Data Review Tuesday, September 11, 2001
Site Name: Allied Paper (MI)
Case Number: 29546 Laboratory: Southwest Laboratory
SDG: E00Q1

US EPA RECORDS CENTER REGION 5
560060

PCBs

Samples:

Sample No	Station Location	Matrix	Date Collected	Date Extracted	Date Analyzed
E00Q1	AP-SL029-16-01	Soil	07/30/01	08/02/01	08/14/01
E00Q2	AP-SL029-16-02	Soil	07/30/01	08/02/01	08/14/01
E00Q3	AP-SL029-16-03	Soil	07/30/01	08/02/01	08/14/01
E00Q4	AP-SL029-16-04	Soil	07/30/01	08/02/01	08/21/01
E00Q5	AP-SL029-16-05	Soil	07/30/01	08/02/01	08/21/01
E00Q6	AP-SL029-16-06	Soil	07/30/01	08/02/01	08/21/01
E00Q7	AP-SL029-16-06DP	Soil	07/30/01	08/02/01	08/21/01
E00Q8	AP-SL029-18-01	Soil	07/30/01	08/02/01	08/21/01
E00Q9	AP-SL029-18-02	Soil	07/30/01	08/02/01	08/21/01
E00R0	AP-SL029-18-03	Soil	07/30/01	08/02/01	08/21/01
E00R1	AP-SL029-18-04	Soil	07/30/01	08/02/01	08/21/01
E00R2	AP-SL029-18-05	Soil	07/30/01	08/02/01	08/21/01
E00R3	AP-SL029-18-06	Soil	07/30/01	08/02/01	08/21/01
E00R4	AP-SL029-18-06DP	Soil	07/30/01	08/02/01	08/21/01
E00R5	AP-SL029-18-07	Soil	07/30/01	08/02/01	08/21/01
E00R6	AP-SL029-21-01	Soil	07/30/01	08/02/01	08/21/01
E00R7	AP-SL029-21-02	Soil	07/30/01	08/02/01	08/21/01
E00R8	AP-SL029-21-03	Soil	07/30/01	08/02/01	08/21/01
E00R9	AP-SL029-21-03DP	Soil	07/30/01	08/02/01	08/21/01
E00S0	AP-SL029-21-04	Soil	07/30/01	08/02/01	08/21/01

Holding Time:

All samples were extracted and analyzed within the required holding time. The samples arrived in a cooler at 5.4 degrees Celsius.

Method Blank:

Method Blank:

Two method blanks PBLKSB, and PBLKSA were associated with this SDG. PBLKSB was analyzed on 08/14/01 with (E00Q1 thru E00Q9, E00R0 thru E00R9, E00S0, E00Q1DL, E00Q2DL, E00Q8DL, E00Q9DL, E00R6DL, and MS/MSD). PBLKSA was analyzed on 08/28/01 with (E00Q9RE). The PBLKSB, and PBLKSA results were free of contamination. All samples underwent OLMO4.2 cleanup, Silica Gel Cleanup, and sulfuric acid cleanup prior analysis. All instrument blanks associated with this sample set were free of contamination.

Surrogate Recovery:

All method blank and investigated samples had surrogate recoveries within the acceptance quality control limits (30 to 170%), except E00Q8 (DCB1 199%), E00Q9 (DCB1 238%, DCB2 200%), E00R6 (DCB1 228%), E00Q9RE (DCB1 310%, DCB2 181%), and diluted out in E00Q8DL (DCB1 261D%, DCB2 173D%), and E00Q9DL (DCB1 312D%, DCB2 294D%). Therefore, qualify the detected values in the samples E00Q8, E00Q9, E00R6, E00Q9RE, E00Q8DL, and E00Q9DL as estimated (J).

Matrix Spike/ Matrix Spike Duplicate Recovery:
The matrix spike/ matrix spike duplicate audit was performed on sample E00Q2. The matrix spike duplicate recovery was at 282% outside the quality control limits (29 to 135%). Therefore, qualify aroclor 1254 as (J) in sample E00Q2. However, the matrix spike and the relative percent difference (RPD %) recoveries were acceptable.

Laboratory Control Sample Recovery:
The two laboratories control samples/laboratories control samples duplicates, and the (RPD%) relative percent difference recoveries were within the quality control limits (29 to 135%).

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

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

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

Data Reviewed By: Tania Balikji-Shammo Date: 09/11/01

067-4A -AAR)

DATE: September 5,2001

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

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

Attn: Tonya Balla

SITE NAME: Allied Paper

CASE NO.	LAB	NO # OF SAMPLES	SDG	MATRIX
29546	Southwest	20	E00Q1	SOIL

Upon receipt of data, please check each package for completeness and note any missing deliverables below.

Send this form back to Sylvia Griffin, Data Management Coordinator after filling in the blanks below.

Data Received by:_____ Date:_____

PROBLEMS:

Please indicate if data is complete, and note if there are any deliverables missing from the cases noted above.

_____

_____

Received by Data Management Coordinator, CRL for file.

Date:_____

Signature:_____

FROM: U.S. EPA
Region V
Central Regional Laboratory
536 S. Clark, 10th Floor
CHICAGO, IL 60605

RECEIVED
SEP 07 2001

Sent By: Eva M. Dixon, Sr. Data Specialist
ESAT

TPB

Regional Transmittal Form

SEP 05 2001

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE:

SUBJECT: Review of Data
Received for Review on 9-4-01

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

TO: Data User: WESTON

We have reviewed the data for the following case:

SITE NAME: ALLIED PAPER (MI)

CASE NUMBER: 29546 SDG NUMBER: E00Q1

Number and Type of Samples: 20 (SOIL)

Sample Numbers: E00Q1-9, E00R0-9, E00S0

Laboratory: SOUTHWEST Hrs for Review:

Following are our findings:

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

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V
ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Sample Delivery Group: E00Q1 CERCLIS No: MID006007308

Case No: 29546 Site Name/Location: ALLIED PAPER

Contractor or EPA Lab: SOUTHWEST Data User: WESTON

No. of Samples: 20 Date Sampled or Date Received: 9-4-01

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

Are basic data forms in? Yes ✓ No ____
No of samples claimed: 20 No. of samples received: 20

Received by: EVA M. DIXON / ESAT Date: 9-4-01

Received by LSSS: EVA M. DIXON / ESAT Date: 9-4-01

Review started: ____ Reviewer Signature: ____

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

Copied by: EVA M. DIXON / ESAT Date: 9-5-01

Mailed to user by: EVA M. DIXON / ESAT Date: 9-5-01

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

Data received by: ____ Date: ____

Data review received by: ____ Date: ____

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

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

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

INORGANIC/ORGANIC COMPLETE SDG FILE (CSF) INVENTORY CHECKLIST

Case No. 29546 SDG No. E00Q1 SDG Nos. to Follow _____ _____ _____ SAS No. _____ Date Recvd 9 / 4 /01

EPA Lab ID: SOUTHWEST	ORIGINALS	YES	NO	N/A
Lab Location: BROKEN ARROW, OK	CUSTODY SEALS			
Region: 5 Audit No:	1. Present on package?	✓		
Re-Submitted CSF? Yes____ No ✓	2. Intact upon receipt?	✓		
Box No (s): _____	FORM DC-2			
COMMENTS:	3. Numbering scheme accurate?			
	4. Are enclosed documents listed?			
	5. Are listed documents enclosed?			
	FORM DC-1			
	6. Present?			
	7. Complete?			
	8. Accurate?			
	CHAIN-OF-CUSTODY RECORD(s)			
	9. Signed?			
	10. Dated?			
	TRAFFIC REPORT (s) / PACKING LIST(s)			
	11. Signed?			
	12. Dated?			
	AIRBILLS / AIRBILL STICKER			
	13. Present?			
	14. Signed?			
	15. Dated?			
	SAMPLE TAGS			
	16. Does DC-1 list tags as being included?			
	17. Present?			
	OTHER DOCUMENTS			
	18. Complete?			
	19. Legible?			
	20. Original?			
Over for additional comments.	If 'NO', does the copy indicate where the original documents are located?			

Received by: Eva H. Dixon EVA H. DIXON/ESAT Date 9/4/01

Audited by: _____ _____ Date ___/___/___

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

TO BE COMPLETED BY CEAT

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

Entered by: _____ _____

Reviewed by: _____ _____
Signature Printed Name/ Title

ESAT Tracking Log-In Sheet

Data Review Level 1
# of Folders 1

SOW Version # 4.2
Site/Project ID: 059BLA00

DATE RECEIVED AT CRL 9-4-01

USER Weston

SITE NAME Allied Paper (MI)

CASE/SAS NUMBER 29546 SDG. NO. E00Q1

SAMPLING DATE 7-30-01 DATE SHIPPED 7-31-01

CONTRACT LAB Southwest

NUMBER OF SAMPLES 20 DATE TO ETM 9-4-01

SAMPLES	MATRIX	ANALYSES
E00Q1-9	Soil Water Other	PCBs
E00R0-9	Soil Water Other	
E00S0	Soil Water Other	
	Soil Water Other	
	Soil Water Other	
	Soil Water Other	
	Soil Water Other	
	Soil Water Other	
	Soil Water Other	
	Soil Water Other	
	Soil Water Other	
	Soil Water Other	

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

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

SEP 04 2001

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME SOUTHWEST LABORATORY OF OKLAHOMA
CITY/STATE BROKEN ARROW, OKLAHOMA

CASE NO. 29546 SDG NO. F0001 SDG NOS. TO FOLLOW
SAS NO.

CONTRACT NO. 68D99079
SOW NO. OLM04.2

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

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
1. Inventory Sheet (Form DC-2) (Do not Number)				
2. SDG Case Narrative	1	2		
3. SDG Cover Sheet/Traffic Report	3	5		
4. Volatiles Data				
a. QC Summary				
System Monitoring Compound Summary (Form II	N/A	N/A		
Matrix Spike/Matrix Spike Duplicate Summary (Form III VOA)				
Method Blank Summary (Form IV VOA)				
GC/MS Instrument Performance Check (Form V VOA)				
Internal Standard Area and RT Summary (Form VIII VOA)				
b. Sample Data				
TCL Results - (Form I VOA-1, VOA-2)				
Tentatively Identified Compounds (Form I VOA-				
Reconstructed total ion chromatograms (RIC) for each sample				
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds identified				
Quantitation reports				
Mass Spectra of all reported TICs with three best library matches				
c. Standards Data (All Instruments)				
Initial Calibration Data (Form VI VOA-1, VOA-2)				
RICs and Quan Reports for all Standards				
Continuing Calibration Data (Form VII VOA-1, VOA-2)				
RICs and Quantitation Reports for all Standards				
d. Raw QC Data				
BFB				
Blank Data				
Martix Spike/Matrix Spike Duplicate Data				

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

CASE NO. 29546 SDG NO. EC0G1 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)	N/A	N/A	✓	
MS/MSD Summary (Form III SV)				
Method Blank Summary (Form IV SV)				
GC/MS Instrument Performance Check (Form V SV)				
Internal Standard Area and RT Summary (Form VIII SV)				
b. Sample Data				
TCL Results - (Form I SV-1, SV-2)				
Tentatively Identified Compounds (Form I SV-				
Reconstructed total ion chromatograms (RIC) for each sample				
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds				
Quantitation reports				
Mass Spectra of TICs with three best library matches				
GPC chromatograms (if GPC is required)				
c. Standards Data (All Instruments)				
Initial Calibration Data (Form VI SV-1, SV-2)				
RICs and Quan Reports for all Standards				
Continuing Calibration Data (Form VII SV-1, SV-				
RICs and Quantitation Reports for all Standards				
d. Raw QC Data				
DFTPP				
Blank Data				
Matrix Spike/Matrix Spike Duplicate Data				
e. Raw GPC Data				
6. **Pesticides Data**				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II	6	7	✓	
MS/MSD Duplicate Summary (Form III PEST)	8	10		
Method Blank Summary (Form IV PEST)	11	13		

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

CASE NO. 29546 SDG NO. E0001 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
6. Pesticides Data (Cont.)				
b. Sample Data	14	180		
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	181	415		
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	416	457		
Matrix Spke/Matrix Spike Duplicate Data	458	475		

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

CASE NO. 29546 SDG NO. E0001 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
6. **Pesticides Data** (Cont.)				
e. Raw GPC Data	476	521		
f. Raw Florisil Data	n/a	n/a		
7. **Miscellaneous Data**				
Original preparation and analysis forms or of preparation and analysis logbook pages	522	539		
Internal sample and sample extract transfer chain-of-custody records	539A	539F		
Screening records	n/a	n/a		
All instrument output, including strip charts from screening activities (describe or list)				
8. **EPA Shipping/Receiving Documents**				
Airbills (No. of shipments 2)	540	541		
Chain-of-Custody Records	542	543		
Sample Tags	544	563		
Sample Log-in Sheet (Lab & DC1)	564	~~568~~ 567	Sty 8/3/01	
Miscellaneous Shipping/Receiving Records (describe or list)				
Manual Changes, Analytical Request Form	568	576		
	n/a	n/a		
9. **Internal Lab Sample Transfer Records and Tracking Sheets** (describe or list)				
10. **Other Records** (describe or list)				
Telephone Communication Log				

11. **Comments:** _____

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

SEP 04 2001

SDG NARRATIVE
September 1, 2001

CONTRACT: 68W99079

CASE NO: 29546

SDG NO: E00Q1

SAMPLES: E00Q1, E00Q1DL, E00Q2, E00Q2DL, E00Q2MS, E00Q2MSD, E00Q3, E00Q4, E00Q5, E00Q6, E00Q7, E00Q8, E00Q8DL, E00Q9, E00Q9DL, E00Q9RE, E00R0, E00R1, E00R2, E00R3, E00R4, E00R5, E00R6, E00R6DL, E00R7, E00R8, E00R9, and E00S0.

FRACTION: Pesticide/PCB

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

The following samples in this SDG labeled with a DL are considered billable since samples required dilutions to get target compounds within instruments linear range: E00Q1DL, E00Q2DL, D00Q8DL, E00Q9DL and E00R6DL.

The following sample in this SDG labeled with a RE is considered billable since this sample required a re-extracted to verify high DCB recovery on both columns. Note: The re-extracted sample was not analyzed as a dilution since the original sample was analyzed at a dilution and re-extract was to only to verify high surrogate recoveries. Note: This re-extract was outside of 10-day extract hold time.

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

The sample cooler arrived at 5.4 degrees Celsius. Note: no custody seals were present on the sample coolers (see e-mail logs).

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

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

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

CASE NO. 25524 SDG NO. E0001 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	(Signature)	(Printed Name/Title)	(Date)
Completed by: (CLP Lab)	Sandra Jackett	Sandra Jackett / Data Clerk	8/31/01
Verified by: (CLP Lab)	Theldon H. Williams	Theldon H. Williams Data Clerk	08/31/01
Audited by: (EPA)			

Surrogates: All surrogates were within QC limits with the following exceptions: Sample E00Q8 and E00R6 had high DCB surrogate recovery on one column, therefore sample was not re-extracted. Sample E00Q9 had DCB outside of QC limits high on both columns. This sample was re-extracted and again had high surrogate recoveries on both columns indicating matrix problems.

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

Matrix Spikes: Arochlor 1254 was used for the matrix spike and matrix spike duplicate. The MSD had high spike recovery at 282%.

Retention Times: All retention times were within QC limits.

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

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

Initial Calibrations: Initial calibrations were analyzed for Aroclor 1016, 1242, 1254 and 1260 and all percent RSDs were within QC limits (average of all peaks at > 20%RSD)

Calibration Verifications: Calibration verifications were analyzed for Aroclors 1016 and 1260. All percent differences were within QC limits (average of all peaks at > 15%).

All manual integrations in this data package for GC/EC have been performed for one of the following reasons:

a. Data system missed a peak during processing.
b. Data system improperly integrated a peak.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Harry M. Borg
Organic Program Manager

September 1, 2001

Contract Laboratory Program

Sample Delivery Group (SDG) Cover Sheet

SDG Number E00Q1

ST 8/2/01

Laboratory Name Southwest Laboratory of Ok. Laboratory Code SWOK

Contract No. 68W99079 Case No. ~~OLM04.2~~ 29546

Analyses Price 910.40 SDG Turnaround 7

EPA Sample Numbers in SDG (Listed in Numerical Order)

1) E00Q1	7) E00Q7	13) E00R3	19) E00R9
2) E00Q2	8) E00Q8	14) E00R4	20) E00S0
3) E00Q3	9) E00Q9	15) E00R5	21)
4) E00Q4	10) E00R0	16) E00R6	22)
5) E00Q5	11) E00R1	17) E00R7	23)
6) E00Q6	12) E00R2	18) E00R8	24)

ST 8/2/01

E00Q1	E00S0
First Sample in SDG	Last Sample in SDG
08/01/2001	08/01/2001
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).*

0 3

Signature [illegible] Date 8-2-01

Version 2.0

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

Case No:	29546
DAS No:	
SDG No:	E00Q1

L

Date Shipped:	7/31/2001
Carrier Name:	FedEx
Airbill:	821876980270
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]	7-31-01 1730	[illegible]	8-1-01 8:40
2			
3			
4			

Sampler Signature: [illegible]

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 E00Q1 Sample Condition On Receipt
E00Q1	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038239 (Ice Only) (1)	AP-SL029-16-01	S:	7/30/2001	16:45		OK
E00Q2	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038240 (Ice Only) (1)	AP-SL029-16-02	S:	7/30/2001	16:47		
E00Q3	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038241 (Ice Only) (1)	AP-SL029-16-03	S:	7/30/2001	16:49		
E00Q4	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038242 (Ice Only) (1)	AP-SL029-16-04	S:	7/30/2001	17:05		
E00Q5	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038243 (Ice Only) (1)	AP-SL029-16-05	S:	7/30/2001	17:08		8-1-01
E00Q6	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038244 (Ice Only) (1)	AP-SL029-16-06	S:	7/30/2001	17:10		
E00Q7	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038245 (Ice Only) (1)	AP-SL029-16-06DP	S:	7/30/2001	17:10		
E00Q8	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038246 (Ice Only) (1)	AP-SL029-18-01	S:	7/30/2001	17:15		
E00Q9	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038247 (Ice Only) (1)	AP-SL029-18-02	S:	7/30/2001	17:20		
E00R0	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038248 (Ice Only) (1)	AP-SL029-18-03	S:	7/30/2001	17:25		

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC: E00Q2, E00S3, E00W1	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 5.4 T.B.	Chain of Custody Seal Number: 177814, 177815
Analysis Key: PCBs = PCBs	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? A Shipment Iced? Y

No Seals

R Number: 5-490998136-073101-0001

LABORATORY COPY

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

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

Case No:	29546
DAS No:	
SDG No:	E00Q1

L

Date Shipped:	7/31/2001
Carrier Name:	FedEx
Airbill:	821876980270
Shipped to:	Southwest Labs of Oklahoma, Inc. 1700 West Albany Suite C Broken Arrow OK 74012 (918) 251-0545

Chain of Custody Record

Sampler Signature:

Relinquished By	(Date / Time)	Received By	(Date / Time)
1	7.31.01 1730		8-1-01 8:40
2			
3			
4			

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 E00Q1 Sample Condition On Receipt
E00R1	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038249 (Ice Only) (1)	AP-SL029-18-04	S:	7/30/2001	17:30		OK 8-1-01
E00R2	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038250 (Ice Only) (1)	AP-SL029-18-05	S:	7/30/2001	17:30		
E00R3	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038251 (Ice Only) (1)	AP-SL029-18-06	S:	7/30/2001	17:35		
E00R4	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038252 (Ice Only) (1)	AP-SL029-18-06DP	S:	7/30/2001	17:35		
E00R5	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038253 (Ice Only) (1)	AP-SL029-18-07	S:	7/30/2001	17:40		
E00R6	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038254 (Ice Only) (1)	AP-SL029-21-01	S:	7/30/2001	17:30		
E00R7	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038255 (Ice Only) (1)	AP-SL029-21-02	S:	7/30/2001	17:33		
E00R8	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038256 (Ice Only) (1)	AP-SL029-21-03	S:	7/30/2001	17:35		
E00R9	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038257 (Ice Only) (1)	AP-SL029-21-03DP	S:	7/30/2001	17:35		
* E00S0	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038258 (Ice Only) (1)	AP-SL029-21-04	S:	7/30/2001	17:50		

* SDG Final Sample

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC: E00Q2, E00S3, E00W1	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 5.4 T.B.	Chain of Custody Seal Number: 177819, 177815
Analysis Key: PCBs = PCBs	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? N / Shipment Iced? Y

No Seals

R Number: 5-490998136-073101-0001

LABORATORY COPY

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

2F

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

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

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	TOT OUT
01	PBLKSB	56	60	76	76	0
02	PBLKSA	95	89	109	114	0
03	ELCS1	77	68	90	88	0
04	ELCS2	77	75	95	92	0
05	E00Q1	74	68	138	96	0
06	E00Q2	72	70	105	82	0
07	E00Q2MS	75	75	143	104	0
08	E00Q2MSD	84	87	133	113	0
09	E00Q3	47	45	77	49	0
10	E00Q4	100	96	150	92	0
11	E00Q5	82	76	102	80	0
12	E00Q7	83	80	103	81	0
13	E00Q8	76	70	199*	138	1
14	E00Q9	105	97	238*	200*	2
15	E00R0	91	84	130	96	0
16	E00R1	93	87	121	91	0
17	E00R2	86	80	99	85	0
18	E00R3	86	76	99	85	0
19	E00R4	61	54	71	63	0
20	E00R5	49	44	58	49	0
21	E00R6	95	86	228*	122	1
22	E00R7	69	63	82	64	0
23	E00R8	95	89	125	90	0
24	E00R9	93	86	143	87	0
25	E00S0	73	66	77	73	0
26	ELCS3	98	94	116	120	0
27	ELCS4	83	81	100	103	0
28	E00Q1DL	77	70	165	108	0
29	E00Q2DL	44	41	74	64	0
30	E00Q6	115	111	144	112	0

QC LIMITS

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

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

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FORM II PCB-1

2F
SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

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

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	TOT OUT
01	E00Q8DL	88	76	261D	173D	0
02	E00Q9DL	104	94	312D	294D	0
03	E00R6DL	96	89	146	117	0
04	E00Q9RE	98	85	310*	181*	2
05						
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26						
27						
28						
29						
30						

QC LIMITS

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

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

7

FORM II PCB-1

3H

SOIL AROCLOR LABORATORY CONTROL SPIKE/ DUPLICATE RECOVERY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

LCS Sample NO.: ELCS1

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Aroclor-1254	133	113	85	29-135

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1254	133	136	102	18	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: _____

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3F

SOIL AROCLOR MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix Spike - Client Sample NO.: E00Q2

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Aroclor-1254	146	528	690	111	29-135

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1254	151	954	282 *	32	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: 1 out of 2 outside limits

Comments: _____

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FORM III PCB-2

3H

SOIL AROCLOR LABORATORY CONTROL SPIKE/ DUPLICATE RECOVERY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

LCS Sample NO.: ELCS3

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Aroclor-1254	133	157	118	29-135

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1254	133	135	102	15	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: _____

_____

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4C

AROCLOR METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

PBLKSB

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: BL0802SB Lab File ID: 16081407

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

Sulfur Cleanup: (Y/N) Y Date Extracted: 08/02/01

Date Analyzed (1): 08/14/01 Date Analyzed (2): 08/14/01

Time Analyzed (1): 1549 Time Analyzed (2): 1549

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

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	ELCS1	LC0802SB	08/14/01	08/14/01
02	ELCS2	LD0802SB	08/14/01	08/14/01
03	E00Q1	47158.01	08/14/01	08/14/01
04	E00Q2	47158.02	08/14/01	08/14/01
05	E00Q2MS	47158.03MS	08/14/01	08/14/01
06	E00Q2MSD	47158.04MSD	08/14/01	08/14/01
07	E00Q3	47158.05	08/14/01	08/14/01
08	E00Q4	47158.06	08/21/01	08/21/01
09	E00Q5	47158.07	08/21/01	08/21/01
10	E00Q7	47158.09	08/21/01	08/21/01
11	E00Q8	47158.10	08/21/01	08/21/01
12	E00Q9	47158.11	08/21/01	08/21/01
13	E00R0	47158.12	08/21/01	08/21/01
14	E00R1	47158.13	08/21/01	08/21/01
15	E00R2	47158.14	08/21/01	08/21/01
16	E00R3	47158.15	08/21/01	08/21/01
17	E00R4	47158.16	08/21/01	08/21/01
18	E00R5	47158.17	08/21/01	08/21/01
19	E00R6	47158.18	08/21/01	08/21/01
20	E00R7	47158.19	08/21/01	08/21/01
21	E00R8	47158.20	08/21/01	08/21/01
22	E00R9	47158.21	08/21/01	08/21/01
23	E00S0	47158.22	08/21/01	08/21/01
24	E00Q1DL	47158.01DL	08/29/01	08/29/01
25	E00Q2DL	47158.02DL	08/29/01	08/29/01
26	E00Q6	47158.08	08/29/01	08/29/01

Comments: _____

4C

AROCLOR METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

PBLKSB

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: BL0802SB Lab File ID: 16081407

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

Sulfur Cleanup: (Y/N) Y Date Extracted: 08/02/01

Date Analyzed (1): 08/14/01 Date Analyzed (2): 08/14/01

Time Analyzed (1): 1549 Time Analyzed (2): 1549

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

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	E00Q8DL	47158.10DL	08/29/01	08/29/01
02	E00Q9DL	47158.11DL	08/29/01	08/29/01
03	E00R6DL	47158.18DL	08/29/01	08/29/01
04				
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26				

Comments:

4C

AROCLOR METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

PBLKSA

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: BL0823SA Lab File ID: 16082824

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

Sulfur Cleanup: (Y/N) Y Date Extracted: 08/23/01

Date Analyzed (1): 08/28/01 Date Analyzed (2): 08/28/01

Time Analyzed (1): 2201 Time Analyzed (2): 2201

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

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	ELCS3	LC0823SA	08/28/01	08/28/01
02	ELCS4	LD0823SA	08/29/01	08/29/01
03	E00Q9RE	47158.11RE	08/30/01	08/30/01
04				
05				
06				
07				
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Comments:

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00Q1

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: 47158.01

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/14/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	36	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	~~860~~ 900	~~E~~ DJ
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	440	
11096-82-5	Aroclor-1260	140	
Surrogate amount spiked		7.20	

TBS
9/11/01
apply this results TB 10/1

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FORM I PCB

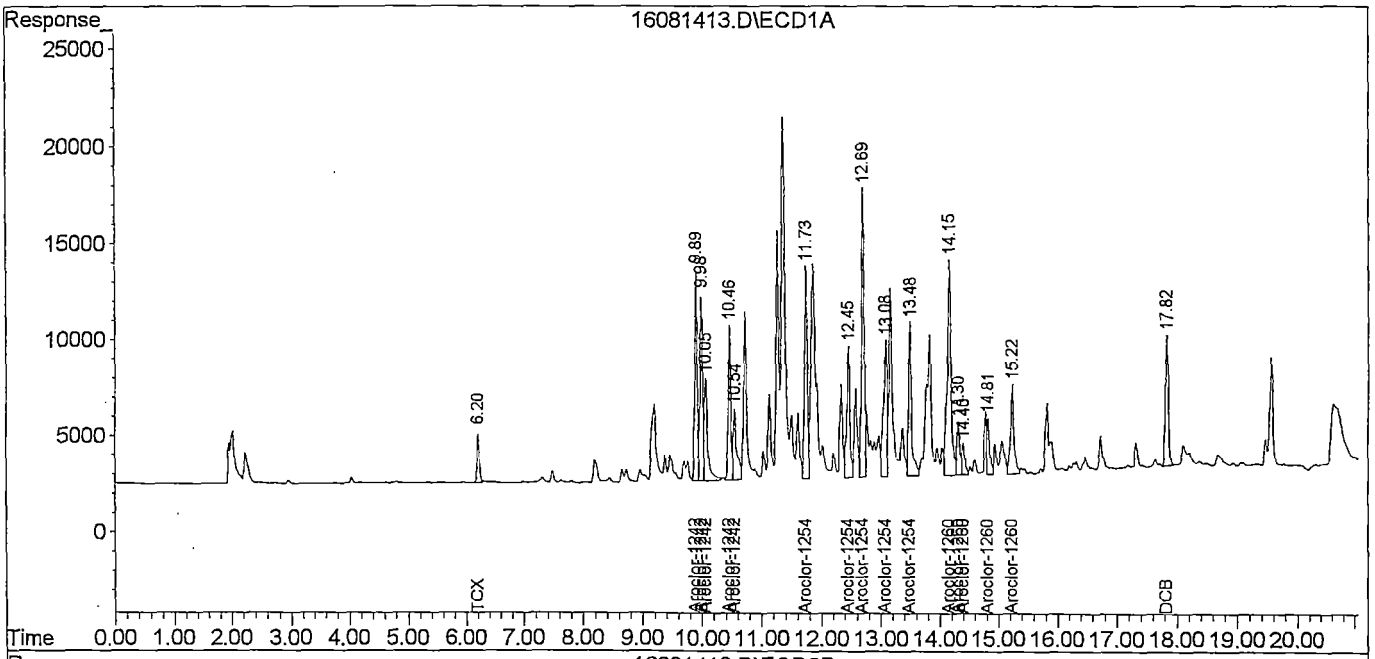
Chromatographic Report

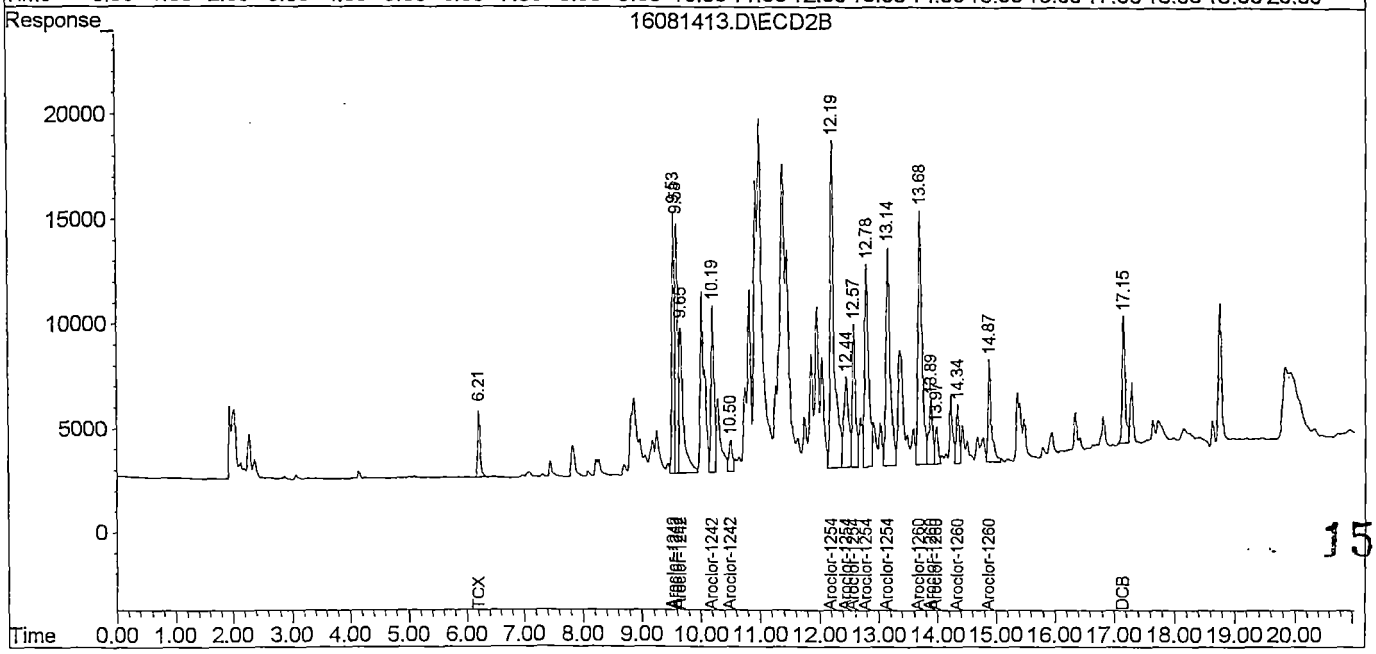
Signal #1 : F:\HPCHEM\HP\16\DATA\08_14_01\16081413.D\ECD1A.CH Vial: 13
Signal #2 : F:\HPCHEM\HP\16\DATA\08_14_01\16081413.D\ECD2B.CH
Acq On : 14 Aug 2001 18:17 Operator: TLM
Sample : 47158.01 *E00Q1 * Inst : HP_16
Misc : *EPA*31.2G/5.0ML*11 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 16 14:54 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_14_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

8-31-01





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_14_01\16081413.D\ECD1A.CH Vial: 13
Signal #2 : F:\HPCHEM\HP\16\DATA\08_14_01\16081413.D\ECD2B.CH
Acq On : 14 Aug 2001 18:17 Operator: TLM
Sample : 47158.01 *E00Q1 * Inst : HP_16
Misc : *EPA*31.2G/5.0ML*11 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 16 14:54 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_14_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	6.20	6.21	68289	96836	5.295	4.932
	Spiked Amount 7.203			Recovery	=	73.52%	68.48%
22)	S DCB	17.83	17.15	232402	199065	9.952	6.949 #
	Spiked Amount 7.203			Recovery	=	138.17%	96.48%
	Target Compounds:						
7)	L4 Aroclor-1242	9.89	9.53	310497	335089	1180.5 E	1063.3 E
8)	L4 Aroclor-1242 {2}	9.98	9.58	288322	401312	1044.7 E	1006.4 E
9)	L4 Aroclor-1242 {3}	10.06	9.65	231943	349951	821.5 E	754.7 E
10)	L4 Aroclor-1242 {4}	10.46	10.19	235005	292418	758.4 E	1036.8 E#
11)	L4 Aroclor-1242 {5}	10.54	10.50	160470	62915	868.9 E	428.4 #
	Sum Aroclor-1242			1226237	1441685	4674.1	4289.4
	Average Aroclor-1242					934.820	857.888
12)	L6 Aroclor-1254	11.73	12.20	354228	739901	437.7	487.0
13)	L6 Aroclor-1254 {2}	12.45	12.44	250215	242376	451.0	572.0 #
14)	L6 Aroclor-1254 {3}	12.69	12.57	454125	263132	379.4	385.7
15)	L6 Aroclor-1254 {4}	13.08	12.78	288822	462115	475.2	521.1
16)	L6 Aroclor-1254 {5}	13.49	13.14	287973	518714	435.4	448.0
	Sum Aroclor-1254			1635363	2226238	2178.7	2413.8
	Average Aroclor-1254					435.750	482.764
17)	L7 Aroclor-1260	14.15	13.68	495960	572486	302.8	285.6
18)	L7 Aroclor-1260 {2}	14.31	13.89	99068	147279	114.2	138.7
19)	L7 Aroclor-1260 {3}	14.40	13.98	60684	65322	111.7	94.6
20)	L7 Aroclor-1260 {4}	14.81	14.34	93818	95678	104.0	99.0
21)	L7 Aroclor-1260 {5}	15.23	14.88	186031	196583	102.8	83.2
	Sum Aroclor-1260			935561	1077349	264.8	252.5
	Average Aroclor-1260					147.085	140.205

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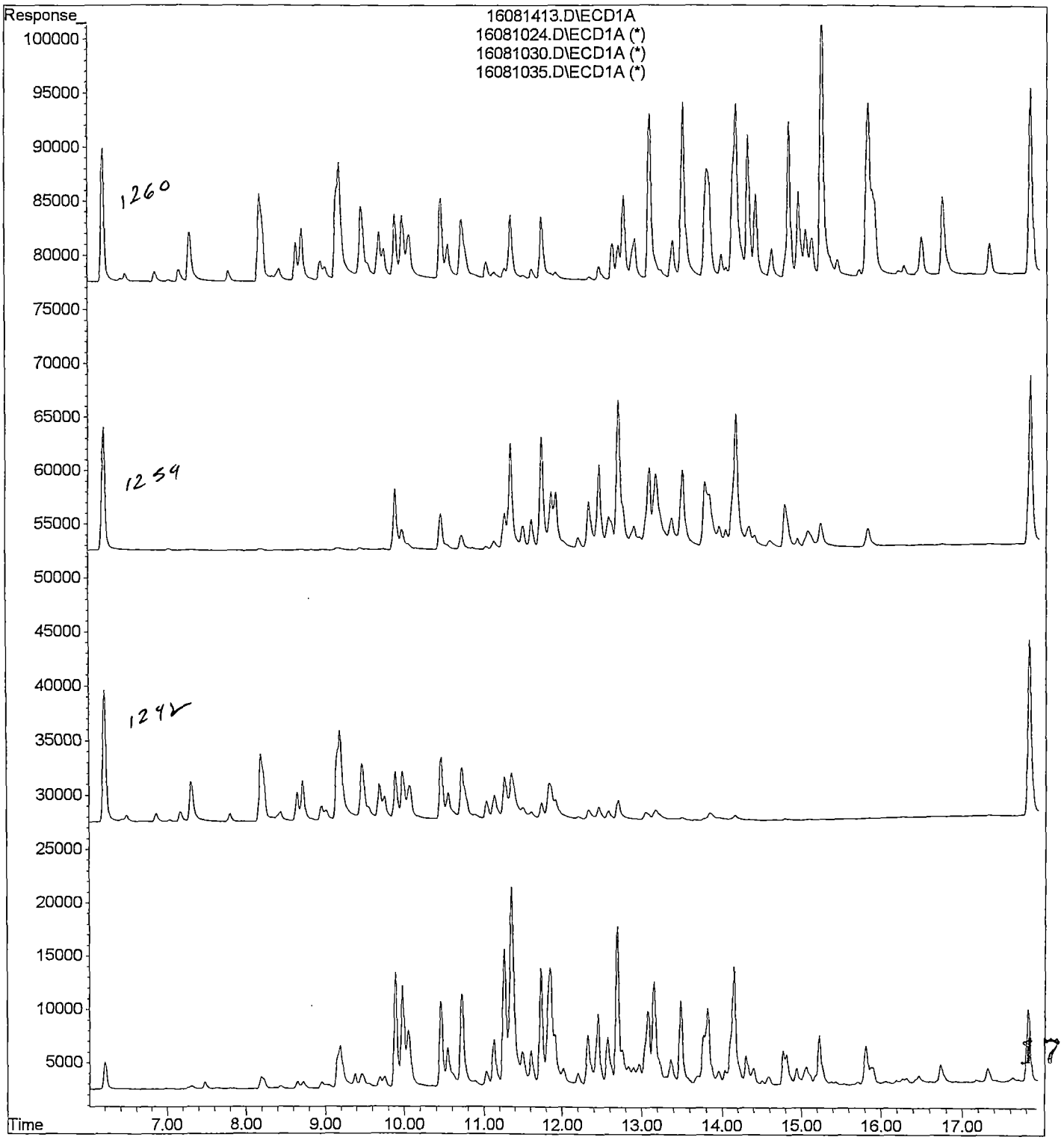
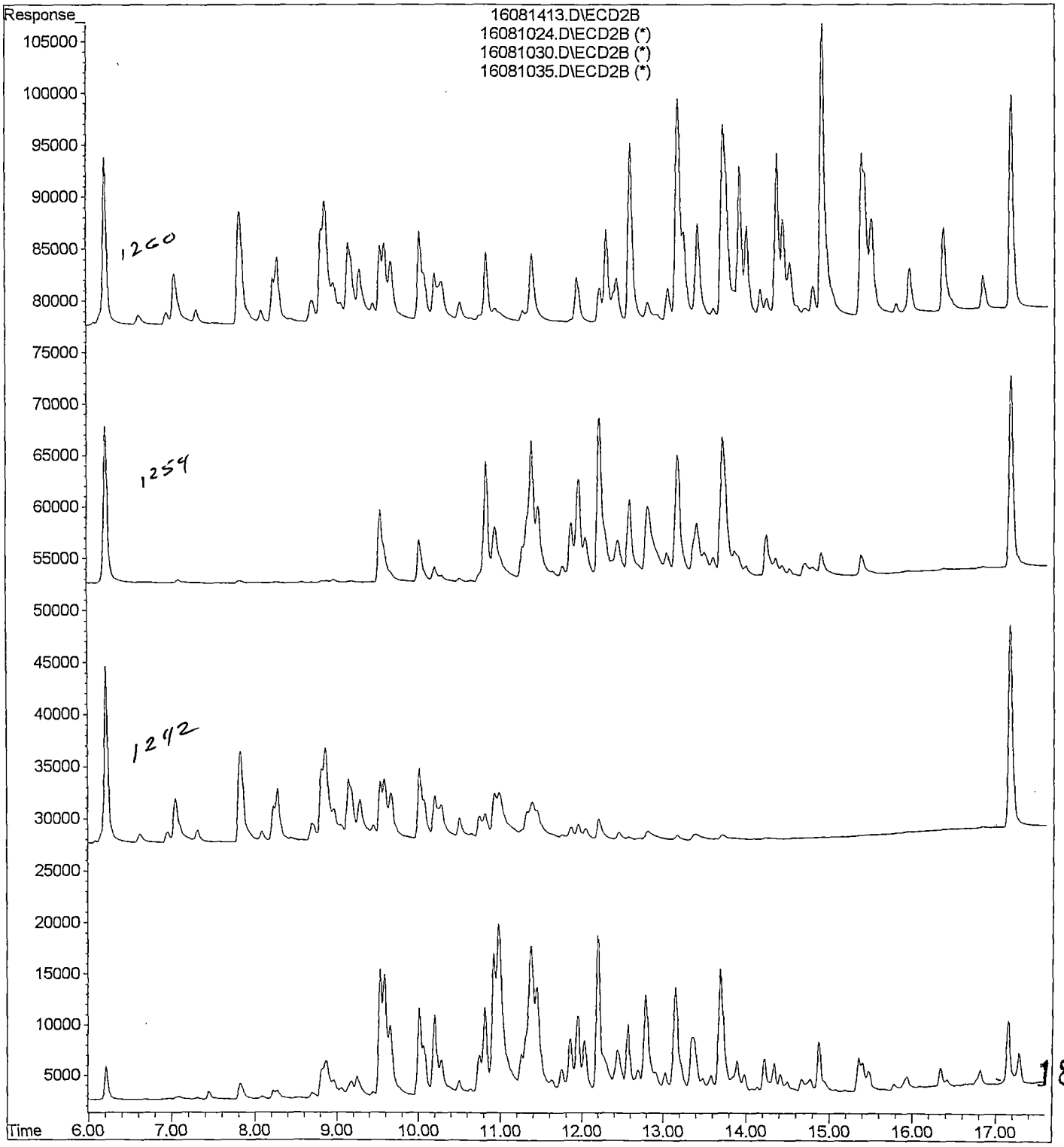
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

File : F:\HPCHEM\HP\16\DATA\08_14_01\16081413.D
Operator : TLM
Acquired : 14 Aug 2001 18:17 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.01 *E00Q1 *
Misc Info : *EPA*31.2G/5.0ML*11
Vial Number: 13

ok
8-31-01



File : F:\HPCHEM\HP\16\DATA\08_14_01\16081413.D
Operator : TLM
Acquired : 14 Aug 2001 18:17 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.01 *E00Q1 *
Misc Info : *EPA*31.2G/5.0ML*11
Vial Number: 13



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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00Q1DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: 47158.01DL

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/29/01

Injection Volume: 0.5(uL) Dilution Factor: 10.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	360	U
11104-28-2	Aroclor-1221	360	U
11141-16-5	Aroclor-1232	360	U
53469-21-9	Aroclor-1242	900	DP J
12672-29-6	Aroclor-1248	360	U
11097-69-1	Aroclor-1254	490	D
11096-82-5	Aroclor-1260	160	DJ
Surrogate amount spiked		7.20	

TBS
9/11/01

FORM I PCB

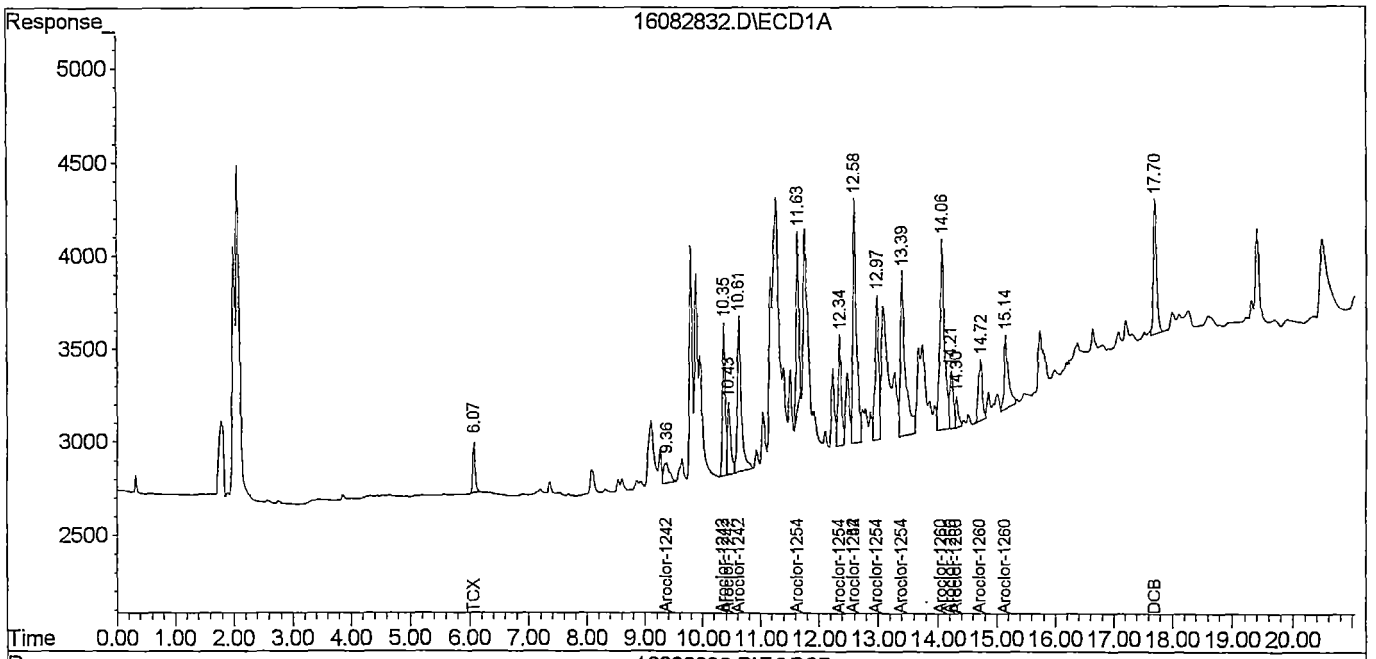
Chromatographic Report

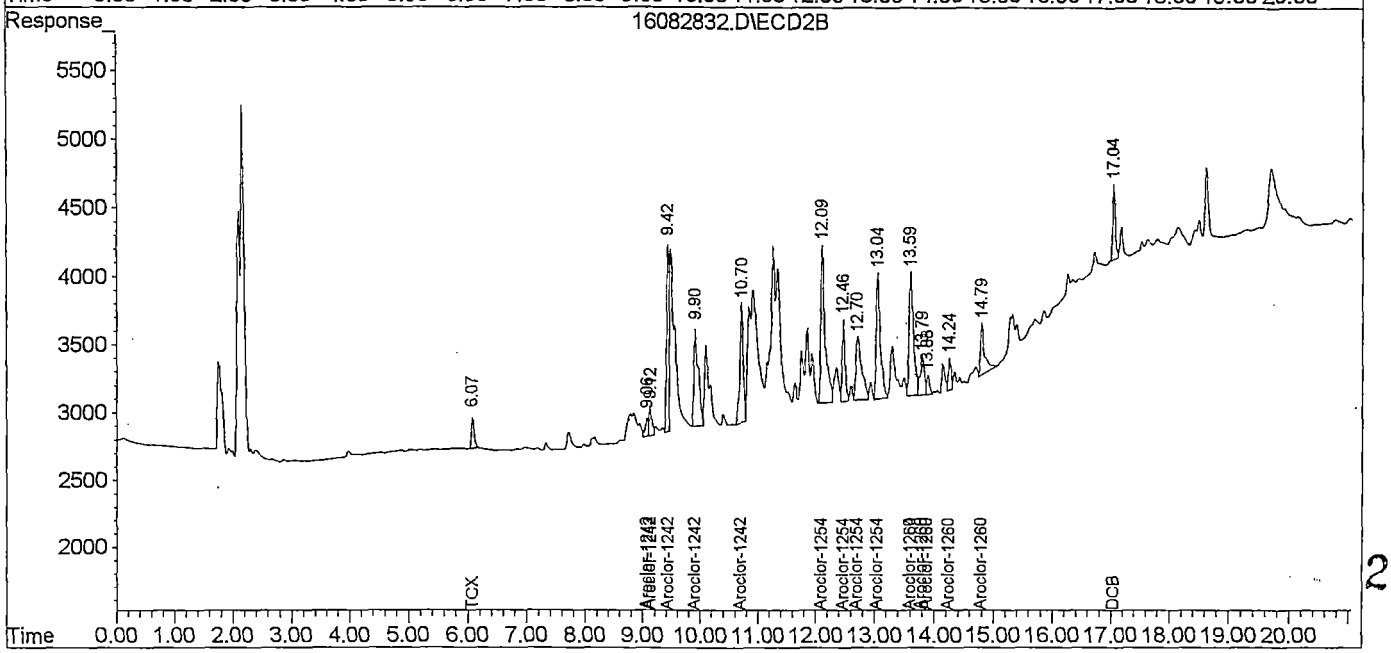
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082832.D\ECD1A.CH Vial: 32
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082832.D\ECD2B.CH
Acq On : 29 Aug 2001 1:18 Operator: TLM
Sample : 47158.01DL *E00Q1DL * Inst : HP_16
Misc : *EPA*31.2G/5.0ML*11 Dilution: 10.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 30 16:42 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

ok 8-31-01





20

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082832.D\ECD1A.CH Vial: 32
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082832.D\ECD2B.CH
Acq On : 29 Aug 2001 1:18 Operator: TLM
Sample : 47158.01DL *E00Q1DL * Inst : HP_16
Misc : *EPA*31.2G/5.0ML*11 Dilution: 10.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 30 16:42 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
System Monitoring Compounds:						
1) S TCX	6.06	6.07	7706	7838	5.555m	5.042m
Spiked Amount 7.203			Recovery	=	77.13%	70.00%
22) S DCB	17.70	17.04	27686	16685	11.9m	7.757m #
Spiked Amount 7.203			Recovery	=	165.22%	107.70%
Target Compounds:						
7) L4 Aroclor-1242	9.36	9.07	8048	4568	128.9	94.2 #
8) L4 Aroclor-1242 {2}	10.35	9.12f	26277	6958	703.3	236.9 #
9) L4 Aroclor-1242 {3}	10.44	9.43	15612	40196	741.3	1547.8 #
10) L4 Aroclor-1242 {4}	10.61	9.90	38758	38958	719.2	765.0
11) L4 Aroclor-1242 {5}	12.59	10.70	56829	36116	4069.3	1864.5 #
Sum Aroclor-1242			145525	126796	6361.9	4508.4
Average Aroclor-1242					1272.375	901.682
12) L6 Aroclor-1254	11.63	12.10	27610	58785	332.8	527.2 #
13) L6 Aroclor-1254 {2}	12.34	12.46	23324	21035	421.7	421.7
14) L6 Aroclor-1254 {3}	12.59	12.70	56829	32183	471.9	548.5
15) L6 Aroclor-1254 {4}	12.97	13.04	30776	42979	500.4	474.5
16) L6 Aroclor-1254 {5}	13.39	13.59	50538	47348	762.6	454.1 #
Sum Aroclor-1254			189077	202331	2489.5	2425.9
Average Aroclor-1254					497.894	485.180
17) L7 Aroclor-1260	14.06	13.59	55376	47348	384.5	317.3
18) L7 Aroclor-1260 {2}	14.21	13.79	12390	13093	149.7	162.2
19) L7 Aroclor-1260 {3}	14.30	13.88	6255	5215	106.4	95.1
20) L7 Aroclor-1260 {4}	14.72	14.24	15807	7526	193.9	104.9 #
21) L7 Aroclor-1260 {5}	15.14	14.79	19588	18124	117.2	102.6
Sum Aroclor-1260			109415	91307	3427.2	2816.6
Average Aroclor-1260					190.333	156.420

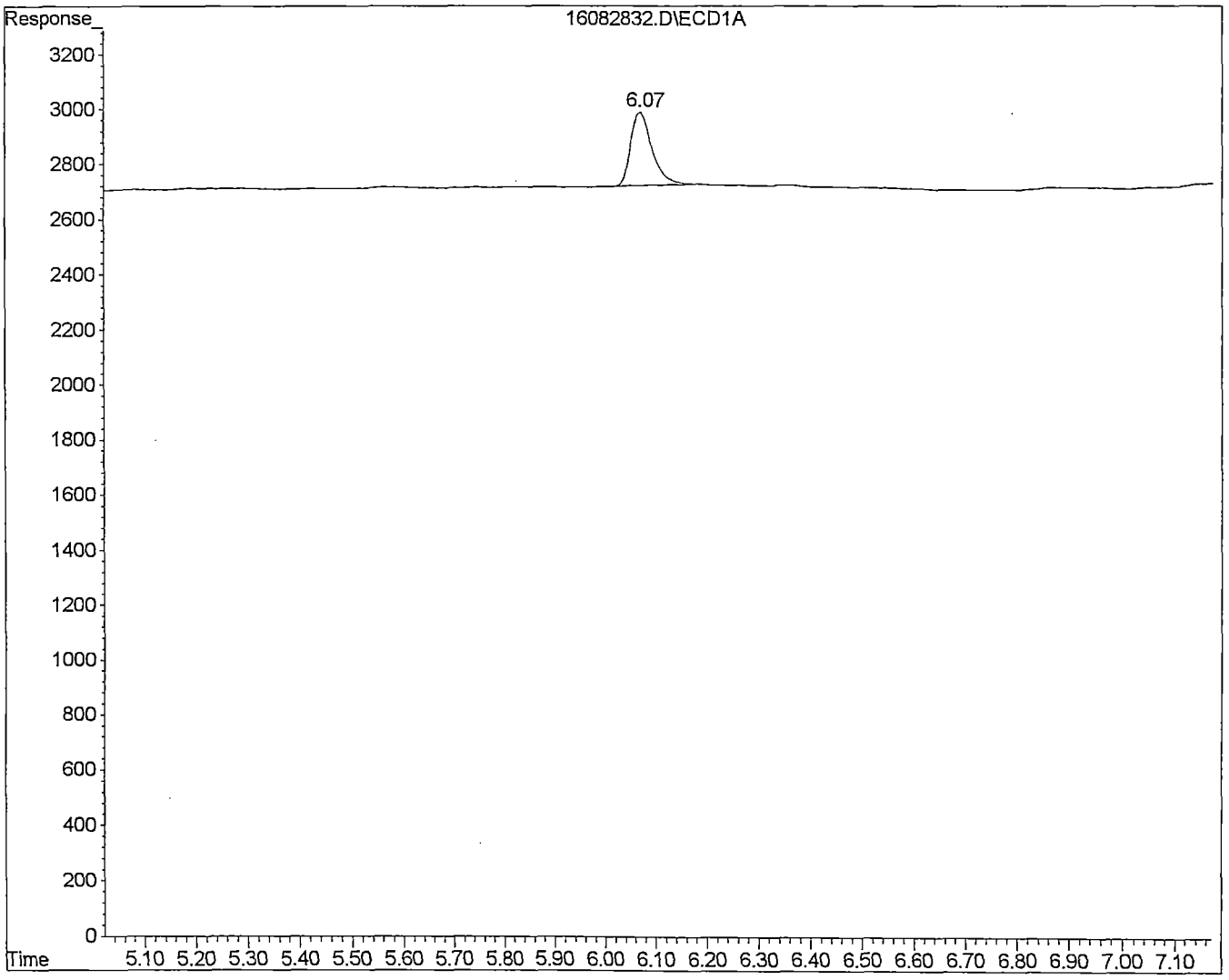
3m 8-30-01

21

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

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_28_01\16082832.D
Date Acquired: 29 Aug 2001 1:18
Inst: HP_16 Operator ID: TLM
Name: 47158.01DL *E00Q1DL *
Misc: *EPA*31.2G/5.0ML*11
Method: F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title: PCB/TOXAPHENE
Quant Time: Aug 30 16:42 2001 Quant Results File: XPCBH28.RES



TCX 6.07min area: 7706 m

Integration Time Range: 6.02 - 6.17 JM 8-30-01 ok 8-31-01

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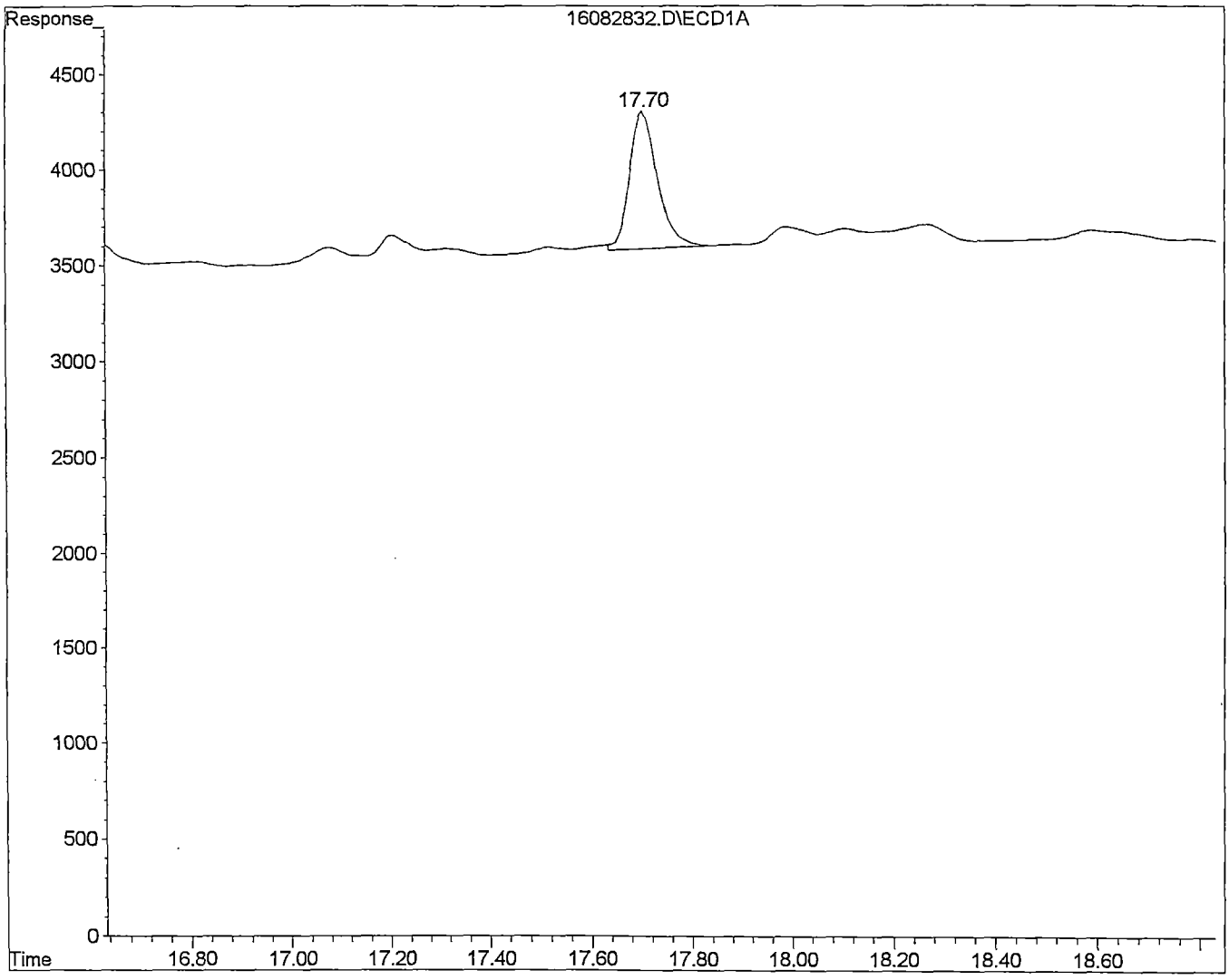
F:\HPCHEM\HP\16\DATA\08_28_01\16082832.D
Report generated: Thu Aug 30 17:06:18 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_28_01\16082832.D
Date Acquired: 29 Aug 2001 1:18
Inst: HP_16 Operator ID: TLM
Name: 47158.01DL *E00Q1DL *
Misc: *EPA*31.2G/5.0ML*11
Method: F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title: PCB/TOXAPHENE
Quant Time: Aug 30 16:42 2001 Quant Results File: XPCBH28.RES



DCB 17.70min area: 27686 m

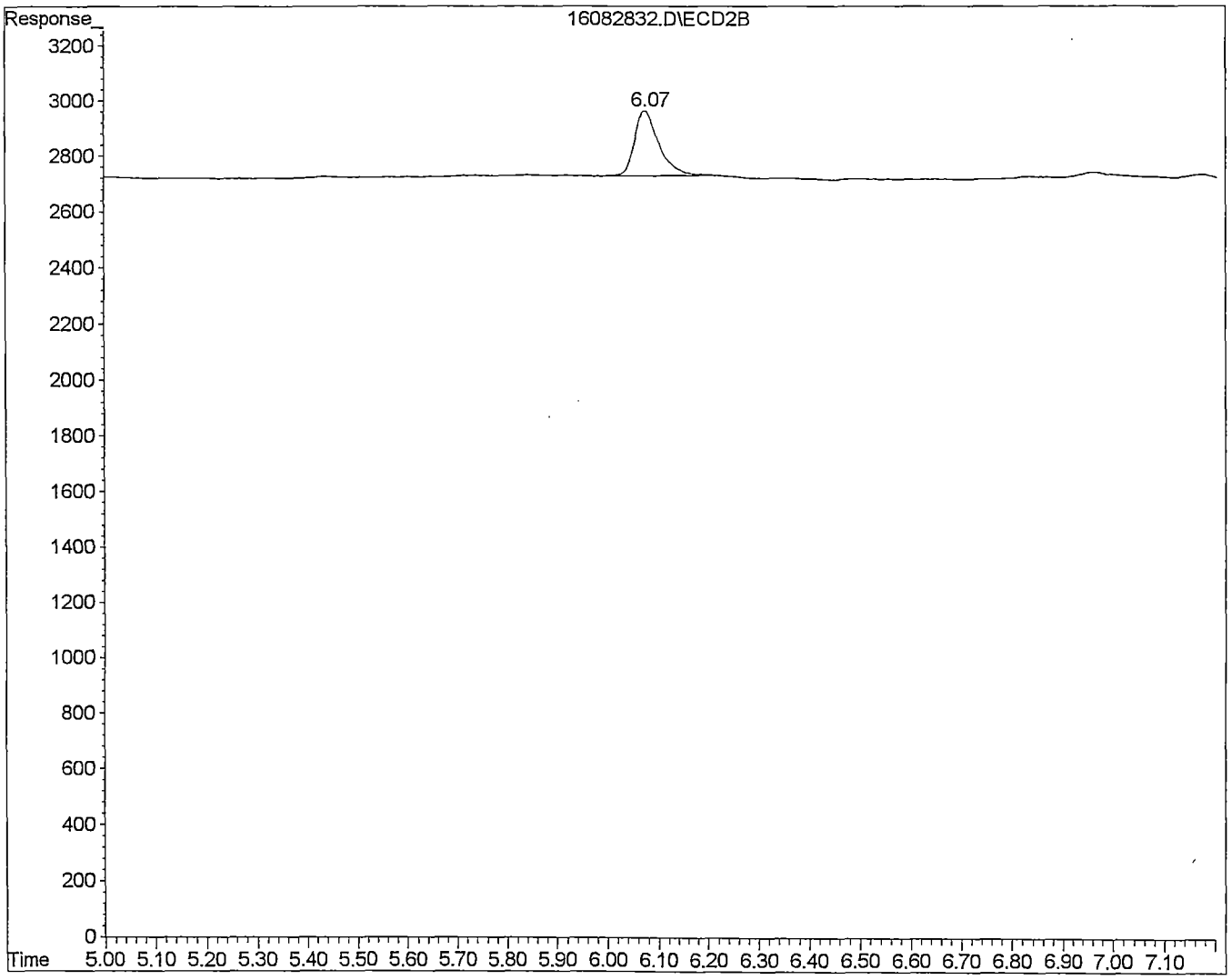
Integration Time Range: 17.63 - 17.83 JM 8-30-01

ok 8-31-01

F:\HPCHEM\HP\16\DATA\08_28_01\16082832.D
Report generated: Thu Aug 30 17:06:19 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_28_01\16082832.D
Date Acquired: 29 Aug 2001 1:18
Inst: HP_16 Operator ID: TLM
Name: 47158.01DL *E00Q1DL *
Misc: *EPA*31.2G/5.0ML*11
Method: F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title: PCB/TOXAPHENE
Quant Time: Aug 30 16:42 2001 Quant Results File: XPCBH28.RES



TCX #2 6.07min area: 7838 m

Integration Time Range: 6.00 - 6.20 JM 8-30-01

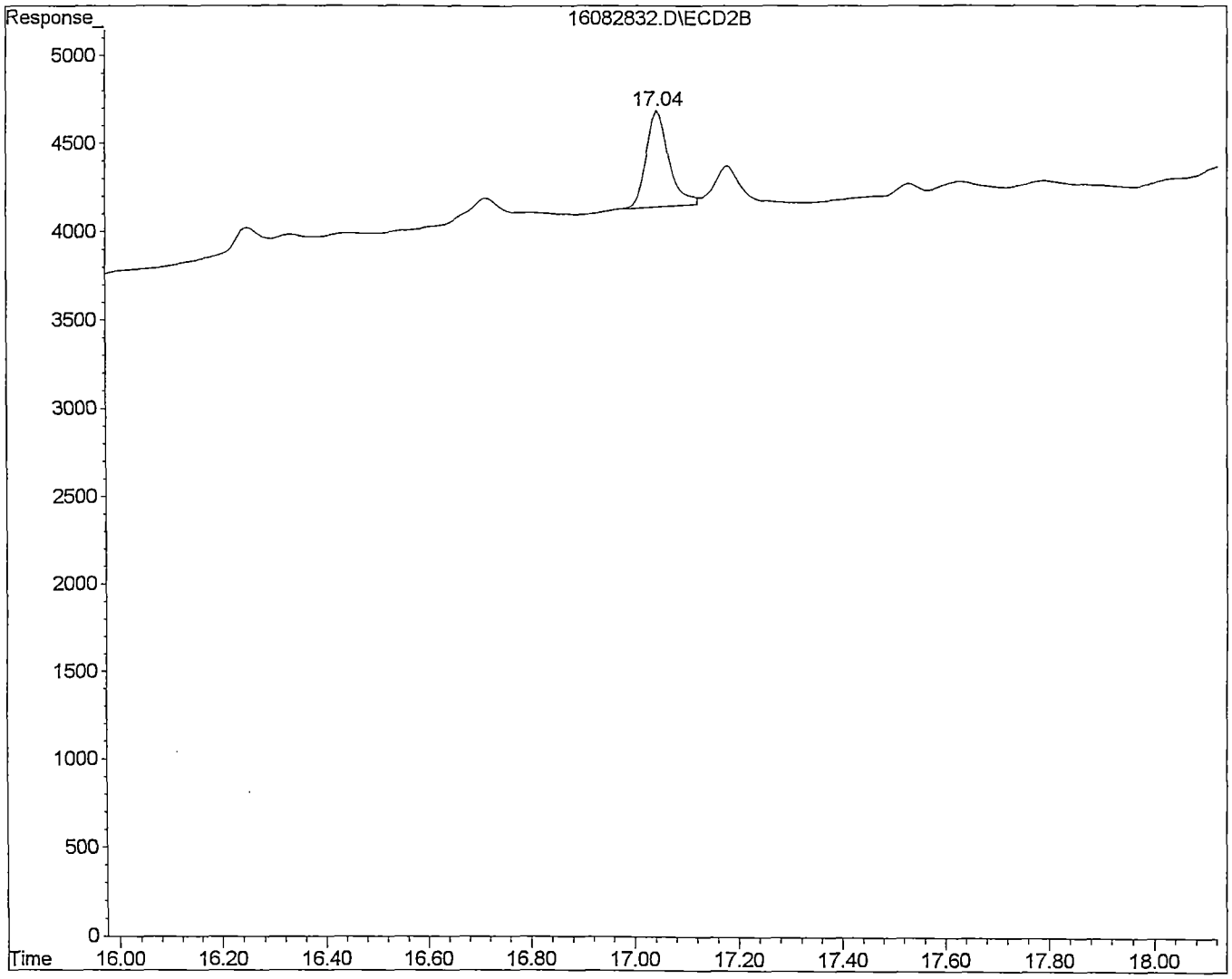
Ok 8-31-01

24

F:\HPCHEM\HP\16\DATA\08_28_01\16082832.D
Report generated: Thu Aug 30 17:06:19 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_28_01\16082832.D
Date Acquired: 29 Aug 2001 1:18
Inst: HP_16 Operator ID: TLM
Name: 47158.01DL *E00Q1DL *
Misc: *EPA*31.2G/5.0ML*11
Method: F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title: PCB/TOXAPHENE
Quant Time: Aug 30 16:42 2001 Quant Results File: XPCBH28.RES



DCB #2 17.04min area: 16685 m

Integration Time Range: 16.98 - 17.12

TM 8-30-01

ok 8-31-01

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F:\HPCHEM\HP\16\DATA\08_28_01\16082832.D
Report generated: Thu Aug 30 17:06:20 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00Q2

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: 47158.02

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/14/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	~~520~~	490DJ ~~E~~
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	~~530~~	340DJ ~~E~~
11096-82-5	Aroclor-1260	180	
Surrogate amount spiked		7.76	

TBS 9/11/01
applyplus
results
TB
10/4

FORM I PCB

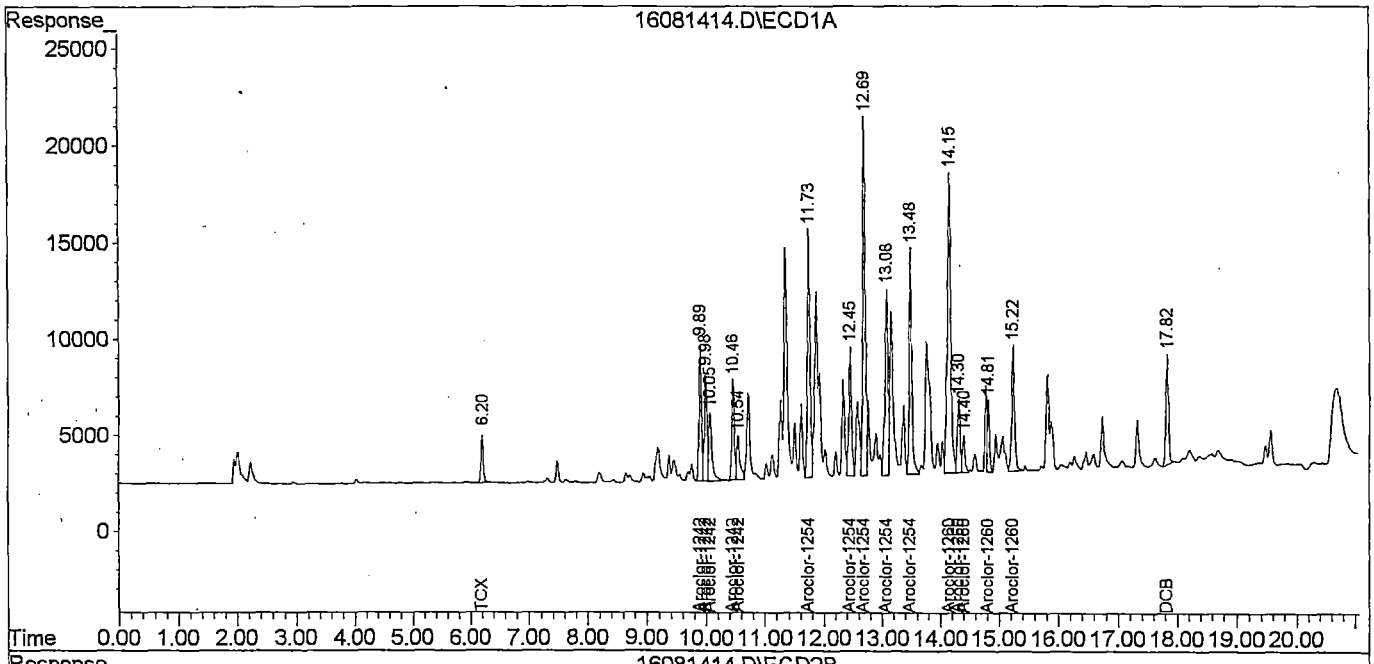
Chromatographic Report

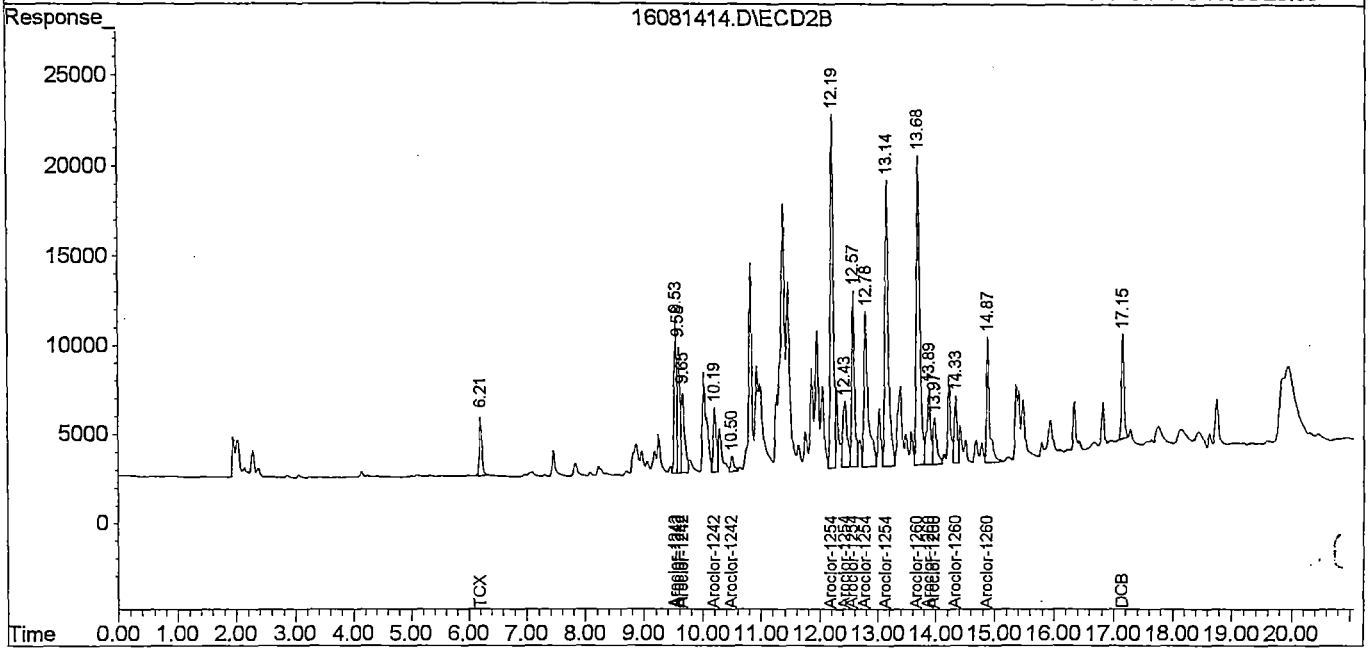
Signal #1 : F:\HPCHEM\HP\16\DATA\08_14_01\16081414.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\16\DATA\08_14_01\16081414.D\ECD2B.CH
Acq On : 14 Aug 2001 18:41 Operator: TLM
Sample : 47158.02 *E00Q2 * Inst : HP_16
Misc : *EPA*30.7G/5.0ML*16 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 16 14:54 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_14_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

8-31-01





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_14_01\16081414.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\16\DATA\08_14_01\16081414.D\ECD2B.CH
Acq On : 14 Aug 2001 18:41 Operator: TLM
Sample : 47158.02 *E00Q2 * Inst : HP_16
Misc : *EPA*30.7G/5.0ML*16 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 16 14:54 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_14_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	6.21	6.21	67235	98466	5.614	5.400
	Spiked Amount 7.756			Recovery	=	72.39%	69.63%
22)	S DCB	17.82	17.15	176294	169923	8.129	6.388
	Spiked Amount 7.756			Recovery	=	104.82%	82.37%
	Target Compounds:						
7)	L4 Aroclor-1242	9.89	9.53	202021	236043	827.0 E	806.5 E
8)	L4 Aroclor-1242 {2}	9.98	9.58	167378	231397	653.0 E	624.8 E
9)	L4 Aroclor-1242 {3}	10.06	9.65	145084	181091	553.3	420.5
10)	L4 Aroclor-1242 {4}	10.46	10.20	152295	129060	529.2	492.7
11)	L4 Aroclor-1242 {5}	10.55	10.50	90723	36075	529.0	264.5 #
	Sum Aroclor-1242			757502	813666	3091.6	2609.0
	Average Aroclor-1242					618.329	521.805
12)	L6 Aroclor-1254	11.73	12.19	404312	684058	538.0 E	484.8
13)	L6 Aroclor-1254 {2}	12.45	12.43	223742	198956	434.3	505.6
14)	L6 Aroclor-1254 {3}	12.69	12.57	547143	346442	492.2	546.8
15)	L6 Aroclor-1254 {4}	13.08	12.78	330411	451635	585.4 E	548.4
16)	L6 Aroclor-1254 {5}	13.48	13.14	361774	691811	589.0 E	643.3 E
	Sum Aroclor-1254			1867382	2372902	2638.8	2729.0
	Average Aroclor-1254					527.758	545.793
17)	L7 Aroclor-1260	14.15	13.68	610840	746544	401.5	401.0
18)	L7 Aroclor-1260 {2}	14.31	13.89	128261	190642	159.2	193.3
19)	L7 Aroclor-1260 {3}	14.40	13.98	59989	108685	118.9	169.5 #
20)	L7 Aroclor-1260 {4}	14.81	14.34	97298	130804	116.1	145.7 #
21)	L7 Aroclor-1260 {5}	15.23	14.88	208198	264203	123.9	120.4
	Sum Aroclor-1260			1104585	1440879	356.6	399.4
	Average Aroclor-1260					183.922	205.973

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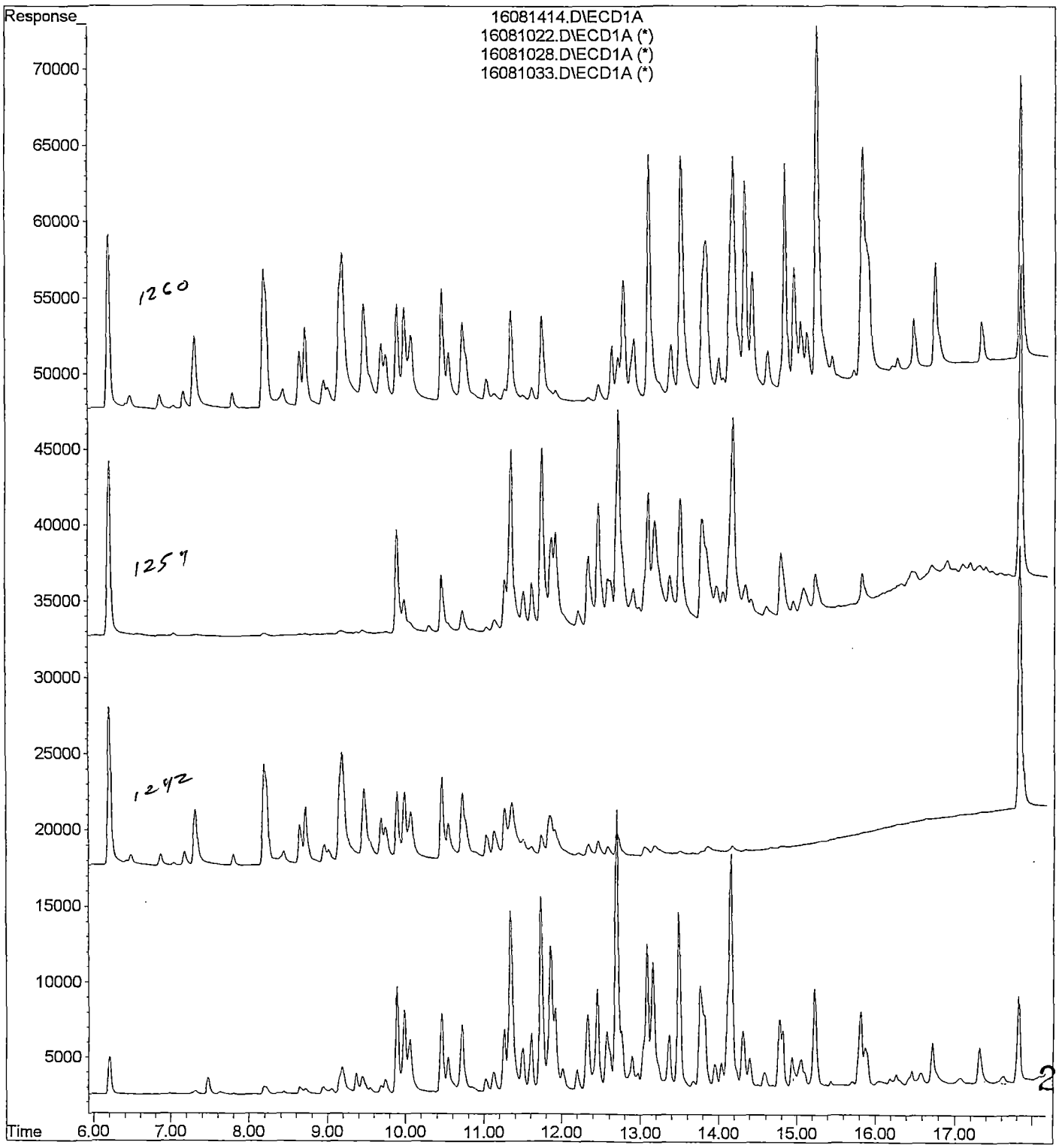
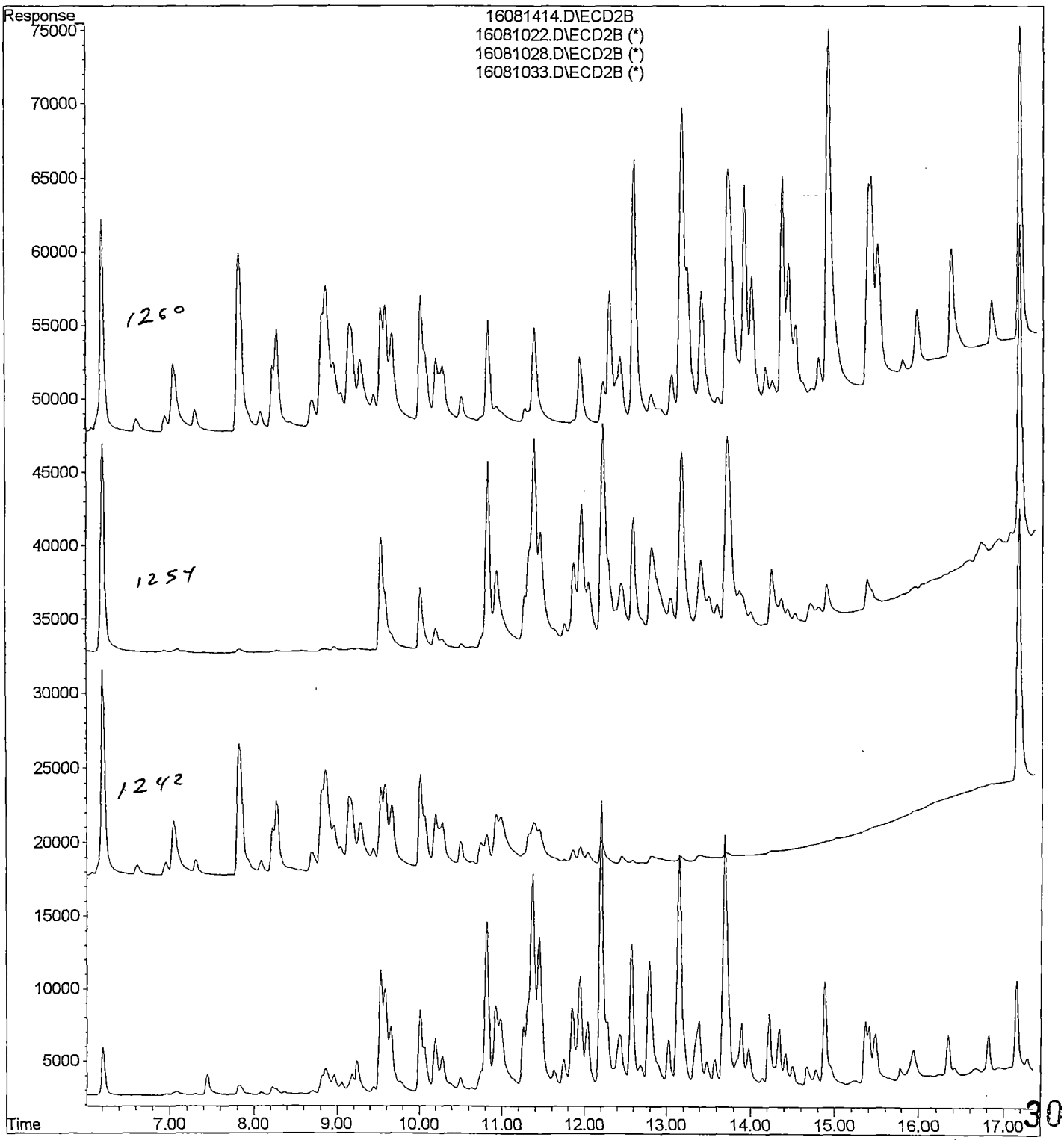
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

File : F:\HPCHEM\HP\16\DATA\08_14_01\16081414.D
Operator : TLM
Acquired : 14 Aug 2001 18:41 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.02 *E00Q2 *
Misc Info : *EPA*30.7G/5.0ML*16
Vial Number: 14

OK
8-31-01



File : F:\HPCHEM\HP\16\DATA\08_14_01\16081414.D
Operator : TLM
Acquired : 14 Aug 2001 18:41 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.02 *E00Q2 *
Misc Info : *EPA*30.7G/5.0ML*16
Vial Number: 14



1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00Q2DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: 47158.02DL

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/29/01

Injection Volume: 0.5(uL) Dilution Factor: 5.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	190	U
11104-28-2	Aroclor-1221	190	U
11141-16-5	Aroclor-1232	190	U
53469-21-9	Aroclor-1242	490	DP
12672-29-6	Aroclor-1248	190	U
11097-69-1	Aroclor-1254	340	D
11096-82-5	Aroclor-1260	130	DJ
	Surrogate amount spiked	7.76	

FORM I PCB

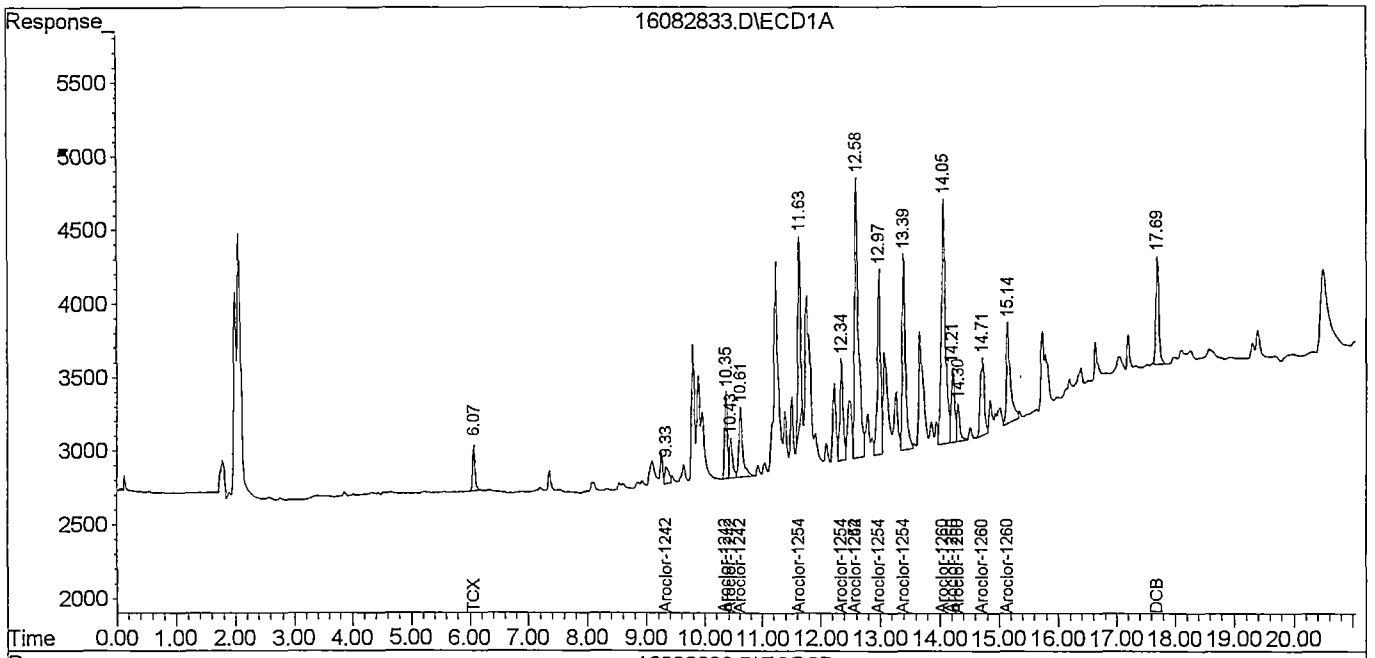
Chromatographic Report

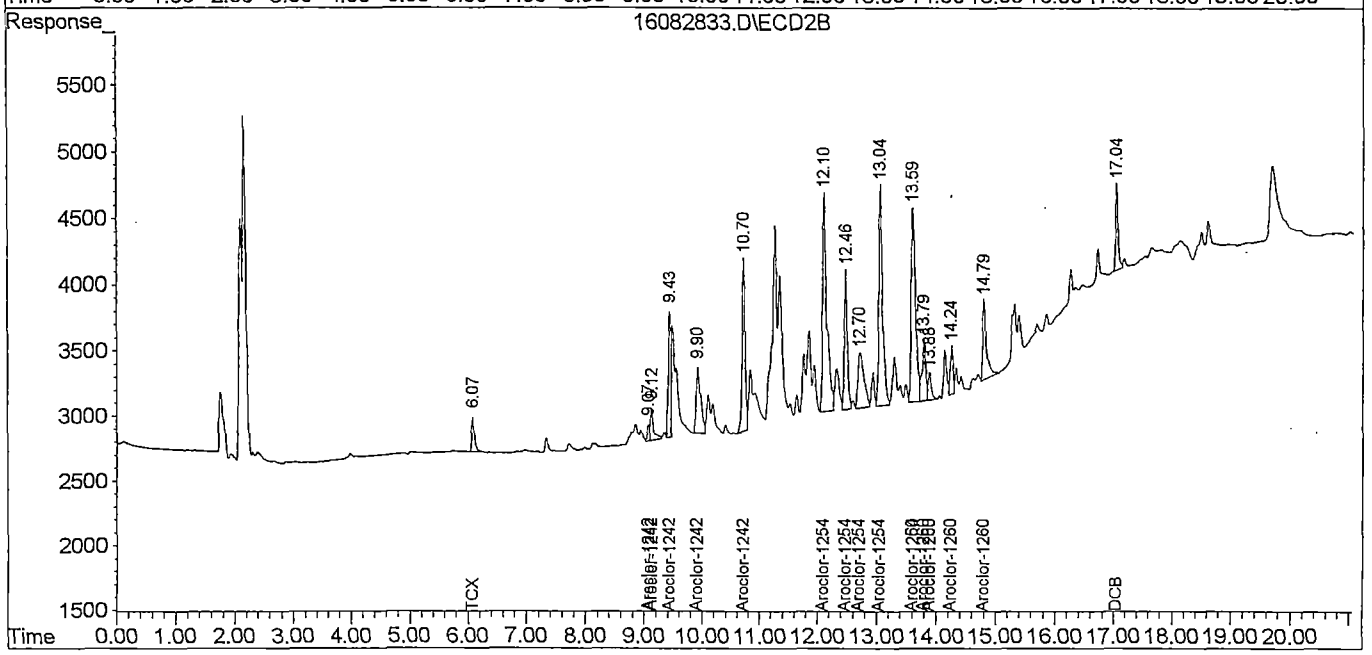
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082833.D\ECD1A.CH Vial: 33
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082833.D\ECD2B.CH
Acq On : 29 Aug 2001 1:42 Operator: TLM
Sample : 47158.02DL *E00Q2DL * Inst : HP_16
Misc : *EPA*30.7G/5.0ML*16 Dilution: 5.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 30 16:44 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

ok 8-31-01





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082833.D\ECD1A.CH Vial: 33
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082833.D\ECD2B.CH
Acq On : 29 Aug 2001 1:42 Operator: TLM
Sample : 47158.02DL *E00Q2DL * Inst : HP_16
Misc : *EPA*30.7G/5.0ML*16 Dilution: 5.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 30 16:44 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	6.06	6.07	8824	9181	3.425m	3.180m	
	Spiked Amount 7.756			Recovery	=	44.16%	41.00%	
22)	S DCB	17.69	17.04	25006	19684	5.772m	4.927m	
	Spiked Amount 7.756			Recovery	=	74.42%	63.53%	
	Target Compounds:							
7)	L4 Aroclor-1242	9.34	9.07	5769	3276	49.7	36.4	#
8)	L4 Aroclor-1242 {2}	10.35	9.12f	18746	9400	270.1	172.3	#
9)	L4 Aroclor-1242 {3}	10.44	9.43	10602	29131	271.0	603.9	#
10)	L4 Aroclor-1242 {4}	10.61	9.91	22130	27466	221.1	290.4	#
11)	L4 Aroclor-1242 {5}	12.59	10.71	86888	47959	3349.6 E	1333.0	#
	Sum Aroclor-1242			144135	117232	4161.6	2436.0	
	Average Aroclor-1242					832.320	487.197	
12)	L6 Aroclor-1254	11.63	12.10	38313	82910	248.7	400.3	#
13)	L6 Aroclor-1254 {2}	12.34	12.46	26117	36759	254.2	396.8	#
14)	L6 Aroclor-1254 {3}	12.59	12.70	86888	29901	388.4	274.4	#
15)	L6 Aroclor-1254 {4}	12.97	13.04	45401	74283	397.5	441.5	
16)	L6 Aroclor-1254 {5}	13.39	13.59	51403	73252	417.6	378.2	
	Sum Aroclor-1254			248123	297105	1706.4	1891.1	
	Average Aroclor-1254					341.281	378.228	
17)	L7 Aroclor-1260	14.06	13.59	80393	73252	300.6	264.3	
18)	L7 Aroclor-1260 {2}	14.21	13.79	19375	20306	126.0	135.4	
19)	L7 Aroclor-1260 {3}	14.30	13.88	9239	8021	84.6	78.8	
20)	L7 Aroclor-1260 {4}	14.72	14.24	25242	12497	166.7	93.8	#
21)	L7 Aroclor-1260 {5}	15.14	14.79	31031	25514	100.0	77.7	
	Sum Aroclor-1260			165280	139589	1508.1	1260.3	
	Average Aroclor-1260					155.565	130.002	

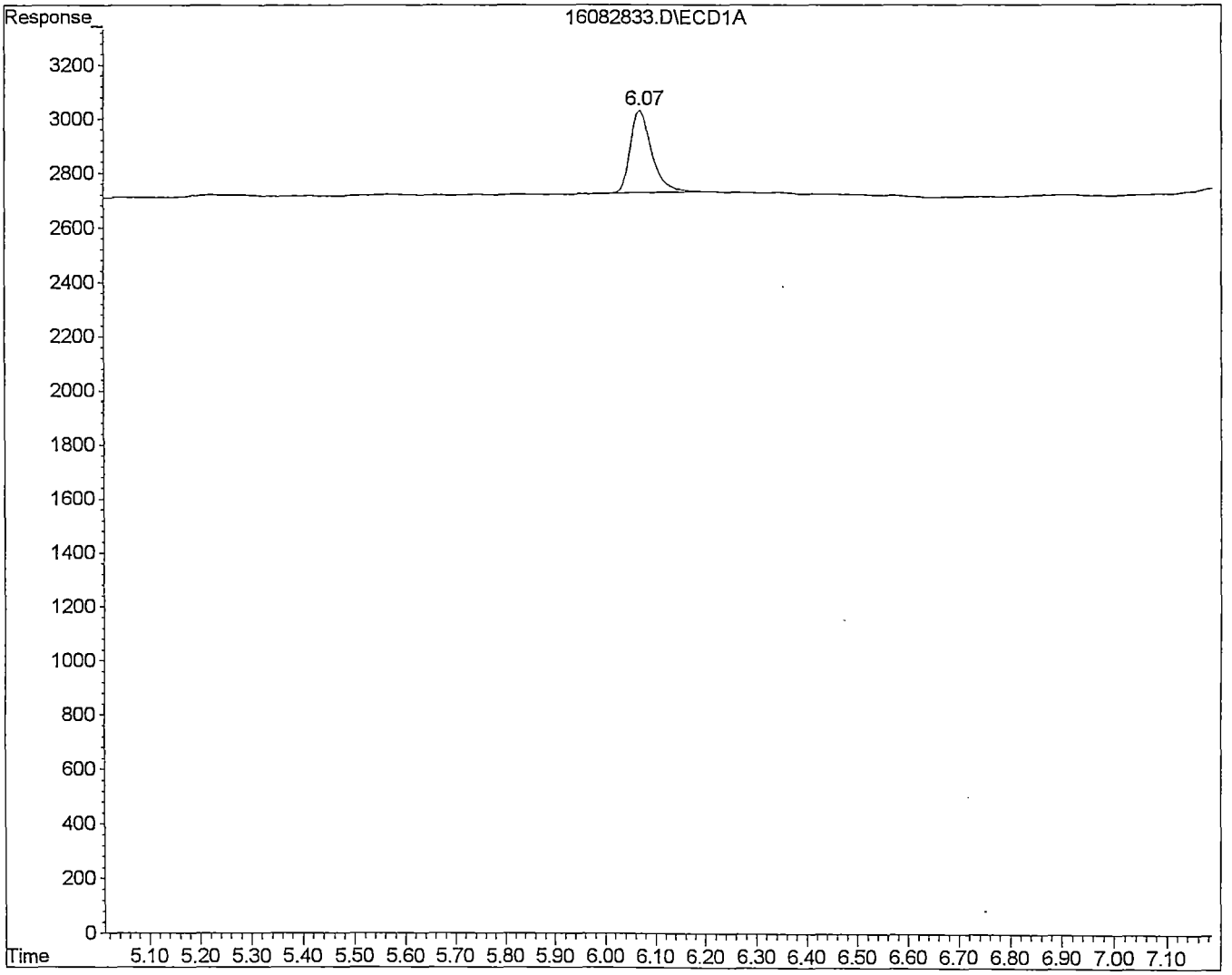
3m 8-30-01

33

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

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_28_01\16082833.D
Date Acquired: 29 Aug 2001 1:42
Inst: HP_16 Operator ID: TLM
Name: 47158.02DL *E00Q2DL *
Misc: *EPA*30.7G/5.0ML*16
Method: F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title: PCB/TOXAPHENE
Quant Time: Aug 30 16:44 2001 Quant Results File: XPCBH28.RES



TCX 6.07min area: 8824 m

Integration Time Range: 6.01 - 6.19

8-30-01

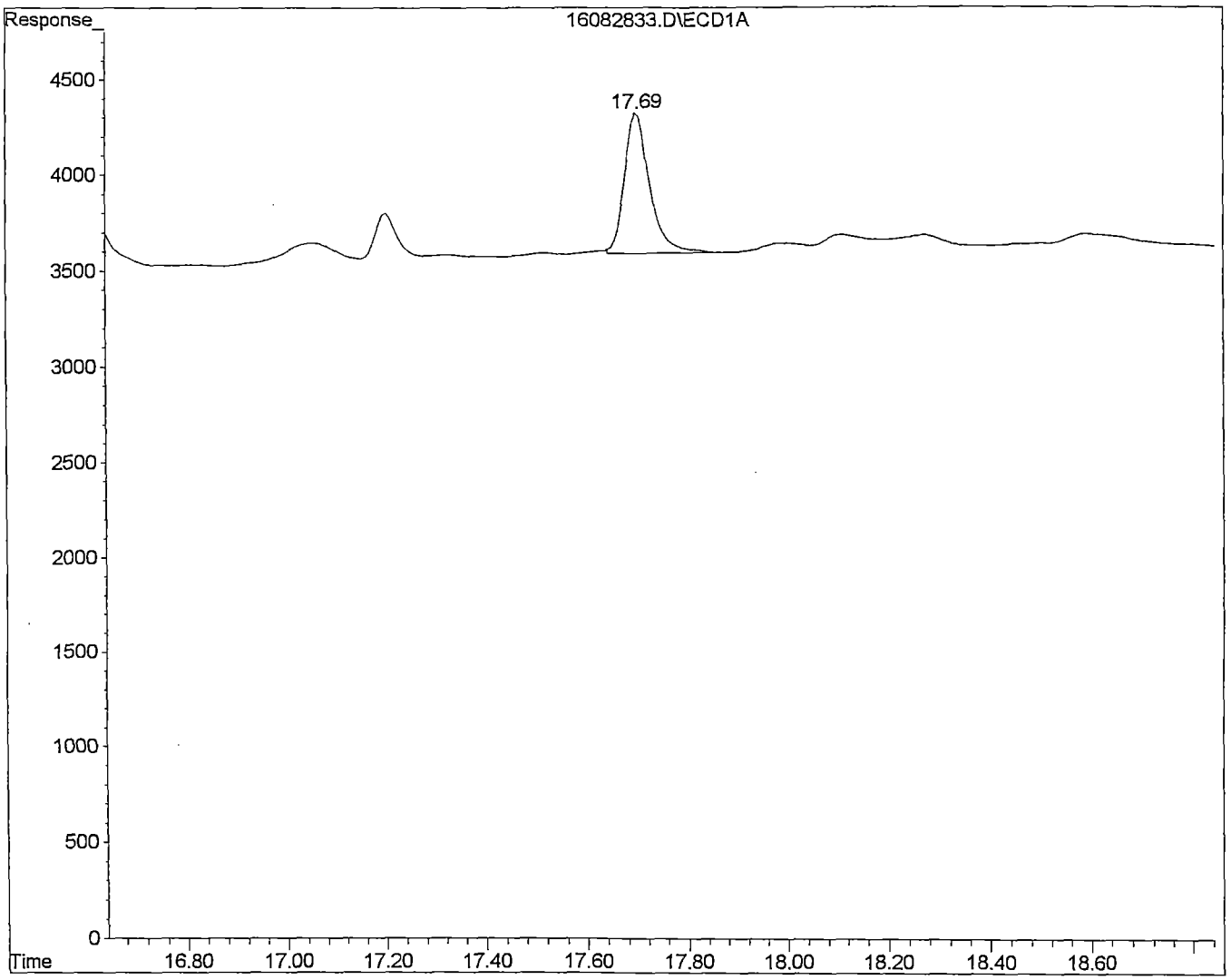
8/31/01

34

F:\HPCHEM\HP\16\DATA\08_28_01\16082833.D
Report generated: Thu Aug 30 17:06:22 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_28_01\16082833.D
Date Acquired: 29 Aug 2001 1:42
Inst: HP_16 Operator ID: TLM
Name: 47158.02DL *E00Q2DL *
Misc: *EPA*30.7G/5.0ML*16
Method: F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title: PCB/TOXAPHENE
Quant Time: Aug 30 16:44 2001 Quant Results File: XPCBH28.RES



DCB 17.69min area: 25006 m

Integration Time Range: 17.64 - 17.84

JM 8-30-01

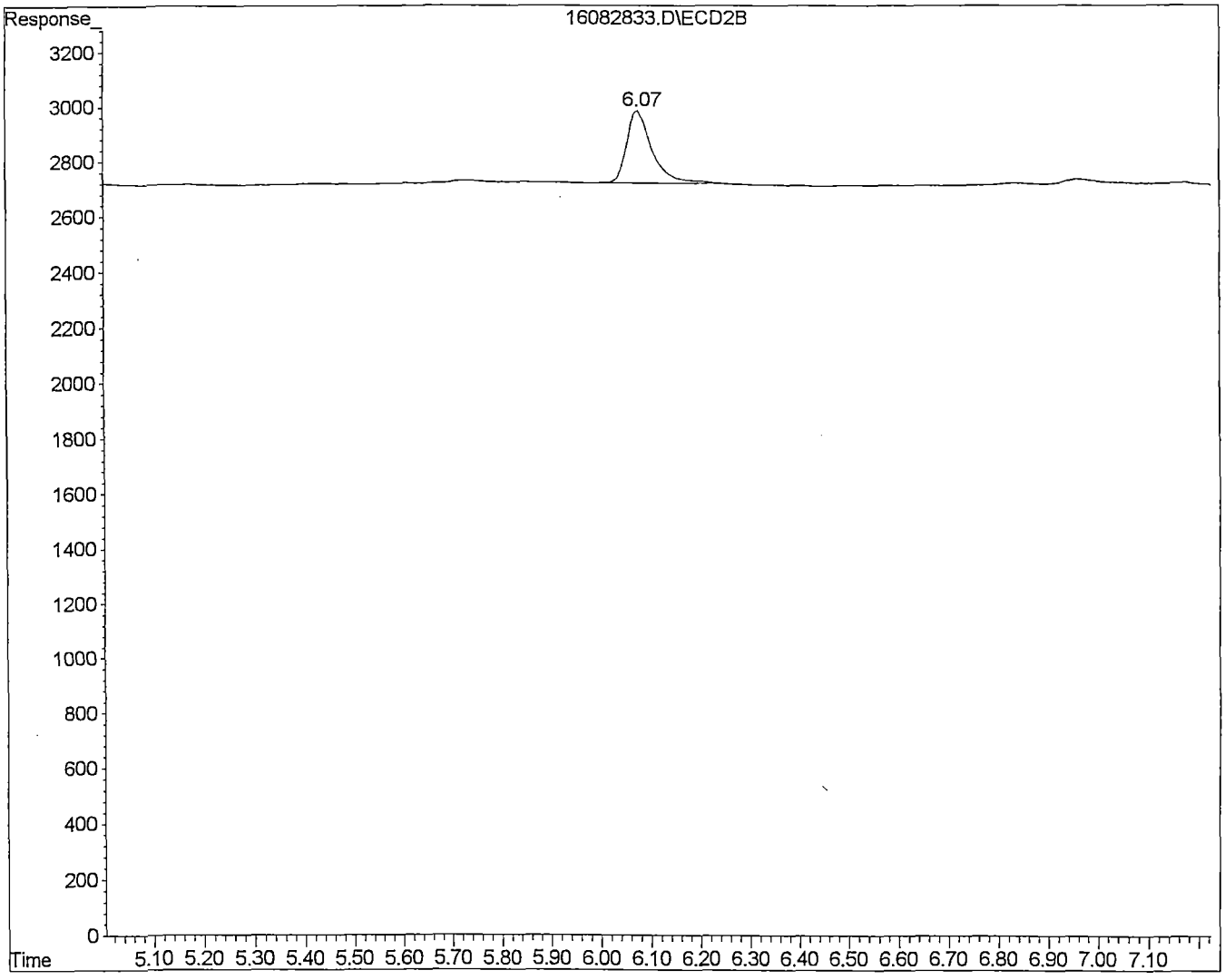
ok 8-31-01

35

F:\HPCHEM\HP\16\DATA\08_28_01\16082833.D
Report generated: Thu Aug 30 17:06:23 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_28_01\16082833.D
Date Acquired: 29 Aug 2001 1:42
Inst: HP_16 Operator ID: TLM
Name: 47158.02DL *E00Q2DL *
Misc: *EPA*30.7G/5.0ML*16
Method: F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title: PCB/TOXAPHENE
Quant Time: Aug 30 16:44 2001 Quant Results File: XPCBH28.RES



TCX #2 6.07min area: 9181 m

Integration Time Range: 6.00 - 6.23

TM 8-30-01

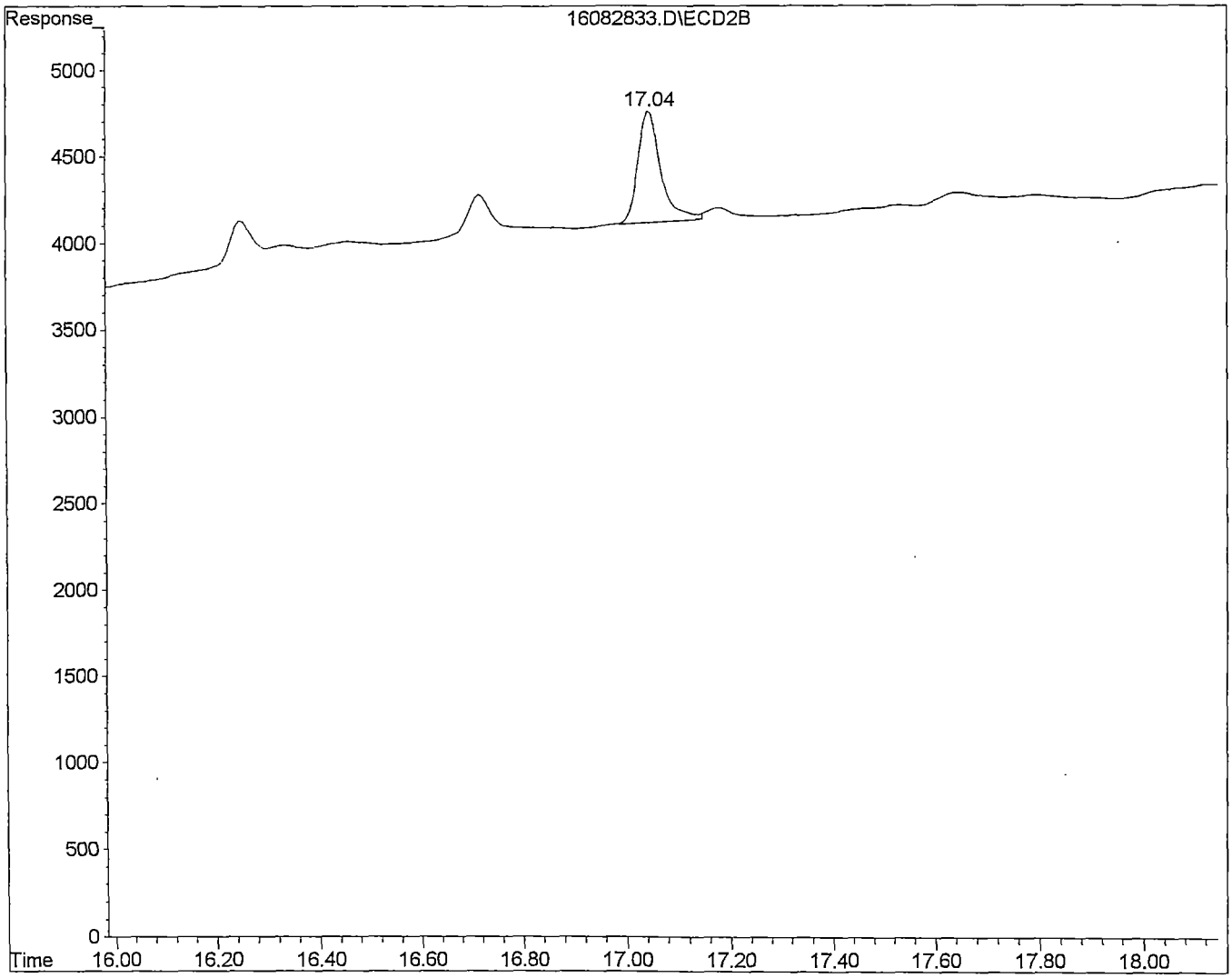
OK 8-31-01

36

F:\HPCHEM\HP\16\DATA\08_28_01\16082833.D
Report generated: Thu Aug 30 17:06:23 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_28_01\16082833.D
Date Acquired: 29 Aug 2001 1:42
Inst: HP_16 Operator ID: TLM
Name: 47158.02DL *E00Q2DL *
Misc: *EPA*30.7G/5.0ML*16
Method: F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title: PCB/TOXAPHENE
Quant Time: Aug 30 16:44 2001 Quant Results File: XPCBH28.RES



DCB #2 17.04min area: 19684 m

Integration Time Range: 16.98 - 17.14

8-30-01

ok 8-31-01

F:\HPCHEM\HP\16\DATA\08_28_01\16082833.D
Report generated: Thu Aug 30 17:06:24 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00Q3

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: 47158.05

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

% Moisture: 14 decanted: (Y/N) __ Date Received: 08/01/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/14/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	96	
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	63	
11096-82-5	Aroclor-1260	35	J
Surrogate amount spiked		7.75	

TBS
9/11/01

TB
10/1

38

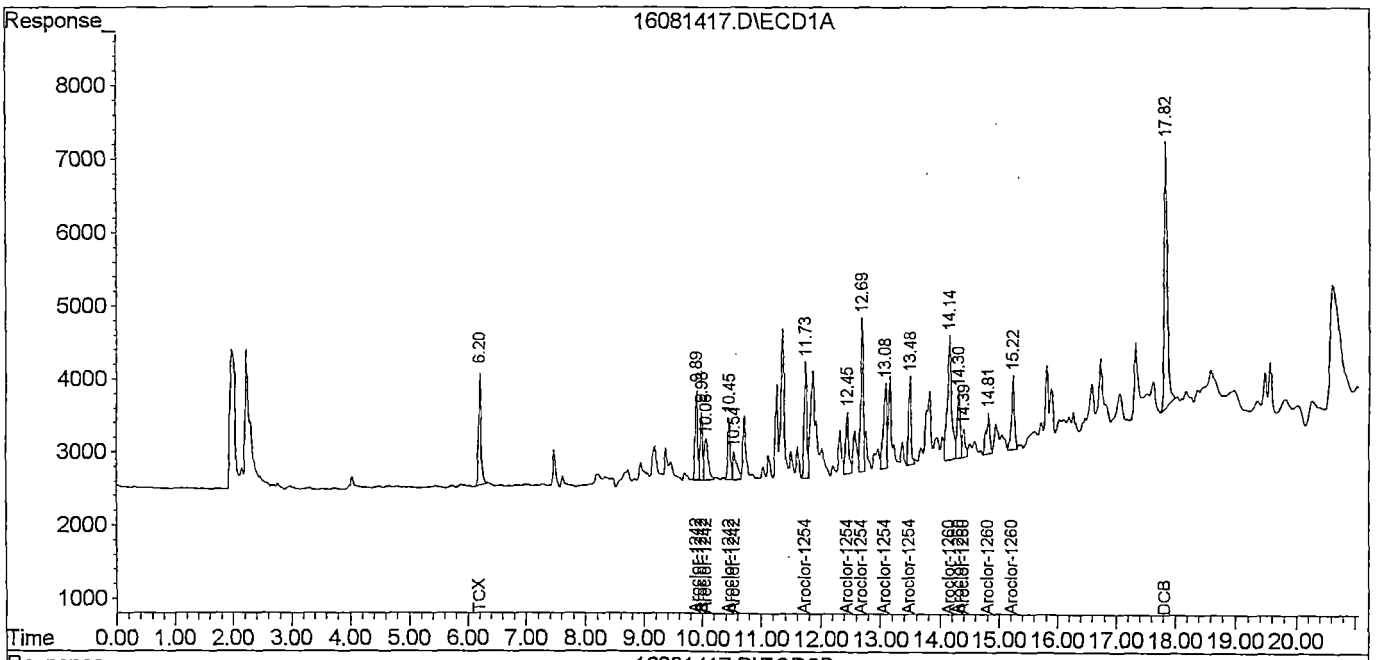
Chromatographic Report

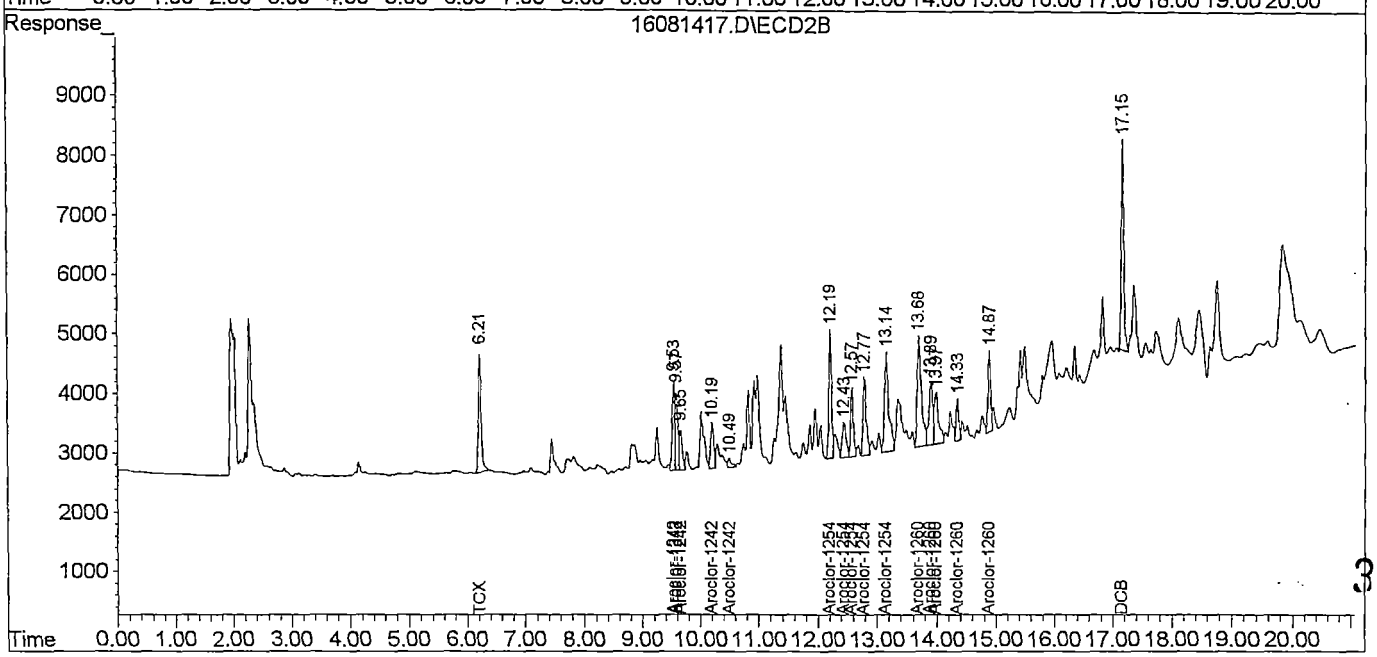
Signal #1 : F:\HPCHEM\HP\16\DATA\08_14_01\16081417.D\ECD1A.CH Vial: 17
Signal #2 : F:\HPCHEM\HP\16\DATA\08_14_01\16081417.D\ECD2B.CH
Acq On : 14 Aug 2001 19:55 Operator: TLM
Sample : 47158.05 *E00Q3 * Inst : HP_16
Misc : *EPA*30G/5.0ML*14 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 16 14:55 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_14_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

ok 8-31-01





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_14_01\16081417.D\ECD1A.CH Vial: 17
Signal #2 : F:\HPCHEM\HP\16\DATA\08_14_01\16081417.D\ECD2B.CH
Acq On : 14 Aug 2001 19:55 Operator: TLM
Sample : 47158.05 *E00Q3 * Inst : HP_16
Misc : *EPA*30G/5.0ML*14 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 16 14:55 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_14_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

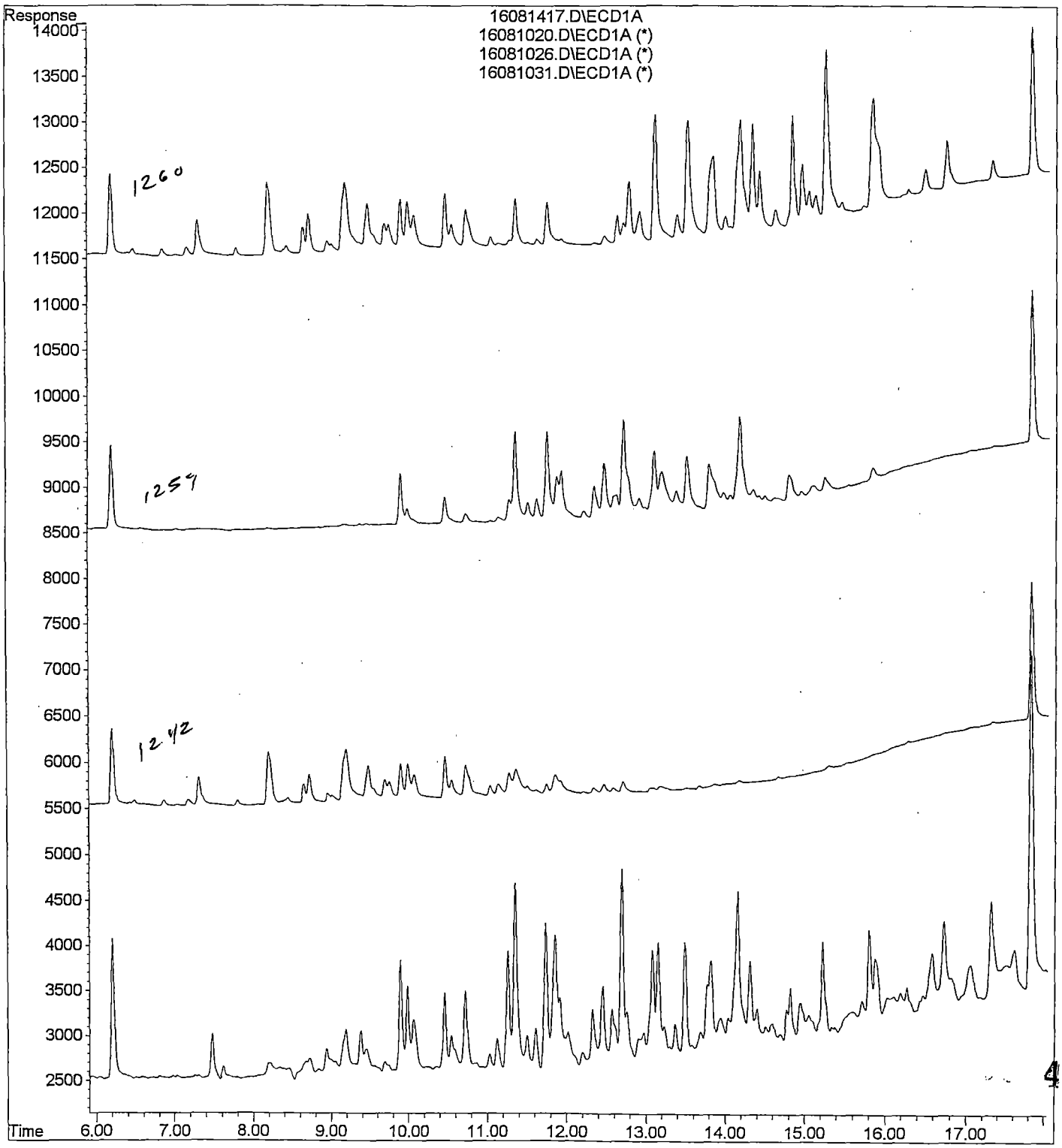
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	6.20	6.21	43897	63412	3.663	3.476	
	Spiked Amount 7.752			Recovery	=	47.25%	44.84%	
22)	S DCB	17.82	17.15	129775	100990	5.981	3.795	#
	Spiked Amount 7.752			Recovery	=	77.15%	48.96%	
	Target Compounds:							
7)	L4 Aroclor-1242	9.89	9.53	35275	44369	144.3	151.5	
8)	L4 Aroclor-1242 {2}	9.98	9.58	27397	41469	106.8	111.9	
9)	L4 Aroclor-1242 {3}	10.06	9.65	25582	23691	97.5	55.0	#
10)	L4 Aroclor-1242 {4}	10.46	10.19	25120	28739	87.3	109.7	#
11)	L4 Aroclor-1242 {5}	10.54	10.50	18073	7129	105.3	52.2	#
	Sum Aroclor-1242			131447	145398	541.3	480.3	
	Average Aroclor-1242					108.258	96.069	
12)	L6 Aroclor-1254	11.73	12.19	50694	71719	67.4	50.8	
13)	L6 Aroclor-1254 {2}	12.45	12.44	31293	28509	60.7	72.4	
14)	L6 Aroclor-1254 {3}	12.69	12.57	62859	37878	56.5	59.8	
15)	L6 Aroclor-1254 {4}	13.08	12.78	41938	50022	74.3	60.7	
16)	L6 Aroclor-1254 {5}	13.48	13.14	35823	83341	58.3	77.5	#
	Sum Aroclor-1254			222607	271470	317.2	321.2	
	Average Aroclor-1254					63.442	64.232	
17)	L7 Aroclor-1260	14.15	13.68	84138	90583	55.3	48.6	
18)	L7 Aroclor-1260 {2}	14.31	13.89	33137	46537	41.1	47.2	
19)	L7 Aroclor-1260 {3}	14.40	13.97	14193	45771	28.1	71.3	#
20)	L7 Aroclor-1260 {4}	14.82	14.33	23637	22743	28.2	25.3	
21)	L7 Aroclor-1260 {5}	15.23	14.87	34852	42830	20.7	19.5	
	Sum Aroclor-1260			189956	248464	67.2	82.2	
	Average Aroclor-1260					34.686	42.393	

40

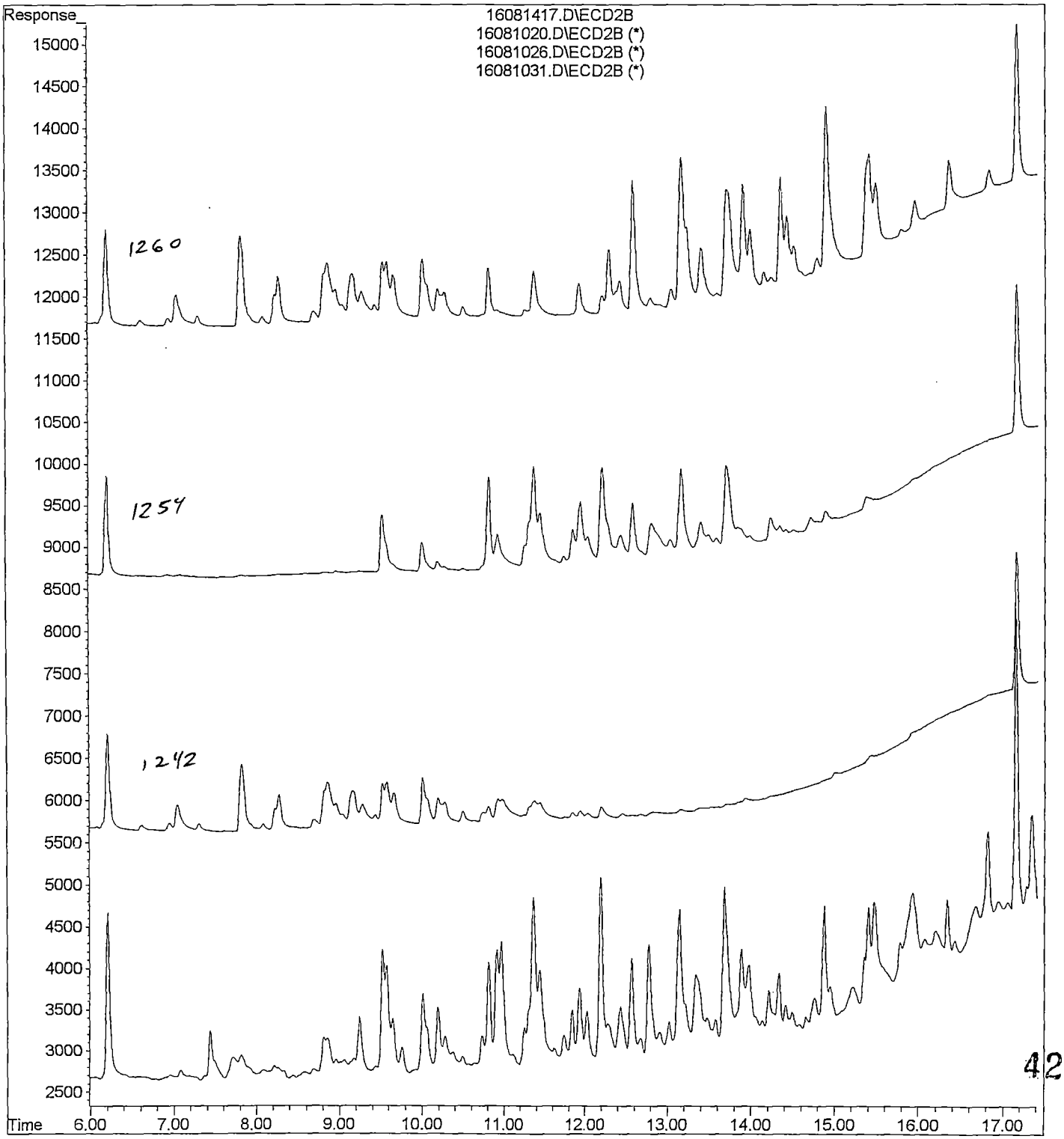
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

File : F:\HPCHEM\HP\16\DATA\08_14_01\16081417.D
Operator : TLM
Acquired : 14 Aug 2001 19:55 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.05 *E00Q3 *
Misc Info : *EPA*30G/5.0ML*14
Vial Number: 17

ok
8-31-01



File : F:\HPCHEM\HP\16\DATA\08_14_01\16081417.D
Operator : TLM
Acquired : 14 Aug 2001 19:55 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.05 *E00Q3 *
Misc Info : *EPA*30G/5.0ML*14
Vial Number: 17



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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00Q4

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: 47158.06

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

% Moisture: 65 decanted: (Y/N) __ Date Received: 08/01/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/21/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	94	U
11104-28-2	Aroclor-1221	94	U
11141-16-5	Aroclor-1232	94	U
53469-21-9	Aroclor-1242	180	J ~~P~~
12672-29-6	Aroclor-1248	94	U
11097-69-1	Aroclor-1254	130 ~~E~~	
11096-82-5	Aroclor-1260	46	J
Surrogate amount spiked		19.04	

TBS 9/11/01
TB 10/1

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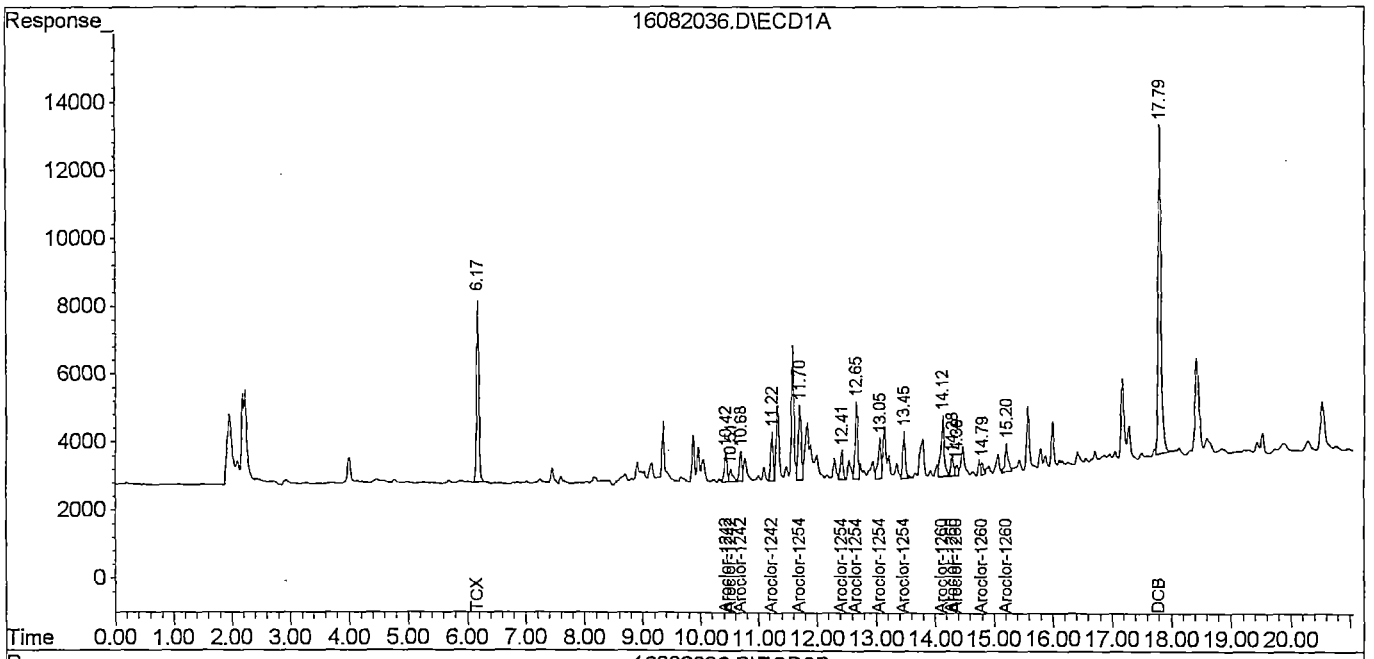
Chromatographic Report

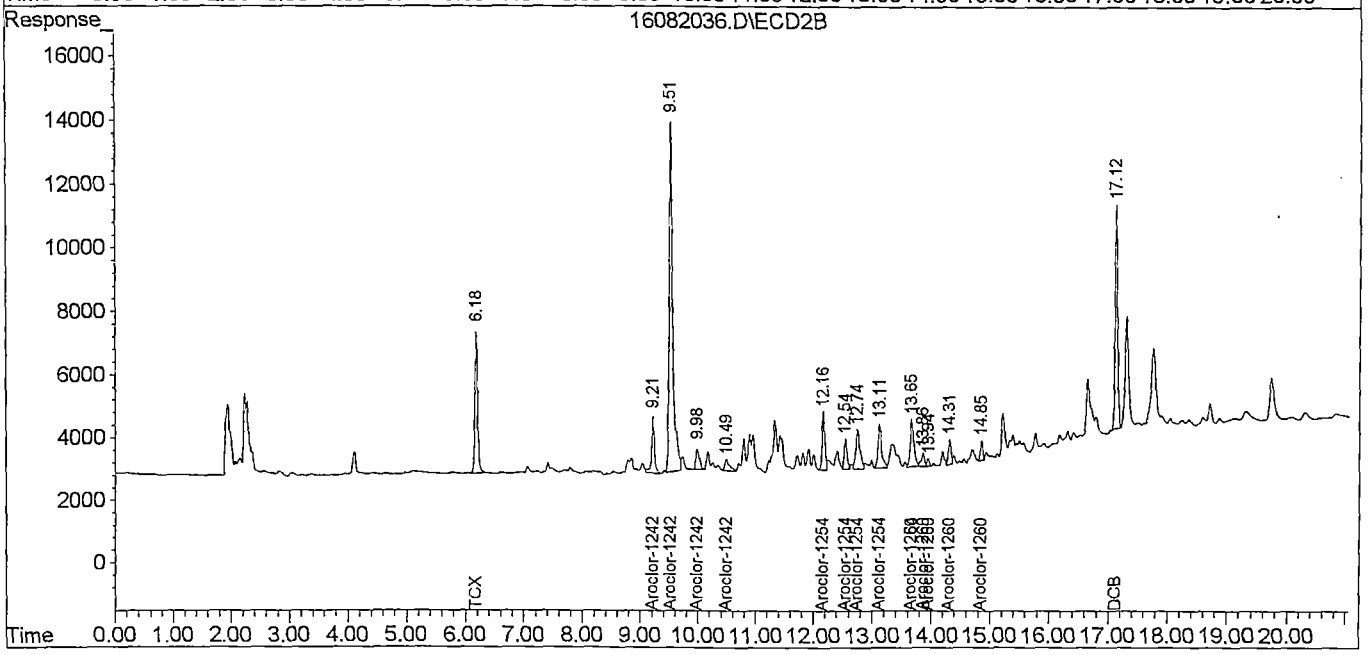
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082036.D\ECD1A.CH Vial: 36
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082036.D\ECD2B.CH
Acq On : 21 Aug 2001 4:40 Operator: TLM
Sample : 47158.06 *E00Q4 * Inst : HP_16
Misc : *EPA*30G/5.0ML*65 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 22 18:54 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

op 8-31-01





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082036.D\ECD1A.CH Vial: 36
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082036.D\ECD2B.CH
Acq On : 21 Aug 2001 4:40 Operator: TLM
Sample : 47158.06 *E00Q4 * Inst : HP_16
Misc : *EPA*30G/5.0ML*65 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 22 18:54 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

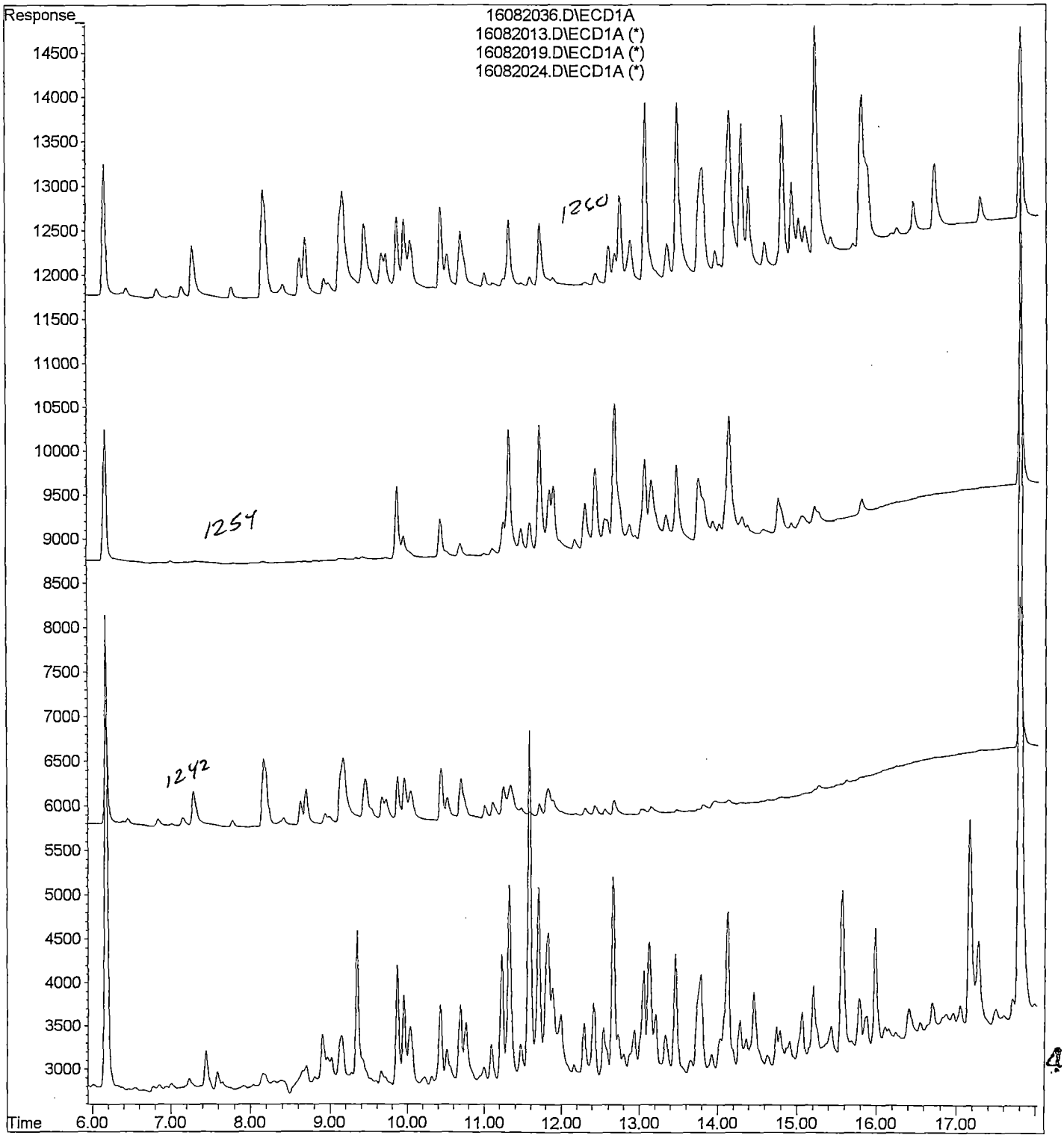
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	6.17	6.18	146587	142456	19.0	18.3	
	Spiked Amount 19.048			Recovery	=	99.75%	96.08%	
22)	S DCB	17.79	17.12	322088	201453	28.6	17.4	#
	Spiked Amount 19.048			Recovery	=	150.15%	91.35%	
	Target Compounds:							
8)	L4 Aroclor-1242 {2}	10.43	9.21f	27520	60685	152.3	414.1	#
9)	L4 Aroclor-1242 {3}	10.51	9.51	16025	470332	153.8	3746.9	E#
10)	L4 Aroclor-1242 {4}	10.69	9.98	26636	27357	111.3	108.7	
11)	L4 Aroclor-1242 {5}	11.22	10.49	40973	21687	291.6	415.1	#
	Sum Aroclor-1242			111156	580061	708.9	4684.7	
	Average Aroclor-1242					177.225	1171.181	
12)	L6 Aroclor-1254	11.70	12.16	77715	60711	180.9	102.9	#
13)	L6 Aroclor-1254 {2}	12.42	12.54	27399	34106	92.4	125.2	#
14)	L6 Aroclor-1254 {3}	12.66	12.74	64523	60944	102.5	173.1	#
15)	L6 Aroclor-1254 {4}	13.05	13.11	41124	59359	130.3	132.0	
16)	L6 Aroclor-1254 {5}	13.46	13.65	44297	67388	131.5	127.8	
	Sum Aroclor-1254			255058	282507	637.5	660.9	
	Average Aroclor-1254					127.491	132.188	
17)	L7 Aroclor-1260	14.12	13.65	72676	67388	87.7	86.4	
18)	L7 Aroclor-1260 {2}	14.28	13.86	18527	17406	42.3	42.2	
19)	L7 Aroclor-1260 {3}	14.36	13.95	10747	7411	39.0	28.2	#
20)	L7 Aroclor-1260 {4}	14.79	14.31	11499	27192	25.0	71.1	#
21)	L7 Aroclor-1260 {5}	15.20	14.85	32210	17167	35.2	18.5	#
	Sum Aroclor-1260			145660	136565	218.3	234.7	
	Average Aroclor-1260					45.845	49.294	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16082036.D XPCBH20.M Wed Aug 22 19:02:03 2001 Page 1

File : F:\HPCHEM\HP\16\DATA\08_20_01\16082036.D
Operator : TLM
Acquired : 21 Aug 2001 4:40 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.06 *E00Q4 *
Misc Info : *EPA*30G/5.0ML*65
Vial Number: 36

Ok
8-31-01



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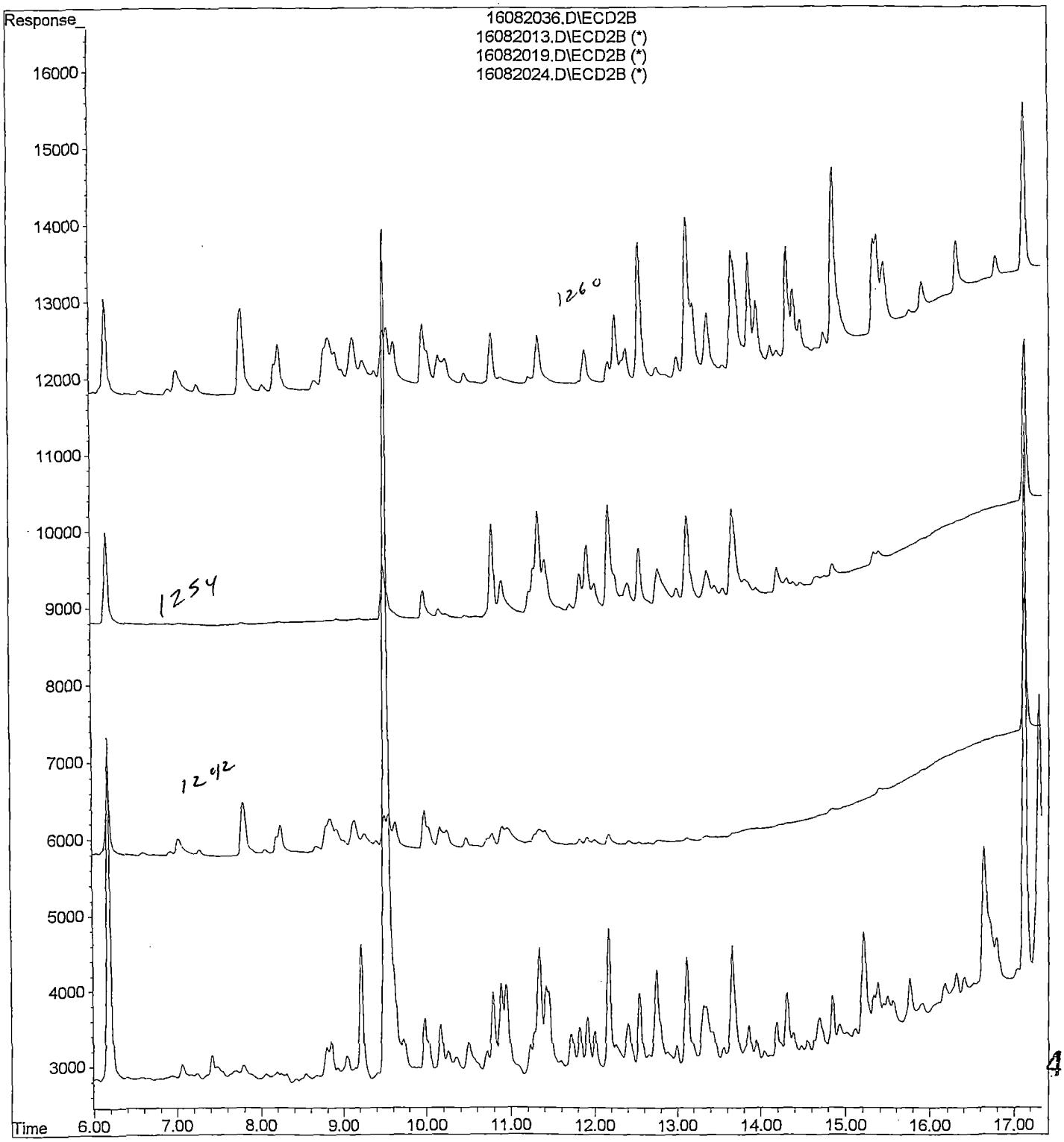
Operator : TLM
Acquired : 21 Aug 2001 4:40 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.06 *E00Q4 *
Misc Info : *EPA*30G/5.0ML*65
Vial Number: 36



1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00Q5

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: 47158.07

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

% Moisture: 32 decanted: (Y/N) __ Date Received: 08/01/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/21/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	48	U
11104-28-2	Aroclor-1221	48	U
11141-16-5	Aroclor-1232	48	U
53469-21-9	Aroclor-1242	48	U
12672-29-6	Aroclor-1248	48	U
11097-69-1	Aroclor-1254	41	J
11096-82-5	Aroclor-1260	13	J
	Surrogate amount spiked	9.71	

FORM I PCB

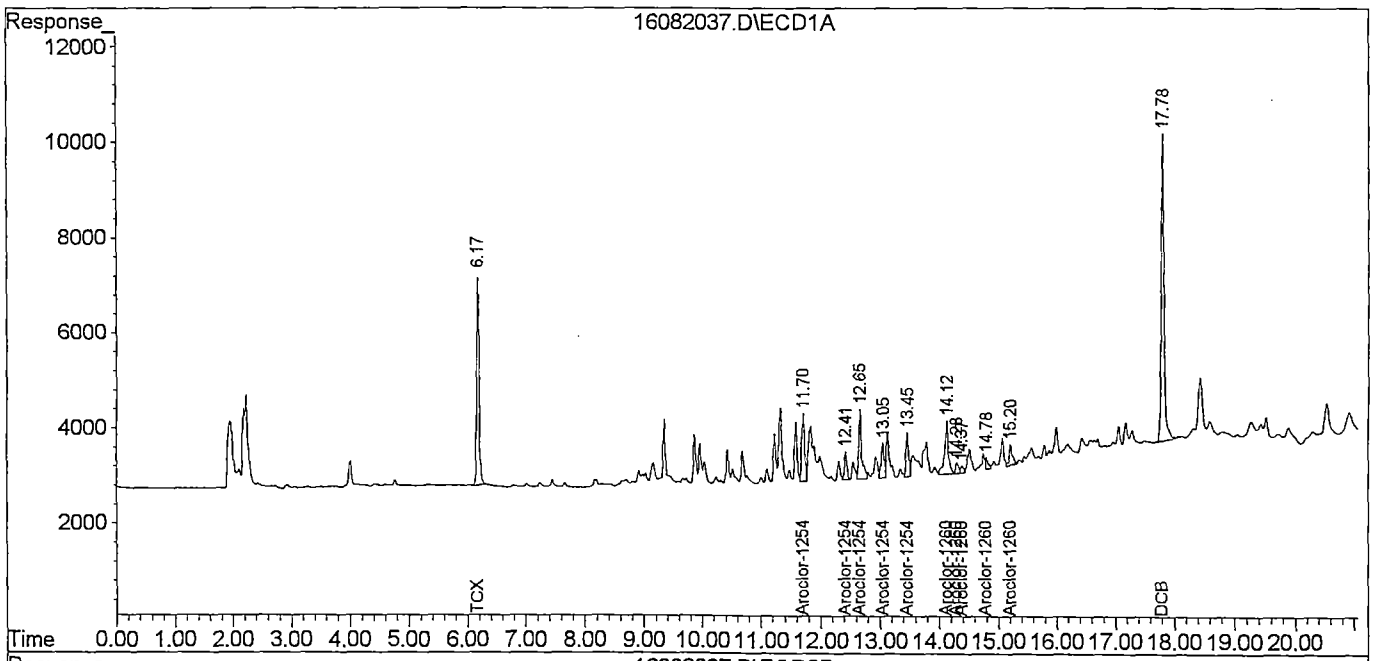
Chromatographic Report

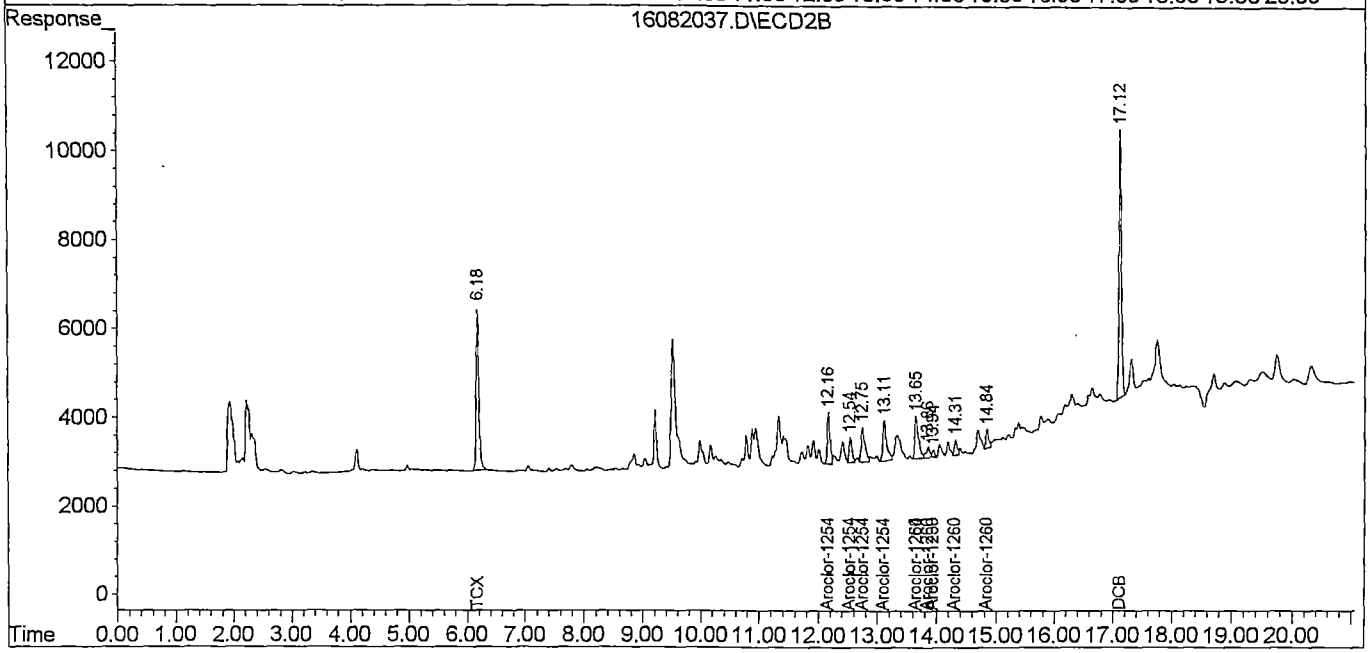
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082037.D\ECD1A.CH Vial: 37
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082037.D\ECD2B.CH
Acq On : 21 Aug 2001 5:05 Operator: TLM
Sample : 47158.07 *E00Q5 * Inst : HP_16
Misc : *EPA*30.3G/5.0ML*32 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 28 17:22 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

ok 8-31-01





49

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082037.D\ECD1A.CH Vial: 37
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082037.D\ECD2B.CH
Acq On : 21 Aug 2001 5:05 Operator: TLM
Sample : 47158.07 *E00Q5 * Inst : HP_16
Misc : *EPA*30.3G/5.0ML*32 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 28 17:22 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

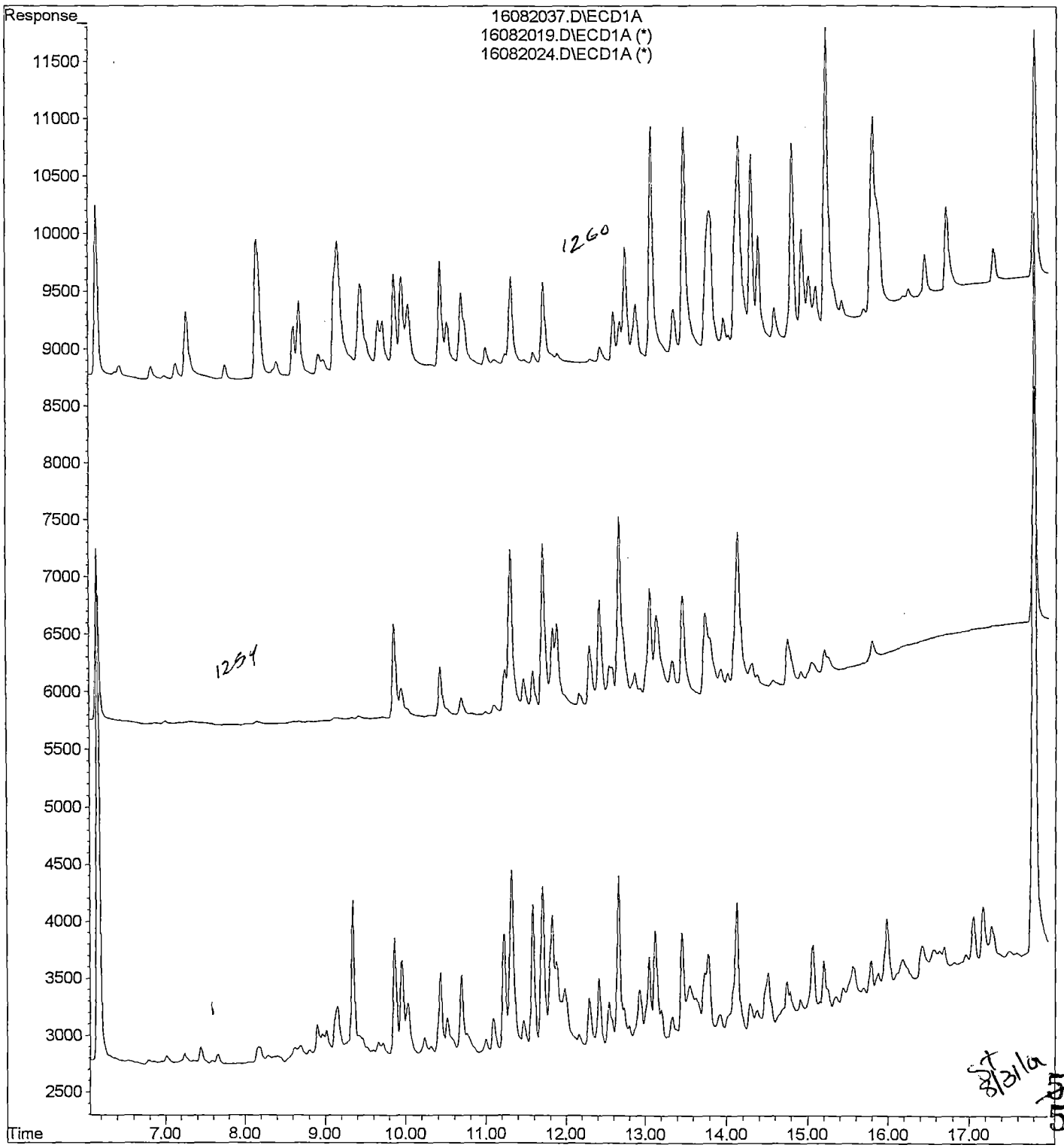
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	6.17	6.18	120599	113280	7.981	7.412	
	Spiked Amount 9.707			Recovery	=	82.22%	76.36%	
22)	S DCB	17.79	17.12	218495	175268	9.889	7.730	
	Spiked Amount 9.707			Recovery	=	101.88%	79.63%	
	Target Compounds:							
12)	L6 Aroclor-1254	11.70	12.16	50085	38286	59.4	33.1	#
13)	L6 Aroclor-1254 {2}	12.42	12.54	17558	19689	30.2	36.8	
14)	L6 Aroclor-1254 {3}	12.66	12.75	51573	34364	41.7	49.7	
15)	L6 Aroclor-1254 {4}	13.05	13.11	25818	40574	41.7	46.0	
16)	L6 Aroclor-1254 {5}	13.46	13.65	28932	41298	43.8	39.9	
	Sum Aroclor-1254			173965	174212	216.7	205.5	
	Average Aroclor-1254					43.349	41.104	
17)	L7 Aroclor-1260	14.12	13.65	49118	41298	30.2	27.0	
18)	L7 Aroclor-1260 {2}	14.28	13.86	7507	10836	8.740	13.4	#
19)	L7 Aroclor-1260 {3}	14.37	13.94	5409	4925	9.998	9.564	
20)	L7 Aroclor-1260 {4}	14.78	14.31	7097	11244	7.875	15.0	#
21)	L7 Aroclor-1260 {5}	15.20	14.85	15977	14054	8.888	7.709	
	Sum Aroclor-1260			85109	82357	31.9	35.3	
	Average Aroclor-1260					13.143	14.528	

50

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

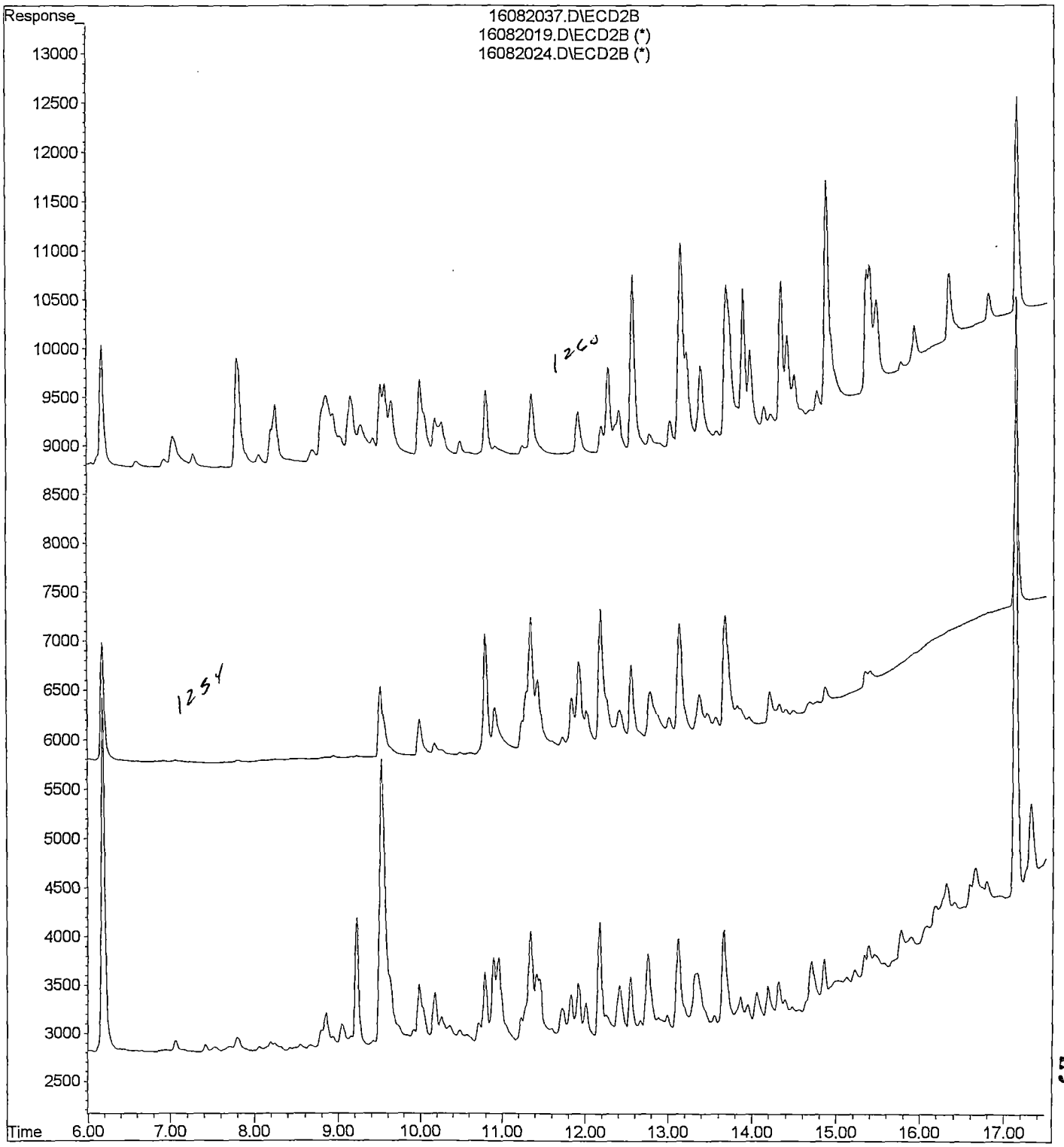
File : F:\HPCHEM\HP\16\DATA\08_20_01\16082037.D
Operator : TLM
Acquired : 21 Aug 2001 5:05 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.07 *E00Q5 *
Misc Info : *EPA*30.3G/5.0ML*32
Vial Number: 37

ok
8-31-01



8/31/01

File : F:\HPCHEM\HP\16\DATA\08_20_01\16082037.D
Operator : TLM
Acquired : 21 Aug 2001 5:05 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.07 *E00Q5 *
Misc Info : *EPA*30.3G/5.0ML*32
Vial Number: 37



1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00Q6

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: 47158.08

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/29/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	75	U
11104-28-2	Aroclor-1221	75	U
11141-16-5	Aroclor-1232	75	U
53469-21-9	Aroclor-1242	140	J ~~P~~
12672-29-6	Aroclor-1248	75	U
11097-69-1	Aroclor-1254	56	J ~~P~~
11096-82-5	Aroclor-1260	22	J
Surrogate amount spiked		15.10	

TBS 9/11/01

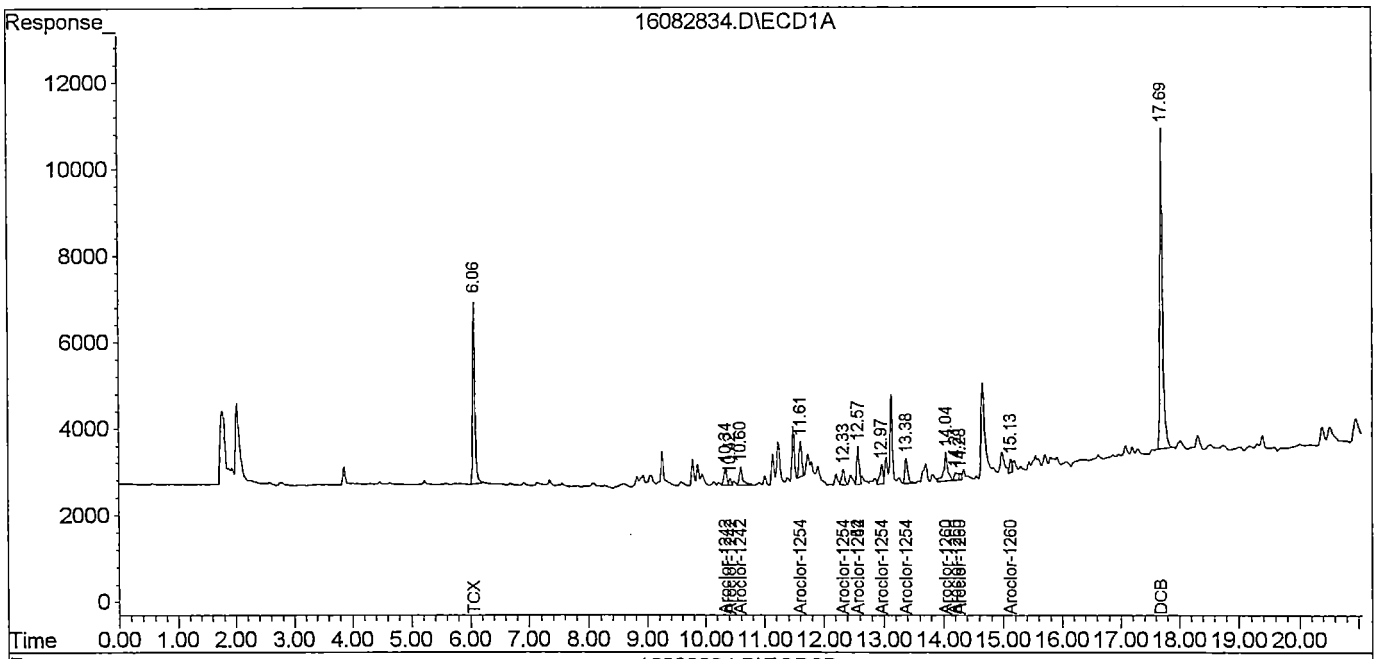
FORM I PCB

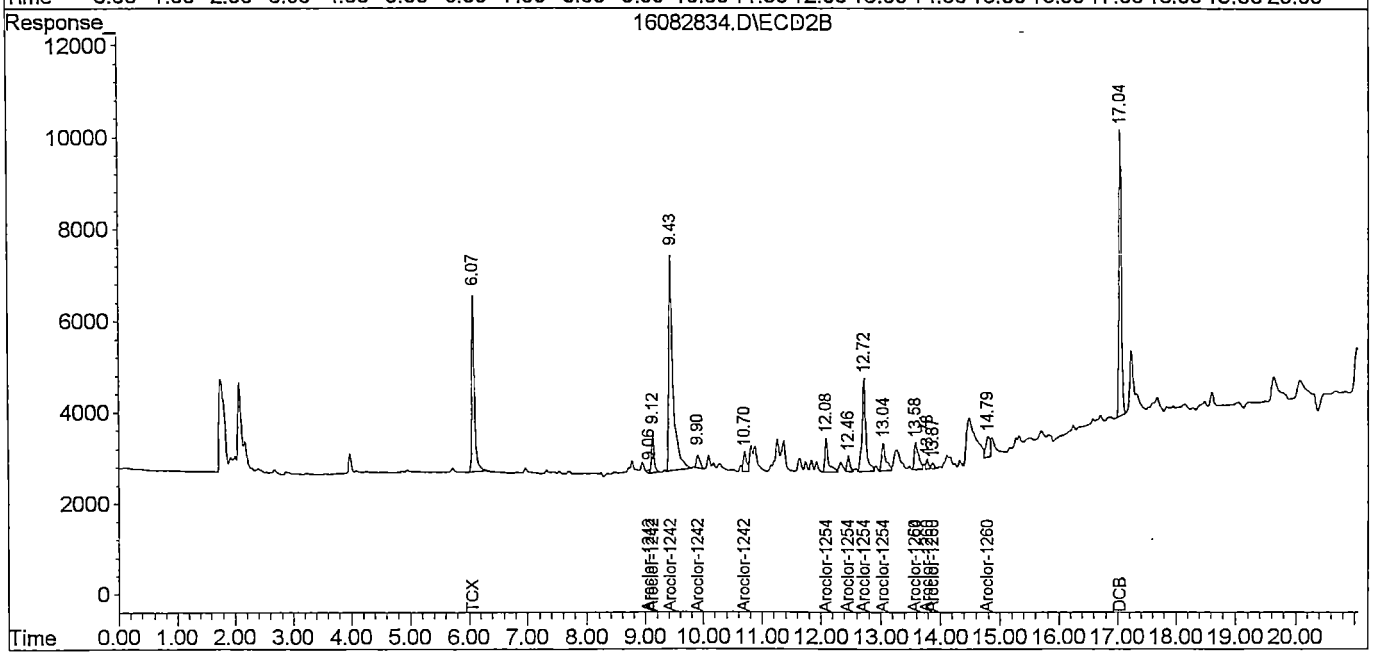
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082834.D\ECD1A.CH Vial: 34
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082834.D\ECD2B.CH
Acq On : 29 Aug 2001 2:07 Operator: TLM
Sample : 47158.08 *E00Q6 * Inst : HP_16
Misc : *EPA*30.1G/5.0ML*56 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 30 17:38 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

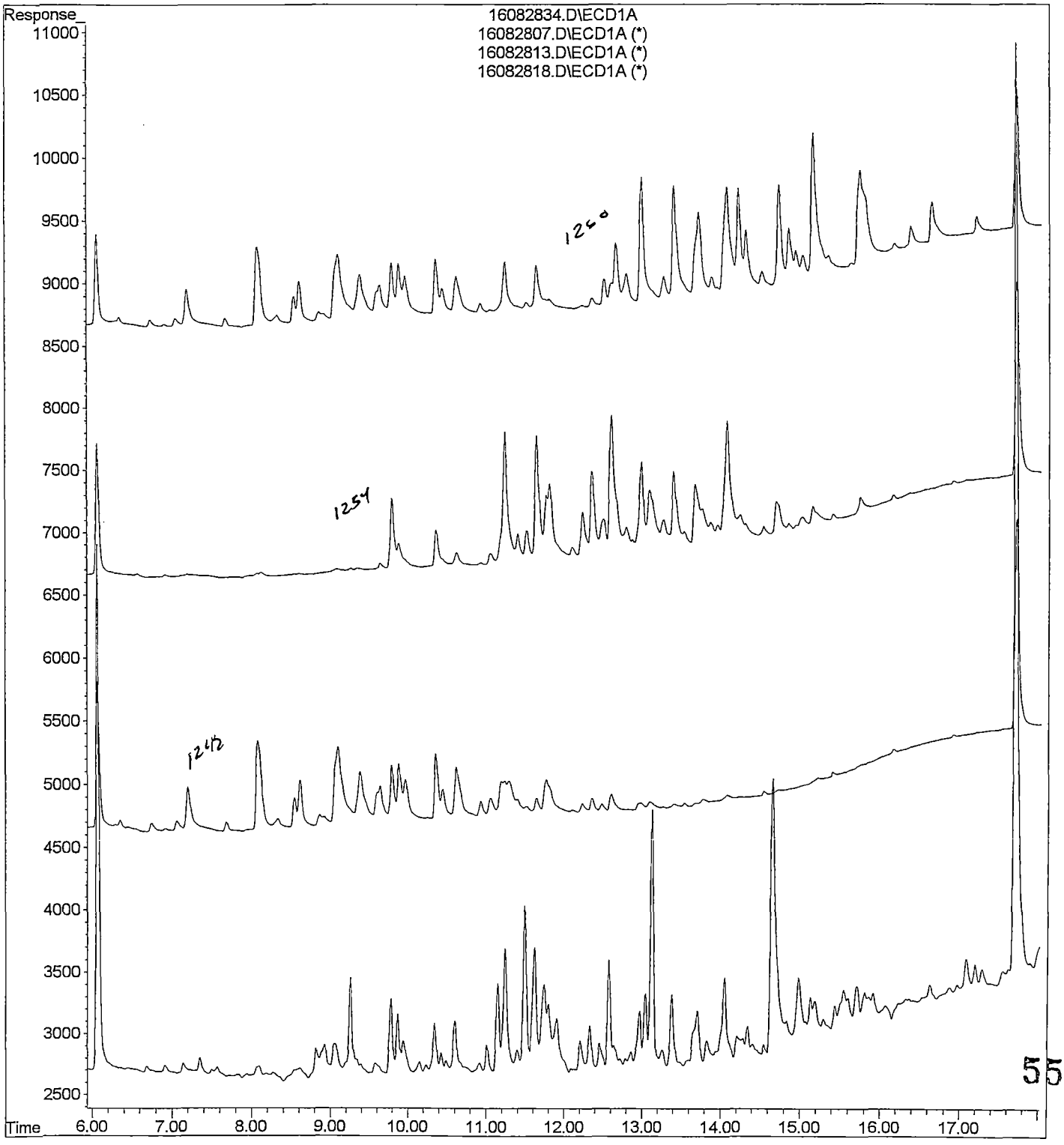




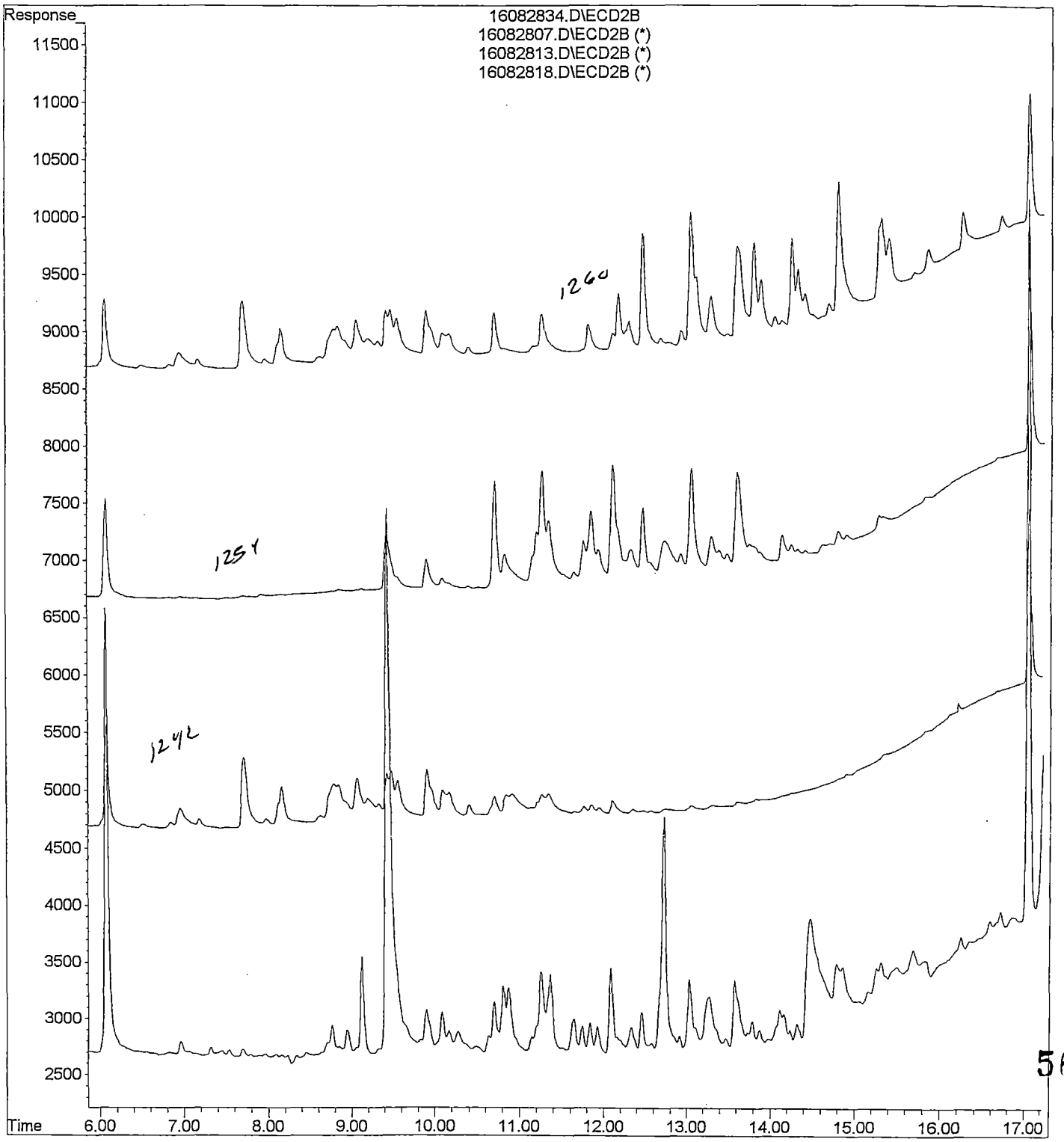
54

File : F:\HPCHEM\HP\16\DATA\08_28_01\16082834.D
Operator : TLM
Acquired : 29 Aug 2001 2:07 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.08 *E00Q6 *
Misc Info : *EPA*30.1G/5.0ML*56
Vial Number: 34

OK
8-31-01



File : F:\HPCHEM\HP\16\DATA\08_28_01\16082834.D
Operator : TLM
Acquired : 29 Aug 2001 2:07 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.08 *E00Q6 *
Misc Info : *EPA*30.1G/5.0ML*56
Vial Number: 34



Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082834.D\ECD1A.CH Vial: 34
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082834.D\ECD2B.CH
Acq On : 29 Aug 2001 2:07 Operator: TLM
Sample : 47158.08 *E00Q6 * Inst : HP_16
Misc : *EPA*30.1G/5.0ML*56 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 30 17:38 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
System Monitoring Compounds:						
1) S TCX	6.07	6.07	114659	124767	17.3	16.8
Spiked Amount 15.101			Recovery	=	114.56%	111.25%
22) S DCB	17.69	17.04	242465	174252	21.8m	17.0
Spiked Amount 15.101			Recovery	=	144.36%	112.57%
Target Compounds:						
~~7) L4 Aroclor-1242~~	~~0.00~~	~~9.06~~	~~0~~	~~1888~~	~~N.D.~~	~~8.166m #~~
8) L4 Aroclor-1242 {2}	10.34	9.12f	13386	26836	75.1	191.5m #
9) L4 Aroclor-1242 {3}	10.43	9.43	4024	242803	40.1	1960.2 E#
10) L4 Aroclor-1242 {4}	10.60	9.90	17526	11588	68.2	47.7 #
11) L4 Aroclor-1242 {5}	12.58	10.70	25704	16599	385.9	179.7 #
Sum Aroclor-1242			60640	299713	569.2	2387.3
Average Aroclor-1242					142.311	477.460
12) L6 Aroclor-1254	11.61	12.09	26256	31646	66.4	59.5
13) L6 Aroclor-1254 {2}	12.33	12.46	12691	11313	48.1	47.6
14) L6 Aroclor-1254 {3}	12.58	12.72	25704	86780	44.8	310.1 #
15) L6 Aroclor-1254 {4}	12.97	13.04	16407	29350	55.9	67.9
16) L6 Aroclor-1254 {5}	13.38	13.58	20212	29668	63.9	59.7
Sum Aroclor-1254			101269	188757	279.1	544.7
Average Aroclor-1254					55.820	108.944
17) L7 Aroclor-1260	14.05	13.58	31160	29668	45.4	41.7
18) L7 Aroclor-1260 {2}	14.21	13.79	7194	6482	18.2	16.8
19) L7 Aroclor-1260 {3}	14.28	13.87	4074	3780	14.5	14.5
21) L7 Aroclor-1260 {5}	15.13	14.79	9089	22175	11.4	26.3 #
Sum Aroclor-1260			51517	62106	67.6	75.0
Average Aroclor-1260					22.380	24.822

8-31-01 9-30-4

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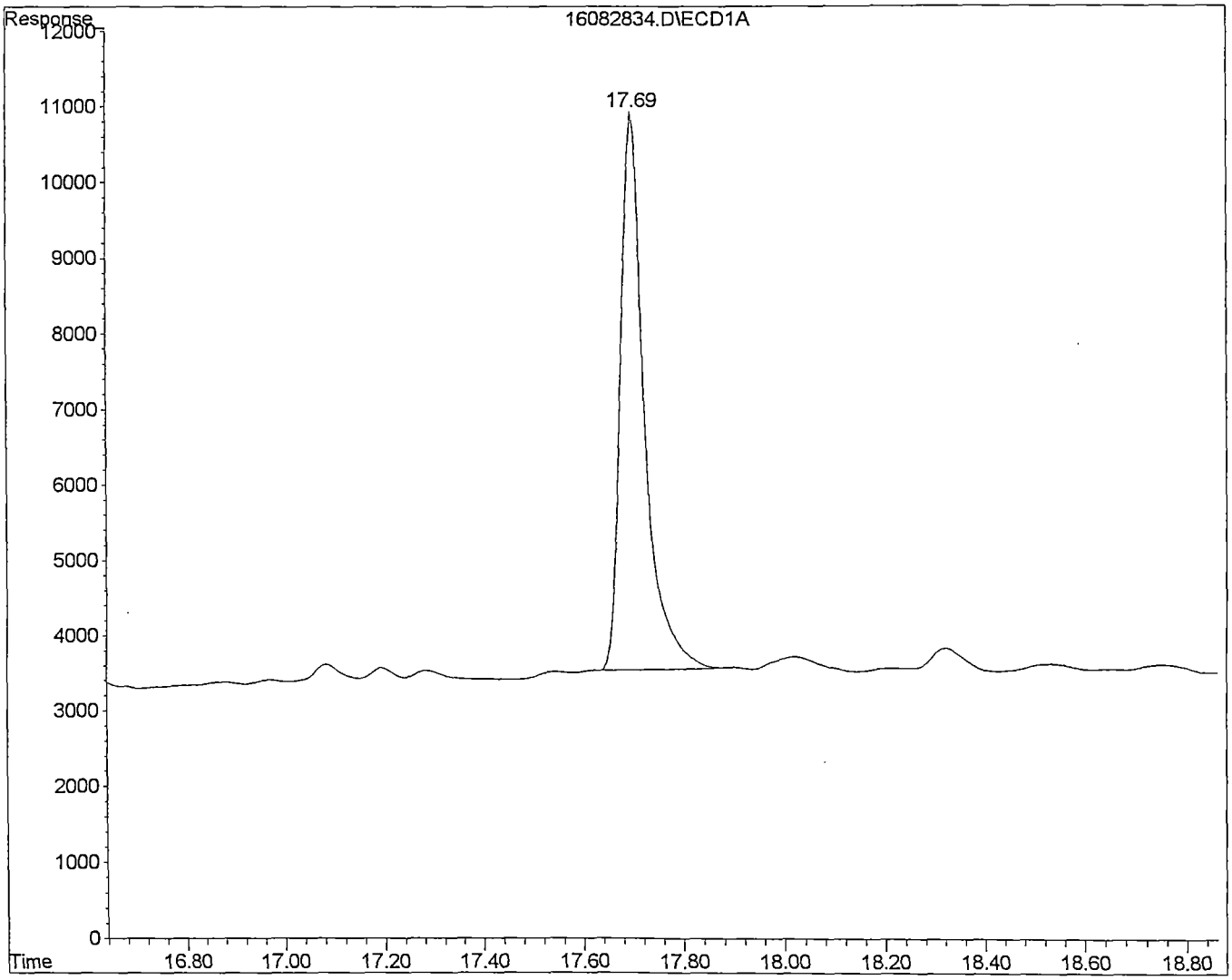
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_28_01\16082834.D
Date Acquired: 29 Aug 2001 2:07
Inst: HP_16 Operator ID: TLM
Name: 47158.08 *E00Q6 *
Misc: *EPA*30.1G/5.0ML*56
Method: F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title: PCB/TOXAPHENE
Quant Time: Aug 30 17:38 2001 Quant Results File: XPCBH28.RES



DCB 17.69min area: 242465 m

Integration Time Range: 17.64 - 17.86

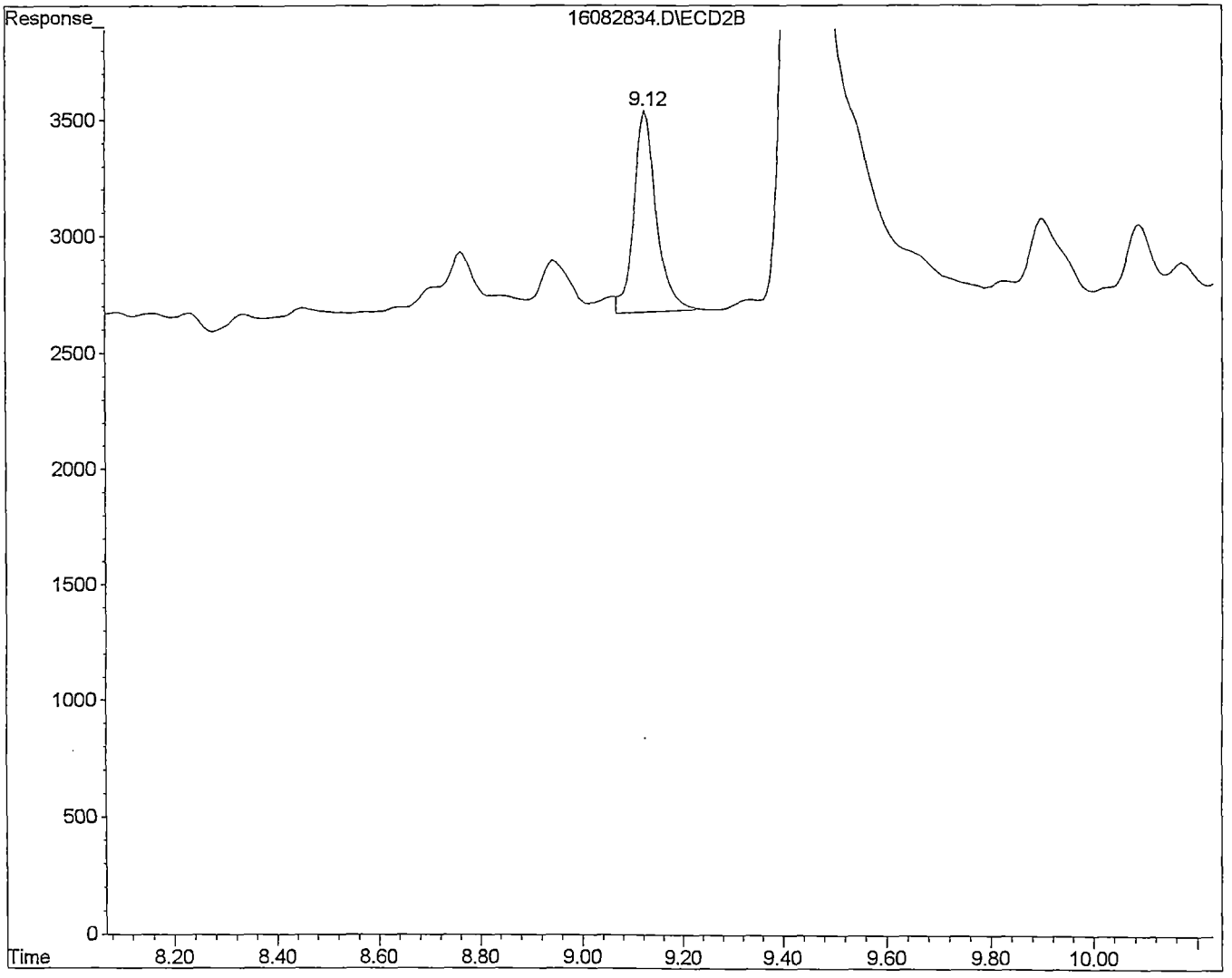
TLM 8-30-01

OK 8-31-01

F:\HPCHEM\HP\16\DATA\08_28_01\16082834.D
Report generated: Thu Aug 30 17:39:32 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_28_01\16082834.D
Date Acquired: 29 Aug 2001 2:07
Inst: HP_16 Operator ID: TLM
Name: 47158.08 *E00Q6 *
Misc: *EPA*30.1G/5.0ML*56
Method: F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title: PCB/TOXAPHENE
Quant Time: Aug 30 17:38 2001 Quant Results File: XPCBH28.RES



Aroclor-1242 {2} #2 9.12min area: 26836 m

Integration Time Range: 9.07 - 9.23

JM
8-30-01

ok
8-31-01

F:\HPCHEM\HP\16\DATA\08_28_01\16082834.D
Report generated: Thu Aug 30 17:39:33 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00Q7

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: 47158.09

Sample wt/vol: 32.8 (g/mL) G Lab File ID:_____

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/21/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	40	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	21	JP
11096-82-5	Aroclor-1260	6.8	JP
	Surrogate amount spiked	8.02	

TBS
9/11/01

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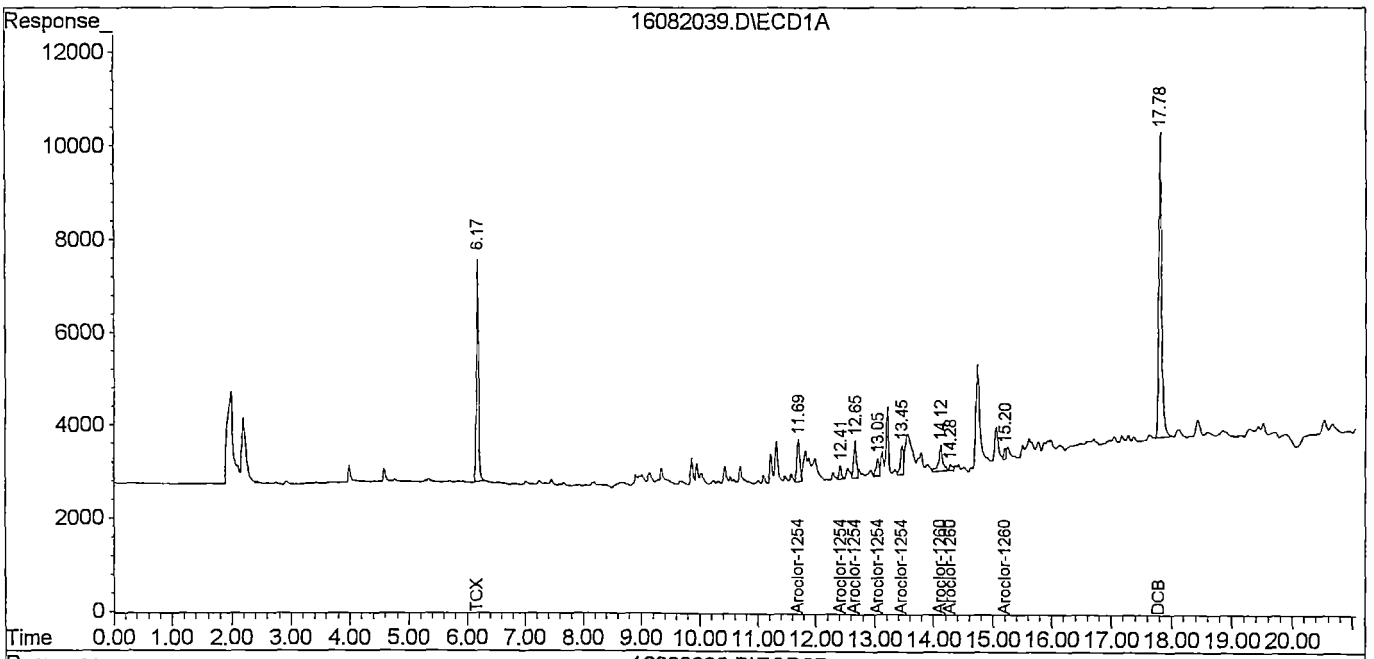
Chromatographic Report

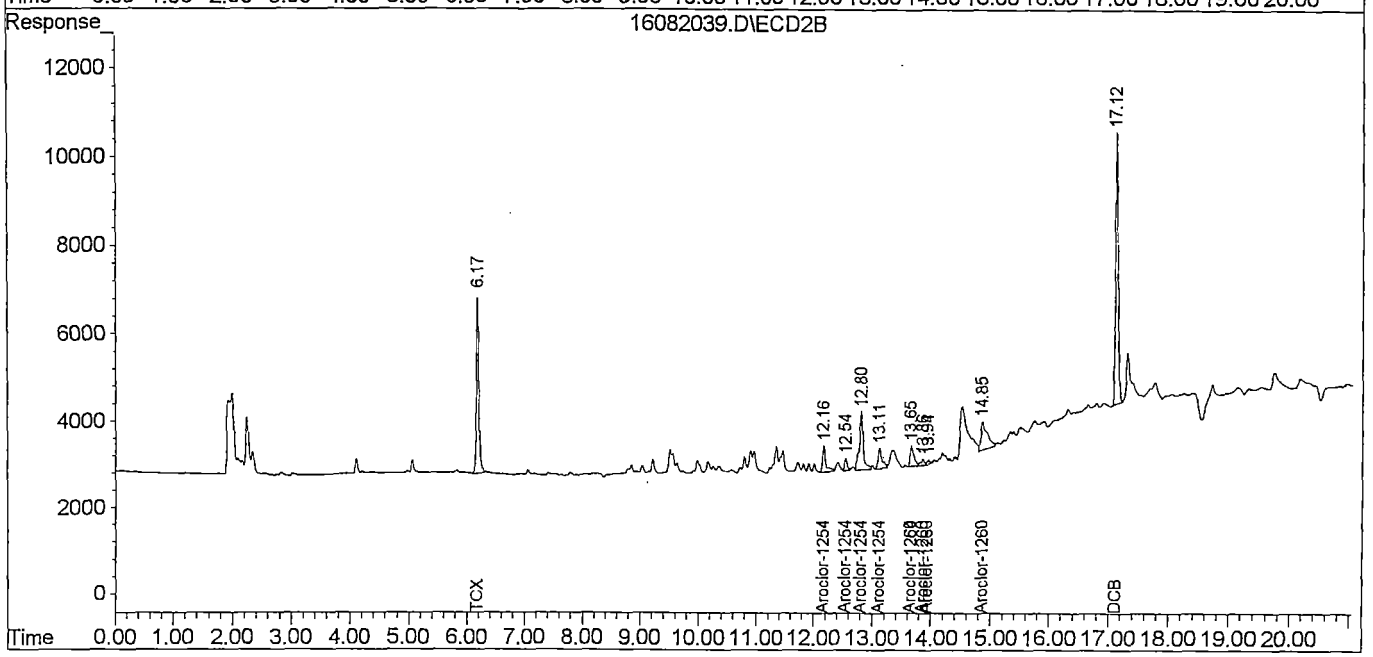
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082039.D\ECD1A.CH Vial: 39
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082039.D\ECD2B.CH
Acq On : 21 Aug 2001 5:54 Operator: TLM
Sample : 47158.09 *E00Q7 * Inst : HP_16
Misc : *EPA*32.8G/5.0ML*24 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 28 17:29 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

Ok 8-31-01





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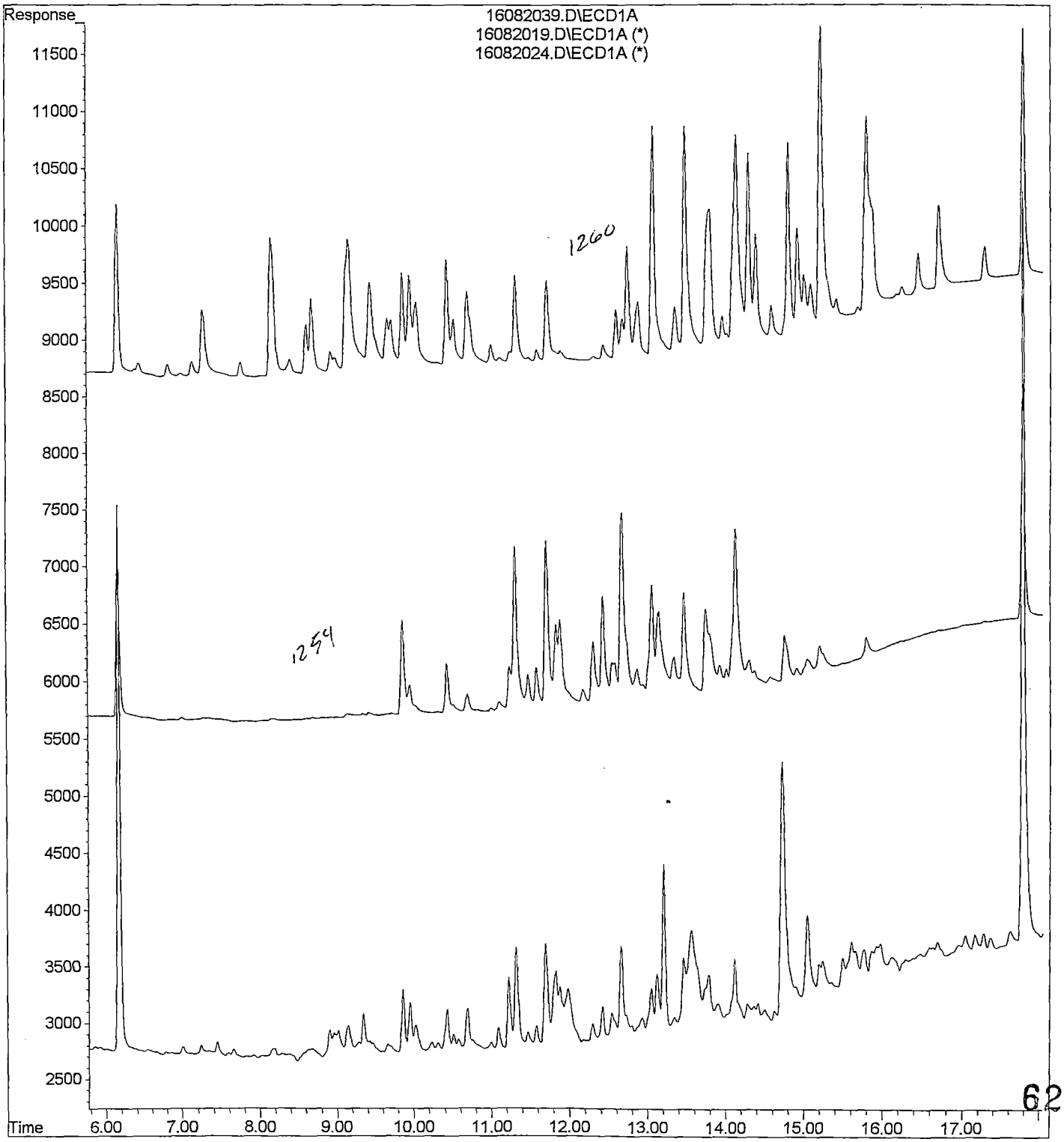
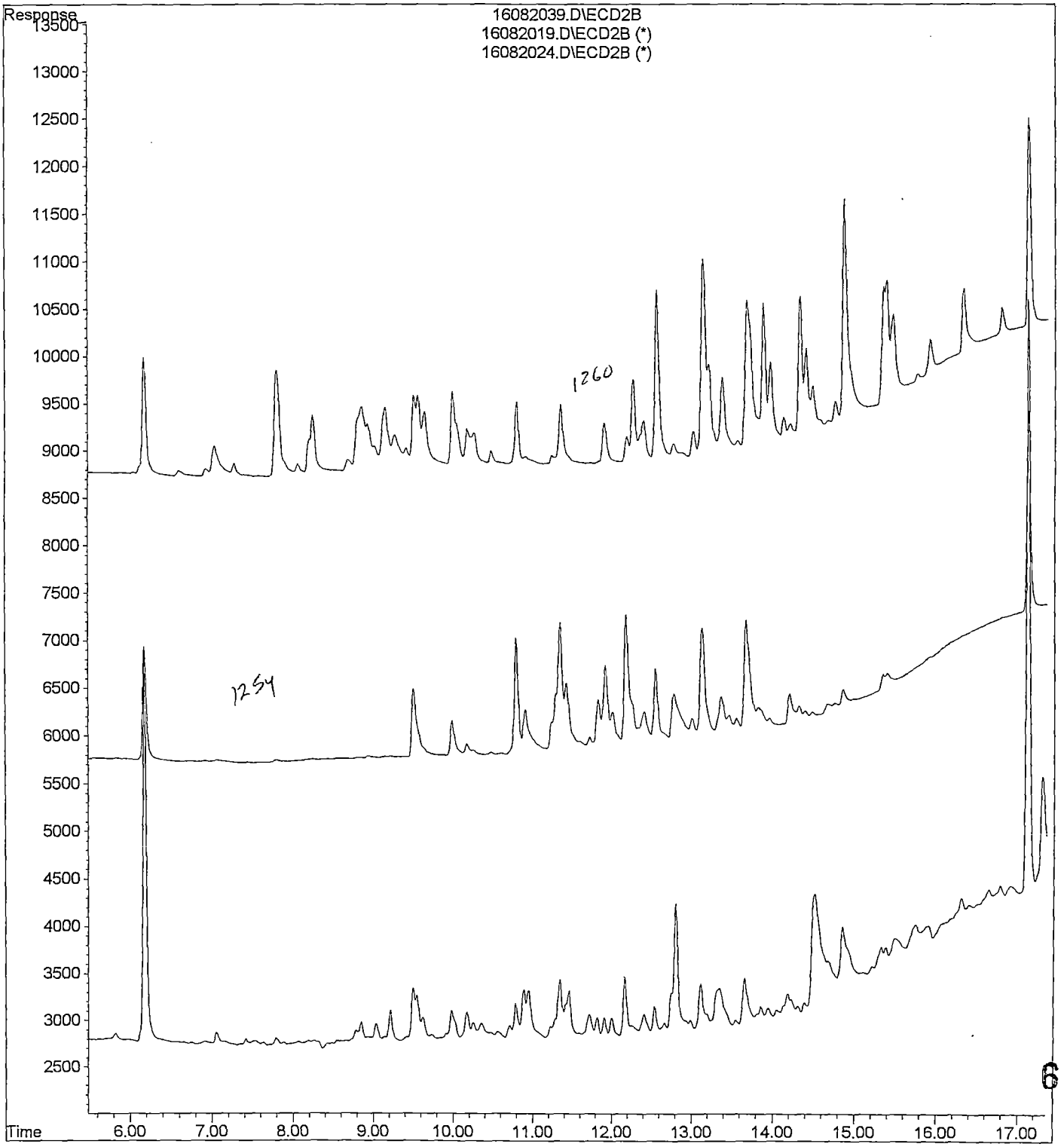
File : F:\HPCHEM\HP\16\DATA\08_20_01\16082039.D
Operator : TLM
Acquired : 21 Aug 2001 5:54 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.09 *E00Q7 *
Misc Info : *EPA*32.8G/5.0ML*24
Vial Number: 39

8/2
8-31-01



File : F:\HPCHEM\HP\16\DATA\08_20_01\16082039.D
Operator : TLM
Acquired : 21 Aug 2001 5:54 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.09 *E00Q7 *
Misc Info : *EPA*32.8G/5.0ML*24
Vial Number: 39



Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082039.D\ECD1A.CH Vial: 39
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082039.D\ECD2B.CH
Acq On : 21 Aug 2001 5:54 Operator: TLM
Sample : 47158.09 *E00Q7 * Inst : HP_16
Misc : *EPA*32.8G/5.0ML*24 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 28 17:29 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	6.17	6.18	122095	118484	6.678	6.408	
	Spiked Amount 8.023			Recovery	=	83.23%	79.87%	
22)	S DCB	17.79	17.12	219864	177855	8.225	6.483	
	Spiked Amount 8.023			Recovery	=	102.52%	80.80%	
	Target Compounds:							
12)	L6 Aroclor-1254	11.70	12.16	32439	24770	31.8	17.7	#
13)	L6 Aroclor-1254 {2}	12.42	12.54	8442	8798	12.0	13.6	
14)	L6 Aroclor-1254 {3}	12.66	12.80f	24436	60055	16.3	71.8	#
15)	L6 Aroclor-1254 {4}	13.05	13.11	13897	22143	18.5	20.7	
16)	L6 Aroclor-1254 {5}	13.46	13.65	22152	21841	27.7	17.4	#
	Sum Aroclor-1254			101366	137607	106.4	141.3	
	Average Aroclor-1254					21.274	28.263	
17)	L7 Aroclor-1260	14.12	13.65	25970	21841	13.2	11.8	
18)	L7 Aroclor-1260 {2}	14.28	13.86	4918	6337	4.733	6.472	#
19)	L7 Aroclor-1260 {3}	0.00	13.94	0	3569	N.D.	5.728	#
21)	L7 Aroclor-1260 {5}	15.20	14.86	5358	49403	2.464	22.4	#
	Sum Aroclor-1260			36247	81150	8.184	18.6	
	Average Aroclor-1260					6.800	11.600	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16082039.D XPCBH20.M Tue Aug 28 17:30:05 2001 Page 1

