Data Review
Site Name: Allied Paper (MI)
Case Number: 29294 Laboratory: Southwest Laboratory
SDG: E00H4

Thursday, July 04, 2001

US EPA RECORDS CENTER REGION 5
560100

PCBs

Samples:

Sample No	Station Location	Matrix	Date Collected	Date Extracted	Date Analyzed
E00H4	AP-SL069-03	Soil	06/06/01	06/08/01	06/16/01
E00H8	AP-SL069-06	Soil	06/06/01	06/08/01	06/16/01
E00H9	AP-SL064-01	Soil	06/06/01	06/08/01	06/16/01
E00J0	AP-SL064-02	Soil	06/06/01	06/08/01	06/16/01
E00J1	AP-SL064-03	Soil	06/06/01	06/08/01	06/16/01
E00J2	AP-SL064-04	Soil	06/06/01	06/08/01	06/16/01
E00J3	AP-SL064-04DP	Soil	06/06/01	06/08/01	06/16/01
E00J4	AP-SL064-05	Soil	06/06/01	06/08/01	06/16/01
E00J5	AP-SL044-01	Soil	06/06/01	06/08/01	06/16/01
E00J6	AP-SL044-02	Soil	06/06/01	06/08/01	06/16/01
E00J7	AP-SL044-03	Soil	06/06/01	06/08/01	06/16/01
E00J8	AP-SL044-04	Soil	06/06/01	06/08/01	06/16/01
E00J9	AP-SL068-01	Soil	06/06/01	06/08/01	06/16/01
E00K0	AP-SL068-02	Soil	06/06/01	06/08/01	06/16/01
E00K1	AP-SL068-03	Soil	06/06/01	06/08/01	06/16/01
E00K2	AP-SL068-04	Soil	06/06/01	06/08/01	06/16/01
E30M8	AP-SD035-01	Soil	06/06/01	06/08/01	06/16/01
E30N0	AP-SD035-03	Soil	06/06/01	06/08/01	06/16/01
E30N1	AP-SD035-04	Soil	06/06/01	06/08/01	06/16/01
E30N2	AP-SL058-01	Soil	06/06/01	06/08/01	06/16/01

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

Method Blank:
The method blank PBLKSD was associated with SDG. PBLKSD was analyzed on 06/15/01 with all the samples (E00H4, E00H8, E00H9, E00J0 thru E00J9, E00K0 thru E00K2, E30N0 thru E30N2, E30M8, and MS/MSD). The PBLKSD 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%).

Matrix Spike/ Matrix Spike Duplicate Recovery:
The matrix spike/ matrix spike duplicate audit was performed on sample E00H4. The matrix spike/matrix spike duplicate, and relative percent difference (RPD %) recoveries were within the quality control limits (29 to 135%).

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

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

Initial And Continuing Verifications Calibration:
The aroclor initial calibration recoveries were all within the quality control limit.
The multi-component calibration verification recoveries were within the average (15%) acceptance limit.

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: 07/05/01

JUN 2 1 2001

67-4A- AAL2

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME SOUTHWEST LABORATORY OF OKLAHOMA
CITY/STATE BROKEN ARROW, OKLAHOMA
CASE NO. 29294 SDG NO. E0044 SDG NOS. TO FOLLOW
SAS NO.
CONTRACT NO. 68W99078
SOW NO. OLM04.2

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

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
1. Inventory Sheet (Form DC-2) (Do not Number)			EM	
2. SDG Case Narrative	1	2		
3. SDG Cover Sheet/Traffic Report	3	7		
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. 29294 SDG NO. E00H4 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	EM	
MS/MSD Summary (Form III SV)				
Method Blank Summary (Form IV SV)				
GC/MS Instrument Performance Check (Form V SV)				
Internal Standard Area and RT Summary (Form VIII SV)				
b. Sample Data				
TCL Results - (Form I SV-1, SV-2)				
Tentatively Identified Compounds (Form I SV-				
Reconstructed total ion chromatograms (RIC) for each sample				
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds				
Quantitation reports				
Mass Spectra of TICs with three best library matches				
GPC chromatograms (if GPC is required)				
c. Standards Data (All Instruments)				
Initial Calibration Data (Form VI SV-1, SV-2)				
RICs and Quan Reports for all Standards				
Continuing Calibration Data (Form VII SV-1, SV-				
RICs and Quantitation Reports for all Standards				
d. Raw QC Data				
DFTPP				
Blank Data				
Matrix Spike/Matrix Spike Duplicate Data				
e. Raw GPC Data				
6. **Pesticides Data**				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II	8	8		
MS/MSD Duplicate Summary (Form III PEST)	9	10		
Method Blank Summary (Form IV PEST)	11	11		

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

CASE NO. 29294 SDG NO. E00H4 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
6. **Pesticides Data** (Cont.)				
b. Sample Data	12	100		
TCL Results - Organic Analysis Data Sheet (Form I PEST)			EM	
Chromatograms (Primary Column)				
Chromatograms from second GC column				
GC Integration report or data system printout				
Manual work sheets				
For pesticides/Aroclors by GC/MS, Copies of raw spectra and copies of background-subtracted mass spectra of target compounds (samples & standards)				
c. Standards Data	101	207		
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	208	242		
Matrix Spke/Matrix Spike Duplicate Data	243	267		

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

CASE NO. 29294 SDG NO. E0044 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
6. **Pesticides Data** (Cont.)				
e. Raw GPC Data	268	273	EM	
f. Raw Florisil Data	n/a	n/a		
7. **Miscellaneous Data**				
Original preparation and analysis forms or of preparation and analysis logbook pages	274	280		
Internal sample and sample extract transfer chain-of-custody records	281	288		
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)	289	290		
Chain-of-Custody Records	291	294		
Sample Tags	295	314		
Sample Log-in Sheet (Lab & DC1)	315	320		
Miscellaneous Shipping/Receiving Records (describe or list)				
Memos, analytical Request	321	326		
Darmo	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:** _____

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

CASE NO. 29294 SDG NO. E00H4 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	(Signature)	(Printed Name/Title)	(Date)
Completed by: (CLP Lab)	Sandra Jackett	Sandra Jackett/Data Clerk	6/20/01
Verified by: (CLP Lab)	Emma Morton	Emma Morton Data Clerk	6/20/01
Audited by: (EPA)			

JUN 2 1 2001

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

SDG NARRATIVE

June 20, 2001

CONTRACT: 68W99079

CASE NO: 29294

SDG NO: E00H4

SAMPLES: E00H4, E00H4MS, E00H4MSD, E00H8, E00H9, E00J0, E00J1, E00J2, E00J3, E00J4, E00J5, E00J6, E00J7, E00J8, E00J9, E00K0, E00K1, E00K2, E00K3, E00M8, E00M8DL, E00N0, E00N1, E00N2 and E00N2DL.

FRACTION: Pesticide/PCB

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

Columns: The soil samples were analyzed on J&W (agilent technologies) dual analytical columns, DB17MS, length 30m, id 0.32 mm, film thickness 0.25 um) and DB-XLB, length 30m, id 0.32 mm, film thickness 0.25 um. These columns were specifically designed for pesticide/PCB separation as required by the EPA's SOW. All applicable manufacturer's instructions were followed for the analysis of pesticides/PCBs. Manufacturer provided information on the performance characteristics of the columns are kept on site. HYDROGEN was used as the carrier gas for all samples analyzed on instrument signals HP_15A and HP_15B with columns DB-17MS & DB-XLB.

The following samples in this SDG labeled with a DL are considered billable since these samples had dilutions analyzed to get target compounds within instruments linear range, E00M8DL and E00N2DL.

The sample cooler arrived at 4.8 & 5.0 degrees Celsius.

The modification for these soils included the following cleanups: OLM04.2 GPC cleanup followed by SW846 method 3630 Silica Gel Cleanup which was then followed by SW846- method 3665 sulfuric acid cleanup prior to analyses. No florisil clean up was necessary as part of the modification.

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

Surrogates: All surrogates were within QC limits.

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

duplicate.

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

Retention Times: All retention times were within QC limits.

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

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

Initial Calibrations: Initial calibrations were analyzed for Arochlor 1016, 1242, 1254 and 1260 and all percent RSDs were within QC limits of an average 20% RSD per arochlor (this is the average % RSD of all 5 peaks).

Calibration Verifications: Calibration verifications were analyzed for Arochlors 1016 and 1260. All percent differences were within QC limits of an average 15%D per arochlor (this is the average %D of all 5 peaks).

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

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

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

Harry M. Borg

Harry M. Borg
Organic Program Manager

June 20, 2001

Contract Laboratory Program

Sample Delivery Group (SDG) Cover Sheet

SDG Number E00H4

St 6/11/01

Laboratory Name Southwest Laboratory of Ok. Laboratory Code SWOK

Contract No. 68W99079 Case No. ~~OLM04.2~~ 29254

Analyses Price 910.40 SDG Turnaround 7

EPA Sample Numbers in SDG (Listed in Numerical Order)

1) E00H4	7) E00J3	13) E00J9	19) E30N1
2) E00H8	8) E00J4	14) E00K0	20) E30N2
3) E00H9	9) E00J5	15) E00K1	21)
4) E00J0	10) E00J6	16) E00K2	22)
5) E00J1	11) E00J7	17) E30M8	23)
6) E00J2	12) E00J8	18) E30N0	24)

St 6/11/01

E00H4

First Sample in SDG

E30N2

Last Sample in SDG

06/07/2001

First Sample Receipt Date

06/08/2001

Last Sample Receipt Date

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

Signature Harry M. Berg Date 6-11-01

Version 2.0

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

Case No:	29294
DAS No:	2001ZG07 H4
SDG No:	E00E6

L

Date Shipped: 6/6/2001
Carrier Name: FedEx
Airbill: 821876982001
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]	6-6-01 1715	[illegible]	6-7-01 8:32
2			
3			
4			

Sampler Signature:

For Lab Use Only ST 6/8/01

Lab Contract No: 68W99079
Unit Price: 910.40
Transfer To:
Lab Contract No: ST 6/8/01
Unit Price:

H4 E00E6

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
E00G6	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-119278 (Ice Only) (1)	AP-SL061-01	S:	6/5/2001	16:21		
E00G7	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-119280 (Ice Only) (1)	AP-SL061-02	S:	6/5/2001	16:21		
E00G8	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-119282 (Ice Only) (1)	AP-SL061-03	S:	6/5/2001	16:21		
E00G9	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-119283 (Ice Only) (1)	AP-SL061-03DP	S:	6/5/2001	16:21		
E00H0	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-119284 (Ice Only) (1)	AP-SL061-04	S:	6/5/2001	16:21		
E00H1	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119285 (Ice Only) (1)	AP-SL069-01	S:	6/6/2001	11:30		
E00H3	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119288 (Ice Only) (1)	AP-SL069-02	S:	6/6/2001	11:30		
E00H4	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119290 (Ice Only) (1)	AP-SL069-03	S:	6/6/2001	11:30		
E00H5	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119292 (Ice Only) (1)	AP-SL069-04	S:	6/6/2001	11:30		
E00H6	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119294 (Ice Only) (1)	AP-SL069-05	S:	6/6/2001	11:30		

COPY
ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E00E6
Signature S Jackett
Date 6/8/01

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
	E00H4, E00E6	[illegible]	4.8°C	17899, 177900

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

R Number: 5-154097651-060601-0001

LABORATORY COPY

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

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

Case No:	29294
DAS No:	2001ZG07
SDG No:	E00H4

L

Date Shipped:	6/6/2001
Carrier Name:	FedEx
Airbill:	821876982001
Shipped to:	Southwest Labs of Oklahoma, Inc. 1700 West Albany Suite C Broken Arrow OK 74012 (918) 251-0545

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
1 [illegible]	6-6-01 1715	[illegible]	6-7-01 8:30
2			
3			
4			

Sampler Signature:

For Lab Use Only

Lab Contract No:	68W99079
Unit Price:	91040
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 E00H4
E00H7	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119295 (Ice Only) (1)	AP-SL069-05DP	S:	6/6/2001	11:30		
E00H8	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119298 (Ice Only) (1)	AP-SL069-06	S:	6/6/2001	11:30		
E00H9	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119300 (Ice Only) (1)	AP-SL064-01	S:	6/6/2001	12:00		
E00J0	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119302 (Ice Only) (1)	AP-SL064-02	S:	6/6/2001	12:00		
E00J1	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119303 (Ice Only) (1)	AP-SL064-03	S:	6/6/2001	12:00		
E00J2	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119305 (Ice Only) (1)	AP-SL064-04	S:	6/6/2001	12:00		
E00J3	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119307 (Ice Only) (1)	AP-SL064-04DP	S:	6/6/2001	12:00		
E00J4	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119308 (Ice Only) (1)	AP-SL064-05	S:	6/6/2001	12:00		
E00J5	Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119310 (Ice Only) (1)	AP-SD044-01	S:	6/6/2001	9:45		
E00J6	Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119311 (Ice Only) (1)	AP-SD044-02	S:	6/6/2001	9:45		

COPY

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E00E6
Signature [illegible]
Date 6/8/01

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC: E00H4, E00E6	Additional Sampler Signature(s): [illegible]	Cooler Temperature Upon Receipt: 4-8°C	Chain of Custody Seal Number: 17899, 17900
Analysis Key: PCBs = PCBs	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? Y / Shipment Iced? Y

R Number: 5-154097651-060601-0001

LABORATORY COPY

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

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

Case No:	29294
DAS No:	2001ZG07
SDG No:	E00H4

L

Date Shipped:	6/7/01
Carrier Name:	FedEx
Airbill:	821876981998
Shipped to:	Southwest Labs of Oklahoma, Inc. 1700 West Albany Suite C Broken Arrow OK 74012 (918) 251-0545

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
[illegible]	6.7.01 1810	[illegible]	6-8-01 8:30
2			
3			
4			

Sampler Signature:

For Lab Use Only

Lab Contract No:	68W99079
Unit Price:	910.40
Transfer To:	
Lab Contract No:	
Unit Price:	

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt E00H4
E30M8	Sediment/ Greg Gehrig	L/G	PCBs (7)	5-050336 (Ice Only) (1)	AP-SD035-01	S: 6/6/01	17:40		
E30M9	Sediment/ Greg Gehrig	L/G	PCBs (7)	5-050339 (Ice Only) (1)	AP-SD035-02	S: 6/6/01	17:40		
E30N0	Sediment/ Greg Gehrig	L/G	PCBs (7)	5-050341 (Ice Only) (1)	AP-SD035-03	S: 6/6/01	17:40		
E30N1	Sediment/ Greg Gehrig	L/G	PCBs (7)	5-050343 (Ice Only) (1)	AP-SD035-04	S: 6/6/01	17:40		
* E30N2	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-050344 (Ice Only) (1)	AP-SL058-01	S: 6/6/01	18:15		
E30N3	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-050347 (Ice Only) (1)	AP-SL058-02	S: 6/6/01	18:15		
E30N7	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-050355 (Ice Only) (1)	AP-SL058-05	S: 6/6/01	18:15		
E30N8	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-050357 (Ice Only) (1)	AP-SL059-01	S: 6/6/01	16:40		
E30N9	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-050358 (Ice Only) (1)	AP-SL059-02	S: 6/6/01	16:40		
E30P0	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-050359 (Ice Only) (1)	AP-SL059-03	S: 6/6/01	16:40		

*SDG Final Sample

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

TR Number: 5-201142833-060701-0001

LABORATORY COPY

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

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

Case No:	29294
DAS No:	2001ZG07
SDG No:	E00H4

L

Date Shipped:	6/6/2001
Carrier Name:	FedEx
Airbill:	821876982001
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]	6/6/01 1715	[illegible]	6-2-01 8:30
2			
3			
4			

Sampler Signature:

For Lab Use Only

Lab Contract No:	68W99079
Unit Price:	910.40
Transfer To:	
Lab Contract No:	
Unit Price:	

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION		SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY E00H4 Sample Condition On Receipt
E00J7	Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119312 (Ice Only) (1)	AP-SD044-03	S:	6/6/2001	9:45		
E00J8	Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119313 (Ice Only) (1)	AP-SD044-04	S:	6/6/2001	9:45		
E00J9	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119315 (Ice Only) (1)	AP-SL068-01	S:	6/6/2001	10:20		
E00K0	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119317 (Ice Only) (1)	AP-SL068-02	S:	6/6/2001	10:20		
E00K1	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119318 (Ice Only) (1)	AP-SL068-03	S:	6/6/2001	10:20		
E00K2	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119319 (Ice Only) (1)	AP-SL068-04	S:	6/6/2001	10:20		

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC: E00H4, E00E6	Additional Sampler Signature(s): [illegible]	Cooler Temperature Upon Receipt: 4-8°C	Chain of Custody Seal Number: 17899, 177900
Analysis Key: PCBs = PCBs	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? Y / Shipment Iced? Y

R Number: 5-154097651-060601-0001

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

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

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

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	TOT OUT
01	PBLKSD	70	74	83	84	0
02	ELCS1	65	68	76	77	0
03	ELCS2	67	72	84	88	0
04	E00H4	62	66	72	76	0
05	E00H4MS	71	76	83	88	0
06	E00H4MSD	66	71	78	81	0
07	E00H8	51	55	64	65	0
08	E00H9	60	63	68	71	0
09	E00J0	78	84	90	94	0
10	E00J1	64	68	77	81	0
11	E00J2	41	43	54	55	0
12	E00J3	55	62	69	67	0
13	E00J4	71	76	78	83	0
14	E00J5	60	63	78	81	0
15	E00J6	93	98	105	108	0
16	E00J7	68	71	80	81	0
17	E00J8	64	69	75	70	0
18	E00J9	71	82	113	93	0
19	E00K0	76	78	80	86	0
20	E00K1	79	82	97	96	0
21	E00K2	72	75	86	88	0
22	E30M8	66	63	85	87	0
23	E30N0	73	75	79	69	0
24	E30N1	60	60	74	72	0
25	E30N2	58	54	77	79	0
26	E30M8DL	97	82	140	127	0
27	E30N2DL	90	70	114	111	0
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

JC 8

FORM II PCB-1

3H

SOIL AROCLOR LABORATORY CONTROL SPIKE/ DUPLICATE RECOVERY

Lab Name: SWL-TULSA Case No.: 29294 SDG No.: E00H4

LCS Sample NO.: ELCS1

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Aroclor-1254	133	93.4	70	29-135

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1254	133	102	77	9	50	29-135

Column to be used to flag recovery values

* Values outside of QC limits

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

Comments: _____

_____

3F

SOIL AROCLOR MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Matrix Spike - Client Sample NO.: E00H4

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Aroclor-1254	338	0	248	73	29-135

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1254	324	249	77	0	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: _____

_____

10

4C

AROCLOR METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

PBLKSD

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Lab Sample ID: BL0608SD Lab File ID: 15061475

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

Sulfur Cleanup: (Y/N) N Date Extracted: 06/08/01

Date Analyzed (1): 06/15/01 Date Analyzed (2): 06/15/01

Time Analyzed (1): 2234 Time Analyzed (2): 2234

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

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	ELCS1	LC0608SD	06/15/01	06/15/01
02	ELCS2	LD0608SD	06/15/01	06/15/01
03	E00H4	46702.33	06/16/01	06/16/01
04	E00H4MS	46702.34MS	06/16/01	06/16/01
05	E00H4MSD	46702.35MSD	06/16/01	06/16/01
06	E00H8	46702.36	06/16/01	06/16/01
07	E00H9	46702.37	06/16/01	06/16/01
08	E00J0	46702.38	06/16/01	06/16/01
09	E00J1	46702.39	06/16/01	06/16/01
10	E00J2	46702.40	06/16/01	06/16/01
11	E00J3	46702.41	06/16/01	06/16/01
12	E00J4	46702.42	06/16/01	06/16/01
13	E00J5	46702.43	06/16/01	06/16/01
14	E00J6	46702.44	06/16/01	06/16/01
15	E00J7	46702.45	06/16/01	06/16/01
16	E00J8	46702.46	06/16/01	06/16/01
17	E00J9	46702.47	06/16/01	06/16/01
18	E00K0	46702.48	06/16/01	06/16/01
19	E00K1	46702.49	06/16/01	06/16/01
20	E00K2	46702.50	06/16/01	06/16/01
21	E30M8	46721.01	06/16/01	06/16/01
22	E30N0	46721.02	06/16/01	06/16/01
23	E30N1	46721.03	06/16/01	06/16/01
24	E30N2	46721.04	06/16/01	06/16/01
25	E30M8DL	46721.01DL	06/18/01	06/18/01
26	E30N2DL	46721.04DL	06/18/01	06/18/01

Comments: _____

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00H4

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Matrix: (soil/water) SOIL Lab Sample ID: 46702.33

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

% Moisture: 61 decanted: (Y/N) __ Date Received: 06/07/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/08/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	84	U
11104-28-2	Aroclor-1221	84	U
11141-16-5	Aroclor-1232	84	U
53469-21-9	Aroclor-1242	84	U
12672-29-6	Aroclor-1248	84	U
11097-69-1	Aroclor-1254	84	U
11096-82-5	Aroclor-1260	84	U
	Surrogate amount spiked	16.99	

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061483.D\ECD1A.CH Vial: 83
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061483.D\ECD2B.CH
Acq On : 16 Jun 2001 1:40 Operator: DDC
Sample : 46702.33 *E00H4 * Inst : HP_15
Misc : *EPA*30.2G/5.0ML*61 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:15 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	311633	306226	10.5	11.2
	Spiked Amount 16.981			Recovery	=	61.83%	65.96%
22)	S DCB	18.28	18.69	373021	359307	12.2	12.9
	Spiked Amount 16.981			Recovery	=	71.85%	75.97%

Target Compounds:

13

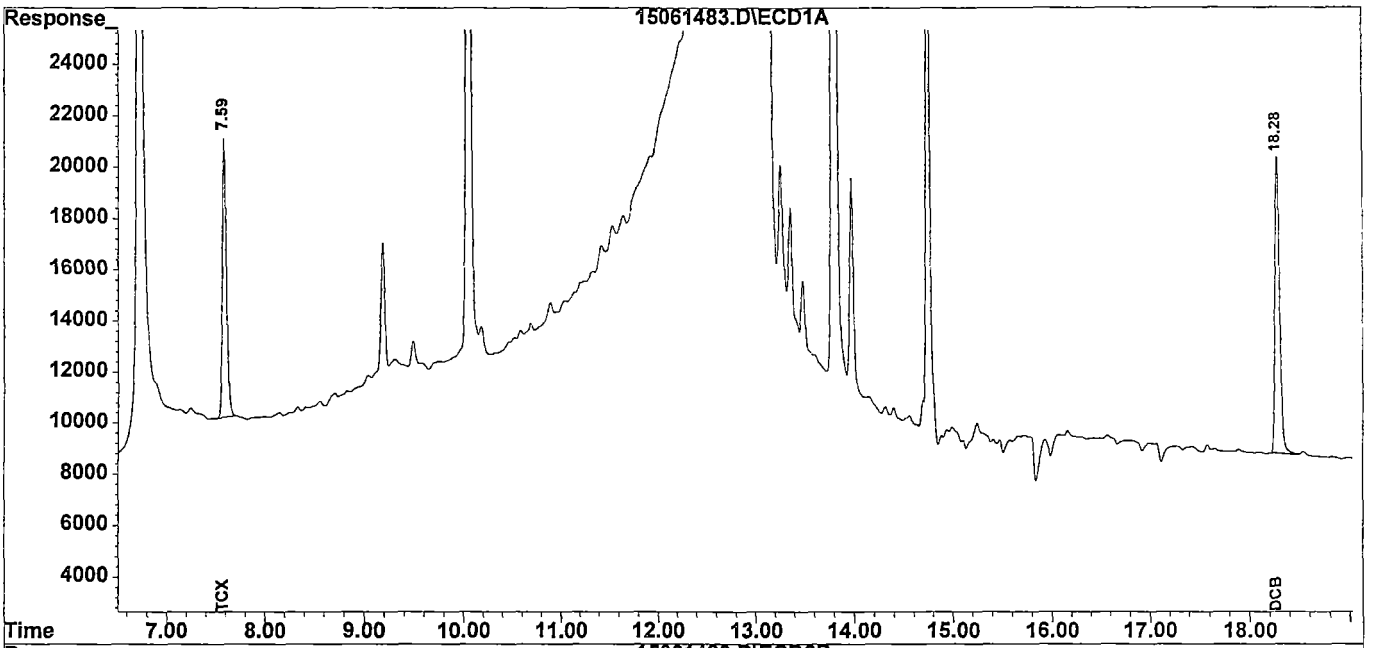
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

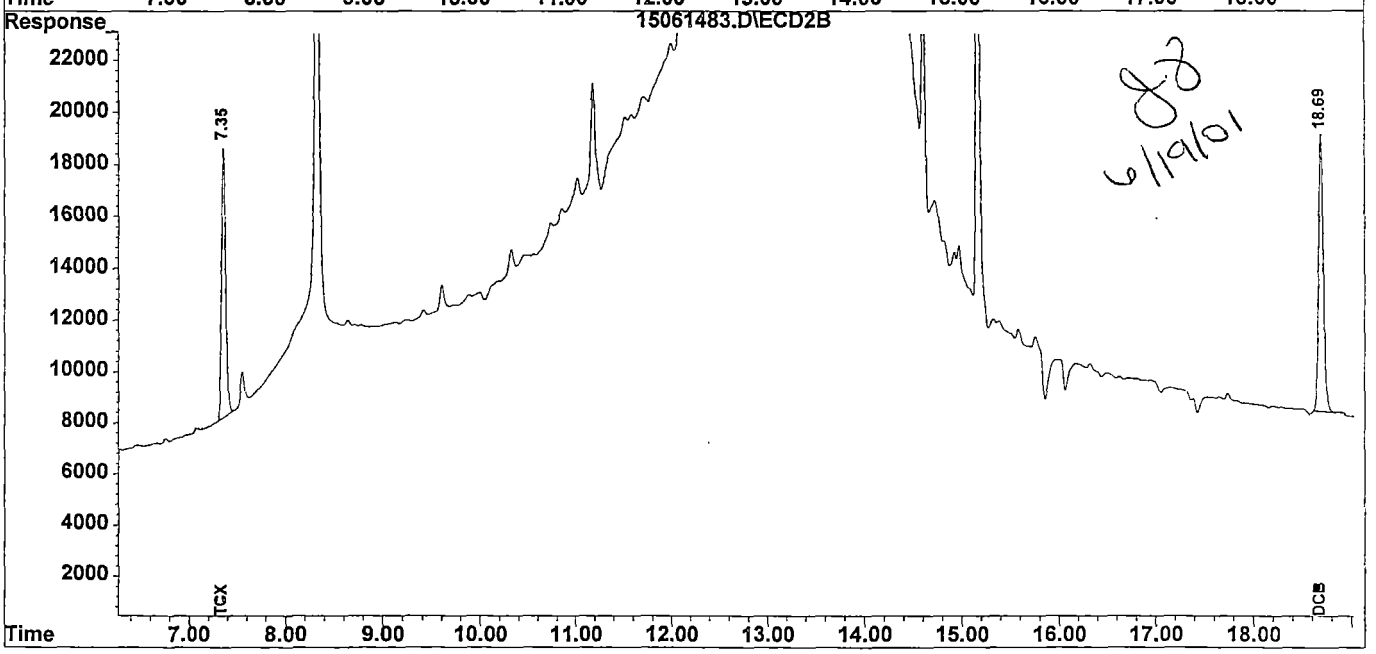
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061483.D\ECD1A.CH Vial: 83
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061483.D\ECD2B.CH
Acq On : 16 Jun 2001 1:40 Operator: DDC
Sample : 46702.33 *E00H4 * Inst : HP_15
Misc : *EPA*30.2G/5.0ML*61 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:15 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





JB 6/19/01

14

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061483.D\ECD1A.CH Vial: 83
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061483.D\ECD2B.CH
Acq On : 16 Jun 2001 1:40 Operator: DDC
Sample : 46702.33 *E00H4 * Inst : HP_15
Misc : *EPA*30.2G/5.0ML*61 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:15 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	311633	306226	10.5	11.2
	Spiked Amount 16.981			Recovery	=	61.83%	65.96%
22)	S DCB	18.28	18.69	373021	359307	12.2	12.9
	Spiked Amount 16.981			Recovery	=	71.85%	75.97%

Target Compounds:

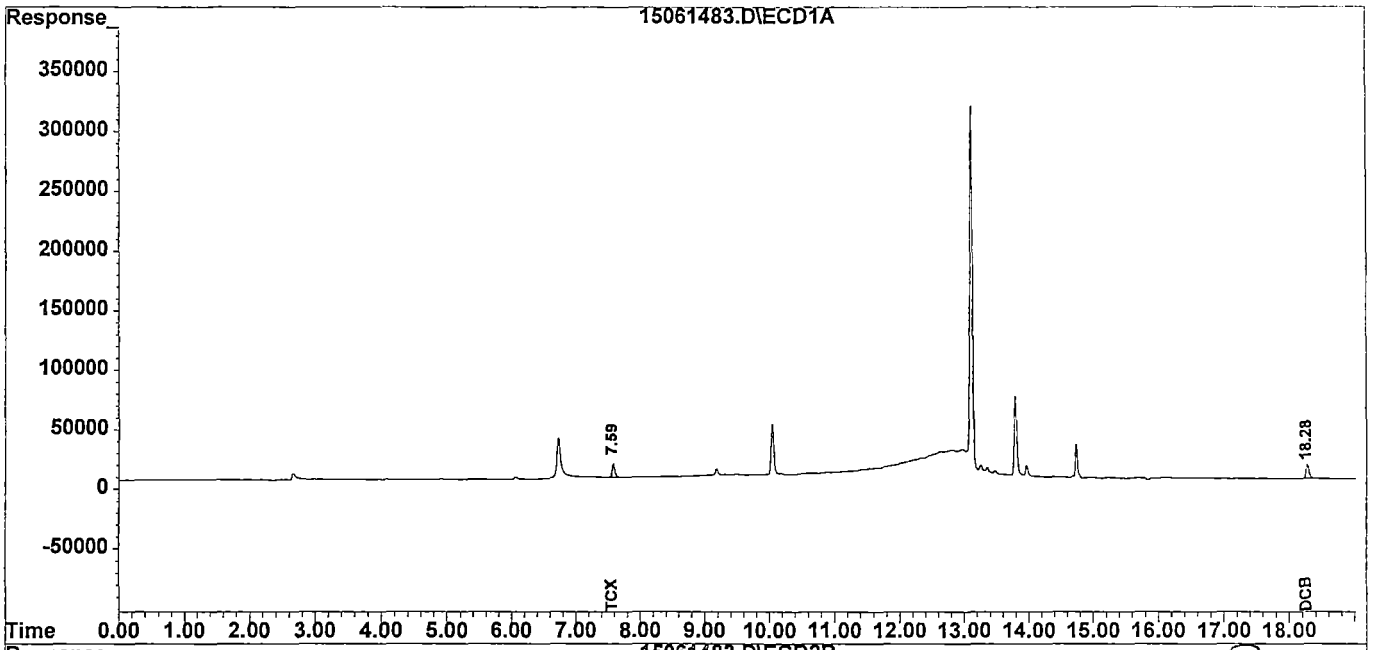
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

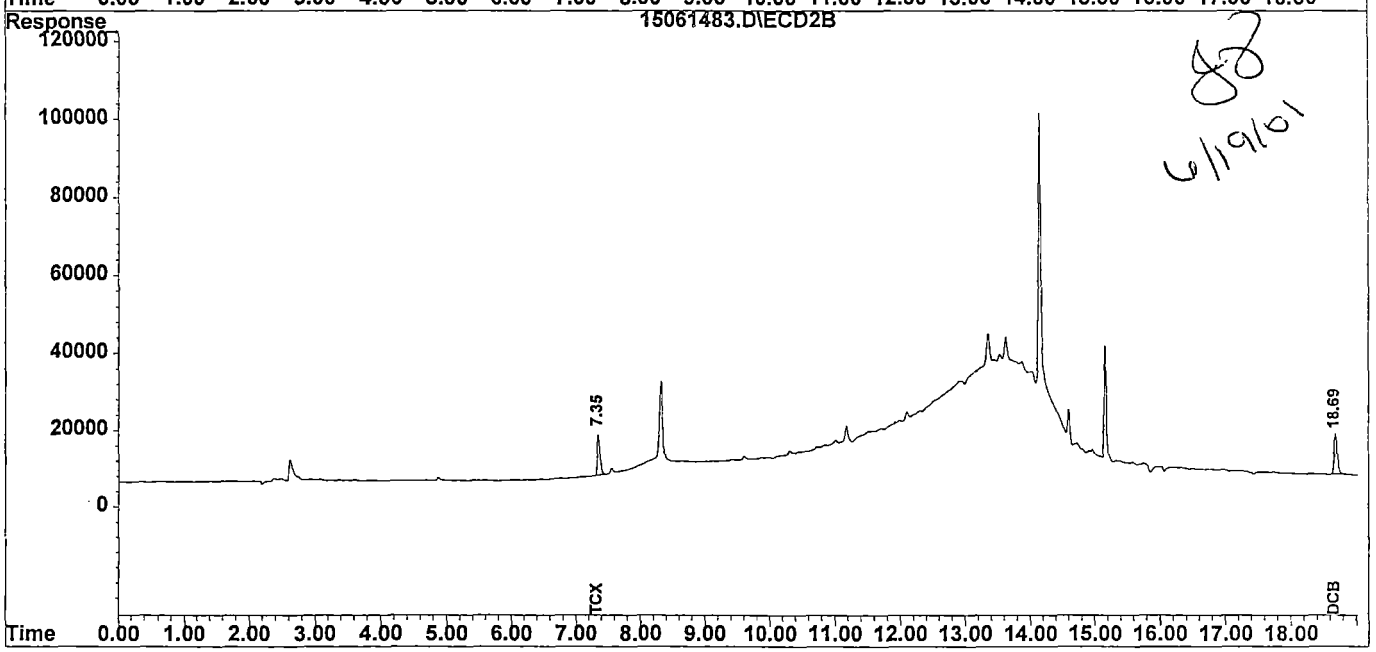
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061483.D\ECD1A.CH Vial: 83
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061483.D\ECD2B.CH
Acq On : 16 Jun 2001 1:40 Operator: DDC
Sample : 46702.33 *E00H4 * Inst : HP_15
Misc : *EPA*30.2G/5.0ML*61 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:15 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





6/19/01

16

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00H8

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Matrix: (soil/water) SOIL Lab Sample ID: 46702.36

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

% Moisture: 37 decanted: (Y/N) __ Date Received: 06/07/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/08/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	51	U
11104-28-2	Aroclor-1221	51	U
11141-16-5	Aroclor-1232	51	U
53469-21-9	Aroclor-1242	290	J P
12672-29-6	Aroclor-1248	51	U
11097-69-1	Aroclor-1254	51	U
11096-82-5	Aroclor-1260	51	U
Surrogate amount spiked		10.28	

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061486.D\ECD1A.CH Vial: 86
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061486.D\ECD2B.CH
Acq On : 16 Jun 2001 2:49 Operator: DDC
Sample : 46702.36 *E00H8 * Inst : HP_15
Misc : *EPA*30.9G/5.0ML*37 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:19 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.59	7.35	254571	254474	5.214	5.641	
	Spiked Amount 10.274			Recovery	=	50.75%	54.91%	
22)	S DCB	18.28	18.69	330796	308967	6.557	6.698	
	Spiked Amount 10.274			Recovery	=	63.82%	65.19%	
	Target Compounds:							
7)	L4 Aroclor-1242	8.42	10.39	255275	232455	225.4	423.7	#
8)	L4 Aroclor-1242 {2}	9.70	11.18	122624	1142247	160.9	1225.5	E#
9)	L4 Aroclor-1242 {3}	10.58f	0.00	960441	0	486.1	N.D.	#
10)	L4 Aroclor-1242 {4}	0.00	12.64	0	33935	N.D. d	56.8	#
	Sum Aroclor-1242			1338340	1408637	872.4	1706.0	
	Average Aroclor-1242					290.794	568.660	

18

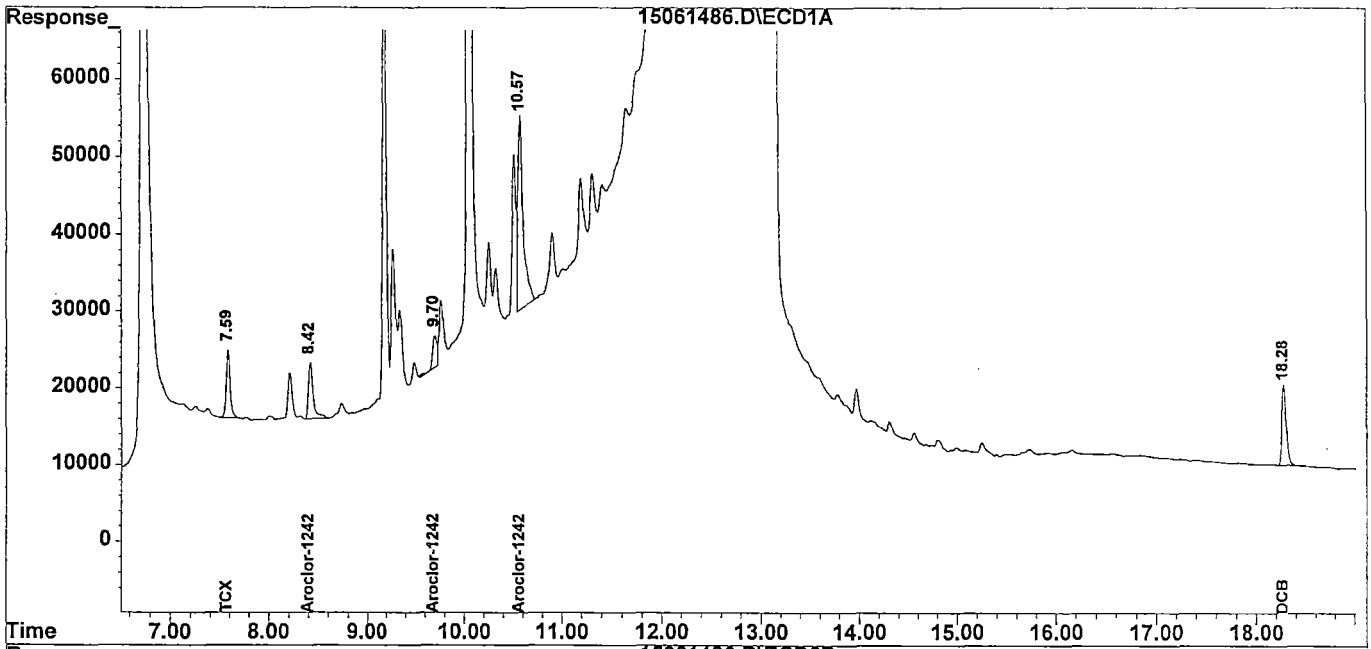
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

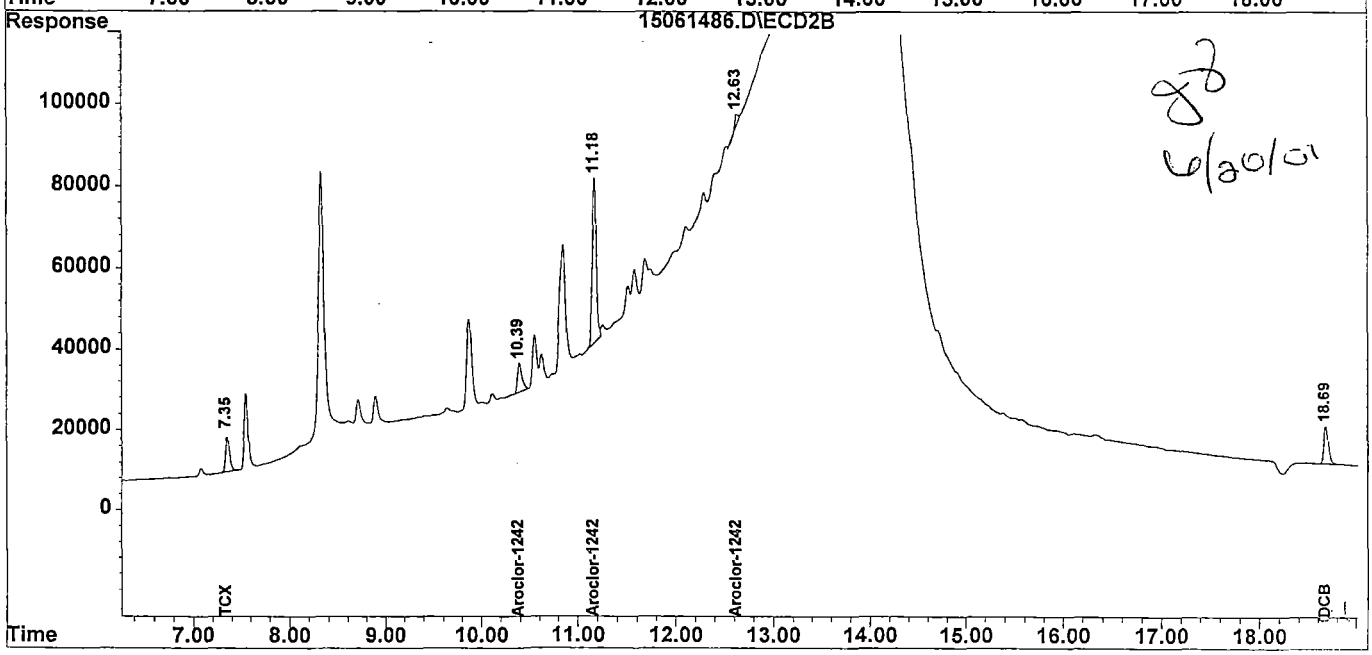
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061486.D\ECD1A.CH Vial: 86
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061486.D\ECD2B.CH
Acq On : 16 Jun 2001 2:49 Operator: DDC
Sample : 46702.36 *E00H8 * Inst : HP_15
Misc : *EPA*30.9G/5.0ML*37 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:19 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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

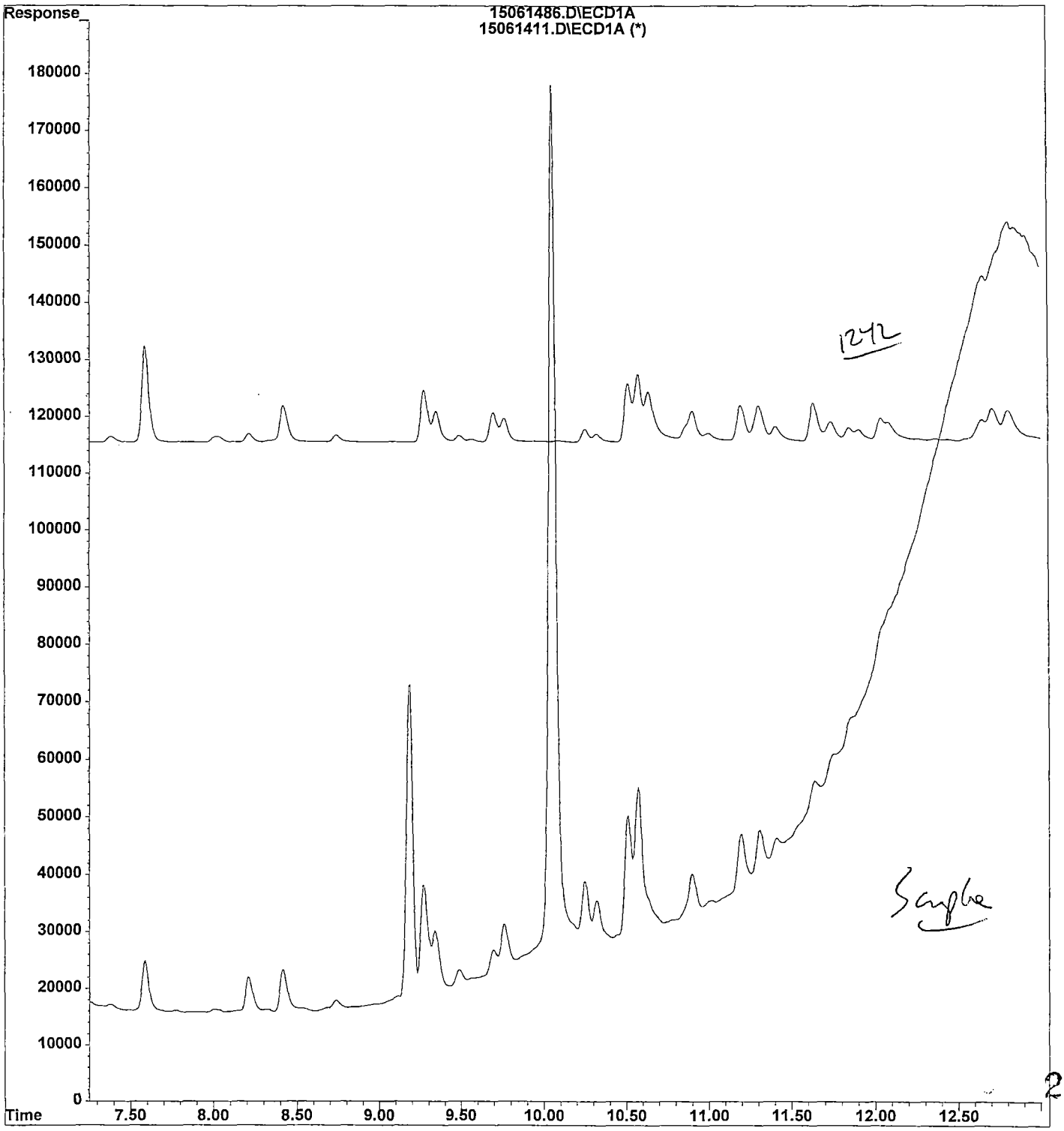




8
6/20/01

19

File : F:\HPCHEM\HP\15\DATA\06_14_01\15061486.D
Operator : DDC
Acquired : 16 Jun 2001 2:49 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 46702.36 *E00H8 *
Misc Info : *EPA*30.9G/5.0ML*37
Vial Number: 86



20

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061486.D\ECD1A.CH Vial: 86
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061486.D\ECD2B.CH
Acq On : 16 Jun 2001 2:49 Operator: DDC
Sample : 46702.36 *E00H8 * Inst : HP_15
Misc : *EPA*30.9G/5.0ML*37 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:19 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.59	7.35	254571	254474	5.214	5.641	
	Spiked Amount 10.274			Recovery	=	50.75%	54.91%	
22)	S DCB	18.28	18.69	330796	308967	6.557	6.698	
	Spiked Amount 10.274			Recovery	=	63.82%	65.19%	
	Target Compounds:							
7)	L4 Aroclor-1242	8.42	10.39	255275	232455	225.4	423.7	#
8)	L4 Aroclor-1242 {2}	9.70	11.18	122624	1142247	160.9	1225.5	E#
	L4 Aroclor-1242 {3}	10.58f	0.00	960441	0	486.1	N.D.	#
10)	L4 Aroclor-1242 {4}	0.00	12.64	0	33935	N.D. d	56.8	#
	Sum Aroclor-1242			1338340	1408637	872.4	1706.0	
	Average Aroclor-1242					290.794	568.660	

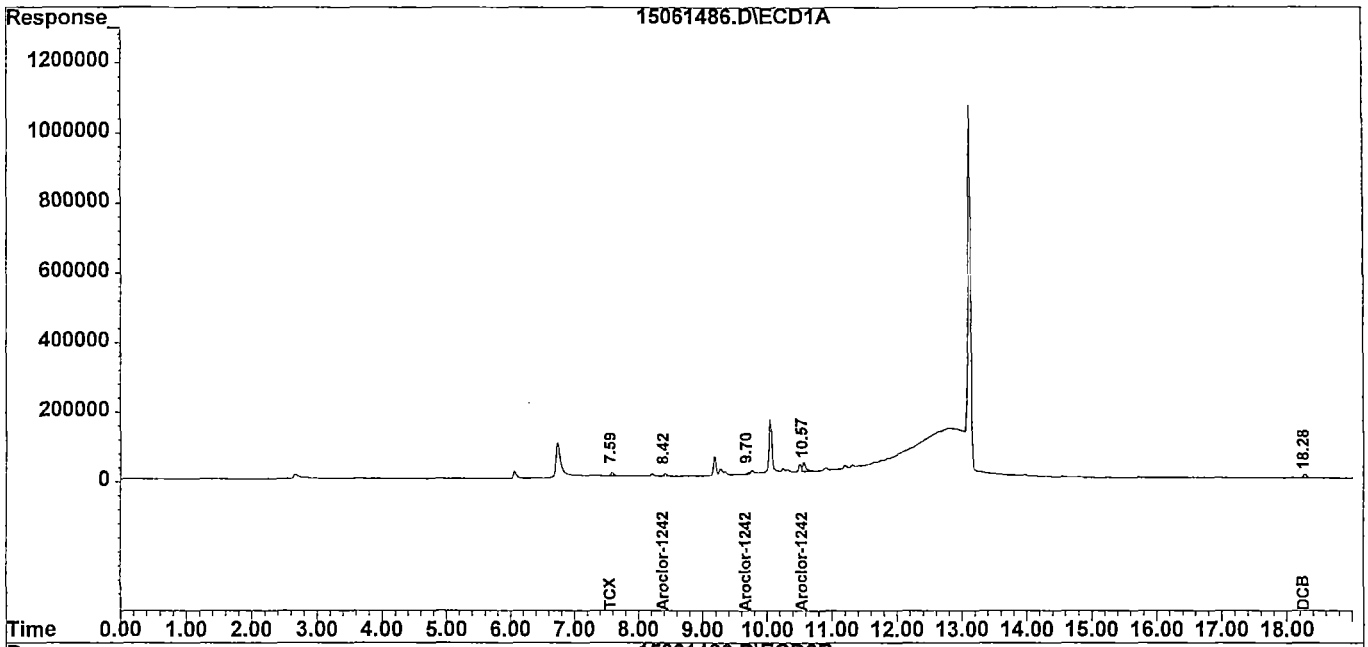
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

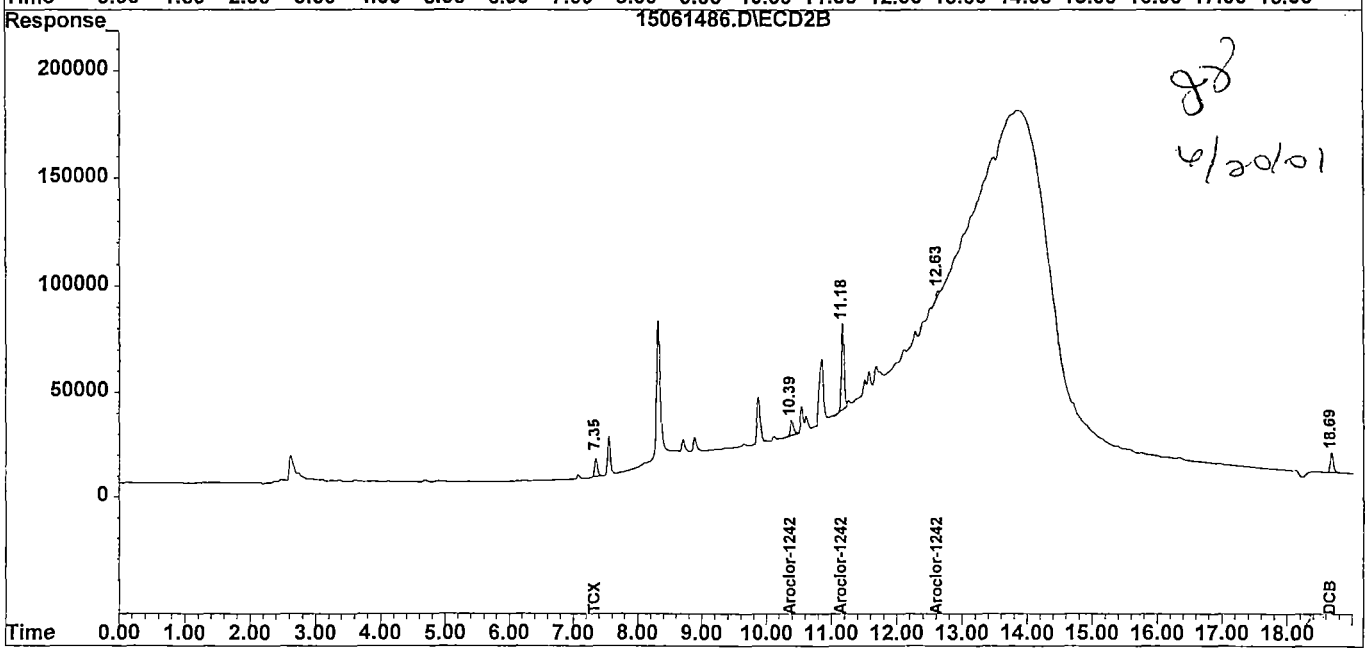
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061486.D\ECD1A.CH Vial: 86
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061486.D\ECD2B.CH
Acq On : 16 Jun 2001 2:49 Operator: DDC
Sample : 46702.36 *E00H8 * Inst : HP_15
Misc : *EPA*30.9G/5.0ML*37 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:19 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00H9

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Matrix: (soil/water) SOIL Lab Sample ID: 46702.37

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

% Moisture: 37 decanted: (Y/N) __ Date Received: 06/07/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/08/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	51	U
11104-28-2	Aroclor-1221	51	U
11141-16-5	Aroclor-1232	51	U
53469-21-9	Aroclor-1242	51	U
12672-29-6	Aroclor-1248	51	U
11097-69-1	Aroclor-1254	51	U
11096-82-5	Aroclor-1260	51	U
Surrogate amount spiked		10.28	

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061487.D\ECD1A.CH Vial: 87
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061487.D\ECD2B.CH
Acq On : 16 Jun 2001 3:13 Operator: DDC
Sample : 46702.37 *E00H9 * Inst : HP_15
Misc : *EPA*30.9G/5.0ML*37 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:21 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	299455	290819	6.133	6.447
	Spiked Amount 10.274			Recovery	=	59.70%	62.75%
22)	S DCB	18.28	18.69	354537	335778	7.028	7.280
	Spiked Amount 10.274			Recovery	=	68.41%	70.86%

Target Compounds:

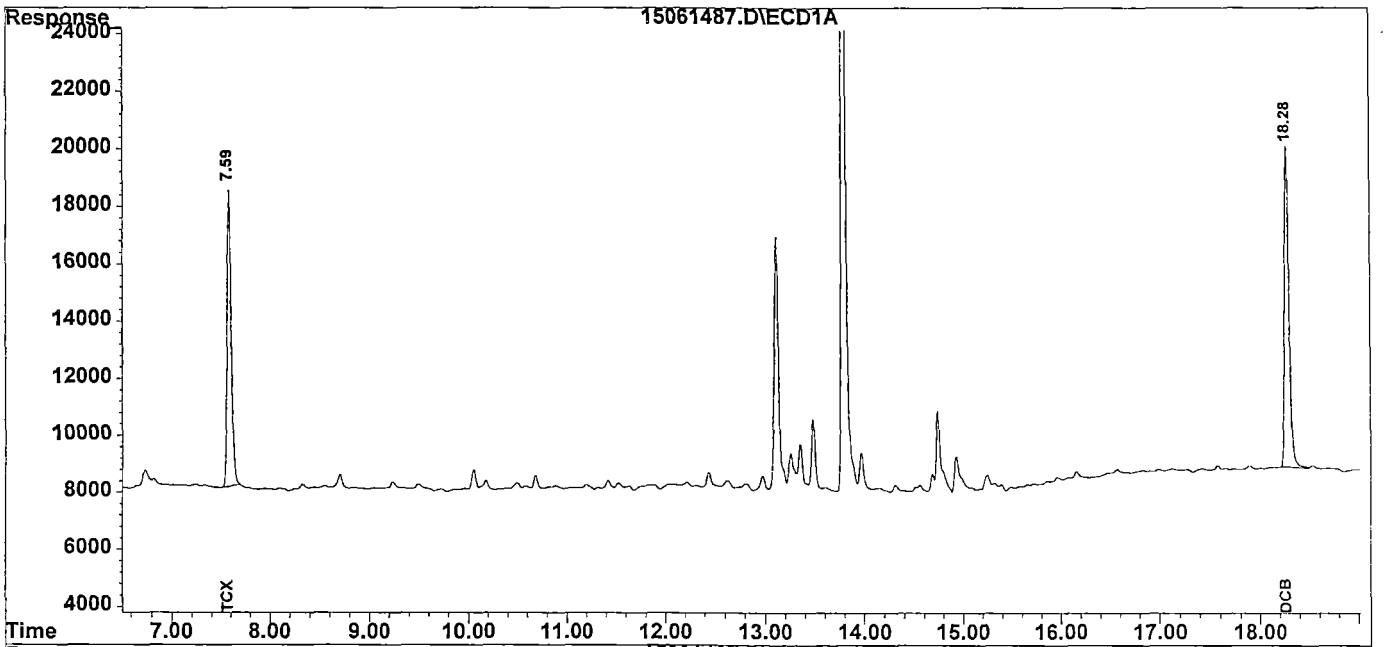
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
15061487.D XPCBF14.M Sat Jun 16 10:23:30 2001 Page 1

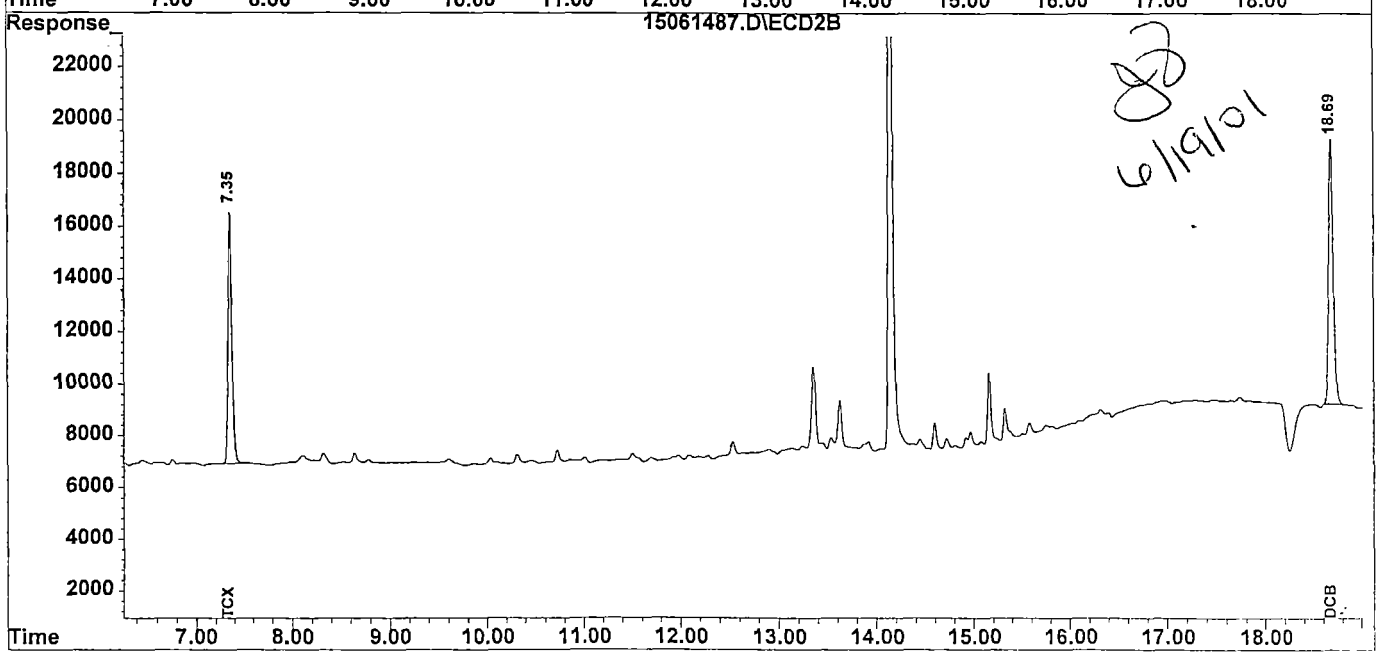
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061487.D\ECD1A.CH Vial: 87
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061487.D\ECD2B.CH
Acq On : 16 Jun 2001 3:13 Operator: DDC
Sample : 46702.37 *E00H9 * Inst : HP_15
Misc : *EPA*30.9G/5.0ML*37 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:21 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00J0

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Matrix: (soil/water) SOIL Lab Sample ID: 46702.38

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

% Moisture: 16 decanted: (Y/N) __ Date Received: 06/07/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/08/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U
	Surrogate amount spiked	7.68	

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061488.D\ECD1A.CH Vial: 88
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061488.D\ECD2B.CH
Acq On : 16 Jun 2001 3:36 Operator: DDC
Sample : 46702.38 *E00J0 * Inst : HP_15
Misc : *EPA*31G/5.0ML*16 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:21 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	392222	388690	6.005	6.441
	Spiked Amount 7.680			Recovery	=	78.19%	83.86%
22)	S DCB	18.28	18.69	468600	447563	6.944	7.254
	Spiked Amount 7.680			Recovery	=	90.41%	94.45%

Target Compounds:

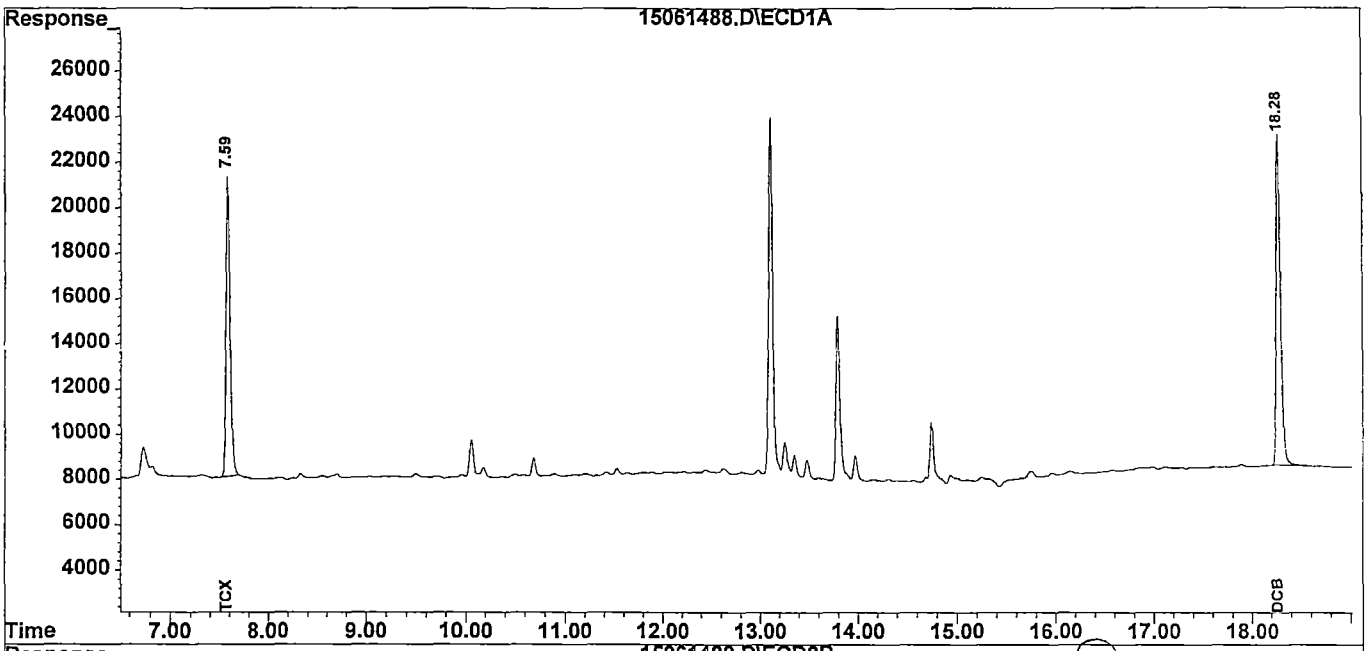
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
15061488.D XPCBF14.M Sat Jun 16 10:23:39 2001 Page 1

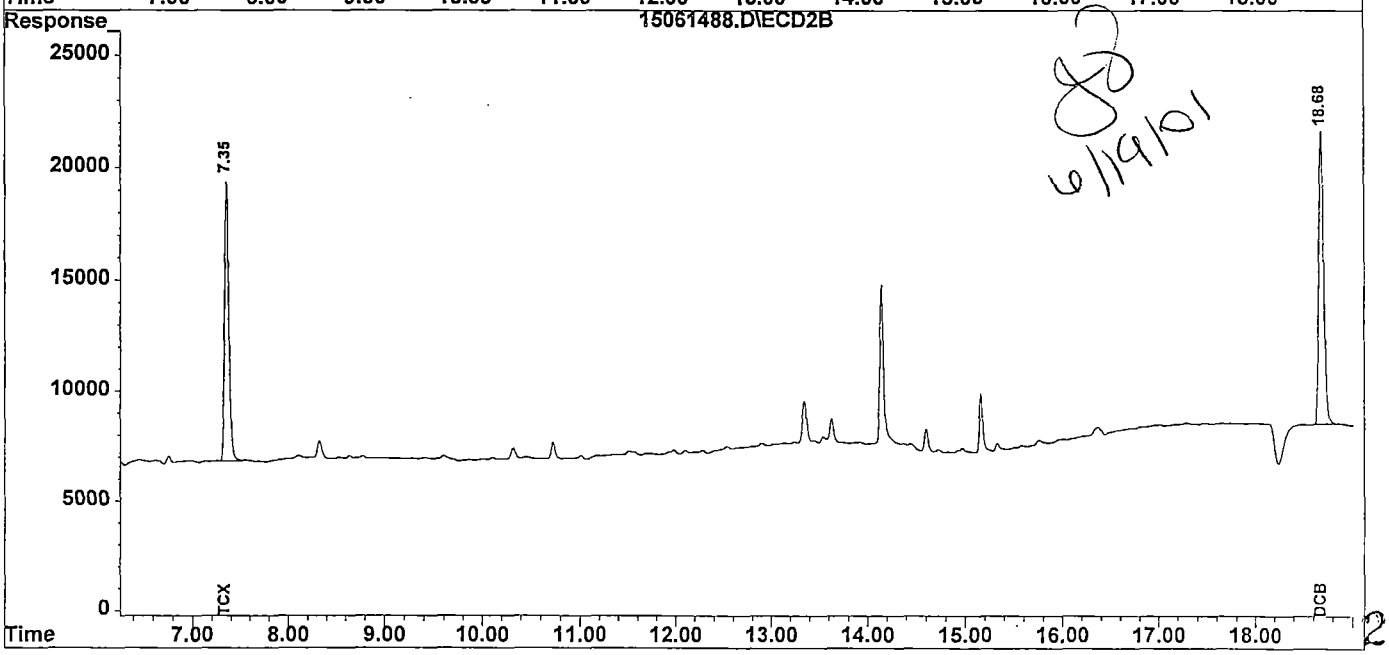
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061488.D\ECD1A.CH Vial: 88
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061488.D\ECD2B.CH
Acq On : 16 Jun 2001 3:36 Operator: DDC
Sample : 46702.38 *E00J0 * Inst : HP_15
Misc : *EPA*31G/5.0ML*16 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:21 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00J1

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Matrix: (soil/water) SOIL Lab Sample ID: 46702.39

Sample wt/vol: 34.0 (g/mL) G Lab File ID:_____

% Moisture: 30 decanted: (Y/N) __ Date Received: 06/07/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/08/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	42	U
11104-28-2	Aroclor-1221	42	U
11141-16-5	Aroclor-1232	42	U
53469-21-9	Aroclor-1242	42	U
12672-29-6	Aroclor-1248	42	U
11097-69-1	Aroclor-1254	42	U
11096-82-5	Aroclor-1260	42	U
Surrogate amount spiked		8.40	

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061489.D\ECD1A.CH Vial: 89
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061489.D\ECD2B.CH
Acq On : 16 Jun 2001 3:59 Operator: DDC
Sample : 46702.39 *E00J1 * Inst : HP_15
Misc : *EPA*34G/5.0ML*30 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:21 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	322034	314559	5.395	5.703
	Spiked Amount 8.403			Recovery	=	64.20%	67.87%
22)	S DCB	18.28	18.69	399411	385260	6.476	6.832
	Spiked Amount 8.403			Recovery	=	77.06%	81.30%

Target Compounds:

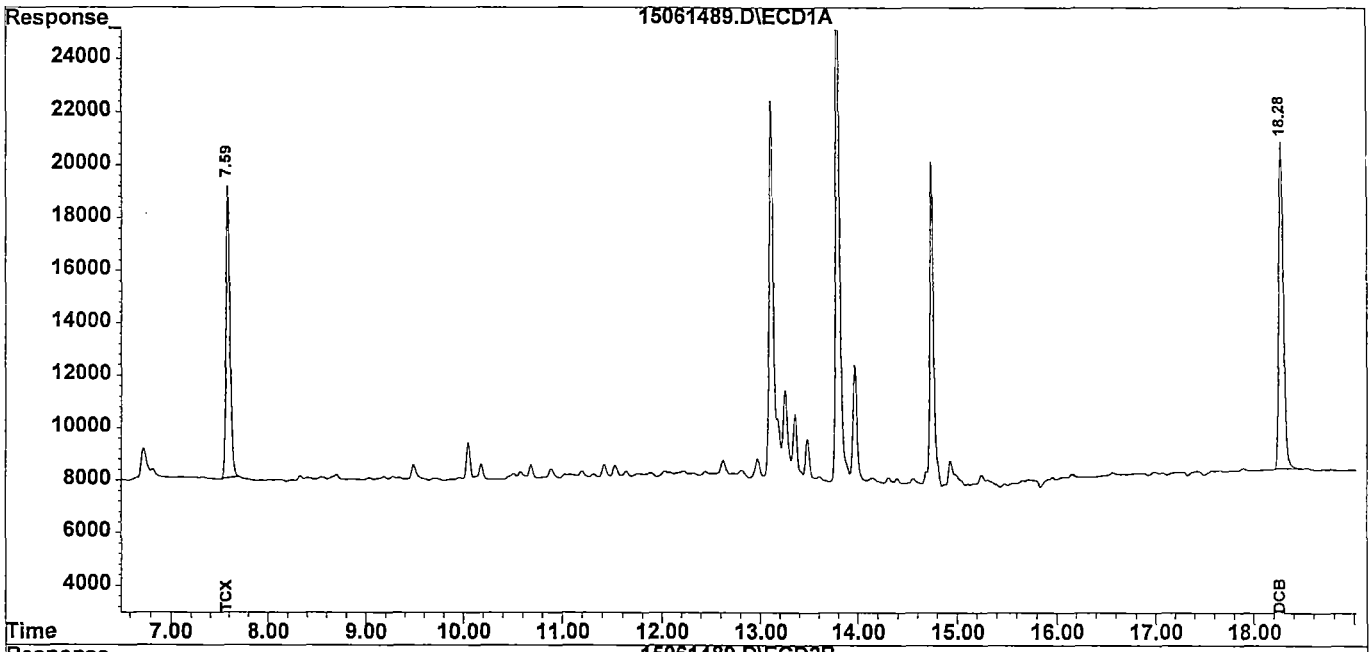
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

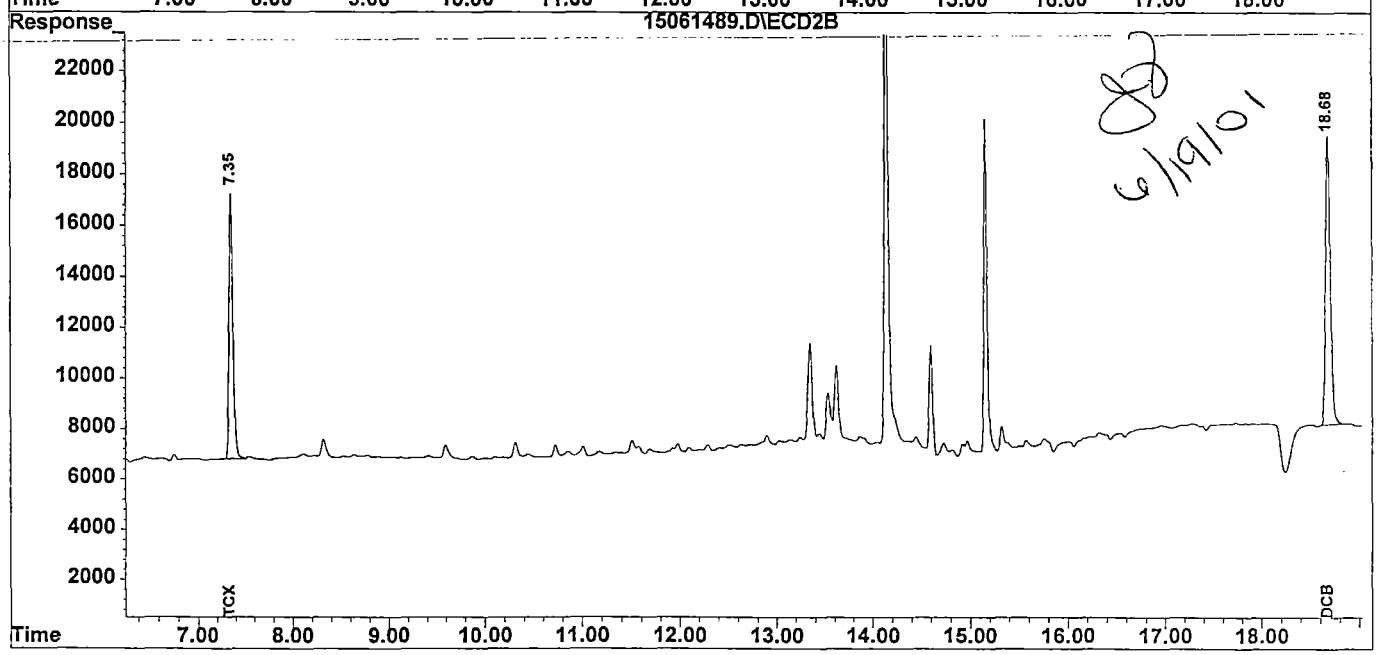
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061489.D\ECD1A.CH Vial: 89
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061489.D\ECD2B.CH
Acq On : 16 Jun 2001 3:59 Operator: DDC
Sample : 46702.39 *E00J1 * Inst : HP_15
Misc : *EPA*34G/5.0ML*30 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:21 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00J2

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Matrix: (soil/water) SOIL Lab Sample ID: 46702.40

Sample wt/vol: 33.7 (g/mL) G Lab File ID:_____

% Moisture: 33 decanted: (Y/N) __ Date Received: 06/07/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/08/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	44	U
11104-28-2	Aroclor-1221	44	U
11141-16-5	Aroclor-1232	44	U
53469-21-9	Aroclor-1242	35	J
12672-29-6	Aroclor-1248	44	U
11097-69-1	Aroclor-1254	49	
11096-82-5	Aroclor-1260	44	U
Surrogate amount spiked		8.86	

TBS 7/7/01 TB 7/18/01

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061496.D\ECD1A.CH Vial: 96
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061496.D\ECD2B.CH
Acq On : 16 Jun 2001 6:41 Operator: DDC
Sample : 46702.40 *E00J2 * Inst : HP_15
Misc : *EPA*33.7G/5.0ML*33 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:24 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.59	7.35	205778	197550	3.634	3.776	
	Spiked Amount 8.858			Recovery	=	41.03%	42.63%	
22)	S DCB	18.28	18.68	278183	259305	4.754	4.847	
	Spiked Amount 8.858			Recovery	=	53.67%	54.72%	
	Target Compounds:							
7)	L4 Aroclor-1242	0.00	10.39	0	36004	N.D. d	56.6	#
	L4 Aroclor-1242 {2}	9.69	11.18	23381	38837	26.5	35.9	#
	L4 Aroclor-1242 {3}	10.63	12.40	54302	30035	23.7	49.4	#
10)	L4 Aroclor-1242 {4}	11.64	0.00	66122	0	51.0	N.D. d	#
11)	L4 Aroclor-1242 {5}	12.81	13.14	71619	43755	39.8	45.1	
	Sum Aroclor-1242			215425	148631	140.9	187.0	
	Average Aroclor-1242					35.235	46.756	
12)	L6 Aroclor-1254	12.62	12.30	84567	68794	32.3	84.3	#
13)	L6 Aroclor-1254 {2}	13.35f	13.02	186422	49892	111.3	46.5	#
15)	L6 Aroclor-1254 {4}	0.00	14.92	0	25384	N.D. d	15.2	#
16)	L6 Aroclor-1254 {5}	14.99	0.00	39307	0	22.4	N.D. d	#
	Sum Aroclor-1254			310296	144071	165.9	146.0	
	Average Aroclor-1254					55.303	48.652	

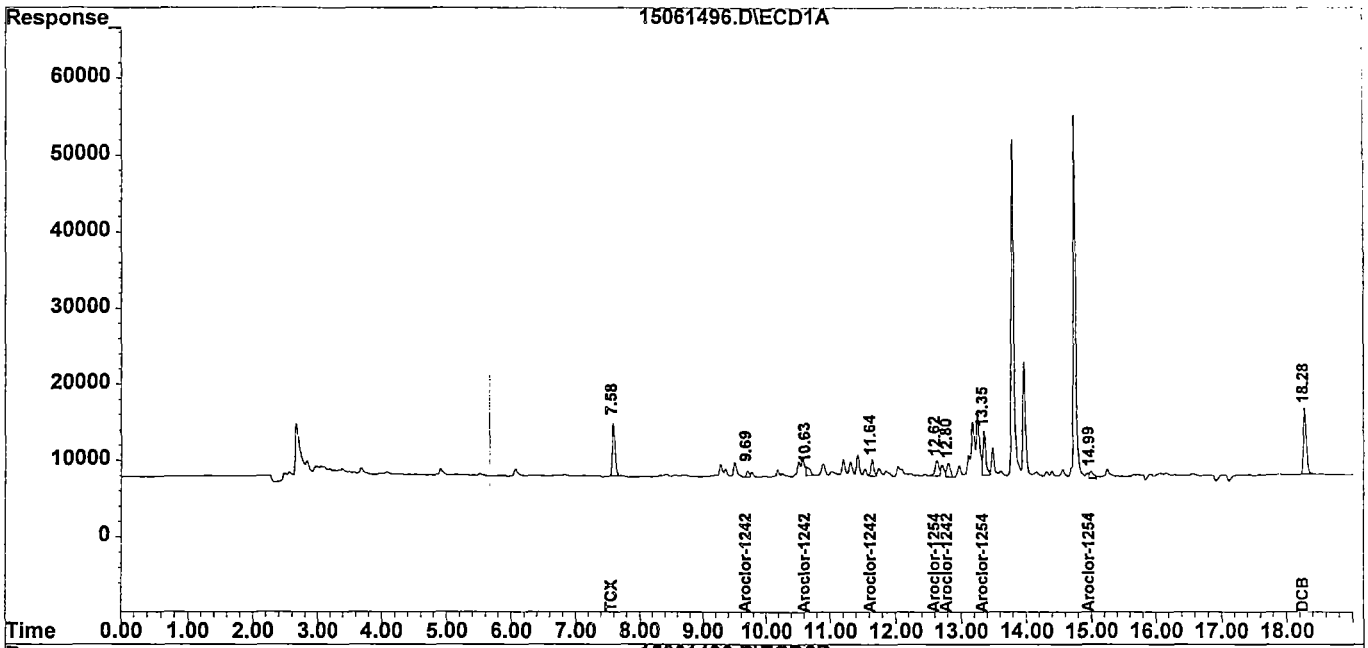
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

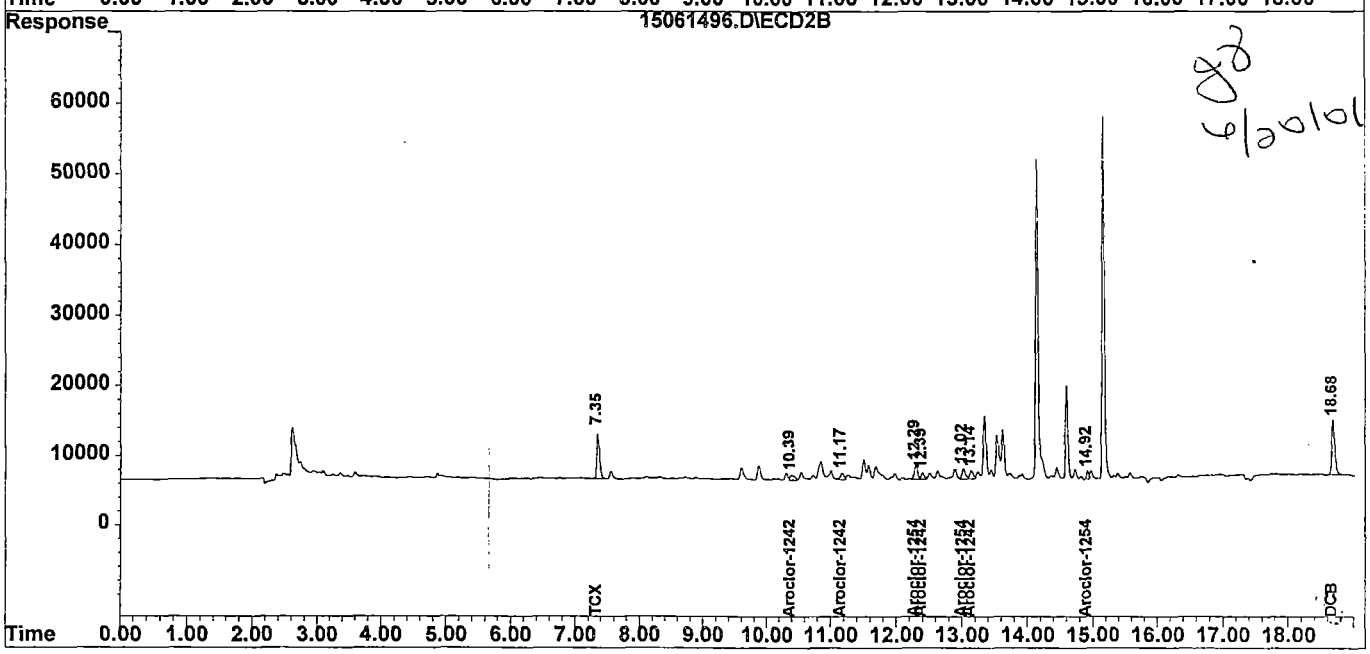
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061496.D\ECD1A.CH Vial: 96
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061496.D\ECD2B.CH
Acq On : 16 Jun 2001 6:41 Operator: DDC
Sample : 46702.40 *E00J2 * Inst : HP_15
Misc : *EPA*33.7G/5.0ML*33 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:24 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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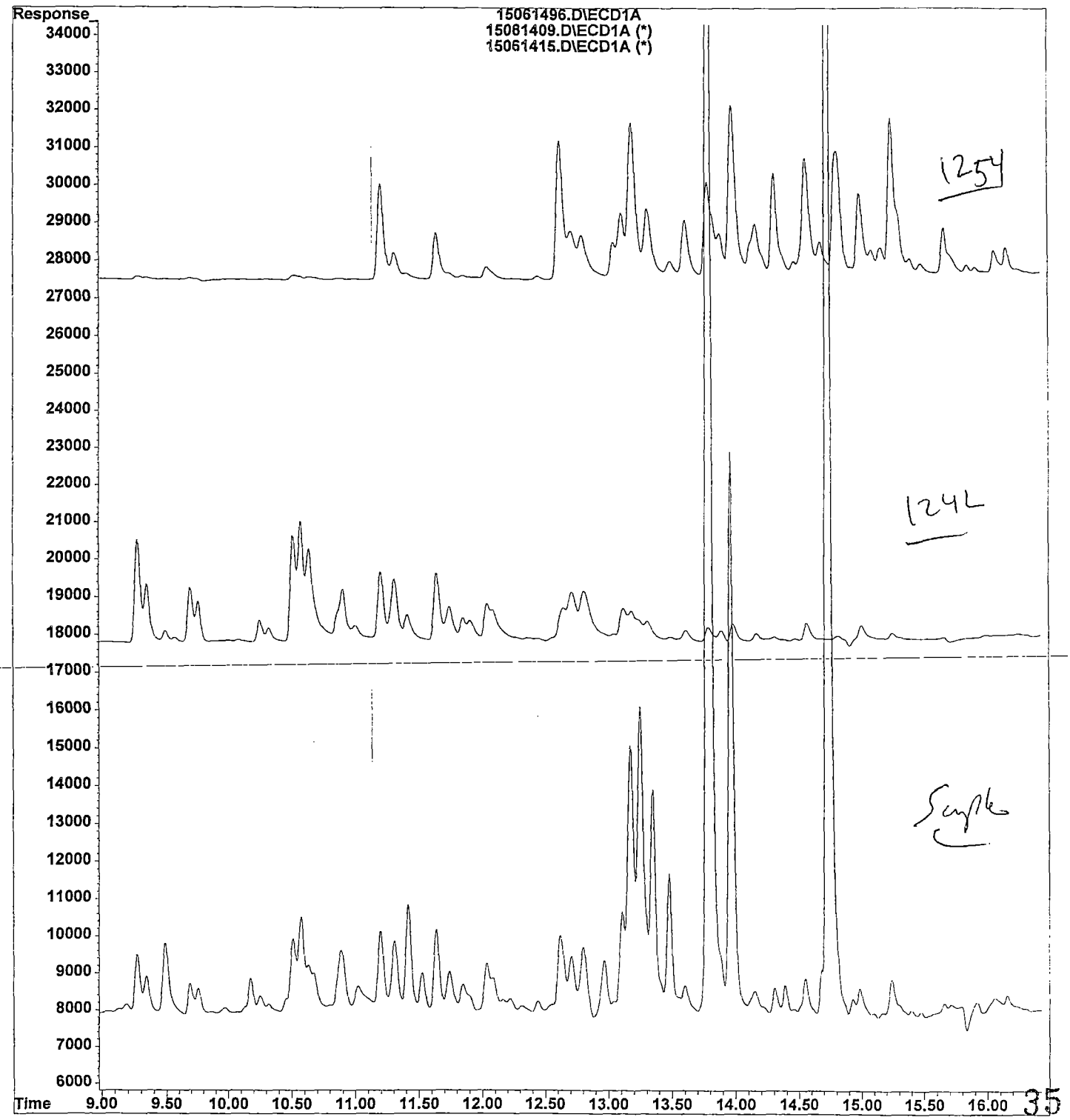
File : F:\HPCHEM\HP\15\DATA\06_14_01\15061496.D
Operator : DDC
Acquired : 16 Jun 2001 6:41 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 46702.40 *E00J2 *
Misc Info : *EPA*33.7G/5.0ML*33
Vial Number: 96



1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00J3

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Matrix: (soil/water) SOIL Lab Sample ID: 46702.41

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

% Moisture: 42 decanted: (Y/N) __ Date Received: 06/07/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/08/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	55	U
11104-28-2	Aroclor-1221	55	U
11141-16-5	Aroclor-1232	55	U
53469-21-9	Aroclor-1242	55	U
12672-29-6	Aroclor-1248	55	U
11097-69-1	Aroclor-1254	55	U
11096-82-5	Aroclor-1260	55	U
	Surrogate amount spiked	11.09	

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061497.D\ECD1A.CH Vial: 97
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061497.D\ECD2B.CH
Acq On : 16 Jun 2001 7:05 Operator: DDC
Sample : 46702.41 *E00J3 * Inst : HP_15
Misc : *EPA*31.1G/5.0ML*42 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 13:35 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	278374	285043	6.153	6.819
	Spiked Amount 11.088			Recovery	=	55.49%	61.50%
22)	S DCB	18.28	18.69	359360	317068	7.688	7.419
	Spiked Amount 11.088			Recovery	=	69.34%	66.91%

Target Compounds:

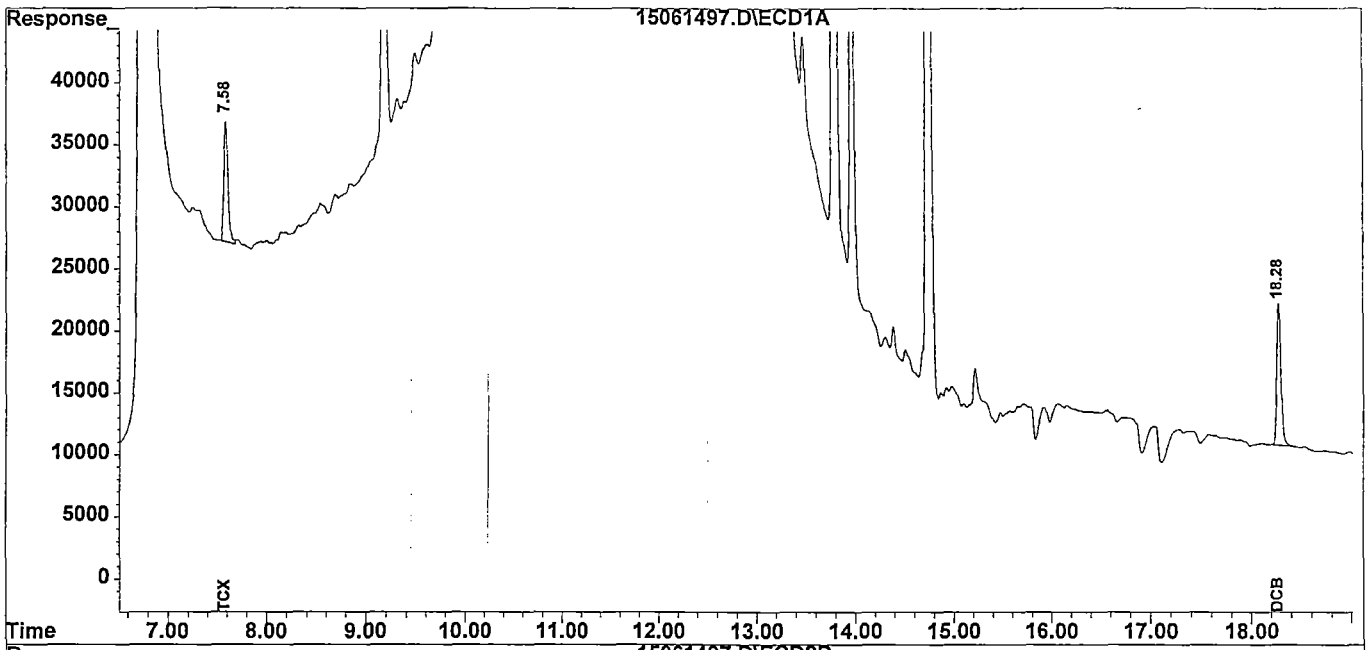
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

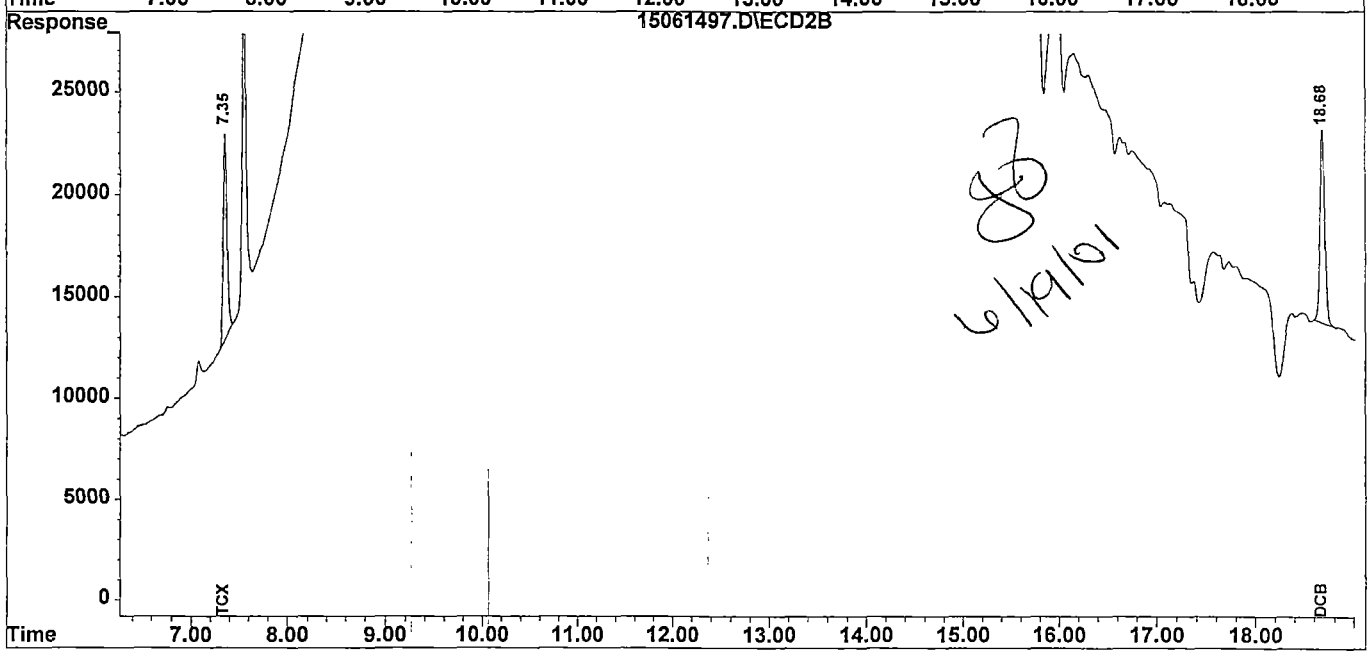
Chromatographic Report

```
Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061497.D\ECD1A.CH Vial: 97
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061497.D\ECD2B.CH
Acq On    : 16 Jun 2001   7:05                        Operator: DDC
Sample    : 46702.41  *E00J3  *                       Inst    : HP_15
Misc      : *EPA*31.1G/5.0ML*42                       Dilution: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e
Quant Time: Jun 18 13:35 2001  Quant Results File: XPCBF14.RES

Method       : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path   : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update  : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





6/19/01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061497.D\ECD1A.CH Vial: 97
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061497.D\ECD2B.CH
Acq On : 16 Jun 2001 7:05 Operator: DDC
Sample : 46702.41 *E00J3 * Inst : HP_15
Misc : *EPA*31.1G/5.0ML*42 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 13:35 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	278374	285043	6.153	6.819
	Spiked Amount 11.088			Recovery	=	55.49%	61.50%
22)	S DCB	18.28	18.69	359360	317068	7.688	7.419
	Spiked Amount 11.088			Recovery	=	69.34%	66.91%

Target Compounds:

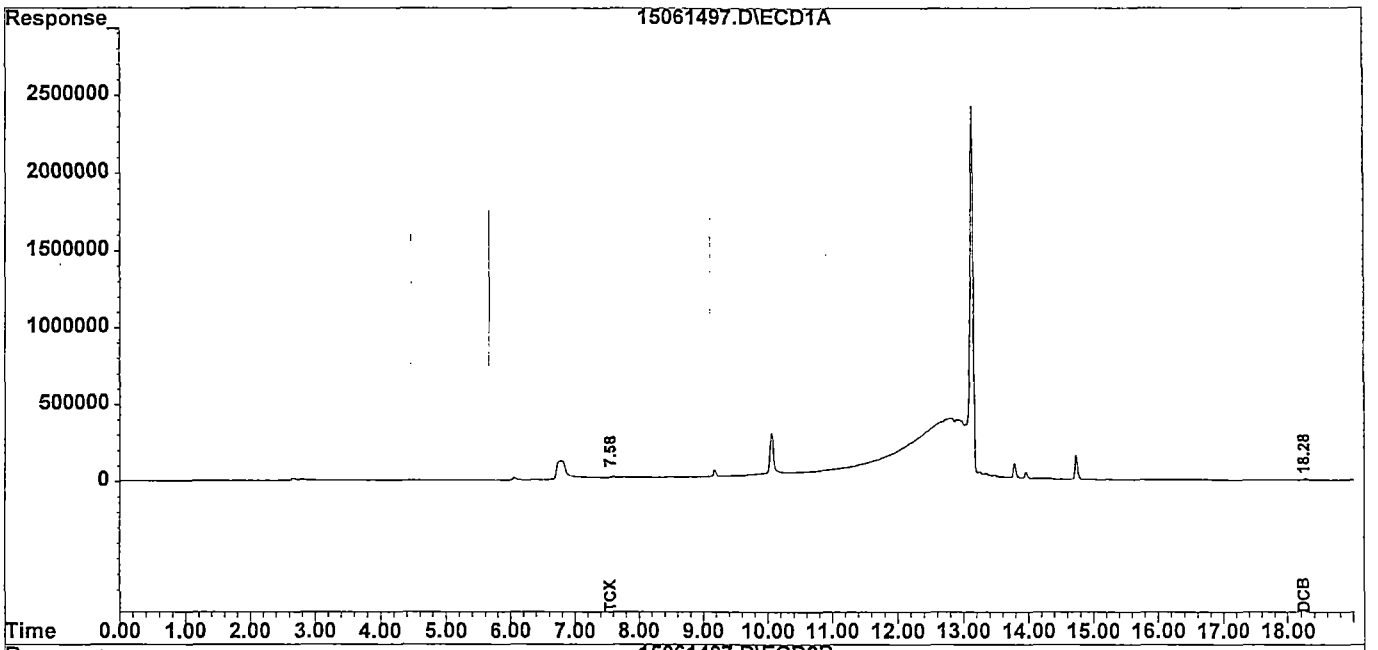
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

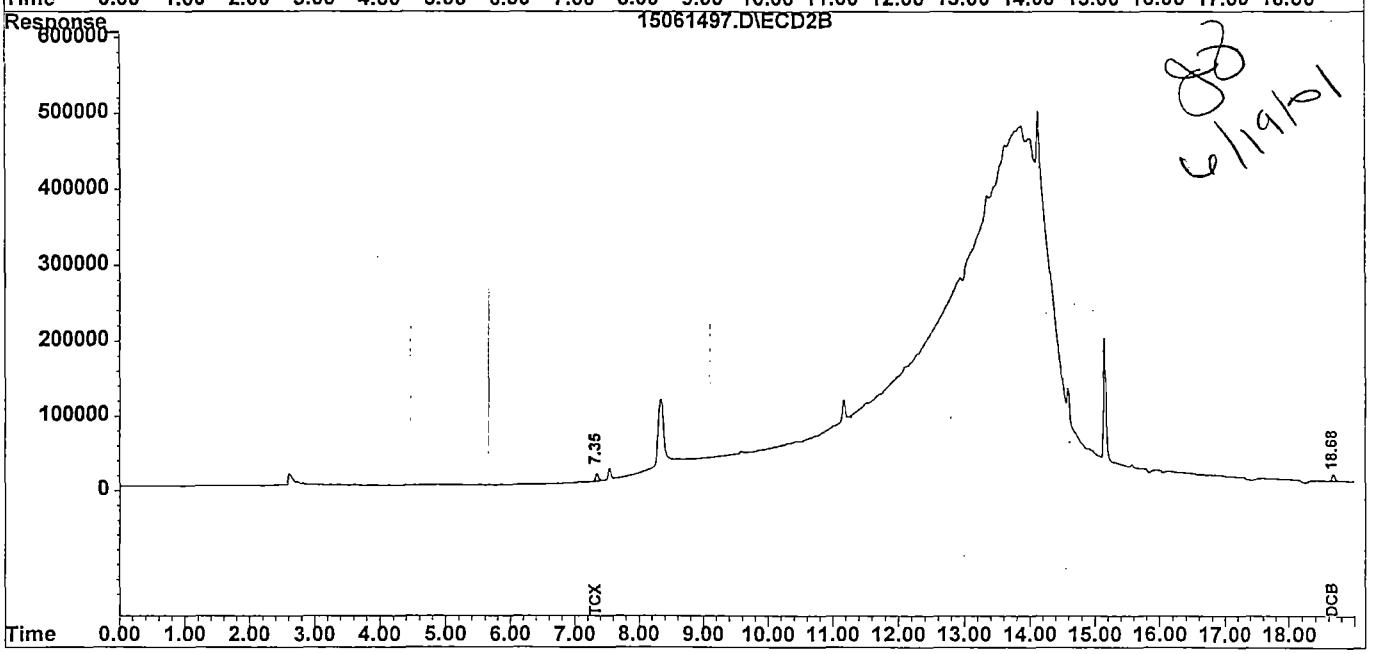
Chromatographic Report

