SDMS US EPA REGION V -1

SOME IMAGES WITHIN THIS DOCUMENT MAY BE ILLEGIBLE DUE TO BAD SOURCE DOCUMENTS.

#150765

ANALYTICAL SERVICES, INC.

October 30, 2000

Mr. Dave Hendren
Ecology & Environment
33 North Dearborn, Suite 900
Chicago IL 60602

Re: Reproduction of Report
Sauget Area Project
EIS Order 970400209

Dear Dave:

Enclosed please find the subject report requested by your client. Should you have any questions, please feel free to contact me.

Sincerely,

EIS ANALYTICAL SERVICES, INC.

Andris Rozite
President

Enclosure

1701 North Ironwood Drive, Suite B • South Bend, Indiana 46635 • Phone: 219/277-0707 Fax: 219/273-5699
2009 RPT copy for EPA

ANALYTICAL SERVICES, INC.

May 22, 1997

Mr. Dave Hendren
Ecology & Environment, Inc.
33 North Dearborn, Suite 900
Chicago IL 60602

CLIENT FILE

Re: Sauget Area Project
Final Report of Analysis

Dear Dave:

Enclosed please find the final report for the subject analysis. Dioxans/Furans were subcontracted to Triangle Laboratories and their report is enclosed in its entirety.

We have not evaluated the Dioxin/Furan report and are leaving that up to you. Questions concerning this analysis may be directed to either Triangle Labs or to us. If to us, we would simply be "intermediates".

There were no unusual problems experienced in the remaining analysis. The following comments are provided concerning this work:

- SVOC is evaluated by linear regression and not average response factors.
- PCB which was detected in the combined Pesticide/PCB analysis run was reanalyzed using a PCB specific column/temp program to assist in pattern recognition.

Should you have any questions, please feel free to contact me.

Sincerely,

EIS ANALYTICAL SERVICES, INC.

Andris Rozite
President

AR:acr
Enclosures

1701 North Ironwood Drive, Suite B • South Bend, Indiana 46635 • Phone: 219/277-0707 Fax: 219/273-5699
2009 RPT 42083 E&E

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

I ON 5
~~230 South Dearborn Street~~
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.

PROJECT NAME: Sauget Area 1

SAMPLERS: (Signature) Damon M Swaro

4-209

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	EIS #	NO. OF CONTAINERS	PCB	Metals	PAH	Pesticides	TOC	Dioxin	REMARKS
F101	4/18/97	1020		X		42083	1	X	X	X				QA Level II
F102		1030	X			42084	1	X	X	X	X	X		
F103		1053	X			42085	1	X	X		X	X		Send Results To:
F104		1125	X			42086	1	X	X		X	X		Dave Hendren
F105		1200	X			42087	1	X	X	X				Ecology and Environment
W F106		1210	X			42088	1	X	X	X				33 N. Dearborn St.
F107		1250	X			42089	1	X	X	X	X			Chicago, IL 60602
F108		1340	X			42090	1	X	X					Tel: (312) 578-9243
F109		1340	X			42091	1	X	X					Fax: (312) 578-9345
F301		1020		X		42092	1						X	
F302		1030	X			42093	1						X	Turn Around
F305		1200	X			42094	1						X	Verbal - 2 weeks; Dioxin - 3 weeks
F307	✓	1250	X			42095	1						X	Hardcopy - 3 weeks; Dioxin - 4 weeks

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Damon M Swaro	4/21/97 1600				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks To: ~~Ecology and Environment~~ EIS Analytical Services ~~[redacted]~~ ~~[redacted]~~ Contact: ~~[redacted]~~ Andy Rozite	

Distribution White — Accompanies Shipment; Pink — Coordinator Field Files; Yellow — Laboratory File

10710

[redacted]

Mr David Hendren
Ecology & Environment, Inc.
33 North Dearborn, Suite 900
Chicago, IL 60602
Tel No: 312-578-9243
Fax No: 312-578-9345
PO No:
Project Name: Sauget Area

Report Date:	5/22/97
EIS Order No:	**970400209**
EIS Sample No:	042083
EIS Project No:	2009-1000-97
Client Sample ID:	**F101**
Date Collected:	4/18/97
Date Received:	4/22/97
Collected By:	DMS

This report presents results of analysis for your sample(s) received under our Order No above. This Number is to be used in all inquiries concerning this report. The EIS Sample No above, as well as your Sample ID, refer to the first sample in a multi-sample submission

DEFINITIONS:
MDL = Method Detection Limit normally achieved in the absence of interferences or other matrix difficulties.
SDL = Sample Detection Limit achieved in your sample. If numerically greater than the MDL, dilutions were required in order to perform the analysis. If numerically less than the MDL, alternate techniques were employed.