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00Q8

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: 47158.10

Sample wt/vol: 32.2 (g/mL) G Lab File ID:_____

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/21/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	40	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	~~930~~ 990	~~E~~ DJ
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	~~1700~~ 2400	~~E~~ DJ
11096-82-5	Aroclor-1260	~~660~~ 990	~~E~~ DJ
Surrogate amount spiked		8.17	

apply this results
TBS 9/11/01 TB 10/1

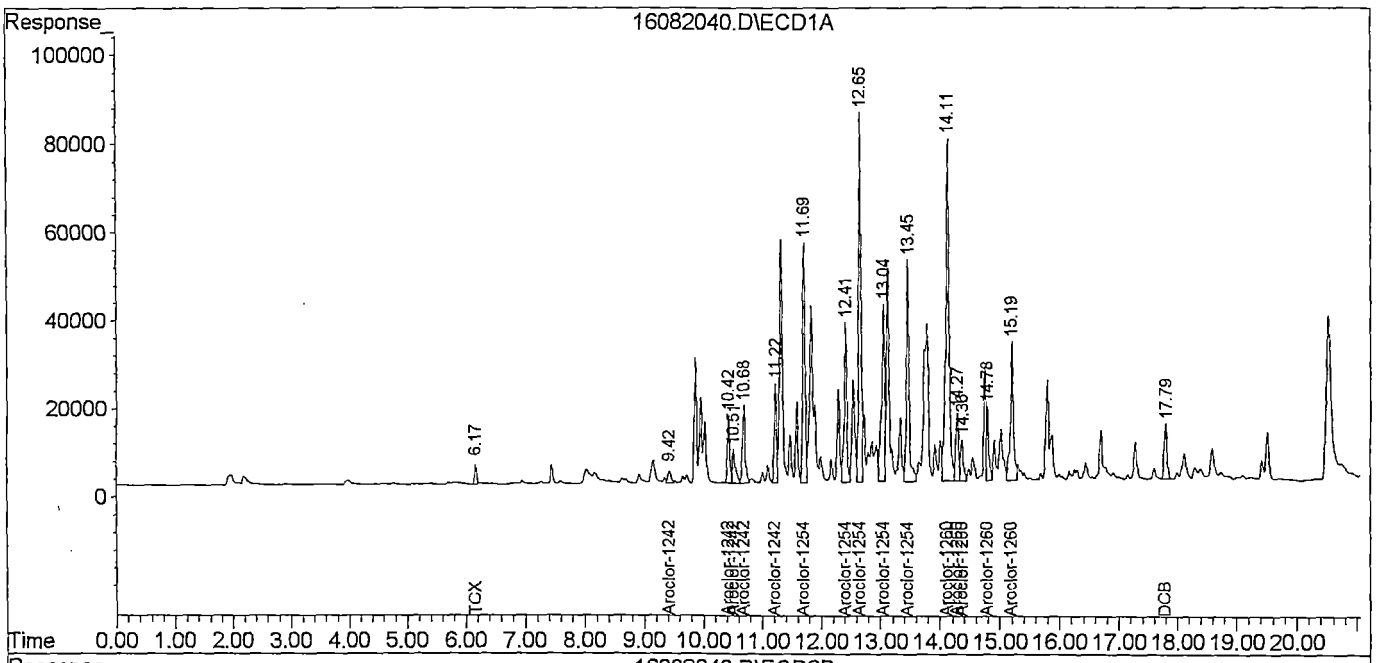
FORM I PCB

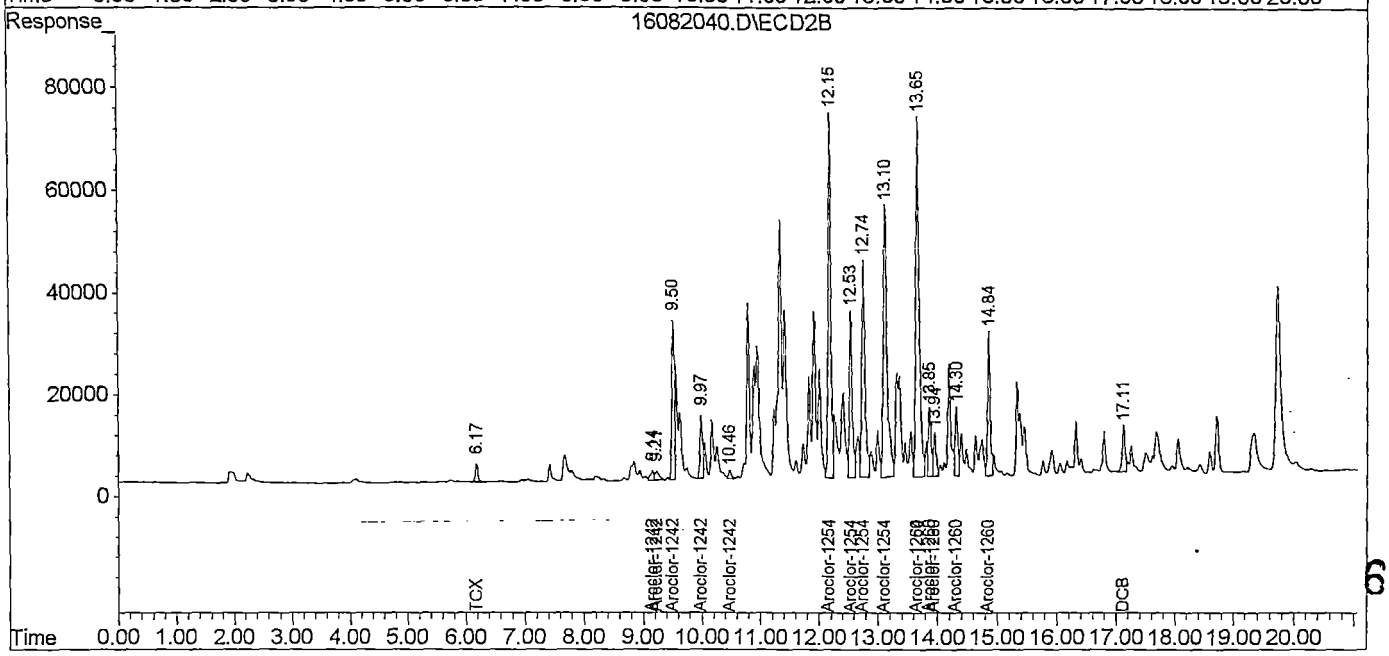
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082040.D\ECD1A.CH Vial: 40
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082040.D\ECD2B.CH
Acq On : 21 Aug 2001 6:19 Operator: TLM
Sample : 47158.10 *E00Q8 * Inst : HP_16
Misc : *EPA*32.2G/5.0ML*24 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 22 18:58 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

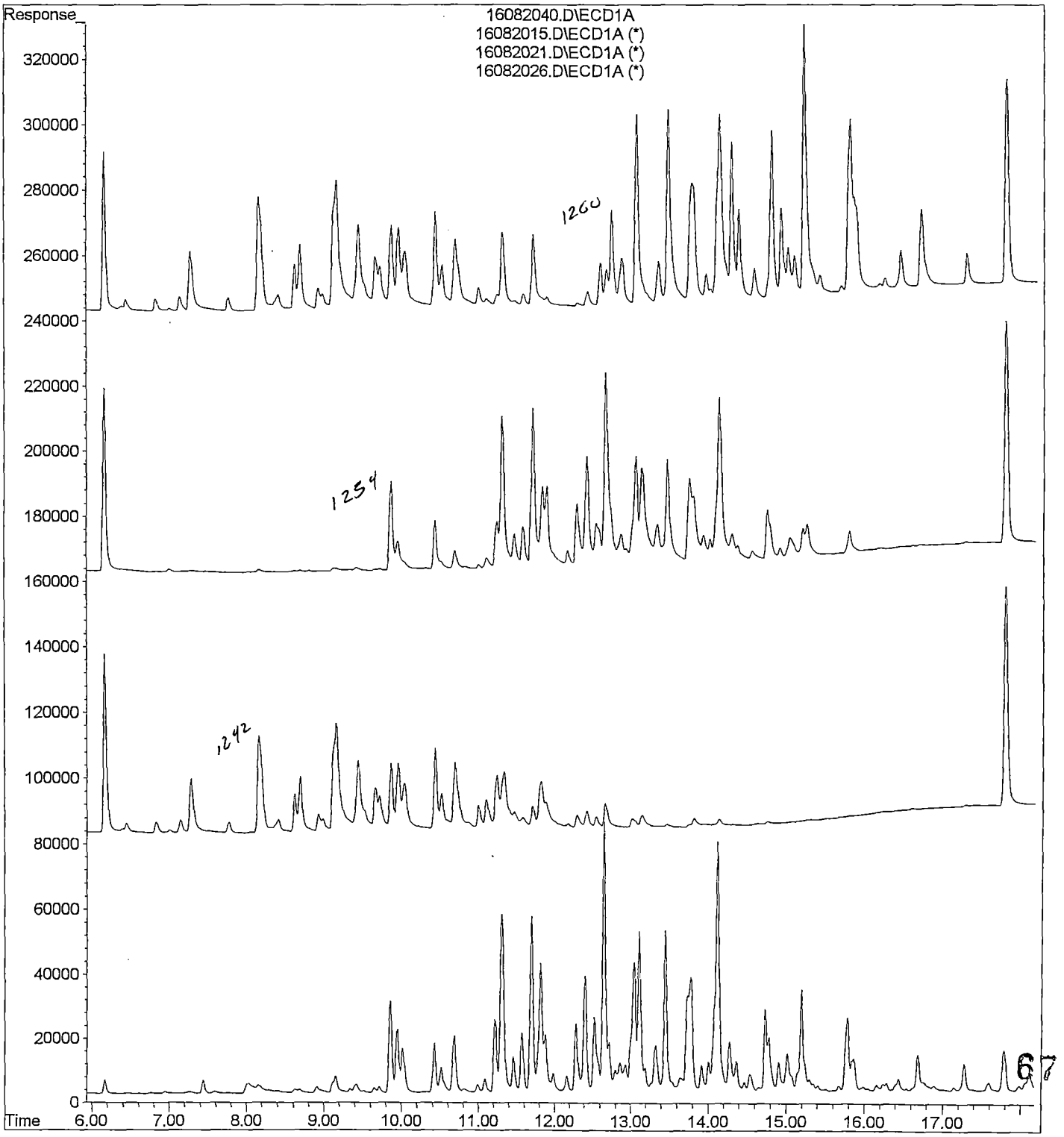




66

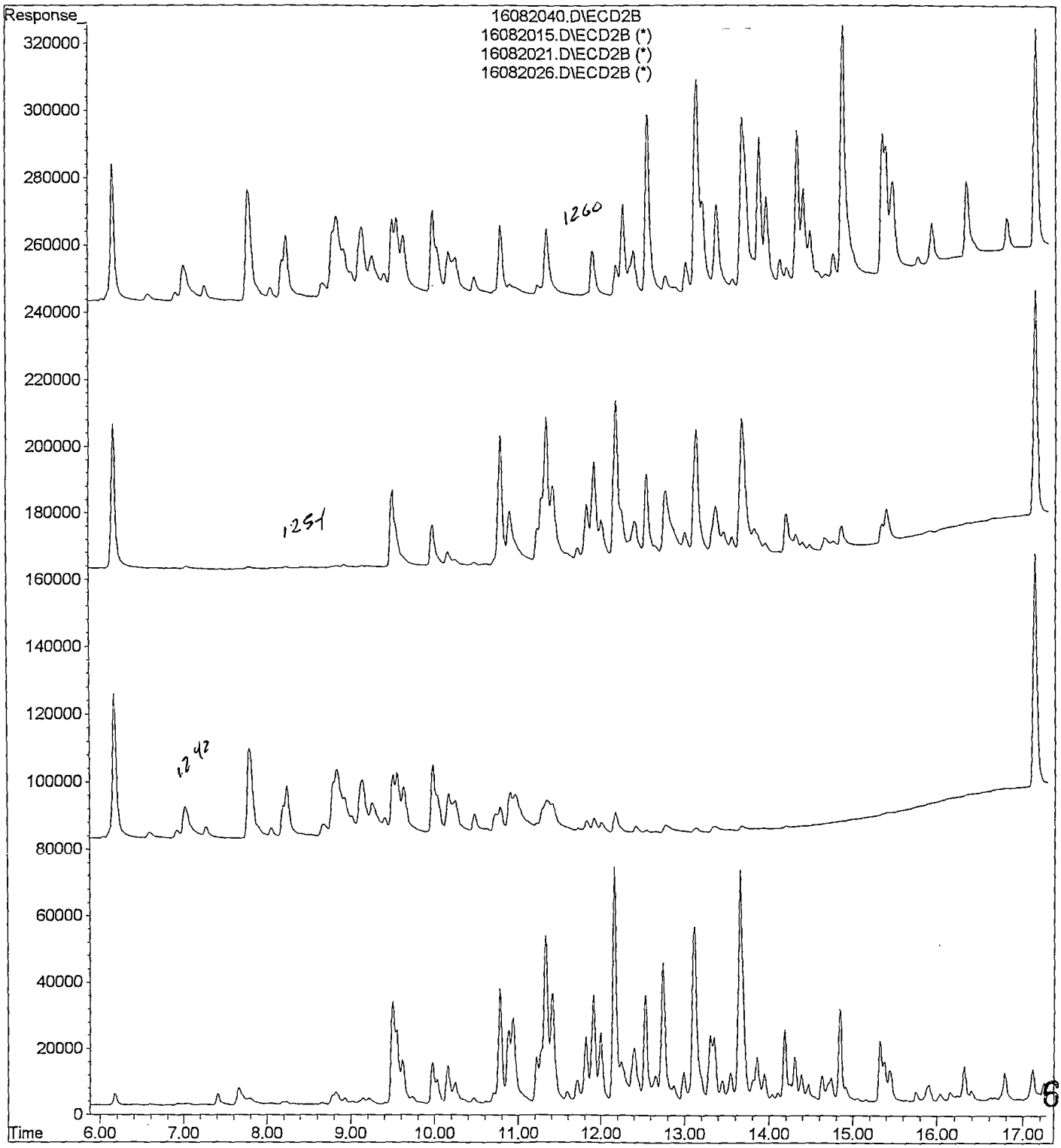
File : F:\HPCHEM\HP\16\DATA\08_20_01\16082040.D
Operator : TLM
Acquired : 21 Aug 2001 6:19 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.10 *E00Q8 *
Misc Info : *EPA*32.2G/5.0ML*24
Vial Number: 40

op
8-31-01



67

File : F:\HPCHEM\HP\16\DATA\08_20_01\16082040.D
Operator : TLM
Acquired : 21 Aug 2001 6:19 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.10 *E00Q8 *
Misc Info : *EPA*32.2G/5.0ML*24
Vial Number: 40



Quantitation Report

```
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082040.D\ECD1A.CH Vial: 40
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082040.D\ECD2B.CH
Acq On    : 21 Aug 2001   6:19                        Operator: TLM
Sample    : 47158.10  *E00Q8  *                       Inst    : HP_16
Misc      : *EPA*32.2G/5.0ML*24                       Dilution: 1.00
IntFile Signal #1: events1.e     IntFile Signal #2: events2.e
Quant Time: Aug 22 18:58 2001  Quant Results File: XPCBH20.RES

Method       : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path   : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update  : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	6.17	6.18	111185	104082	6.195	5.734
	Spiked Amount 8.173			Recovery	=	75.80%	70.16%
22)	S DCB	17.79	17.11	426024	303876	16.2m	11.3m #
	Spiked Amount 8.173			Recovery	=	198.22%	138.27%
	Target Compounds:						
7)	L4 Aroclor-1242	9.42	9.15	112584	76689	174.0	141.6
8)	L4 Aroclor-1242 {2}	10.42	9.21f	418423	84621	993.3 E	247.8 #
9)	L4 Aroclor-1242 {3}	10.51	9.50	288263	937603	1186.9 E	3204.8 E#
10)	L4 Aroclor-1242 {4}	10.68	9.98	564294	360487	1011.6 E	614.3 #
11)	L4 Aroclor-1242 {5}	11.22	10.47	605777	55705	1849.5 E	457.5 #
	Sum Aroclor-1242			1989341	1515106	5215.3	4665.9
	Average Aroclor-1242					1043.063	933.180
12)	L6 Aroclor-1254	11.70	12.16	1564454	2233836	1562.2 E	1624.4 E
13)	L6 Aroclor-1254 {2}	12.41	12.53	1091364	1094383	1578.6 E	1723.5 E
14)	L6 Aroclor-1254 {3}	12.65	12.74	2293428	1573951	1562.6 E	1918.0 E
15)	L6 Aroclor-1254 {4}	13.04	13.11	1424459	2294894	1936.1 E	2189.2 E
16)	L6 Aroclor-1254 {5}	13.45	13.65	1538377	2784537	1959.2 E	2265.7 E
	Sum Aroclor-1254			7912081	9981601	8598.7	9720.8
	Average Aroclor-1254					1719.741	1944.167
17)	L7 Aroclor-1260	14.11	13.65	2933764	2784537	1519.4 E	1532.4 E
18)	L7 Aroclor-1260 {2}	14.28	13.86	536212	451970	525.6 E	470.2
19)	L7 Aroclor-1260 {3}	14.37	13.94	318802	284226	496.1	464.7
20)	L7 Aroclor-1260 {4}	14.78	14.31	492199	412223	459.8	462.5
21)	L7 Aroclor-1260 {5}	15.20	14.84	1069493	810485	500.9	374.3 #
	Sum Aroclor-1260			5350470	4743441	1431.0	1350.2
	Average Aroclor-1260					700.366	660.836

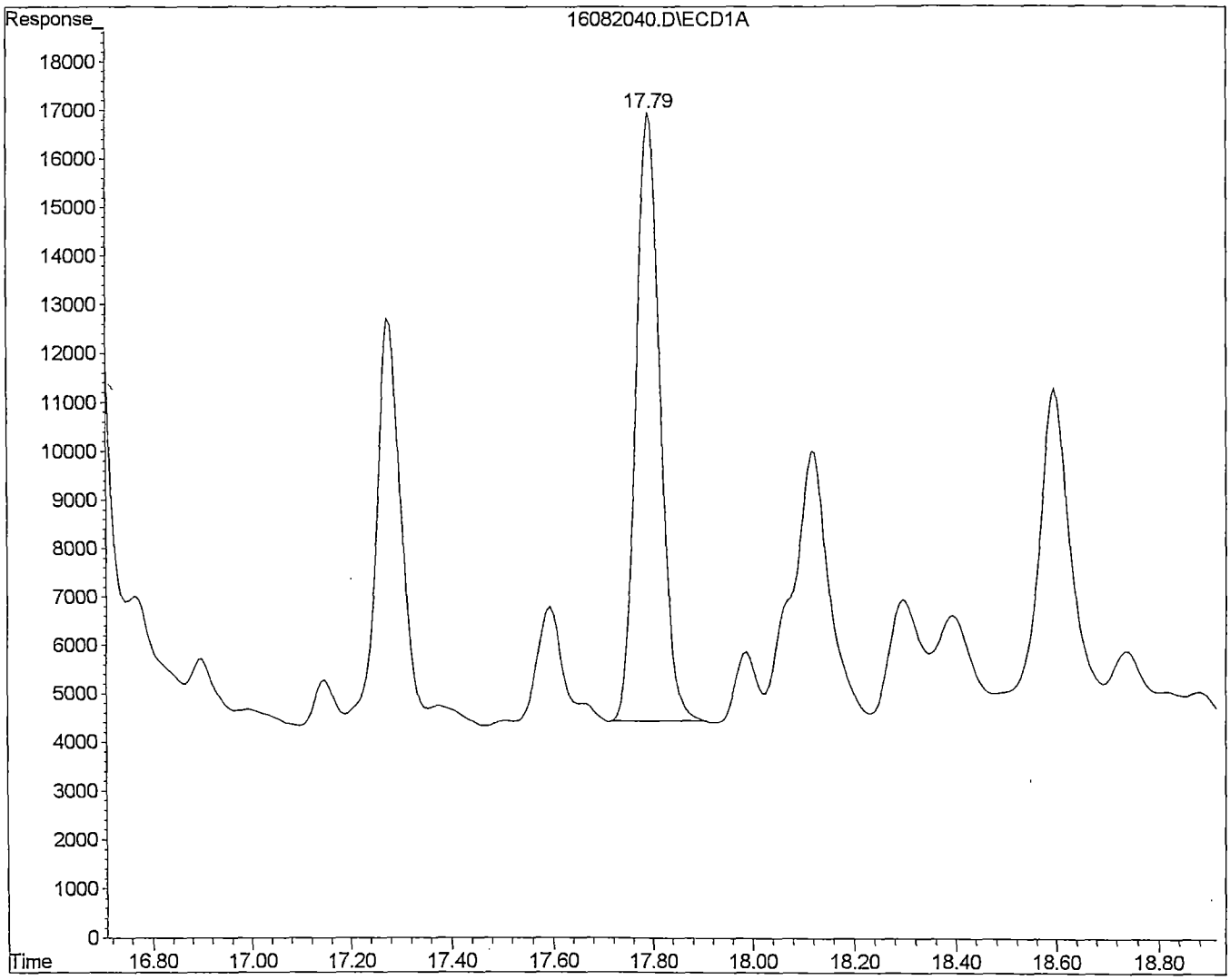
JM 8-22-01

69

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

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_20_01\16082040.D
Date Acquired: 21 Aug 2001 6:19
Inst: HP_16 Operator ID: TLM
Name: 47158.10 *E00Q8 *
Misc: *EPA*32.2G/5.0ML*24
Method: F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title: PCB/TOXAPHENE
Quant Time: Aug 22 18:58 2001 Quant Results File: XPCBH20.RES



DCB 17.79min area: 426024 m

Integration Time Range: 17.71 - 17.91

JAN 8-22-01

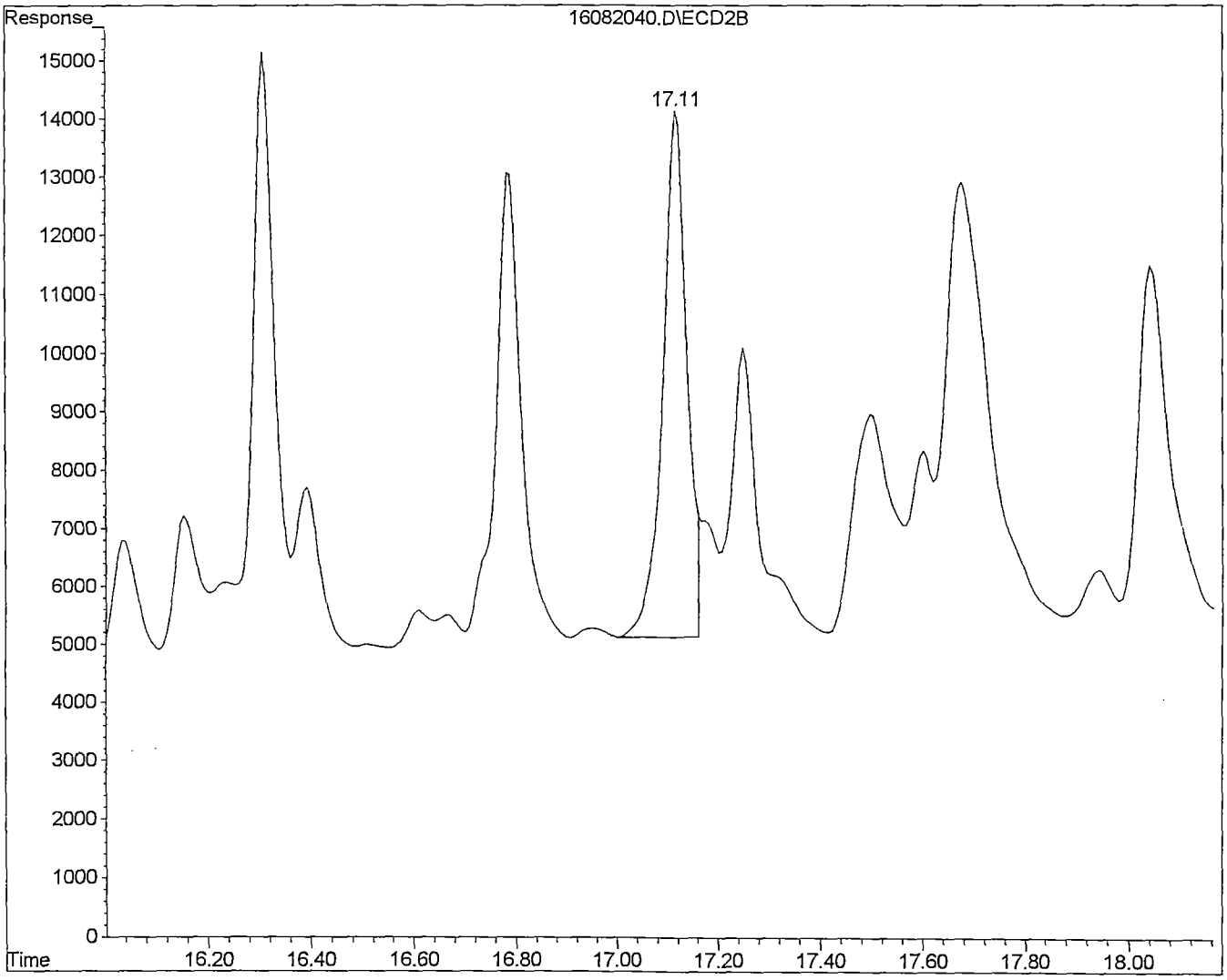
OK 8-31-01

70

F:\HPCHEM\HP\16\DATA\08_20_01\16082040.D
Report generated: Wed Aug 22 19:00:21 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_20_01\16082040.D
Date Acquired: 21 Aug 2001 6:19
Inst: HP_16 Operator ID: TLM
Name: 47158.10 *E00Q8 *
Misc: *EPA*32.2G/5.0ML*24
Method: F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title: PCB/TOXAPHENE
Quant Time: Aug 22 18:58 2001 Quant Results File: XPCBH20.RES



DCB #2 17.11min area: 303876 m

Integration Time Range: 17.00 - 17.16

8-22-01

5-31-01

71

F:\HPCHEM\HP\16\DATA\08_20_01\16082040.D
Report generated: Wed Aug 22 19:00:22 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00Q8DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: 47158.10DL

Sample wt/vol: 32.2 (g/mL) G Lab File ID:_____

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/29/01

Injection Volume: 0.5(uL) Dilution Factor: 10.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	400	U
11104-28-2	Aroclor-1221	400	U
11141-16-5	Aroclor-1232	400	U
53469-21-9	Aroclor-1242	990	J ~~DP~~
12672-29-6	Aroclor-1248	400	U
11097-69-1	Aroclor-1254	2400	J ~~D~~
11096-82-5	Aroclor-1260	990	J ~~D~~
Surrogate amount spiked		8.17	

TBS
9/11/01

72

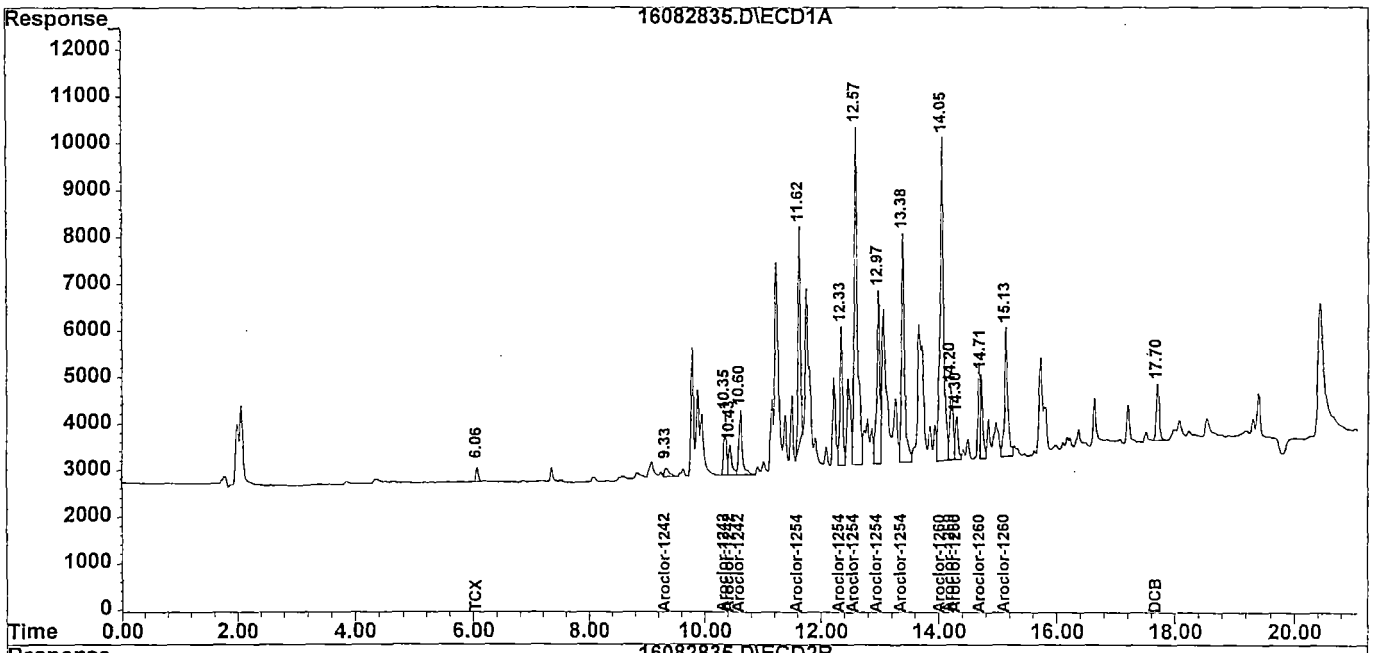
Chromatographic Report

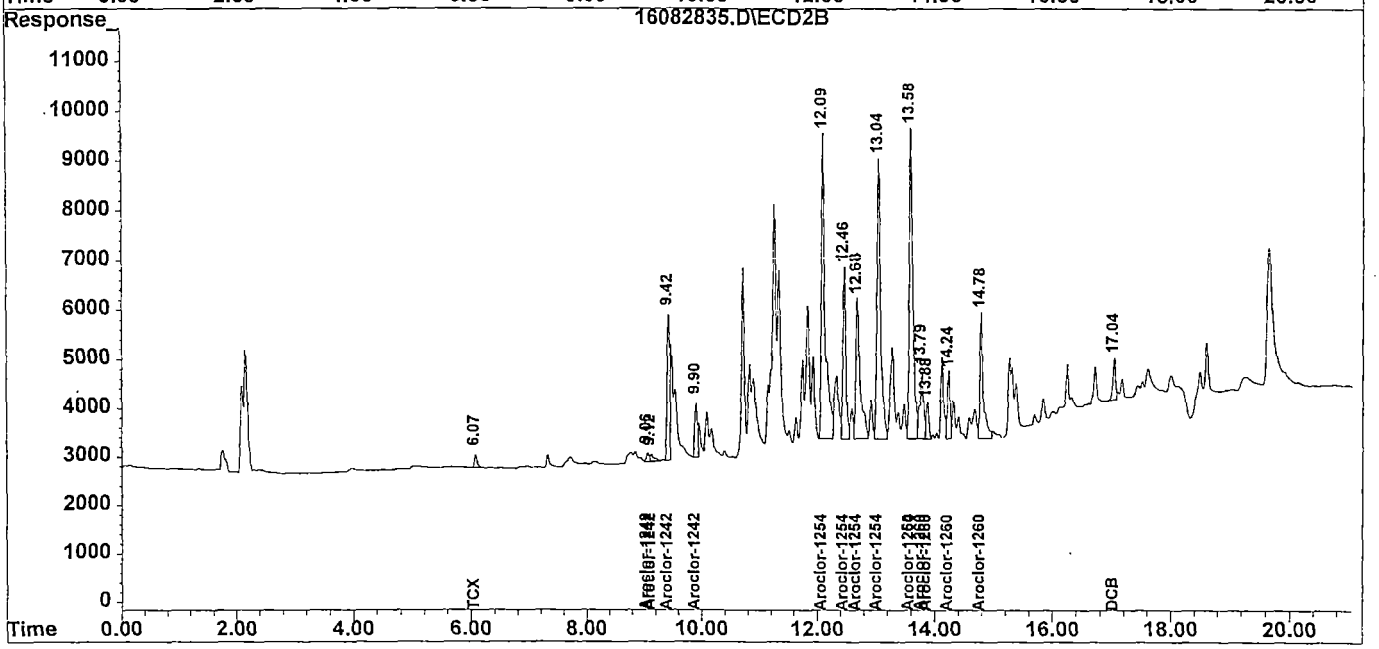
```
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082835.D\ECD1A.CH Vial: 35
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082835.D\ECD2B.CH
Acq On    : 29 Aug 2001   2:32                        Operator: TLM
Sample    : 47158.10DL  *E00Q8DL  *                   Inst    : HP_16
Misc      : *EPA*32.2G/5.0ML*24                       Dilution: 10.00
IntFile Signal #1: events1.e     IntFile Signal #2: events2.e
Quant Time: Sep  1  7:51 2001  Quant Results File: XPCBH28.RES

Method        : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path    : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update   : Mon Aug 06 16:43:52 2001
Response via  : Multiple Level Calibration

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

ik 9-1-01





73

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082835.D\ECD1A.CH Vial: 35
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082835.D\ECD2B.CH
Acq On : 29 Aug 2001 2:32 Operator: TLM
Sample : 47158.10DL *E00Q8DL * Inst : HP_16
Misc : *EPA*32.2G/5.0ML*24 Dilution: 10.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 1 7:51 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	6.06	6.07	8782	8484	7.183m	6.193m	
	Spiked Amount 8.173			Recovery	=	87.89%	75.78%	
22)	S DCB	17.70	17.04	43844	26842	21.3m	14.2m	#
	Spiked Amount 8.173			Recovery	=	260.63%	173.75%	
	Target Compounds:							
7)	L4 Aroclor-1242	9.34	9.07	11619	5908	211.1	138.3	#
8)	L4 Aroclor-1242 {2}	10.35	9.12f	39481	6997	1199.0	270.3	#
9)	L4 Aroclor-1242 {3}	10.43	9.42	25267	91645	1361.3	4004.1	#
10)	L4 Aroclor-1242 {4}	10.61	9.90	56223	35425	1183.7	789.3	#
	Sum Aroclor-1242			132590	139976	3955.1	5202.0	
	Average Aroclor-1242					988.787	1300.511	
12)	L6 Aroclor-1254	11.62	12.09	132720	280894	1815.4	2858.2	#
13)	L6 Aroclor-1254 {2}	12.34	12.46	98079	120833	2012.1	2748.8	#
14)	L6 Aroclor-1254 {3}	12.58	12.68	271363	150946	2556.8	2919.0	
15)	L6 Aroclor-1254 {4}	12.97	13.04	130831	250981	2413.8	3143.9	#
16)	L6 Aroclor-1254 {5}	13.38	13.58	179904	279238	3080.4	3038.5	
	Sum Aroclor-1254			812897	1082892	11878.6	14708.4	
	Average Aroclor-1254					2375.711	2941.681	
17)	L7 Aroclor-1260	14.05	13.58	297551	279238	2344.5	2123.5	
18)	L7 Aroclor-1260 {2}	14.21	13.79	57644	65599	790.1	921.9	
19)	L7 Aroclor-1260 {3}	14.30	13.88	32439	25177	626.3	521.1	
20)	L7 Aroclor-1260 {4}	14.71	14.24	53548	45585	745.2	721.0	
21)	L7 Aroclor-1260 {5}	15.13	14.78	105320	104088	715.0	668.4	
	Sum Aroclor-1260			546503	519687	21334.8	20251.3	
	Average Aroclor-1260					1044.208	991.181	

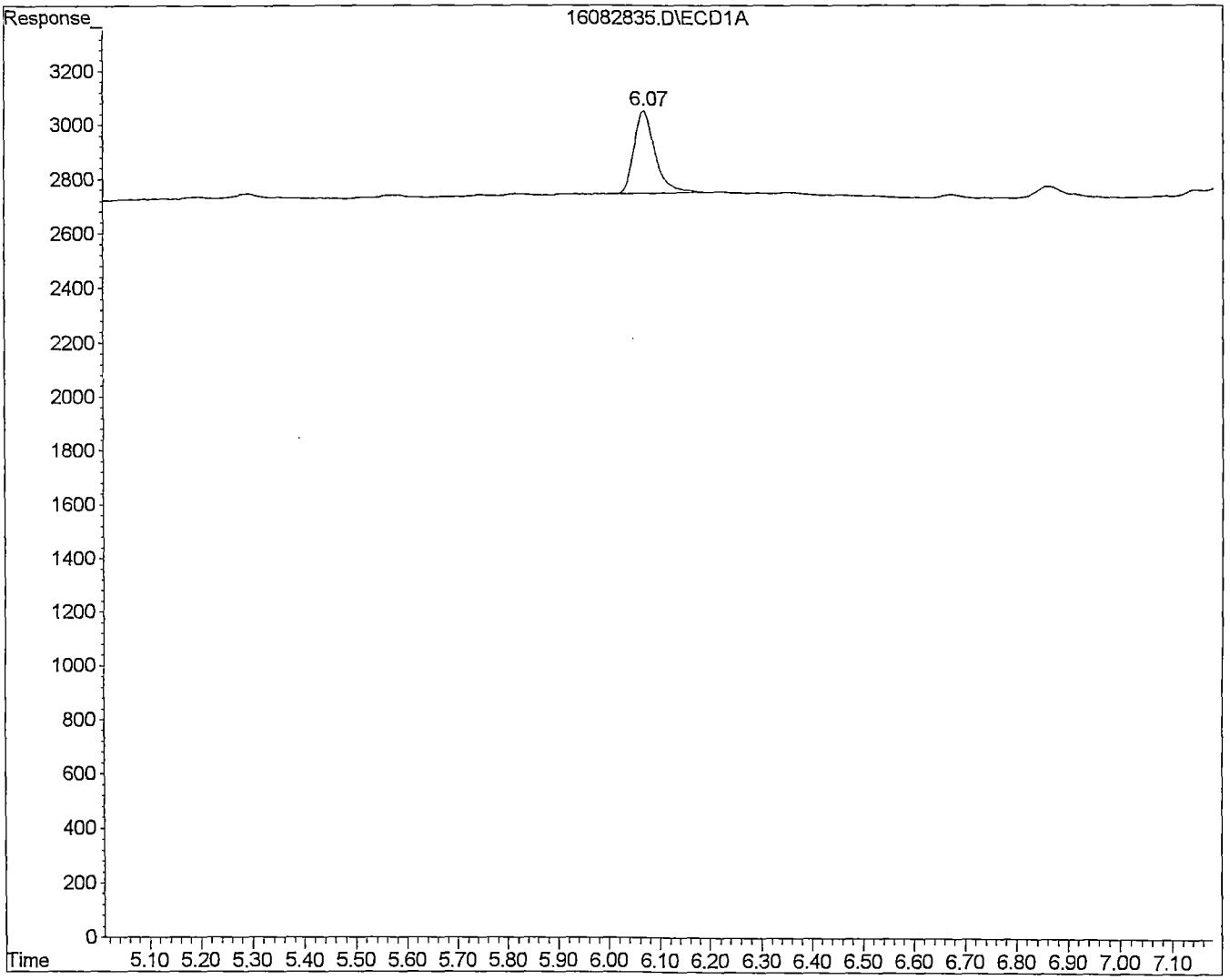
9-1-01

74

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

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_28_01\16082835.D
Date Acquired: 29 Aug 2001 2:32
Inst: HP_16 Operator ID: TLM
Name: 47158.10DL *E00Q8DL *
Misc: *EPA*32.2G/5.0ML*24
Method: F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title: PCB/TOXAPHENE
Quant Time: Aug 30 16:45 2001 Quant Results File: XPCBH28.RES



TCX 6.06min area: 8782 m

Integration Time Range: 6.01 - 6.18

JM
8-30-01

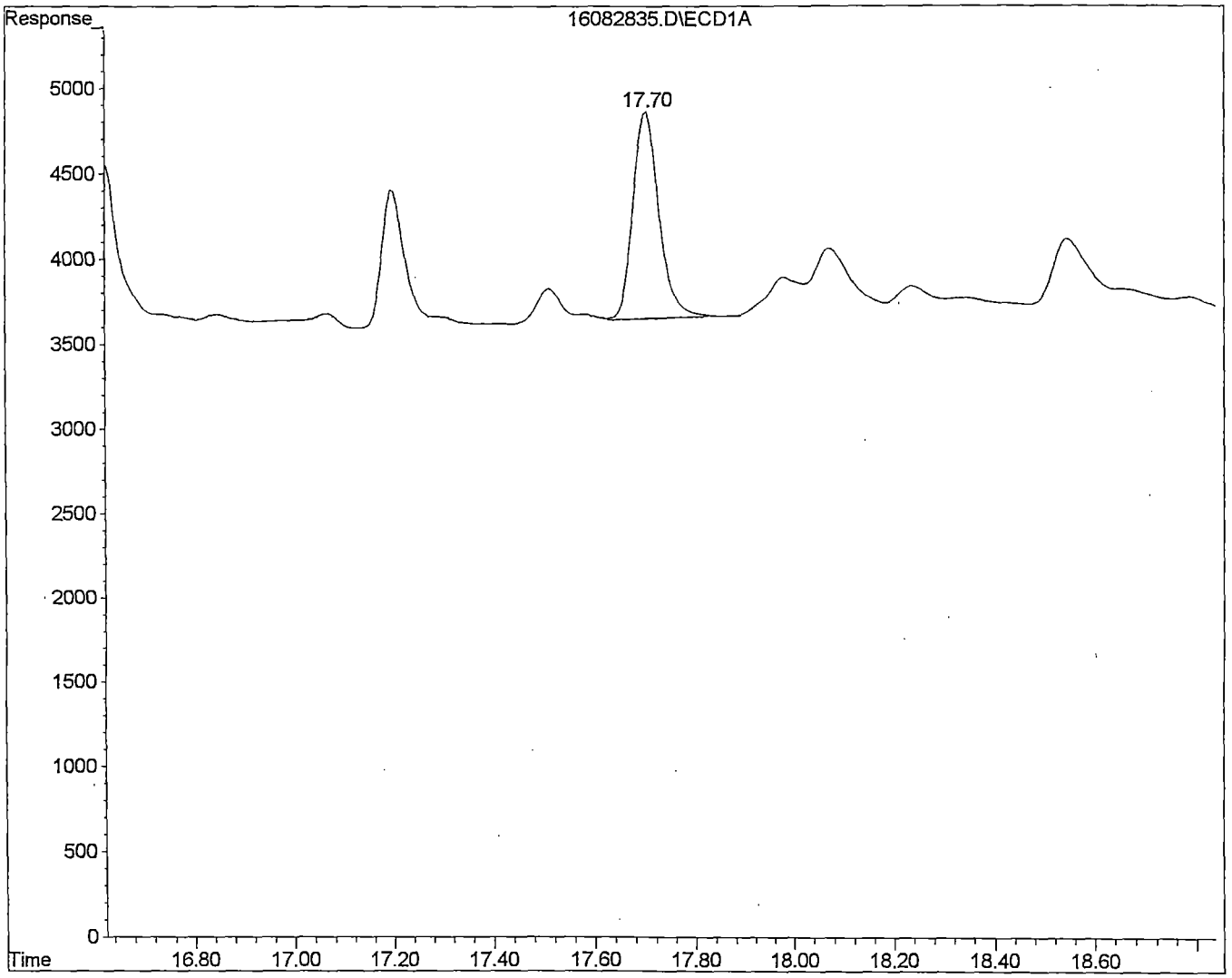
ok
8-31-01

75

F:\HPCHEM\HP\16\DATA\08_28_01\16082835.D
Report generated: Thu Aug 30 17:06:28 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_28_01\16082835.D
Date Acquired: 29 Aug 2001 2:32
Inst: HP_16 Operator ID: TLM
Name: 47158.10DL *E00Q8DL *
Misc: *EPA*32.2G/5.0ML*24
Method: F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title: PCB/TOXAPHENE
Quant Time: Aug 30 16:45 2001 Quant Results File: XPCBH28.RES



DCB 17.70min area: 43844 m

Integration Time Range: 17.62 - 17.84

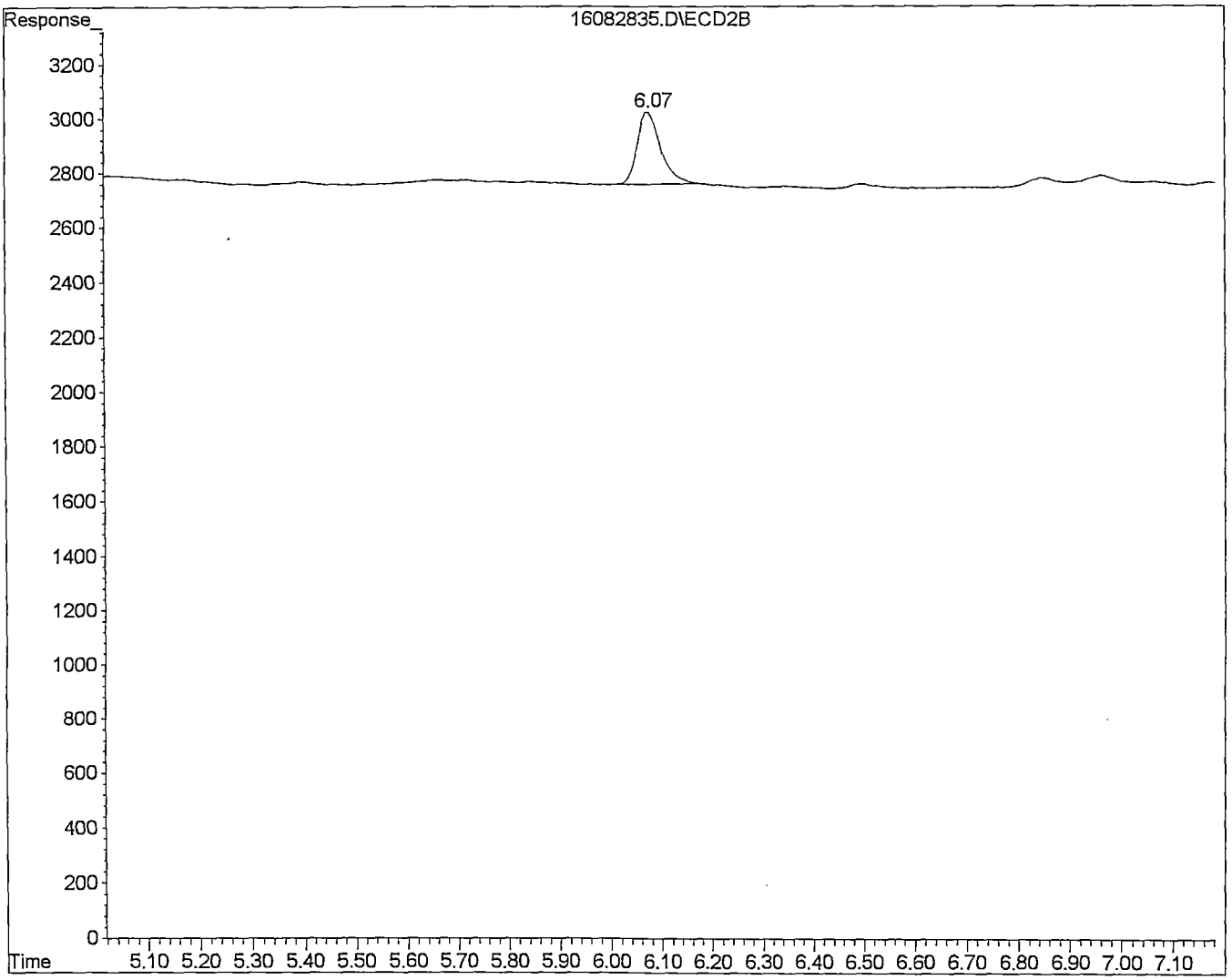
DM 8-30-01

ok 8-31-01

F:\HPCHEM\HP\16\DATA\08_28_01\16082835.D
Report generated: Thu Aug 30 17:06:29 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_28_01\16082835.D
Date Acquired: 29 Aug 2001 2:32
Inst: HP_16 Operator ID: TLM
Name: 47158.10DL *E00Q8DL *
Misc: *EPA*32.2G/5.0ML*24
Method: F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title: PCB/TOXAPHENE
Quant Time: Aug 30 16:45 2001 Quant Results File: XPCBH28.RES



TCX #2 6.07min area: 8484 m

Integration Time Range: 6.02 - 6.18

ok 8-31-01

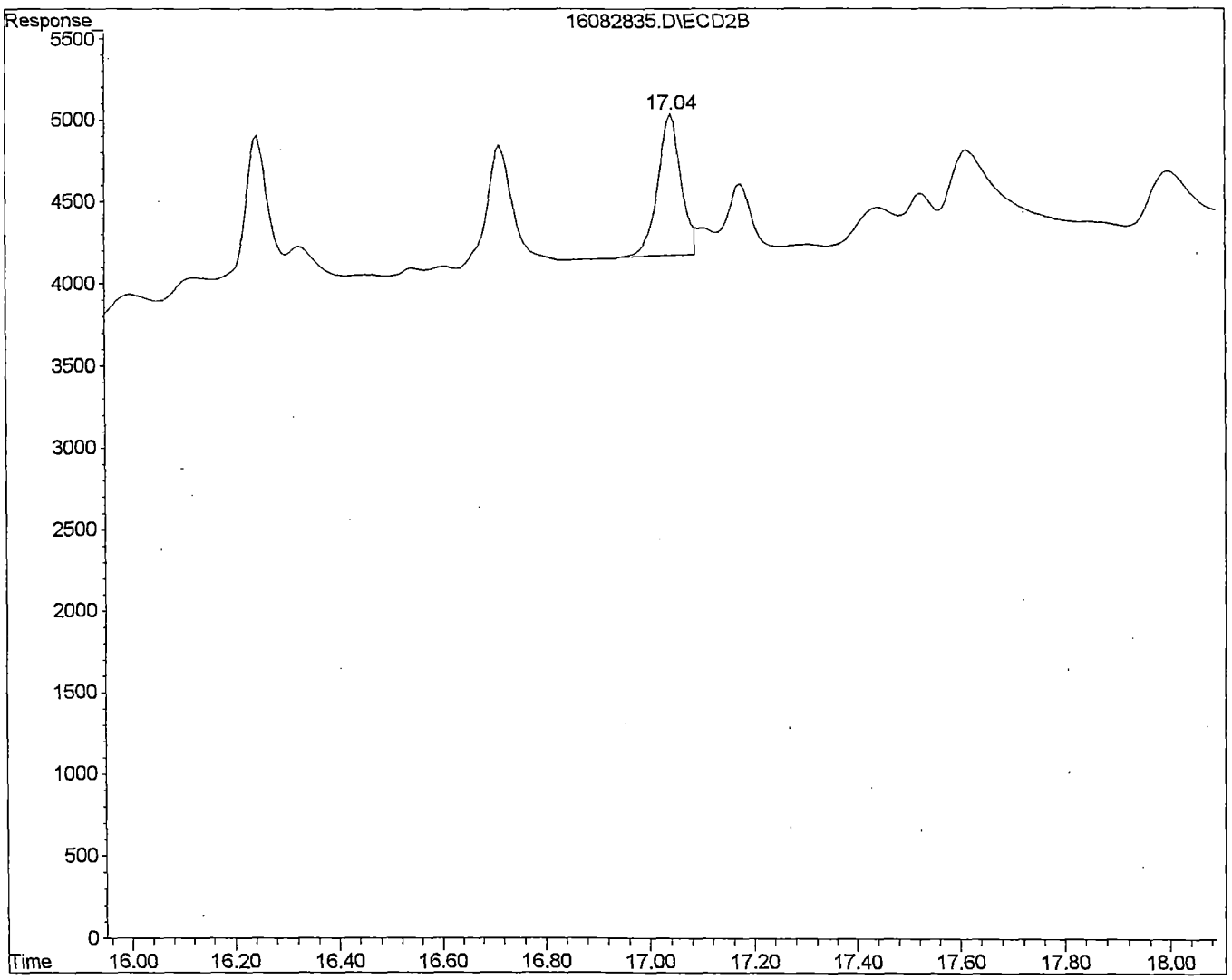
TM 8-30-01

77

F:\HPCHEM\HP\16\DATA\08_28_01\16082835.D
Report generated: Thu Aug 30 17:06:30 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_28_01\16082835.D
Date Acquired: 29 Aug 2001 2:32
Inst: HP_16 Operator ID: TLM
Name: 47158.10DL *E00Q8DL *
Misc: *EPA*32.2G/5.0ML*24
Method: F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title: PCB/TOXAPHENE
Quant Time: Aug 30 16:45 2001 Quant Results File: XPCBH28.RES



DCB #2 17.04min area: 26842 m

Integration Time Range: 16.95 - 17.09

JM 8-30-01

ok 8-31-01

78

F:\HPCHEM\HP\16\DATA\08_28_01\16082835.D
Report generated: Thu Aug 30 17:06:31 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00Q9

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: 47158.11

Sample wt/vol: 32.0 (g/mL) G Lab File ID:_____

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/21/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	~~880~~	1800 ~~EP~~ DJ
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	~~1400~~	1800 ~~E~~ DJ
11096-82-5	Aroclor-1260	~~600~~	800 ~~E~~ DJ
	Surrogate amount spiked	7.91	

TBS
9/11/01
apply this results

TB
10/1

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FORM I PCB

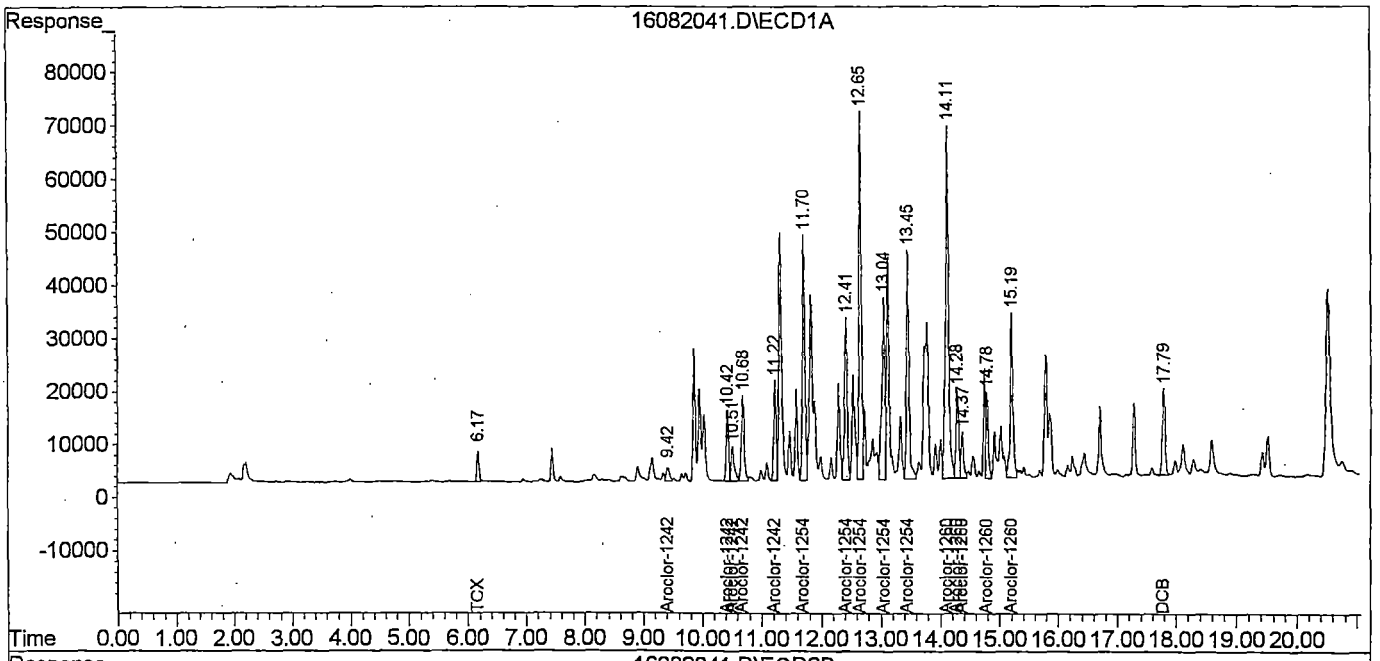
Chromatographic Report

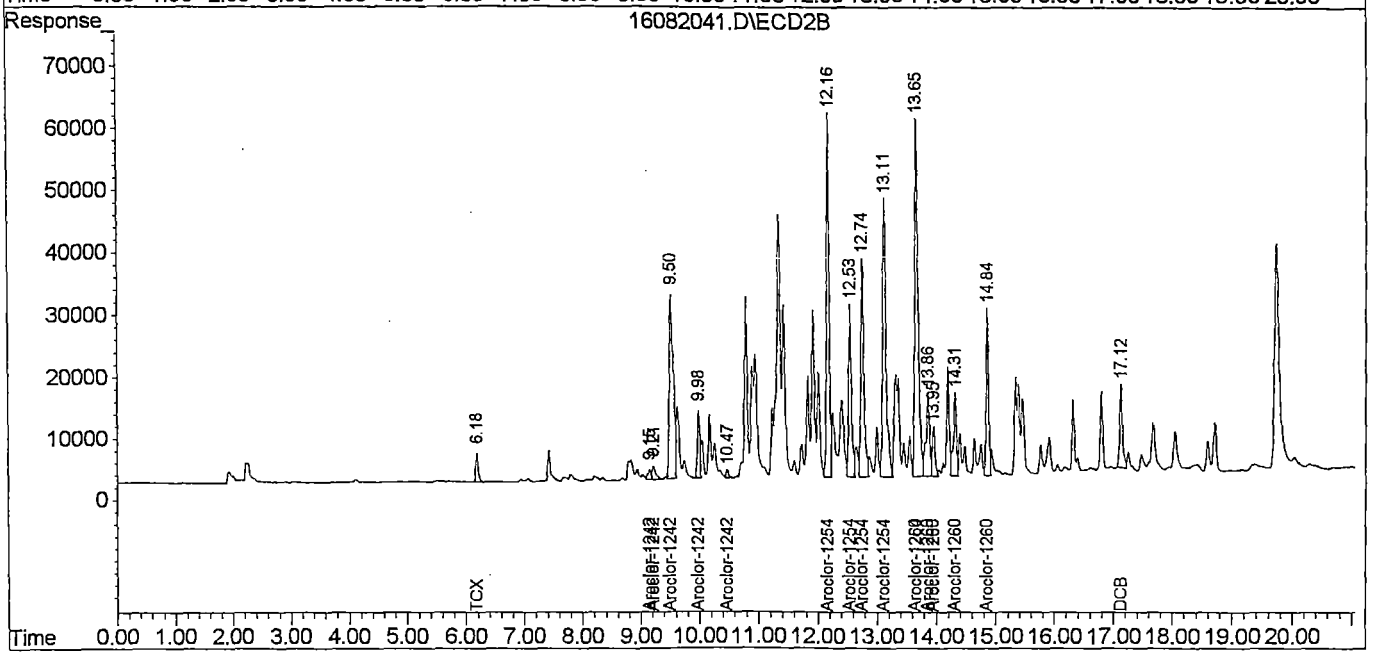
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082041.D\ECD1A.CH Vial: 41
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082041.D\ECD2B.CH
Acq On : 21 Aug 2001 6:44 Operator: TLM
Sample : 47158.11 *E00Q9 * Inst : HP_16
Misc : *EPA*32G/5.0ML*21 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 22 18:55 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

Ok 8-31-01

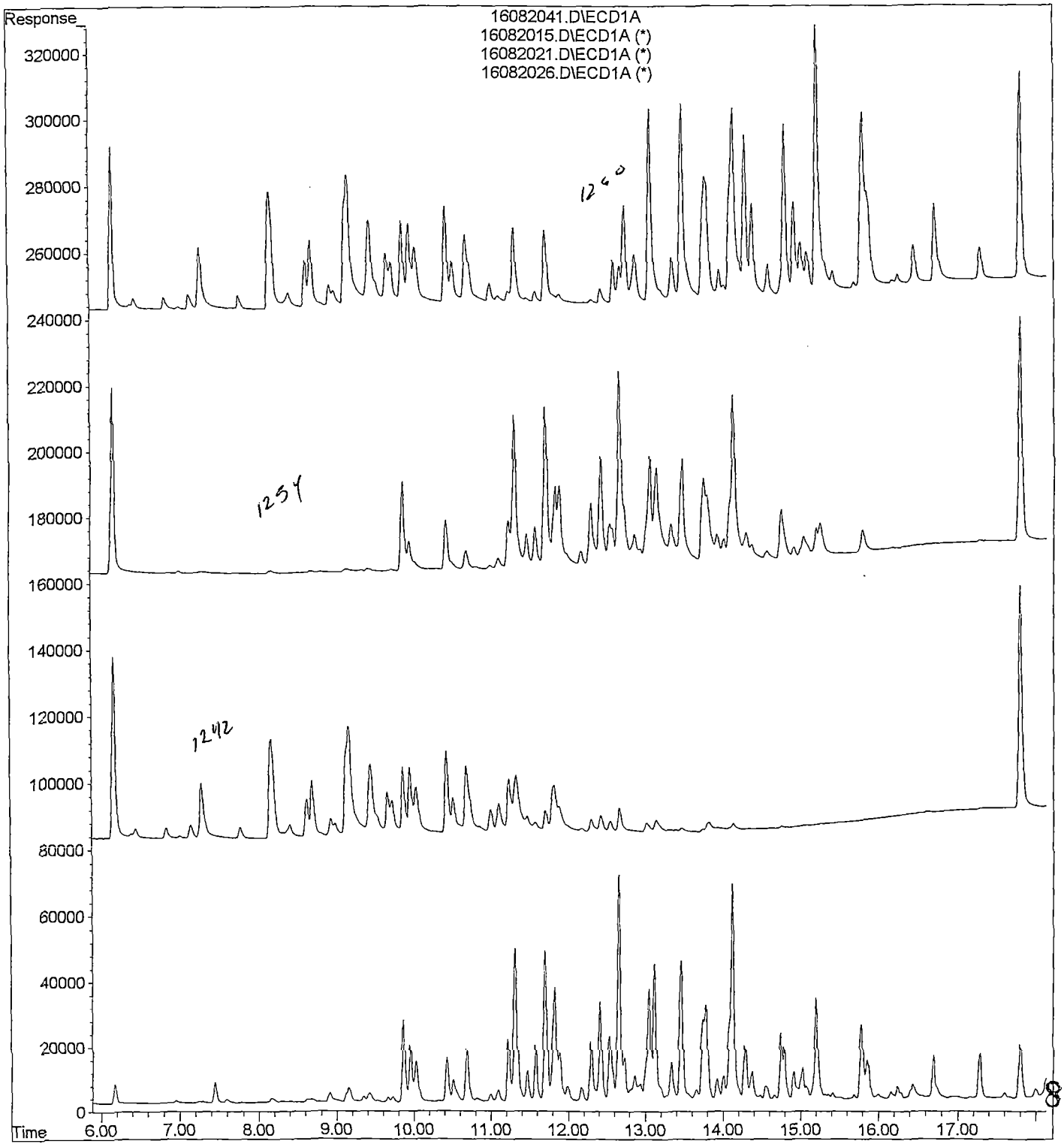




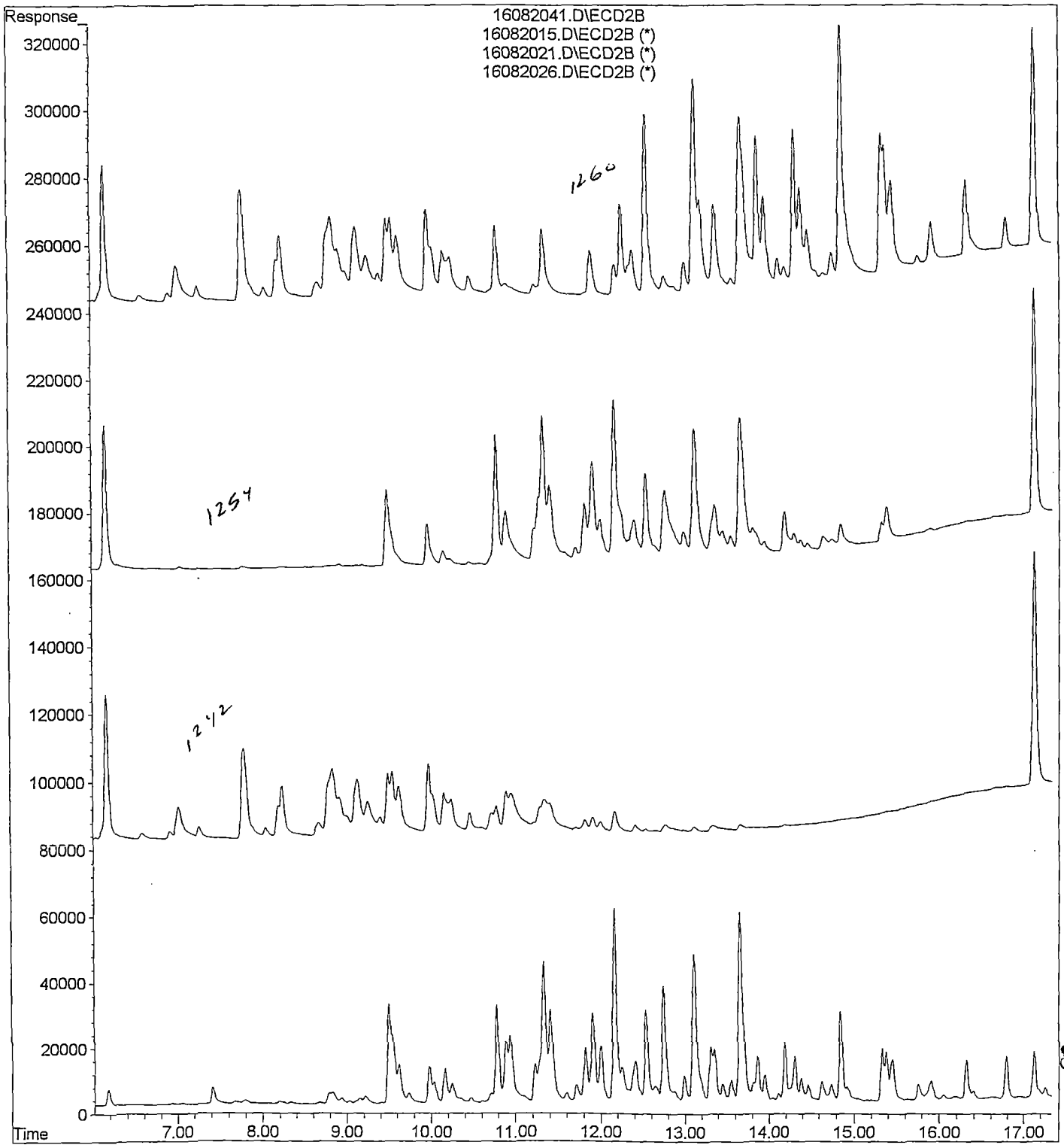
80

File : F:\HPCHEM\HP\16\DATA\08_20_01\16082041.D
Operator : TLM
Acquired : 21 Aug 2001 6:44 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.11 *E00Q9 *
Misc Info : *EPA*32G/5.0ML*21
Vial Number: 41

ok
8-31-01



File : F:\HPCHEM\HP\16\DATA\08_20_01\16082041.D
Operator : TLM
Acquired : 21 Aug 2001 6:44 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.11 *E00Q9 *
Misc Info : *EPA*32G/5.0ML*21
Vial Number: 41



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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082041.D\ECD1A.CH Vial: 41
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082041.D\ECD2B.CH
Acq On : 21 Aug 2001 6:44 Operator: TLM
Sample : 47158.11 *E00Q9 * Inst : HP_16
Misc : *EPA*32G/5.0ML*21 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 22 18:55 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	6.17	6.18	154187	144566	8.316	7.710	
	Spiked Amount 7.911			Recovery	=	105.11%	97.45%	
22)	S DCB	17.79	17.12	511058	439781	18.9	15.8	
	Spiked Amount 7.911			Recovery	=	238.90%	199.71%	
	Target Compounds:							
7)	L4 Aroclor-1242	9.42	9.15	110362	63210	165.1	112.9	#
8)	L4 Aroclor-1242 {2}	10.42	9.21f	372177	98631	855.3 E	279.5	#
9)	L4 Aroclor-1242 {3}	10.51	9.50	248981	1440140	992.4 E	4765.2	E#
10)	L4 Aroclor-1242 {4}	10.68	9.98	515054	316486	893.8 E	522.1	#
11)	L4 Aroclor-1242 {5}	11.22	10.47	511146	45949	1510.7 E	365.3	#
	Sum Aroclor-1242			1757720	1964417	4417.3	6045.1	
	Average Aroclor-1242					883.464	1209.012	
12)	L6 Aroclor-1254	11.70	12.16	1344473	1851529	1299.6 E	1303.3 E	
13)	L6 Aroclor-1254 {2}	12.41	12.54	909583	914165	1273.6 E	1393.7 E	
14)	L6 Aroclor-1254 {3}	12.65	12.74	1920572	1292403	1266.7 E	1524.6 E	
15)	L6 Aroclor-1254 {4}	13.05	13.11	1196800	1843026	1574.7 E	1701.9 E	
16)	L6 Aroclor-1254 {5}	13.45	13.65	1291490	2292130	1592.2 E	1805.4 E	
	Sum Aroclor-1254			6662917	8193252	7006.9	7729.0	
	Average Aroclor-1254					1401.373	1545.801	
17)	L7 Aroclor-1260	14.12	13.65	2404495	2292130	1205.5 E	1221.1 E	
18)	L7 Aroclor-1260 {2}	14.28	13.86	537945	575974	510.5 E	580.1 E	
19)	L7 Aroclor-1260 {3}	14.37	13.95	278169	259943	419.0	411.4	
20)	L7 Aroclor-1260 {4}	14.78	14.31	443642	476687	401.2	517.8	#
21)	L7 Aroclor-1260 {5}	15.20	14.85	966174	767680	438.1	343.2	
	Sum Aroclor-1260			4630424	4372414	1176.5	1215.8	
	Average Aroclor-1260					594.847	614.714	

83

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

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00Q9RE

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: 47158.11RE

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/23/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/30/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	41	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	1900	J ~~EP~~
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	1400	J ~~E~~
11096-82-5	Aroclor-1260	530	J ~~E~~
Surrogate amount spiked		8.38	

TBS
9/11/01

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FORM I PCB

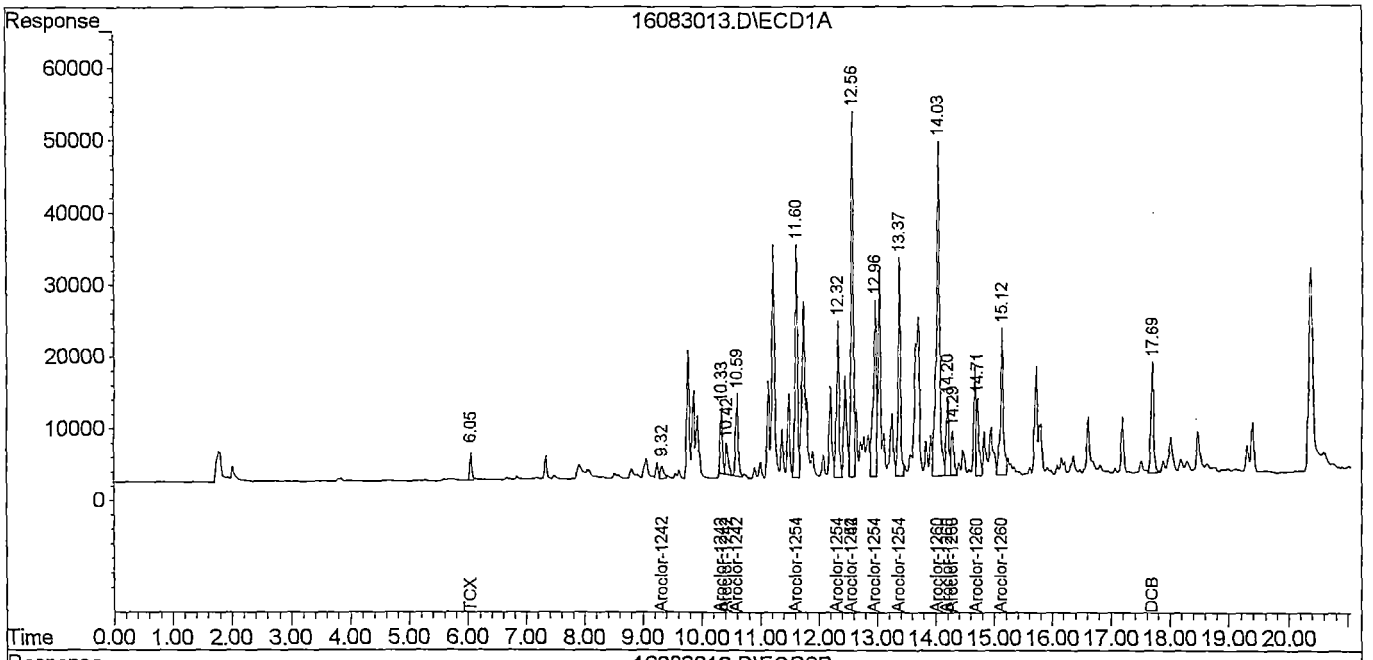
Chromatographic Report

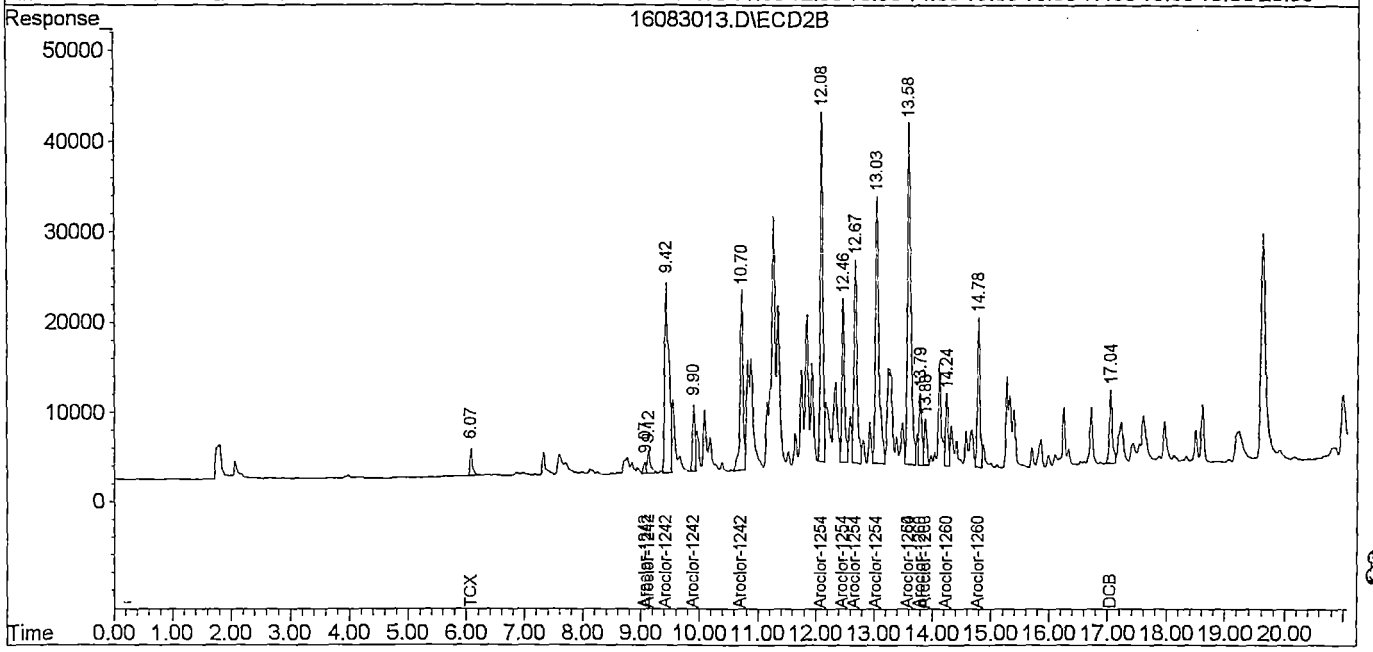
Signal #1 : F:\HPCHEM\HP\16\DATA\08_30_01\16083013.D\ECD1A.CH Vial: 13
Signal #2 : F:\HPCHEM\HP\16\DATA\08_30_01\16083013.D\ECD2B.CH
Acq On : 30 Aug 2001 15:12 Operator: TLM
Sample : 47158.11RE *E00Q9RE * Inst : HP_16
Misc : *EPA*30.2G/5.0ML*21 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 31 9:52 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_30_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

ok
8-31-01

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

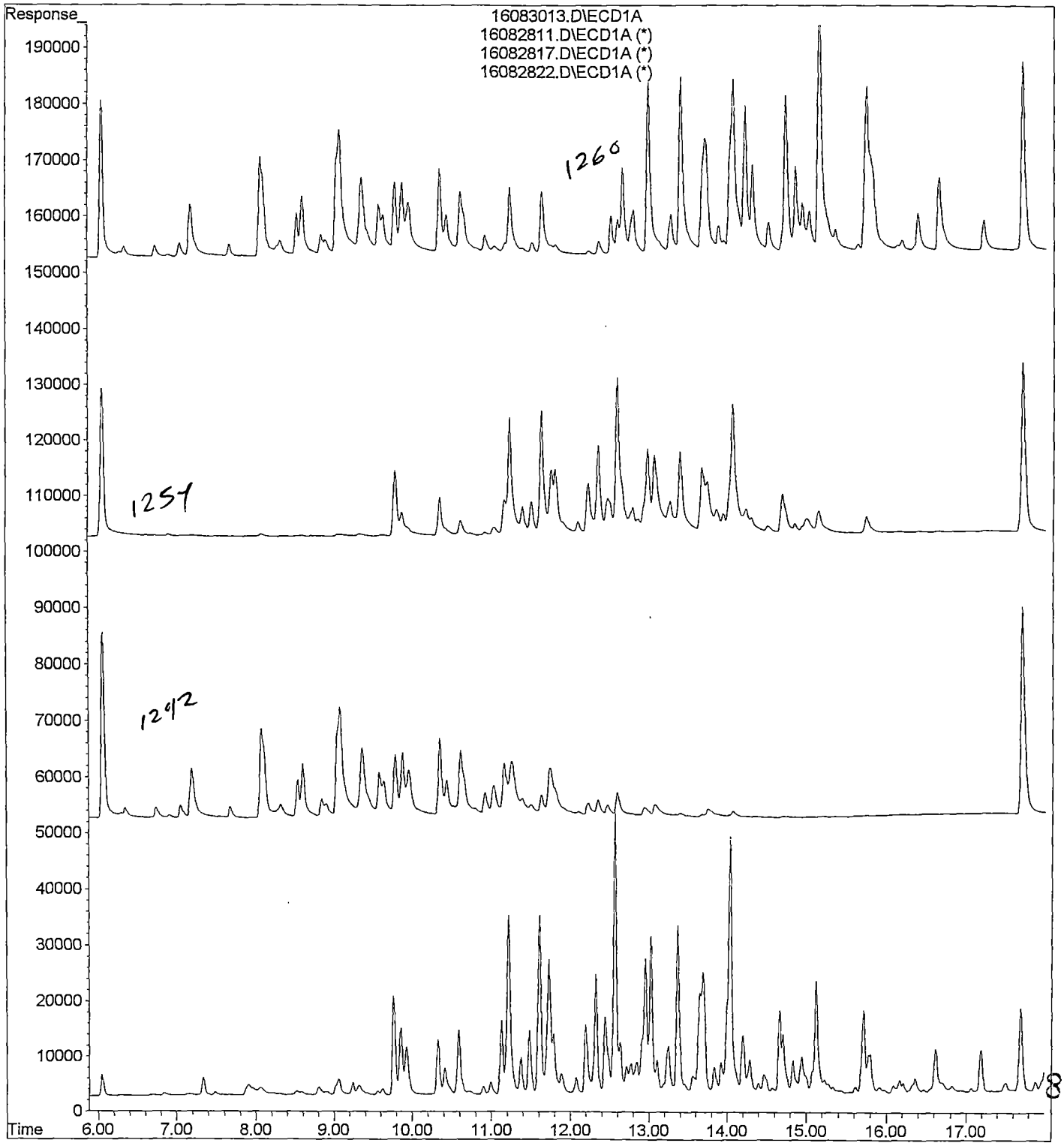




85

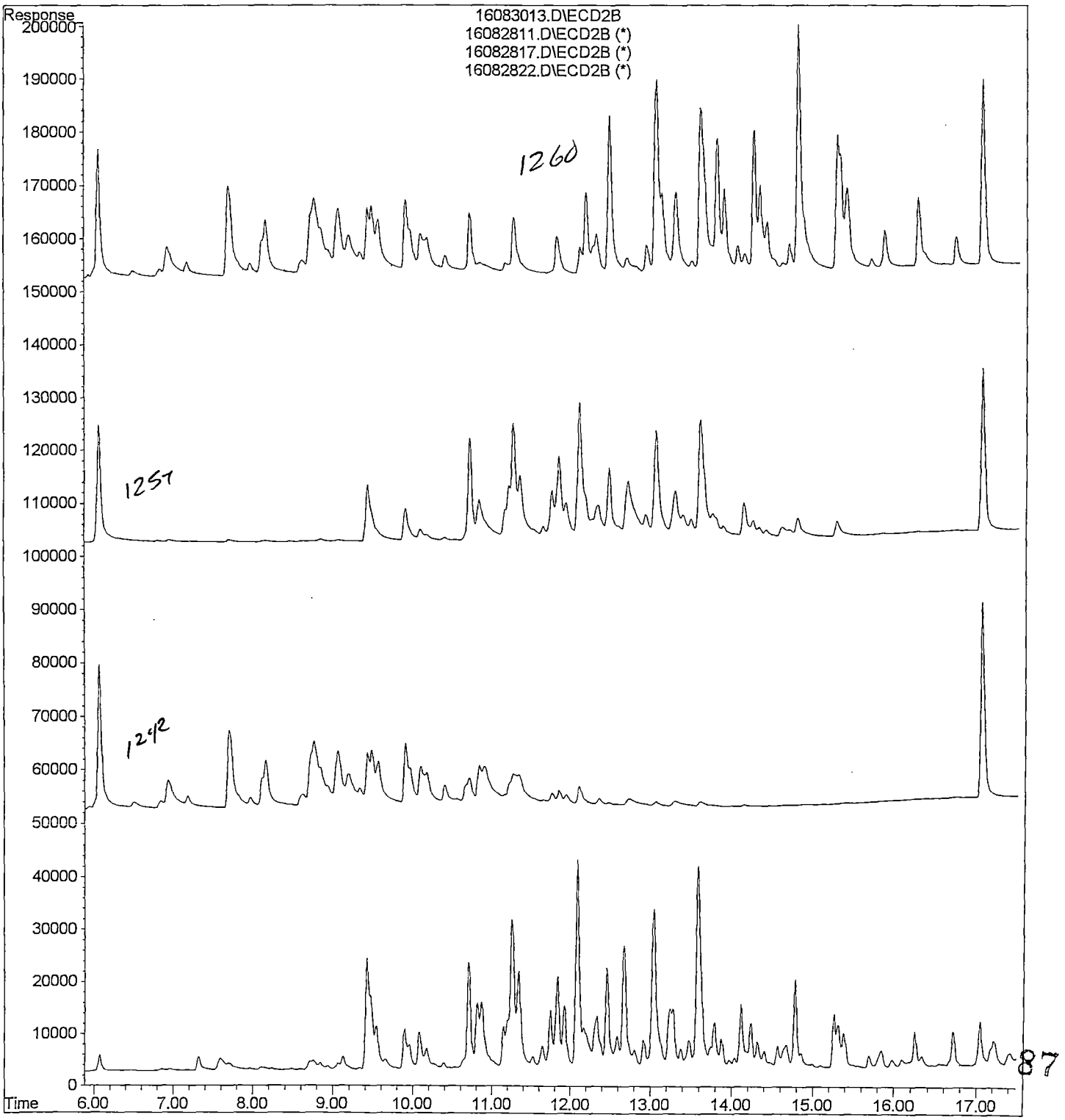
File : F:\HPCHEM\HP\16\DATA\08_30_01\16083013.D
Operator : TLM
Acquired : 30 Aug 2001 15:12 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.11RE *E00Q9RE *
Misc Info : *EPA*30.2G/5.0ML*21
Vial Number: 13

GR 8-31-01



86

File : F:\HPCHEM\HP\16\DATA\08_30_01\16083013.D
Operator : TLM
Acquired : 30 Aug 2001 15:12 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.11RE *E00Q9RE *
Misc Info : *EPA*30.2G/5.0ML*21
Vial Number: 13



87

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_30_01\16083013.D\ECD1A.CH Vial: 13
Signal #2 : F:\HPCHEM\HP\16\DATA\08_30_01\16083013.D\ECD2B.CH
Acq On : 30 Aug 2001 15:12 Operator: TLM
Sample : 47158.11RE *E00Q9RE * Inst : HP_16
Misc : *EPA*30.2G/5.0ML*21 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 31 9:52 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_30_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	6.05	6.08	97481	95494	8.179	7.150	
	Spiked Amount 8.383			Recovery	=	97.57%	85.29%	
22)	S DCB	17.70	17.04	520032	280404	25.9	15.2	#
	Spiked Amount 8.383			Recovery	=	308.96%	181.32%	
	Target Compounds:							
7)	L4 Aroclor-1242	9.32f	9.07	76156	37898	141.9	91.0	#
8)	L4 Aroclor-1242 {2}	10.33	9.13f	232226	94361	723.4 E	373.9	#
9)	L4 Aroclor-1242 {3}	10.42	9.42	140298	1014837	775.3 E	4548.1	E#
10)	L4 Aroclor-1242 {4}	10.59	9.90	350840	222445	757.7 E	508.4	#
11)	L4 Aroclor-1242 {5}	12.56	10.70	1372470	665108	11438.1 E	3996.5	E#
	Sum Aroclor-1242			2171990	2034650	13836.5	9517.9	
	Average Aroclor-1242					2767.295	1903.570	
12)	L6 Aroclor-1254	11.61	12.08	949922	1212257	1332.8 E	1265.3	E
13)	L6 Aroclor-1254 {2}	12.32	12.46	637225	585921	1340.9 E	1367.2	E
14)	L6 Aroclor-1254 {3}	12.56	12.67	1372470	821408	1326.4 E	1629.3	E
15)	L6 Aroclor-1254 {4}	12.96	13.04	883729	1266951	1672.4 E	1627.9	E
16)	L6 Aroclor-1254 {5}	13.37	13.58	886515	1540246	1557.0 E	1719.1	E
	Sum Aroclor-1254			4729862	5426785	7229.6	7608.8	
	Average Aroclor-1254					1445.915	1521.760	
17)	L7 Aroclor-1260	14.04	13.58	1750271	1540246	1414.6 E	1201.5	E
18)	L7 Aroclor-1260 {2}	14.20	13.79	353370	266061	496.8	383.5	
19)	L7 Aroclor-1260 {3}	14.29	13.88	215320	163305	426.4	346.7	
20)	L7 Aroclor-1260 {4}	14.71	14.24	324598	244172	463.3	396.2	
21)	L7 Aroclor-1260 {5}	15.12	14.78	690799	472680	481.0	311.3	#
	Sum Aroclor-1260			3334359	2686464	1375.7	1106.2	
	Average Aroclor-1260					656.435	527.831	

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

1D

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00Q9DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: 47158.11DL

Sample wt/vol: 32.0 (g/mL) G Lab File ID:_____

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/29/01

Injection Volume: 0.5(uL) Dilution Factor: 10.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	390	U
11104-28-2	Aroclor-1221	390	U
11141-16-5	Aroclor-1232	390	U
53469-21-9	Aroclor-1242	1800	J ~~DE~~
12672-29-6	Aroclor-1248	390	U
11097-69-1	Aroclor-1254	1800	J ~~D~~
11096-82-5	Aroclor-1260	800	J ~~D~~
Surrogate amount spiked		7.91	

TBS
9/11/01

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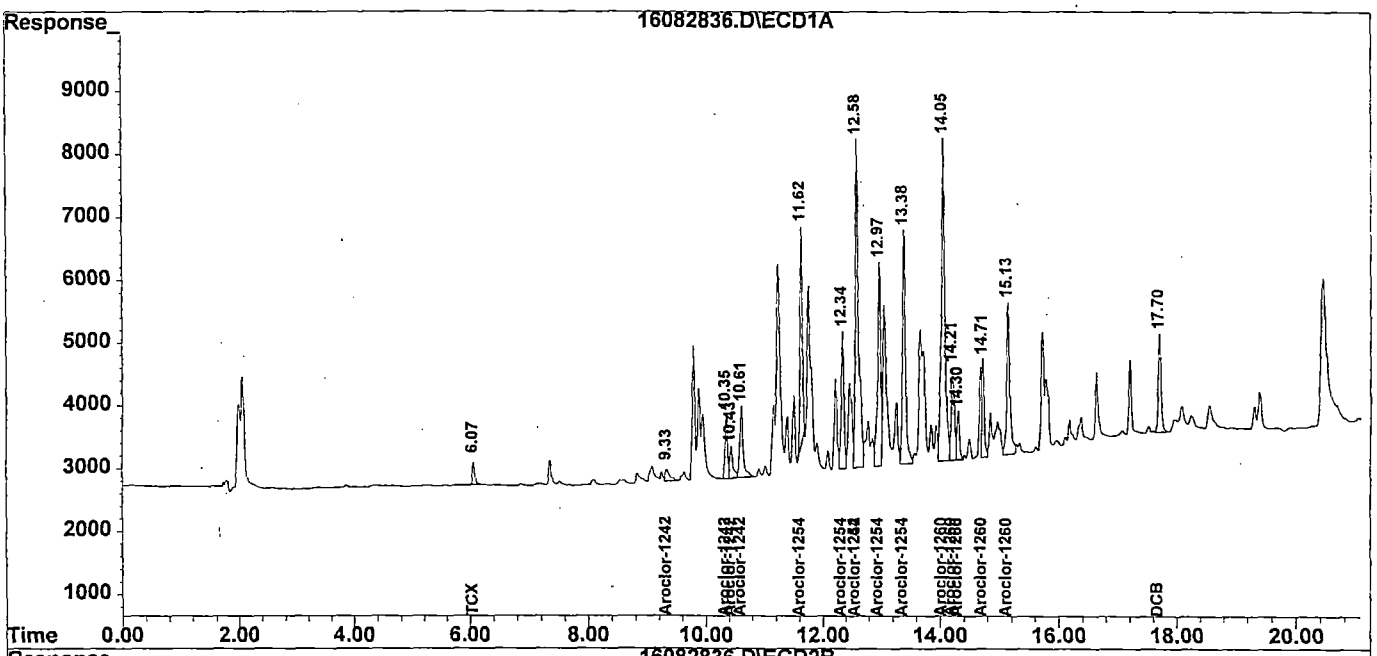
FORM I PCB

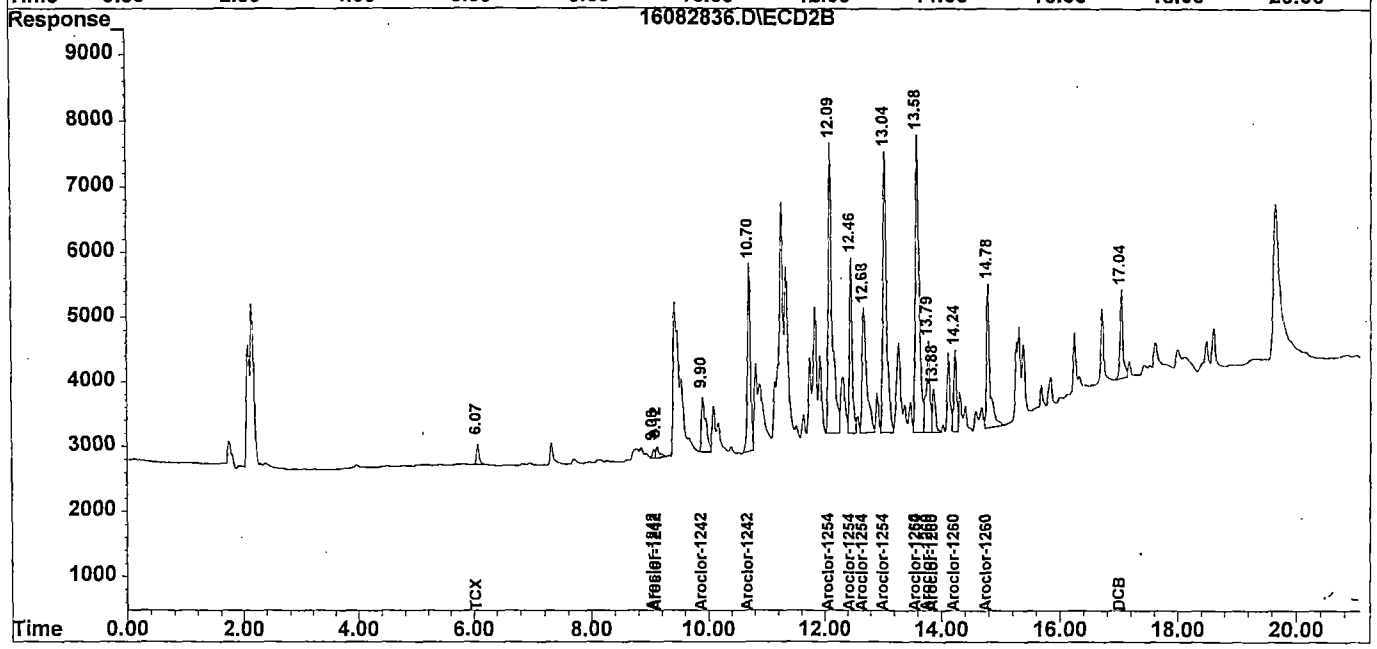
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082836.D\ECD1A.CH Vial: 36
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082836.D\ECD2B.CH
Acq On : 29 Aug 2001 2:56 Operator: TLM
Sample : 47158.11DL *E00Q9DL * Inst : HP_16
Misc : *EPA*32G/5.0ML*21 Dilution: 10.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 1 9:08 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082836.D\ECD1A.CH Vial: 36
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082836.D\ECD2B.CH
Acq On : 29 Aug 2001 2:56 Operator: TLM
Sample : 47158.11DL *E00Q9DL * Inst : HP_16
Misc : *EPA*32G/5.0ML*21 Dilution: 10.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Sep 1 9:08 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

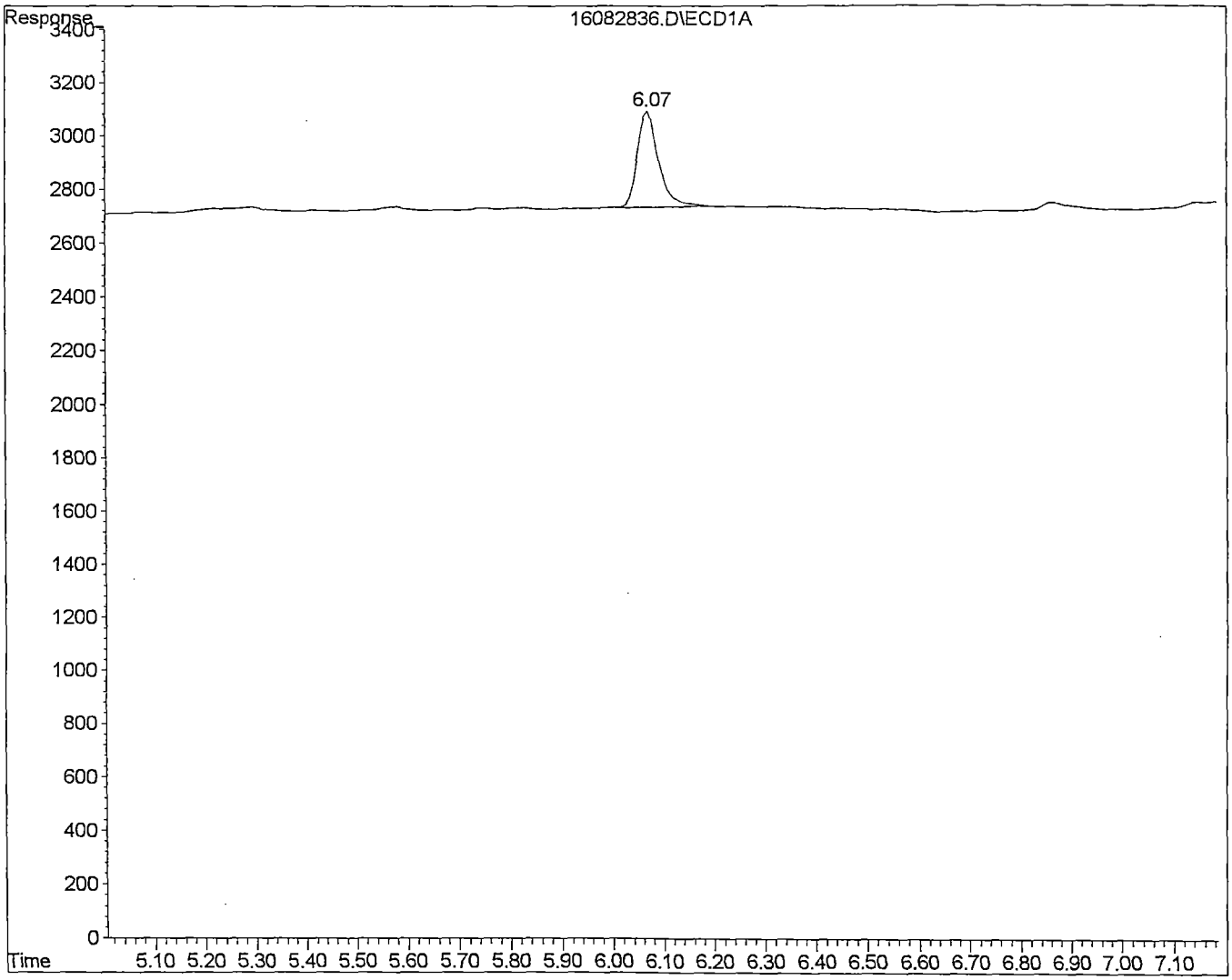
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	6.06	6.07	10406	10478	8.240m	7.404m	
	Spiked Amount 7.911			Recovery	=	104.15%	93.59%	
22)	S DCB	17.70	17.04	52409	45564	24.7m	23.3m	
	Spiked Amount 7.911			Recovery	=	312.21%	294.51%	
	Target Compounds:							
7)	L4 Aroclor-1242	9.34	9.07	10044	3985	176.7	90.3	#
8)	L4 Aroclor-1242 {2}	10.35	9.12f	31040	7510	912.5	280.8	#
9)	L4 Aroclor-1242 {3}	10.43	0.00	19961	0	1041.1	N.D. d	#
10)	L4 Aroclor-1242 {4}	10.61	9.90	46718	45143	952.1	973.7	
11)	L4 Aroclor-1242 {5}	12.58	10.70	204197	100870	16060.5 E	5720.1	#
	Sum Aroclor-1242			311960	157508	19142.9	7064.9	
	Average Aroclor-1242					3828.579	1766.233	
12)	L6 Aroclor-1254	11.62	12.09	99176	204344	1313.2	2012.8	#
13)	L6 Aroclor-1254 {2}	12.34	12.46	73593	92119	1461.5	2028.6	#
14)	L6 Aroclor-1254 {3}	12.58	12.69	204197	105956	1862.5	1983.5	
15)	L6 Aroclor-1254 {4}	12.97	13.04	114583	185913	2046.5	2254.4	
16)	L6 Aroclor-1254 {5}	13.38	13.59	127661	207333	2116.0	2184.0	
	Sum Aroclor-1254			619210	795665	8799.7	10463.3	
	Average Aroclor-1254					1759.939	2092.657	
17)	L7 Aroclor-1260	14.05	13.59	218281	207333	1664.9	1526.3	
18)	L7 Aroclor-1260 {2}	14.21	13.79	52664	60184	698.8	818.8	
19)	L7 Aroclor-1260 {3}	14.30	13.88	25213	23187	471.2	464.5	
20)	L7 Aroclor-1260 {4}	14.72	14.24	45473	41957	612.6	642.4	
21)	L7 Aroclor-1260 {5}	15.14	14.78	89169	88463	586.0	549.9	
	Sum Aroclor-1260			430800	421124	15955.2	15830.5	
	Average Aroclor-1260					806.696	800.389	

91

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

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_28_01\16082836.D
Date Acquired: 29 Aug 2001 2:56
Inst: HP_16 Operator ID: TLM
Name: 47158.11DL *E00Q9DL *
Misc: *EPA*32G/5.0ML*21
Method: F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title: PCB/TOXAPHENE
Quant Time: Aug 30 16:46 2001 Quant Results File: XPCBH28.RES



TCX 6.07min area: 10406 m

Integration Time Range: 6.01 - 6.18

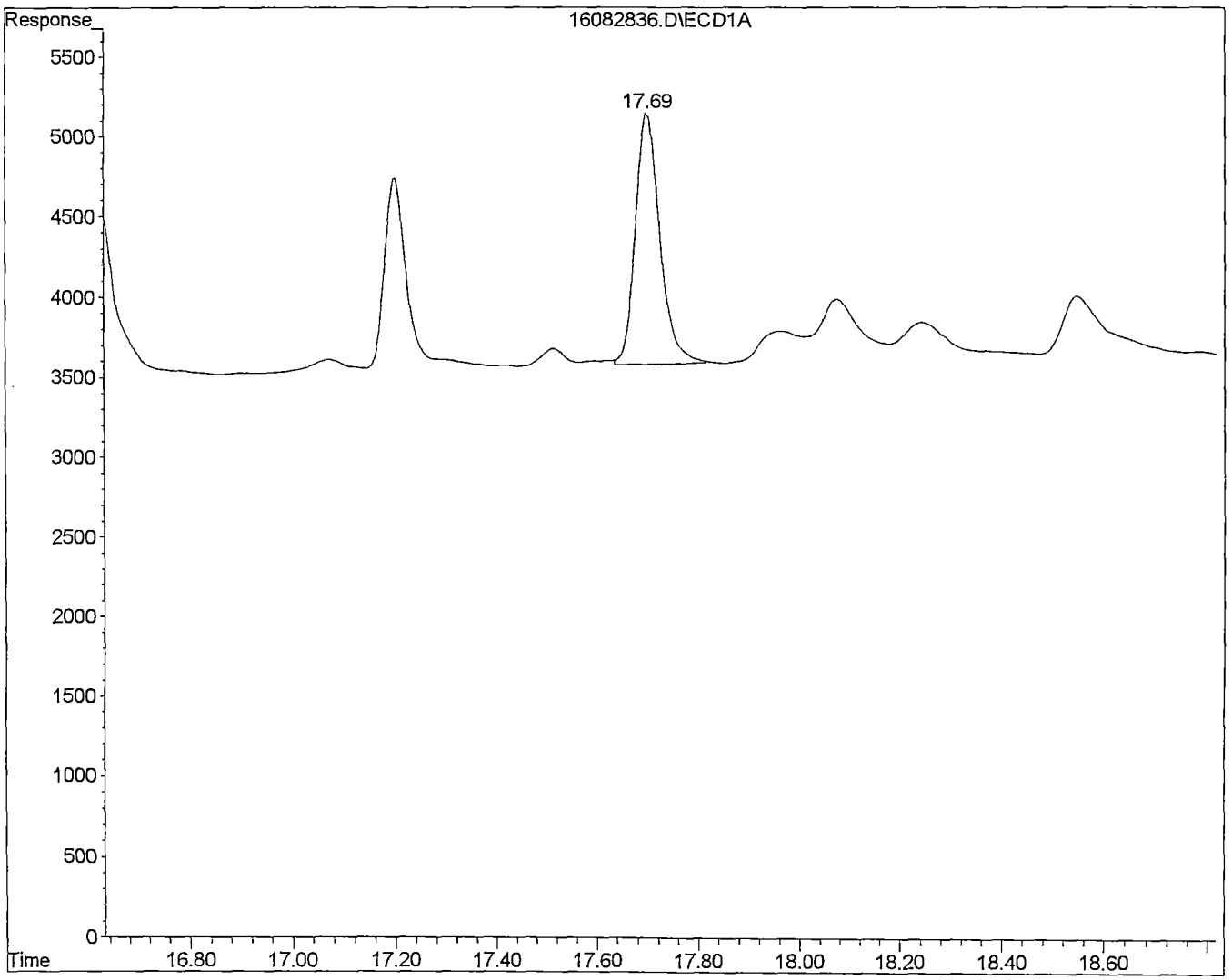
TM 8-30-01

ok 8-31-01 (br)

F:\HPCHEM\HP\16\DATA\08_28_01\16082836.D
Report generated: Thu Aug 30 17:06:32 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_28_01\16082836.D
Date Acquired: 29 Aug 2001 2:56
Inst: HP_16 Operator ID: TLM
Name: 47158.11DL *E00Q9DL *
Misc: *EPA*32G/5.0ML*21
Method: F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title: PCB/TOXAPHENE
Quant Time: Aug 30 16:46 2001 Quant Results File: XPCBH28.RES



DCB 17.70min area: 52409 m

Integration Time Range: 17.63 - 17.82

8-30-01

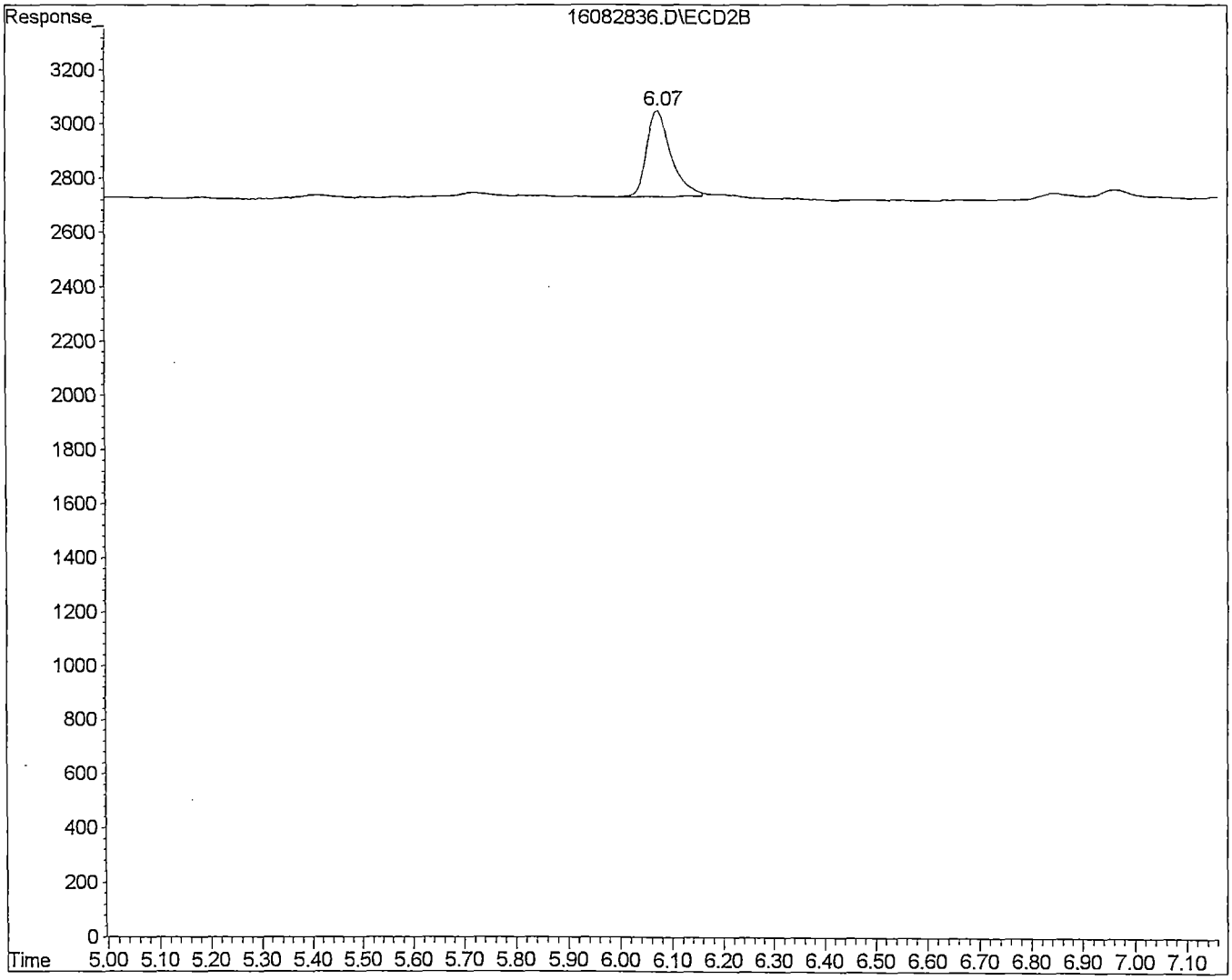
8-31-01

93

F:\HPCHEM\HP\16\DATA\08_28_01\16082836.D
Report generated: Thu Aug 30 17:06:33 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_28_01\16082836.D
Date Acquired: 29 Aug 2001 2:56
Inst: HP_16 Operator ID: TLM
Name: 47158.11DL *E00Q9DL *
Misc: *EPA*32G/5.0ML*21
Method: F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title: PCB/TOXAPHENE
Quant Time: Aug 30 16:46 2001 Quant Results File: XPCBH28.RES



TCX #2 6.07min area: 10478 m

Integration Time Range: 6.00 - 6.16

TM 8-30-01

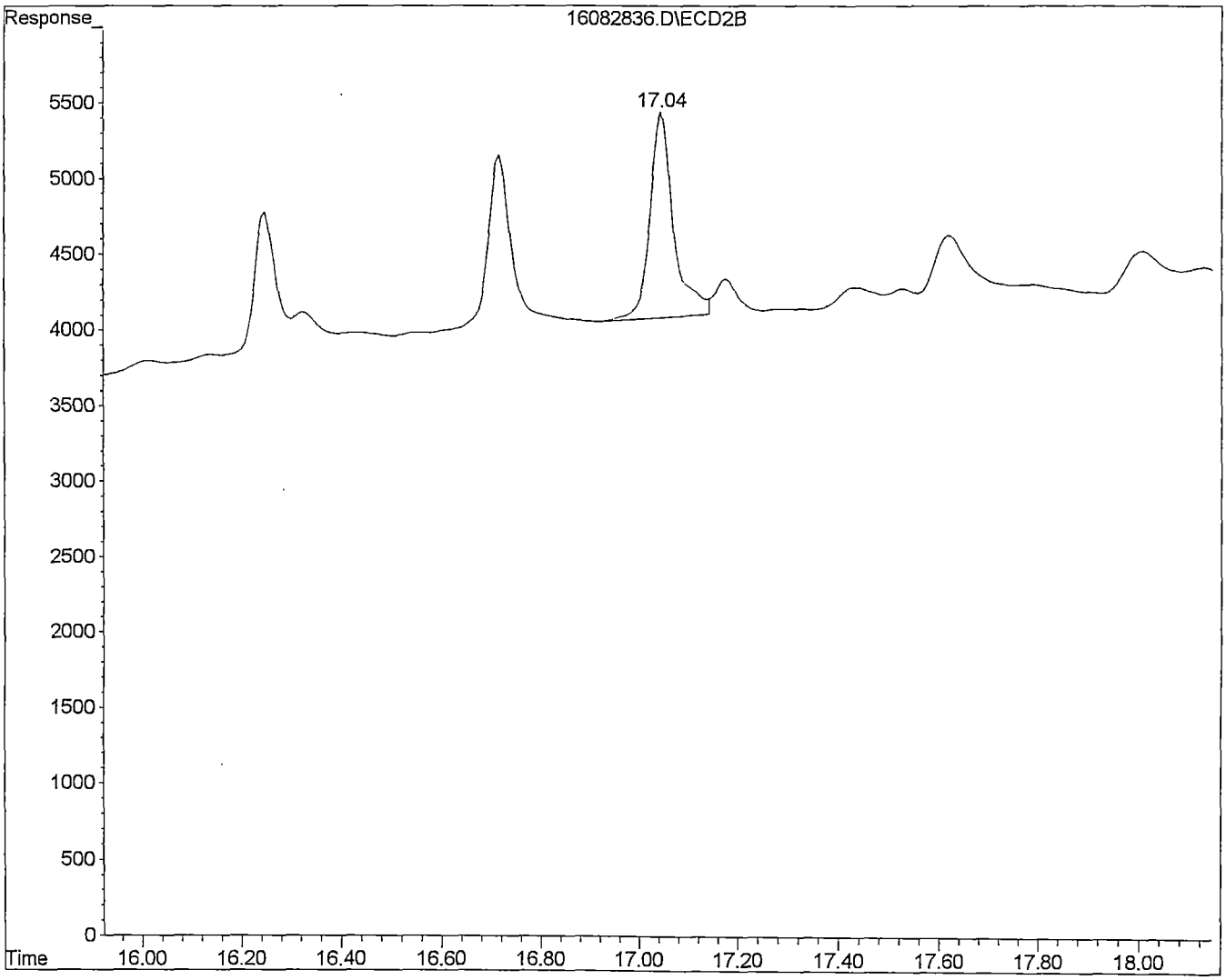
ok 8-31-01

94

F:\HPCHEM\HP\16\DATA\08_28_01\16082836.D
Report generated: Thu Aug 30 17:06:34 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_28_01\16082836.D
Date Acquired: 29 Aug 2001 2:56
Inst: HP_16 Operator ID: TLM
Name: 47158.11DL *E00Q9DL *
Misc: *EPA*32G/5.0ML*21
Method: F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title: PCB/TOXAPHENE
Quant Time: Aug 30 16:46 2001 Quant Results File: XPCBH28.RES



DCB #2 17.04min area: 45564 m

Integration Time Range: 16.92 - 17.14

JM 8-30-01

OK 8-31-01

F:\HPCHEM\HP\16\DATA\08_28_01\16082836.D
Report generated: Thu Aug 30 17:06:35 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00R0

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: 47158.12

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/21/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	49	U
11104-28-2	Aroclor-1221	49	U
11141-16-5	Aroclor-1232	49	U
53469-21-9	Aroclor-1242	250	J ~~P~~
12672-29-6	Aroclor-1248	49	U
11097-69-1	Aroclor-1254	400	~~J~~
11096-82-5	Aroclor-1260	160	
Surrogate amount spiked		9.90	

TBS 9/11/01 TB 10/1

96

FORM I PCB

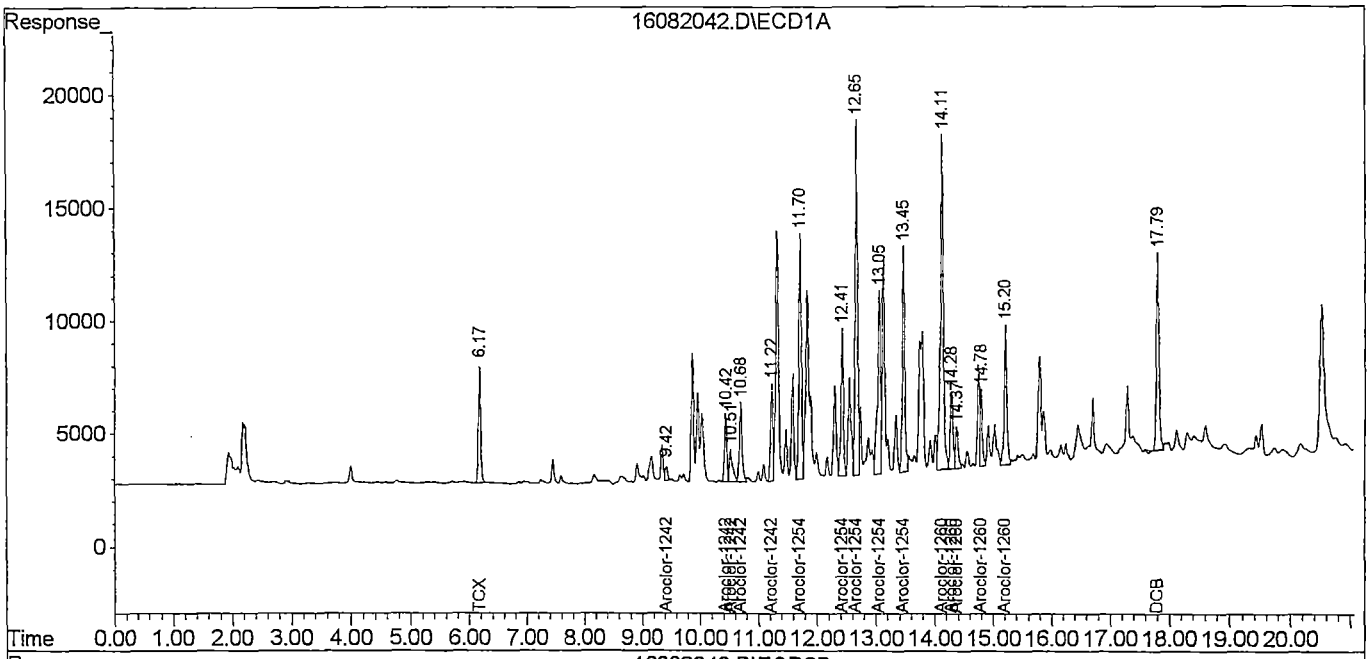
Chromatographic Report

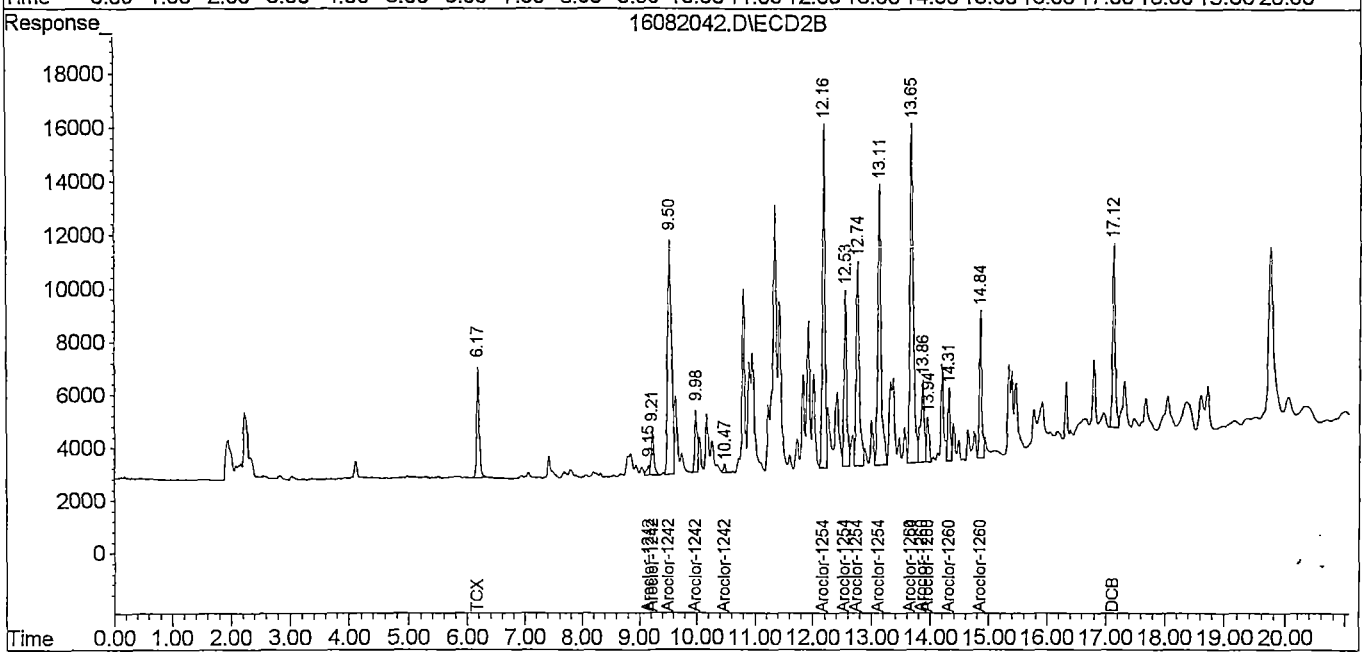
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082042.D\ECD1A.CH Vial: 42
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082042.D\ECD2B.CH
Acq On : 21 Aug 2001 7:09 Operator: TLM
Sample : 47158.12 *E00R0 * Inst : HP_16
Misc : *EPA*30.6G/5.0ML*34 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 22 18:55 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

ok 8-31-01

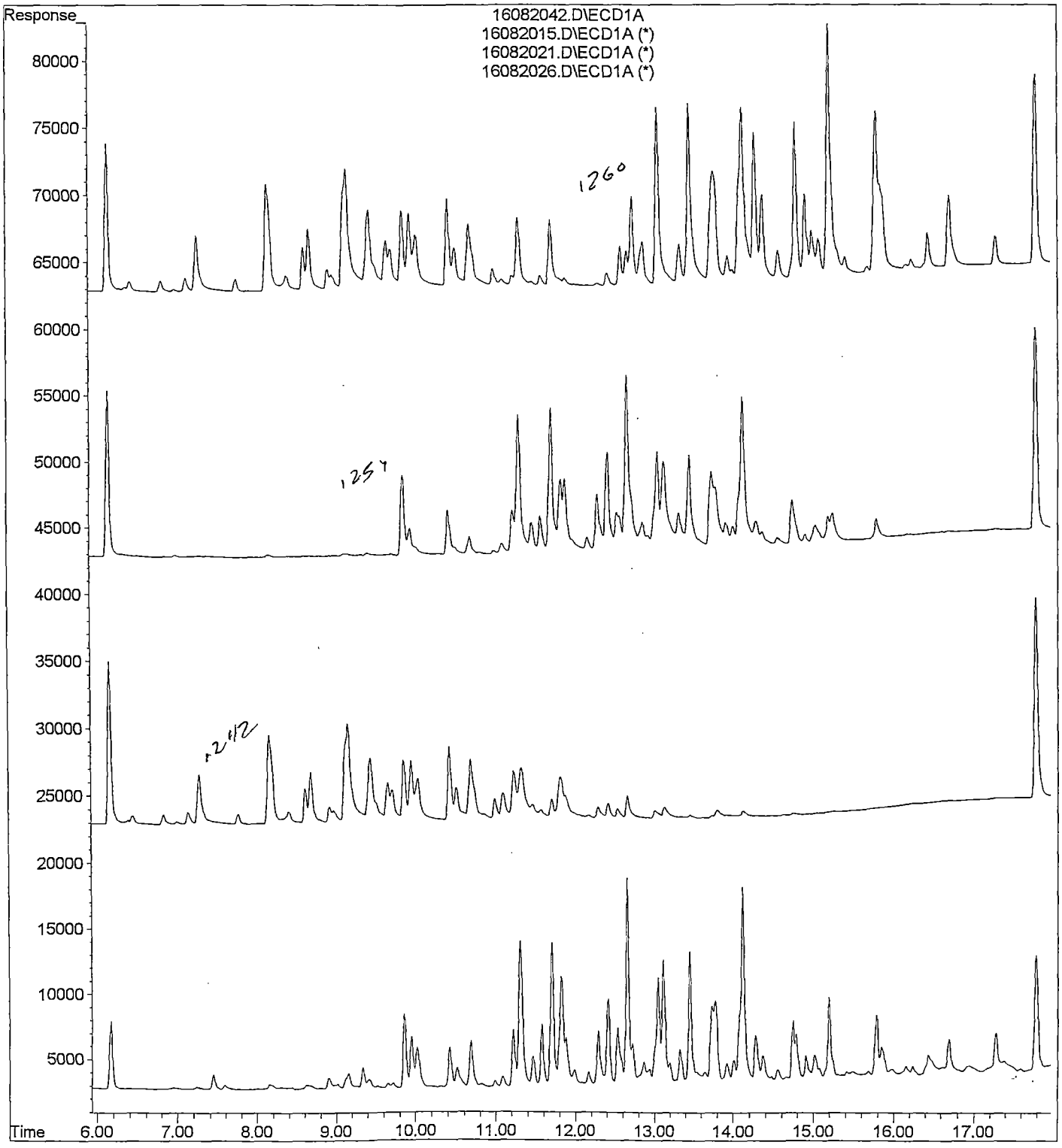




97

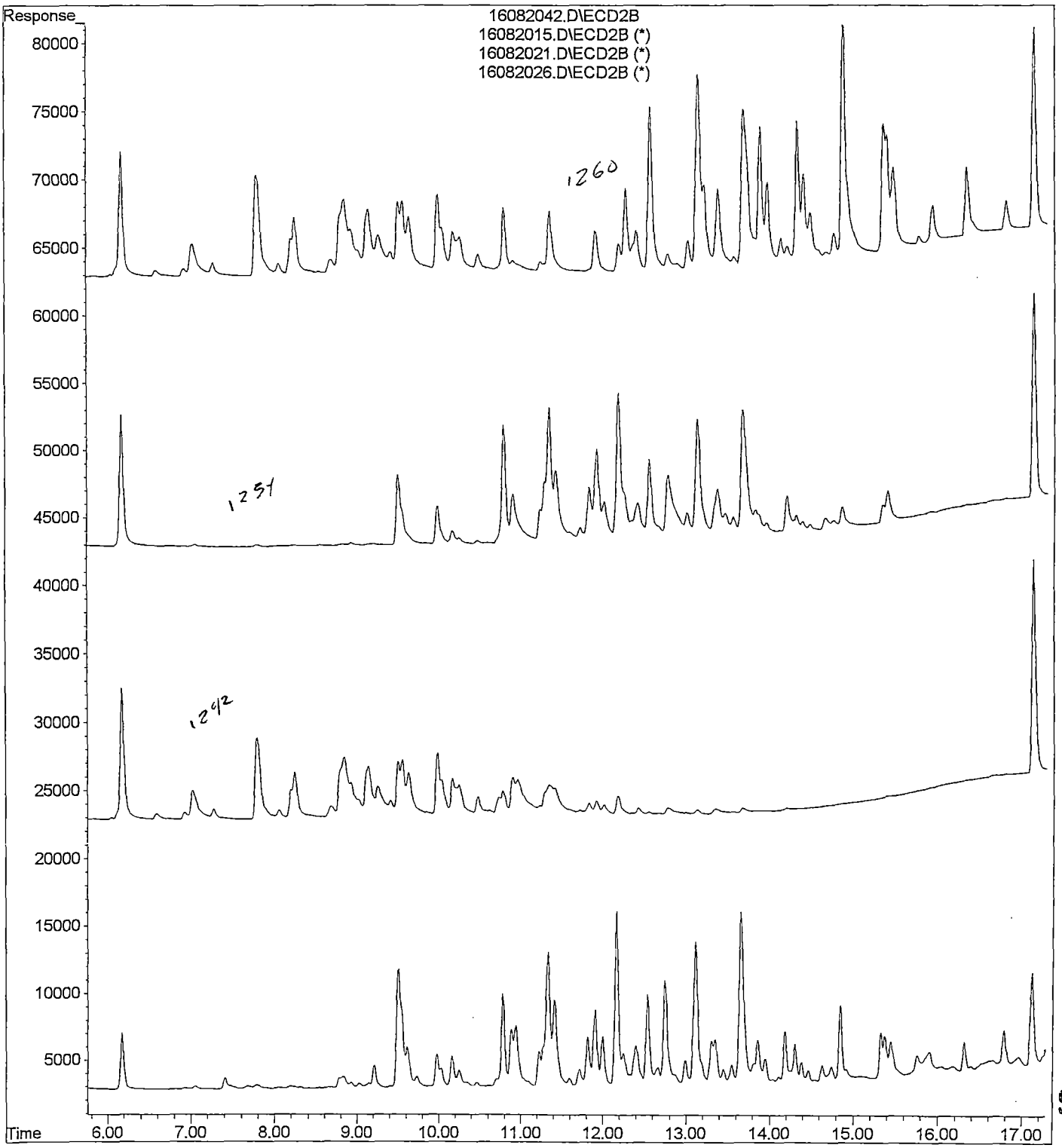
File : F:\HPCHEM\HP\16\DATA\08_20_01\16082042.D
Operator : TLM
Acquired : 21 Aug 2001 7:09 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.12 *E00R0 *
Misc Info : *EPA*30.6G/5.0ML*34
Vial Number: 42

ok
8-31-01



98

File : F:\HPCHEM\HP\16\DATA\08_20_01\16082042.D
Operator : TLM
Acquired : 21 Aug 2001 7:09 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.12 *E00R0 *
Misc Info : *EPA*30.6G/5.0ML*34
Vial Number: 42



Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082042.D\ECD1A.CH Vial: 42
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082042.D\ECD2B.CH
Acq On : 21 Aug 2001 7:09 Operator: TLM
Sample : 47158.12 *E00R0 * Inst : HP_16
Misc : *EPA*30.6G/5.0ML*34 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 22 18:55 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	6.17	6.18	133356	124792	9.003	8.330	
	Spiked Amount 9.903			Recovery	=	90.91%	84.12%	
22)	S DCB	17.79	17.12	279562	211141	12.9	9.500	#
	Spiked Amount 9.903			Recovery	=	130.26%	95.93%	
	Target Compounds:							
7)	L4 Aroclor-1242	9.42	9.15	20494	12110	38.4	27.1	#
8)	L4 Aroclor-1242 {2}	10.43	9.21f	84889	56390	244.2	200.1	
9)	L4 Aroclor-1242 {3}	10.51	9.51	56757	413668	283.2	1713.3	E#
10)	L4 Aroclor-1242 {4}	10.68	9.98	114746	69584	249.3	143.7	#
11)	L4 Aroclor-1242 {5}	11.22	10.47	118038	7772	436.7	77.3	#
	Sum Aroclor-1242			394925	559524	1251.7	2161.5	
	Average Aroclor-1242					250.337	432.298	
12)	L6 Aroclor-1254	11.70	12.16	328026	400033	396.9	352.5	
13)	L6 Aroclor-1254 {2}	12.41	12.54	190150	212353	333.3	405.2	
14)	L6 Aroclor-1254 {3}	12.65	12.74	429770	286072	354.8	422.4	
15)	L6 Aroclor-1254 {4}	13.05	13.11	273254	421770	450.0	487.5	
16)	L6 Aroclor-1254 {5}	13.45	13.65	289904	511642	447.4	504.5	
	Sum Aroclor-1254			1511105	1831871	1982.4	2172.1	
	Average Aroclor-1254					396.483	434.425	
17)	L7 Aroclor-1260	14.12	13.65	534674	511642	335.5	341.2	
18)	L7 Aroclor-1260 {2}	14.28	13.86	109532	138543	130.1	174.6	#
19)	L7 Aroclor-1260 {3}	14.37	13.95	61787	55095	116.5	109.2	
20)	L7 Aroclor-1260 {4}	14.78	14.31	93329	81814	105.6	111.2	
21)	L7 Aroclor-1260 {5}	15.20	14.85	188513	158119	107.0	88.5	
	Sum Aroclor-1260			987835	945214	393.5	408.4	
	Average Aroclor-1260					158.955	164.942	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16082042.D XPCBH20.M Wed Aug 22 19:03:17 2001 Page 1

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00R1

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: 47158.13

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/21/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	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	220	
11096-82-5	Aroclor-1260	72	
	Surrogate amount spiked	9.26	

TBS 9/11/01 TB 10/1

101

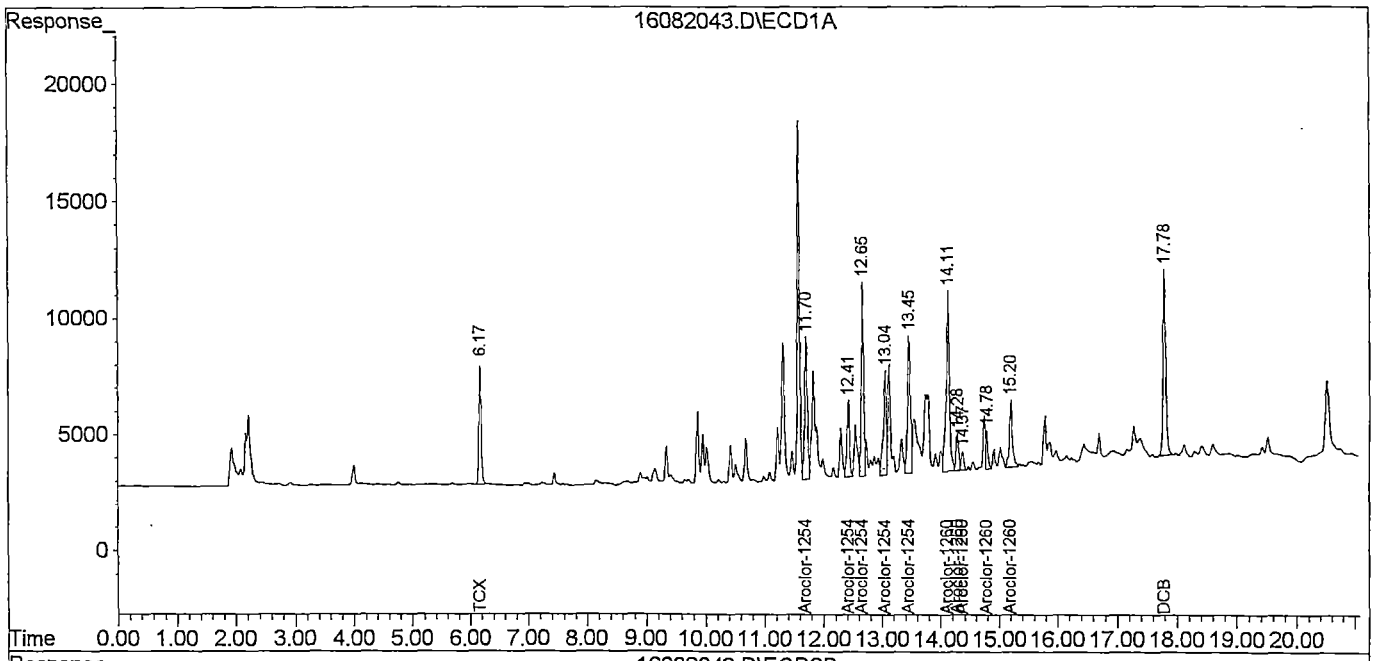
Chromatographic Report

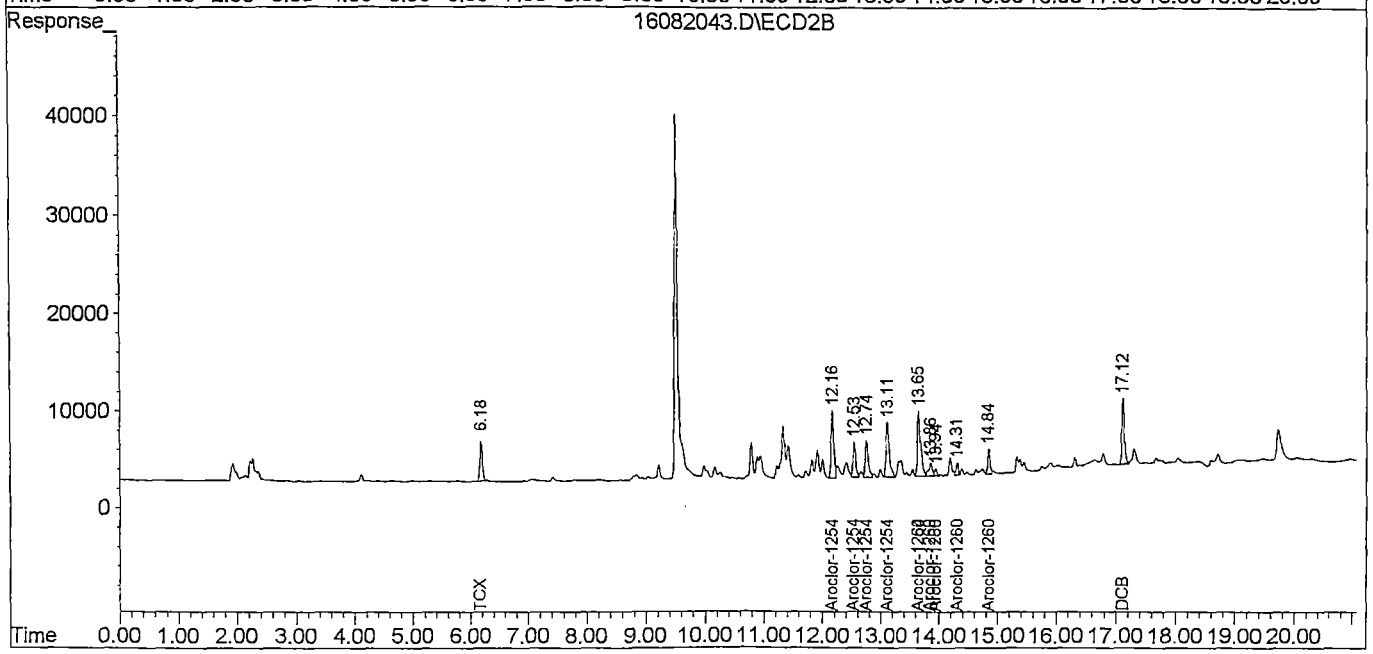
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082043.D\ECD1A.CH Vial: 43
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082043.D\ECD2B.CH
Acq On : 21 Aug 2001 7:33 Operator: TLM
Sample : 47158.13 *E00R1 * Inst : HP_16
Misc : *EPA*31.3G/5.0ML*31 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 28 17:33 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

ok 8-31-01

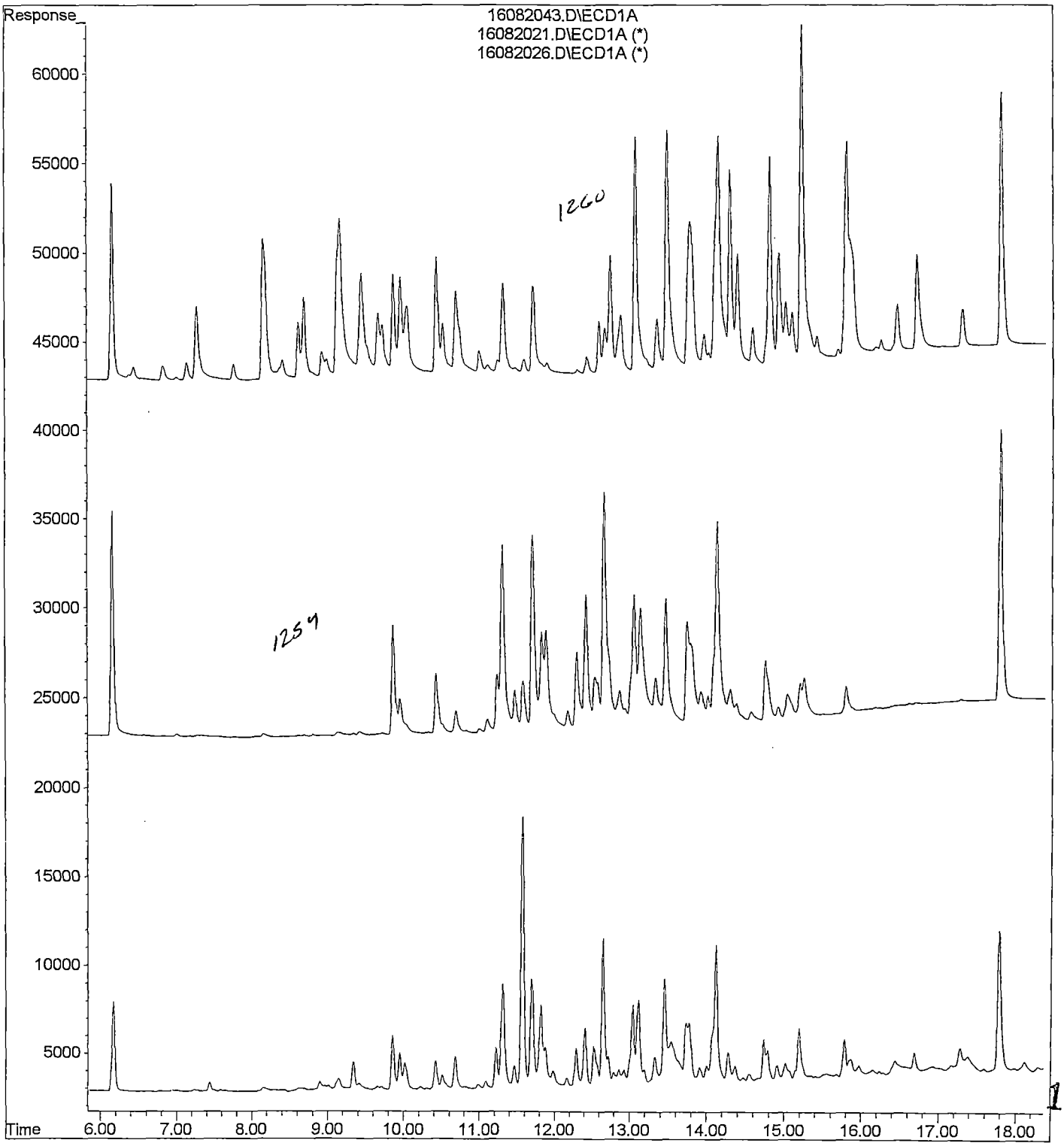




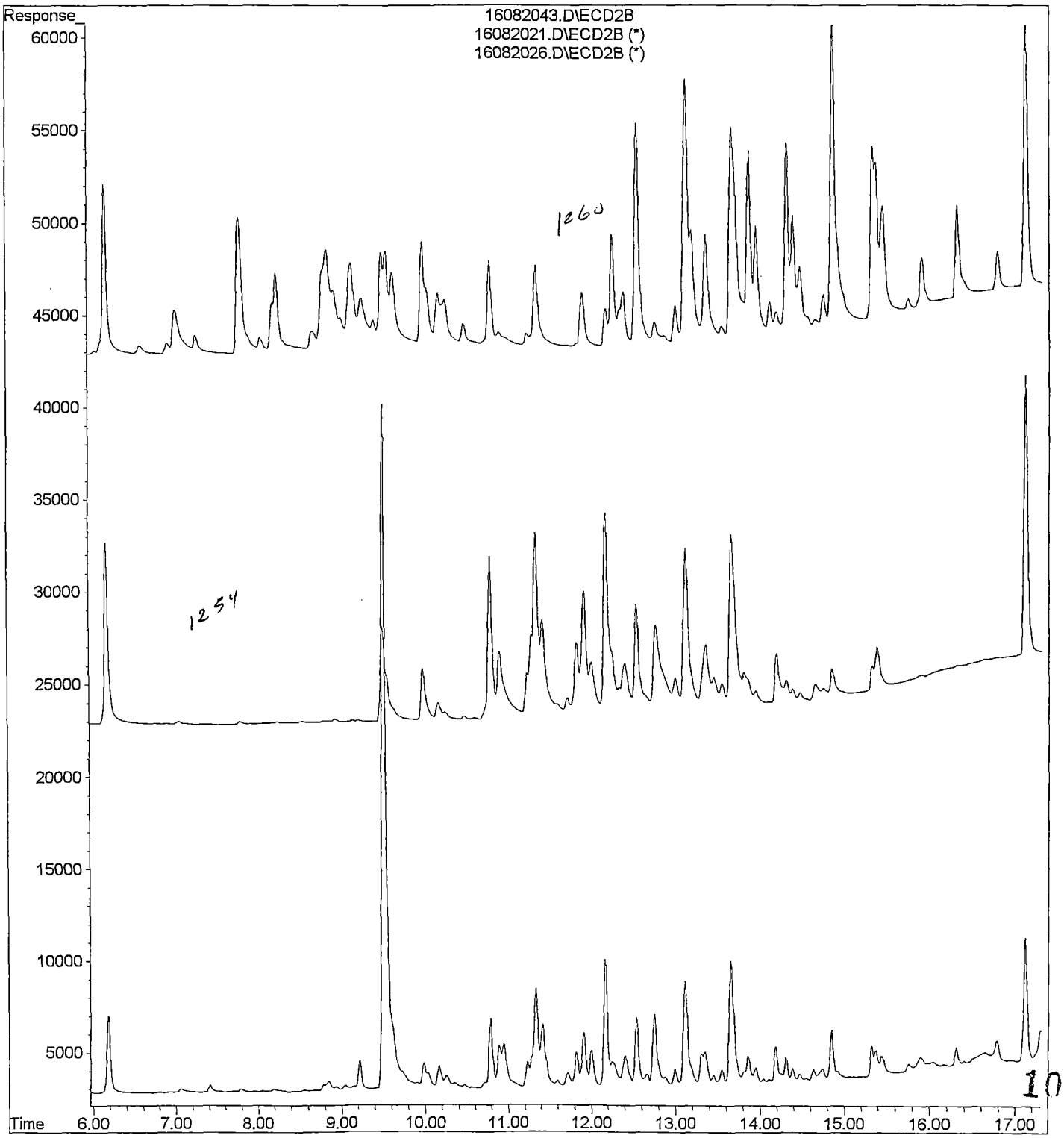
102

File : F:\HPCHEM\HP\16\DATA\08_20_01\16082043.D
Operator : TLM
Acquired : 21 Aug 2001 7:33 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.13 *E00R1 *
Misc Info : *EPA*31.3G/5.0ML*31
Vial Number: 43

ok
8-31-01



File : F:\HPCHEM\HP\16\DATA\08_20_01\16082043.D
Operator : TLM
Acquired : 21 Aug 2001 7:33 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.13 *E00R1 *
Misc Info : *EPA*31.3G/5.0ML*31
Vial Number: 43



Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082043.D\ECD1A.CH Vial: 43
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082043.D\ECD2B.CH
Acq On : 21 Aug 2001 7:33 Operator: TLM
Sample : 47158.13 *E00R1 * Inst : HP_16
Misc : *EPA*31.3G/5.0ML*31 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 28 17:33 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	6.17	6.18	137118	129782	8.657	8.102	
	Spiked Amount 9.261			Recovery	=	93.48%	87.49%	
22)	S DCB	17.79	17.12	259421	201021	11.2	8.458	
	Spiked Amount 9.261			Recovery	=	120.94%	91.33%	
	Target Compounds:							
12)	L6 Aroclor-1254	11.70	12.16	197196	217838	223.1	179.5	
13)	L6 Aroclor-1254 {2}	12.41	12.54	97282	117065	159.4	208.9	#
14)	L6 Aroclor-1254 {3}	12.65	12.75	234432	147342	181.0	203.5	
15)	L6 Aroclor-1254 {4}	13.05	13.11	152166	229952	234.4	248.6	
16)	L6 Aroclor-1254 {5}	13.45	13.65	203692	264882	293.9	244.2	
	Sum Aroclor-1254			884768	977079	1091.9	1084.6	
	Average Aroclor-1254					218.372	216.927	
17)	L7 Aroclor-1260	14.12	13.65	297454	264882	174.6	165.2	
18)	L7 Aroclor-1260 {2}	14.28	13.86	52015	58850	57.8	69.4	
19)	L7 Aroclor-1260 {3}	14.37	13.95	24897	22774	43.9	42.2	
20)	L7 Aroclor-1260 {4}	14.78	14.31	44242	35580	46.8	45.2	
21)	L7 Aroclor-1260 {5}	15.20	14.85	98647	76924	52.4	40.3	
	Sum Aroclor-1260			517256	459012	173.8	167.7	
	Average Aroclor-1260					75.084	72.448	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16082043.D XPCBH20.M Tue Aug 28 17:34:10 2001 Page 1

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00R2

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: 47158.14

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

% Moisture: 37 decanted: (Y/N) __ Date Received: 08/01/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/21/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	50	U
11104-28-2	Aroclor-1221	50	U
11141-16-5	Aroclor-1232	50	U
53469-21-9	Aroclor-1242	140	J ~~P~~
12672-29-6	Aroclor-1248	50	U
11097-69-1	Aroclor-1254	230	
11096-82-5	Aroclor-1260	81	
Surrogate amount spiked		10.14	

TBS 9/11/01

TB 10/1

106

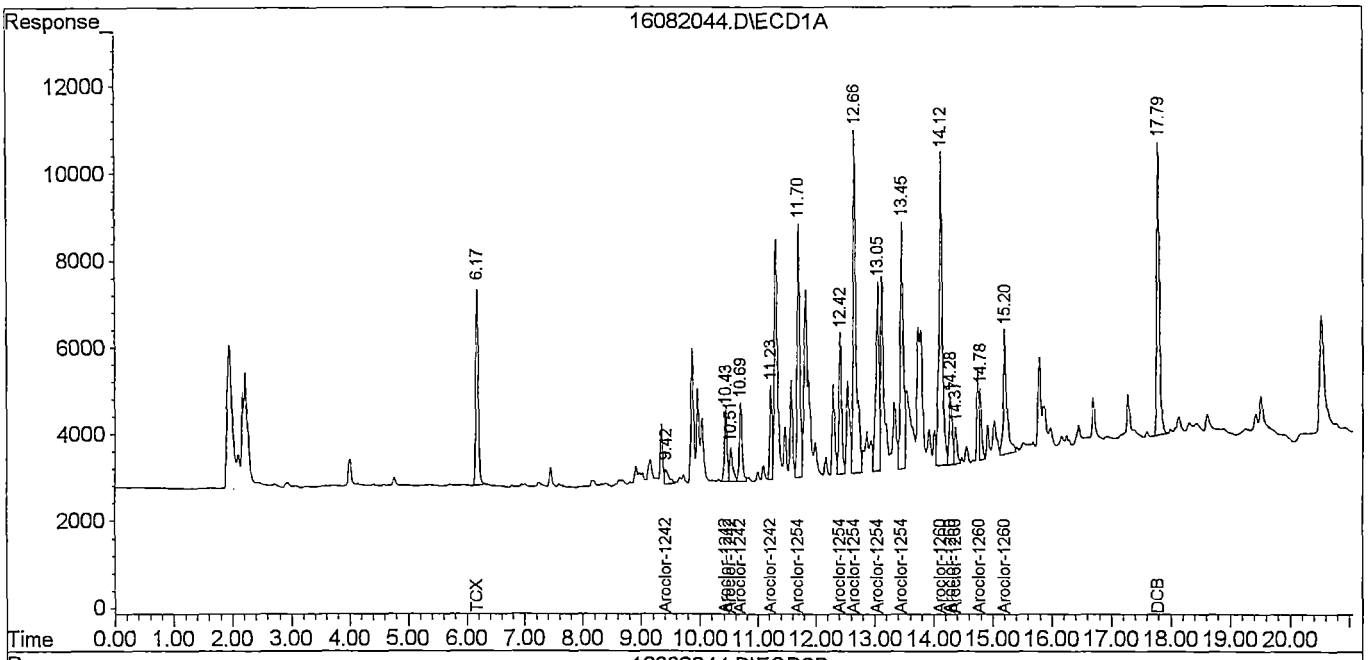
Chromatographic Report

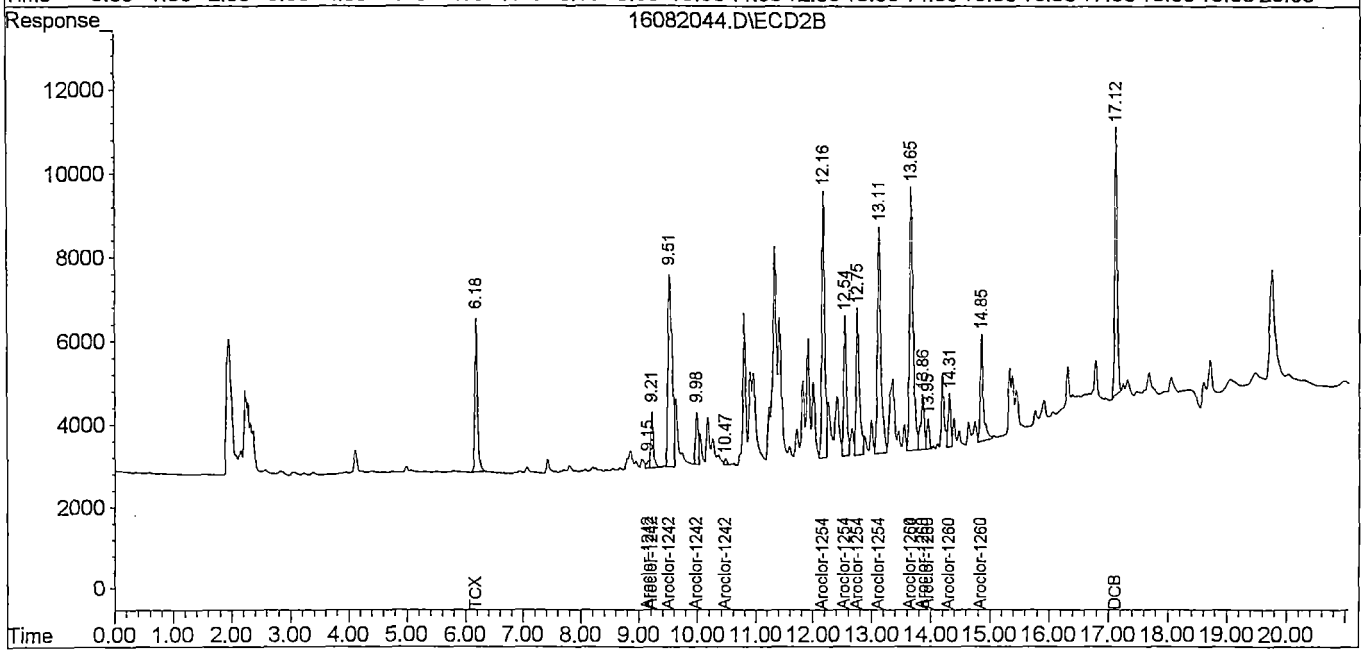
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082044.D\ECD1A.CH Vial: 44
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082044.D\ECD2B.CH
Acq On : 21 Aug 2001 7:58 Operator: TLM
Sample : 47158.14 *E00R2 * Inst : HP_16
Misc : *EPA*31.3G/5.0ML*37 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 28 17:35 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

ok 8-31-01

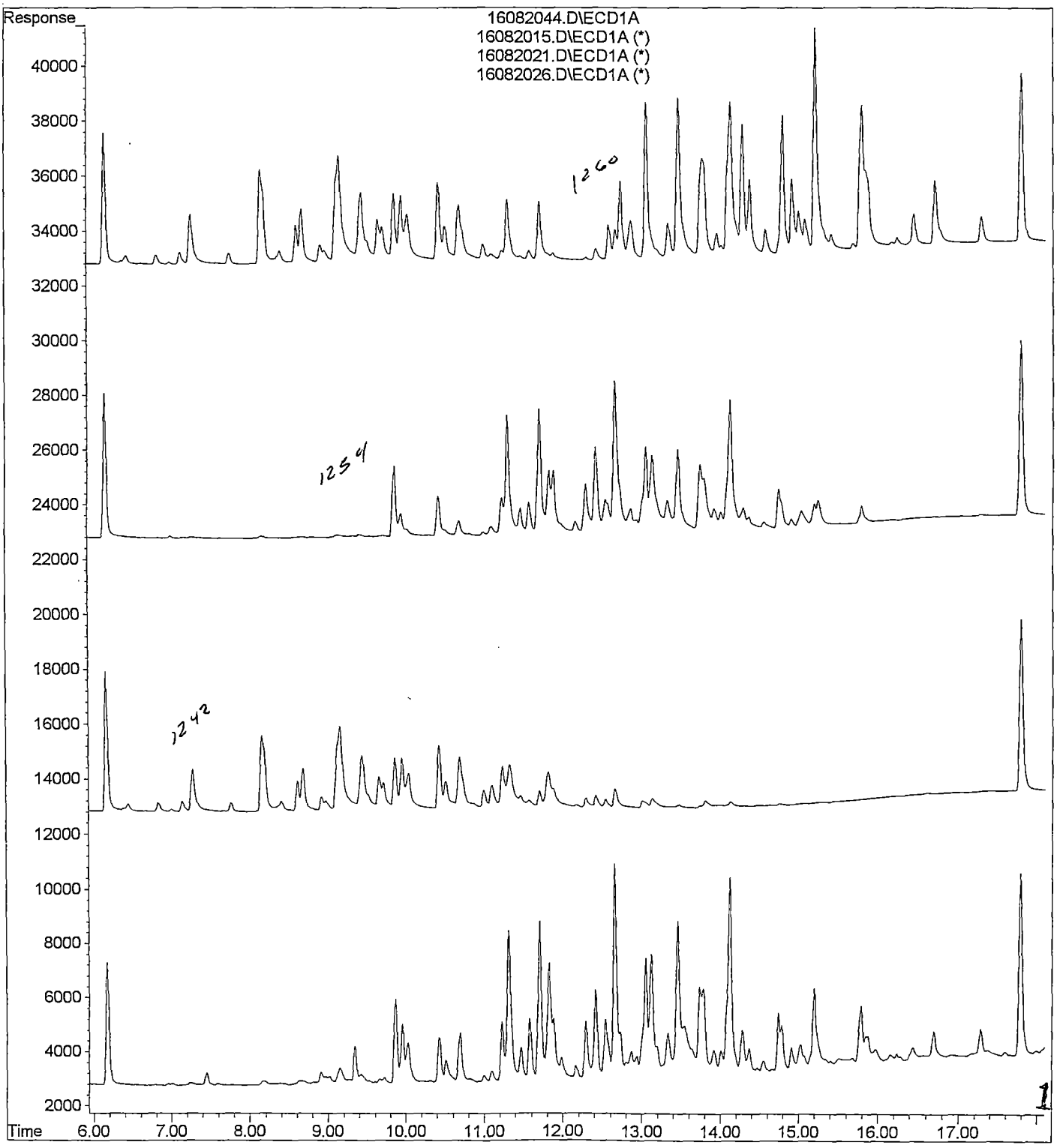




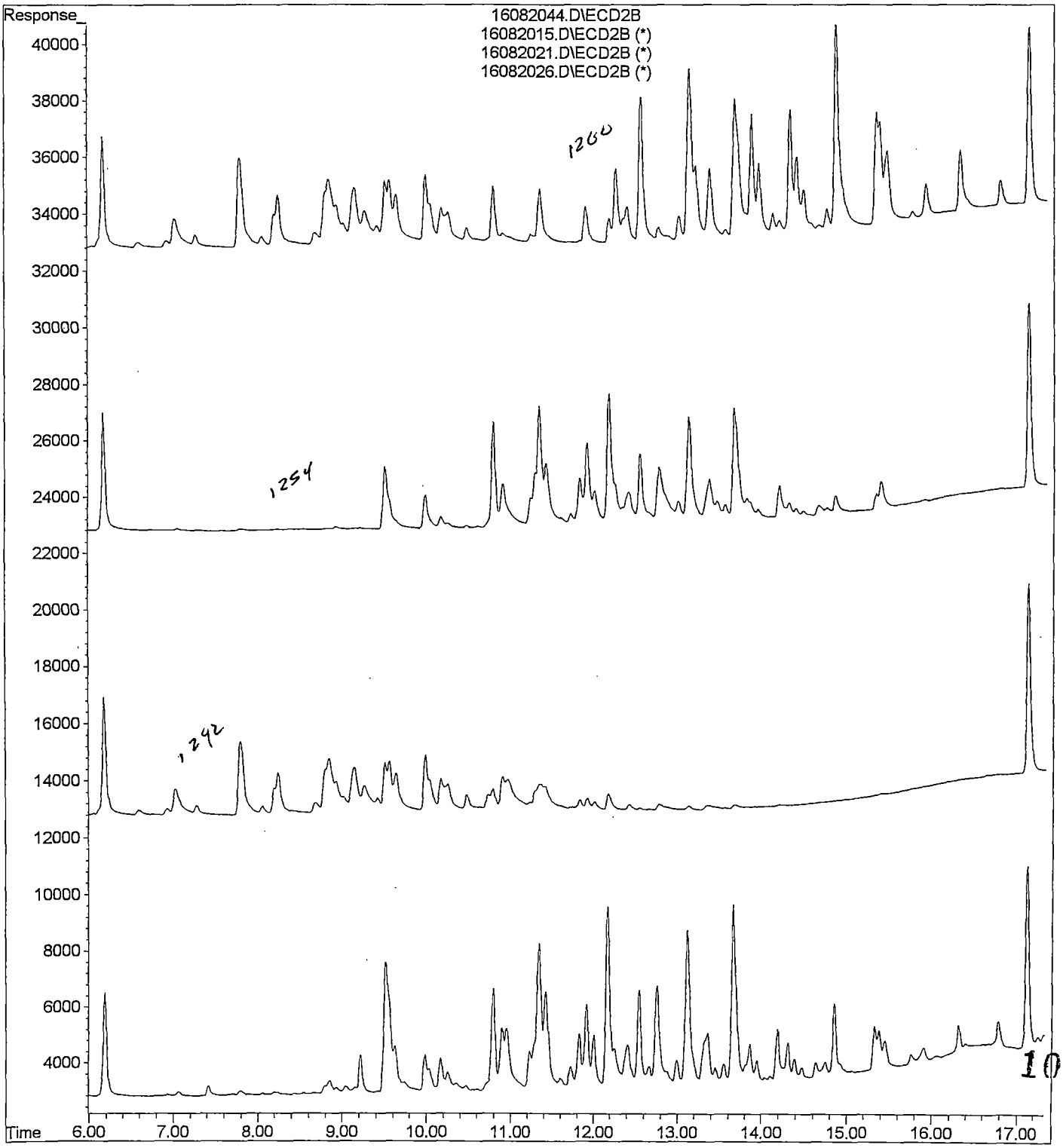
107

File : F:\HPCHEM\HP\16\DATA\08_20_01\16082044.D
Operator : TLM
Acquired : 21 Aug 2001 7:58 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.14 *E00R2 *
Misc Info : *EPA*31.3G/5.0ML*37
Vial Number: 44

ok
8-31-01



File : F:\HPCHEM\HP\16\DATA\08_20_01\16082044.D
Operator : TLM
Acquired : 21 Aug 2001 7:58 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.14 *E00R2 *
Misc Info : *EPA*31.3G/5.0ML*37
Vial Number: 44



Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082044.D\ECD1A.CH Vial: 44
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082044.D\ECD2B.CH
Acq On : 21 Aug 2001 7:58 Operator: TLM
Sample : 47158.14 *E00R2 * Inst : HP_16
Misc : *EPA*31.3G/5.0ML*37 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 28 17:35 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

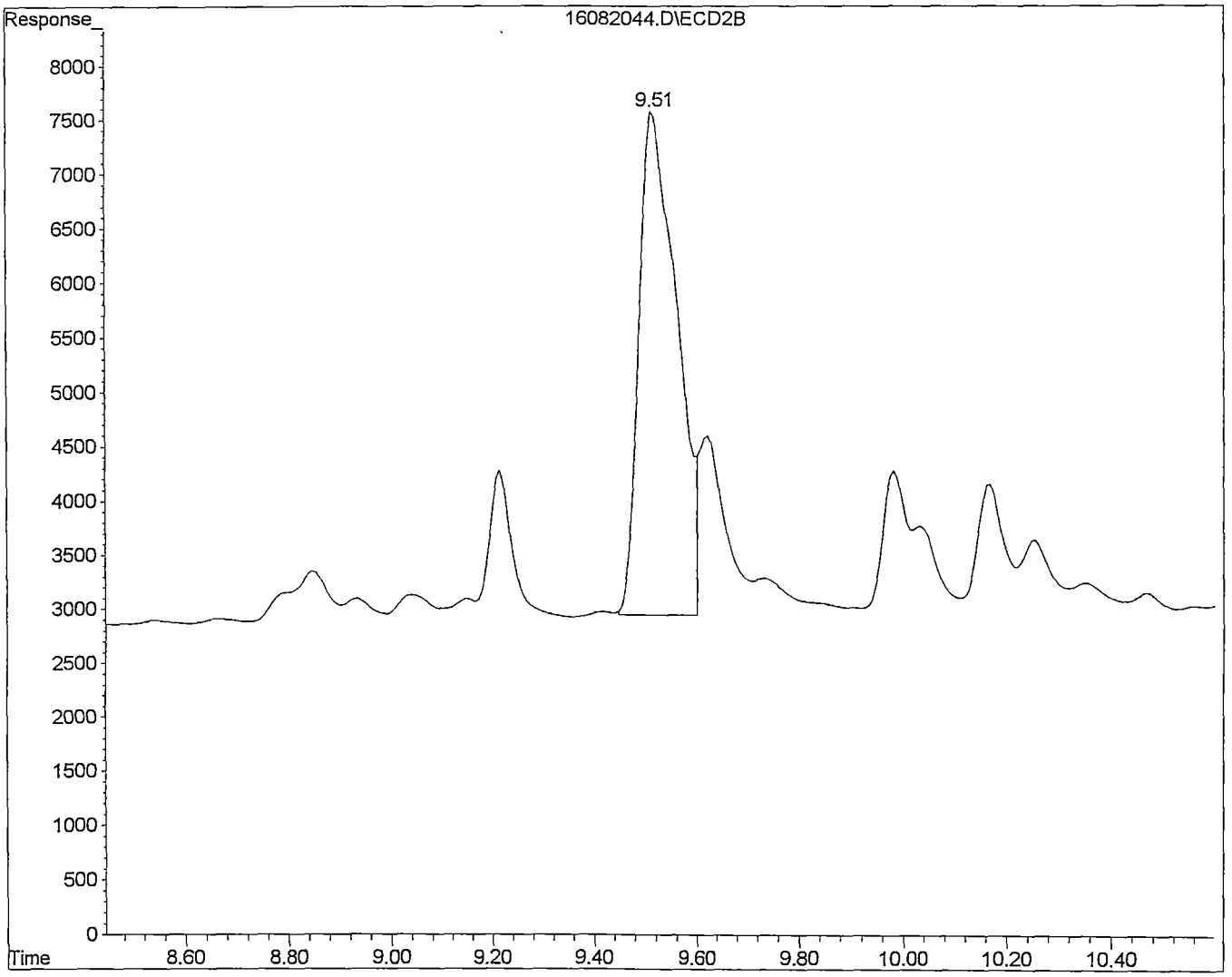
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	6.17	6.18	126850	118799	8.771	8.122
	Spiked Amount 10.143			Recovery	=	86.48%	80.08%
22)	S DCB	17.79	17.12	212209	187335	10.0	8.633
	Spiked Amount 10.143			Recovery	=	98.60%	85.12%
	Target Compounds:						
7)	L4 Aroclor-1242	9.42	9.15	17260	5671	33.1	13.0 #
8)	L4 Aroclor-1242 {2}	10.43	9.22f	48655	42704	143.3	155.2
9)	L4 Aroclor-1242 {3}	10.52	9.51	30602	239748	156.4	1017.0mE#
10)	L4 Aroclor-1242 {4}	10.69	9.98	61640	38952	137.1	82.4 #
11)	L4 Aroclor-1242 {5}	11.23	10.47	62212	4628	235.7	47.2m #
	Sum Aroclor-1242			220369	331704	705.7	1314.7
	Average Aroclor-1242					141.136	262.942
12)	L6 Aroclor-1254	11.70	12.17	187617	216148	232.5	195.1
13)	L6 Aroclor-1254 {2}	12.42	12.54	102920	114145	184.8	223.1
14)	L6 Aroclor-1254 {3}	12.66	12.75	278656	145934	235.6	220.7
15)	L6 Aroclor-1254 {4}	13.05	13.11	154845	227545	261.2	269.4
16)	L6 Aroclor-1254 {5}	13.46	13.66	206826	261619	326.9	264.2
	Sum Aroclor-1254			930864	965391	1241.0	1172.4
	Average Aroclor-1254					248.192	234.485
17)	L7 Aroclor-1260	14.12	13.66	284668	261619	183.0	178.7
18)	L7 Aroclor-1260 {2}	14.28	13.86	54480	57387	66.3	74.1
19)	L7 Aroclor-1260 {3}	14.37	13.95	28452	22025	54.9	44.7
20)	L7 Aroclor-1260 {4}	14.78	14.31	44469	39429	51.6	54.9
21)	L7 Aroclor-1260 {5}	15.20	14.85	115396	90094	67.1	51.6
	Sum Aroclor-1260			527465	470554	214.4	204.9
	Average Aroclor-1260					84.564	80.801

110

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

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_20_01\16082044.D
Date Acquired: 21 Aug 2001 7:58
Inst: HP_16 Operator ID: TLM
Name: 47158.14 *E00R2 *
Misc: *EPA*31.3G/5.0ML*37
Method: F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title: PCB/TOXAPHENE
Quant Time: Aug 28 17:35 2001 Quant Results File: XPCBH20.RES



Aroclor-1242 {3} #2 9.51min area: 239748 m

Integration Time Range: 9.44 - 9.60

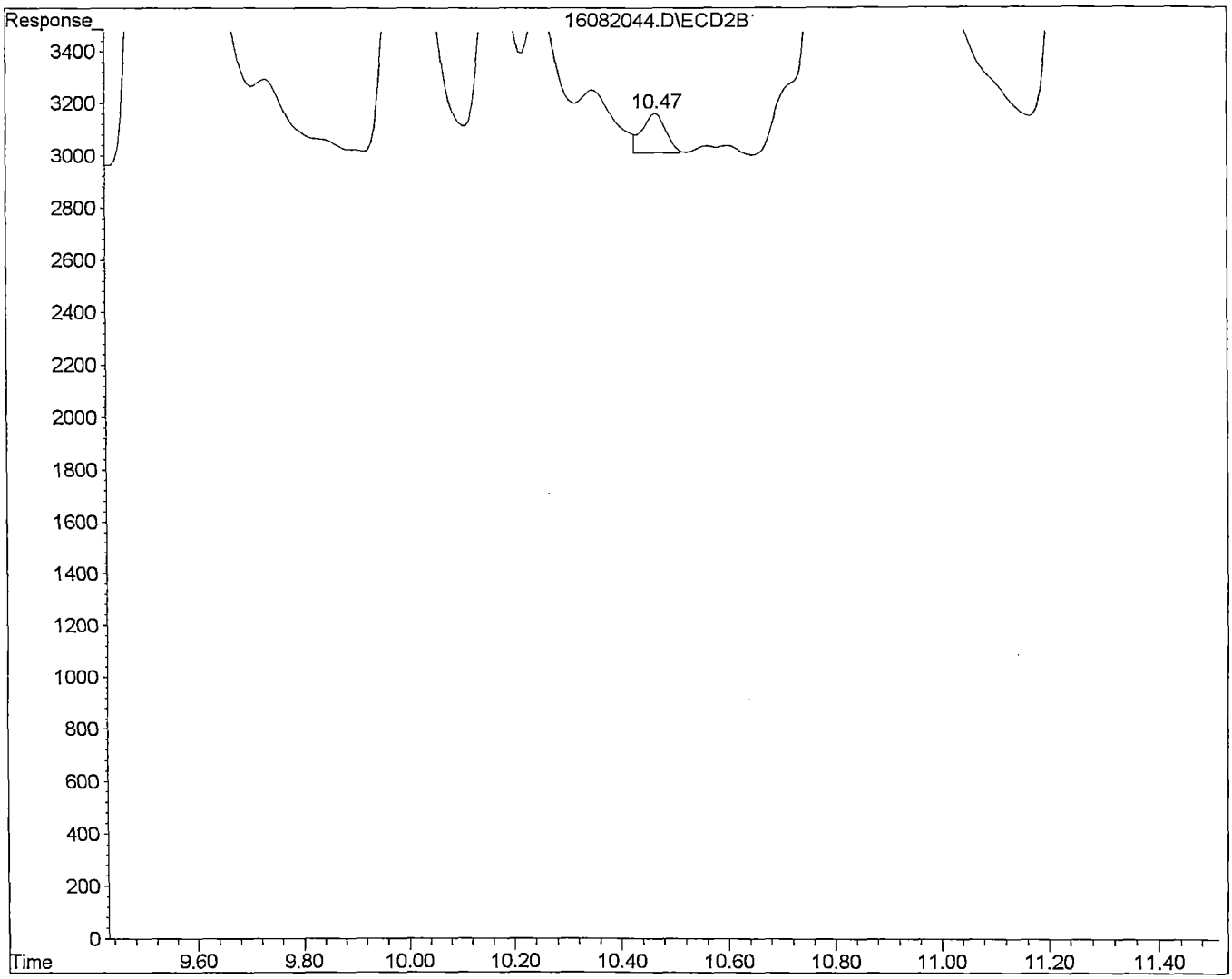
JM
8-28-01

111

F:\HPCHEM\HP\16\DATA\08_20_01\16082044.D
Report generated: Tue Aug 28 17:36:25 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_20_01\16082044.D
Date Acquired: 21 Aug 2001 7:58
Inst: HP_16 Operator ID: TLM
Name: 47158.14 *E00R2 *
Misc: *EPA*31.3G/5.0ML*37
Method: F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title: PCB/TOXAPHENE
Quant Time: Aug 28 17:35 2001 Quant Results File: XPCBH20.RES



Aroclor-1242 {5} #2 10.47min area: 4628 m

Integration Time Range: 10.43 - 10.51

JM 8-28-01

112

F:\HPCHEM\HP\16\DATA\08_20_01\16082044.D
Report generated: Tue Aug 28 17:36:26 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00R3

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: 47158.15

Sample wt/vol: 34.7 (g/mL) G Lab File ID:_____

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/21/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	34	U
11141-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	69	
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	100	J
11096-82-5	Aroclor-1260	36	
	Surrogate amount spiked	6.78	

TBS 9/11/01 TB 10/1

FORM I PCB

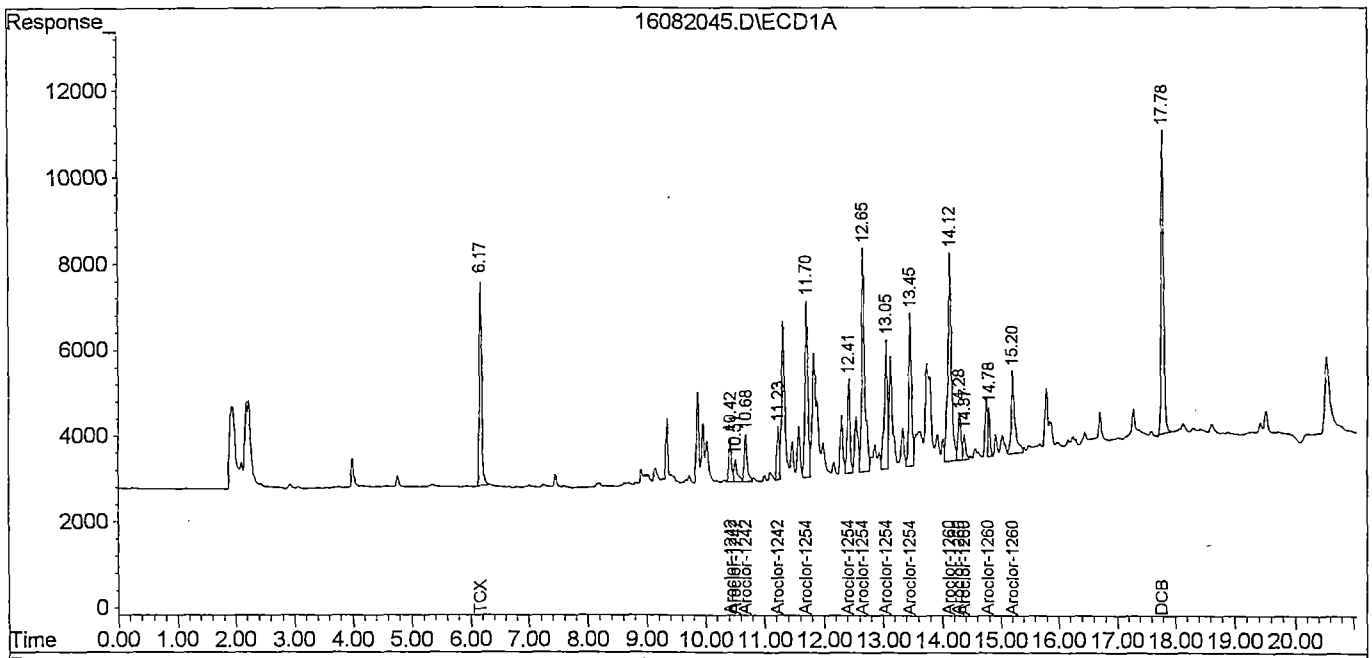
Chromatographic Report

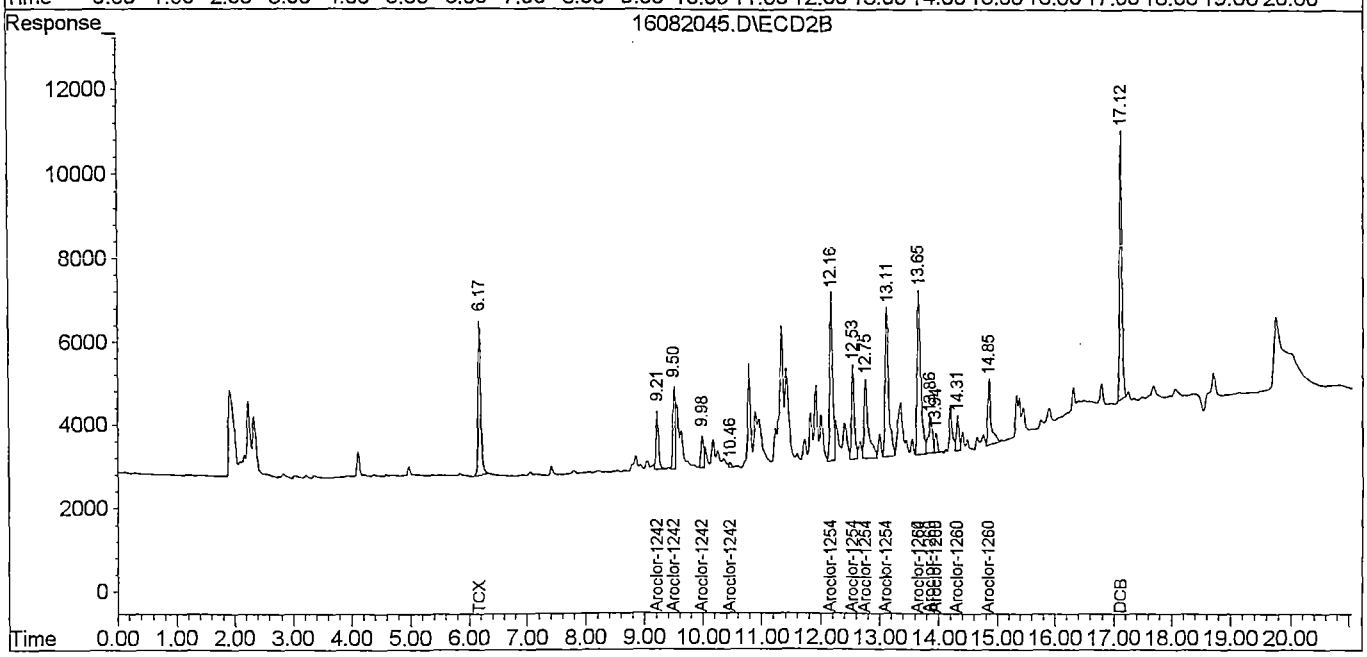
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082045.D\ECD1A.CH Vial: 45
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082045.D\ECD2B.CH
Acq On : 21 Aug 2001 8:23 Operator: TLM
Sample : 47158.15 *E00R3 * Inst : HP_16
Misc : *EPA*34.7G/5.0ML*15 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 28 17:43 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

ok 8-31-01

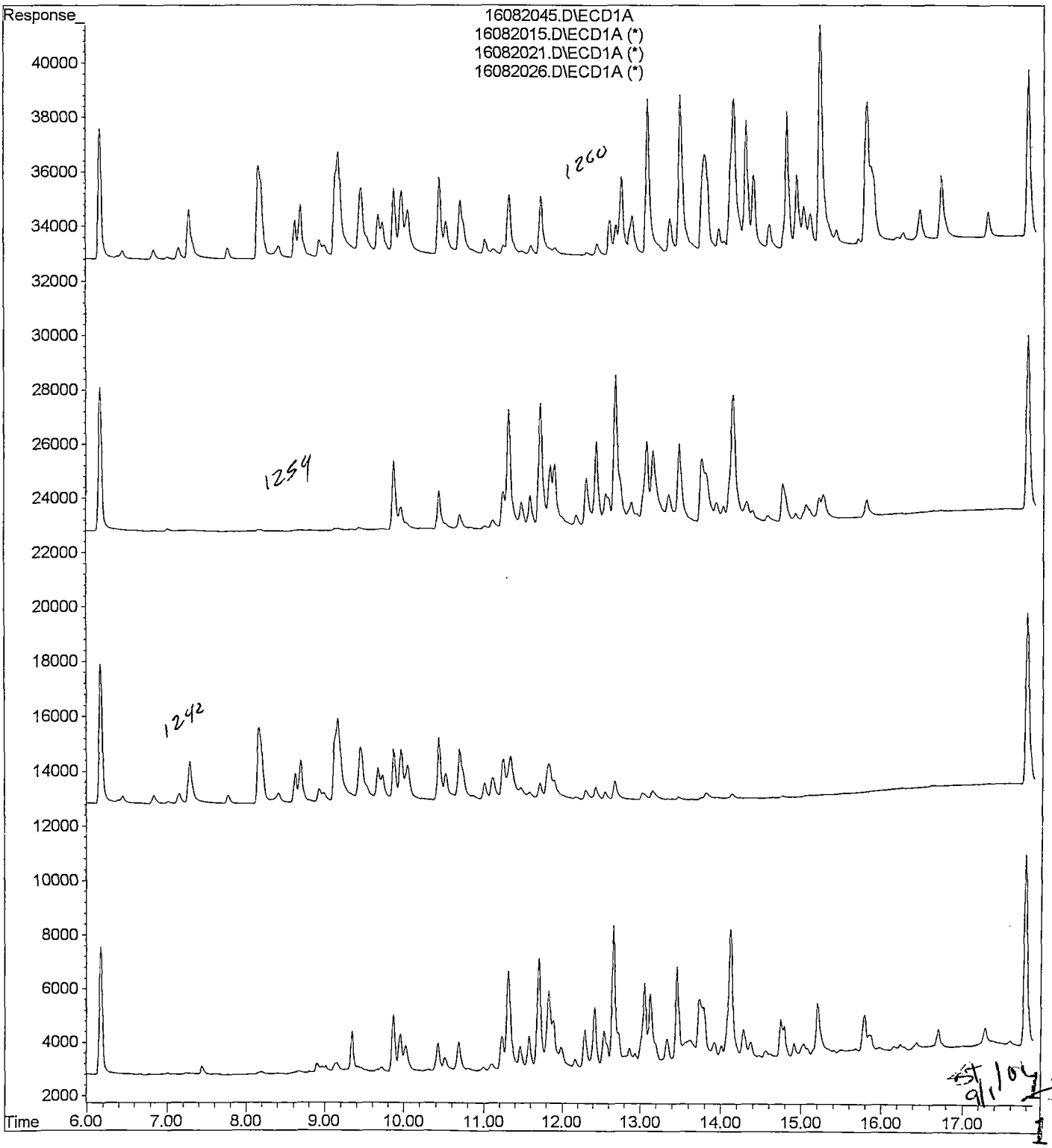




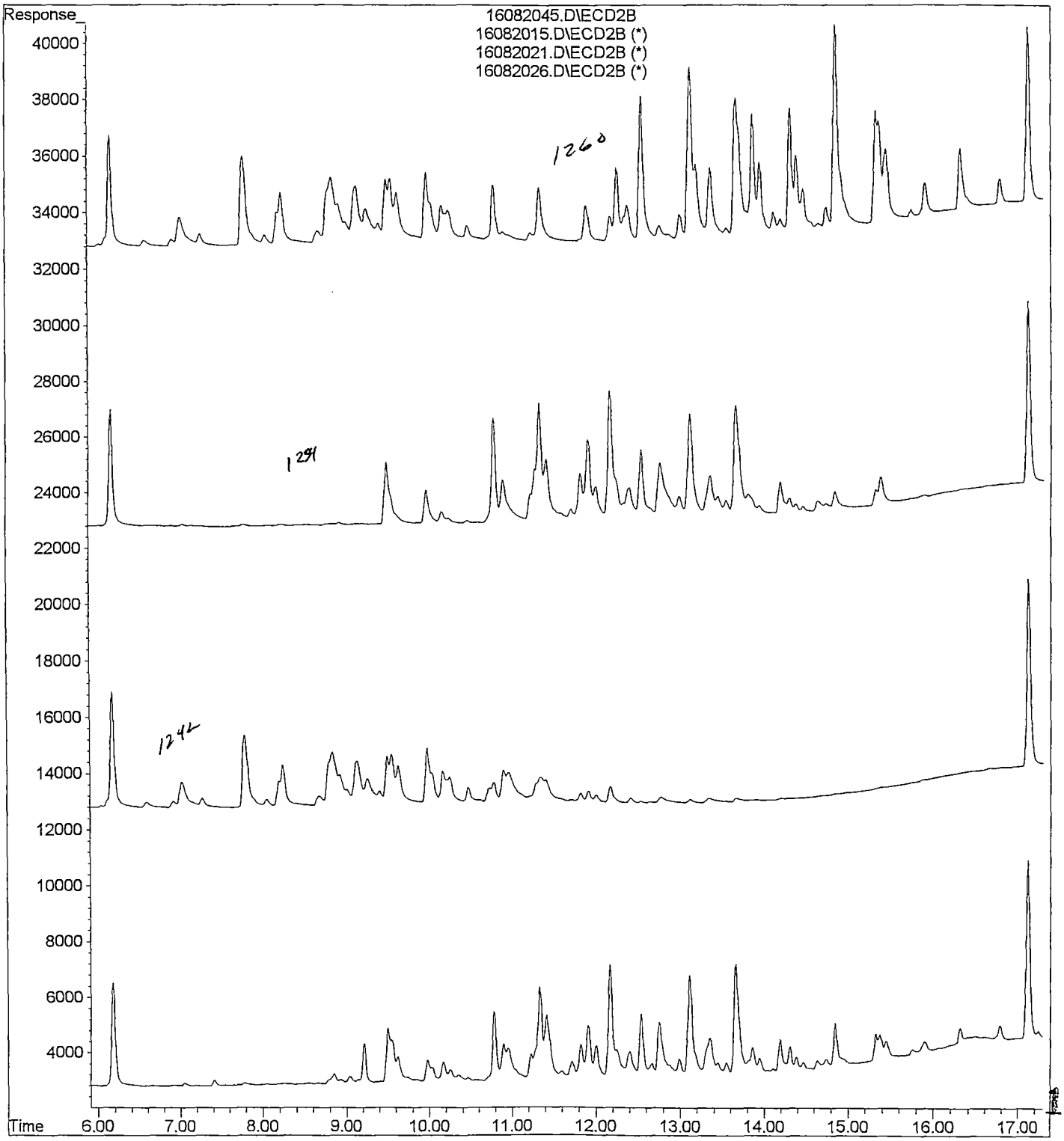
1/4

File : F:\HPCHEM\HP\16\DATA\08_20_01\16082045.D
Operator : TLM
Acquired : 21 Aug 2001 8:23 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.15 *E00R3 *
Misc Info : *EPA*34.7G/5.0ML*15
Vial Number: 45

ok
8-31-01



File : F:\HPCHEM\HP\16\DATA\08_20_01\16082045.D
Operator : TLM
Acquired : 21 Aug 2001 8:23 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.15 *E00R3 *
Misc Info : *EPA*34.7G/5.0ML*15
Vial Number: 45



Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082045.D\ECD1A.CH Vial: 45
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082045.D\ECD2B.CH
Acq On : 21 Aug 2001 8:23 Operator: TLM
Sample : 47158.15 *E00R3 * Inst : HP_16
Misc : *EPA*34.7G/5.0ML*15 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 28 17:43 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	6.17	6.18	125733	112462	5.812	5.141
	Spiked Amount 6.781			Recovery	=	85.71%	75.82%
22)	S DCB	17.78	17.12	212007	186568	6.703	5.748
	Spiked Amount 6.781			Recovery	=	98.85%	84.77%
	Target Compounds:						
8)	L4 Aroclor-1242 {2}	10.43	9.21f	31967	42504	63.0	103.3m #
9)	L4 Aroclor-1242 {3}	10.51	9.50	19171	59468	65.5	168.7m #
10)	L4 Aroclor-1242 {4}	10.69	9.98	38853	26332	57.8	37.2m #
11)	L4 Aroclor-1242 {5}	11.23	10.46	35901	3240	90.9	22.1m #
	Sum Aroclor-1242			125892	131544	277.2	331.2
	Average Aroclor-1242					69.297	82.803
12)	L6 Aroclor-1254	11.70	12.16	141981	138469	117.6	83.5 #
13)	L6 Aroclor-1254 {2}	12.42	12.54	69750	75936	83.7	99.2
14)	L6 Aroclor-1254 {3}	12.66	12.75	189607	98759	107.2	99.9
15)	L6 Aroclor-1254 {4}	13.05	13.11	103493	152809	116.7	120.9
16)	L6 Aroclor-1254 {5}	13.46	13.66	114599	167738	121.1	113.2
	Sum Aroclor-1254			619430	633711	546.3	516.8
	Average Aroclor-1254					109.266	103.361
17)	L7 Aroclor-1260	14.12	13.66	199384	167738	85.7	76.6
18)	L7 Aroclor-1260 {2}	14.28	13.86	40113	40442	32.6	34.9
19)	L7 Aroclor-1260 {3}	14.37	13.95	20417	14734	26.4	20.0
20)	L7 Aroclor-1260 {4}	14.78	14.31	29860	26574	23.1	24.7
21)	L7 Aroclor-1260 {5}	15.20	14.85	84574	59110	32.9	22.6 #
	Sum Aroclor-1260			374348	308598	68.0	60.6
	Average Aroclor-1260					40.134	35.775

JM 8-28-01

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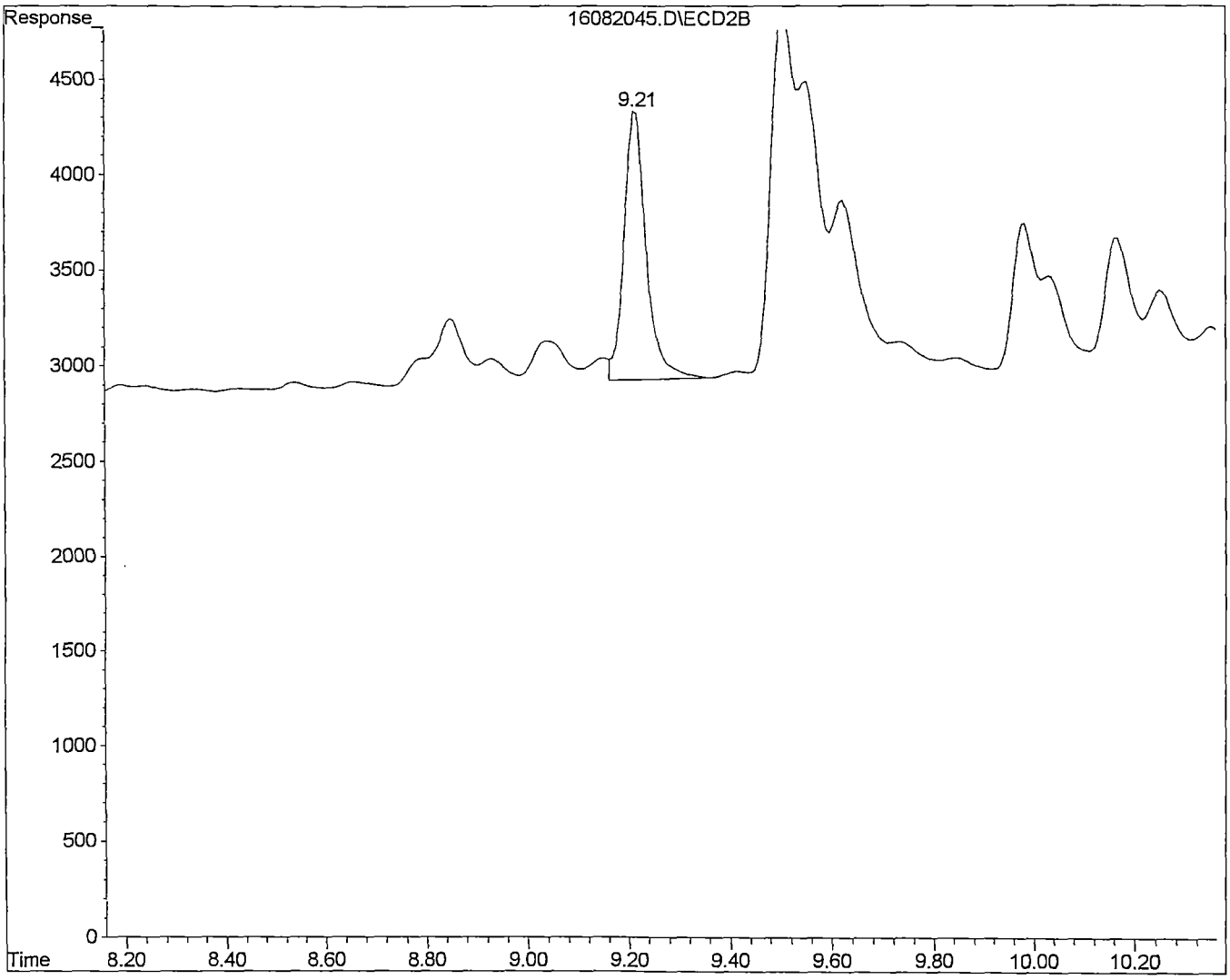
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_20_01\16082045.D
Date Acquired: 21 Aug 2001 8:23
Inst: HP_16 Operator ID: TLM
Name: 47158.15 *E00R3 *
Misc: *EPA*34.7G/5.0ML*15
Method: F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title: PCB/TOXAPHENE
Quant Time: Aug 28 17:43 2001 Quant Results File: XPCBH20.RES



Aroclor-1242 {2} #2 9.21min area: 42504 m

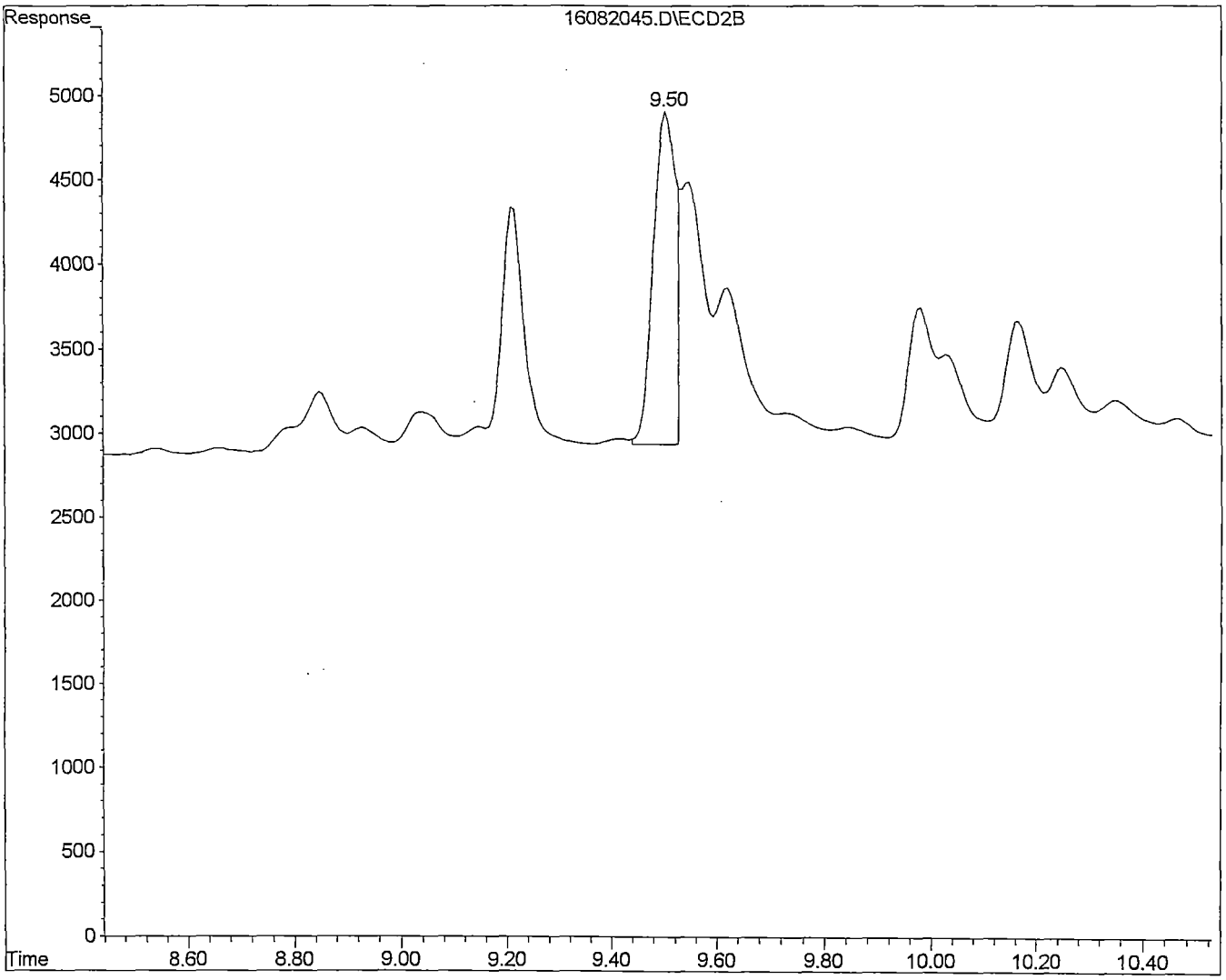
Integration Time Range: 9.16 - 9.36

JM 8-28-01

F:\HPCHEM\HP\16\DATA\08_20_01\16082045.D
Report generated: Tue Aug 28 17:44:39 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_20_01\16082045.D
Date Acquired: 21 Aug 2001 8:23
Inst: HP_16 Operator ID: TLM
Name: 47158.15 *E00R3 *
Misc: *EPA*34.7G/5.0ML*15
Method: F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title: PCB/TOXAPHENE
Quant Time: Aug 28 17:43 2001 Quant Results File: XPCBH20.RES



Aroclor-1242 {3} #2 9.50min area: 59468 m

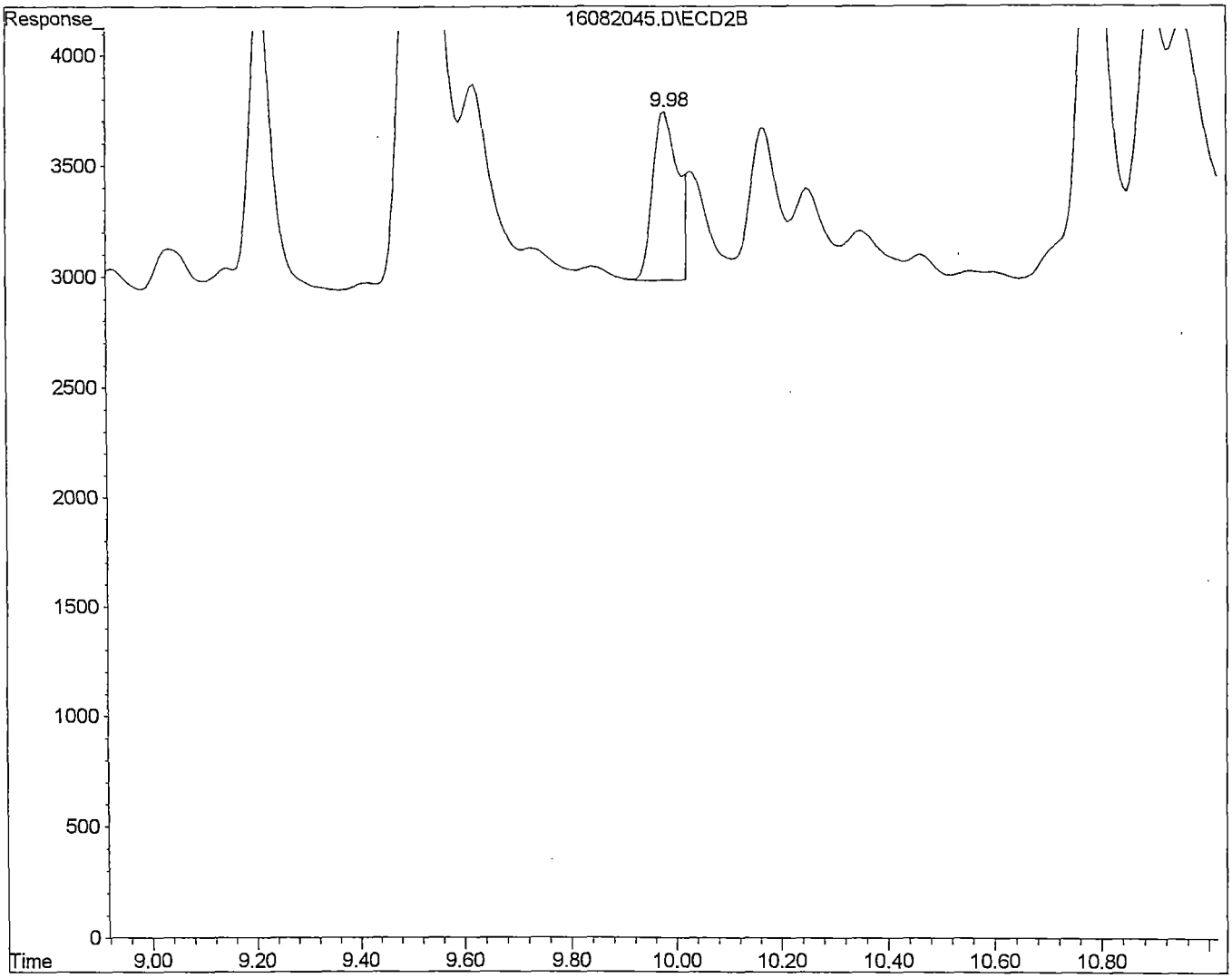
Integration Time Range: 9.44 - 9.53

TM
8-28-01

F:\HPCHEM\HP\16\DATA\08_20_01\16082045.D
Report generated: Tue Aug 28 17:44:40 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_20_01\16082045.D
Date Acquired: 21 Aug 2001 8:23
Inst: HP_16 Operator ID: TLM
Name: 47158.15 *E00R3 *
Misc: *EPA*34.7G/5.0ML*15
Method: F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title: PCB/TOXAPHENE
Quant Time: Aug 28 17:43 2001 Quant Results File: XPCBH20.RES



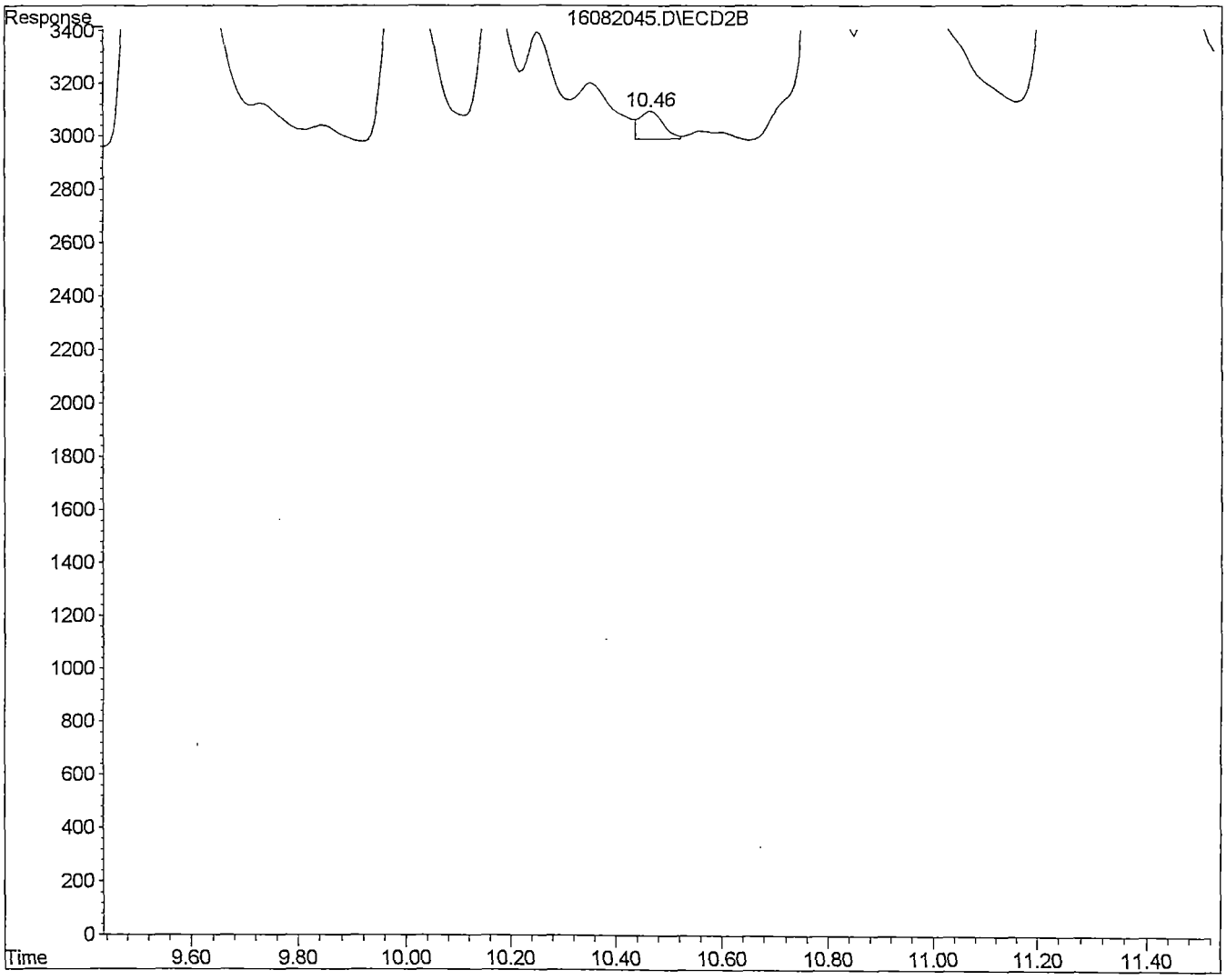
Aroclor-1242 {4} #2 9.98min area: 26332 m