```
Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061497.D\ECD1A.CH Vial: 97
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061497.D\ECD2B.CH
Acq On    : 16 Jun 2001  7:05                        Operator: DDC
Sample    : 46702.41  *E00J3  *                      Inst    : HP_15
Misc      : *EPA*31.1G/5.0ML*42                      Dilution: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e
Quant Time: Jun 18 13:35 2001  Quant Results File: XPCBF14.RES

Method       : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path   : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update  : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00J4

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Matrix: (soil/water) SOIL Lab Sample ID: 46702.42

Sample wt/vol: 34.2 (g/mL) G Lab File ID:_____

% Moisture: 28 decanted: (Y/N) __ Date Received: 06/07/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/08/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

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	40	U
11096-82-5	Aroclor-1260	40	U
	Surrogate amount spiked	8.12	

FORM I PCB

Quantitation Report

```
Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061498.D\ECD1A.CH Vial: 98
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061498.D\ECD2B.CH
Acq On    : 16 Jun 2001   7:28                        Operator: DDC
Sample    : 46702.42  *E00J4  *                       Inst    : HP_15
Misc      : *EPA*34.2G/5.0ML*28                       Dilution: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e
Quant Time: Jun 18 13:35 2001  Quant Results File: XPCBF14.RES

Method       : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path   : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update  : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	356681	351152	5.775	6.154
	Spiked Amount 8.122			Recovery	=	71.10%	75.77%
22)	S DCB	18.28	18.69	401703	392581	6.295	6.729
	Spiked Amount 8.122			Recovery	=	77.50%	82.85%
	Target Compounds:						

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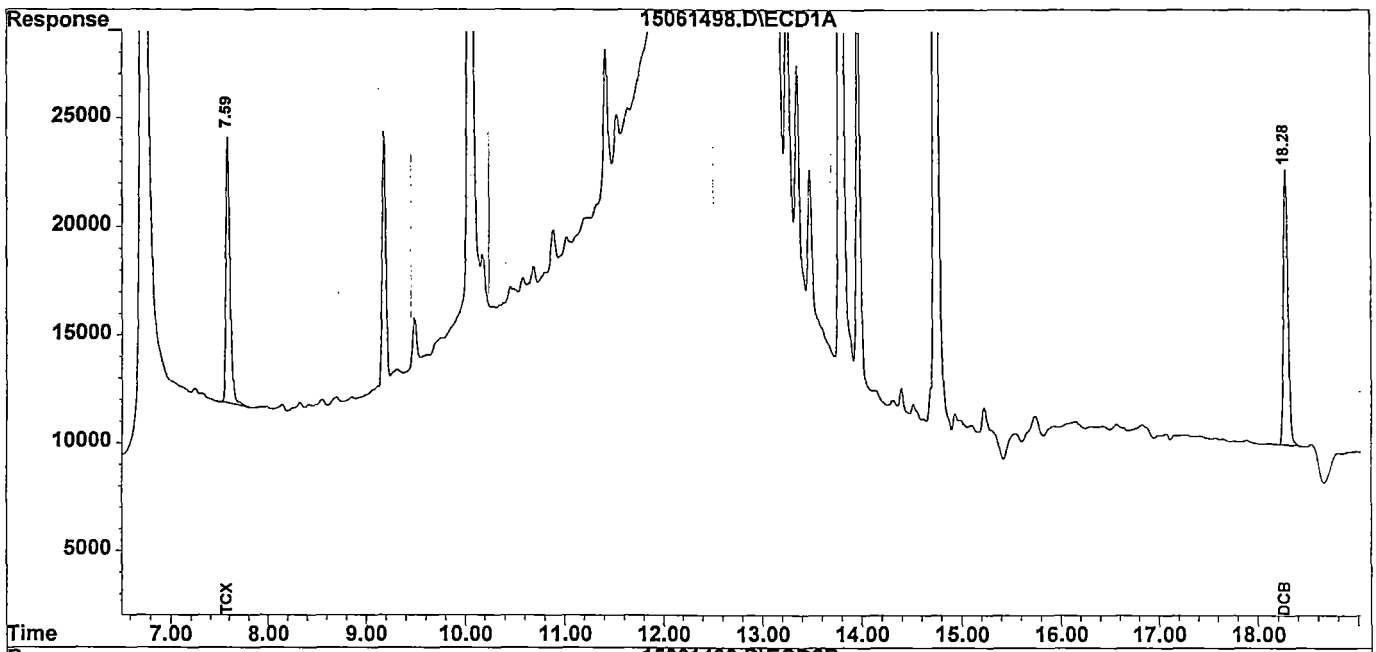
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

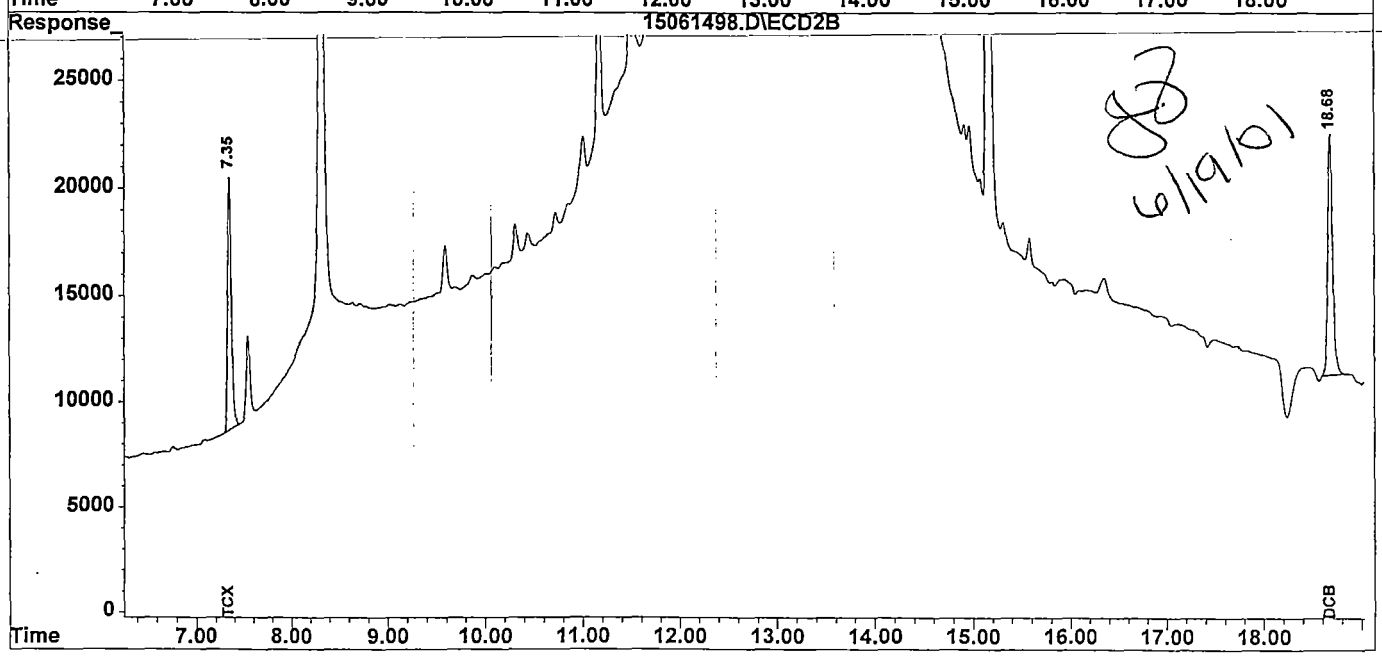
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061498.D\ECD1A.CH Vial: 98
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061498.D\ECD2B.CH
Acq On : 16 Jun 2001 7:28 Operator: DDC
Sample : 46702.42 *E00J4 * Inst : HP_15
Misc : *EPA*34.2G/5.0ML*28 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 13:35 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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6/19/01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061498.D\ECD1A.CH Vial: 98
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061498.D\ECD2B.CH
Acq On : 16 Jun 2001 7:28 Operator: DDC
Sample : 46702.42 *E00J4 * Inst : HP_15
Misc : *EPA*34.2G/5.0ML*28 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 13:35 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	356681	351152	5.775	6.154
	Spiked Amount 8.122			Recovery	=	71.10%	75.77%
22)	S DCB	18.28	18.69	401703	392581	6.295	6.729
	Spiked Amount 8.122			Recovery	=	77.50%	82.85%

Target Compounds:

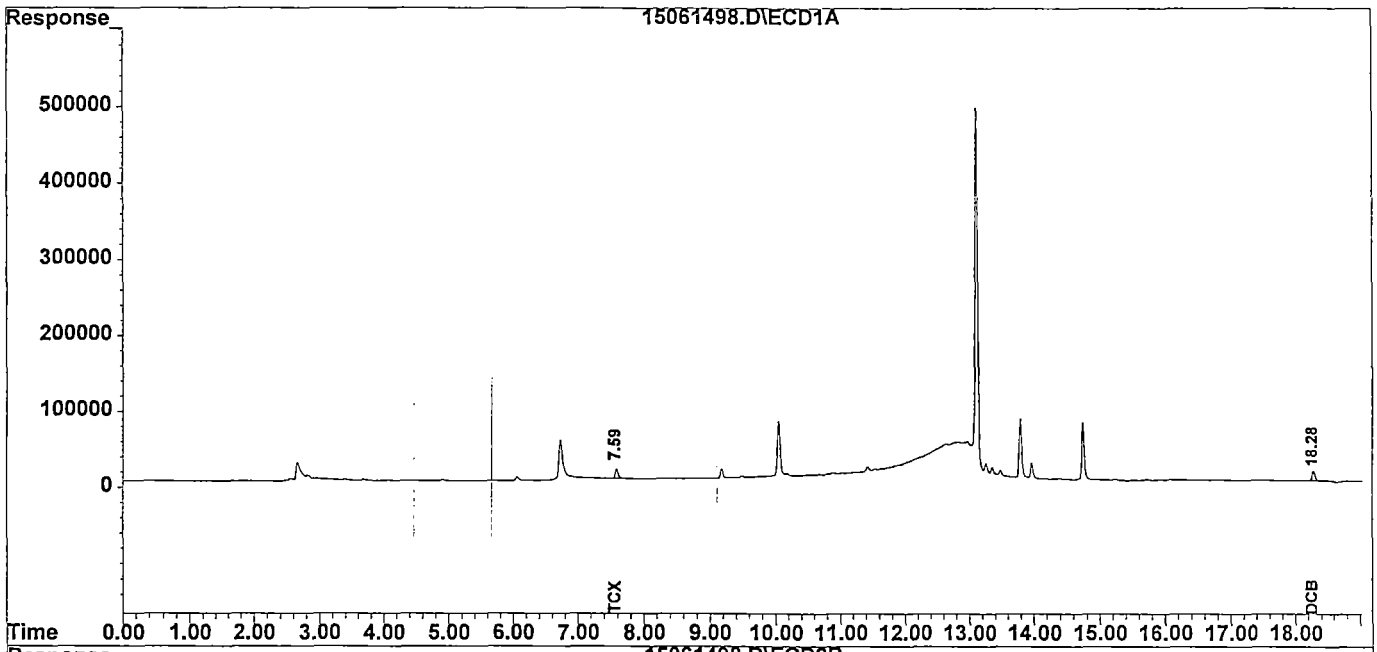
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
15061498.D XPCBF14.M Mon Jun 18 13:38:06 2001 Page 1

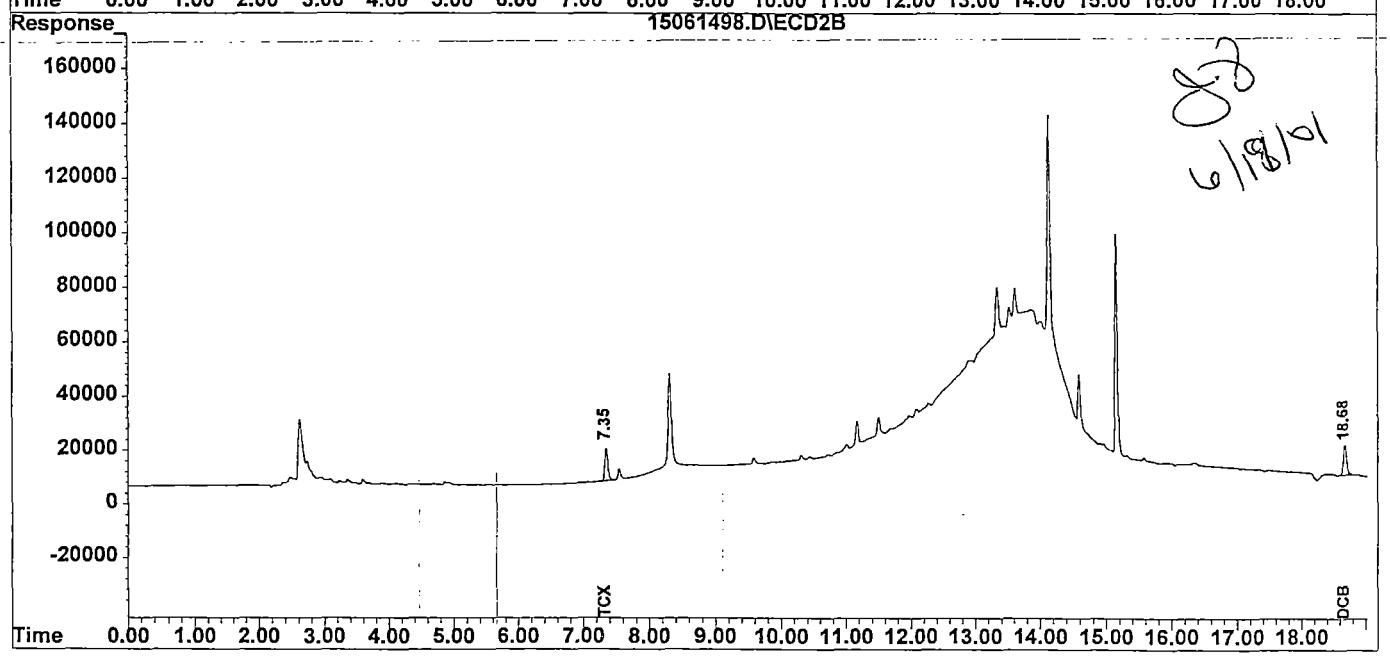
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061498.D\ECD1A.CH Vial: 98
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061498.D\ECD2B.CH
Acq On : 16 Jun 2001 7:28 Operator: DDC
Sample : 46702.42 *E00J4 * Inst : HP_15
Misc : *EPA*34.2G/5.0ML*28 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 13:35 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





6/18/01

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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00J5

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Matrix: (soil/water) SOIL Lab Sample ID: 46702.43

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

% Moisture: 19 decanted: (Y/N) __ Date Received: 06/07/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/08/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	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	40	U
11096-82-5	Aroclor-1260	40	U
	Surrogate amount spiked	8.12	

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061499.D\ECD1A.CH Vial: 99
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061499.D\ECD2B.CH
Acq On : 16 Jun 2001 7:51 Operator: DDC
Sample : 46702.43 *E00J5 * Inst : HP_15
Misc : *EPA*30.4G/5.0ML*19 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 9:14 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	302255	290950	4.894	5.099
	Spiked Amount 8.122			Recovery	=	60.25%	62.78%
22)	S DCB	18.28	18.69	407193	382350	6.381	6.553
	Spiked Amount 8.122			Recovery	=	78.56%	80.68%

Target Compounds:

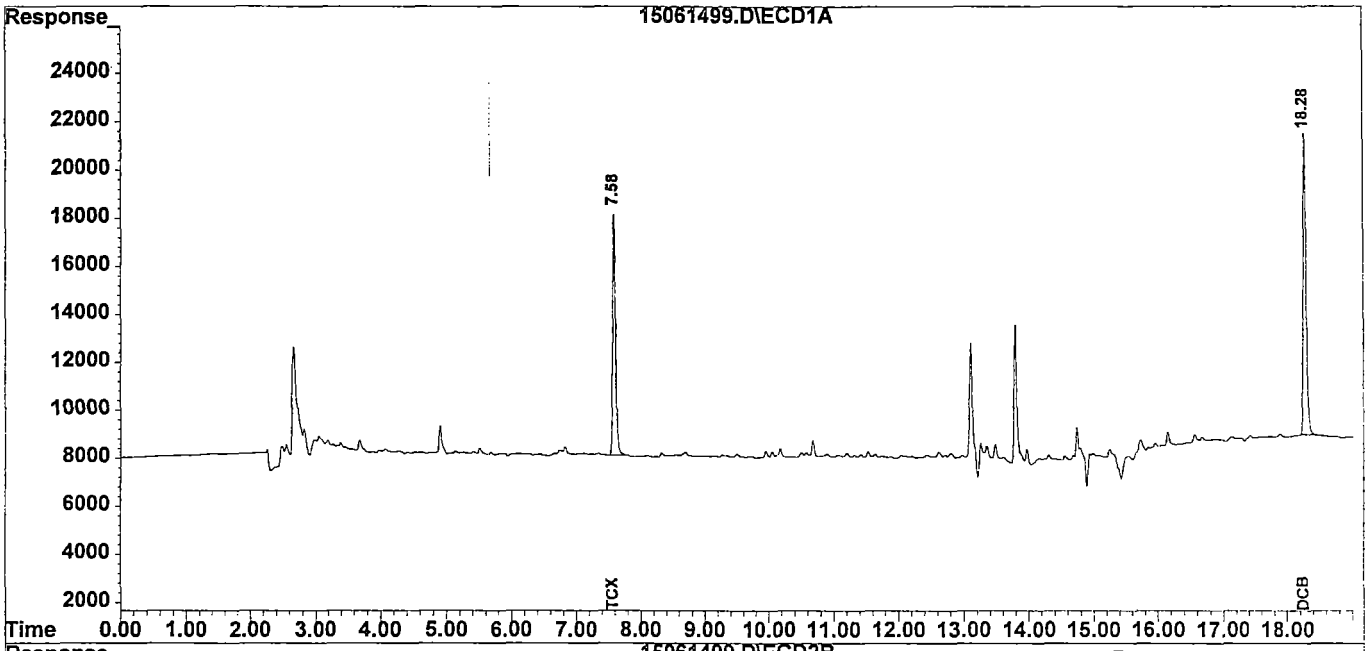
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
15061499.D XPCBF14.M Mon Jun 18 09:46:05 2001 Page 1

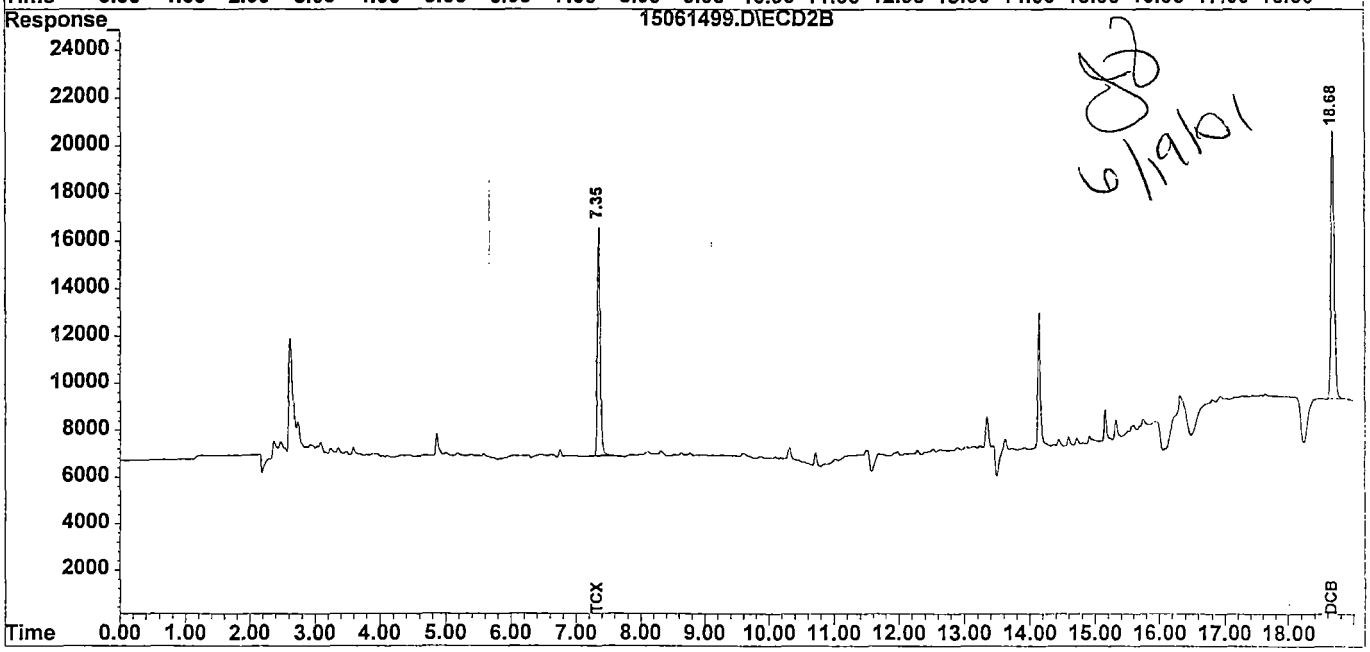
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061499.D\ECD1A.CH Vial: 99
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061499.D\ECD2B.CH
Acq On : 16 Jun 2001 7:51 Operator: DDC
Sample : 46702.43 *E00J5 * Inst : HP_15
Misc : *EPA*30.4G/5.0ML*19 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 9:14 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





6/19/01

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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00J6

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Matrix: (soil/water) SOIL Lab Sample ID: 46702.44

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

% Moisture: 21 decanted: (Y/N) __ Date Received: 06/07/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/08/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	41	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	12	JP
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	41	U
11096-82-5	Aroclor-1260	41	U
Surrogate amount spiked		8.27	

TBS 7/7/01 TB 7/18/01

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061500.D\ECD1A.CH Vial: 100
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061500.D\ECD2B.CH
Acq On : 16 Jun 2001 8:14 Operator: DDC
Sample : 46702.44 *E00J6 * Inst : HP_15
Misc : *EPA*30.6G/5.0ML*21 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 9:18 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.59	7.35	465695	454562	7.681	8.114	
	Spiked Amount 8.273			Recovery	=	92.84%	98.07%	
22)	S DCB	18.28	18.69	545781	513221	8.712	8.960	
	Spiked Amount 8.273			Recovery	=	105.30%	108.30%	
	Target Compounds:							
7)	L4 Aroclor-1242	8.42	10.39	4945	11692	3.516	17.2	#
	L4 Aroclor-1242 {2}	9.70	11.18	7389	10180	7.807	8.795	
	L4 Aroclor-1242 {3}	10.68f	12.40	46760	21185	19.1	32.5	#
10)	L4 Aroclor-1242 {4}	11.64	12.63	23182	39766	16.7	53.6	#
11)	L4 Aroclor-1242 {5}	12.81	13.14	26876	39499	14.0	38.1	#
	Sum Aroclor-1242			109153	122322	61.0	150.1	
	Average Aroclor-1242					12.206	30.025	

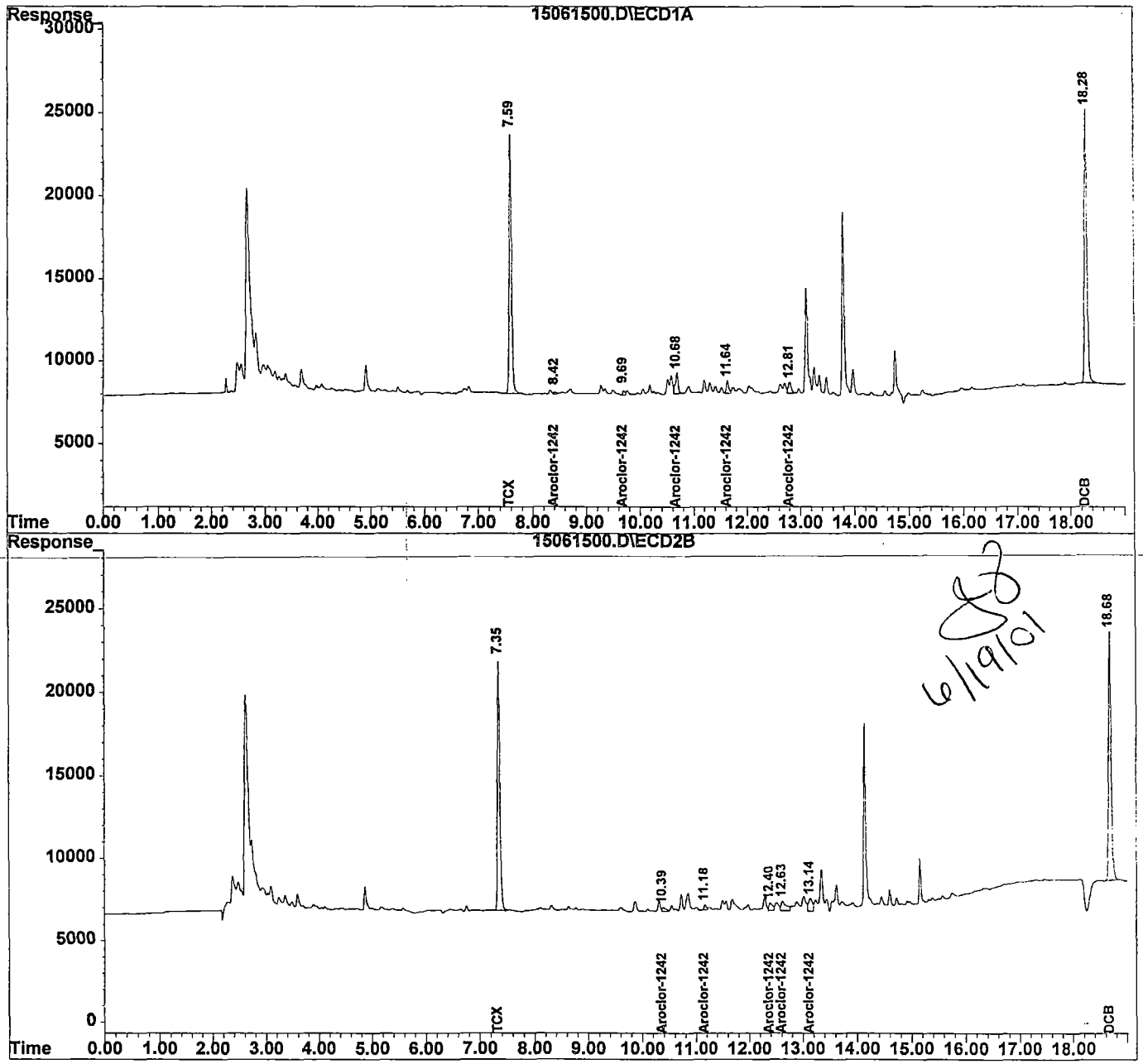
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
15061500.D XPCBF14.M Mon Jun 18 09:46:14 2001 Page 1

Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061500.D\ECD1A.CH Vial: 100
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061500.D\ECD2B.CH
Acq On : 16 Jun 2001 8:14 Operator: DDC
Sample : 46702.44 *E00J6 * Inst : HP_15
Misc : *EPA*30.6G/5.0ML*21 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 9:18 2001 Quant Results File: XPCBF14.RES

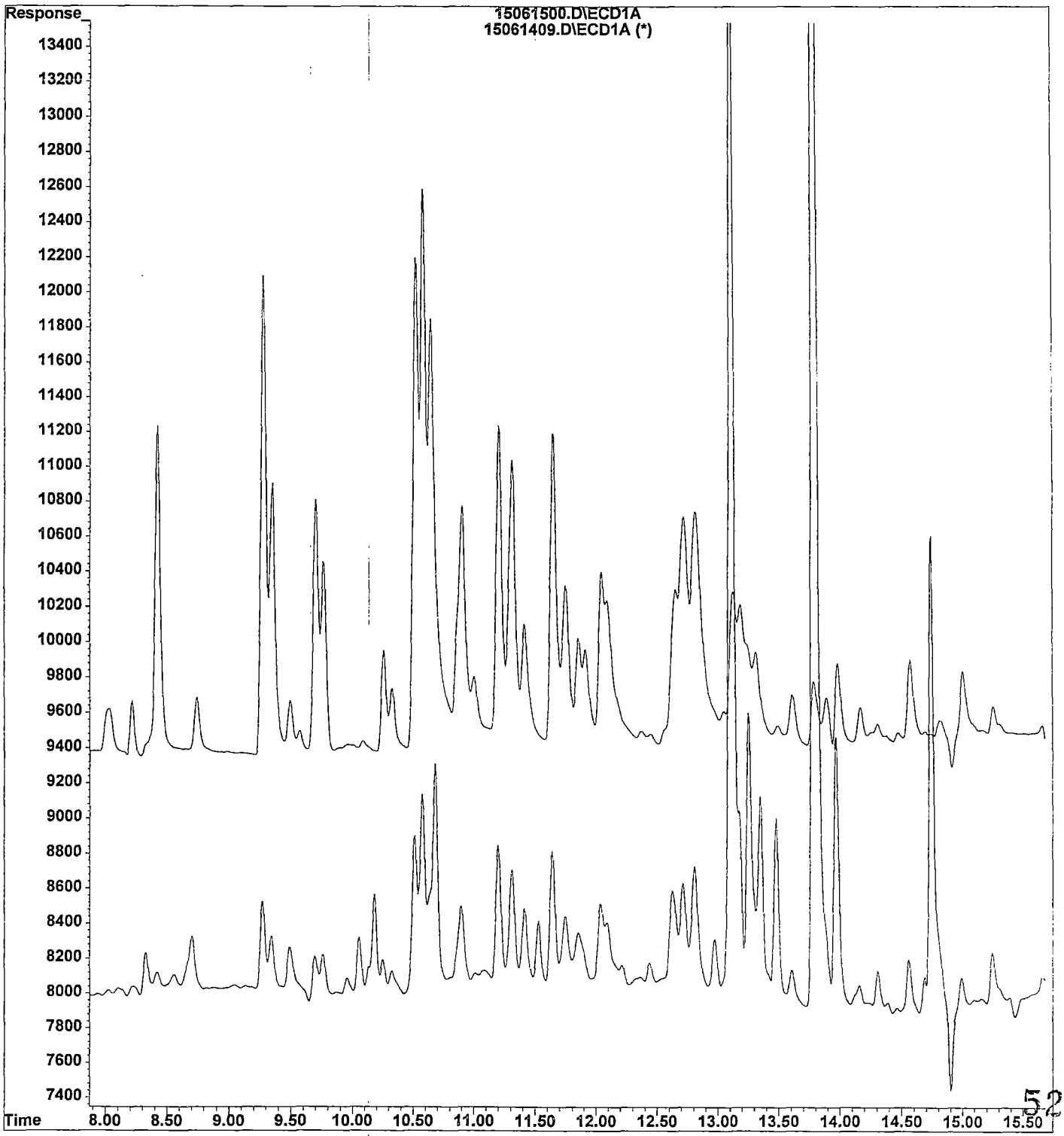
Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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



51

File : F:\HPCHEM\HP\15\DATA\06_14_01\15061500.D
Operator : DDC
Acquired : 16 Jun 2001 8:14 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 46702.44
Misc Info :
Vial Number: 100



1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00J7

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Matrix: (soil/water) SOIL Lab Sample ID: 46702.45

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

% Moisture: 19 decanted: (Y/N) __ Date Received: 06/07/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/08/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	11	JP
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	7.5	J
11096-82-5	Aroclor-1260	39	U
Surrogate amount spiked		7.94	

TBS 7/21/01 TB 7/18/01

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061501.D\ECD1A.CH Vial: 1
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061501.D\ECD2B.CH
Acq On : 16 Jun 2001 8:37 Operator: DDC
Sample : 46702.45 *E00J7 * Inst : HP_15
Misc : *EPA*31.1G/5.0ML*19 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 9:20 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.59	7.35	341693	329077	5.408	5.637	
	Spiked Amount 7.939			Recovery	=	68.12%	71.00%	
22)	S DCB	18.28	18.69	415602	383529	6.366	6.426	
	Spiked Amount 7.939			Recovery	=	80.18%	80.94%	
	Target Compounds:							
7)	L4 Aroclor-1242	8.42	0.00	7300	0	4.980	N.D. d	#
[illegible]	L4 Aroclor-1242 {2}	0.00	11.18	0	11191	N.D. d	9.278	#
[illegible]	L4 Aroclor-1242 {3}	10.64	12.40	11786	17081	4.610	25.2	#
10)	L4 Aroclor-1242 {4}	11.64	12.63	32285	18934	22.3	24.5	
11)	L4 Aroclor-1242 {5}	0.00	13.14	0	16890	N.D. d	15.6	#
	Sum Aroclor-1242			51372	64097	31.9	74.5	
	Average Aroclor-1242					10.633	18.636	
12)	L6 Aroclor-1254	12.63	0.00	30791	0	10.5	N.D. d	#
13)	L6 Aroclor-1254 {2}	0.00	13.02	0	24176	N.D. d	20.2	#
15)	L6 Aroclor-1254 {4}	14.31	14.92	12272	12217	5.266	6.553	
16)	L6 Aroclor-1254 {5}	14.99	15.39	13109	6285	6.687	2.727	#
	Sum Aroclor-1254			56172	42679	22.5	29.5	
	Average Aroclor-1254					7.495	9.825	

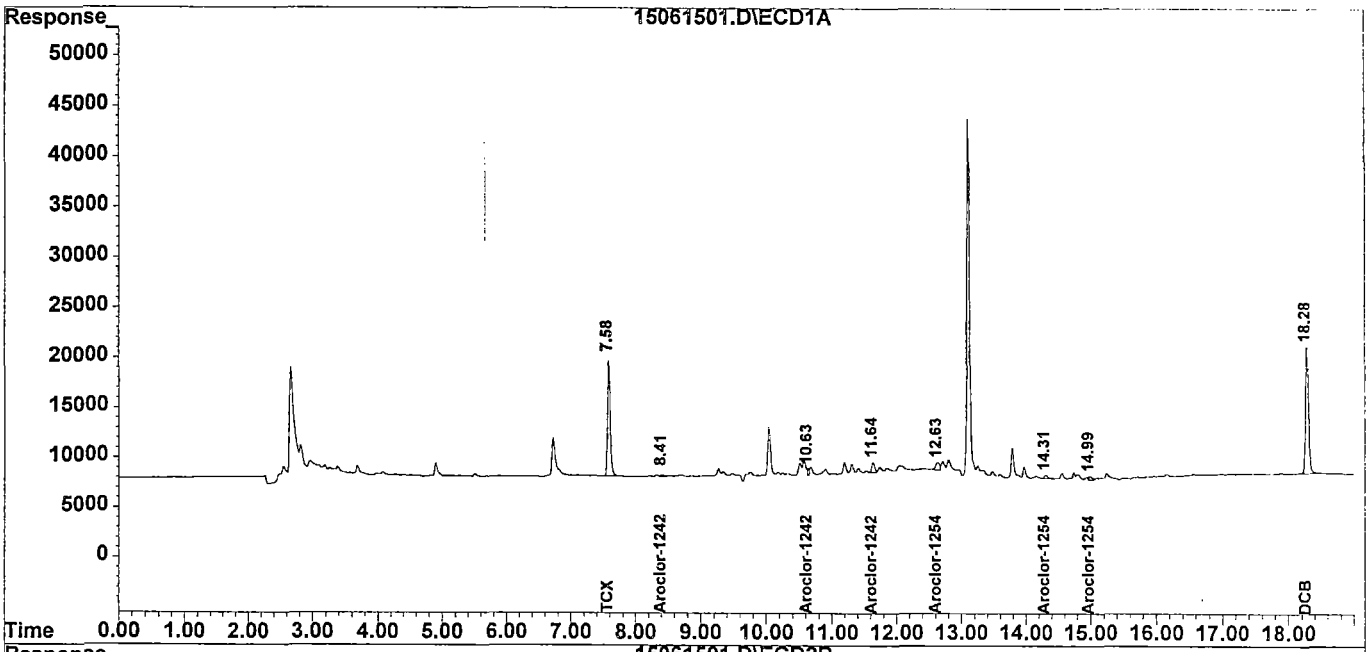
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
15061501.D XPCBF14.M Mon Jun 18 09:46:23 2001 Page 1

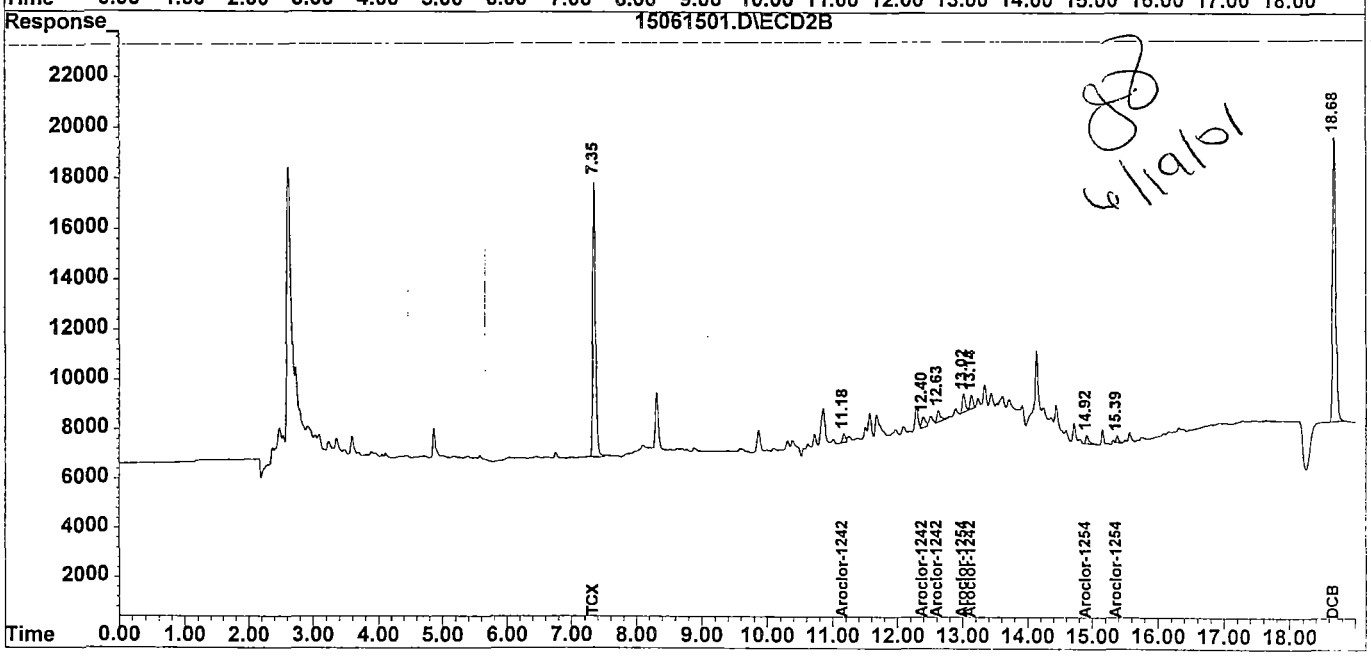
Chromatographic Report

```
Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061501.D\ECD1A.CH Vial: 1
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061501.D\ECD2B.CH
Acq On    : 16 Jun 2001  8:37                        Operator: DDC
Sample    : 46702.45  *E00J7  *                      Inst    : HP_15
Misc      : *EPA*31.1G/5.0ML*19                      Dilution: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e
Quant Time: Jun 18  9:20 2001  Quant Results File: XPCBF14.RES

Method       : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path   : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update  : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





6/19/01

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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00J8

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Matrix: (soil/water) SOIL Lab Sample ID: 46702.46

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

% Moisture: 21 decanted: (Y/N) __ Date Received: 06/07/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/08/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

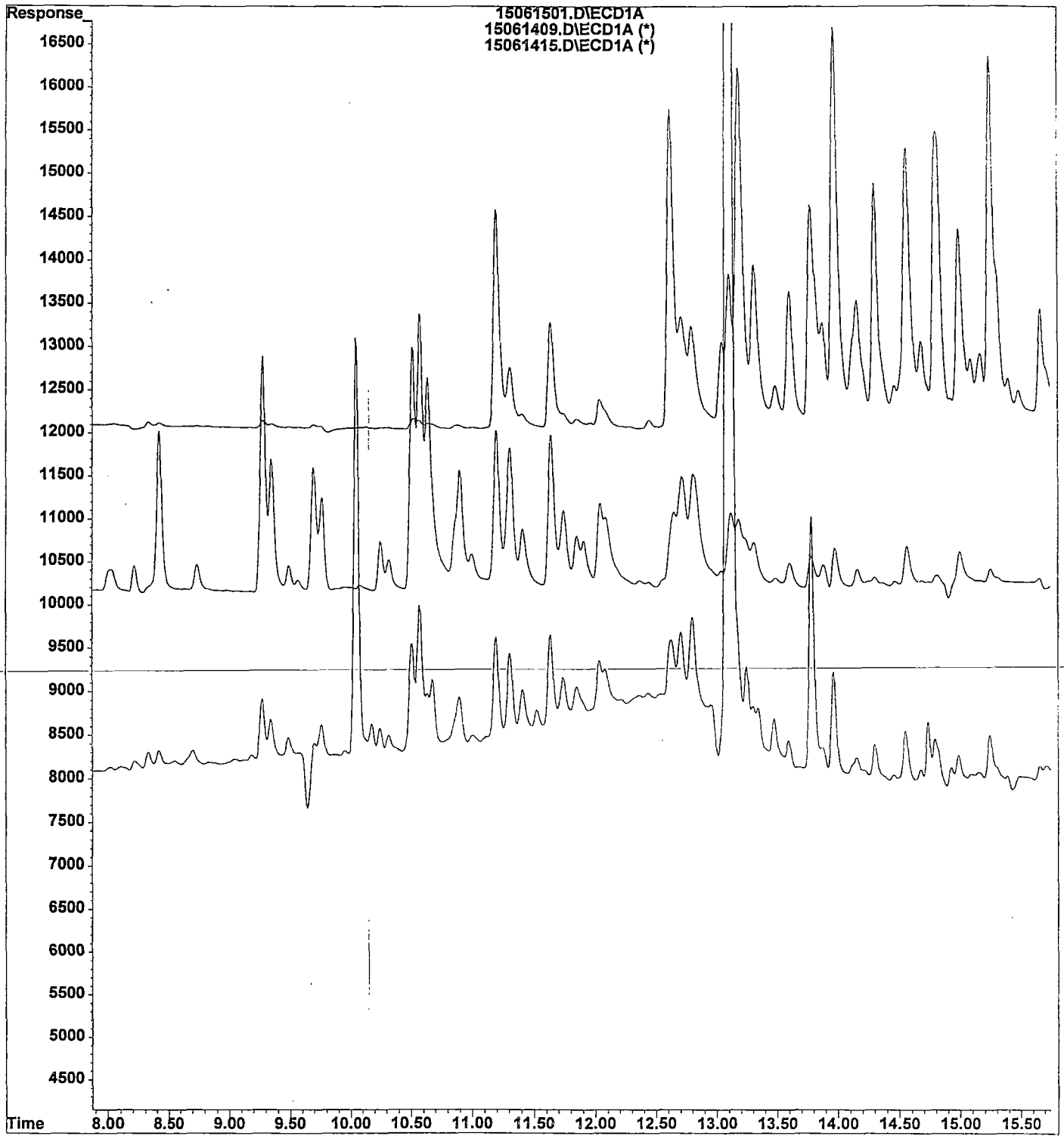
GPC Cleanup: (Y/N) Y pH: 7.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	41	~~U~~ UJ TBS 7/7/01
11104-28-2	Aroclor-1221	41	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	33	~~J~~
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	72	~~J~~
11096-82-5	Aroclor-1260	41	U
Surrogate amount spiked		8.22	

TBS 7/7/01 TB 7/18/01

FORM I PCB

File : F:\HPCHEM\HP\15\DATA\06_14_01\15061501.D
Operator : DDC
Acquired : 16 Jun 2001 8:37 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 46702.45
Misc Info :
Vial Number: 1



Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061502.D\ECD1A.CH Vial: 2
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061502.D\ECD2B.CH
Acq On : 16 Jun 2001 9:00 Operator: DDC
Sample : 46702.46 *E00J8 * Inst : HP_15
Misc : *EPA*30.8G/5.0ML*21 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 9:24 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.59	7.35	318853	319645	5.225	5.669	
	Spiked Amount 8.220			Recovery	=	63.57%	68.97%	
22)	S DCB	18.28	18.68	390913	333945	6.200	5.792	
	Spiked Amount 8.220			Recovery	=	75.43%	70.47%	
	Target Compounds:							
7)	L4 Aroclor-1242	8.42	10.40	24486	37960	17.3	55.4	#
'	L4 Aroclor-1242 {2}	9.70	11.18	48382	85299	50.8	73.2	#
,	L4 Aroclor-1242 {3}	10.64	12.68f	74131	62432	30.0	95.2m	#
10)	L4 Aroclor-1242 {4}	0.00	12.68f	0	69868	N.D. d	93.5m	#
11)	L4 Aroclor-1242 {5}	0.00	13.19f	0	87744	N.D. d	84.0m	#
	Sum Aroclor-1242			146999	343303	98.1	401.3	
	Average Aroclor-1242					32.701	80.267	
13)	L6 Aroclor-1254 {2}	0.00	13.03	0	66019	N.D. d	57.1	#
14)	L6 Aroclor-1254 {3}	13.79	13.92	661378	83286	263.5	66.0	#
15)	L6 Aroclor-1254 {4}	14.31	14.92	184963	151012	82.2	83.9	
16)	L6 Aroclor-1254 {5}	14.99	15.39	163287	178352	86.2	80.1	
	Sum Aroclor-1254			1009628	478670	431.9	287.1	
	Average Aroclor-1254					143.968	71.773	

DDC 6-18-01

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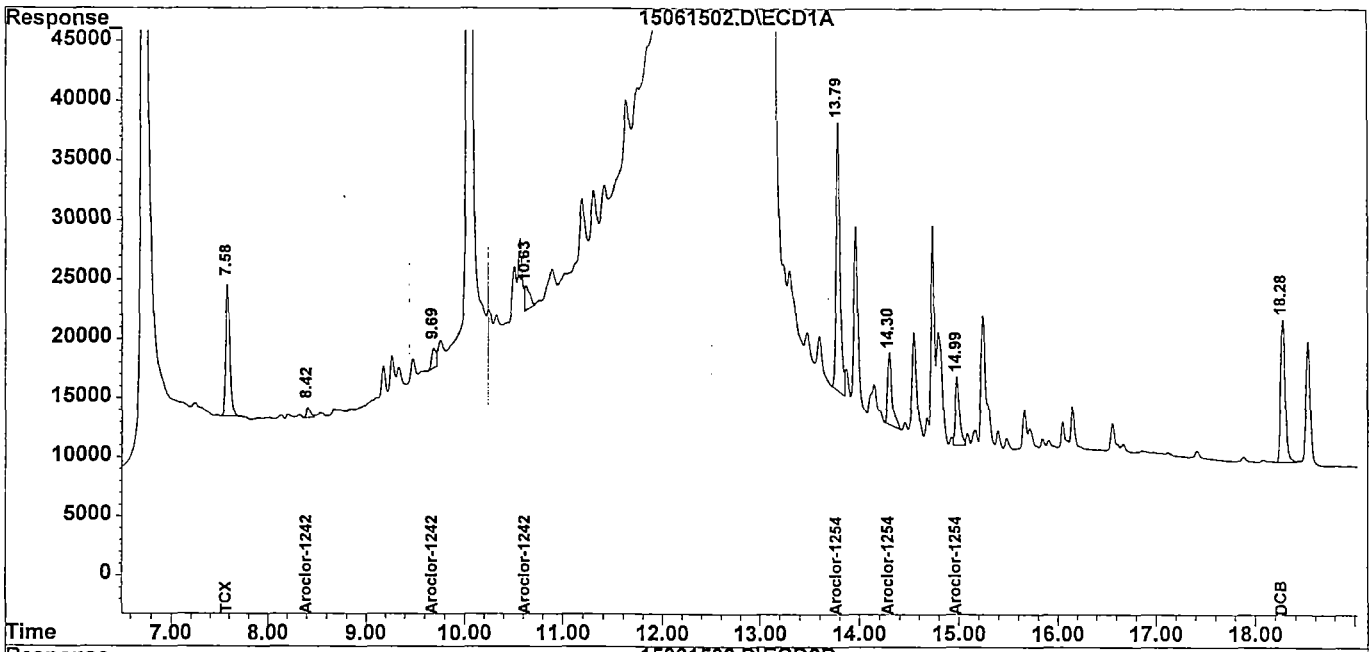
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

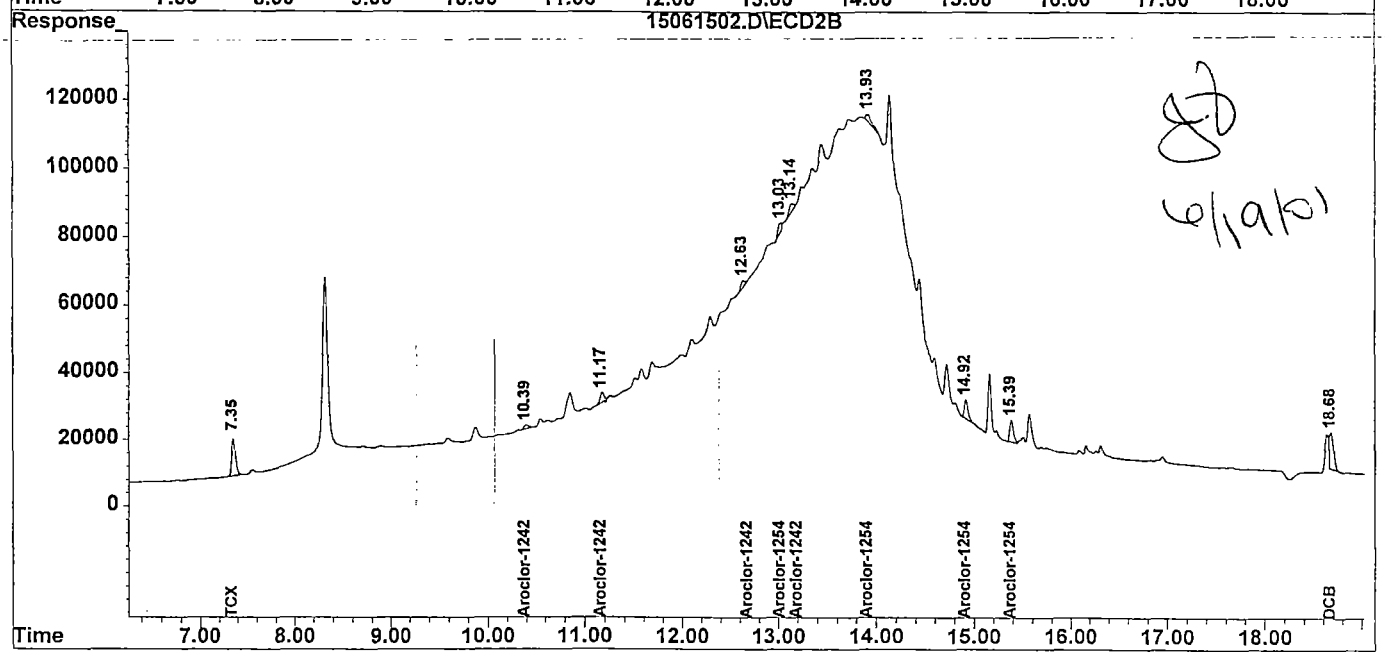
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061502.D\ECD1A.CH Vial: 2
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061502.D\ECD2B.CH
Acq On : 16 Jun 2001 9:00 Operator: DDC
Sample : 46702.46 *E00J8 * Inst : HP_15
Misc : *EPA*30.8G/5.0ML*21 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 9:24 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





6/19/01

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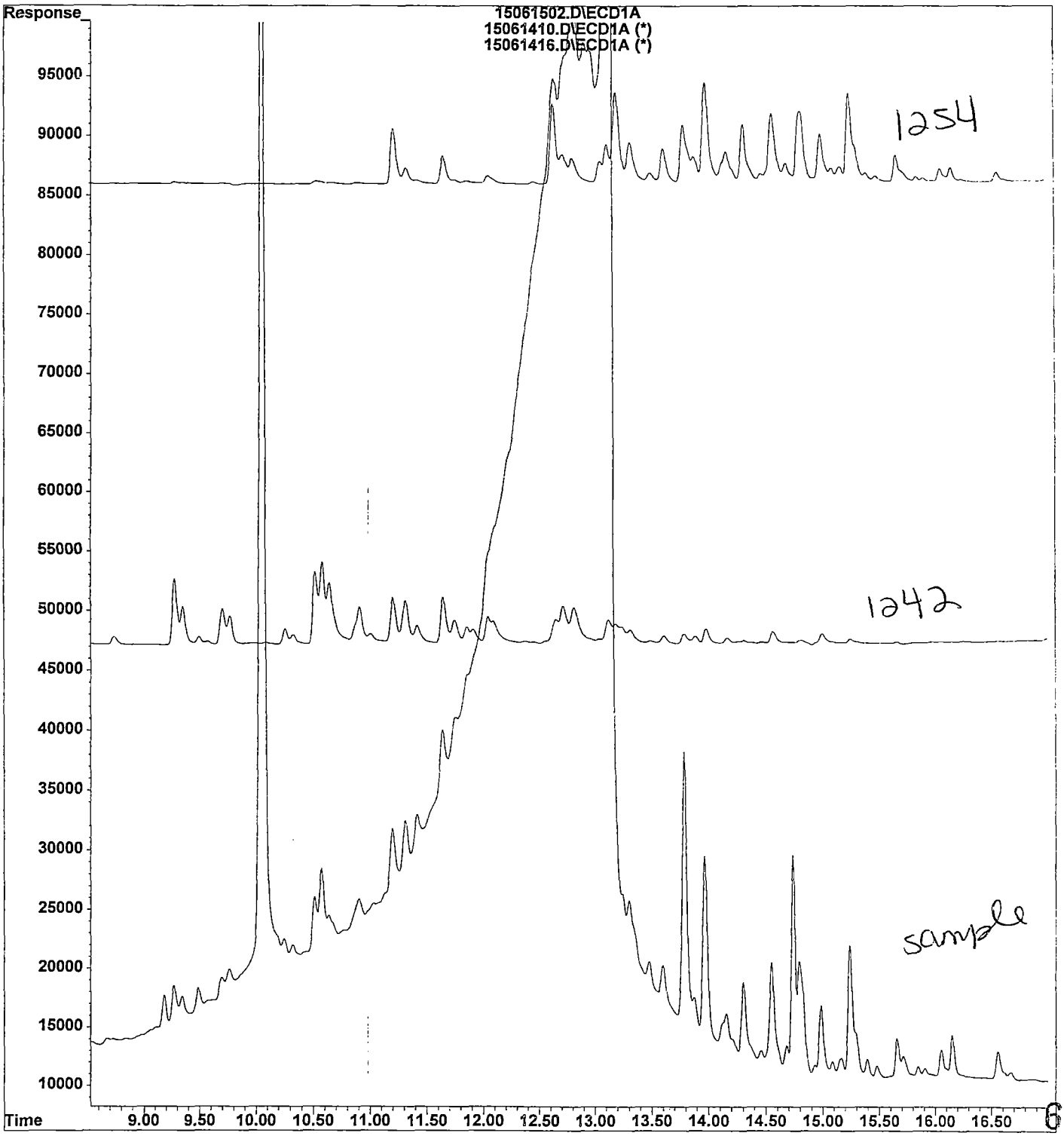
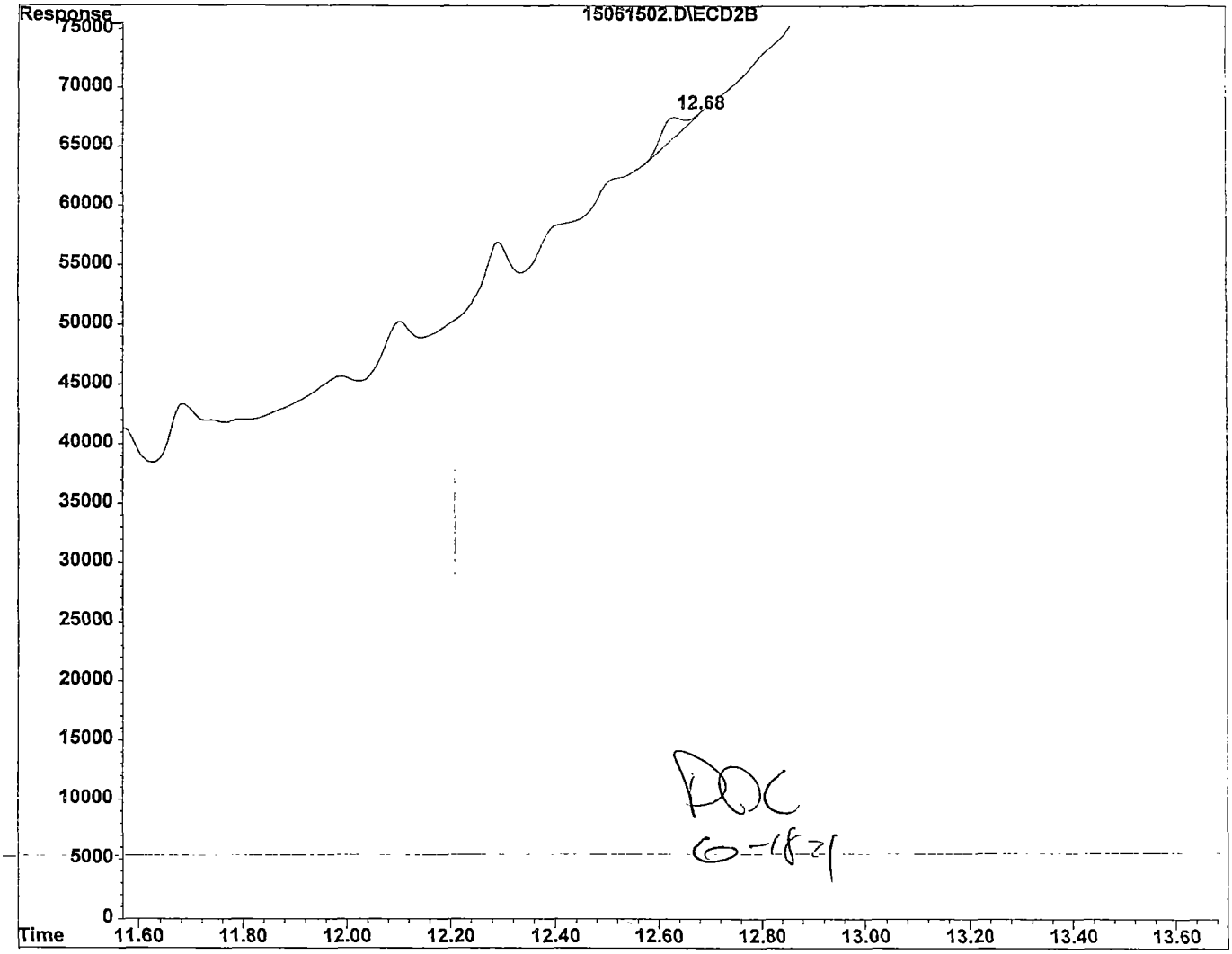
File : F:\HPCHEM\HP\15\DATA\06_14_01\15061502.D
Operator : DDC
Acquired : 16 Jun 2001 9:00 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 46702.46
Misc Info :
Vial Number: 2



MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\15\DATA\06_14_01\15061502.D
Date Acquired: 16 Jun 2001 9:00
Inst: HP_15 Operator ID: DDC
Name: 46702.46 *E00J8 *
Misc: *EPA*30.8G/5.0ML*21
Method: F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title: PCB/TOXAPHENE
Quant Time: Jun 18 9:24 2001 Quant Results File: XPCBF14.RES

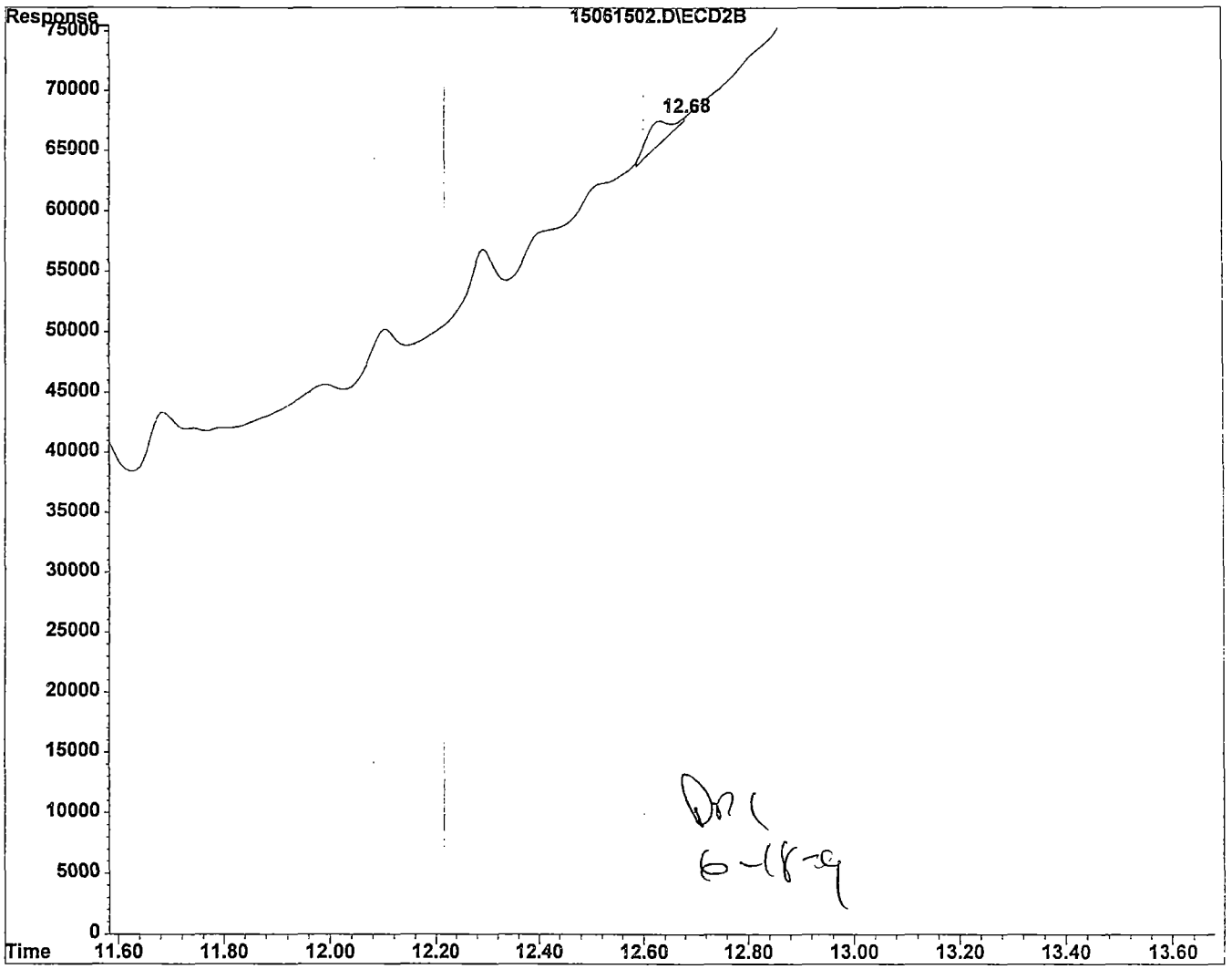


Aroclor-1242 {3} #2 12.68min area: 62432 m

Integration Time Range: 12.57 - 12.68

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\15\DATA\06_14_01\15061502.D
Date Acquired: 16 Jun 2001 9:00
Inst: HP_15 Operator ID: DDC
Name: 46702.46 *E00J8 *
Misc: *EPA*30.8G/5.0ML*21
Method: F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title: PCB/TOXAPHENE
Quant Time: Jun 18 9:24 2001 Quant Results File: XPCBF14.RES

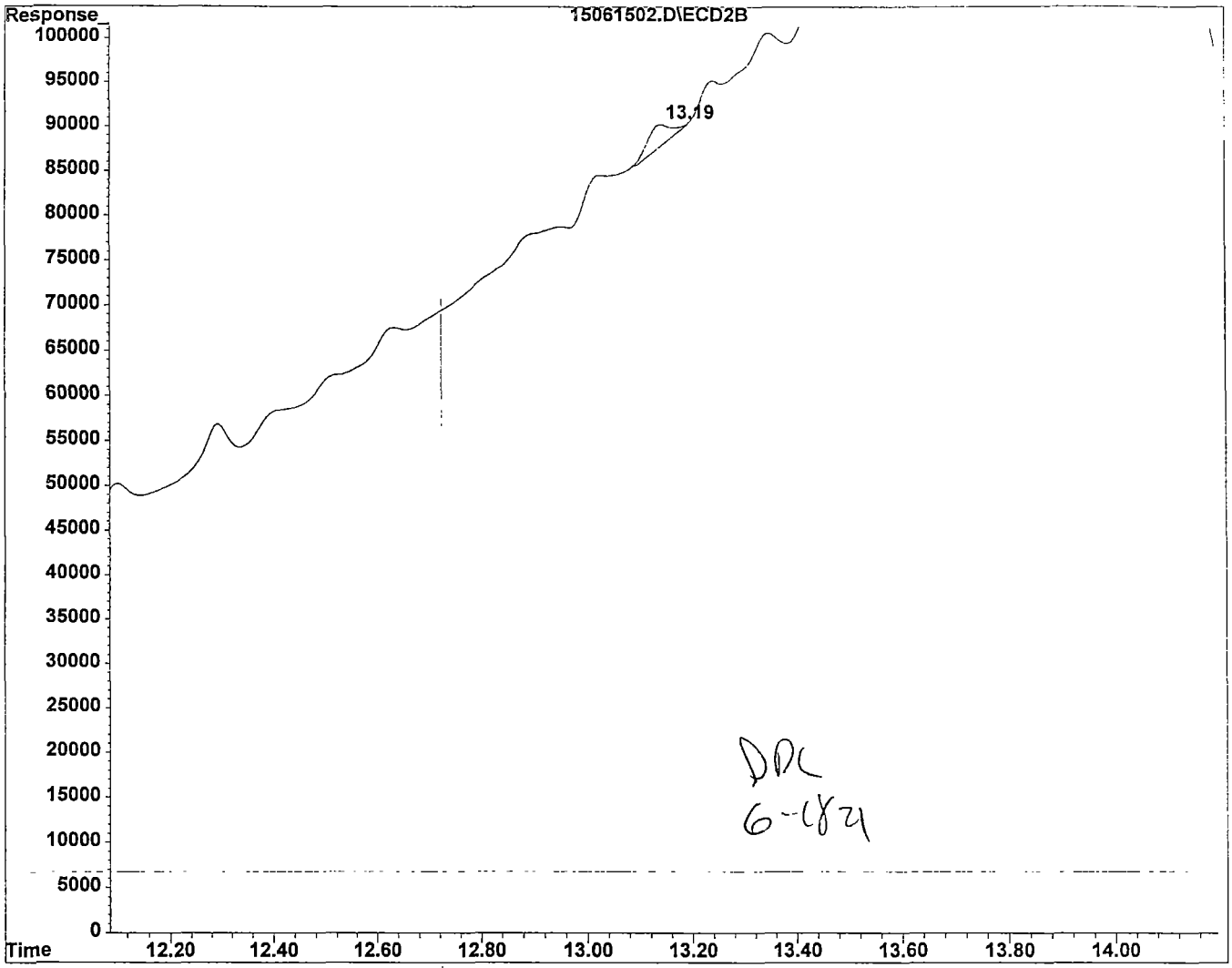


Aroclor-1242 {4} #2 12.68min area: 69868 m

Integration Time Range: 12.58 - 12.68

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\15\DATA\06_14_01\15061502.D
Date Acquired: 16 Jun 2001 9:00
Inst: HP_15 Operator ID: DDC
Name: 46702.46 *E00J8 *
Misc: *EPA*30.8G/5.0ML*21
Method: F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title: PCB/TOXAPHENE
Quant Time: Jun 18 9:24 2001 Quant Results File: XPCBF14.RES



Aroclor-1242 {5} #2 13.19min area: 87744 m

Integration Time Range: 13.09 - 13.19

F:\HPCHEM\HP\15\DATA\06_14_01\15061502.D
Report generated: Mon Jun 18 10:16:41 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061502.D\ECD1A.CH Vial: 2
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061502.D\ECD2B.CH
Acq On : 16 Jun 2001 9:00 Operator: DDC
Sample : 46702.46 *E00J8 * Inst : HP_15
Misc : *EPA*30.8G/5.0ML*21 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 9:24 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.59	7.35	318853	319645	5.225	5.669	
	Spiked Amount 8.220			Recovery	=	63.57%	68.97%	
22)	S DCB	18.28	18.68	390913	333945	6.200	5.792	
	Spiked Amount 8.220			Recovery	=	75.43%	70.47%	
	Target Compounds:							
7)	L4 Aroclor-1242	8.42	10.40	24486	37960	17.3	55.4	#
`	L4 Aroclor-1242 {2}	9.70	11.18	48382	85299	50.8	73.2	# DPL 6-18
,	L4 Aroclor-1242 {3}	10.64	12.68f	74131	62432	30.0	95.2m	#
10)	L4 Aroclor-1242 {4}	0.00	12.68f	0	69868	N.D. d	93.5m	#
11)	L4 Aroclor-1242 {5}	0.00	13.19f	0	87744	N.D. d	84.0m	#
	Sum Aroclor-1242			146999	343303	98.1	401.3	
	Average Aroclor-1242					32.701	80.267	
13)	L6 Aroclor-1254 {2}	0.00	13.03	0	66019	N.D. d	57.1	#
14)	L6 Aroclor-1254 {3}	13.79	13.92	661378	83286	263.5	66.0	#
15)	L6 Aroclor-1254 {4}	14.31	14.92	184963	151012	82.2	83.9	
16)	L6 Aroclor-1254 {5}	14.99	15.39	163287	178352	86.2	80.1	
	Sum Aroclor-1254			1009628	478670	431.9	287.1	
	Average Aroclor-1254					143.968	71.773	

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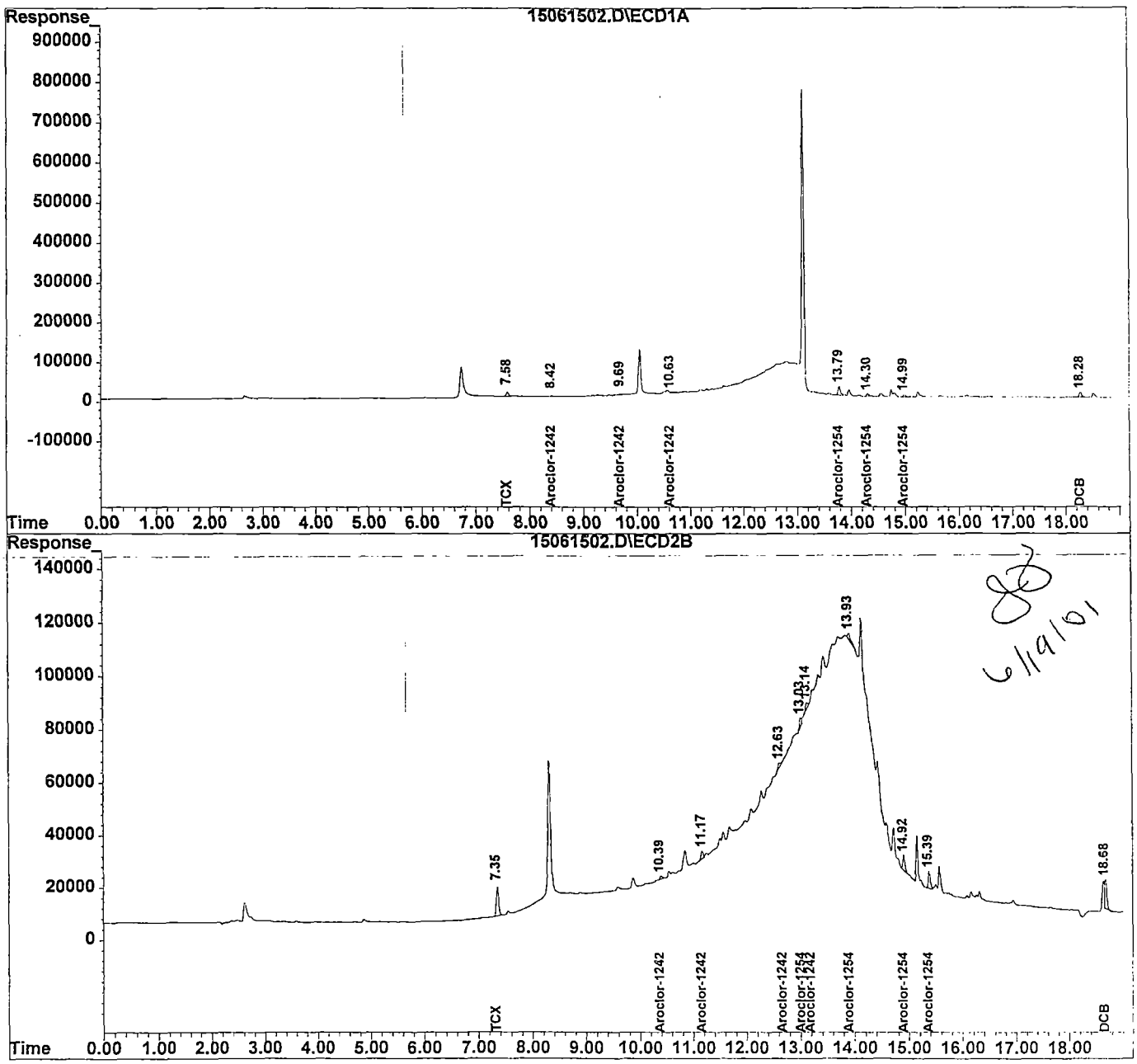
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061502.D\ECD1A.CH Vial: 2
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061502.D\ECD2B.CH
Acq On : 16 Jun 2001 9:00 Operator: DDC
Sample : 46702.46 *E00J8 * Inst : HP_15
Misc : *EPA*30.8G/5.0ML*21 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 9:24 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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



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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00J9

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Matrix: (soil/water) SOIL Lab Sample ID: 46702.47

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

% Moisture: 39 decanted: (Y/N) __ Date Received: 06/07/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/08/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.2 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	53	U
11104-28-2	Aroclor-1221	53	U
11141-16-5	Aroclor-1232	53	U
53469-21-9	Aroclor-1242	200	
12672-29-6	Aroclor-1248	53	U
11097-69-1	Aroclor-1254	140	
11096-82-5	Aroclor-1260	61	
Surrogate amount spiked		10.64	

TB 7/18/01

TB 7/2/01

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061509.D\ECD1A.CH Vial: 9
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061509.D\ECD2B.CH
Acq On : 16 Jun 2001 11:43 Operator: DDC
Sample : 46702.47 *E00J9 * Inst : HP_15
Misc : *EPA*30.8G/5.0ML*39 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 9:27 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.59	7.36	357178	380833	7.580	8.747	
	Spiked Amount 10.645			Recovery	=	71.21%	82.17%	
22)	S DCB	18.29	18.69	585897	440050	12.0	9.885	
	Spiked Amount 10.645			Recovery	=	112.73%	92.86%	
	Target Compounds:							
9)	L4 Aroclor-1242 {3}	10.69f	12.40	91881	181332	48.2	358.3	#
	L4 Aroclor-1242 {4}	11.64	12.64	344088	57529	318.8	99.7	#
	L4 Aroclor-1242 {5}	12.80	13.14	342740	203728	229.0	252.6	
	Sum Aroclor-1242			778709	442588	596.0	710.6	
	Average Aroclor-1242					198.656	236.856	
12)	L6 Aroclor-1254	12.63	0.00	190914	0	87.5	N.D. d	#
13)	L6 Aroclor-1254 {2}	13.31	13.02	312498	264401	224.2	296.1	#
14)	L6 Aroclor-1254 {3}	13.79	13.93	220250	56904	113.6	58.4	#
15)	L6 Aroclor-1254 {4}	14.31	14.92	266587	207096	153.4	148.9	
	Sum Aroclor-1254			990250	528401	578.7	503.5	
	Average Aroclor-1254					144.682	167.833	
17)	L7 Aroclor-1260	14.31	0.00	266587	0	87.2	N.D. d	#
18)	L7 Aroclor-1260 {2}	14.80	14.72	387599	301264	94.3	111.6	
19)	L7 Aroclor-1260 {3}	0.00	14.92	0	207096	N.D. d	64.9	#
20)	L7 Aroclor-1260 {4}	15.72	16.09	120911	61302	54.0	33.5	#
21)	L7 Aroclor-1260 {5}	16.16	16.32	236335	150193	53.1	33.8	#
	Sum Aroclor-1260			1011432	719855	153.6	129.7	
	Average Aroclor-1260					72.163	60.941	

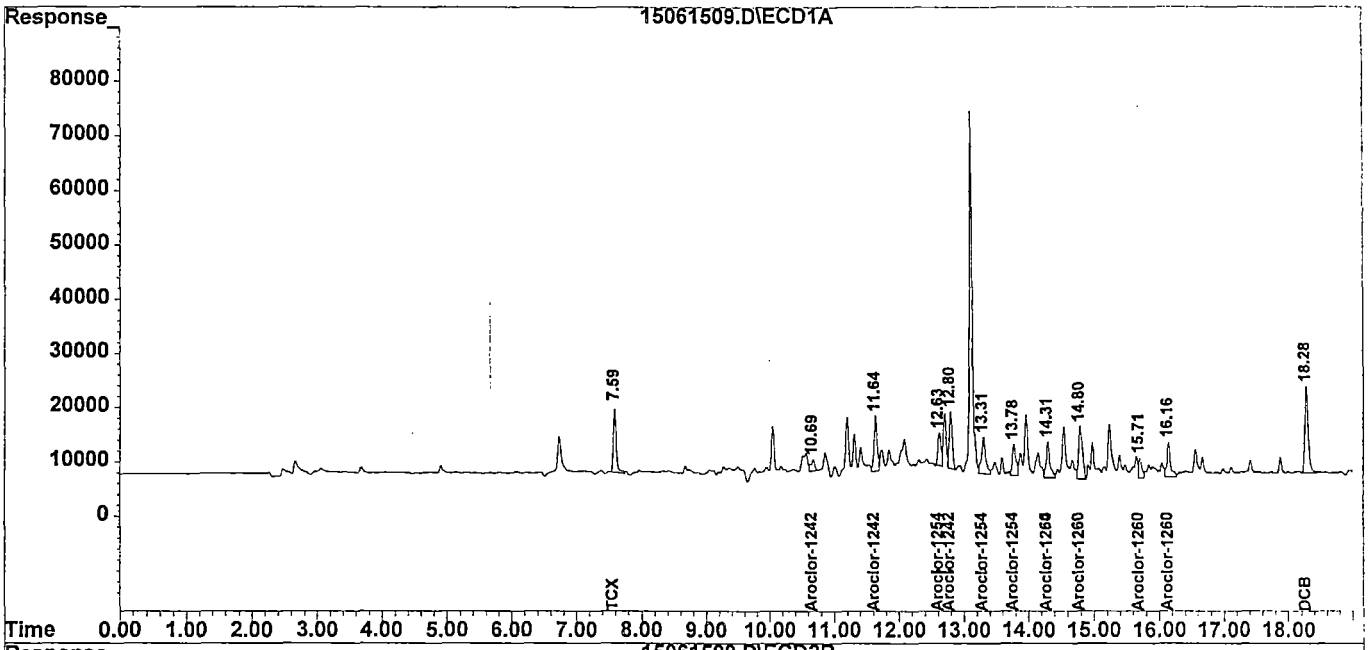
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
15061509.D XPCBF14.M Mon Jun 18 09:46:43 2001 Page 1

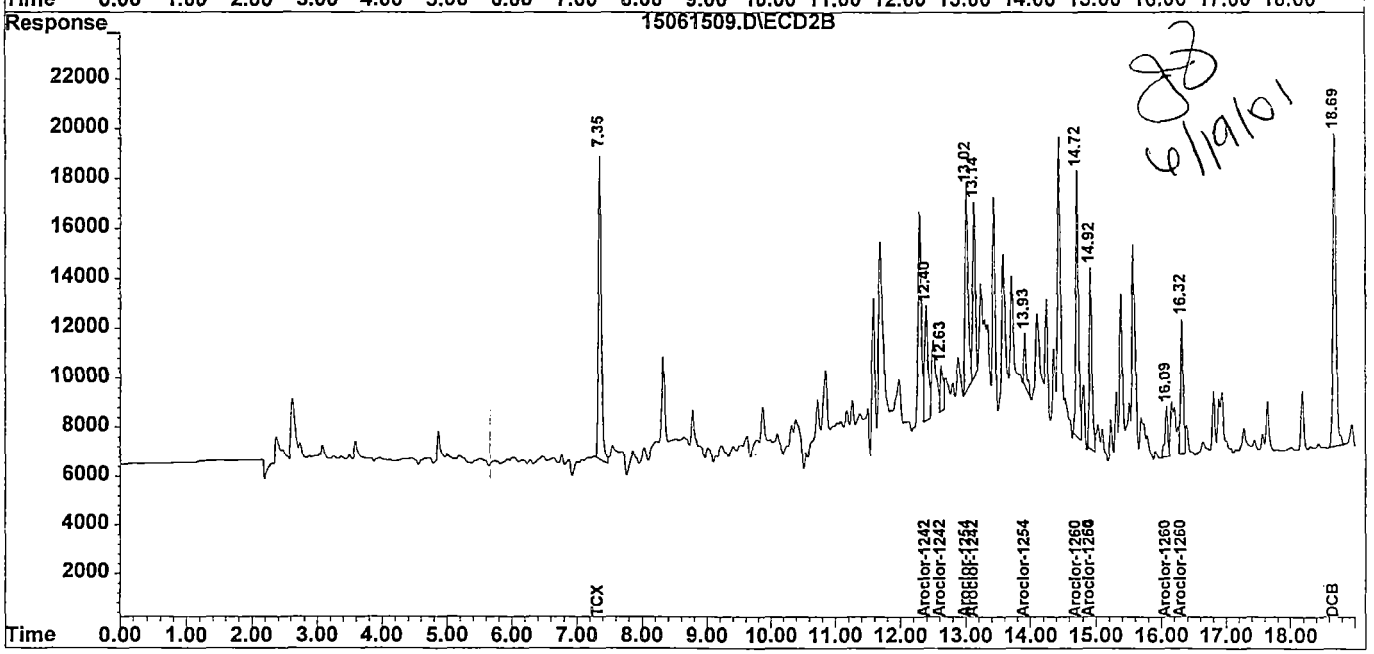
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061509.D\ECD1A.CH Vial: 9
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061509.D\ECD2B.CH
Acq On : 16 Jun 2001 11:43 Operator: DDC
Sample : 46702.47 *E00J9 * Inst : HP_15
Misc : *EPA*30.8G/5.0ML*39 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 9:27 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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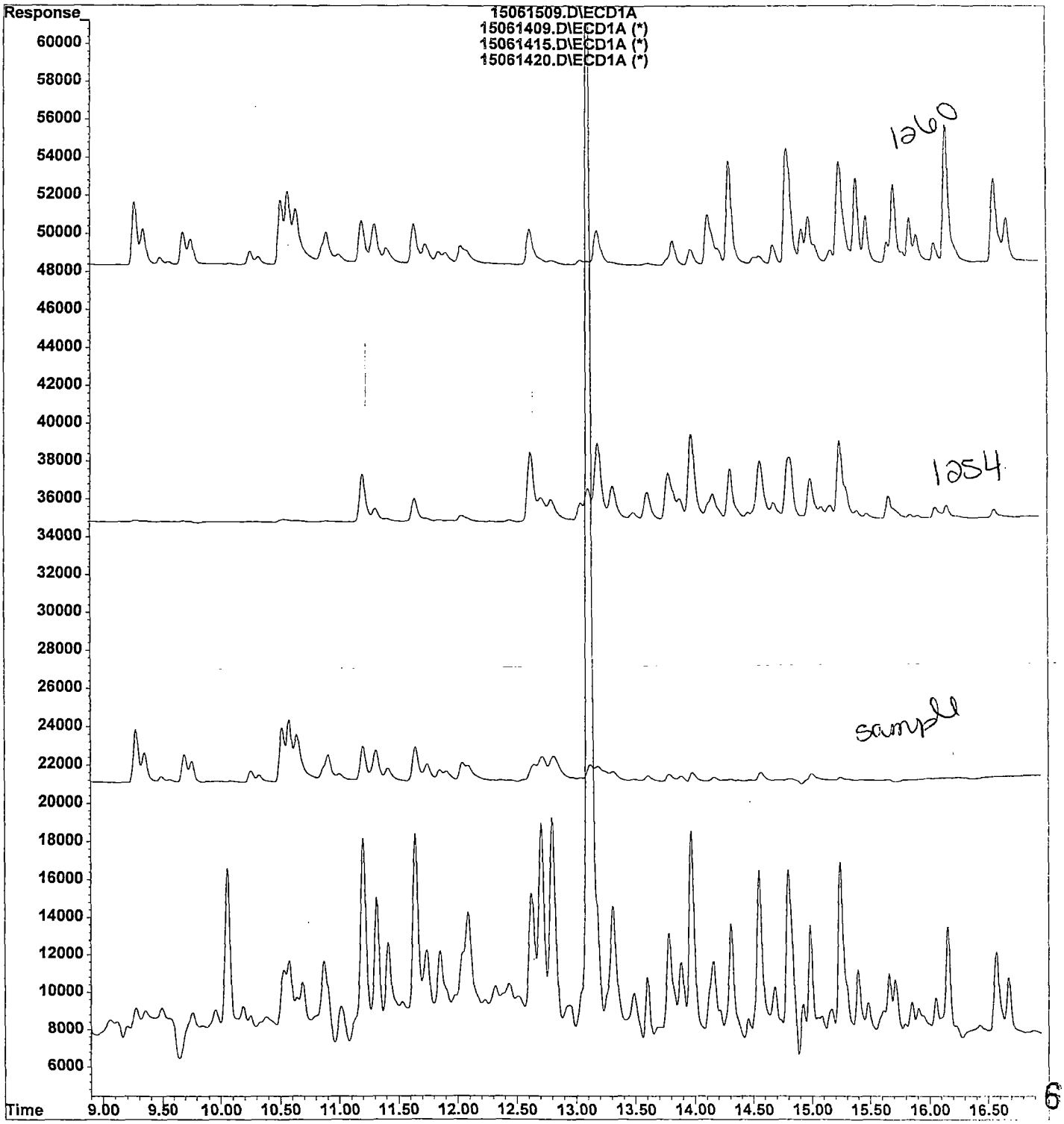
File : F:\HPCHEM\HP\15\DATA\06_14_01\15061509.D
Operator : DDC
Acquired : 16 Jun 2001 11:43 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 46702.47
Misc Info :
Vial Number: 9



1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00K0

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Matrix: (soil/water) SOIL Lab Sample ID: 46702.48

Sample wt/vol: 33.4 (g/mL) G Lab File ID:_____

% Moisture: 13 decanted: (Y/N) __ Date Received: 06/07/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/08/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	34	U
11141-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	U
	Surrogate amount spiked	6.88	

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061510.D\ECD1A.CH Vial: 10
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061510.D\ECD2B.CH
Acq On : 16 Jun 2001 12:06 Operator: DDC
Sample : 46702.48 *E00K0 * Inst : HP_15
Misc : *EPA*33.4G/5.0ML*13 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 9:27 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.36	381086	364006	5.229	5.406
	Spiked Amount 6.883			Recovery	=	75.97%	78.54%
22)	S DCB	18.28	18.69	415316	406965	5.515	5.911
	Spiked Amount 6.883			Recovery	=	80.13%	85.88%

Target Compounds:

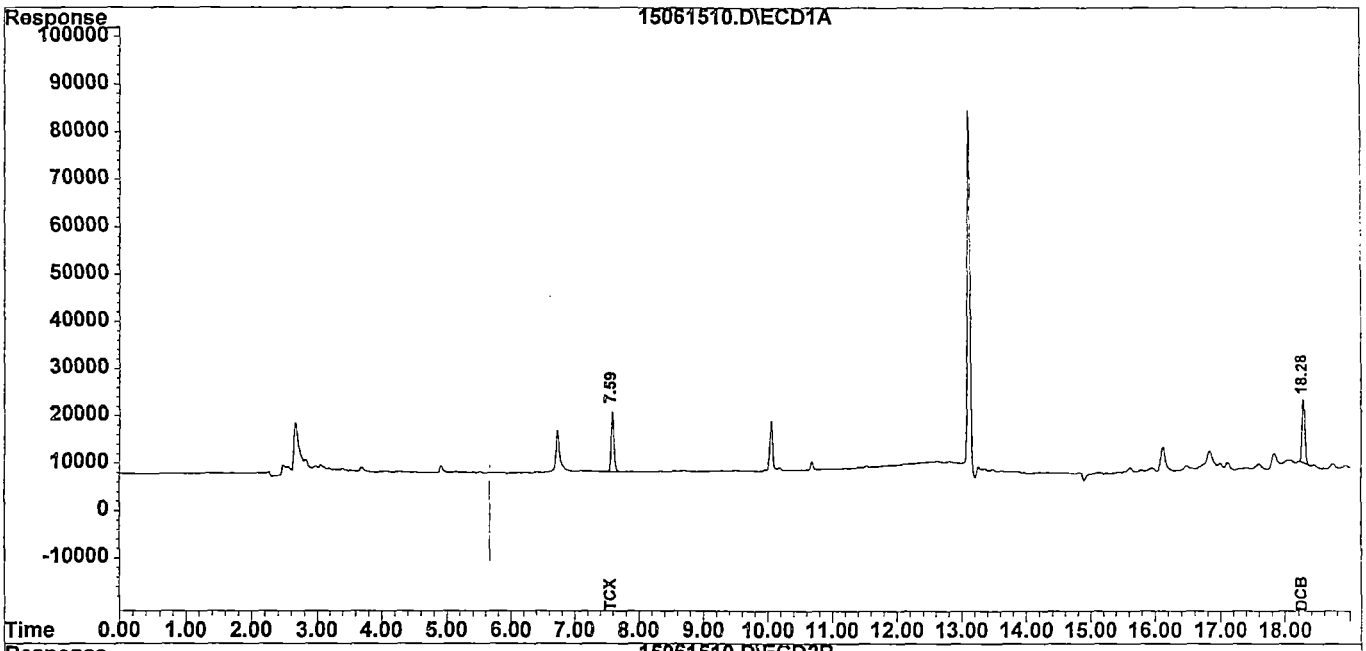
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

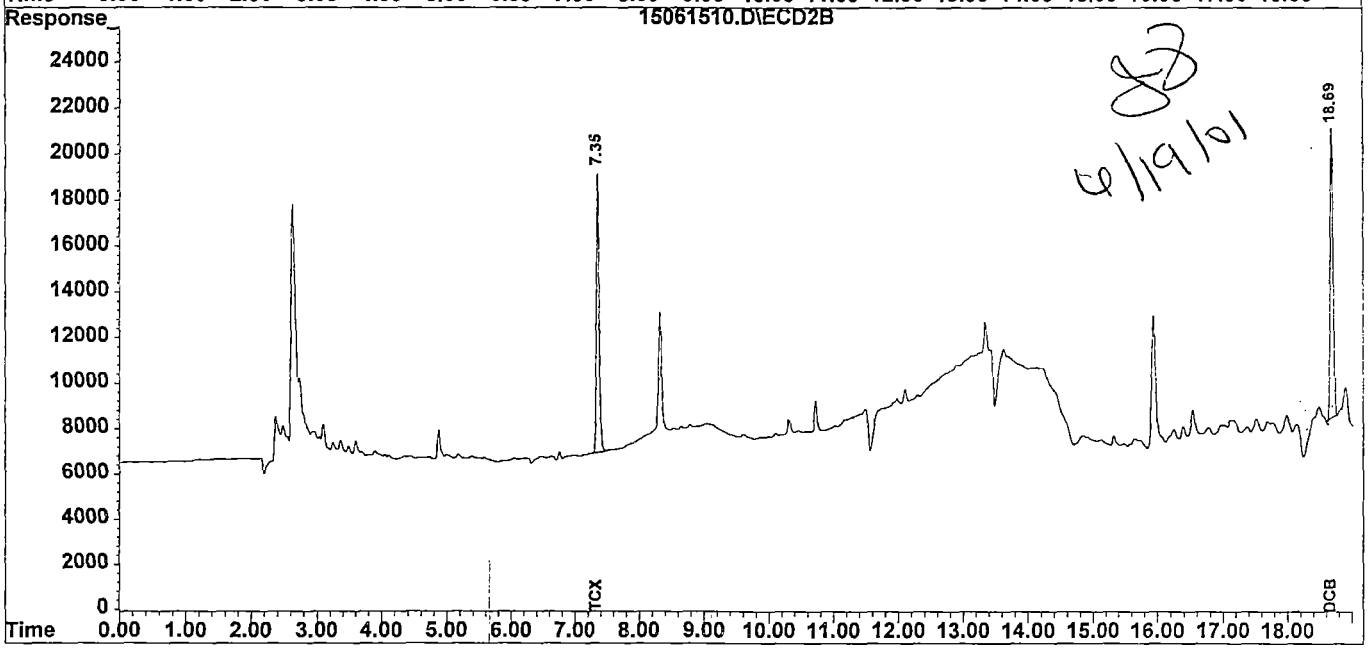
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061510.D\ECD1A.CH Vial: 10
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061510.D\ECD2B.CH
Acq On : 16 Jun 2001 12:06 Operator: DDC
Sample : 46702.48 *E00K0 * Inst : HP_15
Misc : *EPA*33.4G/5.0ML*13 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 9:27 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00K1

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Matrix: (soil/water) SOIL Lab Sample ID: 46702.49

Sample wt/vol: 36.0 (g/mL) G Lab File ID:_____

% Moisture: 11 decanted: (Y/N) __ Date Received: 06/07/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/08/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	31	U
11104-28-2	Aroclor-1221	31	U
11141-16-5	Aroclor-1232	31	U
53469-21-9	Aroclor-1242	31	U
12672-29-6	Aroclor-1248	31	U
11097-69-1	Aroclor-1254	31	U
11096-82-5	Aroclor-1260	31	U
	Surrogate amount spiked	6.24	

