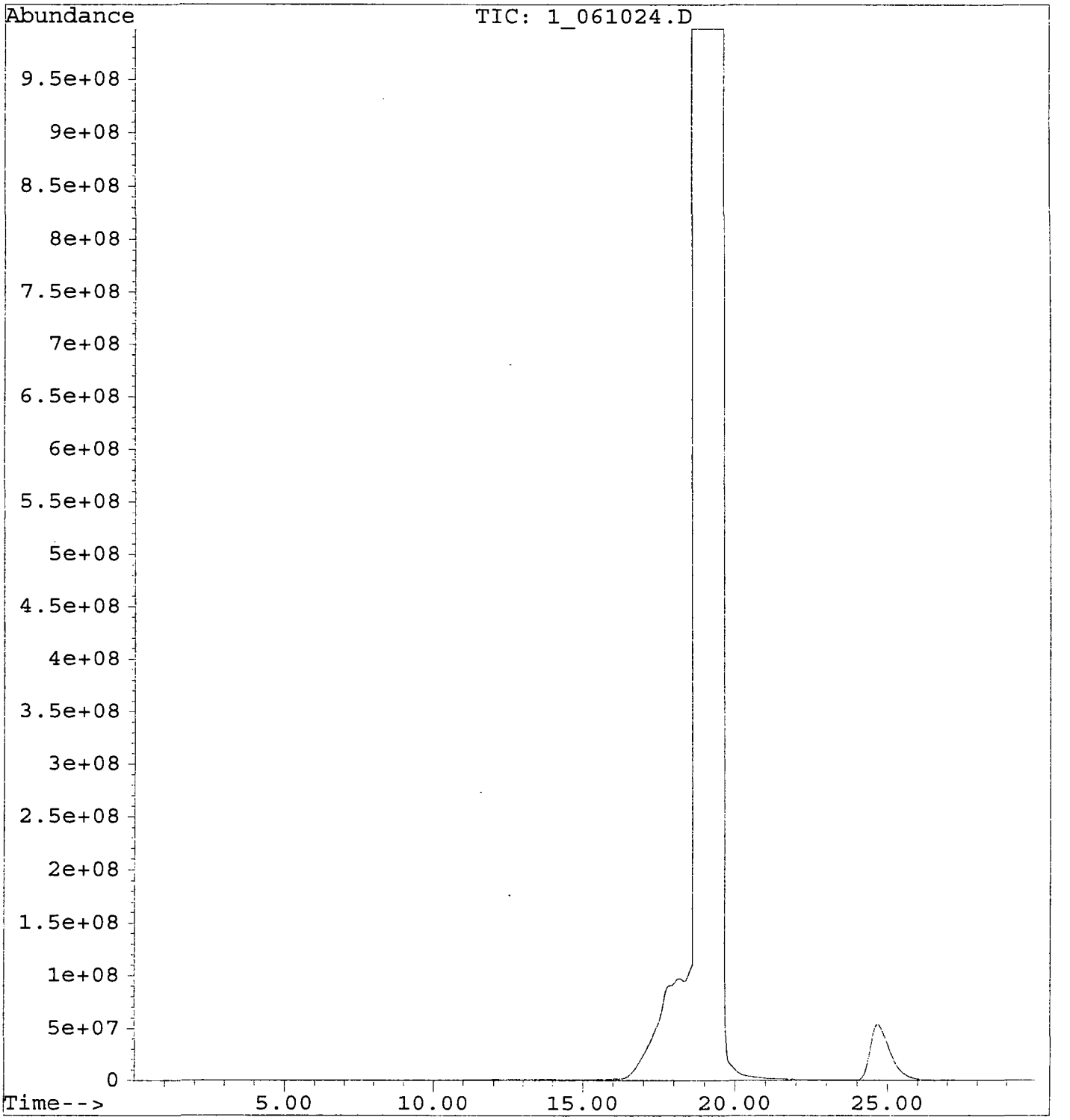
File : C:\HPCHEM\5\DATA\061001\1_061011.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 04:18 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: LD0609SA EPA 29294
Misc Info : COL# 418002
Vial Number: 11



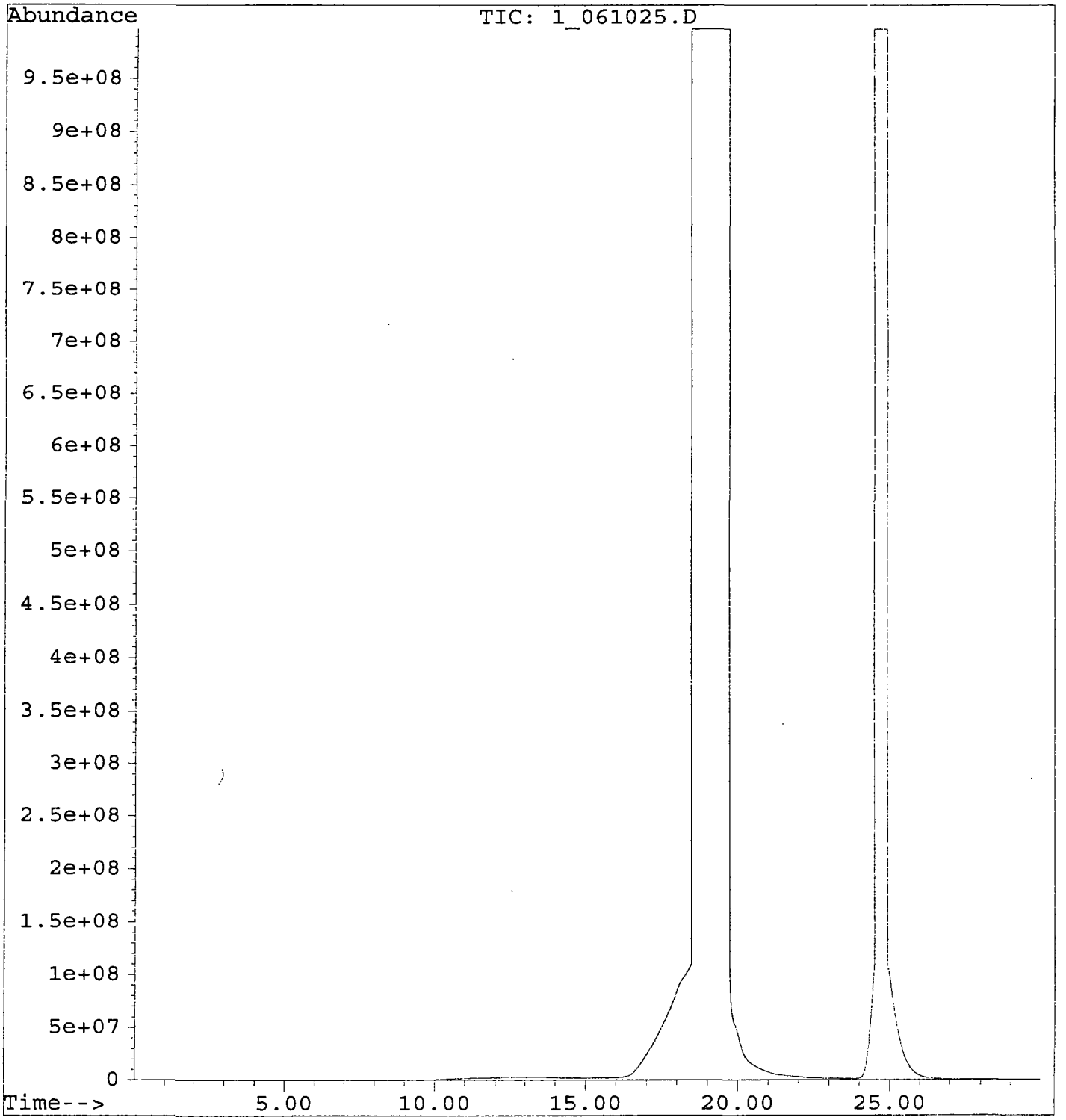
File : C:\HPCHEM\5\DATA\061001\1_061019.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 08:26 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 46721.49-E30S4 EPA
Misc Info : COL# 418002
Vial Number: 19



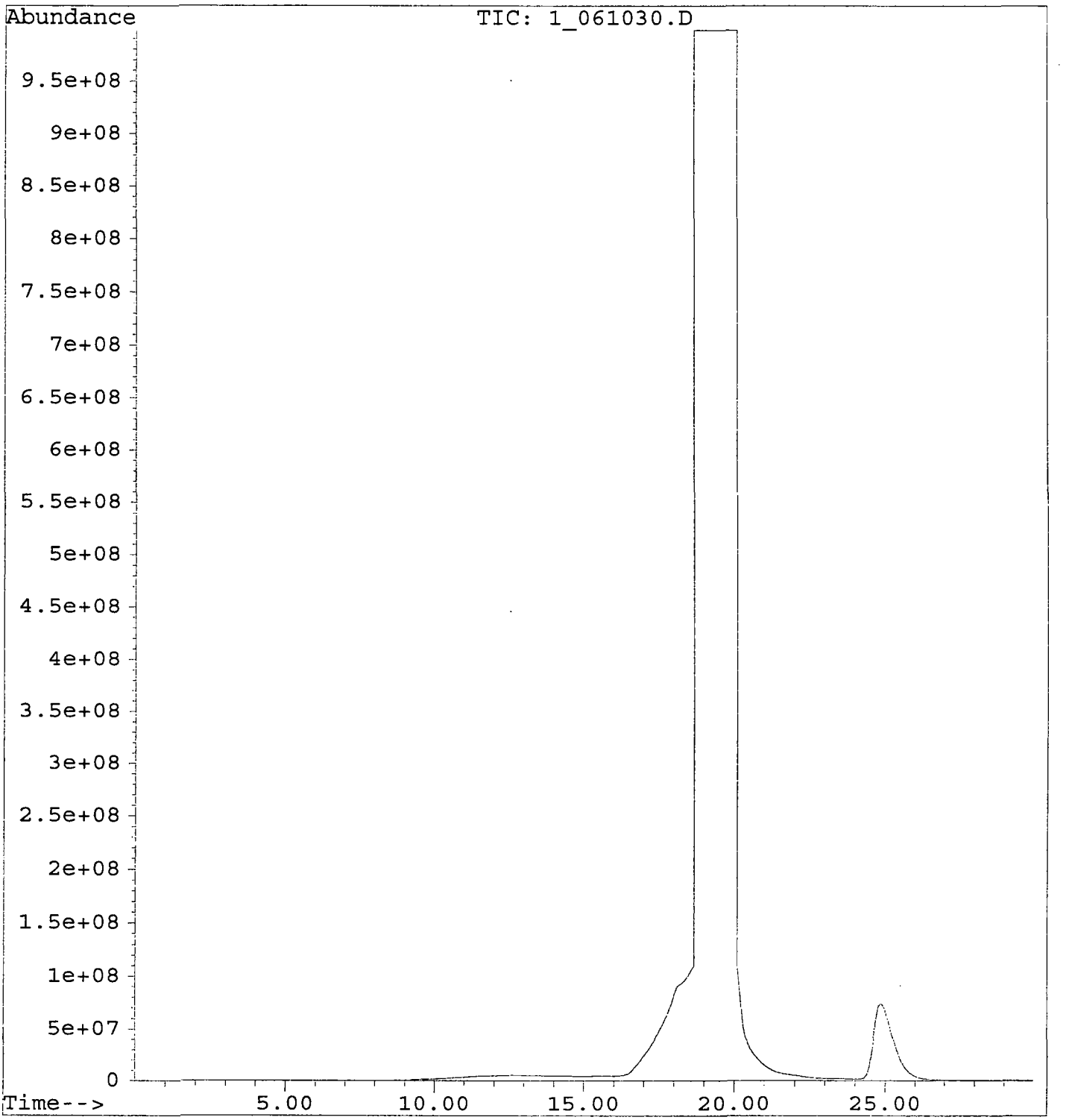
File : C:\HPCHEM\5\DATA\061001\1_061024.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 11:00 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 46721.54-E30S7 EPA
Misc Info : COL# 418002
Vial Number: 24



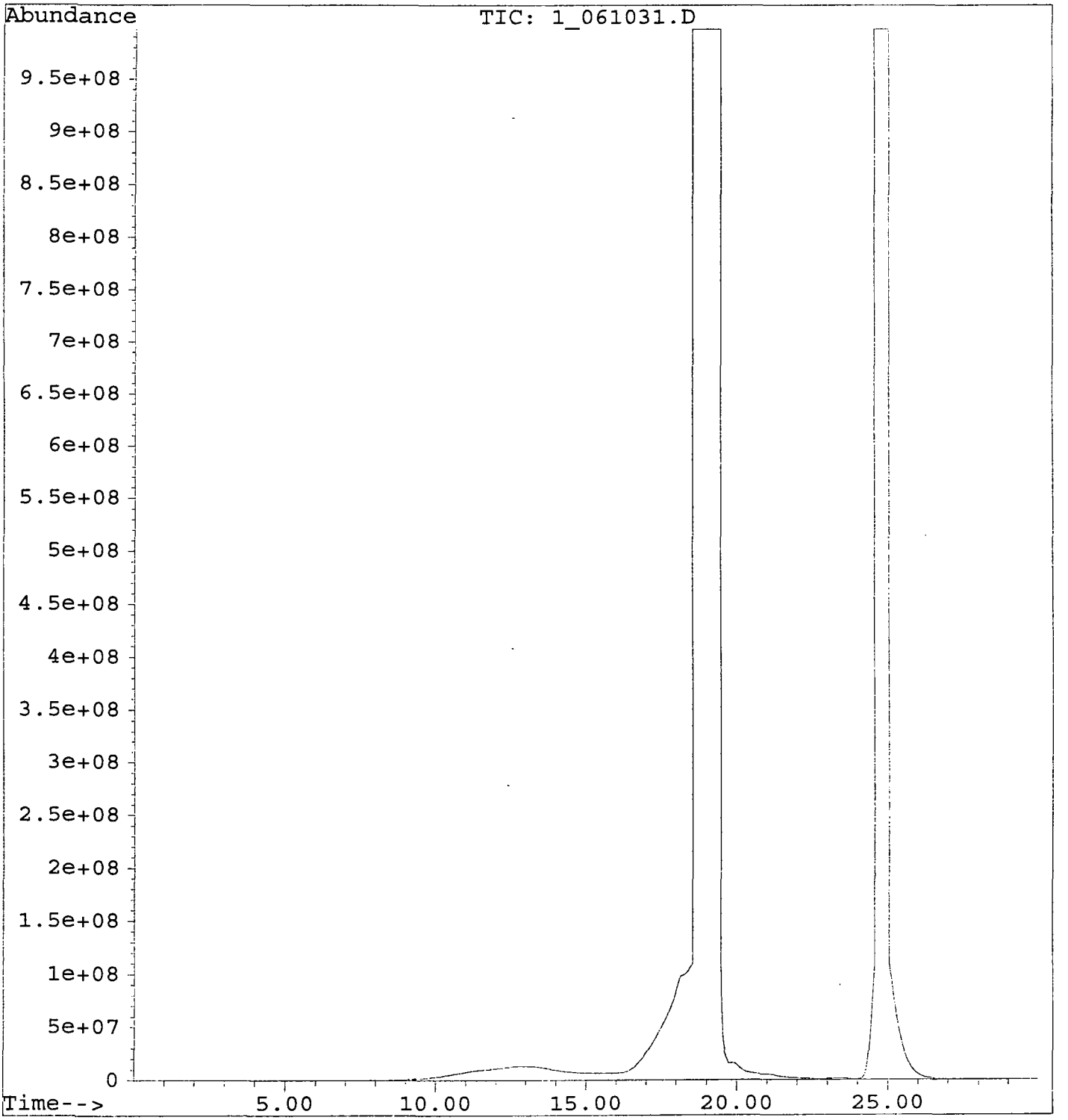
File : C:\HPCHEM\5\DATA\061001\1_061025.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 11:31 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 46721.53-E30S6 EPA
Misc Info : COL# 418002
Vial Number: 25



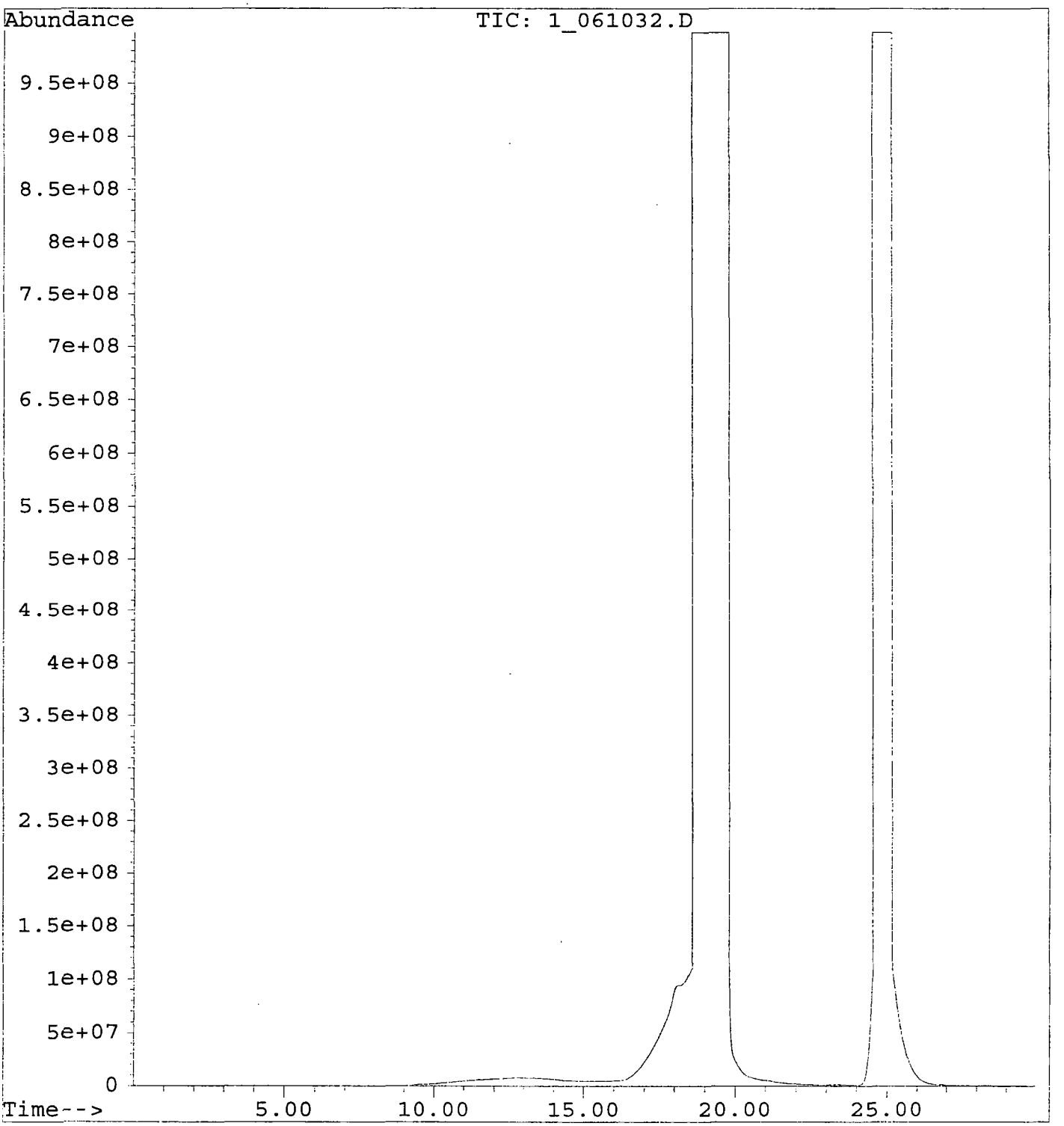
File : C:\HPCHEM\5\DATA\061001\1_061030.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 14:06 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 46721.55-E30S8 EPA
Misc Info : COL# 418002
Vial Number: 30



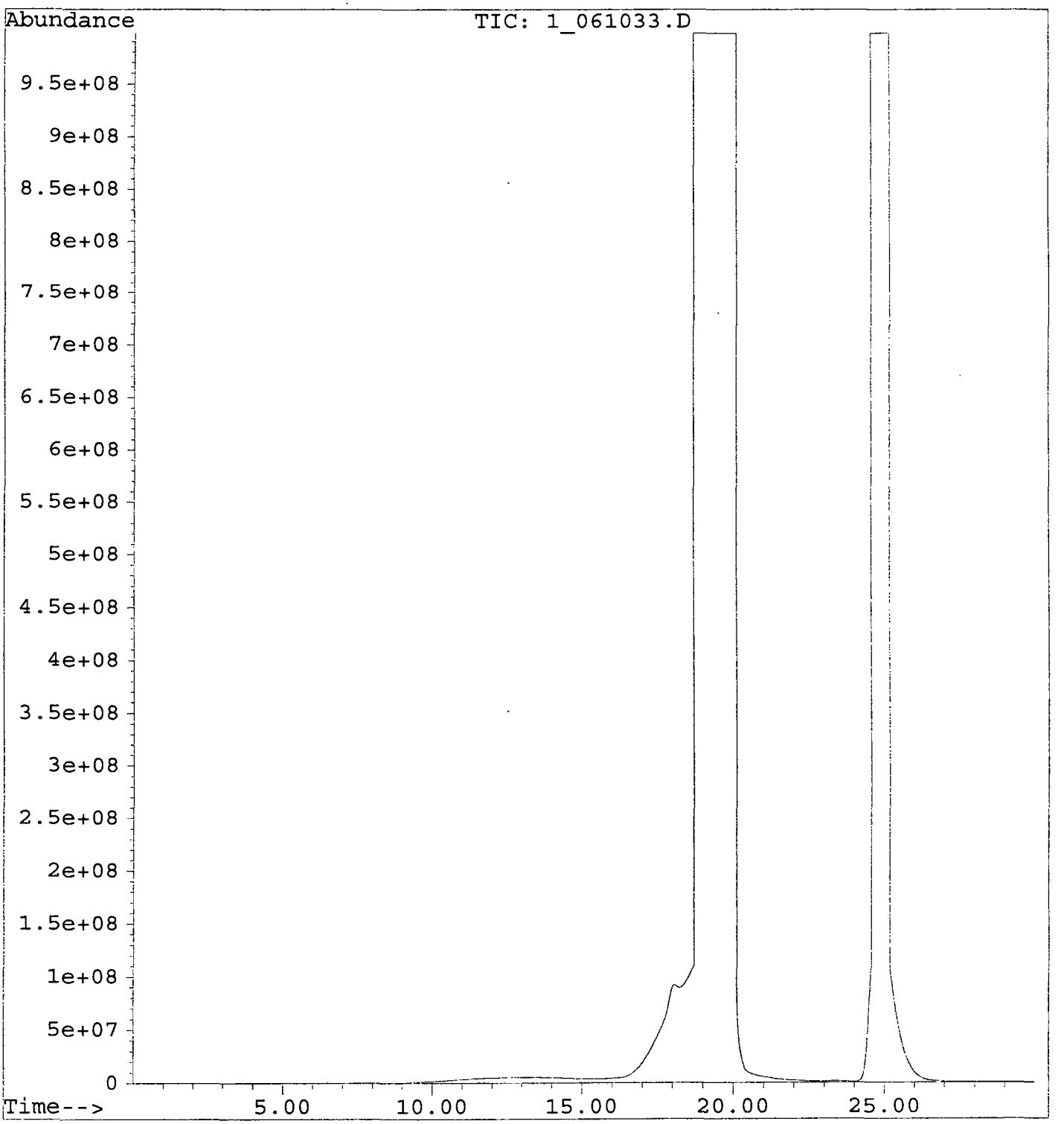
File : C:\HPCHEM\5\DATA\061001\1_061031.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 14:37 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 46721.50-E30S5 EPA
Misc Info : COL# 418002
Vial Number: 31



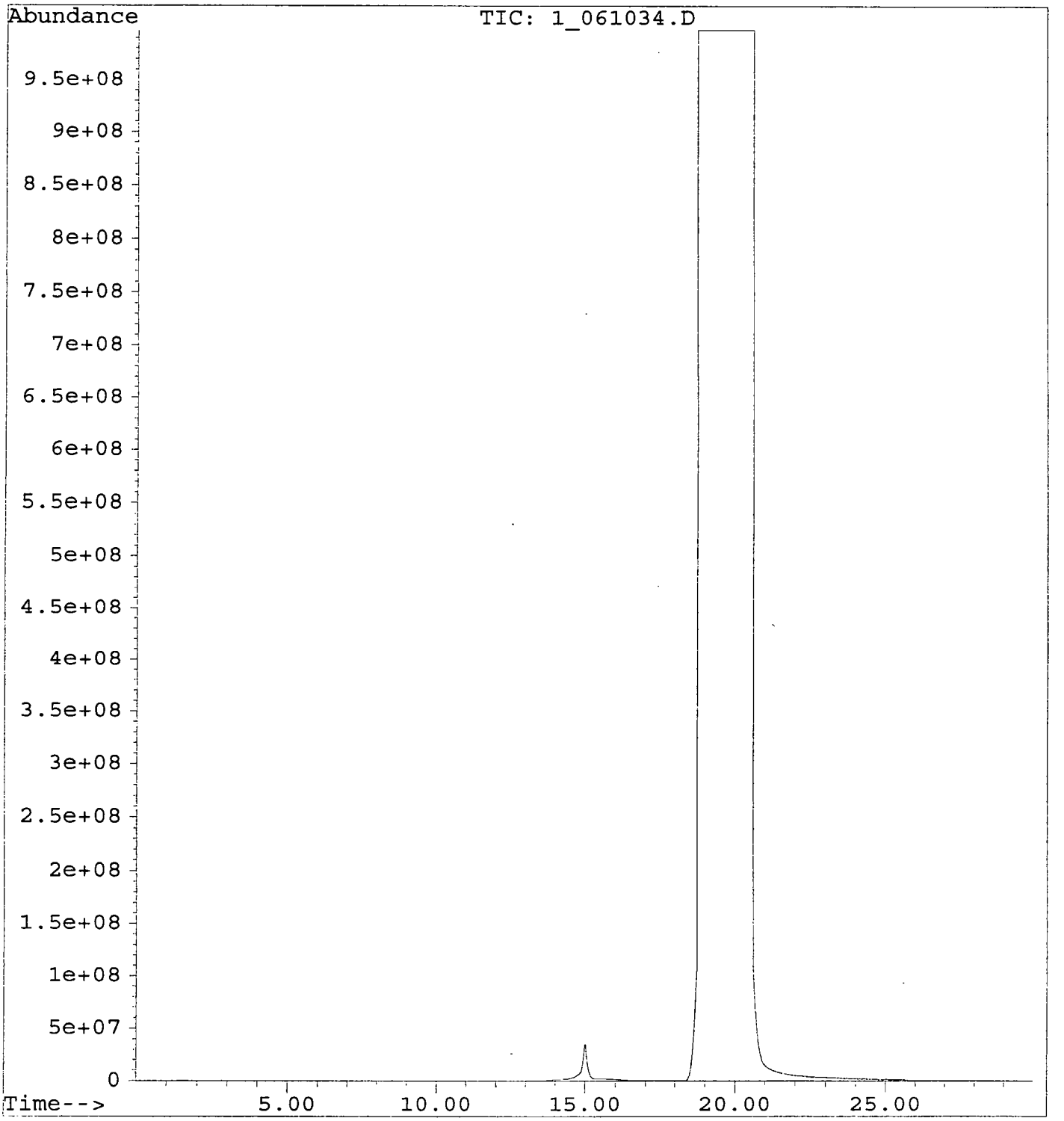
File : C:\HPCHEM\5\DATA\061001\1_061032.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 15:08 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 46721.51-MS-E30S5 EPA
Misc Info : COL# 418002
Vial Number: 32



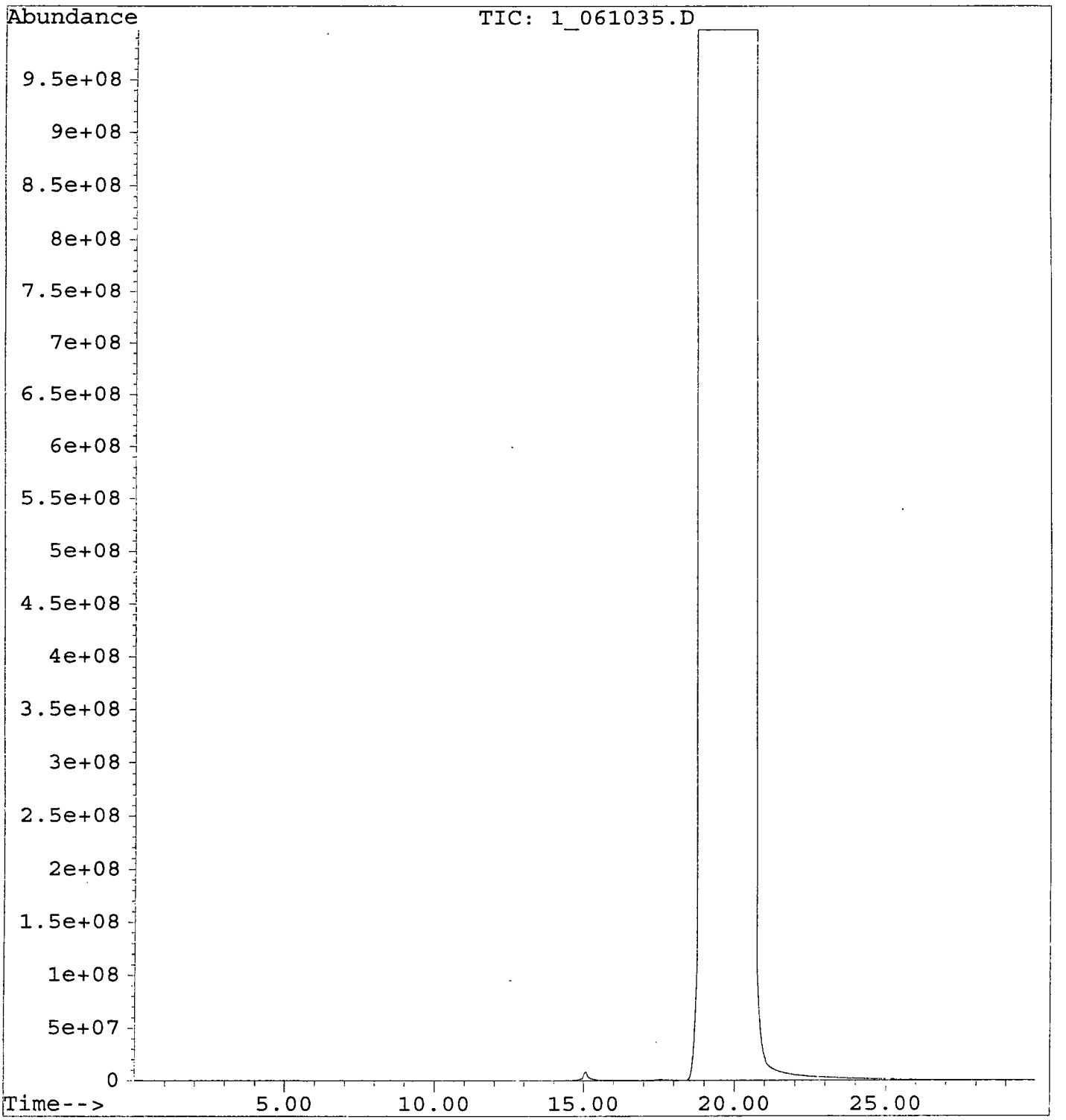
File : C:\HPCHEM\5\DATA\061001\1_061033.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 15:40 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 46721.52-MSD-E30S5 EPA
Misc Info : COL# 418002
Vial Number: 33



