DATA CHEM LABORATORIES
A SORENSON COMPANY

211029

Client: Roy F. Weston
Project: EPA Region II START #G2
DCL Account No: 3008
DCL Set ID No.: 97C-0439-01,, 03, 04

		Page Nos. From	Page Nos. To	(Please Check:) Lab	(Please Check:) Client
1.	Inventory Sheet (Do not number)			✓	
2.	Client Chain-of-Custody Records	1	1	✓	
3.	Polychlorinated Biphenyls (97C-0439-01)				
	Case Narrative	2	3	✓	
	Analytical Forms	4	52	✓	
	Sample Tracking Documentation	53	59	✓	
	Analytical Documentation	60	129	✓	
	Raw Data	130	258	✓	
4.	Polychlorinated Biphenyls (97C-0439-04)				
	Case Narrative	259	260	✓	
	Analytical Forms	261	301	✓	
	Sample Tracking Documentation	302	307	✓	
	Analytical Documentation	308	373	✓	
	Raw Data	374	476	✓	
5.	Percent Solids (97C-0439-03)				
	Case Narrative	NA	NA	✓	
	Analytical Forms	477 PM 4/5/98	478	✓	
	Sample Tracking Documentation	479	481	✓	
	Analytical Documentation	482	482	✓	
	Raw Data	NA	NA	✓	
6.	Shipping/Receiving Documents				
	Airbill (No. of Shipments: 1)	483	483	✓	
	Sample Log-In Sheet	484	484	✓	
	DCL Cooler Receipt Checklist	485	485	✓	
7.	Other Records (Describe or list)				
	Telephone Communication Log	NA	NA	✓	
		NA	NA	✓	
		NA	NA	✓	

8. Comments:

Completed by (DataChem Laboratories):

	Renee Thelin / Document Control	01/05/98
(Signature)	(Print Name & Title)	(Date)

Audited by (Client):

(Signature)	(Print Name & Title)	(Date)

RFP No.: 2226

PO No.: 87052

CHAIN OF CUSTODY RECORD

WESTON. MANAGERS DESIGNERS/CONSULTANTS

SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM
EPA CONTRACT 68-W5-0019
Phone: 908-225-6116 Fax: 908-225-7037

Matrix Box No.	
1. Surface Water	1. HCl
2. Ground Water	2. HNO3
3. Leachate	3. Na2SO4
4. Rinsate	4. H2SO4
5. Soil/Sediment	5. Other (Specify)
6. Oil	6. Ice Only
7. Waste	N. Not Preserved
8. Other (Specify)	* See Comments

Send verbal and written results to: Roy F. Weston, Inc., USEPA Region II START
Suite 201, 1090 King Georges Post Road, Edison, New Jersey 08837-3703
Attention: Smita Sumbaly, START Analytical Coordinator

Sample Number	Sample Collection MM/DD/YY/Time	Sample Matrix (Enter box #)	Conc. Low-L Med-M High-H	Sample Type Comp-C Grab-G	Sample Preserv. (Enter box #)	RAS ANALYSIS VOA	BNA	PEST	PCBs	TAL	CN	RCRA ANALYSIS KIN	COR	REAC	OTHER
AAAANS2	11/6/97/1525	5	L	G	6										Total PCBs
AAAASS2	11/6/97/1527														
AAAAND2	11/6/97/1536														
AAAASED(S)	11/6/97/1520														
AAAANS3	11/6/97/1535														
AAAANS1	11/6/97/1525														
AAAAND1	11/6/97/1530														
RB2	11/6/97/1630														
	~~11/6/97~~														
	~~11/6/97~~														
	~~11/6/97~~														

Comments: Extra sample volume given for MS/MSD sample # AAAANS1

Person Assuming Responsibility for Sample:	Time	Date (MM/DD/YY)
M. Malkoff	1700	11/6/97

Sample Number	Relinquished By:	Time	Date	Received By:	Reason for Change of Custody
All	M. Malkoff	1800	11/6/97	FEDEX	Shipment to LAB
Sample Number	Relinquished By:	Time	Date	Received By:	Reason for Change of Custody
	FEDEX	0930	11/7/97	Michael Morrissey	
Sample Number	Relinquished By:	Time	Date	Received By:	Reason for Change of Custody

0001

Roy F. Weston, Inc.
FEDERAL PROGRAMS DIVISION
In Association with Resource Applications, Inc., R.E. Sarriera Associates, PRC Environmental Management, C.C. Johnson & Malhotra, P.C., and GRB Environmental Services, Inc.

DATA CHEM
LABORATORIES, INC.
A SORENSON COMPANY

Case Narrative

Method:	8080A	**Client:**	Roy F. Weston
Analysis:	Polychlorinated Biphenyls	**Project:**	EPA Region II START #G2
Preparation SOP No.:	OE-SW-3550	**SDG No.:**	AAAAND
Analysis SOP No.:	OE-SW-8080	**DCL Account:**	3008
Matrix:	Soil	**DCL Set ID:**	97C-0439-01

General Set Information: There were two soil samples received in the set. The sample was batched with a method blank sample, a laboratory control sample, a matrix spike sample and a matrix spike duplicate sample for polychlorinated biphenyl analysis by EPA SW-846 Method 8080A.

Method Summary: Each sample was extracted into methylene chloride and concentrated in a K-D apparatus. A solvent exchange to hexane was performed and the final extract volume was adjusted to 10 mL. Analysis was performed by single column capillary gas chromatography with electron capture detector.

Sample Preparation: The samples were prepared according to the published procedures found in EPA SW-846 Method 3550C, modified to accommodate the sample matrix. Due to the appearance of the final extracts, prior to sample analysis, the sample extracts were washed with concentrated sulfuric acid to prevent instrument contamination and to aid in PCB peak pattern identification (EPA SW-846 Method 3665) and sulfur cleaned with mercury (EPA SW-846 Method 3665).

Holding Times: Holding time requirements were met for both sample preparation and analysis.

Dilutions: All samples were reanalyzed for PCB-1254 at 1:100 dilutions with exception of the method blank sample and the QC sample.

Method and Sample QC Data:

Method Blank (BL) : No target analytes were detected in the method blank.

Laboratory Control Sample (QC): The QC was spiked with 167 ug/kilogram of PCB-1016 and PCB-1260. All QC recoveries were within control limits.

MS/MSD Sample(s): The matrix spike and matrix spike duplicate samples were prepared from sample 97C05249 (AAAANS1). Samples were spiked with 167 ug/Kg of PCB-1016 and PCB-1260. Due to the high concentration of PCB-1254 in the parent sample, the parent sample and spike samples were reanalyzed at 1:100 dilutions. Spike recoveries were high for both the MS and MSD samples. The relative percent difference (RPD) between the two spike recoveries was within method performance control limits for PCB-1260 but above the control limit for PCB-1016.

Surrogates: All samples were spiked with 16.7 ug/kilogram of surrogate standards tetrachloro-m-xylene and dibutylchorendate. Even though the method only requires one surrogate to be within control limits, two are spiked. This is done since the retention time window for tetrachloro-m-xylene falls in the same region as PCB 1016 while the retention time window for dibutylchlorendate falls in the same region as PCB 1260. If high concentrations of either PCB are present in the sample, the remaining surrogate can still be effectively quantitated, maintaining acceptable quality control. Surrogate acceptance critria is met if one of the surrogates is in control. All tetrachloro-m-xylene surrogate recoveries were within the method performance control limits. The dibutylchlorendate recoveries for the sample analyses were not quantitated due to an interference form the PCB pattern. Since all tetrachloro-m-xylene surrogate recoveries were within the method performance control limits, surrogate acceptance criteria was met.

Instrument QC:

Initial Calibration: All calibration curves met method specification.

Initial Calibration Verification(ICV): All analyte recoveries were within ±25%.

Continuing Calibration Verification (CCV): All continuing calibration verification standard recoveries were within ±15% with exception of the PCB-1260 in the end CCV (-27%). Low PCB recoveries are attributted to the analysis of the undiluted field samples. Calibration recoveries have typically been low following the analysis of undiluted soil field samples. Dilutions analyses for the field samples are therefore analyzed prior to the undiluted sample analyses.

NC/CAR: No Non-conformance/Corrective Action Reports were required for this set.

Sample Calculation: Analyte concentrations in sample extracts were determined by interpolation from quadratic regression of standard response versus concentration. Final concentration if ug/kilogram was determined from the equation

$$C_S \quad \frac{C_E \quad V_E \quad DF}{V_S}$$

where C_S = Analyte concentration in sample (ug/kilogram)

C_E = Analyte concentration in extract (mg/mL)

V_E = Final volume of extract (mL)

DF = Dilution factor

V_S = Initial aliquot of sample taken for preparation (Kilogram)

Miscellaneous Comments: None.

0003

Richard W. Wade December 16, 1997

Richard W. Wade, DCL Section Manager

DATA CHEM LABORATORIES, INC.
A SORENSON COMPANY

1
PESTICIDES
ANALYSIS DATA SHEET

Report Number: 97-00015

CLIENT SAMPLE NO.

AAAANS1

Client Name: Roy F. Weston
Site: NA
Project: NA
SDG No.: AAAAND
DCL Set ID: 97C-0439-01
Matrix: SOIL
DCL Sample ID: 97C05249
Sample wt/vol: 0.030 Kg
Reporting Basis: Dry
% Moisture: 38.9
Decanted: N
Date Received: 07-Nov-1997 00:00
Extraction Method: 3550C
Date Extracted: 13-Nov-1997 00:00
Analysis Method: 8080A
Date Analyzed: 23-Nov-1997 22:57
Concentrated Extract Volume: 10.0 mL
Injection Volume: 3.0 uL
Dilution Factor: ~~100.~~ 1
GPC Cleanup: N
pH: N/A
Sulfur Cleanup: Y

CAS NO.	COMPOUND	MDL	PQL	CONC: ug/Kg	Q
12674-11-2	Aroclor 1016	4.8	11.	4.8	UD J
11104-28-2	Aroclor 1221	34.	55.	34.	UD
11141-16-5	Aroclor 1232	6.0	11.	6.0	UD
53469-21-9	Aroclor 1242	4.1	11.	4.1	UD
12672-29-6	Aroclor 1248	3.8	11.	3.8	UD
11097-69-1	Aroclor 1254	250 ~~2.5~~	1100 ~~11.~~	4600	D NJ
11096-82-5	Aroclor 1260	240 ~~2.4~~	↓ ~~11.~~	240 ~~2.4~~	UD J

D=1:100

0004

DATA CHEM LABORATORIES, INC.
A SORENSON COMPANY

1
PESTICIDES
ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

AAAAND1

Client Name: Roy F. Weston
Site: NA
Project: NA
SDG No.: AAAAND
DCL Set ID: 97C-0439-01
Matrix: SOIL
DCL Sample ID: 97C05250
Sample wt/vol: 0.030 Kg
Reporting Basis: Dry
% Moisture: 42.4
Decanted: N
Date Received: 07-Nov-1997 00:00
Extraction Method: 3550C
Date Extracted: 13-Nov-1997 00:00
Analysis Method: 8080A
Date Analyzed: 24-Nov-1997 00:47
Concentrated Extract Volume: 10.0 mL
Injection Volume: 3.0 uL
Dilution Factor: ~~100.~~ 1
GPC Cleanup: N
pH: N/A
Sulfur Cleanup: Y

CAS NO.	COMPOUND	MDL	PQL	CONC: ug/Kg	Q
12674-11-2	Aroclor 1016	5.1	12.	5.1	UD J
11104-28-2	Aroclor 1221	36.	58.	36.	UD
11141-16-5	Aroclor 1232	6.4	12.	6.4	UD
53469-21-9	Aroclor 1242	4.4	12.	4.4	UD
12672-29-6	Aroclor 1248	400 ~~4.0~~	1200 ~~12.~~	400 ~~4.0~~	UD
11097-69-1	Aroclor 1254	270 ~~2.7~~	~~12.~~	8700	D NJ
11096-82-5	Aroclor 1260	260 ~~2.6~~	~~12.~~	260 ~~2.6~~	UD J

D=1:100

0005

DATA CHEM LABORATORIES, INC.
A SORENSON COMPANY

1
PESTICIDES
ANALYSIS DATA SHEET

Report Number: 97-00015

CLIENT SAMPLE NO.

AAAANS1

Client Name: Roy F. Weston
Site: NA
Project: NA
SDG No.: AAAAND
DCL Set ID: 97C-0439-01
Matrix: SOIL
DCL Sample ID: 97C05249MS
Sample wt/vol: 0.030 Kg
Reporting Basis: Dry
% Moisture: 38.9
Decanted: N
Date Received: 07-Nov-1997 00:00
Extraction Method: 3550C
Date Extracted: 13-Nov-1997 00:00
Analysis Method: 8080A
Date Analyzed: 23-Nov-1997 23:33
Concentrated Extract Volume: 10.0 mL
Injection Volume: 3.0 uL
Dilution Factor: 100.
GPC Cleanup: N
pH: N/A
Sulfur Cleanup: Y

CAS NO.	COMPOUND	MDL	PQL	CONC: ug/Kg	Q
12674-11-2	Aroclor 1016	4.8	11.	1820	D
11096-82-5	Aroclor 1260	2.4	11.	10500	D

0006

DATA CHEM LABORATORIES, INC.
A SORENSON COMPANY

1
PESTICIDES
ANALYSIS DATA SHEET

Report Number: 97-00015

CLIENT SAMPLE NO.
AAAANS1

Client Name: Roy F. Weston
Site: NA
Project: NA
SDG No.: AAAAND
DCL Set ID: 97C-0439-01
Matrix: SOIL
DCL Sample ID: 97C05249MSD
Sample wt/vol: 0.030 Kg
Reporting Basis: Dry
% Moisture: 38.9
Decanted: N
Date Received: 07-Nov-1997 00:00
Extraction Method: 3550C
Date Extracted: 13-Nov-1997 00:00
Analysis Method: 8080A
Date Analyzed: 24-Nov-1997 00:10
Concentrated Extract Volume: 10.0 mL
Injection Volume: 3.0 uL
Dilution Factor: 100.
GPC Cleanup: N
pH: N/A
Sulfur Cleanup: Y

CAS NO.	COMPOUND	MDL	PQL	CONC: ug/Kg	Q
12674-11-2	Aroclor 1016	4.8	11.	1350	D
11096-82-5	Aroclor 1260	2.4	11.	10300	D

0007

DATA CHEM LABORATORIES, INC.
A SORENSON COMPANY

1
PESTICIDES
ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

BL-142144-1

Client Name: Roy F. Weston
Site: NA
Project: NA
SDG No.: AAAAND
DCL Set ID: 97C-0439-01
Matrix: SOIL
DCL Sample ID: BL-142144-1
Sample wt/vol: 0.030 Kg
Reporting Basis: As Received
% Moisture:
Decanted:
Date Received: 07-Nov-1997 00:00
Extraction Method: 3550C
Date Extracted: 13-Nov-1997 00:00
Analysis Method: 8080A
Date Analyzed: 23-Nov-1997 21:44
Concentrated Extract Volume: 10.0 mL
Injection Volume: 3.0 uL
Dilution Factor: 1.00
GPC Cleanup: N
pH: N/A
Sulfur Cleanup: Y

CAS NO.	COMPOUND	MDL	PQL	CONC: ug/Kg	Q
12674-11-2	Aroclor 1016	2.95	6.67	2.95	U
11104-28-2	Aroclor 1221	20.9	33.3	20.9	U
11141-16-5	Aroclor 1232	3.68	6.67	3.68	U
53469-21-9	Aroclor 1242	2.53	6.67	2.53	U
12672-29-6	Aroclor 1248	2.30	6.67	2.30	U
11097-69-1	Aroclor 1254	1.54	6.67	1.54	U
11096-82-5	Aroclor 1260	1.47	6.67	1.47	U

0008

DATA CHEM
LABORATORIES, INC.
A SORENSON COMPANY

1
PESTICIDES
ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

QC-142144-1

Client Name: Roy F. Weston
Site: NA
Project: NA
SDG No.: AAAAND
DCL Set ID: 97C-0439-01
Matrix: SOIL
DCL Sample ID: QC-142144-1
Sample wt/vol: 0.030 Kg
Reporting Basis: As Received
% Moisture:
Decanted:
Date Received: 07-Nov-1997 00:00
Extraction Method: 3550C
Date Extracted: 13-Nov-1997 00:00
Analysis Method: 8080A
Date Analyzed: 23-Nov-1997 22:20
Concentrated Extract Volume: 10.0 mL
Injection Volume: 3.0 uL
Dilution Factor: 1.00
GPC Cleanup: N
pH: N/A
Sulfur Cleanup: Y

CAS NO.	COMPOUND	MDL	PQL	CONC: ug/Kg	Q
12674-11-2	Aroclor 1016	2.95	6.67	142.	
11096-82-5	Aroclor 1260	1.47	6.67	134.	

FORM I CHROM

DATA CHEM LABORATORIES, INC.
A SORENSON COMPANY

2
PESTICIDES
SURROGATE RECOVERY

Client Name: Roy F. Weston Site: NA

Project: NA SDG No.: AAAAND DCL Set ID: 97C-0439-01

Matrix: SOIL Analysis Method: 8080A

Column(1): DB-608 ID: .53mm

	CLIENT SAMPLE NO.	TCX COLUMN 1 % REC	DBC COLUMN 1 % REC	TOTAL OUT
01	AAAANS1	88.6	0*	1
02	AAAAND1	76.0	0*	1
03	AAAANS1 MS	93.5	0*	1
04	AAAANS1 MSD	89.8	0*	1
05	BL-142144-1	96.2	90.8	0
06	QC-142144-1	75.1	99.4	0

QC LIMITS

TCX = Tetrachloro-meta-Xylene (38.4-156.)
DBC = Dibutylchlorendate (37.0-147.)

FORM II CHROM

0010

DATA CHEM LABORATORIES, INC.
A SORENSON COMPANY

3-1
PESTICIDES
MS and MSD RECOVERY

Report Number: 97-00015

Client Name: Roy F. Weston Site: NA

Project: NA SDG No.: AAAAND DCL Set ID: 97C-0439-01

Matrix: SOIL Analysis Method: 8080A

Matrix Spike - Client Sample No. AAAANS1 DCL Sample No.: 97C05249MS

MS Concentration Units: ug/Kg

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	MS CONCENTRATION	MS % REC	REC QC LIMITS
Aroclor 1016	167.	0 ~~2900~~	3000 ~~1820~~	1796 ~~354~~	44.0-140.
Aroclor 1260	167.	0 ~~16000~~	20333 ~~10500~~	~~1660~~ * 12175	48.1-146.

MSD Concentration Units: ug/Kg

COMPOUND	SPIKE ADDED	MSD CONCENTRATION	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC
Aroclor 1016	167.	2167 ~~1350~~	1297 ~~672~~	~~32~~ 30 *	15.8	44.0-140.
Aroclor 1260	167.	16750 ~~10300~~	~~1570~~ * 10030	~~35~~ 19	45.9	48.1-146.

* Values outside of contract required QC limits.

RPD: 1 out of 2 outside limits.
Spike Recovery: 3 out of 4 outside limits.

FORM III CHROM-1

DATA CHEM
LABORATORIES, INC.
A SORENSON COMPANY

3-2
PESTICIDES
LCS and LCSD RECOVERY

Report Number: 97-00015

Client Name: Roy F. Weston
Site: NA
Project: NA
SDG No.: AAAAND
DCL Set ID: 97C-0439-01
Matrix: SOIL
Analysis Method: 8080A
DCL Sample No.: QC-142144-1

LCS Concentration Units: ug/Kg

COMPOUND	TARGET CONCENTRATION	LCS CONCENTRATION	LCS % REC	REC QC LIMITS
Aroclor 1016	167.	142.	85.3	53.1-140.
Aroclor 1260	167.	134.	80.3	48.0-151.

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

FORM III CHROM-2

DATA CHEM
LABORATORIES, INC.
A SORENSON COMPANY

4
PESTICIDES
METHOD BLANK SUMMARY

Report Number: 97-00015

SAMPLE NO.

BL-142144-1

Client Name: Roy F. Weston
Site: NA
Project: NA
SDG No.: AAAAND
DCL Set ID: 97C-0439-01
Matrix: SOIL
DCL Sample ID: BL-142144-1
Analysis Method: 8080A
Extraction Method: 3550C
Sulfur Cleanup: Y
Date Extracted: 13-Nov-1997 00:00
Column (1): DB-608
ID: .53mm
Date Analyzed (1): 23-Nov-1997 21:44
Instrument ID (1): GC/ECD-6

THIS METHOD BLANK APPLIES TO THE FOLLOWING FIELD SAMPLES AND LAB QC

	CLIENT SAMPLE NO.	DCL SAMPLE NO.	DATE ANALYZED COLUMN 1
01	AAAANS1	97C05249	23-Nov-1997 22:57
02	AAAAND1	97C05250	24-Nov-1997 00:47
03	AAAANS1	97C05249MS	23-Nov-1997 23:33
04	AAAANS1	97C05249MSD	24-Nov-1997 00:10
05	QC-142144-1	QC-142144-1	23-Nov-1997 22:20

FORM IV CHROM

DATA CHEM LABORATORIES
A SORENSON COMPANY

Datapackage Table of Contents

Information pertaining to this datapackage is divided into the four categories listed below (see colored divider sheets for an inventory list of each category). If an item on the inventory is not applicable, an "NA" is placed in the corresponding check box. A Case Narrative immediately precedes this Table of Contents and contains pertinent information about this datapackage.

Analytical Forms ..... Yellow
Sample Tracking Documentation ..... Pink
Analytical Documentation ..... Blue
Raw Data ..... Green

◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆

Analytical Forms
Inventory Checklist

☒ Case Narrative

☒ IRDMIS	☒ Commercial Forms
☐ Data Review and Approval Form	☐ Analytical or Environmental Report Form
☐ IRDMIS Reports	☐ Set Comments
☐ GC/MS TICs	☐ Applicable QC Sheets

☒ RLIMS Forms	
☒ Cover Form	☒ Matrix Spike/Matrix Spike Duplicate Sample (Form F)
☒ Sample Group Comments (Form H)	☒ Surrogate Summary (Form G)
☒ Sample Analysis Data Sheet (Form A)	☒ Initial Calibration Form
☒ Laboratory Control Sample (Form B)	☒ Initial Calibration Verification (ICV) Form
☒ Blank Sample (Form C)	☒ Continuing Calibration Form
☒ Matrix Spike Sample (Form D)	☒ Serial Dilution Form
☒ Matrix Duplicate Sample (Form E)	☒ Endrin Breakdown or BFB/DFTPP GC/MS Tuning Form

Analytical Forms
Reviewer Checklist

- ✓ The Analytical Forms Inventory Checklist above is complete.
- ✓ The Case Narrative was completed in accordance with procedures in DCL SOP XX-DC-020, "Datapackage Preparation and Validation."
- ✓ Only the correct report forms are used (IRDMIS or Commercial Forms or RLIMS Forms).
- ✓ All fields on the report forms are complete with the correct information, including signatures.
- ✓ Results for all samples are reported per client request.
- ✓ Units, methods, and dates are correct.
- ✓ Sample and/or set comments are complete.

0614

Assembled by: _____ (Signature) 12/16/97 (Date) Reviewed by: _____ (Signature) 12/16/97 (Date)

DATA CHEM LABORATORIES
A Sorenson Company

COVER PAGE

ANALYTICAL REPORT FOR
Roy F. Weston

Phone(908) 225-6116 Fax(908) 225-7037

Form COVER-V1.3
12159718522012
Page 1

G97B7026

DCL Report Group..: 97C-0439-01

Date Printed.....: 15-DEC-97 18:52

Project Protocol #: P97B5002
Client Ref Number.: Not Provided
Release Number....: AAAAND

Analysis Method(s): 8080A

Roy F. Weston
Attention: Smita Sumbaly
1090 King Georges Post Road, Suite 201
Edison, NJ 08837

Client Sample Name	Laboratory Sample Name	Date Sampled	Date Received
Method Blank	BL-142144-1	NA	NA
LCS	QC-142144-1	NA	NA
AAAANS1	97C05249	06-NOV-97	07-NOV-97
AAAANS1	97C05249MS	06-NOV-97	07-NOV-97
AAAANS1	97C05249MSD	06-NOV-97	07-NOV-97
AAAAND1	97C05250	06-NOV-97	07-NOV-97

Analyst: J. Chris Taylor — Date 12/15/97

Reviewer: Vicki Hoe-Lin Tsai — Date 12/16/97

Lab Supervisor: Richard W. Wade — Date 12/17/97

960 West LeVoy Drive / Salt Lake City, Utah 84123-2547
Phone (801) 266-7700 Web Page: www.datachem.com
FAX (801) 268-9992 E-mail: lab@datachem.com

DATA CHEM LABORATORIES
A Sorenson Company

COVER PAGE

ANALYTICAL REPORT FOR
Roy F. Weston

Phone(908) 225-6116 Fax(908) 225-7037

Form COVER-V1.3
12159718522012
Page 1

G97B7026

DCL Report Group..: 97C-0439-01

Date Printed.....: 15-DEC-97 18:52

Project Protocol #: P97B5002
Client Ref Number.: Not Provided
Release Number....: AAAAND

Analysis Method(s): 8080A

Roy F. Weston
Attention: Smita Sumbaly
1090 King Georges Post Road, Suite 201
Edison, NJ 08837

Client Sample Name	Laboratory Sample Name	Date Sampled	Date Received
Method Blank	BL-142144-1	NA	NA
LCS	QC-142144-1	NA	NA
AAAANS1	97C05249	06-NOV-97	07-NOV-97
AAAANS1	97C05249MS	06-NOV-97	07-NOV-97
AAAANS1	97C05249MSD	06-NOV-97	07-NOV-97
AAAAND1	97C05250	06-NOV-97	07-NOV-97

Analyst: J. Chris Taylor — Date 12/15/97

Reviewer: Vicki Hoe-Lin Tsai — Date 12/16/97

Lab Supervisor: Richard W. Wade — Date 12/17/97

960 West LeVoy Drive / Salt Lake City, Utah 84123-2547
Phone (801) 266-7700 Web Page: www.datachem.com
FAX (801) 268-9992 E-mail: lab@datachem.com

DATA CHEM LABORATORIES
A Sorenson Company

FORM H (TYPE I)
SINGLE METHOD ANALYSES

SAMPLE GROUP COMMENTS

G97B7026

DCL Report Group..: 97C-0439-01
Date Printed.....: 15-DEC-97 18:52

Client Name...: Roy F. Weston

Release Number....: AAAAND

General Information

The DCL QC Database maintains all numerical figures which are input from the pertinent data source. These data have not been rounded to significant figures nor have they been moisture corrected. Reports generated from the system, however, list data which have been rounded to the number of significant figures requested by the client or deemed appropriate for the method. This may create minor discrepancies between data which appear on the QC Summary Forms (Forms B-G) and those that would be calculated from rounded analytical results. Additionally, if a moisture correction is performed, differences will be observed between the QC data and the surrogate data reported on Form A (or other report forms) and corresponding data reported on QC Summary Forms. In these cases, the Form A will indicate the "Report Basis" as well as the moisture value used for making the correction.
Report generation options: PX

Result Symbol Definitions

ND - Not Detected above the MDL or IDL (LLD or MDC for radiochemistry).
** - No result could be reported, see sample comments for details.

Qualifier Symbol Definitions

U - Not Detected above the MDL or IDL (LLD or MDC for radiochemistry).
For radiochemistry the nuclide was not identified by the Canberra Nuclear NID program, activity values reported are calculated using the Canberra Nuclear MINACT program.
B - For organic analysis the qualifier indicates that this analyte was found in the method blank.
For inorganic analysis the qualifier signifies the value is between the IDL and PQL.
J - The qualifier indicates that the value is between the MDL and the PQL. It is also used for indicating an estimated value for tentatively identified compounds in mass spectrometry where a 1:1 response is assumed.

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DATA CHEM LABORATORIES
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FORM A (TYPE I)
SINGLE METHOD ANALYSES

SAMPLE ANALYSIS DATA SHEET

Form RLIMS63A-V1.3
12159718522012
Page 3

S97BC023

Date Printed.....: 15-DEC-97 18:52

Client Name.....: Roy F. Weston
Client Ref Number....: Not Provided
Sampling Site.....: Not Applicable
Release Number.....: AAAAND

Date Received.....: Not Applicable

Client Sample Name: **BL-142144-1**
DCL Sample Name...: **BL-142144-1**
DCL Report Group..: **97C-0439-01**

Matrix.....: SOIL
Date Sampled.....: Not Applicable
Reporting Units...: µg/Kg

DCL Preparation Group: G97BC016
Date Prepared.....: 13-NOV-97 00:00
Preparation Method...: 3550C
Aliquot Weight/Volume: 0.030 Kg
Net Weight/Volume....: 0.030

DCL Analysis Group: G97C000K
Analysis Method...: 8080A
Instrument Type...: GC/ECD
Instrument ID.....: GC/ECD-6
Column Type.....: DB-608
☒ Primary
☐ Confirmation

Analytical Results

Analyte	Date Analyzed	MDL	Result	Comment	Qual.	Dilution	CRDL
Aroclor 1016	23-NOV-97 21:44	2.95	ND			1.00	6.67
Aroclor 1221	23-NOV-97 21:44	20.9	ND			1.00	33.3
Aroclor 1232	23-NOV-97 21:44	3.68	ND			1.00	6.67
Aroclor 1242	23-NOV-97 21:44	2.53	ND			1.00	6.67
Aroclor 1248	23-NOV-97 21:44	2.30	ND			1.00	6.67
Aroclor 1254	23-NOV-97 21:44	1.54	ND			1.00	6.67
Aroclor 1260	23-NOV-97 21:44	1.47	ND			1.00	6.67

Surrogate Recoveries

Analyte	Result	Spiked Amount	Percent Recovery
Dibutylchlorendate	15.1	16.7	90.8
Tetrachloro-m-xylene	16.0	16.7	96.2

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FORM A (TYPE I)
SINGLE METHOD ANALYSES

SAMPLE ANALYSIS DATA SHEET

Form RLIMS63A-V1.3
12159718522012
Page 4

S97BC024

Date Printed.....: 15-DEC-97 18:52

Client Name.....: Roy F. Weston
Client Ref Number....: Not Provided
Sampling Site.....: Not Applicable
Release Number.....: AAAAND

Date Received.....: Not Applicable

Client Sample Name: QC-142144-1
DCL Sample Name...: QC-142144-1
DCL Report Group..: 97C-0439-01

Matrix.....: SOIL
Date Sampled.....: Not Applicable
Reporting Units...: µg/Kg

DCL Preparation Group: G97BC016
Date Prepared.....: 13-NOV-97 00:00
Preparation Method...: 3550C
Aliquot Weight/Volume: 0.030 Kg
Net Weight/Volume....: 0.030

DCL Analysis Group: G97C000K
Analysis Method...: 8080A
Instrument Type...: GC/ECD
Instrument ID.....: GC/ECD-6
Column Type.....: DB-608
☒ Primary
☐ Confirmation

Analytical Results

Analyte	Date Analyzed	MDL	Result	Comment	Qual.	Dilution	CRDL
Aroclor 1016	23-NOV-97 22:20	2.95	140			1.00	6.67
Aroclor 1260	23-NOV-97 22:20	1.47	130			1.00	6.67

Surrogate Recoveries

Analyte	Result	Spiked Amount	Percent Recovery
Dibutylchlorendate	16.6	16.7	99.4
Tetrachloro-m-xylene	12.5	16.7	75.1

0018

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DATA CHEM LABORATORIES
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FORM A (TYPE I)
SINGLE METHOD ANALYSES

SAMPLE ANALYSIS DATA SHEET

S97B70MW

Date Printed.....: 15-DEC-97 18:52

Client Name.....: Roy F. Weston
Client Ref Number....: Not Provided
Sampling Site.....: Not Provided
Release Number.....: AAAAND

Date Received.....: 07-NOV-97 00:00

DCL Preparation Group: G97BC016
Date Prepared.....: 13-NOV-97 00:00
Preparation Method...: 3550C
Aliquot Weight/Volume: 0.030 Kg
Net Weight/Volume....: 0.030

Client Sample Name: **AAAANS1**
DCL Sample Name...: **97C05249**
DCL Report Group..: **97C-0439-01**

Matrix.....: SOIL
Date Sampled.....: 06-NOV-97 15:25
Reporting Units...: µg/Kg
Report Basis.....: ☐ As Received ☒ Dried
Percent Solids....: 61.1

DCL Analysis Group: G97C000K
Analysis Method...: 8080A
Instrument Type...: GC/ECD
Instrument ID.....: GC/ECD-6
Column Type.....: DB-608
☒ Primary
☐ Confirmation

Analytical Results

Analyte	Date Analyzed	MDL	Result	Comment	Qual.	Dilution	CRDL
Aroclor 1016	23-NOV-97 22:57	4.8	ND			100.	11.
Aroclor 1221	23-NOV-97 22:57	34.	ND			100.	55.
Aroclor 1232	23-NOV-97 22:57	6.0	ND			100.	11.
Aroclor 1242	23-NOV-97 22:57	4.1	ND			100.	11.
Aroclor 1248	23-NOV-97 22:57	3.8	ND			100.	11.
Aroclor 1254	23-NOV-97 22:57	2.5	4600			100.	11.
Aroclor 1260	23-NOV-97 22:57	2.4	ND			100.	11.

Surrogate Recoveries

Analyte	Result	Spiked Amount	Percent Recovery
Tetrachloro-m-xylene	14.8	16.7	88.6

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FORM A (TYPE I)
SINGLE METHOD ANALYSES

SAMPLE ANALYSIS DATA SHEET

Form RLIMS63A-V1.3
12159718522012
Page 6

S97B70MX

Date Printed.....: 15-DEC-97 18:52

Client Name.....: Roy F. Weston
Client Ref Number....: Not Provided
Sampling Site.....: Not Provided
Release Number.....: AAAAND

Date Received.....: 07-NOV-97 00:00

DCL Preparation Group: G97BC016
Date Prepared.....: 13-NOV-97 00:00
Preparation Method...: 3550C
Aliquot Weight/Volume: 0.030 Kg
Net Weight/Volume....: 0.030

Client Sample Name: **AAAANS1**
DCL Sample Name...: **97C05249MS**
DCL Report Group..: **97C-0439-01**

Matrix.....: SOIL
Date Sampled.....: 06-NOV-97 15:25
Reporting Units...: µg/Kg
Report Basis.....: ☐ As Received ☒ Dried
Percent Solids....: 61.1

DCL Analysis Group: G97C000K
Analysis Method...: 8080A
Instrument Type...: GC/ECD
Instrument ID.....: GC/ECD-6
Column Type.....: DB-608
☒ Primary
☐ Confirmation

Analytical Results

Analyte	Date Analyzed	MDL	Result	Comment	Qual.	Dilution	CRDL
Aroclor 1016	23-NOV-97 23:33	4.8	2900			100.	11.
Aroclor 1260	23-NOV-97 23:33	2.4	16000			100.	11.

Surrogate Recoveries

Analyte	Result	Spiked Amount	Percent Recovery
Tetrachloro-m-xylene	15.6	16.7	93.5

0020

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FORM A (TYPE I)
SINGLE METHOD ANALYSES

SAMPLE ANALYSIS DATA SHEET

Form RLIMS63A-V1.3
12159718522012

S97B70MY

Date Printed.....: 15-DEC-97 18:52

Client Name.....: Roy F. Weston
Client Ref Number....: Not Provided
Sampling Site.....: Not Provided
Release Number.....: AAAAND

Date Received.....: 07-NOV-97 00:00

DCL Preparation Group: G97BC016
Date Prepared.....: 13-NOV-97 00:00
Preparation Method...: 3550C
Aliquot Weight/Volume: 0.030 Kg
Net Weight/Volume....: 0.030

Client Sample Name: **AAAANS1**
DCL Sample Name...: **97C05249MSD**
DCL Report Group..: **97C-0439-01**

Matrix.....: SOIL
Date Sampled.....: 06-NOV-97 15:25
Reporting Units...: µg/Kg
Report Basis.....: ☐ As Received ☒ Dried
Percent Solids....: 61.1

DCL Analysis Group: G97C000K
Analysis Method...: 8080A
Instrument Type...: GC/ECD
Instrument ID.....: GC/ECD-6
Column Type.....: DB-608
☒ Primary
☐ Confirmation

Analytical Results

Analyte	Date Analyzed	MDL	Result	Comment	Qual.	Dilution	CRDL
Aroclor 1016	24-NOV-97 00:10	4.8	2100			100.	11.
Aroclor 1260	24-NOV-97 00:10	2.4	16000			100.	11.

Surrogate Recoveries

Analyte	Result	Spiked Amount	Percent Recovery
Tetrachloro-m-xylene	15.0	16.7	89.8

0021

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FORM A (TYPE I)
SINGLE METHOD ANALYSES

SAMPLE ANALYSIS DATA SHEET

S97B70MZ

Date Printed.....: 15-DEC-97 18:52

Client Name.....: Roy F. Weston
Client Ref Number....: Not Provided
Sampling Site.....: Not Provided
Release Number.....: AAAAND

Date Received.....: 07-NOV-97 00:00

DCL Preparation Group: G97BC016
Date Prepared.....: 13-NOV-97 00:00
Preparation Method...: 3550C
Aliquot Weight/Volume: 0.030 Kg
Net Weight/Volume....: 0.030

Client Sample Name: **AAAAND1**
DCL Sample Name...: **97C05250**
DCL Report Group..: **97C-0439-01**

Matrix.....: SOIL
Date Sampled.....: 06-NOV-97 15:30
Reporting Units...: µg/Kg
Report Basis.....: ☐ As Received ☒ Dried
Percent Solids....: 57.6

DCL Analysis Group: G97C000K
Analysis Method...: 8080A
Instrument Type...: GC/ECD
Instrument ID.....: GC/ECD-6
Column Type.....: DB-608
☒ Primary
☐ Confirmation

Analytical Results

Analyte	Date Analyzed	MDL	Result	Comment	Qual.	Dilution	CRDL
Aroclor 1016	24-NOV-97 00:47	5.1	ND			100.	12.
Aroclor 1221	24-NOV-97 00:47	36.	ND			100.	58.
Aroclor 1232	24-NOV-97 00:47	6.4	ND			100.	12.
Aroclor 1242	24-NOV-97 00:47	4.4	ND			100.	12.
Aroclor 1248	24-NOV-97 00:47	4.0	ND			100.	12.
Aroclor 1254	24-NOV-97 00:47	2.7	8700			100.	12.
Aroclor 1260	24-NOV-97 00:47	2.6	ND			100.	12.

Surrogate Recoveries

Analyte	Result	Spiked Amount	Percent Recovery
Tetrachloro-m-xylene	12.7	16.7	76.0

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DATA CHEM LABORATORIES
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FORM B (TYPE I)
SINGLE METHOD ANALYSES

QUALITY CONTROL DATA SHEET
LABORATORY CONTROL SAMPLE (LCS)

S97BC024

Client Name.....: Roy F. Weston
Release Number.....: AAAAND

Matrix.....: SOIL
Reporting Units.....: ug/Kg

DCL Preparation Group: G97BC016
Date Prepared.....: 13-NOV-97 00:00
Preparation Method...: 3550C

DCL Sample Name...: QC-142144-1
Date Printed.....: 15-DEC-97 18:52

DCL Analysis Group: G97C000K
Analysis Method...: OP-SW-8080
Instrument Type...: GC/ECD
Instrument ID.....: GC/ECD-6
Column Type.....: DB-608
☒ Primary
☐ Confirmation

QC Limit Type.....: Performance

Analytical Results

Analyte	Date Analyzed	Target	Result	Percent Recovery	QC Limits	QC Flag
PCB 1016	23-NOV-97 22:20	167.	142.	85.3	53.1/140.	
PCB 1260	23-NOV-97 22:20	167.	134.	80.3	48.0/151.	

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DATA CHEM LABORATORIES
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FORM F (TYPE I)
SINGLE METHOD ANALYSES

QUALITY CONTROL DATA SHEET
MATRIX SPIKE SAMPLE
MATRIX SPIKE DUPLICATE SAMPLE

S97B70MX

Client Name.....: Roy F. Weston
Release Number.....: AAAAND

Matrix.....: SOIL
Reporting Units.....: ug/Kg

DCL Preparation Group: G97BC016
Date Prepared.....: 13-NOV-97 00:00
Preparation Method...: 3550C

DCL Sample Name...: **97C05249MS**
Date Printed.....: 15-DEC-97 18:52

DCL Analysis Group: G97C000K
Analysis Method...: OP-SW-8080
Instrument Type...: GC/ECD
Instrument ID.....: GC/ECD-6
Column Type.....: DB-608
[X] Primary
[ ] Confirmation

QC Limit Type.....: Performance

Analytical Results

Analyte	Date Analyzed	Sample Result	Spiked Result	Spike Added	Percent Recovery	QC Limits	QC Flag
PCB 1016	23-NOV-97 23:33	1230	1820	167.	354.	44.0/140.	*
PCB 1260	23-NOV-97 23:33	7720	10500	167.	1660	48.1/146.	*

S97B70MY

DCL Sample Name...: **97C05249MSD**

Analytical Results

Analyte	Date Analyzed	Duplicate Result	Percent Recovery	Mean	Range	RPD	QC Limits	QC Flag
PCB 1016	24-NOV-97 00:10	1350	67.2	1580	478.	30.	0.00/15.8	*
PCB 1260	24-NOV-97 00:10	10300	1570	10400	141.	1.4	0.00/45.9	

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FORM G (TYPE I)
SINGLE METHOD ANALYSES

QUALITY CONTROL DATA SHEET
SURROGATE SUMMARY

G97BC016

Date Printed.....: 15-DEC-97 18:52

Client Name.....: Roy F. Weston
Release Number.....: AAAAND

DCL Analysis Group: G97C000K
Analysis Method...: OP-SW-8080

Matrix.....: SOIL
Reporting Units.....: ug/Kg

DCL Prep Group....: G97BC016
Preparation Method: 3550C

QC Limit Type.....: Performance

Surrogate Recoveries

Surr. ID	Tetrachloro-m-xylene				Dibutylchlorendate							
QC Limits	38.4/156.				37.0/147.							
DCL Sample Number	Analyte Result	Spiked Amount	% Rec.	Q	Analyte Result	Spiked Amount	% Rec.	Q	Analyte Result	Spiked Amount	% Rec.	Q
97C05249	14.8	16.7	88.6									
97C05249MS	15.6	16.7	93.5									
97C05249MSD	15.0	16.7	89.8									
97C05250	12.7	16.7	76.0									
BL-142144-1	16.0	16.7	96.2		15.1	16.7	90.8					
QC-142144-1	12.5	16.7	75.1		16.6	16.7	99.4					

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FORM K
RUN LOG

Form RLIMS63-V1.0
12159718223880
Page 1

R97CG000

Run ID.....: R97CG000
Start Date.....: 13-NOV-1997 22:22

Method.....: 8080A

Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Date Printed.....: 15-DEC-1997 18:22

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

	Sample Name		Dilution	Date Acquired
	PRIME		1	13-NOV-1997 22:22
	PCB221_2.0		1	13-NOV-1997 22:58
	PCB232_2.0		1	13-NOV-1997 23:35
	PCB242_2.0		1	14-NOV-1997 00:12
	PCB248_2.0		1	14-NOV-1997 00:49
	$1254_0.02	NG	1	14-NOV-1997 01:25
	$1254_0.10	NG	1	14-NOV-1997 02:02
	$1254_0.20		1	14-NOV-1997 02:38
	$1254_1.0		1	14-NOV-1997 03:15
	$1254_2.0		1	14-NOV-1997 03:52
NG	ICV1254_1.0		1	14-NOV-1997 04:29
	$1660_0.01	NG	1	14-NOV-1997 05:05
	$1660_0.10		1	14-NOV-1997 05:42
	$1660_0.20		1	14-NOV-1997 06:19
	$1660_1.0		1	14-NOV-1997 06:56
	$1660_2.0		1	14-NOV-1997 07:32
NG	ICV_1660_1.0		1	14-NOV-1997 08:09
	CCV_1660_1.0		1	22-NOV-1997 12:04
	BL-142132-1		1	22-NOV-1997 12:40
	QC-142132-1		1	22-NOV-1997 13:17
	97C05169		100	22-NOV-1997 13:54
	97C05170		100	22-NOV-1997 14:31
	97C05171		100	22-NOV-1997 15:07
	97C05172		100	22-NOV-1997 15:44
	97C05173		100	22-NOV-1997 16:21
	97C05174		100	22-NOV-1997 16:58
	97C05175		100	22-NOV-1997 17:34
	97C05176		100	22-NOV-1997 18:11
	CCV_1660_1.0		1	22-NOV-1997 18:48
	97C05176MS		100	22-NOV-1997 19:24
	97C05176MSD		100	22-NOV-1997 20:01
	97C05177		100	22-NOV-1997 20:38
	97C05178		100	22-NOV-1997 21:15
	97C05179		100	22-NOV-1997 21:51
	97C05180		100	22-NOV-1997 22:28
	97C05181		100	22-NOV-1997 23:05
	97C05182		100	22-NOV-1997 23:42
	97C05183		100	23-NOV-1997 00:18
	97C05184		100	23-NOV-1997 00:55
	CCV_1660_1.0		1	23-NOV-1997 01:32
	97C05185		100	23-NOV-1997 02:09
	97C05186		100	23-NOV-1997 02:45
	97C05187		100	23-NOV-1997 03:22
	97C05188		100	23-NOV-1997 03:59

	Sample Name	Dilution	Date Acquired
	97C05169	1	23-NOV-1997 04:35
	97C05170	1	23-NOV-1997 05:12
	97C05171	1	23-NOV-1997 05:49
	97C05172	1	23-NOV-1997 06:25
	97C05173	1	23-NOV-1997 07:02
	97C05174	1	23-NOV-1997 07:39
	CCV_1660_1.0	1	23-NOV-1997 08:16
	97C05175	1	23-NOV-1997 08:52
	97C05176	1	23-NOV-1997 09:29
	97C05176MS	1	23-NOV-1997 10:06
	97C05176MSD	1	23-NOV-1997 10:42
	97C05177	1	23-NOV-1997 11:19
	97C05178	1	23-NOV-1997 11:56
	97C05179	1	23-NOV-1997 12:33
	97C05180	1	23-NOV-1997 13:09
	97C05181	1	23-NOV-1997 13:46
	97C05182	1	23-NOV-1997 14:23
#5	CCV_1660_1.0	1	23-NOV-1997 14:59
	97C05183	1	23-NOV-1997 15:36
	97C05184	1	23-NOV-1997 16:13
	97C05185	1	23-NOV-1997 16:50
	97C05186	1	23-NOV-1997 17:27
	97C05187	1	23-NOV-1997 18:03
	97C05188	1	23-NOV-1997 18:40
	BL-142147-1	1	23-NOV-1997 19:17
	QC-142147-1	1	23-NOV-1997 19:53
	97C05251	1	23-NOV-1997 20:30
1260 NG	CCV_1660_1.0	1	23-NOV-1997 21:07
	BL-142144-1	1	23-NOV-1997 21:44
	QC-142144-1	1	23-NOV-1997 22:20
	97C05249	100	23-NOV-1997 22:57
	97C05249MS	100	23-NOV-1997 23:33
	97C05249MSD	100	24-NOV-1997 00:10
	97C05250	100	24-NOV-1997 00:47
	97C05249	1	24-NOV-1997 01:24
	97C05249MS	1	24-NOV-1997 02:00
	97C05249MSD	1	24-NOV-1997 02:37
	97C05250	1	24-NOV-1997 03:14
Notch NG	CCV 1660 1.0	1	24-NOV-1997 03:50

0026

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FORM L
INITIAL CALIBRATION

Form RLIMS63-V1.0
12159718223880
Page 2

C97CG000

Compound.....: Dibutylchlorendate
Method.....: 8080A

Date Printed.....: 15-DEC-1997 18:22

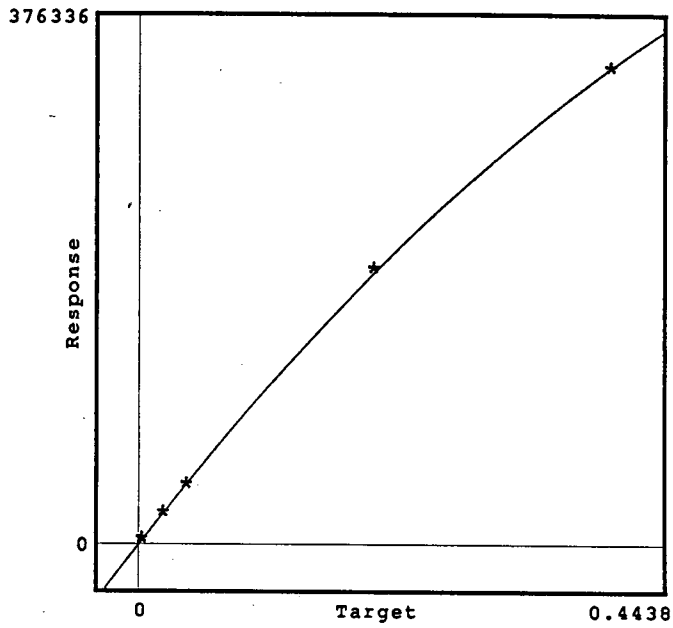
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9998570
Formula.....:
$-565885.0*X^2 + 1072870.*X + 715.6290$

RT Mean.....: 22.006
RT Std Deviation.: 0.00337

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1660_0.01	22.01	0.00200000	2954	2859.120	-3.21	14-NOV-1997 05:05
$1660_0.10	22.01	0.0200000	21698	21946.80	1.15	14-NOV-1997 05:42
$1660_0.20	22.01	0.0400000	41468	42725.30	3.03	14-NOV-1997 06:19
$1660_1.0	22.01	0.200000	195086	192656.0	-1.25	14-NOV-1997 06:56
$1660_2.0	22.01	0.400000	338384	339325.0	0.28	14-NOV-1997 07:32

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C97CG000

Compound.....: **PCB 1016**
Method.....: **8080A**

Date Printed.....: 15-DEC-1997 18:22

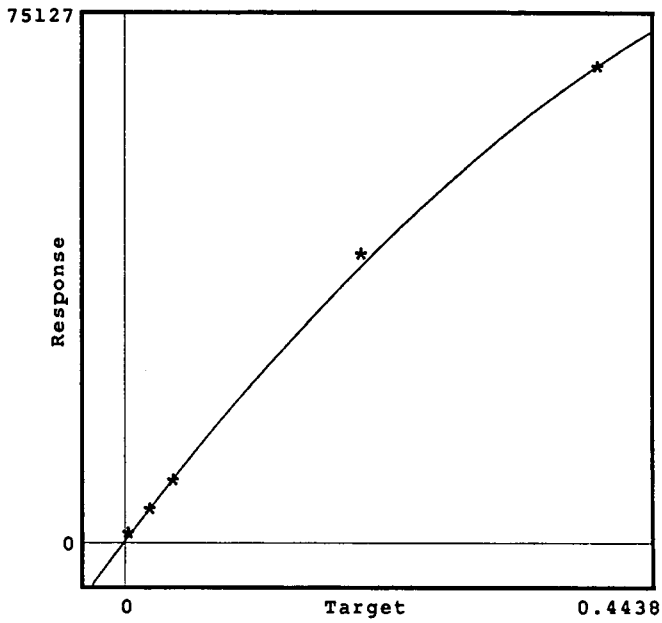
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9988950
Formula.....:
$-128118.0*X^2 + 219459.0*X + 489.4230$

RT Mean.....: 10.104
RT Std Deviation.: 0.005257

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1660_0.01	10.11	0.00200000	1039	927.8300	-10.70	14-NOV-1997 05:05
$1660_0.10	10.11	0.0200000	4496	4827.360	7.37	14-NOV-1997 05:42
$1660_0.20	10.11	0.0400000	8559	9062.810	5.89	14-NOV-1997 06:19
$1660_1.0	10.10	0.200000	40599	39256.50	-3.31	14-NOV-1997 06:56
$1660_2.0	10.10	0.400000	67270	67774.20	0.75	14-NOV-1997 07:32

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C97CG000

Compound.....: PCB 1016
Method.....: 8080A

Date Printed.....: 15-DEC-1997 18:22

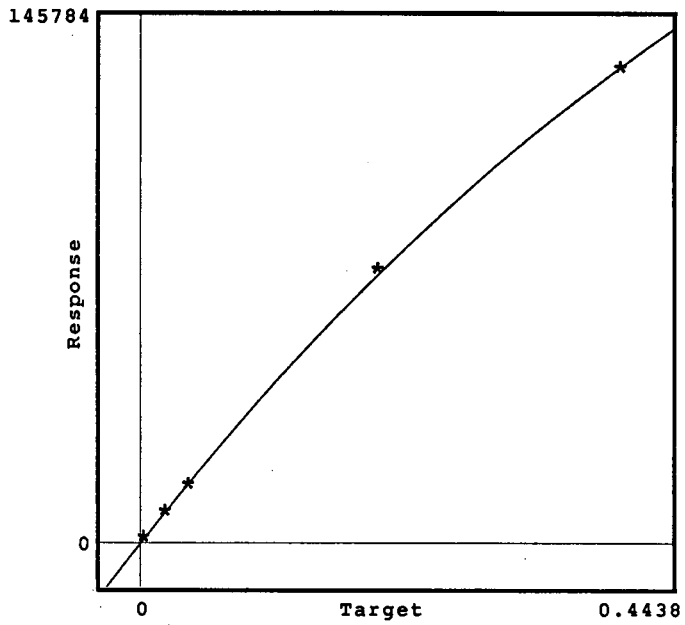
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9997330
Formula.....:
$-206499.0*X^2 + 410710.0*X + 193.9410$

RT Mean.....: 11.337
RT Std Deviation.: 0.005795

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1660_0.01	11.34	0.00200000	1059	1014.530	-4.20	14-NOV-1997 05:05
$1660_0.10	11.34	0.0200000	8227	8325.540	1.20	14-NOV-1997 05:42
$1660_0.20	11.34	0.0400000	15617	16291.90	4.32	14-NOV-1997 06:19
$1660_1.0	11.33	0.200000	75357	74076.00	-1.70	14-NOV-1997 06:56
$1660_2.0	11.33	0.400000	130942	131438.0	0.38	14-NOV-1997 07:32

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C97CG000

Compound.....: PCB 1016
Method.....: 8080A

Date Printed.....: 15-DEC-1997 18:22

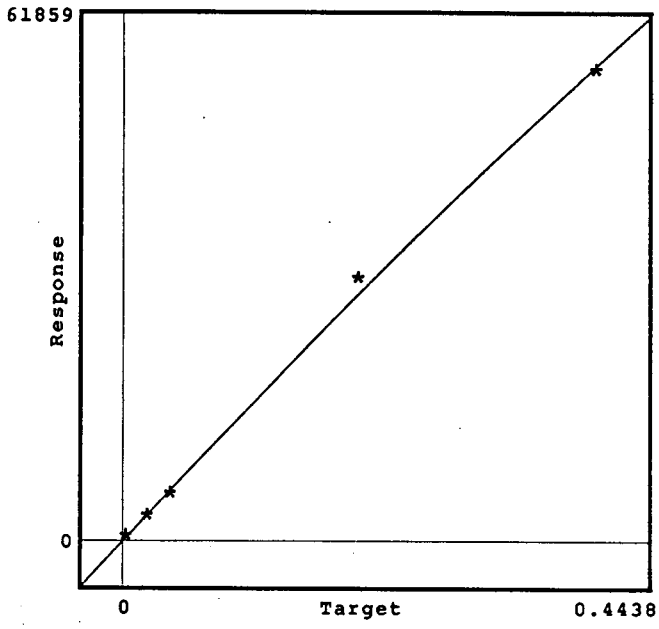
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9975610
Formula.....:
$-24556.90*X^2 + 149088.0*X + 58.33370$

RT Mean.....: 11.886
RT Std Deviation.: 0.010342

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1660_0.01	11.87	0.00200000	428	356.4130	-16.73	14-NOV-1997 05:05
$1660_0.10	11.90	0.0200000	2758	3030.280	9.87	14-NOV-1997 05:42
$1660_0.20	11.90	0.0400000	5382	5982.590	11.16	14-NOV-1997 06:19
$1660_1.0	11.88	0.200000	30595	28893.80	-5.56	14-NOV-1997 06:56
$1660_2.0	11.88	0.400000	55074	55764.70	1.25	14-NOV-1997 07:32

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C97CG000

Compound.....: PCB 1016
Method.....: 8080A

Date Printed.....: 15-DEC-1997 18:22

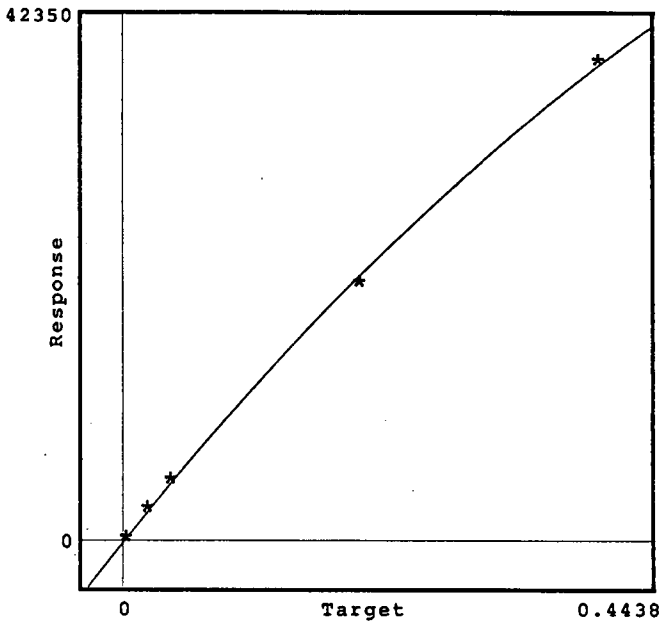
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9990770
Formula.....:
$-54653.30*X^2 + 117536.0*X + -103.9630$

RT Mean.....: 12.494
RT Std Deviation.: 0.004133

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1660_0.01	12.50	0.00200000	117	130.8910	11.87	14-NOV-1997 05:05
$1660_0.10	12.49	0.0200000	2475	2224.910	-10.10	14-NOV-1997 05:42
$1660_0.20	12.50	0.0400000	4710	4510.060	-4.25	14-NOV-1997 06:19
$1660_1.0	12.49	0.200000	20557	21217.20	3.21	14-NOV-1997 06:56
$1660_2.0	12.49	0.400000	38449	38166.10	-0.74	14-NOV-1997 07:32

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C97CG000

Compound.....: PCB 1016
Method.....: 8080A

Date Printed.....: 15-DEC-1997 18:22

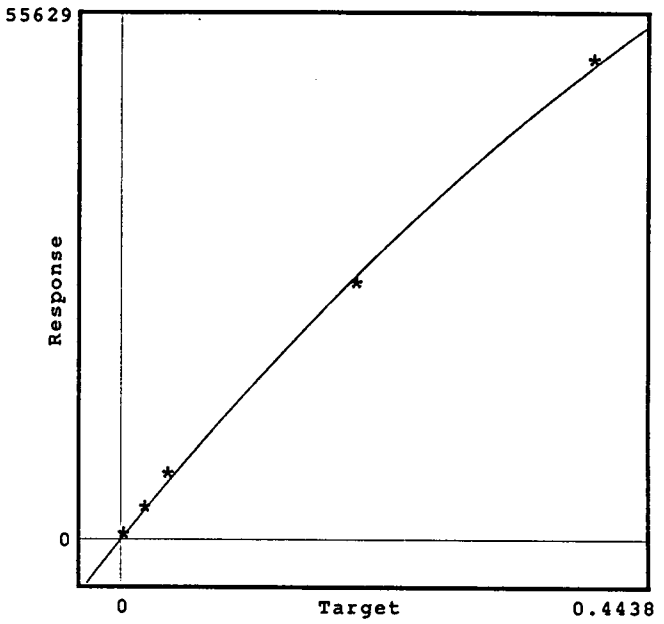
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9985420
Formula.....:
$-70086.50*X^2 + 153138.0*X + 117.3150$

RT Mean.....: 13.604
RT Std Deviation.: 0.003683

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1660_0.01	13.60	0.00200000	388	423.3120	9.10	14-NOV-1997 05:05
$1660_0.10	13.61	0.0200000	3217	3152.050	-2.02	14-NOV-1997 05:42
$1660_0.20	13.61	0.0400000	6816	6130.720	-10.05	14-NOV-1997 06:19
$1660_1.0	13.60	0.200000	26913	27941.60	3.82	14-NOV-1997 06:56
$1660_2.0	13.60	0.400000	50589	50158.90	-0.85	14-NOV-1997 07:32

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C97CG000

Compound.....: PCB 1254
Method.....: 8080A

Date Printed.....: 15-DEC-1997 18:22

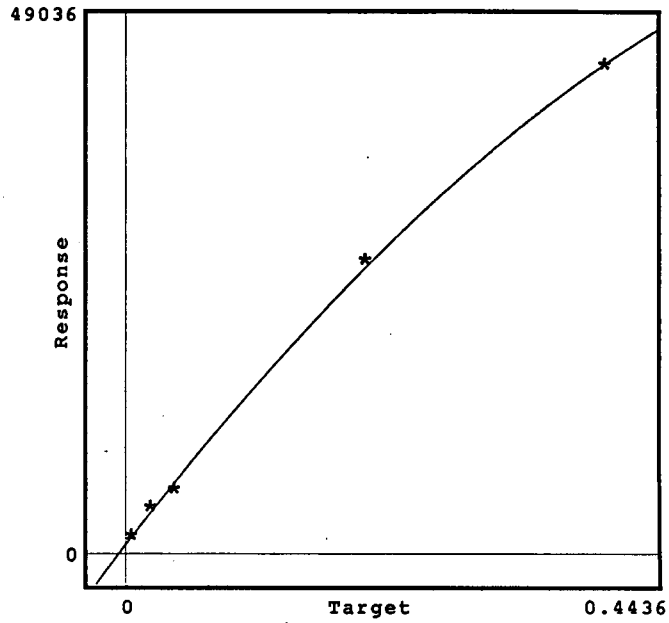
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9978840
Formula.....:
$-82019.00*X^2 + 141140.0*X + 998.3150$

RT Mean.....: 16.573
RT Std Deviation.: 0

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1254_0.02	16.58	0.00400000	1559	1561.560	0.16	14-NOV-1997 01:25
$1254_0.10	16.57	0.0200000	4192	3788.310	-9.63	14-NOV-1997 02:02
$1254_0.20	16.58	0.0400000	5856	6512.690	11.21	14-NOV-1997 02:38
$1254_1.0	16.57	0.200000	26533	25945.60	-2.21	14-NOV-1997 03:15
$1254_2.0	16.57	0.400000	44126	44331.30	0.47	14-NOV-1997 03:52

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FORM L
INITIAL CALIBRATION

C97CG000

Compound.....: PCB 1254
Method.....: 8080A

Date Printed.....: 15-DEC-1997 18:22

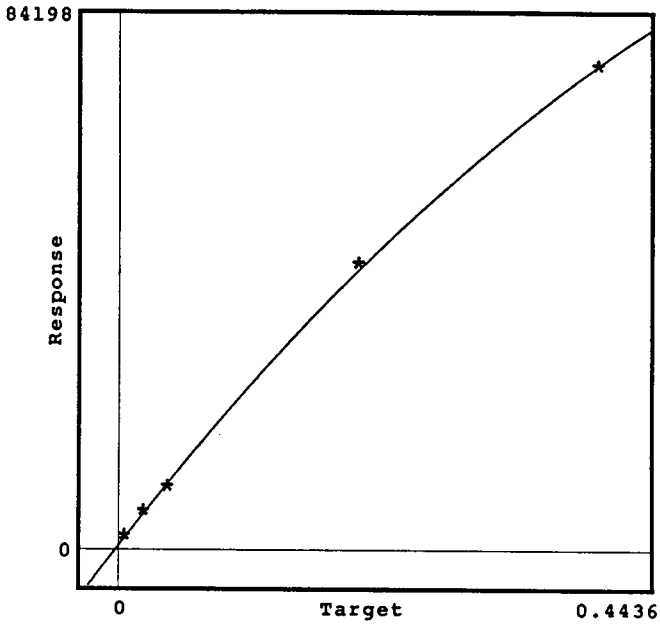
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9992760
Formula.....:
$-129835.0*X^2 + 239785.0*X + 897.6360$

RT Mean.....: 16.806
RT Std Deviation.: 0.005447

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1254_0.02	16.81	0.00400000	1903	1854.700	-2.54	14-NOV-1997 01:25
$1254_0.10	16.80	0.0200000	5837	5641.410	-3.35	14-NOV-1997 02:02
$1254_0.20	16.81	0.0400000	9573	10281.30	7.40	14-NOV-1997 02:38
$1254_1.0	16.81	0.200000	44519	43661.30	-1.93	14-NOV-1997 03:15
$1254_2.0	16.81	0.400000	75723	76038.20	0.42	14-NOV-1997 03:52

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FORM L
INITIAL CALIBRATION

C97CG000

Compound.....: PCB 1254
Method.....: 8080A

Date Printed.....: 15-DEC-1997 18:22

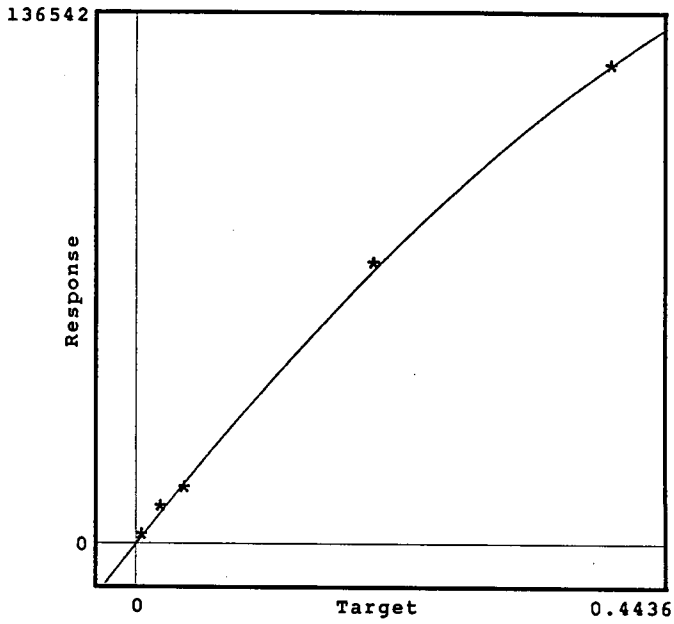
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9982360
Formula.....:
$-210443.0*X^2 + 391549.0*X + 241.6240$

RT Mean.....: 17.673
RT Std Deviation.: 0.004172

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1254_0.02	17.68	0.00400000	1776	1804.450	1.60	14-NOV-1997 01:25
$1254_0.10	17.67	0.0200000	9016	7988.430	-11.40	14-NOV-1997 02:02
$1254_0.20	17.68	0.0400000	13977	15566.90	11.38	14-NOV-1997 02:38
$1254_1.0	17.67	0.200000	71560	70133.70	-1.99	14-NOV-1997 03:15
$1254_2.0	17.67	0.400000	122684	123190.0	0.41	14-NOV-1997 03:52

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FORM L
INITIAL CALIBRATION

C97CG000

Compound.....: **PCB 1254**
Method.....: **8080A**

Date Printed.....: 15-DEC-1997 18:22

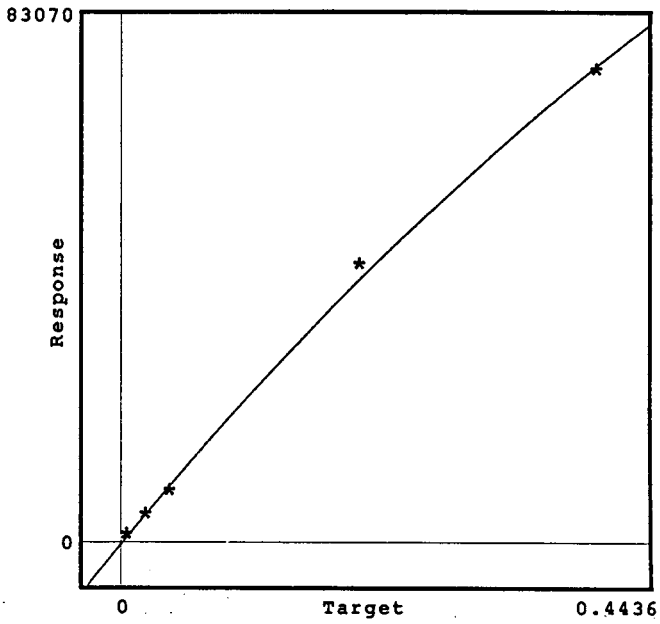
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9975780
Formula.....:
$-96861.60*X^2 + 226290.0*X + -100.5300$

RT Mean.....: 18.237
RT Std Deviation.: 0.003863

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1254_0.02	18.24	0.00400000	944	803.0790	-14.93	14-NOV-1997 01:25
$1254_0.10	18.23	0.0200000	4109	4386.520	6.75	14-NOV-1997 02:02
$1254_0.20	18.24	0.0400000	7847	8796.090	12.09	14-NOV-1997 02:38
$1254_1.0	18.24	0.200000	43477	41283.00	-5.05	14-NOV-1997 03:15
$1254_2.0	18.24	0.400000	74084	74917.60	1.13	14-NOV-1997 03:52

0036

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FORM L
INITIAL CALIBRATION

C97CG000

Compound.....: PCB 1254
Method.....: 8080A

Date Printed.....: 15-DEC-1997 18:22

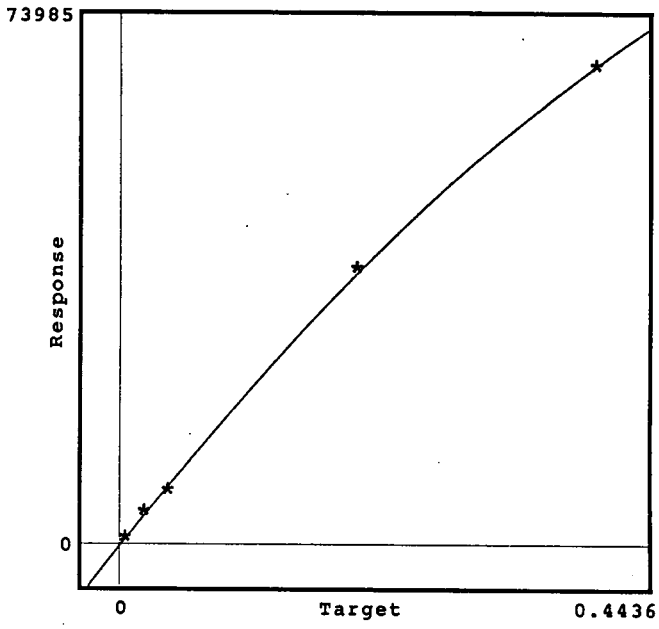
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9990100
Formula.....:
$-107779.0*X^2 + 209992.0*X + -17.35090$

RT Mean.....: 19.212
RT Std Deviation.: 0.004628

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1254_0.02	19.22	0.00400000	812	820.8920	1.10	14-NOV-1997 01:25
$1254_0.10	19.22	0.0200000	4529	4139.370	-8.60	14-NOV-1997 02:02
$1254_0.20	19.21	0.0400000	7550	8209.880	8.74	14-NOV-1997 02:38
$1254_1.0	19.21	0.200000	38265	37669.80	-1.56	14-NOV-1997 03:15
$1254_2.0	19.21	0.400000	66520	66734.70	0.32	14-NOV-1997 03:52

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FORM L
INITIAL CALIBRATION

C97CG000

Compound.....: PCB 1260
Method.....: 8080A

Date Printed.....: 15-DEC-1997 18:22

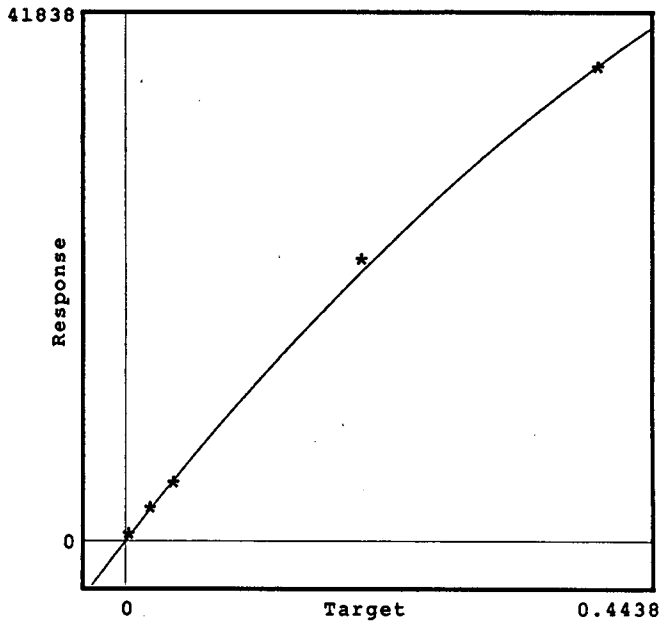
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9988190
Formula.....:
$-61768.10*X^2 + 118769.0*X + 101.2450$

RT Mean.....: 17.471
RT Std Deviation.: 0.006753

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1660_0.01	17.46	0.00200000	373	338.5360	-9.24	14-NOV-1997 05:05
$1660_0.10	17.48	0.0200000	2374	2451.910	3.28	14-NOV-1997 05:42
$1660_0.20	17.48	0.0400000	4371	4753.170	8.74	14-NOV-1997 06:19
$1660_1.0	17.47	0.200000	22180	21384.30	-3.59	14-NOV-1997 06:56
$1660_2.0	17.47	0.400000	37426	37725.90	0.80	14-NOV-1997 07:32

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C97CG000

Compound.....: PCB 1260
Method.....: 8080A

Date Printed.....: 15-DEC-1997 18:22

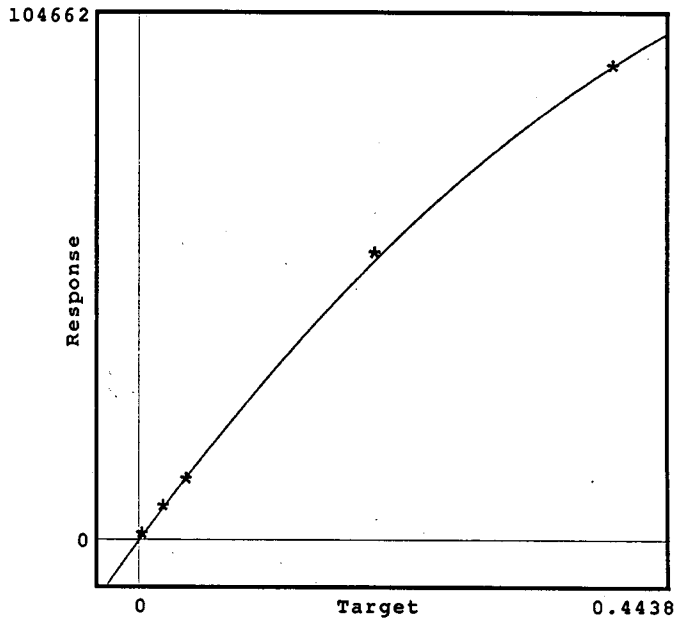
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9996200
Formula.....:
$-203747.0*X^2 + 317014.0*X + 163.6860$

RT Mean.....: 17.868
RT Std Deviation.: 0.002397

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1660_0.01	17.87	0.00200000	832	796.8990	-4.22	14-NOV-1997 05:05
$1660_0.10	17.87	0.0200000	6400	6422.470	0.35	14-NOV-1997 05:42
$1660_0.20	17.87	0.0400000	11882	12518.20	5.35	14-NOV-1997 06:19
$1660_1.0	17.87	0.200000	56496	55416.60	-1.91	14-NOV-1997 06:56
$1660_2.0	17.87	0.400000	93972	94369.80	0.42	14-NOV-1997 07:32

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FORM L
INITIAL CALIBRATION

C97CG000

Compound.....: PCB 1260
Method.....: 8080A

Date Printed.....: 15-DEC-1997 18:22

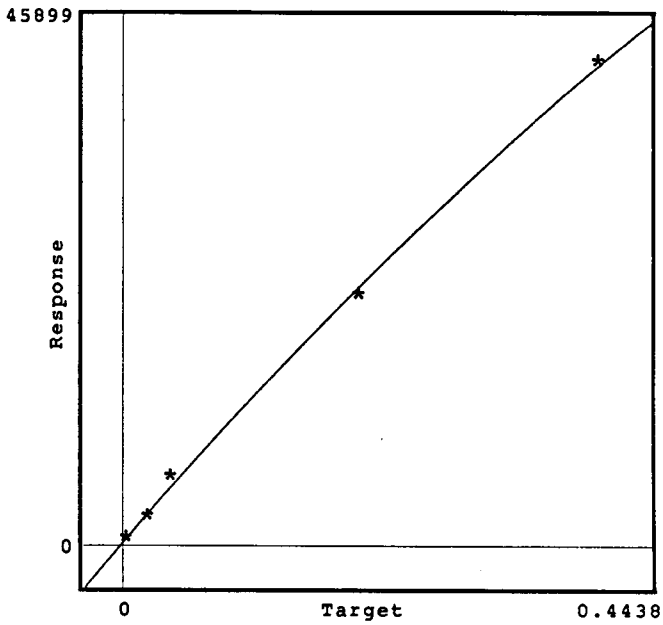
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9970370
Formula.....:
$-39143.40*X^2 + 118252.0*X + 372.8690$

RT Mean.....: 15.067
RT Std Deviation.: 0.004603

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1660_0.01	15.06	0.00200000	596	609.2170	2.22	14-NOV-1997 05:05
$1660_0.10	15.07	0.0200000	2476	2722.260	9.95	14-NOV-1997 05:42
$1660_0.20	15.07	0.0400000	5919	5040.330	-14.84	14-NOV-1997 06:19
$1660_1.0	15.07	0.200000	21717	22457.60	3.41	14-NOV-1997 06:56
$1660_2.0	15.07	0.400000	41715	41410.80	-0.73	14-NOV-1997 07:32

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DATA CHEM LABORATORIES
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FORM L
INITIAL CALIBRATION

C97CG000

Compound.....: PCB 1260
Method.....: 8080A

Date Printed.....: 15-DEC-1997 18:22

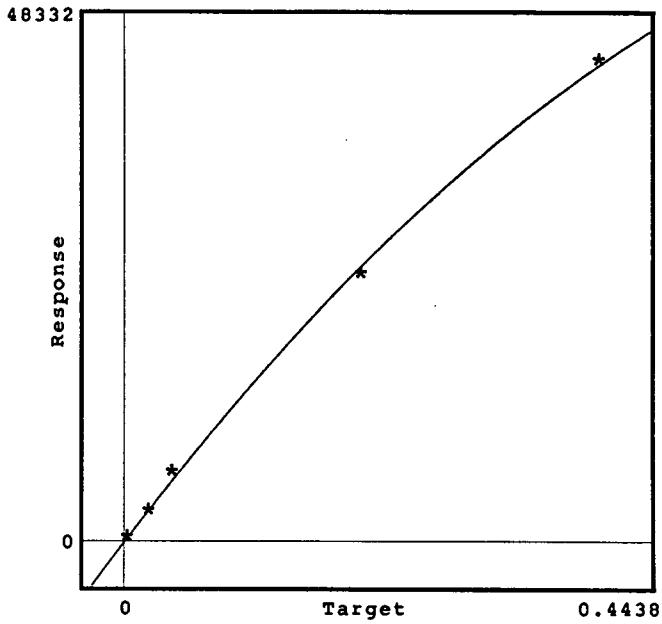
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9982900
Formula.....:
$-81195.20*X^2 + 141415.0*X + -4.937600$

RT Mean.....: 15.341
RT Std Deviation.: 0.004122

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1660_0.01	15.34	0.00200000	264	277.5680	5.14	14-NOV-1997 05:05
$1660_0.10	15.35	0.0200000	2683	2790.890	4.02	14-NOV-1997 05:42
$1660_0.20	15.34	0.0400000	6261	5521.760	-11.81	14-NOV-1997 06:19
$1660_1.0	15.34	0.200000	24211	25030.30	3.38	14-NOV-1997 06:56
$1660_2.0	15.34	0.400000	43894	43569.90	-0.74	14-NOV-1997 07:32

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DATA CHEM LABORATORIES
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FORM L
INITIAL CALIBRATION

C97CG000

Compound.....: PCB 1260
Method.....: 8080A

Date Printed.....: 15-DEC-1997 18:22

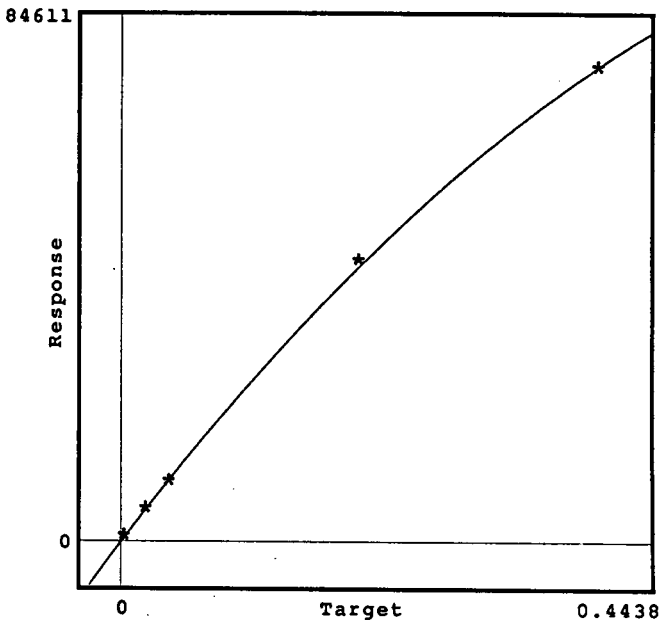
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9996710
Formula.....:
$-148950.0*X^2 + 250015.0*X + 112.9940$

RT Mean.....: 17.198
RT Std Deviation.: 0.002342

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1660_0.01	17.20	0.00200000	641	612.4290	-4.46	14-NOV-1997 05:05
$1660_0.10	17.20	0.0200000	5000	5053.720	1.07	14-NOV-1997 05:42
$1660_0.20	17.20	0.0400000	9421	9875.280	4.82	14-NOV-1997 06:19
$1660_1.0	17.20	0.200000	44991	44158.00	-1.85	14-NOV-1997 06:56
$1660_2.0	17.20	0.400000	75974	76287.00	0.41	14-NOV-1997 07:32

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FORM L
INITIAL CALIBRATION

C97CG000

Compound.....: **Tetrachloro-m-xylene**
Method.....: **8080A**

Date Printed.....: 15-DEC-1997 18:22

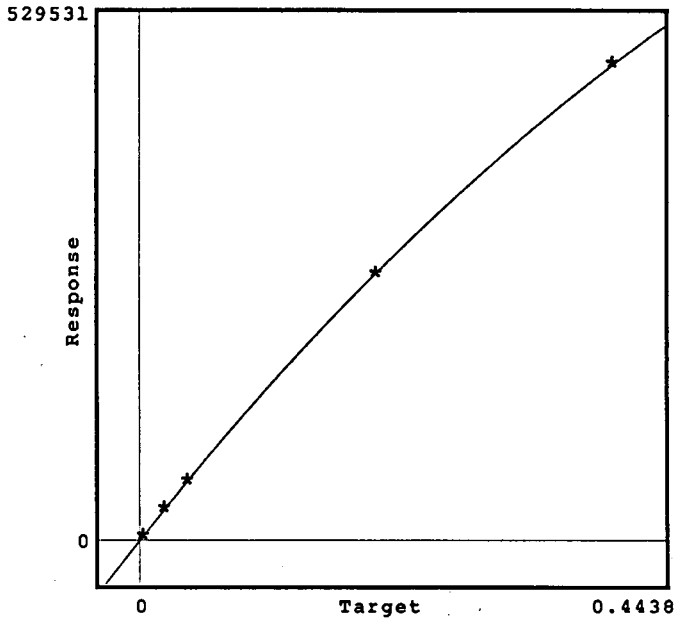
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9999550
Formula.....:
$-710705.0*X^2 + 1475350.*X + 1019.260$

RT Mean.....: 6.798
RT Std Deviation.: 0.001529

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1660_0.01	6.80	0.00200000	3876	3967.130	2.35	14-NOV-1997 05:05
$1660_0.10	6.80	0.0200000	31154	30242.00	-2.93	14-NOV-1997 05:42
$1660_0.20	6.80	0.0400000	58744	58896.30	0.26	14-NOV-1997 06:19
$1660_1.0	6.80	0.200000	266553	267661.0	0.42	14-NOV-1997 06:56
$1660_2.0	6.80	0.400000	477923	477448.0	-0.1	14-NOV-1997 07:32

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FORM N1
INITIAL CALIBRATION VERIFICATION

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R97CG000

Sample Name.....: ICV1254_1.0
Acquisition Date.: 14-NOV-1997 04:29

Method.....: 8080A

Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Calibration Units: ug/ml

Date Printed.....: 15-DEC-1997 19:06

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Run ID.....: R97CG000
Run Start Date...: 13-NOV-1997 22:22

Compound	Retent Time	Retention Time Window		RT Flag	Target	Found	% Diff	Limit (± %)	Verf Flag
PCB 1254	16.58	16.53	16.63		0.200000	0.149212	-25	25	
PCB 1254	16.81	16.70	16.92		0.200000	0.160396	-20	25	
PCB 1254	17.68	17.63	17.73		0.200000	0.161506	-19	25	
PCB 1254	18.24	18.19	18.29		0.200000	0.224354	12	25	
PCB 1254	19.21	19.16	19.26		0.200000	0.143522	-28	25	*

* Failed acceptance criteria.

0044

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FORM N1
INITIAL CALIBRATION VERIFICATION

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R97CG000

Sample Name.....: ICV_1660_1.0
Acquisition Date.: 14-NOV-1997 08:09

Method.....: 8080A

Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Calibration Units: ug/ml

Date Printed.....: 15-DEC-1997 19:06

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Run ID.....: R97CG000
Run Start Date...: 13-NOV-1997 22:22

Compound	Retent Time	Retention Time Window		RT Flag	Target	Found	% Diff	Limit (± %)	Verf Flag
PCB 1016	10.10	10.05	10.15		0.200000	0.281820	41	25	*
PCB 1016	11.33	11.29	11.39		0.200000	0.236117	18	25	
PCB 1016	11.88	11.84	11.94		0.200000	0.242775	21	25	
PCB 1016	12.49	12.45	12.55		0.200000	0.199997	0	25	
PCB 1016	13.60	13.56	13.66		0.200000	0.206751	3	25	
PCB 1260	15.06	15.02	15.12		0.200000	0.155937	-22	25	
PCB 1260	15.34	15.29	15.39		0.200000	0.148255	-26	25	*
PCB 1260	17.20	17.15	17.25		0.200000	0.199019	0	25	
PCB 1260	17.47	17.43	17.53		0.200000	0.200305	0	25	
PCB 1260	17.87	17.81	17.91		0.200000	0.210578	5	25	

* Failed acceptance criteria.

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FORM N2
CONTINUING CALIBRATION VERIFICATION

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12159719063393
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R97CG000

Sample Name.....: CCV_1660_1.0
Acquisition Date.: 22-NOV-1997 12:04

Method.....: 8080A

Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Calibration Units: ug/ml

Date Printed.....: 15-DEC-1997 19:06

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Run ID.....: R97CG000
Run Start Date...: 13-NOV-1997 22:22

Compound	Retent Time	Retention Time Window		RT Flag	Target	Found	% Diff	Limit (± %)	Verf Flag
Tetrachloro-m-xylene	6.82	6.75	6.85		0.200000	0.170126	-15	15	
PCB 1016	10.11	10.05	10.15		0.200000	0.186772	-7	15	
PCB 1016	11.36	11.29	11.39		0.200000	0.180457	-10	15	
PCB 1016	11.91	11.84	11.94		0.200000	0.197310	-1	15	
PCB 1016	12.51	12.45	12.55		0.200000	0.216905	8	15	
PCB 1016	13.62	13.56	13.66		0.200000	0.199731	0	15	
PCB 1260	15.08	15.02	15.12		0.200000	0.201076	1	15	
PCB 1260	15.36	15.29	15.39		0.200000	0.178494	-11	15	
PCB 1260	17.22	17.15	17.25		0.200000	0.151409	-24	15	*
PCB 1260	17.49	17.43	17.53		0.200000	0.171486	-14	15	
PCB 1260	17.88	17.81	17.91		0.200000	0.160739	-20	15	*
Dibutylchlorendate	22.02	21.96	22.06		0.200000	0.175681	-12	15	

* Failed acceptance criteria.

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FORM N2
CONTINUING CALIBRATION VERIFICATION

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R97CG000

Sample Name.....: CCV_1660_1.0
Acquisition Date.: 22-NOV-1997 18:48

Method.....: 8080A

Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Calibration Units: ug/ml

Date Printed.....: 15-DEC-1997 19:06

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Run ID.....: R97CG000
Run Start Date...: 13-NOV-1997 22:22

Compound	Retent Time	Retention Time Window		RT Flag	Target	Found	% Diff	Limit (± %)	Verf Flag
Tetrachloro-m-xylene	6.81	6.75	6.85		0.200000	0.173201	-13	15	
PCB 1016	10.10	10.05	10.15		0.200000	0.184259	-8	15	
PCB 1016	11.35	11.29	11.39		0.200000	0.178408	-11	15	
PCB 1016	11.90	11.84	11.94		0.200000	0.194664	-3	15	
PCB 1016	12.49	12.45	12.55		0.200000	0.221939	11	15	
PCB 1016	13.60	13.56	13.66		0.200000	0.200115	0	15	
PCB 1260	15.06	15.02	15.12		0.200000	0.207580	4	15	
PCB 1260	15.34	15.29	15.39		0.200000	0.180989	-10	15	
PCB 1260	17.20	17.15	17.25		0.200000	0.166090	-17	15	*
PCB 1260	17.47	17.43	17.53		0.200000	0.190551	-5	15	
PCB 1260	17.86	17.81	17.91		0.200000	0.177417	-11	15	
Dibutylchlorendate	22.00	21.96	22.06		0.200000	0.191353	-4	15	

* Failed acceptance criteria.

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FORM N2
CONTINUING CALIBRATION VERIFICATION

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R97CG000

Sample Name.....: CCV_1660_1.0
Acquisition Date.: 23-NOV-1997 01:32

Method.....: 8080A

Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Calibration Units: ug/ml

Date Printed.....: 15-DEC-1997 19:06

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Run ID.....: R97CG000
Run Start Date...: 13-NOV-1997 22:22

Compound	Retent Time	Retention Time Window		RT Flag	Target	Found	% Diff	Limit (± %)	Verf Flag
Tetrachloro-m-xylene	6.81	6.75	6.85		0.200000	0.169387	-15	15	
PCB 1016	10.10	10.05	10.15		0.200000	0.181744	-9	15	
PCB 1016	11.35	11.29	11.39		0.200000	0.170814	-15	15	
PCB 1016	11.90	11.84	11.94		0.200000	0.184319	-8	15	
PCB 1016	12.49	12.45	12.55		0.200000	0.213735	7	15	
PCB 1016	13.61	13.56	13.66		0.200000	0.189040	-5	15	
PCB 1260	15.06	15.02	15.12		0.200000	0.203762	2	15	
PCB 1260	15.34	15.29	15.39		0.200000	0.179001	-10	15	
PCB 1260	17.20	17.15	17.25		0.200000	0.161656	-19	15	*
PCB 1260	17.47	17.43	17.53		0.200000	0.188778	-6	15	
PCB 1260	17.86	17.81	17.91		0.200000	0.177327	-11	15	
Dibutylchlorendate	21.99	21.96	22.06		0.200000	0.200050	0	15	

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FORM N2
CONTINUING CALIBRATION VERIFICATION

R97CG000

Sample Name.....: CCV_1660_1.0
Acquisition Date.: 23-NOV-1997 08:16

Method.....: 8080A

Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Calibration Units: ug/ml

Date Printed.....: 15-DEC-1997 19:06

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Run ID.....: R97CG000
Run Start Date...: 13-NOV-1997 22:22

Compound	Retent Time	Retention Time Window		RT Flag	Target	Found	% Diff	Limit (± %)	Verf Flag
Tetrachloro-m-xylene	6.81	6.75	6.85		0.200000	0.179204	-10	15	
PCB 1016	10.10	10.05	10.15		0.200000	0.193819	-3	15	
PCB 1016	11.34	11.29	11.39		0.200000	0.175762	-12	15	
PCB 1016	11.89	11.84	11.94		0.200000	0.183812	-8	15	
PCB 1016	12.49	12.45	12.55		0.200000	0.189411	-5	15	
PCB 1016	13.60	13.56	13.66		0.200000	0.174004	-13	15	
PCB 1260	15.06	15.02	15.12		0.200000	0.166350	-17	15	*
PCB 1260	15.34	15.29	15.39		0.200000	0.144091	-28	15	*
PCB 1260	17.20	17.15	17.25		0.200000	0.139291	-30	15	*
PCB 1260	17.47	17.43	17.53		0.200000	0.152300	-24	15	*
PCB 1260	17.86	17.81	17.91		0.200000	0.145171	-27	15	*
Dibutylchlorendate	22.00	21.96	22.06		0.200000	0.179029	-10	15	

* Failed acceptance criteria.

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FORM N2
CONTINUING CALIBRATION VERIFICATION

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R97CG000

Sample Name.....: CCV_1660_1.0
Acquisition Date.: 23-NOV-1997 14:59

Method.....: 8080A

Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Calibration Units: ug/ml

Date Printed.....: 15-DEC-1997 19:06

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Run ID.....: R97CG000
Run Start Date...: 13-NOV-1997 22:22

Compound	Retent Time	Retention Time Window		RT Flag	Target	Found	% Diff	Limit (± %)	Verf Flag
Tetrachloro-m-xylene	6.81	6.75	6.85		0.200000	0.174148	-13	15	
PCB 1016	10.10	10.05	10.15		0.200000	0.184567	-8	15	
PCB 1016	11.35	11.29	11.39		0.200000	0.171797	-14	15	
PCB 1016	11.90	11.84	11.94		0.200000	0.181472	-9	15	
PCB 1016	12.49	12.45	12.55		0.200000	0.193282	-3	15	
PCB 1016	13.61	13.56	13.66		0.200000	0.173592	-13	15	
PCB 1260	15.07	15.02	15.12		0.200000	0.163664	-18	15	*
PCB 1260	15.35	15.29	15.39		0.200000	0.142627	-29	15	*
PCB 1260	17.20	17.15	17.25		0.200000	0.138510	-31	15	*
PCB 1260	17.47	17.43	17.53		0.200000	0.151170	-24	15	*
PCB 1260	17.87	17.81	17.91		0.200000	0.140946	-30	15	*
Dibutylchlorendate	22.00	21.96	22.06		0.200000	0.169189	-15	15	

* Failed acceptance criteria.

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FORM N2
CONTINUING CALIBRATION VERIFICATION

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Page 8

R97CG000

Sample Name.....: CCV_1660_1.0
Acquisition Date.: 23-NOV-1997 21:07

Method.....: 8080A

Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Calibration Units: ug/ml

Date Printed.....: 15-DEC-1997 19:06

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Run ID.....: R97CG000
Run Start Date...: 13-NOV-1997 22:22

Compound	Retent Time	Retention Time Window		RT Flag	Target	Found	% Diff	Limit (± %)	Verf Flag
Tetrachloro-m-xylene	6.81	6.75	6.85		0.200000	0.174020	-13	15	
PCB 1016	10.10	10.05	10.15		0.200000	0.188324	-6	15	
PCB 1016	11.34	11.29	11.39		0.200000	0.181600	-9	15	
PCB 1016	11.89	11.84	11.94		0.200000	0.198781	-1	15	
PCB 1016	12.49	12.45	12.55		0.200000	0.228018	14	15	
PCB 1016	13.60	13.56	13.66		0.200000	0.206590	3	15	
PCB 1260	15.06	15.02	15.12		0.200000	0.213978	7	15	
PCB 1260	15.34	15.29	15.39		0.200000	0.190065	-5	15	
PCB 1260	17.20	17.15	17.25		0.200000	0.155281	-22	15	*
PCB 1260	17.47	17.43	17.53		0.200000	0.179603	-10	15	
PCB 1260	17.86	17.81	17.91		0.200000	0.164536	-18	15	*
Dibutylchlorendate	21.99	21.96	22.06		0.200000	0.183875	-8	15	

* Failed acceptance criteria.

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FORM N2
CONTINUING CALIBRATION VERIFICATION

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R97CG000

Sample Name.....: CCV_1660_1.0
Acquisition Date.: 24-NOV-1997 03:50

Method.....: 8080A

Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Calibration Units: ug/ml

Date Printed.....: 15-DEC-1997 19:06

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Run ID.....: R97CG000
Run Start Date...: 13-NOV-1997 22:22

Compound	Retent Time	Retention Time Window		RT Flag	Target	Found	% Diff	Limit (± %)	Verf Flag
Tetrachloro-m-xylene	6.81	6.75	6.85		0.200000	0.169878	-15	15	
PCB 1016	10.10	10.05	10.15		0.200000	0.181010	-9	15	
PCB 1016	11.35	11.29	11.39		0.200000	0.163795	-18	15	*
PCB 1016	11.90	11.84	11.94		0.200000	0.172568	-14	15	
PCB 1016	12.50	12.45	12.55		0.200000	0.180676	-10	15	
PCB 1016	13.61	13.56	13.66		0.200000	0.165892	-17	15	*
PCB 1260	15.07	15.02	15.12		0.200000	0.171139	-14	15	
PCB 1260	15.35	15.29	15.39		0.200000	0.146808	-27	15	*
PCB 1260	17.21	17.15	17.25		0.200000	0.130143	-35	15	*
PCB 1260	17.48	17.43	17.53		0.200000	0.145069	-27	15	*
PCB 1260	17.87	17.81	17.91		0.200000	0.135507	-32	15	*
Dibutylchlorendate	22.01	21.96	22.06		0.200000	0.167954	-16	15	*

* Failed acceptance criteria.

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Sample Tracking Documentation
Inventory Checklist

- [X] LIMS Grouping Reports
- [X] DataChem Laboratories (DCL) Chain-of-Custody Record
- [X] DCL Sample Work Order
- [NA] Copy of numbered Nonconformance/Corrective Action Report (NC/CAR)
- [NA] Copy of Client-Related Problem Report (CPR)

Sample Tracking Documentation
Reviewer Checklist

- X The Sample Tracking Documentation Inventory Checklist above is complete.
- X DCL Chain-of-Custody Record provides signatures for the sample portion reported in this data package.
- X DCL Chain-of-Custody Record was completed in accordance with procedures in DCL SOP XX-DC-006 "Chain-of-Custody and Laboratory Tracking."
- X Methods specified on the Sample Work Order were performed or an explanation for deviations is provided.
- X Special instructions on the Sample Work Order were followed.
- X Project Management instructions on the Project Protocol Worksheet were followed.
- X Client's requests were met or an explanation is provided in the Case Narrative.
- NP NC/CAR and/or CPR were completed in accordance with procedures in DCL SOP QC-DC-006 "Nonconformance/Corrective Action Report (NC/CAR) Procedures."

0053

Assembled by: _____ 12/16/97 Reviewed by: _____ 12/16/97
Signature Date Signature Date

Rev. 3/95

DataChem Laboratories
LIMS - Sample Master System
Preparation Group Report

Date: 12-NOV-1997 13:33
User: CORUM

RLIMS15-V1.2

Preparation Run Name: G97BC016

Group ID: G97BC016

Samples: 6

Pos	Laboratory Sample Name	Field Sample Name 1	Field Sample Name 2	Laboratory Sample ID	Laboratory Group Name	Accnt. Number
1	BL-142144-1	BL-142144-1		S97BC023	97C-0439-01	03008
2	QC-142144-1	QC-142144-1		S97BC024	97C-0439-01	03008
3	97C05249	AAAANS1		S97B70MW	97C-0439-01	03008
4	97C05249MS	AAAANS1		S97B70MX	97C-0439-01	03008
5	97C05249MSD	AAAANS1		S97B70MY	97C-0439-01	03008
6	97C05250	AAAAND1		S97B70MZ	97C-0439-01	03008

----- END OF LISTING -----

DataChem Laboratories
LIMS - Sample Master System
Analysis Group Report

Date: 1-DEC-1997 10:57
User: TAYLORC

RLIMS15-V1.2

Analysis Run Name: G97C000K

Group ID: G97C000K

Samples: 6

Pos	Laboratory Sample Name	Field Sample Name 1	Field Sample Name 2	Laboratory Sample ID	Laboratory Group Name	Accnt. Number
1	BL-142144-1	BL-142144-1		S97BC023	97C-0439-01	03008
2	QC-142144-1	QC-142144-1		S97BC024	97C-0439-01	03008
3	97C05249	AAAANS1		S97B70MW	97C-0439-01	03008
4	97C05249MS	AAAANS1		S97B70MX	97C-0439-01	03008
5	97C05249MSD	AAAANS1		S97B70MY	97C-0439-01	03008
6	97C05250	AAAAND1		S97B70MZ	97C-0439-01	03008

----- END OF LISTING -----

DataChem Laboratories
LIMS - Sample Master System
User Group Report

Date: 15-DEC-1997 16:54 | Page: 1
User: TAYLORC | RLIMS15-V1.2

User Group Name: G97CG01P | Group ID: G97CG01P

Samples: 33

Pos	Laboratory Sample Name	Field Sample Name 1	Field Sample Name 2	Laboratory Sample ID	Laboratory Group Name	Accnt. Number
1	BL-142132-1	BL-142132-1		S97BC01V	97C-0435-01	03008
2	QC-142132-1	QC-142132-1		S97BC01W	97C-0435-01	03008
3	97C05169	KKKNS3		S97B70CW	97C-0435-01	03008
4	97C05170	KKKNS2		S97B70CX	97C-0435-01	03008
5	97C05171	KKKSS2		S97B70CY	97C-0435-01	03008
6	97C05172	KKKSED(D)		S97B70CZ	97C-0435-01	03008
7	97C05173	KKKSD1		S97B70D0	97C-0435-01	03008
8	97C05174	KKKND2		S97B70D1	97C-0435-01	03008
9	97C05175	EEEND2		S97B70D2	97C-0435-01	03008
10	97C05176	EEENS1		S97B70D3	97C-0435-01	03008
11	97C05176MS	EEENS1		S97B70D4	97C-0435-01	03008
12	97C05176MSD	EEENS1		S97B70D5	97C-0435-01	03008
13	97C05177	EEENS2		S97B70D6	97C-0435-01	03008
14	97C05178	EEESD1		S97B70D7	97C-0435-01	03008
15	97C05179	EEESS2		S97B70D8	97C-0435-01	03008
16	97C05180	EEESD2		S97B70D9	97C-0435-01	03008
17	97C05181	EEESS1		S97B70DB	97C-0435-01	03008
18	97C05182	EEESED(S)		S97B70DC	97C-0435-01	03008
19	97C05183	EEENS3		S97B70DD	97C-0435-01	03008
20	97C05184	EEEND1		S97B70DF	97C-0435-01	03008
21	97C05185	CCCSED(S)		S97B70DG	97C-0435-01	03008
22	97C05186	CCCNS1		S97B70DH	97C-0435-01	03008
23	97C05187	CCCND1		S97B70DJ	97C-0435-01	03008
24	97C05188	CCCSED(D)		S97B70DK	97C-0435-01	03008
25	BL-142144-1	BL-142144-1		S97BC023	97C-0439-01	03008
26	QC-142144-1	QC-142144-1		S97BC024	97C-0439-01	03008
27	97C05249	AAAANS1		S97B70MW	97C-0439-01	03008
28	97C05249MS	AAAANS1		S97B70MX	97C-0439-01	03008
29	97C05249MSD	AAAANS1		S97B70MY	97C-0439-01	03008
30	97C05250	AAAAND1		S97B70MZ	97C-0439-01	03008
31	BL-142147-1	BL-142147-1		S97B800Q	97C-0439-04	03008
32	QC-142147-1	QC-142147-1		S97B800R	97C-0439-04	03008
33	97C05251	RB2		S97B70N4	97C-0439-04	03008

----- END OF LISTING -----

Earliest Sampling Date: 6-Nov-1997

DataChem Laboratories
CHAIN-OF-CUSTODY

Results due by: 26-Nov-1997

Project/Job/Task: P97B5002	Split:	Root Set ID: 97C-0439 *	Reporting Group	01	02	03							#
Client: Roy F. Weston		Account: 03008	Analysis	PCBs	Solids (Decanted)	Solids (Total)							Bottles
Comments:													
Verified: m 11-10-97													

Date Sampled	Field ID Number	DCL Sample Name	DCL Sample ID	QC	Matrix	Customer ID 2					PCBs	Solids (Decanted)	Solids (Total)							Bottles
6-Nov-1997	AAAANS1	97C05249			SOIL						X	X	X							1
6-Nov-1997	AAAANS1	97C05249MS		MS	SOIL						X									1
6-Nov-1997	AAAANS1	97C05249MSD		MSD	SOIL						X									1
6-Nov-1997	AAAAND1	97C05250			SOIL						X	X	X							1

ORIGINAL FIELD SAMPLE CHAIN-OF-CUSTODY				SAMPLE PREPARATION / ANALYSIS CHAIN-OF-CUSTODY Sample Prep/Analysis for: 8080 Prepared/Analyzed by: [signature] Lab Notebook No.: 194/077 Date/Time: 11/13/97 15:20			
Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Reason for Transfer/ Storage Location	Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Reason for Transfer/ Storage Location
Walk-in/Room/Shelf/Fridge Michael McMillan	11-10-97 1230	R23-1 [signature]	Labeling/Shelving CN1	[signature]	11/15/97 1300	Barbara Hopkins	Filter
R23-1 MRM	11/12/97 13:30	Walk-in/Room/Shelf/Fridge SAMPLE PREP GROUP RM 20 BK #3319 IN MRM	Storage: % solids	Barbara Hopkins	11-16-97 0015	Kevin Nottemeyer	CONC
SAMPLE PREP GROUP RM 20 BK #3319 IN MRM	11/12/97 16:00	R23-1 MRM CN1	Storage	Kevin Nottemeyer	0345 11-16-97	R-16-1C	STORAGE/R-16-1C
R23-1 [signature]	11/12/97 15:30	[signature]	Ext. PCB	R-16-1C	11-22-97 1100	[signature]	8080 Analysis R-72-1

Check Box if there is a continuation page ☐

Printed 11/8/1997 14:32

Form: COFC1.01-SWV2.30

Sample Work Order

QC Clearance: _____
Project Manager: Scott B. Saulls
Client: Roy F. Weston
Account: 03008 **SDG:** AAAAND
Project/Task: P97B5002
Date Received: 7-Nov-1997
Date for Mailing Report: 26-Nov-1997
Date for Verbal Report: 21-Nov-1997

DCL Root Set ID: 97C-0439*
DCL Lab. Name: 97C05249–97C05251
Total # Samples: 5
Sample Entry: Michael D McMillan
Section: ZC
Earliest Sampling Date: 6-Nov-1997
Preparation Type:

Rep. Group	ZC Section Analytes Requested	Latest Prep. Date	Latest Anal. Date	No. of Samp.	Storage Location	Analysis/Prep. Method	Inst.	Matrix
01	PCBs	13-Nov-1997[c]	Prep+40 d	4		8080A/3550A	GC/ECD	SOIL
04	PCBs	13-Nov-1997[c]	Prep+40 d	1		8080A/3550A	GC/ECD	WATER

[c]Based on date of collection

Special Instructions: _____

Section Manager: Richard W. Wade

0058

Other Sections Receiving Sample Portions: FC, FS

Sample Work Order

QC Clearance: _____
Project Manager: Scott B. Saulls
Client: Roy F. Weston
Account: 03008 **SDG:** AAAAND
Project/Task: P97B5002
Date Received: 7-Nov-1997
Date for Mailing Report: 26-Nov-1997
Date for Verbal Report: 21-Nov-1997

DCL Root Set ID: 97C-0439 *
DCL Lab. Name: 97C05249–97C05250
Total # Samples: 2
Sample Entry: Michael D McMillan
Section: FC
Earliest Sampling Date: 6-Nov-1997
Preparation Type:

Rep. Group	FC Section Analytes Requested	Latest Prep. Date	Latest Anal. Date	No. of Samp.	Storage Location	Analysis/Prep. Method	Inst.	Matrix
02	Solids (Decanted)			2				SOIL

Special Instructions: _____

Section Manager: Sheldon E. Henderson

0059

Other Sections Receiving Sample Portions: ZC, FS

DATA CHEM LABORATORIES
A SORENSON COMPANY

Analytical Documentation
Inventory Checklist

- [NA] This is a "dummy datapackage". Data for inventory checklist found with set _____
- [NA] Copy of TCLP Preparation Logbook Pages
- [X] Copy of Sample Preparation Notebook/Logbook Pages
- [X] Copy of Analyst's Notebook/Method Logbook Pages
- [X] Copy of Instrument Injection Logbook/Instrument Logbook/Run Log Pages
- [NA] Copy of Reagent Logbook Pages
- [X] Copy of Working Standard Preparation Logbook Pages
- [X] Copy of Secondary or Intermediate Standard Preparation Logbook Pages
- [X] Copy of Primary Standard or Concentrated Stock Standard Preparation Logbook Pages
- [X] Certificates of Analysis for Standards
- [NA] Copy of Standard Verification Logbook Pages (including documentation for spiking solutions and/or calibration standards)
- [NA] Copy of Preparation Logbooks for solutions prepared by QC

All other miscellaneous documentation associated with this set (describe)

- [X] % SOLIDS + uncorrected PCBs

Analytical Documentation
Reviewer Checklist

- [X] The Analytical Documentation Inventory Checklist above is complete.
- [X] Basic documentation procedures were followed in accordance with DCL SOP XX-DC-004 "Analytical Data Record Keeping."
- [X] All notebook and logbook pages contain page number, book number, title, and available space for pagination (if required).
- [X] All notebook and logbook pages were signed and dated by the analyst and reviewer before copying.
- [X] All copies are legible.
- [X] Standard preparation is documented in accordance with DCL SOP XX-DC-019 "Standards Purity, Preparation, Traceability and Verification" or by WR-DC-001 "The Acquisition, Preparation, and use of Radioactive Standard Reference Materials."
- [X] Documentation is provided to verify that standard calibration solutions and spiking solutions are traceable to a vendor certificate.