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061511.D\ECD1A.CH Vial: 11
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061511.D\ECD2B.CH
Acq On : 16 Jun 2001 12:29 Operator: DDC
Sample : 46702.49 *E00K1 * Inst : HP_15
Misc : *EPA*36G/5.0ML*11 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 9:27 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.36	397982	380612	4.952	5.126
	Spiked Amount 6.242			Recovery	=	79.33%	82.12%
22)	S DCB	18.29	18.69	502365	455496	6.050	6.000
	Spiked Amount 6.242			Recovery	=	96.92%	96.12%

Target Compounds:

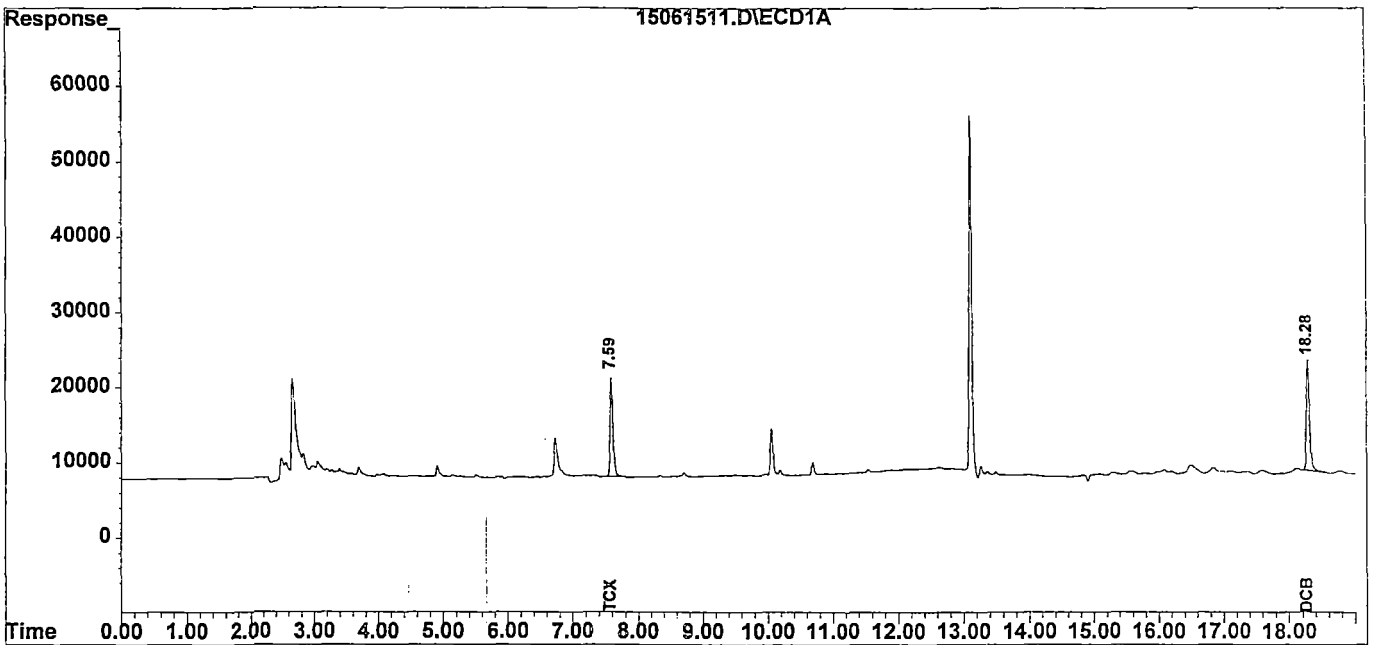
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
15061511.D XPCBF14.M Mon Jun 18 09:47:00 2001

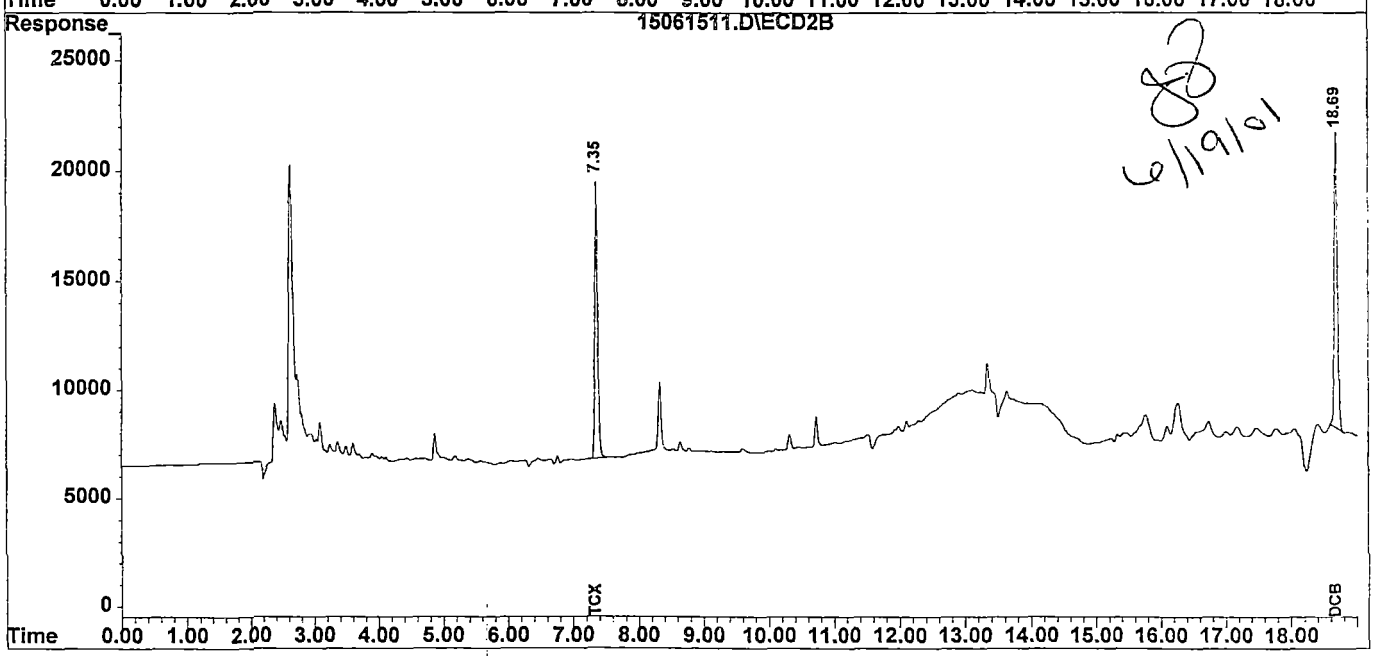
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061511.D\ECD1A.CH Vial: 11
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061511.D\ECD2B.CH
Acq On : 16 Jun 2001 12:29 Operator: DDC
Sample : 46702.49 *E00K1 * Inst : HP_15
Misc : *EPA*36G/5.0ML*11 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 9:27 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





6/19/01

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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00K2

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Matrix: (soil/water) SOIL Lab Sample ID: 46702.50

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

% Moisture: 12 decanted: (Y/N) __ Date Received: 06/07/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/08/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

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	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	37	U
11096-82-5	Aroclor-1260	37	U
	Surrogate amount spiked	7.53	

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061512.D\ECD1A.CH Vial: 12
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061512.D\ECD2B.CH
Acq On : 16 Jun 2001 12:53 Operator: DDC
Sample : 46702.50 *E00K2 * Inst : HP_15
Misc : *EPA*30.2G/5.0ML*12 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 9:27 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.36	363569	346565	5.454	5.627
	Spiked Amount 7.526			Recovery	=	72.47%	74.77%
22)	S DCB	18.29	18.69	445791	415589	6.473	6.600
	Spiked Amount 7.526			Recovery	=	86.01%	87.70%

Target Compounds:

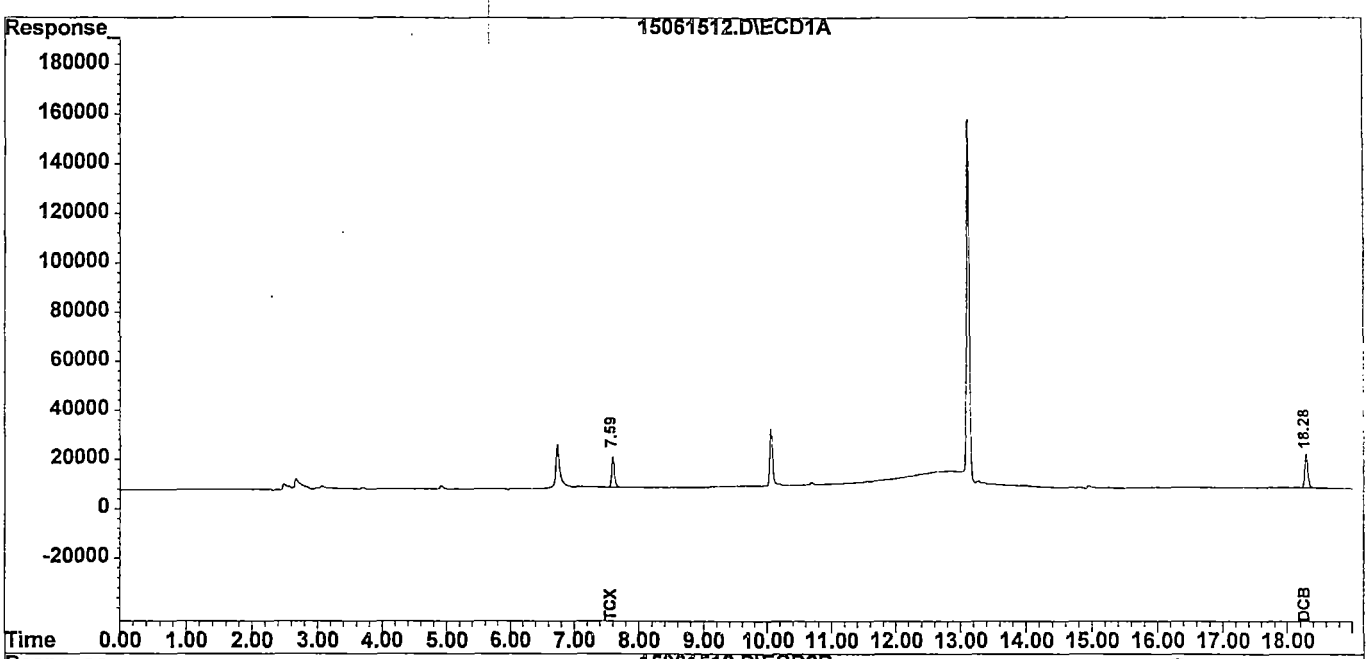
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

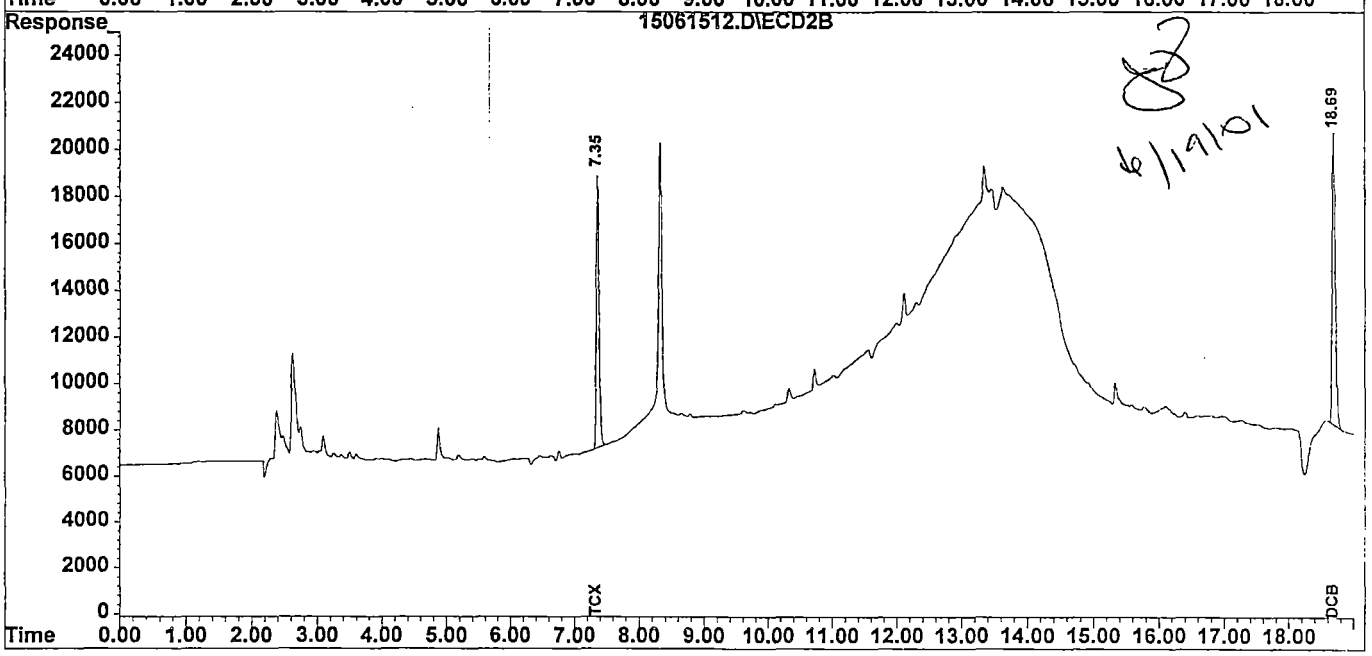
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061512.D\ECD1A.CH Vial: 12
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061512.D\ECD2B.CH
Acq On : 16 Jun 2001 12:53 Operator: DDC
Sample : 46702.50 *E00K2 * Inst : HP_15
Misc : *EPA*30.2G/5.0ML*12 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 9:27 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30M8

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Matrix: (soil/water) SOIL Lab Sample ID: 46721.01

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

% Moisture: 73 decanted: (Y/N) __ Date Received: 06/08/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/08/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	120	U
11104-28-2	Aroclor-1221	120	U
11141-16-5	Aroclor-1232	120	U
53469-21-9	Aroclor-1242	4100	~~E~~ 7800 D
12672-29-6	Aroclor-1248	120	U
11097-69-1	Aroclor-1254	1500	
11096-82-5	Aroclor-1260	680	
Surrogate amount spiked		24.70	

7/17/01 TB 7/18/01

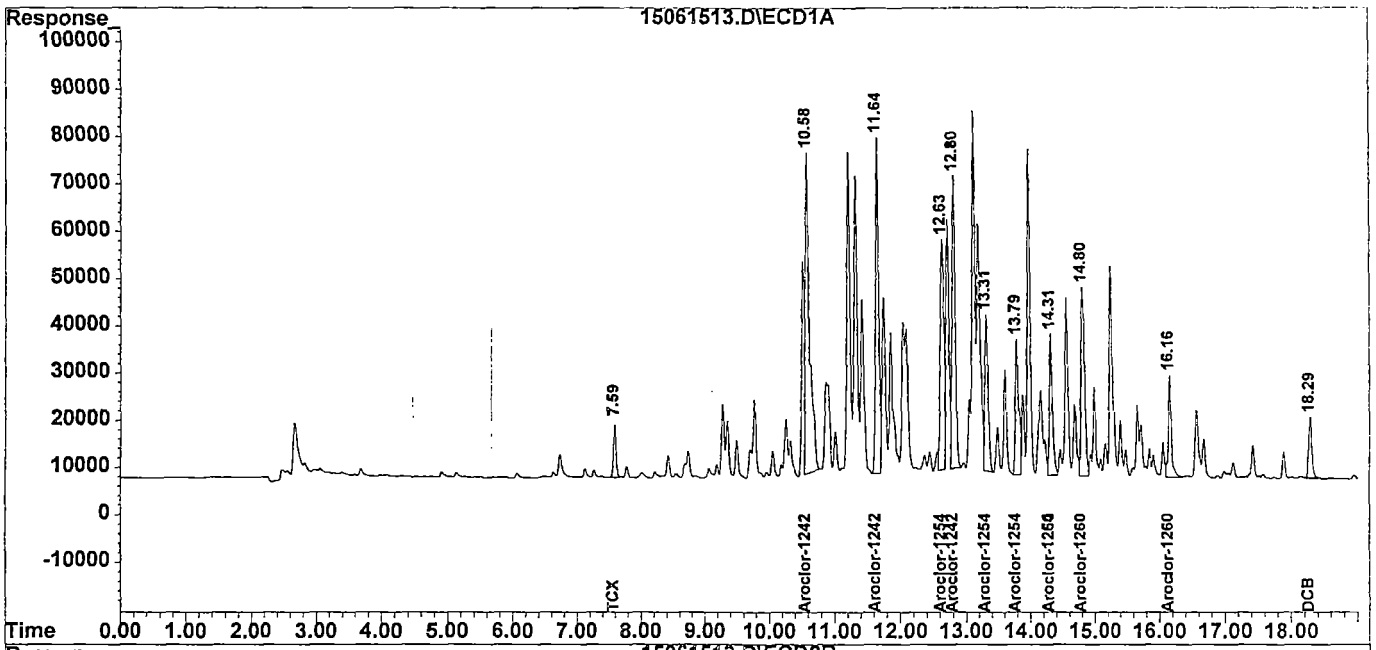
FORM I PCB

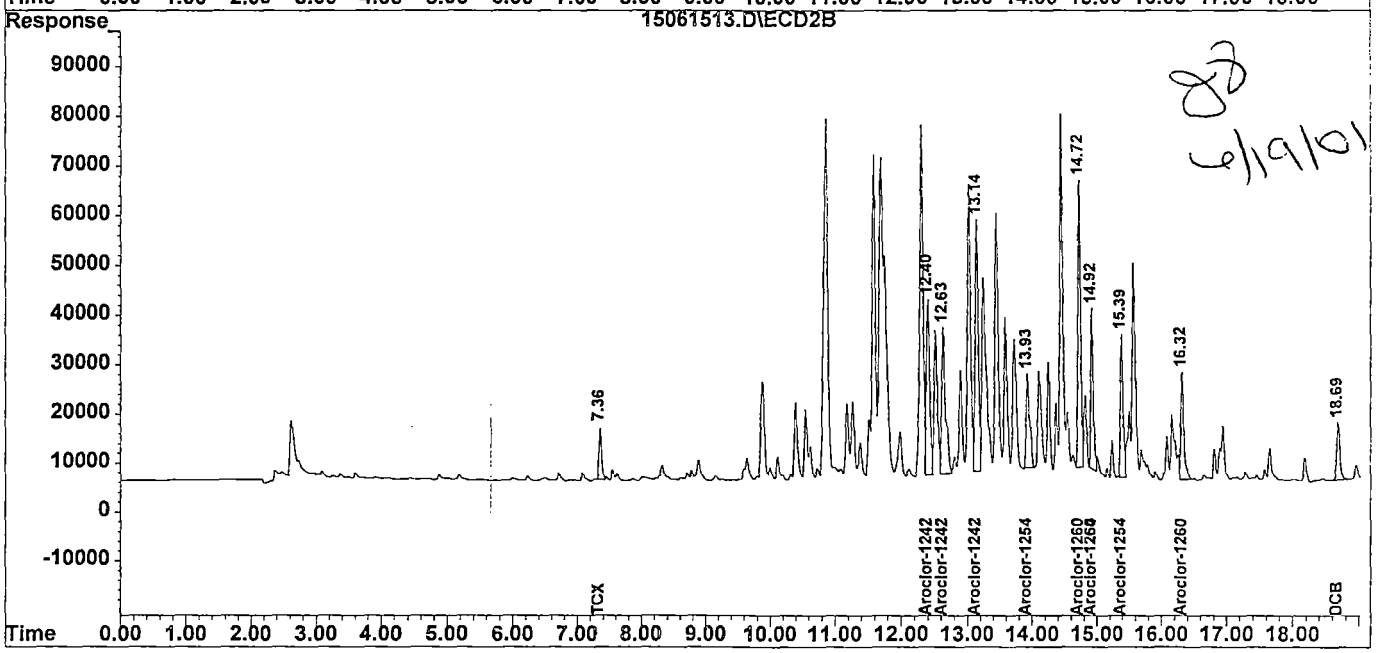
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061513.D\ECD1A.CH Vial: 13
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061513.D\ECD2B.CH
Acq On : 16 Jun 2001 13:16 Operator: DDC
Sample : 46721.01 *E30M8 * Inst : HP_15
Misc : *EPA*30G/5.0ML*73 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 9:30 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





8B
6/19/01

81

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061513.D\ECD1A.CH Vial: 13
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061513.D\ECD2B.CH
Acq On : 16 Jun 2001 13:16 Operator: DDC
Sample : 46721.01 *E30M8 * Inst : HP_15
Misc : *EPA*30G/5.0ML*73 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 9:30 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.60	7.36	331544	294200	16.3	15.7
	Spiked Amount 24.691			Recovery	=	66.02%	63.59%
22)	S DCB	18.29	18.70	438614	410930	20.9	21.4
	Spiked Amount 24.691			Recovery	=	84.65%	86.67%
	Target Compounds:						
9)	L4 Aroclor-1242 {3}	10.58f	12.40	3133999	1306921	3812.4 E	5989.3 E#
[illegible])	L4 Aroclor-1242 {4}	11.65	12.64	2347165	1236407	5043.6 E	4971.4 E
[illegible])	L4 Aroclor-1242 {5}	12.81	13.14	2150164	1752951	3332.5 E	5040.9 E#
	Sum Aroclor-1242			7631328	4296278	12188.5	16001.6
	Average Aroclor-1242					4062.832	5333.873
12)	L6 Aroclor-1254	12.63	0.00	1866633	0	1985.5 E	N.D. d #
13)	L6 Aroclor-1254 {2}	13.31	0.00	1187514	0	1975.7 E	N.D. d #
14)	L6 Aroclor-1254 {3}	13.79	13.93	1039672	721396	1244.2	1717.6 #
15)	L6 Aroclor-1254 {4}	14.31	14.93	1005272	926797	1341.6	1546.1
16)	L6 Aroclor-1254 {5}	0.00	15.39	0	889091	N.D. d	1199.8 #
	Sum Aroclor-1254			5099091	2537284	6547.1	4463.5
	Average Aroclor-1254					1636.769	1487.834
17)	L7 Aroclor-1260	14.31	0.00	1005272	0	763.0	N.D. d #
18)	L7 Aroclor-1260 {2}	14.80	14.73	1618690	1711174	913.7	1470.9 #
19)	L7 Aroclor-1260 {3}	0.00	14.93	0	926797	N.D. d	673.3 #
21)	L7 Aroclor-1260 {5}	16.16	16.33	713992	698461	371.9	364.7
	Sum Aroclor-1260			3337954	3336431	2529.1	3097.3
	Average Aroclor-1260					682.860	836.275

80

(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.

E30M8DL

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Matrix: (soil/water) SOIL Lab Sample ID: 46721.01DL

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

% Moisture: 73 decanted: (Y/N) __ Date Received: 06/08/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/08/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/18/01

Injection Volume: 0.5(uL) Dilution Factor: 10.0

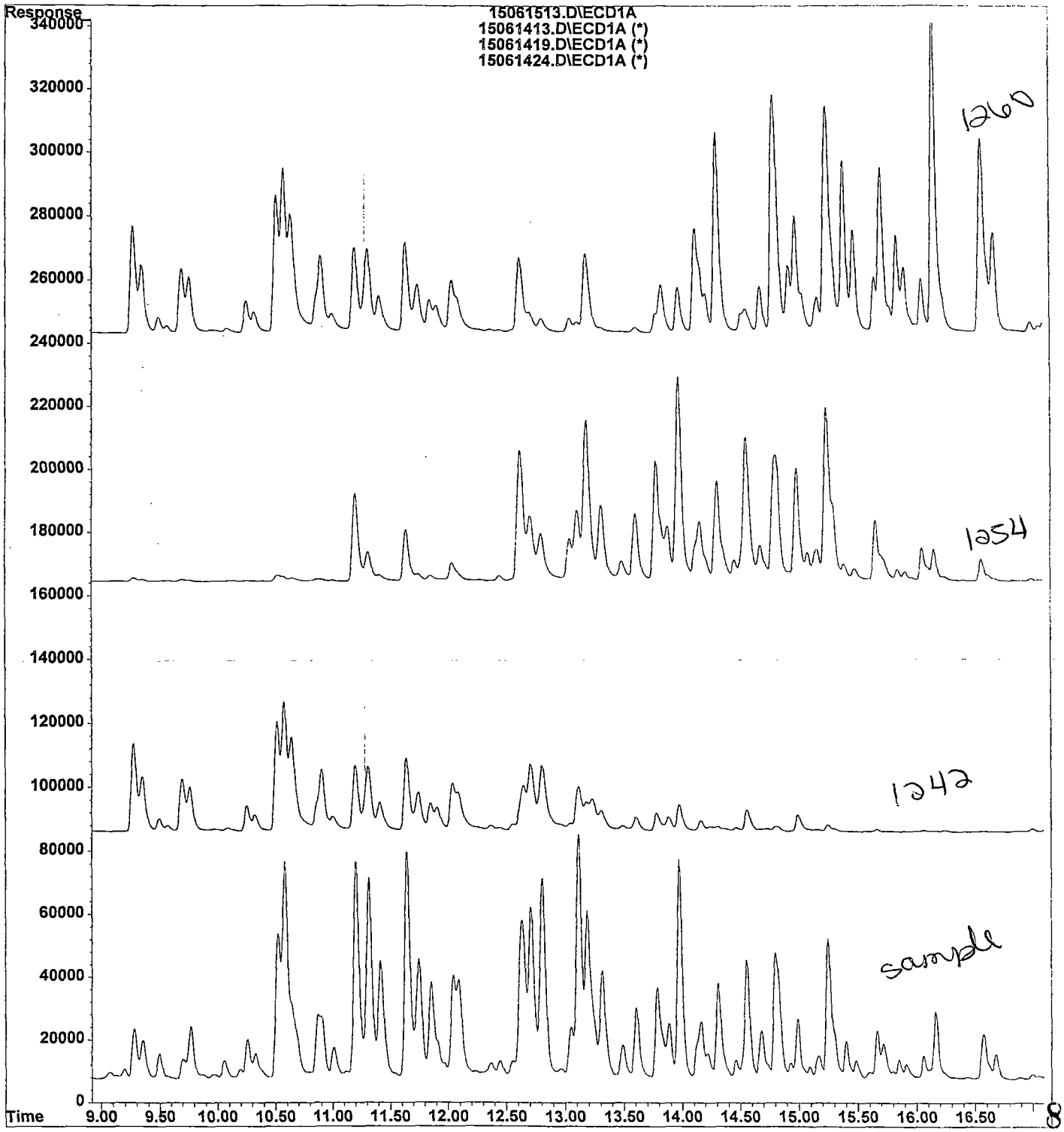
GPC Cleanup: (Y/N) Y pH: 7.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	1200	U~~J~~
11104-28-2	Aroclor-1221	1200	U~~J~~
11141-16-5	Aroclor-1232	1200	U~~J~~
53469-21-9	Aroclor-1242	7800	~~D~~J
12672-29-6	Aroclor-1248	~~1200~~	U~~J~~
11097-69-1	Aroclor-1254	2600	~~D~~J
11096-82-5	Aroclor-1260	790	D~~J~~
	Surrogate amount spiked	24.70	

TBS
7/7/01

FORM I PCB

File : F:\HPCHEM\HP\15\DATA\06_14_01\15061513.D
Operator : DDC
Acquired : 16 Jun 2001 13:16 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 46721.01
Misc Info :
Vial Number: 13



Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_18_01\15061805.D\ECD1A.CH Vial: 5
Signal #2 : F:\HPCHEM\HP\15\DATA\06_18_01\15061805.D\ECD2B.CH
Acq On : 18 Jun 2001 11:17 Operator: DDC
Sample : 46721.01DL *E30M8DL * Inst : HP_15
Misc : *EPA*30G/5.0ML*73 Dilution: 10.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 13:26 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_18_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.60	7.36	48844	37803	24.0	20.1	
	Spiked Amount 24.691			Recovery	=	97.20%	81.41%	
22)	S DCB	18.28	18.69	72749	60056	34.7	31.3	
	Spiked Amount 24.691			Recovery	=	140.54%	126.77%	
	Target Compounds:							
9)	L4 Aroclor-1242 {3}	10.58f	12.41	581194	204627	7070.0	9377.5	#
	L4 Aroclor-1242 {4}	11.65	12.64	467624	194002	10048.4	7800.6	
	L4 Aroclor-1242 {5}	12.81	13.15	414905	261367	6430.5	7516.1	
	Sum Aroclor-1242			1463723	659995	23548.9	24694.1	
	Average Aroclor-1242					7849.628	8231.374	
13)	L6 Aroclor-1254 {2}	13.32	0.00	241290	0	4014.5	N.D. d	#
14)	L6 Aroclor-1254 {3}	13.79	13.94	199704	126954	2390.0	3022.8	#
15)	L6 Aroclor-1254 {4}	14.31	14.93	211946	177640	2828.6	2963.4	
16)	L6 Aroclor-1254 {5}	14.99	15.40	100437	145642	1593.4	1965.4	
	Sum Aroclor-1254			753377	450235	10826.5	7951.5	
	Average Aroclor-1254					2706.617	2650.502	
17)	L7 Aroclor-1260	14.31	0.00	211946	0	1608.6	N.D. d	#
19)	L7 Aroclor-1260 {3}	0.00	14.93	0	177640	N.D. d	1290.4	#
20)	L7 Aroclor-1260 {4}	15.72	16.10	64698	40294	670.5	510.0	
21)	L7 Aroclor-1260 {5}	16.16	16.33	120724	108332	628.9	565.6	
	Sum Aroclor-1260			397368	326266	35901.5	29210.5	
	Average Aroclor-1260					969.341	788.683	

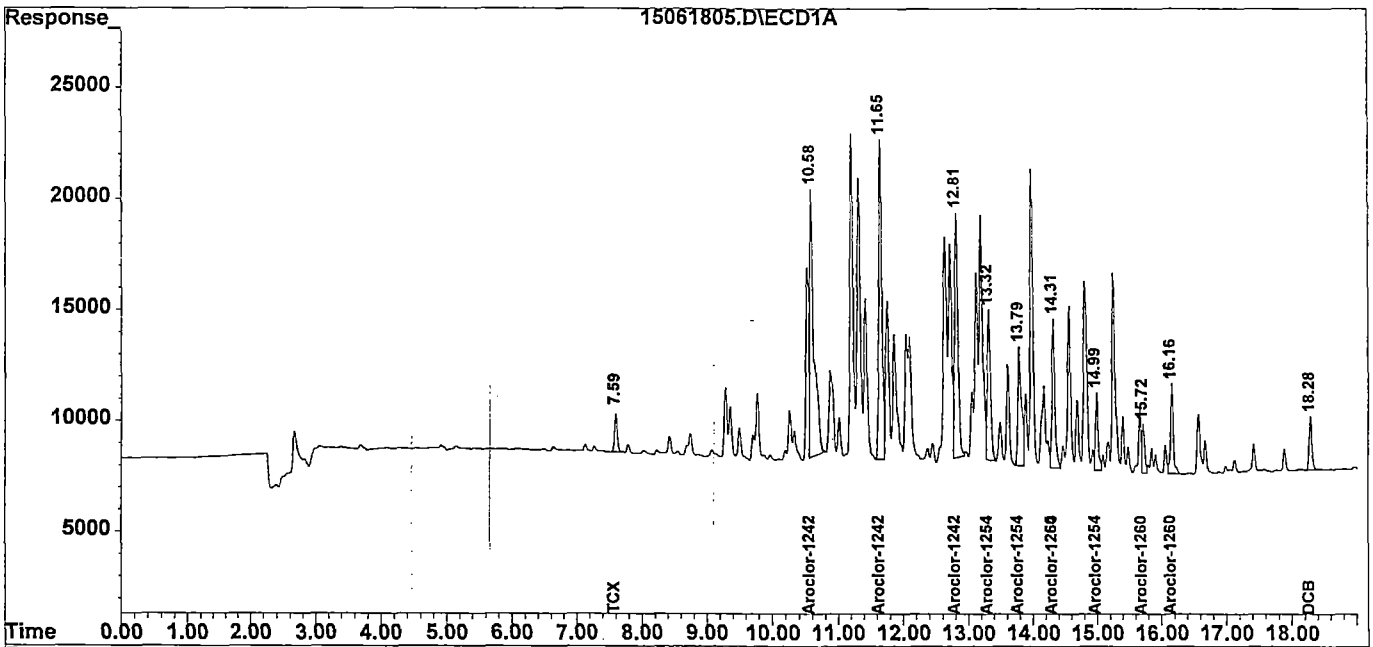
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

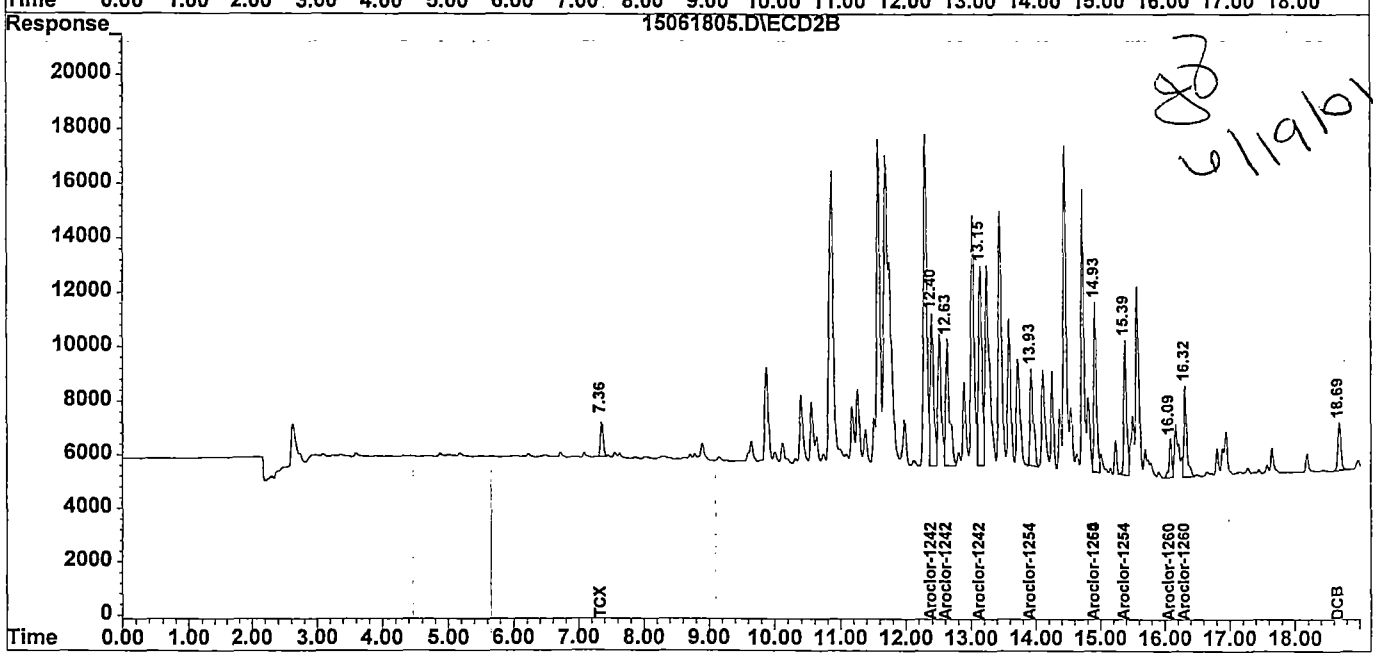
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_18_01\15061805.D\ECD1A.CH Vial: 5
Signal #2 : F:\HPCHEM\HP\15\DATA\06_18_01\15061805.D\ECD2B.CH
Acq On : 18 Jun 2001 11:17 Operator: DDC
Sample : 46721.01DL *E30M8DL * Inst : HP_15
Misc : *EPA*30G/5.0ML*73 Dilution: 10.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 13:26 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_18_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





6/19/01

85

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30N0

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Matrix: (soil/water) SOIL Lab Sample ID: 46721.02

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

% Moisture: 67 decanted: (Y/N) __ Date Received: 06/08/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/08/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	98	U
11104-28-2	Aroclor-1221	98	U
11141-16-5	Aroclor-1232	98	U
53469-21-9	Aroclor-1242	98	U
12672-29-6	Aroclor-1248	98	U
11097-69-1	Aroclor-1254	98	U
11096-82-5	Aroclor-1260	98	U
	Surrogate amount spiked	19.88	

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061514.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061514.D\ECD2B.CH
Acq On : 16 Jun 2001 13:39 Operator: DDC
Sample : 46721.02 *E30N0 * Inst : HP_15
Misc : *EPA*30.5G/5.0ML*67 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 9:30 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.36	368119	346068	14.6	14.8
	Spiked Amount 19.871			Recovery	=	73.47%	74.48%
22)	S DCB	18.29	18.70	408750	328283	15.7	13.8
	Spiked Amount 19.871			Recovery	=	79.01%	69.45%
	Target Compounds:						

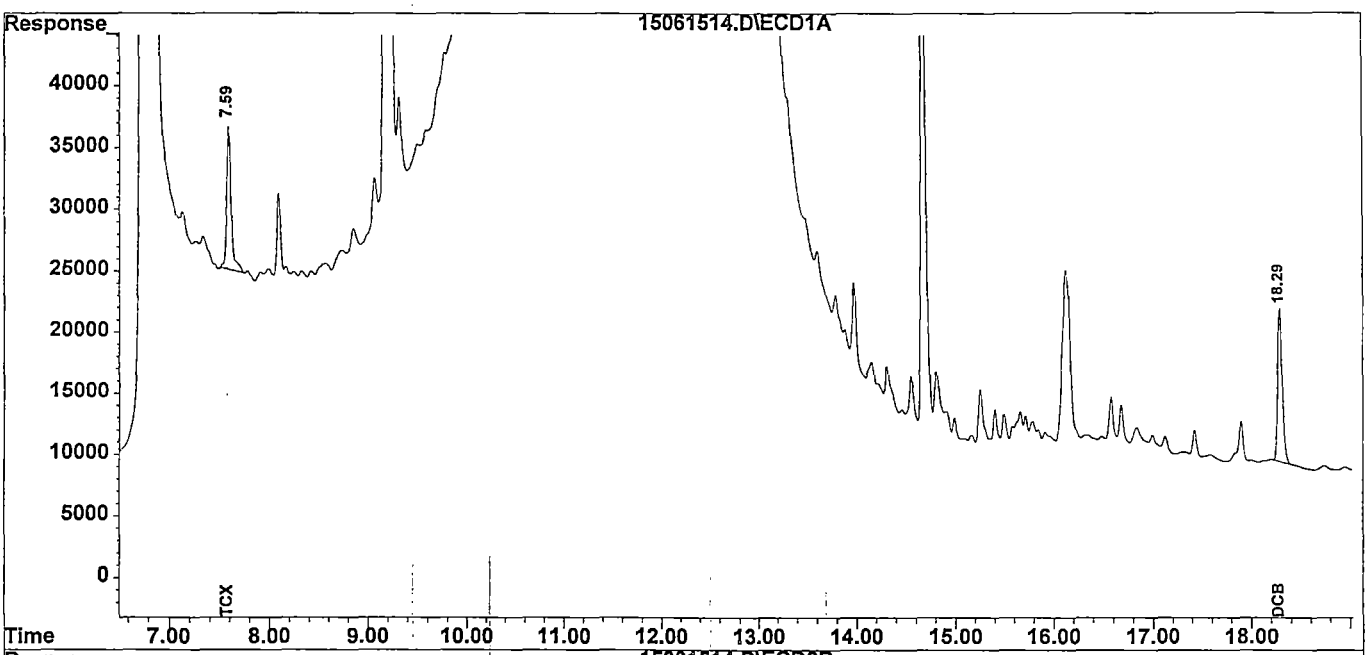
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

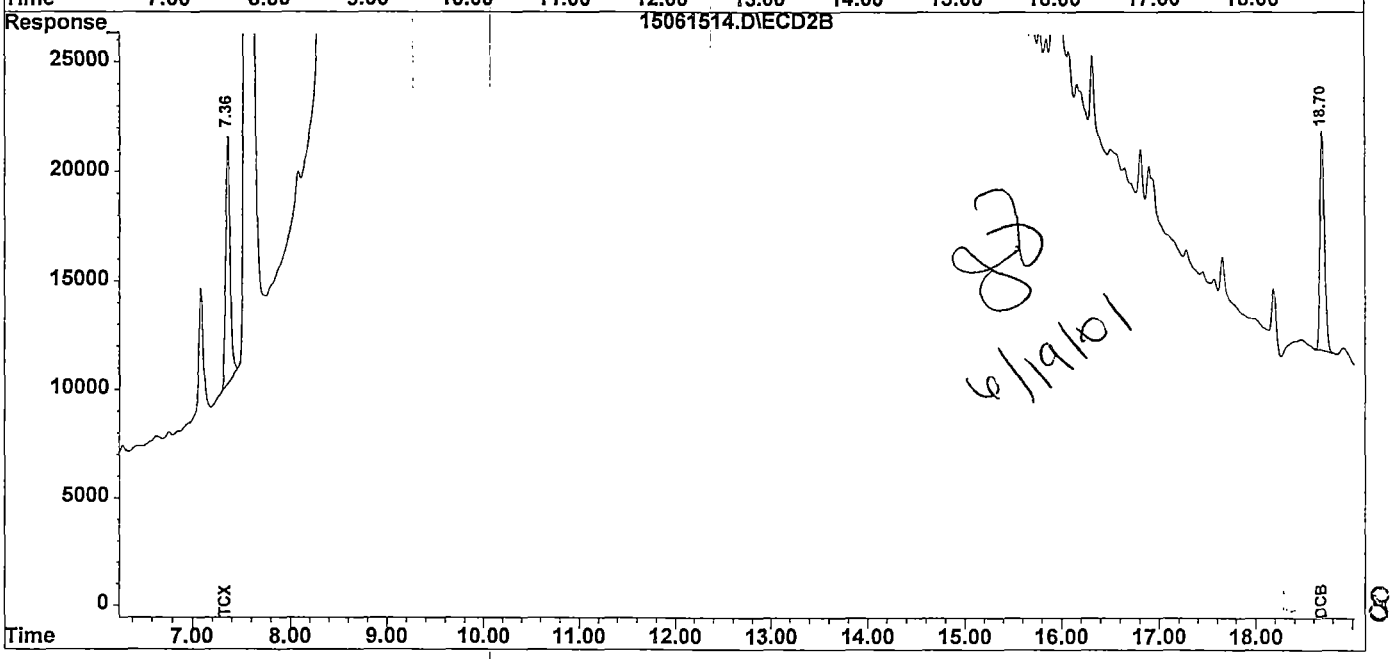
Chromatographic Report

```
Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061514.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061514.D\ECD2B.CH
Acq On    : 16 Jun 2001  13:39                        Operator: DDC
Sample    : 46721.02  *E30N0  *                       Inst    : HP_15
Misc      : *EPA*30.5G/5.0ML*67                       Dilution: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e
Quant Time: Jun 18  9:30 2001  Quant Results File: XPCBF14.RES

Method        : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path    : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update   : Thu Jun 07 08:46:05 2001
Response via  : Multiple Level Calibration

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





6/19/01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061514.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061514.D\ECD2B.CH
Acq On : 16 Jun 2001 13:39 Operator: DDC
Sample : 46721.02 *E30N0 * Inst : HP_15
Misc : *EPA*30.5G/5.0ML*67 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 9:30 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.36	368119	346068	14.6	14.8
	Spiked Amount 19.871			Recovery	=	73.47%	74.48%
22)	S DCB	18.29	18.70	408750	328283	15.7	13.8
	Spiked Amount 19.871			Recovery	=	79.01%	69.45%

Target Compounds:

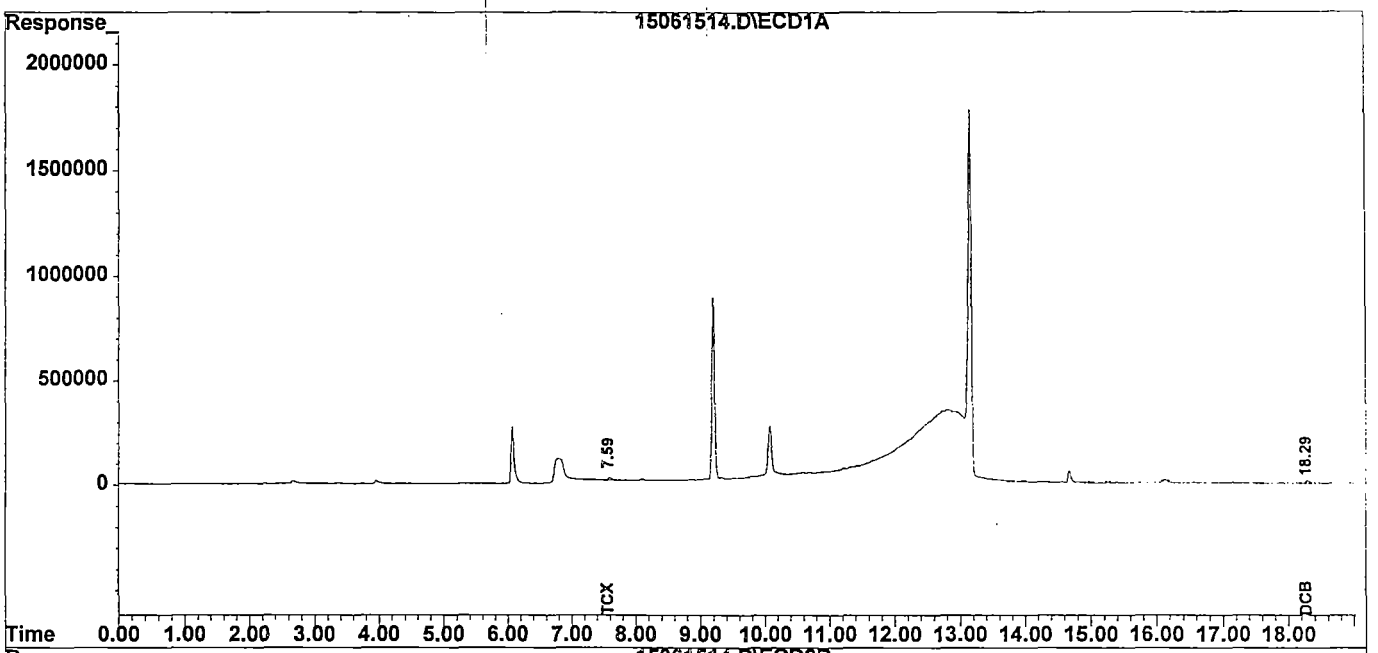
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

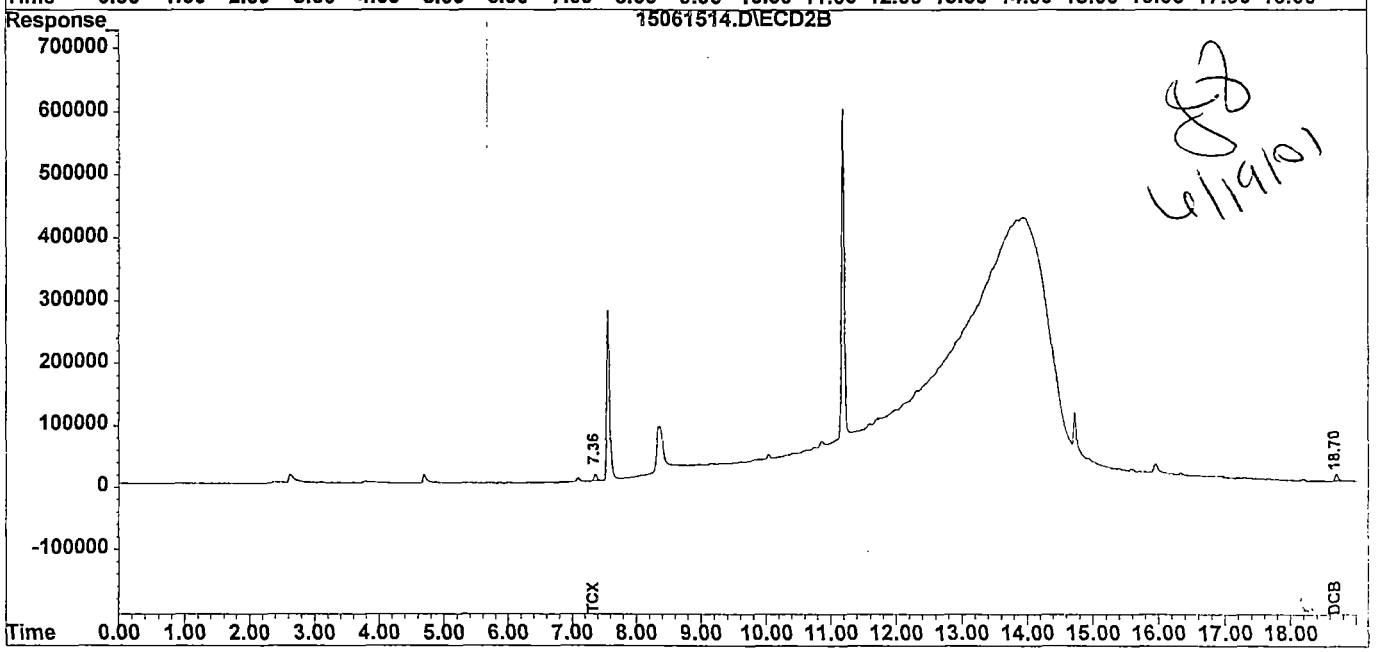
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061514.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061514.D\ECD2B.CH
Acq On : 16 Jun 2001 13:39 Operator: DDC
Sample : 46721.02 *E30N0 * Inst : HP_15
Misc : *EPA*30.5G/5.0ML*67 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 9:30 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





6/19/01

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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30N1

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Matrix: (soil/water) SOIL Lab Sample ID: 46721.03

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

% Moisture: 18 decanted: (Y/N) __ Date Received: 06/08/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/08/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Sulfur Cleanup: (Y/N) N

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	40	U
11096-82-5	Aroclor-1260	40	U
	Surrogate amount spiked	8.05	

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061515.D\ECD1A.CH Vial: 15
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061515.D\ECD2B.CH
Acq On : 16 Jun 2001 14:02 Operator: DDC
Sample : 46721.03 *E30N1 * Inst : HP_15
Misc : *EPA*30.3G/5.0ML*18 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 9:30 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.60	7.36	298895	278222	4.796	4.832
	Spiked Amount 8.050			Recovery	=	59.58%	60.03%
22)	S DCB	18.29	18.70	382265	343384	5.937	5.833
	Spiked Amount 8.050			Recovery	=	73.76%	72.46%
	Target Compounds:						

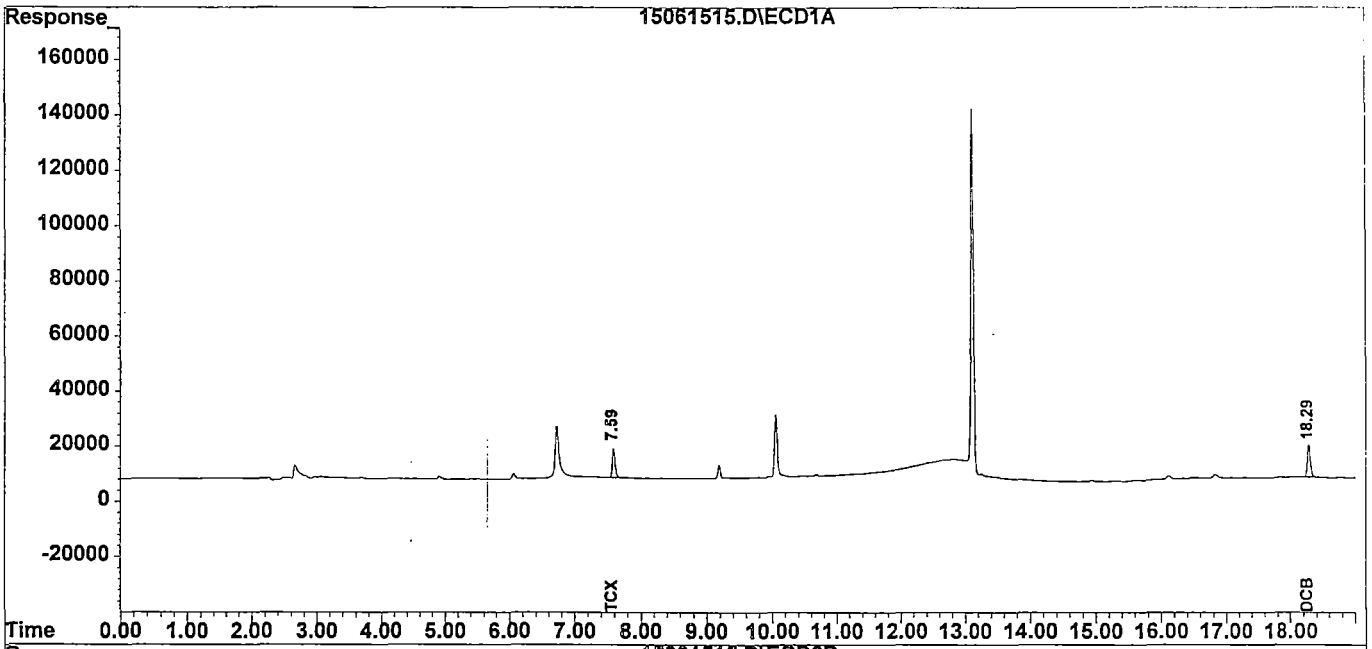
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

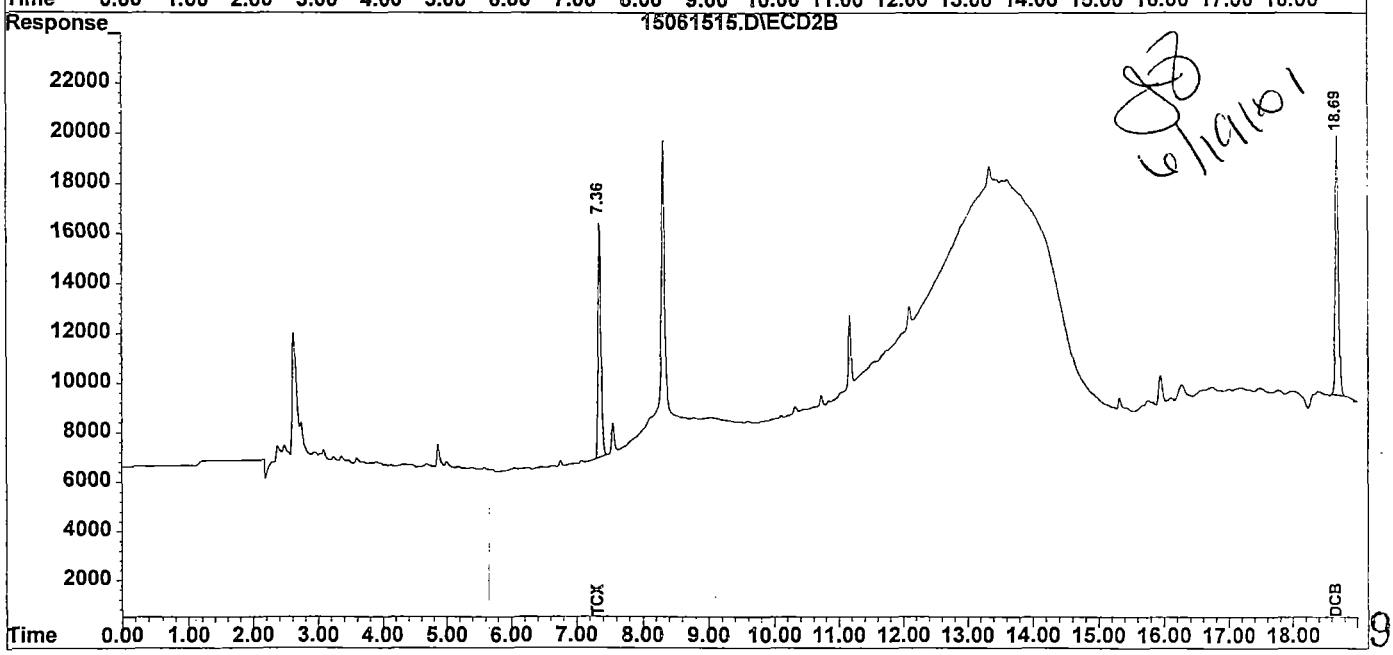
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061515.D\ECD1A.CH Vial: 15
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061515.D\ECD2B.CH
Acq On : 16 Jun 2001 14:02 Operator: DDC
Sample : 46721.03 *E30N1 * Inst : HP_15
Misc : *EPA*30.3G/5.0ML*18 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 9:30 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





6/19/01

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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30N2

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Matrix: (soil/water) SOIL Lab Sample ID: 46721.04

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

% Moisture: 71 decanted: (Y/N) __ Date Received: 06/08/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/08/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	110	U~~J~~
11104-28-2	Aroclor-1221	110	U~~J~~
11141-16-5	Aroclor-1232	110	U~~J~~
53469-21-9	Aroclor-1242	~~1800~~	~~EPJ~~ 3700 DJ
12672-29-6	Aroclor-1248	110	U~~J~~
11097-69-1	Aroclor-1254	~~1900~~	~~EJ~~ 3200 DJ
11096-82-5	Aroclor-1260	640	~~J~~
Surrogate amount spiked		22.53	

TB 7/18/01 TB 7/18/01

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061516.D\ECD1A.CH Vial: 16
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061516.D\ECD2B.CH
Acq On : 16 Jun 2001 14:26 Operator: DDC
Sample : 46721.04 *E30N2 * Inst : HP_15
Misc : *EPA*30.6G/5.0ML*71 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 9:32 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.60	7.36	293912	251401	13.2	12.2
	Spiked Amount 22.538			Recovery	=	58.57%	54.13%
22)	S DCB	18.29	18.70	398417	375994	17.3	17.9
	Spiked Amount 22.538			Recovery	=	76.76%	79.42%
	Target Compounds:						
7)	L4 Aroclor-1242	8.42	0.00	448854	0	869.2	N.D. d #
[illegible]	L4 Aroclor-1242 {2}	0.00	11.19	0	1508466	N.D.	3550.3 E#
[illegible]	L4 Aroclor-1242 {3}	10.68f	0.00	696684	0	773.6	N.D. d #
10)	L4 Aroclor-1242 {4}	0.00	12.64	0	977535	N.D. d	3587.7 E#
11)	L4 Aroclor-1242 {5}	12.81	13.14	2780910	2278145	3934.1 E	5979.8 E#
	Sum Aroclor-1242			3926448	4764146	5576.9	13117.8
	Average Aroclor-1242					1858.973	4372.609
12)	L6 Aroclor-1254	12.63	0.00	2455984	0	2384.5 E	N.D. d #
13)	L6 Aroclor-1254 {2}	13.32	0.00	1515246	0	2301.1 E	N.D. d #
14)	L6 Aroclor-1254 {3}	13.79	13.93	1491531	1153019	1629.3 E	2505.9 E#
15)	L6 Aroclor-1254 {4}	14.31	14.93	1574049	1397623	1917.5 E	2128.1 E
16)	L6 Aroclor-1254 {5}	14.99	15.39	937696	1425199	1357.9	1755.5 #
	Sum Aroclor-1254			7974505	3975841	9590.3	6389.5
	Average Aroclor-1254					1918.058	2129.840
17)	L7 Aroclor-1260	14.31	0.00	1574049	0	1090.5	N.D. d #
18)	L7 Aroclor-1260 {2}	14.81	0.00	2409797	0	1241.6	N.D. d #
19)	L7 Aroclor-1260 {3}	0.00	14.93	0	1397623	N.D. d	926.7 #
20)	L7 Aroclor-1260 {4}	15.72	16.10	557461	393083	527.3	454.1
21)	L7 Aroclor-1260 {5}	16.16	16.33	1103494	1167616	524.7	556.4
	Sum Aroclor-1260			5644802	2958323	3813.5	2183.1
	Average Aroclor-1260					846.019	645.769

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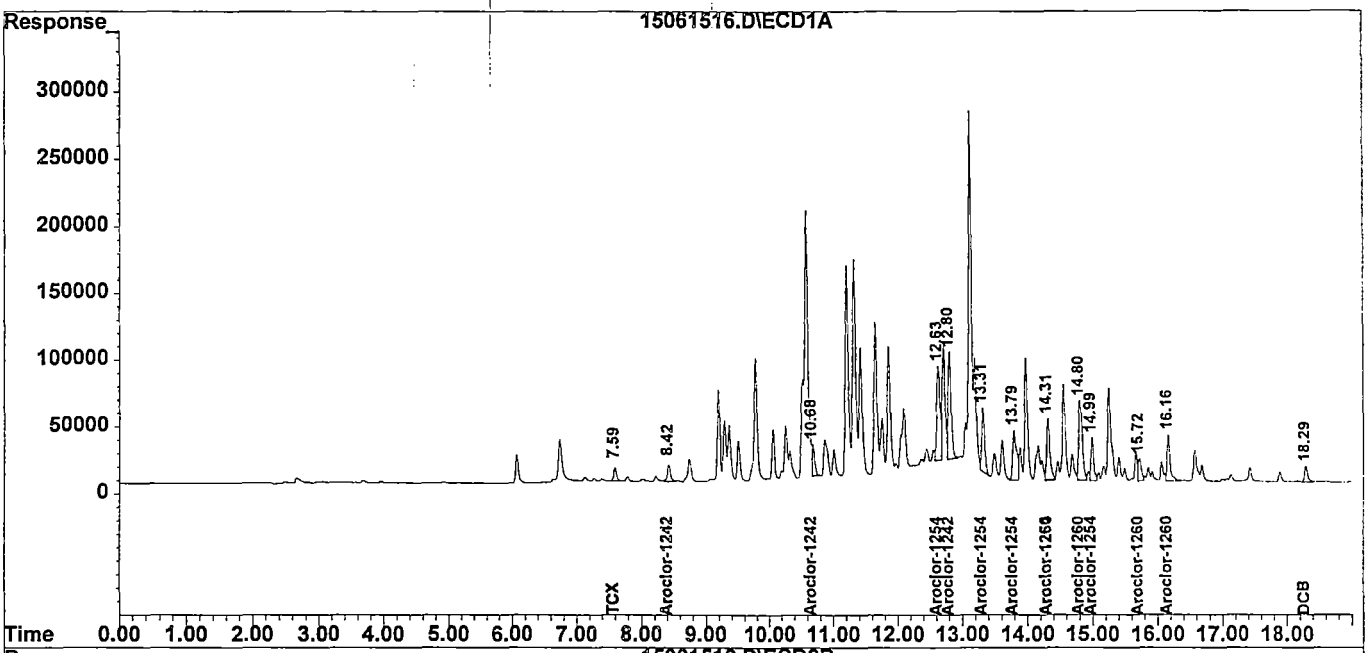
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

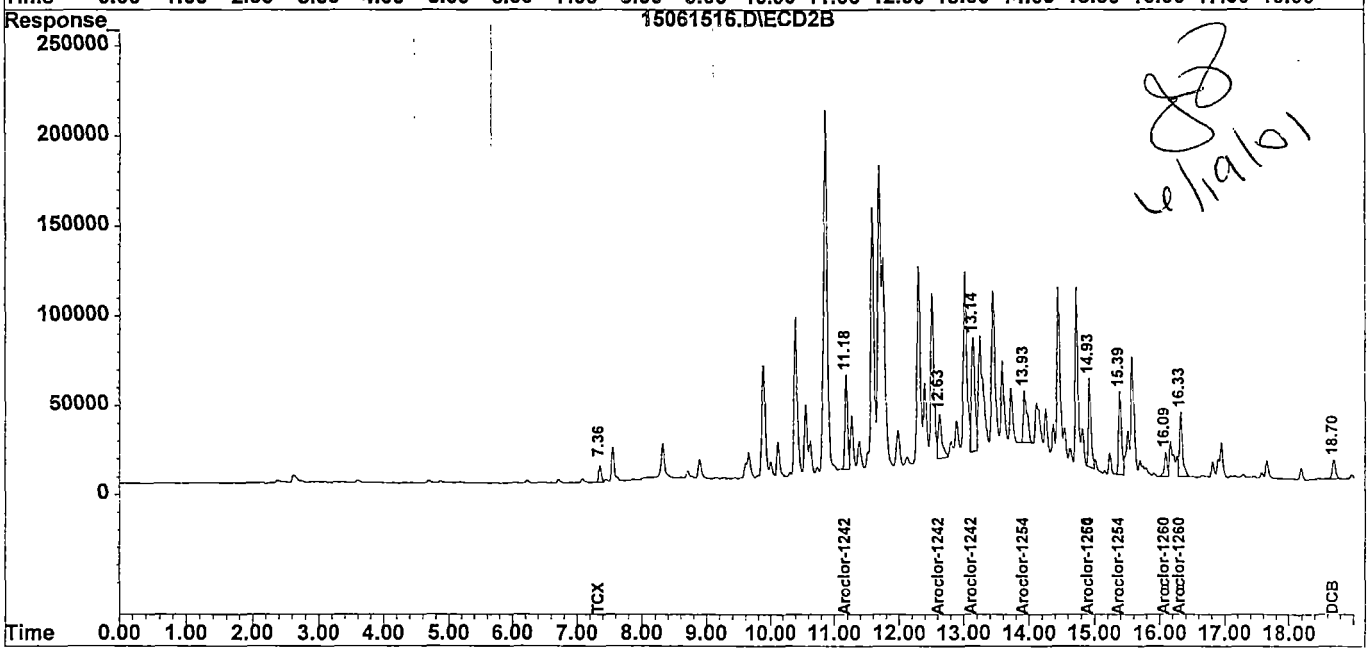
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061516.D\ECD1A.CH Vial: 16
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061516.D\ECD2B.CH
Acq On : 16 Jun 2001 14:26 Operator: DDC
Sample : 46721.04 *E30N2 * Inst : HP_15
Misc : *EPA*30.6G/5.0ML*71 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 9:32 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





6/19/01

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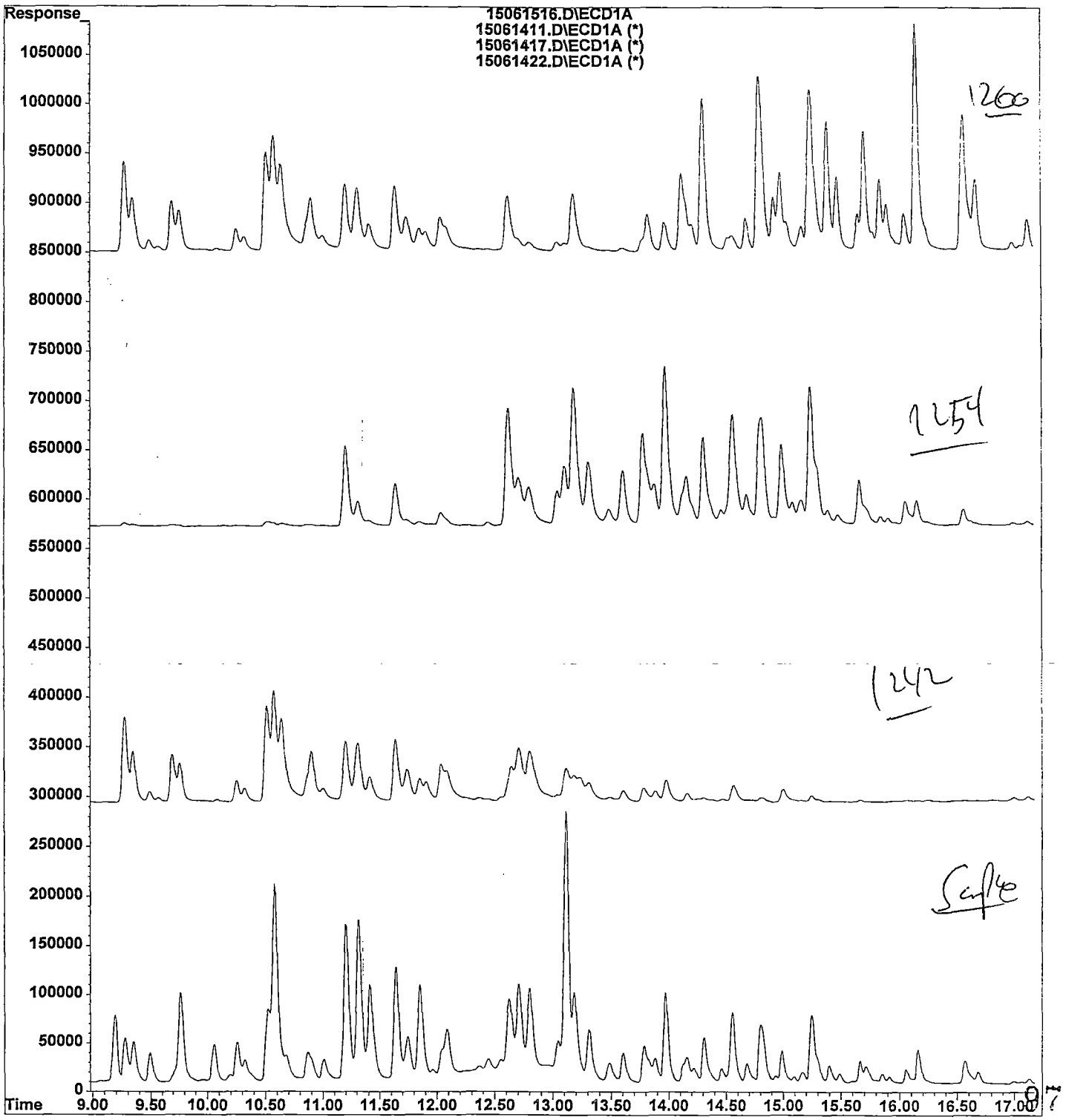
File : F:\HPCHEM\HP\15\DATA\06_14_01\15061516.D
Operator : DDC
Acquired : 16 Jun 2001 14:26 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 46721.04
Misc Info :
Vial Number: 16



1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30N2DL

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Matrix: (soil/water) SOIL Lab Sample ID: 46721.04DL

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

% Moisture: 71 decanted: (Y/N) __ Date Received: 06/08/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/08/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/18/01

Injection Volume: 0.5(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 6.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	1100	U J
11104-28-2	Aroclor-1221	1100	U J
11141-16-5	Aroclor-1232	~~1100~~	~~U J~~
53469-21-9	Aroclor-1242	3700	~~D J~~
12672-29-6	Aroclor-1248	1100	U J
11097-69-1	Aroclor-1254	3200	~~D J~~
11096-82-5	Aroclor-1260	1000	~~D J~~ J
Surrogate amount spiked		22.53	

TBS 7/7/01

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_18_01\15061806.D\ECD1A.CH Vial: 6
Signal #2 : F:\HPCHEM\HP\15\DATA\06_18_01\15061806.D\ECD2B.CH
Acq On : 18 Jun 2001 11:40 Operator: DDC
Sample : 46721.04DL *E30N2DL * Inst : HP_15
Misc : *EPA*30.6G/5.0ML*71 Dilution: 10.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 13:27 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_18_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg	
	System Monitoring Compounds:							
1)	S TCX	7.59	7.35	45021	32459	20.2	15.8	
	Spiked Amount 22.538			Recovery	=	89.63%	70.10%	
22)	S DCB	18.28	18.69	59220	52419	25.8	24.9	
	Spiked Amount 22.538			Recovery	=	114.47%	110.48%	
	Target Compounds:							
7)	L4 Aroclor-1242	8.42	0.00	90584	0	1754.2	N.D. d	#
`	L4 Aroclor-1242 {2}	0.00	11.18	0	105538	N.D. d	2483.9	#
,	L4 Aroclor-1242 {3}	10.68f	0.00	167997	0	1865.4	N.D. d	#
10)	L4 Aroclor-1242 {4}	0.00	12.63	0	146939	N.D. d	5392.9	#
11)	L4 Aroclor-1242 {5}	12.80	13.14	531756	319774	7522.7	8393.6	
	Sum Aroclor-1242			790336	572252	11142.3	16270.5	
	Average Aroclor-1242					3714.087	5423.489	
14)	L6 Aroclor-1254 {3}	13.79	13.93	280248	191555	3061.4	4163.1	#
15)	L6 Aroclor-1254 {4}	14.31	14.92	332245	250095	4047.3	3808.2	
16)	L6 Aroclor-1254 {5}	14.99	15.39	164307	213523	2379.3	2630.1	
	Sum Aroclor-1254			776800	655173	9488.0	10601.3	
	Average Aroclor-1254					3162.678	3533.783	
17)	L7 Aroclor-1260	14.31	0.00	332245	0	2301.7	N.D. d	#
18)	L7 Aroclor-1260 {2}	14.80	0.00	469260	0	2417.7	N.D. d	#
19)	L7 Aroclor-1260 {3}	0.00	14.92	0	250095	N.D. d	1658.3	#
20)	L7 Aroclor-1260 {4}	0.00	16.09	0	55658	N.D. d	643.0	#
21)	L7 Aroclor-1260 {5}	16.16	16.32	271595	170188	1291.4	811.1	#
	Sum Aroclor-1260			1073100	475941	67735.2	35073.2	
	Average Aroclor-1260					2003.607	1037.466	

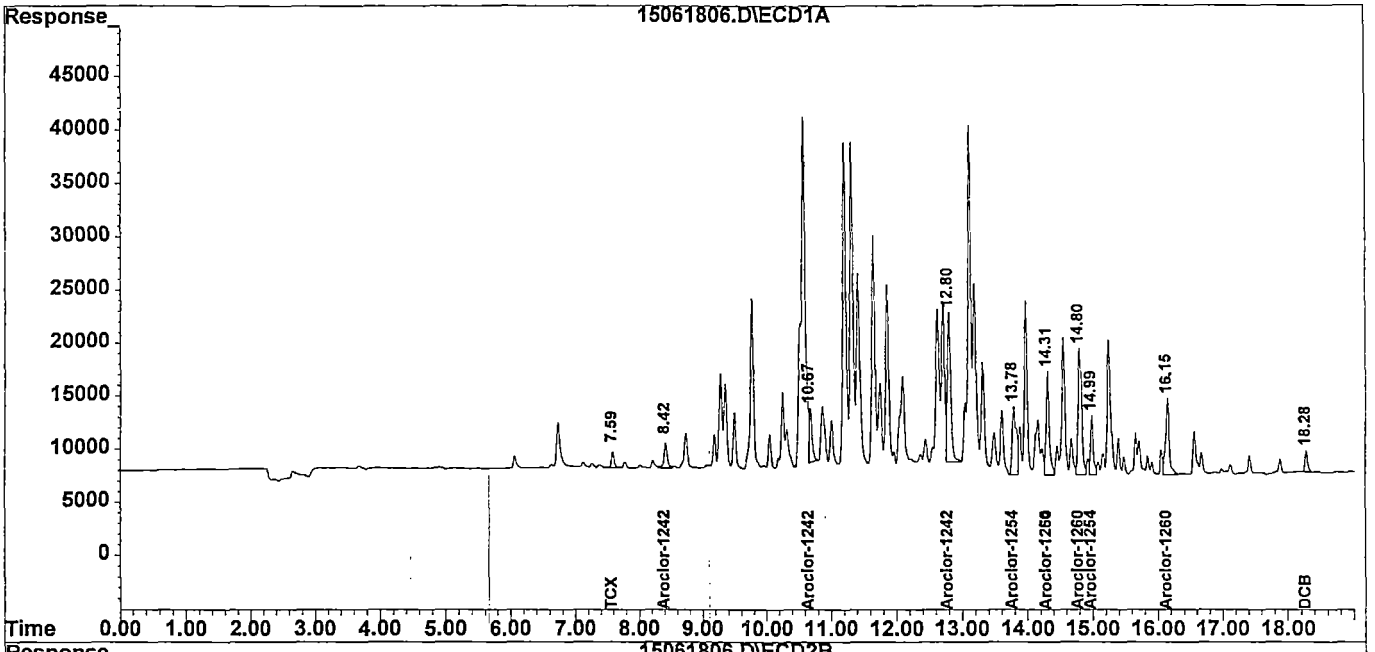
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

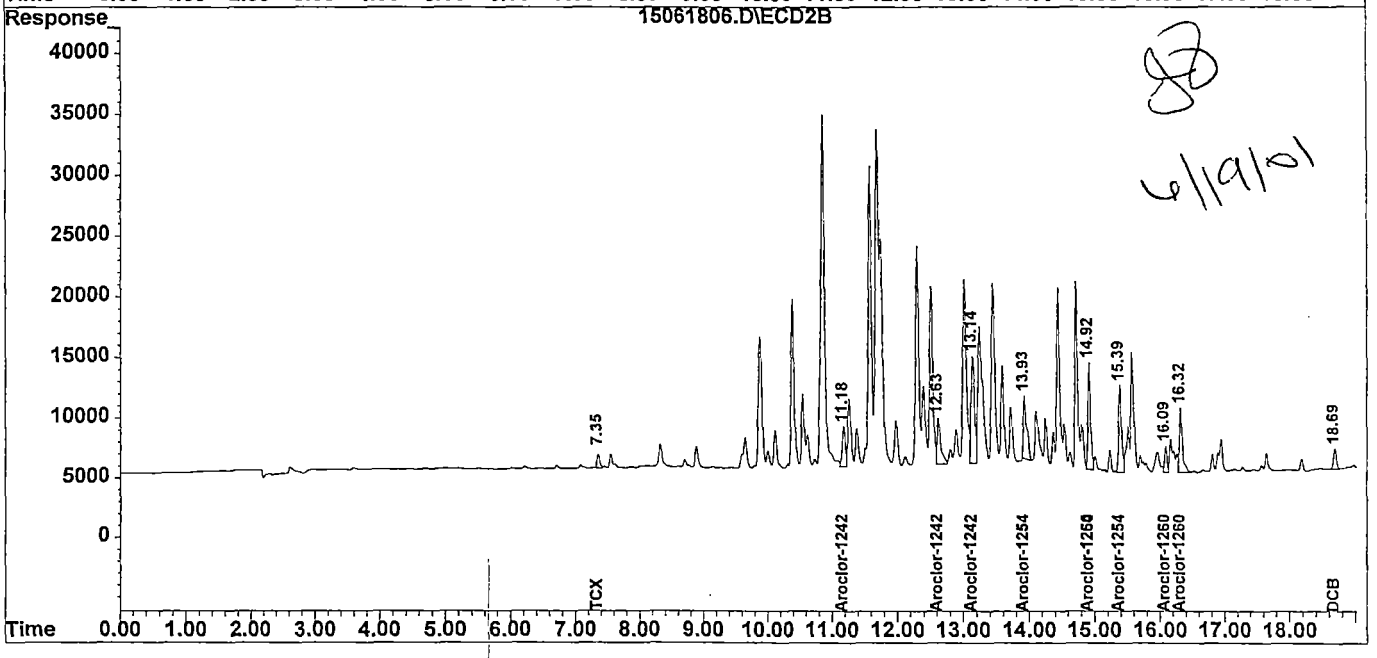
Chromatographic Report

```
Signal #1 : F:\HPCHEM\HP\15\DATA\06_18_01\15061806.D\ECD1A.CH Vial: 6
Signal #2 : F:\HPCHEM\HP\15\DATA\06_18_01\15061806.D\ECD2B.CH
Acq On    : 18 Jun 2001  11:40                        Operator: DDC
Sample    : 46721.04DL  *E30N2DL  *                   Inst    : HP_15
Misc      : *EPA*30.6G/5.0ML*71                       Dilution: 10.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e
Quant Time: Jun 18 13:27 2001  Quant Results File: XPCBF14.RES

Method        : F:\HPCHEM\HP\15\DATA\06_18_01\XPCBF14.M
Title-Path    : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update   : Thu Jun 07 08:46:05 2001
Response via  : Multiple Level Calibration

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





6/19/01

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6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Instrument ID: HP_15A Date(s) Analyzed: 06/14/01 06/14/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1242 L1	0.10	1	8.42	664620	MEAN
		2	9.70	431270	
		3	10.64	1180000	
		4	11.65	626890	
		5	12.82	889640	
Aroclor 1242 L2	0.20	1	8.42	676060	MEAN
		2	9.70	463215	
		3	10.64	1196685	
		4	11.64	669200	
		5	12.81	934410	
Aroclor 1242 L3	0.40	1	8.42	569663	MEAN
		2	9.70	391655	
		3	10.64	994758	
		4	11.64	572580	
		5	12.81	800968	
Aroclor 1242 L4	0.80	1	8.42	519064	MEAN
		2	9.70	348104	
		3	10.64	887894	
		4	11.64	515894	
		5	12.81	709150	
Aroclor 1242 L5	1.60	1	8.42	480072	MEAN
		2	9.70	323281	
		3	10.64	815075	
		4	11.64	488104	
		5	12.81	648654	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1242 MEAN	1	8.42	8.37	8.47	581896	14.9
	2	9.70	9.65	9.75	391505	14.7
	3	10.64	10.59	10.69	1014882	16.8
	4	11.64	11.59	11.69	574534	13.1
	5	12.81	12.76	12.86	796564	15.0

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Instrument ID: HP_15B Date(s) Analyzed: 06/14/01 06/14/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1242 L1	0.10	1	10.40	328290	MEAN
		2	11.18	458310	
		3	12.40	226860	
		4	12.64	296180	
		5	13.16	424240	
Aroclor 1242 L2	0.20	1	10.40	308150	MEAN
		2	11.18	527150	
		3	12.40	287435	
		4	12.64	332650	
		5	13.15	465130	
Aroclor 1242 L3	0.40	1	10.40	269228	MEAN
		2	11.18	490823	
		3	12.40	284498	
		4	12.64	310398	
		5	13.15	427783	
Aroclor 1242 L4	0.80	1	10.40	252833	MEAN
		2	11.18	464951	
		3	12.40	275704	
		4	12.64	297655	
		5	13.15	411609	
Aroclor 1242 L5	1.60	1	10.40	250581	MEAN
		2	11.18	452749	
		3	12.40	272488	
		4	12.63	298319	
		5	13.15	417811	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1242 MEAN	1	10.40	10.35	10.45	281816	12.3
	2	11.18	11.13	11.23	478797	6.4
	3	12.40	12.35	12.45	269397	9.1
	4	12.64	12.59	12.69	307040	5.0
	5	13.15	13.10	13.20	429315	4.9

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Instrument ID: HP_15A Date(s) Analyzed: 06/14/01 06/14/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1254 L1	0.10	1	12.63	1354190	MEAN
		2	13.32	852680	
		3	13.79	1130160	
		4	14.32	1042710	
		5	15.00	811800	
Aroclor 1254 L2	0.20	1	12.63	1244390	MEAN
		2	13.32	790885	
		3	13.79	1057770	
		4	14.32	964245	
		5	15.00	755995	
Aroclor 1254 L3	0.40	1	12.63	1197170	MEAN
		2	13.32	770083	
		3	13.79	1068970	
		4	14.31	963943	
		5	15.00	796793	
Aroclor 1254 L4	0.80	1	12.63	1047134	MEAN
		2	13.32	677325	
		3	13.79	973559	
		4	14.31	861929	
		5	15.00	768728	
Aroclor 1254 L5	1.60	1	12.62	960460	MEAN
		2	13.31	619195	
		3	13.78	927454	
		4	14.31	792509	
		5	15.00	757597	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1254 MEAN	1	12.63	12.58	12.68	1160669	13.5
	2	13.32	13.27	13.37	742034	12.6
	3	13.79	13.74	13.84	1031583	7.8
	4	14.31	14.26	14.36	925067	10.6
	5	15.00	14.95	15.05	778182	3.2

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Instrument ID: HP_15B Date(s) Analyzed: 06/14/01 06/14/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1254 L1	0.10	1	12.31	393420	MEAN
		2	13.03	470210	
		3	13.94	530240	
		4	14.93	794340	
		5	15.40	925580	
Aroclor 1254 L2	0.20	1	12.31	384045	MEAN
		2	13.03	462840	
		3	13.94	520895	
		4	14.93	731295	
		5	15.40	871060	
Aroclor 1254 L3	0.40	1	12.30	359990	MEAN
		2	13.02	490663	
		3	13.94	541980	
		4	14.93	766540	
		5	15.40	934830	
Aroclor 1254 L4	0.80	1	12.31	337459	MEAN
		2	13.02	474138	
		3	13.93	507148	
		4	14.93	720706	
		5	15.40	917469	
Aroclor 1254 L5	1.60	1	12.30	332944	MEAN
		2	13.02	478175	
		3	13.93	492271	
		4	14.93	687450	
		5	15.39	925389	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1254 MEAN	1	12.30	12.25	12.35	361572	7.5
	2	13.02	12.97	13.07	475205	2.2
	3	13.94	13.89	13.99	518507	3.7
	4	14.93	14.88	14.98	740066	5.6
	5	15.40	15.35	15.45	914866	2.8

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Instrument ID: HP_15A Date(s) Analyzed: 06/14/01 06/14/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1221	0.40	1	8.03	384860	SINGLE
		2	8.21	234865	POINT
		3	8.42	919358	
		4			
		5			
Aroclor 1232	0.40	1	8.42	814160	SINGLE
		2	9.27	432953	POINT
		3	9.70	280733	
		4	10.52	459765	
		5			
Aroclor 1248	0.40	1	9.28	415635	SINGLE
		2	10.52	623393	POINT
		3	11.41	463830	
		4	11.75	498110	
		5	13.19	919535	

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Instrument ID: HP_15B Date(s) Analyzed: 06/14/01 06/14/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1221	0.40	1	8.37	307348	SINGLE
		2	8.71	233798	POINT
		3	8.89	669085	
		4			
		5			
Aroclor 1232	0.40	1	8.89	606745	SINGLE
		2	10.55	270270	POINT
		3	11.18	282938	
		4	12.40	147110	
		5			
Aroclor 1248	0.40	1	9.88	520953	SINGLE
		2	11.58	857708	POINT
		3	12.52	314513	
		4	13.25	569510	
		5	13.59	224343	

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Instrument ID: HP_15A Date(s) Analyzed: 06/15/01 06/15/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1016 L1	0.10	1	8.42	738450	MEAN
		2	9.28	990920	
		3	10.58	1186730	
		4	11.20	812690	
		5	11.64	741060	
Aroclor 1016 L2	0.20	1	8.42	706515	MEAN
		2	9.27	914520	
		3	10.58	1136515	
		4	11.20	768955	
		5	11.64	723050	
Aroclor 1016 L3	0.40	1	8.42	645238	MEAN
		2	9.28	820375	
		3	10.58	1102935	
		4	11.20	704955	
		5	11.64	682690	
Aroclor 1016 L4	0.80	1	8.42	660726	MEAN
		2	9.27	818364	
		3	10.58	1183484	
		4	11.20	716871	
		5	11.64	719753	
Aroclor 1016 L5	1.60	1	8.42	550421	MEAN
		2	9.27	664431	
		3	10.58	1038345	
		4	11.20	602249	
		5	11.64	619226	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1016 MEAN	1	8.42	8.37	8.47	660270	10.9
	2	9.27	9.22	9.32	841722	14.5
	3	10.58	10.53	10.63	1129602	5.5
	4	11.20	11.15	11.25	721144	11.0
	5	11.64	11.59	11.69	697156	7.0

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Instrument ID: HP_15A Date(s) Analyzed: 06/15/01 06/15/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1260 L1	0.10	1	14.32	1874150	MEAN
		2	14.81	2459160	
		3	15.26	2235550	
		4	15.72	1204690	
		5	16.17	2460320	
Aroclor 1260 L2	0.20	1	14.32	1722650	MEAN
		2	14.81	2269205	
		3	15.26	2097835	
		4	15.72	1208850	
		5	16.16	2311980	
Aroclor 1260 L3	0.40	1	14.31	1587458	MEAN
		2	14.81	2134213	
		3	15.26	2044663	
		4	15.72	1211755	
		5	16.16	2407915	
Aroclor 1260 L4	0.80	1	14.31	1587676	MEAN
		2	14.80	2170741	
		3	15.26	2128451	
		4	15.72	1224845	
		5	16.16	2427140	
Aroclor 1260 L5	1.60	1	14.31	1361061	MEAN
		2	14.80	1902787	
		3	15.25	1924112	
		4	15.72	1106082	
		5	16.16	2242677	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1260 MEAN	1	14.31	14.26	14.36	1626599	11.7
	2	14.81	14.76	14.86	2187221	9.3
	3	15.26	15.21	15.31	2086122	5.5
	4	15.72	15.67	15.77	1191244	4.0
	5	16.16	16.11	16.21	2370006	3.8

FORM VI PCB-3

6F

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Instrument ID: HP_15B Date(s) Analyzed: 06/15/01 06/15/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1016 L1	0.10	1	8.89	576010	MEAN
		2	9.88	1410260	
		3	10.86	1987780	
		4	11.18	620580	
		5	12.30	699230	
Aroclor 1016 L2	0.20	1	8.89	554130	MEAN
		2	9.88	1316915	
		3	10.86	1970985	
		4	11.18	618165	
		5	12.30	705495	
Aroclor 1016 L3	0.40	1	8.89	512588	MEAN
		2	9.88	1205165	
		3	10.86	1919785	
		4	11.18	615683	
		5	12.30	675705	
Aroclor 1016 L4	0.80	1	8.89	537636	MEAN
		2	9.88	1240376	
		3	10.86	2163193	
		4	11.18	687905	
		5	12.30	741581	
Aroclor 1016 L5	1.60	1	8.89	461864	MEAN
		2	9.88	1035686	
		3	10.86	1952811	
		4	11.18	618398	
		5	12.30	659559	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1016 MEAN	1	8.89	8.84	8.94	528446	8.3
	2	9.88	9.83	9.93	1241681	11.2
	3	10.86	10.81	10.91	1998911	4.8
	4	11.18	11.13	11.23	632146	4.9
	5	12.30	12.25	12.35	696314	4.5

FORM VI PCB-3

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Instrument ID: HP_15B Date(s) Analyzed: 06/15/01 06/15/01

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

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

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1260 L1	0.10	1	14.45	894730	MEAN
		2	14.73	1591790	
		3	14.93	1861870	
		4	16.10	1023360	
		5	16.33	2408050	
Aroclor 1260 L2	0.20	1	14.44	856875	MEAN
		2	14.73	1479185	
		3	14.93	1714690	
		4	16.10	960915	
		5	16.33	2300000	
Aroclor 1260 L3	0.40	1	14.44	826690	MEAN
		2	14.73	1389670	
		3	14.93	1630365	
		4	16.10	943100	
		5	16.33	2252848	
Aroclor 1260 L4	0.80	1	14.44	902056	MEAN
		2	14.73	1458426	
		3	14.93	1732690	
		4	16.10	1013381	
		5	16.33	2499388	
Aroclor 1260 L5	1.60	1	14.44	819836	MEAN
		2	14.73	1262104	
		3	14.93	1557877	
		4	16.09	936229	
		5	16.33	2362651	

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1260 MEAN	1	14.44	14.39	14.49	860037	4.4
	2	14.73	14.68	14.78	1436235	8.5
	3	14.93	14.88	14.98	1699498	6.7
	4	16.10	16.05	16.15	975397	4.1
	5	16.33	16.28	16.38	2364587	4.1

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 06/15/01 06/15/01

Client Sample No.(PIBLK): PIBLK5N Date Analyzed : 06/15/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 2038

Client Sample No.: AR1660L3A5 Date Analyzed : 06/15/01

Lab Sample ID : 5-29-7 Time Analyzed : 2101

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.42	8.37	8.47	686013	660270	3.9
Aroclor 1016 #2	9.28	9.22	9.32	863955	841722	2.6
Aroclor 1016 #3	10.58	10.53	10.63	1121595	1129600	0.7
Aroclor 1016 #4	11.21	11.15	11.25	681763	721144	5.5
Aroclor 1016 #5	11.65	11.59	11.69	696055	697156	0.2
Aroclor 1260 #1	14.32	14.26	14.36	1649190	1626600	1.4
Aroclor 1260 #2	14.81	14.76	14.86	2237098	2187220	2.3
Aroclor 1260 #3	15.26	15.21	15.31	2106065	2086120	1.0
Aroclor 1260 #4	15.72	15.67	15.77	1191778	1191240	0.0
Aroclor 1260 #5	16.17	16.11	16.21	2363788	2370010	0.3

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

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MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 06/15/01 06/15/01

Client Sample No.(PIBLK): PIBLK5N Date Analyzed : 06/15/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 2038

Client Sample No.: AR1660L3A5 Date Analyzed : 06/15/01

Lab Sample ID : 5-29-7 Time Analyzed : 2101

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.90	8.84	8.94	581345	528446	10.0
Aroclor 1016 #2	9.88	9.83	9.93	1357893	1241680	9.4
Aroclor 1016 #3	10.86	10.81	10.91	2133153	1998910	6.7
Aroclor 1016 #4	11.19	11.13	11.23	671185	632146	6.2
Aroclor 1016 #5	12.31	12.25	12.35	738753	696314	6.1
Aroclor 1260 #1	14.45	14.39	14.49	905953	860037	5.3
Aroclor 1260 #2	14.73	14.68	14.78	1514570	1436240	5.5
Aroclor 1260 #3	14.93	14.88	14.98	1781033	1699500	4.8
Aroclor 1260 #4	16.10	16.05	16.15	968303	975397	0.7
Aroclor 1260 #5	16.33	16.28	16.38	2393420	2364590	1.2

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

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 06/15/01 06/15/01

Client Sample No.(PIBLK): PIBLK50 Date Analyzed : 06/16/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 0030

Client Sample No.: AR1660L3C5 Date Analyzed : 06/16/01

Lab Sample ID : 5-29-7 Time Analyzed : 0053

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.42	8.37	8.47	691993	660270	4.8
Aroclor 1016 #2	9.28	9.22	9.32	870795	841722	3.5
Aroclor 1016 #3	10.58	10.53	10.63	1125303	1129600	0.4
Aroclor 1016 #4	11.20	11.15	11.25	682010	721144	5.4
Aroclor 1016 #5	11.64	11.59	11.69	698098	697156	0.1
Aroclor 1260 #1	14.32	14.26	14.36	1673018	1626600	2.9
Aroclor 1260 #2	14.81	14.76	14.86	2256365	2187220	3.2
Aroclor 1260 #3	15.26	15.21	15.31	2135655	2086120	2.4
Aroclor 1260 #4	15.72	15.67	15.77	1225923	1191240	2.9
Aroclor 1260 #5	16.16	16.11	16.21	2392093	2370010	0.9

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

FORM VII PCB

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MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 06/15/01 06/15/01

Client Sample No.(PIBLK): PIBLK50 Date Analyzed : 06/16/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 0030

Client Sample No.: AR1660L3C5 Date Analyzed : 06/16/01

Lab Sample ID : 5-29-7 Time Analyzed : 0053

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.89	8.84	8.94	590898	528446	11.8
Aroclor 1016 #2	9.88	9.83	9.93	1373568	1241680	10.6
Aroclor 1016 #3	10.86	10.81	10.91	2069923	1998910	3.6
Aroclor 1016 #4	11.18	11.13	11.23	631663	632146	0.1
Aroclor 1016 #5	12.30	12.25	12.35	756600	696314	8.7
Aroclor 1260 #1	14.44	14.39	14.49	917220	860037	6.7
Aroclor 1260 #2	14.73	14.68	14.78	1506823	1436240	4.9
Aroclor 1260 #3	14.93	14.88	14.98	1806505	1699500	6.3
Aroclor 1260 #4	16.09	16.05	16.15	1025618	975397	5.2
Aroclor 1260 #5	16.33	16.28	16.38	2505943	2364590	6.0

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

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 06/15/01 06/15/01

Client Sample No.(PIBLK): PIBLK5P Date Analyzed : 06/16/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 0532

Client Sample No.: AR1660L3E5 Date Analyzed : 06/16/01

Lab Sample ID : 5-29-7 Time Analyzed : 0555

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.42	8.37	8.47	724620	660270	9.8
Aroclor 1016 #2	9.27	9.22	9.32	911123	841722	8.2
Aroclor 1016 #3	10.58	10.53	10.63	1206098	1129600	6.8
Aroclor 1016 #4	11.20	11.15	11.25	715970	721144	0.7
Aroclor 1016 #5	11.64	11.59	11.69	739195	697156	6.0
Aroclor 1260 #1	14.31	14.26	14.36	1790175	1626600	10.0
Aroclor 1260 #2	14.81	14.76	14.86	2430890	2187220	11.1
Aroclor 1260 #3	15.26	15.21	15.31	2324555	2086120	11.4
Aroclor 1260 #4	15.72	15.67	15.77	1331190	1191240	11.7
Aroclor 1260 #5	16.16	16.11	16.21	2648173	2370010	11.7

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

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 06/15/01 06/15/01

Client Sample No.(PIBLK): PIBLK5P Date Analyzed : 06/16/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 0532

Client Sample No.: AR1660L3E5 Date Analyzed : 06/16/01

Lab Sample ID : 5-29-7 Time Analyzed : 0555

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.89	8.84	8.94	622718	528446	17.8*
Aroclor 1016 #2	9.87	9.83	9.93	1417118	1241680	14.1
Aroclor 1016 #3	10.85	10.81	10.91	2216503	1998910	10.9
Aroclor 1016 #4	11.18	11.13	11.23	669230	632146	5.9
Aroclor 1016 #5	12.30	12.25	12.35	800083	696314	14.9
Aroclor 1260 #1	14.44	14.39	14.49	986075	860037	14.6
Aroclor 1260 #2	14.73	14.68	14.78	1612205	1436240	12.2
Aroclor 1260 #3	14.93	14.88	14.98	1946440	1699500	14.5
Aroclor 1260 #4	16.09	16.05	16.15	1119508	975397	14.8
Aroclor 1260 #5	16.32	16.28	16.38	2754190	2364590	16.5*