CHAIN-OF-CUSTODY is enclosed if received with your sample submission.

QUALITY ASSURANCE OFFICER

LABORATORY DIRECTOR

The data in this report has been reviewed and complies with EIS Quality Control unless specifically addressed above.

EIS Analytical Services Inc **1701 N. Ironwood Drive, Suite B * South Bend, IN 46635 * Tel: 219-277-0707 * Fax: 219-273-5699**

SAMPLE RESULTS

CLIENT SAMPLE ID: F101
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042083
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Arsenic,Total	232	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Barium,Total	145	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Cadmium,Total	<1.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Chromium,Total	44.2	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Lead,Total	41.2	mg/kg(wet)	5	5	ClearN	4/28/97	6010
Mercury,Total	<0.1	mg/kg(wet)	0.1	0.2	ShaneD	4/30/97	7471
Selenium,Total	<5.0	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Silver,Total	<2.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010

lab specific DL

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

SAMPLE RESULTS

CLIENT SAMPLE ID: F101
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042083
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Acenaphthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Acenaphthylene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Anthracene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(a)anthracene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(a)pyrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(b)fluoranthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(ghi)perylene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(k)fluoranthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Chrysene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Dibenzo(a,h)anthracene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Fluoranthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Fluorene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Indeno(1,2,3-cd)pyrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Naphthalene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Phenanthrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Pyrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

SAMPLE RESULTS

CLIENT SAMPLE ID: F101
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042083
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
PCB (AR1016)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1221)	nd	mg/kg(wet)	0.2	0.2	KlepperW	4/25/97	8081
PCB (AR1232)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1242)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1248)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1254)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1260)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

SAMPLE RESULTS

CLIENT SAMPLE ID: F102
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042084
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Total Organic Carbon (TOC)	26600	mg/kg(wet)	5	5	BaunG	4/28/97	9060 M

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

SAMPLE RESULTS

CLIENT SAMPLE ID: F102
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042084
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Arsenic,Total	187	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Barium,Total	162	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Cadmium,Total	4.56	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Chromium,Total	29.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Lead,Total	199	mg/kg(wet)	5	5	ClearN	4/28/97	6010
Mercury,Total	0.24	mg/kg(wet)	0.1	0.2	ShaneD	4/30/97	7471
Selenium,Total	<5.0	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Silver,Total	<2.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

SAMPLE RESULTS

CLIENT SAMPLE ID: F102
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042084
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Acenaphthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Acenaphthylene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Anthracene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(a)anthracene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(a)pyrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(b)fluoranthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(ghi)perylene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(k)fluoranthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Chrysene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Dibenzo(a,h)anthracene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Fluoranthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Fluorene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Indeno(1,2,3-cd)pyrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Naphthalene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Phenanthrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Pyrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

SAMPLE RESULTS

CLIENT SAMPLE ID: F102
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042084
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
PCB (AR1016)	nd	mg/kg(wet)	0.5	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1221)	nd	mg/kg(wet)	1	0.2	CarmichaelJ	4/26/97	8081
PCB (AR1232)	nd	mg/kg(wet)	0.5	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1242)	nd	mg/kg(wet)	0.5	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1248)	nd	mg/kg(wet)	0.5	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1254)	2.1	mg/kg(wet)	0.5	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1260)	nd	mg/kg(wet)	0.5	0.1	CarmichaelJ	4/26/97	8081

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

SAMPLE RESULTS

CLIENT SAMPLE ID: F102
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042084
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Aldrin	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Chlordane(alpha)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Chlordane(gamma)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Dieldrin	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endosulfan I	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endosulfan II	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endosulfan sulfate	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endrin	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endrin aldehyde	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endrin ketone	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Heptachlor	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (alpha-BHC)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (beta-BHC)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (delta-BHC)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (gamma-BHC)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Methoxychlor	nd	mg/kg(wet)	0.25	0.005	CarmichaelJ	4/26/97	8081
P,P'-DDD	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
P,P'-DDE	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
P,P'-DDT	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Toxaphene	nd	mg/kg(wet)	2.5	0.2	CarmichaelJ	4/26/97	8081