0060

Assembled by: _____ (Signature) 12/15/97 (Date) Reviewed by: _____ (Signature) 12/16/97 (Date)

Rev. 6/95

Date Set Extracted: Nov 13. 1997
Account No.: 3008
DCL Set No.: 97C.0439.01
Group ID/Lot: G97BC016

DATACHEM LABORATORIES EXTRACTION NOTEBOOK

Book No. EXT 194 Page No. 077
Sample Medium: Soil
Extraction Method: 8080 PCB's/3550

	DCL No.	Field No.	Sample Vol./Wt. (mL/g)	pH Original	pH Adjusted	pH Adjusted	Spike Sol'n (mL) Surrogate Std.	Spike Sol'n (mL) Matrix	Spike Sol'n (mL) Matrix	Appearance and Observations	Final Volume (mL)
1	Blank	BL.142144.1	–				1.0 ml	–	–	N/A	10 ml
2	L.C.S	QC.142144.1	–					1.0 ml	–		
3	97C05249	AAAANS1	30.0g		N/A			–	–		
4	49 S	S1						1.0 ml	–		
5	49 mm	S1						1.0 ml	–		
6	50	D1						–	–		
7											
8											
9											
10											
11											
12											
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16											
17											
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21											
22											
23											
24											
25											

11-13-97

Solvents (+Lot #): Mecl2. Bfs. lot. 090
Acetone. Bfs. lot. 967647
Hexane. Bfs. lot. B0207

Balance ID: 38110013

Surrogate Std. Ref. No.: 157WS3R21 Spiked by: SB

Matrix Spike No.: 138WS27505 Spiked by:

Matrix Spike No.: N/A Spiked by: N/A

Extractionist: Bernie Date: 11.13.97

Checker: [signature] Date: 11-17-97

Sonicator Tuned by: Date: 11/13/97

Comments: Sonication Extraction

0061

NCR or CPR

* = Entry En

TITLE Roy F Weston SDG AAAAND

Project No. 03008
Book No. 3161

DATA CHEM LABORATORIES

Date: 1-DEC-1997 10:57
User: TAYLORC

Page: 1
RLIMS15-V1.2

Analysis Run Name: G97C000L

Group ID: G97C000L

Samples: 3

Pos	Laboratory Sample Name	Field Sample Name 1	Field Sample Name 2	Laboratory Sample ID	Laboratory Group Name	Accnt. Number
1	BL-142147-1	BL-142147-1		S97B800Q	97C-0439-04	03008
2	QC-142147-1	QC-142147-1		S97B800R	97C-0439-04	03008
3	97C05251	RB2		S97B70N4	97C-0439-04	03008

Client Name.....: Roy F. Weston
Release Number.....: AAAAND

Matrix.....: WATER
Reporting Units.....: ug/L

DCL Sample Name...: QC-142147-1
Date Printed.....: 15-DEC-97 18:31

DCL Analysis Group: G97C000L
Analysis Method...: OP-SW-8080
Instrument Type...: GC/ECD
Instrument ID.....: GC/ECD-6
Column Type.....: DB-608
[X] Primary
[ ] Confirmation

DCL Preparation Group: G97B800H
Date Prepared.....: 09-NOV-97 00:00
Preparation Method...: 3550C

QC Limit Type.....: Performance

Analytical Results

Analyte	Date Analyzed	Target	Result	Percent Recovery	QC Limits	QC Flag
PCB 1016	23-NOV-97 19:53	5.00	4.65	93.0	54.1/145.	
PCB 1260	23-NOV-97 19:53	5.00	4.38	87.6	50.3/131.	

Date: 1-DEC-1997 10:57
User: TAYLORC

Page: 1
RLIMS15-V1.2

Analysis Run Name: G97C000K

Group ID: G97C000K

Samples: 6

Pos	Laboratory Sample Name	Field Sample Name 1	Field Sample Name 2	Laboratory Sample ID	Laboratory Group Name	Accnt. Number
1	BL-142144-1	BL-142144-1		S97BC023	97C-0439-01	03008
2	QC-142144-1	QC-142144-1		S97BC024	97C-0439-01	03008
3	97C05249	AAAANS1		S97B70MW	97C-0439-01	03008
4	97C05249MS	AAAANS1		S97B70MX	97C-0439-01	03008
5	97C05249MSD	AAAANS1		S97B70MY	97C-0439-01	03008
6	97C05250	AAAAND1		S97B70MZ	97C-0439-01	03008

Client Name.....: Roy F. Weston
Release Number.....: AAAAND

Matrix.....: SOIL
Reporting Units.....: ug/Kg

DCL Sample Name...: QC-142144-1
Date Printed.....: 15-DEC-97 18:52

DCL Analysis Group: G97C000K
Analysis Method...: OP-SW-8080
Instrument Type...: GC/ECD
Instrument ID.....: GC/ECD-6
Column Type.....: DB-608
[X] Primary
[ ] Confirmation

DCL Preparation Group: G97BC016
Date Prepared.....: 13-NOV-97 00:00
Preparation Method...: 3550C

QC Limit Type.....: Performance

Analytical Results

Analyte	Date Analyzed	Target	Result	Percent Recovery	QC Limits	QC Flag
PCB 1016	23-NOV-97 22:20	167.	142.	85.3	53.1/140.	
PCB 1260	23-NOV-97 22:20	167.	134.	80.3	48.0/151.	

Client Name.....: Roy F. Weston
Release Number.....: AAAAND

Matrix.....: SOIL
Reporting Units.....: ug/Kg

DCL Sample Name...: 97C05249MS
Date Printed.....: 15-DEC-97 18:52

DCL Analysis Group: G97C000K
Analysis Method...: OP-SW-8080
Instrument Type...: GC/ECD
Instrument ID.....: GC/ECD-6
Column Type.....: DB-608
[X] Primary
[ ] Confirmation

DCL Preparation Group: G97BC016
Date Prepared.....: 13-NOV-97 00:00
Preparation Method...: 3550C

QC Limit Type.....: Performance

Analytical Results

Analyte	Date Analyzed	Sample Result	Spiked Result	Spike Added	Percent Recovery	QC Limits	QC Flag
PCB 1016	23-NOV-97 23:33	1230	1820	167.	354.	44.0/160.	*
PCB 1260	23-NOV-97 23:33	7720	10500	167.	1660	48.1/146.	*

#97B70MY

DCL Sample Name...: 97C05249MSD

Analytical Results

Analyte	Date Analyzed	Duplicate Result	Percent Recovery	Mean	Range	RPD	QC Limits	QC Flag
PCB 1016	24-NOV-97 00:10	1350	67.2	1590	478.	30.	0.00/15.8	*
PCB 1260	24-NOV-97 00:10	10300	1570	10400	141.	1.4	0.00/43.9	

Client Name.....: Roy F. Weston
Release Number.....: AAAAND

Matrix.....: WATER
Reporting Units.....: ug/L

DCL Analysis Group: G97C000L
Analysis Method...: OP-SW-8080

DCL Prep Group....: G97B800N
Preparation Method: 3550C

QC Limit Type.....: Performance

Surrogate Recoveries

Surr. ID / QC Limits	Dibutylchlorendate 35.4/148.				Tetrachloro-m-xylene 43.7/132.							
DCL Sample Number	Analyte Result	Spiked Amount	% Rec.	Q	Analyte Result	Spiked Amount	% Rec.	Q	Analyte Result	Spiked Amount	% Rec.	Q
97C05251	0.341	0.500	68.1		0.437	0.500	87.4					
BL-142147-1	0.382	0.500	76.3		0.398	0.500	79.5					
QC-142147-1	0.434	0.500	86.8		0.369	0.500	73.8					

Client Name.....: Roy F. Weston
Release Number.....: AAAAND

Matrix.....: SOIL
Reporting Units.....: ug/Kg

DCL Analysis Group: G97C000K
Analysis Method...: OP-SW-8080

DCL Prep Group....: G97BC016
Preparation Method: 3550C

QC Limit Type.....: Performance

Surrogate Recoveries

Surr. ID / QC Limits	Tetrachloro-m-xylene 38.7/154.				Dibutylchlorendate 37.0/147.							
DCL Sample Number	Analyte Result	Spiked Amount	% Rec.	Q	Analyte Result	Spiked Amount	% Rec.	Q	Analyte Result	Spiked Amount	% Rec.	Q
97C05249	14.8	16.7	88.6									
97C05249MS	15.6	16.7	93.5									
97C05249MSD	15.0	16.7	89.8									
97C05250	12.7	16.7	76.0									
BL-142144-1	16.0	16.7	96.2		15.1	16.7	90.8					
QC-142144-1	12.5	16.7	75.4		16.6	16.7	99.4					

method: 8080A dates of analysis: 11/23-24/97

					date
extraction method:	3510	matrix	water	aliquot 1.0L	11/9
"	3550	"	soil	" 0.030kg	11/13/97

instrument: (GC/ECD-6) HP5890 GC w/ DB-608 column (30m x 0.53mm id x 0.5μm) & ECD (ch 56).

oven program: 150C x 2min; ramp @ 5C/min to 275C; hold 7min.

standards: All calibration curves meet method specifications. All ICV recoveries are within ±25%. All CCV recoveries are within ±15% with exception of CCV #4, PCB 1260 (+25.2%); CCV 5, PCB-1260 (-26.4%) & CCV #7, PCB 1260 (-27%).

samples analyzed at full strength caused a temporary loss of calibration.

samples: All tetrachloro-m-xylene surrogate recoveries are reported from undiluted sample analyses & are in control.

All QC recoveries are in control. A soil MS/MSD were prepared from sample 97C05249. Due to a high PCB-1254 result in the parent, spike recoveries were poor (results from 1:100 dilution).

dilutions: 97C05249, MS, MSD & 5250 were all reanalyzed at 1:100 dilutions.

0062

Cal/run id: C/R97 CG000

To Page No.

Witnessed & Understood by me, [signature]

Date 12/16/97

Invented by NOT APPLICABLE

Recorded by [signature]

Date 12/15/97

dilutions:

97C05249
MS
MSD
5250
} 1:100

DB-608

ICV 1254; 5 -28 $\bar{x}$ = -16
1016; 1 +41 $\bar{x}$ = +16.6
1260; 2 -26 $\bar{x}$ = -8.6

BL132, QC132
5169–76 @ 1:100 →

CCV#1 PCB260; 3 -24
; 5 -20 } $\bar{x}$ = -13.1

5176MS – 5184 @ 1:100 →

CCV#2 PCB260; 3 -17 $\bar{x}$ = -7.8

5185–5188 @ 1:100,
5169–5174 →

CCV#3 PCB260; 3 -19 $\bar{x}$ = -8.8

5175–5182 →

CCV#4 PCB260; 1 -17
2 -28
3 -30
4 -24
5 -27
} $\bar{x}$ = -25.2

5183–5188, BL147, QC147
5251 →

CCV#5 PCB260; 1 -18
2 -29
3 -31
4 -24
5 -30
} -26.4

BL144, QC144,
5249–5250 @ 1:100 →

CCV#6 PCB260; 3 -22
5 -18
} $\bar{x}$ = -9.6

5249–5250

CCV#7 PCB016; 2 -18
; 5 -17
} $\bar{x}$ = -13.6

PCB260; 2 -27
3 -35
4 -27
5 -32
} $\bar{x}$ = -27

TITLE DATACHEM LABORATORIES – GC – PESTICIDE ANALYSIS

Project No. 0348
Book No. 3307

DATA CHEM LABORATORIES

From Page No.

analyst: J. Chris Taylor client: Ray F. Weston method: 8081A column: DB-608

sets: 97C-0435-01, 97C-0439-01, 97C-0439-04

DATACHEM LABORATORIES GC-PESTICIDE ANALYSIS

INJECTION LOGBOOK FOR GC ECD-6

Sequence File = DISK:[TAYLORC]5697326.SEQ;3 Data Directory = DISK:[T

Seq#	Rep#	Sample Name / Sample Notes	Data Filename	Acquisition Time
1	1	PRIME	5697326001.RAW;1	13-NOV-1997 22:22:00
2	1	PCB221_2.0 138-WS-27569-1	5697326002.RAW;1	13-NOV-1997 22:58:46
3	1	PCB232_2.0 138-WS-27570-1	5697326003.RAW;1	13-NOV-1997 23:35:29
4	1	PCB242_2.0 138-WS-27571-1	5697326004.RAW;1	14-NOV-1997 00:12:15
5	1	PCB248_2.0 138-WS-27572-1	5697326005.RAW;1	14-NOV-1997 00:49:00
6	1	$1254_0.02 138-WS-27591	5697326006.RAW;1	14-NOV-1997 01:25:46
7	1	$1254_0.10 138-WS-27591	5697326007.RAW;1	14-NOV-1997 02:02:29
8	1	$1254_0.20 138-WS-27591	5697326008.RAW;1	14-NOV-1997 02:38:55
9	1	$1254_1.0 138-WS-27591	5697326009.RAW;1	14-NOV-1997 03:15:38
10	1	$1254_2.0 138-WS-27591	5697326010.RAW;1	14-NOV-1997 03:52:23
11	1	ICV1254_1.0 138-WS-27533	5697326011.RAW;1	14-NOV-1997 04:29:06
12	1	$1660_0.01 138-WS-27588-1	5697326012.RAW;1	14-NOV-1997 05:05:54
13	1	$1660_0.10 138-WS-27590-4	5697326013.RAW;1	14-NOV-1997 05:42:36
14	1	$1660_0.20 138-WS-27590-3	5697326014.RAW;1	14-NOV-1997 06:19:23
15	1	$1660_1.0 138-WS-27590-2	5697326015.RAW;1	14-NOV-1997 06:56:05
16	1	$1660_2.0 138-WS-27590-1	5697326016.RAW;1	14-NOV-1997 07:32:51
17	1	ICV_1660_1.0 138-WS-27589-1	5697327017.RAW;1	14-NOV-1997 08:09:34
18	1	CCV_1660_1.0 138-WS-27590	5697327018.RAW;1	22-NOV-1997 12:04:04
17	1	BL-142132-1 97C-0435-01	5697326017.RAW;2	22-NOV-1997 12:40:47
18	1	QC-142132-1 97C-0435-01	5697326018.RAW;1	22-NOV-1997 13:17:32
19	1	97C05169 X100 97C-0435-01	5697326019.RAW;1	22-NOV-1997 13:54:15
20	1	97C05170 X100 97C-0435-01	5697326020.RAW;1	22-NOV-1997 14:31:02
21	1	97C05171 X100 97C-0435-01	5697326021.RAW;1	22-NOV-1997 15:07:44
22	1	97C05172 X100 97C-0435-01	5697326022.RAW;1	22-NOV-1997 15:44:31
		TL 12/15/97		
23	1	97C05173 X100 97C-0435-01	5697326023.RAW;1	22-NOV-1997 16:21:13
24	1	97C05174 X100 97C-0435-01	5697326024.RAW;1	22-NOV-1997 16:58:01
25	1	97C05175 X100 97C-0435-01	5697326025.RAW;1	22-NOV-1997 17:34:42
26	1	97C05176 X100 97C-0435-01	5697326026.RAW;1	22-NOV-1997 18:11:30
27	1	CCV_1660_1.0 138-WS-27590	5697326027.RAW;1	22-NOV-1997 18:48:13
28	1	97C05176MS X100 97C-0435-01	5697326028.RAW;1	22-NOV-1997 19:24:59
29	1	97C05176MSD X100 97C-0435-01	5697326029.RAW;1	22-NOV-1997 20:01:42
30	1	97C05177 X100 97C-0435-01	5697326030.RAW;1	22-NOV-1997 20:38:27
31	1	97C05178 X100 97C-0435-01	5697326031.RAW;1	22-NOV-1997 21:15:10
32	1	97C05179 X100 97C-0435-01	5697326032.RAW;1	22-NOV-1997 21:51:51
33	1	97C05180 X100 97C-0435-01	5697326033.RAW;1	22-NOV-1997 22:28:34
34	1	97C05181 X100 97C-0435-01	5697326034.RAW;1	22-NOV-1997 23:05:19
35	1	97C05182 X100 97C-0435-01	5697326035.RAW;1	22-NOV-1997 23:42:02
36	1	97C05183 X100 97C-0435-01	5697326036.RAW;1	23-NOV-1997 00:18:48
37	1	97C05184 X100 97C-0435-01	5697326037.RAW;1	23-NOV-1997 00:55:32
38	1	CCV_1660_1.0 138-WS-27590	5697326038.RAW;1	23-NOV-1997 01:32:19
39	1	97C05185 X100 97C-0435-01	5697326039.RAW;1	23-NOV-1997 02:09:03
40	1	97C05186 X100 97C-0435-01	5697326040.RAW;1	23-NOV-1997 02:45:49
41	1	97C05187 X100 97C-0435-01	5697326041.RAW;1	23-NOV-1997 03:22:29
42	1	97C05188 X100 97C-0435-01	5697326042.RAW;1	23-NOV-1997 03:59:14
43	1	97C05169 97C-0435-01	5697326043.RAW;1	23-NOV-1997 04:35:37
44	1	97C05170 97C-0435-01	5697326044.RAW;1	23-NOV-1997 05:12:20
45	1	97C05171 97C-0435-01	5697326045.RAW;1	23-NOV-1997 05:49:05
46	1	97C05172 97C-0435-01	5697326046.RAW;1	23-NOV-1997 06:25:47
		TL 12/15/97		
47	1	97C05173 97C-0435-01	5697326047.RAW;1	23-NOV-1997 07:02:32
48	1	97C05174 97C-0435-01	5697326048.RAW;1	23-NOV-1997 07:39:19
49	1	CCV_1660_1.0 138-WS-27590	5697326049.RAW;1	23-NOV-1997 08:16:05
50	1	97C05175 97C-0435-01	5697326050.RAW;1	23-NOV-1997 08:52:52
51	1	97C05176 97C-0435-01	5697326051.RAW;1	23-NOV-1997 09:29:31
52	1	97C05176MS 97C-0435-01	5697326052.RAW;1	23-NOV-1997 10:06:14
53	1	97C05176MSD 97C-0435-01	5697326053.RAW;1	23-NOV-1997 10:42:54
54	1	97C05177 97C-0435-01	5697326054.RAW;1	23-NOV-1997 11:19:36
55	1	97C05178 97C-0435-01	5697326055.RAW;1	23-NOV-1997 11:56:21
56	1	97C05179 97C-0435-01	5697326056.RAW;1	23-NOV-1997 12:33:12
57	1	97C05180 97C-0435-01	5697326057.RAW;1	23-NOV-1997 13:09:56
58	1	97C05181 97C-0435-01	5697326058.RAW;1	23-NOV-1997 13:46:23
59	1	97C05182 97C-0435-01	5697326059.RAW;1	23-NOV-1997 14:23:09
60	1	CCV_1660_1.0 138-WS-27590	5697326060.RAW;1	23-NOV-1997 14:59:55
61	1	97C05183 97C-0435-01	5697326061.RAW;1	23-NOV-1997 15:36:46
62	1	97C05184 97C-0435-01	5697326062.RAW;1	23-NOV-1997 16:13:33
63	1	97C05185 97C-0435-01	5697326063.RAW;1	23-NOV-1997 16:50:17
64	1	97C05186 97C-0435-01	5697326064.RAW;1	23-NOV-1997 17:27:04
65	1	97C05187 97C-0435-01	5697326065.RAW;1	23-NOV-1997 18:03:49
66	1	97C05188 97C-0435-01	5697326066.RAW;1	23-NOV-1997 18:40:15
67	1	BL-142147-1 97C-0439-04	5697326067.RAW;1	23-NOV-1997 19:17:01
68	1	QC-142147-1 97C-0439-04	5697326068.RAW;1	23-NOV-1997 19:53:48
69	1	97C05251 97C-0439-04	5697326069.RAW;1	23-NOV-1997 20:30:30
70	1	CCV_1660_1.0 138-WS-27590	5697326070.RAW;1	23-NOV-1997 21:07:17
		TL 12/15/97		
71	1	BL-142144-1 97C-0439-01	5697326071.RAW;1	23-NOV-1997 21:44:00
72	1	QC-142144-1 97C-0439-01	5697326072.RAW;1	23-NOV-1997 22:20:47
73	1	97C05249 X100 97C-0439-01	5697326073.RAW;1	23-NOV-1997 22:57:08
74	1	97C05249MS X100 97C-0439-01	5697326074.RAW;1	23-NOV-1997 23:33:54
75	1	97C05249MSD X100 97C-0439-01	5697326075.RAW;1	24-NOV-1997 00:10:37
76	1	97C05250 X100 97C-0439-01	5697326076.RAW;1	24-NOV-1997 00:47:24
77	1	97C05249 97C-0439-01	5697326077.RAW;1	24-NOV-1997 01:24:10
78	1	97C05249MS 97C-0439-01	5697326078.RAW;1	24-NOV-1997 02:00:56
79	1	97C05249MSD 97C-0439-01	5697326079.RAW;1	24-NOV-1997 02:37:42
80	1	97C05250 97C-0439-01	5697326080.RAW;1	24-NOV-1997 03:14:06
81	1	CCV_1660_1.0 138-WS-27590	5697326081.RAW;1	24-NOV-1997 03:50:54
		TL 12/15/97		

TL 12/15/97

To Page No.

Witnessed & Understood by me, James Cox

Date 12/16/97

Invented by NOT APPLICABLE

Recorded by

Date 12/15/97

0064

WORKING STANDARDS

STANDARD PREPARATION LOGBOOK NO 138WS

Page No. 169

138 WS 27569 DCL WORKING STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1221

Solvent Hexane Vendor B&J Grade Pest. Lot BL891

	Compound	Intermediate Standard or Parent Solution	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1221	36IS7181	100	0.2	10	2.0
2.				0.1		1.0
3.		36IS7181	10	0.2		0.20
4.				0.1		0.10
5.				0.02		0.02
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9/15/97

SS

EXPIRATION DATE 3/15/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/15/97

Checked By: Vicki Tsai Supervisor:

Comments:

STANDARD SOLUTIONS OF INTERMEDIATE CONCENTRATION

STANDARD PREPARATION LOGBOOK NO. 36 IS

Page No. 181

36 IS 7181 DCL INTERMEDIATE STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1221

Solvent Hexane Vendor B & J Grade Pest. Lot BL 891

	Compound	Stock Std or Parent Solution ID No.	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1221	36CS07123	1000	1	10	100
2.	TCMX	36CS07127	↓	0.2	↓	MIX 20
3.	DCB	36CS7126	↓	0.2	↓	20
4.	PCB 1221	36IS7181	100	1	10	10
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SLS 9/15/97

EXPIRATION DATE 3/15/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/15/97

Checked By: Vicki Tsai Supervisor:

Comments:

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 123

36 CS 07123 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: PCB 1221

Vendor: Chem Service Lot No.: 119-18C (F108) Purity: 0

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00508 g

TARE WEIGHT 0 g

NET WEIGHT 0.00508 g

NET WEIGHT CORRECTED FOR PURITY 5.08 mg

Purity Correction —

Solvent toluene Vendor B&J Grade Pesticide Lot B0165

Dilution Volume 5.08 mL

FINAL CONCENTRATION ~~5~~ SS 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor:

Comments:

0067

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 127

36 CS 07127 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: TCMX

Vendor: Aldrich Lot No.: 0052481(KY) Purity: 0

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00493 g

TARE WEIGHT 0 g

NET WEIGHT 0.00493 g

NET WEIGHT CORRECTED FOR PURITY 4.93 mg

Purity Correction —

Solvent Toluene Vendor B&J Grade Pesticide Lot B0165

Dilution Volume 4.93 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor:

Comments:

0068

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 126

36 cs 07126 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: DCB

Vendor: Chem Service Lot No.: 136-76A (F850) Purity: 99%

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00853 g

TARE WEIGHT 0 g

NET WEIGHT 0.00853 g

NET WEIGHT CORRECTED FOR PURITY 8.53 mg

Purity Correction 8.45 mg

Solvent toluene Vendor B+J Grade Pesticide Lot B0165

Dilution Volume 8.45 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor:

Comments:

0069

WORKING STANDARDS

STANDARD PREPARATION LOGBOOK NO. 138WS

Page No. 170

138WS 27570 DCL WORKING STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1232

Solvent Hexane Vendor B&J Grade Pest Lot BL891

	Compound	Intermediate Standard or Parent Solution	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1232	36IS 7182	100	0.2	10	2.0
2.				0.1		1.0
3.		36IS7182	10	0.2		0.20
4.				0.1		0.10
5.				0.02		0.02
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EXPIRATION DATE 3/16/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/16/97

Checked By: Vicki Tsai Supervisor:

Comments:

0070

STANDARD SOLUTIONS OF INTERMEDIATE CONCENTRATION

STANDARD PREPARATION LOGBOOK NO. 36 IS

Page No. 182

36 IS 7182 DCL INTERMEDIATE STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1232

Solvent Hexane Vendor B&J Grade Pest. Lot BL891

	Compound	Stock Std or Parent Solution ID No.	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1232	36IS7172	1000	1	10	100
2.	TCMX	36CS7127	↓	0.2	↓	Mix 20
3.	DCB	36CS7126	↓	0.2	↓	20
4.	PCB 1232	36IS7182	100	1	10	10
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9/16/97

EXPIRATION DATE 3/16/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/16/97

Checked By: Vicki Tai Supervisor:

Comments:

0071

STANDARD SOLUTIONS OF INTERMEDIATE CONCENTRATION

STANDARD PREPARATION LOGBOOK NO. 36 IS

Page No. 172

36 IS 7172 DCL INTERMEDIATE STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1016, 1232 48

Solvent Toluene Vendor B&J Grade Pesticide Lot B0165

	Compound	Stock Std or Parent Solution ID No.	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1016	NSI 125-07-07	5000	1.0	5.0	1000
2.	PCB 1232 48 SS	NSI 108-01-06	5000	1.0	5.0	1000
3.	PCB 1232	NSI 107-01-07	~~5000~~ 1000 SS 9/16/97	~~1.0~~ SS 9/16/97	~~5~~ SS 9/16/97	1000
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a/15/97

EXPIRATION DATE 3/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/98

Checked By: Vicki Tsai Supervisor:

Comments:

0072

Certificate of Analysis

Compound Name: PCB-1232
Lot Number: E-107-01-07
Expiration Date: 8/98

CAS Number: 11141-16-5
Molecular Wt.: 222.8
Molecular Formula: Mixture of congeners, primarily $C_{12}H_9Cl$, $C_{12}H_8Cl_2$, & $C_{12}H_7Cl_3$

NSI STANDARD SOLUTION

ANALYTE	GRAVIMETRIC CONCENTRATION	PURITY	SOLVENT
PCB-1232 (CARCINOGEN)	1010 ug/mL	Technical Mix	Methanol (FLAMMABLE, IRRITANT)

Preparation: Concentration is calculated from wt/vol or vol/vol measurements using microbalances calibrated with NIST traceable weights to 0.0001g and/or ASTM Class A volumetric glassware or calibrated equivalent labware.

NSI Environmental Solution's Method of Analysis: GC/FID Megabore DB-1 Column

Verification: Concentration and lot homogeneity are verified by NSI after ampuling. A quality control sample was included in the analysis and both the standard solution and the QC sample were prepared independently from the calibration solution.

STORAGE & HANDLING

Store at ≤ 5°C. Allow to equilibrate to room temperature before use.

A Material Safety Data Sheet (MSDS) is enclosed for the solvent. MSDSs for the components comprising greater than 1.0% of the solution or 0.1% for components which are known to be carcinogens are available upon request.

0073

Produced by: NSI Environmental Solutions
PO Box 12313, Research Triangle Park, NC 27709
1-800-234-7837

STANDARD SOLUTIONS OF INTERMEDIATE CONCENTRATION

STANDARD PREPARATION LOGBOOK NO. 36 IS

Page No. 172

36 IS 7172 DCL INTERMEDIATE STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1016, 1232 48

Solvent Toluene Vendor B&J Grade Pesticide Lot B0165

	Compound	Stock Std or Parent Solution ID No.	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1016	NSI 125-07-01	5000	1.0	5.0	1000
2.	PCB 1232 48 SS	NSI 108-01-06	5000	1.0	5.0	1000
3.	PCB 1232	NSI 107-01-07	~~5000~~ 1000 SS 9/16/97	~~1.0~~ 1.0 SS 9/16/97	~~5~~ 5 SS 9/16/97	1000
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9/16/97

EXPIRATION DATE 3/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/98

Checked By: Vicki Tsai Supervisor:

Comments:

0074

Certificate of Analysis

Compound Name: PCB-1016
Lot Number: W-125-07-01
Expiration Date: 12/99

CAS Number: 12674-11-2
Molecular Wt.: 240 (Average)
Molecular Formula: Mixture of congeners, primarily $C_{12}H_8Cl_2$ & $C_{12}H_7Cl_3$

NSI STANDARD SOLUTION

ANALYTE	GRAVIMETRIC CONCENTRATION	CHROMATOGRAPHIC PURITY	SOLVENT
PCB-1016 (CARCINOGEN)	5001 ug/mL	Technical Mix	Iso-octane (FLAMMABLE, IRRITANT)

Preparation: Reported concentration value has been corrected for purity using purity values obtained by NSI analysts. Concentration is calculated from wt/vol or vol/vol measurements using microbalances calibrated with NIST traceable weights to 0.0001g and/or ASTM Class A volumetric glassware or calibrated equivalent labware.

NSI Environmental Solution's Method of Analysis: GC/FID RTX-5 Column

Verification: Concentration and lot homogeneity are verified by NSI after ampuling. A quality control sample was included in the analysis and both the standard solution and the QC sample were prepared independently from the calibration solution.

STORAGE & HANDLING

Store at ≤ 5°C. Allow to equilibrate to room temperature before use.

A Material Safety Data Sheet (MSDS) is enclosed for the solvent. MSDSs for the components comprising greater than 1.0% of the solution or 0.1% for components which are known to be carcinogens are available upon request.

Produced by: NSI Environmental Solutions
PO Box 12313, Research Triangle Park, NC 27709
1-800-234-7837

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 127

36 CS 07127 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: TCMX

Vendor: Aldrich Lot No.: 0052481(KY) Purity: 0

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00493 g

TARE WEIGHT 0 g

NET WEIGHT 0.00493 g

NET WEIGHT CORRECTED FOR PURITY 4.93 mg

Purity Correction —

Solvent Toluene Vendor B&J Grade Pesticide Lot B0165

Dilution Volume 4.93 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor:

Comments:

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 126

36 CS 07126 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: DCB

Vendor: Chem Service Lot No.: 136-76A (F850) Purity: 99%

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00853 g

TARE WEIGHT 0 g

NET WEIGHT 0.00853 g

NET WEIGHT CORRECTED FOR PURITY 8.53 mg

Purity Correction 8.45 mg

Solvent toluene Vendor B+J Grade Pesticide Lot B0165

Dilution Volume 8.45 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor:

Comments:

0077

WORKING STANDARDS

STANDARD PREPARATION LOGBOOK NO 138WS

Page No. 171

138 WS 27571 DCL WORKING STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1242

Solvent Hexane Vendor B&J Grade Pest. Lot B0207

	Compound	Intermediate Standard or Parent Solution	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1242	36IS7183	100	0.2	10	2.0
2.	↓	↓	↓	0.1	↓	1.0
3.	↓	36IS7183	10	0.2	↓	0.20
4.	↓	↓	↓	0.1	↓	0.10
5.	↓	↓	↓	0.02	↓	0.02
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SS 9/17/97

EXPIRATION DATE 3/17/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/17/97

Checked By: U. Hsi Tsai Supervisor:

Comments:

STANDARD SOLUTIONS OF INTERMEDIATE CONCENTRATION

STANDARD PREPARATION LOGBOOK NO. 36 IS

Page No. 183

36 IS 7183 DCL INTERMEDIATE STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1242

Solvent Hexane Vendor B&J Grade Pest. Lot BL891

	Compound	Stock Std or Parent Solution ID No.	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1242	36CS07125	1000	1	10	100
2.	TCMX	36CS 7127	↓	0.2	↓	Mix 20
3.	DCB	36CS 7127	↓	0.2	↓	20
4.	PCB ~~1144~~ 1242 SS 9/16/97	36IS 7183	100	1	10	10
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SS 9/16/97

EXPIRATION DATE 3/16/97

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/16/97

Checked By: Vicki Tsai Supervisor:

Comments:

0079

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 125

36 CS 07125 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: PCB 1242

Vendor: Chem Service Lot No.: 160-142D (F109) Purity: 0

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00698 g

TARE WEIGHT 0 g

NET WEIGHT 0.00698 g

NET WEIGHT CORRECTED FOR PURITY 6.98 mg

Purity Correction —

Solvent toluene Vendor B&J Grade Pesticide Lot B0165

Dilution Volume 6.98 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor:

Comments:

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 127

36 CS 07127 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: TCMX

Vendor: Aldrich Lot No.: 005248 1(KY) Purity: 0

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00493 g

TARE WEIGHT 0 g

NET WEIGHT 0.00493 g

NET WEIGHT CORRECTED FOR PURITY 4.93 mg

Purity Correction —

Solvent Toluene Vendor B&J Grade Pesticide Lot B0165

Dilution Volume 4.93 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor:

Comments:

0081

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 126

36 CS 07126 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: DCB

Vendor: Chem Service Lot No.: 136-76A (F850) Purity: 99%

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00853 g

TARE WEIGHT 0 g

NET WEIGHT 0.00853 g

NET WEIGHT CORRECTED FOR PURITY 8.53 mg

Purity Correction 8.45 mg

Solvent toluene Vendor B+J Grade Pesticide Lot B0165

Dilution Volume 8.45 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor:

Comments:

0082

WORKING STANDARDS

STANDARD PREPARATION LOGBOOK NO.138WS

Page No. 172

138WS 27572 DCL WORKING STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1248

Solvent Hexane Vendor B&J Grade Pest. Lot B0207

	Compound	Intermediate Standard or Parent Solution	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1248	36IS7184	100	0.2	10	2.0
2.	↓	↓	↓	0.1	↓	1.0
3.	↓	36IS7184	10	0.2	↓	0.2
4.	↓	↓	↓	0.1	↓	0.1
5.	↓	↓	↓	0.02	↓	0.02
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9/17/97

SS

EXPIRATION DATE 3/17/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/17/97

Checked By: Vicki Tsai Supervisor:

Comments:

0083

STANDARD SOLUTIONS OF INTERMEDIATE CONCENTRATION

STANDARD PREPARATION LOGBOOK NO. 36 IS

Page No. 184

36 IS 7184 DCL INTERMEDIATE STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1248

Solvent Hexane Vendor B&J Grade Rest. Lot BL891

	Compound	Stock Std or Parent Solution ID No.	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1248	36IS7172	1000	1	10	100
2.	TCMX	36CS 7127	↓	0.2	↓	Mix 20
3.	DCB	36CS 7126	↓	0.2	↓	20
4.	PCB 1248	36 IS 7184	100	1	10	10
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SS 9/16/97

EXPIRATION DATE 3/16/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/16/97

Checked By: Vicki Tsai Supervisor:

Comments:

0084

STANDARD SOLUTIONS OF INTERMEDIATE CONCENTRATION

STANDARD PREPARATION LOGBOOK NO. 36 IS

Page No. 172

36 IS 7172 DCL INTERMEDIATE STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1016, 1232 48

Solvent toluene Vendor B&J Grade Pesticide Lot B0165

	Compound	Stock Std or Parent Solution ID No.	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1016	NSI 125-07-01	5000	1.0	5.0	1000
2.	PCB 1232 48 SS	NSI 108-01-06	5000	1.0	5.0	1000
3.	PCB 1232	NSI 107-01-07	~~5000~~ 1000 SS 8/19/97	~~1.0~~ SS 9/16/97	~~5~~ SS 9/16/97	1000
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a/15/97

EXPIRATION DATE 3/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/98

Checked By: Vicki Tsai Supervisor:

Comments:

0085

Certificate of Analysis

Compound Name: PCB-1248
Lot Number: E-108-01-06
Expiration Date: 2/99

CAS Number: 12672-29-6
Molecular Wt.: 291.6 (Average)
Molecular Formula: Mixture of congeners, primarily $C_{12}H_6Cl_4$, $C_{12}H_5Cl_5$, & $C_{12}H_7Cl_3$

NSI STANDARD SOLUTION

ANALYTE	GRAVIMETRIC CONCENTRATION	PURITY	SOLVENT
PCB-1248 (CARCINOGEN)	5005 ug/mL	Technical Mix	Iso-octane (FLAMMABLE, IRRITANT)

Preparation: Reported concentration value has been corrected for purity using purity values obtained by NSI analysts. Concentration is calculated from wt/vol or vol/vol measurements using microbalances calibrated with NIST traceable weights to 0.0001g and/or ASTM Class A volumetric glassware or calibrated equivalent labware.

Verification: Concentration and lot homogeneity are verified by NSI after ampuling. A quality control sample was included in the analysis and both the standard solution and the QC sample were prepared independently from the calibration solution.

STORAGE & HANDLING

Store at ≤ 5°C. Allow to equilibrate to room temperature before use.

A Material Safety Data Sheet (MSDS) is enclosed for the solvent. MSDSs for the components comprising greater than 1.0% of the solution or 0.1% for components which are known to be carcinogens are available upon request.

0086

Produced by: NSI Environmental Solutions
PO Box 12313, Research Triangle Park, NC 27709
1-800-234-7837

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 127

36 CS 07127 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: TCMX

Vendor: Aldrich Lot No.: 0052481(KY) Purity: 0

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00493 g

TARE WEIGHT 0 g

NET WEIGHT 0.00493 g

NET WEIGHT CORRECTED FOR PURITY 4.93 mg

Purity Correction —

Solvent Toluene Vendor B&J Grade Pesticide Lot B0165

Dilution Volume 4.93 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor:

Comments:

0087

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 126

36 cs 07126 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: DCB

Vendor: Chem Service Lot No.: 136-76A (F850) Purity: 99%

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00853 g

TARE WEIGHT 0 g

NET WEIGHT 0.00853 g

NET WEIGHT CORRECTED FOR PURITY 8.53 mg

Purity Correction 8.45 mg

Solvent toluene Vendor B+J Grade Pesticide Lot B0165

Dilution Volume 8.45 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor:

Comments:

0088

WORKING STANDARDS

STANDARD PREPARATION LOGBOOK NO. 138WS

Page No. 191

138WS27591 DCL WORKING STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1254 Standards - various conc.

Solvent Hexane Vendor B&J Grade Pest Lot B0207

	Compound	Intermediate Standard or Parent Solution	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1254	36IS7180	100	0.5	25	2.0
2.	↓	↓	↓	0.25	↓	1.0
3.	↓	36IS7180	10	0.5	↓	0.2
4.	↓	↓	↓	0.25	↓	0.1
5.	↓	↓	↓	0.05	↓	0.02
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SS 10/21/97

EXPIRATION DATE 4/21/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 10/21/97

Checked By: [illegible] Supervisor:

Comments:

STANDARD SOLUTIONS OF INTERMEDIATE CONCENTRATION

STANDARD PREPARATION LOGBOOK NO. 36 IS

Page No. 180

36 IS 7180 DCL INTERMEDIATE STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1254

Solvent Hexane Vendor Burg Grade Pesti Lot BL 891

	Compound	Stock Std or Parent Solution ID No.	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1254	36CS07122	1000	1	10	100
2.	TCMX	36CS07127	✓	0.2	✓	Mix 20
3.	DCB	36CS7126	✓	0.2	✓	20
4.	PCB 1254	36IS7180	100	1	10	10
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EXPIRATION DATE 3/15/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/15/97

Checked By: Vicki Tsai Supervisor:

Comments:

0090

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36CS

Page No. 122

36cs 07122 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: PCB 1254

Vendor: Chem Service Lot No.: 120-15B (F111) Purity: —

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00709 g

TARE WEIGHT Ø g

NET WEIGHT 0.00709 g

NET WEIGHT CORRECTED FOR PURITY 7.09 mg

Purity Correction —

Solvent Toluene Vendor B&J Grade Pesticide Lot B0165

Dilution Volume 7.09 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 8/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor:

Comments:

0091

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 127

36 cs 07127 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: TCMX

Vendor: Aldrich Lot No.: 0052481(KY) Purity: 0

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00493 g

TARE WEIGHT 0 g

NET WEIGHT 0.00493 g

NET WEIGHT CORRECTED FOR PURITY 4.93 mg

Purity Correction —

Solvent toluene Vendor B&J Grade Pesticide Lot B0165

Dilution Volume 4.93 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor:

Comments:

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 126

36 cs 07126 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: DCB

Vendor: Chem Service Lot No.: 136-76A (F850) Purity: 99%

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00853 g

TARE WEIGHT 0 g

NET WEIGHT 0.00853 g

NET WEIGHT CORRECTED FOR PURITY 8.53 mg

Purity Correction 8.45 mg

Solvent toluene Vendor B+J Grade Pesticide Lot B0165

Dilution Volume 8.45 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor:

Comments:

WORKING STANDARDS

STANDARD PREPARATION LOGBOOK NO. 138WS

Page No. 133

138WS 27533 DCL WORKING STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1254 - ICV

Solvent Hexane Vendor B & J Grade Pest Lot B0207

	Compound	Intermediate Standard or Parent Solution	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1254	ULTRA K-0827	100	0.25	25	1.0
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7-2-97

EXPIRATION DATE 1-2-98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: [signature] Date of Preparation: 7-2-97

Checked By: [signature] Supervisor:

Comments:

Certificate of Analysis

Aroclor 1254 Solution

Catalog Number: PP-351

Lot Number: K0827
Page: 1

This ULTRAstandard(TM) solution was gravimetrically prepared, and the analyte concentrations were verified using high resolution gas chromatography and/or high performance liquid chromatography. The solution was prepared at the nominal concentration stated on the box label. The true value for each analyte, determined gravimetrically, is listed below.

Component	Weight/mL*
Aroclor 1254 (PCB 1254)	100.5 µg

Solvent: hexane

* All weights are traceable through N.I.S.T. Test No. 732/221797

0095

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WORKING STANDARDS

STANDARD PREPARATION LOGBOOK NO. 138WS

Page No. 190

138WS 27590 DCL WORKING STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1660 Standards - various conc.

Solvent Hexane Vendor B&J Grade Pest Lot B0207

	Compound	Intermediate Standard or Parent Solution	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1660	36IS7179	100	0.5	25	2.0
2.	↓	↓	↓	0.25	↓	1.0
3.	↓	36IS7179	10	0.5	↓	0.2
4.	↓	↓	↓	0.25	↓	0.1
5.	↓	↓	↓	0.125	↓	0.05
6.	↓	↓	↓	0.025	↓	0.01
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SS 10/21/97

EXPIRATION DATE ~~4/21/98~~ 3-15-98
SS 10-22-97

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 10/21/97

Checked By: Supervisor:

Comments:

0096

STANDARD SOLUTIONS OF INTERMEDIATE CONCENTRATION

STANDARD PREPARATION LOGBOOK NO. 36 IS

Page No. 179

36 IS 7179 DCL INTERMEDIATE STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1016/1260

Solvent Hexane Vendor Baxter Grade Pest. Lot BL891

	Compound	Stock Std or Parent Solution ID No.	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1016	36IS7172	1000	1	10	100
2.	PCB 1260	~~36IS7178~~ 36CS-7121	↓	1	↓	100
3.	TCMX	36CS07127	↓	0.2	↓	Mix 20
4.	DCB	36CS07126	↓	0.2	↓	20
5.	PCB 1066/TCMX DCB	36IS7179	100/20	1.0	10	10/2
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9/15/97

EXPIRATION DATE 3/15/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Vicky Tai Date of Preparation: 9/15/97

Checked By: Stacy Smith Supervisor:

Comments:

0097

Certificate of Analysis

Compound Name: PCB-1260
Lot Number: W-129-06-01
Expiration Date: 12/99

CAS Number: 11096-82-5
Molecular Wt.: 377.6
Molecular Formula: Mixture of congeners, primarily $C_{12}H_4Cl_6$, $C_{12}H_5Cl_5$, $C_{12}H_6Cl_4$, & $C_{12}H_7Cl_3$

NSI STANDARD SOLUTION

ANALYTE	GRAVIMETRIC CONCENTRATION	PURITY	SOLVENT
PCB-1260 (CARCINOGEN)	5010 ug/mL	Technical Mix	Iso-octane (FLAMMABLE, IRRITANT)

Preparation: Reported concentration value has been corrected for purity using purity values obtained by NSI analysts. Concentration is calculated from wt/vol or vol/vol measurements using microbalances calibrated with NIST traceable weights to 0.0001g and/or ASTM Class A volumetric glassware or calibrated equivalent labware.

NSI Environmental Solution's Method of Analysis: GC/FID DB-5 Column

Verification: Concentration and lot homogeneity are verified by NSI after ampuling. A quality control sample was included in the analysis and both the standard solution and the QC sample were prepared independently from the calibration solution.

STORAGE & HANDLING

Store at ≤ 5°C. Allow to equilibrate to room temperature before use.

A Material Safety Data Sheet (MSDS) is enclosed for the solvent. MSDSs for the components comprising greater than 1.0% of the solution or 0.1% for components which are known to be carcinogens are available upon request.

0098

Produced by:

NSI Environmental Solutions
PO Box 12313, Research Triangle Park, NC 27709
1-800-234-7837

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 127

36 cs 07127 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: TCMX

Vendor: Aldrich Lot No.: 0052481(KY) Purity: 0

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value - 0.1 - g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00493 g

TARE WEIGHT 0 g

NET WEIGHT 0.00493 g

NET WEIGHT CORRECTED FOR PURITY 4.93 mg

Purity Correction —

Solvent Toluene Vendor B&J Grade Pesticide Lot B0165

Dilution Volume 4.93 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor: [illegible]

Comments:

0099

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 126

36 CS 07126 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: DCB

Vendor: Chem Service Lot No.: 136-76A (F850) Purity: 99%

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00853 g

TARE WEIGHT 0 g

NET WEIGHT 0.00853 g

NET WEIGHT CORRECTED FOR PURITY 8.53 mg

Purity Correction 8.45 mg

Solvent toluene Vendor B+J Grade Pesticide Lot B0165

Dilution Volume 8.45 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor:

Comments:

0100

WORKING STANDARDS

STANDARD PREPARATION LOGBOOK NO. 138WS

Page No. 188

138WS 27588 DCL WORKING STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1660 0.02

Solvent Hex Vendor B&J Grade BEST Lot B0207

	Compound	Intermediate Standard or Parent Solution	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1660	138WS 27567-6	2.0	0.1	10.	0.02
2.						
3.						
4.						
5.						
6.						
7.						
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EXPIRATION DATE 3-15-98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Lynn Walker Date of Preparation: 10-15-~~98~~ 97 SW

Checked By: Supervisor:

Comments:

0101

WORKING STANDARDS

STANDARD PREPARATION LOGBOOK NO. 138WS

Page No. 167

138WS27567 DCL WORKING STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1066

Solvent Hexane Vendor B & J Grade Pest Lot BL891

	Compound	Intermediate Standard or Parent Solution	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1066	36757179	10	.05	10	0.05
2.	↓	↓	↓	.05	↓	0.05
3.				.1		0.1
4.		↓	↓	.2		0.2
5.		36757179	100	.1		1
6.	↓	↓	100	.2	↓	2
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9/15/97

EXPIRATION DATE 3/15/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/15/97

Checked By: [illegible] Supervisor:

Comments:

0102

STANDARD SOLUTIONS OF INTERMEDIATE CONCENTRATION

STANDARD PREPARATION LOGBOOK NO. 36 IS

Page No. 179

36 IS 7179 DCL INTERMEDIATE STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1016/1260

Solvent Hexane Vendor Bag Grade pest Lot BL891

	Compound	Stock Std or Parent Solution ID No.	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1016	36IS7172	1000	1	10	100
2.	PCB 1260	~~36IS7178~~ 36-CS-7121		1		100
3.	TCMX	36CS07127		0.2		mix 20
4.	DCB	36CS07126		0.2		20
5.	PCB 1066/TCMX DCB	36IS7179	100/20	1.0	10	10/2
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9/15/97

EXPIRATION DATE 3/15/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: [signature] Date of Preparation: 9/15/97

Checked By: Staci Smith Supervisor:

Comments:

STANDARD SOLUTIONS OF INTERMEDIATE CONCENTRATION

STANDARD PREPARATION LOGBOOK NO. 36 IS

Page No. 172

36 IS 7172 DCL INTERMEDIATE STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1016, 12~~32~~ 48 SS

Solvent Toluene Vendor B&J Grade Pesticide Lot B0165

	Compound	Stock Std or Parent Solution ID No.	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1016	NSI 125-07-01	5000	1.0	5.0	1000
2.	PCB 12~~32~~ 48 SS	NSI 108-01-06	5000	1.0	5.0	1000
3.	PCB 1232	NSI 107-01-07	~~5000~~ 1000 SS 9/10/97	~~1.0~~ SS 9/10/97	~~5~~ SS 9/10/97	1000
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SS 9/10/97

EXPIRATION DATE 3/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/98

Checked By: Vicki Tsai Supervisor:

Comments:

0104

Certificate of Analysis

Compound Name: PCB-1016
Lot Number: W-125-07-01
Expiration Date: 12/99

CAS Number: 12674-11-2
Molecular Wt.: 240 (Average)
Molecular Formula: Mixture of congeners, primarily $C_{12}H_8Cl_2$ & $C_{12}H_7Cl_3$

NSI STANDARD SOLUTION

ANALYTE	GRAVIMETRIC CONCENTRATION	CHROMATOGRAPHIC PURITY	SOLVENT
PCB-1016 (CARCINOGEN)	5001 ug/mL	Technical Mix	Iso-octane (FLAMMABLE, IRRITANT)

Preparation: Reported concentration value has been corrected for purity using purity values obtained by NSI analysts. Concentration is calculated from wt/vol or vol/vol measurements using microbalances calibrated with NIST traceable weights to 0.0001g and/or ASTM Class A volumetric glassware or calibrated equivalent labware.

NSI Environmental Solution's Method of Analysis: GC/FID RTX-5 Column

Verification: Concentration and lot homogeneity are verified by NSI after ampuling. A quality control sample was included in the analysis and both the standard solution and the QC sample were prepared independently from the calibration solution.

STORAGE & HANDLING

Store at ≤ 5°C. Allow to equilibrate to room temperature before use.

A Material Safety Data Sheet (MSDS) is enclosed for the solvent. MSDSs for the components comprising greater than 1.0% of the solution or 0.1% for components which are known to be carcinogens are available upon request.

0105

Produced by:

NSI Environmental Solutions
PO Box 12313, Research Triangle Park, NC 27709
1-800-234-7837

Certificate of Analysis

Compound Name: PCB-1260
Lot Number: W-129-06-01
Expiration Date: 12/99

CAS Number: 11096-82-5
Molecular Wt.: 377.6
Molecular Formula: Mixture of congeners, primarily $C_{12}H_6Cl_4$, $C_{12}H_5Cl_5$, $C_{12}H_4Cl_6$, & $C_{12}H_3Cl_7$

NSI STANDARD SOLUTION

ANALYTE	GRAVIMETRIC CONCENTRATION	PURITY	SOLVENT
PCB-1260 (CARCINOGEN)	5010 ug/mL	Technical Mix	Iso-octane (FLAMMABLE, IRRITANT)

Preparation: Reported concentration value has been corrected for purity using purity values obtained by NSI analysts. Concentration is calculated from wt/vol or vol/vol measurements using microbalances calibrated with NIST traceable weights to 0.0001g and/or ASTM Class A volumetric glassware or calibrated equivalent labware.

NSI Environmental Solution's Method of Analysis: GC/FID DB-5 Column

Verification: Concentration and lot homogeneity are verified by NSI after ampuling. A quality control sample was included in the analysis and both the standard solution and the QC sample were prepared independently from the calibration solution.

STORAGE & HANDLING

Store at ≤ 5°C. Allow to equilibrate to room temperature before use.

A Material Safety Data Sheet (MSDS) is enclosed for the solvent. MSDSs for the components comprising greater than 1.0% of the solution or 0.1% for components which are known to be carcinogens are available upon request.

Produced by: NSI Environmental Solutions
PO Box 12313, Research Triangle Park, NC 27709
1-800-234-7837

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 127

36 CS 07127 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: TCMX

Vendor: Aldrich Lot No.: 0052481(KY) Purity: 0

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value - 0.1 - g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00493 g

TARE WEIGHT 0 g

NET WEIGHT 0.00493 g

NET WEIGHT CORRECTED FOR PURITY 4.93 mg

Purity Correction —

Solvent Toluene Vendor B&J Grade Pesticide Lot B0165

Dilution Volume 4.93 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor:

Comments:

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 126

36 CS 07126 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: DCB

Vendor: Chem Service Lot No.: 136-76A (F850) Purity: 99%

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00853 g

TARE WEIGHT 0 g

NET WEIGHT 0.00853 g

NET WEIGHT CORRECTED FOR PURITY 8.53 mg

Purity Correction 8.45 mg

Solvent toluene Vendor B+J Grade Pesticide Lot B0165

Dilution Volume 8.45 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor:

Comments:

0108

WORKING STANDARDS

STANDARD PREPARATION LOGBOOK NO. 138WS

Page No. 189

138WS 27589 DCL WORKING STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB ICV 1016/1260

Solvent Hexane Vendor B&J Grade Pest Lot B0207

	Compound	Intermediate Standard or Parent Solution	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1016	ULTRA 10076	100	0.1	10	1.0
2.	PCB 1260	ULTRA 10075	100	0.1	10	1.0
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10-18-97

EXPIRATION DATE 4-18-98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: [illegible] Date of Preparation: 10-18-97

Checked By: [illegible] Supervisor:

Comments:

Certificate of Analysis

Aroclor 1016 Solution

Catalog Number: PP-281

Lot Number: L0076
Page: 1

This ULTRAstandard(TM) solution was gravimetrically prepared, and the analyte concentrations were verified using high resolution gas chromatography and/or high performance liquid chromatography. The solution was prepared at the nominal concentration stated on the box label. The true value for each analyte, determined gravimetrically, is listed below.

Component	Weight/mL*
Aroclor 1016 (PCB 1016)	100.4 µg

Solvent: hexane

* All weights are traceable through N.I.S.T. Test No. 732/221797

0110

ULTRA SCIENTIFIC
ISO 9001 Registered
250 Smith Street, North Kingstown, RI 02852 • 401 294 9400 • 800 338 1754

Certificate of Analysis

Aroclor 1260 Solution

Catalog Number: PP-361

Lot Number: K1055
Page: 1

This ULTRAstandard(TM) solution was gravimetrically prepared, and the analyte concentrations were verified using high resolution gas chromatography and/or high performance liquid chromatography. The solution was prepared at the nominal concentration stated on the box label. The true value for each analyte, determined gravimetrically, is listed below.

Component	Weight/mL*
Aroclor 1260 (PCB 1260)	100.5 µg

Solvent: hexane

0111

* All weights are traceable through N.I.S.T. Test No. 732/221797

ULTRA SCIENTIFIC
ISO 9001 Registered
250 Smith Street, North Kingstown, RI 02852 • 401 294 9400 • 800 338 1754

WORKING STANDARDS

STANDARD PREPARATION LOGBOOK NO157WS

Page No. 021

157WS31221 DCL WORKING STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: 8080 Surrogate

Solvent acetone Vendor Fisher Grade Pest Lot 967647

	Compound	Intermediate Standard or Parent Solution	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	CL10BP NSI	1084-06-02	200	1.25	500	0.5
2.	CL4XYL	118004-01	200	1.25	500	
3.	DBUCLE NSI	198-08-01	200	~~1.25~~ 11/12/97	500	
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11/12/97

EXPIRATION DATE 5/12/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: [signature] Date of Preparation: 11/12/97

Checked By: [signature] Supervisor:

Comments:

Certificate of Analysis

Compound Name: 2,4,5,6-Tetrachloro-m-xylene
Lot Number: W-1180-04-01
Expiration Date: 7/98

CAS Number: 877-09-8
Molecular Wt.: 244.0
Molecular Formula: $C_8H_6Cl_4$

NSI STANDARD SOLUTION

ANALYTE	GRAVIMETRIC CONCENTRATION	CHROMATOGRAPHIC PURITY	SOLVENT
2,4,5,6-Tetrachloro-m-xylene	200 ug/mL	97.3 %	Acetone (FLAMMABLE, IRRITANT)

Preparation: Reported concentration value has been corrected for purity using purity values obtained by NSI analysts. Concentration is calculated from wt/vol or vol/vol measurements using microbalances calibrated with NIST traceable weights to 0.0001g and/or ASTM Class A volumetric glassware or calibrated equivalent labware.

NSI Environmental Solution's Method of Analysis: GC/FID DB-608 Column

Verification: Concentration and lot homogeneity are verified by NSI after ampuling. A quality control sample was included in the analysis and both the standard solution and the QC sample were prepared independently from the calibration solution.

STORAGE & HANDLING

Store at ≤ 5°C. Allow to equilibrate to room temperature before use.

A Material Safety Data Sheet (MSDS) is enclosed for the solvent. MSDSs for the components comprising greater than 1.0% of the solution or 0.1% for components which are known to be carcinogens are available upon request.

0113

Produced by: NSI Environmental Solutions
PO Box 12313, Research Triangle Park, NC 27709
1-800-234-7837

Certificate of Analysis

Compound Name: Dibutyl chlorendate
Lot Number: W-798-08-01
Expiration Date: 4/98

CAS Number: 1770-80-5
Molecular Wt.: 501.06
Molecular Formula: $C_{17}H_{20}Cl_6O_4$

NSI STANDARD SOLUTION

ANALYTE	GRAVIMETRIC CONCENTRATION	CHROMATOGRAPHIC PURITY	SOLVENT
Dibutyl chlorendate	200 ug/mL	98.0 %	Acetone (FLAMMABLE, IRRITANT)

Preparation: Reported concentration value has been corrected for purity using purity values obtained by NSI analysts. Concentration is calculated from wt/vol or vol/vol measurements using microbalances calibrated with NIST traceable weights to 0.0001g and/or ASTM Class A volumetric glassware or calibrated equivalent labware.

NSI Environmental Solution's Method of Analysis: GC/FID XTI-5 Column

Verification: Concentration and lot homogeneity are verified by NSI after ampuling. A quality control sample was included in the analysis and both the standard solution and the QC sample were prepared independently from the calibration solution.

STORAGE & HANDLING

Store at ≤ 5°C. Allow to equilibrate to room temperature before use.

A Material Safety Data Sheet (MSDS) is enclosed for the solvent. MSDSs for the components comprising greater than 1.0% of the solution or 0.1% for components which are known to be carcinogens are available upon request.

0114

Produced by:

NSI Environmental Solutions
PO Box 12313, Research Triangle Park, NC 27709
1-800-234-7837

Certificate of Analysis

Compound Name: Decachlorobiphenyl
Lot Number: W-1084-06-02
Expiration Date: 6/98

CAS Number: 2051-24-3
Molecular Wt.: 498.7
Molecular Formula: $C_{12}Cl_{10}$

NSI STANDARD SOLUTION

ANALYTE	GRAVIMETRIC CONCENTRATION	CHROMATOGRAPHIC PURITY	SOLVENT
Decachlorobiphenyl	203 ug/mL	97.7 %	Acetone (FLAMMABLE, IRRITANT)

Preparation: Reported concentration value has been corrected for purity using purity values obtained by NSI analysts. Concentration is calculated from wt/vol or vol/vol measurements using microbalances calibrated with NIST traceable weights to 0.0001g and/or ASTM Class A volumetric glassware or calibrated equivalent labware.

NSI Environmental Solution's Method of Analysis: GC/FID DB-608 Column

Verification: Concentration and lot homogeneity are verified by NSI after ampuling. A quality control sample was included in the analysis and both the standard solution and the QC sample were prepared independently from the calibration solution.

STORAGE & HANDLING

Store at ≤ 5°C. Allow to equilibrate to room temperature before use.

A Material Safety Data Sheet (MSDS) is enclosed for the solvent. MSDSs for the components comprising greater than 1.0% of the solution or 0.1% for components which are known to be carcinogens are available upon request.

0115

Produced by:

NSI Environmental Solutions
PO Box 12313, Research Triangle Park, NC 27709
1-800-234-7837

WORKING STANDARDS

STANDARD PREPARATION LOGBOOK NO. 138 WS

Page No. 135

138 WS 27535 DCL WORKING STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 8080 MS

Solvent Acetone Vendor Fisher Grade UV Lot 965882

	Compound	Intermediate Standard or Parent Solution	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1016/1260	NSZ 8-10770	5,000	0.5	500	5.0
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7-3-97

EXPIRATION DATE 1-3-98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: [illegible] Date of Preparation: 7-3-97

Checked By: [illegible] Supervisor:

Comments:

0116

Certificate of Analysis

Mixture Name: PCB Matrix Spike
Lot Number: Q-1077D
(CARCINOGEN)

Expiration Date: 12/96
Solvent: Toluene
(FLAMMABLE, IRRITANT)

CUSTOM REFERENCE SOLUTION

COMPOUND NUMBER	ANALYTE	GRAVIMETRIC CONCENTRATION (ug/mL)	CHROMATOGRAPHIC PURITY (%)
E-0125-01	PCB-1016	5060	Technical Mix
E-0129-01	PCB-1260	5004	Technical Mix

Preparation: Reported concentration value has been corrected for purity and is typically accurate to 0.5%. Concentration is calculated from wt/vol or vol/vol measurements using microbalances calibrated with NIST tracable weights to 0.0001g and/or ASTM Class A volumetric glassware or calibrated, equivalent labware.

STORAGE & HANDLING

Store at ≤ 5°C. Transfer to tightly sealed glass vial with Teflon-lined septum or cap after opening. Allow to equilibrate to room temperature before use.

This reference material is a dilute homogeneous solution of the above listed compounds in toluene. Hazard information for this specific solution is not available. However, MSDSs are enclosed for the solvent and the components comprising greater than 1.0% of the solution or 0.1% for components which are known to be carcinogens.

Produced by:

NSI Environmental Solutions
PO Box 12313, Research Triangle Park, NC 27709
1-800-234-7837

WORKING STANDARDS

STANDARD PREPARATION LOGBOOK NO. 157WS

Page No. 005

157WS31205 DCL WORKING STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: 8080 Surrogate Spike

Solvent Acetone Vendor Fisher Grade Pest Lot 967647

	Compound	Intermediate Standard or Parent Solution	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	TCMX	NSF 1180-04-01	200	1.25	500	0.5
2.	DBC	NSF 798-08-01	↓	↓	↓	↓
3.	DCB	NSF 1084-06-03				
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EXPIRATION DATE 4-30-98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: [illegible] Date of Preparation: 10-31-97

Checked By: _____ Supervisor: _____

Comments: _____

WORKING STANDARDS

STANDARD PREPARATION LOGBOOK NO. 138WS

Page No. 174

138WS 27574 DCL WORKING STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: 8080 Surrogate Spike

Solvent Acetone Vendor Fisher Grade Pest Lot 967647

	Compound	Intermediate Standard or Parent Solution	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	TCMX	NSI 1180-04-01	200	1.75	700	0.5
2.	DBC	NSI 798-08-01	↓	↓	↓	↓
3.	DCB	NSI 1084-06-02	↓	↓	↓	↓
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9-30-97

EXPIRATION DATE 3-30-98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: [illegible] Date of Preparation: 9-30-97

Checked By: Vicki Tsai Supervisor:

0119

Comments:

Certificate of Analysis

Compound Name: 2,4,5,6-Tetrachloro-m-xylene
Lot Number: W-1180-04-01
Expiration Date: 7/98

CAS Number: 877-09-8
Molecular Wt.: 244.0
Molecular Formula: $C_8H_6Cl_4$

NSI STANDARD SOLUTION

ANALYTE	GRAVIMETRIC CONCENTRATION	CHROMATOGRAPHIC PURITY	SOLVENT
2,4,5,6-Tetrachloro-m-xylene	200 ug/mL	97.3 %	Acetone (FLAMMABLE, IRRITANT)

Preparation: Reported concentration value has been corrected for purity using purity values obtained by NSI analysts. Concentration is calculated from wt/vol or vol/vol measurements using microbalances calibrated with NIST traceable weights to 0.0001g and/or ASTM Class A volumetric glassware or calibrated equivalent labware.

NSI Environmental Solution's Method of Analysis: GC/FID DB-608 Column

Verification: Concentration and lot homogeneity are verified by NSI after ampuling. A quality control sample was included in the analysis and both the standard solution and the QC sample were prepared independently from the calibration solution.

STORAGE & HANDLING

Store at ≤ 5°C. Allow to equilibrate to room temperature before use.

A Material Safety Data Sheet (MSDS) is enclosed for the solvent. MSDSs for the components comprising greater than 1.0% of the solution or 0.1% for components which are known to be carcinogens are available upon request.

0120

Produced by:

NSI Environmental Solutions
PO Box 12313, Research Triangle Park, NC 27709
1-800-234-7837

Certificate of Analysis

Compound Name: Dibutyl chlorendate
Lot Number: W-798-08-01
Expiration Date: 4/98

CAS Number: 1770-80-5
Molecular Wt.: 501.06
Molecular Formula: $C_{17}H_{20}Cl_6O_4$

NSI STANDARD SOLUTION

ANALYTE	GRAVIMETRIC CONCENTRATION	CHROMATOGRAPHIC PURITY	SOLVENT
Dibutyl chlorendate	200 ug/mL	98.0 %	Acetone (FLAMMABLE, IRRITANT)

Preparation: Reported concentration value has been corrected for purity using purity values obtained by NSI analysts. Concentration is calculated from wt/vol or vol/vol measurements using microbalances calibrated with NIST traceable weights to 0.0001g and/or ASTM Class A volumetric glassware or calibrated equivalent labware.

NSI Environmental Solution's Method of Analysis: GC/FID XTI-5 Column

Verification: Concentration and lot homogeneity are verified by NSI after ampuling. A quality control sample was included in the analysis and both the standard solution and the QC sample were prepared independently from the calibration solution.

STORAGE & HANDLING

Store at ≤ 5°C. Allow to equilibrate to room temperature before use.

A Material Safety Data Sheet (MSDS) is enclosed for the solvent. MSDSs for the components comprising greater than 1.0% of the solution or 0.1% for components which are known to be carcinogens are available upon request.

0121

Produced by:

NSI Environmental Solutions
PO Box 12313, Research Triangle Park, NC 27709
1-800-234-7837

Certificate of Analysis

Compound Name: Decachlorobiphenyl
Lot Number: W-1084-06-02
Expiration Date: 6/98

CAS Number: 2051-24-3
Molecular Wt.: 498.7
Molecular Formula: $C_{12}Cl_{10}$

NSI STANDARD SOLUTION

ANALYTE	GRAVIMETRIC CONCENTRATION	CHROMATOGRAPHIC PURITY	SOLVENT
Decachlorobiphenyl	203 ug/mL	97.7 %	Acetone (FLAMMABLE, IRRITANT)

Preparation: Reported concentration value has been corrected for purity using purity values obtained by NSI analysts. Concentration is calculated from wt/vol or vol/vol measurements using microbalances calibrated with NIST traceable weights to 0.0001g and/or ASTM Class A volumetric glassware or calibrated equivalent labware.

NSI Environmental Solution's Method of Analysis: GC/FID DB-608 Column

Verification: Concentration and lot homogeneity are verified by NSI after ampuling. A quality control sample was included in the analysis and both the standard solution and the QC sample were prepared independently from the calibration solution.

STORAGE & HANDLING

Store at ≤ 5°C. Allow to equilibrate to room temperature before use.

A Material Safety Data Sheet (MSDS) is enclosed for the solvent. MSDSs for the components comprising greater than 1.0% of the solution or 0.1% for components which are known to be carcinogens are available upon request.

0122

Produced by:

NSI Environmental Solutions
PO Box 12313, Research Triangle Park, NC 27709
1-800-234-7837

DATA CHEM LABORATORIES
A Sorenson Company

ANALYTICAL REPORT

Form ARF-AL
Page 1 of 1
Part 1 of 1
12159717081411

Date _____
Laboratory Group Name 97C-0439-03
Account No. 03008

Roy F. Weston
Attention: Smita Sumbaly
1090 King Georges Post Road, Suite 201
Edison, NJ 08837

FAX (908) 225-7037
Telephone (908) 225-6116

Sampling Collection and Shipment

Sampling Site _____ Date of Collection November 06, 1997

Date Samples Received at Laboratory November 07, 1997

Analysis

Method of Analysis XX-EP-800

Date(s) of Analysis November 12, 1997

Analytical Results

Field Sample Number	Laboratory Number	Sample Type	Solids (Total) %							
AAAANS1	97C05249	SOIL	61.1							
AAAANS1	97C05249MD	SOIL	65.3							
AAAAND1	97C05250	SOIL	57.6							
Limit of Detection										

† See comment on last page.
ND Parameter not detected above LOD.
NR Parameter not requested.

** See comment on last page.
( ) Parameter between LOD and LOQ.

Analyst: Michelle R. Manning

0123

Reviewer: Trinh T. Le

960 West LeVoy Drive / Salt Lake City, Utah 84123-2547
Phone (801) 266-7700 Web Page: www.datachem.com
FAX (801) 268-9992 E-mail: lab@datachem.com

DATA CHEM LABORATORIES
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FORM A (TYPE I)
SINGLE METHOD ANALYSES

SAMPLE ANALYSIS DATA SHEET

Form RLIMS63A-V1.3
12159718411131
Page 3

S97BC023

Date Printed.....: 15-DEC-97 18:41

Client Name.....: Roy F. Weston
Client Ref Number....: Not Provided
Sampling Site.....: Not Applicable
Release Number.....: AAAAND

Date Received.....: Not Applicable

Client Sample Name: BL-142144-1
DCL Sample Name...: BL-142144-1
DCL Report Group..: 97C-0439-01

Matrix.....: SOIL
Date Sampled.....: Not Applicable
Reporting Units...: µg/Kg

DCL Preparation Group: G97BC016
Date Prepared.....: 13-NOV-97 00:00
Preparation Method...: 3550C
Aliquot Weight/Volume: 0.030 Kg
Net Weight/Volume....: 1.0

DCL Analysis Group: G97C000K
Analysis Method...: 8080A
Instrument Type...: GC/ECD
Instrument ID.....: GC/ECD-6
Column Type.....: DB-608
☒ Primary
☐ Confirmation

Analytical Results

Analyte	Date Analyzed	MDL	Result	Comment	Qual.	Dilution	CRDL
Aroclor 1016	23-NOV-97 21:44	2.95	ND			1.00	6.67
Aroclor 1221	23-NOV-97 21:44	20.9	ND			1.00	33.3
Aroclor 1232	23-NOV-97 21:44	3.68	ND			1.00	6.67
Aroclor 1242	23-NOV-97 21:44	2.53	ND			1.00	6.67
Aroclor 1248	23-NOV-97 21:44	2.30	ND			1.00	6.67
Aroclor 1254	23-NOV-97 21:44	1.54	ND			1.00	6.67
Aroclor 1260	23-NOV-97 21:44	1.47	ND			1.00	6.67

Surrogate Recoveries

Analyte	Result	Spiked Amount	Percent Recovery
Tetrachloro-m-xylene	16.03		
Dibutylchlorendate	15.14		

NOTE: This data is from the LIMS not the QC database.

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Phone (801) 266-7700 Web Page: www.datachem.com
FAX (801) 268-9992 E-mail: lab@datachem.com

DATA CHEM LABORATORIES
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FORM A (TYPE I)
SINGLE METHOD ANALYSES

SAMPLE ANALYSIS DATA SHEET

Form RLIMS63A-V1.3
12159718411131
Page 4

S97BC024

Date Printed.....: 15-DEC-97 18:41

Client Name.....: Roy F. Weston
Client Ref Number....: Not Provided
Sampling Site.....: Not Applicable
Release Number.....: AAAAND

Date Received.....: Not Applicable

Client Sample Name: QC-142144-1
DCL Sample Name...: QC-142144-1
DCL Report Group..: 97C-0439-01

Matrix.....: SOIL
Date Sampled.....: Not Applicable
Reporting Units...: µg/Kg

DCL Preparation Group: G97BC016
Date Prepared.....: 13-NOV-97 00:00
Preparation Method...: 3550C
Aliquot Weight/Volume: 0.030 Kg
Net Weight/Volume....: 1.0

DCL Analysis Group: G97C000K
Analysis Method...: 8080A
Instrument Type...: GC/ECD
Instrument ID.....: GC/ECD-6
Column Type.....: DB-608
☒ Primary
☐ Confirmation

Analytical Results

Analyte	Date Analyzed	MDL	Result	Comment	Qual.	Dilution	CRDL
Aroclor 1016	23-NOV-97 22:20	2.95	142.1			1.00	6.67
Aroclor 1260	23-NOV-97 22:20	1.47	133.8			1.00	6.67

Surrogate Recoveries

Analyte	Result	Spiked Amount	Percent Recovery
Tetrachloro-m-xylene	12.51		
Dibutylchlorendate	16.56		

NOTE: This data is from the LIMS not the QC database.

0125

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Phone (801) 266-7700 Web Page: www.datachem.com
FAX (801) 268-9992 E-mail: lab@datachem.com

DATA CHEM LABORATORIES
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FORM A (TYPE I)
SINGLE METHOD ANALYSES

SAMPLE ANALYSIS DATA SHEET

Form RLIMS63A-V1.3
12159718411131
Page 5

S97B70MW

Date Printed.....: 15-DEC-97 18:41

Client Name.....: Roy F. Weston
Client Ref Number....: Not Provided
Sampling Site.....: Not Provided
Release Number.....: AAAAND

Date Received.....: 07-NOV-97 00:00

Client Sample Name: AAAANS1
DCL Sample Name...: 97C05249
DCL Report Group..: 97C-0439-01

Matrix.....: SOIL
Date Sampled.....: 06-NOV-97 15:25
Reporting Units...: µg/Kg
Report Basis.....: ☒ As Received ☐ Dried

DCL Preparation Group: G97BC016
Date Prepared.....: 13-NOV-97 00:00
Preparation Method...: 3550C
Aliquot Weight/Volume: 0.030 Kg
Net Weight/Volume....: 1.0

DCL Analysis Group: G97C000K
Analysis Method...: 8080A
Instrument Type...: GC/ECD
Instrument ID.....: GC/ECD-6
Column Type.....: DB-608
☒ Primary
☐ Confirmation

Analytical Results

Analyte	Date Analyzed	MDL	Result	Comment	Qual.	Dilution	CRDL
Aroclor 1016	23-NOV-97 22:57	2.95	ND			100.	6.67
Aroclor 1221	23-NOV-97 22:57	20.9	ND			100.	33.3
Aroclor 1232	23-NOV-97 22:57	3.68	ND			100.	6.67
Aroclor 1242	23-NOV-97 22:57	2.53	ND			100.	6.67
Aroclor 1248	23-NOV-97 22:57	2.30	ND			100.	6.67
Aroclor 1254	23-NOV-97 22:57	1.54	2782			100.	6.67
Aroclor 1260	23-NOV-97 22:57	1.47	ND			100.	6.67

Surrogate Recoveries

Analyte	Result	Spiked Amount	Percent Recovery
Tetrachloro-m-xylene	14.76		
Dibutylchlorendate	14.76		

NOTE: This data is from the LIMS not the QC database.

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Phone (801) 266-7700 Web Page: www.datachem.com
FAX (801) 268-9992 E-mail: lab@datachem.com

DATA CHEM LABORATORIES
A Sorenson Company

FORM A (TYPE I)
SINGLE METHOD ANALYSES

SAMPLE ANALYSIS DATA SHEET

S97B70MX

Date Printed.....: 15-DEC-97 18:41

Client Name.....: Roy F. Weston
Client Ref Number....: Not Provided
Sampling Site.....: Not Provided
Release Number.....: AAAAND

Date Received.....: 07-NOV-97 00:00

Client Sample Name: **AAAANS1**
DCL Sample Name...: **97C05249MS**
DCL Report Group..: **97C-0439-01**

Matrix.....: SOIL
Date Sampled.....: 06-NOV-97 15:25
Reporting Units...: µg/Kg
Report Basis.....: ☒ As Received ☐ Dried

DCL Preparation Group: G97BC016
Date Prepared.....: 13-NOV-97 00:00
Preparation Method...: 3550C
Aliquot Weight/Volume: 0.030 Kg
Net Weight/Volume....: 1.0

DCL Analysis Group: G97C000K
Analysis Method...: 8080A
Instrument Type...: GC/ECD
Instrument ID.....: GC/ECD-6
Column Type.....: DB-608
☒ Primary
☐ Confirmation

Analytical Results

Analyte	Date Analyzed	MDL	Result	Comment	Qual.	Dilution	CRDL
Aroclor 1016	23-NOV-97 23:33	2.95	1823			100.	6.67
Aroclor 1260	23-NOV-97 23:33	1.47	10487			100.	6.67

Surrogate Recoveries

Analyte	Result	Spiked Amount	Percent Recovery
Tetrachloro-m-xylene	15.59		
Dibutylchlorendate	15.59		

NOTE: This data is from the LIMS not the QC database.

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Phone (801) 266-7700 Web Page: www.datachem.com
FAX (801) 268-9992 E-mail: lab@datachem.com

DATA CHEM LABORATORIES
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FORM A (TYPE I)
SINGLE METHOD ANALYSES

SAMPLE ANALYSIS DATA SHEET

Form RLIMS63A-V1.3
12159718411131
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S97B70MY

Date Printed.....: 15-DEC-97 18:41

Client Name.....: Roy F. Weston
Client Ref Number....: Not Provided
Sampling Site.....: Not Provided
Release Number.....: AAAAND

Date Received.....: 07-NOV-97 00:00

Client Sample Name: AAAAMS1
DCL Sample Name...: 97C05249MSD
DCL Report Group..: 97C-0439-01

Matrix.....: SOIL
Date Sampled.....: 06-NOV-97 15:25
Reporting Units...: µg/Kg
Report Basis.....: ☒ As Received ☐ Dried

DCL Preparation Group: G97BC016
Date Prepared.....: 13-NOV-97 00:00
Preparation Method...: 3550C
Aliquot Weight/Volume: 0.030 Kg
Net Weight/Volume....: 1.0

DCL Analysis Group: G97C000K
Analysis Method...: 8080A
Instrument Type...: GC/ECD
Instrument ID.....: GC/ECD-6
Column Type.....: DB-608
☒ Primary
☐ Confirmation

Analytical Results

Analyte	Date Analyzed	MDL	Result	Comment	Qual.	Dilution	CRDL
Aroclor 1016	24-NOV-97 00:10	2.95	1345			100.	6.67
Aroclor 1260	24-NOV-97 00:10	1.47	10346			100.	6.67

Surrogate Recoveries

Analyte	Result	Spiked Amount	Percent Recovery
Tetrachloro-m-xylene	14.97		
Dibutylchlorendate	14.97		

NOTE: This data is from the LIMS not the QC database.

0128

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Phone (801) 266-7700 Web Page: www.datachem.com
FAX (801) 268-9992 E-mail: lab@datachem.com

DATA CHEM LABORATORIES
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FORM A (TYPE I)
SINGLE METHOD ANALYSES

SAMPLE ANALYSIS DATA SHEET

S97B70MZ

Date Printed.....: 15-DEC-97 18:41

Client Name.....: Roy F. Weston
Client Ref Number....: Not Provided
Sampling Site.....: Not Provided
Release Number.....: AAAAND

Date Received.....: 07-NOV-97 00:00

Client Sample Name: **AAAAND1**
DCL Sample Name...: **97C05250**
DCL Report Group..: **97C-0439-01**

Matrix.....: SOIL
Date Sampled.....: 06-NOV-97 15:30
Reporting Units...: µg/Kg
Report Basis.....: ☒ As Received ☐ Dried

DCL Preparation Group: G97BC016
Date Prepared.....: 13-NOV-97 00:00
Preparation Method...: 3550C
Aliquot Weight/Volume: 0.030 Kg
Net Weight/Volume....: 1.0

DCL Analysis Group: G97C000K
Analysis Method...: 8080A
Instrument Type...: GC/ECD
Instrument ID.....: GC/ECD-6
Column Type.....: DB-608
☒ Primary
☐ Confirmation

Analytical Results

Analyte	Date Analyzed	MDL	Result	Comment	Qual.	Dilution	CRDL
Aroclor 1016	24-NOV-97 00:47	2.95	ND			100.	6.67
Aroclor 1221	24-NOV-97 00:47	20.9	ND			100.	33.3
Aroclor 1232	24-NOV-97 00:47	3.68	ND			100.	6.67
Aroclor 1242	24-NOV-97 00:47	2.53	ND			100.	6.67
Aroclor 1248	24-NOV-97 00:47	2.30	ND			100.	6.67
Aroclor 1254	24-NOV-97 00:47	1.54	5007			100.	6.67
Aroclor 1260	24-NOV-97 00:47	1.47	ND			100.	6.67

Surrogate Recoveries

Analyte	Result	Spiked Amount	Percent Recovery
Tetrachloro-m-xylene	12.67		
Dibutylchlorendate	12.67		

NOTE: This data is from the LIMS not the QC database.

960 West LeVoy Drive / Salt Lake City, Utah 84123-2547
Phone (801) 266-7700 Web Page: www.datachem.com
FAX (801) 268-9992 E-mail: lab@datachem.com

Raw Data
Environmental Organic Analysis
Table of Contents
(Rev. 1: 3/95 GLH)

- [NA] DUMMY: Raw data is contained with set _____
- [X] Section 1. Sequencing Order
- [X] Section 2. Quantitation Data
- [X] Section 3. Calibration Data (Primary Column)
- [X] Section 4. Extract Data (Primary Column)
- [X] Section 5. Confirmation Column Data
- [NA] Other (describe) _____

The following signatures verify that the raw data and all inventory and reviewer checklists in each raw data section (all green sheets) are complete and accurate.

Assembled by: _____ 12/5/97 Reviewed by: _____ 12/16/97
Signature Date Signature Date

Section 1. Environmental Organic Analysis
(Rev. 1: 3/95)
Sequencing Order
Inventory Checklist

USAEC Protocol including UH20, LH17, etc. (Excluding PST1-WA/SO and HBG1-WA/SO)

1. Prime (optional)
2. Solvent blank (optional)
3. Breakdown evaluation (if not accommodated by calibration standards)
4. Calibration Standards (or continuing calibration)
5. Initial Calibration Verification (ICV)
6. Solvent blank (optional)
7. Extracts
   - a. Method Blank
   - b. QC extracts
   - c. Field sample extracts (including MS/MSD where applicable)
   - d. remaining QC extracts
8. Continuing Calibration
   - a. Are: aliquots of the high calibration standards
   - b. Frequency: after every analytical lot
   - c. Criteria: % of the analytes ±25% and RTW

PST1-WA/SO Protocol

1. Prime (optional)
2. Solvent blank (optional)
3. Breakdown evaluation - PEM
4. Calibration Standards (or Continuing Calibration)
5. Initial Calibration Verification (ICV)
6. Solvent blank (optional)
7. Extracts
   - a. Method Blank
   - b. QC extracts
   - c. Field sample extracts (including MS/MSD where applicable)
   - d. remaining QC extracts
8. Continuing Calibration
   - a. Are: a solvent blank and alternating PEM with aliquots of the A and BMIX calibration standards
   - b. Frequency: every 12 hours
   - c. Criteria: % of the analytes ±25% and RTW

HGB1-WA/SO Protocol

1. Prime (optional)
2. Solvent blank (optional)
3. Calibration Standards (or Continuing Calibration)
4. Initial Calibration Verification (ICV)
5. Solvent blank (Optional)
6. Extracts
   - a. Method Blank
   - b. QC extracts
   - c. Field sample extracts (including MS/MSD where applicable)
   - d. remaining QC extracts
7. Continuing Calibration
   - a. Are: aliquots of mid-range calibration standards
   - b. Frequency: every 12 hours
   - c. Criteria: % of the analytes ±25% and RTW

SW-846 Protocol including 8080, 8150, etc.

1. Prime (optional)
2. ~~Solvent blank (optional)~~
3. Breakdown evaluation (if not accommodated by calibration standards)
4. Calibration Standards (or continuing calibration)
5. Initial Calibration Verification (ICV)
6. Solvent blank (optional)
7. Extracts
   - a. Method Blank
   - b. LCS(s)
   - c. Field sample extracts {including MS/MSD(s)}
8. Continuing Calibration
   - a. Are: aliquots of the mid-range calibration standards
   - b. Frequency: a minimum of every 10 extracts
   - c. Criteria: ±15% and RTW

Section 1. Sequencing Order
Reviewer Checklist

0131

The order of the raw data is consistent with applicable protocol.

Data has been initialed and dated by the analyst and checker in the appropriate places.

Sequence: DISK:[TAYLORC]5697326.SEQ;3
Date: 15-DEC-1997 16:42:48.34

Spl	Sample Name	Inj	Method File	Calib RT	Calib CF	Data File
1	PRIME	1	5697326_8080P			5697326001
2	PCB221_2.0	1	5697326_8080P			5697326002
3	PCB232_2.0	1	5697326_8080P			5697326003
4	PCB242_2.0	1	5697326_8080P			5697326004
5	PCB248_2.0	1	5697326_8080P			5697326005
6	$1254_0.02	1	5697326_8080P	I	R	5697326006
7	$1254_0.10	1	5697326_8080P	I	R	5697326007
8	$1254_0.20	1	5697326_8080P	I	R	5697326008
9	$1254_1.0	1	5697326_8080P	I	R	5697326009
10	$1254_2.0	1	5697326_8080P	I	R	5697326010
11	ICV1254_1.0	1	5697326_8080P			5697326011
12	$1660_0.01	1	5697326_8080P	I	R	5697326012
13	$1660_0.10	1	5697326_8080P	I	R	5697326013
14	$1660_0.20	1	5697326_8080P	I	R	5697326014
15	$1660_1.0	1	5697326_8080P	I	R	5697326015
16	$1660_2.0	1	5697326_8080P	I	R	5697326016
17	ICV_1660_1.0	1	5697326_8080P			5697327017
18	CCV_1660_1.0	1	5697326_8080P			5697327018
19	BL-142132-1	1	5697326_8080P			5697326017
20	QC-142132-1	1	5697326_8080P			5697326018
21	97C05169 X100	1	5697326_8080P			5697326019
22	97C05170 X100	1	5697326_8080P			5697326020
23	97C05171 X100	1	5697326_8080P			5697326021
24	97C05172 X100	1	5697326_8080P			5697326022
25	97C05173 X100	1	5697326_8080P			5697326023
26	97C05174 X100	1	5697326_8080P			5697326024
27	97C05175 X100	1	5697326_8080P			5697326025
28	97C05176 X100	1	5697326_8080P			5697326026
29	CCV_1660_1.0	1	5697326_8080P			5697326027
30	97C05176MS X100	1	5697326_8080P			5697326028
31	97C05176MSD X100	1	5697326_8080P			5697326029
32	97C05177 X100	1	5697326_8080P			5697326030
33	97C05178 X100	1	5697326_8080P			5697326031
34	97C05179 X100	1	5697326_8080P			5697326032
35	97C05180 X100	1	5697326_8080P			5697326033
36	97C05181 X100	1	5697326_8080P			5697326034
37	97C05182 X100	1	5697326_8080P			5697326035
38	97C05183 X100	1	5697326_8080P			5697326036
39	97C05184 X100	1	5697326_8080P			5697326037
40	CCV_1660_1.0	1	5697326_8080P			5697326038
41	97C05185 X100	1	5697326_8080P			5697326039
42	97C05186 X100	1	5697326_8080P			5697326040
43	97C05187 X100	1	5697326_8080P			5697326041
44	97C05188 X100	1	5697326_8080P			5697326042
45	97C05169	1	5697326_8080P			5697326043
46	97C05170	1	5697326_8080P			5697326044
47	97C05171	1	5697326_8080P			5697326045
48	97C05172	1	5697326_8080P			5697326046
49	97C05173	1	5697326_8080P			5697326047
50	97C05174	1	5697326_8080P			5697326048
51	CCV_1660_1.0	1	5697326_8080P			5697326049
52	97C05175	1	5697326_8080P			5697326050
53	97C05176	1	5697326_8080P			5697326051
54	97C05176MS	1	5697326_8080P			5697326052
55	97C05176MSD	1	5697326_8080P			5697326053
56	97C05177	1	5697326_8080P			5697326054
57	97C05178	1	5697326_8080P			5697326055
58	97C05179	1	5697326_8080P			5697326056

59	97C05180	1	5697326_8080P	5697326057
60	97C05181	1	5697326_8080P	5697326058
61	97C05182	1	5697326_8080P	5697326059
62	CCV_1660_1.0	1	5697326_8080P	5697326060
63	97C05183	1	5697326_8080P	5697326061
64	97C05184	1	5697326_8080P	5697326062
65	97C05185	1	5697326_8080P	5697326063
66	97C05186	1	5697326_8080P	5697326064
67	97C05187	1	5697326_8080P	5697326065
68	97C05188	1	5697326_8080P	5697326066
69	BL-142147-1	1	5697326_8080P	5697326067
70	QC-142147-1	1	5697326_8080P	5697326068
71	97C05251	1	5697326_8080P	5697326069
72	CCV_1660_1.0	1	5697326_8080P	5697326070
73	BL-142144-1	1	5697326_8080P	5697326071
74	QC-142144-1	1	5697326_8080P	5697326072
75	97C05249 X100	1	5697326_8080P	5697326073
76	97C05249MS X100	1	5697326_8080P	5697326074
77	97C05249MSD X100	1	5697326_8080P	5697326075
78	97C05250 X100	1	5697326_8080P	5697326076
79	97C05249	1	5697326_8080P	5697326077
80	97C05249MS	1	5697326_8080P	5697326078
81	97C05249MSD	1	5697326_8080P	5697326079
82	97C05250	1	5697326_8080P	5697326080
83	CCV_1660_1.0	1	5697326_8080P	5697326081

Reports: Delayed
Calibration mode: 2. Calibrate standards before analyzing unknowns.

PENelson ACCESS*CHROM v1.9 Injection Log Worksheet

Sequence File = DISK:[TAYLORC]5697326.SEQ;3 Data Directory = DISK:[TAYLORC]

Seq#	Rep#	Sample Name Sample Notes	Data Filename	Acquisition Time
1	1	PRIME	5697326001.RAW;1	13-NOV-1997 22:22:00
2	1	PCB221_2.0 138-WS-27569-1	5697326002.RAW;1	13-NOV-1997 22:58:46
3	1	PCB232_2.0 138-WS-27570-1	5697326003.RAW;1	13-NOV-1997 23:35:29
4	1	PCB242_2.0 138-WS-27571-1	5697326004.RAW;1	14-NOV-1997 00:12:15
5	1	PCB248_2.0 138-WS-27572-1	5697326005.RAW;1	14-NOV-1997 00:49:00
6	1	$1254_0.02 138-WS-27591	5697326006.RAW;1	14-NOV-1997 01:25:46
7	1	$1254_0.10 138-WS-27591	5697326007.RAW;1	14-NOV-1997 02:02:29
8	1	$1254_0.20 138-WS-27591	5697326008.RAW;1	14-NOV-1997 02:38:55
9	1	$1254_1.0 138-WS-27591	5697326009.RAW;1	14-NOV-1997 03:15:38
10	1	$1254_2.0 138-WS-27591	5697326010.RAW;1	14-NOV-1997 03:52:23
11	1	ICV1254_1.0 138-WS-27533	5697326011.RAW;1	14-NOV-1997 04:29:06
12	1	$1660_0.01 138-WS-27588-1	5697326012.RAW;1	14-NOV-1997 05:05:54
13	1	$1660_0.10 138-WS-27590-4	5697326013.RAW;1	14-NOV-1997 05:42:36
14	1	$1660_0.20 138-WS-27590-3	5697326014.RAW;1	14-NOV-1997 06:19:23
15	1	$1660_1.0 138-WS-27590-2	5697326015.RAW;1	14-NOV-1997 06:56:05
16	1	$1660_2.0 138-WS-27590-1	5697326016.RAW;1	14-NOV-1997 07:32:51
17	1	ICV_1660_1.0 138-WS-27589-1	5697327017.RAW;1	14-NOV-1997 08:09:34
18	1	CCV_1660_1.0 138-WS-27590	5697327018.RAW;1	22-NOV-1997 12:04:04
17	1	BL-142132-1 97C-0435-01	5697326017.RAW;2	22-NOV-1997 12:40:47
18	1	QC-142132-1 97C-0435-01	5697326018.RAW;1	22-NOV-1997 13:17:32
19	1	97C05169 X100 97C-0435-01	5697326019.RAW;1	22-NOV-1997 13:54:15
20	1	97C05170 X100 97C-0435-01	5697326020.RAW;1	22-NOV-1997 14:31:02
21	1	97C05171 X100 97C-0435-01	5697326021.RAW;1	22-NOV-1997 15:07:44
22	1	97C05172 X100 97C-0435-01	5697326022.RAW;1	22-NOV-1997 15:44:31

PENelson ACCESS*CHROM v1.9 Injection Log Worksheet

Sequence File = DISK:[TAYLORC]5697326.SEQ;3 Data Directory = DISK:[TAYLORC]

Seq#	Rep#	Sample Name Sample Notes	Data Filename	Acquisition Time
23	1	97C05173 X100 97C-0435-01	5697326023.RAW;1	22-NOV-1997 16:21:13
24	1	97C05174 X100 97C-0435-01	5697326024.RAW;1	22-NOV-1997 16:58:01
25	1	97C05175 X100 97C-0435-01	5697326025.RAW;1	22-NOV-1997 17:34:42
26	1	97C05176 X100 97C-0435-01	5697326026.RAW;1	22-NOV-1997 18:11:30
27	1	CCV_1660_1.0 138-WS-27590	5697326027.RAW;1	22-NOV-1997 18:48:13
28	1	97C05176MS X100 97C-0435-01	5697326028.RAW;1	22-NOV-1997 19:24:59
29	1	97C05176MSD X100 97C-0435-01	5697326029.RAW;1	22-NOV-1997 20:01:42
30	1	97C05177 X100 97C-0435-01	5697326030.RAW;1	22-NOV-1997 20:38:27
31	1	97C05178 X100 97C-0435-01	5697326031.RAW;1	22-NOV-1997 21:15:10
32	1	97C05179 X100 97C-0435-01	5697326032.RAW;1	22-NOV-1997 21:51:51
33	1	97C05180 X100 97C-0435-01	5697326033.RAW;1	22-NOV-1997 22:28:34
34	1	97C05181 X100 97C-0435-01	5697326034.RAW;1	22-NOV-1997 23:05:19
35	1	97C05182 X100 97C-0435-01	5697326035.RAW;1	22-NOV-1997 23:42:02
36	1	97C05183 X100 97C-0435-01	5697326036.RAW;1	23-NOV-1997 00:18:48
37	1	97C05184 X100 97C-0435-01	5697326037.RAW;1	23-NOV-1997 00:55:32
38	1	CCV_1660_1.0 138-WS-27590	5697326038.RAW;1	23-NOV-1997 01:32:19
39	1	97C05185 X100 97C-0435-01	5697326039.RAW;1	23-NOV-1997 02:09:03
40	1	97C05186 X100 97C-0435-01	5697326040.RAW;1	23-NOV-1997 02:45:49
41	1	97C05187 X100 97C-0435-01	5697326041.RAW;1	23-NOV-1997 03:22:29
42	1	97C05188 X100 97C-0435-01	5697326042.RAW;1	23-NOV-1997 03:59:14
43	1	97C05169 97C-0435-01	5697326043.RAW;1	23-NOV-1997 04:35:37
44	1	97C05170 97C-0435-01	5697326044.RAW;1	23-NOV-1997 05:12:20
45	1	97C05171 97C-0435-01	5697326045.RAW;1	23-NOV-1997 05:49:05
46	1	97C05172 97C-0435-01	5697326046.RAW;1	23-NOV-1997 06:25:47

PENelson ACCESS*CHROM v1.9 Injection Log Worksheet

Sequence File = DISK:[TAYLORC]5697326.SEQ;3 Data Directory = DISK:[TAYLORC]

Seq#	Rep#	Sample Name Sample Notes	Data Filename	Acquisition Time
47	1	97C05173 97C-0435-01	5697326047.RAW;1	23-NOV-1997 07:02:32
48	1	97C05174 97C-0435-01	5697326048.RAW;1	23-NOV-1997 07:39:19
49	1	CCV_1660_1.0 138-WS-27590	5697326049.RAW;1	23-NOV-1997 08:16:05
50	1	97C05175 97C-0435-01	5697326050.RAW;1	23-NOV-1997 08:52:52
51	1	97C05176 97C-0435-01	5697326051.RAW;1	23-NOV-1997 09:29:31
52	1	97C05176MS 97C-0435-01	5697326052.RAW;1	23-NOV-1997 10:06:14
53	1	97C05176MSD 97C-0435-01	5697326053.RAW;1	23-NOV-1997 10:42:54
54	1	97C05177 97C-0435-01	5697326054.RAW;1	23-NOV-1997 11:19:36
55	1	97C05178 97C-0435-01	5697326055.RAW;1	23-NOV-1997 11:56:21
56	1	97C05179 97C-0435-01	5697326056.RAW;1	23-NOV-1997 12:33:12
57	1	97C05180 97C-0435-01	5697326057.RAW;1	23-NOV-1997 13:09:56
58	1	97C05181 97C-0435-01	5697326058.RAW;1	23-NOV-1997 13:46:23
59	1	97C05182 97C-0435-01	5697326059.RAW;1	23-NOV-1997 14:23:09
60	1	CCV_1660_1.0 138-WS-27590	5697326060.RAW;1	23-NOV-1997 14:59:55
61	1	97C05183 97C-0435-01	5697326061.RAW;1	23-NOV-1997 15:36:46
62	1	97C05184 97C-0435-01	5697326062.RAW;1	23-NOV-1997 16:13:33
63	1	97C05185 97C-0435-01	5697326063.RAW;1	23-NOV-1997 16:50:17
64	1	97C05186 97C-0435-01	5697326064.RAW;1	23-NOV-1997 17:27:04
65	1	97C05187 97C-0435-01	5697326065.RAW;1	23-NOV-1997 18:03:49
66	1	97C05188 97C-0435-01	5697326066.RAW;1	23-NOV-1997 18:40:15
67	1	BL-142147-1 97C-0439-04	5697326067.RAW;1	23-NOV-1997 19:17:01
68	1	QC-142147-1 97C-0439-04	5697326068.RAW;1	23-NOV-1997 19:53:48
69	1	97C05251 97C-0439-04	5697326069.RAW;1	23-NOV-1997 20:30:30
70	1	CCV_1660_1.0 138-WS-27590	5697326070.RAW;1	23-NOV-1997 21:07:17

PENelson ACCESS*CHROM v1.9 Injection Log Worksheet

Sequence File = DISK:[TAYLORC]5697326.SEQ;3 Data Directory = DISK:[TAYLORC]

Seq#	Rep#	Sample Name Sample Notes	Data Filename	Acquisition Time
71	1	BL-142144-1 97C-0439-01	5697326071.RAW;1	23-NOV-1997 21:44:00
72	1	QC-142144-1 97C-0439-01	5697326072.RAW;1	23-NOV-1997 22:20:47
73	1	97C05249 X100 97C-0439-01	5697326073.RAW;1	23-NOV-1997 22:57:08
74	1	97C05249MS X100 97C-0439-01	5697326074.RAW;1	23-NOV-1997 23:33:54
75	1	97C05249MSD X100 97C-0439-01	5697326075.RAW;1	24-NOV-1997 00:10:37
76	1	97C05250 X100 97C-0439-01	5697326076.RAW;1	24-NOV-1997 00:47:24
77	1	97C05249 97C-0439-01	5697326077.RAW;1	24-NOV-1997 01:24:10
78	1	97C05249MS 97C-0439-01	5697326078.RAW;1	24-NOV-1997 02:00:56
79	1	97C05249MSD 97C-0439-01	5697326079.RAW;1	24-NOV-1997 02:37:42
80	1	97C05250 97C-0439-01	5697326080.RAW;1	24-NOV-1997 03:14:06
81	1	CCV_1660_1.0 138-WS-27590	5697326081.RAW;1	24-NOV-1997 03:50:54

Section 2.
Environmental Organic Analysis
(Rev. 1: 3/95)

Quantitation Data
Inventory Checklist

[NA] Muddle Sheets

[X] Tabular Summary Sheets - Primary and Confirmation (if applicable) Columns

Section 2.
Quantitation Data
Reviewer Checklist

X The quantitation data inventory checklist above is complete.

X The calibration data has been verified for the following:

- ☞ The response data on the muddle sheets are consistent with tabular summary sheets for all data.
- ☞ The correct conversion factor(s) has/have been applied on the muddle sheets.