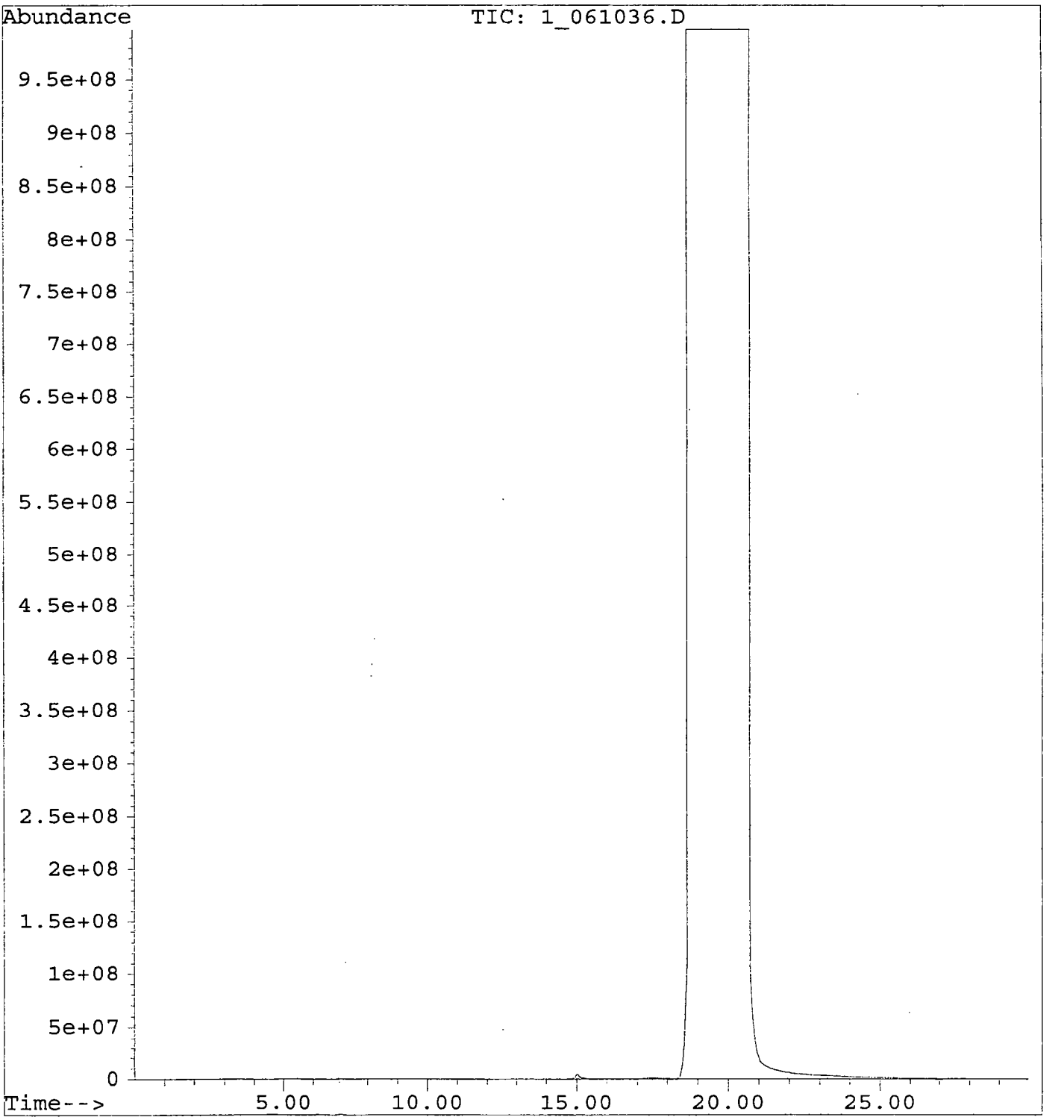
File : C:\HPCHEM\5\DATA\061001\1_061034.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 16:11 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 34



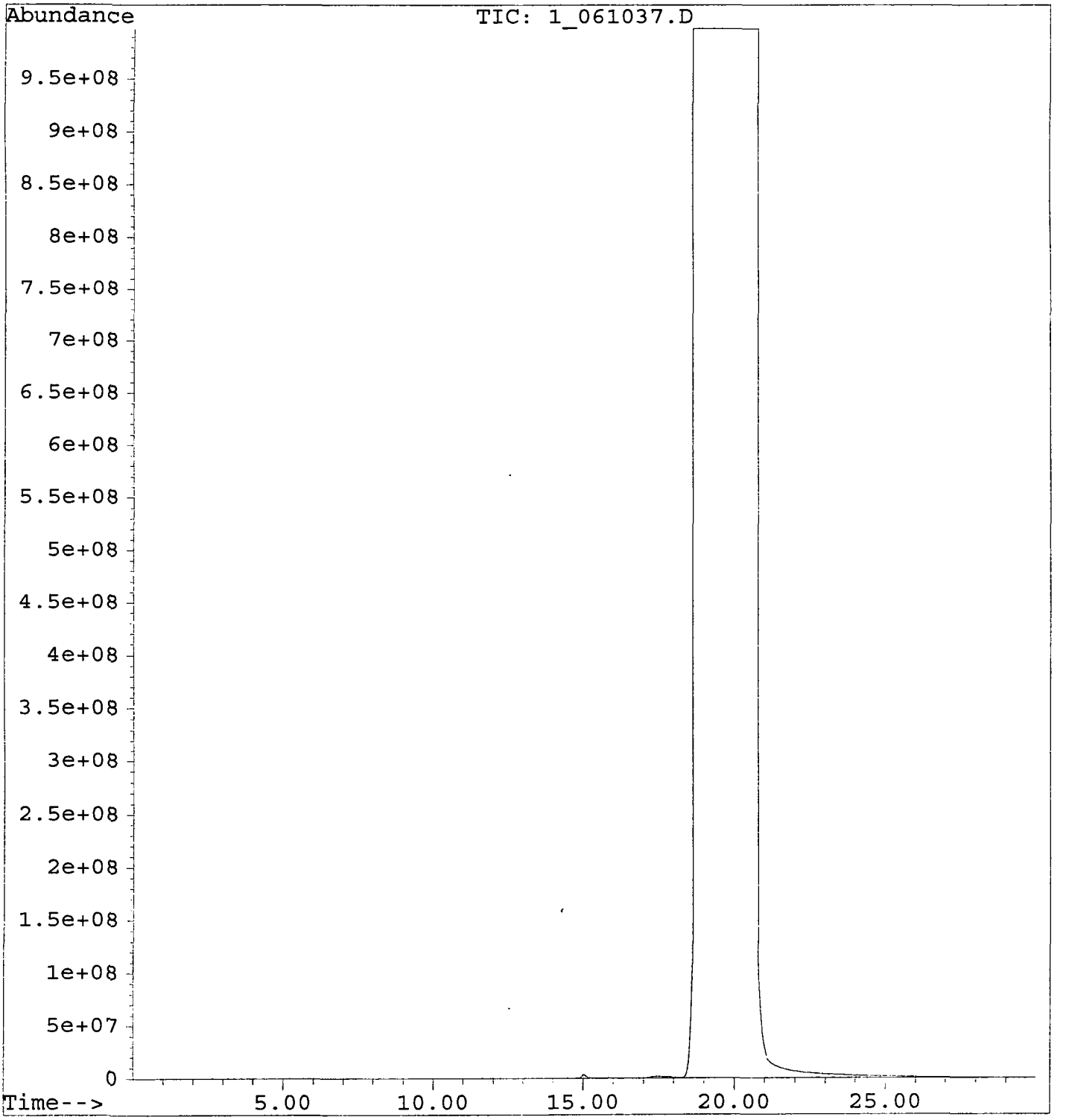
File : C:\HPCHEM\5\DATA\061001\1_061035.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 16:42 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 35



File : C:\HPCHEM\5\DATA\061001\1_061036.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 17:13 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 36

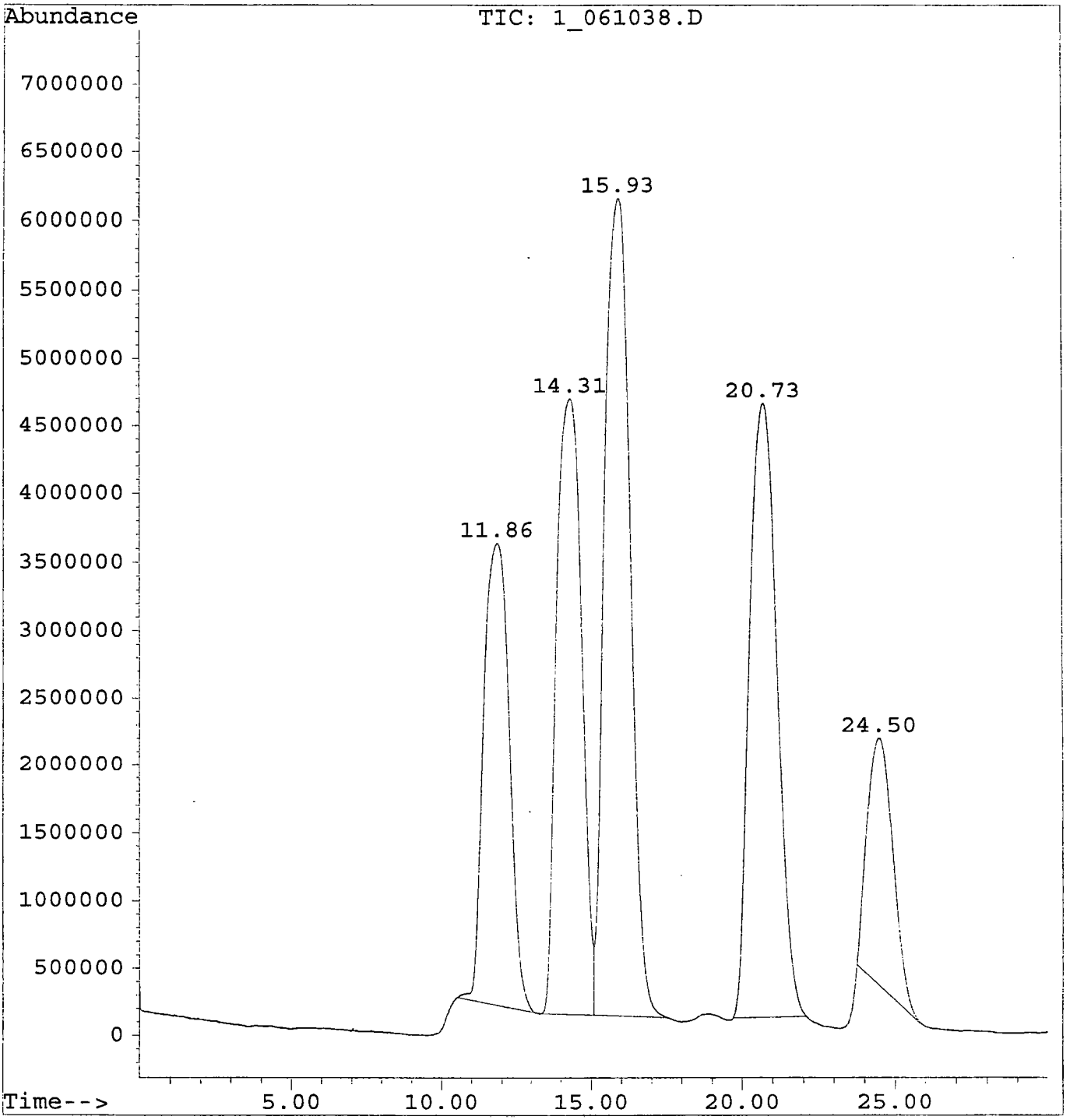


File : C:\HPCHEM\5\DATA\061001\1_061037.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 17:44 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 37



Data File : C:\HPCHEM\5\DATA\061001\1_061038.D
Acq On : 11 Jun 01 18:15
Sample : CAL STD (FINAL)
Misc : COL# 418002

Vial: 38
Operator: CD COL#
Inst : GPC1
Multiplr: 1.00



1) 11.86 = Corn Oil
2) 14.31 = Pthalate
3) 15.93 = Methoxychlor
4) 20.73 = Perylene
5) 24.50 = Sulfur

Chromatographic Resolution Report

Data File : C:\HPCHEM\5\DATA\061001\1_061038.D Vial: 38
Acq On : 11 Jun 01 18:15 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
11.865	14.314	100.00
14.314	15.928	88.83
15.928	20.727	100.00
20.727	24.495	100.00

Gel Permeation Chromatography (GPC) Run Log - GPC1

SWOK/AATS SWL-OE-102-16 Rev.#: 2.1 Fraction Collected: 45 mLs

Col. ID.: 418002 Protocol: GC699 Fraction: PEST Cycle: 15-9

Cal. Std. Page: Client: EPA Case# 29294

DATE/TIME	POS.	SAMPLE ID	FILE	COMMENT
06/10/01 23:09	1	CAL STD (INITIAL)	1_061001	
06/10/01 23:40	2	SB	1_061002	
06/11/01 00:11	3	SB	1_061003	
06/11/01 00:42	4	SB	1_061004	
06/11/01 01:12	5	SB	1_061005	
06/11/01 01:44	6	SB#061001A (PEST)	1_061006	
06/11/01 02:14	7	SB#061001B (PEST)	1_061007	
06/11/01 02:45	8	BL0609SA EPA 29294	1_061008	
06/11/01 03:16	9	BB0609SA EPA 29294	1_061009	
06/11/01 03:48	10	LC0609SA EPA 29294	1_061010	
06/11/01 04:18	11	LD0609SA EPA 29294	1_061011	
06/11/01 04:49	12	46732.05-E30T3 EPA	1_061012	
06/11/01 05:20	13	46732.03-E30T1 EPA	1_061013	
06/11/01 05:51	14	46732.04-E30T2 EPA	1_061014	
06/11/01 06:22	15	46732.01-E30S9 EPA	1_061015	
06/11/01 06:53	16	46732.07-E30T6 EPA	1_061016	
06/11/01 07:23	17	46732.10-E30T9 EPA	1_061017	
06/11/01 07:54	18	46732.13-E30W2 EPA	1_061018	
06/11/01 08:26	19	46721.49-E30S4 EPA	1_061019	
06/11/01 08:57	20	46732.11-E30W0 EPA	1_061020	
06/11/01 09:27	21	46732.12-E30W1 EPA	1_061021	

06/21
Verification Signature/Date

4/21/01
Analyst Signature/Date

Book: OE-102-16-RUN-18 Page No.: 87

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
06/11/01 09:58	22	46732.14-E30W3 EPA	1_061022	
06/11/01 10:29	23	46732.15-E30W4 EPA	1_061023	
06/11/01 11:00	24	46721.54-E30S7 EPA	1_061024	
06/11/01 11:31	25	46721.53-E30S6 EPA	1_061025	
06/11/01 12:03	26	46732.02-E30T0 EPA	1_061026	
06/11/01 12:33	27	46732.06-E30T5 EPA	1_061027	
06/11/01 13:04	28	46732.08-E30T7 EPA	1_061028	
06/11/01 13:35	29	46732.09-E30T8 EPA	1_061029	
06/11/01 14:06	30	46721.55-E30S8 EPA	1_061030	
06/11/01 14:37	31	46721.50-E30S5 EPA	1_061031	
06/11/01 15:08	32	46721.51-MS-E30S5 EPA	1_061032	
06/11/01 15:40	33	46721.52-MSD-E30S5 EPA	1_061033	
06/11/01 16:11	34	SB	1_061034	
06/11/01 16:42	35	SB	1_061035	
06/11/01 17:13	36	SB	1_061036	
06/11/01 17:44	37	SB	1_061037	
06/11/01 18:15	38	CAL STD (FINAL)	1_061038	

Compound	Initial RT	Final RT	% Difference
Phthalate	14.19	14.31	0.84
Methoxychlor	15.79	15.93	0.89
Perylene	20.59	20.73	0.68

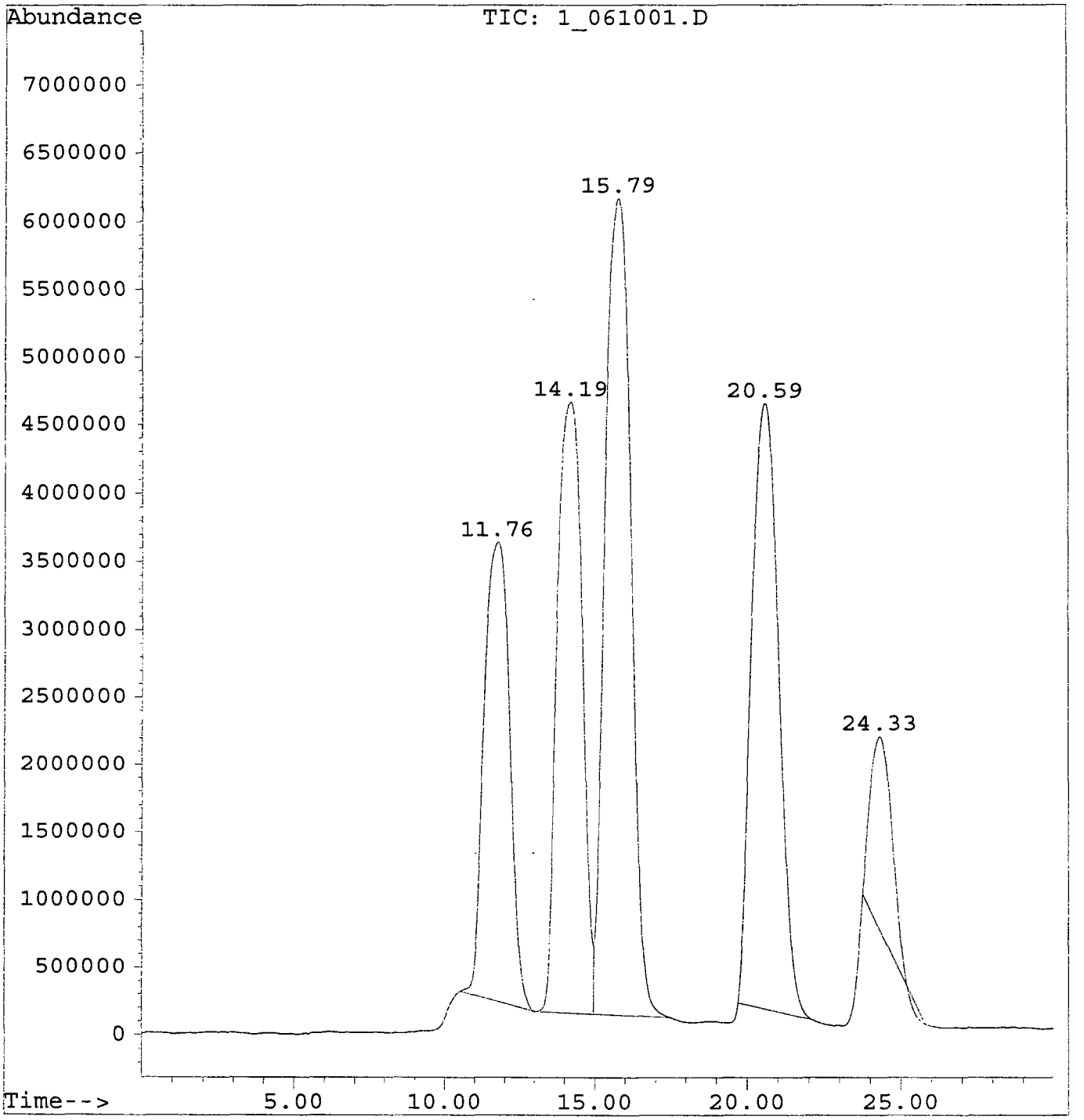
06/21 — Verification Signature/Date

6/21/01 — Analyst Signature/Date

Book: OE-102-16-RUN-18 Page No.: 88

Data File : C:\HPCHEM\5\DATA\061001\1_061001.D
Acq On : 10 Jun 01 11:09 PM
Sample : CAL STD (INITIAL)
Misc : COL# 418002

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



1) 11.76 = Corn Oil
2) 14.19 = Pthalate
3) 15.79 = Methoxychlor
4) 20.59 = Perylene
5) 24.33 = Sulfur

Chromatographic Resolution Report

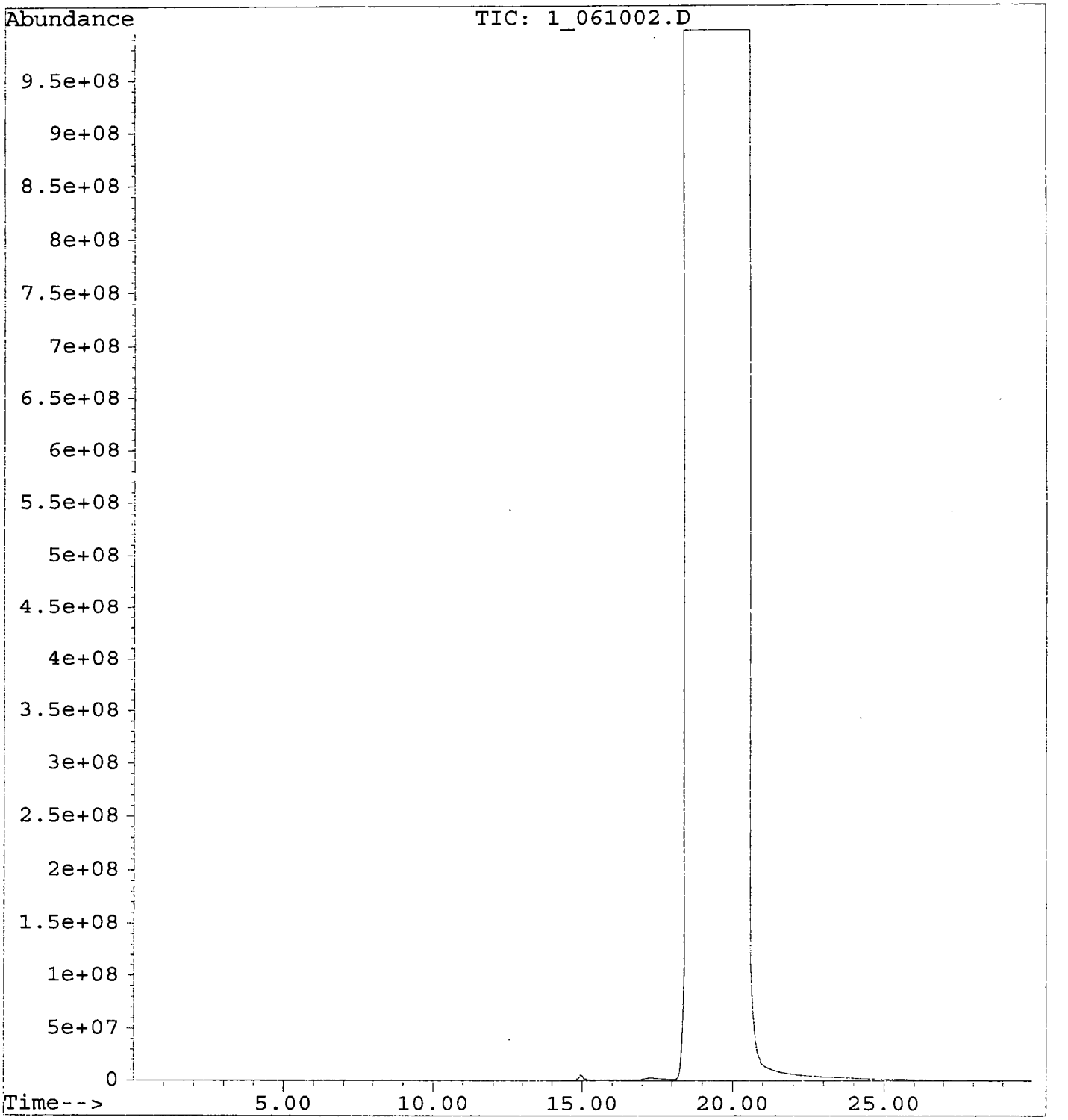
Data File : C:\HPCHEM\5\DATA\061001\1_061001.D
Acq On : 10 Jun 01 23:09
Sample : CAL STD (INITIAL)
Misc : COL# 418002

Vial: 1
Operator: CD COL# 4
Inst : GPC1
Multiplr: 1.00

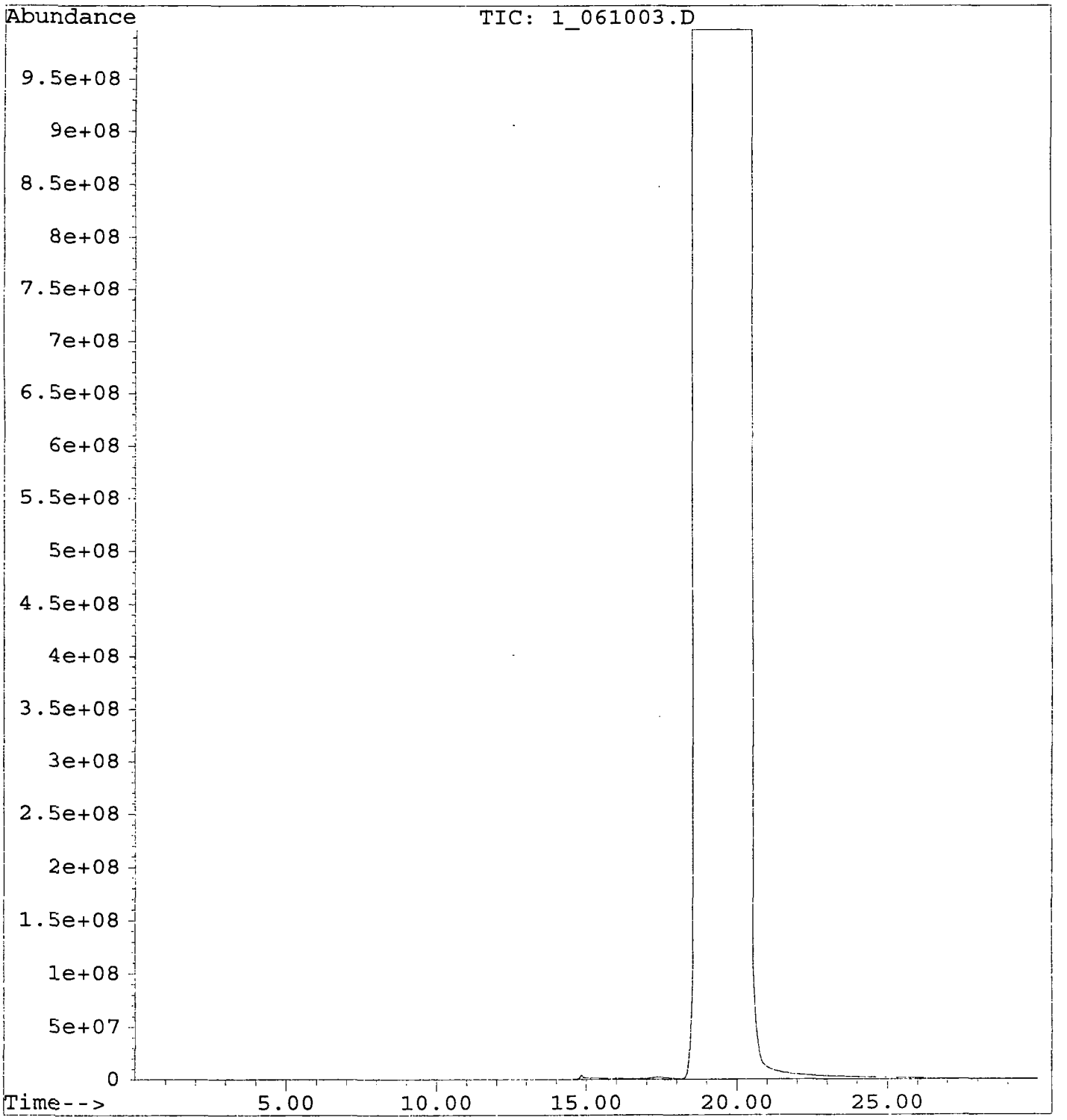
Method : C:\HPCHEM\5\METHODS\GPC.M
Title :

RT#1	RT#2	Resolution
11.759	14.195	100.00
14.195	15.793	88.62
15.793	20.591	100.00
20.591	24.327	100.00

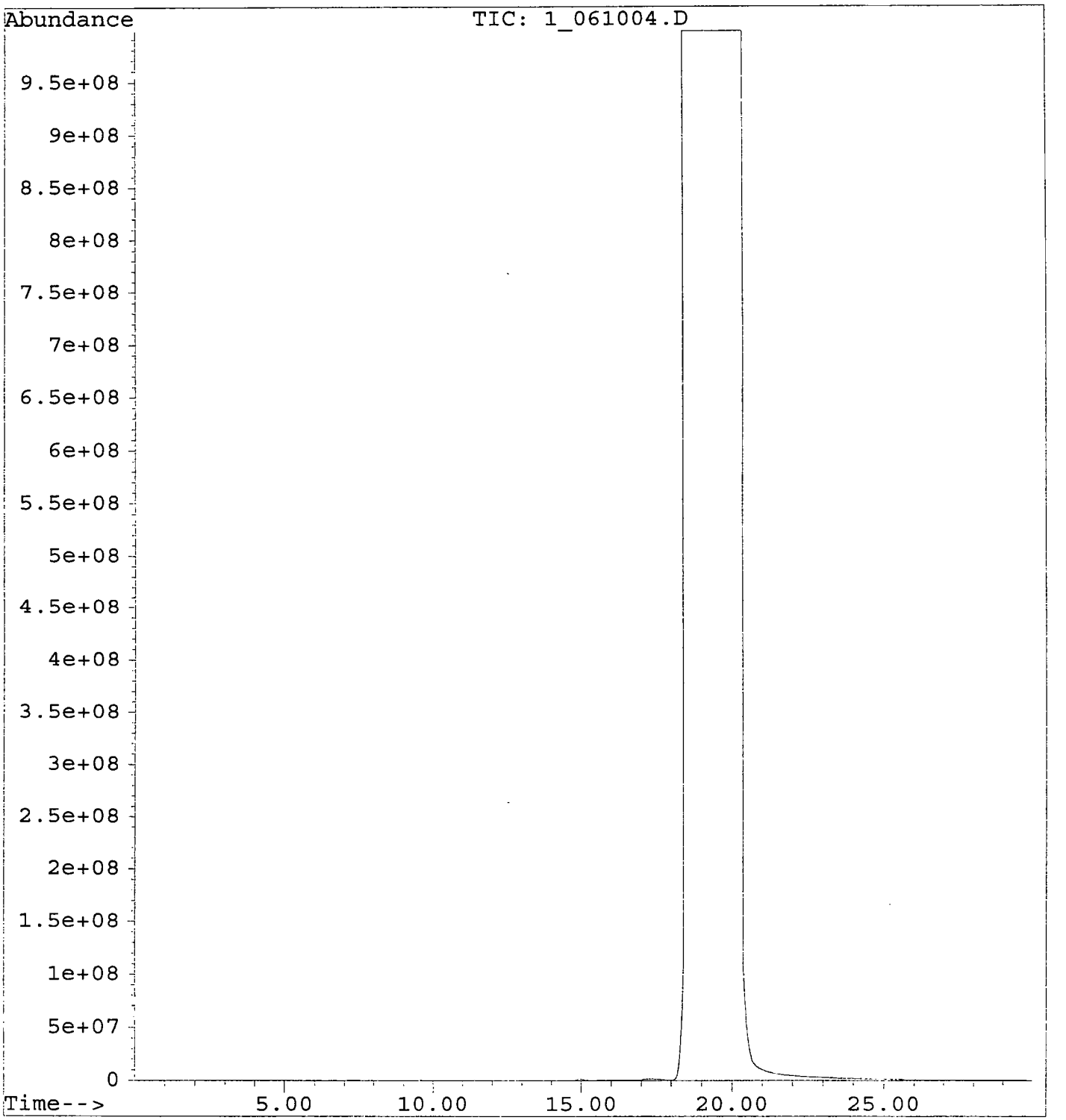
File : C:\HPCHEM\5\DATA\061001\1_061002.D
Operator : CD COL# 418002
Acquired : 10 Jun 01 23:40 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 2