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

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 06/15/01 06/15/01

Client Sample No.(PIBLK): PIBLK5Q Date Analyzed : 06/16/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1033

Client Sample No.: AR1660L3G5 Date Analyzed : 06/16/01

Lab Sample ID : 5-29-7 Time Analyzed : 1056

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.42	8.37	8.47	722228	660270	9.4
Aroclor 1016 #2	9.28	9.22	9.32	892485	841722	6.0
Aroclor 1016 #3	10.58	10.53	10.63	1206773	1129600	6.8
Aroclor 1016 #4	11.20	11.15	11.25	729563	721144	1.2
Aroclor 1016 #5	11.65	11.59	11.69	751113	697156	7.7
Aroclor 1260 #1	14.32	14.26	14.36	1831505	1626600	12.6
Aroclor 1260 #2	14.81	14.76	14.86	2488883	2187220	13.8
Aroclor 1260 #3	15.26	15.21	15.31	2377983	2086120	14.0
Aroclor 1260 #4	15.72	15.67	15.77	1363270	1191240	14.4
Aroclor 1260 #5	16.16	16.11	16.21	2746243	2370010	15.9*

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

FORM VII PCB

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MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 06/15/01 06/15/01

Client Sample No.(PIBLK): PIBLK5Q Date Analyzed : 06/16/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1033

Client Sample No.: AR1660L3G5 Date Analyzed : 06/16/01

Lab Sample ID : 5-29-7 Time Analyzed : 1056

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.89	8.84	8.94	621075	528446	17.5*
Aroclor 1016 #2	9.88	9.83	9.93	1426848	1241680	14.9
Aroclor 1016 #3	10.86	10.81	10.91	2245440	1998910	12.3
Aroclor 1016 #4	11.18	11.13	11.23	677675	632146	7.2
Aroclor 1016 #5	12.30	12.25	12.35	812388	696314	16.7*
Aroclor 1260 #1	14.44	14.39	14.49	986270	860037	14.7
Aroclor 1260 #2	14.73	14.68	14.78	1610070	1436240	12.1
Aroclor 1260 #3	14.93	14.88	14.98	1904668	1699500	12.1
Aroclor 1260 #4	16.10	16.05	16.15	1135875	975397	16.4*
Aroclor 1260 #5	16.33	16.28	16.38	2767565	2364590	17.0*

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

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 06/15/01 06/15/01

Client Sample No.(PIBLK): PIBLK5S Date Analyzed : 06/16/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 2211

Client Sample No.: AR1660L3K5 Date Analyzed : 06/16/01

Lab Sample ID : 5-29-7 Time Analyzed : 2234

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.42	8.37	8.47	724715	660270	9.8
Aroclor 1016 #2	9.27	9.22	9.32	922865	841722	9.6
Aroclor 1016 #3	10.58	10.53	10.63	1225618	1129600	8.5
Aroclor 1016 #4	11.20	11.15	11.25	732873	721144	1.6
Aroclor 1016 #5	11.64	11.59	11.69	753668	697156	8.1
Aroclor 1260 #1	14.32	14.26	14.36	1793693	1626600	10.3
Aroclor 1260 #2	14.81	14.76	14.86	2441940	2187220	11.6
Aroclor 1260 #3	15.26	15.21	15.31	2313308	2086120	10.9
Aroclor 1260 #4	15.72	15.67	15.77	1309423	1191240	9.9
Aroclor 1260 #5	16.16	16.11	16.21	2675030	2370010	12.9

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

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 06/15/01 06/15/01

Client Sample No.(PIBLK): PIBLK5S Date Analyzed : 06/16/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 2211

Client Sample No.: AR1660L3K5 Date Analyzed : 06/16/01

Lab Sample ID : 5-29-7 Time Analyzed : 2234

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.89	8.84	8.94	569493	528446	7.8
Aroclor 1016 #2	9.87	9.83	9.93	1272483	1241680	2.5
Aroclor 1016 #3	10.86	10.81	10.91	2056015	1998910	2.9
Aroclor 1016 #4	11.18	11.13	11.23	616978	632146	2.4
Aroclor 1016 #5	12.30	12.25	12.35	715275	696314	2.7
Aroclor 1260 #1	14.44	14.39	14.49	853403	860037	0.8
Aroclor 1260 #2	14.73	14.68	14.78	1381785	1436240	3.8
Aroclor 1260 #3	14.93	14.88	14.98	1628690	1699500	4.2
Aroclor 1260 #4	16.09	16.05	16.15	951973	975397	2.4
Aroclor 1260 #5	16.33	16.28	16.38	2321208	2364590	1.8

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

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 06/15/01 06/15/01

Client Sample No.(PIBLK): PIBLK5Y Date Analyzed : 06/18/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 0850

Client Sample No.: AR1660L3V5 Date Analyzed : 06/18/01

Lab Sample ID : 5-29-7 Time Analyzed : 0913

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.41	8.37	8.47	695595	660270	5.4
Aroclor 1016 #2	9.27	9.22	9.32	886068	841722	5.3
Aroclor 1016 #3	10.57	10.53	10.63	1169078	1129600	3.5
Aroclor 1016 #4	11.20	11.15	11.25	711703	721144	1.3
Aroclor 1016 #5	11.64	11.59	11.69	734448	697156	5.4
Aroclor 1260 #1	14.31	14.26	14.36	1774040	1626600	9.1
Aroclor 1260 #2	14.80	14.76	14.86	2387740	2187220	9.2
Aroclor 1260 #3	15.26	15.21	15.31	2236653	2086120	7.2
Aroclor 1260 #4	15.72	15.67	15.77	1263970	1191240	6.1
Aroclor 1260 #5	16.16	16.11	16.21	2442403	2370010	3.1

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

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 06/15/01 06/15/01

Client Sample No.(PIBLK): PIBLK5Y Date Analyzed : 06/18/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 0850

Client Sample No.: AR1660L3V5 Date Analyzed : 06/18/01

Lab Sample ID : 5-29-7 Time Analyzed : 0913

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.89	8.84	8.94	534965	528446	1.2
Aroclor 1016 #2	9.87	9.83	9.93	1218120	1241680	1.9
Aroclor 1016 #3	10.85	10.81	10.91	2068633	1998910	3.5
Aroclor 1016 #4	11.18	11.13	11.23	633280	632146	0.2
Aroclor 1016 #5	12.30	12.25	12.35	710933	696314	2.1
Aroclor 1260 #1	14.44	14.39	14.49	872488	860037	1.5
Aroclor 1260 #2	14.72	14.68	14.78	1433395	1436240	0.2
Aroclor 1260 #3	14.93	14.88	14.98	1702400	1699500	0.2
Aroclor 1260 #4	16.09	16.05	16.15	922530	975397	5.4
Aroclor 1260 #5	16.32	16.28	16.38	2294065	2364590	3.0

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

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 06/15/01 06/15/01

Client Sample No.(PIBLK): PIBLK5Z Date Analyzed : 06/18/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1227

Client Sample No.: AR1660L3X5 Date Analyzed : 06/18/01

Lab Sample ID : 5-29-7 Time Analyzed : 1250

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.42	8.37	8.47	730688	660270	10.7
Aroclor 1016 #2	9.28	9.22	9.32	921350	841722	9.5
Aroclor 1016 #3	10.58	10.53	10.63	1238098	1129600	9.6
Aroclor 1016 #4	11.21	11.15	11.25	747903	721144	3.7
Aroclor 1016 #5	11.65	11.59	11.69	775403	697156	11.2
Aroclor 1260 #1	14.32	14.26	14.36	1863835	1626600	14.6
Aroclor 1260 #2	14.81	14.76	14.86	2535755	2187220	15.9*
Aroclor 1260 #3	15.26	15.21	15.31	2405463	2086120	15.3*
Aroclor 1260 #4	15.72	15.67	15.77	1353338	1191240	13.6
Aroclor 1260 #5	16.17	16.11	16.21	2619548	2370010	10.5

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

7F

MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 06/15/01 06/15/01

Client Sample No.(PIBLK): PIBLK5Z Date Analyzed : 06/18/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1227

Client Sample No.: AR1660L3X5 Date Analyzed : 06/18/01

Lab Sample ID : 5-29-7 Time Analyzed : 1250

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.90	8.84	8.94	544363	528446	3.0
Aroclor 1016 #2	9.88	9.83	9.93	1239350	1241680	0.2
Aroclor 1016 #3	10.86	10.81	10.91	2114953	1998910	5.8
Aroclor 1016 #4	11.18	11.13	11.23	651868	632146	3.1
Aroclor 1016 #5	12.31	12.25	12.35	724493	696314	4.1
Aroclor 1260 #1	14.45	14.39	14.49	894470	860037	4.0
Aroclor 1260 #2	14.73	14.68	14.78	1483425	1436240	3.3
Aroclor 1260 #3	14.93	14.88	14.98	1761155	1699500	3.6
Aroclor 1260 #4	16.10	16.05	16.15	952263	975397	2.4
Aroclor 1260 #5	16.33	16.28	16.38	2349633	2364590	0.6

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

ST 6/20/01

8D
AROCLOR ANALYTICAL SEQUENCE

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29294 SAS No.: SDG No.: E00H4

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

Instrument ID: HP_15A

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	RESC5C	5-441-6	06/14/01	1952	7.59	18.28
02	AR1221L35C	5-420-6	06/14/01	2015	7.59	18.28
03	AR1232L35C	5-422-6	06/14/01	2038	7.59	18.29
04	AR1242L15C	5-11-7	06/14/01	2101	7.59	18.29
05	AR1242L25C	5-10-7	06/14/01	2125	7.59	18.29
06	AR1242L35C	5-9-7	06/14/01	2148	7.59	18.29
07	AR1242L45C	5-8-7	06/14/01	2211	7.59	18.29
08	AR1242L55C	5-7-7	06/14/01	2234	7.59	18.29
09	AR1248L35C	5-424-6	06/14/01	2257	7.59	18.29
10	AR1254L15C	5-6-7	06/14/01	2321	7.59	18.29
11	AR1254L25C	5-5-7	06/14/01	2344	7.59	18.29
12	AR1254L35C	5-4-7	06/15/01	0007	7.59	18.29
13	AR1254L45C	5-3-7	06/15/01	0030	7.59	18.28
14	AR1254L55C	5-2-7	06/15/01	0053	7.59	18.28
15	AR1660L15C	5-31-7	06/15/01	0117	7.59	18.29
16	AR1660L25C	5-30-7	06/15/01	0140	7.59	18.28
17	AR1660L35V	5-29-7	06/15/01	0203	7.59	18.28
18	AR1660L45C	5-28-7	06/15/01	0226	7.59	18.29
19	AR1660L55C	5-27-7	06/15/01	0249	7.59	18.28
20	PIBLK5G	5-414-6	06/15/01	0313	7.59	18.29
21	PIBLK5N	5-414-6	06/15/01	2038	7.60	18.29
22	AR1660L3A5	5-29-7	06/15/01	2101	7.60	18.29
23	PBLKSD	BL0608SD	06/15/01	2234	7.59	18.28
24	ELCS1	LC0608SD	06/15/01	2321	7.59	18.28
25	ELCS2	LD0608SD	06/15/01	2344	7.59	18.28
26	PIBLK5O	5-414-6	06/16/01	0030	7.59	18.28
27	AR1660L3C5	5-29-7	06/16/01	0053	7.59	18.28
28	E00H4	46702.33	06/16/01	0140	7.59	18.28
29	E00H4MS	46702.34MS	06/16/01	0203	7.59	18.28
30	E00H4MSD	46702.35MSD	06/16/01	0226	7.59	18.28
31	E00H8	46702.36	06/16/01	0249	7.59	18.28
32	E00H9	46702.37	06/16/01	0313	7.59	18.28
33	E00J0	46702.38	06/16/01	0336	7.59	18.28
34	E00J1	46702.39	06/16/01	0359	7.59	18.28
35	PIBLK5P	5-414-6	06/16/01	0532	7.59	18.28

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

8D
AROCLOR ANALYTICAL SEQUENCE

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29294 SAS No.: SDG No.: E00H4

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

Instrument ID: HP_15A

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR1660L3E5	5-29-7	06/16/01	0555	7.59	18.28
02	E00J2	46702.40	06/16/01	0641	7.59	18.28
03	E00J3	46702.41	06/16/01	0705	7.59	18.28
04	E00J4	46702.42	06/16/01	0728	7.59	18.28
05	E00J5	46702.43	06/16/01	0751	7.59	18.28
06	E00J6	46702.44	06/16/01	0814	7.59	18.28
07	E00J7	46702.45	06/16/01	0837	7.59	18.28
08	E00J8	46702.46	06/16/01	0900	7.59	18.28
09	PIBLK5Q	5-414-6	06/16/01	1033	7.59	18.29
10	AR1660L3G5	5-29-7	06/16/01	1056	7.59	18.29
11	E00J9	46702.47	06/16/01	1143	7.59	18.29
12	E00K0	46702.48	06/16/01	1206	7.59	18.28
13	E00K1	46702.49	06/16/01	1229	7.59	18.29
14	E00K2	46702.50	06/16/01	1253	7.59	18.29
15	E30M8	46721.01	06/16/01	1316	7.60	18.29
16	E30N0	46721.02	06/16/01	1339	7.59	18.29
17	E30N1	46721.03	06/16/01	1402	7.60	18.29
18	E30N2	46721.04	06/16/01	1426	7.60	18.29
19	PIBLK5S	5-414-6	06/16/01	2211	7.59	18.29
20	AR1660L3K5	5-29-7	06/16/01	2234	7.59	18.28
21	PIBLK5Y	5-414-6	06/18/01	0850	7.58	18.28
22	AR1660L3V5	5-29-7	06/18/01	0913	7.59	18.28
23	E30M8DL	46721.01DL	06/18/01	1117	7.60	18.28
24	E30N2DL	46721.04DL	06/18/01	1140	7.59	18.28
25	PIBLK5Z	5-414-6	06/18/01	1227	7.59	18.29
26	AR1660L3X5	5-29-7	06/18/01	1250	7.60	18.29
27						
28						
29						
30						
31						
32						
33						
34						
35						

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

8D
AROCLOR ANALYTICAL SEQUENCE

Lab Name: SWL-TULSA Contract: 68W99079

Lab Code: SWOK Case No.: 29294 SAS No.: SDG No.: E00H4

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

Instrument ID: HP_15B

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	RESC5C	5-441-6	06/14/01	1952	7.35	18.70
02	AR1221L35C	5-420-6	06/14/01	2015	7.35	18.70
03	AR1232L35C	5-422-6	06/14/01	2038	7.35	18.70
04	AR1242L15C	5-11-7	06/14/01	2101	7.36	18.70
05	AR1242L25C	5-10-7	06/14/01	2125	7.36	18.70
06	AR1242L35C	5-9-7	06/14/01	2148	7.36	18.70
07	AR1242L45C	5-8-7	06/14/01	2211	7.36	18.70
08	AR1242L55C	5-7-7	06/14/01	2234	7.36	18.70
09	AR1248L35C	5-424-6	06/14/01	2257	7.36	18.70
10	AR1254L15C	5-6-7	06/14/01	2321	7.36	18.70
11	AR1254L25C	5-5-7	06/14/01	2344	7.36	18.70
12	AR1254L35C	5-4-7	06/15/01	0007	7.35	18.70
13	AR1254L45C	5-3-7	06/15/01	0030	7.36	18.69
14	AR1254L55C	5-2-7	06/15/01	0053	7.35	18.69
15	AR1660L15C	5-31-7	06/15/01	0117	7.35	18.70
16	AR1660L25C	5-30-7	06/15/01	0140	7.35	18.70
17	AR1660L35V	5-29-7	06/15/01	0203	7.35	18.69
18	AR1660L45C	5-28-7	06/15/01	0226	7.35	18.69
19	AR1660L55C	5-27-7	06/15/01	0249	7.35	18.69
20	PIBLK5G	5-414-6	06/15/01	0313	7.35	18.70
21	PIBLK5N	5-414-6	06/15/01	2038	7.36	18.70
22	AR1660L3A5	5-29-7	06/15/01	2101	7.36	18.70
23	PBLKSD	BL0608SD	06/15/01	2234	7.36	18.69
24	ELCS1	LC0608SD	06/15/01	2321	7.36	18.69
25	ELCS2	LD0608SD	06/15/01	2344	7.35	18.69
26	PIBLK5O	5-414-6	06/16/01	0030	7.35	18.69
27	AR1660L3C5	5-29-7	06/16/01	0053	7.35	18.69
28	E00H4	46702.33	06/16/01	0140	7.35	18.69
29	E00H4MS	46702.34MS	06/16/01	0203	7.35	18.69
30	E00H4MSD	46702.35MSD	06/16/01	0226	7.35	18.69
31	E00H8	46702.36	06/16/01	0249	7.35	18.69
32	E00H9	46702.37	06/16/01	0313	7.35	18.69
33	E00J0	46702.38	06/16/01	0336	7.35	18.69
34	E00J1	46702.39	06/16/01	0359	7.35	18.69
35	PIBLK5P	5-414-6	06/16/01	0532	7.35	18.69

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.: 29294 SAS No.: SDG No.: E00H4

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

Instrument ID: HP_15B

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR1660L3E5	5-29-7	06/16/01	0555	7.35	18.69
02	E00J2	46702.40	06/16/01	0641	7.35	18.68
03	E00J3	46702.41	06/16/01	0705	7.35	18.69
04	E00J4	46702.42	06/16/01	0728	7.35	18.69
05	E00J5	46702.43	06/16/01	0751	7.35	18.69
06	E00J6	46702.44	06/16/01	0814	7.35	18.69
07	E00J7	46702.45	06/16/01	0837	7.35	18.69
08	E00J8	46702.46	06/16/01	0900	7.35	18.68
09	PIBLK5Q	5-414-6	06/16/01	1033	7.35	18.69
10	AR1660L3G5	5-29-7	06/16/01	1056	7.35	18.69
11	E00J9	46702.47	06/16/01	1143	7.36	18.69
12	E00K0	46702.48	06/16/01	1206	7.36	18.69
13	E00K1	46702.49	06/16/01	1229	7.36	18.69
14	E00K2	46702.50	06/16/01	1253	7.36	18.69
15	E30M8	46721.01	06/16/01	1316	7.36	18.70
16	E30N0	46721.02	06/16/01	1339	7.36	18.70
17	E30N1	46721.03	06/16/01	1402	7.36	18.70
18	E30N2	46721.04	06/16/01	1426	7.36	18.70
19	PIBLK5S	5-414-6	06/16/01	2211	7.36	18.69
20	AR1660L3K5	5-29-7	06/16/01	2234	7.35	18.69
21	PIBLK5Y	5-414-6	06/18/01	0850	7.35	18.68
22	AR1660L3V5	5-29-7	06/18/01	0913	7.35	18.68
23	E30M8DL	46721.01DL	06/18/01	1117	7.36	18.69
24	E30N2DL	46721.04DL	06/18/01	1140	7.35	18.69
25	PIBLK5Z	5-414-6	06/18/01	1227	7.36	18.69
26	AR1660L3X5	5-29-7	06/18/01	1250	7.36	18.70
27						
28						
29						
30						
31						
32						
33						
34						
35						

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

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

ELCS1

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Lab Sample ID: LC0608SD Date(s) Analyzed: 06/15/01 06/15/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	12.63	12.58	12.68	92.0		
Aroclor-1254	2	13.32	13.27	13.37	91.7		
	3	13.79	13.74	13.84	92.1		
COLUMN 1	4	14.31	14.26	14.36	91.2		
	5	15.00	14.95	15.05	100	93.4	
	1	12.30	12.25	12.35	86.6		
	2	13.02	12.97	13.07	102		
	3	13.93	13.89	13.99	80.6		
COLUMN 2	4	14.93	14.88	14.98	105		
	5	15.40	15.35	15.45	106	96.0	2.7
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

ELCS2

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Lab Sample ID: LD0608SD Date(s) Analyzed: 06/15/01 06/15/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	12.63	12.58	12.68	96.8		
Aroclor-1254	2	13.32	13.27	13.37	97.9		
	3	13.78	13.74	13.84	97.9		
COLUMN 1	4	14.31	14.26	14.36	98.6		
	5	15.00	14.95	15.05	120	102	
	1	12.30	12.25	12.35	87.0		
	2	13.02	12.97	13.07	111		
	3	13.93	13.89	13.99	82.0		
COLUMN 2	4	14.93	14.88	14.98	117		
	5	15.39	15.35	15.45	120	103	1.0
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

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IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00H4MS

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Lab Sample ID: 46702.34MS Date(s) Analyzed: 06/16/01 06/16/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	12.62	12.58	12.68	283		
Aroclor-1254	2	13.31	13.27	13.37	129		
	3						
COLUMN 1	4	14.31	14.26	14.36	255		
	5	14.99	14.95	15.05	325	248	
	1	12.29	12.25	12.35	176		
	2	13.02	12.97	13.07	182		
	3	14.92	13.89	13.99	346		
COLUMN 2	4	15.39	14.88	14.98	308		
	5	15.39	15.35	15.45	316	266	7.0
	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.

E00H4MSD

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Lab Sample ID: 46702.35MSD Date(s) Analyzed: 06/16/01 06/16/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	12.62	12.58	12.68	180		
Aroclor-1254	2						
	3						
COLUMN 1	4	14.31	14.26	14.36	235		
	5	14.99	14.95	15.05	331	249	
	1	12.29	12.25	12.35	206		
	2	13.03	12.97	13.07	205		
	3	14.92	13.89	13.99	353		
COLUMN 2	4	15.39	14.88	14.98	290		
	5	15.39	15.35	15.45	312	273	9.2
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00H8

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Lab Sample ID: 46702.36 Date(s) Analyzed: 06/16/01 06/16/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	8.42	8.37	8.47	225		
Aroclor-1242	2	9.70	9.65	9.75	161		
	3	10.58	10.59	10.69	486		
COLUMN 1	4						
	5					291	
	1	10.39	10.35	10.45	424		
	2	11.18	11.13	11.23	1220		
	3						
COLUMN 2	4	12.64	12.59	12.69	56.8		
	5					567	94.8
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00J2

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Lab Sample ID: 46702.40 Date(s) Analyzed: 06/16/01 06/16/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1						
Aroclor-1242	2	9.69	9.65	9.75	26.4		
	3	10.63	10.59	10.69	23.7		
COLUMN 1	4	11.64	11.59	11.69	51.0		
	5	12.81	12.76	12.86	39.8	35.2	
	1	10.39	10.35	10.45	56.6		
	2	11.18	11.13	11.23	35.9		
	3	12.40	12.35	12.45	49.4		
COLUMN 2	4						
	5	13.14	13.10	13.20	45.1	46.8	28.3
	1	12.62	12.58	12.68	32.3		
Aroclor-1254	2	13.35	13.27	13.37	111		
	3						
COLUMN 1	4						
	5	14.99	14.95	15.05	22.4	55.2	
	1	12.30	12.25	12.35	84.3		
	2	13.02	12.97	13.07	46.5		
	3						
COLUMN 2	4	14.92	14.88	14.98	15.2		
	5					48.7	13.3
	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.

E00J6

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Lab Sample ID: 46702.44 Date(s) Analyzed: 06/16/01 06/16/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	8.42	8.37	8.47	3.5		
Aroclor-1242	2	9.70	9.65	9.75	7.8		
	3	10.68	10.59	10.69	19.0		
COLUMN 1	4	11.64	11.59	11.69	16.7		
	5	12.81	12.76	12.86	14.0	12.2	
	1	10.39	10.35	10.45	17.2		
	2	11.18	11.13	11.23	8.8		
	3	12.40	12.35	12.45	32.5		
COLUMN 2	4	12.63	12.59	12.69	53.6		
	5	13.14	13.10	13.20	38.0	30.0	84.4
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

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IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00J7

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Lab Sample ID: 46702.45 Date(s) Analyzed: 06/16/01 06/16/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	8.42	8.37	8.47	5.0		
Aroclor-1242	2						
	3	10.64	10.59	10.69	4.6		
COLUMN 1	4	11.64	11.59	11.69	22.3		
	5					10.6	
	1						
	2	11.18	11.13	11.23	9.3		
	3	12.40	12.35	12.45	25.2		
COLUMN 2	4	12.63	12.59	12.69	24.5		
	5	13.14	13.10	13.20	15.6	18.6	54.8
	1	12.63	12.58	12.68	10.5		
Aroclor-1254	2						
	3						
COLUMN 1	4	14.31	14.26	14.36	5.3		
	5	14.99	14.95	15.05	6.7	7.5	
	1						
	2	13.02	12.97	13.07	20.2		
	3						
COLUMN 2	4	14.92	14.88	14.98	6.6		
	5	15.39	15.35	15.45	2.7	9.8	27.0
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00J8

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Lab Sample ID: 46702.46 Date(s) Analyzed: 06/16/01 06/16/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	8.42	8.37	8.47	17.3		
Aroclor-1242	2	9.70	9.65	9.75	50.8		
	3	10.64	10.59	10.69	30.0		
COLUMN 1	4						
	5					32.7	
	1	10.40	10.35	10.45	55.4		
	2	11.18	11.13	11.23	73.2		
	3	12.68	12.35	12.45	95.2		
COLUMN 2	4	12.68	12.59	12.69	93.5		
	5	13.19	13.10	13.20	84.0	80.3	84.2
	1						
Aroclor-1254	2						
	3	13.79	13.74	13.84	263		
COLUMN 1	4	14.31	14.26	14.36	82.2		
	5	14.99	14.95	15.05	86.2	144	
	1						
	2	13.03	12.97	13.07	57.1		
	3	13.92	13.89	13.99	66.0		
COLUMN 2	4	14.92	14.88	14.98	83.9		
	5	15.39	15.35	15.45	80.1	71.8	66.9
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E00J9

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Lab Sample ID: 46702.47 Date(s) Analyzed: 06/16/01 06/16/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1						
Aroclor-1242	2						
	3	10.69	10.59	10.69	48.2		
COLUMN 1	4	11.64	11.59	11.69	319		
	5	12.80	12.76	12.86	229	199	
	1						
	2						
	3	12.40	12.35	12.45	358		
COLUMN 2	4	12.64	12.59	12.69	99.7		
	5	13.14	13.10	13.20	252	236	17.0
	1	12.63	12.58	12.68	87.5		
Aroclor-1254	2	13.31	13.27	13.37	224		
	3	13.79	13.74	13.84	114		
COLUMN 1	4	14.31	14.26	14.36	153		
	5					145	
	1						
	2	13.02	12.97	13.07	296		
	3	13.93	13.89	13.99	58.4		
COLUMN 2	4	14.92	14.88	14.98	149		
	5					168	15.9
	1	14.31	14.26	14.36	87.2		
Aroclor-1260	2	14.80	14.76	14.86	94.3		
	3						
COLUMN 1	4	15.72	15.67	15.77	54.0		
	5	16.16	16.11	16.21	53.1	72.2	
	1						
	2	14.72	14.68	14.78	112		
	3	14.92	14.88	14.98	64.8		
COLUMN 2	4	16.09	16.05	16.15	33.4		
	5	16.32	16.28	16.38	33.8	61.0	16.8

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30M8

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Lab Sample ID: 46721.01 Date(s) Analyzed: 06/16/01 06/16/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1						
Aroclor-1242	2						
	3	10.58	10.59	10.69	3810		
COLUMN 1	4	11.65	11.59	11.69	5040		
	5	12.81	12.76	12.86	3330	4060	
	1						
	2						
	3	12.40	12.35	12.45	5990		
COLUMN 2	4	12.64	12.59	12.69	4970		
	5	13.14	13.10	13.20	5040	5330	27.1
	1	12.63	12.58	12.68	1980		
Aroclor-1254	2	13.31	13.27	13.37	1980		
	3	13.79	13.74	13.84	1240		
COLUMN 1	4	14.31	14.26	14.36	1340		
	5					1640	
	1						
	2						
	3	13.93	13.89	13.99	1720		
COLUMN 2	4	14.93	14.88	14.98	1550		
	5	15.39	15.35	15.45	1200	1490	9.6
	1	14.31	14.26	14.36	763		
Aroclor-1260	2	14.80	14.76	14.86	914		
	3						
COLUMN 1	4						
	5	16.16	16.11	16.21	372	683	
	1						
	2	14.73	14.68	14.78	1470		
	3	14.93	14.88	14.98	673		
COLUMN 2	4						
	5	16.33	16.28	16.38	365	836	20.1

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30M8DL

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Lab Sample ID: 46721.01DL Date(s) Analyzed: 06/18/01 06/18/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1						
Aroclor-1242	2						
	3	10.58	10.59	10.69	7070		
COLUMN 1	4	11.65	11.59	11.69	10000		
	5	12.81	12.76	12.86	6430	7830	
	1						
	2						
	3	12.41	12.35	12.45	9380		
COLUMN 2	4	12.64	12.59	12.69	7800		
	5	13.15	13.10	13.20	7520	8230	5.0
	1						
Aroclor-1254	2	13.32	13.27	13.37	4010		
	3	13.79	13.74	13.84	2390		
COLUMN 1	4	14.31	14.26	14.36	2830		
	5	14.99	14.95	15.05	1590	2700	
	1						
	2						
	3	13.94	13.89	13.99	3020		
COLUMN 2	4	14.93	14.88	14.98	2960		
	5	15.40	15.35	15.45	1960	2650	1.9
	1	14.31	14.26	14.36	1610		
Aroclor-1260	2						
	3						
COLUMN 1	4	15.72	15.67	15.77	670		
	5	16.16	16.11	16.21	629	970	
	1						
	2						
	3	14.93	14.88	14.98	1290		
COLUMN 2	4	16.10	16.05	16.15	510		
	5	16.33	16.28	16.38	566	789	20.6

At least 3 peaks are required for identification of multicomponent analytes

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IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30N2

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Lab Sample ID: 46721.04 Date(s) Analyzed: 06/16/01 06/16/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	8.42	8.37	8.47	869		
Aroclor-1242	2						
	3	10.68	10.59	10.69	774		
COLUMN 1	4						
	5	12.81	12.76	12.86	3930	1860	
	1						
	2	11.19	11.13	11.23	3550		
	3						
COLUMN 2	4	12.64	12.59	12.69	3590		
	5	13.14	13.10	13.20	5980	4370	80.6
	1	12.63	12.58	12.68	2380		
Aroclor-1254	2	13.32	13.27	13.37	2300		
	3	13.79	13.74	13.84	1630		
COLUMN 1	4	14.31	14.26	14.36	1920		
	5	14.99	14.95	15.05	1360	1920	
	1						
	2						
	3	13.93	13.89	13.99	2500		
COLUMN 2	4	14.93	14.88	14.98	2130		
	5	15.39	15.35	15.45	1760	2130	10.4
	1	14.31	14.26	14.36	1090		
Aroclor-1260	2	14.81	14.76	14.86	1240		
	3						
COLUMN 1	4	15.72	15.67	15.77	527		
	5	16.16	16.11	16.21	525	846	
	1						
	2						
	3	14.93	14.88	14.98	927		
COLUMN 2	4	16.10	16.05	16.15	454		
	5	16.33	16.28	16.38	556	646	26.8

At least 3 peaks are required for identification of multicomponent analytes

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30N2DL

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Lab Sample ID: 46721.04DL Date(s) Analyzed: 06/18/01 06/18/01

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

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

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	8.42	8.37	8.47	1750		
Aroclor-1242	2						
	3	10.68	10.59	10.69	1860		
COLUMN 1	4						
	5	12.80	12.76	12.86	7520	3710	
	1						
	2	11.18	11.13	11.23	2480		
	3						
COLUMN 2	4	12.63	12.59	12.69	5390		
	5	13.14	13.10	13.20	8390	5420	37.5
	1						
Aroclor-1254	2						
	3	13.79	13.74	13.84	3060		
COLUMN 1	4	14.31	14.26	14.36	4050		
	5	14.99	14.95	15.05	2380	3160	
	1						
	2						
	3	13.93	13.89	13.99	4160		
COLUMN 2	4	14.92	14.88	14.98	3810		
	5	15.39	15.35	15.45	2630	3530	11.1
	1	14.31	14.26	14.36	2300		
Aroclor-1260	2	14.80	14.76	14.86	2420		
	3						
COLUMN 1	4						
	5	16.16	16.11	16.21	1290	2000	
	1						
	2						
	3	14.92	14.88	14.98	1660		
COLUMN 2	4	16.09	16.05	16.15	643		
	5	16.32	16.28	16.38	811	1040	63.2

At least 3 peaks are required for identification of multicomponent analytes

page 1 of 1

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061406.D\ECD1A.CH Vial: 6
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061406.D\ECD2B.CH
Acq On : 14 Jun 2001 19:52 Operator: DDC
Sample : RESC5C Inst : HP_15
Misc : 5-441-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:38 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	488499	403758	19.5	17.4
22)	S DCB	18.28	18.70	501631	423965	19.4	17.9
	Target Compounds:						

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Signature Imelda M. Villain
Date 06/19/01

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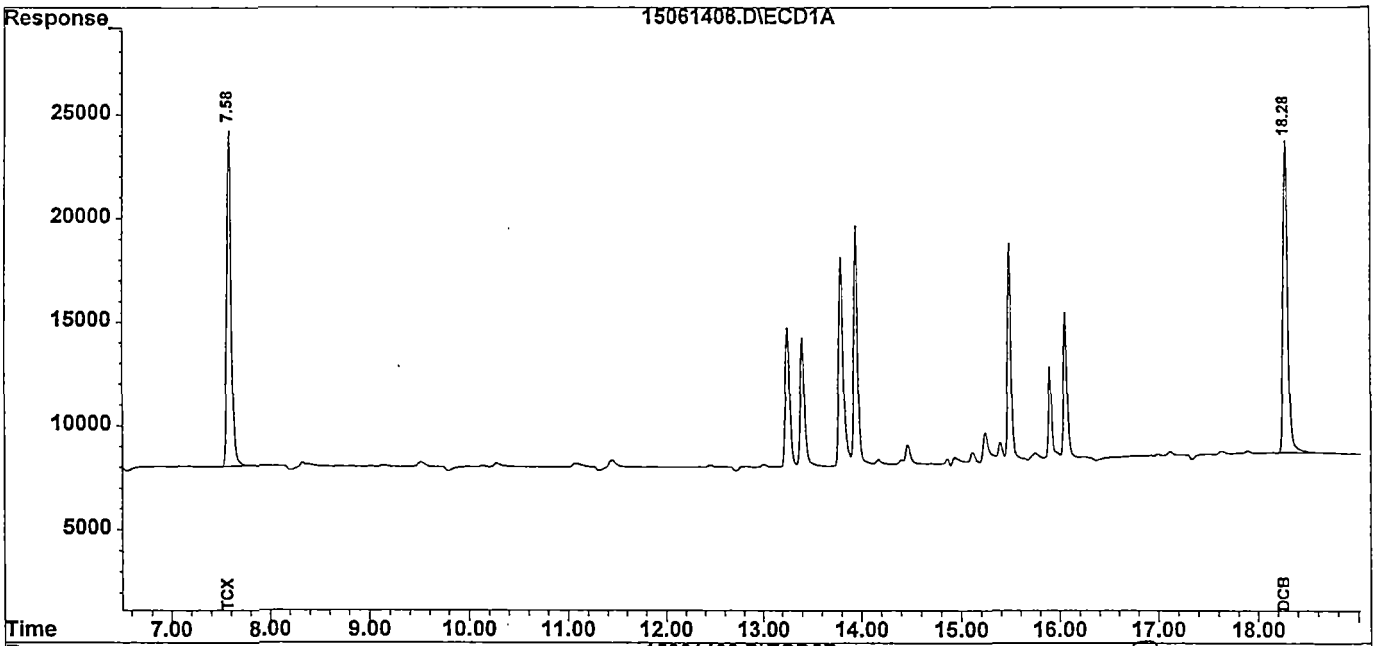
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

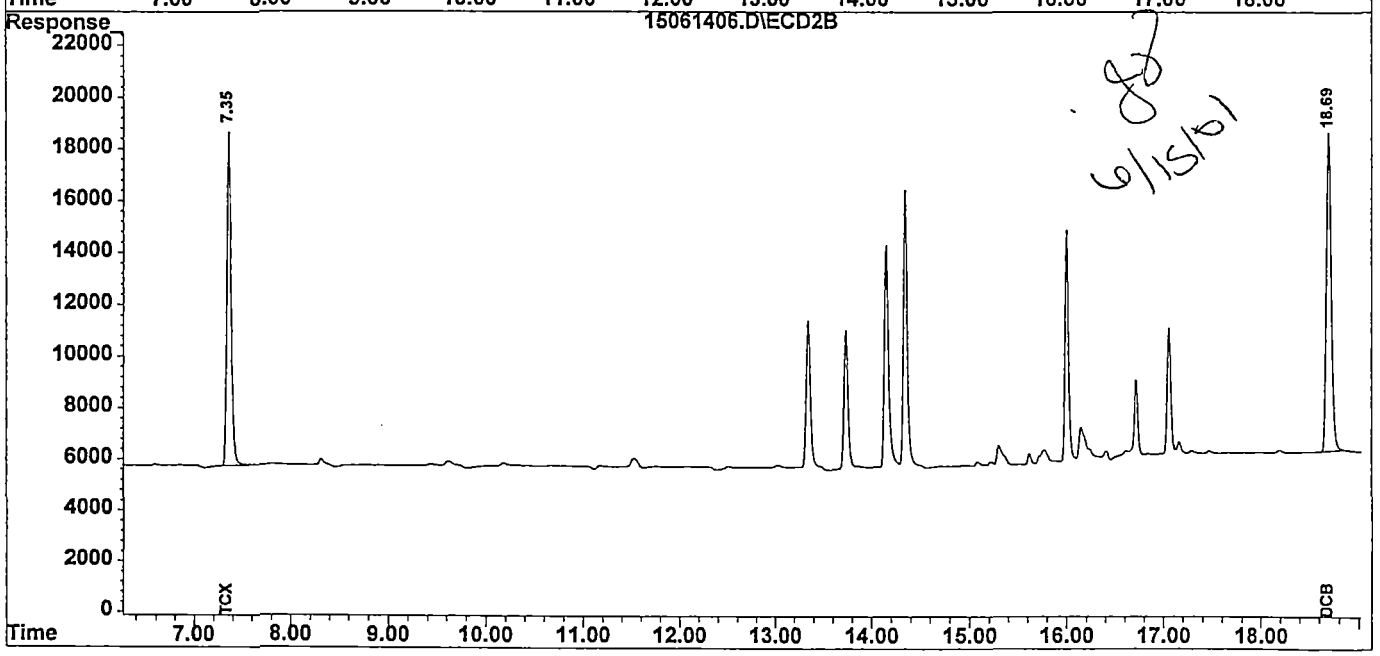
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061406.D\ECD1A.CH Vial: 6
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061406.D\ECD2B.CH
Acq On : 14 Jun 2001 19:52 Operator: DDC
Sample : RESC5C Inst : HP_15
Misc : 5-441-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:38 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





6/15/01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061407.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061407.D\ECD2B.CH
Acq On : 14 Jun 2001 20:15 Operator: DDC
Sample : AR1221L35C Inst : HP_15
Misc : 5-420-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:38 2001 Quant Results File: XPCBF14.RES
Multi Time: Jun 15 8:38 2001 Quant Results File: xspcbf14.RES

Pesticide Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001

Multi-Component Method : f:\hpchem\hp\15\data\06_14_01\xspcbf14.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	505022	410406	20.1	17.7
22)	S DCB	18.28	18.70	549882	467335	21.2	19.7
	Target Compounds:						
	Multi-Component Compounds:						
2)	L2 Aroclor-1221	8.03	8.37	153944	122939	450.3	505.0
3)	L2 Aroclor-1221 {2}	8.21	8.71	93946	93519	433.7	524.6
4)	L2 Aroclor-1221 {3}	8.42	8.89	367743	267634	473.2	511.1
	Sum Aroclor-1221			615633	484092	1357.2	1540.6
	Average Aroclor-1221					452.390	513.550

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Date 06/19/01
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145

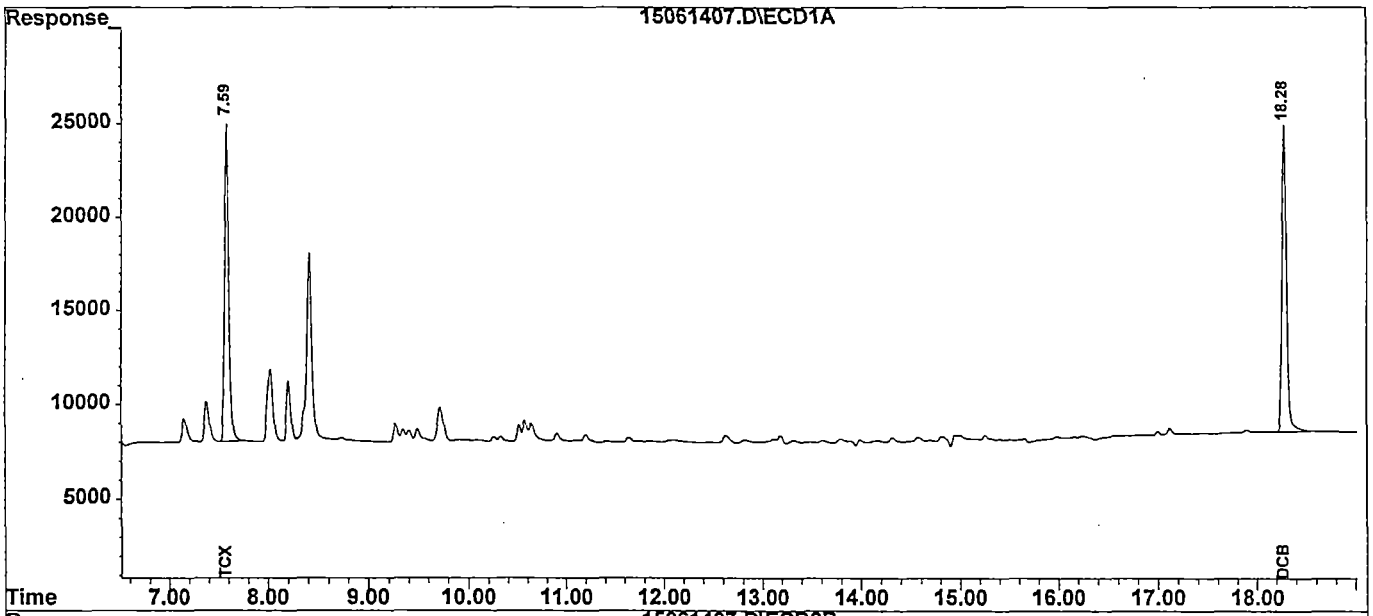
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

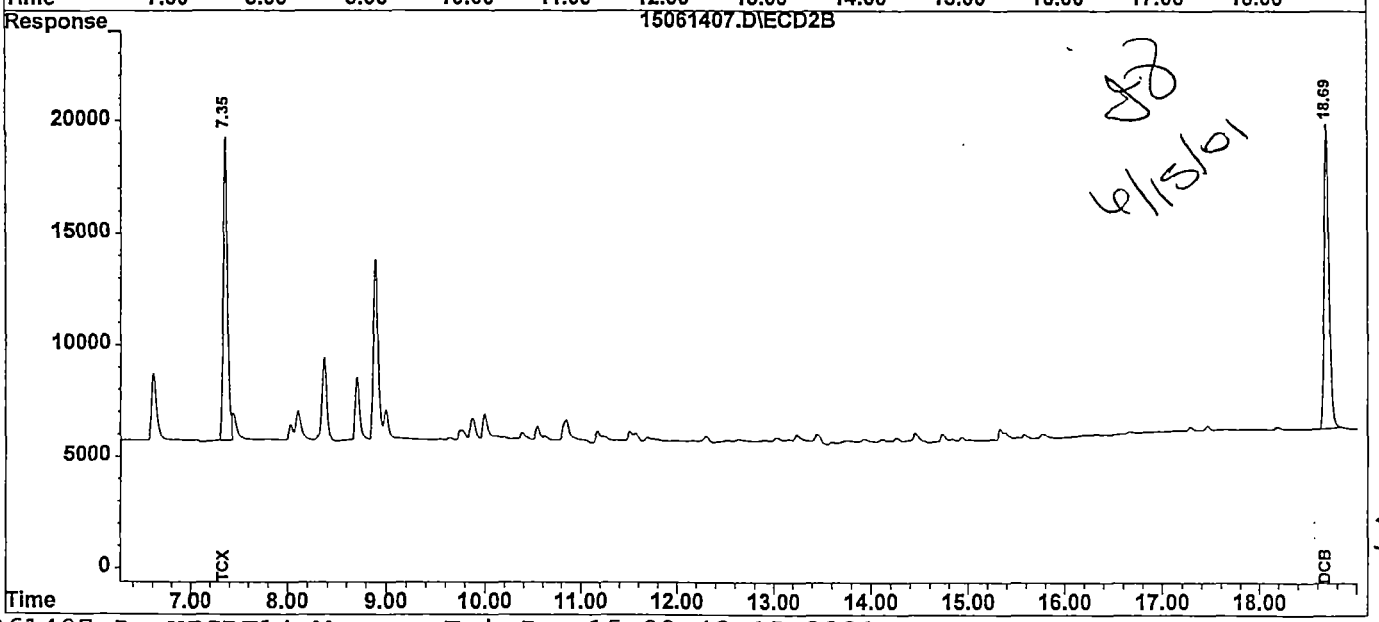
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061407.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061407.D\ECD2B.CH
Acq On : 14 Jun 2001 20:15 Operator: DDC
Sample : AR1221L35C Inst : HP_15
Misc : 5-420-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:38 2001 Quant Results File: XPCBF14.RES
Quant Time: Jun 15 8:38 2001 Quant Results File: xspcbf14.RES

Pesticide Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001

Multi-Component Method : f:\hpchem\hp\15\data\06_14_01\xspcbf14.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B





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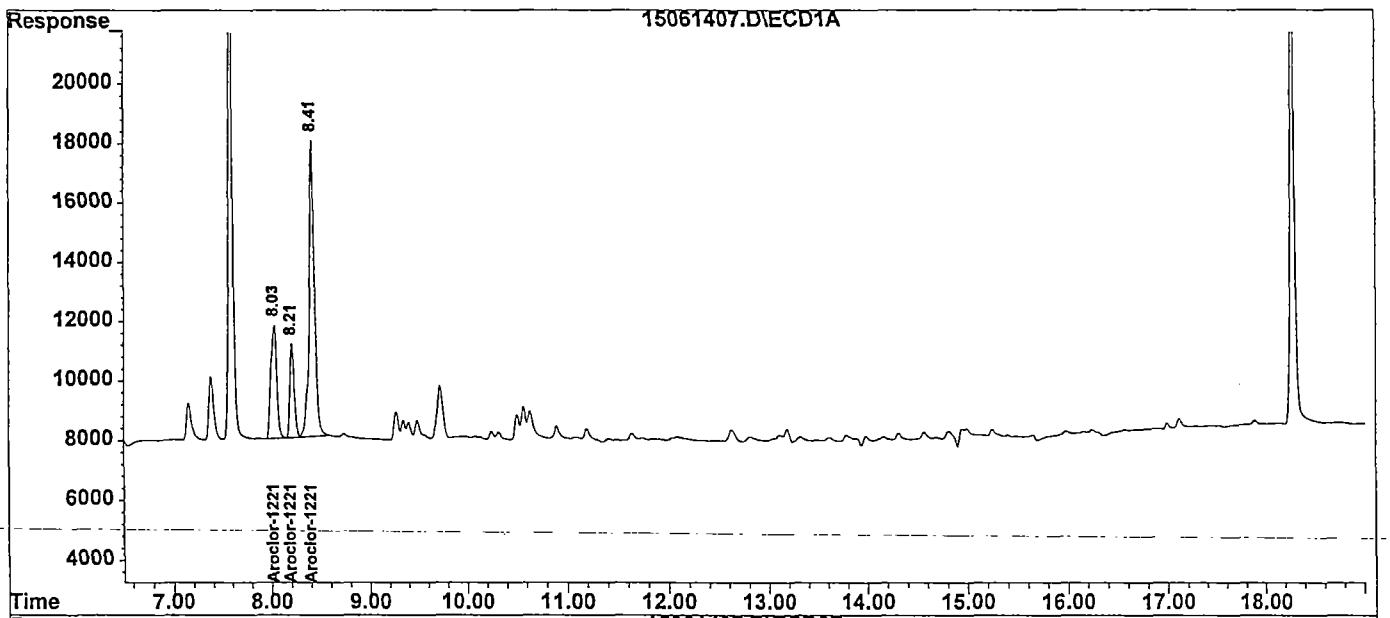
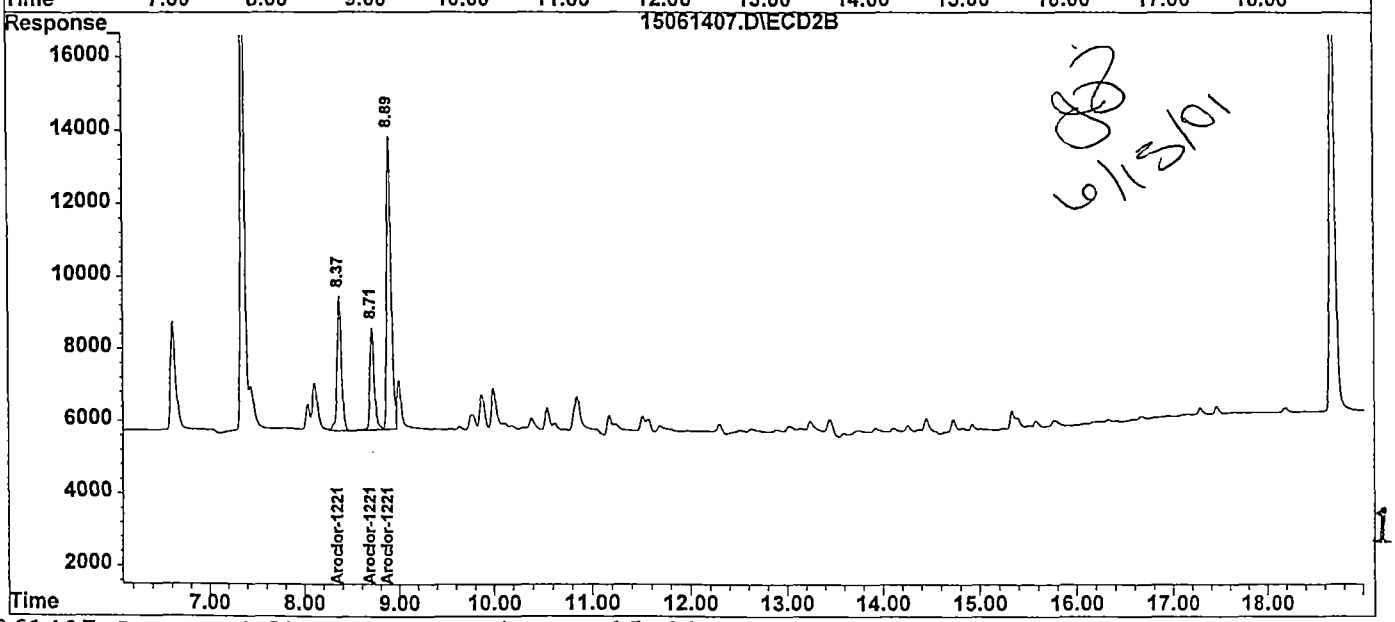
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061407.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061407.D\ECD2B.CH
Acq On : 14 Jun 2001 20:15 Operator: DDC
Sample : AR1221L35C Inst : HP_15
Misc : 5-420-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:38 2001 Quant Results File: xspcbf14.RES
Quant Time: Jun 15 8:38 2001 Quant Results File: xspcbf14.RES

Pesticide Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001

Multi-Component Method : f:\hpchem\hp\15\data\06_14_01\xspcbf14.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : DB-MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 Signal #2 Info : .32
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B





6/15/01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061408.D\ECD1A.CH Vial: 8
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061408.D\ECD2B.CH
Acq On : 14 Jun 2001 20:38 Operator: DDC
Sample : AR1232L35C Inst : HP_15
Misc : 5-422-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:39 2001 Quant Results File: XPCBF14.RES
Multi Time: Jun 15 8:39 2001 Quant Results File: xspcbf14.RES

Pesticide Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001

Multi-Component Method : f:\hpchem\hp\15\data\06_14_01\xspcbf14.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	7.59	7.35	494820	432479	19.7	18.7	
22)	S DCB	18.29	18.70	511764	430372	19.7	18.2	
	Target Compounds:							
	Multi-Component Compounds:							
5)	L3 Aroclor-1232	8.42	8.89	325664	242698	495.8	546.2	
6)	L3 Aroclor-1232 {2}	9.27	10.55	173181	108108	493.0	410.7	
7)	L3 Aroclor-1232 {3}	9.70	11.18	112293	113175	507.3	660.7	#
8)	L3 Aroclor-1232 {4}	10.52	12.40	183906	58844	636.7	583.0	
	Sum Aroclor-1232			795044	522826	2132.8	2200.5	
	Average Aroclor-1232					533.200	550.134	

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Date 06/19/01

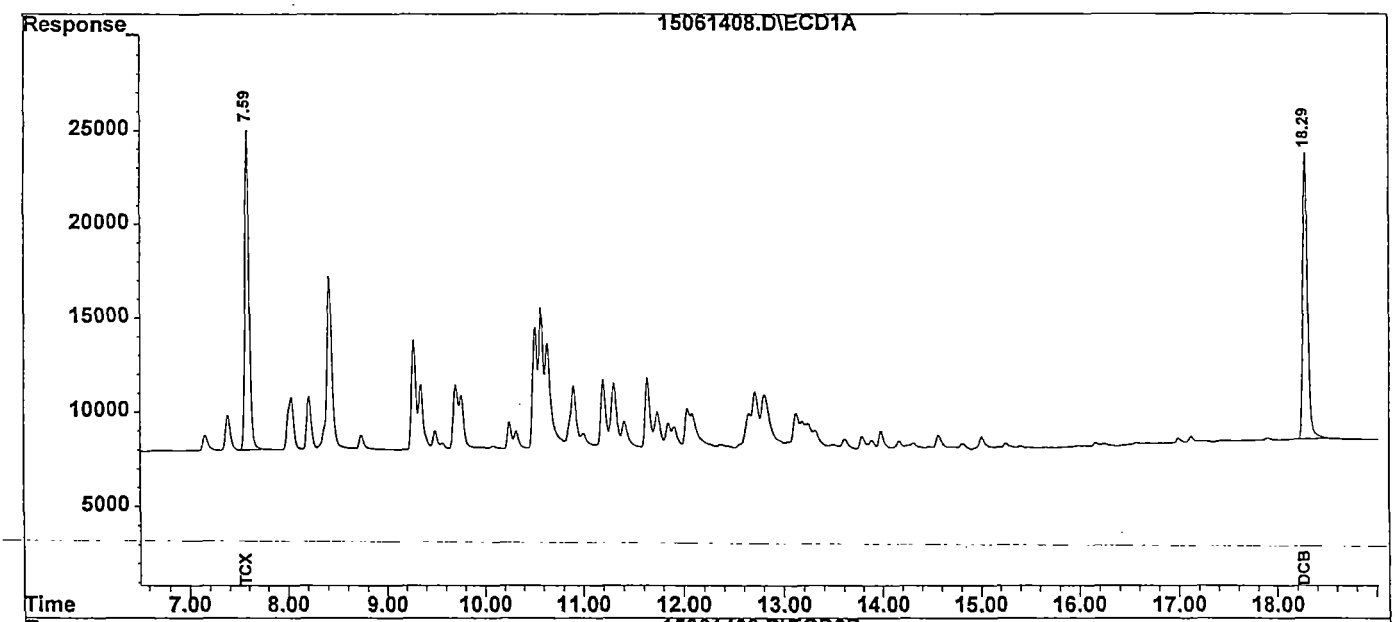
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
15061408.D xspcbf14.m Fri Jun 15 08:43:28 2001 Page 1

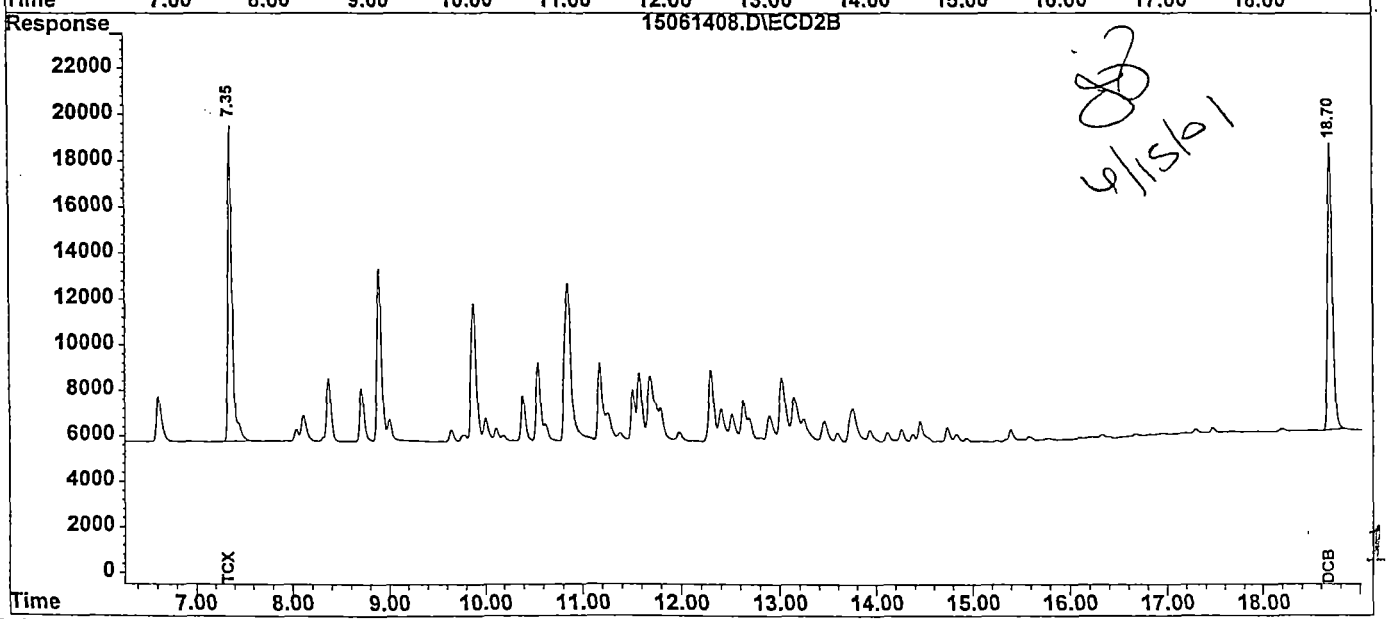
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061408.D\ECD1A.CH Vial: 8
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061408.D\ECD2B.CH
Acq On : 14 Jun 2001 20:38 Operator: DDC
Sample : AR1232L35C Inst : HP_15
Misc : 5-422-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:39 2001 Quant Results File: XPCBF14.RES
Quant Time: Jun 15 8:39 2001 Quant Results File: xspcbf14.RES

Pesticide Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001

Multi-Component Method : f:\hpchem\hp\15\data\06_14_01\xspcbf14.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B





6/15/01

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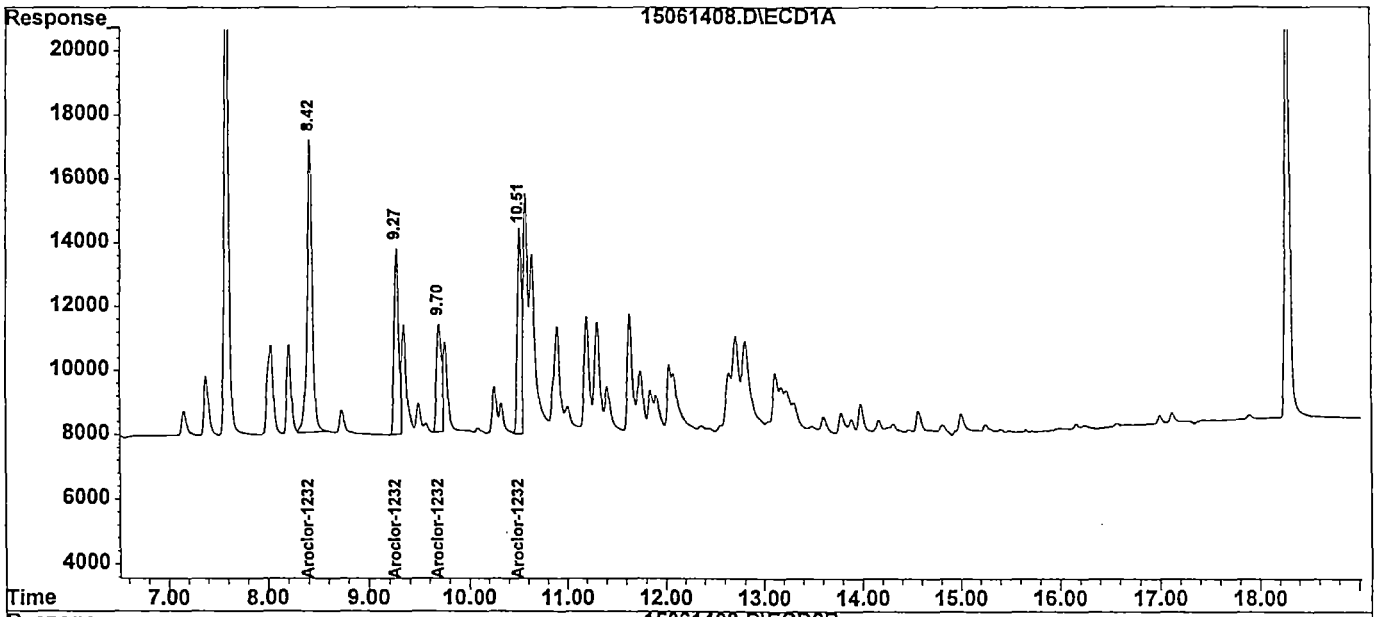
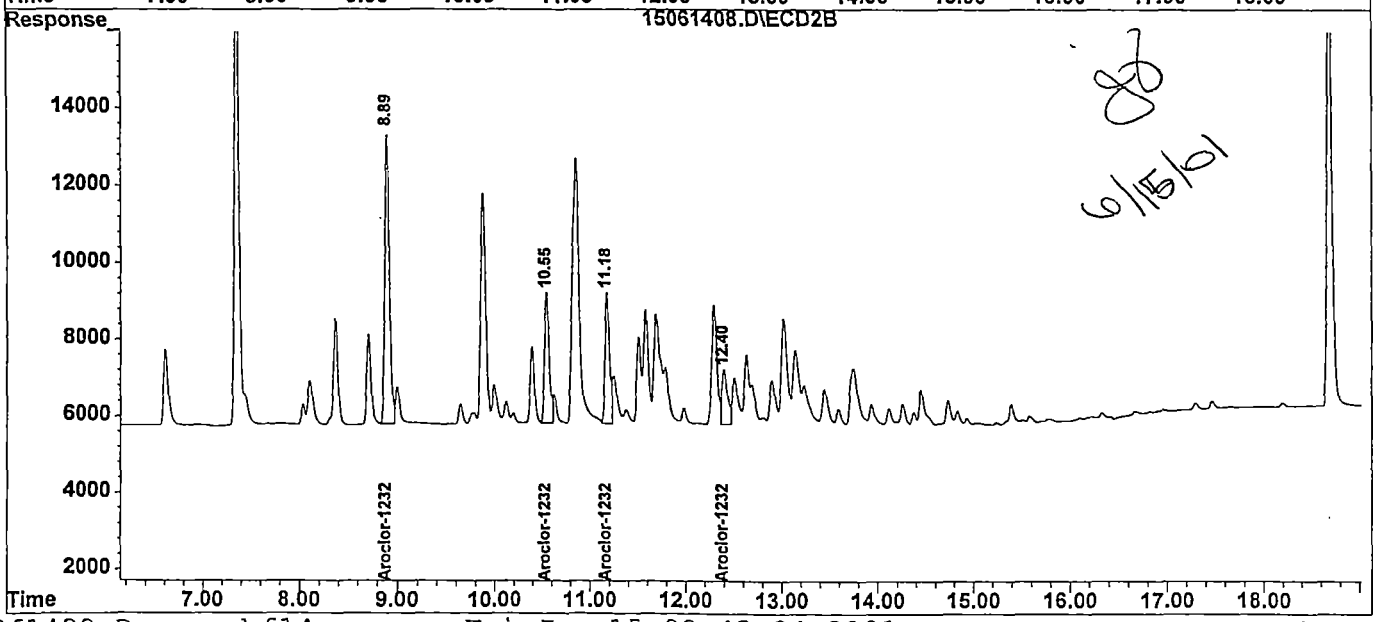
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061408.D\ECD1A.CH Vial: 8
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061408.D\ECD2B.CH
Acq On : 14 Jun 2001 20:38 Operator: DDC
Sample : AR1232L35C Inst : HP_15
Misc : 5-422-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:39 2001 Quant Results File: xspcbf14.RES
Quant Time: Jun 15 8:39 2001 Quant Results File: xspcbf14.RES

Pesticide Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001

Multi-Component Method : f:\hpchem\hp\15\data\06_14_01\xspcbf14.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : DB-MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 Signal #2 Info : .32
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B





6/15/01

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Response Factor Report HP_15

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

Calibration Files
L1 =15061409.D L2 =15061410.D L3 =15061411.D
L4 =15061412.D L5 =15061413.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
7) Aroclor-1242	664.6	676.1	569.7	519.1	480.1	581.9	14.93
8) Aroclor-1242 {2}	431.3	463.2	391.7	348.1	323.3	391.5	14.71
9) Aroclor-1242 {3}	1.2	1.2	1.0	0.9	0.8	1.0 E3	16.84
10) Aroclor-1242 {4}	626.9	669.2	572.6	515.9	488.1	574.5	13.09
11) Aroclor-1242 {5}	889.6	934.4	801.0	709.2	648.7	796.6	15.01

Signal #2 Calibration Files
L1 =15061409.D L2 =15061410.D L3 =15061411.D
L4 =15061412.D L5 =15061413.D

Compound	L1	L2	L3	L4	L5	Avg	%RSD
30) Aroclor-1242 #2	328.3	308.2	269.2	252.8	250.6	281.8	12.33
31) Aroclor-1242 {2} #2	458.3	527.1	490.8	465.0	452.7	478.8	6.41
32) Aroclor-1242 {3} #2	226.9	287.4	284.5	275.7	272.5	269.4	9.12
33) Aroclor-1242 {4} #2	296.2	332.6	310.4	297.7	298.3	307.0	5.02
[illegible] Aroclor-1242 {5} #2	424.2	465.1	427.8	411.6	417.8	429.3	4.88

(#) = Out of Range

XPCBF14.M Fri Jun 15 08:27:47 2001

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E3065
Signature Imelda M. Williams
Date 06/19/01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061409.D\ECD1A.CH Vial: 9
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061409.D\ECD2B.CH
Acq On : 14 Jun 2001 21:01 Operator: DDC
Sample : AR1242L15C Inst : HP_15
Misc : 5-11-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:26 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_12_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	7.59	7.36	135054	105321	5.854	6.018	
22)	S DCB	18.29	18.70	152227	122815	11.1	12.0	
	Target Compounds:							
7)	L4 Aroclor-1242	8.42	10.40	66462	32829	129.0	176.6	#
8)	L4 Aroclor-1242 {2}	9.70	11.18	43127	45831	130.3	159.1	
	L4 Aroclor-1242 {3}	10.64	12.40	118000	22686	111.0	118.9	
1	L4 Aroclor-1242 {4}	11.65	12.64	62689	29618	134.8	177.9	#
11)	L4 Aroclor-1242 {5}	12.82	13.16	88964	42424	116.9	196.9	#
	Sum Aroclor-1242			379243	173387	622.1	829.5	
	Average Aroclor-1242					124.412	165.899	

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Signature Arnelda M. Williams
Date 06/19/01

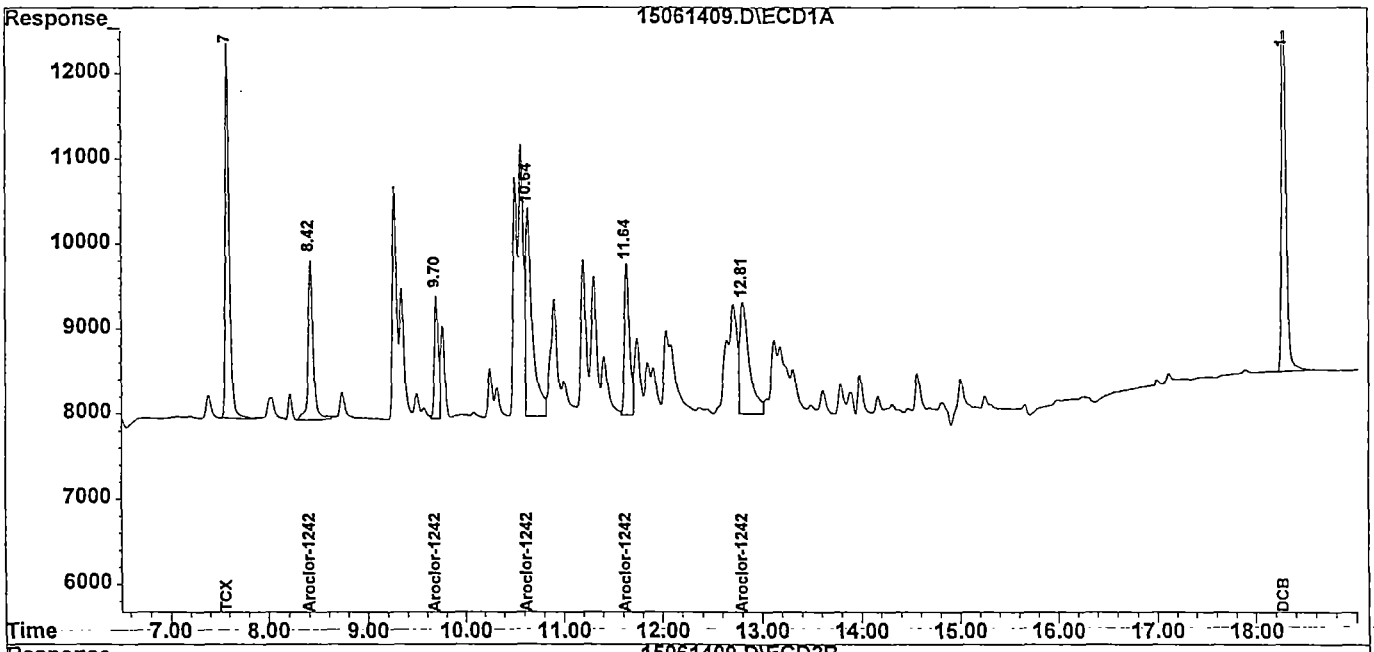
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

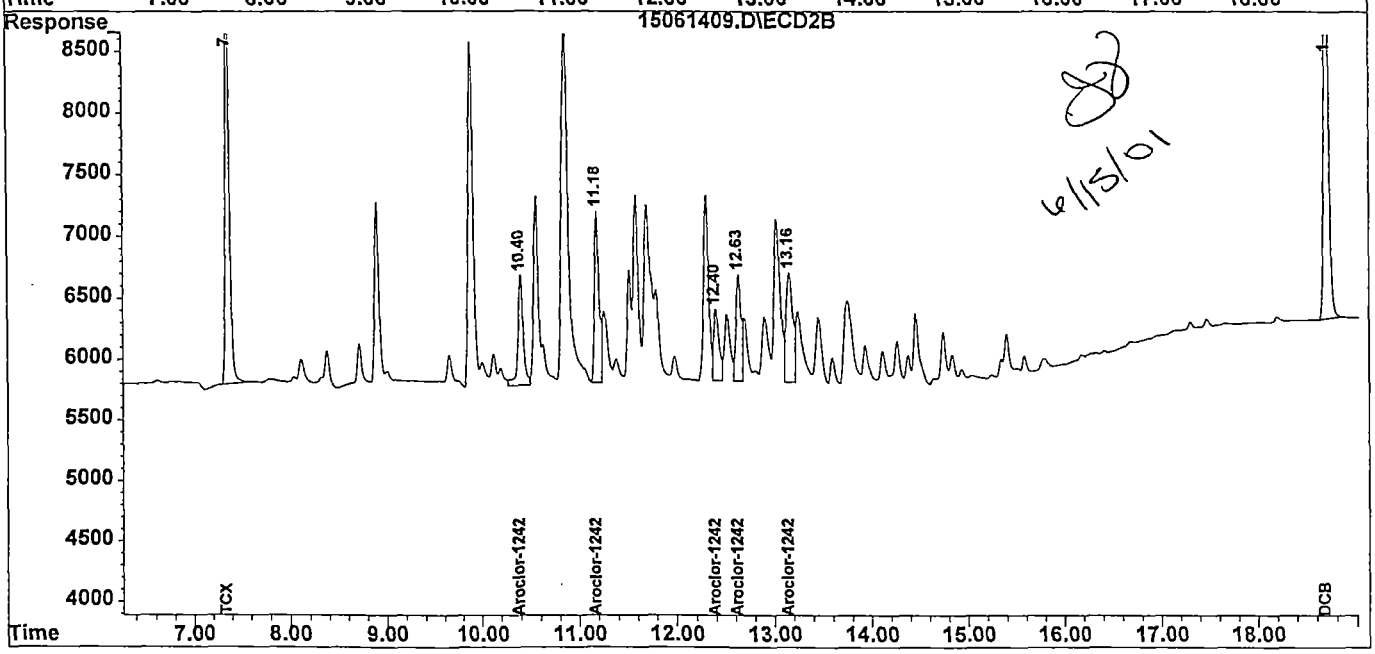
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061409.D\ECD1A.CH Vial: 9
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061409.D\ECD2B.CH
Acq On : 14 Jun 2001 21:01 Operator: DDC
Sample : AR1242L15C Inst : HP_15
Misc : 5-11-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:26 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_12_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061410.D\ECD1A.CH Vial: 10
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061410.D\ECD2B.CH
Acq On : 14 Jun 2001 21:25 Operator: DDC
Sample : AR1242L25C Inst : HP_15
Misc : 5-10-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:26 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	7.59	7.36	293407	241472	12.4	13.1	
22)	S DCB	18.29	18.70	312279	259315	17.8	19.2	
	Target Compounds:							
7)	L4 Aroclor-1242	8.42	10.40	135212	61630	249.8	284.2	
8)	L4 Aroclor-1242 {2}	9.70	11.18	92643	105430	263.4	325.3	
	L4 Aroclor-1242 {3}	10.64	12.40	239337	57487	222.4	291.0	#
1.	L4 Aroclor-1242 {4}	11.64	12.64	133840	66530	268.2	338.5	#
11)	L4 Aroclor-1242 {5}	12.81	13.15	186882	93026	241.7	351.0	#
	Sum Aroclor-1242			787913	384103	1245.4	1590.1	
Average Aroclor-1242						249.087	318.015	

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CSF 29294 SDG E3065
Signature Janette M. Williams
Date 06/19/01

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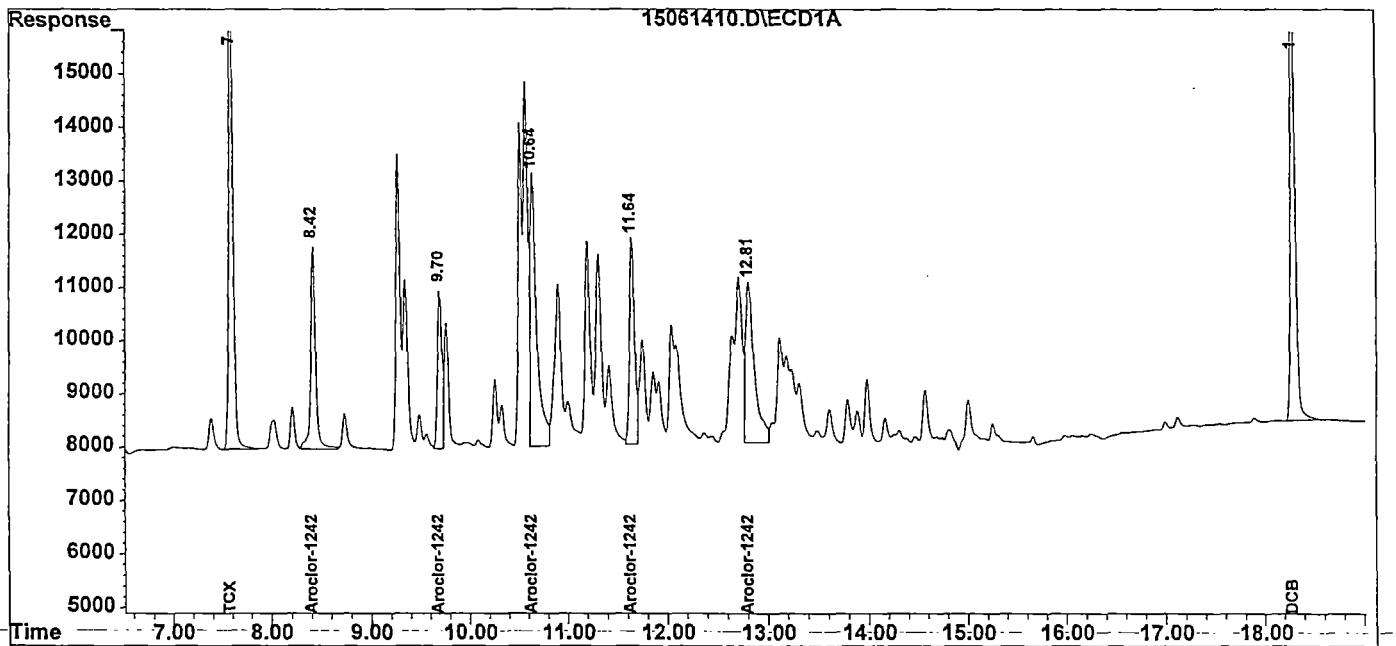
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

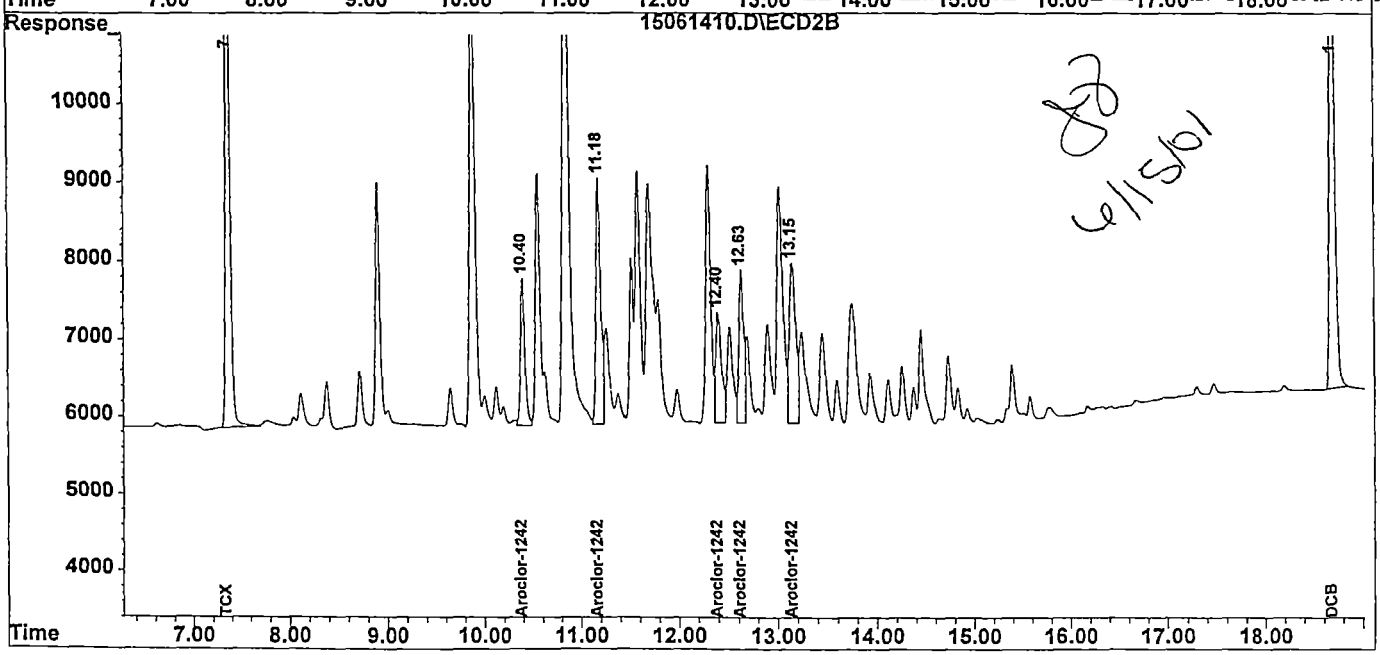
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061410.D\ECD1A.CH Vial: 10
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061410.D\ECD2B.CH
Acq On : 14 Jun 2001 21:25 Operator: DDC
Sample : AR1242L25C Inst : HP_15
Misc : 5-10-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:26 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061411.D\ECD1A.CH Vial: 11
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061411.D\ECD2B.CH
Acq On : 14 Jun 2001 21:48 Operator: DDC
Sample : AR1242L35C Inst : HP_15
Misc : 5-9-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:27 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	7.59	7.36	518572	440874	20.8	22.2	
22)	S DCB	18.29	18.70	546107	469999	25.5	27.7	
	Target Compounds:							
7)	L4 Aroclor-1242	8.42	10.40	227865	107691	395.8	449.7	
8)	L4 Aroclor-1242 {2}	9.70	11.18	156662	196329	420.4	526.5	#
	L4 Aroclor-1242 {3}	10.64	12.40	397903	113799	363.3	522.3	#
	L4 Aroclor-1242 {4}	11.64	12.64	229032	124159	426.9	534.7	#
11)	L4 Aroclor-1242 {5}	12.81	13.15	320387	171113	402.6	534.0	#
	Sum Aroclor-1242			1331849	713090	2009.1	2567.3	
	Average Aroclor-1242					401.813	513.459	

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG P3065
Signature Arnelda M. Villain
Date 06/19/01
Page 3

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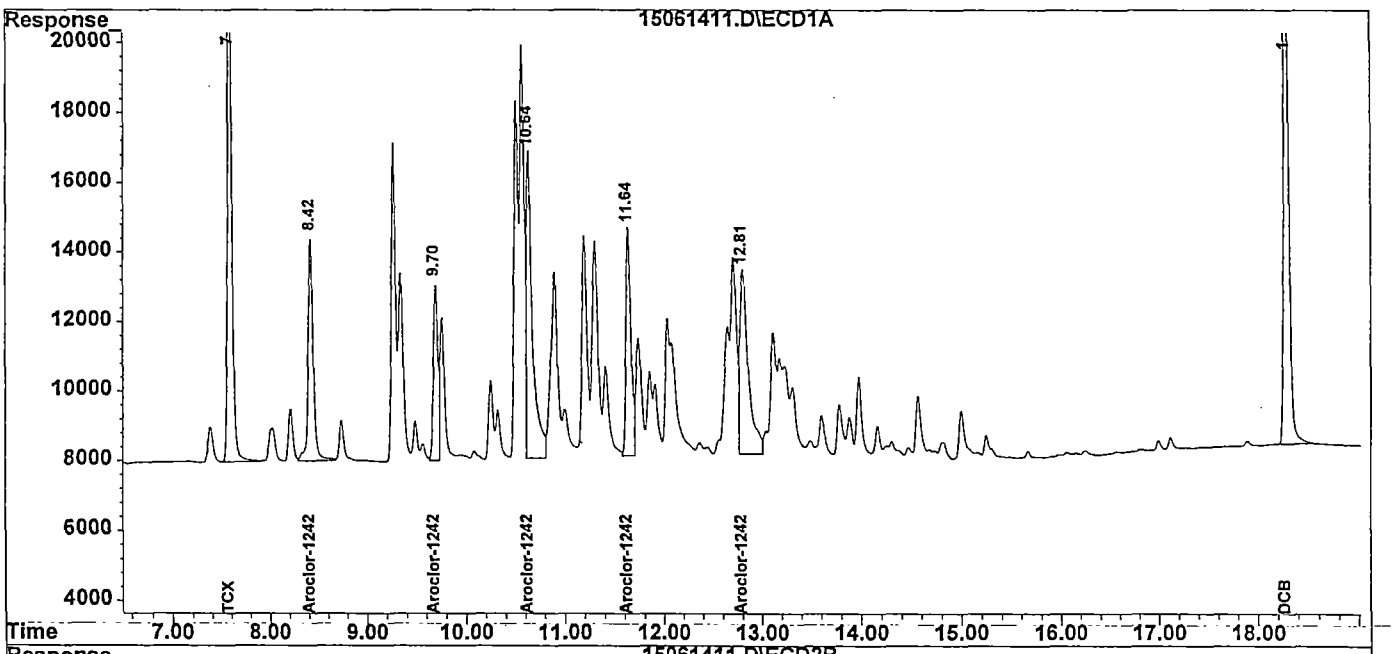
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

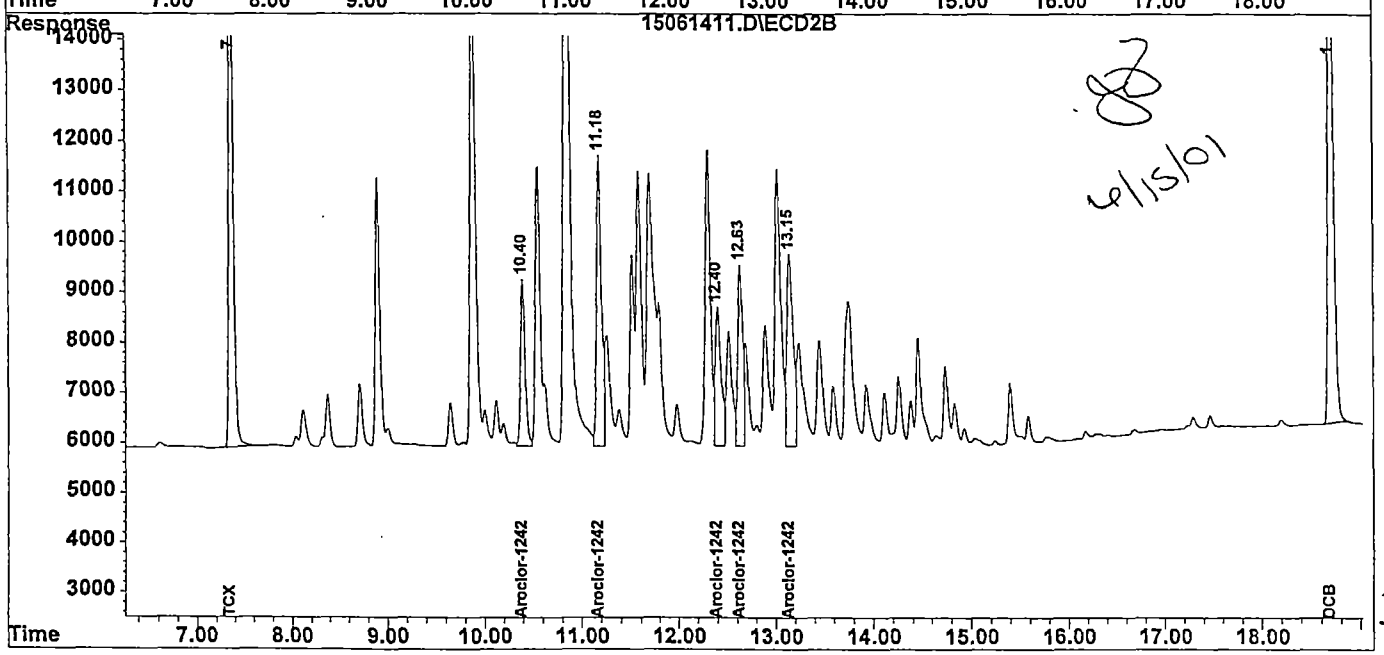
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061411.D\ECD1A.CH Vial: 11
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061411.D\ECD2B.CH
Acq On : 14 Jun 2001 21:48 Operator: DDC
Sample : AR1242L35C Inst : HP_15
Misc : 5-9-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:27 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061412.D\ECD1A.CH Vial: 12
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061412.D\ECD2B.CH
Acq On : 14 Jun 2001 22:11 Operator: DDC
Sample : AR1242L45C Inst : HP_15
Misc : 5-8-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:27 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	7.59	7.36	988426	882087	40.0	43.7	
22)	S DCB	18.29	18.70	967958	871636	41.2	45.6	
	Target Compounds:							
7)	L4 Aroclor-1242	8.42	10.40	415251	202266	711.8	784.0	
8)	L4 Aroclor-1242 {2}	9.70	11.18	278483	371961	724.9	887.2	
	L4 Aroclor-1242 {3}	10.64	12.40	710315	220563	653.5	916.0	#
1.	L4 Aroclor-1242 {4}	11.64	12.64	412715	238124	738.2	902.3	
11)	L4 Aroclor-1242 {5}	12.81	13.15	567320	329287	696.0	896.7	#
	Sum Aroclor-1242			2384084	1362201	3524.3	4386.2	
	Average Aroclor-1242					704.857	877.231	

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E3065
Signature Bruella M. Williams
Date 06/19/01

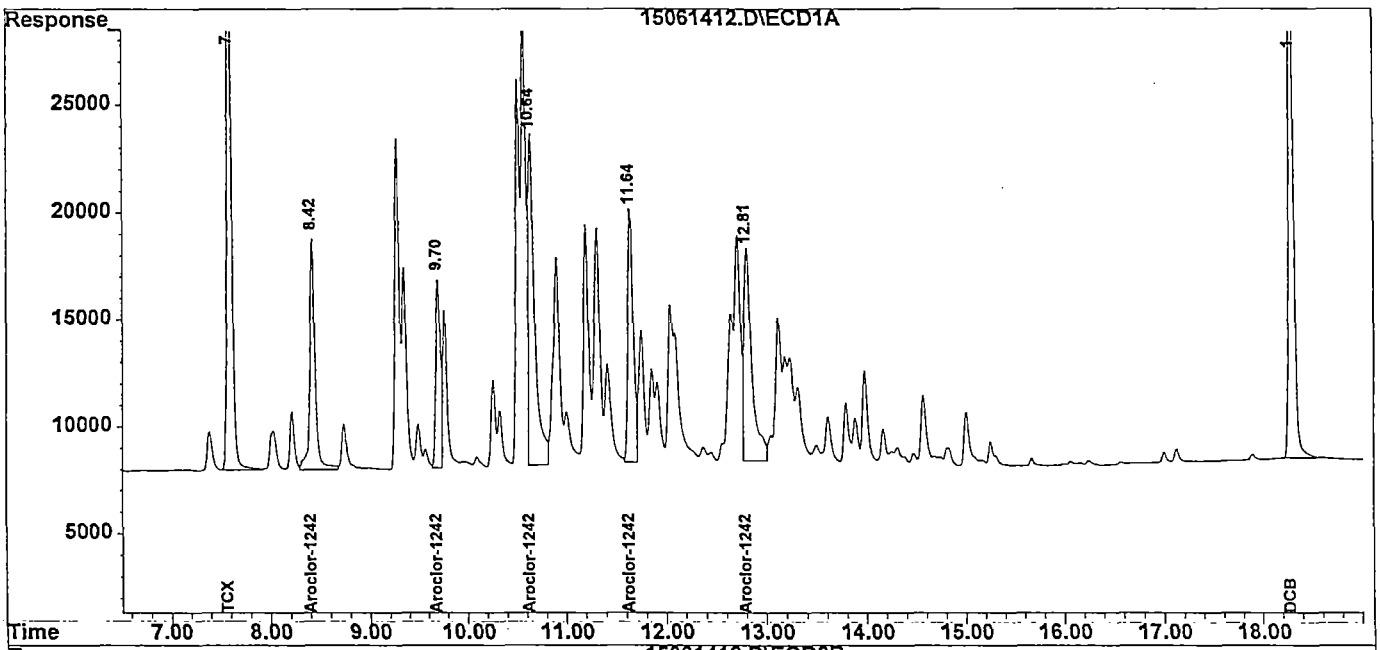
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

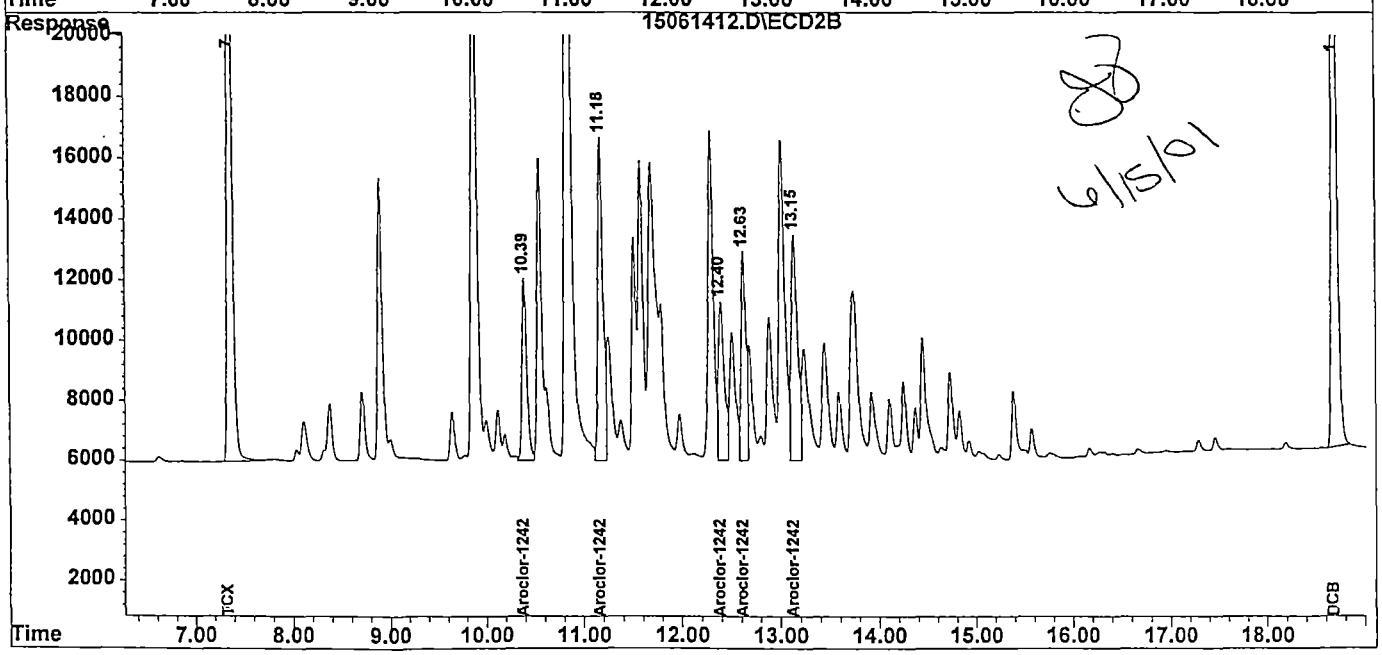
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061412.D\ECD1A.CH Vial: 12
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061412.D\ECD2B.CH
Acq On : 14 Jun 2001 22:11 Operator: DDC
Sample : AR1242L45C Inst : HP_15
Misc : 5-8-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:27 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061413.D\ECD1A.CH Vial: 13
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061413.D\ECD2B.CH
Acq On : 14 Jun 2001 22:34 Operator: DDC
Sample : AR1242L55C Inst : HP_15
Misc : 5-7-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:27 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.36	1975730	1848939	77.9 E	86.9 E
22)	S DCB	18.29	18.70	1717429	1544713	67.4 E	72.3 E
	Target Compounds:						
7)	L4 Aroclor-1242	8.42	10.40	768115	400930	1312.3	1483.4 E
8)	L4 Aroclor-1242 {2}	9.70	11.18	517249	724398	1329.8 E	1599.7 E
	L4 Aroclor-1242 {3}	10.64	12.40	1304120	435981	1235.5	1696.4 E#
1.	L4 Aroclor-1242 {4}	11.64	12.63	780967	477310	1372.8 E	1654.7 E
11)	L4 Aroclor-1242 {5}	12.81	13.15	1037847	668498	1277.4	1666.2 E#
	Sum Aroclor-1242			4408298	2707116	6527.8	8100.5
	Average Aroclor-1242					1305.570	1620.091

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG F3065
Signature Amelia M. Miller
Date 06/19/01
COC