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

SAMPLE RESULTS

CLIENT SAMPLE ID: F103
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042085
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Total Organic Carbon (TOC)	16900	mg/kg(wet)	5	5	BaunG	4/28/97	9060 M

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

SAMPLE RESULTS

CLIENT SAMPLE ID: F103
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042085
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Arsenic,Total	213	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Barium,Total	179	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Cadmium,Total	8.29	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Chromium,Total	43.8	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Lead,Total	111	mg/kg(wet)	5	5	ClearN	4/28/97	6010
Mercury,Total	0.30	mg/kg(wet)	0.1	0.2	ShaneD	4/30/97	7471
Selenium,Total	<5.0	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Silver,Total	<2.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

SAMPLE RESULTS

CLIENT SAMPLE ID: F103
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042085
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
PCB (AR1016)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1221)	nd	mg/kg(wet)	0.2	0.2	CarmichaelJ	4/26/97	8081
PCB (AR1232)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1242)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1248)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1254)	0.50	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1260)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

SAMPLE RESULTS

CLIENT SAMPLE ID: F103
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042085
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Aldrin	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Chlordane(alpha)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Chlordane(gamma)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Dieldrin	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endosulfan I	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endosulfan II	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endosulfan sulfate	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endrin	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endrin aldehyde	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endrin ketone	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Heptachlor	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (alpha-BHC)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (beta-BHC)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (delta-BHC)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (gamma-BHC)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Methoxychlor	nd	mg/kg(wet)	0.25	0.005	CarmichaelJ	4/26/97	8081
P,P'-DDD	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
P,P'-DDE	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
P,P'-DDT	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Toxaphene	nd	mg/kg(wet)	2.5	0.2	CarmichaelJ	4/26/97	8081

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

SAMPLE RESULTS

CLIENT SAMPLE ID: F104
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042086
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Total Organic Carbon (TOC)	17600	mg/kg(wet)	5	5	BaunG	4/28/97	9060 M

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

SAMPLE RESULTS

CLIENT SAMPLE ID: F104
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042086
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Arsenic,Total	276	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Barium,Total	228	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Cadmium,Total	16.3	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Chromium,Total	27.2	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Lead,Total	124	mg/kg(wet)	5	5	ClearN	4/28/97	6010
Mercury,Total	0.55	mg/kg(wet)	0.11	0.2	ShaneD	4/30/97	7471
Selenium,Total	<5.0	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Silver,Total	<2.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

SAMPLE RESULTS

CLIENT SAMPLE ID: F104
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042086
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
PCB (AR1016)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1221)	nd	mg/kg(wet)	0.2	0.2	CarmichaelJ	4/26/97	8081
PCB (AR1232)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1242)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1248)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1254)	0.52	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1260)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

SAMPLE RESULTS

CLIENT SAMPLE ID: F104
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042086
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Aldrin	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Chlordane(alpha)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Chlordane(gamma)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Dieldrin	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endosulfan I	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endosulfan II	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endosulfan sulfate	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endrin	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endrin aldehyde	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endrin ketone	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Heptachlor	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (alpha-BHC)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (beta-BHC)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (delta-BHC)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (gamma-BHC)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Methoxychlor	nd	mg/kg(wet)	0.25	0.005	CarmichaelJ	4/26/97	8081
P,P'-DDD	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
P,P'-DDE	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
P,P'-DDT	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Toxaphene	nd	mg/kg(wet)	2.5	0.2	CarmichaelJ	4/26/97	8081

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

SAMPLE RESULTS

CLIENT SAMPLE ID: F105
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042087
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Arsenic,Total	166	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Barium,Total	116	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Cadmium,Total	<1.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Chromium,Total	12.6	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Lead,Total	56.2	mg/kg(wet)	5	5	ClearN	4/28/97	6010
Mercury,Total	<0.12	mg/kg(wet)	0.12	0.2	ShaneD	4/30/97	7471
Selenium,Total	<5.0	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Silver,Total	<2.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