PENelson ACCESS*CHROM V1.8 Peak Summary Worksheet 12/15/97

Sample Name	CL4XYL Result	PCB016 Result	PCB260 Result	PCB254 Result	DBUCLE Result	Peak RT Mean / RT SD / Response
	6.7978	11.978	16.59	17.621	22.006	RT Mean
	1.6193E-03	1.178	1.165	0.8688	9.1894E-04	RT SD
PRIME	-6.4322E-04	-1.5885E-03	1.5566E-03	9.5232E-04		
PCB221_2.0	0.4936	0.1556	6.7096E-02	2.7779E-02	0.4601	
PCB232_2.0	0.3682	0.7454	0.1258	7.9041E-02	0.333	
PCB242_2.0	0.2504	0.8718	0.4212	0.1109	0.2175	
PCB248_2.0	0.2283	0.8697	0.363	0.2884	0.2333	
$1254_0.02	0	0	0	0	0	
$1254_0.10	0	0	0	0	0	
$1254_0.20	0	0	0	0	0	
$1254_1.0	0	0	0	0	0	
$1254_2.0	0	0	0	0	0	
ICV1254_1.0		0.2867	1.554	0.839		
$1660_0.01	0	0	0	0	0	
$1660_0.10	0	0	0	0	0	
$1660_0.20	0	0	0	0	0	
$1660_1.0	0	0	0	0	0	
$1660_2.0	0	0	0	0	0	
ICV_1660_1.0	5.6150E-03	1.167	0.9141	0.6079	8.8394E-03	
CCV_1660_1.0	0.1701	0.9812	0.8632	0.3305	0.1757	
BL-142132-1	16	17.78	6.887	5.414	15.56	
QC-142132-1	14.76	168.2	155.2	62.34	16.55	
97C05169 X10	-3.8015E-02	22.32	180	51.83		
97C05170 X10	-2.0168E-02	17.32	149.3	50.42		
97C05171 X10	-3.5756E-02	32.36	327.4	131.3		
97C05172 X10	-3.0786E-02	330.8	80.39	41.75		
97C05173 X10	-2.9656E-02	94.08	628.3	261.7		
97C05174 X10	-4.2081E-02	16	136	46.11		
97C05175 X10	-2.5138E-02	21.08	57.98	11.27		
97C05176 X10	1.8241E-02	76.06	179.9	117.4		
CCV_1660_1.0	0.1732	0.9794	0.9226	0.3627	0.1914	
97C05176MS X	-2.3331E-02	66.5	143.6	96.06		
97C05176MSD	-3.6434E-02	64.45	153.6	103.5		
97C05177 X10	-3.3045E-02	49.77	172	118.8		
97C05178 X10	-5.0440E-02		-3.9928E-03		-7.6616E-02	
97C05179 X10	-5.8120E-02	1.224	6.554	0.7496	-6.0464E-02	
97C05180 X10	-4.8633E-02				-7.1646E-02	
97C05181 X10	-5.1118E-02	39.06	320.3	147.5		
97C05182 X10	6.7727E-02	54.03	70.84	54.27		
97C05183 X10	-4.3663E-02	57.72	167.5	113.5		
97C05184 X10	-4.4340E-02	95.78	438.2	189.9		
CCV_1660_1.0	0.1694	0.9397	0.9105	0.3555	0.2	

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PENelson ACCESS*CHROM V1.8 Peak Summary Worksheet

Sample Name	CL4XYL Result	PCB016 Result	PCB260 Result	PCB254 Result	DBUCLE Result	Peak RT Mean / RT SD / Response
	6.7978	11.978	16.59	17.621	22.006	
	1.6193E-03	1.178	1.165	0.8688	9.1894E-04	
97C05185 X10	-1.8586E-02	28.96	46.44	26.66		
97C05186 X10	-4.5244E-02	21.94	171.4	53.28		
97C05187 X10	-5.3828E-02		0.4964		-6.0774E-02	
97C05188 X10	-4.5470E-02	18.63	164.3	16.08	-2.1011E-02	
97C05169	14.7	117.5	0	0		
+	+	+	+	+	+	
97C05170	14.11	92.19	0	0		
97C05171	15.41	210.6	0	0		
97C05172	15.52	0	0	0		
97C05173	15.22	261.2	0	0		
97C05174	15.68	90.8	0	0		
+	+	+	+	+	+	
CCV_1660_1.0	0.1792	0.9168	0.7472	0.3048	0.179	
97C05175	16.45	44.77	0	199.2	14.18	
97C05176	15.4	165.9	0	0		
97C05176MS	14.87	185.4	0	0		
97C05176MSD	15.35	206.9	0	0		
+	+	+	+	+	+	
97C05177	15.41	123	0	0		
97C05178	16.6	3.665	26.19	7.224	13.35	
97C05179	16.31	155.2	563.6	388.5	13.33	
97C05180	16.25	2.587	53.46	17.93	13.72	
97C05181	14.82	222.1	0	0		
+	+	+	+	+	+	
97C05182	15.82	152.8	0	0		
CCV_1660_1.0	0.1741	0.9047	0.7369	0.3002	0.1692	
97C05183	13.1	405.9	0	0		
97C05184	15.79	243.6	0	0		
97C05185	16.21	121.7	0	0	14.34	
+	+	+	+	+	+	
97C05186	15.79	150.9	0	0		
97C05187	15.6	12.48	32.36	28.2	12.89	
97C05188	16.61	401.8	126.6	0	13.74	
BL-142147-1	0.3977		6.2989E-02	-5.8678E-02	0.3817	
QC-142147-1	0.3691	4.65	4.382	1.629	0.4341	
+	+	+	+	+	+	
97C05251	0.4369	6.6752E-02	8.6961E-02		0.3405	
CCV_1660_1.0	0.174	1.003	0.9035	0.3436	0.1839	
BL-142144-1	16.03	0.3137	3.406	-1.23	15.14	
QC-142144-1	12.51	142.1	133.8	52.65	16.56	
97C05249 X10	-5.8346E-02	12.33	151.6	27.82		
+	+	+	+	+	+	
97C05249MS X	-3.7789E-02	18.23	200.4	41.43		
97C05249MSD	-4.2081E-02	13.45	166.4	29.4		
97C05250 X10	-3.9822E-02	10.56	231.8	50.07		
97C05249	14.76	307.4	0	0		
97C05249MS	15.59	175.7	0	0		
+	+	+	+	+	+	

PENelson ACCESS*CHROM V1.8 Peak Summary Worksheet

Sample Name	CL4XYL Result	PCB016 Result	PCB260 Result	PCB254 Result	DBUCLE Result	Peak RT Mean / RT SD / Response
	6.7978	11.978	16.59	17.621	22.006	RT Mean
	1.6193E-03	1.178	1.165	0.8688	9.1894E-04	RT SD
97C05249MSD	14.97	466.6	0	0		
97C05250	12.67	142.6	0	0		
CCV_1660_1.0	0.1699	0.8639	0.7287	0.2809	0.168	

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Section 3.
Environmental Organic Analysis
(Rev. 1: 3/95)

Calibration Data (Primary Column)
Inventory Checklist

☒ The initial calibration consists of the following:

- ▲ Calibration standards
- ▲ Initial Calibration Verification (ICV) solution
- ▲ Mid-range pattern identification standards (if applicable)
- ▲ Breakdown calculation solution (if not accommodated by calibration standards)

☒ Continuing Calibration (in sequence-specified order)

Section 3.
Calibration Data (Primary Column)
Reviewer Checklist

X The calibration data inventory checklist above is complete.

X The calibration data has been verified for the following:

- ☞ Response data are consistent with tabular summary sheets for all data.
- ☞ For each analyte on the tabular summary, the retention time is consistent with the calibration standards.
- ☞ The low standards are clearly distinguished from the baseline.
- ☞ Integration is consistent with good chromatography practices unless otherwise specified on raw data.
- ☞ When multi-component analytes are being quantitated, the total response is shown on each raw data file for each multi-peak method used.
- ☞ No saturated peaks have been used for quantitation.
- ☞ Manual edits have been initialed and dated by the analyst.
- ☞ All method headers reflect correct analysis data.

X Unless otherwise stated with reasoning in the case narrative, the following QC has been verified:

- ☞ Breakdown criteria for endrin and 4,4'-DDT has been met (if applicable).
- ☞ All continuing calibration response and retention time window criteria have been met.
- ☞ The Initial Calibration Verification criteria has been met.

Date.....15-DEC-1997 16:53:39.85 User: TAYLORC
Report number.....1197265422
Raw file.....DISK:[TAYLORC]5697326006.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;85
Last method update..15-DEC-1997 16:53:46.26

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Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....22

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Acq. date.....14-NOV-1997 01:25:46
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....$1254_0.02
Notes.....138-WS-27591

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
  length.....30 M
  diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.002 min
Area reject.....100 count(s)
Noise threshold.....10.0 microvolts
Start peak width....6.00 sec(s)
Min. window.....8.00 sec

Delay time.....6.500 min
No. peaks found.....36
Area threshold.....120
Area/Pk.Ht.....H
% window.....0.00

Analysis type.....EXTERNAL STANDARD
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic
Calib. factors.....Replace
Volume injected.....1.00000

A/D range.....1.0 volt(s)

Origin treatment....Ignore
Retention times.....Unaltered
(1/x,y) exponent....-1

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
10.10	PCB016;1	1		
11.34	PCB016;2	1		

EXTERNAL STANDARD CALIBRATION

Calibration Sample name: $1254_0.02

Peak Name	R.T.(min)	Peak Ht	Conc	CF	Ref	Std
CL4XYL	6.800	7388				
PCB016;3	11.916	424				
PCB016;4	12.490	562				
PCB015;5	13.610	421				
PCB260;1	15.071	1162				

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PCB260;2	15.344	1620		
PCB254;1	16.575	1559	4.0000E-03	3.897E+05
PCB254;2	16.811	1903	4.0000E-03	4.757E+05
PCB260;3	17.207	2842		
PCB260;4	17.473	479		
PCB254;3	17.678	1776	4.0000E-03	4.440E+05
PCB260;5	17.864	390		
PCB254;4	18.241	944	4.0000E-03	2.360E+05
PCB254;5	19.216	812	4.0000E-03	2.030E+05
DBUCLE	22.008	4937		

METHOD CALIBRATION CHANGES

Peak Name	Old R.T. (min)	New R.T. (min)	Old CF	New CF	% Rel. St. Dev.	N runs
CL4XYL	6.772	6.772				0
PCB016;3	11.879	11.879				0
PCB016;4	12.497	12.497				0
PCB015;5	13.603	13.603				0
PCB260;1	15.075	15.075				0
PCB260;2	15.349	15.349				0
PCB254;1	16.574	16.574	3.898E+05	3.897E+05		1
PCB254;2	16.806	16.806	4.758E+05	4.757E+05		1
PCB260;3	17.201	17.201				0
PCB260;4	17.477	17.477				0
PCB254;3	17.673	17.673	4.440E+05	4.440E+05		1
PCB260;5	17.864	17.864				0
PCB254;4	18.234	18.234	2.360E+05	2.360E+05		1
PCB254;5	19.215	19.215	2.030E+05	2.030E+05		1
DBUCLE	22.012	22.012				0

ANALYSIS NOTES

1: ERROR in calibration data for Sample or Internal Std. peak. (145)
2: WARNING: Peak windows overlap. Check peak identification. (245)

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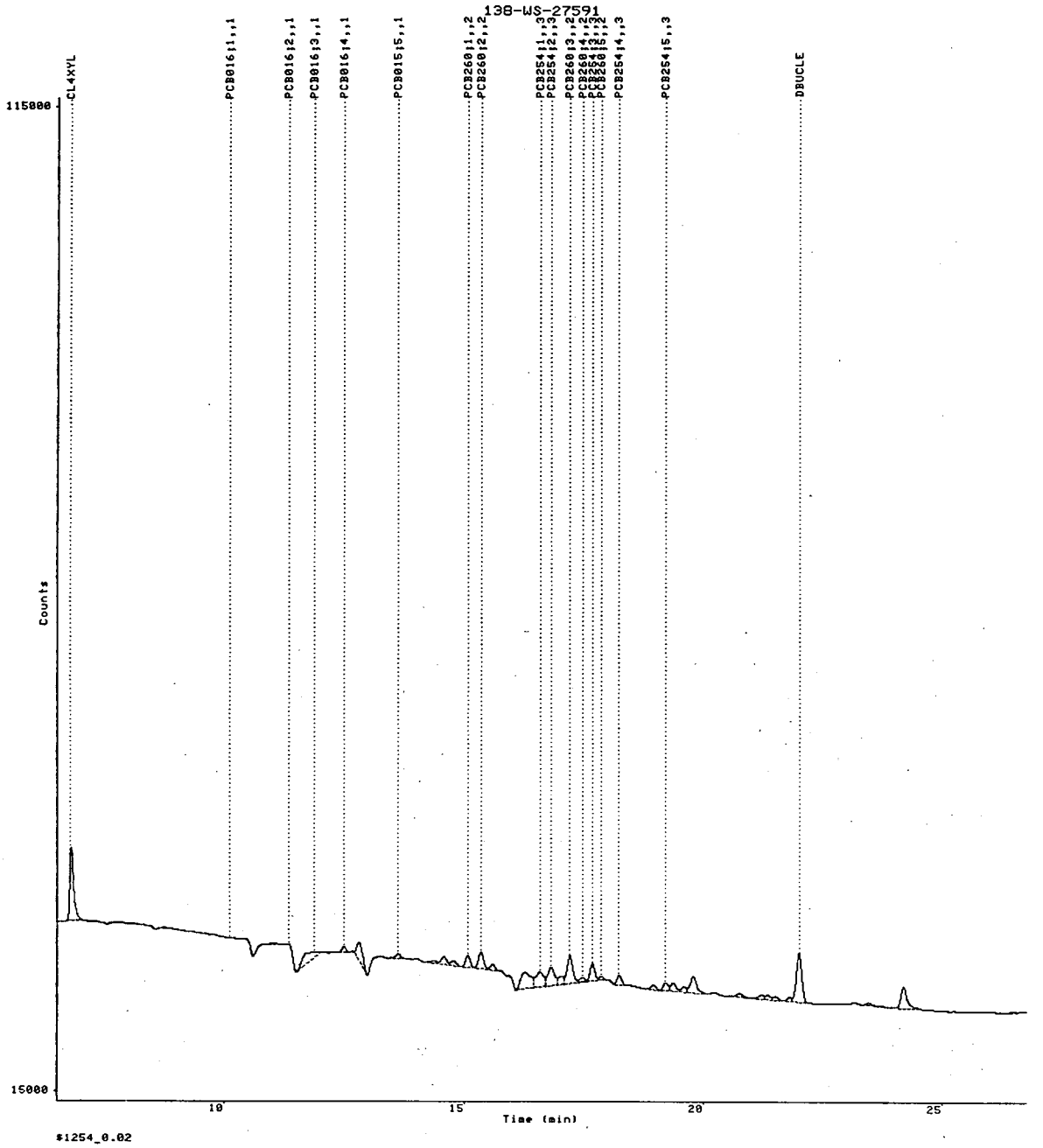
Data file: DISK:[TAYLORC]5697326006.RAW;1
Report: 1197265422
Acquired: 14-NOV-1997 01:25:46
Time range: 6.50-26.75



Date.....15-DEC-1997 16:53:55.85 User: TAYLORC
Report number.....1197265423
Raw file.....DISK:[TAYLORC]5697326007.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;86
Last method update..15-DEC-1997 16:54:02.98

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....22

Acq. date.....14-NOV-1997 02:02:29
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....$1254_0.10
Notes.....138-WS-27591

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min
Area reject.....100 count(s)
Noise threshold.....10.0 microvolts
Start peak width....6.00 sec(s)
Min. window.....8.00 sec

Delay time.....6.500 min
No. peaks found.....83
Area threshold.....120
Area/Pk.Ht.....H
% window.....0.00

Analysis type.....EXTERNAL STANDARD
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic
Calib. factors.....Replace
Volume injected.....1.00000

A/D range.....1.0 volt(s)

Origin treatment....Ignore
Retention times.....Unaltered
(1/x,y) exponent....-1

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
11.88	PCB016;3	1		

EXTERNAL STANDARD CALIBRATION

Calibration Sample name: $1254_0.10

Peak Name	R.T.(min)	Peak Ht	Conc	CF	Ref	Std
CL4XYL	6.796	39088				
PCB016;1	10.091	617				
PCB016;2	11.373	1573				
PCB016;4	12.490	2960				
PCB015;5	13.612	3394				
PCB260;1	15.067	6628				
PCB260;2	15.341	7548				
PCB254;1	16.570	4192	2.0000E-02	2.096E+05		
PCB254;2	16.797	5837	2.0000E-02	2.918E+05		

PCB260;3	17.230	18761		
PCB260;4	17.464	1793		
PCB254;3	17.668	9016	2.0000E-02	4.508E+05
PCB260;5	17.860	3291		
PCB254;4	18.232	4109	2.0000E-02	2.054E+05
PCB254;5	19.218	4529	2.0000E-02	2.264E+05
DBUCLE	22.006	21791		

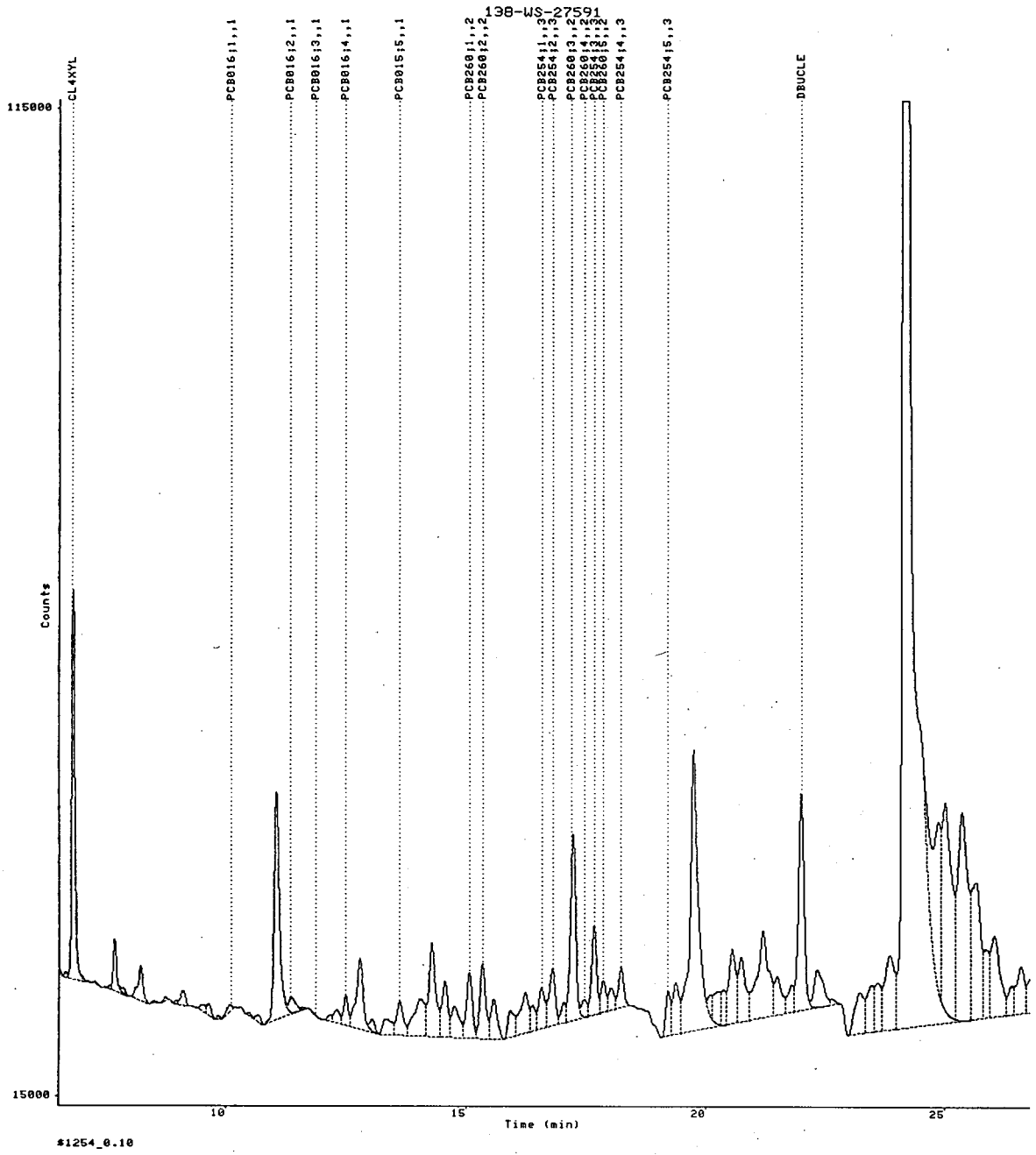
METHOD CALIBRATION CHANGES

Peak Name	Old R.T. (min)	New R.T. (min)	Old CF	New CF	% Rel. St. Dev.	N runs
CL4XYL	6.772	6.772				0
PCB016;1	10.100	10.100				0
PCB016;2	11.337	11.337				0
PCB016;4	12.497	12.497				0
PCB015;5	13.603	13.603				0
PCB260;1	15.075	15.075				0
PCB260;2	15.349	15.349				0
PCB254;1	16.574	16.574	2.096E+05	2.096E+05		1
PCB254;2	16.806	16.806	2.918E+05	2.918E+05		1
PCB260;3	17.201	17.201				0
PCB260;4	17.477	17.477				0
PCB254;3	17.673	17.673	4.508E+05	4.508E+05		1
PCB260;5	17.864	17.864				0
PCB254;4	18.234	18.234	2.054E+05	2.054E+05		1
PCB254;5	19.215	19.215	2.264E+05	2.264E+05		1
DBUCLE	22.012	22.012				0

ANALYSIS NOTES

1: ERROR in calibration data for Sample or Internal Std. peak. (145)
2: WARNING: Peak windows overlap. Check peak identification. (245)

Data file: DISK:[TAYLORC]5697326007.RAW;1
Report: 1197265423
Acquired: 14-NOV-1997 02:02:29
Time range: 6.50-26.75



0148

Date.....15-DEC-1997 16:54:12.28 User: TAYLORC
Report number.....1197265424
Raw file.....DISK:[TAYLORC]5697326008.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;87
Last method update..15-DEC-1997 16:54:19.32

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....22

Acq. date.....14-NOV-1997 02:38:55
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....$1254_0.20
Notes.....138-WS-27591

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....46
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Calib. factors.....Replace Retention times.....Unaltered
Volume injected.....1.00000 (1/x,y) exponent....-1

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
10.10	PCB016;1	1		
11.88	PCB016;3	1		

EXTERNAL STANDARD CALIBRATION

Calibration Sample name: $1254_0.20

Peak Name	R.T.(min)	Peak Ht	Conc	CF	Ref	Std
CL4XYL	6.798	62645				
PCB016;2	11.335	300				
PCB016;4	12.496	5881				
PCB015;5	13.611	3885				
PCB260;1	15.072	11088				
PCB260;2	15.342	13658				
PCB254;1	16.575	5856	4.0000E-02	1.464E+05		
PCB254;2	16.810	9573	4.0000E-02	2.393E+05		

PCB260;3	17.205	19098		
PCB260;4	17.474	3347		
PCB254;3	17.675	13977	4.0000E-02	3.494E+05
PCB260;5	17.862	5818		
PCB254;4	18.240	7847	4.0000E-02	1.962E+05
PCB254;5	19.213	7550	4.0000E-02	1.888E+05
DBUCLE	22.007	42557		

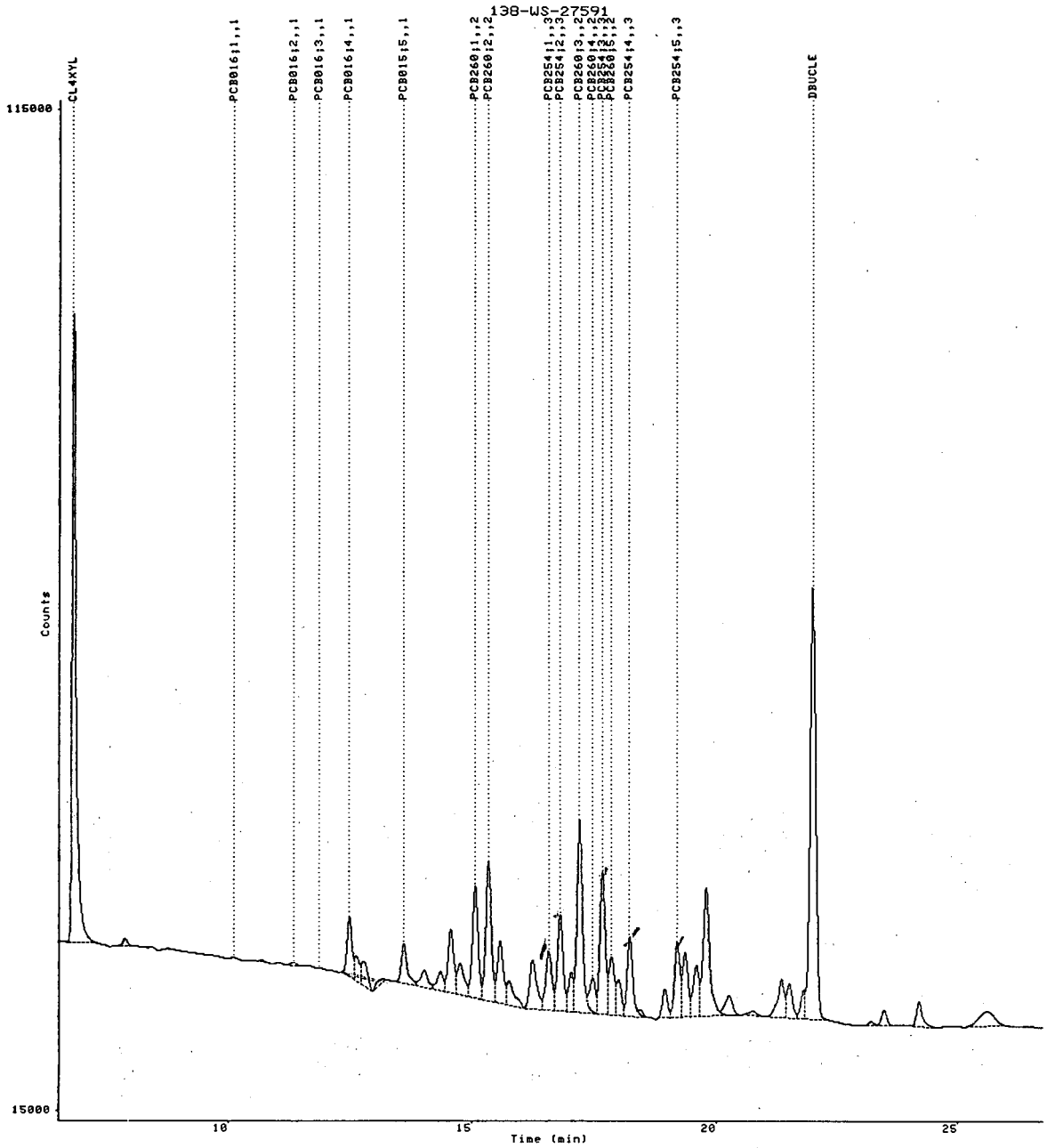
METHOD CALIBRATION CHANGES

Peak Name	Old R.T. (min)	New R.T. (min)	Old CF	New CF	% Rel. St. Dev.	N runs
CL4XYL	6.772	6.772				0
PCB016;2	11.337	11.337				0
PCB016;4	12.497	12.497				0
PCB015;5	13.603	13.603				0
PCB260;1	15.075	15.075				0
PCB260;2	15.349	15.349				0
PCB254;1	16.574	16.574	1.464E+05	1.464E+05		1
PCB254;2	16.806	16.806	2.393E+05	2.393E+05		1
PCB260;3	17.201	17.201				0
PCB260;4	17.477	17.477				0
PCB254;3	17.673	17.673	3.494E+05	3.494E+05		1
PCB260;5	17.864	17.864				0
PCB254;4	18.234	18.234	1.962E+05	1.962E+05		1
PCB254;5	19.215	19.215	1.888E+05	1.888E+05		1
DBUCLE	22.012	22.012				0

ANALYSIS NOTES

1: ERROR in calibration data for Sample or Internal Std. peak. (145)
2: WARNING: Peak windows overlap. Check peak identification. (245)

Data file: DISK:[TAYLORC]5697326008.RAW;1
Report: 1197265424
Acquired: 14-NOV-1997 02:38:55
Time range: 6.50-26.75



$1254_0.20

Date.....15-DEC-1997 16:54:28.65 User: TAYLORC
Report number.....1197265425
Raw file.....DISK:[TAYLORC]5697326009.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;88
Last method update..15-DEC-1997 16:54:35.61

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....22

Acq. date.....14-NOV-1997 03:15:38
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....$1254_1.0
Notes.....138-WS-27591

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
  length.....30 M
  diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....56
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Calib. factors.....Replace Retention times.....Unaltered
Volume injected.....1.00000 (1/x,y) exponent....-1

==========
EXTERNAL STANDARD CALIBRATION
==========
Calibration Sample name: $1254_1.0

Peak Name	R.T.(min)	Peak Ht	Conc	CF	Ref Std
CL4XYL	6.797	293752			
PCB016;1	10.105	703			
PCB016;2	11.336	1829			
PCB016;3	11.885	471			
PCB016;4	12.495	28640			
PCB015;5	13.610	21315			
PCB260;1	15.071	50165			
PCB260;2	15.341	60704			
PCB254;1	16.574	26533	0.20000	1.327E+05	
PCB254;2	16.808	44519	0.20000	2.226E+05	
PCB260;3	17.204	89146			
PCB260;4	17.475	18083			
PCB254;3	17.672	71560	0.20000	3.578E+05	
PCB260;5	17.862	30893			
PCB254;4	18.237	43477	0.20000	2.174E+05	
PCB254;5	19.208	38265	0.20000	1.913E+05	

DBUCLE 22.006 200901

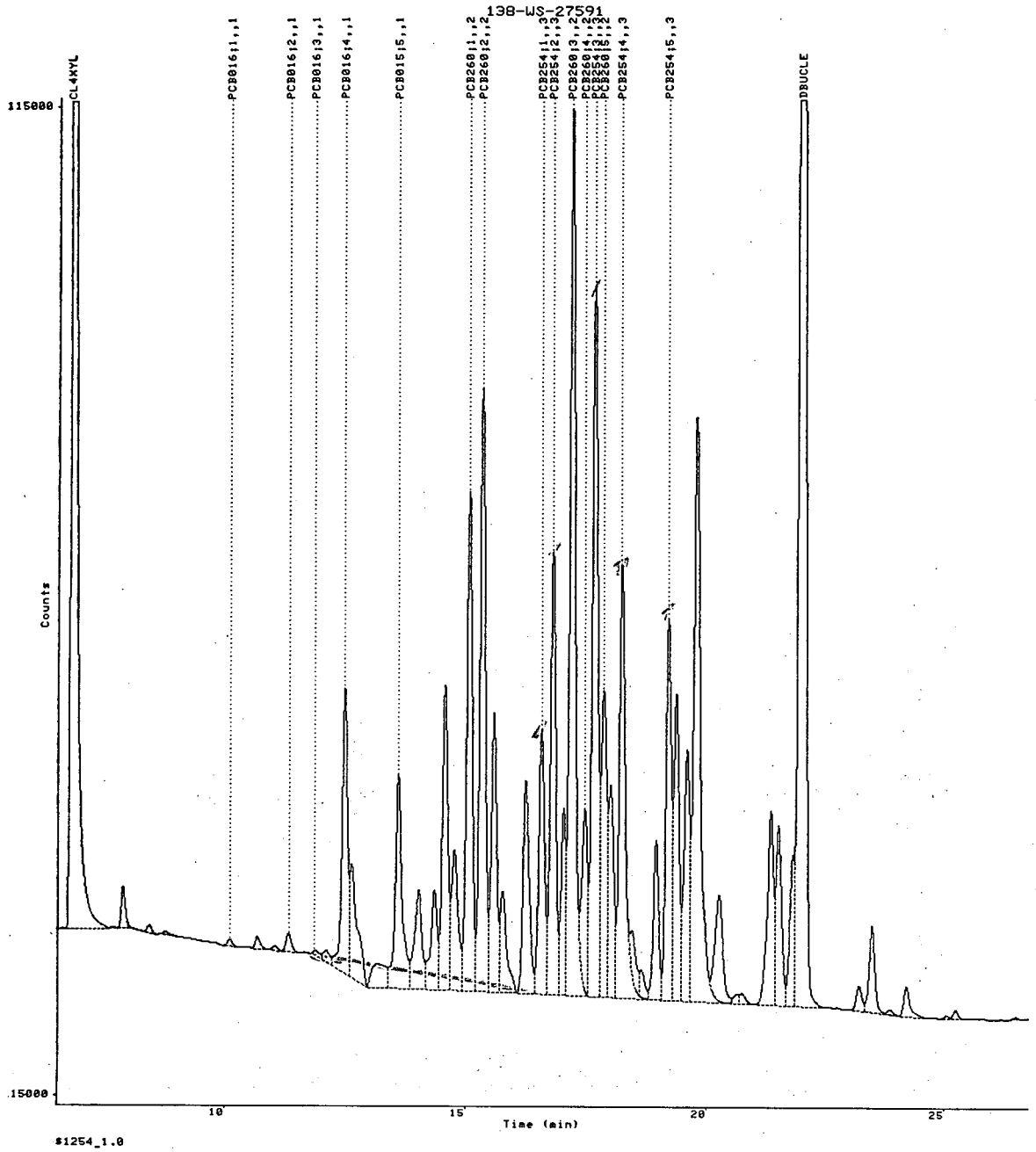
METHOD CALIBRATION CHANGES

Peak Name	Old R.T. (min)	New R.T. (min)	Old CF	New CF	% Rel. St. Dev.	N runs
CL4XYL	6.772	6.772				0
PCB016;1	10.100	10.100				0
PCB016;2	11.337	11.337				0
PCB016;3	11.879	11.879				0
PCB016;4	12.497	12.497				0
PCB015;5	13.603	13.603				0
PCB260;1	15.075	15.075				0
PCB260;2	15.349	15.349				0
PCB254;1	16.574	16.574	1.327E+05	1.327E+05		1
PCB254;2	16.806	16.806	2.226E+05	2.226E+05		1
PCB260;3	17.201	17.201				0
PCB260;4	17.477	17.477				0
PCB254;3	17.673	17.673	3.578E+05	3.578E+05		1
PCB260;5	17.864	17.864				0
PCB254;4	18.234	18.234	2.174E+05	2.174E+05		1
PCB254;5	19.215	19.215	1.913E+05	1.913E+05		1
DBUCLE	22.012	22.012				0

ANALYSIS NOTES

1: ERROR in calibration data for Sample or Internal Std. peak. (145)
2: WARNING: Peak windows overlap. Check peak identification. (245)

Data file: DISK:[TAYLORC]5697326009.RAW;1
Report: 1197265425
Acquired: 14-NOV-1997 03:15:38
Time range: 6.50-26.75



0154

Date.....15-DEC-1997 16:54:44.49 User: TAYLORC
Report number.....1197265426
Raw file.....DISK:[TAYLORC]5697326010.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;89
Last method update..15-DEC-1997 16:54:51.30

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....23

Acq. date.....14-NOV-1997 03:52:23
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....$1254_2.0
Notes.....138-WS-27591

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
  length.....30 M
  diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....54
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Calib. factors.....Replace Retention times.....Unaltered
Volume injected.....1.00000 (1/x,y) exponent.....-1

==========
EXTERNAL STANDARD CALIBRATION
==========
Calibration Sample name: $1254_2.0

Peak Name	R.T.(min)	Peak Ht	Conc	CF	Ref Std
CL4XYL	6.796	491602			--- ---
PCB016;1	10.105	1267			
PCB016;2	11.335	3322			
PCB016;3	11.890	766			
PCB016;4	12.494	46531			
PCB015;5	13.608	33095			
PCB260;1	15.071	82145			
PCB260;2	15.339	100432			
PCB254;1	16.572	44126	0.40000	1.103E+05	
PCB254;2	16.806	75723	0.40000	1.893E+05	
PCB260;3	17.202	150072			
PCB260;4	17.474	30038			
PCB254;3	17.671	122684	0.40000	3.067E+05	
PCB260;5	17.861	51515			
PCB254;4	18.237	74084	0.40000	1.852E+05	
PCB254;5	19.207	66520	0.40000	1.663E+05	

DBUCLE 22.006 347041

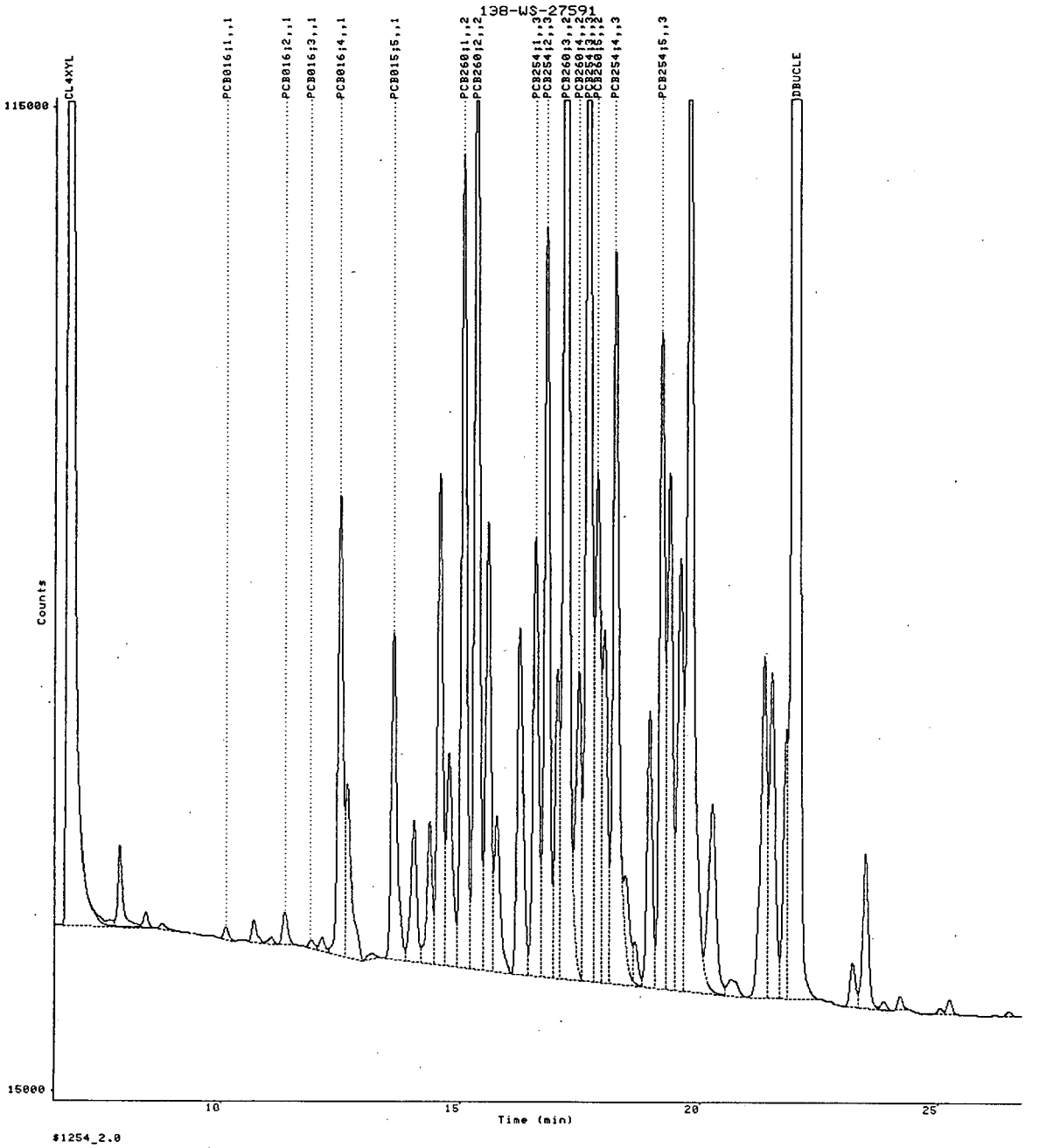
METHOD CALIBRATION CHANGES

Peak Name	Old R.T. (min)	New R.T. (min)	Old CF	New CF	% Rel. St. Dev.	N runs
CL4XYL	6.772	6.772				0
PCB016;1	10.100	10.100				0
PCB016;2	11.337	11.337				0
PCB016;3	11.879	11.879				0
PCB016;4	12.497	12.497				0
PCB015;5	13.603	13.603				0
PCB260;1	15.075	15.075				0
PCB260;2	15.349	15.349				0
PCB254;1	16.574	16.574	1.103E+05	1.103E+05		1
PCB254;2	16.806	16.806	1.893E+05	1.893E+05		1
PCB260;3	17.201	17.201				0
PCB260;4	17.477	17.477				0
PCB254;3	17.673	17.673	3.067E+05	3.067E+05		1
PCB260;5	17.864	17.864				0
PCB254;4	18.234	18.234	1.852E+05	1.852E+05		1
PCB254;5	19.215	19.215	1.663E+05	1.663E+05		1
DBUCLE	22.012	22.012				0

ANALYSIS NOTES

1: ERROR in calibration data for Sample or Internal Std. peak. (145)
2: WARNING: Peak windows overlap. Check peak identification. (245)

Data file: DISK:[TAYLORC]5697326010.RAW;1
Report: 1197265426
Acquired: 14-NOV-1997 03:52:23
Time range: 6.50-26.75



Date.....15-DEC-1997 16:55:00.53 User: TAYLORC
Report number.....1197265427
Raw file.....DISK:[TAYLORC]5697326012.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;90
Last method update..15-DEC-1997 16:55:07.26

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....20

Acq. date.....14-NOV-1997 05:05:54
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....$1660_0.01
Notes.....138-WS-27588-1

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min
Area reject.....100 count(s)
Noise threshold.....10.0 microvolts
Start peak width....6.00 sec(s)
Min. window.....8.00 sec

Delay time.....6.500 min
No. peaks found.....48
Area threshold.....120
Area/Pk.Ht.....H
% window.....0.00

Analysis type.....EXTERNAL STANDARD
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic
Calib. factors.....Replace
Volume injected.....1.00000

A/D range.....1.0 volt(s)

Origin treatment....Ignore
Retention times.....Unaltered
(1/x,y) exponent....-1

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
16.57	PCB254;1	3		
16.81	PCB254;2	3		
19.22	PCB254;5	3		

EXTERNAL STANDARD CALIBRATION

Calibration Sample name: $1660_0.01

Peak Name	R.T.(min)	Peak Ht	Conc	CF	Ref	Std
CL4XYL	6.800	3876	2.0000E-03	1.938E+06		
PCB016;1	10.110	1039	2.0000E-03	5.195E+05		
PCB016;2	11.339	1059	2.0000E-03	5.295E+05		
PCB016;3	11.870	428	2.0000E-03	2.140E+05		
PCB016;4	12.501	117	2.0000E-03	5.850E+04		
PCB015;5	13.599	388	2.0000E-03	1.940E+05		
PCB260;1	15.058	596	2.0000E-03	2.980E+05		

PCB260;2	15.341	264	2.0000E-03	1.320E+05
PCB260;3	17.201	641	2.0000E-03	3.205E+05
PCB260;4	17.460	373	2.0000E-03	1.865E+05
PCB254;3	17.695	123		
PCB260;5	17.871	832	2.0000E-03	4.160E+05
PCB254;4	18.241	1212		
DBUCLE	22.007	2954	2.0000E-03	1.477E+06

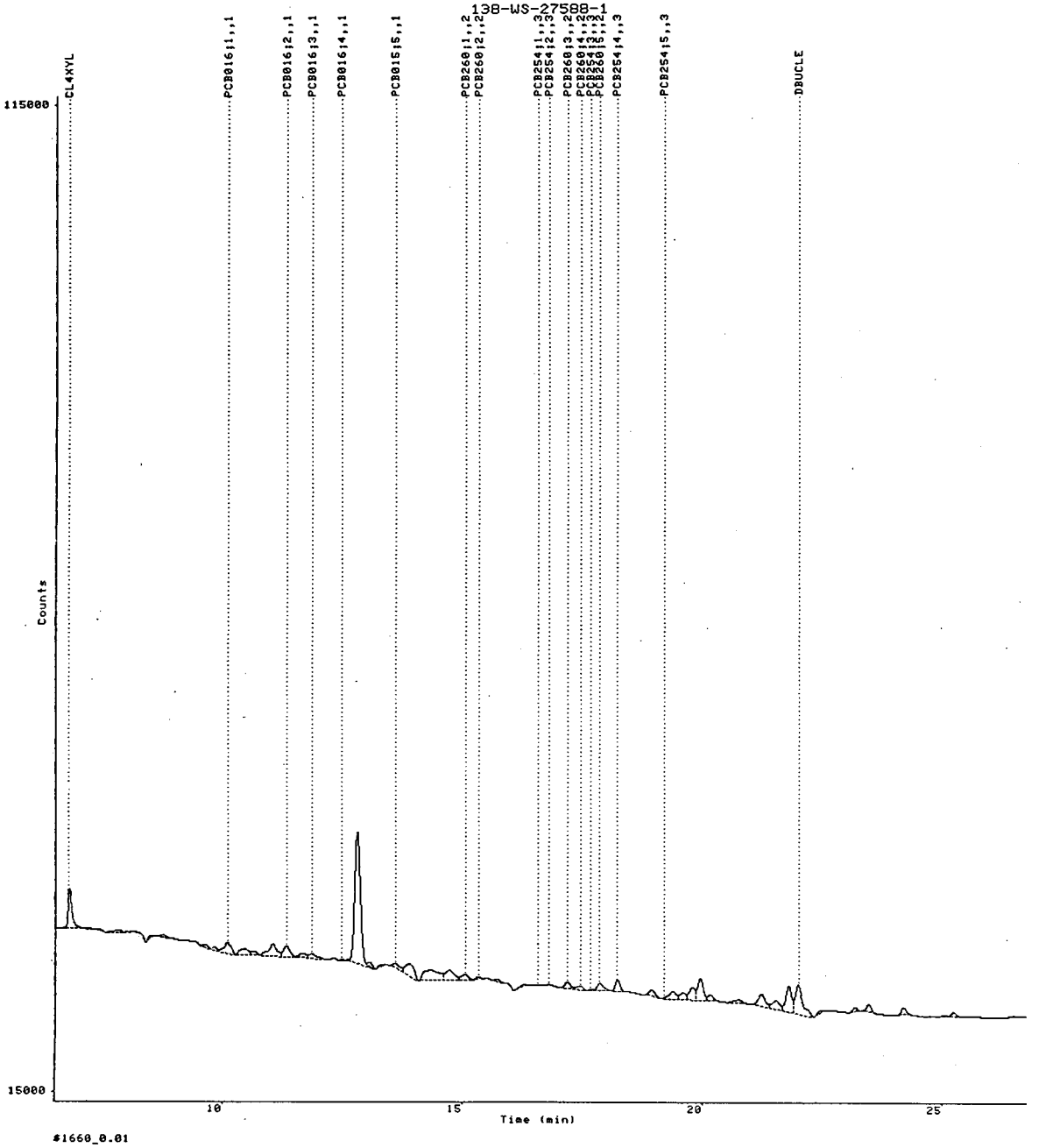
METHOD CALIBRATION CHANGES

Peak Name	Old R.T. (min)	New R.T. (min)	Old CF	New CF	% Rel. St. Dev.	N runs
CL4XYL	6.772	6.772	1.938E+06	1.938E+06		1
PCB016;1	10.100	10.100	5.195E+05	5.195E+05		1
PCB016;2	11.337	11.337	5.295E+05	5.295E+05		1
PCB016;3	11.879	11.879	2.140E+05	2.140E+05		1
PCB016;4	12.497	12.497	5.850E+04	5.850E+04		1
PCB015;5	13.603	13.603	1.940E+05	1.940E+05		1
PCB260;1	15.075	15.075	2.980E+05	2.980E+05		1
PCB260;2	15.349	15.349	1.320E+05	1.320E+05		1
PCB260;3	17.201	17.201	3.205E+05	3.205E+05		1
PCB260;4	17.477	17.477	1.865E+05	1.865E+05		1
PCB254;3	17.673	17.673				0
PCB260;5	17.864	17.864	4.160E+05	4.160E+05		1
PCB254;4	18.234	18.234				0
DBUCLE	22.012	22.012	1.477E+06	1.477E+06		1

ANALYSIS NOTES

1: ERROR in calibration data for Sample or Internal Std. peak. (145)
2: WARNING: Peak windows overlap. Check peak identification. (245)

Data file: DISK:[TAYLORC]5697326012.RAW;1
Report: 1197265427
Acquired: 14-NOV-1997 05:05:54
Time range: 6.50-26.75



0160

Date.....15-DEC-1997 16:55:16.54 User: TAYLORC
Report number.....1197265428
Raw file.....DISK:[TAYLORC]5697326013.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;91
Last method update..15-DEC-1997 16:55:23.40

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....21

Acq. date.....14-NOV-1997 05:42:36
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....$1660_0.10
Notes.....138-WS-27590-4

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
  length.....30 M
  diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....50
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Calib. factors.....Replace Retention times.....Unaltered
Volume injected.....1.00000 (1/x,y) exponent....-1

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
16.57	PCB254;1	3		
19.22	PCB254;5	3		

EXTERNAL STANDARD CALIBRATION

Calibration Sample name: $1660_0.10

Peak Name	R.T.(min)	Peak Ht	Conc	CF	Ref	Std
CL4XYL	6.799	31154	2.0000E-02	1.558E+06		
PCB016;1	10.107	4496	2.0000E-02	2.248E+05		
PCB016;2	11.343	8227	2.0000E-02	4.114E+05		
PCB016;3	11.895	2758	2.0000E-02	1.379E+05		
PCB016;4	12.494	2475	2.0000E-02	1.238E+05		
PCB015;5	13.609	3217	2.0000E-02	1.608E+05		
PCB260;1	15.070	2476	2.0000E-02	1.238E+05		
PCB260;2	15.345	2683	2.0000E-02	1.342E+05		

PCB254;2	16.813	537		
PCB260;3	17.200	5000	2.0000E-02	2.500E+05
PCB260;4	17.476	2374	2.0000E-02	1.187E+05
PCB254;3	17.684	390		
PCB260;5	17.870	6400	2.0000E-02	3.200E+05
PCB254;4	18.241	9892		
DBUCLE	22.006	21698	2.0000E-02	1.085E+06

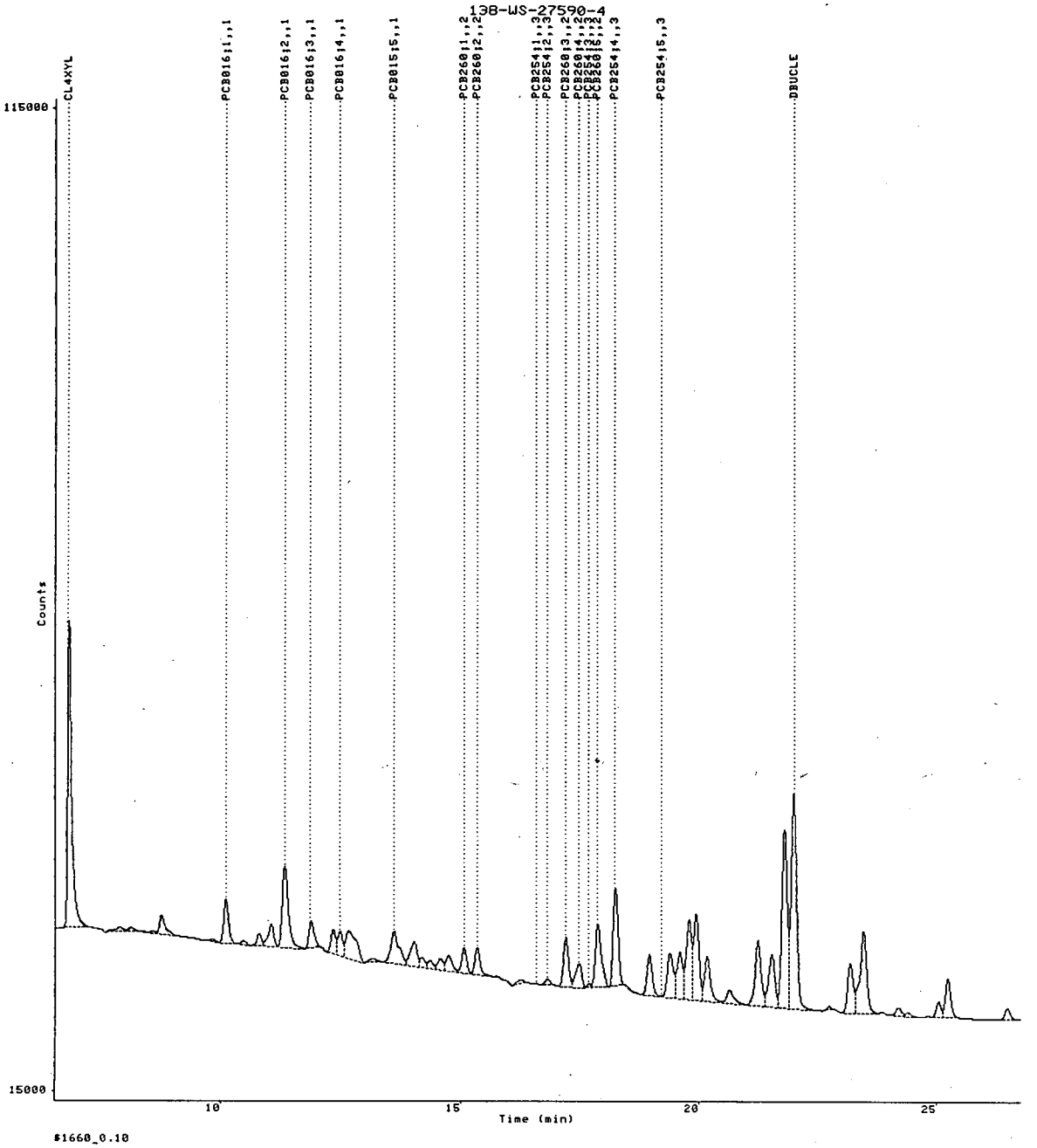
METHOD CALIBRATION CHANGES

Peak Name	Old R.T. (min)	New R.T. (min)	Old CF	New CF	% Rel. St. Dev.	N runs
CL4XYL	6.772	6.772	1.558E+06	1.558E+06		1
PCB016;1	10.100	10.100	2.248E+05	2.248E+05		1
PCB016;2	11.337	11.337	4.114E+05	4.114E+05		1
PCB016;3	11.879	11.879	1.379E+05	1.379E+05		1
PCB016;4	12.497	12.497	1.238E+05	1.238E+05		1
PCB015;5	13.603	13.603	1.608E+05	1.608E+05		1
PCB260;1	15.075	15.075	1.238E+05	1.238E+05		1
PCB260;2	15.349	15.349	1.342E+05	1.342E+05		1
PCB254;2	16.806	16.806				0
PCB260;3	17.201	17.201	2.500E+05	2.500E+05		1
PCB260;4	17.477	17.477	1.187E+05	1.187E+05		1
PCB254;3	17.673	17.673				0
PCB260;5	17.864	17.864	3.200E+05	3.200E+05		1
PCB254;4	18.234	18.234				0
DBUCLE	22.012	22.012	1.085E+06	1.085E+06		1

ANALYSIS NOTES

1: ERROR in calibration data for Sample or Internal Std. peak. (145)
2: WARNING: Peak windows overlap. Check peak identification. (245)

Data file: DISK:[TAYLORC]5697326013.RAW;1
Report: 1197265428
Acquired: 14-NOV-1997 05:42:36
Time range: 6.50-26.75



Date.....15-DEC-1997 16:55:33.17 User: TAYLORC
Report number.....1197265429
Raw file.....DISK:[TAYLORC]5697326014.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;92
Last method update..15-DEC-1997 16:55:40.13

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....21

Acq. date.....14-NOV-1997 06:19:23
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....$1660_0.20
Notes.....138-WS-27590-3

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min
Area reject.....100 count(s)
Noise threshold.....10.0 microvolts
Start peak width....6.00 sec(s)
Min. window.....8.00 sec

Delay time.....6.500 min
No. peaks found.....55
Area threshold.....120
Area/Pk.Ht.....H
% window.....0.00

Analysis type.....EXTERNAL STANDARD
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic
Calib. factors.....Replace
Volume injected.....1.00000

A/D range.....1.0 volt(s)

Origin treatment....Ignore
Retention times.....Unaltered
(1/x,y) exponent....-1

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref Std
19.22	PCB254;5	3	

EXTERNAL STANDARD CALIBRATION

Calibration Sample name: $1660_0.20

Peak Name	R.T.(min)	Peak Ht	Conc	CF	Ref Std
CL4XYL	6.799	58744	4.0000E-02	1.469E+06	
PCB016;1	10.107	8559	4.0000E-02	2.140E+05	
PCB016;2	11.342	15617	4.0000E-02	3.904E+05	
PCB016;3	11.895	5382	4.0000E-02	1.346E+05	
PCB016;4	12.495	4710	4.0000E-02	1.178E+05	
PCB015;5	13.609	6816	4.0000E-02	1.704E+05	
PCB260;1	15.071	5919	4.0000E-02	1.480E+05	
PCB260;2	15.343	6261	4.0000E-02	1.565E+05	
PCB254;1	16.564	501			

PCB254;2	16.814	1210		
PCB260;3	17.199	9421	4.0000E-02	2.355E+05
PCB260;4	17.476	4371	4.0000E-02	1.093E+05
PCB254;3	17.678	874		
PCB260;5	17.869	11882	4.0000E-02	2.970E+05
PCB254;4	18.239	18391		
DBUCLE	22.006	41468	4.0000E-02	1.037E+06

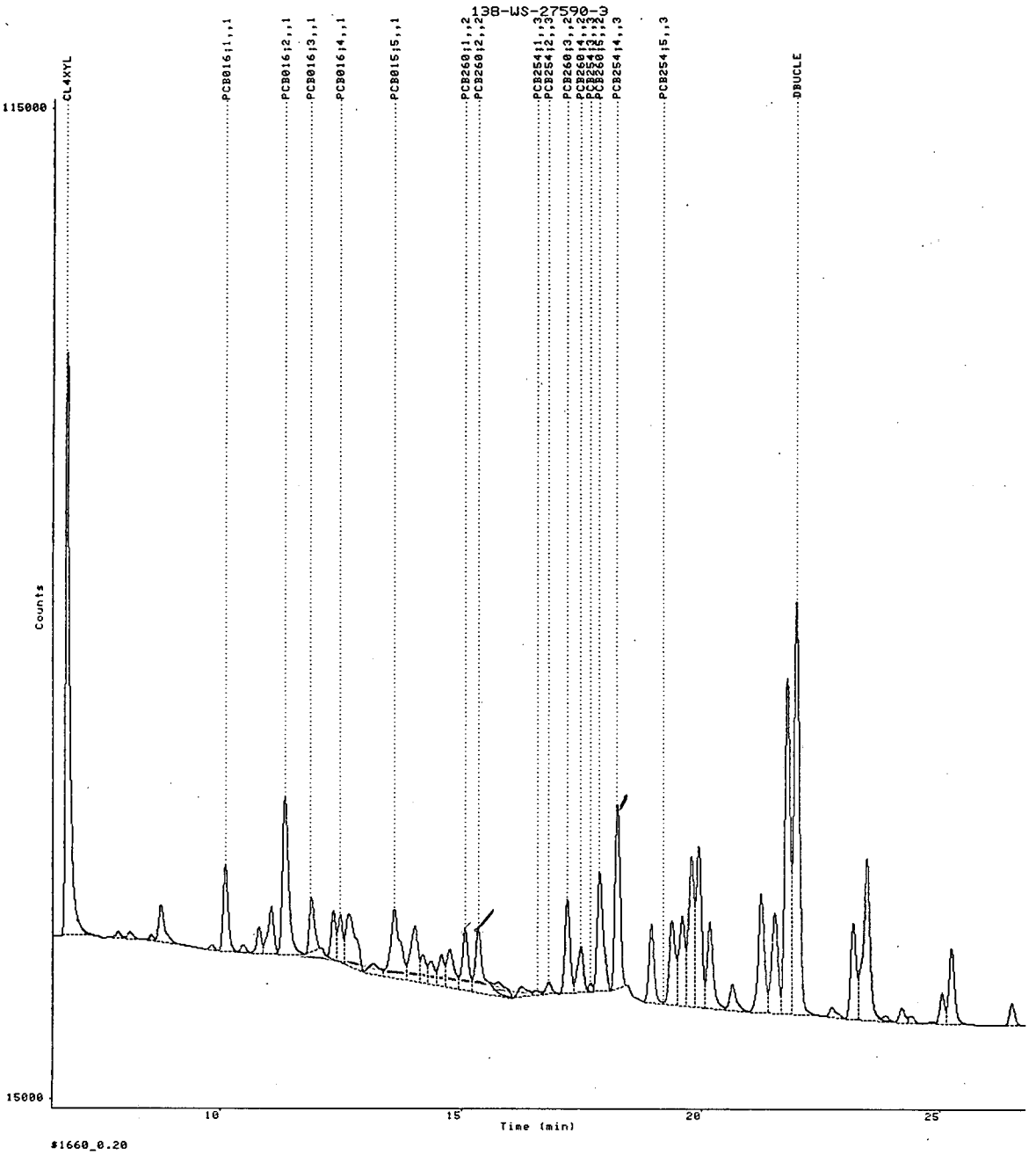
METHOD CALIBRATION CHANGES

Peak Name	Old R.T. (min)	New R.T. (min)	Old CF	New CF	% Rel. St. Dev.	N runs
CL4XYL	6.772	6.772	1.469E+06	1.469E+06		1
PCB016;1	10.100	10.100	2.140E+05	2.140E+05		1
PCB016;2	11.337	11.337	3.904E+05	3.904E+05		1
PCB016;3	11.879	11.879	1.346E+05	1.346E+05		1
PCB016;4	12.497	12.497	1.178E+05	1.178E+05		1
PCB015;5	13.603	13.603	1.704E+05	1.704E+05		1
PCB260;1	15.075	15.075	1.480E+05	1.480E+05		1
PCB260;2	15.349	15.349	1.565E+05	1.565E+05		1
PCB254;1	16.574	16.574				0
PCB254;2	16.806	16.806				0
PCB260;3	17.201	17.201	2.355E+05	2.355E+05		1
PCB260;4	17.477	17.477	1.093E+05	1.093E+05		1
PCB254;3	17.673	17.673				0
PCB260;5	17.864	17.864	2.970E+05	2.970E+05		1
PCB254;4	18.234	18.234				0
DBUCLE	22.012	22.012	1.037E+06	1.037E+06		1

ANALYSIS NOTES

1: ERROR in calibration data for Sample or Internal Std. peak. (145)
2: WARNING: Peak windows overlap. Check peak identification. (245)

Data file: DISK:[TAYLORC]5697326014.RAW;1
Report: 1197265429
Acquired: 14-NOV-1997 06:19:23
Time range: 6.50-26.75



0166

Date.....15-DEC-1997 16:55:48.58 User: TAYLORC
Report number.....1197265430
Raw file.....DISK:[TAYLORC]5697326015.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;93
Last method update..15-DEC-1997 16:55:55.58

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....23

Acq. date.....14-NOV-1997 06:56:05
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....$1660_1.0
Notes.....138-WS-27590-2

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min
Area reject.....100 count(s)
Noise threshold.....10.0 microvolts
Start peak width....6.00 sec(s)
Min. window.....8.00 sec

Delay time.....6.500 min
No. peaks found.....65
Area threshold.....120
Area/Pk.Ht.....H
% window.....0.00

Analysis type.....EXTERNAL STANDARD
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic
Calib. factors.....Replace
Volume injected.....1.00000

A/D range.....1.0 volt(s)

Origin treatment....Ignore
Retention times.....Unaltered
(1/x,y) exponent....-1

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
16.57	PCB254;1	3		
19.22	PCB254;5	3		

EXTERNAL STANDARD CALIBRATION

Calibration Sample name: $1660_1.0

Peak Name	R.T.(min)	Peak Ht	Conc	CF	Ref	Std
CL4XYL	6.797	266553	0.20000	1.333E+06		
PCB016;1	10.100	40599	0.20000	2.030E+05		
PCB016;2	11.331	75357	0.20000	3.768E+05		
PCB016;3	11.884	30595	0.20000	1.530E+05		
PCB016;4	12.491	20557	0.20000	1.028E+05		
PCB015;5	13.603	26913	0.20000	1.346E+05		
PCB260;1	15.067	21717	0.20000	1.086E+05		
PCB260;2	15.337	24211	0.20000	1.211E+05		

PCB254;2	16.785	7417		
PCB260;3	17.195	44991	0.20000	2.250E+05
PCB260;4	17.472	22180	0.20000	1.109E+05
PCB254;3	17.671	9398		
PCB260;5	17.865	56496	0.20000	2.825E+05
PCB254;4	18.234	92910		
DBUCLE	22.005	195086	0.20000	9.754E+05

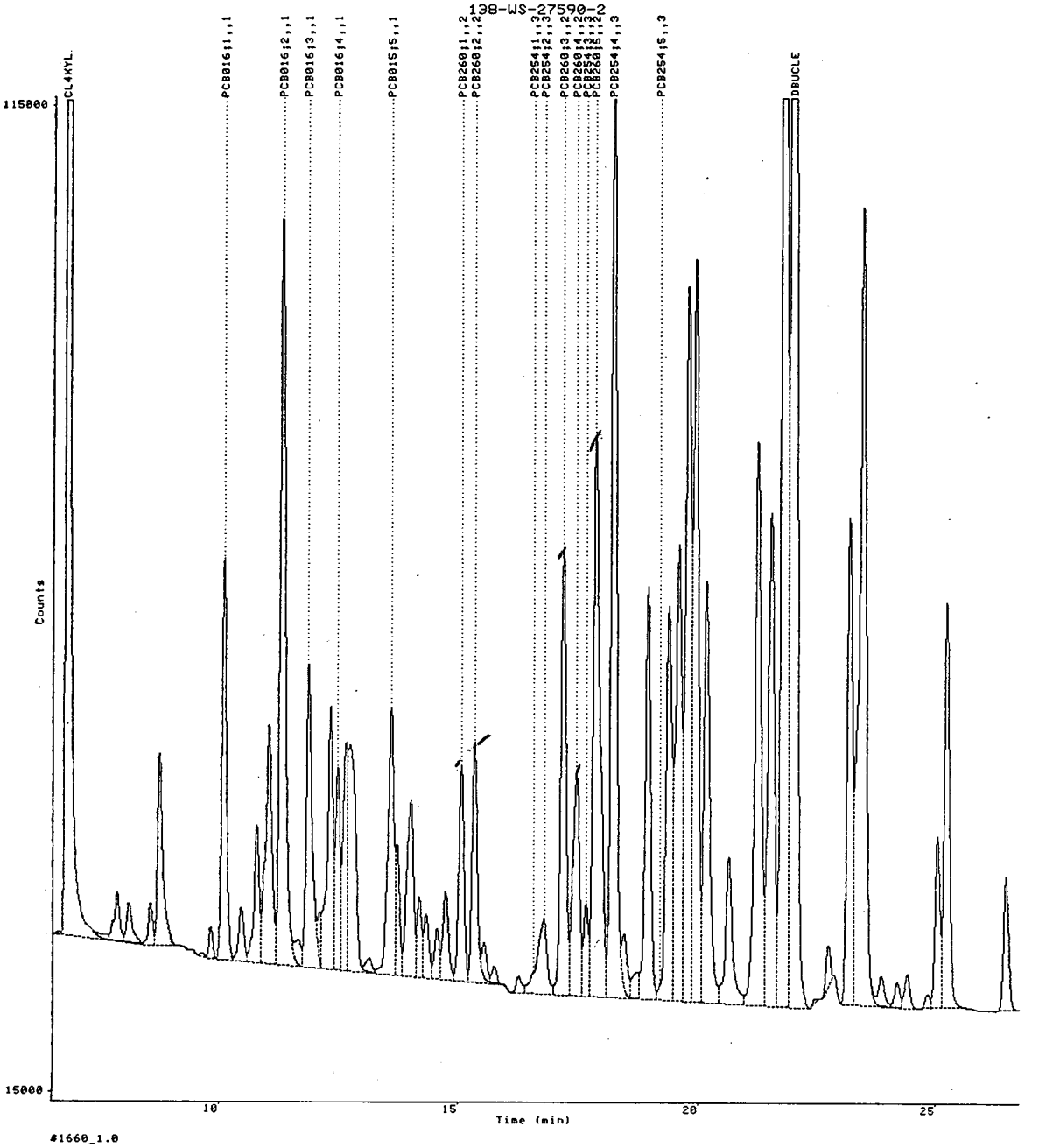
METHOD CALIBRATION CHANGES

Peak Name	Old R.T. (min)	New R.T. (min)	Old CF	New CF	% Rel. St. Dev.	N runs
CL4XYL	6.772	6.772	1.333E+06	1.333E+06		1
PCB016;1	10.100	10.100	2.030E+05	2.030E+05		1
PCB016;2	11.337	11.337	3.768E+05	3.768E+05		1
PCB016;3	11.879	11.879	1.530E+05	1.530E+05		1
PCB016;4	12.497	12.497	1.028E+05	1.028E+05		1
PCB015;5	13.603	13.603	1.346E+05	1.346E+05		1
PCB260;1	15.075	15.075	1.086E+05	1.086E+05		1
PCB260;2	15.349	15.349	1.211E+05	1.211E+05		1
PCB254;2	16.806	16.806				0
PCB260;3	17.201	17.201	2.250E+05	2.250E+05		1
PCB260;4	17.477	17.477	1.109E+05	1.109E+05		1
PCB254;3	17.673	17.673				0
PCB260;5	17.864	17.864	2.825E+05	2.825E+05		1
PCB254;4	18.234	18.234				0
DBUCLE	22.012	22.012	9.754E+05	9.754E+05		1

ANALYSIS NOTES

1: ERROR in calibration data for Sample or Internal Std. peak. (145)
2: WARNING: Peak windows overlap. Check peak identification. (245)

Data file: DISK:[TAYLORC]5697326015.RAW;1
Report: 1197265430
Acquired: 14-NOV-1997 06:56:05
Time range: 6.50-26.75



0169

Date.....15-DEC-1997 16:56:05.26 User: TAYLORC
Report number.....1197265431
Raw file.....DISK:[TAYLORC]5697326016.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;94
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....22

Acq. date.....14-NOV-1997 07:32:51
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....$1660_2.0
Notes.....138-WS-27590-1

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....66
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Calib. factors.....Replace Retention times.....Unaltered
Volume injected.....1.00000 (1/x,y) exponent....-1

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
19.22	PCB254;5	3		

EXTERNAL STANDARD CALIBRATION

Calibration Sample name: $1660_2.0

Peak Name	R.T.(min)	Peak Ht	Conc	CF	Ref	Std
CL4XYL	6.796	477923	0.40000	1.195E+06		
PCB016;1	10.098	67270	0.40000	1.682E+05		
PCB016;2	11.332	130942	0.40000	3.274E+05		
PCB016;3	11.884	55074	0.40000	1.377E+05		
PCB016;4	12.490	38449	0.40000	9.612E+04		
PCB015;5	13.602	50589	0.40000	1.265E+05		
PCB260;1	15.067	41715	0.40000	1.043E+05		
PCB260;2	15.338	43894	0.40000	1.097E+05		
PCB254;1	16.570	2726				

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PCB254;2	16.808	10895		
PCB260;3	17.196	75974	0.40000	1.899E+05
PCB260;4	17.472	37426	0.40000	9.356E+04
PCB254;3	17.671	15444		
PCB260;5	17.865	93972	0.40000	2.349E+05
PCB254;4	18.235	153373		
DBUCLE	22.005	338384	0.40000	8.460E+05

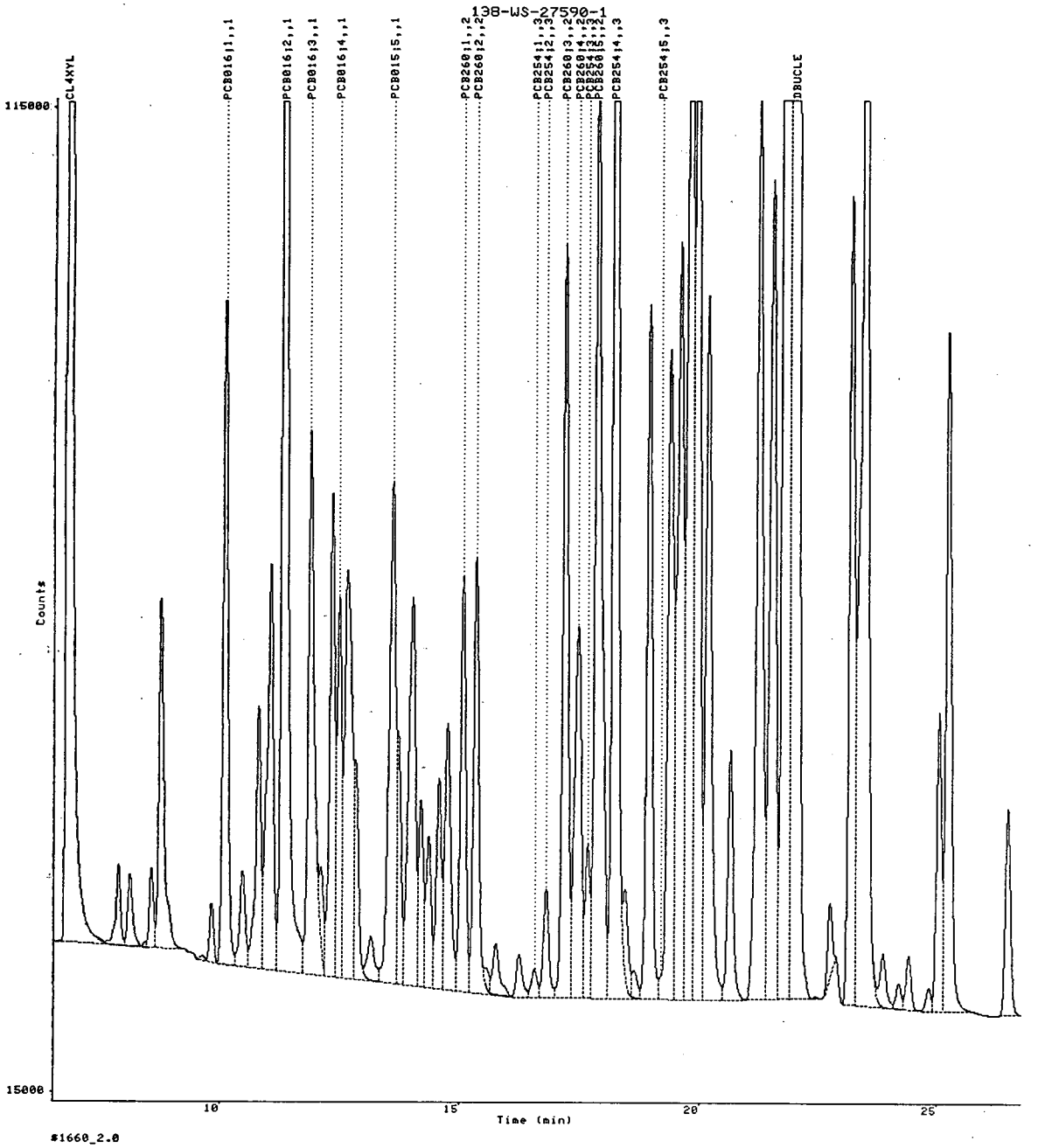
METHOD CALIBRATION CHANGES

Peak Name	Old R.T. (min)	New R.T. (min)	Old CF	New CF	% Rel. St. Dev.	N runs
CL4XYL	6.772	6.772	1.195E+06	1.195E+06		1
PCB016;1	10.100	10.100	1.682E+05	1.682E+05		1
PCB016;2	11.337	11.337	3.274E+05	3.274E+05		1
PCB016;3	11.879	11.879	1.377E+05	1.377E+05		1
PCB016;4	12.497	12.497	9.612E+04	9.612E+04		1
PCB015;5	13.603	13.603	1.265E+05	1.265E+05		1
PCB260;1	15.075	15.075	1.043E+05	1.043E+05		1
PCB260;2	15.349	15.349	1.097E+05	1.097E+05		1
PCB254;1	16.574	16.574				0
PCB254;2	16.806	16.806				0
PCB260;3	17.201	17.201	1.899E+05	1.899E+05		1
PCB260;4	17.477	17.477	9.356E+04	9.356E+04		1
PCB254;3	17.673	17.673				0
PCB260;5	17.864	17.864	2.349E+05	2.349E+05		1
PCB254;4	18.234	18.234				0
DBUCLE	22.012	22.012	8.460E+05	8.460E+05		1

ANALYSIS NOTES

1: ERROR in calibration data for Sample or Internal Std. peak. (145)
2: WARNING: Peak windows overlap. Check peak identification. (245)

Data file: DISK:[TAYLORC]5697326016.RAW;1
Report: 1197265431
Acquired: 14-NOV-1997 07:32:51
Time range: 6.50-26.75



0172

Date.....15-DEC-1997 16:56:36.10 User: TAYLORC
Report number.....1197265433
Raw file.....DISK:[TAYLORC]5697326002.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....17

Acq. date.....13-NOV-1997 22:58:46
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....PCB221_2.0
Notes.....138-WS-27569-1

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
  length.....30 M
  diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....54
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...1.00000E+00

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EXTERNAL STANDARD ANALYSIS

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Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref Std	BL	Group
CL4XYL	6.795	-1.38	0.4936 +	556125		BE	
	7.789			5691		EV	
	7.873			11135		EV	
	8.110			28250		VE	
	8.422			1884		EV	
	8.565			18910		VV	
	8.757			56104		VE	
	8.929			9706		EB	
	9.804			4017		BV	
PCB016;1	10.086	0.82	0.04736	10595		VB	1
	10.480			1011		BV	
	10.692			2800		VV	
	10.797			2102		VV	
	11.058			6046		VV	
PCB016;2	11.340	-0.16	0.03106	12750		VB	1

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PCB016;3	11.895	-0.94	0.03725	5578	BV	1
	12.348			4954	VV	
PCB016;4	12.491	0.37	0.02493	2792	VV	1
	12.796			6135	VB	
	13.117			624	BB	
PCB015;5	13.592	0.66	0.01499	2397	BV	1
	14.013			1118	VV	
	14.204			407	VV	
	14.361			1055	VV	
	14.575			2301	VV	
	14.768			2213	VV	
PCB260;1	15.075	0.03	0.02066	2799	VV	2
PCB260;2	15.345	0.23	0.02412	3359	VV	2
	15.585			1252	VV	
	15.767			1662	VB	
	16.257			1478	BV	
PCB254;1	16.578	-0.25	3.569E-03-	1501	VV	3
PCB254;2	16.813	-0.43	5.561E-03	2227	VV	3
	17.041			760	VV	
PCB260;3	17.210	-0.52	0.01653	4206	VB	2
PCB260;4	17.479	-0.15	3.355E-03	499	BB	2
PCB254;3	17.681	-0.45	5.072E-03	2222	BV	3
PCB260;5	17.872	-0.51	2.427E-03	932	VB	2
PCB254;4	18.245	-0.65	8.184E-03	1745	BB	3
	18.953			795	BB	
PCB254;5	19.219	-0.21	5.393E-03	1112	BV	3
	19.381			1349	VV	
	19.632			1552	VV	
	19.808			2763	VE	
	20.187			330	EB	
	20.765			1478	BV	
	21.232			1139	VV	
	21.529			476	VB	
DBUCLE	22.012	-0.02	0.4601 +	374556	BB	
	23.193			299	BB	
	23.476			363	BB	
	24.200			2236	BB	
	25.238			147	BB	
	29.911			232	BB	

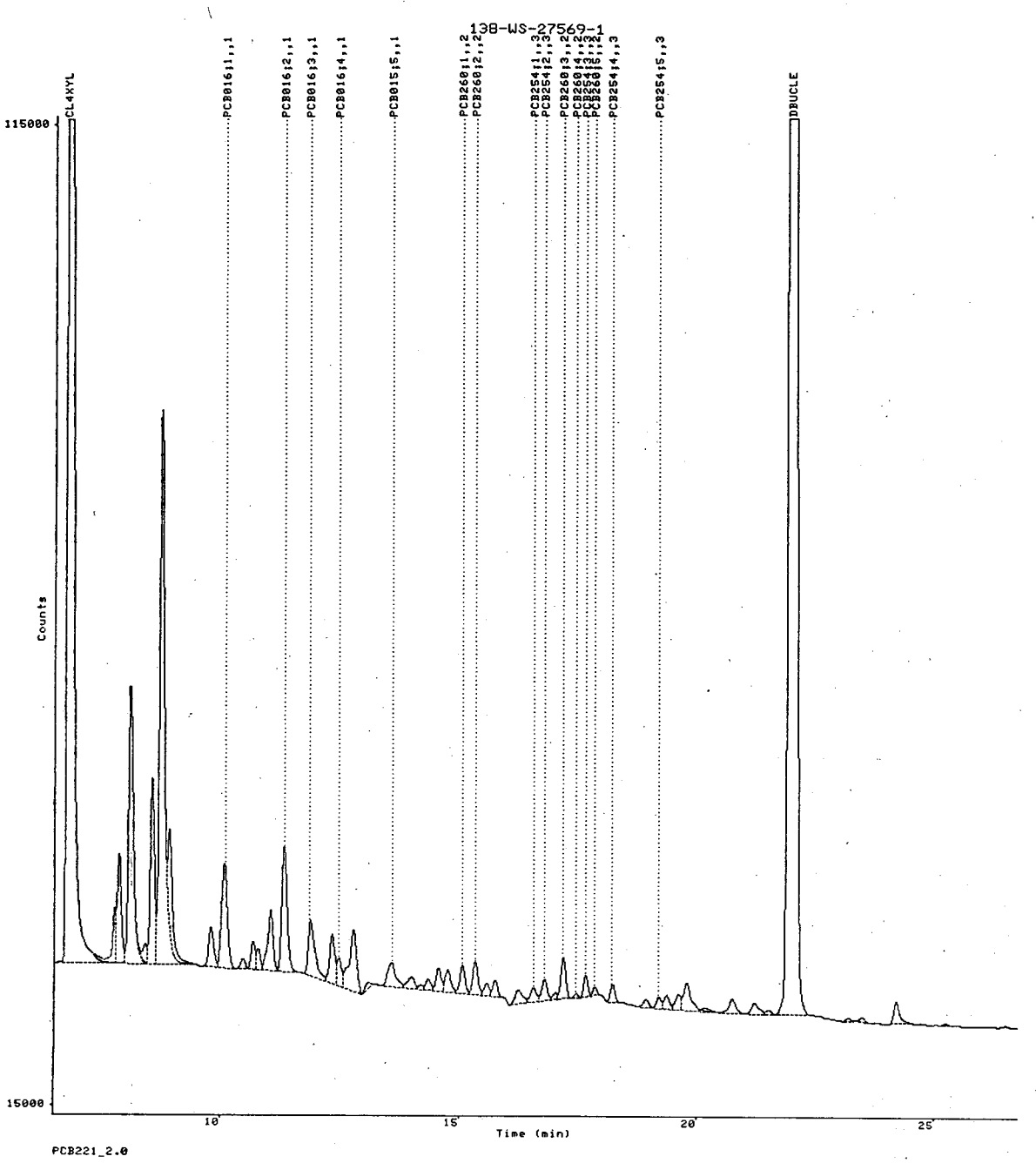
GROUP REPORT

Group	UG/ML
1	0.1556
2	6.710E-02
3	2.778E-02

ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)
2: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697326002.RAW;1
Report: 1197265433
Acquired: 13-NOV-1997 22:58:46
Time range: 6.50-26.75



0175

Date.....15-DEC-1997 16:56:49.74 User: TAYLORC
Report number.....1197265434
Raw file.....DISK:[TAYLORC]5697326003.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....17

Acq. date.....13-NOV-1997 23:35:29
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....PCB232_2.0
Notes.....138-WS-27570-1

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
  length.....30 M
  diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....59
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...1.00000E+00

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EXTERNAL STANDARD ANALYSIS
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Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref Std	BL	Group
CL4XYL	6.795	-1.36	0.3682	447911		BE	
	7.622			546		EV	
	7.872			8226		EV	
	8.109			13465		EB	
	8.564			10290		BV	
	8.756			36504		VE	
	8.927			4191		EB	
	9.645			637		BV	
	9.823			3724		VB	
PCB016;1	10.099	0.08	0.1644	33102		BB	
	10.469			4635		BV	
	10.801			11319		VV	
	11.054			22452		VV	
PCB016;2	11.332	0.31	0.1628	61592		VV	1
PCB016;3	11.885	-0.36	0.1768	25649		VE	1

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	12.105			2686	EV	
	12.340			21704	VV	
PCB016;4	12.492	0.27	0.1403	15309	VV	1
	12.781			26773	VE	
	13.080			1228	EB	
PCB015;5	13.602	0.04	0.1011	14888	BB	1
	13.897			8866	BB	
	14.200			3822	BV	
	14.356			10006	VV	
	14.567			19827	VV	
	14.762			25418	VV	
PCB260;1	15.070	0.32	0.03612	4593	VB	2
PCB260;2	15.340	0.55	0.04254	5864	BV	2
	15.578			3276	VV	
	15.762			25058	VB	
	16.277			2479	BV	
PCB254;1	16.576	-0.10	0.02229	4104	VV	3
PCB254;2	16.809	-0.19	0.01724	4994	VV	3
	17.046			4293	VV	
PCB260;3	17.205	-0.24	0.03212	7990	VE	2
PCB260;4	17.470	0.39	0.01089	1387	EV	2
PCB254;3	17.677	-0.27	0.01308	5327	VV	3
PCB260;5	17.865	-0.07	4.097E-03	1459	VV	2
	18.032			2382	VV	
PCB254;4	18.241	-0.45	8.086E-03	1723	VB	3
	18.912			1444	BB	
PCB254;5	19.210	0.30	0.01834	3797	BE	3
	19.377			569	EB	
	19.628			569	BV	
	19.812			1203	VB	
	20.166			544	BB	
	20.403			51	BB	
	20.761			1530	BV	
	21.224			3548	VV	
	21.538			1538	VV	
DBUCLE	22.009	0.21	0.3330	295225	VB	
	22.559			559	BB	
	23.196			1189	BV	
	23.476			1519	VB	
	24.195			1647	BB	
	25.034			293	BV	
	25.233			663	VB	
	26.490			160	BB	
	29.903			134	BB	

GROUP REPORT

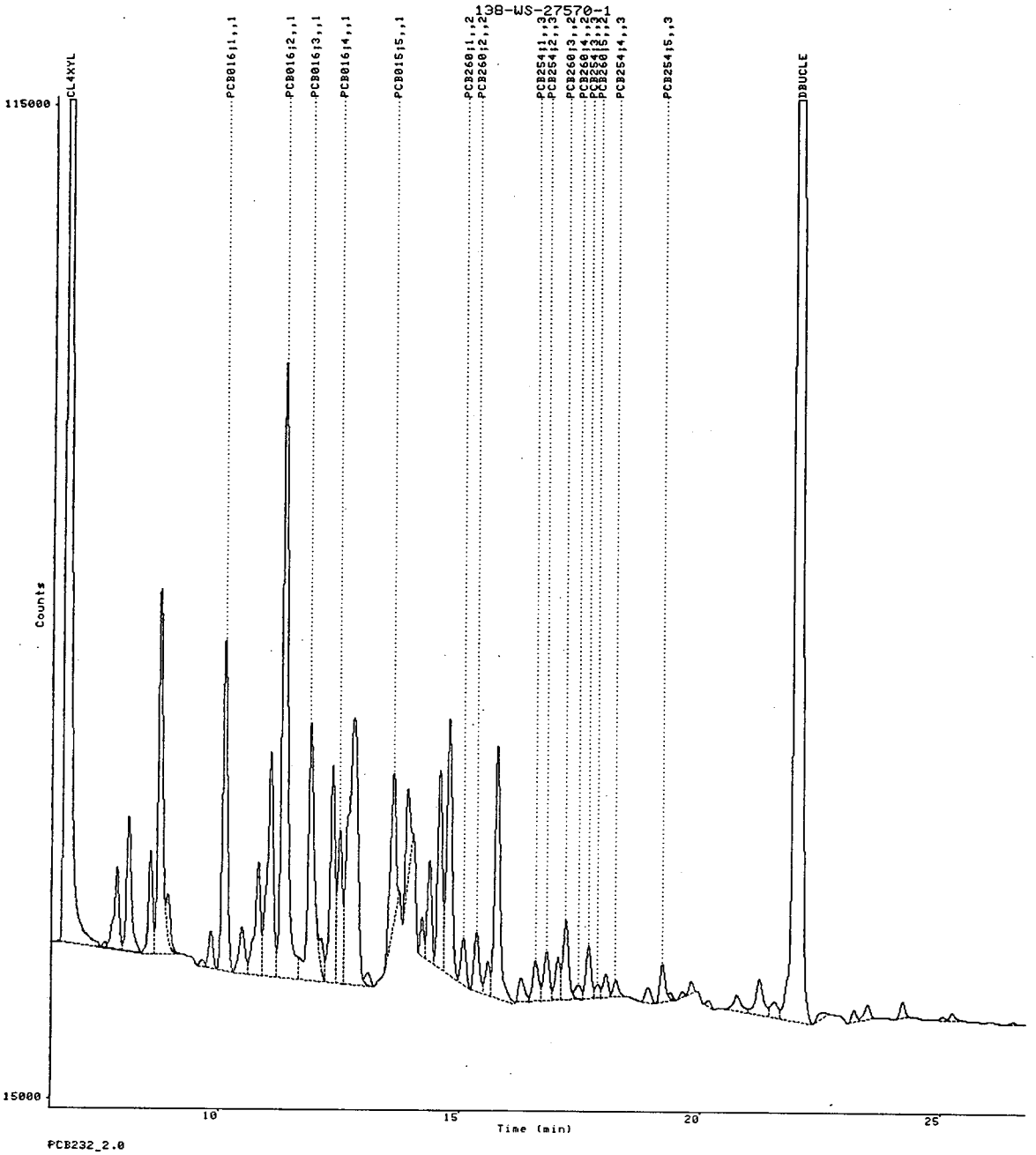
Group	UG/ML
1	0.7454
2	0.1258
3	7.904E-02

ANALYSIS NOTES

0177

1: WARNING: Peak windows overlap. Check peak identification. (245)

Data file: DISK:[TAYLORC]5697326003.RAW;1
Report: 1197265434
Acquired: 13-NOV-1997 23:35:29
Time range: 6.50-26.75



Date.....15-DEC-1997 16:57:03.44 User: TAYLORC
Report number.....1197265435
Raw file.....DISK:[TAYLORC]5697326004.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....17

Acq. date.....14-NOV-1997 00:12:15
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....PCB242_2.0
Notes.....138-WS-27571-1

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
  length.....30 M
  diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....84
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...1.00000E+00

==========
EXTERNAL STANDARD ANALYSIS
==========
Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref Std	BL	Group
	6.628			1271		BV	
CL4XYL	6.795	-1.35	0.2504	325928		VE	
	7.254			592		EB	
	7.671			17399		BV	
	7.869			6616		VV	
	8.113			4917		VV	
	8.221			14001		VB	
	8.427			193		BV	
	8.560			5093		VV	
	8.753			22790		VE	
	9.108			686		EB	
	9.520			385		BV	
	9.645			1026		VB	
	9.827			2804		BB	
PCB016;1	10.097	0.18	0.1933	38122		BE	1

0179

	10.469			4577	EV	
	10.797			11626	VV	
	11.053			45937	VV	
PCB016;2	11.327	0.60	0.1838	68691	VE	1
	11.698			2278	EV	
PCB016;3	11.880	-0.05	0.1905	27564	VE	1
	12.124			3241	EV	
	12.334			23606	VV	
PCB016;4	12.490	0.41	0.1467	15960	VV	1
	12.672			18214	VE	
	13.063			468	EV	
	13.160			530	EB	
	13.316			365	BV	
PCB015;5	13.601	0.12	0.1576	22512	VV	1
	13.723			10792	VV	
	14.021			18762	VV	
	14.193			8972	VV	
	14.349			16737	VV	
	14.561			26480	VV	
	14.757			31023	VV	
PCB260;1	15.067	0.50	0.04952	6133	VB	2
PCB260;2	15.339	0.60	0.05719	7817	BV	2
	15.575			4827	VV	
	15.756			27958	VE	
	16.243			4169	EV	
PCB254;1	16.574	-0.02	0.02911	5038	VV	3
PCB254;2	16.800	0.35	0.02286	6311	VV	3
	17.041			5787	VV	
PCB260;3	17.246	-2.67	0.3057	62616	VE	2
PCB260;4	17.452	1.51	7.071E-03	938	EV	2
PCB254;3	17.669	0.25	0.02288	9091	VE	3
PCB260;5	17.857	0.43	1.776E-03-	726	EV	2
	18.029			3507	VE	
PCB254;4	18.227	0.40	3.707E-03-	737	EV	3
	18.346			854	EV	
	18.543			277	VB	
	18.857			1040	BB	
PCB254;5	19.214	0.08	0.03232	6657	BV	3
	19.379			2493	VV	
	19.824			10332	VE	
	20.093			1056	EV	
	20.398			1821	EV	
	20.583			2294	VV	
	20.757			3019	VV	
	21.205			5407	VB	
DBUCLE	22.008	0.25	0.2175	207280	BE	
	22.343			2684	EB	
	23.240			3139	BV	
	23.611			3515	VV	
	23.856			6005	VV	
	24.190			53203	VV	
	24.502			14568	VV	
	24.863			14739	VV	
	25.011			17463	VV	
	25.373			19936	VV	
	25.651			12468	VV	
	25.853			6541	VV	
	26.024			7575	VV	
	26.382			1977	VV	
	26.579			3373	VV	

26.768	2009	VB
27.304	248	BB
27.613	445	BB
28.041	357	BB
28.871	539	BV
29.015	420	VB
29.433	810	BB
29.878	239	BB
30.326	1836	BB

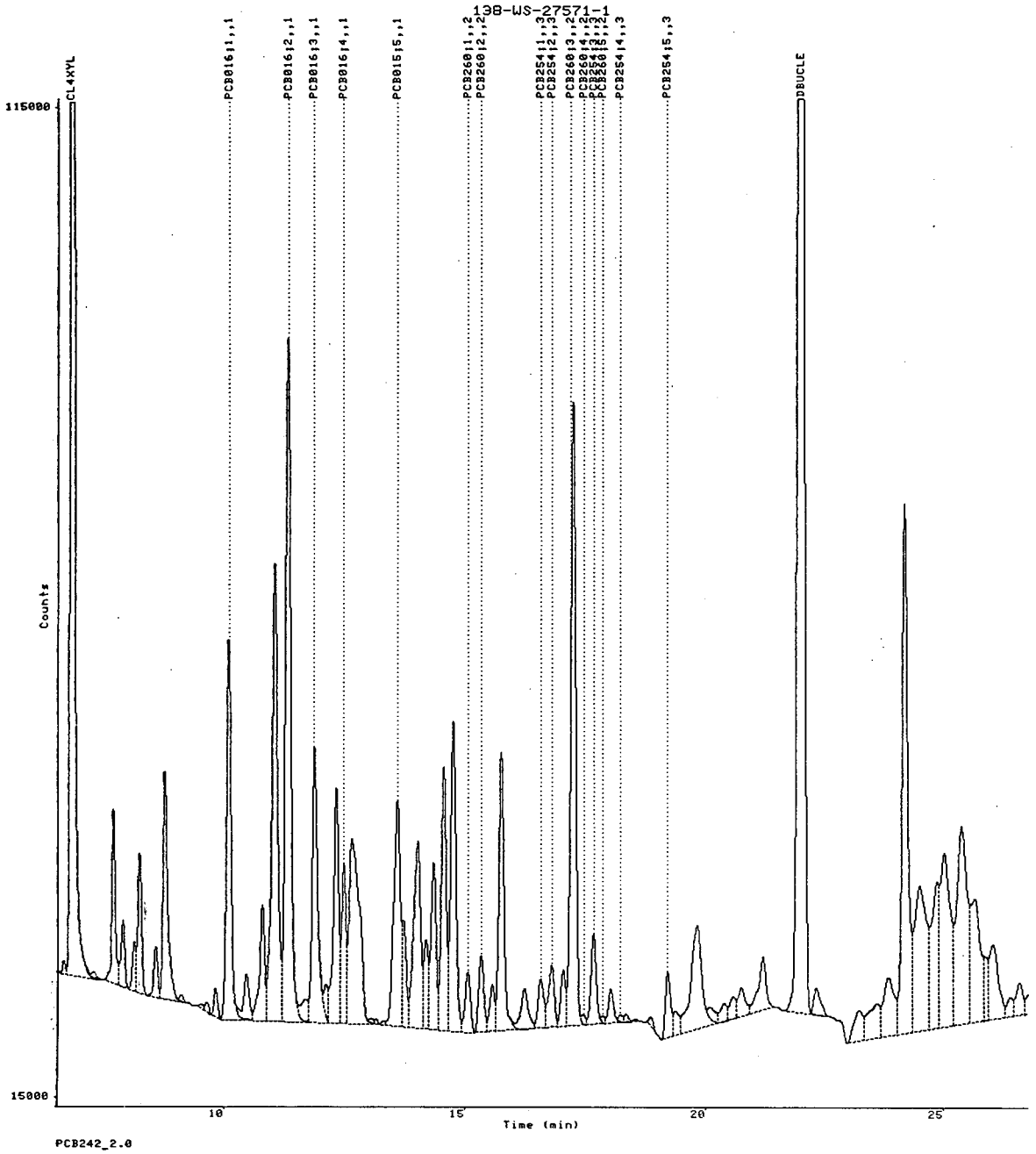
GROUP REPORT

Group	UG/ML
1	0.8718
2	0.4212
3	0.1109

ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)
2: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697326004.RAW;1
Report: 1197265435
Acquired: 14-NOV-1997 00:12:15
Time range: 6.50-26.75



Date.....15-DEC-1997 16:57:17.85 User: TAYLORC
Report number.....1197265436
Raw file.....DISK:[TAYLORC]5697326005.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....17

Acq. date.....14-NOV-1997 00:49:00
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....PCB248_2.0
Notes.....138-WS-27572-1

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
  length.....30 M
  diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....58
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...1.00000E+00

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EXTERNAL STANDARD ANALYSIS
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Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref Std	BL	Group
	6.617			125		BV	
CL4XYL	6.796	-1.44	0.2283	300777		VB	
	7.673			87		BB	
	7.876			4317		BB	
	8.423			769		BB	
	8.762			1444		BB	
	9.828			751		BB	
PCB016;1	10.102	-0.13	0.09197	19589		BE	1
	10.461			1378		EV	
	10.801			8984		VV	
	11.056			8282		VV	
PCB016;2	11.335	0.13	0.1611	60992		VV	1
PCB016;3	11.887	-0.51	0.1200	17589		VV	1
	12.114			6662		VV	
	12.343			16713		VV	

0183

PCB016;4	12.493	0.23	0.3016	30376	VV	1
	12.670			33135	VV	
	12.839			13998	VB	
	13.173			3650	BB	
PCB015;5	13.606	-0.21	0.1951	27324	BB	1
	14.024			30947	BV	
	14.198			9413	VV	
	14.356			30258	VV	
	14.567			45964	VV	
	14.764			55739	VE	
PCB260;1	15.070	0.30	0.1044	12289	EV	2
PCB260;2	15.343	0.39	0.1287	16856	VV	2
	15.585			11399	VV	
	15.764			52738	VB	
	16.250			8317	BV	
PCB254;1	16.577	-0.17	0.07128	10642	VV	3
PCB254;2	16.809	-0.20	0.05392	13449	VV	3
	17.039			13338	VV	
PCB260;3	17.205	-0.25	0.1051	24749	VE	2
PCB260;4	17.472	0.33	0.02409	2927	EV	2
PCB254;3	17.674	-0.09	0.05592	21480	VE	3
PCB260;5	17.785	4.74	6.574E-04-	372	EV	2
	18.030			7090	VV	
PCB254;4	18.243	-0.55	0.02032	4457	VB	3
	18.959			1730	BV	
PCB254;5	19.212	0.18	0.08699	17434	VE	3
	19.607			2736	EV	
	19.799			6037	VV	
	19.943			3013	VV	
	20.188			1756	VV	
	20.757			1019	VB	
	21.256			2447	BV	
	21.534			2462	VV	
	21.823			9128	VV	
DBUCLE	22.008	0.23	0.2333	220223	VB	
	23.197			2305	BV	
	23.476			4686	VB	
	24.198			3611	BB	
	25.038			909	BV	
	25.234			3054	VE	
	25.628			547	EB	
	26.484			550	BB	
	30.245			3023	BB	

GROUP REPORT

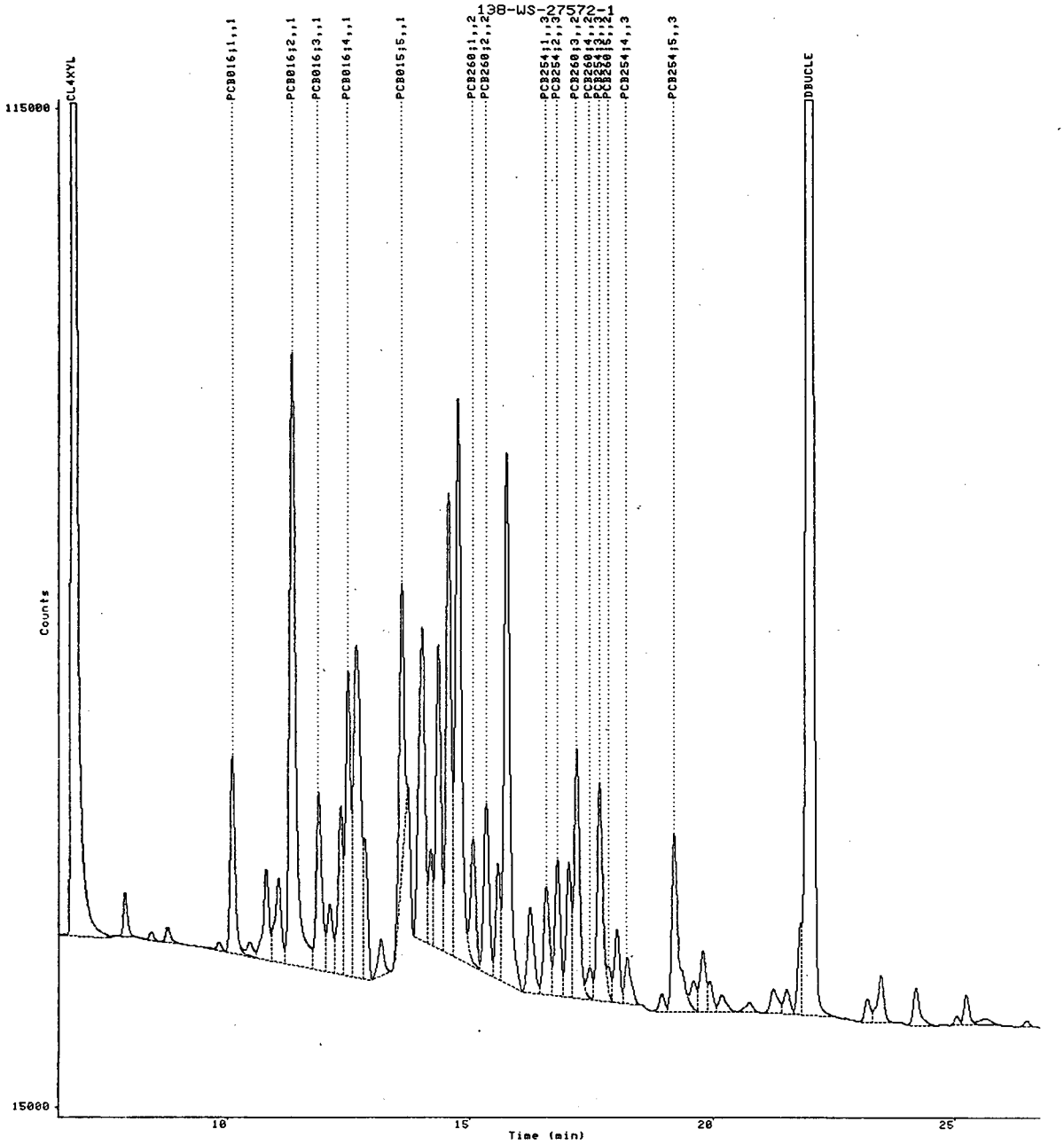
Group	UG/ML
1	0.8697
2	0.3630
3	0.2884

0184

ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)
2: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697326005.RAW;1
Report: 1197265436
Acquired: 14-NOV-1997 00:49:00
Time range: 6.50-26.75



PCB248_2.0

Date.....15-DEC-1997 16:57:31.51 User: TAYLORC
Report number.....1197265437
Raw file.....DISK:[TAYLORC]5697326011.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....23

Acq. date.....14-NOV-1997 04:29:06
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....ICV1254_1.0
Notes.....138-WS-27533

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....48
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...1.00000E+00

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
6.77	CL4XYL			
22.01	DBUCLE			

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref	Std	BL	Group
	9.279			6576			BB	
PCB016;1	10.103	-0.20	7.959E-04-	664			BB	1
	10.795			145			BB	
	11.054			280			BB	
PCB016;2	11.338	-0.06	3.974E-03	1823			BB	1
PCB016;3	11.890	-0.67	1.843E-03-	333			BV	1
	12.115			485			VV	

0186

PCB016;4	12.496	0.07	0.1909	20338	VV	1
	12.641			7328	VB	
	13.165			279	BB	
PCB015;5	13.611	-0.46	0.08921	13221	BV	1
	14.033			5922	VV	
	14.362			5687	VV	
	14.571			19950	VV	
	14.767			8555	VV	
PCB260;1	15.072	0.19	0.4047 +	41818	VV	2
PCB260;2	15.341	0.50	0.5118 +	51104	VV	2
	15.584			20526	VV	
	15.768			6676	VB	
	16.246			15887	BV	
PCB254;1	16.575	-0.05	0.1492	20232	VV	3
PCB254;2	16.809	-0.18	0.1604	36018	VV	3
	17.034			13062	VV	
PCB260;3	17.204	-0.19	0.3736	72724	VE	2
PCB260;4	17.475	0.13	0.1551	17033	EV	2
PCB254;3	17.675	-0.14	0.1615	57990	VV	3
PCB260;5	17.862	0.12	0.1091	32338	VV	2
	17.992			19144	VV	
PCB254;4	18.238	-0.26	0.2244	45793	VE	3
	18.449			4137	EV	
	18.650			2592	EV	
	18.955			18197	VV	
PCB254;5	19.213	0.10	0.1435	27901	VV	3
	19.373			30765	VV	
	19.600			27702	VV	
	19.796			61796	VE	
	20.260			11631	EV	
	20.648			1280	VB	
	21.357			19274	BV	
	21.520			21218	VV	
	21.813			22075	VB	
	23.211			3221	BV	
	23.474			13184	VE	
	23.860			748	EB	
	24.198			1112	BB	
	25.039			496	BV	
	25.234			1045	VB	
	27.577			374	BB	