160

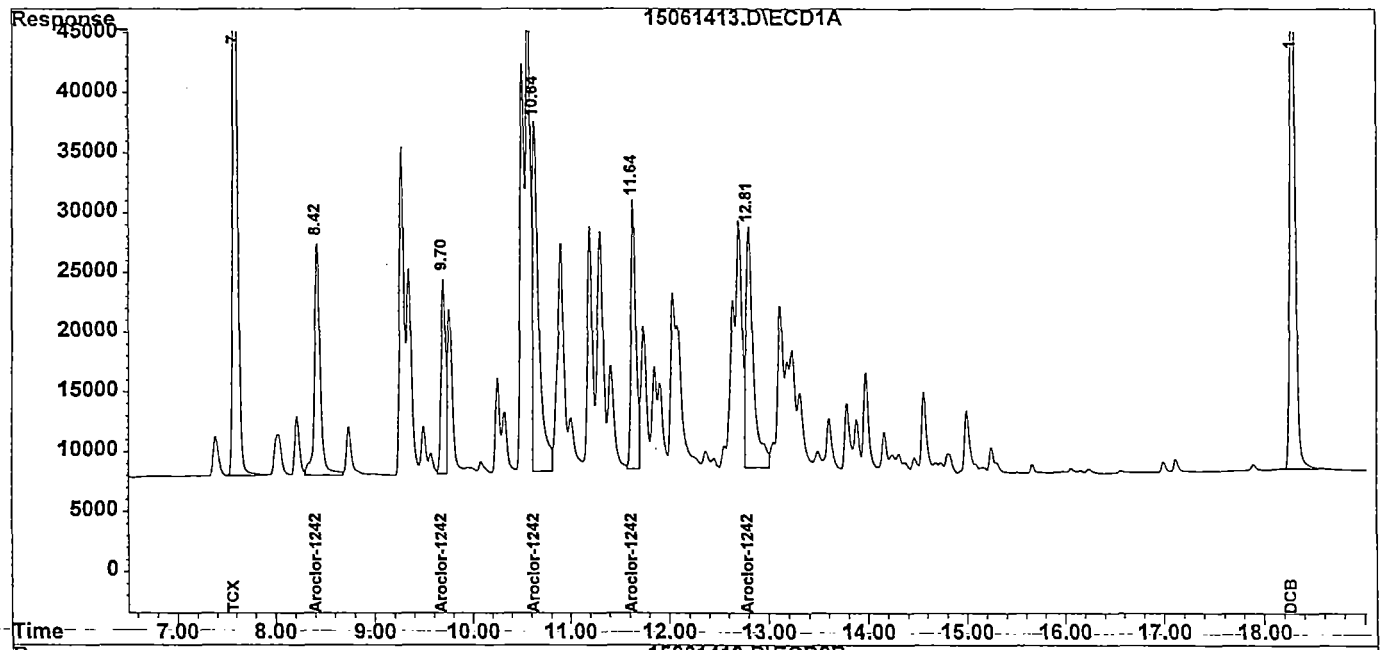
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

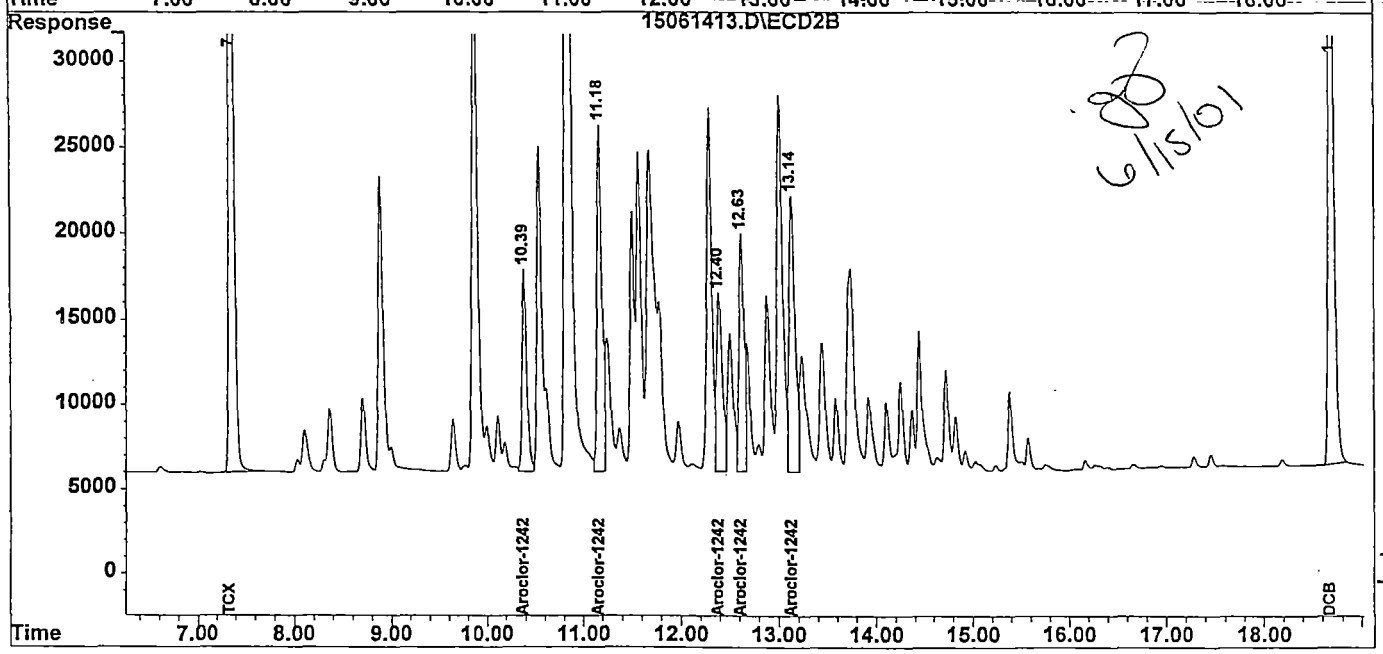
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061413.D\ECD1A.CH Vial: 13
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061413.D\ECD2B.CH
Acq On : 14 Jun 2001 22:34 Operator: DDC
Sample : AR1242L55C Inst : HP_15
Misc : 5-7-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:27 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





6/15/01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061414.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061414.D\ECD2B.CH
Acq On : 14 Jun 2001 22:57 Operator: DDC
Sample : AR1248L35C Inst : HP_15
Misc : 5-424-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:40 2001 Quant Results File: XPCBF14.RES
Multi Time: Jun 15 8:40 2001 Quant Results File: xspcbf14.RES

Pesticide Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001

Multi-Component Method : f:\hpchem\hp\15\data\06_14_01\xspcbf14.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	7.59	7.36	456902	401121	18.2	17.3	
22)	S DCB	18.29	18.70	479601	433798	18.5	18.3	
	Target Compounds:							
	Multi-Component Compounds:							
14)	L5 Aroclor-1248	9.28	9.88	166254	208381	497.5	517.1	
15)	L5 Aroclor-1248 {2}	10.52	11.58	249357	343083	739.1	620.5	
16)	L5 Aroclor-1248 {3}	11.41	12.52	185532	125805	325.2	591.7	#
17)	L5 Aroclor-1248 {4}	11.75	13.25	199244	227804	435.3	520.0	
18)	L5 Aroclor-1248 {5}	13.19f	13.59	367814	89737	420.0	786.4	#
	Sum Aroclor-1248			1168202	994810	2417.1	3035.6	
	Average Aroclor-1248					483.416	607.123	

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Signature Arnelda M. Williams
Date 06/19/01

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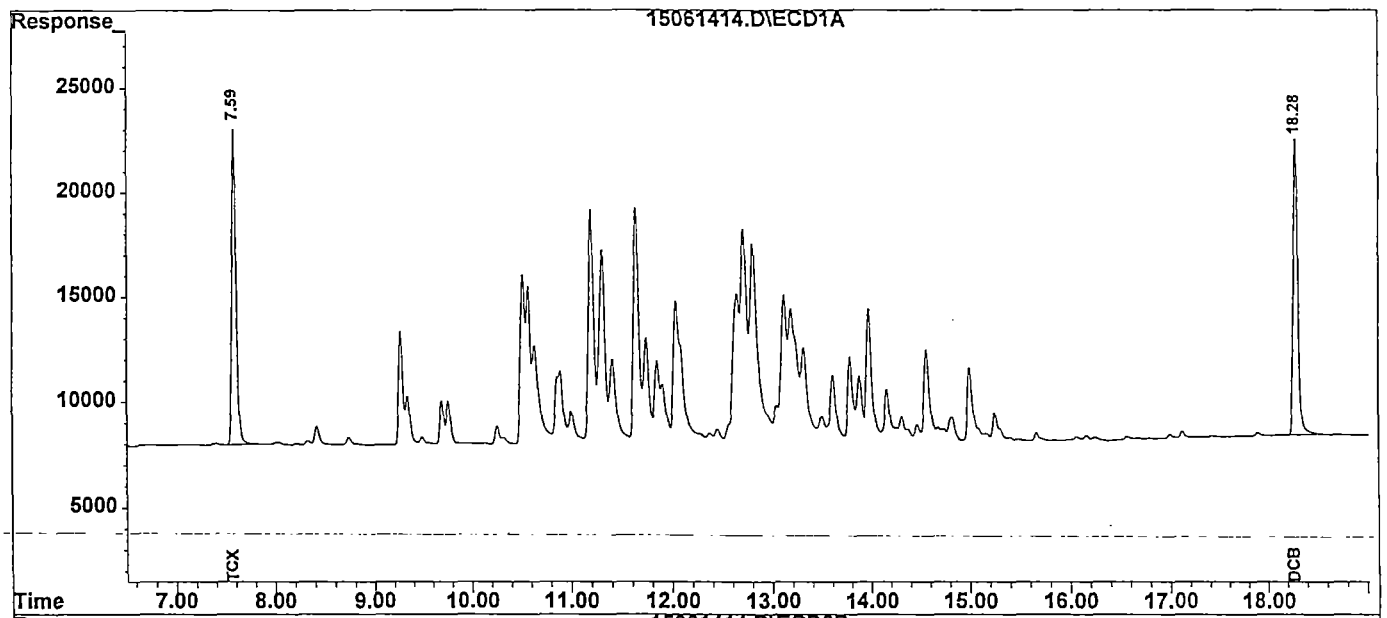
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

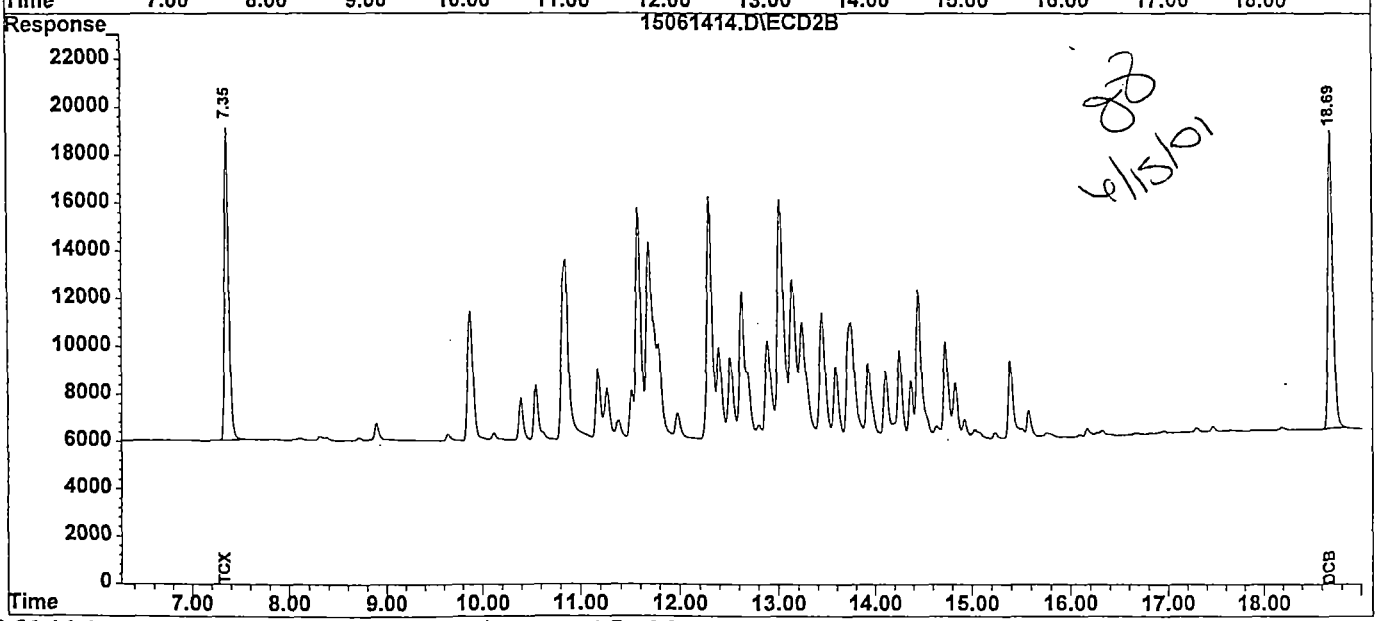
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061414.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061414.D\ECD2B.CH
Acq On : 14 Jun 2001 22:57 Operator: DDC
Sample : AR1248L35C Inst : HP_15
Misc : 5-424-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:40 2001 Quant Results File: XPCBF14.RES
Quant Time: Jun 15 8:40 2001 Quant Results File: xspcbf14.RES

Pesticide Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001

Multi-Component Method : f:\hpchem\hp\15\data\06_14_01\xspcbf14.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B





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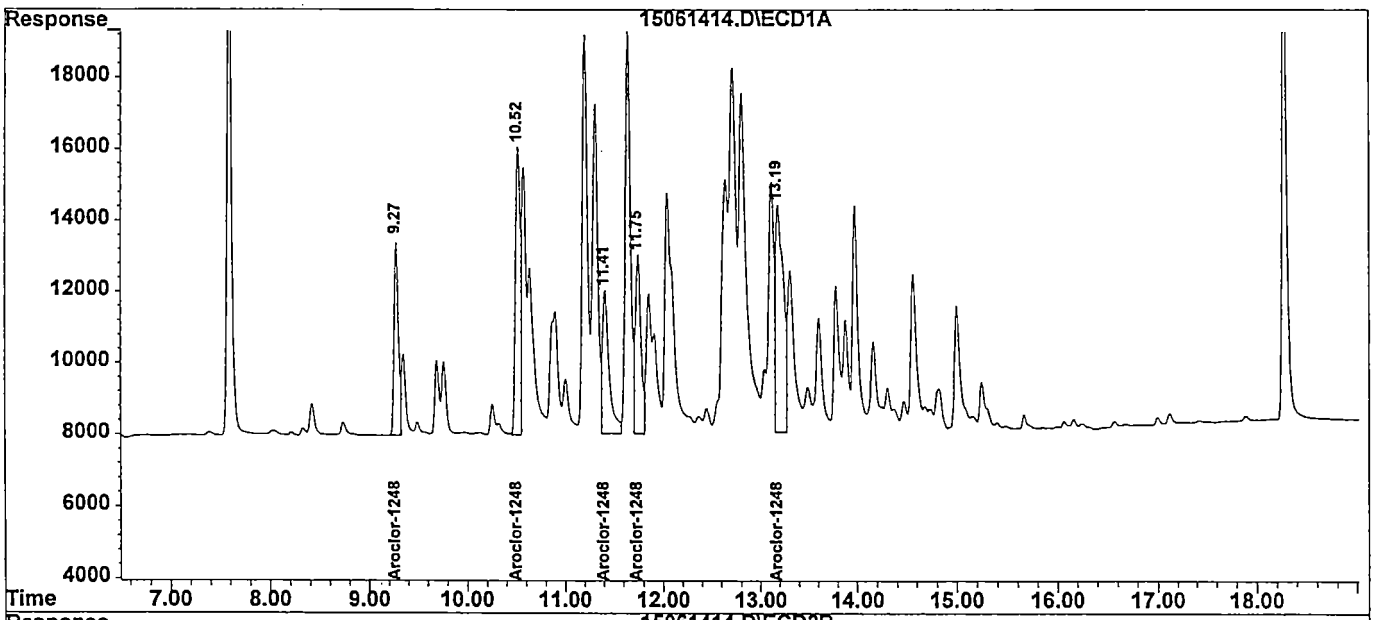
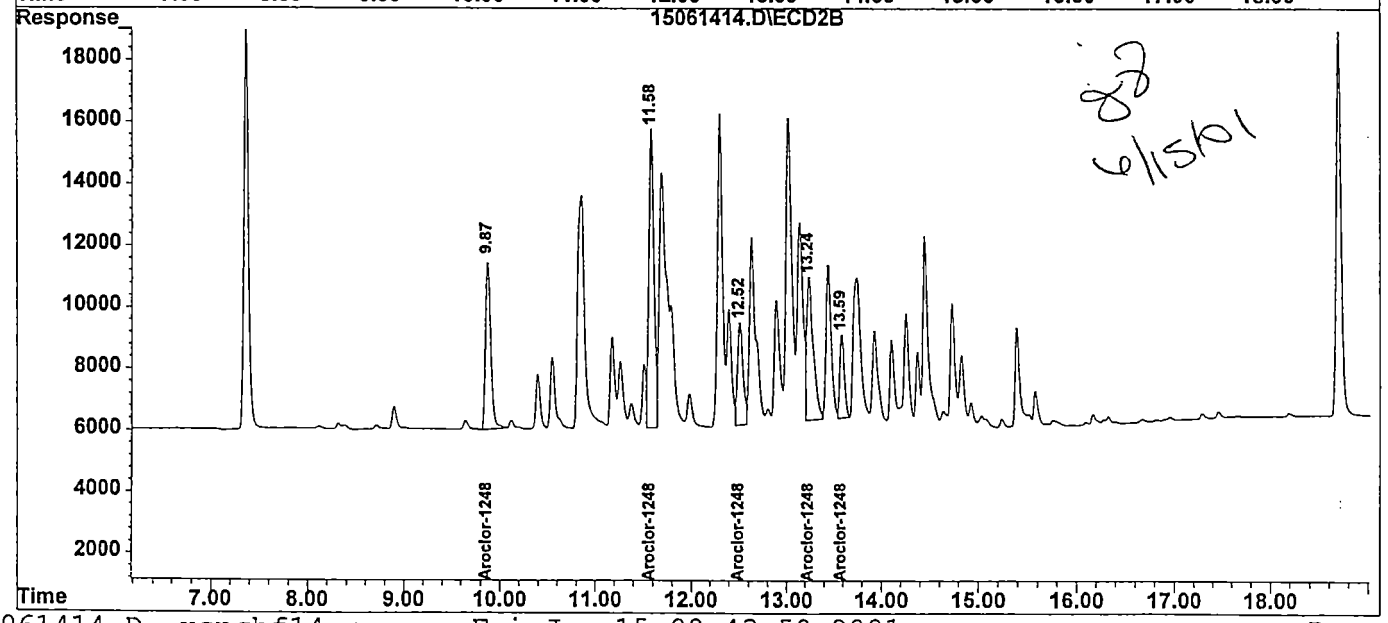
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061414.D\ECD1A.CH Vial: 14
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061414.D\ECD2B.CH
Acq On : 14 Jun 2001 22:57 Operator: DDC
Sample : AR1248L35C Inst : HP_15
Misc : 5-424-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:40 2001 Quant Results File: xspcbf14.RES
Quant Time: Jun 15 8:40 2001 Quant Results File: xspcbf14.RES

Pesticide Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-ICAL Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001

Multi-Component Method : f:\hpchem\hp\15\data\06_14_01\xspcbf14.m
Title : PCB/TOXAPHENE
Last Update : Fri May 18 09:02:00 2001
Volume Inj. : 0.5uL
Signal #1 Phase : DB-MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 Signal #2 Info : .32
Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B





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Response Factor Report HP_15

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

Calibration Files
L1 =15061415.D L2 =15061416.D L3 =15061417.D
L4 =15061418.D L5 =15061419.D

	Compound	L1	L2	L3	L4	L5	Avg	%RSD
12)	Aroclor-1254	1.4	1.2	1.2	1.0	1.0	1.2 E3	13.54
13)	Aroclor-1254 {2}	852.7	790.9	770.1	677.3	619.2	742.0	12.55
14)	Aroclor-1254 {3}	1.1	1.1	1.1	1.0	0.9	1.0 E3	7.82
15)	Aroclor-1254 {4}	1.0	1.0	1.0	0.9	0.8	0.9 E3	10.60
16)	Aroclor-1254 {5}	811.8	756.0	796.8	768.7	757.6	778.2	3.20

Signal #2 Calibration Files
L1 =15061415.D L2 =15061416.D L3 =15061417.D
L4 =15061418.D L5 =15061419.D

	Compound	L1	L2	L3	L4	L5	Avg	%RSD
35)	Aroclor-1254 #2	393.4	384.0	360.0	337.5	332.9	361.6	7.48
36)	Aroclor-1254 {2} #2	470.2	462.8	490.7	474.1	478.2	475.2	2.17
37)	Aroclor-1254 {3} #2	530.2	520.9	542.0	507.1	492.3	518.5	3.75
38)	Aroclor-1254 {4} #2	794.3	731.3	766.5	720.7	687.5	740.1	5.60
39)	Aroclor-1254 {5} #2	925.6	871.1	934.8	917.5	925.4	914.9	2.76

(#) = Out of Range

XPCBF14.M Fri Jun 15 08:31:05 2001

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E3065
Signature [signature]
Date 06/19/01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061415.D\ECD1A.CH Vial: 15
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061415.D\ECD2B.CH
Acq On : 14 Jun 2001 23:21 Operator: DDC
Sample : AR1254L15C Inst : HP_15
Misc : 5-6-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:30 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	7.59	7.36	139309	117132	5.289	5.210	
22)	S DCB	18.29	18.70	132238	114875	4.911	4.990	
	Target Compounds:							
12)	L6 Aroclor-1254	12.63	12.31	135419	39342	116.8	158.0	#
13)	L6 Aroclor-1254 {2}	13.32f	13.03f	85268	47021	115.9	172.1	#
1	L6 Aroclor-1254 {3}	13.79f	13.94	113016	53024	144.2	155.1	
15)	L6 Aroclor-1254 {4}	14.32	14.93	104271	79434	129.4	137.7	
16)	L6 Aroclor-1254 {5}	15.00	15.40	81180	92558	157.5	196.5	
	Sum Aroclor-1254			519155	311378	663.8	819.3	
	Average Aroclor-1254					132.766	163.869	

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CSF 29294 SDG E3055
Signature Pamela M. Williams
Date 06/19/01

166

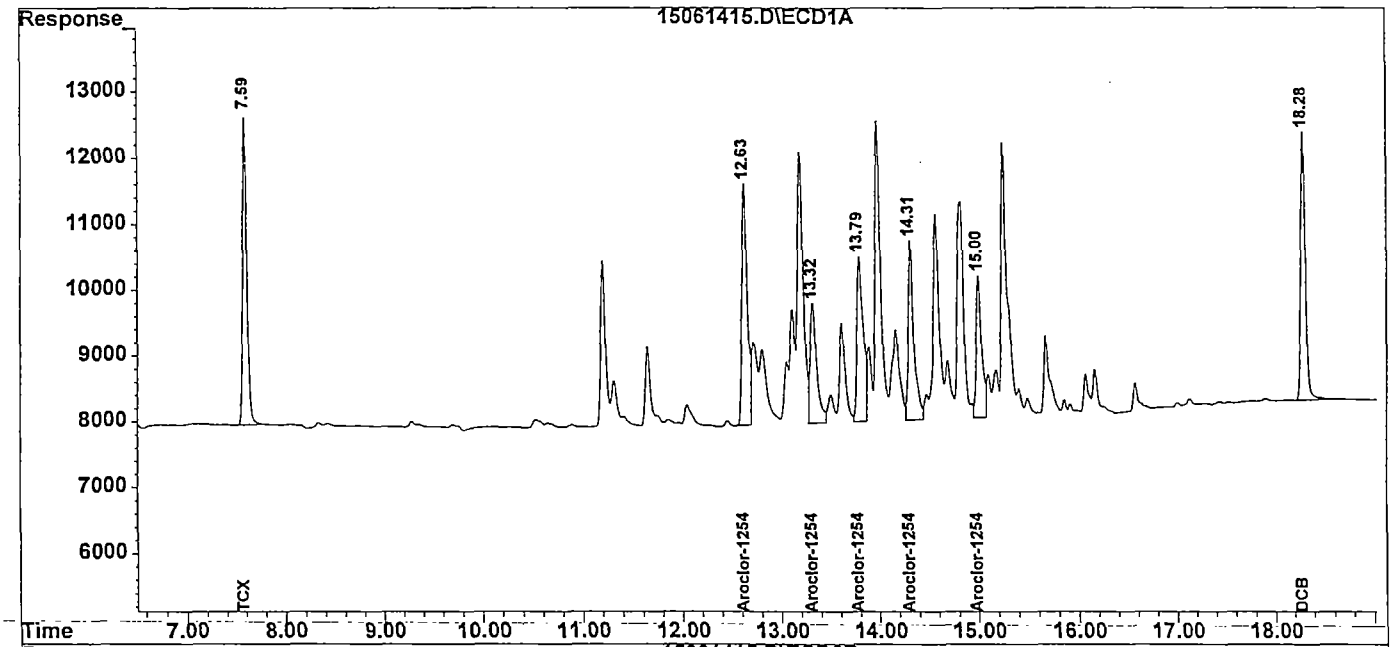
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

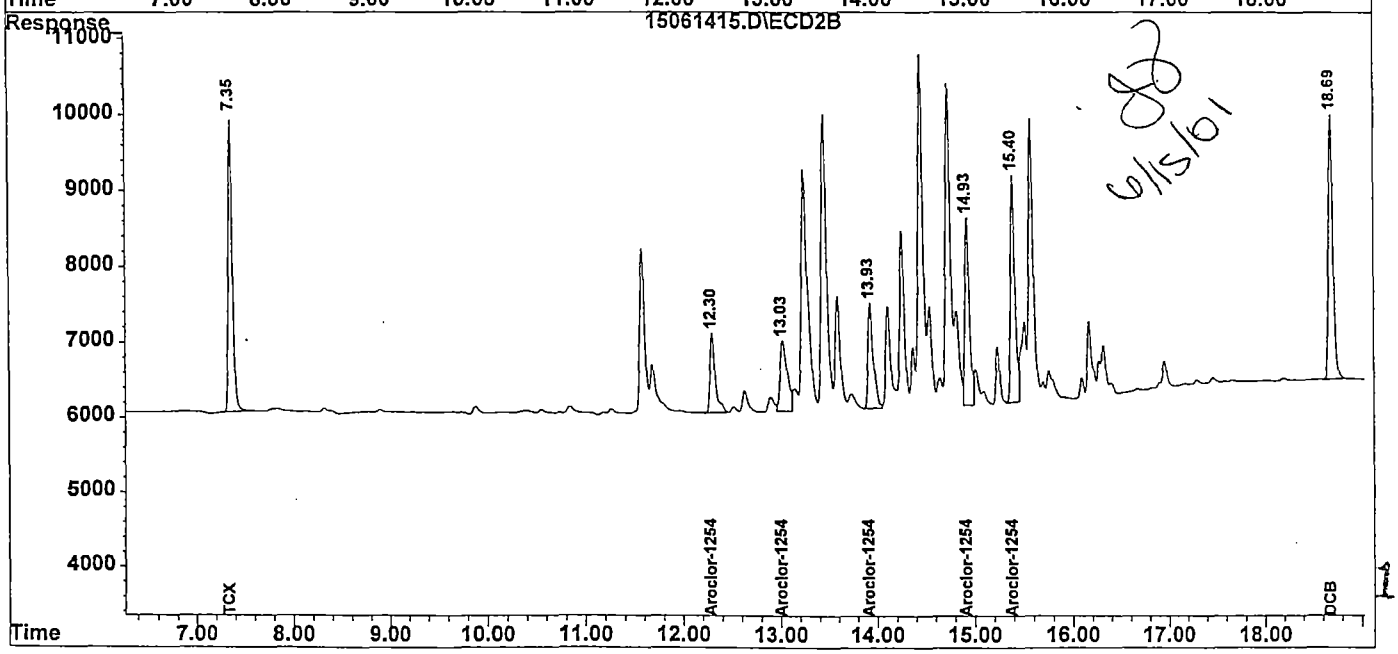
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061415.D\ECD1A.CH Vial: 15
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061415.D\ECD2B.CH
Acq On : 14 Jun 2001 23:21 Operator: DDC
Sample : AR1254L15C Inst : HP_15
Misc : 5-6-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:30 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061416.D\ECD1A.CH Vial: 16
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061416.D\ECD2B.CH
Acq On : 14 Jun 2001 23:44 Operator: DDC
Sample : AR1254L25C Inst : HP_15
Misc : 5-5-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:30 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	7.59	7.36	271921	234796	10.3	10.2	
22)	S DCB	18.29	18.70	219219	195149	8.390	8.596	
	Target Compounds:							
12)	L6 Aroclor-1254	12.63	12.31	248878	76809	204.6	267.7	#
13)	L6 Aroclor-1254 {2}	13.32	13.03	158177	92568	205.6	283.6	#
1	L6 Aroclor-1254 {3}	13.79	13.94	211554	104179	237.5	266.4	
1.,	L6 Aroclor-1254 {4}	14.32	14.93	192849	146259	231.0	229.8	
16)	L6 Aroclor-1254 {5}	15.00	15.40	151199	174212	277.9	308.3	
	Sum Aroclor-1254			962657	594028	1156.6	1355.8	
Average Aroclor-1254						231.318	271.167	

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CSF 29294 SDG E3065
Signature Arnelda M. Williams
Date 06/19/01

168

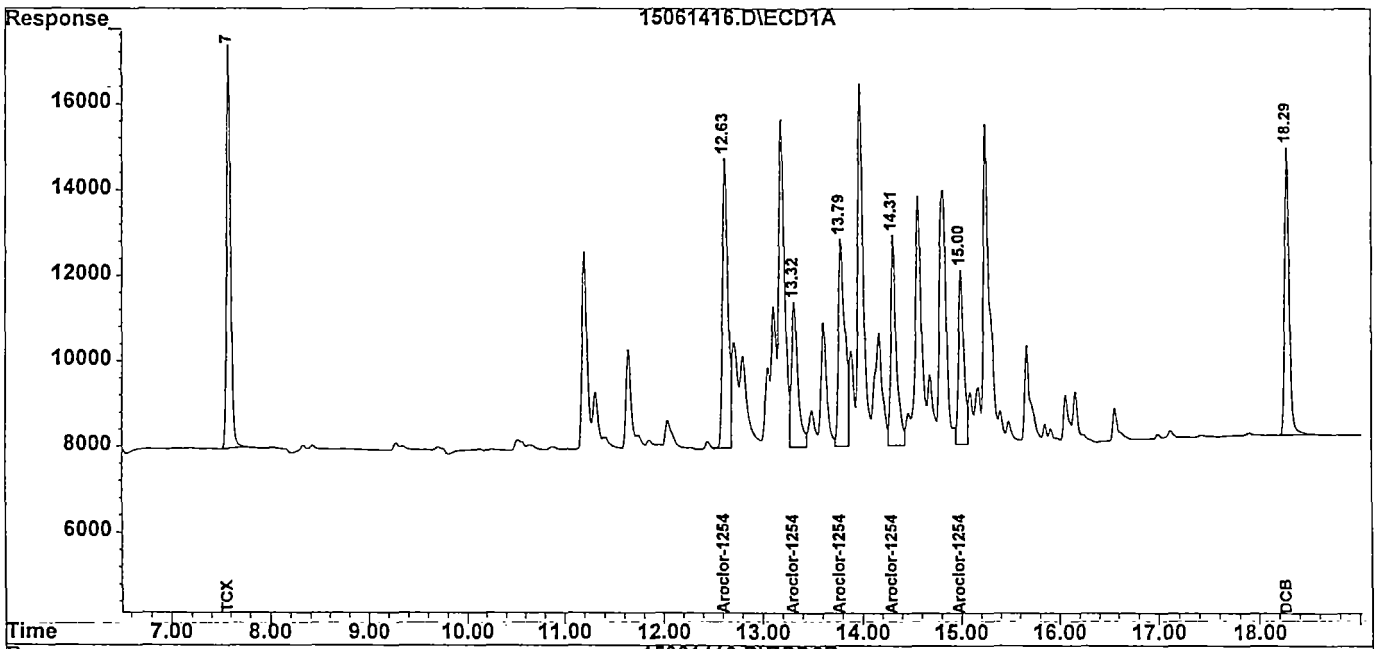
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

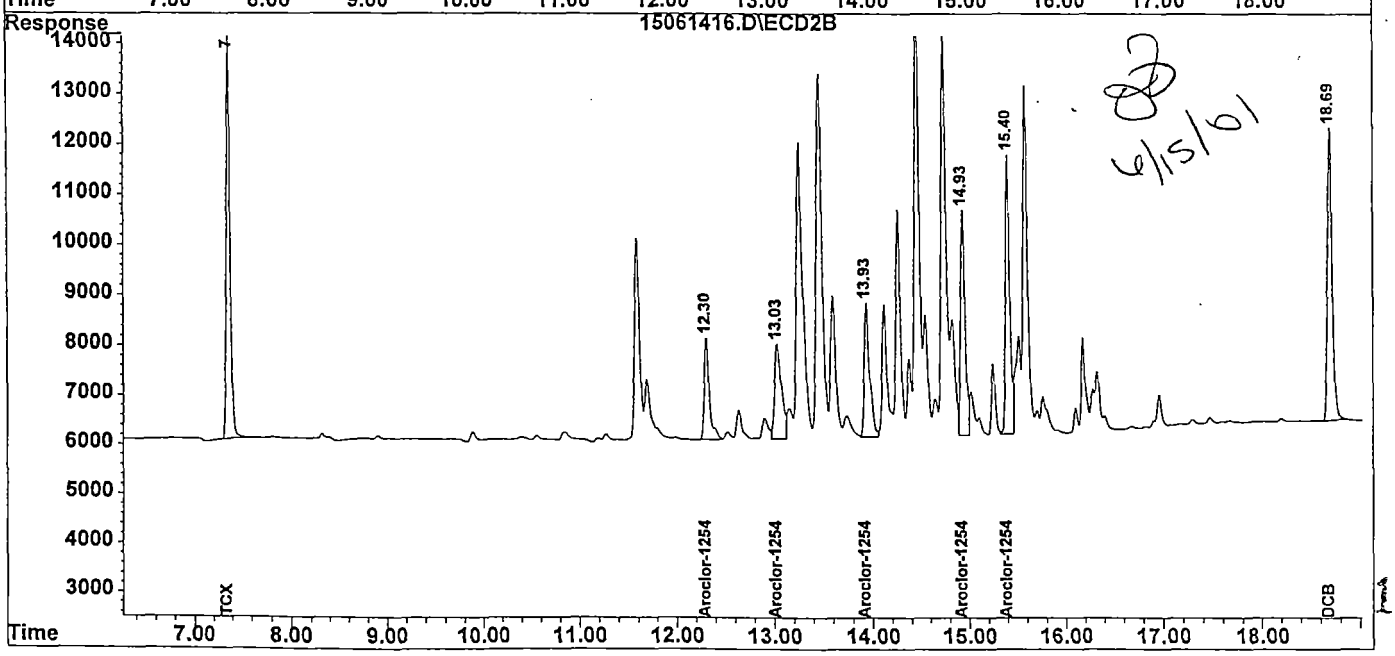
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061416.D\ECD1A.CH Vial: 16
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061416.D\ECD2B.CH
Acq On : 14 Jun 2001 23:44 Operator: DDC
Sample : AR1254L25C Inst : HP_15
Misc : 5-5-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:30 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061417.D\ECD1A.CH Vial: 17
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061417.D\ECD2B.CH
Acq On : 15 Jun 2001 00:07 Operator: DDC
Sample : AR1254L35C Inst : HP_15
Misc : 5-4-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:30 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	7.59	7.35	542897	491926	20.8	21.6	
22)	S DCB	18.29	18.70	508248	461624	20.9	21.6	
	Target Compounds:							
12)	L6 Aroclor-1254	12.63	12.30	478868	143996	384.5	454.5	
13)	L6 Aroclor-1254 {2}	13.32	13.02	308033	196265	394.7	530.4	#
1	L6 Aroclor-1254 {3}	13.79	13.94	427588	216792	453.2	500.5	
1[illegible],	L6 Aroclor-1254 {4}	14.31	14.93	385577	306616	445.7	454.8	
16)	L6 Aroclor-1254 {5}	15.00	15.40	318717	373932	529.7	574.6	
	Sum Aroclor-1254			1918784	1237600	2207.7	2514.9	
	Average Aroclor-1254					441.532	502.976	

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CSF 29294 SDG E3065
Signature Amelia M. Williams
Date 06/19/01

170

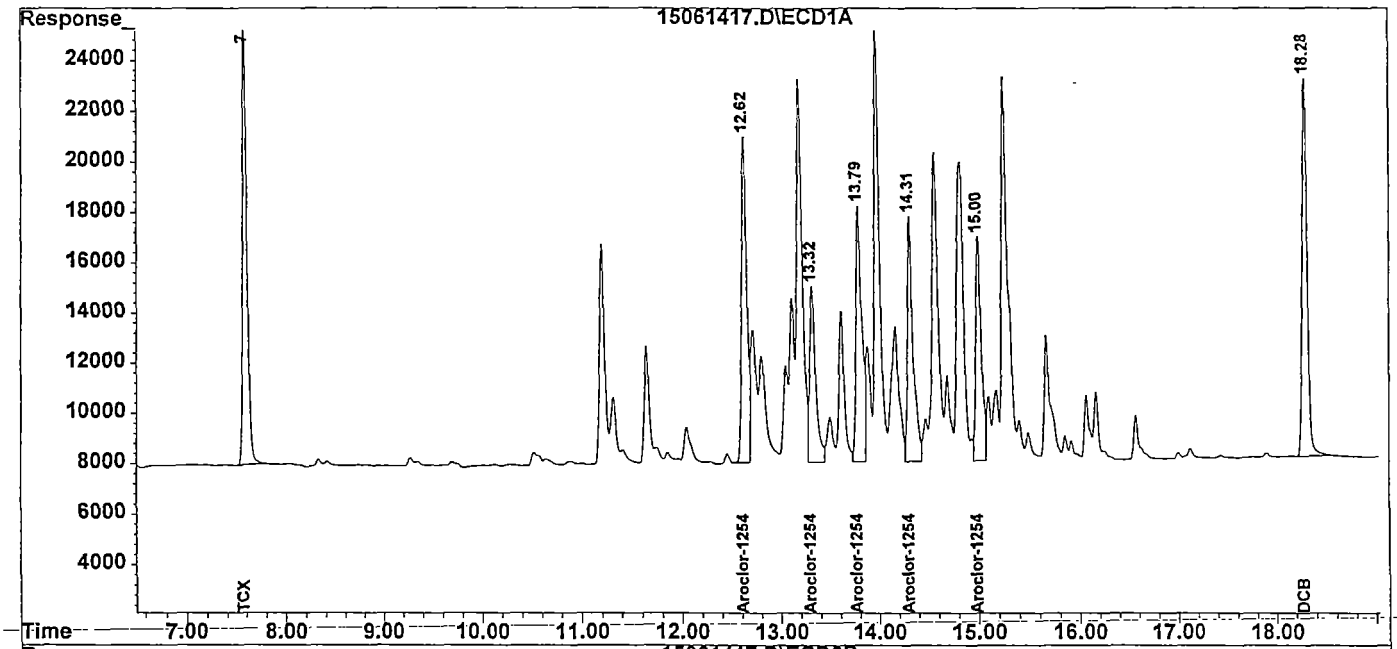
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

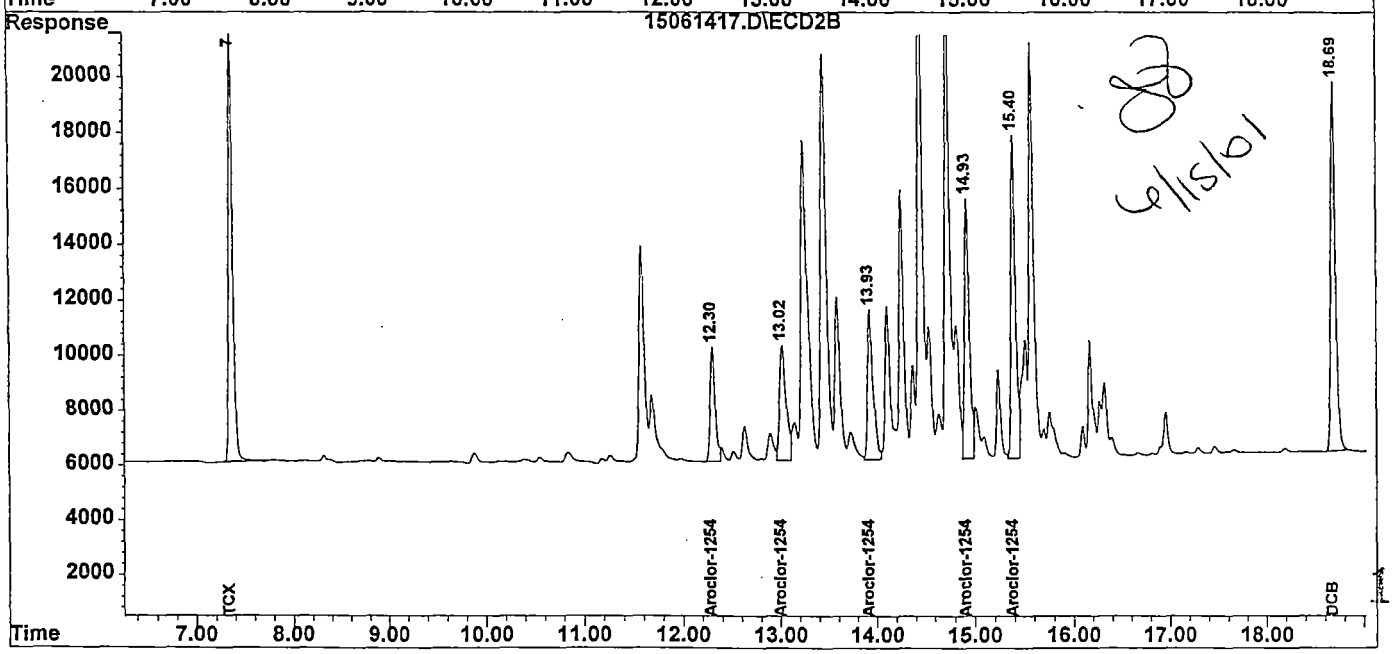
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061417.D\ECD1A.CH Vial: 17
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061417.D\ECD2B.CH
Acq On : 15 Jun 2001 00:07 Operator: DDC
Sample : AR1254L35C Inst : HP_15
Misc : 5-4-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:30 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061418.D\ECD1A.CH Vial: 18
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061418.D\ECD2B.CH
Acq On : 15 Jun 2001 00:30 Operator: DDC
Sample : AR1254L45C Inst : HP_15
Misc : 5-3-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:30 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	7.59	7.36	997664	940220	37.9	40.3	
22)	S DCB	18.28	18.69	994683	918949	41.6	43.1	
	Target Compounds:							
12)	L6 Aroclor-1254	12.63	12.31	837707	269967	676.6	793.7	
13)	L6 Aroclor-1254 {2}	13.32	13.02	541860	379310	689.4	912.7	#
1	L6 Aroclor-1254 {3}	13.79	13.93	778847	405718	815.2	857.1	
15)	L6 Aroclor-1254 {4}	14.31	14.93	689543	576565	765.4	804.5	
16)	L6 Aroclor-1254 {5}	15.00	15.40	614982	733975	917.0	980.3	
	Sum Aroclor-1254			3462939	2365533	3863.5	4348.3	
	Average Aroclor-1254					772.693	869.654	

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CSF 29294 SDG E3065
Signature Anella M. Williams
Date 06/19/01

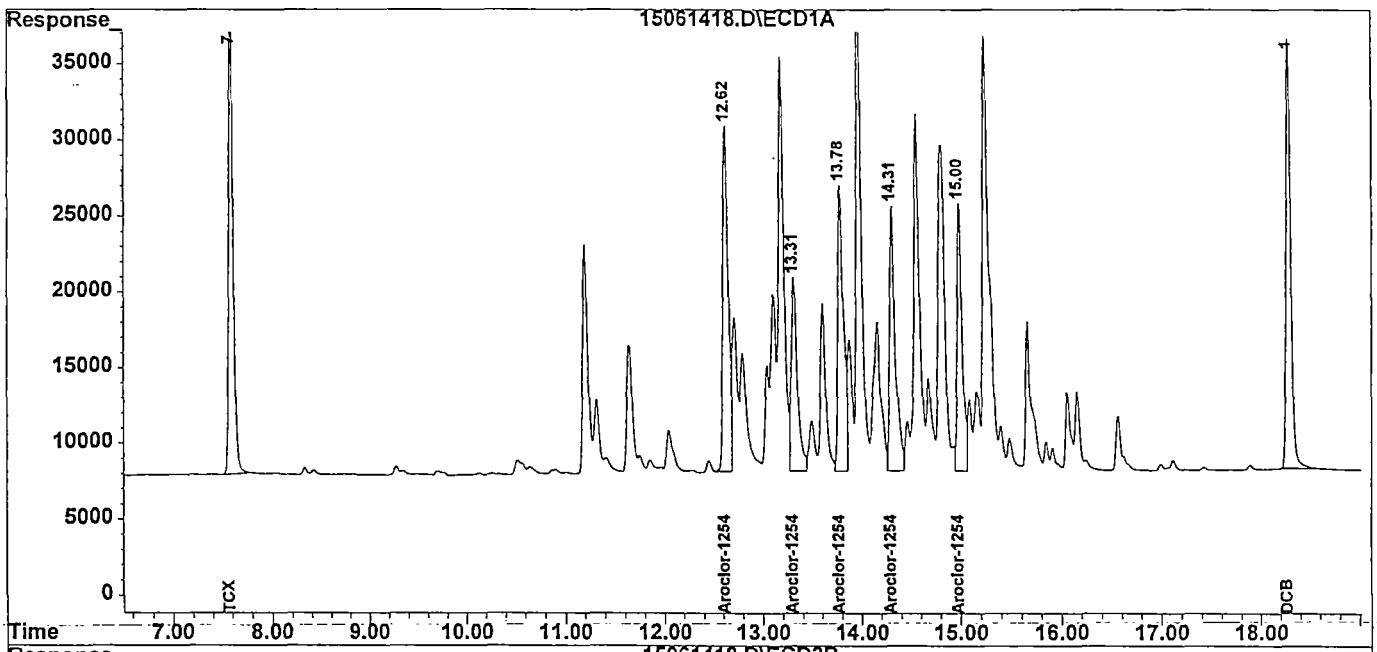
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

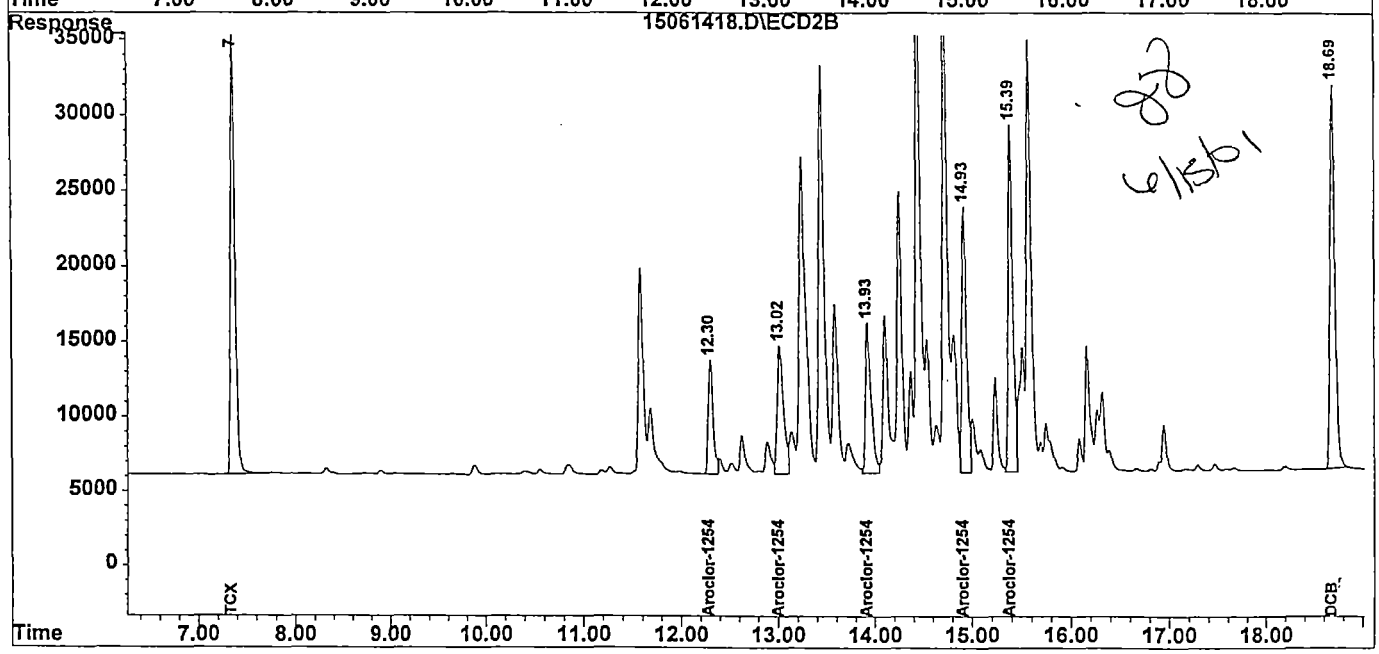
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061418.D\ECD1A.CH Vial: 18
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061418.D\ECD2B.CH
Acq On : 15 Jun 2001 00:30 Operator: DDC
Sample : AR1254L45C Inst : HP_15
Misc : 5-3-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:30 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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6/15/01

173

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061419.D\ECD1A.CH Vial: 19
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061419.D\ECD2B.CH
Acq On : 15 Jun 2001 00:53 Operator: DDC
Sample : AR1254L55C Inst : HP_15
Misc : 5-2-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:30 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	1990139	1960813	75.5 E	83.0 E
22)	S DCB	18.28	18.69	1818831	1709047	75.7 E	79.2 E
	Target Compounds:						
12)	L6 Aroclor-1254	12.62	12.30	1536736	532711	1278.9	1513.6 E
13)	L6 Aroclor-1254 {2}	13.31	13.02	990712	765080	1290.0	1733.2 E#
[illegible]	L6 Aroclor-1254 {3}	13.78	13.93	1483926	787634	1491.5 E	1583.0 E
1[illegible]	L6 Aroclor-1254 {4}	14.31	14.93	1268014	1099920	1383.4 E	1495.6 E
16)	L6 Aroclor-1254 {5}	15.00	15.39	1212155	1480623	1668.1 E	1774.5 E
	Sum Aroclor-1254			6491544	4665969	7111.8	8099.9
	Average Aroclor-1254					1422.358	1619.977

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29274 SDG E3065
Signature Emilia M. Williams
Date 06/19/01

174

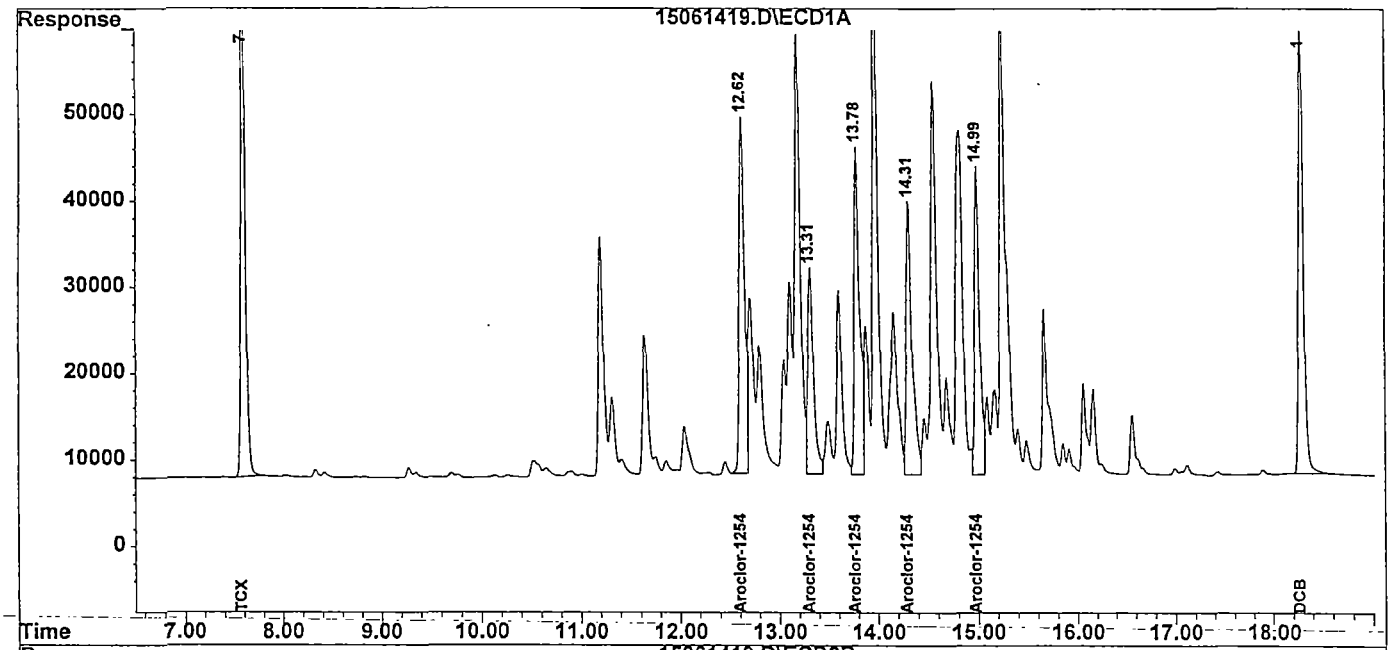
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

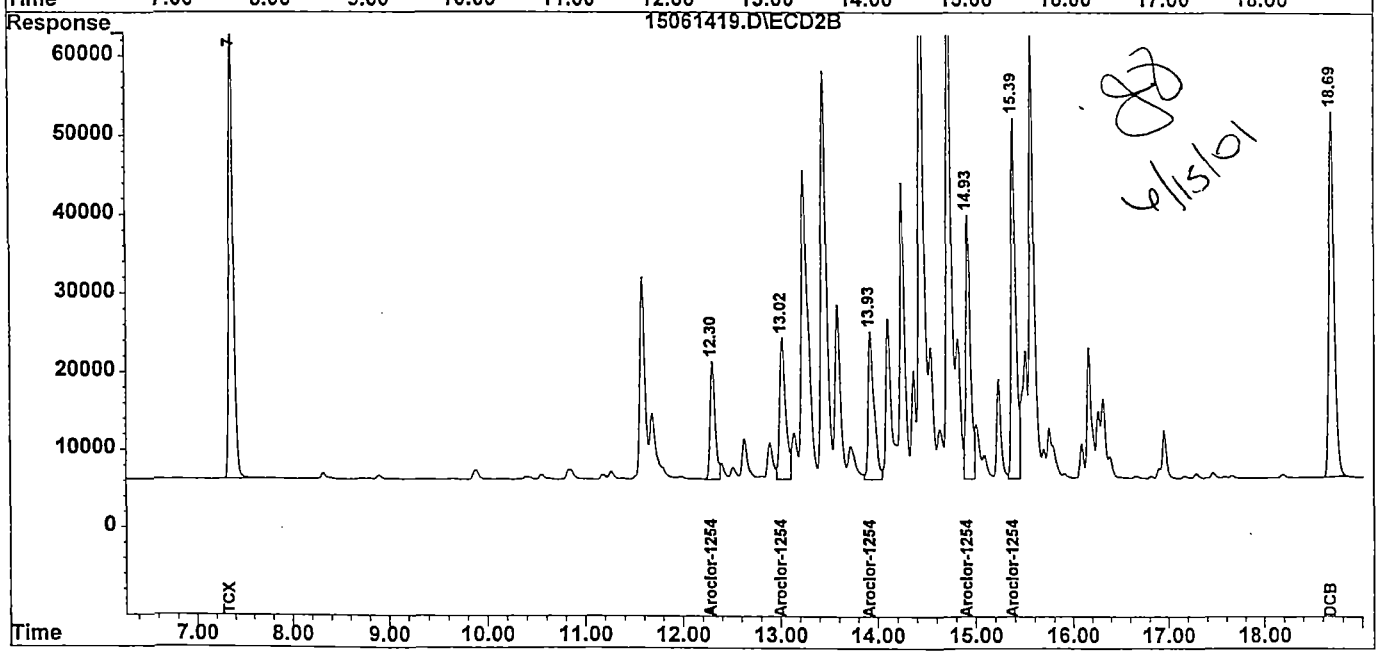
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061419.D\ECD1A.CH Vial: 19
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061419.D\ECD2B.CH
Acq On : 15 Jun 2001 00:53 Operator: DDC
Sample : AR1254L55C Inst : HP_15
Misc : 5-2-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:30 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





6/15/01

175

Response Factor Report HP_15

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
ıst Update : Thu Jun 07 08:46:05 2001
ɔsponse via : Initial Calibration

Calibration Files
L1 =15061420.D L2 =15061421.D L3 =15061422.D
L4 =15061423.D L5 =15061424.D

	Compound	L1	L2	L3	L4	L5	Avg	%RSD
1)	TCX	25.5	24.9	24.0	27.0	24.0	25.1 E3	4.88
2)	Aroclor-1016	738.4	706.5	645.2	660.7	550.4	660.3	10.85
3)	Aroclor-1016 {2}	990.9	914.5	820.4	818.4	664.4	841.7	14.55
4)	Aroclor-1016 {3}	1.2	1.1	1.1	1.2	1.0	1.1 E3	5.47
5)	Aroclor-1016 {4}	812.7	769.0	705.0	716.9	602.2	721.1	10.98
6)	Aroclor-1016 {5}	741.1	723.1	682.7	719.8	619.2	697.2	6.95
17)	Aroclor-1260	1.9	1.7	1.6	1.6	1.4	1.6 E3	11.67
18)	Aroclor-1260 {2}	2.5	2.3	2.1	2.2	1.9	2.2 E3	9.28
19)	Aroclor-1260 {3}	2.2	2.1	2.0	2.1	1.9	2.1 E3	5.48
20)	Aroclor-1260 {4}	1.2	1.2	1.2	1.2	1.1	1.2 E3	4.05
21)	Aroclor-1260 {5}	2.5	2.3	2.4	2.4	2.2	2.4 E3	3.80
22)	DCB	27.6	25.4	26.1	26.2	24.3	25.9 E3	4.78

Signal #2 Calibration Files
L1 =15061420.D L2 =15061421.D L3 =15061422.D
L4 =15061423.D L5 =15061424.D

	Compound	L1	L2	L3	L4	L5	Avg	%RSD
24)	TCX #2	21.9	22.1	22.0	26.0	24.0	23.2 E3	7.67
25)	Aroclor-1016 #2	576.0	554.1	512.6	537.6	461.9	528.4	8.30
26)	Aroclor-1016 {2} #2	1.4	1.3	1.2	1.2	1.0	1.2 E3	11.24
27)	Aroclor-1016 {3} #2	2.0	2.0	1.9	2.2	2.0	2.0 E3	4.76
28)	Aroclor-1016 {4} #2	620.6	618.2	615.7	687.9	618.4	632.1	4.94
29)	Aroclor-1016 {5} #2	699.2	705.5	675.7	741.6	659.6	696.3	4.49
40)	Aroclor-1260 #2	894.7	856.9	826.7	902.1	819.8	860.0	4.39
41)	Aroclor-1260 {2} #2	1.6	1.5	1.4	1.5	1.3	1.4 E3	8.46
42)	Aroclor-1260 {3} #2	1.9	1.7	1.6	1.7	1.6	1.7 E3	6.74
43)	Aroclor-1260 {4} #2	1.0	1.0	0.9	1.0	0.9	1.0 E3	4.14
44)	Aroclor-1260 {5} #2	2.4	2.3	2.3	2.5	2.4	2.4 E3	4.05
45)	DCB #2	24.5	22.9	23.9	24.3	22.9	23.7 E3	3.24

(#) = Out of Range

XPCBF14.M Fri Jun 15 08:33:29 2001

COPY

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E3055
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Date 06/19/01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061420.D\ECD1A.CH Vial: 20
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061420.D\ECD2B.CH
Acq On : 15 Jun 2001 1:17 Operator: DDC
Sample : AR1660L15C Inst : HP_15
Misc : 5-31-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:32 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds:							
1)	S TCX	7.59	7.35	127373	109686	4.824	4.589	
22)	S DCB	18.29	18.70	138223	122544	5.694	5.575	
	Target Compounds:							
2)	L1 Aroclor-1016	8.42	8.89	73845	57601	131.8	137.4	
3)	L1 Aroclor-1016 {2}	9.28	9.88	99092	141026	153.0	137.0	
	L1 Aroclor-1016 {3}	10.58	10.86	118673	198778	170.8	141.4	
5)	L1 Aroclor-1016 {4}	11.20	11.18	81269	62058	149.0	177.2	
6)	L1 Aroclor-1016 {5}	11.64	12.30	74106	69923	143.8	169.6	
	Sum Aroclor-1016			446985	529387	748.4	762.6	
	Average Aroclor-1016					149.677	152.528	
17)	L7 Aroclor-1260	14.32	14.45	187415	89473	119.0	155.8	#
18)	L7 Aroclor-1260 {2}	14.81	14.73	245916	159179	156.1	121.3	
19)	L7 Aroclor-1260 {3}	15.26	14.93	223555	186187	154.3	154.4	
20)	L7 Aroclor-1260 {4}	15.72	16.10	120469	102336	112.3	148.2	#
21)	L7 Aroclor-1260 {5}	16.17	16.33	246032	240805	151.8	176.1	
	Sum Aroclor-1260			1023387	777980	693.6	755.9	
	Average Aroclor-1260					138.722	151.170	

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CSF 29294 SDG E3065
Signature Michelle M. Williams
Date 06/19/01

177

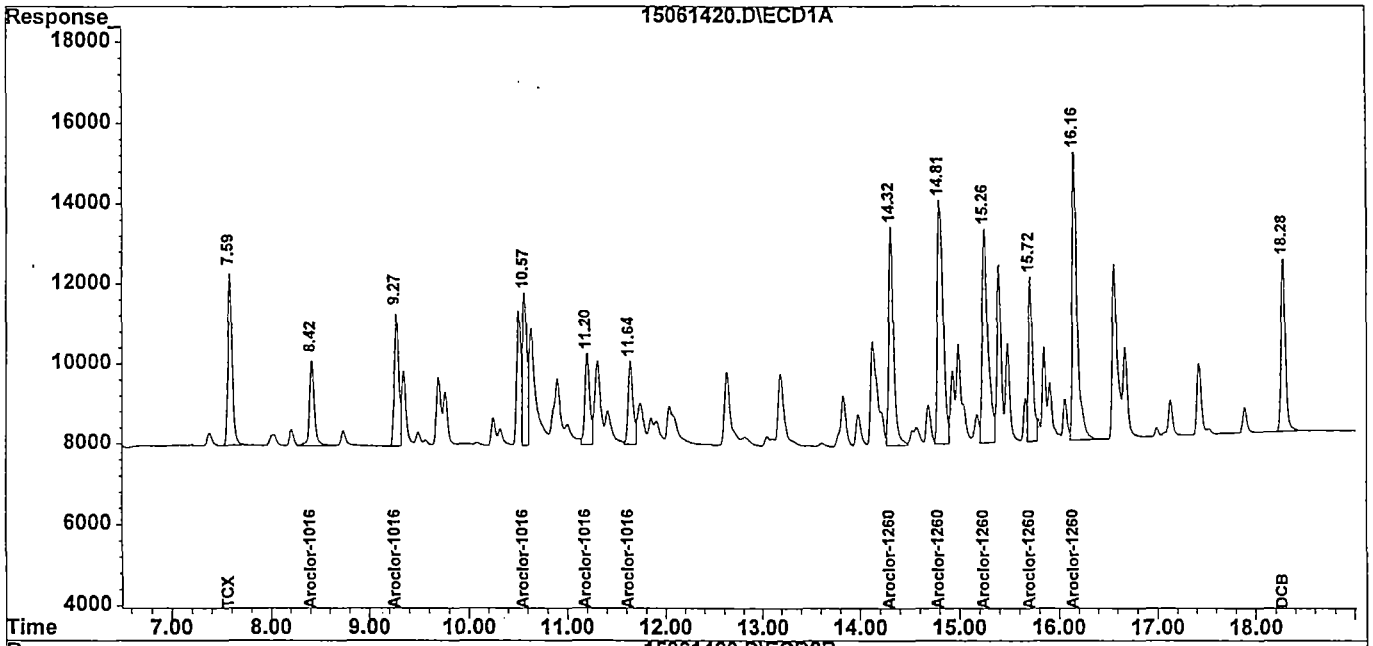
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

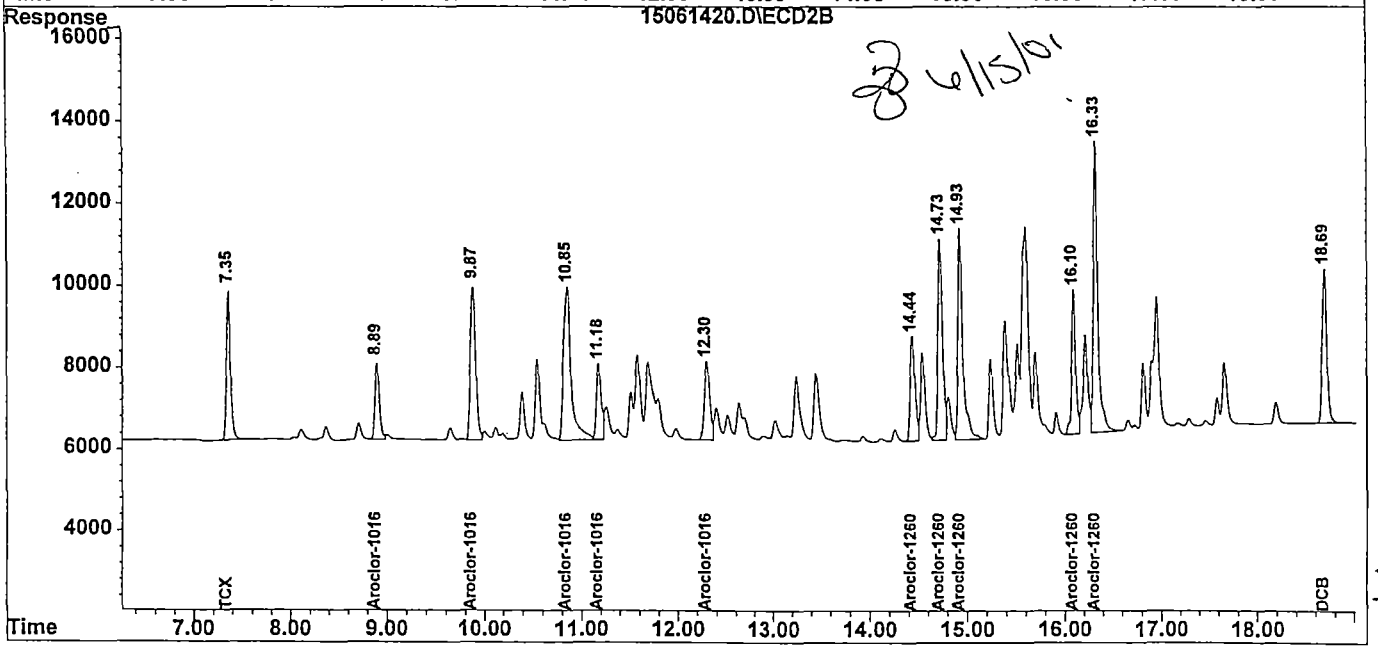
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061420.D\ECD1A.CH Vial: 20
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061420.D\ECD2B.CH
Acq On : 15 Jun 2001 1:17 Operator: DDC
Sample : AR1660L15C Inst : HP_15
Misc : 5-31-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:32 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061421.D\ECD1A.CH Vial: 21
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061421.D\ECD2B.CH
Acq On : 15 Jun 2001 1:40 Operator: DDC
Sample : AR1660L25C Inst : HP_15
Misc : 5-30-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:32 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	249261	220511	9.614	9.341
22)	S DCB	18.28	18.70	253676	228729	10.3	10.3
	Target Compounds:						
2)	L1 Aroclor-1016	8.42	8.89	141303	110826	238.6	242.0
3)	L1 Aroclor-1016 {2}	9.27	9.88	182904	263383	262.8	241.0
	L1 Aroclor-1016 {3}	10.58	10.86	227303	394197	287.3	255.2
	L1 Aroclor-1016 {4}	11.20	11.18	153791	123633	258.7	301.2
6)	L1 Aroclor-1016 {5}	11.64	12.30	144610	141099	257.0	296.2
	Sum Aroclor-1016			849911	1033137	1304.4	1335.7
	Average Aroclor-1016					260.879	267.136
17)	L7 Aroclor-1260	14.32	14.44	344530	171375	210.4	262.6
18)	L7 Aroclor-1260 {2}	14.81	14.73	453841	295837	255.9	213.4
19)	L7 Aroclor-1260 {3}	15.26	14.93	419567	342938	256.8	250.0
20)	L7 Aroclor-1260 {4}	15.72	16.10	241770	192183	216.3	250.0
21)	L7 Aroclor-1260 {5}	16.16	16.33	462396	460000	257.4	285.0
	Sum Aroclor-1260			1922103	1462332	1196.8	1261.0
	Average Aroclor-1260					239.359	252.197

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E3065
Signature Brenda M. Williams
Date 06/19/01

179

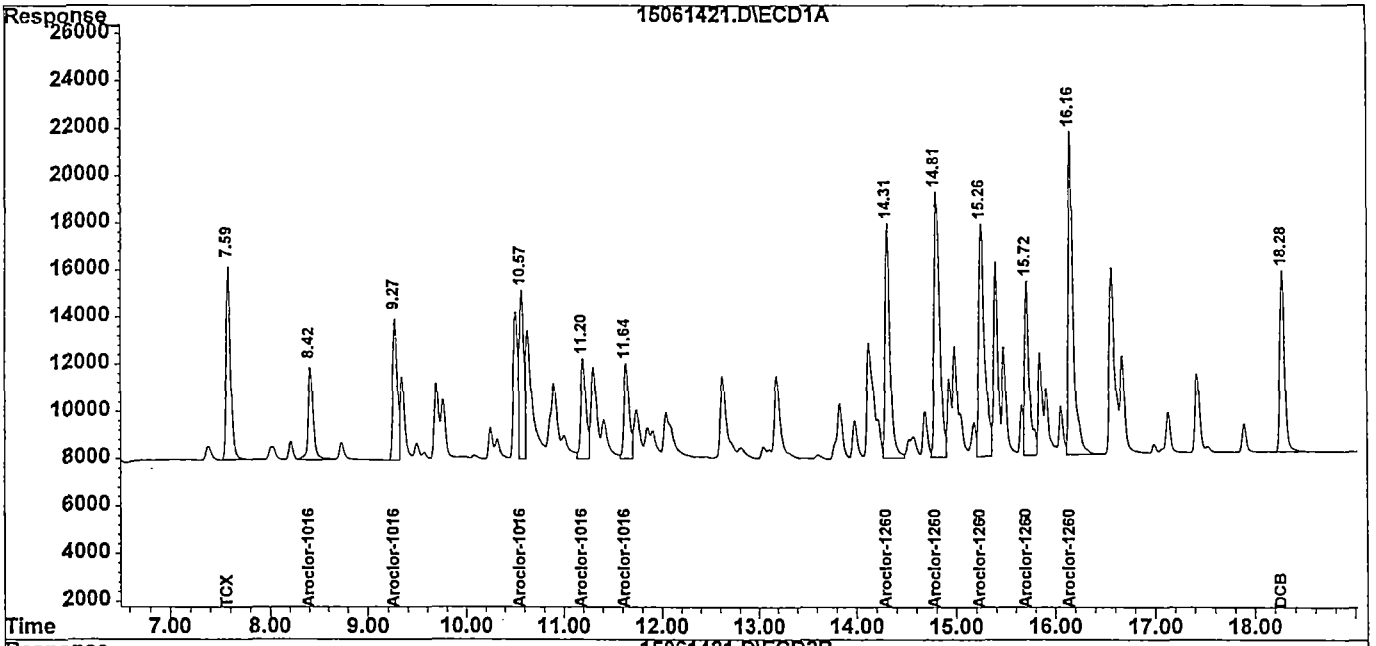
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

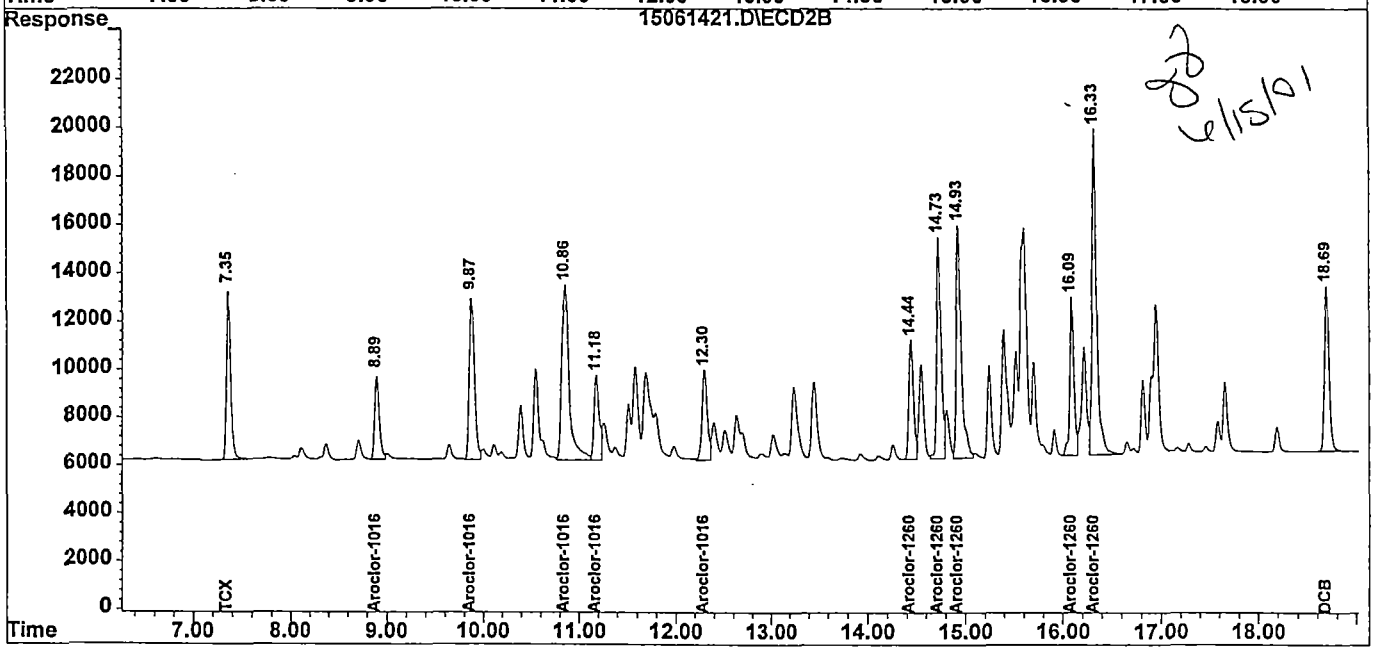
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061421.D\ECD1A.CH Vial: 21
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061421.D\ECD2B.CH
Acq On : 15 Jun 2001 1:40 Operator: DDC
Sample : AR1660L25C Inst : HP_15
Misc : 5-30-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:32 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061422.D\ECD1A.CH Vial: 22
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061422.D\ECD2B.CH
Acq On : 15 Jun 2001 2:03 Operator: DDC
Sample : AR1660L35V Inst : HP_15
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:32 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	479903	439200	18.8	18.8
22)	S DCB	18.28	18.69	522253	477829	20.7	20.8
	Target Compounds:						
2)	L1 Aroclor-1016	8.42	8.89	258095	205035	420.9	414.1
3)	L1 Aroclor-1016 {2}	9.28	9.88	328150	482066	444.1	422.1
	L1 Aroclor-1016 {3}	10.58	10.86	441174	767914	500.0	458.4
5)	L1 Aroclor-1016 {4}	11.20	11.18	281982	246273	443.5	524.4
6)	L1 Aroclor-1016 {5}	11.64	12.30	273076	270282	451.5	502.0
	Sum Aroclor-1016			1582477	1971570	2260.0	2321.0
	Average Aroclor-1016					452.001	464.201
17)	L7 Aroclor-1260	14.31	14.44	634983	330676	381.8	461.2
18)	L7 Aroclor-1260 {2}	14.81	14.73	853685	555868	444.6	389.2
19)	L7 Aroclor-1260 {3}	15.26	14.93	817865	652146	459.0	436.1
20)	L7 Aroclor-1260 {4}	15.72	16.10	484702	377240	425.3	451.8
21)	L7 Aroclor-1260 {5}	16.16	16.33	963166	901139	488.8	490.7
	Sum Aroclor-1260			3754400	2817068	2199.6	2228.9
	Average Aroclor-1260					439.914	445.789

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CSF 29294 SDG E3065
Signature Bridgette M Williams
Date 06/19/01

181

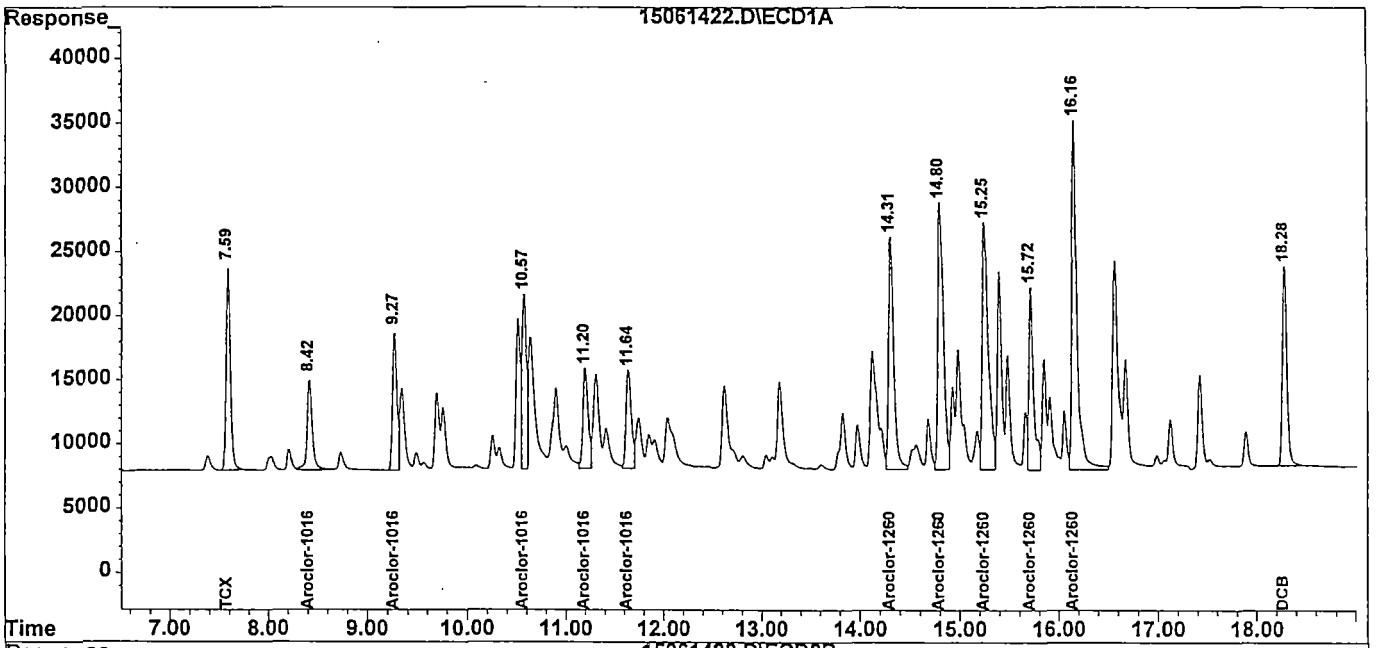
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

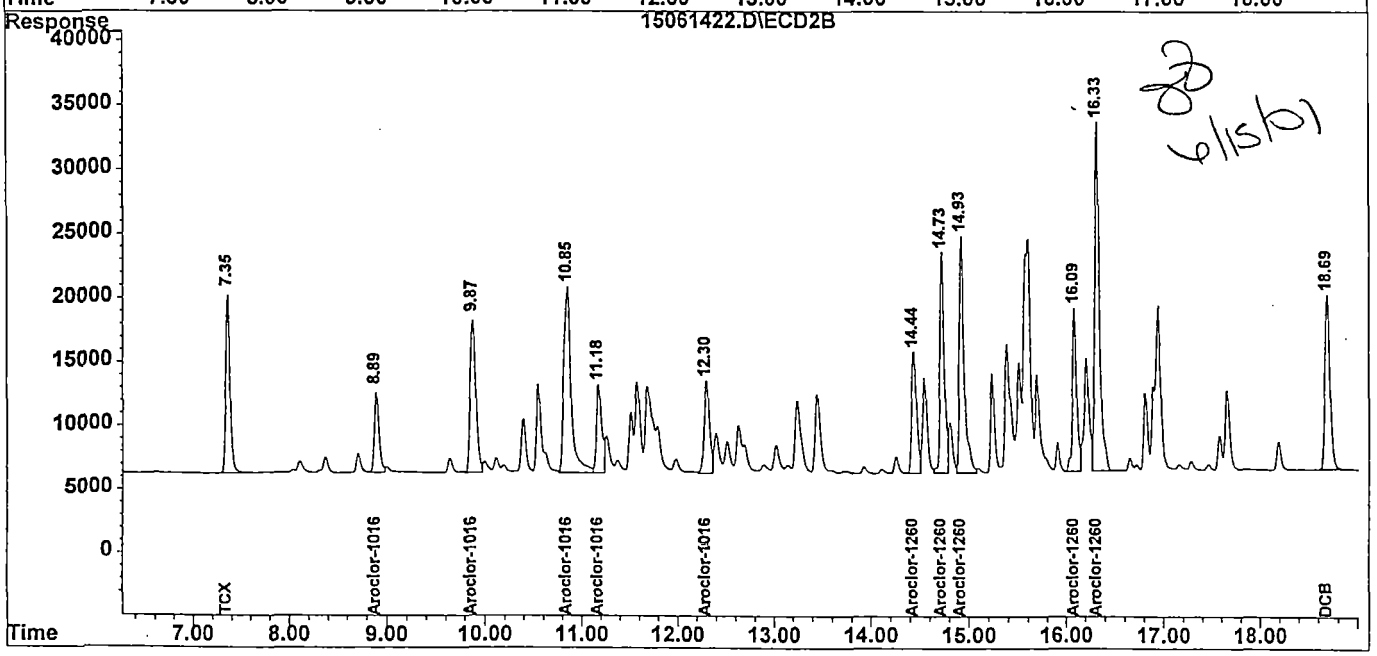
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061422.D\ECD1A.CH Vial: 22
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061422.D\ECD2B.CH
Acq On : 15 Jun 2001 2:03 Operator: DDC
Sample : AR1660L35V Inst : HP_15
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:32 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





6/15/01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061423.D\ECD1A.CH Vial: 23
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061423.D\ECD2B.CH
Acq On : 15 Jun 2001 2:26 Operator: DDC
Sample : AR1660L45C Inst : HP_15
Misc : 5-28-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:33 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	1078758	1038335	43.4	45.6
22)	S DCB	18.29	18.69	1047391	971711	41.3	42.0
	Target Compounds:						
2)	L1 Aroclor-1016	8.42	8.89	528581	430109	866.1	845.0
3)	L1 Aroclor-1016 {2}	9.27	9.88	654691	992301	869.0	867.9
	L1 Aroclor-1016 {3}	10.58	10.86	946787	1730554	1007.8	1002.5
	L1 Aroclor-1016 {4}	11.20	11.18	573497	550324	889.0	1078.2
6)	L1 Aroclor-1016 {5}	11.64	12.30	575802	593265	938.1	1032.1
	Sum Aroclor-1016			3279358	4296553	4570.0	4825.8
	Average Aroclor-1016					913.996	965.154
17)	L7 Aroclor-1260	14.31	14.44	1270141	721645	795.4	969.0
18)	L7 Aroclor-1260 {2}	14.80	14.73	1736593	1166741	884.1	839.5
19)	L7 Aroclor-1260 {3}	15.26	14.93	1702761	1386152	926.2	906.6
20)	L7 Aroclor-1260 {4}	15.72	16.10	979876	810705	862.6	943.3
21)	L7 Aroclor-1260 {5}	16.16	16.33	1941712	1999510	940.6	1019.6
	Sum Aroclor-1260			7631084	6084752	4408.8	4677.9
	Average Aroclor-1260					881.756	935.580

COPY

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E3065
Signature Freddie M. Williams
Date 06/19/01

183

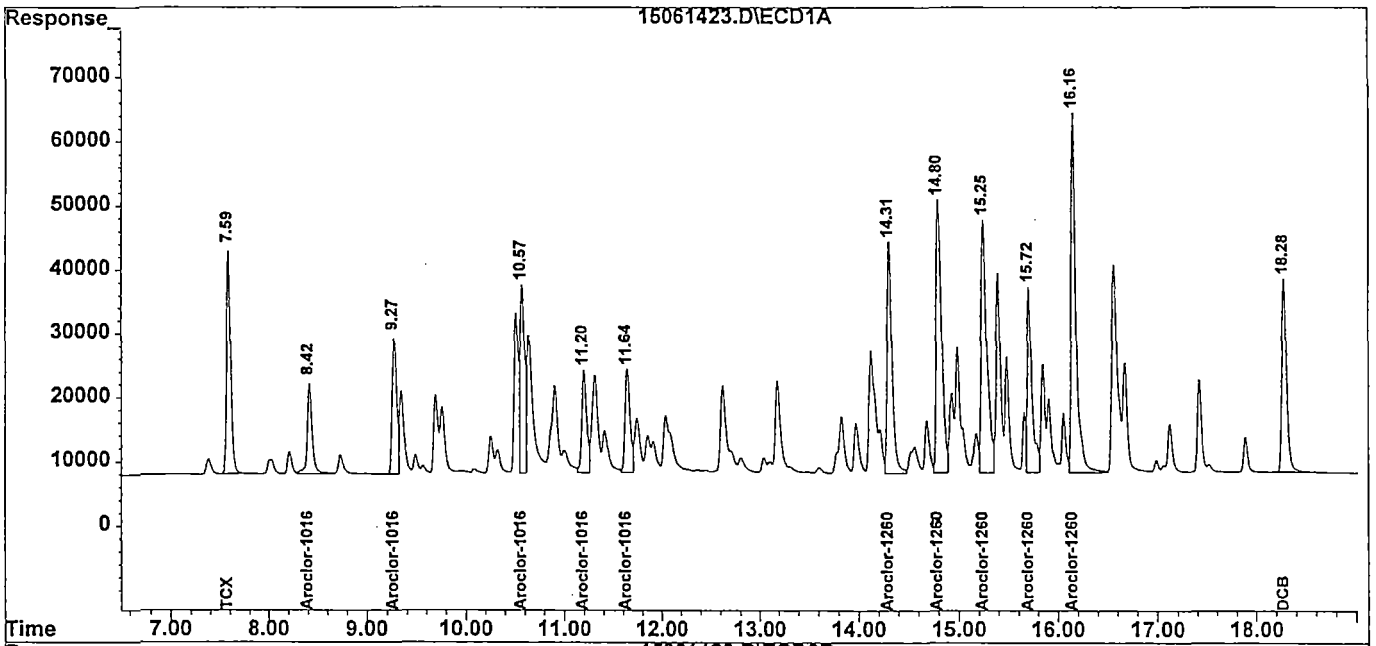
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

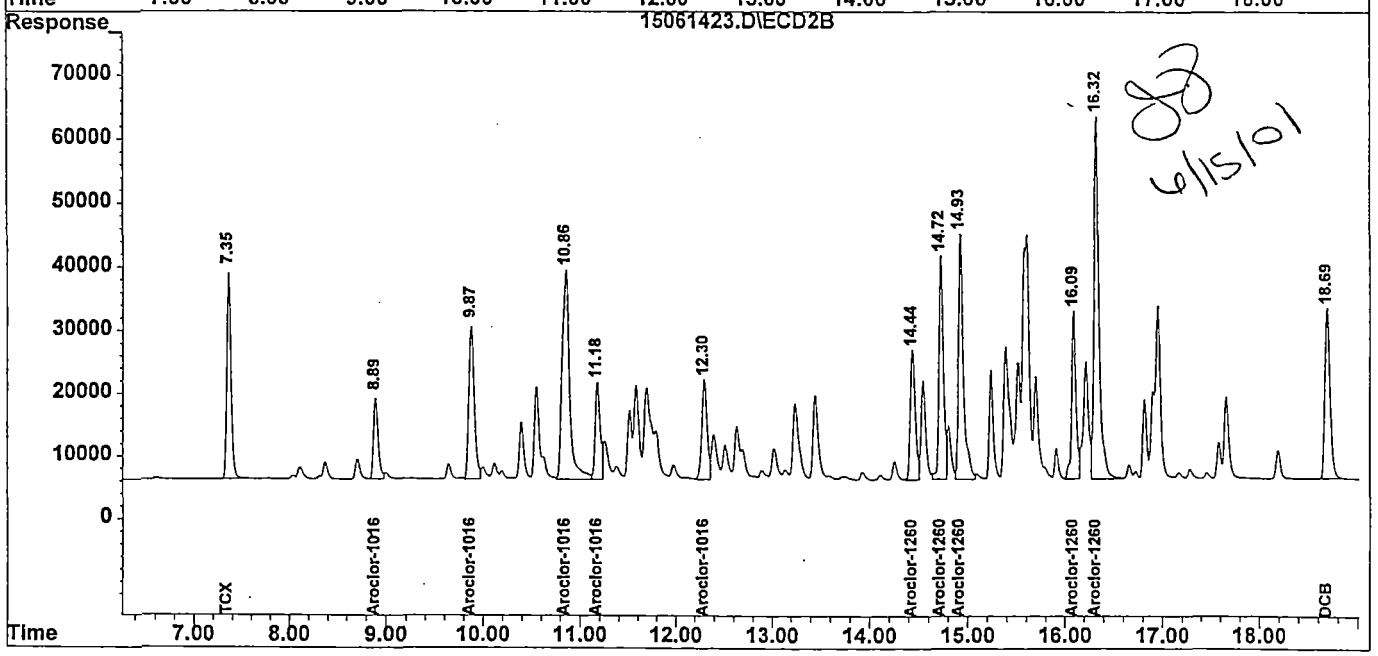
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061423.D\ECD1A.CH Vial: 23
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061423.D\ECD2B.CH
Acq On : 15 Jun 2001 2:26 Operator: DDC
Sample : AR1660L45C Inst : HP_15
Misc : 5-28-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:33 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





SB 6/15/01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061424.D\ECD1A.CH Vial: 24
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061424.D\ECD2B.CH
Acq On : 15 Jun 2001 2:49 Operator: DDC
Sample : AR1660L55C Inst : HP_15
Misc : 5-27-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:33 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	1923319	1916734	76.2	82.3
22)	S DCB	18.28	18.69	1941000	1832457	75.8 E	78.4 E
	Target Compounds:						
2)	L1 Aroclor-1016	8.42	8.89	880674	738982	1373.4 E	1384.8
3)	L1 Aroclor-1016 {2}	9.27	9.88	1063089	1657098	1319.7 E	1373.6 E
	L1 Aroclor-1016 {3}	10.58	10.86	1661352	3124497	1587.7 E	1656.5 E
5)	L1 Aroclor-1016 {4}	11.20	11.18	963599	989436	1399.2 E	1706.9 E
6)	L1 Aroclor-1016 {5}	11.64	12.30	990762	1055295	1498.4 E	1640.3 E
	Sum Aroclor-1016			5559476	7565309	7178.3	7762.1
	Average Aroclor-1016					1435.670	1552.414
17)	L7 Aroclor-1260	14.31	14.44	2177698	1311737	1342.9 E	1616.3 E
18)	L7 Aroclor-1260 {2}	14.80	14.73	3044459	2019367	1451.2 E	1412.8 E
19)	L7 Aroclor-1260 {3}	15.25	14.93	3078579	2492603	1553.1 E	1525.5 E
20)	L7 Aroclor-1260 {4}	15.72	16.09	1769731	1497966	1527.1 E	1616.3 E
21)	L7 Aroclor-1260 {5}	16.16	16.33	3588283	3780241	1600.7 E	1728.4 E
	Sum Aroclor-1260			13658750	11101914	7475.0	7899.3
	Average Aroclor-1260					1494.991	1579.862

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ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E3065
Signature Ruth M. Miller
Date 06/19/01

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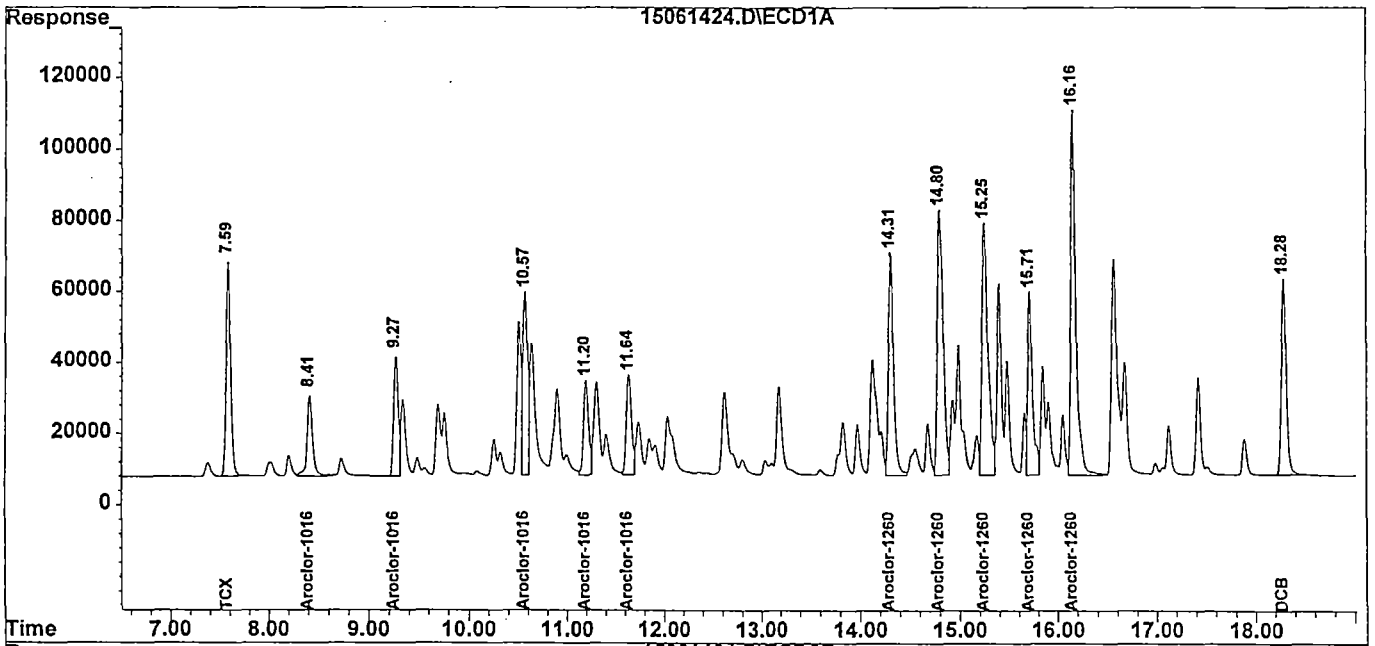
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
15061424.D XPCBF14.M Fri Jun 15 08:33:22 2001 Page 1

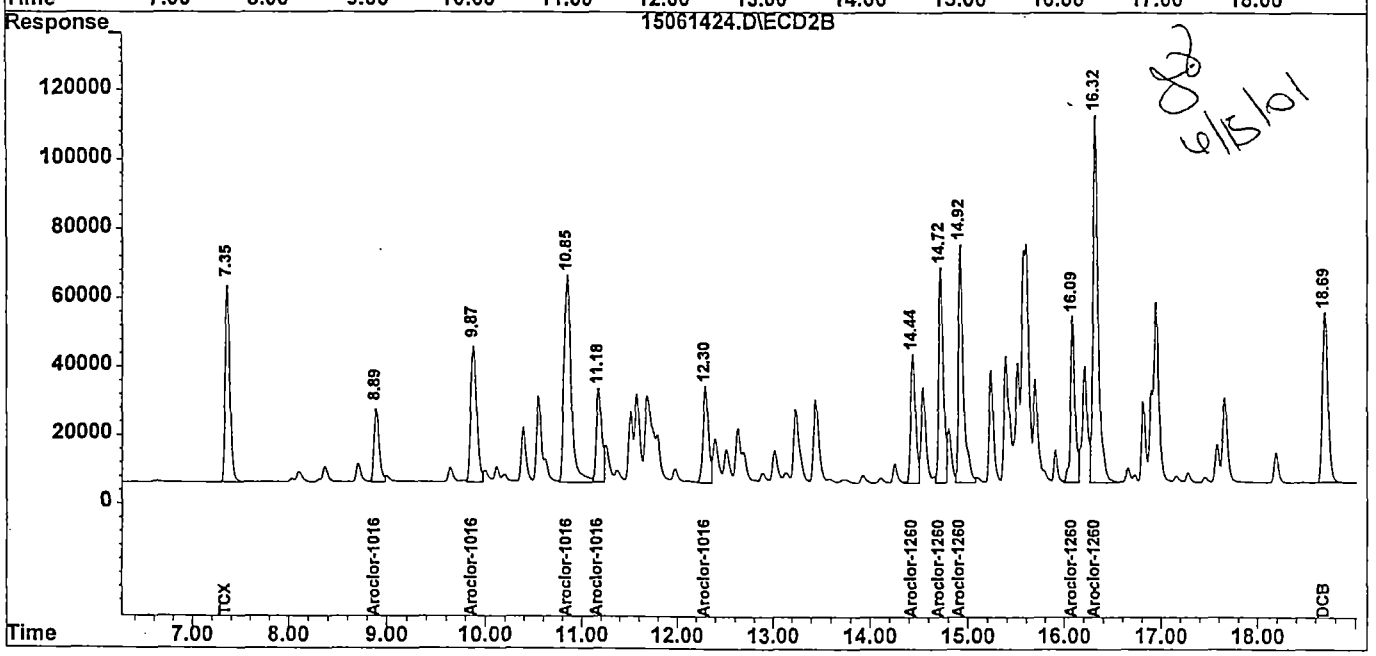
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061424.D\ECD1A.CH Vial: 24
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061424.D\ECD2B.CH
Acq On : 15 Jun 2001 2:49 Operator: DDC
Sample : AR1660L55C Inst : HP_15
Misc : 5-27-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:33 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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Continuing Calibration Report HP_15