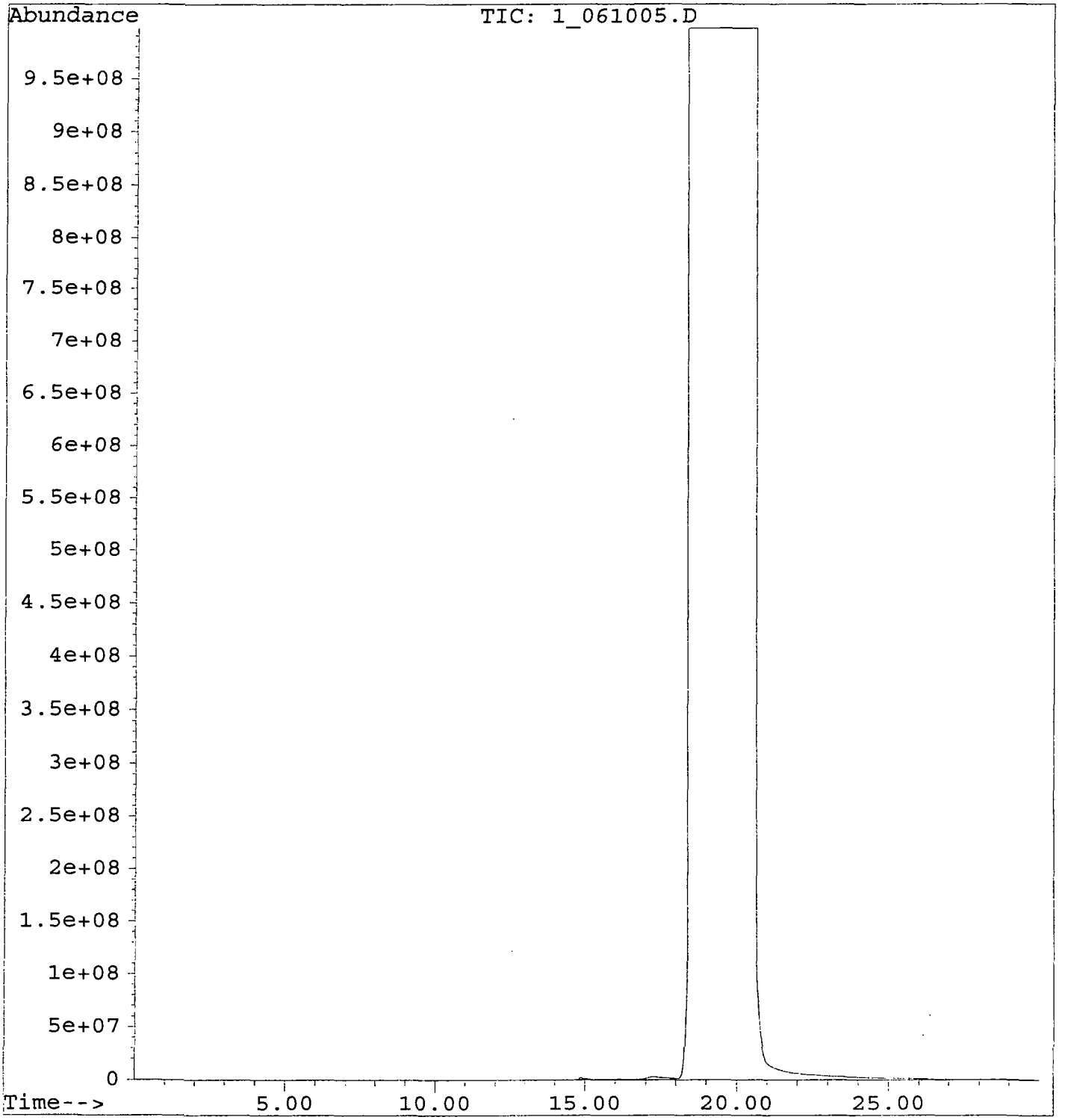
File : C:\HPCHEM\5\DATA\061001\1_061003.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 00:11 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 3



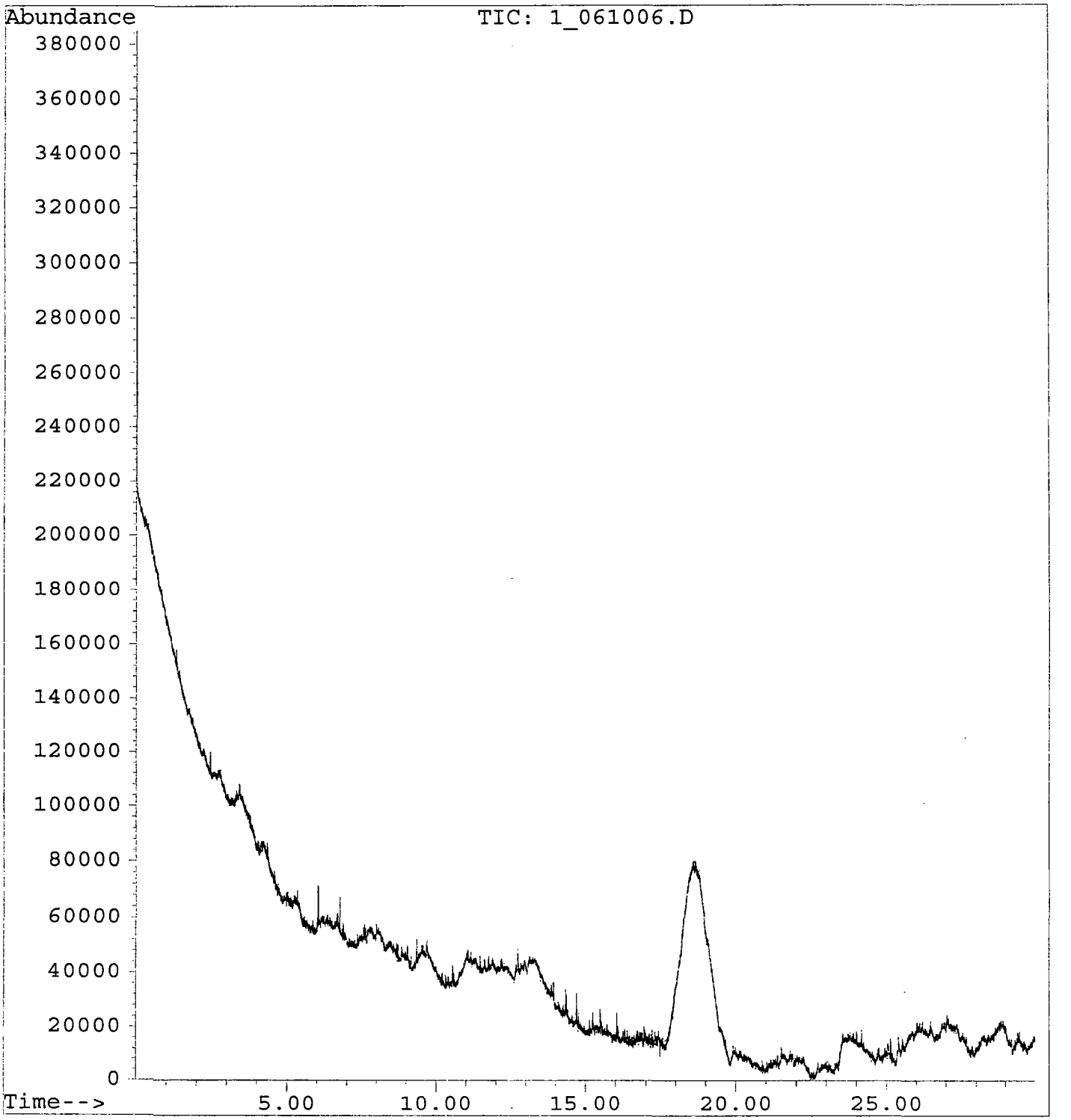
File : C:\HPCHEM\5\DATA\061001\1_061004.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 00:42 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 4



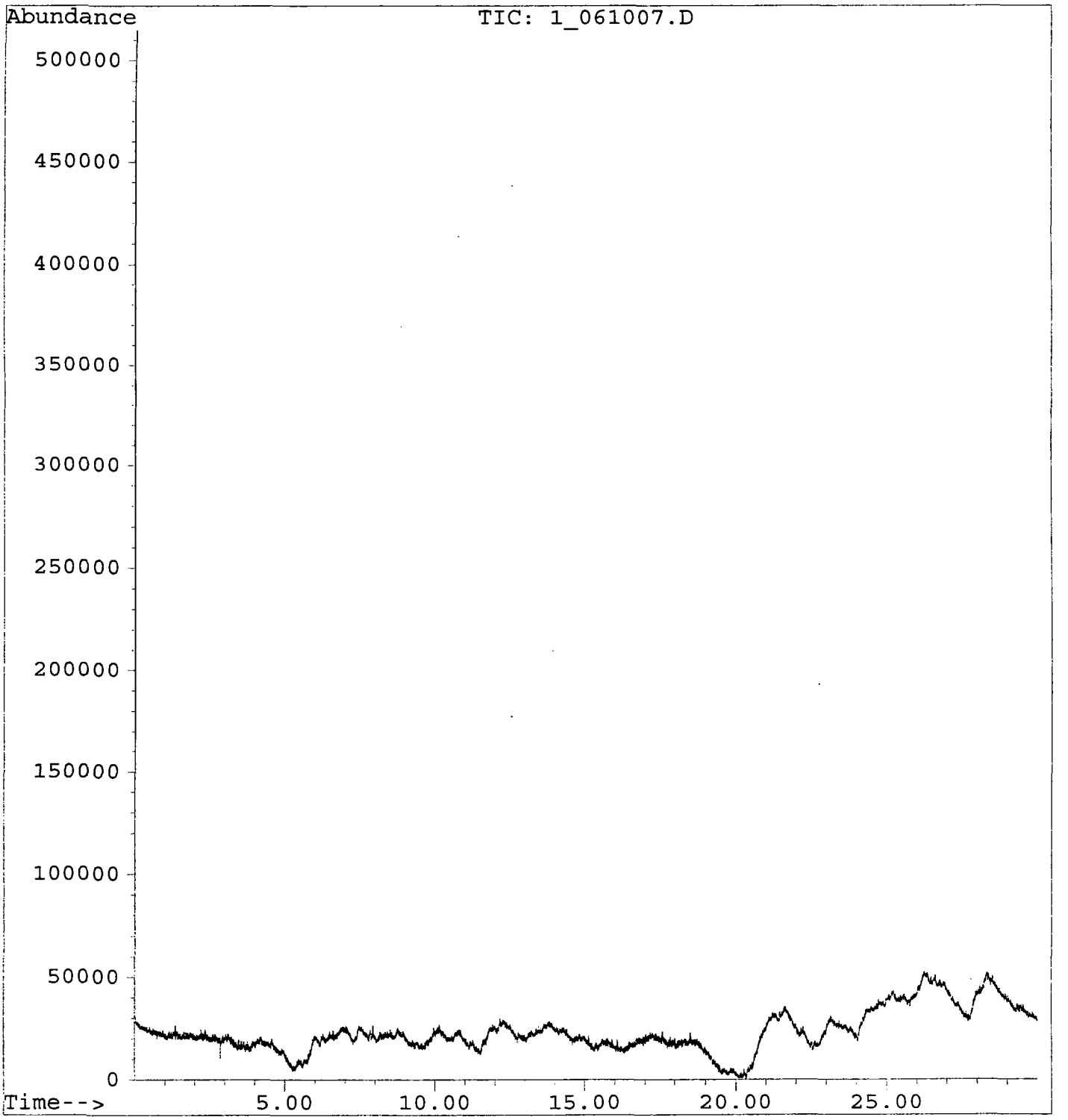
File : C:\HPCHEM\5\DATA\061001\1_061005.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 01:12 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 5



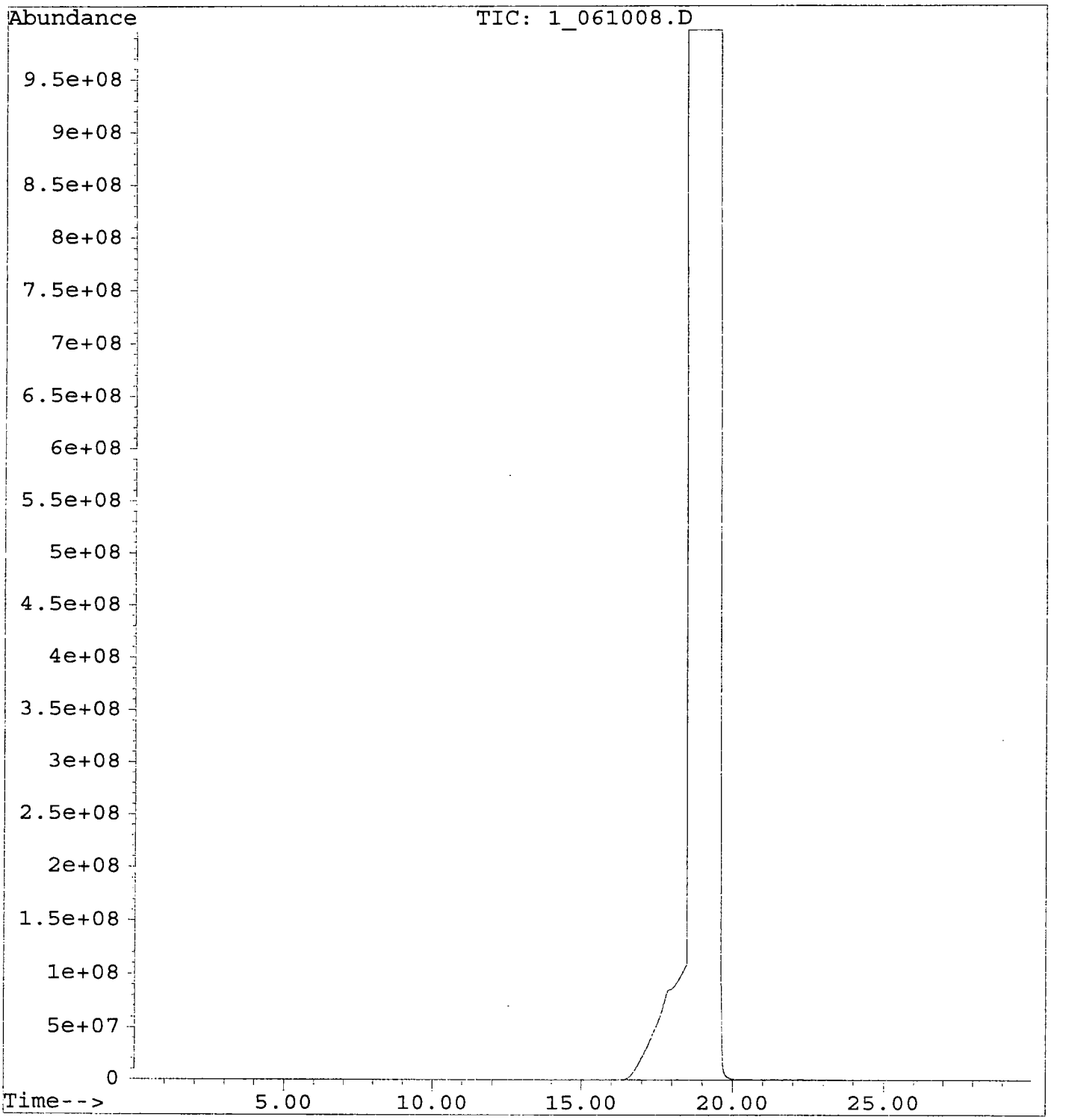
File : C:\HPCHEM\5\DATA\061001\1_061006.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 01:44 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB#061001A (PEST)
Misc Info : COL# 418002
Vial Number: 6



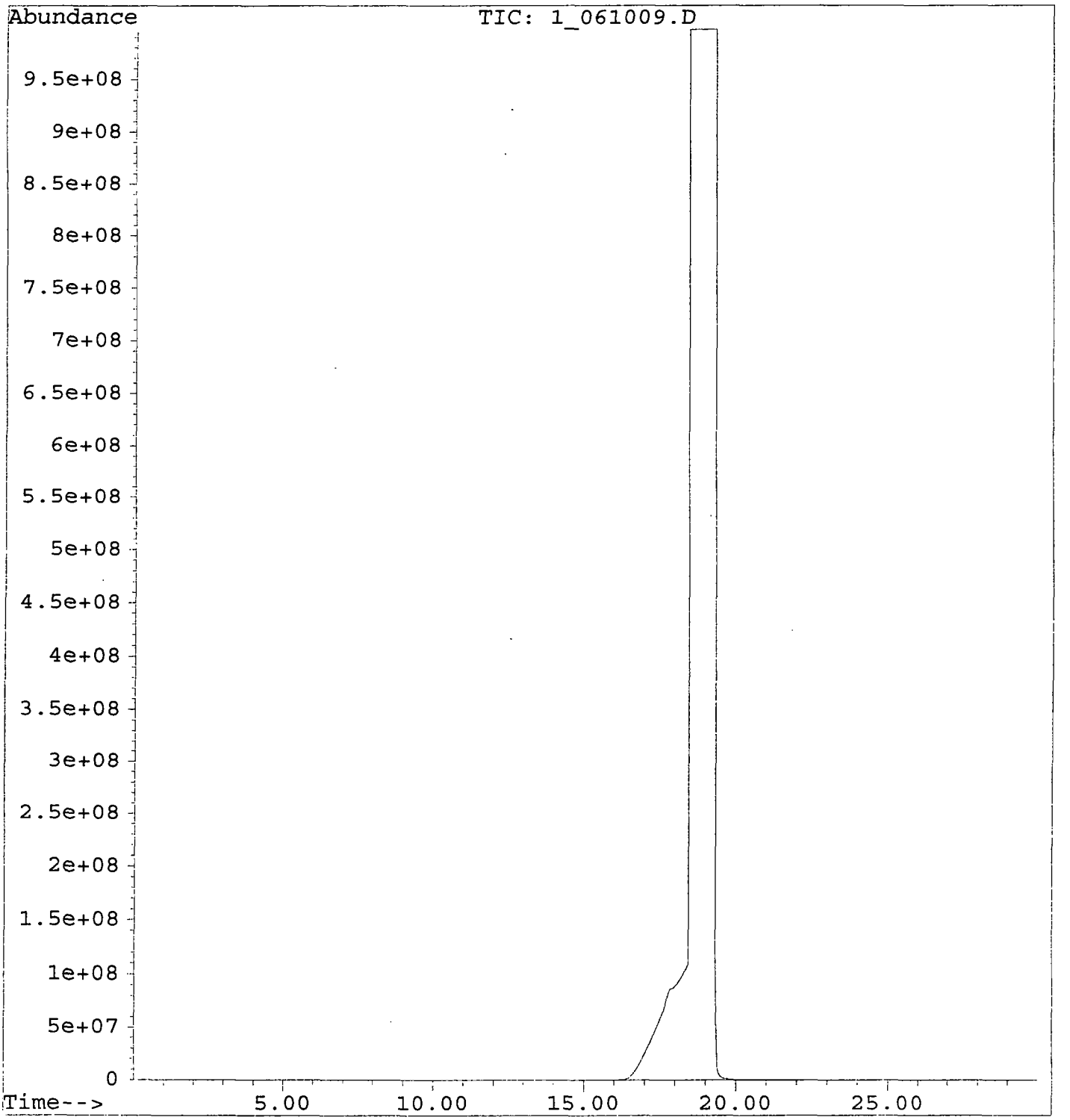
File : C:\HPCHEM\5\DATA\061001\1_061007.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 02:14 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB#061001B (PEST)
Misc Info : COL# 418002
Vial Number: 7



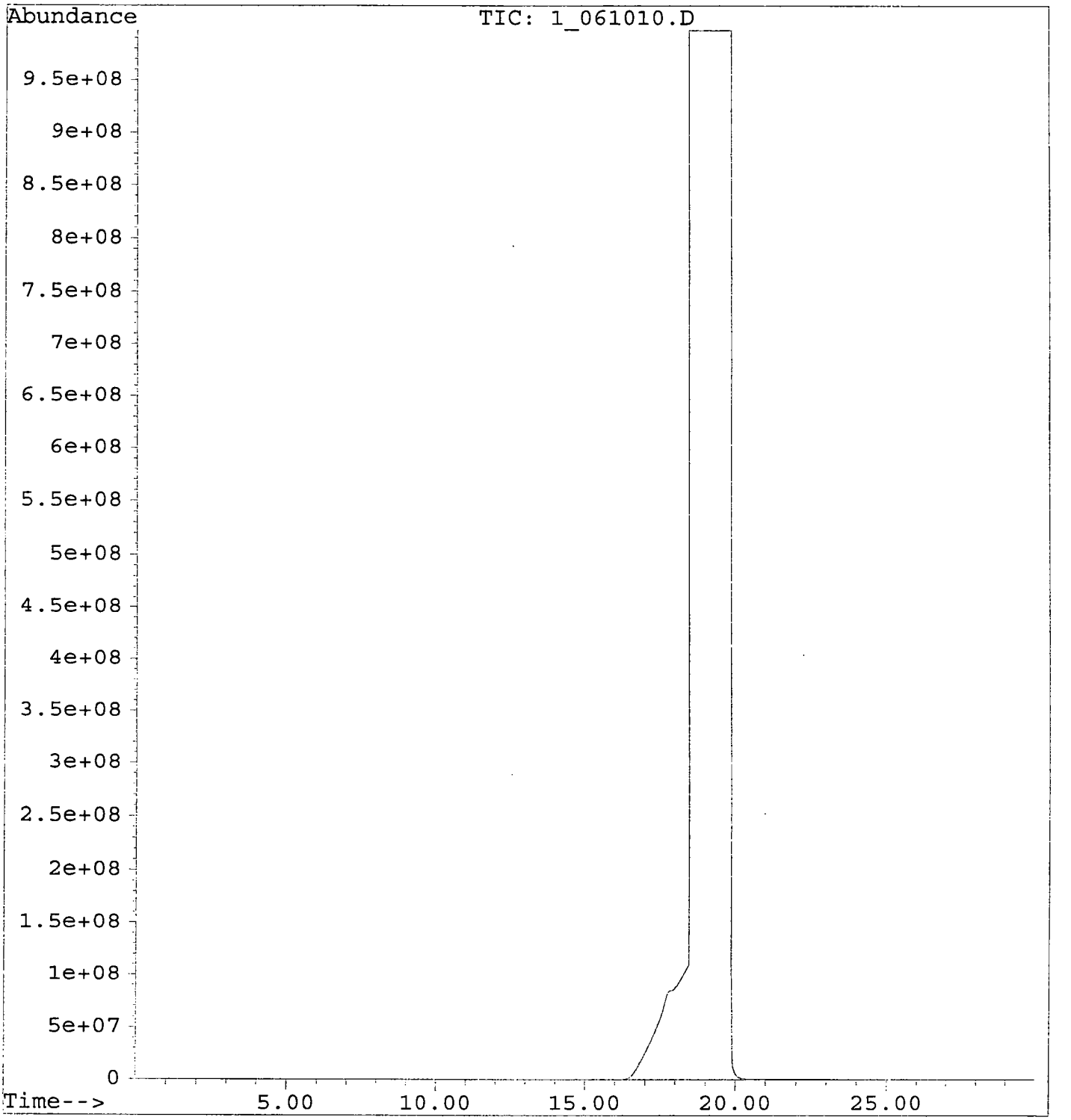
File : C:\HPCHEM\5\DATA\061001\1_061008.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 02:45 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: BL0609SA EPA 29294
Misc Info : COL# 418002
Vial Number: 8



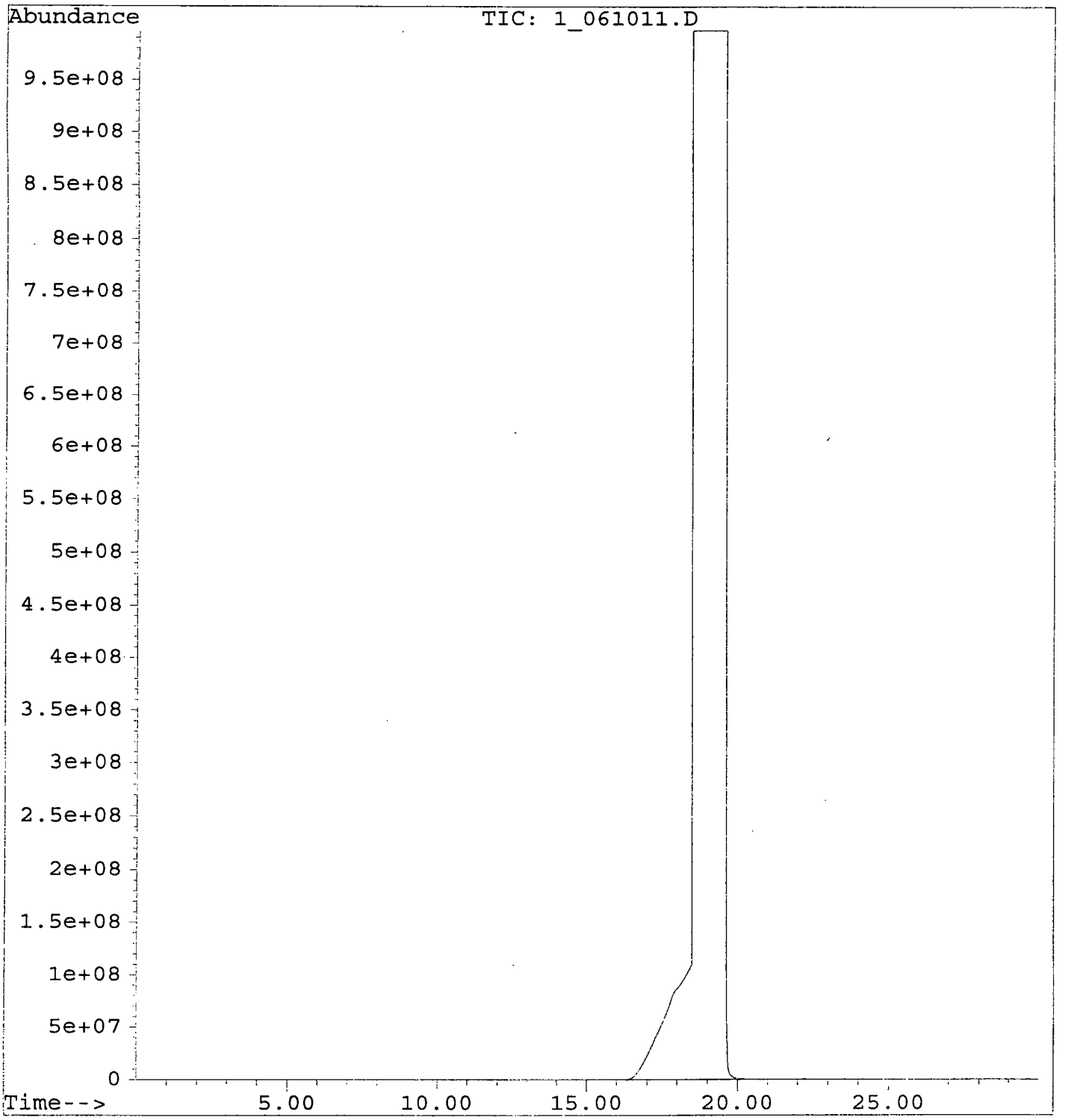
File : C:\HPCHEM\5\DATA\061001\1_061009.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 03:16 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: BB0609SA EPA 29294
Misc Info : COL# 418002
Vial Number: 9



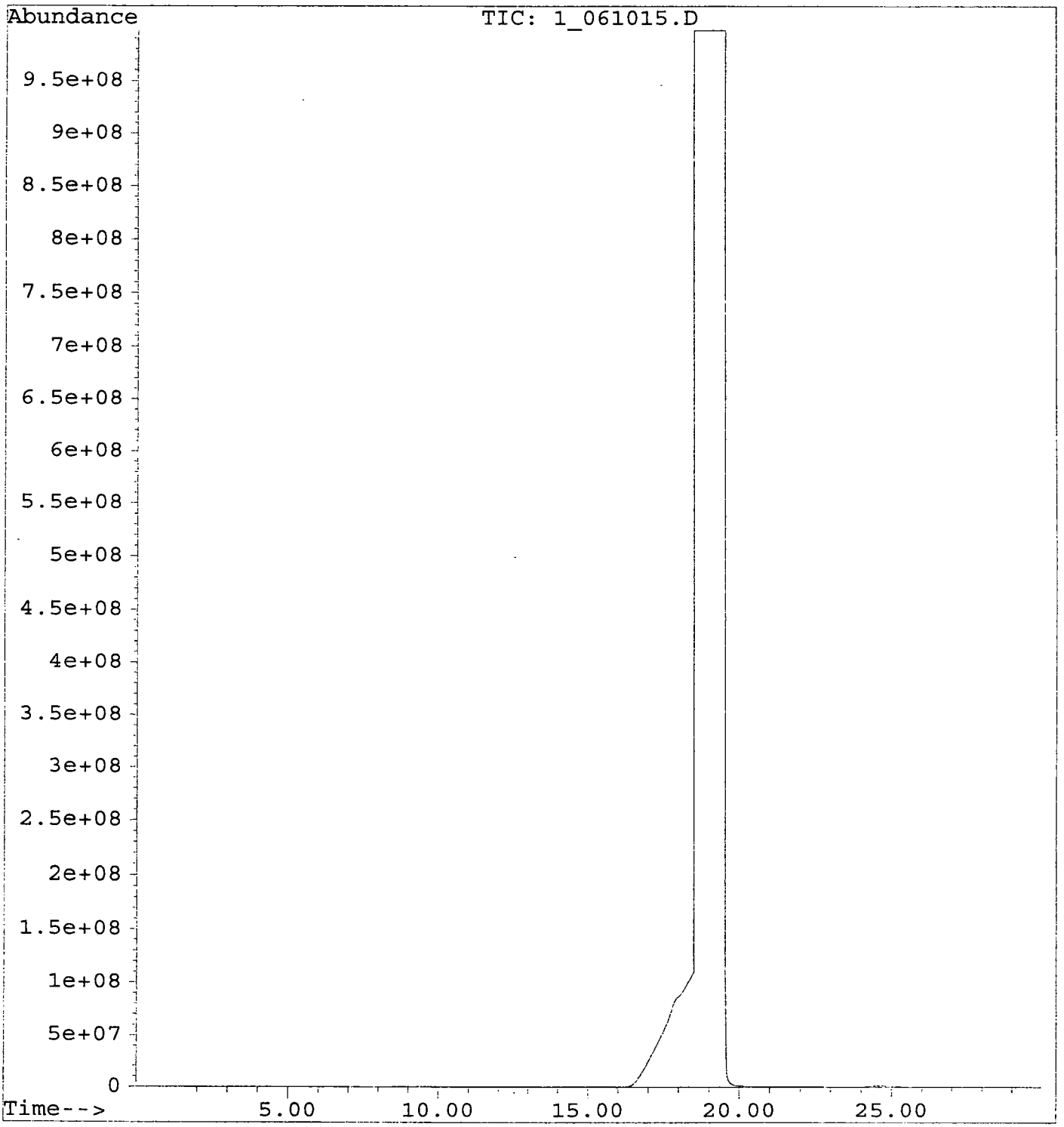
File : C:\HPCHEM\5\DATA\061001\1_061010.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 03:48 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: LC0609SA EPA 29294
Misc Info : COL# 418002
Vial Number: 10