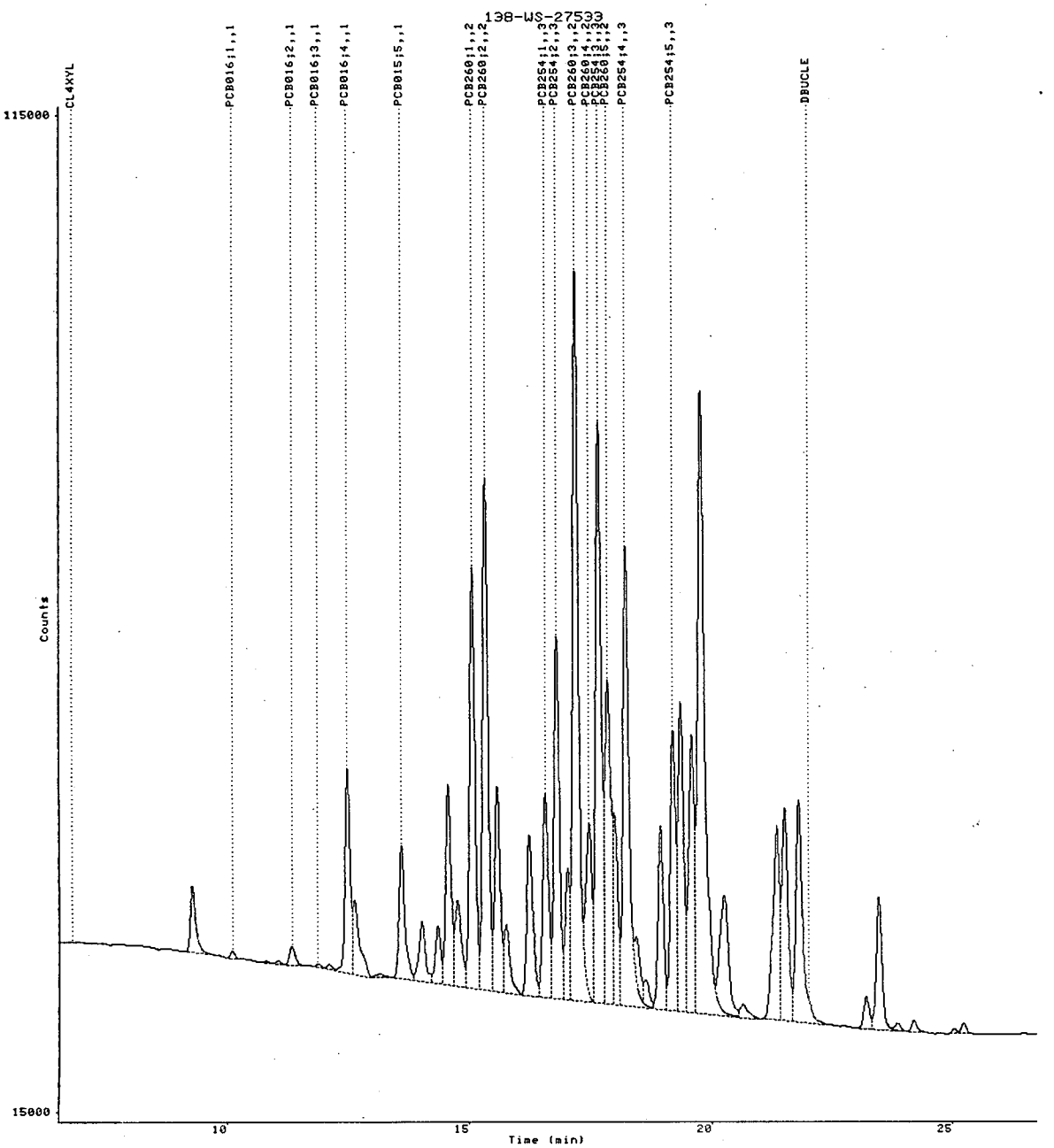
GROUP REPORT

Group	UG/ML
1	0.2867
2	1.554
3	0.8390

ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)
2: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697326011.RAW;1
Report: 1197265437
Acquired: 14-NOV-1997 04:29:06
Time range: 6.50-26.75



ICV1254_1.0

0188

Date.....15-DEC-1997 16:57:45.18 User: TAYLORC
Report number.....1197265438
Raw file.....DISK:[TAYLORC]5697327017.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....22

Acq. date.....14-NOV-1997 08:09:34
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....ICV_1660_1.0
Notes.....138-WS-27589-1

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min
Area reject.....100 count(s)
Noise threshold.....10.0 microvolts
Start peak width....6.00 sec(s)
Min. window.....8.00 sec

Delay time.....6.500 min
No. peaks found.....74
Area threshold.....120
Area/Pk.Ht.....H
% window.....0.00

Analysis type.....EXTERNAL STANDARD
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000

A/D range.....1.0 volt(s)

Origin treatment....Ignore

Conversion factor...1.00000E+00

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
16.57	PCB254;1	3		
19.22	PCB254;5	3		

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref	Std	BL	Group
	6.649			181			BV	
CL4XYL	6.796	-1.45	5.615E-03	9281			VB	
	7.135			189			BB	
	7.457			285			BV	
	7.668			1888			VV	
	7.781			2332			VV	
	7.865			3013			VV	

0189

	8.111			10524	VB	
	8.563			9456	BV	
	8.755			33090	VB	
	9.649			641	BV	
	9.826			4132	VV	
PCB016;1	10.100	-0.00	0.2818	52162	VB	1
	10.470			7350	BV	
	10.798			15732	VV	
	11.057			32839	VV	
PCB016;2	11.329	0.49	0.2361	85657	VE	1
	11.679			3970	EV	
PCB016;3	11.882	-0.19	0.2428	34806	VV	1
	12.337			28394	VV	
PCB016;4	12.491	0.37	0.2000	21217	VV	1
	12.665			24681	VV	
	12.839			11336	VB	
	13.082			137	BB	
PCB015;5	13.602	0.09	0.2068	28783	BV	1
	13.718			13481	VV	
	14.014			21348	VV	
	14.197			10063	VV	
	14.332			11911	VV	
	14.563			7754	VV	
	14.740			12935	VV	
	14.925			6237	VV	
PCB260;1	15.062	0.79	0.1559	17861	VV	2
PCB260;2	15.336	0.75	0.1483	19176	VV	2
	15.539			13533	VE	
	15.753			2749	EV	
	16.064			361	VB	
	16.261			476	BB	
PCB254;2	16.715	5.48	0.04416	11234	BV	3
PCB260;3	17.196	0.32	0.1990	43971	VV	2
PCB260;4	17.471	0.36	0.2003	21413	VV	2
PCB254;3	17.668	0.29	0.01708	6866	VV	3
PCB260;5	17.865	-0.05	0.2106	57885	VV	2
PCB254;4	18.234	0.02	0.5466 +	94655	VE	3
	18.456			5099	EV	
	18.950			39905	VB	
	19.390			41066	BV	
	19.597			45861	VV	
	19.789			72009	VV	
	19.945			88722	VV	
	20.175			49904	VV	
	20.648			20868	VV	
	21.250			68846	VV	
	21.538			56029	VV	
	21.805			201998	VE	
DBUCLE	22.006	0.33	8.839E-03	10155	EV	
	22.333			1822	VV	
	22.483			2470	VV	
	22.749			9583	VB	
	23.191			59458	BV	
	23.469			95685	VE	
	23.855			5624	EV	
	24.189			132057	VE	
	24.830			6068	EV	
	25.033			27837	EV	
	25.226			55382	VE	
	25.646			2665	EV	

26.049	1273	EB
26.479	10398	BB
27.322	215	BV
27.573	7464	VB
28.032	107	BB
29.432	334	BB
30.343	736	BB

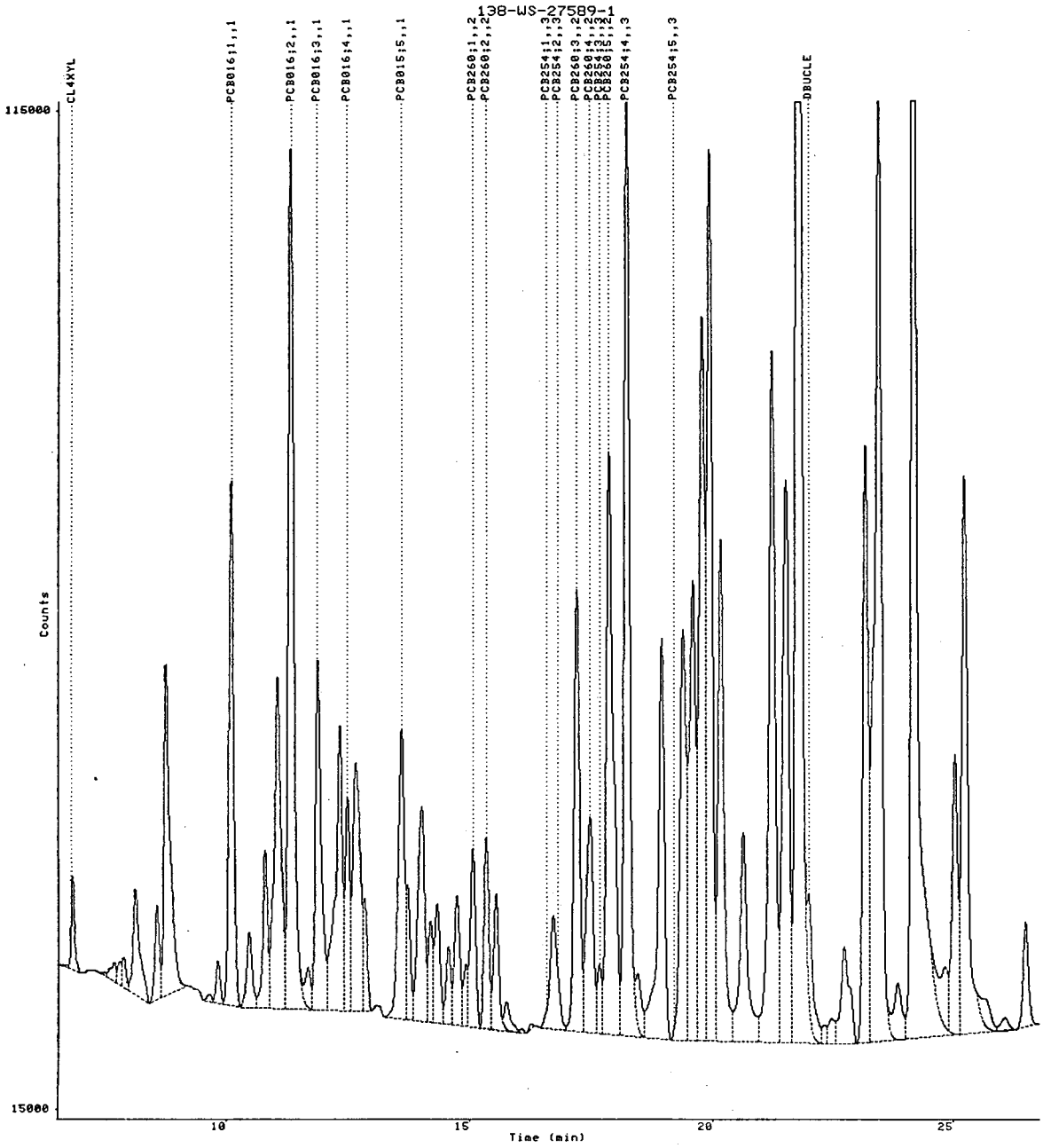
GROUP REPORT

Group	UG/ML
1	1.167
2	0.9141
3	0.6079

ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)
2: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697327017.RAW;1
Report: 1197265438
Acquired: 14-NOV-1997 08:09:34
Time range: 6.50-26.75



ICV_1660_1.0

0192

Date.....15-DEC-1997 16:57:59.47 User: TAYLORC
Report number.....1197265439
Raw file.....DISK:[TAYLORC]5697327018.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....8

Acq. date.....22-NOV-1997 12:04:04
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....CCV_1660_1.0
Notes.....138-WS-27590

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....58
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...1.00000E+00

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref Std
19.22	PCB254;5	3	

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref Std	BL	Group
CL4XYL	6.817	-2.70	0.1701	231446		BE	
	7.896			4201		EV	
	8.138			3738		EV	
	8.444			944		EV	
	8.587			3850		EV	
	8.782			17230		VB	
	9.835			2970		BV	
PCB016;1	10.113	-0.79	0.1868	37009		VE	1

0193

	10.485			4832	EV	
	10.814			14508	VV	
	11.066			22621	VV	
PCB016;2	11.359	-1.35	0.1805	67585	VV	1
PCB016;3	11.912	-1.97	0.1973	28519	VV	1
	12.364			25306	VV	
PCB016;4	12.505	-0.49	0.2169	22819	VV	1
	12.687			24726	VV	
	12.859			11444	VV	
	13.178			3773	VV	
PCB015;5	13.620	-1.03	0.1997	27908	VV	1
	14.037			23224	VV	
	14.202			11061	VV	
	14.379			8202	VV	
	14.593			11023	VV	
	14.760			13623	VV	
PCB260;1	15.080	-0.32	0.2011	22568	VV	2
PCB260;2	15.359	-0.62	0.1785	22650	VE	2
	15.782			2563	EB	
	16.256			2485	BV	
PCB254;1	16.588	-0.83	1.721E-03-	1241	VV	3
PCB254;2	16.827	-1.25	0.01716	4974	VV	3
PCB260;3	17.216	-0.89	0.1514	34553	VV	2
PCB260;4	17.488	-0.65	0.1715	18652	VV	2
PCB254;3	17.703	-1.80	0.01335	5433	VV	3
PCB260;5	17.882	-1.10	0.1607	45856	VV	2
PCB254;4	18.264	-1.81	0.2983	58780	VB	3
	18.978			28206	BV	
	19.401			29699	VV	
	19.626			31194	VV	
	19.817			52505	VV	
	19.966			48630	VV	
	20.202			26807	VV	
	20.674			9564	VB	
	21.273			38480	BV	
	21.558			34017	VV	
	21.837			112440	VV	
DBUCLE	22.015	-0.21	0.1757	171735	VB	
	22.764			3454	BV	
	22.891			1748	VV	
	23.215			33805	VV	
	23.494			53916	VE	
	23.898			1830	EB	
	24.421			2032	BB	
	24.853			845	BV	
	25.056			12107	VV	
	25.257			28902	VB	
	26.504			8316	BB	
	27.597			1156	BB	
	28.469			289	BB	

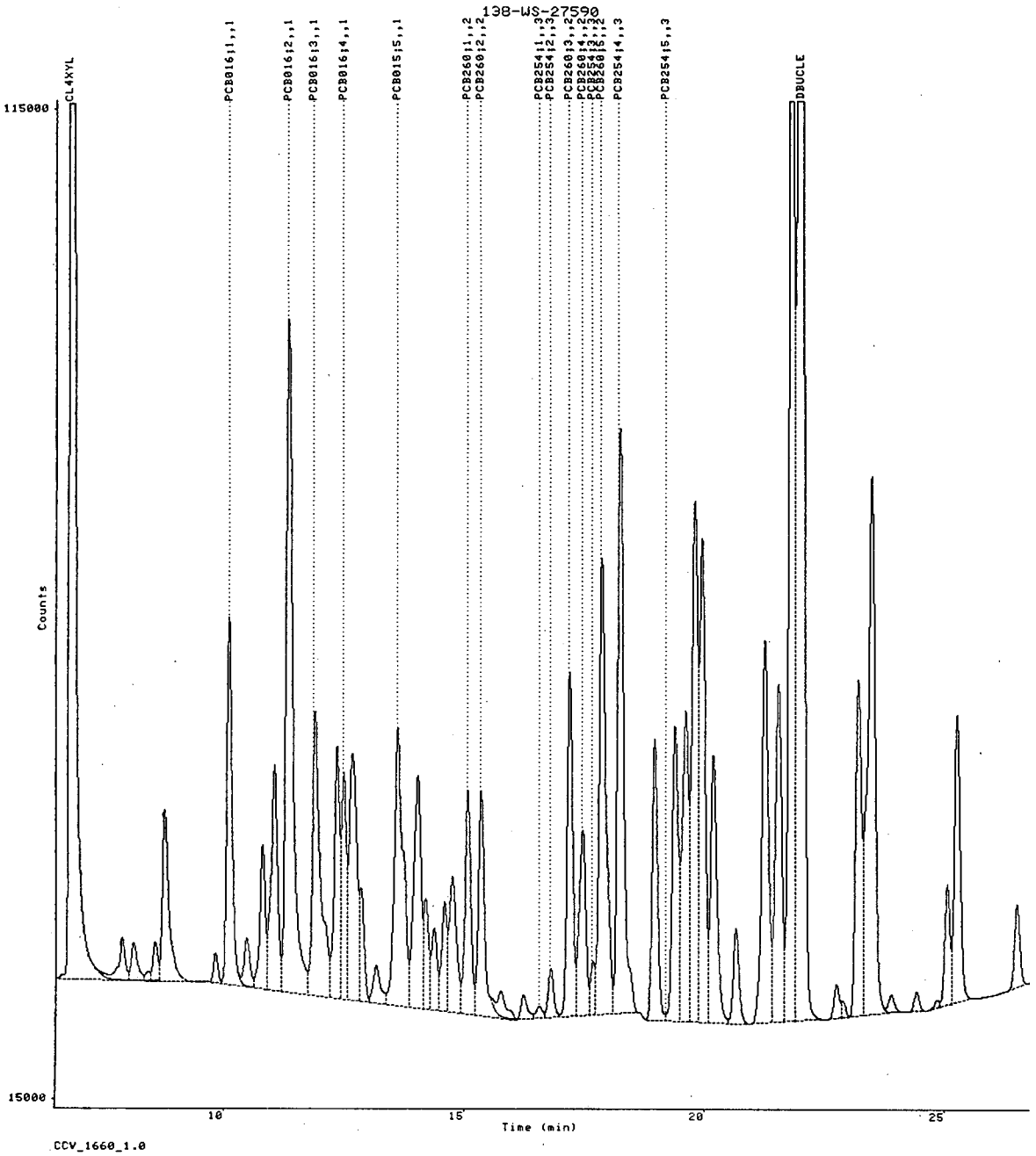
GROUP REPORT

Group	UG/ML
1	0.9812
2	0.8632
3	0.3305

ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)
2: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697327018.RAW;1
Report: 1197265439
Acquired: 22-NOV-1997 12:04:04
Time range: 6.50-26.75



0196

Date.....15-DEC-1997 17:00:29.82 User: TAYLORC
Report number.....1197265450
Raw file.....DISK:[TAYLORC]5697326027.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....9

Acq. date.....22-NOV-1997 18:48:13
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....CCV_1660_1.0
Notes.....138-WS-27590

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
  length.....30 M
  diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....57
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...1.00000E+00

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
19.22	PCB254;5	3		

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref	Std	BL	Group
CL4XYL	6.806	-2.05	0.1732	235232			BE	
	7.886			3518			EV	
	8.125			3321			EV	
	8.429			820			EV	
	8.574			3422			EV	
	8.769			16341			VB	
	9.820			2809			BV	
PCB016;1	10.099	0.04	0.1843	36577			VE	1

0197

	10.471			4912	EV	
	10.798			14523	VV	
	11.051			22522	VV	
PCB016;2	11.345	-0.46	0.1784	66895	VV	1
PCB016;3	11.896	-1.03	0.1947	28150	VV	1
	12.348			24981	VV	
PCB016;4	12.488	0.55	0.2219	23290	VV	1
	12.672			25271	VV	
	12.840			11947	VB	
	13.164			3959	BV	
PCB015;5	13.604	-0.09	0.2001	27956	VV	1
	14.021			23370	VV	
	14.186			11190	VV	
	14.364			8050	VV	
	14.579			10651	VV	
	14.742			13470	VV	
PCB260;1	15.062	0.77	0.2076	23233	VV	2
PCB260;2	15.341	0.47	0.1810	22930	VE	2
	15.762			1969	EB	
	16.241			3096	BV	
PCB254;1	16.569	0.28	6.591E-03	1925	VV	3
PCB254;2	16.808	-0.12	0.02101	5879	VV	3
PCB260;3	17.197	0.24	0.1661	37529	VV	2
PCB260;4	17.467	0.58	0.1906	20490	VV	2
PCB254;3	17.687	-0.83	0.01454	5889	VV	3
PCB260;5	17.864	-0.01	0.1774	49994	VV	2
PCB254;4	18.245	-0.68	0.3206	62490	VB	3
	18.958			30784	BV	
	19.381			32940	VV	
	19.606			34141	VV	
	19.800			57956	VV	
	19.947			54217	VV	
	20.182			29725	VV	
	20.655			10855	VB	
	21.252			42258	BV	
	21.538			37256	VV	
	21.816			120586	VV	
DBUCLE	21.995	1.00	0.1914	185294	VB	
	22.742			3799	BV	
	22.869			1941	VB	
	23.192			36966	BV	
	23.472			57839	VE	
	23.876			1984	EB	
	24.398			2256	BB	
	24.829			927	BV	
	25.035			12953	VV	
	25.235			31219	VB	
	26.481			9002	BB	
	27.571			1297	BB	

GROUP REPORT

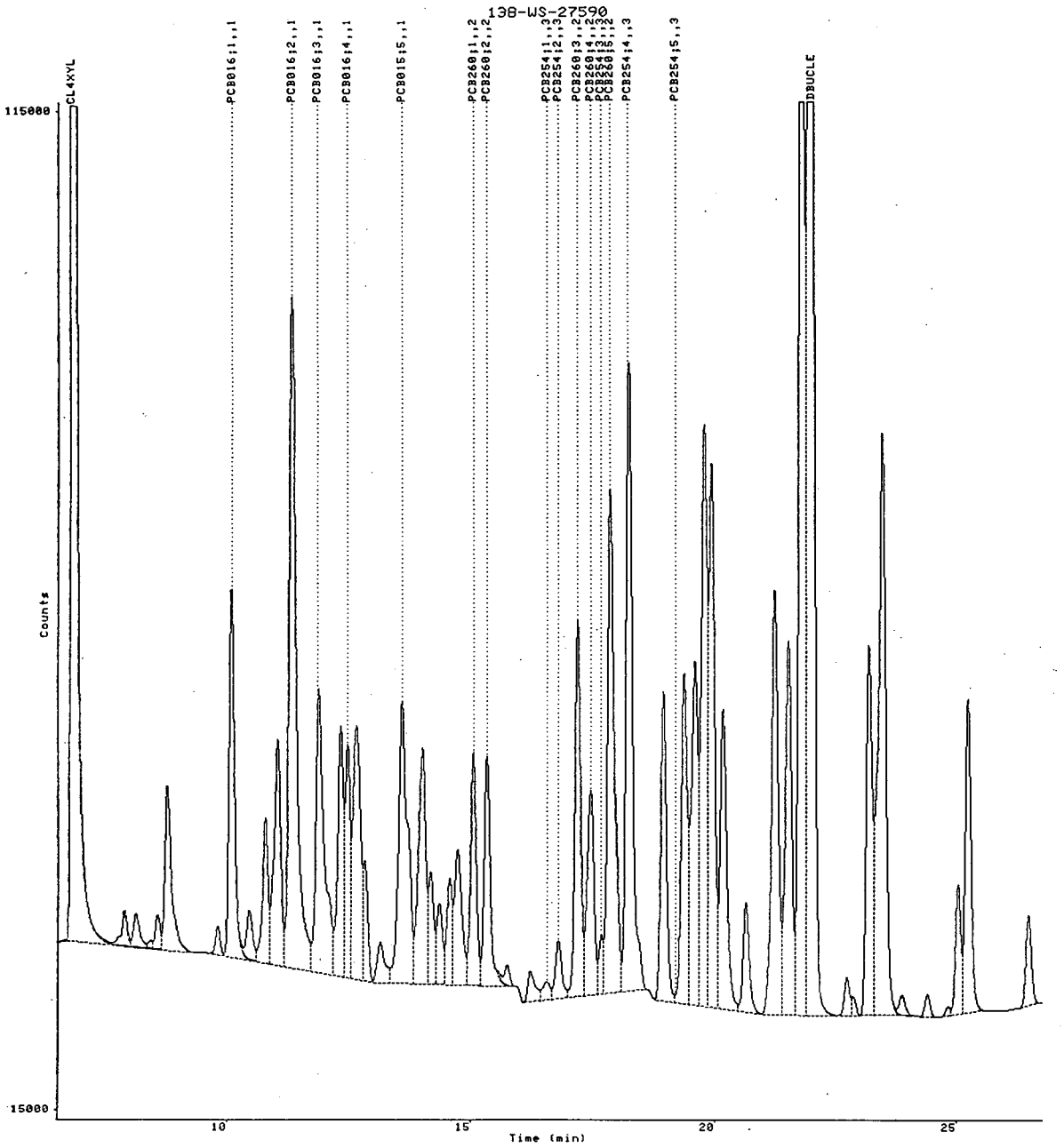
Group	UG/ML
1	0.9794
2	0.9226
3	0.3627

0198

ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)

Data file: DISK:[TAYLORC]5697326027.RAW;1
Report: 1197265450
Acquired: 22-NOV-1997 18:48:13
Time range: 6.50-26.75



CCV_1660_1.0

0200

Date.....15-DEC-1997 17:02:58.35 User: TAYLORC
Report number.....1197265461
Raw file.....DISK:[TAYLORC]5697326038.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....8

Acq. date.....23-NOV-1997 01:32:19
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....CCV_1660_1.0
Notes.....138-WS-27590

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
  length.....30 M
  diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....57
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...1.00000E+00

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref Std
19.22	PCB254;5	3	

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref Std	BL	Group
	6.617			59		BV	
CL4XYL	6.806	-2.03	0.1694	230533		VE	
	7.886			3610		EV	
	8.126			3330		EV	
	8.427			823		EV	
	8.575			3365		EV	
	8.771			15768		VB	
	9.820			2782		BV	

0201

PCB016;1	10.099	0.03	0.1817	36143	VE	1
	10.471			4670	EV	
	10.798			13964	VV	
	11.051			21856	VV	
PCB016;2	11.347	-0.58	0.1708	64324	VV	1
PCB016;3	11.898	-1.14	0.1843	26704	VV	1
	12.350			23750	VV	
PCB016;4	12.489	0.49	0.2137	22521	VV	1
	12.673			24373	VV	
	12.841			11188	VV	
	13.162			3259	VV	
PCB015;5	13.606	-0.18	0.1890	26562	VV	1
	14.022			22626	VV	
	14.186			10574	VV	
	14.365			7336	VV	
	14.579			10101	VV	
	14.742			13084	VV	
PCB260;1	15.063	0.71	0.2038	22843	VV	2
PCB260;2	15.342	0.41	0.1790	22707	VE	2
	15.763			1867	EB	
	16.238			2490	BV	
PCB254;1	16.570	0.26	1.246E-03-	1174	VV	3
PCB254;2	16.809	-0.16	0.01788	5143	VV	3
PCB260;3	17.197	0.26	0.1617	36637	VV	2
PCB260;4	17.468	0.54	0.1888	20321	VV	2
PCB254;3	17.687	-0.83	0.01345	5468	VV	3
PCB260;5	17.863	0.04	0.1773	49972	VV	2
PCB254;4	18.246	-0.72	0.3229	62876	VB	3
	18.958			31189	BV	
	19.380			33945	VV	
	19.608			35458	VV	
	19.800			59449	VV	
	19.945			56357	VV	
	20.181			30987	VV	
	20.654			11518	VB	
	21.251			44574	BV	
	21.538			39270	VV	
	21.816			125351	VV	
DBUCLE	21.994	1.10	0.2000	192698	VB	
	22.740			2892	BB	
	23.193			37979	BV	
	23.471			59645	VE	
	23.874			2088	EB	
	24.397			2360	BB	
	24.827			1003	BV	
	25.032			13689	VV	
	25.235			32129	VB	
	26.480			9488	BB	
	27.567			1428	BB	

GROUP REPORT

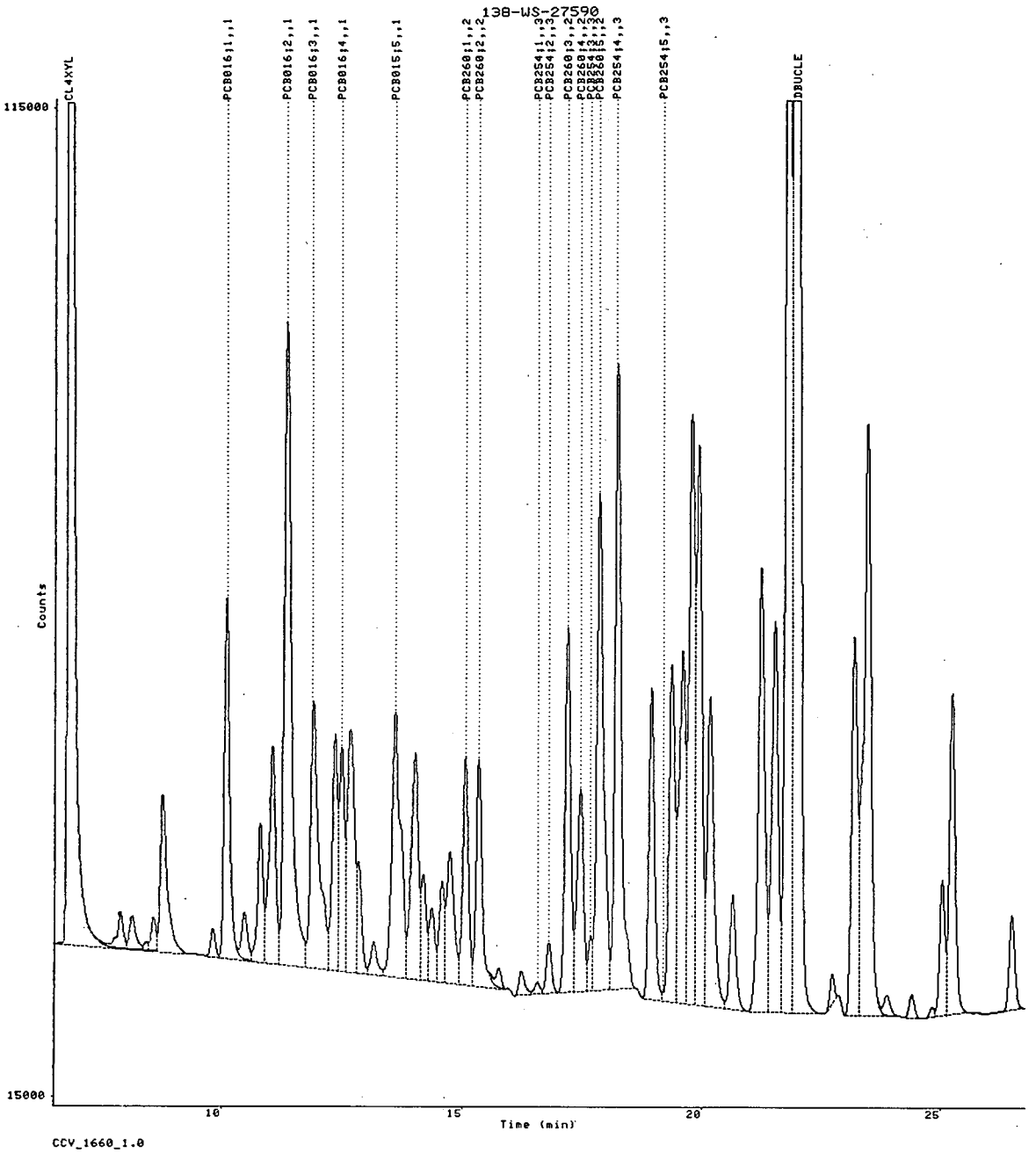
Group	UG/ML
1	0.9397
2	0.9105
3	0.3555

0202

ANALYSIS NOTES

```
---------------------------------------------------------------------------
  1: WARNING: Peak windows overlap. Check peak identification. (245)
  2: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)
---------------------------------------------------------------------------
```

Data file: DISK:[TAYLORC]5697326038.RAW;1
Report: 1197265461
Acquired: 23-NOV-1997 01:32:19
Time range: 6.50-26.75



0204

Date.....15-DEC-1997 17:05:57.85 User: TAYLORC
Report number.....1197265472
Raw file.....DISK:[TAYLORC]5697326049.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....8

Acq. date.....23-NOV-1997 08:16:05
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....CCV_1660_1.0
Notes.....138-WS-27590

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.000 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....67
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...1.00000E+00

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
19.22	PCB254;5	3		

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref	Std	BL	Group
CL4XYL	6.806	-2.04	0.1792	242585			BE	
	7.664			245			EV	
	7.881			4286			EV	
	8.123			3429			EV	
	8.427			621			EV	
	8.573			3760			VV	
	8.767			17915			VB	
	9.819			2960			BV	

0205

PCB016;1	10.097	0.15	0.1938	38212	VE	1
	10.469			4412	EV	
	10.797			13773	VV	
	11.049			21915	VV	
PCB016;2	11.343	-0.38	0.1758	66002	VV	1
PCB016;3	11.894	-0.91	0.1838	26633	VV	1
	12.346			22856	VV	
PCB016;4	12.489	0.47	0.1894	20198	VV	1
	12.672			22233	VV	
	12.838			9687	VV	
	13.159			2542	VB	
PCB015;5	13.602	0.06	0.1740	24642	BV	1
	14.020			19416	VV	
	14.185			8211	VV	
	14.362			5457	VV	
	14.578			8091	VV	
	14.742			10268	VV	
PCB260;1	15.063	0.74	0.1664	18961	VV	2
PCB260;2	15.342	0.43	0.1441	18686	VB	2
	15.770			1289	BB	
	16.235			2074	BB	
PCB254;1	16.571	0.16	-2.148E-04-	968	BV	3
PCB254;2	16.808	-0.10	0.01496	4455	VV	3
PCB260;3	17.196	0.27	0.1393	32048	VV	2
PCB260;4	17.468	0.53	0.1523	16757	VV	2
PCB254;3	17.684	-0.66	0.01307	5325	VV	3
PCB260;5	17.864	0.01	0.1452	41891	VV	2
PCB254;4	18.245	-0.64	0.2770	55148	VB	3
	18.958			25742	BV	
	19.380			27582	VV	
	19.606			29221	VV	
	19.797			49966	VV	
	19.948			45917	VV	
	20.183			24990	VV	
	20.655			9274	VB	
	21.251			36980	BV	
	21.538			32858	VV	
	21.817			110714	VV	
DBUCLE	21.995	1.03	0.1790	174655	VB	
	22.743			3353	BV	
	22.876			1661	VV	
	23.195			33582	VV	
	23.472			54036	VE	
	23.883			1924	EV	
	24.148			167	EB	
	24.398			1933	BB	
	24.837			1450	BV	
	25.034			12505	VV	
	25.236			29235	VB	
	25.868			86	BB	
	26.484			8297	BE	
	26.957			372	EB	
	27.575			1151	BV	
	27.953			7246	VB	
	28.676			52	BB	
	28.942			487	BV	
	29.170			132	VB	
	29.413			87	BB	
	30.047			3923	BB	

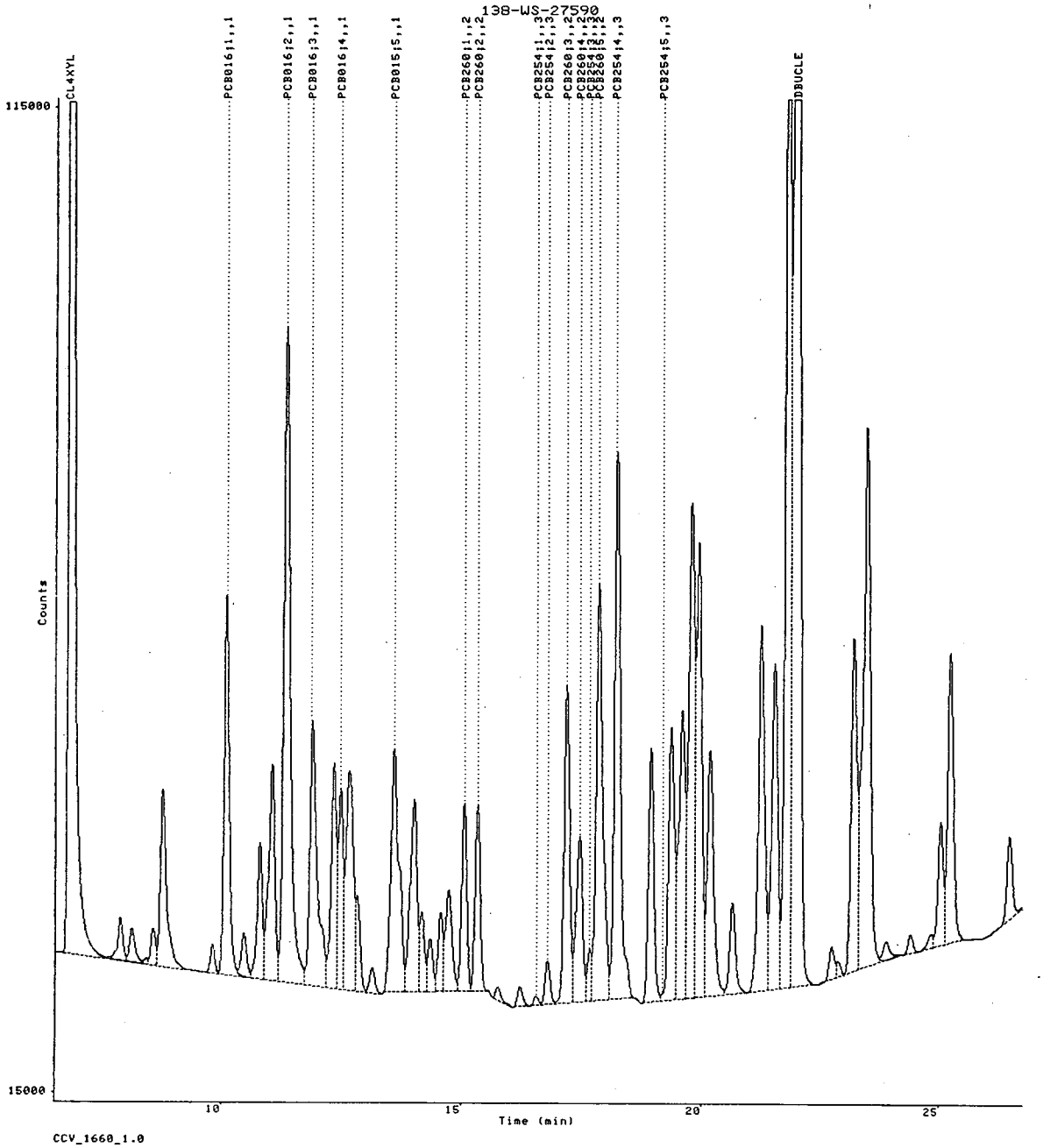
GROUP REPORT

Group	UG/ML
1	0.9168
2	0.7472
3	0.3048

ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)
2: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697326049.RAW;1
Report: 1197265472
Acquired: 23-NOV-1997 08:16:05
Time range: 6.50-26.75



0208

Date.....15-DEC-1997 17:08:34.01 User: TAYLORC
Report number.....1197265483
Raw file.....DISK:[TAYLORC]5697326060.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....8

Acq. date.....23-NOV-1997 14:59:55
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....CCV_1660_1.0
Notes.....138-WS-27590

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
  length.....30 M
  diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....64
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...1.00000E+00

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
19.22	PCB254;5	3		

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref	Std	BL	Group
CL4XYL	6.808	-2.17	0.1741	236395			BE	
	7.664			761			EV	
	7.885			3814			EV	
	8.124			3263			EV	
	8.433			699			VV	
	8.574			3577			VV	
	8.768			16989			VB	
	9.821			2767			BV	

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PCB016;1	10.100	0.00	0.1846	36630	VV	1
	10.471			4494	VV	
	10.800			13633	VV	
	11.052			21608	VV	
PCB016;2	11.345	-0.49	0.1718	64658	VV	1
PCB016;3	11.896	-1.05	0.1815	26305	VV	1
	12.349			23137	VV	
PCB016;4	12.490	0.43	0.1933	20572	VV	1
	12.674			22668	VV	
	12.840			10218	VB	
	13.163			3043	BV	
PCB015;5	13.605	-0.10	0.1736	24589	VV	1
	14.023			19798	VV	
	14.187			8622	VV	
	14.366			5942	VV	
	14.581			8508	VV	
	14.745			10640	VV	
PCB260;1	15.065	0.60	0.1637	18678	VV	2
PCB260;2	15.346	0.20	0.1426	18513	VB	2
	15.771			1410	BB	
	16.241			2301	BV	
PCB254;1	16.576	-0.13	2.801E-03-	1393	VV	3
PCB254;2	16.812	-0.33	0.01619	4745	VV	3
PCB260;3	17.201	-0.03	0.1385	31885	VV	2
PCB260;4	17.473	0.24	0.1512	16644	VV	2
PCB254;3	17.689	-0.96	0.01380	5605	VV	3
PCB260;5	17.868	-0.21	0.1409	40798	VV	2
PCB254;4	18.249	-0.90	0.2674	53488	VB	3
	18.964			24886	BV	
	19.385			26846	VV	
	19.611			28124	VV	
	19.805			47894	VV	
	19.951			43867	VV	
	20.189			24070	VB	
	20.660			8579	BB	
	21.258			35757	BV	
	21.543			32026	VV	
	21.822			105509	VV	
DBUCLE	21.999	0.76	0.1692	166037	VB	
	22.748			3163	BV	
	22.882			1608	VV	
	23.202			32056	VV	
	23.478			51152	VE	
	23.893			2087	EV	
	24.151			1006	EV	
	24.409			2724	VV	
	24.849			3879	VV	
	25.040			14590	VV	
	25.242			30453	VB	
	26.490			7989	BE	
	26.870			724	EV	
	26.930			538	EB	
	27.393			70	BB	
	27.944			11351	BE	
	29.057			1298	EV	
	30.057			17423	VB	

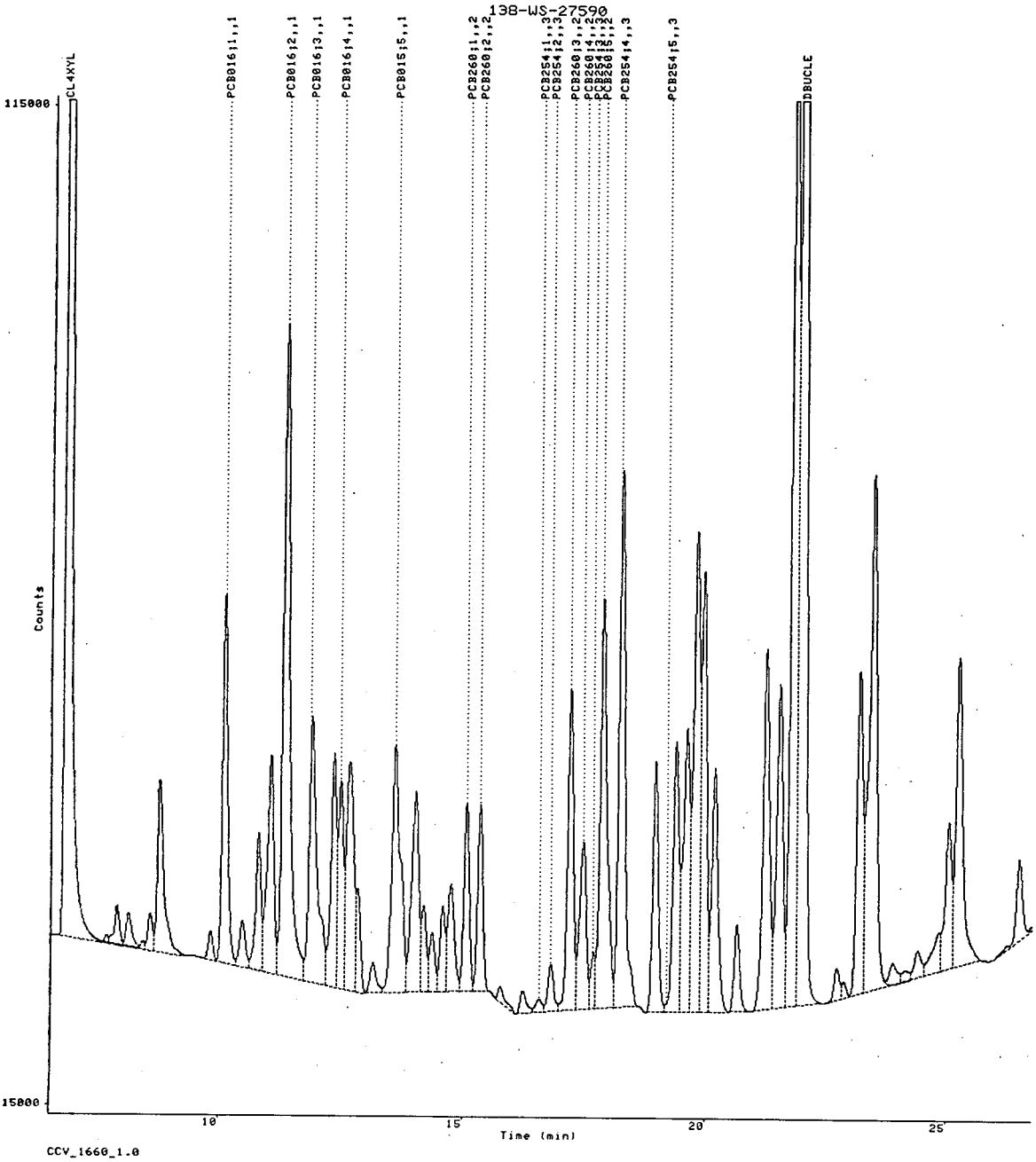
GROUP REPORT

Group	UG/ML
1	0.9047
2	0.7369
3	0.3002

ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)
2: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697326060.RAW;1
Report: 1197265483
Acquired: 23-NOV-1997 14:59:55
Time range: 6.50-26.75



0212

Date.....15-DEC-1997 17:10:54.59 User: TAYLORC
Report number.....1197265493
Raw file.....DISK:[TAYLORC]5697326070.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....7

Acq. date.....23-NOV-1997 21:07:17
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....CCV_1660_1.0
Notes.....138-WS-27590

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
  length.....30 M
  diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....58
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...1.00000E+00

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
19.22	PCB254;5	3		

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref	Std	BL	Group
CL4XYL	6.806	-2.06	0.1740	236238			BE	
	7.884			3753			EV	
	8.122			3442			EV	
	8.430			839			EV	
	8.571			3598			EV	
	8.766			16797			VB	
	9.816			2929			BV	
PCB016;1	10.096	0.23	0.1883	37275			VE	1

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	10.466			5077	EV	
	10.796			14764	VV	
	11.047			23056	VV	
PCB016;2	11.343	-0.39	0.1816	67969	VV	1
PCB016;3	11.894	-0.92	0.1988	28724	VV	1
	12.345			25674	VV	
PCB016;4	12.487	0.62	0.2280	23855	VV	1
	12.669			26057	VV	
	12.836			12608	VB	
	13.162			4550	BV	
PCB015;5	13.602	0.07	0.2066	28763	VV	1
	14.019			24284	VV	
	14.181			12186	VV	
	14.362			9087	VV	
	14.577			11757	VV	
	14.739			14495	VV	
PCB260;1	15.061	0.84	0.2140	23884	VV	2
PCB260;2	15.341	0.51	0.1901	23940	VE	2
	15.763			3290	EB	
	16.242			3083	BV	
PCB254;1	16.568	0.36	6.598E-03	1926	VV	3
PCB254;2	16.807	-0.06	0.02018	5684	VV	3
PCB260;3	17.196	0.28	0.1553	35344	VV	2
PCB260;4	17.466	0.64	0.1796	19440	VV	2
PCB254;3	17.683	-0.62	0.01387	5632	VV	3
PCB260;5	17.863	0.07	0.1645	46808	VV	2
PCB254;4	18.246	-0.70	0.3029	59561	VB	3
	18.959			28413	BV	
	19.378			30462	VV	
	19.606			32089	VV	
	19.798			53850	VV	
	19.946			50178	VV	
	20.182			27723	VV	
	20.654			10125	VB	
	21.251			40196	BV	
	21.538			35733	VV	
	21.818			115783	VV	
DBUCLE	21.992	1.17	0.1839	178859	VB	
	22.740			3642	BV	
	22.869			1829	VB	
	23.195			35087	BV	
	23.472			55855	VE	
	23.878			1828	EB	
	24.398			2125	BB	
	24.829			896	BV	
	25.034			12359	VV	
	25.236			29727	VB	
	26.484			8591	BB	
	27.571			1452	BV	
	28.788			639	VB	

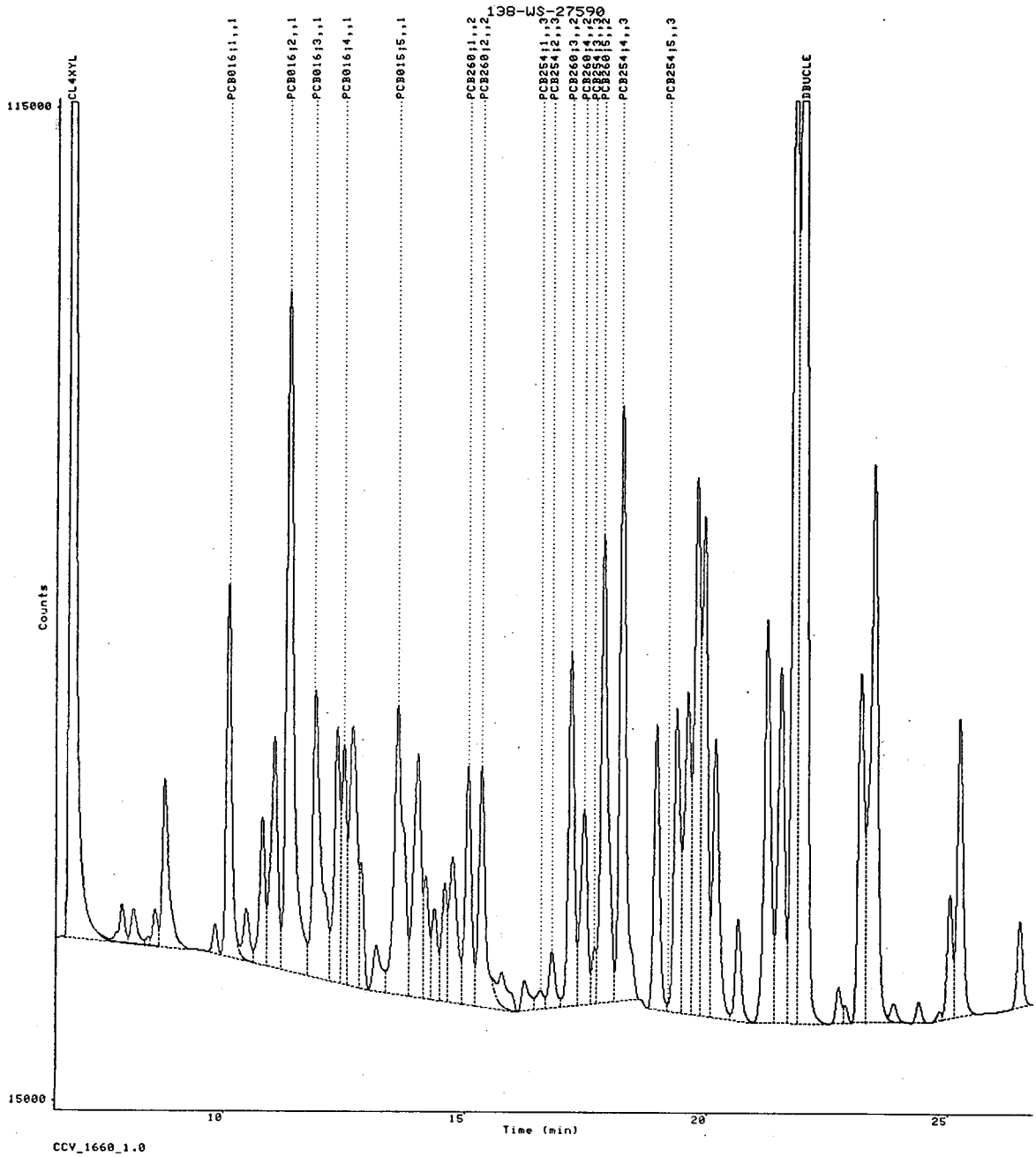
GROUP REPORT

Group	UG/ML
1	1.003
2	0.9035
3	0.3436

ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)

Data file: DISK:[TAYLORC]5697326070.RAW;1
Report: 1197265493
Acquired: 23-NOV-1997 21:07:17
Time range: 6.50-26.75



Date.....15-DEC-1997 17:13:25.87 User: TAYLORC
Report number.....1197265504
Raw file.....DISK:[TAYLORC]5697326081.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....2

Acq. date.....24-NOV-1997 03:50:54
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....CCV_1660_1.0
Notes.....138-WS-27590

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
  length.....30 M
  diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.000 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....63
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...1.00000E+00

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
19.22	PCB254;5	3		

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref	Std	BL	Group
CL4XYL	6.812	-2.42	0.1699	231140			BB	
	7.889			3735			BV	
	8.128			3106			VE	
	8.436			558			EV	
	8.579			3458			VV	
	8.773			16678			VB	
	9.824			2749			BV	
PCB016;1	10.104	-0.24	0.1810	36016			VE	1

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	10.475			4284	EV	
	10.803			13156	VV	
	11.056			20955	VV	
PCB016;2	11.352	-0.87	0.1638	61926	VV	1
PCB016;3	11.902	-1.37	0.1726	25055	VV	1
	12.353			21586	VV	
PCB016;4	12.496	0.08	0.1807	19348	VV	1
	12.680			21273	VV	
	12.846			9404	VB	
	13.167			2665	BV	
PCB015;5	13.610	-0.39	0.1659	23593	VV	1
	14.028			18887	VV	
	14.192			8587	VV	
	14.372			6122	VV	
	14.586			8551	VV	
	14.749			10819	VV	
PCB260;1	15.071	0.24	0.1711	19464	VV	2
PCB260;2	15.353	-0.23	0.1468	19006	VE	2
	15.779			1830	EB	
	16.245			1955	BV	
PCB254;1	16.582	-0.45	-5.122E-04-	926	VV	3
PCB254;2	16.818	-0.73	0.01351	4114	VV	3
PCB260;3	17.207	-0.38	0.1301	30128	VV	2
PCB260;4	17.477	-0.01	0.1451	16031	VV	2
PCB254;3	17.698	-1.52	0.01168	4787	VV	3
PCB260;5	17.874	-0.60	0.1355	39380	VV	2
PCB254;4	18.257	-1.37	0.2562	51517	VB	3
	18.971			24036	BV	
	19.390			25528	VV	
	19.619			27190	VV	
	19.810			46422	VV	
	19.960			42793	VV	
	20.194			23332	VV	
	20.667			8942	VV	
	21.264			34472	VV	
	21.551			31558	VV	
	21.829			104751	VV	
DBUCLE	22.005	0.39	0.1680	164947	VB	
	22.753			3274	BV	
	22.883			1667	VV	
	23.208			31366	VV	
	23.484			50380	VE	
	23.892			1638	EV	
	24.164			155	EB	
	24.412			1771	BB	
	25.047			12666	BV	
	25.250			28342	VB	
	26.497			8077	BB	
	27.005			177	BB	
	27.588			1749	BV	
	27.975			8068	VB	
	28.965			398	BB	
	29.400			1390	BB	
	29.918			1259	BB	

GROUP REPORT

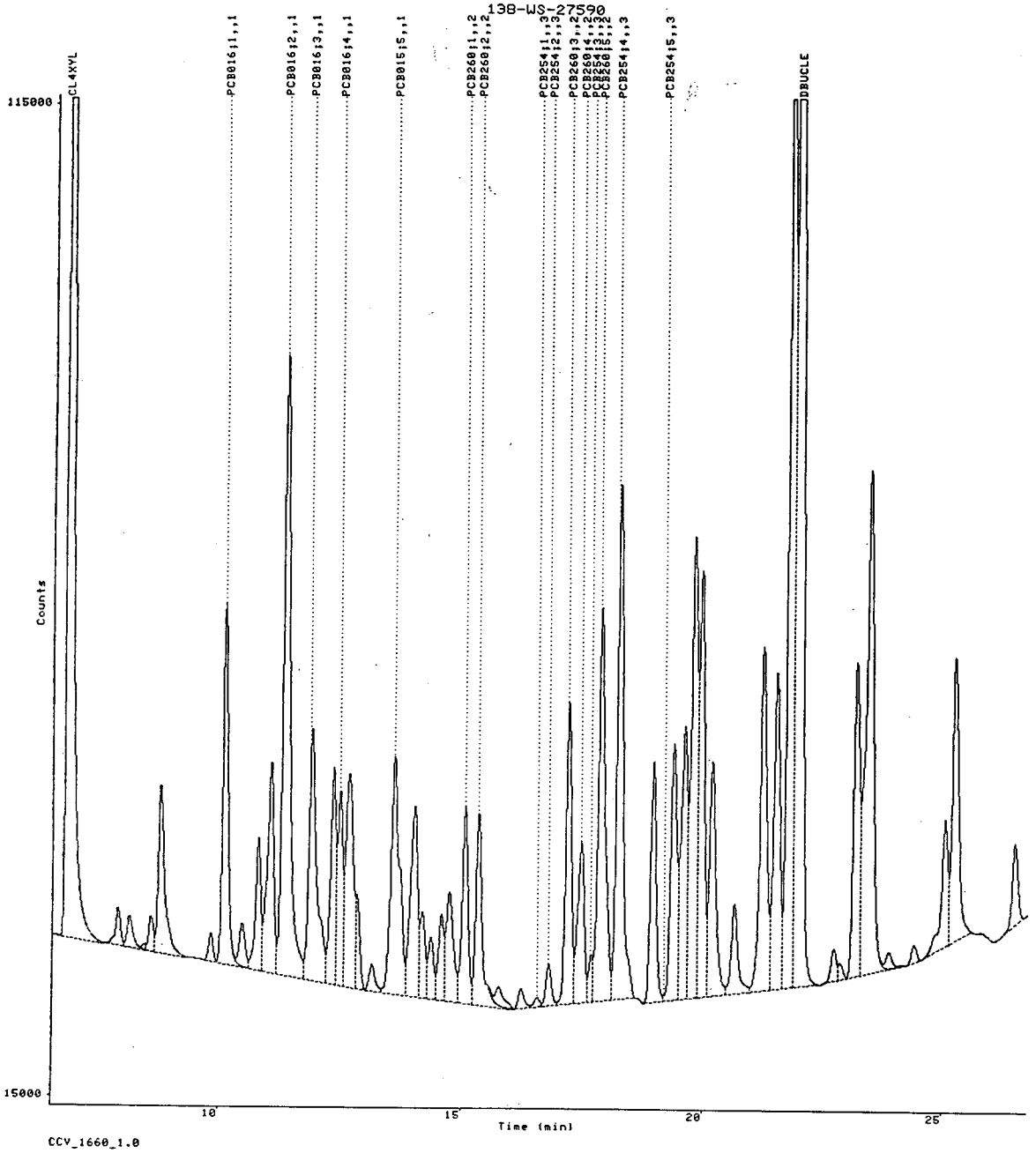
Group	UG/ML

1	0.8639
2	0.7287
3	0.2809

ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)
2: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697326081.RAW;1
Report: 1197265504
Acquired: 24-NOV-1997 03:50:54
Time range: 6.50-26.75



12/16/97

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Section 4.
Environmental Organic Analysis
(Rev. 1: 3/95)

Extract Data (Primary Column)
Inventory Checklist

- [x] Blank, QC sample(s), MS/MSD(s) {if applicable}, and field sample extracts
- [x] Surrogate data (if applicable): the surrogate data consists of the raw data for all extracts
- [NA] Dilutions (if applicable)

Section 4.
Extract Data (Primary Column)
Reviewer Checklist

X The extract data inventory checklist above is complete.

X The extract data has been verified for the following:

- Response data are consistent with tabular summary sheets for all data.
- Spiked analyte and surrogate retention times fall within the applicable retention time windows.
- The chromatograms are scaled no greater than the low calibration standard(s), with the exception of chromatograms that have been re-scaled due to high level hits or matrix.
- Integration is consistent with good chromatography practices unless otherwise specified on raw data.
- When multi-component analytes are being quantitated, the total response is shown on each raw data file for each multi-peak method used.
- Manual edits have been initialed and dated by the analyst.
- All method headers reflect correct analysis data.

X Unless otherwise stated with reasoning in the case narrative, the following QC criteria has been verified:

- Analytical hold times have been met.
- All surrogate and spiked analyte recovery criteria has been met.
- Extraction and analytical hold times have been met.
- Dilutions were performed appropriately.

Date.....15-DEC-1997 17:11:08.07 User: TAYLORC
Report number.....1197265494
Raw file.....DISK:[TAYLORC]5697326071.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Th 12/16/97

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....2

12/16/97

Acq. date.....23-NOV-1997 21:44:00
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....BL-142144-1
Notes.....97C-0439-01

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.002 min
Area reject.....100 count(s)
Noise threshold.....10.0 microvolts
Start peak width....6.00 sec(s)
Min. window.....8.00 sec

Delay time.....6.500 min
No. peaks found.....33
Area threshold.....120
Area/Pk.Ht.....H
% window.....0.00

Analysis type.....EXTERNAL STANDARD
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000

A/D range.....1.0 volt(s)

Origin treatment....Ignore

Conversion factor...3.33333E+02

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
10.10	PCB016;1	1		
11.34	PCB016;2	1		
11.88	PCB016;3	1		
16.81	PCB254;2	3		
17.48	PCB260;4	2		
19.22	PCB254;5	3		

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

0222

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref	Std	BL	Group
CL4XYL	6.805	-1.99	16.03	70342			BB	
	7.654			481			BV	
	7.881			1174			VB	

	8.277				294	BB	
	8.851				50	BB	
	9.826				258	BB	
	10.440				96	BB	
	10.686				214	BB	
	11.046				559	BB	
	11.659				210	BB	
PCB016;4	12.499	-0.13	0.4994	-	72	BB	1
	12.642				175	BB	
PCB015;5	13.596	0.43	-0.1857	-	32	BB	1
	13.818				346	BB	
	14.726				211	BB	
PCB260;1	15.063	0.72	0.3528	-	498	BB	2
PCB260;2	15.349	0.02	1.479		621	BV	2
	15.551				721	VB	
	16.231				77	BB	
PCB254;1	16.583	-0.54	-2.163	-	79	BB	3
PCB260;3	17.210	-0.55	1.470		1213	BB	2
PCB254;3	17.693	-1.17	0.1740	-	446	BV	3
PCB260;5	17.853	0.66	0.1034	-	262	VB	2
PCB254;4	18.245	-0.68	0.7587	-	414	BB	3
	19.363				243	BB	
	19.593				128	BV	
	19.800				567	VB	
	21.210				979	BB	
DBUCLE	21.995	1.02	15.14		48286	BB	
	23.492				150	BB	
	24.401				326	BB	
	26.487				1143	BB	
	27.568				51704	BB	

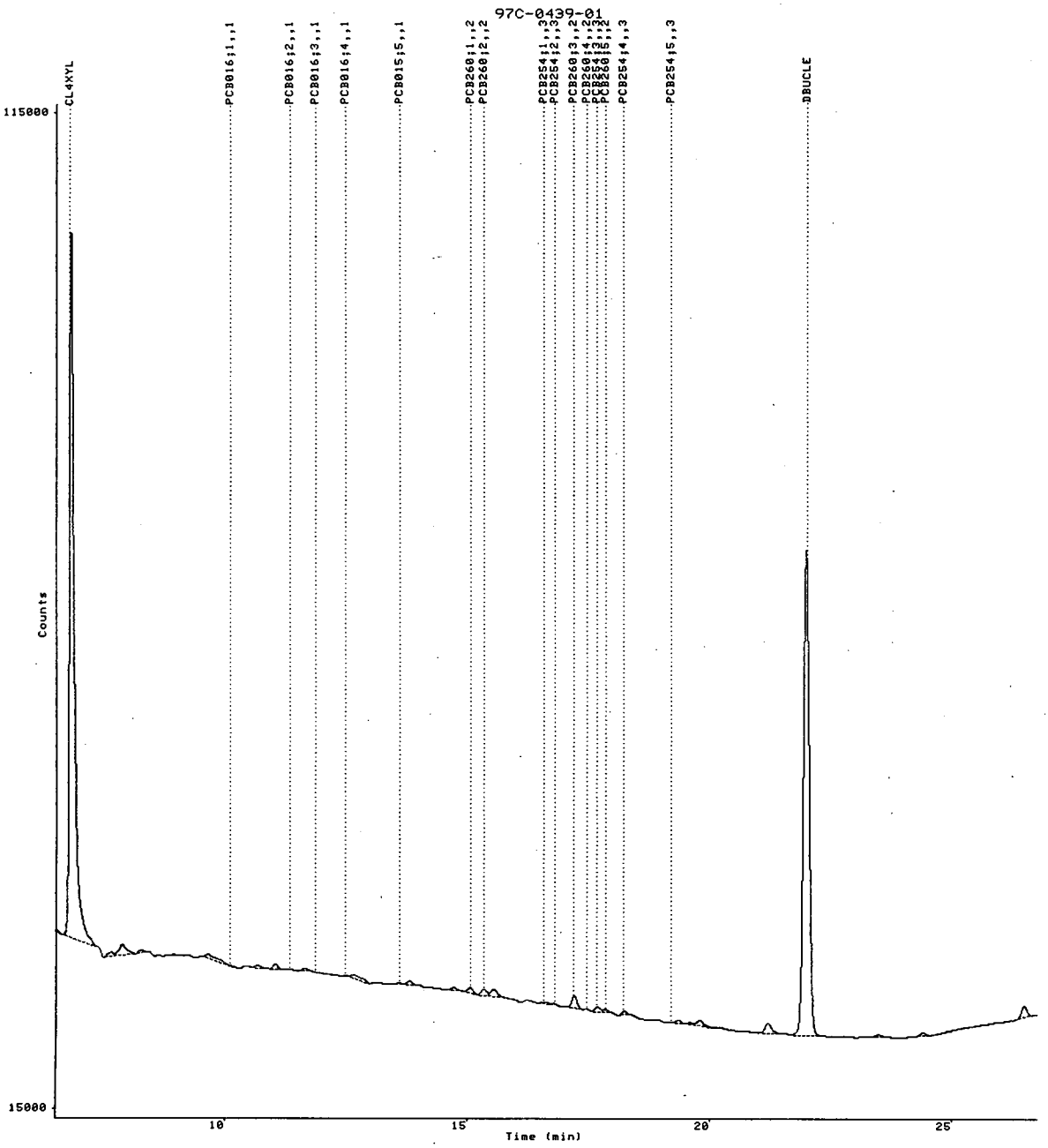
GROUP REPORT

Group	UG/ML
1	0.3137
2	3.406
3	-1.230

ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)
2: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697326071.RAW;1
Report: 1197265494
Acquired: 23-NOV-1997 21:44:00
Time range: 6.50-26.75



BL-142144-1

0224

Date.....15-DEC-1997 17:11:21.21 User: TAYLORC
Report number.....1197265495
Raw file.....DISK:[TAYLORC]5697326072.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....2

Acq. date.....23-NOV-1997 22:20:47
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....QC-142144-1
Notes.....97C-0439-01

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....60
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...3.33333E+02

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
19.22	PCB254;5	3		

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref	Std	BL	Group
	6.605			1807			BB	
CL4XYL	6.812	-2.39	12.51	55378			BB	
	7.657			236			BV	
	7.773			417			VV	
	7.877			1275			VB	
	8.121			1365			BB	
	8.575			1172			BV	
	8.766			7528			VB	

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	9.240			261	BB	
	9.816			1199	BB	
PCB016;1	10.098	0.13	27.99	18012	BB	1
	10.470			1727	BV	
	10.797			6045	VV	
	11.049			10352	VV	
PCB016;2	11.345	-0.47	26.24	31242	VV	1
PCB016;3	11.896	-1.00	28.54	12642	VV	1
	12.347			10683	VV	
PCB016;4	12.489	0.49	30.82	10295	VV	1
	12.676			10836	VE	
	13.156			1169	EB	
PCB015;5	13.600	0.16	28.48	12689	BV	1
	14.015			12899	VV	
	14.182			5103	VV	
	14.362			3160	VV	
	14.580			4388	VV	
	14.740			5465	VV	
PCB260;1	15.062	0.79	30.94	11011	VV	2
PCB260;2	15.343	0.35	27.29	11028	VB	2
	15.765			420	BB	
	16.233			1135	BB	
PCB254;1	16.567	0.45	-0.7461 -	682	BV	3
PCB254;2	16.807	-0.08	3.438	3357	VV	3
PCB260;3	17.199	0.14	24.78	17873	VV	2
PCB260;4	17.468	0.55	25.93	8966	VV	2
PCB254;3	17.688	-0.87	2.973	3717	VV	3
PCB260;5	17.864	-0.00	24.91	22720	VV	2
PCB254;4	18.247	-0.80	46.98	29871	VB	3
	18.960			13423	BV	
	19.379			15114	VV	
	19.609			15680	VV	
	19.800			28240	VV	
	19.946			23598	VV	
	20.184			12986	VV	
	20.723			7818	VB	
	21.252			19026	BV	
	21.540			17114	VV	
	21.819			54014	VV	
DBUCLE	21.994	1.07	16.56	52622	VB	
	22.740			1577	BV	
	22.876			773	VB	
	23.197			16519	BV	
	23.474			26943	VE	
	23.882			806	EB	
	24.402			814	BB	
	24.830			380	BV	
	25.035			5303	VV	
	25.238			12804	VB	
	26.486			3604	BB	
	27.570			52810	BB	
	28.921			315	BB	

GROUP REPORT

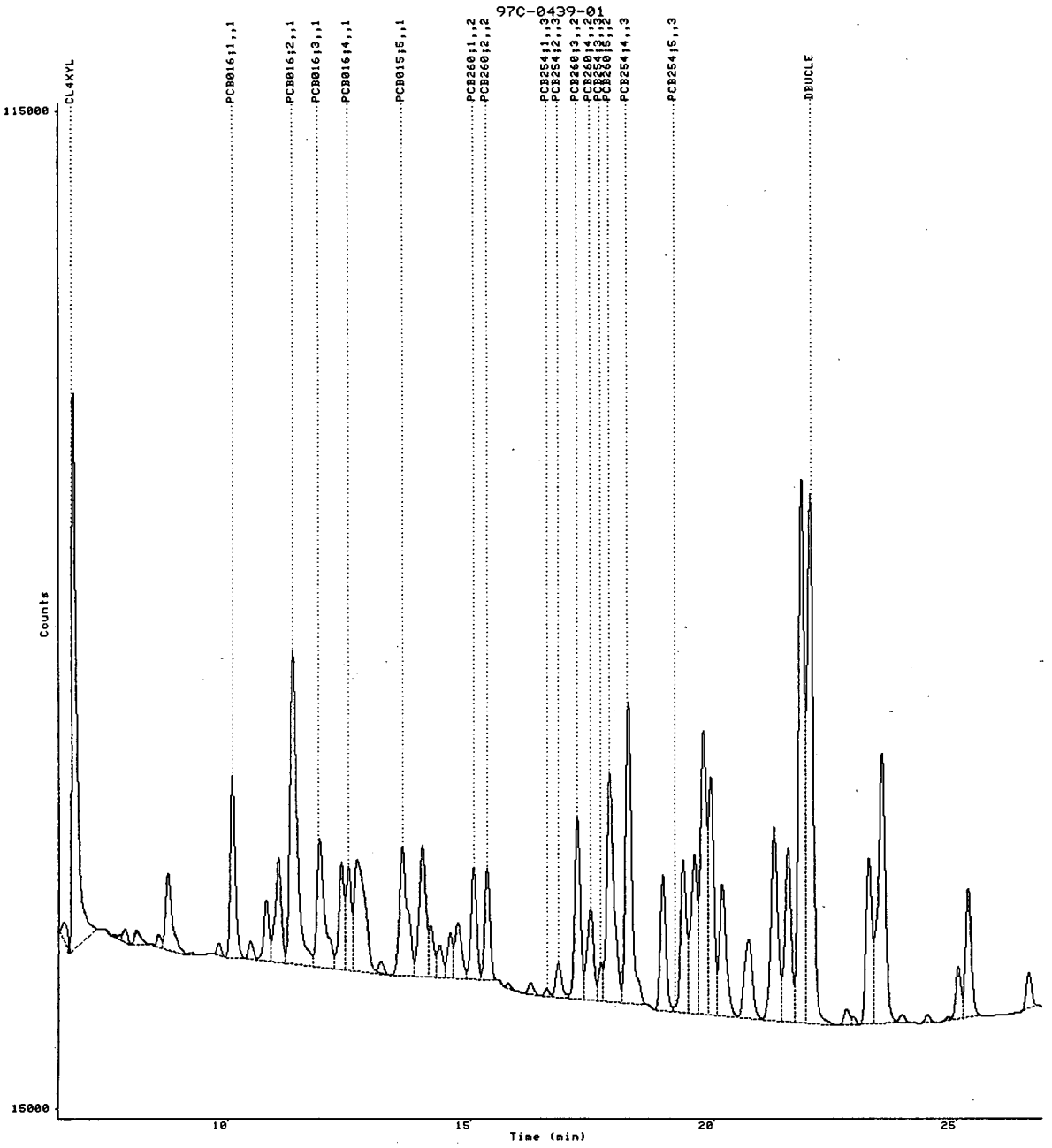
Group	UG/ML
1	142.1
2	133.8

3	52.65

ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)
2: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697326072.RAW;1
Report: 1197265495
Acquired: 23-NOV-1997 22:20:47
Time range: 6.50-26.75



QC-142144-1

0228

Date.....15-DEC-1997 17:11:34.96 User: TAYLORC
Report number.....1197265496
Raw file.....DISK:[TAYLORC]5697326073.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....2

Acq. date.....23-NOV-1997 22:57:08
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....97C05249 X100
Notes.....97C-0439-01

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.002 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....43
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...3.33333E+02

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
11.88	PCB016;3	1		
22.01	DBUCLE			

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref	Std	BL	Group
CL4XYL	6.808	-2.18	-0.05835-	761			BB	0229
	7.666			9399			BE	
	8.240			665			EB	
PCB016;1	10.098	0.11	-0.4195 -	213			BB	1
	11.034			1277			BV	
PCB016;2	11.352	-0.88	0.9038	1306			VV	1
	11.620			511			VB	

	12.110			414	BB	
PCB016;4	12.493	0.23	10.10	3406	BV	1
	12.645			2829	VB	
	13.165			421	BB	
PCB015;5	13.601	0.09	1.751	920	BB	1
	13.982			628	BV	
	14.264			1445	VV	
	14.587			1067	VV	
PCB260;1	15.061	0.82	30.52	10871	VV	2
PCB260;2	15.352	-0.18	24.01	9760	VV	2
	15.561			7424	VB	
	15.924			675	BV	
	16.241			3663	VB	
PCB254;1	16.574	-0.01	3.167	2332	BV	3
PCB254;2	16.808	-0.10	4.472	4091	VB	3
	17.044			1327	BV	
~~PCB260;3~~ do not use.	17.241	-2.37	89.85	56683	VE	2
PCB260;4	17.466	0.67	3.956	1502	EB	2
PCB254;3	17.688	-0.89	3.960	4864	BV	3
PCB260;5	17.859	0.28	3.289	3272	VB	2
PCB254;4	18.245	-0.67	12.28	8103	BB	3
	18.956			1905	BB	
PCB254;5	19.228	-0.80	3.939	2449	BV	3
	19.367			4638	VV	
	19.607			4188	VV	
	19.805			9960	VB	
	20.268			1235	BB	
	21.356			5160	BV	
	21.523			4195	VV	
	21.818			3636	VB	
	23.209			531	BV	
	23.477			1688	VB	
	25.049			133	BV	
	25.238			329	VB	
	26.496			86	BB	
	27.578			554	BB	

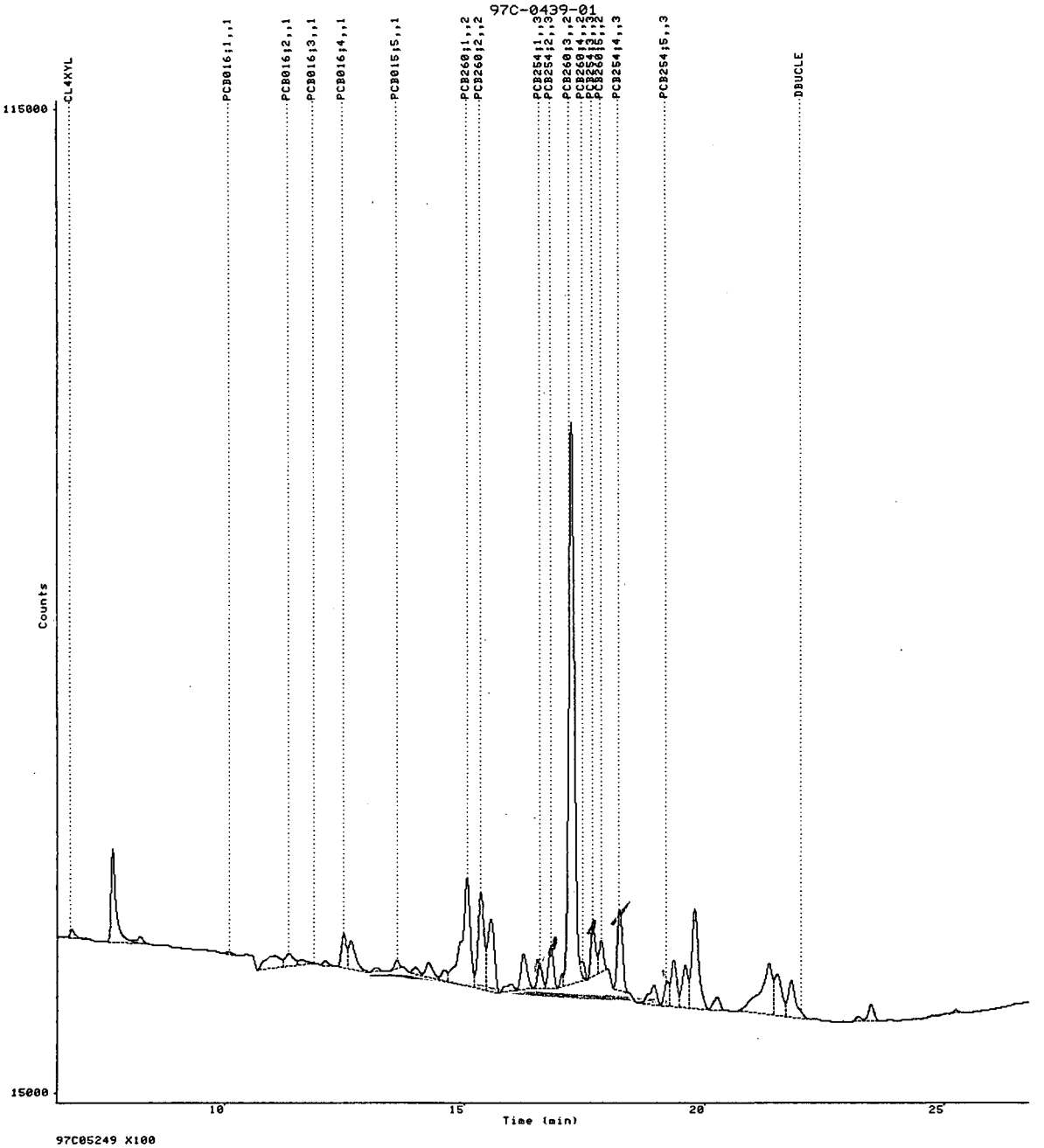
GROUP REPORT

Group	UG/ML
1	12.33
2	~~151.6~~ $61.775 \times \frac{5}{4} = 77.2187$
3	27.82

ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)
2: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697326073.RAW;1
Report: 1197265496
Acquired: 23-NOV-1997 22:57:08
Time range: 6.50-26.75



0231

Date.....15-DEC-1997 17:11:48.58 User: TAYLORC
Report number.....1197265497
Raw file.....DISK:[TAYLORC]5697326074.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....2

Acq. date.....23-NOV-1997 23:33:54
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....97C05249MS X100
Notes.....97C-0439-01

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.002 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....52
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...3.33333E+02

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
11.88	PCB016;3	1		
22.01	DBUCLE			

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref	Std	BL	Group
CL4XYL	6.808	-2.18	-0.03779-	852			BB	
	7.667			11062			BB	
	8.241			667			BB	
	8.799			114			BB	
	9.271			89			BB	
PCB016;1	10.097	0.18	-0.08417-	434			BB	1
	10.465			489			BV	

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	10.575			1029	VB	
	11.046			1309	BV	
PCB016;2	11.352	-0.90	1.243	1723	VV	1
	11.623			479	VB	
	12.114			907	BB	
PCB016;4	12.493	0.22	14.00	4737	BV	1
	12.646			3715	VB	
	13.162			443	BB	
PCB015;5	13.598	0.33	3.073	1523	BV	1
	13.730			918	VV	
	13.984			952	VV	
	14.273			1120	VV	
	14.588			1660	VV	
PCB260;1	15.062	0.78	37.79	13276	VV	2
PCB260;2	15.351	-0.10	30.15	12121	VV	2
	15.564			7879	VB	
	15.836			734	BV	
	15.972			800	VV	
	16.238			3680	VV	
PCB254;1	16.574	-0.00	6.110	3558	VV	3
PCB254;2	16.808	-0.10	7.215	6027	VV	3
	17.044			2431	VV	
~~PCB260;3~~ do not use 12/15/07	17.240	-2.36	116.5	69315	VE	2
PCB260;4	17.466	0.67	8.515	3095	EV	2
PCB254;3	17.690	-1.01	7.628	9092	EV	3
PCB260;5	17.858	0.36	7.443	7141	VV	2
	18.024			2814	VV	
PCB254;4	18.246	-0.71	14.51	9569	VB	3
	18.956			2691	BV	
PCB254;5	19.230	-0.87	5.959	3702	VV	3
	19.369			6649	VV	
	19.606			5818	VV	
	19.805			13927	VV	
	20.267			1987	VB	
	21.354			4424	BV	
	21.530			3519	VV	
	21.822			4963	VB	
	22.313			201	BB	
	22.904			283	BB	
	23.208			828	BV	
	23.476			2506	VB	
	25.047			155	BV	
	25.239			547	VB	
	26.498			150	BB	
	27.578			635	BB	

GROUP REPORT

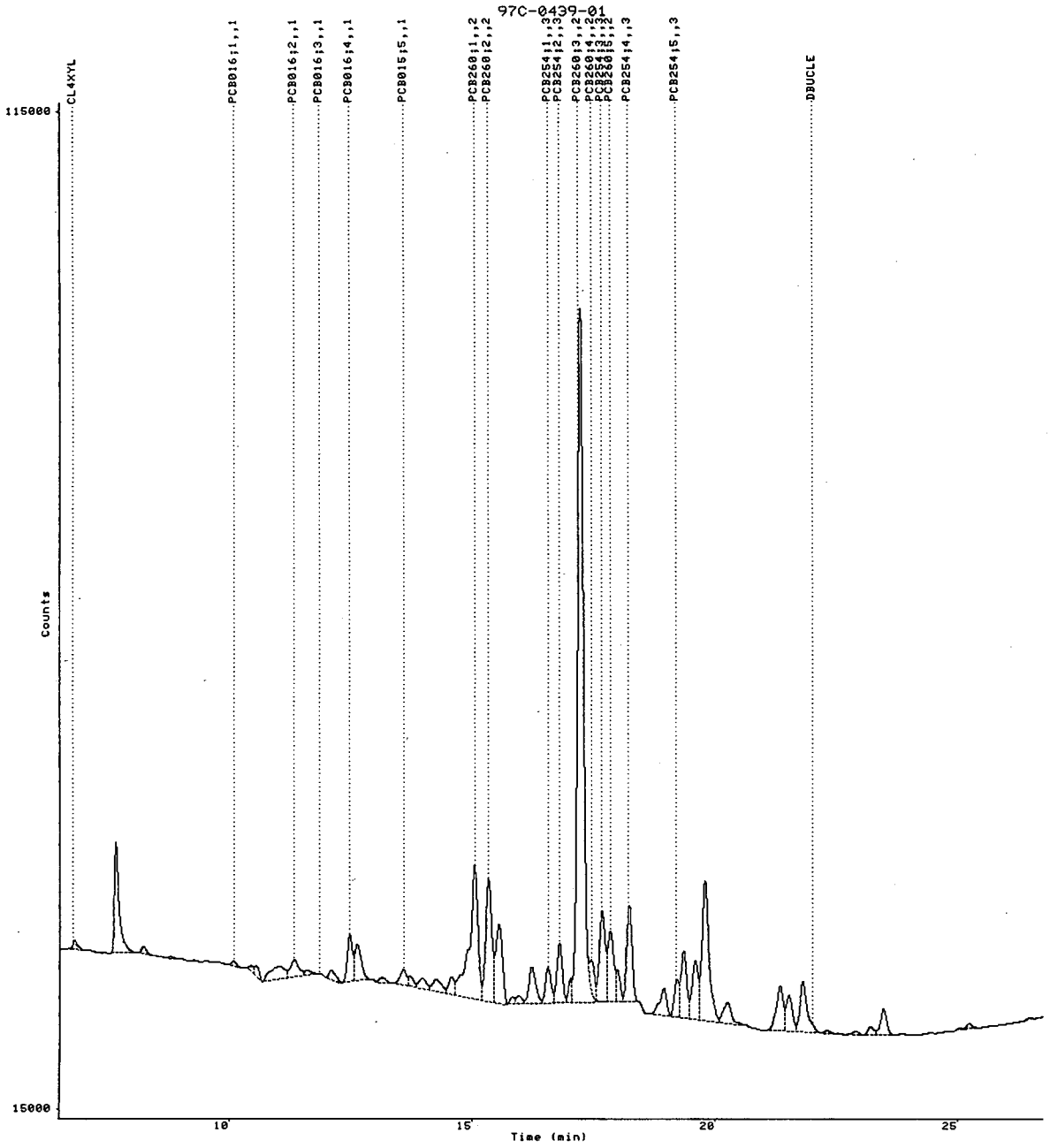
Group	UG/ML
1	18.23
2	~~200.4~~ 83.898 x 5/4 = 104.8725
3	41.43

0233

ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)
2: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697326074.RAW;1
Report: 1197265497
Acquired: 23-NOV-1997 23:33:54
Time range: 6.50-26.75



97C05249MS X100

0234

Date.....15-DEC-1997 17:12:02.10 User: TAYLORC
Report number.....1197265498
Raw file.....DISK:[TAYLORC]5697326075.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....2

Acq. date.....24-NOV-1997 00:10:37
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....97C05249MSD X100
Notes.....97C-0439-01

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.002 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....47
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...3.33333E+02

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
11.88	PCB016;3	1		
17.48	PCB260;4	2		
22.01	DBUCLE			

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

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Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref	Std	BL	Group
CL4XYL	6.811	-2.33	-0.04208-	833			BB	
	7.669			10077			BE	
	8.242			725			EB	
PCB016;1	10.100	-0.03	-0.1525 -	389			BB	1
	10.462			404			BV	
	10.572			963			VB	

	11.043			1217	BV	
PCB016;2	11.355	-1.11	1.010	1437	VE	1
	11.623			238	EB	
	12.112			421	BB	
PCB016;4	12.496	0.05	10.69	3609	BV	1
	12.647			2816	VB	
	13.164			415	BB	
PCB015;5	13.603	-0.01	1.905	990	BB	1
	13.981			504	BV	
	14.269			988	VV	
	14.589			1108	VV	
	14.931			4524	VV	
PCB260;1	15.063	0.71	31.91	11335	VV	2
PCB260;2	15.353	-0.25	25.02	10151	VV	2
	15.561			7643	VB	
	15.844			567	BV	
	15.975			638	VB	
	16.241			2860	BB	
PCB254;1	16.575	-0.05	3.444	2448	BV	3
PCB254;2	16.809	-0.20	4.789	4316	VB	3
	17.045			907	BV	
~~PCB260;3~~ dont use	17.244	-2.57	104.3	63753	VB	2
PCB254;3	17.690	-1.04	4.627	5636	BV	3
PCB260;5	17.861	0.20	5.145	5008	VV	2
PCB254;4	18.247	-0.77	12.42	8195	VB	3
	18.958			2148	BB	
PCB254;5	19.231	-0.96	4.117	2560	BV	3
	19.370			4988	VV	
	19.608			4575	VV	
	19.806			10802	VB	
	20.265			1339	BB	
	21.355			3436	BV	
	21.531			2766	VV	
	21.824			4228	VE	
	22.317			208	EB	
	23.212			685	BV	
	23.479			2051	VB	
	24.145			178	BB	
	25.235			414	BB	
	26.499			143	BB	
	27.579			613	BB	

GROUP REPORT

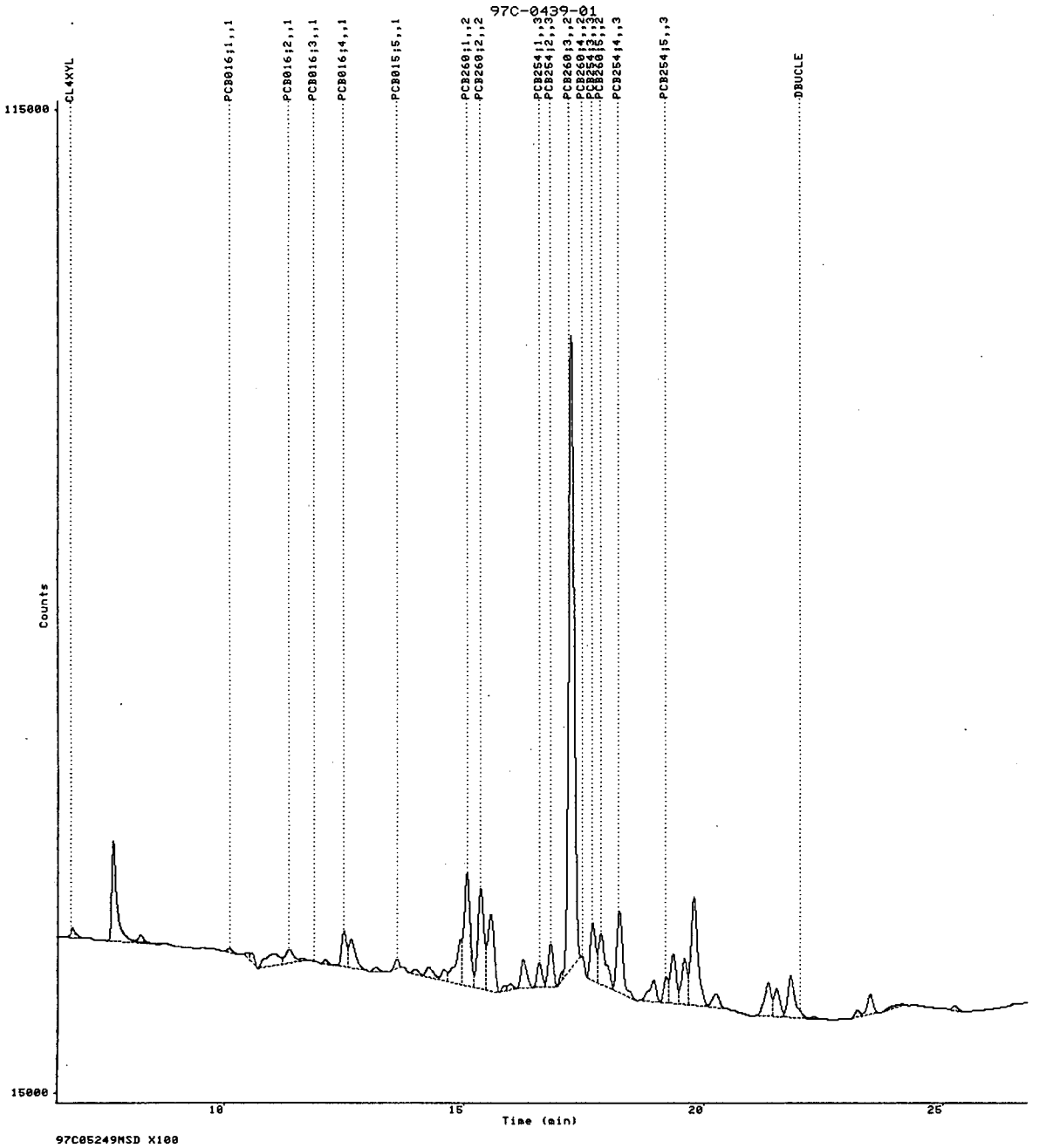
Group	UG/ML
1	13.45
2	~~166.4~~ $62.075 \times \frac{5}{3} = 103.458$
3	29.40

0236

ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)
2: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697326075.RAW;1
Report: 1197265498
Acquired: 24-NOV-1997 00:10:37
Time range: 6.50-26.75



0237

Date.....15-DEC-1997 17:12:15.97 User: TAYLORC
Report number.....1197265499
Raw file.....DISK:[TAYLORC]5697326076.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....2

Acq. date.....24-NOV-1997 00:47:24
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....97C05250 X100
Notes.....97C-0439-01

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.002 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....53
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...3.33333E+02

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
11.88	PCB016;3	1		
22.01	DBUCLE			

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref	Std	BL	Group
CL4XYL	6.810	-2.28	-0.03982-	843			BB	
	7.667			4273			BB	
	8.245			7548			BB	
	9.555			81			BB	
PCB016;1	10.098	0.15	-0.2542 -	322			BB	1
	10.605			2312			BB	
	10.799			656			BV	

0238

	11.048			1053	VV	
PCB016;2	11.361	-1.43	0.9396	1350	VV	1
	11.628			1157	VB	
	12.114			239	BB	
	12.326			252	BV	
PCB016;4	12.503	-0.34	8.013	2690	VV	1
	12.644			2817	VV	
	13.162			2006	VB	
PCB015;5	13.598	0.28	1.863	971	BV	1
	13.759			865	VV	
	14.010			624	VB	
	14.269			3886	BV	
	14.726			3921	VV	
	14.928			33190	VV	
PCB260;1	15.054	1.27	112.4	35804	VV	2
PCB260;2	15.368	-1.11	50.35	19504	VV	2
	15.540			32796	VB	
	15.821			745	BV	
	15.980			1318	VB	
	16.245			3200	BV	
PCB254;1	16.574	-0.00	6.258	3619	VV	3
PCB254;2	16.807	-0.08	8.556	6967	VB	3
	17.047			2708	BV	
PCB260;3	17.223	-1.30	54.96	37286	VE	2
PCB260;4	17.475	0.13	7.246	2654	EB	2
PCB254;3	17.689	-0.96	6.476	7769	BV	3
PCB260;5	17.860	0.24	6.775	6523	VB	2
PCB254;4	18.235	-0.06	23.82	15574	BB	3
	18.966			5236	BV	
PCB254;5	19.228	-0.79	4.959	3083	VV	3
	19.371			9159	VV	
	19.608			8505	VV	
	19.806			19471	VB	
	20.266			2613	BB	
	20.821			119	BB	
	21.356			6570	BV	
	21.534			4303	VV	
	21.824			6586	VE	
	22.310			448	EB	
	23.212			1367	BV	
	23.477			3525	VB	
	23.864			179	BB	
	25.043			204	BV	
	25.242			660	VB	
	26.494			248	BB	
	27.580			620	BB	

GROUP REPORT

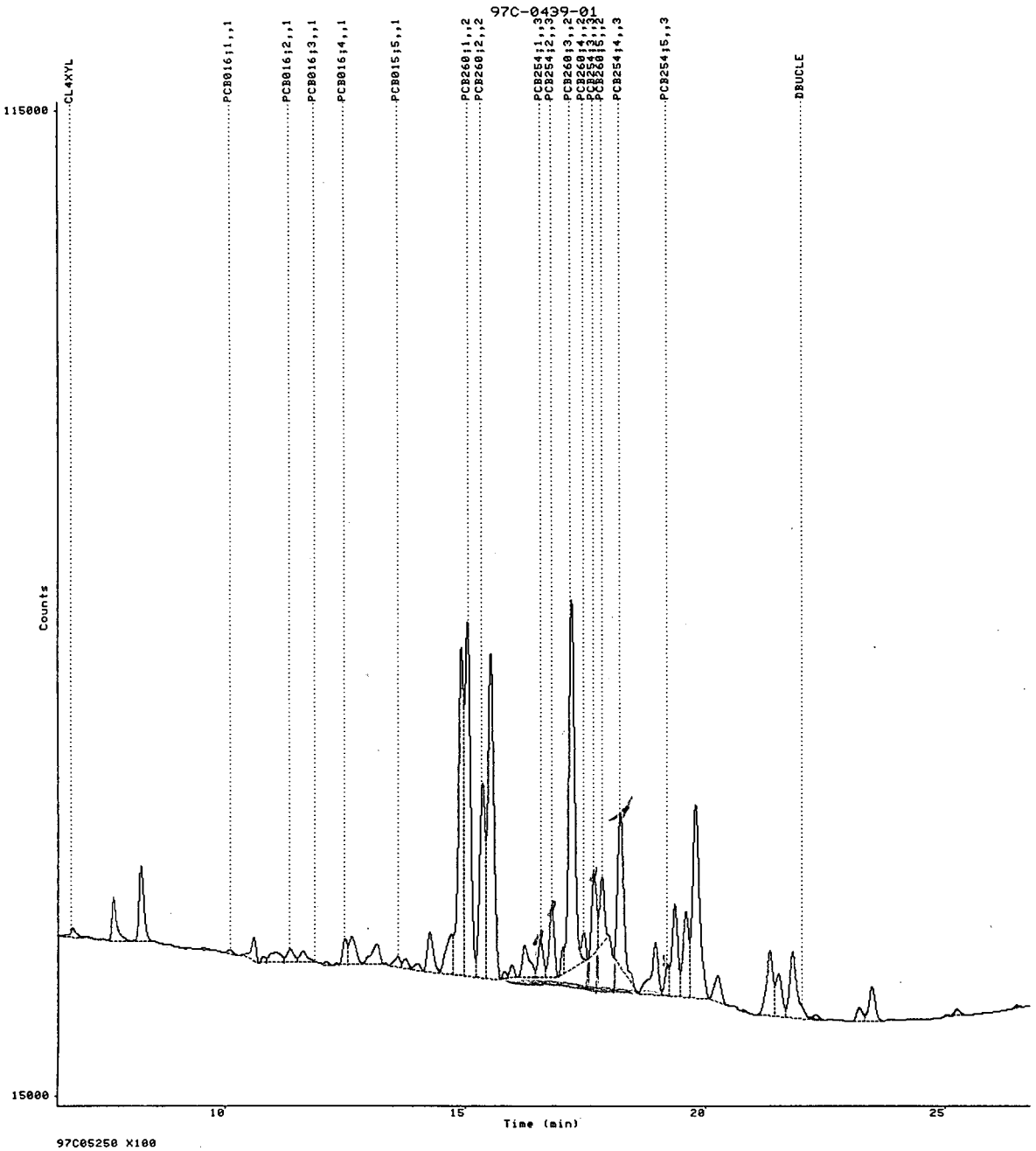
Group	UG/ML
1	10.56
2	231.8
3	50.07

0239

ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)
2: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697326076.RAW;1
Report: 1197265499
Acquired: 24-NOV-1997 00:47:24
Time range: 6.50-26.75



0241

Date.....15-DEC-1997 17:12:29.44 User: TAYLORC
Report number.....1197265500
Raw file.....DISK:[TAYLORC]5697326077.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....2

Acq. date.....24-NOV-1997 01:24:10
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....97C05249
Notes.....97C-0439-01

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.000 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....92
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...3.33333E+02

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
11.88	PCB016;3	1		
22.01	DBUCLE			

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref	Std	BL	Group
	6.664			3280			BV	
CL4XYL	6.804	-1.93	14.76	64966			VE	
	7.129			1112			EB	
	7.495			3101			BV	
	7.666			427866			VE	
	8.119			14587			EV	
	8.233			46729			EV	

0242

	8.525				12216	EV	
	8.823				10234	VE	
	9.047				1332	EB	
	9.187				1105	BB	
	9.526				14602	BE	
	9.808				2295	EB	
PCB016;1	10.093	0.41	21.00		13809	BB	1
	10.452				14095	BV	
	10.616				27532	VV	
	10.768				13953	VV	
	10.955				26256	VV	
	11.038				24898	VV	
PCB016;2	11.326	0.63	62.42		69864	VV	1
	11.621				14122	VV	
	11.739				5223	VB	
	12.108				22351	BV	
PCB016;4	12.476	1.29			527024	VV	1
	12.629				144149	VE	
	12.983				25438	EV	
	13.119				34371	EV	
	13.359				5065	VV	
PCB015;5	13.594	0.52	224.0	+	71376	VV	1
	13.731				33850	VV	
	13.969				31316	VV	
	14.267				104216	VV	
	14.569				64791	VV	
	14.768				84502	VV	
	14.930				250176	VV	
PCB260;1	15.060	0.89			467249	VV	2
PCB260;2	15.348	0.05			401905	VV	2
	15.556				346874	VE	
	15.747				26962	EV	
	15.983				37371	EV	
	16.243				228011	VV	
PCB254;1	16.569	0.30			152022	VV	3
PCB254;2	16.803	0.20			261020	VV	3
PCB260;3	17.239	-2.28			955475	VE	2
PCB260;4	17.453	1.45			59166	EV	2
PCB254;3	17.676	-0.19			388705	VV	3
PCB260;5	17.859	0.28			229781	VV	2
	17.999				139403	VV	
PCB254;4	18.244	-0.61			532798	VE	3
	18.447				21089	EV	
	18.832				87047	VV	
	18.957				126326	VV	
PCB254;5	19.209	0.34			201959	VV	3
	19.369				227853	VV	
	19.604				238949	VV	
	19.800				530831	VV	
	20.264				88432	VV	
	20.441				23063	VB	
	20.803				2698	BB	
	21.352				202906	BV	
	21.524				175148	VV	
	21.822				223727	VE	
	22.313				15113	EB	
	22.577				2634	BV	
	22.765				3766	VV	
	22.877				3691	VB	
	23.211				47459	BV	

23.477	125417	VB
23.856	12080	BB
24.218	1277	BV
24.411	3040	VB
24.773	4645	BB
25.040	9818	BV
25.237	32900	VB
25.670	1160	BB
26.113	780	BV
26.269	881	VV
26.491	13502	VE
26.708	2199	EV
26.818	2724	EV
27.183	3606	VV
27.579	51520	VE
27.839	7815	EV
28.153	25471	VV
28.439	6769	VV
28.813	5867	VV
29.121	2019	VV
29.365	2670	VV
29.790	2149	VV
30.125	3459	VV
30.425	2769	VV
30.656	2148	VB

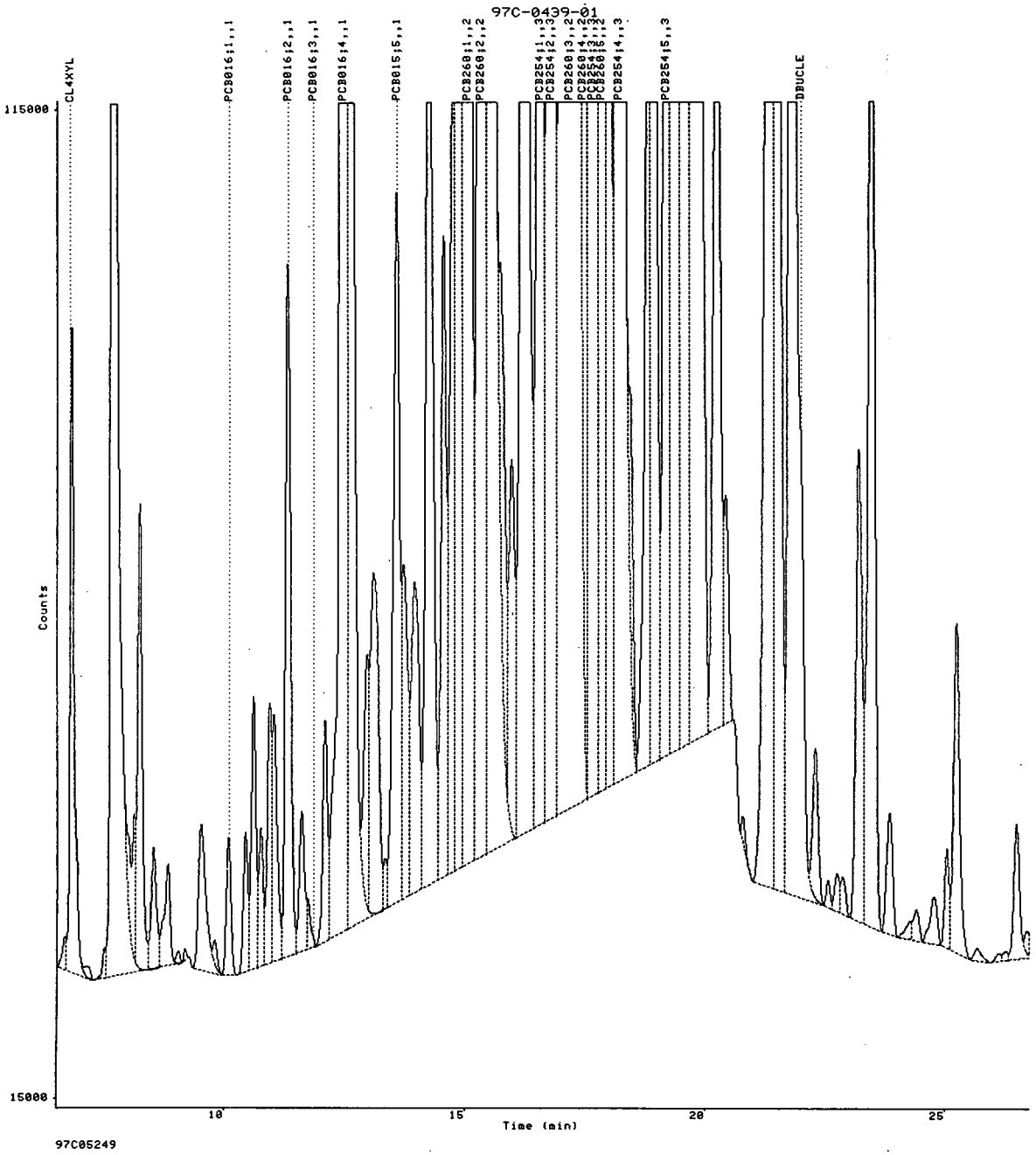
GROUP REPORT

Group	UG/ML
1	307.4

ANALYSIS NOTES

1: Response is outside of the response function domain. (149)
2: WARNING: Peak windows overlap. Check peak identification. (245)
3: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697326077.RAW;1
Report: 1197265500
Acquired: 24-NOV-1997 01:24:10
Time range: 6.50-26.75



0245

Date.....15-DEC-1997 17:12:43.70 User: TAYLORC
Report number.....1197265501
Raw file.....DISK:[TAYLORC]5697326078.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....2

Acq. date.....24-NOV-1997 02:00:56
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....97C05249MS
Notes.....97C-0439-01

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.000 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....87
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...3.33333E+02

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
22.01	DBUCLE			

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref	Std	BL	Group
	6.641			2737			BV	
CL4XYL	6.804	-1.93	15.59	68450			VB	
	7.666			503721			BE	
	8.118			11822			EV	
	8.233			55848			EV	
	8.530			14761			EV	
	8.776			14050			VB	
	9.275			1062			BV	