SAMPLE RESULTS

CLIENT SAMPLE ID: F105
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042087
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Acenaphthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Acenaphthylene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Anthracene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(a)anthracene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(a)pyrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(b)fluoranthene	0.63	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(ghi)perylene	0.52	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(k)fluoranthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Chrysene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Dibenzo(a,h)anthracene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Fluoranthene	0.62	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Fluorene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Indeno(1,2,3-cd)pyrene	0.50	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Naphthalene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Phenanthrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Pyrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

SAMPLE RESULTS

CLIENT SAMPLE ID: F105
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042087
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
PCB (AR1016)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1221)	nd	mg/kg(wet)	0.2	0.2	KlepperW	4/25/97	8081
PCB (AR1232)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1242)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1248)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1254)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1260)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

SAMPLE RESULTS

CLIENT SAMPLE ID: F106
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042088
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Arsenic,Total	160	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Barium,Total	133	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Cadmium,Total	<1.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Chromium,Total	12.1	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Lead,Total	28.3	mg/kg(wet)	5	5	ClearN	4/28/97	6010
Mercury,Total	<0.13	mg/kg(wet)	0.13	0.2	ShaneD	4/30/97	7471
Selenium,Total	<5.0	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Silver,Total	<2.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

SAMPLE RESULTS

CLIENT SAMPLE ID: F106
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042088
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Acenaphthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Acenaphthylene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Anthracene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(a)anthracene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(a)pyrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(b)fluoranthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(ghi)perylene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(k)fluoranthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Chrysene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Dibenzo(a,h)anthracene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Fluoranthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Fluorene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Indeno(1,2,3-cd)pyrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Naphthalene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Phenanthrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Pyrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

SAMPLE RESULTS

CLIENT SAMPLE ID: F106
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042088
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
PCB (AR1016)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1221)	nd	mg/kg(wet)	0.2	0.2	KlepperW	4/25/97	8081
PCB (AR1232)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1242)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1248)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1254)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1260)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

SAMPLE RESULTS

CLIENT SAMPLE ID: F107
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042089
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Arsenic,Total	144	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Barium,Total	137	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Cadmium,Total	<1.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Chromium,Total	10.4	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Lead,Total	28.2	mg/kg(wet)	5	5	ClearN	4/28/97	6010
Mercury,Total	<0.13	mg/kg(wet)	0.13	0.2	ShaneD	4/30/97	7471
Selenium,Total	<5.0	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Silver,Total	<2.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

SAMPLE RESULTS

CLIENT SAMPLE ID: F107
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042089
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Acenaphthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Acenaphthylene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Anthracene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(a)anthracene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(a)pyrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(b)fluoranthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(ghi)perylene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(k)fluoranthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Chrysene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Dibenzo(a,h)anthracene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Fluoranthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Fluorene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Indeno(1,2,3-cd)pyrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Naphthalene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Phenanthrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Pyrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

SAMPLE RESULTS

CLIENT SAMPLE ID: F107
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042089
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
PCB (AR1016)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1221)	nd	mg/kg(wet)	0.2	0.2	CarmichaelJ	4/26/97	8081
PCB (AR1232)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1242)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1248)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1254)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1260)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

SAMPLE RESULTS

CLIENT SAMPLE ID: F107
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042089
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Aldrin	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
Chlordane(alpha)	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
Chlordane(gamma)	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
Dieldrin	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
Endosulfan I	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
Endosulfan II	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
Endosulfan sulfate	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
Endrin	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
Endrin aldehyde	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
Endrin ketone	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
Heptachlor	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (alpha-BHC)	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (beta-BHC)	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (delta-BHC)	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (gamma-BHC)	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
Methoxychlor	nd	mg/kg(wet)	0.02	0.005	CarmichaelJ	4/26/97	8081
P,P'-DDD	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
P,P'-DDE	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
P,P'-DDT	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
Toxaphene	nd	mg/kg(wet)	0.2	0.2	CarmichaelJ	4/26/97	8081