Integration Time Range: 9.92 - 10.02 TM 8-28-01

F:\HPCHEM\HP\16\DATA\08_20_01\16082045.D
Report generated: Tue Aug 28 17:44:40 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_20_01\16082045.D
Date Acquired: 21 Aug 2001 8:23
Inst: HP_16 Operator ID: TLM
Name: 47158.15 *E00R3 *
Misc: *EPA*34.7G/5.0ML*15
Method: F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title: PCB/TOXAPHENE
Quant Time: Aug 28 17:43 2001 Quant Results File: XPCBH20.RES



Aroclor-1242 {5} #2 10.46min area: 3240 m

Integration Time Range: 10.43 - 10.52

TM 8-28-01

F:\HPCHEM\HP\16\DATA\08_20_01\16082045.D
Report generated: Tue Aug 28 17:44:41 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00R4

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: 47158.16

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/21/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	41	
11096-82-5	Aroclor-1260	15	J
	Surrogate amount spiked	7.82	

TB 10/1 TBS 9/11/01

FORM I PCB

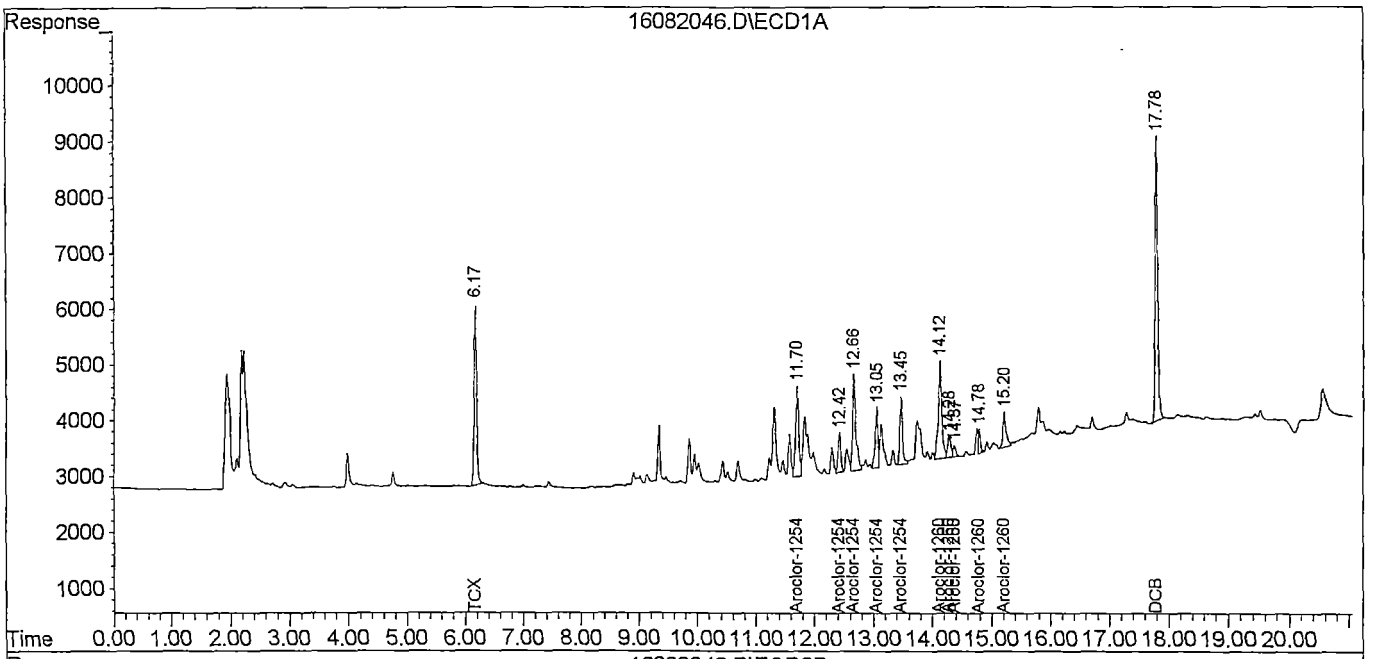
Chromatographic Report

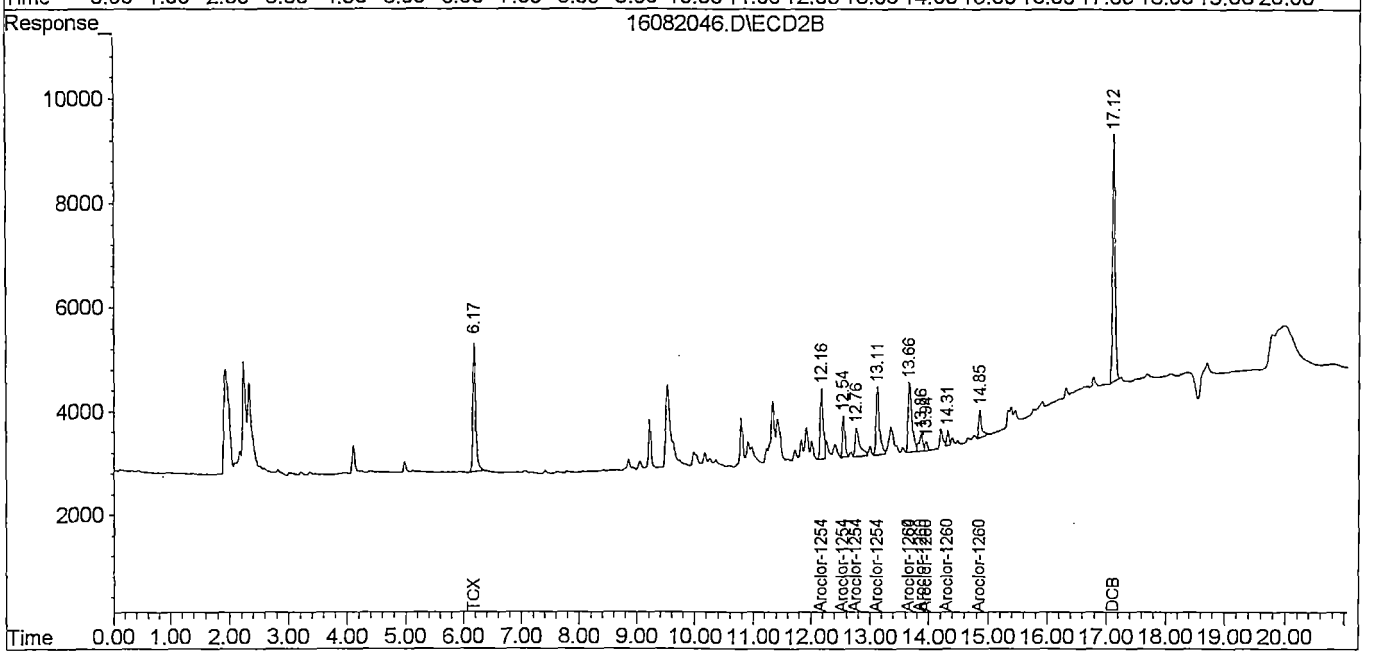
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082046.D\ECD1A.CH Vial: 46
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082046.D\ECD2B.CH
Acq On : 21 Aug 2001 , 8:47 Operator: TLM
Sample : 47158.16 *E00R4 * Inst : HP_16
Misc : *EPA*30.1G/5.0ML*15 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 28 17:45 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

ok 8-31-01 [illegible]





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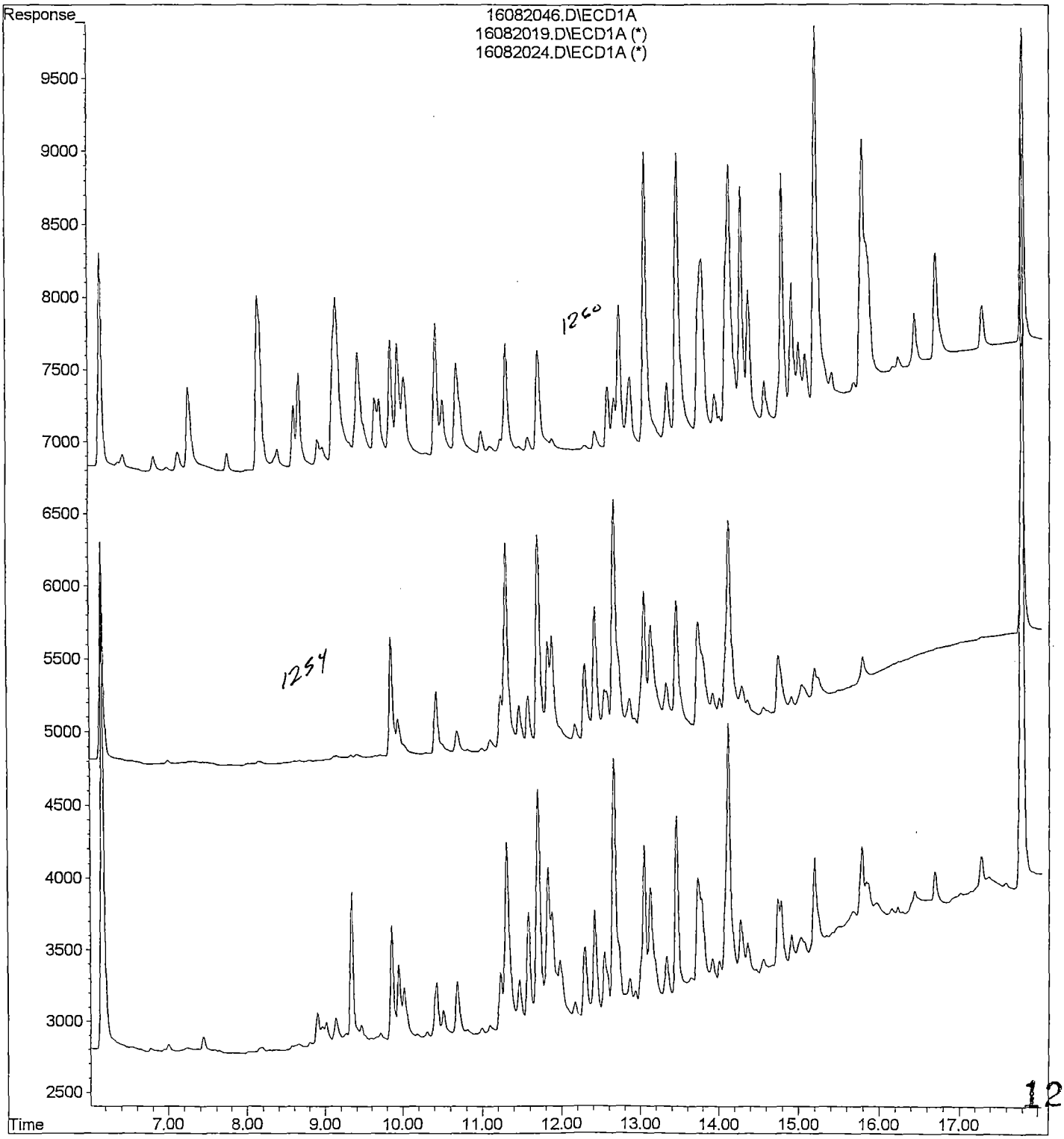
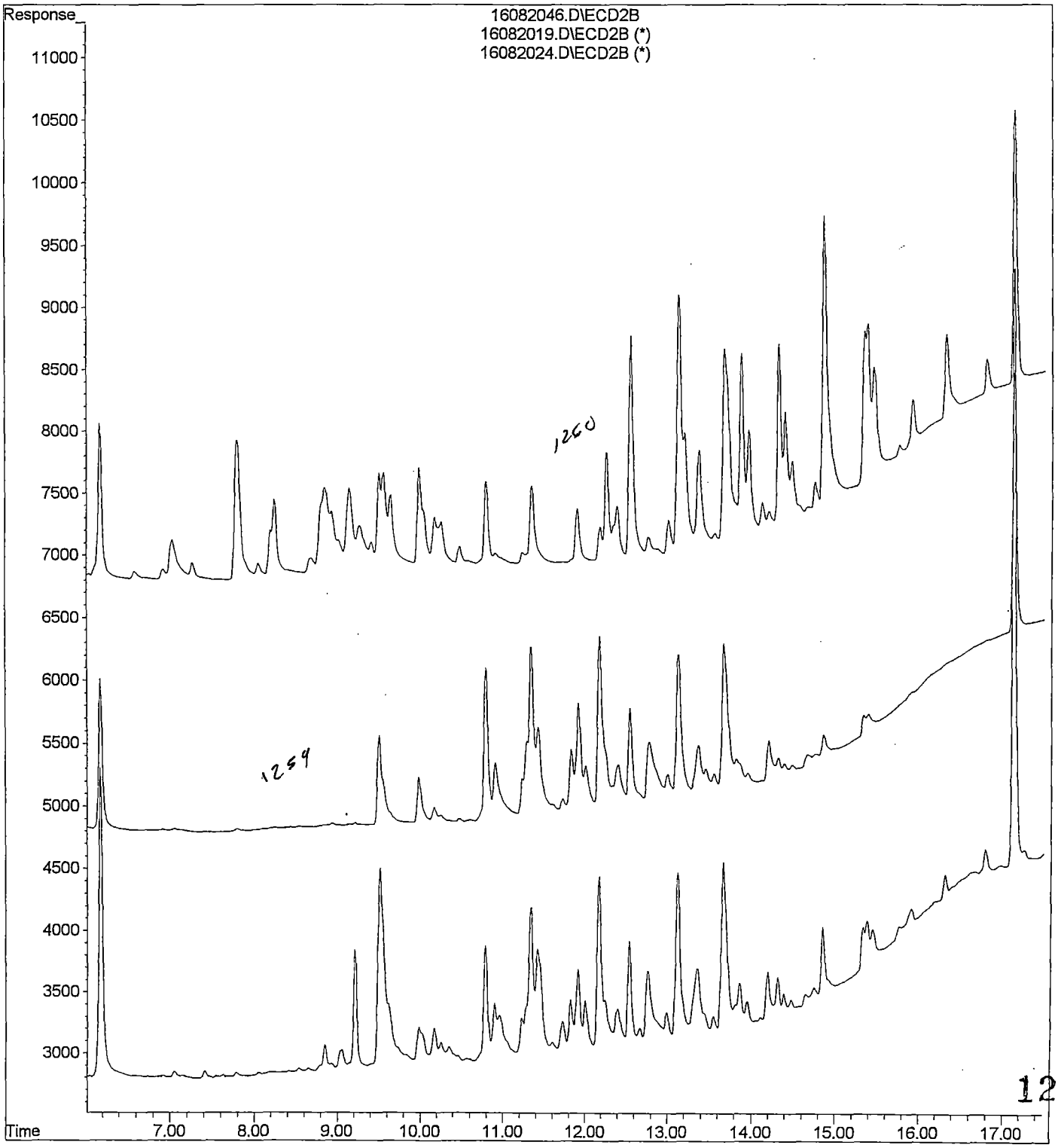
File : F:\HPCHEM\HP\16\DATA\08_20_01\16082046.D
Operator : TLM
Acquired : 21 Aug 2001 8:47 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.16 *E00R4 *
Misc Info : *EPA*30.1G/5.0ML*15
Vial Number: 46

ok
8-31-01



File : F:\HPCHEM\HP\16\DATA\08_20_01\16082046.D
Operator : TLM
Acquired : 21 Aug 2001 8:47 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.16 *E00R4 *
Misc Info : *EPA*30.1G/5.0ML*15
Vial Number: 46



Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082046.D\ECD1A.CH Vial: 46
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082046.D\ECD2B.CH
Acq On : 21 Aug 2001 8:47 Operator: TLM
Sample : 47158.16 *E00R4 * Inst : HP_16
Misc : *EPA*30.1G/5.0ML*15 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 28 17:45 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	6.17	6.18	89033	80065	4.745	4.219	
	Spiked Amount 7.817			Recovery	=	60.70%	53.97%	
22)	S DCB	17.78	17.12	151642	139460	5.527	4.953	
	Spiked Amount 7.817			Recovery	=	70.70%	63.36%	
	Target Compounds:							
12)	L6 Aroclor-1254	11.70	12.17	61207	47959	58.5	33.4	#
13)	L6 Aroclor-1254 {2}	12.42	12.54	22619	25865	31.3	39.0	
14)	L6 Aroclor-1254 {3}	12.66	12.76	65706	30939	42.8	36.1	
15)	L6 Aroclor-1254 {4}	13.05	13.12	34915	54951	45.4	50.1	
16)	L6 Aroclor-1254 {5}	13.46	13.66	38862	62590	47.3	48.7	
	Sum Aroclor-1254			223310	222304	225.3	207.2	
	Average Aroclor-1254					45.061	41.447	
17)	L7 Aroclor-1260	14.12	13.66	71979	62590	35.7	32.9	
18)	L7 Aroclor-1260 {2}	14.28	13.86	14403	15292	13.5	15.2	
19)	L7 Aroclor-1260 {3}	14.37	13.95	6621	5461	9.855	8.540	
20)	L7 Aroclor-1260 {4}	14.78	14.31	11792	8581	10.5	9.209	
21)	L7 Aroclor-1260 {5}	15.20	14.85	24805	18306	11.1	8.086	#
	Sum Aroclor-1260			129600	110230	31.5	28.9	
	Average Aroclor-1260					16.133	14.800	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16082046.D XPCBH20.M Tue Aug 28 17:45:42 2001 Page 1

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00R5

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: 47158.17

Sample wt/vol: 31.4 (g/mL) G Lab File ID:_____

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/21/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	40	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	45	
11096-82-5	Aroclor-1260	15	JP
	Surrogate amount spiked	8.06	

TBS 9/11/01 TB 10/1

FORM I PCB

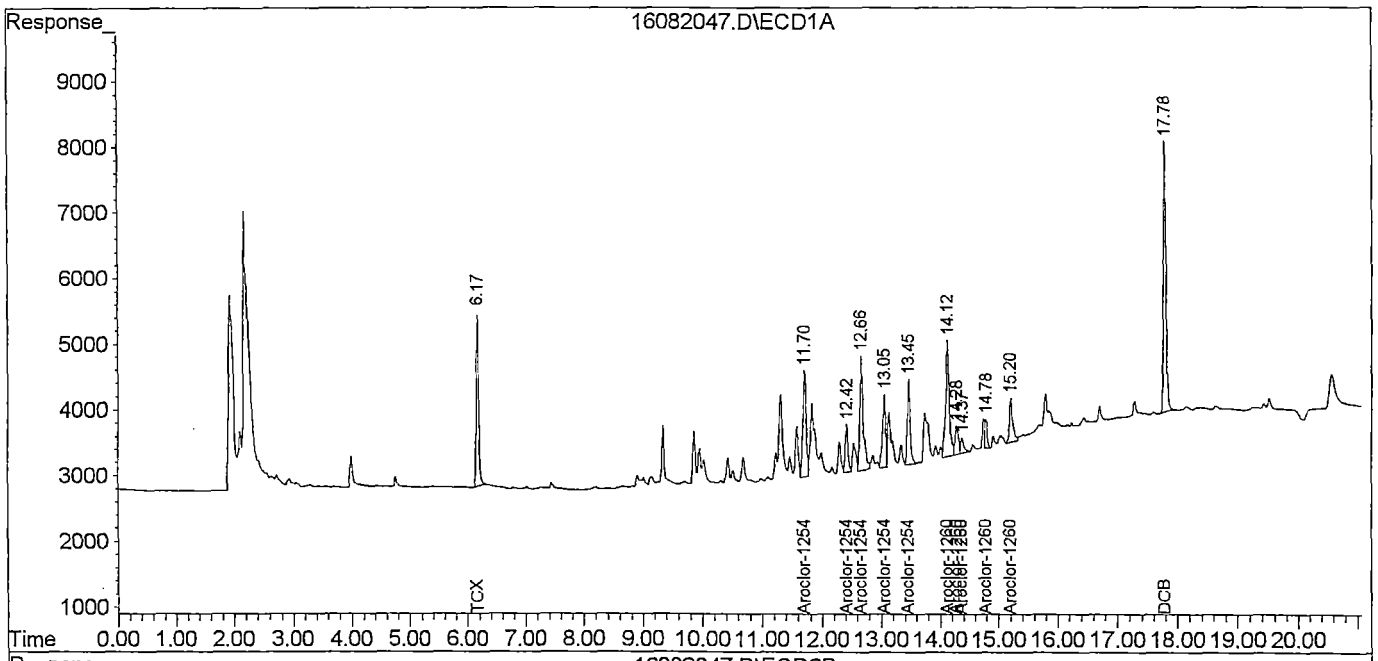
Chromatographic Report

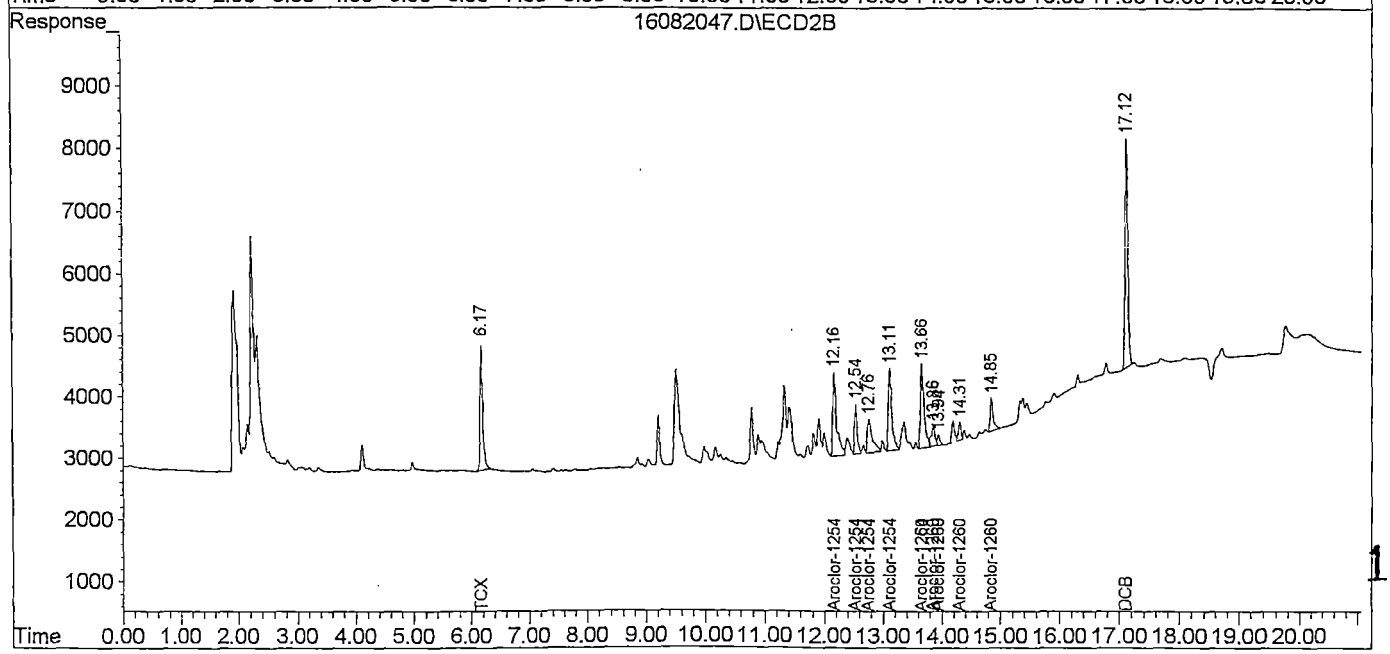
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082047.D\ECD1A.CH Vial: 47
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082047.D\ECD2B.CH
Acq On : 21 Aug 2001 9:12 Operator: TLM
Sample : 47158.17 *E00R5 * Inst : HP_16
Misc : *EPA*31.4G/5.0ML*21 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 28 17:46 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

ok
8-31-01 DH

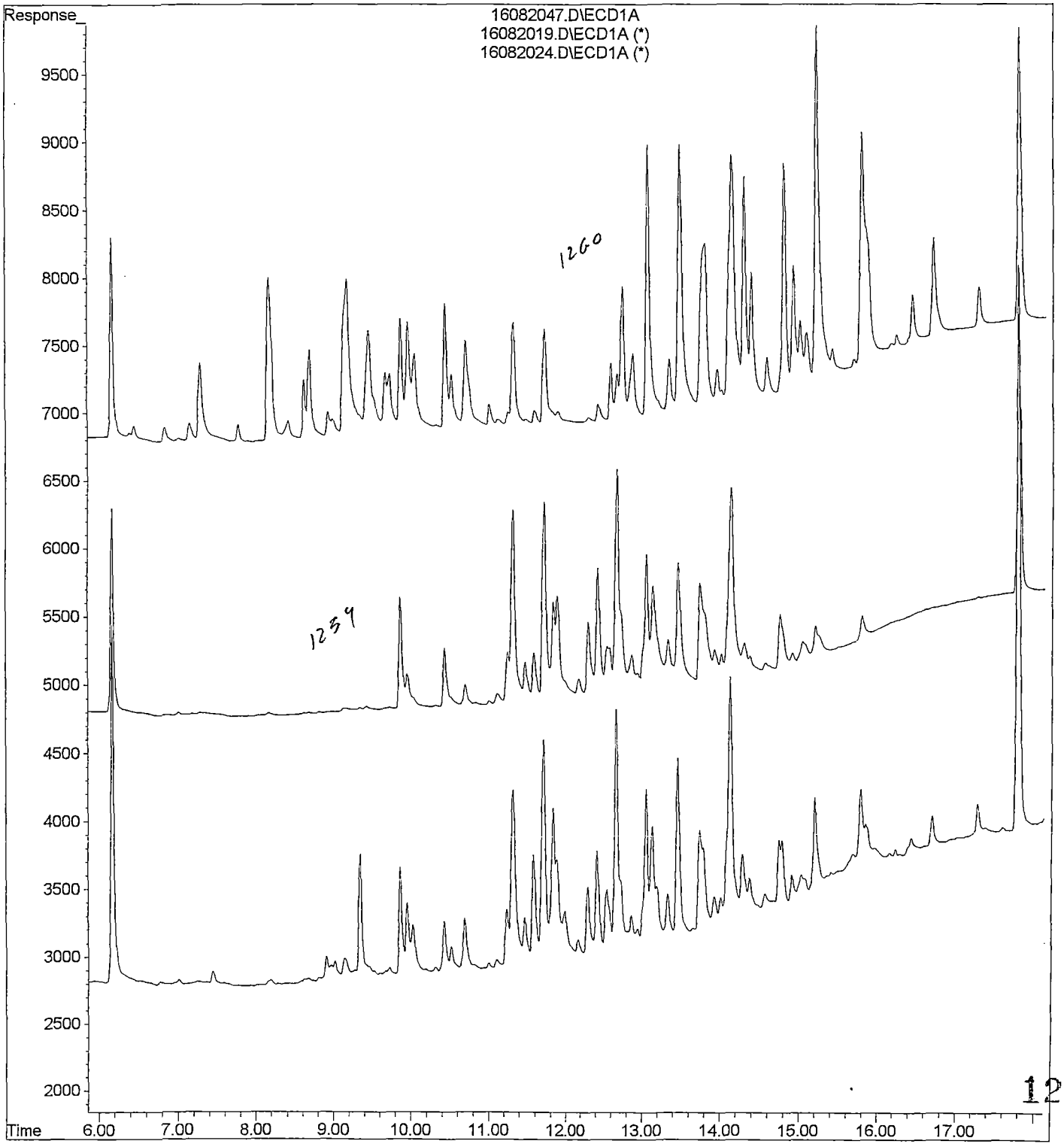




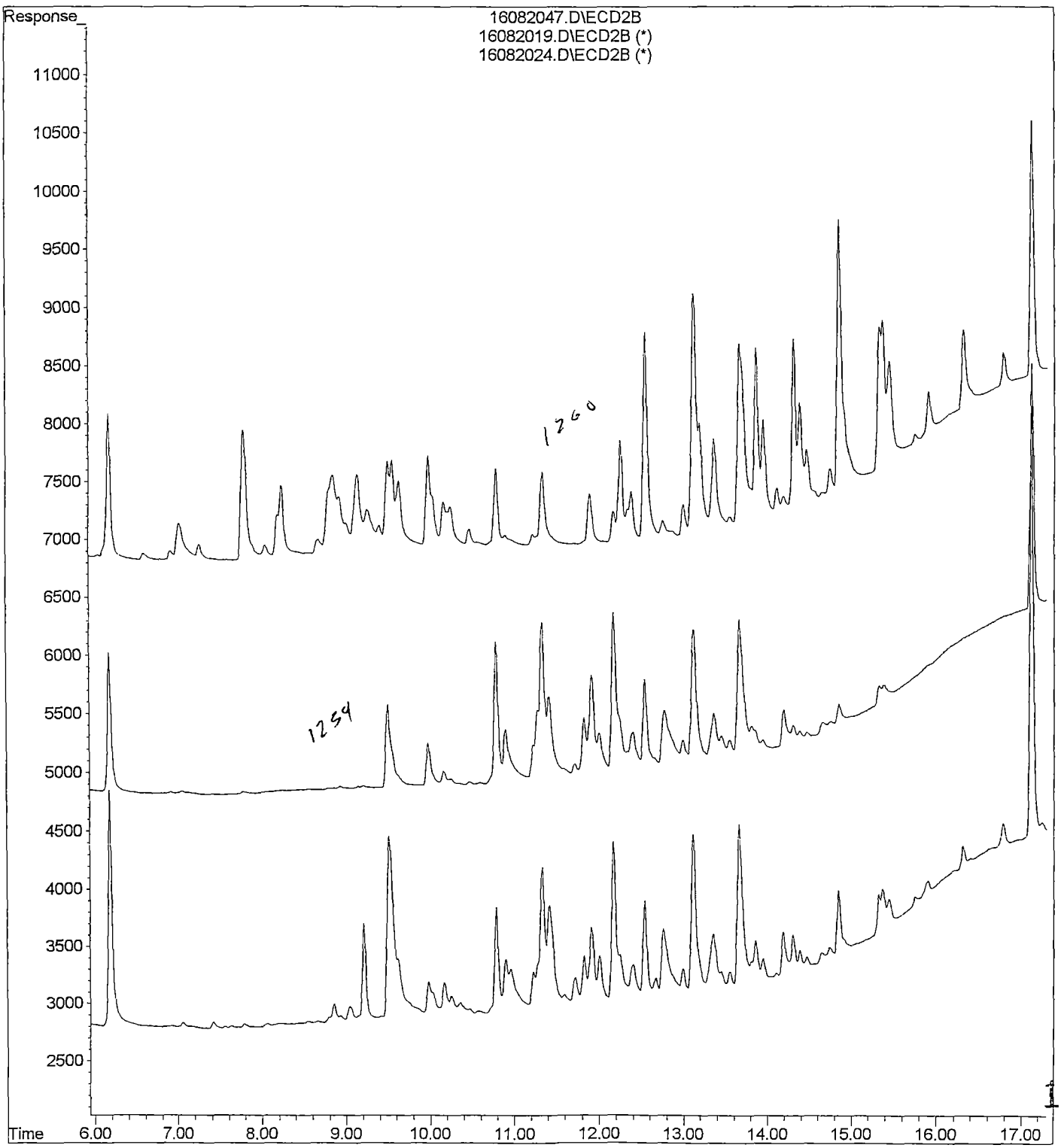
128

File : F:\HPCHEM\HP\16\DATA\08_20_01\16082047.D
Operator : TLM
Acquired : 21 Aug 2001 9:12 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.17 *E00R5 *
Misc Info : *EPA*31.4G/5.0ML*21
Vial Number: 47

ok
8-31-01



File : F:\HPCHEM\HP\16\DATA\08_20_01\16082047.D
Operator : TLM
Acquired : 21 Aug 2001 9:12 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.17 *E00R5 *
Misc Info : *EPA*31.4G/5.0ML*21
Vial Number: 47



Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082047.D\ECD1A.CH Vial: 47
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082047.D\ECD2B.CH
Acq On : 21 Aug 2001 9:12 Operator: TLM
Sample : 47158.17 *E00R5 * Inst : HP_16
Misc : *EPA*31.4G/5.0ML*21 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 28 17:46 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	6.17	6.18	71938	64953	3.954	3.530	
	Spiked Amount 8.063			Recovery	=	49.04%	43.78%	
22)	S DCB	17.78	17.12	125453	107691	4.716	3.945	
	Spiked Amount 8.063			Recovery	=	58.49%	48.93%	
	Target Compounds:							
12)	L6 Aroclor-1254	11.70	12.17	59920	61688	59.0	44.3	#
13)	L6 Aroclor-1254 {2}	12.42	12.54	24127	26736	34.4	41.5	
14)	L6 Aroclor-1254 {3}	12.66	12.76	69383	32383	46.6	38.9	
15)	L6 Aroclor-1254 {4}	13.05	13.11	37426	55901	50.2	52.6	
16)	L6 Aroclor-1254 {5}	13.46	13.66	42838	62150	53.8	49.9	
	Sum Aroclor-1254			233694	238858	244.1	227.2	
	Average Aroclor-1254					48.820	45.444	
17)	L7 Aroclor-1260	14.12	13.66	76822	62150	39.3	33.7	
18)	L7 Aroclor-1260 {2}	14.28	13.86	17277	15238	16.7	15.6	
19)	L7 Aroclor-1260 {3}	14.37	13.95	9736	5297	14.9	8.543	#
20)	L7 Aroclor-1260 {4}	14.78	14.31	12231	8917	11.3	9.870	
21)	L7 Aroclor-1260 {5}	15.20	14.85	25716	18591	11.9	8.470	#
	Sum Aroclor-1260			141782	110192	37.9	30.7	
	Average Aroclor-1260					18.812	15.253	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16082047.D XPCBH20.M Tue Aug 28 17:46:22 2001 Page 1

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00R6

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: 47158.18

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

% Moisture: 47 decanted: (Y/N) __ Date Received: 08/01/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/21/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	60	U
11104-28-2	Aroclor-1221	60	U
11141-16-5	Aroclor-1232	60	U
53469-21-9	Aroclor-1242	~~1500~~ 680	~~EP~~ J
12672-29-6	Aroclor-1248	60	U
11097-69-1	Aroclor-1254	~~2100~~ 320	~~E~~ J
11096-82-5	Aroclor-1260	~~700~~ 130	~~E~~ J
Surrogate amount spiked		12.13	

apply this results
TBS 9/11/01
TB
10/1

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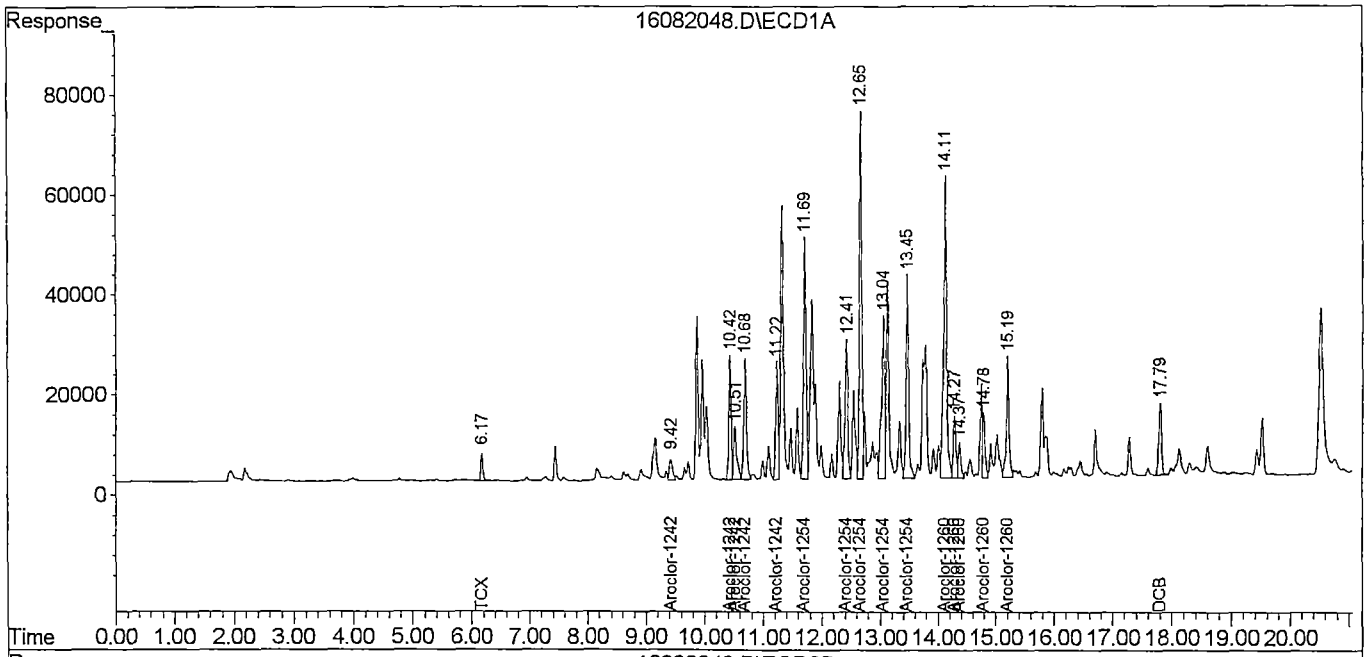
Chromatographic Report

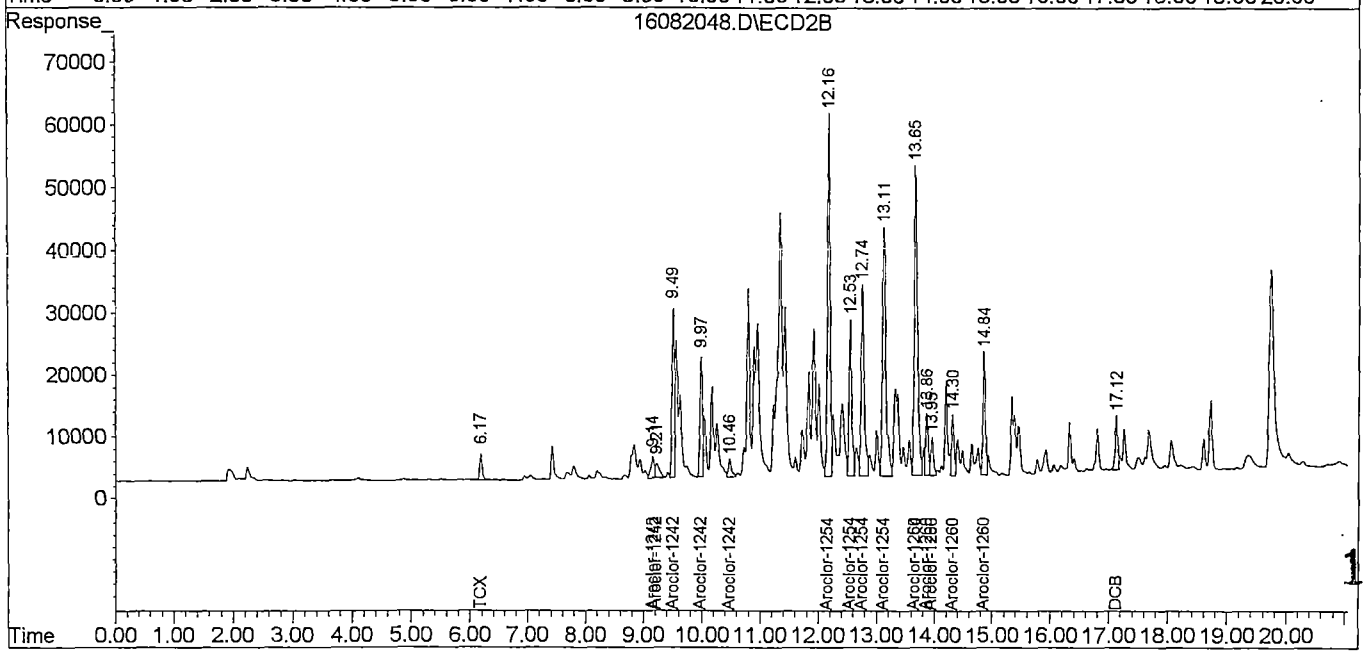
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082048.D\ECD1A.CH Vial: 48
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082048.D\ECD2B.CH
Acq On : 21 Aug 2001 9:37 Operator: TLM
Sample : 47158.18 *E00R6 * Inst : HP_16
Misc : *EPA*31.1G/5.0ML*47 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 22 18:58 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

ok 8-31-01

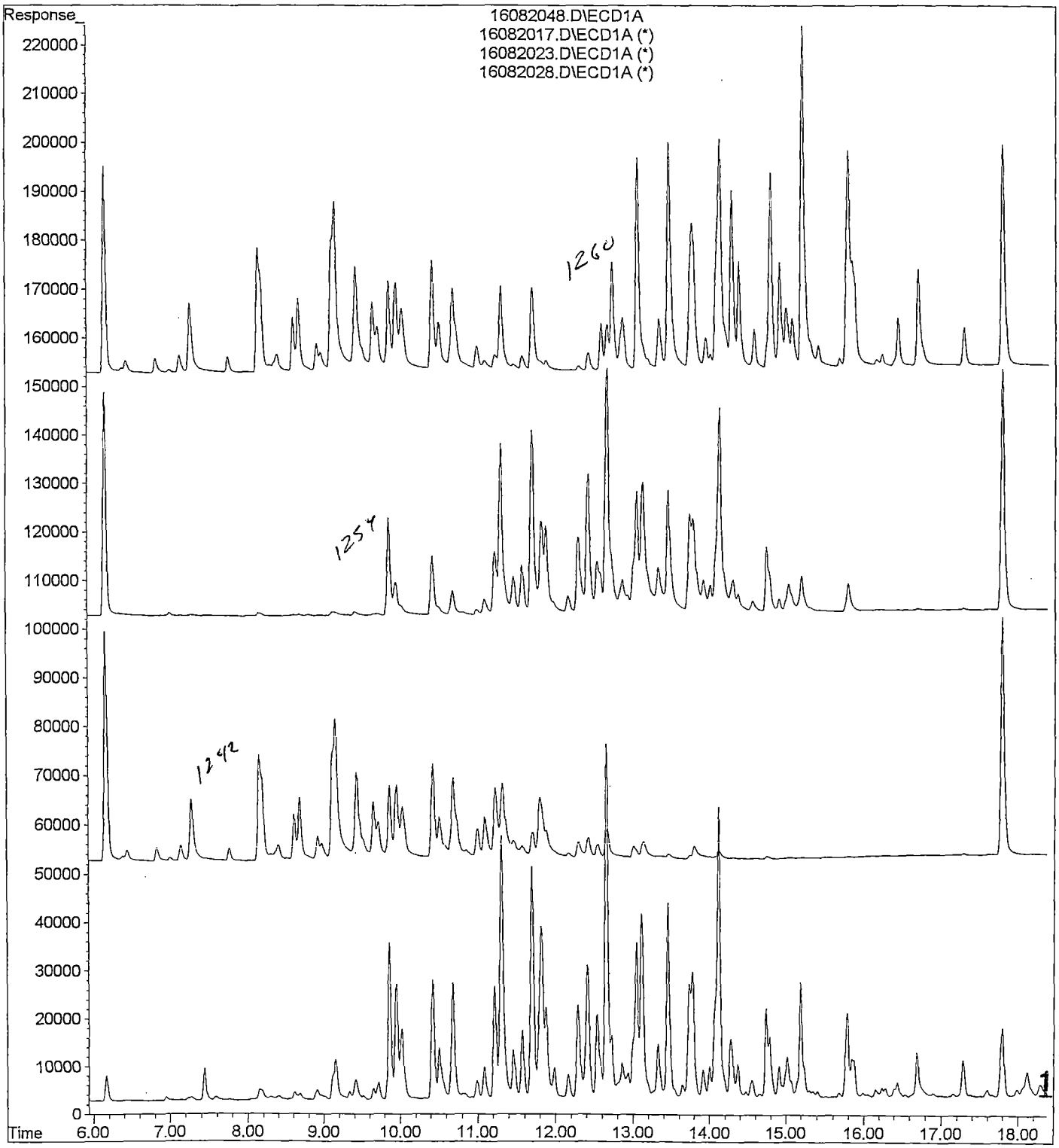




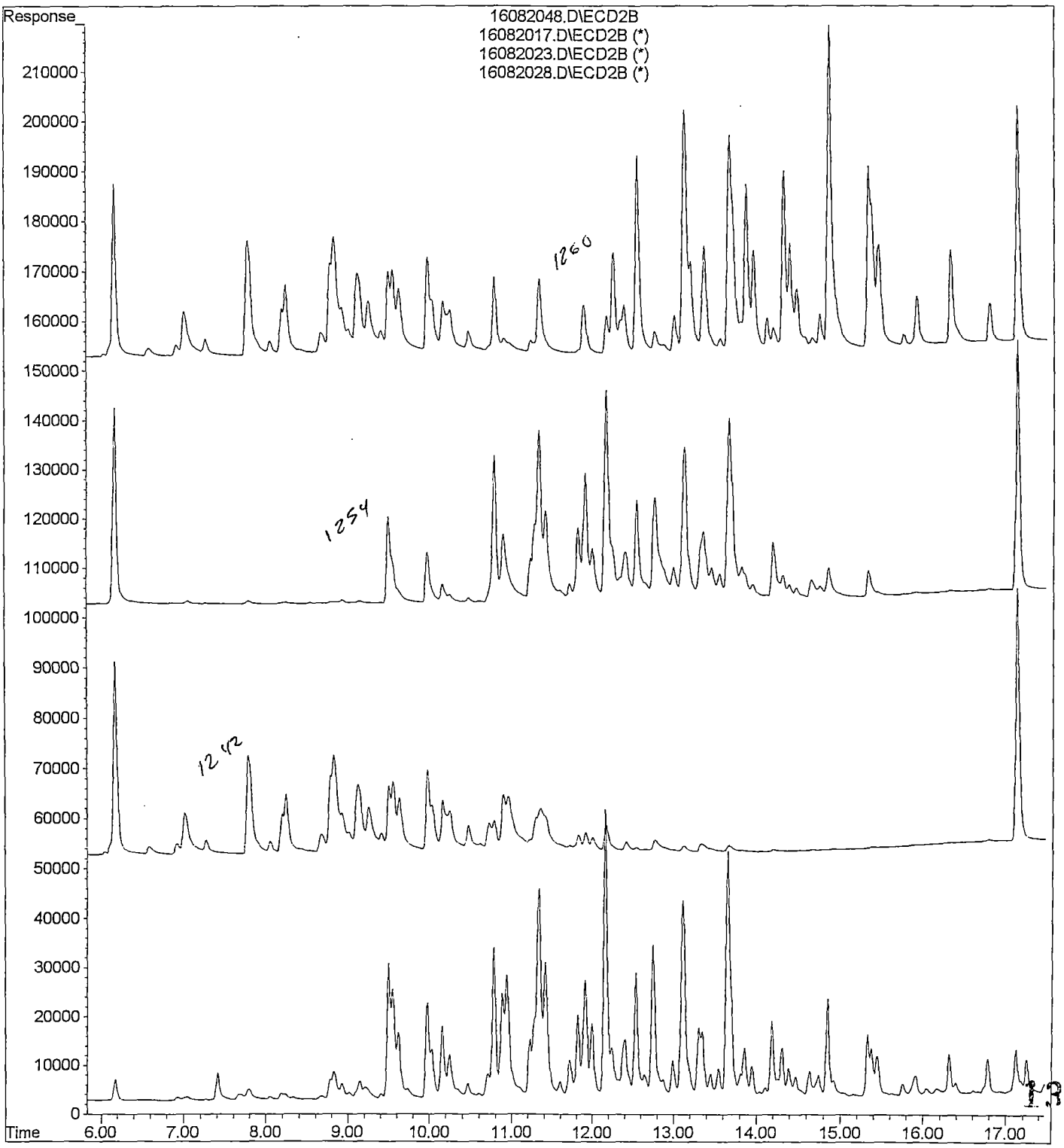
133

File : F:\HPCHEM\HP\16\DATA\08_20_01\16082048.D
Operator : TLM
Acquired : 21 Aug 2001 9:37 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.18 *E00R6 *
Misc Info : *EPA*31.1G/5.0ML*47
Vial Number: 48

Ok 8-31-01



File : F:\HPCHEM\HP\16\DATA\08_20_01\16082048.D
Operator : TLM
Acquired : 21 Aug 2001 9:37 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.18 *E00R6 *
Misc Info : *EPA*31.1G/5.0ML*47
Vial Number: 48



Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082048.D\ECD1A.CH Vial: 48
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082048.D\ECD2B.CH
Acq On : 21 Aug 2001 9:37 Operator: TLM
Sample : 47158.18 *E00R6 * Inst : HP_16
Misc : *EPA*31.1G/5.0ML*47 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 22 18:58 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	6.17	6.18	139510	128145	11.5	10.5
	Spiked Amount 12.134			Recovery	=	94.78%	86.54%
22)	S DCB	17.79	17.12	488815	267564	27.7m	14.8m #
	Spiked Amount 12.134			Recovery	=	228.29%	121.97%
	Target Compounds:						
7)	L4 Aroclor-1242	9.42	9.15	167714	137002	384.9	375.4
8)	L4 Aroclor-1242 {2}	10.42	9.21f	677476	120985	2387.9 E	525.9 #
9)	L4 Aroclor-1242 {3}	10.51	9.50	402223	744148	2458.7 E	3776.4 E#
10)	L4 Aroclor-1242 {4}	10.68	9.98	779561	568319	2074.8 E	1437.9 E#
11)	L4 Aroclor-1242 {5}	11.22	10.47	650983	109647	2950.9 E	1336.9 E#
	Sum Aroclor-1242			2677957	1680102	10257.1	7452.5
	Average Aroclor-1242					2051.429	1490.501
12)	L6 Aroclor-1254	11.70	12.16	1417814	1849203	2102.0 E	1996.4 E
13)	L6 Aroclor-1254 {2}	12.41	12.53	907264	831726	1948.4 E	1944.7 E
14)	L6 Aroclor-1254 {3}	12.65	12.74	2039999	1149423	2063.6 E	2079.6 E
15)	L6 Aroclor-1254 {4}	13.04	13.11	1144263	1660348	2309.1 E	2351.6 E
16)	L6 Aroclor-1254 {5}	13.45	13.65	1203853	1982528	2276.2 E	2395.0 E
	Sum Aroclor-1254			6713192	7473228	10699.3	10767.3
	Average Aroclor-1254					2139.855	2153.458
17)	L7 Aroclor-1260	14.12	13.65	2230280	1982528	1714.9 E	1619.9 E
18)	L7 Aroclor-1260 {2}	14.28	13.86	414171	317798	602.8	490.9
19)	L7 Aroclor-1260 {3}	14.37	13.95	226529	199578	523.4	484.5
20)	L7 Aroclor-1260 {4}	14.78	14.31	364846	301300	506.0	501.9
21)	L7 Aroclor-1260 {5}	15.20	14.85	771805	564127	536.7	386.8 #
	Sum Aroclor-1260			4007630	3365332	2356.2	2113.7
	Average Aroclor-1260					776.748	696.786

JM 8-22

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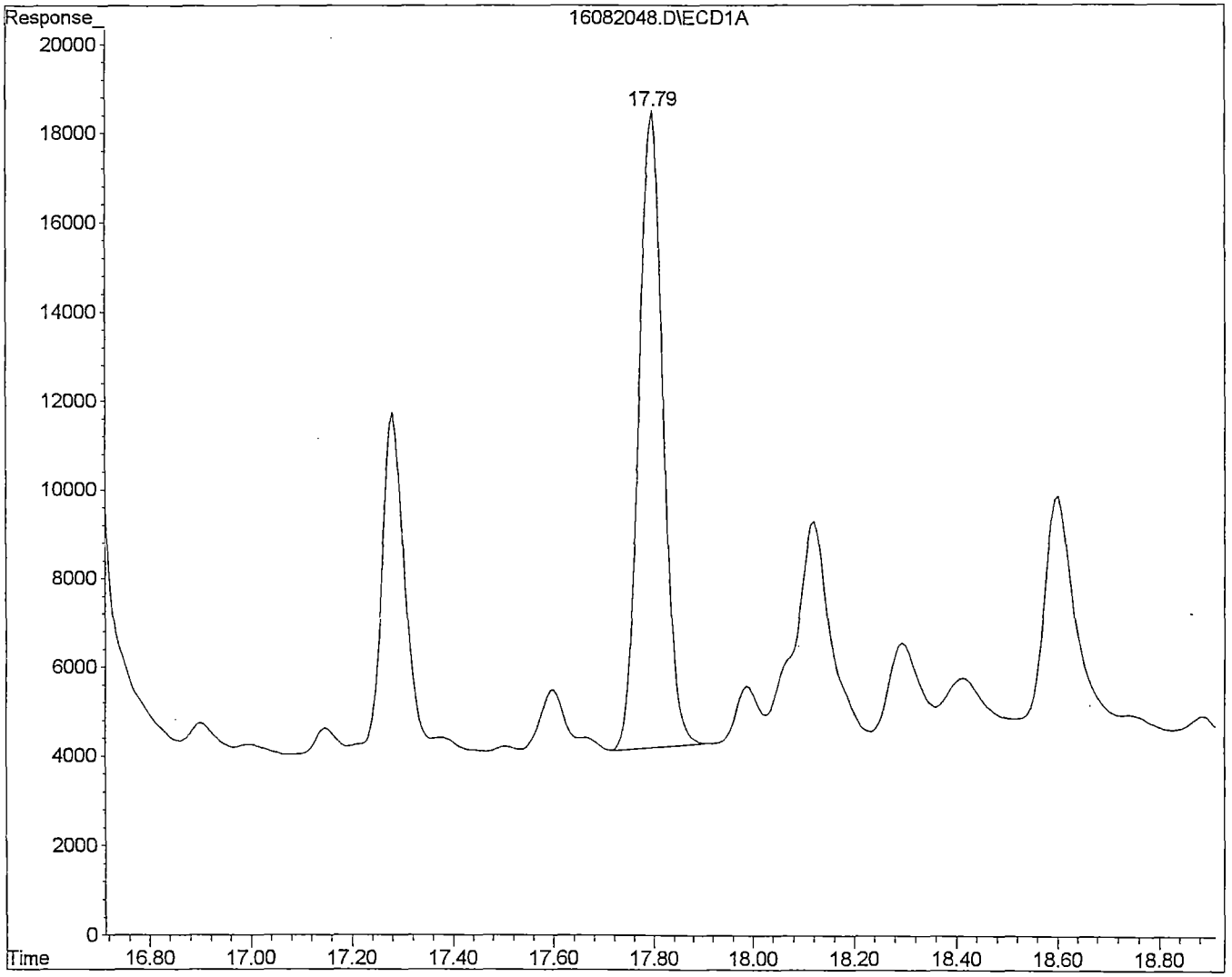
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_20_01\16082048.D
Date Acquired: 21 Aug 2001 9:37
Inst: HP_16 Operator ID: TLM
Name: 47158.18 *E00R6 *
Misc: *EPA*31.1G/5.0ML*47
Method: F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title: PCB/TOXAPHENE
Quant Time: Aug 22 18:58 2001 Quant Results File: XPCBH20.RES



DCB 17.79min area: 488815 m

Integration Time Range: 17.71 - 17.91 JM 8-22-01

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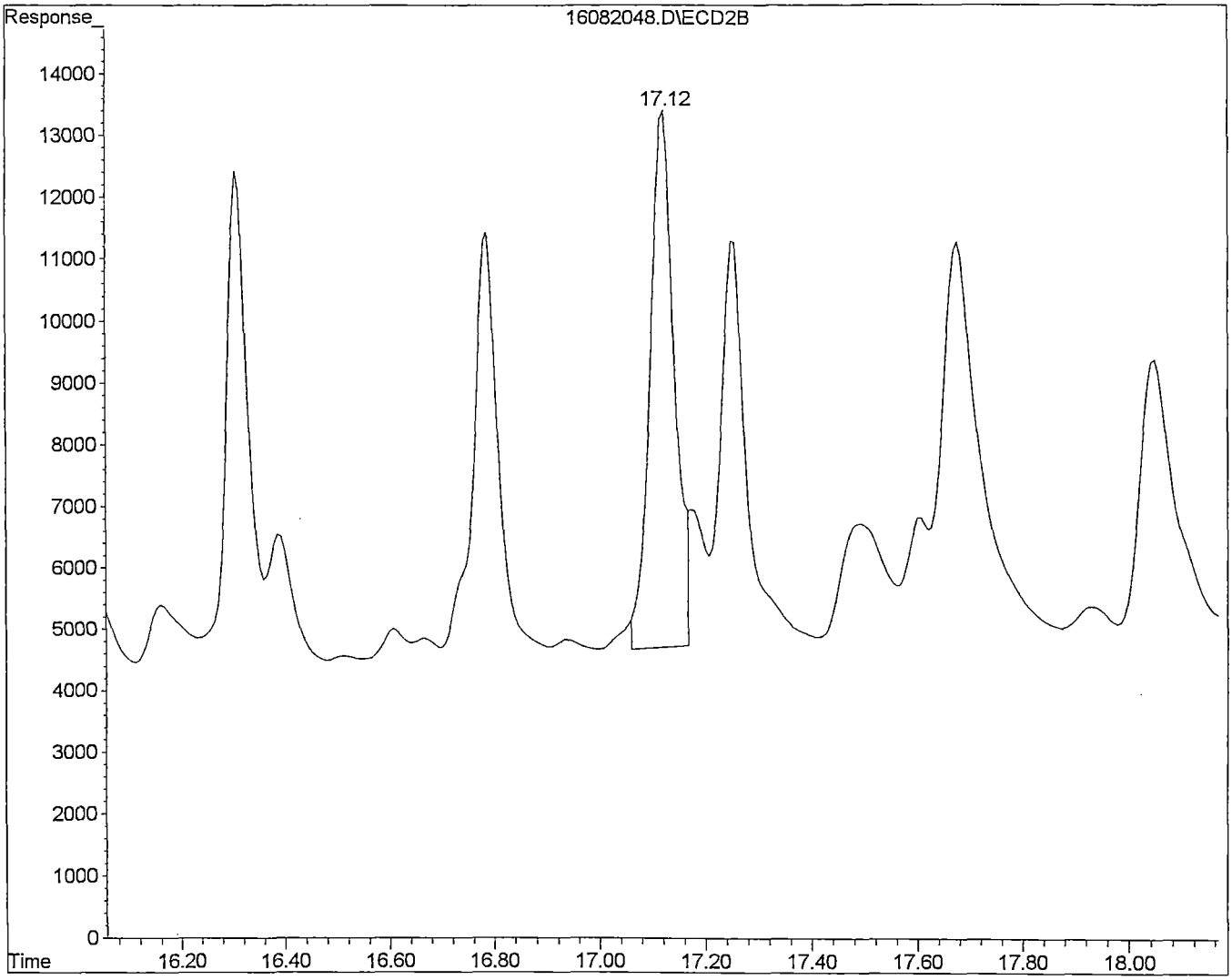
F:\HPCHEM\HP\16\DATA\08_20_01\16082048.D
Report generated: Wed Aug 22 19:00:29 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_20_01\16082048.D
Date Acquired: 21 Aug 2001 9:37
Inst: HP_16 Operator ID: TLM
Name: 47158.18 *E00R6 *
Misc: *EPA*31.1G/5.0ML*47
Method: F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title: PCB/TOXAPHENE
Quant Time: Aug 22 18:58 2001 Quant Results File: XPCBH20.RES



DCB #2 17.12min area: 267564 m

Integration Time Range: 17.06 - 17.17

JM
8-22-01

F:\HPCHEM\HP\16\DATA\08_20_01\16082048.D
Report generated: Wed Aug 22 19:00:30 2001

1D

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00R6DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: 47158.18DL

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

% Moisture: 47 decanted: (Y/N) __ Date Received: 08/01/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/29/01

Injection Volume: 0.5(uL) Dilution Factor: 10.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	600	U
11104-28-2	Aroclor-1221	600	U
11141-16-5	Aroclor-1232	600	U
53469-21-9	Aroclor-1242	680	DP
12672-29-6	Aroclor-1248	600	U
11097-69-1	Aroclor-1254	320	DJ
11096-82-5	Aroclor-1260	130	DJP
Surrogate amount spiked		12.13	

FORM I PCB

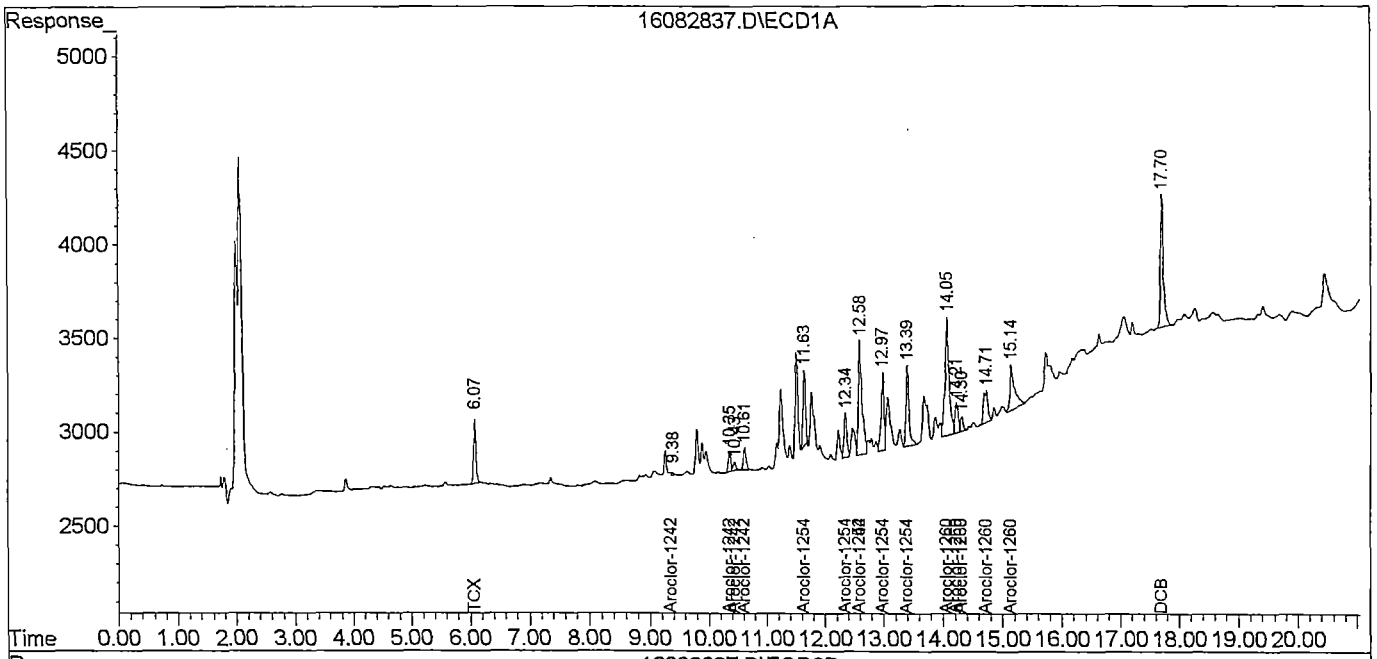
Chromatographic Report

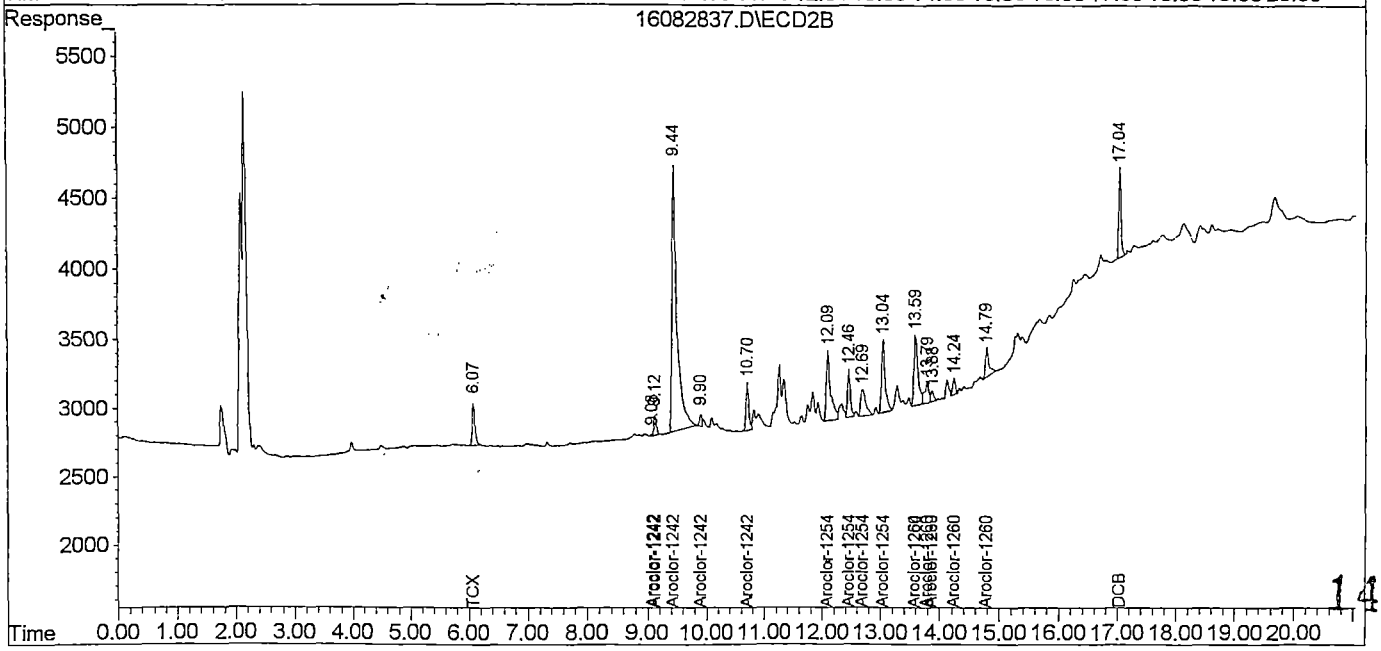
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082837.D\ECD1A.CH Vial: 37
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082837.D\ECD2B.CH
Acq On : 29 Aug 2001 3:21 Operator: TLM
Sample : 47158.18DL *E00R6DL * Inst : HP_16
Misc : *EPA*31.1G/5.0ML*47 Dilution: 10.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 30 17:04 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

ob 8-31-01





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082837.D\ECD1A.CH Vial: 37
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082837.D\ECD2B.CH
Acq On : 29 Aug 2001 3:21 Operator: TLM
Sample : 47158.18DL *E00R6DL * Inst : HP_16
Misc : *EPA*31.1G/5.0ML*47 Dilution: 10.00 ✓
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 30 17:04 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	6.07	6.07	9619	10010	11.7m	10.8m	
	Spiked Amount 12.134			Recovery	=	96.43%	89.01%	
22)	S DCB	17.70	17.04	24479	18122	17.7	14.2	
	Spiked Amount 12.134			Recovery	=	145.87%	117.03%	
	Target Compounds:							
7)	L4 Aroclor-1242	9.35	9.08	428	336	11.5m	11.7m	
8)	L4 Aroclor-1242 {2}	10.35	9.12f	3212	4036	144.8m	231.5m	#
9)	L4 Aroclor-1242 {3}	10.43	9.44	1260	117469	100.8m	7620.0	#
10)	L4 Aroclor-1242 {4}	10.61	9.90	4141	2492	129.4	82.4m	#
11)	L4 Aroclor-1242 {5}	12.58	10.71	25090	11816	3026.5	1027.6	#
	Sum Aroclor-1242			34131	136149	3413.1	8973.3	
	Average Aroclor-1242					682.625	1794.651	
12)	L6 Aroclor-1254	11.63	12.10	11984	25746	243.4	389.0	#
13)	L6 Aroclor-1254 {2}	12.34	12.46	8090	12035	246.4	406.5	#
14)	L6 Aroclor-1254 {3}	12.58	12.70	25090	11174	351.0	320.8	
15)	L6 Aroclor-1254 {4}	12.97	13.04	14262	22913	390.7	426.1	
16)	L6 Aroclor-1254 {5}	13.39	13.59	15421	24558	392.0	396.7	
	Sum Aroclor-1254			74845	96427	1623.4	1939.1	
	Average Aroclor-1254					324.684	387.827	
17)	L7 Aroclor-1260	14.06	13.59	30131	24558	352.5	277.3	
18)	L7 Aroclor-1260 {2}	14.21	13.79	6198	7576	126.1	158.1	#
19)	L7 Aroclor-1260 {3}	14.30	13.88	2566	2614	73.5	80.3	
20)	L7 Aroclor-1260 {4}	14.72	14.24	8310	3541	171.7	83.2	#
21)	L7 Aroclor-1260 {5}	15.14	14.79	12621	7980	127.2	76.1	#
	Sum Aroclor-1260			59825	46270	5163.2	4094.6	
	Average Aroclor-1260					170.209	134.983	

7m 8.30-01

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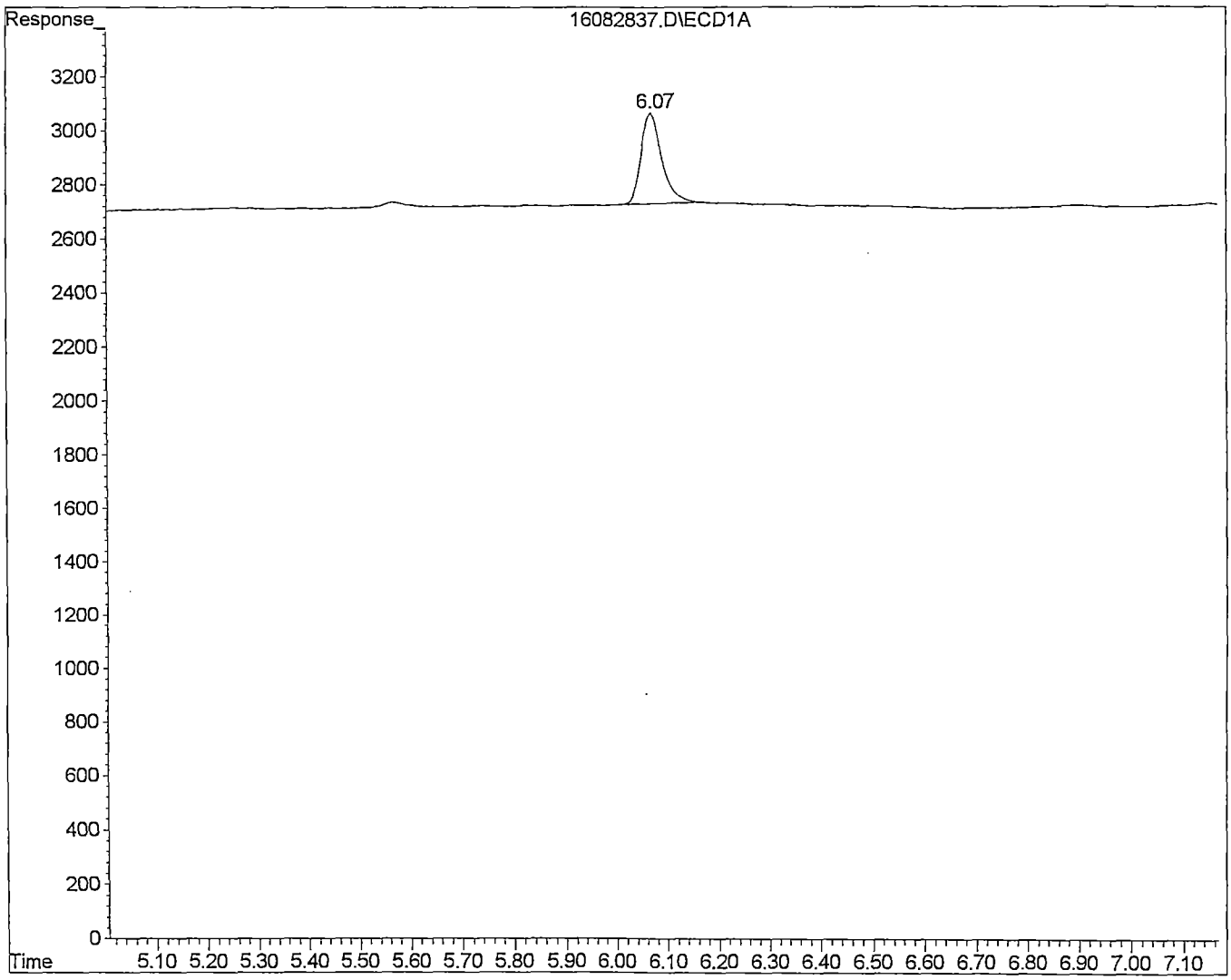
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_28_01\16082837.D
Date Acquired: 29 Aug 2001 3:21
Inst: HP_16 Operator ID: TLM
Name: 47158.18DL *E00R6DL *
Misc: *EPA*31.1G/5.0ML*47
Method: F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title: PCB/TOXAPHENE
Quant Time: Aug 30 17:04 2001 Quant Results File: XPCBH28.RES



TCX 6.07min area: 9619 m

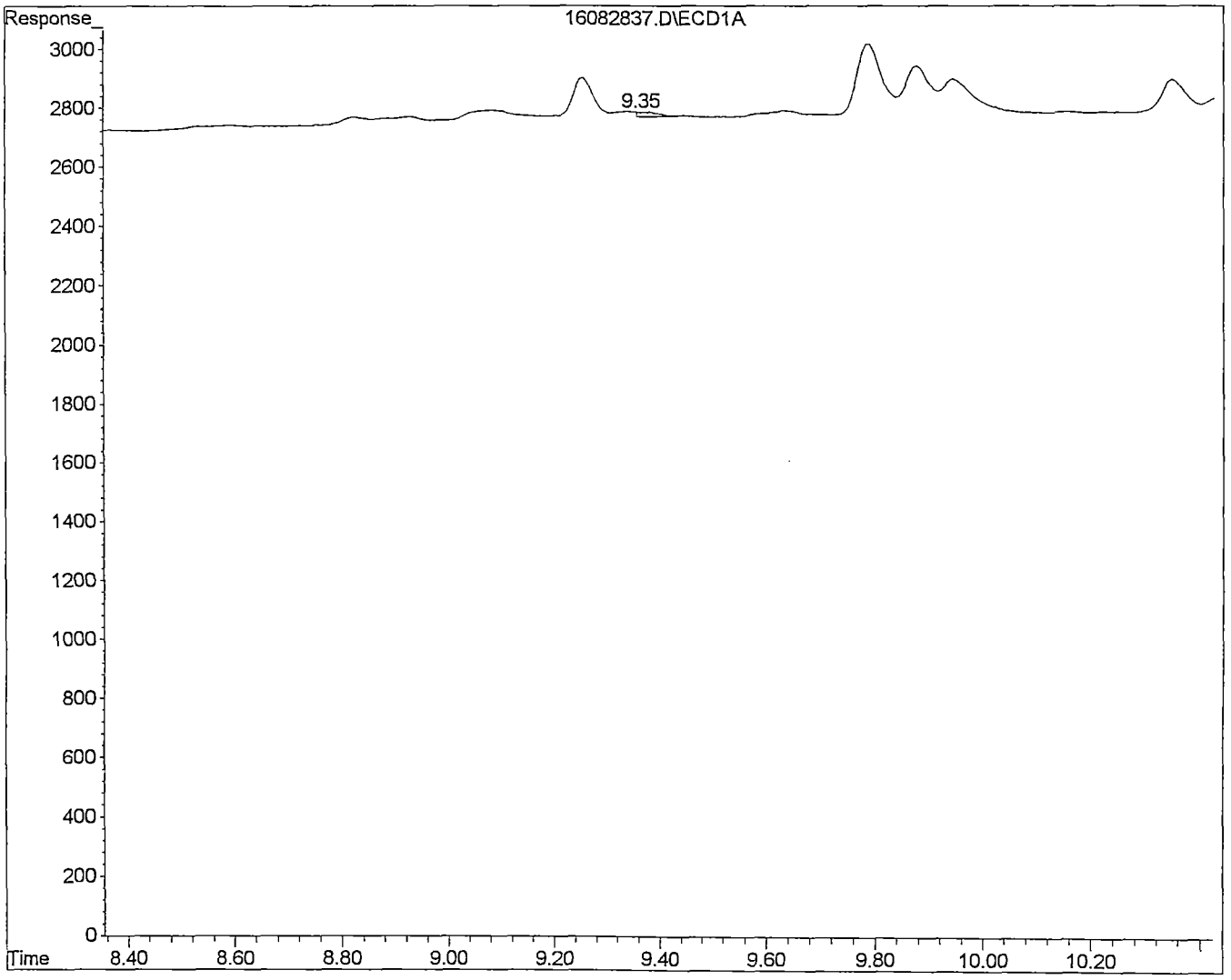
Integration Time Range: 6.01 - 6.17

JM
8-30-01

F:\HPCHEM\HP\16\DATA\08_28_01\16082837.D
Report generated: Thu Aug 30 17:06:36 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_28_01\16082837.D
Date Acquired: 29 Aug 2001 3:21
Inst: HP_16 Operator ID: TLM
Name: 47158.18DL *E00R6DL *
Misc: *EPA*31.1G/5.0ML*47
Method: F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title: PCB/TOXAPHENE
Quant Time: Aug 30 17:04 2001 Quant Results File: XPCBH28.RES



Aroclor-1242 9.35min area: 428 m

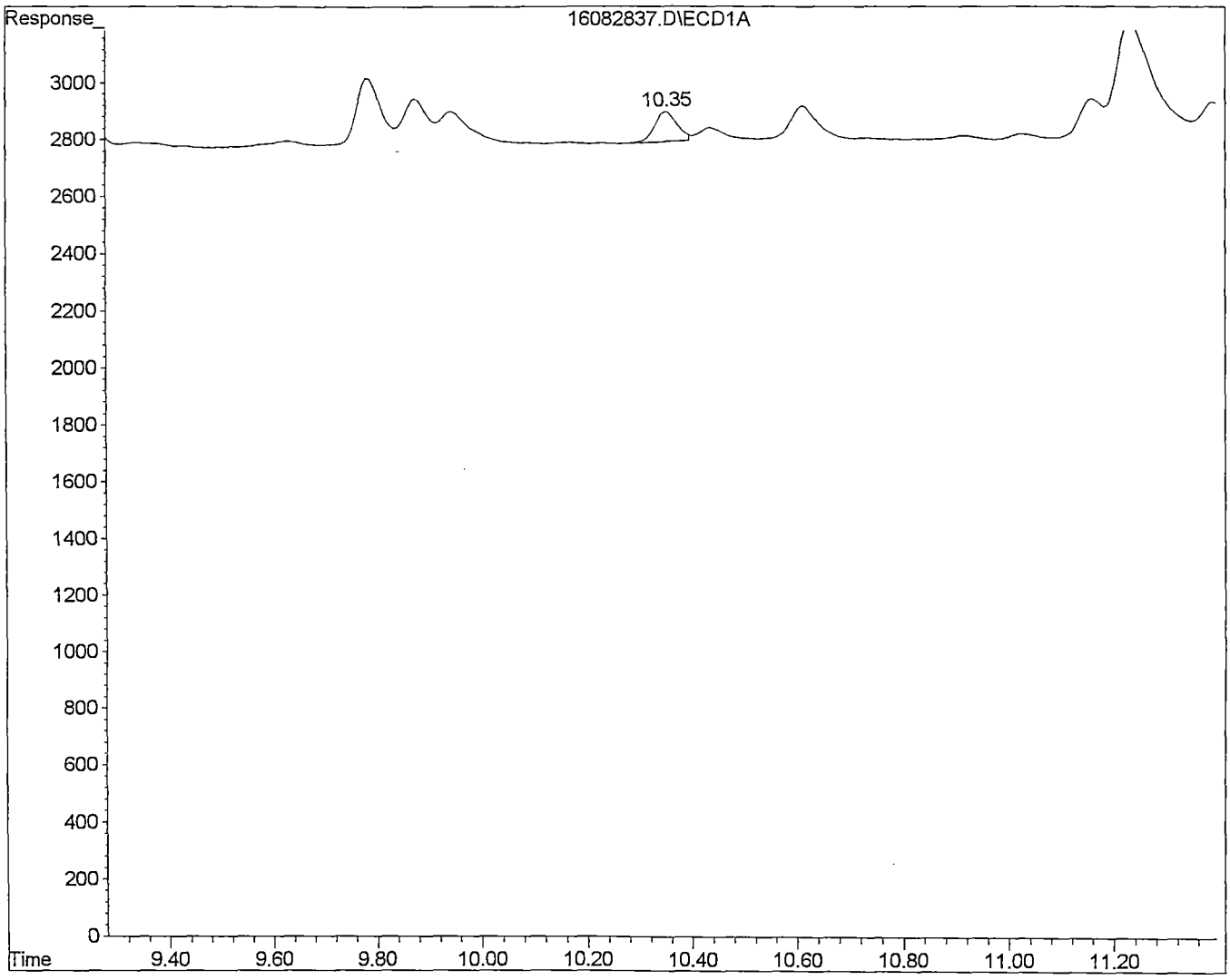
Integration Time Range: 9.35 - 9.42

TM
8-30-01

F:\HPCHEM\HP\16\DATA\08_28_01\16082837.D
Report generated: Thu Aug 30 17:06:37 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_28_01\16082837.D
Date Acquired: 29 Aug 2001 3:21
Inst: HP_16 Operator ID: TLM
Name: 47158.18DL *E00R6DL *
Misc: *EPA*31.1G/5.0ML*47
Method: F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title: PCB/TOXAPHENE
Quant Time: Aug 30 17:04 2001 Quant Results File: XPCBH28.RES



Aroclor-1242 {2} 10.35min area: 3212 m

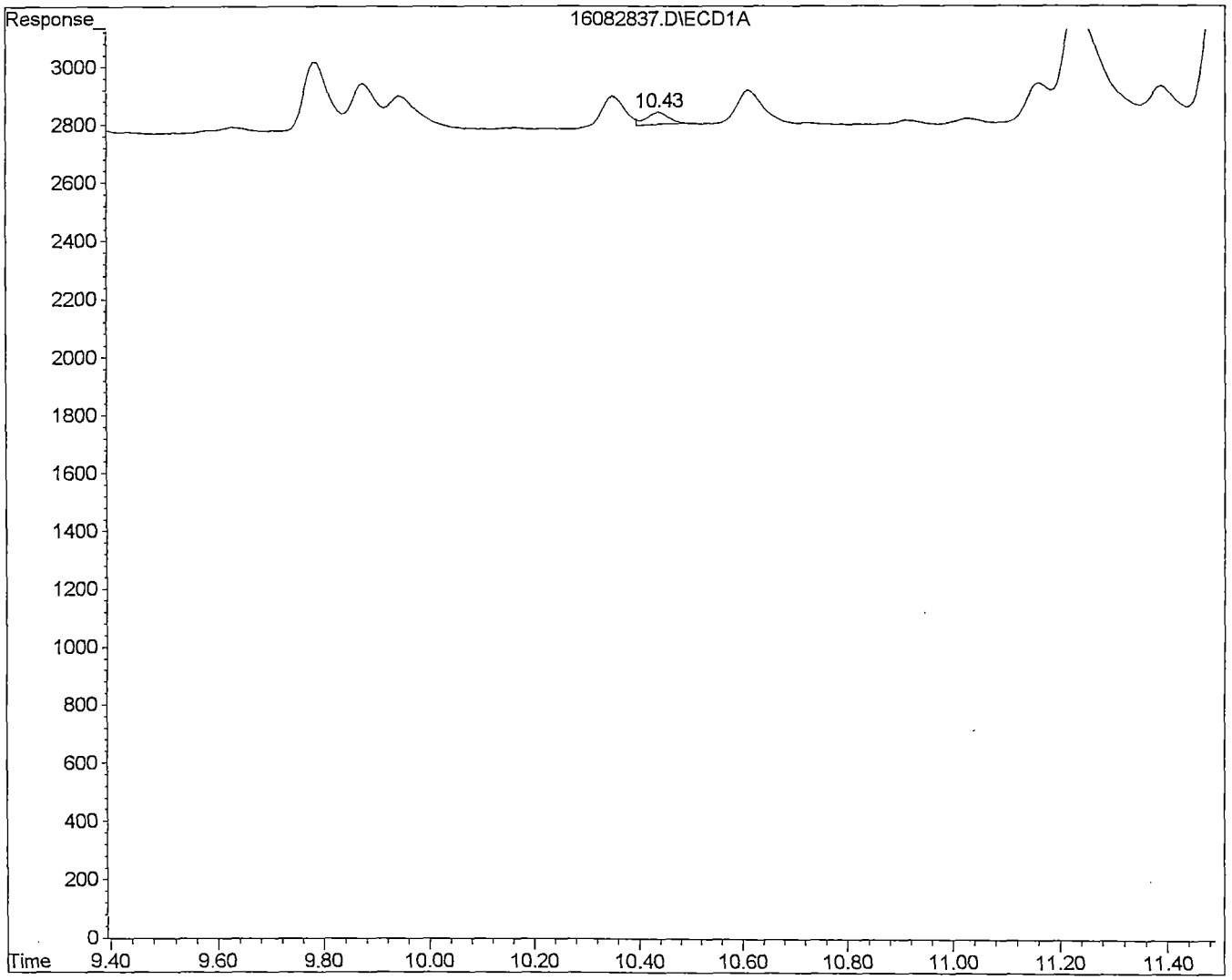
Integration Time Range: 10.28 - 10.39

JM
8-30-01

F:\HPCHEM\HP\16\DATA\08_28_01\16082837.D
Report generated: Thu Aug 30 17:06:37 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_28_01\16082837.D
Date Acquired: 29 Aug 2001 3:21
Inst: HP_16 Operator ID: TLM
Name: 47158.18DL *E00R6DL *
Misc: *EPA*31.1G/5.0ML*47
Method: F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title: PCB/TOXAPHENE
Quant Time: Aug 30 17:04 2001 Quant Results File: XPCBH28.RES



Aroclor-1242 {3} 10.43min area: 1260 m

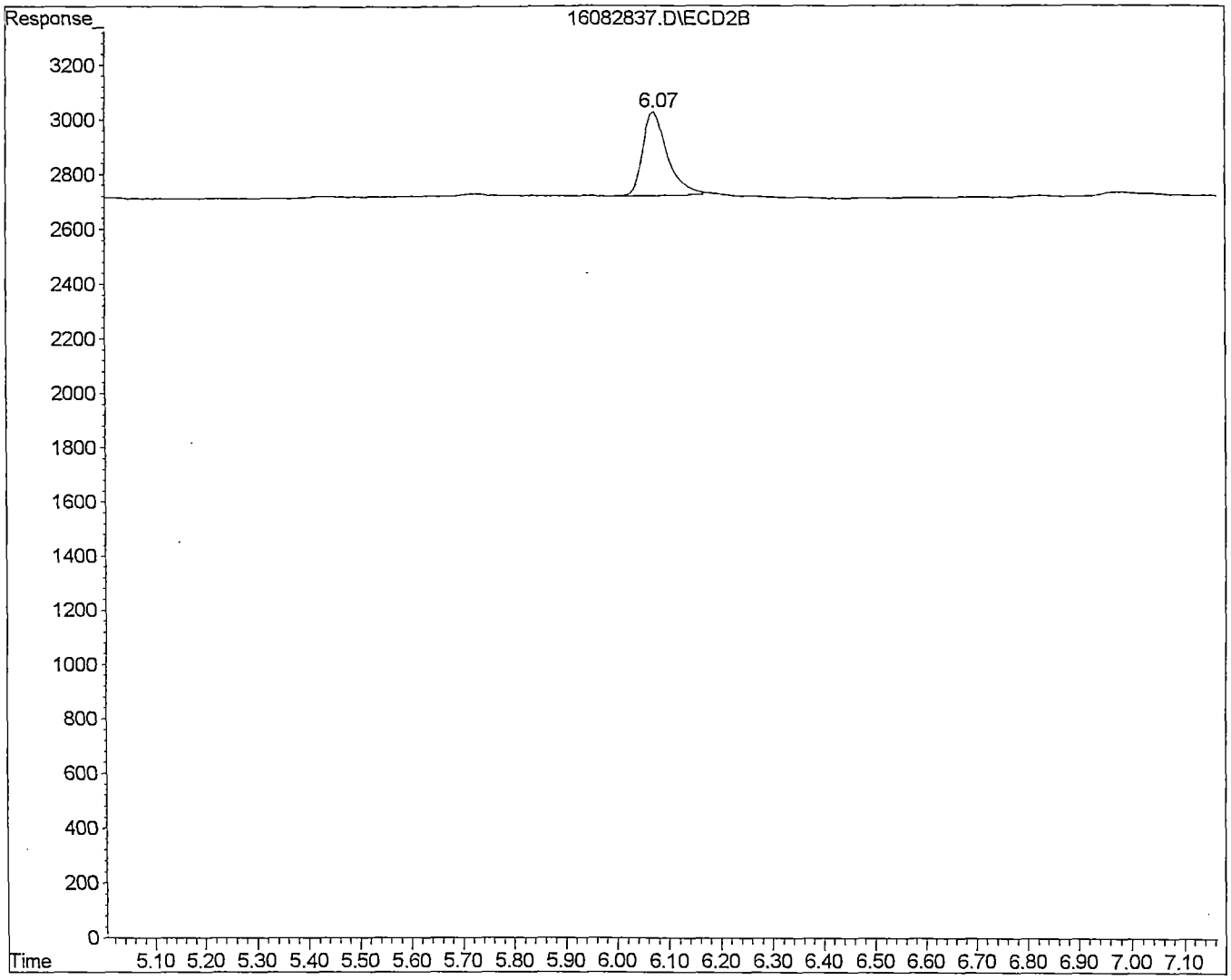
Integration Time Range: 10.39 - 10.49

JM
8-30-01

F:\HPCHEM\HP\16\DATA\08_28_01\16082837.D
Report generated: Thu Aug 30 17:06:38 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_28_01\16082837.D
Date Acquired: 29 Aug 2001 3:21
Inst: HP_16 Operator ID: TLM
Name: 47158.18DL *E00R6DL *
Misc: *EPA*31.1G/5.0ML*47
Method: F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title: PCB/TOXAPHENE
Quant Time: Aug 30 17:04 2001 Quant Results File: XPCBH28.RES



TCX #2 6.07min area: 10010 m

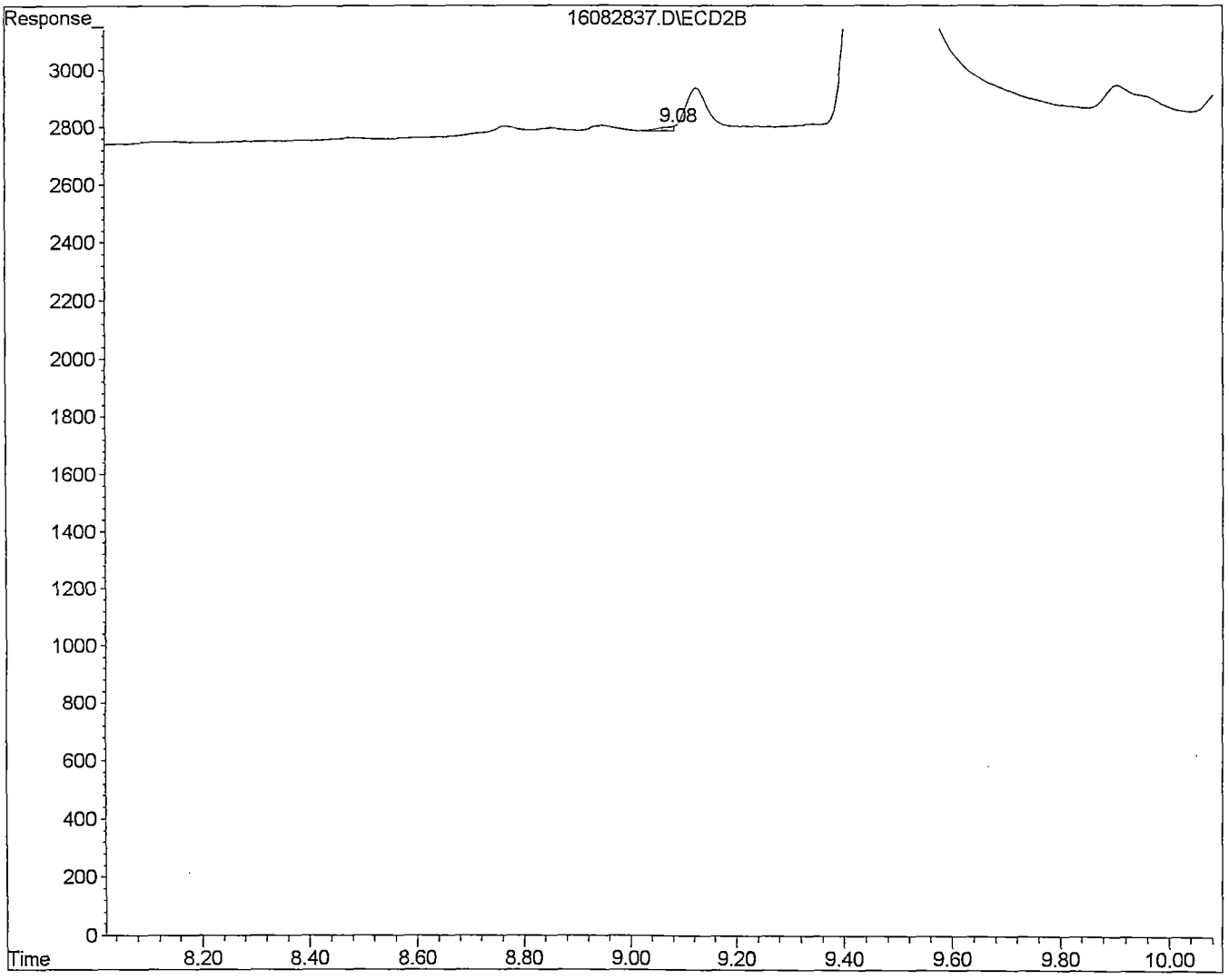
Integration Time Range: 6.01 - 6.16

JM
8-30-01

F:\HPCHEM\HP\16\DATA\08_28_01\16082837.D
Report generated: Thu Aug 30 17:06:39 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_28_01\16082837.D
Date Acquired: 29 Aug 2001 3:21
Inst: HP_16 Operator ID: TLM
Name: 47158.18DL *E00R6DL *
Misc: *EPA*31.1G/5.0ML*47
Method: F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title: PCB/TOXAPHENE
Quant Time: Aug 30 17:04 2001 Quant Results File: XPCBH28.RES



Aroclor-1242 #2 9.08min area: 336 m

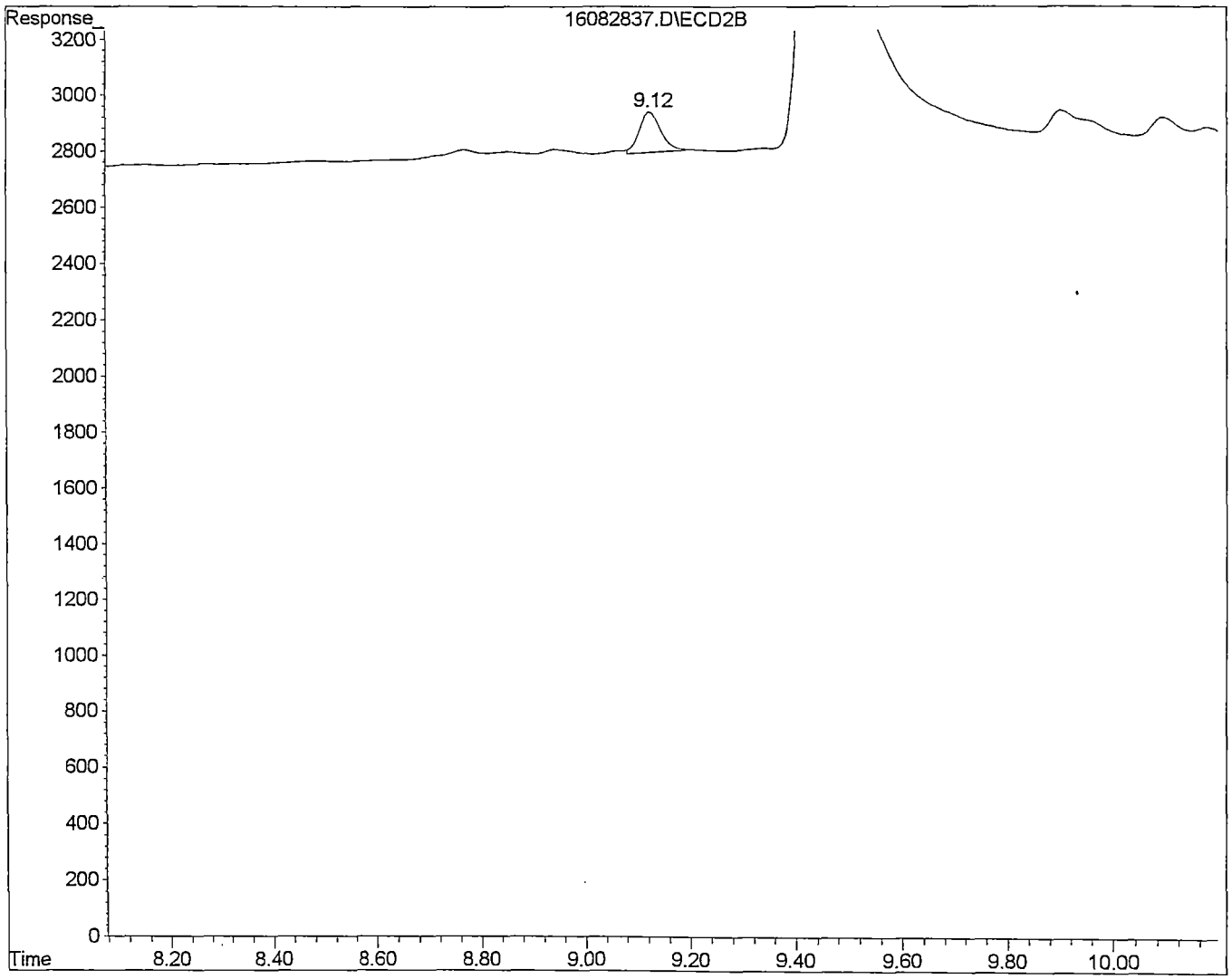
Integration Time Range: 9.02 - 9.08

DM
8-30-01

F:\HPCHEM\HP\16\DATA\08_28_01\16082837.D
Report generated: Thu Aug 30 17:06:40 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_28_01\16082837.D
Date Acquired: 29 Aug 2001 3:21
Inst: HP_16 Operator ID: TLM
Name: 47158.18DL *E00R6DL *
Misc: *EPA*31.1G/5.0ML*47
Method: F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title: PCB/TOXAPHENE
Quant Time: Aug 30 17:04 2001 Quant Results File: XPCBH28.RES



Aroclor-1242 {2} #2 9.12min area: 4036 m

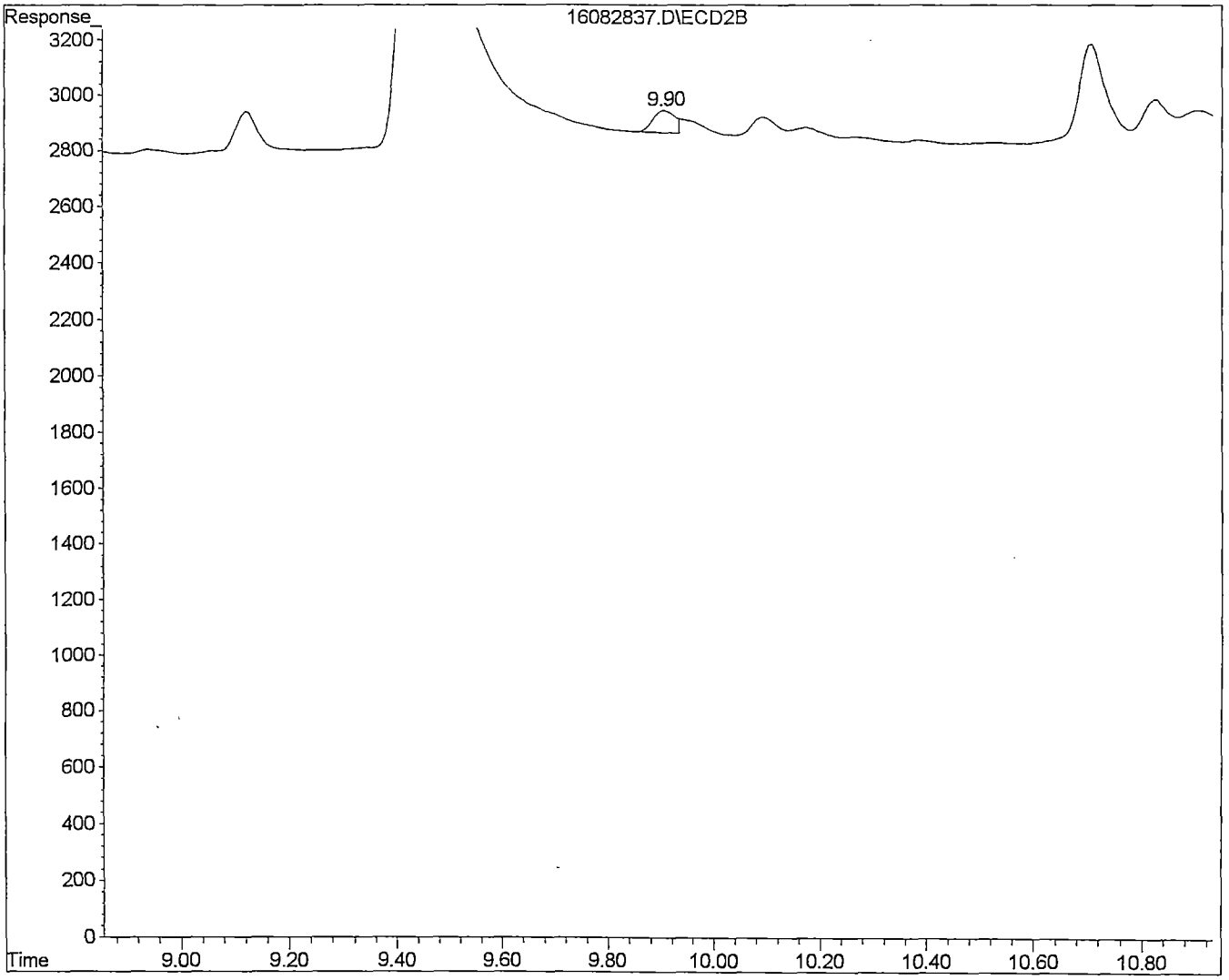
Integration Time Range: 9.08 - 9.19

JM
8-30-01

F:\HPCHEM\HP\16\DATA\08_28_01\16082837.D
Report generated: Thu Aug 30 17:06:41 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_28_01\16082837.D
Date Acquired: 29 Aug 2001 3:21
Inst: HP_16 Operator ID: TLM
Name: 47158.18DL *E00R6DL *
Misc: *EPA*31.1G/5.0ML*47
Method: F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title: PCB/TOXAPHENE
Quant Time: Aug 30 17:04 2001 Quant Results File: XPCBH28.RES



Aroclor-1242 {4} #2 9.90min area: 2492 m

Integration Time Range: 9.86 - 9.93

JM
8-30-01

F:\HPCHEM\HP\16\DATA\08_28_01\16082837.D
Report generated: Thu Aug 30 17:06:42 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00R7

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: 47158.19

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/21/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	42	U
11104-28-2	Aroclor-1221	42	U
11141-16-5	Aroclor-1232	42	U
53469-21-9	Aroclor-1242	65	J ~~P~~
12672-29-6	Aroclor-1248	42	U
11097-69-1	Aroclor-1254	80	J ~~P~~
11096-82-5	Aroclor-1260	49	J ~~P~~
Surrogate amount spiked		8.43	

TBS
9/11/01

FORM I PCB

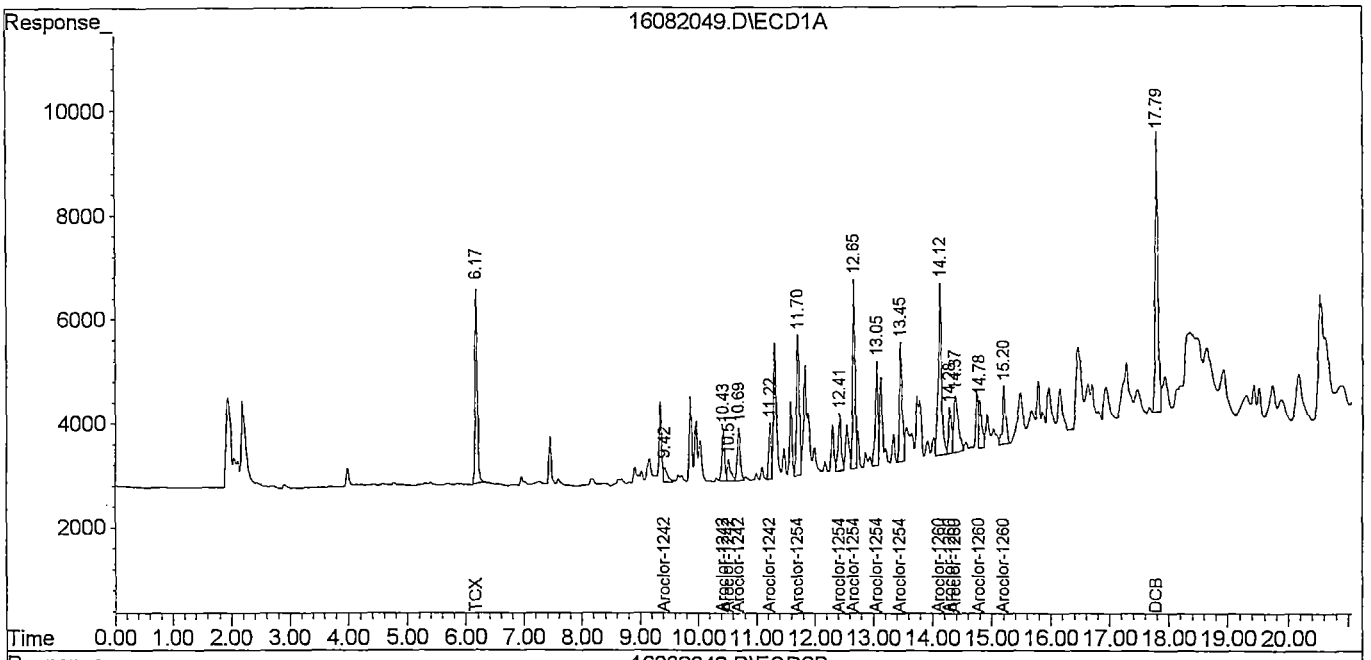
Chromatographic Report

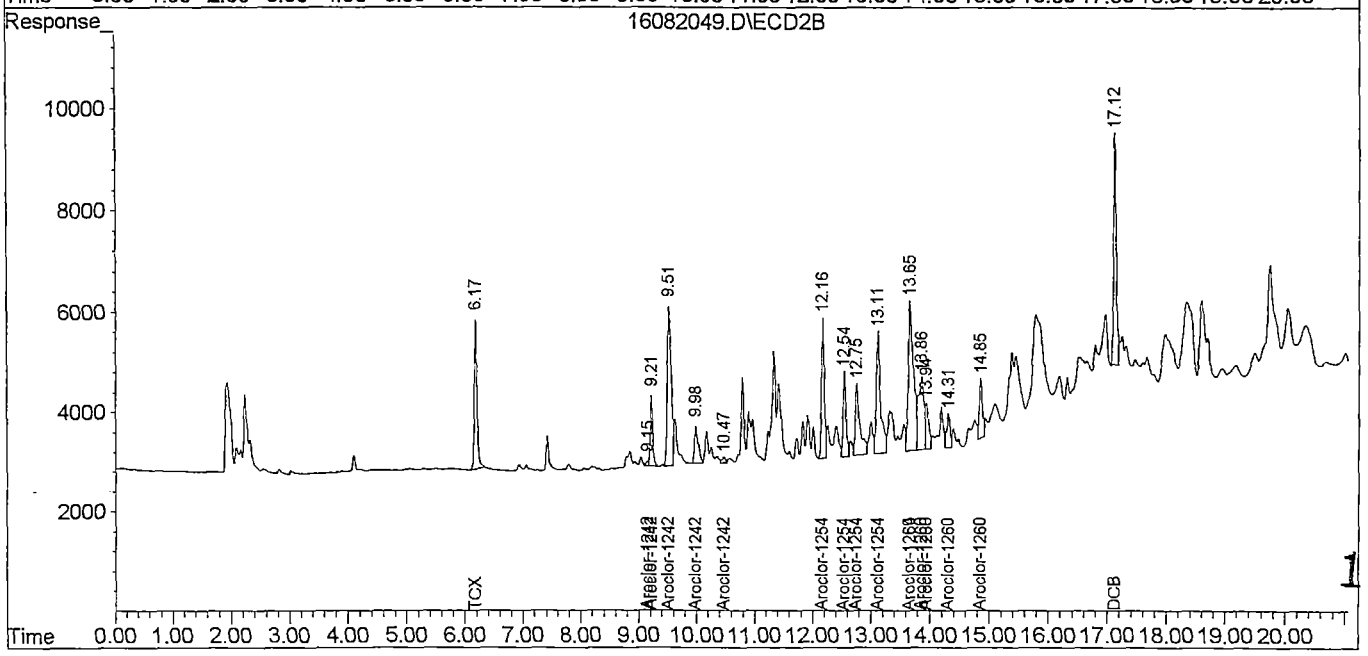
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082049.D\ECD1A.CH Vial: 49
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082049.D\ECD2B.CH
Acq On : 21 Aug 2001 10:01 Operator: TLM
Sample : 47158.19 *E00R7 * Inst : HP_16
Misc : *EPA*31.2G/5.0ML*24 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 28 17:48 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

ok 8-31-01





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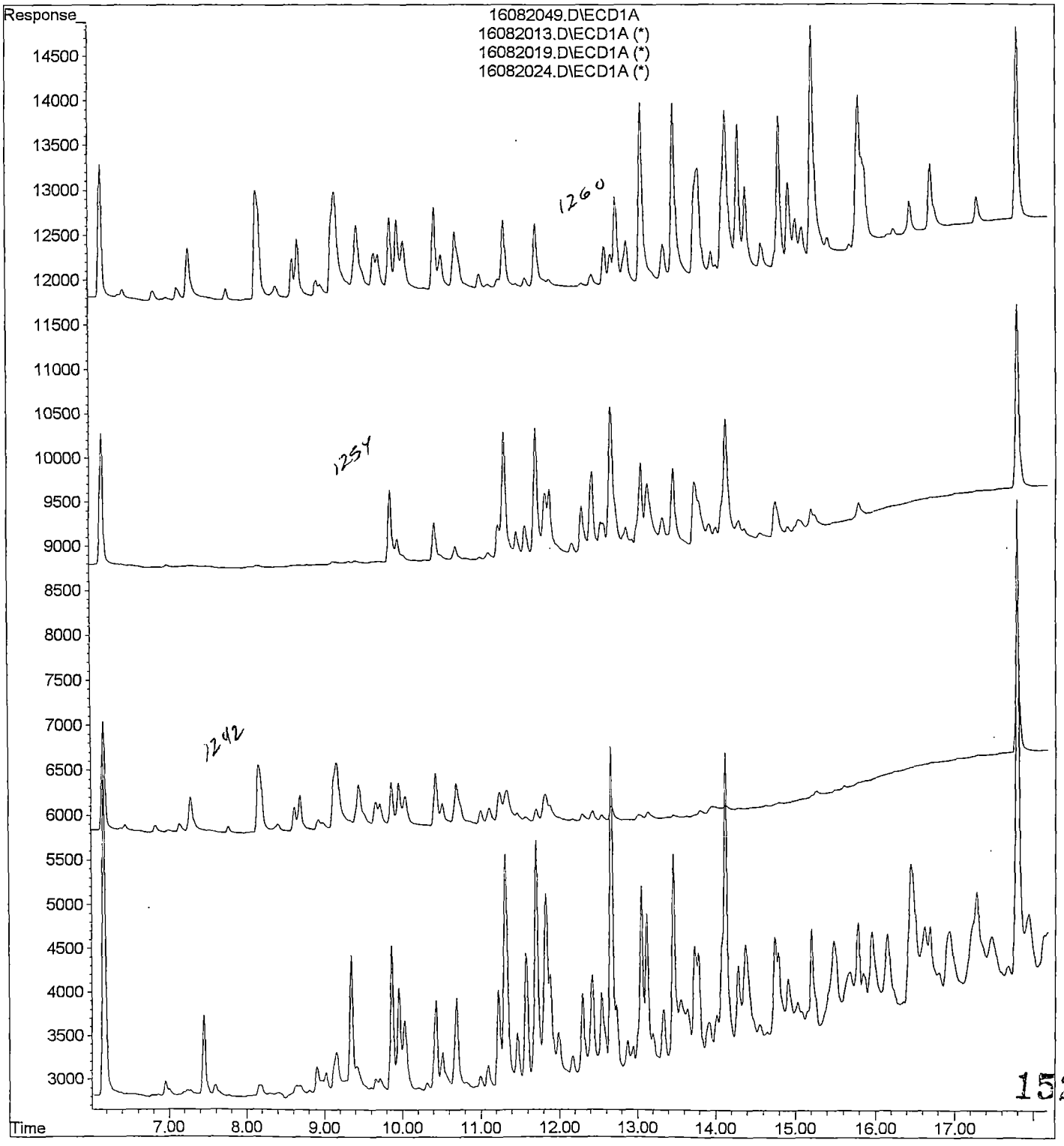
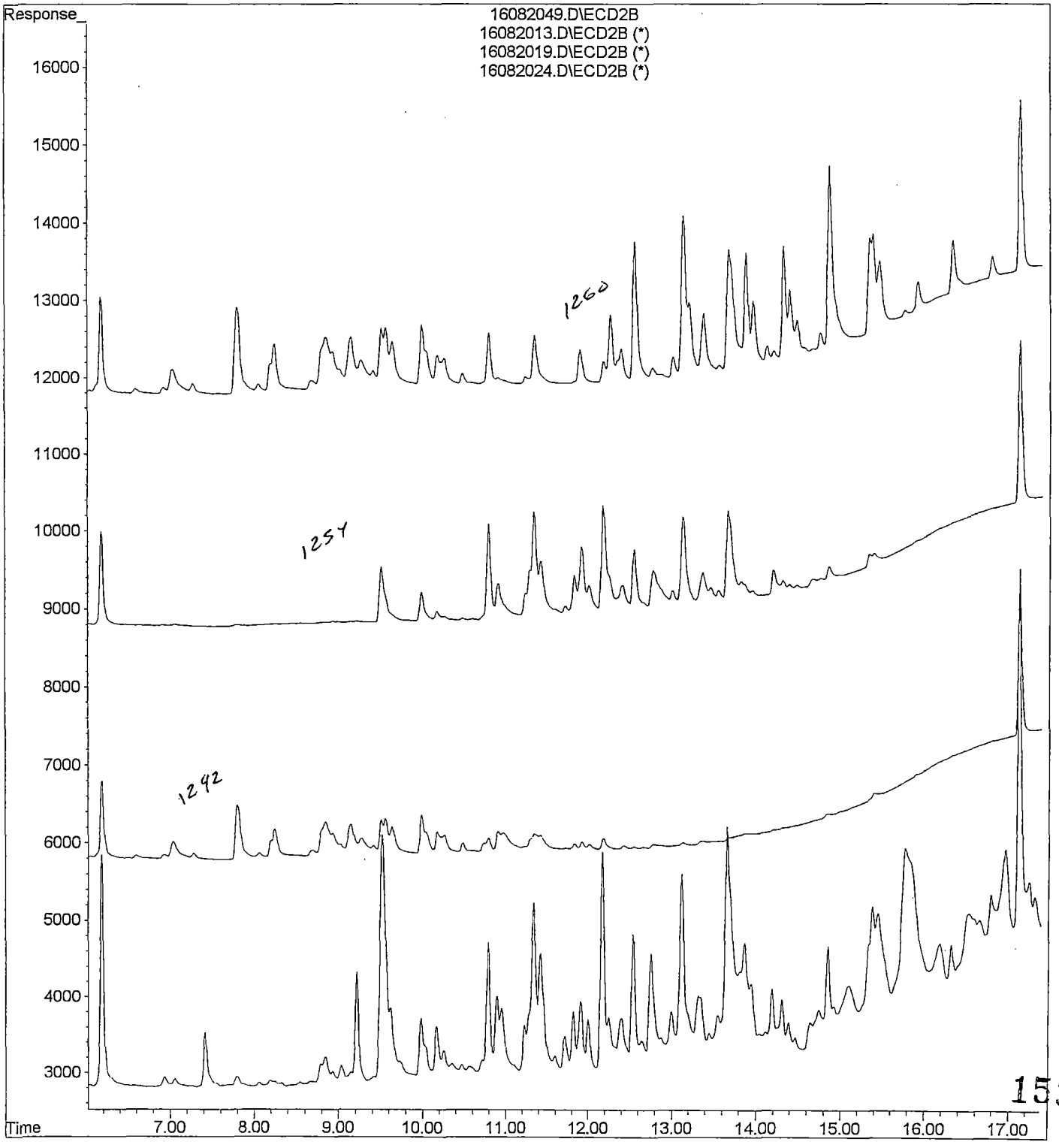
File : F:\HPCHEM\HP\16\DATA\08_20_01\16082049.D
Operator : TLM
Acquired : 21 Aug 2001 10:01 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.19 *E00R7 *
Misc Info : *EPA*31.2G/5.0ML*24
Vial Number: 49

ok
8-31-01



File : F:\HPCHEM\HP\16\DATA\08_20_01\16082049.D
Operator : TLM
Acquired : 21 Aug 2001 10:01 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.19 *E00R7 *
Misc Info : *EPA*31.2G/5.0ML*24
Vial Number: 49



Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082049.D\ECD1A.CH Vial: 49
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082049.D\ECD2B.CH
Acq On : 21 Aug 2001 10:01 Operator: TLM
Sample : 47158.19 *E00R7 * Inst : HP_16
Misc : *EPA*31.2G/5.0ML*24 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 28 17:48 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
System Monitoring Compounds:						
1) S TCX	6.17	6.18	101124	92840	5.815	5.279
Spiked Amount 8.435			Recovery	=	68.94%	62.59%
22) S DCB	17.78	17.12	175063	140241	6.885m	5.374m
Spiked Amount 8.435			Recovery	=	81.63%	63.71%
Target Compounds:						
7) L4 Aroclor-1242	9.41	9.15	13452	2896	21.5m	5.517m #
8) L4 Aroclor-1242 {2}	10.43	9.21f	29845	42408	73.1	128.1m #
9) L4 Aroclor-1242 {3}	10.51	9.51	16525	153656	70.2	542.0m #
10) L4 Aroclor-1242 {4}	10.69	9.98	35338	33580	65.4	59.1
11) L4 Aroclor-1242 {5}	11.23	10.47	30760	4464	96.9	37.8m #
Sum Aroclor-1242			125920	237004	327.1	772.6
Average Aroclor-1242					65.421	154.519
12) L6 Aroclor-1254	11.70	12.16	88528	91997	91.2	69.0
13) L6 Aroclor-1254 {2}	12.42	12.54	38463	59756	57.4	97.1 #
14) L6 Aroclor-1254 {3}	12.66	12.75	103977	80437	73.1	101.2 #
15) L6 Aroclor-1254 {4}	13.05	13.11	61877	122284	86.8	120.4 #
16) L6 Aroclor-1254 {5}	13.46	13.66	70186	185827	92.2	156.0 #
Sum Aroclor-1254			363030	540301	400.8	543.8
Average Aroclor-1254					80.163	108.754
17) L7 Aroclor-1260	14.12	13.66	127791	185827	68.3	105.5 #
18) L7 Aroclor-1260 {2}	14.28	13.86	28808	94552	29.1	101.5 #
19) L7 Aroclor-1260 {3}	14.38	13.94	60848	38121	97.7	64.3 #
20) L7 Aroclor-1260 {4}	14.78	14.31	31123	28081	30.0	32.5
21) L7 Aroclor-1260 {5}	15.20	14.85	42648	42035	20.6	20.0
Sum Aroclor-1260			291218	388617	103.7	136.6
Average Aroclor-1260					49.159	64.789

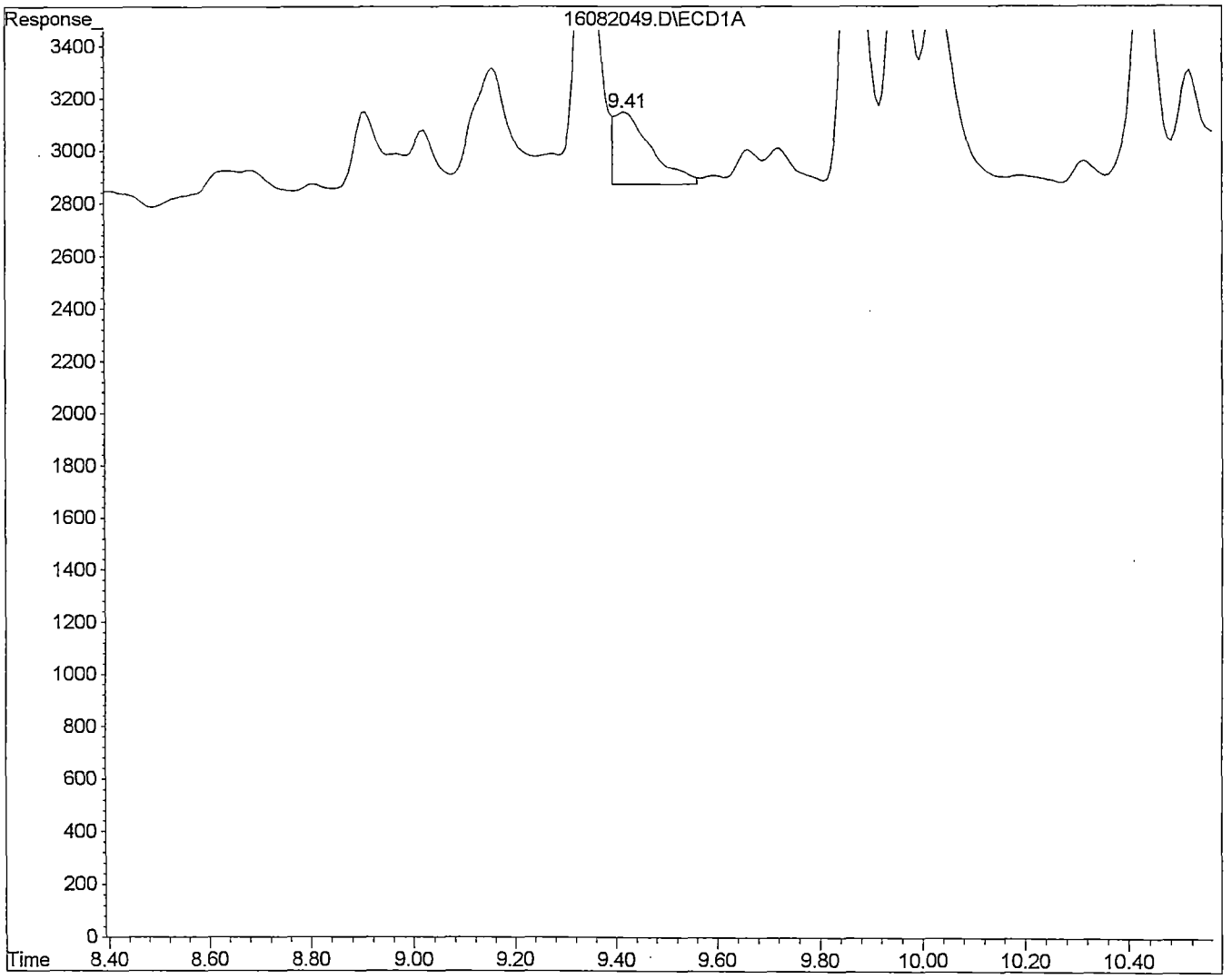
>1M 8-28-01

154

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

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_20_01\16082049.D
Date Acquired: 21 Aug 2001 10:01
Inst: HP_16 Operator ID: TLM
Name: 47158.19 *E00R7 *
Misc: *EPA*31.2G/5.0ML*24
Method: F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title: PCB/TOXAPHENE
Quant Time: Aug 28 17:48 2001 Quant Results File: XPCBH20.RES



Aroclor-1242 9.41min area: 13452 m

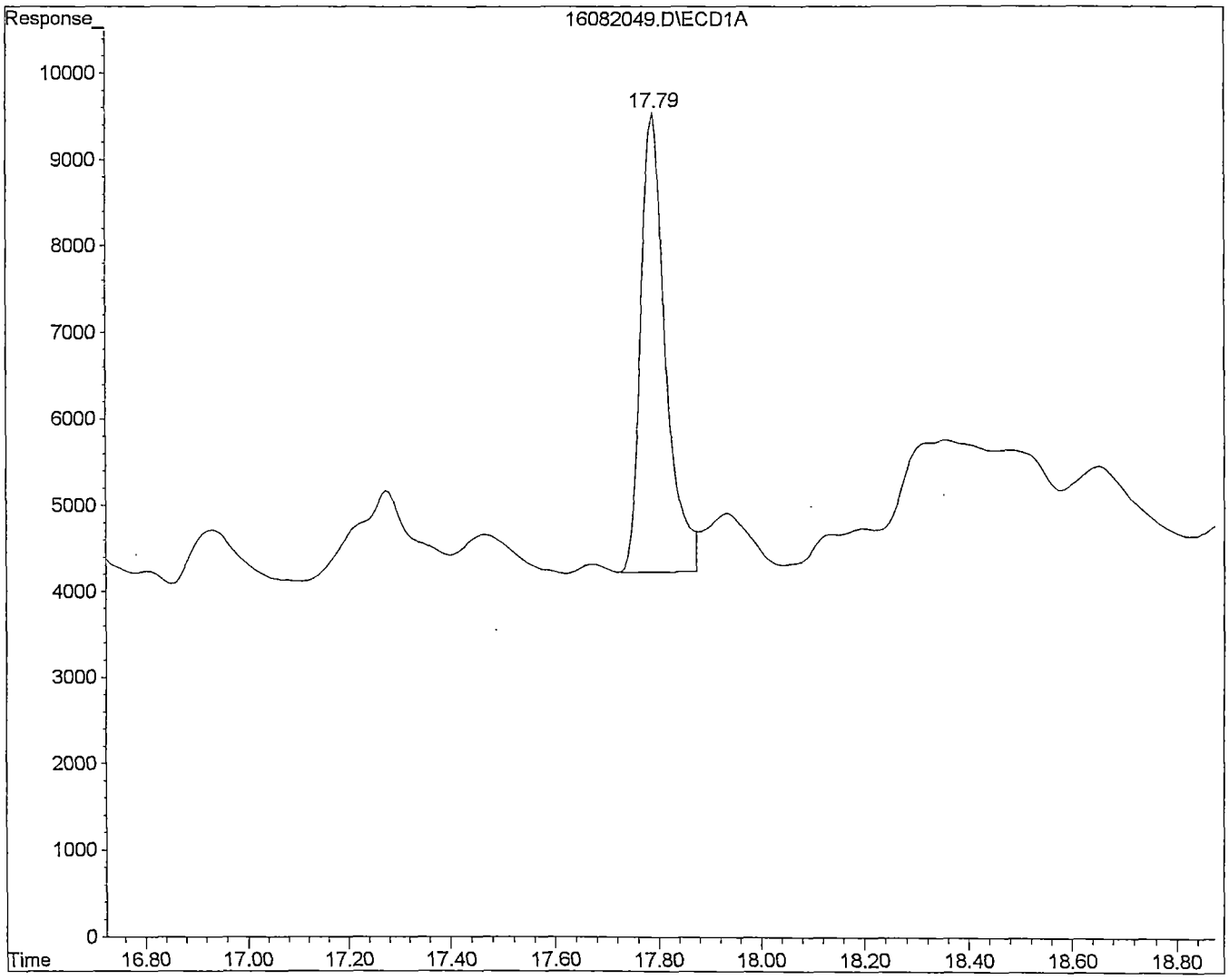
Integration Time Range: 9.39 - 9.56

JM 5-28-01

F:\HPCHEM\HP\16\DATA\08_20_01\16082049.D
Report generated: Tue Aug 28 17:49:31 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_20_01\16082049.D
Date Acquired: 21 Aug 2001 10:01
Inst: HP_16 Operator ID: TLM
Name: 47158.19 *E00R7 *
Misc: *EPA*31.2G/5.0ML*24
Method: F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title: PCB/TOXAPHENE
Quant Time: Aug 28 17:48 2001 Quant Results File: XPCBH20.RES



DCB 17.79min area: 175063 m

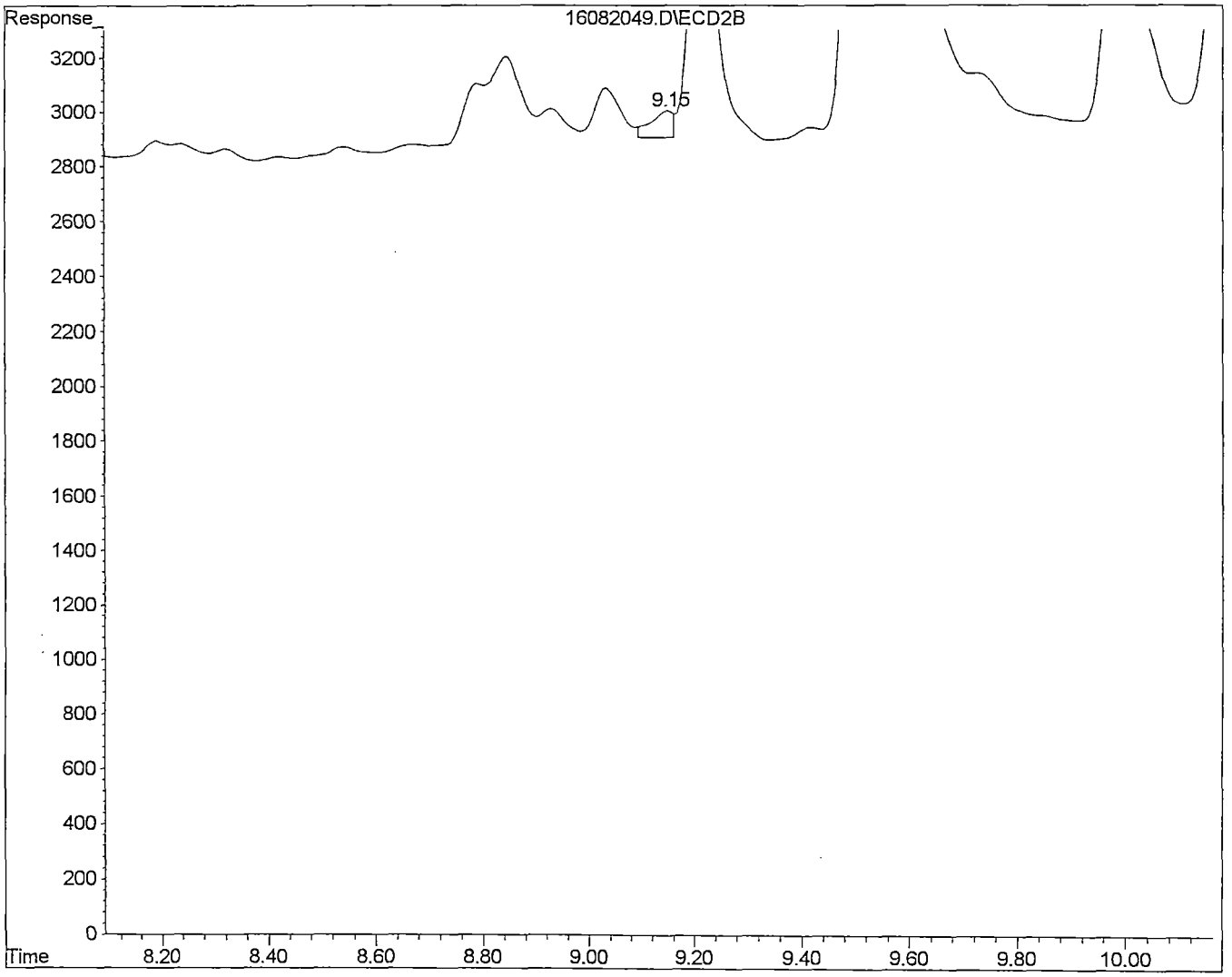
Integration Time Range: 17.73 - 17.87

JM 8-28-01

F:\HPCHEM\HP\16\DATA\08_20_01\16082049.D
Report generated: Tue Aug 28 17:49:31 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_20_01\16082049.D
Date Acquired: 21 Aug 2001 10:01
Inst: HP_16 Operator ID: TLM
Name: 47158.19 *E00R7 *
Misc: *EPA*31.2G/5.0ML*24
Method: F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title: PCB/TOXAPHENE
Quant Time: Aug 28 17:48 2001 Quant Results File: XPCBH20.RES



Aroclor-1242 #2 9.15min area: 2896 m

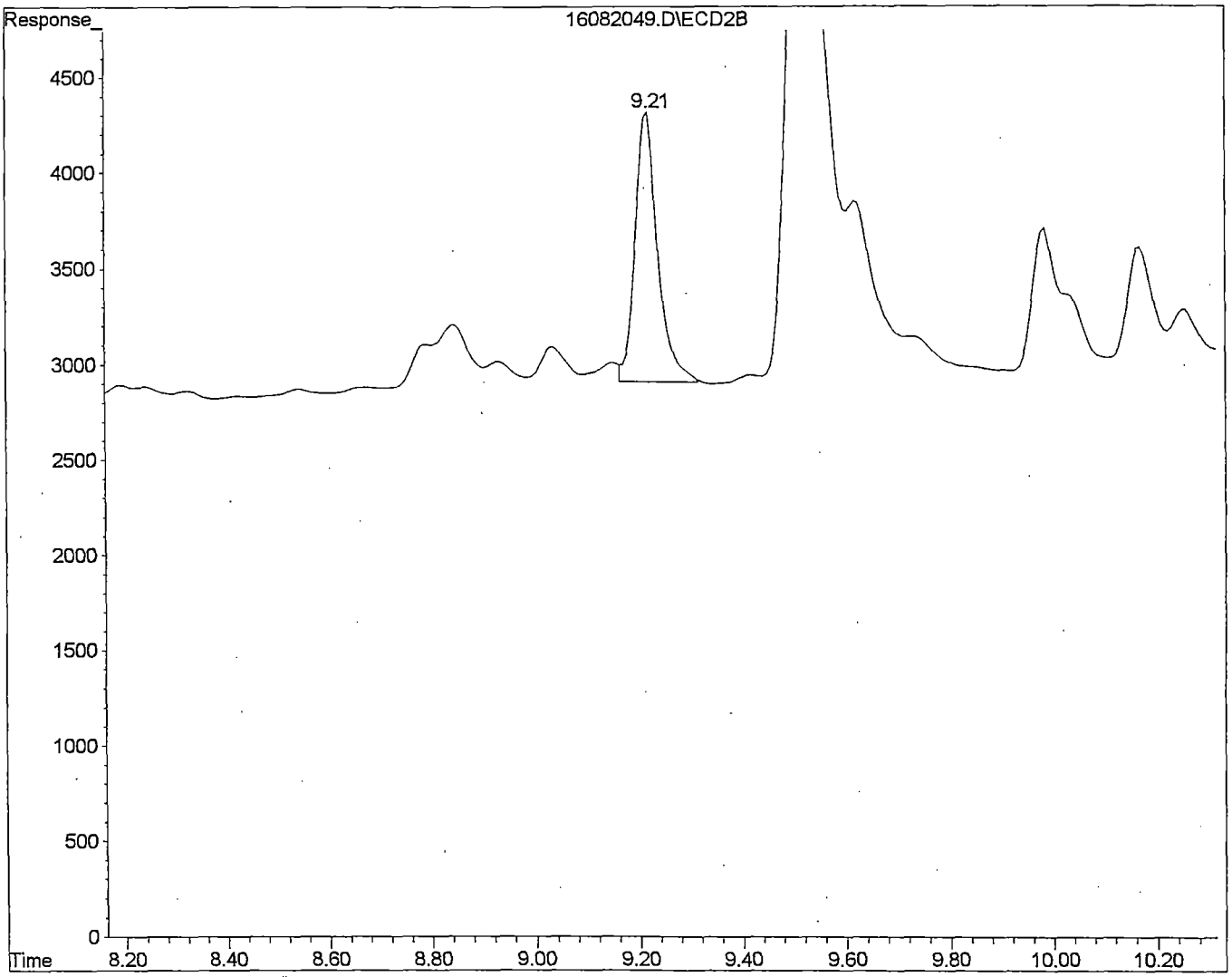
Integration Time Range: 9.09 - 9.16

JRT 8-28-01

F:\HPCHEM\HP\16\DATA\08_20_01\16082049.D
Report generated: Tue Aug 28 17:49:32 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_20_01\16082049.D
Date Acquired: 21 Aug 2001 10:01
Inst: HP_16 Operator ID: TLM
Name: 47158.19 *E00R7 *
Misc: *EPA*31.2G/5.0ML*24
Method: F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title: PCB/TOXAPHENE
Quant Time: Aug 28 17:48 2001 Quant Results File: XPCBH20.RES



Aroclor-1242 {2} #2 9.21min area: 42408 m

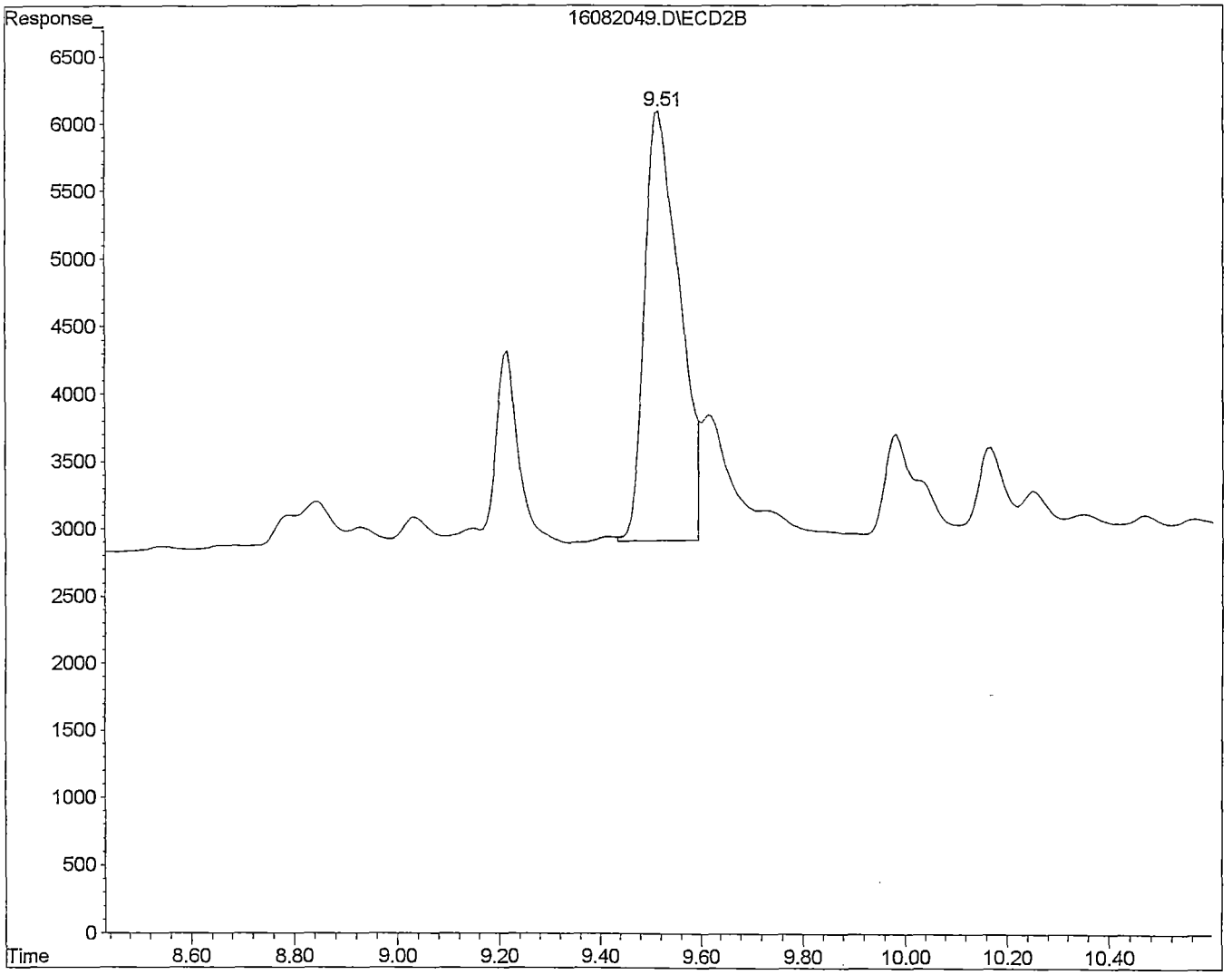
Integration Time Range: 9.16 - 9.31

JAN 8-28-01

F:\HPCHEM\HP\16\DATA\08_20_01\16082049.D
Report generated: Tue Aug 28 17:49:33 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_20_01\16082049.D
Date Acquired: 21 Aug 2001 10:01
Inst: HP_16 Operator ID: TLM
Name: 47158.19 *E00R7 *
Misc: *EPA*31.2G/5.0ML*24
Method: F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title: PCB/TOXAPHENE
Quant Time: Aug 28 17:48 2001 Quant Results File: XPCBH20.RES



Aroclor-1242 {3} #2 9.51min area: 153656 m

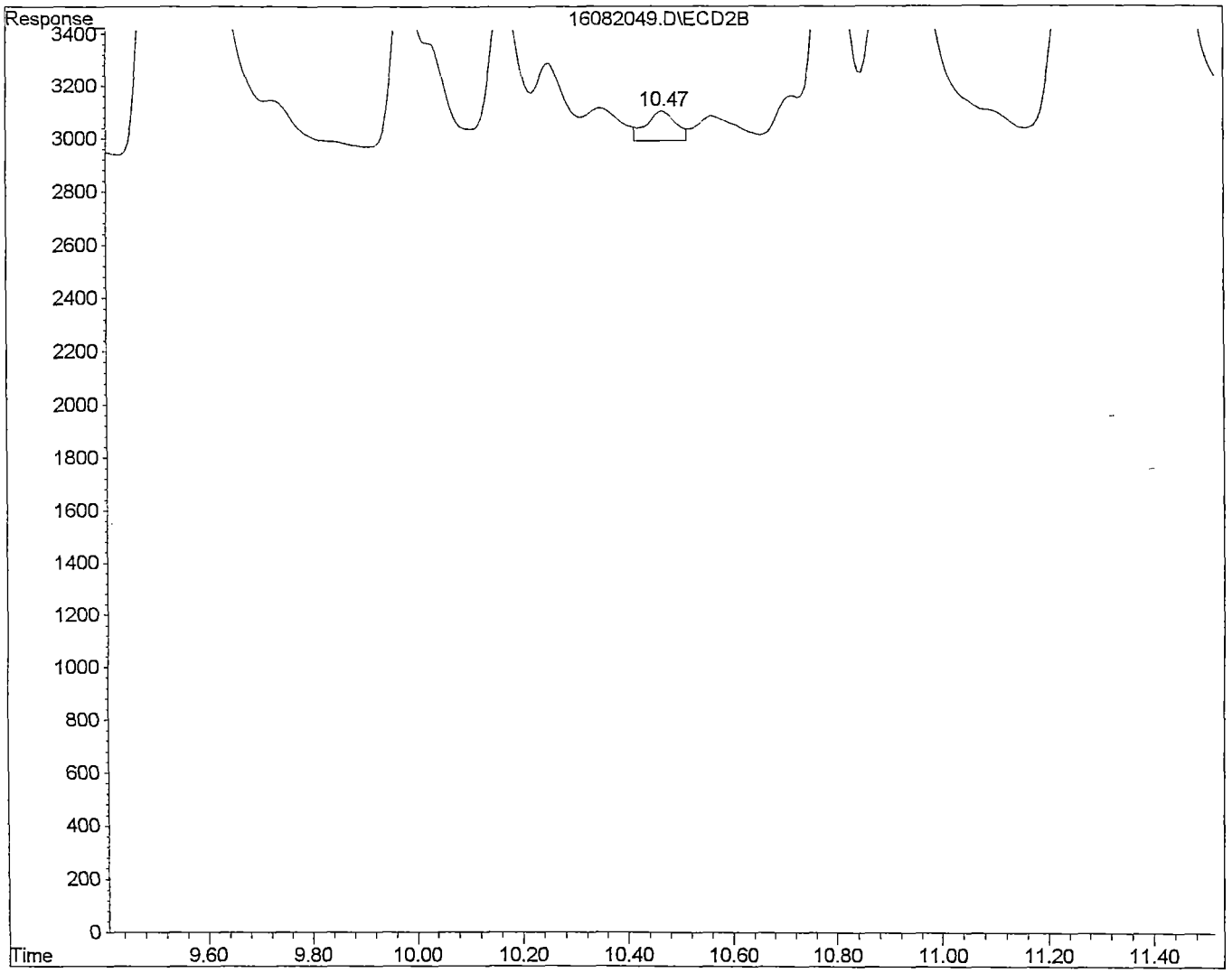
Integration Time Range: 9.43 - 9.60

TLM 8-28-01

F:\HPCHEM\HP\16\DATA\08_20_01\16082049.D
Report generated: Tue Aug 28 17:49:34 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_20_01\16082049.D
Date Acquired: 21 Aug 2001 10:01
Inst: HP_16 Operator ID: TLM
Name: 47158.19 *E00R7 *
Misc: *EPA*31.2G/5.0ML*24
Method: F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title: PCB/TOXAPHENE
Quant Time: Aug 28 17:48 2001 Quant Results File: XPCBH20.RES



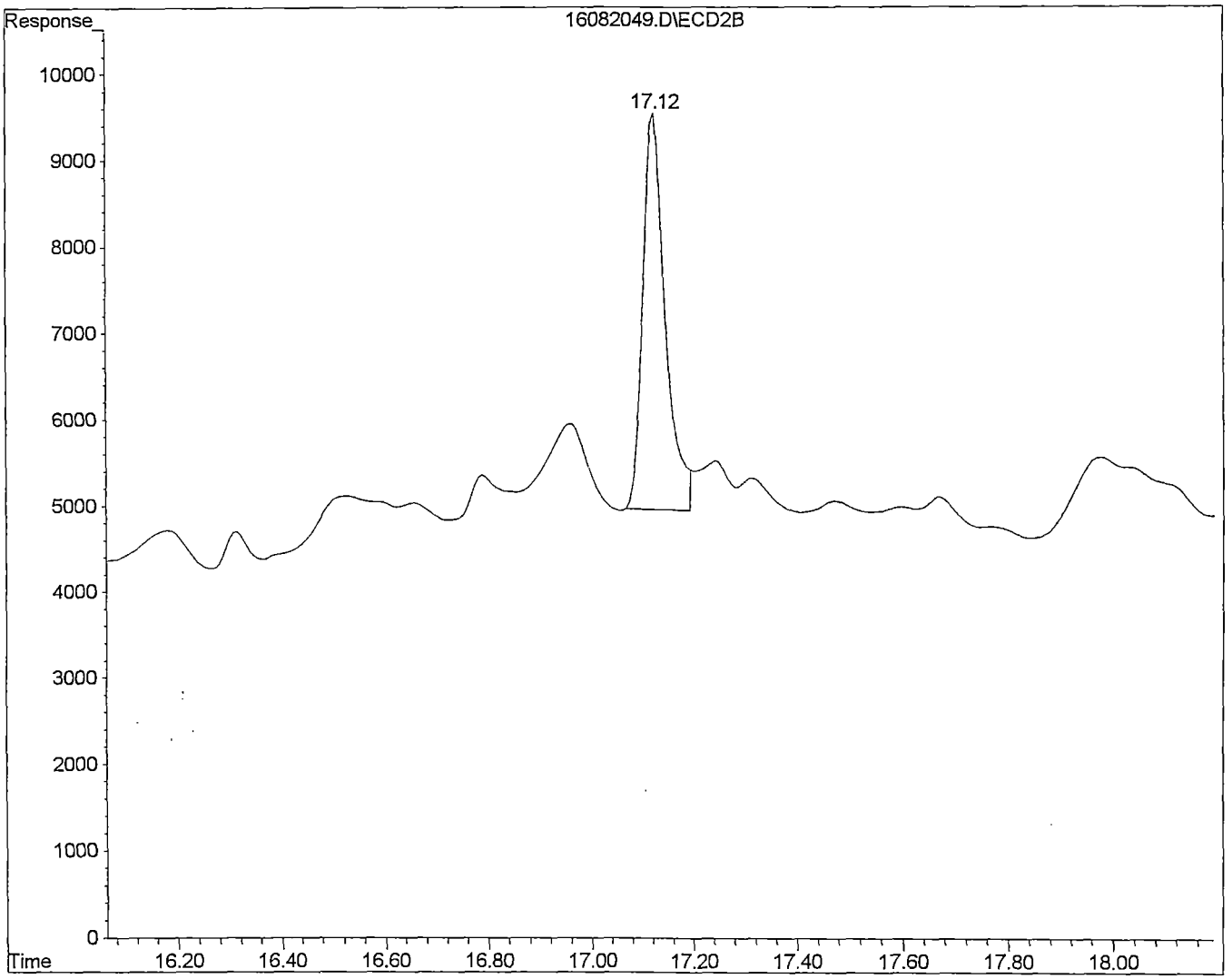
Aroclor-1242 {5} #2 10.47min area: 4464 m

Integration Time Range: 10.41 - 10.51 TM 8-28-01

F:\HPCHEM\HP\16\DATA\08_20_01\16082049.D
Report generated: Tue Aug 28 17:49:35 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_20_01\16082049.D
Date Acquired: 21 Aug 2001 10:01
Inst: HP_16 Operator ID: TLM
Name: 47158.19 *E00R7 *
Misc: *EPA*31.2G/5.0ML*24
Method: F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title: PCB/TOXAPHENE
Quant Time: Aug 28 17:48 2001 Quant Results File: XPCBH20.RES



DCB #2 17.12min area: 140241 m

Integration Time Range: 17.06 - 17.19

JAM 8-28-01

F:\HPCHEM\HP\16\DATA\08_20_01\16082049.D
Report generated: Tue Aug 28 17:49:36 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00R8

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: 47158.20

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

% Moisture: 32 decanted: (Y/N) __ Date Received: 08/01/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/21/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	48	U
11104-28-2	Aroclor-1221	48	U
11141-16-5	Aroclor-1232	48	U
53469-21-9	Aroclor-1242	240	J ~~P~~
12672-29-6	Aroclor-1248	48	U
11097-69-1	Aroclor-1254	280	
11096-82-5	Aroclor-1260	90	
Surrogate amount spiked		9.74	

TBS 9/11/01 TB 1.07.1

FORM I PCB

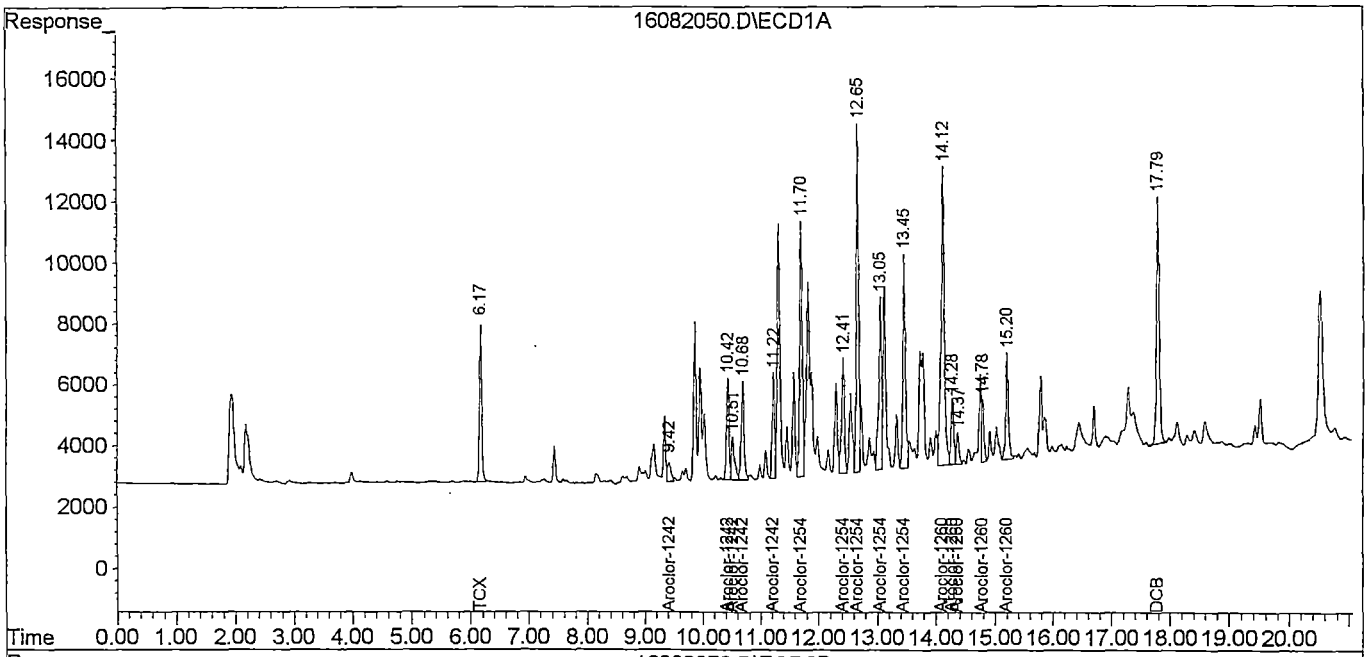
Chromatographic Report

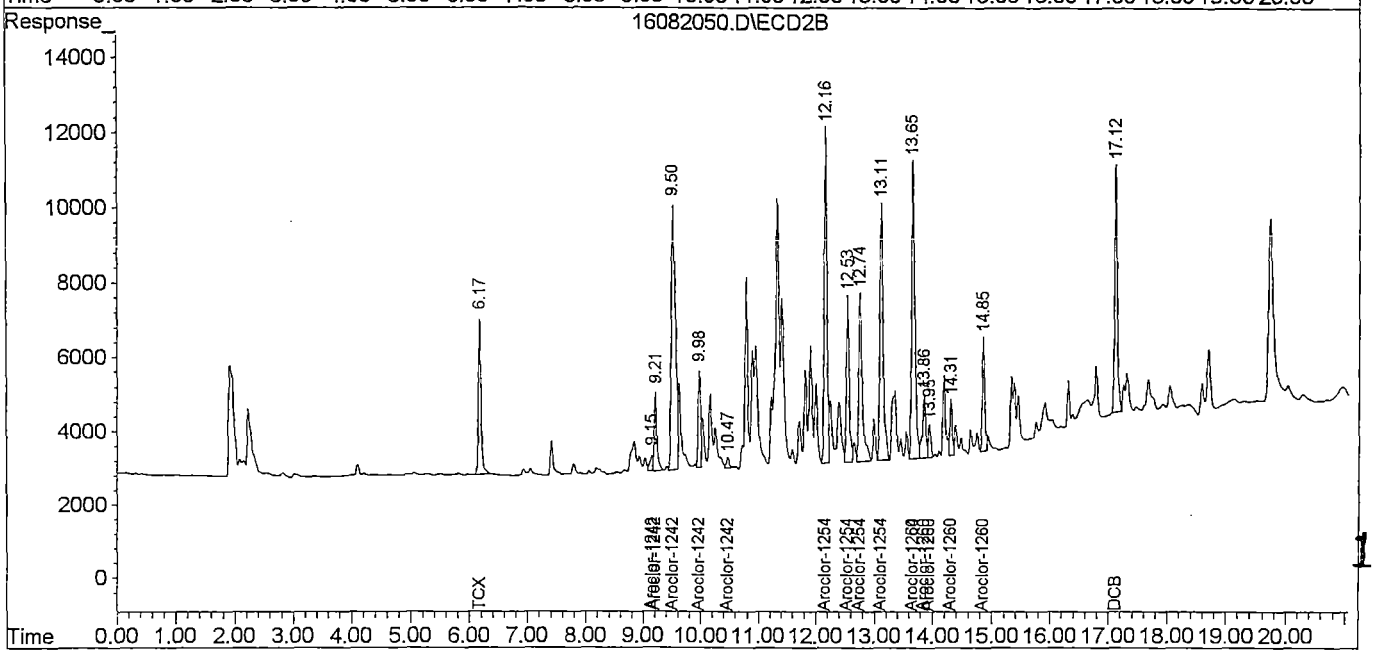
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082050.D\ECD1A.CH Vial: 50
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082050.D\ECD2B.CH
Acq On : 21 Aug 2001 10:26 Operator: TLM
Sample : 47158.20 *E00R8 * Inst : HP_16
Misc : *EPA*30.2G/5.0ML*32 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 28 17:59 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

ok 8-31-01





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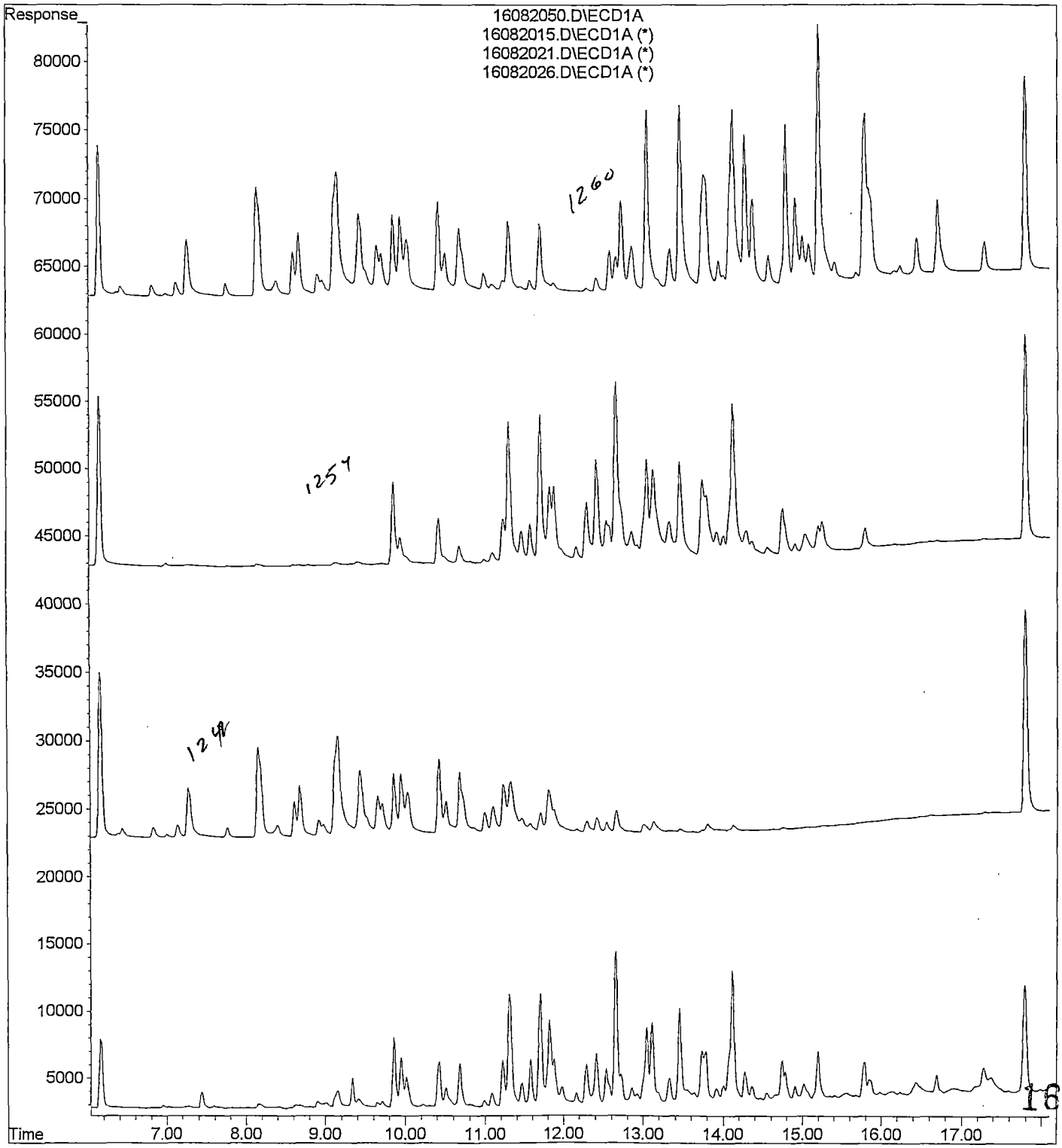
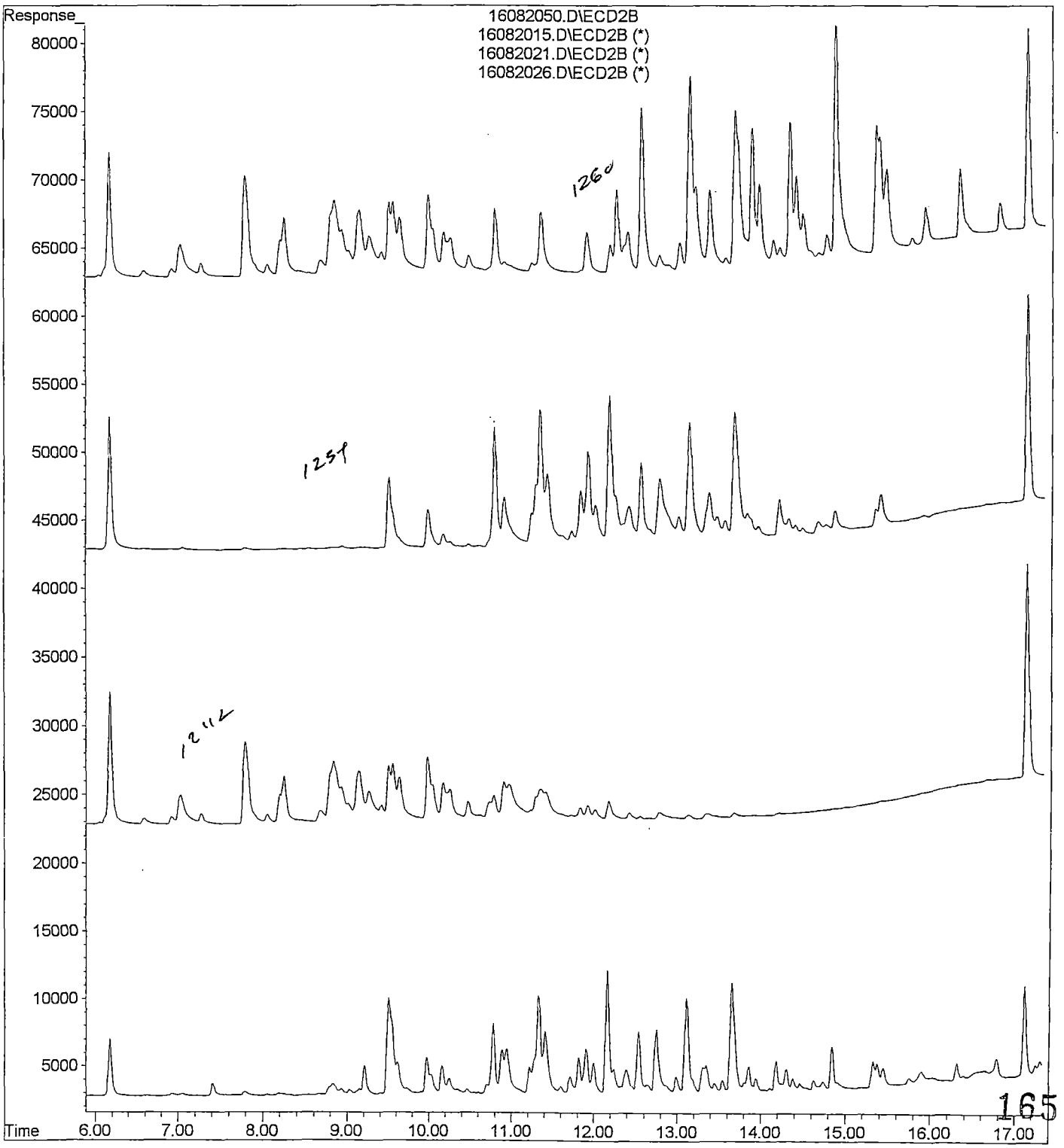
File : F:\HPCHEM\HP\16\DATA\08_20_01\16082050.D
Operator : TLM
Acquired : 21 Aug 2001 10:26 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.20 *E00R8 *
Misc Info : *EPA*30.2G/5.0ML*32
Vial Number: 50

ok 8-31-01



File : F:\HPCHEM\HP\16\DATA\08_20_01\16082050.D
Operator : TLM
Acquired : 21 Aug 2001 10:26 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.20 *E00R8 *
Misc Info : *EPA*30.2G/5.0ML*32
Vial Number: 50



Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082050.D\ECD1A.CH Vial: 50
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082050.D\ECD2B.CH
Acq On : 21 Aug 2001 10:26 Operator: TLM
Sample : 47158.20 *E00R8 * Inst : HP_16
Misc : *EPA*30.2G/5.0ML*32 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 28 17:59 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	6.17	6.18	139749	131899	9.279	8.659	
	Spiked Amount 9.739			Recovery	=	95.28%	88.91%	
22)	S DCB	17.79	17.12	267460	198315	12.1	8.775	#
	Spiked Amount 9.739			Recovery	=	124.24%	90.10%	
	Target Compounds:							
7)	L4 Aroclor-1242	9.42	9.15	26964	14422	49.7	31.7	#
8)	L4 Aroclor-1242 {2}	10.43	9.21f	97181	68852	274.9	240.2	
9)	L4 Aroclor-1242 {3}	10.51	9.51	56917	370984	279.3	1511.1mE	#
10)	L4 Aroclor-1242 {4}	10.68	9.97	107382	81124	229.4	164.7m	#
11)	L4 Aroclor-1242 {5}	11.22	10.47	97287	8244	354.0	80.7m	#
	Sum Aroclor-1242			385730	543626	1187.2	2028.5	
	Average Aroclor-1242					237.440	405.693	
12)	L6 Aroclor-1254	11.70	12.16	266723	286829	317.4	248.5	
13)	L6 Aroclor-1254 {2}	12.42	12.54	120632	142557	207.9	267.5	#
14)	L6 Aroclor-1254 {3}	12.66	12.75	320875	192765	260.5	279.9	
15)	L6 Aroclor-1254 {4}	13.05	13.11	182413	269383	295.5	306.2	
16)	L6 Aroclor-1254 {5}	13.45	13.65	213492	316358	324.0	306.7	
	Sum Aroclor-1254			1104134	1207892	1405.3	1409.0	
	Average Aroclor-1254					281.060	281.799	
17)	L7 Aroclor-1260	14.12	13.65	379045	316358	233.9	207.5	
18)	L7 Aroclor-1260 {2}	14.28	13.86	67655	67765	79.0	84.0	
19)	L7 Aroclor-1260 {3}	14.37	13.95	31688	27074	58.8	52.8	
20)	L7 Aroclor-1260 {4}	14.78	14.31	55731	43841	62.0	58.6	
21)	L7 Aroclor-1260 {5}	15.20	14.85	111753	86561	62.4	47.6	
	Sum Aroclor-1260			645871	541600	241.6	219.4	
	Average Aroclor-1260					99.227	90.098	

JM 8-28-01

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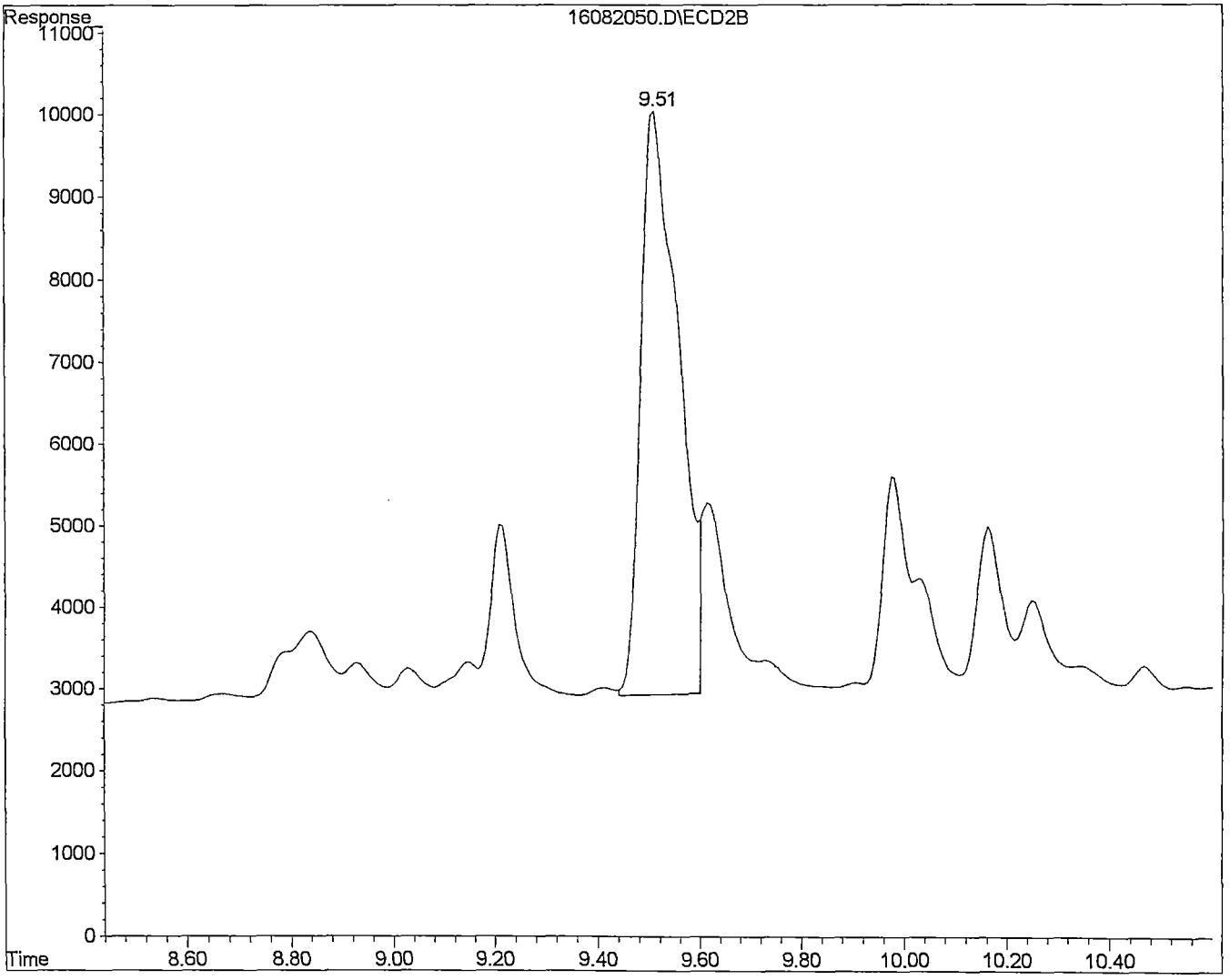
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_20_01\16082050.D
Date Acquired: 21 Aug 2001 10:26
Inst: HP_16 Operator ID: TLM
Name: 47158.20 *E00R8 *
Misc: *EPA*30.2G/5.0ML*32
Method: F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title: PCB/TOXAPHENE
Quant Time: Aug 28 17:59 2001 Quant Results File: XPCBH20.RES



Aroclor-1242 {3} #2 9.51min area: 370984 m

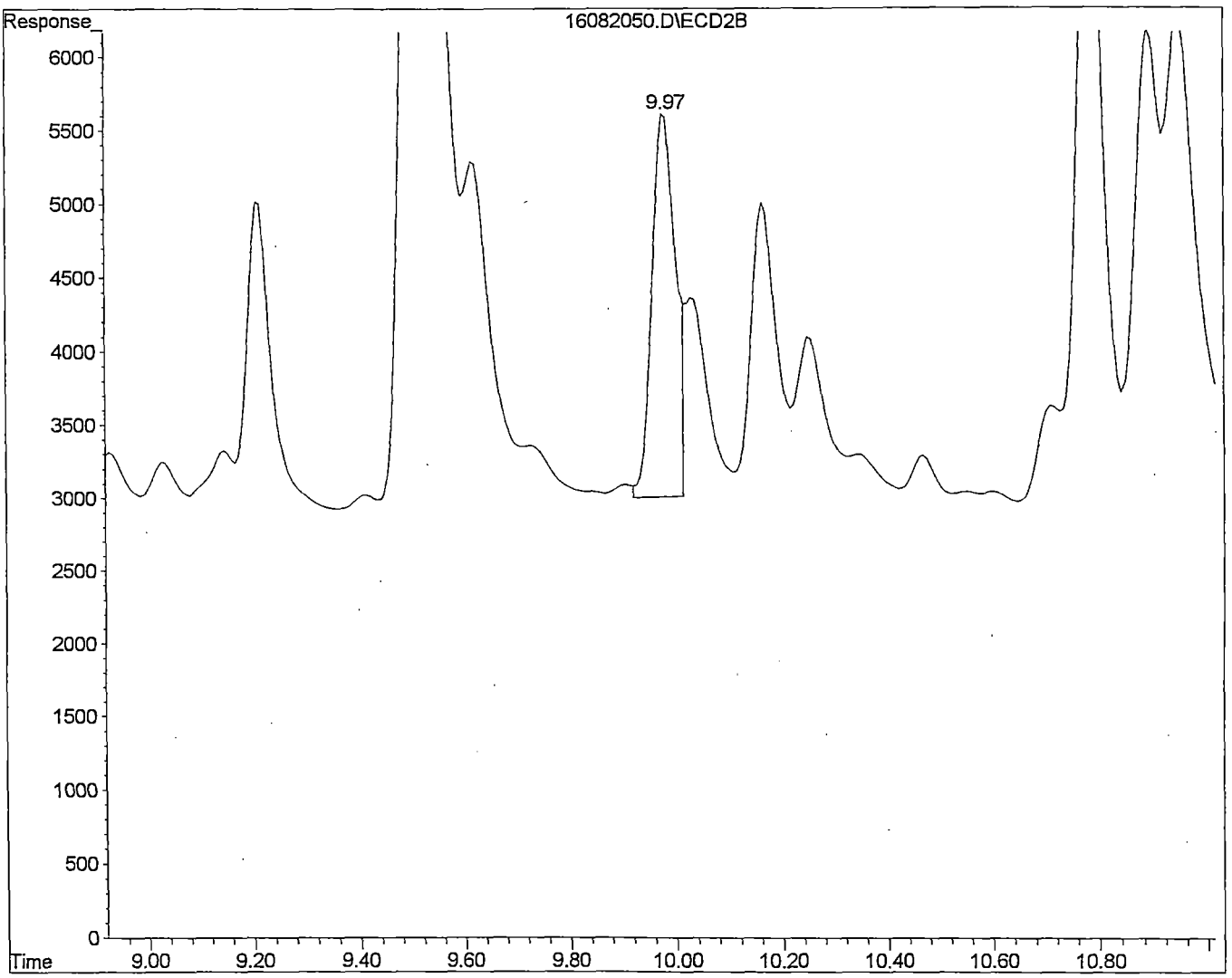
Integration Time Range: 9.44 - 9.60

JAM 9-28-01

F:\HPCHEM\HP\16\DATA\08_20_01\16082050.D
Report generated: Tue Aug 28 18:00:12 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_20_01\16082050.D
Date Acquired: 21 Aug 2001 10:26
Inst: HP_16 Operator ID: TLM
Name: 47158.20 *E00R8 *
Misc: *EPA*30.2G/5.0ML*32
Method: F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title: PCB/TOXAPHENE
Quant Time: Aug 28 17:59 2001 Quant Results File: XPCBH20.RES



Aroclor-1242 {4} #2 9.97min area: 81124 m

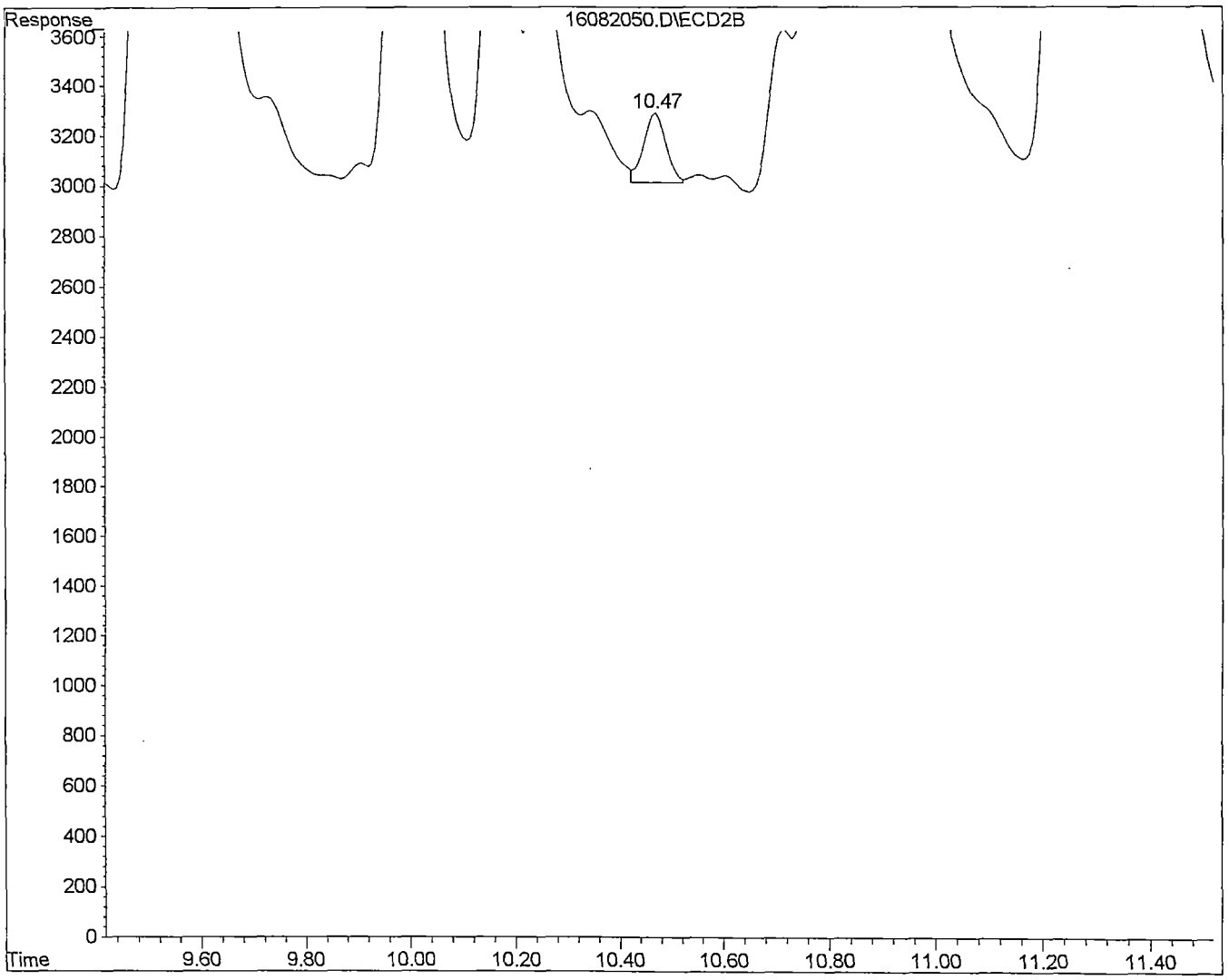
Integration Time Range: 9.92 - 10.01

JM 8-28-01

F:\HPCHEM\HP\16\DATA\08_20_01\16082050.D
Report generated: Tue Aug 28 18:00:13 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_20_01\16082050.D
Date Acquired: 21 Aug 2001 10:26
Inst: HP_16 Operator ID: TLM
Name: 47158.20 *E00R8 *
Misc: *EPA*30.2G/5.0ML*32
Method: F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title: PCB/TOXAPHENE
Quant Time: Aug 28 17:59 2001 Quant Results File: XPCBH20.RES



Aroclor-1242 {5} #2 10.47min area: 8244 m

Integration Time Range: 10.42 - 10.52

TM
8-28-01

F:\HPCHEM\HP\16\DATA\08_20_01\16082050.D
Report generated: Tue Aug 28 18:00:14 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00R9

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: 47158.21

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/21/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	48	U
11104-28-2	Aroclor-1221	48	U
11141-16-5	Aroclor-1232	48	U
53469-21-9	Aroclor-1242	210	J ~~P~~
12672-29-6	Aroclor-1248	48	U
11097-69-1	Aroclor-1254	230	
11096-82-5	Aroclor-1260	75	
Surrogate amount spiked		9.68	

TB 10/1 TB 9/11/01

FORM I PCB

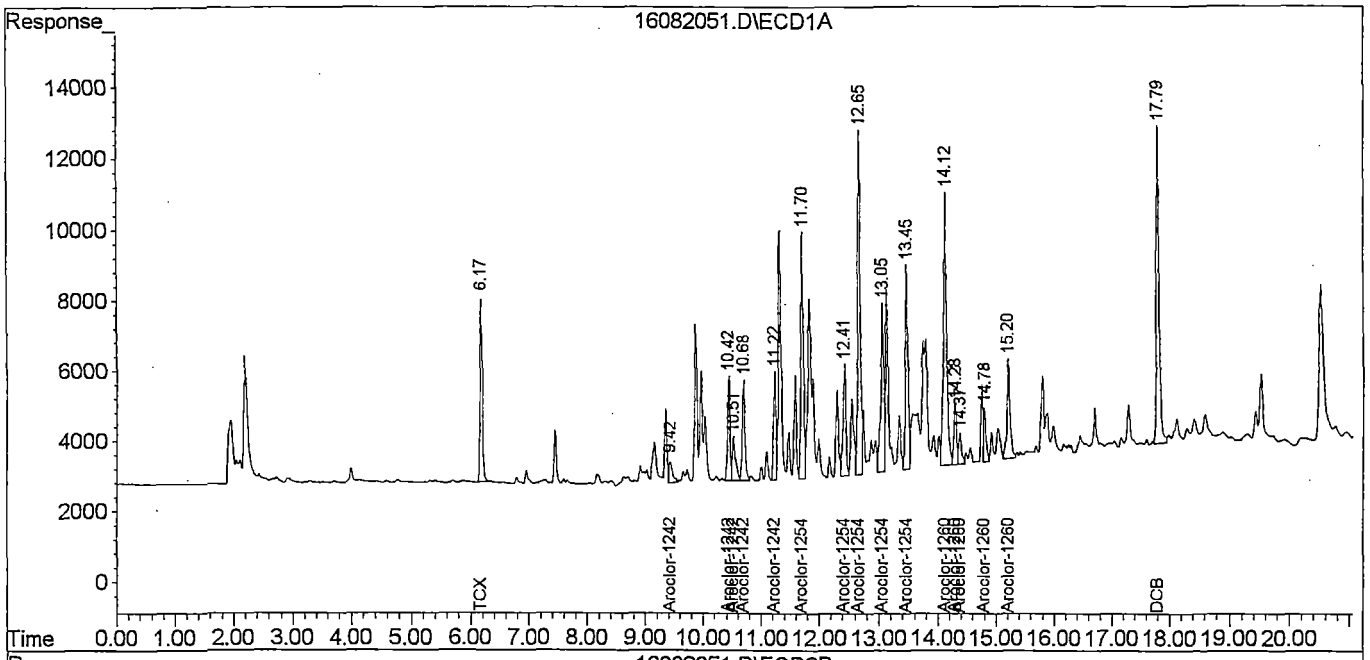
Chromatographic Report

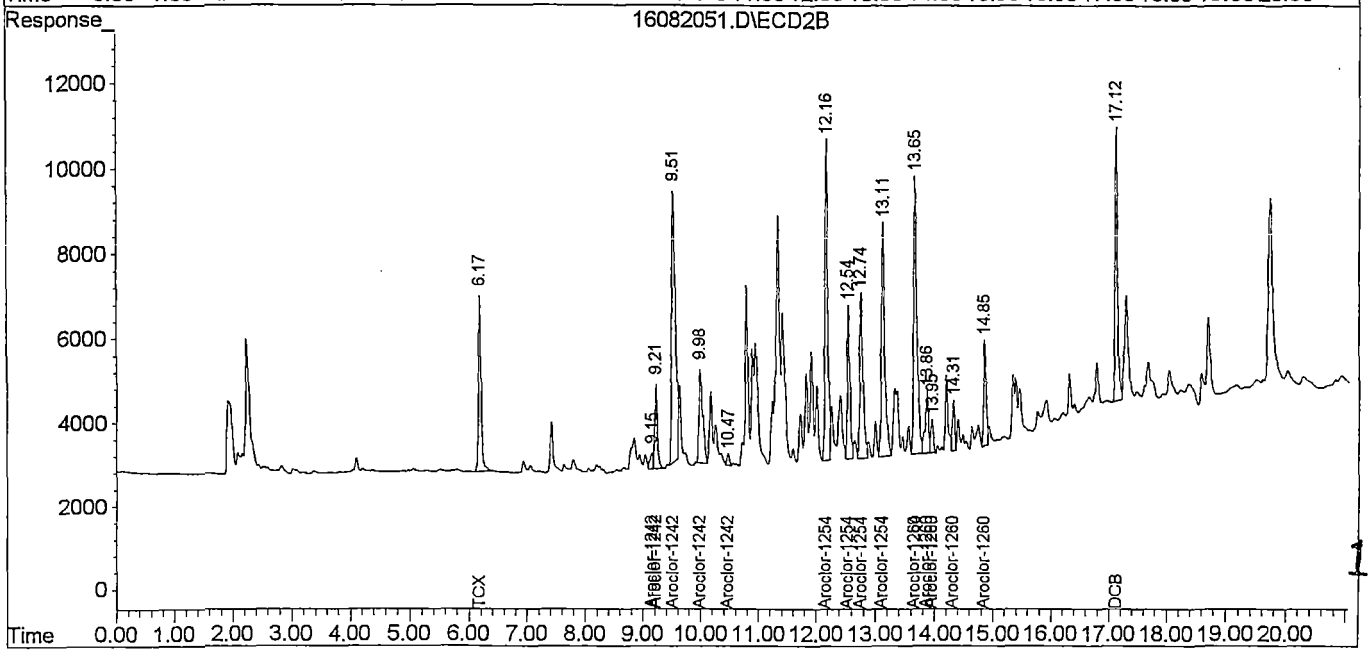
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082051.D\ECD1A.CH Vial: 51
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082051.D\ECD2B.CH
Acq On : 21 Aug 2001 10:51 Operator: TLM
Sample : 47158.21 *E00R9 * Inst : HP_16
Misc : *EPA*31.3G/5.0ML*34 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 22 18:59 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

ok 8-31-01





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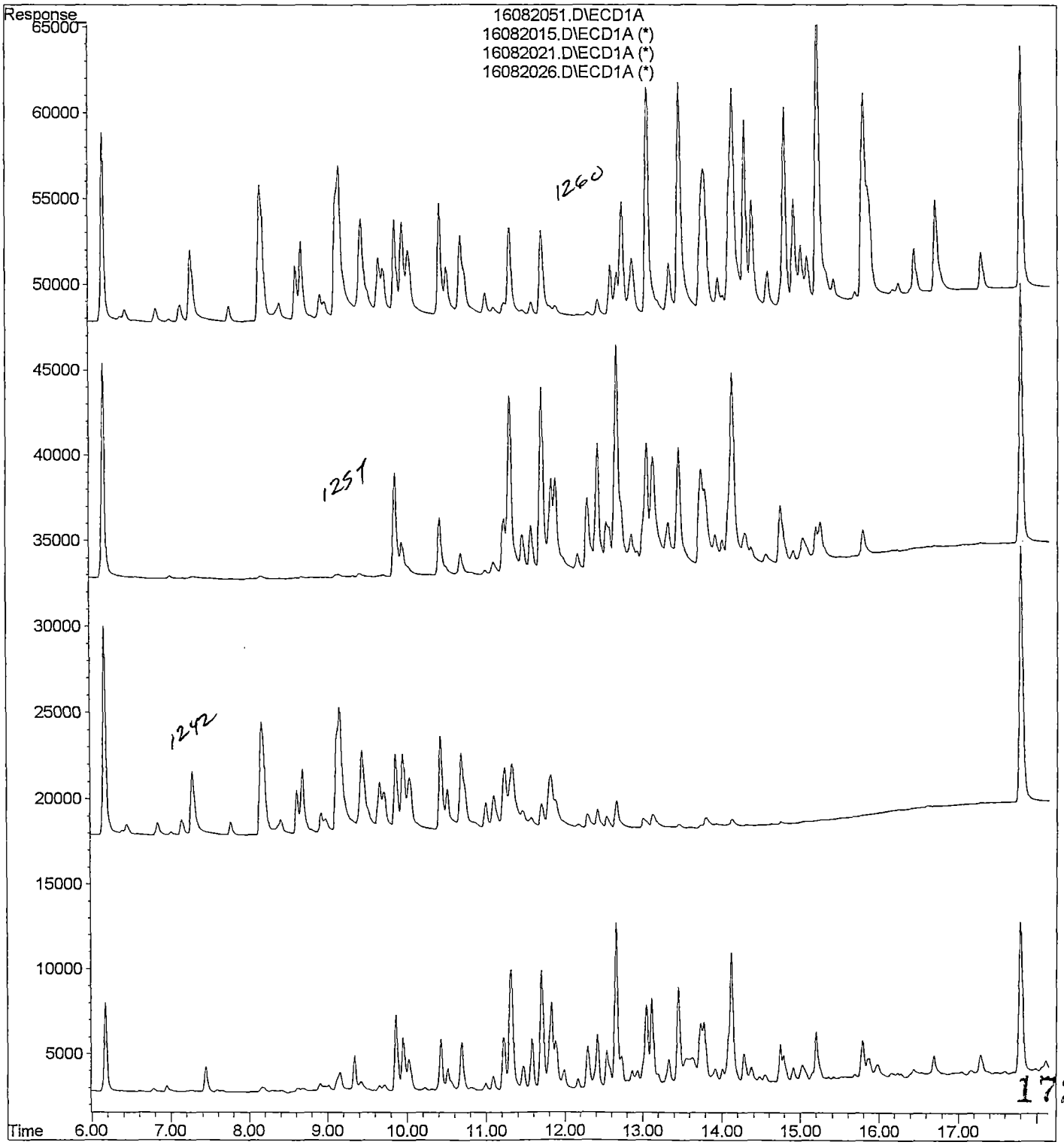
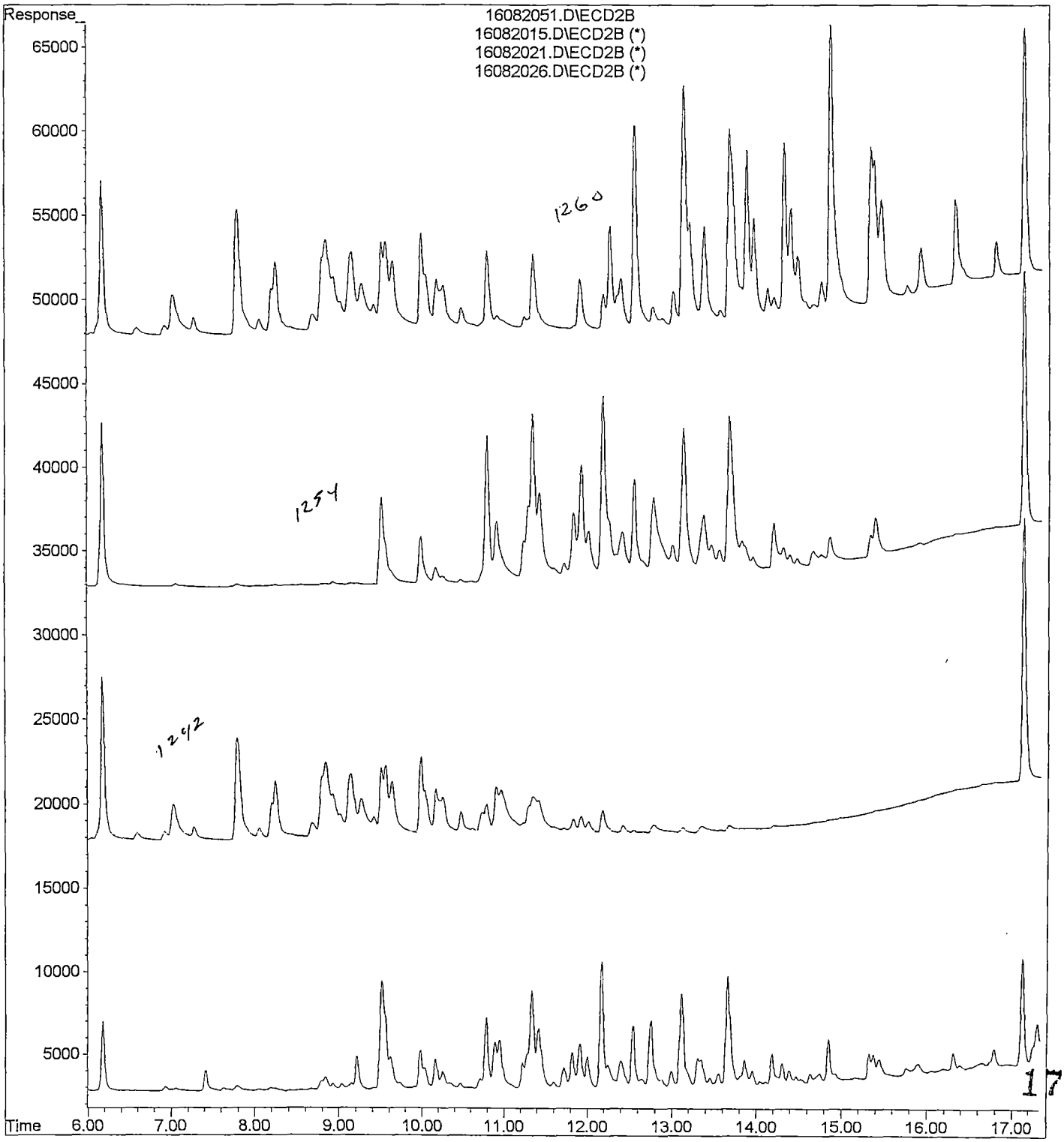
File : F:\HPCHEM\HP\16\DATA\08_20_01\16082051.D
Operator : TLM
Acquired : 21 Aug 2001 10:51 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.21 *E00R9 *
Misc Info : *EPA*31.3G/5.0ML*34
Vial Number: 51

OK 8.31-01



File : F:\HPCHEM\HP\16\DATA\08_20_01\16082051.D
Operator : TLM
Acquired : 21 Aug 2001 10:51 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.21 *E00R9 *
Misc Info : *EPA*31.3G/5.0ML*34
Vial Number: 51



Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082051.D\ECD1A.CH Vial: 51
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082051.D\ECD2B.CH
Acq On : 21 Aug 2001 10:51 Operator: TLM
Sample : 47158.21 *E00R9 * Inst : HP_16
Misc : *EPA*31.3G/5.0ML*34 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 22 18:59 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	6.17	6.18	136806	127785	9.030	8.339	
	Spiked Amount 9.681			Recovery	=	93.27%	86.13%	
22)	S DCB	17.79	17.12	307039	190426	13.9m	8.376	#
	Spiked Amount 9.681			Recovery	=	143.57%	86.52%	
	Target Compounds:							
7)	L4 Aroclor-1242	9.42	9.15	28578	13439	52.3	29.4	#
8)	L4 Aroclor-1242 {2}	10.43	9.21f	86279	65792	242.6	228.2	
9)	L4 Aroclor-1242 {3}	10.51	9.51	50689	309815	247.2	1254.5	E#
10)	L4 Aroclor-1242 {4}	10.69	9.98	94184	100716	200.0	203.3	
11)	L4 Aroclor-1242 {5}	11.22	10.47	86424	7999	312.6	77.8	#
	Sum Aroclor-1242			346155	497761	1054.8	1793.2	
	Average Aroclor-1242					210.959	358.641	
12)	L6 Aroclor-1254	11.70	12.16	220167	236705	260.4	203.9	
13)	L6 Aroclor-1254 {2}	12.42	12.54	101251	115639	173.5	215.7	
14)	L6 Aroclor-1254 {3}	12.66	12.75	273019	147950	220.4	213.6	
15)	L6 Aroclor-1254 {4}	13.05	13.11	161413	221921	259.9	250.8	
16)	L6 Aroclor-1254 {5}	13.46	13.65	179703	260635	271.1	251.2	
	Sum Aroclor-1254			935553	982850	1185.3	1135.2	
	Average Aroclor-1254					237.061	227.047	
17)	L7 Aroclor-1260	14.12	13.65	298502	260635	183.1	169.9	
18)	L7 Aroclor-1260 {2}	14.28	13.86	55592	58915	64.6	72.6	
19)	L7 Aroclor-1260 {3}	14.37	13.95	31643	24682	58.3	47.8	
20)	L7 Aroclor-1260 {4}	14.79	14.31	46475	35195	51.4	46.8	
21)	L7 Aroclor-1260 {5}	15.20	14.85	100728	72989	55.9	39.9	#
	Sum Aroclor-1260			532940	452415	200.1	182.5	
	Average Aroclor-1260					82.669	75.409	

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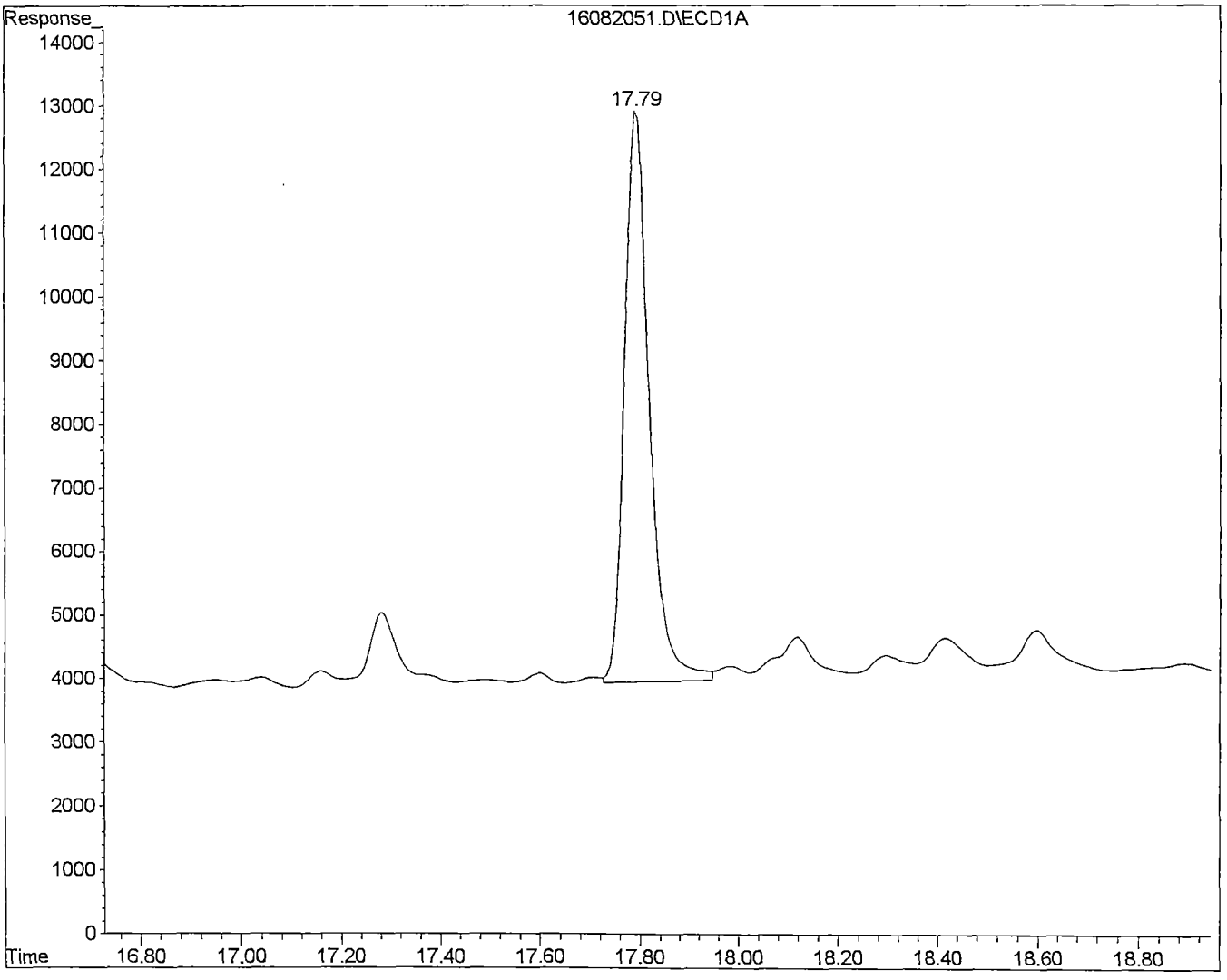
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\16\DATA\08_20_01\16082051.D
Date Acquired: 21 Aug 2001 10:51
Inst: HP_16 Operator ID: TLM
Name: 47158.21 *E00R9 *
Misc: *EPA*31.3G/5.0ML*34
Method: F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title: PCB/TOXAPHENE
Quant Time: Aug 22 18:59 2001 Quant Results File: XPCBH20.RES



DCB 17.79min area: 307039 m

Integration Time Range: 17.73 - 17.94

7114
8-22-01

F:\HPCHEM\HP\16\DATA\08_20_01\16082051.D
Report generated: Wed Aug 22 19:00:34 2001

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00S0

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: 47158.22

Sample wt/vol: 34.3 (g/mL) G Lab File ID:_____

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/21/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	41	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	41	U
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	41	
11096-82-5	Aroclor-1260	18	J
Surrogate amount spiked		8.21	