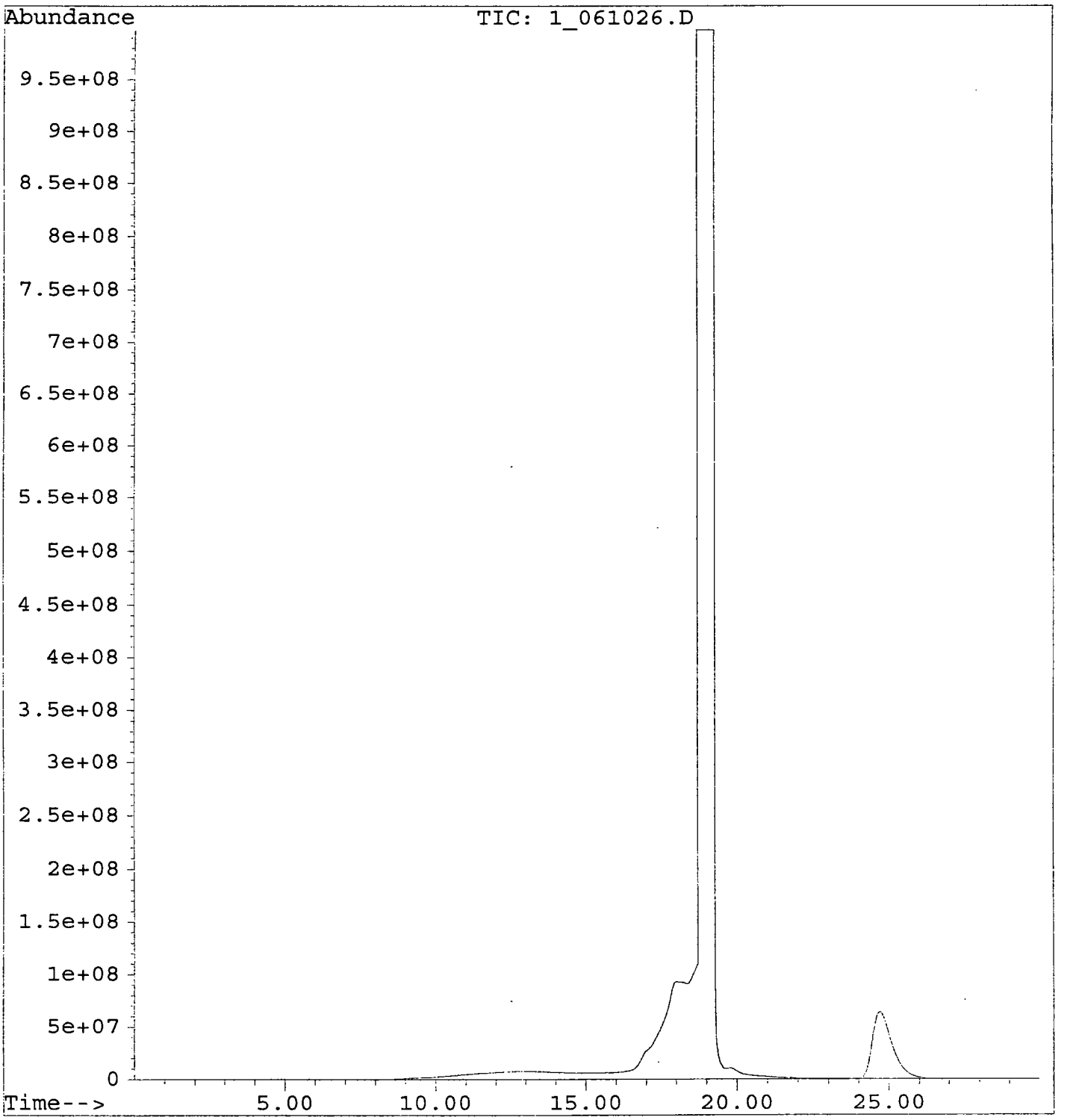
File : C:\HPCHEM\5\DATA\061001\1_061011.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 04:18 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: LD0609SA EPA 29294
Misc Info : COL# 418002
Vial Number: 11



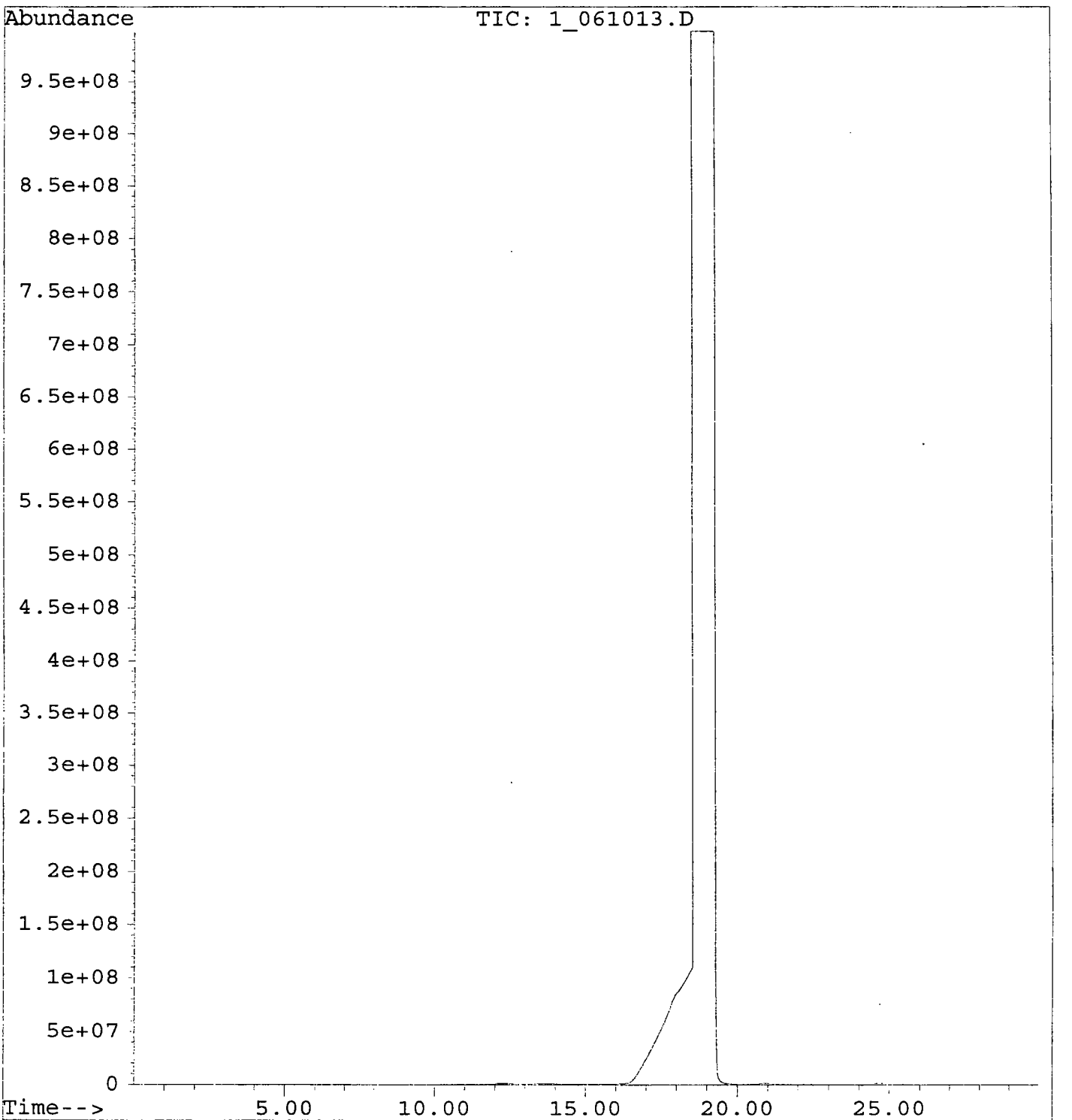
File : C:\HPCHEM\5\DATA\061001\1_061015.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 06:22 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 46732.01-E30S9 EPA
Misc Info : COL# 418002
Vial Number: 15



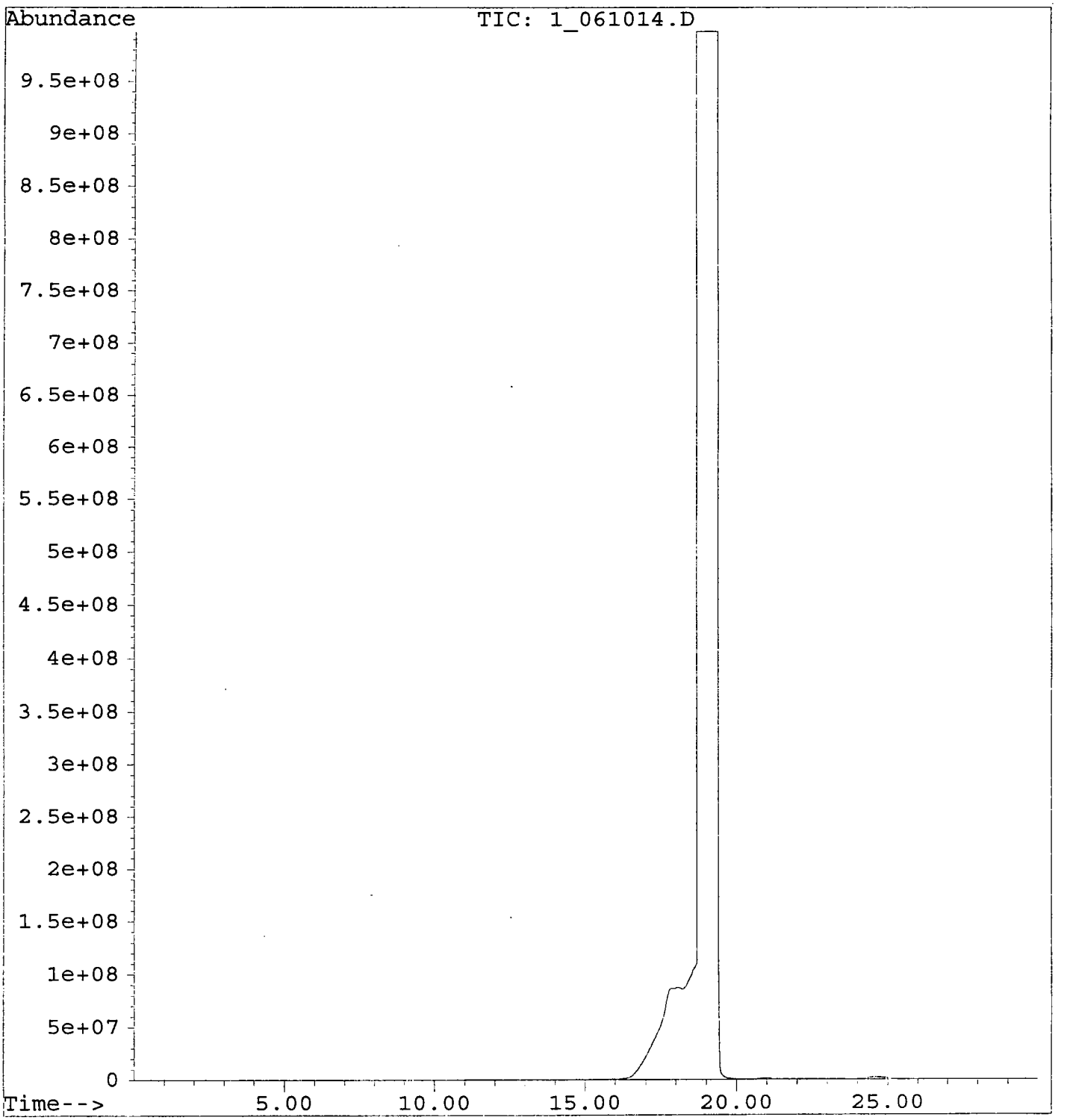
File : C:\HPCHEM\5\DATA\061001\1_061026.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 12:03 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 46732.02-E30T0 EPA
Misc Info : COL# 418002
Vial Number: 26



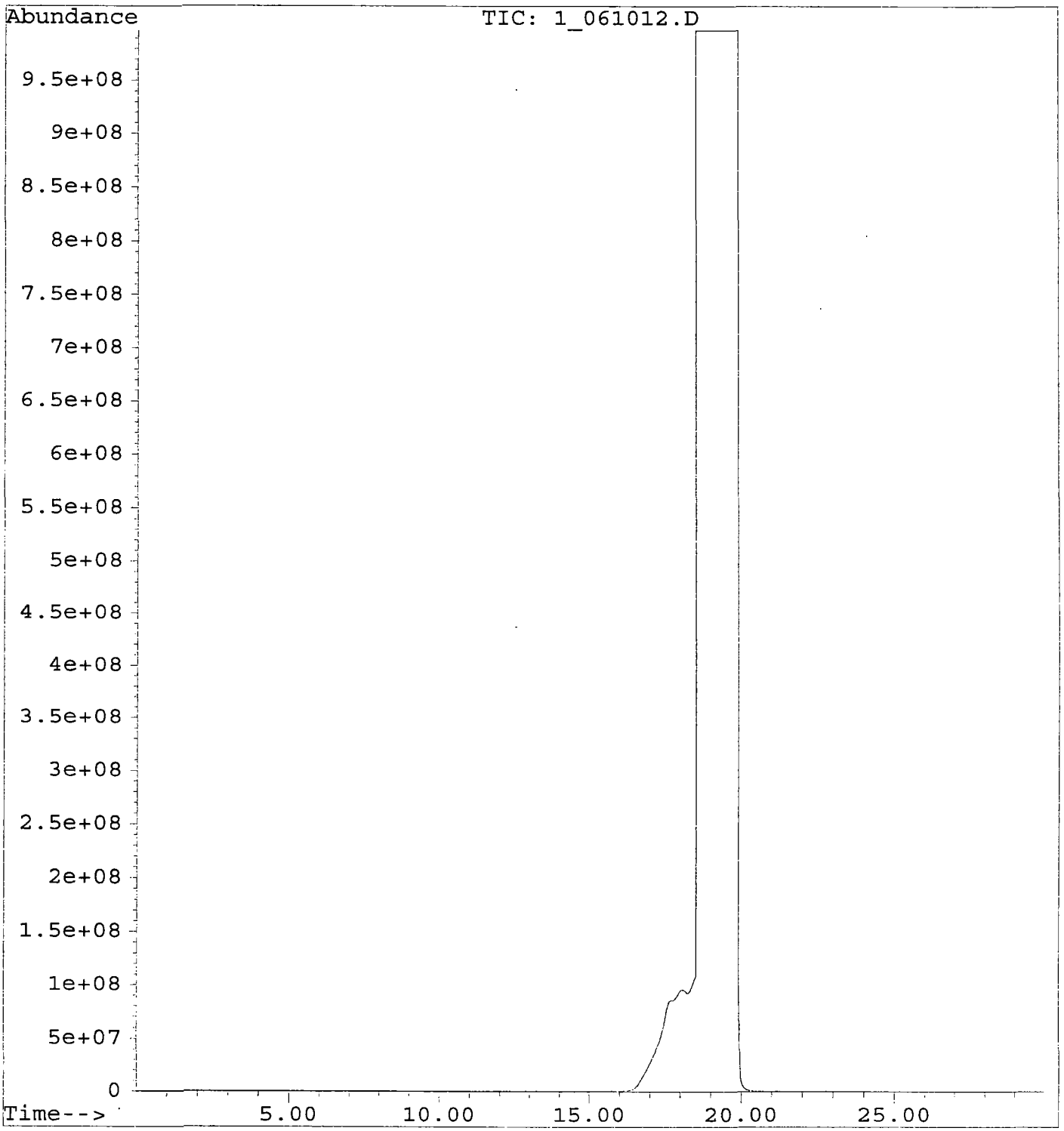
File : C:\HPCHEM\5\DATA\061001\1_061013.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 05:20 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 46732.03-E30T1 EPA
Misc Info : COL# 418002
Vial Number: 13



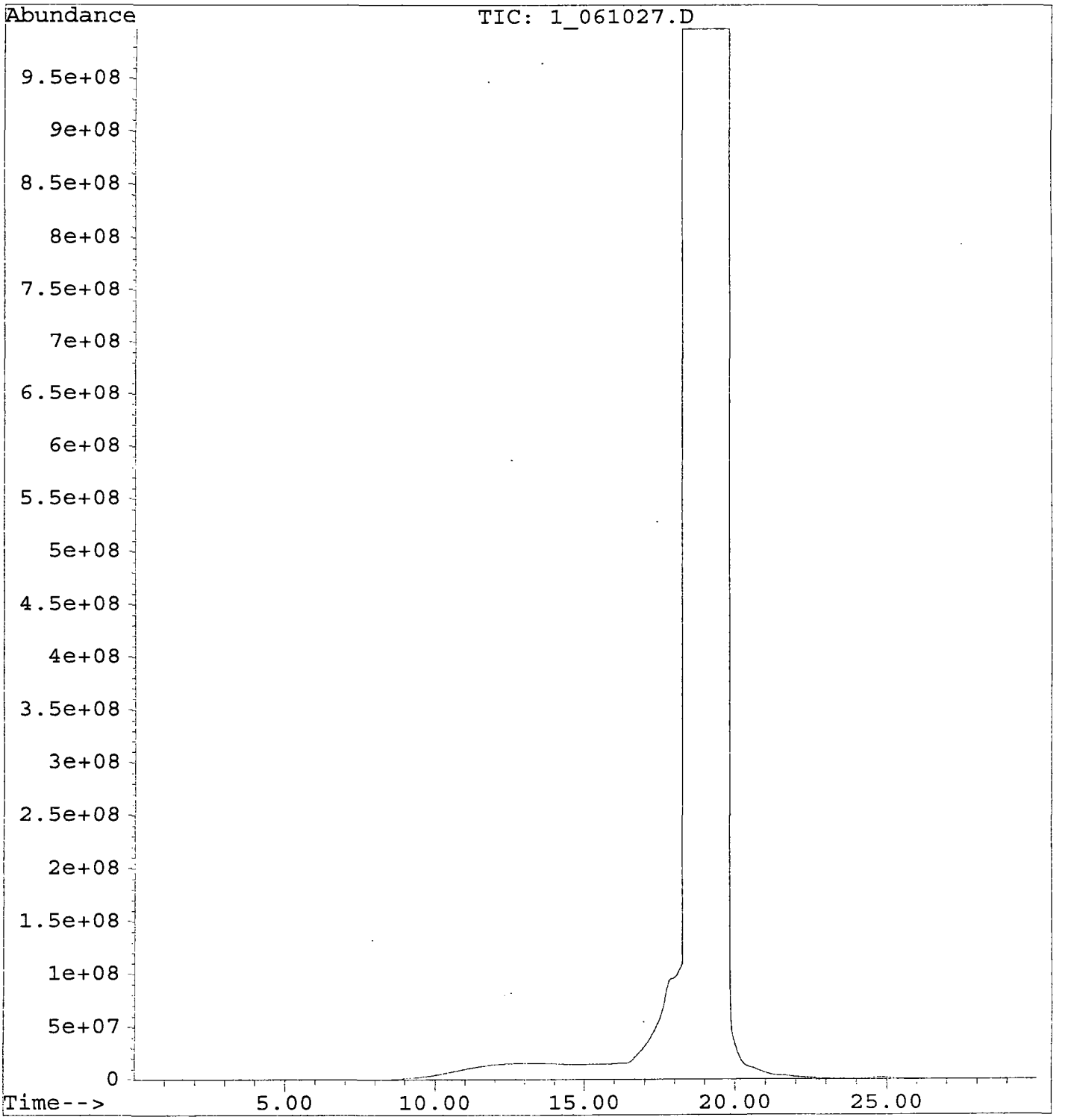
File : C:\HPCHEM\5\DATA\061001\1_061014.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 05:51 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 46732.04-E30T2 EPA
Misc Info : COL# 418002
Vial Number: 14



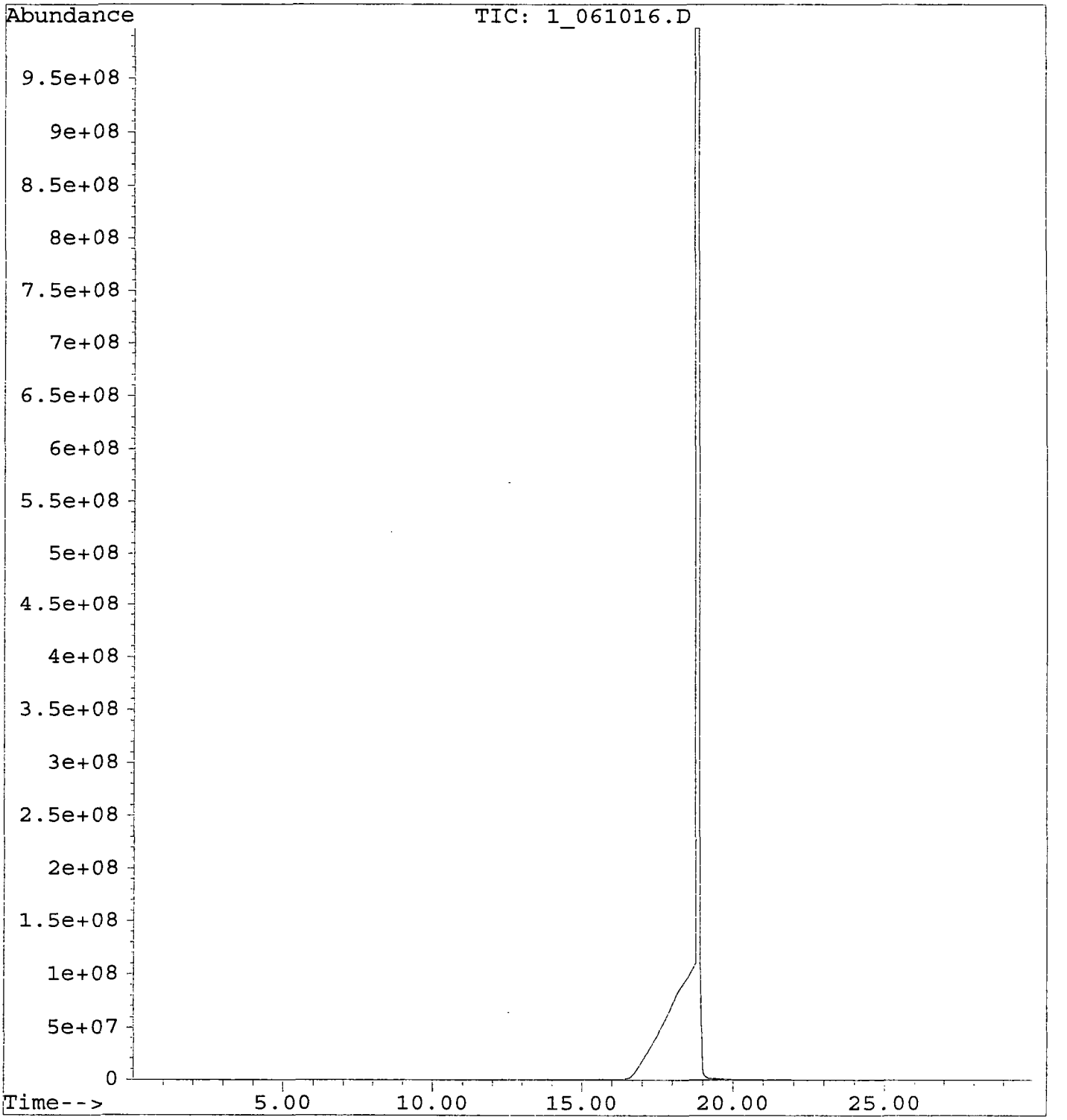
File : C:\HPCHEM\5\DATA\061001\1_061012.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 04:49 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 46732.05-E30T3 EPA
Misc Info : COL# 418002
Vial Number: 12



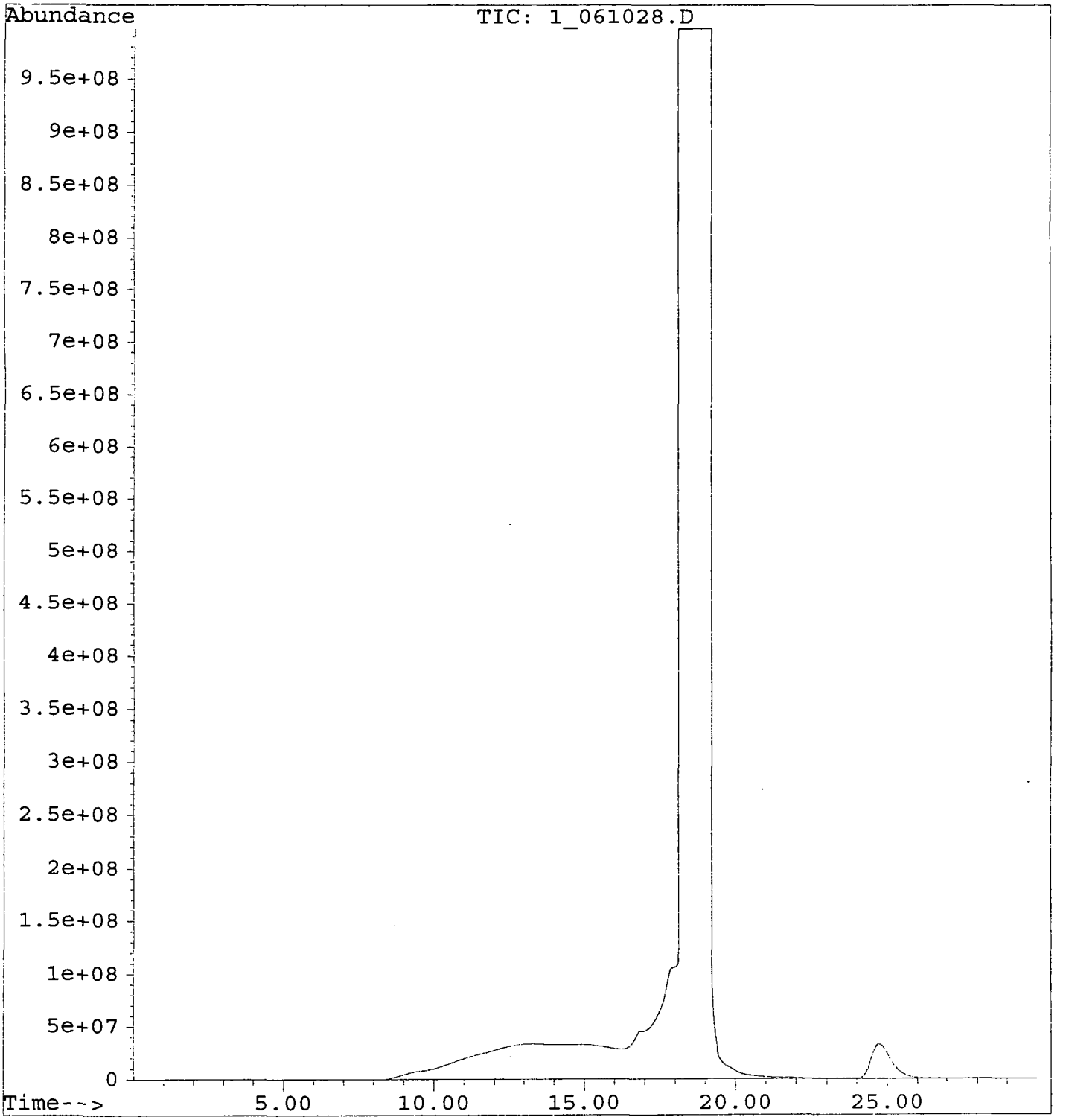
File : C:\HPCHEM\5\DATA\061001\1_061027.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 12:33 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 46732.06-E30T5 EPA
Misc Info : COL# 418002
Vial Number: 27



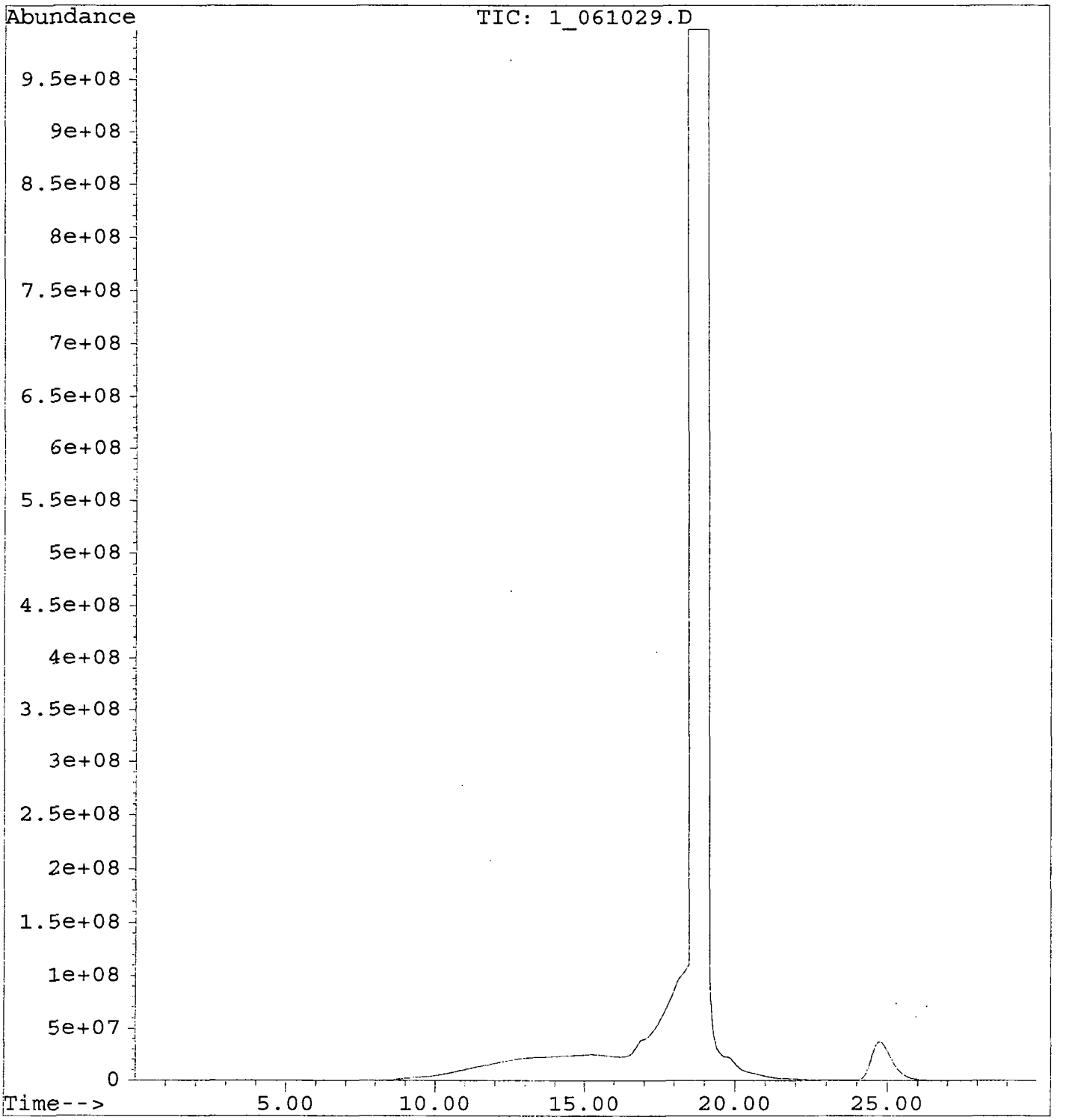
File : C:\HPCHEM\5\DATA\061001\1_061016.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 06:53 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 46732.07-E30T6 EPA
Misc Info : COL# 418002
Vial Number: 16