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

SAMPLE RESULTS

CLIENT SAMPLE ID: F108
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042090
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Arsenic,Total	199	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Barium,Total	138	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Cadmium,Total	<1.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Chromium,Total	14.9	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Lead,Total	45.7	mg/kg(wet)	5	5	ClearN	4/28/97	6010
Mercury,Total	0.12	mg/kg(wet)	0.11	0.2	ShaneD	4/30/97	7471
Selenium,Total	<5.0	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Silver,Total	<2.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

SAMPLE RESULTS

CLIENT SAMPLE ID: F108
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042090
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
PCB (AR1016)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1221)	nd	mg/kg(wet)	0.2	0.2	KlepperW	4/25/97	8081
PCB (AR1232)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1242)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1248)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1254)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1260)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

SAMPLE RESULTS

CLIENT SAMPLE ID: F109
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042091
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Arsenic,Total	160	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Barium,Total	163	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Cadmium,Total	<1.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Chromium,Total	13.9	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Lead,Total	50.2	mg/kg(wet)	5	5	ClearN	4/28/97	6010
Mercury,Total	0.11	mg/kg(wet)	0.11	0.2	ShaneD	4/30/97	7471
Selenium,Total	<5.0	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Silver,Total	<2.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

SAMPLE RESULTS

CLIENT SAMPLE ID: F109
Date Collected: 4/18/97
Date Received: 4/22/97

Report Date: 5/22/97
EIS Sample No: 042091
EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
PCB (AR1016)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1221)	nd	mg/kg(wet)	0.2	0.2	KlepperW	4/25/97	8081
PCB (AR1232)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1242)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1248)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1254)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1260)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

ANALYSIS SUPPORT INFORMATION

CLIENT NAME: Ecology & Environment, Inc.
EIS Order No: 970400209 **Report Date:** 5/22/97

EIS Lab Number	Client Description	Sample Date	Parameter	Result	Date Completed	Analyst	Method
042083	F101	4/18/97	Digest Mercury	Complete	4/29/97	ShaneD	7471
	F101	4/18/97	Digest ICP Metals	Complete	4/24/97	ShaneD	3005 A
	F101	4/18/97	Extract Pest/PCB	Complete	4/24/97	MabryE	3540B
	F101	4/18/97	Extract SVOC	Complete	4/23/97	DavisW	3540B
042084	F102	4/18/97	Digest Mercury	Complete	4/29/97	ShaneD	7471
	F102	4/18/97	Digest ICP Metals	Complete	4/24/97	ShaneD	3005 A
	F102	4/18/97	Extract Pest/PCB	Complete	4/24/97	MabryE	3540B
	F102	4/18/97	Extract SVOC	Complete	4/23/97	DavisW	3540B
042085	F103	4/18/97	Digest Mercury	Complete	4/29/97	ShaneD	7471
	F103	4/18/97	Digest ICP Metals	Complete	4/24/97	ShaneD	3005 A
	F103	4/18/97	Extract Pest/PCB	Complete	4/24/97	MabryE	3540B
042086	F104	4/18/97	Digest Mercury	Complete	4/29/97	ShaneD	7471
	F104	4/18/97	Digest ICP Metals	Complete	4/24/97	ShaneD	3005 A
	F104	4/18/97	Extract Pest/PCB	Complete	4/24/97	MabryE	3540B
042087	F105	4/18/97	Digest Mercury	Complete	4/29/97	ShaneD	7471
	F105	4/18/97	Digest ICP Metals	Complete	4/24/97	ShaneD	3005 A
	F105	4/18/97	Extract Pest/PCB	Complete	4/24/97	MabryE	3540B
	F105	4/18/97	Extract SVOC	Complete	4/23/97	DavisW	3540B
042088	F106	4/18/97	Digest Mercury	Complete	4/29/97	ShaneD	7471
	F106	4/18/97	Digest ICP Metals	Complete	4/24/97	ShaneD	3005 A
	F106	4/18/97	Extract Pest/PCB	Complete	4/24/97	MabryE	3540B
	F106	4/18/97	Extract SVOC	Complete	4/23/97	DavisW	3540B
042089	F107	4/18/97	Digest Mercury	Complete	4/29/97	ShaneD	7471
	F107	4/18/97	Digest ICP Metals	Complete	4/24/97	ShaneD	3005 A
	F107	4/18/97	Extract Pest/PCB	Complete	4/24/97	MabryE	3540B
	F107	4/18/97	Extract SVOC	Complete	4/23/97	DavisW	3540B
042090	F108	4/18/97	Digest Mercury	Complete	4/29/97	ShaneD	7471
	F108	4/18/97	Digest ICP Metals	Complete	4/24/97	ShaneD	3005 A
	F108	4/18/97	Extract Pest/PCB	Complete	4/24/97	MabryE	3540B
042091	F109	4/18/97	Digest Mercury	Complete	4/29/97	ShaneD	7471
	F109	4/18/97	Digest ICP Metals	Complete	4/24/97	ShaneD	3005 A
	F109	4/18/97	Extract Pest/PCB	Complete	4/24/97	MabryE	3540B