0246

	9.516			19979	VV	
	9.810			5589	VV	
PCB016;1	10.091	0.55	44.93	27743	VV	1
	10.451			18214	VV	
	10.617			30790	VV	
	10.774			20536	VV	
	10.955			29982	VV	
	11.039			32546	VV	
PCB016;2	11.326	0.63	96.16	101492	VE	1
	11.621			17619	EV	
	11.748			8769	EV	
PCB016;3	11.875	0.22	34.58	15259	VV	1
	12.108			37700	VV	
PCB016;4	12.475	1.32		590130	VV	1
	12.632			181851	VE	
	12.975			34374	EV	
	13.133			46320	VV	
	13.362			13796	VV	
PCB015;5	13.593	0.61		99895	VV	1
	13.724			52665	VV	
	13.983			53239	VV	
	14.282			76200	VV	
	14.567			102919	VV	
	14.765			121988	VV	
	14.934			283166	VV	
PCB260;1	15.060	0.89		565698	VV	2
PCB260;2	15.348	0.07		511121	VV	2
	15.560			401766	VE	
	15.753			46973	EV	
	15.982			56124	EV	
	16.237			201712	VV	
PCB254;1	16.570	0.26		215210	VV	3
PCB254;2	16.803	0.18		354516	VV	3
PCB260;3	17.238	-2.21		967256	VV	2
PCB260;4	17.459	1.08		262497	VV	2
PCB254;3	17.676	-0.16		567195	VV	3
PCB260;5	17.861	0.20		330389	VV	2
	18.001			204765	VV	
PCB254;4	18.242	-0.48		559253	VE	3
	18.448			41485	EV	
	18.834			121742	EV	
	18.958			200162	VV	
PCB254;5	19.209	0.37		313346	VV	3
	19.368			333443	VV	
	19.606			340039	VV	
	19.800			735227	VE	
	20.263			144913	EV	
	20.426			56352	EV	
	20.634			32150	VV	
	20.802			18581	VV	
	21.349			279075	VV	
	21.525			248908	VV	
	21.823			323176	VE	
	22.316			27359	EV	
	22.579			19647	EV	
	22.914			44649	VV	
	23.209			78243	VV	
	23.473			175302	VE	
	23.859			19020	EV	
	24.236			6023	VV	

24.431	9209	VV
24.783	7634	VV
25.041	18458	VV
25.238	50262	VE
25.651	2545	EB
26.116	553	BV
26.492	18497	VE
26.710	2896	EV
26.835	4246	EV
27.168	5584	VV
27.580	56163	VV
27.818	18717	VV
28.152	25450	VV
28.427	9048	VV
28.817	6833	VV
29.338	6551	VV
29.761	3320	VV
30.140	5525	VV
30.408	9174	VB

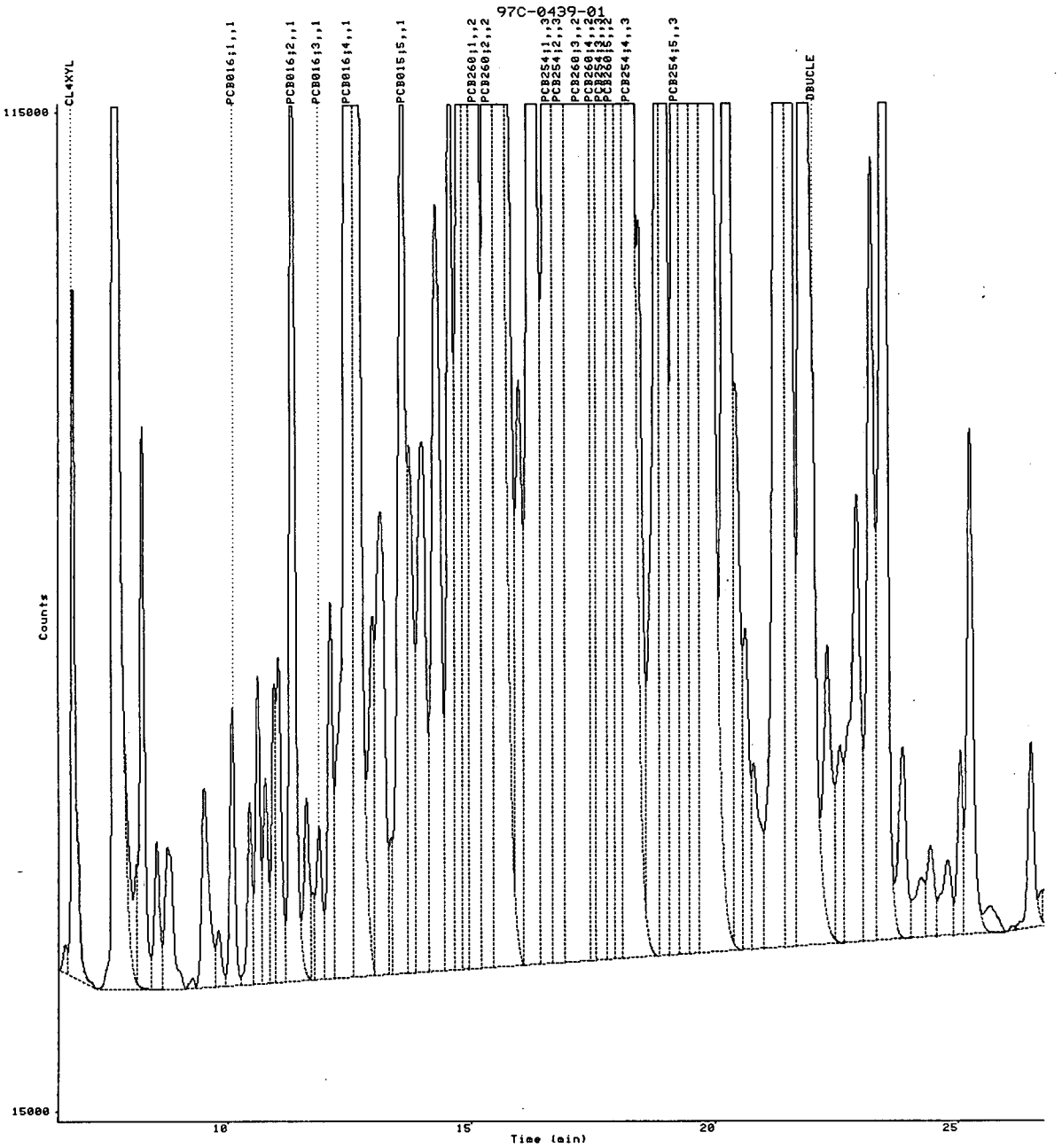
GROUP REPORT

Group	UG/ML
1	175.7

ANALYSIS NOTES

1: Response is outside of the response function domain. (149)
2: WARNING: Peak windows overlap. Check peak identification. (245)
3: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697326078.RAW;1
Report: 1197265501
Acquired: 24-NOV-1997 02:00:56
Time range: 6.50-26.75



97C05249MS

0249

Date.....15-DEC-1997 17:12:57.94 User: TAYLORC
Report number.....1197265502
Raw file.....DISK:[TAYLORC]5697326079.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....2

Acq. date.....24-NOV-1997 02:37:42
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....97C05249MSD
Notes.....97C-0439-01

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.000 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....89
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...3.33333E+02

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
17.48	PCB260;4	2		
22.01	DBUCLE			

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref	Std	BL	Group
	6.652			2141			BV	
CL4XYL	6.805	-2.00	14.97	65843			VB	
	7.492			1690			BV	
	7.666			512272			VE	
	8.121			11818			EV	
	8.234			50552			EV	
	8.531			13843			EV	

0250

	8.757				14116	VV	
	8.807				14034	VB	
	9.195				611	BV	
	9.278				870	VV	
	9.520				17532	VV	
	9.811				4506	VV	
PCB016;1	10.092	0.50	39.86		24900	VB	1
	10.453				14538	BV	
	10.618				27649	VV	
	10.770				19572	VV	
	10.958				26822	VV	
	11.040				29816	VV	
PCB016;2	11.326	0.64	83.52		90140	VE	1
	11.621				16072	EV	
	11.738				7501	EV	
PCB016;3	11.875	0.22	31.15		13777	VV	1
	12.106				25808	VV	
PCB016;4	12.475	1.31			537993	VV	1
	12.629				150551	VE	
	12.979				30294	EV	
	13.121				40284	VV	
	13.358				11551	VV	
PCB015;5	13.593	0.59	312.1	+	82056	VV	1
	13.730				42396	VV	
	13.978				42309	VV	
	14.273				78538	VV	
	14.569				76510	VV	
	14.767				96197	VV	
	14.935				264684	VV	
PCB260;1	15.059	0.99			490182	VV	2
PCB260;2	15.349	-0.03			423932	VV	2
	15.557				362895	VE	
	15.746				32272	EV	
	15.985				51467	EV	
	16.240				182571	VV	
PCB254;1	16.569	0.27			172467	VV	3
PCB254;2	16.803	0.18			286680	VV	3
PCB260;3	17.246	-2.68			970112	VV	2
PCB254;3	17.676	-0.19			413073	VV	3
PCB260;5	17.861	0.17			259756	VV	2
	17.998				159774	VV	
PCB254;4	18.244	-0.58			468894	VE	3
	18.448				34807	EV	
	18.832				107894	VV	
	18.959				155822	VV	
PCB254;5	19.210	0.33			223972	VV	3
	19.369				256487	VV	
	19.606				270789	VV	
	19.802				574370	VE	
	20.261				113099	EV	
	20.438				48541	EV	
	20.630				26140	VV	
	20.801				14694	VV	
	21.351				218163	VV	
	21.527				192601	VV	
	21.822				268027	VE	
	22.313				18700	EV	
	22.578				7488	EV	
	22.756				9833	VV	
	22.884				8954	VV	

23.209	61558	VV
23.474	147350	VE
23.857	15296	EV
24.417	6095	VV
24.799	10261	VV
25.045	24616	VV
25.237	53864	VB
26.183	757	BV
26.490	16879	VE
26.728	3841	EV
26.829	4729	VV
27.170	5039	VV
27.577	52351	VV
27.846	14672	VV
28.152	23896	VV
28.433	8378	VV
28.818	6826	VV
29.021	4524	VV
29.142	4589	VV
29.370	6099	VV
30.118	12245	VV
30.383	8621	VB

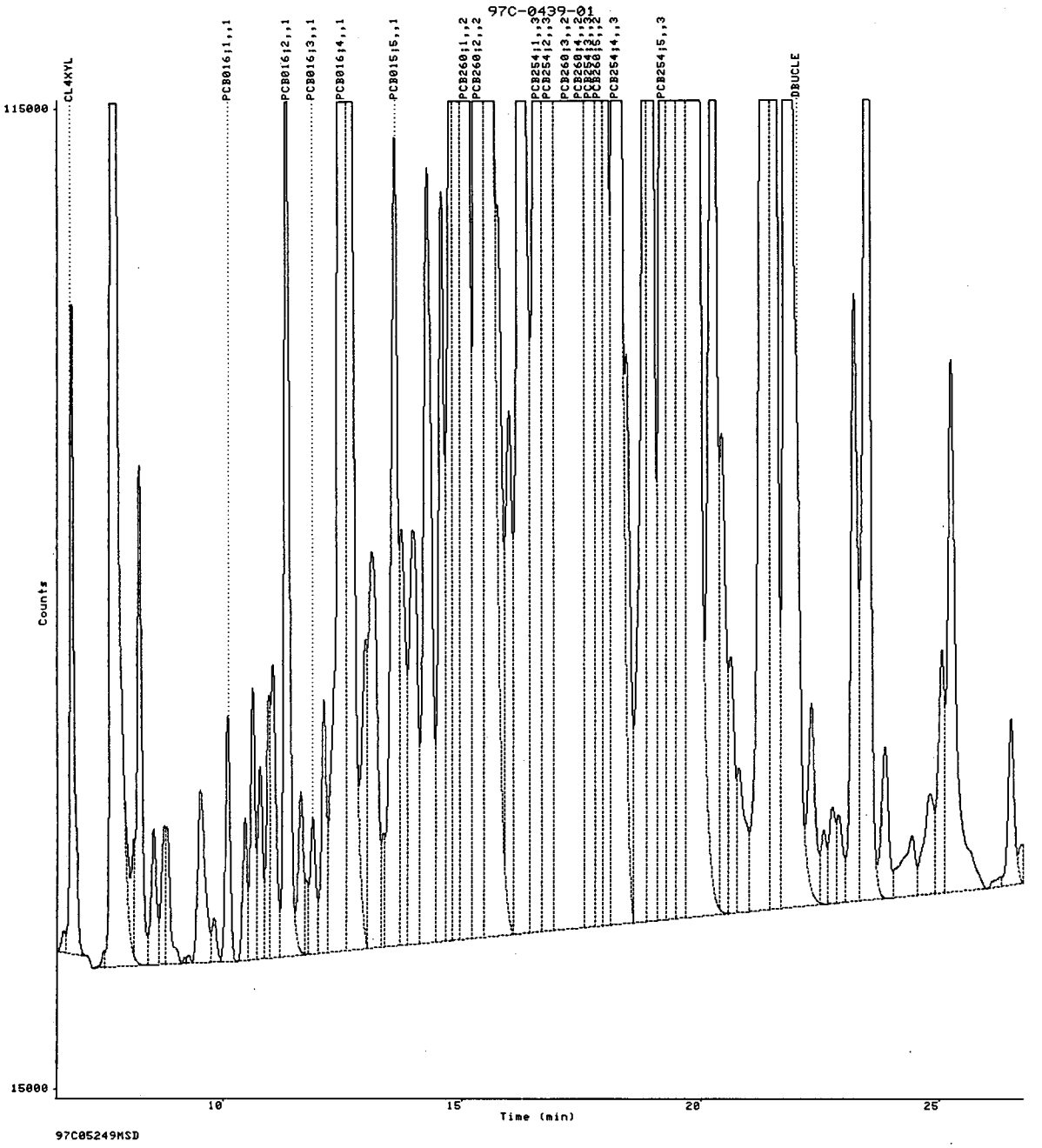
GROUP REPORT

Group	UG/ML
1	466.6

ANALYSIS NOTES

1: Response is outside of the response function domain. (149)
2: WARNING: Peak windows overlap. Check peak identification. (245)
3: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697326079.RAW;1
Report: 1197265502
Acquired: 24-NOV-1997 02:37:42
Time range: 6.50-26.75



0253

Date.....15-DEC-1997 17:13:11.71 User: TAYLORC
Report number.....1197265503
Raw file.....DISK:[TAYLORC]5697326080.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....2

Acq. date.....24-NOV-1997 03:14:06
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....97C05250
Notes.....97C-0439-01

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.000 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....95
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...3.33333E+02

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
22.01	DBUCLE			

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref	Std	BL	Group
	6.656			3686			BV	
CL4XYL	6.808	-2.19	12.67	56068			VB	
	7.122			89			BB	
	7.671			270730			BE	
	7.992			1024			EV	
	8.238			415429			VE	
	8.528			26186			EV	
	8.830			19085			EV	

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	9.184			536	VV	
	9.289			471	VB	
	9.553			20997	BE	
	9.816			1990	EV	
PCB016;1	10.096	0.23	34.80	22003	VV	1
	10.458			20847	VV	
	10.623			133868	VV	
	10.768			51436	VV	
	10.960			44809	VV	
	11.048			40454	VV	
PCB016;2	11.338	-0.05	72.45	79705	VV	1
	11.617			38742	VV	
PCB016;3	11.770	6.53	35.38	15607	VV	1
	11.992			7080	VV	
	12.117			14023	VV	
	12.337			42842	VV	
PCB016;4	12.485	0.70		308642	VV	1
	12.631			158067	VV	
	13.174			162651	VV	
	13.351			52528	VV	
PCB015;5	13.593	0.59		88423	VV	1
	13.774			76922	VV	
	14.019			68579	VV	
	14.275			253127	VV	
PCB260;1	14.994	4.88		970747	VV	2
PCB260;2	15.375	-1.58		867440	VV	2
	15.538			970515	VE	
	15.783			96013	EV	
	15.989			136124	EV	
	16.250			217495	VV	
	16.413			164756	VV	
PCB254;1	16.575	-0.07		241762	VV	3
PCB254;2	16.807	-0.08		417589	VV	3
	17.046			294550	VV	
PCB260;3	17.243	-2.50		962216	VV	2
PCB260;4	17.479	-0.13		297002	VV	2
PCB254;3	17.683	-0.59		655292	VV	3
PCB260;5	17.868	-0.25		454148	VV	2
	18.006			273303	VV	
PCB254;4	18.239	-0.33		920847	VE	3
	18.451			78667	EV	
	18.809			170575	EV	
	18.976			379568	VV	
PCB254;5	19.213	0.13		294547	VV	3
	19.377			454306	VV	
	19.612			484043	VV	
	19.811			967450	VE	
	20.271			200223	EV	
	20.548			52844	VV	
	20.606			54017	VV	
	20.806			37084	VV	
	20.953			22854	VV	
	21.359			372173	VV	
	21.534			270743	VV	
	21.831			389225	VE	
	22.315			35555	EV	
	22.620			14855	EV	
	22.693			15259	VV	
	22.872			12070	VV	
	23.222			106713	VV	

23.482	216243	VE
23.868	22143	EV
24.137	8181	VV
24.249	12083	VV
24.425	8254	VV
24.652	3136	VV
24.847	4139	VV
25.048	21097	VV
25.251	56191	VE
25.653	1403	EB
25.827	124	BB
26.131	1519	BV
26.327	3042	VV
26.501	23431	VE
26.679	2382	EV
27.028	5684	EV
27.188	13810	VV
27.377	6110	VV
27.590	48046	VV
27.859	16314	VV
27.976	15624	VV
28.161	33463	VE
28.624	2376	EB
28.998	750	BB
29.345	3073	BB
29.879	833	BB
30.407	3495	BB

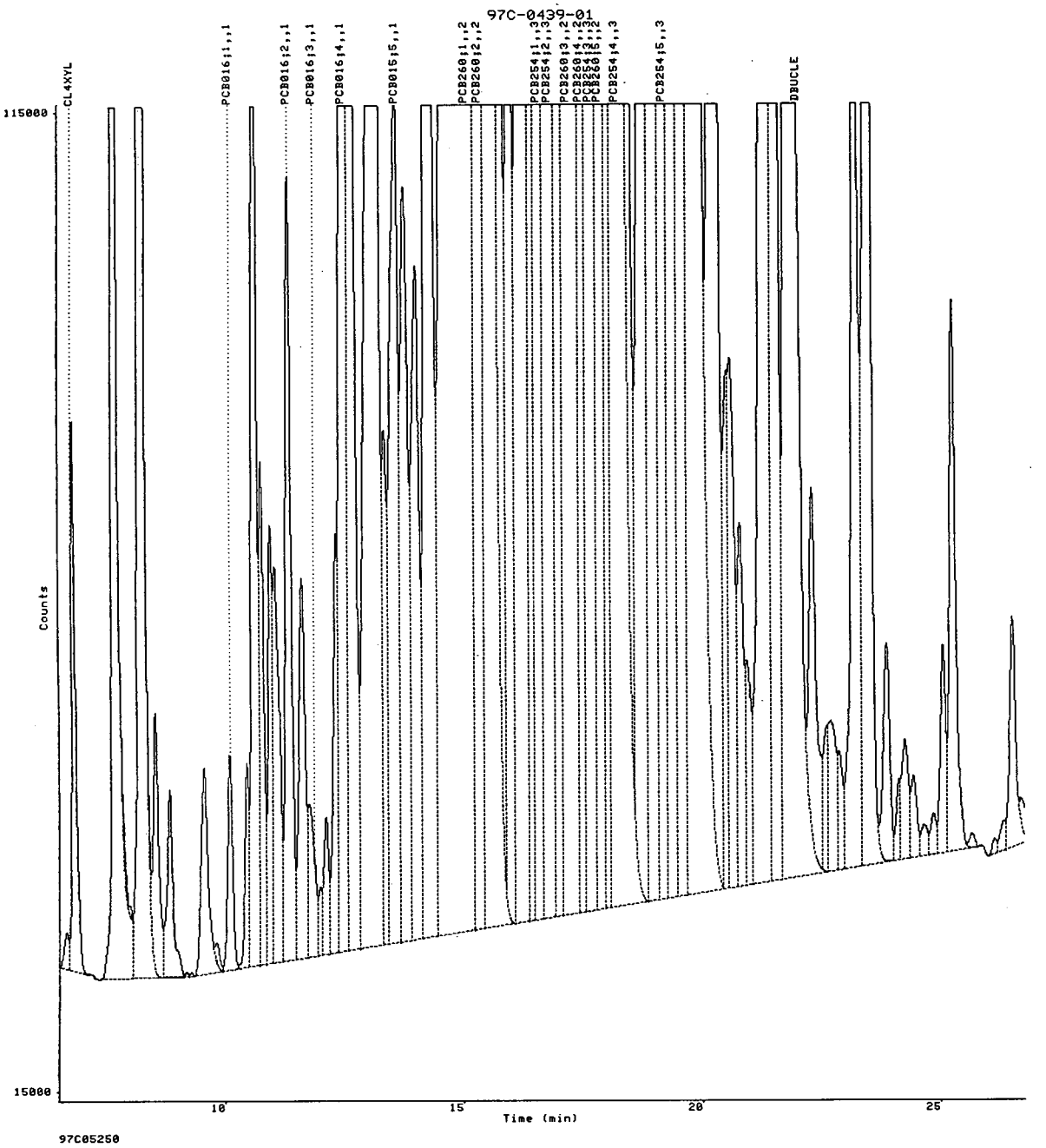
GROUP REPORT

Group	UG/ML
1	142.6

ANALYSIS NOTES

1: Response is outside of the response function domain. (149)
2: WARNING: Peak windows overlap. Check peak identification. (245)
3: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697326080.RAW;1
Report: 1197265503
Acquired: 24-NOV-1997 03:14:06
Time range: 6.50-26.75



12/15/97

12/16/97

0257

Section 5.
Environmental Organic Analysis
(Rev. 1: 3/95)

Confirmation Column Data
Inventory Checklist

NA The confirmation column data as specified in Section 1 of the green sheets.

Section 5.
Confirmation Column Data
Reviewer Checklist

X The confirmation column data inventory checklist above is complete.

X The confirmation column data has been verified for the following:

- Response data are consistent with tabular summary sheets for all data.
- For each analyte on the tabular summary, the retention time is consistent with the mid-range calibration standard.
- The low standards are clearly distinguished from the baseline.
- Integration is consistent with good chromatography practices unless otherwise specified on raw data.
- Spiked analyte and surrogate retention times fall within the applicable retention time windows.
- The chromatograms are scaled no greater than the low calibration standard(s), with the exception of chromatograms that have been re-scaled due to high level hits or matrix.
- Manual edits have been initialed and dated by the analyst.
- All method headers reflect correct analysis data.
- All continuing calibration retention time window criteria have been met.

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Case Narrative

Method:	8080A	**Client:**	Roy F. Weston
Analysis:	Polychlorinated Biphenyls	**Project:**	EPA Region II START #G2
Preparation SOP No.:	OE-SW-3510	**SDG No.:**	AAAAND
Analysis SOP No.:	OE-SW-8080	**DCL Account:**	3008
Matrix:	Water	**DCL Set ID:**	97C-0439-04

General Set Information: There was one water rinse blank sample received in this set. The sample was batched with a method blank and a laboratory control sample. The rinse blank sample, method blank sample and QC sample were analyzed for polychlorinated biphenyls by EPA SW-846 Method 8080A.

Method Summary: Each sample was extracted into methylene chloride and concentrated in a K-D apparatus. A solvent exchange to hexane was performed. Analysis was performed by single column capillary gas chromatography with electron capture detector.

Sample Preparation: The samples were prepared according to the published procedures found in EPA SW-846 Method 3510C, modified to accommodate the sample matrix.

Holding Times: Holding time requirements were met for both sample preparation and analysis.

Dilutions: No sample dilutions were required for analysis.

Method and Sample QC Data:

Method Blank (BL) : No target analytes were detected in the method blank.

Laboratory Control Sample (LCS): All LCS recoveries were within control limits.

MS/MSD Sample(s): MS/MSD analysis was not required.

Surrogates: All samples were spiked with tetrachloro-m-xylene and dibutylchlorendate surrogate standrards. Even though the method only requires one surrogate to be within control limits, two are spiked. To meet the method acceptance criteria, one of two surrogates must be within method control limits. All tetrachloro-m-xylene and dibutylchlorendate recoveries were within the method control limits.

Instrument QC:

Initial Calibration: All calibration curves met method specification.

Initial Calibration Verification (ICV): All analyte recoveries were within ±25%.

Continuing Calibration Verification (CCV): All continuing calibration verification standards recoveries were within ±15% with exception of PCB-1260 recovery for the CCV#5 (-26.4%). Low recovery for PCB-1260 is attributted to the affects that undiluted soil samples from SDG#CCCND1analyzed prior to the rinse blank sample had on the instrument.

NC/CAR: No Non-conformance/Corrective Action Reports were required for this set.

Sample Calculation: Analyte concentrations in sample extracts were determined by interpolation from quadratic regression of standard response versus concentration. Final concentration if µg/liter was determined from the equation

$$C_S \quad \frac{C_E \quad V_E \quad DF}{V_S}$$

where C_S = Analyte concentration in sample (µg/liter)

C_E = Analyte concentration in extract (µg/mL)

V_E = Final volume of extract (mL)

DF = Dilution factor

V_S = Initial aliquot of sample taken for preparation (1 liter)

Miscellaneous Comments: None.

Richard W. Wade December 16, 1997

Richard W. Wade, DCL Section Manager

DATA CHEM LABORATORIES, INC.
A SORENSON COMPANY

1
PESTICIDES
ANALYSIS DATA SHEET

Report Number: 97-00016

CLIENT SAMPLE NO.

RB2

Client Name: Roy F. Weston
Site: NA
Project: NA
SDG No.: AAAAND
DCL Set ID: 97C-0439-04
Matrix: WATER
DCL Sample ID: 97C05251
Sample wt/vol: 1.0 liter
Reporting Basis: As Received
% Moisture:
Decanted:
Date Received: 07-Nov-1997 00:00
Extraction Method: 3510C
Date Extracted: 09-Nov-1997 00:00
Analysis Method: 8080A
Date Analyzed: 23-Nov-1997 20:30
Concentrated Extract Volume: 10.0 mL
Injection Volume: 3.0 uL
Dilution Factor: 1.00
GPC Cleanup: N
pH: N/A
Sulfur Cleanup: Y

CAS NO.	COMPOUND	MDL	PQL	CONC: ug/liter	Q
12674-11-2	Aroclor 1016	.0506	0.20	.0506	U
11104-28-2	Aroclor 1221	.0935	0.20	.0935	U
11141-16-5	Aroclor 1232	.0562	0.20	.0562	U
53469-21-9	Aroclor 1242	.0443	0.20	.0443	U
12672-29-6	Aroclor 1248	.0367	0.20	.0367	U
11097-69-1	Aroclor 1254	.00956	0.20	.00956	U
11096-82-5	Aroclor 1260	.0309	0.20	.0309	U J

0261

DATA CHEM LABORATORIES, INC.
A SORENSON COMPANY

1
PESTICIDES
ANALYSIS DATA SHEET

Report Number: 97-00016

CLIENT SAMPLE NO.

BL-142147-1

Client Name: Roy F. Weston
Site: NA
Project: NA
SDG No.: AAAAND
DCL Set ID: 97C-0439-04
Matrix: WATER
DCL Sample ID: BL-142147-1
Sample wt/vol: 1.0 liter
Reporting Basis: As Received
% Moisture:
Decanted:
Date Received: 07-Nov-1997 00:00
Extraction Method: 3510C
Date Extracted: 09-Nov-1997 00:00
Analysis Method: 8080A
Date Analyzed: 23-Nov-1997 19:17
Concentrated Extract Volume: 10.0 mL
Injection Volume: 3.0 uL
Dilution Factor: 1.00
GPC Cleanup: N
pH: N/A
Sulfur Cleanup: Y

CAS NO.	COMPOUND	MDL	PQL	CONC: ug/liter	Q
12674-11-2	Aroclor 1016	.0506	0.20	.0506	U
11104-28-2	Aroclor 1221	.0935	0.20	.0935	U
11141-16-5	Aroclor 1232	.0562	0.20	.0562	U
53469-21-9	Aroclor 1242	.0443	0.20	.0443	U
12672-29-6	Aroclor 1248	.0367	0.20	.0367	U
11097-69-1	Aroclor 1254	.00956	0.20	.00956	U
11096-82-5	Aroclor 1260	.0309	0.20	.0309	UJ

0262

DATA CHEM
LABORATORIES, INC.
A SORENSON COMPANY

1
PESTICIDES
ANALYSIS DATA SHEET

Report Number: 97-00016

CLIENT SAMPLE NO.

QC-142147-1

Client Name: Roy F. Weston
Site: NA
Project: NA
SDG No.: AAAAND
DCL Set ID: 97C-0439-04
Matrix: WATER
DCL Sample ID: QC-142147-1
Sample wt/vol: 1.0 liter
Reporting Basis: As Received
% Moisture:
Decanted:
Date Received: 07-Nov-1997 00:00
Extraction Method: 3510C
Date Extracted: 09-Nov-1997 00:00
Analysis Method: 8080A
Date Analyzed: 23-Nov-1997 19:53
Concentrated Extract Volume: 10.0 mL
Injection Volume: 3.0 uL
Dilution Factor: 1.00
GPC Cleanup: N
pH: N/A
Sulfur Cleanup: Y

CAS NO.	COMPOUND	MDL	PQL	CONC: ug/liter	Q
12674-11-2	Aroclor 1016	.0506	0.20	4.65	
11096-82-5	Aroclor 1260	.0309	0.20	4.38	

FORM I CHROM

DATA CHEM
LABORATORIES, INC.
A SORENSON COMPANY

2
PESTICIDES
SURROGATE RECOVERY

Report Number: 97-00016

Client Name: Roy F. Weston Site: NA

Project: NA SDG No.: AAAAND DCL Set ID: 97C-0439-04

Matrix: WATER Analysis Method: 8080A

Column(1): DB-608 ID: .53mm

	CLIENT SAMPLE NO.	DBC COLUMN 1 % REC	TCX COLUMN 1 % REC	TOTAL OUT
01	RB2	68.1	87.4	0
02	BL-142147-1	76.3	79.5	0
03	QC-142147-1	86.8	73.8	0

QC LIMITS

DBC = Dibutylchlorendate (35.4-148.)
TCX = Tetrachloro-meta-Xylene (43.2-132.)

FORM II CHROM

DATA CHEM
LABORATORIES, INC.
A SORENSON COMPANY

3-2
PESTICIDES
LCS and LCSD RECOVERY

Report Number: 97-00016

Client Name: Roy F. Weston
Site: NA
Project: NA
SDG No.: AAAAND
DCL Set ID: 97C-0439-04
Matrix: WATER
Analysis Method: 8080A
DCL Sample No.: QC-142147-1

LCS Concentration Units: ug/liter

COMPOUND	TARGET CONCENTRATION	LCS CONCENTRATION	LCS % REC	REC QC LIMITS
Aroclor 1016	5.00	4.65	93.0	54.1-145.
Aroclor 1260	5.00	4.38	87.6	50.3-131.

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

FORM III CHROM-2

DATA CHEM LABORATORIES, INC.
A SORENSON COMPANY

4
PESTICIDES
METHOD BLANK SUMMARY

Report Number: 97-00016

SAMPLE NO.
BL-142147-1

Client Name: Roy F. Weston
Site: NA
Project: NA
SDG No.: AAAAND
DCL Set ID: 97C-0439-04
Matrix: WATER
DCL Sample ID: BL-142147-1
Analysis Method: 8080A
Extraction Method: 3510C
Sulfur Cleanup: Y
Date Extracted: 09-Nov-1997 00:00
Column (1): DB-608
ID: .53mm
Date Analyzed (1): 23-Nov-1997 19:17
Instrument ID (1): GC/ECD-6

THIS METHOD BLANK APPLIES TO THE FOLLOWING FIELD SAMPLES AND LAB QC

	CLIENT SAMPLE NO.	DCL SAMPLE NO.	DATE ANALYZED COLUMN 1
01	RB2	97C05251	23-Nov-1997 20:30
02	QC-142147-1	QC-142147-1	23-Nov-1997 19:53

FORM IV CHROM

DATA CHEM LABORATORIES
A SORENSON COMPANY

Datapackage Table of Contents

Information pertaining to this datapackage is divided into the four categories listed below (see colored divider sheets for an inventory list of each category). If an item on the inventory is not applicable, an "NA" is placed in the corresponding check box. A Case Narrative immediately precedes this Table of Contents and contains pertinent information about this datapackage.

Analytical Forms ..... Yellow
Sample Tracking Documentation ..... Pink
Analytical Documentation ..... Blue
Raw Data ..... Green

♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦

Analytical Forms
Inventory Checklist

☒ Case Narrative

☒ IRDMIS	☒ Commercial Forms
☐ Data Review and Approval Form	☐ Analytical or Environmental Report Form
☐ IRDMIS Reports	☐ Set Comments
☐ GC/MS TICs	☐ Applicable QC Sheets

☒ RLIMS Forms	
☒ Cover Form	NA Matrix Spike/Matrix Spike Duplicate Sample (Form F)
☒ Sample Group Comments (Form H)	☒ Surrogate Summary (Form G)
☒ Sample Analysis Data Sheet (Form A)	☒ Initial Calibration Form
☒ Laboratory Control Sample (Form B)	☒ Initial Calibration Verification (ICV) Form
NA Blank Sample (Form C)	☒ Continuing Calibration Form
NA Matrix Spike Sample (Form D)	NA Serial Dilution Form
NA Matrix Duplicate Sample (Form E)	NA Endrin Breakdown or BFB/DFTPP GC/MS Tuning Form

Analytical Forms
Reviewer Checklist

✓ The Analytical Forms Inventory Checklist above is complete.

✓ The Case Narrative was completed in accordance with procedures in DCL SOP XX-DC-020, "Datapackage Preparation and Validation."

✓ Only the correct report forms are used (IRDMIS or Commercial Forms or RLIMS Forms).

✓ All fields on the report forms are complete with the correct information, including signatures.

✓ Results for all samples are reported per client request.

✓ Units, methods, and dates are correct.

✓ Sample and/or set comments are complete.

0267

Assembled by: _____ Signature 12/16/97 Date Reviewed by: _____ Signature 12/16/97 Date

Rev. 6/95

DATA CHEM LABORATORIES
A Sorenson Company

COVER PAGE

ANALYTICAL REPORT FOR
Roy F. Weston

Phone(908) 225-6116 Fax(908) 225-7037

Form COVER-V1.3
12159718310058
Page 1

G97B7029

DCL Report Group..: 97C-0439-04

Date Printed.....: 15-DEC-97 18:31

Project Protocol #: P97B5002
Client Ref Number.: Not Provided
Release Number....: AAAAND

Analysis Method(s): 8080A

Roy F. Weston
Attention: Smita Sumbaly
1090 King Georges Post Road, Suite 201
Edison, NJ 08837

Client Sample Name	Laboratory Sample Name	Date Sampled	Date Received
Method Blank	BL-142147-1	NA	NA
LCS	QC-142147-1	NA	NA
RB2	97C05251	06-NOV-97	07-NOV-97

Analyst: J. Chris Taylor — Date 12/15/97

Reviewer: Vicki Hoe-Lin Tsai — Date 12/16/97

Lab Supervisor: Richard W. Wade — Date 12/22/97

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Phone (801) 266-7700 Web Page: www.datachem.com
FAX (801) 268-9992 E-mail: lab@datachem.com

DATA CHEM LABORATORIES
A Sorenson Company

FORM H (TYPE I)
SINGLE METHOD ANALYSES

SAMPLE GROUP COMMENTS

G97B7029

DCL Report Group..: 97C-0439-04
Date Printed.....: 15-DEC-97 18:31

Client Name...: Roy F. Weston

Release Number....: AAAAND

General Information

The DCL QC Database maintains all numerical figures which are input from the pertinent data source. These data have not been rounded to significant figures nor have they been moisture corrected. Reports generated from the system, however, list data which have been rounded to the number of significant figures requested by the client or deemed appropriate for the method. This may create minor discrepancies between data which appear on the QC Summary Forms (Forms B-G) and those that would be calculated from rounded analytical results. Additionally, if a moisture correction is performed, differences will be observed between the QC data and the surrogate data reported on Form A (or other report forms) and corresponding data reported on QC Summary Forms. In these cases, the Form A will indicate the "Report Basis" as well as the moisture value used for making the correction.
Report generation options: PX

Result Symbol Definitions

ND - Not Detected above the MDL or IDL (LLD or MDC for radiochemistry).
** - No result could be reported, see sample comments for details.

Qualifier Symbol Definitions

U - Not Detected above the MDL or IDL (LLD or MDC for radiochemistry).
For radiochemistry the nuclide was not identified by the Canberra Nuclear NID program, activity values reported are calculated using the Canberra Nuclear MINACT program.
B - For organic analysis the qualifier indicates that this analyte was found in the method blank.
For inorganic analysis the qualifier signifies the value is between the IDL and PQL.
J - The qualifier indicates that the value is between the MDL and the PQL. It is also used for indicating an estimated value for tentatively identified compounds in mass spectrometry where a 1:1 response is assumed.

960 West LeVoy Drive / Salt Lake City, Utah 84123-2547
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DATA CHEM LABORATORIES
A Sorenson Company

FORM A (TYPE I)
SINGLE METHOD ANALYSES

SAMPLE ANALYSIS DATA SHEET

Form RLIMS63A-V1.3
12159718310058
Page 3

S97B800Q

Date Printed.....: 15-DEC-97 18:31

Client Name.....: Roy F. Weston
Client Ref Number....: Not Provided
Sampling Site.....: Not Applicable
Release Number.....: AAAAND

Date Received.....: Not Applicable

Client Sample Name: BL-142147-1
DCL Sample Name...: BL-142147-1
DCL Report Group..: 97C-0439-04

Matrix.....: WATER
Date Sampled.....: Not Applicable
Reporting Units...: µg/liter

DCL Preparation Group: G97B800H
Date Prepared.....: 09-NOV-97 00:00
Preparation Method...: 3550C
Aliquot Weight/Volume: 1.00 liter
Net Weight/Volume....: Not Required

DCL Analysis Group: G97C000L
Analysis Method...: 8080A
Instrument Type...: GC/ECD
Instrument ID.....: GC/ECD-6
Column Type.....: DB-608
☒ Primary
☐ Confirmation

Analytical Results

Analyte	Date Analyzed	MDL	Result	Comment	Qual.	Dilution	CRDL
Aroclor 1016	23-NOV-97 19:17	.0506	ND			1.00	0.20
Aroclor 1221	23-NOV-97 19:17	.0935	ND			1.00	0.20
Aroclor 1232	23-NOV-97 19:17	.0562	ND			1.00	0.20
Aroclor 1242	23-NOV-97 19:17	.0443	ND			1.00	0.20
Aroclor 1248	23-NOV-97 19:17	.0367	ND			1.00	0.20
Aroclor 1254	23-NOV-97 19:17	.00956	ND			1.00	0.20
Aroclor 1260	23-NOV-97 19:17	.0309	ND			1.00	0.20

Surrogate Recoveries

Analyte	Result	Spiked Amount	Percent Recovery
Dibutylchlorendate	0.382	0.500	76.3
Tetrachloro-m-xylene	0.398	0.500	79.5

0270

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FAX (801) 268-9992 E-mail: lab@datachem.com

DATA CHEM LABORATORIES
A Sorenson Company

FORM A (TYPE I)
SINGLE METHOD ANALYSES

SAMPLE ANALYSIS DATA SHEET

Form RLIMS63A-V1.3
12159718310058
Page 4

S97B800R

Date Printed.....: 15-DEC-97 18:31

Client Name.....: Roy F. Weston
Client Ref Number....: Not Provided
Sampling Site.....: Not Applicable
Release Number.....: AAAAND

Date Received.....: Not Applicable

Client Sample Name: QC-142147-1
DCL Sample Name...: QC-142147-1
DCL Report Group..: 97C-0439-04

Matrix.....: WATER
Date Sampled.....: Not Applicable
Reporting Units...: µg/liter

DCL Preparation Group: G97B800H
Date Prepared.....: 09-NOV-97 00:00
Preparation Method...: 3550C
Aliquot Weight/Volume: 1.00 liter
Net Weight/Volume....: Not Required

DCL Analysis Group: G97C000L
Analysis Method...: 8080A
Instrument Type...: GC/ECD
Instrument ID.....: GC/ECD-6
Column Type.....: DB-608
☒ Primary
☐ Confirmation

Analytical Results

Analyte	Date Analyzed	MDL	Result	Comment	Qual.	Dilution	CRDL
Aroclor 1016	23-NOV-97 19:53	.0506	4.7			1.00	0.20
Aroclor 1260	23-NOV-97 19:53	.0309	4.4			1.00	0.20

Surrogate Recoveries

Analyte	Result	Spiked Amount	Percent Recovery
Dibutylchlorendate	0.434	0.500	86.8
Tetrachloro-m-xylene	0.369	0.500	73.8

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DATA CHEM LABORATORIES
A Sorenson Company

FORM A (TYPE I)
SINGLE METHOD ANALYSES

SAMPLE ANALYSIS DATA SHEET

Form RLIMS63A-V1.3
12159718310058
Page 5

S97B70N4

Date Printed.....: 15-DEC-97 18:31

Client Name.....: Roy F. Weston
Client Ref Number....: Not Provided
Sampling Site.....: Not Provided
Release Number.....: AAAAND

Date Received.....: 07-NOV-97 00:00

Client Sample Name: RB2
DCL Sample Name...: 97C05251
DCL Report Group..: 97C-0439-04

Matrix.....: WATER
Date Sampled.....: 06-NOV-97 16:30
Reporting Units...: µg/liter
Report Basis.....: ☒ As Received ☐ Dried

DCL Preparation Group: G97B800H
Date Prepared.....: 09-NOV-97 00:00
Preparation Method...: 3550C
Aliquot Weight/Volume: 1.00 liter
Net Weight/Volume....: Not Required

DCL Analysis Group: G97C000L
Analysis Method...: 8080A
Instrument Type...: GC/ECD
Instrument ID.....: GC/ECD-6
Column Type.....: DB-608
☒ Primary
☐ Confirmation

Analytical Results

Analyte	Date Analyzed	MDL	Result	Comment	Qual.	Dilution	CRDL
Aroclor 1016	23-NOV-97 20:30	.0506	ND			1.00	0.20
Aroclor 1221	23-NOV-97 20:30	.0935	ND			1.00	0.20
Aroclor 1232	23-NOV-97 20:30	.0562	ND			1.00	0.20
Aroclor 1242	23-NOV-97 20:30	.0443	ND			1.00	0.20
Aroclor 1248	23-NOV-97 20:30	.0367	ND			1.00	0.20
Aroclor 1254	23-NOV-97 20:30	.00956	ND			1.00	0.20
Aroclor 1260	23-NOV-97 20:30	.0309	ND			1.00	0.20

Surrogate Recoveries

Analyte	Result	Spiked Amount	Percent Recovery
Dibutylchlorendate	0.341	0.500	68.1
Tetrachloro-m-xylene	0.437	0.500	87.4

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Phone (801) 266-7700 Web Page: www.datachem.com
FAX (801) 268-9992 E-mail: lab@datachem.com

DATA CHEM LABORATORIES
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FORM B (TYPE I)
SINGLE METHOD ANALYSES

QUALITY CONTROL DATA SHEET
LABORATORY CONTROL SAMPLE (LCS)

S97B800R

Client Name.....: Roy F. Weston
Release Number.....: AAAAND

Matrix.....: WATER
Reporting Units.....: ug/L

DCL Preparation Group: G97B800H
Date Prepared.....: 09-NOV-97 00:00
Preparation Method...: 3550C

DCL Sample Name...: QC-142147-1
Date Printed.....: 15-DEC-97 18:31

DCL Analysis Group: G97C000L
Analysis Method...: OP-SW-8080
Instrument Type...: GC/ECD
Instrument ID.....: GC/ECD-6
Column Type.....: DB-608
[X] Primary
[ ] Confirmation

QC Limit Type.....: Performance

Analytical Results

Analyte	Date Analyzed	Target	Result	Percent Recovery	QC Limits	QC Flag
PCB 1016	23-NOV-97 19:53	5.00	4.65	93.0	54.1/145.	
PCB 1260	23-NOV-97 19:53	5.00	4.38	87.6	50.3/131.	

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DATA CHEM LABORATORIES
A Sorenson Company

FORM G (TYPE I)
SINGLE METHOD ANALYSES

QUALITY CONTROL DATA SHEET
SURROGATE SUMMARY

G97B800H

Date Printed.....: 15-DEC-97 18:31

Client Name.....: Roy F. Weston
Release Number.....: AAAAND

DCL Analysis Group: G97C000L
Analysis Method...: OP-SW-8080

Matrix.....: WATER
Reporting Units.....: ug/L

DCL Prep Group....: G97B800H
Preparation Method: 3550C

QC Limit Type.....: Performance

Surrogate Recoveries

Surr. ID	Dibutylchlorendate				Tetrachloro-m-xylene							
QC Limits	35.4/148.				43.2/132.							
DCL Sample Number	Analyte Result	Spiked Amount	% Rec.	Q	Analyte Result	Spiked Amount	% Rec.	Q	Analyte Result	Spiked Amount	% Rec.	Q
97C05251	0.341	0.500	68.1		0.437	0.500	87.4					
BL-142147-1	0.382	0.500	76.3		0.398	0.500	79.5					
QC-142147-1	0.434	0.500	86.8		0.369	0.500	73.8					

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FORM K
RUN LOG

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12159718223880
Page 1
R97CG000

Run ID.....: R97CG000
Start Date.....: 13-NOV-1997 22:22

Method.....: 8080A

Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Date Printed.....: 15-DEC-1997 18:22

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Sample Name	Dilution	Date Acquired
PRIME	1	13-NOV-1997 22:22
PCB221_2.0	1	13-NOV-1997 22:58
PCB232_2.0	1	13-NOV-1997 23:35
PCB242_2.0	1	14-NOV-1997 00:12
PCB248_2.0	1	14-NOV-1997 00:49
$1254_0.02 NG	1	14-NOV-1997 01:25
$1254_0.10 NG	1	14-NOV-1997 02:02
$1254_0.20	1	14-NOV-1997 02:38
$1254_1.0	1	14-NOV-1997 03:15
$1254_2.0 NG	1	14-NOV-1997 03:52
ICV1254_1.0	1	14-NOV-1997 04:29
$1660_0.01 NG	1	14-NOV-1997 05:05
$1660_0.10	1	14-NOV-1997 05:42
$1660_0.20	1	14-NOV-1997 06:19
$1660_1.0	1	14-NOV-1997 06:56
$1660_2.0	1	14-NOV-1997 07:32
ICV_1660_1.0 NG	1	14-NOV-1997 08:09
CCV_1660_1.0	1	22-NOV-1997 12:04
BL-142132-1	1	22-NOV-1997 12:40
QC-142132-1	1	22-NOV-1997 13:17
97C05169	100	22-NOV-1997 13:54
97C05170	100	22-NOV-1997 14:31
97C05171	100	22-NOV-1997 15:07
97C05172	100	22-NOV-1997 15:44
97C05173	100	22-NOV-1997 16:21
97C05174	100	22-NOV-1997 16:58
97C05175	100	22-NOV-1997 17:34
97C05176	100	22-NOV-1997 18:11
CCV_1660_1.0	1	22-NOV-1997 18:48
97C05176MS	100	22-NOV-1997 19:24
97C05176MSD	100	22-NOV-1997 20:01
97C05177	100	22-NOV-1997 20:38
97C05178	100	22-NOV-1997 21:15
97C05179	100	22-NOV-1997 21:51
97C05180	100	22-NOV-1997 22:28
97C05181	100	22-NOV-1997 23:05
97C05182	100	22-NOV-1997 23:42
97C05183	100	23-NOV-1997 00:18
97C05184	100	23-NOV-1997 00:55
CCV_1660_1.0	1	23-NOV-1997 01:32
97C05185	100	23-NOV-1997 02:09
97C05186	100	23-NOV-1997 02:45
97C05187	100	23-NOV-1997 03:22
97C05188	100	23-NOV-1997 03:59

Sample Name	Dilution	Date Acquired
97C05169	1	23-NOV-1997 04:35
97C05170	1	23-NOV-1997 05:12
97C05171	1	23-NOV-1997 05:49
97C05172	1	23-NOV-1997 06:25
97C05173	1	23-NOV-1997 07:02
97C05174	1	23-NOV-1997 07:39
CCV_1660_1.0	1	23-NOV-1997 08:16
97C05175	1	23-NOV-1997 08:52
97C05176	1	23-NOV-1997 09:29
97C05176MS	1	23-NOV-1997 10:06
97C05176MSD	1	23-NOV-1997 10:42
97C05177	1	23-NOV-1997 11:19
97C05178	1	23-NOV-1997 11:56
97C05179	1	23-NOV-1997 12:33
97C05180	1	23-NOV-1997 13:09
97C05181	1	23-NOV-1997 13:46
97C05182	1	23-NOV-1997 14:23
1260 NG CCV_1660_1.0	1	23-NOV-1997 14:59
97C05183	1	23-NOV-1997 15:36
97C05184	1	23-NOV-1997 16:13
97C05185	1	23-NOV-1997 16:50
97C05186	1	23-NOV-1997 17:27
97C05187	1	23-NOV-1997 18:03
97C05188	1	23-NOV-1997 18:40
BL-142147-1	1	23-NOV-1997 19:17
QC-142147-1	1	23-NOV-1997 19:53
97C05251	1	23-NOV-1997 20:30
1260 NG CCV_1660_1.0	1	23-NOV-1997 21:07
BL-142144-1	1	23-NOV-1997 21:44
QC-142144-1	1	23-NOV-1997 22:20
97C05249	100	23-NOV-1997 22:57
97C05249MS	100	23-NOV-1997 23:33
97C05249MSD	100	24-NOV-1997 00:10
97C05250	100	24-NOV-1997 00:47
97C05249	1	24-NOV-1997 01:24
97C05249MS	1	24-NOV-1997 02:00
97C05249MSD	1	24-NOV-1997 02:37
97C05250	1	24-NOV-1997 03:14
CCV_1660_1.0	1	24-NOV-1997 03:50

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FORM L
INITIAL CALIBRATION

Form RLIMS63-V1.0
12159718223880
Page 2

C97CG000

Compound.....: **Dibutylchlorendate**
Method.....: **8080A**

Date Printed.....: 15-DEC-1997 18:22

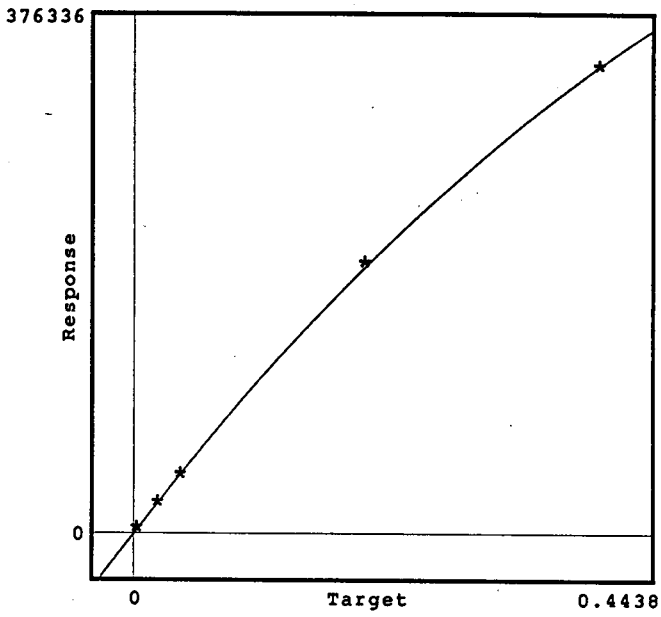
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9998570
Formula.....:
$-565885.0*X^2 + 1072870.*X + 715.6290$

RT Mean.....: 22.006
RT Std Deviation.: 0.00337

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1660_0.01	22.01	0.00200000	2954	2859.120	-3.21	14-NOV-1997 05:05
$1660_0.10	22.01	0.0200000	21698	21946.80	1.15	14-NOV-1997 05:42
$1660_0.20	22.01	0.0400000	41468	42725.30	3.03	14-NOV-1997 06:19
$1660_1.0	22.01	0.200000	195086	192656.0	-1.25	14-NOV-1997 06:56
$1660_2.0	22.01	0.400000	338384	339325.0	0.28	14-NOV-1997 07:32

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FORM L
INITIAL CALIBRATION

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C97CG000

Compound.....: PCB 1016
Method.....: 8080A

Date Printed.....: 15-DEC-1997 18:22

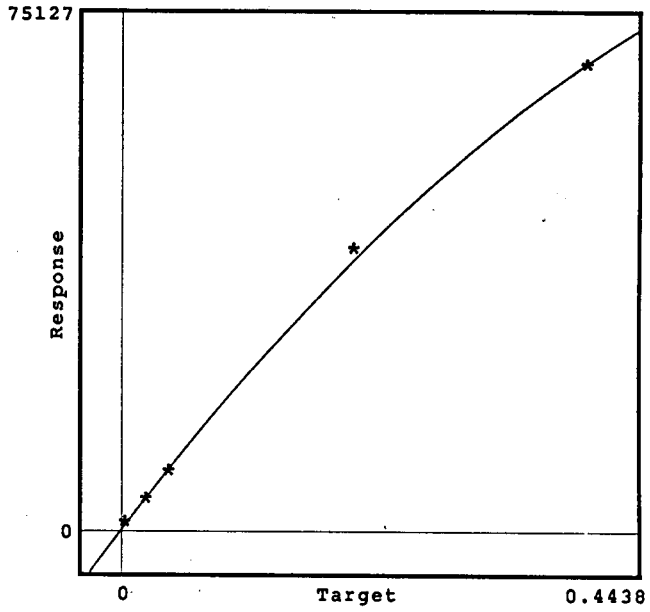
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9988950
Formula.....:
$-128118.0*X^2 + 219459.0*X + 489.4230$

RT Mean.....: 10.104
RT Std Deviation.: 0.005257

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1660_0.01	10.11	0.00200000	1039	927.8300	-10.70	14-NOV-1997 05:05
$1660_0.10	10.11	0.0200000	4496	4827.360	7.37	14-NOV-1997 05:42
$1660_0.20	10.11	0.0400000	8559	9062.810	5.89	14-NOV-1997 06:19
$1660_1.0	10.10	0.200000	40599	39256.50	-3.31	14-NOV-1997 06:56
$1660_2.0	10.10	0.400000	67270	67774.20	0.75	14-NOV-1997 07:32

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FORM L
INITIAL CALIBRATION

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C97CG000

Compound.....: **PCB 1016**
Method.....: **8080A**

Date Printed.....: 15-DEC-1997 18:22

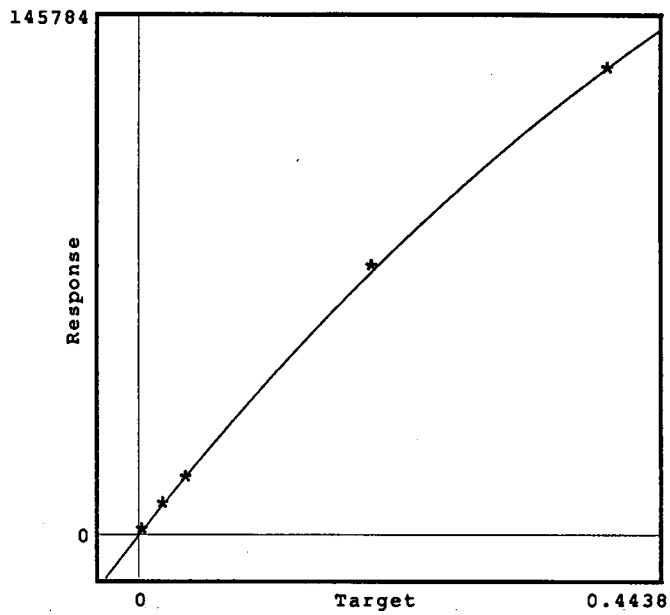
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9997330
Formula.....:
$-206499.0*X^2 + 410710.0*X + 193.9410$

RT Mean.....: 11.337
RT Std Deviation.: 0.005795

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1660_0.01	11.34	0.00200000	1059	1014.530	-4.20	14-NOV-1997 05:05
$1660_0.10	11.34	0.0200000	8227	8325.540	1.20	14-NOV-1997 05:42
$1660_0.20	11.34	0.0400000	15617	16291.90	4.32	14-NOV-1997 06:19
$1660_1.0	11.33	0.200000	75357	74076.00	-1.70	14-NOV-1997 06:56
$1660_2.0	11.33	0.400000	130942	131438.0	0.38	14-NOV-1997 07:32

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FORM L
INITIAL CALIBRATION

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C97CG000

Compound.....: **PCB 1016**
Method.....: **8080A**

Date Printed.....: 15-DEC-1997 18:22

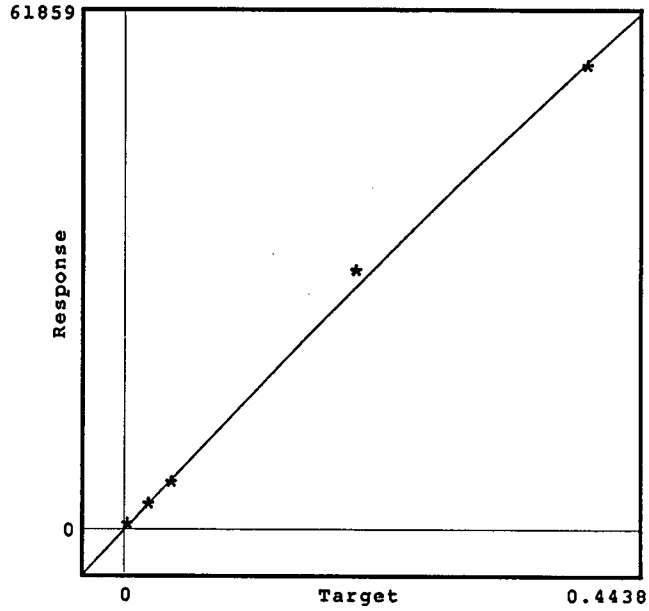
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9975610
Formula.....:
$-24556.90*X^2 + 149088.0*X + 58.33370$

RT Mean.....: 11.886
RT Std Deviation.: 0.010342

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1660_0.01	11.87	0.00200000	428	356.4130	-16.73	14-NOV-1997 05:05
$1660_0.10	11.90	0.0200000	2758	3030.280	9.87	14-NOV-1997 05:42
$1660_0.20	11.90	0.0400000	5382	5982.590	11.16	14-NOV-1997 06:19
$1660_1.0	11.88	0.200000	30595	28893.80	-5.56	14-NOV-1997 06:56
$1660_2.0	11.88	0.400000	55074	55764.70	1.25	14-NOV-1997 07:32

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FORM L
INITIAL CALIBRATION

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C97CG000

Compound.....: PCB 1016
Method.....: 8080A

Date Printed.....: 15-DEC-1997 18:22

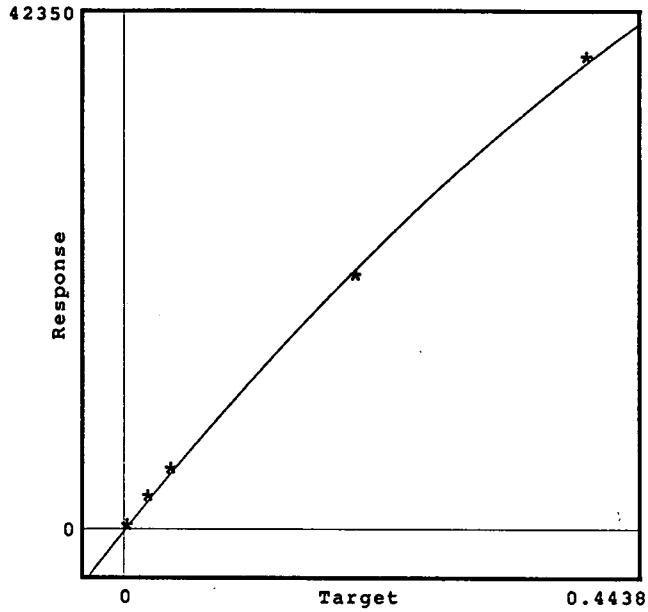
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9990770
Formula.....:
$-54653.30*X^2 + 117536.0*X + -103.9630$

RT Mean.....: 12.494
RT Std Deviation.: 0.004133

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1660_0.01	12.50	0.00200000	117	130.8910	11.87	14-NOV-1997 05:05
$1660_0.10	12.49	0.0200000	2475	2224.910	-10.10	14-NOV-1997 05:42
$1660_0.20	12.50	0.0400000	4710	4510.060	-4.25	14-NOV-1997 06:19
$1660_1.0	12.49	0.200000	20557	21217.20	3.21	14-NOV-1997 06:56
$1660_2.0	12.49	0.400000	38449	38166.10	-0.74	14-NOV-1997 07:32

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FORM L
INITIAL CALIBRATION

C97CG000

Compound.....: PCB 1016
Method.....: 8080A

Date Printed.....: 15-DEC-1997 18:22

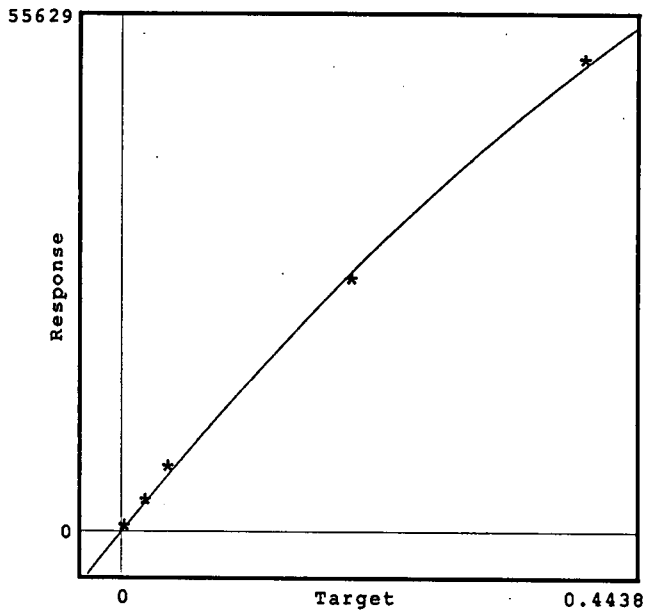
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9985420
Formula.....:
$-70086.50*X^2 + 153138.0*X + 117.3150$

RT Mean.....: 13.604
RT Std Deviation.: 0.003683

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1660_0.01	13.60	0.00200000	388	423.3120	9.10	14-NOV-1997 05:05
$1660_0.10	13.61	0.0200000	3217	3152.050	-2.02	14-NOV-1997 05:42
$1660_0.20	13.61	0.0400000	6816	6130.720	-10.05	14-NOV-1997 06:19
$1660_1.0	13.60	0.200000	26913	27941.60	3.82	14-NOV-1997 06:56
$1660_2.0	13.60	0.400000	50589	50158.90	-0.85	14-NOV-1997 07:32

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DATA CHEM LABORATORIES
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FORM L
INITIAL CALIBRATION

C97CG000

Compound.....: PCB 1254
Method.....: 8080A

Date Printed.....: 15-DEC-1997 18:22

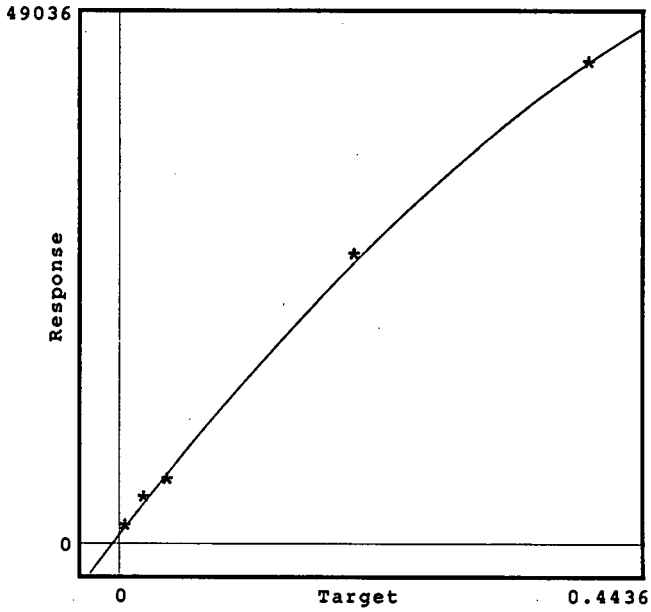
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9978840
Formula.....:
$-82019.00*X^2 + 141140.0*X + 998.3150$

RT Mean.....: 16.573
RT Std Deviation.: 0

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1254_0.02	16.58	0.00400000	1559	1561.560	0.16	14-NOV-1997 01:25
$1254_0.10	16.57	0.0200000	4192	3788.310	-9.63	14-NOV-1997 02:02
$1254_0.20	16.58	0.0400000	5856	6512.690	11.21	14-NOV-1997 02:38
$1254_1.0	16.57	0.200000	26533	25945.60	-2.21	14-NOV-1997 03:15
$1254_2.0	16.57	0.400000	44126	44331.30	0.47	14-NOV-1997 03:52

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DATA CHEM LABORATORIES
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FORM L
INITIAL CALIBRATION

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C97CG000

Compound.....: **PCB 1254**
Method.....: **8080A**

Date Printed.....: 15-DEC-1997 18:22

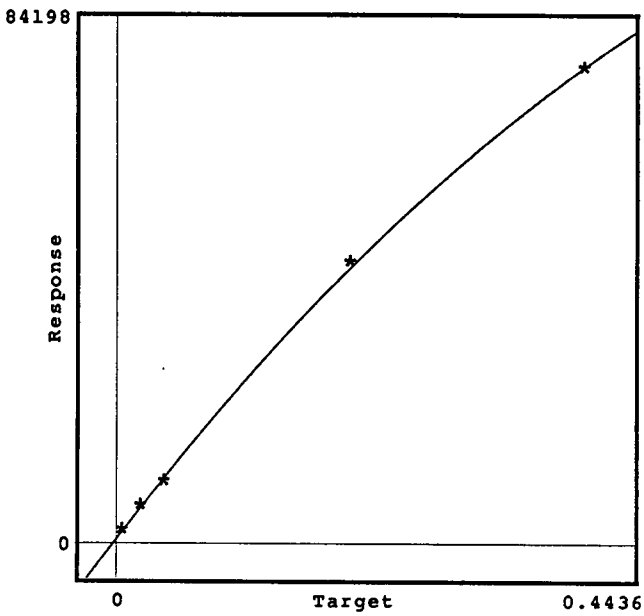
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9992760
Formula.....:
$-129835.0*X^2 + 239785.0*X + 897.6360$

RT Mean.....: 16.806
RT Std Deviation.: 0.005447

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1254_0.02	16.81	0.00400000	1903	1854.700	-2.54	14-NOV-1997 01:25
$1254_0.10	16.80	0.0200000	5837	5641.410	-3.35	14-NOV-1997 02:02
$1254_0.20	16.81	0.0400000	9573	10281.30	7.40	14-NOV-1997 02:38
$1254_1.0	16.81	0.200000	44519	43661.30	-1.93	14-NOV-1997 03:15
$1254_2.0	16.81	0.400000	75723	76038.20	0.42	14-NOV-1997 03:52

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DATA CHEM LABORATORIES
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FORM L
INITIAL CALIBRATION

C97CG000

Compound.....: PCB 1254
Method.....: 8080A

Date Printed.....: 15-DEC-1997 18:22

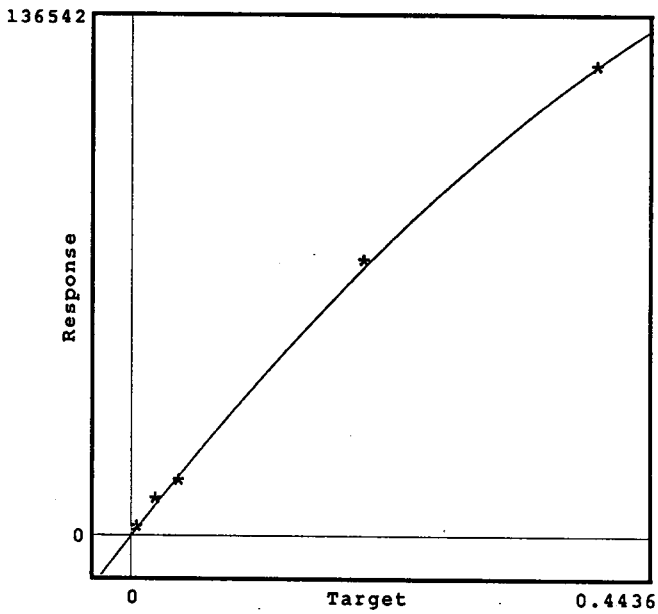
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9982360
Formula.....:
$-210443.0*X^2 + 391549.0*X + 241.6240$

RT Mean.....: 17.673
RT Std Deviation.: 0.004172

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1254_0.02	17.68	0.00400000	1776	1804.450	1.60	14-NOV-1997 01:25
$1254_0.10	17.67	0.0200000	9016	7988.430	-11.40	14-NOV-1997 02:02
$1254_0.20	17.68	0.0400000	13977	15566.90	11.38	14-NOV-1997 02:38
$1254_1.0	17.67	0.200000	71560	70133.70	-1.99	14-NOV-1997 03:15
$1254_2.0	17.67	0.400000	122684	123190.0	0.41	14-NOV-1997 03:52

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DATA CHEM LABORATORIES
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FORM L
INITIAL CALIBRATION

C97CG000

Compound.....: PCB 1254
Method.....: 8080A

Date Printed.....: 15-DEC-1997 18:22

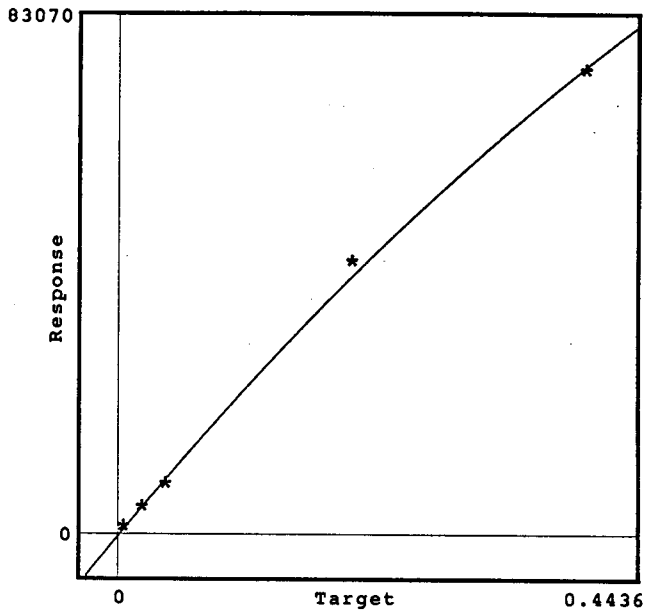
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9975780
Formula.....:
$-96861.60*X^2 + 226290.0*X + -100.5300$

RT Mean.....: 18.237
RT Std Deviation.: 0.003863

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1254_0.02	18.24	0.00400000	944	803.0790	-14.93	14-NOV-1997 01:25
$1254_0.10	18.23	0.0200000	4109	4386.520	6.75	14-NOV-1997 02:02
$1254_0.20	18.24	0.0400000	7847	8796.090	12.09	14-NOV-1997 02:38
$1254_1.0	18.24	0.200000	43477	41283.00	-5.05	14-NOV-1997 03:15
$1254_2.0	18.24	0.400000	74084	74917.60	1.13	14-NOV-1997 03:52

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DATA CHEM LABORATORIES
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FORM L
INITIAL CALIBRATION

C97CG000

Compound.....: PCB 1254
Method.....: 8080A

Date Printed.....: 15-DEC-1997 18:22

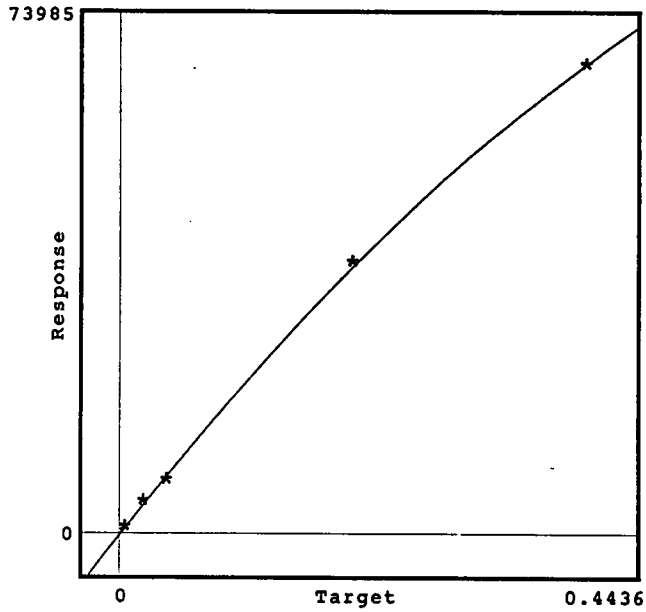
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9990100
Formula.....:
$-107779.0*X^2 + 209992.0*X + -17.35090$

RT Mean.....: 19.212
RT Std Deviation.: 0.004628

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1254_0.02	19.22	0.00400000	812	820.8920	1.10	14-NOV-1997 01:25
$1254_0.10	19.22	0.0200000	4529	4139.370	-8.60	14-NOV-1997 02:02
$1254_0.20	19.21	0.0400000	7550	8209.880	8.74	14-NOV-1997 02:38
$1254_1.0	19.21	0.200000	38265	37669.80	-1.56	14-NOV-1997 03:15
$1254_2.0	19.21	0.400000	66520	66734.70	0.32	14-NOV-1997 03:52

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FORM L
INITIAL CALIBRATION

C97CG000

Compound.....: **PCB 1260**
Method.....: **8080A**

Date Printed.....: 15-DEC-1997 18:22

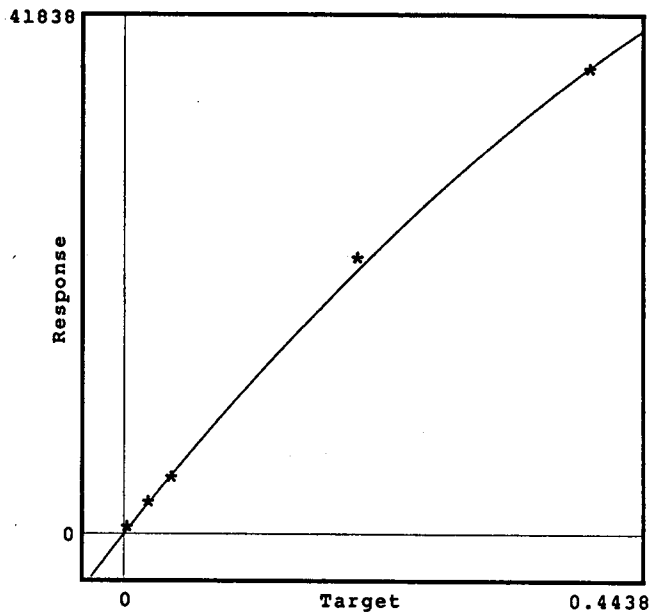
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9988190
Formula.....:
$-61768.10*X^2 + 118769.0*X + 101.2450$

RT Mean.....: 17.471
RT Std Deviation.: 0.006753

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1660_0.01	17.46	0.00200000	373	338.5360	-9.24	14-NOV-1997 05:05
$1660_0.10	17.48	0.0200000	2374	2451.910	3.28	14-NOV-1997 05:42
$1660_0.20	17.48	0.0400000	4371	4753.170	8.74	14-NOV-1997 06:19
$1660_1.0	17.47	0.200000	22180	21384.30	-3.59	14-NOV-1997 06:56
$1660_2.0	17.47	0.400000	37426	37725.90	0.80	14-NOV-1997 07:32

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FORM L
INITIAL CALIBRATION

C97CG000

Compound.....: PCB 1260
Method.....: 8080A

Date Printed.....: 15-DEC-1997 18:22

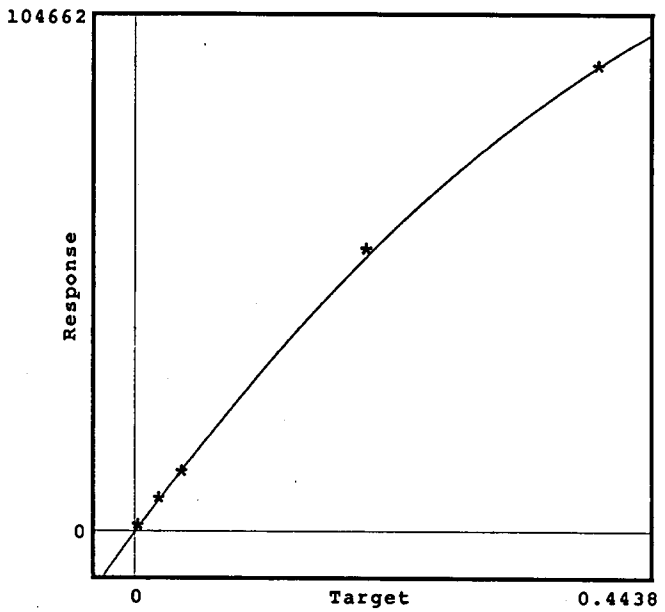
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9996200
Formula.....:
$-203747.0*X^2 + 317014.0*X + 163.6860$

RT Mean.....: 17.868
RT Std Deviation.: 0.002397

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1660_0.01	17.87	0.00200000	832	796.8990	-4.22	14-NOV-1997 05:05
$1660_0.10	17.87	0.0200000	6400	6422.470	0.35	14-NOV-1997 05:42
$1660_0.20	17.87	0.0400000	11882	12518.20	5.35	14-NOV-1997 06:19
$1660_1.0	17.87	0.200000	56496	55416.60	-1.91	14-NOV-1997 06:56
$1660_2.0	17.87	0.400000	93972	94369.80	0.42	14-NOV-1997 07:32

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FORM L
INITIAL CALIBRATION

C97CG000

Compound.....: PCB 1260
Method.....: 8080A

Date Printed.....: 15-DEC-1997 18:22

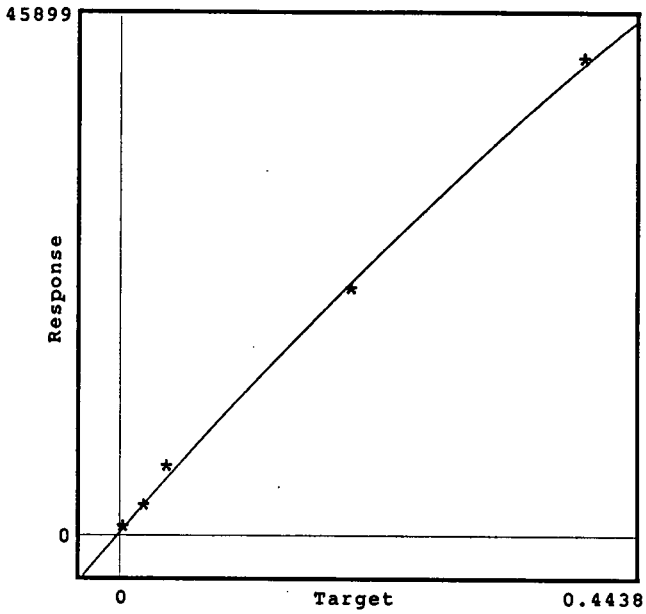
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9970370
Formula.....:
$-39143.40*X^2 + 118252.0*X + 372.8690$

RT Mean.....: 15.067
RT Std Deviation.: 0.004603

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1660_0.01	15.06	0.00200000	596	609.2170	2.22	14-NOV-1997 05:05
$1660_0.10	15.07	0.0200000	2476	2722.260	9.95	14-NOV-1997 05:42
$1660_0.20	15.07	0.0400000	5919	5040.330	-14.84	14-NOV-1997 06:19
$1660_1.0	15.07	0.200000	21717	22457.60	3.41	14-NOV-1997 06:56
$1660_2.0	15.07	0.400000	41715	41410.80	-0.73	14-NOV-1997 07:32

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FORM L
INITIAL CALIBRATION

C97CG000

Compound.....: PCB 1260
Method.....: 8080A

Date Printed.....: 15-DEC-1997 18:22

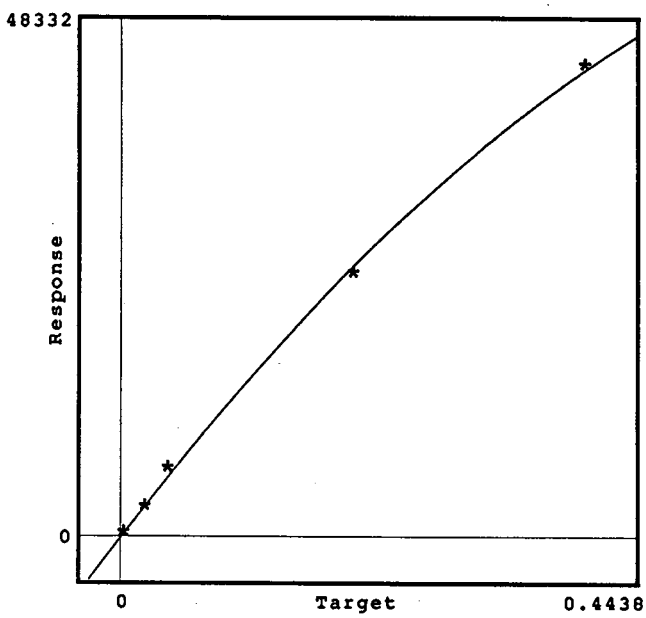
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9982900
Formula.....:
$-81195.20*X^2 + 141415.0*X + -4.937600$

RT Mean.....: 15.341
RT Std Deviation.: 0.004122

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1660_0.01	15.34	0.00200000	264	277.5680	5.14	14-NOV-1997 05:05
$1660_0.10	15.35	0.0200000	2683	2790.890	4.02	14-NOV-1997 05:42
$1660_0.20	15.34	0.0400000	6261	5521.760	-11.81	14-NOV-1997 06:19
$1660_1.0	15.34	0.200000	24211	25030.30	3.38	14-NOV-1997 06:56
$1660_2.0	15.34	0.400000	43894	43569.90	-0.74	14-NOV-1997 07:32

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FORM L
INITIAL CALIBRATION

C97CG000

Compound.....: PCB 1260
Method.....: 8080A

Date Printed.....: 15-DEC-1997 18:22

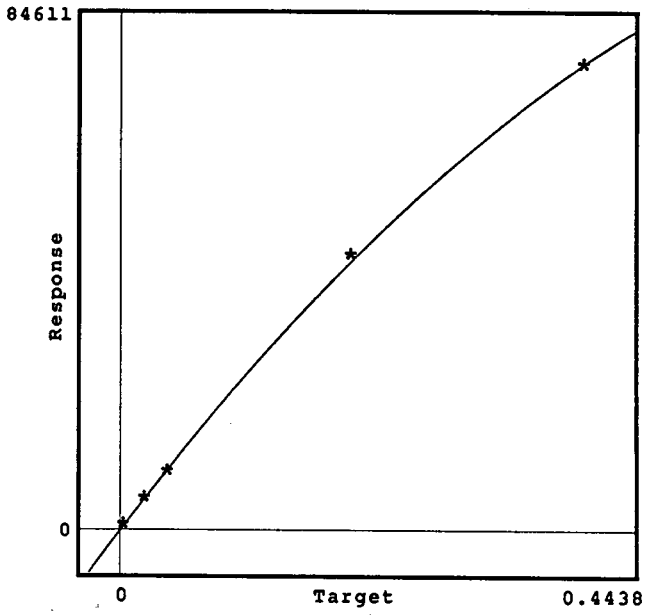
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9996710
Formula.....:
$-148950.0*X^2 + 250015.0*X + 112.9940$

RT Mean.....: 17.198
RT Std Deviation.: 0.002342

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1660_0.01	17.20	0.00200000	641	612.4290	-4.46	14-NOV-1997 05:05
$1660_0.10	17.20	0.0200000	5000	5053.720	1.07	14-NOV-1997 05:42
$1660_0.20	17.20	0.0400000	9421	9875.280	4.82	14-NOV-1997 06:19
$1660_1.0	17.20	0.200000	44991	44158.00	-1.85	14-NOV-1997 06:56
$1660_2.0	17.20	0.400000	75974	76287.00	0.41	14-NOV-1997 07:32

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FORM L
INITIAL CALIBRATION

C97CG000

Compound.....: **Tetrachloro-m-xylene**
Method.....: **8080A**

Date Printed.....: 15-DEC-1997 18:22

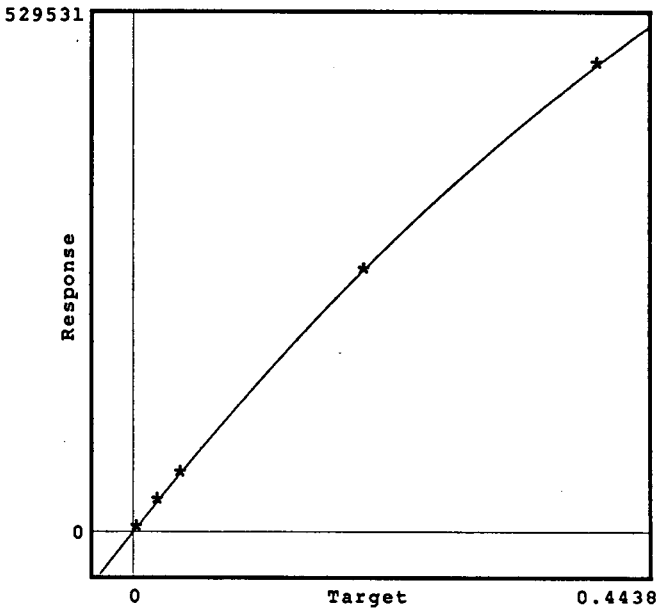
Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Model.....: Quadratic
Coef of Deter(r^2): 0.9999550
Formula.....:
$-710705.0*X^2 + 1475350.*X + 1019.260$

RT Mean.....: 6.798
RT Std Deviation.: 0.001529

Calibration Units: ug/ml



Standard	Retention Time	Target	Response	Estimated Response	Percent Difference	Date Acquired
$1660_0.01	6.80	0.00200000	3876	3967.130	2.35	14-NOV-1997 05:05
$1660_0.10	6.80	0.0200000	31154	30242.00	-2.93	14-NOV-1997 05:42
$1660_0.20	6.80	0.0400000	58744	58896.30	0.26	14-NOV-1997 06:19
$1660_1.0	6.80	0.200000	266553	267661.0	0.42	14-NOV-1997 06:56
$1660_2.0	6.80	0.400000	477923	477448.0	-0.1	14-NOV-1997 07:32

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DATA CHEM LABORATORIES
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FORM N1
INITIAL CALIBRATION VERIFICATION

Form RLIMS63-V1.0
12159719063393
Page 1

R97CG000

Sample Name.....: ICV1254_1.0
Acquisition Date.: 14-NOV-1997 04:29

Method.....: 8080A

Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Calibration Units: ug/ml

Date Printed.....: 15-DEC-1997 19:06

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Run ID.....: R97CG000
Run Start Date...: 13-NOV-1997 22:22

Compound	Retent Time	Retention Time Window		RT Flag	Target	Found	% Diff	Limit (± %)	Verf Flag
PCB 1254	16.58	16.53	16.63		0.200000	0.149212	-25	25	
PCB 1254	16.81	16.70	16.92		0.200000	0.160396	-20	25	
PCB 1254	17.68	17.63	17.73		0.200000	0.161506	-19	25	
PCB 1254	18.24	18.19	18.29		0.200000	0.224354	12	25	
PCB 1254	19.21	19.16	19.26		0.200000	0.143522	-28	25	*

* Failed acceptance criteria.

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DATA CHEM LABORATORIES
A Sorenson Company

FORM N1
INITIAL CALIBRATION VERIFICATION

Form RLIMS63-V1.0
12159719063393
Page 2

R97CG000

Sample Name.....: ICV_1660_1.0
Acquisition Date.: 14-NOV-1997 08:09

Method.....: 8080A

Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Calibration Units: ug/ml

Date Printed.....: 15-DEC-1997 19:06

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Run ID.....: R97CG000
Run Start Date...: 13-NOV-1997 22:22

Compound	Retent Time	Retention Time Window		RT Flag	Target	Found	% Diff	Limit (± %)	Verf Flag
PCB 1016	10.10	10.05	10.15		0.200000	0.281820	41	25	*
PCB 1016	11.33	11.29	11.39		0.200000	0.236117	18	25	
PCB 1016	11.88	11.84	11.94		0.200000	0.242775	21	25	
PCB 1016	12.49	12.45	12.55		0.200000	0.199997	0	25	
PCB 1016	13.60	13.56	13.66		0.200000	0.206751	3	25	
PCB 1260	15.06	15.02	15.12		0.200000	0.155937	-22	25	
PCB 1260	15.34	15.29	15.39		0.200000	0.148255	-26	25	*
PCB 1260	17.20	17.15	17.25		0.200000	0.199019	0	25	
PCB 1260	17.47	17.43	17.53		0.200000	0.200305	0	25	
PCB 1260	17.87	17.81	17.91		0.200000	0.210578	5	25	

* Failed acceptance criteria.

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DATA CHEM LABORATORIES
A Sorenson Company

FORM N2
CONTINUING CALIBRATION VERIFICATION

Form RLIMS63-V1.0
12159719063393
Page 3

R97CG000

Sample Name.....: CCV_1660_1.0
Acquisition Date.: 22-NOV-1997 12:04

Method.....: 8080A

Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Calibration Units: ug/ml

Date Printed.....: 15-DEC-1997 19:06

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Run ID.....: R97CG000
Run Start Date...: 13-NOV-1997 22:22

Compound	Retent Time	Retention Time Window		RT Flag	Target	Found	% Diff	Limit (± %)	Verf Flag
Tetrachloro-m-xylene	6.82	6.75	6.85		0.200000	0.170126	-15	15	
PCB 1016	10.11	10.05	10.15		0.200000	0.186772	-7	15	
PCB 1016	11.36	11.29	11.39		0.200000	0.180457	-10	15	
PCB 1016	11.91	11.84	11.94		0.200000	0.197310	-1	15	
PCB 1016	12.51	12.45	12.55		0.200000	0.216905	8	15	
PCB 1016	13.62	13.56	13.66		0.200000	0.199731	0	15	
PCB 1260	15.08	15.02	15.12		0.200000	0.201076	1	15	
PCB 1260	15.36	15.29	15.39		0.200000	0.178494	-11	15	
PCB 1260	17.22	17.15	17.25		0.200000	0.151409	-24	15	*
PCB 1260	17.49	17.43	17.53		0.200000	0.171486	-14	15	
PCB 1260	17.88	17.81	17.91		0.200000	0.160739	-20	15	*
Dibutylchlorendate	22.02	21.96	22.06		0.200000	0.175681	-12	15	

* Failed acceptance criteria.

0295

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DATA CHEM LABORATORIES
A Sorenson Company

FORM N2
CONTINUING CALIBRATION VERIFICATION

R97CG000

Sample Name.....: CCV_1660_1.0
Acquisition Date.: 22-NOV-1997 18:48

Method.....: 8080A

Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Calibration Units: ug/ml

Date Printed.....: 15-DEC-1997 19:06

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Run ID.....: R97CG000
Run Start Date...: 13-NOV-1997 22:22

Compound	Retent Time	Retention Time Window		RT Flag	Target	Found	% Diff	Limit (± %)	Verf Flag
Tetrachloro-m-xylene	6.81	6.75	6.85		0.200000	0.173201	-13	15	
PCB 1016	10.10	10.05	10.15		0.200000	0.184259	-8	15	
PCB 1016	11.35	11.29	11.39		0.200000	0.178408	-11	15	
PCB 1016	11.90	11.84	11.94		0.200000	0.194664	-3	15	
PCB 1016	12.49	12.45	12.55		0.200000	0.221939	11	15	
PCB 1016	13.60	13.56	13.66		0.200000	0.200115	0	15	
PCB 1260	15.06	15.02	15.12		0.200000	0.207580	4	15	
PCB 1260	15.34	15.29	15.39		0.200000	0.180989	-10	15	
PCB 1260	17.20	17.15	17.25		0.200000	0.166090	-17	15	*
PCB 1260	17.47	17.43	17.53		0.200000	0.190551	-5	15	
PCB 1260	17.86	17.81	17.91		0.200000	0.177417	-11	15	
Dibutylchlorendate	22.00	21.96	22.06		0.200000	0.191353	-4	15	

* Failed acceptance criteria.

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DATA CHEM LABORATORIES
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FORM N2
CONTINUING CALIBRATION VERIFICATION

Form RLIMS63-V1.0
12159719063393
Page 5

R97CG000

Sample Name.....: CCV_1660_1.0
Acquisition Date.: 23-NOV-1997 01:32

Method.....: 8080A

Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Calibration Units: ug/ml

Date Printed.....: 15-DEC-1997 19:06

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Run ID.....: R97CG000
Run Start Date...: 13-NOV-1997 22:22

Compound	Retent Time	Retention Time Window		RT Flag	Target	Found	% Diff	Limit (± %)	Verf Flag
Tetrachloro-m-xylene	6.81	6.75	6.85		0.200000	0.169387	-15	15	
PCB 1016	10.10	10.05	10.15		0.200000	0.181744	-9	15	
PCB 1016	11.35	11.29	11.39		0.200000	0.170814	-15	15	
PCB 1016	11.90	11.84	11.94		0.200000	0.184319	-8	15	
PCB 1016	12.49	12.45	12.55		0.200000	0.213735	7	15	
PCB 1016	13.61	13.56	13.66		0.200000	0.189040	-5	15	
PCB 1260	15.06	15.02	15.12		0.200000	0.203762	2	15	
PCB 1260	15.34	15.29	15.39		0.200000	0.179001	-10	15	
PCB 1260	17.20	17.15	17.25		0.200000	0.161656	-19	15	*
PCB 1260	17.47	17.43	17.53		0.200000	0.188778	-6	15	
PCB 1260	17.86	17.81	17.91		0.200000	0.177327	-11	15	
Dibutylchlorendate	21.99	21.96	22.06		0.200000	0.200050	0	15	

* Failed acceptance criteria.

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DATA CHEM LABORATORIES
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FORM N2
CONTINUING CALIBRATION VERIFICATION

R97CG000

Sample Name.....: CCV_1660_1.0
Acquisition Date.: 23-NOV-1997 08:16

Method.....: 8080A

Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Calibration Units: ug/ml

Date Printed.....: 15-DEC-1997 19:06

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Run ID.....: R97CG000
Run Start Date...: 13-NOV-1997 22:22

Compound	Retent Time	Retention Time Window		RT Flag	Target	Found	% Diff	Limit (± %)	Verf Flag
Tetrachloro-m-xylene	6.81	6.75	6.85		0.200000	0.179204	-10	15	
PCB 1016	10.10	10.05	10.15		0.200000	0.193819	-3	15	
PCB 1016	11.34	11.29	11.39		0.200000	0.175762	-12	15	
PCB 1016	11.89	11.84	11.94		0.200000	0.183812	-8	15	
PCB 1016	12.49	12.45	12.55		0.200000	0.189411	-5	15	
PCB 1016	13.60	13.56	13.66		0.200000	0.174004	-13	15	
PCB 1260	15.06	15.02	15.12		0.200000	0.166350	-17	15	*
PCB 1260	15.34	15.29	15.39		0.200000	0.144091	-28	15	*
PCB 1260	17.20	17.15	17.25		0.200000	0.139291	-30	15	*
PCB 1260	17.47	17.43	17.53		0.200000	0.152300	-24	15	*
PCB 1260	17.86	17.81	17.91		0.200000	0.145171	-27	15	*
Dibutylchlorendate	22.00	21.96	22.06		0.200000	0.179029	-10	15	

* Failed acceptance criteria.

960 West LeVoy Drive / Salt Lake City, Utah 84123-2547
Phone (801) 266-7700 FAX (801) 268-9992

DATA CHEM LABORATORIES
A Sorenson Company

FORM N2
CONTINUING CALIBRATION VERIFICATION

Form RLIMS63-V1.0
12159719063393
Page 7

R97CG000

Sample Name.....: CCV_1660_1.0
Acquisition Date.: 23-NOV-1997 14:59

Method.....: 8080A

Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Calibration Units: ug/ml

Date Printed.....: 15-DEC-1997 19:06

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Run ID.....: R97CG000
Run Start Date...: 13-NOV-1997 22:22

Compound	Retent Time	Retention Time Window		RT Flag	Target	Found	% Diff	Limit (± %)	Verf Flag
Tetrachloro-m-xylene	6.81	6.75	6.85		0.200000	0.174148	-13	15	
PCB 1016	10.10	10.05	10.15		0.200000	0.184567	-8	15	
PCB 1016	11.35	11.29	11.39		0.200000	0.171797	-14	15	
PCB 1016	11.90	11.84	11.94		0.200000	0.181472	-9	15	
PCB 1016	12.49	12.45	12.55		0.200000	0.193282	-3	15	
PCB 1016	13.61	13.56	13.66		0.200000	0.173592	-13	15	
PCB 1260	15.07	15.02	15.12		0.200000	0.163664	-18	15	*
PCB 1260	15.35	15.29	15.39		0.200000	0.142627	-29	15	*
PCB 1260	17.20	17.15	17.25		0.200000	0.138510	-31	15	*
PCB 1260	17.47	17.43	17.53		0.200000	0.151170	-24	15	*
PCB 1260	17.87	17.81	17.91		0.200000	0.140946	-30	15	*
Dibutylchlorendate	22.00	21.96	22.06		0.200000	0.169189	-15	15	

* Failed acceptance criteria.

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DATA CHEM LABORATORIES
A Sorenson Company

FORM N2
CONTINUING CALIBRATION VERIFICATION

R97CG000

Sample Name.....: CCV_1660_1.0
Acquisition Date.: 23-NOV-1997 21:07

Method.....: 8080A

Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Calibration Units: ug/ml

Date Printed.....: 15-DEC-1997 19:06

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Run ID.....: R97CG000
Run Start Date...: 13-NOV-1997 22:22

Compound	Retent Time	Retention Time Window		RT Flag	Target	Found	% Diff	Limit (± %)	Verf Flag
Tetrachloro-m-xylene	6.81	6.75	6.85		0.200000	0.174020	-13	15	
PCB 1016	10.10	10.05	10.15		0.200000	0.188324	-6	15	
PCB 1016	11.34	11.29	11.39		0.200000	0.181600	-9	15	
PCB 1016	11.89	11.84	11.94		0.200000	0.198781	-1	15	
PCB 1016	12.49	12.45	12.55		0.200000	0.228018	14	15	
PCB 1016	13.60	13.56	13.66		0.200000	0.206590	3	15	
PCB 1260	15.06	15.02	15.12		0.200000	0.213978	7	15	
PCB 1260	15.34	15.29	15.39		0.200000	0.190065	-5	15	
PCB 1260	17.20	17.15	17.25		0.200000	0.155281	-22	15	*
PCB 1260	17.47	17.43	17.53		0.200000	0.179603	-10	15	
PCB 1260	17.86	17.81	17.91		0.200000	0.164536	-18	15	*
Dibutylchlorendate	21.99	21.96	22.06		0.200000	0.183875	-8	15	

* Failed acceptance criteria.

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DATA CHEM LABORATORIES
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FORM N2
CONTINUING CALIBRATION VERIFICATION

R97CG000

Sample Name.....: CCV_1660_1.0
Acquisition Date.: 24-NOV-1997 03:50

Method.....: 8080A

Init Calib ID....: C97CG000
Init Calib Date..: 14-NOV-1997 01:25

Calibration Units: ug/ml

Date Printed.....: 15-DEC-1997 19:06

Instrument Name..: GC/ECD-6
Column Name.....: DB-608
Detector Name....: ECD

Run ID.....: R97CG000
Run Start Date...: 13-NOV-1997 22:22

Compound	Retent Time	Retention Time Window		RT Flag	Target	Found	% Diff	Limit (± %)	Verf Flag
Tetrachloro-m-xylene	6.81	6.75	6.85		0.200000	0.169878	-15	15	
PCB 1016	10.10	10.05	10.15		0.200000	0.181010	-9	15	
PCB 1016	11.35	11.29	11.39		0.200000	0.163795	-18	15	*
PCB 1016	11.90	11.84	11.94		0.200000	0.172568	-14	15	
PCB 1016	12.50	12.45	12.55		0.200000	0.180676	-10	15	
PCB 1016	13.61	13.56	13.66		0.200000	0.165892	-17	15	*
PCB 1260	15.07	15.02	15.12		0.200000	0.171139	-14	15	
PCB 1260	15.35	15.29	15.39		0.200000	0.146808	-27	15	*
PCB 1260	17.21	17.15	17.25		0.200000	0.130143	-35	15	*
PCB 1260	17.48	17.43	17.53		0.200000	0.145069	-27	15	*
PCB 1260	17.87	17.81	17.91		0.200000	0.135507	-32	15	*
Dibutylchlorendate	22.01	21.96	22.06		0.200000	0.167954	-16	15	*

* Failed acceptance criteria.

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DATA CHEM LABORATORIES
A SORENSON COMPANY

Sample Tracking Documentation
Inventory Checklist

- [x] LIMS Grouping Reports
- [x] DataChem Laboratories (DCL) Chain-of-Custody Record
- [x] DCL Sample Work Order
- [NA] Copy of numbered Nonconformance/Corrective Action Report (NC/CAR)
- [NA] Copy of Client-Related Problem Report (CPR)

Sample Tracking Documentation
Reviewer Checklist

- [x] The Sample Tracking Documentation Inventory Checklist above is complete.
- [x] DCL Chain-of-Custody Record provides signatures for the sample portion reported in this data package.
- [x] DCL Chain-of-Custody Record was completed in accordance with procedures in DCL SOP XX-DC-006 "Chain-of-Custody and Laboratory Tracking."
- [x] Methods specified on the Sample Work Order were performed or an explanation for deviations is provided.
- [x] Special instructions on the Sample Work Order were followed.
- [x] Project Management instructions on the Project Protocol Worksheet were followed.
- [x] Client's requests were met or an explanation is provided in the Case Narrative.
- [NA] NC/CAR and/or CPR were completed in accordance with procedures in DCL SOP QC-DC-006 "Nonconformance/Corrective Action Report (NC/CAR) Procedures."