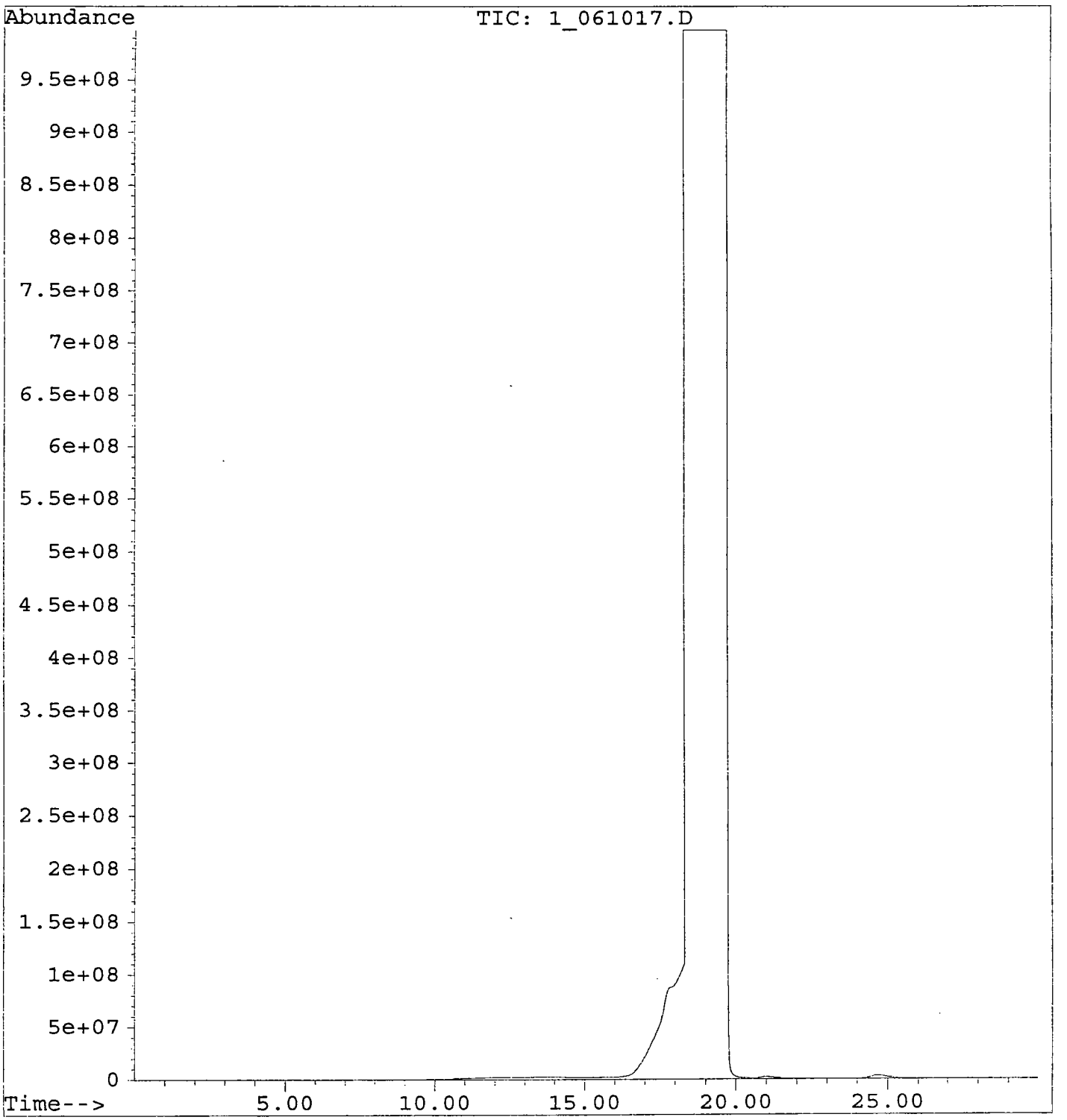
File : C:\HPCHEM\5\DATA\061001\1_061028.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 13:04 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 46732.08-E30T7 EPA
Misc Info : COL# 418002
Vial Number: 28



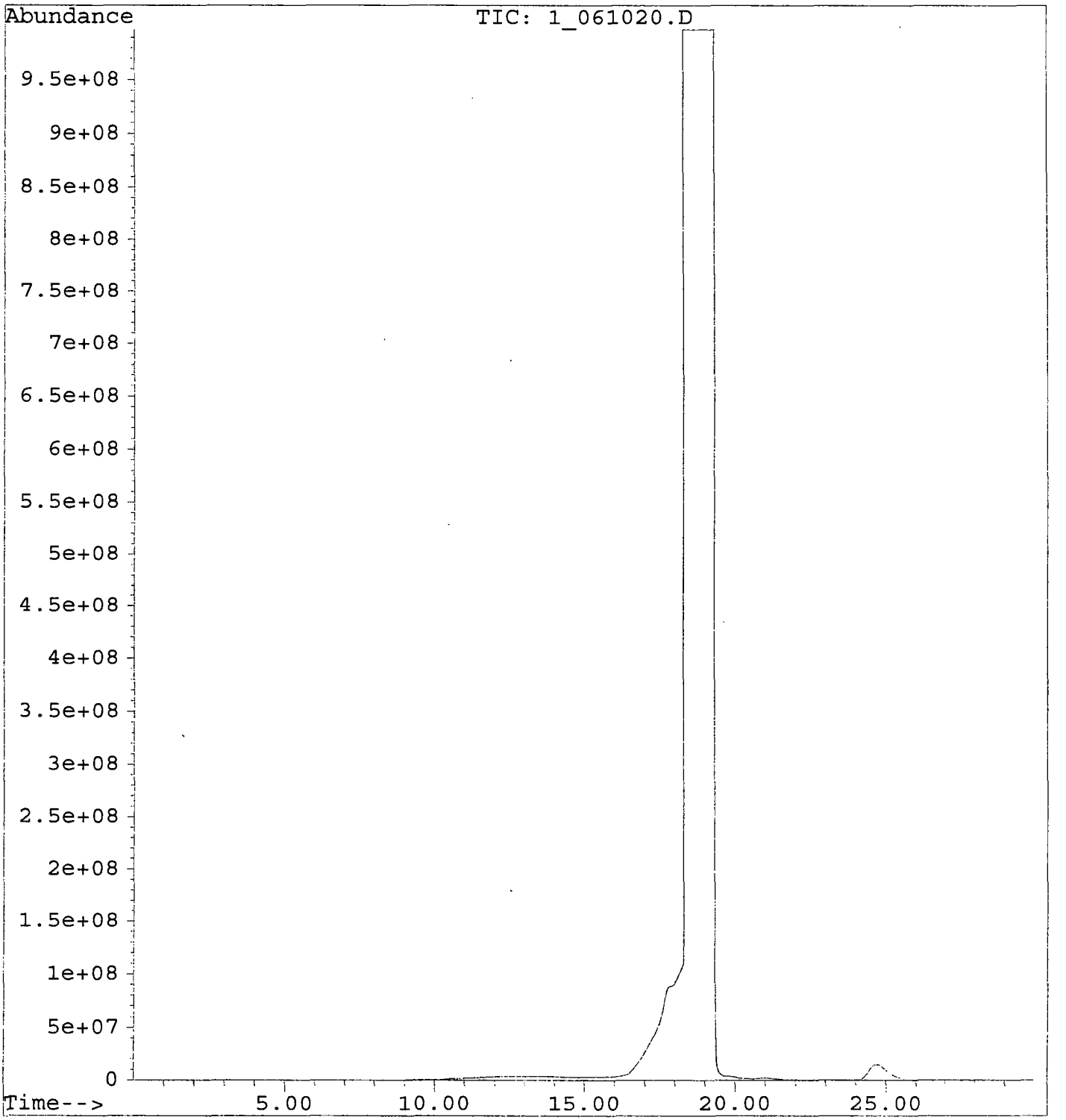
File : C:\HPCHEM\5\DATA\061001\1_061029.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 13:35 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 46732.09-E30T8 EPA
Misc Info : COL# 418002
Vial Number: 29



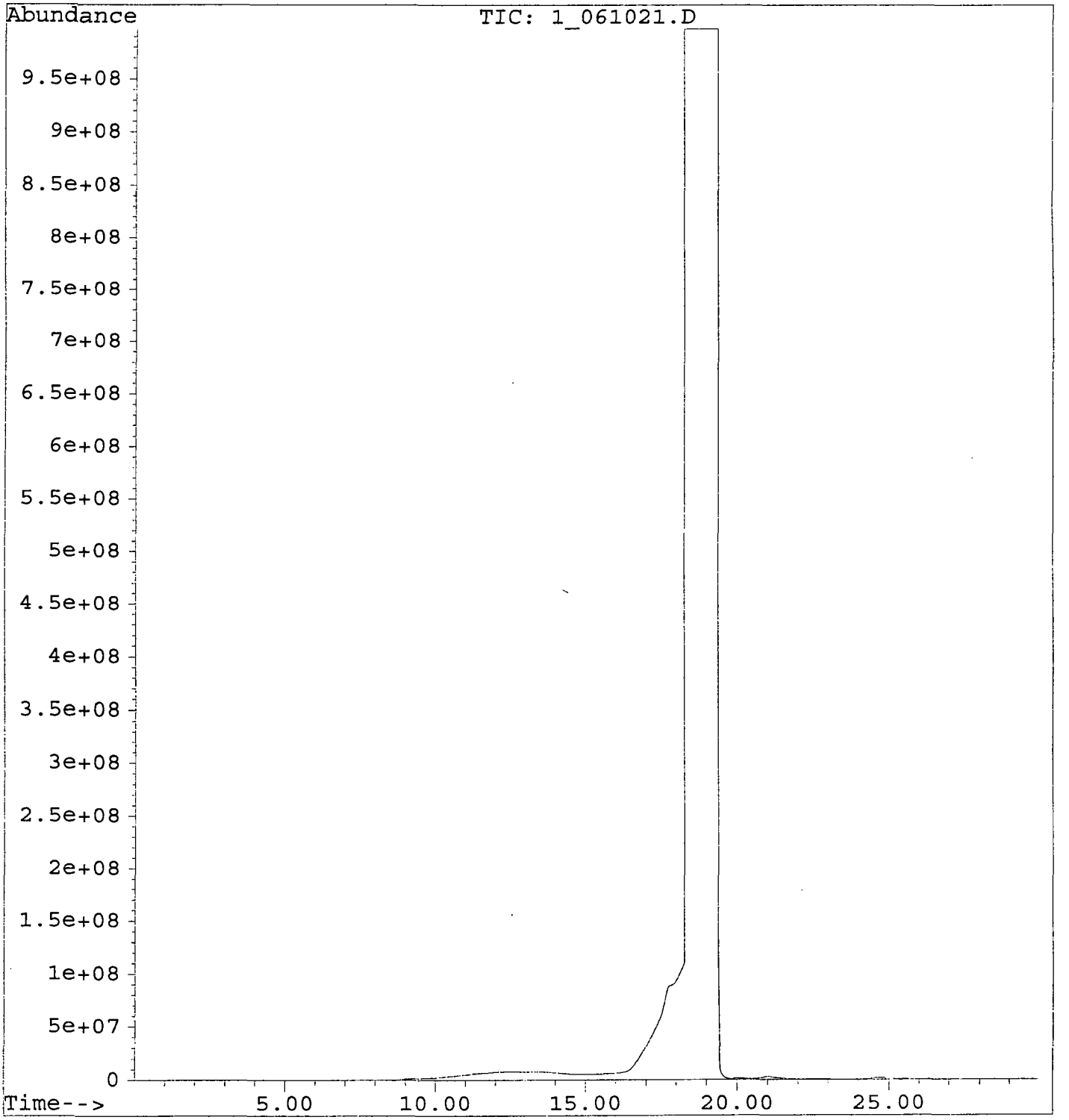
File : C:\HPCHEM\5\DATA\061001\1_061017.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 07:23 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 46732.10-E30T9 EPA
Misc Info : COL# 418002
Vial Number: 17



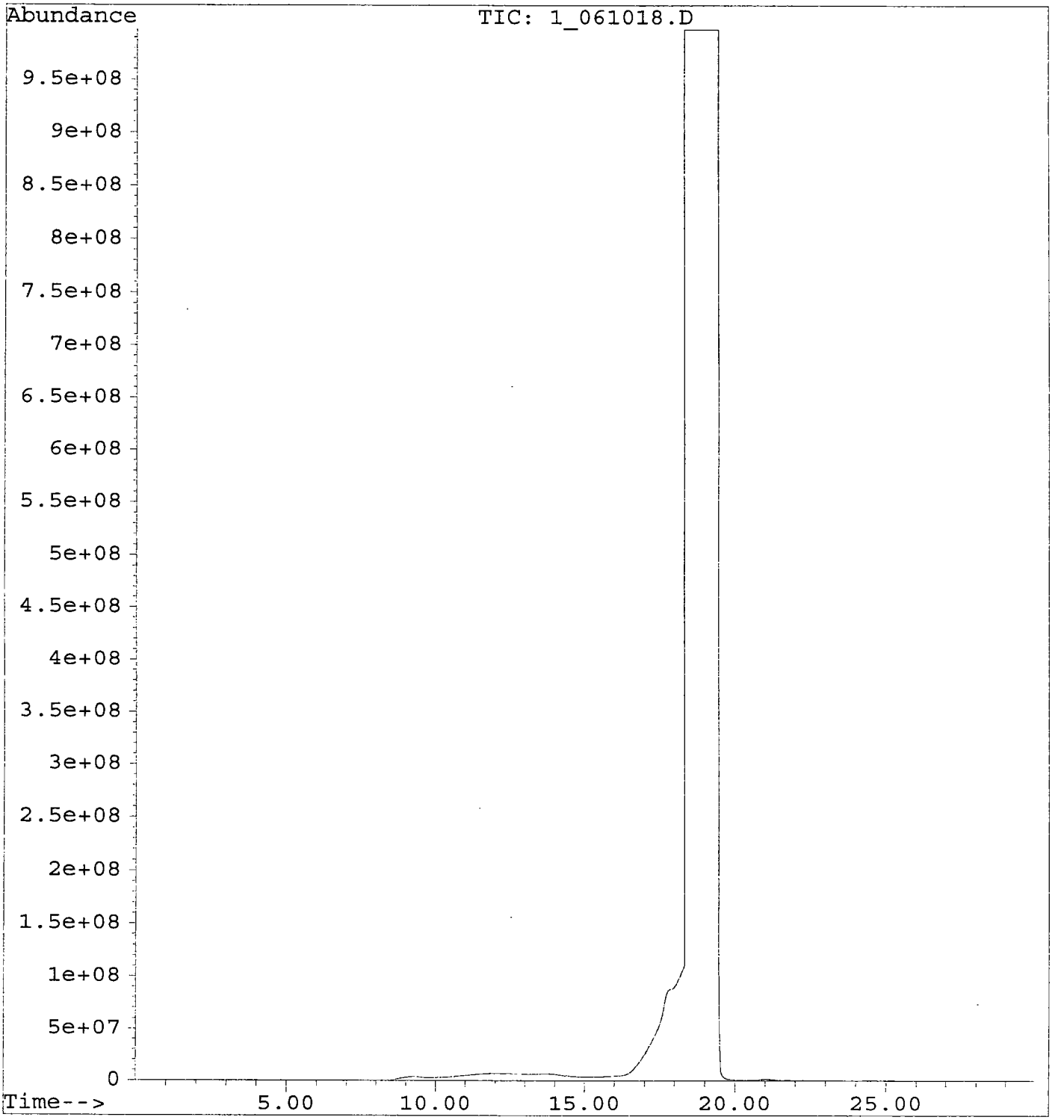
File : C:\HPCHEM\5\DATA\061001\1_061020.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 08:57 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 46732.11-E30W0 EPA
Misc Info : COL# 418002
Vial Number: 20



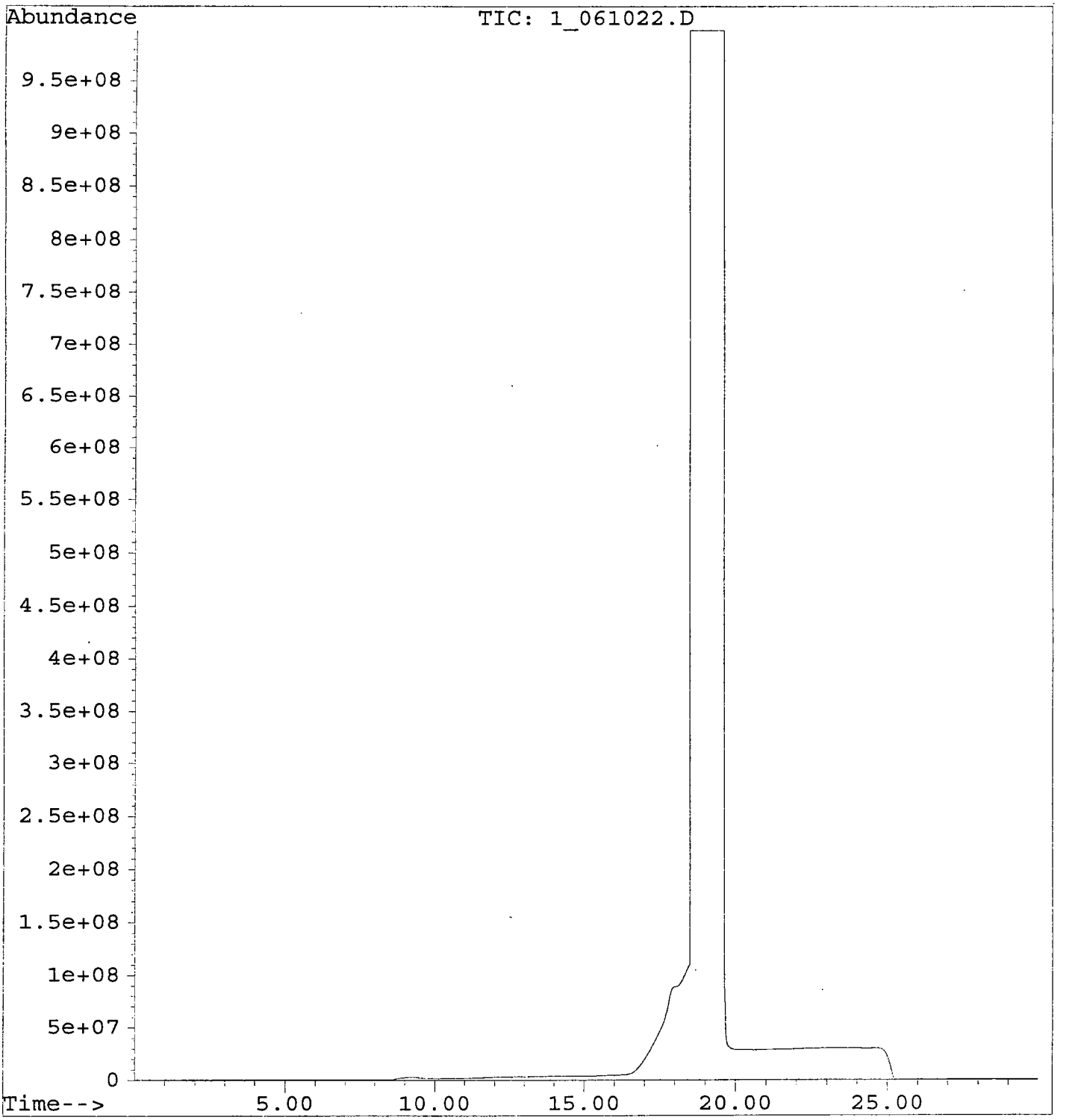
File : C:\HPCHEM\5\DATA\061001\1_061021.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 09:27 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 46732.12-E30W1 EPA
Misc Info : COL# 418002
Vial Number: 21



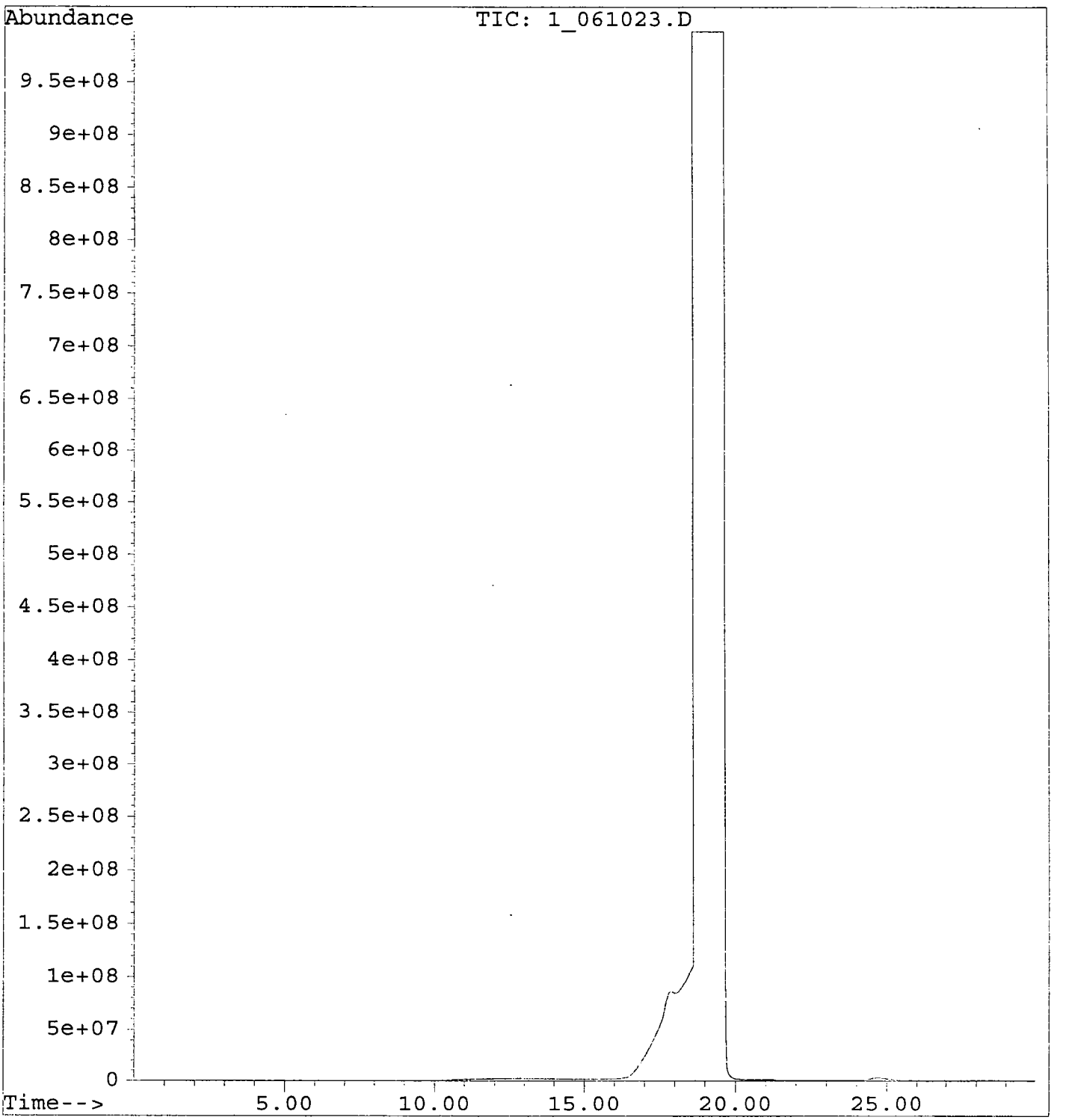
File : C:\HPCHEM\5\DATA\061001\1_061018.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 07:54 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 46732.13-E30W2 EPA
Misc Info : COL# 418002
Vial Number: 18



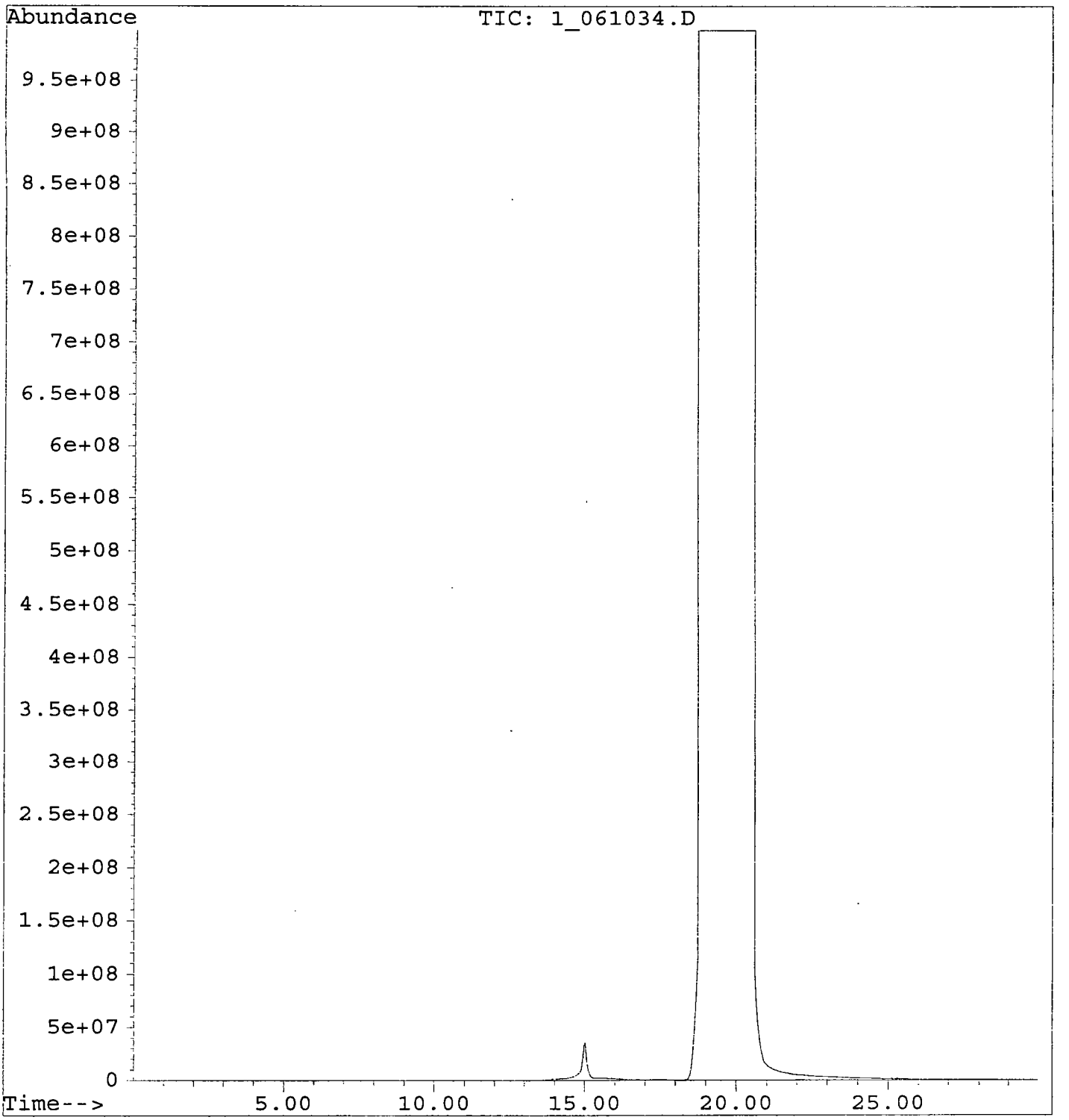
File : C:\HPCHEM\5\DATA\061001\1_061022.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 09:58 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 46732.14-E30W3 EPA
Misc Info : COL# 418002
Vial Number: 22



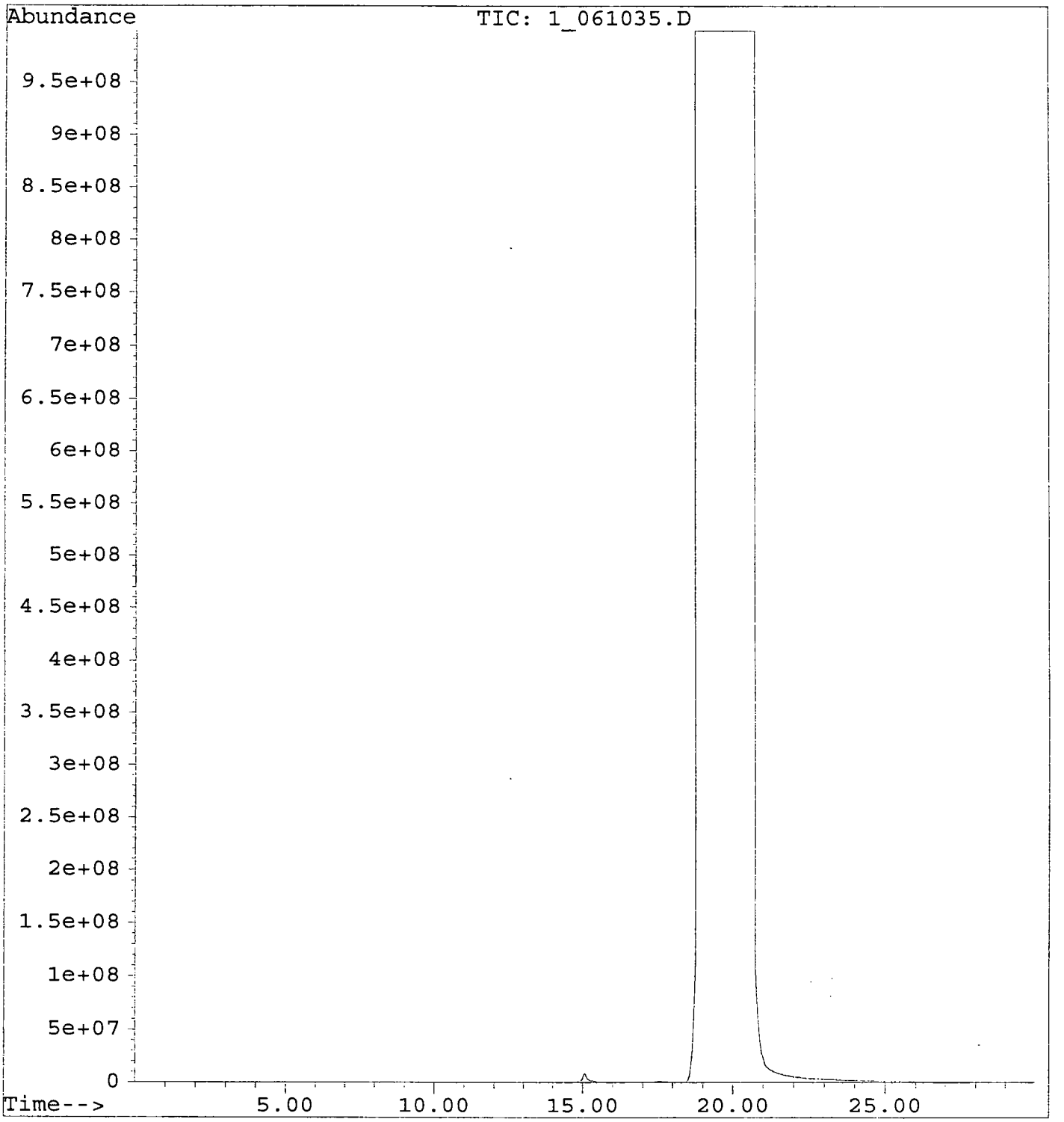
File : C:\HPCHEM\5\DATA\061001\1_061023.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 10:29 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: 46732.15-E30W4 EPA
Misc Info : COL# 418002
Vial Number: 23