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

ANALYSIS SUPPORT INFORMATION

CLIENT NAME: Ecology & Environment, Inc.
EIS Order No: 970400209

Report Date: 5/22/97

EIS Lab Number	Client Description	Sample Date	Parameter	Result	Date Completed	Analyst	Method
042092	F301	4/18/97	Dioxins/Furans	**	5/5/97	Triangle Labs	8290
042093	F302	4/18/97	Dioxins/Furans	**	5/10/97	Triangle Labs	8290
042094	F305	4/18/97	Dioxins/Furans	**	5/10/97	Triangle Labs	8290
042095	F307	4/18/97	Dioxins/Furans	**	5/5/97	Triangle Labs	8290

EIS Analytical Services, Inc. 1701 North Ironwood Drive, Suite B * South Bend, IN 46635 * 219-277-0707 * Fax: 219-273-5699

MERCURY

Mercury Worksheet

Digested 4-29-97
Analyzed 4-30-97

Page 1 of 3

Sulfuric Acid (H_2SO_4) _____

Nitric Acid (HNO_3) _____

Pot. Permanganate ($KMnO_4$) 15 mL

Pot. Persulfate ($K_2S_2O_8$) _____

Aqua Regia 5 mL

Pot. Dichromate ($K_2Cr_2O_7$) _____

Sod. Cl.-Hydrox. Hydrochloride ($NaCl\ NH_2OH \cdot HCl$) 15 mL

Stannous Chloride ($SnCl_2$) 5 mL

	Bottle #	Sample #	Vol. or Wt.		Result	
1	1	Cal. Blank			1 mm	
2	2	0.02 ~~mg~~ Hg	FISHER		16.5	
3	5	0.05 ~~mg~~ Hg			39.5	
4	8	0.1 ~~mg~~ Hg			75	
5	9	0.2 ~~mg~~ Hg			143	
6	13	0.3 ~~mg~~ Hg			205.5	
7	22	Method Blank	200 mL		5.5	
8	23	42083	0.7602 0.5519	0.2083 g.	20	
9	29		0.7588 0.5519	0.2069	15.5	
10	32		0.7546 0.5516	0.2030	10.5	
11	78	(0.1) ms	0.7611 0.5516	0.2095	87	
12	86		0.7580 0.5521	0.2059	86.5	104% Rec
13	88		0.7615 0.5516	0.2099	84	
14	100	dms	0.7572 0.5515	0.2057	86	
15	101		0.7607 0.5516	0.2091	84.5	104% Rec
16	103		0.7568 0.5518	0.2050	87.5	
17	105	42084	0.7644 0.5618	0.2026	34.5	
18	106		0.7664 0.5615	0.2049	39	
19	107		0.7711 0.5619	0.2092	40.5	
20	114	WP027-2 2/1	2 mL		52.5	99% Rec.

COMMENTS EPA Act. = 0.0180 mg/L

$\frac{0.017771}{0.0180} \times 100 = 99\%$ Rec.