0302

Assembled by: _____ 12/6/97 Reviewed by: _____ 12/6/97
Signature Date Signature Date

Rev. 3/95

DataChem Laboratories
LIMS - Sample Master System
Preparation Group Report

Date: 9-NOV-1997 23:29
User: LAMM

RLIMS15-V1.2

Preparation Run Name: G97B800H

Group ID: G97B800H

Samples: 3

Pos	Laboratory Sample Name	Field Sample Name 1	Field Sample Name 2	Laboratory Sample ID	Laboratory Group Name	Accnt. Number
1	BL-142147-1	BL-142147-1		S97B800Q	97C-0439-04	03008
2	QC-142147-1	QC-142147-1		S97B800R	97C-0439-04	03008
3	97C05251	RB2		S97B70N4	97C-0439-04	03008

----- END OF LISTING -----

DataChem Laboratories
LIMS - Sample Master System
Analysis Group Report

Date: 1-DEC-1997 10:57
User: TAYLORC

RLIMS15-V1.2

Analysis Run Name: G97C000L

Group ID: G97C000L

Samples: 3

Pos	Laboratory Sample Name	Field Sample Name 1	Field Sample Name 2	Laboratory Sample ID	Laboratory Group Name	Accnt. Number
1	BL-142147-1	BL-142147-1		S97B800Q	97C-0439-04	03008
2	QC-142147-1	QC-142147-1		S97B800R	97C-0439-04	03008
3	97C05251	RB2		S97B70N4	97C-0439-04	03008

----- END OF LISTING -----

DataChem Laboratories
LIMS - Sample Master System
User Group Report

Date: 15-DEC-1997 16:54
User: TAYLORC

RLIMS15-V1.2

User Group Name: G97CG01P

Group ID: G97CG01P

Samples: 33

Pos	Laboratory Sample Name	Field Sample Name 1	Field Sample Name 2	Laboratory Sample ID	Laboratory Group Name	Accnt. Number
1	BL-142132-1	BL-142132-1		S97BC01V	97C-0435-01	03008
2	QC-142132-1	QC-142132-1		S97BC01W	97C-0435-01	03008
3	97C05169	KKKNS3		S97B70CW	97C-0435-01	03008
4	97C05170	KKKNS2		S97B70CX	97C-0435-01	03008
5	97C05171	KKKSS2		S97B70CY	97C-0435-01	03008
6	97C05172	KKKSED(D)		S97B70CZ	97C-0435-01	03008
7	97C05173	KKKSD1		S97B70D0	97C-0435-01	03008
8	97C05174	KKKND2		S97B70D1	97C-0435-01	03008
9	97C05175	EEEND2		S97B70D2	97C-0435-01	03008
10	97C05176	EEENS1		S97B70D3	97C-0435-01	03008
11	97C05176MS	EEENS1		S97B70D4	97C-0435-01	03008
12	97C05176MSD	EEENS1		S97B70D5	97C-0435-01	03008
13	97C05177	EEENS2		S97B70D6	97C-0435-01	03008
14	97C05178	EEESD1		S97B70D7	97C-0435-01	03008
15	97C05179	EEESS2		S97B70D8	97C-0435-01	03008
16	97C05180	EEESD2		S97B70D9	97C-0435-01	03008
17	97C05181	EEESS1		S97B70DB	97C-0435-01	03008
18	97C05182	EEESED(S)		S97B70DC	97C-0435-01	03008
19	97C05183	EEENS3		S97B70DD	97C-0435-01	03008
20	97C05184	EEEND1		S97B70DF	97C-0435-01	03008
21	97C05185	CCCSED(S)		S97B70DG	97C-0435-01	03008
22	97C05186	CCCNS1		S97B70DH	97C-0435-01	03008
23	97C05187	CCCND1		S97B70DJ	97C-0435-01	03008
24	97C05188	CCCSED(D)		S97B70DK	97C-0435-01	03008
25	BL-142144-1	BL-142144-1		S97BC023	97C-0439-01	03008
26	QC-142144-1	QC-142144-1		S97BC024	97C-0439-01	03008
27	97C05249	AAAANS1		S97B70MW	97C-0439-01	03008
28	97C05249MS	AAAANS1		S97B70MX	97C-0439-01	03008
29	97C05249MSD	AAAANS1		S97B70MY	97C-0439-01	03008
30	97C05250	AAAAND1		S97B70MZ	97C-0439-01	03008
31	BL-142147-1	BL-142147-1		S97B800Q	97C-0439-04	03008
32	QC-142147-1	QC-142147-1		S97B800R	97C-0439-04	03008
33	97C05251	RB2		S97B70N4	97C-0439-04	03008

----- END OF LISTING -----

Earliest Sampling Date: 6-Nov-1997

DataChem Laboratories
CHAIN-OF-CUSTODY

Results due by: 26-Nov-1997

Project/Job/Task: P97B5002 | Split: | Root Set ID: 97C-0439 * | Reporting Group 04

Client: Roy F. Weston | Account: 03008

Comments:

Verified: KN 11-9-97

Date Sampled	Field ID Number	DCL Sample Name	DCL Sample ID	QC	Matrix	Customer ID 2			Analysis		PCBs									# Bottles
6-Nov-1997	RB2	97C05251			WATER						X									2

ORIGINAL FIELD SAMPLE CHAIN-OF-CUSTODY

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Reason for Transfer/ Storage Location
Walk-in / Room/ Shelf/ Fridge R-23-1	11-9-97 2030	Kevin Nottingham	Labeling/Shelving TC Ext
Kevin Nottingham	11.09.97/2030	Walk-in / Room/ Shelf/ Fridge	Storage Extraction

SAMPLE PREPARATION / ANALYSIS CHAIN-OF-CUSTODY

Sample Prep/Analysis for: 8080 / 3510 | Lab Notebook No.: EXT 194

Prepared/Analyzed by: [illegible] | Date/Time: 11.09.97 / 2400

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Reason for Transfer/ Storage Location
[illegible]	11.09.97 2400	Rm 16	Storage
R16-LLH	11-10-97 10:00	Laura L. Hughes	Core
Laura L. Hughes R-16-IC	11-10-97 14:15	B16-IC-LLH	Storage
	11-22-97 1100	[illegible]	R-22-1 Analysis

Check box if there is a continuation page ☐

Form: COFC1.01-SWV2.30

Printed 11/8/1997 14:33

Sample Work Order

QC Clearance: _____

Project Manager: Scott B. Saulls

Client: Roy F. Weston

Account: 03008 **SDG:** AAAAND

Project/Task: P97B5002

Date Received: 7-Nov-1997

Date for Mailing Report: 26-Nov-1997

Date for Verbal Report: 21-Nov-1997

DCL Root Set ID: 97C-0439*

DCL Lab. Name: 97C05249–97C05251

Total # Samples: 5

Sample Entry: Michael D McMillan

Section: ZC

Earliest Sampling Date: 6-Nov-1997

Preparation Type:

Rep. Group	ZC Section Analytes Requested	Latest Prep. Date	Latest Anal. Date	No. of Samp.	Storage Location	Analysis/Prep. Method	Inst.	Matrix
01	PCBs	13-Nov-1997[c]	Prep+40 d	4		8080A/3550A	GC/ECD	SOIL
04	PCBs	13-Nov-1997[c]	Prep+40 d	1		8080A/3550A	GC/ECD	WATER

[c]Based on date of collection

Special Instructions: _____

Section Manager: Richard W. Wade

0307

Other Sections Receiving Sample Portions: FC, FS

DATA CHEM LABORATORIES
A SORENSON COMPANY

Analytical Documentation
Inventory Checklist

- [NA] This is a "dummy datapackage". Data for inventory checklist found with set _____
- [NA] Copy of TCLP Preparation Logbook Pages
- [X] Copy of Sample Preparation Notebook/Logbook Pages
- [X] Copy of Analyst's Notebook/Method Logbook Pages
- [X] Copy of Instrument Injection Logbook/Instrument Logbook/Run Log Pages
- [NA] Copy of Reagent Logbook Pages
- [X] Copy of Working Standard Preparation Logbook Pages
- [X] Copy of Secondary or Intermediate Standard Preparation Logbook Pages
- [X] Copy of Primary Standard or Concentrated Stock Standard Preparation Logbook Pages
- [X] Certificates of Analysis for Standards
- [NA] Copy of Standard Verification Logbook Pages (including documentation for spiking solutions and/or calibration standards)
- [NA] Copy of Preparation Logbooks for solutions prepared by QC

All other miscellaneous documentation associated with this set (describe)

- [X] uncorrected PCB results

Analytical Documentation
Reviewer Checklist

- X The Analytical Documentation Inventory Checklist above is complete.
- X Basic documentation procedures were followed in accordance with DCL SOP XX-DC-004 "Analytical Data Record Keeping."
- X All notebook and logbook pages contain page number, book number, title, and available space for pagination (if required).
- X All notebook and logbook pages were signed and dated by the analyst and reviewer before copying.
- X All copies are legible.
- X Standard preparation is documented in accordance with DCL SOP XX-DC-019 "Standards Purity, Preparation, Traceability and Verification" or by WR-DC-001 "The Acquisition, Preparation, and use of Radioactive Standard Reference Materials."
- X Documentation is provided to verify that standard calibration solutions and spiking solutions are traceable to a vendor certificate.

0308

Assembled by: _____ (Signature) 12/16/97 (Date) Reviewed by: _____ (Signature) 12/16/97 (Date)

Rev. 6/95

Date Set Extracted: 09Nov.'97
Account No.: 3008
DCL Set No.: 97C-0439-04
Group ID/Lot: G97B800H

DATACHEM LABORATORIES EXTRACTION NOTEBOOK

Book No. EXT 194 Page No. 052
Sample Medium: Water
Extraction Method: 8080/3510

	DCL No.	Field No.	Sample Vol./Wt. (mL/g)	pH Original	pH Adjusted	pH Adjusted	Spike Sol'n (mL) Surrogate Std.	Spike Sol'n (mL) Matrix	Spike Sol'n (mL) Matrix	Appearance and Observations	Final Volume (mL)
1	BL-142147-1	BL-142147-1	1000 mL	5.0	NA	NA	1.0	NA	NA	sol. DDI. Aro	10.0
2	QC-142147-1	QC-142147-1	↓	↓	↓	↓	↓	1.0	↓	↓	↓
3	97C05251	RB2	↓	↓	↓	↓	↓	NA	↓	clear	↓
4											
5											
6											
7											
8											
9											
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22											
23											
24											
25											

11.09.97

Solvents (+Lot #): Miller - Bay J - B0151

Balance ID: NA

Surrogate Std. Ref. No.: 157WS31205 Exp. 4.30.98 — Spiked by: [illegible]

Matrix Spike No.: 138WS27535 Exp. 01.03.98 — Spiked by: [illegible]

Matrix Spike No.: NA — Spiked by: NA

Extractionist: [illegible] — Date: 11.09.97

Checker: C.R. Newton — Date: 11.10.97

Sonicator Tuned by: NA Date: NA

Comments: Sep. funnel extraction

11.09.97

NCR or CPR

0309

TITLE Roy F Weston 50G AAAAND

Project No. 03008
Book No. 3161

DATA CHEM LABORATORIES

9

Date: 1-DEC-1997 10:57
User: TAYLORC

Page: 1
RLIMS15-V1.2

Analysis Run Name: G97C000L

Group ID: G97C000L

Samples: 3

Pos	Laboratory Sample Name	Field Sample Name 1	Field Sample Name 2	Laboratory Sample ID	Laboratory Group Name	Accnt. Number
1	BL-142147-1	BL-142147-1		S97B800Q	97C-0439-04	03008
2	QC-142147-1	QC-142147-1		S97B800R	97C-0439-04	03008
3	97C05251	RB2		S97B70N4	97C-0439-04	03008

12/15/97

Date: 1-DEC-1997 10:57
User: TAYLORC

Page: 1
RLIMS15-V1.2

Analysis Run Name: G97C000K

Group ID: G97C000K

Samples: 6

Pos	Laboratory Sample Name	Field Sample Name 1	Field Sample Name 2	Laboratory Sample ID	Laboratory Group Name	Accnt. Number
1	BL-142144-1	BL-142144-1		S97BC023	97C-0439-01	03008
2	QC-142144-1	QC-142144-1		S97BC024	97C-0439-01	03008
3	97C05249	AAAANS1		S97B70MW	97C-0439-01	03008
4	97C05249MS	AAAANS1		S97B70MX	97C-0439-01	03008
5	97C05249MSD	AAAANS1		S97B70MY	97C-0439-01	03008
6	97C05250	AAAAND1		S97B70MZ	97C-0439-01	03008

12/15/97

Client Name.....: Roy F. Weston
Release Number.....: AAAAND

Matrix.....: WATER
Reporting Units.....: ug/L

DCL Sample Name...: QC-142147-1
Date Printed.....: 15-DEC-97 18:31

DCL Analysis Group: G97C000L
Analysis Method...: OP-SW-8080
Instrument Type...: GC/ECD
Instrument ID.....: GC/ECD-6
Column Type.....: DB-608
[X] Primary
[ ] Confirmation

DCL Preparation Group: G97B800H
Date Prepared.....: 09-NOV-97 00:00
Preparation Method...: 3550C

QC Limit Type.....: Performance

Analytical Results

Analyte	Date Analyzed	Target	Result	Percent Recovery	QC Limits	QC Flag
PCB 1016	23-NOV-97 19:53	5.00	4.65	93.0	54.1/145.	
PCB 1260	23-NOV-97 19:53	5.00	4.38	87.6	50.3/131.	

12/15/97

Client Name.....: Roy F. Weston
Release Number.....: AAAAND

Matrix.....: SOIL
Reporting Units.....: ug/Kg

DCL Sample Name...: QC-142144-1
Date Printed.....: 15-DEC-97 18:52

DCL Analysis Group: G97C000K
Analysis Method...: OP-SW-8080
Instrument Type...: GC/ECD
Instrument ID.....: GC/ECD-6
Column Type.....: DB-608
[X] Primary
[ ] Confirmation

DCL Preparation Group: G97BC016
Date Prepared.....: 13-NOV-97 00:00
Preparation Method...: 3550C

QC Limit Type.....: Performance

Analytical Results

Analyte	Date Analyzed	Target	Result	Percent Recovery	QC Limits	QC Flag
PCB 1016	23-NOV-97 22:20	167.	142.	85.3	53.3/160.	
PCB 1260	23-NOV-97 22:20	167.	134.	80.3	48.0/151.	

12/15/97

Client Name.....: Roy F. Weston
Release Number.....: AAAAND

Matrix.....: SOIL
Reporting Units.....: ug/Kg

DCL Sample Name...: 97C05249MS
Date Printed.....: 15-DEC-97 18:52

DCL Analysis Group: G97C000K
Analysis Method...: OP-SW-8080
Instrument Type...: GC/ECD
Instrument ID.....: GC/ECD-6
Column Type.....: DB-608
[X] Primary
[ ] Confirmation

DCL Preparation Group: G97BC016
Date Prepared.....: 13-NOV-97 00:00
Preparation Method...: 3550C

QC Limit Type.....: Performance

Analytical Results

Analyte	Date Analyzed	Sample Result	Spiked Result	Spike Added	Percent Recovery	QC Limits	QC Flag
PCB 1016	23-NOV-97 23:33	1230	1820	167.	354.	44.0/140.	*
PCB 1260	23-NOV-97 23:33	7720	10500	167.	1660	48.3/146.	*

S97B70MY

DCL Sample Name...: 97C05249MSD

Analytical Results

Analyte	Date Analyzed	Duplicate Result	Percent Recovery	Mean	Range	RPD	QC Limits	QC Flag
PCB 1016	24-NOV-97 00:10	1350	67.2	1580	478.	30.	0.00/15.6	*
PCB 1260	24-NOV-97 00:10	10300	1570	10400	141.	1.4	0.00/45.9	

12/15/97

Client Name.....: Roy F. Weston
Release Number.....: AAAAND

Matrix.....: WATER
Reporting Units.....: ug/L

DCL Analysis Group: G97C000L
Analysis Method...: OP-SW-8080

DCL Prep Group....: G97B800H
Preparation Method: 3550C

QC Limit Type.....: Performance

Surrogate Recoveries

Surr. ID	Dibutylchlorendate				Tetrachloro-m-xylene							
QC Limits	35.4/148.				43.2/132.							
DCL Sample Number	Analyte Result	Spiked Amount	% Rec.	Q	Analyte Result	Spiked Amount	% Rec.	Q	Analyte Result	Spiked Amount	% Rec.	Q
97C05251	0.341	0.500	68.1		0.437	0.500	87.4					
BL-142147-1	0.382	0.500	76.3		0.398	0.500	79.5					
QC-142147-1	0.434	0.500	86.8		0.369	0.500	73.8					

12/15/97

method: 8080A dates of analysis: 11/23-24/97

					date
extraction method:	3510	matrix	water	aliquot 1.0L	11/9/
"	3550	"	soil	" 0.030kg	11/13/97

instrument: (GC/ECD-6) HP5890 GC w/ DB-608 column (30m x 0.53 mm id x 0.5 μm) & ECD (ch 56).

oven program: 150C x 2min; ramp @ 5C/min to 275C; hold 7 min.

standards: All calibration curves meet method specifications. All ICV recoveries are within ±25%. All CCV recoveries are within ±15% with exception of CCV #4, PCB 1260 (+25.2%); CCV 5, PCB-1260 (-26.4%) & CCV #7, PCB 1260 (-27%).

samples analyzed at full strength caused a temporary loss of calibration.

samples: All tetrachloro-m-xylene surrogate recoveries are reported from undiluted sample analyses & are in control.

All QC recoveries are in control. A soil MS/MSD were prepared from sample 97C05249. Due to a high PCB-1254 result in the parent, spike recoveries were poor (results from 1:100 dilution).

dilutions: 97C05249, MS, MSD & 5250 were all reanalyzed at 1:100 dilutions.

Client Name.....: Roy F. Weston
Release Number.....: AAAAND

Matrix.....: SOIL
Reporting Units.....: ug/Kg

DCL Analysis Group: G97C000K
Analysis Method...: OP-SW-8080

DCL Prep Group....: G97BC016
Preparation Method: 3550C

QC Limit Type.....: Performance

Surrogate Recoveries

Surr. ID	Tetrachloro-m-xylene				Dibutylchlorendate							
QC Limits	38.7/136.				39.0/149.							
DCL Sample Number	Analyte Result	Spiked Amount	% Rec.	Q	Analyte Result	Spiked Amount	% Rec.	Q	Analyte Result	Spiked Amount	% Rec.	Q
97C05249	14.8	16.7	88.6									
97C05249MS	15.6	16.7	93.5									
97C05249MSD	15.0	16.7	89.8									
97C05250	12.7	16.7	76.0									
BL-142144-1	16.0	16.7	96.2		15.1	16.7	90.8					
QC-142144-1	12.5	16.7	75.4		16.6	16.7	99.4					

12/15/97

0310

C:\/run id: C/R97CG000

To Page No.

Witnessed & Understood by me, [signature]

Date 12/16/97

Invented by NOT APPLICABLE

Date 12/15/97

Recorded by [signature]

0311

dilutions:

97C05249
MS
MSD
5250
} 1:100

DS-6C8

ICV 1254; 5 -28 $\bar{x}$ = -16
1016; 1 +41 $\bar{x}$ = +16.6
1260; 2 -26 $\bar{x}$ = -8.6

CCV#1 PCB260; 3 -24
; 5 -20 } $\bar{x}$ = -13.6

BL132, QC132
5169 – 76 @ 1:100 →

CCV#2 PCB260; 3 -17 $\bar{x}$ = -7.8

5176MS – 5184 @ 1:100 →

CCV#3 PCB260; 3 -19 $\bar{x}$ = -8.8

5185 – 5188 @ 1:100,
5169 – 5174 →

CCV#4 PCB260; 1 -17
2 -28
3 -30
4 -24
5 -27
} $\bar{x}$ = +15.2

5175 – 5182 →

CCV#5 PCB260; 1 -18
2 -29
3 -31
4 -24
5 -30
} -26.4

5183 – 5188, BL147, QC147
5251 →

CCV#6 PCB260; 3 -22
5 -18 } $\bar{x}$ = -9.6

BL144, QC144,
5249 – 5250 @ 1:100,
5249 – 5250 →

CCV#7 PCB016; 2 -18
; 5 -17 } $\bar{x}$ = -13.6

PCB260; 2 -27
3 -35
4 -27
5 -32
} $\bar{x}$ = -27

TITLE DATACHEM LABORATORIES – GC – PESTICIDE ANALYSIS

Project No. 03448
Book No. 3307

DATA CHEM LABORATORIES

From Page No.

analyst: J. Chris Taylor client: Ray F. Weston method: 8081A column: DB-608

sets: 97C-0435-01, 97C-0439-01, 97C-0439-04

DATACHEM LABORATORIES GC-PESTICIDE ANALYSIS
INJECTION LOGBOOK FOR GC ECD-b

Sequence File = DISK:[TAYLORC]5697326.SEQ;3 Data Directory = DISK:[T

Seq#	Rep#	Sample Name / Sample Notes	Data Filename	Acquisition Time
1	1	PRIME	5697326001.RAW;1	13-NOV-1997 22:22:00
2	1	PCB221_2.0 138-WS-27569-1	5697326002.RAW;1	13-NOV-1997 22:58:46
3	1	PCB232_2.0 138-WS-27570-1	5697326003.RAW;1	13-NOV-1997 23:35:29
4	1	PCB242_2.0 138-WS-27571-1	5697326004.RAW;1	14-NOV-1997 00:12:15
5	1	PCB248_2.0 138-WS-27572-1	5697326005.RAW;1	14-NOV-1997 00:49:00
6	1	$1254_0.02 138-WS-27591	5697326006.RAW;1	14-NOV-1997 01:25:46
7	1	$1254_0.10 138-WS-27591	5697326007.RAW;1	14-NOV-1997 02:02:29
8	1	$1254_0.20 138-WS-27591	5697326008.RAW;1	14-NOV-1997 02:38:55
9	1	$1254_1.0 138-WS-27591	5697326009.RAW;1	14-NOV-1997 03:15:38
10	1	$1254_2.0 138-WS-27591	5697326010.RAW;1	14-NOV-1997 03:52:23
11	1	ICV1254_1.0 138-WS-27533	5697326011.RAW;1	14-NOV-1997 04:29:06
12	1	$1660_0.01 138-WS-27588-1	5697326012.RAW;1	14-NOV-1997 05:05:54
13	1	$1660_0.10 138-WS-27590-4	5697326013.RAW;1	14-NOV-1997 05:42:36
14	1	$1660_0.20 138-WS-27590-3	5697326014.RAW;1	14-NOV-1997 06:19:23
15	1	$1660_1.0 138-WS-27590-2	5697326015.RAW;1	14-NOV-1997 06:56:05
16	1	$1660_2.0 138-WS-27590-1	5697326016.RAW;1	14-NOV-1997 07:32:51
17	1	ICV_1660_1.0 138-WS-27589-1	5697327017.RAW;1	14-NOV-1997 08:09:34
18	1	CCV_1660_1.0 138-WS-27590	5697327018.RAW;1	22-NOV-1997 12:04:04
17	1	BL-142132-1 97C-0435-01	5697326017.RAW;2	22-NOV-1997 12:40:47
18	1	QC-142132-1 97C-0435-01	5697326018.RAW;1	22-NOV-1997 13:17:32
19	1	97C05169 X100 97C-0435-01	5697326019.RAW;1	22-NOV-1997 13:54:15
20	1	97C05170 X100 97C-0435-01	5697326020.RAW;1	22-NOV-1997 14:31:02
21	1	97C05171 X100 97C-0435-01	5697326021.RAW;1	22-NOV-1997 15:07:44
22	1	97C05172 X100 97C-0435-01	5697326022.RAW;1	22-NOV-1997 15:44:31
23	1	97C05173 X100 97C-0435-01	5697326023.RAW;1	22-NOV-1997 16:21:13
24	1	97C05174 X100 97C-0435-01	5697326024.RAW;1	22-NOV-1997 16:58:01
25	1	97C05175 X100 97C-0435-01	5697326025.RAW;1	22-NOV-1997 17:34:42
26	1	97C05176 X100 97C-0435-01	5697326026.RAW;1	22-NOV-1997 18:11:30
27	1	CCV_1660_1.0 138-WS-27590	5697326027.RAW;1	22-NOV-1997 18:48:13
28	1	97C05176MS X100 97C-0435-01	5697326028.RAW;1	22-NOV-1997 19:24:59
29	1	97C05176MSD X100 97C-0435-01	5697326029.RAW;1	22-NOV-1997 20:01:42
30	1	97C05177 X100 97C-0435-01	5697326030.RAW;1	22-NOV-1997 20:38:27
31	1	97C05178 X100 97C-0435-01	5697326031.RAW;1	22-NOV-1997 21:15:10
32	1	97C05179 X100 97C-0435-01	5697326032.RAW;1	22-NOV-1997 21:51:51
33	1	97C05180 X100 97C-0435-01	5697326033.RAW;1	22-NOV-1997 22:28:34
34	1	97C05181 X100 97C-0435-01	5697326034.RAW;1	22-NOV-1997 23:05:19
35	1	97C05182 X100 97C-0435-01	5697326035.RAW;1	22-NOV-1997 23:42:02
36	1	97C05183 X100 97C-0435-01	5697326036.RAW;1	23-NOV-1997 00:18:48
37	1	97C05184 X100 97C-0435-01	5697326037.RAW;1	23-NOV-1997 00:55:32
38	1	CCV_1660_1.0 138-WS-27590	5697326038.RAW;1	23-NOV-1997 01:32:19
39	1	97C05185 X100 97C-0435-01	5697326039.RAW;1	23-NOV-1997 02:09:03
40	1	97C05186 X100 97C-0435-01	5697326040.RAW;1	23-NOV-1997 02:45:49
41	1	97C05187 X100 97C-0435-01	5697326041.RAW;1	23-NOV-1997 03:22:29
42	1	97C05188 X100 97C-0435-01	5697326042.RAW;1	23-NOV-1997 03:59:14
43	1	97C05169 97C-0435-01	5697326043.RAW;1	23-NOV-1997 04:35:37
44	1	97C05170 97C-0435-01	5697326044.RAW;1	23-NOV-1997 05:12:20
45	1	97C05171 97C-0435-01	5697326045.RAW;1	23-NOV-1997 05:49:05
46	1	97C05172 97C-0435-01	5697326046.RAW;1	23-NOV-1997 06:25:47
47	1	97C05173 97C-0435-01	5697326047.RAW;1	23-NOV-1997 07:02:32
48	1	97C05174 97C-0435-01	5697326048.RAW;1	23-NOV-1997 07:39:19
49	1	CCV_1660_1.0 138-WS-27590	5697326049.RAW;1	23-NOV-1997 08:16:05
50	1	97C05175 97C-0435-01	5697326050.RAW;1	23-NOV-1997 08:52:52
51	1	97C05176 97C-0435-01	5697326051.RAW;1	23-NOV-1997 09:29:31
52	1	97C05176MS 97C-0435-01	5697326052.RAW;1	23-NOV-1997 10:06:14
53	1	97C05176MSD 97C-0435-01	5697326053.RAW;1	23-NOV-1997 10:42:54
54	1	97C05177 97C-0435-01	5697326054.RAW;1	23-NOV-1997 11:19:36
55	1	97C05178 97C-0435-01	5697326055.RAW;1	23-NOV-1997 11:56:21
56	1	97C05179 97C-0435-01	5697326056.RAW;1	23-NOV-1997 12:33:12
57	1	97C05180 97C-0435-01	5697326057.RAW;1	23-NOV-1997 13:09:56
58	1	97C05181 97C-0435-01	5697326058.RAW;1	23-NOV-1997 13:46:23
59	1	97C05182 97C-0435-01	5697326059.RAW;1	23-NOV-1997 14:23:09
60	1	CCV_1660_1.0 138-WS-27590	5697326060.RAW;1	23-NOV-1997 14:59:55
61	1	97C05183 97C-0435-01	5697326061.RAW;1	23-NOV-1997 15:36:46
62	1	97C05184 97C-0435-01	5697326062.RAW;1	23-NOV-1997 16:13:33
63	1	97C05185 97C-0435-01	5697326063.RAW;1	23-NOV-1997 16:50:17
64	1	97C05186 97C-0435-01	5697326064.RAW;1	23-NOV-1997 17:27:04
65	1	97C05187 97C-0435-01	5697326065.RAW;1	23-NOV-1997 18:03:49
66	1	97C05188 97C-0435-01	5697326066.RAW;1	23-NOV-1997 18:40:15
67	1	BL-142147-1 97C-0439-04	5697326067.RAW;1	23-NOV-1997 19:17:01
68	1	QC-142147-1 97C-0439-04	5697326068.RAW;1	23-NOV-1997 19:53:48
69	1	97C05251 97C-0439-04	5697326069.RAW;1	23-NOV-1997 20:30:30
70	1	CCV_1660_1.0 138-WS-27590	5697326070.RAW;1	23-NOV-1997 21:07:17
71	1	BL-142144-1 97C-0439-01	5697326071.RAW;1	23-NOV-1997 21:44:00
72	1	QC-142144-1 97C-0439-01	5697326072.RAW;1	23-NOV-1997 22:20:47
73	1	97C05249 X100 97C-0439-01	5697326073.RAW;1	23-NOV-1997 22:57:08
74	1	97C05249MS X100 97C-0439-01	5697326074.RAW;1	23-NOV-1997 23:33:54
75	1	97C05249MSD X100 97C-0439-01	5697326075.RAW;1	24-NOV-1997 00:10:37
76	1	97C05250 X100 97C-0439-01	5697326076.RAW;1	24-NOV-1997 00:47:24
77	1	97C05249 97C-0439-01	5697326077.RAW;1	24-NOV-1997 01:24:10
78	1	97C05249MS 97C-0439-01	5697326078.RAW;1	24-NOV-1997 02:00:56
79	1	97C05249MSD 97C-0439-01	5697326079.RAW;1	24-NOV-1997 02:37:42
80	1	97C05250 97C-0439-01	5697326080.RAW;1	24-NOV-1997 03:14:06
81	1	CCV_1660_1.0 138-WS-27590	5697326081.RAW;1	24-NOV-1997 03:50:54

TL 12/15/97

To Page No.

Witnessed & Understood by me, James Cox

Date 12/16/97

Invented by NOT APPLICABLE

Recorded by

Date 12/15/97

0312

WORKING STANDARDS

STANDARD PREPARATION LOGBOOK NO 138WS

Page No. 169

138 WS 27569 DCL WORKING STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1221

Solvent Hexane Vendor B&J Grade Pest. Lot BL891

	Compound	Intermediate Standard or Parent Solution	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1221	36IS7181	100	0.2	10	2.0
2.	↓	↓	↓	0.1	↓	1.0
3.	↓	36IS7181	10	0.2	↓	0.20
4.	↓	↓	↓	0.1	↓	0.10
5.	↓	↓	↓	0.02	↓	0.02
6.						
7.						
8.						
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11.						
12.						
13.						
14.						
15.						
16.						
17.						
18.						
19.						
20.						

9/15/97

EXPIRATION DATE 3/15/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Stacie Smith Date of Preparation: 9/15/97

Checked By: Vicki Tsai Supervisor:

Comments:

STANDARD SOLUTIONS OF INTERMEDIATE CONCENTRATION

STANDARD PREPARATION LOGBOOK NO. 36 IS

Page No. 181

36 IS 7181 DCL INTERMEDIATE STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1221

Solvent Hexane Vendor B & J Grade Pest. Lot BL 891

	Compound	Stock Std or Parent Solution ID No.	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1221	36CS07123	1000	1	10	100
2.	TCMX	36CS07127	↓	0.2	↓	MIX 20
3.	DCB	36CS7126	↓	0.2	↓	20
4.	PCB 1221	36IS7181	100	1	10	10
5.						
6.						
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11.						
12.						
13.						
14.						
15.						
16.						
17.						
18.						
19.						
20.						

SLS 9/15/97

EXPIRATION DATE 3/15/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/15/97

Checked By: Vicki Tsai Supervisor:

Comments:

0314

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 123

36 CS 07123 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: PCB 1221

Vendor: Chem Service Lot No.: 119-18C (F108) Purity: 0

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00508 g

TARE WEIGHT 0 g

NET WEIGHT 0.00508 g

NET WEIGHT CORRECTED FOR PURITY 5.08 mg

Purity Correction —

Solvent toluene Vendor B&J Grade Pesticide Lot B0165

Dilution Volume 5.08 mL

FINAL CONCENTRATION ~~5~~ SS 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Stacei Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor:

Comments:

0315

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 127

36 CS 07127 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: TCMX

Vendor: Aldrich Lot No.: 0052481(KY) Purity: 0

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00493 g

TARE WEIGHT 0 g

NET WEIGHT 0.00493 g

NET WEIGHT CORRECTED FOR PURITY 4.93 mg

Purity Correction —

Solvent Toluene Vendor B&J Grade Pesticide Lot B0165

Dilution Volume 4.93 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor: [illegible]

Comments:

0316

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 126

36 cs 07126 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: DCB

Vendor: Chem Service Lot No.: 136-76A (F850) Purity: 99%

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00853 g

TARE WEIGHT 0 g

NET WEIGHT 0.00853 g

NET WEIGHT CORRECTED FOR PURITY 8.53 mg

Purity Correction 8.45 mg

Solvent toluene Vendor B+J Grade Pesticide Lot B0165

Dilution Volume 8.45 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor:

Comments:

0317

WORKING STANDARDS

STANDARD PREPARATION LOGBOOK NO. 138WS

Page No. 170

138WS 27570 DCL WORKING STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1232

Solvent Hexane Vendor B&J Grade Pest Lot BL891

	Compound	Intermediate Standard or Parent Solution	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1232	3615 7182	100	0.2	10	2.0
2.	↓	↓	↓	0.1	↓	1.0
3.	↓	3615 7182	10	0.2	↓	0.20
4.	↓	↓	↓	0.1	↓	0.10
5.	↓	↓	↓	0.02	↓	0.02
6.						
7.						
8.						
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10.						
11.						
12.			9/16/97			
13.						
14.						
15.						
16.						
17.						
18.						
19.						
20.						

EXPIRATION DATE 3/16/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/16/97

Checked By: Vicki Tsai Supervisor:

Comments:

0318

STANDARD SOLUTIONS OF INTERMEDIATE CONCENTRATION

STANDARD PREPARATION LOGBOOK NO. 36 IS

Page No. 182

36 IS 7182 DCL INTERMEDIATE STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1232

Solvent Hexane Vendor B&J Grade Pest. Lot BL891

	Compound	Stock Std or Parent Solution ID No.	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1232	36IS 7172	1000	1	10	100
2.	TCMX	36CS7127	↓	0.2	↓	Mix 20
3.	DCB	36CS7126	↓	0.2	↓	20
4.	PCB 1232	36IS7182	100	1	10	10
5.						
6.						
7.						
8.						
9.						
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11.						
12.						
13.						
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15.						
16.						
17.						
18.						
19.						
20.						

9/16/97

SS

EXPIRATION DATE 3/16/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/16/97

Checked By: Vicki Tai Supervisor:

Comments:

0319

STANDARD SOLUTIONS OF INTERMEDIATE CONCENTRATION

STANDARD PREPARATION LOGBOOK NO. 36 IS

Page No. 172

36 IS 7172 DCL INTERMEDIATE STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1016, 1232 48

Solvent toluene Vendor B&J Grade Pesticide Lot B0165

	Compound	Stock Std or Parent Solution ID No.	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1016	NSI 125-07-01	5000	1.0	5.0	1000
2.	PCB 1232 48 SS	NSI 108-01-06	5000	1.0	5.0	1000
3.	PCB 1232	NSI 107-01-07	~~5000~~ 1000 SS 9/15/97	~~1.0~~ SS 9/15/97	~~5~~ SS 9/15/97	1000
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
16.						
17.						
18.						
19.						
20.						

SS 9/15/97

EXPIRATION DATE 3/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/98

Checked By: Vicki Tsai Supervisor:

Comments:

0320

Certificate of Analysis

Compound Name: PCB-1232
Lot Number: E-107-01-07
Expiration Date: 8/98

CAS Number: 11141-16-5
Molecular Wt.: 222.8
Molecular Formula: Mixture of congeners, primarily $C_{12}H_9Cl$, $C_{12}H_8Cl_2$, & $C_{12}H_7Cl_3$

NSI STANDARD SOLUTION

ANALYTE	GRAVIMETRIC CONCENTRATION	PURITY	SOLVENT
PCB-1232 (CARCINOGEN)	1010 ug/mL	Technical Mix	Methanol (FLAMMABLE, IRRITANT)

Preparation: Concentration is calculated from wt/vol or vol/vol measurements using microbalances calibrated with NIST traceable weights to 0.0001g and/or ASTM Class A volumetric glassware or calibrated equivalent labware.

NSI Environmental Solution's Method of Analysis: GC/FID Megabore DB-1 Column

Verification: Concentration and lot homogeneity are verified by NSI after ampuling. A quality control sample was included in the analysis and both the standard solution and the QC sample were prepared independently from the calibration solution.

STORAGE & HANDLING

Store at ≤ 5°C. Allow to equilibrate to room temperature before use.

A Material Safety Data Sheet (MSDS) is enclosed for the solvent. MSDSs for the components comprising greater than 1.0% of the solution or 0.1% for components which are known to be carcinogens are available upon request.

0321

Produced by:

NSI Environmental Solutions
PO Box 12313, Research Triangle Park, NC 27709
1-800-234-7837

STANDARD SOLUTIONS OF INTERMEDIATE CONCENTRATION

STANDARD PREPARATION LOGBOOK NO. 36 IS

Page No. 172

36 IS 7172 DCL INTERMEDIATE STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1016, 12~~32~~ 48

Solvent Toluene Vendor B&J Grade Pesticide Lot B0165

	Compound	Stock Std or Parent Solution ID No.	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1016	NSI 125-07-01	5000	1.0	5.0	1000
2.	PCB 12~~32~~48 SS	NSI 108-01-06	5000	1.0	5.0	1000
3.	PCB 1232	NSI 107-01-07	~~5000~~ 1000 SS 9/16/97	~~1.0~~ SS 9/16/97	~~5~~ SS 9/16/97	1000
4.						
5.						
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7.						
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9/15/97

EXPIRATION DATE 3/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/98

Checked By: Vicki Tsai Supervisor:

Comments:

0322

Certificate of Analysis

Compound Name: PCB-1016
Lot Number: W-125-07-01
Expiration Date: 12/99

CAS Number: 12674-11-2
Molecular Wt.: 240 (Average)
Molecular Formula: Mixture of congeners, primarily $C_{12}H_8Cl_2$ & $C_{12}H_7Cl_3$

NSI STANDARD SOLUTION

ANALYTE	GRAVIMETRIC CONCENTRATION	CHROMATOGRAPHIC PURITY	SOLVENT
PCB-1016 (CARCINOGEN)	5001 ug/mL	Technical Mix	Iso-octane (FLAMMABLE, IRRITANT)

Preparation: Reported concentration value has been corrected for purity using purity values obtained by NSI analysts. Concentration is calculated from wt/vol or vol/vol measurements using microbalances calibrated with NIST traceable weights to 0.0001g and/or ASTM Class A volumetric glassware or calibrated equivalent labware.

NSI Environmental Solution's Method of Analysis: GC/FID RTX-5 Column

Verification: Concentration and lot homogeneity are verified by NSI after ampuling. A quality control sample was included in the analysis and both the standard solution and the QC sample were prepared independently from the calibration solution.

STORAGE & HANDLING

Store at ≤ 5°C. Allow to equilibrate to room temperature before use.

A Material Safety Data Sheet (MSDS) is enclosed for the solvent. MSDSs for the components comprising greater than 1.0% of the solution or 0.1% for components which are known to be carcinogens are available upon request.

0323

Produced by:

NSI Environmental Solutions
PO Box 12313, Research Triangle Park, NC 27709
1-800-234-7837

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 127

36 CS 07127 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: TCMX

Vendor: Aldrich Lot No.: 0052481(KY) Purity: 0

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00493 g

TARE WEIGHT 0 g

NET WEIGHT 0.00493 g

NET WEIGHT CORRECTED FOR PURITY 4.93 mg

Purity Correction —

Solvent Toluene Vendor B&J Grade Pesticide Lot B0165

Dilution Volume 4.93 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor: [illegible]

Comments:

0324

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 126

36 CS 07126 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: DCB

Vendor: Chem Service Lot No.: 136-76A (F850) Purity: 99%

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00853 g

TARE WEIGHT 0 g

NET WEIGHT 0.00853 g

NET WEIGHT CORRECTED FOR PURITY 8.53 mg

Purity Correction 8.45 mg

Solvent toluene Vendor B+J Grade Pesticide Lot B0165

Dilution Volume 8.45 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor:

Comments:

0325

WORKING STANDARDS

STANDARD PREPARATION LOGBOOK NO 138WS

Page No. 171

138 WS 27571 DCL WORKING STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1242

Solvent Hexane Vendor B&J Grade Pest. Lot B0207

	Compound	Intermediate Standard or Parent Solution	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1242	36IS7183	100	0.2	10	2.0
2.	↓	↓	↓	0.1	↓	1.0
3.	↓	36IS7183	10	0.2	↓	0.20
4.	↓	↓	↓	0.1	↓	0.10
5.	↓	↓	↓	0.02	↓	0.02
6.						
7.						
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10.						
11.						
12.						
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15.						
16.						
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18.						
19.						
20.						

SS 9/17/97

EXPIRATION DATE 3/17/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/17/97

Checked By: U. Mai Tsai Supervisor:

Comments:

STANDARD SOLUTIONS OF INTERMEDIATE CONCENTRATION

STANDARD PREPARATION LOGBOOK NO. 36 IS

Page No. 183

36 IS 7183 DCL INTERMEDIATE STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1242

Solvent Hexane Vendor B&J Grade Pest. Lot BL891

	Compound	Stock Std or Parent Solution ID No.	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1242	36CS07125	1000	1	10	100
2.	TCMX	36CS 7127	↓	0.2	↓	Mix 20
3.	DCB	36CS 7127	↓	0.2	↓	20
4.	PCB ~~1440~~ 1242 SS 9/16/97	36IS 7183	100	1	10	10
5.						
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7.						
8.						
9.						
10.						
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12.						
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16.						
17.						
18.						
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SS 9/16/97

EXPIRATION DATE 3/16/97

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/16/97

Checked By: Vicki Tai Supervisor:

Comments:

0327

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 125

36 CS 07125 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: PCB 1242

Vendor: Chem Service Lot No.: 160-142-D (F109) Purity: 0

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00698 g

TARE WEIGHT 0 g

NET WEIGHT 0.00698 g

NET WEIGHT CORRECTED FOR PURITY 6.98 mg

Purity Correction —

Solvent toluene Vendor B&J Grade Pesticide Lot B0165

Dilution Volume 6.98 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor: _____

Comments: _____

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 127

36 CS 07127 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: TCMX

Vendor: Aldrich Lot No.: 0052481(KY) Purity: 0

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00493 g

TARE WEIGHT 0 g

NET WEIGHT 0.00493 g

NET WEIGHT CORRECTED FOR PURITY 4.93 mg

Purity Correction —

Solvent Toluene Vendor B&J Grade Pesticide Lot B0165

Dilution Volume 4.93 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor:

Comments:

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 126

36 CS 07126 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: DCB

Vendor: Chem Service Lot No.: 136-76A (F850) Purity: 99%

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00853 g

TARE WEIGHT 0 g

NET WEIGHT 0.00853 g

NET WEIGHT CORRECTED FOR PURITY 8.53 mg

Purity Correction 8.45 mg

Solvent toluene Vendor B+J Grade Pesticide Lot B0165

Dilution Volume 8.45 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor:

Comments:

0330

WORKING STANDARDS

STANDARD PREPARATION LOGBOOK NO. 138WS

Page No. 172

138WS 27572 DCL WORKING STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1248

Solvent Hexane Vendor B&J Grade Pest. Lot B0207

	Compound	Intermediate Standard or Parent Solution	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1248	36IS7184	100	0.2	10	2.0
2.	↓	↓	↓	0.1	↓	1.0
3.	↓	36IS7184	10	0.2	↓	0.2
4.	↓	↓	↓	0.1	↓	0.1
5.	↓	↓	↓	0.02	↓	0.02
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.	9/17/97					
16.						
17.	SS					
18.						
19.						
20.						

EXPIRATION DATE 3/17/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/17/97

Checked By: Vicki Tsai Supervisor:

Comments:

0331

STANDARD SOLUTIONS OF INTERMEDIATE CONCENTRATION

STANDARD PREPARATION LOGBOOK NO. 36 IS

Page No. 184

36 IS 7184 DCL INTERMEDIATE STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1248

Solvent Hexane Vendor B&J Grade Rest. Lot BL891

	Compound	Stock Std or Parent Solution ID No.	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1248	36IS7172	1000	1	10	100
2.	TCMX	36CS 7127	↓	0.2	↓	Mix 20
3.	DCB	36CS 7126	↓	0.2	↓	20
4.	PCB 1248	36 IS 7184	100	1	10	10
5.						
6.						
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8.						
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10.						
11.						
12.						
13.						
14.						
15.						
16.						
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19.						
20.						

9/16/97 SS

EXPIRATION DATE 3/16/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/16/97

Checked By: Vicki Tsai Supervisor:

Comments:

0332

STANDARD SOLUTIONS OF INTERMEDIATE CONCENTRATION

STANDARD PREPARATION LOGBOOK NO. 36 IS

Page No. 172

36 IS 7172 DCL INTERMEDIATE STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1016, 12~~32~~48

Solvent toluene Vendor B&J Grade Pesticide Lot B0165

	Compound	Stock Std or Parent Solution ID No.	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1016	NSI 125-07-01	5000	1.0	5.0	1000
2.	PCB 12~~32~~48 SS	NSI 108-01-06	5000	1.0	5.0	1000
3.	PCB 1232	NSI 107-01-07	~~5000~~ 1000 GS 9/19/97	~~1.0~~ 5 GS 9/16/97	~~5~~ 5 GS 9/16/97	1000
4.						
5.						
6.						
7.						
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11.						
12.						
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GS 9/16/97

EXPIRATION DATE 3/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/98

Checked By: Vicki Tsai Supervisor:

Comments:

Certificate of Analysis

Compound Name: PCB-1248
Lot Number: E-108-01-06
Expiration Date: 2/99

CAS Number: 12672-29-6
Molecular Wt.: 291.6 (Average)
Molecular Formula: Mixture of congeners, primarily $C_{12}H_4Cl_4$, $C_{12}H_3Cl_5$, & $C_{12}H_7Cl_3$

NSI STANDARD SOLUTION

ANALYTE	GRAVIMETRIC CONCENTRATION	PURITY	SOLVENT
PCB-1248 (CARCINOGEN)	5005 ug/mL	Technical Mix	Iso-octane (FLAMMABLE, IRRITANT)

Preparation: Reported concentration value has been corrected for purity using purity values obtained by NSI analysts. Concentration is calculated from wt/vol or vol/vol measurements using microbalances calibrated with NIST traceable weights to 0.0001g and/or ASTM Class A volumetric glassware or calibrated equivalent labware.

Verification: Concentration and lot homogeneity are verified by NSI after ampuling. A quality control sample was included in the analysis and both the standard solution and the QC sample were prepared independently from the calibration solution.

STORAGE & HANDLING

Store at ≤ 5°C. Allow to equilibrate to room temperature before use.

A Material Safety Data Sheet (MSDS) is enclosed for the solvent. MSDSs for the components comprising greater than 1.0% of the solution or 0.1% for components which are known to be carcinogens are available upon request.

0334

Produced by:

NSI Environmental Solutions
PO Box 12313, Research Triangle Park, NC 27709
1-800-234-7837

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 127

36 CS 07127 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: TCMX

Vendor: Aldrich Lot No.: 0052481(KY) Purity: 0

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00493 g

TARE WEIGHT 0 g

NET WEIGHT 0.00493 g

NET WEIGHT CORRECTED FOR PURITY 4.93 mg

Purity Correction —

Solvent Toluene Vendor B&J Grade Pesticide Lot B0165

Dilution Volume 4.93 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor:

Comments:

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 126

36 cs 07126 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: DCB

Vendor: Chem Service Lot No.: 136-76A (F850) Purity: 99%

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00853 g

TARE WEIGHT 0 g

NET WEIGHT 0.00853 g

NET WEIGHT CORRECTED FOR PURITY 8.53 mg

Purity Correction 8.45 mg

Solvent toluene Vendor B+J Grade Pesticide Lot B0165

Dilution Volume 8.45 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor:

Comments:

0336

WORKING STANDARDS

STANDARD PREPARATION LOGBOOK NO. 138WS

Page No. 191

138WS27591 DCL WORKING STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1254 Standards - various conc.

Solvent Hexane Vendor B&J Grade Pest Lot B0207

	Compound	Intermediate Standard or Parent Solution	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1254	36IS 7180	100	0.5	25	2.0
2.	↓	↓	↓	0.25	↓	1.0
3.	↓	36IS 7180	10	0.5	↓	0.2
4.	↓	↓	↓	0.25	↓	0.1
5.	↓	↓	↓	0.05	↓	0.02
6.						
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10.						
11.						
12.						
13.						
14.						
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16.						
17.						
18.						
19.						
20.						

SS 10/21/97

EXPIRATION DATE 4/21/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 10/21/97

Checked By: [illegible] Supervisor:

Comments:

STANDARD SOLUTIONS OF INTERMEDIATE CONCENTRATION

STANDARD PREPARATION LOGBOOK NO. 36 IS

Page No. 180

36 IS 7180 DCL INTERMEDIATE STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1254

Solvent Hexane Vendor Burdg Grade Resti Lot BL 891

	Compound	Stock Std or Parent Solution ID No.	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1254	36CS07122	1000	1	10	100
2.	TCMX	36CS07127	↓	0.2	↓	Mix 20
3.	DCB	36CS7126	↓	0.2	↓	20
4.	PCB 1254	36IS7180	100	1	10	10
5.						
6.						
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8.						
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10.						
11.						
12.						
13.						
14.						
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16.						
17.						
18.						
19.						
20.						

9/15/97

EXPIRATION DATE 3/15/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/15/97

Checked By: Vicki Tsai Supervisor:

Comments:

0338

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36CS

Page No. 122

36cs 07122 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: PCB 1254

Vendor: Chem Service Lot No.: 120-15B (F111) Purity: —

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00709 g

TARE WEIGHT Ø g

NET WEIGHT 0.00709 g

NET WEIGHT CORRECTED FOR PURITY 7.09 mg

Purity Correction —

Solvent Toluene Vendor B&J Grade Pesticide Lot B0165

Dilution Volume 7.09 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: Vicki Tsai Supervisor:

Comments:

0339

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 127

36 CS 07127 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: TCMX

Vendor: Aldrich Lot No.: 0052481(KY) Purity: 0

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00493 g

TARE WEIGHT 0 g

NET WEIGHT 0.00493 g

NET WEIGHT CORRECTED FOR PURITY 4.93 mg

Purity Correction —

Solvent Toluene Vendor B&J Grade Pesticide Lot B0165

Dilution Volume 4.93 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor:

Comments:

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 126

36 cs 07126 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: DCB

Vendor: Chem Service Lot No.: 136-76A (F850) Purity: 99%

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00853 g

TARE WEIGHT 0 g

NET WEIGHT 0.00853 g

NET WEIGHT CORRECTED FOR PURITY 8.53 mg

Purity Correction 8.45 mg

Solvent toluene Vendor B+J Grade Pesticide Lot B0165

Dilution Volume 8.45 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor:

Comments:

0341

WORKING STANDARDS

STANDARD PREPARATION LOGBOOK NO. 138WS

Page No. 133

138WS 27533 DCL WORKING STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1254 - ICV

Solvent Hexane Vendor B & J Grade Pest Lot B0207

	Compound	Intermediate Standard or Parent Solution	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1254	ULTRA K-0827	100	0.25	25	1.0
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
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19.						
20						

7-2-97

EXPIRATION DATE 1-2-98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: [signature] Date of Preparation: 7-2-97

Checked By: [signature] Supervisor:

Comments:

Certificate of Analysis

Aroclor 1254 Solution

Catalog Number: PP-351

Lot Number: K0827
Page: 1

This ULTRAstandard(TM) solution was gravimetrically prepared, and the analyte concentrations were verified using high resolution gas chromatography and/or high performance liquid chromatography. The solution was prepared at the nominal concentration stated on the box label. The true value for each analyte, determined gravimetrically, is listed below.

Component	Weight/mL*
Aroclor 1254 (PCB 1254)	100.5 µg

Solvent: hexane

* All weights are traceable through N.I.S.T. Test No. 732/221797

0343

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WORKING STANDARDS

STANDARD PREPARATION LOGBOOK NO. 138WS

Page No. 190

138WS 27590 DCL WORKING STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1660 Standards - various conc.

Solvent Hexane Vendor B&J Grade Pest Lot B0207

	Compound	Intermediate Standard or Parent Solution	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1660	36IS7179	100	0.5	25	2.0
2.	↓	↓	↓	0.25	↓	1.0
3.	↓	36IS7179	10	0.5	↓	0.2
4.	↓	↓	↓	0.25	↓	0.1
5.	↓	↓	↓	0.125	↓	0.05
6.	↓	↓	↓	0.025	↓	0.01
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SS 10/21/97

EXPIRATION DATE ~~4/21/98~~ 3·15·98
SS 10·21·97

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 10/21/97

Checked By: Supervisor:

Comments:

0344

STANDARD SOLUTIONS OF INTERMEDIATE CONCENTRATION

STANDARD PREPARATION LOGBOOK NO. 36 IS

Page No. 179

36 IS 7179 DCL INTERMEDIATE STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1016/1260

Solvent Hexane Vendor Baxter Grade Pest. Lot BL891

	Compound	Stock Std or Parent Solution ID No.	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1016	36IS7172	1000	1	10	100
2.	PCB 1260	~~36IS7178~~ 36CS7121		1		100
3.	TCMX	36CS07127		0.2		mix 20
4.	DCB	36CS07126		0.2		20
5.	PCB 1066/TCMX DCB	36IS7179	100/20	1.0	10	10/2
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9/15/97

EXPIRATION DATE 3/15/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: [illegible] Date of Preparation: 9/15/97

Checked By: Steve Smith Supervisor:

Comments:

Certificate of Analysis

Compound Name: PCB-1260
Lot Number: W-129-06-01
Expiration Date: 12/99

CAS Number: 11096-82-5
Molecular Wt.: 377.6
Molecular Formula: Mixture of congeners, primarily $C_{12}H_4Cl_6$, $C_{12}H_5Cl_5$, $C_{12}H_6Cl_4$ & $C_{12}H_7Cl_3$

NSI STANDARD SOLUTION

ANALYTE	GRAVIMETRIC CONCENTRATION	PURITY	SOLVENT
PCB-1260 (CARCINOGEN)	5010 ug/mL	Technical Mix	Iso-octane (FLAMMABLE, IRRITANT)

Preparation: Reported concentration value has been corrected for purity using purity values obtained by NSI analysts. Concentration is calculated from wt/vol or vol/vol measurements using microbalances calibrated with NIST traceable weights to 0.0001g and/or ASTM Class A volumetric glassware or calibrated equivalent labware.

NSI Environmental Solution's Method of Analysis: GC/FID DB-5 Column

Verification: Concentration and lot homogeneity are verified by NSI after ampuling. A quality control sample was included in the analysis and both the standard solution and the QC sample were prepared independently from the calibration solution.

STORAGE & HANDLING

Store at ≤ 5°C. Allow to equilibrate to room temperature before use.

A Material Safety Data Sheet (MSDS) is enclosed for the solvent. MSDSs for the components comprising greater than 1.0% of the solution or 0.1% for components which are known to be carcinogens are available upon request.

Produced by:

NSI Environmental Solutions
PO Box 12313, Research Triangle Park, NC 27709
1-800-234-7837

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 127

36 cs 07127 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: TCMX

Vendor: Aldrich Lot No.: 0052481(KY) Purity: 0

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value - 0.1 - g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00493 g

TARE WEIGHT 0 g

NET WEIGHT 0.00493 g

NET WEIGHT CORRECTED FOR PURITY 4.93 mg

Purity Correction —

Solvent Toluene Vendor B&J Grade Pesticide Lot B0165

Dilution Volume 4.93 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor: _____

Comments: _____

0347

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 126

36 cs 07126 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: DCB

Vendor: Chem Service Lot No.: 136-76A (F850) Purity: 99%

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00853 g

TARE WEIGHT 0 g

NET WEIGHT 0.00853 g

NET WEIGHT CORRECTED FOR PURITY 8.53 mg

Purity Correction 8.45 mg

Solvent toluene Vendor B+J Grade Pesticide Lot B0165

Dilution Volume 8.45 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor:

348

Comments:

WORKING STANDARDS

STANDARD PREPARATION LOGBOOK NO. 138WS

Page No. 188

138WS 27588 DCL WORKING STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1660 0.02

Solvent Hex Vendor B&J Grade BEST Lot B0207

	Compound	Intermediate Standard or Parent Solution	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1660	138WS 27567-C	2.0	0.1	10.	0.02
2.						
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EXPIRATION DATE 3-15-98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: [signature] Date of Preparation: 10-15-~~98~~ 97 SW

Checked By: Supervisor:

Comments:

0349

WORKING STANDARDS

STANDARD PREPARATION LOGBOOK NO 138WS

Page No. 167

138WS27567 DCL WORKING STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1066

Solvent Hexane Vendor B&J Grade pest Lot BL891

	Compound	Intermediate Standard or Parent Solution	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1066	36257179	10	.05	10	0.05
2.				.05		0.05
3.				.1		0.1
4.				.2		0.2
5.		36257179	100	.1		1
6.			100	.2		2
7.						
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9/15/97

EXPIRATION DATE 3/15/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/15/97

Checked By: [illegible] Supervisor:

Comments:

STANDARD SOLUTIONS OF INTERMEDIATE CONCENTRATION

STANDARD PREPARATION LOGBOOK NO. 36 IS

Page No. 179

36 IS 7179 DCL INTERMEDIATE STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1016/1260

Solvent Hexane Vendor Bag Grade pest Lot BL891

	Compound	Stock Std or Parent Solution ID No.	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1016	36IS7172	1000	1	10	100
2.	PCB 1260	~~36IS7178~~ 36-CS-7121		1		100
3.	TCMX	36CS07127		0.2		mix 20
4.	DCB	36CS07126		0.2		20
5.	PCB 1066/TCMX DCB	36IS7179	100/20	1.0	10	10/2
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11.						
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9/15/97

EXPIRATION DATE 3/15/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: [signature] Date of Preparation: 9/15/97

Checked By: Staci Smith Supervisor:

Comments:

0351

STANDARD SOLUTIONS OF INTERMEDIATE CONCENTRATION

STANDARD PREPARATION LOGBOOK NO. 36 IS

Page No. 172

36 IS 7172 DCL INTERMEDIATE STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 1016, 1232 48

Solvent Toluene Vendor B&J Grade Pesticide Lot B0165

	Compound	Stock Std or Parent Solution ID No.	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1016	NSI 125-07-01	5000	1.0	5.0	1000
2.	PCB 1232 48 SS	NSI 108-01-06	5000	1.0	5.0	1000
3.	PCB 1232	NSI 107-01-07	~~5000~~ 1000 SS 9/16/97	~~1.0~~ SS 9/16/97	~~5~~ SS 9/16/97	1000
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a/15/97

EXPIRATION DATE 3/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/98

Checked By: Vicki Tsai Supervisor:

Comments:

0352

Certificate of Analysis

Compound Name: PCB-1016
Lot Number: W-125-07-01
Expiration Date: 12/99

CAS Number: 12674-11-2
Molecular Wt.: 240 (Average)
Molecular Formula: Mixture of congeners, primarily $C_{12}H_8Cl_2$ & $C_{12}H_7Cl_3$

NSI STANDARD SOLUTION

ANALYTE	GRAVIMETRIC CONCENTRATION	CHROMATOGRAPHIC PURITY	SOLVENT
PCB-1016 (CARCINOGEN)	5001 ug/mL	Technical Mix	Iso-octane (FLAMMABLE, IRRITANT)

Preparation: Reported concentration value has been corrected for purity using purity values obtained by NSI analysts. Concentration is calculated from wt/vol or vol/vol measurements using microbalances calibrated with NIST traceable weights to 0.0001g and/or ASTM Class A volumetric glassware or calibrated equivalent labware.

NSI Environmental Solution's Method of Analysis: GC/FID RTX-5 Column

Verification: Concentration and lot homogeneity are verified by NSI after ampuling. A quality control sample was included in the analysis and both the standard solution and the QC sample were prepared independently from the calibration solution.

STORAGE & HANDLING

Store at ≤ 5°C. Allow to equilibrate to room temperature before use.

A Material Safety Data Sheet (MSDS) is enclosed for the solvent. MSDSs for the components comprising greater than 1.0% of the solution or 0.1% for components which are known to be carcinogens are available upon request.

Produced by:

NSI Environmental Solutions
PO Box 12313, Research Triangle Park, NC 27709
1-800-234-7837

Certificate of Analysis

Compound Name: PCB-1260
Lot Number: W-129-06-01
Expiration Date: 12/99

CAS Number: 11096-82-5
Molecular Wt.: 377.6
Molecular Formula: Mixture of congeners, primarily $C_{12}H_6Cl_4$, $C_{12}H_5Cl_4$, $C_{12}H_4Cl_5$, & $C_{12}H_2Cl_6$

NSI STANDARD SOLUTION

ANALYTE	GRAVIMETRIC CONCENTRATION	PURITY	SOLVENT
PCB-1260 (CARCINOGEN)	5010 ug/mL	Technical Mix	Iso-octane (FLAMMABLE, IRRITANT)

Preparation: Reported concentration value has been corrected for purity using purity values obtained by NSI analysts. Concentration is calculated from wt/vol or vol/vol measurements using microbalances calibrated with NIST traceable weights to 0.0001g and/or ASTM Class A volumetric glassware or calibrated equivalent labware.

NSI Environmental Solution's Method of Analysis: GC/FID DB-5 Column

Verification: Concentration and lot homogeneity are verified by NSI after ampuling. A quality control sample was included in the analysis and both the standard solution and the QC sample were prepared independently from the calibration solution.

STORAGE & HANDLING

Store at ≤ 5°C. Allow to equilibrate to room temperature before use.

A Material Safety Data Sheet (MSDS) is enclosed for the solvent. MSDSs for the components comprising greater than 1.0% of the solution or 0.1% for components which are known to be carcinogens are available upon request.

0354

Produced by:

NSI Environmental Solutions
PO Box 12313, Research Triangle Park, NC 27709
1-800-234-7837

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 127

36 CS 07127 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: TCMX

Vendor: Aldrich Lot No.: 0052481(KY) Purity: 0

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value - 0.1 - g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00493 g

TARE WEIGHT 0 g

NET WEIGHT 0.00493 g

NET WEIGHT CORRECTED FOR PURITY 4.93 mg

Purity Correction —

Solvent Toluene Vendor B&J Grade Pesticide Lot B0165

Dilution Volume 4.93 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor: _____

Comments: _____

CONCENTRATED STOCK STANDARDS

STANDARD PREPARATION LOGBOOK NO. 36 CS

Page No. 126

36 cs 07126 DCL CONCENTRATED STOCK SOLUTION IDENTIFICATION NUMBER

COMPOUND: DCB

Vendor: Chem Service Lot No.: 136-76A (F850) Purity: 99%

DCL Analytical Balance Identification: 106677

NIST Reference Weight Target Value 0.1 g

NIST Reference Weight Measured Using Balance Identified Above 0.1 g

Difference 0 g

If difference is greater than 0.001 grams: Notify QC. Take corrective action or start over using a different balance.

FINAL GROSS WEIGHT 0.00853 g

TARE WEIGHT 0 g

NET WEIGHT 0.00853 g

NET WEIGHT CORRECTED FOR PURITY 8.53 mg

Purity Correction 8.45 mg

Solvent toluene Vendor B+J Grade Pesticide Lot B0165

Dilution Volume 8.45 mL

FINAL CONCENTRATION 1000 µg/mL

EXPIRATION DATE 9/10/98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: Staci Smith Date of Preparation: 9/10/97

Weight Verified By: [illegible] Supervisor:

Comments:

0356

WORKING STANDARDS

STANDARD PREPARATION LOGBOOK NO. 138WS

Page No. 189

138WS 27589 DCL WORKING STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB ICV 1016/1260

Solvent Hexane Vendor B&J Grade Pest Lot B0207

	Compound	Intermediate Standard or Parent Solution	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1016	ULTRA 10076	100	0.1	10	1.0
2.	PCB 1260	ULTRA 10055	100	0.1	10	1.0
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10-18-97

EXPIRATION DATE 4-18-98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: [illegible] Date of Preparation: 10-18-97

Checked By: [illegible] Supervisor:

Comments:

0357

Certificate of Analysis

Aroclor 1016 Solution

Catalog Number: PP-281

Lot Number: L0076
Page: 1

This ULTRAstandard(TM) solution was gravimetrically prepared, and the analyte concentrations were verified using high resolution gas chromatography and/or high performance liquid chromatography. The solution was prepared at the nominal concentration stated on the box label. The true value for each analyte, determined gravimetrically, is listed below.

Component	Weight/mL*
Aroclor 1016 (PCB 1016)	100.4 µg

Solvent: hexane

0358

* All weights are traceable through N.I.S.T. Test No. 732/221797

ULTRA SCIENTIFIC
ISO 9001 Registered
250 Smith Street, North Kingstown, RI 02852 • 401 294 9400 • 800 338 1754

Certificate of Analysis

Aroclor 1260 Solution

Catalog Number: PP-361

Lot Number: K1055
Page: 1

This ULTRAstandard(TM) solution was gravimetrically prepared, and the analyte concentrations were verified using high resolution gas chromatography and/or high performance liquid chromatography. The solution was prepared at the nominal concentration stated on the box label. The true value for each analyte, determined gravimetrically, is listed below.

Component	Weight/mL*
Aroclor 1260 (PCB 1260)	100.5 µg

Solvent: hexane

0359

* All weights are traceable through N.I.S.T. Test No. 732/221797

ULTRA SCIENTIFIC
ISO 9001 Registered
250 Smith Street, North Kingstown, RI 02852 • 401 294 9400 • 800 338 1754

WORKING STANDARDS

STANDARD PREPARATION LOGBOOK NO 157WS

Page No. 005

157WS31205 DCL WORKING STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: 8080 Surrogate Spike

Solvent Acetone Vendor Fisher Grade Pest Lot 967647

	Compound	Intermediate Standard or Parent Solution	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	TCMX	NSF 1180-04-01	200	1.25	500	0.5
2.	DBC	NSF 798-08-01	↓	↓	↓	↓
3.	DCB	NSF 1884-06-03				
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EXPIRATION DATE 4-30-98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: [illegible] Date of Preparation: 10-31-97

Checked By: _____ Supervisor: _____

Comments: _____

0360

Certificate of Analysis

Compound Name: 2,4,5,6-Tetrachloro-m-xylene
Lot Number: W-1180-04-01
Expiration Date: 7/98

CAS Number: 877-09-8
Molecular Wt.: 244.0
Molecular Formula: $C_8H_6Cl_4$

NSI STANDARD SOLUTION

ANALYTE	GRAVIMETRIC CONCENTRATION	CHROMATOGRAPHIC PURITY	SOLVENT
2,4,5,6-Tetrachloro-m-xylene	200 ug/mL	97.3 %	Acetone (FLAMMABLE, IRRITANT)

Preparation: Reported concentration value has been corrected for purity using purity values obtained by NSI analysts. Concentration is calculated from wt/vol or vol/vol measurements using microbalances calibrated with NIST traceable weights to 0.0001g and/or ASTM Class A volumetric glassware or calibrated equivalent labware.

NSI Environmental Solution's Method of Analysis: GC/FID DB-608 Column

Verification: Concentration and lot homogeneity are verified by NSI after ampuling. A quality control sample was included in the analysis and both the standard solution and the QC sample were prepared independently from the calibration solution.

STORAGE & HANDLING

Store at ≤ 5°C. Allow to equilibrate to room temperature before use.

A Material Safety Data Sheet (MSDS) is enclosed for the solvent. MSDSs for the components comprising greater than 1.0% of the solution or 0.1% for components which are known to be carcinogens are available upon request.

0361

Produced by:

NSI Environmental Solutions
PO Box 12313, Research Triangle Park, NC 27709
1-800-234-7837

Certificate of Analysis

Compound Name: Dibutyl chlorendate
Lot Number: W-798-08-01
Expiration Date: 4/98

CAS Number: 1770-80-5
Molecular Wt.: 501.06
Molecular Formula: $C_{17}H_{20}Cl_6O_4$

NSI STANDARD SOLUTION

ANALYTE	GRAVIMETRIC CONCENTRATION	CHROMATOGRAPHIC PURITY	SOLVENT
Dibutyl chlorendate	200 ug/mL	98.0 %	Acetone (FLAMMABLE, IRRITANT)

Preparation: Reported concentration value has been corrected for purity using purity values obtained by NSI analysts. Concentration is calculated from wt/vol or vol/vol measurements using microbalances calibrated with NIST traceable weights to 0.0001g and/or ASTM Class A volumetric glassware or calibrated equivalent labware.

NSI Environmental Solution's Method of Analysis: GC/FID XTI-5 Column

Verification: Concentration and lot homogeneity are verified by NSI after ampuling. A quality control sample was included in the analysis and both the standard solution and the QC sample were prepared independently from the calibration solution.

STORAGE & HANDLING

Store at ≤ 5°C. Allow to equilibrate to room temperature before use.

A Material Safety Data Sheet (MSDS) is enclosed for the solvent. MSDSs for the components comprising greater than 1.0% of the solution or 0.1% for components which are known to be carcinogens are available upon request.

0362

Produced by:
NSI Environmental Solutions
PO Box 12313, Research Triangle Park, NC 27709
1-800-234-7837

Certificate of Analysis

Compound Name: Decachlorobiphenyl
Lot Number: W-1084-06-02
Expiration Date: 6/98

CAS Number: 2051-24-3
Molecular Wt.: 498.7
Molecular Formula: $C_{12}Cl_{10}$

NSI STANDARD SOLUTION

ANALYTE	GRAVIMETRIC CONCENTRATION	CHROMATOGRAPHIC PURITY	SOLVENT
Decachlorobiphenyl	203 ug/mL	97.7 %	Acetone (FLAMMABLE, IRRITANT)

Preparation: Reported concentration value has been corrected for purity using purity values obtained by NSI analysts. Concentration is calculated from wt/vol or vol/vol measurements using microbalances calibrated with NIST traceable weights to 0.0001g and/or ASTM Class A volumetric glassware or calibrated equivalent labware.

NSI Environmental Solution's Method of Analysis: GC/FID DB-608 Column

Verification: Concentration and lot homogeneity are verified by NSI after ampuling. A quality control sample was included in the analysis and both the standard solution and the QC sample were prepared independently from the calibration solution.

STORAGE & HANDLING

Store at ≤ 5°C. Allow to equilibrate to room temperature before use.

A Material Safety Data Sheet (MSDS) is enclosed for the solvent. MSDSs for the components comprising greater than 1.0% of the solution or 0.1% for components which are known to be carcinogens are available upon request.

0363

Produced by:

NSI Environmental Solutions
PO Box 12313, Research Triangle Park, NC 27709
1-800-234-7837

WORKING STANDARDS

STANDARD PREPARATION LOGBOOK NO 138 WS

Page No. 135

138 WS 27535 DCL WORKING STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: PCB 8080 MS

Solvent Acetone Vendor Fisher Grade UV Lot 965882

	Compound	Intermediate Standard or Parent Solution	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	PCB 1016/1260	NSZ 8-10770	5,000	0.5	500	5.0
2.						
3.						
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5.						
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7-3-97

EXPIRATION DATE 1-3-98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: [illegible] Date of Preparation: 7-3-97

Checked By: [illegible] Supervisor:

Comments:

0364

Certificate of Analysis

Mixture Name: PCB Matrix Spike
Lot Number: Q-1077D
(CARCINOGEN)

Expiration Date: 12/96
Solvent: Toluene
(FLAMMABLE, IRRITANT)

CUSTOM REFERENCE SOLUTION

COMPOUND NUMBER	ANALYTE	GRAVIMETRIC CONCENTRATION (ug/mL)	CHROMATOGRAPHIC PURITY (%)
E-0125-01	PCB-1016	5060	Technical Mix
E-0129-01	PCB-1260	5004	Technical Mix

Preparation: Reported concentration value has been corrected for purity and is typically accurate to 0.5%. Concentration is calculated from wt/vol or vol/vol measurements using microbalances calibrated with NIST tracable weights to 0.0001g and/or ASTM Class A volumetric glassware or calibrated, equivalent labware.

STORAGE & HANDLING

Store at ≤ 5°C. Transfer to tightly sealed glass vial with Teflon-lined septum or cap after opening. Allow to equilibrate to room temperature before use.

This reference material is a dilute homogeneous solution of the above listed compounds in toluene. Hazard information for this specific solution is not available. However, MSDSs are enclosed for the solvent and the components comprising greater than 1.0% of the solution or 0.1% for components which are known to be carcinogens.

Produced by:

NSI Environmental Solutions
PO Box 12313, Research Triangle Park, NC 27709
1-800-234-7837

WORKING STANDARDS

STANDARD PREPARATION LOGBOOK NO. 157WS

Page No. 005

157WS31205 DCL WORKING STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: 8080 Surrogate Spike

Solvent Acetone Vendor Fisher Grade Pest Lot 967647

	Compound	Intermediate Standard or Parent Solution	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	TCMX	NSI 1180-04-01	200	1.25	500	0.5
2.	DBC	NSI 798-08-01	↓	↓	↓	↓
3.	DCB	NSI 1084-06-03				
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EXPIRATION DATE 4-30-98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: [illegible] Date of Preparation: 10-31-97

Checked By: Supervisor:

Comments:

0366

WORKING STANDARDS

STANDARD PREPARATION LOGBOOK NO. 138WS

Page No. 174

138WS 27574 DCL WORKING STANDARD SOLUTION IDENTIFICATION NUMBER

DESCRIPTIVE IDENTIFICATION: 8080 Surrogate Spike

Solvent Acetone Vendor Fisher Grade Pest Lot 967647

	Compound	Intermediate Standard or Parent Solution	Concentration of Parent Solution µg/mL	Volume of Aliquot mL	Final Total Volume mL	FINAL CONCENTRATION µg/mL
1.	TCMX	NSI 1180-04-01	200	1.75	700	0.5
2.	DBC	NSI 798-08-01	↓	↓	↓	↓
3.	DCB	NSI 1084-06-02	↓	↓	↓	↓
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.			97			
12.		98				
13.		97				
14.		97				
15.						
16.						
17.						
18.						
19.						
20.						

EXPIRATION DATE 3-30-98

Refer to applicable contract or method for allowable time period before expiration.

Solution Prepared By: [illegible] Date of Preparation: 9-30-97

Checked By: Vicki Tsai Supervisor:

0367

Comments:

Certificate of Analysis

Compound Name: 2,4,5,6-Tetrachloro-m-xylene
Lot Number: W-1180-04-01
Expiration Date: 7/98

CAS Number: 877-09-8
Molecular Wt.: 244.0
Molecular Formula: $C_8H_6Cl_4$

NSI STANDARD SOLUTION

ANALYTE	GRAVIMETRIC CONCENTRATION	CHROMATOGRAPHIC PURITY	SOLVENT
2,4,5,6-Tetrachloro-m-xylene	200 ug/mL	97.3 %	Acetone (FLAMMABLE, IRRITANT)

Preparation: Reported concentration value has been corrected for purity using purity values obtained by NSI analysts. Concentration is calculated from wt/vol or vol/vol measurements using microbalances calibrated with NIST traceable weights to 0.0001g and/or ASTM Class A volumetric glassware or calibrated equivalent labware.

NSI Environmental Solution's Method of Analysis: GC/FID DB-608 Column

Verification: Concentration and lot homogeneity are verified by NSI after ampuling. A quality control sample was included in the analysis and both the standard solution and the QC sample were prepared independently from the calibration solution.

STORAGE & HANDLING

Store at ≤ 5°C. Allow to equilibrate to room temperature before use.

A Material Safety Data Sheet (MSDS) is enclosed for the solvent. MSDSs for the components comprising greater than 1.0% of the solution or 0.1% for components which are known to be carcinogens are available upon request.

0368

Produced by:

NSI Environmental Solutions
PO Box 12313, Research Triangle Park, NC 27709
1-800-234-7837

Certificate of Analysis

Compound Name: Dibutyl chlorendate
Lot Number: W-798-08-01
Expiration Date: 4/98

CAS Number: 1770-80-5
Molecular Wt.: 501.06
Molecular Formula: $C_{17}H_{20}Cl_6O_4$

NSI STANDARD SOLUTION

ANALYTE	GRAVIMETRIC CONCENTRATION	CHROMATOGRAPHIC PURITY	SOLVENT
Dibutyl chlorendate	200 ug/mL	98.0 %	Acetone (FLAMMABLE, IRRITANT)

Preparation: Reported concentration value has been corrected for purity using purity values obtained by NSI analysts. Concentration is calculated from wt/vol or vol/vol measurements using microbalances calibrated with NIST traceable weights to 0.0001g and/or ASTM Class A volumetric glassware or calibrated equivalent labware.

NSI Environmental Solution's Method of Analysis: GC/FID XTI-5 Column

Verification: Concentration and lot homogeneity are verified by NSI after ampuling. A quality control sample was included in the analysis and both the standard solution and the QC sample were prepared independently from the calibration solution.

STORAGE & HANDLING

Store at ≤ 5°C. Allow to equilibrate to room temperature before use.

A Material Safety Data Sheet (MSDS) is enclosed for the solvent. MSDSs for the components comprising greater than 1.0% of the solution or 0.1% for components which are known to be carcinogens are available upon request.

0369

Produced by:

NSI Environmental Solutions
PO Box 12313, Research Triangle Park, NC 27709
1-800-234-7837

Certificate of Analysis

Compound Name: Decachlorobiphenyl
Lot Number: W-1084-06-02
Expiration Date: 6/98

CAS Number: 2051-24-3
Molecular Wt.: 498.7
Molecular Formula: $C_{12}Cl_{10}$

NSI STANDARD SOLUTION

ANALYTE	GRAVIMETRIC CONCENTRATION	CHROMATOGRAPHIC PURITY	SOLVENT
Decachlorobiphenyl	203 ug/mL	97.7 %	Acetone (FLAMMABLE, IRRITANT)

Preparation: Reported concentration value has been corrected for purity using purity values obtained by NSI analysts. Concentration is calculated from wt/vol or vol/vol measurements using microbalances calibrated with NIST traceable weights to 0.0001g and/or ASTM Class A volumetric glassware or calibrated equivalent labware.

NSI Environmental Solution's Method of Analysis: GC/FID DB-608 Column

Verification: Concentration and lot homogeneity are verified by NSI after ampuling. A quality control sample was included in the analysis and both the standard solution and the QC sample were prepared independently from the calibration solution.

STORAGE & HANDLING

Store at ≤ 5°C. Allow to equilibrate to room temperature before use.

A Material Safety Data Sheet (MSDS) is enclosed for the solvent. MSDSs for the components comprising greater than 1.0% of the solution or 0.1% for components which are known to be carcinogens are available upon request.

0370

Produced by:

NSI Environmental Solutions
PO Box 12313, Research Triangle Park, NC 27709
1-800-234-7837

DATA CHEM LABORATORIES
A Sorenson Company

FORM A (TYPE I)
SINGLE METHOD ANALYSES

SAMPLE ANALYSIS DATA SHEET

S97B800Q

Date Printed.....: 15-DEC-97 18:26

Client Name.....: Roy F. Weston
Client Ref Number....: Not Provided
Sampling Site.....: Not Applicable
Release Number.....: AAAAND

Date Received.....: Not Applicable

Client Sample Name: BL-142147-1
DCL Sample Name...: BL-142147-1
DCL Report Group..: 97C-0439-04

Matrix.....: WATER
Date Sampled.....: Not Applicable
Reporting Units...: µg/liter

DCL Preparation Group: G97B800H
Date Prepared.....: 09-NOV-97 00:00
Preparation Method...: 3550C
Aliquot Weight/Volume: 1.00 liter
Net Weight/Volume....: Not Required

DCL Analysis Group: G97C000L
Analysis Method...: 8080A
Instrument Type...: GC/ECD
Instrument ID.....: GC/ECD-6
Column Type.....: DB-608
☒ Primary
☐ Confirmation

Analytical Results

Analyte	Date Analyzed	MDL	Result	Comment	Qual.	Dilution	CRDL
Aroclor 1016	23-NOV-97 19:17	.0506	ND			1.00	0.20
Aroclor 1221	23-NOV-97 19:17	.0935	ND			1.00	0.20
Aroclor 1232	23-NOV-97 19:17	.0562	ND			1.00	0.20
Aroclor 1242	23-NOV-97 19:17	.0443	ND			1.00	0.20
Aroclor 1248	23-NOV-97 19:17	.0367	ND			1.00	0.20
Aroclor 1254	23-NOV-97 19:17	.00956	ND			1.00	0.20
Aroclor 1260	23-NOV-97 19:17	.0309	ND			1.00	0.20

Surrogate Recoveries

Analyte	Result	Spiked Amount	Percent Recovery
Dibutylchlorendate	0.382	0.500	76.3
Tetrachloro-m-xylene	0.398	0.500	79.5

960 West LeVoy Drive / Salt Lake City, Utah 84123-2547
Phone (801) 266-7700 Web Page: www.datachem.com
FAX (801) 268-9992 E-mail: lab@datachem.com

DATA CHEM LABORATORIES
A Sorenson Company

FORM A (TYPE I)
SINGLE METHOD ANALYSES

SAMPLE ANALYSIS DATA SHEET

S97B800R

Date Printed.....: 15-DEC-97 18:26

Client Name.....: Roy F. Weston
Client Ref Number....: Not Provided
Sampling Site.....: Not Applicable
Release Number.....: AAAAND

Date Received.....: Not Applicable

Client Sample Name: QC-142147-1
DCL Sample Name...: QC-142147-1
DCL Report Group..: 97C-0439-04

Matrix.....: WATER
Date Sampled.....: Not Applicable
Reporting Units...: µg/liter

DCL Preparation Group: G97B800H
Date Prepared.....: 09-NOV-97 00:00
Preparation Method...: 3550C
Aliquot Weight/Volume: 1.00 liter
Net Weight/Volume....: Not Required

DCL Analysis Group: G97C000L
Analysis Method...: 8080A
Instrument Type...: GC/ECD
Instrument ID.....: GC/ECD-6
Column Type.....: DB-608
☒ Primary
☐ Confirmation

Analytical Results

Analyte	Date Analyzed	MDL	Result	Comment	Qual.	Dilution	CRDL
Aroclor 1016	23-NOV-97 19:53	.0506	4.65			1.00	0.20
Aroclor 1260	23-NOV-97 19:53	.0309	4.38			1.00	0.20

Surrogate Recoveries

Analyte	Result	Spiked Amount	Percent Recovery
Dibutylchlorendate	0.434	0.500	86.8
Tetrachloro-m-xylene	0.369	0.500	73.8

960 West LeVoy Drive / Salt Lake City, Utah 84123-2547
Phone (801) 266-7700 Web Page: www.datachem.com
FAX (801) 268-9992 E-mail: lab@datachem.com

DATA CHEM LABORATORIES
A Sorenson Company

FORM A (TYPE I)
SINGLE METHOD ANALYSES

SAMPLE ANALYSIS DATA SHEET

Form RLIMS63A-V1.3
12159718262364
Page 5

S97B70N4

Date Printed.....: 15-DEC-97 18:26

Client Name.....: Roy F. Weston
Client Ref Number....: Not Provided
Sampling Site.....: Not Provided
Release Number.....: AAAAND

Date Received.....: 07-NOV-97 00:00

Client Sample Name: **RB2**
DCL Sample Name...: **97C05251**
DCL Report Group..: **97C-0439-04**

Matrix.....: WATER
Date Sampled.....: 06-NOV-97 16:30
Reporting Units...: µg/liter
Report Basis.....: ☒ As Received ☐ Dried

DCL Preparation Group: G97B800H
Date Prepared.....: 09-NOV-97 00:00
Preparation Method...: 3550C
Aliquot Weight/Volume: 1.00 liter
Net Weight/Volume....: Not Required

DCL Analysis Group: G97C000L
Analysis Method...: 8080A
Instrument Type...: GC/ECD
Instrument ID.....: GC/ECD-6
Column Type.....: DB-608
☒ Primary
☐ Confirmation

Analytical Results

Analyte	Date Analyzed	MDL	Result	Comment	Qual.	Dilution	CRDL
Aroclor 1016	23-NOV-97 20:30	.0506	ND			1.00	0.20
Aroclor 1221	23-NOV-97 20:30	.0935	ND			1.00	0.20
Aroclor 1232	23-NOV-97 20:30	.0562	ND			1.00	0.20
Aroclor 1242	23-NOV-97 20:30	.0443	ND			1.00	0.20
Aroclor 1248	23-NOV-97 20:30	.0367	ND			1.00	0.20
Aroclor 1254	23-NOV-97 20:30	.00956	ND			1.00	0.20
Aroclor 1260	23-NOV-97 20:30	.0309	ND			1.00	0.20

Surrogate Recoveries

Analyte	Result	Spiked Amount	Percent Recovery
Dibutylchlorendate	0.341	0.500	68.1
Tetrachloro-m-xylene	0.437	0.500	87.4

0373

960 West LeVoy Drive / Salt Lake City, Utah 84123-2547
Phone (801) 266-7700 Web Page: www.datachem.com
FAX (801) 268-9992 E-mail: lab@datachem.com

Raw Data
Environmental Organic Analysis
Table of Contents
(Rev. 1: 3/95 GLH)

- [NA] DUMMY: Raw data is contained with set _____
- [X] Section 1. Sequencing Order
- [X] Section 2. Quantitation Data
- [X] Section 3. Calibration Data (Primary Column)
- [X] Section 4. Extract Data (Primary Column)
- [NA] Section 5. Confirmation Column Data
- [NA] Other (describe) _____

The following signatures verify that the raw data and all inventory and reviewer checklists in each raw data section (all green sheets) are complete and accurate.

Assembled by: _____ 12/16/97 Reviewed by: _____ 12/16/97
Signature Date Signature Date

Section 1. Environmental Organic Analysis
(Rev. 1: 3/95)
Sequencing Order
Inventory Checklist

USAEC Protocol including UH20, LH17, etc. (Excluding PST1-WA/SO and HBG1-WA/SO)

1. Prime (optional)
2. Solvent blank (optional)
3. Breakdown evaluation (if not accommodated by calibration standards)
4. Calibration Standards (or continuing calibration)
5. Initial Calibration Verification (ICV)
6. Solvent blank (optional)
7. Extracts
   - a. Method Blank
   - b. QC extracts
   - c. Field sample extracts (including MS/MSD where applicable)
   - d. remaining QC extracts
8. Continuing Calibration
   - a. Are: aliquots of the high calibration standards
   - b. Frequency: after every analytical lot
   - c. Criteria: % of the analytes ±25% and RTW

PST1-WA/SO Protocol

1. Prime (optional)
2. Solvent blank (optional)
3. Breakdown evaluation - PEM
4. Calibration Standards (or Continuing Calibration)
5. Initial Calibration Verification (ICV)
6. Solvent blank (optional)
7. Extracts
   - a. Method Blank
   - b. QC extracts
   - c. Field sample extracts (including MS/MSD where applicable)
   - d. remaining QC extracts
8. Continuing Calibration
   - a. Are: a solvent blank and alternating PEM with aliquots of the A and BMIX calibration standards
   - b. Frequency: every 12 hours
   - c. Criteria: % of the analytes ±25% and RTW

HGB1-WA/SO Protocol

1. Prime (optional)
2. Solvent blank (optional)
3. Calibration Standards (or Continuing Calibration)
4. Initial Calibration Verification (ICV)
5. Solvent blank (Optional)
6. Extracts
   - a. Method Blank
   - b. QC extracts
   - c. Field sample extracts (including MS/MSD where applicable)
   - d. remaining QC extracts
7. Continuing Calibration
   - a. Are: aliquots of mid-range calibration standards
   - b. Frequency: every 12 hours
   - c. Criteria: % of the analytes ±25% and RTW

SW-846 Protocol including 8080, 8150, etc.

1. Prime (optional)
2. Solvent blank (optional)
3. Breakdown evaluation (if not accommodated by calibration standards)
4. Calibration Standards (or continuing calibration)
5. Initial Calibration Verification (ICV)
6. Solvent blank (optional)
7. Extracts
   - a. Method Blank
   - b. LCS(s)
   - c. Field sample extracts {including MS/MSD(s)}
8. Continuing Calibration
   - a. Are: aliquots of the mid-range calibration standards
   - b. Frequency: a minimum of every 10 extracts
   - c. Criteria: ±15% and RTW

Section 1. Sequencing Order
Reviewer Checklist

The order of the raw data is consistent with applicable protocol.

Data has been initialed and dated by the analyst and checker in the appropriate places.

Sequence: DISK:[TAYLORC]5697326.SEQ;3
Date: 15-DEC-1997 16:42:48.34

Spl	Sample Name	Inj	Method File	Calib RT	Calib CF	Data File
1	PRIME	1	5697326_8080P			5697326001
2	PCB221_2.0	1	5697326_8080P			5697326002
3	PCB232_2.0	1	5697326_8080P			5697326003
4	PCB242_2.0	1	5697326_8080P			5697326004
5	PCB248_2.0	1	5697326_8080P			5697326005
6	$1254_0.02	1	5697326_8080P	I	R	5697326006
7	$1254_0.10	1	5697326_8080P	I	R	5697326007
8	$1254_0.20	1	5697326_8080P	I	R	5697326008
9	$1254_1.0	1	5697326_8080P	I	R	5697326009
10	$1254_2.0	1	5697326_8080P	I	R	5697326010
11	ICV1254_1.0	1	5697326_8080P			5697326011
12	$1660_0.01	1	5697326_8080P	I	R	5697326012
13	$1660_0.10	1	5697326_8080P	I	R	5697326013
14	$1660_0.20	1	5697326_8080P	I	R	5697326014
15	$1660_1.0	1	5697326_8080P	I	R	5697326015
16	$1660_2.0	1	5697326_8080P	I	R	5697326016
17	ICV_1660_1.0	1	5697326_8080P			5697327017
18	CCV_1660_1.0	1	5697326_8080P			5697327018
19	BL-142132-1	1	5697326_8080P			5697326017
20	QC-142132-1	1	5697326_8080P			5697326018
21	97C05169 X100	1	5697326_8080P			5697326019
22	97C05170 X100	1	5697326_8080P			5697326020
23	97C05171 X100	1	5697326_8080P			5697326021
24	97C05172 X100	1	5697326_8080P			5697326022
25	97C05173 X100	1	5697326_8080P			5697326023
26	97C05174 X100	1	5697326_8080P			5697326024
27	97C05175 X100	1	5697326_8080P			5697326025
28	97C05176 X100	1	5697326_8080P			5697326026
29	CCV_1660_1.0	1	5697326_8080P			5697326027
30	97C05176MS X100	1	5697326_8080P			5697326028
31	97C05176MSD X100	1	5697326_8080P			5697326029
32	97C05177 X100	1	5697326_8080P			5697326030
33	97C05178 X100	1	5697326_8080P			5697326031
34	97C05179 X100	1	5697326_8080P			5697326032
35	97C05180 X100	1	5697326_8080P			5697326033
36	97C05181 X100	1	5697326_8080P			5697326034
37	97C05182 X100	1	5697326_8080P			5697326035
38	97C05183 X100	1	5697326_8080P			5697326036
39	97C05184 X100	1	5697326_8080P			5697326037
40	CCV_1660_1.0	1	5697326_8080P			5697326038
41	97C05185 X100	1	5697326_8080P			5697326039
42	97C05186 X100	1	5697326_8080P			5697326040
43	97C05187 X100	1	5697326_8080P			5697326041
44	97C05188 X100	1	5697326_8080P			5697326042
45	97C05169	1	5697326_8080P			5697326043
46	97C05170	1	5697326_8080P			5697326044
47	97C05171	1	5697326_8080P			5697326045
48	97C05172	1	5697326_8080P			5697326046
49	97C05173	1	5697326_8080P			5697326047
50	97C05174	1	5697326_8080P			5697326048
51	CCV_1660_1.0	1	5697326_8080P			5697326049
52	97C05175	1	5697326_8080P			5697326050
53	97C05176	1	5697326_8080P			5697326051
54	97C05176MS	1	5697326_8080P			5697326052
55	97C05176MSD	1	5697326_8080P			5697326053
56	97C05177	1	5697326_8080P			5697326054
57	97C05178	1	5697326_8080P			5697326055
58	97C05179	1	5697326_8080P			5697326056

59	97C05180	1	5697326_8080P	5697326057
60	97C05181	1	5697326_8080P	5697326058
61	97C05182	1	5697326_8080P	5697326059
62	CCV_1660_1.0	1	5697326_8080P	5697326060
63	97C05183	1	5697326_8080P	5697326061
64	97C05184	1	5697326_8080P	5697326062
65	97C05185	1	5697326_8080P	5697326063
66	97C05186	1	5697326_8080P	5697326064
67	97C05187	1	5697326_8080P	5697326065
68	97C05188	1	5697326_8080P	5697326066
69	BL-142147-1	1	5697326_8080P	5697326067
70	QC-142147-1	1	5697326_8080P	5697326068
71	97C05251	1	5697326_8080P	5697326069
72	CCV_1660_1.0	1	5697326_8080P	5697326070
73	BL-142144-1	1	5697326_8080P	5697326071
74	QC-142144-1	1	5697326_8080P	5697326072
75	97C05249 X100	1	5697326_8080P	5697326073
76	97C05249MS X100	1	5697326_8080P	5697326074
77	97C05249MSD X100	1	5697326_8080P	5697326075
78	97C05250 X100	1	5697326_8080P	5697326076
79	97C05249	1	5697326_8080P	5697326077
80	97C05249MS	1	5697326_8080P	5697326078
81	97C05249MSD	1	5697326_8080P	5697326079
82	97C05250	1	5697326_8080P	5697326080
83	CCV_1660_1.0	1	5697326_8080P	5697326081

Reports: Delayed
Calibration mode: 2. Calibrate standards before analyzing unknowns.

PENelson ACCESS*CHROM v1.9 Injection Log Worksheet

Sequence File = DISK:[TAYLORC]5697326.SEQ;3 Data Directory = DISK:[TAYLORC]

Seq#	Rep#	Sample Name Sample Notes	Data Filename	Acquisition Time
1	1	PRIME	5697326001.RAW;1	13-NOV-1997 22:22:00
2	1	PCB221_2.0 138-WS-27569-1	5697326002.RAW;1	13-NOV-1997 22:58:46
3	1	PCB232_2.0 138-WS-27570-1	5697326003.RAW;1	13-NOV-1997 23:35:29
4	1	PCB242_2.0 138-WS-27571-1	5697326004.RAW;1	14-NOV-1997 00:12:15
5	1	PCB248_2.0 138-WS-27572-1	5697326005.RAW;1	14-NOV-1997 00:49:00
6	1	$1254_0.02 138-WS-27591	5697326006.RAW;1	14-NOV-1997 01:25:46
7	1	$1254_0.10 138-WS-27591	5697326007.RAW;1	14-NOV-1997 02:02:29
8	1	$1254_0.20 138-WS-27591	5697326008.RAW;1	14-NOV-1997 02:38:55
9	1	$1254_1.0 138-WS-27591	5697326009.RAW;1	14-NOV-1997 03:15:38
10	1	$1254_2.0 138-WS-27591	5697326010.RAW;1	14-NOV-1997 03:52:23
11	1	ICV1254_1.0 138-WS-27533	5697326011.RAW;1	14-NOV-1997 04:29:06
12	1	$1660_0.01 138-WS-27588-1	5697326012.RAW;1	14-NOV-1997 05:05:54
13	1	$1660_0.10 138-WS-27590-4	5697326013.RAW;1	14-NOV-1997 05:42:36
14	1	$1660_0.20 138-WS-27590-3	5697326014.RAW;1	14-NOV-1997 06:19:23
15	1	$1660_1.0 138-WS-27590-2	5697326015.RAW;1	14-NOV-1997 06:56:05
16	1	$1660_2.0 138-WS-27590-1	5697326016.RAW;1	14-NOV-1997 07:32:51
17	1	ICV_1660_1.0 138-WS-27589-1	5697327017.RAW;1	14-NOV-1997 08:09:34
18	1	CCV_1660_1.0 138-WS-27590	5697327018.RAW;1	22-NOV-1997 12:04:04
17	1	BL-142132-1 97C-0435-01	5697326017.RAW;2	22-NOV-1997 12:40:47
18	1	QC-142132-1 97C-0435-01	5697326018.RAW;1	22-NOV-1997 13:17:32
19	1	97C05169 X100 97C-0435-01	5697326019.RAW;1	22-NOV-1997 13:54:15
20	1	97C05170 X100 97C-0435-01	5697326020.RAW;1	22-NOV-1997 14:31:02
21	1	97C05171 X100 97C-0435-01	5697326021.RAW;1	22-NOV-1997 15:07:44
22	1	97C05172 X100 97C-0435-01	5697326022.RAW;1	22-NOV-1997 15:44:31

PENelson ACCESS*CHROM v1.9 Injection Log Worksheet

Sequence File = DISK:[TAYLORC]5697326.SEQ;3 Data Directory = DISK:[TAYLORC]

Seq#	Rep#	Sample Name Sample Notes	Data Filename	Acquisition Time
23	1	97C05173 X100 97C-0435-01	5697326023.RAW;1	22-NOV-1997 16:21:13
24	1	97C05174 X100 97C-0435-01	5697326024.RAW;1	22-NOV-1997 16:58:01
25	1	97C05175 X100 97C-0435-01	5697326025.RAW;1	22-NOV-1997 17:34:42
26	1	97C05176 X100 97C-0435-01	5697326026.RAW;1	22-NOV-1997 18:11:30
27	1	CCV_1660_1.0 138-WS-27590	5697326027.RAW;1	22-NOV-1997 18:48:13
28	1	97C05176MS X100 97C-0435-01	5697326028.RAW;1	22-NOV-1997 19:24:59
29	1	97C05176MSD X100 97C-0435-01	5697326029.RAW;1	22-NOV-1997 20:01:42
30	1	97C05177 X100 97C-0435-01	5697326030.RAW;1	22-NOV-1997 20:38:27
31	1	97C05178 X100 97C-0435-01	5697326031.RAW;1	22-NOV-1997 21:15:10
32	1	97C05179 X100 97C-0435-01	5697326032.RAW;1	22-NOV-1997 21:51:51
33	1	97C05180 X100 97C-0435-01	5697326033.RAW;1	22-NOV-1997 22:28:34
34	1	97C05181 X100 97C-0435-01	5697326034.RAW;1	22-NOV-1997 23:05:19
35	1	97C05182 X100 97C-0435-01	5697326035.RAW;1	22-NOV-1997 23:42:02
36	1	97C05183 X100 97C-0435-01	5697326036.RAW;1	23-NOV-1997 00:18:48
37	1	97C05184 X100 97C-0435-01	5697326037.RAW;1	23-NOV-1997 00:55:32
38	1	CCV_1660_1.0 138-WS-27590	5697326038.RAW;1	23-NOV-1997 01:32:19
39	1	97C05185 X100 97C-0435-01	5697326039.RAW;1	23-NOV-1997 02:09:03
40	1	97C05186 X100 97C-0435-01	5697326040.RAW;1	23-NOV-1997 02:45:49
41	1	97C05187 X100 97C-0435-01	5697326041.RAW;1	23-NOV-1997 03:22:29
42	1	97C05188 X100 97C-0435-01	5697326042.RAW;1	23-NOV-1997 03:59:14
43	1	97C05169 97C-0435-01	5697326043.RAW;1	23-NOV-1997 04:35:37
44	1	97C05170 97C-0435-01	5697326044.RAW;1	23-NOV-1997 05:12:20
45	1	97C05171 97C-0435-01	5697326045.RAW;1	23-NOV-1997 05:49:05
46	1	97C05172 97C-0435-01	5697326046.RAW;1	23-NOV-1997 06:25:47

PENelson ACCESS*CHROM v1.9 Injection Log Worksheet

Sequence File = DISK:[TAYLORC]5697326.SEQ;3 Data Directory = DISK:[TAYLORC]

Seq#	Rep#	Sample Name Sample Notes	Data Filename	Acquisition Time
47	1	97C05173 97C-0435-01	5697326047.RAW;1	23-NOV-1997 07:02:32
48	1	97C05174 97C-0435-01	5697326048.RAW;1	23-NOV-1997 07:39:19
49	1	CCV_1660_1.0 138-WS-27590	5697326049.RAW;1	23-NOV-1997 08:16:05
50	1	97C05175 97C-0435-01	5697326050.RAW;1	23-NOV-1997 08:52:52
51	1	97C05176 97C-0435-01	5697326051.RAW;1	23-NOV-1997 09:29:31
52	1	97C05176MS 97C-0435-01	5697326052.RAW;1	23-NOV-1997 10:06:14
53	1	97C05176MSD 97C-0435-01	5697326053.RAW;1	23-NOV-1997 10:42:54
54	1	97C05177 97C-0435-01	5697326054.RAW;1	23-NOV-1997 11:19:36
55	1	97C05178 97C-0435-01	5697326055.RAW;1	23-NOV-1997 11:56:21
56	1	97C05179 97C-0435-01	5697326056.RAW;1	23-NOV-1997 12:33:12
57	1	97C05180 97C-0435-01	5697326057.RAW;1	23-NOV-1997 13:09:56
58	1	97C05181 97C-0435-01	5697326058.RAW;1	23-NOV-1997 13:46:23
59	1	97C05182 97C-0435-01	5697326059.RAW;1	23-NOV-1997 14:23:09
60	1	CCV_1660_1.0 138-WS-27590	5697326060.RAW;1	23-NOV-1997 14:59:55
61	1	97C05183 97C-0435-01	5697326061.RAW;1	23-NOV-1997 15:36:46
62	1	97C05184 97C-0435-01	5697326062.RAW;1	23-NOV-1997 16:13:33
63	1	97C05185 97C-0435-01	5697326063.RAW;1	23-NOV-1997 16:50:17
64	1	97C05186 97C-0435-01	5697326064.RAW;1	23-NOV-1997 17:27:04
65	1	97C05187 97C-0435-01	5697326065.RAW;1	23-NOV-1997 18:03:49
66	1	97C05188 97C-0435-01	5697326066.RAW;1	23-NOV-1997 18:40:15
67	1	BL-142147-1 97C-0439-04	5697326067.RAW;1	23-NOV-1997 19:17:01
68	1	QC-142147-1 97C-0439-04	5697326068.RAW;1	23-NOV-1997 19:53:48
69	1	97C05251 97C-0439-04	5697326069.RAW;1	23-NOV-1997 20:30:30
70	1	CCV_1660_1.0 138-WS-27590	5697326070.RAW;1	23-NOV-1997 21:07:17

PENelson ACCESS*CHROM v1.9 Injection Log Worksheet

Sequence File = DISK:[TAYLORC]5697326.SEQ;3 Data Directory = DISK:[TAYLORC]

Seq#	Rep#	Sample Name Sample Notes	Data Filename	Acquisition Time
71	1	BL-142144-1 97C-0439-01	5697326071.RAW;1	23-NOV-1997 21:44:00
72	1	QC-142144-1 97C-0439-01	5697326072.RAW;1	23-NOV-1997 22:20:47
73	1	97C05249 X100 97C-0439-01	5697326073.RAW;1	23-NOV-1997 22:57:08
74	1	97C05249MS X100 97C-0439-01	5697326074.RAW;1	23-NOV-1997 23:33:54
75	1	97C05249MSD X100 97C-0439-01	5697326075.RAW;1	24-NOV-1997 00:10:37
76	1	97C05250 X100 97C-0439-01	5697326076.RAW;1	24-NOV-1997 00:47:24
77	1	97C05249 97C-0439-01	5697326077.RAW;1	24-NOV-1997 01:24:10
78	1	97C05249MS 97C-0439-01	5697326078.RAW;1	24-NOV-1997 02:00:56
79	1	97C05249MSD 97C-0439-01	5697326079.RAW;1	24-NOV-1997 02:37:42
80	1	97C05250 97C-0439-01	5697326080.RAW;1	24-NOV-1997 03:14:06
81	1	CCV_1660_1.0 138-WS-27590	5697326081.RAW;1	24-NOV-1997 03:50:54

Section 2.
Environmental Organic Analysis
(Rev. 1: 3/95)

Quantitation Data
Inventory Checklist

[NA] Muddle Sheets

[X] Tabular Summary Sheets - Primary and Confirmation (if applicable) Columns

Section 2.
Quantitation Data
Reviewer Checklist

X The quantitation data inventory checklist above is complete.

X The calibration data has been verified for the following:

- The response data on the muddle sheets are consistent with tabular summary sheets for all data.
- The correct conversion factor(s) has/have been applied on the muddle sheets.

PENelson ACCESS*CHROM V1.8 Peak Summary Worksheet 12/15/97

Sample Name	CL4XYL Result	PCB016 Result	PCB260 Result	PCB254 Result	DBUCLE Result	Peak RT Mean / RT SD / Response
	6.7978	11.978	16.59	17.621	22.006	
	1.6193E-03	1.178	1.165	0.8688	9.1894E-04	
PRIME	-6.4322E-04	-1.5885E-03	1.5566E-03	9.5232E-04		
PCB221_2.0	0.4936	0.1556	6.7096E-02	2.7779E-02	0.4601	
PCB232_2.0	0.3682	0.7454	0.1258	7.9041E-02	0.333	
PCB242_2.0	0.2504	0.8718	0.4212	0.1109	0.2175	
PCB248_2.0	0.2283	0.8697	0.363	0.2884	0.2333	
$1254_0.02	0	0	0	0	0	
$1254_0.10	0	0	0	0	0	
$1254_0.20	0	0	0	0	0	
$1254_1.0	0	0	0	0	0	
$1254_2.0	0	0	0	0	0	
ICV1254_1.0		0.2867	1.554	0.839		
$1660_0.01	0	0	0	0	0	
$1660_0.10	0	0	0	0	0	
$1660_0.20	0	0	0	0	0	
$1660_1.0	0	0	0	0	0	
$1660_2.0	0	0	0	0	0	
ICV_1660_1.0	5.6150E-03	1.167	0.9141	0.6079	8.8394E-03	
CCV_1660_1.0	0.1701	0.9812	0.8632	0.3305	0.1757	
BL-142132-1	16	17.78	6.887	5.414	15.56	
QC-142132-1	14.76	168.2	155.2	62.34	16.55	
97C05169 X10	-3.8015E-02	22.32	180	51.83		
97C05170 X10	-2.0168E-02	17.32	149.3	50.42		
97C05171 X10	-3.5756E-02	32.36	327.4	131.3		
97C05172 X10	-3.0786E-02	330.8	80.39	41.75		
97C05173 X10	-2.9656E-02	94.08	628.3	261.7		
97C05174 X10	-4.2081E-02	16	136	46.11		
97C05175 X10	-2.5138E-02	21.08	57.98	11.27		
97C05176 X10	1.8241E-02	76.06	179.9	117.4		
CCV_1660_1.0	0.1732	0.9794	0.9226	0.3627	0.1914	
97C05176MS X	-2.3331E-02	66.5	143.6	96.06		
97C05176MSD	-3.6434E-02	64.45	153.6	103.5		
97C05177 X10	-3.3045E-02	49.77	172	118.8		
97C05178 X10	-5.0440E-02		-3.9928E-03		-7.6616E-02	
97C05179 X10	-5.8120E-02	1.224	6.554	0.7496	-6.0464E-02	
97C05180 X10	-4.8633E-02				-7.1646E-02	
97C05181 X10	-5.1118E-02	39.06	320.3	147.5		
97C05182 X10	6.7727E-02	54.03	70.84	54.27		
97C05183 X10	-4.3663E-02	57.72	167.5	113.5		
97C05184 X10	-4.4340E-02	95.78	438.2	189.9		
CCV_1660_1.0	0.1694	0.9397	0.9105	0.3555	0.2	

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PENelson ACCESS*CHROM V1.8 Peak Summary Worksheet

Sample Name	CL4XYL Result	PCB016 Result	PCB260 Result	PCB254 Result	DBUCLE Result	Peak RT Mean / RT SD / Response
	6.7978	11.978	16.59	17.621	22.006	
	1.6193E-03	1.178	1.165	0.8688	9.1894E-04	
97C05185 X10	-1.8586E-02	28.96	46.44	26.66		
97C05186 X10	-4.5244E-02	21.94	171.4	53.28		
97C05187 X10	-5.3828E-02		0.4964		-6.0774E-02	
97C05188 X10	-4.5470E-02	18.63	164.3	16.08	-2.1011E-02	
97C05169	14.7	117.5	0	0		
+	+	+	+	+	+	
97C05170	14.11	92.19	0	0		
97C05171	15.41	210.6	0	0		
97C05172	15.52	0	0	0		
97C05173	15.22	261.2	0	0		
97C05174	15.68	90.8	0	0		
+	+	+	+	+	+	
CCV_1660_1.0	0.1792	0.9168	0.7472	0.3048	0.179	
97C05175	16.45	44.77	0	199.2	14.18	
97C05176	15.4	165.9	0	0		
97C05176MS	14.87	185.4	0	0		
97C05176MSD	15.35	206.9	0	0		
+	+	+	+	+	+	
97C05177	15.41	123	0	0		
97C05178	16.6	3.665	26.19	7.224	13.35	
97C05179	16.31	155.2	563.6	388.5	13.33	
97C05180	16.25	2.587	53.46	17.93	13.72	
97C05181	14.82	222.1	0	0		
+	+	+	+	+	+	
97C05182	15.82	152.8	0	0		
CCV_1660_1.0	0.1741	0.9047	0.7369	0.3002	0.1692	
97C05183	13.1	405.9	0	0		
97C05184	15.79	243.6	0	0		
97C05185	16.21	121.7	0	0	14.34	
+	+	+	+	+	+	
97C05186	15.79	150.9	0	0		
97C05187	15.6	12.48	32.36	28.2	12.89	
97C05188	16.61	401.8	126.6	0	13.74	
BL-142147-1	0.3977		6.2989E-02	-5.8678E-02	0.3817	
QC-142147-1	0.3691	4.65	4.382	1.629	0.4341	
+	+	+	+	+	+	
97C05251	0.4369	6.6752E-02	8.6961E-02		0.3405	
CCV_1660_1.0	0.174	1.003	0.9035	0.3436	0.1839	
BL-142144-1	16.03	0.3137	3.406	-1.23	15.14	
QC-142144-1	12.51	142.1	133.8	52.65	16.56	
97C05249 X10	-5.8346E-02	12.33	151.6	27.82		
+	+	+	+	+	+	
97C05249MS X	-3.7789E-02	18.23	200.4	41.43		
97C05249MSD	-4.2081E-02	13.45	166.4	29.4		
97C05250 X10	-3.9822E-02	10.56	231.8	50.07		
97C05249	14.76	307.4	0	0		
97C05249MS	15.59	175.7	0	0		
+	+	+	+	+	+	

PENelson ACCESS*CHROM V1.8 Peak Summary Worksheet

Sample Name	CL4XYL Result	PCB016 Result	PCB260 Result	PCB254 Result	DBUCLE Result	Peak RT Mean / RT SD / Response
	6.7978	11.978	16.59	17.621	22.006	
	1.6193E-03	1.178	1.165	0.8688	9.1894E-04	
97C05249MSD	14.97	466.6	0	0		
97C05250	12.67	142.6	0	0		
CCV_1660_1.0	0.1699	0.8639	0.7287	0.2809	0.168	

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Section 3.
Environmental Organic Analysis
(Rev. 1: 3/95)

Calibration Data (Primary Column)
Inventory Checklist

☒ The initial calibration consists of the following:

- ▲ Calibration standards
- ▲ Initial Calibration Verification (ICV) solution
- ▲ Mid-range pattern identification standards (if applicable)
- ▲ Breakdown calculation solution (if not accommodated by calibration standards)

☒ Continuing Calibration (in sequence-specified order)

Section 3.
Calibration Data (Primary Column)
Reviewer Checklist

X The calibration data inventory checklist above is complete.