TBS 9/11/01 TB 10/1

FORM I PCB

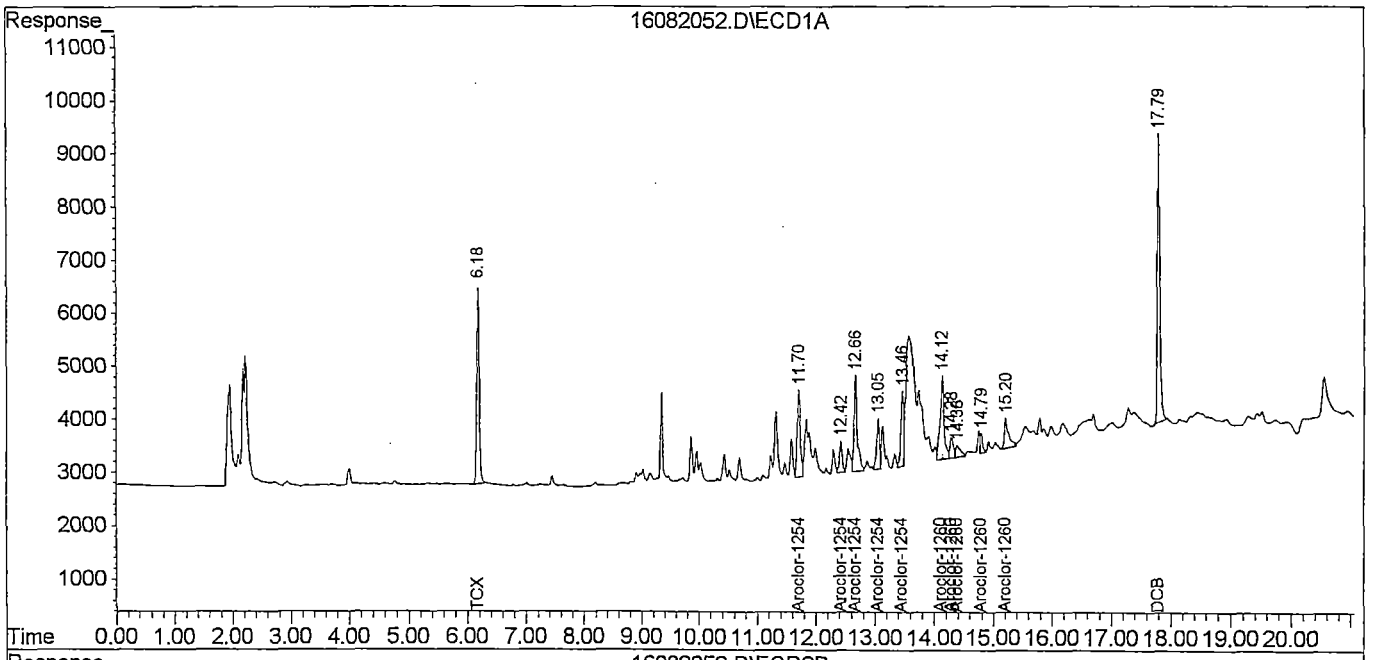
Chromatographic Report

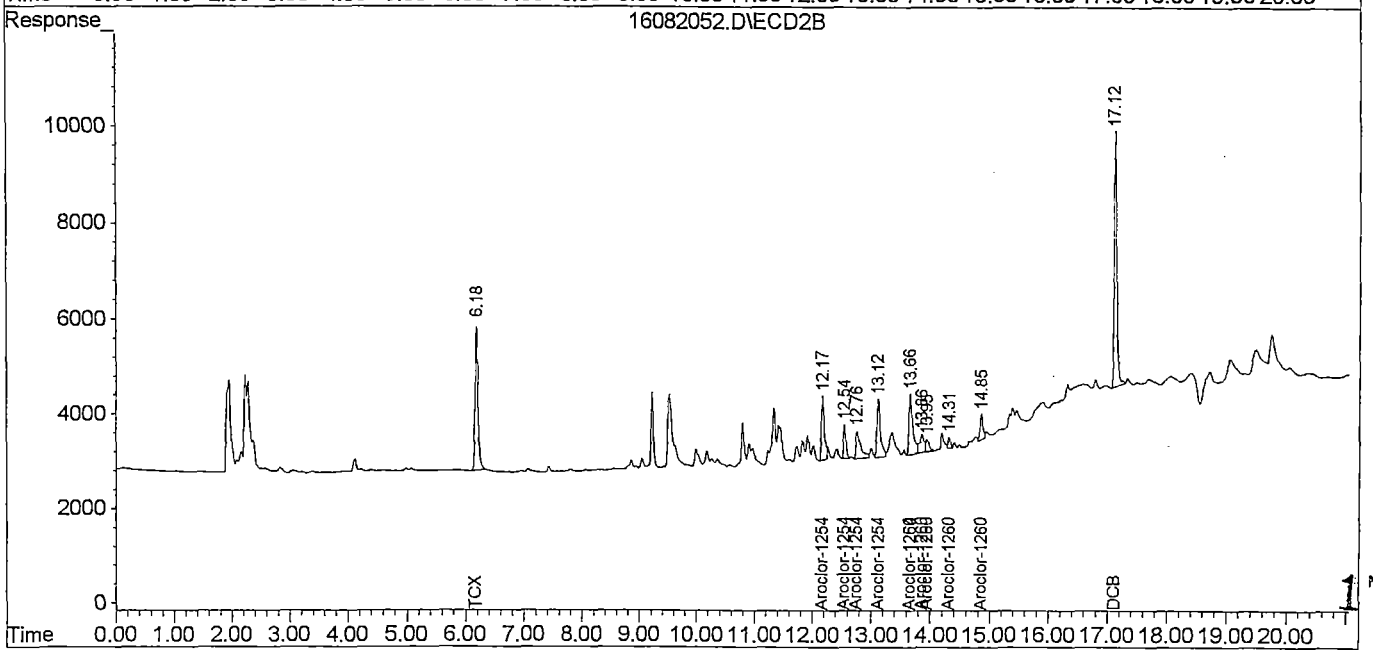
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082052.D\ECD1A.CH Vial: 52
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082052.D\ECD2B.CH
Acq On : 21 Aug 2001 11:15 Operator: TLM
Sample : 47158.22 *E00S0 * Inst : HP_16
Misc : *EPA*34.3G/5.0ML*29 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 28 17:57 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

ok 8-31-01





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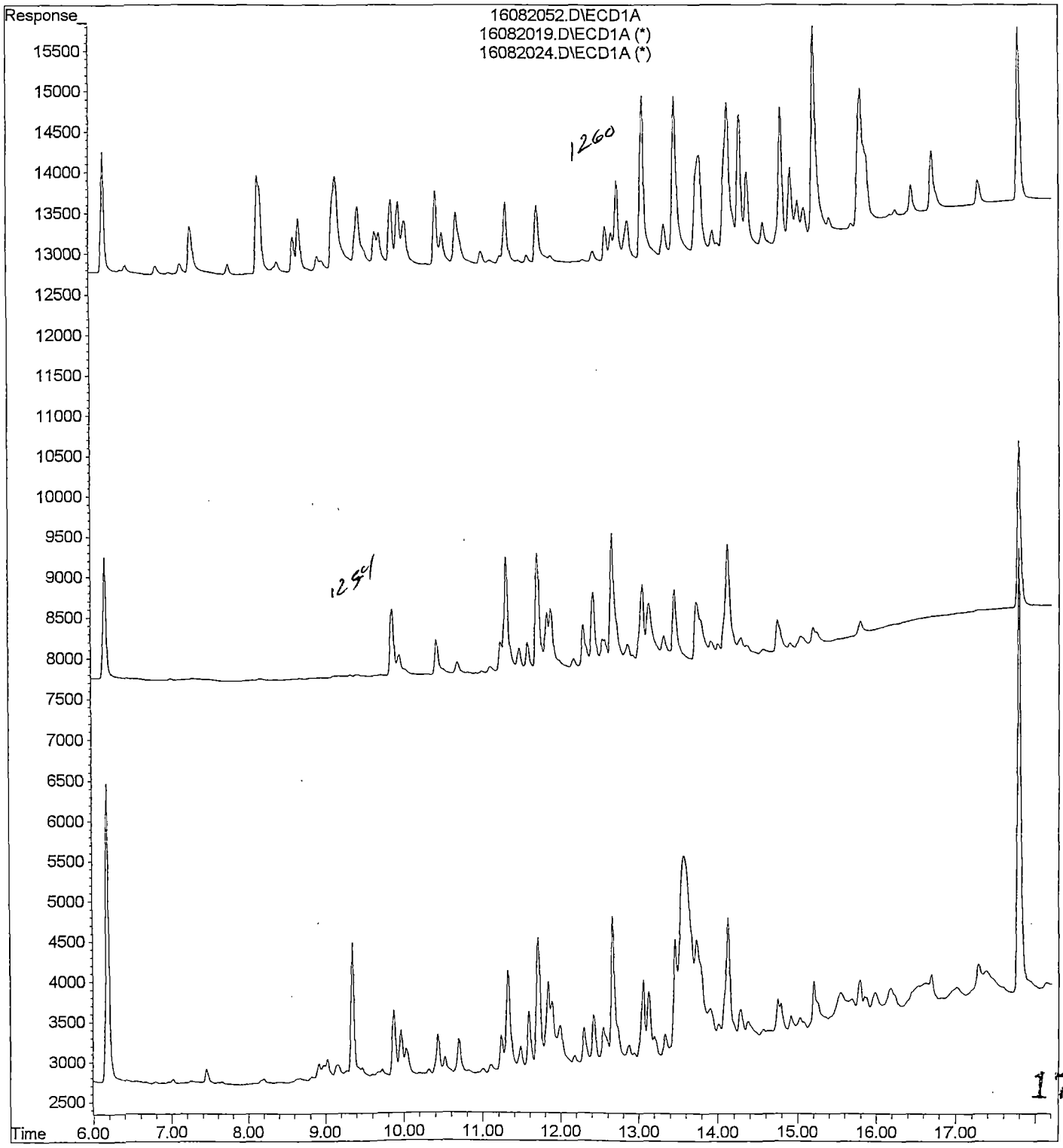
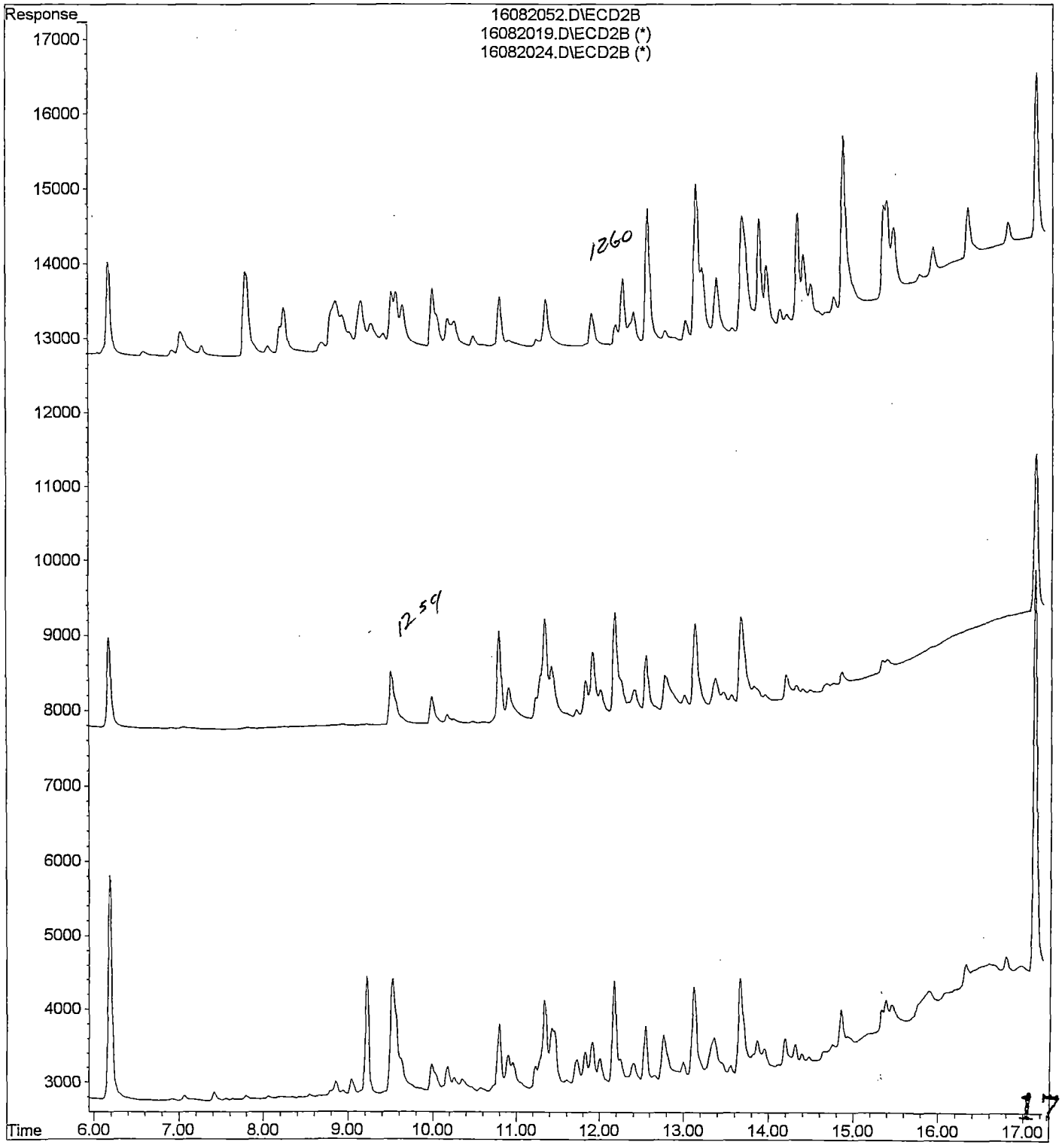
File : F:\HPCHEM\HP\16\DATA\08_20_01\16082052.D
Operator : TLM
Acquired : 21 Aug 2001 11:15 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.22 *E00S0 *
Misc Info : *EPA*34.3G/5.0ML*29
Vial Number: 52

ok 8-31-01



File : F:\HPCHEM\HP\16\DATA\08_20_01\16082052.D
Operator : TLM
Acquired : 21 Aug 2001 11:15 using AcqMethod OLM03.M
Instrument : HP_16
Sample Name: 47158.22 *E00S0 *
Misc Info : *EPA*34.3G/5.0ML*29
Vial Number: 52



Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082052.D\ECD1A.CH Vial: 52
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082052.D\ECD2B.CH
Acq On : 21 Aug 2001 11:15 Operator: TLM
Sample : 47158.22 *E00S0 * Inst : HP_16
Misc : *EPA*34.3G/5.0ML*29 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 28 17:57 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	6.18	6.18	107487	98566	6.018	5.457	
	Spiked Amount 8.213			Recovery	=	73.28%	66.45%	
22)	S DCB	17.79	17.12	165726	159958	6.346	5.968	
	Spiked Amount 8.213			Recovery	=	77.27%	72.67%	
	Target Compounds:							
12)	L6 Aroclor-1254	11.71	12.17	61301	45317	61.5	33.1	#
13)	L6 Aroclor-1254 {2}	12.42	12.54	19431	21548	28.2	34.1	
14)	L6 Aroclor-1254 {3}	12.66	12.76	68949	33509	47.2	41.0	
15)	L6 Aroclor-1254 {4}	13.06	13.12	30407	52072	41.5	49.9	
16)	L6 Aroclor-1254 {5}	13.46	13.66	44500	59106	56.9	48.3	
	Sum Aroclor-1254			224587	211553	235.4	206.5	
	Average Aroclor-1254					47.088	41.299	
17)	L7 Aroclor-1260	14.13	13.66	70710	59106	36.8	32.7	
18)	L7 Aroclor-1260 {2}	14.28	13.86	15521	20961	15.3	21.9	#
19)	L7 Aroclor-1260 {3}	14.38	13.95	12857	10751	20.1	17.7	
20)	L7 Aroclor-1260 {4}	14.79	14.31	10548	7173	9.902	8.087	
21)	L7 Aroclor-1260 {5}	15.21	14.85	29005	17936	13.7	8.324	#
	Sum Aroclor-1260			138641	115926	39.3	36.4	
	Average Aroclor-1260					19.149	17.735	

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

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16A Date(s) Analyzed: 08/10/01 08/10/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1242 L1	0.10	1	9.90	118670	MEAN
		2	9.99	122970	
		3	10.07	117890	
		4	10.46	133940	
		5	10.55	75420	
Aroclor 1242 L2	0.20	1	9.90	98445	MEAN
		2	9.99	103305	
		3	10.07	98695	
		4	10.46	114390	
		5	10.55	65640	
Aroclor 1242 L3	0.40	1	9.90	86375	MEAN
		2	9.99	90613	
		3	10.07	95275	
		4	10.46	99920	
		5	10.55	59608	
Aroclor 1242 L4	0.80	1	9.90	83845	MEAN
		2	9.99	88440	
		3	10.07	96784	
		4	10.46	100505	
		5	10.55	62330	
Aroclor 1242 L5	1.60	1	9.90	86274	MEAN
		2	9.99	91625	
		3	10.07	99738	
		4	10.46	109183	
		5	10.55	69527	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1242 MEAN	1	9.90	9.85	9.95	94722	15.4
	2	9.99	9.94	10.04	99391	14.5
	3	10.07	10.02	10.12	101676	9.1
	4	10.46	10.41	10.51	111588	12.5
	5	10.55	10.50	10.60	66505	9.3

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16B Date(s) Analyzed: 08/10/01 08/10/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1242 L1	0.10	1	9.53	140440	MEAN
		2	9.58	178360	
		3	9.66	197400	
		4	10.20	112970	
		5	10.50	47780	
Aroclor 1242 L2	0.20	1	9.53	123990	MEAN
		2	9.58	155645	
		3	9.66	178200	
		4	10.19	101115	
		5	10.50	51305	
Aroclor 1242 L3	0.40	1	9.53	101858	MEAN
		2	9.58	126740	
		3	9.66	150500	
		4	10.19	83270	
		5	10.50	48043	
Aroclor 1242 L4	0.80	1	9.53	103025	MEAN
		2	9.58	130016	
		3	9.66	157640	
		4	10.19	102431	
		5	10.50	56651	
Aroclor 1242 L5	1.60	1	9.53	98152	MEAN
		2	9.58	127284	
		3	9.66	151237	
		4	10.19	108071	
		5	10.50	60689	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1242 MEAN	1	9.53	9.48	9.58	113493	16.0
	2	9.58	9.53	9.63	143609	15.9
	3	9.66	9.61	9.71	166995	12.2
	4	10.19	10.14	10.24	101571	11.1
	5	10.50	10.45	10.55	52894	10.7

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16A Date(s) Analyzed: 08/10/01 08/10/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1254 L1	0.10	1	11.74	358120	MEAN
		2	12.46	224890	
		3	12.70	497520	
		4	13.09	251600	
		5	13.50	267870	
Aroclor 1254 L2	0.20	1	11.74	293570	MEAN
		2	12.46	193120	
		3	12.70	427700	
		4	13.09	221050	
		5	13.50	237170	
Aroclor 1254 L3	0.40	1	11.74	286188	MEAN
		2	12.46	196050	
		3	12.70	421035	
		4	13.09	214163	
		5	13.50	229880	
Aroclor 1254 L4	0.80	1	11.74	292399	MEAN
		2	12.46	211405	
		3	12.70	446400	
		4	13.08	225161	
		5	13.49	252990	
Aroclor 1254 L5	1.60	1	11.74	226927	MEAN
		2	12.46	173413	
		3	12.70	362789	
		4	13.08	182401	
		5	13.49	203031	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1254 MEAN	1	11.74	11.69	11.79	291441	15.9
	2	12.46	12.41	12.51	199776	9.8
	3	12.70	12.65	12.75	431089	11.3
	4	13.09	13.04	13.14	218875	11.3
	5	13.50	13.45	13.55	238188	10.3

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16B Date(s) Analyzed: 08/10/01 08/10/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1254 L1	0.10	1	12.20	605420	MEAN
		2	12.43	134490	
		3	12.57	247510	
		4	12.80	288850	
		5	13.16	454950	
Aroclor 1254 L2	0.20	1	12.20	558070	MEAN
		2	12.43	136155	
		3	12.57	241480	
		4	12.80	288890	
		5	13.16	423170	
Aroclor 1254 L3	0.40	1	12.20	517535	MEAN
		2	12.43	156150	
		3	12.57	241508	
		4	12.80	316673	
		5	13.15	402753	
Aroclor 1254 L4	0.80	1	12.20	569220	MEAN
		2	12.43	181571	
		3	12.57	270058	
		4	12.80	372905	
		5	13.15	439054	
Aroclor 1254 L5	1.60	1	12.20	485376	MEAN
		2	12.44	154568	
		3	12.57	227820	
		4	12.79	329579	
		5	13.15	365072	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1254 MEAN	1	12.20	12.15	12.25	547124	8.5
	2	12.43	12.38	12.48	152587	12.5
	3	12.57	12.52	12.62	245675	6.3
	4	12.80	12.75	12.85	319379	10.9
	5	13.15	13.10	13.20	417000	8.4

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16A Date(s) Analyzed: 08/10/01 08/10/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1221	0.40	1	6.87	72570	SINGLE
		2	7.18	54038	POINT
		3	7.31	207565	
		4			
		5			
Aroclor 1232	0.40	1	9.19	178628	SINGLE
		2	9.48	112103	POINT
		3	9.70	36308	
		4	9.90	53215	
		5			
Aroclor 1248	0.40	1	10.46	211803	SINGLE
		2	10.72	281250	POINT
		3	11.03	63740	
		4	11.13	106568	
		5	11.27	176340	

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16B Date(s) Analyzed: 08/10/01 08/10/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1221	0.40	1	6.62	91885	SINGLE
		2	6.95	53148	POINT
		3	7.04	249663	
		4			
		5			
Aroclor 1232	0.40	1	8.86	193035	SINGLE
		2	9.15	120168	POINT
		3	9.28	86408	
		4	9.58	77773	
		5			
Aroclor 1248	0.40	1	10.19	200063	SINGLE
		2	10.28	187693	POINT
		3	10.75	73698	
		4	10.81	168740	
		5	10.92	208773	

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16A Date(s) Analyzed: 08/11/01 08/11/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1016 L1	0.10	1	7.32	177140	MEAN
		2	8.20	341760	
		3	8.65	73290	
		4	8.72	143860	
		5	9.19	509730	
Aroclor 1016 L2	0.20	1	7.32	156130	MEAN
		2	8.20	307965	
		3	8.65	70360	
		4	8.72	135550	
		5	9.19	483600	
Aroclor 1016 L3	0.40	1	7.31	129450	MEAN
		2	8.19	255050	
		3	8.65	60813	
		4	8.72	115480	
		5	9.19	417433	
Aroclor 1016 L4	0.80	1	7.32	129641	MEAN
		2	8.20	236911	
		3	8.65	61808	
		4	8.72	112744	
		5	9.19	423313	
Aroclor 1016 L5	1.60	1	7.31	112081	MEAN
		2	8.19	200834	
		3	8.65	55183	
		4	8.72	97734	
		5	9.19	383661	

COMPOUND	PEAK	RT	RT WINDOW FROM	TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1016 MEAN	1	7.31	7.26	7.36	140888	18.2
	2	8.20	8.15	8.25	268504	21.0
	3	8.65	8.60	8.70	64291	11.5
	4	8.72	8.67	8.77	121074	15.3
	5	9.19	9.14	9.24	443547	11.6

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16A Date(s) Analyzed: 08/11/01 08/11/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1260 L1	0.10	1	14.16	677220	MEAN
		2	14.31	382330	
		3	14.41	233290	
		4	14.82	381450	
		5	15.24	766600	
Aroclor 1260 L2	0.20	1	14.16	670430	MEAN
		2	14.31	358785	
		3	14.41	223395	
		4	14.82	360760	
		5	15.24	711115	
Aroclor 1260 L3	0.40	1	14.16	541395	MEAN
		2	14.31	290148	
		3	14.41	183813	
		4	14.82	301268	
		5	15.24	607028	
Aroclor 1260 L4	0.80	1	14.16	562948	MEAN
		2	14.31	287031	
		3	14.41	181851	
		4	14.82	309554	
		5	15.24	624711	
Aroclor 1260 L5	1.60	1	14.15	497672	MEAN
		2	14.31	243606	
		3	14.40	156028	
		4	14.82	271928	
		5	15.23	548723	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1260 MEAN	1	14.16	14.11	14.21	589933	13.6
	2	14.31	14.26	14.36	312380	18.2
	3	14.41	14.36	14.46	195675	16.3
	4	14.82	14.77	14.87	324992	13.8
	5	15.24	15.19	15.29	651635	13.3

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16B Date(s) Analyzed: 08/11/01 08/11/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1016 L1	0.10	1	7.05	161060	MEAN
		2	7.83	468480	
		3	8.70	54500	
		4	8.86	487440	
		5	9.28	221780	
Aroclor 1016 L2	0.20	1	7.05	154845	MEAN
		2	7.82	448665	
		3	8.70	59480	
		4	8.86	490990	
		5	9.28	215075	
Aroclor 1016 L3	0.40	1	7.05	133635	MEAN
		2	7.82	366698	
		3	8.70	52308	
		4	8.86	426725	
		5	9.28	181158	
Aroclor 1016 L4	0.80	1	7.05	140169	MEAN
		2	7.82	368103	
		3	8.70	58883	
		4	8.86	475594	
		5	9.28	188475	
Aroclor 1016 L5	1.60	1	7.04	124236	MEAN
		2	7.82	311254	
		3	8.70	55404	
		4	8.86	325255	
		5	9.28	167536	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1016 MEAN	1	7.05	7.00	7.10	142789	10.6
	2	7.82	7.77	7.87	392640	16.5
	3	8.70	8.65	8.75	56115	5.4
	4	8.86	8.81	8.91	441201	15.8
	5	9.28	9.23	9.33	194805	11.8

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16B Date(s) Analyzed: 08/11/01 08/11/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1260 L1	0.10	1	13.70	809610	MEAN
		2	13.90	453040	
		3	13.98	283600	
		4	14.35	394810	
		5	14.89	941190	
Aroclor 1260 L2	0.20	1	13.70	781000	MEAN
		2	13.90	443165	
		3	13.98	284325	
		4	14.35	385695	
		5	14.89	934375	
Aroclor 1260 L3	0.40	1	13.70	660668	MEAN
		2	13.90	348603	
		3	13.98	227433	
		4	14.34	315775	
		5	14.89	786195	
Aroclor 1260 L4	0.80	1	13.69	708856	MEAN
		2	13.89	355346	
		3	13.98	236845	
		4	14.34	338595	
		5	14.88	835809	
Aroclor 1260 L5	1.60	1	13.69	649578	MEAN
		2	13.89	311892	
		3	13.98	211161	
		4	14.34	306170	
		5	14.88	756919	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1260 MEAN	1	13.69	13.64	13.74	721942	9.9
	2	13.90	13.85	13.95	382409	16.3
	3	13.98	13.93	14.03	248673	13.5
	4	14.34	14.29	14.39	348209	11.6
	5	14.89	14.84	14.94	850898	9.9

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16A Date(s) Analyzed: 08/20/01 08/20/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1242 L1	0.10	1	9.45	263090	MEAN
		2	10.43	170610	
		3	10.52	89420	
		4	10.69	216660	
		5	11.24	117150	
Aroclor 1242 L2	0.20	1	9.44	272850	MEAN
		2	10.43	177705	
		3	10.52	99190	
		4	10.69	243165	
		5	11.24	131885	
Aroclor 1242 L3	0.40	1	9.44	264800	MEAN
		2	10.43	169460	
		3	10.52	98478	
		4	10.69	223235	
		5	11.24	130905	
Aroclor 1242 L4	0.80	1	9.44	271684	MEAN
		2	10.43	178935	
		3	10.51	107480	
		4	10.69	237703	
		5	11.23	147738	
Aroclor 1242 L5	1.60	1	9.44	249469	MEAN
		2	10.43	163920	
		3	10.51	101674	
		4	10.69	218961	
		5	11.23	141519	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1242 MEAN	1	9.44	9.39	9.49	264379	3.5
	2	10.43	10.38	10.48	172126	3.6
	3	10.52	10.47	10.57	99248	6.6
	4	10.69	10.64	10.74	227945	5.2
	5	11.24	11.19	11.29	133839	8.7

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16B Date(s) Analyzed: 08/20/01 08/20/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1242 L1	0.10	1	9.14	219380	MEAN
		2	9.26	132010	
		3	9.51	125670	
		4	9.98	239410	
		5	10.47	31800	
Aroclor 1242 L2	0.20	1	9.14	227925	MEAN
		2	9.26	141495	
		3	9.50	127590	
		4	9.98	247430	
		5	10.47	48960	
Aroclor 1242 L3	0.40	1	9.14	217675	MEAN
		2	9.26	137658	
		3	9.50	119198	
		4	9.98	236273	
		5	10.47	50995	
Aroclor 1242 L4	0.80	1	9.13	229138	MEAN
		2	9.26	147345	
		3	9.50	119921	
		4	9.98	247619	
		5	10.47	59025	
Aroclor 1242 L5	1.60	1	9.12	212808	MEAN
		2	9.25	139328	
		3	9.50	105364	
		4	9.98	228245	
		5	10.47	58007	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1242 MEAN	1	9.13	9.08	9.18	221385	3.1
	2	9.26	9.21	9.31	139567	4.0
	3	9.50	9.45	9.55	119549	7.3
	4	9.98	9.93	10.03	239795	3.4
	5	10.47	10.42	10.52	49757	22.0

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16A Date(s) Analyzed: 08/20/01 08/20/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1254 L1	0.10	1	11.70	511870	MEAN
		2	12.42	326210	
		3	12.66	712280	
		4	13.05	358790	
		5	13.46	373210	
Aroclor 1254 L2	0.20	1	11.70	379210	MEAN
		2	12.42	248675	
		3	12.66	535625	
		4	13.05	271155	
		5	13.46	282640	
Aroclor 1254 L3	0.40	1	11.70	399208	MEAN
		2	12.42	277433	
		3	12.66	587395	
		4	13.05	296158	
		5	13.46	320235	
Aroclor 1254 L4	0.80	1	11.70	382799	MEAN
		2	12.42	277700	
		3	12.66	580776	
		4	13.05	290019	
		5	13.46	318096	
Aroclor 1254 L5	1.60	1	11.70	372981	MEAN
		2	12.42	282480	
		3	12.66	582679	
		4	13.05	287100	
		5	13.45	310148	

COMPOUND	PEAK	RT	RT WINDOW FROM	TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1254 MEAN	1	11.70	11.65	11.75	409213	14.2
	2	12.42	12.37	12.47	282500	9.9
	3	12.66	12.61	12.71	599751	11.1
	4	13.05	13.00	13.10	300644	11.2
	5	13.46	13.41	13.51	320866	10.2

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16B Date(s) Analyzed: 08/20/01 08/20/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1254 L1	0.10	1	12.17	637930	MEAN
		2	12.54	270310	
		3	12.77	306620	
		4	13.12	473100	
		5	13.66	539910	
Aroclor 1254 L2	0.20	1	12.17	497930	MEAN
		2	12.54	225105	
		3	12.77	272435	
		4	13.12	384915	
		5	13.66	447375	
Aroclor 1254 L3	0.40	1	12.17	552150	MEAN
		2	12.54	263613	
		3	12.76	343805	
		4	13.12	428555	
		5	13.66	497355	
Aroclor 1254 L4	0.80	1	12.17	556834	MEAN
		2	12.54	269765	
		3	12.76	364303	
		4	13.12	430764	
		5	13.66	506043	
Aroclor 1254 L5	1.60	1	12.16	564888	MEAN
		2	12.54	268557	
		3	12.75	389446	
		4	13.12	424459	
		5	13.66	520329	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1254 MEAN	1	12.17	12.12	12.22	561946	8.9
	2	12.54	12.49	12.59	259470	7.5
	3	12.76	12.71	12.81	335322	13.8
	4	13.12	13.07	13.17	428359	7.3
	5	13.66	13.61	13.71	502202	6.9

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16A Date(s) Analyzed: 08/20/01 08/20/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1016 L1	0.10	1	7.28	205960	MEAN
		2	8.16	549390	
		3	8.62	112860	
		4	8.69	219850	
		5	9.67	133390	
Aroclor 1016 L2	0.20	1	7.28	183340	MEAN
		2	8.16	478545	
		3	8.62	103130	
		4	8.69	197785	
		5	9.66	126500	
Aroclor 1016 L3	0.40	1	7.28	156753	MEAN
		2	8.16	397148	
		3	8.62	90350	
		4	8.69	171478	
		5	9.66	118260	
Aroclor 1016 L4	0.80	1	7.28	164988	MEAN
		2	8.16	396391	
		3	8.62	97273	
		4	8.69	177905	
		5	9.66	134294	
Aroclor 1016 L5	1.60	1	7.28	143688	MEAN
		2	8.16	336645	
		3	8.62	86501	
		4	8.69	154121	
		5	9.66	125033	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1016 MEAN	1	7.28	7.23	7.33	170946	14.2
	2	8.16	8.11	8.21	431624	19.2
	3	8.62	8.57	8.67	98023	10.7
	4	8.69	8.64	8.74	184228	13.7
	5	9.66	9.61	9.71	127495	5.2

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16A Date(s) Analyzed: 08/20/01 08/20/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1260 L1	0.10	1	14.12	959370	MEAN
		2	14.28	535850	
		3	14.38	330710	
		4	14.79	540030	
		5	15.21	1084760	
Aroclor 1260 L2	0.20	1	14.12	832700	MEAN
		2	14.28	454880	
		3	14.37	285970	
		4	14.79	466715	
		5	15.20	926905	
Aroclor 1260 L3	0.40	1	14.12	711715	MEAN
		2	14.28	377130	
		3	14.37	239023	
		4	14.79	392123	
		5	15.20	779190	
Aroclor 1260 L4	0.80	1	14.12	759685	MEAN
		2	14.28	385211	
		3	14.37	244843	
		4	14.79	416095	
		5	15.20	830296	
Aroclor 1260 L5	1.60	1	14.12	681659	MEAN
		2	14.27	331288	
		3	14.37	212368	
		4	14.79	372091	
		5	15.20	741135	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1260 MEAN	1	14.12	14.07	14.17	789026	14.1
	2	14.28	14.23	14.33	416872	19.2
	3	14.37	14.32	14.42	262583	17.6
	4	14.79	14.74	14.84	437411	15.4
	5	15.20	15.15	15.25	872457	15.8

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16B Date(s) Analyzed: 08/20/01 08/20/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1016 L1	0.10	1	7.03	150870	MEAN
		2	7.79	549450	
		3	9.26	217960	
		4	10.79	187270	
		5	11.34	298730	
Aroclor 1016 L2	0.20	1	7.03	145285	MEAN
		2	7.79	488900	
		3	9.26	197405	
		4	10.78	203595	
		5	11.34	261960	
Aroclor 1016 L3	0.40	1	7.03	123998	MEAN
		2	7.79	402293	
		3	9.26	169370	
		4	10.78	168928	
		5	11.34	222210	
Aroclor 1016 L4	0.80	1	7.02	131281	MEAN
		2	7.79	404130	
		3	9.26	184515	
		4	10.78	177443	
		5	11.33	236151	
Aroclor 1016 L5	1.60	1	7.02	115269	MEAN
		2	7.79	341732	
		3	9.25	166033	
		4	10.78	154608	
		5	11.33	204375	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1016 MEAN	1	7.02	6.97	7.07	133341	11.0
	2	7.79	7.74	7.84	437301	18.7
	3	9.26	9.21	9.31	187057	11.4
	4	10.78	10.73	10.83	178369	10.4
	5	11.34	11.29	11.39	244685	15.0

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16B Date(s) Analyzed: 08/20/01 08/20/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1260 L1	0.10	1	13.66	887450	MEAN
		2	13.86	488490	
		3	13.95	296210	
		4	14.31	432690	
		5	14.86	1030010	
Aroclor 1260 L2	0.20	1	13.66	789015	MEAN
		2	13.86	419615	
		3	13.95	263290	
		4	14.31	384700	
		5	14.85	933905	
Aroclor 1260 L3	0.40	1	13.66	672338	MEAN
		2	13.86	355545	
		3	13.95	226850	
		4	14.31	325600	
		5	14.85	794988	
Aroclor 1260 L4	0.80	1	13.66	717351	MEAN
		2	13.86	374899	
		3	13.95	246596	
		4	14.31	357890	
		5	14.85	879921	
Aroclor 1260 L5	1.60	1	13.65	646384	MEAN
		2	13.86	325384	
		3	13.95	216678	
		4	14.31	320080	
		5	14.85	785225	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1260 MEAN	1	13.66	13.61	13.71	742508	13.1
	2	13.86	13.81	13.91	392787	16.2
	3	13.95	13.90	14.00	249925	12.6
	4	14.31	14.26	14.36	364192	12.7
	5	14.85	14.80	14.90	884810	11.5

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16A Date(s) Analyzed: 08/20/01 08/20/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1221	0.40	1	6.84	77323	SINGLE
		2	7.15	54590	POINT
		3	7.29	196678	
		4			
		5			
Aroclor 1232	0.40	1	8.17	169533	SINGLE
		2	8.69	69958	POINT
		3	9.16	250073	
		4	9.45	135708	
		5			
Aroclor 1248	0.40	1	9.86	299845	SINGLE
		2	9.95	275423	POINT
		3	10.43	340490	
		4	10.69	437925	
		5	11.32	501450	

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16B Date(s) Analyzed: 08/20/01 08/20/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1221	0.40	1	6.60	69130	SINGLE
		2	6.93	37938	POINT
		3	7.02	224835	
		4			
		5			
Aroclor 1232	0.40	1	7.80	169895	SINGLE
		2	8.25	83133	POINT
		3	8.84	243803	
		4	9.64	76193	
		5			
Aroclor 1248	0.40	1	9.50	244203	SINGLE
		2	9.55	264158	POINT
		3	9.98	457723	
		4	10.16	221885	
		5	10.90	250875	

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16A Date(s) Analyzed: 08/28/01 08/28/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1242 L1	0.10	1	9.38	273810	MEAN
		2	10.36	161740	
		3	10.44	89400	
		4	10.62	220360	
		5	12.60	54080	
Aroclor 1242 L2	0.20	1	9.37	198145	MEAN
		2	10.36	111795	
		3	10.44	64530	
		4	10.62	159825	
		5	12.60	37000	
Aroclor 1242 L3	0.40	1	9.37	266670	MEAN
		2	10.35	165015	
		3	10.44	92063	
		4	10.62	245108	
		5	12.60	62055	
Aroclor 1242 L4	0.80	1	9.37	194216	MEAN
		2	10.35	116529	
		3	10.44	69200	
		4	10.61	178096	
		5	12.59	48311	
Aroclor 1242 L5	1.60	1	9.36	191730	MEAN
		2	10.35	117683	
		3	10.44	64029	
		4	10.61	167052	
		5	12.59	50027	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1242 MEAN	1	9.37	9.32	9.42	224914	18.5
	2	10.35	10.30	10.40	134552	19.6
	3	10.44	10.39	10.49	75844	18.2
	4	10.62	10.57	10.67	194088	19.0
	5	12.60	12.55	12.65	50295	18.2

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16B Date(s) Analyzed: 08/28/01 08/28/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1242 L1	0.10	1	9.07	206870	MEAN
		2	9.20	118650	
		3	9.43	116030	
		4	9.91	215870	
		5	10.71	76460	
Aroclor 1242 L2	0.20	1	9.07	144175	MEAN
		2	9.20	84940	
		3	9.43	79210	
		4	9.91	149995	
		5	10.71	48160	
Aroclor 1242 L3	0.40	1	9.06	209353	MEAN
		2	9.20	126880	
		3	9.43	113215	
		4	9.91	222638	
		5	10.71	86870	
Aroclor 1242 L4	0.80	1	9.06	154721	MEAN
		2	9.19	96923	
		3	9.43	80874	
		4	9.91	163063	
		5	10.71	65026	
Aroclor 1242 L5	1.60	1	9.06	157699	MEAN
		2	9.19	101519	
		3	9.42	78299	
		4	9.90	165443	
		5	10.70	72261	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1242 MEAN	1	9.06	9.01	9.11	174564	17.8
	2	9.20	9.15	9.25	105782	16.0
	3	9.43	9.38	9.48	93526	20.6
	4	9.91	9.86	9.96	183402	18.2
	5	10.71	10.66	10.76	69755	20.7

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16A Date(s) Analyzed: 08/28/01 08/28/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1254 L1	0.10	1	11.64	387820	MEAN
		2	12.35	256820	
		3	12.60	539810	
		4	12.98	273540	
		5	13.40	256460	
Aroclor 1254 L2	0.20	1	11.63	314815	MEAN
		2	12.35	200190	
		3	12.59	445355	
		4	12.98	231510	
		5	13.40	253220	
Aroclor 1254 L3	0.40	1	11.63	303168	MEAN
		2	12.35	200853	
		3	12.59	444750	
		4	12.98	230268	
		5	13.39	259878	
Aroclor 1254 L4	0.80	1	11.63	270449	MEAN
		2	12.34	185174	
		3	12.58	404898	
		4	12.97	206316	
		5	13.39	236214	
Aroclor 1254 L5	1.60	1	11.62	217466	MEAN
		2	12.34	152884	
		3	12.58	333635	
		4	12.97	165774	
		5	13.38	187481	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1254 MEAN	1	11.63	11.58	11.68	298743	20.9
	2	12.35	12.30	12.40	199184	18.9
	3	12.59	12.54	12.64	433690	17.2
	4	12.98	12.93	13.03	221482	17.8
	5	13.39	13.34	13.44	238650	12.6

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16B Date(s) Analyzed: 08/28/01 08/28/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1254 L1	0.10	1	12.10	500350	MEAN
		2	12.47	219690	
		3	12.73	215950	
		4	13.05	391590	
		5	13.60	434630	
Aroclor 1254 L2	0.20	1	12.10	400705	MEAN
		2	12.47	177740	
		3	12.72	192285	
		4	13.05	330540	
		5	13.60	377805	
Aroclor 1254 L3	0.40	1	12.10	407413	MEAN
		2	12.46	186218	
		3	12.71	225965	
		4	13.05	341208	
		5	13.60	386278	
Aroclor 1254 L4	0.80	1	12.09	378638	MEAN
		2	12.46	171509	
		3	12.70	223770	
		4	13.05	311159	
		5	13.59	366765	
Aroclor 1254 L5	1.60	1	12.09	320811	MEAN
		2	12.46	142971	
		3	12.69	198588	
		4	13.04	256586	
		5	13.59	312176	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1254 MEAN	1	12.09	12.04	12.14	401583	16.2
	2	12.46	12.41	12.51	179626	15.4
	3	12.71	12.66	12.76	211312	7.2
	4	13.05	13.00	13.10	326217	15.0
	5	13.60	13.55	13.65	375531	11.7

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16A Date(s) Analyzed: 08/28/01 08/28/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1016 L1	0.10	1	7.19	122050	MEAN
		2	8.08	314730	
		3	8.53	53990	
		4	8.60	121150	
		5	9.88	146080	
Aroclor 1016 L2	0.20	1	7.19	141065	MEAN
		2	8.07	350535	
		3	8.53	68660	
		4	8.60	149730	
		5	9.88	166820	
Aroclor 1016 L3	0.40	1	7.19	126045	MEAN
		2	8.07	306498	
		3	8.53	63280	
		4	8.60	135883	
		5	9.87	147008	
Aroclor 1016 L4	0.80	1	7.19	128305	MEAN
		2	8.07	298990	
		3	8.53	67086	
		4	8.60	135251	
		5	9.87	146451	
Aroclor 1016 L5	1.60	1	7.19	106799	MEAN
		2	8.07	244372	
		3	8.53	57087	
		4	8.60	112762	
		5	9.87	120023	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1016 MEAN	1	7.19	7.14	7.24	124853	9.9
	2	8:07	8.02	8.12	303025	12.6
	3	8.53	8.48	8.58	62021	10.2
	4	8.60	8.55	8.65	130955	10.9
	5	9.87	9.82	9.92	145276	11.5

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16A Date(s) Analyzed: 08/28/01 08/28/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1260 L1	0.10	1	14.06	482020	MEAN
		2	14.21	295340	
		3	14.31	206140	
		4	14.72	275980	
		5	15.15	554050	
Aroclor 1260 L2	0.20	1	14.06	577005	MEAN
		2	14.21	347365	
		3	14.31	251210	
		4	14.72	332815	
		5	15.14	682025	
Aroclor 1260 L3	0.40	1	14.06	519678	MEAN
		2	14.21	302738	
		3	14.30	220190	
		4	14.72	295895	
		5	15.14	608505	
Aroclor 1260 L4	0.80	1	14.05	548319	MEAN
		2	14.21	301499	
		3	14.30	213446	
		4	14.72	306890	
		5	15.14	632320	
Aroclor 1260 L5	1.60	1	14.05	466078	MEAN
		2	14.20	243714	
		3	14.30	167226	
		4	14.72	256637	
		5	15.14	532671	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1260 MEAN	1	14.05	14.00	14.10	518620	8.8
	2	14.21	14.16	14.26	298131	12.4
	3	14.30	14.25	14.35	211643	14.3
	4	14.72	14.67	14.77	293643	9.9
	5	15.14	15.09	15.19	601914	10.0

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16B Date(s) Analyzed: 08/28/01 08/28/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1016 L1	0.10	1	6.96	107240	MEAN
		2	7.71	327490	
		3	9.07	198560	
		4	9.48	151700	
		5	11.81	102060	
Aroclor 1016 L2	0.20	1	6.95	134660	MEAN
		2	7.70	388540	
		3	9.06	242835	
		4	9.47	174810	
		5	11.81	121245	
Aroclor 1016 L3	0.40	1	6.95	122908	MEAN
		2	7.70	343035	
		3	9.06	217188	
		4	9.47	152873	
		5	11.81	109290	
Aroclor 1016 L4	0.80	1	6.94	132136	MEAN
		2	7.70	336598	
		3	9.06	224285	
		4	9.47	151160	
		5	11.81	111014	
Aroclor 1016 L5	1.60	1	6.94	113304	MEAN
		2	7.70	274226	
		3	9.05	189397	
		4	9.47	123126	
		5	11.81	90925	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1016 MEAN	1	6.94	6.89	6.99	122050	9.7
	2	7.70	7.65	7.75	333978	12.2
	3	9.06	9.01	9.11	214453	9.9
	4	9.47	9.42	9.52	150734	12.2
	5	11.81	11.76	11.86	106907	10.5

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16B Date(s) Analyzed: 08/28/01 08/28/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1260 L1	0.10	1	13.60	483250	MEAN
		2	13.79	276200	
		3	13.88	176970	
		4	14.25	231410	
		5	14.79	556140	
Aroclor 1260 L2	0.20	1	13.60	592900	MEAN
		2	13.79	335340	
		3	13.88	224845	
		4	14.24	290630	
		5	14.79	717930	
Aroclor 1260 L3	0.40	1	13.59	536768	MEAN
		2	13.79	295310	
		3	13.88	201880	
		4	14.24	259285	
		5	14.79	645220	
Aroclor 1260 L4	0.80	1	13.59	579884	MEAN
		2	13.79	298155	
		3	13.88	210054	
		4	14.24	276099	
		5	14.79	684221	
Aroclor 1260 L5	1.60	1	13.58	493854	MEAN
		2	13.79	248797	
		3	13.88	173479	
		4	14.24	234303	
		5	14.78	578446	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1260 MEAN	1	13.59	13.54	13.64	537331	9.2
	2	13.79	13.74	13.84	290760	10.9
	3	13.88	13.83	13.93	197446	11.1
	4	14.24	14.19	14.29	258345	10.0
	5	14.79	14.74	14.84	636391	10.8

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16A Date(s) Analyzed: 08/28/01 08/28/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1221	0.40	1	6.74	75988	SINGLE
		2	7.06	54435	POINT
		3	7.19	227863	
		4			
		5			
Aroclor 1232	0.40	1	8.08	146950	SINGLE
		2	8.61	67388	POINT
		3	9.09	210760	
		4	9.37	125733	
		5			
Aroclor 1248	0.40	1	9.79	189205	SINGLE
		2	9.88	178270	POINT
		3	10.35	213045	
		4	10.62	302398	
		5	11.17	153818	

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Instrument ID: HP_16B Date(s) Analyzed: 08/28/01 08/28/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1221	0.40	1	6.51	62283	SINGLE
		2	6.84	30328	POINT
		3	6.94	222615	
		4			
		5			
Aroclor 1232	0.40	1	7.71	128800	SINGLE
		2	8.16	75545	POINT
		3	9.07	83195	
		4	9.48	54508	
		5			
Aroclor 1248	0.40	1	9.43	157348	SINGLE
		2	9.48	176640	POINT
		3	9.91	317670	
		4	10.18	159753	
		5	10.84	152153	

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MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

GC Column: RTX-PEST 2 ID: 0.32(mm) Init. Calib Date(s): 08/11/01 08/11/01

Client Sample No.(PIBLK): PIBLKCQ Date Analyzed : 08/14/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 1037

Client Sample No.: AR1660L3CH Date Analyzed : 08/14/01

Lab Sample ID : 5-128-7 Time Analyzed : 1101

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	7.32	7.26	7.36	134023	140888	4.9
Aroclor 1016 #2	8.20	8.15	8.25	273540	268504	1.9
Aroclor 1016 #3	8.65	8.60	8.70	66028	64291	2.7
Aroclor 1016 #4	8.72	8.67	8.77	127860	121074	5.6
Aroclor 1016 #5	9.19	9.14	9.24	445008	443547	0.3
Aroclor 1260 #1	14.16	14.11	14.21	581083	589933	1.5
Aroclor 1260 #2	14.31	14.26	14.36	324183	312380	3.8
Aroclor 1260 #3	14.41	14.36	14.46	209958	195675	7.3
Aroclor 1260 #4	14.83	14.77	14.87	330188	324992	1.6
Aroclor 1260 #5	15.24	15.19	15.29	657305	651635	0.9

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

FORM VII PCB

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

GC Column: RTX-PEST ID: 0.32(mm) Init. Calib Date(s): 08/11/01 08/11/01

Client Sample No.(PIBLK): PIBLKCQ Date Analyzed : 08/14/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 1037

Client Sample No.: AR1660L3CH Date Analyzed : 08/14/01

Lab Sample ID : 5-128-7 Time Analyzed : 1101

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	7.05	7.00	7.10	136130	142789	4.7
Aroclor 1016 #2	7.82	7.77	7.87	397645	392640	1.3
Aroclor 1016 #3	8.71	8.65	8.75	52278	56115	6.8
Aroclor 1016 #4	8.87	8.81	8.91	434638	441201	1.5
Aroclor 1016 #5	9.29	9.23	9.33	201885	194805	3.6
Aroclor 1260 #1	13.71	13.64	13.74	693893	721942	3.9
Aroclor 1260 #2	13.90	13.85	13.95	385073	382409	0.7
Aroclor 1260 #3	13.99	13.93	14.03	258360	248673	3.9
Aroclor 1260 #4	14.35	14.29	14.39	339873	348209	2.4
Aroclor 1260 #5	14.90	14.84	14.94	862690	850898	1.4

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

FORM VII PCB

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

GC Column: RTX-PEST 2 ID: 0.32(mm) Init. Calib Date(s): 08/11/01 08/11/01

Client Sample No.(PIBLK): PIBLKCR Date Analyzed : 08/14/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 2133

Client Sample No.: AR1660L3CJ Date Analyzed : 08/14/01

Lab Sample ID : 5-128-7 Time Analyzed : 2158

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	7.31	7.26	7.36	133335	140888	5.4
Aroclor 1016 #2	8.19	8.15	8.25	257765	268504	4.0
Aroclor 1016 #3	8.65	8.60	8.70	56668	64291	11.9
Aroclor 1016 #4	8.72	8.67	8.77	118930	121074	1.8
Aroclor 1016 #5	9.19	9.14	9.24	417113	443547	6.0
Aroclor 1260 #1	14.16	14.11	14.21	579953	589933	1.7
Aroclor 1260 #2	14.31	14.26	14.36	317523	312380	1.7
Aroclor 1260 #3	14.40	14.36	14.46	205030	195675	4.8
Aroclor 1260 #4	14.82	14.77	14.87	322085	324992	0.9
Aroclor 1260 #5	15.24	15.19	15.29	661458	651635	1.5

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

FORM VII PCB

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

GC Column: RTX-PEST ID: 0.32(mm) Init. Calib Date(s): 08/11/01 08/11/01

Client Sample No.(PIBLK): PIBLKCR Date Analyzed : 08/14/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 2133

Client Sample No.: AR1660L3CJ Date Analyzed : 08/14/01

Lab Sample ID : 5-128-7 Time Analyzed : 2158

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	7.05	7.00	7.10	123790	142789	13.3
Aroclor 1016 #2	7.82	7.77	7.87	360615	392640	8.2
Aroclor 1016 #3	8.71	8.65	8.75	42460	56115	24.3*
Aroclor 1016 #4	8.86	8.81	8.91	389168	441201	11.8
Aroclor 1016 #5	9.28	9.23	9.33	187378	194805	3.8
Aroclor 1260 #1	13.70	13.64	13.74	647673	721942	10.3
Aroclor 1260 #2	13.90	13.85	13.95	357535	382409	6.5
Aroclor 1260 #3	13.98	13.93	14.03	238118	248673	4.2
Aroclor 1260 #4	14.34	14.29	14.39	316803	348209	9.0
Aroclor 1260 #5	14.89	14.84	14.94	798545	850898	6.2

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

FORM VII PCB

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

GC Column: RTX-PEST 2 ID: 0.32(mm) Init. Calib Date(s): 08/20/01 08/20/01

Client Sample No.(PIBLK): PIBLKCX Date Analyzed : 08/21/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 1254

Client Sample No.: AR1660L3CT Date Analyzed : 08/21/01

Lab Sample ID : 5-128-7 Time Analyzed : 1319

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	7.29	7.23	7.33	187218	170946	9.5
Aroclor 1016 #2	8.17	8.11	8.21	483658	431624	12.1
Aroclor 1016 #3	8.62	8.57	8.67	108098	98023	10.3
Aroclor 1016 #4	8.69	8.64	8.74	208395	184228	13.1
Aroclor 1016 #5	9.67	9.61	9.71	142735	127495	12.0
Aroclor 1260 #1	14.12	14.07	14.17	888925	789026	12.7
Aroclor 1260 #2	14.28	14.23	14.33	455123	416872	9.2
Aroclor 1260 #3	14.38	14.32	14.42	284095	262583	8.2
Aroclor 1260 #4	14.79	14.74	14.84	482593	437411	10.3
Aroclor 1260 #5	15.20	15.15	15.25	948558	872457	8.7

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

FORM VII PCB

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

GC Column: RTX-PEST ID: 0.32(mm) Init. Calib Date(s): 08/20/01 08/20/01

Client Sample No.(PIBLK): PIBLKCX Date Analyzed : 08/21/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 1254

Client Sample No.: AR1660L3CT Date Analyzed : 08/21/01

Lab Sample ID : 5-128-7 Time Analyzed : 1319

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	7.03	6.97	7.07	146520	133341	9.9
Aroclor 1016 #2	7.80	7.74	7.84	465410	437301	6.4
Aroclor 1016 #3	9.26	9.21	9.31	203868	187057	9.0
Aroclor 1016 #4	10.79	10.73	10.83	197920	178369	11.0
Aroclor 1016 #5	11.34	11.29	11.39	256390	244685	4.8
Aroclor 1260 #1	13.66	13.61	13.71	802910	742508	8.1
Aroclor 1260 #2	13.86	13.81	13.91	415883	392787	5.9
Aroclor 1260 #3	13.95	13.90	14.00	257068	249925	2.9
Aroclor 1260 #4	14.32	14.26	14.36	386165	364192	6.0
Aroclor 1260 #5	14.86	14.80	14.90	926415	884810	4.7

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

FORM VII PCB

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

GC Column: RTX-PEST 2 ID: 0.32(mm) Init. Calib Date(s): 08/28/01 08/28/01

Client Sample No.(PIBLK): PIBLKC2 Date Analyzed : 08/29/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 0548

Client Sample No.: AR1660L3CE Date Analyzed : 08/29/01

Lab Sample ID : 5-128-7 Time Analyzed : 0613

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	7.20	7.14	7.24	136015	124853	8.9
Aroclor 1016 #2	8.08	8.02	8.12	327390	303025	8.0
Aroclor 1016 #3	8.54	8.48	8.58	69275	62021	11.7
Aroclor 1016 #4	8.60	8.55	8.65	145505	130955	11.1
Aroclor 1016 #5	9.88	9.82	9.92	159255	145276	9.6
Aroclor 1260 #1	14.06	14.00	14.10	585573	518620	12.9
Aroclor 1260 #2	14.21	14.16	14.26	329325	298131	10.5
Aroclor 1260 #3	14.31	14.25	14.35	226243	211643	6.9
Aroclor 1260 #4	14.72	14.67	14.77	331848	293643	13.0
Aroclor 1260 #5	15.14	15.09	15.19	673888	601914	12.0

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

FORM VII PCB

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

GC Column: RTX-PEST ID: 0.32(mm) Init. Calib Date(s): 08/28/01 08/28/01

Client Sample No.(PIBLK): PIBLKC2 Date Analyzed : 08/29/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 0548

Client Sample No.: AR1660L3CE Date Analyzed : 08/29/01

Lab Sample ID : 5-128-7 Time Analyzed : 0613

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	6.95	6.89	6.99	140168	122050	14.8
Aroclor 1016 #2	7.71	7.65	7.75	376760	333978	12.8
Aroclor 1016 #3	9.06	9.01	9.11	241448	214453	12.6
Aroclor 1016 #4	9.48	9.42	9.52	169183	150734	12.2
Aroclor 1016 #5	11.81	11.76	11.86	121438	106907	13.6
Aroclor 1260 #1	13.60	13.54	13.64	612735	537331	14.0
Aroclor 1260 #2	13.79	13.74	13.84	330668	290760	13.7
Aroclor 1260 #3	13.88	13.83	13.93	220263	197446	11.6
Aroclor 1260 #4	14.25	14.19	14.29	298048	258345	15.4*
Aroclor 1260 #5	14.79	14.74	14.84	723648	636391	13.7

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

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

GC Column: RTX-PEST 2 ID: 0.32(mm) Init. Calib Date(s): 08/28/01 08/28/01

Client Sample No.(PIBLK): PIBLKCG Date Analyzed : 08/30/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 1054

Client Sample No.: AR1660L3CI Date Analyzed : 08/30/01

Lab Sample ID : 5-210-7 Time Analyzed : 1119

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	7.20	7.14	7.24	118820	124853	4.8
Aroclor 1016 #2	8.08	8.02	8.12	294288	303025	2.9
Aroclor 1016 #3	8.54	8.48	8.58	57188	62021	7.8
Aroclor 1016 #4	8.60	8.55	8.65	123030	130955	6.1
Aroclor 1016 #5	9.88	9.82	9.92	143800	145276	1.0
Aroclor 1260 #1	14.06	14.00	14.10	534078	518620	3.0
Aroclor 1260 #2	14.21	14.16	14.26	306700	298131	2.9
Aroclor 1260 #3	14.31	14.25	14.35	211710	211643	0.0
Aroclor 1260 #4	14.72	14.67	14.77	304130	293643	3.6
Aroclor 1260 #5	15.14	15.09	15.19	615970	601914	2.3

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

FORM VII PCB

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

GC Column: RTX-PEST ID: 0.32(mm) Init. Calib Date(s): 08/28/01 08/28/01

Client Sample No.(PIBLK): PIBLKCG Date Analyzed : 08/30/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 1054

Client Sample No.: AR1660L3CI Date Analyzed : 08/30/01

Lab Sample ID : 5-210-7 Time Analyzed : 1119

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	6.96	6.89	6.99	102828	122050	15.7*
Aroclor 1016 #2	7.71	7.65	7.75	301530	333978	9.7
Aroclor 1016 #3	9.07	9.01	9.11	192393	214453	10.3
Aroclor 1016 #4	9.48	9.42	9.52	138368	150734	8.2
Aroclor 1016 #5	11.81	11.76	11.86	99050	106907	7.4
Aroclor 1260 #1	13.60	13.54	13.64	503145	537331	6.4
Aroclor 1260 #2	13.80	13.74	13.84	281823	290760	3.1
Aroclor 1260 #3	13.88	13.83	13.93	189290	197446	4.1
Aroclor 1260 #4	14.25	14.19	14.29	249393	258345	3.5
Aroclor 1260 #5	14.79	14.74	14.84	611670	636391	3.9

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

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

GC Column: RTX-PEST 2 ID: 0.32(mm) Init. Calib Date(s): 08/28/01 08/28/01

Client Sample No.(PIBLK): PIBLKCH Date Analyzed : 08/30/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 2103

Client Sample No.: AR1660L3CK Date Analyzed : 08/30/01

Lab Sample ID : 5-210-7 Time Analyzed : 2128

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	7.19	7.14	7.24	122770	124853	1.7
Aroclor 1016 #2	8.07	8.02	8.12	294435	303025	2.8
Aroclor 1016 #3	8.53	8.48	8.58	58240	62021	6.1
Aroclor 1016 #4	8.60	8.55	8.65	123210	130955	5.9
Aroclor 1016 #5	9.87	9.82	9.92	144468	145276	0.6
Aroclor 1260 #1	14.05	14.00	14.10	524698	518620	1.2
Aroclor 1260 #2	14.20	14.16	14.26	291990	298131	2.1
Aroclor 1260 #3	14.30	14.25	14.35	192003	211643	9.3
Aroclor 1260 #4	14.72	14.67	14.77	293833	293643	0.1
Aroclor 1260 #5	15.14	15.09	15.19	592258	601914	1.6

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

FORM VII PCB

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

GC Column: RTX-PEST ID: 0.32(mm) Init. Calib Date(s): 08/28/01 08/28/01

Client Sample No.(PIBLK): PIBLKCH Date Analyzed : 08/30/01

Lab Sample ID (PIBLK): 5-131-7 Time Analyzed : 2103

Client Sample No.: AR1660L3CK Date Analyzed : 08/30/01

Lab Sample ID : 5-210-7 Time Analyzed : 2128

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	6.95	6.89	6.99	110193	122050	9.7
Aroclor 1016 #2	7.70	7.65	7.75	302810	333978	9.3
Aroclor 1016 #3	9.06	9.01	9.11	192158	214453	10.4
Aroclor 1016 #4	9.47	9.42	9.52	136508	150734	9.4
Aroclor 1016 #5	11.80	11.76	11.86	95883	106907	10.3
Aroclor 1260 #1	13.59	13.54	13.64	482270	537331	10.2
Aroclor 1260 #2	13.79	13.74	13.84	261115	290760	10.2
Aroclor 1260 #3	13.87	13.83	13.93	168505	197446	14.7
Aroclor 1260 #4	14.24	14.19	14.29	235295	258345	8.9
Aroclor 1260 #5	14.78	14.74	14.84	567480	636391	10.8

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.: 29546 SAS No.: SDG No.: E00Q1

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

Instrument ID: HP_16A

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	RESCCC	5-441-6	08/10/01	1921	6.21	17.83
02	AR1221L3CC	5-420-6	08/10/01	1946	6.21	17.83
03	AR1232L3CC	5-422-6	08/10/01	2010	6.21	17.83
04	AR1242L1CC	5-11-7	08/10/01	2035	6.21	17.83
05	AR1242L2CC	5-10-7	08/10/01	2059	6.21	17.83
06	AR1242L3CC	5-9-7	08/10/01	2124	6.21	17.83
07	AR1242L4CC	5-8-7	08/10/01	2148	6.21	17.83
08	AR1242L5CC	5-7-7	08/10/01	2213	6.21	17.83
09	AR1248L3CC	5-424-6	08/10/01	2237	6.21	17.83
10	AR1254L1CC	5-6-7	08/10/01	2302	6.21	17.83
11	AR1254L2CC	5-5-7	08/10/01	2327	6.21	17.83
12	AR1254L3CC	5-4-7	08/10/01	2351	6.21	17.83
13	AR1254L4CC	5-3-7	08/11/01	0016	6.21	17.83
14	AR1254L5CC	5-2-7	08/11/01	0040	6.21	17.83
15	AR1660L1CC	5-130-7	08/11/01	0105	6.21	17.83
16	AR1660L2CC	5-129-7	08/11/01	0130	6.21	17.83
17	AR1660L3CY	5-128-7	08/11/01	0154	6.21	17.83
18	AR1660L4CC	5-127-7	08/11/01	0219	6.21	17.83
19	AR1660L5CC	5-126-7	08/11/01	0243	6.21	17.83
20	PIBLKCL	5-131-7	08/11/01	0308	6.21	17.83
21	PIBLKCQ	5-131-7	08/14/01	1037	6.19	17.83
22	AR1660L3CH	5-128-7	08/14/01	1101	6.21	17.83
23	PBLKSB	BL0802SB	08/14/01	1549	6.19	17.82
24	ELCS1	LC0802SB	08/14/01	1727	6.21	17.82
25	ELCS2	LD0802SB	08/14/01	1752	6.20	17.82
26	E00Q1	47158.01	08/14/01	1817	6.20	17.83
27	E00Q2	47158.02	08/14/01	1841	6.21	17.82
28	E00Q2MS	47158.03MS	08/14/01	1906	6.20	17.82
29	E00Q2MSD	47158.04MSD	08/14/01	1930	6.20	17.82
30	E00Q3	47158.05	08/14/01	1955	6.20	17.82
31	PIBLKCR	5-131-7	08/14/01	2133	6.21	17.83
32	AR1660L3CJ	5-128-7	08/14/01	2158	6.21	17.82
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.: 29546 SAS No.: SDG No.: E00Q1

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

Instrument ID: HP_16B

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	RESCCC	5-441-6	08/10/01	1921	6.21	17.16
02	AR1221L3CC	5-420-6	08/10/01	1946	6.21	17.16
03	AR1232L3CC	5-422-6	08/10/01	2010	6.21	17.16
04	AR1242L1CC	5-11-7	08/10/01	2035	6.21	17.16
05	AR1242L2CC	5-10-7	08/10/01	2059	6.21	17.16
06	AR1242L3CC	5-9-7	08/10/01	2124	6.21	17.16
07	AR1242L4CC	5-8-7	08/10/01	2148	6.21	17.16
08	AR1242L5CC	5-7-7	08/10/01	2213	6.21	17.16
09	AR1248L3CC	5-424-6	08/10/01	2237	6.21	17.16
10	AR1254L1CC	5-6-7	08/10/01	2302	6.21	17.16
11	AR1254L2CC	5-5-7	08/10/01	2327	6.21	17.16
12	AR1254L3CC	5-4-7	08/10/01	2351	6.21	17.16
13	AR1254L4CC	5-3-7	08/11/01	0016	6.21	17.16
14	AR1254L5CC	5-2-7	08/11/01	0040	6.21	17.16
15	AR1660L1CC	5-130-7	08/11/01	0105	6.21	17.16
16	AR1660L2CC	5-129-7	08/11/01	0130	6.21	17.16
17	AR1660L3CY	5-128-7	08/11/01	0154	6.21	17.16
18	AR1660L4CC	5-127-7	08/11/01	0219	6.21	17.16
19	AR1660L5CC	5-126-7	08/11/01	0243	6.21	17.16
20	PIBLKCL	5-131-7	08/11/01	0308	6.21	17.16
21	PIBLKCQ	5-131-7	08/14/01	1037	6.21	17.16
22	AR1660L3CH	5-128-7	08/14/01	1101	6.21	17.16
23	PBLKSB	BL0802SB	08/14/01	1549	6.21	17.16
24	ELCS1	LC0802SB	08/14/01	1727	6.21	17.15
25	ELCS2	LD0802SB	08/14/01	1752	6.21	17.15
26	E00Q1	47158.01	08/14/01	1817	6.21	17.15
27	E00Q2	47158.02	08/14/01	1841	6.21	17.15
28	E00Q2MS	47158.03MS	08/14/01	1906	6.21	17.15
29	E00Q2MSD	47158.04MSD	08/14/01	1930	6.21	17.15
30	E00Q3	47158.05	08/14/01	1955	6.21	17.15
31	PIBLKCR	5-131-7	08/14/01	2133	6.21	17.16
32	AR1660L3CJ	5-128-7	08/14/01	2158	6.21	17.16
33						
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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.: 29546 SAS No.: SDG No.: E00Q1

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

Instrument ID: HP_16A

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	RESCCE	5-171-7	08/20/01	1758	6.17	17.80
02	AR1221L3CE	5-420-6	08/20/01	1823	6.18	17.80
03	AR1232L3CE	5-422-6	08/20/01	1848	6.17	17.79
04	AR1242L1CE	5-11-7	08/20/01	1912	6.17	17.79
05	AR1242L2CE	5-10-7	08/20/01	1937	6.17	17.79
06	AR1242L3CE	5-9-7	08/20/01	2002	6.17	17.79
07	AR1242L4CE	5-8-7	08/20/01	2026	6.17	17.79
08	AR1242L5CE	5-7-7	08/20/01	2051	6.17	17.79
09	AR1248L3CE	5-424-6	08/20/01	2116	6.17	17.79
10	AR1254L1CE	5-6-7	08/20/01	2140	6.17	17.79
11	AR1254L2CE	5-5-7	08/20/01	2205	6.17	17.79
12	AR1254L3CE	5-4-7	08/20/01	2230	6.17	17.78
13	AR1254L4CE	5-3-7	08/20/01	2255	6.17	17.79
14	AR1254L5CE	5-2-7	08/20/01	2319	6.17	17.78
15	AR1660L1CE	5-130-7	08/20/01	2344	6.17	17.79
16	AR1660L2CE	5-129-7	08/21/01	0009	6.17	17.79
17	AR1660L3CS	5-128-7	08/21/01	0033	6.17	17.79
18	AR1660L4CE	5-172-7	08/21/01	0058	6.17	17.79
19	AR1660L5CE	5-126-7	08/21/01	0123	6.17	17.78
20	PIBLKCW	5-131-7	08/21/01	0147	6.17	17.79
21	E00Q4	47158.06	08/21/01	0440	6.17	17.79
22	E00Q5	47158.07	08/21/01	0505	6.17	17.79
23	E00Q7	47158.09	08/21/01	0554	6.17	17.79
24	E00Q8	47158.10	08/21/01	0619	6.17	17.79
25	E00Q9	47158.11	08/21/01	0644	6.17	17.79
26	E00R0	47158.12	08/21/01	0709	6.17	17.79
27	E00R1	47158.13	08/21/01	0733	6.17	17.79
28	E00R2	47158.14	08/21/01	0758	6.17	17.79
29	E00R3	47158.15	08/21/01	0823	6.17	17.78
30	E00R4	47158.16	08/21/01	0847	6.17	17.78
31	E00R5	47158.17	08/21/01	0912	6.17	17.78
32	E00R6	47158.18	08/21/01	0937	6.17	17.79
33	E00R7	47158.19	08/21/01	1001	6.17	17.78
34	E00R8	47158.20	08/21/01	1026	6.17	17.79
35	E00R9	47158.21	08/21/01	1051	6.17	17.79

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.: 29546 SAS No.: SDG No.: E00Q1

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

Instrument ID: HP_16A

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	E00S0	47158.22	08/21/01	1115	6.18	17.79
02	PIBLKCX	5-131-7	08/21/01	1254	6.18	17.79
03	AR1660L3CT	5-128-7	08/21/01	1319	6.18	17.79
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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.: 29546 SAS No.: SDG No.: E00Q1

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

Instrument ID: HP_16B

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	RESCCE	5-171-7	08/20/01	1758	6.18	17.13
02	AR1221L3CE	5-420-6	08/20/01	1823	6.18	17.13
03	AR1232L3CE	5-422-6	08/20/01	1848	6.18	17.12
04	AR1242L1CE	5-11-7	08/20/01	1912	6.18	17.13
05	AR1242L2CE	5-10-7	08/20/01	1937	6.18	17.12
06	AR1242L3CE	5-9-7	08/20/01	2002	6.18	17.12
07	AR1242L4CE	5-8-7	08/20/01	2026	6.18	17.12
08	AR1242L5CE	5-7-7	08/20/01	2051	6.18	17.12
09	AR1248L3CE	5-424-6	08/20/01	2116	6.18	17.12
10	AR1254L1CE	5-6-7	08/20/01	2140	6.18	17.12
11	AR1254L2CE	5-5-7	08/20/01	2205	6.18	17.12
12	AR1254L3CE	5-4-7	08/20/01	2230	6.18	17.12
13	AR1254L4CE	5-3-7	08/20/01	2255	6.18	17.12
14	AR1254L5CE	5-2-7	08/20/01	2319	6.18	17.12
15	AR1660L1CE	5-130-7	08/20/01	2344	6.18	17.12
16	AR1660L2CE	5-129-7	08/21/01	0009	6.18	17.12
17	AR1660L3CS	5-128-7	08/21/01	0033	6.18	17.12
18	AR1660L4CE	5-172-7	08/21/01	0058	6.18	17.12
19	AR1660L5CE	5-126-7	08/21/01	0123	6.18	17.12
20	PIBLKCW	5-131-7	08/21/01	0147	6.18	17.12
21	E00Q4	47158.06	08/21/01	0440	6.18	17.12
22	E00Q5	47158.07	08/21/01	0505	6.18	17.12
23	E00Q7	47158.09	08/21/01	0554	6.18	17.12
24	E00Q8	47158.10	08/21/01	0619	6.18	17.11
25	E00Q9	47158.11	08/21/01	0644	6.18	17.12
26	E00R0	47158.12	08/21/01	0709	6.18	17.12
27	E00R1	47158.13	08/21/01	0733	6.18	17.12
28	E00R2	47158.14	08/21/01	0758	6.18	17.12
29	E00R3	47158.15	08/21/01	0823	6.18	17.12
30	E00R4	47158.16	08/21/01	0847	6.18	17.12
31	E00R5	47158.17	08/21/01	0912	6.18	17.12
32	E00R6	47158.18	08/21/01	0937	6.18	17.12
33	E00R7	47158.19	08/21/01	1001	6.18	17.12
34	E00R8	47158.20	08/21/01	1026	6.18	17.12
35	E00R9	47158.21	08/21/01	1051	6.18	17.12

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.: 29546 SAS No.: SDG No.: E00Q1

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

Instrument ID: HP_16B

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	E00S0	47158.22	08/21/01	1115	6.18	17.12
02	PIBLKCX	5-131-7	08/21/01	1254	6.18	17.12
03	AR1660L3CT	5-128-7	08/21/01	1319	6.18	17.12
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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.: 29546 SAS No.: SDG No.: E00Q1

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

Instrument ID: HP_16A

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	RESCCF	5-171-7	08/28/01	1349	6.07	17.71
02	AR1221L3CF	5-420-6	08/28/01	1413	6.07	17.71
03	AR1232L3CF	5-422-6	08/28/01	1438	6.07	17.71
04	AR1242L1CF	5-11-7	08/28/01	1503	6.07	17.71
05	AR1242L2CF	5-10-7	08/28/01	1528	6.07	17.70
06	AR1242L3CF	5-9-7	08/28/01	1552	6.07	17.70
07	AR1242L4CF	5-8-7	08/28/01	1617	6.07	17.70
08	AR1242L5CF	5-7-7	08/28/01	1642	6.07	17.70
09	AR1248L3CF	5-424-6	08/28/01	1706	6.07	17.70
10	AR1254L1CF	5-6-7	08/28/01	1731	6.07	17.71
11	AR1254L2CF	5-5-7	08/28/01	1756	6.07	17.70
12	AR1254L3CF	5-4-7	08/28/01	1820	6.07	17.70
13	AR1254L4CF	5-3-7	08/28/01	1845	6.06	17.70
14	AR1254L5CF	5-2-7	08/28/01	1909	6.06	17.70
15	AR1660L1CF	5-130-7	08/28/01	1934	6.07	17.70
16	AR1660L2CF	5-129-7	08/28/01	1958	6.06	17.70
17	AR1660L3CD	5-128-7	08/28/01	2023	6.06	17.70
18	AR1660L4CF	5-172-7	08/28/01	2048	6.06	17.70
19	AR1660L5CF	5-126-7	08/28/01	2112	6.06	17.70
20	PIBLKCF	5-131-7	08/28/01	2137	6.06	17.70
21	PBLKSA	BL0823SA	08/28/01	2201	6.06	17.70
22	ELCS3	LC0823SA	08/28/01	2340	6.06	17.70
23	ELCS4	LD0823SA	08/29/01	0004	6.07	17.70
24	E00Q1DL	47158.01DL	08/29/01	0118	6.06	17.70
25	E00Q2DL	47158.02DL	08/29/01	0142	6.06	17.69
26	E00Q6	47158.08	08/29/01	0207	6.07	17.69
27	E00Q8DL	47158.10DL	08/29/01	0232	6.06	17.70
28	E00Q9DL	47158.11DL	08/29/01	0256	6.06	17.70
29	E00R6DL	47158.18DL	08/29/01	0321	6.07	17.70
30	PIBLKC2	5-131-7	08/29/01	0548	6.07	17.70
31	AR1660L3CE	5-128-7	08/29/01	0613	6.07	17.70
32	PIBLKCG	5-131-7	08/30/01	1054	6.07	17.70
33	AR1660L3CI	5-210-7	08/30/01	1119	6.07	17.70
34	E00Q9RE	47158.11RE	08/30/01	1512	6.05	17.70
35	PIBLKCH	5-131-7	08/30/01	2103	6.06	17.69

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.: 29546 SAS No.: SDG No.: E00Q1

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

Instrument ID: HP_16A

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR1660L3CK	5-210-7	08/30/01	2128	6.06	17.69
02						
03						
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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.: 29546 SAS No.: SDG No.: E00Q1

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

Instrument ID: HP_16B

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	RESCCF	5-171-7	08/28/01	1349	6.07	17.05
02	AR1221L3CF	5-420-6	08/28/01	1413	6.07	17.05
03	AR1232L3CF	5-422-6	08/28/01	1438	6.08	17.05
04	AR1242L1CF	5-11-7	08/28/01	1503	6.08	17.05
05	AR1242L2CF	5-10-7	08/28/01	1528	6.08	17.05
06	AR1242L3CF	5-9-7	08/28/01	1552	6.08	17.05
07	AR1242L4CF	5-8-7	08/28/01	1617	6.08	17.05
08	AR1242L5CF	5-7-7	08/28/01	1642	6.07	17.05
09	AR1248L3CF	5-424-6	08/28/01	1706	6.08	17.05
10	AR1254L1CF	5-6-7	08/28/01	1731	6.08	17.05
11	AR1254L2CF	5-5-7	08/28/01	1756	6.08	17.05
12	AR1254L3CF	5-4-7	08/28/01	1820	6.08	17.05
13	AR1254L4CF	5-3-7	08/28/01	1845	6.07	17.05
14	AR1254L5CF	5-2-7	08/28/01	1909	6.07	17.04
15	AR1660L1CF	5-130-7	08/28/01	1934	6.07	17.05
16	AR1660L2CF	5-129-7	08/28/01	1958	6.07	17.05
17	AR1660L3CD	5-128-7	08/28/01	2023	6.07	17.05
18	AR1660L4CF	5-172-7	08/28/01	2048	6.07	17.04
19	AR1660L5CF	5-126-7	08/28/01	2112	6.07	17.04
20	PIBLKCF	5-131-7	08/28/01	2137	6.07	17.05
21	PBLKSA	BL0823SA	08/28/01	2201	6.07	17.04
22	ELCS3	LC0823SA	08/28/01	2340	6.07	17.04
23	ELCS4	LD0823SA	08/29/01	0004	6.08	17.04
24	E00Q1DL	47158.01DL	08/29/01	0118	6.07	17.04
25	E00Q2DL	47158.02DL	08/29/01	0142	6.07	17.04
26	E00Q6	47158.08	08/29/01	0207	6.07	17.04
27	E00Q8DL	47158.10DL	08/29/01	0232	6.07	17.04
28	E00Q9DL	47158.11DL	08/29/01	0256	6.07	17.04
29	E00R6DL	47158.18DL	08/29/01	0321	6.07	17.04
30	PIBLKC2	5-131-7	08/29/01	0548	6.08	17.05
31	AR1660L3CE	5-128-7	08/29/01	0613	6.08	17.05
32	PIBLKCG	5-131-7	08/30/01	1054	6.08	17.05
33	AR1660L3CI	5-210-7	08/30/01	1119	6.08	17.05
34	E00Q9RE	47158.11RE	08/30/01	1512	6.08	17.04
35	PIBLKCH	5-131-7	08/30/01	2103	6.07	17.04

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.: 29546 SAS No.: SDG No.: E00Q1

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

Instrument ID: HP_16B

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR1660L3CK	5-210-7	08/30/01	2128	6.07	17.04
02						
03						
04						
05						
06						
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TCX = Tetrachloro-m-xylene (+/- 0.05 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

ELCS1

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: LC0802SB Date(s) Analyzed: 08/14/01 08/14/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	11.74	11.69	11.79	124		
Aroclor-1254	2	12.46	12.41	12.51	112		
	3	12.70	12.65	12.75	110		
COLUMN 1	4	13.08	13.04	13.14	109		
	5	13.49	13.45	13.55	111	110	
	1	12.21	12.15	12.25	111		
	2	12.43	12.38	12.48	121		
	3	12.57	12.52	12.62	118		
COLUMN 2	4	12.81	12.75	12.85	121		
	5	13.15	13.10	13.20	119	120	9.1
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

ELCS2

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: LD0802SB Date(s) Analyzed: 08/14/01 08/14/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	11.74	11.69	11.79	145		
Aroclor-1254	2	12.46	12.41	12.51	133		
	3	12.70	12.65	12.75	132		
COLUMN 1	4	13.08	13.04	13.14	135		
	5	13.49	13.45	13.55	135	140	
	1	12.20	12.15	12.25	127		
	2	12.44	12.38	12.48	141		
	3	12.57	12.52	12.62	135		
COLUMN 2	4	12.81	12.75	12.85	140		
	5	13.15	13.10	13.20	135	140	0.0
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

ELCS3

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: LC0823SA Date(s) Analyzed: 08/28/01 08/28/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	11.62	11.58	11.68	130		
Aroclor-1254	2	12.34	12.30	12.40	164		
	3	12.58	12.54	12.64	163		
COLUMN 1	4	12.97	12.93	13.03	164		
	5	13.39	13.34	13.44	166	160	
	1	12.09	12.04	12.14	166		
	2	12.46	12.41	12.51	163		
	3	12.70	12.66	12.76	198		
COLUMN 2	4	13.04	13.00	13.10	171		
	5	13.59	13.55	13.65	178	180	12.5
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

ELCS4

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: LD0823SA Date(s) Analyzed: 08/29/01 08/29/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	11.62	11.58	11.68	115		
Aroclor-1254	2	12.34	12.30	12.40	140		
	3	12.58	12.54	12.64	140		
COLUMN 1	4	12.97	12.93	13.03	140		
	5	13.39	13.34	13.44	142	140	
	1	12.10	12.04	12.14	143		
	2	12.46	12.41	12.51	139		
	3	12.70	12.66	12.76	167		
COLUMN 2	4	13.05	13.00	13.10	146		
	5	13.59	13.55	13.65	152	150	7.1
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

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FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00Q1

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: 47158.01 Date(s) Analyzed: 08/14/01 08/14/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	9.89	9.85	9.95	1180		
Aroclor-1242	2	9.98	9.94	10.04	1040		
	3	10.06	10.02	10.12	822		
COLUMN 1	4	10.46	10.41	10.51	758		
	5	10.54	10.50	10.60	869	930	
	1	9.53	9.48	9.58	1060		
	2	9.58	9.53	9.63	1010		
	3	9.65	9.61	9.71	755		
COLUMN 2	4	10.19	10.14	10.24	1040		
	5	10.50	10.45	10.55	428	860	8.1
	1	11.73	11.69	11.79	438		
Aroclor-1254	2	12.45	12.41	12.51	451		
	3	12.69	12.65	12.75	379		
COLUMN 1	4	13.08	13.04	13.14	475		
	5	13.49	13.45	13.55	435	440	
	1	12.20	12.15	12.25	487		
	2	12.44	12.38	12.48	572		
	3	12.57	12.52	12.62	386		
COLUMN 2	4	12.78	12.75	12.85	521		
	5	13.14	13.10	13.20	448	480	9.1
	1	14.15	14.11	14.21	303		
Aroclor-1260	2	14.31	14.26	14.36	114		
	3	14.40	14.36	14.46	112		
COLUMN 1	4	14.81	14.77	14.87	104		
	5	15.23	15.19	15.29	103	150	
	1	13.68	13.64	13.74	286		
	2	13.89	13.85	13.95	139		
	3	13.98	13.93	14.03	94.6		
COLUMN 2	4	14.34	14.29	14.39	99.0		
	5	14.88	14.84	14.94	83.2	140	7.1

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00Q1DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: 47158.01DL Date(s) Analyzed: 08/29/01 08/29/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	9.36	9.32	9.42	129		
Aroclor-1242	2	10.35	10.30	10.40	703		
	3	10.44	10.39	10.49	741		
COLUMN 1	4	10.61	10.57	10.67	719		
	5	12.59	12.55	12.65	4070	1300	
	1	9.07	9.01	9.11	94.2		
	2	9.12	9.15	9.25	237		
	3	9.43	9.38	9.48	1550		
COLUMN 2	4	9.90	9.86	9.96	765		
	5	10.70	10.66	10.76	1860	900	44.4
	1	11.63	11.58	11.68	333		
Aroclor-1254	2	12.34	12.30	12.40	422		
	3	12.59	12.54	12.64	472		
COLUMN 1	4	12.97	12.93	13.03	500		
	5	13.39	13.34	13.44	763	500	
	1	12.10	12.04	12.14	527		
	2	12.46	12.41	12.51	422		
	3	12.70	12.66	12.76	548		
COLUMN 2	4	13.04	13.00	13.10	474		
	5	13.59	13.55	13.65	454	490	2.0
	1	14.06	14.00	14.10	385		
Aroclor-1260	2	14.21	14.16	14.26	150		
	3	14.30	14.25	14.35	106		
COLUMN 1	4	14.72	14.67	14.77	194		
	5	15.14	15.09	15.19	117	190	
	1	13.59	13.54	13.64	317		
	2	13.79	13.74	13.84	162		
	3	13.88	13.83	13.93	95.1		
COLUMN 2	4	14.24	14.19	14.29	105		
	5	14.79	14.74	14.84	103	160	18.8

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00Q2

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: 47158.02 Date(s) Analyzed: 08/14/01 08/14/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	9.89	9.85	9.95	827		
Aroclor-1242	2	9.98	9.94	10.04	653		
	3	10.06	10.02	10.12	553		
COLUMN 1	4	10.46	10.41	10.51	529		
	5	10.55	10.50	10.60	529	620	
	1	9.53	9.48	9.58	806		
	2	9.58	9.53	9.63	625		
	3	9.65	9.61	9.71	421		
COLUMN 2	4	10.20	10.14	10.24	493		
	5	10.50	10.45	10.55	264	520	19.2
	1	11.73	11.69	11.79	538		
Aroclor-1254	2	12.45	12.41	12.51	434		
	3	12.69	12.65	12.75	492		
COLUMN 1	4	13.08	13.04	13.14	585		
	5	13.48	13.45	13.55	589	530	
	1	12.19	12.15	12.25	485		
	2	12.43	12.38	12.48	506		
	3	12.57	12.52	12.62	547		
COLUMN 2	4	12.78	12.75	12.85	548		
	5	13.14	13.10	13.20	643	550	3.8
	1	14.15	14.11	14.21	402		
Aroclor-1260	2	14.31	14.26	14.36	159		
	3	14.40	14.36	14.46	119		
COLUMN 1	4	14.81	14.77	14.87	116		
	5	15.23	15.19	15.29	124	180	
	1	13.68	13.64	13.74	401		
	2	13.89	13.85	13.95	193		
	3	13.98	13.93	14.03	169		
COLUMN 2	4	14.34	14.29	14.39	146		
	5	14.88	14.84	14.94	120	210	16.7

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00Q2DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: 47158.02DL Date(s) Analyzed: 08/29/01 08/29/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	9.34	9.32	9.42	49.7		
Aroclor-1242	2	10.35	10.30	10.40	270		
	3	10.44	10.39	10.49	271		
COLUMN 1	4	10.61	10.57	10.67	221		
	5	12.59	12.55	12.65	3350	830	
	1	9.07	9.01	9.11	36.4		
	2	9.12	9.15	9.25	172		
	3	9.43	9.38	9.48	604		
COLUMN 2	4	9.91	9.86	9.96	290		
	5	10.71	10.66	10.76	1330	490	69.4
	1	11.63	11.58	11.68	249		
Aroclor-1254	2	12.34	12.30	12.40	254		
	3	12.59	12.54	12.64	388		
COLUMN 1	4	12.97	12.93	13.03	397		
	5	13.39	13.34	13.44	418	340	
	1	12.10	12.04	12.14	400		
	2	12.46	12.41	12.51	397		
	3	12.70	12.66	12.76	274		
COLUMN 2	4	13.04	13.00	13.10	442		
	5	13.59	13.55	13.65	378	380	11.8
	1	14.06	14.00	14.10	301		
Aroclor-1260	2	14.21	14.16	14.26	126		
	3	14.30	14.25	14.35	84.6		
COLUMN 1	4	14.72	14.67	14.77	167		
	5	15.14	15.09	15.19	100	160	
	1	13.59	13.54	13.64	264		
	2	13.79	13.74	13.84	135		
	3	13.88	13.83	13.93	78.8		
COLUMN 2	4	14.24	14.19	14.29	93.8		
	5	14.79	14.74	14.84	77.7	130	23.1

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00Q2MS

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: 47158.03MS Date(s) Analyzed: 08/14/01 08/14/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	9.89	9.85	9.95	1120		
Aroclor-1242	2	9.98	9.94	10.04	770		
	3	10.05	10.02	10.12	645		
COLUMN 1	4	10.46	10.41	10.51	703		
	5	10.54	10.50	10.60	688	790	
	1	9.52	9.48	9.58	1200		
	2	9.58	9.53	9.63	805		
	3	9.64	9.61	9.71	478		
COLUMN 2	4	10.19	10.14	10.24	602		
	5	10.50	10.45	10.55	333	680	16.2
	1	11.73	11.69	11.79	706		
Aroclor-1254	2	12.44	12.41	12.51	619		
	3	12.68	12.65	12.75	667		
COLUMN 1	4	13.08	13.04	13.14	753		
	5	13.48	13.45	13.55	706	690	
	1	12.19	12.15	12.25	751		
	2	12.43	12.38	12.48	830		
	3	12.56	12.52	12.62	759		
COLUMN 2	4	12.77	12.75	12.85	809		
	5	13.14	13.10	13.20	879	810	17.4
	1	14.14	14.11	14.21	525		
Aroclor-1260	2	14.31	14.26	14.36	191		
	3	14.40	14.36	14.46	151		
COLUMN 1	4	14.81	14.77	14.87	132		
	5	15.22	15.19	15.29	157	230	
	1	13.68	13.64	13.74	606		
	2	13.88	13.85	13.95	177		
	3	13.97	13.93	14.03	190		
COLUMN 2	4	14.33	14.29	14.39	176		
	5	14.87	14.84	14.94	136	260	13.0

At least 3 peaks are required for identification of multicomponent analytes

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FORM X PCB

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00Q2MSD

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: 47158.04MSD Date(s) Analyzed: 08/14/01 08/14/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	9.89	9.85	9.95	1300		
Aroclor-1242	2	9.98	9.94	10.04	927		
	3	10.05	10.02	10.12	755		
COLUMN 1	4	10.46	10.41	10.51	851		
	5	10.54	10.50	10.60	806	930	
	1	9.53	9.48	9.58	1290		
	2	9.58	9.53	9.63	889		
	3	9.65	9.61	9.71	567		
COLUMN 2	4	10.19	10.14	10.24	691		
	5	10.50	10.45	10.55	414	770	20.8
	1	11.73	11.69	11.79	926		
Aroclor-1254	2	12.45	12.41	12.51	811		
	3	12.68	12.65	12.75	910		
COLUMN 1	4	13.08	13.04	13.14	1080		
	5	13.48	13.45	13.55	1050	960	
	1	12.19	12.15	12.25	916		
	2	12.43	12.38	12.48	1040		
	3	12.57	12.52	12.62	992		
COLUMN 2	4	12.78	12.75	12.85	961		
	5	13.14	13.10	13.20	1170	1000	4.2
	1	14.14	14.11	14.21	758		
Aroclor-1260	2	14.30	14.26	14.36	300		
	3	14.40	14.36	14.46	229		
COLUMN 1	4	14.81	14.77	14.87	223		
	5	15.22	15.19	15.29	247	350	
	1	13.68	13.64	13.74	772		
	2	13.89	13.85	13.95	350		
	3	13.98	13.93	14.03	256		
COLUMN 2	4	14.34	14.29	14.39	294		
	5	14.87	14.84	14.94	244	380	8.6

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00Q3

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: 47158.05 Date(s) Analyzed: 08/14/01 08/14/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	9.89	9.85	9.95	144		
Aroclor-1242	2	9.98	9.94	10.04	107		
	3	10.06	10.02	10.12	97.5		
COLUMN 1	4	10.46	10.41	10.51	87.3		
	5	10.54	10.50	10.60	105	110	
	1	9.53	9.48	9.58	152		
	2	9.58	9.53	9.63	112		
	3	9.65	9.61	9.71	55.0		
COLUMN 2	4	10.19	10.14	10.24	110		
	5	10.50	10.45	10.55	52.2	96	14.6
	1	11.73	11.69	11.79	67.4		
Aroclor-1254	2	12.45	12.41	12.51	60.7		
	3	12.69	12.65	12.75	56.5		
COLUMN 1	4	13.08	13.04	13.14	74.3		
	5	13.48	13.45	13.55	58.3	63	
	1	12.19	12.15	12.25	50.8		
	2	12.44	12.38	12.48	72.4		
	3	12.57	12.52	12.62	59.8		
COLUMN 2	4	12.78	12.75	12.85	60.7		
	5	13.14	13.10	13.20	77.5	64	1.6
	1	14.15	14.11	14.21	55.3		
Aroclor-1260	2	14.31	14.26	14.36	41.1		
	3	14.40	14.36	14.46	28.1		
COLUMN 1	4	14.82	14.77	14.87	28.2		
	5	15.23	15.19	15.29	20.7	35	
	1	13.68	13.64	13.74	48.6		
	2	13.89	13.85	13.95	47.2		
	3	13.97	13.93	14.03	71.3		
COLUMN 2	4	14.33	14.29	14.39	25.3		
	5	14.87	14.84	14.94	19.5	42	20.0

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00Q4

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: 47158.06 Date(s) Analyzed: 08/21/01 08/21/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1						
Aroclor-1242	2	10.43	10.38	10.48	152		
	3	10.51	10.47	10.57	154		
COLUMN 1	4	10.69	10.64	10.74	111		
	5	11.22	11.19	11.29	292	180	
	1						
	2	9.21	9.21	9.31	414		
	3	9.51	9.45	9.55	3750		
COLUMN 2	4	9.98	9.93	10.03	109		
	5	10.49	10.42	10.52	415	1200	567
	1	11.70	11.65	11.75	181		
Aroclor-1254	2	12.42	12.37	12.47	92.4		
	3	12.66	12.61	12.71	102		
COLUMN 1	4	13.05	13.00	13.10	130		
	5	13.46	13.41	13.51	131	130	
	1	12.16	12.12	12.22	103		
	2	12.54	12.49	12.59	125		
	3	12.74	12.71	12.81	173		
COLUMN 2	4	13.11	13.07	13.17	132		
	5	13.65	13.61	13.71	128	130	0.0
	1	14.12	14.07	14.17	87.7		
Aroclor-1260	2	14.28	14.23	14.33	42.3		
	3	14.36	14.32	14.42	39.0		
COLUMN 1	4	14.79	14.74	14.84	25.0		
	5	15.20	15.15	15.25	35.2	46	
	1	13.65	13.61	13.71	86.4		
	2	13.86	13.81	13.91	42.2		
	3	13.95	13.90	14.00	28.2		
COLUMN 2	4	14.31	14.26	14.36	71.1		
	5	14.85	14.80	14.90	18.5	49	6.5

At least 3 peaks are required for identification of multicomponent analytes

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IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00Q5

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: 47158.07 Date(s) Analyzed: 08/21/01 08/21/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	11.70	11.65	11.75	59.4		
Aroclor-1254	2	12.42	12.37	12.47	30.2		
	3	12.66	12.61	12.71	41.7		
COLUMN 1	4	13.05	13.00	13.10	41.7		
	5	13.46	13.41	13.51	43.8	43	
	1	12.16	12.12	12.22	33.1		
	2	12.54	12.49	12.59	36.8		
	3	12.75	12.71	12.81	49.7		
COLUMN 2	4	13.11	13.07	13.17	46.0		
	5	13.65	13.61	13.71	39.9	41	4.9
	1	14.12	14.07	14.17	30.2		
Aroclor-1260	2	14.28	14.23	14.33	8.7		
	3	14.37	14.32	14.42	10.0		
COLUMN 1	4	14.78	14.74	14.84	7.9		
	5	15.20	15.15	15.25	8.9	13	
	1	13.65	13.61	13.71	27.0		
	2	13.86	13.81	13.91	13.4		
	3	13.94	13.90	14.00	9.6		
COLUMN 2	4	14.31	14.26	14.36	15.0		
	5	14.85	14.80	14.90	7.7	15	15.4
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

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IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00Q6

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: 47158.08 Date(s) Analyzed: 08/29/01 08/29/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1						
Aroclor-1242	2	10.34	10.30	10.40	75.1		
	3	10.43	10.39	10.49	40.1		
COLUMN 1	4	10.60	10.57	10.67	68.2		
	5	12.58	12.55	12.65	386	140	
	1	9.06	9.01	9.11	8.2		
	2	9.12	9.15	9.25	192		
	3	9.43	9.38	9.48	1960		
COLUMN 2	4	9.90	9.86	9.96	47.7		
	5	10.70	10.66	10.76	180	480	243
	1	11.61	11.58	11.68	66.4		
Aroclor-1254	2	12.33	12.30	12.40	48.1		
	3	12.58	12.54	12.64	44.8		
COLUMN 1	4	12.97	12.93	13.03	55.9		
	5	13.38	13.34	13.44	63.9	56	
	1	12.09	12.04	12.14	59.5		
	2	12.46	12.41	12.51	47.6		
	3	12.72	12.66	12.76	310		
COLUMN 2	4	13.04	13.00	13.10	67.9		
	5	13.58	13.55	13.65	59.7	110	96.4
	1	14.05	14.00	14.10	45.4		
Aroclor-1260	2	14.21	14.16	14.26	18.2		
	3	14.28	14.25	14.35	14.5		
COLUMN 1	4						
	5	15.13	15.09	15.19	11.4	22	
	1	13.58	13.54	13.64	41.7		
	2	13.79	13.74	13.84	16.8		
	3	13.87	13.83	13.93	14.5		
COLUMN 2	4						
	5	14.79	14.74	14.84	26.3	25	13.6

At least 3 peaks are required for identification of multicomponent analytes

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IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00Q7

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: 47158.09 Date(s) Analyzed: 08/21/01 08/21/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	11.70	11.65	11.75	31.8		
Aroclor-1254	2	12.42	12.37	12.47	12.0		
	3	12.66	12.61	12.71	16.3		
COLUMN 1	4	13.05	13.00	13.10	18.5		
	5	13.46	13.41	13.51	27.7	21	
	1	12.16	12.12	12.22	17.7		
	2	12.54	12.49	12.59	13.6		
	3	12.80	12.71	12.81	71.8		
COLUMN 2	4	13.11	13.07	13.17	20.7		
	5	13.65	13.61	13.71	17.4	28	33.3
	1	14.12	14.07	14.17	13.2		
Aroclor-1260	2	14.28	14.23	14.33	4.7		
	3						
COLUMN 1	4						
	5	15.20	15.15	15.25	2.5	6.8	
	1	13.65	13.61	13.71	11.8		
	2	13.86	13.81	13.91	6.5		
	3	13.94	13.90	14.00	5.7		
COLUMN 2	4						
	5	14.86	14.80	14.90	22.4	12	76.5
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

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FORM X PCB

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IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00Q8

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: 47158.10 Date(s) Analyzed: 08/21/01 08/21/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	9.42	9.39	9.49	174		
Aroclor-1242	2	10.42	10.38	10.48	993		
	3	10.51	10.47	10.57	1190		
COLUMN 1	4	10.68	10.64	10.74	1010		
	5	11.22	11.19	11.29	1850	1000	
	1	9.15	9.08	9.18	142		
	2	9.21	9.21	9.31	248		
	3	9.50	9.45	9.55	3200		
COLUMN 2	4	9.98	9.93	10.03	614		
	5	10.47	10.42	10.52	457	930	7.5
	1	11.70	11.65	11.75	1560		
Aroclor-1254	2	12.41	12.37	12.47	1580		
	3	12.65	12.61	12.71	1560		
COLUMN 1	4	13.04	13.00	13.10	1940		
	5	13.45	13.41	13.51	1960	1700	
	1	12.16	12.12	12.22	1620		
	2	12.53	12.49	12.59	1720		
	3	12.74	12.71	12.81	1920		
COLUMN 2	4	13.11	13.07	13.17	2190		
	5	13.65	13.61	13.71	2270	1900	11.8
	1	14.11	14.07	14.17	1520		
Aroclor-1260	2	14.28	14.23	14.33	526		
	3	14.37	14.32	14.42	496		
COLUMN 1	4	14.78	14.74	14.84	460		
	5	15.20	15.15	15.25	501	700	
	1	13.65	13.61	13.71	1530		
	2	13.86	13.81	13.91	470		
	3	13.94	13.90	14.00	465		
COLUMN 2	4	14.31	14.26	14.36	463		
	5	14.84	14.80	14.90	374	660	6.1

At least 3 peaks are required for identification of multicomponent analytes

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IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00Q8DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: 47158.10DL Date(s) Analyzed: 08/29/01 08/29/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	9.34	9.32	9.42	211		
Aroclor-1242	2	10.35	10.30	10.40	1200		
	3	10.43	10.39	10.49	1360		
COLUMN 1	4	10.61	10.57	10.67	1180		
	5					990	
	1	9.07	9.01	9.11	138		
	2	9.12	9.15	9.25	270		
	3	9.42	9.38	9.48	4000		
COLUMN 2	4	9.90	9.86	9.96	789		
	5					1300	31.3
	1	11.62	11.58	11.68	1820		
Aroclor-1254	2	12.34	12.30	12.40	2010		
	3	12.58	12.54	12.64	2560		
COLUMN 1	4	12.97	12.93	13.03	2410		
	5	13.38	13.34	13.44	3080	2400	
	1	12.09	12.04	12.14	2860		
	2	12.46	12.41	12.51	2750		
	3	12.68	12.66	12.76	2920		
COLUMN 2	4	13.04	13.00	13.10	3140		
	5	13.58	13.55	13.65	3040	2900	20.8
	1	14.05	14.00	14.10	2340		
Aroclor-1260	2	14.21	14.16	14.26	790		
	3	14.30	14.25	14.35	626		
COLUMN 1	4	14.71	14.67	14.77	745		
	5	15.13	15.09	15.19	715	1000	
	1	13.58	13.54	13.64	2120		
	2	13.79	13.74	13.84	922		
	3	13.88	13.83	13.93	521		
COLUMN 2	4	14.24	14.19	14.29	721		
	5	14.78	14.74	14.84	668	990	1.0

At least 3 peaks are required for identification of multicomponent analytes

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IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00Q9

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: 47158.11 Date(s) Analyzed: 08/21/01 08/21/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	9.42	9.39	9.49	165		
Aroclor-1242	2	10.42	10.38	10.48	855		
	3	10.51	10.47	10.57	992		
COLUMN 1	4	10.68	10.64	10.74	894		
	5	11.22	11.19	11.29	1510	880	
	1	9.15	9.08	9.18	113		
	2	9.21	9.21	9.31	280		
	3	9.50	9.45	9.55	4770		
COLUMN 2	4	9.98	9.93	10.03	522		
	5	10.47	10.42	10.52	365	1200	36.4
	1	11.70	11.65	11.75	1300		
Aroclor-1254	2	12.41	12.37	12.47	1270		
	3	12.65	12.61	12.71	1270		
COLUMN 1	4	13.05	13.00	13.10	1570		
	5	13.45	13.41	13.51	1590	1400	
	1	12.16	12.12	12.22	1300		
	2	12.54	12.49	12.59	1390		
	3	12.74	12.71	12.81	1520		
COLUMN 2	4	13.11	13.07	13.17	1700		
	5	13.65	13.61	13.71	1810	1500	7.1
	1	14.12	14.07	14.17	1210		
Aroclor-1260	2	14.28	14.23	14.33	510		
	3	14.37	14.32	14.42	419		
COLUMN 1	4	14.78	14.74	14.84	401		
	5	15.20	15.15	15.25	438	600	
	1	13.65	13.61	13.71	1220		
	2	13.86	13.81	13.91	580		
	3	13.95	13.90	14.00	411		
COLUMN 2	4	14.31	14.26	14.36	518		
	5	14.85	14.80	14.90	343	610	1.7

At least 3 peaks are required for identification of multicomponent analytes

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IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00Q9DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: 47158.11DL Date(s) Analyzed: 08/29/01 08/29/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	9.34	9.32	9.42	177		
Aroclor-1242	2	10.35	10.30	10.40	913		
	3	10.43	10.39	10.49	1040		
COLUMN 1	4	10.61	10.57	10.67	952		
	5	12.58	12.55	12.65	16100	3800	
	1	9.07	9.01	9.11	90.3		
	2	9.12	9.15	9.25	281		
	3						
COLUMN 2	4	9.90	9.86	9.96	974		
	5	10.70	10.66	10.76	5720	1800	111
	1	11.62	11.58	11.68	1310		
Aroclor-1254	2	12.34	12.30	12.40	1460		
	3	12.58	12.54	12.64	1860		
COLUMN 1	4	12.97	12.93	13.03	2050		
	5	13.38	13.34	13.44	2120	1800	
	1	12.09	12.04	12.14	2010		
	2	12.46	12.41	12.51	2030		
	3	12.69	12.66	12.76	1980		
COLUMN 2	4	13.04	13.00	13.10	2250		
	5	13.59	13.55	13.65	2180	2100	16.7
	1	14.05	14.00	14.10	1660		
Aroclor-1260	2	14.21	14.16	14.26	699		
	3	14.30	14.25	14.35	471		
COLUMN 1	4	14.72	14.67	14.77	613		
	5	15.14	15.09	15.19	586	810	
	1	13.59	13.54	13.64	1530		
	2	13.79	13.74	13.84	819		
	3	13.88	13.83	13.93	465		
COLUMN 2	4	14.24	14.19	14.29	642		
	5	14.78	14.74	14.84	550	800	1.3

At least 3 peaks are required for identification of multicomponent analytes

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IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00Q9RE

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: 47158.11RE Date(s) Analyzed: 08/30/01 08/30/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	9.32	9.32	9.42	142		
Aroclor-1242	2	10.33	10.30	10.40	723		
	3	10.42	10.39	10.49	775		
COLUMN 1	4	10.59	10.57	10.67	758		
	5	12.56	12.55	12.65	11400	2800	
	1	9.07	9.01	9.11	91.0		
	2	9.13	9.15	9.25	374		
	3	9.42	9.38	9.48	4550		
COLUMN 2	4	9.90	9.86	9.96	508		
	5	10.70	10.66	10.76	4000	1900	47.4
	1	11.61	11.58	11.68	1330		
Aroclor-1254	2	12.32	12.30	12.40	1340		
	3	12.56	12.54	12.64	1330		
COLUMN 1	4	12.96	12.93	13.03	1670		
	5	13.37	13.34	13.44	1560	1400	
	1	12.08	12.04	12.14	1270		
	2	12.46	12.41	12.51	1370		
	3	12.67	12.66	12.76	1630		
COLUMN 2	4	13.04	13.00	13.10	1630		
	5	13.58	13.55	13.65	1720	1500	7.1
	1	14.04	14.00	14.10	1410		
Aroclor-1260	2	14.20	14.16	14.26	497		
	3	14.29	14.25	14.35	426		
COLUMN 1	4	14.71	14.67	14.77	463		
	5	15.12	15.09	15.19	481	660	
	1	13.58	13.54	13.64	1200		
	2	13.79	13.74	13.84	384		
	3	13.88	13.83	13.93	347		
COLUMN 2	4	14.24	14.19	14.29	396		
	5	14.78	14.74	14.84	311	530	24.5

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00R0

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: 47158.12 Date(s) Analyzed: 08/21/01 08/21/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	9.42	9.39	9.49	38.4		
Aroclor-1242	2	10.43	10.38	10.48	244		
	3	10.51	10.47	10.57	283		
COLUMN 1	4	10.68	10.64	10.74	249		
	5	11.22	11.19	11.29	437	250	
	1	9.15	9.08	9.18	27.1		
	2	9.21	9.21	9.31	200		
	3	9.51	9.45	9.55	1710		
COLUMN 2	4	9.98	9.93	10.03	144		
	5	10.47	10.42	10.52	77.3	430	72.0
	1	11.70	11.65	11.75	397		
Aroclor-1254	2	12.41	12.37	12.47	333		
	3	12.65	12.61	12.71	355		
COLUMN 1	4	13.05	13.00	13.10	450		
	5	13.45	13.41	13.51	447	400	
	1	12.16	12.12	12.22	352		
	2	12.54	12.49	12.59	405		
	3	12.74	12.71	12.81	422		
COLUMN 2	4	13.11	13.07	13.17	488		
	5	13.65	13.61	13.71	504	430	7.5
	1	14.12	14.07	14.17	336		
Aroclor-1260	2	14.28	14.23	14.33	130		
	3	14.37	14.32	14.42	117		
COLUMN 1	4	14.78	14.74	14.84	106		
	5	15.20	15.15	15.25	107	160	
	1	13.65	13.61	13.71	341		
	2	13.86	13.81	13.91	175		
	3	13.95	13.90	14.00	109		
COLUMN 2	4	14.31	14.26	14.36	111		
	5	14.85	14.80	14.90	88.5	160	0.0

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00R1

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: 47158.13 Date(s) Analyzed: 08/21/01 08/21/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	11.70	11.65	11.75	223		
Aroclor-1254	2	12.41	12.37	12.47	159		
	3	12.65	12.61	12.71	181		
COLUMN 1	4	13.05	13.00	13.10	234		
	5	13.45	13.41	13.51	294	220	
	1	12.16	12.12	12.22	179		
	2	12.54	12.49	12.59	209		
	3	12.75	12.71	12.81	203		
COLUMN 2	4	13.11	13.07	13.17	249		
	5	13.65	13.61	13.71	244	220	0.0
	1	14.12	14.07	14.17	175		
Aroclor-1260	2	14.28	14.23	14.33	57.8		
	3	14.37	14.32	14.42	43.9		
COLUMN 1	4	14.78	14.74	14.84	46.8		
	5	15.20	15.15	15.25	52.4	75	
	1	13.65	13.61	13.71	165		
	2	13.86	13.81	13.91	69.4		
	3	13.95	13.90	14.00	42.2		
COLUMN 2	4	14.31	14.26	14.36	45.2		
	5	14.85	14.80	14.90	40.3	72	4.2
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00R2

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: 47158.14 Date(s) Analyzed: 08/21/01 08/21/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	9.42	9.39	9.49	33.1		
Aroclor-1242	2	10.43	10.38	10.48	143		
	3	10.52	10.47	10.57	156		
COLUMN 1	4	10.69	10.64	10.74	137		
	5	11.23	11.19	11.29	236	140	
	1	9.15	9.08	9.18	13.0		
	2	9.22	9.21	9.31	155		
	3	9.51	9.45	9.55	1020		
COLUMN 2	4	9.98	9.93	10.03	82.4		
	5	10.47	10.42	10.52	47.2	260	85.7
	1	11.70	11.65	11.75	233		
Aroclor-1254	2	12.42	12.37	12.47	185		
	3	12.66	12.61	12.71	236		
COLUMN 1	4	13.05	13.00	13.10	261		
	5	13.46	13.41	13.51	327	250	
	1	12.17	12.12	12.22	195		
	2	12.54	12.49	12.59	223		
	3	12.75	12.71	12.81	221		
COLUMN 2	4	13.11	13.07	13.17	269		
	5	13.66	13.61	13.71	264	230	8.7
	1	14.12	14.07	14.17	183		
Aroclor-1260	2	14.28	14.23	14.33	66.3		
	3	14.37	14.32	14.42	54.9		
COLUMN 1	4	14.78	14.74	14.84	51.6		
	5	15.20	15.15	15.25	67.1	85	
	1	13.66	13.61	13.71	179		
	2	13.86	13.81	13.91	74.1		
	3	13.95	13.90	14.00	44.7		
COLUMN 2	4	14.31	14.26	14.36	54.9		
	5	14.85	14.80	14.90	51.6	81	4.9

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00R3

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: 47158.15 Date(s) Analyzed: 08/21/01 08/21/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1						
Aroclor-1242	2	10.43	10.38	10.48	63.0		
	3	10.51	10.47	10.57	65.5		
COLUMN 1	4	10.69	10.64	10.74	57.8		
	5	11.23	11.19	11.29	90.9	69	
	1						
	2	9.21	9.21	9.31	103		
	3	9.50	9.45	9.55	169		
COLUMN 2	4	9.98	9.93	10.03	37.2		
	5	10.46	10.42	10.52	22.1	83	20.3
	1	11.70	11.65	11.75	118		
Aroclor-1254	2	12.42	12.37	12.47	83.7		
	3	12.66	12.61	12.71	107		
COLUMN 1	4	13.05	13.00	13.10	117		
	5	13.46	13.41	13.51	121	110	
	1	12.16	12.12	12.22	83.5		
	2	12.54	12.49	12.59	99.2		
	3	12.75	12.71	12.81	99.9		
COLUMN 2	4	13.11	13.07	13.17	121		
	5	13.66	13.61	13.71	113	100	10.0
	1	14.12	14.07	14.17	85.7		
Aroclor-1260	2	14.28	14.23	14.33	32.6		
	3	14.37	14.32	14.42	26.4		
COLUMN 1	4	14.78	14.74	14.84	23.1		
	5	15.20	15.15	15.25	32.9	40	
	1	13.66	13.61	13.71	76.6		
	2	13.86	13.81	13.91	34.9		
	3	13.95	13.90	14.00	20.0		
COLUMN 2	4	14.31	14.26	14.36	24.7		
	5	14.85	14.80	14.90	22.6	36	11.1

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00R4

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: 47158.16 Date(s) Analyzed: 08/21/01 08/21/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	11.70	11.65	11.75	58.5		
Aroclor-1254	2	12.42	12.37	12.47	31.3		
	3	12.66	12.61	12.71	42.8		
COLUMN 1	4	13.05	13.00	13.10	45.4		
	5	13.46	13.41	13.51	47.3	45	
	1	12.17	12.12	12.22	33.4		
	2	12.54	12.49	12.59	39.0		
	3	12.76	12.71	12.81	36.1		
COLUMN 2	4	13.12	13.07	13.17	50.1		
	5	13.66	13.61	13.71	48.7	41	9.8
	1	14.12	14.07	14.17	35.7		
Aroclor-1260	2	14.28	14.23	14.33	13.5		
	3	14.37	14.32	14.42	9.9		
COLUMN 1	4	14.78	14.74	14.84	10.5		
	5	15.20	15.15	15.25	11.1	16	
	1	13.66	13.61	13.71	32.9		
	2	13.86	13.81	13.91	15.2		
	3	13.95	13.90	14.00	8.5		
COLUMN 2	4	14.31	14.26	14.36	9.2		
	5	14.85	14.80	14.90	8.1	15	6.7
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00R5

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: 47158.17 Date(s) Analyzed: 08/21/01 08/21/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	11.70	11.65	11.75	59.0		
Aroclor-1254	2	12.42	12.37	12.47	34.4		
	3	12.66	12.61	12.71	46.6		
COLUMN 1	4	13.05	13.00	13.10	50.2		
	5	13.46	13.41	13.51	53.8	49	
	1	12.17	12.12	12.22	44.3		
	2	12.54	12.49	12.59	41.5		
	3	12.76	12.71	12.81	38.9		
COLUMN 2	4	13.11	13.07	13.17	52.6		
	5	13.66	13.61	13.71	49.9	45	8.9
	1	14.12	14.07	14.17	39.3		
Aroclor-1260	2	14.28	14.23	14.33	16.7		
	3	14.37	14.32	14.42	14.9		
COLUMN 1	4	14.78	14.74	14.84	11.3		
	5	15.20	15.15	15.25	11.9	19	
	1	13.66	13.61	13.71	33.7		
	2	13.86	13.81	13.91	15.6		
	3	13.95	13.90	14.00	8.5		
COLUMN 2	4	14.31	14.26	14.36	9.9		
	5	14.85	14.80	14.90	8.5	15	26.7
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00R6

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: 47158.18 Date(s) Analyzed: 08/21/01 08/21/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	9.42	9.39	9.49	385		
Aroclor-1242	2	10.42	10.38	10.48	2390		
	3	10.51	10.47	10.57	2460		
COLUMN 1	4	10.68	10.64	10.74	2070		
	5	11.22	11.19	11.29	2950	2100	
	1	9.15	9.08	9.18	375		
	2	9.21	9.21	9.31	526		
	3	9.50	9.45	9.55	3780		
COLUMN 2	4	9.98	9.93	10.03	1440		
	5	10.47	10.42	10.52	1340	1500	40.0
	1	11.70	11.65	11.75	2100		
Aroclor-1254	2	12.41	12.37	12.47	1950		
	3	12.65	12.61	12.71	2060		
COLUMN 1	4	13.04	13.00	13.10	2310		
	5	13.45	13.41	13.51	2280	2100	
	1	12.16	12.12	12.22	2000		
	2	12.53	12.49	12.59	1940		
	3	12.74	12.71	12.81	2080		
COLUMN 2	4	13.11	13.07	13.17	2350		
	5	13.65	13.61	13.71	2390	2200	4.8
	1	14.12	14.07	14.17	1710		
Aroclor-1260	2	14.28	14.23	14.33	603		
	3	14.37	14.32	14.42	523		
COLUMN 1	4	14.78	14.74	14.84	506		
	5	15.20	15.15	15.25	537	780	
	1	13.65	13.61	13.71	1620		
	2	13.86	13.81	13.91	491		
	3	13.95	13.90	14.00	484		
COLUMN 2	4	14.31	14.26	14.36	502		
	5	14.85	14.80	14.90	387	700	11.4

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00R6DL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: 47158.18DL Date(s) Analyzed: 08/29/01 08/29/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	9.35	9.32	9.42	11.5		
Aroclor-1242	2	10.35	10.30	10.40	145		
	3	10.43	10.39	10.49	101		
COLUMN 1	4	10.61	10.57	10.67	129		
	5	12.58	12.55	12.65	3030	680	
	1	9.08	9.01	9.11	11.7		
	2	9.12	9.15	9.25	231		
	3	9.44	9.38	9.48	7620		
COLUMN 2	4	9.90	9.86	9.96	82.4		
	5	10.71	10.66	10.76	1030	1800	165
	1	11.63	11.58	11.68	243		
Aroclor-1254	2	12.34	12.30	12.40	246		
	3	12.58	12.54	12.64	351		
COLUMN 1	4	12.97	12.93	13.03	391		
	5	13.39	13.34	13.44	392	320	
	1	12.10	12.04	12.14	389		
	2	12.46	12.41	12.51	406		
	3	12.70	12.66	12.76	321		
COLUMN 2	4	13.04	13.00	13.10	426		
	5	13.59	13.55	13.65	397	390	21.9
	1	14.06	14.00	14.10	352		
Aroclor-1260	2	14.21	14.16	14.26	126		
	3	14.30	14.25	14.35	73.5		
COLUMN 1	4	14.72	14.67	14.77	172		
	5	15.14	15.09	15.19	127	170	
	1	13.59	13.54	13.64	277		
	2	13.79	13.74	13.84	158		
	3	13.88	13.83	13.93	80.3		
COLUMN 2	4	14.24	14.19	14.29	83.2		
	5	14.79	14.74	14.84	76.1	130	30.8

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00R7

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: 47158.19 Date(s) Analyzed: 08/21/01 08/21/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	9.41	9.39	9.49	21.5		
Aroclor-1242	2	10.43	10.38	10.48	73.1		
	3	10.51	10.47	10.57	70.2		
COLUMN 1	4	10.69	10.64	10.74	65.4		
	5	11.23	11.19	11.29	96.9	65	
	1	9.15	9.08	9.18	5.5		
	2	9.21	9.21	9.31	128		
	3	9.51	9.45	9.55	542		
COLUMN 2	4	9.98	9.93	10.03	59.1		
	5	10.47	10.42	10.52	37.8	150	131
	1	11.70	11.65	11.75	91.2		
Aroclor-1254	2	12.42	12.37	12.47	57.4		
	3	12.66	12.61	12.71	73.1		
COLUMN 1	4	13.05	13.00	13.10	86.8		
	5	13.46	13.41	13.51	92.2	80	
	1	12.16	12.12	12.22	69.0		
	2	12.54	12.49	12.59	97.1		
	3	12.75	12.71	12.81	101		
COLUMN 2	4	13.11	13.07	13.17	120		
	5	13.66	13.61	13.71	156	110	37.5
	1	14.12	14.07	14.17	68.3		
Aroclor-1260	2	14.28	14.23	14.33	29.1		
	3	14.38	14.32	14.42	97.7		
COLUMN 1	4	14.78	14.74	14.84	30.0		
	5	15.20	15.15	15.25	20.6	49	
	1	13.66	13.61	13.71	106		
	2	13.86	13.81	13.91	102		
	3	13.94	13.90	14.00	64.3		
COLUMN 2	4	14.31	14.26	14.36	32.5		
	5	14.85	14.80	14.90	20.0	65	32.7

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00R8

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: 47158.20 Date(s) Analyzed: 08/21/01 08/21/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	9.42	9.39	9.49	49.7		
Aroclor-1242	2	10.43	10.38	10.48	275		
	3	10.51	10.47	10.57	279		
COLUMN 1	4	10.68	10.64	10.74	229		
	5	11.22	11.19	11.29	354	240	
	1	9.15	9.08	9.18	31.7		
	2	9.21	9.21	9.31	240		
	3	9.51	9.45	9.55	1510		
COLUMN 2	4	9.97	9.93	10.03	165		
	5	10.47	10.42	10.52	80.7	410	70.8
	1	11.70	11.65	11.75	317		
Aroclor-1254	2	12.42	12.37	12.47	208		
	3	12.66	12.61	12.71	261		
COLUMN 1	4	13.05	13.00	13.10	295		
	5	13.45	13.41	13.51	324	280	
	1	12.16	12.12	12.22	249		
	2	12.54	12.49	12.59	268		
	3	12.75	12.71	12.81	280		
COLUMN 2	4	13.11	13.07	13.17	306		
	5	13.65	13.61	13.71	307	280	0.0
	1	14.12	14.07	14.17	234		
Aroclor-1260	2	14.28	14.23	14.33	79.0		
	3	14.37	14.32	14.42	58.8		
COLUMN 1	4	14.78	14.74	14.84	62.0		
	5	15.20	15.15	15.25	62.4	99	
	1	13.65	13.61	13.71	207		
	2	13.86	13.81	13.91	84.0		
	3	13.95	13.90	14.00	52.8		
COLUMN 2	4	14.31	14.26	14.36	58.6		
	5	14.85	14.80	14.90	47.6	90	10.0

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00R9

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: 47158.21 Date(s) Analyzed: 08/21/01 08/21/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	9.42	9.39	9.49	52.3		
Aroclor-1242	2	10.43	10.38	10.48	243		
	3	10.51	10.47	10.57	247		
COLUMN 1	4	10.69	10.64	10.74	200		
	5	11.22	11.19	11.29	313	210	
	1	9.15	9.08	9.18	29.4		
	2	9.21	9.21	9.31	228		
	3	9.51	9.45	9.55	1250		
COLUMN 2	4	9.98	9.93	10.03	203		
	5	10.47	10.42	10.52	77.8	360	71.4
	1	11.70	11.65	11.75	260		
Aroclor-1254	2	12.42	12.37	12.47	173		
	3	12.66	12.61	12.71	220		
COLUMN 1	4	13.05	13.00	13.10	260		
	5	13.46	13.41	13.51	271	240	
	1	12.16	12.12	12.22	204		
	2	12.54	12.49	12.59	216		
	3	12.75	12.71	12.81	214		
COLUMN 2	4	13.11	13.07	13.17	251		
	5	13.65	13.61	13.71	251	230	4.3
	1	14.12	14.07	14.17	183		
Aroclor-1260	2	14.28	14.23	14.33	64.6		-
	3	14.37	14.32	14.42	58.3		
COLUMN 1	4	14.79	14.74	14.84	51.4		
	5	15.20	15.15	15.25	55.9	83	
	1	13.65	13.61	13.71	170		
	2	13.86	13.81	13.91	72.6		
	3	13.95	13.90	14.00	47.8		
COLUMN 2	4	14.31	14.26	14.36	46.8		
	5	14.85	14.80	14.90	39.9	75	10.7

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00S0

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Lab Sample ID: 47158.22 Date(s) Analyzed: 08/21/01 08/21/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
Aroclor-1254 COLUMN 1	1	11.71	11.65	11.75	61.5		
	2	12.42	12.37	12.47	28.2		
	3	12.66	12.61	12.71	47.2		
	4	13.06	13.00	13.10	41.5		
	5	13.46	13.41	13.51	56.9	47	
Aroclor-1254 COLUMN 2	1	12.17	12.12	12.22	33.1		
	2	12.54	12.49	12.59	34.1		
	3	12.76	12.71	12.81	41.0		
	4	13.12	13.07	13.17	49.9		
	5	13.66	13.61	13.71	48.3	41	14.6
Aroclor-1260 COLUMN 1	1	14.13	14.07	14.17	36.8		
	2	14.28	14.23	14.33	15.3		
	3	14.38	14.32	14.42	20.1		
	4	14.79	14.74	14.84	9.9		
	5	15.21	15.15	15.25	13.7	19	
Aroclor-1260 COLUMN 2	1	13.66	13.61	13.71	32.7		
	2	13.86	13.81	13.91	21.9		
	3	13.95	13.90	14.00	17.7		
	4	14.31	14.26	14.36	8.1		
	5	14.85	14.80	14.90	8.3	18	5.6
_____ COLUMN 1	1						
	2						
	3						
	4						
	5						
_____ COLUMN 2	1						
	2						
	3						
	4						
	5						

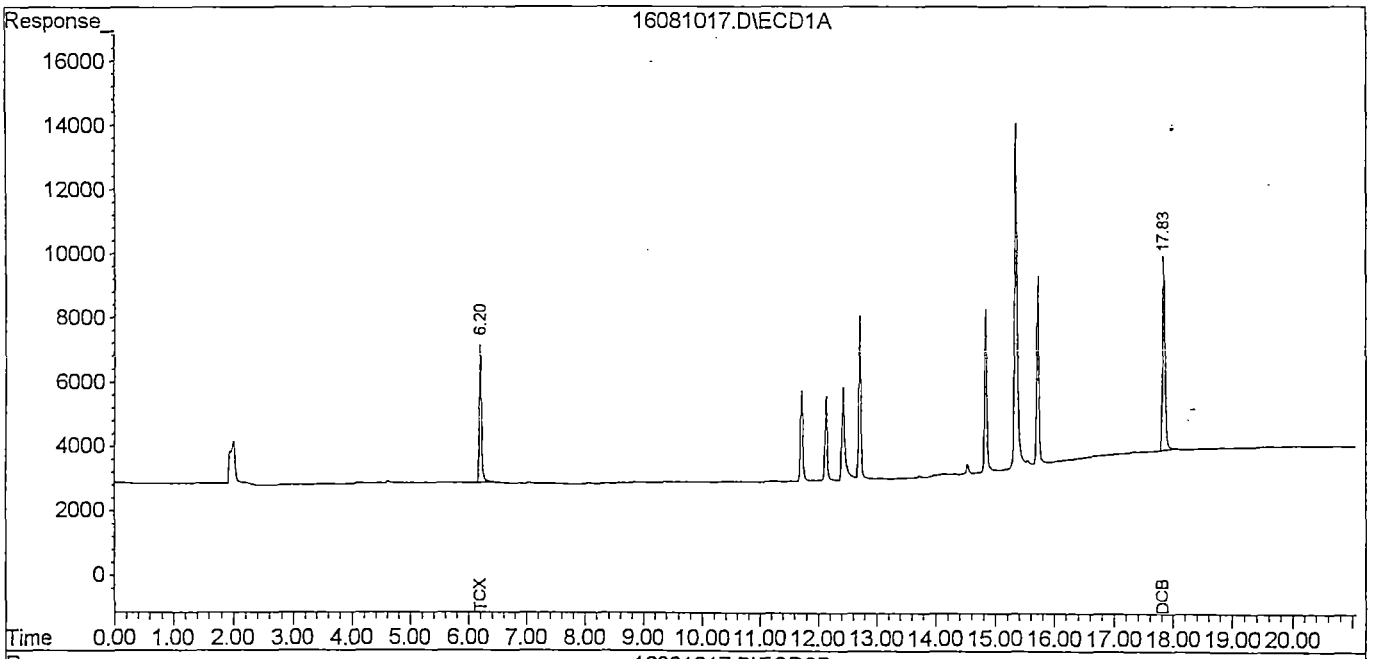
At least 3 peaks are required for identification of multicomponent analytes

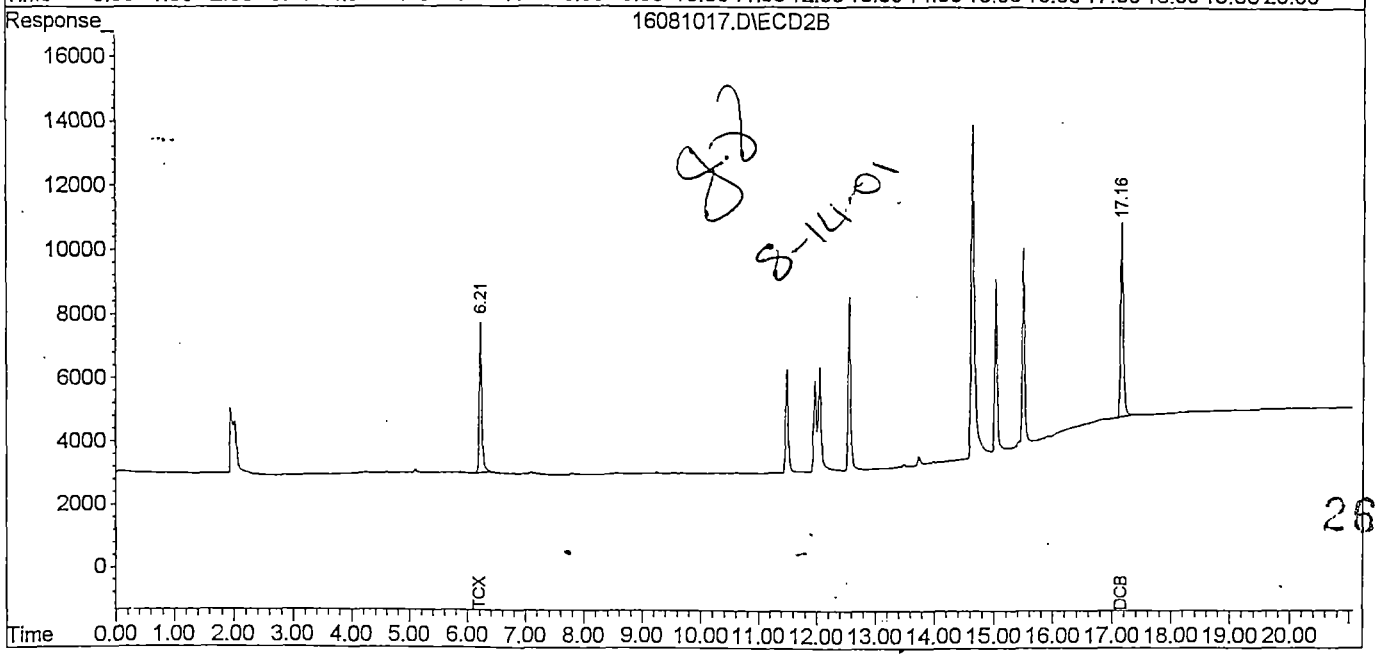
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081017.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081017.D\ECD2B.CH
Acq On : 10 Aug 2001 19:21 Operator: TLM
Sample : RESCCC Inst : HP_16
Misc : 5-441-6 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 11:00 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





8-14-01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081017.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081017.D\ECD2B.CH
Acq On : 10 Aug 2001 19:21 Operator: TLM
Sample : RESCCC Inst : HP_16
Misc : 5-441-6 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 11:00 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.21	6.21	117447	146239	25.3	20.7
22)	S DCB	17.83	17.16	189698	199901	22.6	19.4

Target Compounds:

COPY

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29-546 SDG E00E2
Signature Amelia M. Willia
Date 08/16/01

266

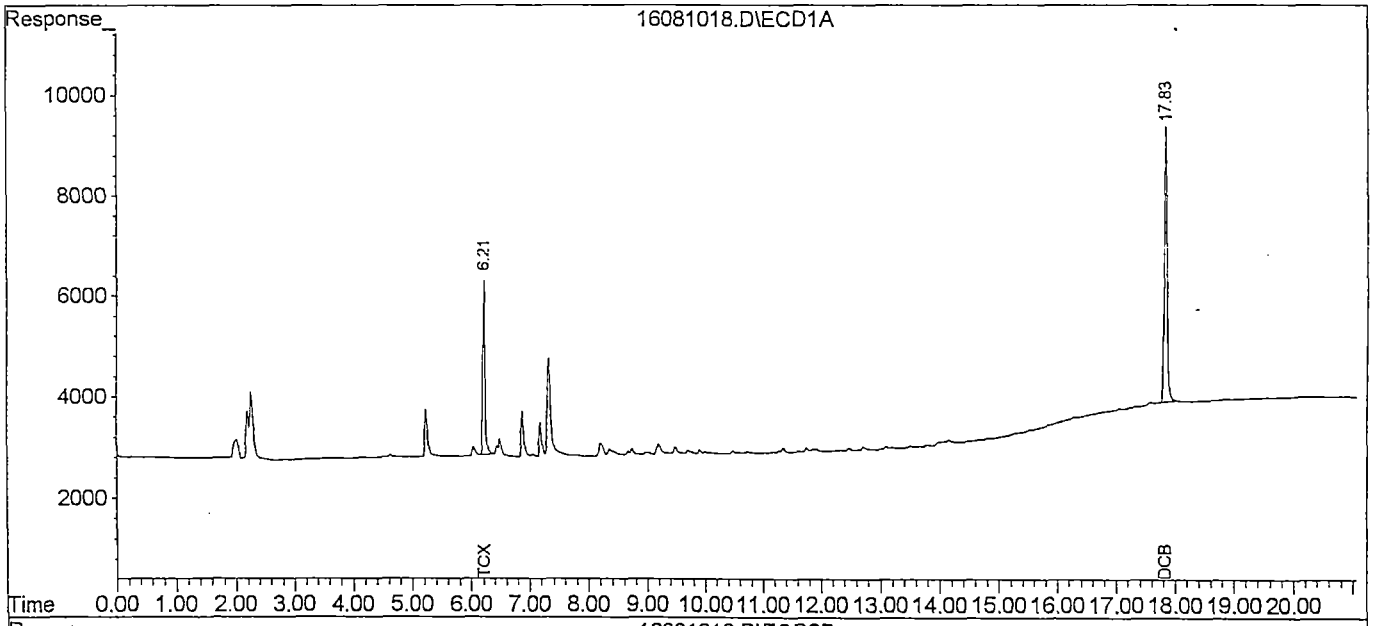
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16081017.D XPCBH10.M Sat Aug 11 11:00:59 2001 Page 1

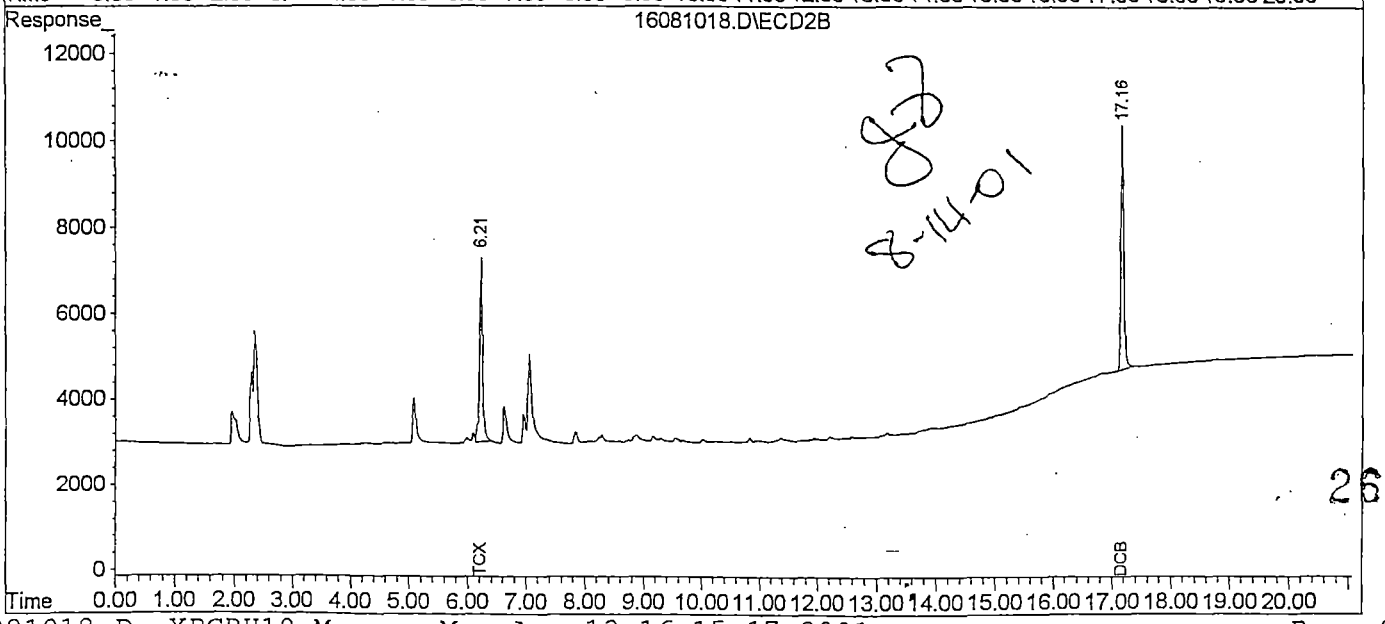
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081018.D\ECD1A.CH Vial: 15
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081018.D\ECD2B.CH
Acq On : 10 Aug 2001 19:46 Operator: TLM
Sample : AR1221L3CC Inst : HP_16
Misc : 5-420-6 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 13 16:04 2001 Quant Results File: XPCBH10.RES
Quant Time: Aug 13 16:13 2001 Quant Results File: xspcbh10.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001

Multi-Component Method : f:\hpchem\hp\16\data\08_10_01\xspcbh10.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





8-14-01

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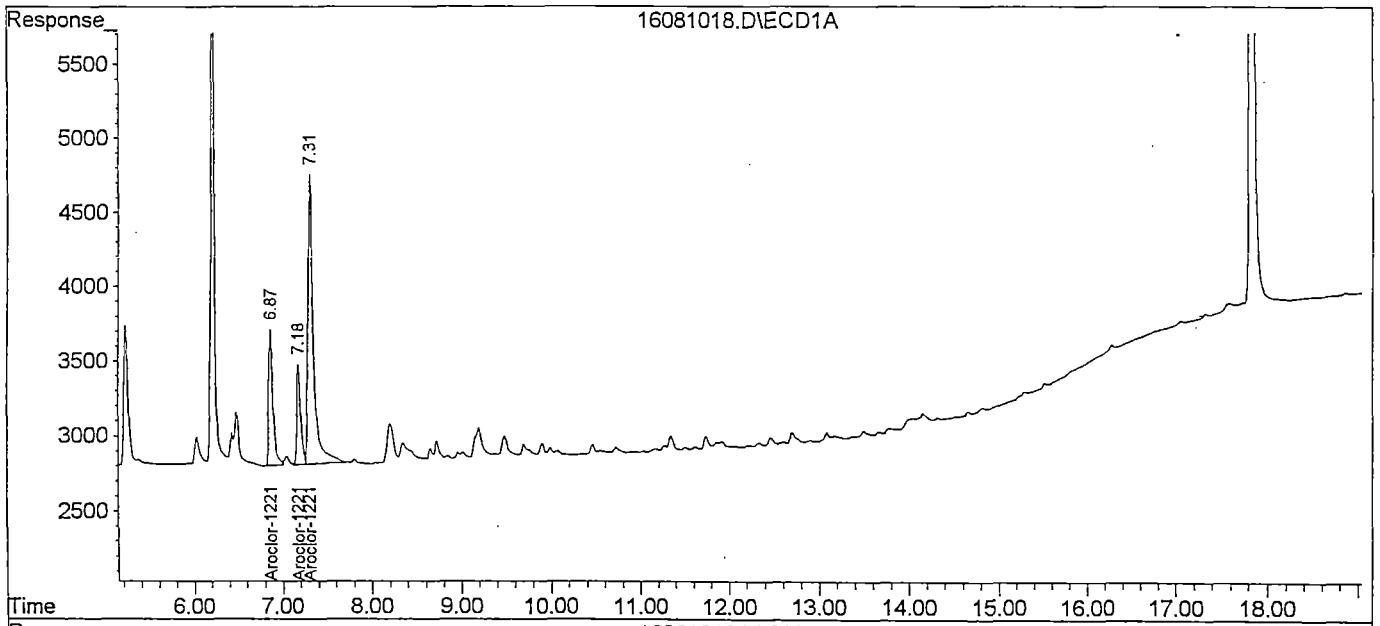
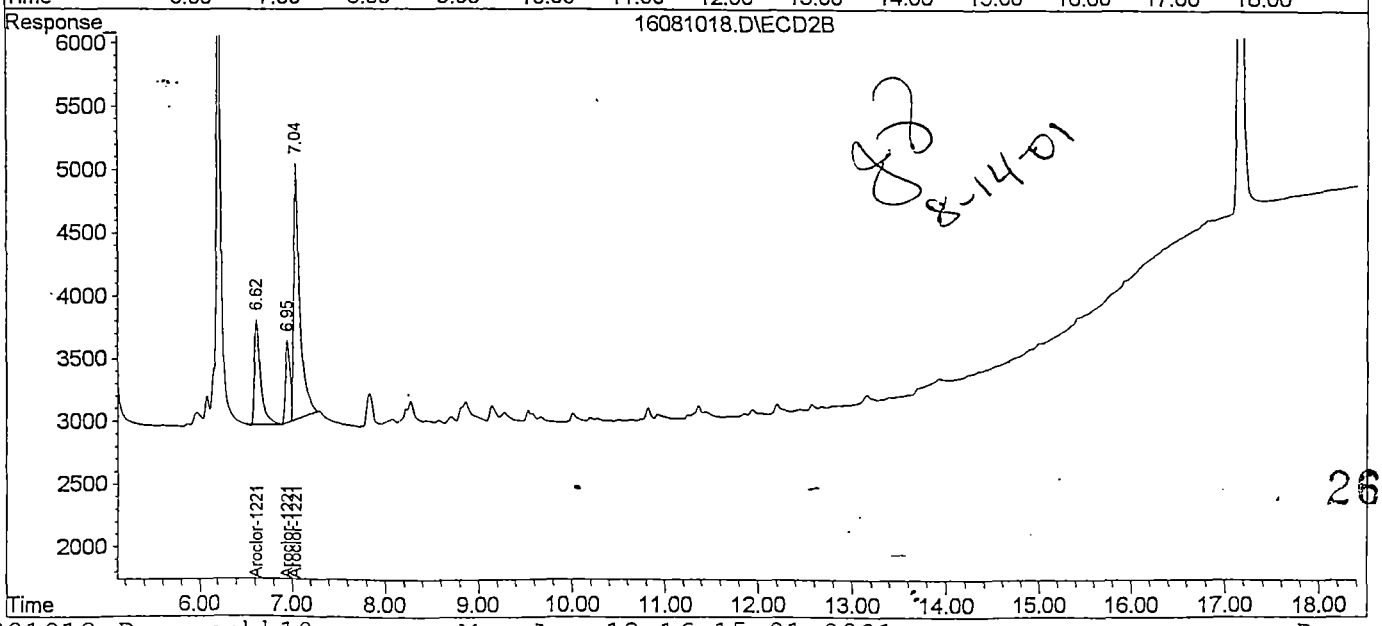
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081018.D\ECD1A.CH Vial: 15
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081018.D\ECD2B.CH
Acq On : 10 Aug 2001 19:46 Operator: TLM
Sample : AR1221L3CC Inst : HP_16
Misc : 5-420-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 13 16:13 2001 Quant Results File: xspcbh10.RES
Quant Time: Aug 13 16:13 2001 Quant Results File: xspcbh10.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001

Multi-Component Method : f:\hpchem\hp\16\data\08_10_01\xspcbh10.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 Signal #2 Info : .32
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





8-14-01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081018.D\ECD1A.CH Vial: 15
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081018.D\ECD2B.CH
Acq On : 10 Aug 2001 19:46 Operator: TLM
Sample : AR1221L3CC Inst : HP_16
Misc : 5-420-6 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 13 16:04 2001 Quant Results File: XPCBH10.RES
Multi Time: Aug 13 16:13 2001 Quant Results File: xspcbh10.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001

Multi-Component Method : f:\hpchem\hp\16\data\08_10_01\xspcbh10.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.21	6.21	96465	146805	20.8	20.8
22)	S DCB	17.83	17.16	175045	190005	20.8	18.4
	Target Compounds:						
	Multi-Component Compounds:						
2)	L2 Aroclor-1221	6.87	6.62	29028	36754	400.0	400.0
3)	L2 Aroclor-1221 {2}	7.18	6.95	21615	21259	400.0	400.0
4)	L2 Aroclor-1221 {3}	7.31	7.04	83026	99865	400.0	400.0
	Sum Aroclor-1221			133669	157879	1200.0	1200.0
	Average Aroclor-1221					400.000	400.000

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29546 SDG E00E2
Signature Amelia M. Williams
Date 08/16/01

269

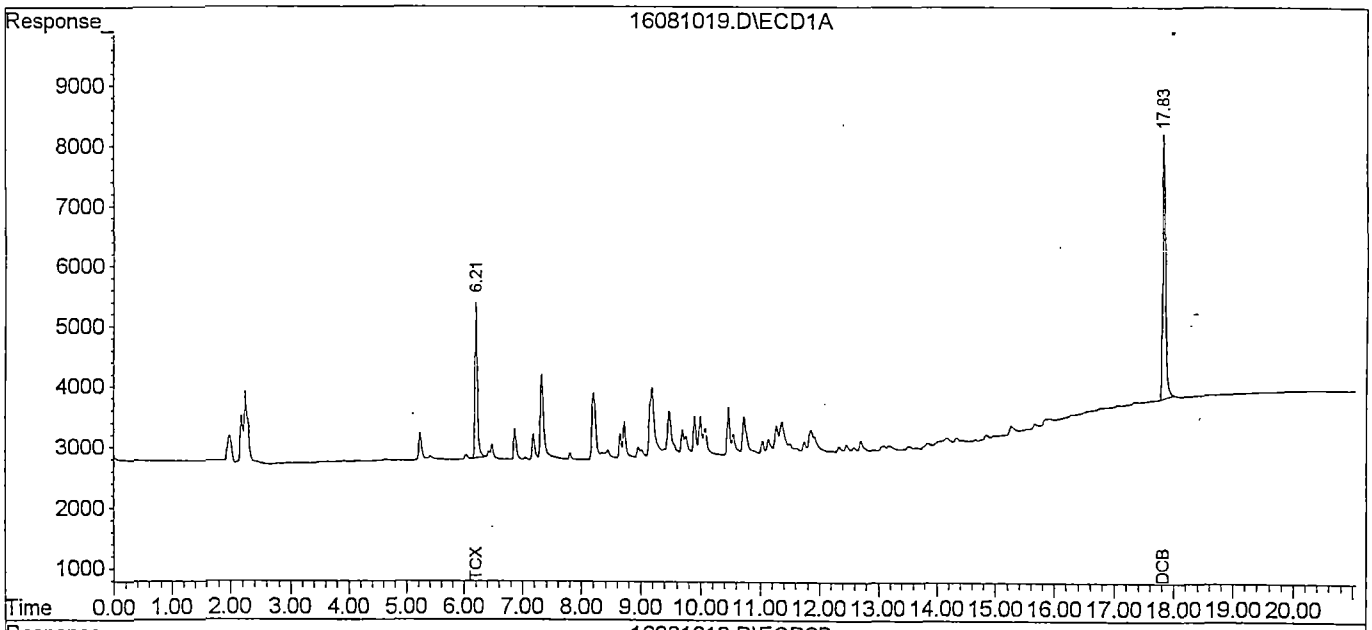
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

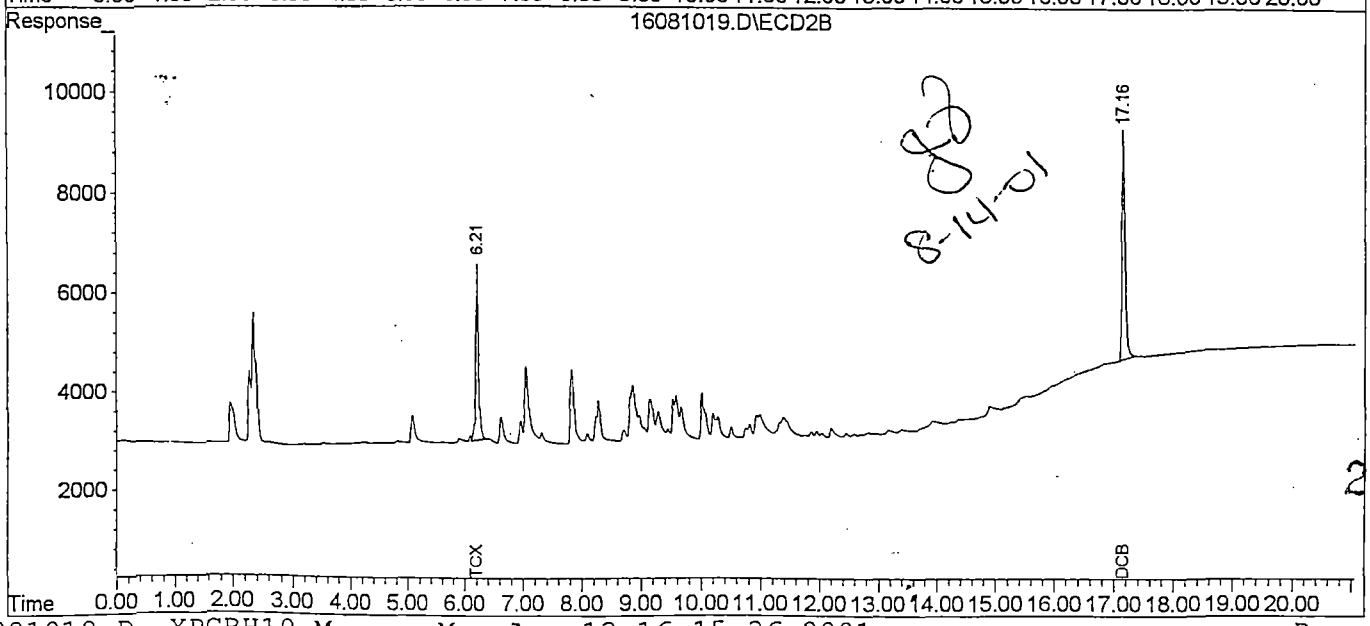
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081019.D\ECD1A.CH Vial: 16
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081019.D\ECD2B.CH
Acq On : 10 Aug 2001 20:10 Operator: TLM
Sample : AR1232L3CC Inst : HP_16
Misc : 5-422-6 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 13 16:04 2001 Quant Results File: XPCBH10.RES
Quant Time: Aug 13 16:13 2001 Quant Results File: xspcbh10.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001

Multi-Component Method : f:\hpchem\hp\16\data\08_10_01\xspcbh10.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





8-14-01

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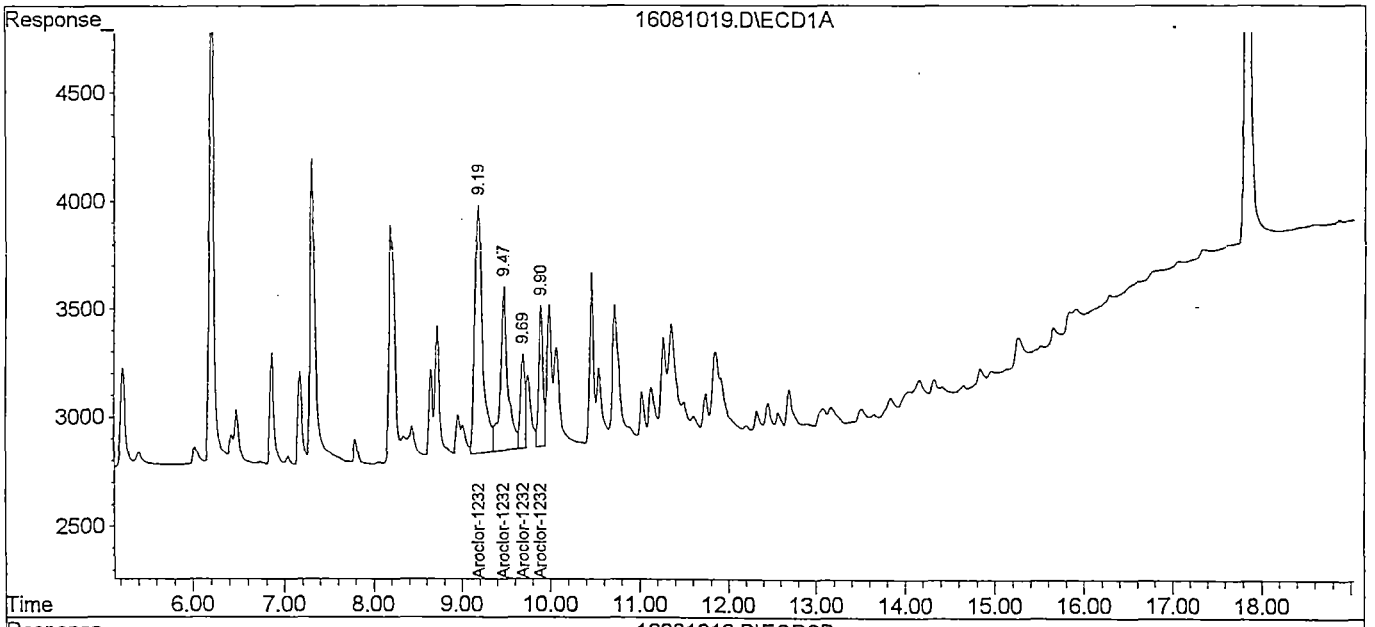
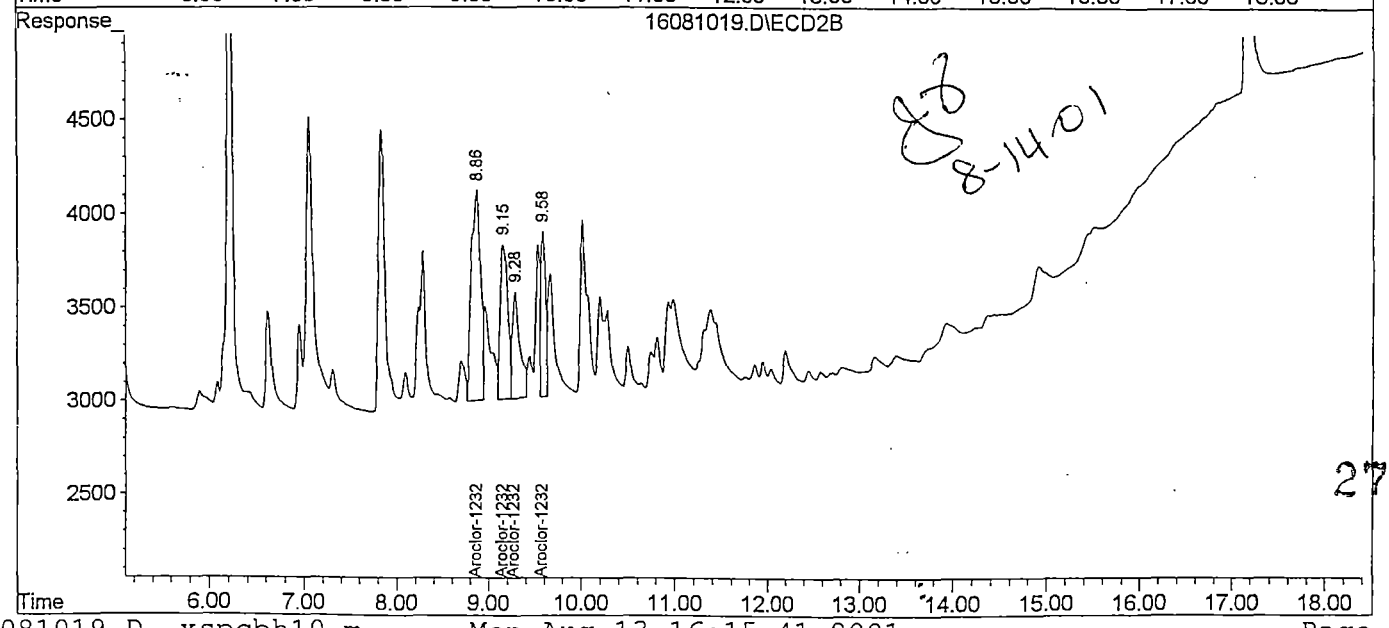
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081019.D\ECD1A.CH Vial: 16
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081019.D\ECD2B.CH
Acq On : 10 Aug 2001 20:10 Operator: TLM
Sample : AR1232L3CC Inst : HP_16
Misc : 5-422-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 13 16:13 2001 Quant Results File: xspcbh10.RES
Quant Time: Aug 13 16:13 2001 Quant Results File: xspcbh10.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001

Multi-Component Method : f:\hpchem\hp\16\data\08_10_01\xspcbh10.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 Signal #2 Info : .32
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





8-14-01

271

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081019.D\ECD1A.CH Vial: 16
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081019.D\ECD2B.CH
Acq On : 10 Aug 2001 20:10 Operator: TLM
Sample : AR1232L3CC Inst : HP_16
Misc : 5-422-6 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 13 16:04 2001 Quant Results File: XPCBH10.RES
Multi Time: Aug 13 16:13 2001 Quant Results File: xspcbh10.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001

Multi-Component Method : f:\hpchem\hp\16\data\08_10_01\xspcbh10.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.21	6.21	77436	123056	16.7	17.4
22)	S DCB	17.83	17.16	144414	158365	17.2	15.4
	Target Compounds:						
	Multi-Component Compounds:						
5)	L3 Aroclor-1232	9.19	8.86	71451	77214	400.0	400.0
6)	L3 Aroclor-1232 {2}	9.48	9.15	44841	48067	400.0	400.0
7)	L3 Aroclor-1232 {3}	9.70	9.28	14523	34563	400.0	400.0
8)	L3 Aroclor-1232 {4}	9.90	9.58	21286	31109	400.0	400.0
	Sum Aroclor-1232			152100	190953	1600.0	1600.0
	Average Aroclor-1232					400.000	400.000

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29546 SDG E00E2
Signature Jacob M. Mullin
Date 08/16/01
COC

272

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

Response Factor Report HP_16

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

Calibration Files
L1 =16081020.D L2 =16081021.D L3 =16081022.D
L4 =16081023.D L5 =16081024.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
7) Aroclor-1242	118.7	98.4	86.4	83.8	86.3	94.7	15.36
8) Aroclor-1242 {2}	123.0	103.3	90.6	88.4	91.6	99.4	14.48
9) Aroclor-1242 {3}	117.9	98.7	95.3	96.8	99.7	101.7	9.07
10) Aroclor-1242 {4}	133.9	114.4	99.9	100.5	109.2	111.6	12.45
11) Aroclor-1242 {5}	75.4	65.6	59.6	62.3	69.5	66.5	9.34
Average %RSD							

Signal #2 Calibration Files
L1 =16081020.D L2 =16081021.D L3 =16081022.D
L4 =16081023.D L5 =16081024.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
30) Aroclor-1242 #2	140.4	124.0	101.9	103.0	98.2	113.5	15.99
31) Aroclor-1242 {2} #2	178.4	155.6	126.7	130.0	127.3	143.6	15.91
32) Aroclor-1242 {3} #2	197.4	178.2	150.5	157.6	151.2	167.0	12.19
33) Aroclor-1242 {4} #2	113.0	101.1	83.3	102.4	108.1	101.6	11.10
34) Aroclor-1242 {5} #2	47.8	51.3	48.0	56.7	60.7	52.9	10.66
Average %RSD							

(#) = Out of Range

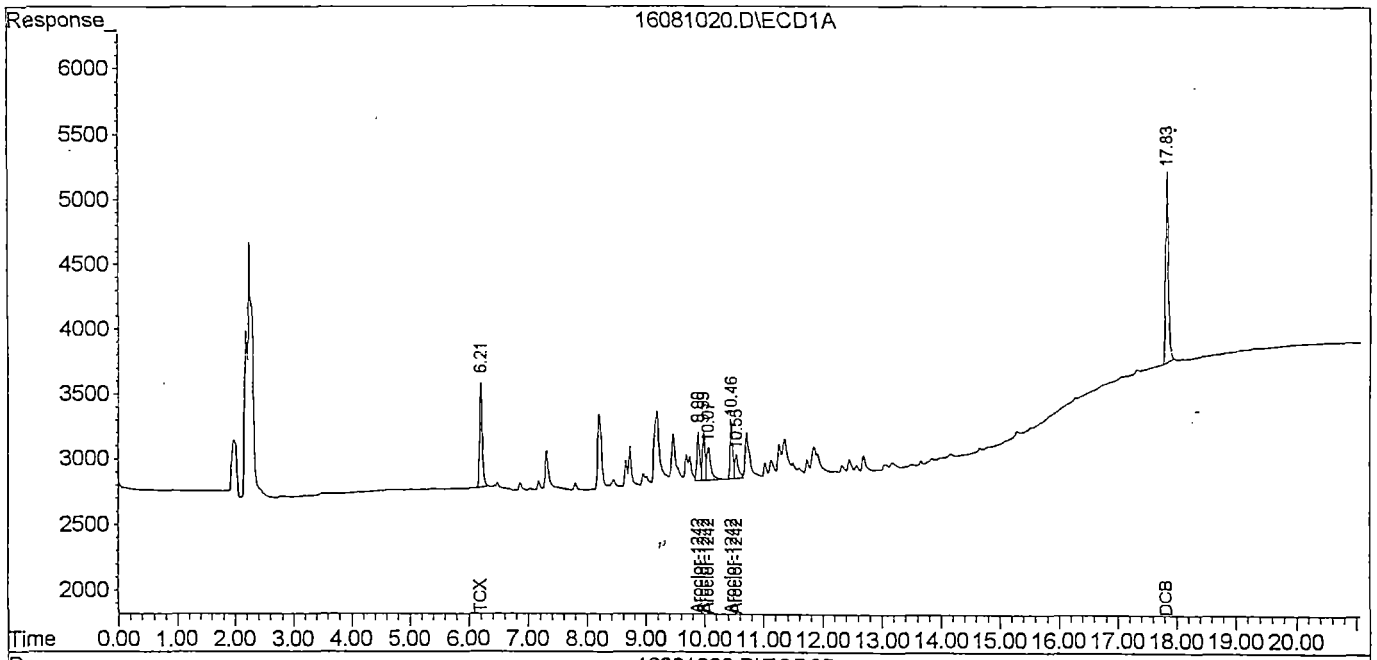
XPCBH10.M Sat Aug 11 10:29:26 2001

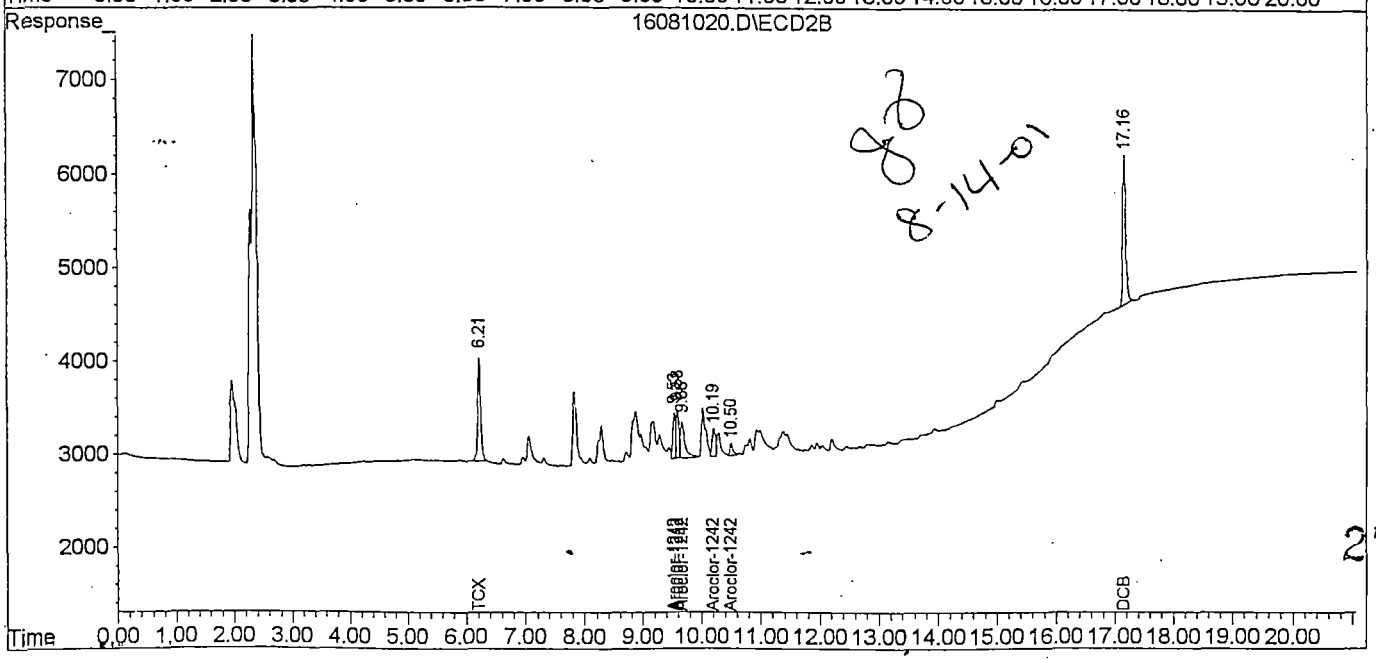
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081020.D\ECD1A.CH Vial: 17
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081020.D\ECD2B.CH
Acq On : 10 Aug 2001 20:35 Operator: TLM
Sample : AR1242L1CC Inst : HP_16
Misc : 5-11-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:28 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_09_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





8-14-01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081020.D\ECD1A.CH Vial: 17
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081020.D\ECD2B.CH
Acq On : 10 Aug 2001 20:35 Operator: TLM
Sample : AR1242L1CC Inst : HP_16
Misc : 5-11-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:28 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_09_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.21	6.21	24084	37534	5.471	5.478
22)	S DCB	17.83	17.16	47196	52986	6.287	5.935
	Target Compounds:						
7)	L4 Aroclor-1242	9.90	9.53	11867	14044	125.6	123.7
8)	L4 Aroclor-1242 {2}	9.99	9.58	12297	17836	124.0	124.2
9)	L4 Aroclor-1242 {3}	10.07	9.66	11789	19740	116.8	118.2
10)	L4 Aroclor-1242 {4}	10.46	10.20	13394	11297	120.4	111.2
	L4 Aroclor-1242 {5}	10.55	10.50	7542	4778	114.1	90.3
	Sum Aroclor-1242			56888	67695	600.9	567.7
	Average Aroclor-1242					120.173	113.540

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29546 SDG E00E2
Signature [illegible]
Date 08/16/01

275

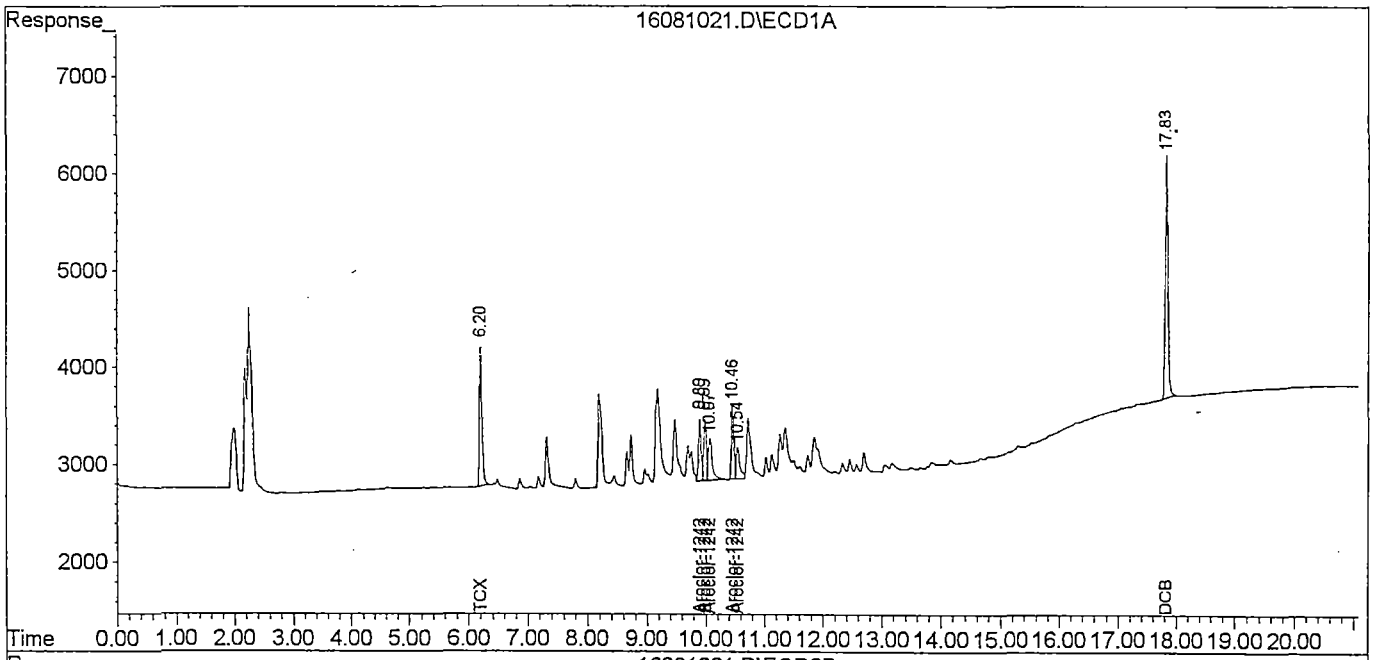
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil? < med. std

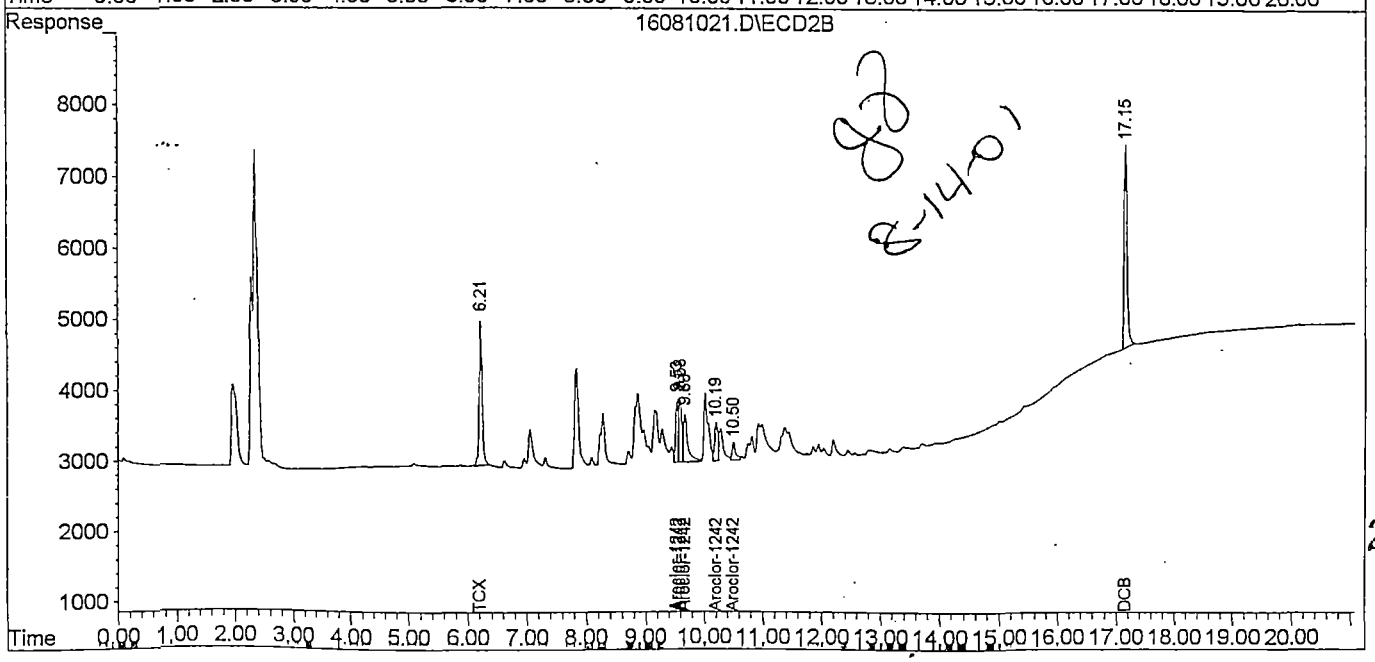
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081021.D\ECD1A.CH Vial: 18
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081021.D\ECD2B.CH
Acq On : 10 Aug 2001 20:59 Operator: TLM
Sample : AR1242L2CC Inst : HP_16
Misc : 5-10-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:28 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





8-14-01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081021.D\ECD1A.CH Vial: 18
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081021.D\ECD2B.CH
Acq On : 10 Aug 2001 20:59 Operator: TLM
Sample : AR1242L2CC Inst : HP_16
Misc : 5-10-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:28 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.21	6.21	42324	67845	10.2	9.902
22)	S DCB	17.83	17.16	79658	93976	10.6	10.5
	Target Compounds:						
7)	L4 Aroclor-1242	9.90	9.53	19689	24798	208.3	218.5
8)	L4 Aroclor-1242 {2}	9.99	9.58	20661	31129	208.4	216.8
9)	L4 Aroclor-1242 {3}	10.07	9.66	19739	35640	195.6	213.4
	L4 Aroclor-1242 {4}	10.46	10.19	22878	20223	205.7	199.1
	L4 Aroclor-1242 {5}	10.55	10.50	13128	10261	198.6	194.0
	Sum Aroclor-1242			96095	122052	1016.5	1041.8
	Average Aroclor-1242					203.302	208.357

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29546 SDG E00E2
Signature Shelda M. Williams
Date 08/16/01

277

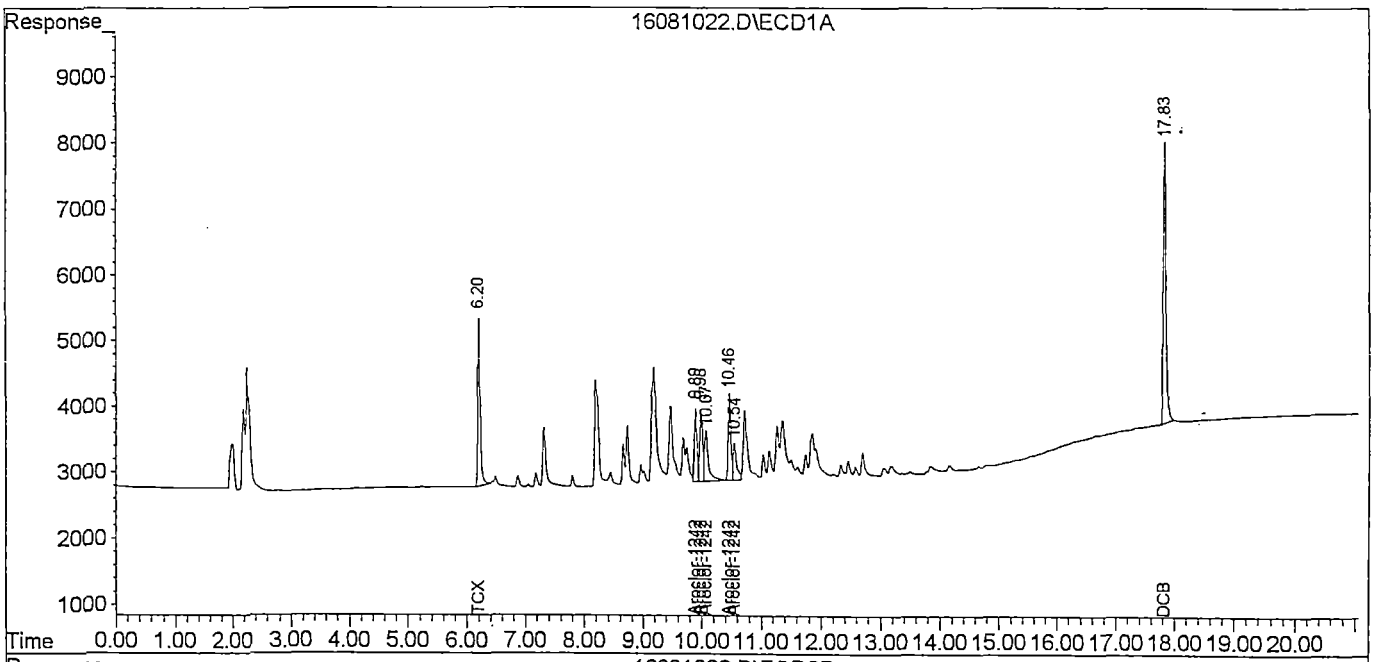
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

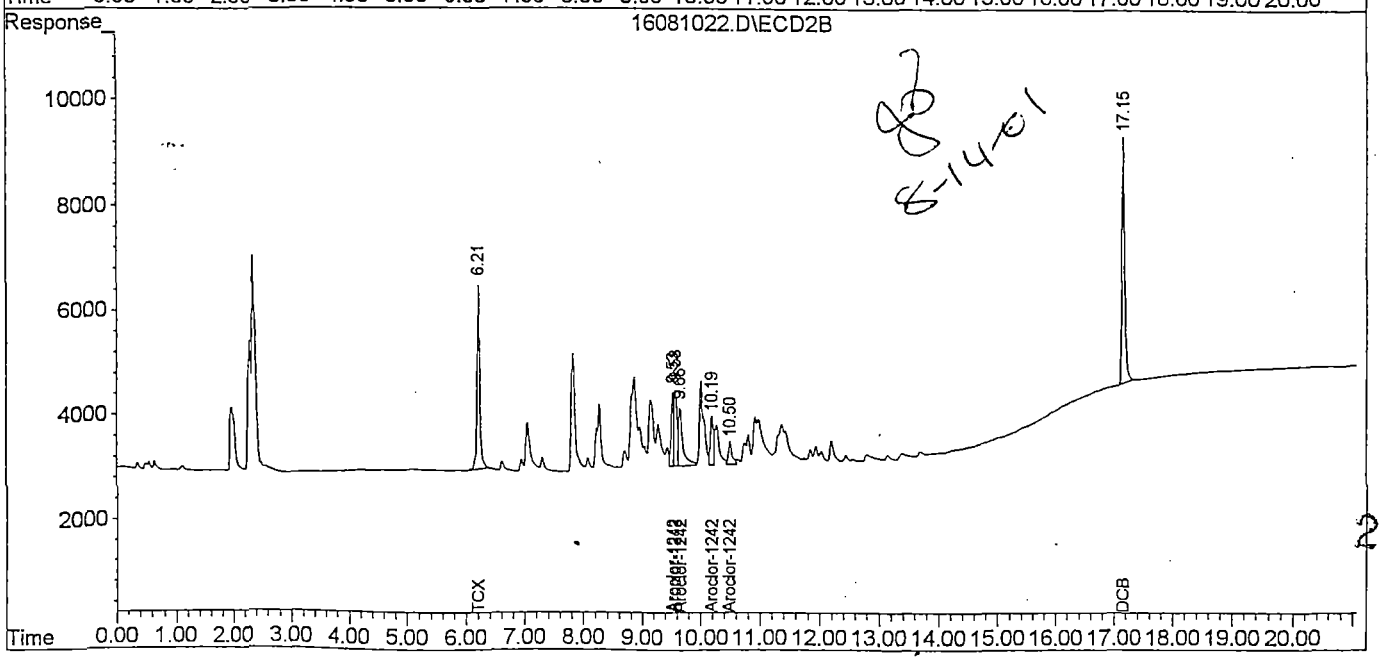
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081022.D\ECD1A.CH Vial: 19
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081022.D\ECD2B.CH
Acq On : 10 Aug 2001 21:24 Operator: TLM
Sample : AR1242L3CC Inst : HP_16
Misc : 5-9-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:28 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081022.D\ECD1A.CH Vial: 19
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081022.D\ECD2B.CH
Acq On : 10 Aug 2001 21:24 Operator: TLM
Sample : AR1242L3CC Inst : HP_16
Misc : 5-9-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:28 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.21	6.21	74980	118835	18.1	17.3
22)	S DCB	17.83	17.16	136800	156608	18.2	17.5
	Target Compounds:						
7)	L4 Aroclor-1242	9.90	9.53	34550	40743	365.5	359.0
8)	L4 Aroclor-1242 {2}	9.99	9.58	36245	50696	365.5	353.0
9)	L4 Aroclor-1242 {3}	10.07	9.66	38110	60200	377.7	360.5
	L4 Aroclor-1242 {4}	10.46	10.19	39968	33308	359.3	327.9
--)	L4 Aroclor-1242 {5}	10.55	10.50	23843	19217	360.6	363.3
	Sum Aroclor-1242			172714	204165	1828.6	1763.7
	Average Aroclor-1242					365.726	352.747

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Signature Frederick M. Williams
Date 08/16/01

279

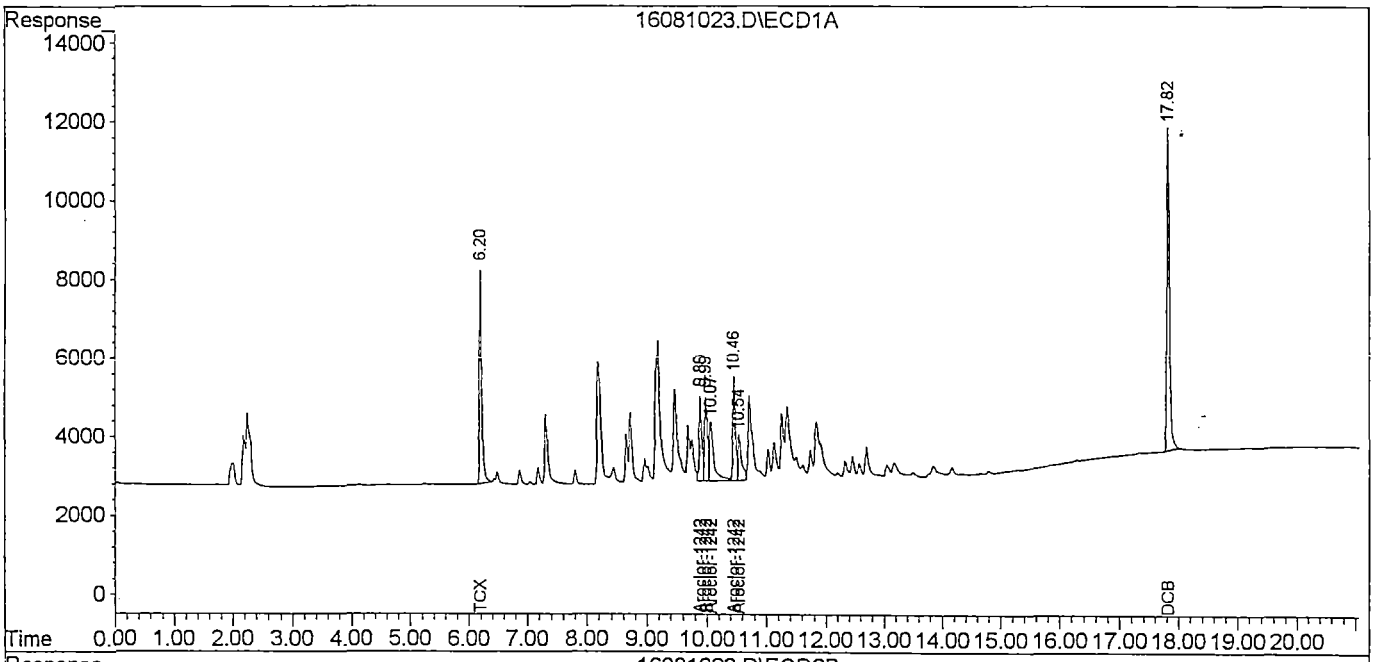
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

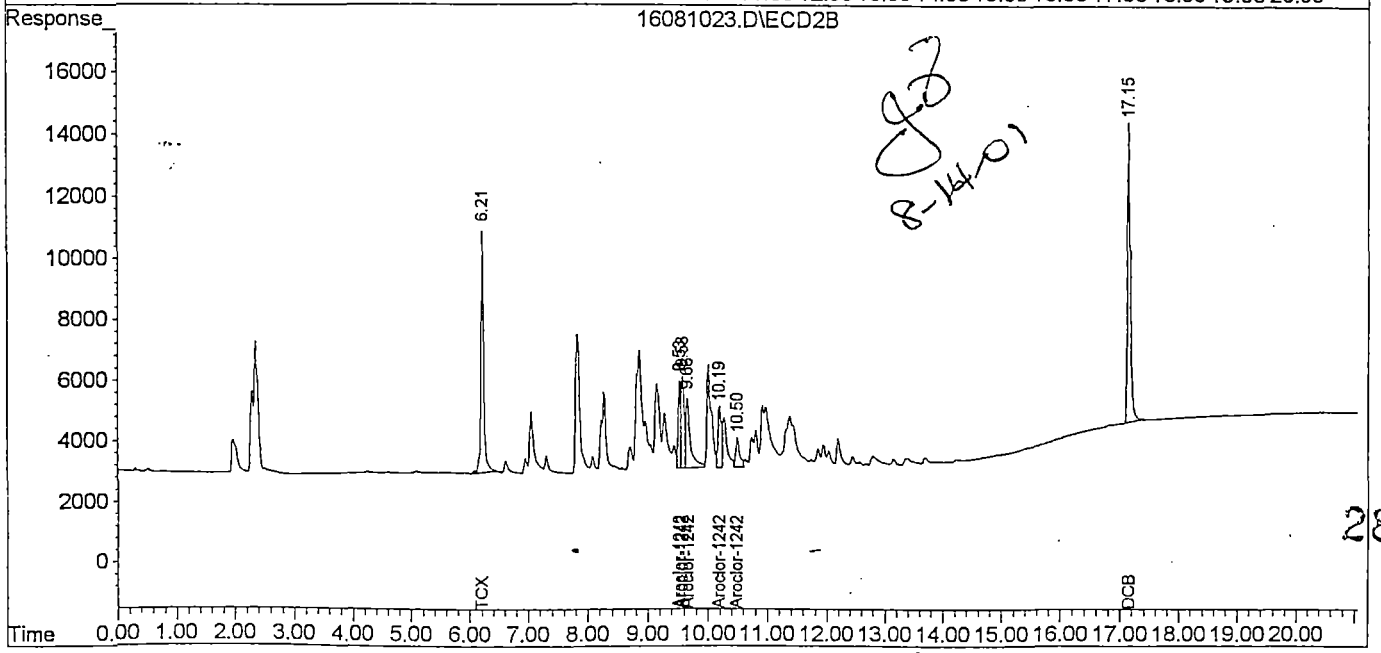
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081023.D\ECD1A.CH Vial: 20
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081023.D\ECD2B.CH
Acq On : 10 Aug 2001 21:48 Operator: TLM
Sample : AR1242L4CC Inst : HP_16
Misc : 5-8-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:28 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





8-14-01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081023.D\ECD1A.CH Vial: 20
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081023.D\ECD2B.CH
Acq On : 10 Aug 2001 21:48 Operator: TLM
Sample : AR1242L4CC Inst : HP_16
Misc : 5-8-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:28 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.21	6.21	154659	268351	37.1	39.2
22)	S DCB	17.83	17.16	263646	329778	35.1	36.9
	Target Compounds:						
7)	L4 Aroclor-1242	9.90	9.53	67076	82420	709.7	726.2
8)	L4 Aroclor-1242 {2}	9.99	9.58	70752	104013	713.5	724.3
9)	L4 Aroclor-1242 {3}	10.07	9.66	77427	126112	767.4	755.2
	L4 Aroclor-1242 {4}	10.46	10.19	80404	81945	722.8	806.8
	L4 Aroclor-1242 {5}	10.55	10.50	49864	45321	754.2	856.8
	Sum Aroclor-1242			345523	439811	3667.5	3869.3
	Average Aroclor-1242					733.491	773.853

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Date 08/16/01

281

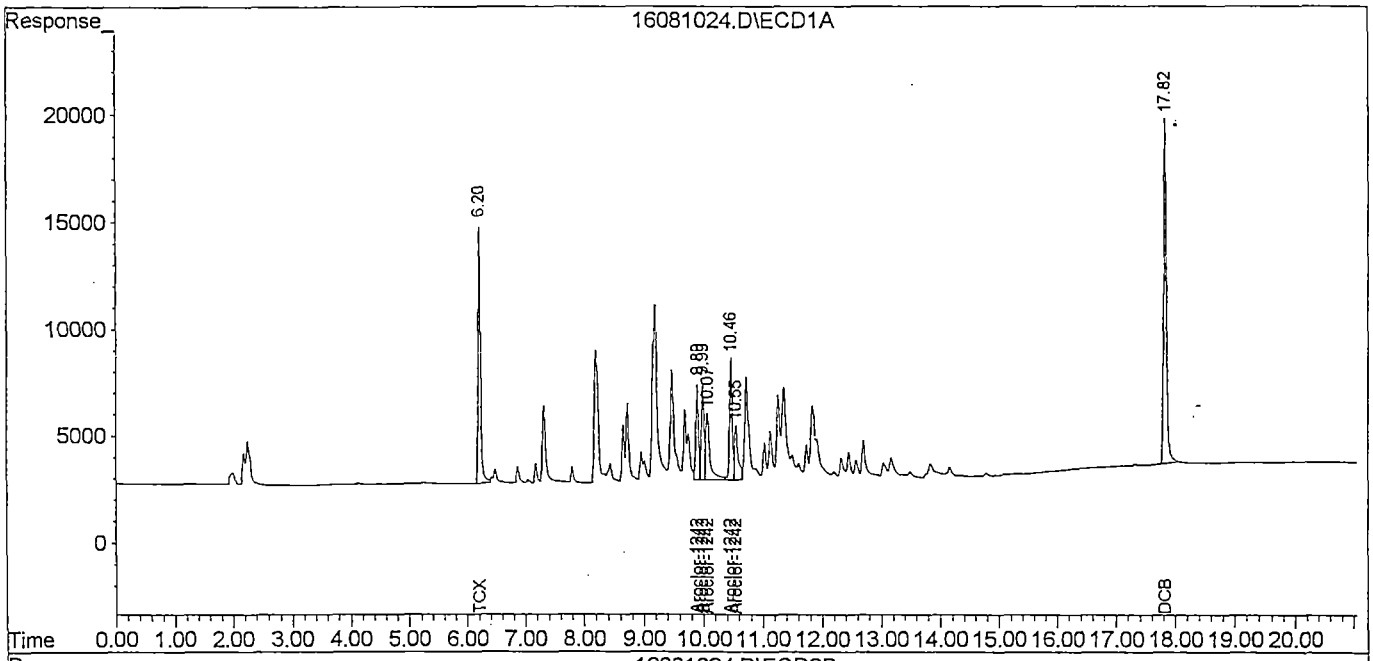
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

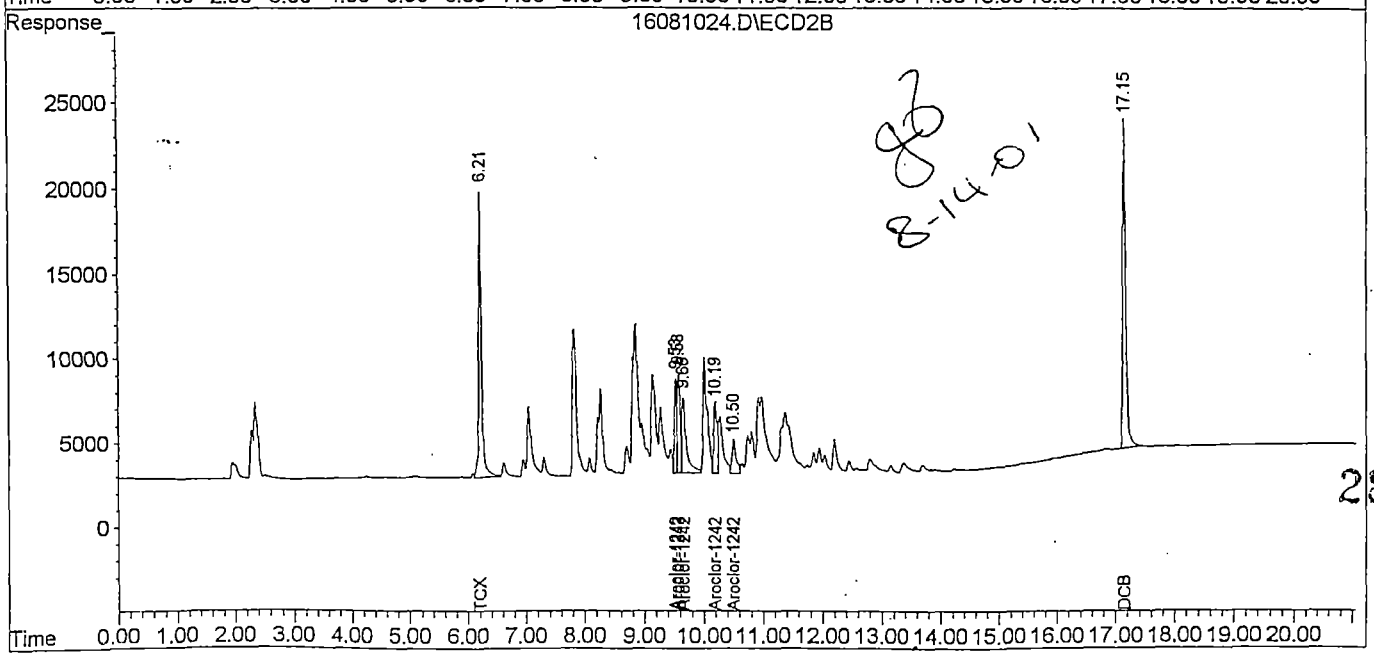
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081024.D\ECD1A.CH Vial: 21
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081024.D\ECD2B.CH
Acq On : 10 Aug 2001 22:13 Operator: TLM
Sample : AR1242L5CC Inst : HP_16
Misc : 5-7-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:29 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





8-14-01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081024.D\ECD1A.CH Vial: 21
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081024.D\ECD2B.CH
Acq On : 10 Aug 2001 22:13 Operator: TLM
Sample : AR1242L5CC Inst : HP_16
Misc : 5-7-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:29 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.21	6.21	343701	585254	82.4	85.4
22)	S DCB	17.83	17.16	535149	685635	71.3	76.8
	Target Compounds:						
7)	L4 Aroclor-1242	9.90	9.53	138039	157043	1457.3	1383.7
8)	L4 Aroclor-1242 {2}	9.99	9.58	146600	203654	1475.0	1418.1
9)	L4 Aroclor-1242 {3}	10.07	9.66	159580	241979	1569.5	1449.0
	L4 Aroclor-1242 {4}	10.46	10.19	174693	172913	1565.5	1702.4
	L4 Aroclor-1242 {5}	10.55	10.50	111243	97103	1672.7	1835.8
	Sum Aroclor-1242			730155	872691	7740.0	7789.0
	Average Aroclor-1242					1548.009	1557.804

ORIGINAL DOCUMENTS ARE INCLUDED IN
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Signature
Date 08/16/01

283

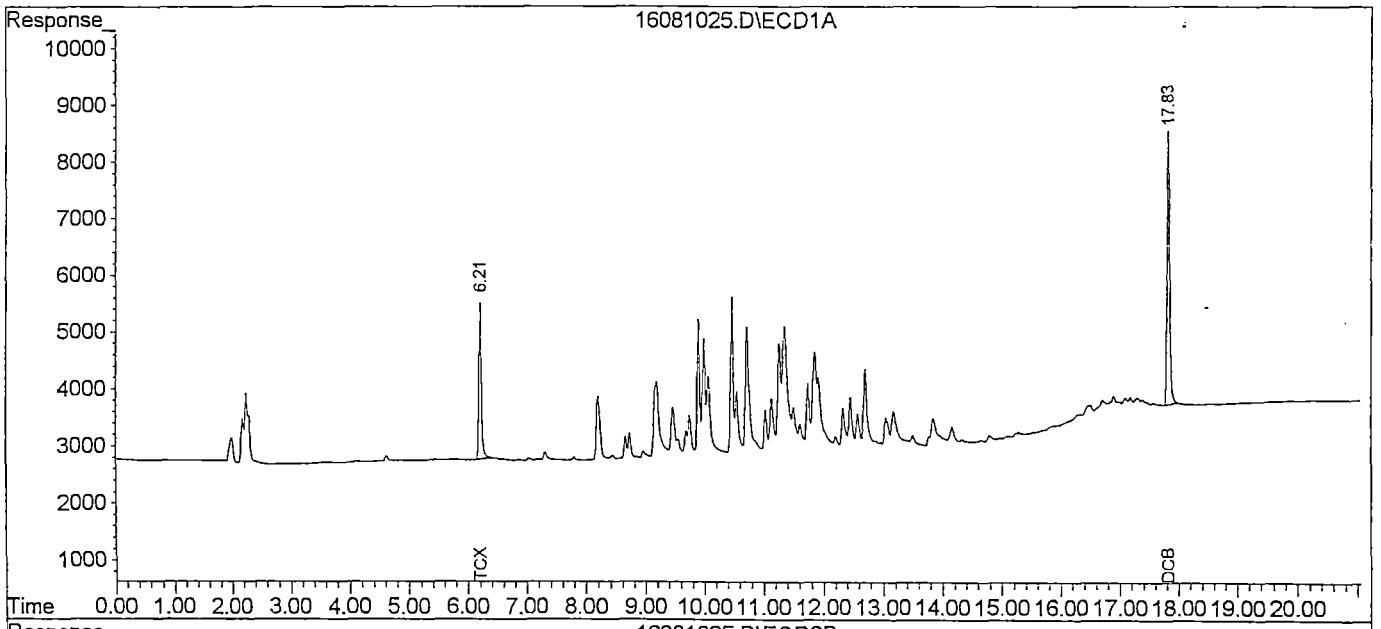
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

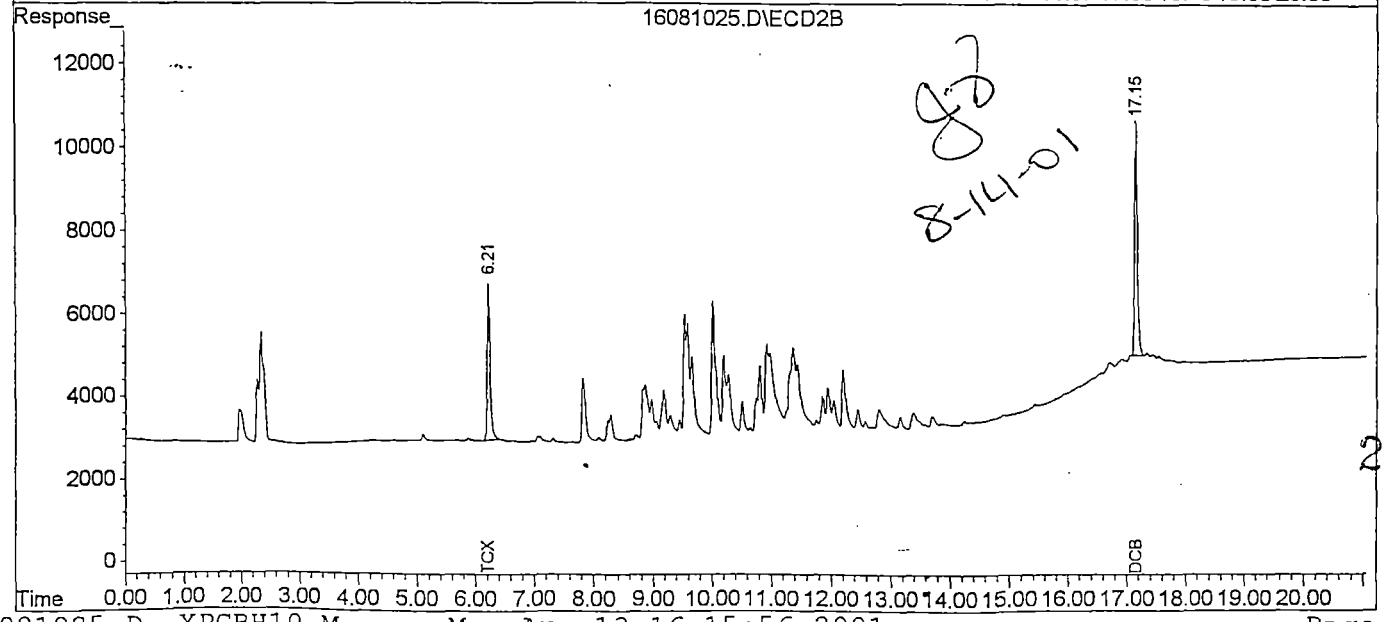
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081025.D\ECD1A.CH Vial: 22
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081025.D\ECD2B.CH
Acq On : 10 Aug 2001 22:37 Operator: TLM
Sample : AR1248L3CC Inst : HP_16
Misc : 5-424-6 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 13 16:04 2001 Quant Results File: XPCBH10.RES
Quant Time: Aug 13 16:14 2001 Quant Results File: xspcbh10.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001

Multi-Component Method : f:\hpchem\hp\16\data\08_10_01\xspcbh10.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





8-14-01

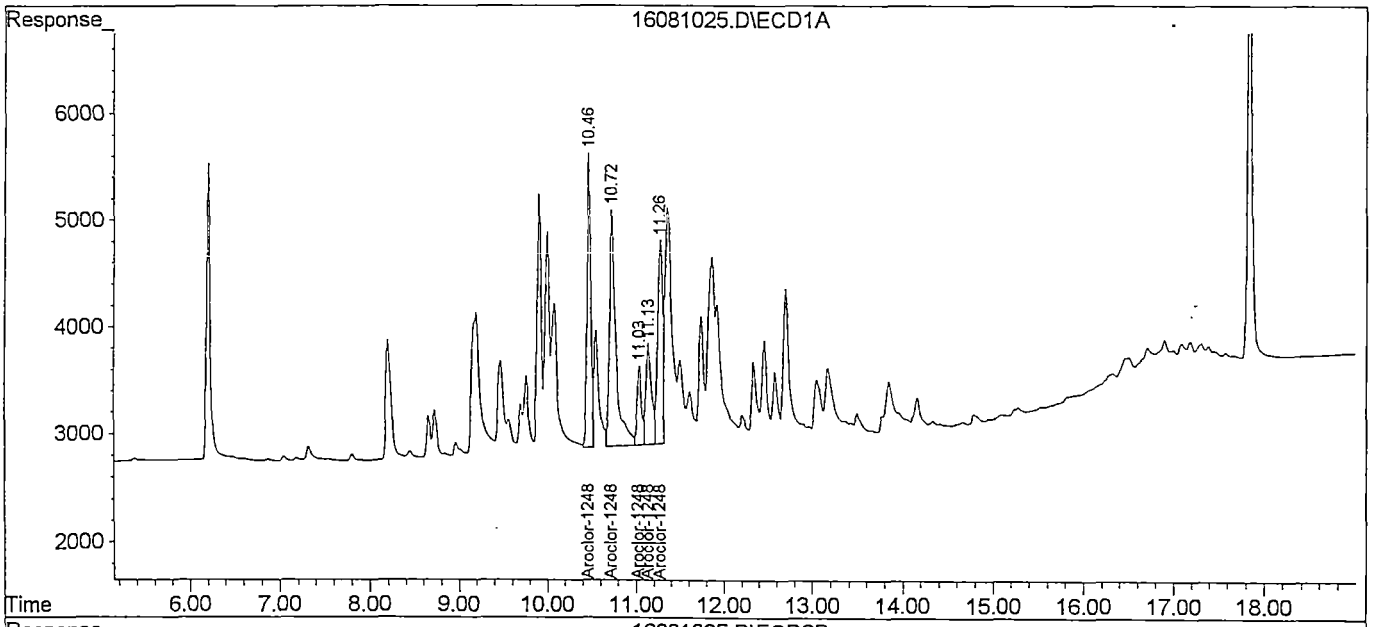
284

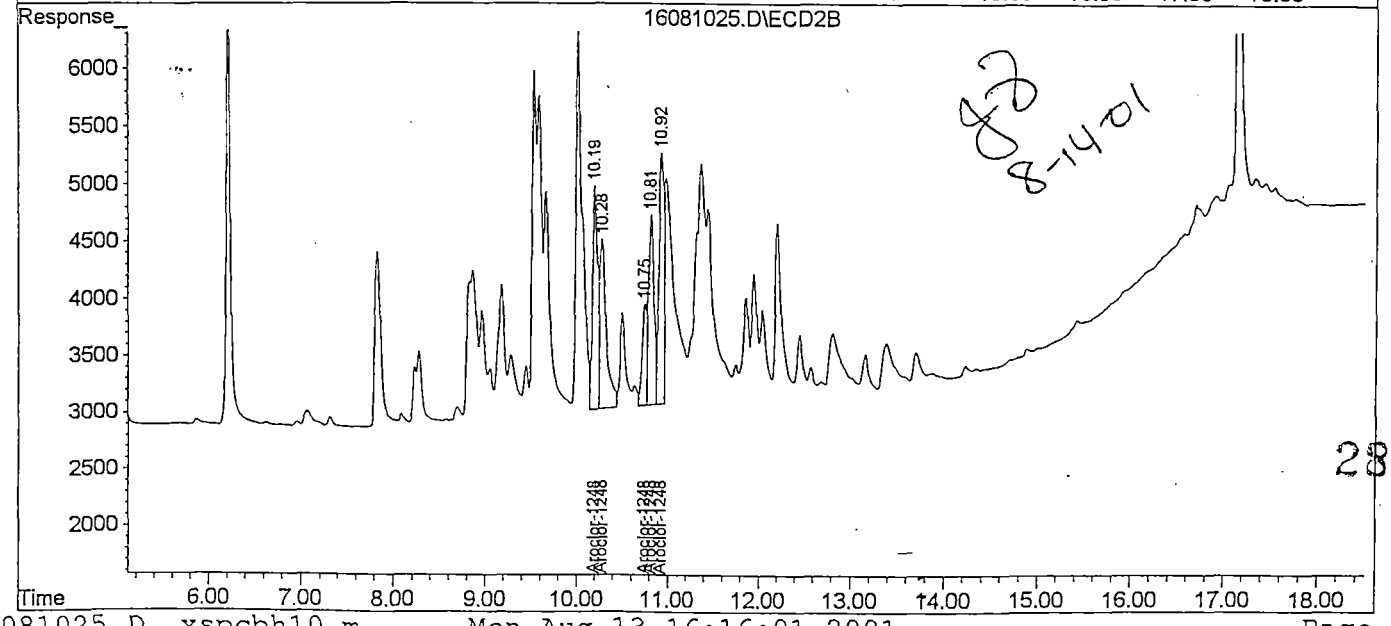
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081025.D\ECD1A.CH Vial: 22
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081025.D\ECD2B.CH
Acq On : 10 Aug 2001 22:37 Operator: TLM
Sample : AR1248L3CC Inst : HP_16
Misc : 5-424-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 13 16:14 2001 Quant Results File: xspcbh10.RES
Quant Time: Aug 13 16:14 2001 Quant Results File: xspcbh10.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001

Multi-Component Method : f:\hpchem\hp\16\data\08_10_01\xspcbh10.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 Signal #2 Info : .32
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B





8-14-01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081025.D\ECD1A.CH Vial: 22
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081025.D\ECD2B.CH
Acq On : 10 Aug 2001 22:37 Operator: TLM
Sample : AR1248L3CC Inst : HP_16
Misc : 5-424-6 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 13 16:04 2001 Quant Results File: XPCBH10.RES
Multi Time: Aug 13 16:14 2001 Quant Results File: xspcbh10.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001