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Sat Jun 16 10:10:35 2001
Response via : Initial Calibration

Continuing Calibration File: 15061471.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	25.081	25.889	E3	-3.2	108
2	L1	Aroclor-1016	660.269	686.012		-3.9	106
3	L1	Aroclor-1016 {2}	841.722	863.955		-2.6	105
4	L1	Aroclor-1016 {3}	1.130	1.122	E3	0.7	102
5	L1	Aroclor-1016 {4}	721.143	681.762		5.5	97
6	L1	Aroclor-1016 {5}	697.156	696.055		0.2	102
17	L7	Aroclor-1260	1.627	1.649	E3	-1.4	104
18	L7	Aroclor-1260 {2}	2.187	2.237	E3	-2.3	105
19	L7	Aroclor-1260 {3}	2.086	2.106	E3	-1.0	103
20	L7	Aroclor-1260 {4}	1.191	1.192	E3	-0.0	98
21	L7	Aroclor-1260 {5}	2.370	2.364	E3	0.3	98
22	S	DCB	25.914	25.336	E3	2.2	97

Signal #2
Continuing Calibration File: 15061471.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	23.173	25.798	E3	-11.3	117
2	L1	Aroclor-1016	528.447	581.345		-10.0	113
3	L1	Aroclor-1016 {2}	1.242	1.358	E3	-9.4	113
4	L1	Aroclor-1016 {3}	1.999	2.133	E3	-6.7	111
5	L1	Aroclor-1016 {4}	632.145	671.185		-6.2	109
6	L1	Aroclor-1016 {5}	696.313	738.752		-6.1	109
17	L7	Aroclor-1260	860.037	905.952		-5.3	110
18	L7	Aroclor-1260 {2}	1.436	1.515	E3	-5.5	109
19	L7	Aroclor-1260 {3}	1.699	1.781	E3	-4.8	109
20	L7	Aroclor-1260 {4}	0.975	0.968	E3	0.7	103
21	L7	Aroclor-1260 {5}	2.365	2.393	E3	-1.2	106
22	S	DCB	23.694	23.449	E3	1.0	98

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

15061471.D XPCBF14.M Sat Jun 16 10:10:42 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061471.D\ECD1A.CH Vial: 71
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061471.D\ECD2B.CH
Acq On : 15 Jun 2001 21:01 Operator: DDC
Sample : AR1660L3A5 Inst : HP_15
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 7:45 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.60	7.36	517772	515964	20.6	22.3
22)	S DCB	18.29	18.70	506719	468982	19.6	19.8
	Target Compounds:						
2)	L1 Aroclor-1016	8.42	8.90	274405	232538	415.6	440.0
3)	L1 Aroclor-1016 {2}	9.28	9.88	345582	543157	410.6	437.4
4)	L1 Aroclor-1016 {3}	10.58	10.86	448638	853261	397.2	426.9
	L1 Aroclor-1016 {4}	11.21	11.19	272705	268474	378.2	424.7
	L1 Aroclor-1016 {5}	11.65	12.31	278422	295501	399.4	424.4
	Sum Aroclor-1016			1619752	2192930	2000.9	2153.4
	Average Aroclor-1016					400.170	430.684
17)	L7 Aroclor-1260	14.32	14.45	659676	362381	405.6	421.4
18)	L7 Aroclor-1260 {2}	14.81	14.73	894839	605828	409.1	421.8
19)	L7 Aroclor-1260 {3}	15.26	14.93	842426	712413	403.8	419.2
20)	L7 Aroclor-1260 {4}	15.72	16.10	476711	387321	400.2	397.1
21)	L7 Aroclor-1260 {5}	16.17	16.33	945515	957368	399.0	404.9
	Sum Aroclor-1260			3819167	3025311	2017.6	2064.3
	Average Aroclor-1260					403.526	412.866

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ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E00E6
Signature [illegible]
Date 06/20/01

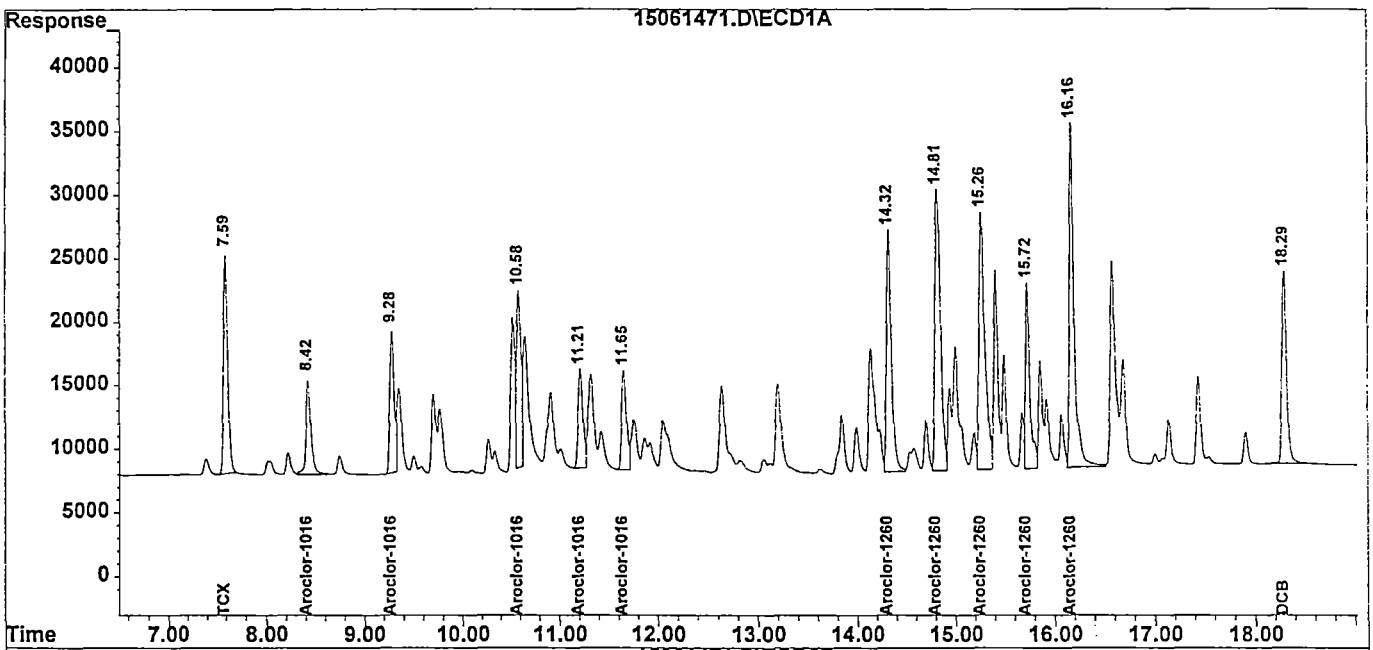
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

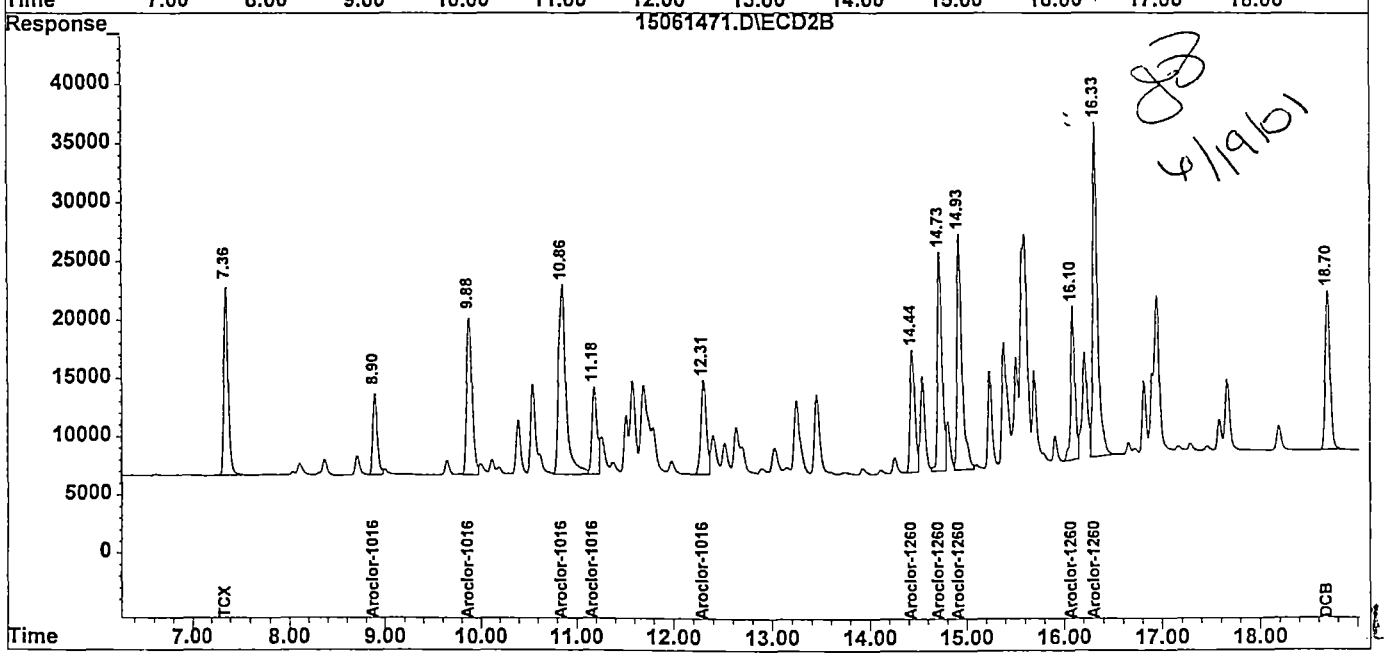
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061471.D\ECD1A.CH Vial: 71
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061471.D\ECD2B.CH
Acq On : 15 Jun 2001 21:01 Operator: DDC
Sample : AR1660L3A5 Inst : HP_15
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 7:45 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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Continuing Calibration Report HP_15

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Sat Jun 16 10:18:24 2001
Response via : Initial Calibration

Continuing Calibration File: 15061481.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	25.081	26.203	E3	-4.5	109
2	L1	Aroclor-1016	660.269	691.993		-4.8	107
3	L1	Aroclor-1016 {2}	841.722	870.795		-3.5	106
4	L1	Aroclor-1016 {3}	1.130	1.125	E3	0.4	102
5	L1	Aroclor-1016 {4}	721.143	682.010		5.4	97
6	L1	Aroclor-1016 {5}	697.156	698.098		-0.1	102
17	L7	Aroclor-1260	1.627	1.673	E3	-2.9	105
18	L7	Aroclor-1260 {2}	2.187	2.256	E3	-3.2	106
19	L7	Aroclor-1260 {3}	2.086	2.136	E3	-2.4	104
20	L7	Aroclor-1260 {4}	1.191	1.226	E3	-2.9	101
21	L7	Aroclor-1260 {5}	2.370	2.392	E3	-0.9	99
22	S	DCB	25.914	25.415	E3	1.9	97

Signal #2
Continuing Calibration File: 15061481.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	23.173	26.335	E3	-13.6	120
2	L1	Aroclor-1016	528.447	590.899		-11.8	115
3	L1	Aroclor-1016 {2}	1.242	1.374	E3	-10.6	114
4	L1	Aroclor-1016 {3}	1.999	2.070	E3	-3.6	108
5	L1	Aroclor-1016 {4}	632.145	631.663		0.1	103
6	L1	Aroclor-1016 {5}	696.313	756.600		-8.7	112
17	L7	Aroclor-1260	860.037	917.220		-6.6	111
18	L7	Aroclor-1260 {2}	1.436	1.507	E3	-4.9	108
19	L7	Aroclor-1260 {3}	1.699	1.807	E3	-6.3	111
20	L7	Aroclor-1260 {4}	0.975	1.026	E3	-5.1	109
21	L7	Aroclor-1260 {5}	2.365	2.506	E3	-6.0	111
22	S	DCB	23.694	24.520	E3	-3.5	103

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

15061481.D XPCBF14.M Sat Jun 16 10:18:30 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061481.D\ECD1A.CH Vial: 81
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061481.D\ECD2B.CH
Acq On : 16 Jun 2001 00:53 Operator: DDC
Sample : AR1660L3C5 Inst : HP_15
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 10:18 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	524061	526707	20.9	22.7
22)	S DCB	18.28	18.69	508297	490397	19.6	20.7
	Target Compounds:						
2)	L1 Aroclor-1016	8.42	8.89	276797	236359	419.2	447.3
3)	L1 Aroclor-1016 {2}	9.28	9.88	348318	549427	413.8	442.5
4)	L1 Aroclor-1016 {3}	10.58	10.86	450121	827969	398.5	414.2
5)	L1 Aroclor-1016 {4}	11.20	11.18	272804	252665	378.3	399.7
6)	L1 Aroclor-1016 {5}	11.64	12.30	279239	302640	400.5	434.6
	Sum Aroclor-1016			1627279	2169061	2010.3	2138.3
	Average Aroclor-1016					402.069	427.659
17)	L7 Aroclor-1260	14.32	14.44	669207	366888	411.4	426.6
18)	L7 Aroclor-1260 {2}	14.81	14.73	902546	602729	412.6	419.7
19)	L7 Aroclor-1260 {3}	15.26	14.93	854262	722602	409.5	425.2
20)	L7 Aroclor-1260 {4}	15.72	16.09	490369	410247	411.6	420.6
21)	L7 Aroclor-1260 {5}	16.16	16.33	956837	1002377	403.7	423.9
	Sum Aroclor-1260			3873221	3104843	2048.9	2115.9
	Average Aroclor-1260					409.786	423.189

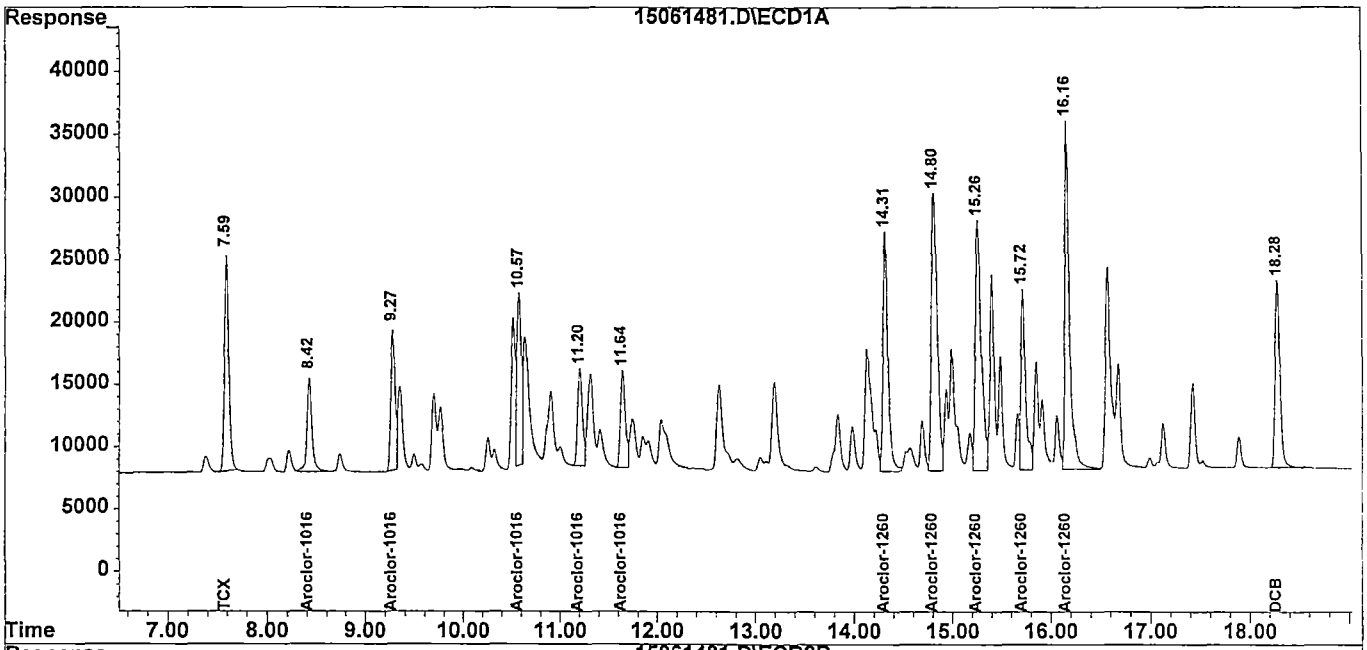
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

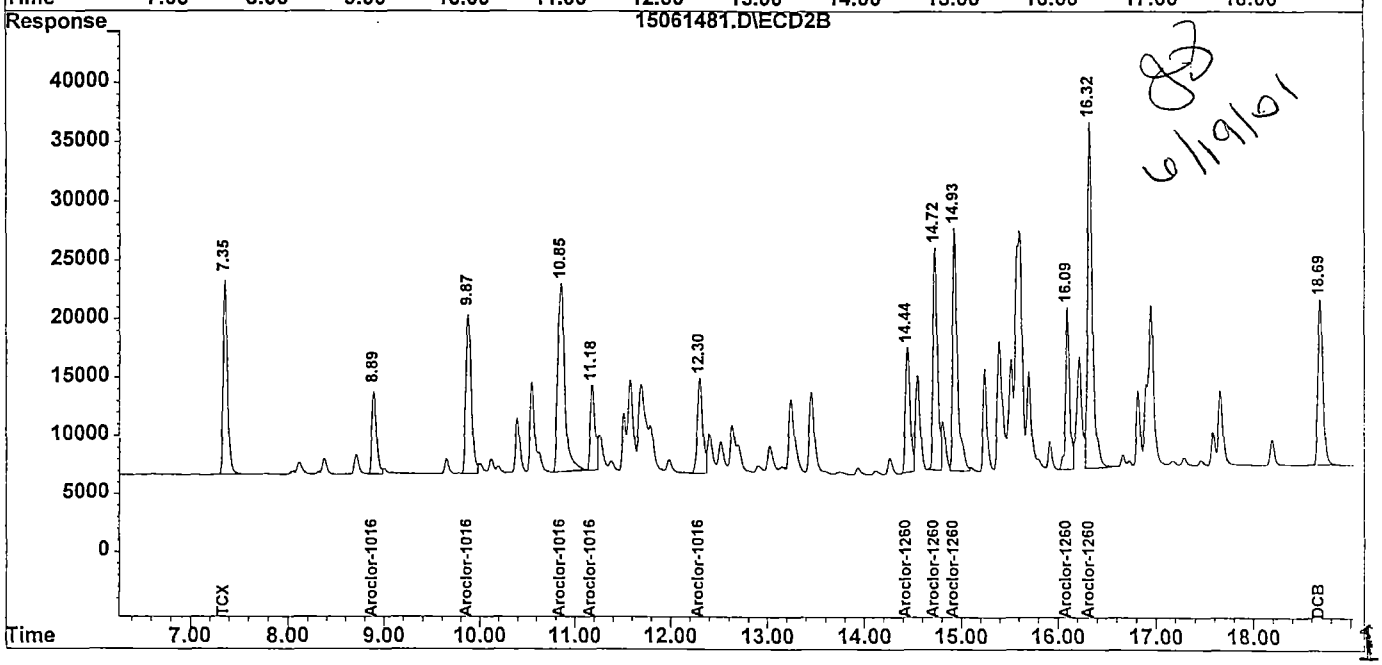
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061481.D\ECD1A.CH Vial: 81
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061481.D\ECD2B.CH
Acq On : 16 Jun 2001 00:53 Operator: DDC
Sample : AR1660L3C5 Inst : HP_15
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 10:18 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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Continuing Calibration Report HP_15

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Sat Jun 16 10:15:38 2001
Response via : Initial Calibration

Continuing Calibration File: 15061494.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	25.081	27.389	E3	-9.2	114
2	L1	Aroclor-1016	660.269	724.619		-9.7	112
3	L1	Aroclor-1016 {2}	841.722	911.122		-8.2	111
4	L1	Aroclor-1016 {3}	1.130	1.206	E3	-6.8	109
5	L1	Aroclor-1016 {4}	721.143	715.970		0.7	102
6	L1	Aroclor-1016 {5}	697.156	739.194		-6.0	108
17	L7	Aroclor-1260	1.627	1.790	E3	-10.1	113
18	L7	Aroclor-1260 {2}	2.187	2.431	E3	-11.1	114
19	L7	Aroclor-1260 {3}	2.086	2.325	E3	-11.4	114
20	L7	Aroclor-1260 {4}	1.191	1.331	E3	-11.7	110
21	L7	Aroclor-1260 {5}	2.370	2.648	E3	-11.7	110
22	S	DCB	25.914	28.178	E3	-8.7	108

Signal #2
Continuing Calibration File: 15061494.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	23.173	27.589	E3	-19.1#	126
2	L1	Aroclor-1016	528.447	622.718		-17.8#	121
3	L1	Aroclor-1016 {2}	1.242	1.417	E3	-14.1	118
4	L1	Aroclor-1016 {3}	1.999	2.217	E3	-10.9	115
5	L1	Aroclor-1016 {4}	632.145	669.230		-5.9	109
6	L1	Aroclor-1016 {5}	696.313	800.083		-14.9	118
17	L7	Aroclor-1260	860.037	986.076		-14.7	119
18	L7	Aroclor-1260 {2}	1.436	1.612	E3	-12.3	116
19	L7	Aroclor-1260 {3}	1.699	1.946	E3	-14.5	119
20	L7	Aroclor-1260 {4}	0.975	1.120	E3	-14.8	119
21	L7	Aroclor-1260 {5}	2.365	2.754	E3	-16.5#	122
22	S	DCB	23.694	26.989	E3	-13.9	113
		Average %Dev				~~-53.15~~	

6/19/01

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

15061494.D XPCBF14.M Sat Jun 16 10:15:44 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061494.D\ECD1A.CH Vial: 94
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061494.D\ECD2B.CH
Acq On : 16 Jun 2001 5:55 Operator: DDC
Sample : AR1660L3E5 Inst : HP_15
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 10:15 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	547787	551772	21.8	23.8
22)	S DCB	18.28	18.69	563568	539784	21.7	22.8
	Target Compounds:						
2)	L1 Aroclor-1016	8.42	8.89	289848	249087	439.0	471.4
3)	L1 Aroclor-1016 {2}	9.27	9.87	364449	566847	433.0	456.5
4)	L1 Aroclor-1016 {3}	10.58	10.85	482439	886601	427.1	443.5
[illegible]	L1 Aroclor-1016 {4}	11.20	11.18	286388	267692	397.1	423.5
[illegible]	L1 Aroclor-1016 {5}	11.64	12.30	295678	320033	424.1	459.6
	Sum Aroclor-1016			1718801	2290261	2120.3	2254.5
	Average Aroclor-1016					424.060	450.898
17)	L7 Aroclor-1260	14.31	14.44	716070	394430	440.2	458.6
18)	L7 Aroclor-1260 {2}	14.81	14.73	972356	644882	444.6	449.0
19)	L7 Aroclor-1260 {3}	15.26	14.93	929822	778576	445.7	458.1
20)	L7 Aroclor-1260 {4}	15.72	16.09	532476	447803	447.0	459.1
21)	L7 Aroclor-1260 {5}	16.16	16.32	1059269	1101676	446.9	465.9
	Sum Aroclor-1260			4209993	3367367	2224.4	2290.8
	Average Aroclor-1260					444.889	458.151

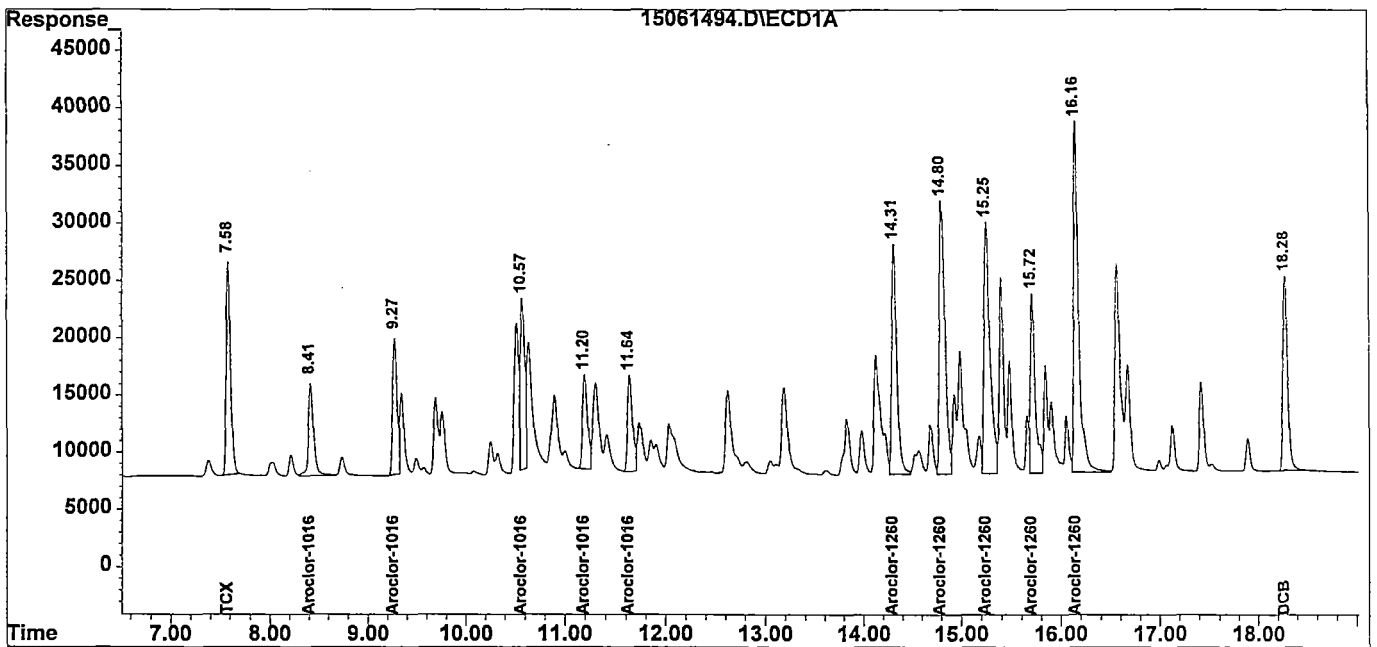
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

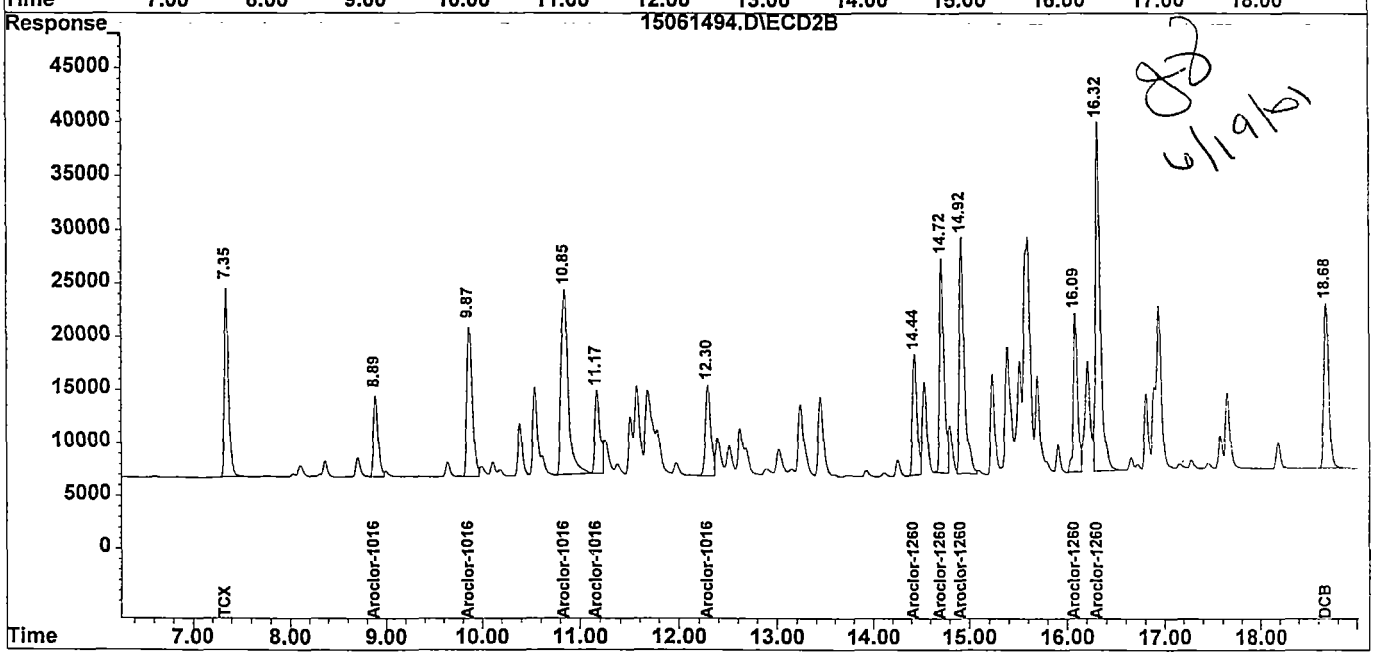
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061494.D\ECD1A.CH Vial: 94
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061494.D\ECD2B.CH
Acq On : 16 Jun 2001 5:55 Operator: DDC
Sample : AR1660L3E5 Inst : HP_15
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 10:15 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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Continuing Calibration Report HP_15

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Sun Jun 17 08:56:07 2001
Response via : Initial Calibration

Continuing Calibration File: 15061507.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	25.081	27.774	E3	-10.7	116
2	L1	Aroclor-1016	660.269	722.227		-9.4	112
3	L1	Aroclor-1016 {2}	841.722	892.486		-6.0	109
4	L1	Aroclor-1016 {3}	1.130	1.207	E3	-6.8	109
5	L1	Aroclor-1016 {4}	721.143	729.563		-1.2	103
6	L1	Aroclor-1016 {5}	697.156	751.112		-7.7	110
17	L7	Aroclor-1260	1.627	1.832	E3	-12.6	115
18	L7	Aroclor-1260 {2}	2.187	2.489	E3	-13.8	117
19	L7	Aroclor-1260 {3}	2.086	2.378	E3	-14.0	116
20	L7	Aroclor-1260 {4}	1.191	1.363	E3	-14.4	113
21	L7	Aroclor-1260 {5}	2.370	2.746	E3	-15.9#	114
22	S	DCB	25.914	28.622	E3	-10.4	110

Signal #2
Continuing Calibration File: 15061507.D

		Compound	AvgRF	CCRF		%Dev	Area%
	S	TCX	23.173	27.436	E3	-18.4#	125
2	L1	Aroclor-1016	528.447	621.076		-17.5#	121
3	L1	Aroclor-1016 {2}	1.242	1.427	E3	-14.9	118
4	L1	Aroclor-1016 {3}	1.999	2.245	E3	-12.3	117
5	L1	Aroclor-1016 {4}	632.145	677.676		-7.2	110
6	L1	Aroclor-1016 {5}	696.313	812.388		-16.7#	120
17	L7	Aroclor-1260	860.037	986.270		-14.7	119
18	L7	Aroclor-1260 {2}	1.436	1.610	E3	-12.1	116
19	L7	Aroclor-1260 {3}	1.699	1.905	E3	-12.1	117
20	L7	Aroclor-1260 {4}	0.975	1.136	E3	-16.5#	120
21	L7	Aroclor-1260 {5}	2.365	2.768	E3	-17.0#	123
22	S	DCB	23.694	27.221	E3	-14.9	114

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

15061507.D XPCBF14.M Sun Jun 17 08:56:13 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061507.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061507.D\ECD2B.CH
Acq On : 16 Jun 2001 10:56 Operator: DDC
Sample : AR1660L3G5 Inst : HP_15
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 17 8:56 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	555473	548715	22.1	23.7
22)	S DCB	18.29	18.69	572434	544418	22.1	23.0
	Target Compounds:						
2)	L1 Aroclor-1016	8.42	8.89	288891	248430	437.5	470.1
3)	L1 Aroclor-1016 {2}	9.28	9.88	356994	570739	424.1	459.6
	L1 Aroclor-1016 {3}	10.58	10.86	482709	898176	427.3	449.3
	L1 Aroclor-1016 {4}	11.20	11.18	291825	271070	404.7	428.8
	L1 Aroclor-1016 {5}	11.65	12.30	300445	324955	431.0	466.7
	Sum Aroclor-1016			1720864	2313370	2124.6	2274.6
	Average Aroclor-1016					424.923	454.917
17)	L7 Aroclor-1260	14.32	14.44	732602	394508	450.4	458.7
18)	L7 Aroclor-1260 {2}	14.81	14.73	995553	644028	455.2	448.4
19)	L7 Aroclor-1260 {3}	15.26	14.93	951193	761867	456.0	448.3
20)	L7 Aroclor-1260 {4}	15.72	16.10	545308	454350	457.8	465.8
21)	L7 Aroclor-1260 {5}	16.16	16.33	1098497	1107026	463.5	468.2
	Sum Aroclor-1260			4323153	3361780	2282.8	2289.4
	Average Aroclor-1260					456.556	457.879

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ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E00E6
Signature [signature]
Date 06/20/01

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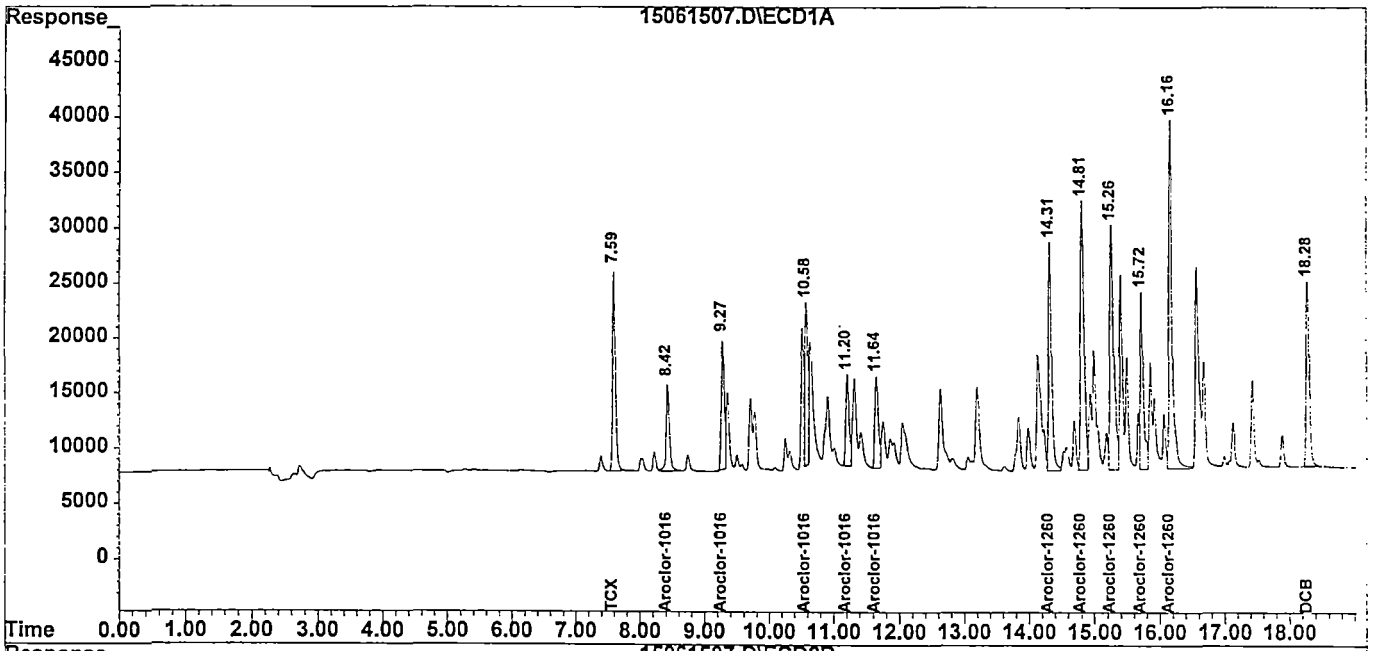
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

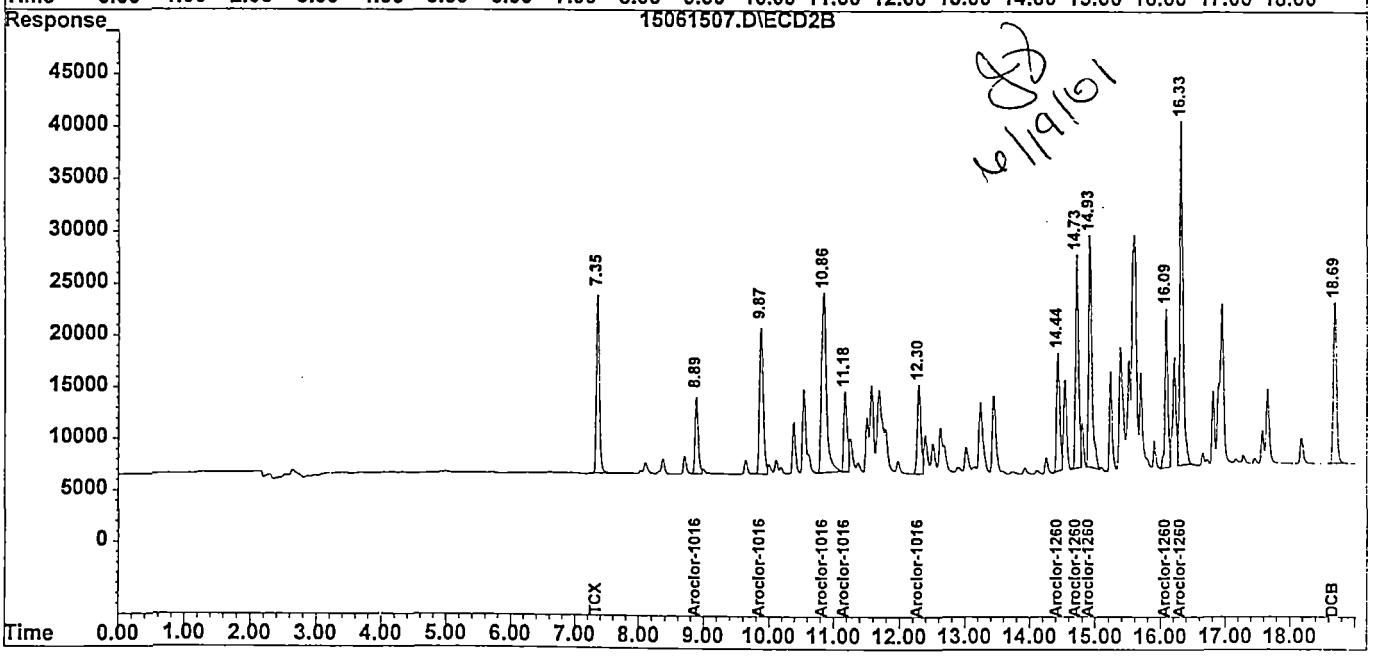
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061507.D\ECD1A.CH Vial: 7
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061507.D\ECD2B.CH
Acq On : 16 Jun 2001 10:56 Operator: DDC
Sample : AR1660L3G5 Inst : HP_15
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 17 8:56 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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Continuing Calibration Report HP_15

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Sun Jun 17 08:59:04 2001
Response via : Initial Calibration

Continuing Calibration File: 15061537.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	25.081	28.299	E3	-12.8	118
2	L1	Aroclor-1016	660.269	724.714		-9.8	112
3	L1	Aroclor-1016 {2}	841.722	922.864		-9.6	112
4	L1	Aroclor-1016 {3}	1.130	1.226	E3	-8.5	111
5	L1	Aroclor-1016 {4}	721.143	732.872		-1.6	104
6	L1	Aroclor-1016 {5}	697.156	753.667		-8.1	110
17	L7	Aroclor-1260	1.627	1.794	E3	-10.3	113
18	L7	Aroclor-1260 {2}	2.187	2.442	E3	-11.6	114
19	L7	Aroclor-1260 {3}	2.086	2.313	E3	-10.9	113
20	L7	Aroclor-1260 {4}	1.191	1.309	E3	-9.9	108
21	L7	Aroclor-1260 {5}	2.370	2.675	E3	-12.9	111
22	S	DCB	25.914	29.052	E3	-12.1	111

Signal #2
Continuing Calibration File: 15061537.D

		Compound	AvgRF	CCRF		%Dev	Area%
	S	TCX	23.173	24.079	E3	-3.9	110
2	L1	Aroclor-1016	528.447	569.492		-7.8	111
3	L1	Aroclor-1016 {2}	1.242	1.272	E3	-2.5	106
4	L1	Aroclor-1016 {3}	1.999	2.056	E3	-2.9	107
5	L1	Aroclor-1016 {4}	632.145	616.977		2.4	100
6	L1	Aroclor-1016 {5}	696.313	715.276		-2.7	106
17	L7	Aroclor-1260	860.037	853.402		0.8	103
18	L7	Aroclor-1260 {2}	1.436	1.382	E3	3.8	99
19	L7	Aroclor-1260 {3}	1.699	1.629	E3	4.2	100
20	L7	Aroclor-1260 {4}	0.975	0.952	E3	2.4	101
21	L7	Aroclor-1260 {5}	2.365	2.321	E3	1.8	103
22	S	DCB	23.694	23.324	E3	1.6	98

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

15061537.D XPCBF14.M Sun Jun 17 08:59:10 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061537.D\ECD1A.CH Vial: 37
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061537.D\ECD2B.CH
Acq On : 16 Jun 2001 22:34 Operator: DDC
Sample : AR1660L3K5 Inst : HP_15
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 17 8:59 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	565986	481585	22.6	20.8
22)	S DCB	18.28	18.69	581042	466489	22.4	19.7
	Target Compounds:						
2)	L1 Aroclor-1016	8.42	8.89	289886	227797	439.0	431.1
3)	L1 Aroclor-1016 {2}	9.27	9.87	369146	508993	438.6	409.9
4)	L1 Aroclor-1016 {3}	10.58	10.86	490247	822406	434.0	411.4
	L1 Aroclor-1016 {4}	11.20	11.18	293149	246791	406.5	390.4
	L1 Aroclor-1016 {5}	11.64	12.30	301467	286110	432.4	410.9
	Sum Aroclor-1016			1743894	2092097	2150.5	2053.7
	Average Aroclor-1016					430.106	410.743
17)	L7 Aroclor-1260	14.32	14.44	717477	341361	441.1	396.9
18)	L7 Aroclor-1260 {2}	14.81	14.73	976776	552714	446.6	384.8
19)	L7 Aroclor-1260 {3}	15.26	14.93	925323	651476	443.6	383.3
20)	L7 Aroclor-1260 {4}	15.72	16.09	523769	380789	439.7	390.4
21)	L7 Aroclor-1260 {5}	16.16	16.33	1070012	928483	451.5	392.7
	Sum Aroclor-1260			4213357	2854823	2222.4	1948.1
	Average Aroclor-1260					444.480	389.628

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ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG F00E6
Signature Joelle M. Williams
Date 06/20/01

200

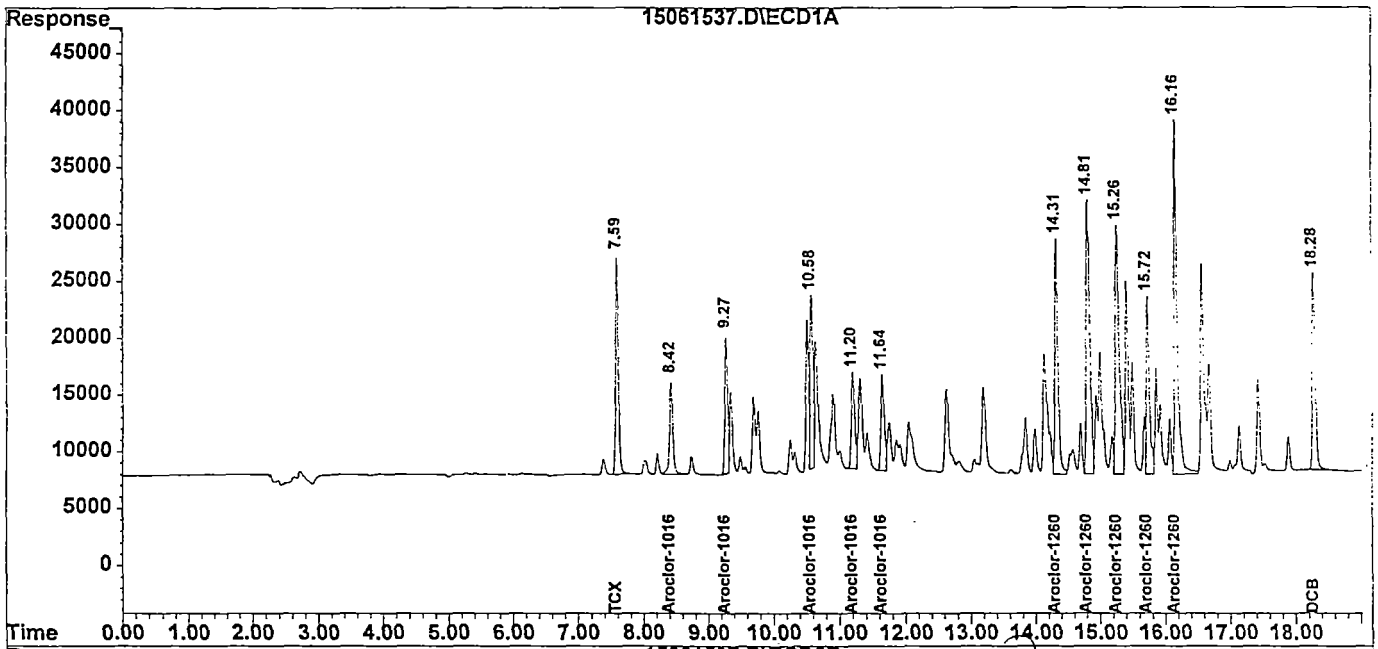
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

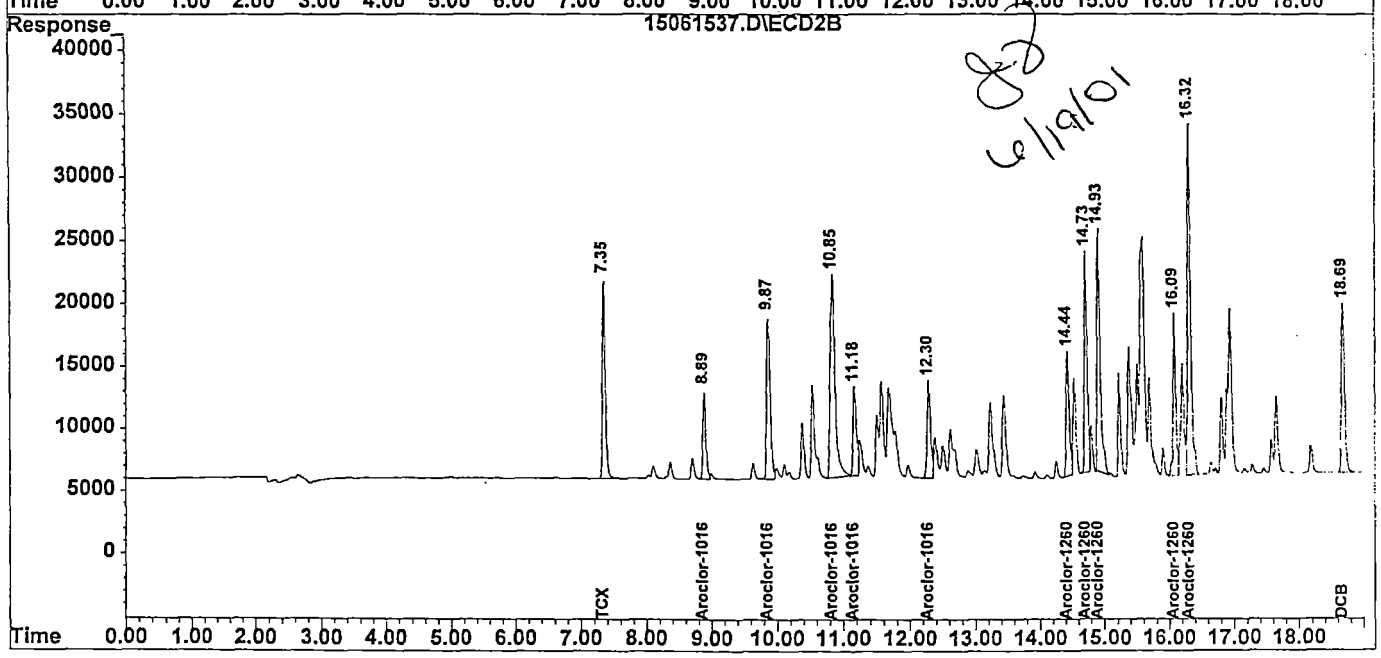
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061537.D\ECD1A.CH Vial: 37
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061537.D\ECD2B.CH
Acq On : 16 Jun 2001 22:34 Operator: DDC
Sample : AR1660L3K5 Inst : HP_15
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 17 8:59 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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Continuing Calibration Report HP_15

Method : F:\HPCHEM\HP\15\DATA\06_18_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Mon Jun 18 13:23:45 2001
Response via : Initial Calibration

Continuing Calibration File: 15061803.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	25.081	26.629	E3	-6.2	111
2	L1	Aroclor-1016	660.269	695.596		-5.4	108
3	L1	Aroclor-1016 {2}	841.722	886.068		-5.3	108
4	L1	Aroclor-1016 {3}	1.130	1.169	E3	-3.5	106
5	L1	Aroclor-1016 {4}	721.143	711.702		1.3	101
6	L1	Aroclor-1016 {5}	697.156	734.448		-5.3	108
17	L7	Aroclor-1260	1.627	1.774	E3	-9.1	112
18	L7	Aroclor-1260 {2}	2.187	2.388	E3	-9.2	112
19	L7	Aroclor-1260 {3}	2.086	2.237	E3	-7.2	109
20	L7	Aroclor-1260 {4}	1.191	1.264	E3	-6.1	104
21	L7	Aroclor-1260 {5}	2.370	2.442	E3	-3.1	101
22	S	DCB	25.914	27.346	E3	-5.5	105

Signal #2
Continuing Calibration File: 15061803.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	23.173	22.400	E3	3.3	102
2	L1	Aroclor-1016	528.447	534.965		-1.2	104
3	L1	Aroclor-1016 {2}	1.242	1.218	E3	1.9	101
4	L1	Aroclor-1016 {3}	1.999	2.069	E3	-3.5	108
5	L1	Aroclor-1016 {4}	632.145	633.281		-0.2	103
6	L1	Aroclor-1016 {5}	696.313	710.932		-2.1	105
17	L7	Aroclor-1260	860.037	872.486		-1.4	106
18	L7	Aroclor-1260 {2}	1.436	1.433	E3	0.2	103
19	L7	Aroclor-1260 {3}	1.699	1.702	E3	-0.2	104
20	L7	Aroclor-1260 {4}	0.975	0.923	E3	5.4	98
21	L7	Aroclor-1260 {5}	2.365	2.294	E3	3.0	102
22	S	DCB	23.694	23.423	E3	1.1	98

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

15061803.D XPCBF14.M Mon Jun 18 13:23:50 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_18_01\15061803.D\ECD1A.CH Vial: 3
Signal #2 : F:\HPCHEM\HP\15\DATA\06_18_01\15061803.D\ECD2B.CH
Acq On : 18 Jun 2001 9:13 Operator: DDC
Sample : AR1660L3V5 Inst : HP_15
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 13:23 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_18_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	532579	448000	21.2	19.3
22)	S DCB	18.28	18.68	546910	468464	21.1	19.8
	Target Compounds:						
2)	L1 Aroclor-1016	8.41	8.89	278238	213986	421.4	404.9
3)	L1 Aroclor-1016 {2}	9.27	9.87	354427	487248	421.1	392.4
4)	L1 Aroclor-1016 {3}	10.57	10.85	467631	827453	414.0	414.0
`	L1 Aroclor-1016 {4}	11.20	11.18	284681	253312	394.8	400.7
,	L1 Aroclor-1016 {5}	11.64	12.30	293779	284373	421.4	408.4
	Sum Aroclor-1016			1678757	2066372	2072.6	2020.4
	Average Aroclor-1016					414.523	404.082
17)	L7 Aroclor-1260	14.31	14.44	709616	348995	436.3	405.8
18)	L7 Aroclor-1260 {2}	14.80	14.72	955096	573358	436.7	399.2
19)	L7 Aroclor-1260 {3}	15.26	14.93	894661	680960	428.9	400.7
20)	L7 Aroclor-1260 {4}	15.72	16.09	505588	369012	424.4	378.3
21)	L7 Aroclor-1260 {5}	16.16	16.32	976961	917626	412.2	388.1
	Sum Aroclor-1260			4041923	2889950	2138.4	1972.1
	Average Aroclor-1260					427.686	394.414

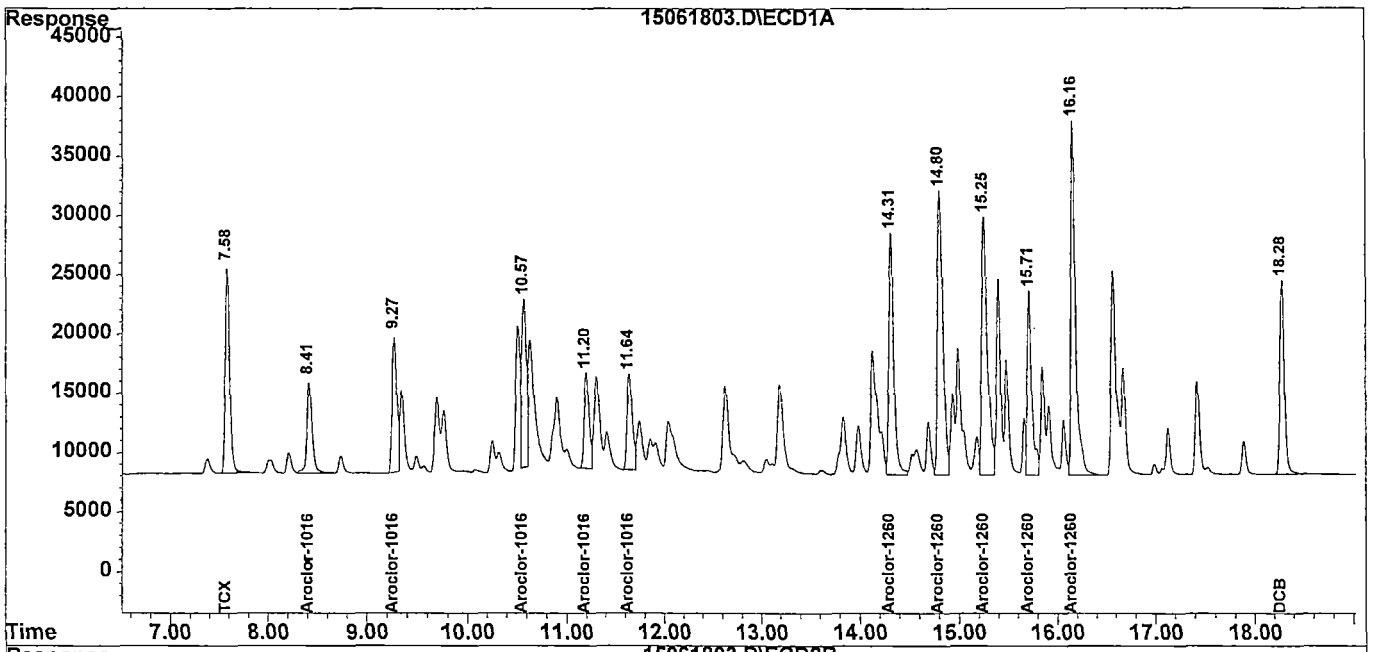
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
15061803.D XPCBF14.M Tue Jun 19 14:01:01 2001 Page 1

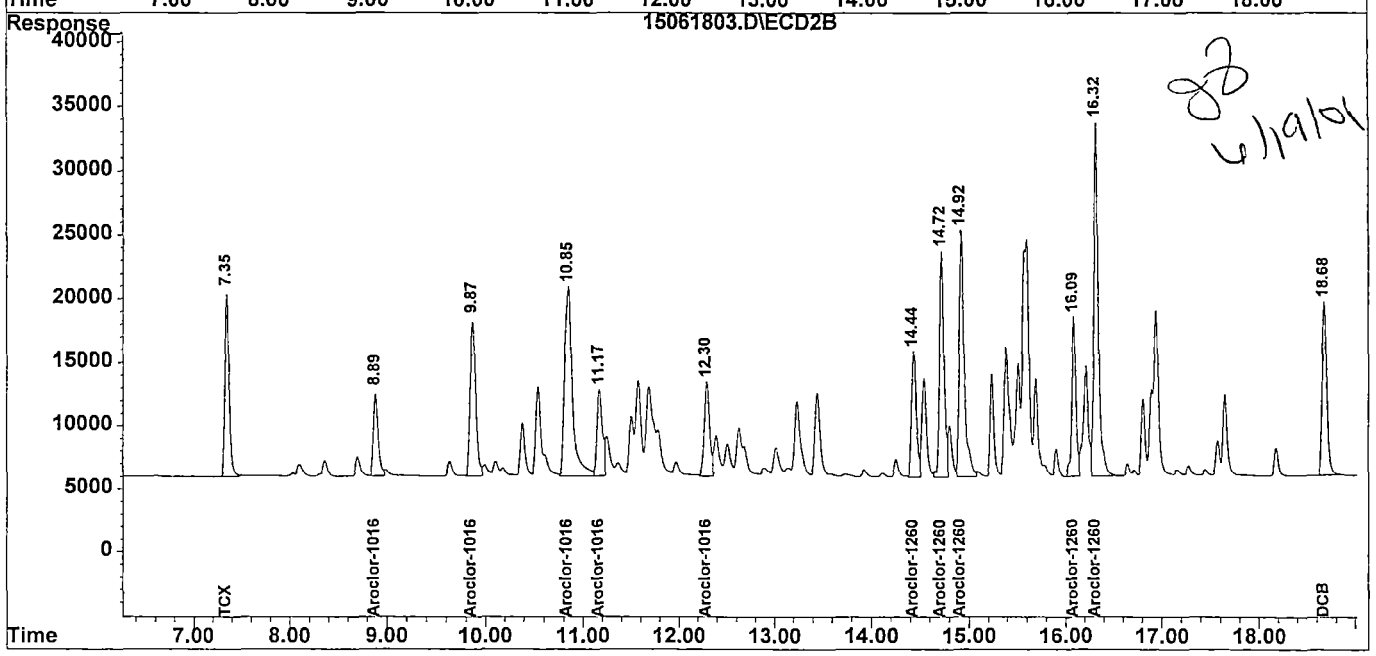
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_18_01\15061803.D\ECD1A.CH Vial: 3
Signal #2 : F:\HPCHEM\HP\15\DATA\06_18_01\15061803.D\ECD2B.CH
Acq On : 18 Jun 2001 9:13 Operator: DDC
Sample : AR1660L3V5 Inst : HP_15
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 13:23 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_18_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





8D 6/19/01

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Continuing Calibration Report HP_15

Method : F:\HPCHEM\HP\15\DATA\06_18_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Mon Jun 18 13:24:27 2001
Response via : Initial Calibration

Continuing Calibration File: 15061809.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	25.081	28.063	E3	-11.9	117
2	L1	Aroclor-1016	660.269	730.688		-10.7	113
3	L1	Aroclor-1016 {2}	841.722	921.351		-9.5	112
4	L1	Aroclor-1016 {3}	1.130	1.238	E3	-9.6	112
5	L1	Aroclor-1016 {4}	721.143	747.903		-3.7	106
6	L1	Aroclor-1016 {5}	697.156	775.403		-11.2	114
17	L7	Aroclor-1260	1.627	1.864	E3	-14.6	117
18	L7	Aroclor-1260 {2}	2.187	2.536	E3	-15.9#	119
19	L7	Aroclor-1260 {3}	2.086	2.405	E3	-15.3#	118
20	L7	Aroclor-1260 {4}	1.191	1.353	E3	-13.6	112
21	L7	Aroclor-1260 {5}	2.370	2.620	E3	-10.5	109
22	S	DCB	25.914	29.098	E3	-12.3	111

Signal #2
Continuing Calibration File: 15061809.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCX	23.173	22.800	E3	1.6	104
2	L1	Aroclor-1016	528.447	544.362		-3.0	106
3	L1	Aroclor-1016 {2}	1.242	1.239	E3	0.2	103
4	L1	Aroclor-1016 {3}	1.999	2.115	E3	-5.8	110
5	L1	Aroclor-1016 {4}	632.145	651.867		-3.1	106
6	L1	Aroclor-1016 {5}	696.313	724.493		-4.0	107
17	L7	Aroclor-1260	860.037	894.471		-4.0	108
18	L7	Aroclor-1260 {2}	1.436	1.483	E3	-3.3	107
19	L7	Aroclor-1260 {3}	1.699	1.761	E3	-3.6	108
20	L7	Aroclor-1260 {4}	0.975	0.952	E3	2.4	101
21	L7	Aroclor-1260 {5}	2.365	2.350	E3	0.6	104
22	S	DCB	23.694	23.253	E3	1.9	97

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

15061809.D XPCBF14.M Mon Jun 18 13:24:33 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_18_01\15061809.D\ECD1A.CH Vial: 9
Signal #2 : F:\HPCHEM\HP\15\DATA\06_18_01\15061809.D\ECD2B.CH
Acq On : 18 Jun 2001 12:50 Operator: DDC
Sample : AR1660L3X5 Inst : HP_15
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 13:24 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_18_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.60	7.36	561260	455998	22.4	19.7
22)	S DCB	18.29	18.70	581970	465059	22.5	19.6
	Target Compounds:						
2)	L1 Aroclor-1016	8.42	8.90	292275	217745	442.7	412.0
3)	L1 Aroclor-1016 {2}	9.28	9.88	368540	495740	437.8	399.2
4)	L1 Aroclor-1016 {3}	10.58	10.86	495239	845981	438.4	423.2
[illegible]	L1 Aroclor-1016 {4}	11.21	11.18	299161	260747	414.8	412.5
[illegible]	L1 Aroclor-1016 {5}	11.65	12.31	310161	289797	444.9	416.2
	Sum Aroclor-1016			1765377	2110009	2178.7	2063.2
	Average Aroclor-1016					435.732	412.637
17)	L7 Aroclor-1260	14.32	14.45	745534	357788	458.3	416.0
18)	L7 Aroclor-1260 {2}	14.81	14.73	1014302	593370	463.7	413.1
19)	L7 Aroclor-1260 {3}	15.26	14.93	962185	704462	461.2	414.5
20)	L7 Aroclor-1260 {4}	15.72	16.10	541335	380905	454.4	390.5
21)	L7 Aroclor-1260 {5}	16.17	16.33	1047819	939853	442.1	397.5
	Sum Aroclor-1260			4311174	2976379	2279.9	2031.7
	Average Aroclor-1260					455.971	406.331

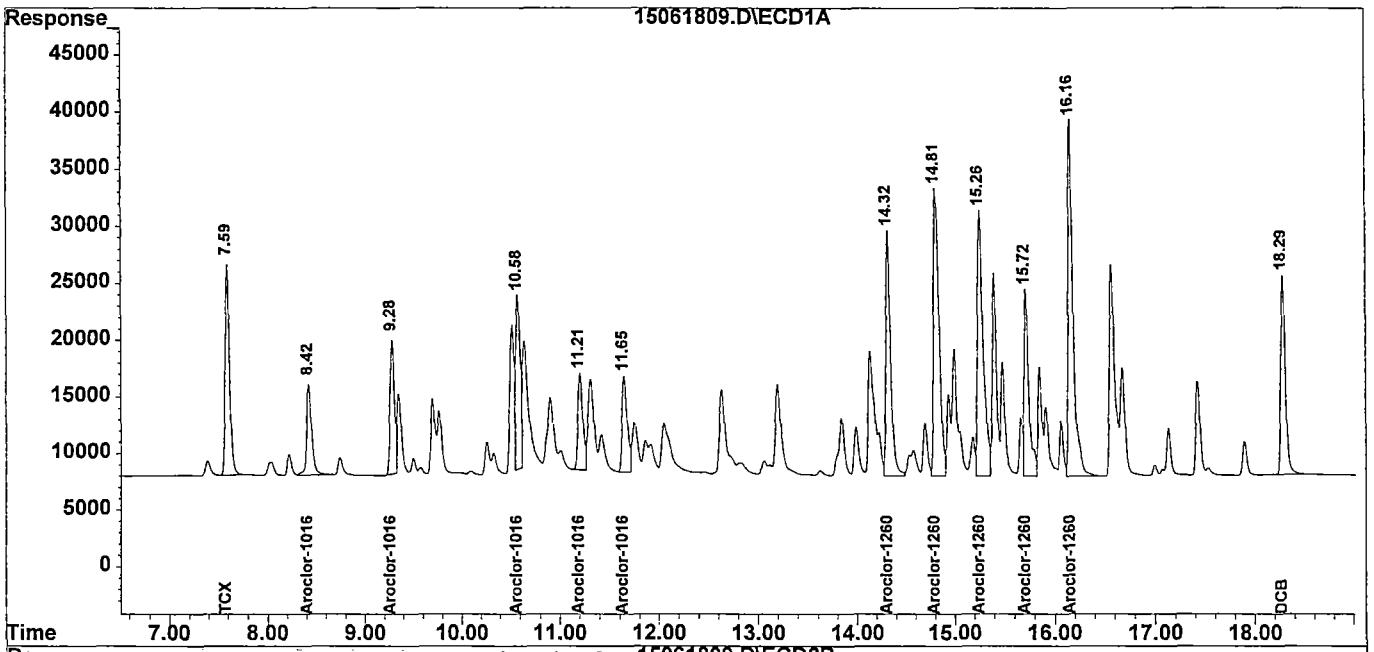
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

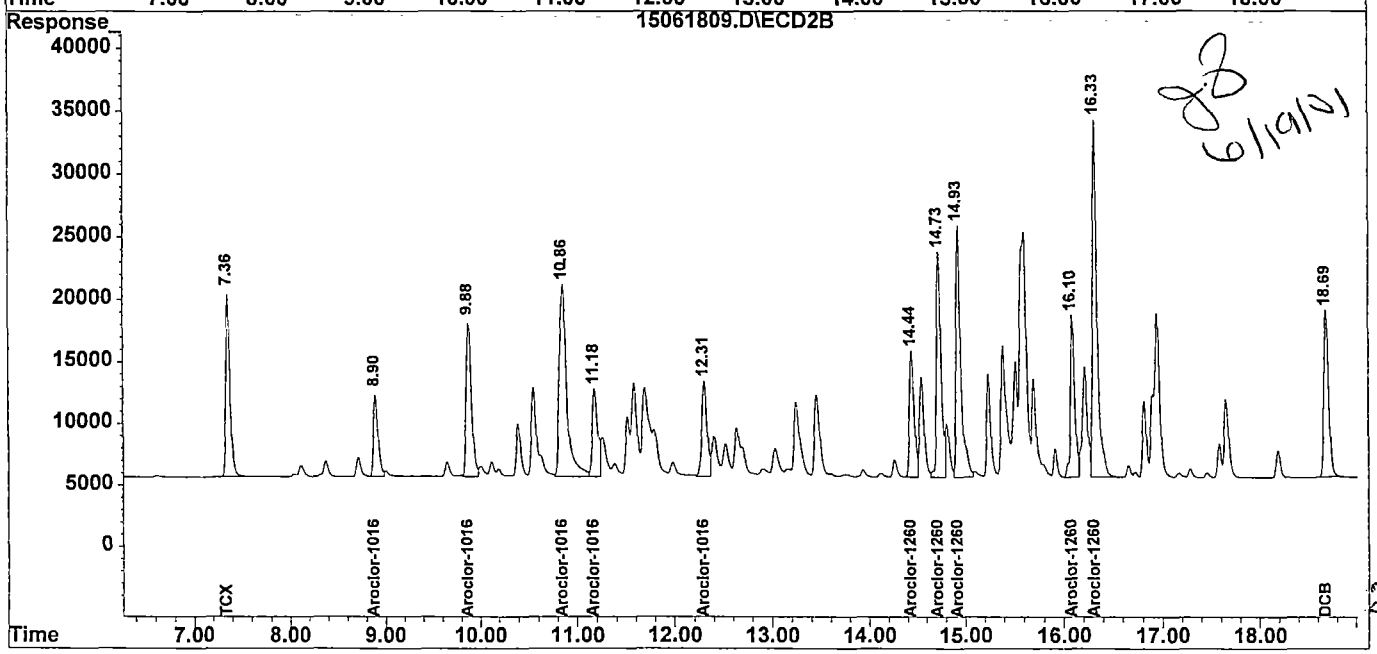
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_18_01\15061809.D\ECD1A.CH Vial: 9
Signal #2 : F:\HPCHEM\HP\15\DATA\06_18_01\15061809.D\ECD2B.CH
Acq On : 18 Jun 2001 12:50 Operator: DDC
Sample : AR1660L3X5 Inst : HP_15
Misc : 5-29-7 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 13:24 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_18_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





JB 6/19/01

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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PBLKSD

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Matrix: (soil/water) SOIL Lab Sample ID: BL0608SD

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

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

Extraction: (SepF/Cont/Sonc) N Date Extracted:06/08/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/15/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U
	Surrogate amount spiked	6.67	

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061475.D\ECD1A.CH Vial: 75
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061475.D\ECD2B.CH
Acq On : 15 Jun 2001 22:34 Operator: DDC
Sample : BL0608SD *PBLKSD * Inst : HP_15
Misc : **30.0G/5.0ML* Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:12 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.36	351355	343947	4.670	4.947
	Spiked Amount 6.667			Recovery	=	70.05%	74.21%
22)	S DCB	18.28	18.69	431936	399926	5.556	5.626
	Spiked Amount 6.667			Recovery	=	83.34%	84.39%

Target Compounds:

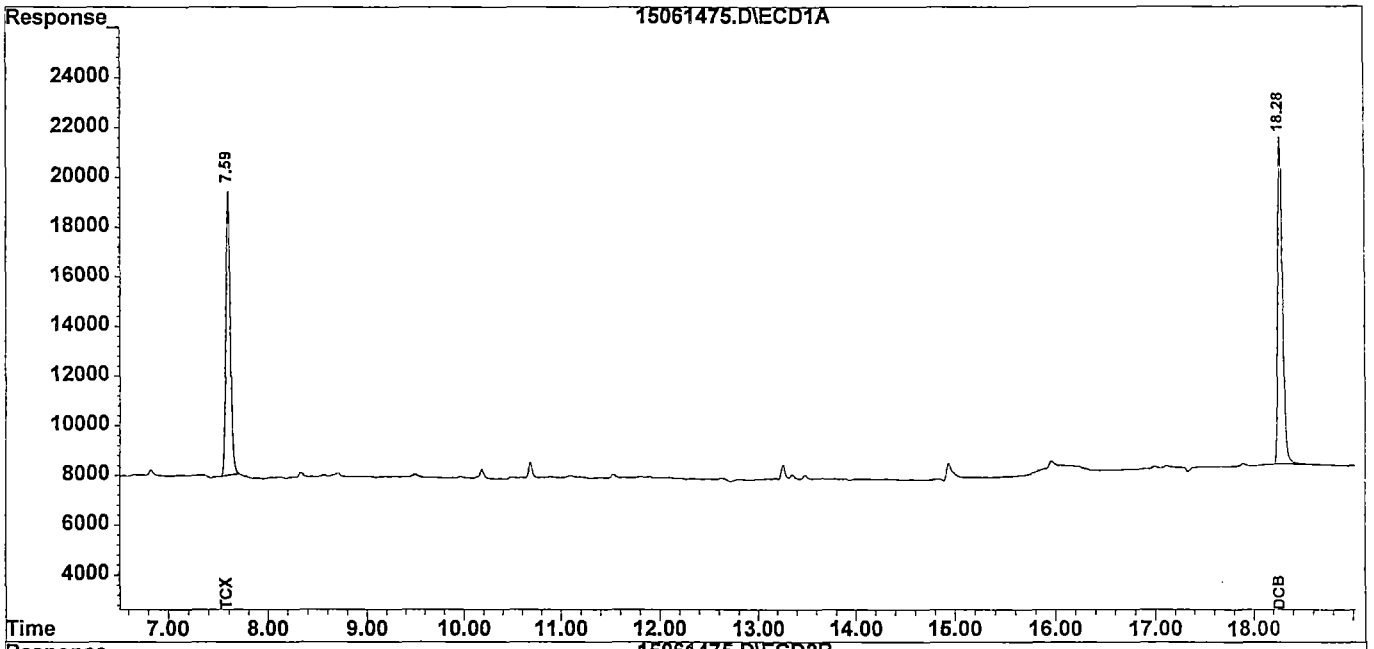
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

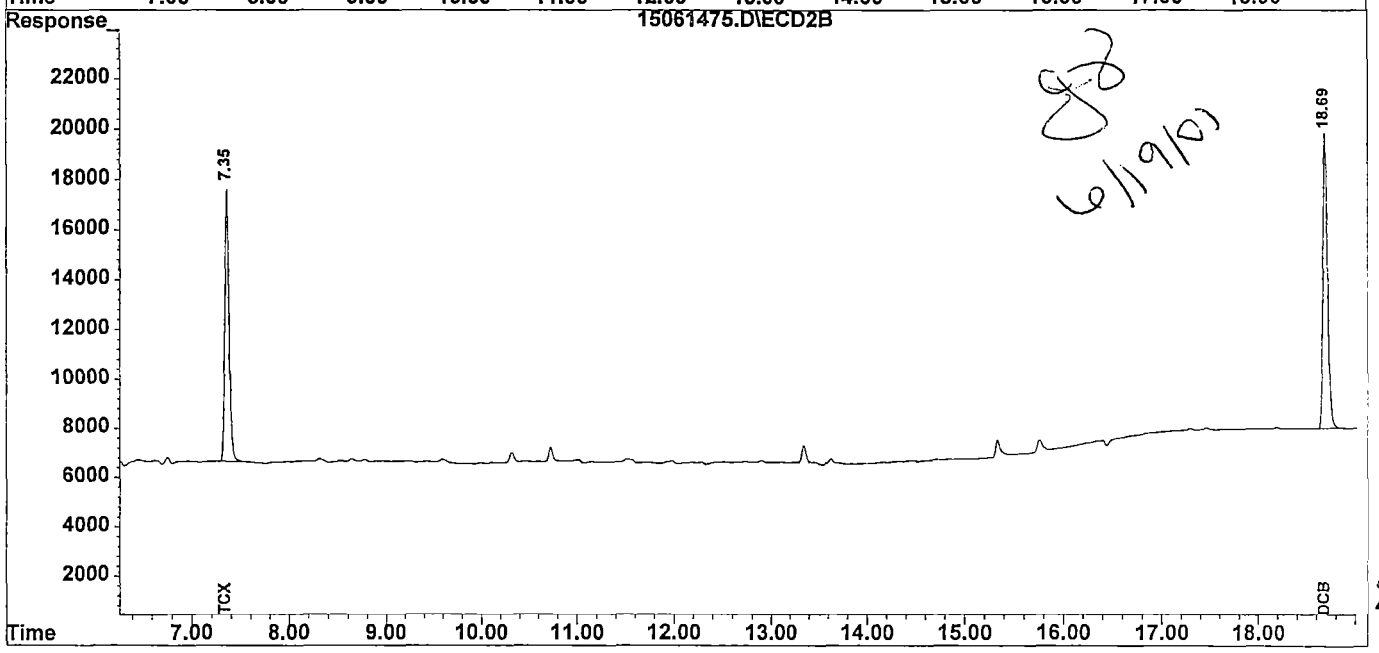
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061475.D\ECD1A.CH Vial: 75
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061475.D\ECD2B.CH
Acq On : 15 Jun 2001 22:34 Operator: DDC
Sample : BL0608SD *PBLKSD * Inst : HP_15
Misc : **30.0G/5.0ML* Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:12 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





6/19/01

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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK5G

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

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

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 06/15/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK5G

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

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

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 06/15/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061425.D\ECD1A.CH Vial: 25
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061425.D\ECD2B.CH
Acq On : 15 Jun 2001 3:13 Operator: DDC
Sample : PIBLK5G Inst : HP_15
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:35 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	480768	444722	19.2	19.2
22)	S DCB	18.29	18.70	481909	443587	18.6	18.7

Target Compounds:

COPY
ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E3065
Signature Sheila M. Williams
Date 06/19/01

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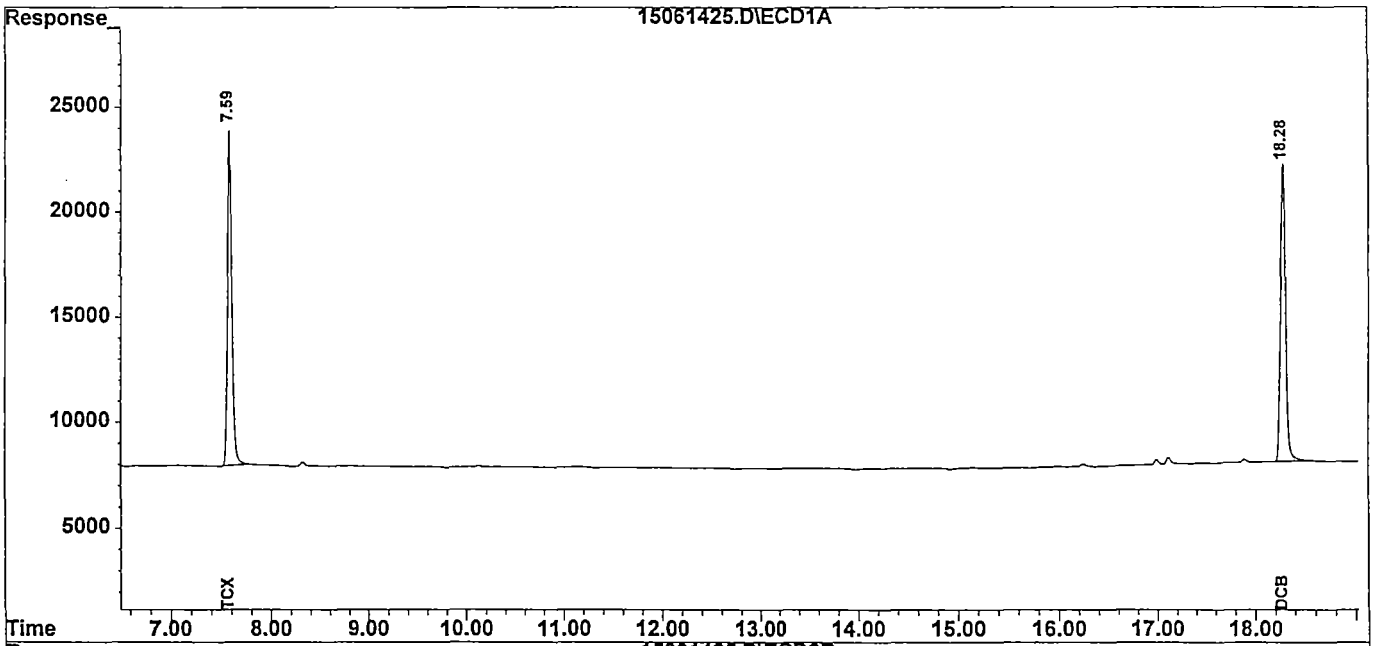
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

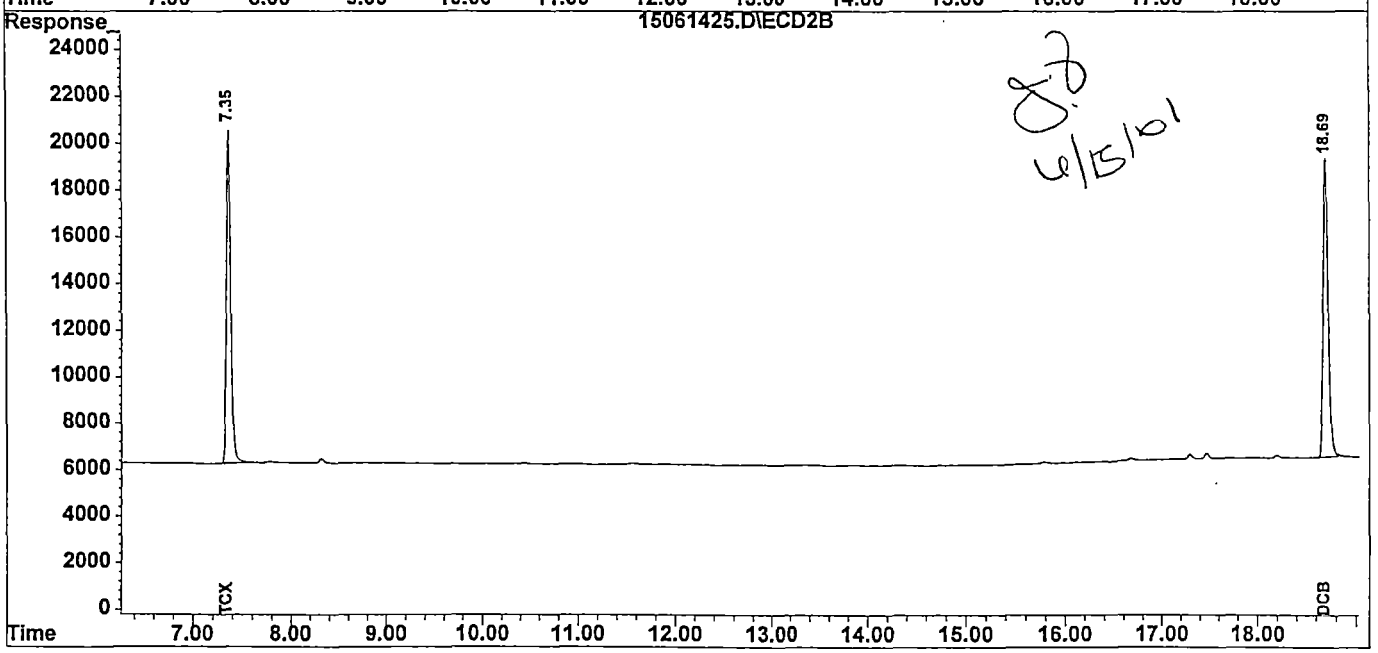
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061425.D\ECD1A.CH Vial: 25
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061425.D\ECD2B.CH
Acq On : 15 Jun 2001 3:13 Operator: DDC
Sample : PIBLK5G Inst : HP_15
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 8:35 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





6/15/01

214

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK5N

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

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

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 06/15/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK5N

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

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

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 06/15/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061470.D\ECD1A.CH Vial: 70
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061470.D\ECD2B.CH
Acq On : 15 Jun 2001 20:38 Operator: DDC
Sample : PIBLK5N Inst : HP_15
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 7:45 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.60	7.36	508768	510991	20.3	22.1
22)	S DCB	18.29	18.70	487083	445395	18.8	18.8
	Target Compounds:						

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E0056
Signature Gretchen M. Williams
Date 06/20/01

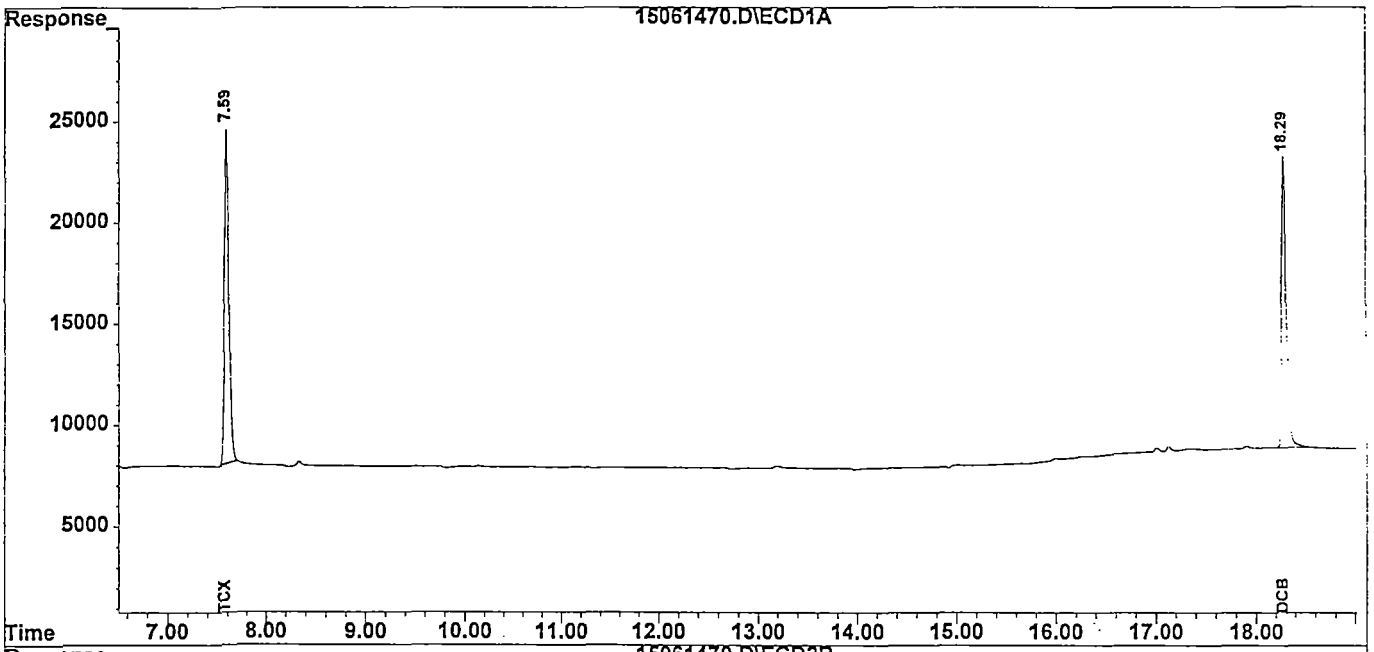
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
15061470.D XPCBF14.M Sat Jun 16 10:16:52 2001 Page 1

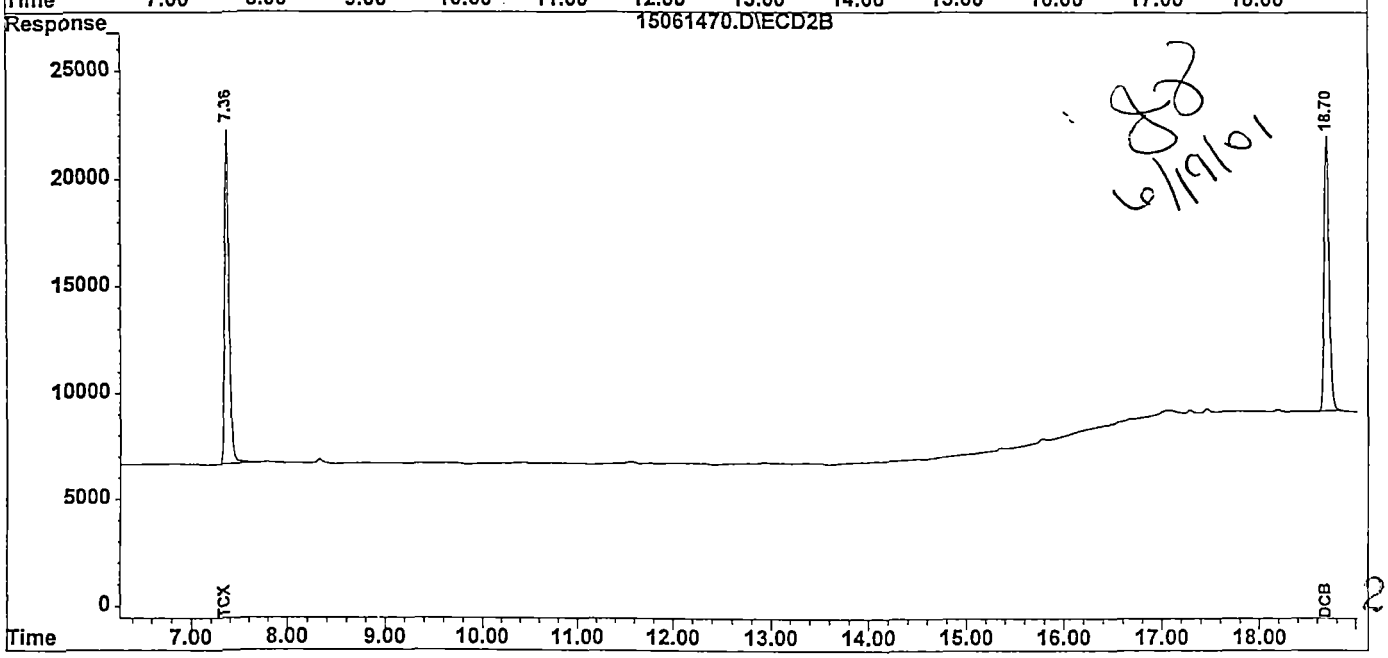
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061470.D\ECD1A.CH Vial: 70
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061470.D\ECD2B.CH
Acq On : 15 Jun 2001 20:38 Operator: DDC
Sample : PIBLK5N Inst : HP_15
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 7:45 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK50

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

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

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 06/16/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK50

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

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

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 06/16/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061480.D\ECD1A.CH Vial: 80
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061480.D\ECD2B.CH
Acq On : 16 Jun 2001 00:30 Operator: DDC
Sample : PIBLK5O Inst : HP_15
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 10:18 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Sat Jun 16 10:18:24 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	488399	491477	19.5	21.2
22)	S DCB	18.28	18.69	468196	444401	18.1	18.8

Target Compounds:

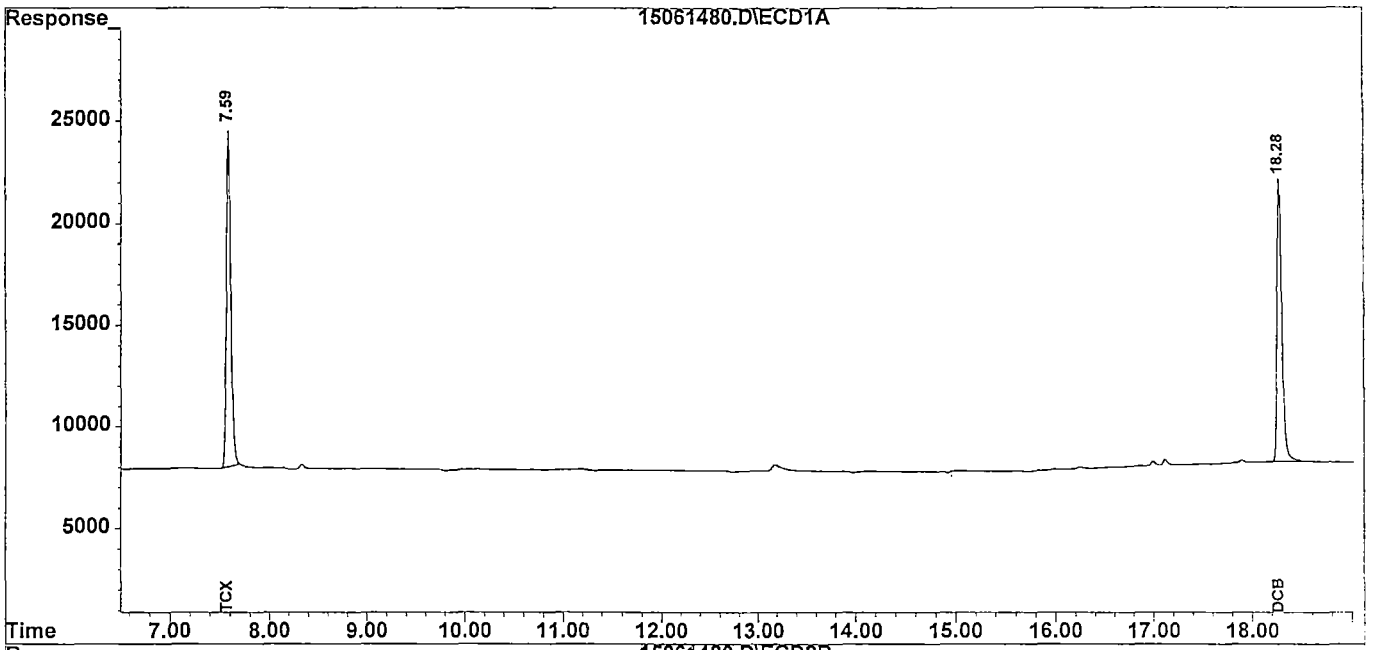
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
15061480.D XPCBF14.M Sat Jun 16 10:19:13 2001 Page 1

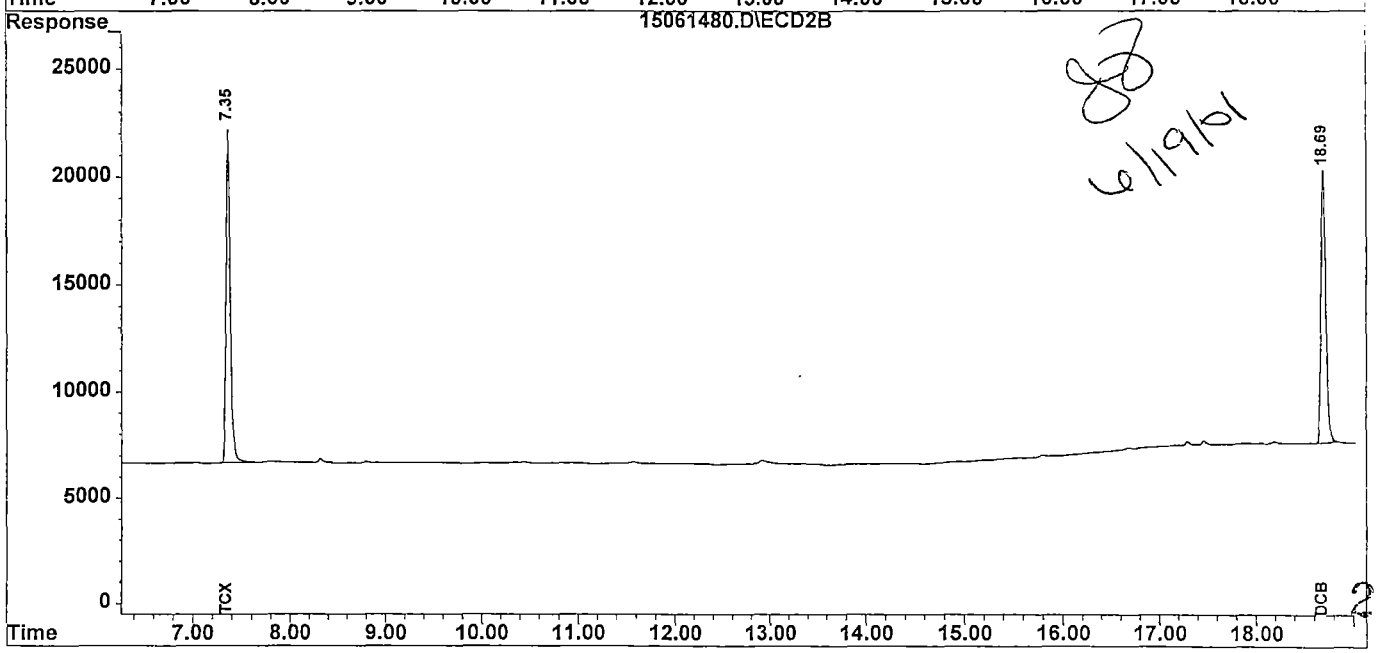
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061480.D\ECD1A.CH Vial: 80
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061480.D\ECD2B.CH
Acq On : 16 Jun 2001 00:30 Operator: DDC
Sample : PIBLK50 Inst : HP_15
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 10:18 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK5P

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

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

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 06/16/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK5P

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

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

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 06/16/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061493.D\ECD1A.CH Vial: 93
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061493.D\ECD2B.CH
Acq On : 16 Jun 2001 5:32 Operator: DDC
Sample : PIBLK5P Inst : HP_15
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 7:45 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	481112	486774	19.2	21.0
22)	S DCB	18.28	18.69	496733	470458	19.2	19.9

Target Compounds:

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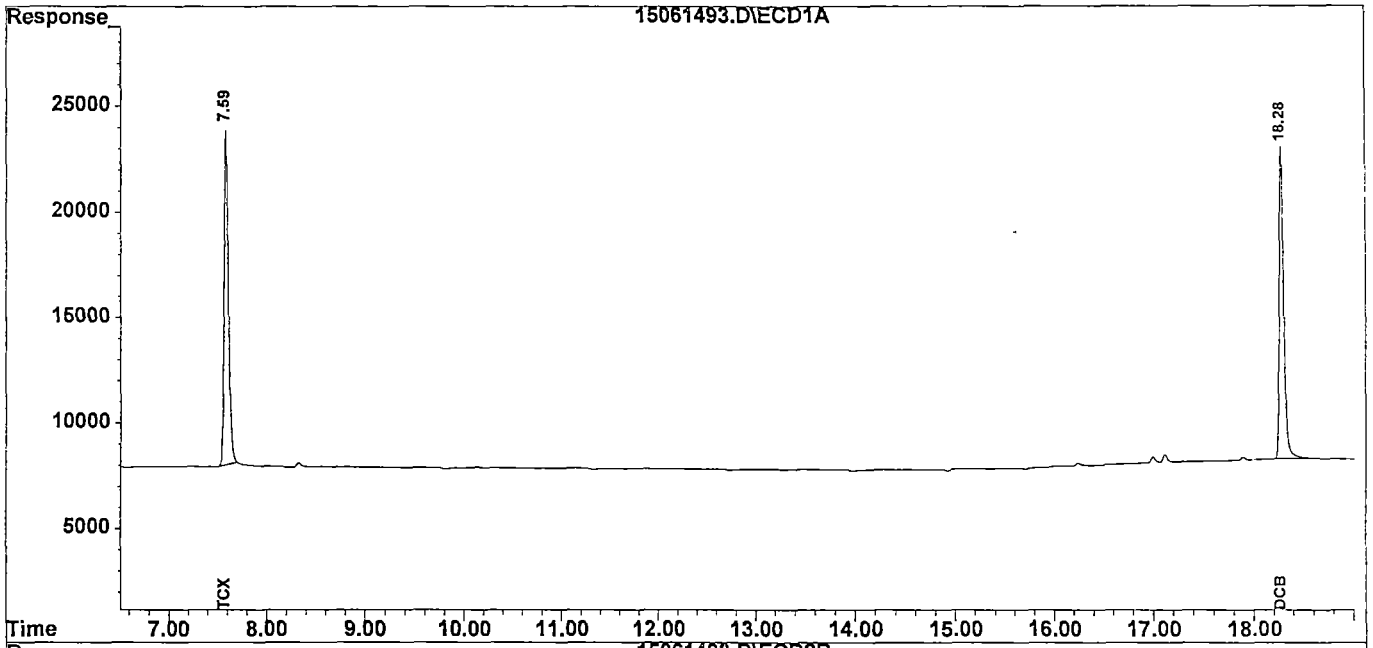
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

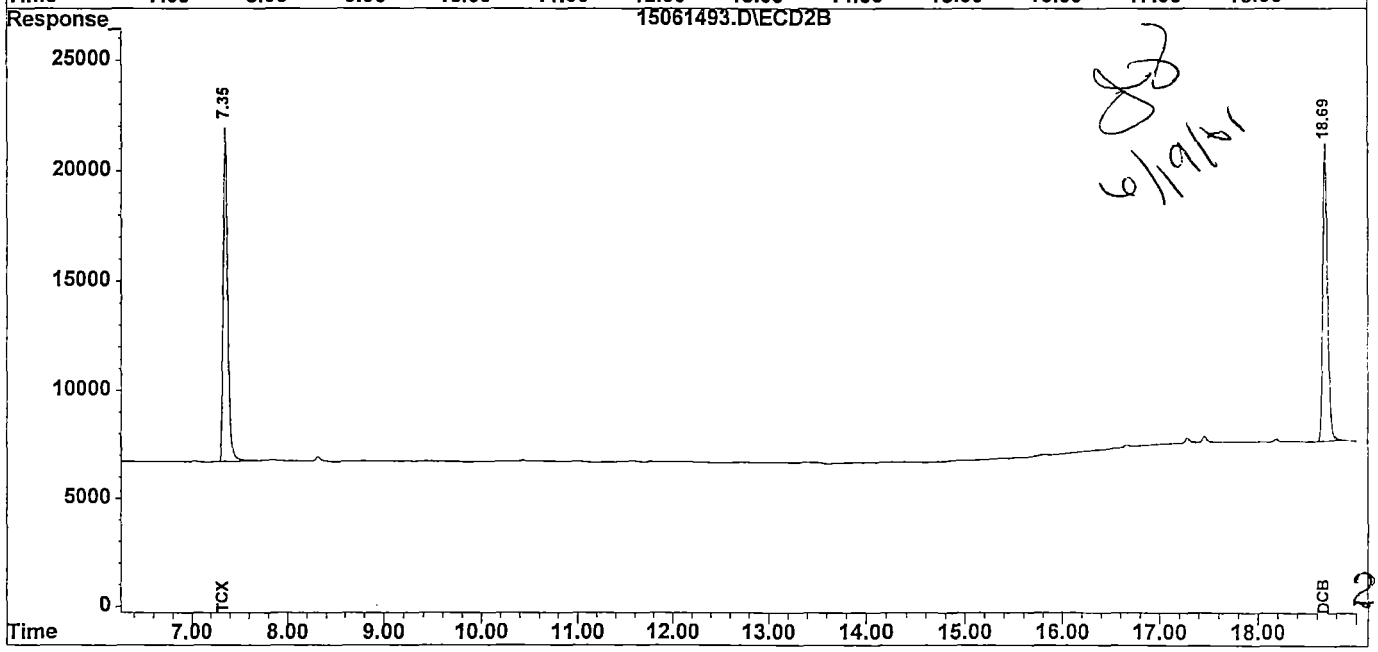
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061493.D\ECD1A.CH Vial: 93
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061493.D\ECD2B.CH
Acq On : 16 Jun 2001 5:32 Operator: DDC
Sample : PIBLK5P Inst : HP_15
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 7:45 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





6/19/01

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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK5Q

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

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

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 06/16/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK5Q

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

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

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 06/16/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061506.D\ECD1A.CH Vial: 6
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061506.D\ECD2B.CH
Acq On : 16 Jun 2001 10:33 Operator: DDC
Sample : PIBLK5Q Inst : HP_15
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 17 8:50 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	526000	517188	21.0	22.3
22)	S DCB	18.29	18.69	515129	448153	19.9	18.9
	Target Compounds:						

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E00E6
Signature Amelia M. Williams
Date 06/20/01

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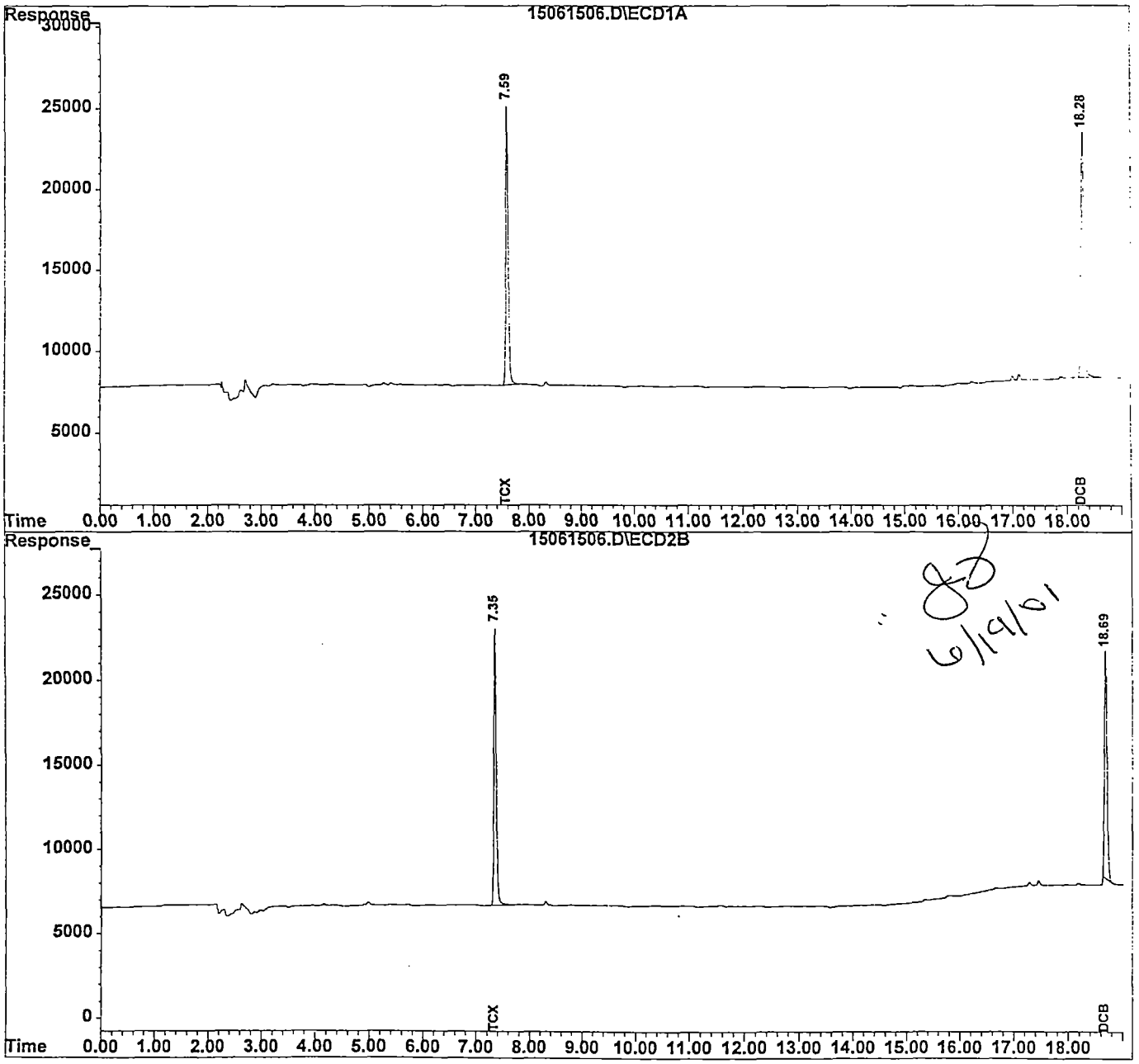
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061506.D\ECD1A.CH Vial: 6
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061506.D\ECD2B.CH
Acq On : 16 Jun 2001 10:33 Operator: DDC
Sample : PIBLK5Q Inst : HP_15
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 17 8:50 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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



6/19/01

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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK5S

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

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

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 06/16/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK5S

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

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

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 06/16/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061536.D\ECD1A.CH Vial: 36
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061536.D\ECD2B.CH
Acq On : 16 Jun 2001 22:11 Operator: DDC
Sample : PIBLK5S Inst : HP_15
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 17 8:58 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.36	550587	473544	22.0	20.4
22)	S DCB	18.29	18.69	526508	445627	20.3	18.8

Target Compounds:

COPY
ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E00E6
Signature Janette M. Williams
Date 06/20/01

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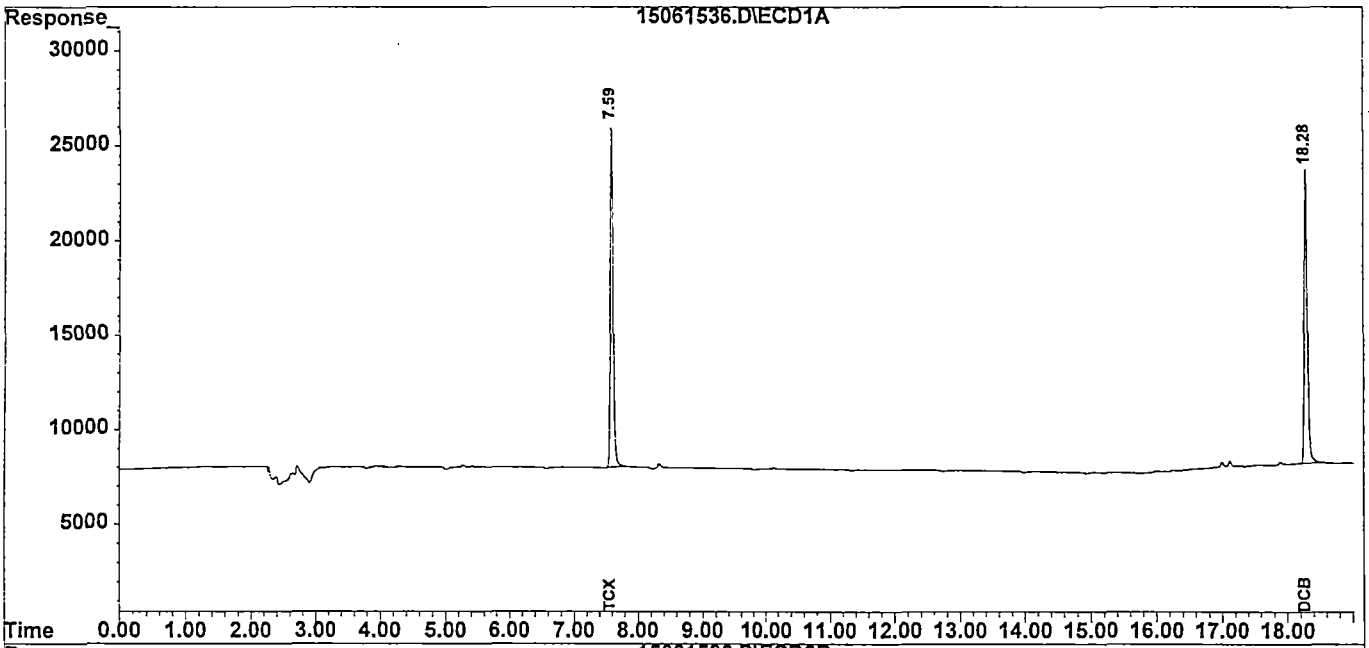
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

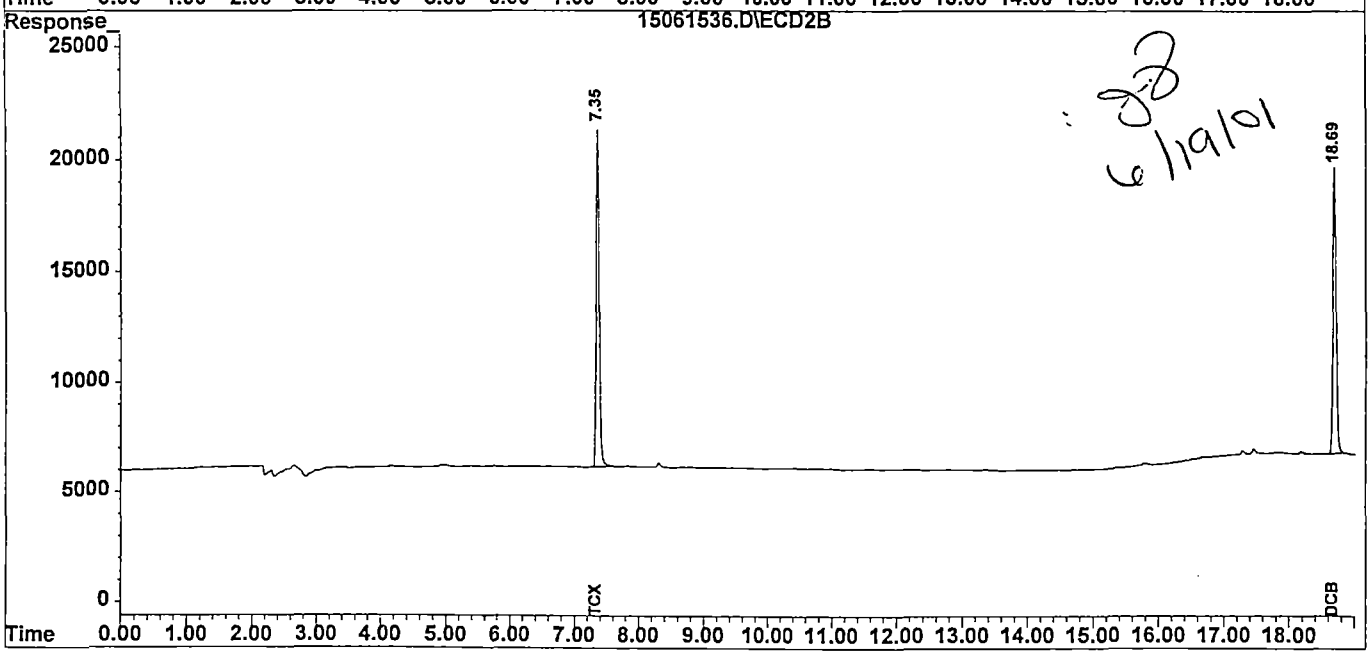
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061536.D\ECD1A.CH Vial: 36
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061536.D\ECD2B.CH
Acq On : 16 Jun 2001 22:11 Operator: DDC
Sample : PIBLK5S Inst : HP_15
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 17 8:58 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK5Y

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

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

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 06/18/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK5Y

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

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

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 06/18/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_18_01\15061802.D\ECD1A.CH Vial: 2
Signal #2 : F:\HPCHEM\HP\15\DATA\06_18_01\15061802.D\ECD2B.CH
Acq On : 18 Jun 2001 8:50 Operator: DDC
Sample : PIBLK5Y Inst : HP_15
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 13:23 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_18_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.58	7.35	518200	429249	20.7	18.5
22)	S DCB	18.28	18.68	498226	446445	19.2	18.8

Target Compounds:

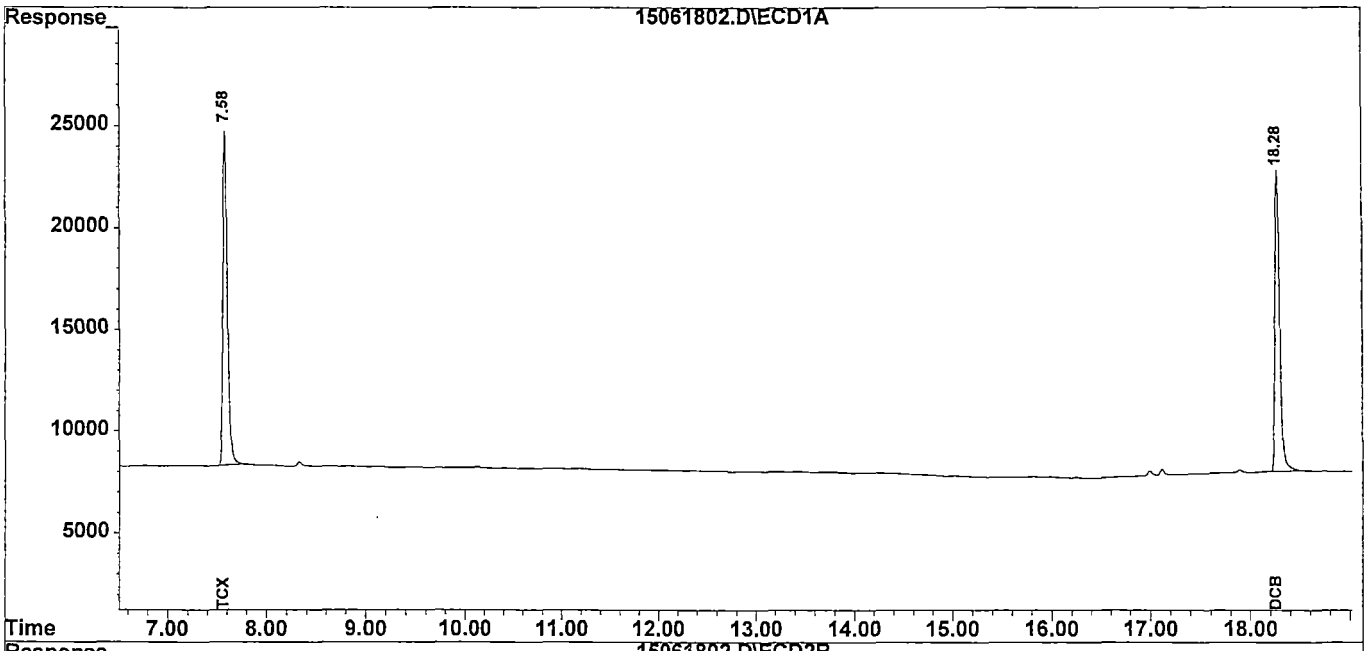
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
15061802.D XPCBF14.M Tue Jun 19 14:00:51 2001 Page 1

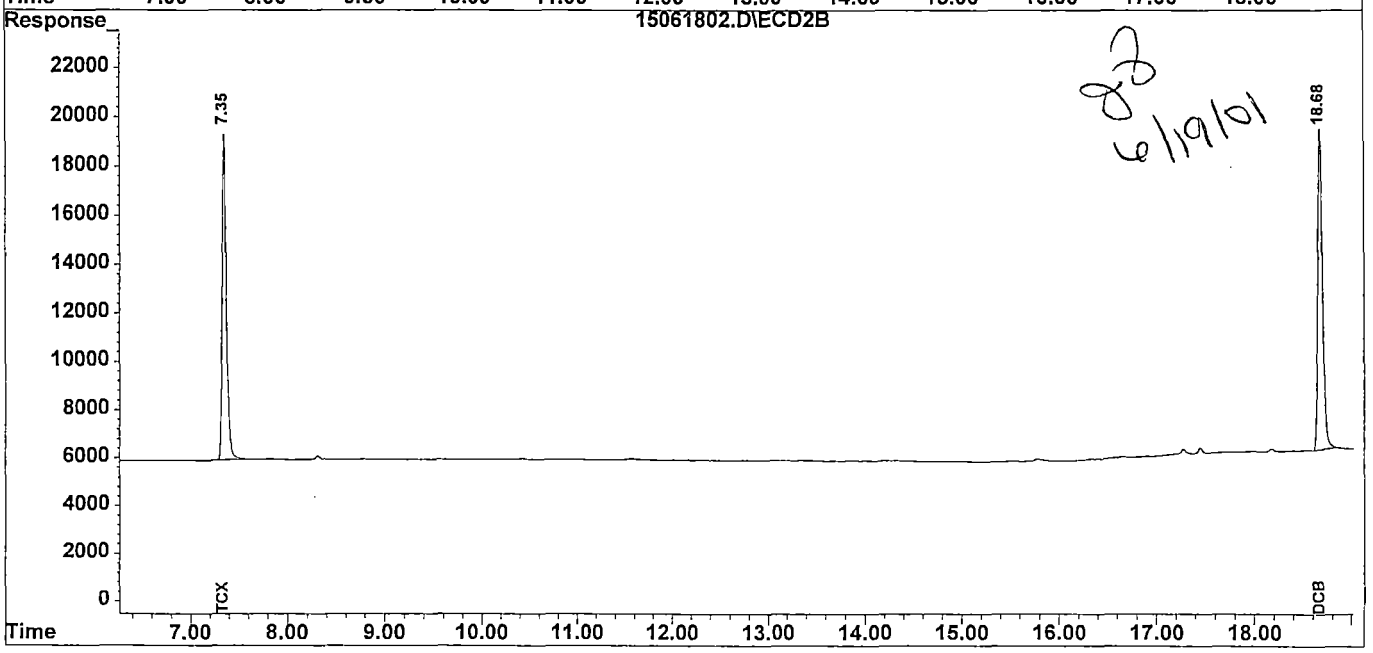
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_18_01\15061802.D\ECD1A.CH Vial: 2
Signal #2 : F:\HPCHEM\HP\15\DATA\06_18_01\15061802.D\ECD2B.CH
Acq On : 18 Jun 2001 8:50 Operator: DDC
Sample : PIBLK5Y Inst : HP_15
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 13:23 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_18_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





6/19/01

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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK5Z

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

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

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 06/18/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK5Z

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

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

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

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

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 06/18/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_18_01\15061808.D\ECD1A.CH Vial: 8
Signal #2 : F:\HPCHEM\HP\15\DATA\06_18_01\15061808.D\ECD2B.CH
Acq On : 18 Jun 2001 12:27 Operator: DDC
Sample : PIBLK5Z Inst : HP_15
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 13:24 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_18_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds:						
1)	S TCX	7.59	7.36	501108	405943	20.0	17.5
22)	S DCB	18.29	18.69	494023	395374	19.1	16.7

Target Compounds:

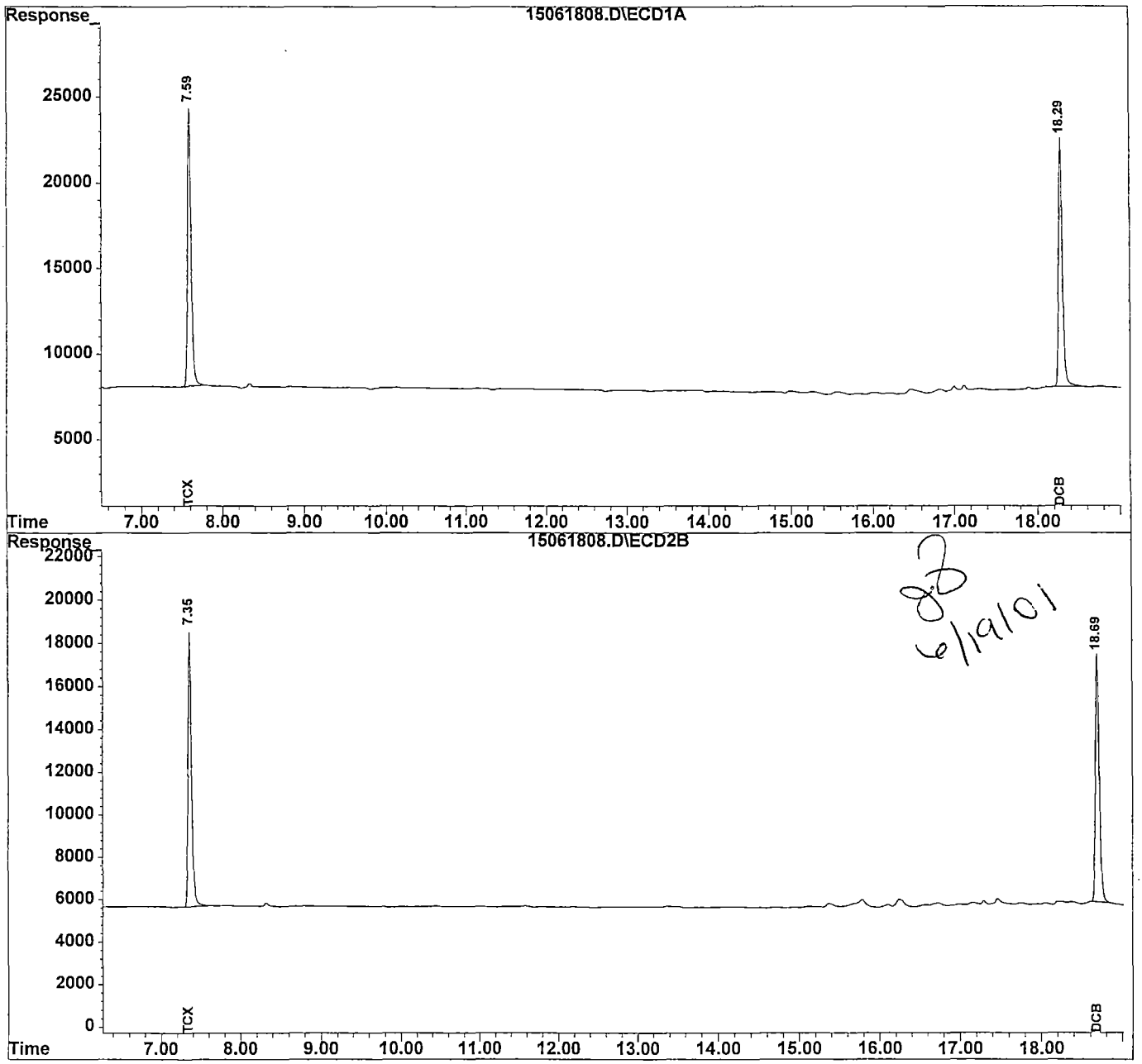
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_18_01\15061808.D\ECD1A.CH Vial: 8
Signal #2 : F:\HPCHEM\HP\15\DATA\06_18_01\15061808.D\ECD2B.CH
Acq On : 18 Jun 2001 12:27 Operator: DDC
Sample : PIBLK5Z Inst : HP_15
Misc : 5-414-6 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 18 13:24 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_18_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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



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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ELCS1

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Matrix: (soil/water) SOIL Lab Sample ID: LC0608SD

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

% Moisture: 0 decanted: (Y/N) __ Date Received: 06/07/01

Extraction: (SepF/Cont/Sonc) N Date Extracted:06/08/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/15/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	93	
11096-82-5	Aroclor-1260	33	U
	Surrogate amount spiked	6.67	

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061477.D\ECD1A.CH Vial: 77
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061477.D\ECD2B.CH
Acq On : 15 Jun 2001 23:21 Operator: DDC
Sample : LC0608SD *ELCS1 * Inst : HP_15
Misc : **30.0G/5.0ML* Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:15 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.36	324329	314255	4.310	4.520
	Spiked Amount 6.667			Recovery	=	64.65%	67.80%
22)	S DCB	18.28	18.69	392008	366196	5.042	5.152
	Spiked Amount 6.667			Recovery	=	75.63%	77.28%
	Target Compounds:						
12)	L6 Aroclor-1254	12.63	12.30	320469	93899	92.0	86.6
13)	L6 Aroclor-1254 {2}	13.32	13.02	204094	144894	91.7	101.6
[illegible]	L6 Aroclor-1254 {3}	13.79	13.93	285146	125365	92.1	80.6
15)	L6 Aroclor-1254 {4}	14.31	14.93	253252	233490	91.3	105.2
16)	L6 Aroclor-1254 {5}	15.00	15.40	233421	291263	100.0	106.1
	Sum Aroclor-1254			1296383	888911	467.1	480.1
	Average Aroclor-1254					93.420	96.017

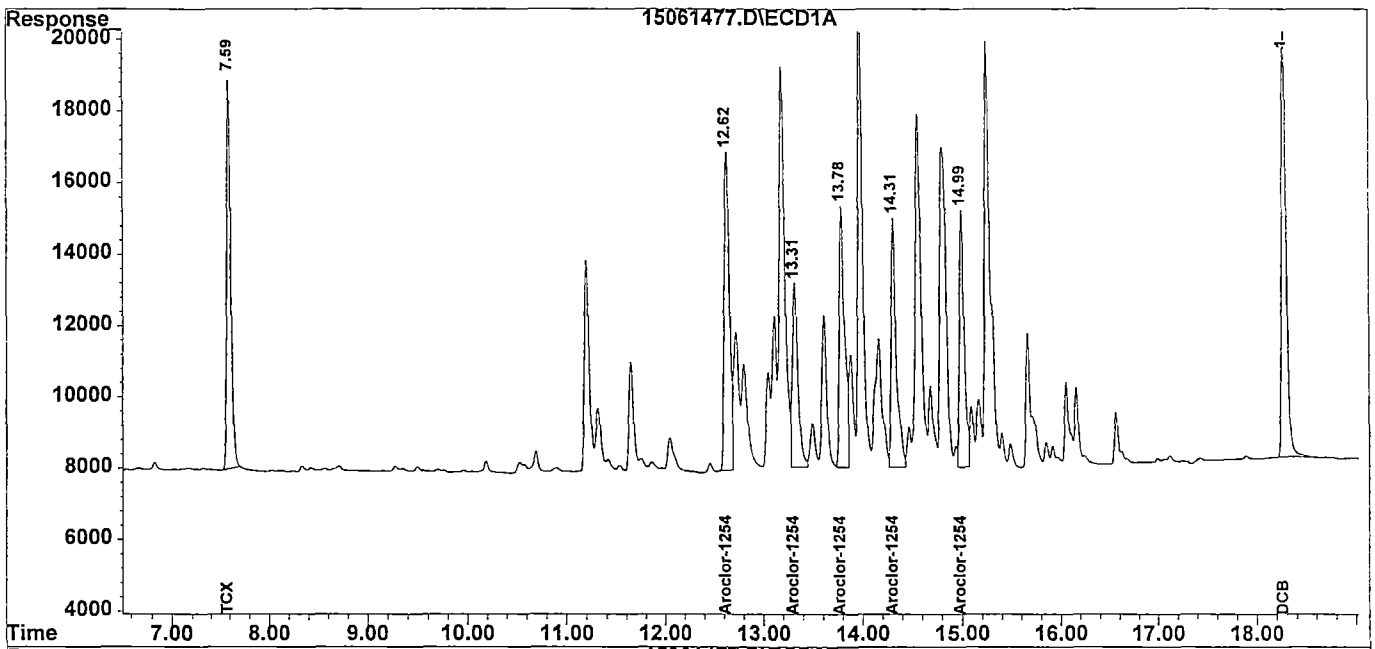
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

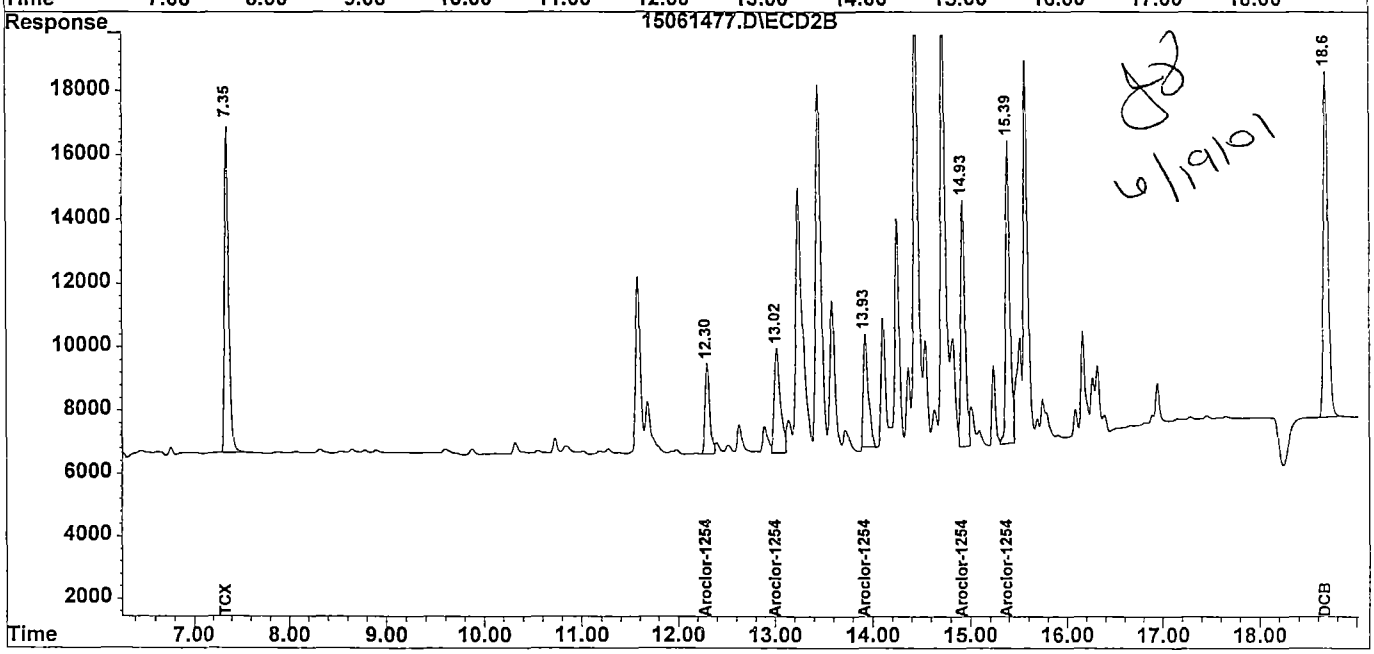
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061477.D\ECD1A.CH Vial: 77
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061477.D\ECD2B.CH
Acq On : 15 Jun 2001 23:21 Operator: DDC
Sample : LC0608SD *ELCS1 * Inst : HP_15
Misc : **30.0G/5.0ML* Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:15 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ELCS2

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Matrix: (soil/water) SOIL Lab Sample ID: LD0608SD

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

% Moisture: 0 decanted: (Y/N) __ Date Received: 06/07/01

Extraction: (SepF/Cont/Sonc) N Date Extracted:06/08/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/15/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	100	
11096-82-5	Aroclor-1260	33	U
Surrogate amount spiked		6.67	

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061478.D\ECD1A.CH Vial: 78
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061478.D\ECD2B.CH
Acq On : 15 Jun 2001 23:44 Operator: DDC
Sample : LD0608SD *ELCS2 * Inst : HP_15
Misc : **30.0G/5.0ML* Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:15 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	337550	332269	4.486	4.780
	Spiked Amount 6.667			Recovery	=	67.29%	71.70%
22)	S DCB	18.28	18.69	438439	416471	5.640	5.859
	Spiked Amount 6.667			Recovery	=	84.60%	87.89%
	Target Compounds:						
12)	L6 Aroclor-1254	12.63	12.30	336888	94326	96.8	87.0
13)	L6 Aroclor-1254 {2}	13.32	13.02	217942	158456	97.9	111.1
14)	L6 Aroclor-1254 {3}	13.78	13.93	302912	127566	97.9	82.0
15)	L6 Aroclor-1254 {4}	14.31	14.93	273627	258956	98.6	116.6
16)	L6 Aroclor-1254 {5}	15.00	15.39	279941	328437	119.9	119.7
	Sum Aroclor-1254			1411310	967741	511.0	516.4
	Average Aroclor-1254					102.209	103.284

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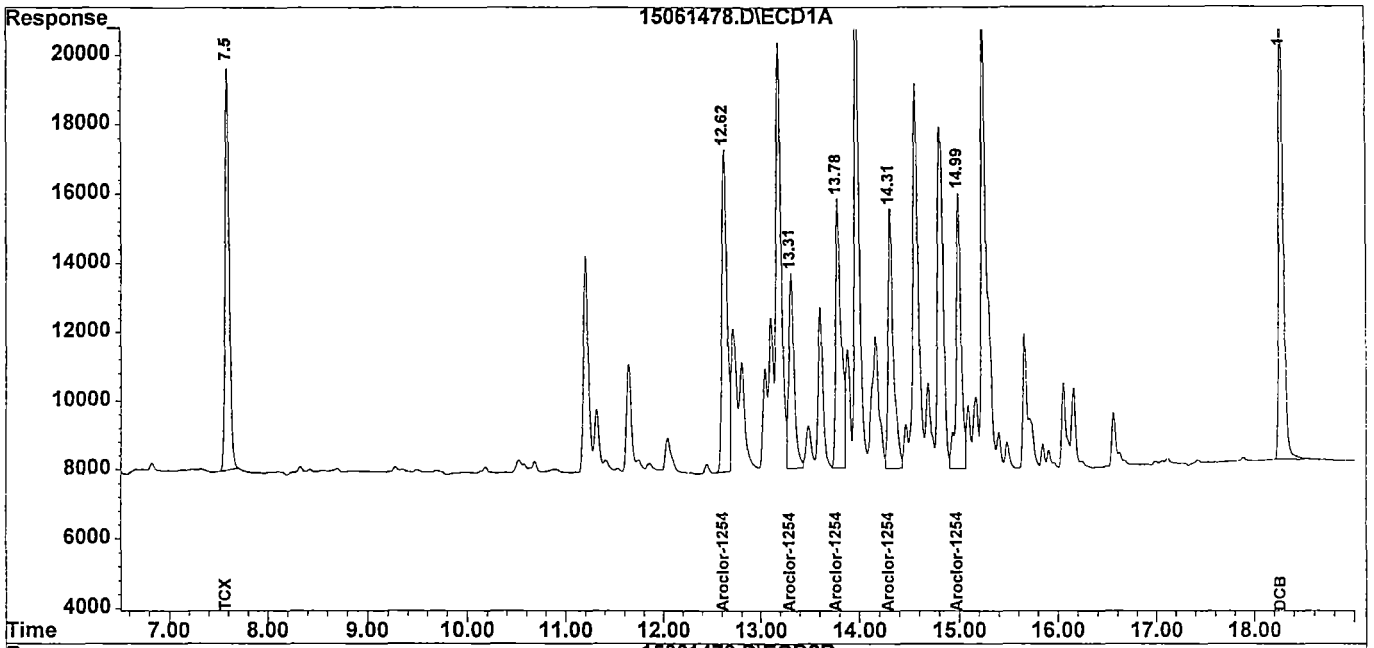
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

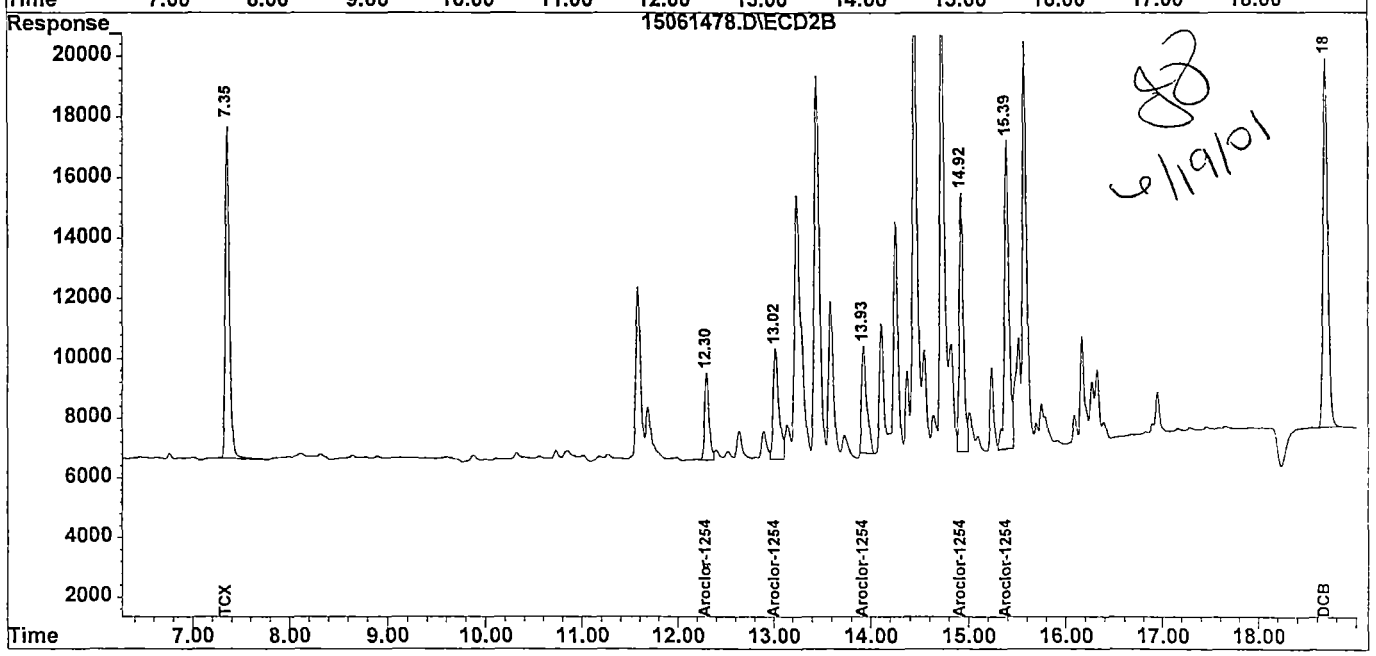
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061478.D\ECD1A.CH Vial: 78
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061478.D\ECD2B.CH
Acq On : 15 Jun 2001 23:44 Operator: DDC
Sample : LD0608SD *ELCS2 * Inst : HP_15
Misc : **30.0G/5.0ML* Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:15 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00H4MS

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Matrix: (soil/water) SOIL Lab Sample ID: 46702.34MS

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

% Moisture: 61 decanted: (Y/N) __ Date Received: 06/07/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/08/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	84	U
11104-28-2	Aroclor-1221	84	U
11141-16-5	Aroclor-1232	84	U
53469-21-9	Aroclor-1242	84	U
12672-29-6	Aroclor-1248	84	U
11097-69-1	Aroclor-1254	250	
11096-82-5	Aroclor-1260	84	U
	Surrogate amount spiked	16.92	

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061484.D\ECD1A.CH Vial: 84
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061484.D\ECD2B.CH
Acq On : 16 Jun 2001 2:03 Operator: DDC
Sample : 46702.34MS *E00H4MS * Inst : HP_15
Misc : *EPA*30.3G/5.0ML*61 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:16 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	354811	353335	12.0	12.9
	Spiked Amount 16.925			Recovery	=	70.90%	76.22%
22)	S DCB	18.28	18.69	430366	417379	14.1	14.9
	Spiked Amount 16.925			Recovery	=	83.31%	88.04%
	Target Compounds:						
12)	L6 Aroclor-1254	12.62	12.29	388443	75392	283.2	176.5m #
13)	L6 Aroclor-1254 {2}	13.31	13.02	112992	102200	128.9	182.0m #
,	L6 Aroclor-1254 {3}	0.00	14.92f	0	211768	N.D. d	345.6m #
15)	L6 Aroclor-1254 {4}	14.31	15.39f	278845	269548	255.1	308.2m
16)	L6 Aroclor-1254 {5}	14.99	15.39	299316	341209	325.5	315.6
	Sum Aroclor-1254			1079596	1000117	992.6	1327.9
	Average Aroclor-1254					248.162	265.580

DDC G1621

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

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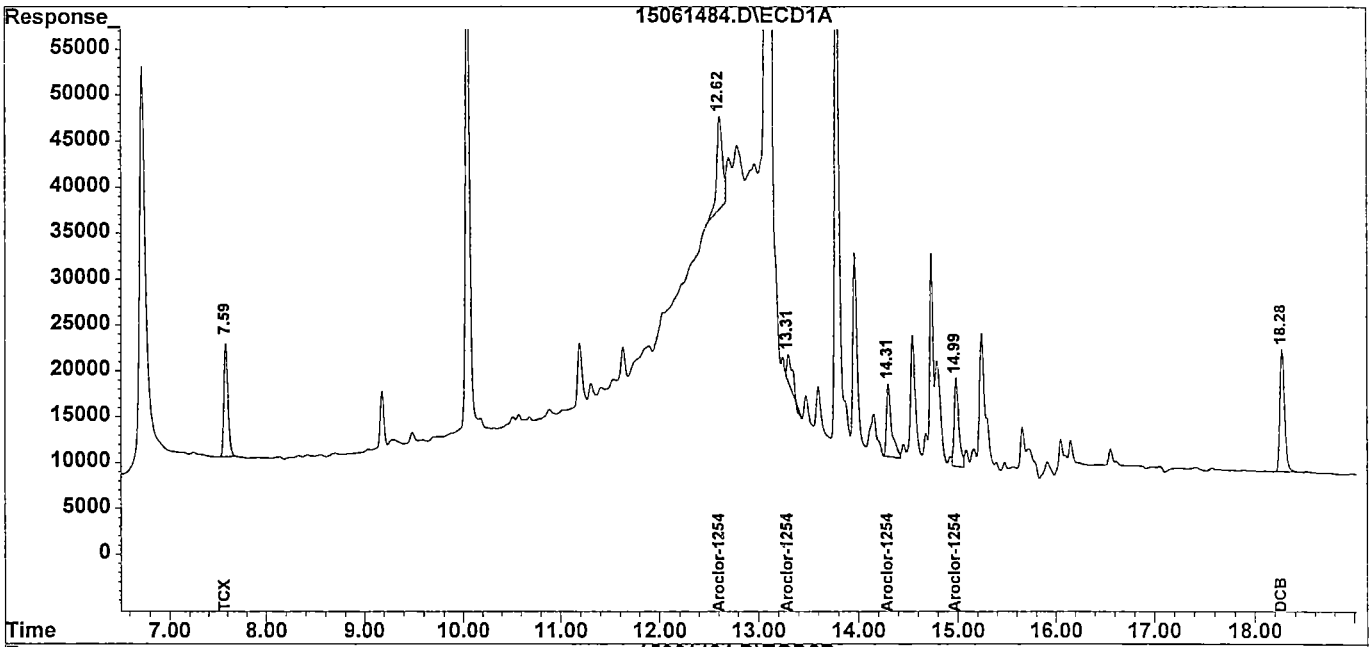
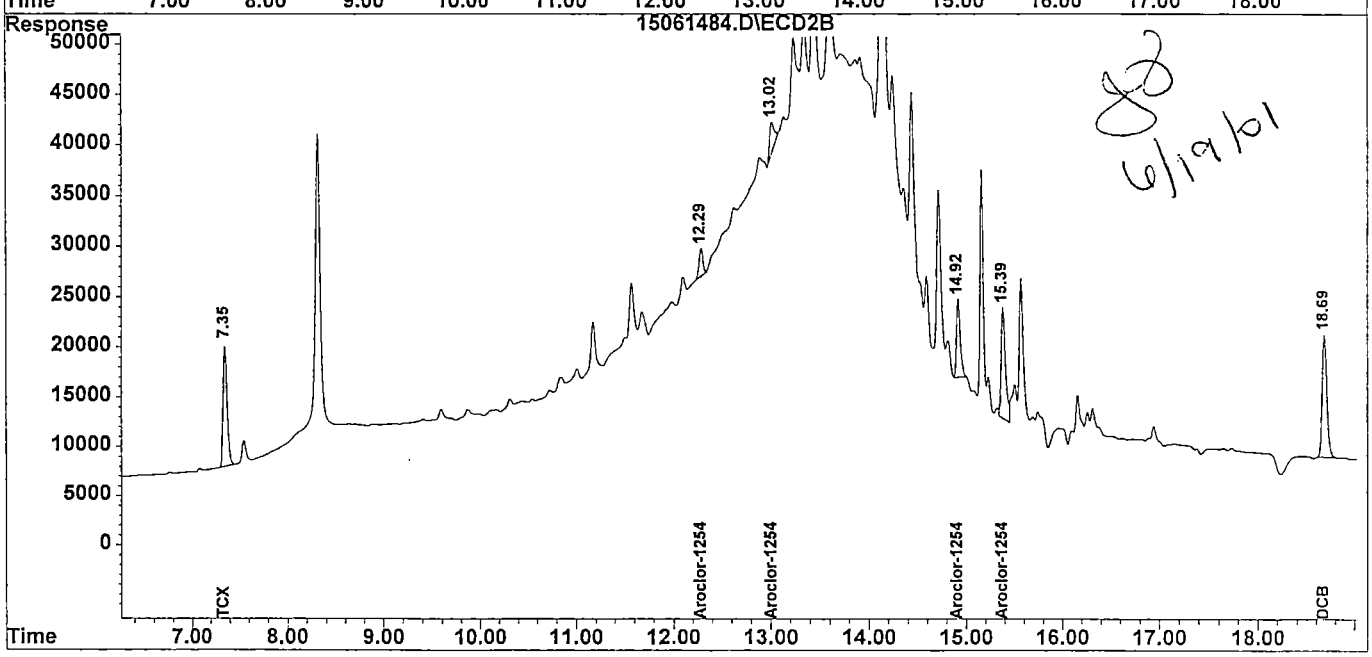
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061484.D\ECD1A.CH Vial: 84
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061484.D\ECD2B.CH
Acq On : 16 Jun 2001 2:03 Operator: DDC
Sample : 46702.34MS *E00H4MS * Inst : HP_15
Misc : *EPA*30.3G/5.0ML*61 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:16 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





6/19/01

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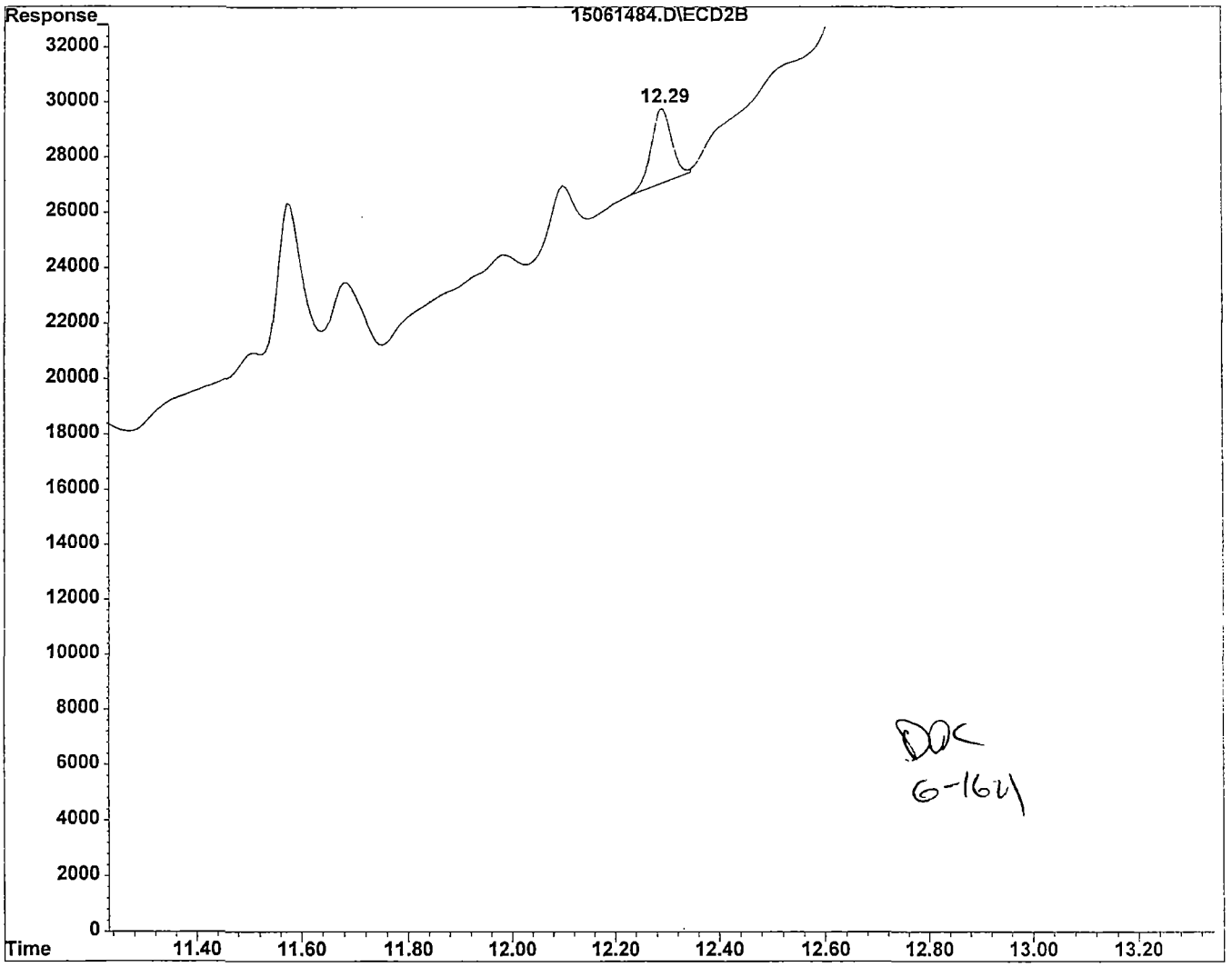
MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\15\DATA\06_14_01\15061484.D
Date Acquired: 16 Jun 2001 2:03
Inst: HP_15 Operator ID: DDC
Name: 46702.34MS *E00H4MS *
Misc: *EPA*30.3G/5.0ML*61
Method: F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title: PCB/TOXAPHENE
Quant Time: Jun 16 8:16 2001 Quant Results File: XPCBF14.RES



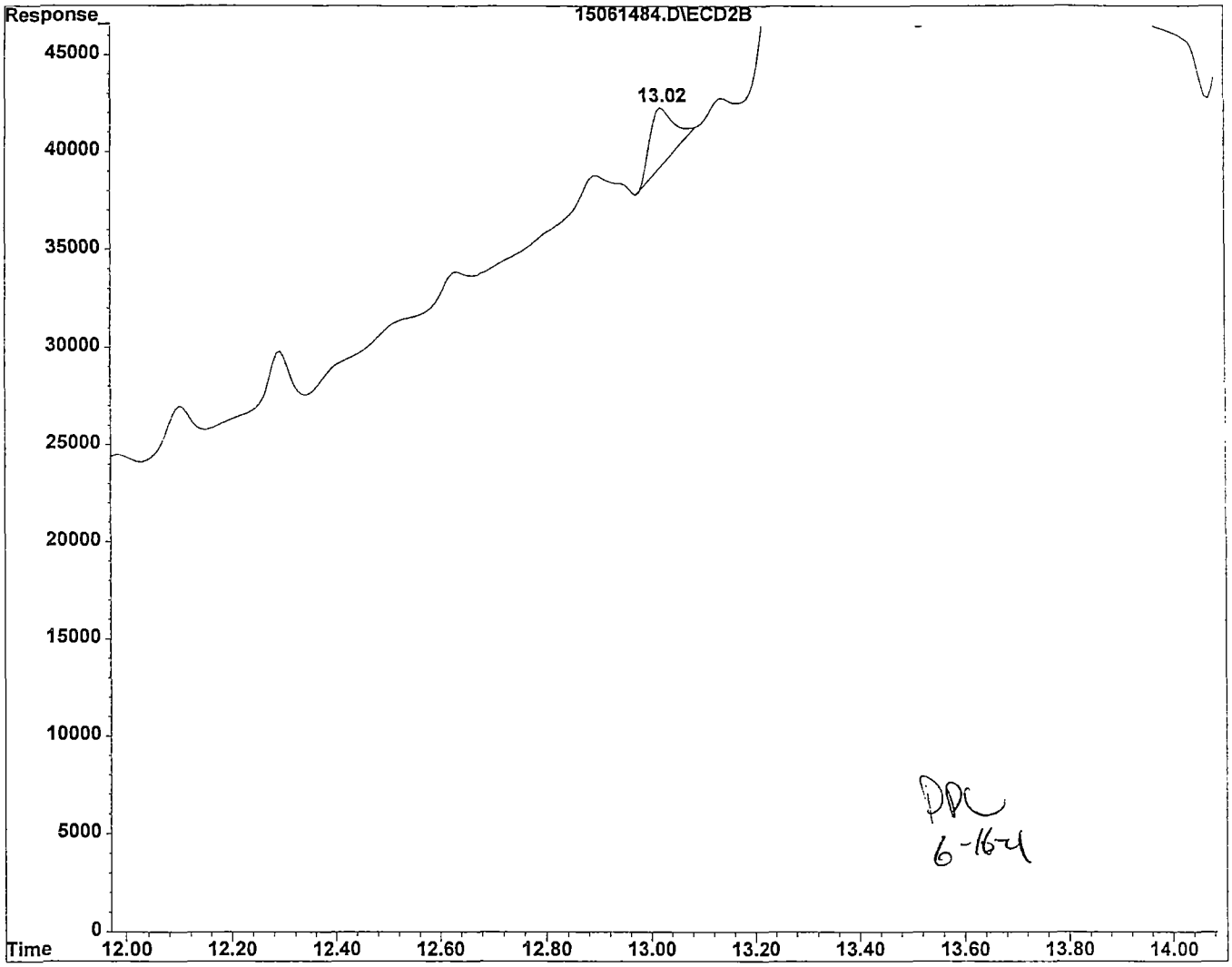
Aroclor-1254 #2 12.29min area: 75392 m

Integration Time Range: 12.23 - 12.34

F:\HPCHEM\HP\15\DATA\06_14_01\15061484.D
Report generated: Sat Jun 16 11:39:42 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\15\DATA\06_14_01\15061484.D
Date Acquired: 16 Jun 2001 2:03
Inst: HP_15 Operator ID: DDC
Name: 46702.34MS *E00H4MS *
Misc: *EPA*30.3G/5.0ML*61
Method: F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title: PCB/TOXAPHENE
Quant Time: Jun 16 8:16 2001 Quant Results File: XPCBF14.RES

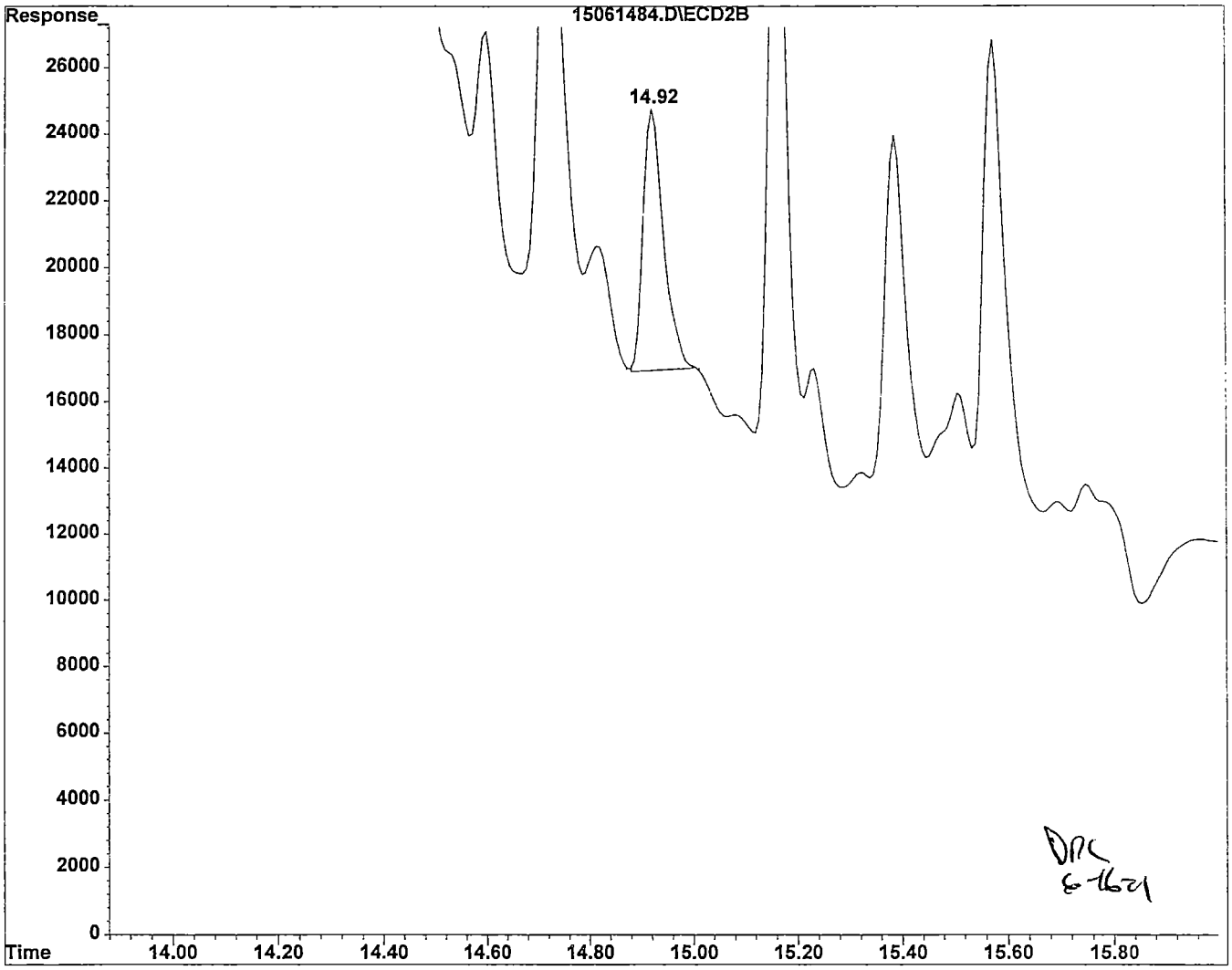


Aroclor-1254 {2} #2 13.02min area: 102200 m

Integration Time Range: 12.97 - 13.08

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\15\DATA\06_14_01\15061484.D
Date Acquired: 16 Jun 2001 2:03
Inst: HP_15 Operator ID: DDC
Name: 46702.34MS *E00H4MS *
Misc: *EPA*30.3G/5.0ML*61
Method: F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title: PCB/TOXAPHENE
Quant Time: Jun 16 8:16 2001 Quant Results File: XPCBF14.RES



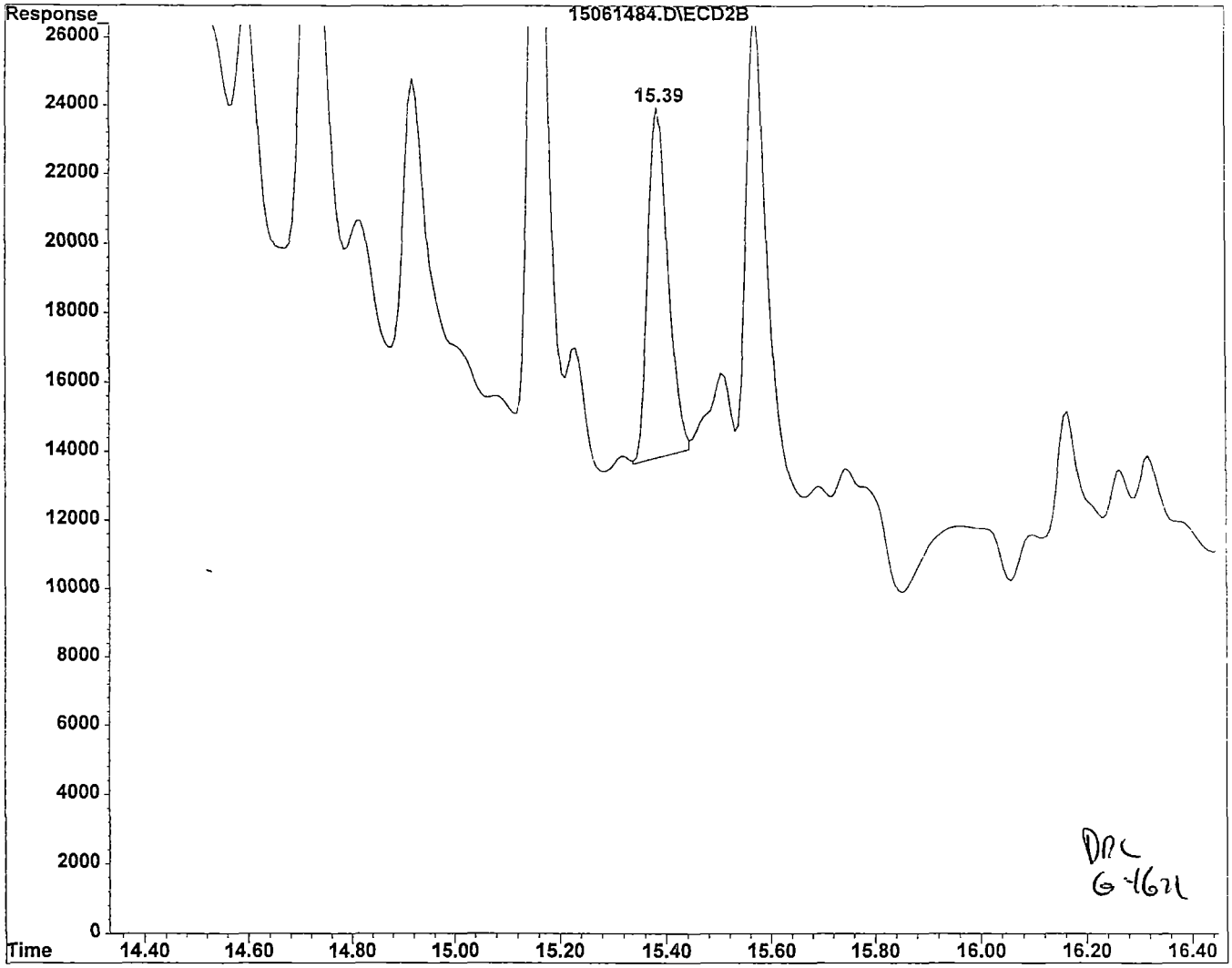
Aroclor-1254 {3} #2 14.92min area: 211768 m

Integration Time Range: 14.88 - 15.00

F:\HPCHEM\HP\15\DATA\06_14_01\15061484.D
Report generated: Sat Jun 16 11:39:42 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\15\DATA\06_14_01\15061484.D
Date Acquired: 16 Jun 2001 2:03
Inst: HP_15 Operator ID: DDC
Name: 46702.34MS *E00H4MS *
Misc: *EPA*30.3G/5.0ML*61
Method: F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title: PCB/TOXAPHENE
Quant Time: Jun 16 8:16 2001 Quant Results File: XPCBF14.RES



Aroclor-1254 {4} #2 15.39min area: 269548 m

Integration Time Range: 15.34 - 15.45

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061484.D\ECD1A.CH Vial: 84
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061484.D\ECD2B.CH
Acq On : 16 Jun 2001 2:03 Operator: DDC
Sample : 46702.34MS *E00H4MS * Inst : HP_15
Misc : *EPA*30.3G/5.0ML*61 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:16 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	354811	353335	12.0	12.9
	Spiked Amount 16.925			Recovery	=	70.90%	76.22%
22)	S DCB	18.28	18.69	430366	417379	14.1	14.9
	Spiked Amount 16.925			Recovery	=	83.31%	88.04%
	Target Compounds:						
12)	L6 Aroclor-1254	12.62	12.29	388443	75392	283.2	176.5m #
13)	L6 Aroclor-1254 {2}	13.31	13.02	112992	102200	128.9	182.0m #
	L6 Aroclor-1254 {3}	0.00	14.92f	0	211768	N.D. d	345.6m #
15)	L6 Aroclor-1254 {4}	14.31	15.39f	278845	269548	255.1	308.2m
16)	L6 Aroclor-1254 {5}	14.99	15.39	299316	341209	325.5	315.6
	Sum Aroclor-1254			1079596	1000117	992.6	1327.9
	Average Aroclor-1254					248.162	265.580

DDC 6-2021

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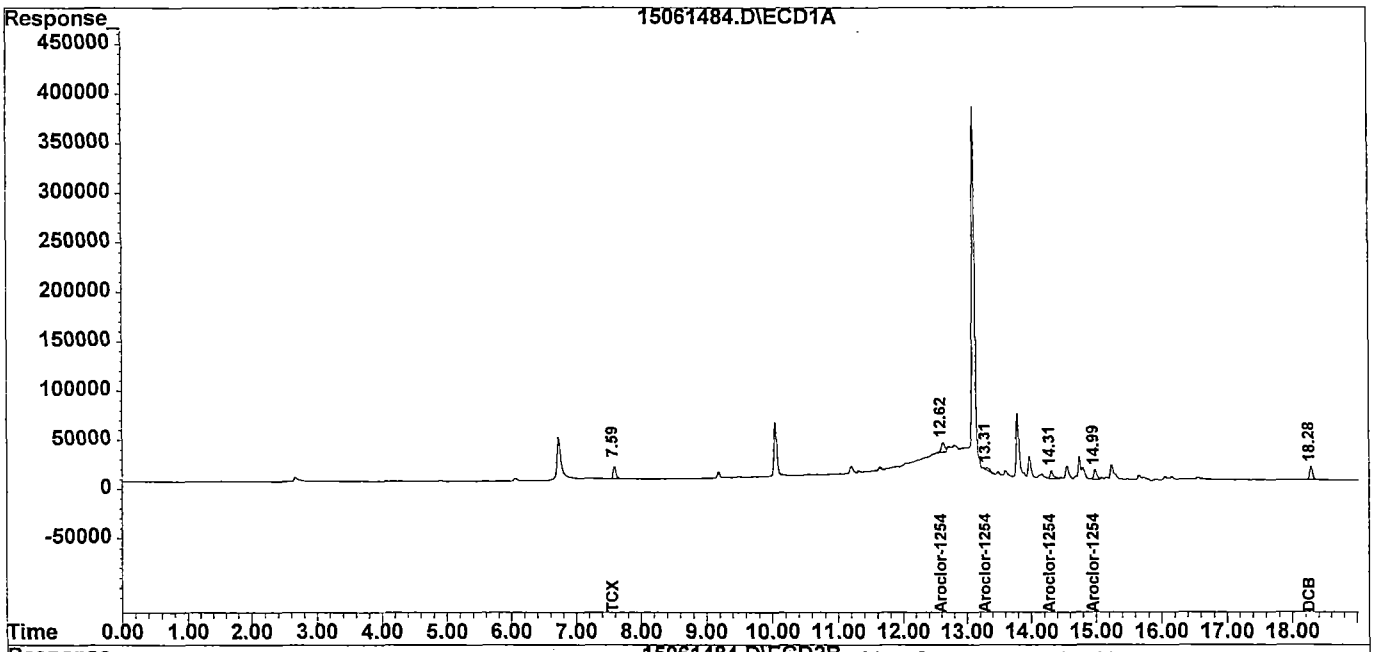
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

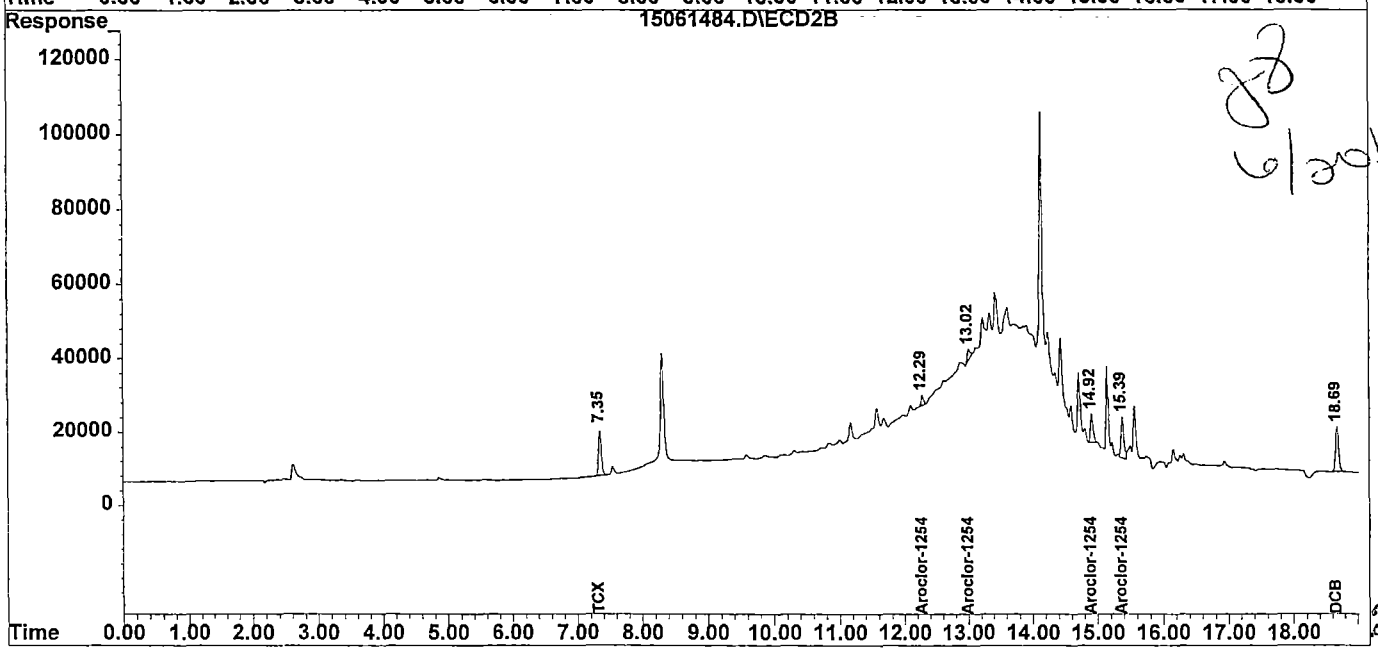
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061484.D\ECD1A.CH Vial: 84
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061484.D\ECD2B.CH
Acq On : 16 Jun 2001 2:03 Operator: DDC
Sample : 46702.34MS *E00H4MS * Inst : HP_15
Misc : *EPA*30.3G/5.0ML*61 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:16 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





6/20/01

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1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E00H4MSD

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E00H4

Matrix: (soil/water) SOIL Lab Sample ID: 46702.35MSD

Sample wt/vol: 31.7 (g/mL) G Lab File ID:_____

% Moisture: 61 decanted: (Y/N) __ Date Received: 06/07/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:06/08/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/16/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	80	U
11104-28-2	Aroclor-1221	80	U
11141-16-5	Aroclor-1232	80	U
53469-21-9	Aroclor-1242	80	U
12672-29-6	Aroclor-1248	80	U
11097-69-1	Aroclor-1254	250	
11096-82-5	Aroclor-1260	80	U
Surrogate amount spiked		16.18	

FORM I PCB

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061485.D\ECD1A.CH Vial: 85
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061485.D\ECD2B.CH
Acq On : 16 Jun 2001 2:26 Operator: DDC
Sample : 46702.35MSD *E00H4MSD * Inst : HP_15
Misc : *EPA*31.7G/5.0ML*61 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:18 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	330049	328898	10.6	11.5
	Spiked Amount 16.177			Recovery	=	65.52%	71.09%
22)	S DCB	18.28	18.69	407035	382384	12.7	13.1
	Spiked Amount 16.177			Recovery	=	78.51%	80.98%
	Target Compounds:					DDC 6-16-01	DDC 6-16-01
12)	L6 Aroclor-1254	12.62	12.29	258148	91980	179.9m	205.8m
13)	L6 Aroclor-1254 {2}	0.00	13.03	0	120648	N.D. d	205.4m #
14)	L6 Aroclor-1254 {3}	0.00	14.92f	0	226492	N.D. d	353.3m #
15)	L6 Aroclor-1254 {4}	14.31	15.39f	269326	265532	235.5	290.2m
16)	L6 Aroclor-1254 {5}	14.99	15.39	318548	352882	331.1	312.0
	Sum Aroclor-1254			846022	1057534	746.5	1366.7
	Average Aroclor-1254					248.835	273.333

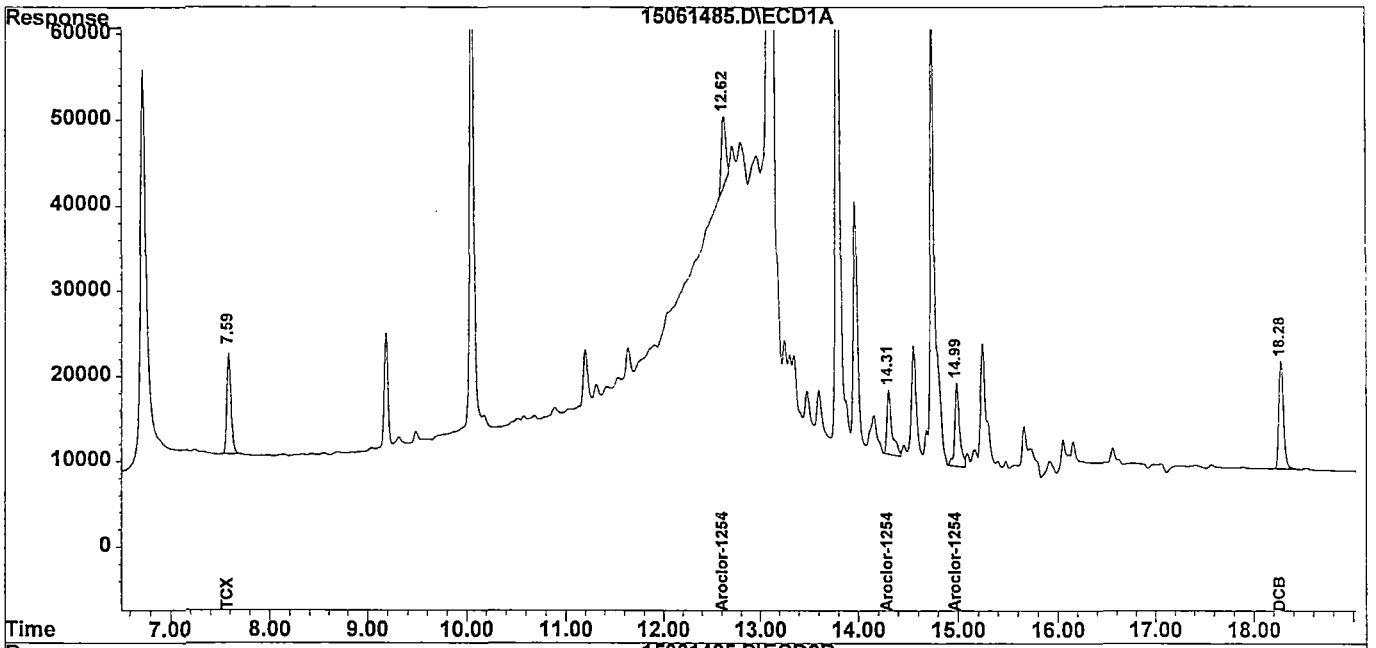
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

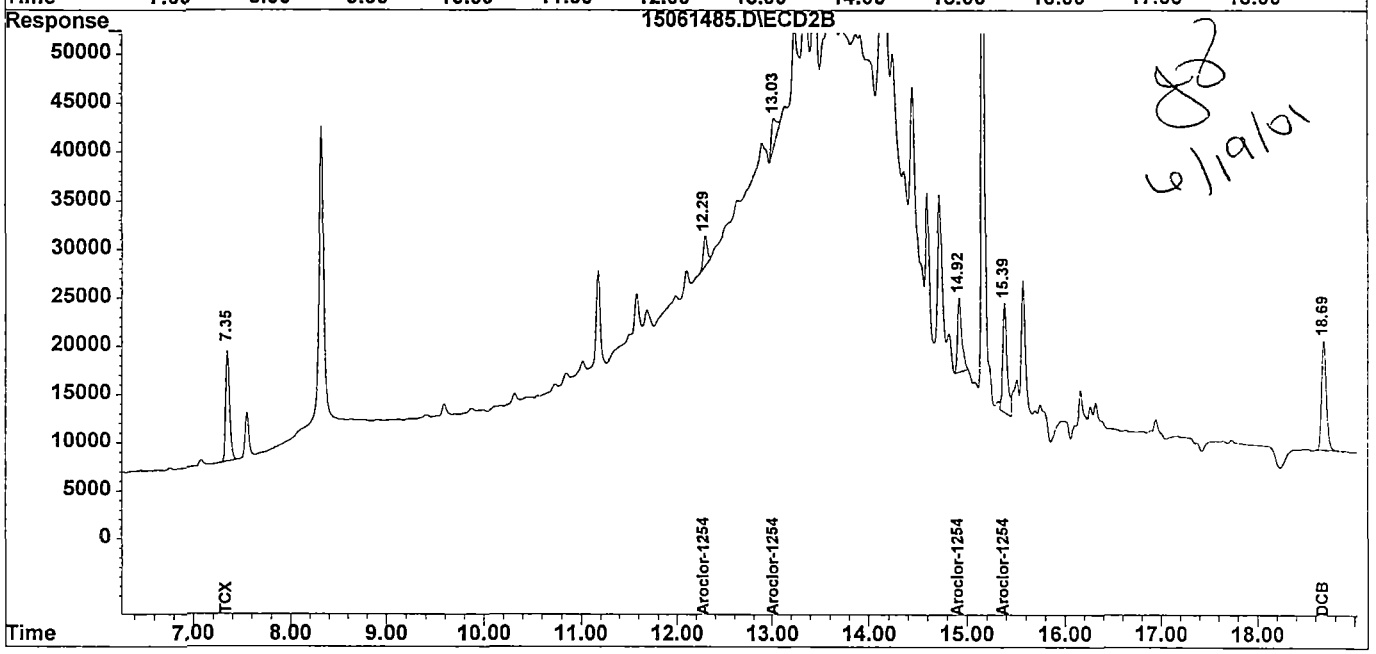
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061485.D\ECD1A.CH Vial: 85
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061485.D\ECD2B.CH
Acq On : 16 Jun 2001 2:26 Operator: DDC
Sample : 46702.35MSD *E00H4MSD * Inst : HP_15
Misc : *EPA*31.7G/5.0ML*61 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:18 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





6/19/01

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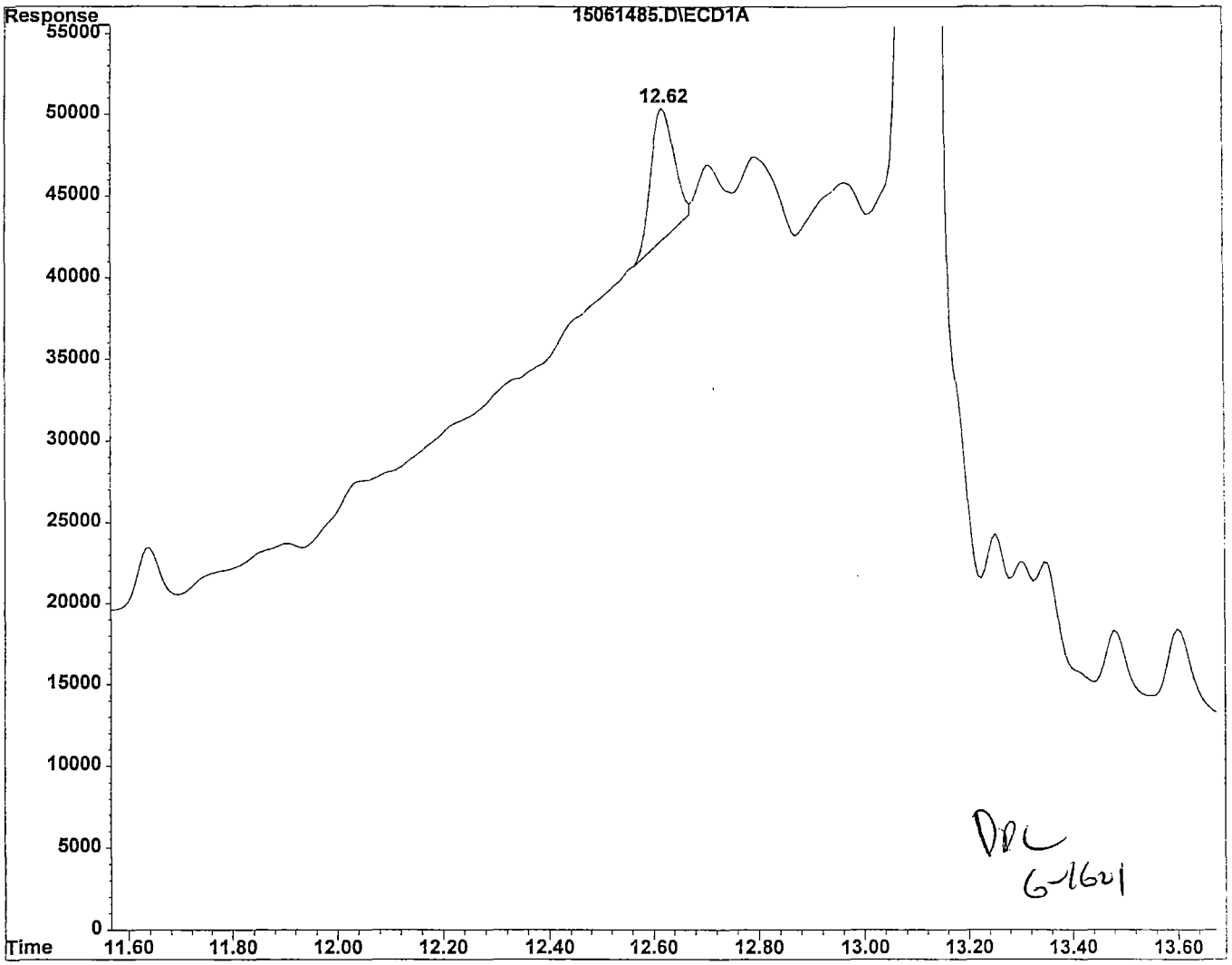
MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\15\DATA\06_14_01\15061485.D
Date Acquired: 16 Jun 2001 2:26
Inst: HP_15 Operator ID: DDC
Name: 46702.35MSD *E00H4MSD *
Misc: *EPA*31.7G/5.0ML*61
Method: F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title: PCB/TOXAPHENE
Quant Time: Jun 16 8:18 2001 Quant Results File: XPCBF14.RES



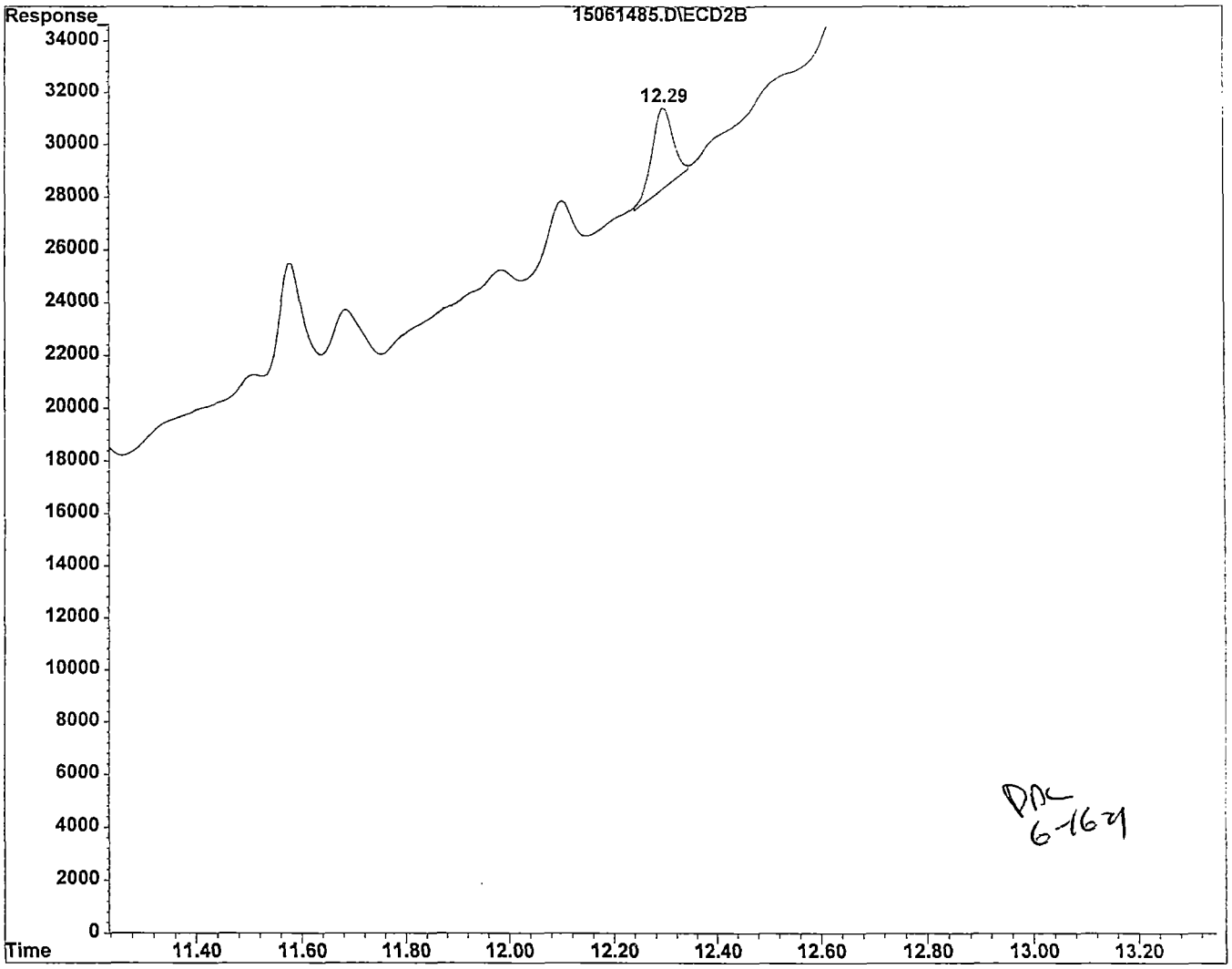
Aroclor-1254 12.62min area: 258148 m

Integration Time Range: 12.57 - 12.67

F:\HPCHEM\HP\15\DATA\06_14_01\15061485.D
Report generated: Sat Jun 16 11:39:44 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\15\DATA\06_14_01\15061485.D
Date Acquired: 16 Jun 2001 2:26
Inst: HP_15 Operator ID: DDC
Name: 46702.35MSD *E00H4MSD *
Misc: *EPA*31.7G/5.0ML*61
Method: F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title: PCB/TOXAPHENE
Quant Time: Jun 16 8:18 2001 Quant Results File: XPCBF14.RES

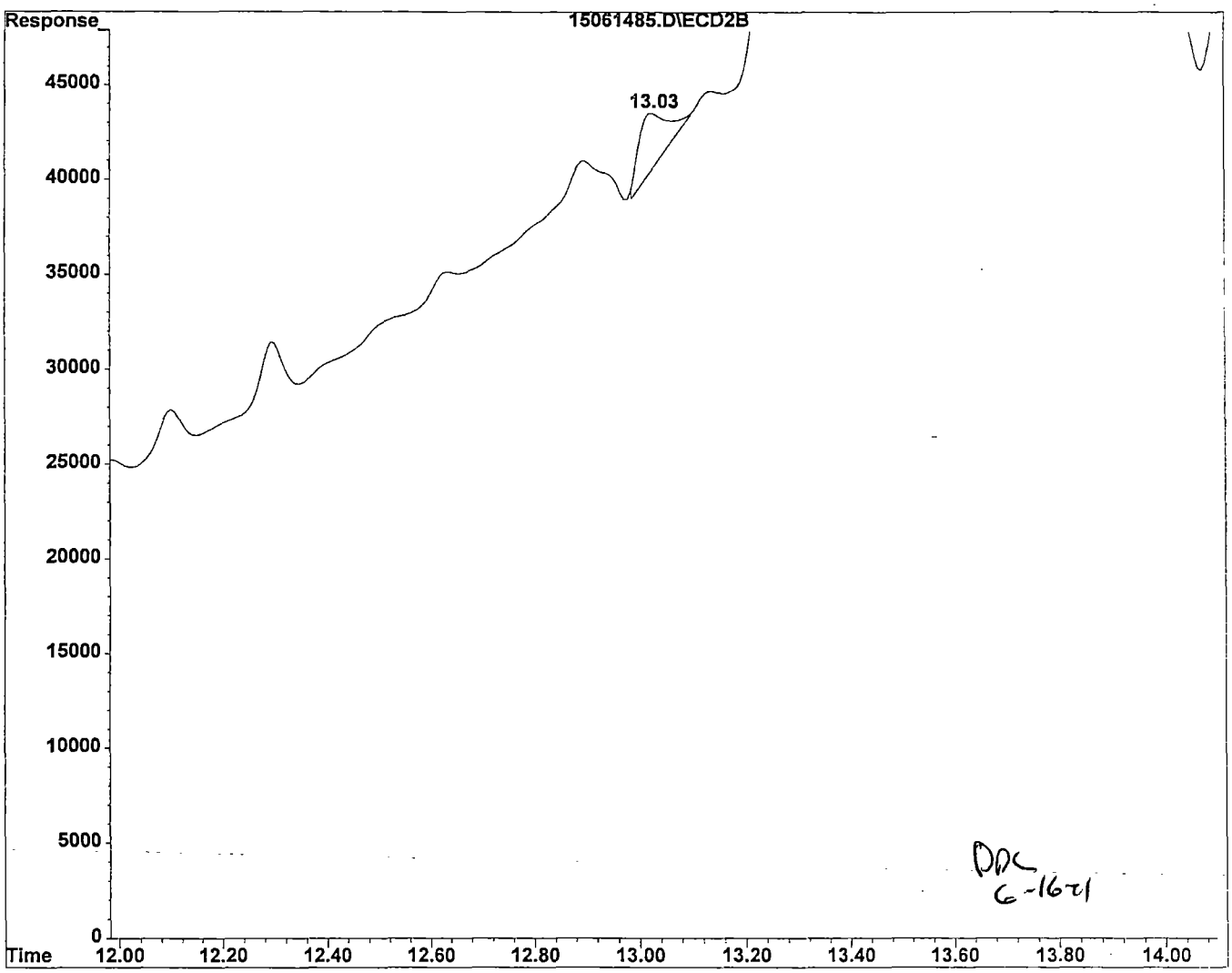


Aroclor-1254 #2 12.29min area: 91980 m

Integration Time Range: 12.24 - 12.35

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\15\DATA\06_14_01\15061485.D
Date Acquired: 16 Jun 2001 2:26
Inst: HP_15 Operator ID: DDC
Name: 46702.35MSD *E00H4MSD *
Misc: *EPA*31.7G/5.0ML*61
Method: F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title: PCB/TOXAPHENE
Quant Time: Jun 16 8:18 2001 Quant Results File: XPCBF14.RES