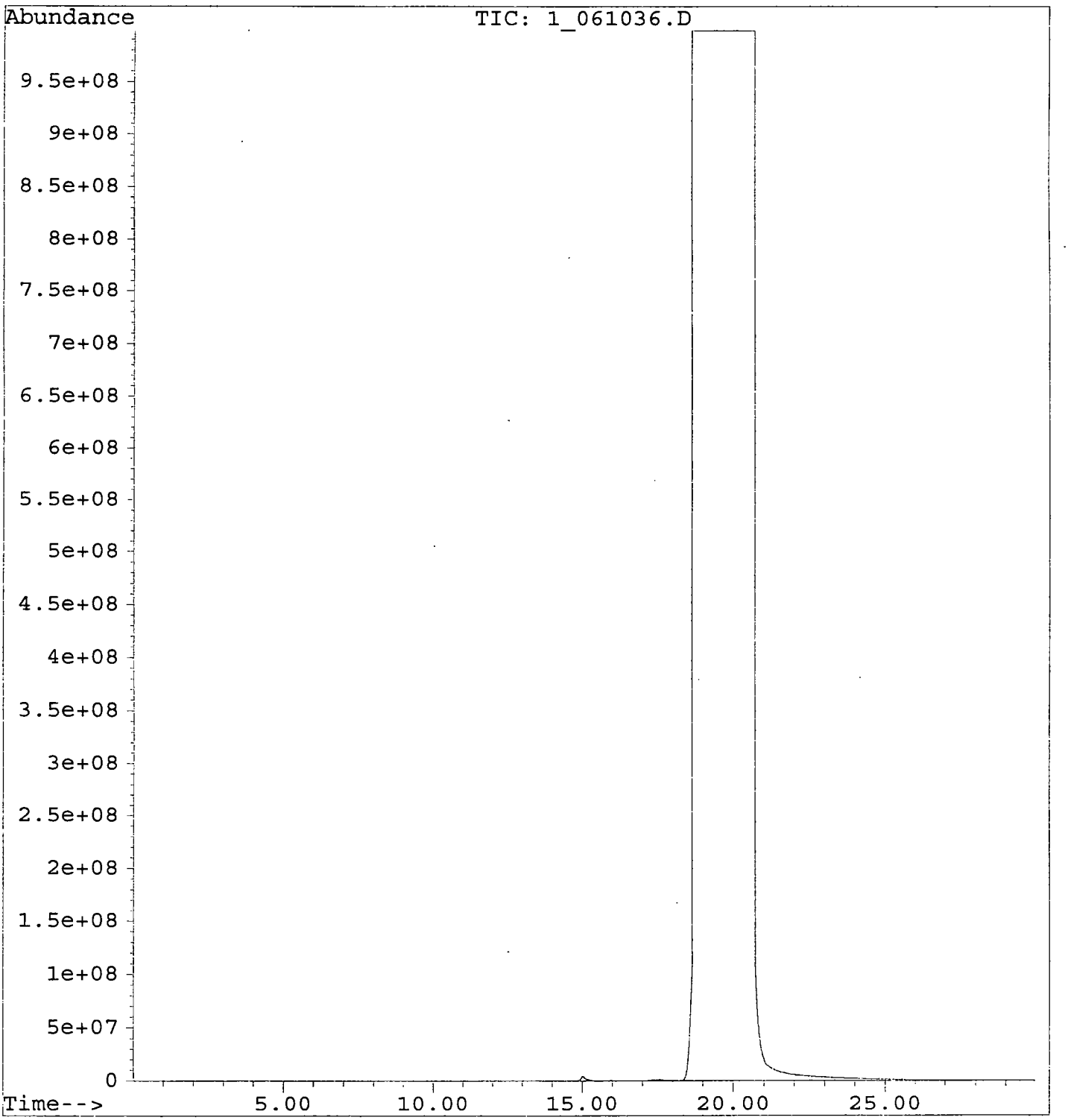
File : C:\HPCHEM\5\DATA\061001\1_061034.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 16:11 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 34



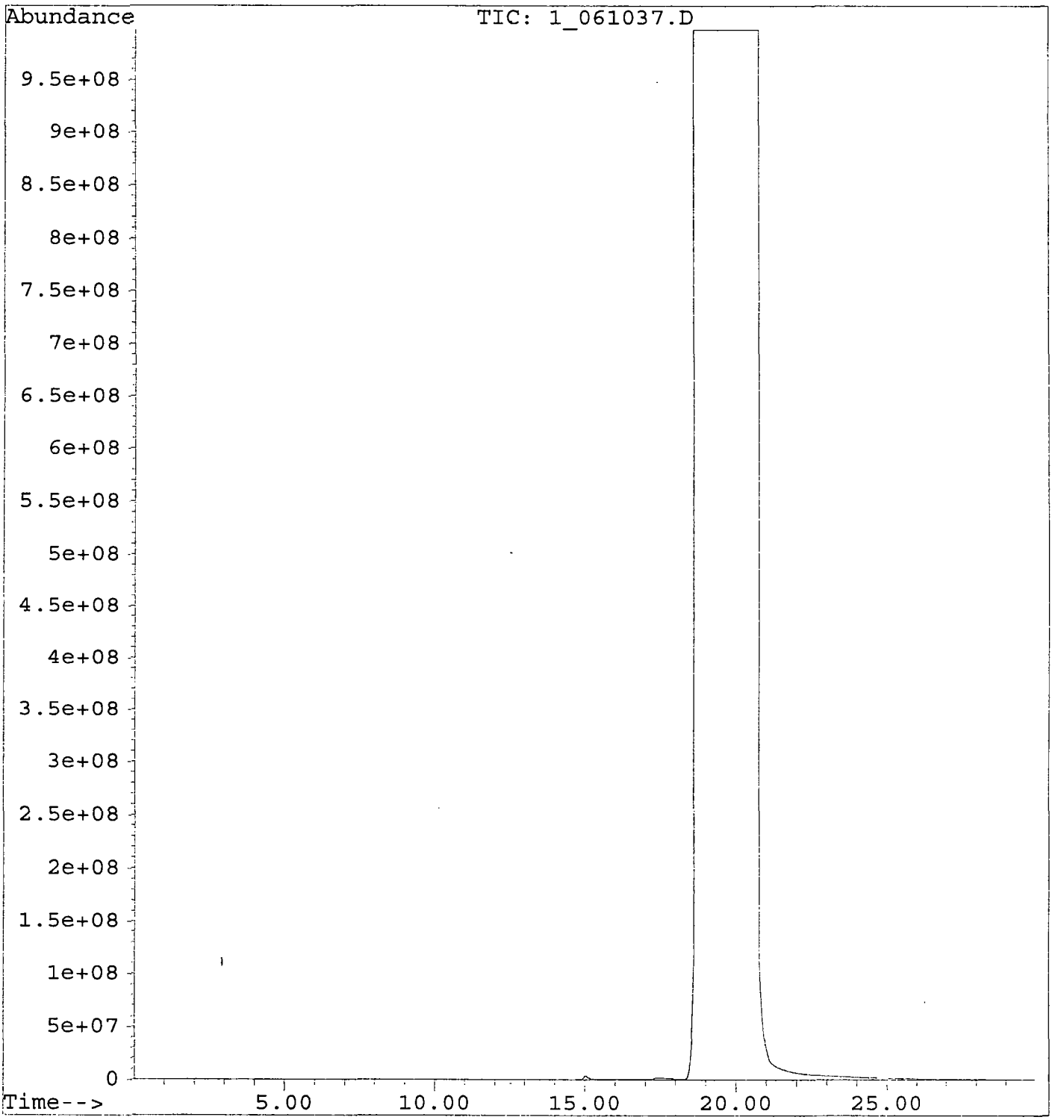
File : C:\HPCHEM\5\DATA\061001\1_061035.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 16:42 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 35



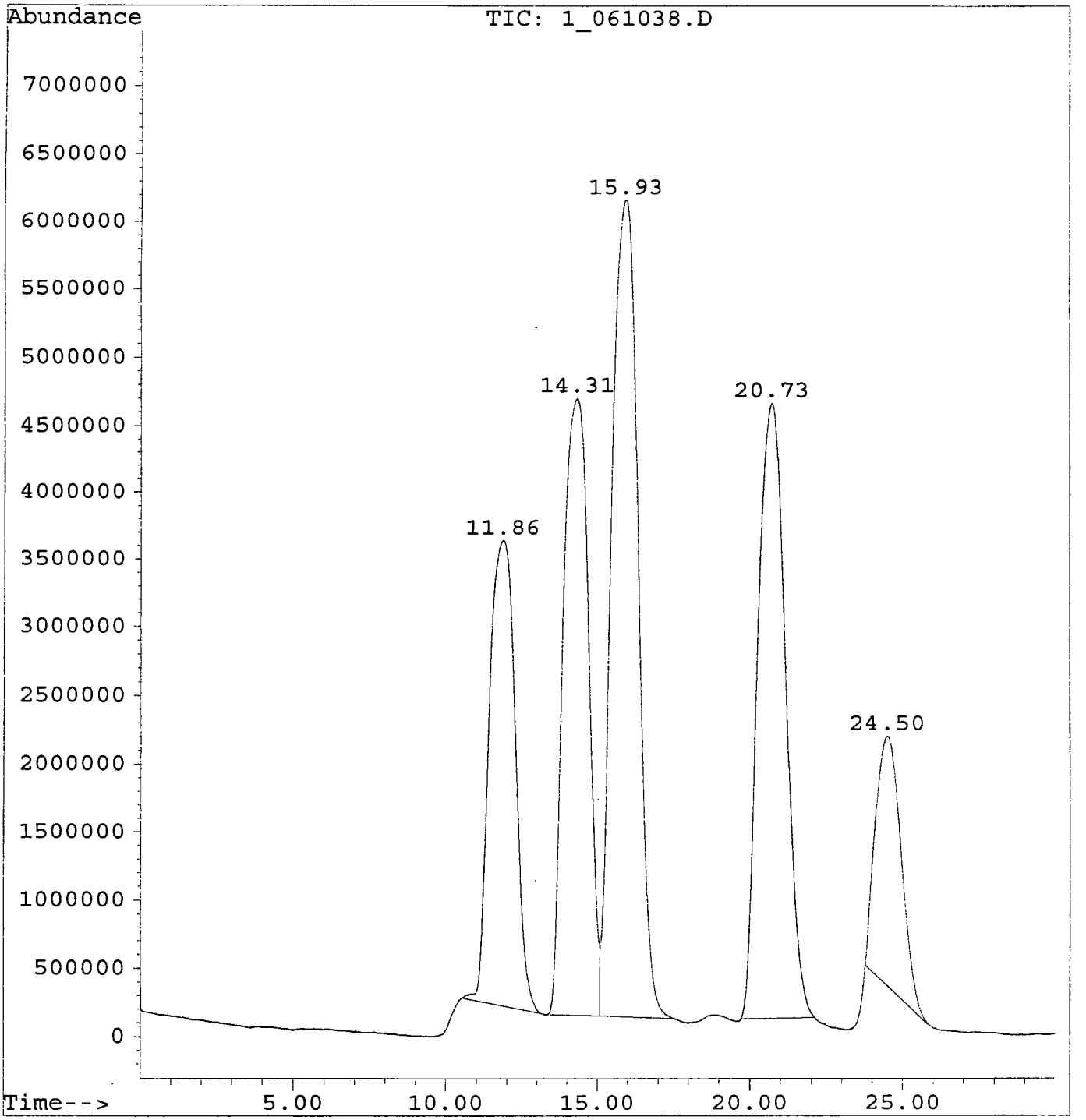
File : C:\HPCHEM\5\DATA\061001\1_061036.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 17:13 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 36



File : C:\HPCHEM\5\DATA\061001\1_061037.D
Operator : CD COL# 418002
Acquired : 11 Jun 01 17:44 using AcqMethod GPC.MTH
Instrument : GPC1
Sample Name: SB
Misc Info : COL# 418002
Vial Number: 37



Data File : C:\HPCHEM\5\DATA\061001\1_061038.D Vial: 38
Acq On : 11 Jun 01 06:15 PM Operator: CD COL#
Sample : CAL STD (FINAL) Inst : GPC1
Misc : COL# 418002 Multiplr: 1.00



1) 11.86 = Corn Oil
2) 14.31 = Pthalate
3) 15.93 = Methoxychlor
4) 20.73 = Perylene
5) 24.50 = Sulfur

Chromatographic Resolution Report

Data File : C:\HPCHEM\5\DATA\061001\1_061038.D Vial: 38
Acq On : 11 Jun 01 18:15 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
11.865	14.314	100.00
14.314	15.928	88.83
15.928	20.727	100.00
20.727	24.495	100.00

Quantitation Report

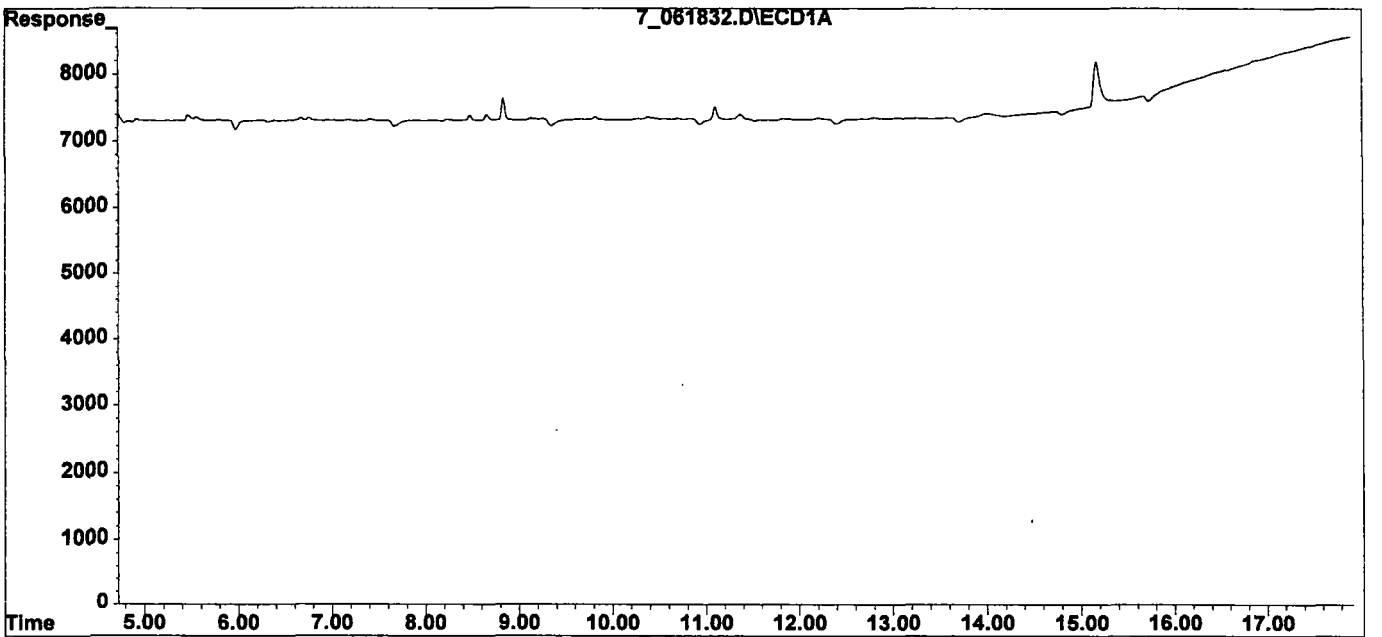
```
Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061832.D\ECD1A.CH Vial: 32
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061832.D\ECD2B.CH
Acq On    : 18 Jun 2001  23:36                        Operator: DDC
Sample    : SB061001A  *SB061001A  *                  Inst    : HP_07
Misc      : **1000ML/10.0ML*                          Dilution: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e
Quant Time: Jun 19  9:58 2001  Quant Results File: XPCBF18.RES

Method       : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path   : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update  : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj.     : 0.5uL
Signal #1 Phase : PEST              Signal #2 Phase: PEST II
Signal #1 Info  : .32 mm            Signal #2 Info : .32 mm
Signal #1 Inst  : HP_07A            Signal #2 Inst : HP_07B

   Compound           RT#1   RT#2    Resp#1   Resp#2    ug/L       ug/L
--------------------------------------------------------------------------

System Monitoring Compounds:

Target Compounds:
```

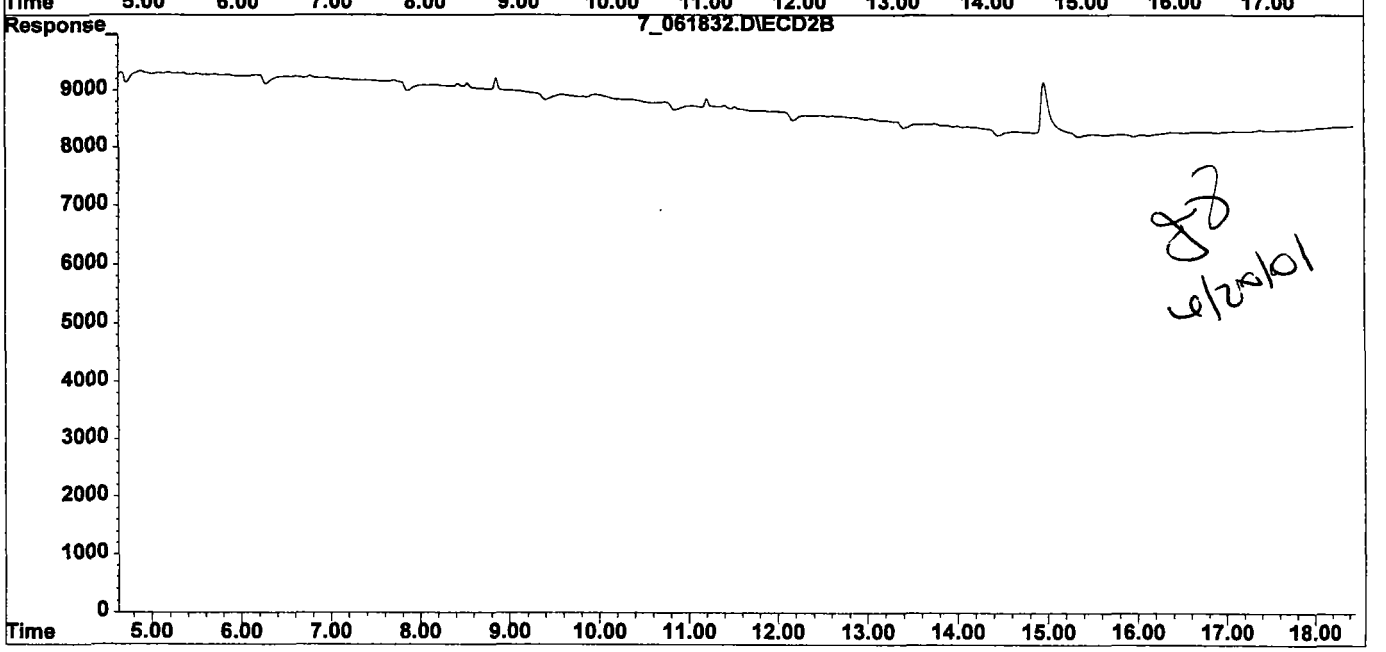
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061832.D\ECD1A.CH Vial: 32
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061832.D\ECD2B.CH
Acq On : 18 Jun 2001 23:36 Operator: DDC
Sample : SB061001A *SB061001A * Inst : HP_07
Misc : **1000ML/10.0ML* Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:58 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





8?
6/20/01

Quantitation Report

```
Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061833.D\ECD1A.CH Vial: 33
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061833.D\ECD2B.CH
Acq On    : 19 Jun 2001  00:00                        Operator: DDC
Sample    : SB061001B  *SB061001B  *                  Inst    : HP_07
Misc      : **1000ML/10.0ML*                          Dilution: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e
Quant Time: Jun 19  9:58 2001  Quant Results File: XPCBF18.RES

Method       : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path   : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update  : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj.      : 0.5uL
Signal #1 Phase : PEST              Signal #2 Phase: PEST II
Signal #1 Info  : .32 mm            Signal #2 Info : .32 mm
Signal #1 Inst  : HP_07A            Signal #2 Inst : HP_07B

   Compound            RT#1   RT#2    Resp#1   Resp#2    ug/L       ug/L
---------------------------------------------------------------------------

System Monitoring Compounds:

Target Compounds:
```

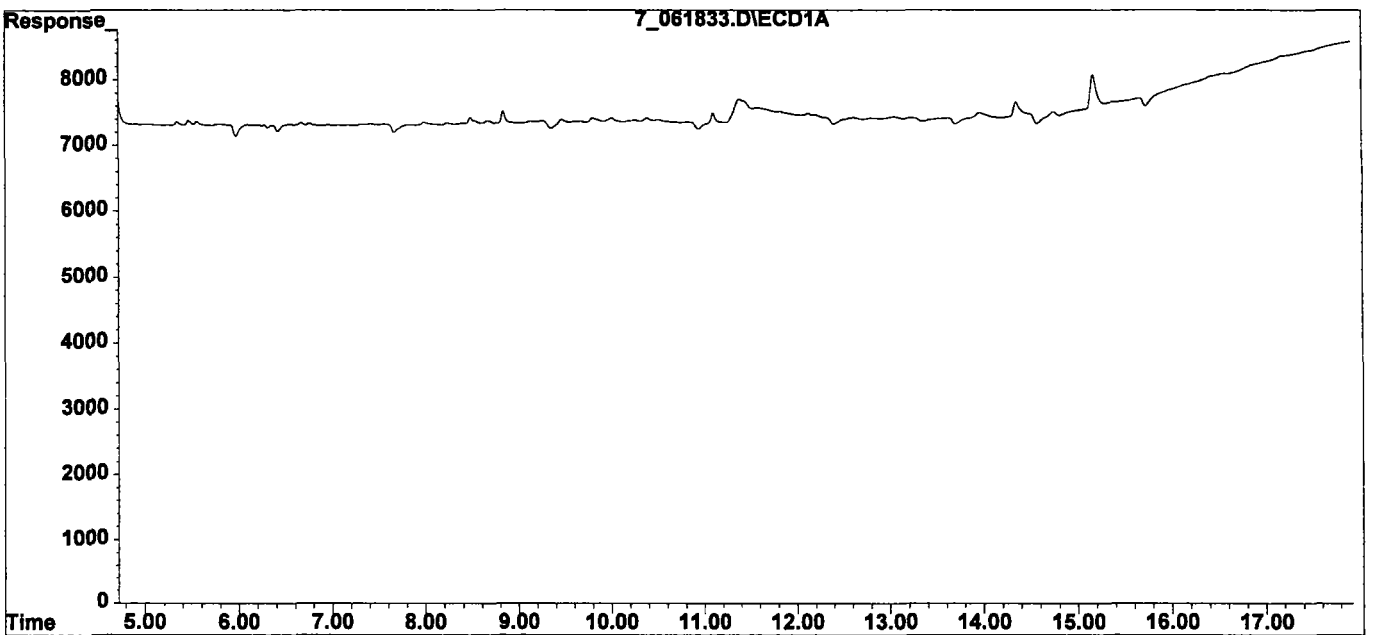
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

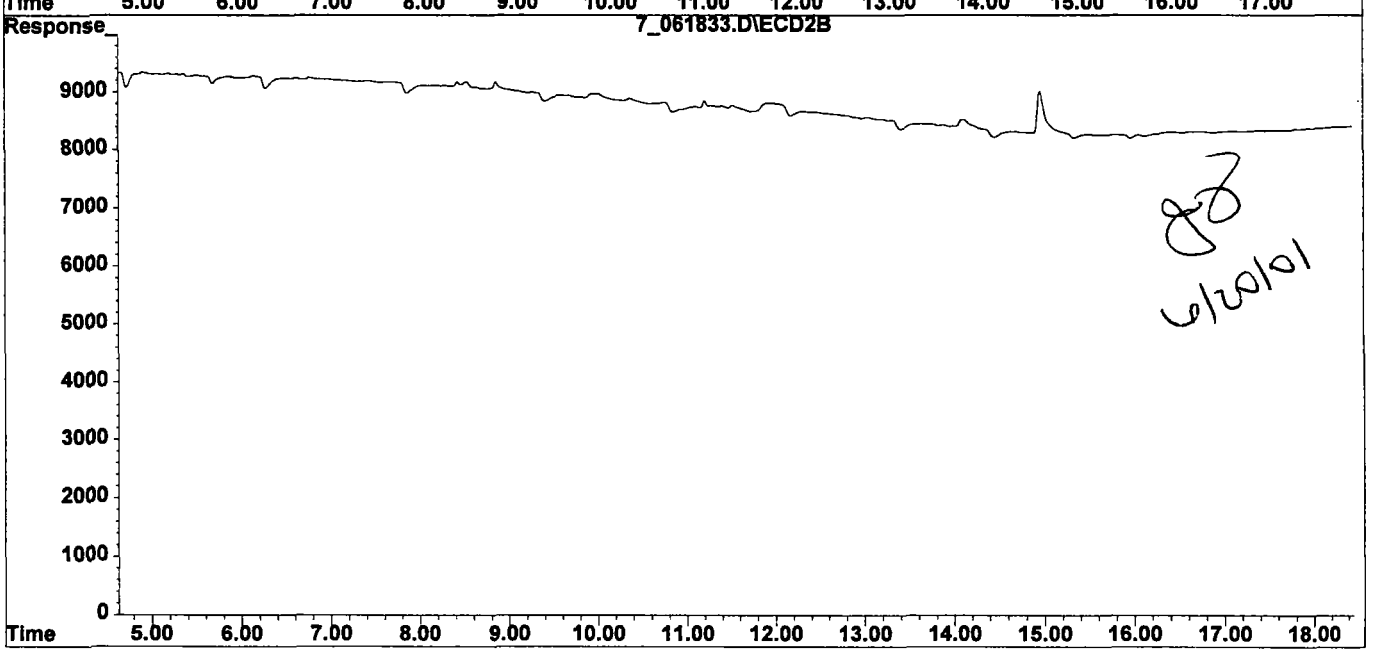
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061833.D\ECD1A.CH Vial: 33
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061833.D\ECD2B.CH
Acq On : 19 Jun 2001 00:00 Operator: DDC
Sample : SB061001B *SB061001B * Inst : HP_07
Misc : **1000ML/10.0ML* Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 19 9:58 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





6/20/01

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-301 OP-301-RUNLOG-12 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_07
SDG NO. : SWLO METHOD FILE(S): XPCBF~~14~~ 18 DOL6-21-01 (8082)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
06/18/01 11:11	HEX	HEX	7_061801	Sol
06/18/01 11:35	HEX	HEX	7_061802	
06/18/01 11:59	HEX	HEX	7_061803	
06/18/01 12:24	HEX	HEX	7_061804	
06/18/01 12:48	HEX	HEX	7_061805	Sol
06/18/01 13:12	RESC7G	5-441-6	7_061806	OK
06/18/01 13:36	AR1221L37G	5-420-6	7_061807	
06/18/01 14:00	AR1232L37G	5-422-6	7_061808	
06/18/01 14:24	AR1242L17G	5-11-7	7_061809	
06/18/01 14:48	AR1242L27G	5-10-7	7_061810	
06/18/01 15:12	AR1242L37G	5-9-7	7_061811	
06/18/01 15:36	AR1242L47G	5-8-7	7_061812	
06/18/01 16:00	AR1242L57G	5-7-7	7_061813	
06/18/01 16:24	AR1248L37G	5-424-6	7_061814	
06/18/01 16:48	AR1254L17G	5-6-7	7_061815	
06/18/01 17:12	AR1254L27G	5-5-7	7_061816	
06/18/01 17:36	AR1254L37G	5-4-7	7_061817	
06/18/01 18:00	AR1254L47G	5-3-7	7_061818	
06/18/01 18:24	AR1254L57G	5-2-7	7_061819	
06/18/01 18:48	AR1660L17G	5-31-7	7_061820	
06/18/01 19:12	AR1660L27G	5-30-7	7_061821	OK

Unless noted, Client Ids are the same for the quant. & confirmation columns

Jennifer Freeman 6-20-01 — Verification Signature/Date

6-20-01 — Analyst Signature/Date

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-301 OP-301-RUNLOG-12 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_07
SDG NO. : SWLO METHOD FILE(S): XPCBF~~14~~ (8082)
18 DAC 6-21

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
06/18/01 19:36	AR1660L37K	5-29-7	7_061822	OK
06/18/01 20:00	AR1660L47G	5-28-7	7_061823	
06/18/01 20:24	AR1660L57G	5-27-7	7_061824	
06/18/01 20:48	PIBLKJ7	5-414-6	7_061825	
06/18/01 21:12	AR1660L3ICV7G	5-442-6	7_061826	
06/18/01 21:36	AR1221L3ICV7G	5-436-6	7_061827	
06/18/01 22:00	AR1232L3ICV7G	5-437-6	7_061828	
06/18/01 22:24	AR1242L3ICV7G	5-438-6	7_061829	
06/18/01 22:48	AR1248L3ICV7G	5-439-6	7_061830	
06/18/01 23:12	AR1254L3ICV7G	5-440-6	7_061831	
06/18/01 23:36	SB061001A	SB061001A	7_061832	
06/19/01 00:00	SB061001B	SB061001B	7_061833	
06/19/01 00:24	PBLKSA	BL0609SA	7_061834	
06/19/01 00:47	PBLKSA	BB0609SA	7_061835	
06/19/01 1:11	ELCS1	LC0609SA	7_061836	
06/19/01 1:35	ELCS2	LD0609SA	7_061837	OK
06/19/01 1:59	HEX	HEX	7_061838	[illegible]
06/19/01 2:23	PIBLKK7	5-414-6	7_061839	OK
06/19/01 2:47	AR1660L37L	5-29-7	7_061840	Run high
06/19/01 3:11	AR1660L37M	5-29-7	7_061841	OK
06/19/01 3:35	E30S4	46721.49	7_061842	OK

Unless noted, Client Ids are the same for the quant. & confirmation columns

Jennifer Hellman 6-20-01 [illegible] 6-20-01
Verification Signature/Date Analyst Signature/Date

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-301 OP-301-RUNLOG-12 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_07
SDG NO. : SWLO METHOD FILE(S): XPCBF~~14~~ (8082) 18DDC 6-24-01

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
06/19/01 3:59	E30S5	46721.50	7_061843	OK
06/19/01 4:23	E30S5MS	46721.51MS	7_061844	
06/19/01 4:47	E30S5MSD	46721.52MSD	7_061845	
06/19/01 5:11	E30S6	46721.53	7_061846	
06/19/01 5:35	E30S7	46721.54	7_061847	
06/19/01 5:59	E30S8	46721.55	7_061848	
06/19/01 6:23	E30S9	46732.01	7_061849	OK
06/19/01 6:47	HEX	HEX	7_061850	Sd
06/19/01 7:11	HEX	HEX	7_061851	Sd
06/19/01 7:35	HEX	HEX	7_061852	Sd
06/19/01 7:59	PIBLKL7	5-414-6	7_061853	OK
06/19/01 8:23	AR1660L37N	5-29-7	7_061854	OK
06/19/01 8:47	AR1660L37O	5-29-7	7_061855	~~
06/19/01 9:11	E30T0	46732.02	7_061856	OK
06/19/01 9:35	E30T1	46732.03	7_061857	
06/19/01 9:59	E30T2	46732.04	7_061858	
06/19/01 10:23	E30T3	46732.05	7_061859	
06/19/01 10:47	E30T5	46732.06	7_061860	
06/19/01 11:11	E30T6	46732.07	7_061861	
06/19/01 11:35	E30T7	46732.08	7_061862	OK
06/19/01 11:58	HEX	HEX	7_061863	Sd

Unless noted, Client Ids are the same for the quant. & confirmation columns

Jennifer Zielman 6-20-01 6-20-01
Verification Signature/Date Analyst Signature/Date

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-301 OP-301-RUNLOG-12 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_07
SDG NO. : SWLO METHOD FILE(S): XPCBF~~14~~ (8082)
18 DAC 6-21-01

DATE/TIME	CLIENT ID		SAMPLE ID	FILE	COMMENT
06/19/01 12:22	HEX		HEX	7_061864	Sd
06/19/01 12:47	HEX		HEX	7_061865	Sd
06/19/01 13:11	PIBLKM7	X	5-414-6	7_061866	OK
06/19/01 13:36	AR1660L37P	X	5-29-7	7_061867	OK
06/19/01 14:00	AR1660L37Q		5-29-7	7_061868	
06/19/01 14:24	E30T8	X	46732.09	7_061869	OK
06/19/01 14:49	E30T9	X	46732.10	7_061870	
06/19/01 15:13	E30W0	X	46732.11	7_061871	
06/19/01 15:38	E30W1	X	46732.12	7_061872	
06/19/01 16:02	E30W2	X	46732.13	7_061873	
06/19/01 16:27	E30W3	X	46732.14	7_061874	
06/19/01 16:51	E30W4	X	46732.15	7_061875	
06/19/01 17:15	E30T0DL	X	46732.02DL	7_061876	
06/19/01 17:40	E30T5DL	X	46732.06DL	7_061877	
06/19/01 18:04	E30T7		46732.08	7_061878	
06/19/01 18:28	E30T7DL	X	46732.08DL	7_061879	OK
06/19/01 18:52	HEX		HEX	7_061880	Sd
06/19/01 19:16	HEX		HEX	7_061881	Sd
06/19/01 19:40	HEX		HEX	7_061882	Sd
06/19/01 20:05	PIBLKN7	X	5-414-6	7_061883	OK
06/19/01 20:29	AR1660L37R	X	5-29-7	7_061884	Out high