Multi-Component Method : f:\hpchem\hp\16\data\08_10_01\xspcbh10.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.21	6.21	82729	126450	17.8	17.9
22)	S DCB	17.83	17.16	151372	180831	18.0	17.5
	Target Compounds:						
	Multi-Component Compounds:						
14)	L5 Aroclor-1248	10.46	10.19	84721	80025	400.0	400.0
15)	L5 Aroclor-1248 {2}	10.72	10.28	112500	75077	400.0	400.0
16)	L5 Aroclor-1248 {3}	11.03	10.75	25496	29479	400.0	400.0
17)	L5 Aroclor-1248 {4}	11.13	10.81	42627	67496	400.0	400.0
18)	L5 Aroclor-1248 {5}	11.27	10.92	70536	83509	400.0	400.0
	Sum Aroclor-1248			335881	335587	2000.0	2000.0
	Average Aroclor-1248					400.000	400.000

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29546 SDG E00E2
Signature [illegible]
Date 08/16/01

286

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

Response Factor Report HP_16

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

Calibration Files
L1 =16081026.D L2 =16081027.D L3 =16081028.D
L4 =16081029.D L5 =16081030.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
12) Aroclor-1254	358.1	293.6	286.2	292.4	226.9	291.4	15.95
13) Aroclor-1254 {2}	224.9	193.1	196.0	211.4	173.4	199.8	9.76
14) Aroclor-1254 {3}	497.5	427.7	421.0	446.4	362.8	431.1	11.26
15) Aroclor-1254 {4}	251.6	221.0	214.2	225.2	182.4	218.9	11.35
16) Aroclor-1254 {5}	267.9	237.2	229.9	253.0	203.0	238.2	10.30
Average %RSD							

Signal #2 Calibration Files
L1 =16081026.D L2 =16081027.D L3 =16081028.D
L4 =16081029.D L5 =16081030.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
35) Aroclor-1254 #2	605.4	558.1	517.5	569.2	485.4	547.1	8.52
36) Aroclor-1254 {2} #2	134.5	136.2	156.1	181.6	154.6	152.6	12.50
37) Aroclor-1254 {3} #2	247.5	241.5	241.5	270.1	227.8	245.7	6.28
38) Aroclor-1254 {4} #2	288.8	288.9	316.7	372.9	329.6	319.4	10.89
39) Aroclor-1254 {5} #2	454.9	423.2	402.8	439.1	365.1	417.0	8.36
Average %RSD							

(#) = Out of Range

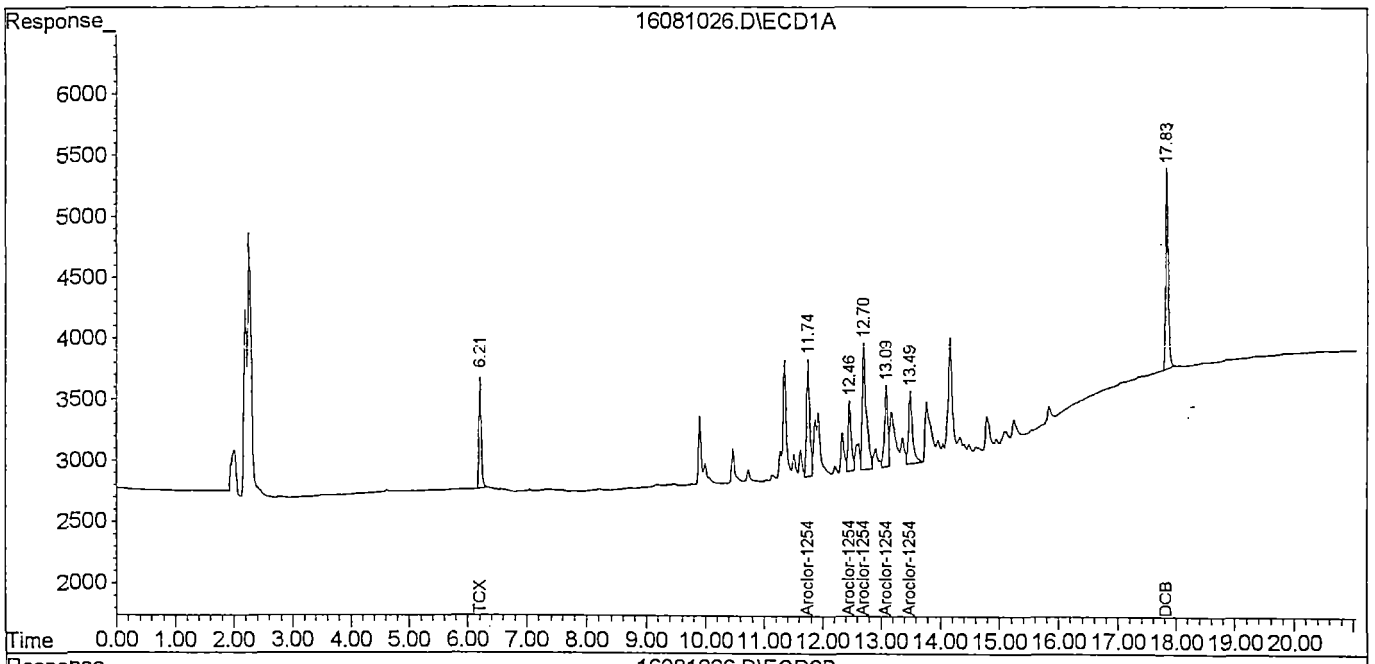
XPCBH10.M Sat Aug 11 10:34:37 2001

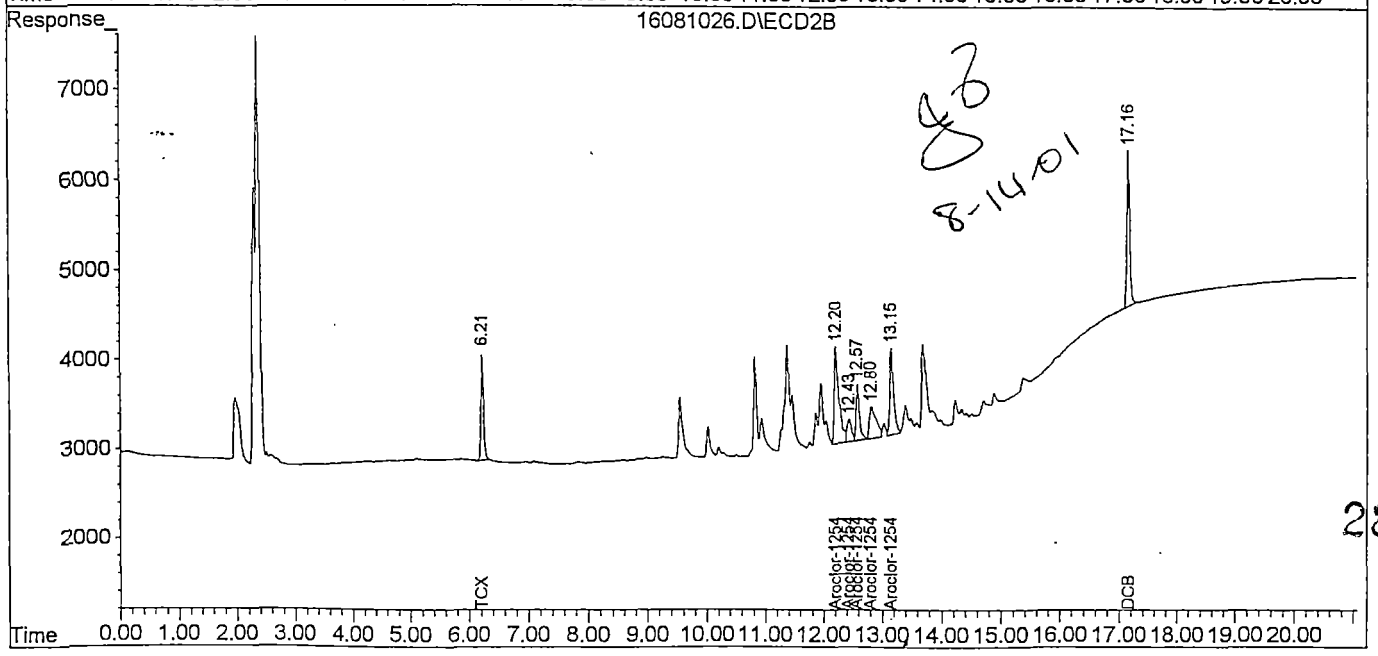
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081026.D\ECD1A.CH Vial: 23
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081026.D\ECD2B.CH
Acq On : 10 Aug 2001 23:02 Operator: TLM
Sample : AR1254L1CC Inst : HP_16
Misc : 5-6-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:33 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





8-14-01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081026.D\ECD1A.CH Vial: 23
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081026.D\ECD2B.CH
Acq On : 10 Aug 2001 23:02 Operator: TLM
Sample : AR1254L1CC Inst : HP_16
Misc : 5-6-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:33 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	6.21	6.21	25824	36488	6.160	5.325	
22)	S DCB	17.83	17.16	51230	56037	6.826	6.277	
	Target Compounds:							
12)	L6 Aroclor-1254	11.74	12.20	35812	60542	99.2	84.8	
13)	L6 Aroclor-1254 {2}	12.46	12.43	22489	13449	88.1	62.8	#
14)	L6 Aroclor-1254 {3}	12.70	12.57	49752	24751	92.1	76.2	
)	L6 Aroclor-1254 {4}	13.09	12.80	25160	28885	92.7	63.3	#
16)	L6 Aroclor-1254 {5}	13.50	13.16	26787	45495	94.3	86.2	
	Sum Aroclor-1254			160000	173121	466.4	373.3	
	Average Aroclor-1254					93.274	74.666	

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Date 08/16/01

289

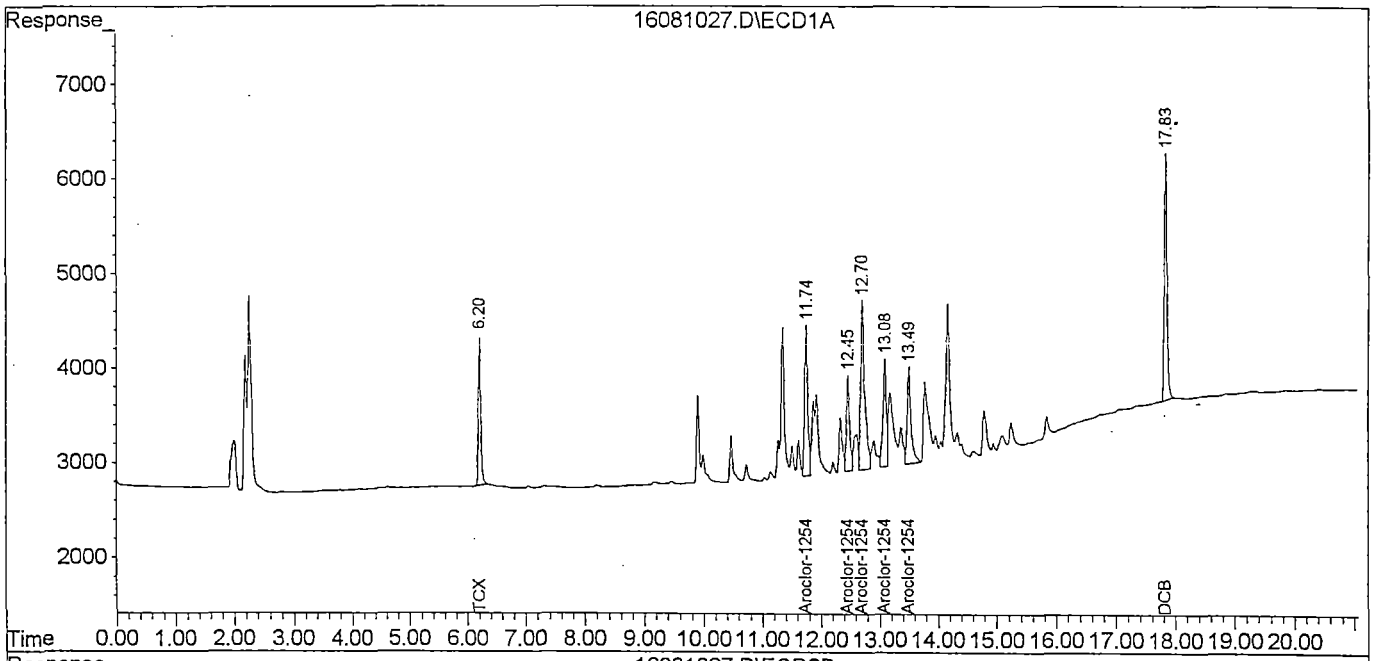
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

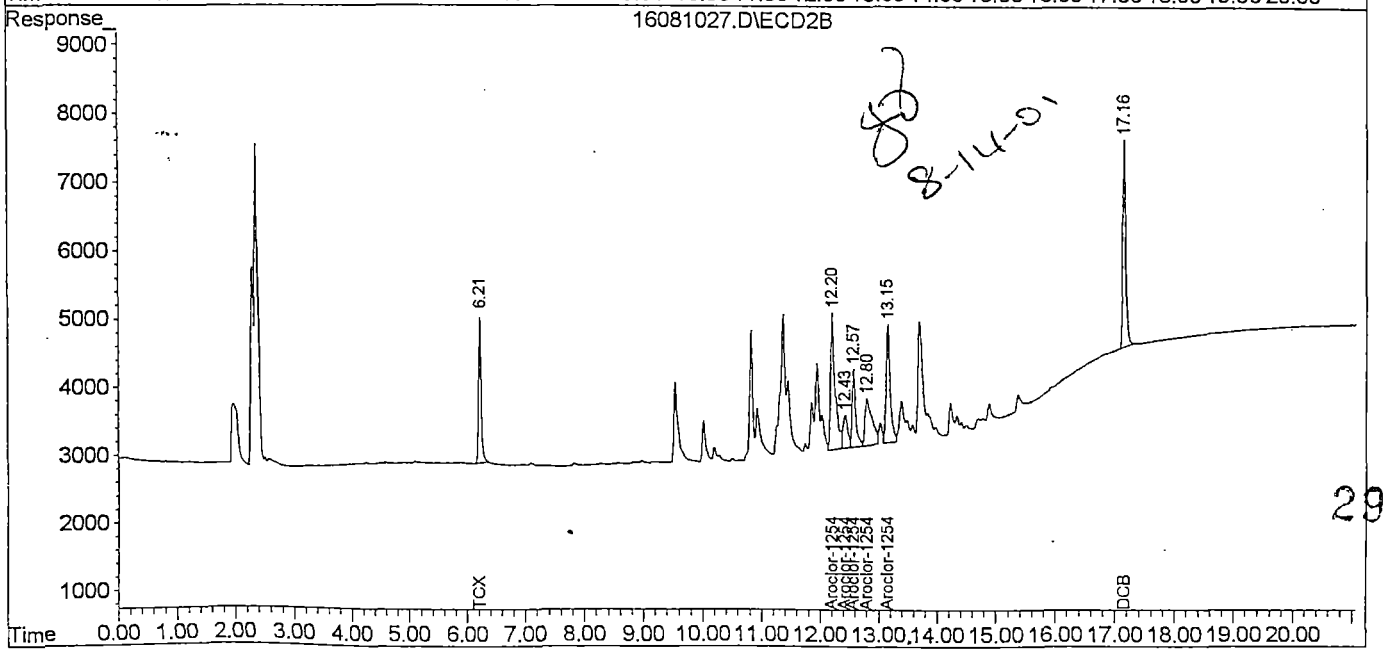
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081027.D\ECD1A.CH Vial: 24
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081027.D\ECD2B.CH
Acq On : 10 Aug 2001 23:27 Operator: TLM
Sample : AR1254L2CC Inst : HP_16
Misc : 5-5-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:33 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081027.D\ECD1A.CH Vial: 24
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081027.D\ECD2B.CH
Acq On : 10 Aug 2001 23:27 Operator: TLM
Sample : AR1254L2CC Inst : HP_16
Misc : 5-5-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:33 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.21	6.21	44674	67234	10.5	9.873
22)	S DCB	17.83	17.16	83139	101428	10.8	11.2
	Target Compounds:						
12)	L6 Aroclor-1254	11.74	12.20	58714	111614	164.0	159.9
13)	L6 Aroclor-1254 {2}	12.46	12.43	38624	27231	154.8	132.3
14)	L6 Aroclor-1254 {3}	12.70	12.57	85540	48296	161.0	151.6
	L6 Aroclor-1254 {4}	13.09	12.80	44210	57778	165.5	130.5
16)	L6 Aroclor-1254 {5}	13.50	13.16	47434	84634	167.9	162.3
	Sum Aroclor-1254			274522	329553	813.3	736.6
	Average Aroclor-1254					162.665	147.325

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291

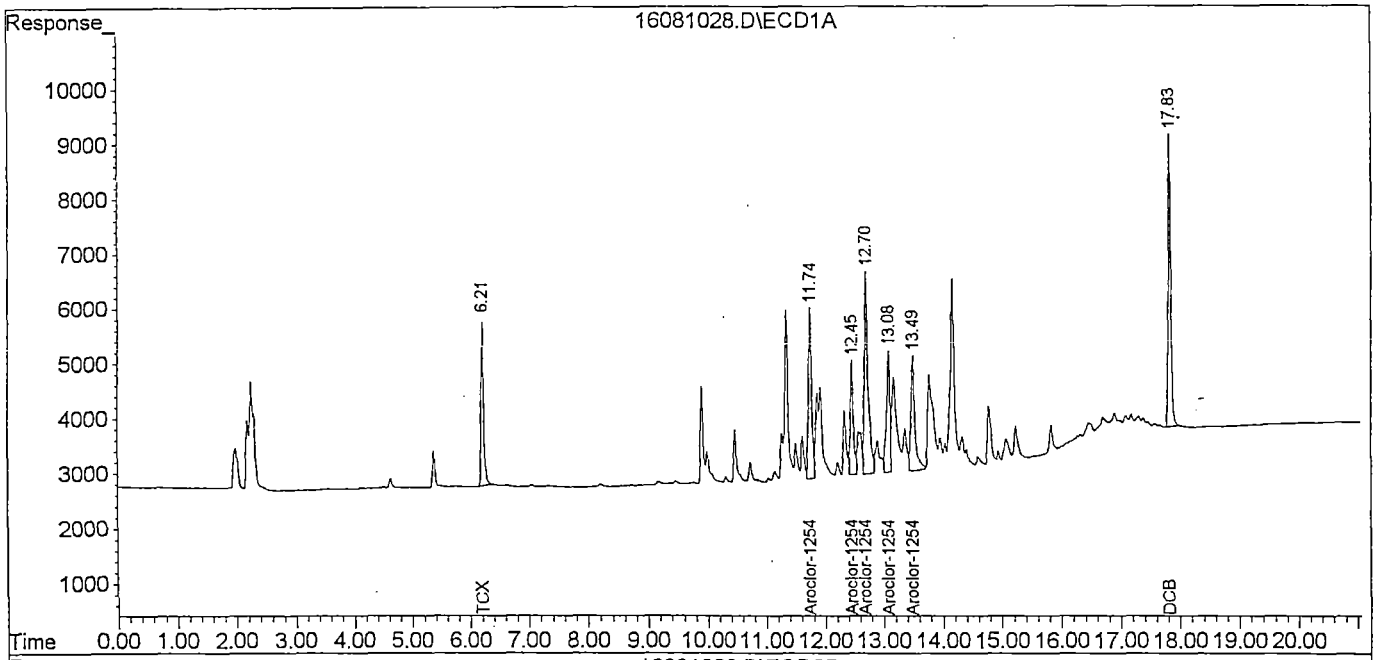
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

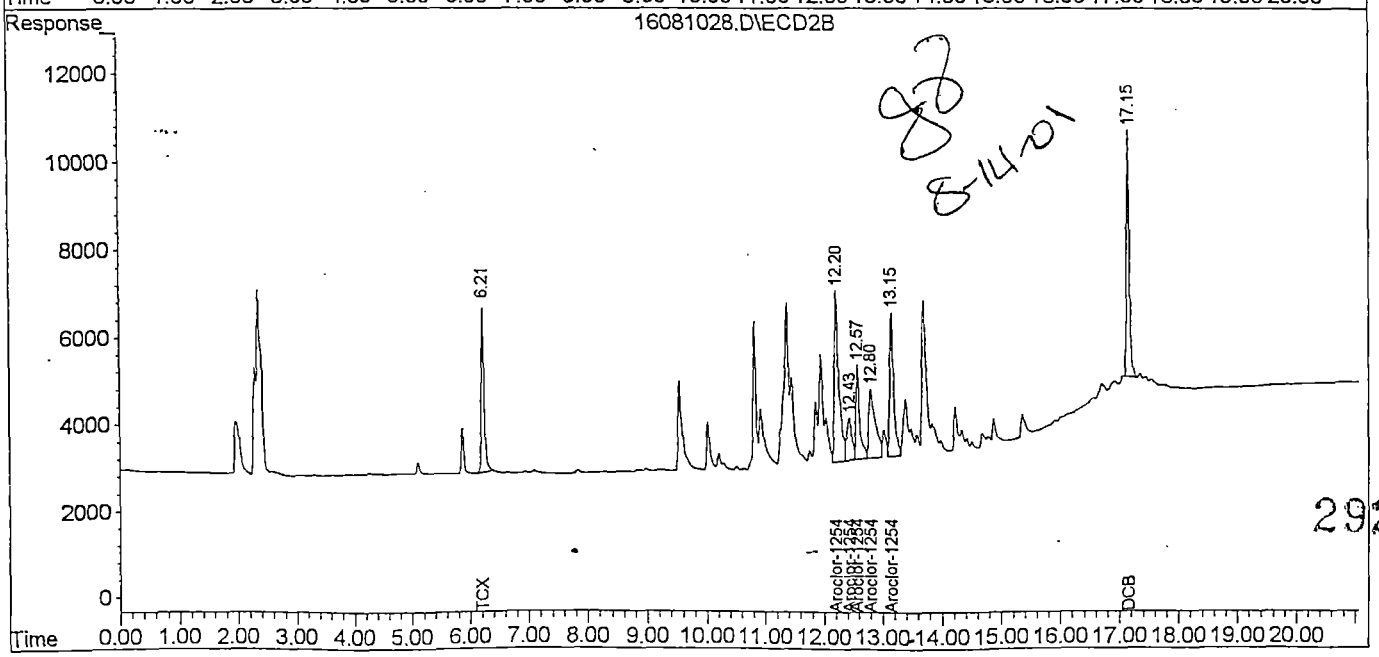
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081028.D\ECD1A.CH Vial: 25
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081028.D\ECD2B.CH
Acq On : 10 Aug 2001 23:51 Operator: TLM
Sample : AR1254L3CC Inst : HP_16
Misc : 5-4-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:33 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





8-14-01

292

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081028.D\ECD1A.CH Vial: 25
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081028.D\ECD2B.CH
Acq On : 10 Aug 2001 23:51 Operator: TLM
Sample : AR1254L3CC Inst : HP_16
Misc : 5-4-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:33 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.21	6.21	89073	128144	20.7	18.9
22)	S DCB	17.83	17.16	166786	180629	21.6	19.6
	Target Compounds:						
12)	L6 Aroclor-1254	11.74	12.20	114475	207014	344.3	313.8
13)	L6 Aroclor-1254 {2}	12.46	12.43	78420	62460	339.6	332.6
14)	L6 Aroclor-1254 {3}	12.70	12.57	168414	96603	341.0	324.4
	L6 Aroclor-1254 {4}	13.09	12.80	85665	126669	344.0	310.4
15)	L6 Aroclor-1254 {5}	13.50	13.15	91952	161101	349.2	327.1
	Sum Aroclor-1254			538924	653848	1718.1	1608.4
	Average Aroclor-1254					343.623	321.671

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CSF 29546 SDG E00E2
Signature Amelia M. William
Date 08/16/01

293

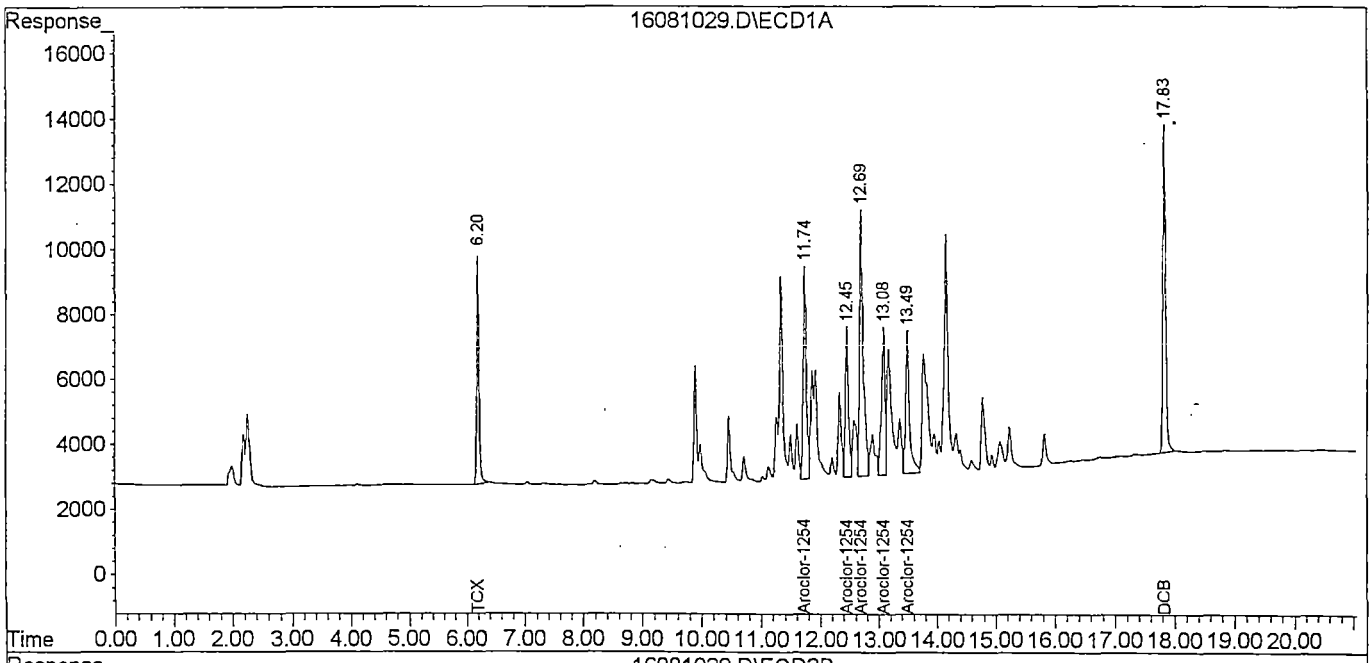
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

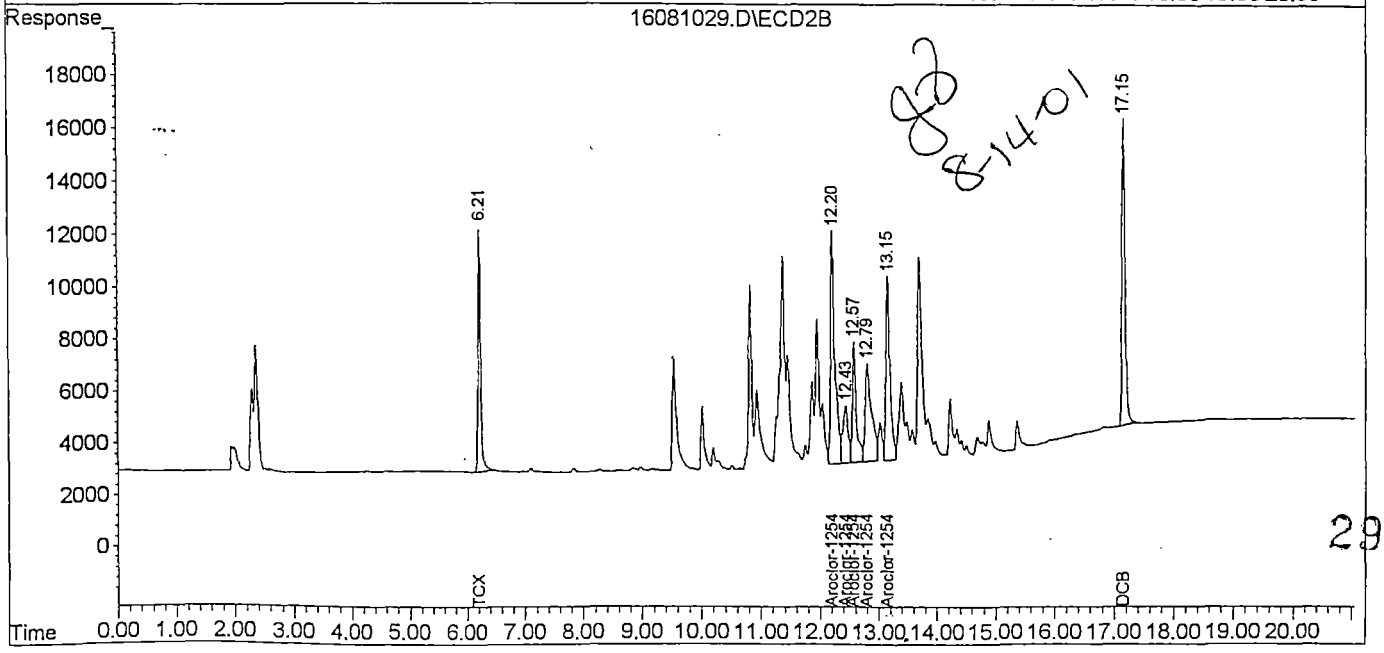
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081029.D\ECD1A.CH Vial: 26
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081029.D\ECD2B.CH
Acq On : 11 Aug 2001 00:16 Operator: TLM
Sample : AR1254L4CC Inst : HP_16
Misc : 5-3-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:34 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





8-14-01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081029.D\ECD1A.CH Vial: 26
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081029.D\ECD2B.CH
Acq On : 11 Aug 2001 00:16 Operator: TLM
Sample : AR1254L4CC Inst : HP_16
Misc : 5-3-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:34 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.21	6.21	195767	289951	44.0	42.1
22)	S DCB	17.83	17.16	321874	396549	40.1	42.0
	Target Compounds:						
12)	L6 Aroclor-1254	11.74	12.20	233919	455376	737.4	743.1
13)	L6 Aroclor-1254 {2}	12.46	12.43	169124	145257	771.6	844.1
14)	L6 Aroclor-1254 {3}	12.70	12.57	357120	216046	759.6	785.3
	L6 Aroclor-1254 {4}	13.08	12.80	180129	298324	758.3	801.6
[illegible])	L6 Aroclor-1254 {5}	13.49	13.15	202392	351243	802.1	764.4
	Sum Aroclor-1254			1142684	1466246	3829.0	3938.5
	Average Aroclor-1254					765.808	787.709

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Date 08/10/00

295

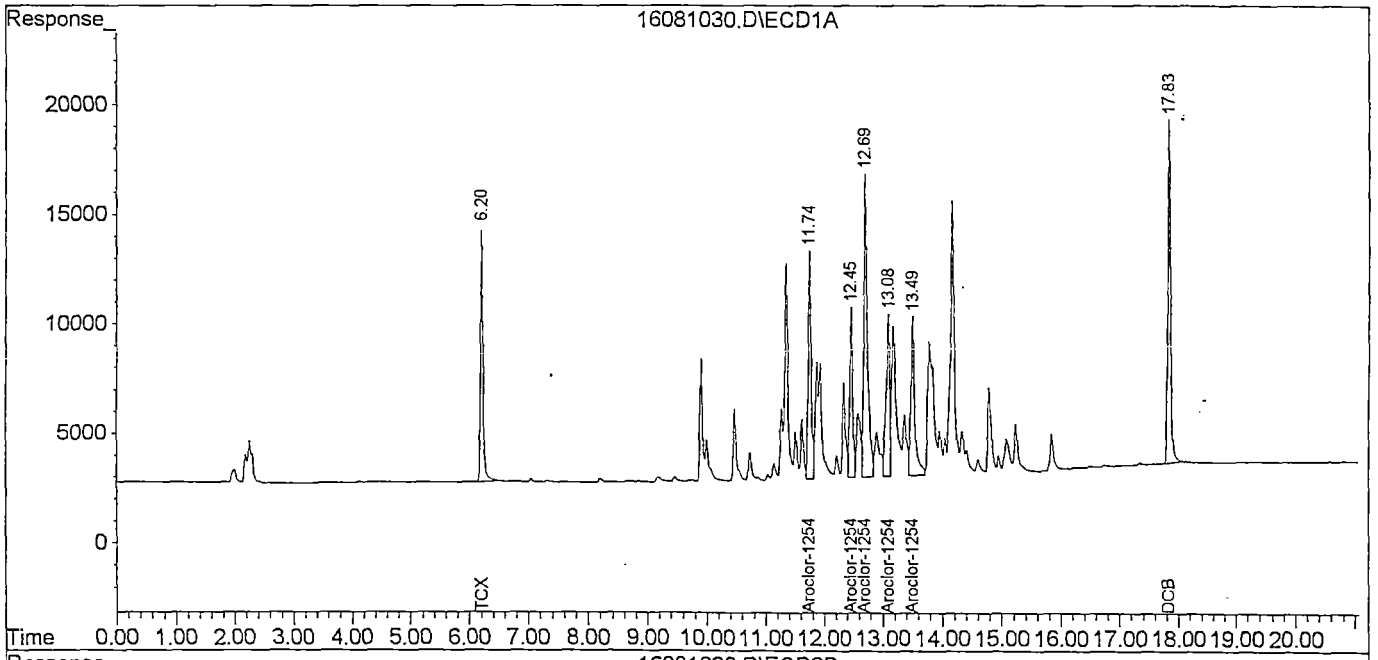
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

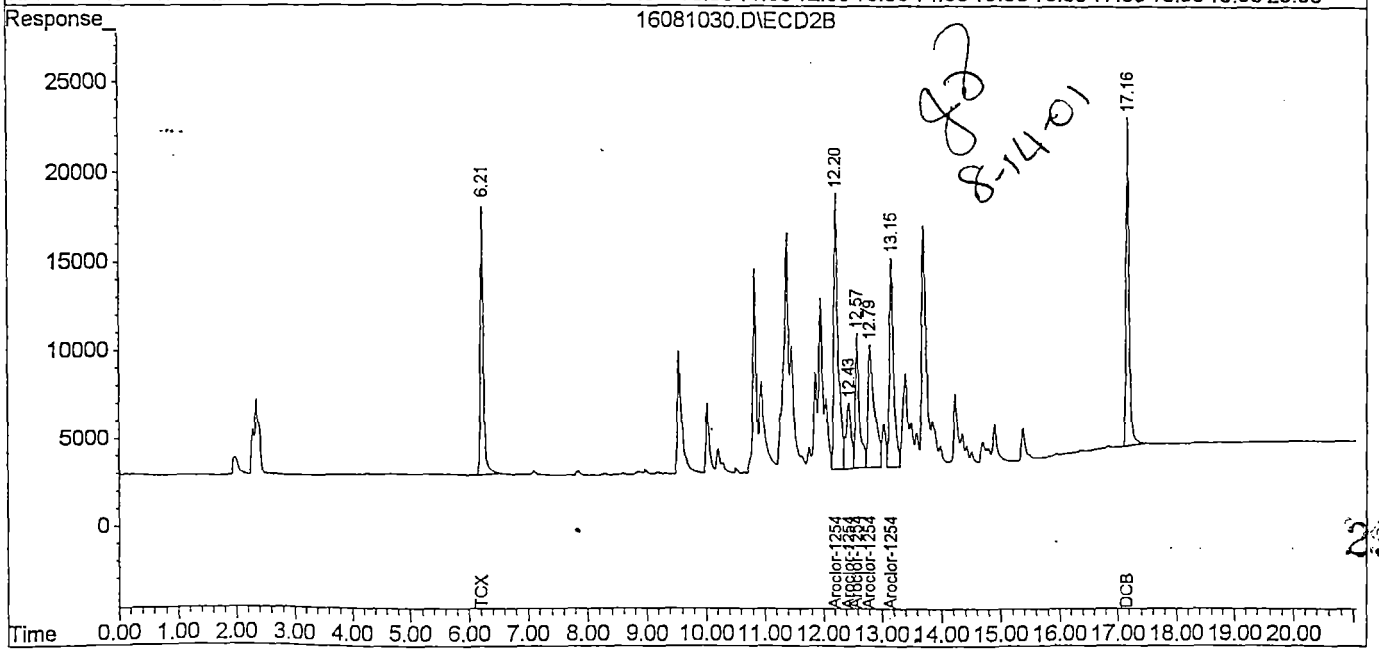
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081030.D\ECD1A.CH Vial: 27
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081030.D\ECD2B.CH
Acq On : 11 Aug 2001 00:40 Operator: TLM
Sample : AR1254L5CC Inst : HP_16
Misc : 5-2-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:34 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





8-14-01

296

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081030.D\ECD1A.CH Vial: 27
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081030.D\ECD2B.CH
Acq On : 11 Aug 2001 00:40 Operator: TLM
Sample : AR1254L5CC Inst : HP_16
Misc : 5-2-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:34 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.21	6.21	341103	515927	73.3	73.7
22)	S DCB	17.83	17.16	521043	661585	62.6	67.7
	Target Compounds:						
12)	L6 Aroclor-1254	11.74	12.20	363083	776601	1176.0	1327.1
13)	L6 Aroclor-1254 {2}	12.46	12.44	277460	247309	1304.4	1510.5
14)	L6 Aroclor-1254 {3}	12.70	12.57	580463	364512	1269.7	1388.2
	L6 Aroclor-1254 {4}	13.08	12.79	291842	527327	1259.8	1506.9
[illegible])	L6 Aroclor-1254 {5}	13.49	13.15	324849	584115	1304.6	1321.5
	Sum Aroclor-1254			1837696	2499864	6314.7	7054.2
	Average Aroclor-1254					1262.932	1410.837

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Signature [signature]
Date 08/16/01

297

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

Response Factor Report HP_16

Method : f:\hpchem\hp\16\data\08_10_01\xpcbh10.m
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

Calibration Files
L1 =16081031.D L2 =16081032.D L3 =16081033.D
L4 =16081034.D L5 =16081035.D

	Compound	L1	L2	L3	L4	L5	Avg		%RSD
1)	TCX	5.2	4.9	4.3	4.5	4.3	4.6	E3	8.59
2)	Aroclor-1016	177.1	156.1	129.4	129.6	112.1	140.9		18.21
3)	Aroclor-1016 {2}	341.8	308.0	255.1	236.9	200.8	268.5		20.97
4)	Aroclor-1016 {3}	73.3	70.4	60.8	61.8	55.2	64.3		11.51
5)	Aroclor-1016 {4}	143.9	135.5	115.5	112.7	97.7	121.1		15.31
6)	Aroclor-1016 {5}	509.7	483.6	417.4	423.3	383.7	443.5		11.64
17)	Aroclor-1260	677.2	670.4	541.4	562.9	497.7	589.9		13.59
18)	Aroclor-1260 {2}	382.3	358.8	290.1	287.0	243.6	312.4		18.19
19)	Aroclor-1260 {3}	233.3	223.4	183.8	181.9	156.0	195.7		16.34
20)	Aroclor-1260 {4}	381.5	360.8	301.3	309.6	271.9	325.0		13.83
21)	Aroclor-1260 {5}	766.6	711.1	607.0	624.7	548.7	651.6		13.30
22)	DCB	10.2	9.5	7.7	7.9	6.7	8.4	E3	16.80
	Average %RSD								

Signal #2 Calibration Files
L1 =16081031.D L2 =16081032.D L3 =16081033.D
L4 =16081034.D L5 =16081035.D

	Compound	L1	L2	L3	L4	L5	Avg		%RSD
24)	TCX #2	7.6	7.3	6.6	7.2	6.7	7.1	E3	5.83
25)	Aroclor-1016 #2	161.1	154.8	133.6	140.2	124.2	142.8		10.59
26)	Aroclor-1016 {2} #2	468.5	448.7	366.7	368.1	311.3	392.6		16.50
27)	Aroclor-1016 {3} #2	54.5	59.5	52.3	58.9	55.4	56.1		5.39
28)	Aroclor-1016 {4} #2	487.4	491.0	426.7	475.6	325.3	441.2		15.81
29)	Aroclor-1016 {5} #2	221.8	215.1	181.2	188.5	167.5	194.8		11.79
40)	Aroclor-1260 #2	809.6	781.0	660.7	708.9	649.6	721.9		9.88
41)	Aroclor-1260 {2} #2	453.0	443.2	348.6	355.3	311.9	382.4		16.29
42)	Aroclor-1260 {3} #2	283.6	284.3	227.4	236.8	211.2	248.7		13.47
43)	Aroclor-1260 {4} #2	394.8	385.7	315.8	338.6	306.2	348.2		11.57
44)	Aroclor-1260 {5} #2	941.2	934.4	786.2	835.8	756.9	850.9		9.90
45)	DCB #2	12.2	11.5	9.4	9.8	8.6	10.3	E3	14.59
	Average %RSD								

(#) = Out of Range

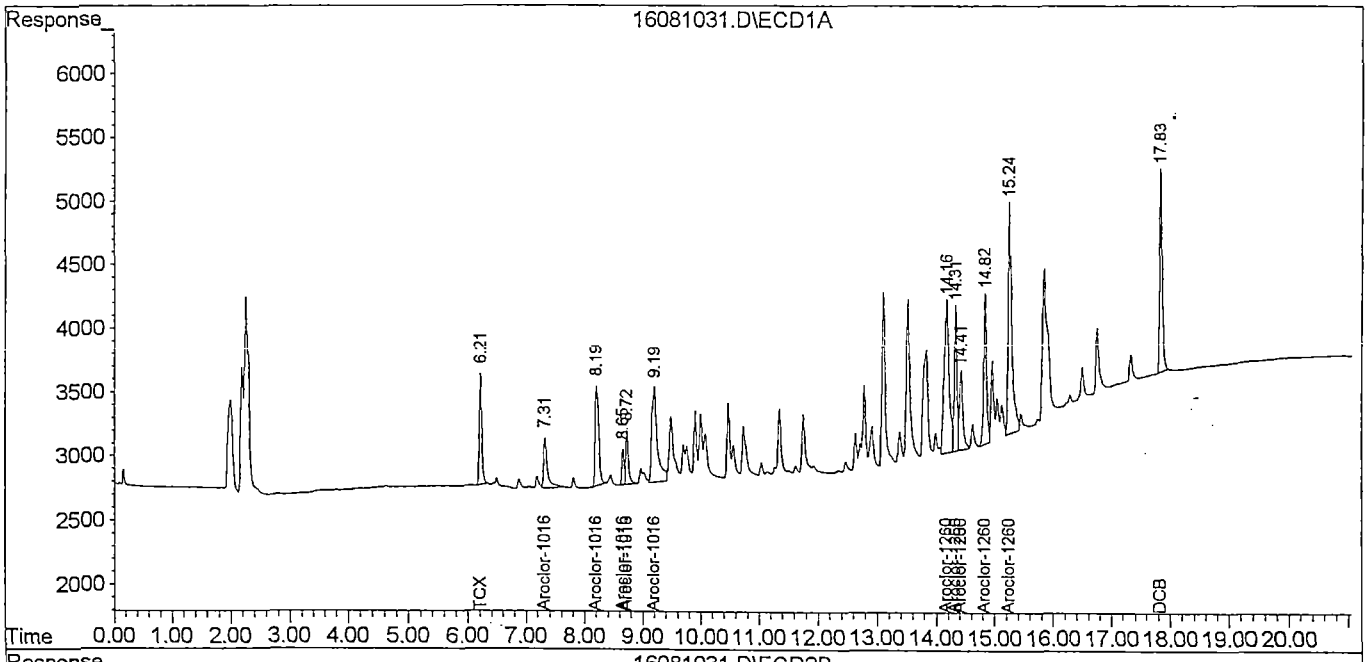
xpcbh10.m Sat Aug 11 10:48:31 2001

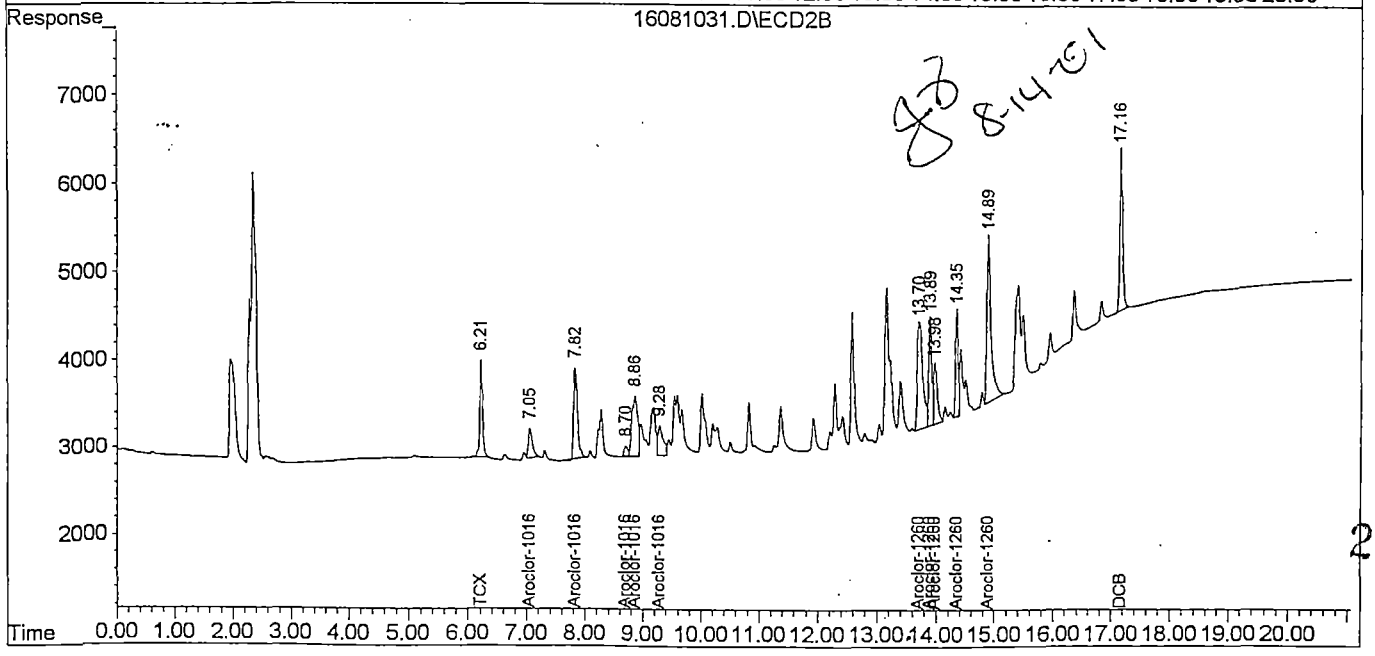
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081031.D\ECD1A.CH Vial: 28
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081031.D\ECD2B.CH
Acq On : 11 Aug 2001 1:05 Operator: TLM
Sample : AR1660L1CC Inst : HP_16
Misc : 5-130-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:47 2001 Quant Results File: xpcbh10.RES

Method : f:\hpchem\hp\16\data\08_10_01\xpcbh10.m
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





8-14-01

299

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081031.D\ECD1A.CH Vial: 28
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081031.D\ECD2B.CH
Acq On : 11 Aug 2001 1:05 Operator: TLM
Sample : AR1660L1CC Inst : HP_16
Misc : 5-130-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:47 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	6.21	6.21	26041	37775	5.607	5.342	
22)	S DCB	17.83	17.16	51135	61208	6.080	5.933	
	Target Compounds:							
2)	L1 Aroclor-1016	7.32	7.05	17714	16106	125.7	112.8	
3)	L1 Aroclor-1016 {2}	8.20	7.83	34176	46848	127.3	119.3	
4)	L1 Aroclor-1016 {3}	8.65	8.70	7329	5450	114.0	76.2	#
	L1 Aroclor-1016 {4}	8.72	8.86	14386	48744	118.8	254.8	#
6)	L1 Aroclor-1016 {5}	9.19	9.28	50973	22178	114.9	50.3	#
	Sum Aroclor-1016			124578	139326	600.8	613.5	
	Average Aroclor-1016					120.151	122.692	
17)	L7 Aroclor-1260	14.16	13.70	67722	80961	114.8	112.1	
18)	L7 Aroclor-1260 {2}	14.31	13.90	38233	45304	122.4	118.5	
19)	L7 Aroclor-1260 {3}	14.41	13.98	23329	28360	119.2	114.0	
20)	L7 Aroclor-1260 {4}	14.82	14.35	38145	39481	117.4	113.4	
21)	L7 Aroclor-1260 {5}	15.24	14.89	76660	94119	117.6	110.6	
	Sum Aroclor-1260			244090	288225	591.4	568.7	
	Average Aroclor-1260					118.286	113.731	

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29546 SDG E00E2
Signature [signature]
Date 08/16/01

300

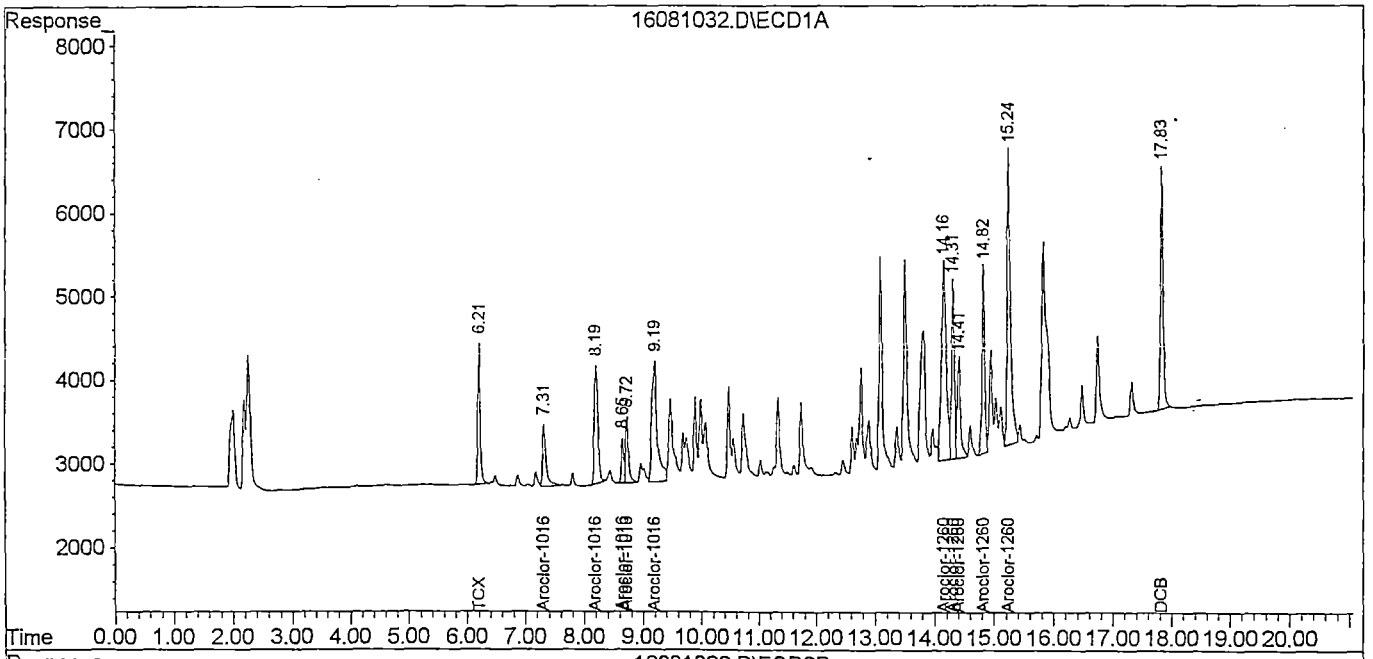
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

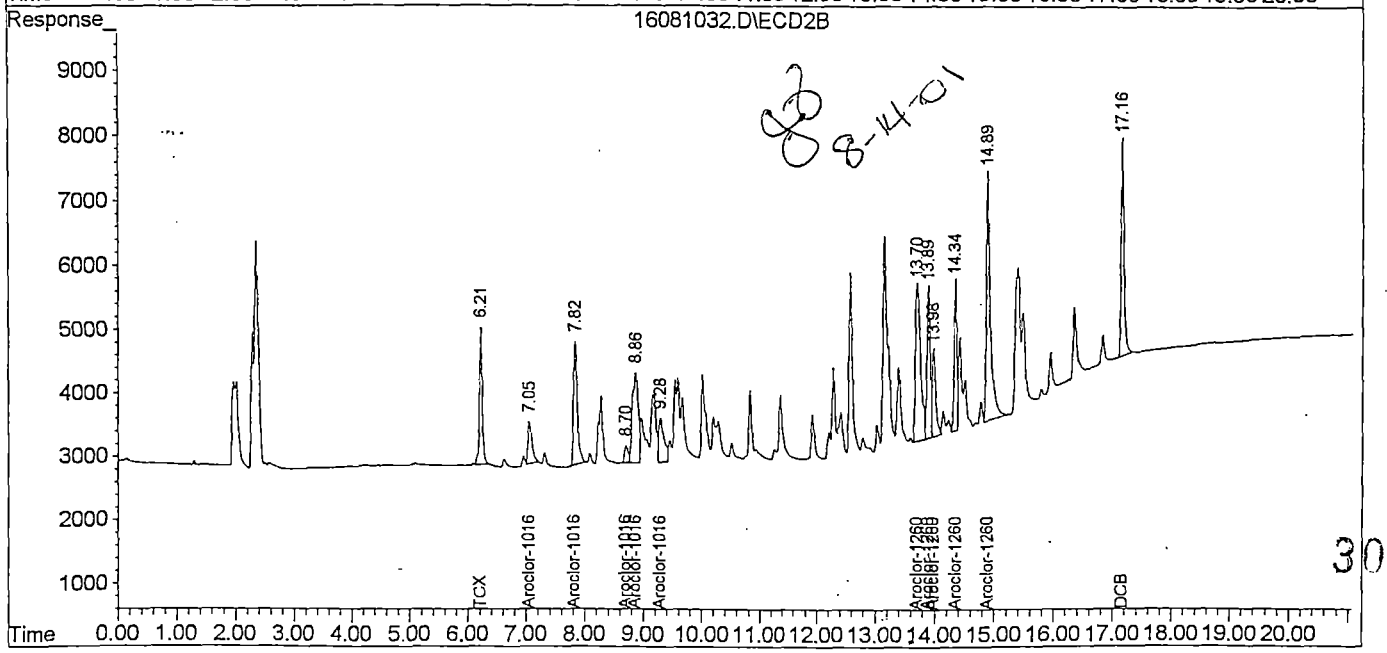
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081032.D\ECD1A.CH Vial: 29
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081032.D\ECD2B.CH
Acq On : 11 Aug 2001 1:30 Operator: TLM
Sample : AR1660L2CC Inst : HP_16
Misc : 5-129-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:47 2001 Quant Results File: xpcbh10.RES

Method : f:\hpchem\hp\16\data\08_10_01\xpcbh10.m
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





301

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081032.D\ECD1A.CH Vial: 29
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081032.D\ECD2B.CH
Acq On : 11 Aug 2001 1:30 Operator: TLM
Sample : AR1660L2CC Inst : HP_16
Misc : 5-129-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:47 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	6.21	6.21	49007	73040	10.6	10.3	
22)	S DCB	17.83	17.16	94809	115035	11.3	11.2	
	Target Compounds:							
2)	L1 Aroclor-1016	7.32	7.05	31226	30969	221.6	216.9	
3)	L1 Aroclor-1016 {2}	8.20	7.82	61593	89733	229.4	228.5	
4)	L1 Aroclor-1016 {3}	8.65	8.70	14072	11896	218.9	195.9	
	L1 Aroclor-1016 {4}	8.72	8.86	27110	98198	223.9	424.3	#
6)	L1 Aroclor-1016 {5}	9.19	9.28	96720	43015	218.1	110.8	#
	Sum Aroclor-1016			230720	273811	1111.9	1176.5	
	Average Aroclor-1016					222.375	235.298	
17)	L7 Aroclor-1260	14.16	13.70	134086	156200	227.3	216.4	
18)	L7 Aroclor-1260 {2}	14.31	13.90	71757	88633	229.7	231.8	
19)	L7 Aroclor-1260 {3}	14.41	13.98	44679	56865	228.3	228.7	
20)	L7 Aroclor-1260 {4}	14.82	14.35	72152	77139	222.0	221.5	
21)	L7 Aroclor-1260 {5}	15.24	14.89	142223	186875	218.3	219.6	
	Sum Aroclor-1260			464896	565712	1125.6	1118.0	
	Average Aroclor-1260					225.119	223.592	

COPY

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29546 SDG E00E2
Signature Ruth M. Goldbain
Date 08/16/01

302

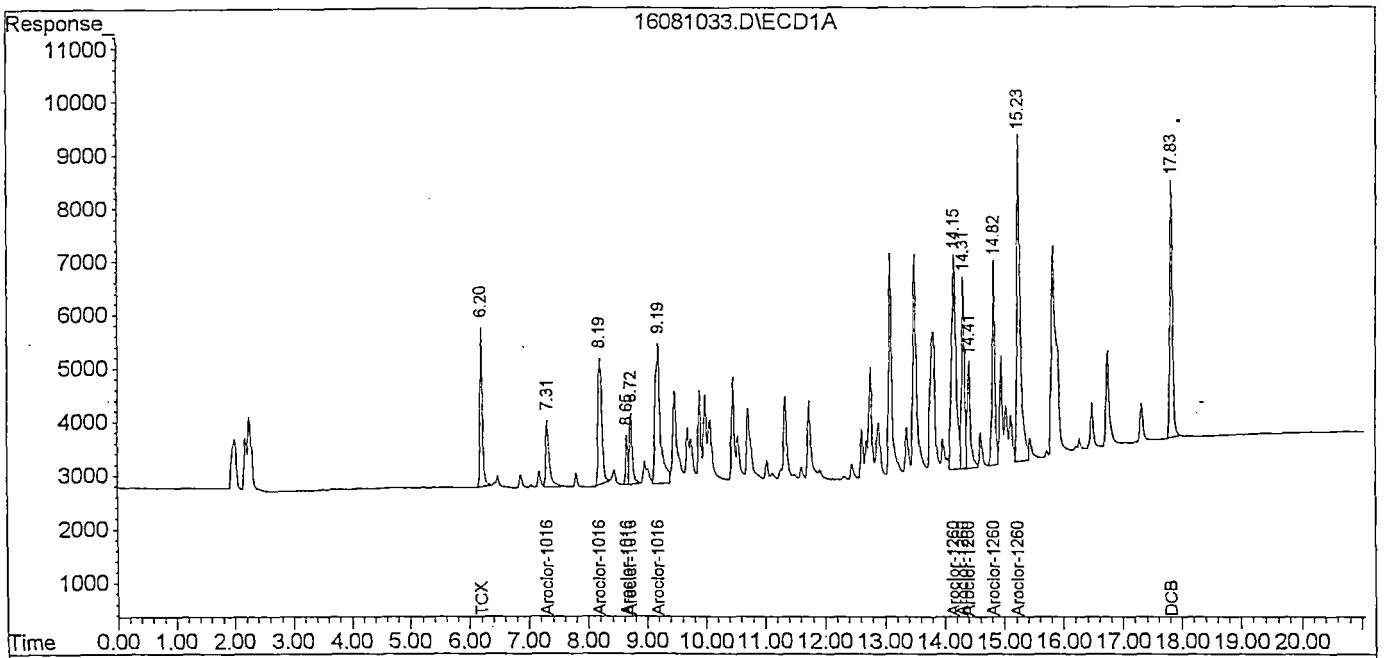
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25%. (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

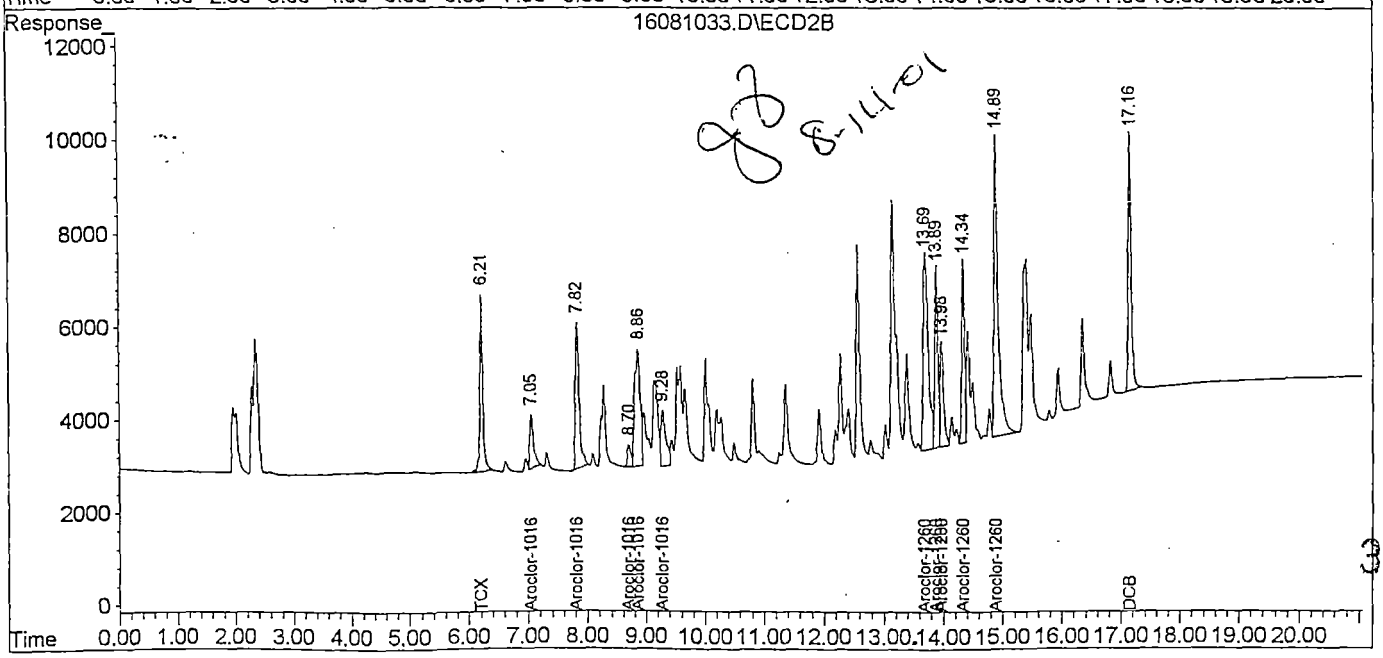
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081033.D\ECD1A.CH Vial: 30
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081033.D\ECD2B.CH
Acq On : 11 Aug 2001 1:54 Operator: TLM
Sample : AR1660L3CY Inst : HP_16
Misc : 5-128-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:47 2001 Quant Results File: xpcbh10.RES

Method : f:\hpchem\hp\16\data\08_10_01\xpcbh10.m
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





8-14-01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081033.D\ECD1A.CH Vial: 30
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081033.D\ECD2B.CH
Acq On : 11 Aug 2001 1:54 Operator: TLM
Sample : AR1660L3CY Inst : HP_16
Misc : 5-128-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:47 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	6.21	6.21	86003	131244	18.5	18.6	
22)	S DCB	17.83	17.16	154346	188178	18.4	18.2	
	Target Compounds:							
2)	L1 Aroclor-1016	7.31	7.05	51780	53454	367.5	374.4	
3)	L1 Aroclor-1016 {2}	8.19	7.82	102020	146679	380.0	373.6	
4)	L1 Aroclor-1016 {3}	8.65	8.70	24325	20923	378.4	355.5	
	L1 Aroclor-1016 {4}	8.72	8.86	46192	170690	381.5	587.5	#
6)	L1 Aroclor-1016 {5}	9.19	9.28	166973	72463	376.4	217.7	#
	Sum Aroclor-1016			391291	464209	1883.8	1908.6	
	Average Aroclor-1016					376.765	381.727	
17)	L7 Aroclor-1260	14.16	13.70	216558	264267	367.1	366.1	
18)	L7 Aroclor-1260 {2}	14.31	13.90	116059	139441	371.5	364.6	
19)	L7 Aroclor-1260 {3}	14.41	13.98	73525	90973	375.7	365.8	
20)	L7 Aroclor-1260 {4}	14.82	14.34	120507	126310	370.8	362.7	
21)	L7 Aroclor-1260 {5}	15.24	14.89	242811	314478	372.6	369.6	
	Sum Aroclor-1260			769460	935469	1857.8	1828.8	
	Average Aroclor-1260					371.557	365.769	

COPY
ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29546 SDG E00E2
Signature Imelda M. Villa
Date 08/16/01

304

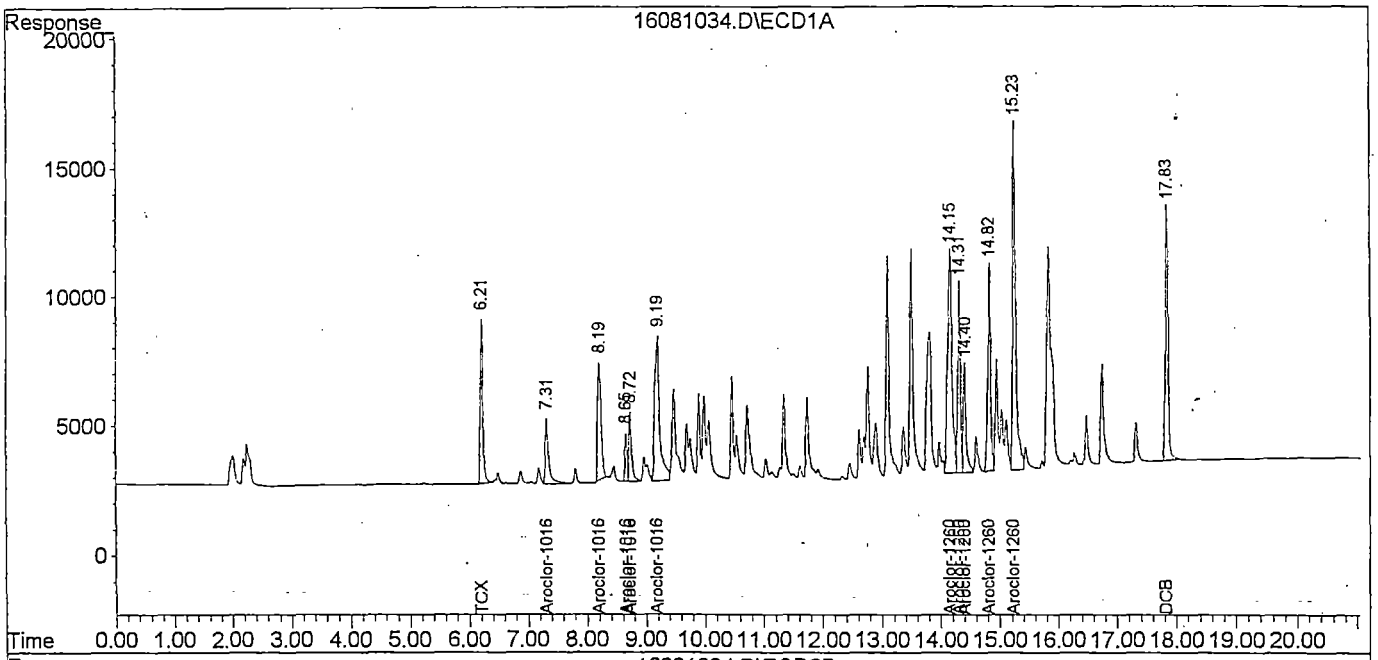
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

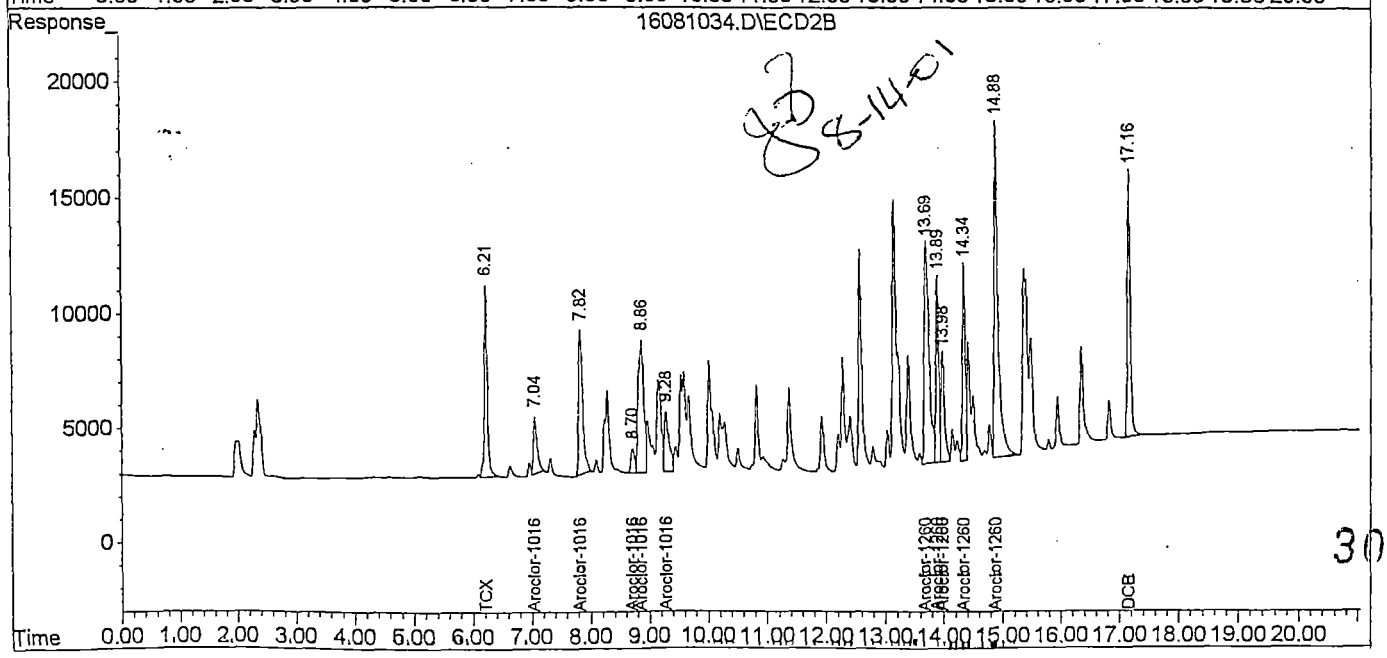
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081034.D\ECD1A.CH Vial: 31
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081034.D\ECD2B.CH
Acq On : 11 Aug 2001 2:19 Operator: TLM
Sample : AR1660L4CC Inst : HP_16
Misc : 5-127-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:48 2001 Quant Results File: xpcbh10.RES

Method : f:\hpchem\hp\16\data\08_10_01\xpcbh10.m
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





8-14-01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081034.D\ECD1A.CH Vial: 31
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081034.D\ECD2B.CH
Acq On : 11 Aug 2001 2:19 Operator: TLM
Sample : AR1660L4CC Inst : HP_16
Misc : 5-127-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:48 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	6.21	6.21	180427	288189	38.8	40.8	
22)	S DCB	17.83	17.16	315136	391828	37.5	38.0	
	Target Compounds:							
2)	L1 Aroclor-1016	7.32	7.05	103713	112135	736.1	785.3	
3)	L1 Aroclor-1016 {2}	8.20	7.82	189529	294482	705.9	750.0	
4)	L1 Aroclor-1016 {3}	8.65	8.70	49446	47106	769.1	819.2	
	L1 Aroclor-1016 {4}	8.72	8.86	90195	380475	745.0	1106.4	E#
6)	L1 Aroclor-1016 {5}	9.19	9.28	338650	150780	763.5	531.3	#
	Sum Aroclor-1016			771533	984978	3719.6	3992.2	
	Average Aroclor-1016					743.916	798.446	
17)	L7 Aroclor-1260	14.16	13.69	450358	567085	763.4	785.5	
18)	L7 Aroclor-1260 {2}	14.31	13.89	229625	284277	735.1	743.4	
19)	L7 Aroclor-1260 {3}	14.41	13.98	145481	189476	743.5	761.9	
20)	L7 Aroclor-1260 {4}	14.82	14.34	247643	270876	762.0	777.9	
21)	L7 Aroclor-1260 {5}	15.24	14.88	499769	668647	766.9	785.8	
	Sum Aroclor-1260			1572876	1980360	3770.9	3854.6	
	Average Aroclor-1260					754.182	770.910	

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29546 SDG E00E2
Signature Fred M. Williams
Date 08/16/01

306

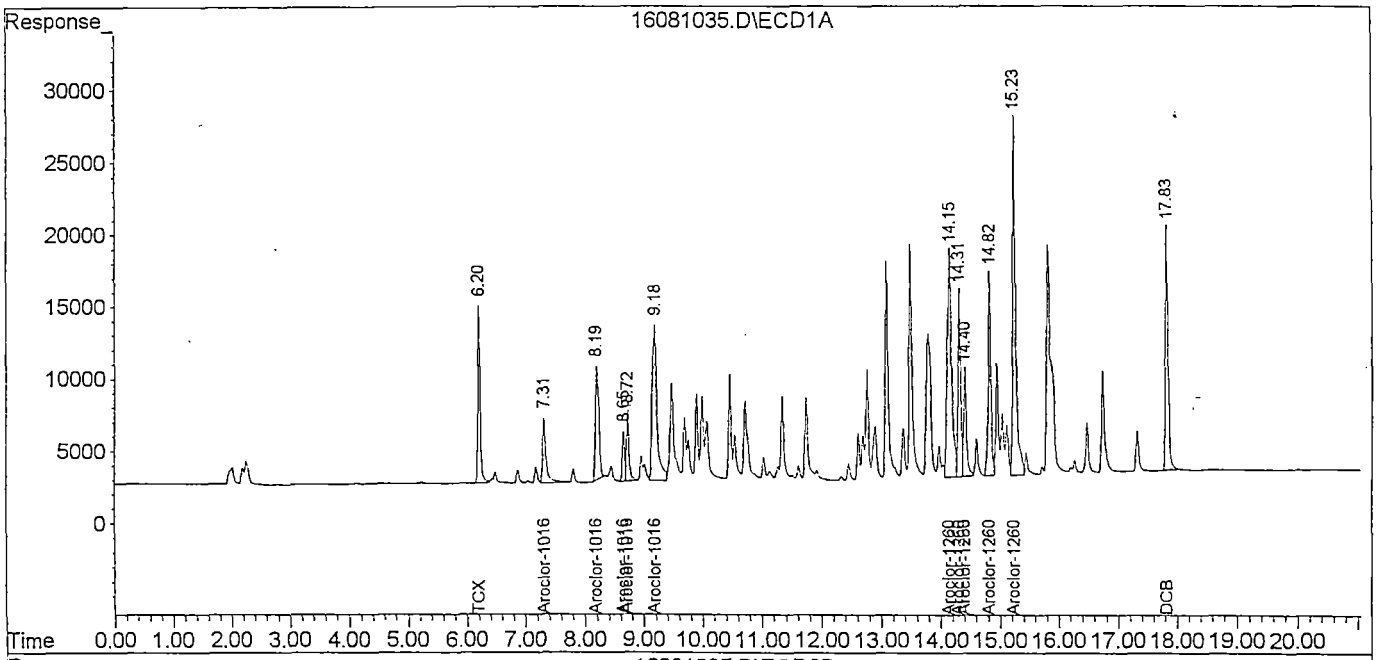
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25%. (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

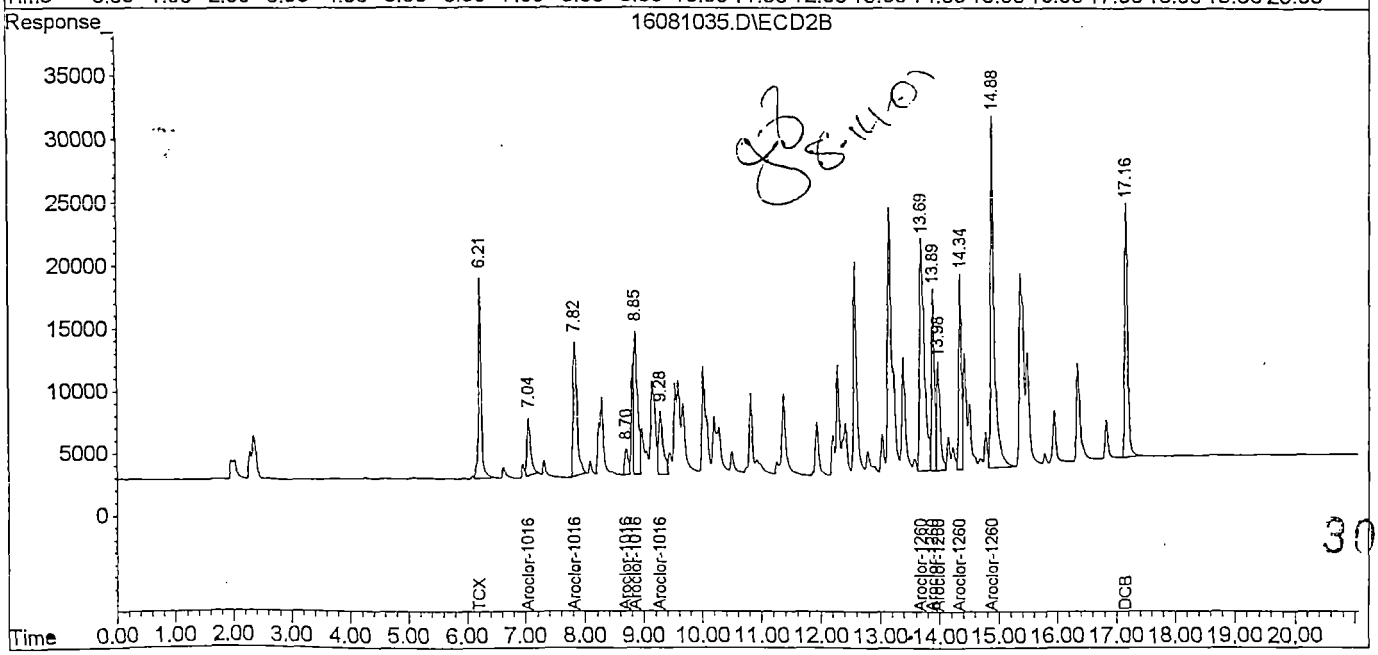
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081035.D\ECD1A.CH Vial: 32
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081035.D\ECD2B.CH
Acq On : 11 Aug 2001 2:43 Operator: TLM
Sample : AR1660L5CC Inst : HP_16
Misc : 5-126-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:48 2001 Quant Results File: xpcbh10.RES

Method : f:\hpchem\hp\16\data\08_10_01\xpcbh10.m
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





307

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081035.D\ECD1A.CH Vial: 32
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081035.D\ECD2B.CH
Acq On : 11 Aug 2001 2:43 Operator: TLM
Sample : AR1660L5CC Inst : HP_16
Misc : 5-126-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 10:48 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.21	6.21	344233	538526	74.1 E	76.2 E
22)	S DCB	17.83	17.16	539595	690324	64.2 E	66.9 E
	Target Compounds:						
2)	L1 Aroclor-1016	7.31	7.04	179329	198778	1272.9	1392.1
3)	L1 Aroclor-1016 {2}	8.19	7.82	321334	498007	1196.8	1268.4
4)	L1 Aroclor-1016 {3}	8.65	8.70	88292	88647	1373.3	1565.3
	L1 Aroclor-1016 {4}	8.72	8.86	156374	520408	1291.6	1285.0 E
6)	L1 Aroclor-1016 {5}	9.19	9.28	613857	268058	1384.0	1184.3
	Sum Aroclor-1016			1359186	1573899	6518.5	6695.0
	Average Aroclor-1016					1303.696	1339.002
17)	L7 Aroclor-1260	14.15	13.69	796275	1039324	1349.8	1439.6
18)	L7 Aroclor-1260 {2}	14.31	13.89	389769	499027	1247.7	1305.0
19)	L7 Aroclor-1260 {3}	14.40	13.98	249644	337858	1275.8	1358.6
20)	L7 Aroclor-1260 {4}	14.82	14.34	435085	489872	1338.8	1406.8
21)	L7 Aroclor-1260 {5}	15.23	14.88	877956	1211071	1347.3	1423.3
	Sum Aroclor-1260			2748729	3577153	6559.4	6933.3
	Average Aroclor-1260					1311.877	1386.668

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29546 SDG E00E2
Signature [illegible]
Date 08/16/01

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

Continuing Calibration Report HP_16

Method : F:\HPCHEM\HP\16\DATA\08_14_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Tue Aug 14 12:12:10 2001
Response via : Initial Calibration

Continuing Calibration File: 16081405.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	4.645	4.631	E3	0.3	108
2	L1	Aroclor-1016	140.888	134.023		4.9	104
3	L1	Aroclor-1016 {2}	268.503	273.539		-1.9	107
4	L1	Aroclor-1016 {3}	64.290	66.027		-2.7	109
5	L1	Aroclor-1016 {4}	121.073	127.861		-5.6	111
6	L1	Aroclor-1016 {5}	443.547	445.007		-0.3	107
17	L7	Aroclor-1260	589.934	581.083		1.5	107
18	L7	Aroclor-1260 {2}	312.380	324.182		-3.8	112
19	L7	Aroclor-1260 {3}	195.676	209.958		-7.3	114
20	L7	Aroclor-1260 {4}	324.992	330.187		-1.6	110
21	L7	Aroclor-1260 {5}	651.635	657.305		-0.9	108
22	S	DCB	8.410	8.751	E3	-4.1	113
		Average %Dev					

Signal #2
Continuing Calibration File: 16081405.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	7.071	7.214	E3	-2.0	110
2	L1	Aroclor-1016	142.789	136.129		4.7	102
3	L1	Aroclor-1016 {2}	392.639	397.644		-1.3	108
4	L1	Aroclor-1016 {3}	56.115	52.278		6.8	100
5	L1	Aroclor-1016 {4}	441.200	434.636		1.5	102
6	L1	Aroclor-1016 {5}	194.805	201.884		-3.6	111
17	L7	Aroclor-1260	721.941	693.892		3.9	105
18	L7	Aroclor-1260 {2}	382.410	385.072		-0.7	110
19	L7	Aroclor-1260 {3}	248.673	258.359		-3.9	114
20	L7	Aroclor-1260 {4}	348.209	339.873		2.4	108
21	L7	Aroclor-1260 {5}	850.898	862.691		-1.4	110
22	S	DCB	10.316	10.600	E3	-2.8	113
		Average %Dev					

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

16081405.D XPCBH10.M Tue Aug 14 12:12:20 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_14_01\16081405.D\ECD1A.CH Vial: 5
Signal #2 : F:\HPCHEM\HP\16\DATA\08_14_01\16081405.D\ECD2B.CH
Acq On : 14 Aug 2001 11:01 Operator: TLM
Sample : AR1660L3CH Inst : HP_16
Misc : 5-128-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 14 12:12 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_14_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.21	6.21	92625	144282	19.9	20.4
22)	S DCB	17.83	17.16	175030	211992	20.8	20.6
	Target Compounds:						
2)	L1 Aroclor-1016	7.32	7.05	53609	54452	380.5	381.3
3)	L1 Aroclor-1016 {2}	8.20	7.82	109416	159058	407.5	405.1
4)	L1 Aroclor-1016 {3}	8.65	8.71	26411	20911	410.8	372.7
5)	L1 Aroclor-1016 {4}	8.72	8.87	51144	173855	422.4	394.0
6)	L1 Aroclor-1016 {5}	9.19	9.29	178003	80754	401.3	414.5
	Sum Aroclor-1016			418583	489029	2022.6	1967.7
	Average Aroclor-1016					404.511	393.535
17)	L7 Aroclor-1260	14.16	13.71	232433	277557	394.0	384.5
18)	L7 Aroclor-1260 {2}	14.31	13.90	129673	154029	415.1	402.8
19)	L7 Aroclor-1260 {3}	14.41	13.99	83983	103344	429.2	415.6
20)	L7 Aroclor-1260 {4}	14.83	14.35	132075	135949	406.4	390.4
21)	L7 Aroclor-1260 {5}	15.24	14.90	262922	345076	403.5	405.5
	Sum Aroclor-1260			841086	1015955	2048.2	1998.8
	Average Aroclor-1260					409.636	399.758

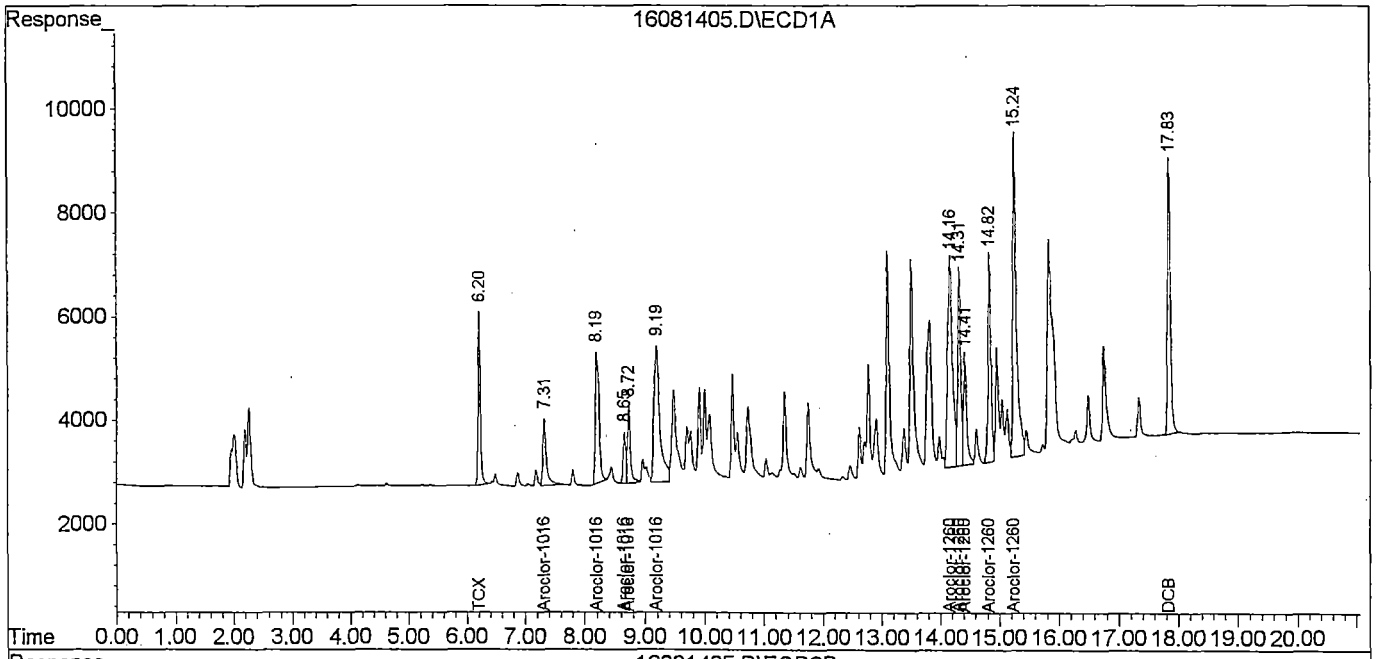
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16081405.D XPCBH10.M Tue Aug 14 12:13:37 2001 Page 1

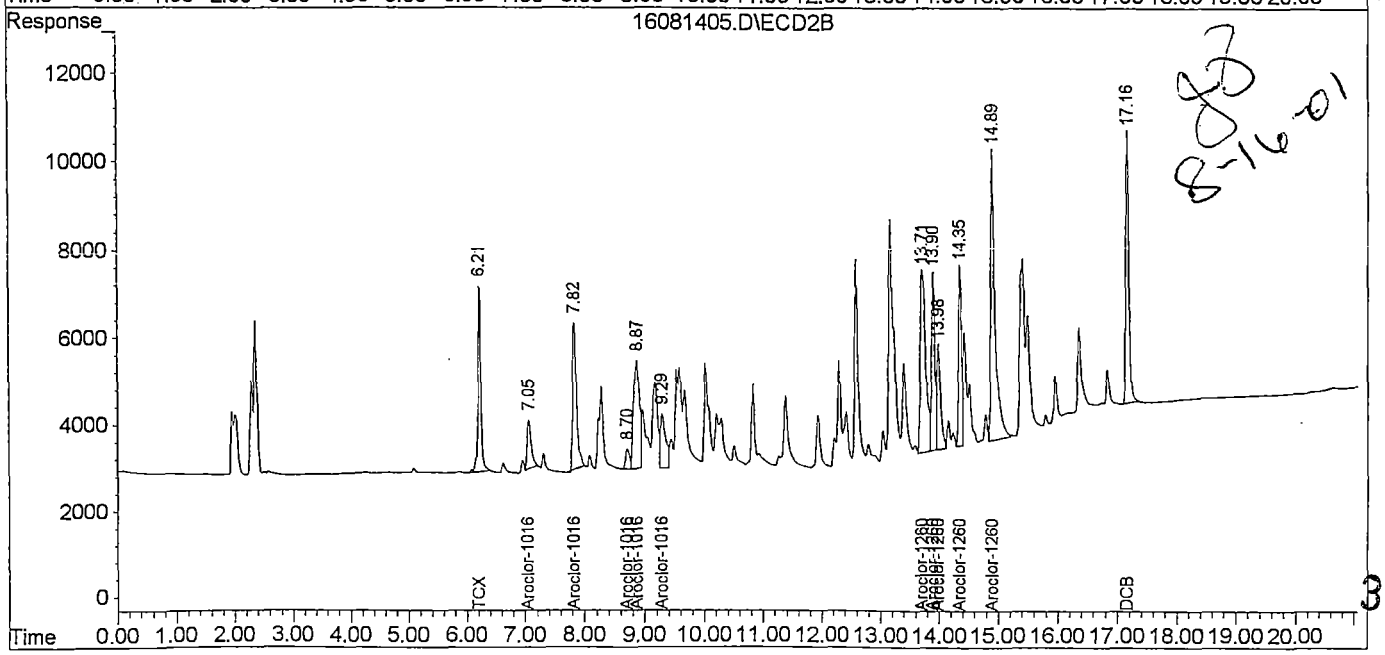
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_14_01\16081405.D\ECD1A.CH Vial: 5
Signal #2 : F:\HPCHEM\HP\16\DATA\08_14_01\16081405.D\ECD2B.CH
Acq On : 14 Aug 2001 11:01 Operator: TLM
Sample : AR1660L3CH Inst : HP_16
Misc : 5-128-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 14 12:12 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_14_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





8-16-01

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Continuing Calibration Report HP_16

Method : F:\HPCHEM\HP\16\DATA\08_14_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Wed Aug 15 10:41:28 2001
Response via : Initial Calibration

Continuing Calibration File: 16081422.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	4.645	4.221	E3	9.1	98
2	L1	Aroclor-1016	140.888	133.334		5.4	103
3	L1	Aroclor-1016 {2}	268.503	257.765		4.0	101
4	L1	Aroclor-1016 {3}	64.290	56.667		11.9	93
5	L1	Aroclor-1016 {4}	121.073	118.930		1.8	103
6	L1	Aroclor-1016 {5}	443.547	417.112		6.0	100
17	L7	Aroclor-1260	589.934	579.952		1.7	107
18	L7	Aroclor-1260 {2}	312.380	317.523		-1.6	109
19	L7	Aroclor-1260 {3}	195.676	205.029		-4.8	112
20	L7	Aroclor-1260 {4}	324.992	322.085		0.9	107
21	L7	Aroclor-1260 {5}	651.635	661.457		-1.5	109
22	S	DCB	8.410	8.332	E3	0.9	108
		Average %Dev					

Signal #2
Continuing Calibration File: 16081422.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	7.071	6.447	E3	8.8	98
2	L1	Aroclor-1016	142.789	123.790		13.3	93
3	L1	Aroclor-1016 {2}	392.639	360.614		8.2	98
4	L1	Aroclor-1016 {3}	56.115	42.460		24.3#	81
5	L1	Aroclor-1016 {4}	441.200	389.166		11.8	91
6	L1	Aroclor-1016 {5}	194.805	187.378		3.8	103
17	L7	Aroclor-1260	721.941	647.673		10.3	98
18	L7	Aroclor-1260 {2}	382.410	357.535		6.5	103
19	L7	Aroclor-1260 {3}	248.673	238.119		4.2	105
20	L7	Aroclor-1260 {4}	348.209	316.802		9.0	100
21	L7	Aroclor-1260 {5}	850.898	798.544		6.2	102
22	S	DCB	10.316	9.337	E3	9.5	99
		Average %Dev					

AVG =19.28

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

16081422.D XPCBH10.M Wed Aug 15 10:41:39 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_14_01\16081422.D\ECD1A.CH Vial: 22
Signal #2 : F:\HPCHEM\HP\16\DATA\08_14_01\16081422.D\ECD2B.CH
Acq On : 14 Aug 2001 21:58 Operator: TLM
Sample : AR1660L3CJ Inst : HP_16
Misc : 5-128-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 15 10:39 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_14_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.21	6.21	84414	128943	18.2	18.2
22)	S DCB	17.82	17.16	166635	186733	19.8	18.1
	Target Compounds:						
2)	L1 Aroclor-1016	7.31	7.05	53334	49516	378.6	346.8
3)	L1 Aroclor-1016 {2}	8.19	7.82	103106	144246	384.0	367.4
4)	L1 Aroclor-1016 {3}	8.65	8.71	22667	16984	352.6	302.7
5)	L1 Aroclor-1016 {4}	8.72	8.86	47572	155667	392.9	352.8
6)	L1 Aroclor-1016 {5}	9.19	9.28	166845	74951	376.2	384.7
	Sum Aroclor-1016			393523	441364	1884.2	1754.4
	Average Aroclor-1016					376.841	350.878
17)	L7 Aroclor-1260	14.16	13.70	231981	259069	393.2	358.9
18)	L7 Aroclor-1260 {2}	14.31	13.90	127009	143014	406.6	374.0
19)	L7 Aroclor-1260 {3}	14.40	13.98	82012	95247	419.1	383.0
20)	L7 Aroclor-1260 {4}	14.82	14.34	128834	126721	396.4	363.9
21)	L7 Aroclor-1260 {5}	15.24	14.89	264583	319418	406.0	375.4
	Sum Aroclor-1260			834418	943469	2021.4	1855.2
	Average Aroclor-1260					404.277	371.033

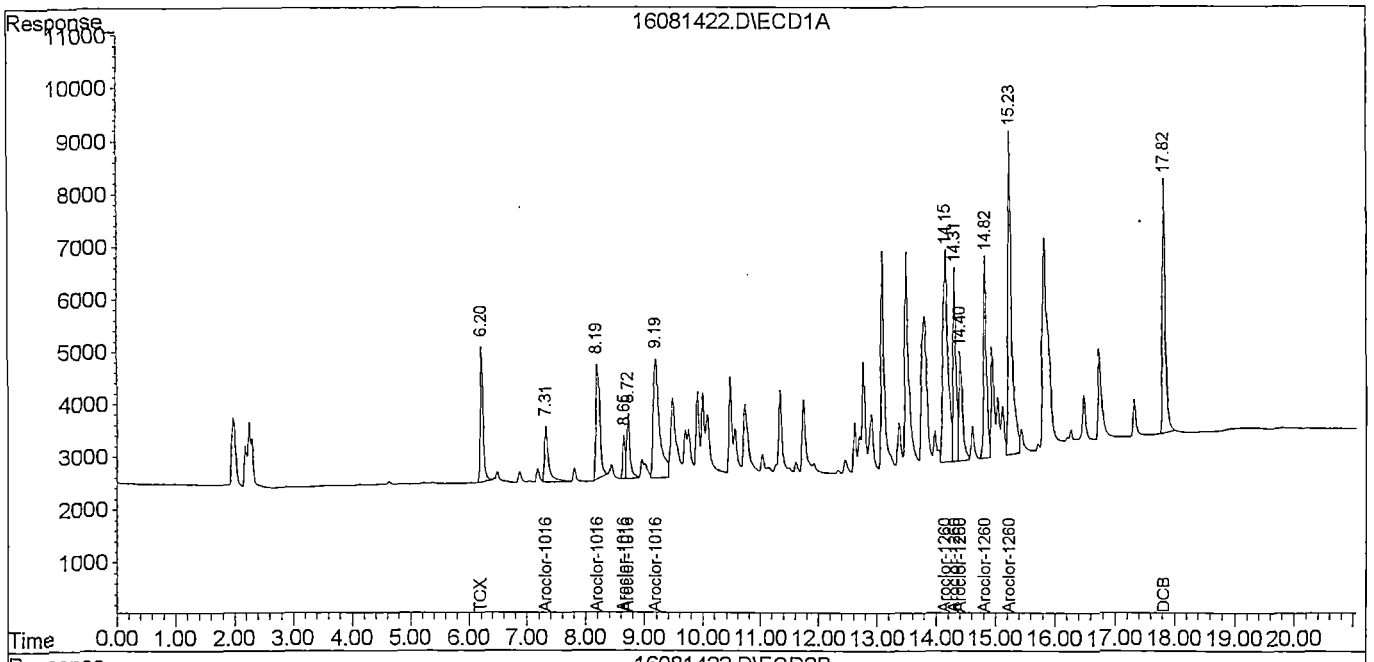
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16081422.D XPCBH10.M Wed Aug 15 10:43:23 2001 Page 1

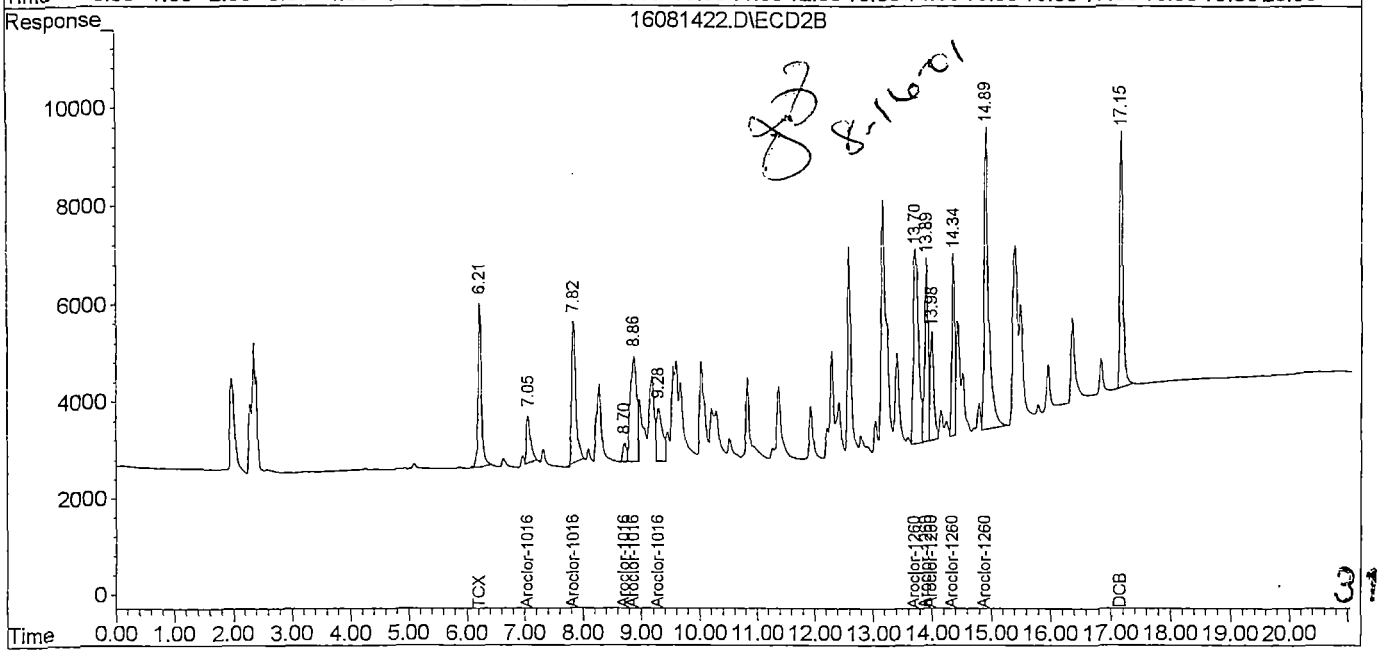
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_14_01\16081422.D\ECD1A.CH Vial: 22
Signal #2 : F:\HPCHEM\HP\16\DATA\08_14_01\16081422.D\ECD2B.CH
Acq On : 14 Aug 2001 21:58 Operator: TLM
Sample : AR1660L3CJ Inst : HP_16
Misc : 5-128-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 15 10:39 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_14_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





8-16-01

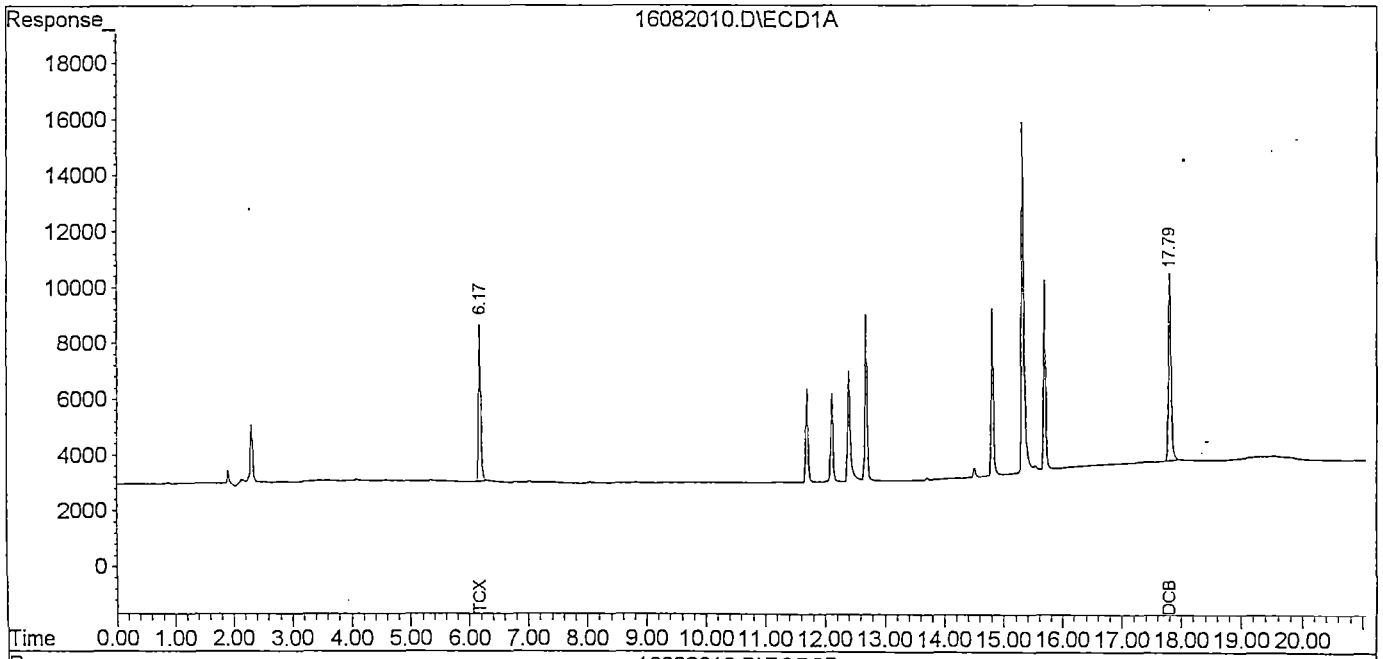
Chromatographic Report

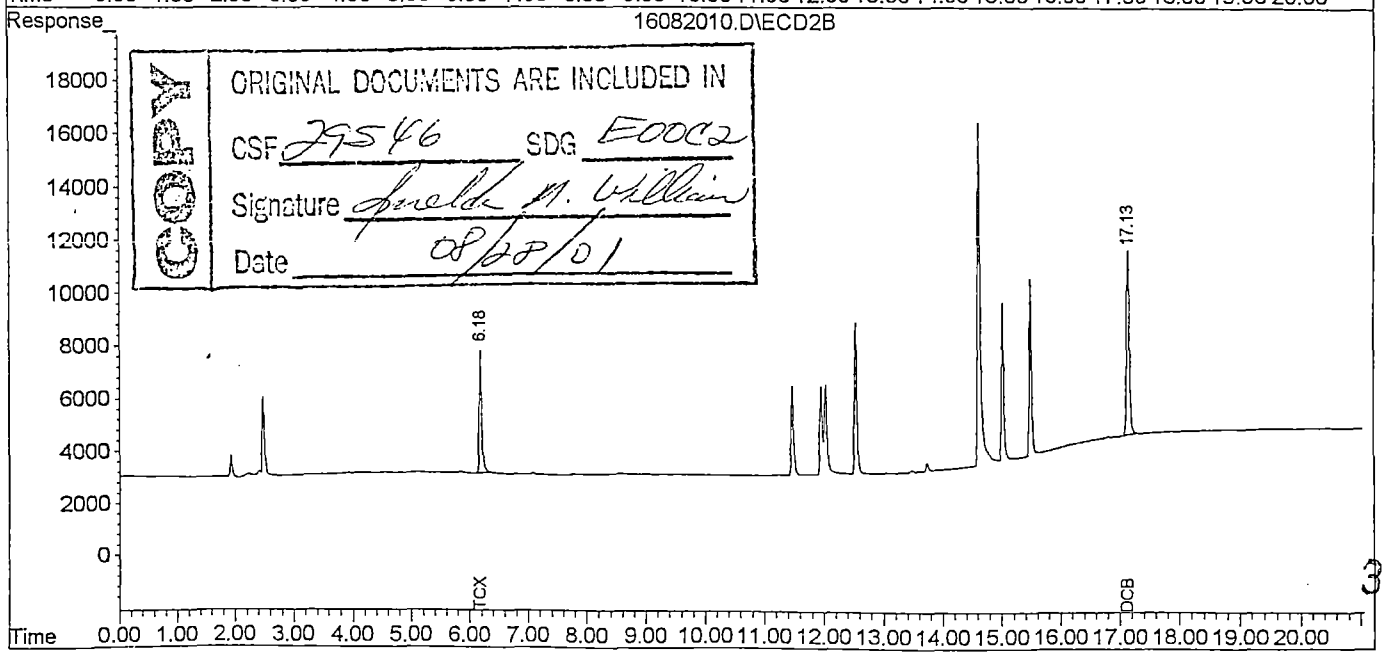
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082010.D\ECD1A.CH Vial: 10
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082010.D\ECD2B.CH
Acq On : 20 Aug 2001 17:58 Operator: TLM
Sample : RESCCE Inst : HP_16
Misc : 5-171-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 24 16:13 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

ok 8-24-01

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





ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29546 SDG E0002
Signature Sandra M. Williams
Date 08/28/01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082010.D\ECD1A.CH Vial: 10
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082010.D\ECD2B.CH
Acq On : 20 Aug 2001 17:58 Operator: TLM
Sample : RESCCE Inst : HP_16
Misc : 5-171-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 24 16:13 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.17	6.18	144153	136440	19.7	18.4
22)	S DCB	17.80	17.13	210433	222417	19.6	20.2

Target Compounds:

316

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

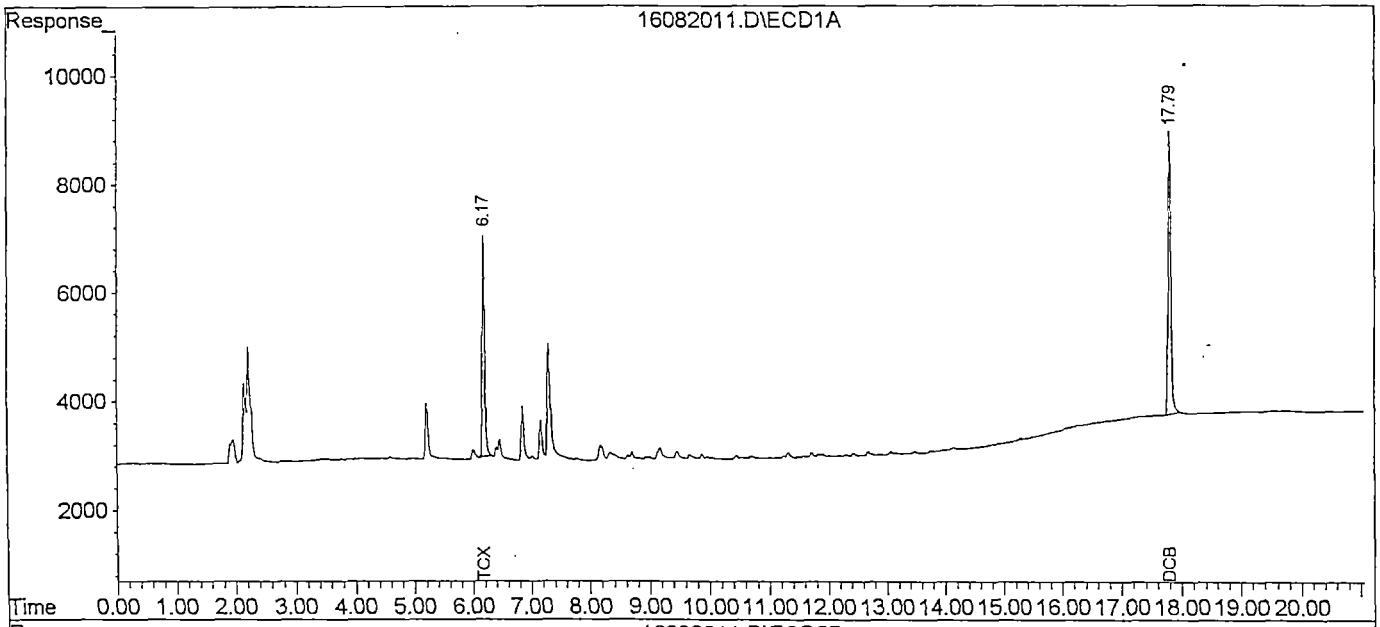
Chromatographic Report

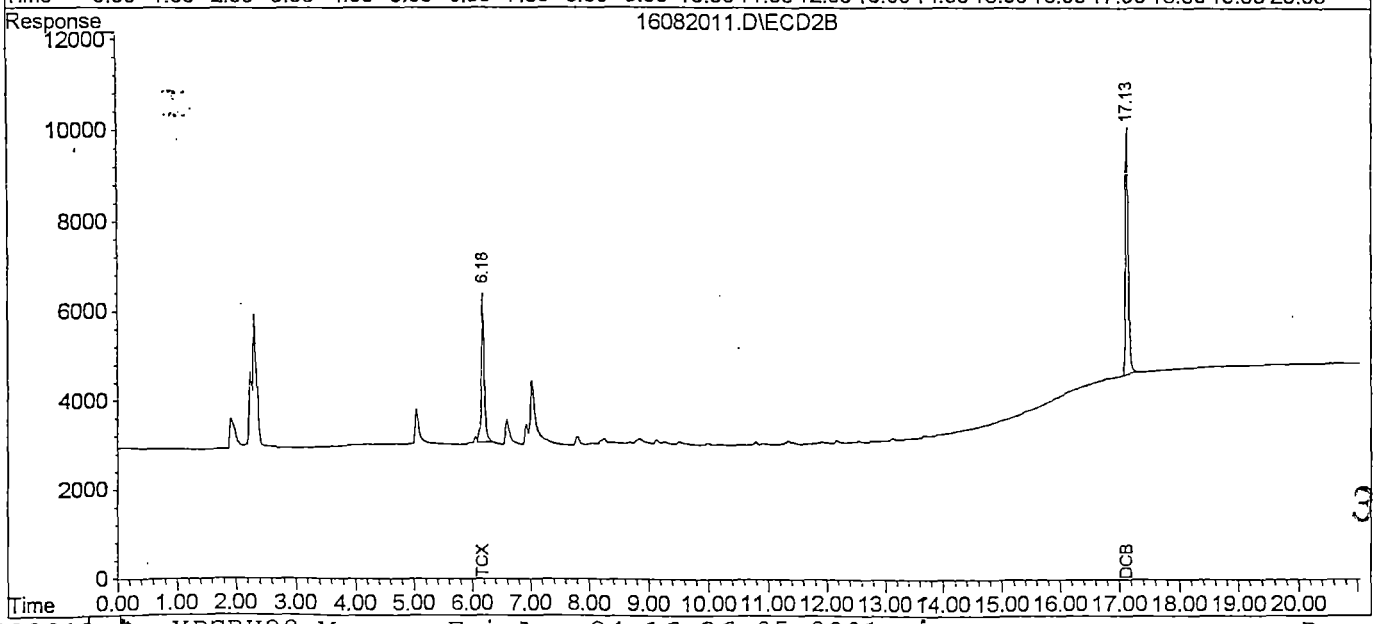
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082011.D\ECD1A.CH Vial: 11
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082011.D\ECD2B.CH
Acq On : 20 Aug 2001 18:23 Operator: TLM
Sample : AR1221L3CE Inst : HP_16
Misc : 5-420-6 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 24 16:31 2001 Quant Results File: XPCBH20.RES
Quant Time: Aug 24 16:34 2001 Quant Results File: xspcbh20.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001

Multi-Component Method : f:\hpchem\hp\16\data\08_20_01\xspcbh20.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

OK
8-24-01 GP





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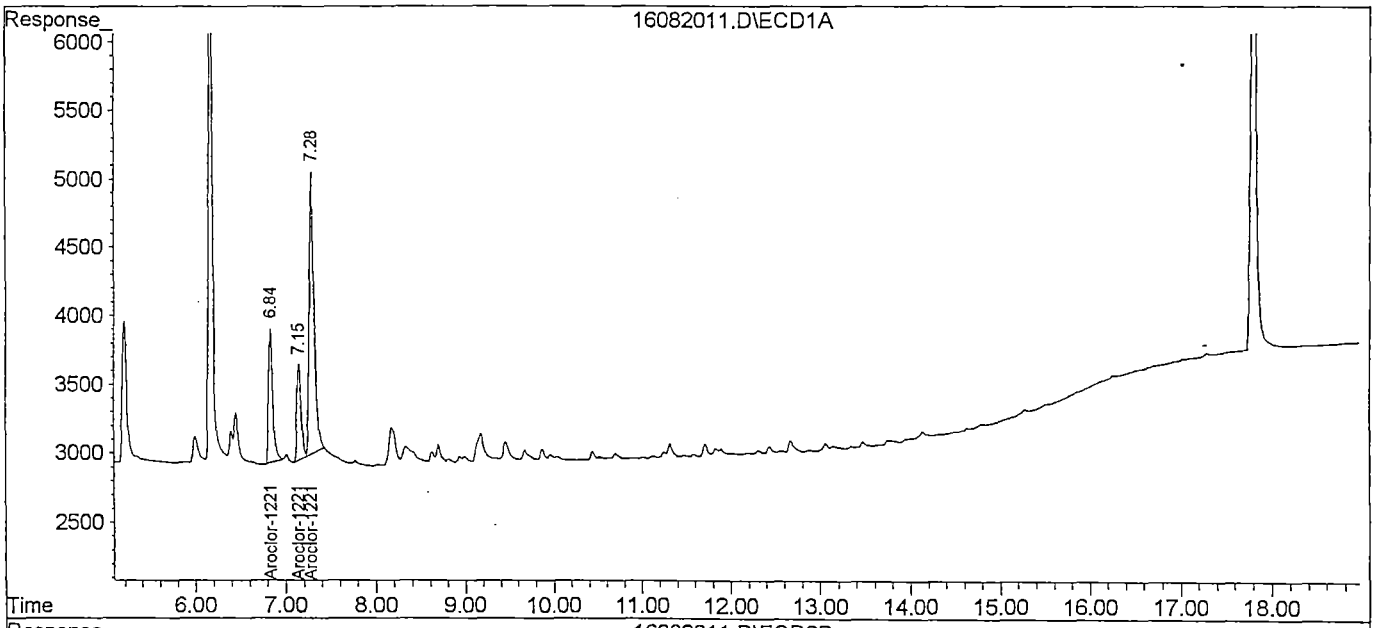
Chromatographic Report

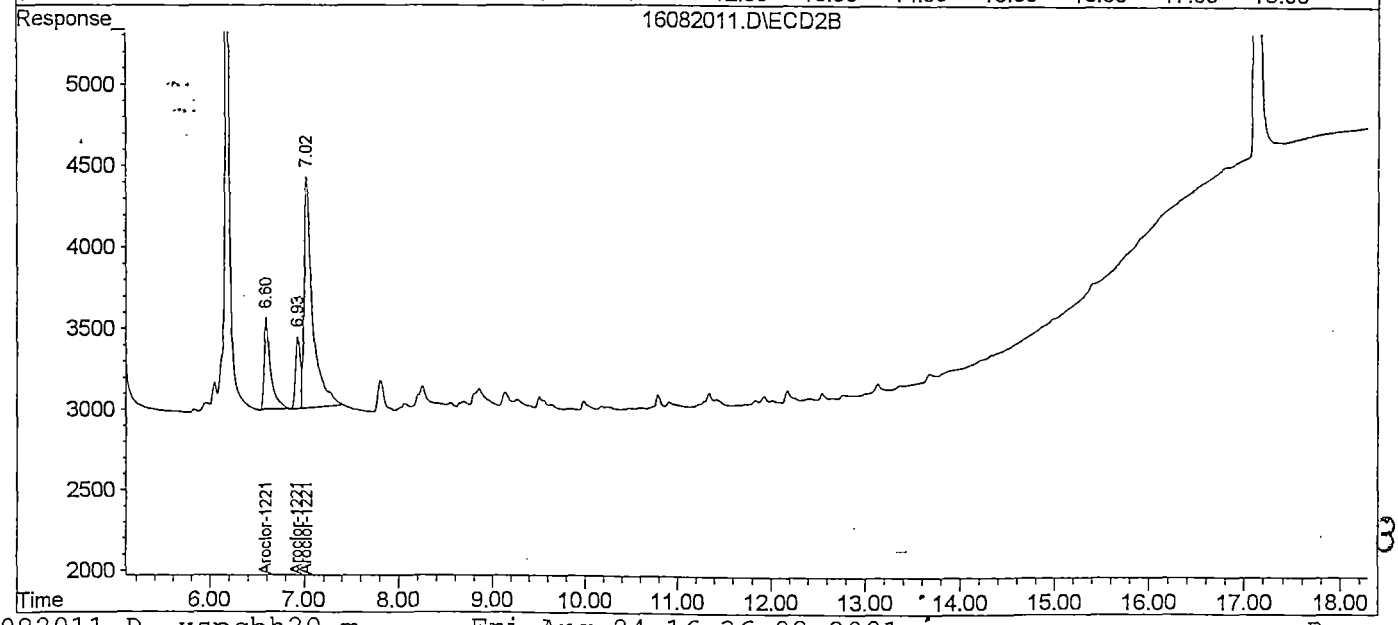
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082011.D\ECD1A.CH Vial: 11
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082011.D\ECD2B.CH
Acq On : 20 Aug 2001 18:23 Operator: TLM
Sample : AR1221L3CE Inst : HP_16
Misc : 5-420-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 24 16:34 2001 Quant Results File: xspcbh20.RES
Quant Time: Aug 24 16:34 2001 Quant Results File: xspcbh20.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001

Multi-Component Method : f:\hpchem\hp\16\data\08_20_01\xspcbh20.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 Signal #2 Info : .32
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

OK 8-24-01





318

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082011.D\ECD1A.CH Vial: 11
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082011.D\ECD2B.CH
Acq On : 20 Aug 2001 18:23 Operator: TLM
Sample : AR1221L3CE Inst : HP_16
Misc : 5-420-6 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 24 16:31 2001 Quant Results File: XPCBH20.RES
Multi Time: Aug 24 16:34 2001 Quant Results File: xspcbh20.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001

Multi-Component Method : f:\hpchem\hp\16\data\08_20_01\xspcbh20.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.18	6.18	113517	115867	15.5	15.6
22)	S DCB	17.80	17.13	166342	175084	15.5	15.9
	Target Compounds:						
	Multi-Component Compounds:						
2)	L2 Aroclor-1221	6.84	6.60	30929	27652	400.0	400.0
3)	L2 Aroclor-1221 {2}	7.15	6.93	21836	15175	400.0	400.0
4)	L2 Aroclor-1221 {3}	7.29	7.02	78671	89934	400.0	400.0
	Sum Aroclor-1221			131436	132761	1200.0	1200.0
	Average Aroclor-1221					400.000	400.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16082011.D xspcbh20.m Fri Aug 24 16:36:02 2001 Page 1

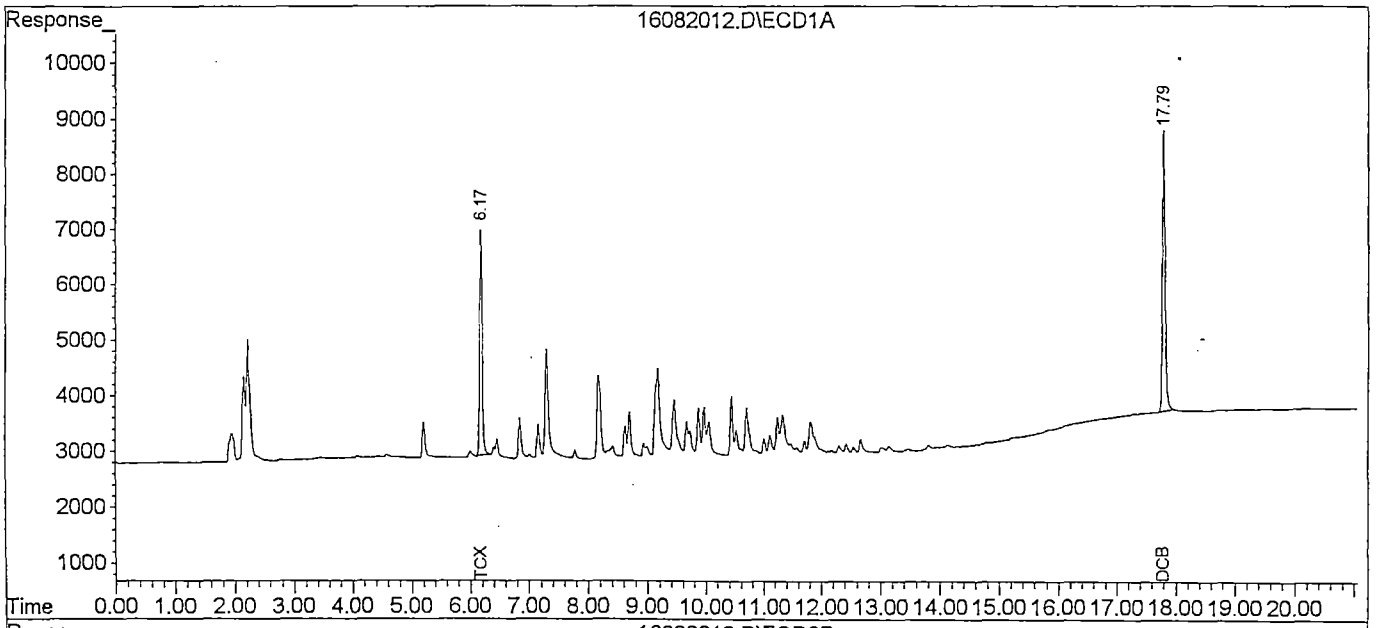
Chromatographic Report

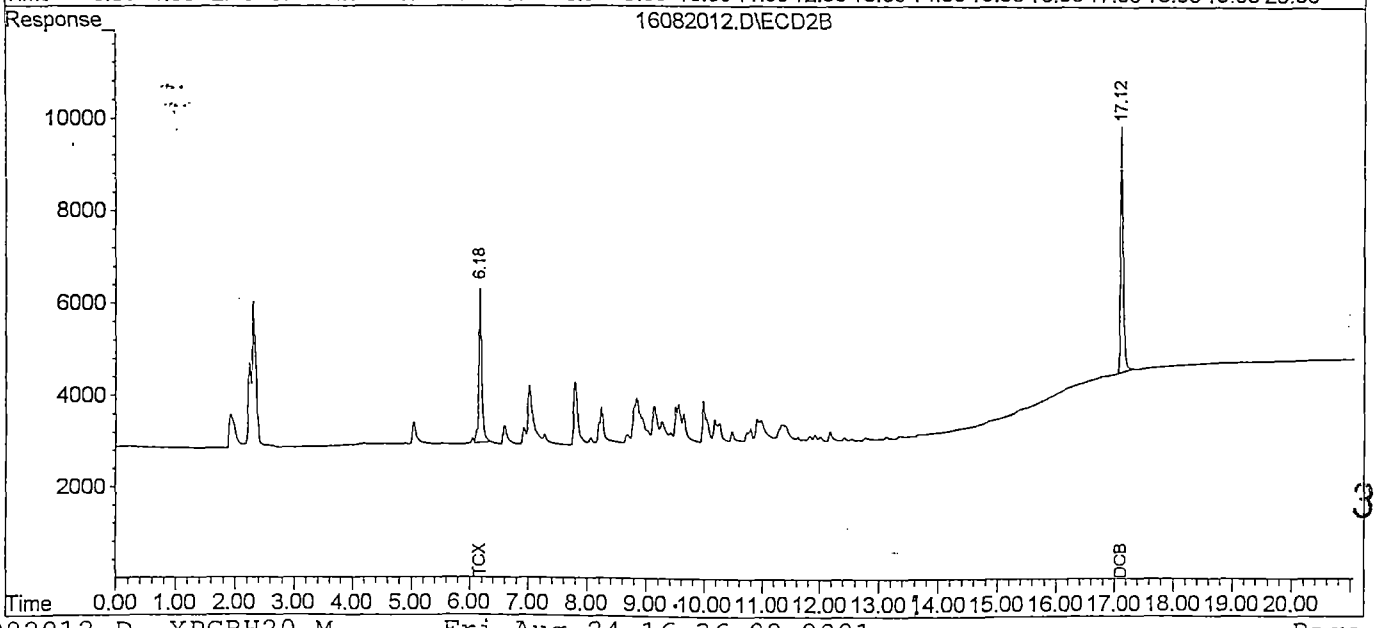
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082012.D\ECD1A.CH Vial: 12
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082012.D\ECD2B.CH
Acq On : 20 Aug 2001 18:48 Operator: TLM
Sample : AR1232L3CE Inst : HP_16
Misc : 5-422-6 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 24 16:32 2001 Quant Results File: XPCBH20.RES
Quant Time: Aug 24 16:34 2001 Quant Results File: xspcbh20.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001

Multi-Component Method : f:\hpchem\hp\16\data\08_20_01\xspcbh20.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

OK 8-24-01





320

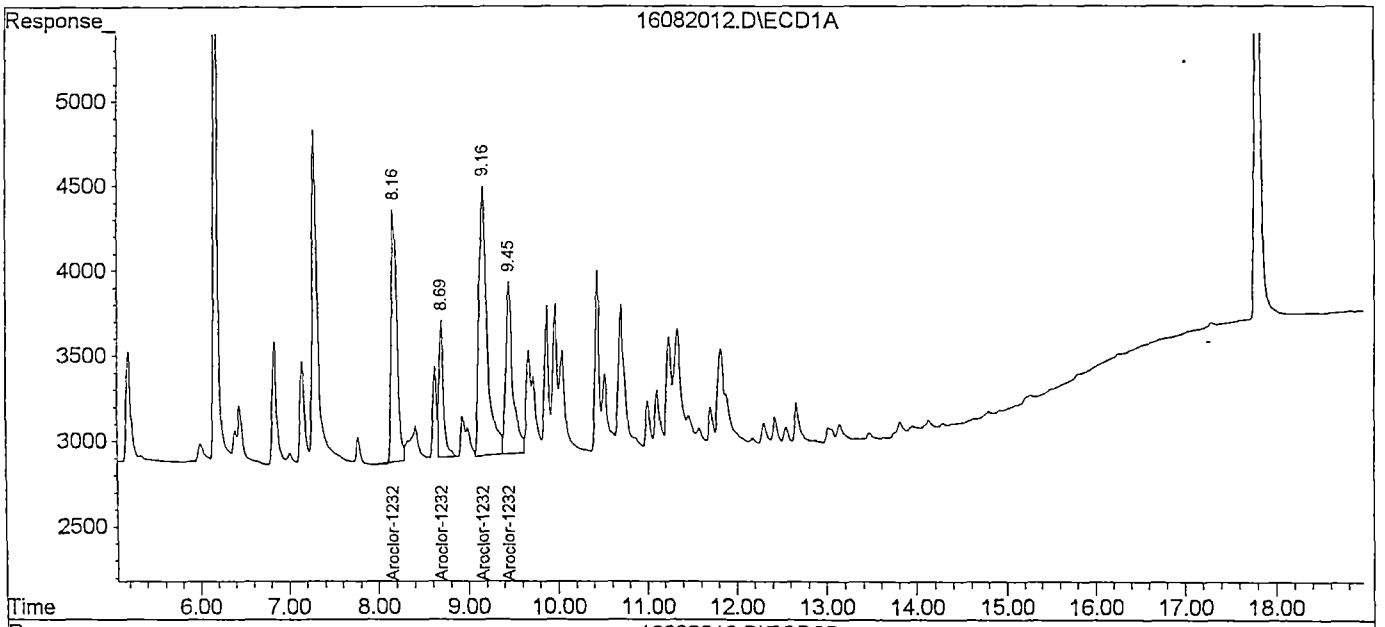
Chromatographic Report

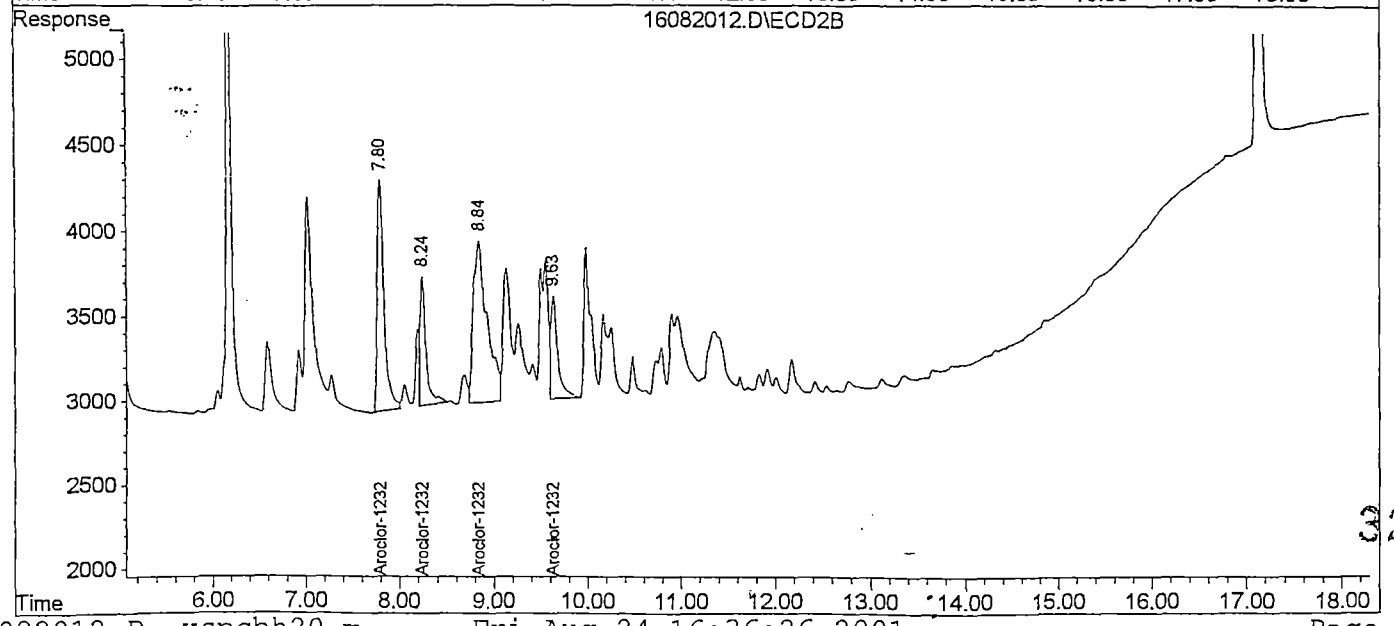
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082012.D\ECD1A.CH Vial: 12
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082012.D\ECD2B.CH
Acq On : 20 Aug 2001 18:48 Operator: TLM
Sample : AR1232L3CE Inst : HP_16
Misc : 5-422-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 24 16:34 2001 Quant Results File: xspcbh20.RES
Quant Time: Aug 24 16:34 2001 Quant Results File: xspcbh20.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001

Multi-Component Method : f:\hpchem\hp\16\data\08_20_01\xspcbh20.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 Signal #2 Info : .32
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

OK 8-24-01





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082012.D\ECD1A.CH Vial: 12
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082012.D\ECD2B.CH
Acq On : 20 Aug 2001 18:48 Operator: TLM
Sample : AR1232L3CE Inst : HP_16
Misc : 5-422-6 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 24 16:32 2001 Quant Results File: XPCBH20.RES
Multi Time: Aug 24 16:34 2001 Quant Results File: xspcbh20.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001

Multi-Component Method : f:\hpchem\hp\16\data\08_20_01\xspcbh20.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.17	6.18	114177	118138	15.6	15.9
22)	S DCB	17.79	17.12	163022	173030	15.2	15.7
	Target Compounds:						
	Multi-Component Compounds:						
5)	L3 Aroclor-1232	8.17	7.80	67813	67958	400.0	400.0
6)	L3 Aroclor-1232 {2}	8.69	8.25	27983	33253	400.0	400.0
7)	L3 Aroclor-1232 {3}	9.16	8.84	100029	97521	400.0	400.0
8)	L3 Aroclor-1232 {4}	9.45	9.64	54283	30477	400.0	400.0
	Sum Aroclor-1232			250108	229210	1600.0	1600.0
	Average Aroclor-1232					400.000	400.000

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

Response Factor Report HP_16

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

OK 8-24-01

Calibration Files
L1 =16082013.D L2 =16082014.D L3 =16082015.D
L4 =16082016.D L5 =16082017.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
7) Aroclor-1242	263.1	272.9	264.8	271.7	249.5	264.4	3.53
8) Aroclor-1242 {2}	170.6	177.7	169.5	178.9	163.9	172.1	3.61
9) Aroclor-1242 {3}	89.4	99.2	98.5	107.5	101.7	99.2	6.59
10) Aroclor-1242 {4}	216.7	243.2	223.2	237.7	219.0	227.9	5.18
11) Aroclor-1242 {5}	117.1	131.9	130.9	147.7	141.5	133.8	8.71
Average %RSD							

Signal #2 Calibration Files
L1 =16082013.D L2 =16082014.D L3 =16082015.D
L4 =16082016.D L5 =16082017.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
30) Aroclor-1242 #2	219.4	227.9	217.7	229.1	212.8	221.4	3.15
31) Aroclor-1242 {2} #2	132.0	141.5	137.7	147.3	139.3	139.6	4.01
32) Aroclor-1242 {3} #2	125.7	127.6	119.2	119.9	105.4	119.5	7.29
33) Aroclor-1242 {4} #2	239.4	247.4	236.3	247.6	228.2	239.8	3.40
34) Aroclor-1242 {5} #2	31.8	49.0	51.0	59.0	58.0	49.8	21.98
Average %RSD							

(#) = Out of Range

XPCBH20.M Wed Aug 22 18:30:32 2001

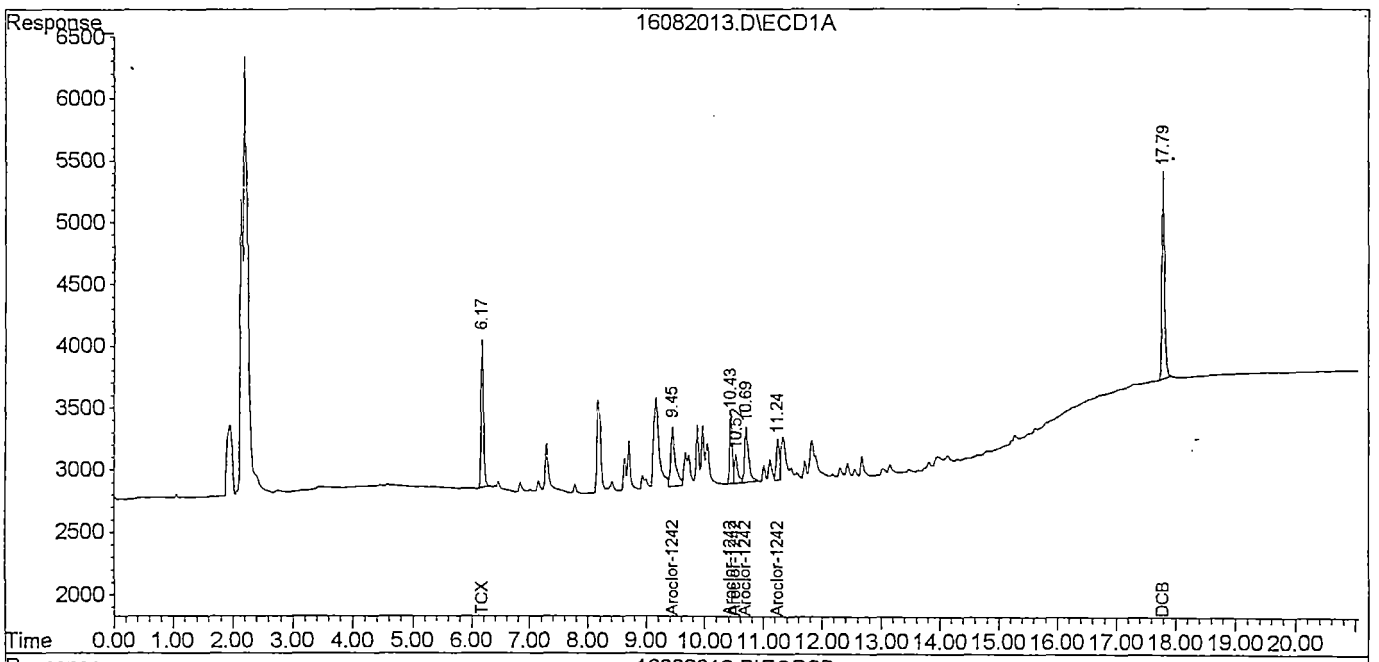
Chromatographic Report

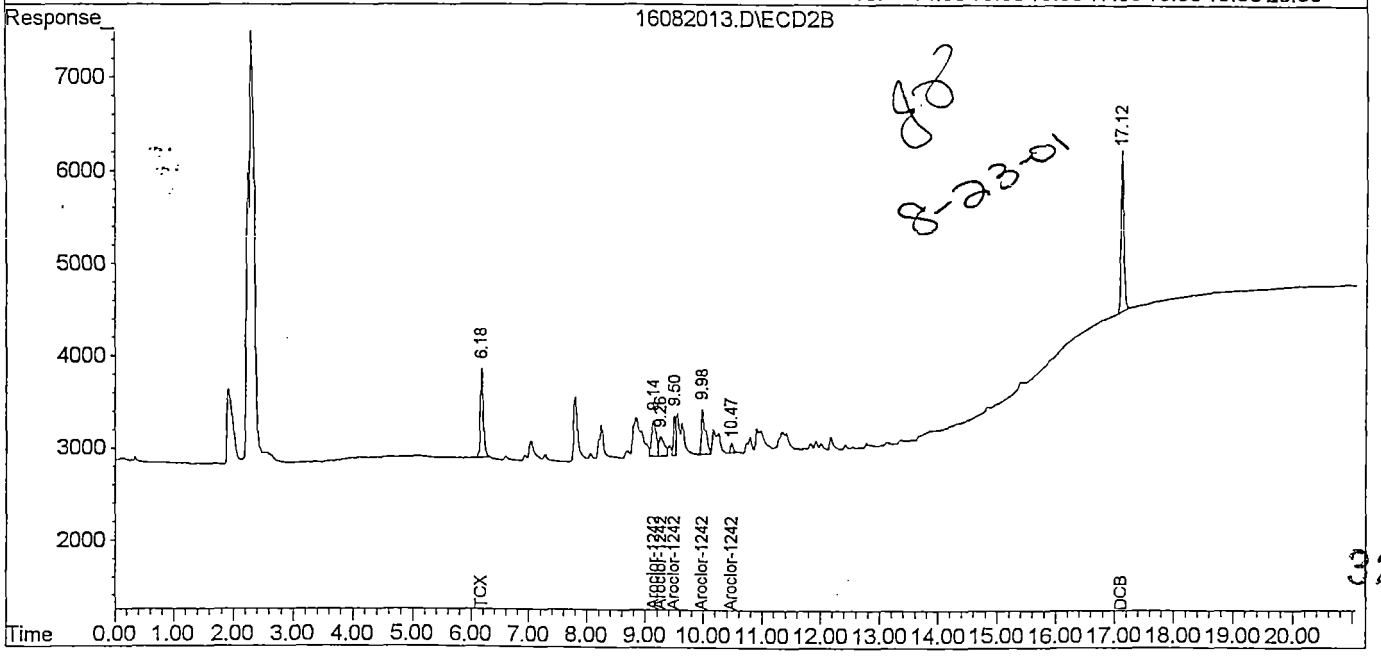
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082013.D\ECD1A.CH Vial: 13
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082013.D\ECD2B.CH
Acq On : 20 Aug 2001 19:12 Operator: TLM
Sample : AR1242L1CE Inst : HP_16
Misc : 5-11-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 22 18:28 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_18_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

OK 8-24-01

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





8-23-01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082013.D\ECD1A.CH Vial: 13
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082013.D\ECD2B.CH
Acq On : 20 Aug 2001 19:12 Operator: TLM
Sample : AR1242L1CE Inst : HP_16
Misc : 5-11-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 22 18:28 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_18_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	6.17	6.18	33716	32011	4.597	4.316	
22)	S DCB	17.79	17.13	52679	54475	4.912	4.950	
	Target Compounds:							
7)	L4 Aroclor-1242	9.45	9.14	26309	21938	99.5	99.1	
8)	L4 Aroclor-1242 {2}	10.43	9.26	17061	13201	171.9	94.6	#
9)	L4 Aroclor-1242 {3}	10.52	9.51	8942	12567	90.1	105.1	
10)	L4 Aroclor-1242 {4}	10.69	9.98	21666	23941	95.0	99.8	
11)	L4 Aroclor-1242 {5}	11.24	10.47	11715	3180	87.5	63.9	#
	Sum Aroclor-1242			85693	74828	544.1	462.6	
	Average Aroclor-1242					108.818	92.511	

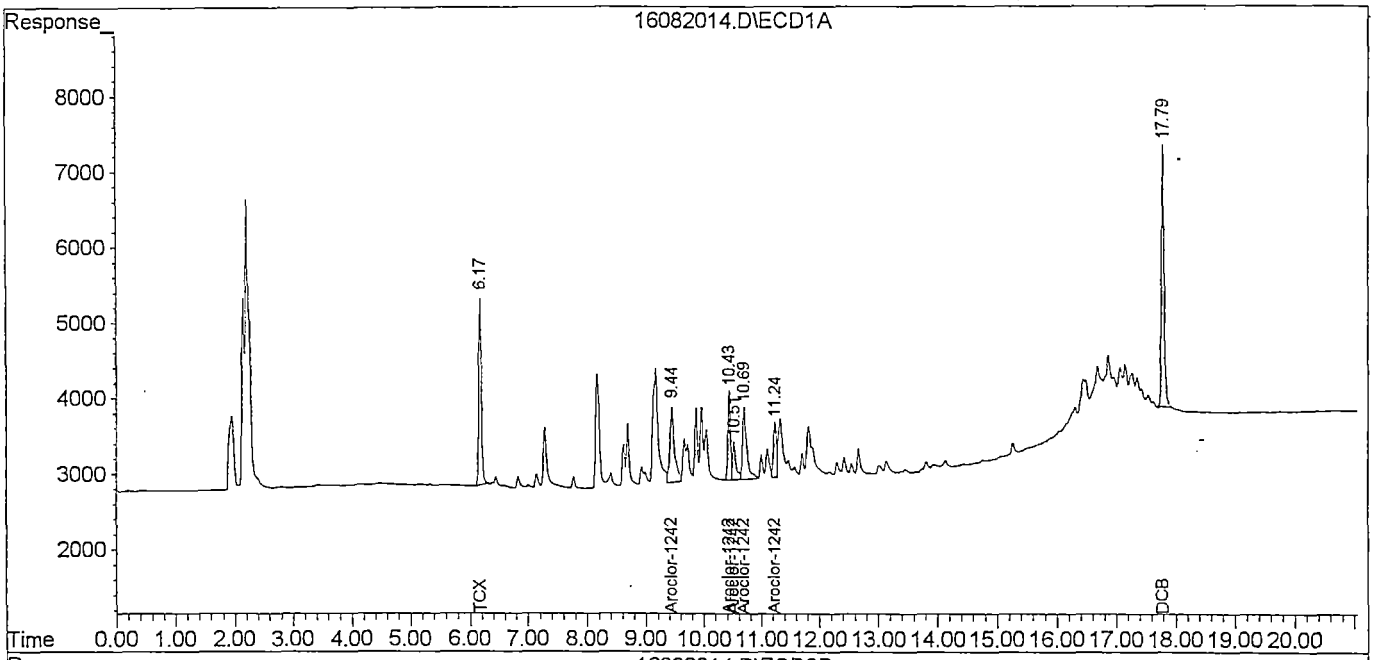
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16082013.D XPCBH20.M Wed Aug 22 18:28:56 2001 Page 1

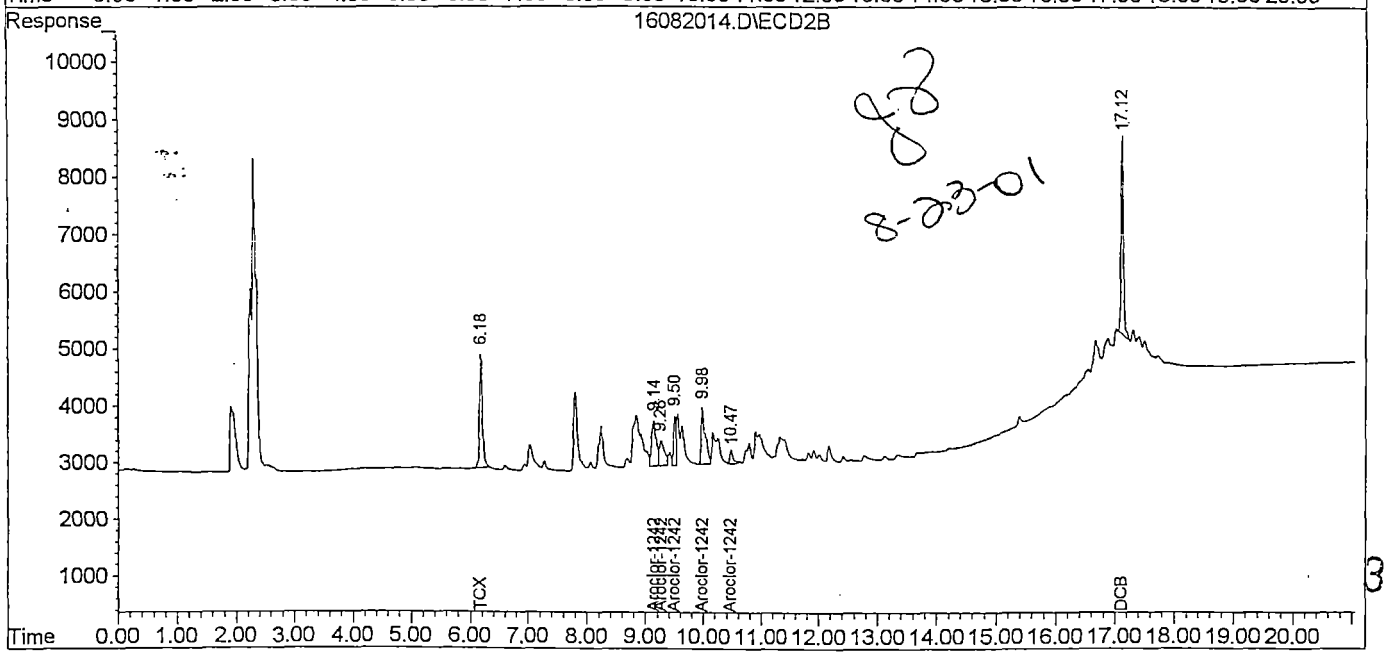
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082014.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082014.D\ECD2B.CH
Acq On : 20 Aug 2001 19:37 Operator: TLM
Sample : AR1242L2CE Inst : HP_16
Misc : 5-10-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 22 18:29 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





8-23-01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082014.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082014.D\ECD2B.CH
Acq On : 20 Aug 2001 19:37 Operator: TLM
Sample : AR1242L2CE Inst : HP_16
Misc : 5-10-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 22 18:29 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	6.17	6.18	72054	68473	10.2	9.700	
22)	S DCB	17.79	17.12	105910	103059	10.4	9.824	
	Target Compounds:							
7)	L4 Aroclor-1242	9.44	9.14	54570	45585	206.4	205.9	
8)	L4 Aroclor-1242 {2}	10.43	9.26	35541	28299	307.7	202.8	#
9)	L4 Aroclor-1242 {3}	10.52	9.50	19838	25518	199.9	213.5	
10)	L4 Aroclor-1242 {4}	10.69	9.98	48633	49486	213.4	206.4	
11)	L4 Aroclor-1242 {5}	11.24	10.47	26377	9792	197.1	196.8	
	Sum Aroclor-1242			184959	158680	1124.5	1025.3	
	Average Aroclor-1242					224.895	205.056	

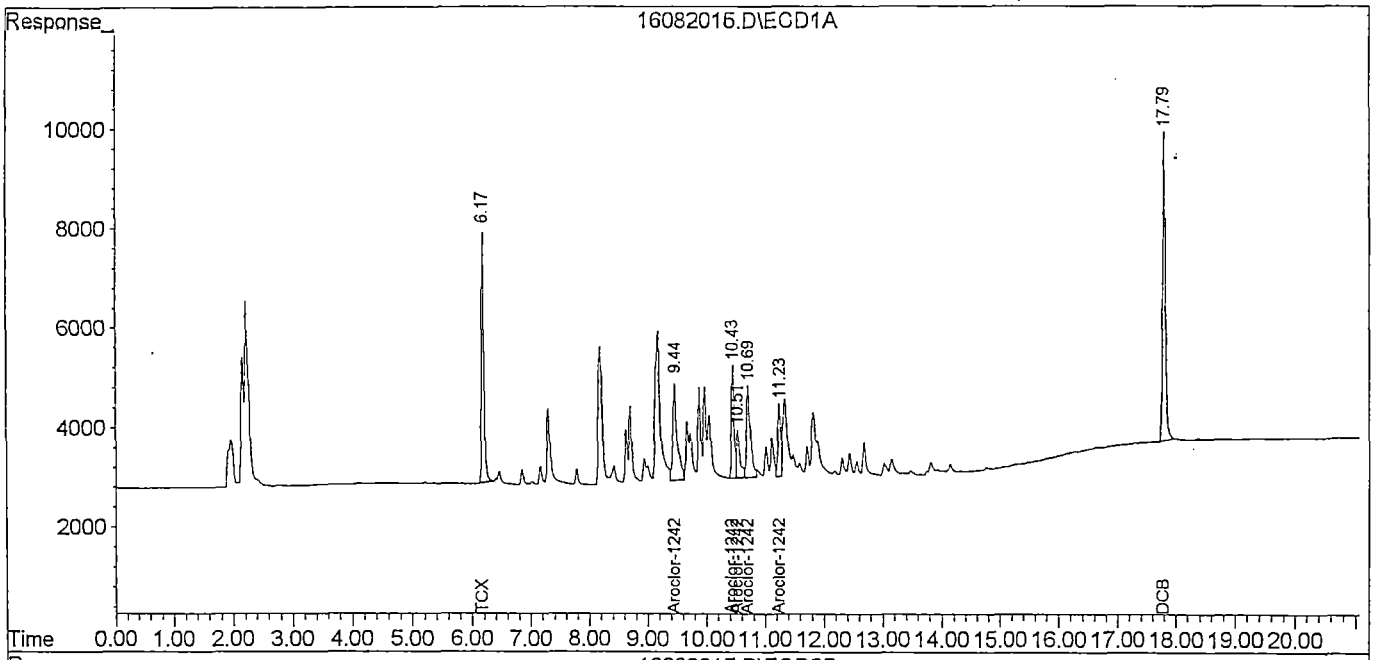
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16082014.D XPCBH20.M Wed Aug 22 18:29:09 2001 Page 1

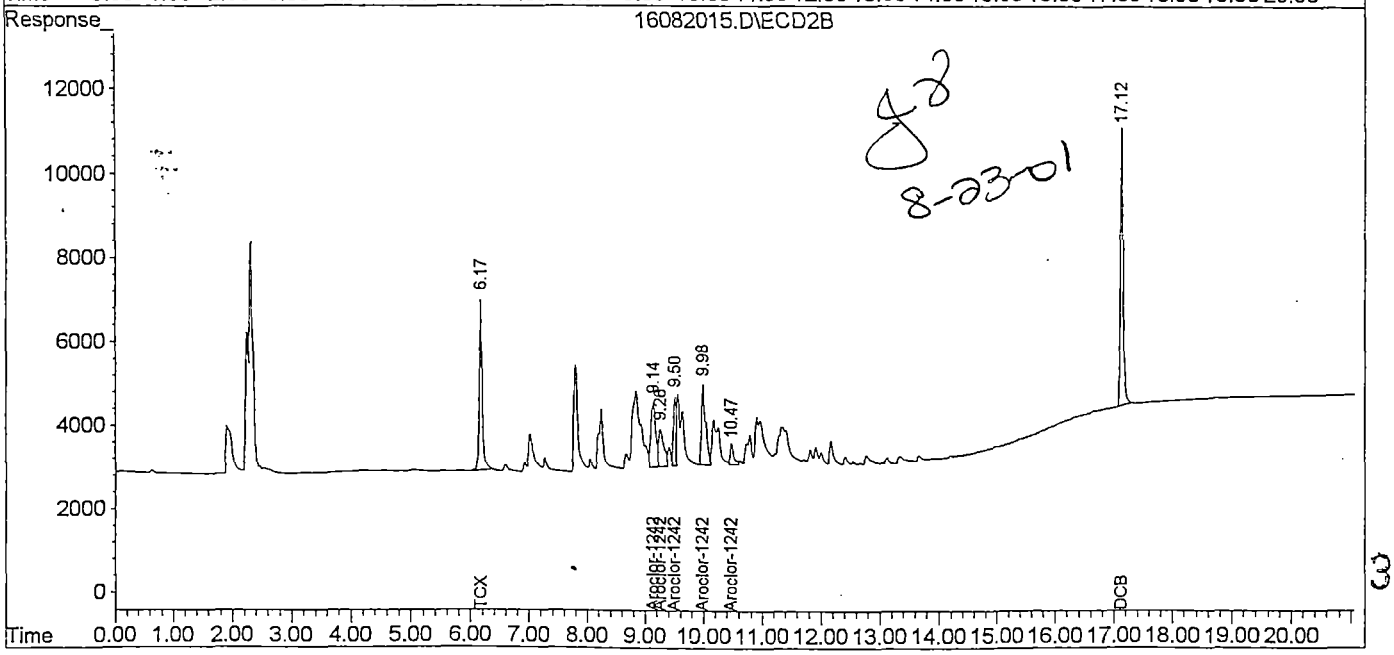
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082015.D\ECD1A.CH Vial: 15
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082015.D\ECD2B.CH
Acq On : 20 Aug 2001 20:02 Operator: TLM
Sample : AR1242L3CE Inst : HP_16
Misc : 5-9-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 22 18:29 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





8-23-01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082015.D\ECD1A.CH Vial: 15
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082015.D\ECD2B.CH
Acq On : 20 Aug 2001 20:02 Operator: TLM
Sample : AR1242L3CE Inst : HP_16
Misc : 5-9-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 22 18:29 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.17	6.18	141871	140827	20.2	20.2
22)	S DCB	17.79	17.12	198586	210559	19.9	20.7
	Target Compounds:						
7)	L4 Aroclor-1242	9.44	9.14	105920	87070	400.6	393.3
8)	L4 Aroclor-1242 {2}	10.43	9.26	67784	55063	516.7	394.5
9)	L4 Aroclor-1242 {3}	10.52	9.50	39391	47679	396.9	398.8
10)	L4 Aroclor-1242 {4}	10.69	9.98	89294	94509	391.7	394.1
11)	L4 Aroclor-1242 {5}	11.24	10.47	52362	20398	391.2	410.0
	Sum Aroclor-1242			354752	304718	2097.2	1990.7
	Average Aroclor-1242					419.438	398.144

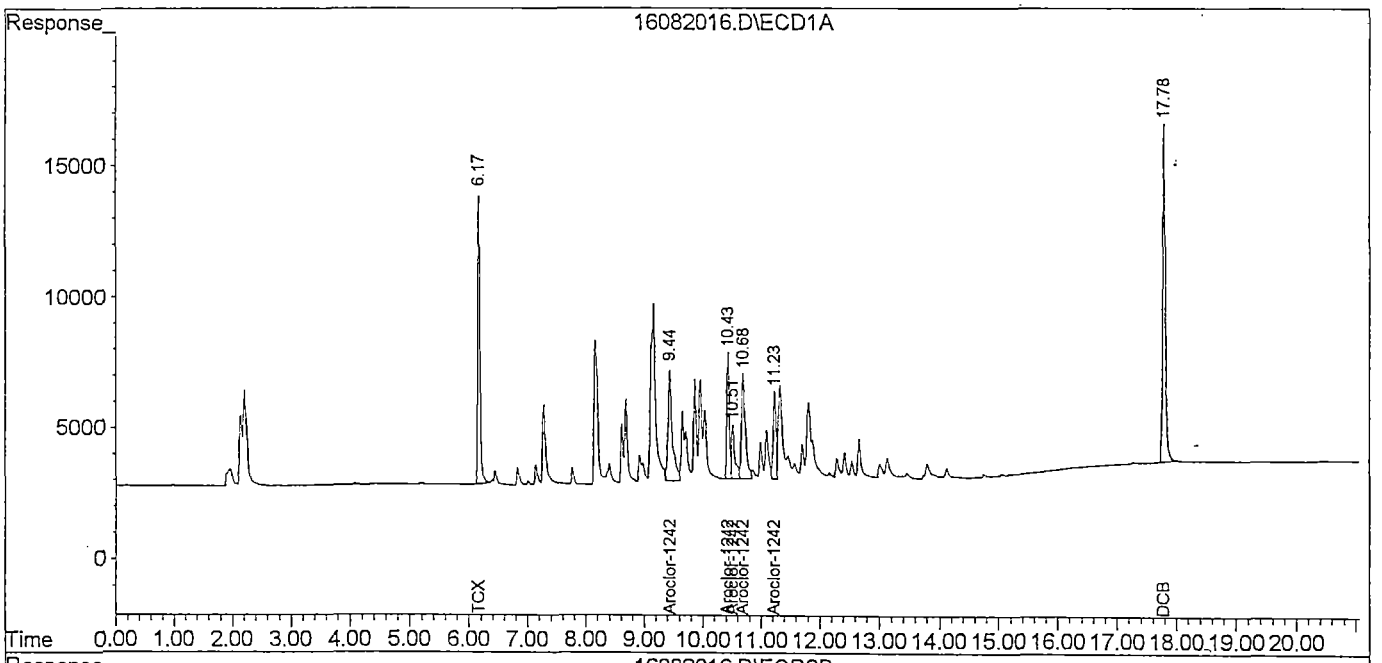
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16082015.D XPCBH20.M Wed Aug 22 18:29:22 2001 Page 1

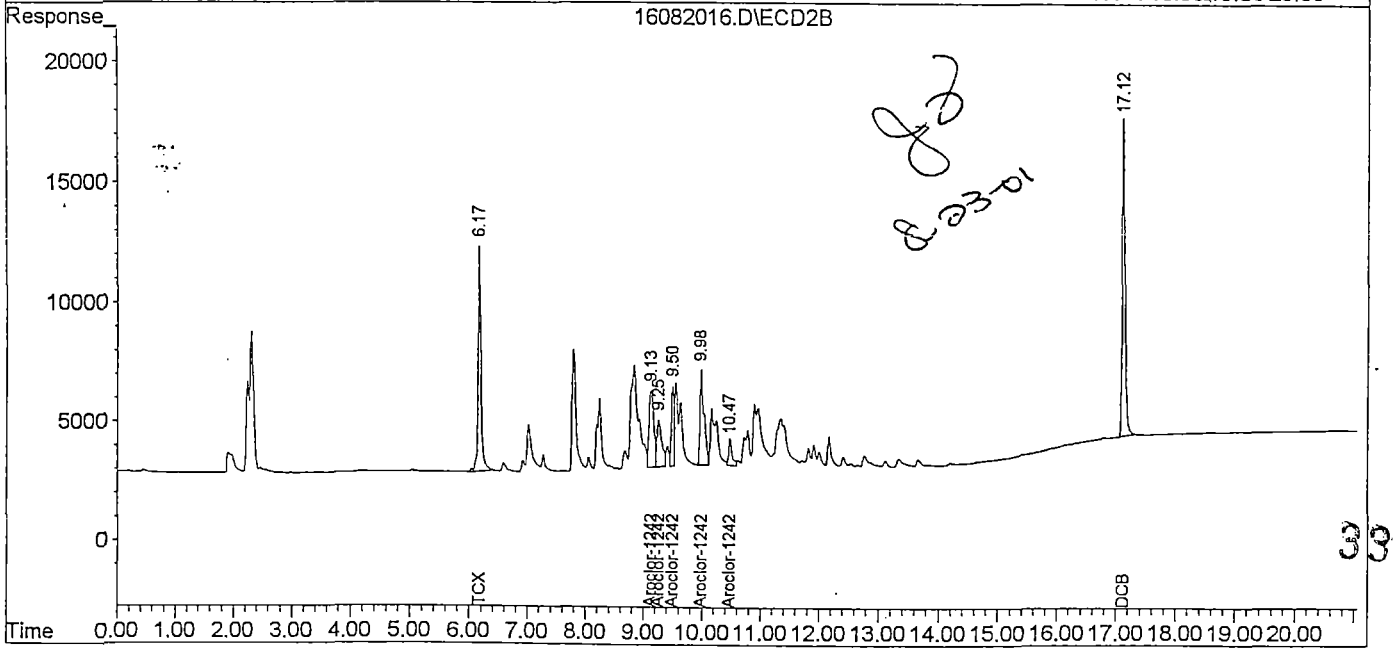
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082016.D\ECD1A.CH Vial: 16
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082016.D\ECD2B.CH
Acq On : 20 Aug 2001 20:26 Operator: TLM
Sample : AR1242L4CE Inst : HP_16
Misc : 5-8-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 22 18:29 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





8-23-01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082016.D\ECD1A.CH Vial: 16
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082016.D\ECD2B.CH
Acq On : 20 Aug 2001 20:26 Operator: TLM
Sample : AR1242L4CE Inst : HP_16
Misc : 5-8-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 22 18:29 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.17	6.18	294071	316957	41.1	45.2
22)	S DCB	17.79	17.12	418334	432982	41.8	42.0
	Target Compounds:						
7)	L4 Aroclor-1242	9.44	9.13	217347	183310	822.1	828.0
8)	L4 Aroclor-1242 {2}	10.43	9.26	143148	117876	984.6	844.6
9)	L4 Aroclor-1242 {3}	10.51	9.50	85984	95937	866.4	802.5
10)	L4 Aroclor-1242 {4}	10.69	9.98	190162	198095	834.2	826.1
11)	L4 Aroclor-1242 {5}	11.23	10.47	118190	47220	883.1	949.0
	Sum Aroclor-1242			754831	642438	4390.4	4250.2
	Average Aroclor-1242					878.077	850.038

JT 8/31/01

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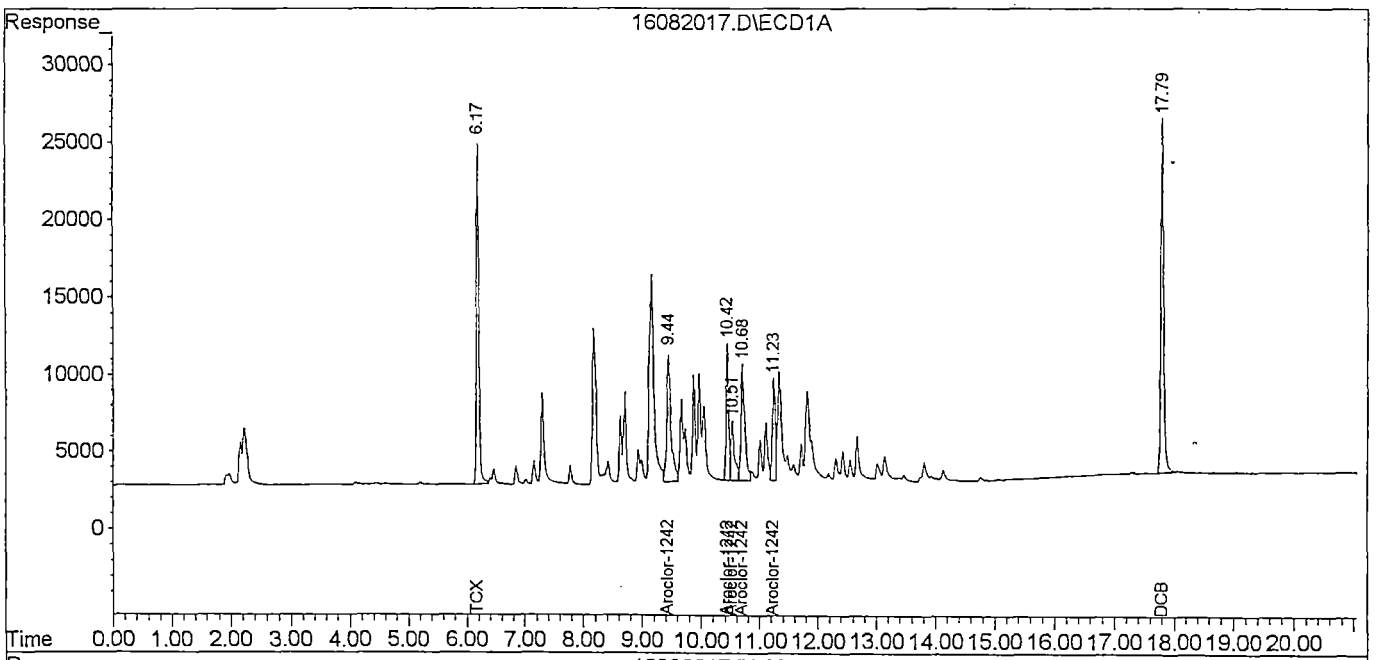
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

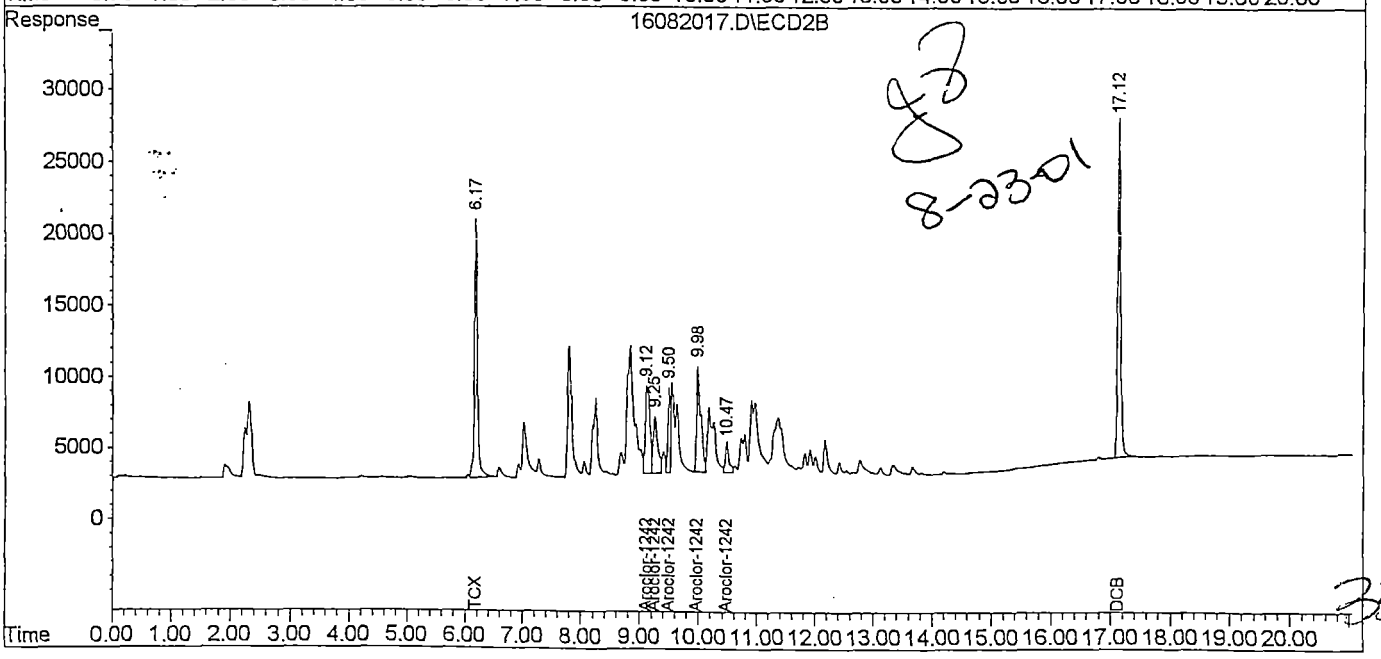
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082017.D\ECD1A.CH Vial: 17
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082017.D\ECD2B.CH
Acq On : 20 Aug 2001 20:51 Operator: TLM
Sample : AR1242L5CE Inst : HP_16
Misc : 5-7-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 22 18:29 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





8-23-01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082017.D\ECD1A.CH Vial: 17
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082017.D\ECD2B.CH
Acq On : 20 Aug 2001 20:51 Operator: TLM
Sample : AR1242L5CE Inst : HP_16
Misc : 5-7-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 22 18:29 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.17	6.18	618060	618404	87.0 E	87.4 E
22)	S DCB	17.79	17.12	744060	782317	73.9 E	75.6 E
	Target Compounds:						
7)	L4 Aroclor-1242	9.44	9.12	399150	340493	1509.8 E	1538.0 E
8)	L4 Aroclor-1242 {2}	10.43	9.25	262272	222924	1642.5 E	1597.3 E
9)	L4 Aroclor-1242 {3}	10.51	9.50	162679	168583	1639.1 E	1410.2
10)	L4 Aroclor-1242 {4}	10.69	9.98	350337	365192	1536.9	1522.9
11)	L4 Aroclor-1242 {5}	11.23	10.47	226430	92811	1691.8 E	1865.3
	Sum Aroclor-1242			1400868	1190003	8020.1	7933.6
	Average Aroclor-1242					1604.028	1586.723

333

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

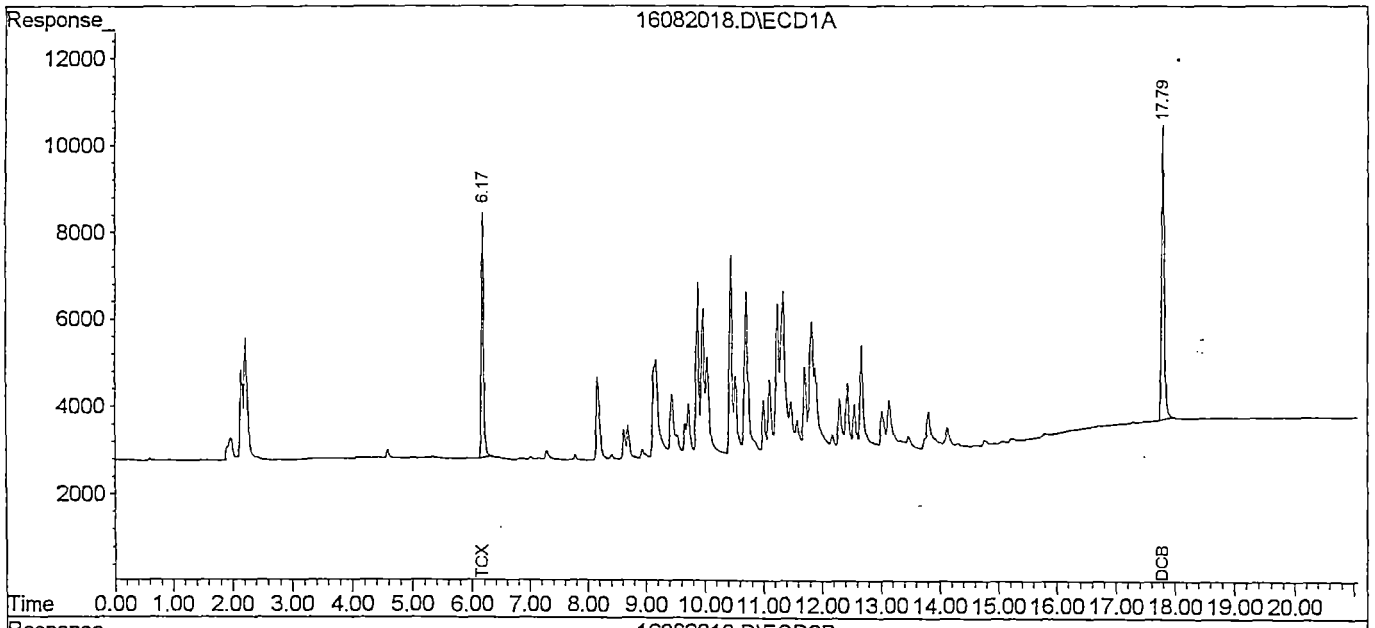
Chromatographic Report

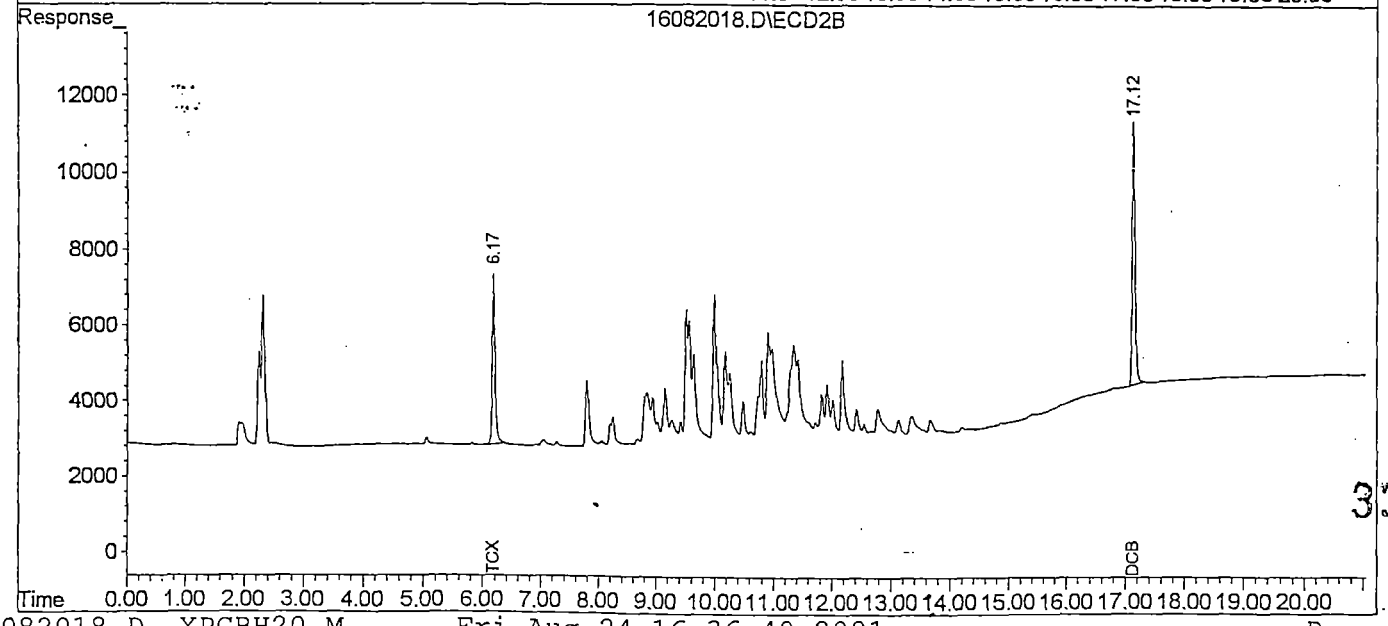
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082018.D\ECD1A.CH Vial: 18
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082018.D\ECD2B.CH
Acq On : 20 Aug 2001 21:16 Operator: TLM
Sample : AR1248L3CE Inst : HP_16
Misc : 5-424-6 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 24 16:32 2001 Quant Results File: XPCBH20.RES
Quant Time: Aug 24 16:35 2001 Quant Results File: xspcbh20.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001

Multi-Component Method : f:\hpchem\hp\16\data\08_20_01\xspcbh20.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

OK 8-24-01 RB





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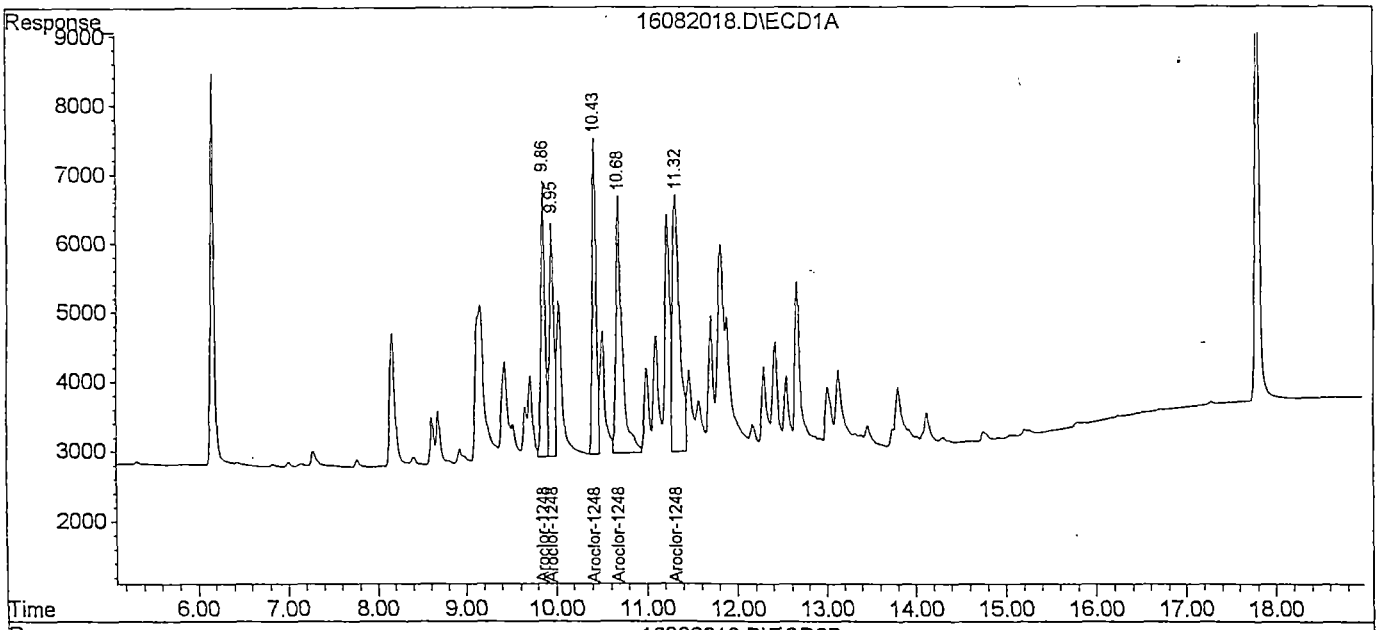
Chromatographic Report

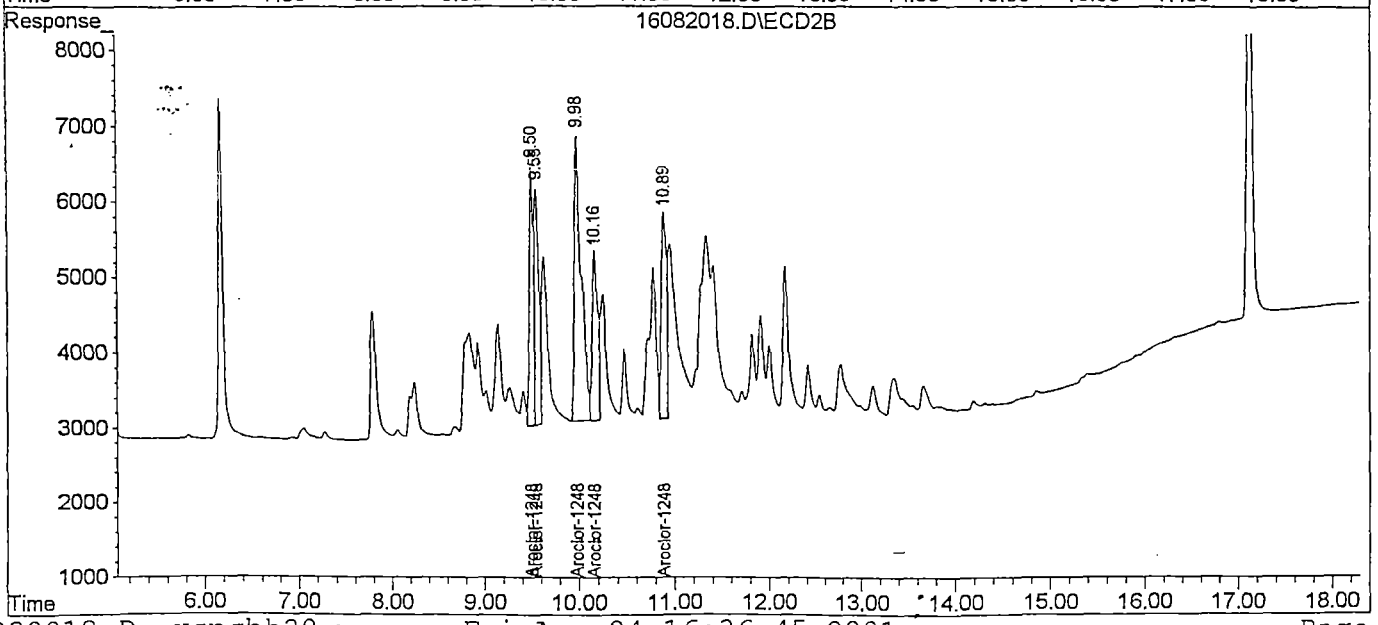
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082018.D\ECD1A.CH Vial: 18
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082018.D\ECD2B.CH
Acq On : 20 Aug 2001 21:16 Operator: TLM
Sample : AR1248L3CE Inst : HP_16
Misc : 5-424-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 24 16:35 2001 Quant Results File: xspcbh20.RES
Quant Time: Aug 24 16:35 2001 Quant Results File: xspcbh20.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001

Multi-Component Method : f:\hpchem\hp\16\data\08_20_01\xspcbh20.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 Signal #2 Info : .32
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

OK 8-24-01





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082018.D\ECD1A.CH Vial: 18
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082018.D\ECD2B.CH
Acq On : 20 Aug 2001 21:16 Operator: TLM
Sample : AR1248L3CE Inst : HP_16
Misc : 5-424-6 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 24 16:32 2001 Quant Results File: XPCBH20.RES
Multi Time: Aug 24 16:35 2001 Quant Results File: xspcbh20.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001

Multi-Component Method : f:\hpchem\hp\16\data\08_20_01\xspcbh20.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.17	6.18	153286	144155	20.9	19.4
22)	S DCB	17.79	17.12	220036	226951	20.5	20.6
	Target Compounds:						
	Multi-Component Compounds:						
14)	L5 Aroclor-1248	9.86	9.50	119938	97681	400.0	400.0
15)	L5 Aroclor-1248 {2}	9.95	9.55	110169	105663	400.0	400.0
16)	L5 Aroclor-1248 {3}	10.43	9.98	136196	183089	400.0	400.0
17)	L5 Aroclor-1248 {4}	10.69	10.16	175170	88754	400.0	400.0
18)	L5 Aroclor-1248 {5}	11.32	10.90	200580	100350	400.0	400.0
	Sum Aroclor-1248			742052	575537	2000.0	2000.0
	Average Aroclor-1248					400.000	400.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16082018.D xspcbh20.m Fri Aug 24 16:36:37 2001 Page 1

Response Factor Report HP_16

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

Calibration Files
L1 =16082019.D L2 =16082020.D L3 =16082021.D
L4 =16082022.D L5 =16082023.D

OK 8-24-01

Compound	L1	L2	L3	L4	L5	Avg	%RSD
12) Aroclor-1254	511.9	379.2	399.2	382.8	373.0	409.2	14.22
13) Aroclor-1254 {2}	326.2	248.7	277.4	277.7	282.5	282.5	9.86
14) Aroclor-1254 {3}	712.3	535.6	587.4	580.8	582.7	599.8	11.05
15) Aroclor-1254 {4}	358.8	271.2	296.2	290.0	287.1	300.6	11.24
16) Aroclor-1254 {5}	373.2	282.6	320.2	318.1	310.1	320.9	10.25
Average %RSD							

Signal #2 Calibration Files
L1 =16082019.D L2 =16082020.D L3 =16082021.D
L4 =16082022.D L5 =16082023.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
35) Aroclor-1254 #2	637.9	497.9	552.2	556.8	564.9	561.9	8.90
36) Aroclor-1254 {2} #2	270.3	225.1	263.6	269.8	268.6	259.5	7.47
37) Aroclor-1254 {3} #2	306.6	272.4	343.8	364.3	389.4	335.3	13.84
38) Aroclor-1254 {4} #2	473.1	384.9	428.6	430.8	424.5	428.4	7.30
39) Aroclor-1254 {5} #2	539.9	447.4	497.4	506.0	520.3	502.2	6.89
Average %RSD							

(#) = Out of Range

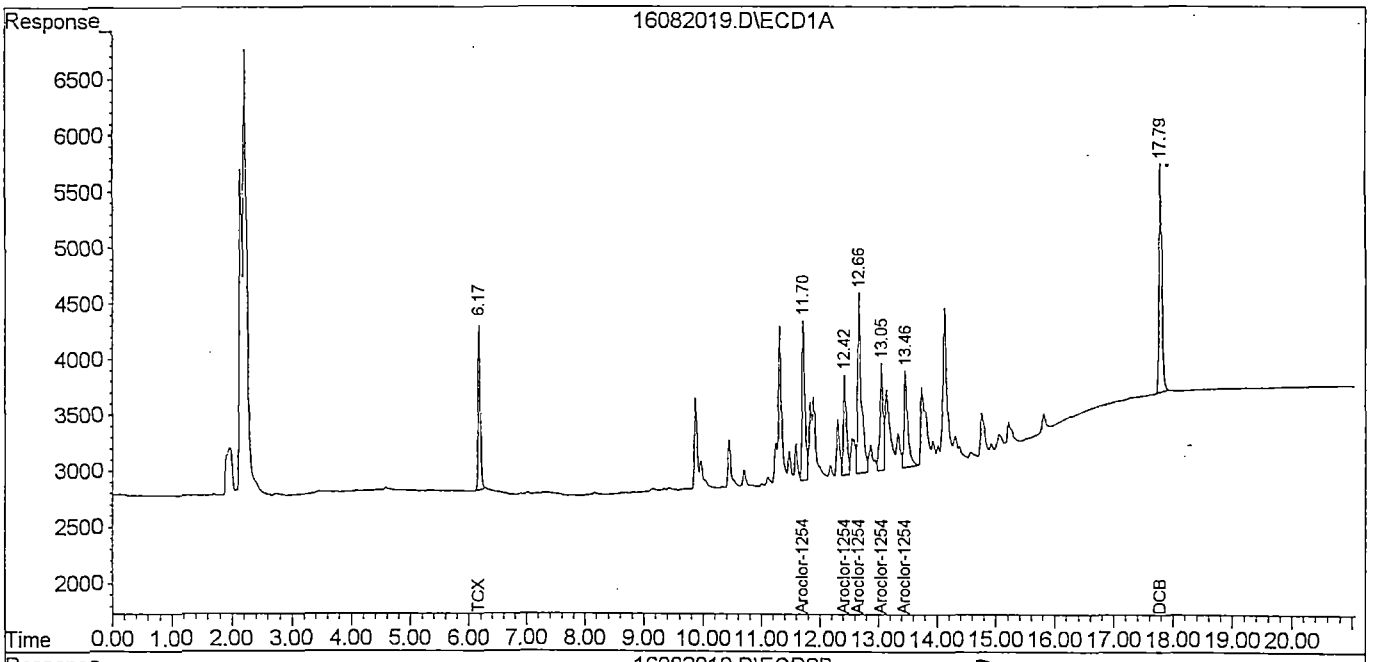
XPCBH20.M Tue Aug 21 14:31:21 2001

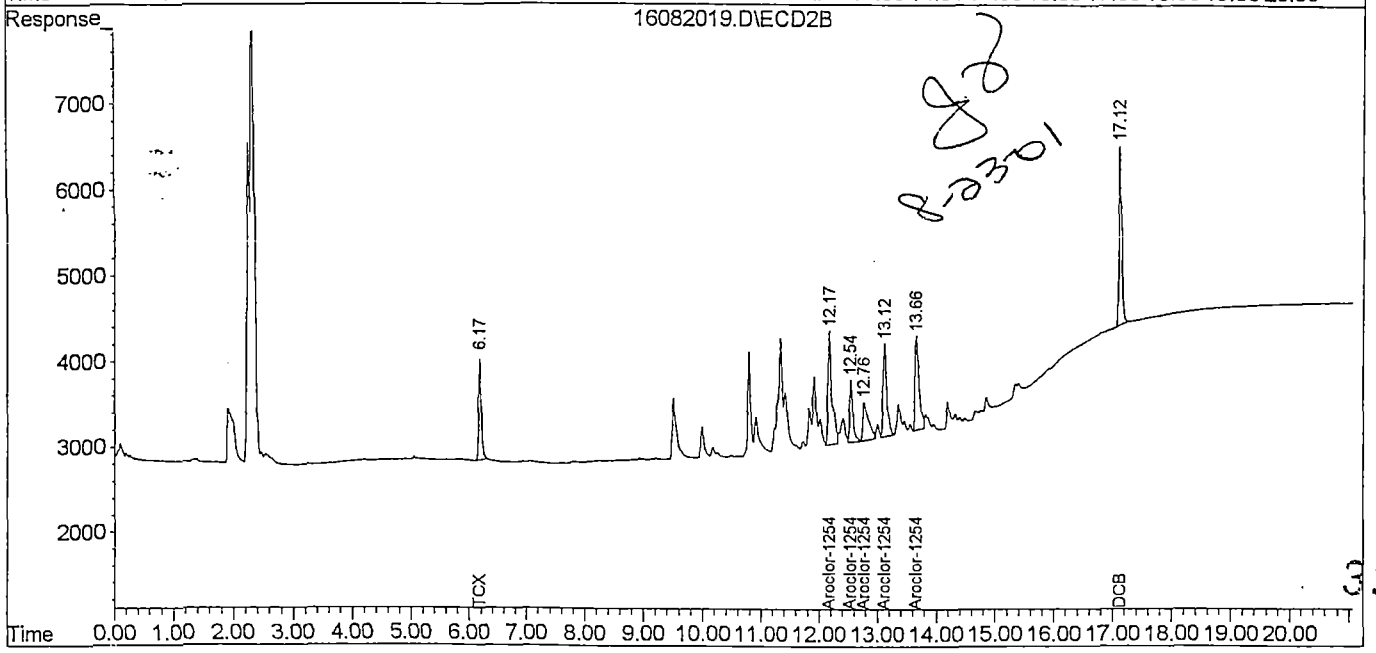
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082019.D\ECD1A.CH Vial: 19
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082019.D\ECD2B.CH
Acq On : 20 Aug 2001 21:40 Operator: TLM
Sample : AR1254L1CE Inst : HP_16
Misc : 5-6-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 21 14:30 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082019.D\ECD1A.CH Vial: 19
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082019.D\ECD2B.CH
Acq On : 20 Aug 2001 21:40 Operator: TLM
Sample : AR1254L1CE Inst : HP_16
Misc : 5-6-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 21 14:30 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.17	6.18	40536	37481	5.611	5.214
22)	S DCB	17.79	17.12	64519	64450	6.348	6.158
	Target Compounds:						
12)	L6 Aroclor-1254	11.70	12.17	51187	63793	123.9	116.6
13)	L6 Aroclor-1254 {2}	12.42	12.54	32621	27031	116.2	107.1
14)	L6 Aroclor-1254 {3}	12.66	12.77	71228	30662	118.8	92.5
15)	L6 Aroclor-1254 {4}	13.05	13.12	35879	47310	120.6	114.2
16)	L6 Aroclor-1254 {5}	13.46	13.66	37321	53991	117.5	111.9
	Sum Aroclor-1254			228236	222788	597.1	542.3
	Average Aroclor-1254					119.419	108.468

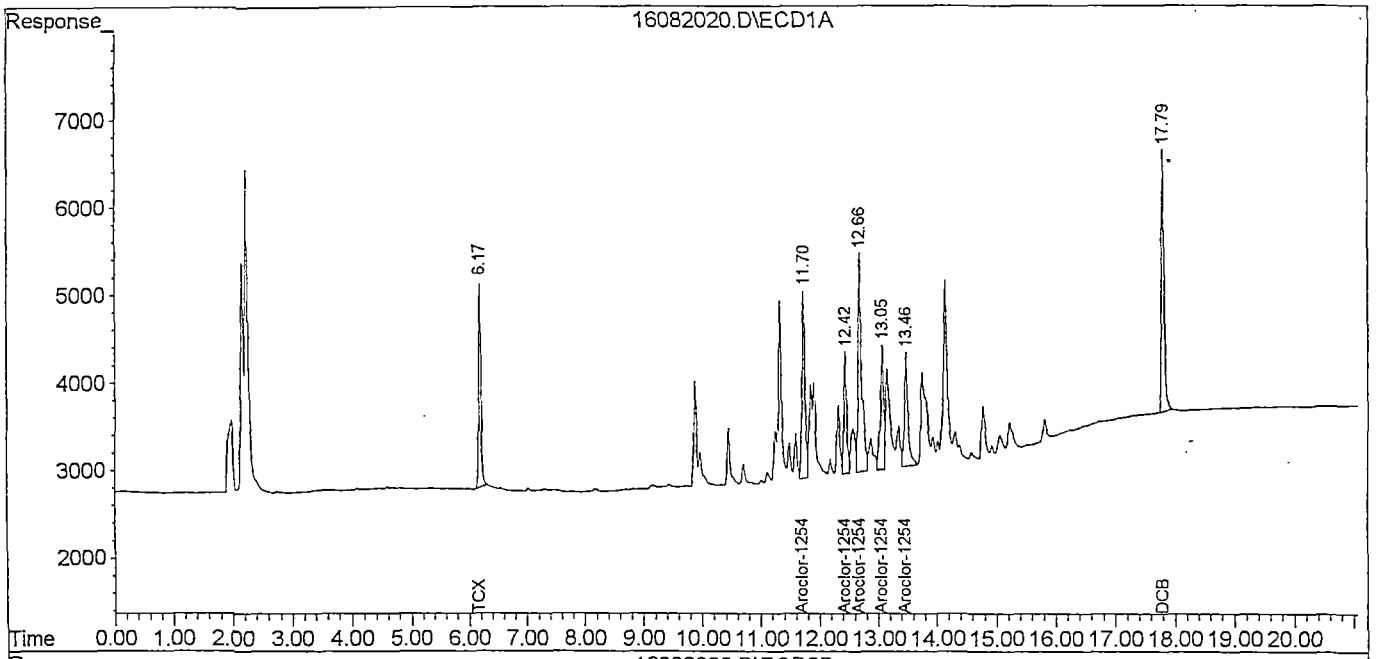
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16082019.D XPCBH20.M Tue Aug 21 14:30:13 2001 Page 1

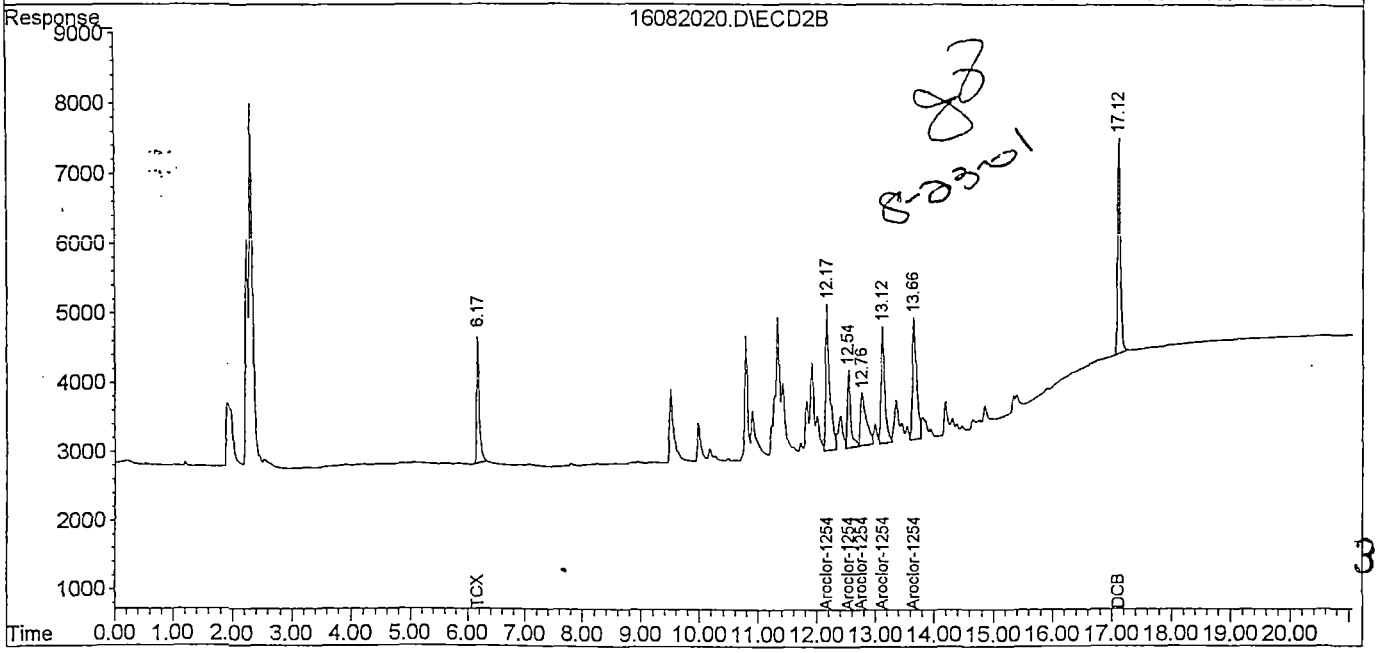
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082020.D\ECD1A.CH Vial: 20
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082020.D\ECD2B.CH
Acq On : 20 Aug 2001 22:05 Operator: TLM
Sample : AR1254L2CE Inst : HP_16
Misc : 5-5-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 21 14:30 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





8-23-01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082020.D\ECD1A.CH Vial: 20
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082020.D\ECD2B.CH
Acq On : 20 Aug 2001 22:05 Operator: TLM
Sample : AR1254L2CE Inst : HP_16
Misc : 5-5-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 21 14:30 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.17	6.18	62833	57717	8.381	7.791
22)	S DCB	17.79	17.12	94598	96177	8.894	8.852
	Target Compounds:						
12)	L6 Aroclor-1254	11.70	12.17	75842	99586	177.2	174.8
13)	L6 Aroclor-1254 {2}	12.42	12.54	49735	45021	170.5	171.7
14)	L6 Aroclor-1254 {3}	12.66	12.77	107125	54487	171.7	159.6
15)	L6 Aroclor-1254 {4}	13.05	13.12	54231	76983	175.0	178.1
16)	L6 Aroclor-1254 {5}	13.46	13.66	56528	89475	171.2	177.8
	Sum Aroclor-1254			343461	365552	865.6	862.0
	Average Aroclor-1254					173.115	172.402

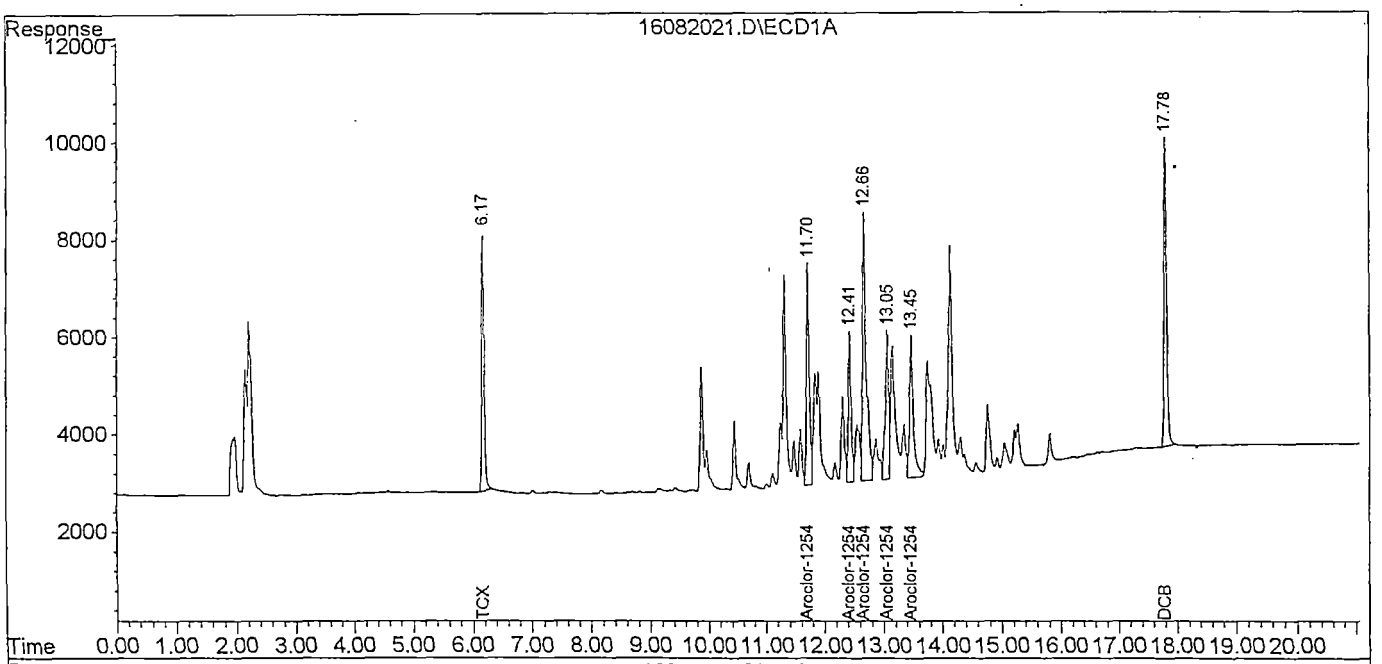
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16082020.D XPCBH20.M Tue Aug 21 14:30:27 2001 Page 1

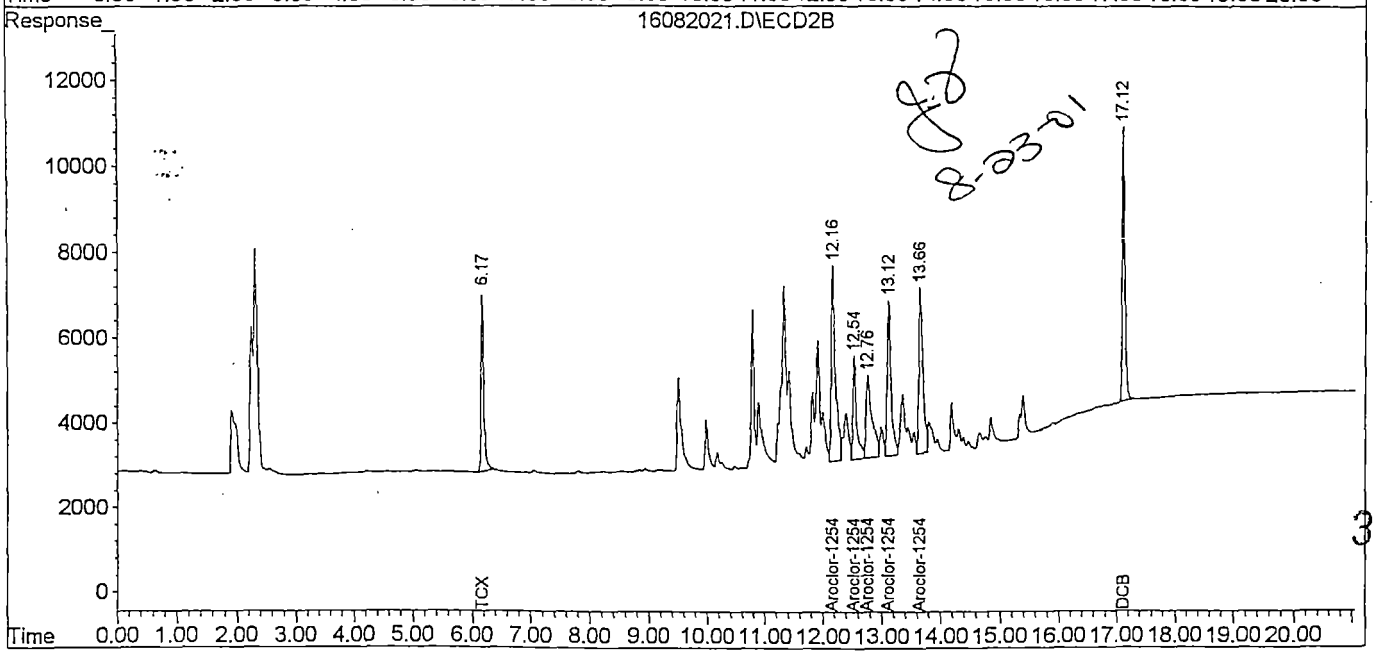
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082021.D\ECD1A.CH Vial: 21
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082021.D\ECD2B.CH
Acq On : 20 Aug 2001 22:30 Operator: TLM
Sample : AR1254L3CE Inst : HP_16
Misc : 5-4-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 21 14:30 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