X The calibration data has been verified for the following:

- ☞ Response data are consistent with tabular summary sheets for all data.
- ☞ For each analyte on the tabular summary, the retention time is consistent with the calibration standards.
- ☞ The low standards are clearly distinguished from the baseline.
- ☞ Integration is consistent with good chromatography practices unless otherwise specified on raw data.
- ☞ When multi-component analytes are being quantitated, the total response is shown on each raw data file for each multi-peak method used.
- ☞ No saturated peaks have been used for quantitation.
- ☞ Manual edits have been initialed and dated by the analyst.
- ☞ All method headers reflect correct analysis data.

X Unless otherwise stated with reasoning in the case narrative, the following QC has been verified:

- ☞ Breakdown criteria for endrin and 4,4'-DDT has been met (if applicable).
- ☞ All continuing calibration response and retention time window criteria have been met.
- ☞ The Initial Calibration Verification criteria has been met.

Date.....15-DEC-1997 16:53:39.85 User: TAYLORC
Report number.....1197265422
Raw file.....DISK:[TAYLORC]5697326006.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;85
Last method update..15-DEC-1997 16:53:46.26

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Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....22

Acq. date.....14-NOV-1997 01:25:46
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....$1254_0.02
Notes.....138-WS-27591

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.002 min
Area reject.....100 count(s)
Noise threshold.....10.0 microvolts
Start peak width....6.00 sec(s)
Min. window.....8.00 sec

Delay time.....6.500 min
No. peaks found.....36
Area threshold.....120
Area/Pk.Ht.....H
% window.....0.00

Analysis type.....EXTERNAL STANDARD
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic
Calib. factors.....Replace
Volume injected.....1.00000

A/D range.....1.0 volt(s)

Origin treatment....Ignore
Retention times.....Unaltered
(1/x,y) exponent....-1

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
10.10	PCB016;1	1		
11.34	PCB016;2	1		

EXTERNAL STANDARD CALIBRATION

Calibration Sample name: $1254_0.02

Peak Name	R.T.(min)	Peak Ht	Conc	CF	Ref	Std
CL4XYL	6.800	7388				
PCB016;3	11.916	424				
PCB016;4	12.490	562				
PCB015;5	13.610	421				
PCB260;1	15.071	1162				

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PCB260;2	15.344	1620		
PCB254;1	16.575	1559	4.0000E-03	3.897E+05
PCB254;2	16.811	1903	4.0000E-03	4.757E+05
PCB260;3	17.207	2842		
PCB260;4	17.473	479		
PCB254;3	17.678	1776	4.0000E-03	4.440E+05
PCB260;5	17.864	390		
PCB254;4	18.241	944	4.0000E-03	2.360E+05
PCB254;5	19.216	812	4.0000E-03	2.030E+05
DBUCLE	22.008	4937		

METHOD CALIBRATION CHANGES

Peak Name	Old R.T. (min)	New R.T. (min)	Old CF	New CF	% Rel. St. Dev.	N runs
CL4XYL	6.772	6.772				0
PCB016;3	11.879	11.879				0
PCB016;4	12.497	12.497				0
PCB015;5	13.603	13.603				0
PCB260;1	15.075	15.075				0
PCB260;2	15.349	15.349				0
PCB254;1	16.574	16.574	3.898E+05	3.897E+05		1
PCB254;2	16.806	16.806	4.758E+05	4.757E+05		1
PCB260;3	17.201	17.201				0
PCB260;4	17.477	17.477				0
PCB254;3	17.673	17.673	4.440E+05	4.440E+05		1
PCB260;5	17.864	17.864				0
PCB254;4	18.234	18.234	2.360E+05	2.360E+05		1
PCB254;5	19.215	19.215	2.030E+05	2.030E+05		1
DBUCLE	22.012	22.012				0

ANALYSIS NOTES

1: ERROR in calibration data for Sample or Internal Std. peak. (145)
2: WARNING: Peak windows overlap. Check peak identification. (245)

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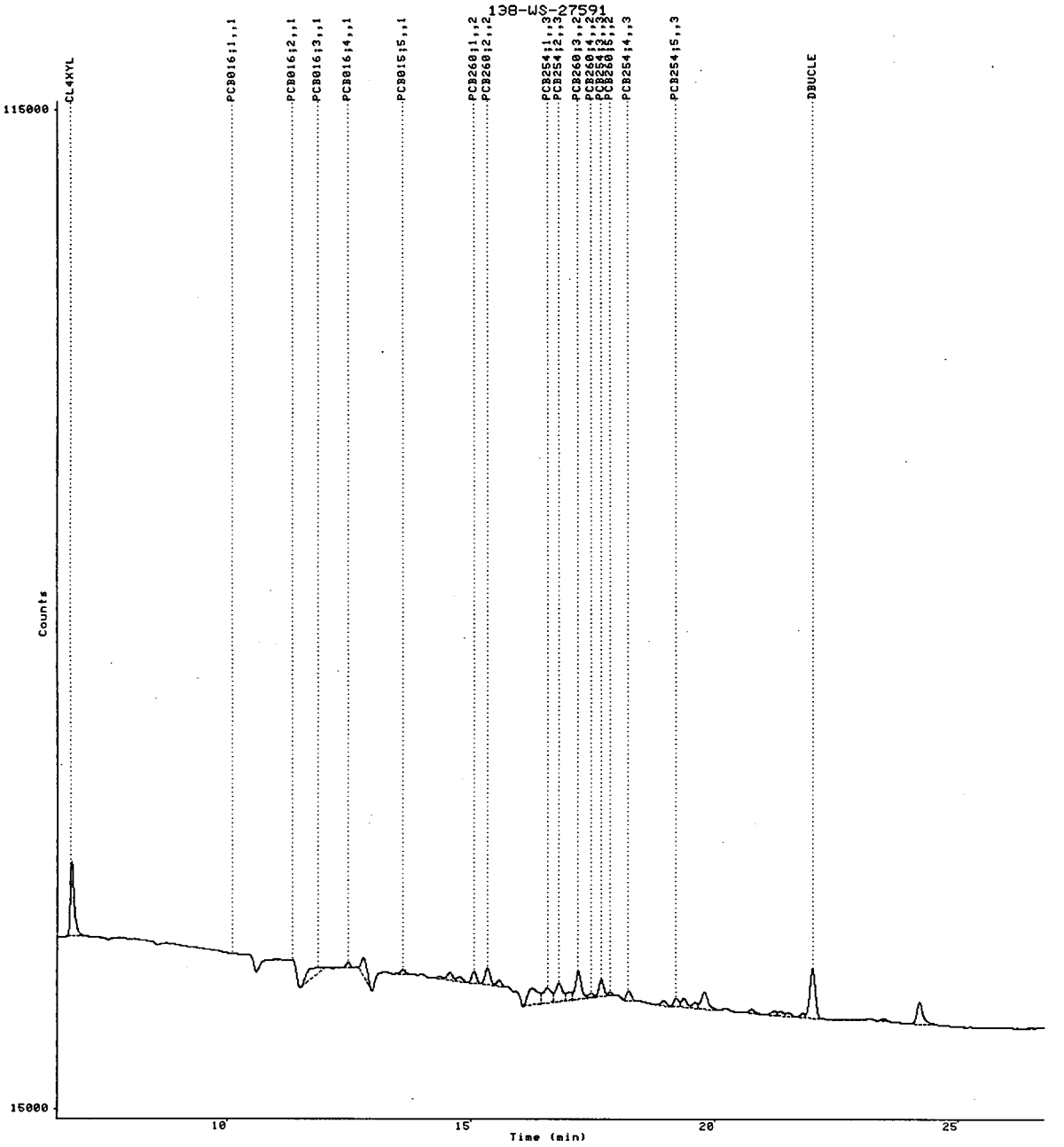
Data file: DISK:[TAYLORC]5697326006.RAW;1
Report: 1197265422
Acquired: 14-NOV-1997 01:25:46
Time range: 6.50-26.75



$1254_0.02

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Date.....15-DEC-1997 16:53:55.85 User: TAYLORC
Report number.....1197265423
Raw file.....DISK:[TAYLORC]5697326007.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;86
Last method update..15-DEC-1997 16:54:02.98

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....22

Acq. date.....14-NOV-1997 02:02:29
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....$1254_0.10
Notes.....138-WS-27591

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....83
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Calib. factors.....Replace Retention times.....Unaltered
Volume injected.....1.00000 (1/x,y) exponent....-1

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
11.88	PCB016;3	1		

EXTERNAL STANDARD CALIBRATION

Calibration Sample name: $1254_0.10

Peak Name	R.T.(min)	Peak Ht	Conc	CF	Ref	Std
CL4XYL	6.796	39088				
PCB016;1	10.091	617				
PCB016;2	11.373	1573				
PCB016;4	12.490	2960				
PCB015;5	13.612	3394				
PCB260;1	15.067	6628				
PCB260;2	15.341	7548				
PCB254;1	16.570	4192	2.0000E-02	2.096E+05		
PCB254;2	16.797	5837	2.0000E-02	2.918E+05		

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PCB260;3	17.230	18761		
PCB260;4	17.464	1793		
PCB254;3	17.668	9016	2.0000E-02	4.508E+05
PCB260;5	17.860	3291		
PCB254;4	18.232	4109	2.0000E-02	2.054E+05
PCB254;5	19.218	4529	2.0000E-02	2.264E+05
DBUCLE	22.006	21791		

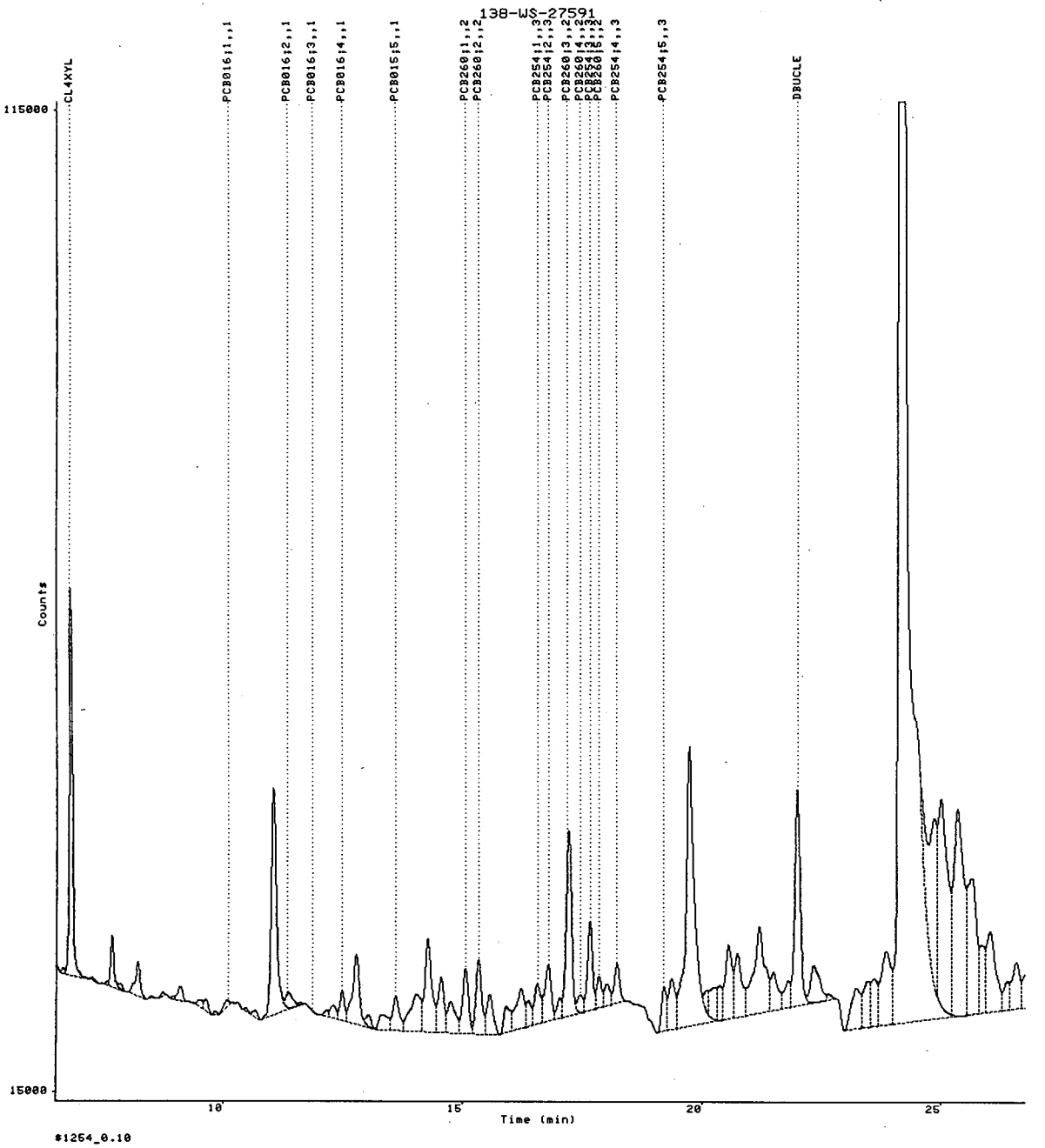
METHOD CALIBRATION CHANGES

Peak Name	Old R.T. (min)	New R.T. (min)	Old CF	New CF	% Rel. St. Dev.	N runs
CL4XYL	6.772	6.772				0
PCB016;1	10.100	10.100				0
PCB016;2	11.337	11.337				0
PCB016;4	12.497	12.497				0
PCB015;5	13.603	13.603				0
PCB260;1	15.075	15.075				0
PCB260;2	15.349	15.349				0
PCB254;1	16.574	16.574	2.096E+05	2.096E+05		1
PCB254;2	16.806	16.806	2.918E+05	2.918E+05		1
PCB260;3	17.201	17.201				0
PCB260;4	17.477	17.477				0
PCB254;3	17.673	17.673	4.508E+05	4.508E+05		1
PCB260;5	17.864	17.864				0
PCB254;4	18.234	18.234	2.054E+05	2.054E+05		1
PCB254;5	19.215	19.215	2.264E+05	2.264E+05		1
DBUCLE	22.012	22.012				0

ANALYSIS NOTES

1: ERROR in calibration data for Sample or Internal Std. peak. (145)
2: WARNING: Peak windows overlap. Check peak identification. (245)

Data file: DISK:[TAYLORC]5697326007.RAW;1
Report: 1197265423
Acquired: 14-NOV-1997 02:02:29
Time range: 6.50-26.75



0392

Date.....15-DEC-1997 16:54:12.28 User: TAYLORC
Report number.....1197265424
Raw file.....DISK:[TAYLORC]5697326008.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;87
Last method update..15-DEC-1997 16:54:19.32

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....22

Acq. date.....14-NOV-1997 02:38:55
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....$1254_0.20
Notes.....138-WS-27591

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....46
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Calib. factors.....Replace Retention times.....Unaltered
Volume injected.....1.00000 (1/x,y) exponent....-1

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
10.10	PCB016;1	1		
11.88	PCB016;3	1		

EXTERNAL STANDARD CALIBRATION

Calibration Sample name: $1254_0.20

Peak Name	R.T.(min)	Peak Ht	Conc	CF	Ref	Std
CL4XYL	6.798	62645				
PCB016;2	11.335	300				
PCB016;4	12.496	5881				
PCB015;5	13.611	3885				
PCB260;1	15.072	11088				
PCB260;2	15.342	13658				
PCB254;1	16.575	5856	4.0000E-02	1.464E+05		
PCB254;2	16.810	9573	4.0000E-02	2.393E+05		

0393

PCB260;3	17.205	19098		
PCB260;4	17.474	3347		
PCB254;3	17.675	13977	4.0000E-02	3.494E+05
PCB260;5	17.862	5818		
PCB254;4	18.240	7847	4.0000E-02	1.962E+05
PCB254;5	19.213	7550	4.0000E-02	1.888E+05
DBUCLE	22.007	42557		

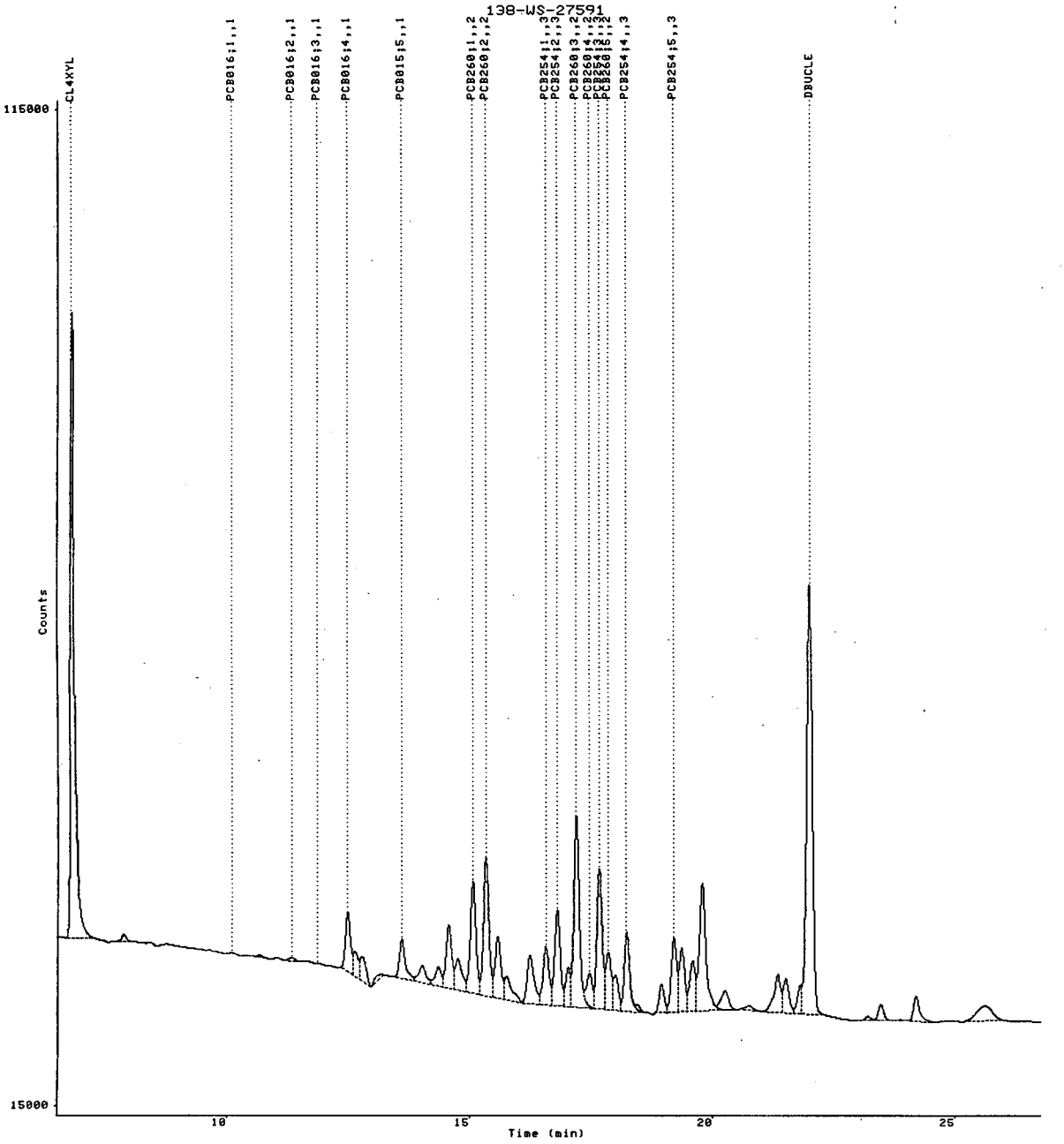
METHOD CALIBRATION CHANGES

Peak Name	Old R.T. (min)	New R.T. (min)	Old CF	New CF	% Rel. St. Dev.	N runs
CL4XYL	6.772	6.772				0
PCB016;2	11.337	11.337				0
PCB016;4	12.497	12.497				0
PCB015;5	13.603	13.603				0
PCB260;1	15.075	15.075				0
PCB260;2	15.349	15.349				0
PCB254;1	16.574	16.574	1.464E+05	1.464E+05		1
PCB254;2	16.806	16.806	2.393E+05	2.393E+05		1
PCB260;3	17.201	17.201				0
PCB260;4	17.477	17.477				0
PCB254;3	17.673	17.673	3.494E+05	3.494E+05		1
PCB260;5	17.864	17.864				0
PCB254;4	18.234	18.234	1.962E+05	1.962E+05		1
PCB254;5	19.215	19.215	1.888E+05	1.888E+05		1
DBUCLE	22.012	22.012				0

ANALYSIS NOTES

1: ERROR in calibration data for Sample or Internal Std. peak. (145)
2: WARNING: Peak windows overlap. Check peak identification. (245)

Data file: DISK:[TAYLORC]5697326008.RAW;1
Report: 1197265424
Acquired: 14-NOV-1997 02:38:55
Time range: 6.50-26.75



$1254_0.20

0395

Date.....15-DEC-1997 16:54:28.65 User: TAYLORC
Report number.....1197265425
Raw file.....DISK:[TAYLORC]5697326009.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;88
Last method update..15-DEC-1997 16:54:35.61

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....22

Acq. date.....14-NOV-1997 03:15:38
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....$1254_1.0
Notes.....138-WS-27591

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
  length.....30 M
  diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min
Area reject.....100 count(s)
Noise threshold.....10.0 microvolts
Start peak width....6.00 sec(s)
Min. window.....8.00 sec

Delay time.....6.500 min
No. peaks found.....56
Area threshold.....120
Area/Pk.Ht.....H
% window.....0.00

Analysis type.....EXTERNAL STANDARD
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic
Calib. factors.....Replace
Volume injected.....1.00000

A/D range.....1.0 volt(s)

Origin treatment....Ignore
Retention times.....Unaltered
(1/x,y) exponent....-1

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EXTERNAL STANDARD CALIBRATION

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Calibration Sample name: $1254_1.0

Peak Name	R.T.(min)	Peak Ht	Conc	CF	Ref Std
CL4XYL	6.797	293752			
PCB016;1	10.105	703			
PCB016;2	11.336	1829			
PCB016;3	11.885	471			
PCB016;4	12.495	28640			
PCB015;5	13.610	21315			
PCB260;1	15.071	50165			
PCB260;2	15.341	60704			
PCB254;1	16.574	26533	0.20000	1.327E+05	
PCB254;2	16.808	44519	0.20000	2.226E+05	
PCB260;3	17.204	89146			
PCB260;4	17.475	18083			
PCB254;3	17.672	71560	0.20000	3.578E+05	
PCB260;5	17.862	30893			
PCB254;4	18.237	43477	0.20000	2.174E+05	
PCB254;5	19.208	38265	0.20000	1.913E+05	

DBUCLE 22.006 200901

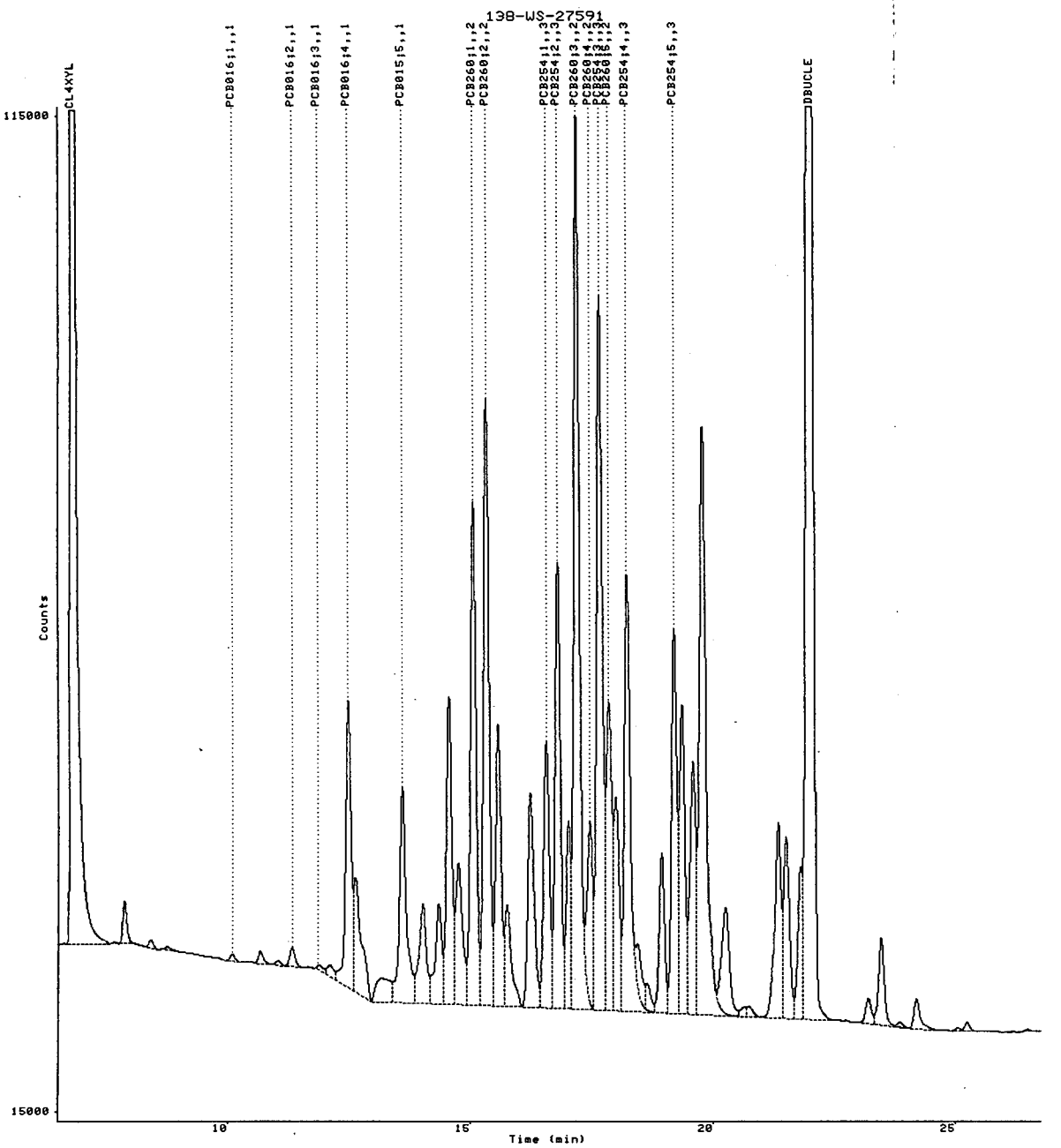
METHOD CALIBRATION CHANGES

Peak Name	Old R.T. (min)	New R.T. (min)	Old CF	New CF	% Rel. St. Dev.	N runs
CL4XYL	6.772	6.772				0
PCB016;1	10.100	10.100				0
PCB016;2	11.337	11.337				0
PCB016;3	11.879	11.879				0
PCB016;4	12.497	12.497				0
PCB015;5	13.603	13.603				0
PCB260;1	15.075	15.075				0
PCB260;2	15.349	15.349				0
PCB254;1	16.574	16.574	1.327E+05	1.327E+05		1
PCB254;2	16.806	16.806	2.226E+05	2.226E+05		1
PCB260;3	17.201	17.201				0
PCB260;4	17.477	17.477				0
PCB254;3	17.673	17.673	3.578E+05	3.578E+05		1
PCB260;5	17.864	17.864				0
PCB254;4	18.234	18.234	2.174E+05	2.174E+05		1
PCB254;5	19.215	19.215	1.913E+05	1.913E+05		1
DBUCLE	22.012	22.012				0

ANALYSIS NOTES

1: ERROR in calibration data for Sample or Internal Std. peak. (145)
2: WARNING: Peak windows overlap. Check peak identification. (245)

Data file: DISK:[TAYLORC]5697326009.RAW;1
Report: 1197265425
Acquired: 14-NOV-1997 03:15:38
Time range: 6.50-26.75



$1254_1.0

0398

Date.....15-DEC-1997 16:54:44.49 User: TAYLORC
Report number.....1197265426
Raw file.....DISK:[TAYLORC]5697326010.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;89
Last method update..15-DEC-1997 16:54:51.30

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....23

Acq. date.....14-NOV-1997 03:52:23
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....$1254_2.0
Notes.....138-WS-27591

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min
Area reject.....100 count(s)
Noise threshold.....10.0 microvolts
Start peak width....6.00 sec(s)
Min. window.....8.00 sec

Delay time.....6.500 min
No. peaks found.....54
Area threshold.....120
Area/Pk.Ht.....H
% window.....0.00

Analysis type.....EXTERNAL STANDARD
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic
Calib. factors.....Replace
Volume injected.....1.00000

A/D range.....1.0 volt(s)

Origin treatment....Ignore
Retention times.....Unaltered
(1/x,y) exponent....-1

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EXTERNAL STANDARD CALIBRATION

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Calibration Sample name: $1254_2.0

Peak Name	R.T.(min)	Peak Ht	Conc	CF	Ref Std
CL4XYL	6.796	491602			
PCB016;1	10.105	1267			
PCB016;2	11.335	3322			
PCB016;3	11.890	766			
PCB016;4	12.494	46531			
PCB015;5	13.608	33095			
PCB260;1	15.071	82145			
PCB260;2	15.339	100432			
PCB254;1	16.572	44126	0.40000	1.103E+05	
PCB254;2	16.806	75723	0.40000	1.893E+05	
PCB260;3	17.202	150072			
PCB260;4	17.474	30038			
PCB254;3	17.671	122684	0.40000	3.067E+05	
PCB260;5	17.861	51515			
PCB254;4	18.237	74084	0.40000	1.852E+05	
PCB254;5	19.207	66520	0.40000	1.663E+05	

DBUCLE 22.006 347041

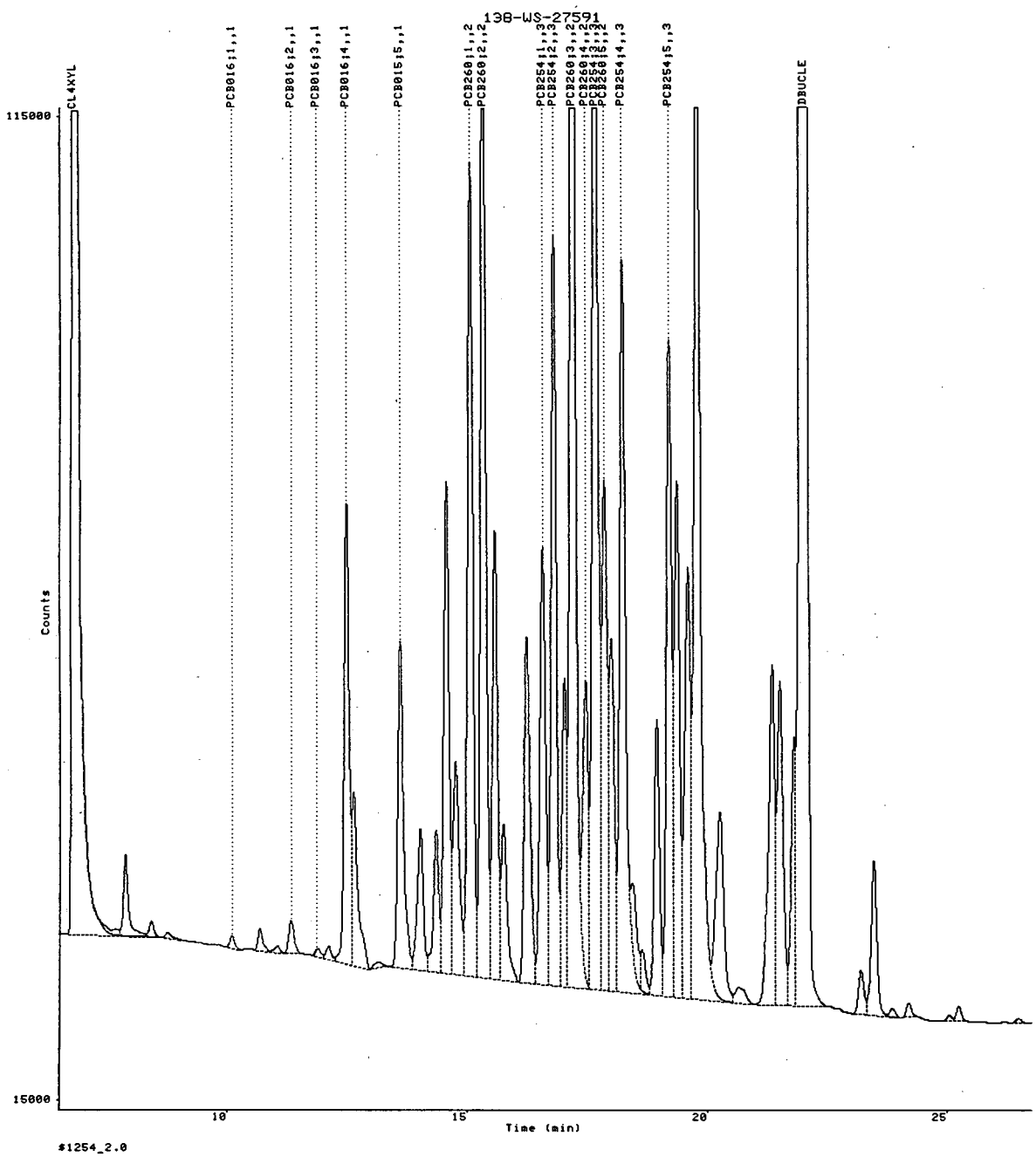
METHOD CALIBRATION CHANGES

Peak Name	Old R.T. (min)	New R.T. (min)	Old CF	New CF	% Rel. St. Dev.	N runs
CL4XYL	6.772	6.772				0
PCB016;1	10.100	10.100				0
PCB016;2	11.337	11.337				0
PCB016;3	11.879	11.879				0
PCB016;4	12.497	12.497				0
PCB015;5	13.603	13.603				0
PCB260;1	15.075	15.075				0
PCB260;2	15.349	15.349				0
PCB254;1	16.574	16.574	1.103E+05	1.103E+05		1
PCB254;2	16.806	16.806	1.893E+05	1.893E+05		1
PCB260;3	17.201	17.201				0
PCB260;4	17.477	17.477				0
PCB254;3	17.673	17.673	3.067E+05	3.067E+05		1
PCB260;5	17.864	17.864				0
PCB254;4	18.234	18.234	1.852E+05	1.852E+05		1
PCB254;5	19.215	19.215	1.663E+05	1.663E+05		1
DBUCLE	22.012	22.012				0

ANALYSIS NOTES

1: ERROR in calibration data for Sample or Internal Std. peak. (145)
2: WARNING: Peak windows overlap. Check peak identification. (245)

Data file: DISK:[TAYLORC]5697326010.RAW;1
Report: 1197265426
Acquired: 14-NOV-1997 03:52:23
Time range: 6.50-26.75



0401

Date.....15-DEC-1997 16:55:00.53 User: TAYLORC
Report number.....1197265427
Raw file.....DISK:[TAYLORC]5697326012.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;90
Last method update..15-DEC-1997 16:55:07.26

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....20

Acq. date.....14-NOV-1997 05:05:54
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....$1660_0.01
Notes.....138-WS-27588-1

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
  length.....30 M
  diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min
Area reject.....100 count(s)
Noise threshold.....10.0 microvolts
Start peak width....6.00 sec(s)
Min. window.....8.00 sec

Delay time.....6.500 min
No. peaks found.....48
Area threshold.....120
Area/Pk.Ht.....H
% window.....0.00

Analysis type.....EXTERNAL STANDARD
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic
Calib. factors.....Replace
Volume injected.....1.00000

A/D range.....1.0 volt(s)

Origin treatment....Ignore
Retention times.....Unaltered
(1/x,y) exponent....-1

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
16.57	PCB254;1	3		
16.81	PCB254;2	3		
19.22	PCB254;5	3		

EXTERNAL STANDARD CALIBRATION

Calibration Sample name: $1660_0.01

Peak Name	R.T.(min)	Peak Ht	Conc	CF	Ref	Std
CL4XYL	6.800	3876	2.0000E-03	1.938E+06		
PCB016;1	10.110	1039	2.0000E-03	5.195E+05		
PCB016;2	11.339	1059	2.0000E-03	5.295E+05		
PCB016;3	11.870	428	2.0000E-03	2.140E+05		
PCB016;4	12.501	117	2.0000E-03	5.850E+04		
PCB015;5	13.599	388	2.0000E-03	1.940E+05		
PCB260;1	15.058	596	2.0000E-03	2.980E+05		

PCB260;2	15.341	264	2.0000E-03	1.320E+05
PCB260;3	17.201	641	2.0000E-03	3.205E+05
PCB260;4	17.460	373	2.0000E-03	1.865E+05
PCB254;3	17.695	123		
PCB260;5	17.871	832	2.0000E-03	4.160E+05
PCB254;4	18.241	1212		
DBUCLE	22.007	2954	2.0000E-03	1.477E+06

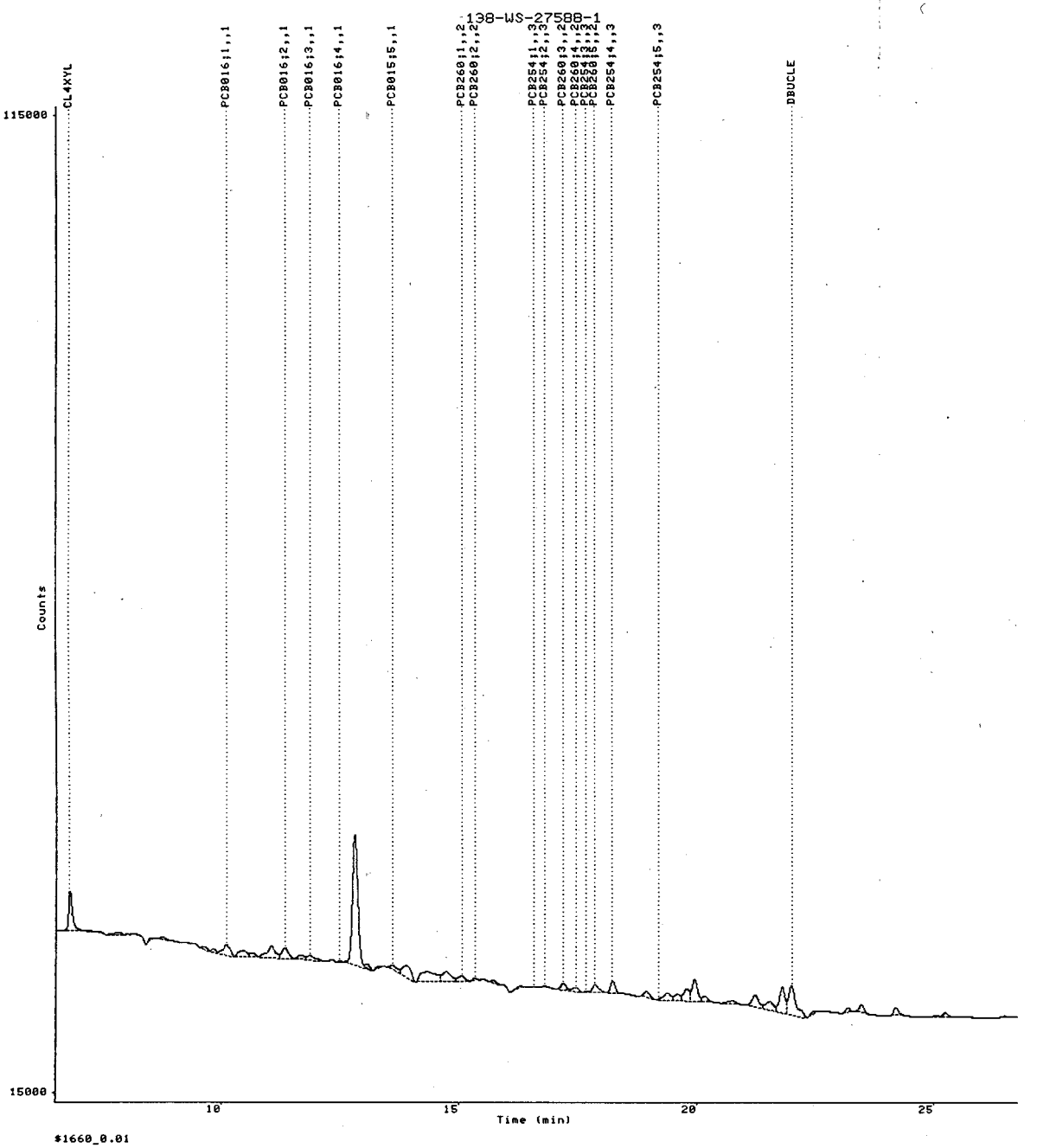
METHOD CALIBRATION CHANGES

Peak Name	Old R.T. (min)	New R.T. (min)	Old CF	New CF	% Rel. St. Dev.	N runs
CL4XYL	6.772	6.772	1.938E+06	1.938E+06		1
PCB016;1	10.100	10.100	5.195E+05	5.195E+05		1
PCB016;2	11.337	11.337	5.295E+05	5.295E+05		1
PCB016;3	11.879	11.879	2.140E+05	2.140E+05		1
PCB016;4	12.497	12.497	5.850E+04	5.850E+04		1
PCB015;5	13.603	13.603	1.940E+05	1.940E+05		1
PCB260;1	15.075	15.075	2.980E+05	2.980E+05		1
PCB260;2	15.349	15.349	1.320E+05	1.320E+05		1
PCB260;3	17.201	17.201	3.205E+05	3.205E+05		1
PCB260;4	17.477	17.477	1.865E+05	1.865E+05		1
PCB254;3	17.673	17.673				0
PCB260;5	17.864	17.864	4.160E+05	4.160E+05		1
PCB254;4	18.234	18.234				0
DBUCLE	22.012	22.012	1.477E+06	1.477E+06		1

ANALYSIS NOTES

1: ERROR in calibration data for Sample or Internal Std. peak. (145)
2: WARNING: Peak windows overlap. Check peak identification. (245)

Data file: DISK:[TAYLORC]5697326012.RAW;1
Report: 1197265427
Acquired: 14-NOV-1997 05:05:54
Time range: 6.50-26.75



0404

Date.....15-DEC-1997 16:55:16.54 User: TAYLORC
Report number.....1197265428
Raw file.....DISK:[TAYLORC]5697326013.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;91
Last method update..15-DEC-1997 16:55:23.40

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....21

Acq. date.....14-NOV-1997 05:42:36
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....$1660_0.10
Notes.....138-WS-27590-4

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min
Area reject.....100 count(s)
Noise threshold.....10.0 microvolts
Start peak width....6.00 sec(s)
Min. window.....8.00 sec

Delay time.....6.500 min
No. peaks found.....50
Area threshold.....120
Area/Pk.Ht.....H
% window.....0.00

Analysis type.....EXTERNAL STANDARD
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic
Calib. factors.....Replace
Volume injected.....1.00000

A/D range.....1.0 volt(s)

Origin treatment....Ignore
Retention times.....Unaltered
(1/x,y) exponent....-1

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
16.57	PCB254;1	3		
19.22	PCB254;5	3		

EXTERNAL STANDARD CALIBRATION

Calibration Sample name: $1660_0.10

Peak Name	R.T.(min)	Peak Ht	Conc	CF	Ref	Std
CL4XYL	6.799	31154	2.0000E-02	1.558E+06		
PCB016;1	10.107	4496	2.0000E-02	2.248E+05		
PCB016;2	11.343	8227	2.0000E-02	4.114E+05		
PCB016;3	11.895	2758	2.0000E-02	1.379E+05		
PCB016;4	12.494	2475	2.0000E-02	1.238E+05		
PCB015;5	13.609	3217	2.0000E-02	1.608E+05		
PCB260;1	15.070	2476	2.0000E-02	1.238E+05		
PCB260;2	15.345	2683	2.0000E-02	1.342E+05		

PCB254;2	16.813	537		
PCB260;3	17.200	5000	2.0000E-02	2.500E+05
PCB260;4	17.476	2374	2.0000E-02	1.187E+05
PCB254;3	17.684	390		
PCB260;5	17.870	6400	2.0000E-02	3.200E+05
PCB254;4	18.241	9892		
DBUCLE	22.006	21698	2.0000E-02	1.085E+06

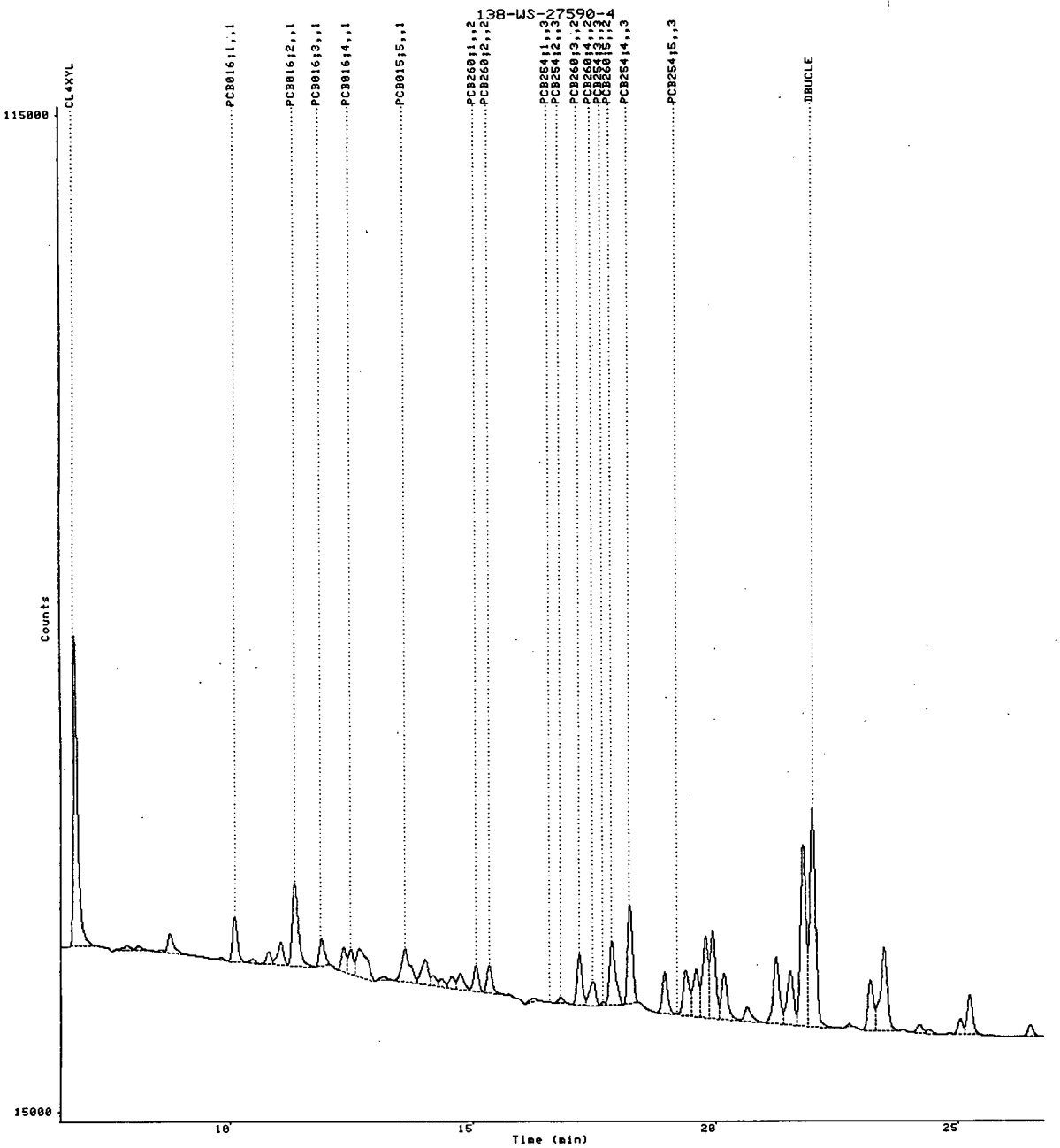
METHOD CALIBRATION CHANGES

Peak Name	Old R.T. (min)	New R.T. (min)	Old CF	New CF	% Rel. St. Dev.	N runs
CL4XYL	6.772	6.772	1.558E+06	1.558E+06		1
PCB016;1	10.100	10.100	2.248E+05	2.248E+05		1
PCB016;2	11.337	11.337	4.114E+05	4.114E+05		1
PCB016;3	11.879	11.879	1.379E+05	1.379E+05		1
PCB016;4	12.497	12.497	1.238E+05	1.238E+05		1
PCB015;5	13.603	13.603	1.608E+05	1.608E+05		1
PCB260;1	15.075	15.075	1.238E+05	1.238E+05		1
PCB260;2	15.349	15.349	1.342E+05	1.342E+05		1
PCB254;2	16.806	16.806				0
PCB260;3	17.201	17.201	2.500E+05	2.500E+05		1
PCB260;4	17.477	17.477	1.187E+05	1.187E+05		1
PCB254;3	17.673	17.673				0
PCB260;5	17.864	17.864	3.200E+05	3.200E+05		1
PCB254;4	18.234	18.234				0
DBUCLE	22.012	22.012	1.085E+06	1.085E+06		1

ANALYSIS NOTES

1: ERROR in calibration data for Sample or Internal Std. peak. (145)
2: WARNING: Peak windows overlap. Check peak identification. (245)

Data file: DISK:[TAYLORC]5697326013.RAW;1
Report: 1197265428
Acquired: 14-NOV-1997 05:42:36
Time range: 6.50-26.75



$1660_0.10

0407

Date.....15-DEC-1997 16:55:33.17 User: TAYLORC
Report number.....1197265429
Raw file.....DISK:[TAYLORC]5697326014.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;92
Last method update..15-DEC-1997 16:55:40.13

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....21

Acq. date.....14-NOV-1997 06:19:23
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....$1660_0.20
Notes.....138-WS-27590-3

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min
Area reject.....100 count(s)
Noise threshold.....10.0 microvolts
Start peak width....6.00 sec(s)
Min. window.....8.00 sec

Delay time.....6.500 min
No. peaks found.....55
Area threshold.....120
Area/Pk.Ht.....H
% window.....0.00

Analysis type.....EXTERNAL STANDARD
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic
Calib. factors.....Replace
Volume injected.....1.00000

A/D range.....1.0 volt(s)

Origin treatment....Ignore
Retention times.....Unaltered
(1/x,y) exponent....-1

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
19.22	PCB254;5	3		

EXTERNAL STANDARD CALIBRATION

Calibration Sample name: $1660_0.20

Peak Name	R.T.(min)	Peak Ht	Conc	CF	Ref	Std
CL4XYL	6.799	58744	4.0000E-02	1.469E+06		
PCB016;1	10.107	8559	4.0000E-02	2.140E+05		
PCB016;2	11.342	15617	4.0000E-02	3.904E+05		
PCB016;3	11.895	5382	4.0000E-02	1.346E+05		
PCB016;4	12.495	4710	4.0000E-02	1.178E+05		
PCB015;5	13.609	6816	4.0000E-02	1.704E+05		
PCB260;1	15.071	5919	4.0000E-02	1.480E+05		
PCB260;2	15.343	6261	4.0000E-02	1.565E+05		
PCB254;1	16.564	501				

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PCB254;2	16.814	1210		
PCB260;3	17.199	9421	4.0000E-02	2.355E+05
PCB260;4	17.476	4371	4.0000E-02	1.093E+05
PCB254;3	17.678	874		
PCB260;5	17.869	11882	4.0000E-02	2.970E+05
PCB254;4	18.239	18391		
DBUCLE	22.006	41468	4.0000E-02	1.037E+06

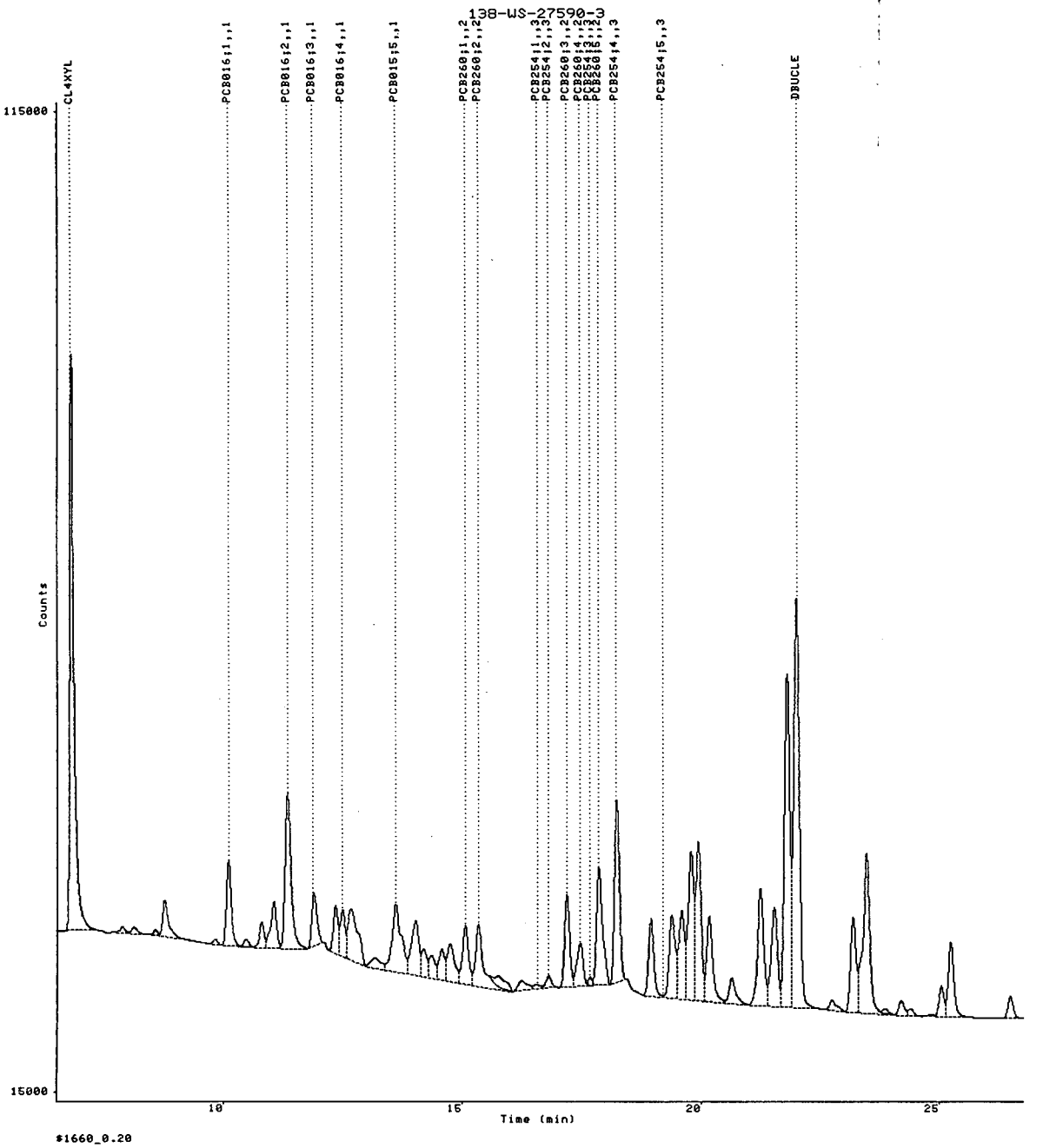
METHOD CALIBRATION CHANGES

Peak Name	Old R.T. (min)	New R.T. (min)	Old CF	New CF	% Rel. St. Dev.	N runs
CL4XYL	6.772	6.772	1.469E+06	1.469E+06		1
PCB016;1	10.100	10.100	2.140E+05	2.140E+05		1
PCB016;2	11.337	11.337	3.904E+05	3.904E+05		1
PCB016;3	11.879	11.879	1.346E+05	1.346E+05		1
PCB016;4	12.497	12.497	1.178E+05	1.178E+05		1
PCB015;5	13.603	13.603	1.704E+05	1.704E+05		1
PCB260;1	15.075	15.075	1.480E+05	1.480E+05		1
PCB260;2	15.349	15.349	1.565E+05	1.565E+05		1
PCB254;1	16.574	16.574				0
PCB254;2	16.806	16.806				0
PCB260;3	17.201	17.201	2.355E+05	2.355E+05		1
PCB260;4	17.477	17.477	1.093E+05	1.093E+05		1
PCB254;3	17.673	17.673				0
PCB260;5	17.864	17.864	2.970E+05	2.970E+05		1
PCB254;4	18.234	18.234				0
DBUCLE	22.012	22.012	1.037E+06	1.037E+06		1

ANALYSIS NOTES

1: ERROR in calibration data for Sample or Internal Std. peak. (145)
2: WARNING: Peak windows overlap. Check peak identification. (245)

Data file: DISK:[TAYLORC]5697326014.RAW;1
Report: 1197265429
Acquired: 14-NOV-1997 06:19:23
Time range: 6.50-26.75



0410

Date.....15-DEC-1997 16:55:48.58 User: TAYLORC
Report number.....1197265430
Raw file.....DISK:[TAYLORC]5697326015.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;93
Last method update..15-DEC-1997 16:55:55.58

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....23

Acq. date.....14-NOV-1997 06:56:05
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....$1660_1.0
Notes.....138-WS-27590-2

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....65
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Calib. factors.....Replace Retention times.....Unaltered
Volume injected.....1.00000 (1/x,y) exponent....-1

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
16.57	PCB254;1	3		
19.22	PCB254;5	3		

EXTERNAL STANDARD CALIBRATION

Calibration Sample name: $1660_1.0

Peak Name	R.T.(min)	Peak Ht	Conc	CF	Ref	Std
CL4XYL	6.797	266553	0.20000	1.333E+06		
PCB016;1	10.100	40599	0.20000	2.030E+05		
PCB016;2	11.331	75357	0.20000	3.768E+05		
PCB016;3	11.884	30595	0.20000	1.530E+05		
PCB016;4	12.491	20557	0.20000	1.028E+05		
PCB015;5	13.603	26913	0.20000	1.346E+05		
PCB260;1	15.067	21717	0.20000	1.086E+05		
PCB260;2	15.337	24211	0.20000	1.211E+05		

PCB254;2	16.785	7417		
PCB260;3	17.195	44991	0.20000	2.250E+05
PCB260;4	17.472	22180	0.20000	1.109E+05
PCB254;3	17.671	9398		
PCB260;5	17.865	56496	0.20000	2.825E+05
PCB254;4	18.234	92910		
DBUCLE	22.005	195086	0.20000	9.754E+05

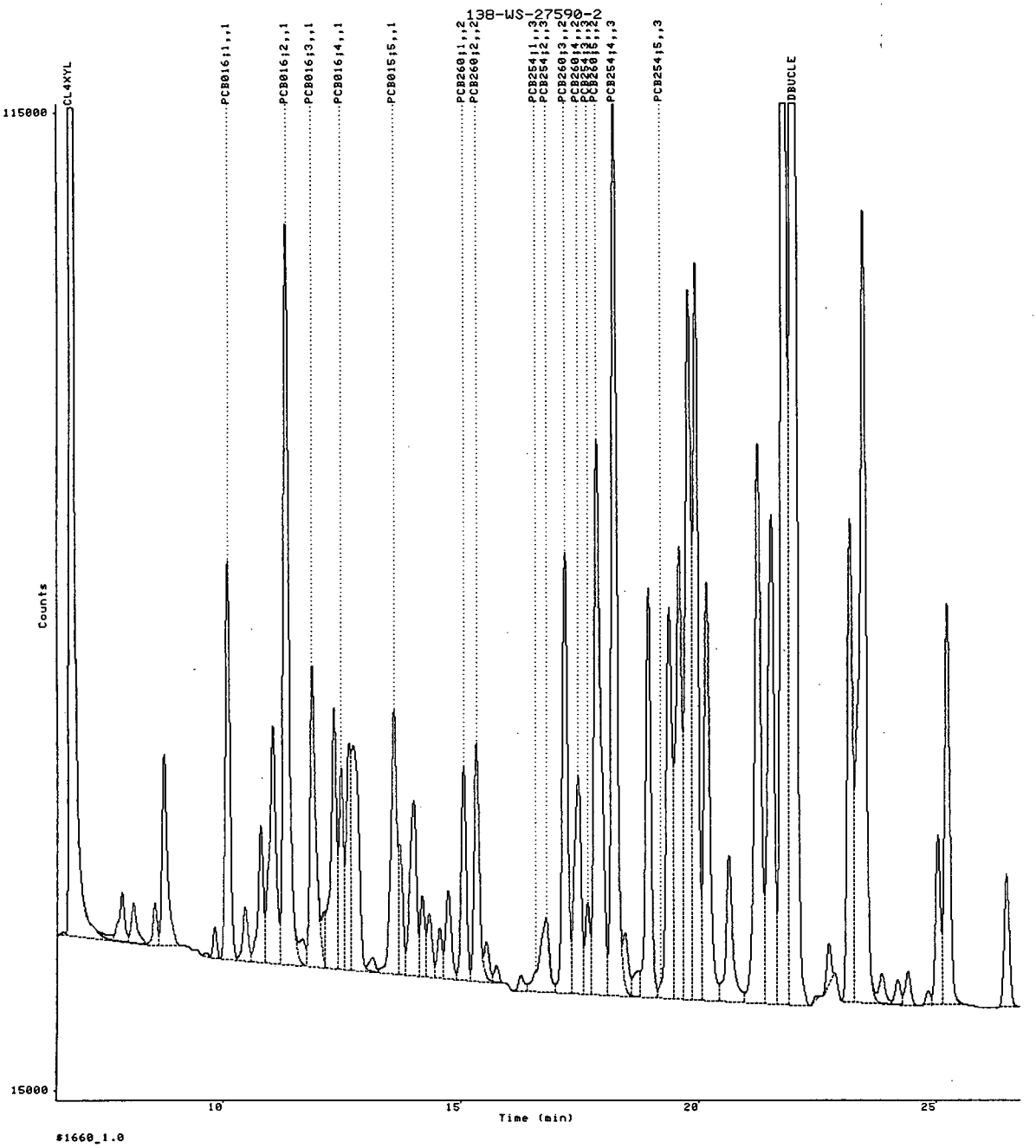
METHOD CALIBRATION CHANGES

Peak Name	Old R.T. (min)	New R.T. (min)	Old CF	New CF	% Rel. St. Dev.	N runs
CL4XYL	6.772	6.772	1.333E+06	1.333E+06		1
PCB016;1	10.100	10.100	2.030E+05	2.030E+05		1
PCB016;2	11.337	11.337	3.768E+05	3.768E+05		1
PCB016;3	11.879	11.879	1.530E+05	1.530E+05		1
PCB016;4	12.497	12.497	1.028E+05	1.028E+05		1
PCB015;5	13.603	13.603	1.346E+05	1.346E+05		1
PCB260;1	15.075	15.075	1.086E+05	1.086E+05		1
PCB260;2	15.349	15.349	1.211E+05	1.211E+05		1
PCB254;2	16.806	16.806				0
PCB260;3	17.201	17.201	2.250E+05	2.250E+05		1
PCB260;4	17.477	17.477	1.109E+05	1.109E+05		1
PCB254;3	17.673	17.673				0
PCB260;5	17.864	17.864	2.825E+05	2.825E+05		1
PCB254;4	18.234	18.234				0
DBUCLE	22.012	22.012	9.754E+05	9.754E+05		1

ANALYSIS NOTES

1: ERROR in calibration data for Sample or Internal Std. peak. (145)
2: WARNING: Peak windows overlap. Check peak identification. (245)

Data file: DISK:[TAYLORC]5697326015.RAW;1
Report: 1197265430
Acquired: 14-NOV-1997 06:56:05
Time range: 6.50-26.75



0413

Date.....15-DEC-1997 16:56:05.26 User: TAYLORC
Report number.....1197265431
Raw file.....DISK:[TAYLORC]5697326016.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;94
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....22

Acq. date.....14-NOV-1997 07:32:51
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....$1660_2.0
Notes.....138-WS-27590-1

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min
Area reject.....100 count(s)
Noise threshold.....10.0 microvolts
Start peak width....6.00 sec(s)
Min. window.....8.00 sec

Delay time.....6.500 min
No. peaks found.....66
Area threshold.....120
Area/Pk.Ht.....H
% window.....0.00

Analysis type.....EXTERNAL STANDARD
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic
Calib. factors.....Replace
Volume injected.....1.00000

A/D range.....1.0 volt(s)

Origin treatment....Ignore
Retention times.....Unaltered
(1/x,y) exponent....-1

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref Std
19.22	PCB254;5	3	

EXTERNAL STANDARD CALIBRATION

Calibration Sample name: $1660_2.0

Peak Name	R.T.(min)	Peak Ht	Conc	CF	Ref Std
CL4XYL	6.796	477923	0.40000	1.195E+06	
PCB016;1	10.098	67270	0.40000	1.682E+05	
PCB016;2	11.332	130942	0.40000	3.274E+05	
PCB016;3	11.884	55074	0.40000	1.377E+05	
PCB016;4	12.490	38449	0.40000	9.612E+04	
PCB015;5	13.602	50589	0.40000	1.265E+05	
PCB260;1	15.067	41715	0.40000	1.043E+05	
PCB260;2	15.338	43894	0.40000	1.097E+05	
PCB254;1	16.570	2726			

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PCB254;2	16.808	10895		
PCB260;3	17.196	75974	0.40000	1.899E+05
PCB260;4	17.472	37426	0.40000	9.356E+04
PCB254;3	17.671	15444		
PCB260;5	17.865	93972	0.40000	2.349E+05
PCB254;4	18.235	153373		
DBUCLE	22.005	338384	0.40000	8.460E+05

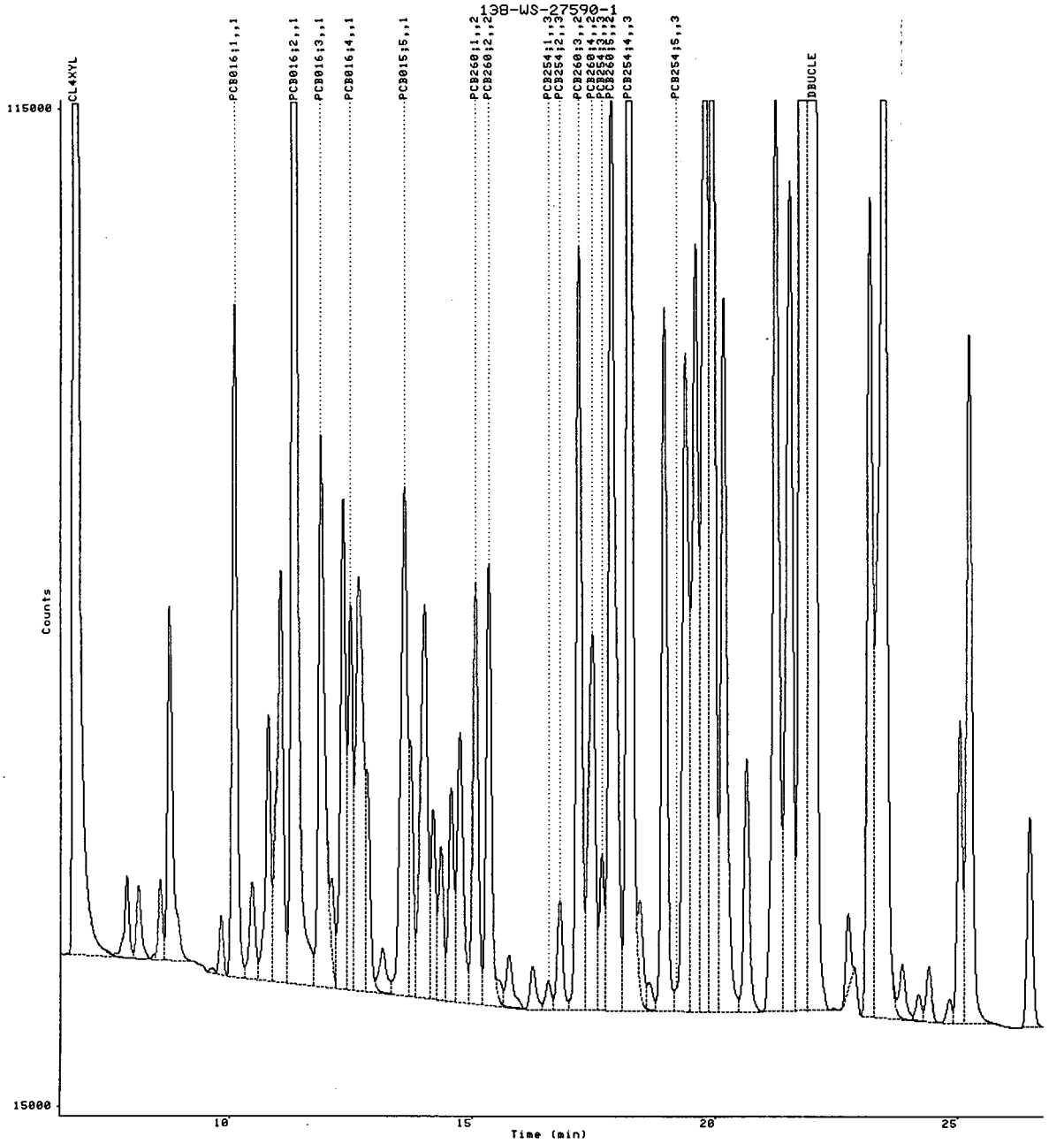
METHOD CALIBRATION CHANGES

Peak Name	Old R.T. (min)	New R.T. (min)	Old CF	New CF	% Rel. St. Dev.	N runs
CL4XYL	6.772	6.772	1.195E+06	1.195E+06		1
PCB016;1	10.100	10.100	1.682E+05	1.682E+05		1
PCB016;2	11.337	11.337	3.274E+05	3.274E+05		1
PCB016;3	11.879	11.879	1.377E+05	1.377E+05		1
PCB016;4	12.497	12.497	9.612E+04	9.612E+04		1
PCB015;5	13.603	13.603	1.265E+05	1.265E+05		1
PCB260;1	15.075	15.075	1.043E+05	1.043E+05		1
PCB260;2	15.349	15.349	1.097E+05	1.097E+05		1
PCB254;1	16.574	16.574				0
PCB254;2	16.806	16.806				0
PCB260;3	17.201	17.201	1.899E+05	1.899E+05		1
PCB260;4	17.477	17.477	9.356E+04	9.356E+04		1
PCB254;3	17.673	17.673				0
PCB260;5	17.864	17.864	2.349E+05	2.349E+05		1
PCB254;4	18.234	18.234				0
DBUCLE	22.012	22.012	8.460E+05	8.460E+05		1

ANALYSIS NOTES

1: ERROR in calibration data for Sample or Internal Std. peak. (145)
2: WARNING: Peak windows overlap. Check peak identification. (245)

Data file: DISK:[TAYLORC]5697326016.RAW;1
Report: 1197265431
Acquired: 14-NOV-1997 07:32:51
Time range: 6.50-26.75



$1660_2.0

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Date.....15-DEC-1997 16:56:36.10 User: TAYLORC
Report number.....1197265433
Raw file.....DISK:[TAYLORC]5697326002.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....17

Acq. date.....13-NOV-1997 22:58:46
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....PCB221_2.0
Notes.....138-WS-27569-1

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....54
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...1.00000E+00

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EXTERNAL STANDARD ANALYSIS
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Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref Std	BL	Group
CL4XYL	6.795	-1.38	0.4936 +	556125		BE	
	7.789			5691		EV	
	7.873			11135		EV	
	8.110			28250		VE	
	8.422			1884		EV	
	8.565			18910		VV	
	8.757			56104		VE	
	8.929			9706		EB	
	9.804			4017		BV	
PCB016;1	10.086	0.82	0.04736	10595		VB	1
	10.480			1011		BV	
	10.692			2800		VV	
	10.797			2102		VV	
	11.058			6046		VV	
PCB016;2	11.340	-0.16	0.03106	12750		VB	1

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PCB016;3	11.895	-0.94	0.03725	5578	BV	1
	12.348			4954	VV	
PCB016;4	12.491	0.37	0.02493	2792	VV	1
	12.796			6135	VB	
	13.117			624	BB	
PCB015;5	13.592	0.66	0.01499	2397	BV	1
	14.013			1118	VV	
	14.204			407	VV	
	14.361			1055	VV	
	14.575			2301	VV	
	14.768			2213	VV	
PCB260;1	15.075	0.03	0.02066	2799	VV	2
PCB260;2	15.345	0.23	0.02412	3359	VV	2
	15.585			1252	VV	
	15.767			1662	VB	
	16.257			1478	BV	
PCB254;1	16.578	-0.25	3.569E-03-	1501	VV	3
PCB254;2	16.813	-0.43	5.561E-03	2227	VV	3
	17.041			760	VV	
PCB260;3	17.210	-0.52	0.01653	4206	VB	2
PCB260;4	17.479	-0.15	3.355E-03	499	BB	2
PCB254;3	17.681	-0.45	5.072E-03	2222	BV	3
PCB260;5	17.872	-0.51	2.427E-03	932	VB	2
PCB254;4	18.245	-0.65	8.184E-03	1745	BB	3
	18.953			795	BB	
PCB254;5	19.219	-0.21	5.393E-03	1112	BV	3
	19.381			1349	VV	
	19.632			1552	VV	
	19.808			2763	VE	
	20.187			330	EB	
	20.765			1478	BV	
	21.232			1139	VV	
	21.529			476	VB	
DBUCLE	22.012	-0.02	0.4601 +	374556	BB	
	23.193			299	BB	
	23.476			363	BB	
	24.200			2236	BB	
	25.238			147	BB	
	29.911			232	BB	

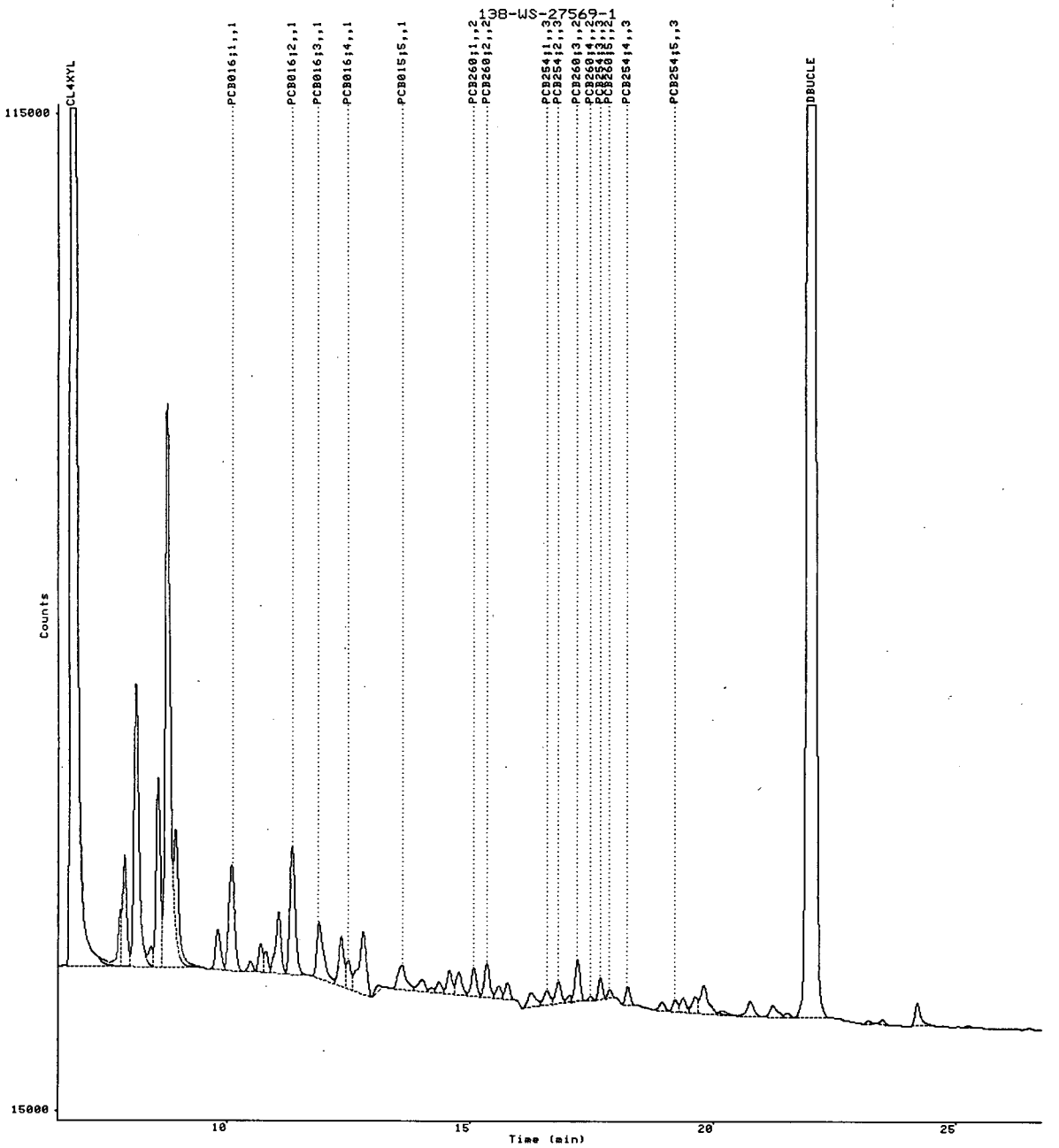
GROUP REPORT

Group	UG/ML
1	0.1556
2	6.710E-02
3	2.778E-02

ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)
2: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697326002.RAW;1
Report: 1197265433
Acquired: 13-NOV-1997 22:58:46
Time range: 6.50-26.75



PCB221_2.0

0419

Date.....15-DEC-1997 16:56:49.74 User: TAYLORC
Report number.....1197265434
Raw file.....DISK:[TAYLORC]5697326003.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....17

Acq. date.....13-NOV-1997 23:35:29
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....PCB232_2.0
Notes.....138-WS-27570-1

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
  length.....30 M
  diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....59
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...1.00000E+00

==========
EXTERNAL STANDARD ANALYSIS
==========
Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref Std	BL	Group
CL4XYL	6.795	-1.36	0.3682	447911		BE	
	7.622			546		EV	
	7.872			8226		EV	
	8.109			13465		EB	
	8.564			10290		BV	
	8.756			36504		VE	
	8.927			4191		EB	
	9.645			637		BV	
	9.823			3724		VB	
PCB016;1	10.099	0.08	0.1644	33102		BB	1
	10.469			4635		BV	
	10.801			11319		VV	
	11.054			22452		VV	
PCB016;2	11.332	0.31	0.1628	61592		VV	1
PCB016;3	11.885	-0.36	0.1768	25649		VE	1

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	12.105			2686	EV	
	12.340			21704	VV	
PCB016;4	12.492	0.27	0.1403	15309	VV	1
	12.781			26773	VE	
	13.080			1228	EB	
PCB015;5	13.602	0.04	0.1011	14888	BB	1
	13.897			8866	BB	
	14.200			3822	BV	
	14.356			10006	VV	
	14.567			19827	VV	
	14.762			25418	VV	
PCB260;1	15.070	0.32	0.03612	4593	VB	2
PCB260;2	15.340	0.55	0.04254	5864	BV	2
	15.578			3276	VV	
	15.762			25058	VB	
	16.277			2479	BV	
PCB254;1	16.576	-0.10	0.02229	4104	VV	3
PCB254;2	16.809	-0.19	0.01724	4994	VV	3
	17.046			4293	VV	
PCB260;3	17.205	-0.24	0.03212	7990	VE	2
PCB260;4	17.470	0.39	0.01089	1387	EV	2
PCB254;3	17.677	-0.27	0.01308	5327	VV	3
PCB260;5	17.865	-0.07	4.097E-03	1459	VV	2
	18.032			2382	VV	
PCB254;4	18.241	-0.45	8.086E-03	1723	VB	3
	18.912			1444	BB	
PCB254;5	19.210	0.30	0.01834	3797	BE	3
	19.377			569	EB	
	19.628			569	BV	
	19.812			1203	VB	
	20.166			544	BB	
	20.403			51	BB	
	20.761			1530	BV	
	21.224			3548	VV	
	21.538			1538	VV	
DBUCLE	22.009	0.21	0.3330	295225	VB	
	22.559			559	BB	
	23.196			1189	BV	
	23.476			1519	VB	
	24.195			1647	BB	
	25.034			293	BV	
	25.233			663	VB	
	26.490			160	BB	
	29.903			134	BB	

GROUP REPORT

Group	UG/ML
1	0.7454
2	0.1258
3	7.904E-02

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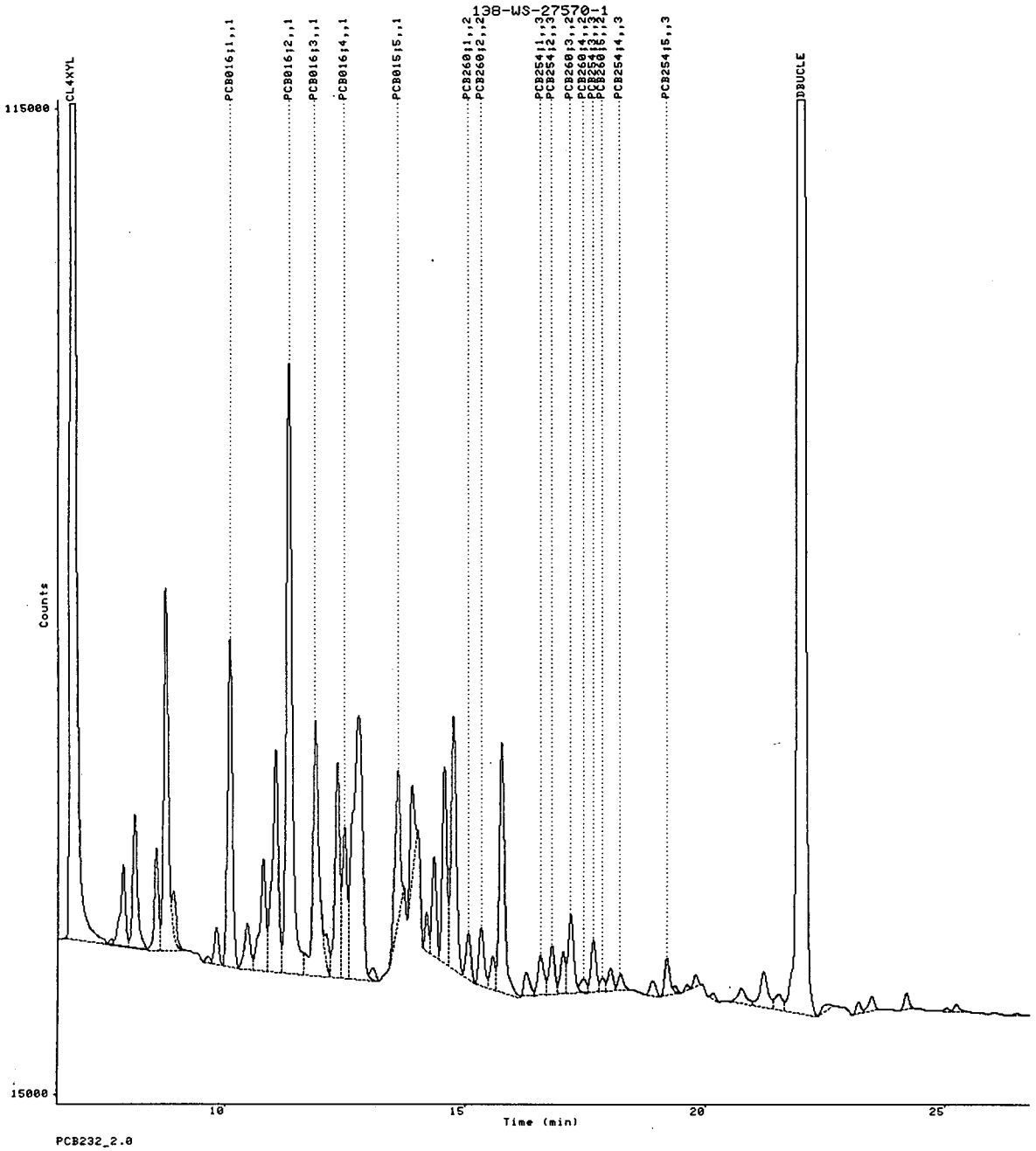
ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)

Data file: DISK:[TAYLORC]5697326003.RAW;1
Report: 1197265434
Acquired: 13-NOV-1997 23:35:29
Time range: 6.50-26.75



0422

Date.....15-DEC-1997 16:57:03.44 User: TAYLORC
Report number.....1197265435
Raw file.....DISK:[TAYLORC]5697326004.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....17

Acq. date.....14-NOV-1997 00:12:15
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....PCB242_2.0
Notes.....138-WS-27571-1

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....84
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...1.00000E+00

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EXTERNAL STANDARD ANALYSIS
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Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref Std	BL	Group
	6.628			1271		BV	
CL4XYL	6.795	-1.35	0.2504	325928		VE	
	7.254			592		EB	
	7.671			17399		BV	
	7.869			6616		VV	
	8.113			4917		VV	
	8.221			14001		VB	
	8.427			193		BV	
	8.560			5093		VV	
	8.753			22790		VE	
	9.108			686		EB	
	9.520			385		BV	
	9.645			1026		VB	
	9.827			2804		BB	
PCB016;1	10.097	0.18	0.1933	38122		BE	1

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	10.469			4577	EV	
	10.797			11626	VV	
	11.053			45937	VV	
PCB016;2	11.327	0.60	0.1838	68691	VE	1
	11.698			2278	EV	
PCB016;3	11.880	-0.05	0.1905	27564	VE	1
	12.124			3241	EV	
	12.334			23606	VV	
PCB016;4	12.490	0.41	0.1467	15960	VV	1
	12.672			18214	VE	
	13.063			468	EV	
	13.160			530	EB	
	13.316			365	BV	
PCB015;5	13.601	0.12	0.1576	22512	VV	1
	13.723			10792	VV	
	14.021			18762	VV	
	14.193			8972	VV	
	14.349			16737	VV	
	14.561			26480	VV	
	14.757			31023	VV	
PCB260;1	15.067	0.50	0.04952	6133	VB	2
PCB260;2	15.339	0.60	0.05719	7817	BV	2
	15.575			4827	VV	
	15.756			27958	VE	
	16.243			4169	EV	
PCB254;1	16.574	-0.02	0.02911	5038	VV	3
PCB254;2	16.800	0.35	0.02286	6311	VV	3
	17.041			5787	VV	
PCB260;3	17.246	-2.67	0.3057	62616	VE	2
PCB260;4	17.452	1.51	7.071E-03	938	EV	2
PCB254;3	17.669	0.25	0.02288	9091	VE	3
PCB260;5	17.857	0.43	1.776E-03-	726	EV	2
	18.029			3507	VE	
PCB254;4	18.227	0.40	3.707E-03-	737	EV	3
	18.346			854	EV	
	18.543			277	VB	
	18.857			1040	BB	
PCB254;5	19.214	0.08	0.03232	6657	BV	3
	19.379			2493	VV	
	19.824			10332	VE	
	20.093			1056	EV	
	20.398			1821	EV	
	20.583			2294	VV	
	20.757			3019	VV	
	21.205			5407	VB	
DBUCLE	22.008	0.25	0.2175	207280	BE	
	22.343			2684	EB	
	23.240			3139	BV	
	23.611			3515	VV	
	23.856			6005	VV	
	24.190			53203	VV	
	24.502			14568	VV	
	24.863			14739	VV	
	25.011			17463	VV	
	25.373			19936	VV	
	25.651			12468	VV	
	25.853			6541	VV	
	26.024			7575	VV	
	26.382			1977	VV	
	26.579			3373	VV	

26.768	2009	VB
27.304	248	BB
27.613	445	BB
28.041	357	BB
28.871	539	BV
29.015	420	VB
29.433	810	BB
29.878	239	BB
30.326	1836	BB

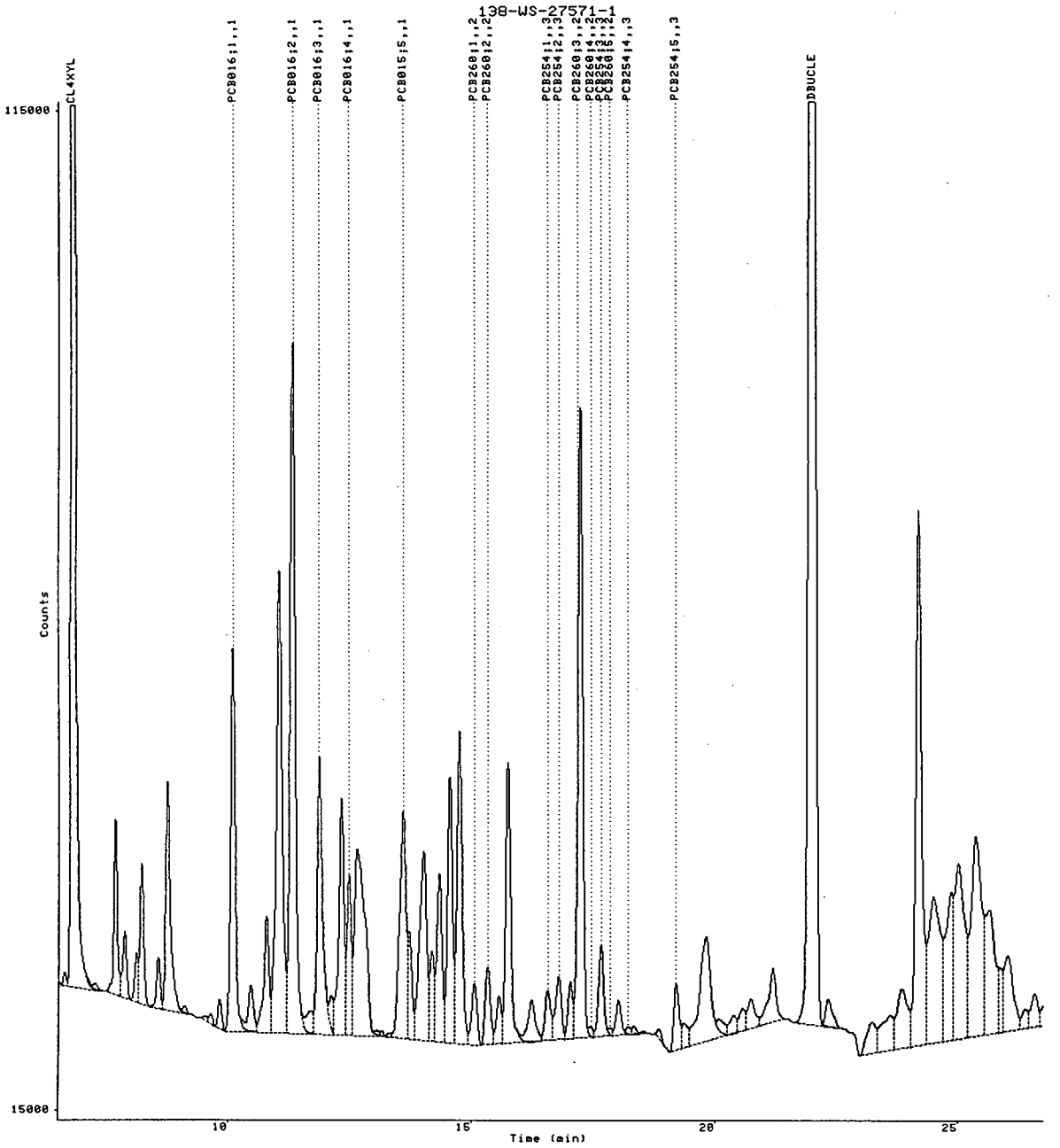
GROUP REPORT

Group	UG/ML
1	0.8718
2	0.4212
3	0.1109

ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)
2: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697326004.RAW;1
Report: 1197265435
Acquired: 14-NOV-1997 00:12:15
Time range: 6.50-26.75



PCB242_2.0

0426

Date.....15-DEC-1997 16:57:17.85 User: TAYLORC
Report number.....1197265436
Raw file.....DISK:[TAYLORC]5697326005.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....17

Acq. date.....14-NOV-1997 00:49:00
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....PCB248_2.0
Notes.....138-WS-27572-1

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
length.....30 M
diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....58
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...1.00000E+00

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EXTERNAL STANDARD ANALYSIS
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Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref Std	BL	Group
	6.617			125		BV	
CL4XYL	6.796	-1.44	0.2283	300777		VB	
	7.673			87		BB	
	7.876			4317		BB	
	8.423			769		BB	
	8.762			1444		BB	
	9.828			751		BB	
PCB016;1	10.102	-0.13	0.09197	19589		BE	1
	10.461			1378		EV	
	10.801			8984		VV	
	11.056			8282		VV	
PCB016;2	11.335	0.13	0.1611	60992		VV	1
PCB016;3	11.887	-0.51	0.1200	17589		VV	1
	12.114			6662		VV	
	12.343			16713		VV	

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PCB016;4	12.493	0.23	0.3016	30376	VV	1
	12.670			33135	VV	
	12.839			13998	VB	
	13.173			3650	BB	
PCB015;5	13.606	-0.21	0.1951	27324	BB	1
	14.024			30947	BV	
	14.198			9413	VV	
	14.356			30258	VV	
	14.567			45964	VV	
	14.764			55739	VE	
PCB260;1	15.070	0.30	0.1044	12289	EV	2
PCB260;2	15.343	0.39	0.1287	16856	VV	2
	15.585			11399	VV	
	15.764			52738	VB	
	16.250			8317	BV	
PCB254;1	16.577	-0.17	0.07128	10642	VV	3
PCB254;2	16.809	-0.20	0.05392	13449	VV	3
	17.039			13338	VV	
PCB260;3	17.205	-0.25	0.1051	24749	VE	2
PCB260;4	17.472	0.33	0.02409	2927	EV	2
PCB254;3	17.674	-0.09	0.05592	21480	VE	3
PCB260;5	17.785	4.74	6.574E-04-	372	EV	2
	18.030			7090	VV	
PCB254;4	18.243	-0.55	0.02032	4457	VB	3
	18.959			1730	BV	
PCB254;5	19.212	0.18	0.08699	17434	VE	3
	19.607			2736	EV	
	19.799			6037	VV	
	19.943			3013	VV	
	20.188			1756	VV	
	20.757			1019	VB	
	21.256			2447	BV	
	21.534			2462	VV	
	21.823			9128	VV	
DBUCLE	22.008	0.23	0.2333	220223	VB	
	23.197			2305	BV	
	23.476			4686	VB	
	24.198			3611	BB	
	25.038			909	BV	
	25.234			3054	VE	
	25.628			547	EB	
	26.484			550	BB	
	30.245			3023	BB	

GROUP REPORT

Group	UG/ML
1	0.8697
2	0.3630
3	0.2884

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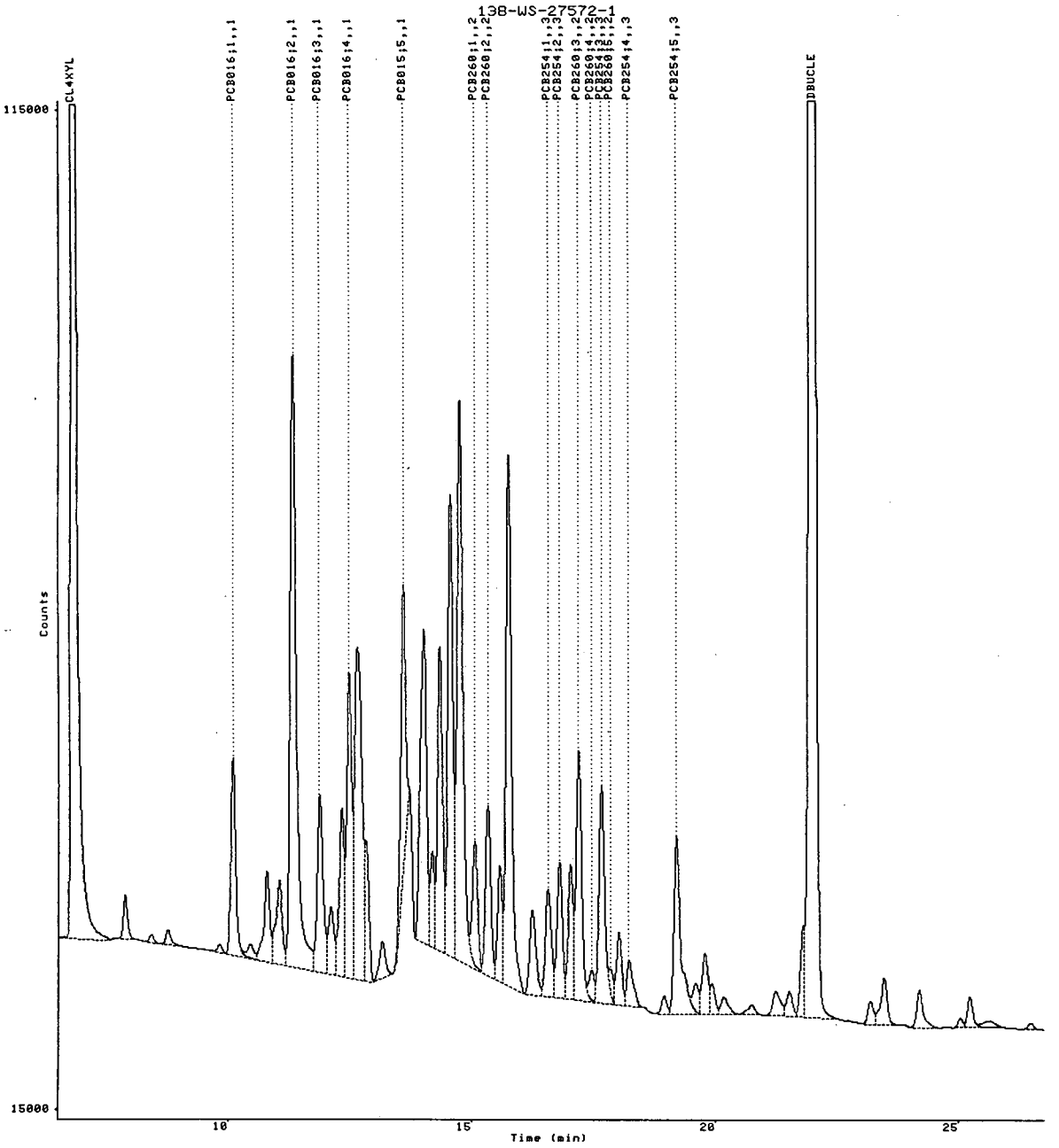
ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)
2: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697326005.RAW;1
Report: 1197265436
Acquired: 14-NOV-1997 00:49:00
Time range: 6.50-26.75



0429

Date.....15-DEC-1997 16:57:31.51 User: TAYLORC
Report number.....1197265437
Raw file.....DISK:[TAYLORC]5697326011.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....23

Acq. date.....14-NOV-1997 04:29:06
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....ICV1254_1.0
Notes.....138-WS-27533

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....48
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...1.00000E+00

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
6.77	CL4XYL			
22.01	DBUCLE			

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref	Std	BL	Group
	9.279			6576			BB	
PCB016;1	10.103	-0.20	7.959E-04-	664			BB	1
	10.795			145			BB	
	11.054			280			BB	
PCB016;2	11.338	-0.06	3.974E-03	1823			BB	1
PCB016;3	11.890	-0.67	1.843E-03-	333			BV	1
	12.115			485			VV	

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PCB016;4	12.496	0.07	0.1909	20338	VV	1
	12.641			7328	VB	
	13.165			279	BB	
PCB015;5	13.611	-0.46	0.08921	13221	BV	1
	14.033			5922	VV	
	14.362			5687	VV	
	14.571			19950	VV	
	14.767			8555	VV	
PCB260;1	15.072	0.19	0.4047 +	41818	VV	2
PCB260;2	15.341	0.50	0.5118 +	51104	VV	2
	15.584			20526	VV	
	15.768			6676	VB	
	16.246			15887	BV	
PCB254;1	16.575	-0.05	0.1492	20232	VV	3
PCB254;2	16.809	-0.18	0.1604	36018	VV	3
	17.034			13062	VV	
PCB260;3	17.204	-0.19	0.3736	72724	VE	2
PCB260;4	17.475	0.13	0.1551	17033	EV	2
PCB254;3	17.675	-0.14	0.1615	57990	VV	3
PCB260;5	17.862	0.12	0.1091	32338	VV	2
	17.992			19144	VV	
PCB254;4	18.238	-0.26	0.2244	45793	VE	3
	18.449			4137	EV	
	18.650			2592	EV	
	18.955			18197	VV	
PCB254;5	19.213	0.10	0.1435	27901	VV	3
	19.373			30765	VV	
	19.600			27702	VV	
	19.796			61796	VE	
	20.260			11631	EV	
	20.648			1280	VB	
	21.357			19274	BV	
	21.520			21218	VV	
	21.813			22075	VB	
	23.211			3221	BV	
	23.474			13184	VE	
	23.860			748	EB	
	24.198			1112	BB	
	25.039			496	BV	
	25.234			1045	VB	
	27.577			374	BB	

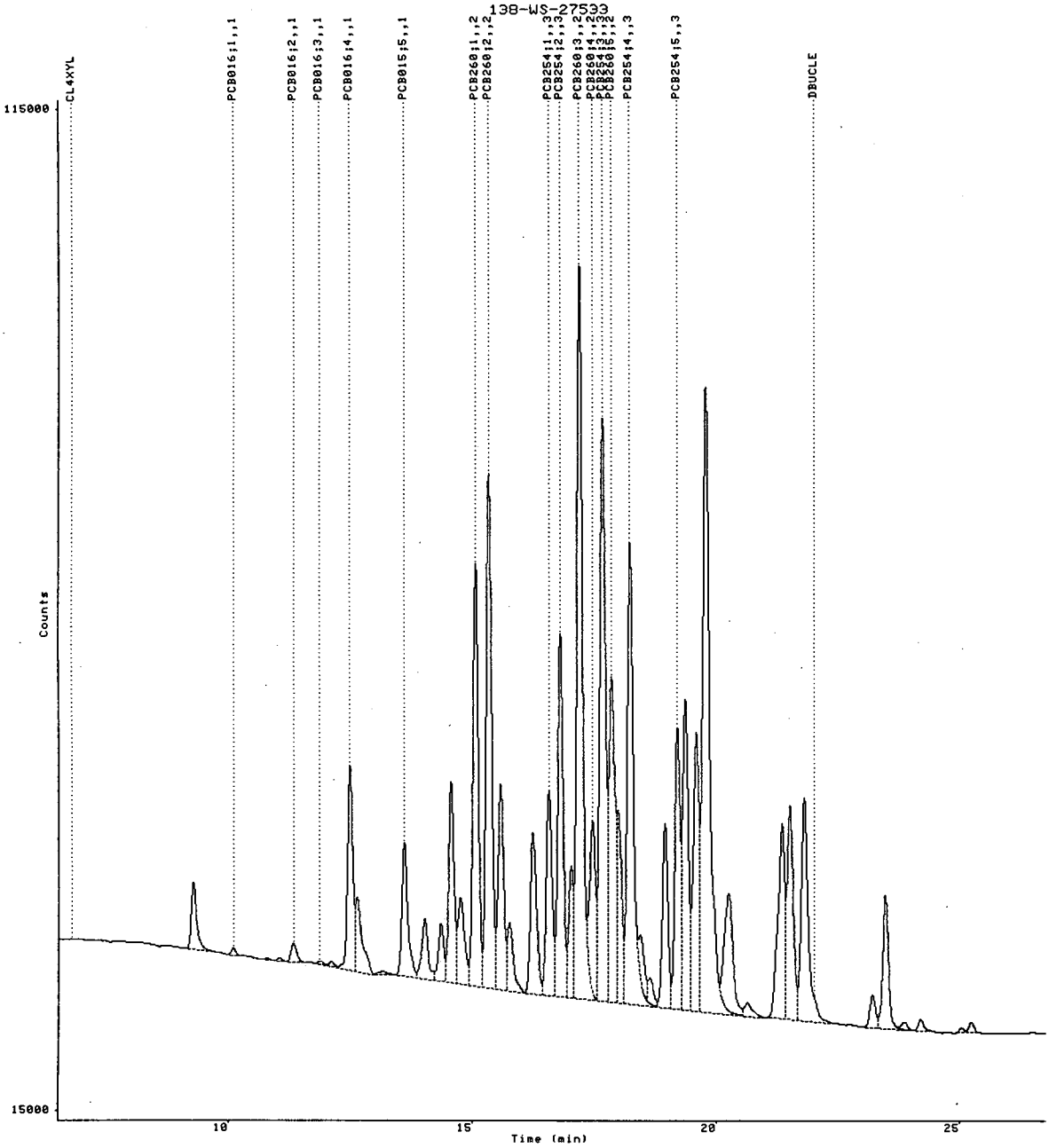
GROUP REPORT

Group	UG/ML
1	0.2867
2	1.554
3	0.8390

ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)
2: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697326011.RAW;1
Report: 1197265437
Acquired: 14-NOV-1997 04:29:06
Time range: 6.50-26.75