Unless noted, Client Ids are the ~~same~~ for the quant. & confirmation columns

Jennifer Anderson 6-20-01 — Verification Signature/Date

Analyst Signature/Date 6-20-01

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-301 OP-301-RUNLOG-12 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_07
SDG NO. : SWLO METHOD FILE(S): XPCBF~~14~~ 18 (8082) DDC 6-21-01

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
06/19/01 20:53	AR1660L37S X	5-29-7	7_061885	QC

Unless noted, Client Ids are the same for the quant. & confirmation columns

Jennifer Zielman 6-20-01 D. Cen 6-20-01
Verification Signature/Date Analyst Signature/Date

Page No.: 58

	SV	ST • PCB	OTHER
CONT EX. (3520C)			
SEP-F (3510C)			
SHAKER			
SONC. (3550B)		XXXXX	
SOXHLET			

[X] RUSH [ ] REEXTRACT [ ] TCLP [ ] DIOXIN

SAMPLE EXTRACTION LOG

6/13

BATCH: 010609SA

EXTRACT DATE: 2001-06-09 12:48

002776
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		
BL0609SA			S/L				30.00	350	10/5	45	2.0		5.0	5.0	N		1000		
BB0609SA			S/L				30.00	350	10/5	45	2.0		5.0	5.0	N		1000		
LC0609SA			S/L				30.00	350	10/5	45	2.0		5.0	5.0	N	1000	1000		
LD0609SA			S/L				30.00	350	10/5	45	2.0		5.0	5.0	N	1000	1000		
46721.49 GC699	XXXXXXXX XXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX	S/L	8.02	15.54	26.0	30.76	350	10/5	45	2.0		5.0	5.0	N		1000		
46721.50 GC699	XXXXXXXX XXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX	S/L	8.04	60.26	12.4	31.16	350	10/5	45	2.0		5.0	5.0	N		1000		
46721.51MS GC699	XXXXXXXX XXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX	S/L	8.04	60.26	12.1	30.42	350	10/5	45	2.0		5.0	5.0	N	1000	1000		
46721.52MSD GC699	XXXXXXXX XXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX	S/L	8.04	60.26	12.1	30.39	350	10/5	45	2.0		5.0	5.0	N		1000		
46721.53 GC699	XXXXXXXX XXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX	S/L	8.04	26.78	22.3	30.39	350	10/5	45	2.0		5.0	5.0	N		1000		
46721.54 GC699	XXXXXXXX XXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX	S/L	8.11	26.62	22.2	30.26	350	10/5	45	2.0		5.0	5.0	N		1000		
46721.55 GC699	XXXXXXXX XXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX	S/L	8.09	46.19	17.1	31.86	350	10/5	45	2.0		5.0	5.0	N		1000		
46732.01 GC699	EPA 29294	06/09/2001 09:30 E30S9	S/L	8.23	7.80	28.4	30.79	350	10/5	45	2.0		5.0	5.0	N		1000		
46732.02 GC699	EPA 29294	06/09/2001 09:30 E30T0	S/L	7.35	44.47	17.1	30.71	350	10/5	45	2.0		5.0	5.0	N		1000		
46732.03 GC699	EPA 29294	06/09/2001 09:30 E30T1	S/L	7.76	30.21	21.1	30.18	350	10/5	45	2.0		5.0	5.0	N		1000		
46732.04 GC699	EPA 29294	06/09/2001 09:30 E30T2	S/L	7.69	31.54	21.1	30.78	350	10/5	45	2.0		5.0	5.0	N		1000		

INITIALS

WEIGHING:	CD	EXTRACTION:	CD	FLORISIL:	
CLEANUP:	CD	KD:	GS		CH2Cl2
BLOWDOWN:	SA	TV:	GS		Acetone
SURROG. SPIKER:	MC	VERIFIER:	GS		Hexane
MATRIX SPIKER:	MC	VERIFIER:	GS		
SUBMITTED BY:	SA	REVIEWED BY:			06/12

ID NUMBERS

FLORISIL CARTRIDGE #:

GPC COLUMN #: 418002 (06-10-01) #3640A

SURROGATES ID CONC #: 5-13-7

MATRIX SPIKE SOLID/CONC #(s): 5-1-7

SOP - METHOD # : SWL-OP- 420 Rev. 1.0

COMMENTS

SB#061001A
SB#061001B

Extracts went through silica gel acid clean-up

Pg 36 Book 1 Res

	SV	PCB	OTHER
CONT EX. (3520C)			
SEP-F (3510C)			
SHAKER			
SONC. (3550B)		XXXXX	
SOXHLET			

[X] RUSH [ ] REEXTRACT [ ] TCLP [ ] DIOXIN

SAMPLE EXTRACTION LOG

BATCH: 010609SA

EXTRACT DATE: 2001-06-09 12:48

002776
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
46732.05 GC699	EPA 29294	06/09/2001 09:30 E30T3	S/L	7.53	28.29	21.9	30.53	350	10/5	45	2.0		5.0	5.0	N		1000		
46732.06 GC699	EPA 29294	06/09/2001 09:30 E30T5	S/L	6.90	40.63	18.3	30.81	350	10/5	45	2.0		5.0	5.0	N		1000		
46732.07 GC699	EPA 29294	06/09/2001 09:30 E30T6	S/L	7.99	9.92	27.6	30.63	350	10/5	45	2.0		5.0	5.0	N		1000		
46732.08 GC699	EPA 29294	06/09/2001 09:30 E30T7	S/L	7.01	58.30	12.8	30.65	350	10/5	45	2.0		5.0	5.0	N		1000		
46732.09 GC699	EPA 29294	06/09/2001 09:30 E30T8	S/L	7.16	58.30	12.6	30.12	350	10/5	45	2.0		5.0	5.0	N		1000		
46732.10 GC699	EPA 29294	06/09/2001 09:30 E30T9	S/L	7.12	40.05	18.1	30.21	350	10/5	45	2.0		5.0	5.0	N		1000		
46732.11 GC699	EPA 29294	06/09/2001 09:30 E30W0	S/L	7.02	60.04	12.0	30.13	350	10/5	45	2.0		5.0	5.0	N		1000		
46732.12 GC699	EPA 29294	06/09/2001 09:30 E30W1	S/L	7.50	76.18	7.3	30.69	350	10/5	45	2.0		5.0	5.0	N		1000		
46732.13 GC699	EPA 29294	06/09/2001 09:30 E30W2	S/L	7.11	70.07	9.0	30.10	350	10/5	45	2.0		5.0	5.0	N		1000		
46732.14 GC699	EPA 29294	06/09/2001 09:30 E30W3	S/L	7.59	72.12	8.5	30.51	350	10/5	45	2.0		5.0	5.0	N		1000		
46732.15 GC699	EPA 29294	06/09/2001 09:30 E30W4	S/L	7.00	30.70	21.3	30.78	350	10/5	45	2.0		5.0	5.0	N		1000		

S/gel

INITIALS

WEIGHING:	SA	EXTRACTION:	CD	FLORISIL:
CLEANUP:	CD	KD:	GS	CH_2Cl_2
BLOWDOWN:	CD	TV:	GS	acetone
SURROG. SPIKER:	MC	VERIFIER:	GS	Hexane
MATRIX SPIKER:	MC	VERIFIER:	GS	
SUBMITTED BY:	SA	REVIEWED BY:		6/12

ID NUMBERS

FLORISIL CARTRIDGE #:

GPC COLUMN #: 418002 (06-10-01) #364-01

SURROGATES ID CONC #: 5-13-7

MATRIX SPIKE SOLID/CONC #(s): 5-1-7

SOP - METHOD # : SWL-OP- 420 Rev. 1.0

COMMENTS

SB #061001A
SB #061001B

Extracts went through Silgel acid clean-up

P9 36 Book 1 Page

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.
6/6	5:40	46690.01	Nissaki	[illegible]	N	GC10	1
06/07	3:45	N_2SO_4 test (lot# 102)	SWLO	SA	N	GC800	X
06/07	5:45	46612.22, 25, 26	EPA	SA	Y	GC699	X
6-08	11:00a	46707.01 – 18, ms msd	TOLTEST	GS	N	GC200	18
6-08	4:20p	46699.01 – 08; ms msd;	TETRA-SF	GS	N	GC399 = 300	8
↓	↓	46714.01-02	↓	↓	↓		2
06/08	9:30p	46689.01 – 22 ms, msd	EPA	SA	N	GC699	22
06/08	9:30p	46689.23 – 44 ms, msd	EPA	SA	N	GC699	22
06-11	12:00p	46729.17, 18 ms msd; 19, 20	Tetra-SF	GS	N	GC399 = GC300	4
↓	↓	46734.17; 18	↓	↓	↓	↓	2
06/11	9:20	46629.10	EPA	SA	Y ~~N~~	Ret GC699	X
06/11	9:20	46702.11 – 32	EPA	SA	N	GC699	22
06/11	9:20	46612 – 33, 34, 36	EPA	SA	Y	Ret GC699	X
06/11	9:20	46613.02, 05, 10	EPA	SA	Y	Ret GC699	X
06/11	9:20	46689.45 – 56, ms/msd	EPA	SA	N	GC699	12
06/11	9:20	46702.01 – 10	EPA	SA	N	GC699	10
06-12	11:00	Pest Order 418002	SWLO	MC	N	GC819	X
06-12	4:55	PEST / Aroc CHK (364BN)	SWLO	SA	N	GC 819	X
06-12	4:55	PEST / Aroc CHK (418002)	SWLO	SA	N	GC 819	X
06/12	9:30p	46721.94 – 55 ms / msd	EPA	SA	N	GC699	7
06/12	9:30p	46732.01 – 15	EPA	SA	N	GC699	15
06/12	9:30p	46732.16 – 37	EPA	SA	N	GC699	22

SOUTHWEST LABORATORY OF OKLAHOMA, INC.
1700 West Albany • Broken Arrow, OK 74012 • Office (918) 251-2858 • Fax (918) 251-2599

Southwest Laboratory of Oklahoma
1700 W. Albany Suite C
Broken Arrow, OK 74012-1421

INTERNAL CHAIN OF CUSTODY

Date	06/08/2001
Episode	**46721**
Client	**EPA**
Project	OLM04.2
Received	06/07/01

Test Code	Cont ID	(Circle the Sample Numbers Checked out) #	#	#	#	#	#	#	Date/Time Out	Analyst	Date/Time In
GC699	A	1	2	3	4	5	6	7			
		8	9	10	11	12	13	14			
		15	16	17	18	19	20	21			
		22	23	24	25	26	27	28			
		29	30	31	32	33	34	35			
		36	37	38	39	40	41	42			
		43	44	45	46	47	48	49			
		50	51	52	53	54	55		06/10 4:50	CD ~~EC~~	06/10 5:00
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			
		29	30	31	32	33	34	35			
		36	37	38	39	40	41	42			
		43	44	45	46	47	48	49			
		50	51	52	53	54	55		06:45	EC	06/10 J.C.

[redacted]	SV	OD ST • PCB	OTHER
CONT EX. (3520C)			
SEP-F (3510C)			
SHAKER			
SONC. (3550B)		XXXXX	
SOXHLET			

[X] RUSH [ ] REEXTRACT [ ] TCLP [ ] DXIN

SAMPLE EXTRACTION LA

6/13

BATCH: 010609SA

EXTRACT DATE: 2001-06-09 12:48

002776
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~~ Stgl	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		
BL0609SA			S/L				30.00	350	10/5	45	2.0		5.0	5.0	N		1000		
BB0609SA			S/L				30.00	350	10/5	45	2.0		5.0	5.0	N		1000		
LC0609SA			S/L				30.00	350	10/5	45	2.0		5.0	5.0	N	1000	1000		
LD0609SA			S/L				30.00	350	10/5	45	2.0		5.0	5.0	N	1000	1000		
46721.49 GC699	EPA 29294	06/08/2001 08:30 E30S4	S/L	8.02	15.54	26.0	30.76	350	10/5	45	2.0		5.0	5.0	N		1000		
46721.50 GC699	EPA 29294	06/08/2001 08:30 E30S5	S/L	8.04	60.26	12.4	31.16	350	10/5	45	2.0		5.0	5.0	N		1000		
46721.51MS GC699	EPA 29294	06/08/2001 08:30 E30S5MS	S/L	8.04	60.26	12.1	30.42	350	10/5	45	2.0		5.0	5.0	N	1000	1000		
46721.52MSD GC699	EPA 29294	06/08/2001 08:30 E30S5MSD	S/L	8.04	60.26	12.1	30.39	350	10/5	45	2.0		5.0	5.0	N		1000		
46721.53 GC699	EPA 29294	06/08/2001 08:30 E30S6	S/L	8.04	26.78	22.3	30.39	350	10/5	45	2.0		5.0	5.0	N		1000		
46721.54 GC699	EPA 29294	06/08/2001 08:30 E30S7	S/L	8.11	26.62	22.2	30.26	350	10/5	45	2.0		5.0	5.0	N		1000		
46721.55 GC699	EPA 29294	06/08/2001 08:30 E30S8	S/L	8.09	46.19	17.1	31.86	350	10/5	45	2.0		5.0	5.0	N		1000		
46732.01 GC699	XXXXXXX XXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXX	S/L	8.23	7.80	28.4	30.79	350	10/5	45	2.0		5.0	5.0	N		1000		
46732.02 GC699	XXXXXXX XXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXX	S/L	7.35	44.47	17.1	30.71	350	10/5	45	2.0		5.0	5.0	N		1000		
46732.03 GC699	XXXXXXX XXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXX	S/L	7.76	30.21	21.1	30.18	350	10/5	45	2.0		5.0	5.0	N		1000		
46732.04 GC699	XXXXXXX XXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXX	S/L	7.69	31.54	21.1	30.78	350	10/5	45	2.0		5.0	5.0	N		1000		

INITIALS

WEIGHING:	CD	EXTRACTION:	CD	FLORISIL:
CLEANUP:	CD	KD:	GS	CH2Cl2
BLOWDOWN:	SA	TV:	GS	acetone
SURROG. SPIKER:	MC	VERIFIER:	GS	Hexane
MATRIX SPIKER:	MC	VERIFIER:	GS	
SUBMITTED BY:	SA	REVIEWED BY:	[illegible] 06/11	

ID NUMBERS

FLORISIL CARTRIDGE #:

GPC COLUMN #: 418002 (06-10-01) #3640A

SURROGATES ID CONC #: 5-13-7

MATRIX SPIKE SOLID/CONC #(s): 5-1-7

SOP - METHOD # : SWL-OP- 420 Rev. 1.0

COMMENTS

SB#061001A
SB#061001B

Extracts went through stgel and acid clean-up

PG 36 BOOK 1 R CAS

[redacted]	SV	OD ST • PCB	OTHER
CONT EX. (3520C)			
SEP-F (3510C)			
SHAKER			
SONC. (3550B)		XXXXX	
SOXHLET			

[X] RUSH [ ] REEXTRACT [ ] TCLP [ ] DIOXIN

SAMPLE EXTRACTION LO

BATCH: 010609SA

EXTRACT DATE: 2001-06-09 12:48

002776
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
46732.05 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX	S/L	7.53	28.29	21.9	30.53	350	10/5	45	2.0		5.0	5.0	N		1000		
46732.06 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX	S/L	6.90	40.63	18.3	30.81	350	10/5	45	2.0		5.0	5.0	N		1000		
46732.07 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX	S/L	7.99	9.92	27.6	30.63	350	10/5	45	2.0		5.0	5.0	N		1000		
46732.08 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX	S/L	7.01	58.30	12.8	30.65	350	10/5	45	2.0		5.0	5.0	N		1000		
46732.09 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX	S/L	7.16	58.30	12.6	30.12	350	10/5	45	2.0		5.0	5.0	N		1000		
46732.10 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX	S/L	7.12	40.05	18.1	30.21	350	10/5	45	2.0		5.0	5.0	N		1000		
46732.11 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX	S/L	7.02	60.04	12.0	30.13	350	10/5	45	2.0		5.0	5.0	N		1000		
46732.12 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX	S/L	7.50	76.18	7.3	30.69	350	10/5	45	2.0		5.0	5.0	N		1000		
46732.13 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX	S/L	7.11	70.07	9.0	30.10	350	10/5	45	2.0		5.0	5.0	N		1000		
46732.14 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX	S/L	7.59	72.12	8.5	30.51	350	10/5	45	2.0		5.0	5.0	N		1000		
46732.15 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX	S/L	7.00	30.70	21.3	30.78	350	10/5	45	2.0		5.0	5.0	N		1000		

INITIALS					
WEIGHING:	SA	EXTRACTION:	CD	FLORISIL:	
CLEANUP:	CD	KD:	GS		CH2Cl2
BLOWDOWN:	SA	TV:	GS		acetone
SURROG. SPIKER:	MC	VERIFIER:	GS		Hexane
MATRIX SPIKER:	MC	VERIFIER:	GS		06/12
SUBMITTED BY:	SA	REVIEWED BY:			

ID NUMBERS	
FLORISIL CARTRIDGE #:	
GPC COLUMN #:	418002 (06-10-01) #364001
SURROGATES ID CONC #:	5-13-7
MATRIX SPIKE SOLID/CONC #(s):	5-1-7
SOP - METHOD # : SWL-OP-	420 Rev. 1-0

COMMENTS
SB #06100 1A
SB #06100 1B
Extracts went through sfgel & acid Clean-up

PG 36 Book 1 Recs

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.
6/6	5:40	46690.01	Nissaki	[illegible]	N	GC610	1
06/07	3:45	N_2SO_4 test (lot# 102)	SWLO	SA	N	GC800	X
06/07	5:45	46612.22, 25, 26	EPA	SA	Y	GC699	X
6-08	11:00a	46707.07 – 18, ms msD	TOLTEST	GS	N	GC200	18
6-08	4:10p	46699.01 – 08; ms msD;	TETRA-SF	GS	N	GC399 = 300	8
↓	↓	46714.01 – 02	↓	↓	↓		2
06/08	9:30p	46689.01 – 22 ms, msD	EPA	SA	N	GC699	22
06/08	9:30p	46689.23 – 44 ms, msD	EPA	SA	N	GC699	22
06-11	12:00p	46779.17, 18 ms msD; 19, 20	Tetra-SF	GS	N	GC399 = 6300	4
↓	↓	46734.17; 18	↓	↓	↓	↓	2
06/11	9:20	46629.10	EPA	SA	Y	GC699 Ret	X
06/11	9:20	46702.11 – 32	EPA	SA	N	GC699	22
06/11	9:20	46612 – 33, 34, 36	EPA	SA	Y	GC699 Ret	X
06/11	9:20	46613.02, 05, 10	EPA	SA	Y	GC699 Ret	X
06/11	9:20	46689.45 – 56, ms/msD	EPA	SA	N	GC699	12
06/11	9:20	46702.01 – 10	EPA	SA	N	GC699	10
06-12	11:00	Put Order 413002	SWLO	MC	N	GC819	X
06-12	4:55	PEST / Aroc CHK (364B1)	SWLO	SA	N	GC819	X
06-12	4:55	PEST / Aroc CHK (418802)	SWLO	SA	N	GC819	X
06/12	9:30p	46781.94 – 55 ms/msD	EPA	SA	N	GC699	7
06/12	9:30p	46732.01 – 15	EPA	SA	N	GC699	15
06/12	9:30p	46732 16 – 37	EPA	SA	N	GC699	22

SOUTHWEST LABORATORY OF OKLAHOMA, INC.
1700 West Albany • Broken Arrow, OK 74012 • Office (918) 251-2858 • Fax (918) 251-2599

Southwest Laboratory of Oklahoma
1700 W. Albany Suite C
Broken Arrow, OK 74012-1421

INTERNAL CHAIN OF CUSTODY

Date	06/09/2001
Episode	**46732**
Client	**EPA**
Project	OLM04.2
Received	06/09/01

Test Code	Cont ID	(Circle the Sample Numbers Checked out) #	#	#	#	#	#	#	Date/Time Out	Analyst	Date/Time In
GC699	A	1	2	3	4	5	6	7			
		8	9	10	11	12	13	14			
		15	16	17	18	19	20	21			
		22	23	24	25	26	27	28			
		29	30	31	32	33	34	35			
		36	37	38	39	40	41	42			
		43	44	45	46	47	48	49			
		50	51	52	53	54	55	56			
		57	58	59	60	61	62	63			
		64	65	66	67	68	69	70			
		71	72	73	74	75	76	77	06/09	CD	~~06/09~~ 5:00p
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			
		29	30	31	32	33	34	35			
		36	37	38	39	40	41	42			
		43	44	45	46	47	48	49			
		50	51	52	53	54	55	56			
		57	58	59	60	61	62	63			
		64	65	66	67	68	69	70			
		71	72	73	74	75	76	77	06/09	CD	06/09 5:00pm

Quantitation Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061878.D\ECD1A.CH Vial: 78
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061878.D\ECD2B.CH
Acq On : 19 Jun 2001 18:04 Operator: DDC
Sample : 46732.08 *E30T7 * Inst : HP_07
Misc : *EPA*30.6G/5.0ML*58 Dilution: 10.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 20 9:07 2001 Quant Results File: XPCBF18.RES

Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Initial Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	5.81f	5.72	35817	38873	13.6	12.2
	Spiked Amount 15.562			Recovery	=	87.39%	78.40%
22)	S DCB	16.87	17.40	50768	63330	25.2	30.1
	Spiked Amount 15.562			Recovery	=	161.94%	193.42%
	Target Compounds:						
7)	L4 Aroclor-1242	9.19	7.71	797957	1647519	15773.9 E	11108.4 #
	L4 Aroclor-1242 {2}	9.81	0.00	378666	0	10950.1	N.D. d #
	L4 Aroclor-1242 {3}	10.12	10.05	203325	532463	9482.2	15357.6 E#
10)	L4 Aroclor-1242 {4}	10.44	10.54	377010	242529	13868.2 E	17842.2 E#
	Sum Aroclor-1242			1756958	2422512	50074.3	44308.2
	Average Aroclor-1242					12518.584	14769.405
12)	L6 Aroclor-1254	10.54	0.00	401654	0	4475.5	N.D. d #
13)	L6 Aroclor-1254 {2}	11.49	11.26	146385	527265	3305.9	3696.2
14)	L6 Aroclor-1254 {3}	12.21	12.22	222030	858590	2355.7	4596.3 #
15)	L6 Aroclor-1254 {4}	12.42	13.05	473007	384843	4085.2	3490.0
16)	L6 Aroclor-1254 {5}	12.80	13.34	476928	318319	3282.9	2966.1
	Sum Aroclor-1254			1720005	2089016	17505.2	14748.6
	Average Aroclor-1254					3501.031	3687.144
17)	L7 Aroclor-1260	12.21	12.62	222030	370534	1330.3	1771.9 #
18)	L7 Aroclor-1260 {2}	12.80	13.05	476928	384843	1722.8	1965.8
19)	L7 Aroclor-1260 {3}	13.36	13.74	426962	501863	1974.1	2501.0 #
20)	L7 Aroclor-1260 {4}	14.04	14.43	93068	113191	904.1	947.4
21)	L7 Aroclor-1260 {5}	14.59	14.86	148927	194421	650.8	966.4 #
	Sum Aroclor-1260			1367914	1564852	51214.2	63434.0
	Average Aroclor-1260					1316.409	1630.508

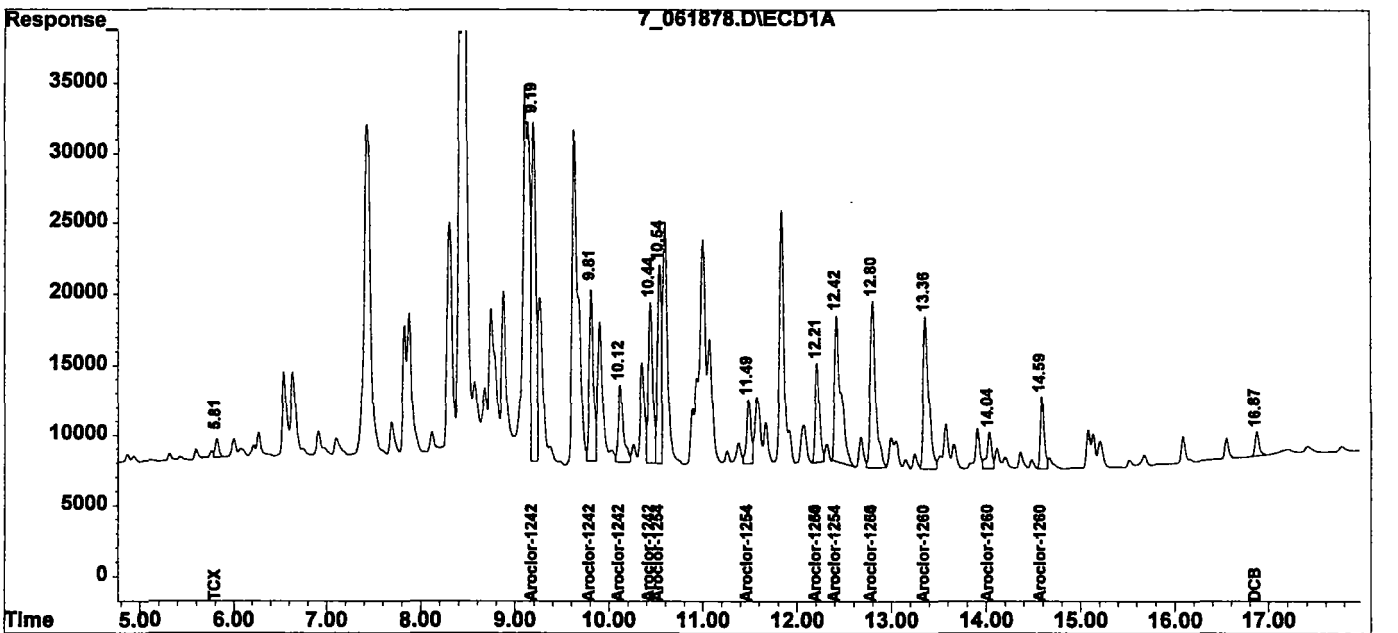
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

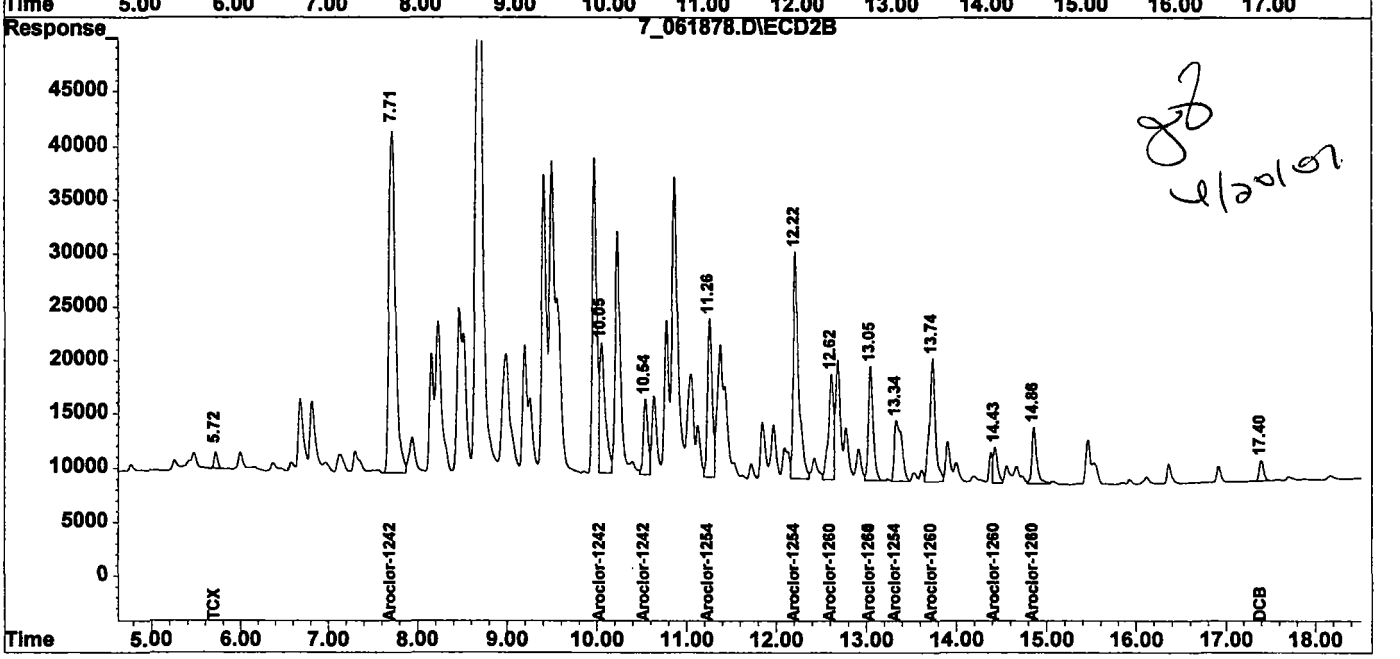
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061878.D\ECD1A.CH Vial: 78
Signal #2 : F:\HPCHEM\HP\7\DATA\06_18_01\7_061878.D\ECD2B.CH
Acq On : 19 Jun 2001 18:04 Operator: DDC
Sample : 46732.08 *E30T7 * Inst : HP_07
Misc : *EPA*30.6G/5.0ML*58 Dilution: 10.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 20 9:07 2001 Quant Results File: XPCBF18.RES

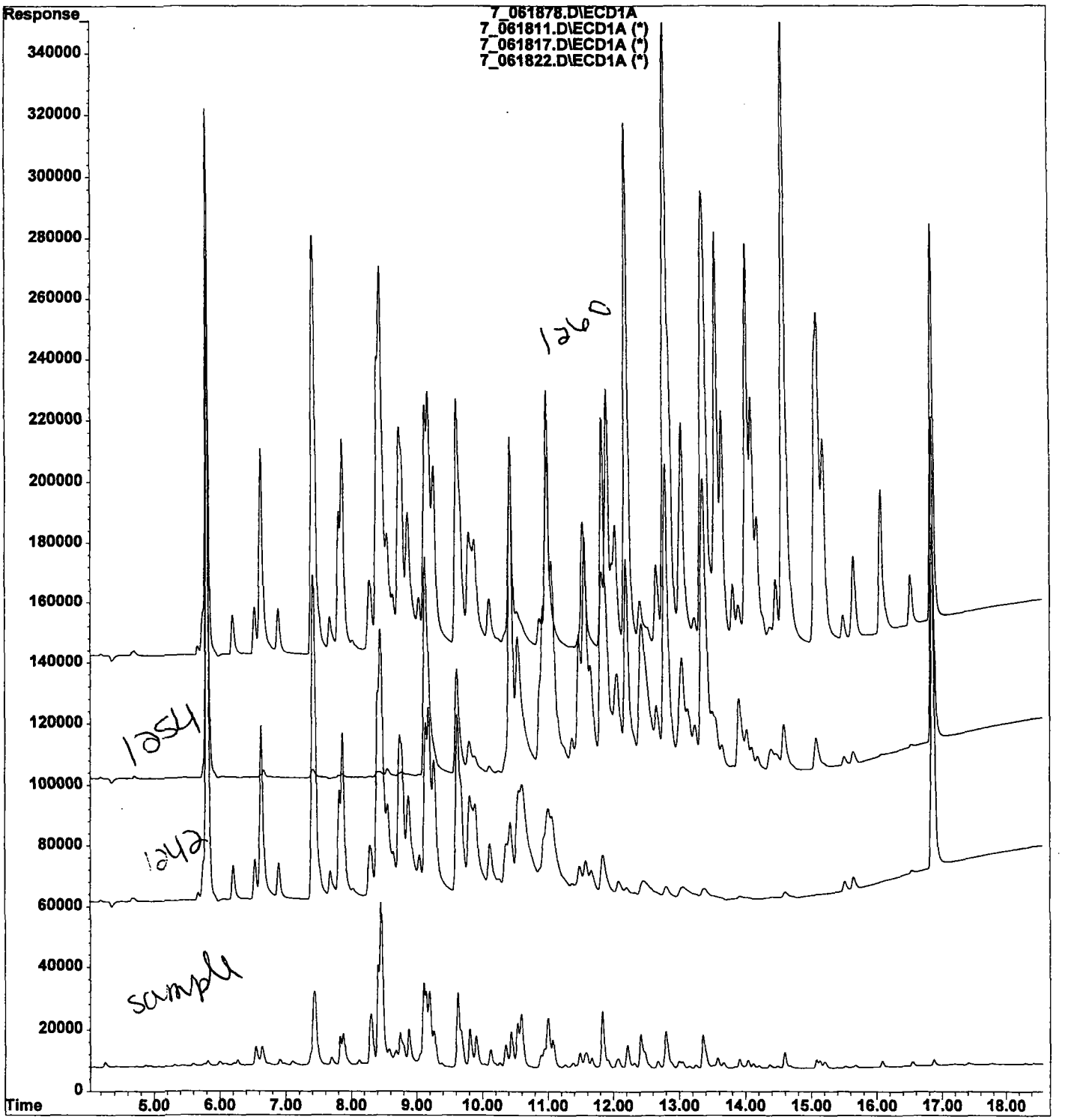
Method : F:\HPCHEM\HP\7\DATA\06_18_01\XPCBF18.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_18_01\
Last Update : Wed Jun 06 14:28:40 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : PEST Signal #2 Phase: PEST II
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_07A Signal #2 Inst : HP_07B





File : F:\HPCHEM\HP\7\DATA\06_18_01\7_061878.D
Operator : DDC
Acquired : 19 Jun 2001 18:04 using AcqMethod OLM03.M
Instrument : HP_07
Sample Name: 46732.08 *E30T7 *
Misc Info : *EPA*30.6G/5.0ML*58
Vial Number: 78



466

000

FedEx USA Airbill FedEx Tracking Number 821876981998

SPG11

Form I.D. No. 0215 Recipient's Copy

RECIPIENT: PEEL HERE

1 From This portion can be removed for Recipient's records.

Date 6-7-01 FedEx Tracking Number 821876981998

Sender's Name Lone Hrg 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

2 Your Internal Billing Reference

3 To

Recipient's Name SAMPLE LOG-IN Phone 918 251-0545

Company SOUTHWEST LABS OF OKLAHOMA, INC.