8-23-01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082021.D\ECD1A.CH Vial: 21
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082021.D\ECD2B.CH
Acq On : 20 Aug 2001 22:30 Operator: TLM
Sample : AR1254L3CE Inst : HP_16
Misc : 5-4-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 21 14:30 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.17	6.18	143003	133195	19.6	18.5
22)	S DCB	17.78	17.12	200213	203575	19.2	19.0
	Target Compounds:						
12)	L6 Aroclor-1254	11.70	12.17	159683	220860	398.7	412.3
13)	L6 Aroclor-1254 {2}	12.42	12.54	110973	105445	405.9	429.4
14)	L6 Aroclor-1254 {3}	12.66	12.76	234958	137522	402.3	432.5
15)	L6 Aroclor-1254 {4}	13.05	13.12	118463	171422	407.6	422.4
16)	L6 Aroclor-1254 {5}	13.46	13.66	128094	198942	414.5	420.1
	Sum Aroclor-1254			752172	834191	2029.0	2116.7
	Average Aroclor-1254					405.803	423.332

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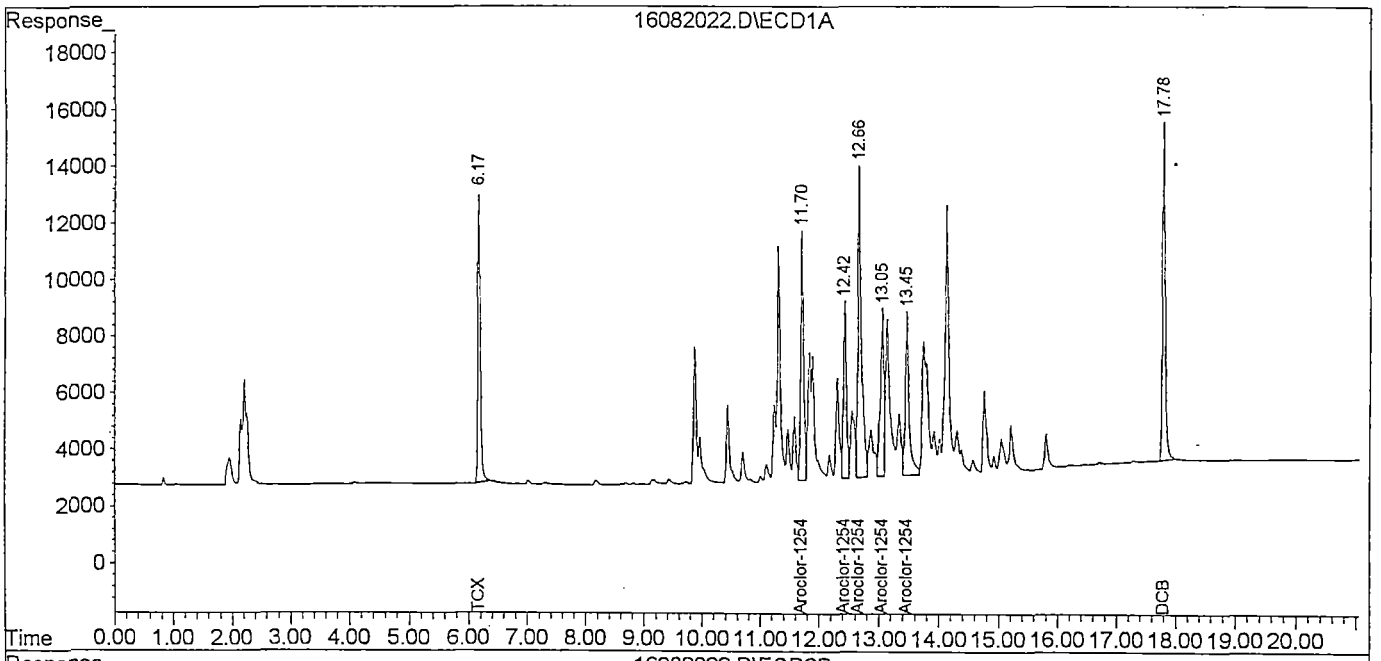
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

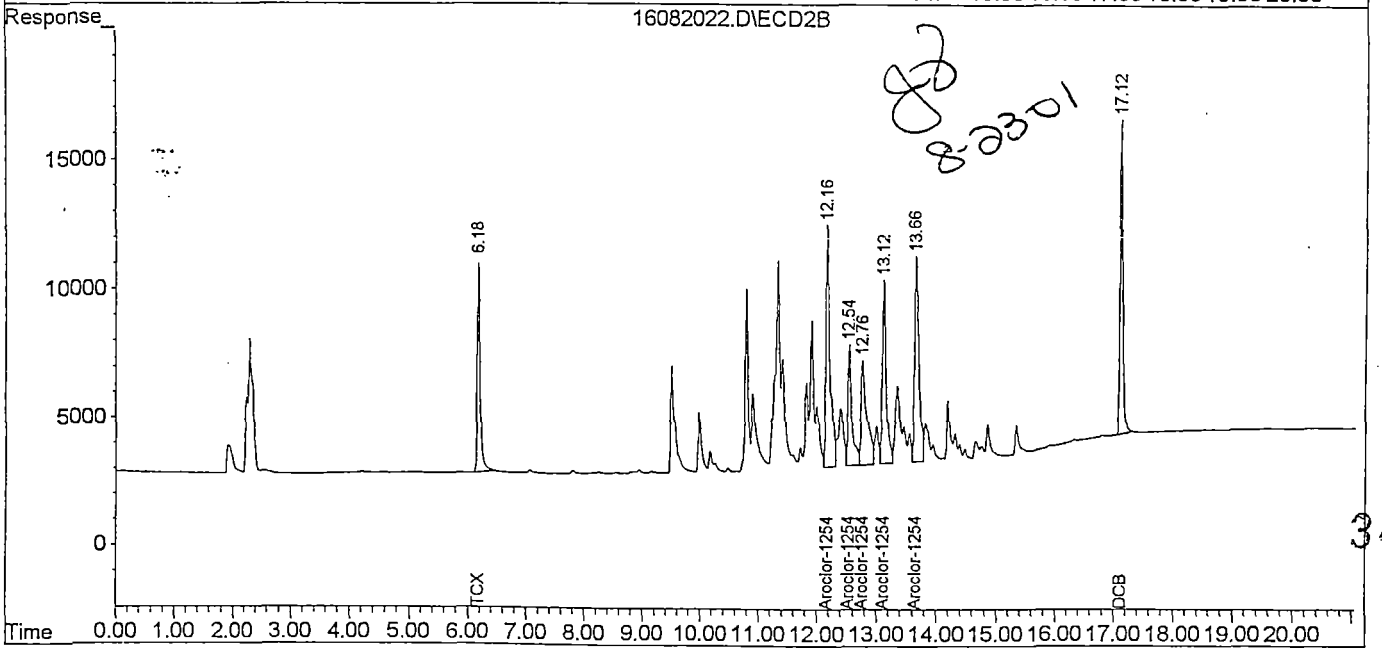
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082022.D\ECD1A.CH Vial: 22
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082022.D\ECD2B.CH
Acq On : 20 Aug 2001 22:55 Operator: TLM
Sample : AR1254L4CE Inst : HP_16
Misc : 5-3-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 21 14:30 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





8-23-01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082022.D\ECD1A.CH Vial: 22
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082022.D\ECD2B.CH
Acq On : 20 Aug 2001 22:55 Operator: TLM
Sample : AR1254L4CE Inst : HP_16
Misc : 5-3-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 21 14:30 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.17	6.18	292759	278421	40.0	39.1
22)	S DCB	17.79	17.12	389111	400149	37.3	37.5
	Target Compounds:						
12)	L6 Aroclor-1254	11.70	12.17	306239	445467	754.9	815.7
13)	L6 Aroclor-1254 {2}	12.42	12.54	222160	215812	799.0	860.0
14)	L6 Aroclor-1254 {3}	12.66	12.76	464621	291442	784.0	897.1
15)	L6 Aroclor-1254 {4}	13.05	13.12	232015	344611	784.9	831.1
16)	L6 Aroclor-1254 {5}	13.46	13.66	254477	404834	808.5	835.7
	Sum Aroclor-1254			1479512	1702166	3931.3	4239.6
	Average Aroclor-1254					786.265	847.912

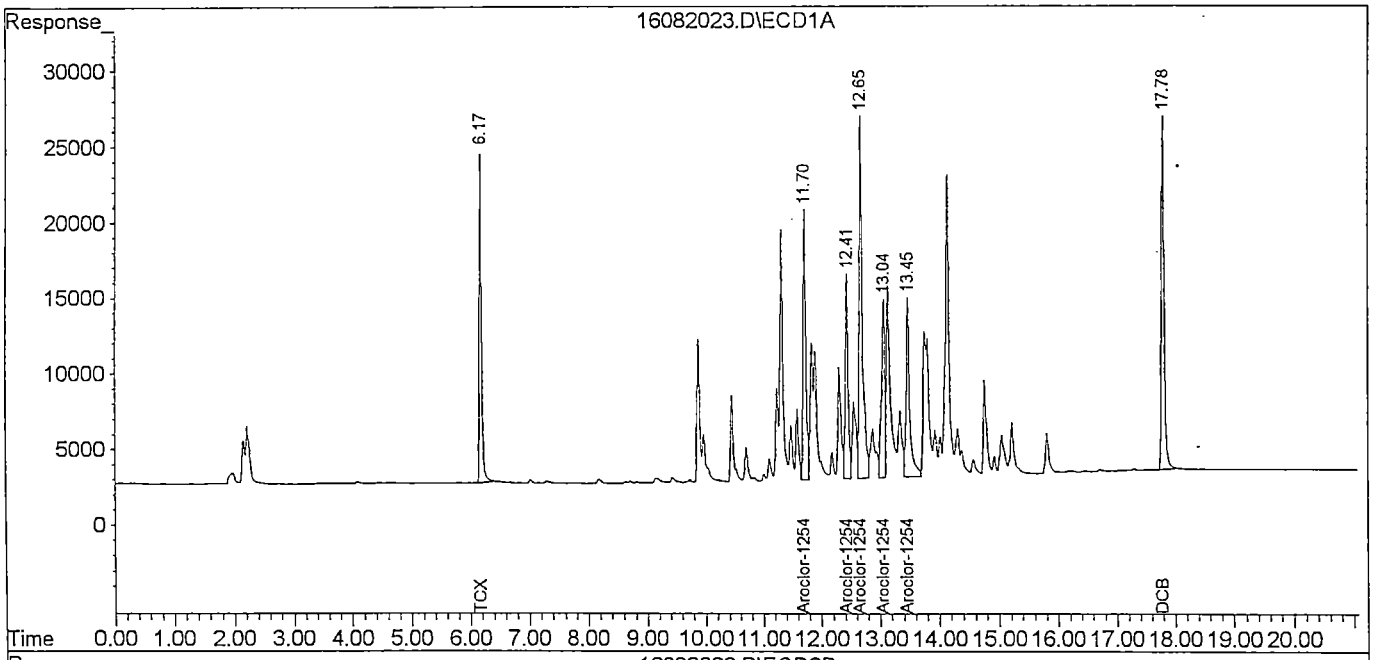
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16082022.D XPCBH20.M Tue Aug 21 14:30:57 2001 Page 1

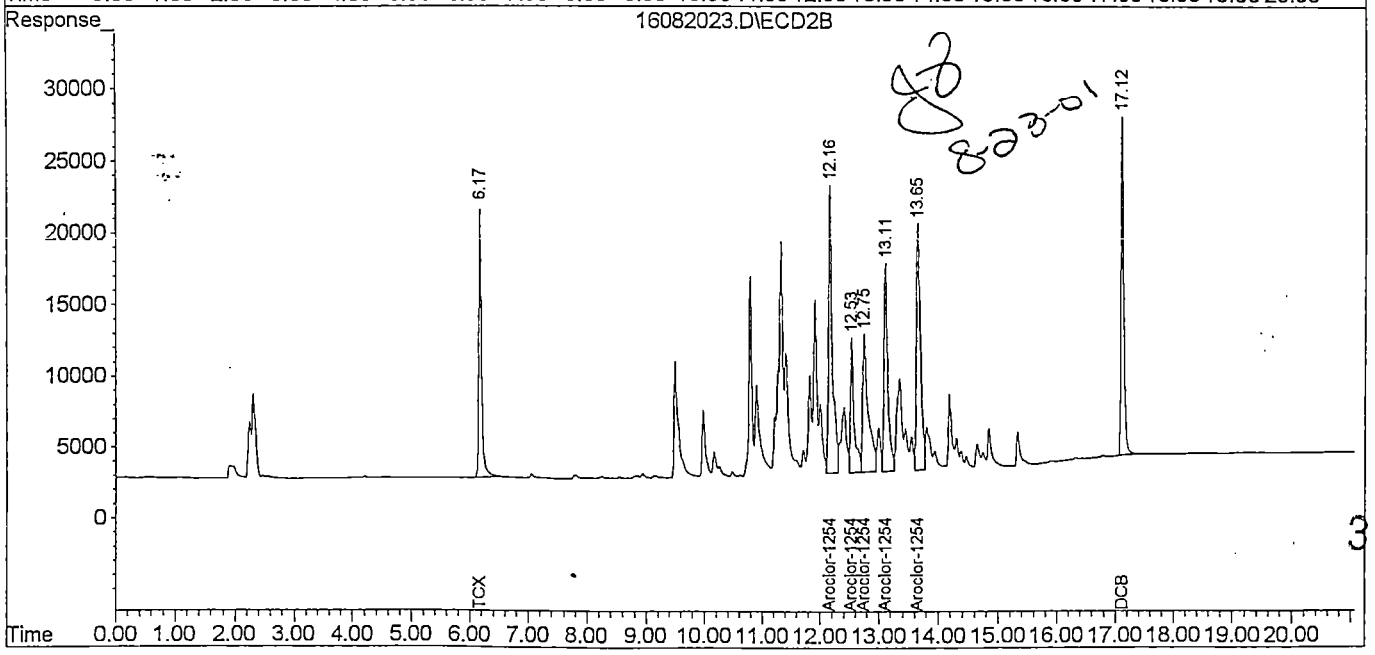
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082023.D\ECD1A.CH Vial: 23
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082023.D\ECD2B.CH
Acq On : 20 Aug 2001 23:19 Operator: TLM
Sample : AR1254L5CE Inst : HP_16
Misc : 5-2-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 21 14:31 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





8-23-01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082023.D\ECD1A.CH Vial: 23
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082023.D\ECD2B.CH
Acq On : 20 Aug 2001 23:19 Operator: TLM
Sample : AR1254L5CE Inst : HP_16
Misc : 5-2-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 21 14:31 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.17	6.18	577783	601521	79.0	86.9
22)	S DCB	17.78	17.12	764252	781238	74.3 E	74.4
	Target Compounds:						
12)	L6 Aroclor-1254	11.70	12.16	596769	903821	1478.8 E	1649.2 E
13)	L6 Aroclor-1254 {2}	12.42	12.54	451968	429691	1629.6 E	1701.6 E
14)	L6 Aroclor-1254 {3}	12.66	12.75	932287	623114	1579.6 E	1914.6 E
15)	L6 Aroclor-1254 {4}	13.05	13.12	459360	679135	1556.3 E	1627.2 E
16)	L6 Aroclor-1254 {5}	13.45	13.66	496236	832527	1575.0 E	1707.0 E
	Sum Aroclor-1254			2936620	3468289	7819.2	8599.6
	Average Aroclor-1254					1563.843	1719.922

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16082023.D XPCBH20.M Tue Aug 21 14:31:12 2001 Page 1

Response Factor Report HP_16

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

OK 8-24-01

Calibration Files
L1 =16082024.D L2 =16082025.D L3 =16082026.D
L4 =16082027.D L5 =16082028.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
1) TCX	8.1	7.3	6.5	7.6	7.1	7.3 E3	8.35
2) Aroclor-1016	206.0	183.3	156.8	165.0	143.7	170.9	14.21
3) Aroclor-1016 {2}	549.4	478.5	397.1	396.4	336.6	431.6	19.22
4) Aroclor-1016 {3}	112.9	103.1	90.3	97.3	86.5	98.0	10.68
5) Aroclor-1016 {4}	219.8	197.8	171.5	177.9	154.1	184.2	13.74
6) Aroclor-1016 {5}	133.4	126.5	118.3	134.3	125.0	127.5	5.16
17) Aroclor-1260	959.4	832.7	711.7	759.7	681.7	789.0	14.07
18) Aroclor-1260 {2}	535.9	454.9	377.1	385.2	331.3	416.9	19.16
19) Aroclor-1260 {3}	330.7	286.0	239.0	244.8	212.4	262.6	17.64
20) Aroclor-1260 {4}	540.0	466.7	392.1	416.1	372.1	437.4	15.40
21) Aroclor-1260 {5}	1.1	0.9	0.8	0.8	0.7	0.9 E3	15.77
22) DCB	13.4	11.5	9.7	10.1	8.8	10.7 E3	16.76
Average %RSD							

Signal #2 Calibration Files
L1 =16082024.D L2 =16082025.D L3 =16082026.D
L4 =16082027.D L5 =16082028.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
24) TCX #2	8.2	7.4	6.7	7.6	7.2	7.4 E3	7.30
25) Aroclor-1016 #2	150.9	145.3	124.0	131.3	115.3	133.3	11.05
26) Aroclor-1016 {2} #2	549.4	488.9	402.3	404.1	341.7	437.3	18.68
27) Aroclor-1016 {3} #2	218.0	197.4	169.4	184.5	166.0	187.1	11.41
28) Aroclor-1016 {4} #2	187.3	203.6	168.9	177.4	154.6	178.4	10.38
29) Aroclor-1016 {5} #2	298.7	262.0	222.2	236.2	204.4	244.7	15.05
40) Aroclor-1260 #2	887.5	789.0	672.3	717.4	646.4	742.5	13.12
41) Aroclor-1260 {2} #2	488.5	419.6	355.5	374.9	325.4	392.8	16.17
42) Aroclor-1260 {3} #2	296.2	263.3	226.9	246.6	216.7	249.9	12.60
43) Aroclor-1260 {4} #2	432.7	384.7	325.6	357.9	320.1	364.2	12.72
44) Aroclor-1260 {5} #2	1.0	0.9	0.8	0.9	0.8	0.9 E3	11.51
45) DCB #2	13.5	11.9	9.9	10.6	9.2	11.0 E3	15.41
Average %RSD							

(#) = Out of Range

XPCBH20.M Fri Aug 24 15:09:54 2001

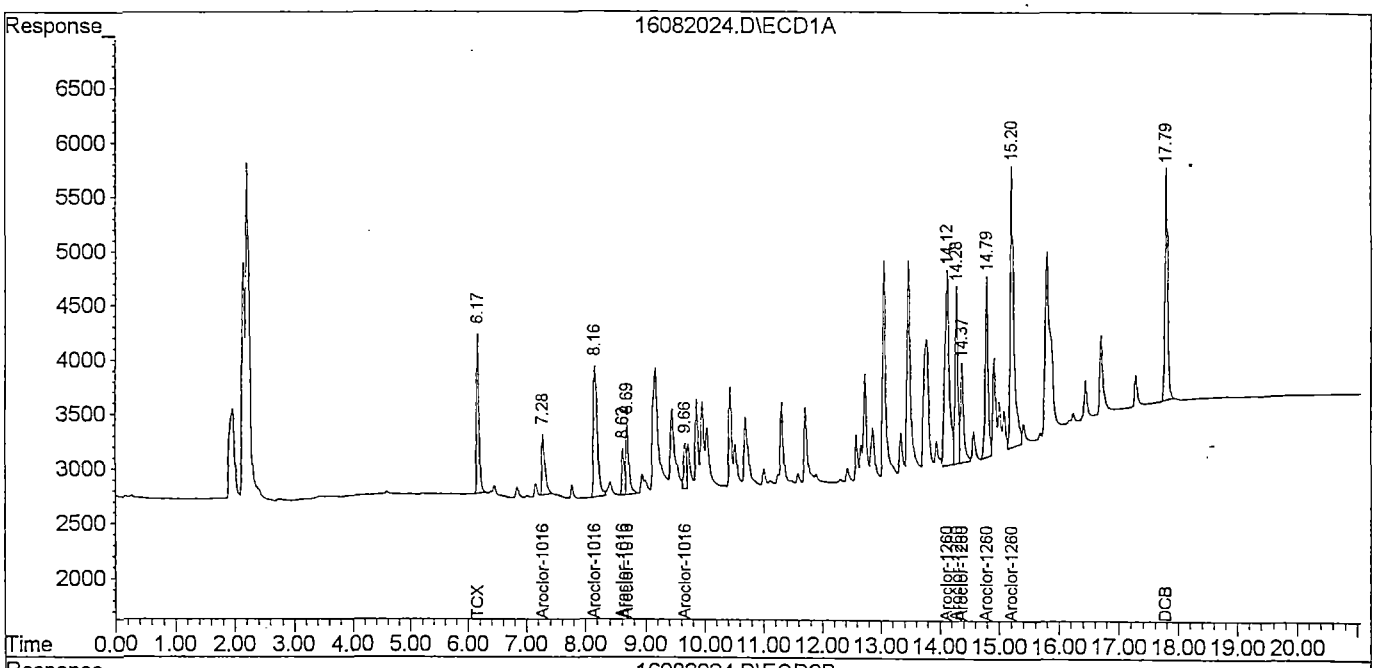
Chromatographic Report

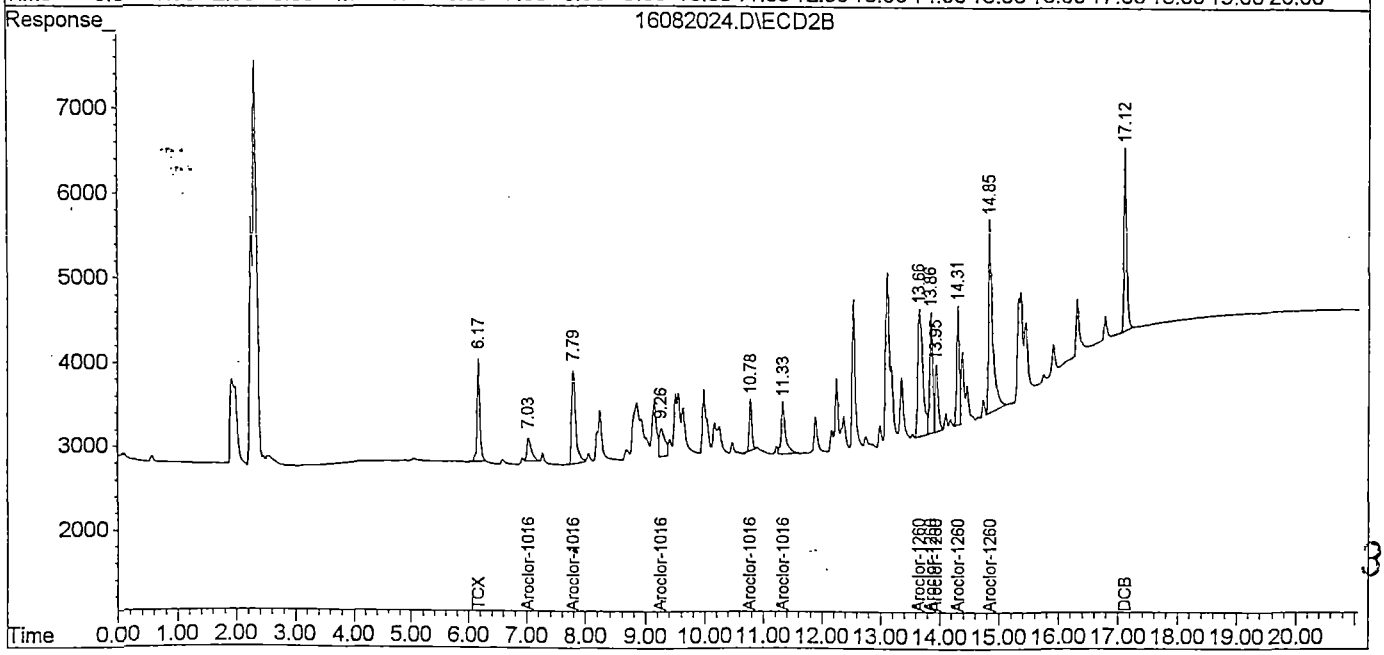
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082024.D\ECD1A.CH Vial: 24
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082024.D\ECD2B.CH
Acq On : 20 Aug 2001 23:44 Operator: TLM
Sample : AR1660L1CE Inst : HP_16
Misc : 5-130-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 24 15:08 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

ok 8-24-01 PH

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082024.D\ECD1A.CH Vial: 24
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082024.D\ECD2B.CH
Acq On : 20 Aug 2001 23:44 Operator: TLM
Sample : AR1660L1CE Inst : HP_16
Misc : 5-130-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 24 15:08 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	6.17	6.18	40727	40962	5.553	5.522	
22)	S DCB	17.79	17.12	67086	67350	6.256	6.120	
	Target Compounds:							
2)	L1 Aroclor-1016	7.28	7.03	20596	15087	120.5	113.1	
3)	L1 Aroclor-1016 {2}	8.16	7.79	54939	54945	127.3	125.6	
4)	L1 Aroclor-1016 {3}	8.62	9.26	11286	21796	115.1	51.9	#
5)	L1 Aroclor-1016 {4}	8.69	10.79	21985	18727	119.3	100.1	
6)	L1 Aroclor-1016 {5}	9.67	11.34	13339	29873	20.2	167.5	#
	Sum Aroclor-1016			122145	140427	502.4	558.2	
	Average Aroclor-1016					100.482	111.650	
17)	L7 Aroclor-1260	14.12	13.66	95937	88745	121.6	119.5	
18)	L7 Aroclor-1260 {2}	14.28	13.86	53585	48849	128.5	124.4	
19)	L7 Aroclor-1260 {3}	14.38	13.95	33071	29621	125.9	118.5	
20)	L7 Aroclor-1260 {4}	14.79	14.31	54003	43269	123.5	118.8	
21)	L7 Aroclor-1260 {5}	15.21	14.86	108476	103001	124.3	116.4	
	Sum Aroclor-1260			345073	313485	623.9	597.6	
	Average Aroclor-1260					124.774	119.525	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16082024.D XPCBH20.M Fri Aug 24 15:08:44 2001 Page 1

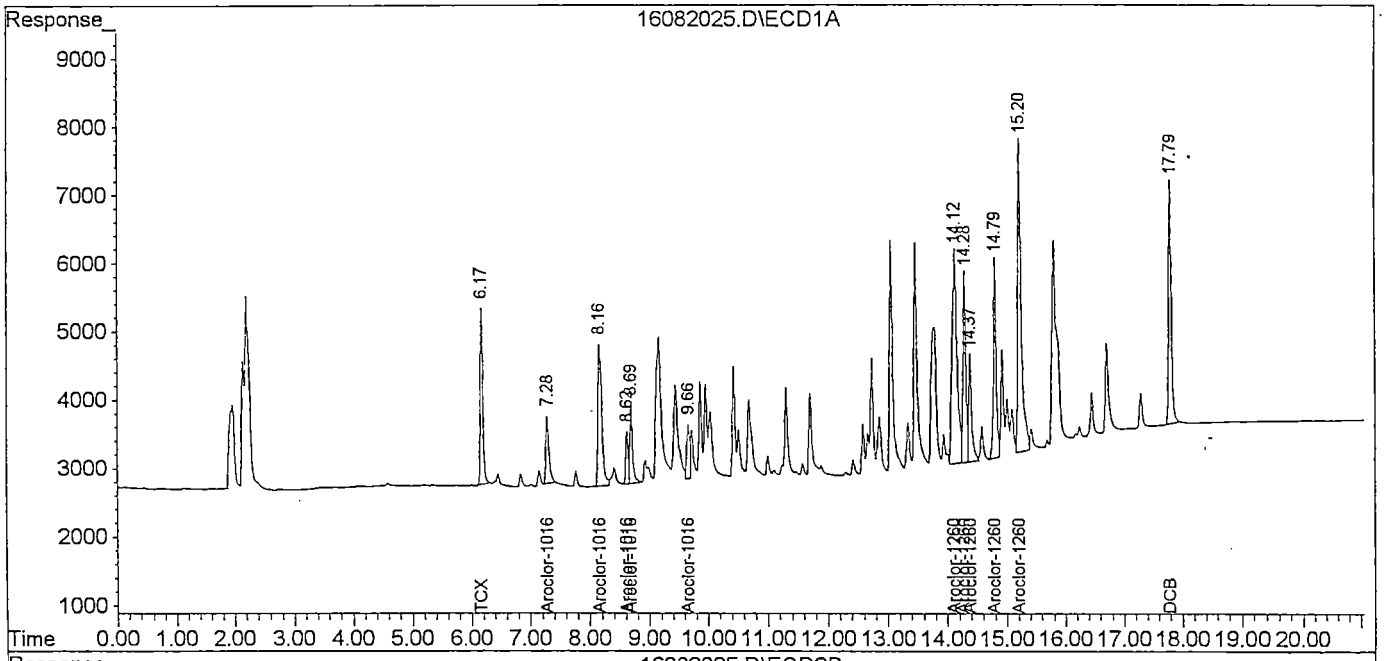
Chromatographic Report

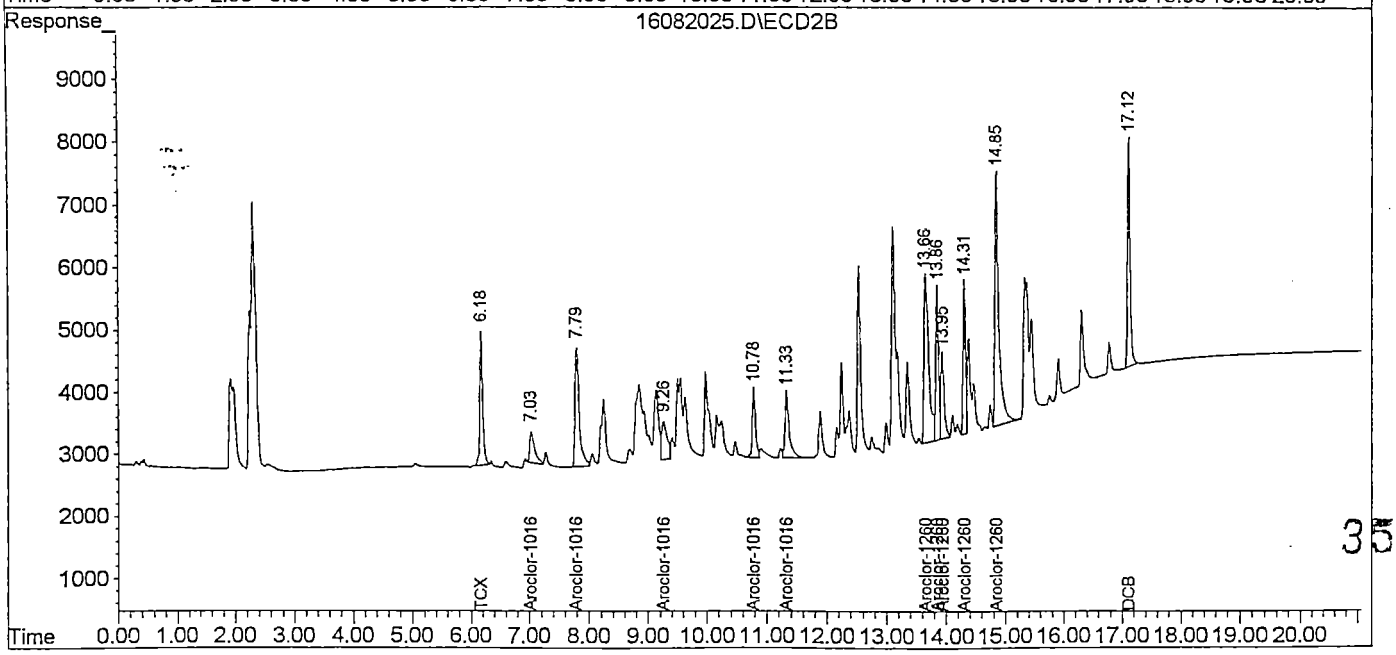
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082025.D\ECD1A.CH Vial: 25
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082025.D\ECD2B.CH
Acq On : 21 Aug 2001 00:09 Operator: TLM
Sample : AR1660L2CE ✓ Inst : HP_16
Misc : 5-129-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 24 15:08 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

OK 8-24-01

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082025.D\ECD1A.CH Vial: 25
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082025.D\ECD2B.CH
Acq On : 21 Aug 2001 00:09 Operator: TLM
Sample : AR1660L2CE Inst : HP_16
Misc : 5-129-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 24 15:08 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	6.17	6.18	73484	73578	10.0	9.920	
22)	S DCB	17.79	17.12	115380	118641	10.8	10.8	
	Target Compounds:							
2)	L1 Aroclor-1016	7.28	7.03	36668	29057	214.5	217.9	
3)	L1 Aroclor-1016 {2}	8.16	7.79	95709	97780	221.7	223.6	
4)	L1 Aroclor-1016 {3}	8.62	9.26	20626	39481	210.4	106.8	#
5)	L1 Aroclor-1016 {4}	8.69	10.78	39557	40719	214.7	225.1	
6)	L1 Aroclor-1016 {5}	9.66	11.34	25300	52392	47.4	261.1	#
	Sum Aroclor-1016			217860	259430	908.8	1034.5	
	Average Aroclor-1016					181.758	206.893	
17)	L7 Aroclor-1260	14.12	13.66	166540	157803	211.1	212.5	
18)	L7 Aroclor-1260 {2}	14.28	13.86	90976	83923	218.2	213.7	
19)	L7 Aroclor-1260 {3}	14.37	13.95	57194	52658	217.8	210.7	
20)	L7 Aroclor-1260 {4}	14.79	14.31	93343	76940	213.4	211.3	
21)	L7 Aroclor-1260 {5}	15.20	14.85	185381	186781	212.5	211.1	
	Sum Aroclor-1260			593434	558106	1073.0	1059.2	
	Average Aroclor-1260					214.600	211.849	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16082025.D XPCBH20.M Fri Aug 24 15:08:59 2001 Page 1

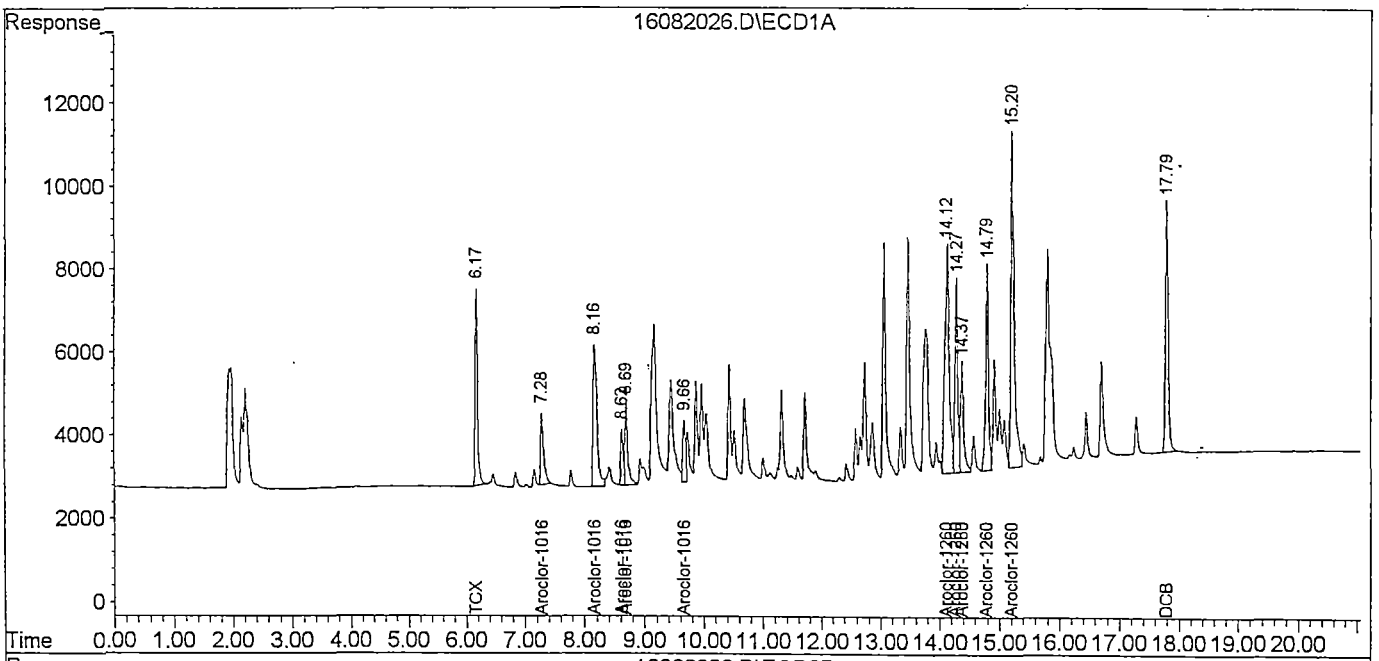
Chromatographic Report

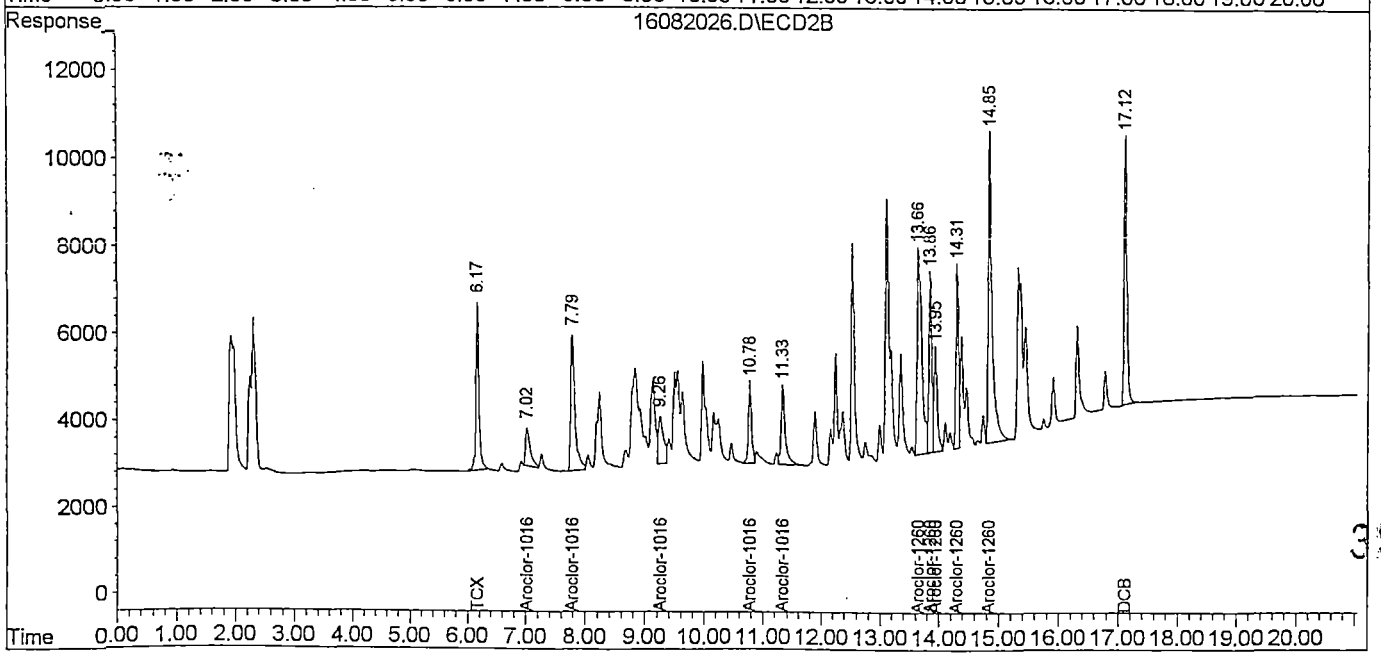
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082026.D\ECD1A.CH Vial: 26
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082026.D\ECD2B.CH
Acq On : 21 Aug 2001 00:33 Operator: TLM
Sample : AR1660L3CS Inst : HP_16
Misc : 5-128-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 24 15:09 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

OK 8-24-01 KW

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





Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082026.D\ECD1A.CH Vial: 26
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082026.D\ECD2B.CH
Acq On : 21 Aug 2001 00:33 Operator: TLM
Sample : AR1660L3CS Inst : HP_16
Misc : 5-128-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 24 15:09 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	6.17	6.18	129414	134650	17.6	18.2	
22)	S DCB	17.79	17.12	193763	198132	18.1	18.0	
	Target Compounds:							
2)	L1 Aroclor-1016	7.28	7.03	62701	49599	366.8	372.0	
3)	L1 Aroclor-1016 {2}	8.16	7.79	158859	160917	368.1	368.0	
4)	L1 Aroclor-1016 {3}	8.62	9.26	36140	67748	368.7	211.3	#
5)	L1 Aroclor-1016 {4}	8.69	10.78	68591	67571	372.3	371.0	
6)	L1 Aroclor-1016 {5}	9.66	11.34	47304	88884	112.5	418.6	#
	Sum Aroclor-1016			373595	434718	1588.3	1740.8	
	Average Aroclor-1016					317.663	348.167	
17)	L7 Aroclor-1260	14.12	13.66	284686	268935	360.8	362.2	
18)	L7 Aroclor-1260 {2}	14.28	13.86	150852	142218	361.9	362.1	
19)	L7 Aroclor-1260 {3}	14.37	13.95	95609	90740	364.1	363.1	
20)	L7 Aroclor-1260 {4}	14.79	14.31	156849	130240	358.6	357.6	
21)	L7 Aroclor-1260 {5}	15.20	14.85	311676	317995	357.2	359.4	
	Sum Aroclor-1260			999672	950128	1802.6	1804.4	
	Average Aroclor-1260					360.521	360.870	

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

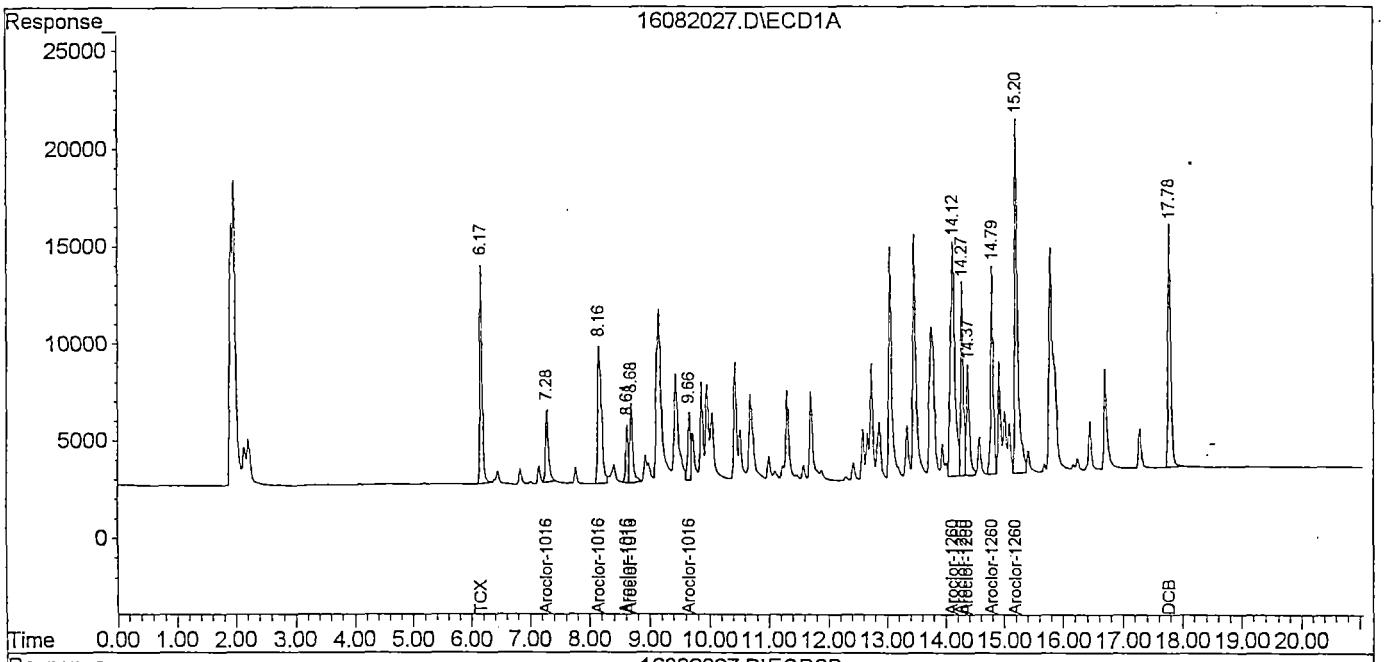
Chromatographic Report

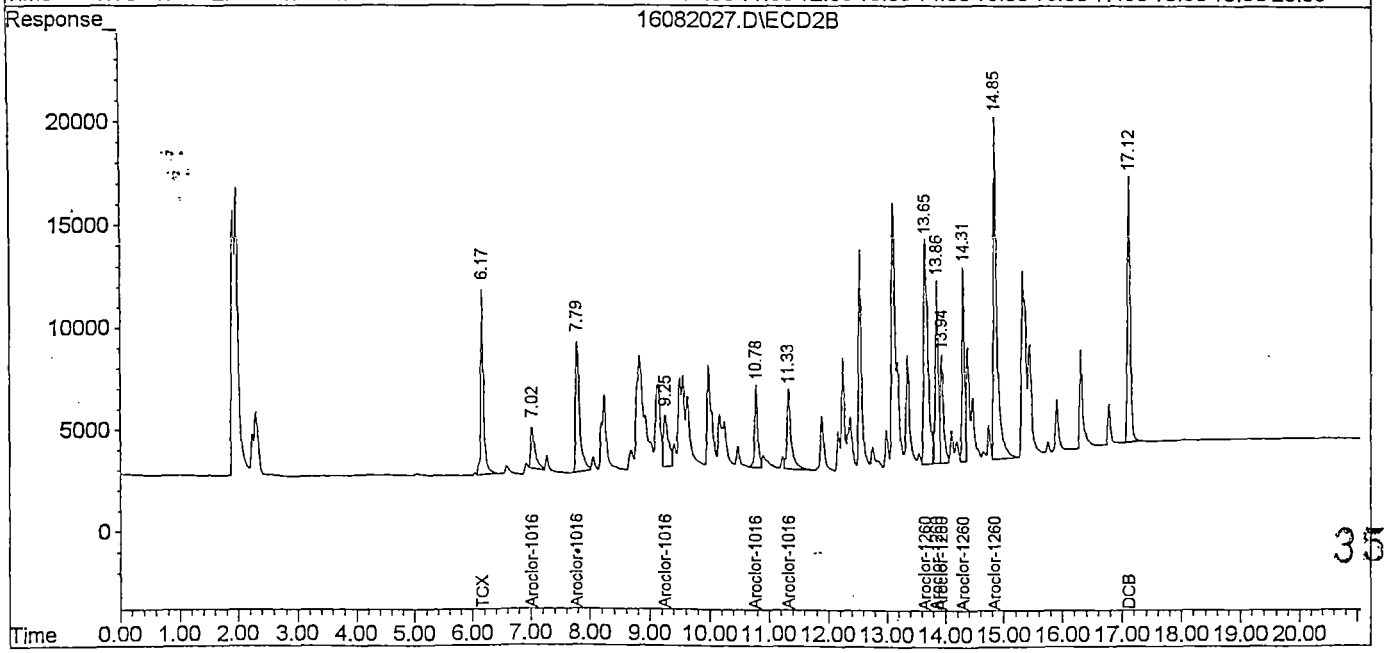
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082027.D\ECD1A.CH Vial: 27
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082027.D\ECD2B.CH
Acq On : 21 Aug 2001 00:58 Operator: TLM
Sample : AR1660L4CE Inst : HP_16
Misc : 5-172-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 24 15:09 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

OK 8-24-01

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





35 51

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082027.D\ECD1A.CH Vial: 27
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082027.D\ECD2B.CH
Acq On : 21 Aug 2001 00:58 Operator: TLM
Sample : AR1660L4CE Inst : HP_16
Misc : 5-172-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 24 15:09 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	6.17	6.18	302887	305007	41.3	41.1	
22)	S DCB	17.79	17.12	405971	424029	37.9	38.5	
	Target Compounds:							
2)	L1 Aroclor-1016	7.28	7.02	131990	105025	772.1	787.6	
3)	L1 Aroclor-1016 {2}	8.16	7.79	317113	323304	734.7	739.3	
4)	L1 Aroclor-1016 {3}	8.62	9.26	77818	147612	793.9	535.4	#
5)	L1 Aroclor-1016 {4}	8.69	10.78	142324	141954	772.5	779.7	
6)	L1 Aroclor-1016 {5}	9.66	11.33	107435	188921	332.4	847.2	#
	Sum Aroclor-1016			776680	906816	3405.6	3689.3	
	Average Aroclor-1016					681.119	737.858	
17)	L7 Aroclor-1260	14.12	13.66	607748	573881	770.3	772.9	
18)	L7 Aroclor-1260 {2}	14.28	13.86	308169	299919	739.2	763.6	
19)	L7 Aroclor-1260 {3}	14.37	13.95	195874	197277	745.9	789.3	
20)	L7 Aroclor-1260 {4}	14.79	14.31	332876	286312	761.0	786.2	
21)	L7 Aroclor-1260 {5}	15.20	14.85	664237	703937	761.3	795.6	
	Sum Aroclor-1260			2108905	2061327	3777.8	3907.5	
	Average Aroclor-1260					755.559	781.509	

356

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

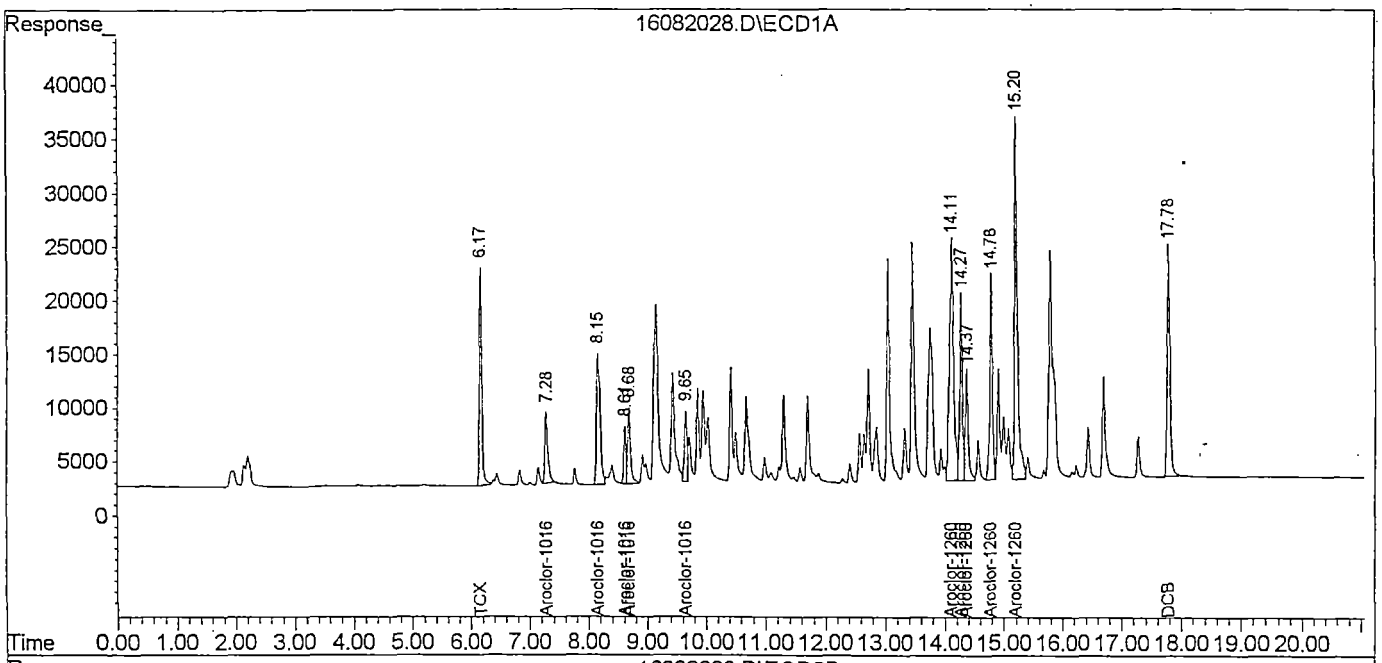
Chromatographic Report

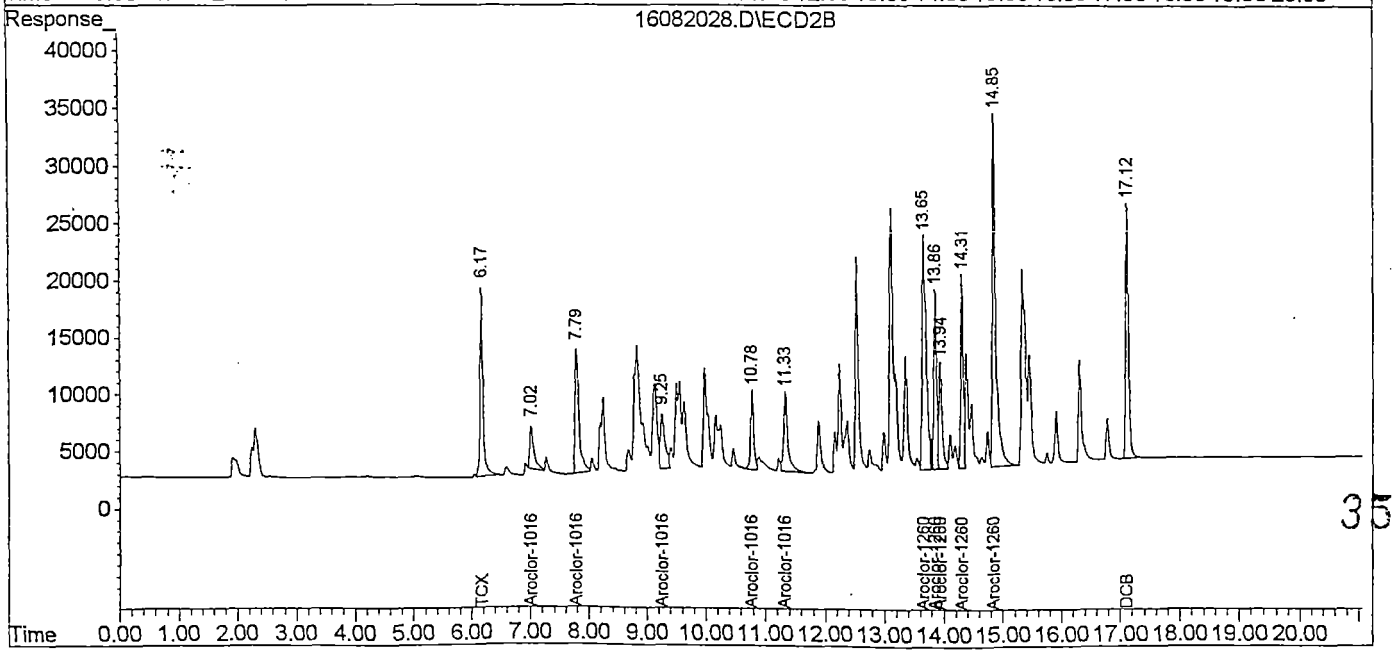
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082028.D\ECD1A.CH Vial: 28
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082028.D\ECD2B.CH
Acq On : 21 Aug 2001 1:23 Operator: TLM
Sample : AR1660L5CE Inst : HP_16
Misc : 5-126-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 24 15:09 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

OK 8-24-01





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082028.D\ECD1A.CH Vial: 28
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082028.D\ECD2B.CH
Acq On : 21 Aug 2001 1:23 Operator: TLM
Sample : AR1660L5CE Inst : HP_16
Misc : 5-126-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 24 15:09 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.17	6.18	570685	574324	77.8 E	77.4 E
22)	S DCB	17.78	17.12	706053	734688	65.8	66.8
	Target Compounds:						
2)	L1 Aroclor-1016	7.28	7.02	229901	184430	1344.9	1383.1
3)	L1 Aroclor-1016 {2}	8.16	7.79	538632	546771	1247.9 E	1250.3 E
4)	L1 Aroclor-1016 {3}	8.62	9.25	138402	265653	1411.9 E	1210.8
5)	L1 Aroclor-1016 {4}	8.69	10.78	246593	247372	1338.5	1369.3
6)	L1 Aroclor-1016 {5}	9.66	11.33	200053	327000	910.8	1393.1 E#
	Sum Aroclor-1016			1353581	1571226	6254.1	6606.7
	Average Aroclor-1016					1250.811	1321.347
17)	L7 Aroclor-1260	14.12	13.65	1090655	1034215	1382.3	1392.9
18)	L7 Aroclor-1260 {2}	14.27	13.86	530060	520614	1271.5	1325.4 E
19)	L7 Aroclor-1260 {3}	14.37	13.95	339789	346684	1294.0 E	1387.2 E
20)	L7 Aroclor-1260 {4}	14.79	14.31	595345	512128	1361.1	1406.2 E
21)	L7 Aroclor-1260 {5}	15.20	14.85	1185816	1256360	1359.2	1419.9 E
	Sum Aroclor-1260			3741665	3670002	6668.0	6931.6
	Average Aroclor-1260					1333.610	1386.317

358

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

Continuing Calibration Report HP_16

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Sat Aug 25 10:58:59 2001
Response via : Initial Calibration

Continuing Calibration File: 16082057.D

ok 8-27-01

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

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	7.334	8.249	E3	-12.5	127
2	L1	Aroclor-1016	170.945	187.217		-9.5	119
3	L1	Aroclor-1016 {2}	431.624	483.657		-12.1	122
4	L1	Aroclor-1016 {3}	98.022	108.097		-10.3	120
5	L1	Aroclor-1016 {4}	184.227	208.395		-13.1	122
6	L1	Aroclor-1016 {5}	127.496	142.736		-12.0	121
17	L7	Aroclor-1260	789.026	888.924		-12.7	125
18	L7	Aroclor-1260 {2}	416.873	455.124		-9.2	121
19	L7	Aroclor-1260 {3}	262.584	284.095		-8.2	119
20	L7	Aroclor-1260 {4}	437.411	482.592		-10.3	123
21	L7	Aroclor-1260 {5}	0.872	0.949	E3	-8.7	122
22	S	DCB	10.724	11.700	E3	-9.1	121
		Average %Dev					

Signal #2
Continuing Calibration File: 16082057.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	7.417	7.907	E3	-6.6	117
2	L1	Aroclor-1016	133.341	146.519		-9.9	118
3	L1	Aroclor-1016 {2}	437.300	465.410		-6.4	116
4	L1	Aroclor-1016 {3}	187.057	203.868		-9.0	120
5	L1	Aroclor-1016 {4}	178.368	197.920		-11.0	117
6	L1	Aroclor-1016 {5}	244.685	256.390		-4.8	115
17	L7	Aroclor-1260	742.507	802.910		-8.1	119
18	L7	Aroclor-1260 {2}	392.788	415.883		-5.9	117
19	L7	Aroclor-1260 {3}	249.924	257.068		-2.9	113
20	L7	Aroclor-1260 {4}	364.191	386.165		-6.0	119
21	L7	Aroclor-1260 {5}	0.885	0.926	E3	-4.7	117
22	S	DCB	11.005	11.318	E3	-2.8	114
		Average %Dev					

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

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082057.D\ECD1A.CH Vial: 57
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082057.D\ECD2B.CH
Acq On : 21 Aug 2001 13:19 Operator: TLM
Sample : AR1660L3CT Inst : HP_16
Misc : 5-128-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 25 10:56 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.18	6.18	164971	158136	22.5	21.3
22)	S DCB	17.79	17.12	233991	226365	21.8	20.6
	Target Compounds:						
2)	L1 Aroclor-1016	7.29	7.03	74887	58608	438.1	439.5
3)	L1 Aroclor-1016 {2}	8.17	7.80	193463	186164	448.2	425.7
4)	L1 Aroclor-1016 {3}	8.62	9.26	43239	81547	441.1	435.9
5)	L1 Aroclor-1016 {4}	8.69	10.79	83358	79168	452.5	443.8
6)	L1 Aroclor-1016 {5}	9.67	11.34	57094	102556	447.8	419.1
	Sum Aroclor-1016			452041	508043	2227.7	2164.2
	Average Aroclor-1016					445.539	432.835
17)	L7 Aroclor-1260	14.12	13.66	355570	321164	450.6	432.5
18)	L7 Aroclor-1260 {2}	14.28	13.86	182049	166353	436.7	423.5
19)	L7 Aroclor-1260 {3}	14.38	13.95	113638	102827	432.8	411.4
20)	L7 Aroclor-1260 {4}	14.79	14.32	193037	154466	441.3	424.1
21)	L7 Aroclor-1260 {5}	15.20	14.86	379423	370566	434.9	418.8
	Sum Aroclor-1260			1223717	1115376	2196.3	2110.4
	Average Aroclor-1260					439.264	422.087

361

(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 Resolution Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082804.D\ECD1A.CH Vial: 4
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082804.D\ECD2B.CH
Acq On : 28 Aug 2001 13:49 Operator: TLM
Sample : RESCCF Inst : HP_16
Misc : 5-171-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title : PCB/TOXAPHENE

RT#1	RT#2	Resolution	Compound for RT#1
6.067	17.706	100.00%	TCX
Signal #2			
6.074	17.052	100.00%	TCX #2

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29546 SDG E00W
Signature S Zackett
Date 8/31/01

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* = Value less than resolution criteria, 60 for RESC, 90 for PEM, INDA, INDB
16082804.D XPCBH28.M Wed Aug 29 15:53:52 2001

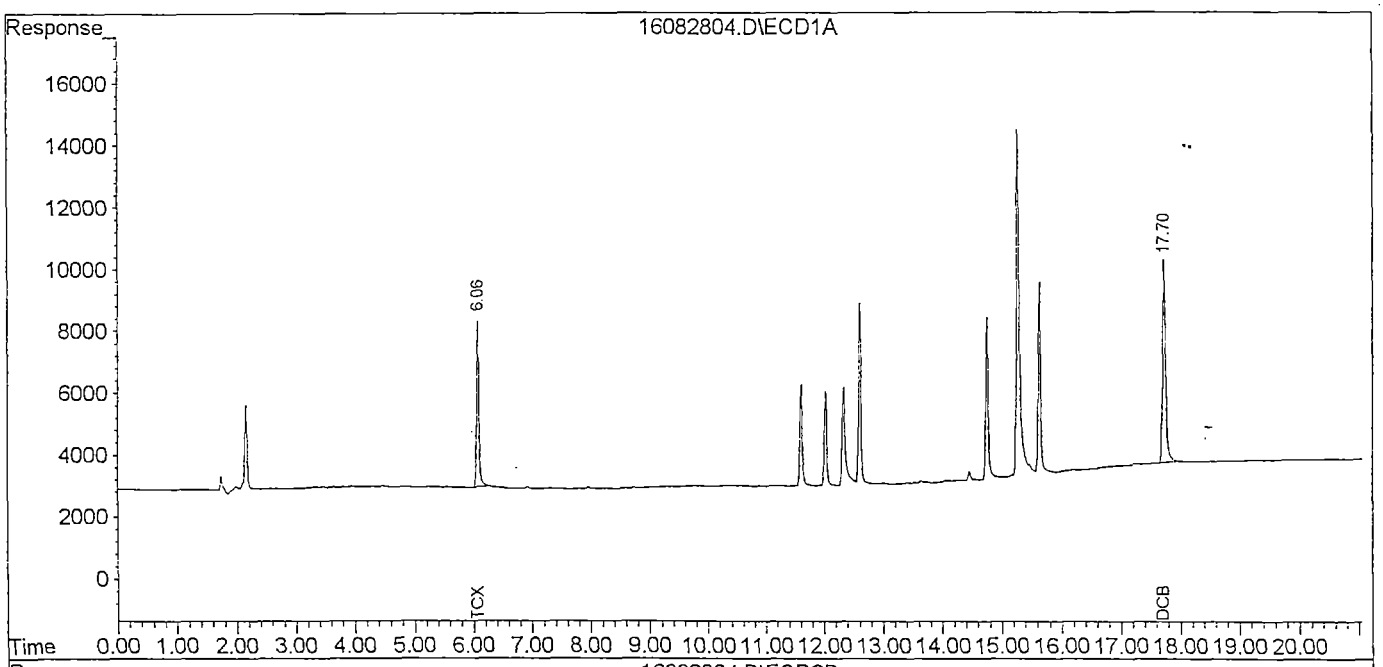
Chromatographic Report

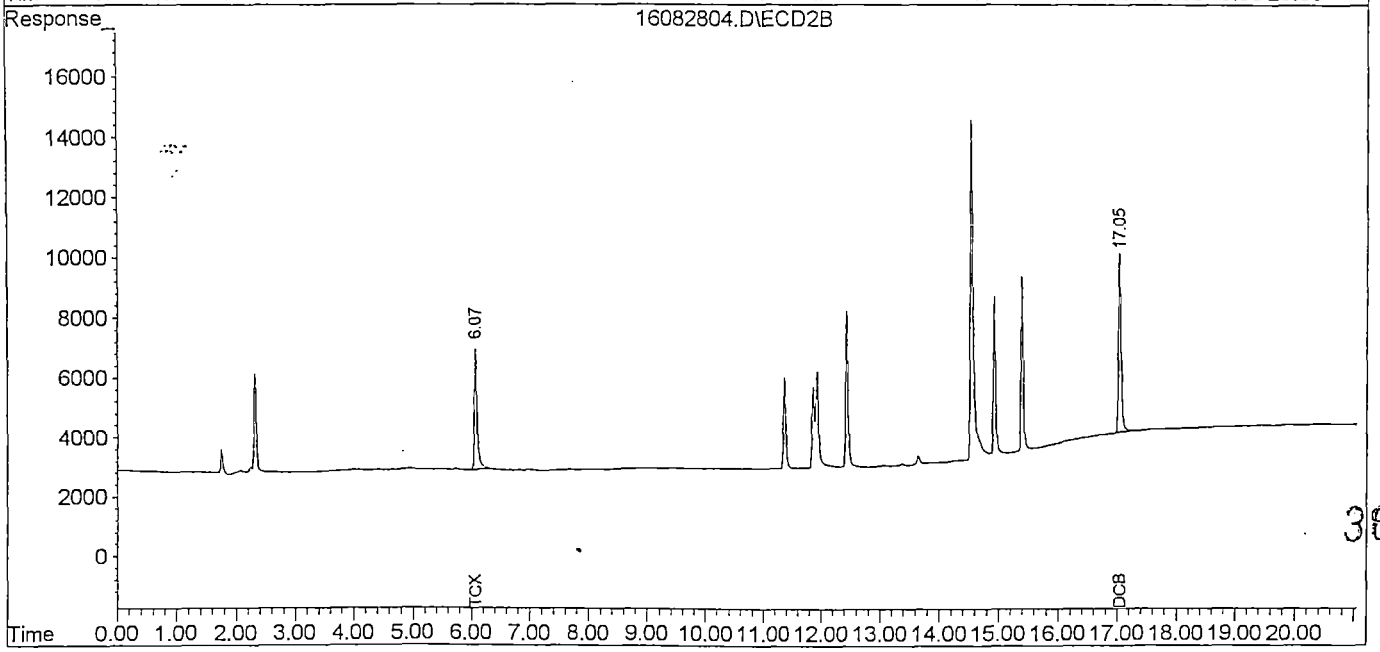
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082804.D\ECD1A.CH Vial: 4
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082804.D\ECD2B.CH
Acq On : 28 Aug 2001 13:49 Operator: TLM
Sample : RESCCF Inst : HP_16
Misc : 5-171-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:53 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

ob
8-30-01





363

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082804.D\ECD1A.CH Vial: 4
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082804.D\ECD2B.CH
Acq On : 28 Aug 2001 13:49 Operator: TLM
Sample : RESCCF Inst : HP_16
Misc : 5-171-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:53 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.07	6.07	146545	132714	29.3	23.7
22)	S DCB	17.71	17.05	237265	192285	28.2	24.8

Target Compounds:

364

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

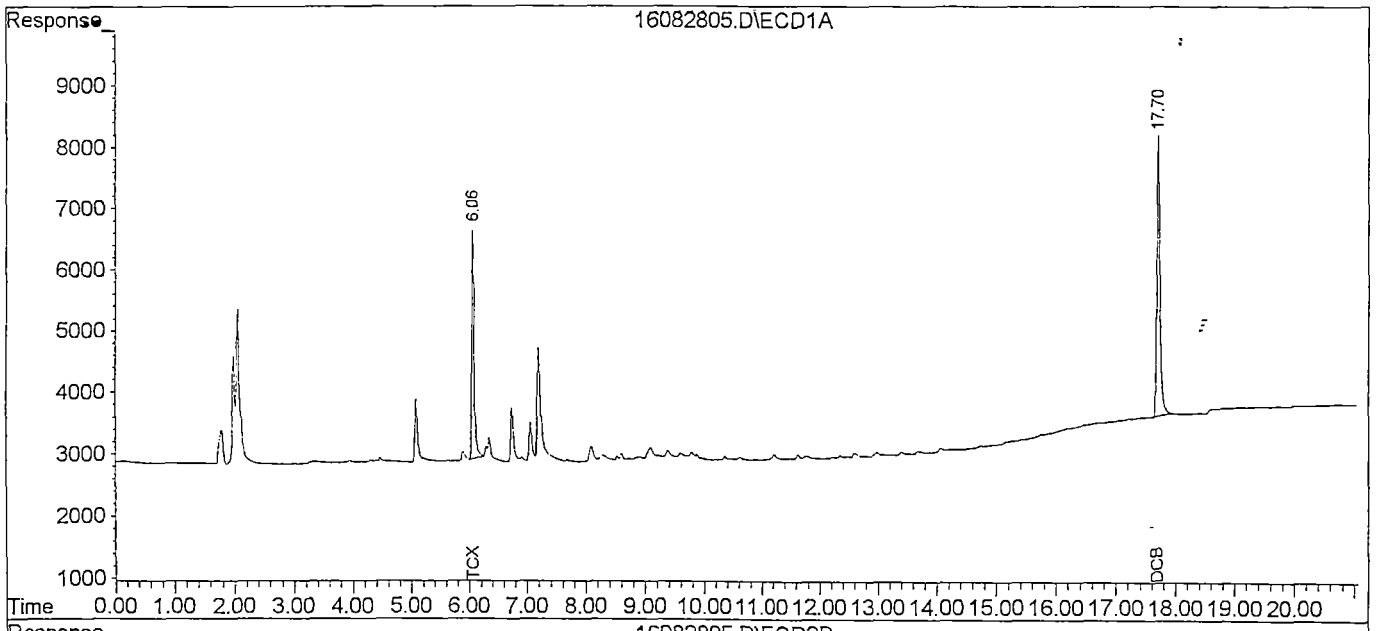
Chromatographic Report

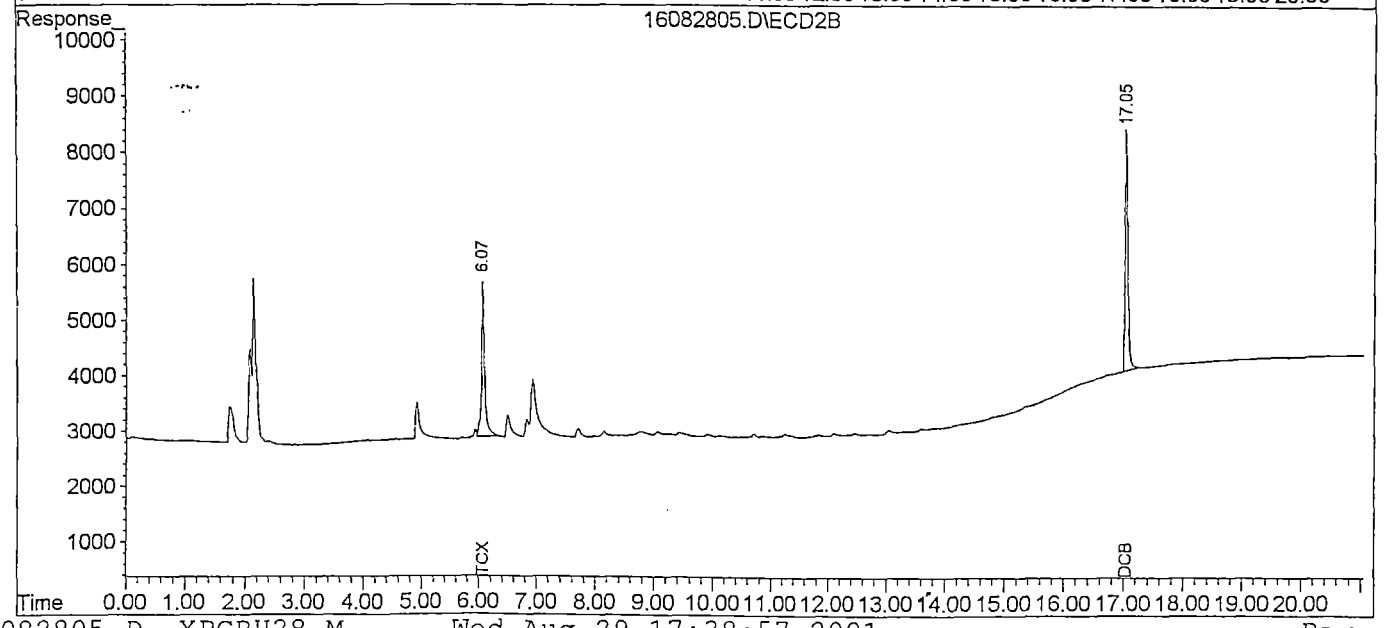
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082805.D\ECD1A.CH Vial: 5
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082805.D\ECD2B.CH
Acq On : 28 Aug 2001 14:13 Operator: TLM
Sample : AR1221L3CF Inst : HP_16
Misc : 5-420-6 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 17:32 2001 Quant Results File: XPCBH28.RES
Quant Time: Aug 29 17:38 2001 Quant Results File: xspcbh28.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001

Multi-Component Method : f:\hpchem\hp\16\data\08_28_01\xspcbh28.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

ok 8-30-01





365

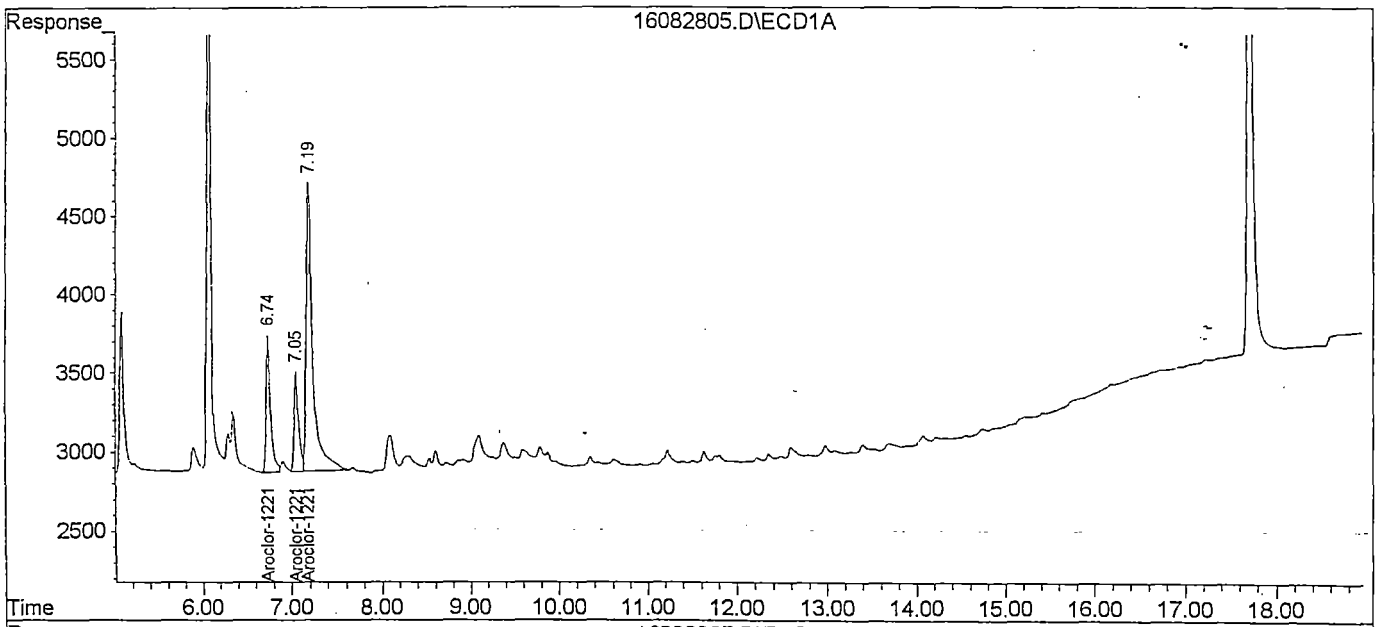
Chromatographic Report

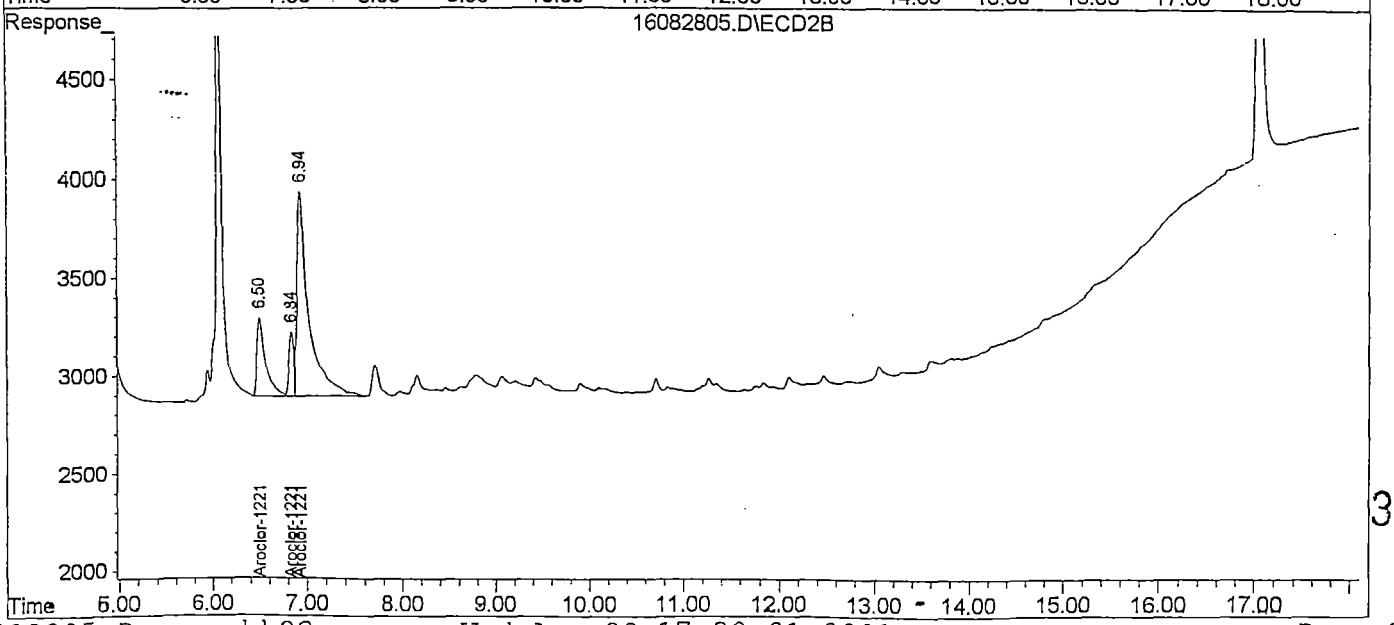
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082805.D\ECD1A.CH Vial: 5
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082805.D\ECD2B.CH
Acq On : 28 Aug 2001 14:13 Operator: TLM
Sample : AR1221L3CF ✓ Inst : HP_16
Misc : 5-420-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 29 17:38 2001 Quant Results File: xspcbh28.RES
Quant Time: Aug 29 17:38 2001 Quant Results File: xspcbh28.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001

Multi-Component Method : f:\hpchem\hp\16\data\08_28_01\xspcbh28.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 Signal #2 Info : .32
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

ok 8-30-01





366

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082805.D\ECD1A.CH Vial: 5
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082805.D\ECD2B.CH
Acq On : 28 Aug 2001 14:13 Operator: TLM
Sample : AR1221L3CF Inst : HP_16
Misc : 5-420-6 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 17:32 2001 Quant Results File: XPCBH28.RES
Multi Time: Aug 29 17:38 2001 Quant Results File: xspcbh28.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001

Multi-Component Method : f:\hpchem\hp\16\data\08_28_01\xspcbh28.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.07	6.07	105091	107927	21.0	19.3
22)	S DCB	17.71	17.05	165771	139444	19.7	18.0
	Target Compounds:						
	Multi-Component Compounds:						
2)	L2 Aroclor-1221	6.74	6.51	30395	24913	400.0	400.0
3)	L2 Aroclor-1221 {2}	7.06	6.84	21774	12131	400.0	400.0
4)	L2 Aroclor-1221 {3}	7.19	6.94	91145	89046	400.0	400.0
	Sum Aroclor-1221			143314	126090	1200.0	1200.0
	Average Aroclor-1221					400.000	400.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16082805.D xspcbh28.m Wed Aug 29 17:38:54 2001 Page 1

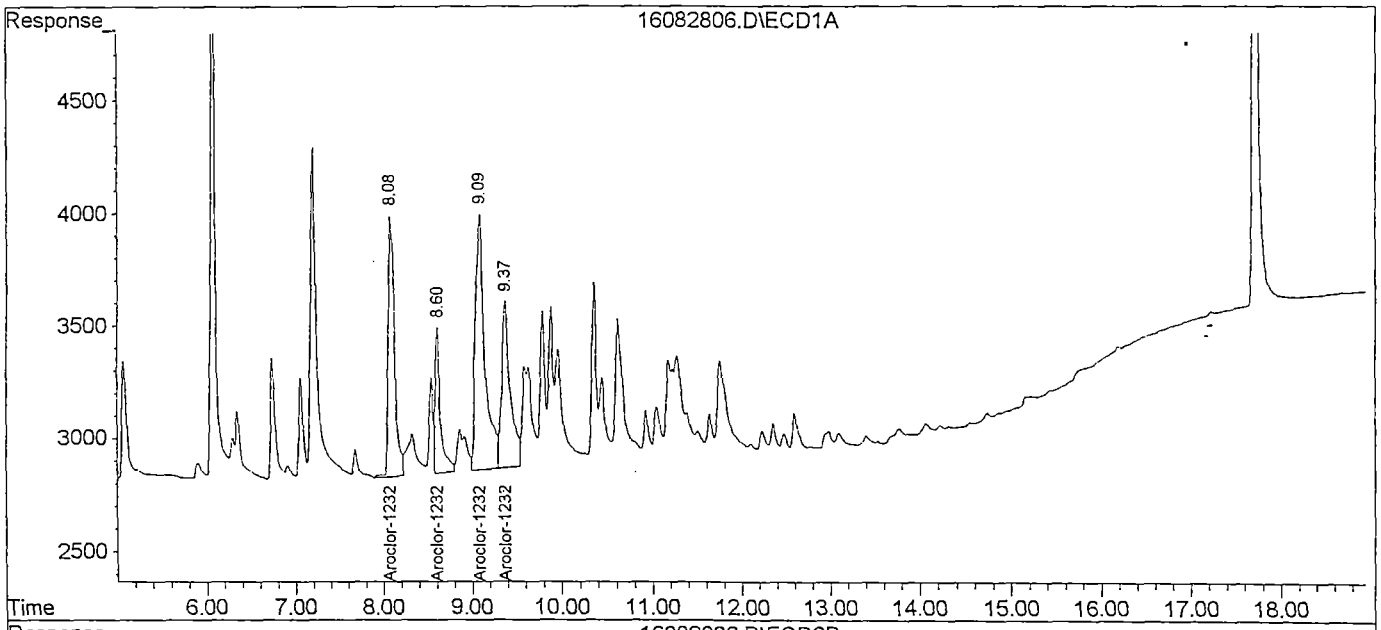
Chromatographic Report

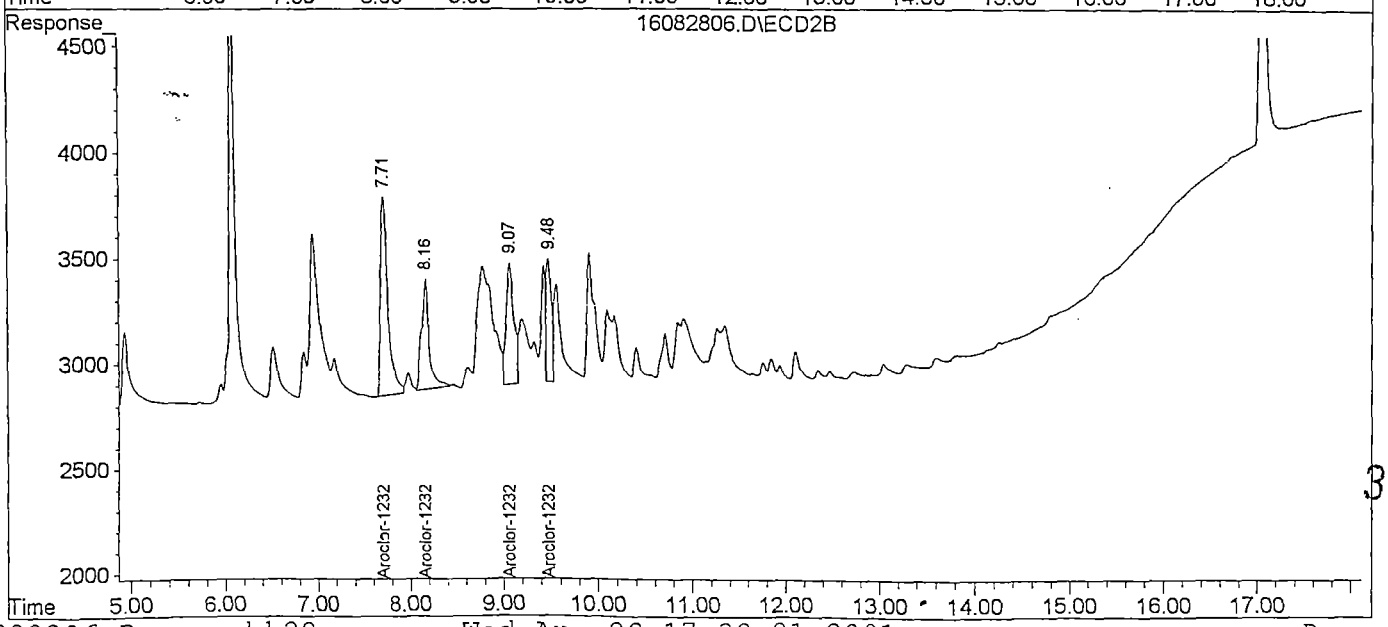
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082806.D\ECD1A.CH Vial: 6
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082806.D\ECD2B.CH
Acq On : 28 Aug 2001 14:38 Operator: TLM
Sample : AR1232L3CF ✓ Inst : HP_16
Misc : 5-422-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 29 17:38 2001 Quant Results File: xspcbh28.RES
Quant Time: Aug 29 17:38 2001 Quant Results File: xspcbh28.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001

Multi-Component Method : f:\hpchem\hp\16\data\08_28_01\xspcbh28.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 Signal #2 Info : .32
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

Ok 8-30-01 RB





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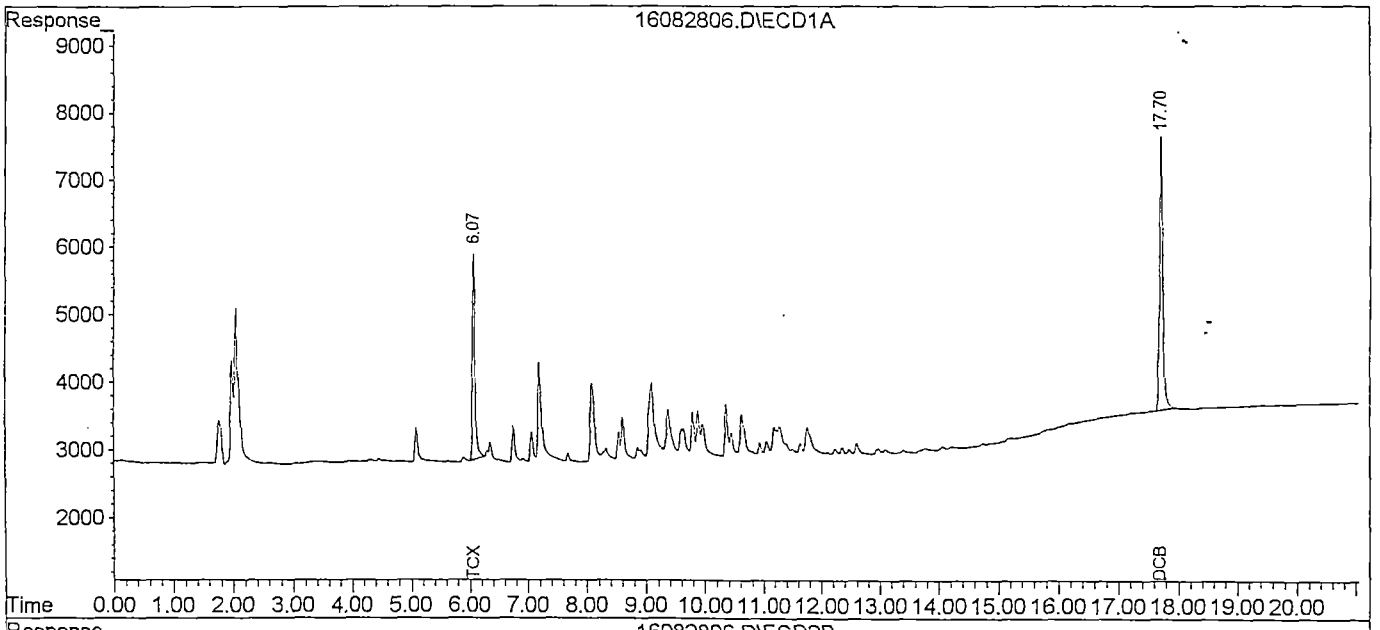
Chromatographic Report

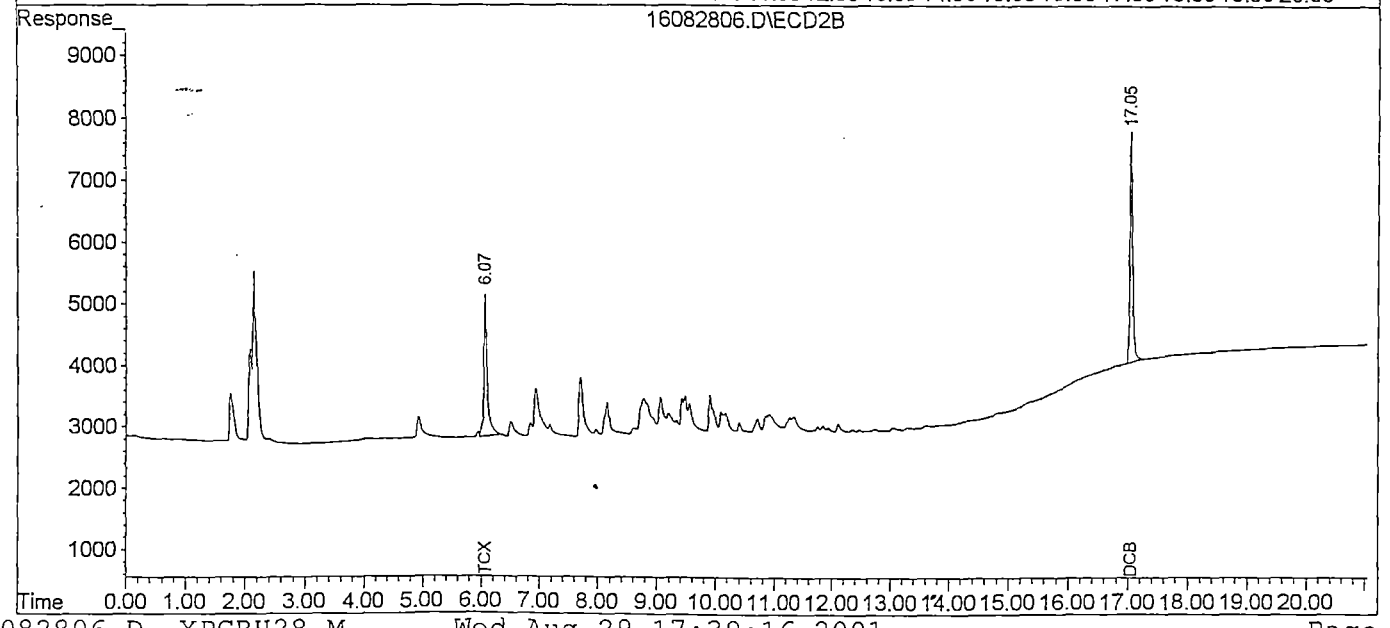
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082806.D\ECD1A.CH Vial: 6
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082806.D\ECD2B.CH
Acq On : 28 Aug 2001 14:38 Operator: TLM
Sample : AR1232L3CF Inst : HP_16
Misc : 5-422-6 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 17:32 2001 Quant Results File: XPCBH28.RES
Quant Time: Aug 29 17:38 2001 Quant Results File: xspcbh28.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001

Multi-Component Method : f:\hpchem\hp\16\data\08_28_01\xspcbh28.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

ok 8-30-01





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082806.D\ECD1A.CH Vial: 6
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082806.D\ECD2B.CH
Acq On : 28 Aug 2001 14:38 Operator: TLM
Sample : AR1232L3CF Inst : HP_16
Misc : 5-422-6 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 17:32 2001 Quant Results File: XPCBH28.RES
Multi Time: Aug 29 17:38 2001 Quant Results File: xspcbh28.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001

Multi-Component Method : f:\hpchem\hp\16\data\08_28_01\xspcbh28.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.07	6.08	90496	92604	18.1	16.5
22)	S DCB	17.71	17.05	147827	122813	17.6	15.9
	Target Compounds:						
	Multi-Component Compounds:						
5)	L3 Aroclor-1232	8.08	7.71	58780	51520	400.0	400.0
6)	L3 Aroclor-1232 {2}	8.61	8.16	26955	30218	400.0	400.0
7)	L3 Aroclor-1232 {3}	9.09	9.07	84304	33278	400.0	400.0
8)	L3 Aroclor-1232 {4}	9.37	9.48	50293	21803	400.0	400.0
	Sum Aroclor-1232			220332	136820	1600.0	1600.0
	Average Aroclor-1232					400.000	400.000

370

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

Response Factor Report HP_16

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

Calibration Files
L1 =16082807.D L2 =16082808.D L3 =16082809.D
L4 =16082810.D L5 =16082811.D

Oh 8-30-01

Compound	L1	L2	L3	L4	L5	Avg	%RSD
7) Aroclor-1242	273.8	198.1	266.7	194.2	191.7	224.9	18.46
8) Aroclor-1242 {2}	161.7	111.8	165.0	116.5	117.7	134.6	19.64
9) Aroclor-1242 {3}	89.4	64.5	92.1	69.2	64.0	75.8	18.16
10) Aroclor-1242 {4}	220.4	159.8	245.1	178.1	167.1	194.1	19.03
11) Aroclor-1242 {5}	54.1	37.0	62.1	48.3	50.0	50.3	18.15
Average %RSD							

Signal #2 Calibration Files
L1 =16082807.D L2 =16082808.D L3 =16082809.D
L4 =16082810.D L5 =16082811.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
30) Aroclor-1242 #2	206.9	144.2	209.4	154.7	157.7	174.6	17.79
31) Aroclor-1242 {2} #2	118.7	84.9	126.9	96.9	101.5	105.8	15.97
32) Aroclor-1242 {3} #2	116.0	79.2	113.2	80.9	78.3	93.5	20.64
33) Aroclor-1242 {4} #2	215.9	150.0	222.6	163.1	165.4	183.4	18.18
34) Aroclor-1242 {5} #2	76.5	48.2	86.9	65.0	72.3	69.8	20.68
Average %RSD							

(#) = Out of Range

XPCBH28.M Wed Aug 29 15:41:03 2001

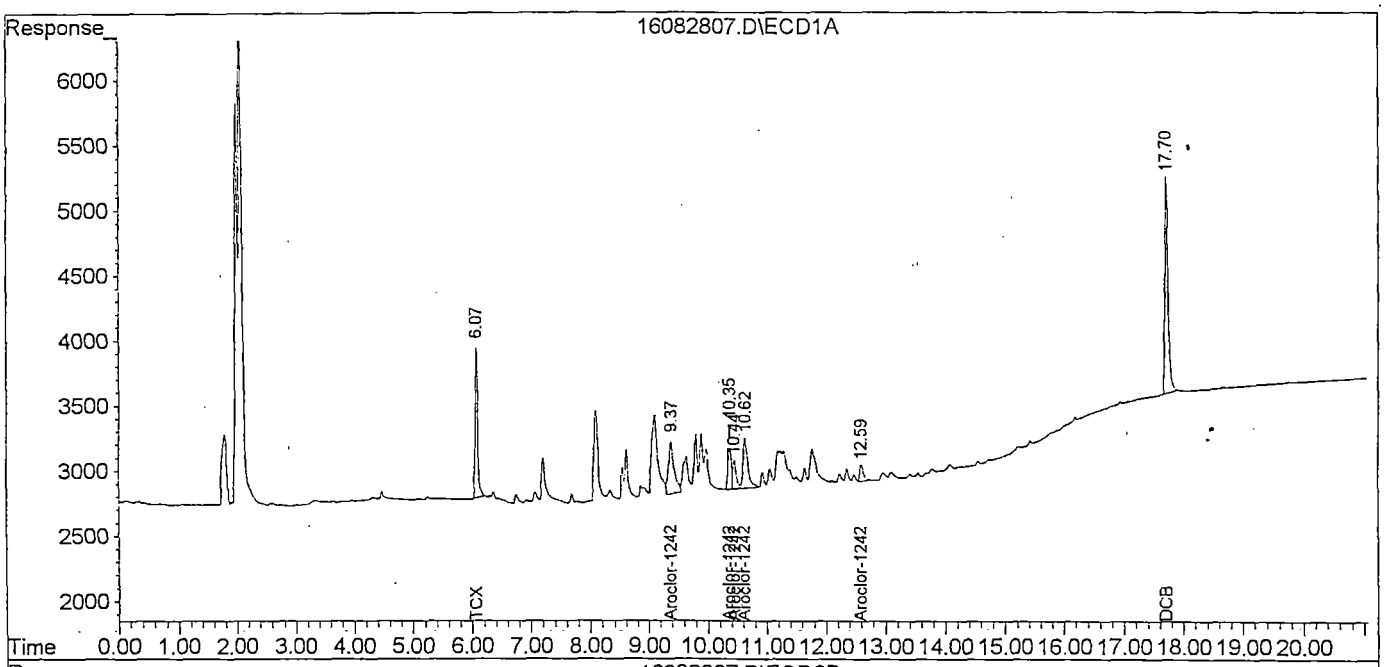
Chromatographic Report

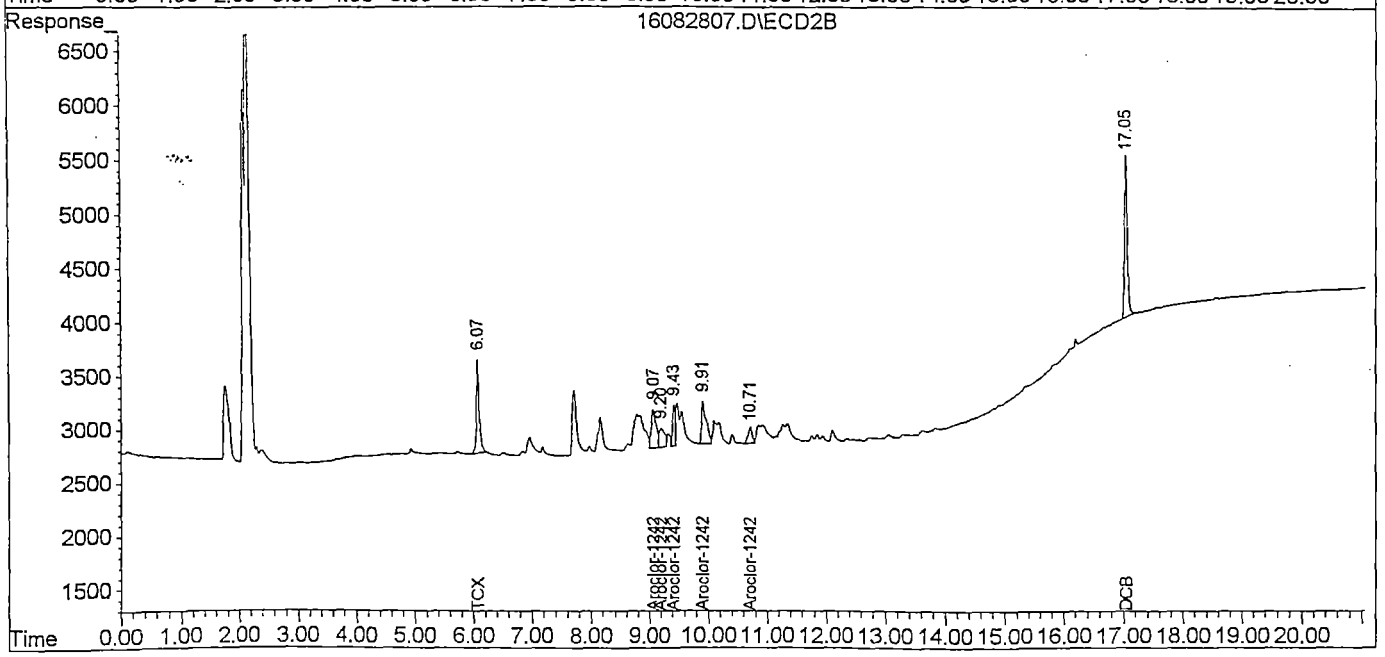
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082807.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082807.D\ECD2B.CH
Acq On : 28 Aug 2001 15:03 Operator: TLM
Sample : AR1242L1CF Inst : HP_16
Misc : 5-11-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:39 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_27_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

Oh 8-30-01





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082807.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082807.D\ECD2B.CH
Acq On : 28 Aug 2001 15:03 Operator: TLM
Sample : AR1242L1CF Inst : HP_16
Misc : 5-11-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:39 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_27_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.07	6.08	33553	30659	6.715	5.532
22)	S DCB	17.71	17.05	59935	48357	7.224	6.362
	Target Compounds:						
7)	L4 Aroclor-1242	9.38	9.07	27381	20687	121.7	118.5
8)	L4 Aroclor-1242 {2}	10.36	9.20	16174	11865	120.2	112.2
9)	L4 Aroclor-1242 {3}	10.44	9.43	8940	11603	117.9	124.1
10)	L4 Aroclor-1242 {4}	10.62	9.91	22036	21587	113.5	117.7
11)	L4 Aroclor-1242 {5}	12.60	10.71	5408	7646	107.5	109.6
	Sum Aroclor-1242			79939	73388	580.9	582.1
	Average Aroclor-1242					116.175	116.410

373

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

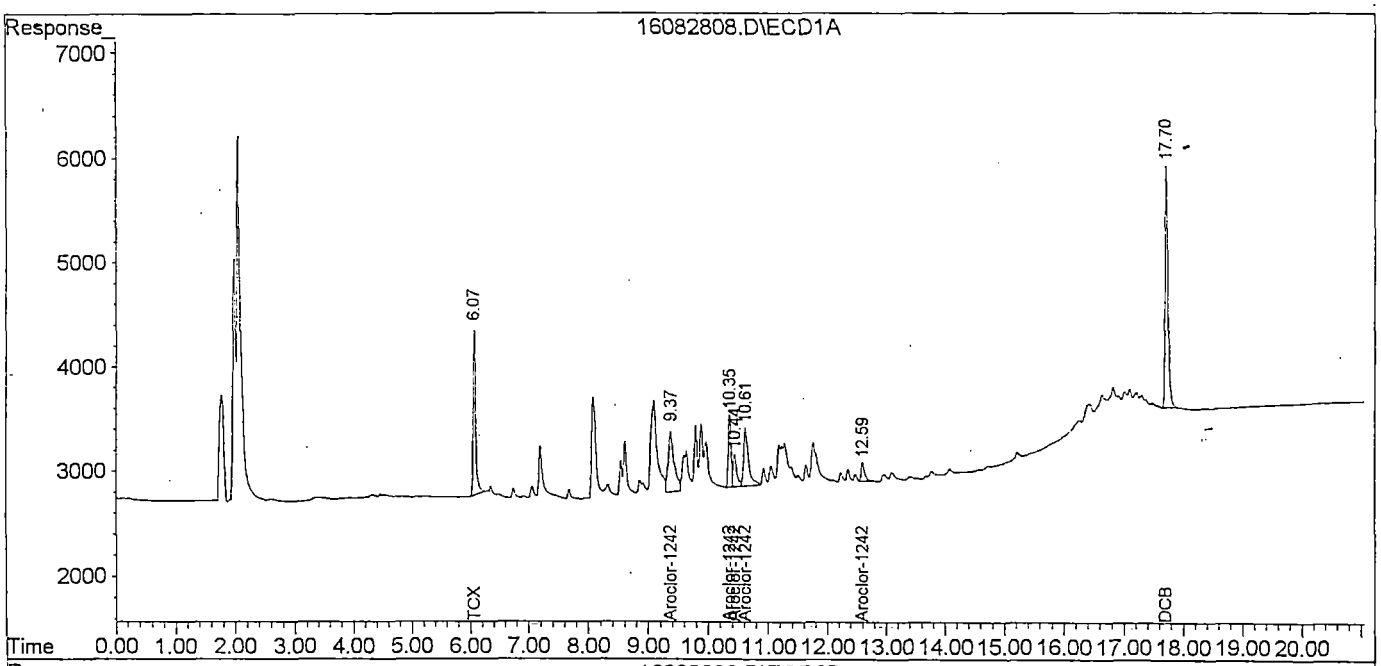
Chromatographic Report

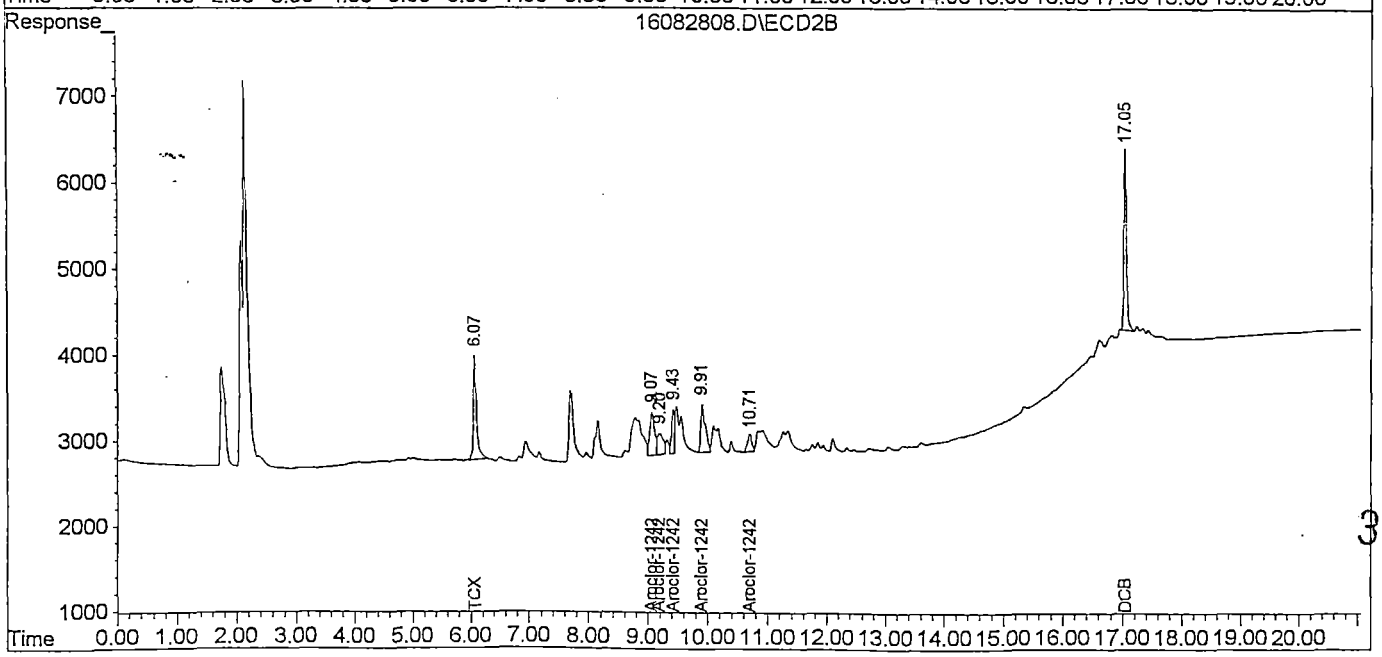
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082808.D\ECD1A.CH Vial: 8
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082808.D\ECD2B.CH
Acq On : 28 Aug 2001 15:28 Operator: TLM
Sample : AR1242L2CF Inst : HP_16
Misc : 5-10-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:40 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

ok 8-30-01

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082808.D\ECD1A.CH Vial: 8
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082808.D\ECD2B.CH
Acq On : 28 Aug 2001 15:28 Operator: TLM
Sample : AR1242L2CF Inst : HP_16
Misc : 5-10-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:40 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.07	6.08	47204	46308	8.614	7.850
22)	S DCB	17.70	17.05	78098	64738	8.600	8.000
	Target Compounds:						
7)	L4 Aroclor-1242	9.37	9.07	39629	28835	176.2	165.2
8)	L4 Aroclor-1242 {2}	10.36	9.20	22359	16988	166.2	160.6
9)	L4 Aroclor-1242 {3}	10.44	9.43	12906	15842	170.2	169.4
10)	L4 Aroclor-1242 {4}	10.62	9.91	31965	29999	164.7	163.6
11)	L4 Aroclor-1242 {5}	12.60	10.71	7400	9632	147.1	138.1
	Sum Aroclor-1242			114259	101297	824.4	796.8
	Average Aroclor-1242					164.872	159.365

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16082808.D XPCBH28.M Wed Aug 29 15:40:12 2001 Page 1

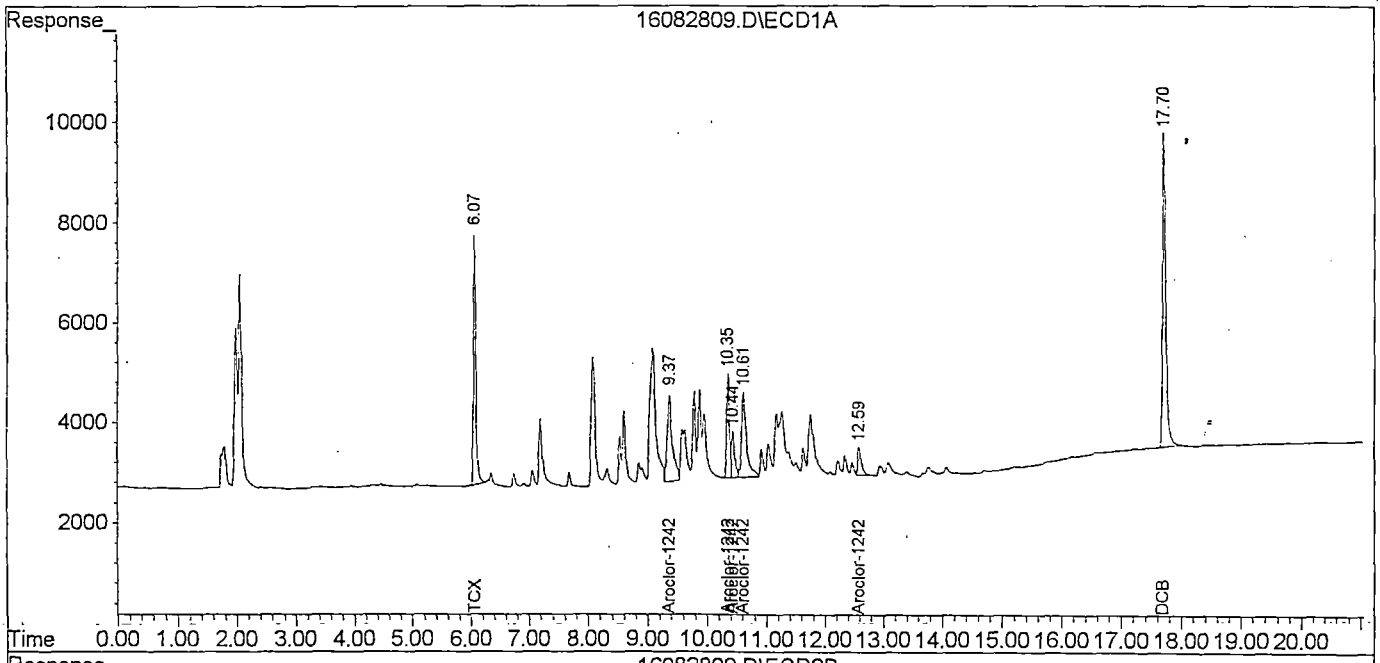
Chromatographic Report

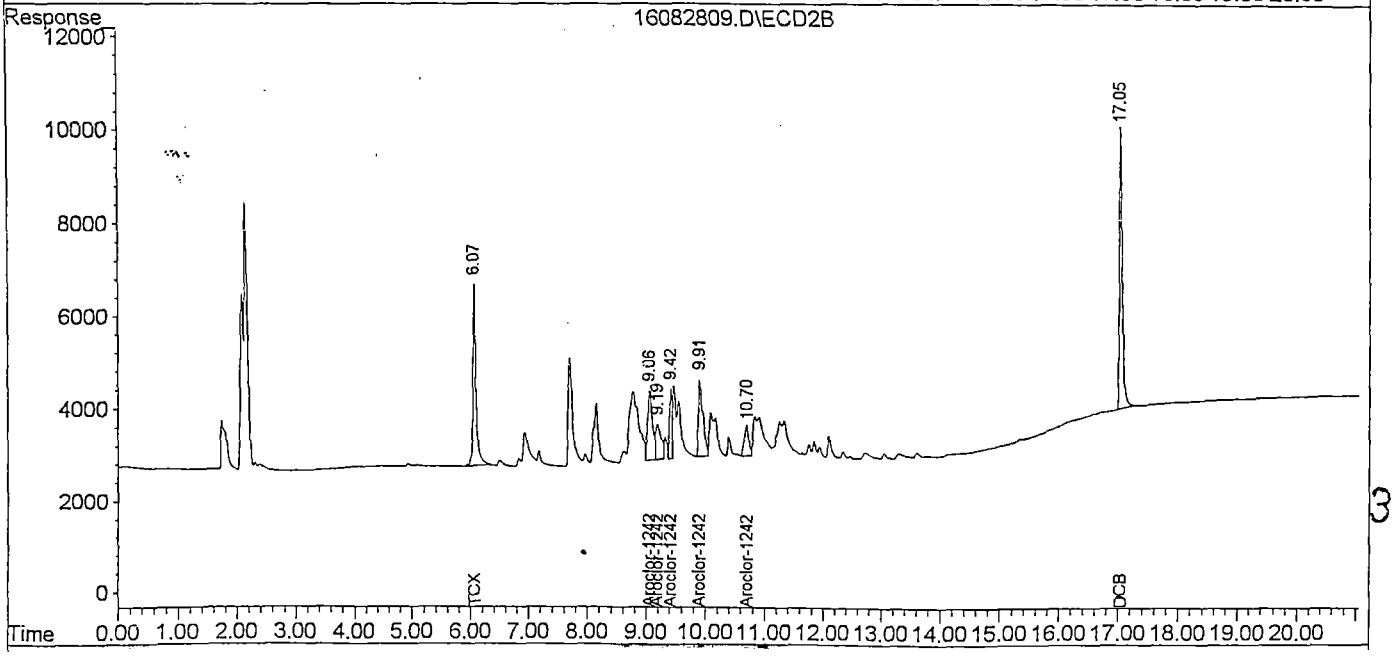
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082809.D\ECD1A.CH Vial: 9
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082809.D\ECD2B.CH
Acq On : 28 Aug 2001 15:52 Operator: TLM
Sample : AR1242L3CF Inst : HP_16
Misc : 5-9-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:40 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

ok
8-30-01

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082809.D\ECD1A.CH Vial: 9
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082809.D\ECD2B.CH
Acq On : 28 Aug 2001 15:52 Operator: TLM
Sample : AR1242L3CF Inst : HP_16
Misc : 5-9-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:40 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.07	6.08	139817	142087	26.1	25.3
22)	S DCB	17.70	17.05	232173	200494	26.7	26.3
	Target Compounds:						
7)	L4 Aroclor-1242	9.37	9.06	106668	83741	474.3	479.7
8)	L4 Aroclor-1242 {2}	10.35	9.20	66006	50752	490.6	479.8
9)	L4 Aroclor-1242 {3}	10.44	9.43	36825	45286	485.5	484.2
10)	L4 Aroclor-1242 {4}	10.62	9.91	98043	89055	505.1	485.6
11)	L4 Aroclor-1242 {5}	12.60	10.71	24822	34748	493.5	498.1
	Sum Aroclor-1242			332364	303581	2449.0	2427.4
	Average Aroclor-1242					489.807	485.481

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16082809.D XPCBH28.M Wed Aug 29 15:40:26 2001 Page 1

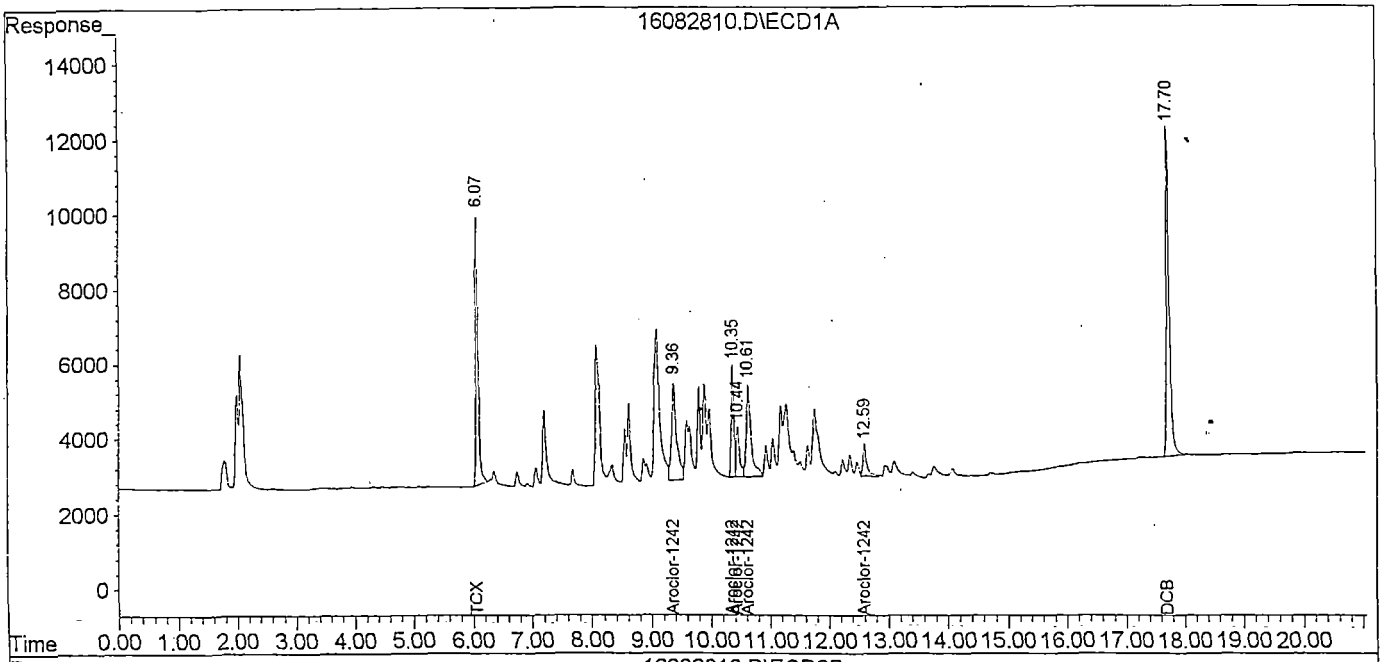
Chromatographic Report

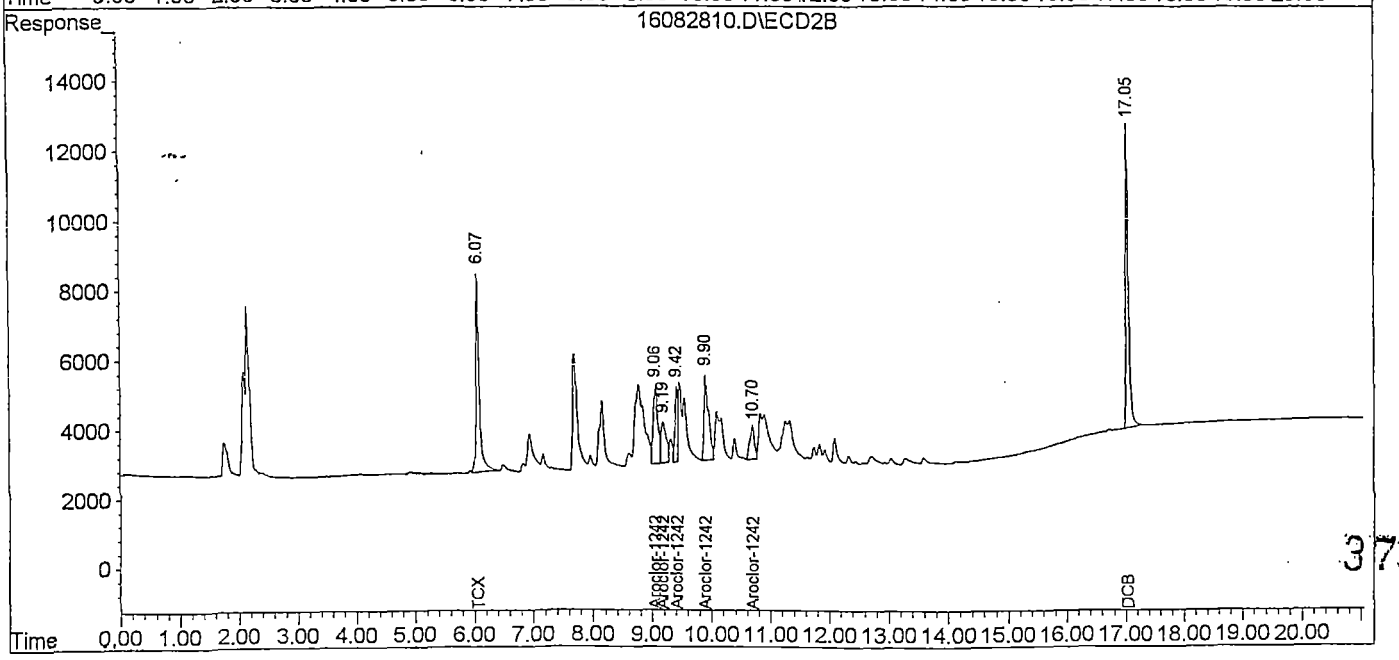
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082810.D\ECD1A.CH Vial: 10
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082810.D\ECD2B.CH
Acq On : 28 Aug 2001 16:17 Operator: TLM
Sample : AR1242L4CF Inst : HP_16
Misc : 5-8-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:40 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

ok
8-30-01

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082810.D\ECD1A.CH Vial: 10
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082810.D\ECD2B.CH
Acq On : 28 Aug 2001 16:17 Operator: TLM
Sample : AR1242L4CF Inst : HP_16
Misc : 5-8-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:40 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.07	6.08	208899	222737	36.3	37.7
22)	S DCB	17.70	17.05	328628	291389	35.3	36.2
	Target Compounds:						
7)	L4 Aroclor-1242	9.37	9.06	155373	123777	690.8	709.1
8)	L4 Aroclor-1242 {2}	10.35	9.19	93223	77538	692.8	733.0
9)	L4 Aroclor-1242 {3}	10.44	9.43	55360	64699	729.9	691.8
10)	L4 Aroclor-1242 {4}	10.61	9.91	142477	130450	734.1	711.3
11)	L4 Aroclor-1242 {5}	12.59	10.71	38649	52021	768.5	745.8
	Sum Aroclor-1242			485083	448484	3616.1	3590.9
	Average Aroclor-1242					723.226	718.173

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

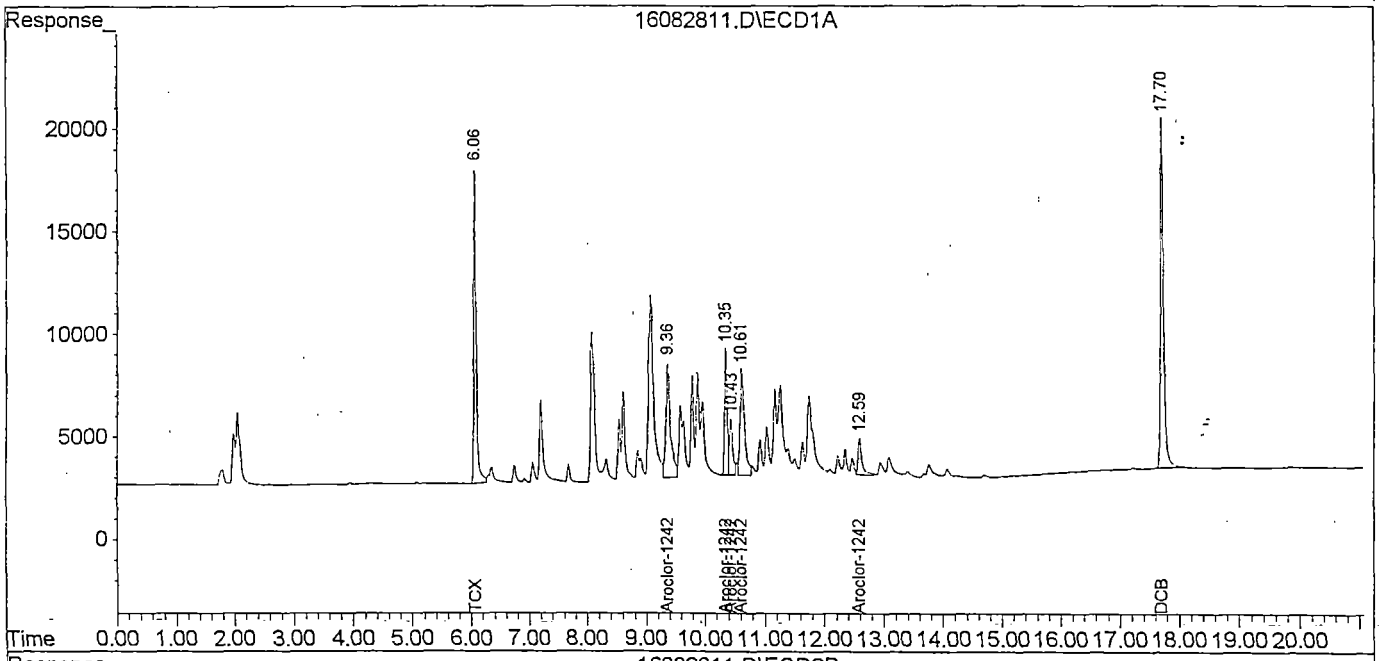
Chromatographic Report

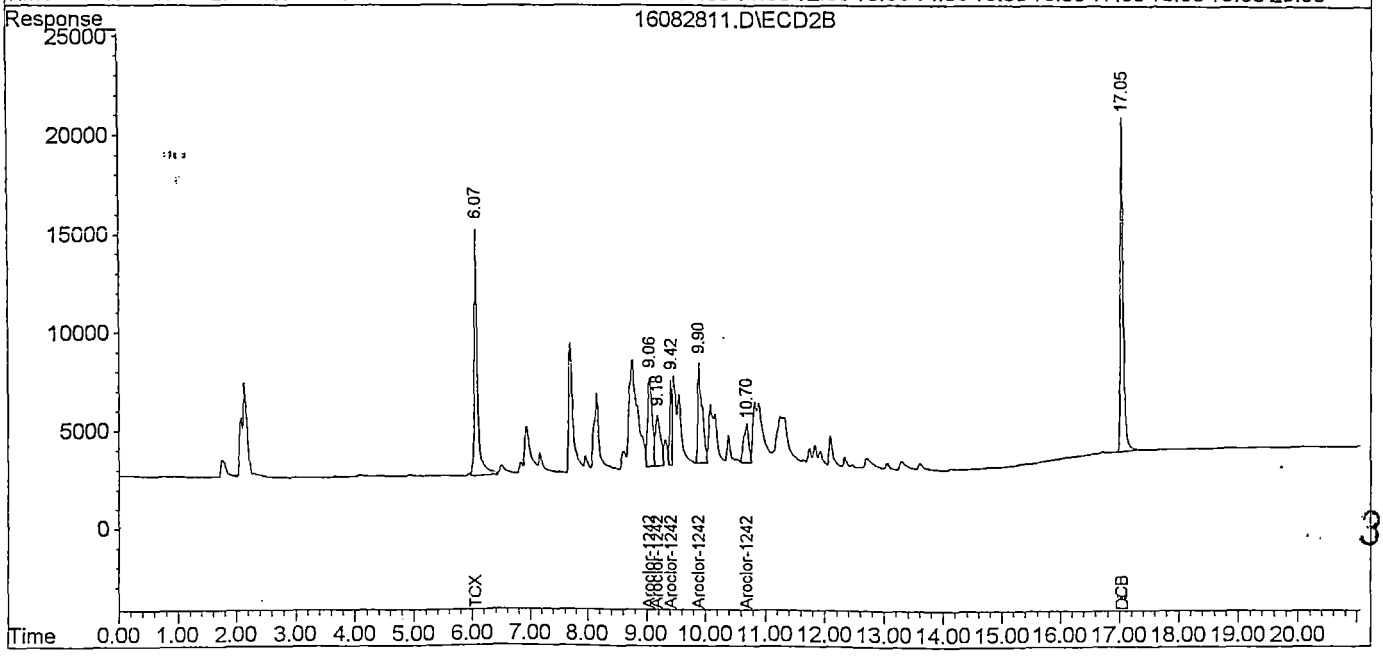
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082811.D\ECD1A.CH Vial: 11
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082811.D\ECD2B.CH
Acq On : 28 Aug 2001 16:42 Operator: TLM
Sample : AR1242L5CF Inst : HP_16
Misc : 5-7-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:40 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

ok 8-30-01

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082811.D\ECD1A.CH Vial: 11
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082811.D\ECD2B.CH
Acq On : 28 Aug 2001 16:42 Operator: TLM
Sample : AR1242L5CF Inst : HP_16
Misc : 5-7-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:40 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.07	6.07	457475	489687	80.2 E	84.9 E
22)	S DCB	17.70	17.05	624978	562117	67.7 E	71.3 E
	Target Compounds:						
7)	L4 Aroclor-1242	9.36	9.06	306768	252319	1363.9 E	1445.4
8)	L4 Aroclor-1242 {2}	10.35	9.19	188293	162431	1399.4	1535.5 E
9)	L4 Aroclor-1242 {3}	10.44	9.42	102446	125278	1350.8 E	1339.5
10)	L4 Aroclor-1242 {4}	10.61	9.90	267283	264708	1377.1 E	1443.3 E
11)	L4 Aroclor-1242 {5}	12.59	10.70	80043	115617	1591.5	1657.5 E
	Sum Aroclor-1242			944833	920353	7082.7	7421.2
	Average Aroclor-1242					1416.543	1484.244

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16082811.D XPCBH28.M Wed Aug 29 15:40:53 2001 Page 1

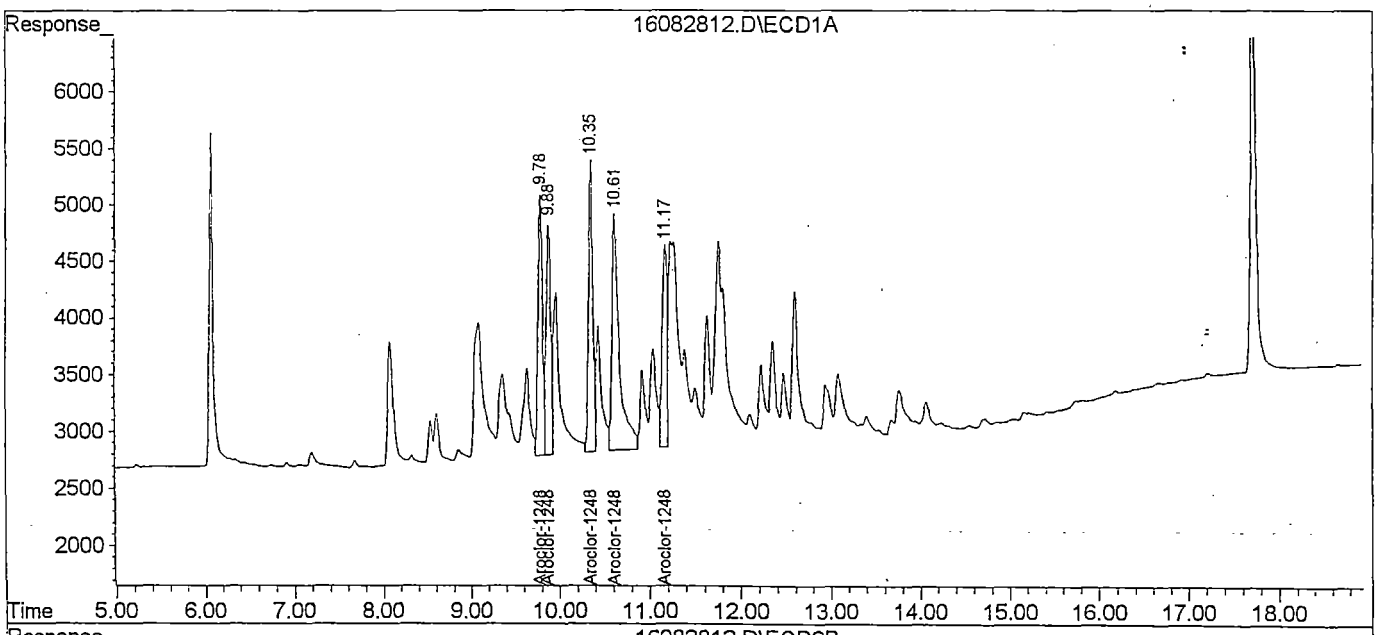
Chromatographic Report

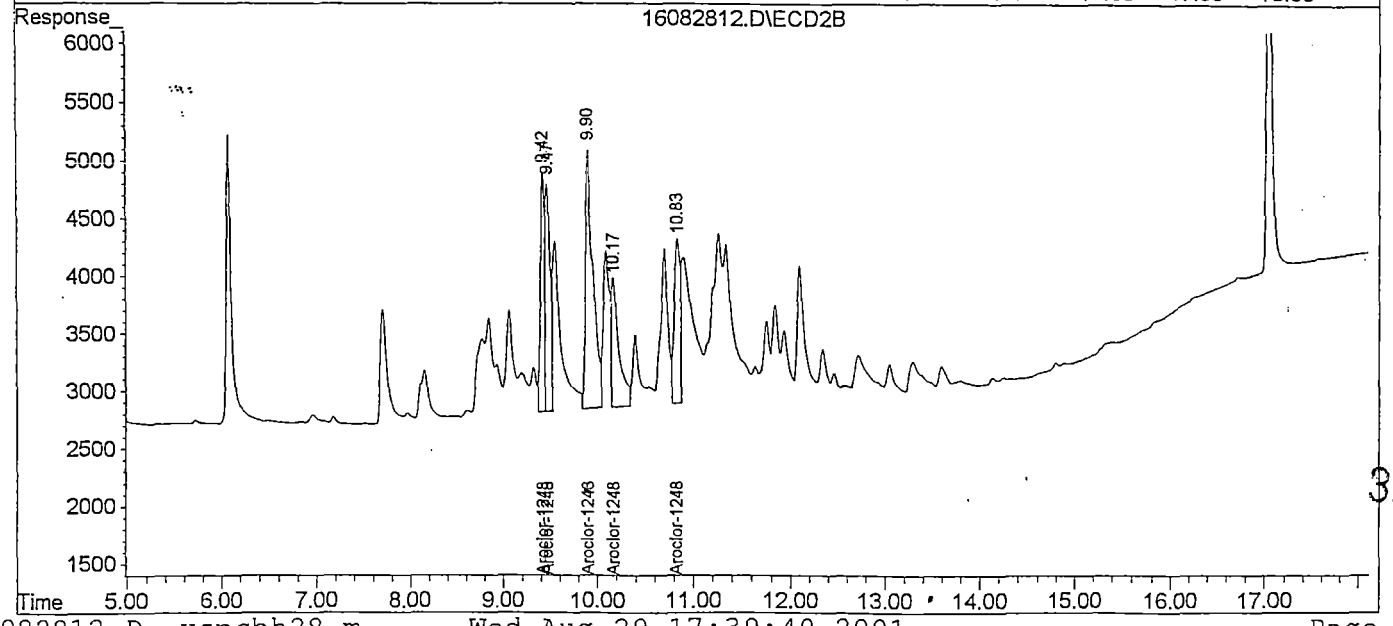
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082812.D\ECD1A.CH Vial: 12
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082812.D\ECD2B.CH
Acq On : 28 Aug 2001 17:06 Operator: TLM
Sample : AR1248L3CF Inst : HP_16
Misc : 5-424-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 29 17:33 2001 Quant Results File: xspcbh28.RES
Quant Time: Aug 29 17:33 2001 Quant Results File: xspcbh28.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001

Multi-Component Method : f:\hpchem\hp\16\data\08_28_01\xspcbh28.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 Signal #2 Info : .32
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

ok 8-30-01





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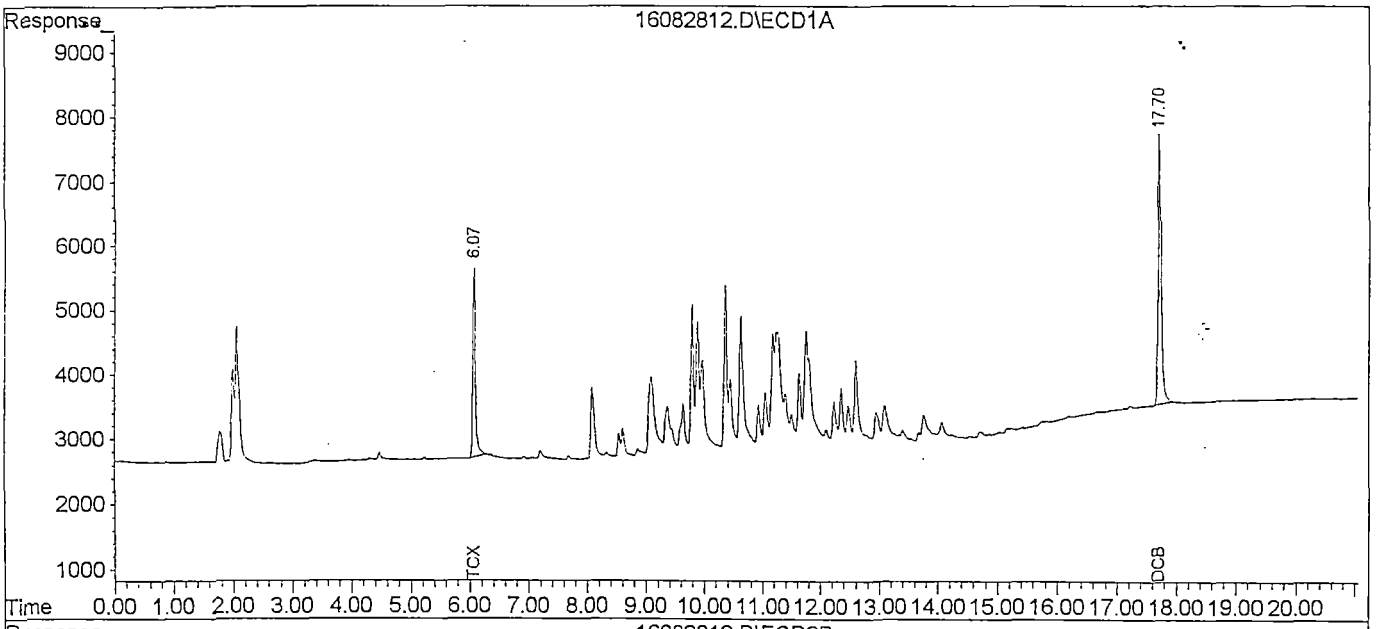
Chromatographic Report

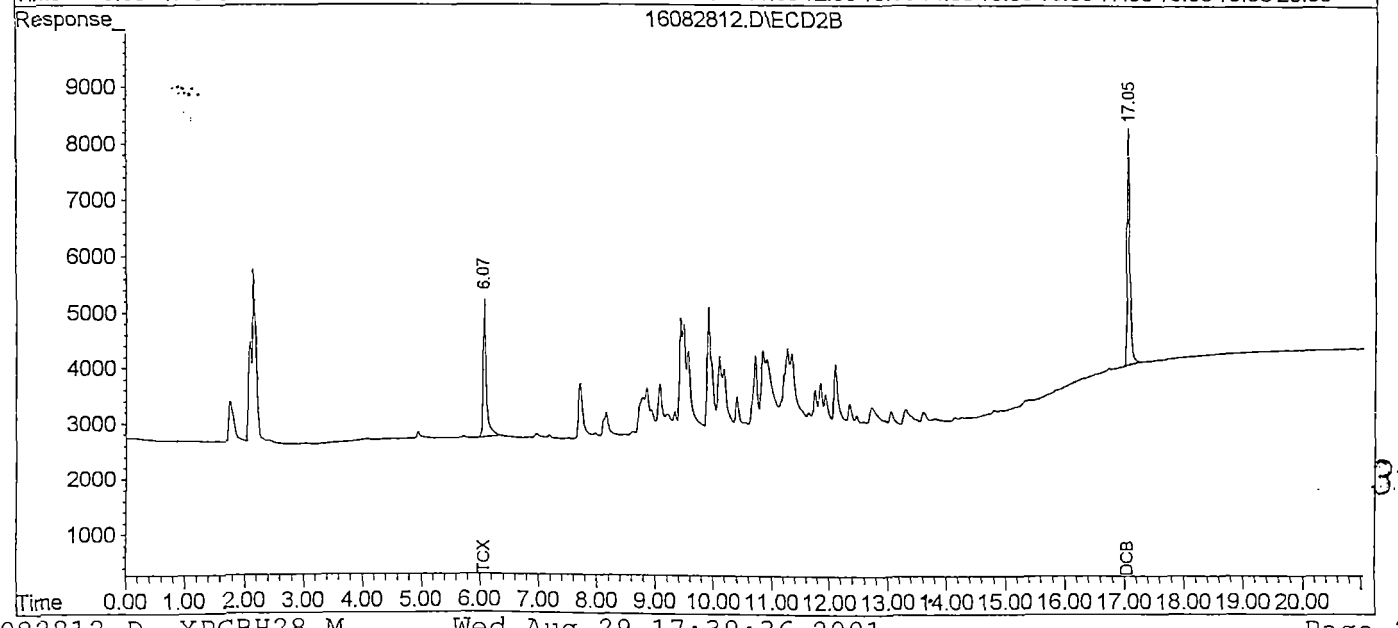
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082812.D\ECD1A.CH Vial: 12
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082812.D\ECD2B.CH
Acq On : 28 Aug 2001 17:06 Operator: TLM
Sample : AR1248L3CF Inst : HP_16
Misc : 5-424-6 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 17:32 2001 Quant Results File: XPCBH28.RES
Quant Time: Aug 29 17:33 2001 Quant Results File: xspcbh28.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001

Multi-Component Method : f:\hpchem\hp\16\data\08_28_01\xspcbh28.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

ok 8-30-01





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082812.D\ECD1A.CH Vial: 12
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082812.D\ECD2B.CH
Acq On : 28 Aug 2001 17:06 Operator: TLM
Sample : AR1248L3CF Inst : HP_16
Misc : 5-424-6 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 17:32 2001 Quant Results File: XPCBH28.RES
Multi Time: Aug 29 17:33 2001 Quant Results File: xspcbh28.RES

Pesticide Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001

Multi-Component Method : f:\hpchem\hp\16\data\08_28_01\xspcbh28.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : RTX-PEST 2 Signal #2 Phase: RTX-PEST
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_16A Signal #2 Inst : HP_16B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.07	6.08	88751	93362	17.8	16.7
22)	S DCB	17.70	17.05	154788	138738	18.4	17.9
	Target Compounds:						
	Multi-Component Compounds:						
14)	L5 Aroclor-1248	9.79	9.43	75682	62939	400.0	400.0
15)	L5 Aroclor-1248 {2}	9.88	9.48	71308	70656	400.0	400.0
16)	L5 Aroclor-1248 {3}	10.35	9.91	85218	127068	400.0	400.0
17)	L5 Aroclor-1248 {4}	10.62	10.18	120959	63901	400.0	400.0
18)	L5 Aroclor-1248 {5}	11.17	10.84	61527	60861	400.0	400.0
	Sum Aroclor-1248			414694	385425	2000.0	2000.0
	Average Aroclor-1248					400.000	400.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16082812.D xspcbh28.m Wed Aug 29 17:39:33 2001 Page 1

Response Factor Report HP_16

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

Ok 8-30-01

Calibration Files
L1 =16082813.D L2 =16082814.D L3 =16082815.D
L4 =16082816.D L5 =16082817.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
12) Aroclor-1254	387.8	314.8	303.2	270.4	217.5	298.7	20.92
13) Aroclor-1254 {2}	256.8	200.2	200.9	185.2	152.9	199.2	18.90
14) Aroclor-1254 {3}	539.8	445.4	444.7	404.9	333.6	433.7	17.24
15) Aroclor-1254 {4}	273.5	231.5	230.3	206.3	165.8	221.5	17.81
16) Aroclor-1254 {5}	256.5	253.2	259.9	236.2	187.5	238.7	12.58

Average %RSD

Signal #2 Calibration Files
L1 =16082813.D L2 =16082814.D L3 =16082815.D
L4 =16082816.D L5 =16082817.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
35) Aroclor-1254 #2	500.4	400.7	407.4	378.6	320.8	401.6	16.16
36) Aroclor-1254 {2} #2	219.7	177.7	186.2	171.5	143.0	179.6	15.40
37) Aroclor-1254 {3} #2	216.0	192.3	226.0	223.8	198.6	211.3	7.16
38) Aroclor-1254 {4} #2	391.6	330.5	341.2	311.2	256.6	326.2	15.01
39) Aroclor-1254 {5} #2	434.6	377.8	386.3	366.8	312.2	375.5	11.69

Average %RSD

(#) = Out of Range

XPCBH28.M Wed Aug 29 15:43:27 2001

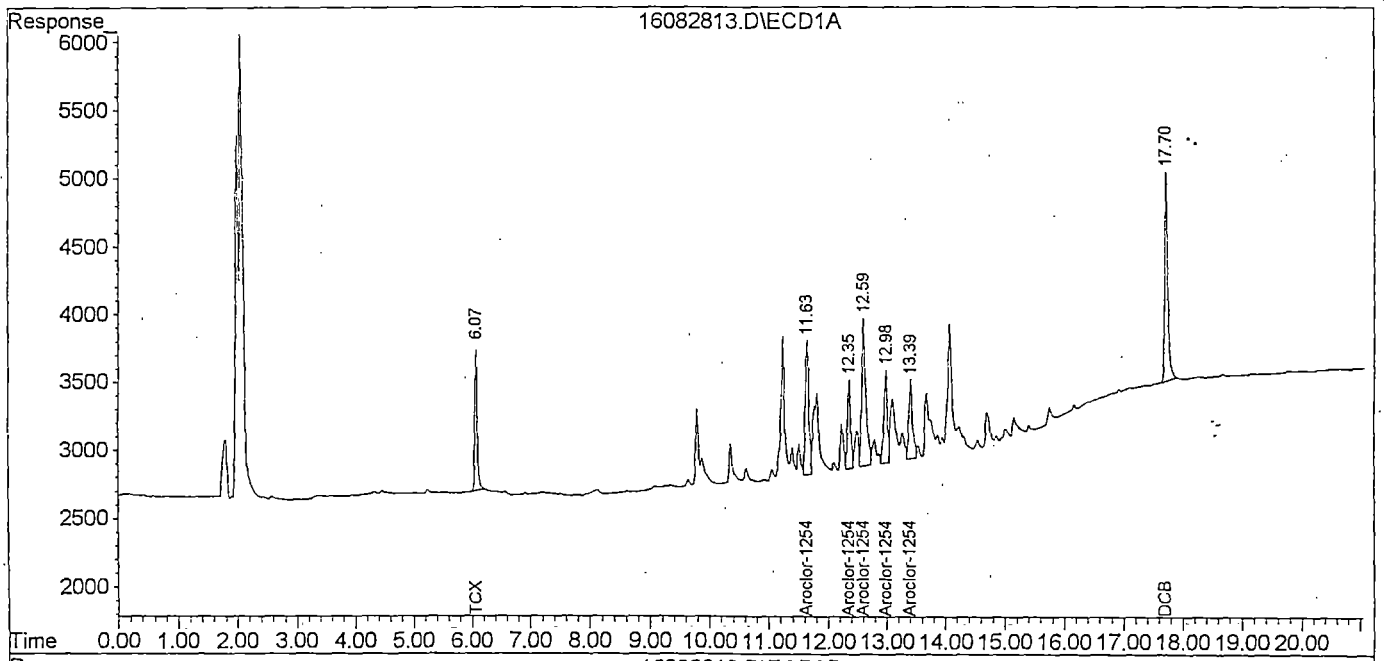
Chromatographic Report

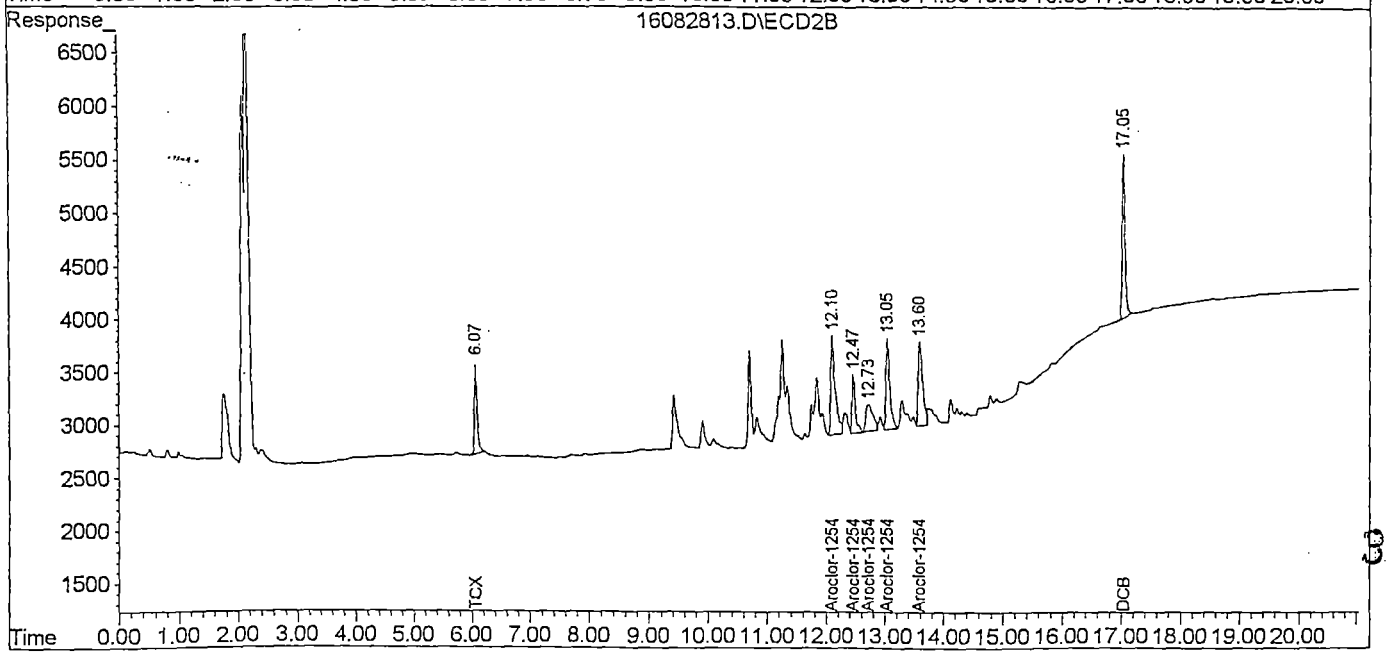
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082813.D\ECD1A.CH Vial: 13
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082813.D\ECD2B.CH
Acq On : 28 Aug 2001 17:31 Operator: TLM
Sample : AR1254L1CF Inst : HP_16
Misc : 5-6-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:42 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

ok 8-30-01

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082813.D\ECD1A.CH Vial: 13
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082813.D\ECD2B.CH
Acq On : 28 Aug 2001 17:31 Operator: TLM
Sample : AR1254L1CF Inst : HP_16
Misc : 5-6-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:42 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.07	6.08	30573	28720	5.206	4.859
22)	S DCB	17.71	17.05	57241	49752	6.034	6.145
	Target Compounds:						
12)	L6 Aroclor-1254	11.64	12.10	38782	50035	129.8	124.6
13)	L6 Aroclor-1254 {2}	12.35	12.47	25682	21969	128.9	122.3
14)	L6 Aroclor-1254 {3}	12.60	12.73f	53981	21595	124.5	102.2
15)	L6 Aroclor-1254 {4}	12.98	13.05	27354	39159	123.5	120.0
16)	L6 Aroclor-1254 {5}	13.40	13.60	25646	43463	107.5	115.7
	Sum Aroclor-1254			171445	176221	614.2	584.9
	Average Aroclor-1254					122.838	116.974

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16082813.D XPCBH28.M Wed Aug 29 15:42:24 2001 Page 1

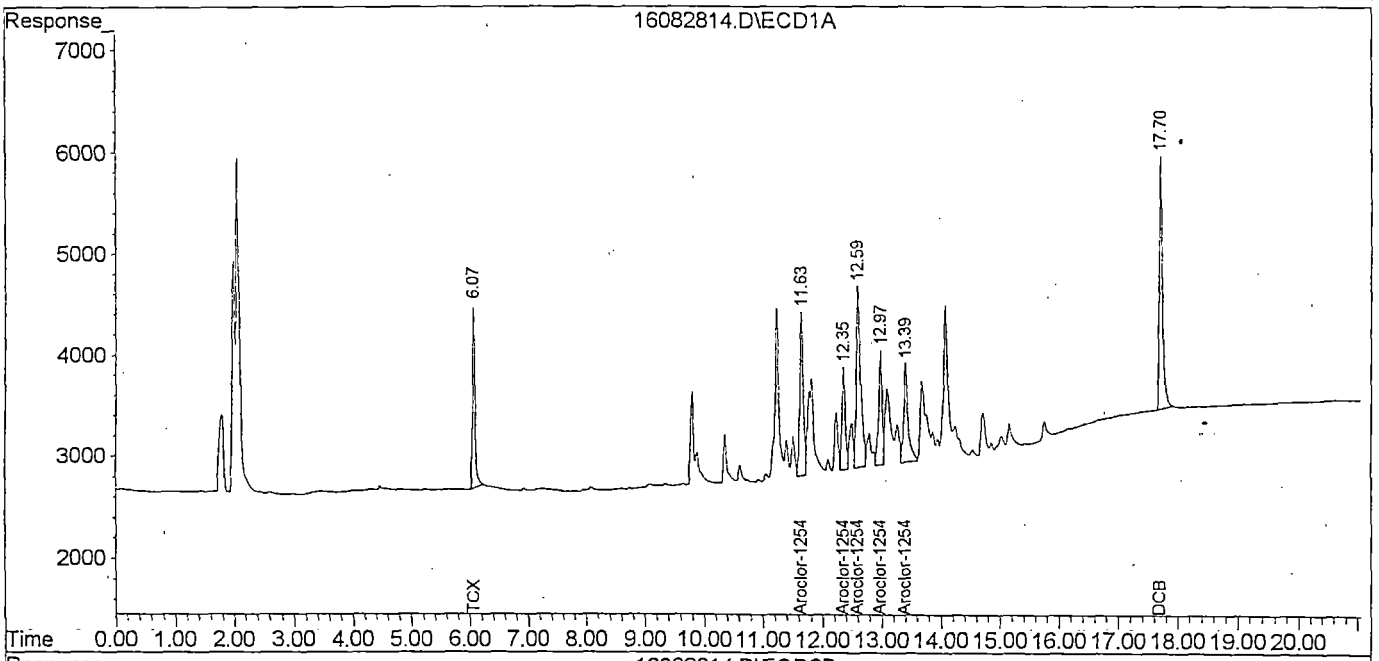
Chromatographic Report

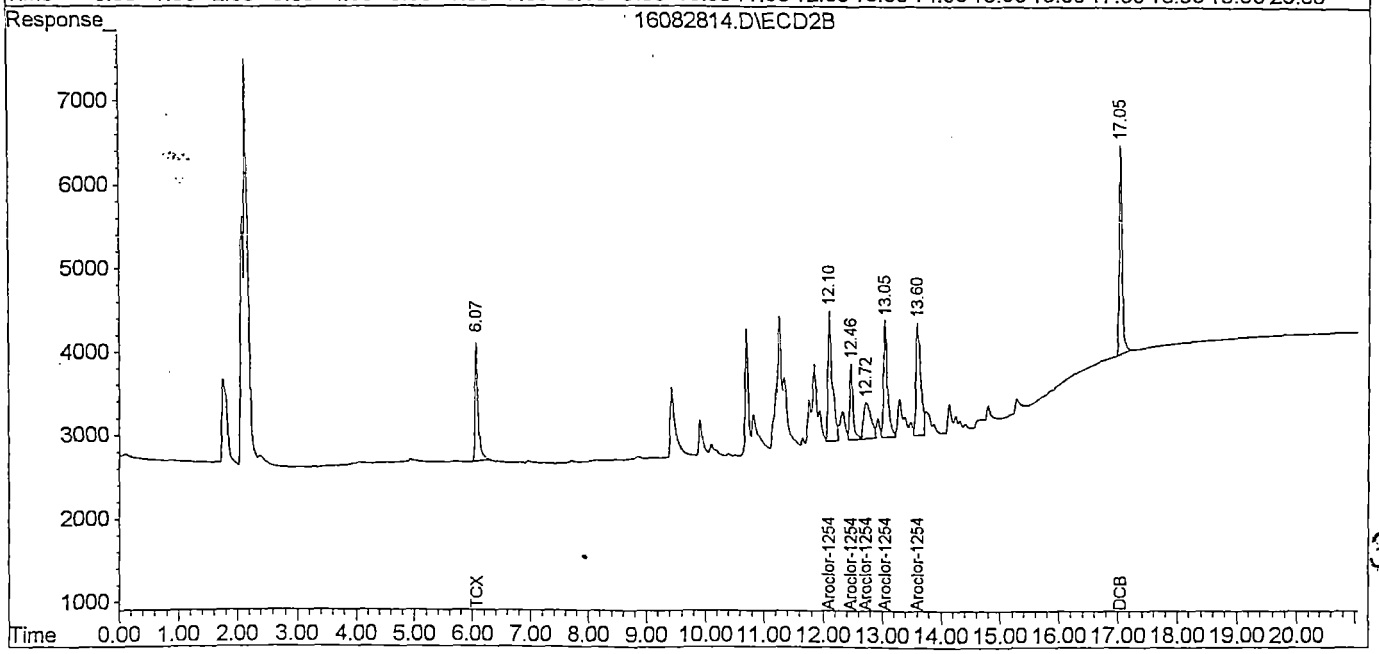
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082814.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082814.D\ECD2B.CH
Acq On : 28 Aug 2001 17:56 Operator: TLM
Sample : AR1254L2CF Inst : HP_16
Misc : 5-5-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:42 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

ok
8-30-01

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082814.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082814.D\ECD2B.CH
Acq On : 28 Aug 2001 17:56 Operator: TLM
Sample : AR1254L2CF Inst : HP_16
Misc : 5-5-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:42 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.07	6.08	52389	52840	9.106	9.058
22)	S DCB	17.70	17.05	92339	81529	9.845	10.0
	Target Compounds:						
12)	L6 Aroclor-1254	11.63	12.10	62963	80141	210.8	199.6
13)	L6 Aroclor-1254 {2}	12.35	12.47	40038	35548	201.0	197.9
14)	L6 Aroclor-1254 {3}	12.59	12.72	89071	38457	205.4	182.0
15)	L6 Aroclor-1254 {4}	12.98	13.05	46302	66108	209.1	202.7
16)	L6 Aroclor-1254 {5}	13.40	13.60	50644	75561	212.2	201.2
	Sum Aroclor-1254			289018	295815	1038.4	983.3
	Average Aroclor-1254					207.683	196.663

389

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

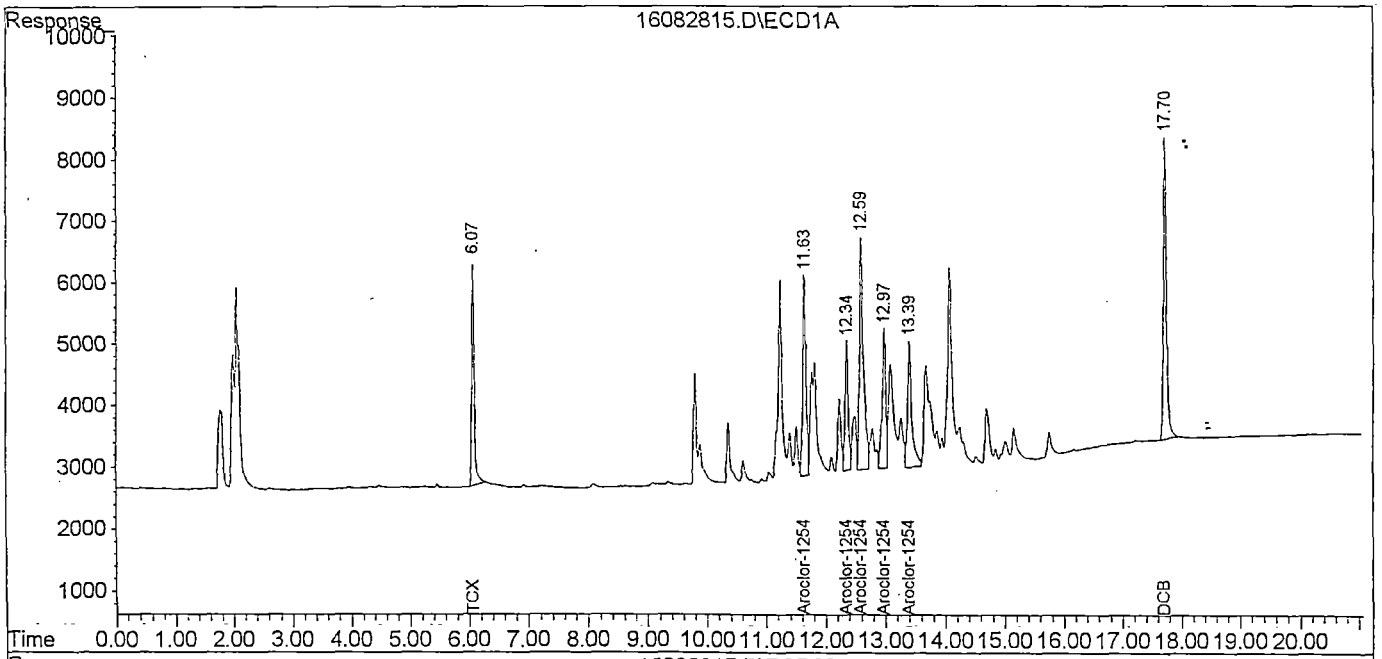
Chromatographic Report

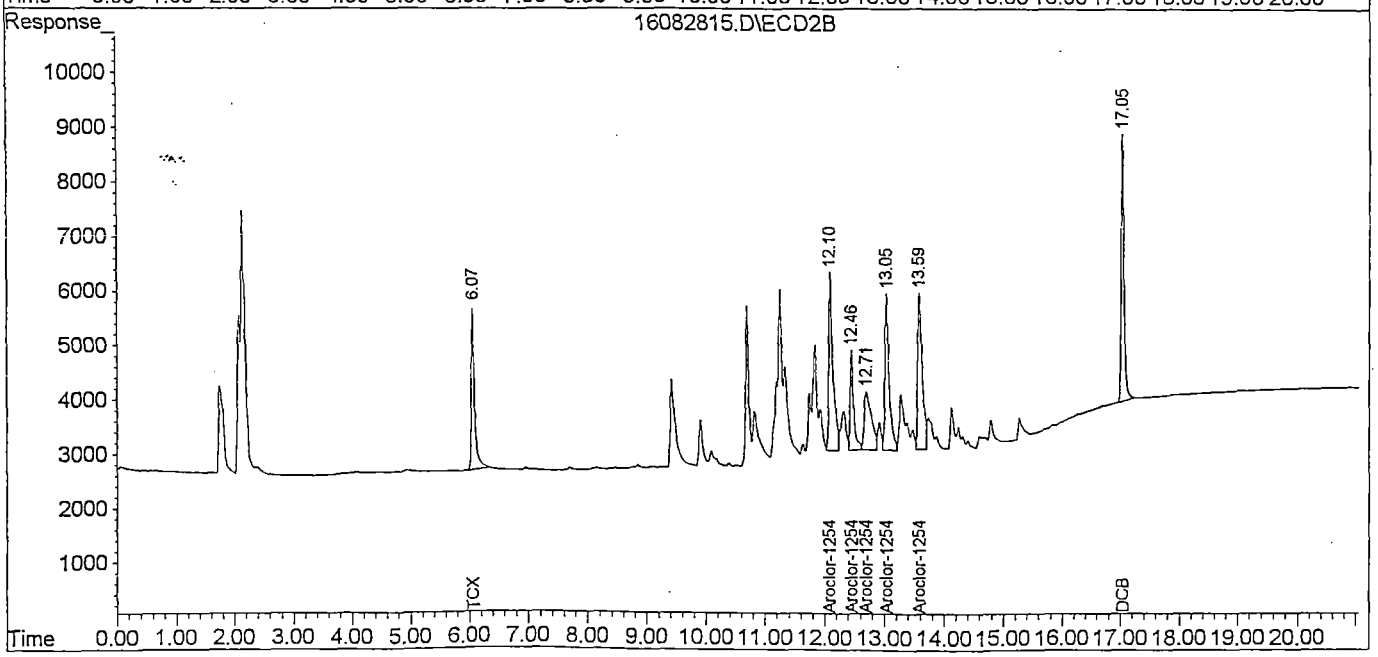
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082815.D\ECD1A.CH Vial: 15
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082815.D\ECD2B.CH
Acq On : 28 Aug 2001 18:20 Operator: TLM
Sample : AR1254L3CF Inst : HP_16
Misc : 5-4-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:42 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

ok
8-30-01

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





390

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082815.D\ECD1A.CH Vial: 15
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082815.D\ECD2B.CH
Acq On : 28 Aug 2001 18:20 Operator: TLM
Sample : AR1254L3CF Inst : HP_16
Misc : 5-4-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:42 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.07	6.08	109082	112239	18.6	18.8
22)	S DCB	17.70	17.05	179745	162054	18.6	19.1
	Target Compounds:						
12)	L6 Aroclor-1254	11.63	12.10	121267	162965	405.9	405.8
13)	L6 Aroclor-1254 {2}	12.35	12.46	80341	74487	403.3	414.7
14)	L6 Aroclor-1254 {3}	12.59	12.71	177900	90386	410.2	427.7
15)	L6 Aroclor-1254 {4}	12.98	13.05	92107	136483	415.9	418.4
16)	L6 Aroclor-1254 {5}	13.39	13.60	103951	154511	435.6	411.4
	Sum Aroclor-1254			575565	618831	2070.9	2078.0
	Average Aroclor-1254					414.184	415.610

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

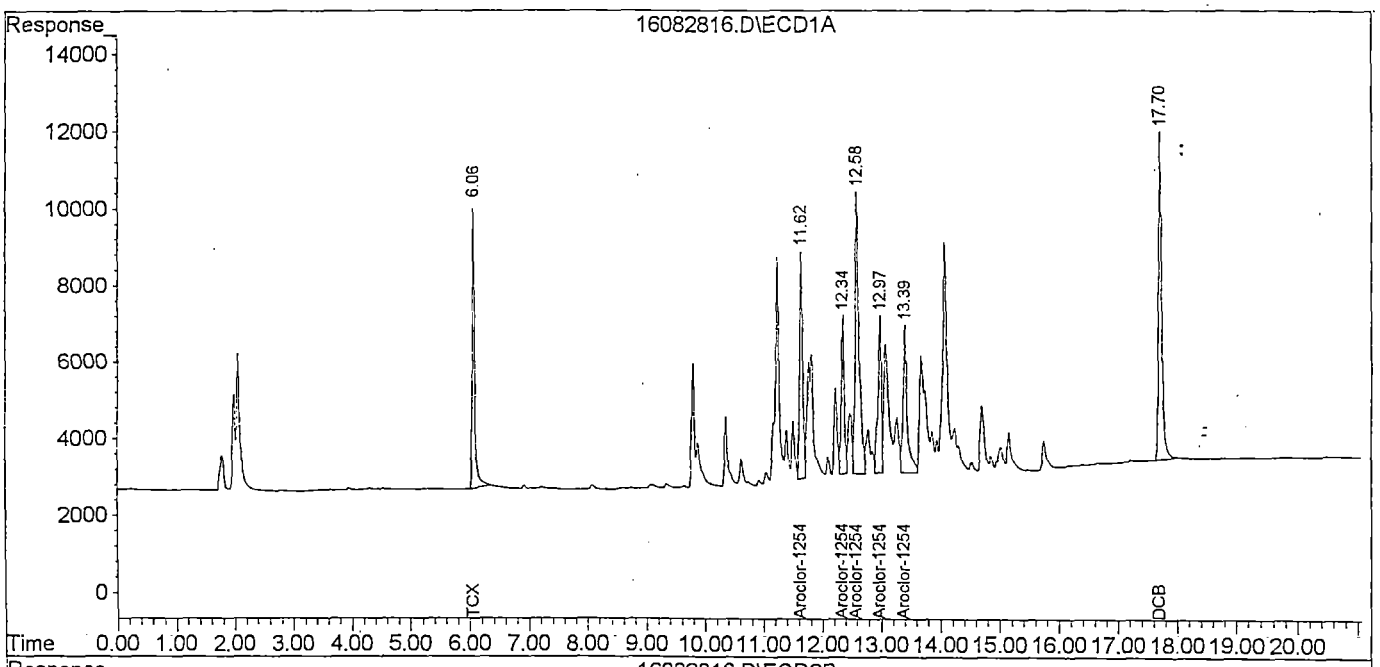
Chromatographic Report

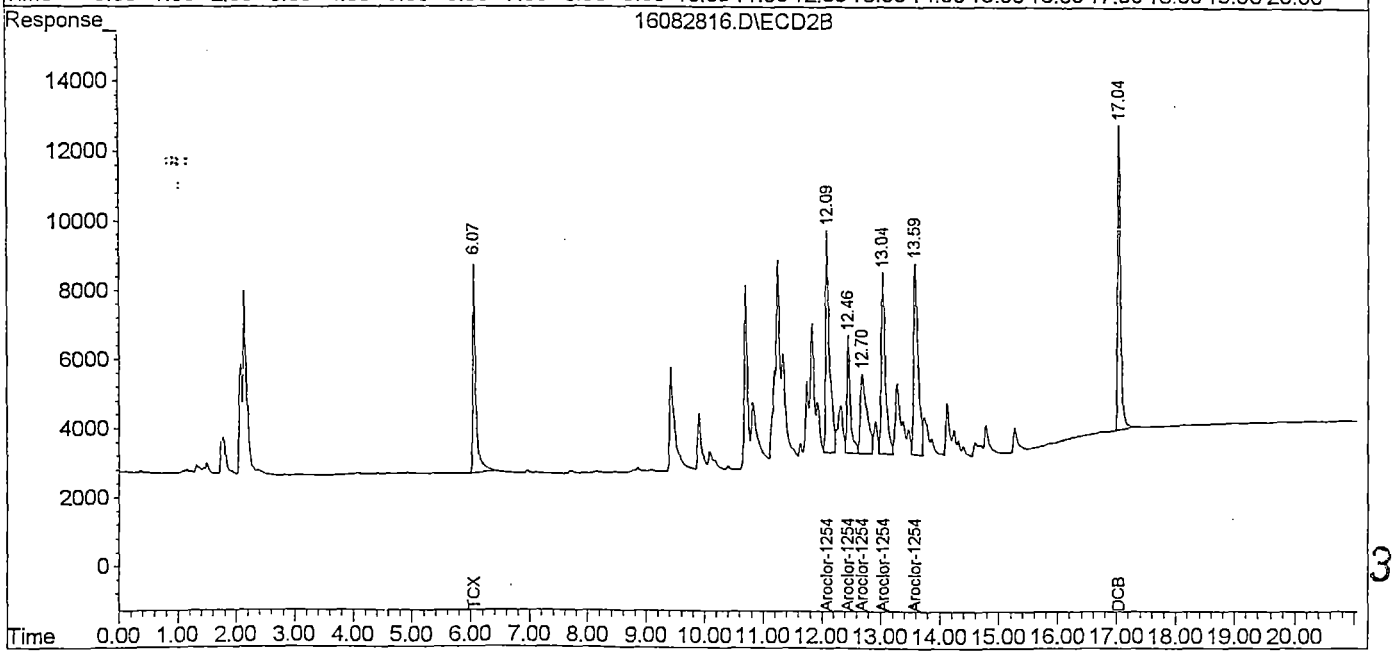
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082816.D\ECD1A.CH Vial: 16
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082816.D\ECD2B.CH
Acq On : 28 Aug 2001 18:45 Operator: TLM
Sample : AR1254L4CF Inst : HP_16
Misc : 5-3-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:42 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

ok
8-30-01

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





392

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082816.D\ECD1A.CH Vial: 16
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082816.D\ECD2B.CH
Acq On : 28 Aug 2001 18:45 Operator: TLM
Sample : AR1254L4CF Inst : HP_16
Misc : 5-3-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:42 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.06	6.07	211986	219866	38.2	38.8
22)	S DCB	17.70	17.05	325370	296308	35.6	36.6
	Target Compounds:						
12)	L6 Aroclor-1254	11.63	12.09	216359	302910	724.2	754.3
13)	L6 Aroclor-1254 {2}	12.34	12.46	148139	137207	743.7	763.9
14)	L6 Aroclor-1254 {3}	12.58	12.70	323918	179016	746.9	847.2
15)	L6 Aroclor-1254 {4}	12.97	13.05	165053	248927	745.2	763.1
16)	L6 Aroclor-1254 {5}	13.39	13.59	188971	293412	791.8	781.3
	Sum Aroclor-1254			1042440	1161472	3751.9	3909.7
	Average Aroclor-1254					750.380	781.941

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16082816.D XPCBH28.M Wed Aug 29 15:43:05 2001 Page 1

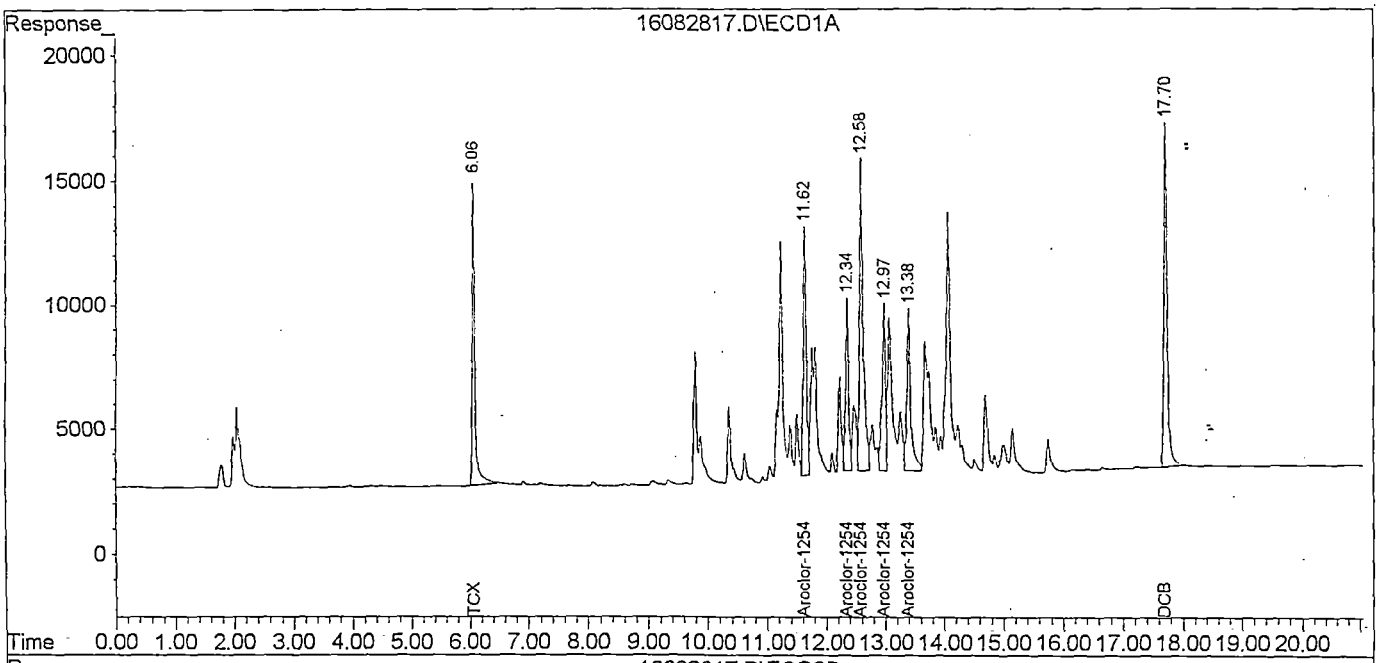
Chromatographic Report

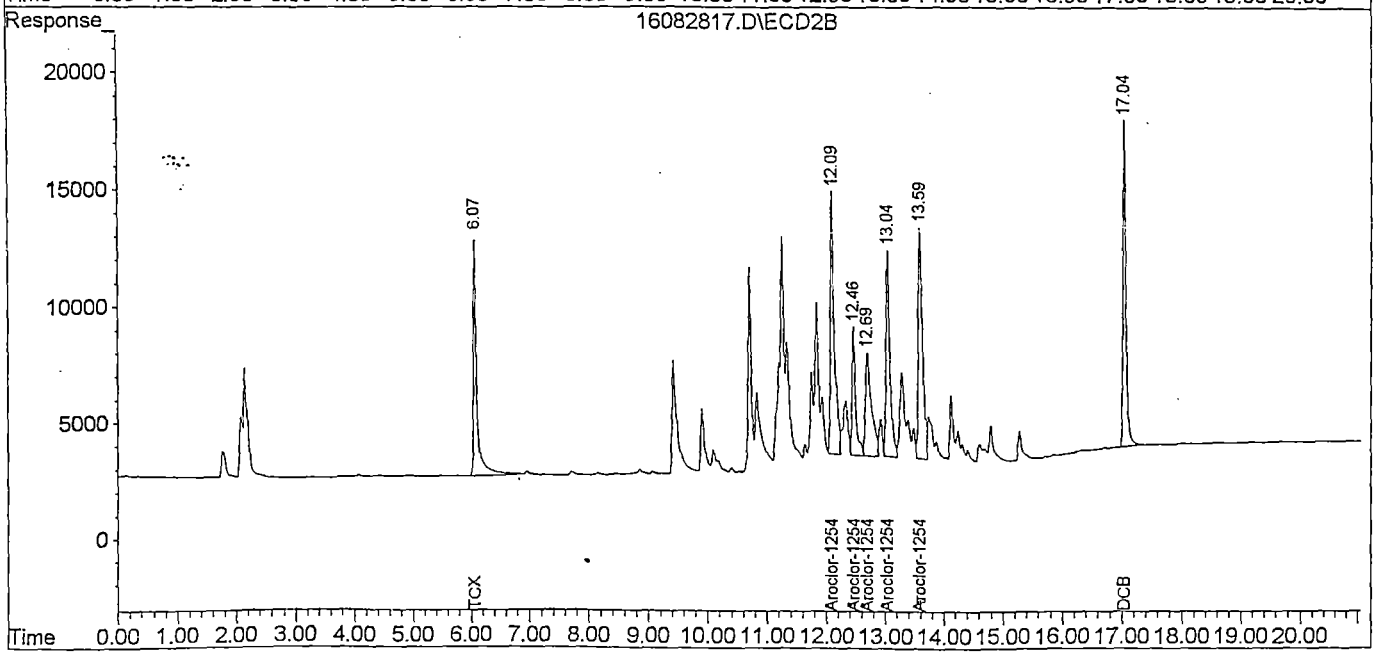
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082817.D\ECD1A.CH Vial: 17
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082817.D\ECD2B.CH
Acq On : 28 Aug 2001 19:09 Operator: TLM
Sample : AR1254L5CF Inst : HP_16
Misc : 5-2-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:43 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

ok 8-30-01

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





394

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082817.D\ECD1A.CH Vial: 17
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082817.D\ECD2B.CH
Acq On : 28 Aug 2001 19:09 Operator: TLM
Sample : AR1254L5CF Inst : HP_16
Misc : 5-2-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:43 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.06	6.07	388916	433298	69.9	76.7
22)	S DCB	17.70	17.04	521465	477960	57.2	58.8
	Target Compounds:						
12)	L6 Aroclor-1254	11.62	12.09	347945	513298	1164.7	1278.2 E
13)	L6 Aroclor-1254 {2}	12.34	12.46	244615	228754	1228.1	1273.5
14)	L6 Aroclor-1254 {3}	12.58	12.69	533816	317740	1230.9 E	1503.7 E
15)	L6 Aroclor-1254 {4}	12.97	13.04	265239	410538	1197.6	1258.5 E
16)	L6 Aroclor-1254 {5}	13.38	13.59	299969	499481	1256.9 E	1330.1 E
	Sum Aroclor-1254			1691583	1969812	6078.2	6643.9
	Average Aroclor-1254					1215.631	1328.780

395

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

Response Factor Report HP_16

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

ok
8-30-01

Calibration Files
L1 =16082818.D L2 =16082819.D L3 =16082820.D
L4 =16082821.D L5 =16082822.D

	Compound	L1	L2	L3	L4	L5	Avg	%RSD
1)	TCX	4.3	5.3	5.0	5.5	4.9	5.0 E3	9.45
2)	Aroclor-1016	122.1	141.1	126.0	128.3	106.8	124.9	9.89
3)	Aroclor-1016* {2}	314.7	350.5	306.5	299.0	244.4	303.0	12.63
4)	Aroclor-1016 {3}	54.0	68.7	63.3	67.1	57.1	62.0	10.20
5)	Aroclor-1016 {4}	121.2	149.7	135.9	135.3	112.8	131.0	10.95
6)	Aroclor-1016 {5}	146.1	166.8	147.0	146.5	120.0	145.3	11.45
17)	Aroclor-1260	482.0	577.0	519.7	548.3	466.1	518.6	8.83
18)	Aroclor-1260 {2}	295.3	347.4	302.7	301.5	243.7	298.1	12.35
19)	Aroclor-1260 {3}	206.1	251.2	220.2	213.4	167.2	211.6	14.26
20)	Aroclor-1260 {4}	276.0	332.8	295.9	306.9	256.6	293.6	9.92
21)	Aroclor-1260 {5}	554.1	682.0	608.5	632.3	532.7	601.9	9.99
22)	DCB	8.1	9.7	8.5	8.6	7.0	8.4 E3	11.68
	Average %RSD							

Signal #2 Calibration Files
L1 =16082818.D L2 =16082819.D L3 =16082820.D
L4 =16082821.D L5 =16082822.D

	Compound	L1	L2	L3	L4	L5	Avg	%RSD
24)	TCX #2	4.3	6.0	5.7	6.2	5.7	5.6 E3	13.08
25)	Aroclor-1016 #2	107.2	134.7	122.9	132.1	113.3	122.0	9.67
26)	Aroclor-1016 {2} #2	327.5	388.5	343.0	336.6	274.2	334.0	12.23
27)	Aroclor-1016 {3} #2	198.6	242.8	217.2	224.3	189.4	214.5	9.86
28)	Aroclor-1016 {4} #2	151.7	174.8	152.9	151.2	123.1	150.7	12.18
29)	Aroclor-1016 {5} #2	102.1	121.2	109.3	111.0	90.9	106.9	10.53
40)	Aroclor-1260 #2	483.3	592.9	536.8	579.9	493.9	537.3	9.17
41)	Aroclor-1260 {2} #2	276.2	335.3	295.3	298.2	248.8	290.8	10.92
42)	Aroclor-1260 {3} #2	177.0	224.8	201.9	210.1	173.5	197.4	11.11
43)	Aroclor-1260 {4} #2	231.4	290.6	259.3	276.1	234.3	258.3	9.99
44)	Aroclor-1260 {5} #2	556.1	717.9	645.2	684.2	578.4	636.4	10.78
45)	DCB #2	7.2	8.9	7.9	8.1	6.7	7.7 E3	10.76
	Average %RSD							

(#) = Out of Range

XPCBH28.M Wed Aug 29 15:47:38 2001

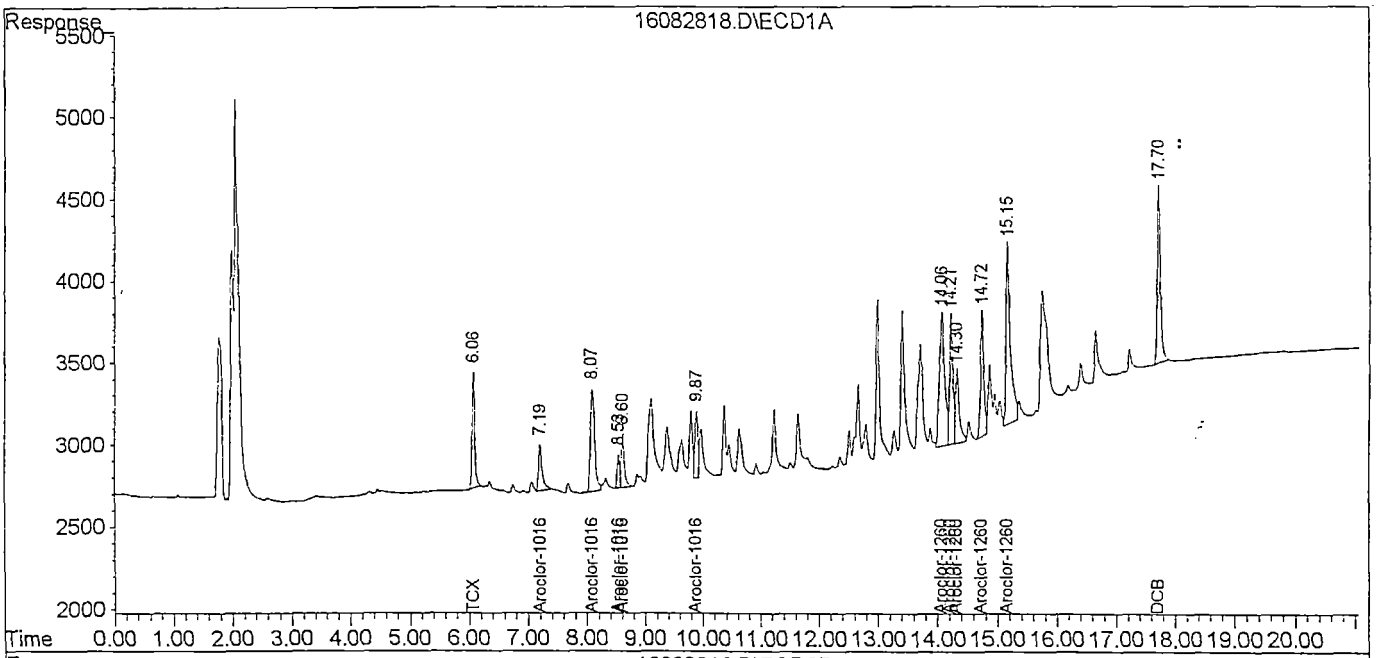
Chromatographic Report

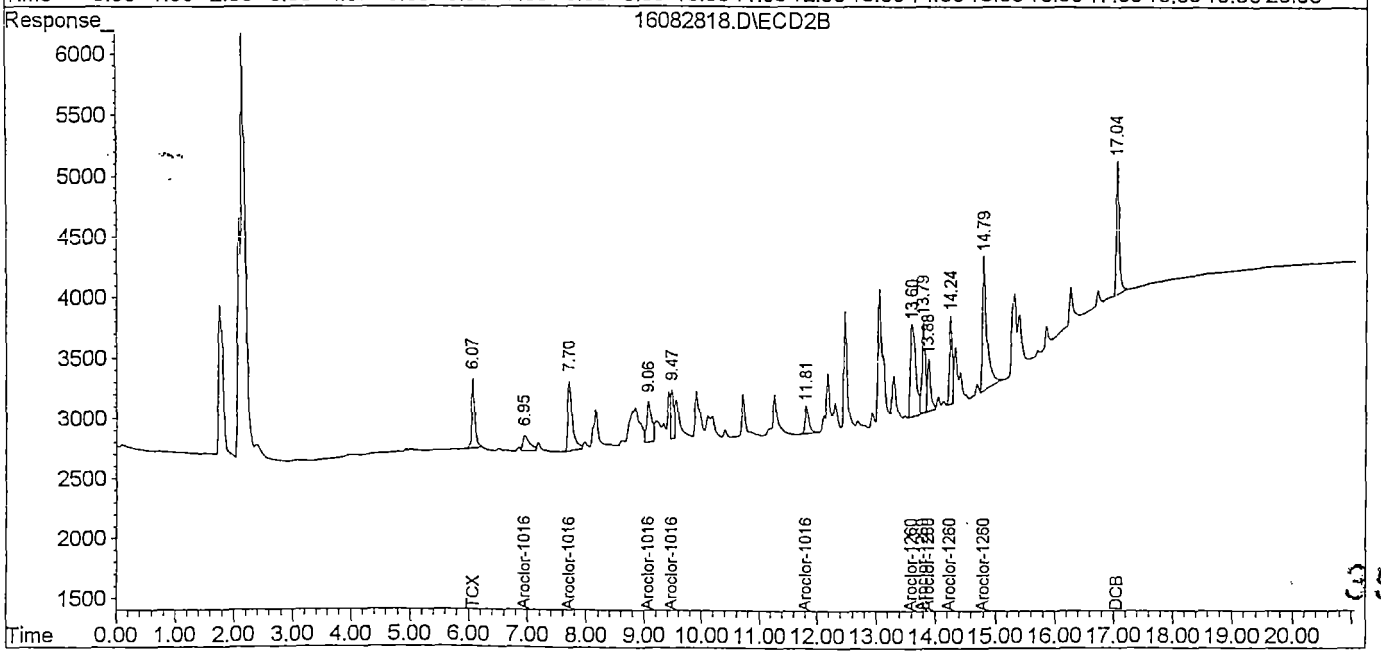
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082818.D\ECD1A.CH Vial: 18
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082818.D\ECD2B.CH
Acq On : 28 Aug 2001 19:34 Operator: TLM
Sample : AR1660L1CF Inst : HP_16
Misc : 5-130-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:46 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

ok 8-30-01 GB





097

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082818.D\ECD1A.CH Vial: 18
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082818.D\ECD2B.CH
Acq On : 28 Aug 2001 19:34 Operator: TLM
Sample : AR1660L1CF Inst : HP_16
Misc : 5-130-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:46 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.07	6.07	21471	21733	3.981	3.944
22)	S DCB	17.70	17.05	40319	36061	4.548	4.555
	Target Compounds:						
2)	L1 Aroclor-1016	7.19	6.96	12205	10724	97.8	87.9
3)	L1 Aroclor-1016 {2}	8.08	7.71	31473	32749	103.9	98.1
4)	L1 Aroclor-1016 {3}	8.53	9.07	5399	19856	87.1	92.6
5)	L1 Aroclor-1016 {4}	8.60	9.48	12115	15170	92.5	100.6
6)	L1 Aroclor-1016 {5}	9.88	11.81	14608	10206	100.6	95.4
	Sum Aroclor-1016			75800	88705	481.7	474.5
	Average Aroclor-1016					96.348	94.909
17)	L7 Aroclor-1260	14.06	13.60	48202	48325	92.9	90.1
18)	L7 Aroclor-1260 {2}	14.21	13.79	29534	27620	99.1	95.1
19)	L7 Aroclor-1260 {3}	14.31	13.88	20614	17697	97.4	89.9
20)	L7 Aroclor-1260 {4}	14.72	14.25	27598	23141	94.0	89.7
21)	L7 Aroclor-1260 {5}	15.15	14.79	55405	55614	92.0	87.4
	Sum Aroclor-1260			181353	172397	475.4	452.2
	Average Aroclor-1260					95.088	90.441

398

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

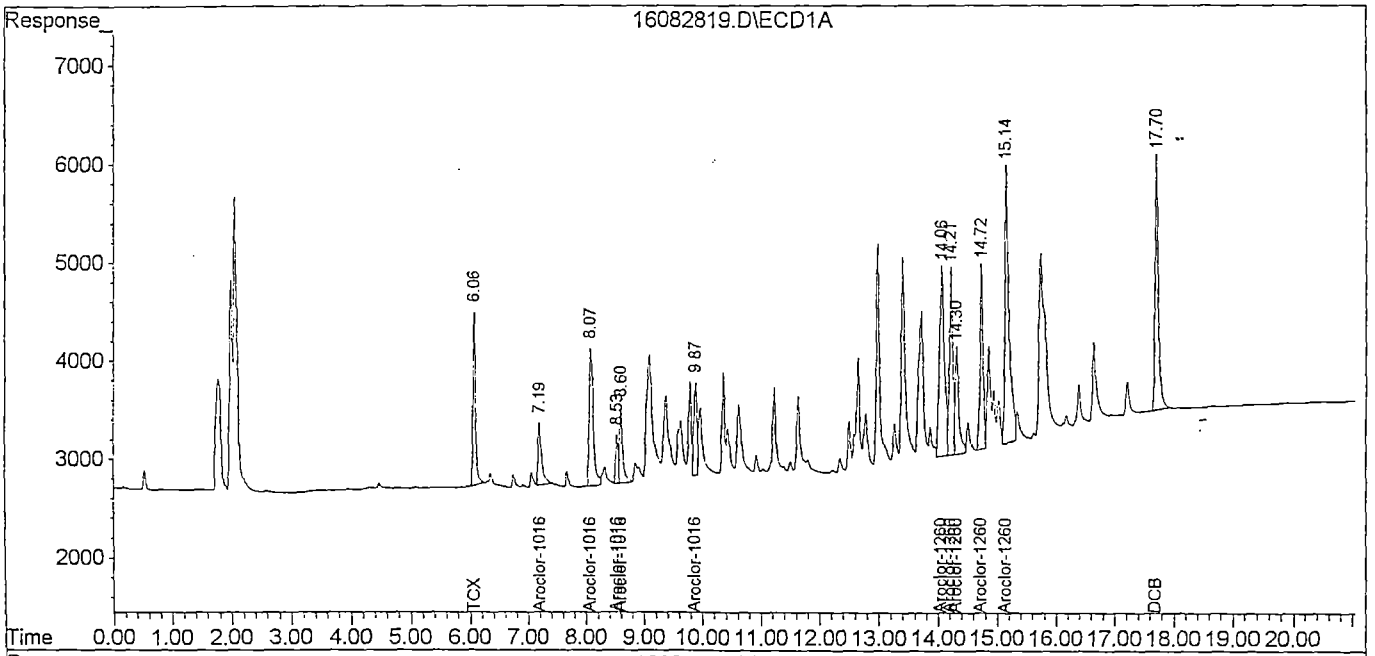
Chromatographic Report

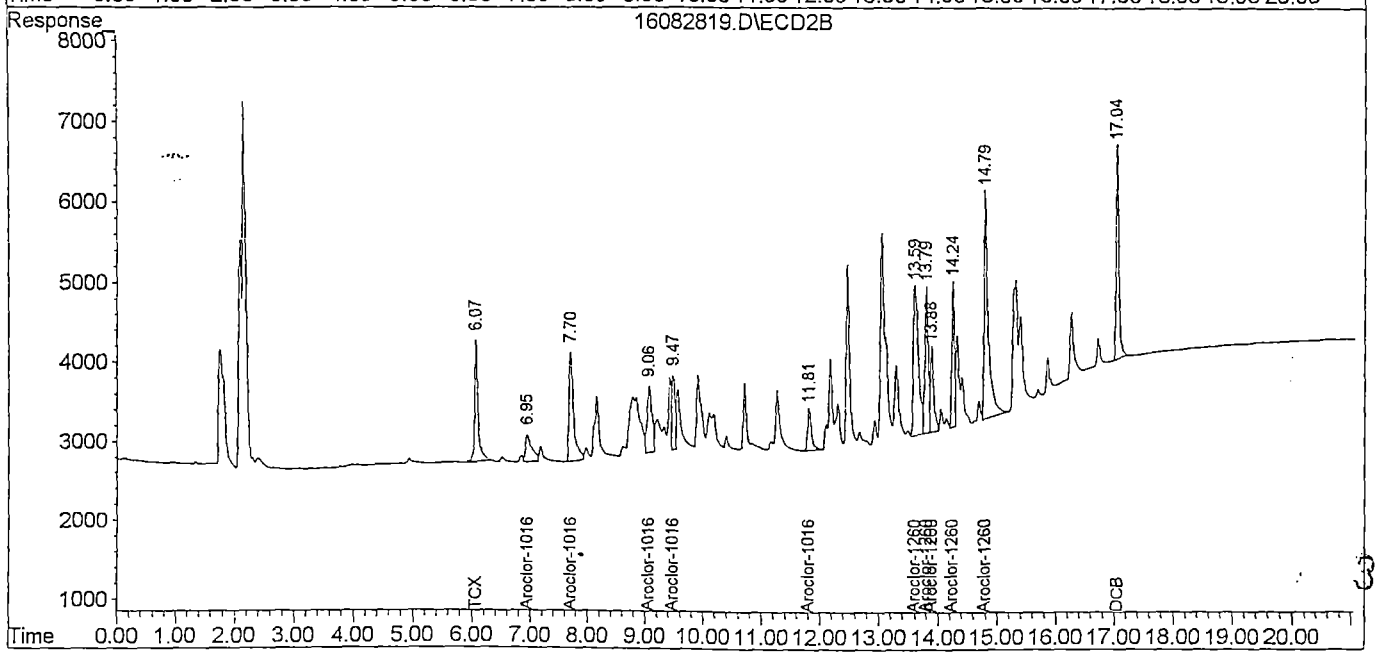
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082819.D\ECD1A.CH Vial: 19
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082819.D\ECD2B.CH
Acq On : 28 Aug 2001 19:58 Operator: TLM
Sample : AR1660L2CF Inst : HP_16
Misc : 5-129-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:46 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

ok 8-30-01

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





399

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082819.D\ECD1A.CH Vial: 19
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082819.D\ECD2B.CH
Acq On : 28 Aug 2001 19:58 Operator: TLM
Sample : AR1660L2CF Inst : HP_16
Misc : 5-129-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:46 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.06	6.07	53082	60103	10.6	11.5
22)	S DCB	17.70	17.05	97440	88853	11.9	12.1
	Target Compounds:						
2)	L1 Aroclor-1016	7.19	6.95	28213	26932	226.0	220.7
3)	L1 Aroclor-1016 {2}	8.07	7.70	70107	77708	231.4	232.7
4)	L1 Aroclor-1016 {3}	8.53	9.06	13732	48567	221.4	226.5
5)	L1 Aroclor-1016 {4}	8.60	9.47	29946	34962	228.7	231.9
6)	L1 Aroclor-1016 {5}	9.88	11.81	33364	24249	229.7	226.6
	Sum Aroclor-1016			175362	212418	1137.1	1138.4
	Average Aroclor-1016					227.414	227.680
17)	L7 Aroclor-1260	14.06	13.60	115401	118580	222.5	221.1
18)	L7 Aroclor-1260 {2}	14.21	13.79	69473	67068	233.0	231.0
19)	L7 Aroclor-1260 {3}	14.31	13.88	50242	44969	237.4	228.4
20)	L7 Aroclor-1260 {4}	14.72	14.24	66563	58126	226.7	225.2
21)	L7 Aroclor-1260 {5}	15.14	14.79	136405	143586	226.6	225.7
	Sum Aroclor-1260			438084	432330	1146.2	1131.4
	Average Aroclor-1260					229.247	226.285

400

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

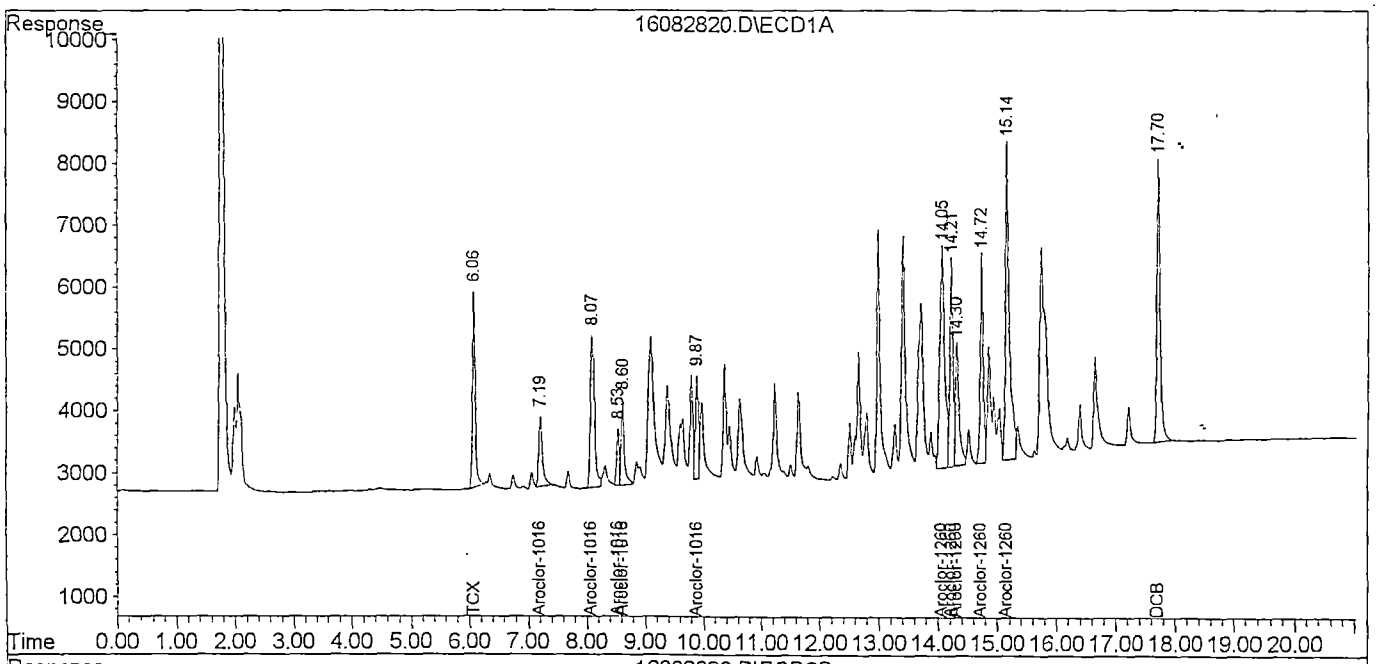
Chromatographic Report

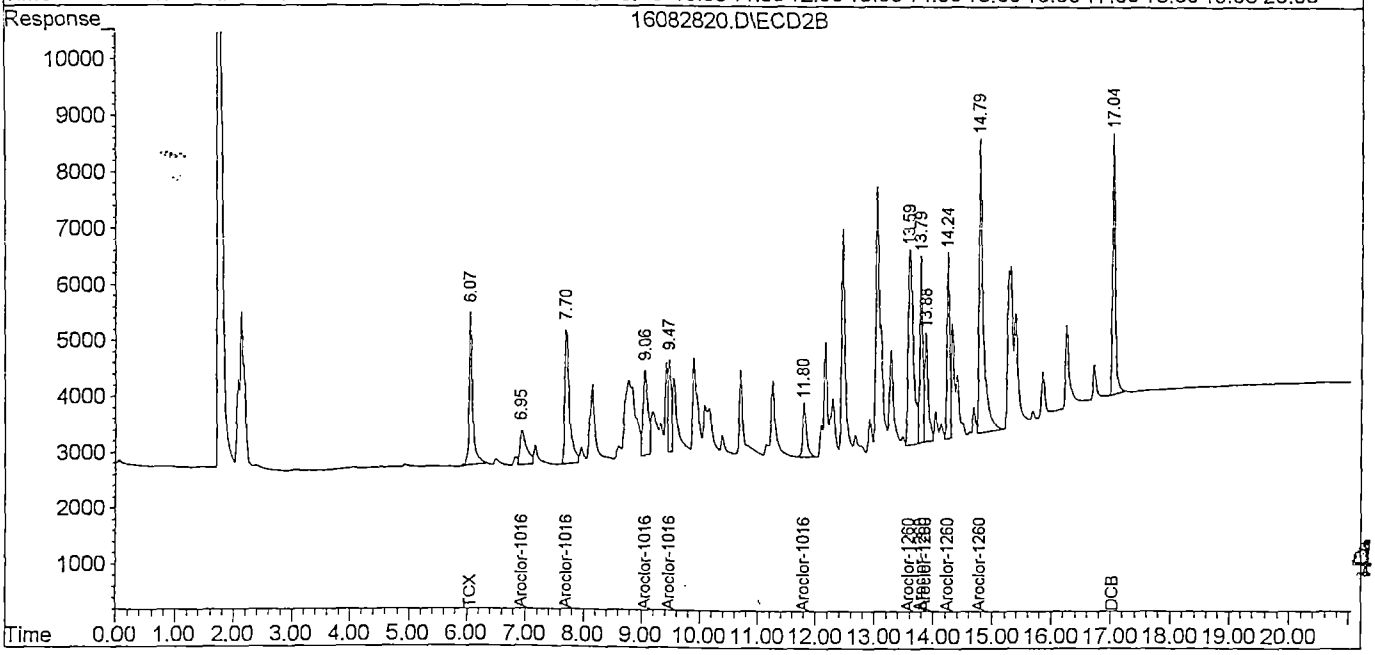
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082820.D\ECD1A.CH Vial: 20
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082820.D\ECD2B.CH
Acq On : 28 Aug 2001 20:23 Operator: TLM
Sample : AR1660L3CD Inst : HP_16
Misc : 5-128-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:46 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

ok 8-30-01





401

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082820.D\ECD1A.CH Vial: 20
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082820.D\ECD2B.CH
Acq On : 28 Aug 2001 20:23 Operator: TLM
Sample : AR1660L3CD Inst : HP_16
Misc : 5-128-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:46 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.06	6.07	99833	114386	19.8	21.3
22)	S DCB	17.70	17.05	170499	157591	20.6	21.0
	Target Compounds:						
2)	L1 Aroclor-1016	7.19	6.95	50418	49163	403.8	402.8
3)	L1 Aroclor-1016 {2}	8.07	7.70	122599	137214	404.6	410.8
4)	L1 Aroclor-1016 {3}	8.53	9.06	25312	86875	408.1	405.1
5)	L1 Aroclor-1016 {4}	8.60	9.47	54353	61149	415.1	405.7
6)	L1 Aroclor-1016 {5}	9.87	11.81	58803	43716	404.8	408.6
	Sum Aroclor-1016			311484	378117	2036.3	2033.0
	Average Aroclor-1016					407.267	406.606
17)	L7 Aroclor-1260	14.06	13.59	207871	214707	400.8	400.3
18)	L7 Aroclor-1260 {2}	14.21	13.79	121095	118124	406.2	406.8
19)	L7 Aroclor-1260 {3}	14.30	13.88	88076	80752	416.2	410.1
20)	L7 Aroclor-1260 {4}	14.72	14.24	118358	103714	403.1	401.9
21)	L7 Aroclor-1260 {5}	15.14	14.79	243402	258088	404.4	405.7
	Sum Aroclor-1260			778802	775384	2030.6	2024.9
	Average Aroclor-1260					406.119	404.974