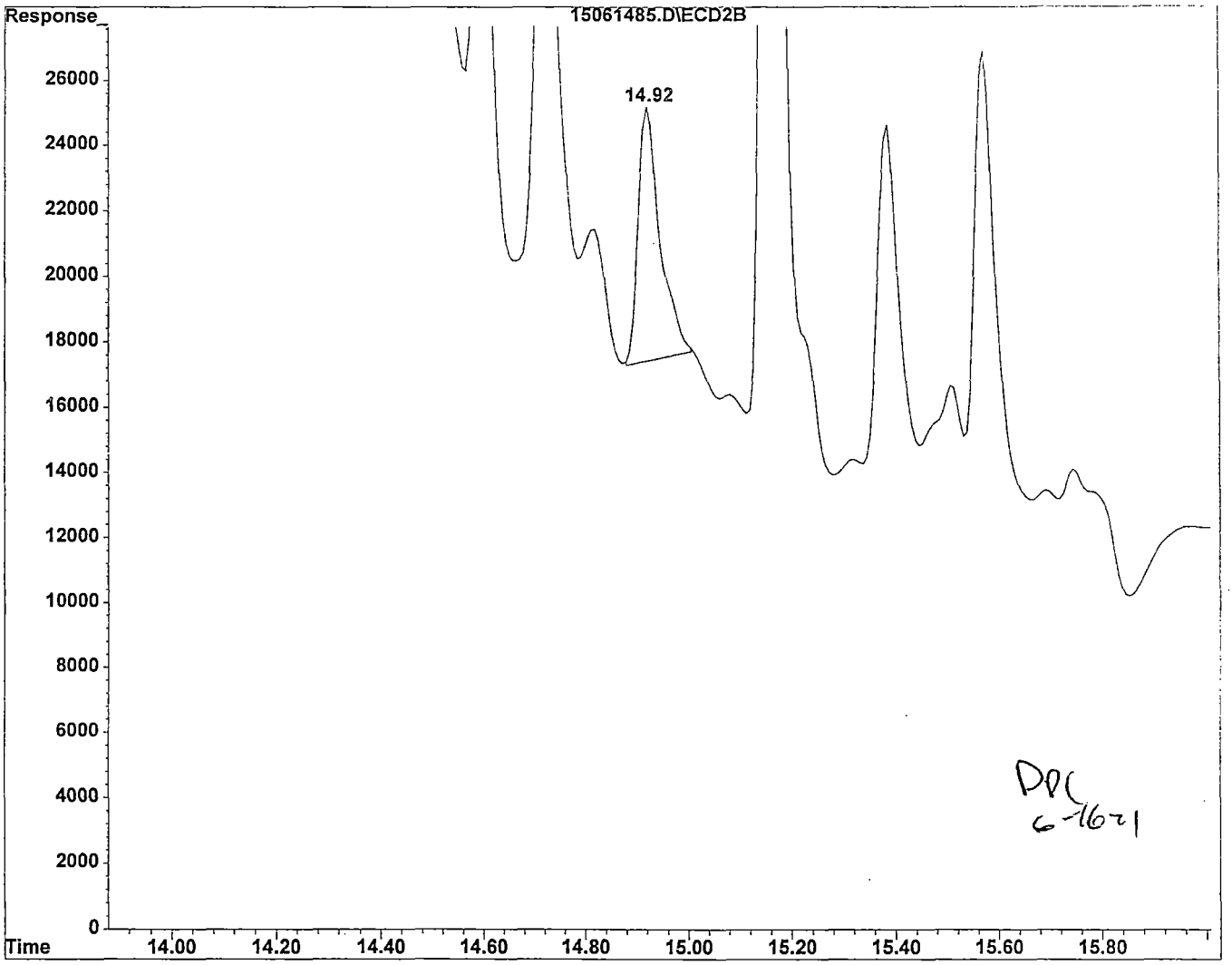


Aroclor-1254 {2} #2 13.03min area: 120648 m

Integration Time Range: 12.98 - 13.10

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\15\DATA\06_14_01\15061485.D
Date Acquired: 16 Jun 2001 2:26
Inst: HP_15 Operator ID: DDC
Name: 46702.35MSD *E00H4MSD *
Misc: *EPA*31.7G/5.0ML*61
Method: F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title: PCB/TOXAPHENE
Quant Time: Jun 16 8:18 2001 Quant Results File: XPCBF14.RES



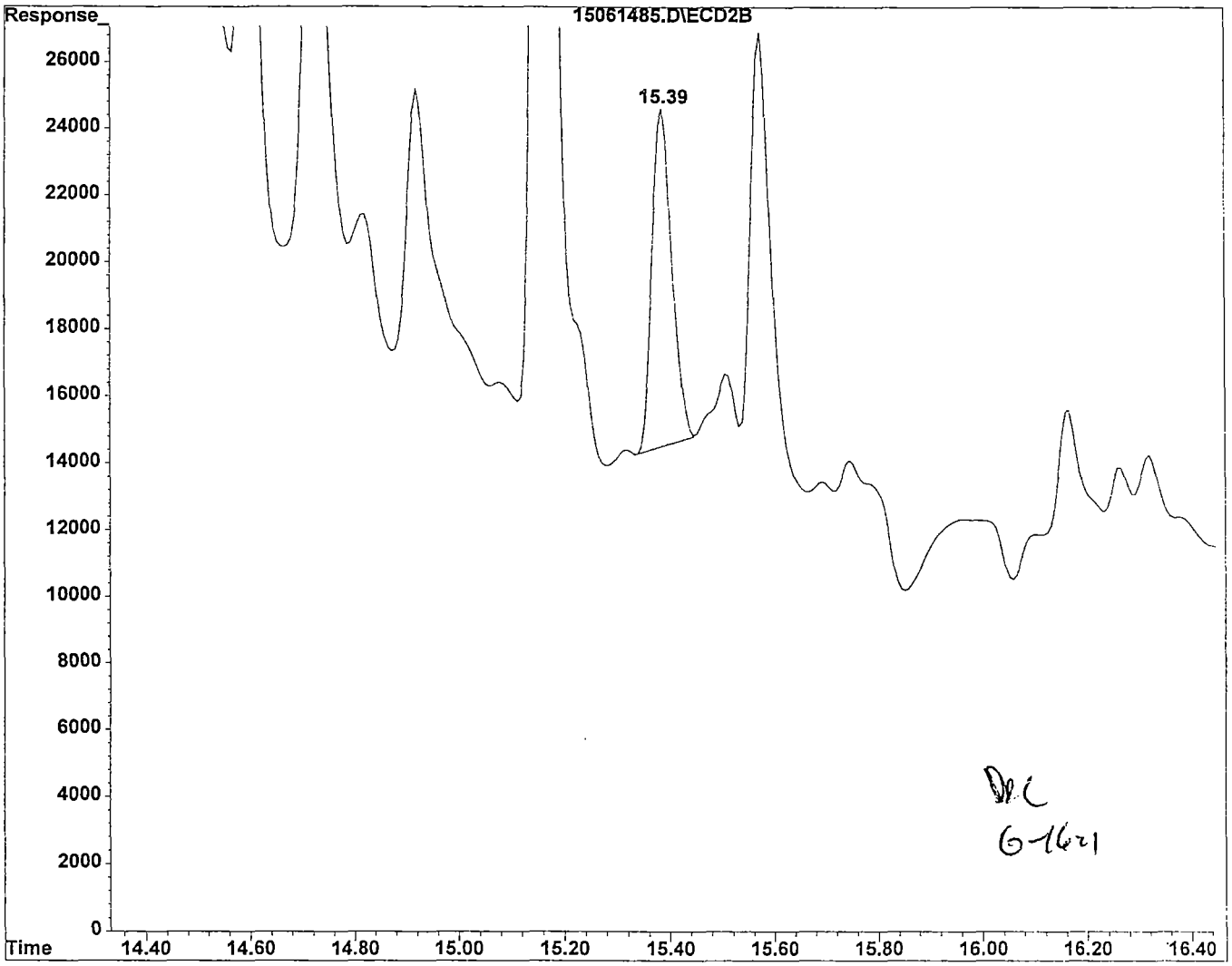
Aroclor-1254 {3} #2 14.92min area: 226492 m

Integration Time Range: 14.88 - 15.01

F:\HPCHEM\HP\15\DATA\06_14_01\15061485.D
Report generated: Sat Jun 16 11:39:45 2001

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\15\DATA\06_14_01\15061485.D
Date Acquired: 16 Jun 2001 2:26
Inst: HP_15 Operator ID: DDC
Name: 46702.35MSD *E00H4MSD *
Misc: *EPA*31.7G/5.0ML*61
Method: F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title: PCB/TOXAPHENE
Quant Time: Jun 16 8:18 2001 Quant Results File: XPCBF14.RES



Aroclor-1254 {4} #2 15.39min area: 265532 m

Integration Time Range: 15.33 - 15.45

F:\HPCHEM\HP\15\DATA\06_14_01\15061485.D
Report generated: Sat Jun 16 11:39:45 2001

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061485.D\ECD1A.CH Vial: 85
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061485.D\ECD2B.CH
Acq On : 16 Jun 2001 2:26 Operator: DDC
Sample : 46702.35MSD *E00H4MSD * Inst : HP_15
Misc : *EPA*31.7G/5.0ML*61 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:18 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	330049	328898	10.6	11.5
	Spiked Amount 16.177			Recovery	=	65.52%	71.09%
22)	S DCB	18.28	18.69	407035	382384	12.7	13.1
	Spiked Amount 16.177			Recovery	=	78.51%	80.98%
	Target Compounds:					DRC 6-20-01	DRC 6-20-01
12)	L6 Aroclor-1254	12.62	12.29	258148	91980	179.9m	205.8m
13)	L6 Aroclor-1254 {2}	0.00	13.03	0	120648	N.D. d	205.4m #
	L6 Aroclor-1254 {3}	0.00	14.92f	0	226492	N.D. d	353.3m #
15)	L6 Aroclor-1254 {4}	14.31	15.39f	269326	265532	235.5	290.2m
16)	L6 Aroclor-1254 {5}	14.99	15.39	318548	352882	331.1	312.0
	Sum Aroclor-1254			846022	1057534	746.5	1366.7
	Average Aroclor-1254					248.835	273.333

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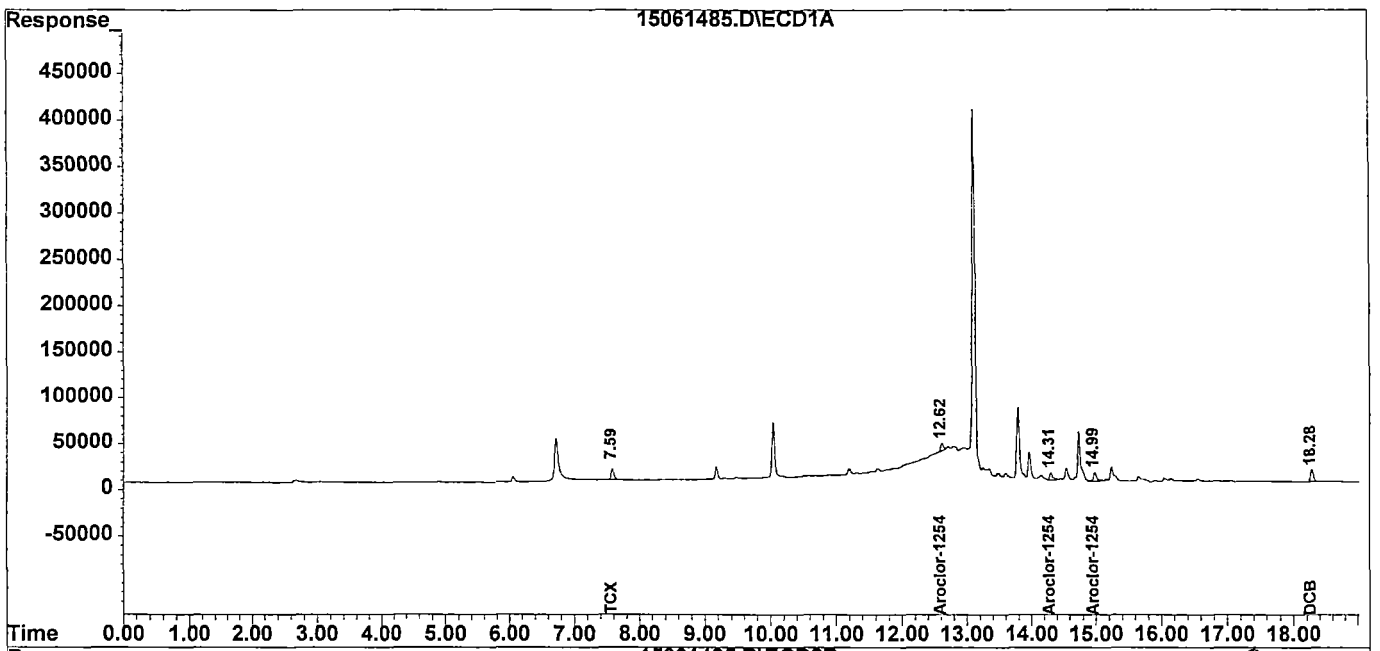
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

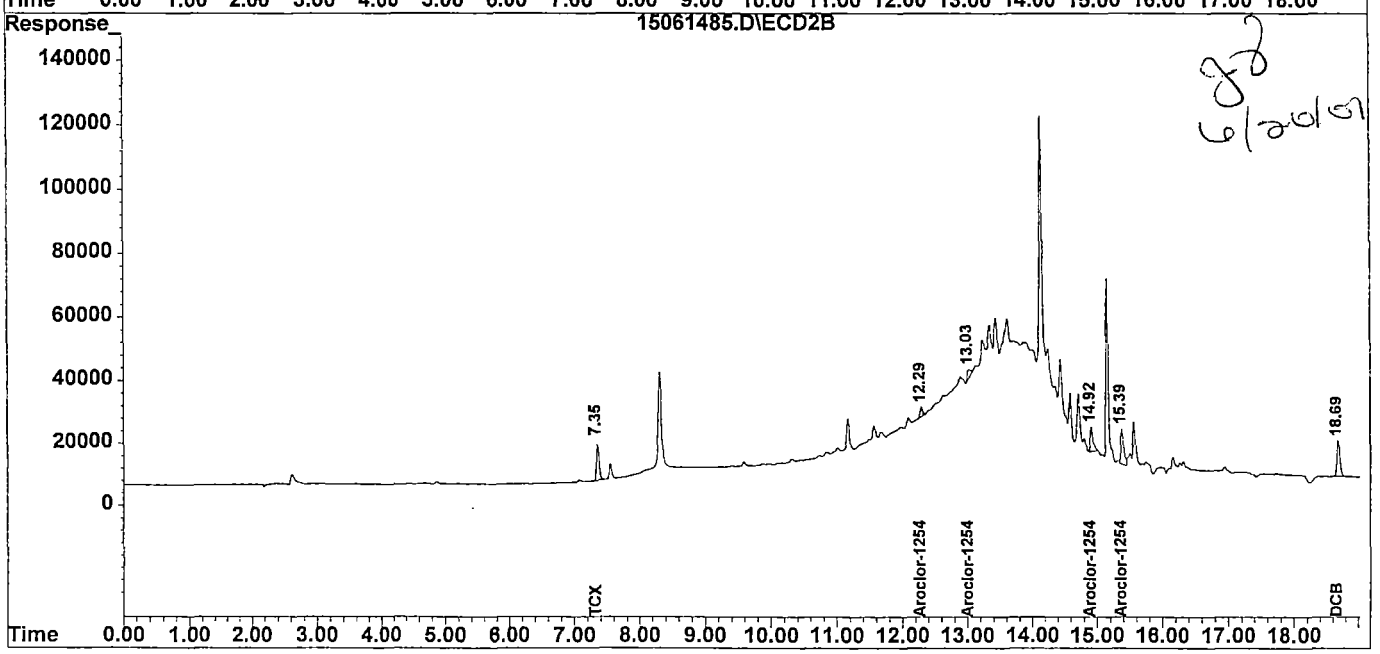
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061485.D\ECD1A.CH Vial: 85
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061485.D\ECD2B.CH
Acq On : 16 Jun 2001 2:26 Operator: DDC
Sample : 46702.35MSD *E00H4MSD * Inst : HP_15
Misc : *EPA*31.7G/5.0ML*61 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:18 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





6/20/01

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Sequence Name: C:\HPCHEM\5\SEQUENCE\060901.S
Comment: GC699-EPA-29294
Operator: CD COL# 418002
Data Path: C:\HPCHEM\5\DATA\060901\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1)	Calibration	1	1_060901	GPC	CAL STD (INITIAL)
2)	Blank	2	1_060902	GPC	SB
3)	Blank	3	1_060903	GPC	SB
4)	Blank	4	1_060904	GPC	SB
5)	Blank	5	1_060905	GPC	SB
6)	Blank	6	1_060906	GPC	SB#060901A (PEST)
7)	Blank	7	1_060907	GPC	SB#060901B (PEST)
8)	Blank	8	1_060908	GPC	BL0608SD EPA 29294
9)	Blank	9	1_060909	GPC	BB0608SD EPA 29294
10)	Blank	10	1_060910	GPC	LC0608SD EPA 29294
11)	Blank	11	1_060911	GPC	LD0608SD EPA 29294
12)	Blank	12	1_060912	GPC	46702.50-E00K2-EPA
13)	Blank	13	1_060913	GPC	46702.38-E00JO-EPA
14)	Blank	14	1_060914	GPC	46702.43-E00J5-EPA
15)	Blank	15	1_060915	GPC	46702.44-E00J6-EPA
16)	Blank	16	1_060916	GPC	46702.45-E00J7-EPA
17)	Blank	17	1_060917	GPC	46702.46-E00J8-EPA
18)	Blank	18	1_060918	GPC	46702.48-E00KO-EPA
19)	Blank	19	1_060919	GPC	46702.49-E00K1-EPA
20)	Blank	20	1_060920	GPC	46702.36-E00H8-EPA
21)	Blank	21	1_060921	GPC	46702.37-E00H9-EPA
22)	Blank	22	1_060922	GPC	46702.39-E00J1-EPA
23)	Blank	23	1_060923	GPC	46702.40-E00J2-EPA
24)	Blank	24	1_060924	GPC	46702.41-E00J3-EPA
25)	Blank	25	1_060925	GPC	46702.42-E00J3-EPA
26)	Blank	26	1_060926	GPC	46721.03-E30N1-EPA
27)	Blank	27	1_060927	GPC	46702.33-E00H4-EPA
28)	Blank	28	1_060928	GPC	46702.34-MS-E00H4-EPA
29)	Blank	29	1_060929	GPC	46702.35-MSD-E00H4-EPA
30)	Blank	30	1_060930	GPC	46702.47-E00J9-EPA
31)	Blank	31	1_060931	GPC	46721.01-E30M8-EPA
32)	Blank	32	1_060932	GPC	46721.02-E30N0-EPA
33)	Blank	33	1_060933	GPC	46721.04-E30N2-EPA
34)	Blank	34	1_060934	GPC	SB
35)	Blank	35	1_060935	GPC	SB
36)	Blank	36	1_060936	GPC	SB
37)	Blank	37	1_060937	GPC	SB
38)	Calibration	38	1_060938	GPC	CAL STD (FINAL)
39)					

* Computer Error — Data not collected by computer
CR 6/20/01

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Gel Permeation Chromatography (GPC) Run Log - GPC1

SWOK/AATS SWL-OE-102-16 Rev.#: 2.1 Fraction Collected: 45 mLs

Col. ID.: 418002 Protocol: GC699 Fraction: PEST Cycle: 15-9

Cal. Std. Page: Client: EPA Case# 29294

DATE/TIME	POS.	SAMPLE ID	FILE	COMMENT
06/10/01 11:12	23	46702.40-E00J2-EPA	1_060923	
06/09/01 22:07	1	CAL STD (INITIAL)	1_060901	
06/09/01 22:38	2	SB	1_060902	
06/09/01 23:08	3	SB	1_060903	
06/09/01 23:40	4	SB	1_060904	
06/10/01 00:10	5	SB	1_060905	
06/10/01 00:41	6	SB#060901A (PEST)	1_060906	
06/10/01 01:13	7	SB#060901B (PEST)	1_060907	
06/10/01 01:44	8	BL0608SD EPA 29294	1_060908	
06/10/01 02:15	9	BB0608SD EPA 29294	1_060909	
06/10/01 02:46	10	LC0608SD EPA 292	1_060910	

Compound	Initial RT	Final RT	% Difference
Phthalate			
Methoxychlor			
Perylene			

6/20/2001

Verification Signature/Date

6/20/01

Analyst Signature/Date

Book: OE-102-16-RUN-18 Page No.: 86

★ Computer Error — Computer only collected data for 10 out of 38 vials. Missing data for EPA 46702.33—.50, EPA 46721.01—.04

CR 6/20/01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061473.D\ECD1A.CH Vial: 73
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061473.D\ECD2B.CH
Acq On : 15 Jun 2001 21:48 Operator: DDC
Sample : SB060901A *SB060901A * Inst : HP_15
Misc : **1000ML/10.0ML* Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:11 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L

System Monitoring Compounds:

Target Compounds:

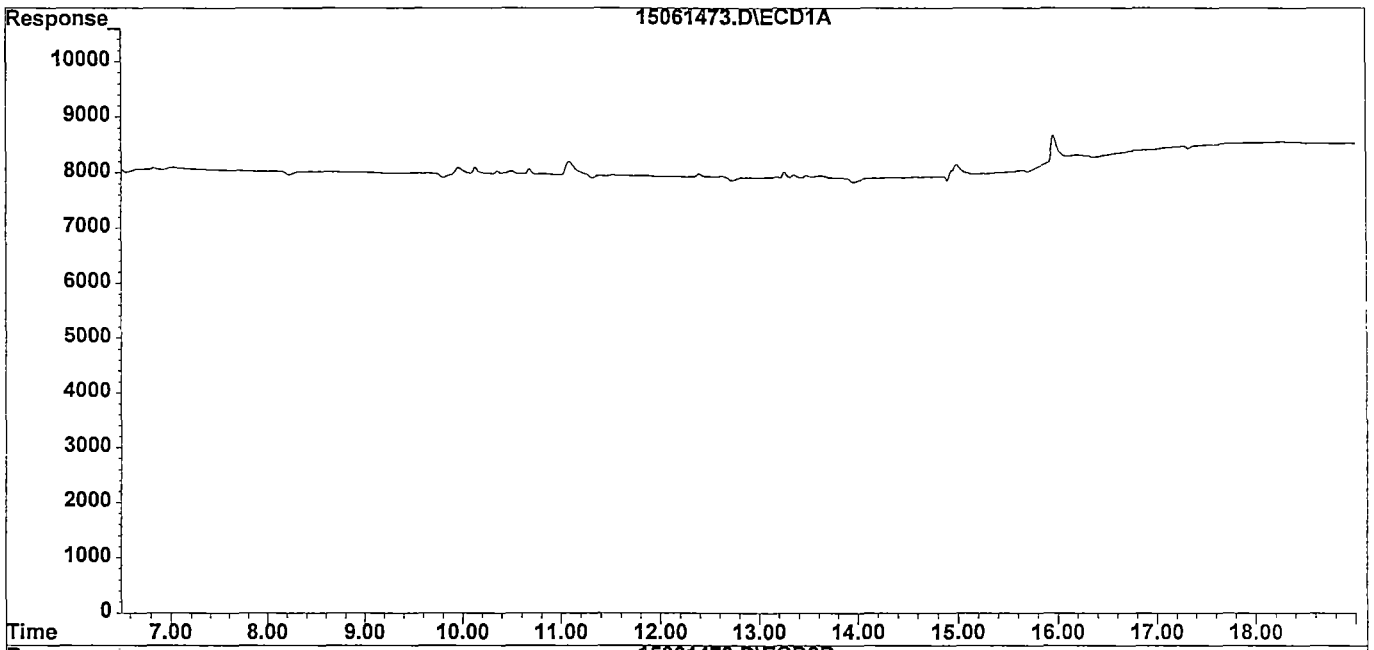
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
15061473.D XPCBF14.M Sat Jun 16 10:22:05 2001 Page 1

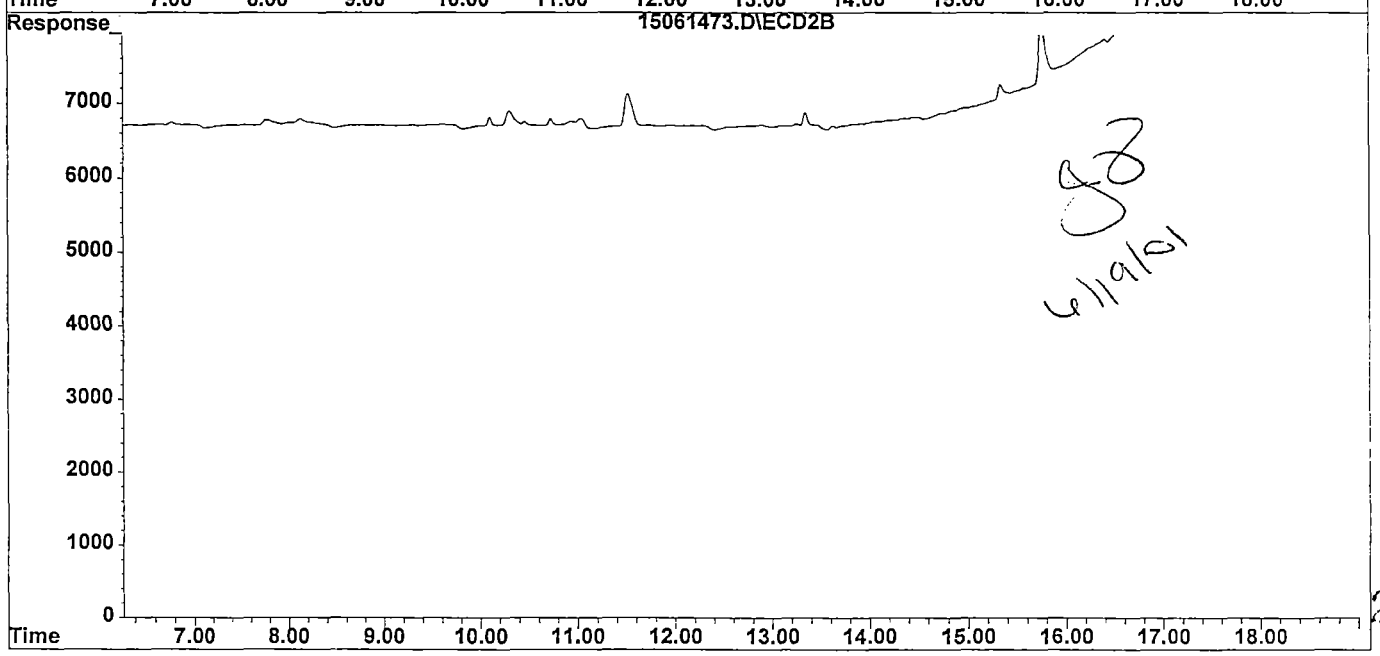
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061473.D\ECD1A.CH Vial: 73
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061473.D\ECD2B.CH
Acq On : 15 Jun 2001 21:48 Operator: DDC
Sample : SB060901A *SB060901A * Inst : HP_15
Misc : **1000ML/10.0ML* Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:11 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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6/19/01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061474.D\ECD1A.CH Vial: 74
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061474.D\ECD2B.CH
Acq On : 15 Jun 2001 22:11 Operator: DDC
Sample : SB060901B *SB060901B * Inst : HP_15
Misc : **1000ML/10.0ML* Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:12 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Initial Calibration

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

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L

System Monitoring Compounds:

Target Compounds:

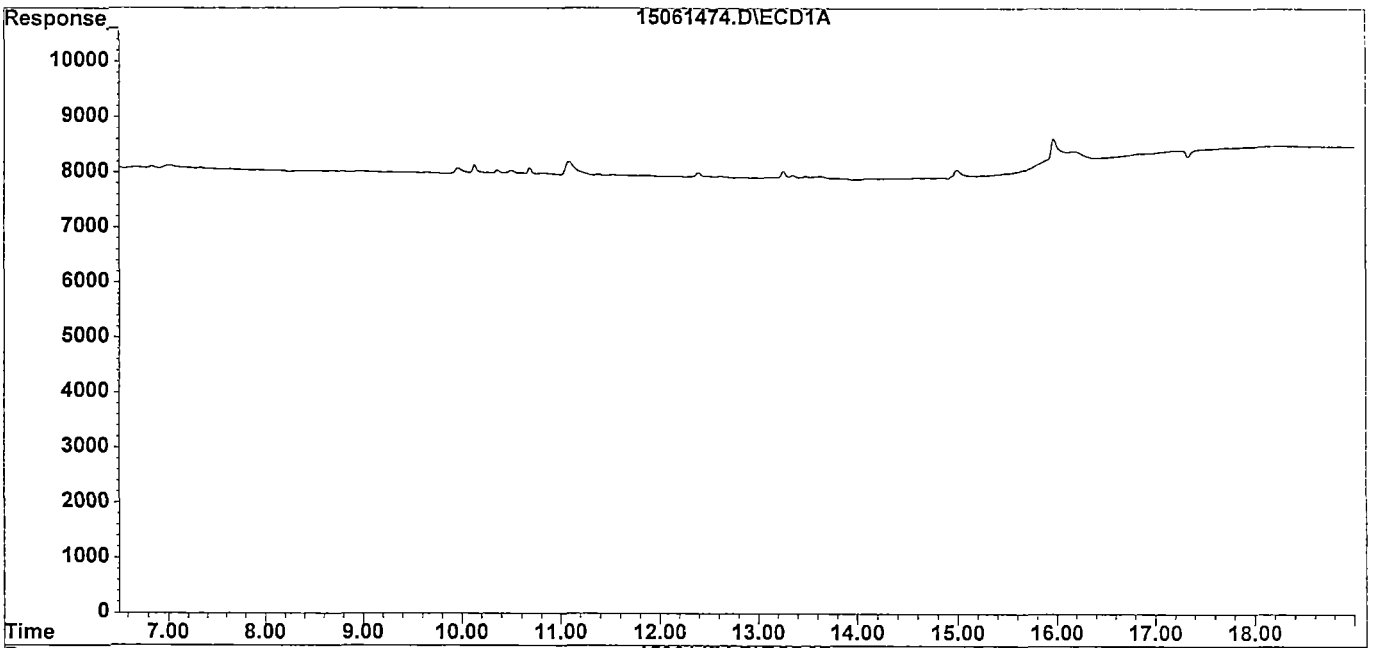
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std
15061474.D XPCBF14.M Sat Jun 16 10:22:13 2001 Page 1

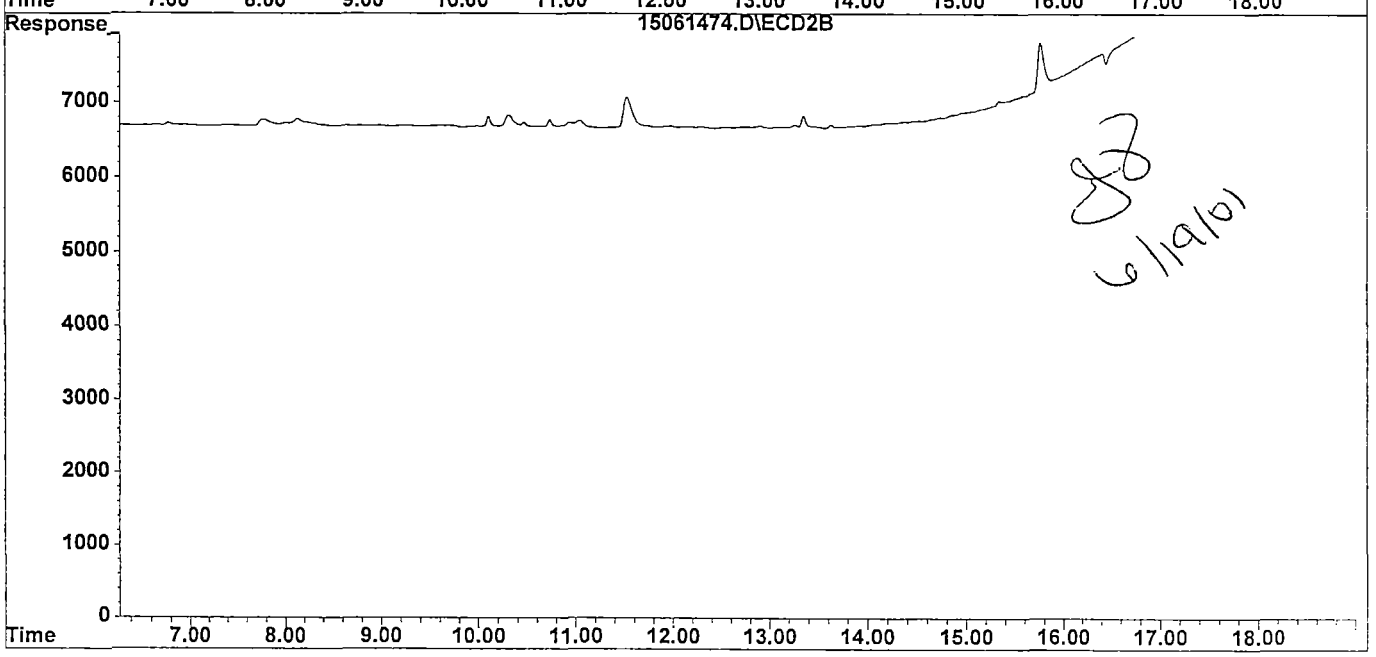
Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061474.D\ECD1A.CH Vial: 74
Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061474.D\ECD2B.CH
Acq On : 15 Jun 2001 22:11 Operator: DDC
Sample : SB060901B *SB060901B * Inst : HP_15
Misc : **1000ML/10.0ML* Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 8:12 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

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





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GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-415 OP-415-RUNLOG-13 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_15
SDG NO. : SWLO METHOD FILE(S): XPCBF14 (8082)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
06/14/01 14:02	HEX	HEX	15061401	Sol
06/14/01 14:25	HEX	HEX	15061402	
06/14/01 14:48	HEX	HEX	15061403	
06/14/01 15:12	HEX	HEX	15061404	
06/14/01 19:28	HEX	HEX	15061405	Sol
06/14/01 19:52	RESC5C	5-441-6	15061406	OK
06/14/01 20:15	AR1221L35C	5-420-6	15061407	
06/14/01 20:38	AR1232L35C	5-422-6	15061408	
06/14/01 21:01	AR1242L15C	5-11-7	15061409	
06/14/01 21:25	AR1242L25C	5-10-7	15061410	
06/14/01 21:48	AR1242L35C	5-9-7	15061411	
06/14/01 22:11	AR1242L45C	5-8-7	15061412	
06/14/01 22:34	AR1242L55C	5-7-7	15061413	
06/14/01 22:57	AR1248L35C	5-424-6	15061414	
06/14/01 23:21	AR1254L15C	5-6-7	15061415	
06/14/01 23:44	AR1254L25C	5-5-7	15061416	
06/15/01 00:07	AR1254L35C	5-4-7	15061417	
06/15/01 00:30	AR1254L45C	5-3-7	15061418	
06/15/01 00:53	AR1254L55C	5-2-7	15061419	
06/15/01 1:17	AR1660L15C	5-31-7	15061420	
06/15/01 1:40	AR1660L25C	5-30-7	15061421	OK

Unless noted, Client Ids are the same for the quant. & confirmation columns

6/15/01 — Verification Signature/Date

6-15-01 — Analyst Signature/Date

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GC Laboratory Run Log - PESTICIDE/PCB

SWOR/AATS SWLO-OP-415 OP-415-RUNLOG-13 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_15
SDG NO. : SWLO METHOD FILE(S): XPCBF14 (8082)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
06/15/01 2:03	AR1660L35V	5-29-7	15061422	OK
06/15/01 2:26	AR1660L45C	5-28-7	15061423	
06/15/01 2:49	AR1660L55C	5-27-7	15061424	
06/15/01 3:13	PIBLK5G	5-414-6	15061425	
06/15/01 3:36	AR1660L3ICV5C	5-442-6	15061426	
06/15/01 3:59	AR1221L3ICV5C	5-436-6	15061427	
06/15/01 4:22	AR1232L3ICV5C	5-437-6	15061428	
06/15/01 4:45	AR1242L3ICV5C	5-438-6	15061429	
06/15/01 5:09	AR1248L3ICV5C	5-439-6	15061430	
06/15/01 5:32	AR1254L3ICV5C	5-440-6	15061431	OK
06/15/01 5:55	E30G7DL	46676.10DL	15061432	
06/15/01 6:18	E00E6	46702.11	15061433	
06/15/01 6:41	E00E6MS	46702.12MS	15061434	
06/15/01 7:05	E00E6MSD	46702.13MSD	15061435	
06/15/01 7:28	E00F6	46702.14	15061436	
06/15/01 7:51	E00F7	46702.15	15061437	
06/15/01 8:14	E00F8	46702.16	15061438	
06/15/01 8:37	E00G0	46702.17	15061439	
06/15/01 9:01	E00G1	46702.18	15061440	OK
06/15/01 9:24	HEX	HEX	15061441	S-1
06/15/01 9:47	HEX	HEX	15061442	S-1

Unless noted, Client Ids are the same for the quant. & confirmation columns

6/15/01 — Verification Signature/Date

6-15-01 — Analyst Signature/Date

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GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-415 OP-415-RUNLOG-13 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_15
SDG NO. : SWLO METHOD FILE(S): XPCBF14 (8082)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
06/15/01 19:28	HEX	HEX	15061467	Sd
06/15/01 19:51	HEX	HEX	15061468	Sd
06/15/01 20:15	HEX	HEX	15061469	Sd
06/15/01 20:38	PIBLK5N	5-414-6	15061470	OK
06/15/01 21:01	AR1660L3A5	5-29-7	15061471	OK
06/15/01 21:24	AR1660L3B5	5-29-7	15061472	"
06/15/01 21:48	SB060901A	SB060901A	15061473	OK
06/15/01 22:11	SB060901B	SB060901B	15061474	
06/15/01 22:34	PBLKSD	BL0608SD	15061475	
06/15/01 22:57	PBLKSD	BB0608SD	15061476	
06/15/01 23:21	ELCS1	LC0608SD	15061477	
06/15/01 23:44	ELCS2	LD0608SD	15061478	
06/16/01 00:07	HEX	HEX	15061479	Sd
06/16/01 00:30	PIBLK5O	5-414-6	15061480	OK
06/16/01 00:53	AR1660L3C5	5-29-7	15061481	OK
06/16/01 1:17	AR1660L3D5	5-29-7	15061482	"
06/16/01 1:40	E00H4	46702.33	15061483	OK
06/16/01 2:03	E00H4MS	46702.34MS	15061484	
06/16/01 2:26	E00H4MSD	46702.35MSD	15061485	
06/16/01 2:49	E00H8	46702.36	15061486	
06/16/01 3:13	E00H9	46702.37	15061487	OK

Unless noted, Client Ids are the same for the quant. & confirmation columns

Verification Signature/Date 6/18/01 Analyst Signature/Date 6-18-01

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-415 OP-415-RUNLOG-13 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_15
SDG NO. : SWLO METHOD FILE(S): XPCBF14 (8082)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
06/16/01 3:36	E00J0	46702.38	15061488	OK
06/16/01 3:59	E00J1	46702.39	15061489	OK
06/16/01 4:22	HEX	HEX	15061490	Sd
06/16/01 4:45	HEX	HEX	15061491	Sd
06/16/01 5:09	HEX	HEX	15061492	Sd
06/16/01 5:32	PIBLK5P	5-414-6	15061493	OK
06/16/01 5:55	AR1660L3E5	5-29-7	15061494	OK
06/16/01 6:18	AR1660L3F5	5-29-7	15061495	~
06/16/01 6:41	E00J2	46702.40	15061496	OK
06/16/01 7:05	E00J3	46702.41	15061497	
06/16/01 7:28	E00J4	46702.42	15061498	
06/16/01 7:51	E00J5	46702.43	15061499	
06/16/01 8:14	E00J6	46702.44	15061500	
06/16/01 8:37	E00J7	46702.45	15061501	
06/16/01 9:00	E00J8	46702.46	15061502	OK
06/16/01 9:24	HEX	HEX	15061503	Sd
06/16/01 9:47	HEX	HEX	15061504	Sd
06/16/01 10:10	HEX	HEX	15061505	Sd
06/16/01 10:33	PIBLK5Q	5-414-6	15061506	OK
06/16/01 10:56	AR1660L3G5	5-29-7	15061507	OK
06/16/01 11:20	AR1660L3H5	5-29-7	15061508	~

Unless noted, Client Ids are the same for the quant. & confirmation columns

Verification Signature/Date 6/18/01

Analyst Signature/Date 6-18-01

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-415 OP-415-RUNLOG-13 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_15
SDG NO. : SWLO METHOD FILE(S): XPCBF14 (8082)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
06/16/01 11:43	E00J9	46702.47	15061509	OK
06/16/01 12:06	E00K0	46702.48	15061510	
06/16/01 12:29	E00K1	46702.49	15061511	
06/16/01 12:53	E00K2	46702.50	15061512	
06/16/01 13:16	E30M8	46721.01	15061513	
06/16/01 13:39	E30N0	46721.02	15061514	
06/16/01 14:02	E30N1	46721.03	15061515	
06/16/01 14:26	E30N2	46721.04	15061516	OK
06/16/01 14:49	HEX	HEX	15061517	
06/16/01 15:12	HEX	HEX	15061518	
06/16/01 15:35	HEX	HEX	15061519	
06/16/01 15:59	PIBLK5R	5-414-6	15061520	OK NW 3
06/16/01 16:22	AR1660L3I5	5-29-7	15061521	OK NW
06/16/01 16:45	AR1660L3J5	5-29-7	15061522	
06/16/01 17:08	E00F8DL	46702.16DL	15061523	OK
06/16/01 17:32	E00F8	46702.16	15061524	
06/16/01 17:55	E00G0DL	46702.17DL	15061525	
06/16/01 18:18	E00G0	46702.17	15061526	
06/16/01 18:42	E00G1DL	46702.18DL	15061527	
06/16/01 19:05	E00G3DL	46702.20DL	15061528	
06/16/01 19:28	E00G4DL	46702.21DL	15061529	OK

Unless noted, Client Ids are the same for the quant. & confirmation columns

Verification Signature/Date

Analyst Signature/Date

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-415 OP-415-RUNLOG-13 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_15
SDG NO. : SWLO METHOD FILE(S): XPCBF14 (8082)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
06/16/01 19:51	E00G4	46702.21	15061530	OK
06/16/01 20:14	E00G6DL	46702.23DL	15061531	
06/16/01 20:38	E00G1	46702.18	15061532	
06/16/01 21:01	HEX	HEX	15061533	
06/16/01 21:24	HEX	HEX	15061534	
06/16/01 21:47	HEX	HEX	15061535	
06/16/01 22:11	PIBLK5S	5-414-6	15061536	OK
06/16/01 22:34	AR1660L3K5	5-29-7	15061537	OK
06/16/01 22:57	AR1660L3L5	5-29-7	15061538	

Unless noted, Client Ids are the same for the quant. & confirmation columns

6/18/01 6/18/01

Verification Signature/Date Analyst Signature/Date

Page No.: 12

GC Laboratory Run Log - PESTICIDE/PCB

SWOK/AATS SWLO-OP-415 OP-415-RUNLOG-13 SWL Rev.#: 2.1

CASE NO.: SWLO INJ. VOL: 0.5 uL INSTRUMENT: HP_15
SDG NO. : SWLO METHOD FILE(S): XPCBF14 (8082)

DATE/TIME	CLIENT ID	SAMPLE ID	FILE	COMMENT
06/18/01 8:27	HEX	HEX	15061801	Sol
06/18/01 8:50	PIBLK5O	5-414-6	15061802	OK
06/18/01 9:13	AR1660L3C5	5-29-7	15061803	OK
06/18/01 9:37	AR1660L3D5	5-29-7	15061804	"
06/18/01 11:17	E30M8DL	46721.01DL	15061805	OK
06/18/01 11:40	E30N2DL	46721.04DL	15061806	OK
06/18/01 12:03	HEX	HEX	15061807	Sol
06/18/01 12:27	PIBLK5P	5-414-6	15061808	OK
06/18/01 12:50	AR1660L3E5	5-29-7	15061809	OK

Unless noted, Client Ids are the same for the quant. & confirmation columns

6/18/01 6-18-4

Verification Signature/Date Analyst Signature/Date

[X] RUSH ☐ REEXTRACT ☐ TCLP ☐ DIOXIN

SAMPLE EXTRACTION L

6/13

	SV	ST • PCB	OTHER
CONT EX. (3520C)			
SEP-F (3510C)			
SHAKER			
SONC. (3550B)		XXXXX	
SOXHLET			

BATCH: 010608SD

EXTRACT DATE: 2001-06-08 13:52

002772

Page: 2 of 2

SAMPLE ID (EPISODE #)	CLIENT / CASE	DATE RECEIVED / CLIENT SAMPLE ID	MATRIX/LEVEL	SAMPLE pH	% MOISTURE (%)	DRY WEIGHT (g)	AMOUNT EXTRACTED (g • ml)	EXTRACTED VOLUME (ml)	GPC VOLUME (ml)	GPC ELUTE VOL (ml)	FLORISIL VOL CONC (ml)	FLORISIL FIN VOL CONC (ml)	VOL SV (P) (ml)	FIN PROCESS VOLUME (ml)	SCREEN Y/N (Y/N)	MS SV (P) (µL)	SURR SV (P) (µL)	BASE pH CONFIRMATION	ACID pH CONFIRMATION
46702.44 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXX	S/L	8.04	20.69	24.2	30.57	350	10/5	45	2.0		5.0	5.0	N		1000		
46702.45 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXX	S/L	7.10	18.98	25.2	31.08	350	10/5	45	2.0		5.0	5.0	N		1000		
46702.46 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXX	S/L	7.14	20.80	24.4	30.75	350	10/5	45	2.0		5.0	5.0	N		1000		
46702.47 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXX	S/L	5.23	38.61	18.9	30.85	350	10/5	45	2.0		5.0	5.0	N		1000		
46702.48 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXX	S/L	7.40	13.25	29.0	33.40	350	10/5	45	2.0		5.0	5.0	N		1000		
46702.49 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXX	S/L	7.37	11.30	31.9	36.02	350	10/5	45	2.0		5.0	5.0	N		1000		
46702.50 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXX	S/L	6.57	12.54	26.4	30.15	350	10/5	45	2.0		5.0	5.0	N		1000		
45721.01 GC699	EPA 29294	06/08/2001 08:30 E30H8	S/L	7.13	73.45	8.0	30.03	350	10/5	45	2.0		5.0	5.0	N		1000		
45721.02 GC699	EPA 29294	06/08/2001 08:30 E30N0	S/L	7.15	67.43	9.9	30.49	350	10/5	45	2.0		5.0	5.0	N		1000		
45721.03 GC699	EPA 29294	06/08/2001 08:30 E30N1	S/L	6.53	18.36	24.7	30.30	350	10/5	45	2.0		5.0	5.0	N		1000		
45721.04 GC699	EPA 29294	06/08/2001 08:30 E30N2	S/L	6.40	70.61	9.0	30.55	350	10/5	45	2.0		5.0	5.0	N		1000		

INITIALS

WEIGHING:	SA	EXTRACTION:	CD	FLORISIL:	
CLEANUP:	CD	KD:	GS		CH2Cl2
BLOWDOWN:	SA	TV:	CD		acetone
SURROG. SPIKER:	CD	VERIFIER:	GS		Hexane
MATRIX SPIKER:	CD	VERIFIER:	GS		
SUBMITTED BY:	SA	REVIEWED BY:			06/13

ID NUMBERS

FLORISIL CARTRIDGE #:

GPC COLUMN #: 418002 (06-09-01) #3640A

SURROGATES ID CONC #: 5-13-7

MATRIX SPIKE SOLID/CONC #(s): 5-1-7

SOP - METHOD # : SWL-OP- 420 Rev. 1.0

COMMENTS

SB #060901A

SB #060901B

Extracts alent through gel & acid clean-up

P936 Book 1 Page

	SV	ST • PCB	OTHER
CONT EX. (3520C)			
SEP-F (3510C)			
SHAKER			
SONC. (3550B)		XXXXX	
SOXHLET			

[X] RUSH [ ] REEXTRACT [ ] TCLP [ ] DIOXIN

SAMPLE EXTRACTION L

BATCH: 010608SD

EXTRACT DATE: 2001-06-08 13:52

002772

Page: 1 of 2

SAMPLE ID (EPISODE #)	CLIENT CASE	DATE RECEIVED CLIENT SAMPLE ID	MATRIX/LEVEL	SAMPLE pH	% MOISTURE	DRY WEIGHT	AMOUNT EXTRACTED	EXTRACTED VOLUME	GPC VOLUME	GPC ELUTE VOL	FLORISIL VOL CONC	FLORISIL FIN VOL CONC	VOL SV (P)	FIN PROCESS VOLUME	SCREEN Y/N	MS SV (P)	SURR SV (P)	BASE pH CONFIRMATION	ACID pH CONFIRMATION
					%	g	g • ml	ml	ml	ml	ml	ml	ml	ml	Y/N	µL	µL		
BL0608SD			S/L				30.00	350	10/5	45	2.0		5.0	5.0	N		1000		
BB0608SD			S/L				30.00	350	10/5	45	2.0		5.0	5.0	N		1000		
LC0608SD			S/L				30.00	350	10/5	45	2.0		5.0	5.0	N	1000	1000		
LD0608SD			S/L				30.00	350	10/5	45	2.0		5.0	5.0	N	1000	1000		
46702.33 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXX	S/L	7.53	61.27	11.7	30.17	350	10/5	45	2.0		5.0	5.0	N		1000		
46702.34MS GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXX	S/L	7.53	61.27	11.7	30.29	350	10/5	45	2.0		5.0	5.0	N	1000	1000		
46702.35MSD GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXX	S/L	7.53	61.27	12.3	31.74	350	10/5	45	2.0		5.0	5.0	N	1000	1000		
46702.36 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXX	S/L	7.63	36.85	19.5	30.93	350	10/5	45	2.0		5.0	5.0	N		1000		
46702.37 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXX	S/L	7.70	36.68	19.5	30.87	350	10/5	45	2.0		5.0	5.0	N		1000		
46702.38 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXX	S/L	7.97	16.11	26.0	31.02	350	10/5	45	2.0		5.0	5.0	N		1000		
46702.39 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXX	S/L	7.74	30.40	23.7	34.04	350	10/5	45	2.0		5.0	5.0	N		1000		
46702.40 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXX	S/L	7.12	33.49	22.4	33.68	350	10/5	45	2.0		5.0	5.0	N		1000		
46702.41 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXX	S/L	6.48	42.02	18.0	31.11	350	10/5	45	2.0		5.0	5.0	N		1000		
46702.42 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXX	S/L	6.63	28.19	24.6	34.25	350	10/5	45	2.0		5.0	5.0	N		1000		
46702.43 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXX	S/L	7.73	18.78	24.7	30.43	350	10/5	45	2.0		5.0	5.0	N		1000		

INITIALS

WEIGHING:	CD	EXTRACTION:	CD	FLORISIL:	CH2Cl2
CLEANUP:	CD	KD:	GS		acetone
BLOWDOWN:	SA	TV:	CD		Hexane
SURROG. SPIKER:	CD	VERIFIER:	GS		
MATRIX SPIKER:	CD	VERIFIER:	GS		
SUBMITTED BY:	SA	REVIEWED BY:			06/13

ID NUMBERS

FLORISIL CARTRIDGE #:

GPC COLUMN #: 418002 (06-09-01) #3640A

SURROGATES ID CONC #: 5-13-7

MATRIX SPIKE SOLID/CONC #(s): 5-1-7

SOP - METHOD # : SWL-OP-2420 Rev. 1-0

COMMENTS

Pg 36 Book 7 Pcas

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.
06/13	9:30p	46702.33-50 MS/MSD	EPA	SA	N	GC699	18
06/13	9:30p	46721.1-4	EPA	SA	N	GC698	4
06/13	9:30p	46721.5-26	EPA	SA	N	GC698	22
		46733. 08.09.10ms11ms12	Tetra			GC399	5

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Southwest Laboratory of Oklahoma
1700 W. Albany Suite C
Broken Arrow, OK 74012-1421

INTERNAL CHAIN OF CUSTODY

Date 06/07/2001
Episode **46702**
Client **EPA**
Project OLM04.2
Received 06/07/01

Test Code	Cont ID	#	#	#	#	#	#	#	Date/Time Out	Analyst	Date/Time In
		(Circle the Sample Numbers Checked out)									
GC699	A	1	2	3	4	5	6	7			
		8	9	10	11	12	13	14			
		15	16	17	18	19	20	21			
		22	23	24	25	26	27	28			
		29	30	31	32	33	34	35			
		36	37	38	39	40	41	42			
		43	44	45	46	47	48	49			
		50							6/7 2:30	[illegible]	6/7 3:30
IN660	A	1	2	3	4	5	6	7			
		8	9	10	11	12	13	14			
		15	16	17	18	19	20	21			
		22	23	24	25	26	27	28			
		29	30	31	32	33	34	35			
		36	37	38	39	40	41	42	6/7		6/7
		43	44	45	46	47	48	49			
		50							3:30	EC	4:45

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.
06/13	9:30p	46702.33-50 MS/MSD	EPA	SA	N	GC699	18
06/13	9:30p	46721.1-4	EPA	SA	N	GC699	4
06/13	9:30p	46721.5-26	EPA	SA	N	GC699	22
		46733.08.09.10ms11ms12	Tetra			GC399	5
6/14	4:15p	46611.01-06 MS MSD	Allwaste	GS	Y	GC310	X
		46722.01-08; 723.01-05;	B&MC	GS	N	GC599	5/8
		46731-01-06; 745.01		GS	N		5
06/14	7:45	46727.12-16 MS/MSD	FERNALD	SA	N	GC899 ~~FERNALD~~	5
06/14	7:45	46722.01-09	B&MC	SA	N	GC801	7
06/14	7:45	46723.01-03,05	B&MC	SA	N	GC801	4
06/14	7:45	46731.01,02MS,03MSD,05,06	B&MC	SA	N	GC801	5
06/14	7:45	46745.01	B&MC	SA	N	GC801	1
06-15	11:15	46718.01; 02	EPA	MC	N	GC819	2
06/15	6:40	PEST/AROCL CHK	SWLO	SA	N	GC819	X
06/15	6:40	PEST/AROCL CHK	SWLO	SA	N	GC819	X
06/15	6:40	PEST/AROCL CHK	SWLO	SA	N	GC819	X
06/15	6:40	PEST/AROCL CHK	SWLO	SA	N	GC819	X
06/15	8:00	46663.24-28 MS/MSD	EPA	SA	Y	GC699	5
06/15	9:00	46721.27-48 MS/MSD	EPA	SA	N	GC699	22
06/15	9:55	46732.38-59 MS/MSD	EPA	SA	N	GC699	22
6/16	8:15a	46754.07-11 MS MSD	CRC	GS	N	GC330	11
6/16	11:00a	46767.01-19 MS MSD	TOLTEST	GS	N	GC200	19
06/16	4:20p	46659.01	TOLTEST	SA	~~N~~ Y	GC801	1
06/16	4:20p	46755.01-02, 05, 08, 08MS, 08MSD, 09	ENSAFE	SA	N	GC801	5
06/16	4:20p	46722.01-09	B&MC	SA	N	GC601	9
06/16	4:20p	46723.01-03	B&MC	SA	N	GC601	3

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	SV	ST • PCB	OTHER
CONT EX. (3520C)			
SEP-F (3510C)			
SHAKER			
SONC. (3550B)		XXXXX	
SOXHLET			

[X] RUSH ☐ REEXTRACT ☐ TCLP [IOXIN

SAMPLE EXTRACTION L(

6/12

BATCH: 010608SD

EXTRACT DATE: 2001-06-08 13:52

002772

Page: 1 of 2

SAMPLE ID (EPISODE #)	CLIENT CASE	DATE RECEIVED CLIENT SAMPLE ID	MATRIX/LEVEL	SAMPLE pH	% MOISTURE	DRY WEIGHT	AMOUNT EXTRACTED	EXTRACTED VOLUME	GPC VOLUME	GPC ELUTE VOL	~~FLORISIL~~ VOL CONC	FLORISIL FIN VOL CONC	VOL SV (P)	FIN PROCESS VOLUME	SCREEN Y/N	MS SV (P)	SURR SV (P)	BASE pH CONFIRMATION	ACID pH CONFIRMATION
					%	g	(g) • ml	ml	ml	ml	ml	ml	ml	ml	Y/N	µL	µL		
BL0608SD			S/L				30.00	350	10/5	45	2.0		5.0	5.0	N		1000		
BB0608SD			S/L				30.00	350	10/5	45	2.0		5.0	5.0	N		1000		
LC0608SD			S/L				30.00	350	10/5	45	2.0		5.0	5.0	N	1000	1000		
LD0608SD			S/L				30.00	350	10/5	45	2.0		5.0	5.0	N	1000	1000		
46702.33 GC699	EPA 29294	06/07/2001 08:30 E00H4	S/L	7.53	61.27	11.7	30.17	350	10/5	45	2.0		5.0	5.0	N		1000		
46702.34MS GC699	EPA 29294	06/07/2001 08:30 E00H4MS	S/L	7.53	61.27	11.7	30.29	350	10/5	45	2.0		5.0	5.0	N	1000	1000		
46702.35MSD GC699	EPA 29294	06/07/2001 08:30 E00H4MSD	S/L	7.53	61.27	12.3	31.74	350	10/5	45	2.0		5.0	5.0	N	1000	1000		
46702.36 GC699	EPA 29294	06/07/2001 08:30 E00H8	S/L	7.53	36.85	19.5	30.93	350	10/5	45	2.0		5.0	5.0	N		1000		
46702.37 GC699	EPA 29294	06/07/2001 08:30 E00H9	S/L	7.70	36.68	19.5	30.87	350	10/5	45	2.0		5.0	5.0	N		1000		
46702.38 GC699	EPA 29294	06/07/2001 08:30 E00J0	S/L	7.97	16.11	26.0	31.02	350	10/5	45	2.0		5.0	5.0	N		1000		
46702.39 GC699	EPA 29294	06/07/2001 08:30 E00J1	S/L	7.74	30.40	23.7	34.04	350	10/5	45	2.0		5.0	5.0	N		1000		
46702.40 GC699	EPA 29294	06/07/2001 08:30 E00J2	S/L	7.12	33.49	22.4	33.68	350	10/5	45	2.0		5.0	5.0	N		1000		
46702.41 GC699	EPA 29294	06/07/2001 08:30 E00J3	S/L	6.48	42.02	18.0	31.11	350	10/5	45	2.0		5.0	5.0	N		1000		
46702.42 GC699	EPA 29294	06/07/2001 08:30 E00J4	S/L	6.63	28.19	24.6	34.25	350	10/5	45	2.0		5.0	5.0	N		1000		
46702.43 GC699	EPA 29294	06/07/2001 08:30 E00J5	S/L	7.73	18.78	24.7	30.43	350	10/5	45	2.0		5.0	5.0	N		1000		

INITIALS

WEIGHING:	CD	EXTRACTION:	CD	FLORISIL:	
CLEANUP:	CD	KD:	GS		CH_2Cl_2
BLOWDOWN:	SA	TV:	CD		acetone
SURROG. SPIKER:	CD	VERIFIER:	GS		Hexane
MATRIX SPIKER:	CD	VERIFIER:	GS		
SUBMITTED BY:	SA	REVIEWED BY:	06/13		

ID NUMBERS

FLORISIL CARTRIDGE #:

GPC COLUMN #: 418002 (06-09-01) #3640A

SURROGATES ID CONC #: 5-13-7

MATRIX SPIKE SOLID/CONC #(s): 5-1-7

SOP - METHOD # : SWL-OP- 420 Rev. 1-0

PG 36 Book 1 Reas

COMMENTS

SB # 060901A
SB # 060901B

Extracts went through silica gel & acid clean-up

[redacted] D

	SV	ST • PCB	OTHER
CONT EX. (3520C)			
SEP-F (3510C)			
SHAKER			
SONC. (3550B)		XXXXX	
SOXHLET			

[X] RUSH ☐ REEXTRACT ☐ TCLP [ ] DIOXIN

SAMPLE EXTRACTION L

BATCH: 010608SD

EXTRACT DATE: 2001-06-08 13:52

002772

Page: 2 of 2

SAMPLE ID (EPISODE #)	CLIENT CASE	DATE RECEIVED CLIENT SAMPLE ID	MATRIX/LEVEL	SAMPLE pH	% MOISTURE %	DRY WEIGHT g	AMOUNT EXTRACTED g • ml	EXTRACTED VOLUME ml	GPC VOLUME ml	GPC ELUTE VOL ml	FLORISIL VOL CONC ml	FLORISIL FIN VOL CONC ml	VOL SV (P) ml	FIN PROCESS VOLUME ml	SCREEN Y/N Y/N	MS SV (P) µL	SURR SV (P) µL	BASE pH CONFIRMATION	ACID pH CONFIRMATION
46702.44 GC699	EPA 29294	06/07/2001 08:30 E00J6	S/L	8.04	20.69	24.2	30.57	350	10/5	45	2.0		5.0	5.0	N		1000		
46702.45 GC699	EPA 29294	06/07/2001 08:30 E00J7	S/L	7.10	18.98	25.2	31.08	350	10/5	45	2.0		5.0	5.0	N		1000		
46702.46 GC699	EPA 29294	06/07/2001 08:30 E00J8	S/L	7.14	20.80	24.4	30.75	350	10/5	45	2.0		5.0	5.0	N		1000		
46702.47 GC699	EPA 29294	06/07/2001 08:30 E00J9	S/L	5.23	38.61	18.9	30.85	350	10/5	45	2.0		5.0	5.0	N		1000		
46702.48 GC699	EPA 29294	06/07/2001 08:30 E00K0	S/L	7.40	13.25	29.0	33.40	350	10/5	45	2.0		5.0	5.0	N		1000		
46702.49 GC699	EPA 29294	06/07/2001 08:30 E00K1	S/L	7.37	11.30	31.9	36.02	350	10/5	45	2.0		5.0	5.0	N		1000		
46702.50 GC699	EPA 29294	06/07/2001 08:30 E00K2	S/L	6.57	12.54	26.4	30.15	350	10/5	45	2.0		5.0	5.0	N		1000		
46721.01 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXX	S/L	7.13	73.45	8.0	30.03	350	10/5	45	2.0		5.0	5.0	N		1000		
46721.02 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXX	S/L	7.15	67.43	9.9	30.49	350	10/5	45	2.0		5.0	5.0	N		1000		
46721.03 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXX	S/L	6.53	18.36	24.7	30.30	350	10/5	45	2.0		5.0	5.0	N		1000		
46721.04 GC699	XXXXXXXX XXXXXXXX	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXX	S/L	6.40	70.61	9.0	30.55	350	10/5	45	2.0		5.0	5.0	N		1000		

INITIALS

WEIGHING:	SA	EXTRACTION:	CD	FLORISIL:	
CLEANUP:	CD	KD:	GS		CH2Cl2
BLOWDOWN:	SA	TV:	CD		acetone
SURROG. SPIKER:	CD	VERIFIER:	GS		Hexane
MATRIX SPIKER:	CD	VERIFIER:	GS		
SUBMITTED BY:	SA	REVIEWED BY:			06/13

ID NUMBERS

FLORISIL CARTRIDGE #:

GPC COLUMN #: 418002 (06-09-01) #3640

SURROGATES ID CONC #: 5-13-7

MATRIX SPIKE SOLID/CONC #(s): 5-1-7

SOP - METHOD # : SWL-OP- 420 Rev. 1.0

COMMENTS

SB # 060901A
SB# 060901B

Extracts went through sgel & acid clean-up.

P-936 Book 1 Page

EXTRACT RECEIPT LOG

SWL-OP-301 REV. NO.: ____
SWL OP-301-EXTRCPT-6
SWOK/AATS
OP301a3.doc

Date	Time	Sample Episode Number(s)	Client	Extr. Chemist Initials	Re-extract? (Y/N)	Comments	No. of Samp.
06/13	9:30p	46702.33-50 MS/MSD	EPA	SA	N	GC699	18
06/13	9:30p	46721.1-4	EPA	SA	N	GC698	4
06/13	9:30p	46721.5-26	EPA	SA	N	GC698	22
		46733.08.09.10ms/msd 12	Tetra			GC399	5

288

467

FedEx USA Airbill FedEx Tracking Number 8218 7698 2001

Form I.D. No. 0215

SPG11

From This portion can be removed for Recipient's records.

Date 6-6-01 FedEx Tracking Number 8218 7698 2001

Sender's Name Lorie Hay Phone 847 918-4000

Company ROY F WESTON INC

Address 750 E BUNKER CT STE 500 Dept./Floor/Suite/Room

City VERNON HILLS State IL ZIP 60061

2 Your Internal Billing Reference

3 To

Recipient Name SAMPLE LOG- IN Phone 918 251-0545

Company SOUTHWEST LABS OF OKLAHOMA, INC.

Address 1700 WEST ALBANY, STE. C

To "HOLD" at FedEx location, print FedEx address. We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

City BROKEN ARROW State OK ZIP 74012

RECIPIENT: PEEL HERE

8218 7698 2001

0146095931

4a Express Package Service — Packages up to 150 lbs. Delivery commitment may be later in some areas.

- [x] FedEx Priority Overnight — Next business morning
- [ ] FedEx Standard Overnight — Next business afternoon
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations
- [ ] FedEx 2Day* — Second business day
- [ ] FedEx Express Saver* — Third business day

* FedEx Envelope/Letter Rate not available. Minimum charge: One-pound rate

4b Express Freight Service — Packages over 150 lbs. Delivery commitment may be later in some areas.

- [ ] FedEx 1Day Freight* — Next business day
- [ ] FedEx 2Day Freight — Second business day
- [ ] FedEx 3Day Freight — Third business day

* Call for Confirmation:

5 Packaging — * Declared value limit $500

- [ ] FedEx Envelope/Letter*
- [ ] FedEx Pak*
- [x] Other Pkg. — Includes FedEx Box, FedEx Tube, and customer pkg.

6 Special Handling — Include FedEx address in Section 3.

- [x] SATURDAY Delivery — Available for FedEx Priority Overnight and FedEx 2Day to select ZIP codes
- [ ] SUNDAY Delivery — Available for FedEx Priority Overnight to select ZIP codes
- [ ] HOLD Weekday at FedEx Location — Not available with FedEx First Overnight
- [ ] HOLD Saturday at FedEx Location — Available for FedEx Priority Overnight and FedEx 2Day to select locations

Does this shipment contain dangerous goods? One box must be checked.

- [ ] No
- [ ] Yes — As per attached Shipper's Declaration
- [ ] Yes — Shipper's Declaration not required
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

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 88 | Total Charges | Credit Card Auth.

Our liability is limited to $100 unless you declare a higher value. See the *FedEx Service Guide* for details.

8 Release Signature — *Sign to authorize delivery without obtaining signature.*

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

Questions? Call 1·800·Go·FedEx (800-463-3339)
Visit our Web site at www.fedex.com

Printed in U.S.A. GBFE 5/00

402

COPY

ORIGINAL DOCUMENTS ARE INCLUDED IN CSF 29294 SDG 20047

Signature S Jackson

Date 6/8/01

ST 6/8/01

289

466

D90

FedEx USA Airbill

FedEx Tracking Number 821876981998

SPG11

Form I.D. No. 0215

1 From This portion can be removed for Recipient's records.

Date 10-7-01 FedEx Tracking Number 821876981998

Sender's Name Lone Hrg Phone 847 918-4000

Company ROY F WESTON INC

Address 750 E BUNKER CT STE 500 Dept./Floor/Suite/Room

City VERNON HILLS State IL ZIP 60061

2 Your Internal Billing Reference

3 To

Recipient's Name SAMPLE LOG-IN Phone 918 251-0545

Company SOUTHWEST LABS OF OKLAHOMA, INC.

Address 0 WEST ALBANY, STE. C

To "HOLD" at FedEx location, print FedEx address. We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

City BROKEN ARROW State OK ZIP 74012

RECIPIENT: PEEL HERE

8218 7698 1998

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
- [x] 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 1 Total Weight 12 Total Charges

Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See the *FedEx Service Guide* for details.

8 Release Signature *Sign to authorize delivery without obtaining signature.*

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

Questions? Call 1·800·Go·FedEx (800-463-3339)

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402

290

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

Case No:	29294
DAS No:	2001ZG07 H4
SDG No:	E00E6

L

Date Shipped:	6/6/2001
Carrier Name:	FedEx
Airbill:	821876982001
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]	6-6-01 1715	[illegible]	6-7-01 8:[illegible]
2			
3			
4			

Sampler Signature:

For Lab Use Only ST 6/8/01

Lab Contract No:	68W99079
Unit Price:	910.40
Transfer To:	
Lab Contract No:	ST 6/8/0
Unit Price:	

H4 E00E6

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
E00G6	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-119278 (Ice Only) (1)	AP-SL061-01	S:	6/5/2001	16:21		
E00G7	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-119280 (Ice Only) (1)	AP-SL061-02	S:	6/5/2001	16:21		
E00G8	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-119282 (Ice Only) (1)	AP-SL061-03	S:	6/5/2001	16:21		
E00G9	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-119283 (Ice Only) (1)	AP-SL061-03DP	S:	6/5/2001	16:21		
E00H0	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-119284 (Ice Only) (1)	AP-SL061-04	S:	6/5/2001	16:21		
E00H1	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119285 (Ice Only) (1)	AP-SL069-01	S:	6/6/2001	11:30		
E00H3	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119288 (Ice Only) (1)	AP-SL069-02	S:	6/6/2001	11:30		
E00H4	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119290 (Ice Only) (1)	AP-SL069-03	S:	6/6/2001	11:30		
E00H5	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119292 (Ice Only) (1)	AP-SL069-04	S:	6/6/2001	11:30		
E00H6	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119294 (Ice Only) (1)	AP-SL069-05	S:	6/6/2001	11:30		

COPY

ORIGINAL DOCUMENTS ARE INCLUDED IN CSF 29294 SDG 2001ZG07

Signature S. Jackett

Date 6/8/01

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC: E00H4, E00E6	Additional Sampler Signature(s): [illegible]	Cooler Temperature Upon Receipt: 4.8°C	Chain of Custody Seal Number: 17899, 177900
Analysis Key: PCBs = PCBs	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? Y / Shipment Iced? Y

R Number: 5-154097651-060601-0001

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

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

Case No:	29294
DAS No:	2001ZG07
SDG No:	E00H4

L

Date Shipped:	6/6/2001
Carrier Name:	FedEx
Airbill:	821876982001
Shipped to:	Southwest Labs of Oklahoma, Inc. 1700 West Albany Suite C Broken Arrow OK 74012 (918) 251-0545

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
1 [illegible]	6-6-01 1715	[illegible]	6-7-01 8:30
2			
3			
4			

Sampler Signature:

For Lab Use Only

Lab Contract No:	68W99079
Unit Price:	91040
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 E00H4
E00H7	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119295 (Ice Only) (1)	AP-SL069-05DP	S:	6/6/2001	11:30		
E00H8	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119298 (Ice Only) (1)	AP-SL069-06	S:	6/6/2001	11:30		
E00H9	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119300 (Ice Only) (1)	AP-SL064-01	S:	6/6/2001	12:00		
E00J0	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119302 (Ice Only) (1)	AP-SL064-02	S:	6/6/2001	12:00		
E00J1	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119303 (Ice Only) (1)	AP-SL064-03	S:	6/6/2001	12:00		
E00J2	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119305 (Ice Only) (1)	AP-SL064-04	S:	6/6/2001	12:00		
E00J3	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119307 (Ice Only) (1)	AP-SL064-04DP	S:	6/6/2001	12:00		
E00J4	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119308 (Ice Only) (1)	AP-SL064-05	S:	6/6/2001	12:00		
E00J5	Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119310 (Ice Only) (1)	AP-SD044-01	S:	6/6/2001	9:45		
E00J6	Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119311 (Ice Only) (1)	AP-SD044-02	S:	6/6/2001	9:45		

COPY

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E00E6
Signature D Jackoff
Date 6/8/01

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: E00H4, E00E6	Additional Sampler Signature(s): [illegible]	Cooler Temperature Upon Receipt: 4-8°C	Chain of Custody Seal Number: 17899, 17900
Analysis Key: CO PCBs = PCBs RO	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? Y Shipment Iced? Y

R Number: 5-154097651-060601-0001

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

Case No:	29294
DAS No:	2001ZG07
SDG No:	E00H4

L

Date Shipped:	6/6/2001
Carrier Name:	FedEx
Airbill:	821876982001
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]	6/6/01 1715	[illegible]	6-7-01 8:30
2			
3			
4			

Sampler Signature:

For Lab Use Only

Lab Contract No:	68W99079
Unit Price:	910.40
Transfer To:	
Lab Contract No:	
Unit Price:	

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt E00H4
E00J7	Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119312 (Ice Only) (1)	AP-SD044-03	S: 6/6/2001	9:45		
E00J8	Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119313 (Ice Only) (1)	AP-SD044-04	S: 6/6/2001	9:45		
E00J9	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119315 (Ice Only) (1)	AP-SL068-01	S: 6/6/2001	10:20		
E00K0	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119317 (Ice Only) (1)	AP-SL068-02	S: 6/6/2001	10:20		
E00K1	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119318 (Ice Only) (1)	AP-SL068-03	S: 6/6/2001	10:20		
E00K2	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-119319 (Ice Only) (1)	AP-SL068-04	S: 6/6/2001	10:20		

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC: E00H4, E00E6	Additional Sampler Signature(s): [illegible]	Cooler Temperature Upon Receipt: 4.8°C	Chain of Custody Seal Number: 17899, 17790
Analysis Key: PCBs = PCBs	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? Y / Shipment Iced? Y

R Number: 5-154097651-060601-0001

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

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

Case No:	29294
DAS No:	2001ZG07
SDG No:	E00H4

L

Date Shipped:	6/7/01
Carrier Name:	FedEx
Airbill:	821876981998
Shipped to:	Southwest Labs of Oklahoma, Inc. 1700 West Albany Suite C Broken Arrow OK 74012 (918) 251-0545

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
[illegible]	6.7.01 1810	[illegible]	6-8-01 8:30
2			
3			
4			

Sampler Signature:

For Lab Use Only

Lab Contract No:	68W99079
Unit Price:	910.40
Transfer To:	
Lab Contract No:	
Unit Price:	

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME			INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt E00H4
E30M8	Sediment/ Greg Gehrig	L/G	PCBs (7)	5-050336 (Ice Only) (1)	AP-SD035-01	S:	6/6/01	17:40		
E30M9	Sediment/ Greg Gehrig	L/G	PCBs (7)	5-050339 (Ice Only) (1)	AP-SD035-02	S:	6/6/01	17:40		
E30N0	Sediment/ Greg Gehrig	L/G	PCBs (7)	5-050341 (Ice Only) (1)	AP-SD035-03	S:	6/6/01	17:40		
E30N1	Sediment/ Greg Gehrig	L/G	PCBs (7)	5-050343 (Ice Only) (1)	AP-SD035-04	S:	6/6/01	17:40		
* E30N2	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-050344 (Ice Only) (1)	AP-SL058-01	S:	6/6/01	18:15		
E30N3	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-050347 (Ice Only) (1)	AP-SL058-02	S:	6/6/01	18:15		
E30N7	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-050355 (Ice Only) (1)	AP-SL058-05	S:	6/6/01	18:15		
E30N8	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-050357 (Ice Only) (1)	AP-SL059-01	S:	6/6/01	16:40		
E30N9	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-050358 (Ice Only) (1)	AP-SL059-02	S:	6/6/01	16:40		
E30P0	Soil/Sediment/ Greg Gehrig	L/G	PCBs (7)	5-050359 (Ice Only) (1)	AP-SL059-03	S:	6/6/01	16:40		

*SDG Final Sample

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

TR Number: 5-201142833-060701-0001

LABORATORY COPY

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Send Copy to: Contract Laboratory Analytical Services Support, 2000 Edmund Halley Dr., Reston, VA. 20191-3436 Phone 703/264-9348 Fax 703/264-9222

Southwest Laboratory of Oklahoma
1700 W. Albany Suite C
Broken Arrow, OK 74012-1421

SAMPLE LOG-IN RECORD

Date 06/07/2001 Page3
Episode **46702**
Client **EPA**
Project OLM04.2
Received 06/07/01
Logged In 06/07/01

TEST	PRI	DUE	CONTAINER	DESCRIPTION	EXTRACTED	ANALYST	ANALYZED
GC699	6	06/13/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46702.29**		Sampled:06/06/01 11:30		ID:E00H3	SDG:	Matrix: S	Containers: 1
GC699	6	06/13/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46702.30**		Sampled:06/06/01 11:30		ID:E00H5	SDG:	Matrix: S	Containers: 1
GC699	6	06/13/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46702.31**		Sampled:06/06/01 11:30		ID:E00H6	SDG:	Matrix: S	Containers: 1
GC699	6	06/13/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46702.32**		Sampled:06/06/01 11:30		ID:E00H7	SDG:	Matrix: S	Containers: 1
GC699	6	06/13/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46702.33N2**		Sampled:06/06/01 11:30		ID:E00H4	SDG:	Matrix: S	Containers: 1
GC699	6	06/13/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46702.34MS2**		Sampled:06/06/01 11:30		ID:E00H4MS	SDG:	Matrix: S	Containers: 1
GC699	6	06/13/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46702.35SD2**		Sampled:06/06/01 11:30		ID:E00H4MSD	SDG:	Matrix: S	Containers: 1
GC699	6	06/13/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46702.36**		Sampled:06/06/01 11:30		ID:E00H8	SDG:	Matrix: S	Containers: 1
GC699	6	06/13/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46702.37**		Sampled:06/06/01 12:00		ID:E00H9	SDG:	Matrix: S	Containers: 1
GC699	6	06/13/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46702.38**		Sampled:06/06/01 12:00		ID:E00J0	SDG:	Matrix: S	Containers: 1
GC699	6	06/13/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46702.39**		Sampled:06/06/01 12:00		ID:E00J1	SDG:	Matrix: S	Containers: 1
GC699	6	06/13/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46702.40**		Sampled:06/06/01 12:00		ID:E00J2	SDG:	Matrix: S	Containers: 1
GC699	6	06/13/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46702.41**		Sampled:06/06/01 12:00		ID:E00J3	SDG:	Matrix: S	Containers: 1
GC699	6	06/13/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			

COPY

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29954 SDG E0GE6
Signature S Lacher
Date 6/8/01

Southwest Laboratory of Oklahoma
1700 W. Albany Suite C
Broken Arrow, OK 74012-1421

SAMPLE LOG-IN RECORD

Date 06/07/2001 Page4
Episode **46702**
Client **EPA**
Project OLM04.2
Received 06/07/01
Logged In 06/07/01

TEST	PRI	DUE	CONTAINER	DESCRIPTION	EXTRACTED	ANALYST	ANALYZED
Sample: **46702.42**		Sampled:06/06/01 12:00		ID:E00J4	SDG:	Matrix: S	Containers: 1
GC699	6	06/13/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46702.43**		Sampled:06/06/01 09:45		ID:E00J5	SDG:	Matrix: S	Containers: 1
GC699	6	06/13/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46702.44**		Sampled:06/06/01 09:45		ID:E00J6	SDG:	Matrix: S	Containers: 1
GC699	6	06/13/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46702.45**		Sampled:06/06/01 09:45		ID:E00J7	SDG:	Matrix: S	Containers: 1
GC699	6	06/13/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46702.46**		Sampled:06/06/01 09:45		ID:E00J8	SDG:	Matrix: S	Containers: 1
GC699	6	06/13/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46702.47**		Sampled:06/06/01 10:20		ID:E00J9	SDG:	Matrix: S	Containers: 1
GC699	6	06/13/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46702.48**		Sampled:06/06/01 10:20		ID:E00K0	SDG:	Matrix: S	Containers: 1
GC699	6	06/13/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46702.49**		Sampled:06/06/01 10:20		ID:E00K1	SDG:	Matrix: S	Containers: 1
GC699	6	06/13/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46702.50**		Sampled:06/06/01 10:20		ID:E00K2	SDG:	Matrix: S	Containers: 1
GC699	6	06/13/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			

Southwest Laboratory of Oklahoma
1700 W. Albany Suite C
Broken Arrow, OK 74012-1421

SAMPLE LOG-IN RECORD

REVIEWED
BY
DATE 06/08/01

Date 06/08/2001 Page 1
Episode **46721**
Client **EPA**
Project OLM04.2
Received 06/08/01
Logged In 06/08/01

TEST	PRI	DUE	CONTAINER	DESCRIPTION	EXTRACTED	ANALYST	ANALYZED
Sample: **46721.01**		Sampled:06/06/01		17:40 ID:E30M8	SDG:	Matrix: S	Containers: 1
GC699	6	06/14/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46721.02**		Sampled:06/06/01		17:40 ID:E30N0	SDG:	Matrix: S	Containers: 1
GC699	6	06/14/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46721.03**		Sampled:06/06/01		17:40 ID:E30N1	SDG:	Matrix: S	Containers: 1
GC699	6	06/14/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46721.04**		Sampled:06/06/01		18:15 ID:E30N2	SDG:	Matrix: S	Containers: 1
GC699	6	06/14/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46721.05N1**		Sampled:06/06/01		17:40 ID:E30M9	SDG:	Matrix: S	Containers: 1
GC699	6	06/14/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46721.06MS1**		Sampled:06/06/01		17:40 ID:E30M9	SDG:	Matrix: S	Containers: 1
GC699	6	06/14/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46721.07SD1**		Sampled:06/06/01		17:40 ID:E30M9MSD	SDG:	Matrix: S	Containers: 1
GC699	6	06/14/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46721.08**		Sampled:06/06/01		18:15 ID:E30N3	SDG:	Matrix: S	Containers: 1
GC699	6	06/14/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46721.09**		Sampled:06/06/01		18:15 ID:E30N4	SDG:	Matrix: S	Containers: 1
GC699	6	06/14/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46721.10**		Sampled:06/06/01		18:15 ID:E30N5	SDG:	Matrix: S	Containers: 1
GC699	6	06/14/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46721.11**		Sampled:06/06/01		18:15 ID:E30N6	SDG:	Matrix: S	Containers: 1
GC699	6	06/14/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46721.12**		Sampled:06/06/01		18:15 ID:E30N7	SDG:	Matrix: S	Containers: 1
GC699	6	06/14/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46721.13**		Sampled:06/06/01		16:40 ID:E30N8	SDG:	Matrix: S	Containers: 1
GC699	6	06/14/2001	A	NON STD PCB			
IN660	8	06/11/2001	A	% MOISTURE			
Sample: **46721.14**		Sampled:06/06/01		16:40 ID:E30N9	SDG:	Matrix: S	Containers: 1
GC699	6	06/14/2001	A	NON STD PCB			

SAMPLE LOG-IN SHEET

Lab Name SOUTHWEST LABORATORY OF OKLAHOMA	Page 2 of 3
Received by (Print Name) JASON SPRIGGS	Log-In Date 2001-06-07 10:46
Received by (Signature)	
Case Number 29294	Sample Delivery Group No. E00H4 / SAS Number

Remarks: Cooler: 06/07/01-1

1. Custody Seals(s)	Present/Absent* Intact/ Broken
2. Custody Seal Nos.	177899-900
3. Chain-of Custody Records	Present/Absent*
4. Traffic Reports or Packing Lists	Present/Absent*
5. Airbill	Airbill/ Sticker Present/Absent*
6. Airbill No.	821876982001
7. Sample Tags	Present/Absent*
Sample Tag Numbers	Listed/Not Listed on Chain-of-Custody
8. Sample Condition	Intact/ Broken*/Leaking
Cooler Temperature Indicator Bottle	Present/Absent*
9. Cooler Temperature	4.8c
10. Does Information on Custody records, traffic reports, and sample tags agree?	Yes/ No*
11. Date Received at Lab	06/07/01
12. Time Received	08:30

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment: etc,
E00G2	5-119272	46702.19	
E00G3	5-119273	46702.20	
E00G4	5-119274	46702.21	
E00G5	5-119276	46702.22	
E00G6	5-119278	46702.23	
E00G7	5-119280	46702.24	
E00G8	5-119282	46702.25	
E00G9	5-119283	46702.26	
E00H0	5-119284	46702.27	
E00H1	5-119285	46702.28	
E00H3	5-119288	46702.29	
E00H5	5-119292	46702.30	
E00H6	5-119294	46702.31	
E00H7	5-119295	46702.32	
E00H4	5-119290	46702.33	
E00H4MS	5-119290	46702.34	
E00H4MSD	5-119290	46702.35	

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 26254 SDG E00H4
Signature
Date 6/8/01

Sample Transfer	
Fraction PCB	Fraction
Area # 8	Area #
By JS	By
On 6-7-01	On

* Contact SMO and attach record of resolution.

Reviewed By	Logbook No.
Date 06/07/01	Logbook Page No. 318

SAMPLE LOG-IN SHEET

Lab Name SOUTHWEST LABORATORY OF OKLAHOMA	Page 3 of 3
Received by (Print Name) JASON SPRIGGS	Log-In Date 2001-06-07 10:46
Received by (Signature)	
Case Number 29294	Sample Delivery Group No. E00H4 / SAS Number

Remarks: Cooler: 06/07/01-1

1. Custody Seals(s)	Present/Absent* Intact/ Broken
2. Custody Seal Nos.	177899-900
3. Chain-of Custody Records	Present/Absent*
4. Traffic Reports or Packing Lists	Present/Absent*
5. Airbill	Airbill/ Sticker Present/Absent*
6. Airbill No.	821876982001
7. Sample Tags	Present/Absent*
Sample Tag Numbers	Listed/Not Listed on Chain-of-Custody
8. Sample Condition	Intact/ Broken*/Leaking
Cooler Temperature Indicator Bottle	Present/Absent*
9. Cooler Temperature	4.8c
10. Does Information on Custody records, traffic reports, and sample tags agree?	Yes/ No*
11. Date Received at Lab	06/07/01
12. Time Received	08:30

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment: etc,
E00H8	5-119298	46702.36	
E00H9	5-119300	46702.37	
E00J0	5-119302	46702.38	
E00J1	5-119303	46702.39	
E00J2	5-119305	46702.40	
E00J3	5-119307	46702.41	
E00J4	5-119308	46702.42	
E00J5	5-119310	46702.43	
E00J6	5-119311	46702.44	
E00J7	5-119312	46702.45	
E00J8	5-119313	46702.46	
E00J9	5-119315	46702.47	
E00K0	5-119317	46702.48	
E00K1	5-119318	46702.49	
E00K2	5-119319	46702.50	

Sample Transfer	
Fraction PCB	Fraction
Area # 9	Area #
By JS	By
On 6-7-01	On

* Contact SMO and attach record of resolution.

Reviewed By	Logbook No.
Date 06/07/01	Logbook Page No. 319

SAMPLE LOG-IN SHEET

Lab Name SOUTHWEST LABORATORY OF OKLAHOMA	Page 1 of 4
Received by (Print Name) JASON SPRIGGS	Log-In Date 2001-06-08 11:21
Received by (Signature)	
Case Number 29294	Sample Delivery Group No. E00H4 / SAS Number

Remarks: Cooler: 06/08/01-1

1. Custody Seals(s)	Present/Absent* Intact/ Broken
2. Custody Seal Nos.	177895-896
3. Chain-of Custody Records	Present/Absent*
4. Traffic Reports or Packing Lists	Present/Absent*
5. Airbill	Airbill/ Sticker Present/Absent*
6. Airbill No.	821876981998
7. Sample Tags	Present/Absent*
Sample Tag Numbers	Listed/Not Listed on Chain-of-Custody
8. Sample Condition	Intact/ Broken*/Leaking
Cooler Temperature Indicator Bottle	Present/Absent*
9. Cooler Temperature	5.0c
10. Does Information on Custody records, traffic reports, and sample tags agree?	Yes/ No*
11. Date Received at Lab	06/08/01
12. Time Received	08:30

Sample Transfer	
Fraction PCB	Fraction
Area # 9	Area #
By JS	By
On 6-8-01	On

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment: etc,
E30M8	5-050336	46721.01	
E30N0	5-050341	46721.02	
E30N1	5-050343	46721.03	
E30N2	5-050344	46721.04	
E30M9	5-050339	46721.05	
E30M9	5-050339	46721.06	
E30M9MSD	5-050339	46721.07	
E30N3	5-050347	46721.08	
E30N4	5-050349	46721.09	
E30N5	5-050351	46721.10	
E30N6	5-050353	46721.11	
E30N7	5-050355	46721.12	
E30N8	5-050357	46721.13	
E30N9	5-050358	46721.14	
E30P0	5-050359	46721.15	
E30P1	5-050360	46721.16	
E30P2	5-050361	46721.17	
E30P3	5-050362	46721.18	

* Contact SMO and attach record of resolution.

Reviewed By	Logbook No. 320
Date 06/08/01	Logbook Page No.

REQUEST FOR MODIFIED ANALYSIS

EPA's Contract Laboratory Program is seeking current CLP laboratories interested in performing organic analysis through a modified analysis protocol administered through the SOW "flexibility clause" as presented in Section 4.2.2.8 Exhibit A, page A-8 The modifications presented further in this document neither increase or decrease the value of the product (sample analysis and full data deliverables) provided to EPA by the Contractor (as compared to worth of original product previously negotiated in the contract). Therefore, no upward or downward contract adjustments in price are necessary, i.e., the modified analysis will be performed at the same price as that stated in the original contract.

In order to facilitate this modified analysis protocol, and to still ensure quality analytical data, the changes to the SOW listed in the link below will need to be made: Laboratories volunteering to analyze samples by this protocol are requested to review the changes and then acknowledge their desire to participate by signing, dating, and returning the acknowledgment document at the end of the request document.

It is not mandatory that laboratories agree to perform modified analyses, and laboratories will not be adversely affected by not performing modified analyses. All samples that are to be analyzed by the modified protocol will be distributed to the volunteer laboratories according to the sample scheduling Standard Operating Procedure (SOP). Volunteer laboratories are not guaranteed to receive samples under the modified protocol.

MODIFIED ANALYSIS FORM

Modification Reference Number: PCB-REG5

Estimated Number of Samples: 1400

Estimated Sampling Date: 3/21/2001 -

Sample Matrix: Soil and Sediments

Fractions Affected: Pesticides/ PCBs

Specific Modifications: See below:

Required OLM04.2 Changes

OLM04.2 requires contract laboratories to analyze samples for Pesticides and Aroclors through the protocol outlined in Exhibit D, Analytical Methods for Pesticides/Aroclors. Specific target analytes and their associated contract required quantitation limits (CRQL) are listed in Exhibit C, Section 3.0, page C-8 of OLM04.2.

The proposed modified analysis will require the laboratory to use sample cleanup and analysis techniques not currently written into OLM04.2. The cleanup techniques to be used should generally follow guidelines for Silica Gel cleanup as presented in SW 846 Method 3630, followed by Sulfuric acid cleanup as presented in SW 846 method 3665A, and the analytical technique should generally follow PCB GC guidelines presented in SW 846 Method 8082.

Because the particular cleanup technique is destructive to certain pesticide compounds that are target analytes of OLM04.2, isolation, quantitation, and reporting of pesticides compounds for this project is not required. Only the list of Aroclors presented in Exhibit C, Section 3 is to be analyzed and reported. Further, the need to perform the Florisil cleanup technique presented in Exhibit D/Pest is waved. However, the lab is required to still perform the GPC cleanup presented in Exhibit D/Pest.

For calibration purposes the following procedural and Quality Assurance requirements must be followed:

a. A 5-point calibration curve for combined aroclors 1016/1260 and single mid-level points for all other arochlors are to be analyzed prior to any sample analysis. For the 5-point analysis, the low point on the curve must reflect the required CRQL.

b. The 5 point curve must meet an average 20 % RSD

c. If other arochlors are suspected, or other arochlors are detected in an analysis, a separate 5-point calibration must be run for the particular arochlor. The 20 % RSD requirement will apply to any other arochlor 5-point analysis performed.

d. A continuing calibration verification standard of arochlors 1016/1260 must be analyzed every 12 hours of analysis and not to exceed 20 samples.

e. The continuing calibration verification analysis must be within 15% of the expected value. If the % difference is greater than 15%, all samples analyzed prior to the continuing calibration verification must be reanalyzed.

f. Each extraction batch must contain method blanks, laboratory control spike and matrix spike/matrix spike duplicate samples (provided sufficient sample is sent for the matrix spike and duplicate analysis).

g. Each field sample and quality control sample must contain Decachlorobiphenyl surrogate (DCB). Samples may be spiked with TMX surrogate as well, but no recovery requirements will be placed on the TMX, as this compound is sensitive to sulfuric acid cleanup.

h. All samples failing to meet DCB recovery limits of 30% to 170% must be re-extracted and re-analyzed.

i. For the laboratory control spike, arochlor 1254 is to be used. The results of the laboratory control sample should fall between the recovery limits of 29 to 135 %. If the recovery falls below 29%, all samples within the

extraction batch must be re-extracted and re-analyzed. If the recovery is above 135% and arochlors are not detected in the batch sample, then no further action is necessary. If the recovery is above 135% and arochlors are present in any of the batch samples, then the samples containing arochlor must be re-extracted and re-analyzed.

j. Arochlor 1254 is to be used for the matrix spike and duplicate analyses. Advisory limits are 29% to 135% are set for the matrix spike and duplicate analysis. As these limit are only advisory, no particular action is required for QC samples outside these limits. However, consistent recovery outside these limits for analysis in which no apparent matrix interference is present may justify a review by EPA personnel, and the laboratory may be requested to repeat certain analyses at no further cost to the government.

k. Some, or all, samples may require a reporting CRQL of 25 ug/Kg (33 ug/Kg is the OLM04.2 required CRQL). For these samples, the laboratory must extract 40 grams of sample, as opposed to the normal 30 grams. Also, extra sodium sulfate may have to be added to the sample in order to dry the sample properly.

l. For reporting purposes, the laboratory is to provide a standard CLP data package at the turnaround time requested by the Region. Modifications to reporting requirements due to the changes presented in this modification request form shall be incorporated into the hard copy deliverables and into the electronic diskette where practical and easily accommodated. All CLP forms associated with florisil cleanup, and GPC check analysis are not required. Any other reporting requirements, not mentioned in this document which the lab believes is affected by the modifications required for this project shall be noted in the case narrative. All hard copy and electronic reporting requirements not affected by these modifications shall be subjected to CCS. The Organic Program Manager will make recommendations to the Contracting Officer as to any disputes concerning CCS defects charged against samples.

While not required in the final data package, the laboratory should keep on file in the lab, the SOPs used to perform the Acid and Silica Gel cleanup techniques. Also, the lab should include copies of this modification request forms in the final hard copy data packages.

SOUTHWEST LABORATORY OF OKLAHOMA

ANALYTICAL REQUEST FORM, SWL-GA-131

Ref# 5076

Pg 2 of 3

Client	ACCOUNTING OFFICER	Client Code:	EPA
Contact	Heather Bauer	Phone&Fax#:	703-264-9348 703-264-9222
Project	OLM04.2	PO Number:	
Location	29294	Receipt Date	06/07/2001 Due: 06/13/2001
SDG	Open	Sample TAT:	Fax Rpt 7
Reports			
Data Pkgs	CLP: 2		
EDD			

Special Provisions: Must use arochlor 1254 for LCS/LCSD & MS/MSD
Samples need to be GPCed, silica gel cleaned & Acid cleaned.
Case#29294, to date WK OF 6/04: 96 soils , 5 sets QC

Client ID	Type	Matrix	GC699									
E00G4		S	X									
E00G5		S	X									
E00G6		S	X									
E00G7		S	X									
E00G8		S	X									
E00G9		S	X									
E00H0		S	X									
E00H1		S	X									
E00H3		S	X									
E00H5		S	X									
E00H6		S	X									
E00H7		S	X									
E00H4	N2	S	X									
E00H4MS	MS2	S	X									
E00H4MSD	SD2	S	X									
E00H8		S	X									
E00H9		S	X									
E00J0		S	X									
E00J1		S	X									
E00J2		S	X									

ORIGINAL DOCUMENTS ARE INCLUDED IN
CSF 29294 SDG E00G
Signature S Drackett
Date 6/8/01

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

Billing Address: Same As Reporting Address

Project Officer: HARRY M. BORG

Prepared 06/07/2001

SOUTHWEST LABORATORY OF OKLAHOMA

ANALYTICAL REQUEST FORM, SWL-GA-131

Ref# 5076

Client	ACCOUNTING OFFICER	Client Code:	EPA
Contact	Heather Bauer	Phone&Fax#:	703-264-9348 703-264-9222
Project	OLM04.2	PO Number:	
Location	29294	Receipt Date	06/07/2001 Due: 06/13/2001
SDG	Open	Sample TAT:	Fax Rpt 7
Reports			
Data Pkgs	CLP: 2		
EDD			

Special Provisions: Must use arochlor 1254 for LCS/LCSD & MS/MSD
Samples need to be GPCed, silica gel cleaned & Acid cleaned.
Case#29294, to date WK OF 6/04: 96 soils , 5 sets QC

Client ID	Type	Matrix	GC699									
E00J3		S	X									
E00J4		S	X									
E00J5		S	X									
E00J6		S	X									
E00J7		S	X									
E00J8		S	X									
E00J9		S	X									
E00K0		S	X									
E00K1		S	X									
E00K2		S	X									

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

Billing Address: Same As Reporting Address

Project Officer: HARRY M. BORG

Prepared 06/07/2001

SOUTHWEST LABORATORY OF OKLAHOMA

ANALYTICAL REQUEST FORM, SWL-GA-131

Ref# 5091

Pg 1 of 3

Client	ACCOUNTING OFFICER	Client Code:	EPA
Contact	Heather Bauer	Phone&Fax#:	703-264-9348 703-264-9222
Project	OLM04.2	PO Number:	
Location	29294	Receipt Date	06/08/2001 Due: 06/14/2001
SDG	Open	Sample TAT:	Fax Rpt 7
Reports			
Data Pkgs	CLP: 2		
EDD			

Special Provisions: Must use arochlor 1254 for LCS/LCSD & MS/MSD
Samples need to be GPCed, silica gel cleaned & Acid cleaned.
Case#29294, to date WK OF 6/04: 145 soils , 8 sets QC

Client ID	Type	Matrix	GC699									
E30M8		S	X									
E30N0		S	X									
E30N1		S	X									
E30N2		S	X									
E30M9	N1	S	X									
E30M9	MS1	S	X									
E30M9MSD	SD1	S	X									
E30N3		S	X									
E30N4		S	X									
E30N5		S	X									
E30N6		S	X									
E30N7		S	X									
E30N8		S	X									
E30N9		S	X									
E30P0		S	X									
E30P1		S	X									
E30P2		S	X									
E30P3		S	X									
E30P4		S	X									
E30P5		S	X									

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

Billing Address: Same As Reporting Address

326

Project Officer: HARRY M. BORG

Prepared 06/08/2001