Address 0 WEST ALBANY, 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 1998

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.

- [ ] 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
- [x] Yes — As per attached Shipper's Declaration
- [ ] Yes — Shipper's Declaration not required
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg
- [ ] Cargo Aircraft Only

Dangerous Goods cannot be shipped in FedEx packaging.

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 12 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 4/00 Part #155912 ©1994-2000 FedEx PRINTED IN U.S.A. GBFE 5/00

402

ORIGINAL DOCUMENTS ARE INCLUDED IN

CSF 29254 SDG E00H4

Signature S Jackett

Date 6/11/01

324

FedEx emp# 15937 08JUN01

PRIORITY SATURDAY

TRK# 8218 7698 1987 FORM 0215

Deliver By: 09JUN01 A1

74012 -OK-US

TUL X0 RVSA

FedEx USA Airbill

FedEx Tracking Number 821876981987

Form I.D. No.

1 From This portion can be removed for Recipient's records.

Date 6·8·01 FedEx Tracking Number 821876981987

Sender's Name Lorie Hong 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 12634.001.002.0067.00

3 To

Recipient's Name SAMPLE LOG-IN Phone 918 251-0545

Company SOUTHWEST LABS OF OKAAHOMA, INC.

Address 1700 WEST ALBANY, 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 1987

4a Expre

- [x] FedEx Next busi
- [ ] FedEx Second

4b Express Freight Service

Delivery Commitment Day

- [ ] FedEx 1Day Freight* Next business day
- [ ] FedEx 2Day Freight Second business day
- [ ] FedEx 3Day Freight Third business day

* Call for Confirmation:

5 Packaging * Declared value limit $500

- [ ] FedEx Envelope/Letter*
- [ ] FedEx Pak*
- [x] Other Pkg. Includes FedEx Box, FedEx Tube, and customer pkg.

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
- [ ] Cargo Aircraft Only

Dangerous Goods cannot be shipped in FedEx packaging.

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	Total Weight	Total Charges
1	124	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 #155912 • ©1994-2000 FedEx • PRINTED IN U.S.A. GBFE 5/00

402

01460759 31

325

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

Case No:	29294
DAS No:	2001ZG07
SDG No:	E30S4

L

Date Shipped:	6/7/01
Carrier Name:	FedEx
Airbill:	821876981998
Shipped to:	Southwest Labs of Oklahoma, Inc. 1700 West Albany Suite C Broken Arrow OK 74012 (918) 251-0545

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
1 [illegible]	6-7-01 1810	[illegible]	6-8-01 8:30
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 E30S4
E30S0	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050410 (Ice Only) (1)	AP-SD027-02	S: 6/7/01 11:59		
E30S1	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050412 (Ice Only) (1)	AP-SD027-03	S: 6/7/01 11:59		
E30S2	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050414 (Ice Only) (1)	AP-SD027-03DP	S: 6/7/01 11:59		
E30S3	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050415 (Ice Only) (1)	AP-SD027-04	S: 6/7/01 11:59		
E30S4	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050419 (Ice Only) (1)	AP-SD026-01	S: 6/7/01 10:38		
E30S5	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050421 (Ice Only) (1)	AP-SD026-02	S: 6/7/01 10:38		
E30S6	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050424 (Ice Only) (1)	AP-SD026-03	S: 6/7/01 10:38		
E30S7	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050426 (Ice Only) (1)	AP-SD026-04	S: 6/7/01 10:38		
E30S8	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050428 (Ice Only) (1)	AP-SD026-05	S: 6/7/01 10:38		

329

COPY
ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E30S3
Signature [illegible]
Date 6/11/01

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: E30M9, E30R2, E30S5	Additional Sampler Signature(s): [illegible]	Cooler Temperature Upon Receipt: 5.0 C.B.	Chain of Custody Seal Number: 177895, 177896
Analysis Key: PCBs = PCBs	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact?__ Shipment Iced?__

TR Number: 5-201142833-060701-0001

LABORATORY COPY

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

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

Case No:	29294
DAS No:	2001ZG07
SDG No:	E3054

L

Date Shipped:	6/8/01
Carrier Name:	FedEx
Airbill:	821876981976
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 [signature]	060801 1500	[signature]	6-9-01 9:30
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 E3054
E30S9	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050430 (Ice Only) (1)	AP-SD045-01	S:	6/7/01	16:55		
E30T0	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050431 (Ice Only) (1)	AP-SD045-02	S:	6/7/01	16:55		
E30T1	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050433 (Ice Only) (1)	AP-SD045-03	S:	6/7/01	16:55		
E30T2	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050435 (Ice Only) (1)	AP-SD045-03DP	S:	6/7/01	16:55		
E30T3	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050436 (Ice Only) (1)	AP-SD045-04	S:	6/7/01	16:55		
E30T4	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050439 (Ice Only) (1)	AP-SD045-05	S:	6/7/01	16:55		
E30T5	Sediment/ Joe Ruiz	L/G	PCBs (7)	5-050441 (Ice Only) (1)	AP-SD054-01	S:	6/7/01	16:03		
E30T6	Sediment/ Joe Ruiz	L/G	PCBs (7)	5-050443 (Ice Only) (1)	AP-SD054-02	S:	6/7/01	16:03		
E30T7	Sediment/ Joe Ruiz	L/G	PCBs (7)	5-050445 (Ice Only) (1)	AP-SD054-03	S:	6/7/01	16:03		
E30T8	Sediment/ Joe Ruiz	L/G	PCBs (7)	5-050447 (Ice Only) (1)	AP-SD054-04	S:	6/7/01	16:03		

321

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC: E30T4, E30W6, E30X7, E30Y9	Additional Sampler Signature(s): [signature]	Cooler Temperature Upon Receipt: 4.8°C T.B.	Chain of Custody Seal Number: 177889, 177890
Analysis Key: PCBs = PCBs	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact?__	Shipment Iced?__

TR Number: 5-201142833-060801-0002

LABORATORY COPY

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

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

Case No:	29294
DAS No:	2001ZG07
SDG No:	E3054

L

Date Shipped:	6/8/01
Carrier Name:	FedEx
Airbill:	821876981976
Shipped to:	Southwest Labs of Oklahoma, Inc. 1700 West Albany Suite C Broken Arrow OK 74012 (918) 251-0545

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
[illegible]	6801 1500	[illegible]	6-9-01
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 E3054
E30T9	Sediment/ Joe Ruiz	L/G	PCBs (7)	5-050449 (Ice Only) (1)	AP-SD054-05	S:	6/7/01	16:03		
E30W0	Sediment/ Joe Ruiz	L/G	PCBs (7)	5-50451 (Ice Only) (1)	AP-SD054-05DP	S:	6/7/01	16:03		
E30W1	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050452 (Ice Only) (1)	AP-SD036-01	S:	6/7/01	15:20		
E30W2	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050455 (Ice Only) (1)	AP-SD036-02	S:	6/7/01	15:20		
E30W3	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050457 (Ice Only) (1)	AP-SD036-03	S:	6/7/01	15:20		
* E30W4	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050459 (Ice Only) (1)	AP-SD036-04	S:	6/7/01	15:20		
E30W5	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050461 (Ice Only) (1)	AP-SD043-01	S:	6/7/01	16:15		
E30W6	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050462 (Ice Only) (1)	AP-SD043-02	S:	6/7/01	16:15		
E30W7	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050463 (Ice Only) (1)	AP-SD043-03	S:	6/7/01	16:15		
E30W8	Sediment/ Joe Klemp	L/G	PCBs (7)	5-050465 (Ice Only) (1)	AP-SD043-03DP	S:	6/7/01	16:15		

*SDG Final Sample.

Shipment for Case Complete?Y	Sample(s) to be used for laboratory QC: E30T4, E30W6, E30X7, E30Y9	Additional Sampler Signature(s): [illegible]	Cooler Temperature Upon Receipt: 4.8°C	Chain of Custody Seal Number: 177889, 177890
Analysis Key: PCBs = PCBs	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact?__ Shipment Iced?__

TR Number: 5-201142833-060801-0002

LABORATORY COPY

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

Southwest Laboratory of Oklahoma
1700 W. Albany Suite C
Broken Arrow, OK 74012-1421

SAMPLE LOG-IN RECORD

Date 06/08/2001 Page4
Episode **46721**
Client **EPA**
Project OLM04.2
Received 06/08/01
Logged In 06/08/01

TEST	PRI	DUE	CONTAINER	DESCRIPTION	EXTRACTED	ANALYST	ANALYZED
Sample: **46721.42**		Sampled:06/07/01		11:48 ID:E30R6	SDG:	Matrix: S	Containers: 1
GC699	6	06/14/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46721.43**		Sampled:06/07/01		11:48 ID:E30R7	SDG:	Matrix: S	Containers: 1
GC699	6	06/14/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46721.44**		Sampled:06/07/01		11:59 ID:E30R9	SDG:	Matrix: S	Containers: 1
GC699	6	06/14/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46721.45**		Sampled:06/07/01		11:59 ID:E30S0	SDG:	Matrix: S	Containers: 1
GC699	6	06/14/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46721.46**		Sampled:06/07/01		11:59 ID:E30S1	SDG:	Matrix: S	Containers: 1
GC699	6	06/14/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46721.47**		Sampled:06/07/01		11:59 ID:E30S2	SDG:	Matrix: S	Containers: 1
GC699	6	06/14/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46721.48**		Sampled:06/07/01		11:59 ID:E30S3	SDG:	Matrix: S	Containers: 1
GC699	6	06/14/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46721.49**		Sampled:06/07/01		10:38 ID:E30S4	SDG:	Matrix: S	Containers: 1
GC699	6	06/14/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46721.50N3**		Sampled:06/07/01		10:38 ID:E30S5	SDG:	Matrix: S	Containers: 1
GC699	6	06/14/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46721.51MS3**		Sampled:06/07/01		10:38 ID:E30S5MS	SDG:	Matrix: S	Containers: 1
GC699	6	06/14/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46721.52SD3**		Sampled:06/07/01		10:38 ID:E30S5MSD	SDG:	Matrix: S	Containers: 1
GC699	6	06/14/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46721.53**		Sampled:06/07/01		10:38 ID:E30S6	SDG:	Matrix: S	Containers: 1
GC699	6	06/14/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46721.54**		Sampled:06/07/01		10:38 ID:E30S7	SDG:	Matrix: S	Containers: 1
GC699	6	06/14/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46721.55**		Sampled:06/07/01		10:38 ID:E30S8	SDG:	Matrix: S	Containers: 1
GC699	6	06/14/2001	A	NON STD PCB			

COPY

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29594 SDG 28063
Signature S Dechett
Date 6/11/01

Southwest Laboratory of Oklahoma
1700 W. Albany Suite C
Broken Arrow, OK 74012-1421

SAMPLE LOG-IN RECORD

Date	06/08/2001 Page5
Episode	**46721**
Client	**EPA**
Project	OLM04.2
Received	06/08/01
Logged In	06/08/01

TEST	PRI	DUE	CONTAINER	DESCRIPTION	EXTRACTED	ANALYST	ANALYZED
IN660	8	06/11/2001	A	% MOISTURE			

Southwest Laboratory of Oklahoma
1700 W. Albany Suite C
Broken Arrow, OK 74012-1421

SAMPLE LOG-IN RECORD

REVIEWED
BY Harry Inborg
DATE 6-9-01

Date 06/09/2001 Page1
Episode **46732**
Client **EPA**
Project OLM04.2
Received 06/09/01
Logged In 06/09/01

TEST	PRI	DUE	CONTAINER	DESCRIPTION	EXTRACTED		ANALYST	ANALYZED
Sample: **46732.01**		Sampled:06/07/01	16:55	ID:E30S9		SDG:	Matrix: S	Containers: 1
GC699	6	06/15/2001	A	NON STD PCB				
IN660	8	06/11/2001	A	% MOISTURE				
Sample: **46732.02**		Sampled:06/07/01	16:55	ID:E30T0		SDG:	Matrix: S	Containers: 1
GC699	6	06/15/2001	A	NON STD PCB				
IN660	8	06/11/2001	A	% MOISTURE				
Sample: **46732.03**		Sampled:06/07/01	16:55	ID:E30T1		SDG:	Matrix: S	Containers: 1
GC699	6	06/15/2001	A	NON STD PCB				
IN660	8	06/11/2001	A	% MOISTURE				
Sample: **46732.04**		Sampled:06/07/01	16:55	ID:E30T2		SDG:	Matrix: S	Containers: 1
GC699	6	06/15/2001	A	NON STD PCB				
IN660	8	06/11/2001	A	% MOISTURE				
Sample: **46732.05**		Sampled:06/07/01	16:55	ID:E30T3		SDG:	Matrix: S	Containers: 1
GC699	6	06/15/2001	A	NON STD PCB				
IN660	8	06/11/2001	A	% MOISTURE				
Sample: **46732.06**		Sampled:06/07/01	16:03	ID:E30T5		SDG:	Matrix: S	Containers: 1
GC699	6	06/15/2001	A	NON STD PCB				
IN660	8	06/11/2001	A	% MOISTURE				
Sample: **46732.07**		Sampled:06/07/01	16:03	ID:E30T6		SDG:	Matrix: S	Containers: 1
GC699	6	06/15/2001	A	NON STD PCB				
IN660	8	06/11/2001	A	% MOISTURE				
Sample: **46732.08**		Sampled:06/07/01	16:03	ID:E30T7		SDG:	Matrix: S	Containers: 1
GC699	6	06/15/2001	A	NON STD PCB				
IN660	8	06/11/2001	A	% MOISTURE				
Sample: **46732.09**		Sampled:06/07/01	16:03	ID:E30T8		SDG:	Matrix: S	Containers: 1
GC699	6	06/15/2001	A	NON STD PCB				
IN660	8	06/11/2001	A	% MOISTURE				
Sample: **46732.10**		Sampled:06/07/01	16:03	ID:E30T9		SDG:	Matrix: S	Containers: 1
GC699	6	06/15/2001	A	NON STD PCB				
IN660	8	06/11/2001	A	% MOISTURE				
Sample: **46732.11**		Sampled:06/07/01	16:03	ID:E30W0		SDG:	Matrix: S	Containers: 1
GC699	6	06/15/2001	A	NON STD PCB				
IN660	8	06/11/2001	A	% MOISTURE				
Sample: **46732.12**		Sampled:06/07/01	15:20	ID:E30W1		SDG:	Matrix: S	Containers: 1
GC699	6	06/15/2001	A	NON STD PCB				
IN660	8	06/11/2001	A	% MOISTURE				
Sample: **46732.13**		Sampled:06/07/01	15:20	ID:E30W2		SDG:	Matrix: S	Containers: 1
GC699	6	06/15/2001	A	NON STD PCB				
IN660	8	06/11/2001	A	% MOISTURE				
Sample: **46732.14**		Sampled:06/07/01	15:20	ID:E30W3		SDG:	Matrix: S	Containers: 1
GC699	6	06/15/2001	A	NON STD PCB				

Southwest Laboratory of Oklahoma
1700 W. Albany Suite C
Broken Arrow, OK 74012-1421

SAMPLE LOG-IN RECORD

Date	06/09/2001 Page2
Episode	**46732**
Client	**EPA**
Project	OLM04.2
Received	06/09/01
Logged In	06/09/01

TEST	PRI	DUE	CONTAINER	DESCRIPTION	EXTRACTED	ANALYST	ANALYZED
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46732.15**	Sampled:06/07/01	15:20	ID:E30W4		SDG:	Matrix: S	Containers: 1
GC699	6	06/15/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46732.16**	Sampled:06/07/01	16:15	ID:E30W5		SDG:	Matrix: S	Containers: 1
GC699	6	06/15/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46732.17N1**	Sampled:06/07/01	16:55	ID:E30T4		SDG:	Matrix: S	Containers: 1
GC699	6	06/15/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46732.18MS1**	Sampled:06/07/01	16:55	ID:E30T4MS		SDG:	Matrix: S	Containers: 1
GC699	6	06/15/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46732.19SD1**	Sampled:06/07/01	16:55	ID:E30T4MSD		SDG:	Matrix: S	Containers: 1
GC699	6	06/15/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46732.20**	Sampled:06/07/01	16:15	ID:E30W7		SDG:	Matrix: S	Containers: 1
GC699	6	06/15/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46732.21**	Sampled:06/07/01	16:15	ID:E30W8		SDG:	Matrix: S	Containers: 1
GC699	6	06/15/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46732.22**	Sampled:06/07/01	16:15	ID:E30W9		SDG:	Matrix: S	Containers: 1
GC699	6	06/15/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46732.23**	Sampled:06/07/01	16:15	ID:E30X0		SDG:	Matrix: S	Containers: 1
GC699	6	06/15/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46732.24**	Sampled:06/07/01	15:35	ID:E30X1		SDG:	Matrix: S	Containers: 1
GC699	6	06/15/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46732.25**	Sampled:06/07/01	15:35	ID:E30X2		SDG:	Matrix: S	Containers: 1
GC699	6	06/15/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46732.26**	Sampled:06/07/01	15:35	ID:E30X3		SDG:	Matrix: S	Containers: 1
GC699	6	06/15/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46732.27**	Sampled:06/07/01	15:35	ID:E30X4		SDG:	Matrix: S	Containers: 1
GC699	6	06/15/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46732.28**	Sampled:06/07/01	16:51	ID:E30X5		SDG:	Matrix: S	Containers: 1

SAMPLE LOG-IN SHEET

Lab Name SOUTHWEST LABORATORY OF OKLAHOMA	Page 3 of 4
Received by (Print Name) JASON SPRIGGS	Log-In Date 2001-06-08 11:21
Received by (Signature)	
Case Number 29294	Sample Delivery Group No. E30S4 / SAS Number

Remarks: Cooler: 06/08/01-1

1. Custody Seals(s)	Present/Absent* Intact/ Broken
2. Custody Seal Nos.	177895-896
3. Chain-of Custody Records	Present/Absent*
4. Traffic Reports or Packing Lists	Present/Absent*
5. Airbill	Airbill/ Sticker Present/Absent*
6. Airbill No.	821876981998
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	5.0c
10. Does Information on Custody records, traffic reports, and sample tags agree?	Yes/ No*
11. Date Received at Lab	06/08/01
12. Time Received	08:30

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment: etc,
E30R2	5-050392	46721.36	
E30R2MS	5-050392	46721.37	
E30R2MSD	5-050392	46721.38	
E30R3	5-050394	46721.39	
E30R4	5-050397	46721.40	
E30R5	5-050399	46721.41	
E30R6	5-050401	46721.42	
E30R7	5-050403	46721.43	
E30R9	5-050408	46721.44	
E30S0	5-050410	46721.45	
E30S1	5-050412	46721.46	
E30S2	5-050414	46721.47	
E30S3	5-050415	46721.48	
E30S4	5-050419	46721.49	
E30S5	5-050421	46721.50	
E30S5MS	5-050421	46721.51	
E30S5MSD	5-050421	46721.52	

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E30S3
Signature
Date 6/11/01

Sample Transfer	
Fraction PCB	Fraction
Area # 9	Area #
By JS	By
On 6-8-01	On

* Contact SMO and attach record of resolution.

Reviewed By	Logbook No.
Date 06/08/01	Logbook Page No.

FORM-DC1

OLM04.2

SAMPLE LOG-IN SHEET

Lab Name SOUTHWEST LABORATORY OF OKLAHOMA	Page 4 of 4
Received by (Print Name) JASON SPRIGGS	Log-In Date 2001-06-08 11:21
Received by (Signature)	
Case Number 29294	Sample Delivery Group No. E30S4 / SAS Number

Remarks: Cooler: 06/08/01-1

1. Custody Seals(s)	Present/Absent* Intact/ Broken
2. Custody Seal Nos.	177895-896
3. Chain-of Custody Records	Present/Absent*
4. Traffic Reports or Packing Lists	Present/Absent*
5. Airbill	Airbill/ Sticker Present/Absent*
6. Airbill No.	821876981998
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	5.0c
10. Does Information on Custody records, traffic reports, and sample tags agree?	Yes/ No*
11. Date Received at Lab	06/08/01
12. Time Received	08:30

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment: etc,
E30S6	5-050424	46721.53	
E30S7	5-050426	46721.54	
E30S8	5-050428	46721.55	

Sample Transfer	
Fraction PCB	Fraction
Area # 9	Area #
By JS	By
On 6-8-01	On

* Contact SMO and attach record of resolution.

Reviewed By	Logbook No.
Date 06/08/01	Logbook Page No.

FORM-DC1 OLM04.2

SAMPLE LOG-IN SHEET

Lab Name SOUTHWEST LABORATORY OF OKLAHOMA	Page 1 of 5
Received by (Print Name) JASON SPRIGGS	Log-In Date 2001-06-09 11:02
Received by (Signature)	
Case Number 29294	Sample Delivery Group No. E30S4 / SAS Number

Remarks: Cooler: 06/09/01-1

1. Custody Seals(s)	Present/Absent* Intact/ Broken
2. Custody Seal Nos.	177889-890
3. Chain-of Custody Records	Present/Absent*
4. Traffic Reports or Packing Lists	Present/Absent*
5. Airbill	Airbill/ Sticker Present/Absent*
6. Airbill No.	821876981978 87 6-9-01
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	4.8c
10. Does Information on Custody records, traffic reports, and sample tags agree?	Yes/ No*
11. Date Received at Lab	06/09/01
12. Time Received	09:30

Sample Transfer	
Fraction TCB	Fraction
Area # 5	Area #
By JS	By
On 6-9-01	On

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment: etc,
E30S9	5-050430	46732.01	
E30T0	5-050431	46732.02	
E30T1	5-050433	46732.03	
E30T2	5-050435	46732.04	
E30T3	5-050436	46732.05	
E30T5	5-050441	46732.06	
E30T6	5-050443	46732.07	
E30T7	5-050445	46732.08	
E30T8	5-050447	46732.09	
E30T9	5-050449	46732.10	
E30W0	5-050451	46732.11	
E30W1	5-050452	46732.12	
E30W2	5-050455	46732.13	
E30W3	5-050457	46732.14	
E30W4	5-050459	46732.15	
E30W5	5-050461	46732.16	
E30T4	5-050439	46732.17	
E30T4MS	5-050439	46732.18	

* Contact SMO and attach record of resolution.

Reviewed By Hans M. Borg	Logbook No.
Date 6-9-01	Logbook Page No.

FORM-DC1 OLM04.2

Harry Borg

From: Bauer, Heather [Heather.Bauer@dyncorp.com]
Sent: Wednesday, June 13, 2001 10:35 AM
To: Harry Borg (E-mail)
Cc: Howard Pham (E-mail); Tanya Balla (E-mail)
Subject: Region 05 | Case 29294 | Lab SWOK | Issue samples received 6/9/01 - air bill # discrepancy | FINAL

Harry,
Following is the resolution from Region 5. Per the Region, it appears as though the airbills got mixed up. Please note all issues in the case narrative and proceed with the analysis of the samples. Please let me know if you have any other questions or problems.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----

From: **Pham.Howard@epamail.epa.gov [mailto:Pham.Howard@epamail.epa.gov]**
Sent: Wednesday, June 13, 2001 10:39 AM
To: Bauer, Heather
Subject: Re: Region 05 | Case 29294 | Lab SWOK | Issue samples received 6/9/01 - air bill # discrepancy.

Hi Heather,

Please ask the lab proceed the analyses and made a note in the case narrative.

Thanks.

Howard Pham

"Bauer, Heather" <Heather.Bauer@dyncorp.com>

To: Howard Pham/R5/USEPA/US@EPA
Subject: Region 05 | Case 29294 | Lab SWOK | Issue samples received 6/9/01 - air bill # discrepancy
06/12/2001 03:32 PM
Please respond to "Bauer, Heather"

Howard,

Following is the response from the sampler. Please advise on how the lab should proceed as quickly as possible.

- Heather

  Heather Bauer
  DynCorp
  (703)264-9348

-----Original Message-----

From: **Heather Bauer [mailto:heather.bauer@dyncorp.com]**
Sent: Monday, June 11, 2001 2:36 PM
To: 'Howard at home (E-mail)'
Subject: Region 05 | Case 29294 | Lab SWOK | Issue samples received

6/9/01 - air bill # discrepancy.

Howard,

Tanya Balla said that dioxins were sent to the same lab but were outside of the CLP and it looked like the airbills got mixed up.

Heather Bauer
DynCorp
(703)264-9348

6/11/2001 2:20 P.M. Phone conversation with Tanya Balla. She said that dioxins were sent to the same lab but were outside of the CLP and it looked like the airbills got mixed up.

-----Original Message-----

From: **Heather Bauer [mailto:heather.bauer@dyncorp.com]**
Sent: Monday, June 11, 2001 12:08 PM
To: 'Tanya Balla (E-mail)'
Cc: 'Howard Pham (E-mail)'; 'Howard at home (E-mail)'
Subject: Region 05 | Case 29294 | Lab SWOK | Issue samples received 6/9/01 - air bill # discrepancy.

This is Carolyn Mack, CLP Scheduling Team Leader. I am covering for Heather while she is out.

SWOK sent the following e-mail indicating that the airbill that was listed on the TR/COC is different that the actual airbill number. This is indicated in the below e-mail. Also, the lab received some dioxin samples under airbill # 821876981987 from the same person as the CLP samples.

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----

From: **hborg@swlab.com [mailto:hborg@swlab.com]**
Sent: Saturday, June 09, 2001 1:02 PM
To: Mack, Carolyn
Cc: Bauer, Heather
Subject: Region 5, Case # 29294; samples received 6/9/01;air bill # discrepancy.

Carolyn,

The airbill number on the cooler for the samples arriving on 6/9/01 was FED X # 821876981987

The airbill number listed on the traffic reports was FED X # 821876981976

The laboratory will note the cooler airbill as FED X # 821876981987 on the DC1 form and note problem in SDG narrative.

Note: The laboratory also received Dioxin samples for a Region 5 (regional contract) which had FED X # 821876981987 listed on that traffic report and the cooler had FED X # 821876981976. These two coolers were sent from the same person.

Harry M. Borg
Organic Program Manager
SWOK

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 must reflect the required CRQL.

b. The 5 point curve must meet an average 20 % RSD

c. If other arochlors are suspected, or other arochlors are detected in an analysis, a separate 5-point calibration must be run for the particular arochlor. The 20 % RSD requirement will apply to any other arochlor 5-point analysis performed.

d. A continuing calibration verification standard of arochlors 1016/1260 must be analyzed every 12 hours of analysis and not to exceed 20 samples.

e. The continuing calibration verification analysis must be within 15% of the expected value. If the % difference is greater than 15%, all samples analyzed prior to the continuing calibration verification must be reanalyzed.

f. Each extraction batch must contain method blanks, laboratory control spike and matrix spike/matrix spike duplicate samples (provided sufficient sample is sent for the matrix spike and duplicate analysis).

g. Each field sample and quality control sample must contain Decachlorobiphenyl surrogate (DCB). Samples may be spiked with TMX surrogate as well, but no recovery requirements will be placed on the TMX, as this compound is sensitive to sulfuric acid cleanup.

h. All samples failing to meet DCB recovery limits of 30% to 170% must be re-extracted and re-analyzed.

i. For the laboratory control spike, arochlor 1254 is to be used. The results of the laboratory control sample should fall between the recovery limits of 29 to 135 %. If the recovery falls below 29%, all samples within the

extraction batch must be re-extracted and re-analyzed. If the recovery is above 135% and arochlors are not detected in the batch sample, then no further action is necessary. If the recovery is above 135% and arochlors are present in any of the batch samples, then the samples containing arochlor must be re-extracted and re-analyzed.

j. Arochlor 1254 is to be used for the matrix spike and duplicate analyses. Advisory limits are 29% to 135% are set for the matrix spike and duplicate analysis. As these limit are only advisory, no particular action is required for QC samples outside these limits. However, consistent recovery outside these limits for analysis in which no apparent matrix interference is present may justify a review by EPA personnel, and the laboratory may be requested to repeat certain analyses at no further cost to the government.

k. Some, or all, samples may require a reporting CRQL of 25 ug/Kg (33 ug/Kg is the OLM04.2 required CRQL). For these samples, the laboratory must extract 40 grams of sample, as opposed to the normal 30 grams. Also, extra sodium sulfate may have to be added to the sample in order to dry the sample properly.

l. For reporting purposes, the laboratory is to provide a standard CLP data package at the turnaround time requested by the Region. Modifications to reporting requirements due to the changes presented in this modification request form shall be incorporated into the hard copy deliverables and into the electronic diskette where practical and easily accommodated. All CLP forms associated with florisil cleanup, and GPC check analysis are not required. Any other reporting requirements, not mentioned in this document which the lab believes is affected by the modifications required for this project shall be noted in the case narrative. All hard copy and electronic reporting requirements not affected by these modifications shall be subjected to CCS. The Organic Program Manager will make recommendations to the Contracting Officer as to any disputes concerning CCS defects charged against samples.

While not required in the final data package, the laboratory should keep on file in the lab, the SOPs used to perform the Acid and Silica Gel cleanup techniques. Also, the lab should include copies of this modification request forms in the final hard copy data packages.