402

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

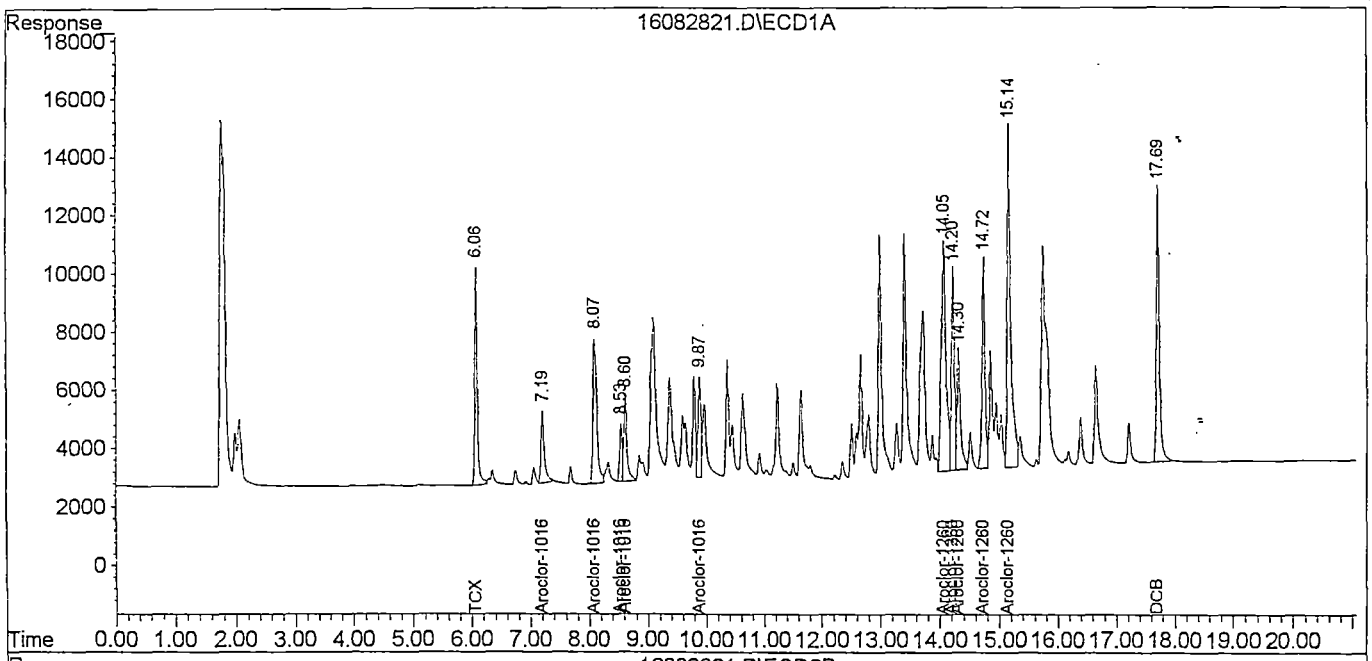
Chromatographic Report

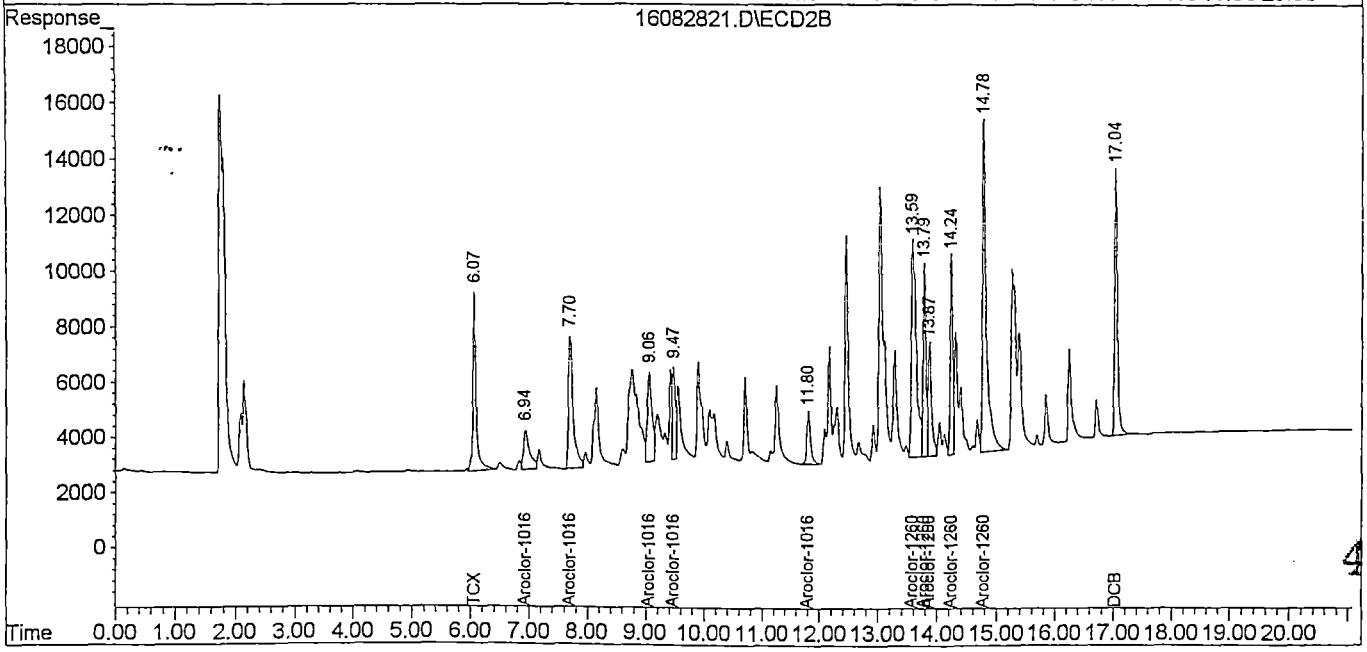
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082821.D\ECD1A.CH Vial: 21
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082821.D\ECD2B.CH
Acq On : 28 Aug 2001 20:48 Operator: TLM
Sample : AR1660L4CF Inst : HP_16
Misc : 5-172-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:47 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

ok 8-30-01

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





403

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082821.D\ECD1A.CH Vial: 21
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082821.D\ECD2B.CH
Acq On : 28 Aug 2001 20:48 Operator: TLM
Sample : AR1660L4CF Inst : HP_16
Misc : 5-172-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:47 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.06	6.07	221094	248742	44.7	46.1
22)	S DCB	17.70	17.04	345236	322008	42.1	43.1
	Target Compounds:						
2)	L1 Aroclor-1016	7.19	6.94	102644	105709	822.1	866.1
3)	L1 Aroclor-1016 {2}	8.07	7.70	239192	269278	789.3	806.3
4)	L1 Aroclor-1016 {3}	8.53	9.06	53669	179428	865.3	836.7
5)	L1 Aroclor-1016 {4}	8.60	9.47	108201	120928	826.2	802.3
6)	L1 Aroclor-1016 {5}	9.87	11.81	117161	88811	806.5	830.1
	Sum Aroclor-1016			620868	764154	4109.5	4141.4
	Average Aroclor-1016					821.906	828.282
17)	L7 Aroclor-1260	14.05	13.59	438655	463907	845.8	864.9
18)	L7 Aroclor-1260 {2}	14.21	13.79	241199	238524	809.0	821.5
19)	L7 Aroclor-1260 {3}	14.30	13.88	170757	168043	806.8	853.5
20)	L7 Aroclor-1260 {4}	14.72	14.24	245512	220879	836.1	855.9
21)	L7 Aroclor-1260 {5}	15.14	14.79	505856	547377	840.4	860.5
	Sum Aroclor-1260			1601979	1638730	4138.2	4256.3
	Average Aroclor-1260					827.634	851.257

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16082821.D XPCBH28.M Wed Aug 29 15:47:13 2001 Page 1

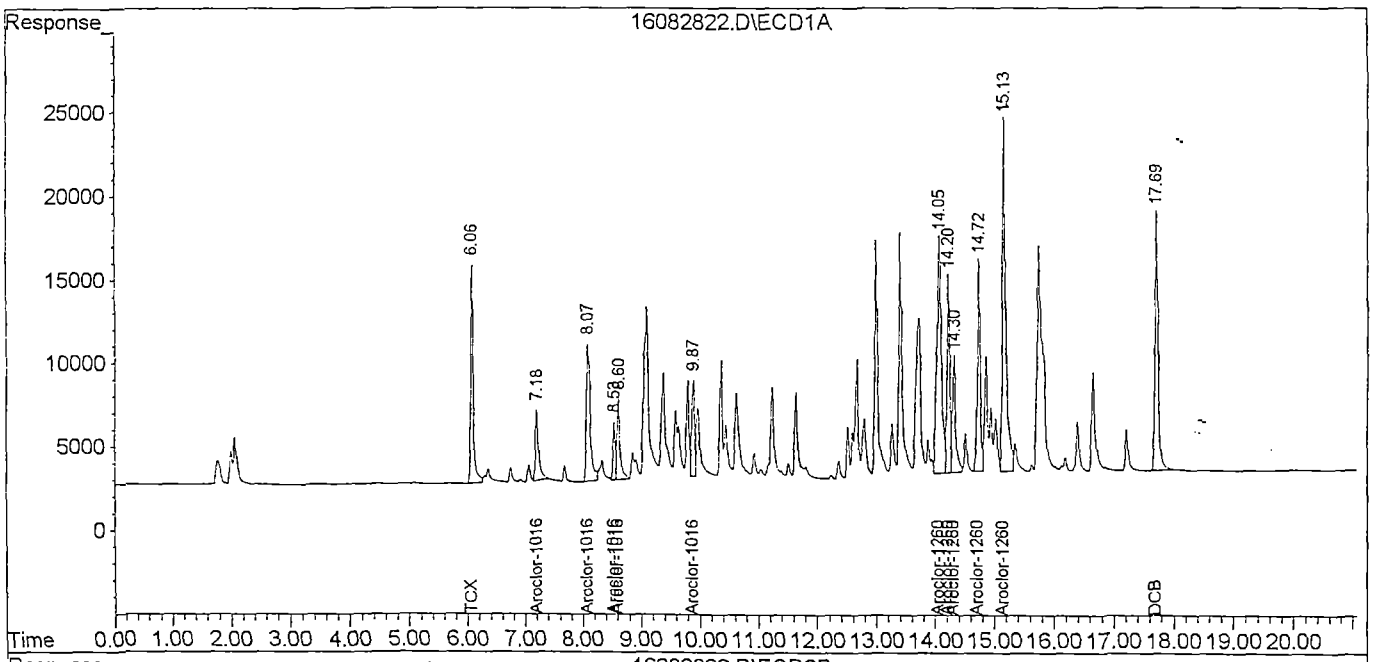
Chromatographic Report

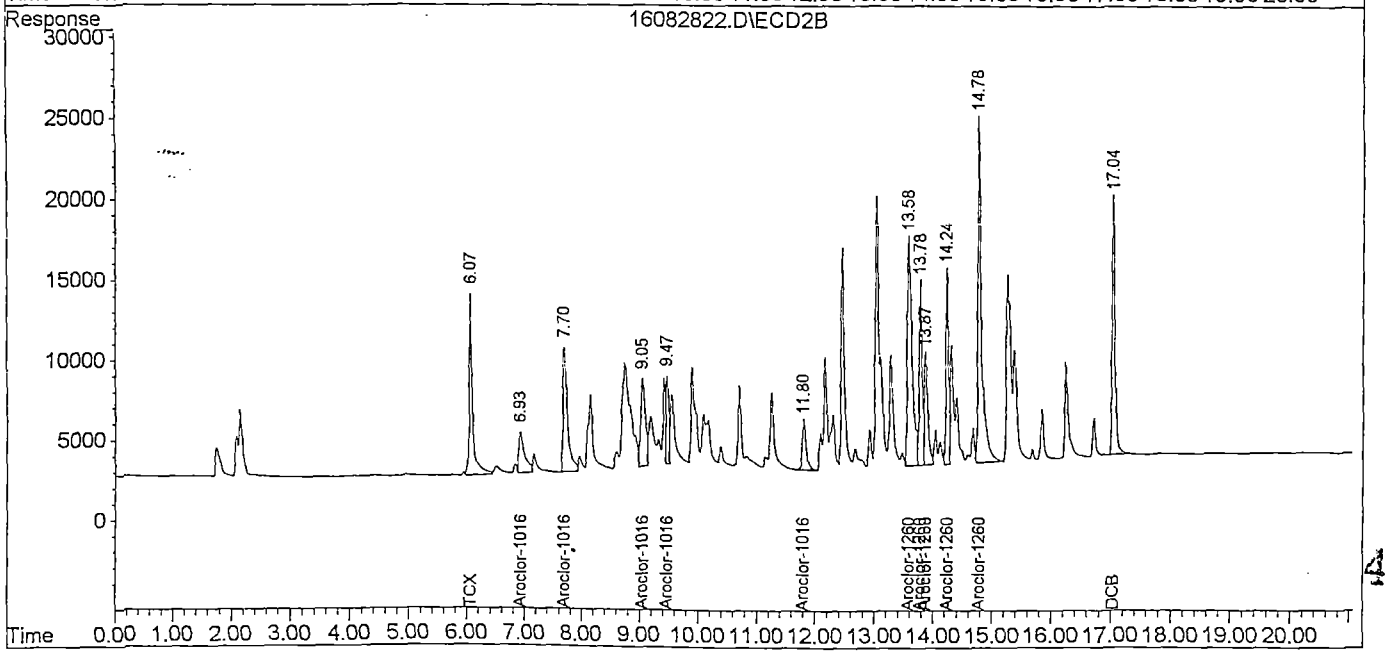
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082822.D\ECD1A.CH Vial: 22
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082822.D\ECD2B.CH
Acq On : 28 Aug 2001 21:12 Operator: TLM
Sample : AR1660L5CF Inst : HP_16
Misc : 5-126-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:47 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

ok 8-30-01





405

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082822.D\ECD1A.CH Vial: 22
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082822.D\ECD2B.CH
Acq On : 28 Aug 2001 21:12 Operator: TLM
Sample : AR1660L5CF Inst : HP_16
Misc : 5-126-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:47 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.06	6.07	388522	455725	77.8	82.2 E
22)	S DCB	17.70	17.04	562825	536257	67.8 E	70.6 E
	Target Compounds:						
2)	L1 Aroclor-1016	7.19	6.94	170878	181286	1368.6	1485.4 E
3)	L1 Aroclor-1016 {2}	8.07	7.70	390995	438762	1290.3	1313.8 E
4)	L1 Aroclor-1016 {3}	8.53	9.05	91339	303035	1472.7 E	1413.1 E
5)	L1 Aroclor-1016 {4}	8.60	9.47	180419	197002	1377.7	1307.0
6)	L1 Aroclor-1016 {5}	9.87	11.81	192037	145480	1321.9 E	1359.7
	Sum Aroclor-1016			1025668	1265566	6831.3	6878.9
	Average Aroclor-1016					1366.251	1375.771
17)	L7 Aroclor-1260	14.05	13.58	745724	790167	1437.9 E	1473.1 E
18)	L7 Aroclor-1260 {2}	14.20	13.79	389943	398075	1308.0 E	1371.0 E
19)	L7 Aroclor-1260 {3}	14.30	13.88	267562	277566	1264.2	1409.7 E
20)	L7 Aroclor-1260 {4}	14.72	14.24	410619	374885	1398.4	1452.7 E
21)	L7 Aroclor-1260 {5}	15.14	14.78	852274	925513	1415.9 E	1455.0 E
	Sum Aroclor-1260			2666122	2766206	6824.4	7161.5
	Average Aroclor-1260					1364.875	1432.308

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16082822.D XPCBH28.M Wed Aug 29 15:47:29 2001 Page 1

Continuing Calibration Report HP_16

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Wed Aug 29 15:55:22 2001
Response via : Initial Calibration

Continuing Calibration File: 16082844.D

ok 8-30-01

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

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	4.996	5.374	E3	-7.6	108
2	L1	Aroclor-1016	124.853	136.016		-8.9	108
3	L1	Aroclor-1016 {2}	303.024	327.391		-8.0	107
4	L1	Aroclor-1016 {3}	62.021	69.275		-11.7	109
5	L1	Aroclor-1016 {4}	130.955	145.505		-11.1	107
6	L1	Aroclor-1016 {5}	145.276	159.254		-9.6	108
17	L7	Aroclor-1260	518.620	585.571		-12.9	113
18	L7	Aroclor-1260 {2}	298.131	329.324		-10.5	109
19	L7	Aroclor-1260 {3}	211.642	226.243		-6.9	103
20	L7	Aroclor-1260 {4}	293.643	331.846		-13.0	112
21	L7	Aroclor-1260 {5}	601.915	673.887		-12.0	111
22	S	DCB	8.400	9.137	E3	-8.8	107
		Average %Dev					

Signal #2
Continuing Calibration File: 16082844.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	5.598	6.388	E3	-14.1	112
2	L1	Aroclor-1016	122.049	140.167		-14.8	114
3	L1	Aroclor-1016 {2}	333.977	376.759		-12.8	110
4	L1	Aroclor-1016 {3}	214.454	241.446		-12.6	111
5	L1	Aroclor-1016 {4}	150.733	169.184		-12.2	111
6	L1	Aroclor-1016 {5}	106.908	121.437		-13.6	111
17	L7	Aroclor-1260	537.332	612.736		-14.0	114
18	L7	Aroclor-1260 {2}	290.762	330.667		-13.7	112
19	L7	Aroclor-1260 {3}	197.445	220.263		-11.6	109
20	L7	Aroclor-1260 {4}	258.345	298.047		-15.4#	115
21	L7	Aroclor-1260 {5}	636.390	723.648		-13.7	112
22	S	DCB	7.746	8.819	E3	-13.9	112
		Average %Dev					

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

16082844.D XPCBH28.M Wed Aug 29 15:55:29 2001

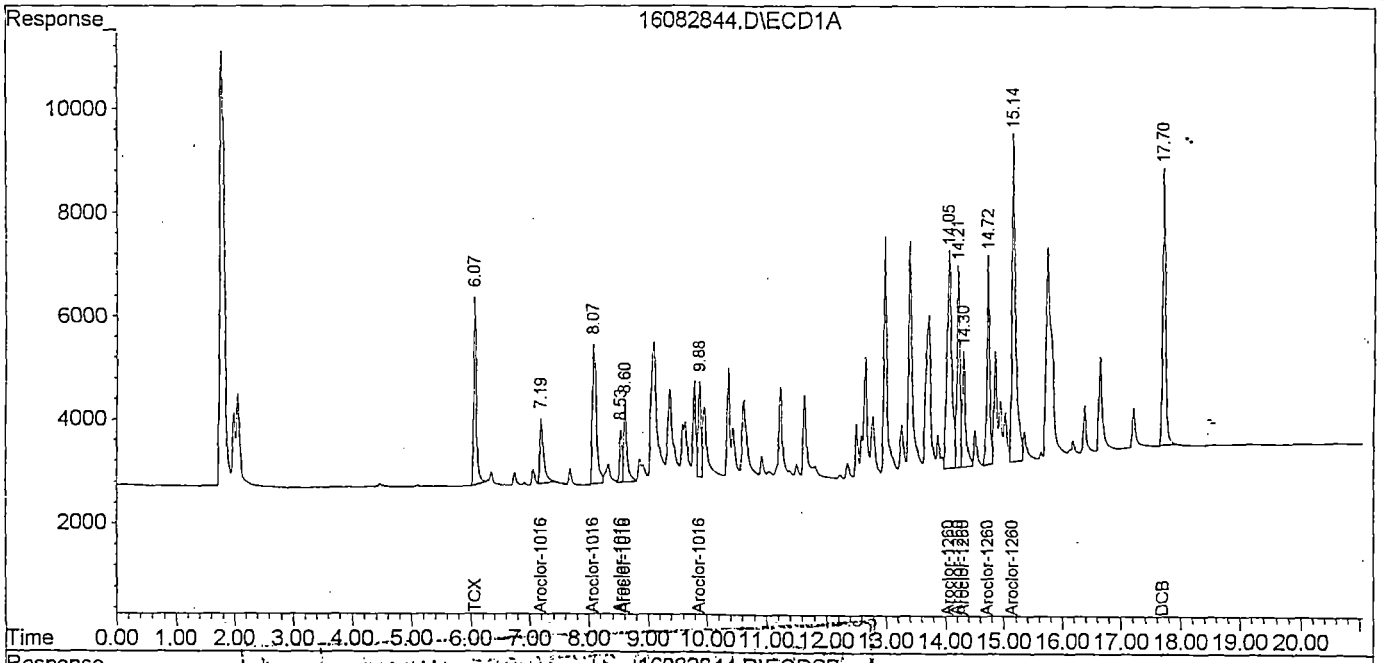
Chromatographic Report

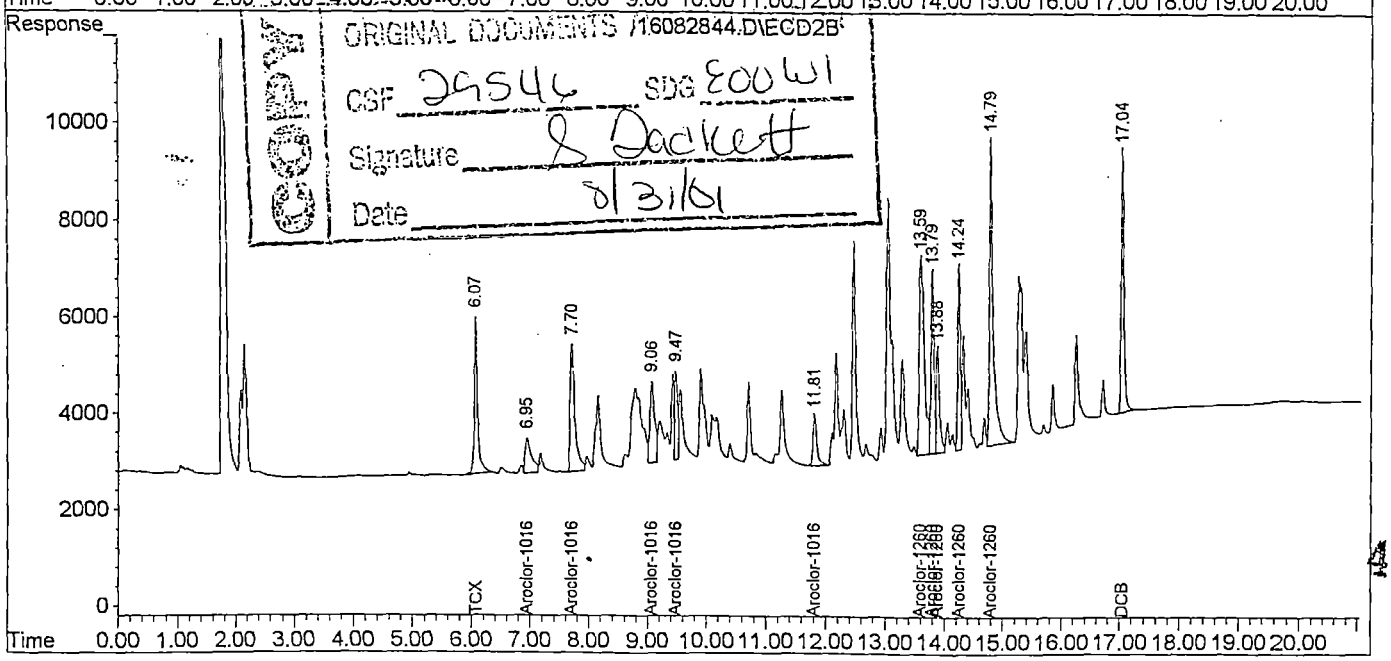
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082844.D\ECD1A.CH Vial: 44
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082844.D\ECD2B.CH
Acq On : 29 Aug 2001 6:13 Operator: TLM
Sample : AR1660L3CE Inst : HP_16
Misc : 5-128-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:51 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

ok 8-30-01

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





ORIGINAL DOCUMENTS
CSF 29546 SDG E00W1
Signature S Dackett
Date 8/31/01

408

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082844.D\ECD1A.CH Vial: 44
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082844.D\ECD2B.CH
Acq On : 29 Aug 2001 6:13 Operator: TLM
Sample : AR1660L3CE Inst : HP_16
Misc : 5-128-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:51 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.07	6.08	107489	127757	21.5	22.8
22)	S DCB	17.70	17.05	182732	176388	21.8	22.8
	Target Compounds:						
2)	L1 Aroclor-1016	7.20	6.95	54406	56067	435.8	459.4
3)	L1 Aroclor-1016 {2}	8.08	7.71	130956	150704	432.2	451.2
4)	L1 Aroclor-1016 {3}	8.54	9.06	27710	96579	446.8	450.3
5)	L1 Aroclor-1016 {4}	8.60	9.48	58202	67673	444.4	449.0
6)	L1 Aroclor-1016 {5}	9.88	11.81	63702	48575	438.5	454.4
	Sum Aroclor-1016			334976	419597	2197.6	2264.3
	Average Aroclor-1016					439.528	452.858
17)	L7 Aroclor-1260	14.06	13.60	234229	245094	451.6	456.1
18)	L7 Aroclor-1260 {2}	14.21	13.79	131730	132267	441.9	454.9
19)	L7 Aroclor-1260 {3}	14.31	13.88	90497	88105	427.6	446.2
20)	L7 Aroclor-1260 {4}	14.72	14.25	132739	119219	452.0	461.5
21)	L7 Aroclor-1260 {5}	15.14	14.79	269555	289459	447.8	454.8
	Sum Aroclor-1260			858749	874144	2221.0	2273.6
	Average Aroclor-1260					444.191	454.714

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16082844.D XPCBH28.M Wed Aug 29 15:56:27 2001 Page 1

Continuing Calibration Report HP_16

Method : F:\HPCHEM\HP\16\DATA\08_30_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Thu Aug 30 12:03:56 2001
Response via : Initial Calibration

Continuing Calibration File: 16083005.D

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

ok 8-31-01

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	4.996	4.691	E3	6.1	94
2	L1	Aroclor-1016	124.853	118.820		4.8	94
3	L1	Aroclor-1016 {2}	303.024	294.288		2.9	96
4	L1	Aroclor-1016 {3}	62.021	57.189		7.8	90
5	L1	Aroclor-1016 {4}	130.955	123.029		6.1	91
6	L1	Aroclor-1016 {5}	145.276	143.801		1.0	98
17	L7	Aroclor-1260	518.620	534.077		-3.0	103
18	L7	Aroclor-1260 {2}	298.131	306.700		-2.9	101
19	L7	Aroclor-1260 {3}	211.642	211.711		-0.0	96
20	L7	Aroclor-1260 {4}	293.643	304.130		-3.6	103
21	L7	Aroclor-1260 {5}	601.915	615.969		-2.3	101
22	S	DCB	8.400	8.320	E3	1.0	98
		Average %Dev					

Signal #2
Continuing Calibration File: 16083005.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	5.598	4.955	E3	11.5	87
2	L1	Aroclor-1016	122.049	102.827		15.7#	84
3	L1	Aroclor-1016 {2}	333.977	301.531		9.7	88
4	L1	Aroclor-1016 {3}	214.454	192.393		10.3	89
5	L1	Aroclor-1016 {4}	150.733	138.368		8.2	91
6	L1	Aroclor-1016 {5}	106.908	99.051		7.3	91
17	L7	Aroclor-1260	537.332	503.144		6.4	94
18	L7	Aroclor-1260 {2}	290.762	281.823		3.1	95
19	L7	Aroclor-1260 {3}	197.445	189.291		4.1	94
20	L7	Aroclor-1260 {4}	258.345	249.393		3.5	96
21	L7	Aroclor-1260 {5}	636.390	611.669		3.9	95
22	S	DCB	7.746	7.341	E3	5.2	93
		Average %Dev					

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

16083005.D XPCBH28.M Thu Aug 30 12:04:13 2001

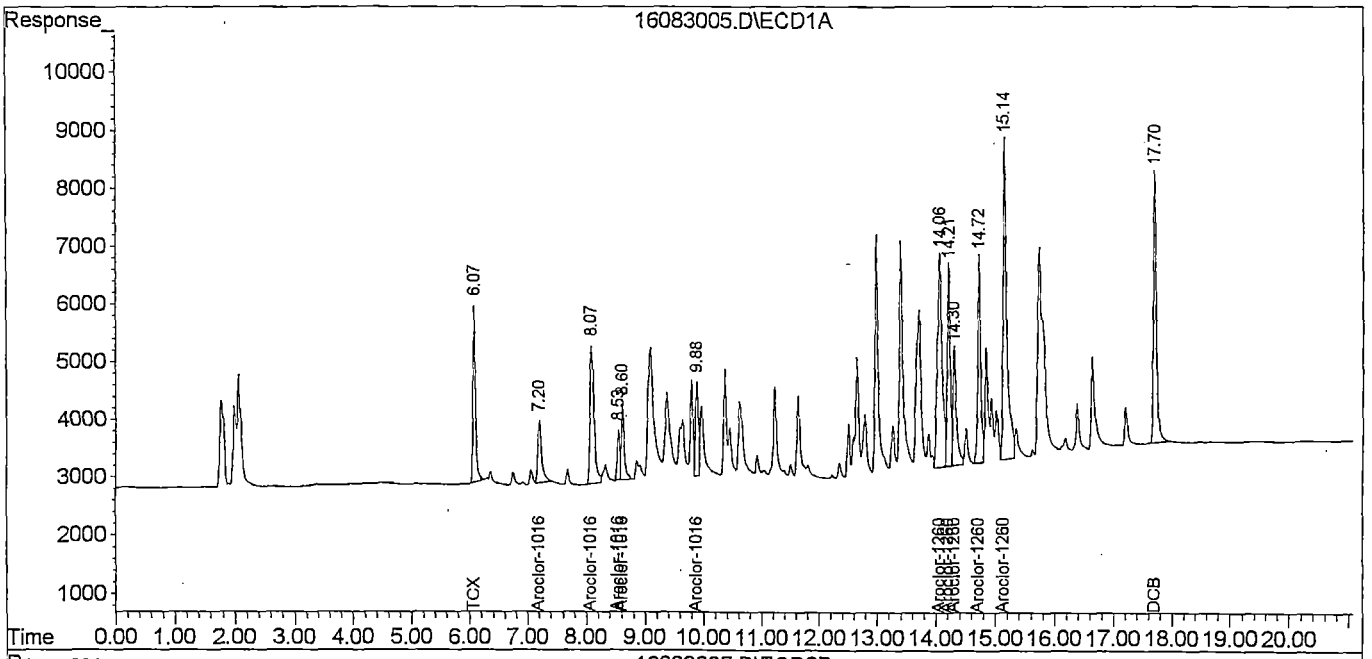
Chromatographic Report

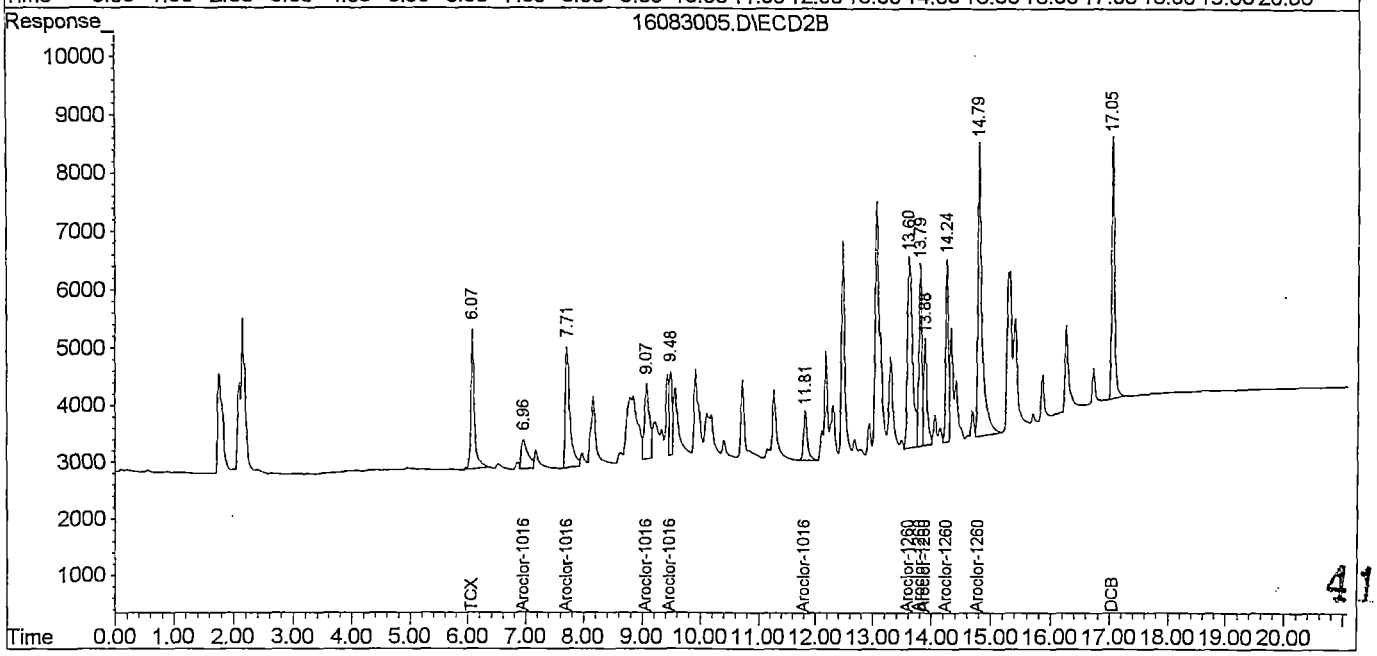
Signal #1 : F:\HPCHEM\HP\16\DATA\08_30_01\16083005.D\ECD1A.CH Vial: 5
Signal #2 : F:\HPCHEM\HP\16\DATA\08_30_01\16083005.D\ECD2B.CH
Acq On : 30 Aug 2001 11:19 Operator: TLM
Sample : AR1660L3CI Inst : HP_16
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 30 12:03 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_30_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

op 8-31-01





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_30_01\16083005.D\ECD1A.CH Vial: 5
Signal #2 : F:\HPCHEM\HP\16\DATA\08_30_01\16083005.D\ECD2B.CH
Acq On : 30 Aug 2001 11:19 Operator: TLM
Sample : AR1660L3CI ✓ Inst : HP_16
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 30 12:03 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_30_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.07	6.08	93827	99102	18.8	17.7
22)	S DCB	17.70	17.05	166398	146813	19.8	19.0
	Target Compounds:						
2)	L1 Aroclor-1016	7.20	6.96f	47528	41131	380.7	337.0
3)	L1 Aroclor-1016 {2}	8.08	7.71	117715	120612	388.5	361.1
4)	L1 Aroclor-1016 {3}	8.54	9.07	22875	76957	368.8	358.9
5)	L1 Aroclor-1016 {4}	8.60	9.48	49212	55347	375.8	367.2
6)	L1 Aroclor-1016 {5}	9.88	11.81	57520	39620	395.9	370.6
	Sum Aroclor-1016			294851	333668	1909.7	1794.8
	Average Aroclor-1016					381.941	358.957
17)	L7 Aroclor-1260	14.06	13.60	213631	201258	411.9	374.5
18)	L7 Aroclor-1260 {2}	14.21	13.80	122680	112729	411.5	387.7
19)	L7 Aroclor-1260 {3}	14.31	13.88	84684	75716	400.1	383.5
20)	L7 Aroclor-1260 {4}	14.72	14.25	121652	99757	414.3	386.1
21)	L7 Aroclor-1260 {5}	15.14	14.79	246388	244668	409.3	384.5
	Sum Aroclor-1260			789035	734128	2047.2	1916.3
	Average Aroclor-1260					409.435	383.267

412

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

Continuing Calibration Report HP_16

Method : F:\HPCHEM\HP\16\DATA\08_30_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Fri Aug 31 08:58:22 2001
Response via : Initial Calibration

Continuing Calibration File: 16083028.D

ok 8-31-01@

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

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	4.996	4.697	E3	6.0	94
2	L1	Aroclor-1016	124.853	122.769		1.7	97
3	L1	Aroclor-1016 {2}	303.024	294.436		2.8	96
4	L1	Aroclor-1016 {3}	62.021	58.240		6.1	92
5	L1	Aroclor-1016 {4}	130.955	123.210		5.9	91
6	L1	Aroclor-1016 {5}	145.276	144.466		0.6	98
7							
17	L7	Aroclor-1260	518.620	524.698		-1.2	101
18	L7	Aroclor-1260 {2}	298.131	291.990		2.1	96
19	L7	Aroclor-1260 {3}	211.642	192.003		9.3	87
20	L7	Aroclor-1260 {4}	293.643	293.832		-0.1	99
21	L7	Aroclor-1260 {5}	601.915	592.258		1.6	97
22	S	DCB	8.400	7.674	E3	8.6	90
		Average %Dev					

Signal #2
Continuing Calibration File: 16083028.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	5.598	4.934	E3	11.9	86
2	L1	Aroclor-1016	122.049	110.192		9.7	90
3	L1	Aroclor-1016 {2}	333.977	302.811		9.3	88
4	L1	Aroclor-1016 {3}	214.454	192.156		10.4	88
5	L1	Aroclor-1016 {4}	150.733	136.508		9.4	89
6	L1	Aroclor-1016 {5}	106.908	95.883		10.3	88
17	L7	Aroclor-1260	537.332	482.271		10.2	90
18	L7	Aroclor-1260 {2}	290.762	261.114		10.2	88
19	L7	Aroclor-1260 {3}	197.445	168.504		14.7	83
20	L7	Aroclor-1260 {4}	258.345	235.296		8.9	91
21	L7	Aroclor-1260 {5}	636.390	567.479		10.8	88
22	S	DCB	7.746	6.636	E3	14.3	84
		Average %Dev					

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

16083028.D XPCBH28.M Fri Aug 31 08:58:35 2001

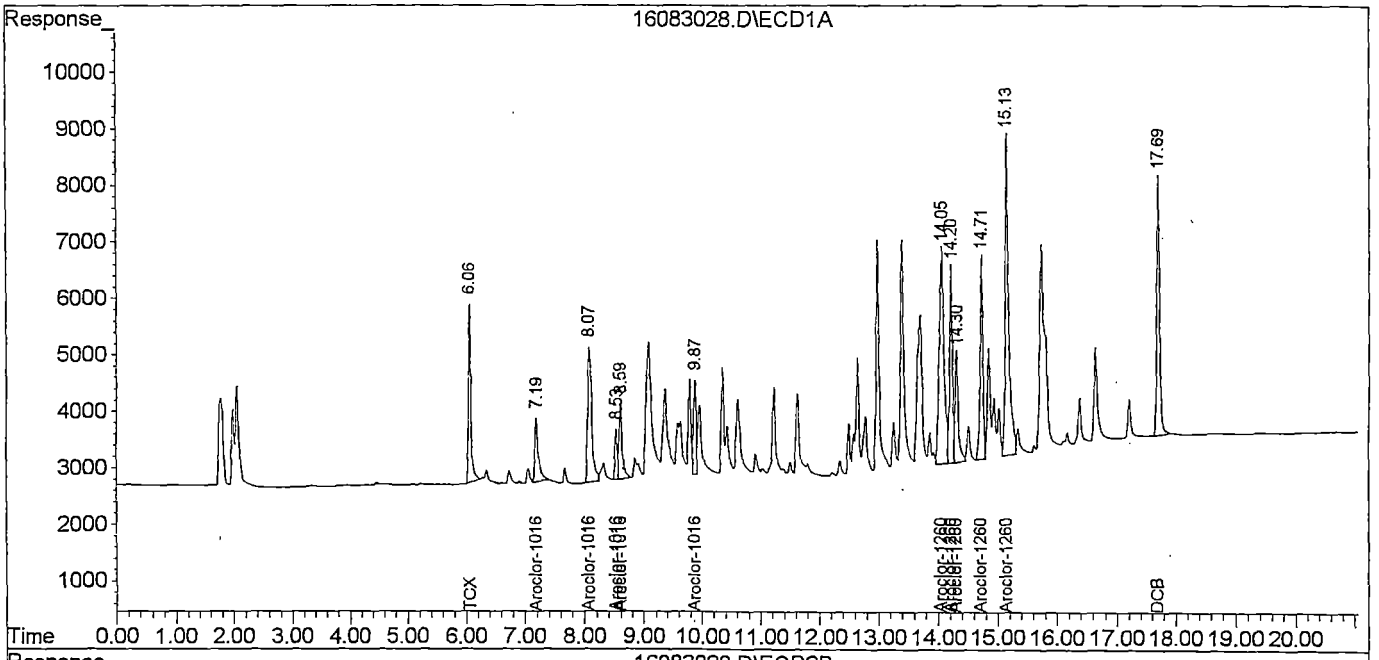
Chromatographic Report

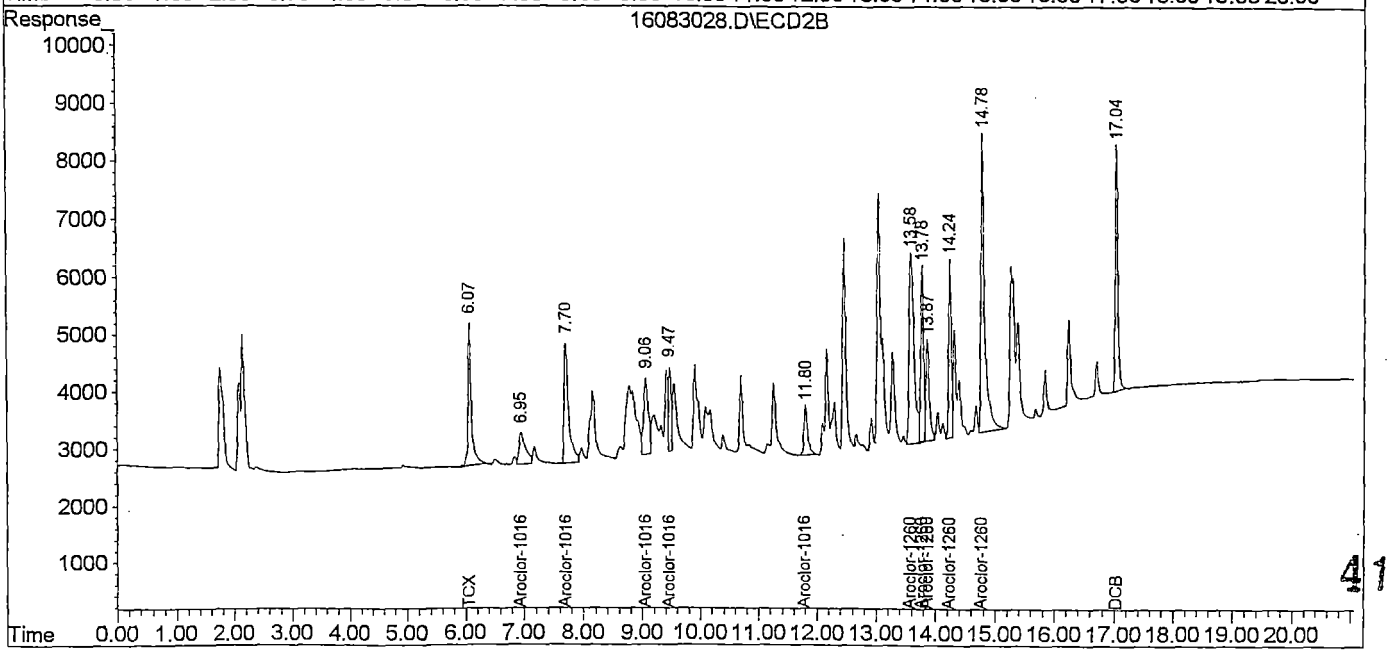
Signal #1 : F:\HPCHEM\HP\16\DATA\08_30_01\16083028.D\ECD1A.CH Vial: 28
Signal #2 : F:\HPCHEM\HP\16\DATA\08_30_01\16083028.D\ECD2B.CH
Acq On : 30 Aug 2001 21:28 Operator: TLM
Sample : AR1660L3CK Inst : HP_16
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 31 8:54 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_30_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

ok 8-31-01

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_30_01\16083028.D\ECD1A.CH Vial: 28
Signal #2 : F:\HPCHEM\HP\16\DATA\08_30_01\16083028.D\ECD2B.CH
Acq On : 30 Aug 2001 21:28 Operator: TLM
Sample : AR1660L3CK Inst : HP_16
Misc : 5-210-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 31 8:54 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_30_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.06	6.07	93949	98686	18.8	17.6
22)	S DCB	17.69	17.04	153489	132725	18.3	17.1
	Target Compounds:						
2)	L1 Aroclor-1016	7.19	6.95	49108	44077	393.3	361.1
3)	L1 Aroclor-1016 {2}	8.07	7.70	117774	121124	388.7	362.7
4)	L1 Aroclor-1016 {3}	8.53	9.06	23296	76863	375.6	358.4
5)	L1 Aroclor-1016 {4}	8.60	9.47	49284	54603	376.3	362.3
6)	L1 Aroclor-1016 {5}	9.87	11.80	57787	38353	397.8	358.8
	Sum Aroclor-1016			297248	335020	1931.7	1803.2
	Average Aroclor-1016					386.342	360.645
17)	L7 Aroclor-1260	14.05	13.59	209879	192908	404.7	359.0
18)	L7 Aroclor-1260 {2}	14.20	13.79	116796	104446	391.8	359.2
19)	L7 Aroclor-1260 {3}	14.30	13.87	76801	67402	362.9	341.4
20)	L7 Aroclor-1260 {4}	14.72	14.24	117533	94118	400.3	364.3
21)	L7 Aroclor-1260 {5}	15.14	14.78	236903	226992	393.6	356.7
	Sum Aroclor-1260			757912	685866	1953.2	1780.6
	Average Aroclor-1260					390.634	356.119

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16083028.D XPCBH28.M Fri Aug 31 08:59:44 2001 Page 1

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PBLKSA

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: BL0823SA

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/23/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/28/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U
	Surrogate amount spiked	6.67	

FORM I PCB

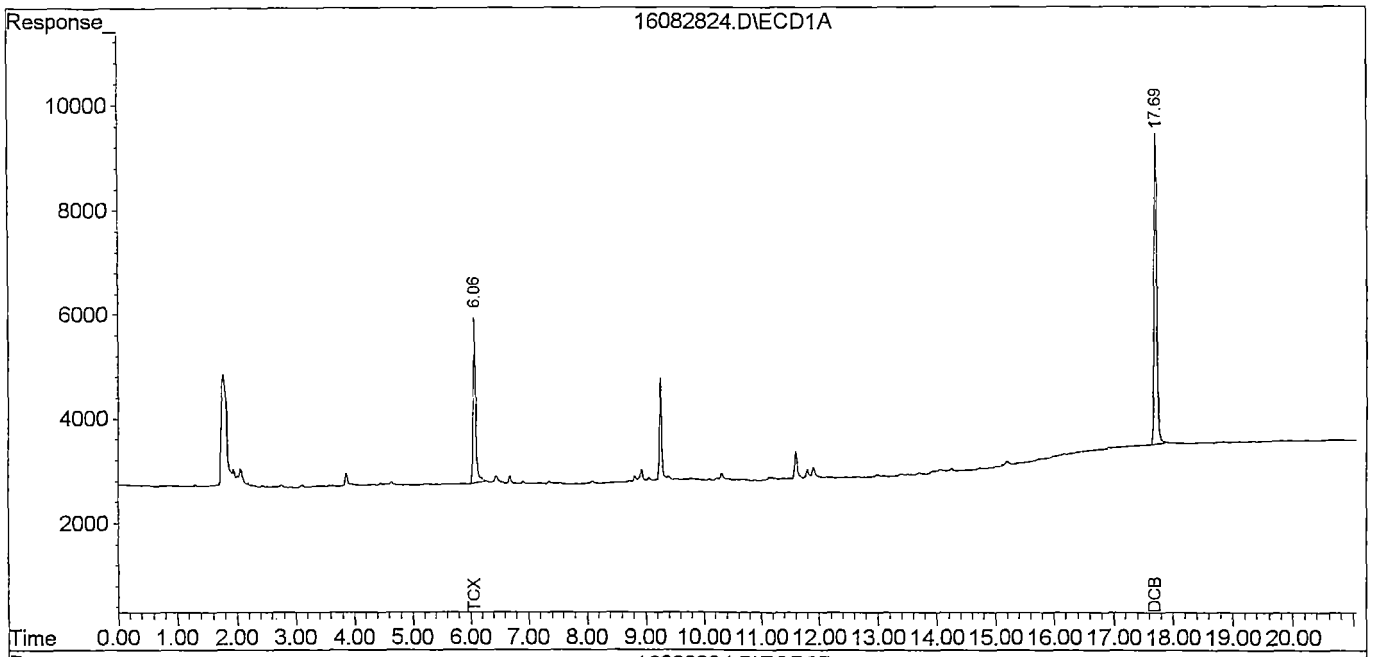
Chromatographic Report

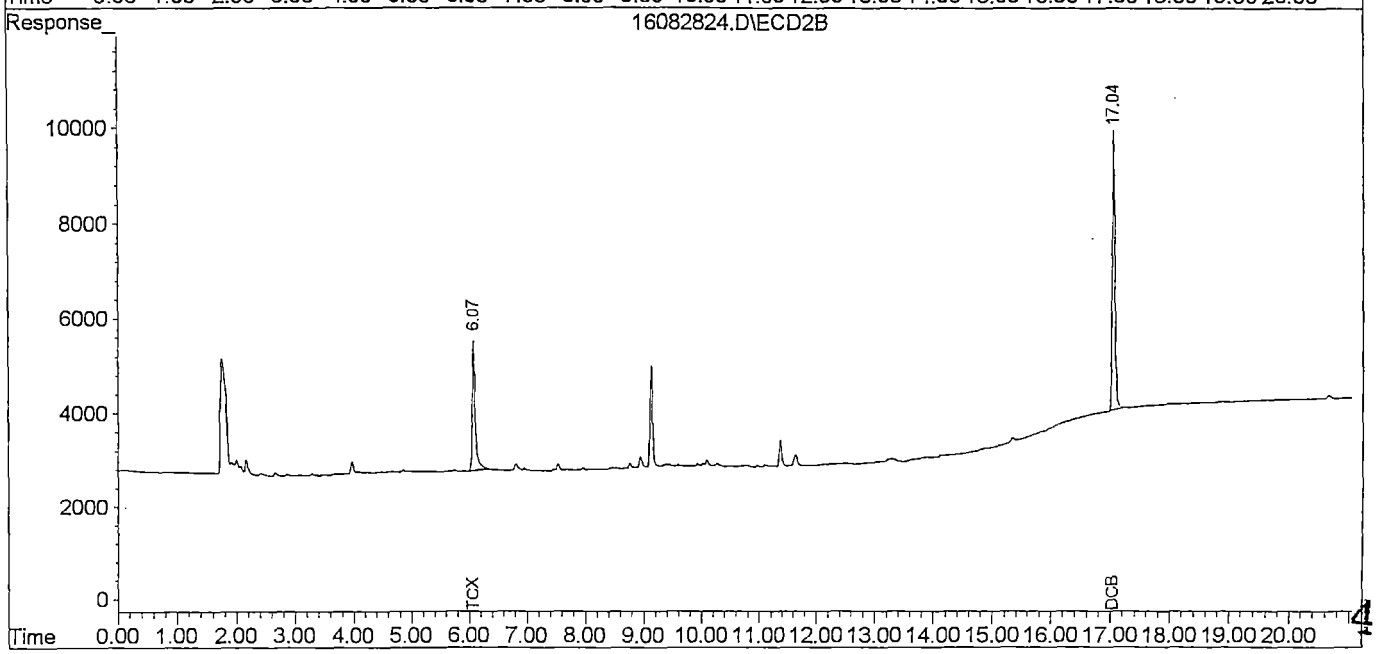
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082824.D\ECD1A.CH Vial: 24
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082824.D\ECD2B.CH
Acq On : 28 Aug 2001 22:01 Operator: TLM
Sample : BL0823SA *PBLKSA * Inst : HP_16
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 18:10 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

ok 8-31-01





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082824.D\ECD1A.CH Vial: 24
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082824.D\ECD2B.CH
Acq On : 28 Aug 2001 22:01 Operator: TLM
Sample : BL0823SA *PBLKSA * Inst : HP_16
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 18:10 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	6.06	6.07	94449	100178	6.302	5.965
	Spiked Amount 6.667			Recovery	=	94.53%	89.48%
22)	S DCB	17.70	17.04	182598	176470	7.246	7.594
	Spiked Amount 6.667			Recovery	=	108.69%	113.91%

Target Compounds:

418

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

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PBLKSB

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: BL0802SB

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/14/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U
	Surrogate amount spiked	6.67	

FORM I PCB

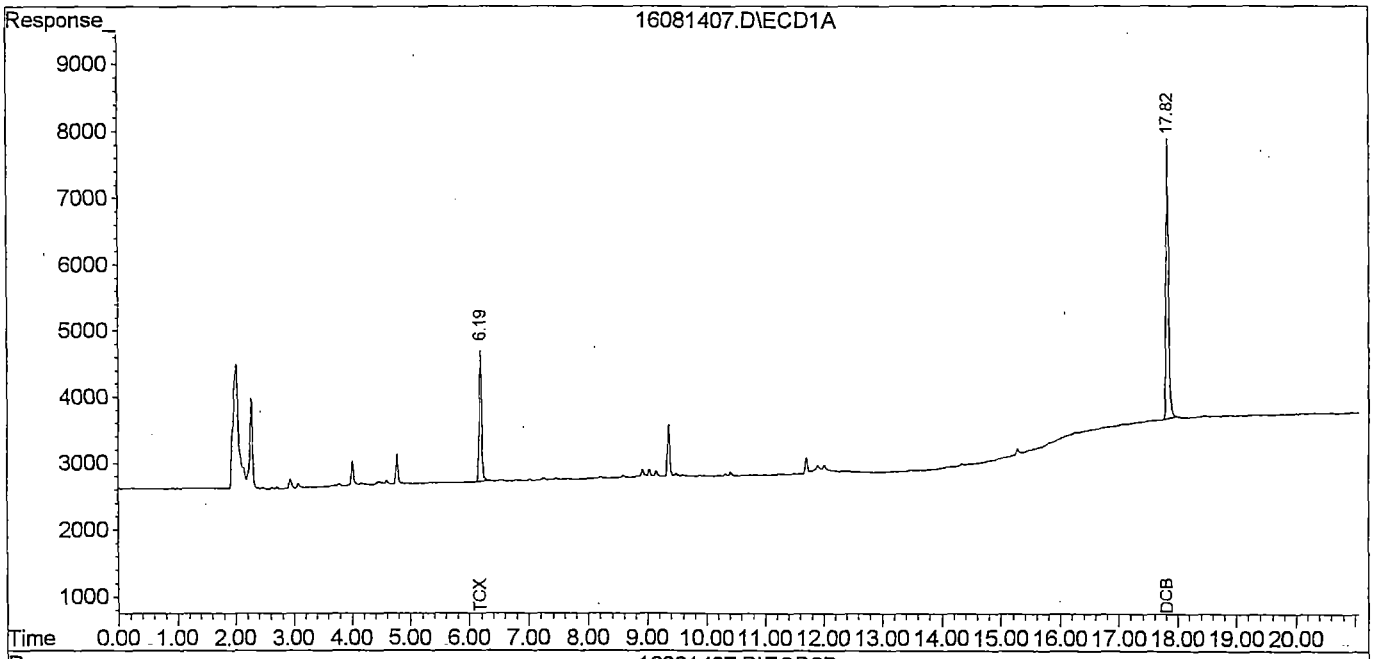
Chromatographic Report

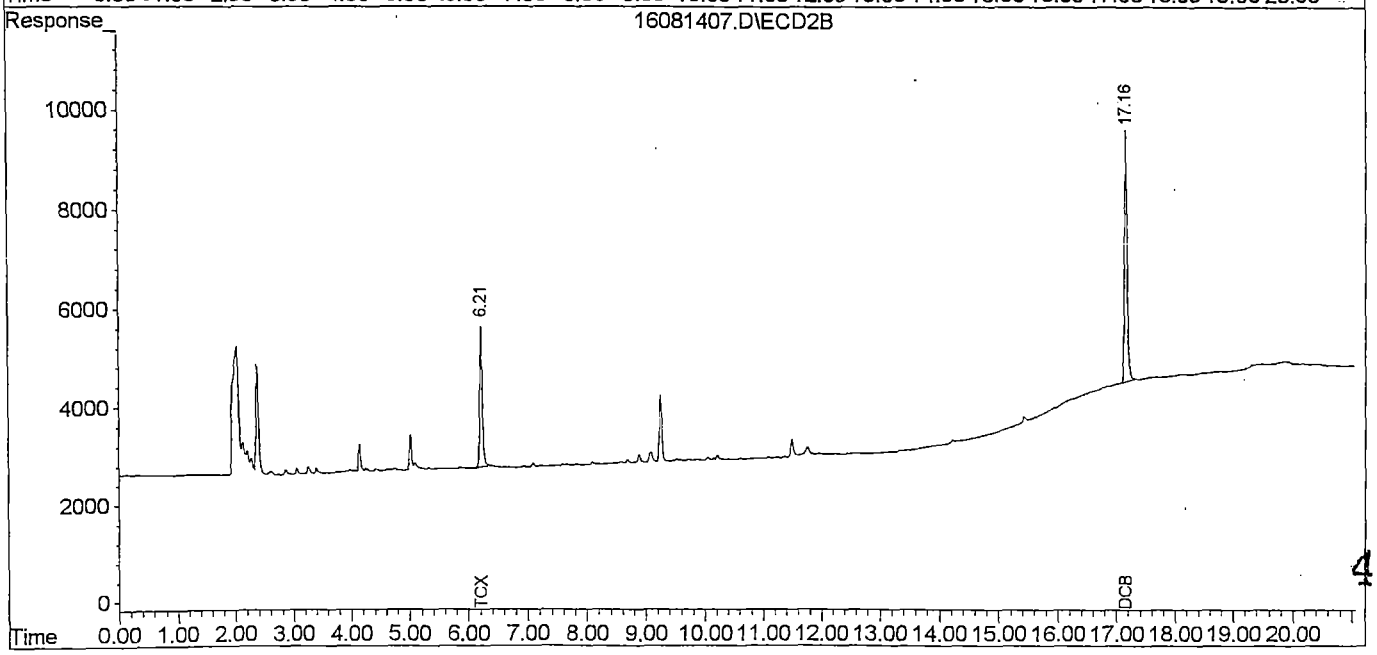
Signal #1 : F:\HPCHEM\HP\16\DATA\08_14_01\16081407.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\16\DATA\08_14_01\16081407.D\ECD2B.CH
Acq On : 14 Aug 2001 15:49 Operator: TLM
Sample : BL0802SB/ *PBLKSB/ * Inst : HP_16
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 16 14:53 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_14_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

ok 8-31-01





420

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_14_01\16081407.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\16\DATA\08_14_01\16081407.D\ECD2B.CH
Acq On : 14 Aug 2001 15:49 Operator: TLM
Sample : BL0802SB *PBLKSB * Inst : HP_16
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 16 14:53 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_14_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	6.19f	6.21	52398	84548	3.761	3.985
	Spiked Amount 6.667			Recovery	=	56.42%	59.78%
22)	S DCB	17.82	17.16	127429	157111	5.051	5.077
	Spiked Amount 6.667			Recovery	=	75.77%	76.16%

Target Compounds:

421

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

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKCF

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 08/28/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKCF

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 08/28/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

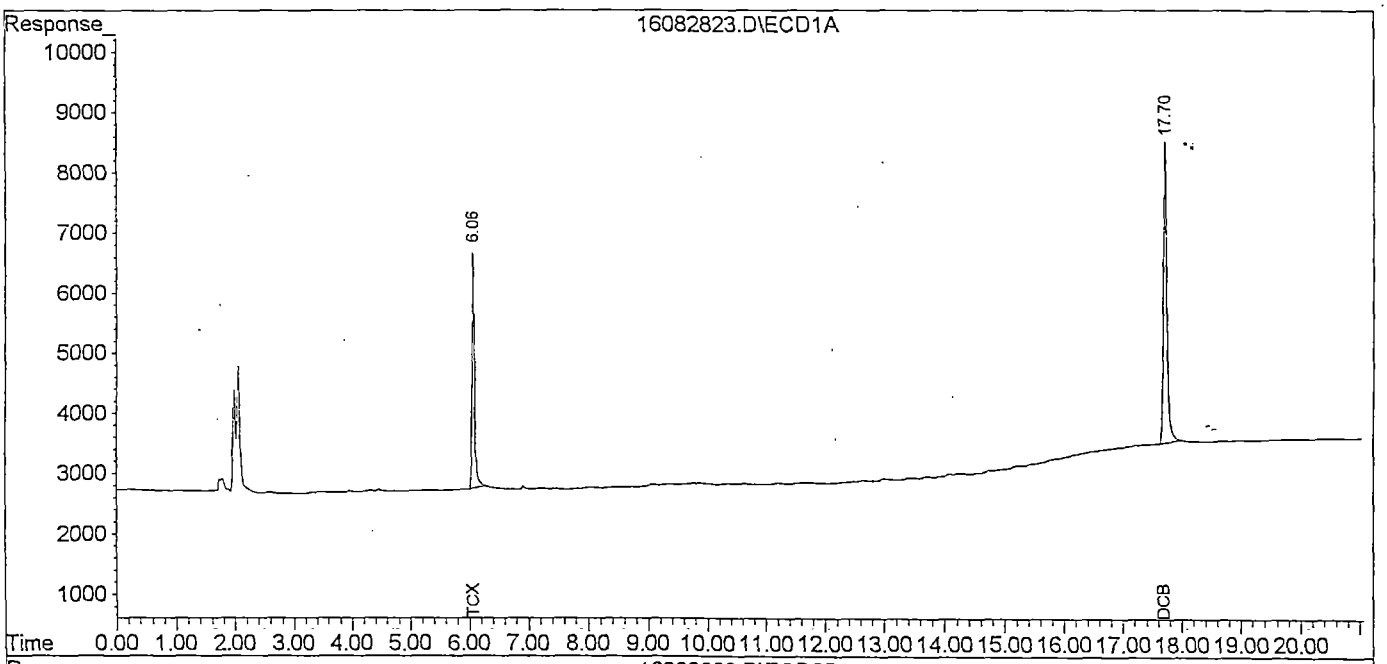
Chromatographic Report

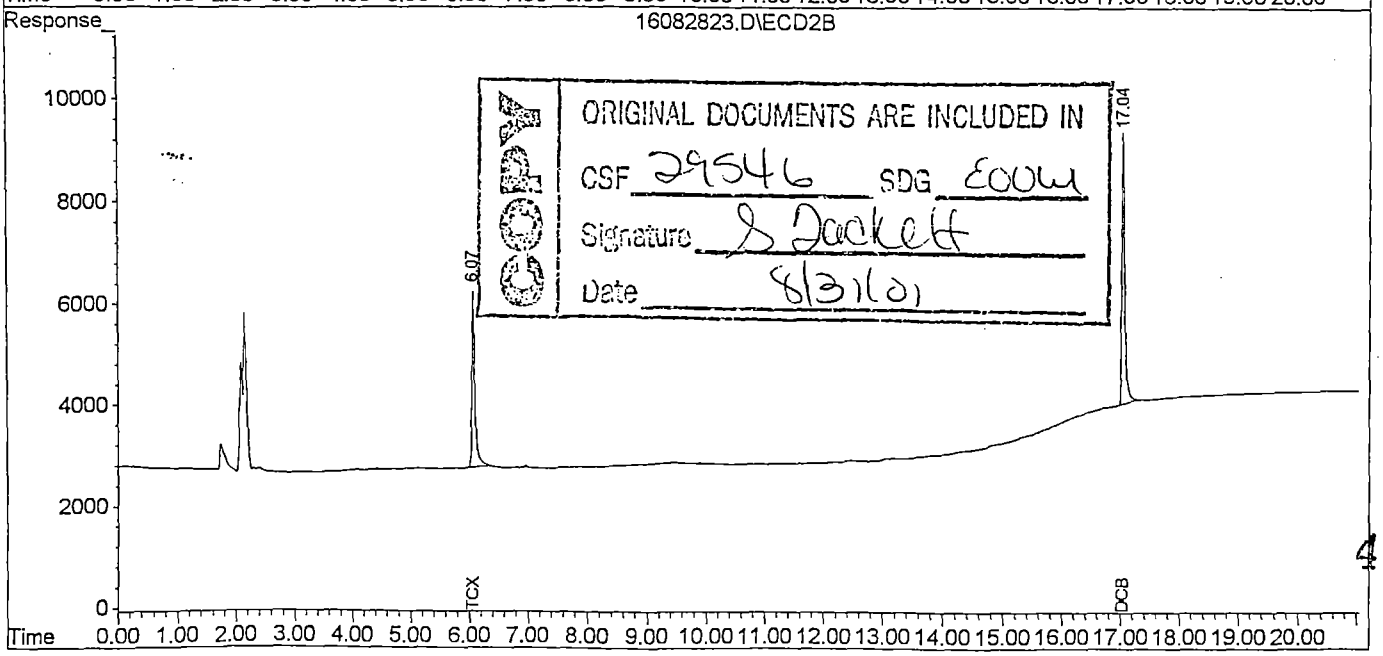
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082823.D\ECD1A.CH Vial: 23
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082823.D\ECD2B.CH
Acq On : 28 Aug 2001 21:37 Operator: TLM
Sample : PIBLKCF Inst : HP_16
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:51 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

Op 8-30-01





ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29546 SDG E00W
Signature S Dackett
Date 8/31/01

424

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082823.D\ECD1A.CH Vial: 23
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082823.D\ECD2B.CH
Acq On : 28 Aug 2001 21:37 Operator: TLM
Sample : PIBLKCF Inst : HP_16
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:51 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.06	6.07	115176	122918	23.1	22.0
22)	S DCB	17.70	17.05	197458	184514	23.5	23.8

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
16082823.D XPCBH28.M Wed Aug 29 15:54:41 2001 Page 1

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKCG

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 08/30/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKCG

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 08/30/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_30_01\16083004.D\ECD1A.CH Vial: 4
Signal #2 : F:\HPCHEM\HP\16\DATA\08_30_01\16083004.D\ECD2B.CH
Acq On : 30 Aug 2001 10:54 Operator: TLM
Sample : PIBLKCG Inst : HP_16
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 30 11:46 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_30_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.07	6.08	109539	106180	21.9	19.0
22)	S DCB	17.70	17.05	184188	161888	21.9	20.9
	Target Compounds:						

428

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

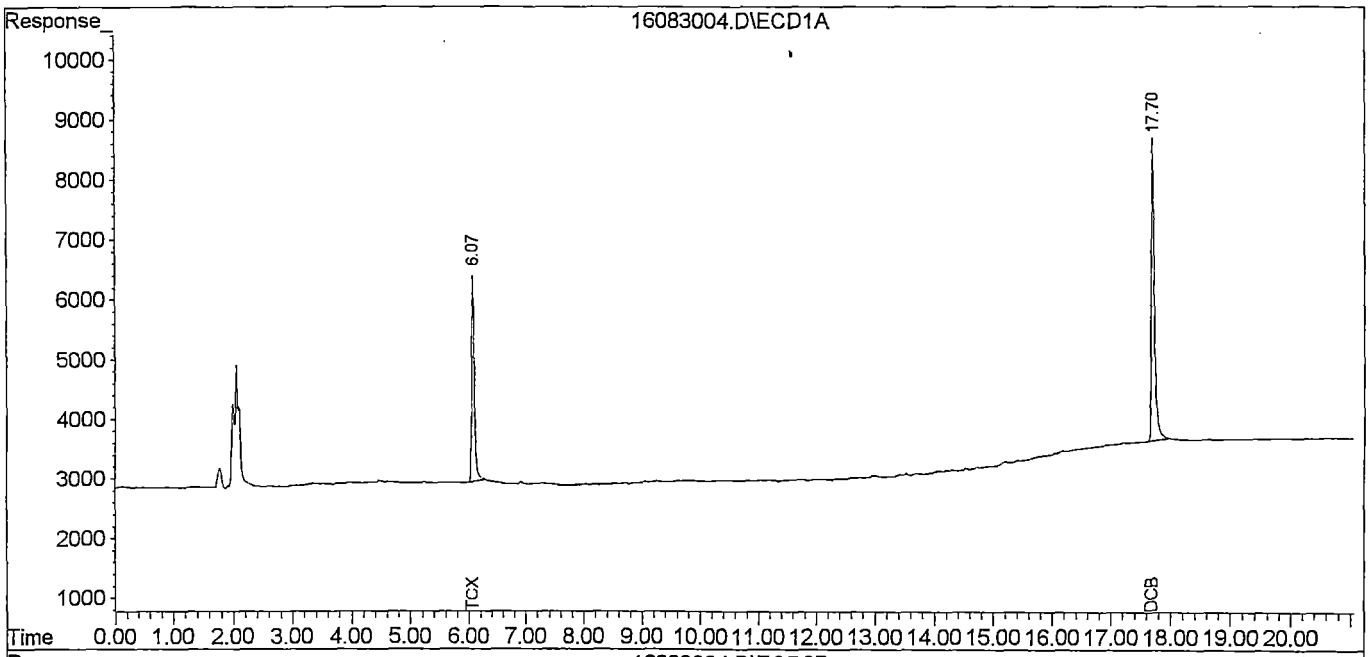
Chromatographic Report

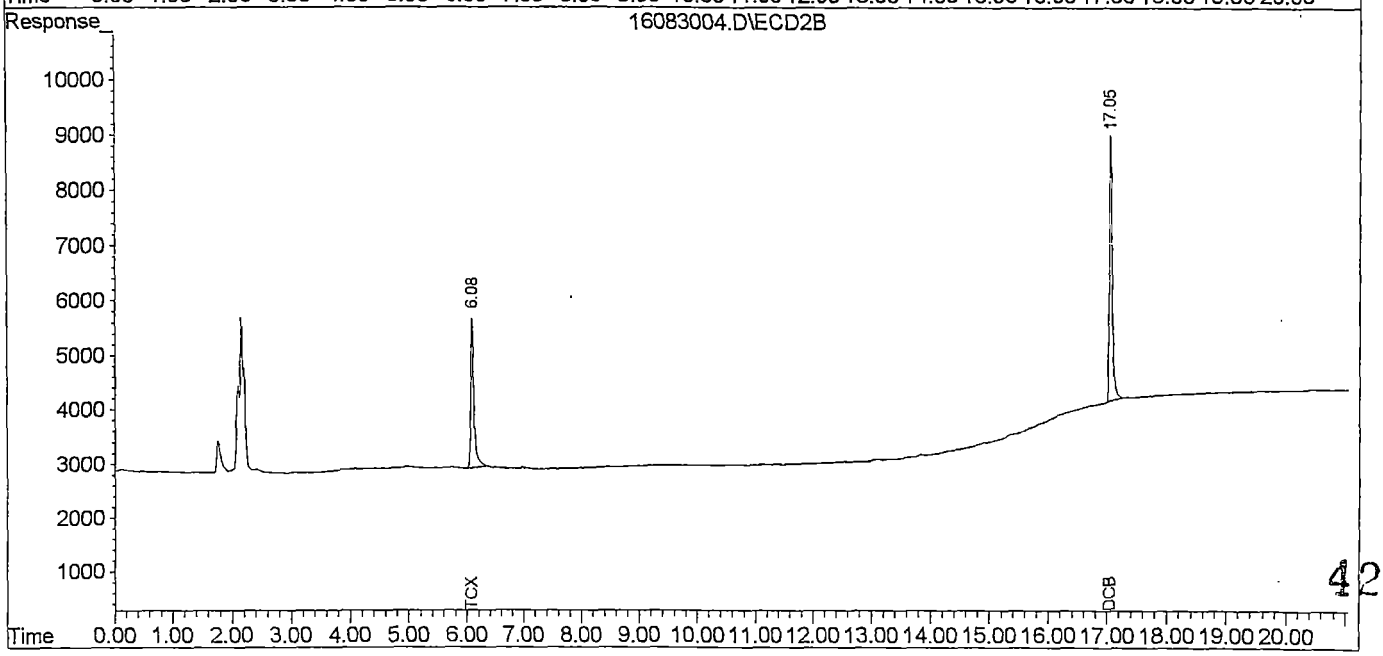
Signal #1 : F:\HPCHEM\HP\16\DATA\08_30_01\16083004.D\ECD1A.CH Vial: 4
Signal #2 : F:\HPCHEM\HP\16\DATA\08_30_01\16083004.D\ECD2B.CH
Acq On : 30 Aug 2001 10:54 Operator: TLM
Sample : PIBLKCG Inst : HP_16
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 30 11:46 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_30_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

ok 8/31/01





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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKCH

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 08/30/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKCH

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 08/30/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

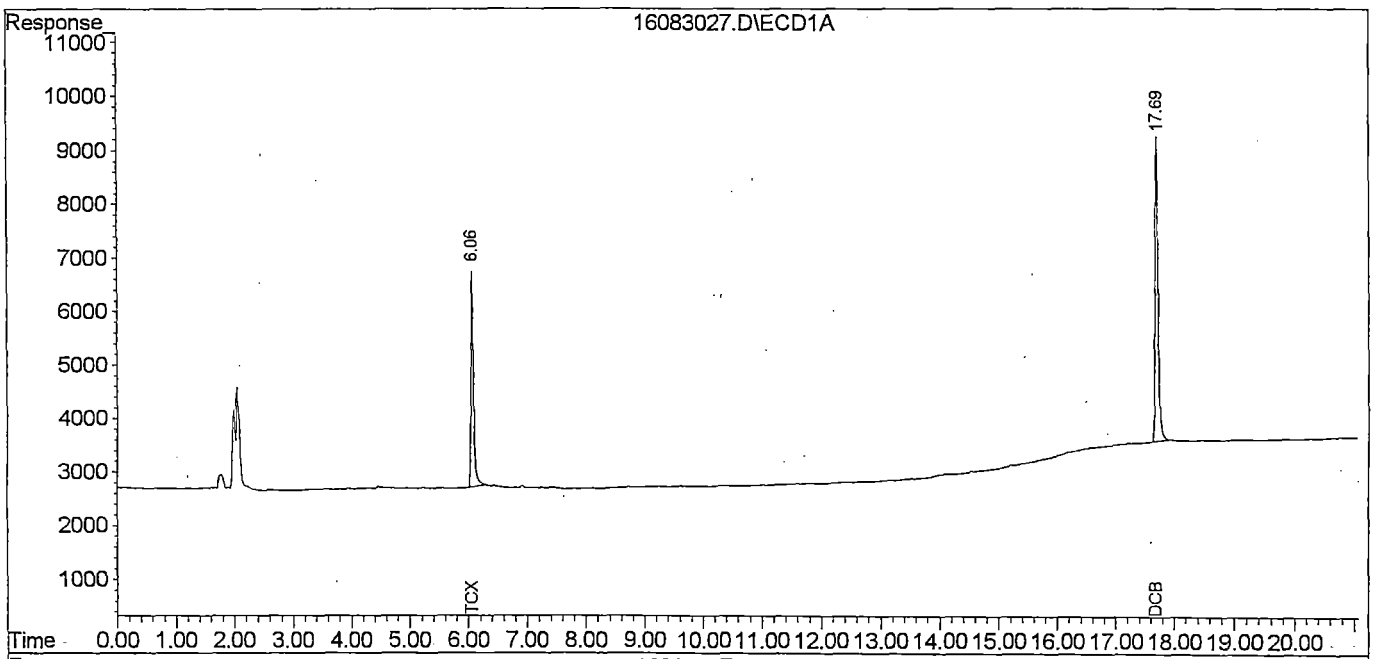
Chromatographic Report

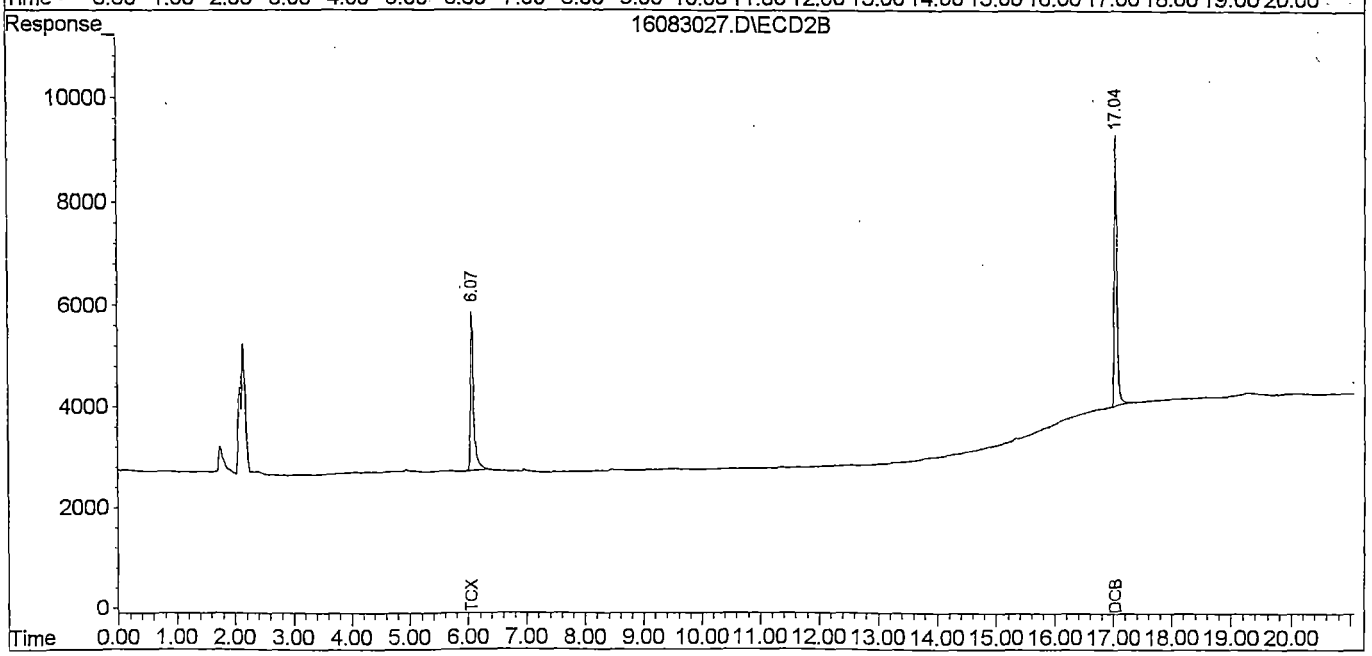
Signal #1 : F:\HPCHEM\HP\16\DATA\08_30_01\16083027.D\ECD1A.CH Vial: 27
Signal #2 : F:\HPCHEM\HP\16\DATA\08_30_01\16083027.D\ECD2B.CH
Acq On : 30 Aug 2001 21:03 Operator: TLM
Sample : PIBLKCH Inst : HP_16
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 31 8:52 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_30_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

ok 8-31-01

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





432

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_14_01\16081404.D\ECD1A.CH Vial: 4
Signal #2 : F:\HPCHEM\HP\16\DATA\08_14_01\16081404.D\ECD2B.CH
Acq On : 14 Aug 2001 10:37 Operator: TLM
Sample : PIBLKCQ Inst : HP_16
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 14 12:11 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_14_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.19f	6.21	100189	136260	21.6	19.3
22)	S DCB	17.83	17.16	168497	205097	20.0	19.9
	Target Compounds:						

440

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

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKCQ

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 08/14/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKCQ

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 08/14/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081036.D\ECD1A.CH Vial: 33
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081036.D\ECD2B.CH
Acq On : 11 Aug 2001 3:08 Operator: TLM
Sample : PIBLKCL Inst : HP_16
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 11:09 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.21	6.21	89203	130882	19.2	18.5
22)	S DCB	17.83	17.16	167356	205348	19.9	19.9
	Target Compounds:						

COPY

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29546 SDG EC0E2
Signature [signature]
Date 8/16/01

437

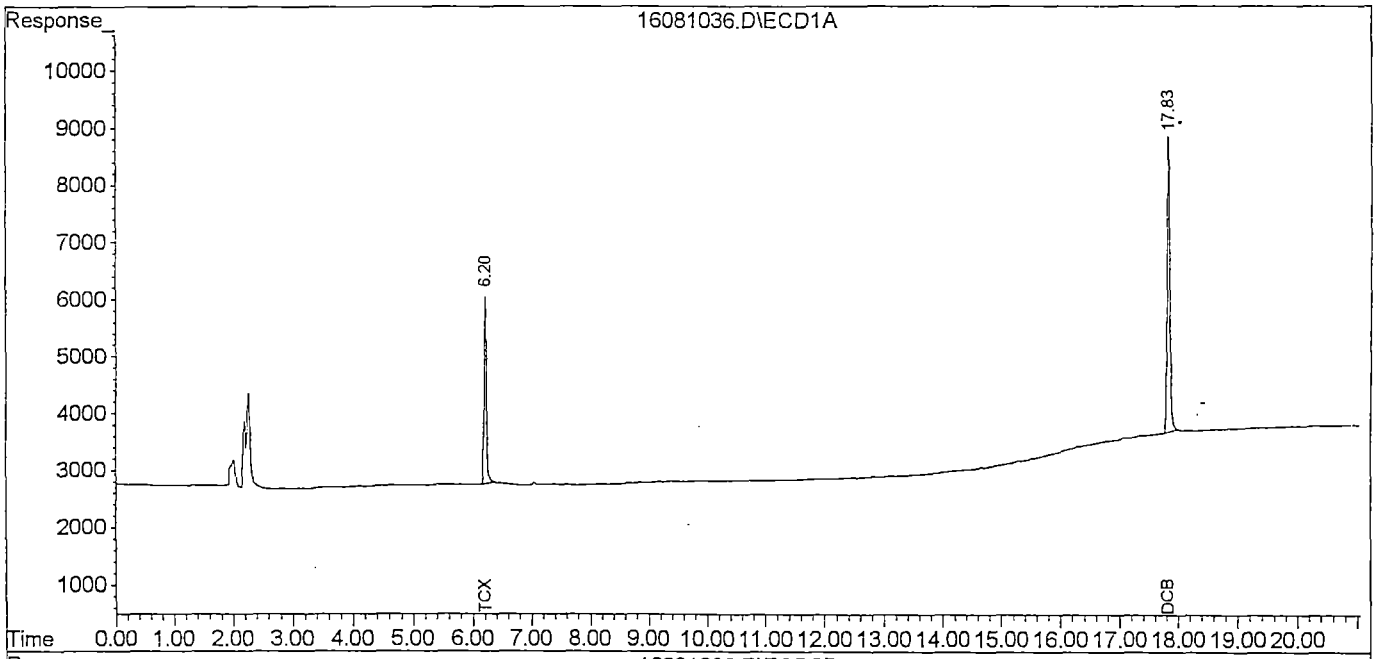
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

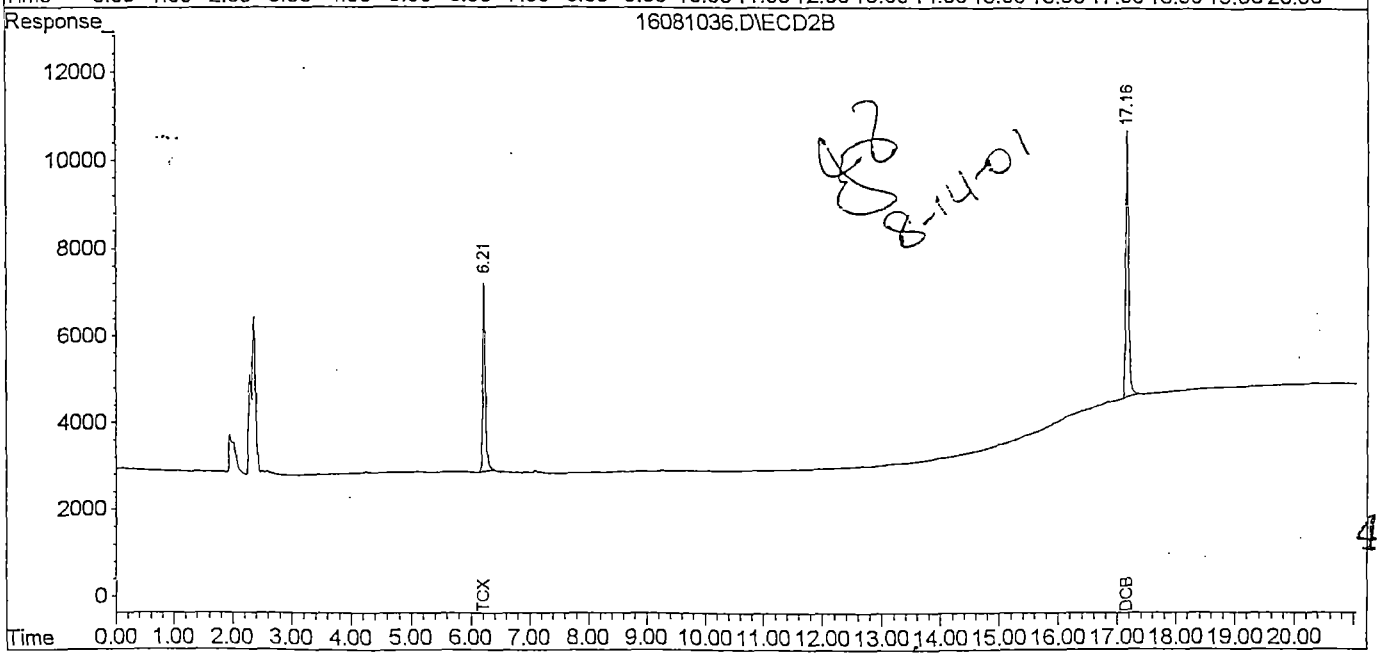
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_10_01\16081036.D\ECD1A.CH Vial: 33
Signal #2 : F:\HPCHEM\HP\16\DATA\08_10_01\16081036.D\ECD2B.CH
Acq On : 11 Aug 2001 3:08 Operator: TLM
Sample : PIBLKCL Inst : HP_16
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 11 11:09 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_10_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





8-14-01

436

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKCL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 08/11/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKCL

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 08/11/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_30_01\16083027.D\ECD1A.CH Vial: 27
Signal #2 : F:\HPCHEM\HP\16\DATA\08_30_01\16083027.D\ECD2B.CH
Acq On : 30 Aug 2001 21:03 Operator: TLM
Sample : PIBLKCH Inst : HP_16
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 31 8:52 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_30_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.06	6.07	120643	113355	24.1	20.2
22)	S DCB	17.69	17.04	191595	165732	22.8	21.4
	Target Compounds:						

433

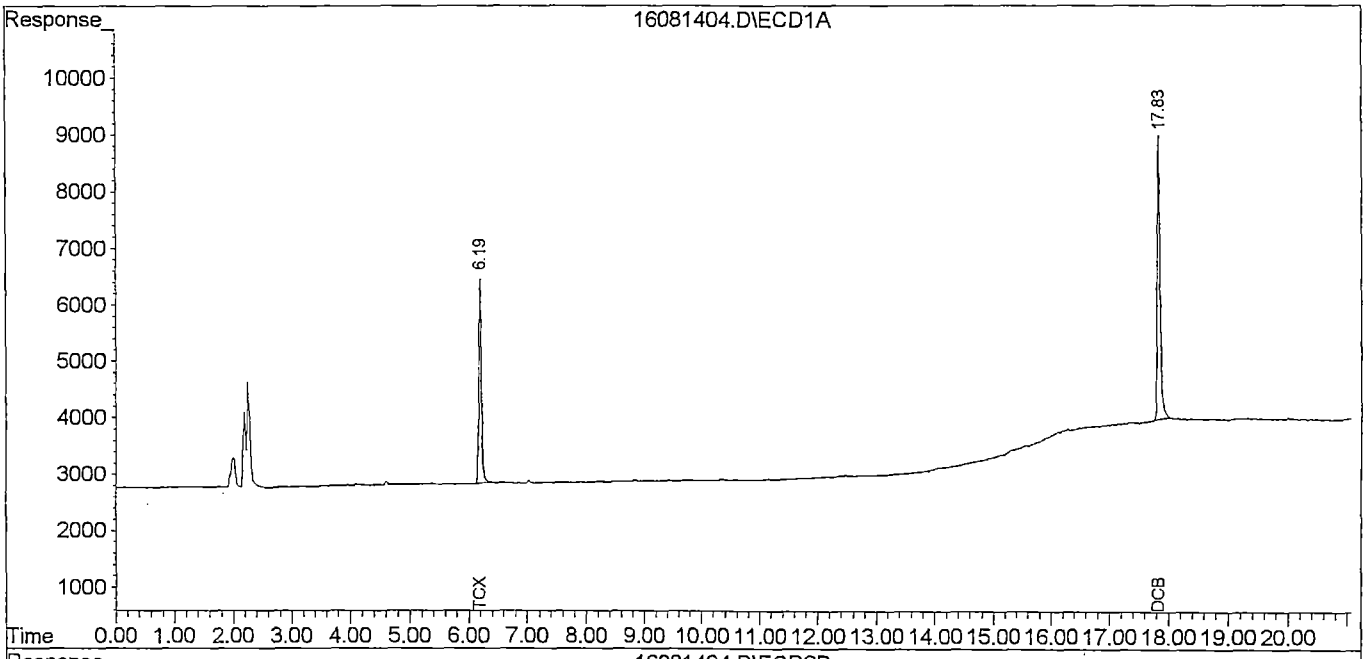
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

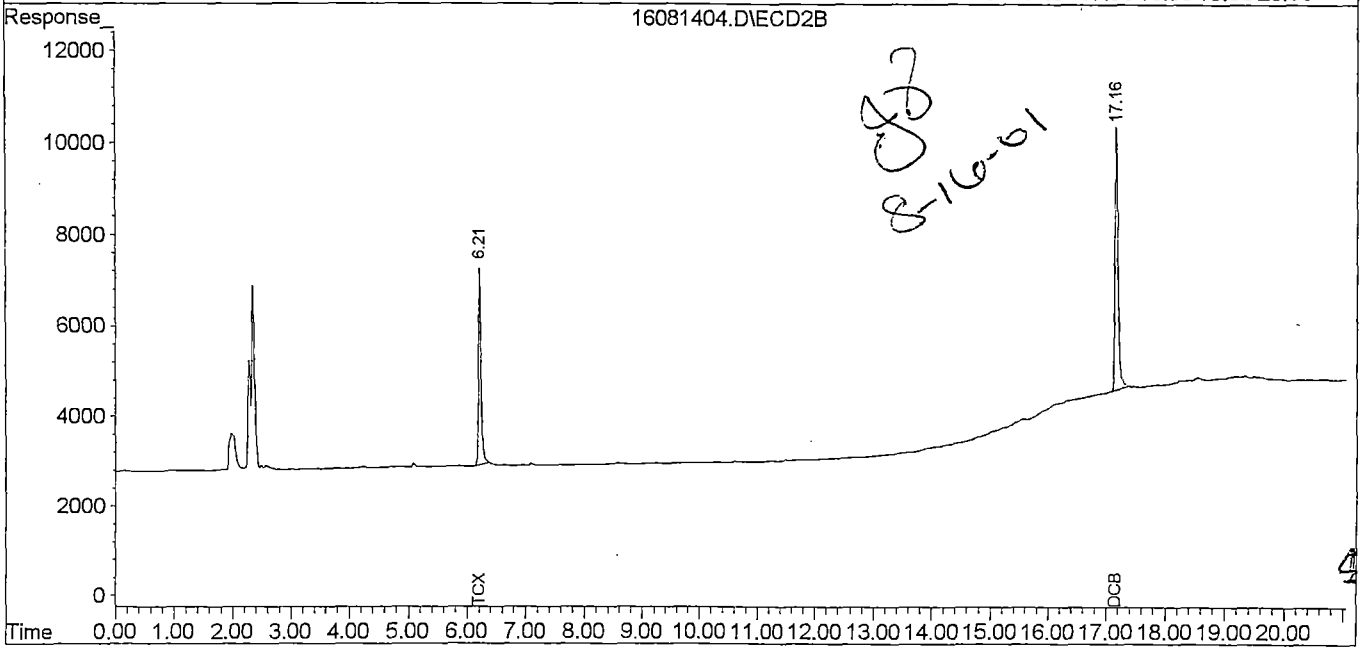
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_14_01\16081404.D\ECD1A.CH Vial: 4
Signal #2 : F:\HPCHEM\HP\16\DATA\08_14_01\16081404.D\ECD2B.CH
Acq On : 14 Aug 2001 10:37 Operator: TLM
Sample : PIBLKCQ Inst : HP_16
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 14 12:11 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_14_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





8-16-01

441

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKCR

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 08/14/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_14_01\16081421.D\ECD1A.CH Vial: 21
Signal #2 : F:\HPCHEM\HP\16\DATA\08_14_01\16081421.D\ECD2B.CH
Acq On : 14 Aug 2001 21:33 Operator: TLM
Sample : PIBLKCR Inst : HP_16
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 15 10:39 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_14_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.21	6.21	80251	111878	17.3	15.8
22)	S DCB	17.83	17.16	150356	168143	17.9	16.3
	Target Compounds:						

444

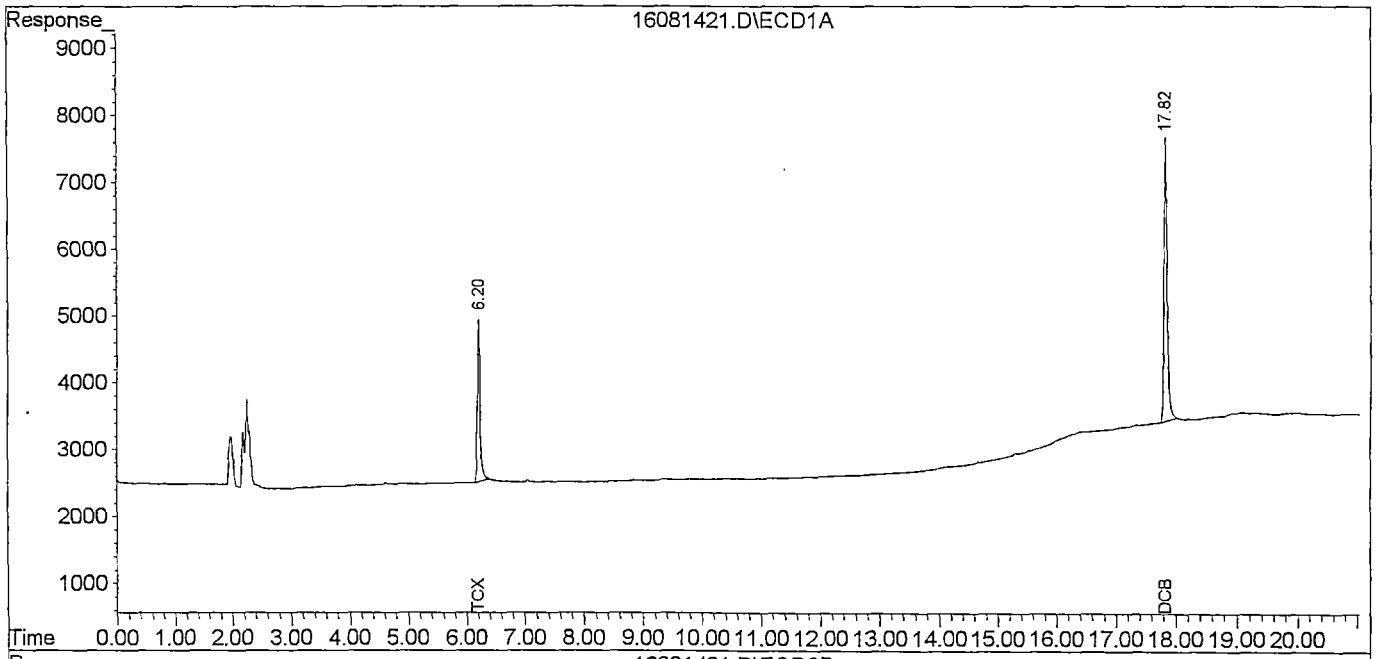
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

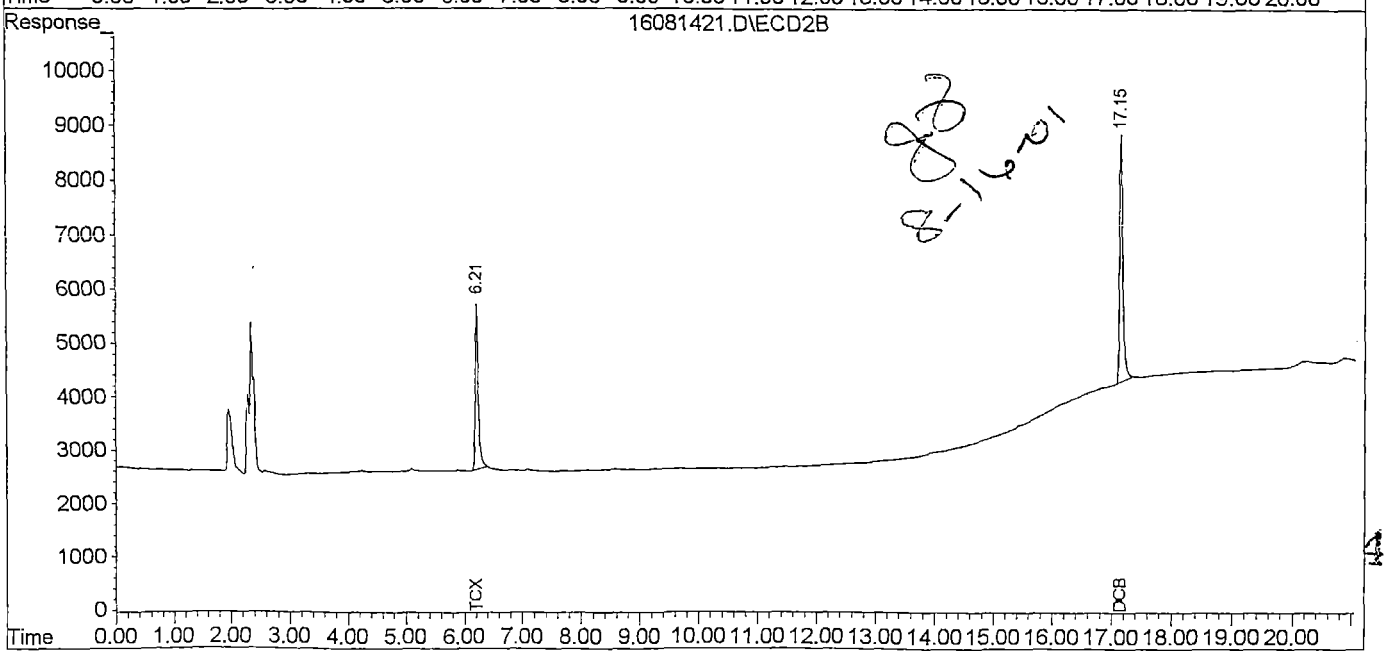
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_14_01\16081421.D\ECD1A.CH Vial: 21
Signal #2 : F:\HPCHEM\HP\16\DATA\08_14_01\16081421.D\ECD2B.CH
Acq On : 14 Aug 2001 21:33 Operator: TLM
Sample : PIBLKCR Inst : HP_16
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 15 10:39 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_14_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





8-14-01

445

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKCW

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 08/21/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKCW

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 08/21/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

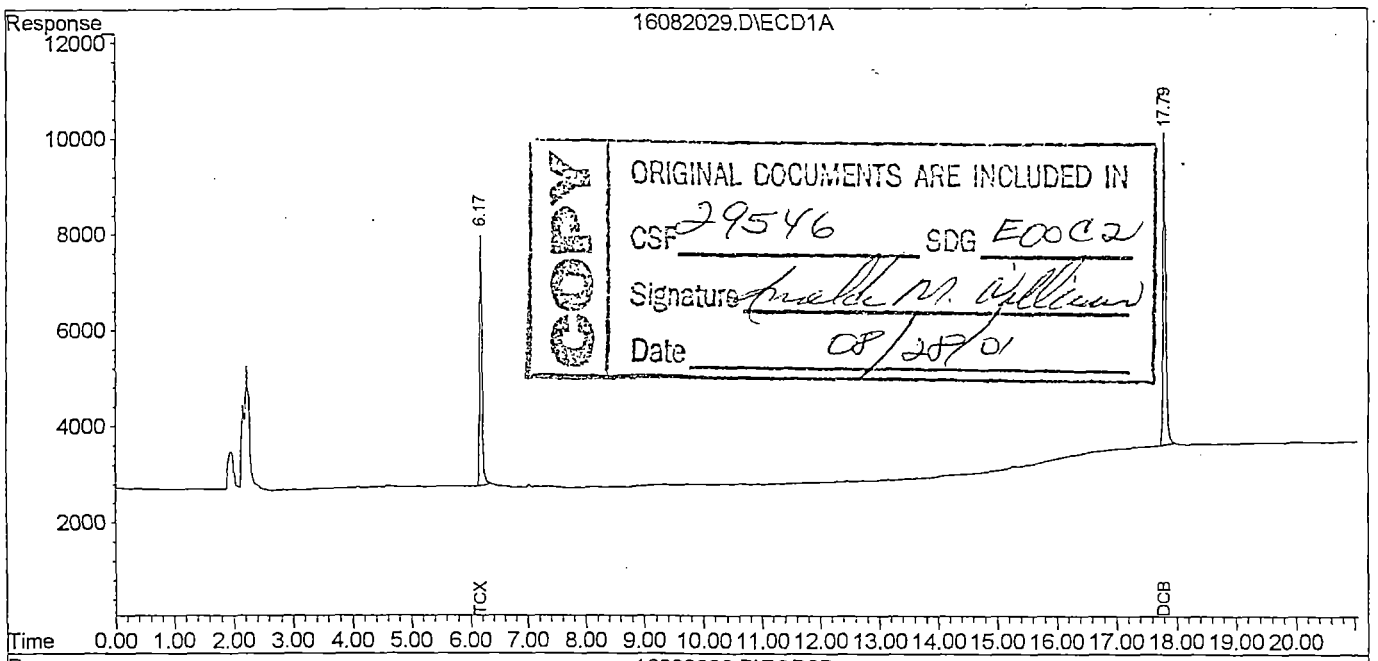
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082029.D\ECD1A.CH Vial: 29
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082029.D\ECD2B.CH
Acq On : 21 Aug 2001 1:47 Operator: TLM
Sample : PIBLKCW Inst : HP_16
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 24 15:22 2001 Quant Results File: XPCBH20.RES

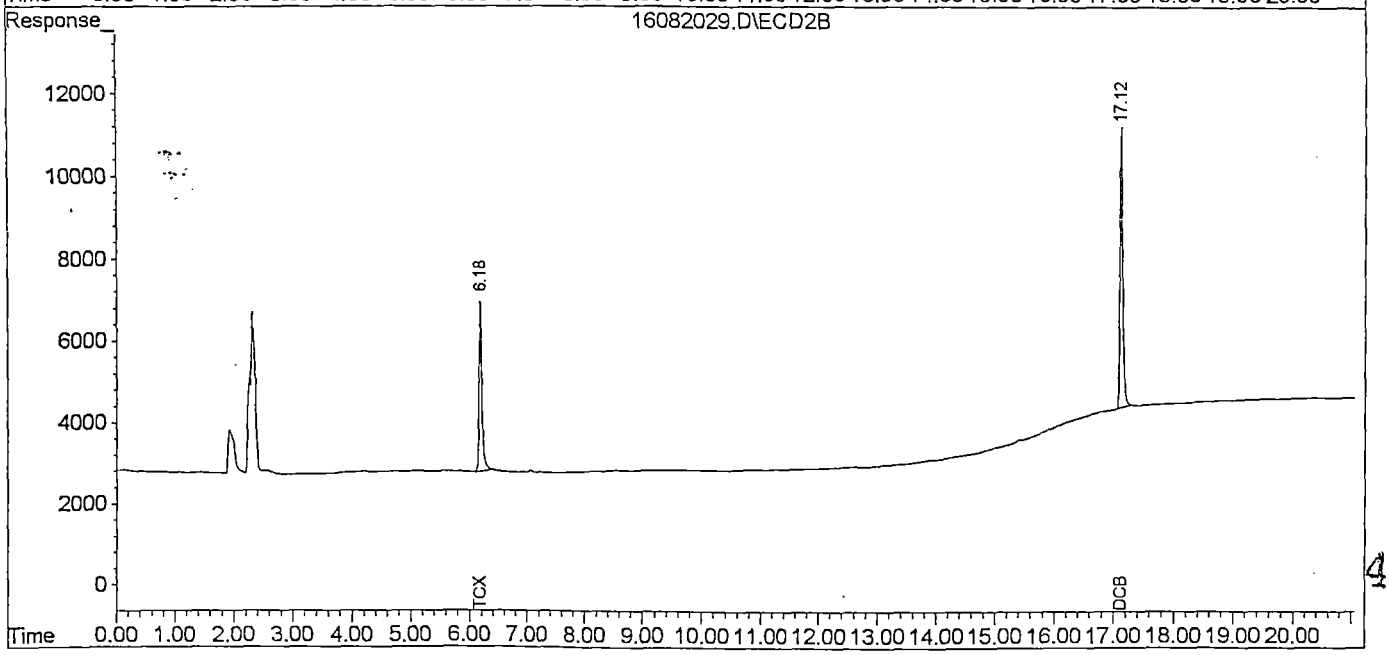
Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

OK 8-24-01

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



COPY
ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29546 SDG E00C2
Signature Noelle M. Williams
Date 08/28/01



448

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082029.D\ECD1A.CH Vial: 29
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082029.D\ECD2B.CH
Acq On : 21 Aug 2001 1:47 Operator: TLM
Sample : PIBLKCW Inst : HP_16
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 24 15:22 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.17	6.18	145912	139515	19.9	18.8
22)	S DCB	17.79	17.12	210625	219900	19.6	20.0

Target Compounds:

449

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

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKCX

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 08/21/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKCX

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 08/21/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

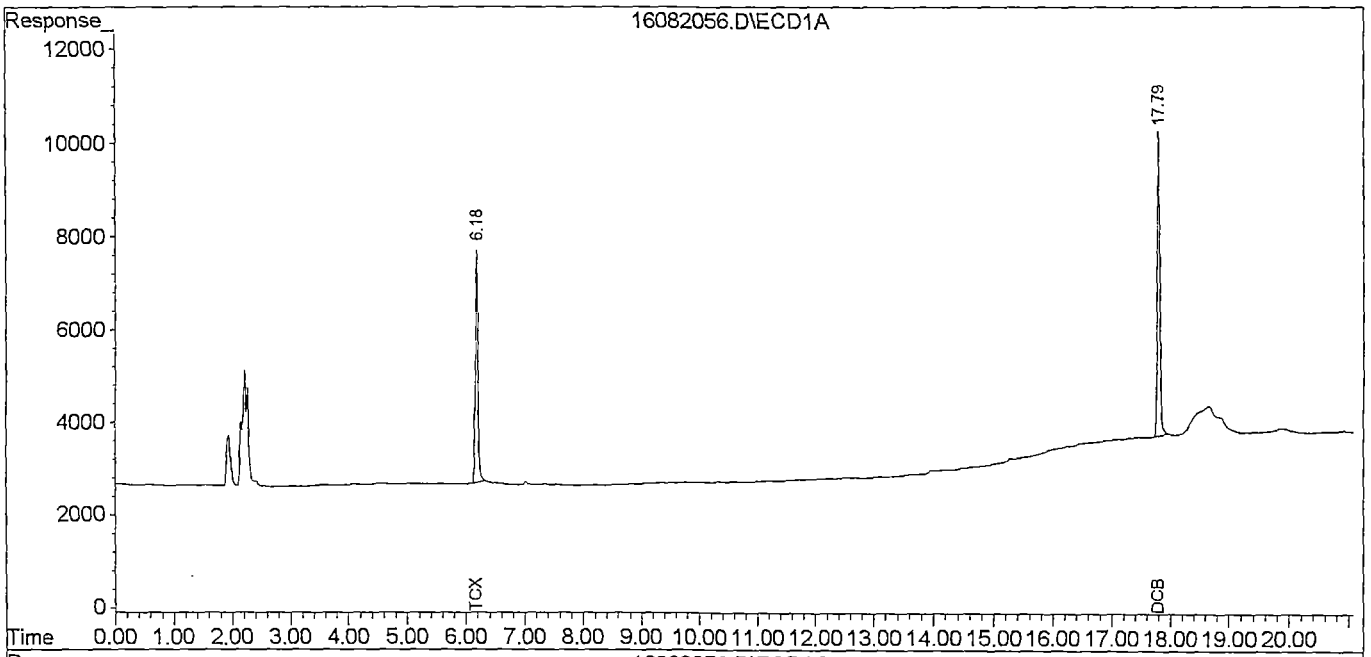
Chromatographic Report

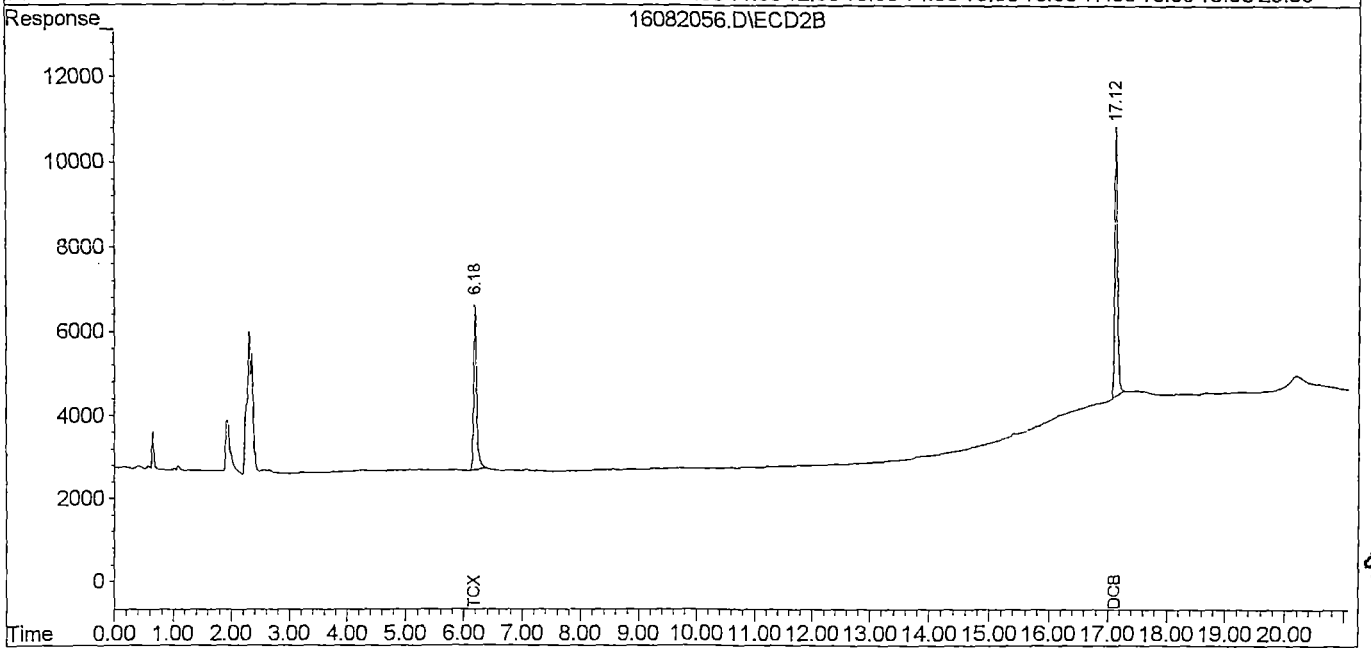
Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082056.D\ECD1A.CH Vial: 56
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082056.D\ECD2B.CH
Acq On : 21 Aug 2001 12:54 Operator: TLM
Sample : PIBLKCX Inst : HP_16
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 25 10:55 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

OK 8-27-01

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





452

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_20_01\16082056.D\ECD1A.CH Vial: 56
Signal #2 : F:\HPCHEM\HP\16\DATA\08_20_01\16082056.D\ECD2B.CH
Acq On : 21 Aug 2001 12:54 Operator: TLM
Sample : PIBLKCX Inst : HP_16
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 25 10:55 2001 Quant Results File: XPCBH20.RES

Method : F:\HPCHEM\HP\16\DATA\08_20_01\XPCBH20.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_20_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.18	6.18	146426	132507	20.0	17.9
22)	S DCB	17.79	17.12	206768	199579	19.3	18.1

Target Compounds:

453

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

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKC2

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 08/29/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLKC2

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) WATER Lab Sample ID: 5-131-7

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 08/29/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

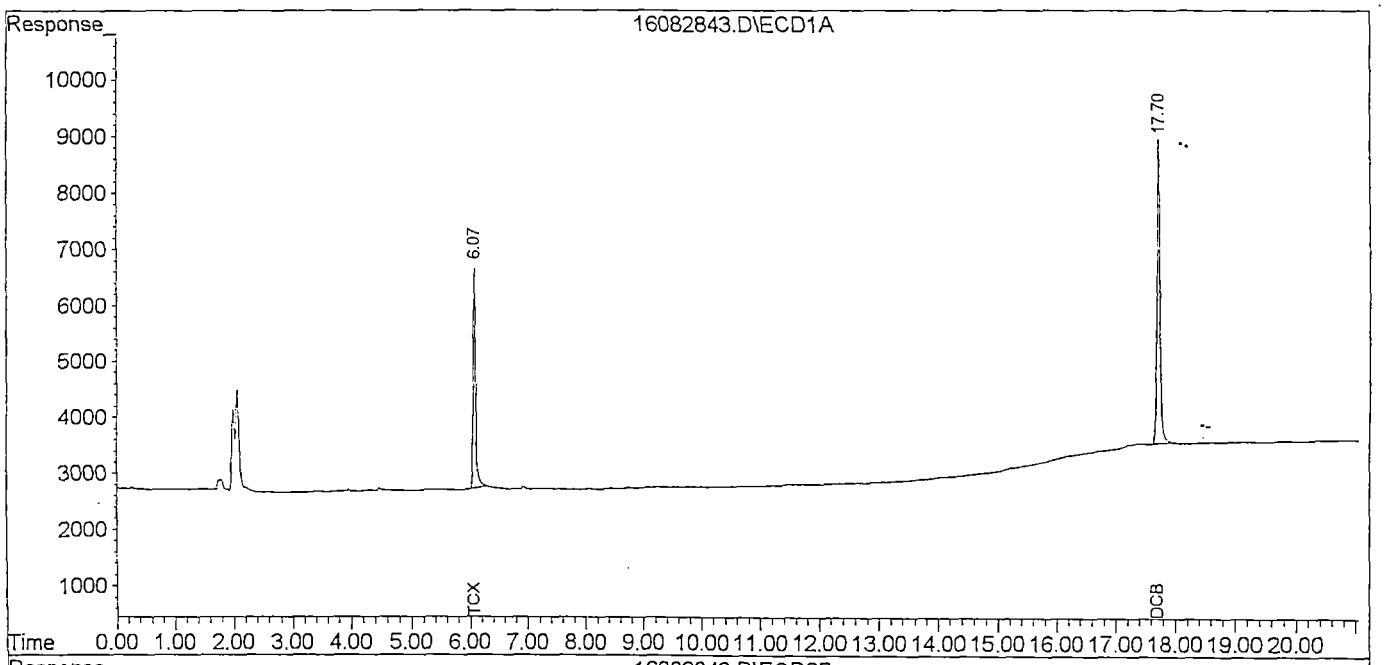
Chromatographic Report

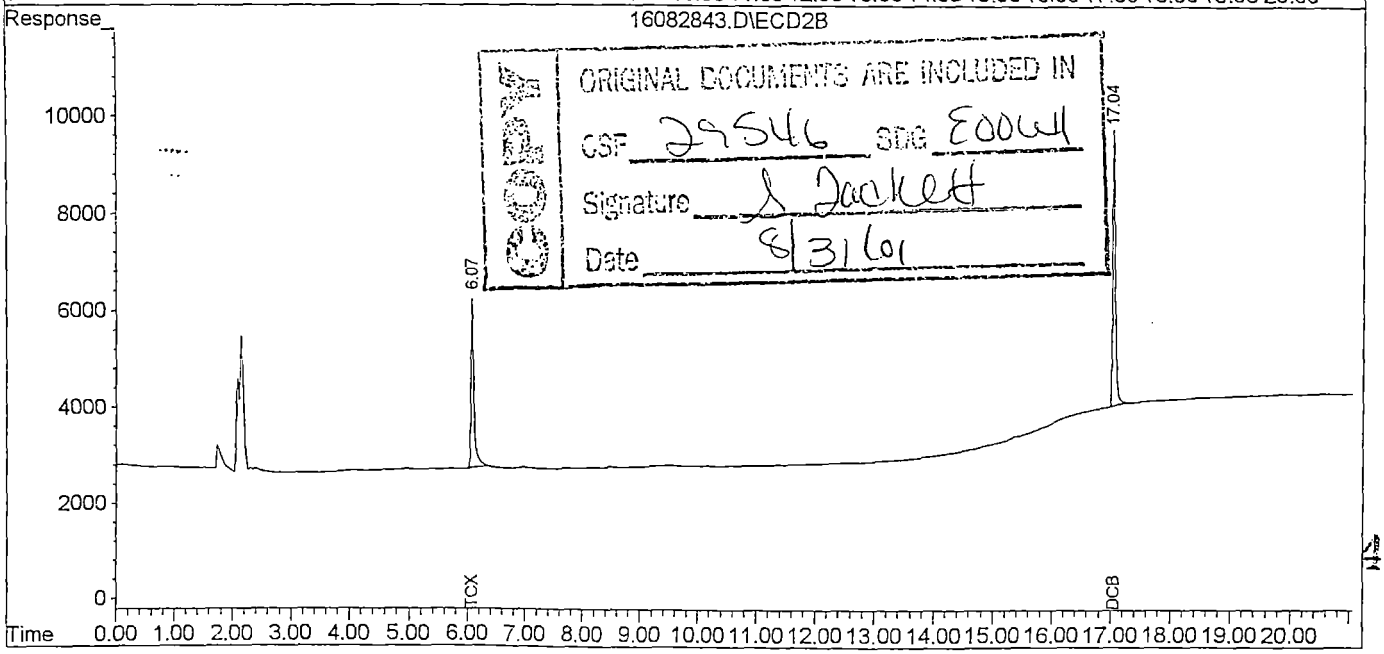
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082843.D\ECD1A.CH Vial: 43
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082843.D\ECD2B.CH
Acq On : 29 Aug 2001 5:48 Operator: TLM
Sample : PIBLKCF2 St 8/31/01 Inst : HP_16
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:50 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

8-30-01





ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29546 SDG E0044
Signature S Jackett
Date 8/31/01

456

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082843.D\ECD1A.CH Vial: 43
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082843.D\ECD2B.CH
Acq On : 29 Aug 2001 5:48 Operator: TLM
Sample : PIBLKC~~1~~2 ST 8/31/01 Inst : HP_16
Misc : 5-131-7 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 15:50 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	6.07	6.08	115779	125500	23.2	22.4
22)	S DCB	17.70	17.05	191783	185070	22.8	23.9
	Target Compounds:						

457

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

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ELCS1

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: LC0802SB

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/14/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	110	
11096-82-5	Aroclor-1260	33	U
Surrogate amount spiked		6.67	

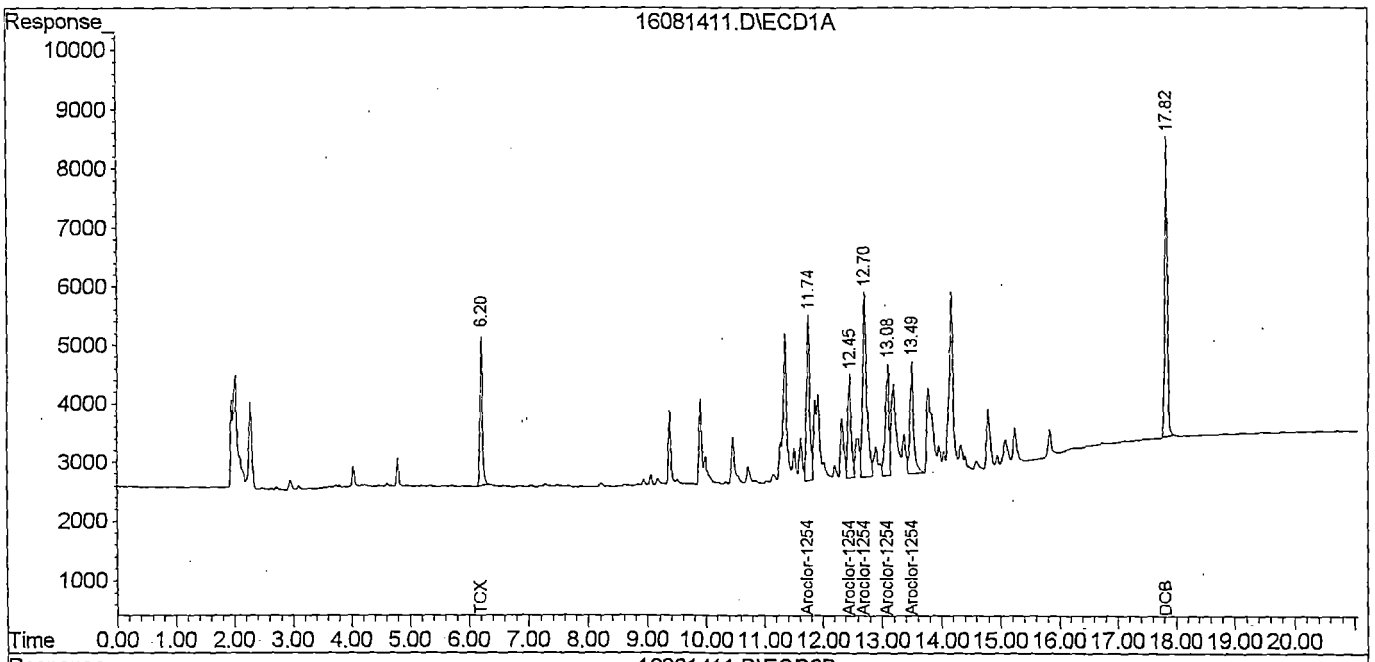
FORM I PCB

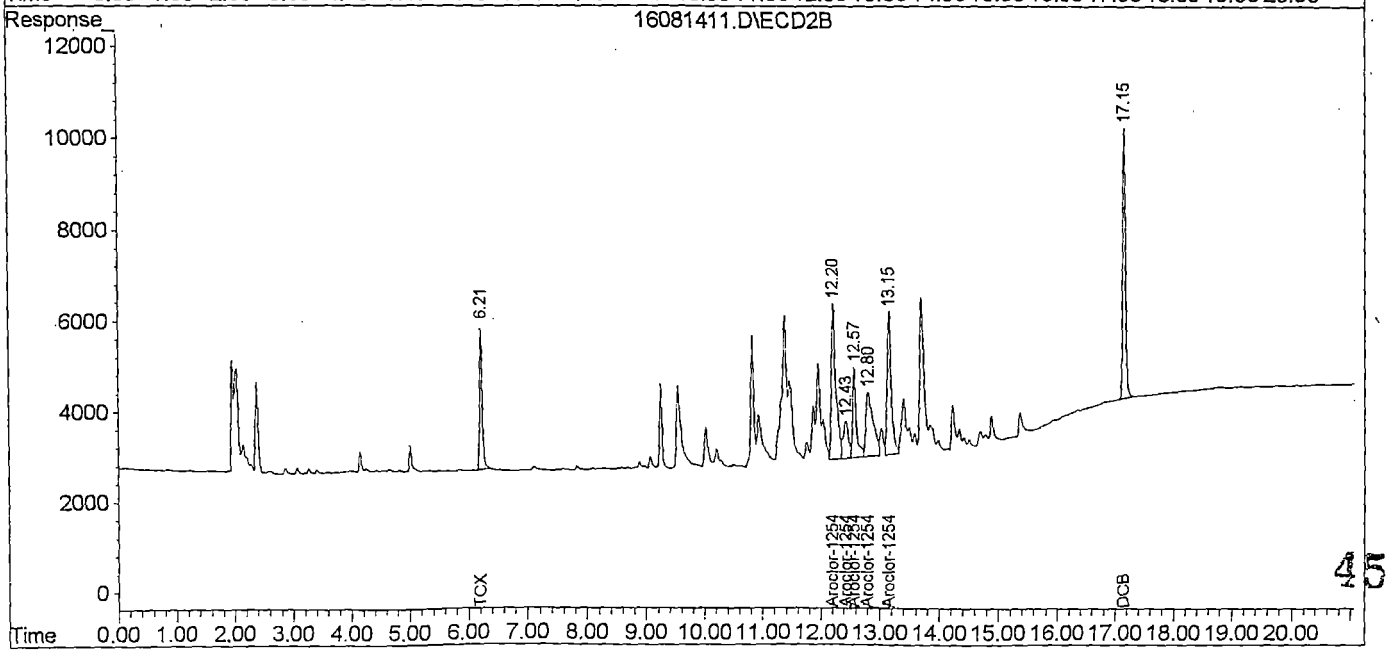
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_14_01\16081411.D\ECD1A.CH Vial: 11
Signal #2 : F:\HPCHEM\HP\16\DATA\08_14_01\16081411.D\ECD2B.CH
Acq On : 14 Aug 2001 17:27 Operator: TLM
Sample : LC0802SB ~~*LC0802SB~~ * Inst : HP_16
Misc : **30G/5.0ML*0 ELCS1 8/31/01 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 16 14:54 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_14_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





459

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_14_01\16081411.D\ECD1A.CH Vial: 11
Signal #2 : F:\HPCHEM\HP\16\DATA\08_14_01\16081411.D\ECD2B.CH
Acq On : 14 Aug 2001 17:27 Operator: TLM
Sample : LC0802SB ~~*LC0802SB *~~ Inst : HP_16
Misc : **30G/5.0ML*0 ELCS1 08/31/01 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 16 14:54 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_14_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	6.21	6.21	71155	96074	5.107	4.529
	Spiked Amount 6.667			Recovery	=	76.61%	67.94%
22)	S DCB	17.82	17.15	151438	182481	6.003	5.897
	Spiked Amount 6.667			Recovery	=	90.05%	88.46%
	Target Compounds:						
12)	L6 Aroclor-1254	11.74	12.21	108816	182203	124.5	111.0
13)	L6 Aroclor-1254 {2}	12.46	12.43	66847	55605	111.5	121.5
14)	L6 Aroclor-1254 {3}	12.70	12.57	142510	86899	110.2	117.9
15)	L6 Aroclor-1254 {4}	13.08	12.81	71862	116171	109.4	121.2
16)	L6 Aroclor-1254 {5}	13.49	13.15	79322	148907	111.0	119.0
	Sum Aroclor-1254			469357	589786	566.6	590.7
	Average Aroclor-1254					113.327	118.132

460

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

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ELCS3

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: LC0823SA

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/23/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/28/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	160	
11096-82-5	Aroclor-1260	33	U
Surrogate amount spiked		6.67	

FORM I PCB

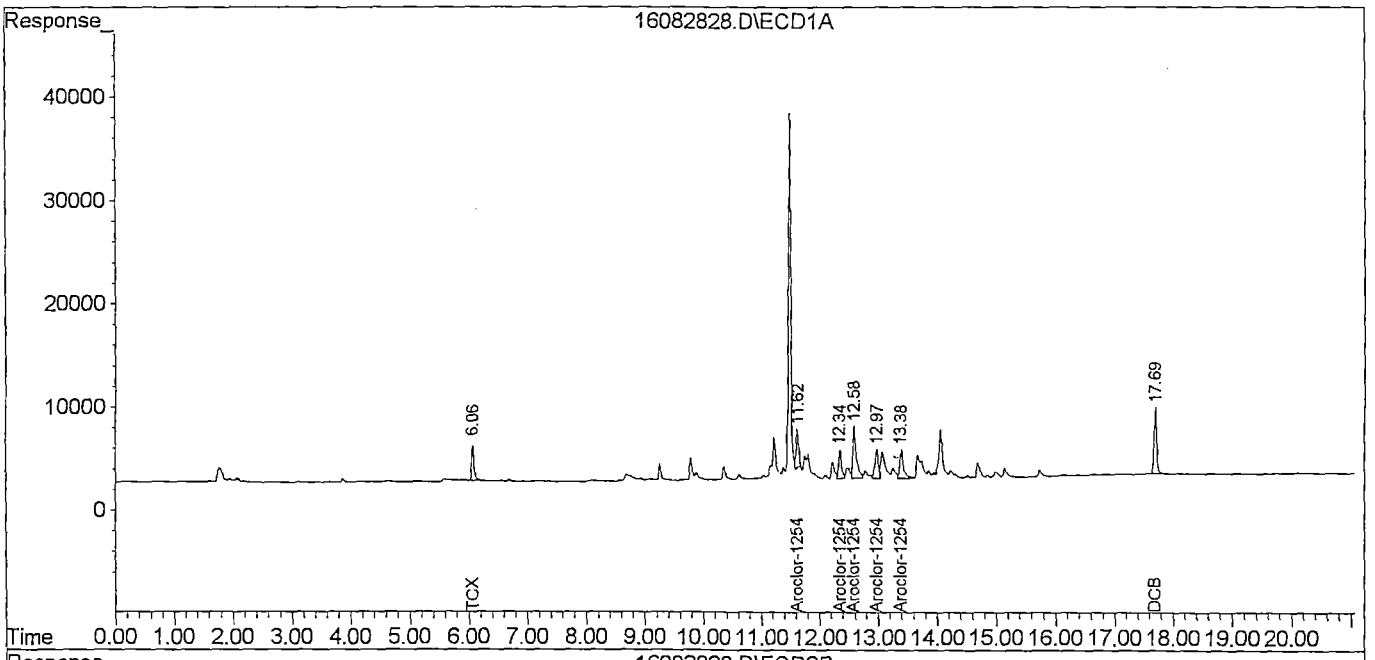
Chromatographic Report

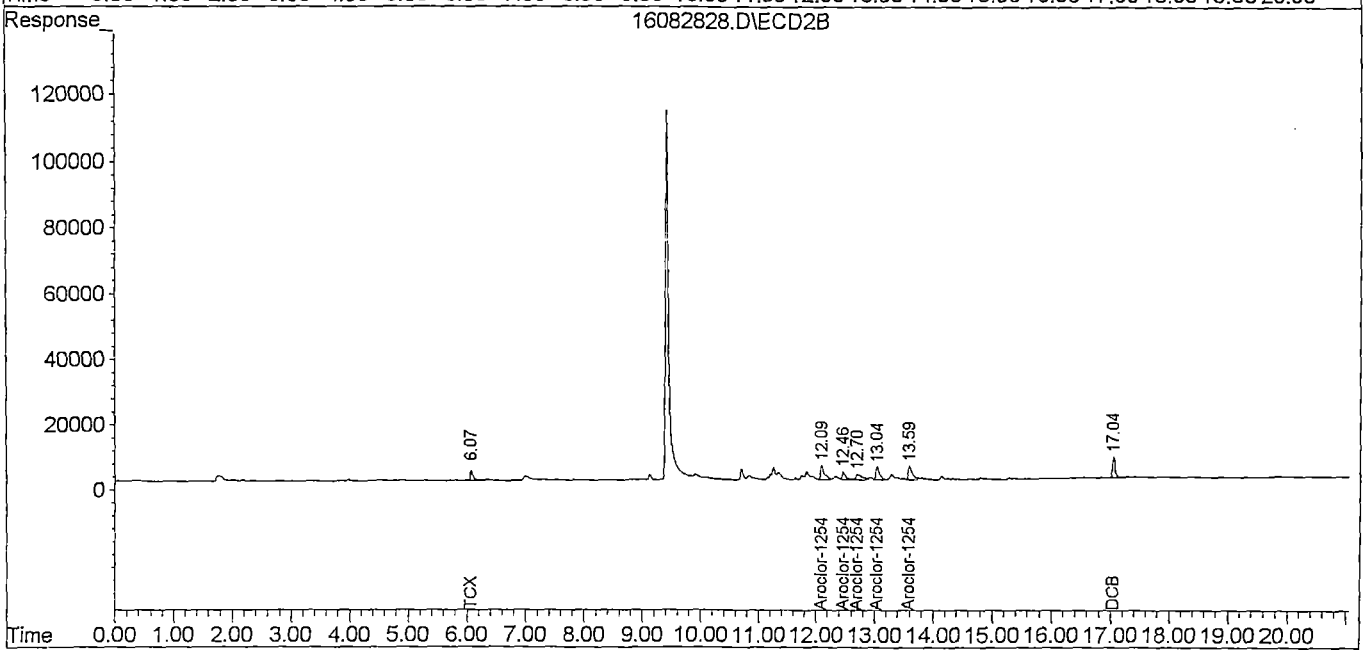
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082828.D\ECD1A.CH Vial: 28
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082828.D\ECD2B.CH
Acq On : 28 Aug 2001 23:40 Operator: TLM
Sample : LC0823SA ~~*ELCS1SA~~ * Inst : HP_16
Misc : **30G/5.0ML*0 ELCS3 for 08/31/01 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 18:11 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

ok 8-31-01





462

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082828.D\ECD1A.CH Vial: 28
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082828.D\ECD2B.CH
Acq On : 28 Aug 2001 23:40 Operator: TLM
Sample : LC0823SA *ELCS1SA* ELCS3 Inst : HP_16
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 18:11 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	6.06	6.07	97612	105403	6.513	6.276	
	Spiked Amount 6.667			Recovery	=	97.70%	94.14%	
22)	S DCB	17.70	17.04	194572	186620	7.721	8.031	
	Spiked Amount 6.667			Recovery	=	115.82%	120.47%	
	Target Compounds:							
12)	L6 Aroclor-1254	11.62	12.09	116226	199758	129.7	165.8	#
13)	L6 Aroclor-1254 {2}	12.34	12.46	97766	87766	163.6	162.9	
14)	L6 Aroclor-1254 {3}	12.58	12.70	211859	125366	162.8	197.8	
15)	L6 Aroclor-1254 {4}	12.97	13.04	108953	167082	164.0	170.7	
16)	L6 Aroclor-1254 {5}	13.39	13.59	118996	200846	166.2	178.3	
	Sum Aroclor-1254			653801	780818	786.3	875.4	
	Average Aroclor-1254					157.262	175.088	

463

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

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ELCS2

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: LD0802SB

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/14/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	140	
11096-82-5	Aroclor-1260	33	U
Surrogate amount spiked		6.67	

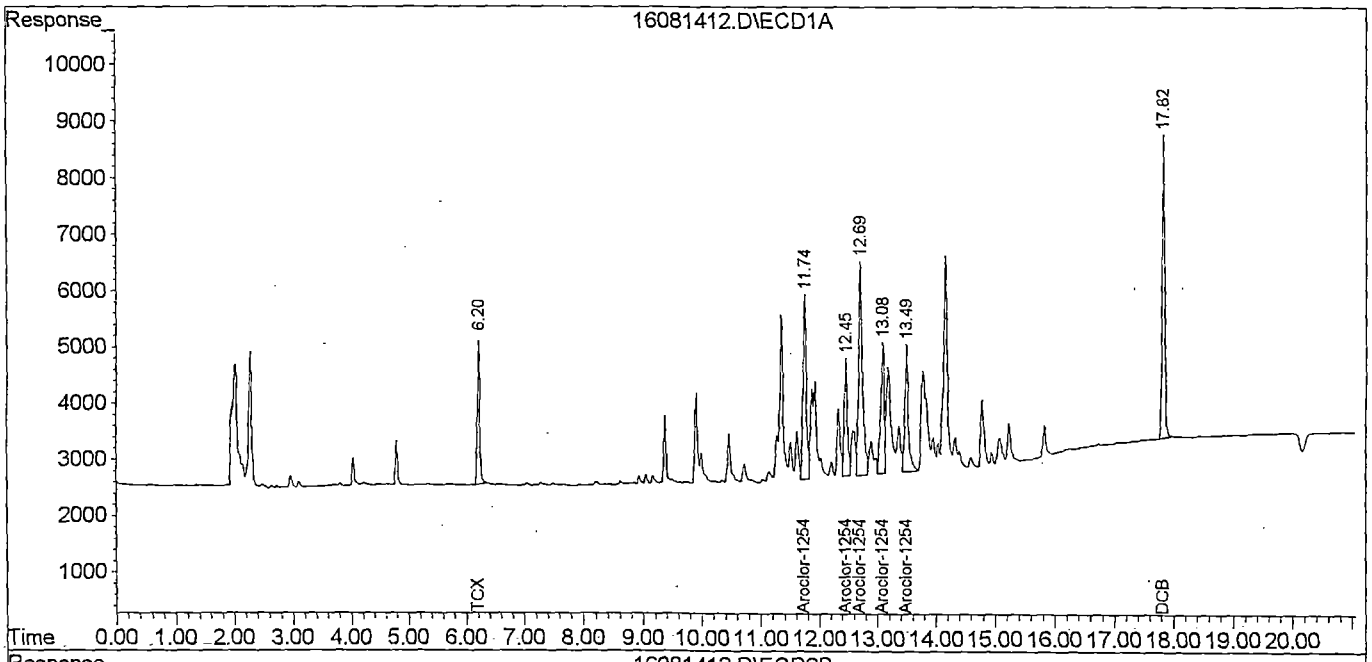
FORM I PCB

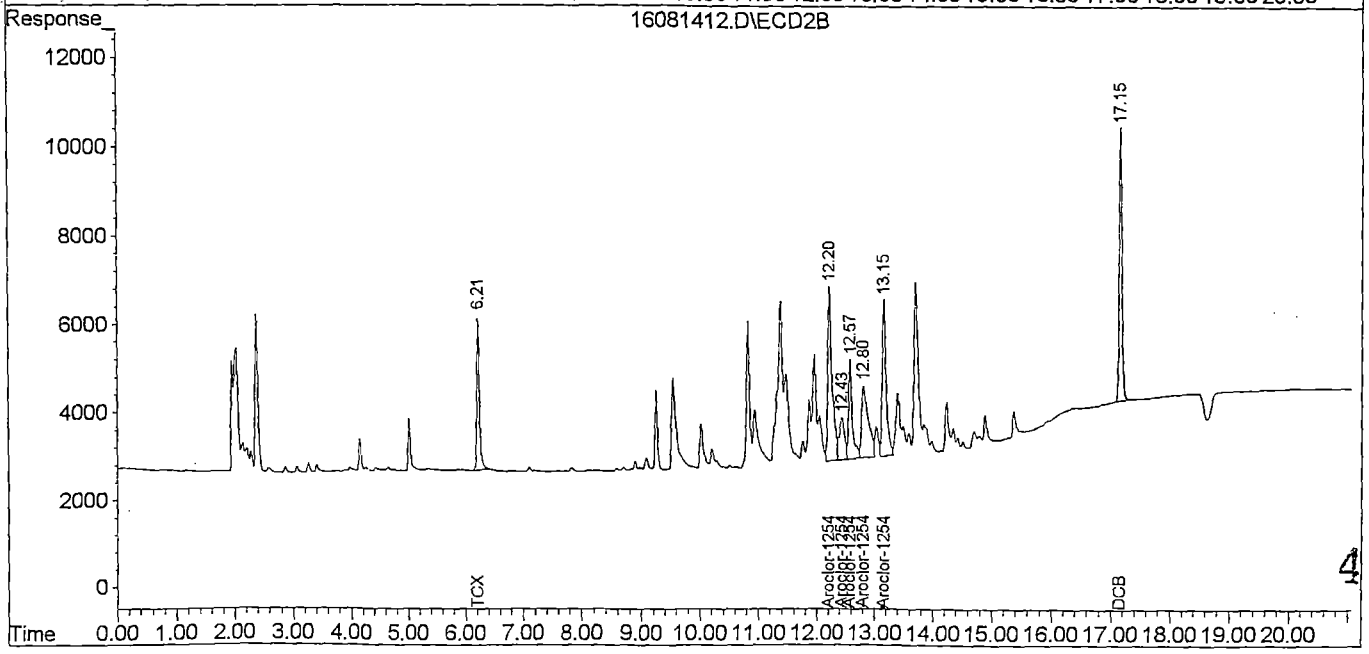
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_14_01\16081412.D\ECD1A.CH Vial: 12
Signal #2 : F:\HPCHEM\HP\16\DATA\08_14_01\16081412.D\ECD2B.CH
Acq On : 14 Aug 2001 17:52 Operator: TLM
Sample : LD0802SB ~~*LD0802SB~~* Inst : HP_16
Misc : **30G/5.0ML*0 ELCS2 08/31/01 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 16 14:54 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_14_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





465

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_14_01\16081412.D\ECD1A.CH Vial: 12
Signal #2 : F:\HPCHEM\HP\16\DATA\08_14_01\16081412.D\ECD2B.CH
Acq On : 14 Aug 2001 17:52 Operator: TLM
Sample : LD0802SB *~~LD0802SB~~ * Inst : HP_16
Misc : **30G/5.0ML*0 ELCS2 8/31/01 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 16 14:54 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_14_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	6.20	6.21	71210	106214	5.111	5.007
	Spiked Amount 6.667			Recovery	=	76.67%	75.11%
22)	S DCB	17.82	17.15	160218	190111	6.351	6.143
	Spiked Amount 6.667			Recovery	=	95.27%	92.15%
	Target Compounds:						
12)	L6 Aroclor-1254	11.74	12.20	126718	208473	144.9	127.0
13)	L6 Aroclor-1254 {2}	12.46	12.44	79861	64532	133.3	141.0
14)	L6 Aroclor-1254 {3}	12.70	12.57	170971	99490	132.2	135.0
15)	L6 Aroclor-1254 {4}	13.08	12.81	88512	133825	134.8	139.7
16)	L6 Aroclor-1254 {5}	13.49	13.15	96247	168904	134.7	135.0
	Sum Aroclor-1254			562310	675225	679.9	677.7
	Average Aroclor-1254					135.976	135.532

466

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

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ELCS4

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: LD0823SA

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/23/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/29/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	140	
11096-82-5	Aroclor-1260	33	U
Surrogate amount spiked		6.67	

FORM I PCB

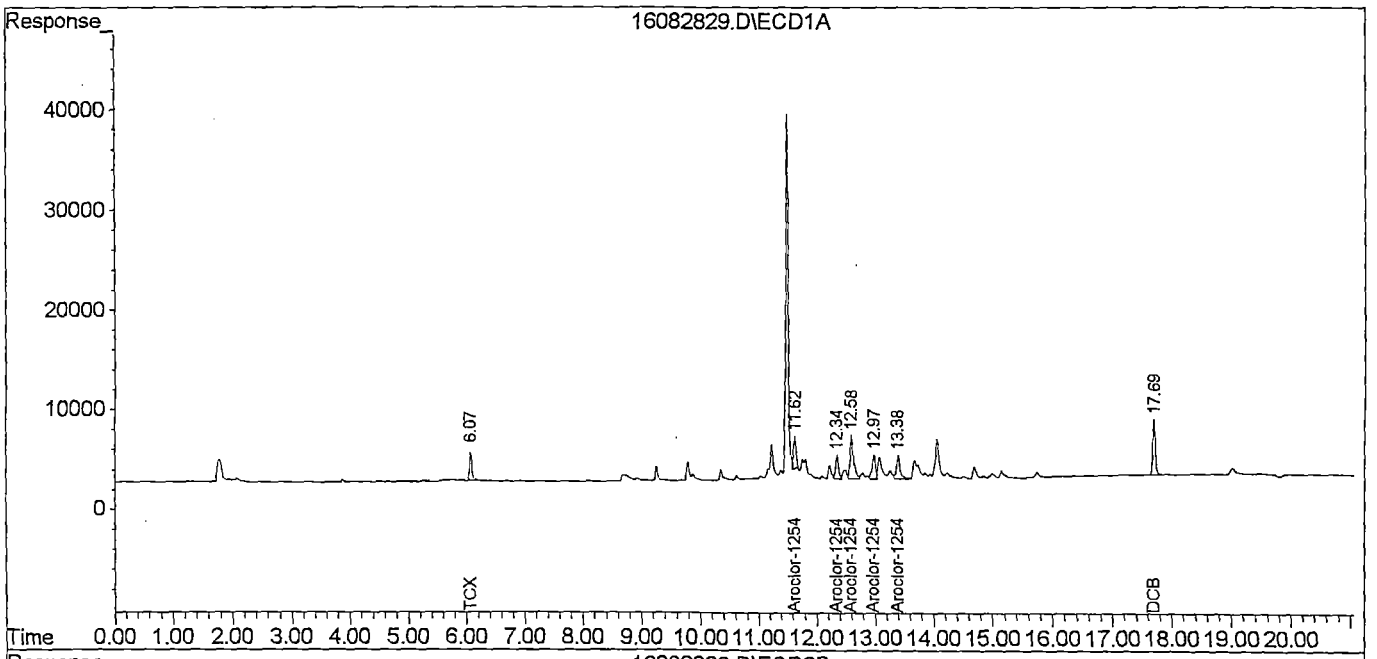
Chromatographic Report

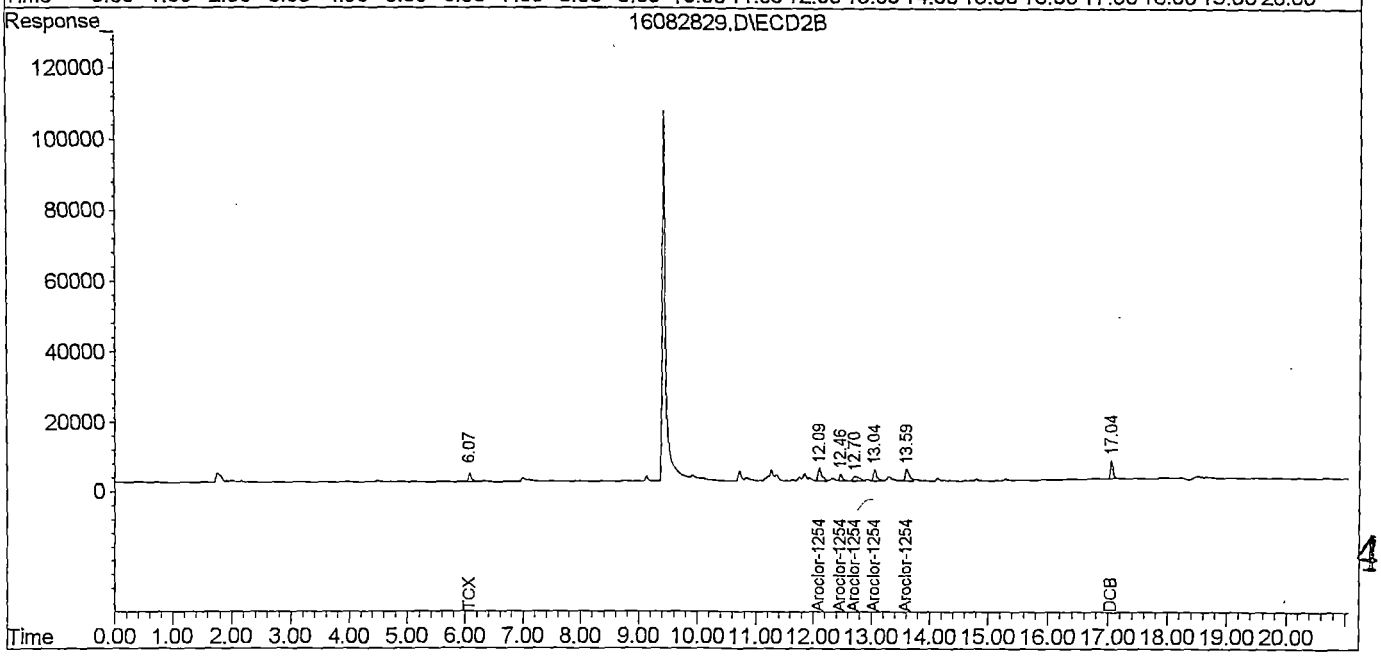
Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082829.D\ECD1A.CH Vial: 29
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082829.D\ECD2B.CH
Acq On : 29 Aug 2001 00:04 Operator: TLM
Sample : LD0823SA ~~*ELCS2SA' *~~ ELCS4 Inst : HP_16
Misc : **30G/5.0ML*0 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 18:11 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

ok 8-31-01





468

Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082829.D\ECD1A.CH Vial: 29
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082829.D\ECD2B.CH
Acq On : 29 Aug 2001 00:04 Operator: TLM
Sample : LD0823SA ~~*ELCS2SA *~~ Inst : HP_16
Misc : **30G/5.0ML*0 ELCS4 08/31/01 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 18:11 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	6.07	6.08	83117	90403	5.546	5.383
	Spiked Amount 6.667			Recovery	=	83.19%	80.75%
22)	S DCB	17.70	17.04	168175	160255	6.674	6.896
	Spiked Amount 6.667			Recovery	=	100.11%	103.44%
	Target Compounds:						
12)	L6 Aroclor-1254	11.62	12.10	103431	172051	115.4	142.8
13)	L6 Aroclor-1254 {2}	12.34	12.46	83619	74997	139.9	139.2
14)	L6 Aroclor-1254 {3}	12.58	12.70	181507	105649	139.5	166.7
15)	L6 Aroclor-1254 {4}	12.97	13.05	93203	143344	140.3	146.5
16)	L6 Aroclor-1254 {5}	13.39	13.59	101576	171194	141.9	152.0
	Sum Aroclor-1254			563337	667235	677.0	747.1
	Average Aroclor-1254					135.400	149.414

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16082829.D XPCBH28.M Wed Aug 29 18:17:55 2001 Page 1

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00Q2MS

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: 47158.03MS

Sample wt/vol: 32.7 (g/mL) G Lab File ID:_____

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/14/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

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	680	E
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	690	E
11096-82-5	Aroclor-1260	230	E
Surrogate amount spiked		7.28	

FORM I PCB

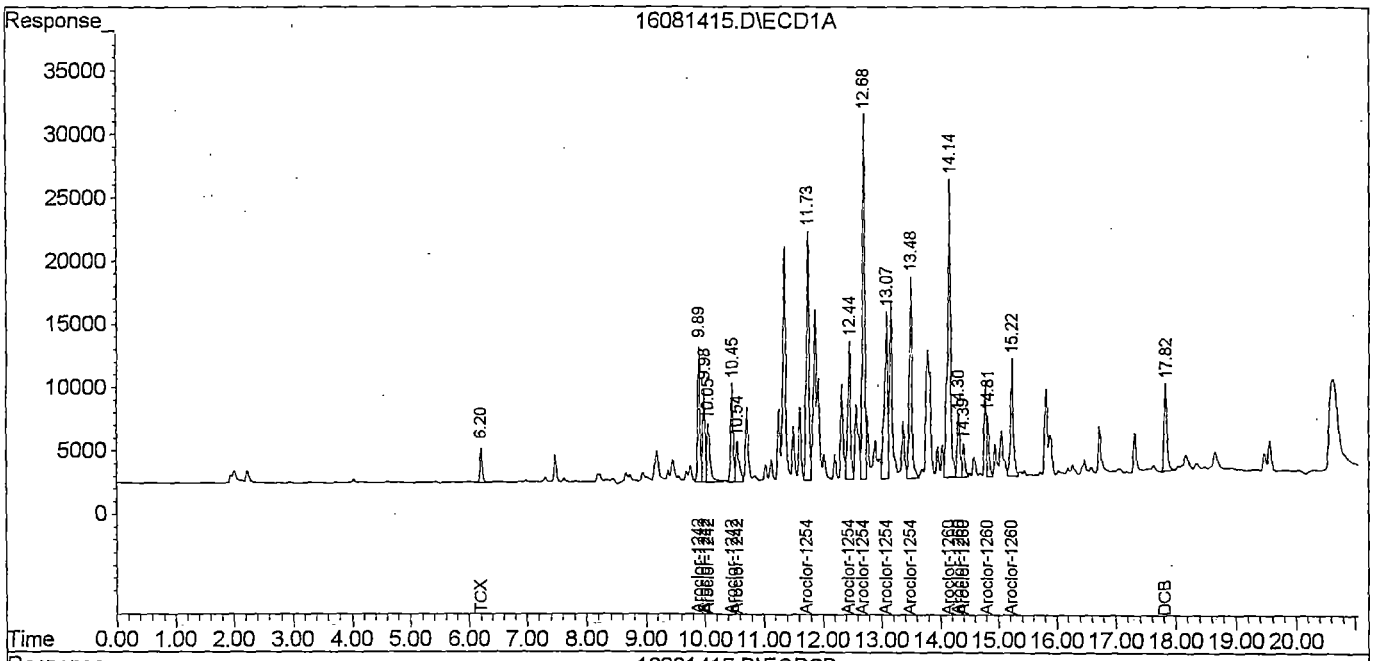
Chromatographic Report

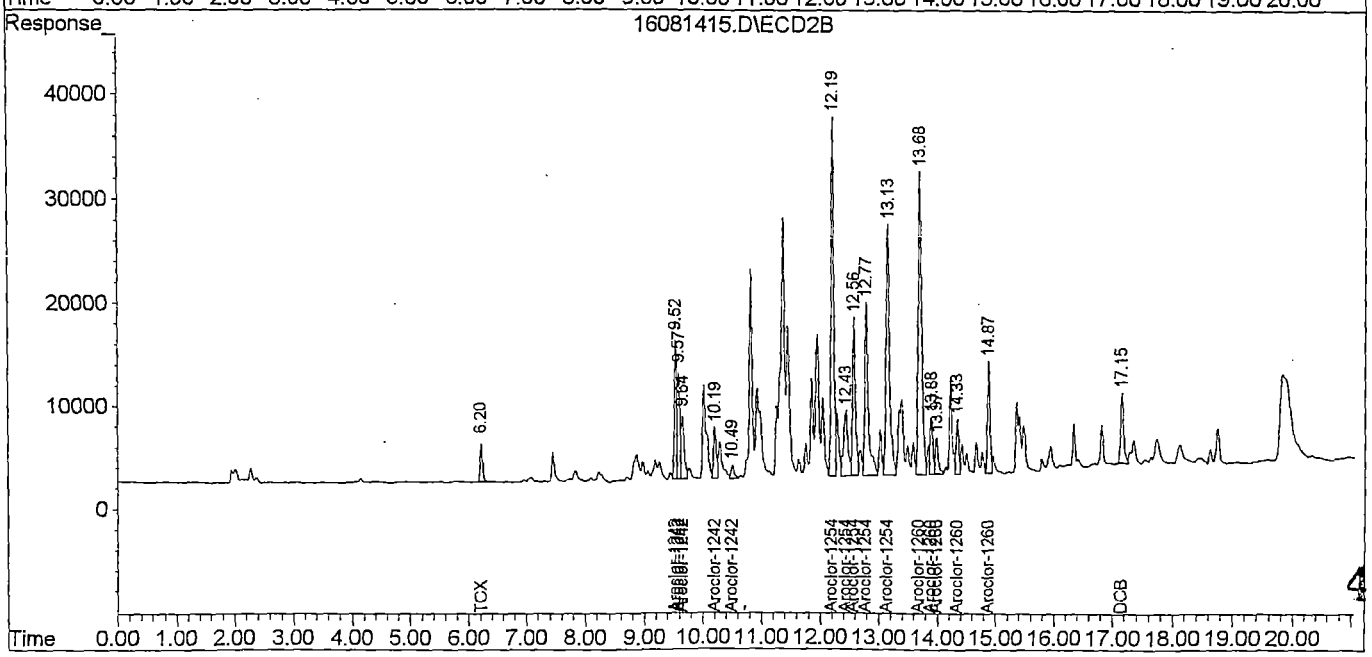
Signal #1 : F:\HPCHEM\HP\16\DATA\08_14_01\16081415.D\ECD1A.CH Vial: 15
Signal #2 : F:\HPCHEM\HP\16\DATA\08_14_01\16081415.D\ECD2B.CH
Acq On : 14 Aug 2001 19:06 Operator: TLM
Sample : 47158.03MS *E00Q2MS * Inst : HP_16
Misc : *EPA*32.7G/5.0ML*16 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 16 14:55 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_14_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

ok 8-31-01





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_14_01\16081415.D\ECD1A.CH Vial: 15
Signal #2 : F:\HPCHEM\HP\16\DATA\08_14_01\16081415.D\ECD2B.CH
Acq On : 14 Aug 2001 19:06 Operator: TLM
Sample : 47158.03MS *E00Q2MS * Inst : HP_16
Misc : *EPA*32.7G/5.0ML*16 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 16 14:55 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_14_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	6.20	6.21	69524	105932	5.450	5.454	
	Spiked Amount 7.281			Recovery	=	74.85%	74.91%	
22)	S DCB	17.82	17.15	240374	215546	10.4	7.607	#
	Spiked Amount 7.281			Recovery	=	142.83%	104.47%	
	Target Compounds:							
7)	L4 Aroclor-1242	9.89	9.52	291895	373846	1121.9 E	1199.2 E	
8)	L4 Aroclor-1242 {2}	9.98	9.58	210176	317471	769.9 E	804.8 E	
9)	L4 Aroclor-1242 {3}	10.05	9.64	180138	219216	645.0 E	477.9	#
10)	L4 Aroclor-1242 {4}	10.46	10.19	215485	168083	703.0 E	602.4	
11)	L4 Aroclor-1242 {5}	10.54	10.50	125657	48362	687.9 E	332.9	#
	Sum Aroclor-1242			1023351	1126977	3927.7	3417.2	
	Average Aroclor-1242					785.531	683.449	
12)	L6 Aroclor-1254	11.73	12.19	565463	1128260	706.4 E	750.8 E	
13)	L6 Aroclor-1254 {2}	12.44	12.43	339827	347664	619.3 E	829.5 E	#
14)	L6 Aroclor-1254 {3}	12.68	12.56	789559	511868	666.8 E	758.5 E	
15)	L6 Aroclor-1254 {4}	13.08	12.77	452580	710046	752.8 E	809.4 E	
16)	L6 Aroclor-1254 {5}	13.48	13.14	461721	1007122	705.7 E	879.3 E	
	Sum Aroclor-1254			2609150	3704960	3450.9	4027.4	
	Average Aroclor-1254					690.189	805.485	
17)	L7 Aroclor-1260	14.14	13.68	851038	1201612	525.2 E	605.9 E	
18)	L7 Aroclor-1260 {2}	14.31	13.88	164007	186430	191.1	177.5	
19)	L7 Aroclor-1260 {3}	14.40	13.97	80965	129906	150.6	190.2	#
20)	L7 Aroclor-1260 {4}	14.81	14.33	117496	167974	131.6	175.6	#
21)	L7 Aroclor-1260 {5}	15.22	14.87	281669	318676	157.4	136.3	
	Sum Aroclor-1260			1495176	2004597	420.8	468.0	
	Average Aroclor-1260					231.191	257.116	

472

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

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00Q2MSD

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29546 SDG No.: E00Q1

Matrix: (soil/water) SOIL Lab Sample ID: 47158.04MSD

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

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

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:08/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/14/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	37	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	770	E
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	960	E
11096-82-5	Aroclor-1260	350	E
	Surrogate amount spiked	7.56	

FORM I PCB

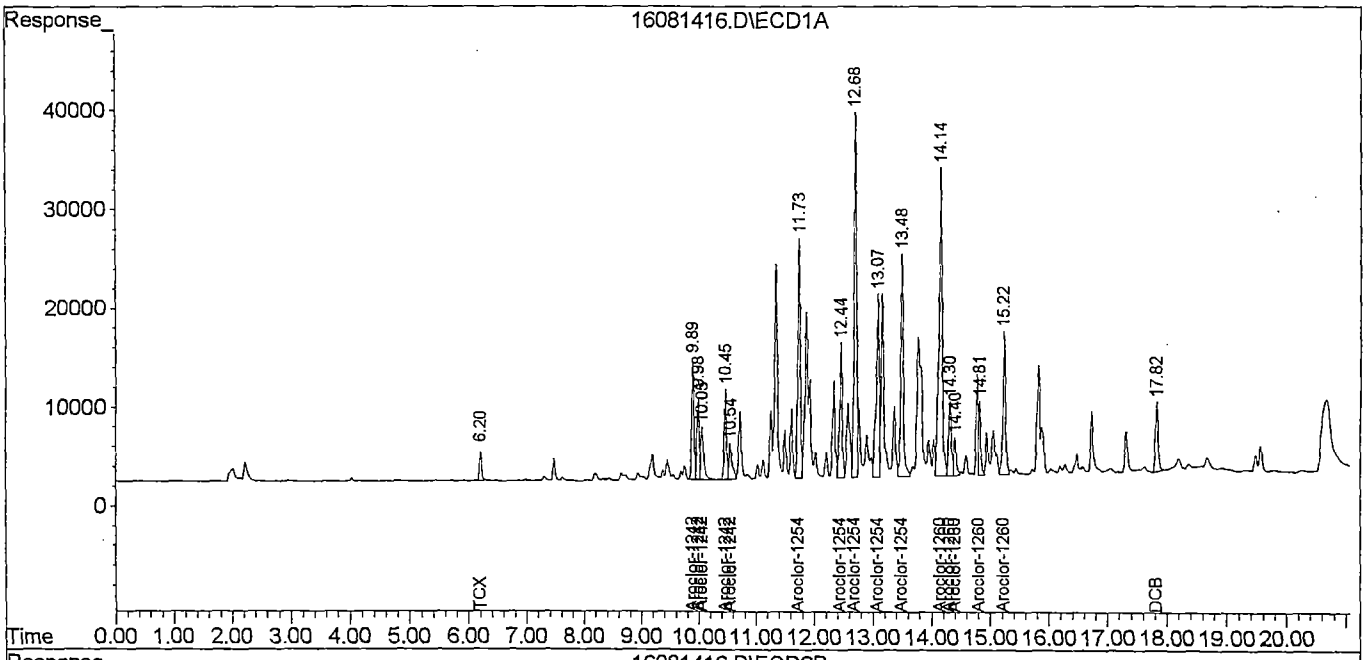
Chromatographic Report

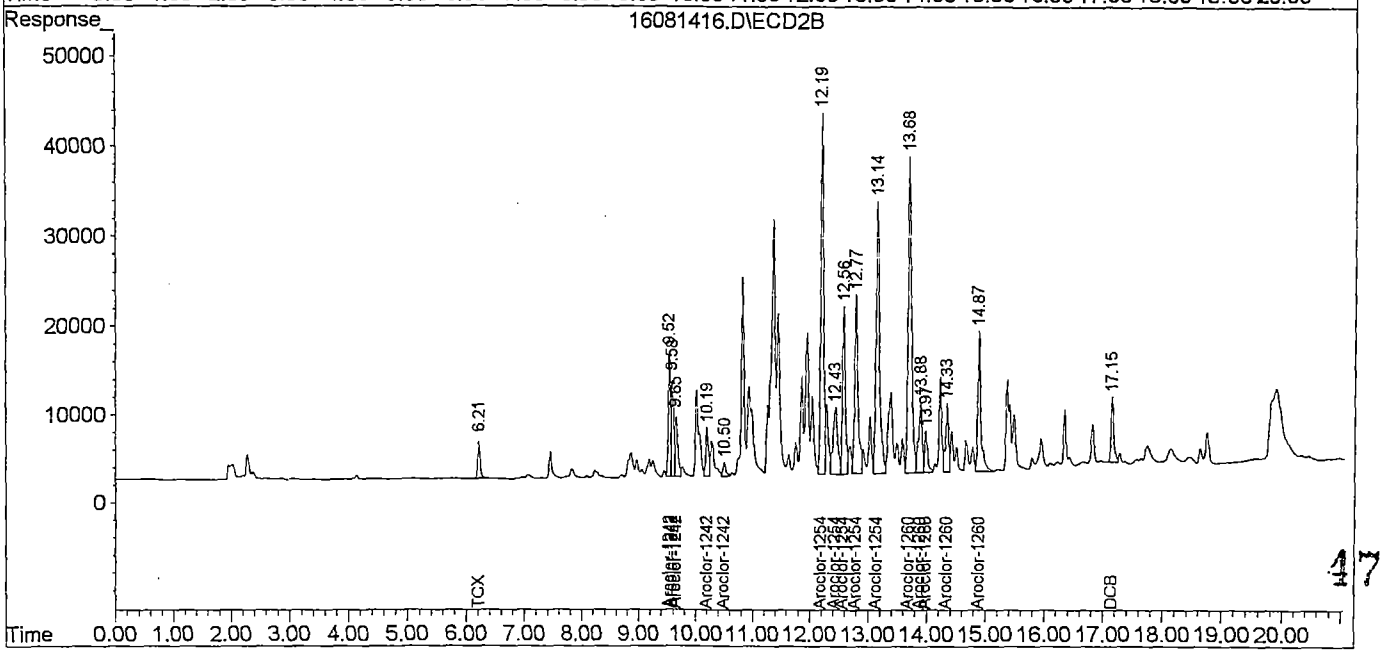
Signal #1 : F:\HPCHEM\HP\16\DATA\08_14_01\16081416.D\ECD1A.CH Vial: 16
Signal #2 : F:\HPCHEM\HP\16\DATA\08_14_01\16081416.D\ECD2B.CH
Acq On : 14 Aug 2001 19:30 Operator: TLM
Sample : 47158.04MSD *E00Q2MSD * Inst : HP_16
Misc : *EPA*31.5G/5.0ML*16 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 16 14:55 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_14_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

ok 8-31-01

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_14_01\16081416.D\ECD1A.CH Vial: 16
Signal #2 : F:\HPCHEM\HP\16\DATA\08_14_01\16081416.D\ECD2B.CH
Acq On : 14 Aug 2001 19:30 Operator: TLM
Sample : 47158.04MSD *E00Q2MSD * Inst : HP_16
Misc : *EPA*31.5G/5.0ML*16 Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 16 14:55 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_14_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	6.20	6.21	78053	123132	6.351	6.581
	Spiked Amount 7.559			Recovery	=	84.02%	87.07%
22)	S DCB	17.82	17.15	222895	233480	10.0	8.554
	Spiked Amount 7.559			Recovery	=	132.30%	113.17%
	Target Compounds:						
7)	L4 Aroclor-1242	9.89	9.53	325458	386050	1298.5 E	1285.5 E
8)	L4 Aroclor-1242 {2}	9.98	9.58	243684	337628	926.6 E	888.5 E
9)	L4 Aroclor-1242 {3}	10.05	9.65	203156	250491	755.1 E	566.9 E
10)	L4 Aroclor-1242 {4}	10.46	10.19	251242	185845	850.9 E	691.5 E
11)	L4 Aroclor-1242 {5}	10.54	10.50	141824	57999	805.9 E	414.4 #
	Sum Aroclor-1242			1165363	1218013	4637.1	3846.8
	Average Aroclor-1242					927.428	769.367
12)	L6 Aroclor-1254	11.73	12.19	714265	1325960	926.2 E	915.9 E
13)	L6 Aroclor-1254 {2}	12.45	12.43	428875	420350	811.3 E	1041.1 E#
14)	L6 Aroclor-1254 {3}	12.68	12.57	1038469	644924	910.4 E	992.1 E
15)	L6 Aroclor-1254 {4}	13.08	12.78	623107	812267	1075.9 E	961.2 E
16)	L6 Aroclor-1254 {5}	13.48	13.14	660348	1288794	1047.8 E	1168.0 E
	Sum Aroclor-1254			3465065	4492296	4771.6	5078.4
	Average Aroclor-1254					954.330	1015.674
17)	L7 Aroclor-1260	14.14	13.68	1183177	1475661	758.0 E	772.5 E
18)	L7 Aroclor-1260 {2}	14.30	13.89	248289	354451	300.4	350.3
19)	L7 Aroclor-1260 {3}	14.40	13.98	118359	168759	228.6	256.5
20)	L7 Aroclor-1260 {4}	14.81	14.34	192101	271034	223.4	294.2 #
21)	L7 Aroclor-1260 {5}	15.22	14.87	425200	548715	246.6	243.7
	Sum Aroclor-1260			2167126	2818620	664.0	724.5
	Average Aroclor-1260					351.392	383.430

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
16081416.D XPCBH10.M Thu Aug 16 15:18:52 2001 Page 1

Gel Permeation Chromatography (GPC) Run Log - GPC2

SWOK/AATS SWL-OE-102-16 Rev.#: 2.1 Fraction Collected: 45 mLs

Col. ID.: 364134 Protocol: GC699 Fraction: PEST Cycle: 15-9

Cal. Std. Page: Client: EPA Case#

DATE/TIME	POS.	SAMPLE ID	FILE	COMMENT
08/03/01 14:48	1	CAL STD (INITIAL)	2_080301	
08/03/01 15:19	2	SB	2_080302	
08/03/01 15:50	3	SB	2_080303	
08/03/01 16:21	4	SB	2_080304	
08/03/01 16:52	5	SB	2_080305	
08/03/01 17:24	6	SB#080301C (PEST)	2_080306	
08/03/01 17:55	7	SB#080301D (PEST)	2_080307	
08/03/01 18:26	8	BL0802SD-EPA	2_080308	
08/03/01 18:57	9	BB0802SD-EPA	2_080309	
08/03/01 19:28	10	LC0802SD-EPA	2_080310	
08/03/01 19:59	11	LD0802SD-EPA	2_080311	
08/03/01 20:30	12	47158.15-E00R3-EPA	2_080312	
08/03/01 21:01	13	47158.16-E00R4-EPA	2_080313	
08/03/01 21:32	14	47158.17-E00R5-EPA	2_080314	
08/03/01 22:03	15	47158.22-E00S0-EPA	2_080315	
08/03/01 22:35	16	47158.14-E00R2-EPA	2_080316	
08/03/01 23:06	17	47158.07-E00Q5-EPA	2_080317	
08/03/01 23:37	18	47158.09-E00Q7-EPA	2_080318	
08/04/01 00:08	19	47158.13-E00R1-EPA	2_080319	
08/04/01 00:39	20	47158.01-E00Q1-EPA	2_080320	
08/04/01 01:10	21	47158.02-E00Q2-EPA	2_080321	

8/21/2001 8/16/01

Verification Signature/Date Analyst Signature/Date

Book: OE-102-16-RUN-18 Page No.: 72

Gel Permeation Chromatography (GPC) Run Log - GPC2

SWOK/AATS SWL-OE-102-16 Rev.#: 2.1 Fraction Collected: 45 mLs

Col. ID.: 364134 Protocol: GC699 Fraction: PEST Cycle: 15-9

Cal. Std. Page: Client: EPA Case#

DATE/TIME	POS.	SAMPLE ID	FILE	COMMENT
08/04/01 01:41	22	47158.03-MS-E00Q2-EPA	2_080322	
08/04/01 02:12	23	47158.04-MSD-E00Q2-EPA	2_080323	
08/04/01 02:43	24	47158.05-E00Q3-EPA	2_080324	
08/04/01 03:14	25	47158.19-E00R7-EPA	2_080325	
08/04/01 03:46	26	47158.20-E00R8-EPA	2_080326	
08/04/01 04:17	27	47158.21-E00R9-EPA	2_080327	
08/04/01 04:48	28	47158.06-E00Q4-EPA	2_080328	
08/04/01 05:19	29	47158.08-E00Q6-EPA	2_080329	
08/04/01 05:50	30	47158.10-E00Q8-EPA	2_080330	
08/04/01 06:21	31	47158.11-E00Q9-EPA	2_080331	
08/04/01 06:52	32	47158.12-E00R0-EPA	2_080332	
08/04/01 07:23	33	47158.18-E00R6-EPA	2_080333	
08/04/01 07:54	34	SB	2_080334	
08/04/01 08:25	35	SB	2_080335	
08/04/01 08:57	36	SB	2_080336	
08/04/01 09:28	37	SB	2_080337	
08/04/01 09:59	38	CAL STD (FINAL)	2_080338	

Compound	Initial RT	Final RT	% Difference
Phthalate	14.58	14.18	2.74
Methoxychlor	16.24	15.77	2.89
Perylene	21.29	20.74	2.58

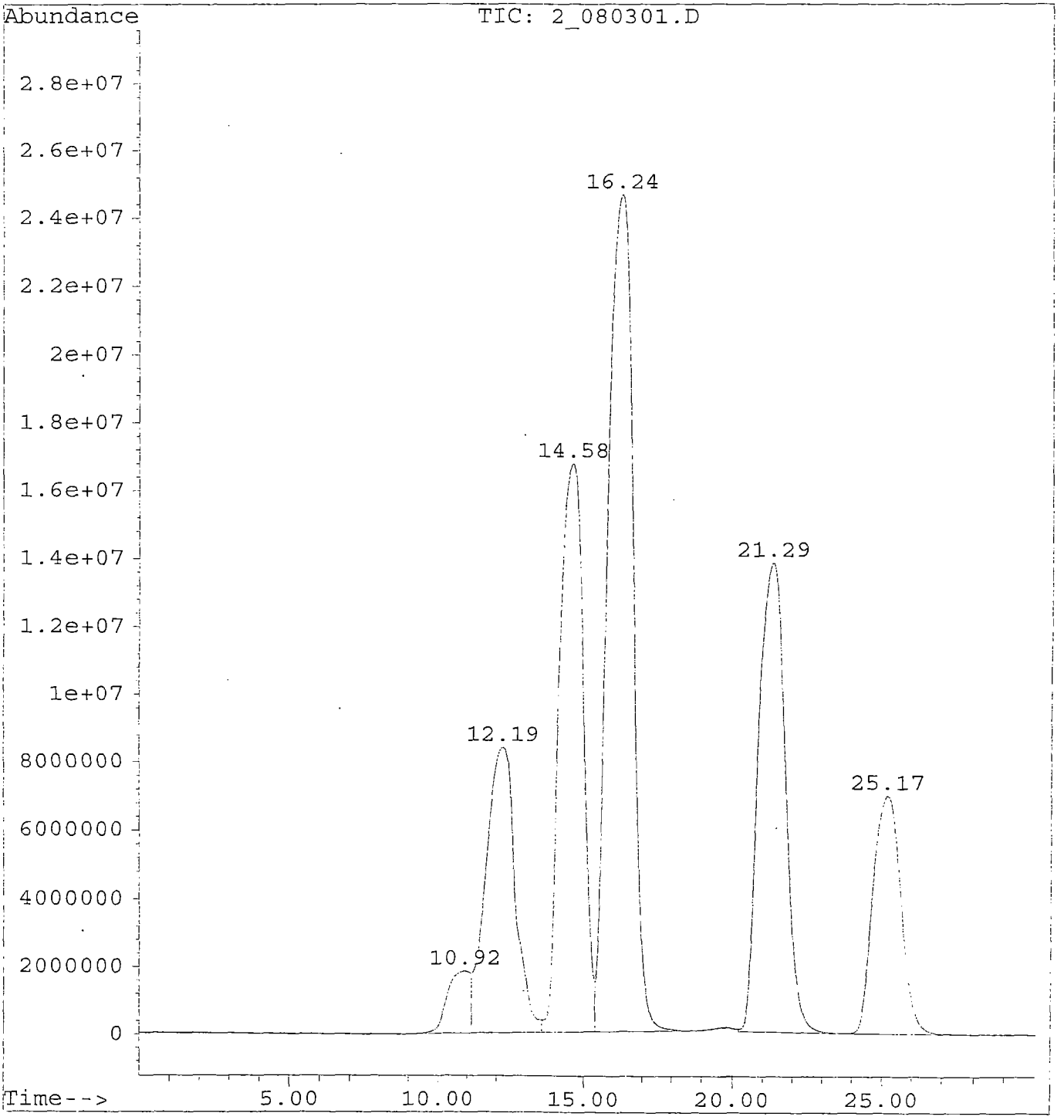
8/21/2001 8/16/01

Verification Signature/Date Analyst Signature/Date

Book: OE-102-16-RUN-18 Page No.: 73

Data File : C:\HPCHEM\6\DATA\080301\2_080301.D
Acq On : 03 Aug 01 02:48 PM
Sample : CAL STD (INITIAL)
Misc : COL# 364134

Vial: 1
Operator: CD COL#
Inst : GPC2
Multiplr: 1.00



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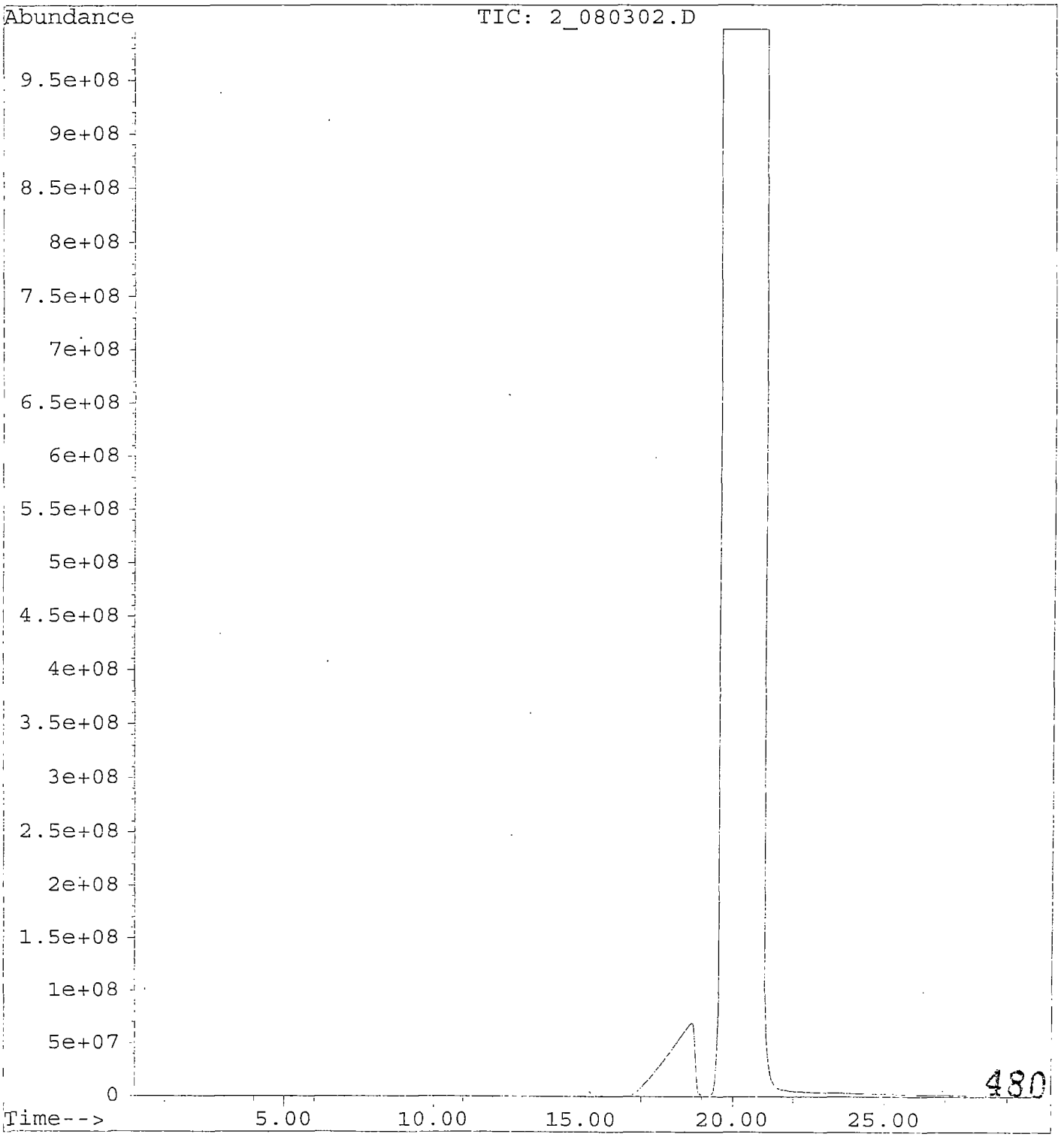
Chromatographic Resolution Report

Data File : C:\HPCHEM\6\DATA\080301\2_080301.D Vial: 1
Acq On : 03 Aug 01 14:48 Operator: CD COL# 36
Sample : CAL STD (INITIAL) Inst : GPC2
Misc : COL# 364134 Multiplr: 1.00

Method : C:\HPCHEM\6\METHODS\GPC.M
Title :

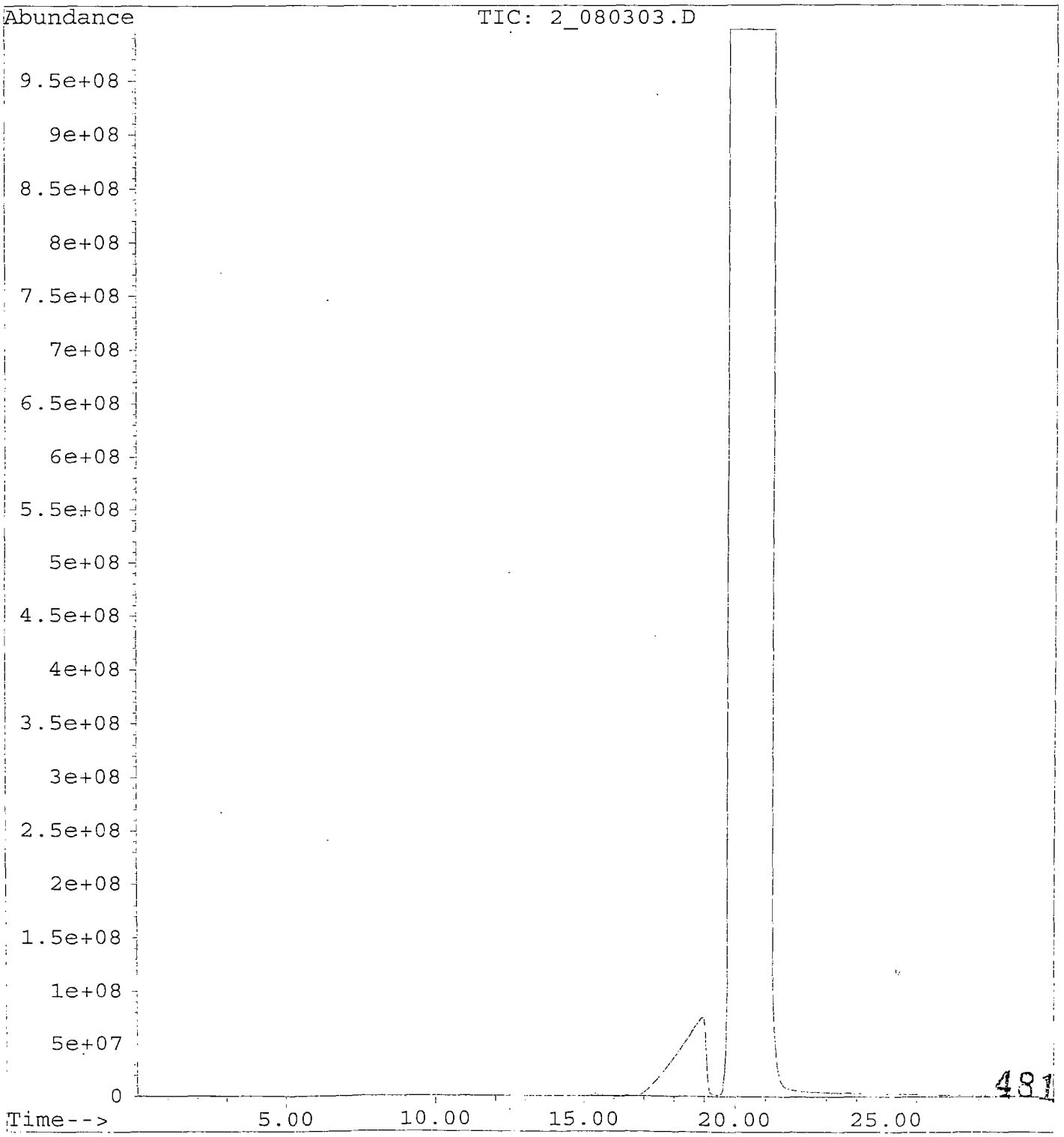
RT#1	RT#2	Resolution
10.916	12.188	3.40
12.188	14.581	95.51
14.581	16.236	91.15
16.236	21.292	100.00
21.292	25.169	99.96

File : C:\HPCHEM\6\DATA\080301\2_080302.D
Operator : CD COL# 364134
Acquired : 03 Aug 01 15:19 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: SB
Misc Info : COL# 364134
Vial Number: 2

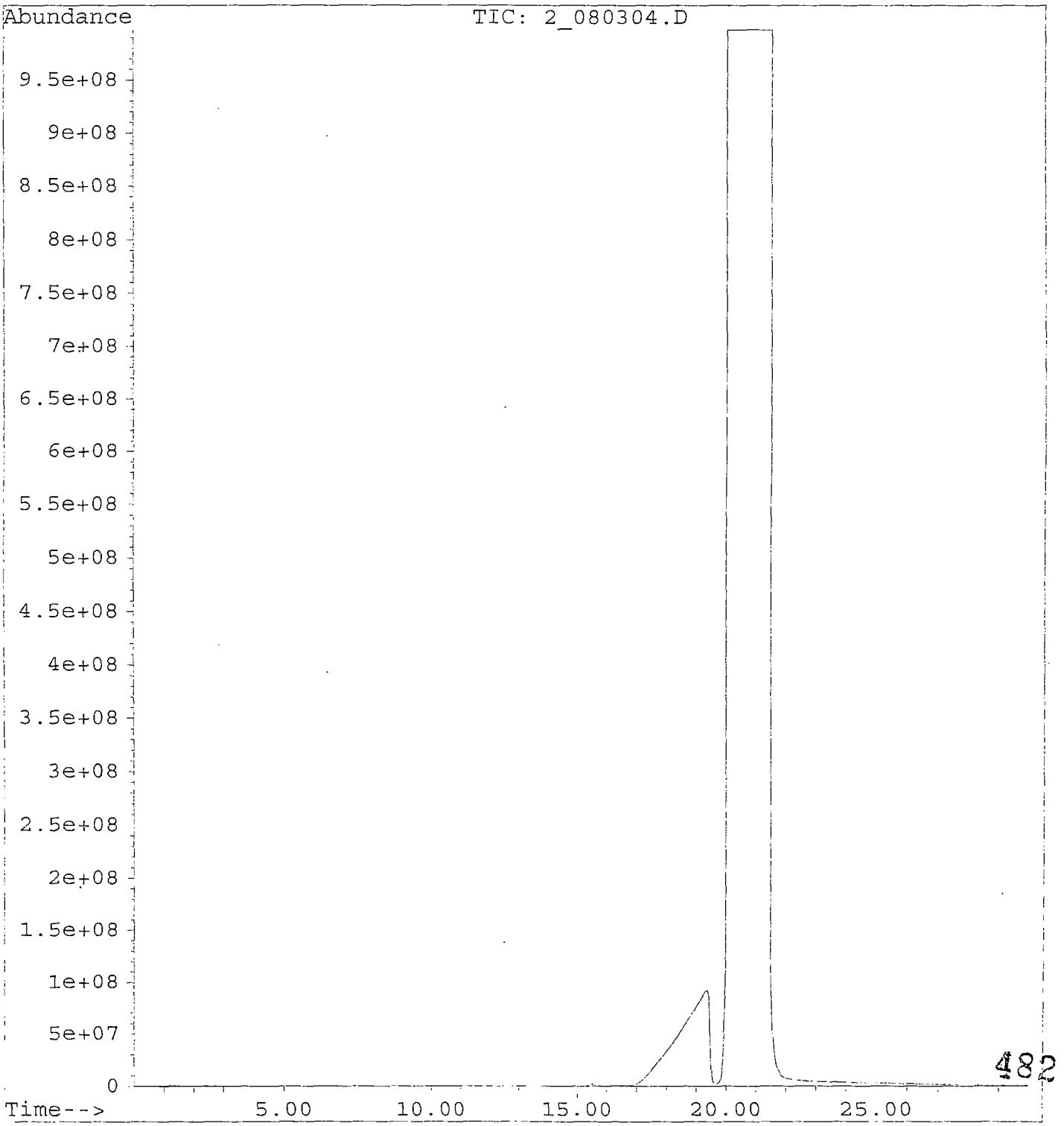


480

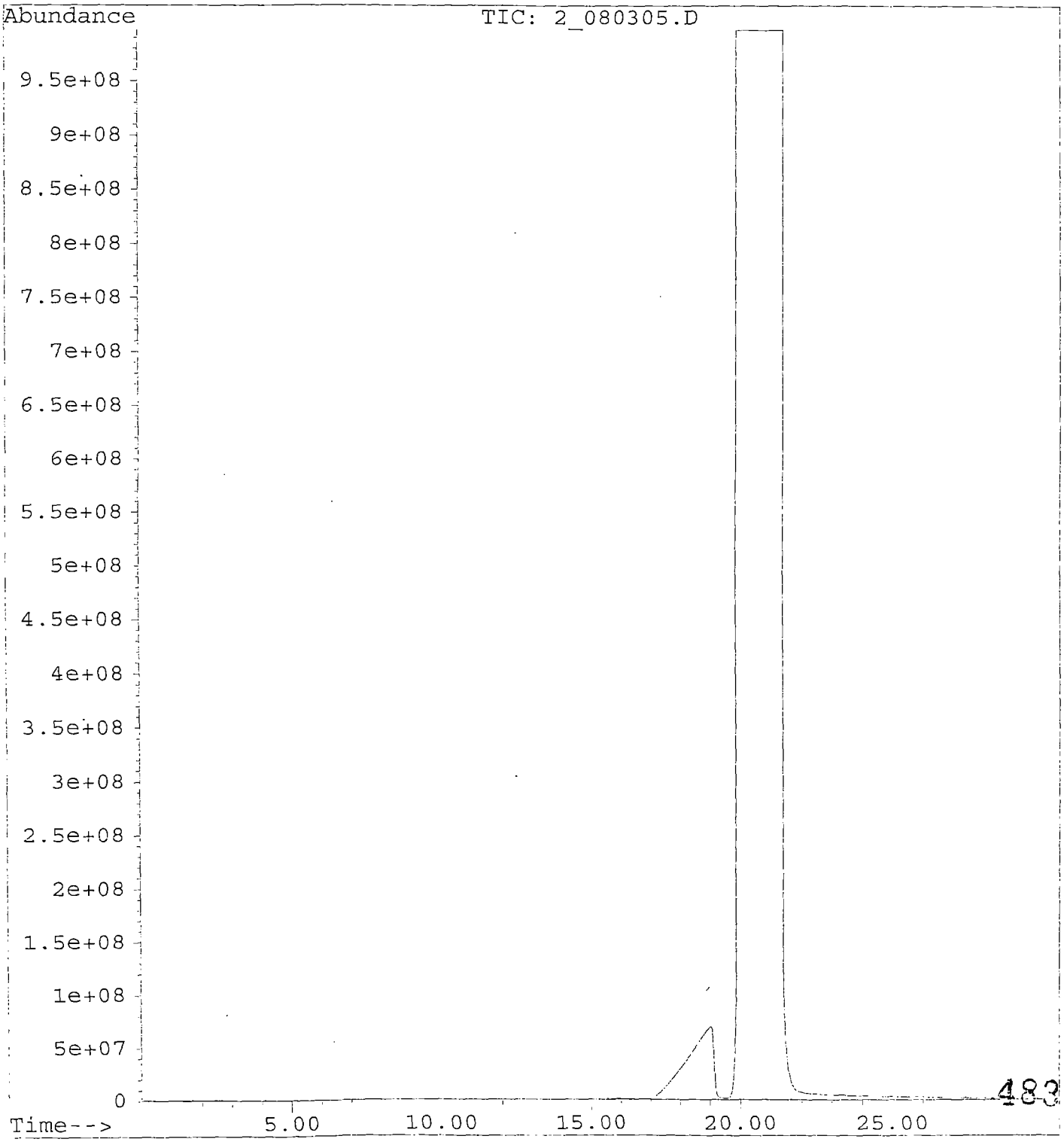
File : C:\HPCHEM\6\DATA\080301\2_080303.D
Operator : CD COL# 364134
Acquired : 03 Aug 01 15:50 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: SB
Misc Info : COL# 364134
Vial Number: 3



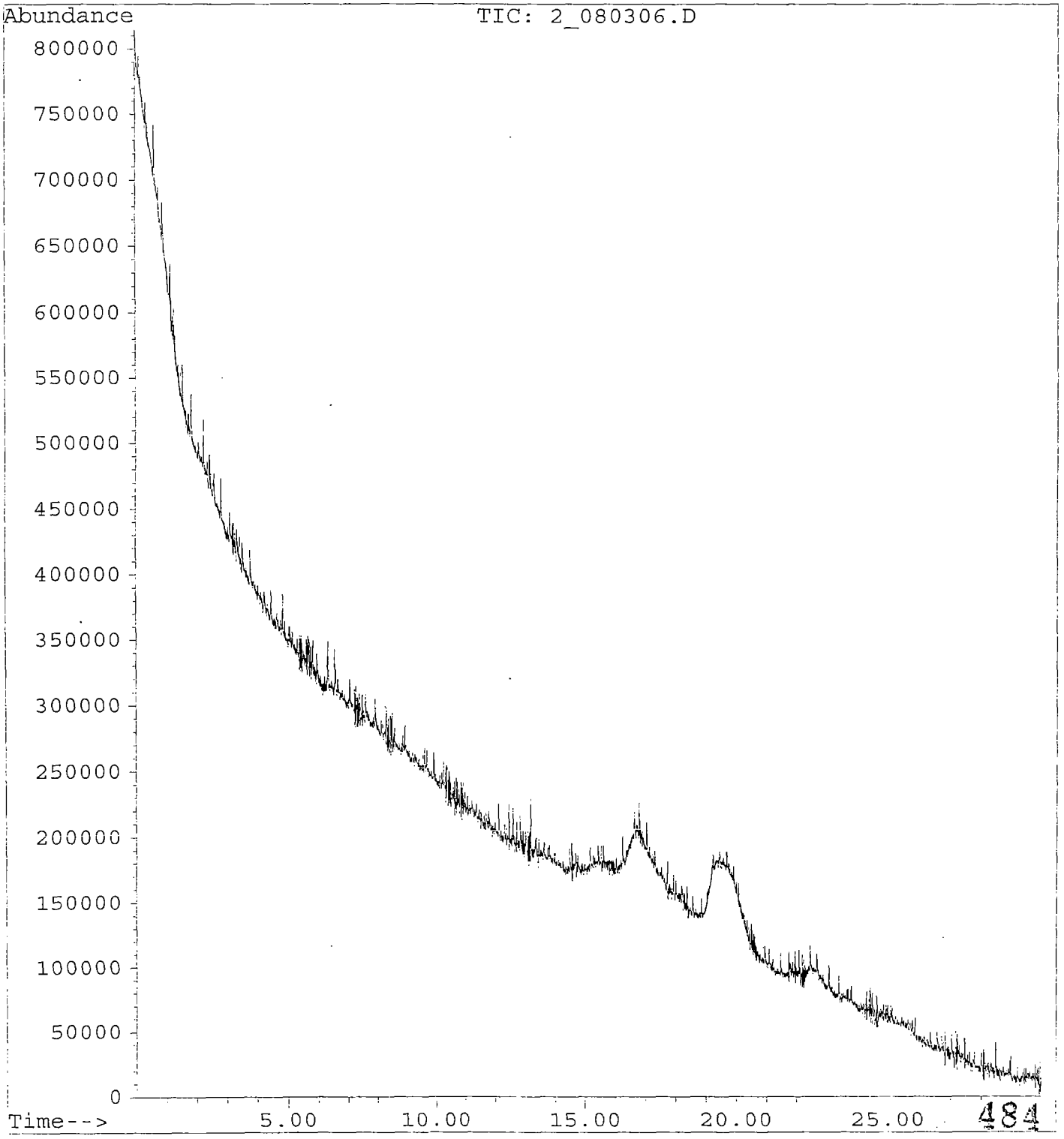
File : C:\HPCHEM\6\DATA\080301\2_080304.D
Operator : CD COL# 364134
Acquired : 03 Aug 01 16:21 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: SB
Misc Info : COL# 364134
Vial Number: 4



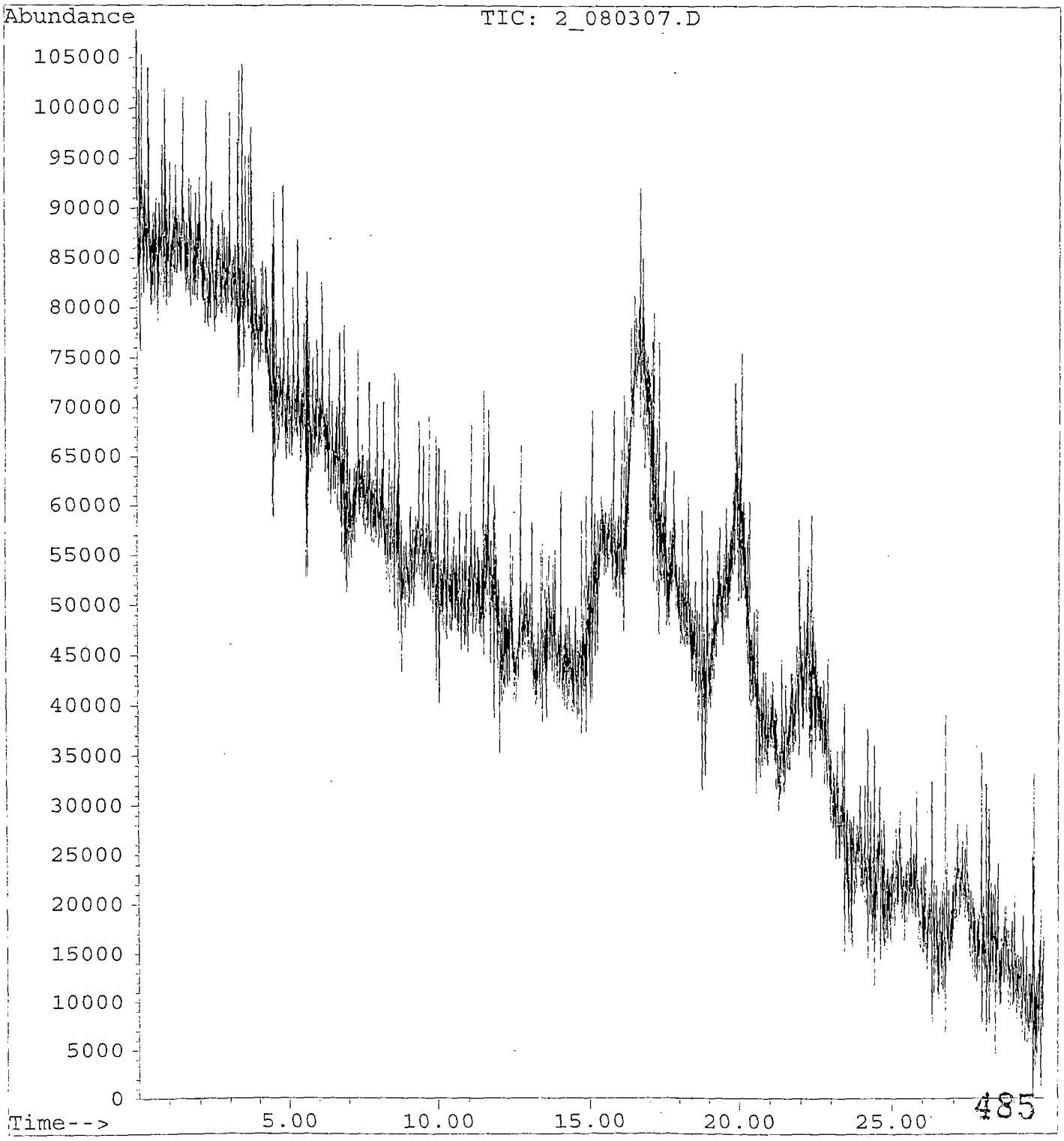
File : C:\HPCHEM\6\DATA\080301\2_080305.D
Operator : CD COL# 364134
Acquired : 03 Aug 01 16:52 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: SB
Misc Info : COL# 364134
Vial Number: 5



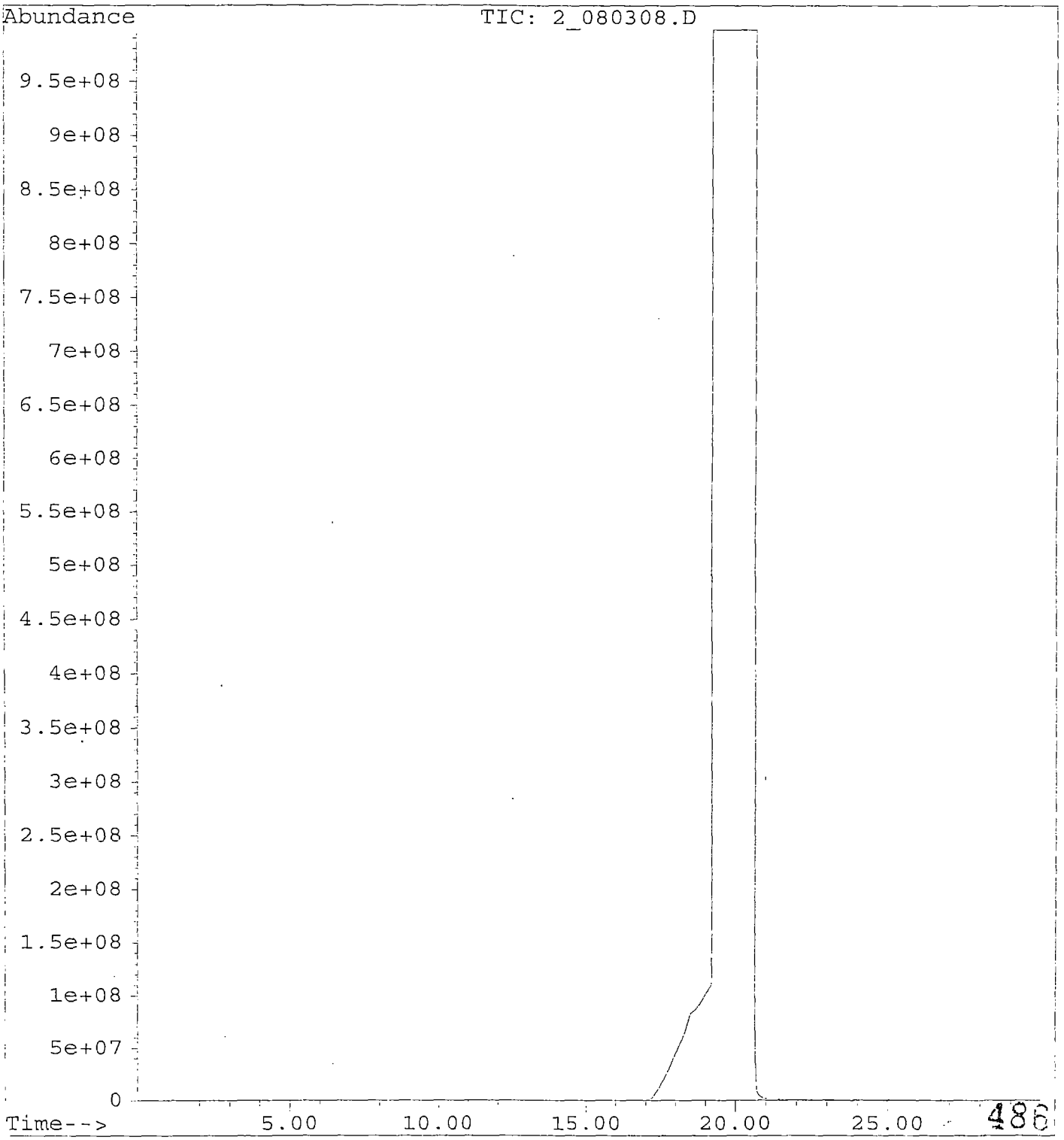
File : C:\HPCHEM\6\DATA\080301\2_080306.D
Operator : CD COL# 364134
Acquired : 03 Aug 01 17:24 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: SB#080301C (PEST)
Misc Info : COL# 364134
Vial Number: 6