ICV1254_1.0

0432

Date.....15-DEC-1997 16:57:45.18 User: TAYLORC
Report number.....1197265438
Raw file.....DISK:[TAYLORC]5697327017.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....22

Acq. date.....14-NOV-1997 08:09:34
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....ICV_1660_1.0
Notes.....138-WS-27589-1

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....74
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...1.00000E+00

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref Std
16.57	PCB254;1	3	
19.22	PCB254;5	3	

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref Std	BL	Group
	6.649			181		BV	
CL4XYL	6.796	-1.45	5.615E-03	9281		VB	
	7.135			89		BB	
	7.457			285		BV	
	7.668			1888		VV	
	7.781			2332		VV	
	7.865			3013		VV	

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	8.111			10524	VB	
	8.563			9456	BV	
	8.755			33090	VB	
	9.649			641	BV	
	9.826			4132	VV	
PCB016;1	10.100	-0.00	0.2818	52162	VB	1
	10.470			7350	BV	
	10.798			15732	VV	
	11.057			32839	VV	
PCB016;2	11.329	0.49	0.2361	85657	VE	1
	11.679			3970	EV	
PCB016;3	11.882	-0.19	0.2428	34806	VV	1
	12.337			28394	VV	
PCB016;4	12.491	0.37	0.2000	21217	VV	1
	12.665			24681	VV	
	12.839			11336	VB	
	13.082			137	BB	
PCB015;5	13.602	0.09	0.2068	28783	BV	1
	13.718			13481	VV	
	14.014			21348	VV	
	14.197			10063	VV	
	14.332			11911	VV	
	14.563			7754	VV	
	14.740			12935	VV	
	14.925			6237	VV	
PCB260;1	15.062	0.79	0.1559	17861	VV	2
PCB260;2	15.336	0.75	0.1483	19176	VV	2
	15.539			13533	VE	
	15.753			2749	EV	
	16.064			361	VB	
	16.261			476	BB	
PCB254;2	16.715	5.48	0.04416	11234	BV	3
PCB260;3	17.196	0.32	0.1990	43971	VV	2
PCB260;4	17.471	0.36	0.2003	21413	VV	2
PCB254;3	17.668	0.29	0.01708	6866	VV	3
PCB260;5	17.865	-0.05	0.2106	57885	VV	2
PCB254;4	18.234	0.02	0.5466 +	94655	VE	3
	18.456			5099	EV	
	18.950			39905	VB	
	19.390			41066	BV	
	19.597			45861	VV	
	19.789			72009	VV	
	19.945			88722	VV	
	20.175			49904	VV	
	20.648			20868	VV	
	21.250			68846	VV	
	21.538			56029	VV	
	21.805			201998	VE	
DBUCLE	22.006	0.33	8.839E-03	10155	EV	
	22.333			1822	VV	
	22.483			2470	VV	
	22.749			9583	VB	
	23.191			59458	BV	
	23.469			95685	VE	
	23.855			5624	EV	
	24.189			132057	VE	
	24.830			6068	EV	
	25.033			27837	EV	
	25.226			55382	VE	
	25.646			2665	EV	

26.049	1273	EB
26.479	10398	BB
27.322	215	BV
27.573	7464	VB
28.032	107	BB
29.432	334	BB
30.343	736	BB

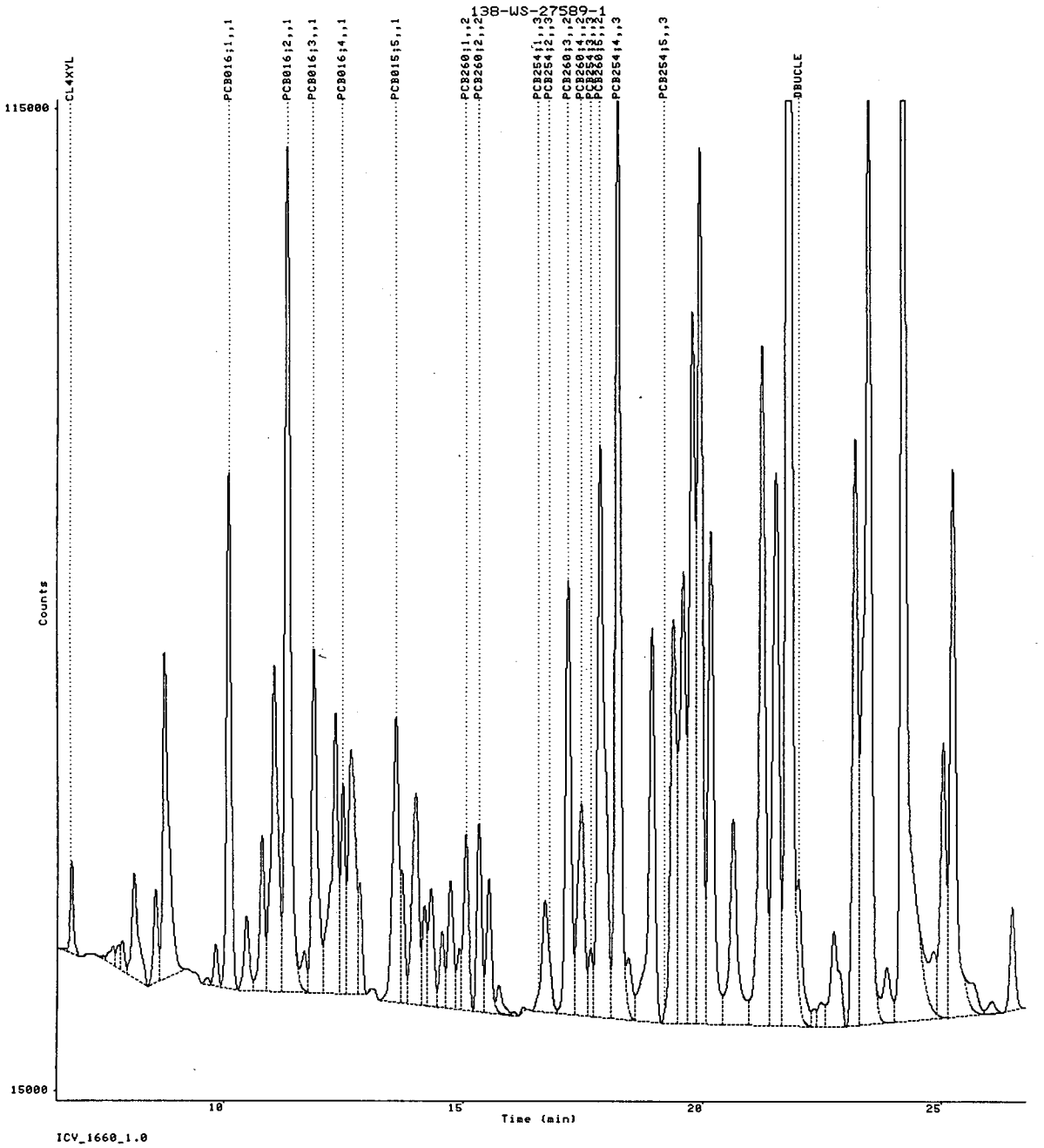
GROUP REPORT

Group	UG/ML
1	1.167
2	0.9141
3	0.6079

ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)
2: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697327017.RAW;1
Report: 1197265438
Acquired: 14-NOV-1997 08:09:34
Time range: 6.50-26.75



Date.....15-DEC-1997 16:57:59.47 User: TAYLORC
Report number.....1197265439
Raw file.....DISK:[TAYLORC]5697327018.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....8

Acq. date.....22-NOV-1997 12:04:04
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....CCV_1660_1.0
Notes.....138-WS-27590

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....58
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...1.00000E+00

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
19.22	PCB254;5	3		

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref	Std	BL	Group
CL4XYL	6.817	-2.70	0.1701	231446			BE	
	7.896			4201			EV	
	8.138			3738			EV	
	8.444			944			EV	
	8.587			3850			EV	
	8.782			17230			VB	
	9.835			2970			BV	
PCB016;1	10.113	-0.79	0.1868	37009			VE	1

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	10.485			4832	EV	
	10.814			14508	VV	
	11.066			22621	VV	
PCB016;2	11.359	-1.35	0.1805	67585	VV	1
PCB016;3	11.912	-1.97	0.1973	28519	VV	1
	12.364			25306	VV	
PCB016;4	12.505	-0.49	0.2169	22819	VV	1
	12.687			24726	VV	
	12.859			11444	VV	
	13.178			3773	VV	
PCB015;5	13.620	-1.03	0.1997	27908	VV	1
	14.037			23224	VV	
	14.202			11061	VV	
	14.379			8202	VV	
	14.593			11023	VV	
	14.760			13623	VV	
PCB260;1	15.080	-0.32	0.2011	22568	VV	2
PCB260;2	15.359	-0.62	0.1785	22650	VE	2
	15.782			2563	EB	
	16.256			2485	BV	
PCB254;1	16.588	-0.83	1.721E-03-	1241	VV	3
PCB254;2	16.827	-1.25	0.01716	4974	VV	3
PCB260;3	17.216	-0.89	0.1514	34553	VV	2
PCB260;4	17.488	-0.65	0.1715	18652	VV	2
PCB254;3	17.703	-1.80	0.01335	5433	VV	3
PCB260;5	17.882	-1.10	0.1607	45856	VV	2
PCB254;4	18.264	-1.81	0.2983	58780	VB	3
	18.978			28206	BV	
	19.401			29699	VV	
	19.626			31194	VV	
	19.817			52505	VV	
	19.966			48630	VV	
	20.202			26807	VV	
	20.674			9564	VB	
	21.273			38480	BV	
	21.558			34017	VV	
	21.837			112440	VV	
DBUCLE	22.015	-0.21	0.1757	171735	VB	
	22.764			3454	BV	
	22.891			1748	VV	
	23.215			33805	VV	
	23.494			53916	VE	
	23.898			1830	EB	
	24.421			2032	BB	
	24.853			845	BV	
	25.056			12107	VV	
	25.257			28902	VB	
	26.504			8316	BB	
	27.597			1156	BB	
	28.469			289	BB	

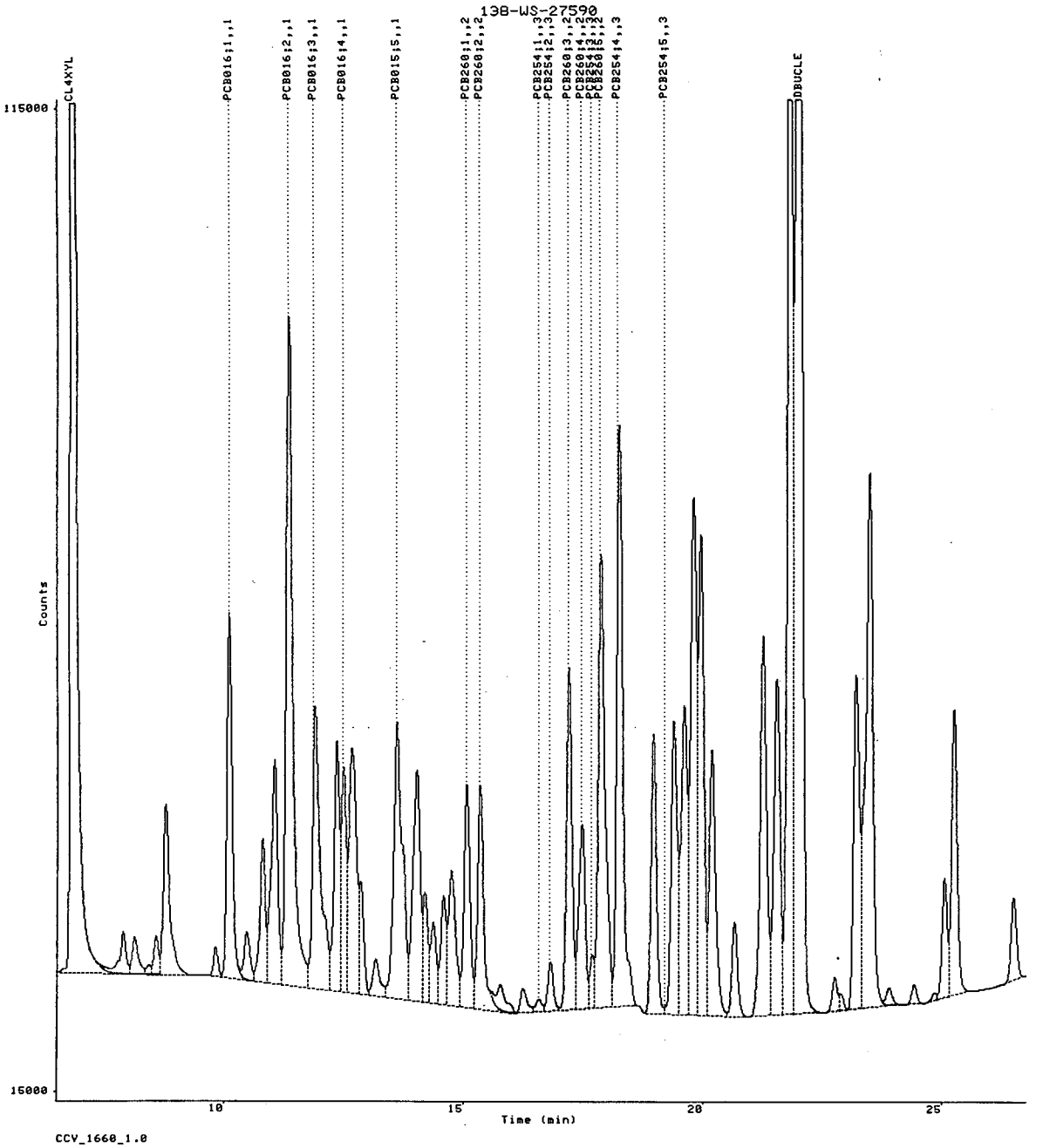
GROUP REPORT

Group	UG/ML
1	0.9812
2	0.8632
3	0.3305

ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)
2: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697327018.RAW;1
Report: 1197265439
Acquired: 22-NOV-1997 12:04:04
Time range: 6.50-26.75



0440

Date.....15-DEC-1997 17:00:29.82 User: TAYLORC
Report number.....1197265450
Raw file.....DISK:[TAYLORC]5697326027.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....9

Acq. date.....22-NOV-1997 18:48:13
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....CCV_1660_1.0
Notes.....138-WS-27590

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....57
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...1.00000E+00

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref Std
19.22	PCB254;5	3	

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref Std	BL	Group
CL4XYL	6.806	-2.05	0.1732	235232		BE	
	7.886			3518		EV	
	8.125			3321		EV	
	8.429			820		EV	
	8.574			3422		EV	
	8.769			16341		VB	
	9.820			2809		BV	
PCB016;1	10.099	0.04	0.1843	36577		VE	1

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	10.471			4912	EV	
	10.798			14523	VV	
	11.051			22522	VV	
PCB016;2	11.345	-0.46	0.1784	66895	VV	1
PCB016;3	11.896	-1.03	0.1947	28150	VV	1
	12.348			24981	VV	
PCB016;4	12.488	0.55	0.2219	23290	VV	1
	12.672			25271	VV	
	12.840			11947	VB	
	13.164			3959	BV	
PCB015;5	13.604	-0.09	0.2001	27956	VV	1
	14.021			23370	VV	
	14.186			11190	VV	
	14.364			8050	VV	
	14.579			10651	VV	
	14.742			13470	VV	
PCB260;1	15.062	0.77	0.2076	23233	VV	2
PCB260;2	15.341	0.47	0.1810	22930	VE	2
	15.762			1969	EB	
	16.241			3096	BV	
PCB254;1	16.569	0.28	6.591E-03	1925	VV	3
PCB254;2	16.808	-0.12	0.02101	5879	VV	3
PCB260;3	17.197	0.24	0.1661	37529	VV	2
PCB260;4	17.467	0.58	0.1906	20490	VV	2
PCB254;3	17.687	-0.83	0.01454	5889	VV	3
PCB260;5	17.864	-0.01	0.1774	49994	VV	2
PCB254;4	18.245	-0.68	0.3206	62490	VB	3
	18.958			30784	BV	
	19.381			32940	VV	
	19.606			34141	VV	
	19.800			57956	VV	
	19.947			54217	VV	
	20.182			29725	VV	
	20.655			10855	VB	
	21.252			42258	BV	
	21.538			37256	VV	
	21.816			120586	VV	
DBUCLE	21.995	1.00	0.1914	185294	VB	
	22.742			3799	BV	
	22.869			1941	VB	
	23.192			36966	BV	
	23.472			57839	VE	
	23.876			1984	EB	
	24.398			2256	BB	
	24.829			927	BV	
	25.035			12953	VV	
	25.235			31219	VB	
	26.481			9002	BB	
	27.571			1297	BB	

GROUP REPORT

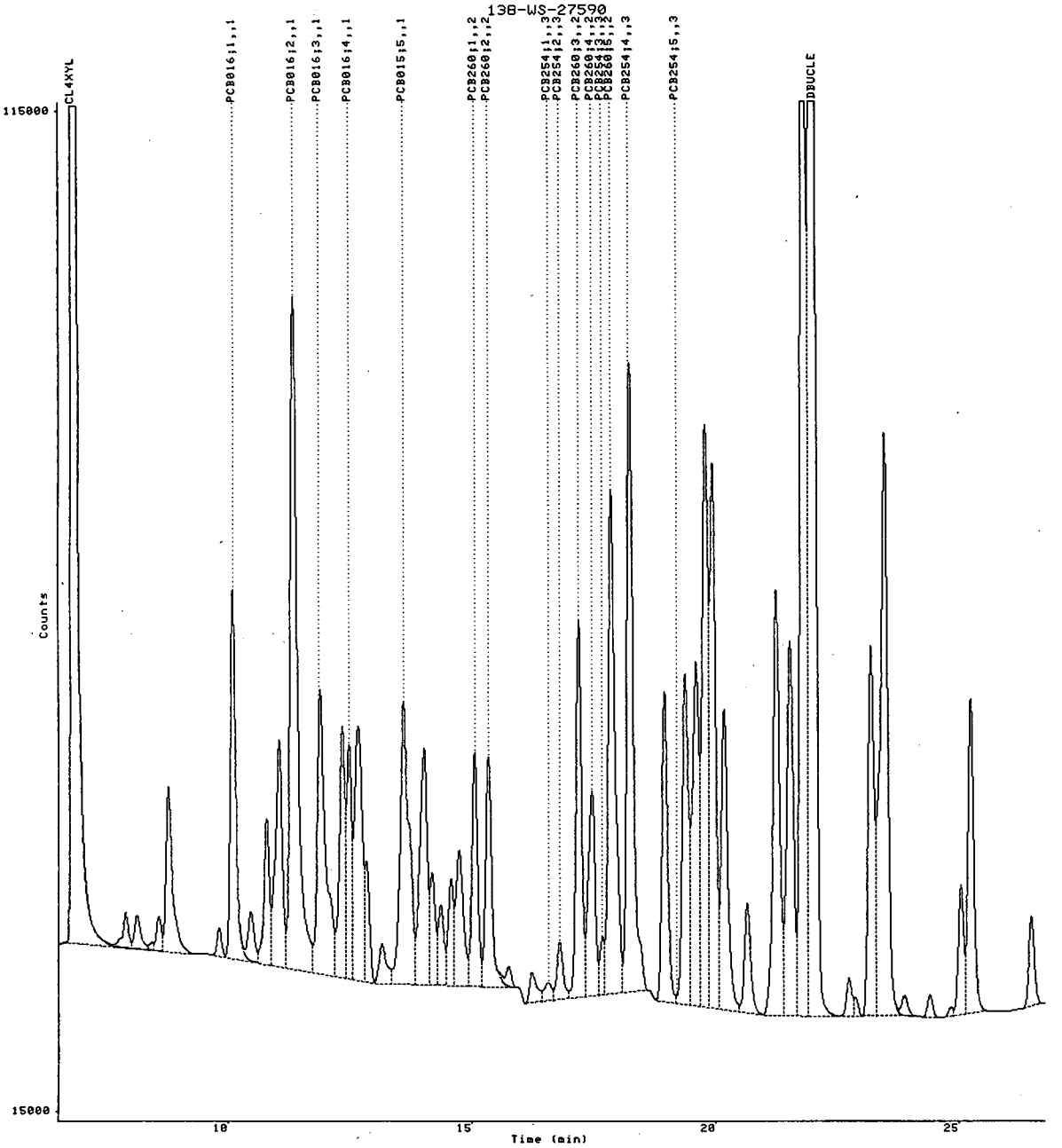
Group	UG/ML
1	0.9794
2	0.9226
3	0.3627

0442

ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)

Data file: DISK:[TAYLORC]5697326027.RAW;1
Report: 1197265450
Acquired: 22-NOV-1997 18:48:13
Time range: 6.50-26.75



CCV_1660_1.0

0444

Date.....15-DEC-1997 17:02:58.35 User: TAYLORC
Report number.....1197265461
Raw file.....DISK:[TAYLORC]5697326038.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....8

Acq. date.....23-NOV-1997 01:32:19
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....CCV_1660_1.0
Notes.....138-WS-27590

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....57
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...1.00000E+00

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
19.22	PCB254;5	3		

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref	Std	BL	Group
	6.617			59			BV	
CL4XYL	6.806	-2.03	0.1694	230533			VE	
	7.886			3610			EV	
	8.126			3330			EV	
	8.427			823			EV	
	8.575			3365			EV	
	8.771			15768			VB	
	9.820			2782			BV	

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PCB016;1	10.099	0.03	0.1817	36143	VE	1
	10.471			4670	EV	
	10.798			13964	VV	
	11.051			21856	VV	
PCB016;2	11.347	-0.58	0.1708	64324	VV	1
PCB016;3	11.898	-1.14	0.1843	26704	VV	1
	12.350			23750	VV	
PCB016;4	12.489	0.49	0.2137	22521	VV	1
	12.673			24373	VV	
	12.841			11188	VV	
	13.162			3259	VV	
PCB015;5	13.606	-0.18	0.1890	26562	VV	1
	14.022			22626	VV	
	14.186			10574	VV	
	14.365			7336	VV	
	14.579			10101	VV	
	14.742			13084	VV	
PCB260;1	15.063	0.71	0.2038	22843	VV	2
PCB260;2	15.342	0.41	0.1790	22707	VE	2
	15.763			1867	EB	
	16.238			2490	BV	
PCB254;1	16.570	0.26	1.246E-03-	1174	VV	3
PCB254;2	16.809	-0.16	0.01788	5143	VV	3
PCB260;3	17.197	0.26	0.1617	36637	VV	2
PCB260;4	17.468	0.54	0.1888	20321	VV	2
PCB254;3	17.687	-0.83	0.01345	5468	VV	3
PCB260;5	17.863	0.04	0.1773	49972	VV	2
PCB254;4	18.246	-0.72	0.3229	62876	VB	3
	18.958			31189	BV	
	19.380			33945	VV	
	19.608			35458	VV	
	19.800			59449	VV	
	19.945			56357	VV	
	20.181			30987	VV	
	20.654			11518	VB	
	21.251			44574	BV	
	21.538			39270	VV	
	21.816			125351	VV	
DBUCLE	21.994	1.10	0.2000	192698	VB	
	22.740			2892	BB	
	23.193			37979	BV	
	23.471			59645	VE	
	23.874			2088	EB	
	24.397			2360	BB	
	24.827			1003	BV	
	25.032			13689	VV	
	25.235			32129	VB	
	26.480			9488	BB	
	27.567			1428	BB	

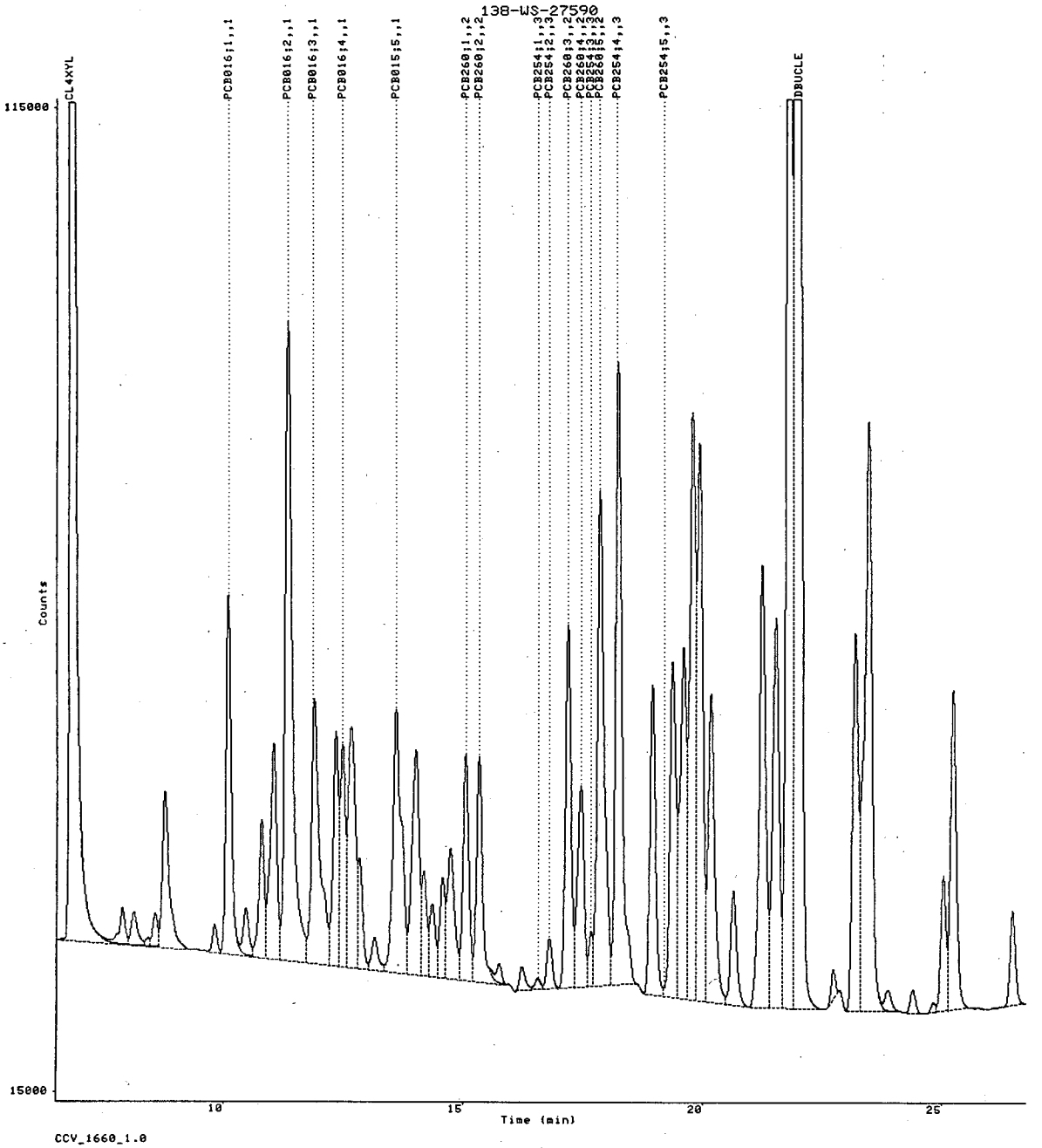
GROUP REPORT

Group	UG/ML
1	0.9397
2	0.9105
3	0.3555

ANALYSIS NOTES

```
---------------------------------------------------------------------------
  1: WARNING: Peak windows overlap. Check peak identification. (245)
  2: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)
---------------------------------------------------------------------------
```

Data file: DISK:[TAYLORC]5697326038.RAW;1
Report: 1197265461
Acquired: 23-NOV-1997 01:32:19
Time range: 6.50-26.75



CCV_1660_1.0

0448

Date.....15-DEC-1997 17:05:57.85 User: TAYLORC
Report number.....1197265472
Raw file.....DISK:[TAYLORC]5697326049.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....8

Acq. date.....23-NOV-1997 08:16:05
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....CCV_1660_1.0
Notes.....138-WS-27590

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.000 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....67
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...1.00000E+00

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
19.22	PCB254;5	3		

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref	Std	BL	Group
CL4XYL	6.806	-2.04	0.1792	242585			BE	
	7.664			245			EV	
	7.881			4286			EV	
	8.123			3429			EV	
	8.427			621			EV	
	8.573			3760			VV	
	8.767			17915			VB	
	9.819			2960			BV	

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PCB016;1	10.097	0.15	0.1938	38212	VE	1
	10.469			4412	EV	
	10.797			13773	VV	
	11.049			21915	VV	
PCB016;2	11.343	-0.38	0.1758	66002	VV	1
PCB016;3	11.894	-0.91	0.1838	26633	VV	1
	12.346			22856	VV	
PCB016;4	12.489	0.47	0.1894	20198	VV	1
	12.672			22233	VV	
	12.838			9687	VV	
	13.159			2542	VB	
PCB015;5	13.602	0.06	0.1740	24642	BV	1
	14.020			19416	VV	
	14.185			8211	VV	
	14.362			5457	VV	
	14.578			8091	VV	
	14.742			10268	VV	
PCB260;1	15.063	0.74	0.1664	18961	VV	2
PCB260;2	15.342	0.43	0.1441	18686	VB	2
	15.770			1289	BB	
	16.235			2074	BB	
PCB254;1	16.571	0.16	-2.148E-04-	968	BV	3
PCB254;2	16.808	-0.10	0.01496	4455	VV	3
PCB260;3	17.196	0.27	0.1393	32048	VV	2
PCB260;4	17.468	0.53	0.1523	16757	VV	2
PCB254;3	17.684	-0.66	0.01307	5325	VV	3
PCB260;5	17.864	0.01	0.1452	41891	VV	2
PCB254;4	18.245	-0.64	0.2770	55148	VB	3
	18.958			25742	BV	
	19.380			27582	VV	
	19.606			29221	VV	
	19.797			49966	VV	
	19.948			45917	VV	
	20.183			24990	VV	
	20.655			9274	VB	
	21.251			36980	BV	
	21.538			32858	VV	
	21.817			110714	VV	
DBUCLE	21.995	1.03	0.1790	174655	VB	
	22.743			3353	BV	
	22.876			1661	VV	
	23.195			33582	VV	
	23.472			54036	VE	
	23.883			1924	EV	
	24.148			167	EB	
	24.398			1933	BB	
	24.837			1450	BV	
	25.034			12505	VV	
	25.236			29235	VB	
	25.868			86	BB	
	26.484			8297	BE	
	26.957			372	EB	
	27.575			1151	BV	
	27.953			7246	VB	
	28.676			52	BB	
	28.942			487	BV	
	29.170			132	VB	
	29.413			87	BB	
	30.047			3923	BB	

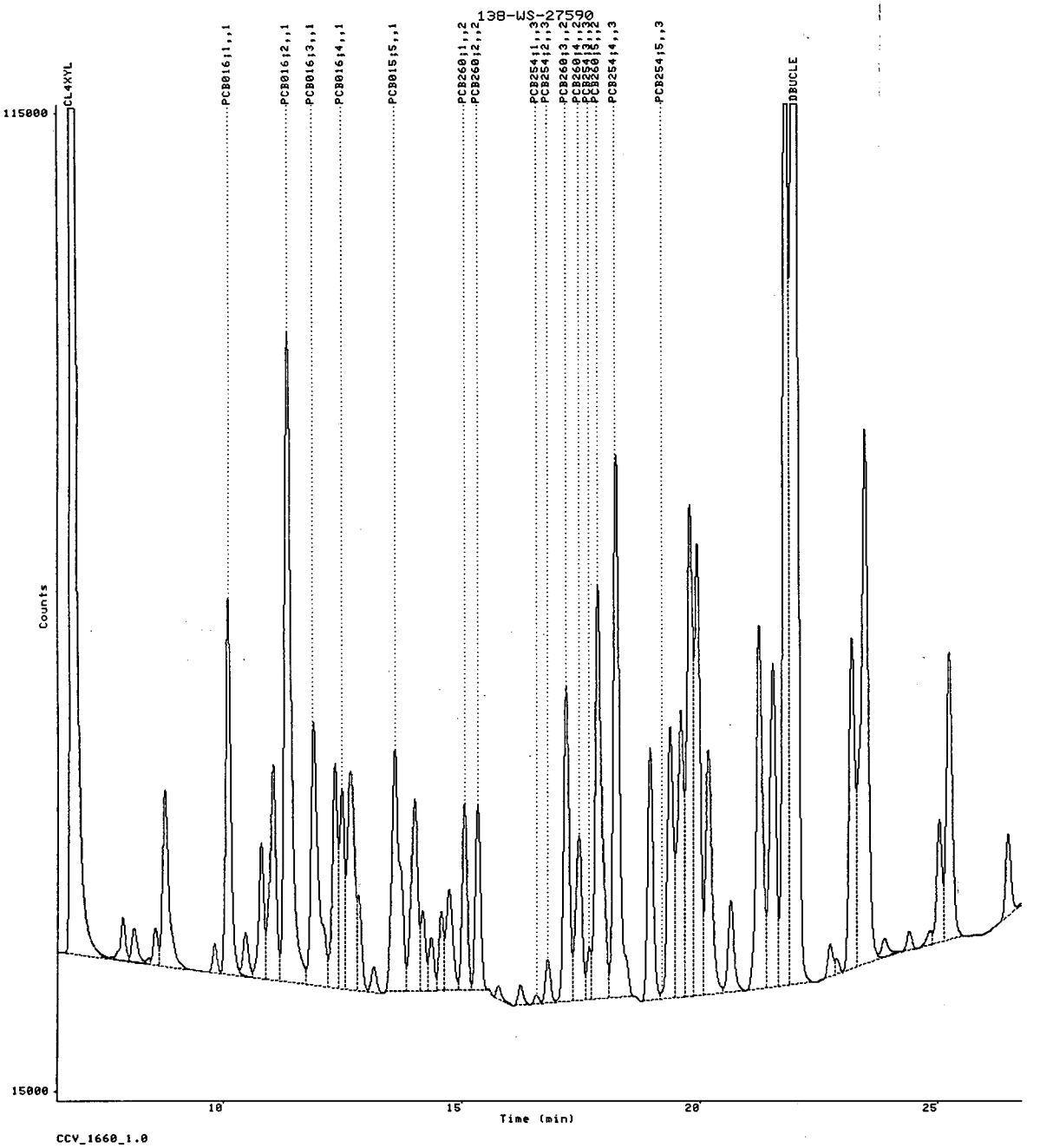
GROUP REPORT

Group	UG/ML
1	0.9168
2	0.7472
3	0.3048

ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)
2: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697326049.RAW;1
Report: 1197265472
Acquired: 23-NOV-1997 08:16:05
Time range: 6.50-26.75



0452

Date.....15-DEC-1997 17:08:34.01 User: TAYLORC
Report number.....1197265483
Raw file.....DISK:[TAYLORC]5697326060.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....8

Acq. date.....23-NOV-1997 14:59:55
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....CCV_1660_1.0
Notes.....138-WS-27590

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....64
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...1.00000E+00

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
19.22	PCB254;5	3		

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref	Std	BL	Group
CL4XYL	6.808	-2.17	0.1741	236395			BE	
	7.664			761			EV	
	7.885			3814			EV	
	8.124			3263			EV	
	8.433			699			VV	
	8.574			3577			VV	
	8.768			16989			VB	
	9.821			2767			BV	

PCB016;1	10.100	0.00	0.1846	36630	VV	1
	10.471			4494	VV	
	10.800			13633	VV	
	11.052			21608	VV	
PCB016;2	11.345	-0.49	0.1718	64658	VV	1
PCB016;3	11.896	-1.05	0.1815	26305	VV	1
	12.349			23137	VV	
PCB016;4	12.490	0.43	0.1933	20572	VV	1
	12.674			22668	VV	
	12.840			10218	VB	
	13.163			3043	BV	
PCB015;5	13.605	-0.10	0.1736	24589	VV	1
	14.023			19798	VV	
	14.187			8622	VV	
	14.366			5942	VV	
	14.581			8508	VV	
	14.745			10640	VV	
PCB260;1	15.065	0.60	0.1637	18678	VV	2
PCB260;2	15.346	0.20	0.1426	18513	VB	2
	15.771			1410	BB	
	16.241			2301	BV	
PCB254;1	16.576	-0.13	2.801E-03-	1393	VV	3
PCB254;2	16.812	-0.33	0.01619	4745	VV	3
PCB260;3	17.201	-0.03	0.1385	31885	VV	2
PCB260;4	17.473	0.24	0.1512	16644	VV	2
PCB254;3	17.689	-0.96	0.01380	5605	VV	3
PCB260;5	17.868	-0.21	0.1409	40798	VV	2
PCB254;4	18.249	-0.90	0.2674	53488	VB	3
	18.964			24886	BV	
	19.385			26846	VV	
	19.611			28124	VV	
	19.805			47894	VV	
	19.951			43867	VV	
	20.189			24070	VB	
	20.660			8579	BB	
	21.258			35757	BV	
	21.543			32026	VV	
	21.822			105509	VV	
DBUCLE	21.999	0.76	0.1692	166037	VB	
	22.748			3163	BV	
	22.882			1608	VV	
	23.202			32056	VV	
	23.478			51152	VE	
	23.893			2087	EV	
	24.151			1006	EV	
	24.409			2724	VV	
	24.849			3879	VV	
	25.040			14590	VV	
	25.242			30453	VB	
	26.490			7989	BE	
	26.870			724	EV	
	26.930			538	EB	
	27.393			70	BB	
	27.944			11351	BE	
	29.057			1298	EV	
	30.057			17423	VB	

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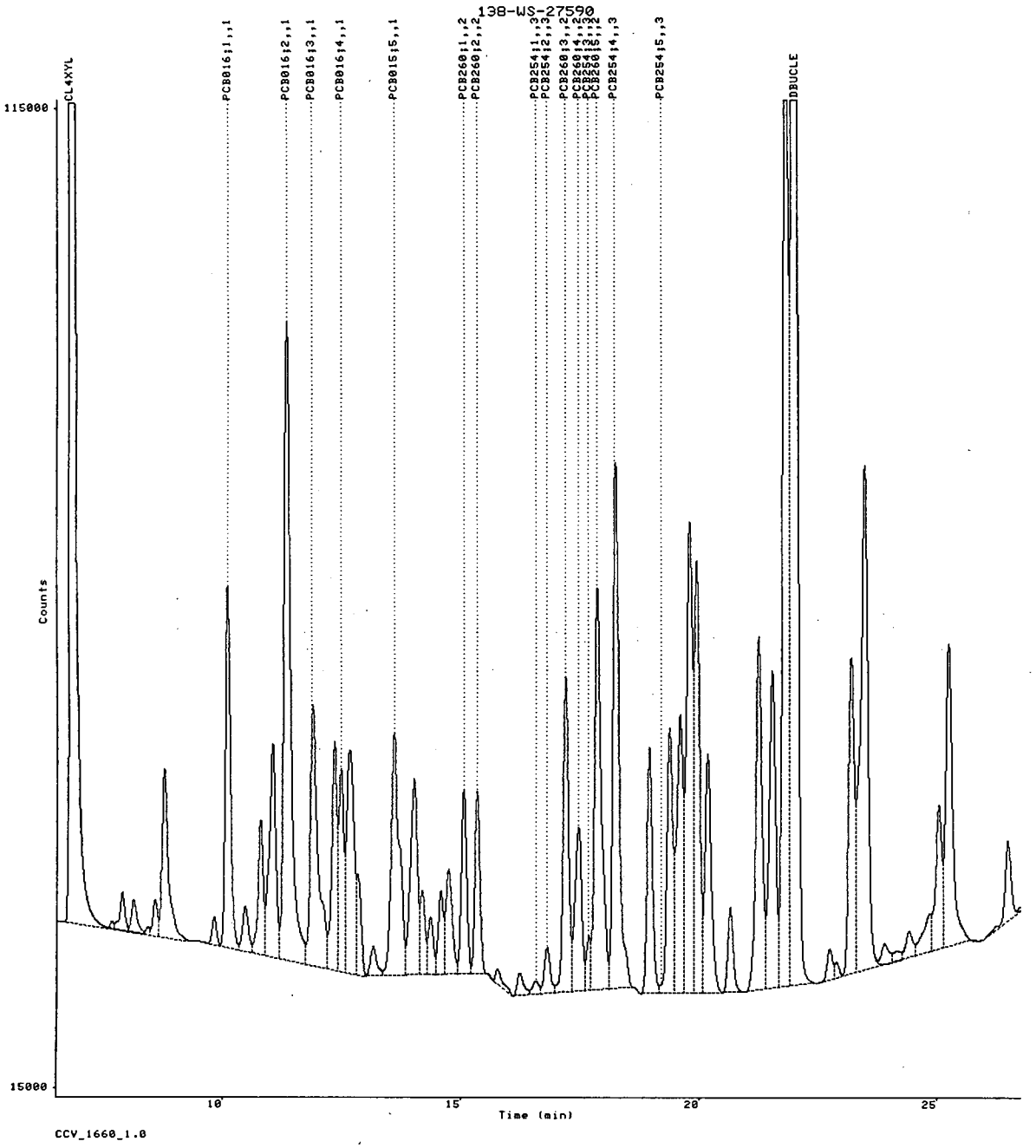
GROUP REPORT

Group	UG/ML
1	0.9047
2	0.7369
3	0.3002

ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)
2: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697326060.RAW;1
Report: 1197265483
Acquired: 23-NOV-1997 14:59:55
Time range: 6.50-26.75



Date.....15-DEC-1997 17:10:54.59 User: TAYLORC
Report number.....1197265493
Raw file.....DISK:[TAYLORC]5697326070.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....7

Acq. date.....23-NOV-1997 21:07:17
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....CCV_1660_1.0
Notes.....138-WS-27590

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....58
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...1.00000E+00

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref Std
19.22	PCB254;5	3	

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref Std	BL	Group
CL4XYL	6.806	-2.06	0.1740	236238		BE	
	7.884			3753		EV	
	8.122			3442		EV	
	8.430			839		EV	
	8.571			3598		EV	
	8.766			16797		VB	
	9.816			2929		BV	
PCB016;1	10.096	0.23	0.1883	37275		VE	1

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	10.466			5077	EV	
	10.796			14764	VV	
	11.047			23056	VV	
PCB016;2	11.343	-0.39	0.1816	67969	VV	1
PCB016;3	11.894	-0.92	0.1988	28724	VV	1
	12.345			25674	VV	
PCB016;4	12.487	0.62	0.2280	23855	VV	1
	12.669			26057	VV	
	12.836			12608	VB	
	13.162			4550	BV	
PCB015;5	13.602	0.07	0.2066	28763	VV	1
	14.019			24284	VV	
	14.181			12186	VV	
	14.362			9087	VV	
	14.577			11757	VV	
	14.739			14495	VV	
PCB260;1	15.061	0.84	0.2140	23884	VV	2
PCB260;2	15.341	0.51	0.1901	23940	VE	2
	15.763			3290	EB	
	16.242			3083	BV	
PCB254;1	16.568	0.36	6.598E-03	1926	VV	3
PCB254;2	16.807	-0.06	0.02018	5684	VV	3
PCB260;3	17.196	0.28	0.1553	35344	VV	2
PCB260;4	17.466	0.64	0.1796	19440	VV	2
PCB254;3	17.683	-0.62	0.01387	5632	VV	3
PCB260;5	17.863	0.07	0.1645	46808	VV	2
PCB254;4	18.246	-0.70	0.3029	59561	VB	3
	18.959			28413	BV	
	19.378			30462	VV	
	19.606			32089	VV	
	19.798			53850	VV	
	19.946			50178	VV	
	20.182			27723	VV	
	20.654			10125	VB	
	21.251			40196	BV	
	21.538			35733	VV	
	21.818			115783	VV	
DBUCLE	21.992	1.17	0.1839	178859	VB	
	22.740			3642	BV	
	22.869			1829	VB	
	23.195			35087	BV	
	23.472			55855	VE	
	23.878			1828	EB	
	24.398			2125	BB	
	24.829			896	BV	
	25.034			12359	VV	
	25.236			29727	VB	
	26.484			8591	BB	
	27.571			1452	BV	
	28.788			639	VB	

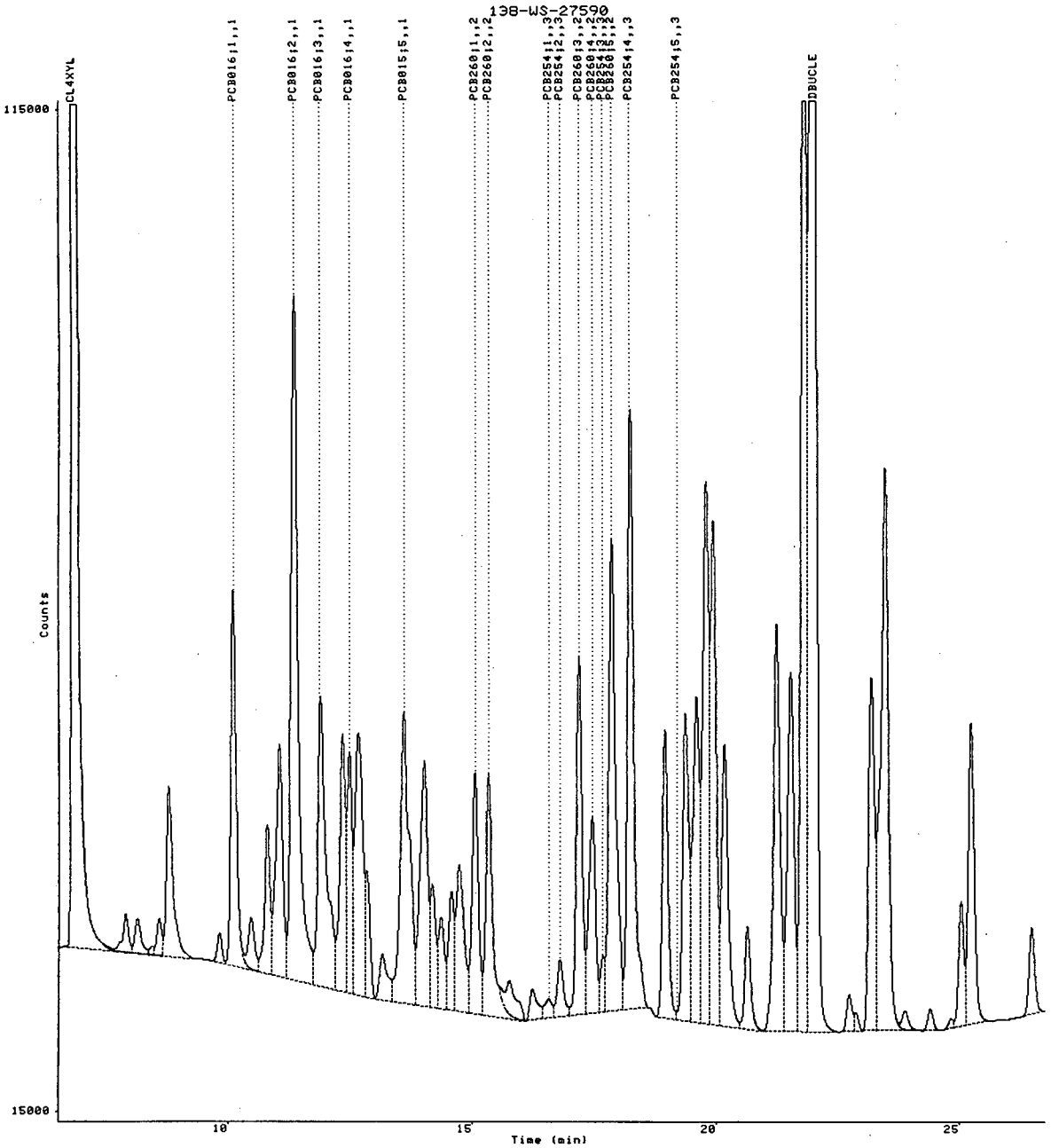
GROUP REPORT

Group	UG/ML
1	1.003
2	0.9035
3	0.3436

ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)

Data file: DISK:[TAYLORC]5697326070.RAW;1
Report: 1197265493
Acquired: 23-NOV-1997 21:07:17
Time range: 6.50-26.75



CCV_1660_1.0

0460

Date.....15-DEC-1997 17:13:25.87 User: TAYLORC
Report number.....1197265504
Raw file.....DISK:[TAYLORC]5697326081.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....2

Acq. date.....24-NOV-1997 03:50:54
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....CCV_1660_1.0
Notes.....138-WS-27590

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.000 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....63
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...1.00000E+00

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref	Std
19.22	PCB254;5	3		

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref	Std	BL	Group
CL4XYL	6.812	-2.42	0.1699	231140			BB	
	7.889			3735			BV	
	8.128			3106			VE	
	8.436			558			EV	
	8.579			3458			VV	
	8.773			16678			VB	
	9.824			2749			BV	
PCB016;1	10.104	-0.24	0.1810	36016			VE	1

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	10.475			4284	EV	
	10.803			13156	VV	
	11.056			20955	VV	
PCB016;2	11.352	-0.87	0.1638	61926	VV	1
PCB016;3	11.902	-1.37	0.1726	25055	VV	1
	12.353			21586	VV	
PCB016;4	12.496	0.08	0.1807	19348	VV	1
	12.680			21273	VV	
	12.846			9404	VB	
	13.167			2665	BV	
PCB015;5	13.610	-0.39	0.1659	23593	VV	1
	14.028			18887	VV	
	14.192			8587	VV	
	14.372			6122	VV	
	14.586			8551	VV	
	14.749			10819	VV	
PCB260;1	15.071	0.24	0.1711	19464	VV	2
PCB260;2	15.353	-0.23	0.1468	19006	VE	2
	15.779			1830	EB	
	16.245			1955	BV	
PCB254;1	16.582	-0.45	-5.122E-04-	926	VV	3
PCB254;2	16.818	-0.73	0.01351	4114	VV	3
PCB260;3	17.207	-0.38	0.1301	30128	VV	2
PCB260;4	17.477	-0.01	0.1451	16031	VV	2
PCB254;3	17.698	-1.52	0.01168	4787	VV	3
PCB260;5	17.874	-0.60	0.1355	39380	VV	2
PCB254;4	18.257	-1.37	0.2562	51517	VB	3
	18.971			24036	BV	
	19.390			25528	VV	
	19.619			27190	VV	
	19.810			46422	VV	
	19.960			42793	VV	
	20.194			23332	VV	
	20.667			8942	VV	
	21.264			34472	VV	
	21.551			31558	VV	
	21.829			104751	VV	
DBUCLE	22.005	0.39	0.1680	164947	VB	
	22.753			3274	BV	
	22.883			1667	VV	
	23.208			31366	VV	
	23.484			50380	VE	
	23.892			1638	EV	
	24.164			155	EB	
	24.412			1771	BB	
	25.047			12666	BV	
	25.250			28342	VB	
	26.497			8077	BB	
	27.005			177	BB	
	27.588			1749	BV	
	27.975			8068	VB	
	28.965			398	BB	
	29.400			1390	BB	
	29.918			1259	BB	

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GROUP REPORT

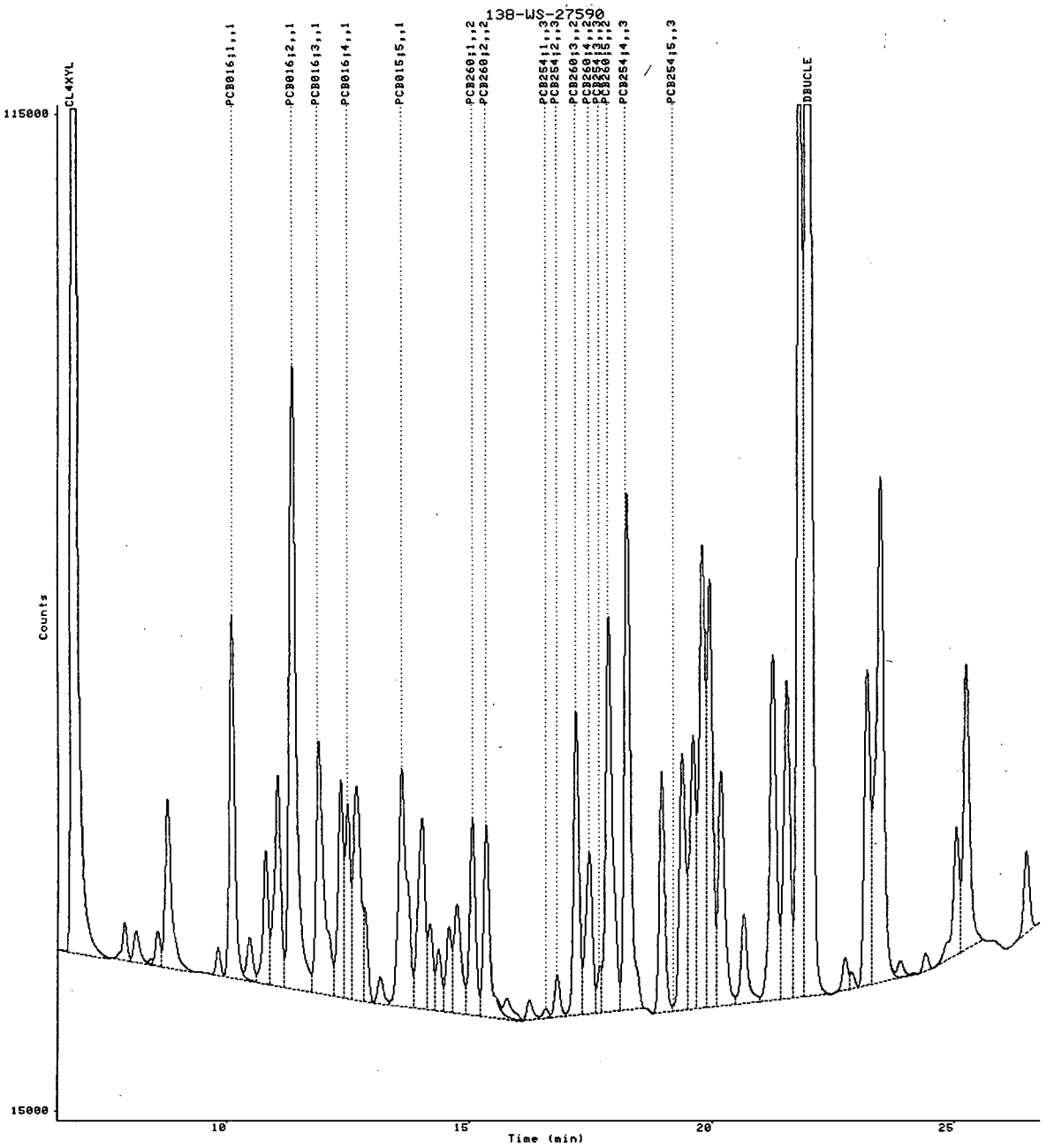
Group	UG/ML

1	0.8639
2	0.7287
3	0.2809

ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)
2: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697326081.RAW;1
Report: 1197265504
Acquired: 24-NOV-1997 03:50:54
Time range: 6.50-26.75



CCV_1660_1.0

WT 12/16/97

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Section 4.
Environmental Organic Analysis
(Rev. 1: 3/95)

Extract Data (Primary Column)
Inventory Checklist

- [x] Blank, QC sample(s), MS/MSD(s) {if applicable}, and field sample extracts
- [x] Surrogate data (if applicable): the surrogate data consists of the raw data for all extracts
- [x] Dilutions (if applicable)

Section 4.
Extract Data (Primary Column)
Reviewer Checklist

Y The extract data inventory checklist above is complete.

Y The extract data has been verified for the following:

- Response data are consistent with tabular summary sheets for all data.
- Spiked analyte and surrogate retention times fall within the applicable retention time windows.
- The chromatograms are scaled no greater than the low calibration standard(s), with the exception of chromatograms that have been re-scaled due to high level hits or matrix.
- Integration is consistent with good chromatography practices unless otherwise specified on raw data.
- When multi-component analytes are being quantitated, the total response is shown on each raw data file for each multi-peak method used.
- Manual edits have been initialed and dated by the analyst.
- All method headers reflect correct analysis data.

Y Unless otherwise stated with reasoning in the case narrative, the following QC criteria has been verified:

- Analytical hold times have been met.
- All surrogate and spiked analyte recovery criteria has been met.
- Extraction and analytical hold times have been met.
- Dilutions were performed appropriately.

Date.....15-DEC-1997 17:10:13.46 User: TAYLORC
Report number.....1197265490
Raw file.....DISK:[TAYLORC]5697326067.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....4

Acq. date.....23-NOV-1997 19:17:01
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....BL-142147-1
Notes.....97C-0439-04

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....30
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...1.00000E+01

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref Std
10.10	PCB016;1	1	
11.34	PCB016;2	1	
11.88	PCB016;3	1	
12.50	PCB016;4	1	
13.60	PCB015;5	1	
17.48	PCB260;4	2	
17.86	PCB260;5	2	

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel) 0466

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref Std	BL	Group
	6.579			63		BV	
CL4XYL	6.809	-2.24	0.3977	58570		VB	

	7.650			525	BV	
	7.886			751	VB	
	8.231			71	BB	
	8.640			112	BB	
	10.691			171	BB	
	11.040			449	BB	
	12.785			3475	BB	
PCB260;1	15.056	1.13	-4.808E-03-	316	BB	2
PCB260;2	15.347	0.14	0.03365	470	BV	2
	15.576			316	VB	
PCB254;1	16.573	0.05	-0.06348-	99	BV	3
PCB254;2	16.806	0.01	-0.02514-	294	VB	3
	17.037			49	BB	
PCB260;3	17.214	-0.76	0.03415	965	BB	2
PCB254;3	17.692	-1.13	5.528E-03-	458	BB	3
PCB254;4	18.247	-0.77	0.02059-	365	BB	3
PCB254;5	19.228	-0.77	3.827E-03-	63	BB	3
	19.806			496	BB	
	20.751			846	BB	
	21.214			577	BB	
DBUCLE	21.998	0.83	0.3817	40838	BB	
	24.410			260	BB	
	26.492			929	BB	
	27.078			596	BV	
	27.571			37512	VE	
	27.945			8423	EB	
	29.436			942	BV	
	29.882			766	VB	

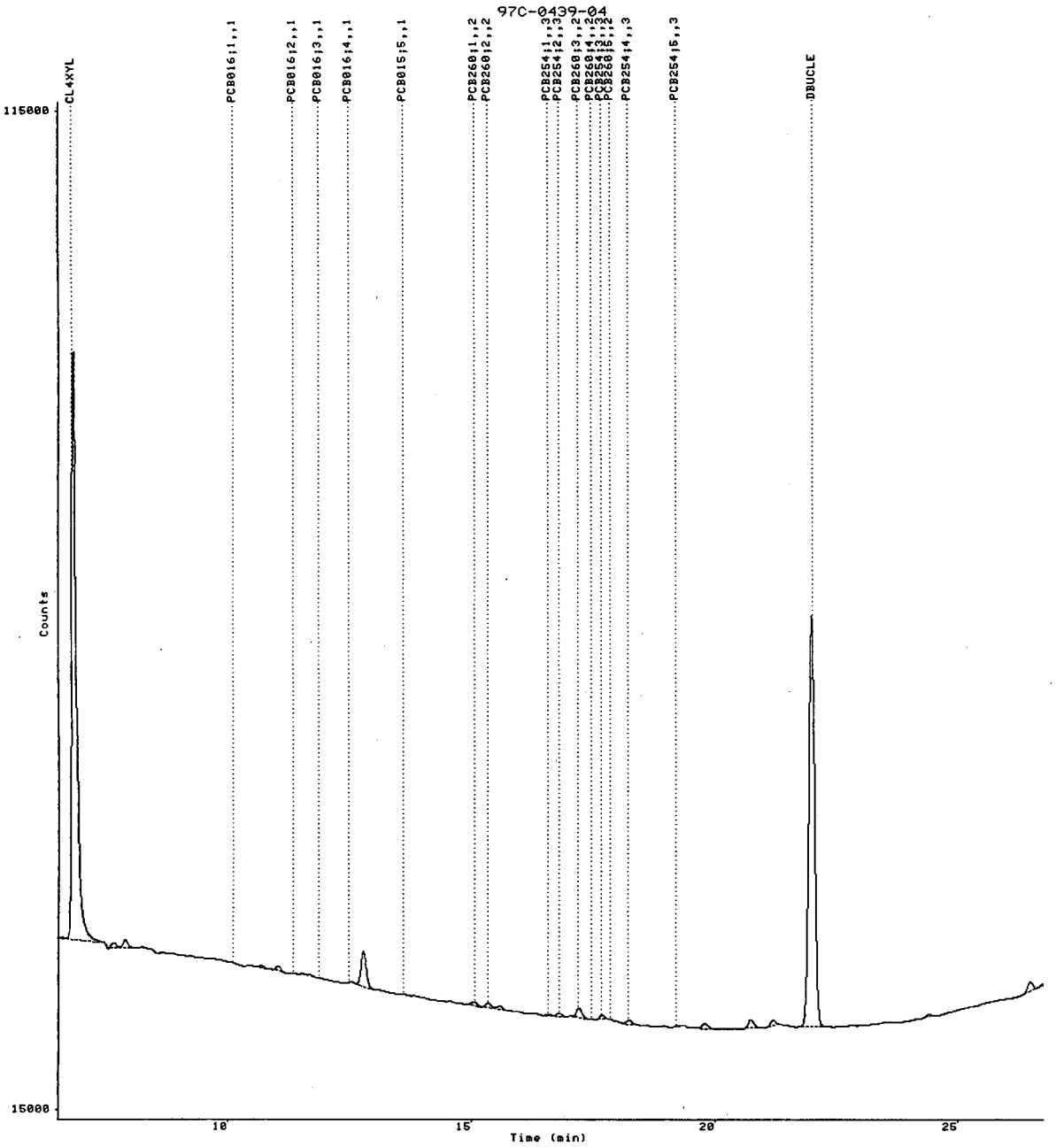
GROUP REPORT

Group	UG/ML
2	6.299E-02
3	-5.868E-02

ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)
2: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697326067.RAW;1
Report: 1197265490
Acquired: 23-NOV-1997 19:17:01
Time range: 6.50-26.75



BL-142147-1

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Date.....15-DEC-1997 17:10:27.40 User: TAYLORC
Report number.....1197265491
Raw file.....DISK:[TAYLORC]5697326068.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....4

Acq. date.....23-NOV-1997 19:53:48
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....QC-142147-1
Notes.....97C-0439-04

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....58
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...1.00000E+01

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref Std
19.22	PCB254;5	3	

EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref Std	BL	Group
CL4XYL	6.809	-2.19	0.3691	54500		BB	
	7.653			343		BV	
	7.776			269		VV	
	7.884			751		VV	
	8.123			1319		VB	
	8.579			1204		BV	
	8.770			7537		VB	
	9.818			1227		BV	

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PCB016;1	10.099	0.07	0.8683	18580	VE	1
	10.470			2176	EV	
	10.798			6755	VV	
	11.050			11426	VV	
PCB016;2	11.348	-0.68	0.8314	32912	VV	1
PCB016;3	11.899	-1.20	0.9232	13613	VV	1
	12.350			11732	VV	
PCB016;4	12.490	0.42	1.068	11823	VV	1
	12.673			12276	VE	
	13.157			1527	EV	
PCB015;5	13.603	0.02	0.9598	14170	VV	1
	14.021			11026	VV	
	14.184			5053	VV	
	14.364			3388	VV	
	14.582			4904	VV	
	14.739			6034	VV	
PCB260;1	15.063	0.74	1.048	12331	VV	2
PCB260;2	15.345	0.26	0.9325	12476	VE	2
	15.767			777	EB	
	16.233			1254	BB	
PCB254;1	16.570	0.27	-0.02577-	634	BV	3
PCB254;2	16.810	-0.22	0.09210	3095	VB	3
PCB260;3	17.200	0.07	0.7765	18629	BV	2
PCB260;4	17.469	0.50	0.8311	9545	VV	2
PCB254;3	17.693	-1.18	0.08344	3494	VV	3
PCB260;5	17.865	-0.08	0.7945	24065	VV	2
PCB254;4	18.248	-0.86	1.479	31258	VB	3
	18.962			14094	BV	
	19.380			15912	VV	
	19.612			16173	VV	
	19.802			29014	VV	
	19.948			25097	VV	
	20.186			13700	VV	
	20.660			4681	VB	
	21.255			19348	BV	
	21.541			17863	VV	
	21.821			56517	VV	
DBUCLE	21.994	1.08	0.4341	46224	VB	
	22.744			1691	BV	
	22.874			850	VB	
	23.199			16630	BV	
	23.474			27702	VE	
	23.884			874	EB	
	24.402			739	BB	
	24.836			430	BV	
	25.037			5710	VV	
	25.240			13479	VB	
	26.486			3499	BB	
	27.570			36006	BE	
	29.057			85	EB	

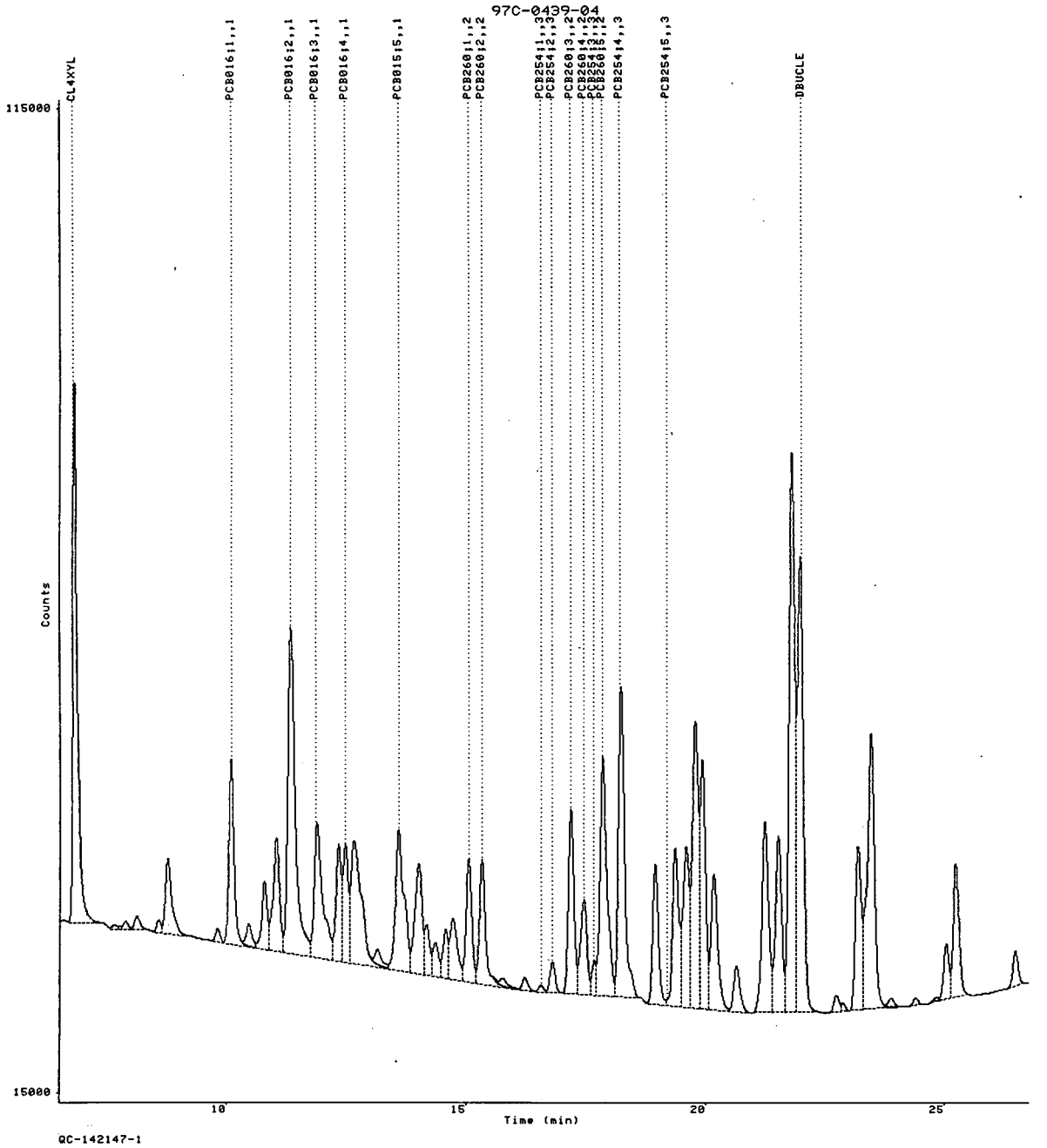
GROUP REPORT

Group	UG/ML
1	4.650
2	4.382
3	1.629

ANALYSIS NOTES

1: WARNING: Peak windows overlap. Check peak identification. (245)
2: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697326068.RAW;1
Report: 1197265491
Acquired: 23-NOV-1997 19:53:48
Time range: 6.50-26.75



0472

Date.....15-DEC-1997 17:10:40.86 User: TAYLORC
Report number.....1197265492
Raw file.....DISK:[TAYLORC]5697326069.RAW;1
Method file.....DISK:[TAYLORC]5697326_8080P.MET;95
Last method update..15-DEC-1997 16:56:12.38

Device.....Channel 56A, Model 941 Serial Num: 1191513684
Reprocess number....4

Acq. date.....23-NOV-1997 20:30:30
Acq. run time.....31.00 min
Acq. sample rate....3.3333 pt(s)/sec

Sample name.....97C05251
Notes.....97C-0439-04

Author.....J. CHRIS TAYLOR
Instrument.....HP5890 EC-6
Column type.....FUSED SILICA CAPILLARY COLUMN
       length.....30 M
       diameter.....53 MM
Stationary phase....DB-608
Mobile phase.....HE
Detector.....ECD
Notes.....150C*2MIN;RAMP@5C/MIN T0 275C;HOLD 7MIN

Anal. run time.....31.001 min Delay time.....6.500 min
Area reject.....100 count(s) No. peaks found.....30
Noise threshold.....10.0 microvolts Area threshold.....120
Start peak width....6.00 sec(s) Area/Pk.Ht.....H
Min. window.....8.00 sec % window.....0.00

Analysis type.....EXTERNAL STANDARD A/D range.....1.0 volt(s)
Sample rack.....0
Sample vial.....165
Analysis fit.....Quadratic Origin treatment....Ignore
Report units.....UG/ML
Sample amount.....1.00000
Volume injected.....1.00000 Conversion factor...1.00000E+01

MISSING PEAKS LIST

R.T.(min)	Peak name	Group	Ref Std
11.34	PCB016;2	1	
12.50	PCB016;4	1	
15.35	PCB260;2	2	
16.57	PCB254;1	3	
16.81	PCB254;2	3	
17.48	PCB260;4	2	
17.67	PCB254;3	3	
17.86	PCB260;5	2	
18.23	PCB254;4	3	
19.22	PCB254;5	3	

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EXTERNAL STANDARD ANALYSIS

Calibration Sample name: (Multilevel)

Peak name	R.T.(min)	T.Diff	UG/ML	Peak Ht	Ref Std	BL	Group

CL4XYL	6.809	-2.20	0.4369	64119			BE	
	7.305			77			EB	
	8.242			970			BB	
	8.635			483			BB	
	9.783			811			BV	
PCB016;1	10.118	-1.06	0.02814	1106			VB	1
	10.969			3908			BE	
	11.531			563			EB	
PCB016;3	11.868	0.63	5.277E-03-	137			BB	1
	12.063			114			BB	
	12.782			4414			BE	
	13.094			232			EB	
PCB015;5	13.582	1.28	0.03333	627			BB	1
	13.958			1313			BB	
PCB260;1	15.031	2.63	0.02904	716			BB	2
	15.962			266			BB	
PCB260;3	17.168	1.97	0.05792	1556			BB	2
	18.710			479			BB	
	19.016			135			BB	
	19.937			722			BB	
	20.744			1670			BB	
	21.195			1217			BB	
DBUCLE	21.998	0.86	0.3405	36596			BB	
	22.791			311			BB	
	24.138			454			BV	
	24.418			246			VB	
	26.494			504			BB	
	27.570			27162			BB	
	29.423			1098			BV	
	29.892			795			VB	

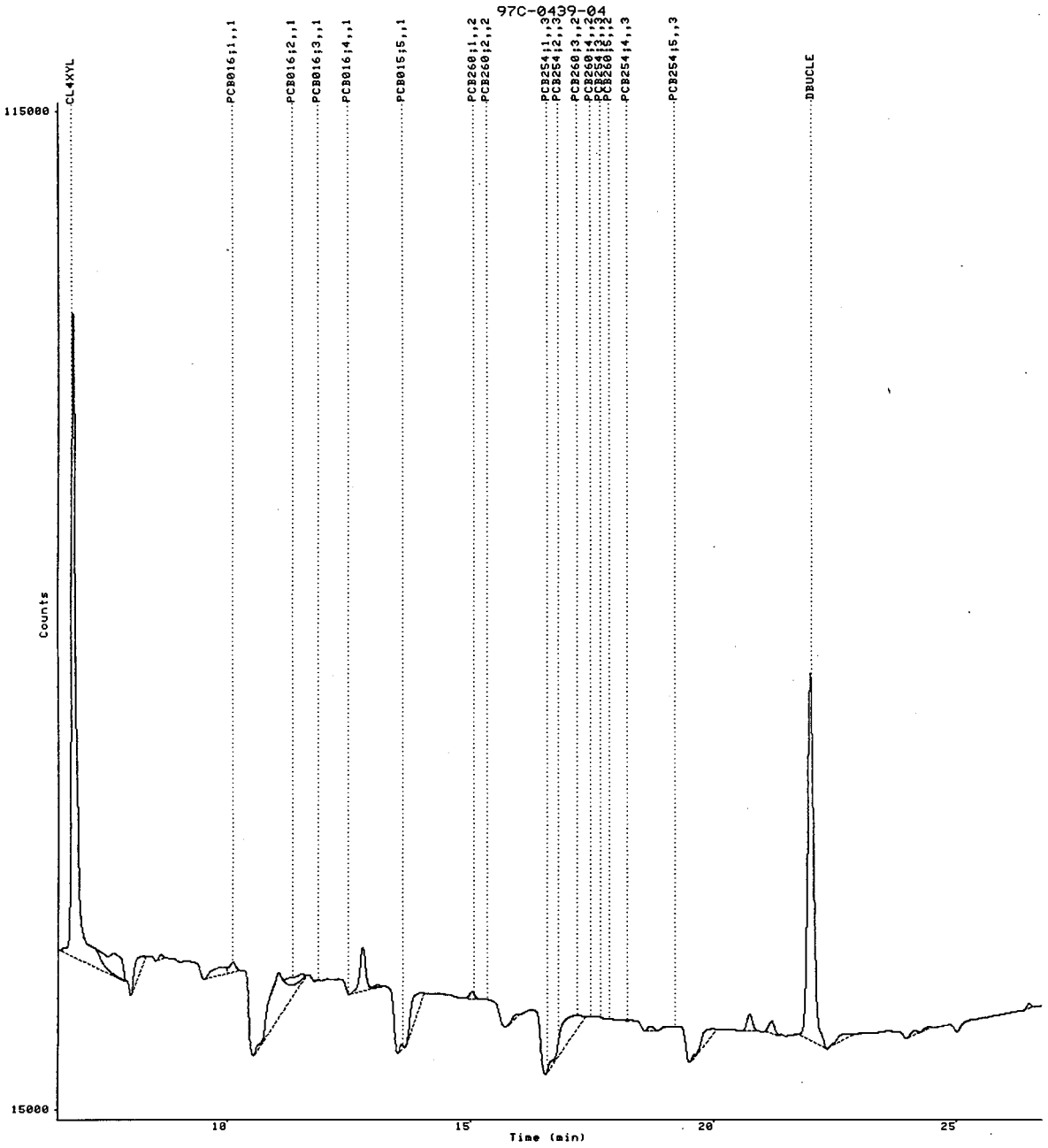
GROUP REPORT

Group	UG/ML
1	6.675E-02
2	8.696E-02

ANALYSIS NOTES

1: WARNING: Peak result(s) extrapolated, "+" (above)/"-" (below). (594)

Data file: DISK:[TAYLORC]5697326069.RAW;1
Report: 1197265492
Acquired: 23-NOV-1997 20:30:30
Time range: 6.50-26.75



12/16/97 0475

12/16/97

Section 5.
Environmental Organic Analysis
(Rev. 1: 3/95)

Confirmation Column Data
Inventory Checklist

NA The confirmation column data as specified in Section 1 of the green sheets.

Section 5.
Confirmation Column Data
Reviewer Checklist

X The confirmation column data inventory checklist above is complete.

X The confirmation column data has been verified for the following:

- Response data are consistent with tabular summary sheets for all data.
- For each analyte on the tabular summary, the retention time is consistent with the mid-range calibration standard.
- The low standards are clearly distinguished from the baseline.
- Integration is consistent with good chromatography practices unless otherwise specified on raw data.
- Spiked analyte and surrogate retention times fall within the applicable retention time windows.
- The chromatograms are scaled no greater than the low calibration standard(s), with the exception of chromatograms that have been re-scaled due to high level hits or matrix.
- Manual edits have been initialed and dated by the analyst.
- All method headers reflect correct analysis data.
- All continuing calibration retention time window criteria have been met.

97C-0439-03

PERCENT SOLIDS DATA

- DCL Sample Work Orders
- DCL Chain-of-Custodies
- Solids Total Analytical Report
- Solids Total Notebook Pages

DATA CHEM LABORATORIES
A Sorenson Company

ANALYTICAL REPORT

Form ARF-AL
Page 1 of 1
Part 1 of 1
11189714330705

Date _____
Laboratory Group Name 97C-0439-03
Account No. 03008

Roy F. Weston
Attention: Smita Sumbaly
1090 King Georges Post Road, Suite 201
Edison, NJ 08837

FAX (908) 225-7037
Telephone (908) 225-6116

Sampling Collection and Shipment

Sampling Site _____ Date of Collection November 06, 1997

Date Samples Received at Laboratory November 07, 1997

Analysis

Method of Analysis XX-EP-800

Date(s) of Analysis November 12, 1997

Analytical Results

Field Sample Number	Laboratory Number	Sample Type	Solids (Total) %								
AAAANS1	97C05249	SOIL	61.1								
AAAANS1	97C05249MD	SOIL	65.3								
AAAAND1	97C05250	SOIL	57.6								
Limit of Detection											

† See comment on last page.
ND Parameter not detected above LOD.
NR Parameter not requested.

** See comment on last page.
( ) Parameter between LOD and LOQ.

Michelle Manning
Analyst: Michelle R. Manning

Trinh Le
Reviewer: Trinh T. Le

960 West LeVoy Drive / Salt Lake City, Utah 84123-2547
Phone (801) 266-7700 Web Page: www.datachem.com
FAX (801) 268-9992 E-mail: lab@datachem.com

DataChem Laboratories
LIMS - Sample Master System
Preparation Group Report

Date: 11-NOV-1997 19:38
User: MANNINGM

RLIMS15-V1.2

Preparation Run Name: G97BB03J

Group ID: G97BB03J

Samples: 3

Pos	Laboratory Sample Name	Field Sample Name 1	Field Sample Name 2	Laboratory Sample ID	Laboratory Group Name	Accnt. Number
1	97C05249	AAAANS1		S97B70N2	97C-0439-03	03008
2	97C05249MD	AAAANS1		S97BB0LS	97C-0439-03	03008
3	97C05250	AAAAND1		S97B70N3	97C-0439-03	03008

----- END OF LISTING -----

Sample Work Order

QC Clearance: _____
Project Manager: Scott B. Saulls
Client: Roy F. Weston
Account: 03008 **SDG:** AAAAND
Project/Task: P97B5002
Date Received: 7-Nov-1997
Date for Mailing Report: 26-Nov-1997
Date for Verbal Report: 21-Nov-1997

DCL Root Set ID: 97C-0439 *
DCL Lab. Name: 97C05249–97C05250
Total # Samples: 2
Sample Entry: Michael D McMillan
Section: FS
Earliest Sampling Date: 6-Nov-1997
Preparation Type:

Rep. Group	FS Section Analytes Requested	Latest Prep. Date	Latest Anal. Date	No. of Samp.	Storage Location	Analysis/Prep. Method	Inst.	Matrix
03	Solids (Total)			2		XX-EP-800	GRAV	SOIL

Special Instructions: GET SAMPLES FROM EXTRACTION

Section Manager: Michael P. Beesley

~~0479~~ 480

Other Sections Receiving Sample Portions: ZC, FC

Earliest Sampling Date: 6-Nov-1997

DataChem Laboratories
CHAIN-OF-CUSTODY

Results due by: 26-Nov-1997

Project/Job/Task: P97B5002 | Split: | Root Set ID: 97C-0439 * | Reporting Group

Client: Roy F. Weston | Account: 03008

Comments:

Verified: M 11-10-97

Date Sampled	Field ID Number	DCL Sample Name	DCL Sample ID	QC	Matrix	Customer ID 2					01 PCBs	02 Solids (Decant-ed)	03 Solids (Total)							# Bottles
6-Nov-1997	AAAANS1	97C05249			SOIL						X	X	X							1
6-Nov-1997	AAAANS1	97C05249MS		MS	SOIL						X									1
6-Nov-1997	AAAANS1	97C05249MSD		MSD	SOIL						X									1
6-Nov-1997	AAAAND1	97C05250			SOIL						X	X	X							1

ORIGINAL FIELD SAMPLE CHAIN-OF-CUSTODY

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Reason for Transfer/ Storage Location
Walk-in/Room/Shelf/Fridge Michael McWan	11-10-97 1230	R23-1	Labeling/Shelving CN
R23-1 MRM	11/12/97 13:30	Walk-in/Room/Shelf/Fridge SAMPLE PREP GROUP RM 20 BK #3319 IN. MRM	Storage: 1/6 solids

SAMPLE PREPARATION / ANALYSIS CHAIN-OF-CUSTODY

Sample Prep/Analysis for: 1/6 solids

Prepared/Analyzed by: SAMPLE PREP GROUP RM 20 BK #3319 IN. MRM

Lab Notebook No.: 3319

Date/Time: 11/13

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Reason for Transfer/ Storage Location

Check box if there is a continuation page ☐

Form: COFC1.01-SWV2.30

Printed 11/8/1997 14:32

TITLE _____ Project No. X Book No. 3319 DATA CHEM 69

From Page No. X- insertion of % solids info for 97C-0424-03, 97C-0423-03, 97C-0439-03 [illegible]

Acct # 3008 METHOD: XX-EP-800, rev Balance ID# 105865

Sat ID #	LIMS User Name	DCL Sample ID	EPA field id (if applicable)	Dish ID	Dish Wt.	Wet+Dish	Dry+Dish	Wet Wt.	Dry Wt.	%Solid	%Moist	Date IN	Time IN	Temp IN C	Date OUT	Time OUT	Temp C
97C-0424-03	MANNINGM	97C04980	TTTSS1	101	1.3203	7.6771	5.5267	6.3568	4.2064	66.2	33.8	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0424-03	MANNINGM	97C04980MD	TTTSS1	63	1.3376	8.6571	6.0840	7.3195	4.7464	64.8	35.2	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0424-03	MANNINGM	97C04981	TTTSED(S)	75	1.3128	8.2878	6.8418	6.975	5.529	79.3	20.7	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0424-03	MANNINGM	97C04982	TTTSD2	83	1.3132	7.3789	5.4016	6.0657	4.0884	67.4	32.6	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0424-03	MANNINGM	97C04983	TTTNS1	82	1.3132	9.9548	6.1424	8.6416	4.8292	55.9	44.1	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0424-03	MANNINGM	97C04984	TTTSS2	87	1.3153	8.8336	8.1430	7.5183	6.8277	90.8	9.2	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0424-03	MANNINGM	97C04985	TTTND2	51	1.3376	8.6281	4.4004	7.2905	3.0628	42.0	58.0	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0424-03	MANNINGM	97C04986	TTTND1	50	1.3272	7.0083	4.2382	5.6811	2.911	51.2	48.8	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0424-03	MANNINGM	97C04987	TTTNS2	49	1.3226	7.8513	4.8880	6.5287	3.5654	54.6	45.4	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0424-03	MANNINGM	97C04988	TTTSD1	37	1.3211	8.0164	5.1262	6.6953	3.8051	56.8	43.2	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0424-03	MANNINGM	97C04989	UUUSD1	22	1.3127	9.2977	5.6428	7.985	4.3301	54.2	45.8	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0424-03	MANNINGM	97C04990	UUUSED(D)	56	1.3192	9.2396	5.5343	7.9204	4.2151	53.2	46.8	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0424-03	MANNINGM	97C04991	UUUSS2	29	1.3215	9.7555	7.5247	8.434	6.2032	73.5	26.5	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0424-03	MANNINGM	97C04992	UUUSED(S)	94	1.3067	7.9346	3.8133	6.6279	2.5066	37.8	62.2	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0424-03	MANNINGM	97C04993	UUUNS1	93	1.3345	7.9894	5.5143	6.6549	4.1798	62.8	37.2	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0424-03	MANNINGM	97C04994	UUUND1	92	1.3137	9.4037	6.1083	8.09	4.7946	59.3	40.7	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0424-03	MANNINGM	97C04995	UUUSS1	91	1.3048	9.7566	7.1504	8.4518	5.8456	69.2	30.8	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0424-03	MANNINGM	97C04996	UUUND2	46	1.3126	8.3017	6.3348	6.9891	5.0222	71.9	28.1	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0424-03	MANNINGM	97C04997	UUUNS2	45	1.3226	8.4356	5.6959	7.113	4.3733	61.5	38.5	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0424-03	MANNINGM	97C04998	UUUNS3	81	1.3095	9.6781	6.5303	8.3686	5.2208	62.4	37.6	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0424-03	MANNINGM	97C04999	UUUSD2	44	1.3178	7.5458	5.8476	6.228	4.5298	72.7	27.3	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0424-03	MANNINGM	97C04999MD	UUUSD2	80	1.3026	8.0585	6.6327	6.7559	5.3301	78.9	21.1	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0423-03	MANNINGM	97C04960	WWWSS2	86	1.3139	8.3356	6.8379	7.0217	5.524	78.7	21.3	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0423-03	MANNINGM	97C04960MD	WWWSS2	85	1.3043	9.7162	7.8653	8.4119	6.561	78.0	22.0	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0423-03	MANNINGM	97C04961	WWWND1	6	1.3219	7.7873	3.5747	6.4654	2.2528	34.8	65.2	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0423-03	MANNINGM	97C04962	WWWSD2	21	1.3138	7.3924	6.2861	6.0786	4.9723	81.8	18.2	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0423-03	MANNINGM	97C04963	WWWND2	20	1.3269	9.3118	6.1956	7.9849	4.8687	61.0	39.0	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0423-03	MANNINGM	97C04964	WWWSS1	19	1.3237	7.792	6.5197	6.4683	5.196	80.3	19.7	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0423-03	MANNINGM	97C04965	WWWSD1	60	1.3205	7.1933	5.8047	5.8728	4.4842	76.4	23.6	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0423-03	MANNINGM	97C04966	WWWSED(D)	47	1.3061	8.4064	7.4907	7.1003	6.1846	87.1	12.9	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0423-03	MANNINGM	97C04967	WWWNS3	61	1.3089	8.3975	5.4383	7.0886	4.1294	58.3	41.7	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0423-03	MANNINGM	97C04968	WWWNS2	59	1.3203	9.3891	6.2053	8.0688	4.885	60.5	39.5	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0423-03	MANNINGM	97C04969	WWWNS1	58	1.3084	9.2581	8.0616	7.9497	6.7532	84.9	15.1	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0423-03	MANNINGM	97C04970	WWWSED(S)	57	1.3168	7.3216	4.9755	6.0048	3.6587	60.9	39.1	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0423-03	MANNINGM	97C04971	VVVSED(S)	56	1.3205	7.7665	5.5284	6.446	4.2079	65.3	34.7	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0423-03	MANNINGM	97C04972	VVVSD2	5	1.3081	9.3234	5.9035	8.0153	4.5954	57.3	42.7	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0423-03	MANNINGM	97C04973	VVVND1	4	1.3133	9.233	5.5446	7.9197	4.2313	53.4	46.6	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0423-03	MANNINGM	97C04974	VVVNS1	52	1.3172	9.3103	5.4764	7.9931	4.1592	52.0	48.0	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0423-03	MANNINGM	97C04975	VVVND2	18	1.3235	8.4172	4.8759	7.0937	3.5524	50.1	49.9	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0423-03	MANNINGM	97C04976	VVVSD1	34	1.3088	7.7498	4.3468	6.441	3.038	47.2	52.8	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0423-03	MANNINGM	97C04977	VVVNS2	17	1.3107	8.9736	5.2564	7.6629	3.9457	51.5	48.5	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0423-03	MANNINGM	97C04978	VVVSS1	90	1.3034	9.2374	6.2185	7.934	4.9151	61.9	38.1	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0423-03	MANNINGM	97C04979	VVVSS2	48	1.305	7.2707	4.2534	5.9657	2.9484	49.4	50.6	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0423-03	MANNINGM	97C04979MD	VVVSS2	89	1.3234	7.1202	4.1476	5.7968	2.8242	48.7	51.3	1997-11-12	03:00 PM	102	1997-11-13	01:00 PM	103
97C-0439-03	MANNINGM	97C05249	AAAANS1	24	1.3208	8.8117	5.9013	7.4909	4.5805	61.1	38.9	1997-11-12	03:00 PM	102	1997-11-13	11:30 AM	107
97C-0439-03	MANNINGM	97C05249MD	AAAANS1	25	1.3255	8.8757	6.2545	7.5502	4.929	65.3	34.7	1997-11-12	03:00 PM	102	1997-11-13	11:30 AM	107
97C-0439-03	MANNINGM	97C05250	AAAAND1	84	1.3119	8.3701	5.3753	7.0582	4.0634	57.6	42.4	1997-11-12	03:00 PM	102	1997-11-13	11:30 AM	107

JSL 11/17/97

JSL 11/17/97

To Page No. X

Witnessed & Understood by me, [signature] Date 11/17/97 Invented by NOT APPLICABLE Date 11/17/97

Recorded by [signature]

0432

FEDERAL EXPRESS

QUESTIONS? CALL 800-238-5355 TOLL FREE.

AIRBILL
PACKAGE TRACKING NUMBER 4811729414

4811729414

RECIPIENT'S COPY

1 Date 11/6

From (Your Name) Please Print: M. HAHNKOPF
Your Phone Number (Very Important): (808-)225-5116
Company: ROY F WESTON INC
Department/Floor No.:
Street Address: 1090 KING GEORGES POST RD #201
City: EDISON State: [illegible] ZIP Required: [illegible]

2 To (Recipient's Name) Please Print: Scott Saulls
Recipient's Phone Number (Very Importa: (801) 266-770
Company: Datachem LAB
Department/Floor N:
Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip Codes.): 960 WEST LEVOY Dr.
City: Salt Lake City State: UT ZIP Required: 84123

YOUR INTERNAL BILLING REFERENCE INFORMATION (optional) (First 24 characters will appear on invoice.): 001054 11098 121 002 2137 00

H IF HOLD FOR PICK-UP, Print FEDEX Address Here
Street Address
City State ZIP Required

3 PAYMENT 1 ☐ Bill Sender 2 ☐ Bill Recipient's FedEx Acct. No. 3 ☒ Bill 3rd Party FedEx Acct. No. 4 ☐ Bill Credit Card 5 ☐ Cash/Check

4 SERVICES (Check only one box)

Priority Overnight (Delivery by next business morning†)
11 ☒ YOUR PACKAGING
16 ☐ FEDEX LETTER*
12 ☐ FEDEX PAK*
13 ☐ FEDEX BOX
14 ☐ FEDEX TUBE

Standard Overnight (Delivery by next business afternoon. No Saturday delivery†)
51 ☐ YOUR PACKAGING
56 ☐ FEDEX LETTER*
52 ☐ FEDEX PAK*
53 ☐ FEDEX BOX
54 ☐ FEDEX TUBE

Economy Two-Day (Delivery by second business day†)
30 ☐ ECONOMY

Government Overnight (Restricted for authorized users only)
46 ☐ GOV'T LETTER
41 ☐ GOV'T PACKAGE

Freight Service (for packages over 150 lbs.)
70 ☐ OVERNIGHT FREIGHT** (Confirmed reservation required)
80 ☐ TWO-DAY FREIGHT**

† Delivery commitment may be later in some areas.
*Declared Value Limit $500.
**Call for delivery schedule

5 DELIVERY AND SPECIAL HANDLING (Check services required)
1 ☐ HOLD FOR PICK-UP (Fill in Box H)
2 ☒ DELIVER WEEKDAY
3 DELIVER SATURDAY (Extra charge) (Not available to all locations) ☐
4 ☐ DANGEROUS GOODS (Extra charge)
5 ☐
6 ☐ DRY ICE ..... Lbs.
7 ☐ OTHER SPECIAL SERVICE
8 ☐
9 ☐ SATURDAY PICK-UP (Extra charge)
10 ☐
☐
12 ☐ HOLIDAY DELIVERY (If offered) (Extra charge)

6

PACKAGES	WEIGHT In Pounds Only	YOUR DECLARED VALUE
Total 17	Total 325	Total

DIM SHIPMENT (Chargeable Weight) ☐ ..... lbs.
L x W x H

Received At:
1 ☐ Regular Stop 3 ☐ Drop Box
2 ☐ On-Call Stop 4 ☐ B/S/C
5 ☒ Station

Emp. No. Date
☐ Cash Received
☐ Return Shipment
☐ Third Party ☐ Chg. To Del. ☐ Chg. To Hold
Street Address
City State Zip
Received By: X Michael McMillan
Date/Time Received: 11-7-97
FedEx Employee Number: 0930

7 Release Signature:

Federal Express Use
Base Charges
Declared Value Charge
Other 1
Other 2
Total Charges

REVISION DATE 2/92
PART #137204 NCREC
FORMAT #126
126
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0483

SAMPLE LOG-IN SHEET

Group Name: 97C-0439

Lab Name: DataChem Laboratories, Inc.	Page 1 of 1
Received By (Print Name): MICHAEL MCMILLAN	Log-In Date: 11-8-97
Received By (Signature): Michael McMillan	
Case Number: NA	Sample Delivery Group No.: AAAAND
	SAS Number: Not Applicable

Remarks:

1. Custody Seal (s) (Present/Absent*) (Intact/Broken*)
2. Custody Seal Nos. NA
3. Chain-of Custody Records (Present/Absent*)
4. Traffic Report or Packing Lists (Present/Absent*)
5. Airbill (Airbill/Sticker) (Present/Absent*)
6. Airbill No. 4811 729 414
7. Sample Tags Present/Absent*
   Sample Tag Numbers Listed/Not Listed on Chain-of-Custody
8. Sample Condition (Intact/Broken*/Leaking*)
   Cooler Temperature 5°C
9. Does information on custody records, traffic reports, and sample tags agree? (Yes/No*) C97-1532
10. Date Received at Lab 11-7-97
11. Time Received 0930

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Matrix	Fraction	Remarks: Condition of Sample Shipment, etc.
AAAANS1	NA	97C05249	S	PCB	MS/MSD ACCEPTABLE
↓ ND1	↓	↓ 50	↓	↓	↓
RB	↓	↓ 51	W	↓	↓

Sample Transfer	
Fraction PCB	Fraction
Area # R23-1	Area #
By ~~MFM~~	By
On 11-7-97	On

* Contact SMO and attach record of resolution

Reviewed By	Logbook No. Not Applicable
Date	Logbook Page No. Not Applicable

FRACTIONS:
C - Cyanide
D - Dissolved Metals
T - Total Metals
F - Full TCL Organics
P- Pesticides
S - Semivolatiles
V - Volatiles

FORM DC-1

0424

08/01/97

DATACHEM LABORATORIES CLIENT-RELATED INFORMATION REPORT (CRIR)

COOLER OR CONTAINER INFORMATION CHECKLIST (Fill In or Circle)

Client Name: WESTON

Project/Task/Site:

Date/Time of Receipt: 11-07-97 0930

Number of Coolers Received: 7

Condition of Coolers: Acceptable/Unacceptable

Temperature Control: Present/Not Included

Custody Seals: Present/Absent/NA

Intact/Broken/NA

Location Temperature Taken: Control/Between Samples

Are all temperatures within project specific guidelines? Yes/No/NA

Tamper Evident: Yes/No/NA

Ice Present: Yes/No/NA

Frozen/Melted/NA

Are all applicable pHs within specific guidelines? Yes/No/NA

pH Check:						
Metals	Yes/No/NA	Total Phenolics	Yes/No/NA	NO3/NO2	Yes/No/NA
Cyandie	Yes/No/NA	TPH - 418.1	Yes/No/NA	Oil & Grease	Yes/No/NA
Sulfide	Yes/No/NA	COD	Yes/No/NA	Total Phosphorous	Yes/No/NA
Ammonia	Yes/No/NA	TKN	Yes/No/NA	Gross A/B, Gamma Spec	Yes/No/NA

Cooler Received	DCL Cooler No.	Temp.	Cooler Received	DCL Cooler No.	Temp.	Cooler Received	DCL Cooler No.	Temp.
1	C97 1526	2 °C	4	C97 1529	3 °C	7	C97 1532	5 °C
2	C97 1527	4 °C	5	C97 1530	4 °C	8	C97	°C
3	C97 1528	6 °C	6	C97 1531	4 °C	9	C97	°C

Taken By: [signature] (Signature) P Coburn (Printed Name) 11-07-97 (Date)

CLIENT-RELATED INFORMATION

- ☐ Missing Cooler
- ☐ Cooler Conditions
- ☐ Missing Paperwork
- ☐ Missing/Incorrect Bottle Labels
- ☐ Missing Samples/Bottles
- ☐ Broken/Leaking Samples
- ☐ Incorrect Bottle Type
- ☐ Cooler Temperatures Out Of Range
- ☐ Incorrect Preservation
- ☐ pH Criteria Not Met
- ☐ Head Space in Bottles
- ☐ Insufficient Sample Volume
- ☐ Chain Of Custody Problems
- ☐ Other:

EPA Custody Seal:

BRIEFLY DESCRIBE THE PROBLEM AND THE ACTION TAKEN:

Faxed to Client? Yes ☐ No ☐ (If yes, attach Fax Cover Sheet)

❖ **Response Required Within 24 Hours** ❖

PROJECT MANAGEMENT

PROJECT MANAGER COMMENTS:

DCL Project Manager: _____ (Printed Name) Returned to Sample Receipt by: _____ (Signature) Date: _____

(Revised 6/4/97)

0485

1/5/98

Sun 8:30 - 10:00 (1.5)
Mon 9:30 - 11:30 (2)
Tue 9:30 - 1200 (2.5)

97C-0439

97C-0439 contains 2 sets of data { 97C-0439-1 (2 soils) - collected 11/6/97
97C-0439-4 (1 RB) - collected 11/6/97 ext. 11/9/97

97C-0439-04 (RB data)

- ICAL all OK
- ICV 1254 and 1260 all failed - at least one peak
- Poor chromatograms of 1254 @ 0.02 and 0.1 µg/ml ; 1260 @ 0.01
- CCVs bracketing MB, QC, and RB failed 1260 %D
  ⇒ "J" 1260 for MB and RB2
- No PCBs were detected in RB

97C-0439-01

- Form 2 didn't summarize surrogate recoveries for both samples 97C05249 (AAAANS1) and 97C05250 (AAAANDI)
- ICAL: see above ; ICVs: see above
- CCVs bracketing the 2 samples failed %D

97C05249 (AAAANS1) 1:100 AR1254 ; peak integration inconsistent w/ std. integration ; "J" AR1254

MS/MSD 1:100 pattern same as native sample ; couldn't see 1016/1260 patterns. ⇒ dil. out ?

97C05250 (AAAANDI) 1:100 AR1254 ; peak integration inconsistent w/ std. integration ; "J" AR1254

49 (1:1) to report 1221 → 1248 ND
50 (1:1) " 1221 → 1242 ND

CONC. VERIFICATION BY QUADRATIC MODEL

97C-0439

	TCMX				DBC		
	Y	CONC.	%R	DF	Y	CONC.	%R
BLANK	70342	0.04810	96	1	48286	0.045	91
QC-142144-1	55378	0.03752	75	1	52622	0.050	99
97C5249	761	-0.00018	-35 *	100	0	-0.001	-133 *
97C5249MS	852	-0.00011	-23 *	100	0	-0.001	-133 *
97C5249MSD	833	-0.00013	-25 *	100	0	-0.001	-133 *
97C5250	843	-0.00012	-24 *	100	0	-0.001	-133 *
97C5249	64966	0.04429	89	1	0	-0.001	-1 *
97C5249MS	68405	0.04673	93	1	0	-0.001	-1 *
97C5249MSD	65843	0.04491	90	1	0	-0.001	-1 *
97C5250	56068	0.03801	76	1	0	-0.001	-1 *
BLANK	58570	0.03977	80	1	40838	0.038	76
QC-124247-1	54500	0.03691	74	1	46224	0.043	87
97C05251	64119	0.04369	87	1	36596	0.034	68

CONC.=(-B+SQRT(B^2-4AC))/(2A) in ug/mL in extract

F.V.= 10 mL
97C-0439

	AR1260-1		AR1260-2		AR1260-3		AR1260-4		AR1260-5		TOTAL CONC.			FINAL CONC.
	Y	CONC.	Y	CONC.	Y	CONC.	Y	CONC.	Y	CONC.	in extract	DF	%S	ug/Kg
ICV1260	21413	0.200	57885	0.211	17861	0.156	19176	0.148	43971	0.199	0.914	1	100	305
CCV5	16644	0.151	40798	0.141	18678	0.164	18516	0.143	31885	0.139	0.737	1	100	246
CCV6	19440	0.180	46808	0.165	23884	0.214	23940	0.190	35344	0.155	0.903	1	100	301
CCV7	16031	0.145	39380	0.136	19464	0.171	19006	0.147	30128	0.130	0.729	1	100	243
QC-142144-1	8966	0.078	22720	0.075	11011	0.093	11028	0.082	17873	0.074	0.402	1	100	134
97C5249	0	-0.001	0	-0.001	0	-0.003	0	0.000	0	0.000	-0.005	1	61.1	-269
97C5249MS	3095	0.026	7141	0.022	~~13728~~	~~0.117~~	12121	0.090	69315	0.350	.488 ~~0.605~~	5/4 100	61.1	~~33029~~ 20333
97C5249MSD	0	-0.001	5008	0.015	~~11335~~	~~0.096~~	10151	0.075	63753	0.313	.402 ~~0.498~~	5/4 100	61.1	~~27181~~ 16750
97C5249	0	-0.001	0	-0.001	0	-0.003	0	0.000	0	0.000	-0.005	1	61.1	-3
97C5249MS	0	-0.001	0	-0.001	0	-0.003	0	0.000	0	0.000	-0.005	1	61.1	-3
97C5249MSD	0	-0.001	0	-0.001	0	-0.003	0	0.000	0	0.000	-0.005	1	61.1	-3

	AR1016-1		AR1016-2		AR1016-3		AR1016-4		AR1016-5					
	Y	CONC.	Y	CONC.	Y	CONC.	Y	CONC.	Y	CONC.				
ICV1016	52162	0.282	85657	0.236	34806	0.243	21217	0.200	28783	0.207	1.167	1	100	389
CCV5	36630	0.185	64658	0.172	26305	0.181	20572	0.193	24589	0.174	0.905	1	100	302
CCV6	37275	0.188	67969	0.182	28724	0.199	23855	0.228	28763	0.207	1.003	1	100	334
CCV7	36016	0.181	61926	0.164	25055	0.173	19348	0.181	23593	0.166	0.864	1	100	288
QC-142144-1	18012	0.084	31242	0.079	12642	0.086	10295	0.092	12689	0.085	0.426	1	100	142
97C5249	0	-0.002	0	0.000	0	0.000	0	0.001	0	-0.001	-0.003	1	61.1	-162
97C5249MS	~~434~~	~~0.000~~	1723	0.004	0	0.000	4737	0.042	1523	0.009	0.054	5/4 100	~~61.1~~	~~2963~~ 3000
97C5249MSD	~~389~~	~~0.000~~	1217	0.002	0	0.000	3609	0.032	990	0.006	0.039	100	~~61.1~~	~~2151~~ 2167
97C5249	0	-0.002	0	0.000	0	0.000	0	0.001	0	-0.001	-0.003	1	61.1	-2
97C5249MS	27743	0.135	101492	0.288	15259	0.104	590130	#NUM!	99895	#NUM!	#NUM!	1	61.1	#NUM!
97C5249MSD	24900	0.120	90140	0.251	13777	0.093	537993	#NUM!	82056	0.936	#NUM!	1	61.1	#NUM!

CONC. VERIFICATION BY QUADRATIC MODEL FOR AR1254

F.V.= 10 mL
97C-0439

CONC.=(-B+SQRT(B^2-4AC))/(2A) in ug/mL in extract

	AR1254-1		AR1254-2		AR1254-3		AR1254-4		AR1254-5		TOTAL CONC.			FINAL CONC
	Y	CONC.	Y	CONC.	Y	CONC.	Y	CONC.	Y	CONC.	in extract	DF	%S	ug/Kg
ICV1254	20232	0.149	36018	0.160	57990	0.162	45793	0.224	27901	0.144	0.839	1	100	280
97C5249	2332	0.010	4091	0.013	4864	0.012	8103	0.037	2449	0.012	0.083	100	61.1	4553
97C5249MS	3558	0.018	6027	0.022	9092	0.023	9569	0.044	3702	0.018	0.124	100	61.1	6780
97C5249MSD	2448	0.010	4316	0.014	5636	0.014	8195	0.037	2560	0.012	0.088	100	61.1	4811
97C5250	3619	0.019	6967	0.026	7769	0.019	15574	0.071	3083	0.015	0.150	100	57.6	8692
97C5249		-0.007		-0.004		-0.001		0.000		0.000	-0.011	1	61.1	-6
97C5249MS		-0.007		-0.004		-0.001		0.000		0.000	-0.011	1	61.1	-6
97C5249MSD		-0.007		-0.004		-0.001		0.000		0.000	-0.011	1	61.1	-6
97C5250		-0.007		-0.004		-0.001		0.000		0.000	-0.011	1	57.6	-6