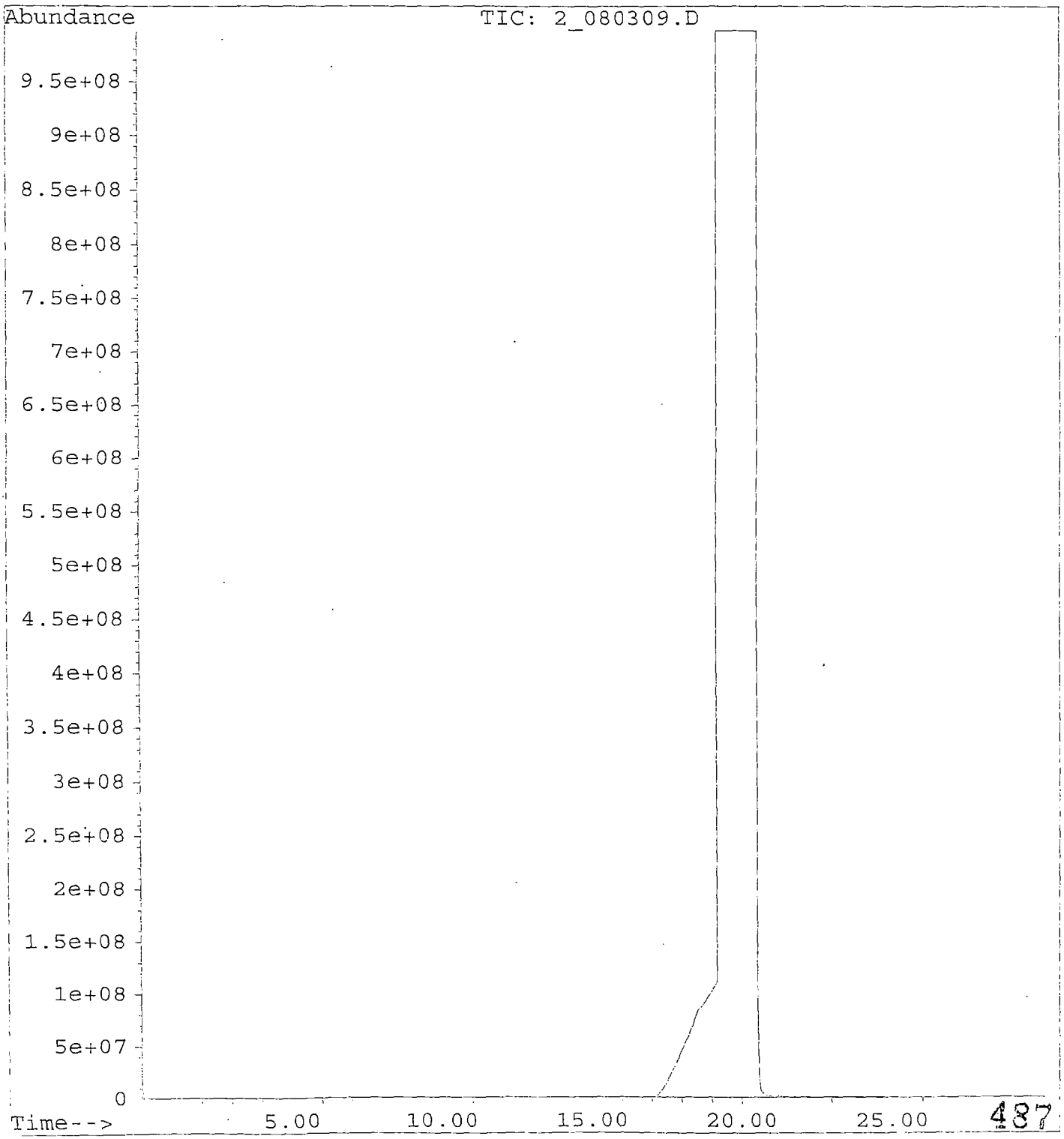
File : C:\HPCHEM\6\DATA\080301\2_080307.D
Operator : CD COL# 364134
Acquired : 03 Aug 01 17:55 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: SB#080301D (PEST)
Misc Info : COL# 364134
Vial Number: 7



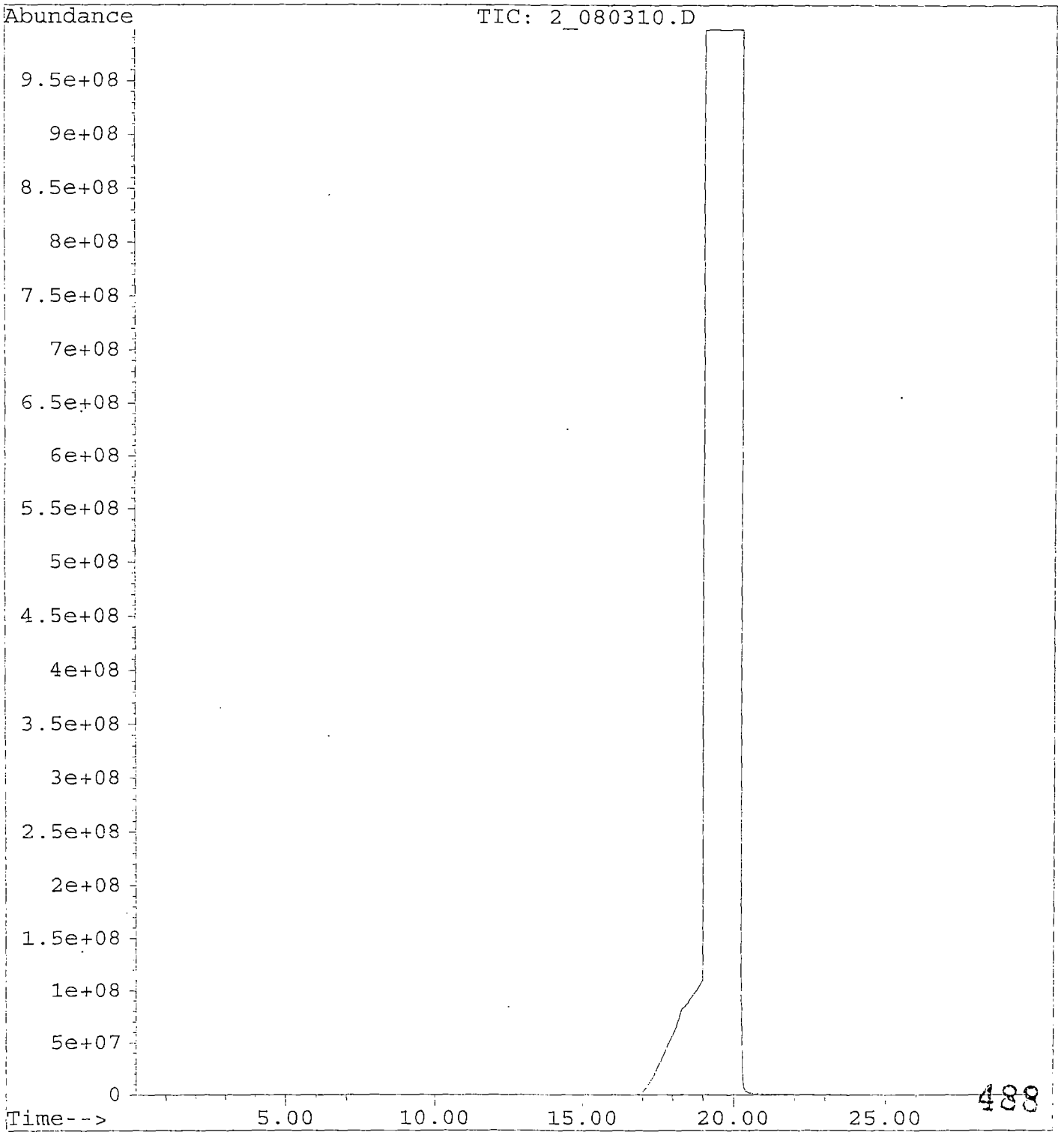
File : C:\HPCHEM\6\DATA\080301\2_080308.D
Operator : CD COL# 364134
Acquired : 03 Aug 01 18:26 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: BL0802SD-EPA
Misc Info : COL# 364134
Vial Number: 8



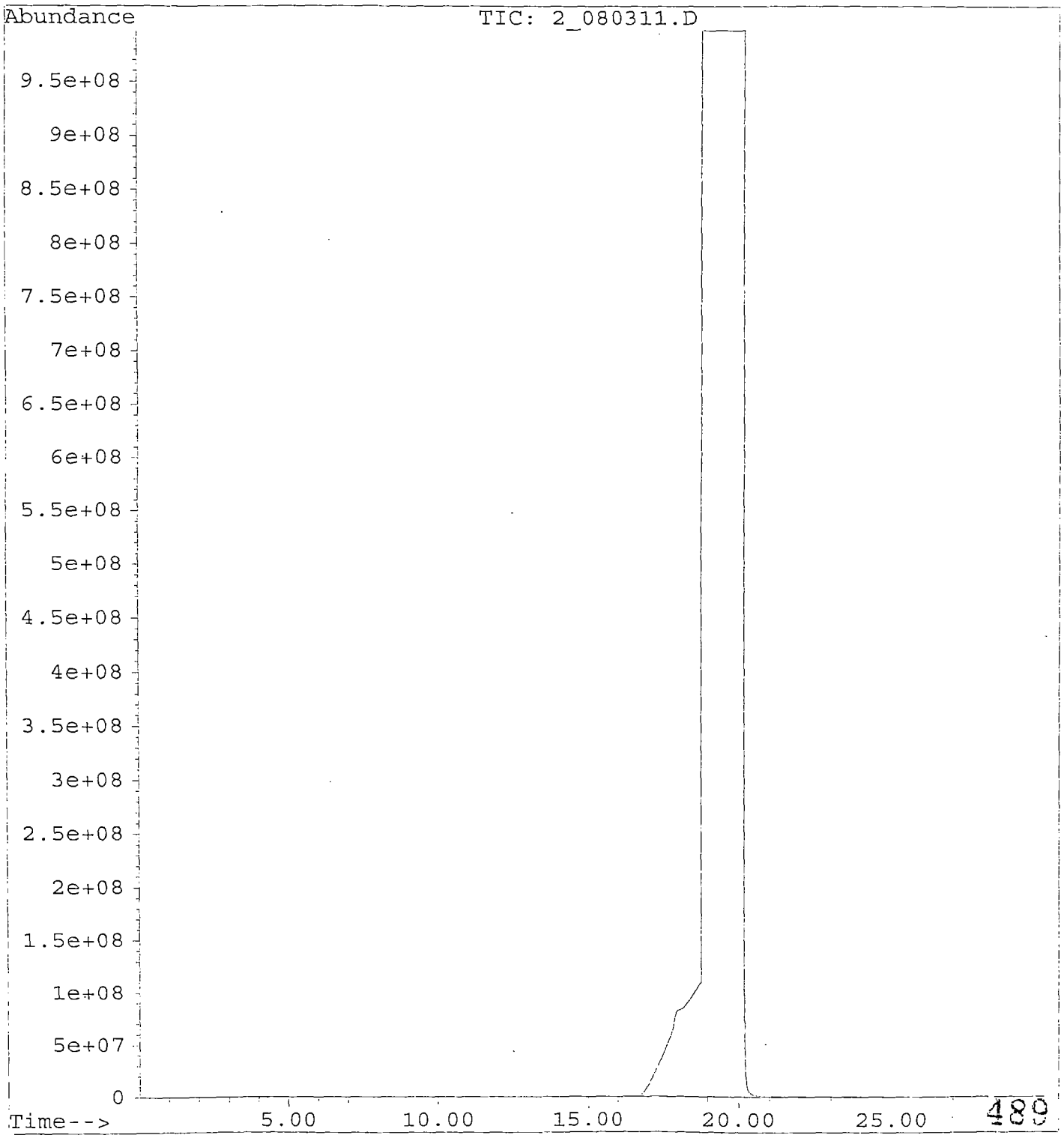
File : C:\HPCHEM\6\DATA\080301\2_080309.D
Operator : CD COL# 364134
Acquired : 03 Aug 01 18:57 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: BB0802SD-EPA
Misc Info : COL# 364134
Vial Number: 9



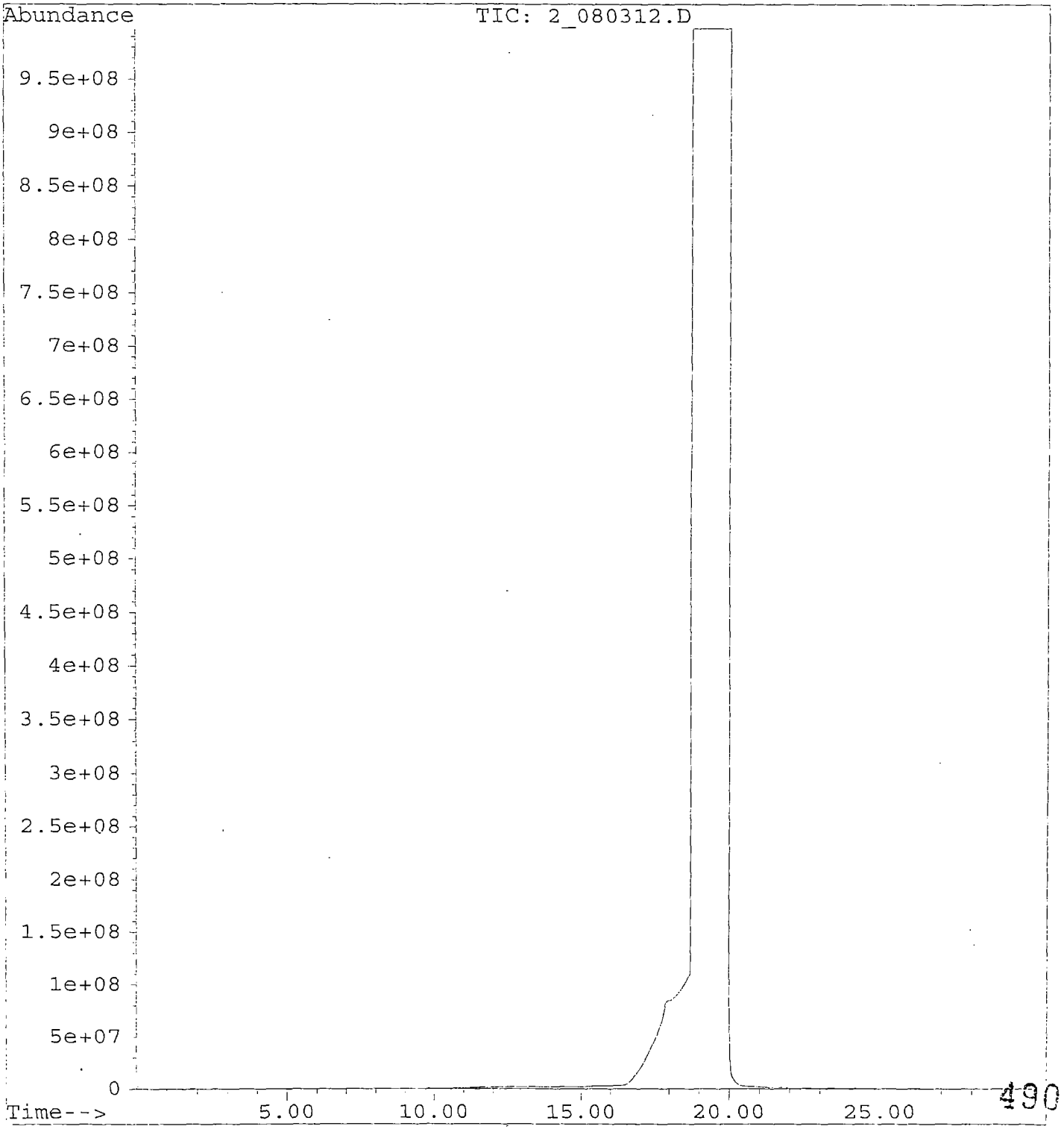
File : C:\HPCHEM\6\DATA\080301\2_080310.D
Operator : CD COL# 364134
Acquired : 03 Aug 01 19:28 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: LC0802SD-EPA
Misc Info : COL# 364134
Vial Number: 10



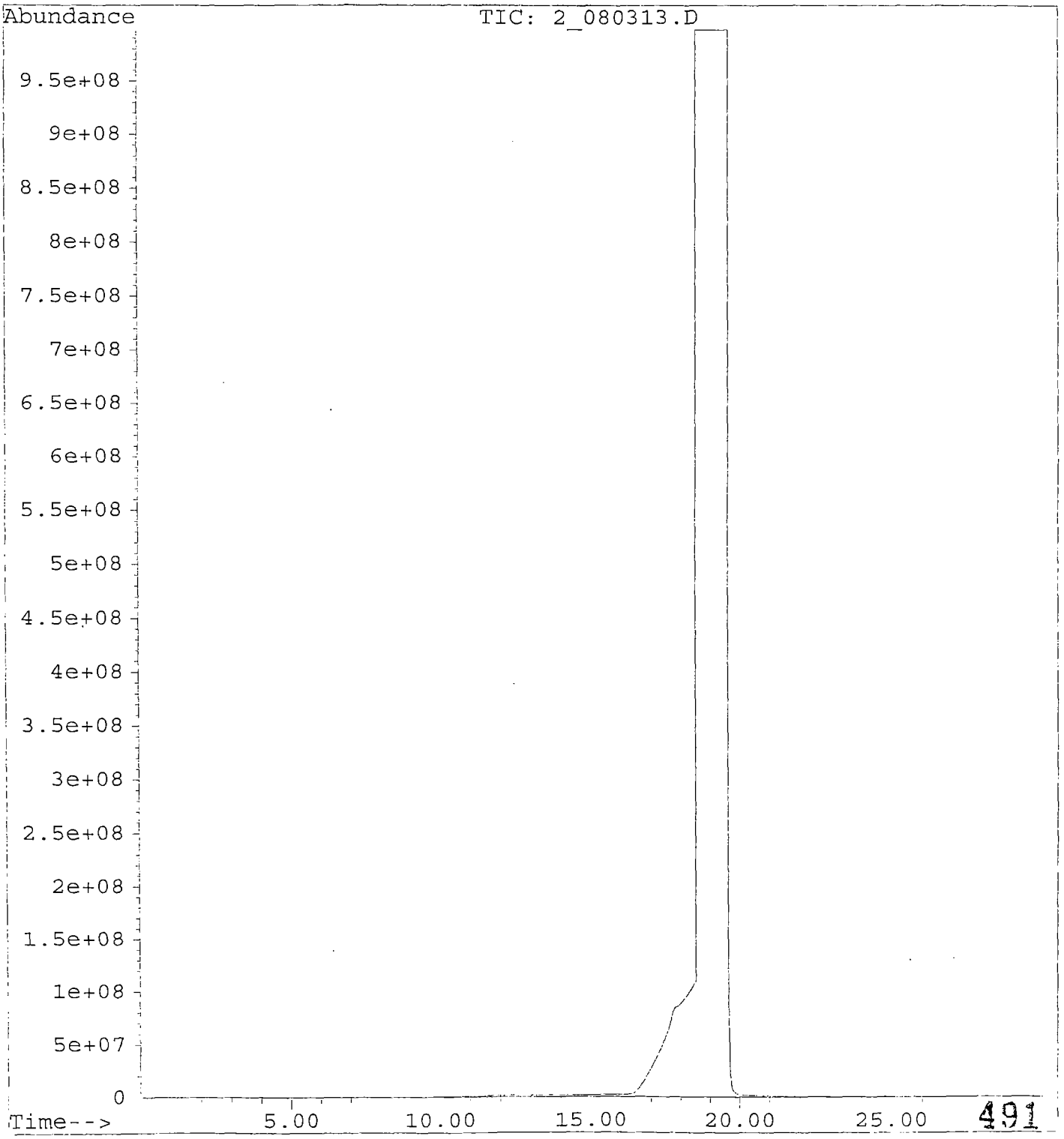
File : C:\HPCHEM\6\DATA\080301\2_080311.D
Operator : CD COL# 364134
Acquired : 03 Aug 01 19:59 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: LD0802SD-EPA
Misc Info : COL# 364134
Vial Number: 11



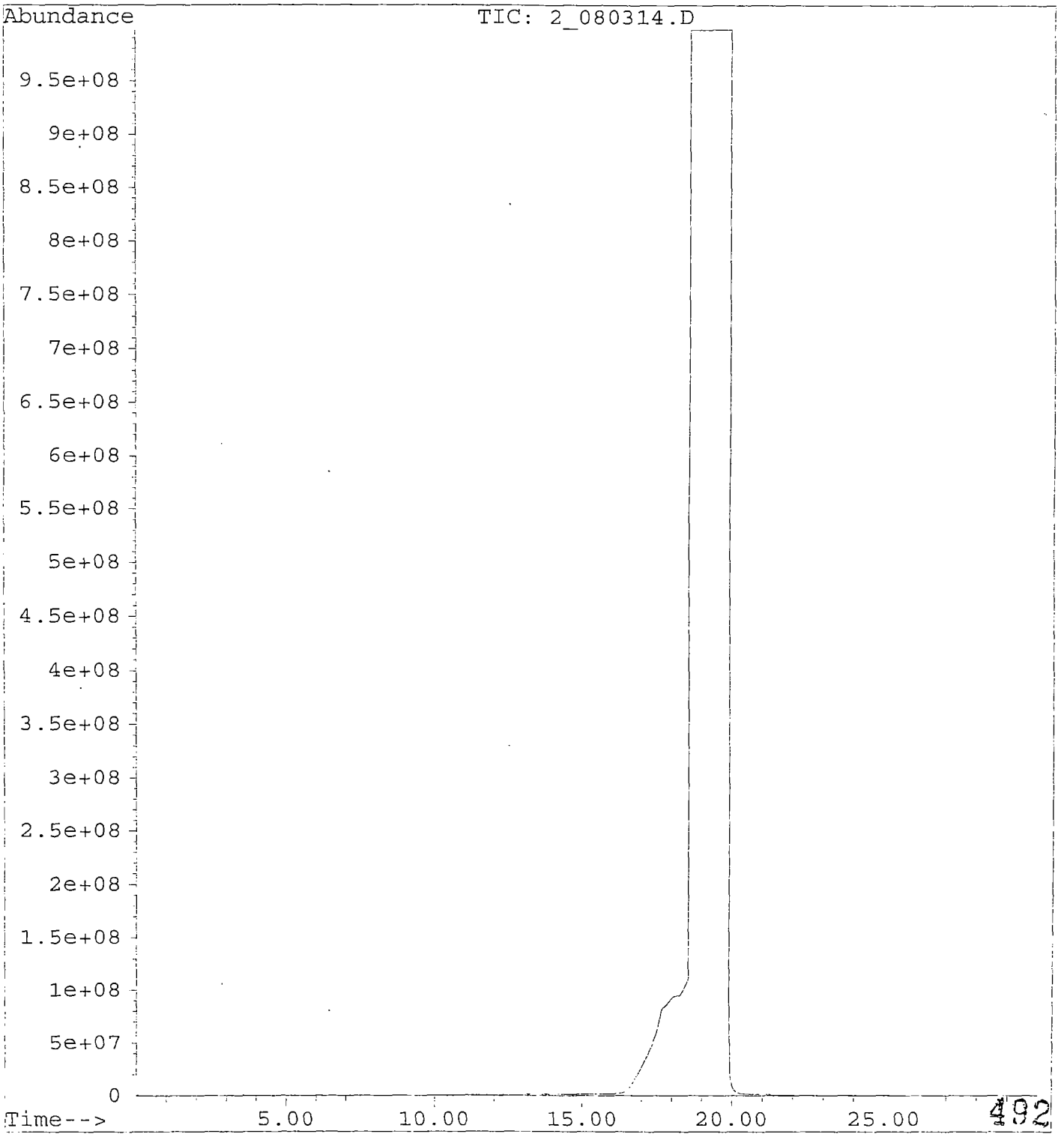
File : C:\HPCHEM\6\DATA\080301\2_080312.D
Operator : CD COL# 364134
Acquired : 03 Aug 01 20:30 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47158.15-E00R3-EPA
Misc Info : COL# 364134
Vial Number: 12



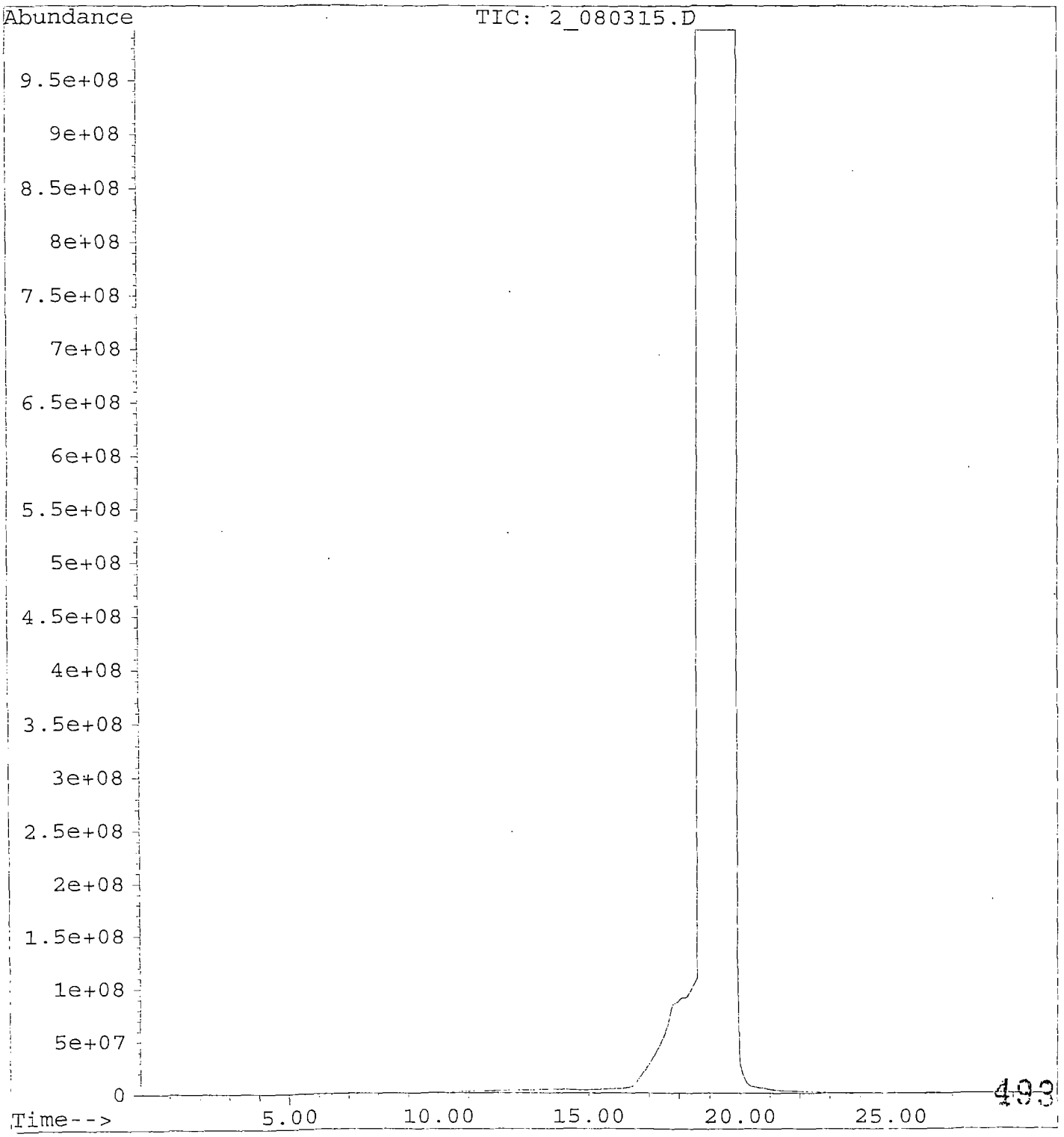
File : C:\HPCHEM\6\DATA\080301\2_080313.D
Operator : CD COL# 364134
Acquired : 03 Aug 01 21:01 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47158.16-E00R4-EPA
Misc Info : COL# 364134
Vial Number: 13



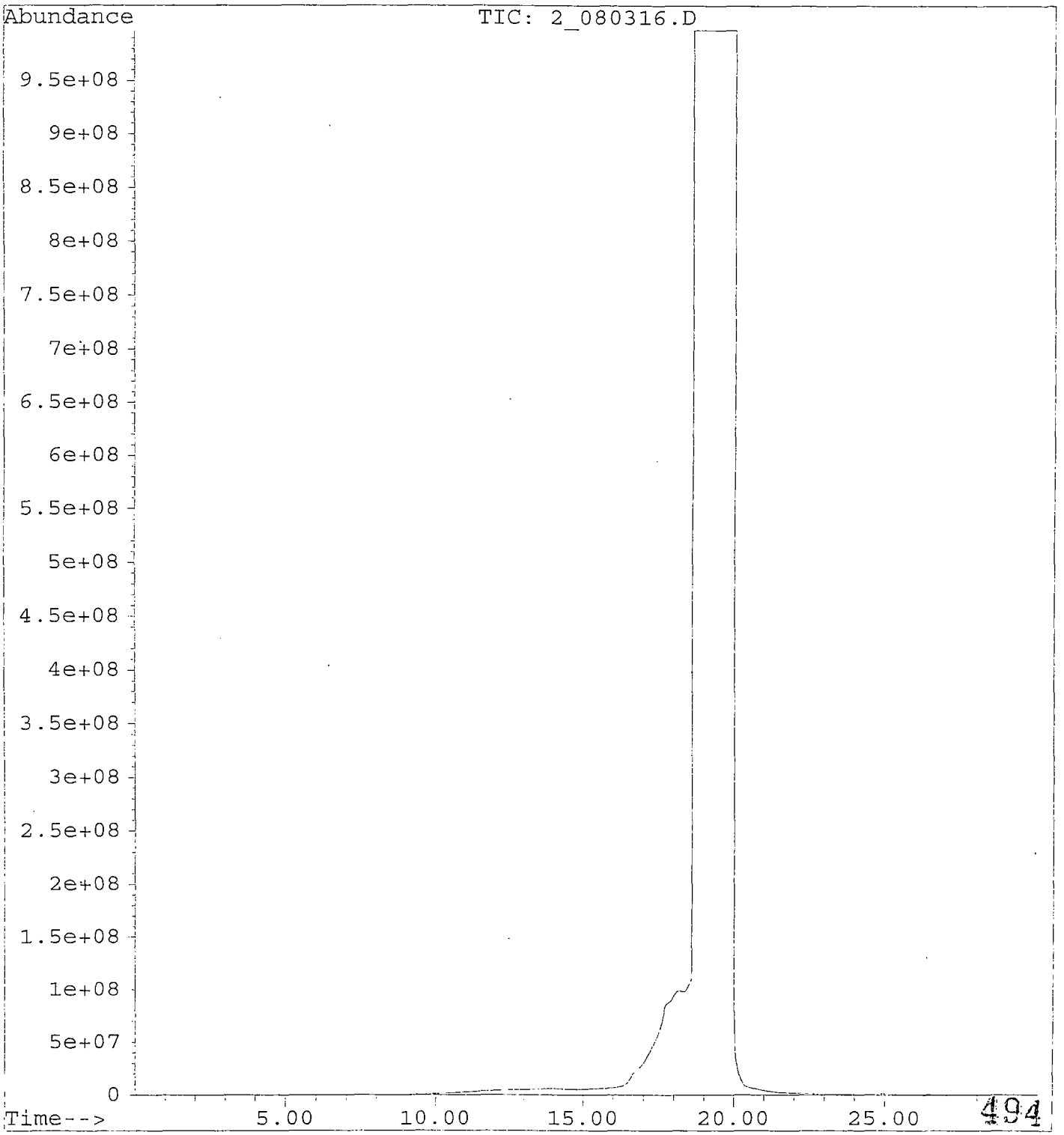
File : C:\HPCHEM\6\DATA\080301\2_080314.D
Operator : CD COL# 364134
Acquired : 03 Aug 01 21:32 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47158.17-E00R5-EPA
Misc Info : COL# 364134
Vial Number: 14



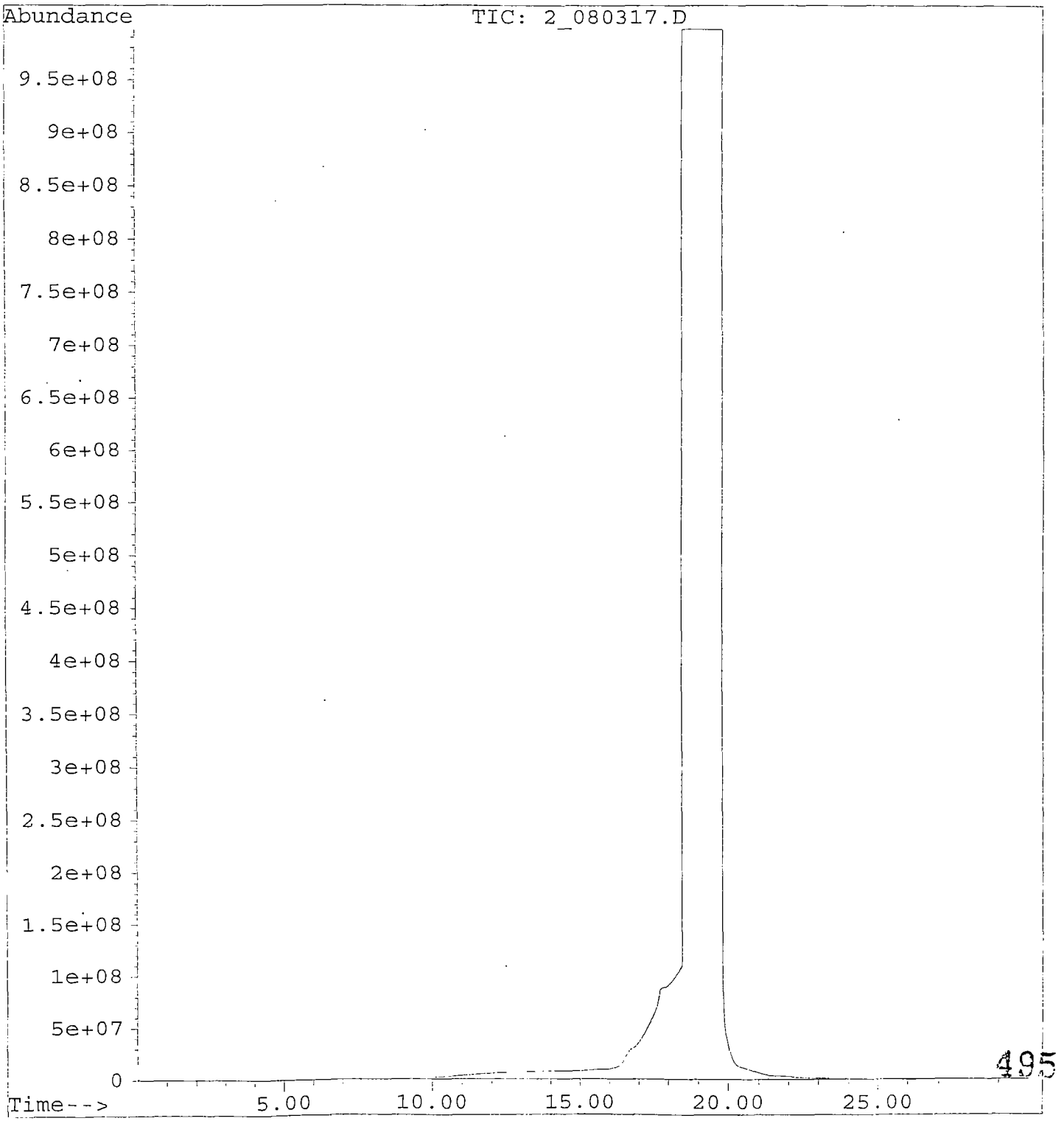
File : C:\HPCHEM\6\DATA\080301\2_080315.D
Operator : CD COL# 364134
Acquired : 03 Aug 01 22:03 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47158.22-E00S0-EPA
Misc Info : COL# 364134
Vial Number: 15



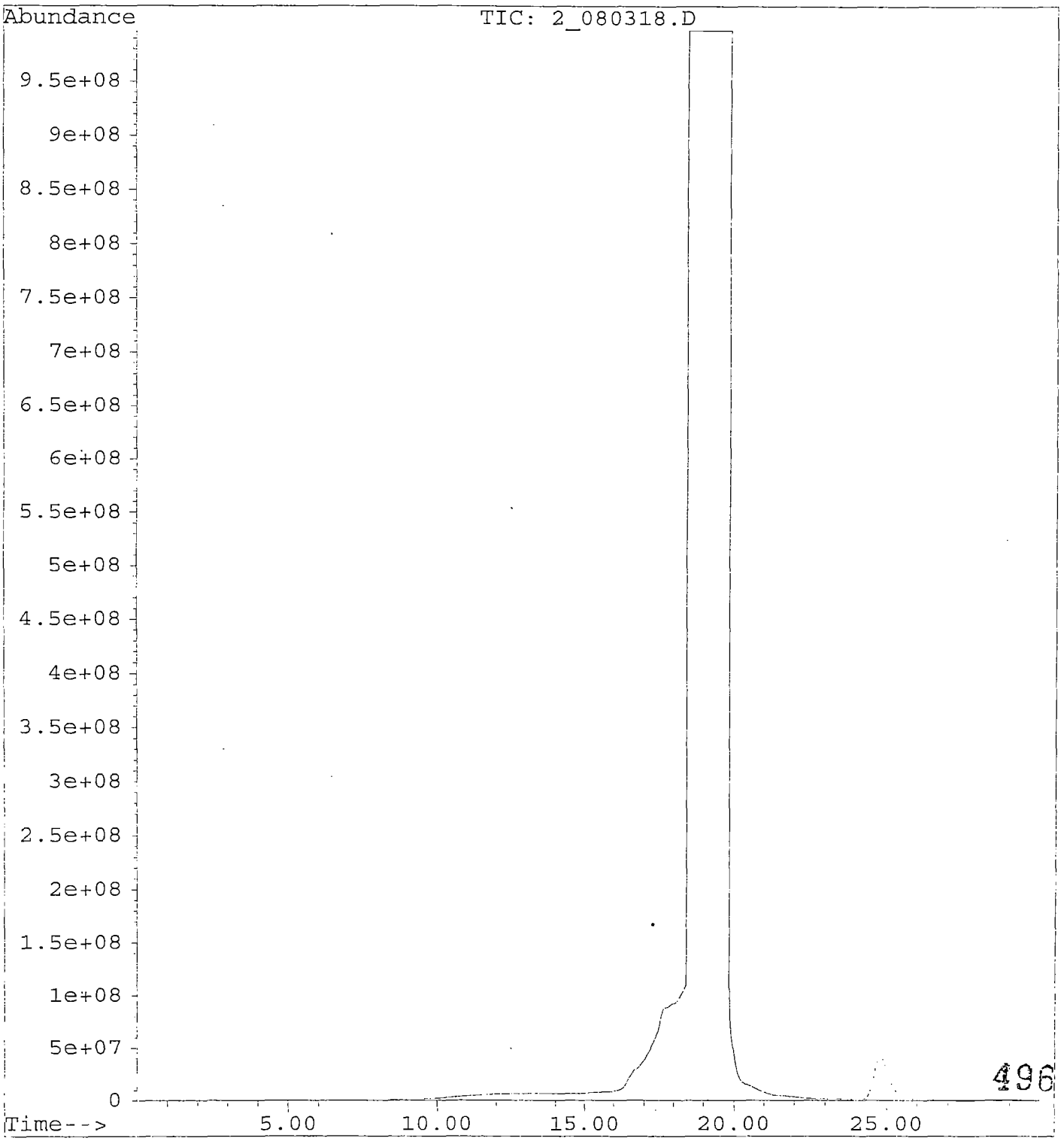
File : C:\HPCHEM\6\DATA\080301\2_080316.D
Operator : CD COL# 364134
Acquired : 03 Aug 01 22:35 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47158.14-E00R2-EPA
Misc Info : COL# 364134
Vial Number: 16



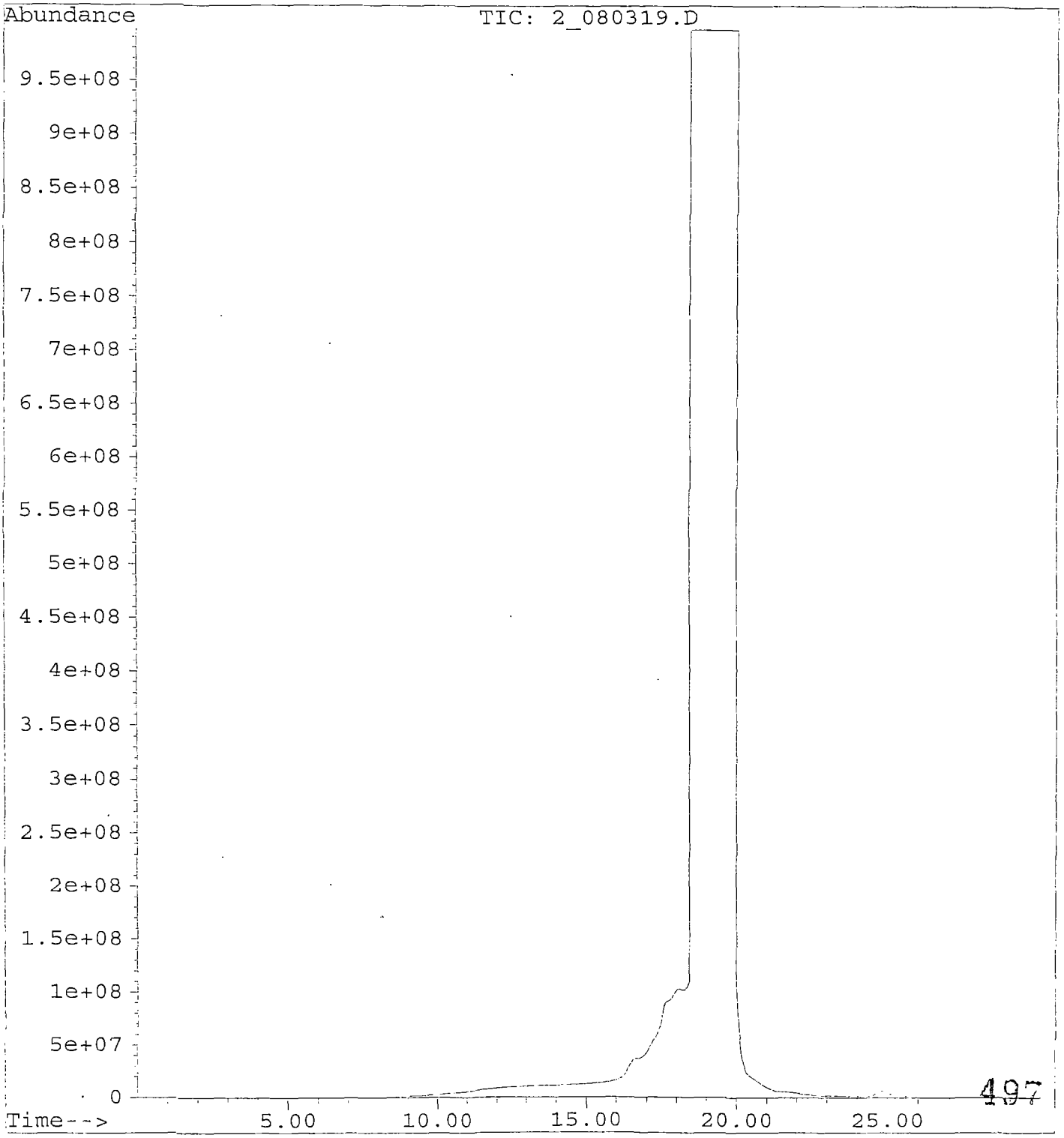
File : C:\HPCHEM\6\DATA\080301\2_080317.D
Operator : CD COL# 364134
Acquired : 03 Aug 01 23:06 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47158.07-E00Q5-EPA
Misc Info : COL# 364134
Vial Number: 17



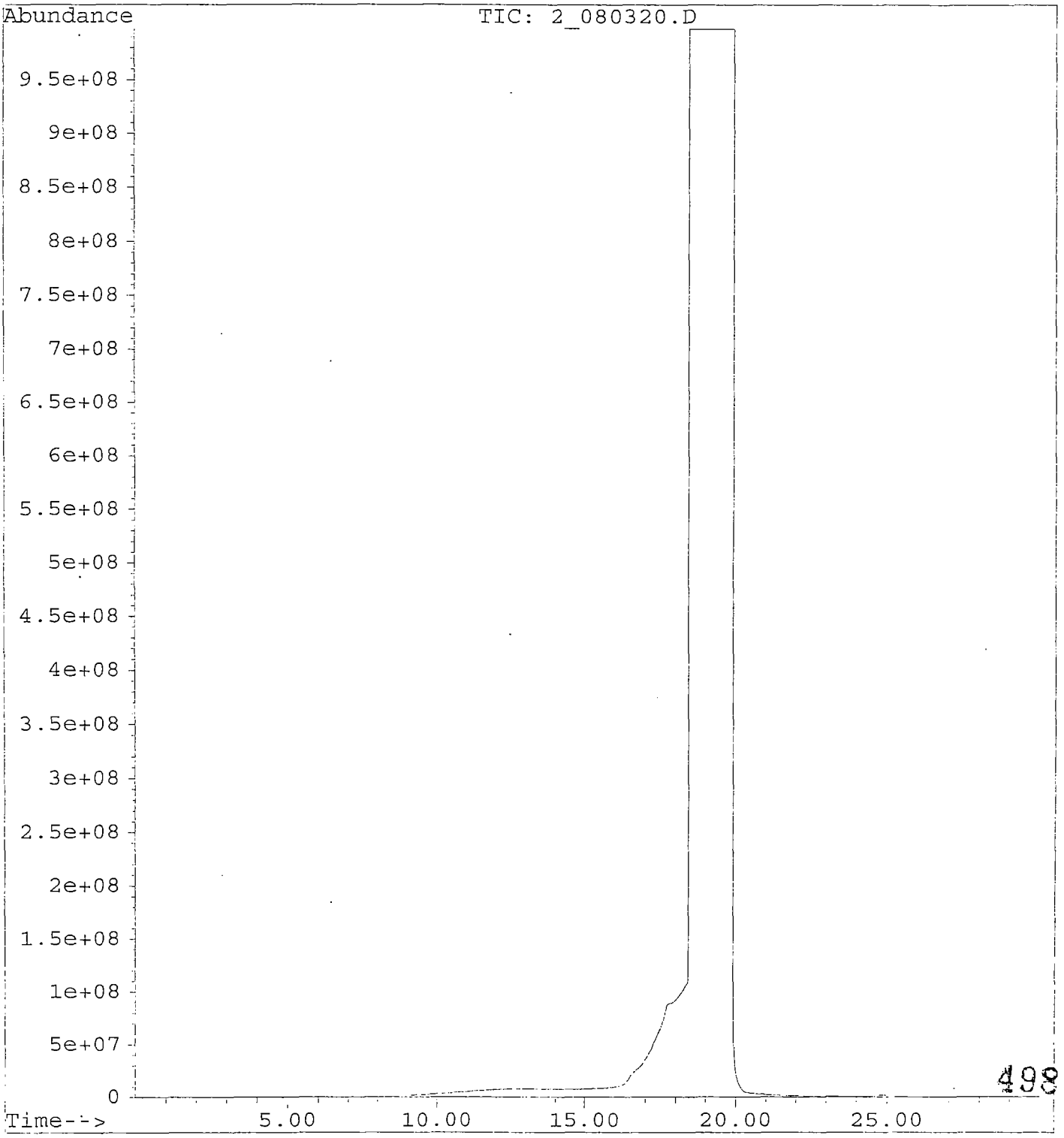
File : C:\HPCHEM\6\DATA\080301\2_080318.D
Operator : CD COL# 364134
Acquired : 03 Aug 01 23:37 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47158.09-E00Q7-EPA
Misc Info : COL# 364134
Vial Number: 18



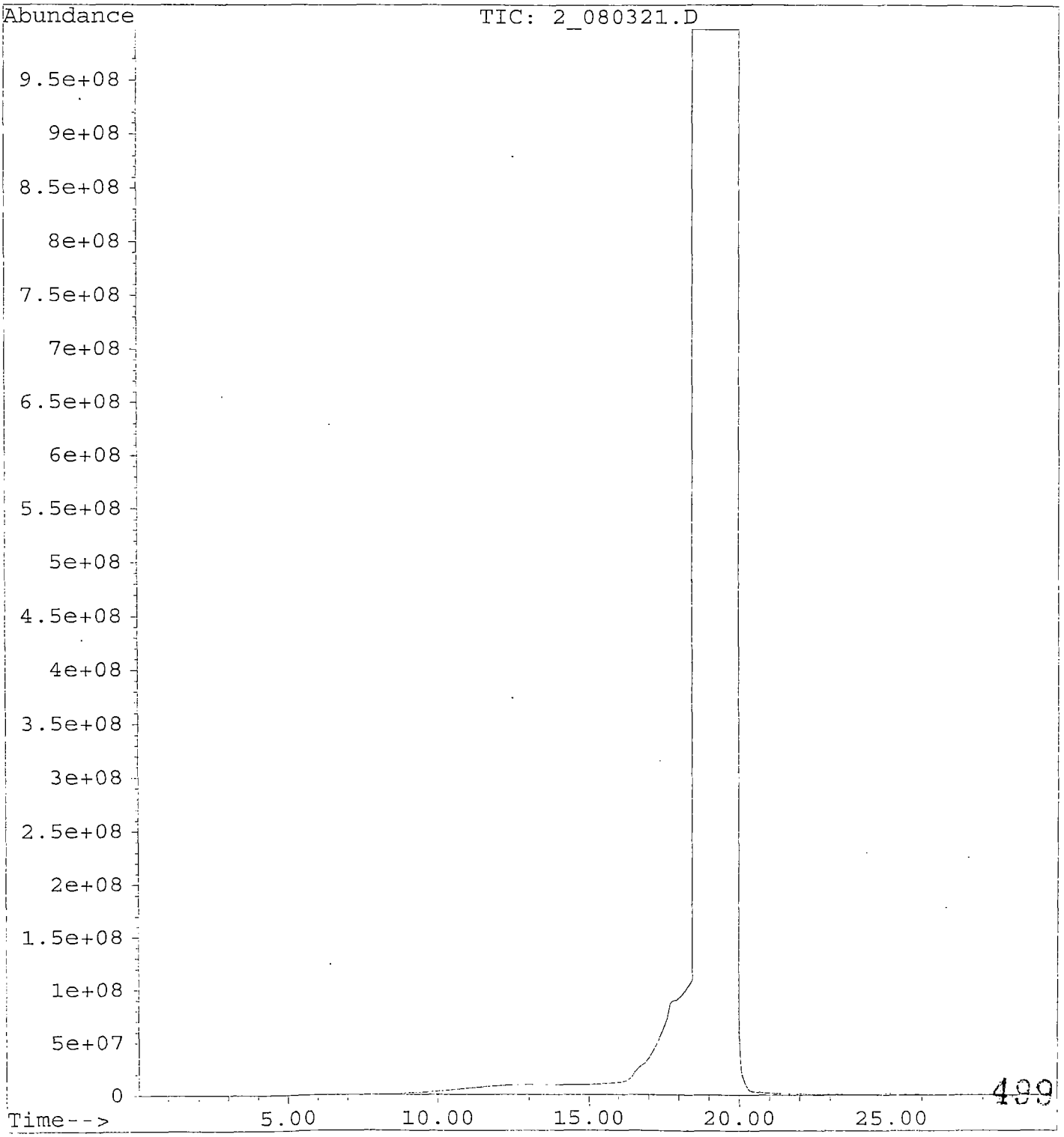
File : C:\HPCHEM\6\DATA\080301\2_080319.D
Operator : CD COL# 364134
Acquired : 04 Aug 01 00:08 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47158.13-E00R1-EPA
Misc Info : COL# 364134
Vial Number: 19



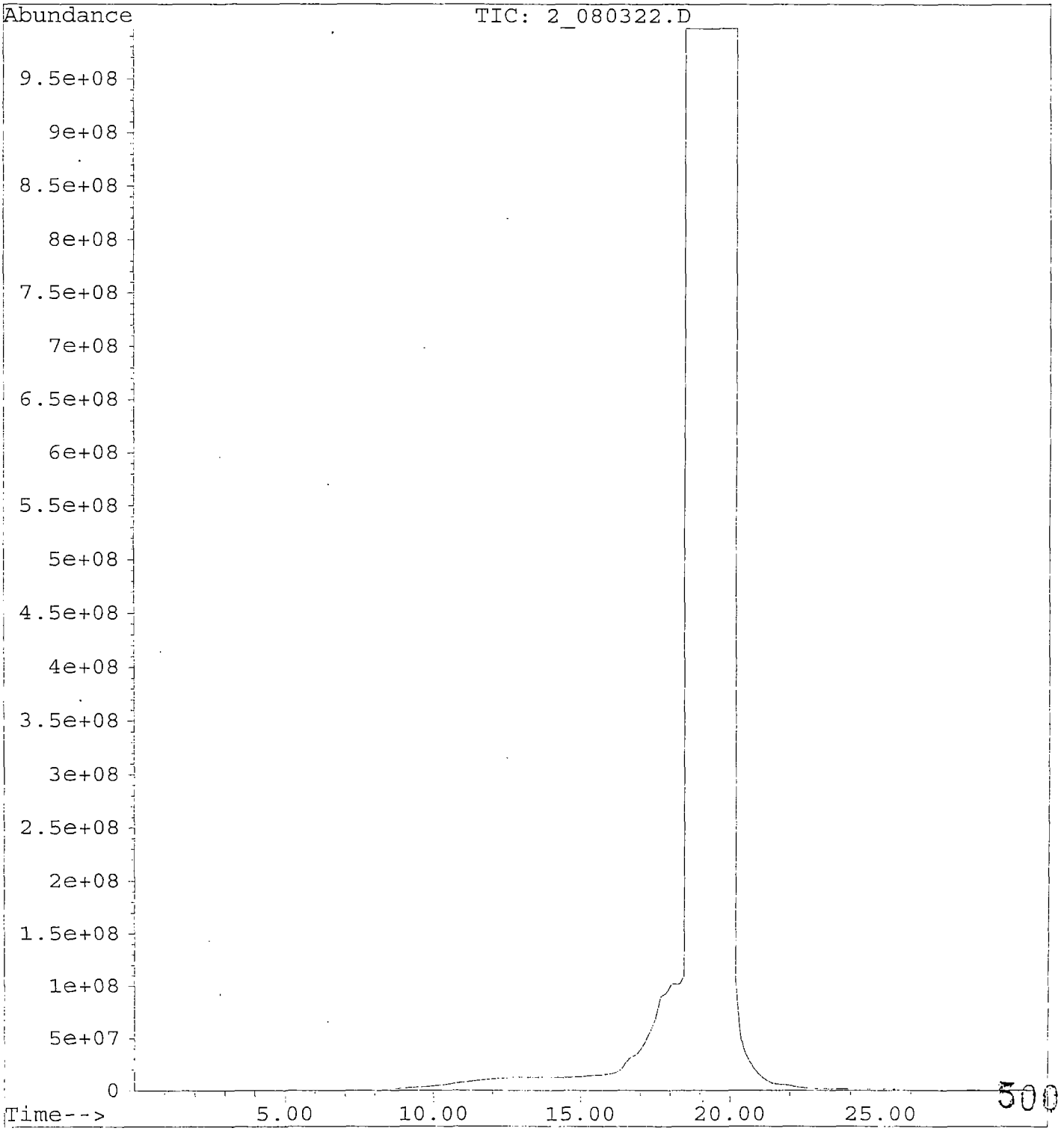
File : C:\HPCHEM\6\DATA\080301\2_080320.D
Operator : CD COL# 364134
Acquired : 04 Aug 01 00:39 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47158.01-E00Q1-EPA
Misc Info : COL# 364134
Vial Number: 20



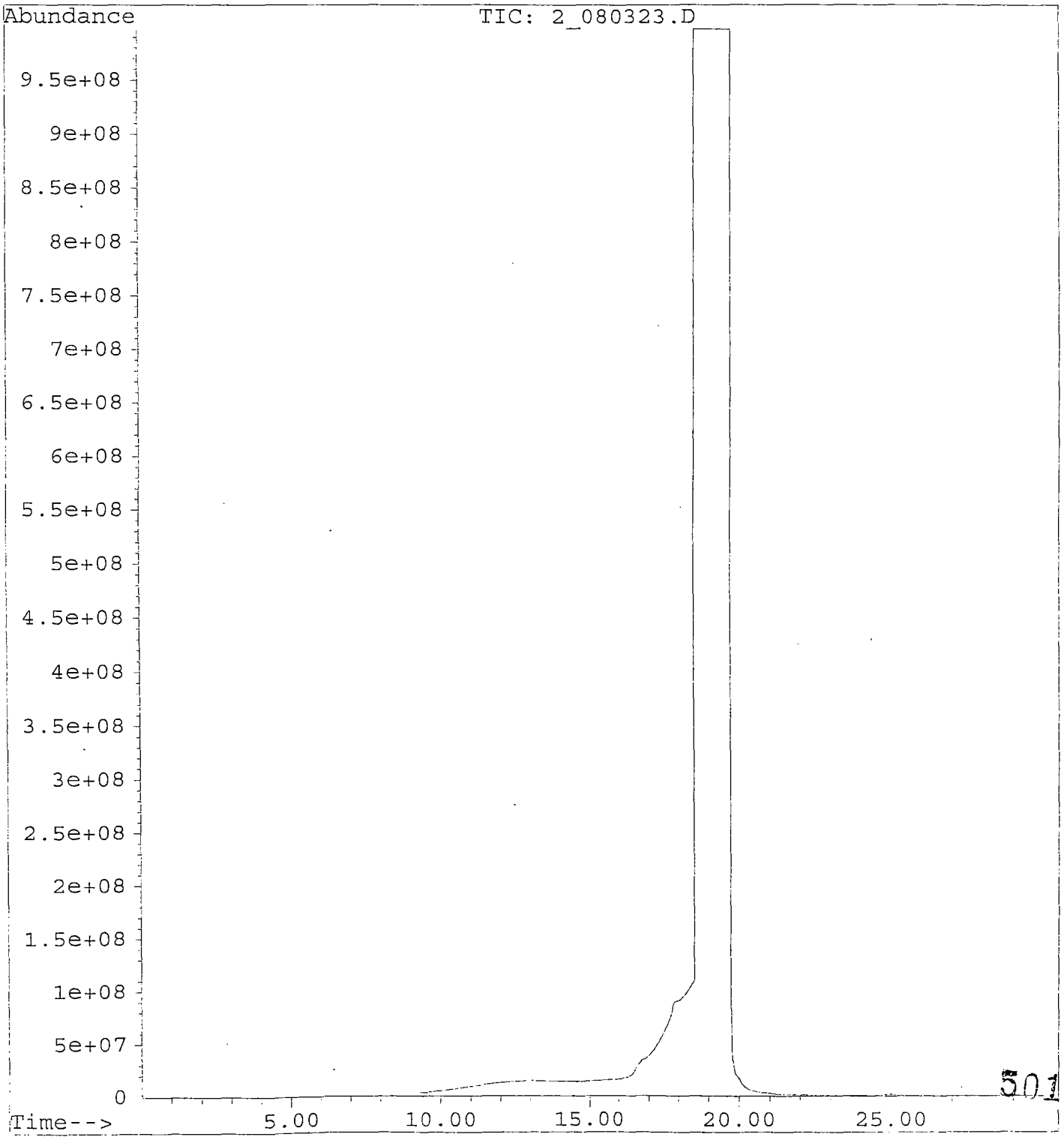
File : C:\HPCHEM\6\DATA\080301\2_080321.D
Operator : CD COL# 364134
Acquired : 04 Aug 01 01:10 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47158.02-E00Q2-EPA
Misc Info : COL# 364134
Vial Number: 21



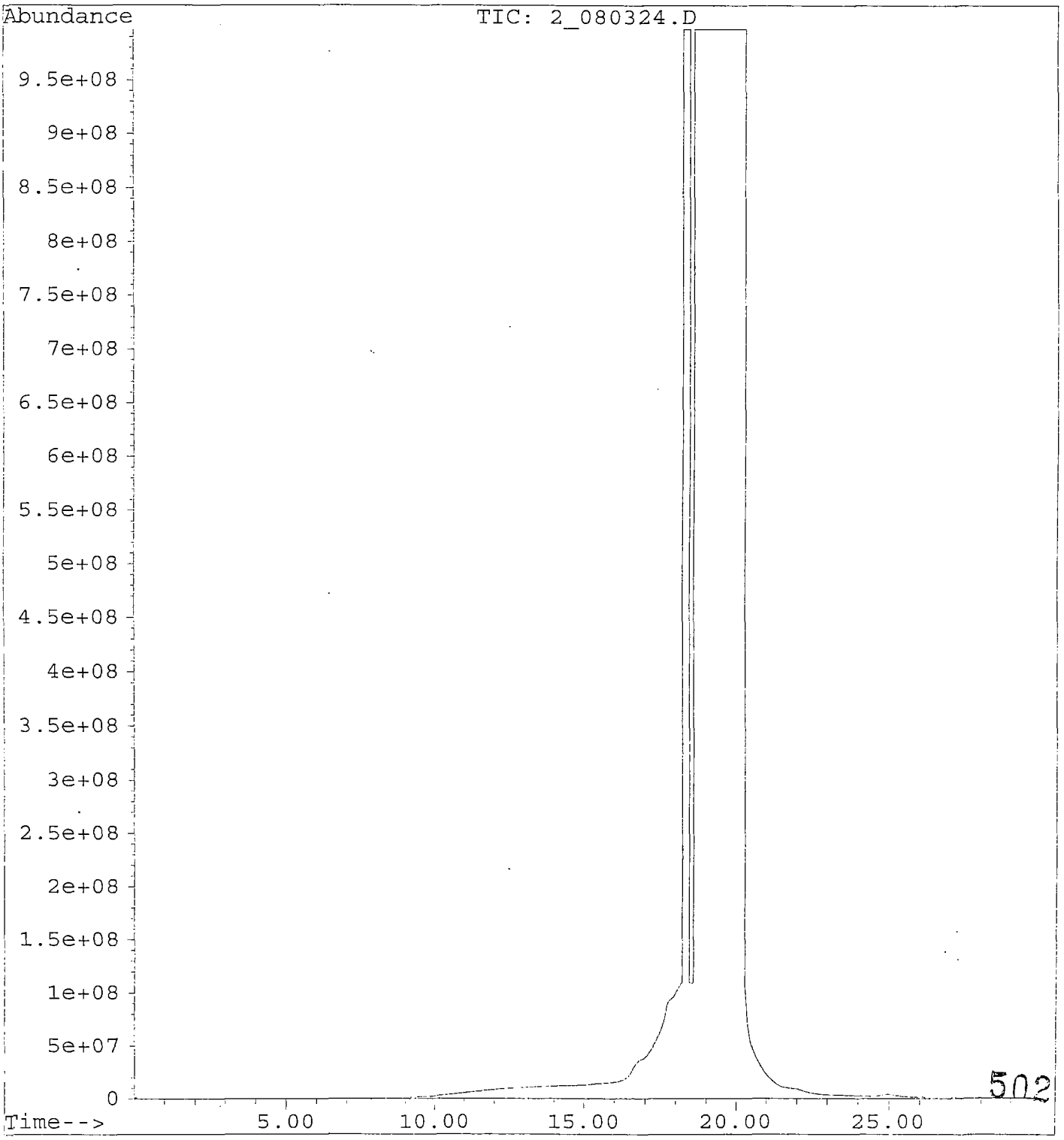
File : C:\HPCHEM\6\DATA\080301\2_080322.D
Operator : CD COL# 364134
Acquired : 04 Aug 01 01:41 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47158.03-MS-E00Q2-EPA
Misc Info : COL# 364134
Vial Number: 22



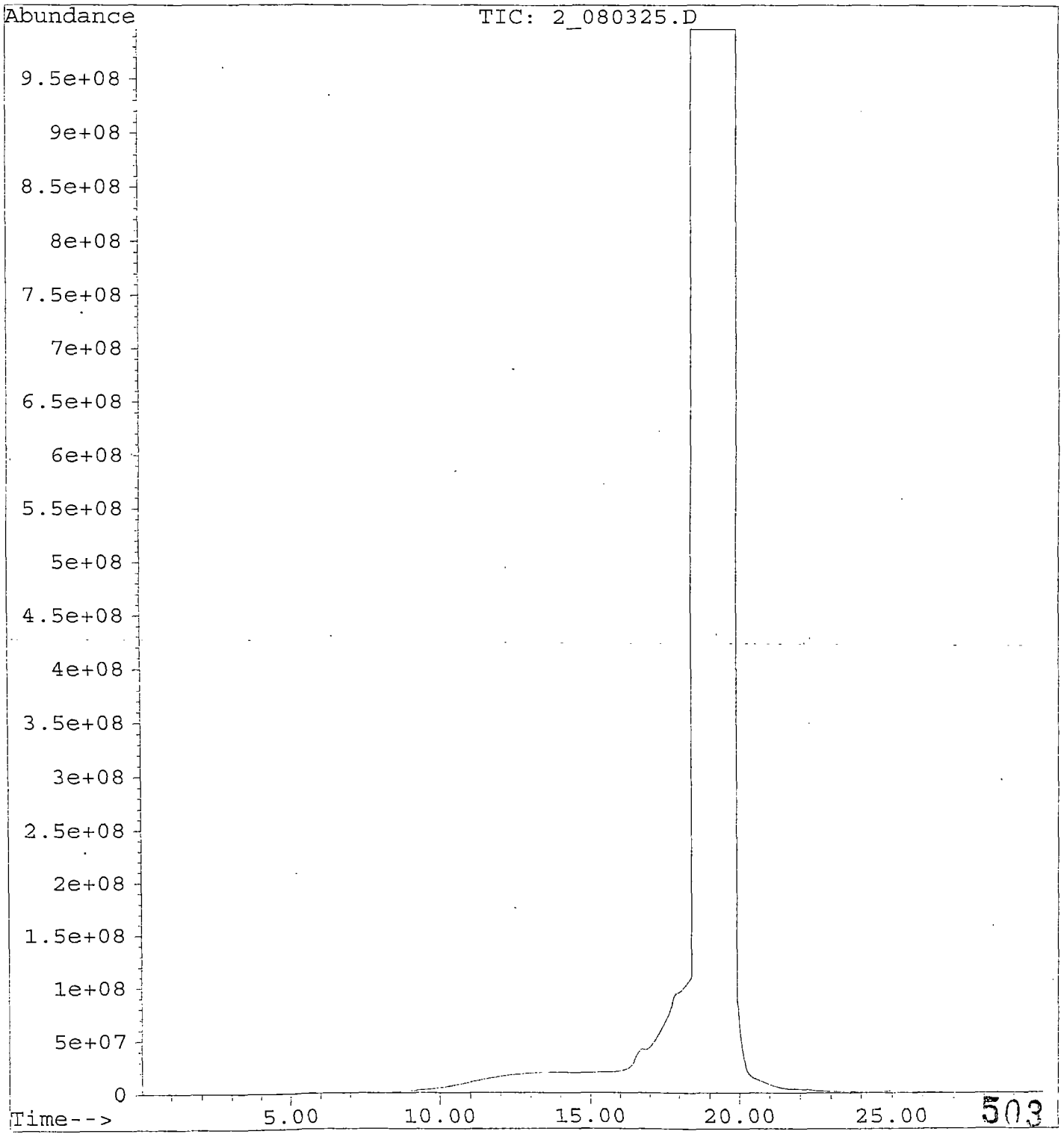
File : C:\HPCHEM\6\DATA\080301\2_080323.D
Operator : CD COL# 364134
Acquired : 04 Aug 01 02:12 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47158.04-MSD-E00Q2-EPA
Misc Info : COL# 364134
Vial Number: 23



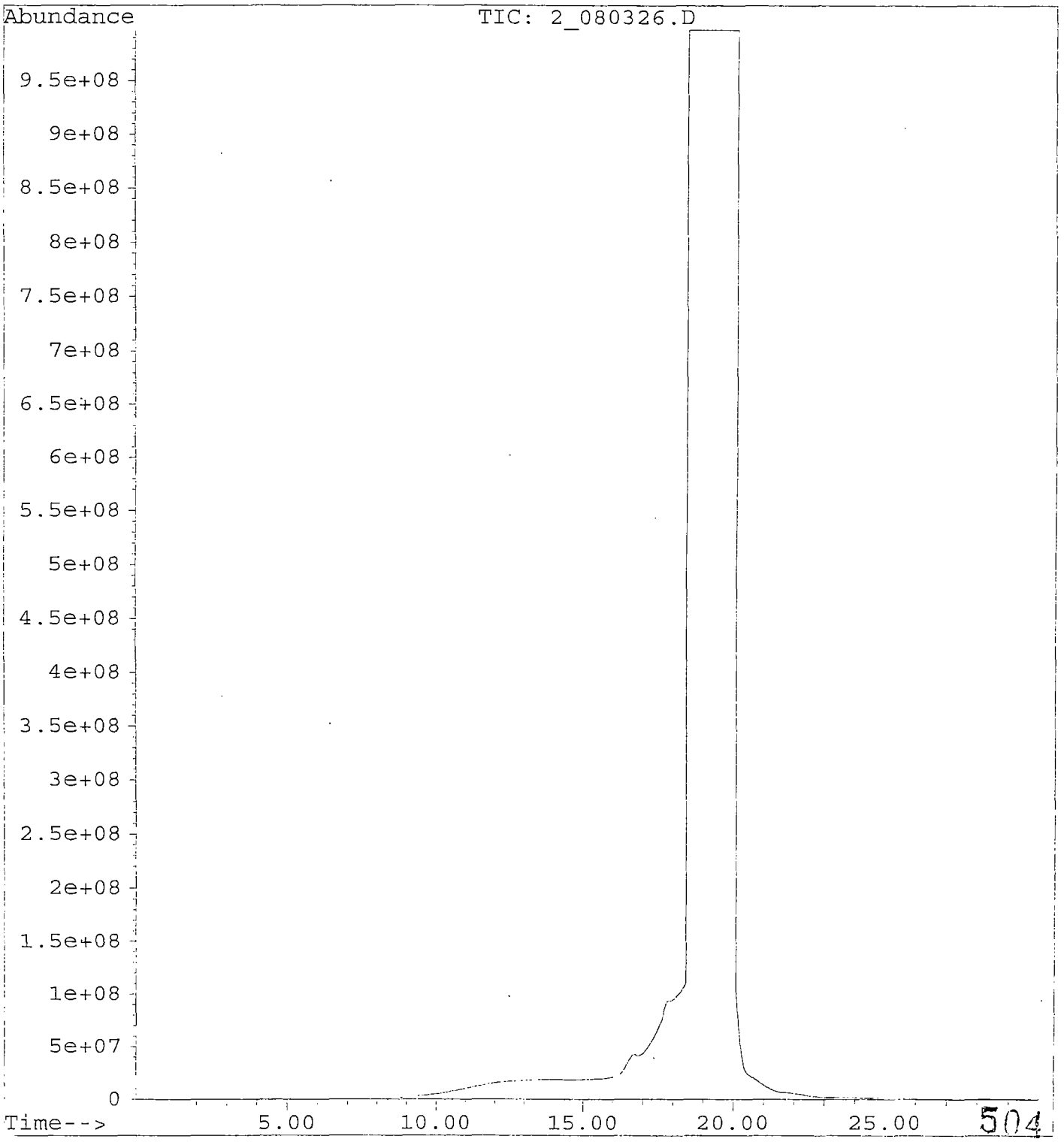
File : C:\HPCHEM\6\DATA\080301\2_080324.D
Operator : CD COL# 364134
Acquired : 04 Aug 01 02:43 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47158.05-E00Q3-EPA
Misc Info : COL# 364134
Vial Number: 24



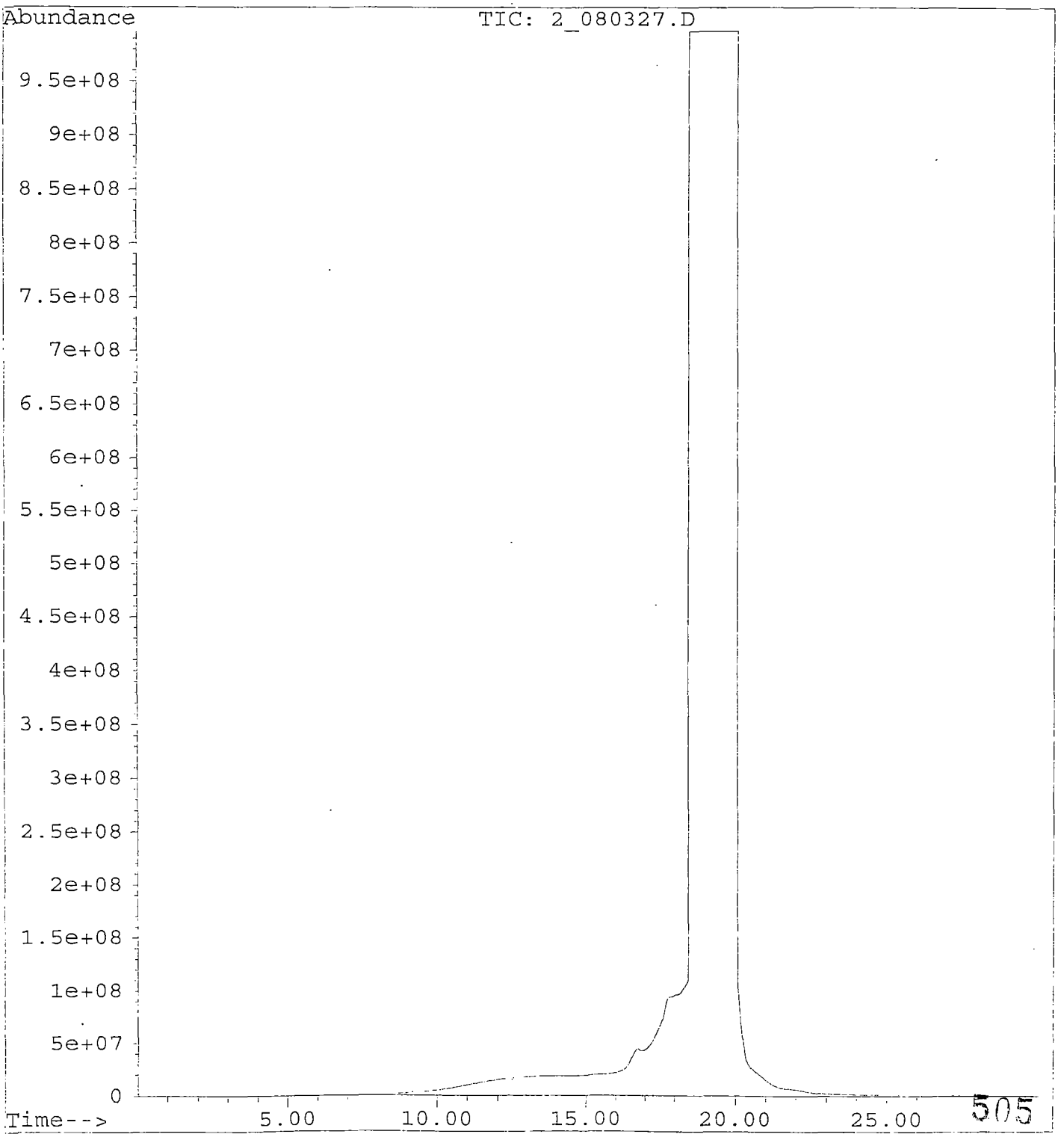
File : C:\HPCHEM\6\DATA\080301\2_080325.D
Operator : CD COL# 364134
Acquired : 04 Aug 01 03:14 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47158.19-E00R7-EPA
Misc Info : COL# 364134
Vial Number: 25



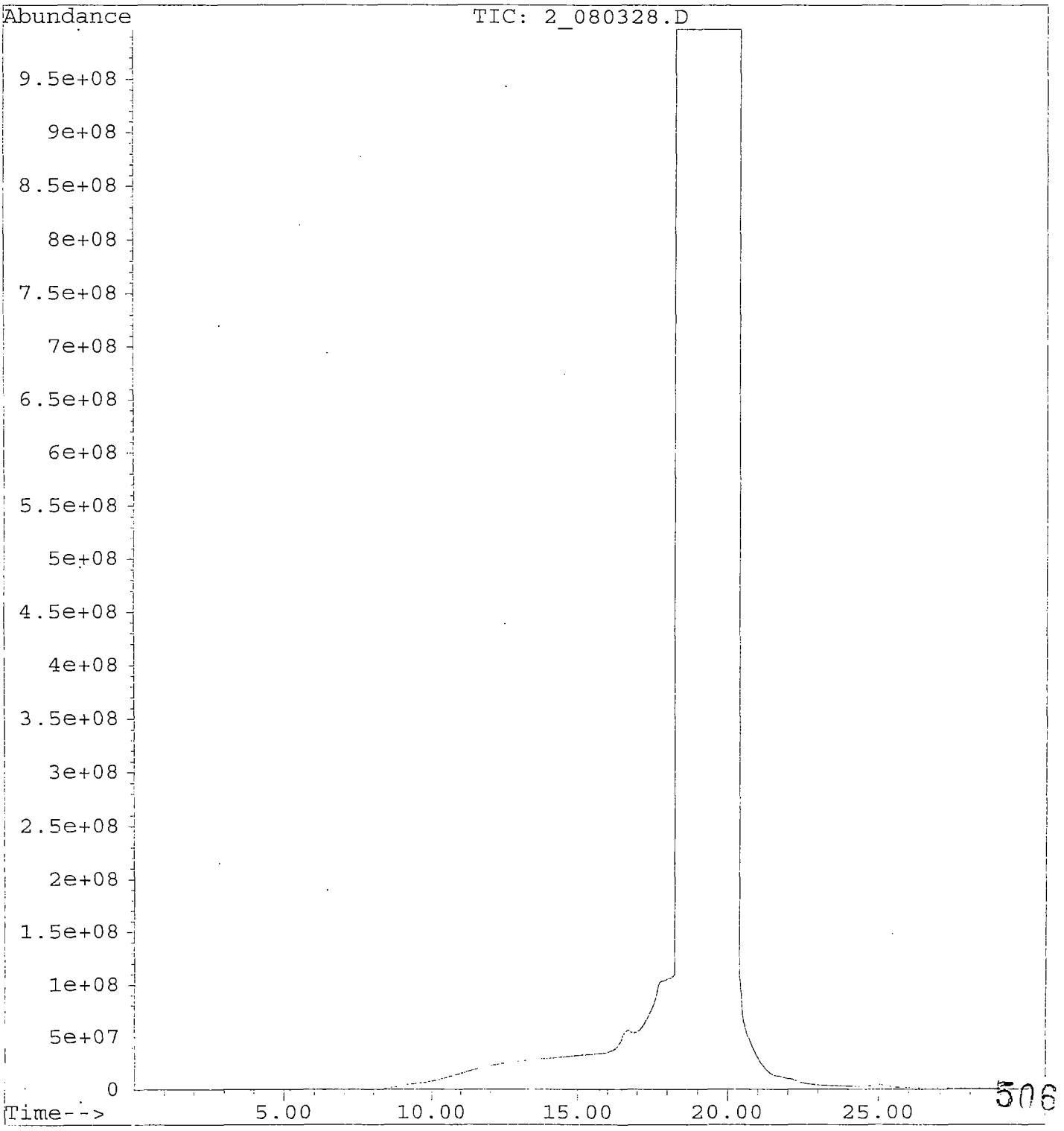
File : C:\HPCHEM\6\DATA\080301\2_080326.D
Operator : CD COL# 364134
Acquired : 04 Aug 01 03:46 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47158.20-E00R8-EPA
Misc Info : COL# 364134
Vial Number: 26



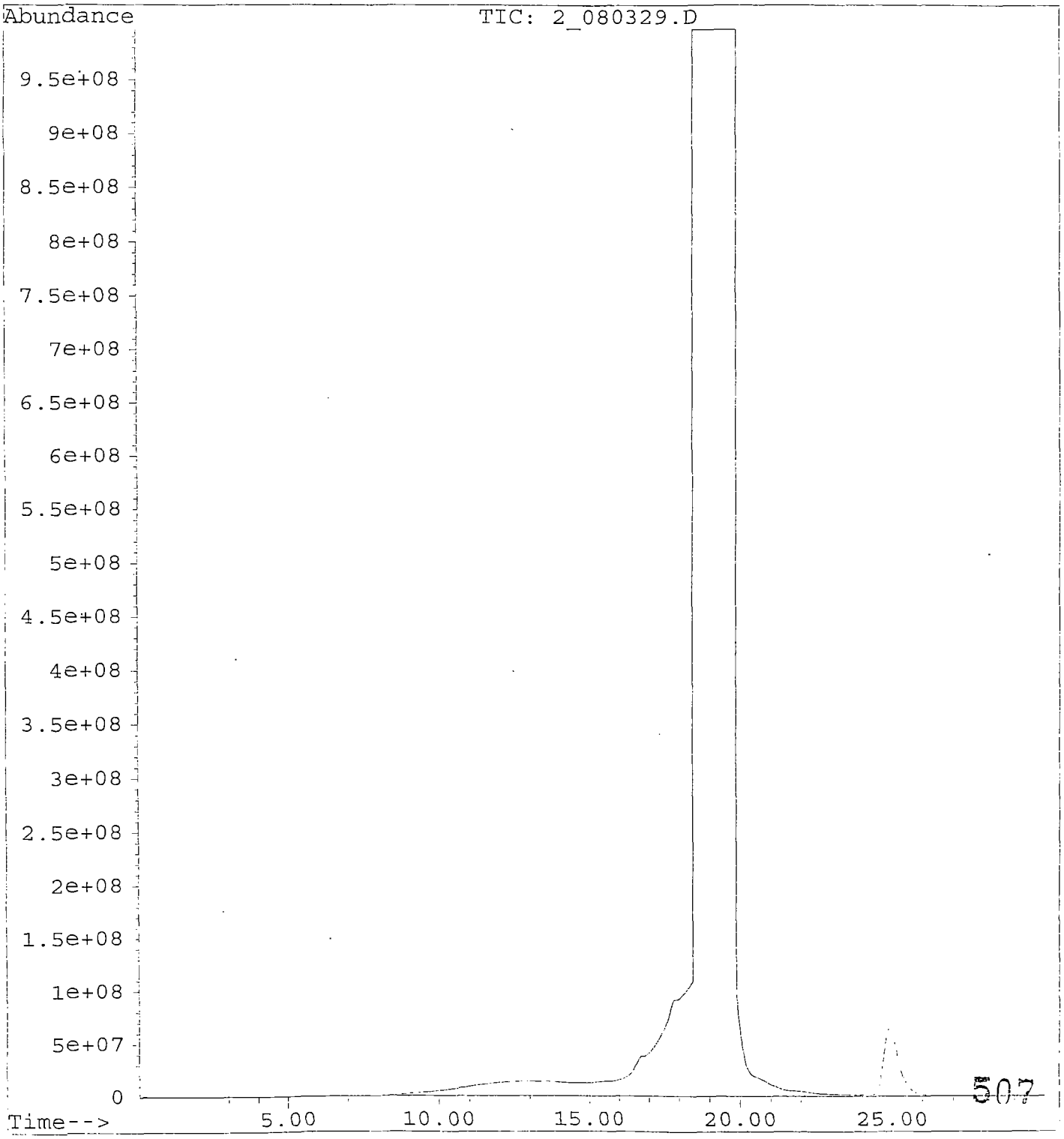
File : C:\HPCHEM\6\DATA\080301\2_080327.D
Operator : CD COL# 364134
Acquired : 04 Aug 01 04:17 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47158.21-E00R9-EPA
Misc Info : COL# 364134
Vial Number: 27



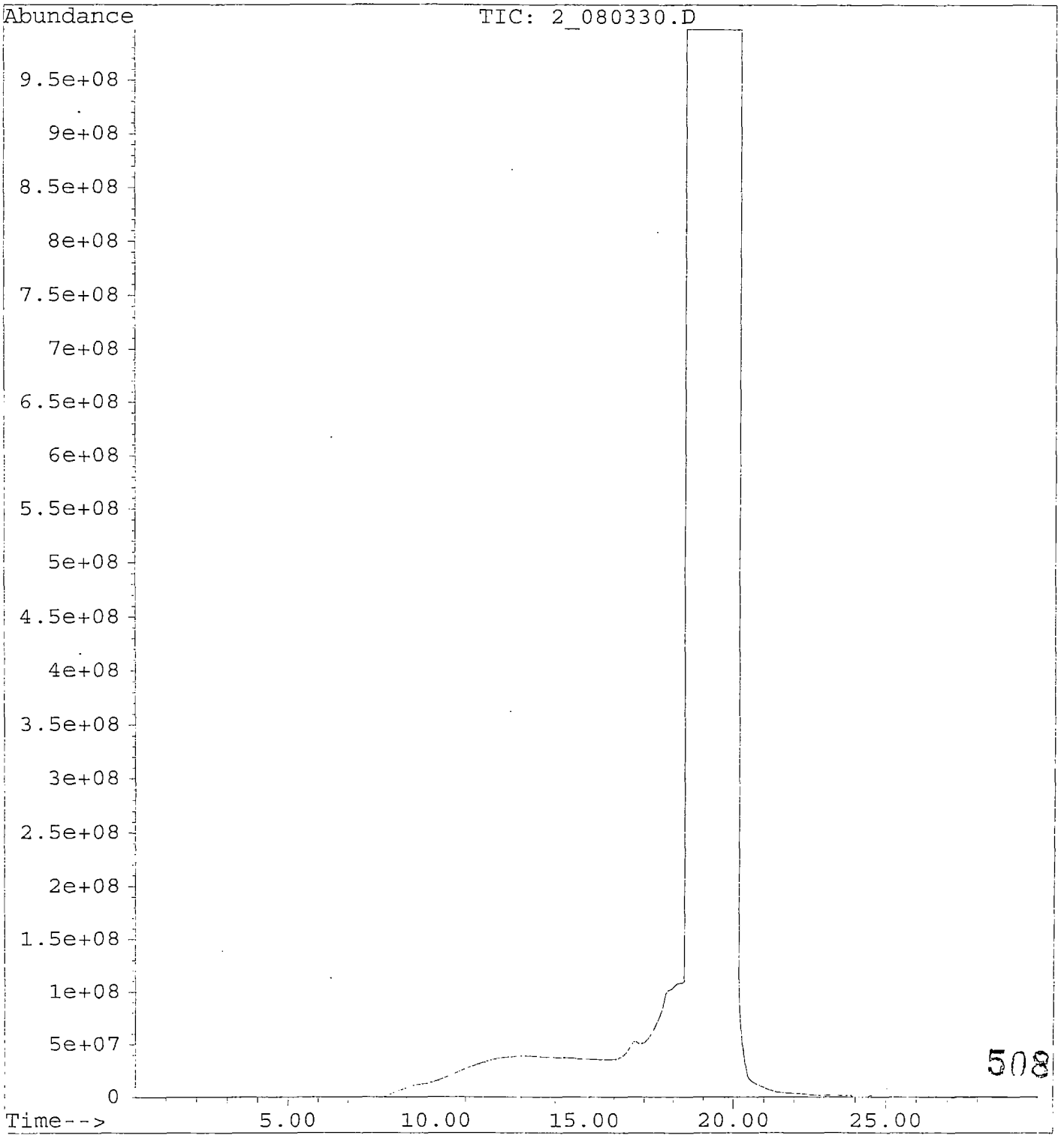
File : C:\HPCHEM\6\DATA\080301\2_080328.D
Operator : CD COL# 364134
Acquired : 04 Aug 01 04:48 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47158.06-E00Q4-EPA
Misc Info : COL# 364134
Vial Number: 28



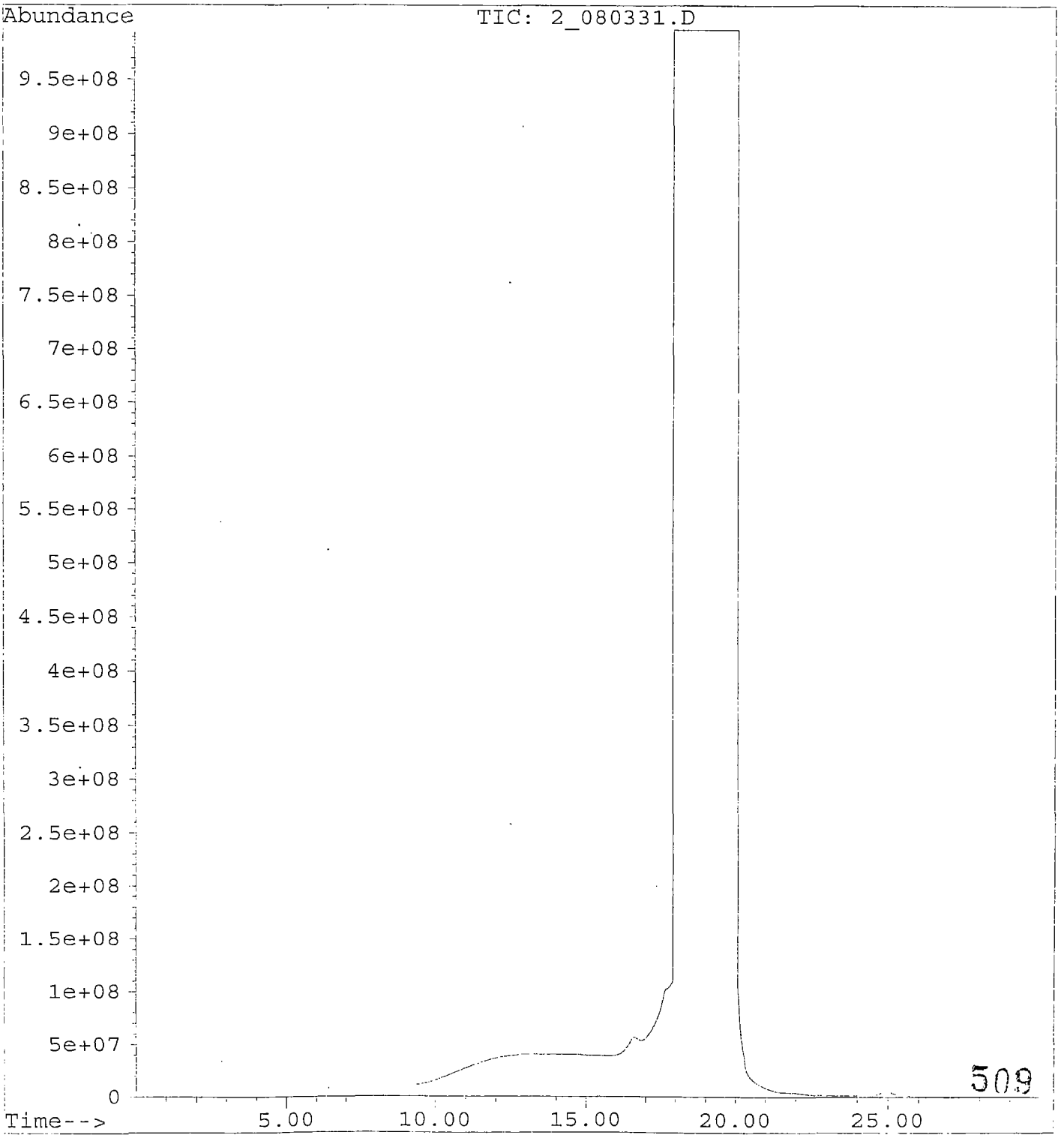
File : C:\HPCHEM\6\DATA\080301\2_080329.D
Operator : CD COL# 364134
Acquired : 04 Aug 01 05:19 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47158.08-E00Q6-EPA
Misc Info : COL# 364134
Vial Number: 29



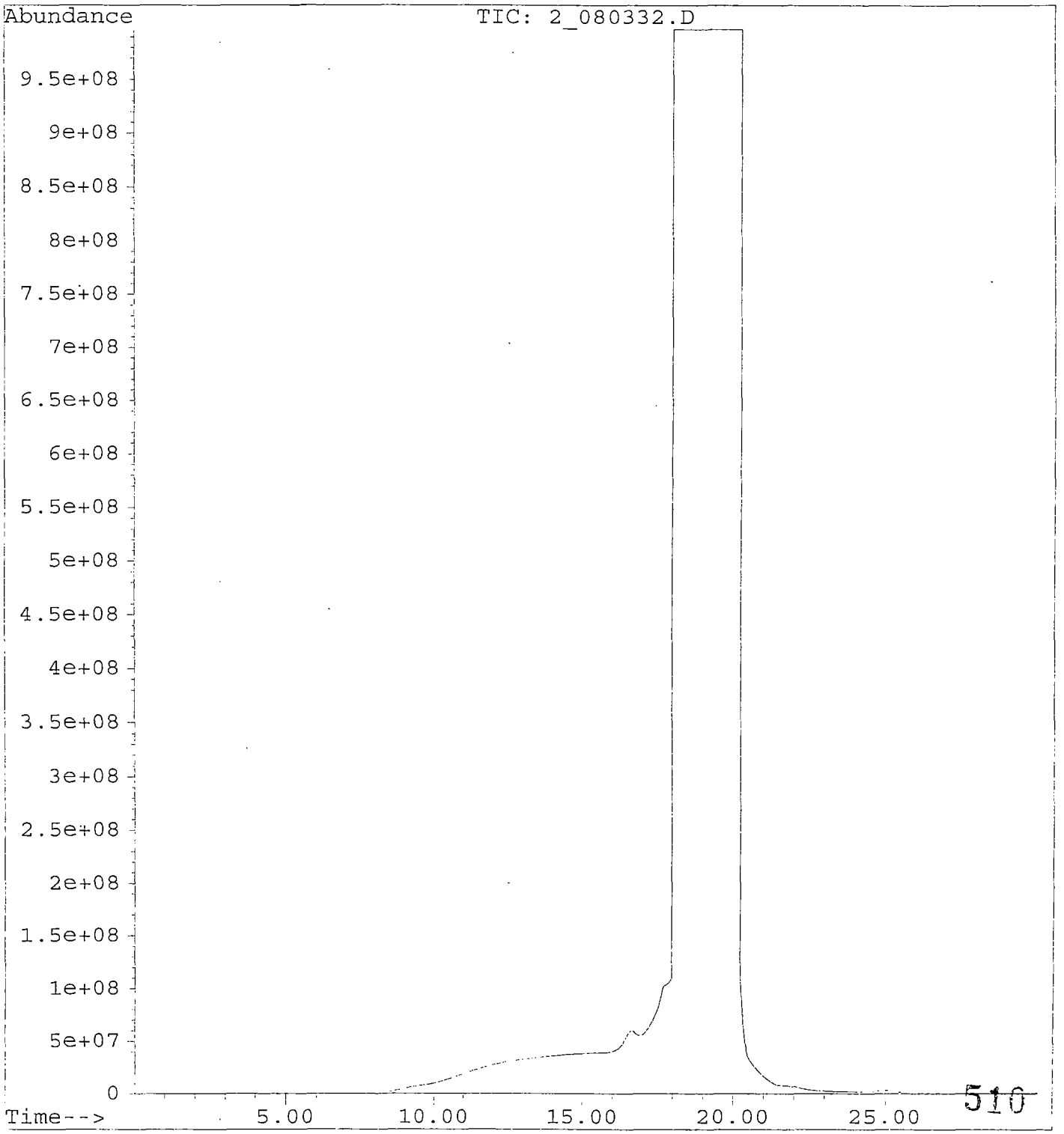
File : C:\HPCHEM\6\DATA\080301\2_080330.D
Operator : CD COL# 364134
Acquired : 04 Aug 01 05:50 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47158.10-E00Q8-EPA
Misc Info : COL# 364134
Vial Number: 30



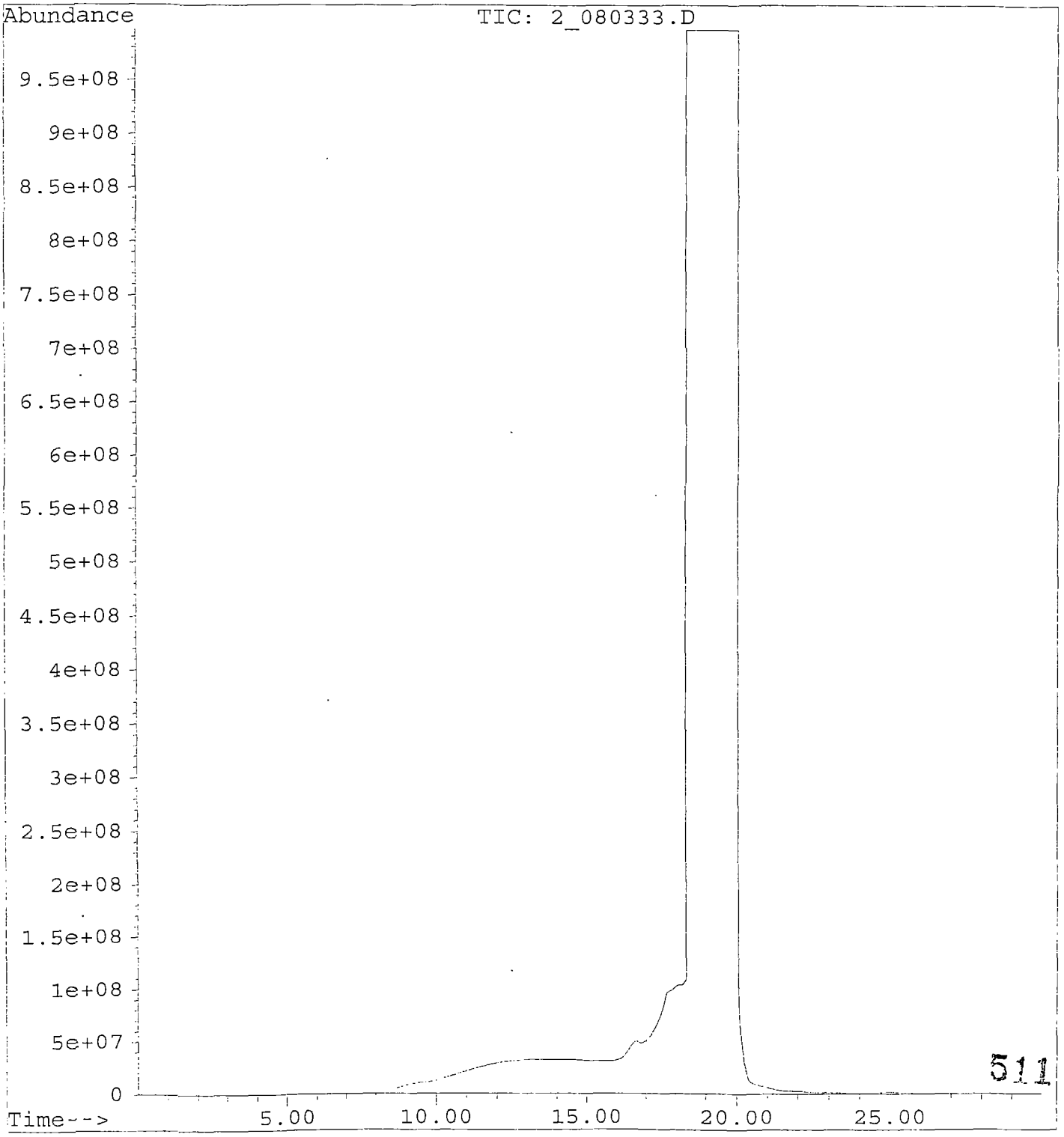
File : C:\HPCHEM\6\DATA\080301\2_080331.D
Operator : CD COL# 364134
Acquired : 04 Aug 01 06:21 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47158.11-E00Q9-EPA
Misc Info : COL# 364134
Vial Number: 31



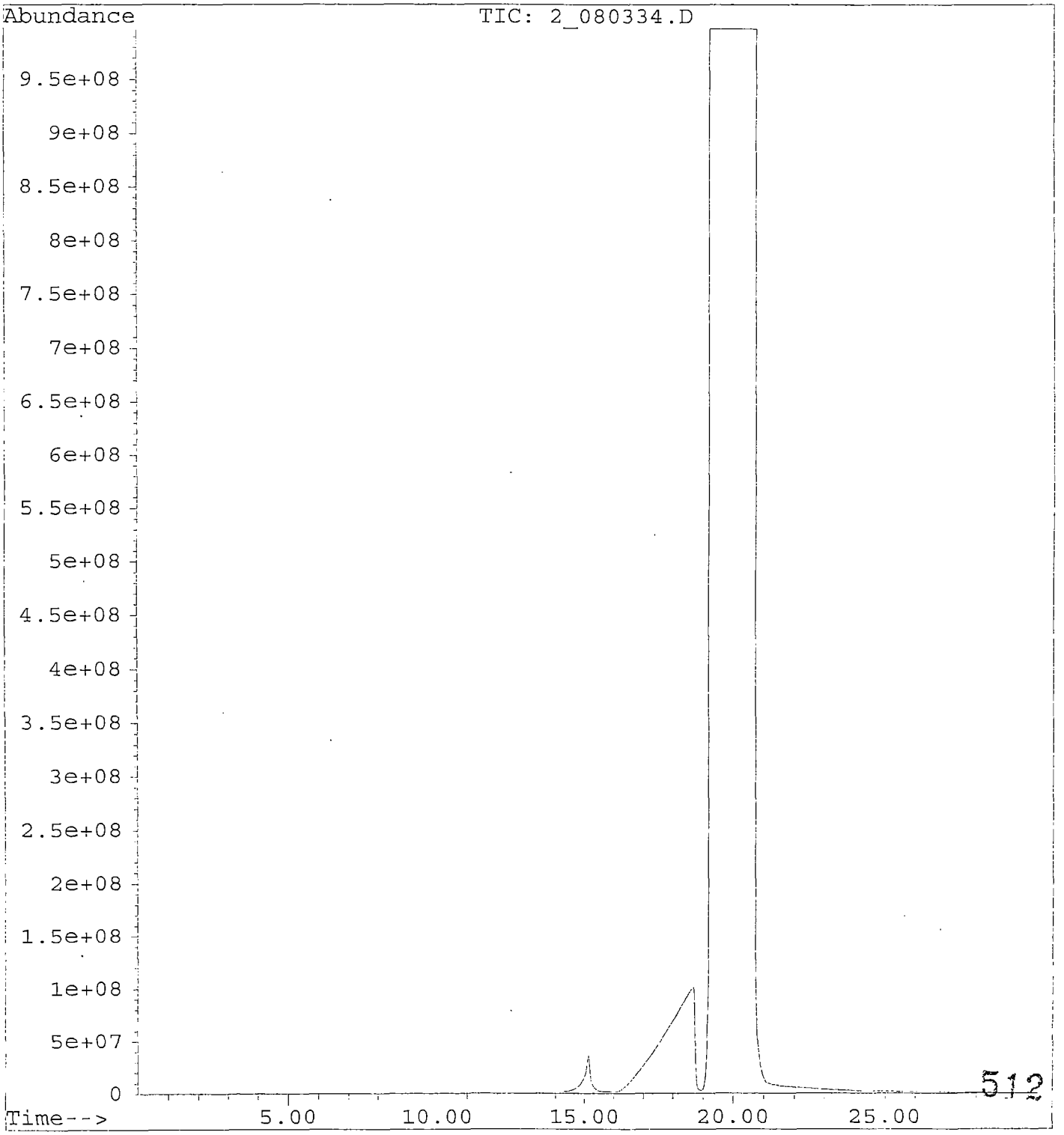
File : C:\HPCHEM\6\DATA\080301\2_080332.D
Operator : CD COL# 364134
Acquired : 04 Aug 01 06:52 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47158.12-E00R0-EPA
Misc Info : COL# 364134
Vial Number: 32



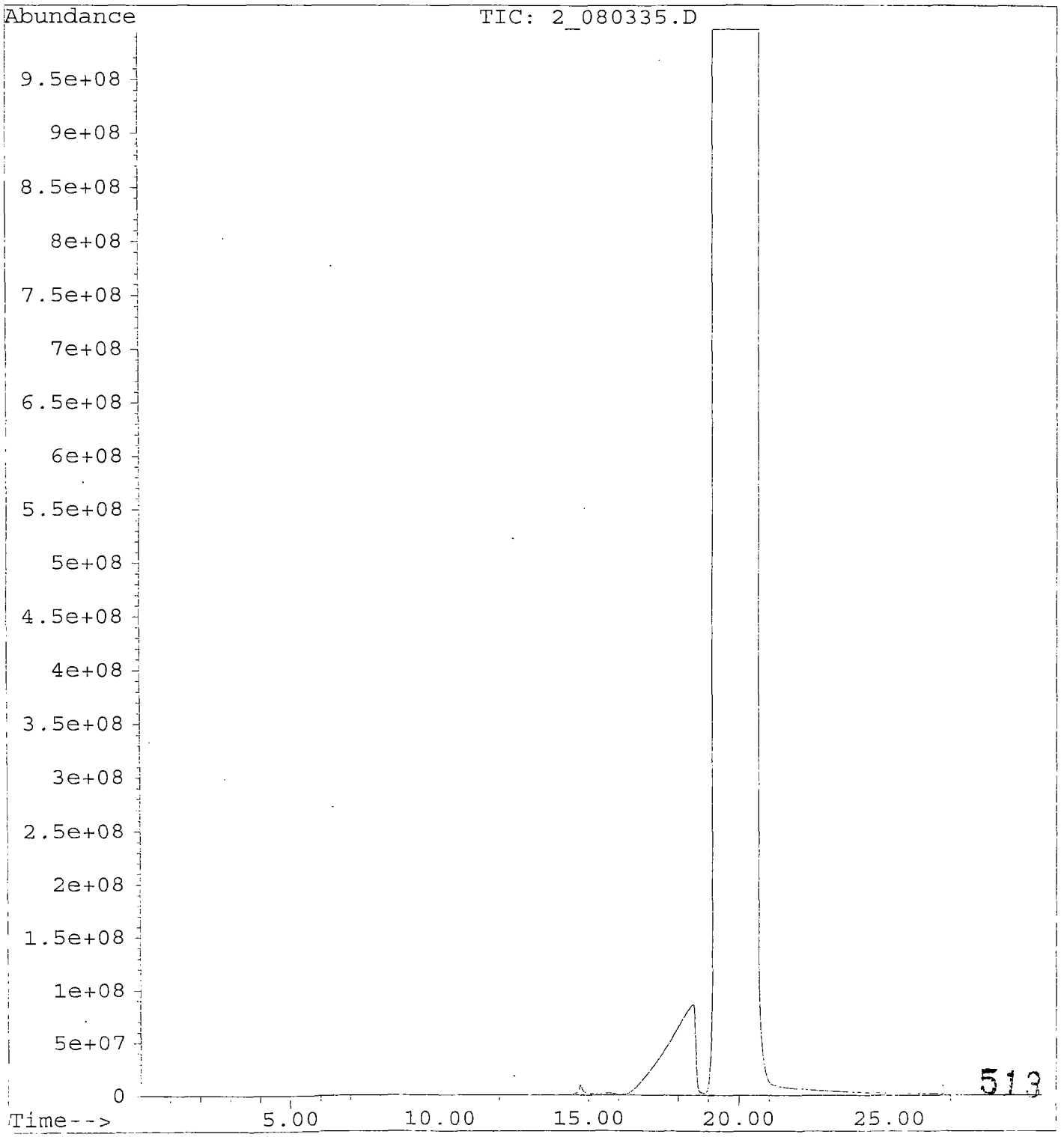
File : C:\HPCHEM\6\DATA\080301\2_080333.D
Operator : CD COL# 364134
Acquired : 04 Aug 01 07:23 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: 47158.18-E00R6-EPA
Misc Info : COL# 364134
Vial Number: 33



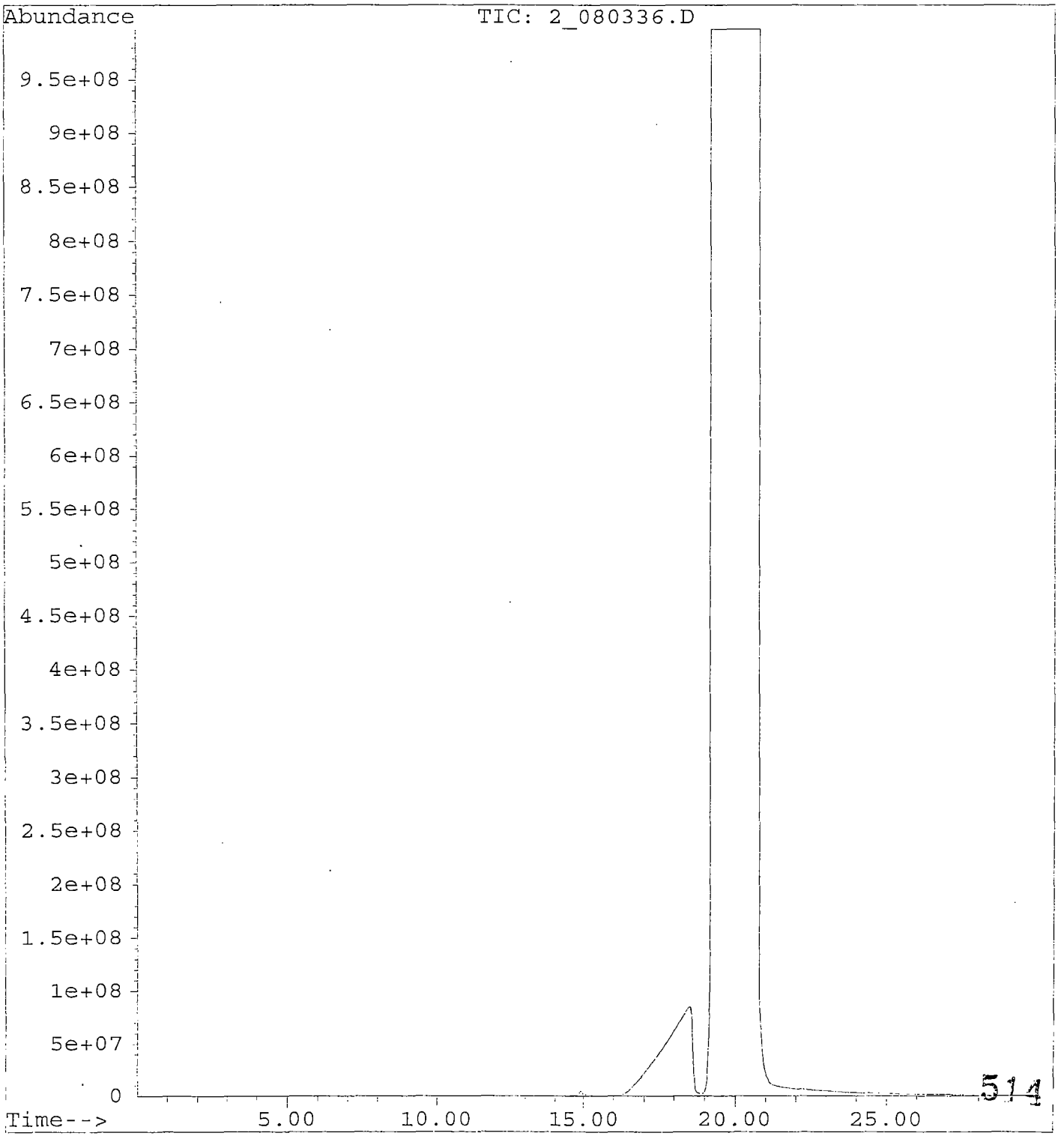
File : C:\HPCHEM\6\DATA\080301\2_080334.D
Operator : CD COL# 364134
Acquired : 04 Aug 01 07:54 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: SB
Misc Info : COL# 364134
Vial Number: 34



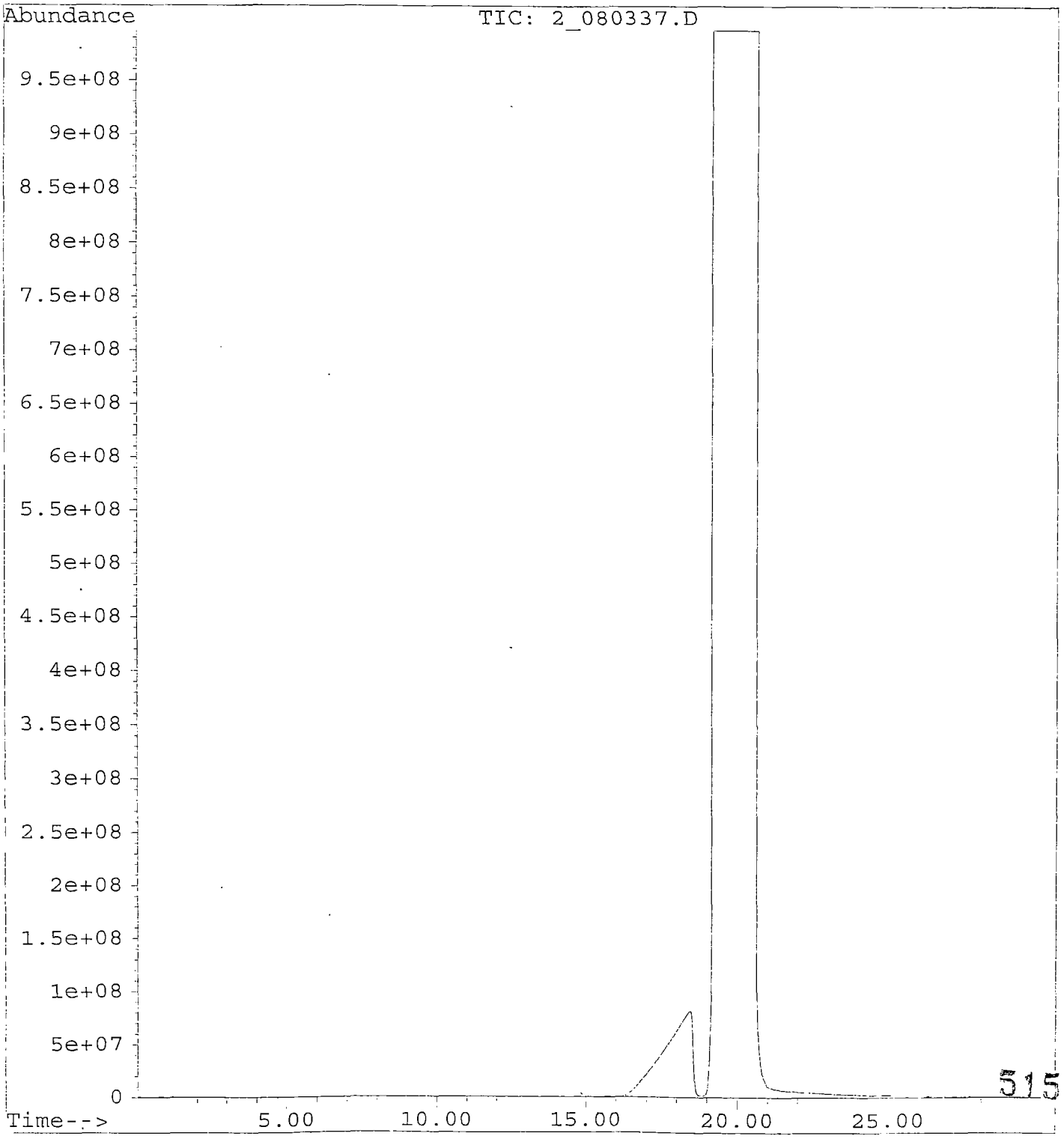
File : C:\HPCHEM\6\DATA\080301\2_080335.D
Operator : CD COL# 364134
Acquired : 04 Aug 01 08:25 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: SB
Misc Info : COL# 364134
Vial Number: 35



File : C:\HPCHEM\6\DATA\080301\2_080336.D
Operator : CD COL# 364134
Acquired : 04 Aug 01 08:57 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: SB
Misc Info : COL# 364134
Vial Number: 36

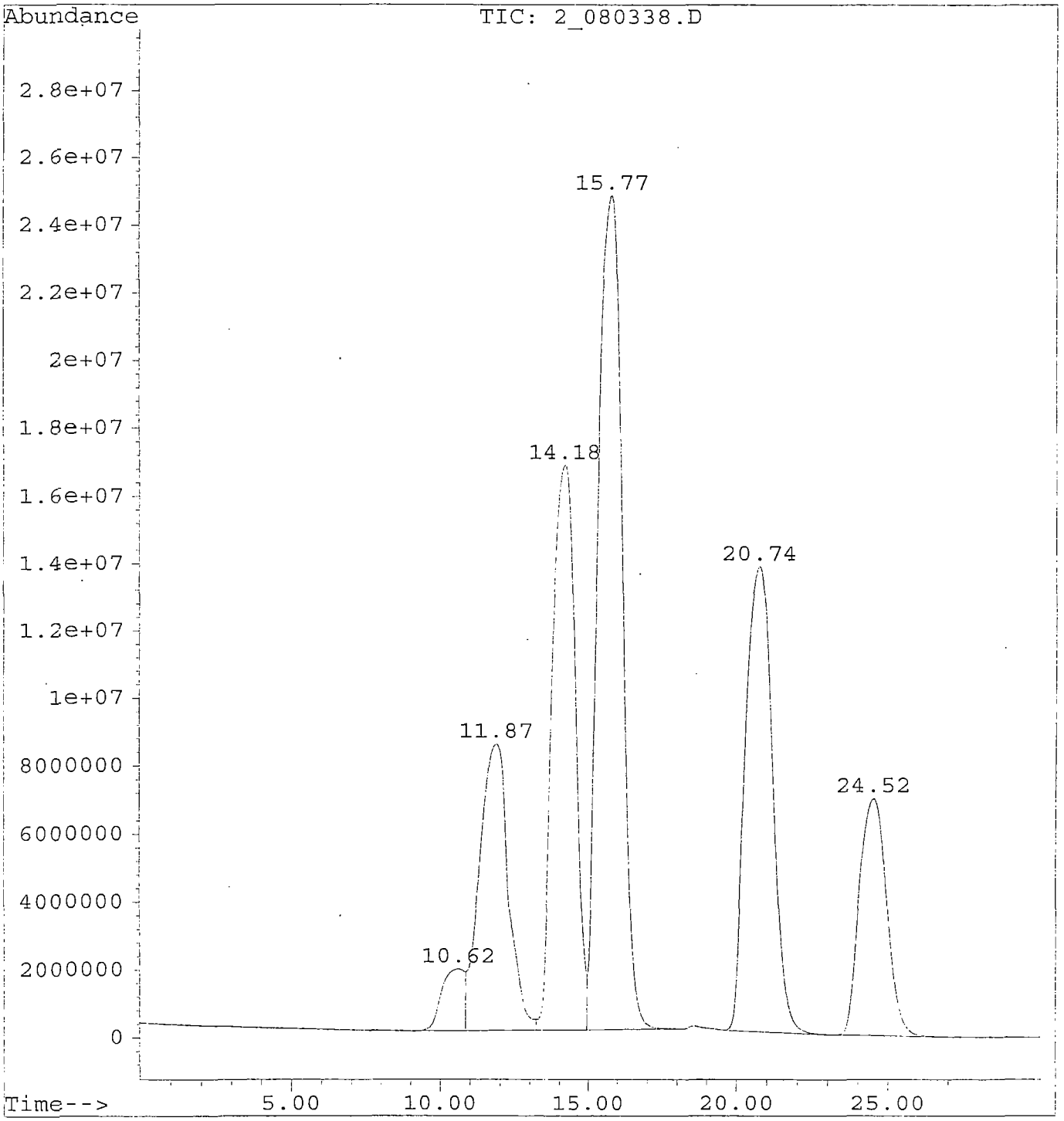


File : C:\HPCHEM\6\DATA\080301\2_080337.D
Operator : CD COL# 364134
Acquired : 04 Aug 01 09:28 using AcqMethod GPC.MTH
Instrument : GPC2
Sample Name: SB
Misc Info : COL# 364134
Vial Number: 37



Data File : C:\HPCHEM\6\DATA\080301\2_080338.D
Acq On : 04 Aug 01 09:59 AM
Sample : CAL STD (FINAL)
Misc : COL# 364134

Vial: 38
Operator: CD COL#
Inst : GPC2
Multiplr: 1.00



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Chromatographic Resolution Report

Data File : C:\HPCHEM\6\DATA\080301\2_080338.D
Acq On : 04 Aug 01 09:59
Sample : CAL STD (FINAL)
Misc : COL# 364134

Vial: 38
Operator: CD COL# 36
Inst : GPC2
Multiplr: 1.00

Method : C:\HPCHEM\6\METHODS\GPC.M
Title :

RT#1	RT#2	Resolution
10.621	11.875	4.85
11.875	14.182	96.12
14.182	15.765	90.12
15.765	20.743	100.00
20.743	24.523	99.70

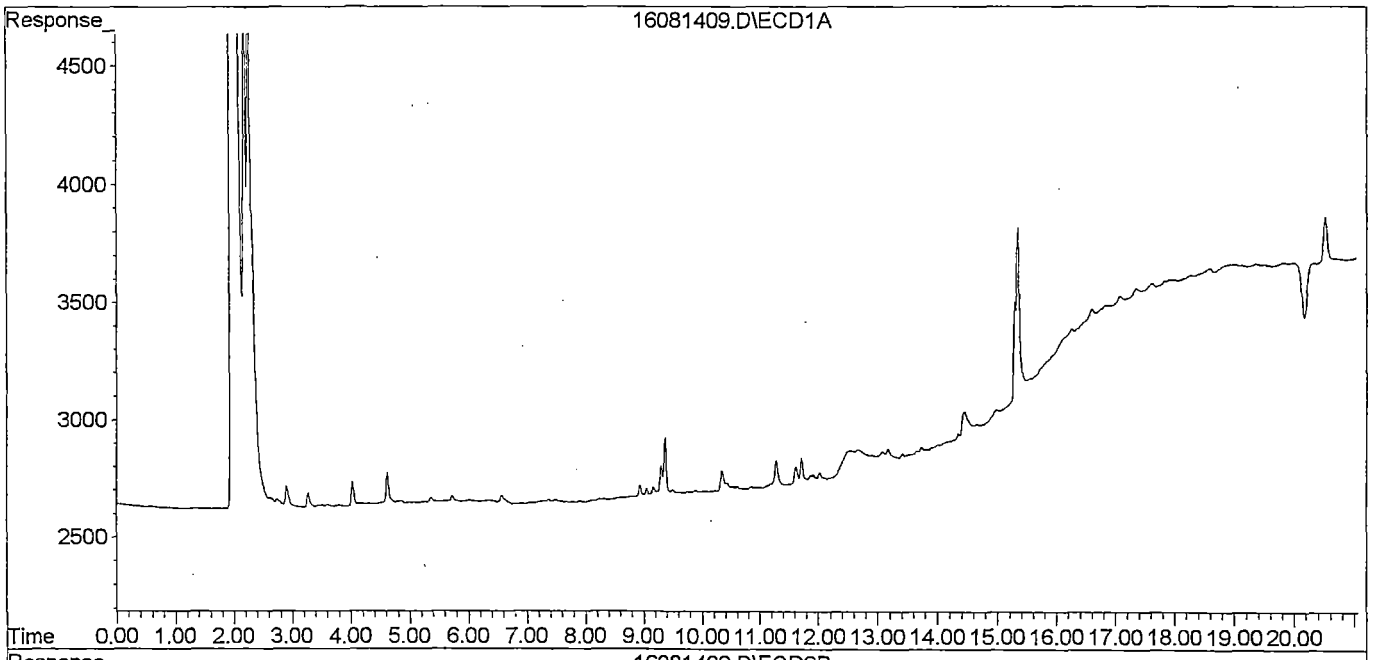
Chromatographic Report

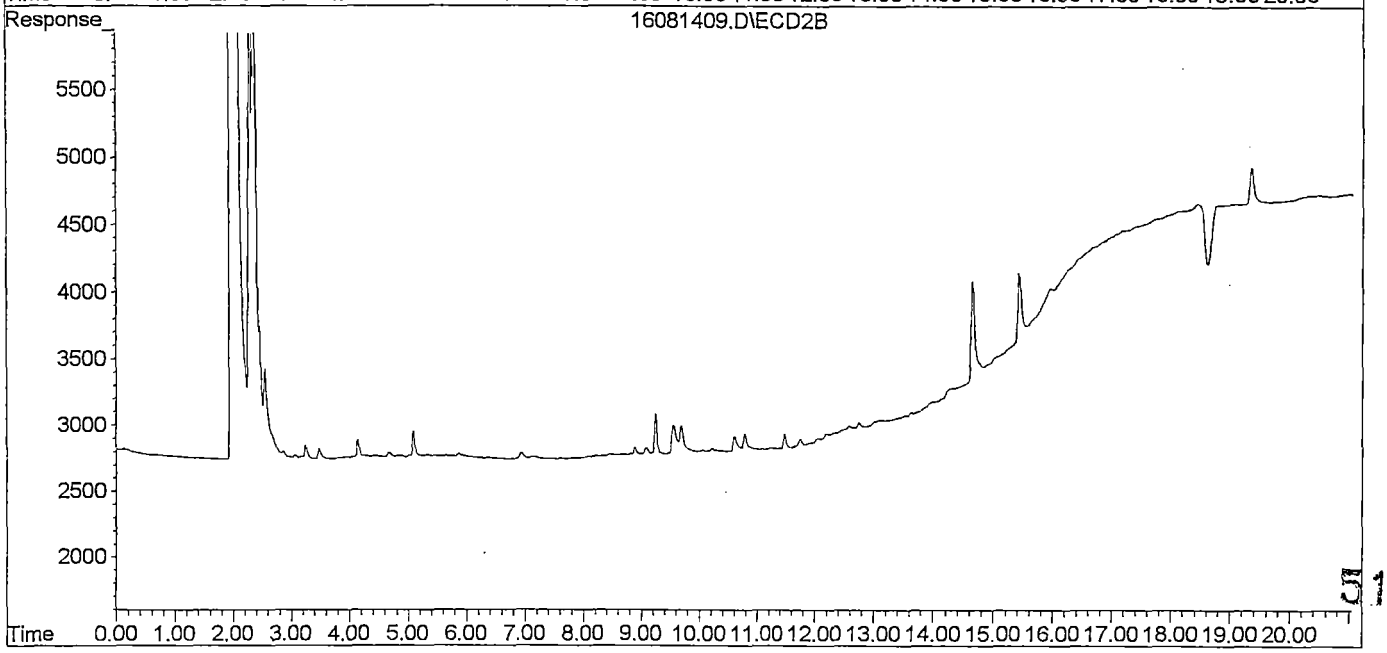
Signal #1 : F:\HPCHEM\HP\16\DATA\08_14_01\16081409.D\ECD1A.CH Vial: 9
Signal #2 : F:\HPCHEM\HP\16\DATA\08_14_01\16081409.D\ECD2B.CH
Acq On : 14 Aug 2001 16:38 Operator: TLM
Sample : SB080301C *SB080301C * Inst : HP_16
Misc : **1000ML/10ML* Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 16 14:53 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_14_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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

ok 8-31-01





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_14_01\16081409.D\ECD1A.CH Vial: 9
Signal #2 : F:\HPCHEM\HP\16\DATA\08_14_01\16081409.D\ECD2B.CH
Acq On : 14 Aug 2001 16:38 Operator: TLM
Sample : SB080301C *SB080301C * Inst : HP_16
Misc : **1000ML/10ML* Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 16 14:53 2001 Quant Results File: XPCBH10.RES

Method : F:\HPCHEM\HP\16\DATA\08_14_01\XPCBH10.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_10_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L

System Monitoring Compounds:

Target Compounds:

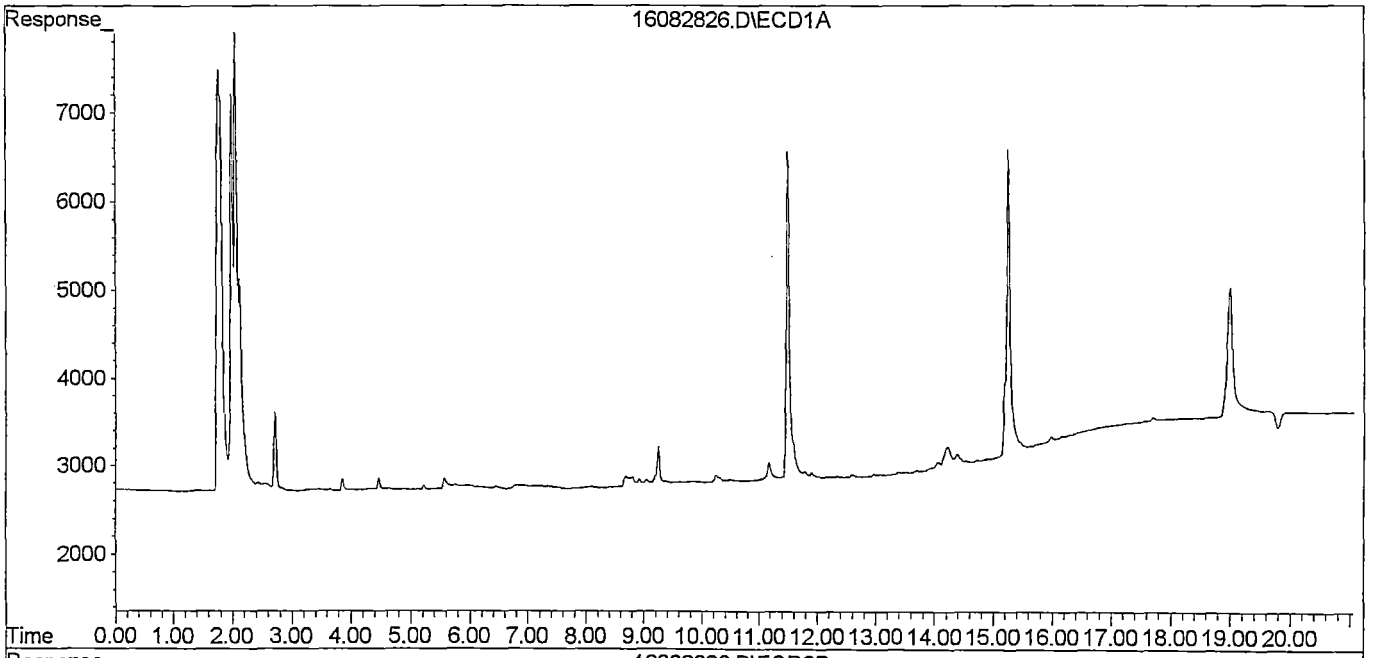
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

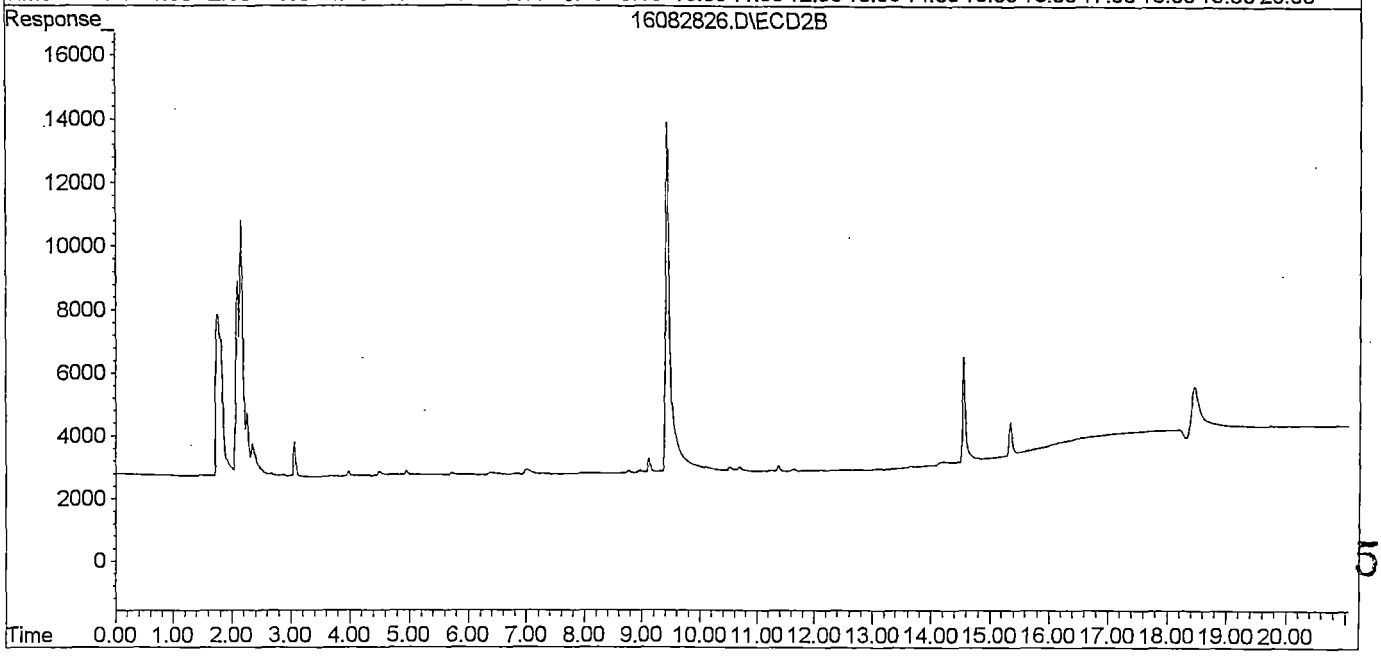
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082826.D\ECD1A.CH Vial: 26
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082826.D\ECD2B.CH
Acq On : 28 Aug 2001 22:50 Operator: TLM
Sample : SB082401A *SB082401A * Inst : HP_16
Misc : **1000ML/10ML* Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 18:10 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Multiple Level Calibration

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\16\DATA\08_28_01\16082826.D\ECD1A.CH Vial: 26
Signal #2 : F:\HPCHEM\HP\16\DATA\08_28_01\16082826.D\ECD2B.CH
Acq On : 28 Aug 2001 22:50 Operator: TLM
Sample : SB082401A *SB082401A * Inst : HP_16
Misc : **1000ML/10ML* Dilution: 1.00
IntFile Signal #1: events1.e IntFile Signal #2: events2.e
Quant Time: Aug 29 18:10 2001 Quant Results File: XPCBH28.RES

Method : F:\HPCHEM\HP\16\DATA\08_28_01\XPCBH28.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\16\DATA\08_28_01\
Last Update : Mon Aug 06 16:43:52 2001
Response via : Initial Calibration

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

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L

System Monitoring Compounds:

Target Compounds:

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

Pages 522 - 527
not needed
9-9/1/01

GC Laboratory Run Log - PESTICIDE/PCB

SWOK AATS SWLO-OP-301 OP-301-RUNLOG-11 SWL Rev.#: 2.1

CASE NO.: EPA INJ. VOL: 0.5 uL INSTRUMENT: HP_16
SDG NO. : 47113 METHOD FILE(S): XPCBH10.M (OLM4.2)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
08/10/01 8:57	HEXANE	HEXANE	16081001	N.C.
08/10/01 9:22	HEXANE	HEXANE	16081002	
08/10/01 9:47	HEXANE	HEXANE	16081003	
08/10/01 11:20	PIBLKCL	5-131-7	16081004	
08/10/01 11:44	AR1660L3CU	5-128-7	16081005	
08/10/01 12:09	AR1660L3CV	5-128-7	16081006	
08/10/01 14:55	COND	COND	16081007	
08/10/01 15:19	PIBLKCK	5-131-7	16081008	
08/10/01 15:44	AR1660L3CW	5-128-7	16081009	
08/10/01 17:43	HEXANE	HEXANE	16081010	
08/10/01 18:07	HEXANE	HEXANE	16081011	
08/10/01 18:32	HEXANE	HEXANE	16081012	
08/10/01 18:56	COND	COND	16081013	
08/10/01 19:21	RESCCC	5-441-6	16081017	OK
08/10/01 19:46	AR1221L3CC	5-420-6	16081018	
08/10/01 20:10	AR1232L3CC	5-422-6	16081019	
08/10/01 20:35	AR1242L1CC	5-11-7	16081020	
08/10/01 20:59	AR1242L2CC	5-10-7	16081021	
08/10/01 21:24	AR1242L3CC	5-9-7	16081022	
08/10/01 21:48	AR1242L4CC	5-8-7	16081023	
08/10/01 22:13	AR1242L5CC	5-7-7	16081024	

Unless noted, Client Ids are the same for the quant. & confirmation columns

Alan Sweet 8/13/01
Verification Signature/Date

8-13-01
Analyst Signature/Date

Page No.: ~~44~~ 48
JM 8-13-01

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-301 OP-301-RUNLOG-11 SWL Rev.#: 2.1

CASE NO.: EPA INJ. VOL: 0.5 uL INSTRUMENT: HP_16
SDG NO. : 47113 METHOD FILE(S): XPCBH10.M (OLM4.2)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
08/10/01 22:37	AR1248L3CC	5-424-6	16081025	OK
08/10/01 23:02	AR1254L1CC	5-6-7	16081026	
08/10/01 23:27	AR1254L2CC	5-5-7	16081027	
08/10/01 23:51	AR1254L3CC	5-4-7	16081028	
08/11/01 00:16	AR1254L4CC	5-3-7	16081029	
08/11/01 00:40	AR1254L5CC	5-2-7	16081030	
08/11/01 1:05	AR1660L1CC	5-130-7	16081031	
08/11/01 1:30	AR1660L2CC	5-129-7	16081032	
08/11/01 1:54	AR1660L3CY	5-128-7	16081033	
08/11/01 2:19	AR1660L4CC	5-127-7	16081034	
08/11/01 2:43	AR1660L5CC	5-126-7	16081035	
08/11/01 3:08	PIBLKCL	5-131-7	16081036	
08/11/01 3:32	AR1660L3ICVCC	5-442-6	16081037	
08/11/01 3:57	AR1221L3ICVCC	5-436-6	16081038	
08/11/01 4:21	AR1232L3ICVCC	5-437-6	16081039	
08/11/01 4:46	AR1242L3ICVCC	5-438-6	16081040	
08/11/01 5:11	AR1248L3ICVCC	5-439-6	16081041	
08/11/01 5:35	AR1254L3ICVCC	5-440-6	16081042	
08/11/01 6:00	E00F5	47113.16	16081043	OK
08/11/01 6:24	E00F5DL	47113.16DL	16081044	OK
08/11/01 6:49	HEXANE	HEXANE	16081045	—

Unless noted, Client Ids are the same for the quant. & confirmation columns

Allen Swart 8/13/01
Verification Signature/Date

8-13-01
Analyst Signature/Date

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SM 8-13-01

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-301 OP-301-RUNLOG-11 SWL Rev.#: 2.1

CASE NO.: EPA INJ. VOL: 0.5 uL INSTRUMENT: HP_16
SDG NO. : 47158 METHOD FILE(S): XPCBH10.M (OLM4.2)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
08/14/01 8:42	HEXANE	HEXANE	16081401	
08/14/01 9:07	HEXANE	HEXANE	16081402	
08/14/01 9:32	COND	COND	16081403	
08/14/01 10:37	PIBLKCQ	5-131-7	16081404	OK
08/14/01 11:01	AR1660L3CH	5-128-7	16081405	OK
08/14/01 11:26	AR1660L3CI	5-128-7	16081406	NV
08/14/01 15:49	PBLKSB	BL0802SB	16081407	OK
08/14/01 16:14	PBLKSB	BB0802SB	16081408	NV
08/14/01 16:38	SB080301C	SB080301C	16081409	OK
08/14/01 17:03	SB080301D	SB080301D	16081410	OK
08/14/01 17:27	~~LC0802SB~~ ELCS 1	LC0802SB	16081411	OK } LCS/LCSD OK
08/14/01 17:52	LD0802SB ELCS 2	LD0802SB	16081412	OK }
08/14/01 18:17	E00Q1	47158.01	16081413	RR 10X
08/14/01 18:41	E00Q2	47158.02	16081414	RR 5X
08/14/01 19:06	E00Q2MS	47158.03MS	16081415	OK
08/14/01 19:30	E00Q2MSD	47158.04MSD	16081416	OK
08/14/01 19:55	E00Q3	47158.05	16081417	OK
08/14/01 20:20	HEXANE	HEXANE	16081418	—
08/14/01 20:44	HEXANE	HEXANE	16081419	—
08/14/01 21:09	HEXANE	HEXANE	16081420	—
08/14/01 21:33	PIBLKCR	5-131-7	16081421	OK

Unless noted, Client Ids are the same for the quant. & confirmation columns

8/16/01 8-16-01

Verification Signature/Date Analyst Signature/Date

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GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-301 OP-301-RUNLOG-11 SWL Rev.#: 2.1

CASE NO.: EPA INJ. VOL: 0.5 uL INSTRUMENT: HP_16
SDG NO. : 47158 METHOD FILE(S): XPCBH10.M (OLM4.2)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
08/14/01 21:58	AR1660L3CJ	5-128-7	16081422	OK
08/14/01 22:23	AR1660L3CK	5-128-7	16081423	N.U.
08/14/01 22:47	E00Q4	47158.06	16081424	RR Next CCAL failed
08/14/01 23:12	E00Q5	47158.07	16081425	
08/14/01 23:36	E00Q6	47158.08	16081426	
08/15/01 00:01	E00Q7	47158.09	16081427	
08/15/01 00:26	E00Q8	47158.10	16081428	
08/15/01 00:50	E00Q9	47158.11	16081429	
08/15/01 1:15	E00R0	47158.12	16081430	
08/15/01 1:39	E00R1	47158.13	16081431	
08/15/01 2:04	E00R2	47158.14	16081432	
08/15/01 2:28	E00R3	47158.15	16081433	
08/15/01 2:53	E00R4	47158.16	16081434	
08/15/01 3:17	E00R5	47158.17	16081435	
08/15/01 3:42	E00R6	47158.18	16081436	
08/15/01 4:07	E00R7	47158.19	16081437	
08/15/01 4:31	E00R8	47158.20	16081438	
08/15/01 4:56	E00R9	47158.21	16081439	
08/15/01 5:20	E00S0	47158.22	16081440	
08/15/01 5:45	HEXANE	HEXANE	16081441	—
08/15/01 6:10	HEXANE	HEXANE	16081442	—

Unless noted, Client Ids are the same for the quant. & confirmation columns

8/16/01 8-16-01

Verification Signature/Date Analyst Signature/Date

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GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-301 OP-301-RUNLOG-11 SWL Rev.#: 2.1

CASE NO.: EPA INJ. VOL: 0.5 uL INSTRUMENT: HP_16
SDG NO. : 47158 METHOD FILE(S): XPCBH20.M (OLM4.2)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
08/20/01 9:48	HEXANE	HEXANE	16082001	NU
08/20/01 10:13	HEXANE	HEXANE	16082002	
08/20/01 10:38	COND	COND	16082003	
08/20/01 11:03	HEXANE	HEXANE	16082004	
08/20/01 11:38	PIBLKCX	5-131-7	16082005	
08/20/01 12:02	AR1660L3CT	5-128-7	16082006	
08/20/01 12:27	AR1660L3CU	5-128-7	16082007	
08/20/01 17:09	COND	COND	16082008	
08/20/01 17:33	HEXANE	HEXANE	16082009	
08/20/01 17:58	RESCCE	5-171-7	16082010	OK
08/20/01 18:23	AR1221L3CE	5-420-6	16082011	
08/20/01 18:48	AR1232L3CE	5-422-6	16082012	
08/20/01 19:12	AR1242L1CE	5-11-7	16082013	
08/20/01 19:37	AR1242L2CE	5-10-7	16082014	
08/20/01 20:02	AR1242L3CE	5-9-7	16082015	
08/20/01 20:26	AR1242L4CE	5-8-7	16082016	
08/20/01 20:51	AR1242L5CE	5-7-7	16082017	
08/20/01 21:16	AR1248L3CE	5-424-6	16082018	
08/20/01 21:40	AR1254L1CE	5-6-7	16082019	
08/20/01 22:05	AR1254L2CE	5-5-7	16082020	
08/20/01 22:30	AR1254L3CE	5-4-7	16082021	

Unless noted, Client Ids are the same for the quant. & confirmation columns

Alan Swart 8/23/01 8-22-01
Verification Signature/Date Analyst Signature/Date

532

GC Laboratory Run Log - PESTICIDE/PCB

SWOR/AATS SWLO-OP-301 OP-301-RUNLOG-11 SWL Rev.#: 2.1

CASE NO.: EPA INJ. VOL: 0.5 uL INSTRUMENT: HP_16
SDG NO. : 47158 METHOD FILE(S): XPCBH20.M (OLM4.2)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
08/20/01 22:55	AR1254L4CE	5-3-7	16082022	OK
08/20/01 23:19	AR1254L5CE	5-2-7	16082023	
08/20/01 23:44	AR1660L1CE	5-130-7	16082024	
08/21/01 00:09	AR1660L2CE	5-129-7	16082025	
08/21/01 00:33	AR1660L3CS	5-128-7	16082026	ICAL OK
08/21/01 00:58	AR1660L4CE	5-172-7	16082027	
08/21/01 1:23	AR1660L5CE	5-126-7	16082028	
08/21/01 1:47	PIBLKCW	5-131-7	16082029	
08/21/01 2:12	AR1660L3ICVCE	5-442-6	16082030	
08/21/01 2:37	AR1221L3ICVCE	5-436-6	16082031	
08/21/01 3:02	AR1232L3ICVCE	5-437-6	16082032	
08/21/01 3:26	AR1242L3ICVCE	5-438-6	16082033	
08/21/01 3:51	AR1248L3ICVCE	5-439-6	16082034	
08/21/01 4:16	AR1254L3ICVCE	5-440-6	16082035	
08/21/01 4:40	E00Q4	47158.06	16082036	OK
08/21/01 5:05	E00Q5	47158.07	16082037	OK
08/21/01 5:30	E00Q6	47158.08	16082038	- sulfur clean again
08/21/01 5:54	E00Q7	47158.09	16082039	OK
08/21/01 6:19	E00Q8	47158.10	16082040	RR ← 10X
08/21/01 6:44	E00Q9	47158.11	16082041	RR at 10X Re-extract high DCB Recovery
08/21/01 7:09	E00R0	47158.12	16082042	OK

OK DCB was high twice

Unless noted, Client Ids are the same for the quant. & confirmation columns

Verification Signature/Date 8/23/01

Analyst Signature/Date 8-22-01

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GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-301 OP-301-RUNLOG-11 SWL Rev.#: 2.1

CASE NO.: EPA INJ. VOL: 0.5 uL INSTRUMENT: HP_16
SDG NO. : 47158 METHOD FILE(S): XPCBH20.M (OLM4.2)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
08/21/01 7:33	E00R1	47158.13	16082043	OK
08/21/01 7:58	E00R2	47158.14	16082044	OK
08/21/01 8:23	E00R3	47158.15	16082045	OK
08/21/01 8:47	E00R4	47158.16	16082046	OK
08/21/01 9:12	E00R5	47158.17	16082047	OK
08/21/01 9:37	E00R6	47158.18	16082048	RRat 10x
08/21/01 10:01	E00R7	47158.19	16082049	OK
08/21/01 10:26	E00R8	47158.20	16082050	OK
08/21/01 10:51	E00R9	47158.21	16082051	OK
08/21/01 11:15	E00S0	47158.22	16082052	OK
08/21/01 11:40	HEXANE	HEXANE	16082053	—
08/21/01 12:05	HEXANE	HEXANE	16082054	—
08/21/01 12:29	HEXANE	HEXANE	16082055	—
08/21/01 12:54	PIBLKCX	5-131-7	16082056	OK
08/21/01 13:19	AR1660L3CT	5-128-7	16082057	OK
08/21/01 13:43	AR1660L3CU	5-128-7	16082058	NJ

Unless noted, Client Ids are the same for the quant. & confirmation columns

Verification Signature/Date 8/23/01

Analyst Signature/Date 8-22-01

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-301 OP-301-RUNLOG-11 SWL Rev.#: 2.1

CASE NO.: EPA INJ. VOL: 0.5 uL INSTRUMENT: HP_16
SDG NO. : 47158, 47162, 47166, 47179 METHOD FILE(S): XPCBH28.M (OLM4.2)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
08/28/01 12:34	1242TEST		16082801	
08/28/01 12:59	COND		16082802	
08/28/01 13:24	HEXANE		16082803	
08/28/01 13:49	RESCCF	5-171-7	16082804	OK
08/28/01 14:13	AR1221L3CF	5-420-6	16082805	
08/28/01 14:38	AR1232L3CF	5-422-6	16082806	
08/28/01 15:03	AR1242L1CF	5-11-7	16082807	
08/28/01 15:28	AR1242L2CF	5-10-7	16082808	
08/28/01 15:52	AR1242L3CF	5-9-7	16082809	
08/28/01 16:17	AR1242L4CF	5-8-7	16082810	
08/28/01 16:42	AR1242L5CF	5-7-7	16082811	
08/28/01 17:06	AR1248L3CF	5-424-6	16082812	
08/28/01 17:31	AR1254L1CF	5-6-7	16082813	
08/28/01 17:56	AR1254L2CF	5-5-7	16082814	
08/28/01 18:20	AR1254L3CF	5-4-7	16082815	
08/28/01 18:45	AR1254L4CF	5-3-7	16082816	
08/28/01 19:09	AR1254L5CF	5-2-7	16082817	
08/28/01 19:34	AR1660L1CF	5-130-7	16082818	
08/28/01 19:58	AR1660L2CF	5-129-7	16082819	
08/28/01 20:23	AR1660L3CD	5-128-7	16082820	
08/28/01 20:48	AR1660L4CF	5-172-7	16082821	

Unless noted, Client Ids are the same for the quant. & confirmation columns

8/30/01 — Verification Signature/Date

8-30-01 — Analyst Signature/Date

GC Laboratory Run Log - PESTICIDE/PCB

SWOK AATS SWLO-OP-301 OP-301-RUNLOG-11 SWL Rev.#: 2.1

CASE NO.: EPA INJ. VOL: 0.5 uL INSTRUMENT: HP_16
SDG NO. : 47158, 47162, 47166, 47179 METHOD FILE(S): XPCBH28.M (OLM4.2)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
08/29/01 5:48	PIBLKC~~F~~2 8/31/01	5-131-7	16082843	OK
08/29/01 6:13	AR1660L3CE	5-128-7	16082844	OK
08/29/01 6:37	AR1660L3CF	5-128-7	16082845	NU
08/29/01 7:02	PBLKSD	BL0802SD	16082846	OK
08/29/01 7:26	E00W5DL	47162.07DL	16082847	OK
08/29/01 7:51	E00W6DL	47162.08DL	16082848	OK
08/29/01 8:16	E00X3	47162.15	16082849	OK
08/29/01 8:40	E00X3DL	47162.15DL	16082850	OK
08/29/01 9:05	E00X4DL	47162.16DL	16082851	OK
08/29/01 9:29	PBLKSE	BL0802SE	16082852	OK
08/29/01 9:54	E00Y3DL	47166.03DL	16082853	OK
08/29/01 10:19	E00Y4DL	47166.04DL	16082854	OK
08/29/01 10:43	E00Y5DL	47166.05DL	16082855	OK
08/29/01 11:08	E00Z1	47166.11	16082856	OK
08/29/01 11:33	E00Z1DL	47166.11DL	16082857	OK
08/29/01 11:57	E00Z7	47166.19	16082858	OK
08/29/01 12:22	E00Z7DL	47166.19DL	16082859	OK
08/29/01 12:47	E0100DL	47166.22DL	16082860	OK
08/29/01 13:11	HEXANE		16082861	—
08/29/01 13:36	HEXANE		16082862	—
08/29/01 14:01	HEXANE		16082863	—

Unless noted, Client Ids are the same for the quant. & confirmation columns

8/30/01
Verification Signature/Date

8-30-01
Analyst Signature/Date

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-301 OP-301-RUNLOG-11 SWL Rev.#: 2.1

CASE NO.: EPA INJ. VOL: 0.5 uL INSTRUMENT: HP_16
SDG NO. : 47158, 47162, 47166, 47179 METHOD FILE(S): XPCBH28.M (OLM4.2)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
08/28/01 21:12	AR1660L5CF	5-126-7	16082822	OK
08/28/01 21:37	PIBLKCF	5-131-7	16082823	OK
08/28/01 22:01	PBLKSA	BL0823SA	16082824	OK
08/28/01 22:26	PBLKSA	BB0823SA	16082825	NU
08/28/01 22:50	SB082401A	SB082401A	16082826	OK
08/28/01 23:15	SB082401B	SB082401B	16082827	OK
08/28/01 23:40	~~ELCS1SA~~ ELCS3 ~~08/31/01~~	LC0823SA	16082828	OK ~~NOT OSL~~ 8-30-01
08/29/01 00:04	~~ELCS2SA~~ ELCS4	LD0823SA	16082829	OK LCS/LCSD OK
08/29/01 00:29	E00Q9RE	47158.11RE	16082830	RR
08/29/01 00:53	E00Q9REDL	47158.11REDL	16082831	OK
08/29/01 1:18	E00Q1DL	47158.01DL	16082832	OK
08/29/01 1:42	E00Q2DL	47158.02DL	16082833	OK
08/29/01 2:07	E00Q6	47158.08	16082834	OK
08/29/01 2:32	E00Q8DL	47158.10DL	16082835	OK
08/29/01 2:56	E00Q9DL	47158.11DL	16082836	OK
08/29/01 3:21	E00R6DL	47158.18DL	16082837	OK
08/29/01 3:45	E0151DL	47179.13DL	16082838	OK
08/29/01 4:10	E0160DL	47179.22DL	16082839	RR
08/29/01 4:34	HEXANE		16082840	—
08/29/01 4:59	HEXANE		16082841	—
08/29/01 5:24	HEXANE		16082842	—

Unless noted, Client Ids are the same for the quant. & confirmation columns

8/30/01 — Verification Signature/Date

8-30-01 — Analyst Signature/Date

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-301 OP-301-RUNLOG-11 SWL Rev.#: 2.1

CASE NO.: EPA INJ. VOL: 0.5 uL INSTRUMENT: HP_16
SDG NO. : 47158, 47181 METHOD FILE(S): XPCBH28.M (OLM4.2)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
08/30/01 9:40	COND	COND	16083001	—
08/30/01 10:05	COND	COND	16083002	—
08/30/01 10:29	HEXANE	HEXANE	16083003	—
08/30/01 10:54	PIBLKCG X	5-131-7	16083004	OK
08/30/01 11:19	AR1660L3CI X	5-210-7	16083005	OK
08/30/01 11:43	AR1660L3CJ	5-210-7	16083006	NU
08/30/01 12:20	PBLK4SA	BL0804SA	16083007	
08/30/01 12:44	PBLK4SA	BB0804SA	16083008	
08/30/01 13:09	SB080701C	SB080701C	16083009	
08/30/01 13:34	SB080701D	SB080701D	16083010	
08/30/01 13:58	ELCS1	LC0804SA	16083011	
08/30/01 14:23	ELCS2	LD0804SA	16083012	
08/30/01 15:12	E00Q9RE X	47158.11RE	16083013	OK
08/30/01 15:41	E0181	47181.01	16083014	
08/30/01 16:07	E0182	47181.02	16083015	
08/30/01 16:32	E0183	47181.03	16083016	
08/30/01 16:57	E0183MS	47181.04MS	16083017	
08/30/01 17:21	E0183MSD	47181.05MSD	16083018	
08/30/01 17:46	E0184	47181.06	16083019	
08/30/01 18:11	E0185	47181.07	16083020	
08/30/01 18:35	E0186	47181.08	16083021	

Unless noted, Client Ids are the same for the quant. & confirmation columns

8/31/01 — Verification Signature/Date

8-31-01 — Analyst Signature/Date

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-301 OP-301-RUNLOG-11 SWL Rev.#: 2.1

CASE NO.: EPA INJ. VOL: 0.5 uL INSTRUMENT: HP_16
SDG NO. : 47158, 47181 METHOD FILE(S): XPCBH28.M (OLM4.2)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
08/30/01 19:00	E0187	47181.09	16083022	
08/30/01 19:25	E0188	47181.10	16083023	
08/30/01 19:49	HEXANE	HEXANE	16083024	—
08/30/01 20:14	HEXANE	HEXANE	16083025	—
08/30/01 20:39	HEXANE	HEXANE	16083026	—
08/30/01 21:03	PIBLKCH X	5-131-7	16083027	OK
08/30/01 21:28	AR1660L3CK X	5-210-7	16083028	OK
08/30/01 21:53	AR1660L3CL	5-210-7	16083029	NV
08/30/01 22:18	E0189	47181.11	16083030	RR
08/30/01 22:42	E0190	47181.12	16083031	Next
08/30/01 23:07	E0191	47181.13	16083032	CCAL
08/30/01 23:31	E0192	47181.14	16083033	Failed
08/30/01 23:56	E0193	47181.15	16083034	
08/31/01 00:21	E0194	47181.16	16083035	
08/31/01 00:45	E0195	47181.17	16083036	
08/31/01 1:10	E0196	47181.18	16083037	
08/31/01 1:35	E0197	47181.19	16083038	
08/31/01 1:59	E0198	47181.20	16083039	
08/31/01 2:24	E0199	47181.21	16083040	
08/31/01 2:48	E01A0	47181.22	16083041	
08/31/01 3:13	HEXANE	HEXANE	16083042	—

Unless noted, Client Ids are the same for the quant. & confirmation columns

8/31/01 — Verification Signature/Date

8-31-01 — Analyst Signature/Date

	SV	ST • PCB	OTHER
CONT EX. (3520C)			
SEP-F (3510C)			
SHAKER			
SONC. (3550B)		XXXXX	
SOXHLET			

[X] RUSH [ ] REEXTRACT [ ] TCLP [ ] DXIN

SAMPLE EXTRACTION L(

BATCH: 010802SB

EXTRACT DATE: 2001-08-02 08:56

002909

Page: 1 of 2

SAMPLE ID (EPISODE #)	CLIENT CASE	DATE RECEIVED CLIENT SAMPLE ID	MATRIX/LEVEL	SAMPLE pH	% MOISTURE %	DRY WEIGHT g	AMOUNT EXTRACTED g • (ml)	EXTRACTED VOLUME ml	GPC VOLUME ml	GPC ELUTE VOL ml	FLORISIL VOL CONC ml	FLORISIL FIN VOL CONC ml	VOL SV (P) ml	FIN PROCESS VOLUME ml	SCREEN Y/N Y/N	MS SV (P) µL	SURR SV (P) µL	BASE pH CONFIRMATION	ACID pH CONFIRMATION
BL0802SB			S/L				30.00	300	10/5	45	2.0		5.0	5.0	N		1000		
BB0802SB			S/L				30.00	300	10/5	45	2.0		5.0	5.0	N		1000		
LC0802SB			S/L				30.00	300	10/5	45	2.0		5.0	5.0	N	1000	1000		
LD0802SB			S/L				30.00	300	10/5	45	2.0		5.0	5.0	N	1000	1000		
47158.01 GC699	EPA	08/01/2001 08:40 E00Q1	S/L	7.22	11.05	27.7	31.17	300	10/5	45	2.0		5.0	5.0	N		1000		
47158.02 GC699	EPA	08/01/2001 08:40 E00Q2	S/L	7.71	15.86	25.8	30.70	300	10/5	45	2.0		5.0	5.0	N		1000		
47158.03MS GC699	EPA	08/01/2001 08:40 E00Q2MS	S/L	7.71	15.86	27.5	32.73	300	10/5	45	2.0		5.0	5.0	N	1000	1000		
47158.04MSD GC699	EPA	08/01/2001 08:40 E00Q2MSD	S/L	7.71	15.86	26.5	31.47	300	10/5	45	2.0		5.0	5.0	N	1000	1000		
47158.05 GC699	EPA	08/01/2001 08:40 E00Q3	S/L	7.64	13.72	25.9	30.02	300	10/5	45	2.0		5.0	5.0	N		1000		
47158.06 GC699	EPA	08/01/2001 08:40 E00Q4	S/L	7.44	64.61	10.6	30.03	300	10/5	45	2.0		5.0	5.0	N		1000		
47158.07 GC699	EPA	08/01/2001 08:40 E00Q5	S/L	7.65	32.26	20.5	30.26	300	10/5	45	2.0		5.0	5.0	N		1000		
47158.08 GC699	EPA	08/01/2001 08:40 E00Q6	S/L	7.27	55.93	13.2	30.06	300	10/5	45	2.0		5.0	5.0	N		1000		
47158.09 GC699	EPA	08/01/2001 08:40 E00Q7	S/L	6.98	23.85	25.0	32.82	300	10/5	45	2.0		5.0	5.0	N		1000		
47158.10 GC699	EPA	08/01/2001 08:40 E00Q8	S/L	7.25	24.04	24.5	32.24	300	10/5	45	2.0		5.0	5.0	N		1000		
47158.11 GC699	EPA	08/01/2001 08:40 E00Q9	S/L	7.42	20.63	25.4	31.95	300	10/5	45	2.0		5.0	5.0	N		1000		

INITIALS

WEIGHING:	CD	EXTRACTION:	CD	FLORISIL:	cH2Cl2
CLEANUP:	CD	KD:	MC		acetone
BLOWDOWN:	BTB	TV:	GS		Hexane
SURROG. SPIKER:	BTB	VERIFIER:	MC		
MATRIX SPIKER:	BTB	VERIFIER:	MC		
SUBMITTED BY:	SA	REVIEWED BY:			08/04

ID NUMBERS

FLORISIL CARTRIDGE #:

GPC COLUMN #: 364134 (08-03-01) #364-01

SURROGATES ID CONC #: 5-145-7

MATRIX SPIKE SOLID/CONC #(s): 5-1-7

SOP - METHOD # : SWL-OP- 415 Rev. 1.0

COMMENTS

SB #080301C
SB #080301P

Extracts went through Silgel & acid clean-up.

PG 37 Book 1 Done

	SV	OD ST • PCB	OTHER
CONT EX. (3520C)			
SEP-F (3510C)			
SHAKER			
SONC. (3550B)		XXXXX	
SOXHLET			

[X] RUSH [ ] REEXTRACT [ ] TCLP [ ] DXIN

SAMPLE EXTRACTION L

BATCH: 010802SB

EXTRACT DATE: 2001-08-02 08:56

002909

Page: 2 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		
47158.12 GC699	EPA	08/01/2001 08:40 E00R0	S/L	7.15	34.24	20.1	30.61	300	10/5	45	2.0		5.0	5.0	N		1000		
47158.13 GC699	EPA	08/01/2001 08:40 E00R1	S/L	7.26	30.72	21.7	31.26	300	10/5	45	2.0		5.0	5.0	N		1000		
47158.14 GC699	EPA	08/01/2001 08:40 E00R2	S/L	7.16	37.26	19.6	31.30	300	10/5	45	2.0		5.0	5.0	N		1000		
47158.15 GC699	EPA	08/01/2001 08:40 E00R3	S/L	7.18	14.98	29.5	34.66	300	10/5	45	2.0		5.0	5.0	N		1000		
47158.16 GC699	EPA	08/01/2001 08:40 E00R4	S/L	7.40	14.58	25.7	30.10	300	10/5	45	2.0		5.0	5.0	N		1000		
47158.17 GC699	EPA	08/01/2001 08:40 E00R5	S/L	7.39	20.66	24.9	31.42	300	10/5	45	2.0		5.0	5.0	N		1000		
47158.18 GC699	EPA	08/01/2001 08:40 E00R6	S/L	7.30	47.45	16.3	31.07	300	10/5	45	2.0		5.0	5.0	N		1000		
47158.19 GC699	EPA	08/01/2001 08:40 E00R7	S/L	7.52	23.94	23.7	31.16	300	10/5	45	2.0		5.0	5.0	N		1000		
47158.20 GC699	EPA	08/01/2001 08:40 E00R8	S/L	7.63	32.17	20.5	30.23	300	10/5	45	2.0		5.0	5.0	N		1000		
47158.21 GC699	EPA	08/01/2001 08:40 E00R9	S/L	7.59	34.39	20.5	31.30	300	10/5	45	2.0		5.0	5.0	N		1000		
47158.22 GC699	EPA	08/01/2001 08:40 E00S0	S/L	7.79	29.04	24.3	34.28	300	10/5	45	2.0		5.0	5.0	N		1000		

INITIALS

WEIGHING:	SA	EXTRACTION:	CD	FLORISIL:
CLEANUP:	CD	KD:	MC	CH2Cl2
BLOWDOWN:	SA	TV:	GS	acetone
SURROG. SPIKER:	BTB	VERIFIER:	MC	Hexane
MATRIX SPIKER:	BTB	VERIFIER:	MC	
SUBMITTED BY:	SA	REVIEWED BY:	08/04	

ID NUMBERS

FLORISIL CARTRIDGE #:

GPC COLUMN #: 364134 (08-03-01) #364024

SURROGATES ID CONC #: 5-145-7

MATRIX SPIKE SOLID/CONC #(s): 5-1-7

SOP - METHOD # : SWL-OP- 415 Rev. 1-0

COMMENTS

SB #080301C
SB #080301D

Extracts went through silgel & acid clean-up

P9 37 Book 1 Page

[X] RUSH [X] REEXTRACT [ ] TCLP [ ] DXIN

SAMPLE EXTRACTION L(

	SV	ST • PCB	OTHER
CONT EX. (3520C)			
SEP-F (3510C)			
SHAKER			
SONC. (3550B)		XXXXX	
SOXHLET			

BATCH: 010823SA

EXTRACT DATE: 2001-08-23 07:10

003008
Page: 1 of 1

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
BL0823SA			S/L				30.00	300	10/5	45	2.0		5.0	5.0	N		1000		
BB0823SA			S/L				30.00	300	10/5	45	2.0		5.0	5.0	N		1000		
LC0823SA			S/L				30.00	300	10/5	45	2.0		5.0	5.0	N	1000	1000		
LD0823SA			S/L				30.00	300	10/5	45	2.0		5.0	5.0	N	1000	1000		
47352.01 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX	S/L	8.10	6.45	28.3	30.26	300	10/5	45	2.0		5.0	5.0	N		1000		
47352.02MS GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX	S/L	8.10	6.45	28.4	30.36	300	10/5	45	2.0		5.0	5.0	N	1000	1000		
47352.03MSD GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX	S/L	8.10	6.45	28.4	30.38	300	10/5	45	2.0		5.0	5.0	N	1000	1000		
47352.04 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX	S/L	7.16	30.95	21.1	30.57	300	10/5	45	2.0		5.0	5.0	N		1000		
47352.05 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX	S/L	7.29	31.72	20.8	30.48	300	10/5	45	2.0		5.0	5.0	N		1000		
47352.06 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX	S/L	6.79	33.90	19.8	30.01	300	10/5	45	2.0		5.0	5.0	N		1000		
47158.11 GC699	EPA	08/01/2001 08:40 E00Q9	S/L	7.42	20.63	24.0	30.18	300	10/5	45	2.0		5.0	5.0	N		1000		

INITIALS

WEIGHING:	MC		MC	FLORISIL:	C/H2Cl2 Acetone Hexane
CLEANUP:	CR	KD:	BTB		
BLOWDOWN:	SA	TV:	GS		
SURROG. SPIKER:	MC	VERIFIER:	BTB		
MATRIX SPIKER:	MC	VERIFIER:	BTB		
SUBMITTED BY:	SA				08/26

ID NUMBERS

FLORISIL CARTRIDGE #:

GPC COLUMN #: 418002 (08-24-01) # 3640A

SURROGATES ID CONC #: 5-157-7

MATRIX SPIKE SOLID/CONC #(s): 5-146-7

SOP - METHOD # : SWL-OP- 415 Rev. 1.0

COMMENTS

SB #082401A
SB #082401B
Extract solvent through silica gel & Acid Clean-up

DG 3 Rank 1 Dec

Southwest Laboratory of Oklahoma
1700 W. Albany Suite C
Broken Arrow, OK 74012-1421

INTERNAL CHAIN OF CUSTODY

Date	8/1/01
Episode	**47158**
Client	**EPA**
Project	OLM04.2
Received	08/01/01

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	08/02 6:00	BTB	08/02 12:00
		22									
IN660	A	1	2	3	4	5	6	7			
		8	9	10	11	12	13	14			
		15	16	17	18	19	20	21	08/02 6:00	BTB	08/02 12:00
		22									

St 9/1/01
~~525~~
539D

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.
7/31	4:05	47077.02	Ensafe	[illegible]	N	GC571	1
07/31	8:35	47112.01-22 MS, MSD	EPA	SA	N	GC699	22
08-01	7:00	47092.01-16 11MS 12MSD	FERNALD	MC	N	GC899	16
8.01	12:00N	47143.01-19 MS MSD	TOLTEST	GS	N	GC200	19
08/01	4:30	47093.01-16 MS, MSD RAD LAB	FERNALD	SA	N	GC699	16
08/01	9:20	47113.01-03, 05, 07, 08, 09, 07-22	EPA	SA	N	GC699	20
08-02	9:00	47077.02	ENSAFE	MC	N	GC881	1
08.02	11.50a	47159.01-18, MS MSD	TOLTEST	GS	N	GC200	18
08/02p	9:00p	47114.01-08 MS, MSD	EPA	SA	N	GC699	8
08/02p	9:00p	47153.01-14	EPA	SA	N	GC699	14
08.02	9:00p	47154.01-22 MS, MSD	EPA	SA	N	GC699	22
08/02	9:15p	PEST/Aroc CHK (415002)	SWLO	SA	N	GC819	X
08-03	7:20	47097.01-22	ENSAFE	MC	N	GC899	22
08-03	7:20	47097.23, 24	ENSAFE	MC	N	GC899	2
08-03	7:20	47116.03, 10-18 14 MS 15 MSD	ENSAFE	MC	N	GC899	9
08-03	8-00	47127.01-07, 47159.14,	MALPIRAL	GS	N	GC 340	7/1/1
8/3	11:05	47172.01					
8/3	11:05	47192.07-11	Syntex	[illegible]	N	GC310	5
8/3	12:35 pm	Hexane Test # 2	SWLO	DHF	N	GC800	X
8/3	4:15	47100.02 / 47122.02	Monto-UT	[illegible]	N	GC218	1
8/3	4:15	47122.02 / 47100.02	Monto-UT	[illegible]	N	GC218	1
08/03	8:40	47155.01-22 MS, MSD	EPA	SA	N	GC699	22
08/03	8:40	47156.01-21 MS, MSD	EPA	SA	N	GC699	21
08/04	7:55p	47158.01-22 MS, MSD	EPA	SA	N	GC699	22
08/04	7:55p	47086.01, 05, 06, 07, 11-13	EPA	SA	Y	GC699	X
08/04	7:55p	47108.02, 03, 05, 06	EPA	SA	Y	GC699	X

9/1/01 539 ~~540~~

EXTRACT RECEIPT LOG

SWL-OP-301 REV. NO.: _____
SWL OP-301-EXTRCPT-6
SWOK/AATS
OP301a3.doc

Date	Time	Sample Episode Number(s)	Client	Extr. Chemist Initials	Re-extract? (Y/N)	Comments	No. of Samp.
08/24	9:30	47280.01-22 MS/MSD	EPA	SA	N	GC699	22
08/26	6:38p	47158.11	EPA	SA	Y	GC699	X
08/26	6:38p	47352.01-06 MS, MSD	EPA	SA	N	GC699	6
8/27	10.00a	47377.01-07	Enseco-D	GS	N	GC341	7
8/27	4:30p	47400.01-07. MS MSD	Adlittle	GS	N	GC370	7
08/27	9:00p	47281.01-22 MS,MSD	EPA	SA	N	GC699	22
08/27	9:00p	47282.01-03	EPA	SA	N	GC699	3
08/27	9:00p	47292.01-19 MS,MSD	EPA	SA	N	GC699	19
08/28	8:00p	47294.01-16 MS, MSD	EPA	SA	N	GC699	16
08/28	8:00p	47293.01-22 MS,MSD	EPA	SA	N	GC699	22
8/29	11:50a	47404-01-11, 13, 14, MS MSD	Tetpitt	GS	N	GC299 = 200	13
↓	↓	47405.05-10	↓	↓	↓	↓	6
08/29	5:40p	47166.19, 21	EPA	SA	Y	Re GC699	X
08/29	5:40p	47316.01-22 MS,MSD	EPA	SA	N	GC699	22
08/29	5:40p	47320.01-05 07-09, 11-22, MS,MSD	EPA	SA	N	GC699	22
8/30	4:45p	47413.01-05, 07-13. MS MSD	Malpiral	GS	N	GC340	12
08/30	7:45p	47404.16, 17	TETPITT	SA	N	GC699	2
08/30	7:45	47419.02, 03, 05	TETPITT	SA	N	GC699	3
08/30	7:45	47404.16, 17	TETPITT	SA	N	GC899	2
08/30	7:45	47419. 02, 03, 05	TETPITT	SA	N	GC899	3
08/30	7:45	47404.01-03, 06-07, 09, 10 MS, 10 MSD 13	TETPITT	SA	N	GC699	5
08/30	7:45	47405.05, 06, 08, 09	TETPITT	SA	N	GC699	3
08/30	7:45	47404.01-03, 06-07, 09-11 MS, MSD 13	TETPITT	SA	N	GC899	9
08/30	7:45	47405. 05, 06, 08, 09	TETPITT	SA	N	GC899	4
8/30	8:00	47302.02	Tetpitt	[illegible]	N	GC599	1
8/30	8:00	47302 01-11	Tetpitt	[illegible]	N	GC599	11

539F ~~527~~

2941

1000

FedEx. USA Airbill FedEx Tracking Number 821876980270

Form I.D. No. 0215

5P011

RECIPIENT: PEEL HERE

1 From This portion can be retained for Recipient's records.

Date 7.31.01 FedEx Tracking Number 821876980270

Sender's Name RICK MEHL Phone 847 918-4000

Company ROY F WESTON INC

Address 450 OLD SKOKIE ROAD

Dept./Floor/Suite/Room

City PARK CITY State IL ZIP 60085

2 Your Internal Billing Reference 12634.001.001.0067.00

3 To

Recipient's Name MR. HARRY BORG Phone 981 251-0545

Company SOUTHWEST LABS OF OKLAHOMA

Address 1700 WEST ALBANY

To "HOLD" at FedEx location, print FedEx address. We cannot deliver to P.O. boxes or P.O. ZIP codes.

SUITE C

Dept./Floor/Suite/Room

City BROKEN ARROW State OK ZIP 60085 74012

08/01/01 8:40

8218 7698 0270

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 * 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.

- [ ] SATURDAY Delivery — Available for FedEx Priority Overnight and FedEx 2Day to select ZIP codes
- [ ] SUNDAY Delivery — Available for FedEx Priority Overnight to select ZIP codes
- [ ] HOLD Weekday at FedEx Location — Not available with FedEx First Overnight
- [ ] HOLD Saturday at FedEx Location — Available for FedEx Priority Overnight and FedEx 2Day to select locations

Does this shipment contain dangerous goods? One box must be checked.

- [ ] No
- [ ] Yes — As per attached Shipper's Declaration
- [ ] Yes — Shipper's Declaration not required
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous Goods cannot be shipped in FedEx packaging.

- [ ] Cargo Aircraft Only

7 Payment Bill to: Enter FedEx Acct. No. or Credit Card No. below.

- [ ] 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	77	

Credit Card Auth.

[1] 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 #156912-1019 • PRINTED IN U.S.A. GBFE 5/00

402

FedEx USA Airbill FedEx Tracking Number 821876980330

Form I.D. No. 0215

1 From This portion can be removed for Recipient's records.

Date FedEx Tracking Number 821876980330

Sender's Name RICK MEHL Phone 847 918-4000

Company ROY F WESTON INC

Address 450 OLD SKOKIE ROAD STE 500 Dept./Floor/Suite/Room

City VERNON HILLS State IL ZIP 60085

RECIPIENT: PEEL HERE

2 Your Internal Billing Reference 12634.001.001.0067.00

3 To

Recipient's Name MR. HARRY BORG Phone 981251 0545

Company SOUTHWEST LABS OF OKLAHOMA

Address 1700 WEST ALBANY, SUITE C

To "HOLD" at FedEx location, print FedEx address. We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

City BROKEN ARROW State OK ZIP 74012

08/01/00 8:40

8218 7698 0330

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 * 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.

- [ ] SATURDAY Delivery — Available for FedEx Priority Overnight and FedEx 2Day to select ZIP codes
- [ ] SUNDAY Delivery — Available for FedEx Priority Overnight to select ZIP codes
- [ ] HOLD Weekday at FedEx Location — Not available with FedEx First Overnight
- [ ] HOLD Saturday at FedEx Location — Available for FedEx Priority Overnight and FedEx 2Day to select locations

Does this shipment contain dangerous goods? One box must be checked.

- [ ] No
- [ ] Yes — As per attached Shipper's Declaration
- [ ] Yes — Shipper's Declaration not required
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous Goods cannot be shipped in FedEx packaging.

- [ ] Cargo Aircraft Only

7 Payment *Bill to:* Enter FedEx Acct. No. or Credit Card No. below.

- [x] Sender — Acct. No. in Section 1 will be billed.
- [ ] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check
- [ ] Obtain Recip. Acct. No.

Total Packages 1 Total Weight 1 lb 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)

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402

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

Case No: 29546
DAS No:
SDG No: E00Q1

L

Date Shipped: 7/31/2001
Carrier Name: FedEx
Airbill: 821876980270
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]	7-31-01 1730	[signature]	8-1-01 8:40
2			
3			
4			

Sampler Signature: [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 E00Q1 Sample Condition On Receipt
E00Q1	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038239 (Ice Only) (1)	AP-SL029-16-01	S:	7/30/2001	16:45		OK
E00Q2	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038240 (Ice Only) (1)	AP-SL029-16-02	S:	7/30/2001	16:47		
E00Q3	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038241 (Ice Only) (1)	AP-SL029-16-03	S:	7/30/2001	16:49		
E00Q4	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038242 (Ice Only) (1)	AP-SL029-16-04	S:	7/30/2001	17:05		8-1-01 (HL)
E00Q5	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038243 (Ice Only) (1)	AP-SL029-16-05	S:	7/30/2001	17:08		
E00Q6	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038244 (Ice Only) (1)	AP-SL029-16-06	S:	7/30/2001	17:10		
E00Q7	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038245 (Ice Only) (1)	AP-SL029-16-06DP	S:	7/30/2001	17:10		
E00Q8	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038246 (Ice Only) (1)	AP-SL029-18-01	S:	7/30/2001	17:15		
E00Q9	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038247 (Ice Only) (1)	AP-SL029-18-02	S:	7/30/2001	17:20		
E00R0	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038248 (Ice Only) (1)	AP-SL029-18-03	S:	7/30/2001	17:25		

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
	E00Q2, E00S3, E00W1		5.4 T.B.	177814, 177815
Analysis Key: CLP PCBs = PCBs	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? N / Shipment Iced? Y

No Seals

R Number: 5-490998136-073101-0001

LABORATORY COPY

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

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

Case No: 29546
DAS No:
SDG No: E00Q1

L

Date Shipped: 7/31/2001
Carrier Name: FedEx
Airbill: 821876980270
Shipped to: Southwest Labs of Oklahoma, Inc. 1700 West Albany Suite C Broken Arrow OK 74012 (918) 251-0545

Chain of Custody Record

Sampler Signature:

Relinquished By	(Date / Time)	Received By	(Date / Time)
1	7-31-01 1730		8-1-01 8:40
2			
3			
4			

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 E00Q1
E00R1	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038249 (Ice Only) (1)	AP-SL029-18-04	S:	7/30/2001	17:30		OK
E00R2	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038250 (Ice Only) (1)	AP-SL029-18-05	S:	7/30/2001	17:30		8-1-01
E00R3	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038251 (Ice Only) (1)	AP-SL029-18-06	S:	7/30/2001	17:35		
E00R4	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038252 (Ice Only) (1)	AP-SL029-18-06DP	S:	7/30/2001	17:35		
E00R5	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038253 (Ice Only) (1)	AP-SL029-18-07	S:	7/30/2001	17:40		
E00R6	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038254 (Ice Only) (1)	AP-SL029-21-01	S:	7/30/2001	17:30		
E00R7	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038255 (Ice Only) (1)	AP-SL029-21-02	S:	7/30/2001	17:33		
E00R8	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038256 (Ice Only) (1)	AP-SL029-21-03	S:	7/30/2001	17:35		
E00R9	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038257 (Ice Only) (1)	AP-SL029-21-03DP	S:	7/30/2001	17:35		
* E00S0	Soil/Sediment/ Joe Ruiz	L/G	PCBs (7)	038258 (Ice Only) (1)	AP-SL029-21-04	S:	7/30/2001	17:50		

* SDG Final Sample

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
	E00Q2, E00S3, E00W1		5.4 T.B.	177819, 177815
Analysis Key: PCBs = PCBs	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? Y / Shipment Iced? Y

No Seals

R Number: 5-490998136-073101-0001

LABORATORY COPY

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

Southwest Laboratory of Oklahoma
1700 W. Albany Suite C
Broken Arrow, OK 74012-1421

SAMPLE LOG-IN RECORD

REVIEWED
BY
DATE 8-1-01

Date	8/1/01	Page1
Episode	**47158**	
Client	**EPA**	
Project	OLM04.2	
Received	08/01/01	
Logged In	08/01/01	

TEST	PRI	DUE	CONTAINER	DESCRIPTION	EXTRACTED	ANALYST	ANALYZED
Sample: **47158.01**		Sampled:07/30/01		16:45 ID:E00Q1	SDG:E00Q1	Matrix: S	Containers: 1
GC699	6	08/07/2001	A	NON STD PCB			
IN660	8	08/03/2001	A	% MOISTURE			
Sample: **47158.02N1**		Sampled:07/30/01		16:47 ID:E00Q2	SDG:E00Q1	Matrix: S	Containers: 1
GC699	6	08/07/2001	A	NON STD PCB			
IN660	8	08/03/2001	A	% MOISTURE			
Sample: **47158.03MS1**		Sampled:07/30/01		16:47 ID:E00Q2MS	SDG:E00Q1	Matrix: S	Containers: 1
GC699	6	08/07/2001	A	NON STD PCB			
IN660	8	08/03/2001	A	% MOISTURE			
Sample: **47158.04SD1**		Sampled:07/30/01		16:47 ID:E00Q2MSD	SDG:E00Q1	Matrix: S	Containers: 1
GC699	6	08/07/2001	A	NON STD PCB			
IN660	8	08/03/2001	A	% MOISTURE			
Sample: **47158.05**		Sampled:07/30/01		16:49 ID:E00Q3	SDG:E00Q1	Matrix: S	Containers: 1
GC699	6	08/07/2001	A	NON STD PCB			
IN660	8	08/03/2001	A	% MOISTURE			
Sample: **47158.06**		Sampled:07/30/01		17:05 ID:E00Q4	SDG:E00Q1	Matrix: S	Containers: 1
GC699	6	08/07/2001	A	NON STD PCB			
IN660	8	08/03/2001	A	% MOISTURE			
Sample: **47158.07**		Sampled:07/30/01		17:08 ID:E00Q5	SDG:E00Q1	Matrix: S	Containers: 1
GC699	6	08/07/2001	A	NON STD PCB			
IN660	8	08/03/2001	A	% MOISTURE			
Sample: **47158.08**		Sampled:07/30/01		17:10 ID:E00Q6	SDG:E00Q1	Matrix: S	Containers: 1
GC699	6	08/07/2001	A	NON STD PCB			
IN660	8	08/03/2001	A	% MOISTURE			
Sample: **47158.09**		Sampled:07/30/01		17:10 ID:E00Q7	SDG:E00Q1	Matrix: S	Containers: 1
GC699	6	08/07/2001	A	NON STD PCB			
IN660	8	08/03/2001	A	% MOISTURE			
Sample: **47158.10**		Sampled:07/30/01		17:15 ID:E00Q8	SDG:E00Q1	Matrix: S	Containers: 1
GC699	6	08/07/2001	A	NON STD PCB			
IN660	8	08/03/2001	A	% MOISTURE			
Sample: **47158.11**		Sampled:07/30/01		17:20 ID:E00Q9	SDG:E00Q1	Matrix: S	Containers: 1
GC699	6	08/07/2001	A	NON STD PCB			
IN660	8	08/03/2001	A	% MOISTURE			
Sample: **47158.12**		Sampled:07/30/01		17:25 ID:E00R0	SDG:E00Q1	Matrix: S	Containers: 1
GC699	6	08/07/2001	A	NON STD PCB			
IN660	8	08/03/2001	A	% MOISTURE			
Sample: **47158.13**		Sampled:07/30/01		17:30 ID:E00R1	SDG:E00Q1	Matrix: S	Containers: 1
GC699	6	08/07/2001	A	NON STD PCB			
IN660	8	08/03/2001	A	% MOISTURE			
Sample: **47158.14**		Sampled:07/30/01		17:30 ID:E00R2	SDG:E00Q1	Matrix: S	Containers: 1
GC699	6	08/07/2001	A	NON STD PCB			

Southwest Laboratory of Oklahoma
1700 W. Albany Suite C
Broken Arrow, OK 74012-1421

SAMPLE LOG-IN RECORD

Date	8/1/01	Page2
Episode	**47158**	
Client	**EPA**	
Project	OLM04.2	
Received	08/01/01	
Logged In	08/01/01	

TEST	PRI	DUE	CONTAINER	DESCRIPTION	EXTRACTED	ANALYST	ANALYZED
IN660	8	08/03/2001	A	% MOISTURE			
Sample: **47158.15**		Sampled:07/30/01	17:35	ID:E00R3	SDG:E00Q1	Matrix: S	Containers: 1
GC699	6	08/07/2001	A	NON STD PCB			
IN660	8	08/03/2001	A	% MOISTURE			
Sample: **47158.16**		Sampled:07/30/01	17:35	ID:E00R4	SDG:E00Q1	Matrix: S	Containers: 1
GC699	6	08/07/2001	A	NON STD PCB			
IN660	8	08/03/2001	A	% MOISTURE			
Sample: **47158.17**		Sampled:07/30/01	17:40	ID:E00R5	SDG:E00Q1	Matrix: S	Containers: 1
GC699	6	08/07/2001	A	NON STD PCB			
IN660	8	08/03/2001	A	% MOISTURE			
Sample: **47158.18**		Sampled:07/30/01	17:30	ID:E00R6	SDG:E00Q1	Matrix: S	Containers: 1
GC699	6	08/07/2001	A	NON STD PCB			
IN660	8	08/03/2001	A	% MOISTURE			
Sample: **47158.19**		Sampled:07/30/01	17:33	ID:E00R7	SDG:E00Q1	Matrix: S	Containers: 1
GC699	6	08/07/2001	A	NON STD PCB			
IN660	8	08/03/2001	A	% MOISTURE			
Sample: **47158.20**		Sampled:07/30/01	17:35	ID:E00R8	SDG:E00Q1	Matrix: S	Containers: 1
GC699	6	08/07/2001	A	NON STD PCB			
IN660	8	08/03/2001	A	% MOISTURE			
Sample: **47158.21**		Sampled:07/30/01	17:35	ID:E00R9	SDG:E00Q1	Matrix: S	Containers: 1
GC699	6	08/07/2001	A	NON STD PCB			
IN660	8	08/03/2001	A	% MOISTURE			
Sample: **47158.22**		Sampled:07/30/01	17:50	ID:E00S0	SDG:E00Q1	Matrix: S	Containers: 1
GC699	6	08/07/2001	A	NON STD PCB			
IN660	8	08/03/2001	A	% MOISTURE			

SAMPLE LOG-IN SHEET

Lab Name: SOUTHWEST LABORATORY OF OKLAHOMA	Page 1 of 2
Received by (Print Name): JASON SPRIGGS	Log-In Date: 2001-08-01 13:28
Received by (Signature)	
Case Number: 29546	Sample Delivery Group No.: E00Q1 / SAS Number

Remarks: Cooler: 08/01/01-1

1. Custody Seals(s)	Present/Absent* Intact/ Broken
2. Custody Seal Nos.	NO SEALS
3. Chain-of Custody Records	Present/Absent*
4. Traffic Reports or Packing Lists	Present/Absent*
5. Airbill	Airbill/ Sticker Present/Absent*
6. Airbill No.	821876980330
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	5.4c
10. Does Information on Custody records, traffic reports, and sample tags agree?	Yes/ No*
11. Date Received at Lab	08/01/01
12. Time Received	08:40

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment: etc,
E00Q1	038239	47158.01	Ok
E00Q2	038240	47158.02	JW 08/01/01
E00Q2MS	038240	47158.03	
E00Q2MSD	038240	47158.04	
E00Q3	038241	47158.05	
E00Q4	038242	47158.06	
E00Q5	038243	47158.07	
E00Q6	038244	47158.08	
E00Q7	038245	47158.09	
E00Q8	038246	47158.10	
E00Q9	038247	47158.11	
E00R0	038248	47158.12	
E00R1	038249	47158.13	
E00R2	038250	47158.14	
E00R3	038251	47158.15	
E00R4	038252	47158.16	
E00R5	038253	47158.17	
E00R6	038254	47158.18	

Sample Transfer

Fraction: PCB	Fraction:
Area #: 9	Area #:
By: JW	By:
On: 8/01/01	On:

* Contact SMO and attach record of resolution.

Reviewed By	Logbook No.
Date: 8-1-01	Logbook Page No.

SAMPLE LOG-IN SHEET

Lab Name SOUTHWEST LABORATORY OF OKLAHOMA	Page 2 of 2
Received by (Print Name) JASON SPRIGGS	Log-In Date 2001-08-01 13:28
Received by (Signature)	
Case Number 29546	Sample Delivery Group No. E00Q1 / SAS Number

Remarks: Cooler: 08/01/01-1

1. Custody Seals(s)	Present/Absent* Intact/ Broken
2. Custody Seal Nos.	NO SEALS
3. Chain-of Custody Records	Present/Absent*
4. Traffic Reports or Packing Lists	Present/Absent*
5. Airbill	Airbill/ Sticker Present/Absent*
6. Airbill No.	821876980330
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	5.4c
10. Does Information on Custody records, traffic reports, and sample tags agree?	Yes/ No*
11. Date Received at Lab	08/01/01
12. Time Received	08:40

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment: etc,
E00R7	038255	47158.19	OK
E00R8	038256	47158.20	08/01/01
E00R9	038257	47158.21	
E00S0	038258	47158.22	
COC referenced wrong airbill; correct airbill # logged. JW 08/01/01			

Sample Transfer	
Fraction PCB	Fraction
Area # 9	Area #
By JW	By
On 8/01/01	On

* Contact SMO and attach record of resolution.

Reviewed By	Logbook No.
Date 8-1-01	Logbook Page No.

Harry Borg
From: Bauer, Heather [Heather.Bauer@dyncorp.com]
Sent: Wednesday, August 01, 2001 3:11 PM
To: Harry Borg (E-mail)
Cc: Howard Pham (E-mail); Tonya Balla (E-mail)
Subject: Region 05 | Case 29546 | Lab SWOK | Issue Missing Custody Seals | FINAL

Harry,
Following is the resolution from Region 5. Per the Region, the lab should note the issue in the case narrative and proceed with the analysis of the 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, August 01, 2001 3:52 PM
To: Bauer, Heather
Subject: Re: Region 05 | Case 29546 | Lab SWOK | Issue Missing Custody Seals

HI Heather,
Please ask the lab proceed the analyses with 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 29546 | Lab SWOK | Issue Missing Custody Seals
08/01/2001 01:18 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.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----

From: Balla, Tonya [mailto:ballat@mail.rfweston.com]
Sent: Wednesday, August 01, 2001 2:10 PM
To: Bauer, Heather
Subject: RE: Region 05 | Case 29546 | Lab SWOK | Issue Missing Custody Seals

I spoke with the field team and they confirmed the presence of custody seals prior to shipment. Please note the problem in the lab narrative.

Thanks
Tonya Balla

-----Original Message-----

From: **Bauer, Heather [mailto:Heather.Bauer@dyncorp.com]**
Sent: Wednesday, August 01, 2001 10:04 AM
To: Howard Pham (E-mail); Tonya Balla (E-mail)
Subject: Region 05 | Case 29546 | Lab SWOK | Issue Missing Custody Seals

Following is an e-mail from SWOK regarding Case 29546. Please advise on how the lab should proceed as quickly as possible.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----

From: **hborg@swlab.com [mailto:hborg@swlab.com]**
Sent: Wednesday, August 01, 2001 10:30 AM
To: Bauer, Heather
Subject: Region 5, Case # 29546, samples received 8/1/01

Heather,

Today we received 2 coolers for this case. One of the coolers did not have custody seals attached. The traffic reports have custody seal numbers on them, but they did not arrive on the cooler. The cooler was taped shut.

The laboratory will proceed with logging in the samples and note problem in SDG narrative.

Harry M. Borg
Organic Program Manager
SWOK

Harry Borg
From: Bauer, Heather [Heather.Bauer@dyncorp.com]
Sent: Friday, August 24, 2001 3:53 PM
To: Harry Borg (E-mail)
Cc: Howard Pham (E-mail); Tonya Balla (E-mail)
Subject: Requesting modification for FRACTION: PEST (modification PCB-REG5) a...

Harry,
Following is the resolution from Region 5. Per the Region, the lab should proceed with the dilutions as recommended. However, the lab should continue to re-extract the samples and re-analyze when the DCB surrogate is outside the QC limits as per the analytical method. Please note the issues in the case narrative and let me know if you have any other questions or problems.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----

From: H161259@aol.com [mailto:H161259@aol.com]
Sent: Friday, August 24, 2001 4:08 PM
To: Bauer, Heather
Subject: Re: FW: Requesting modification for FRACTION: PEST (modification PCB-REG5) a...

Hi Heather,

Please ask the proceed the analyses with the dilution as they recommended, however, they should reextraction the sample with DCB is out of the limits as Linda's resolution.

Thanks,

Howard Pham

-----Original Message-----

From: Heather Bauer [mailto:heather.bauer@dyncorp.com]
Sent: Friday, August 24, 2001 2:55 PM
To: 'Howard at home (E-mail)'
Subject: FW: Requesting modification for FRACTION: PEST (modification PCB-REG5) analyses, Case # 29546,29602 & 29658
Importance: High

Howard,

Following is the response from the sampler. Please advise on how the lab should proceed as quickly as possible.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----

From: **Mark and Tonya Balla [mailto:ballamt@voyager.net]**
Sent: Sunday, August 26, 2001 2:35 PM
To: Bauer, Heather; Howard at home (E-mail)
Cc: short.thomas@epamail.epa.gov; mehlr@mail.rfweston.com
Subject: RE: Requesting modifcation for FRACTION: PEST (modification PCB-REG5) analyses, Case # 29546,29602 & 29658
Importance: High

Howard,

I forwarded on the request to our START QA/QC officer/chemist and her thoughts are included below. If the dilution procedure is modified, please ensure that the laboratory includes this in all applicable data package narratives to aid with data validation.

Thanks
Tonya Balla
Roy F. Weston

> ----------
> **From:** **Korobka, Linda**
> Sent: Friday, August 24, 2001 2:13:00 PM
> To: Balla, Tonya
> Cc: Korobka, Linda
> Subject: Modification for PCB analyses for Allied Paper Site samples
> Auto forwarded by a Rule

Tonya,

It is my professional opinion that the modification to the dilution procedure for the PCB analyses performed on the Allied Paper Site samples as described by Harry Borg (SWOK Organic Program Manager) is acceptable and should give WESTON and the U.S. EPA acceptable results.

However, I do not agree with changing the DCB surrogate requirement for

re-extracting when the DCB recovery is outside the QC limits high. I feel

that the lab should continue to re-extract the samples and re-analyze when the DCB surrogate is outside the QC limits as per the analytical method.

Linda Korobka
Roy F. Weston, Inc.
Suite 100
2501 Jolly Road
Okemos, Michigan 48864
Telephone: (517) 381-5936

-----Original Message-----

From: **Bauer, Heather [mailto:Heather.Bauer@dyncorp.com]**
Sent: Friday, August 24, 2001 10:24 AM
To: Howard at home (E-mail); Tonya Balla (E-mail)
Subject: FW: Requesting modifcation for FRACTION: PEST (modification PCB-REG5) analyses, Case # 29546,29602 & 29658

> ----------

From: **Bauer, Heather[SMTP:HEATHER.BAUER@DYNCORP.COM]**
Sent: Friday, August 24, 2001 11:23:43 AM
To: Howard at home (E-mail); Tonya Balla (E-mail)
Subject: FW: Requesting modifcation for FRACTION: PEST (modification PCB-REG5) analyses, Case # 29546,29602 & 29658
Auto forwarded by a Rule

Howard,

Following is an e-mail from SWOK regarding the Allied Paper site. Please advise on how the lab should proceed as quickly as possible.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----

From: hborg@swlab.com [mailto:hborg@swlab.com]
Sent: Friday, August 24, 2001 10:41 AM
To: Bauer, Heather
Cc: smith.terry@epa.gov; rharris@swlab.com
Subject: Requesting modifcation for FRACTION: PEST (modification PCB-REG5) analyses, Case # 29546,29602 & 29658

Heather,

Please check with region 5 to see if we can make the following modifications for the analyses of these PCB samples. The majority of the samples analyzed to up to this time are requiring dilutions for PCBs ranging from 10 to 100 fold. Method OLM04.2 requires a minimum of a 10 fold more concentrated extract analyses when dilutions are done. The laboratory is requesting a wavier or modification to forgo this requirement. This will allow the laboratory to do original dilutions on the samples and only run them more concentrated if aroclors are not detected within the instruments calibration range. This will speed up the analytical process and also reduce the cost to the region.

The laboratory would also like the region to review the DCB surrogate requirement for re-extracting when the DCB recovery is outside of QC limits high. To date the majority of all re-extracts taken place for this reason have duplicate the original analyses. At his time the laboratory is only sending the samples back for re-extract when the surrogate is outside of limits on both columns.

This will also help speed up the analytical process and help reduce the cost to the region.

Harry M. Borg
Organic Program Manager
SWOK

Required OLM04.2 Changes

OLM04.2 requires contract laboratories to analyze samples for Pesticides and Aroclors through the protocol outlined in Exhibit D, Analytical Methods for Pesticides/Aroclors. Specific target analytes and their associated contract required quantitation limits (CRQL) are listed in Exhibit C, Section 3.0, page C-8 of OLM04.2.

The proposed modified analysis will require the laboratory to use sample cleanup and analysis techniques not currently written into OLM04.2. The cleanup techniques to be used should generally follow guidelines for Silica Gel cleanup as presented in SW 846 Method 3630, followed by Sulfuric acid cleanup as presented in SW 846 method 3665A, and the analytical technique should generally follow PCB GC guidelines presented in SW 846 Method 8082.

Because the particular cleanup technique is destructive to certain pesticide compounds that are target analytes of OLM04.2, isolation, quantitation, and reporting of pesticides compounds for this project is not required. Only the list of Aroclors presented in Exhibit C, Section 3 is to be analyzed and reported. Further, the need to perform the Florisil cleanup technique presented in Exhibit D/Pest is waved. However, the lab is required to still perform the GPC cleanup presented in Exhibit D/Pest.

For calibration purposes the following procedural and Quality Assurance requirements must be followed:

a. A 5-point calibration curve for combined aroclors 1016/1260 and single mid-level points for all other arochlors are to be analyzed prior to any sample analysis. For the 5-point analysis, the low point on the curve nust reflect the required CRQL.

b. The 5 point curve must meet an average 20 % RSD

c. If other arochlors are suspected, or other arochlors are detected in an analysis, a separate 5-point calibration must be run for the particular arochlor. The 20 % RSD requirement will apply to any other arochlor 5-point analysis performed.

d. A continuing calibration verification standard of arochlors 1016/1260 must be analyzed every 12 hours of analysis and not to exceed 20 samples.

e. The continuing calibration verification analysis must be within 15% of the expected value. If the % difference is greater than 15%, all samples analyzed prior to the continuing calibration verification must be reanalyzed.

f. Each extraction batch must contain method blanks, laboratory control spike and matrix spike/matrix spike duplicate samples (provided sufficient sample is sent for the matrix spike and duplicate analysis).

g. Each field sample and quality control sample must contain Decachlorobiphenyl surrogate (DCB). Samples may be spiked with TMX surrogate as well, but no recovery requirements will be placed on the TMX, as this compound is sensitive to sulfuric acid cleanup.

h. All samples failing to meet DCB recovery limits of 30% to 170% must be re-extracted and re-analyzed.

i. For the laboratory control spike, arochlor 1254 is to be used. The results of the laboratory control sample should fall between the recovery limits of 29 to 135 %. If the recovery falls below 29%, all samples within the

extraction batch must be re-extracted and re-analyzed. If the recovery is above 135% and arochlors are not detected in the batch sample, then no further action is necessary. If the recovery is above 135% and arochlors are present in any of the batch samples, then the samples containing arochlor must be re-extracted and re-analyzed.

j. Arochlor 1254 is to be used for the matrix spike and duplicate analyses. Advisory limits are 29% to 135% are set for the matrix spike and duplicate analysis. As these limit are only advisory, no particular action is required for QC samples outside these limits. However, consistent recovery outside these limits for analysis in which no apparent matrix interference is present may justify a review by EPA personnel, and the laboratory may be requested to repeat certain analyses at no further cost to the government.

k. Some, or all, samples may require a reporting CRQL of 25 ug/Kg (33 ug/Kg is the OLM04.2 required CRQL). For these samples, the laboratory must extract 40 grams of sample, as opposed to the normal 30 grams. Also, extra sodium sulfate may have to be added to the sample in order to dry the sample properly.

l. For reporting purposes, the laboratory is to provide a standard CLP data package at the turnaround time requested by the Region. Modifications to reporting requirements due to the changes presented in this modification request form shall be incorporated into the hard copy deliverables and into the electronic diskette where practical and easily accommodated. All CLP forms associated with florisil cleanup, and GPC check analysis are not required. Any other reporting requirements, not mentioned in this document which the lab believes is affected by the modifications required for this project shall be noted in the case narrative. All hard copy and electronic reporting requirements not affected by these modifications shall be subjected to CCS. The Organic Program Manager will make recommendations to the Contracting Officer as to any disputes concerning CCS defects charged against samples.

While not required in the final data package, the laboratory should keep on file in the lab, the SOPs used to perform the Acid and Silica Gel cleanup techniques. Also, the lab should include copies of this modification request forms in the final hard copy data packages.

SOUTHWEST LABORATORY OF OKLAHOMA

ANALYTICAL REQUEST FORM, SWL-GA-131

Ref# 5541

Pg 1 of 2

Client	ACCOUNTING OFFICER	Client Code:	EPA
Contact	Heather Bauer	Phone&Fax#:	703-264-9348 703-264-9222
Project	OLM04.2	PO Number:	
Location	29546	Receipt Date	08/01/2001 Due: 08/07/2001
SDG	E00Q1 Closed	Sample TAT:	Fax Rpt 7
Reports			
Data Pkgs	CLP: 2		
EDD			

Special Provisions: Must use arochlor 1254 for LCS/LCSD & MS/MSD
need GPCed, silica gel & Acid cleaned, 5.4C
Case#29546, to date wk 7/30/01: 20 soils , 1 sets QC

Client ID	Type	Matrix	GC699									
E00Q1		S	X									
E00Q2	N1	S	X									
E00Q2MS	MS1	S	X									
E00Q2MSD	SD1	S	X									
E00Q3		S	X									
E00Q4		S	X									
E00Q5		S	X									
E00Q6		S	X									
E00Q7		S	X									
E00Q8		S	X									
E00Q9		S	X									
E00R0		S	X									
E00R1		S	X									
E00R2		S	X									
E00R3		S	X									
E00R4		S	X									
E00R5		S	X									
E00R6		S	X									
E00R7		S	X									
E00R8		S	X									

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

Billing Address: Same As Reporting Address

575

Project Officer: HARRY M. BORG

Prepared 08/01/2001

SOUTHWEST LABORATORY OF OKLAHOMA

ANALYTICAL REQUEST FORM, SWL-GA-131

Ref# 5541

Pg 2 of 2

Client	ACCOUNTING OFFICER	Client Code:	EPA
Contact	Heather Bauer	Phone&Fax#:	703-264-9348 703-264-9222
Project	OLM04.2	PO Number:	
Location	29546	Receipt Date	08/01/2001 Due: 08/07/2001
SDG	E00Q1 Closed	Sample TAT:	Fax Rpt 7
Reports			
Data Pkgs	CLP: 2		
EDD			

Special Provisions: Must use arochlor 1254 for LCS/LCSD & MS/MSD
need GPCed, silica gel & Acid cleaned, 5.4C
Case#29546, to date wk 7/30/01: 20 soils , 1 sets QC

Client ID	Type	Matrix	GC699									
E00R9		S	X									
E00S0		S	X									

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

Billing Address: Same As Reporting Address

576

Project Officer: HARRY M. BORG

Prepared 08/01/2001