Mercury Worksheet

Page 2 of 3

Sulfuric Acid (H_2SO_4) _____

Nitric Acid (HNO_3) _____

Pot. Permanganate ($KMnO_4$) _____

Pot. Persulfate ($K_2S_2O_8$) _____

Pot. Dichromate ($K_2Cr_2O_7$) _____

Sod. Cl.-Hydrox. Hydrochloride ($NaCl\ NH_2OH \cdot HCl$) _____

Stannous Chloride ($SnCl_2$) _____

	Bottle #	Sample #	Vol. or Wt.		Result
1	115	42085	0.7547 0.5521	0.2076	39
2	118	↓	0.7614 0.5519	0.2095	47
3	138	↓	0.7530 0.5520	0.2010	51.5
4	171	42086	0.7212 0.5368	0.1844	68
5	176	↓	0.7191 0.5366	0.1825	78.5
6	178	↓	0.7222 0.5366	0.1856	71.5
7	185	0.1 ~~mg/kg~~ CK	RICCA		77.5
8	184	Cal. Blank			2.5
9	222	0.02 ~~mg/kg~~	RICCA		17
10	233	0.05 ~~mg/kg~~	↓		38.5
11	236	0.1 ~~mg/kg~~	↓		75
12	241	0.2 ~~mg/kg~~	↓		142.5
13	244	0.3 ~~mg/kg~~	↓		204.5
14	248	Method Blank	200 ml		3.5
15	263	42087	0.7161 0.5368	0.1793	18.5
16	270	↓	0.7137 0.5368	0.1769	16
17	276	↓	0.7095 0.5367	0.1728	13
18	286	↓ dup	0.7122 0.5369	0.1753	13
19	316	↓	0.7152 0.5366	0.1786	14.5
20	317	↓	0.7286 0.5506	0.1780	14

COMMENTS _____

Mercury Worksheet

Sulfuric Acid (H_2SO_4) _____

Nitric Acid (HNO_3) _____

Pot. Permanganate ($KMnO_4$) _____

Pot. Persulfate ($K_2S_2O_8$) _____

Pot. Dichromate ($K_2Cr_2O_7$) _____

Sod. Cl.-Hydrox. Hydrochloride ($NaCl\ NH_2OH \cdot HCl$) _____

Stannous Chloride ($SnCl_2$) _____

	Bottle #	Sample #	Vol. or Wt.	Result
1	318	42088	0.7135 0.5507 0.1628	6
2	324	↓	0.7175 0.5506 0.1669	6
3	326	↓	0.7161 0.5505 0.1656	5.5
4	327	42089	0.7164 0.5501 0.1663	5
5	328	↓	0.7164 0.5500 0.1664	4.5
6	330	↓	0.7158 0.5501 0.1657	4.5
7	331	42090	0.7425 0.5502 0.1923	19.5
8	332	↓	0.7373 0.5500 0.1873	19
9	333	↓	0.7249 0.5433 0.1816	18
10	336	42091	0.7349 0.5485 0.1864	19.5
11	365	↓	0.7304 0.5484 0.1820	18
12	372	↓	0.7296 0.5488 0.1808	17.5
13	381	WPQ27-2 2/1	2ml	91.5 97% Rec.
14	384	0.1 ~~mg~~ CK	FISHER	73 101% Rec.
15				
16				
17				
18				
19				
20				

$\bar{x}$ = 0.13 mg/kg wet
% RSD = 0.13
D.L. = 0.6
D.F. = 0.6

$\bar{x}$ = 0.13 mg/kg wet
% RSD = 0.13
D.L. = 0.6
D.F. = 0.6

$\bar{x}$ = 0.12 mg/kg wet
% RSD = 2.3
D.L. = 0.11
D.F. = 0.5

$\bar{x}$ = 0.11 mg/kg wet
% RSD = 5.4
D.L. = 0.11
D.F. = 0.5

COMMENTS _____

ICP METALS

INITIAL/CONTINUING CALIBRATION VERIFICATION

LAB NAME: EIS ANALYSIS DATE: 04/28/97

METHOD: TCLP
CONC UNITS: mg/l

	- -INITIAL CALIBRATION- -				- - - - CONTINUING CALIBRATION - - - -					
Analyte	True	QC Range (+/-)	Found	QC Status	True	QC Range (+/-)	#1 Found	QC Status	#2 Found	QC Status
AS	1.0	0.1	1.00208	PASS	2.0	0.2	2.06476	PASS	2.06904	PASS
BA	1.0	0.1	1.03655	PASS	2.0	0.2	2.11520	PASS	2.12929	PASS
CD	1.0	0.1	1.00540	PASS	2.0	0.2	2.03873	PASS	2.00171	PASS
CR	1.0	0.1	1.00358	PASS	2.0	0.2	2.04721	PASS	2.04298	PASS
PB	1.0	0.1	1.00331	PASS	2.0	0.2	2.03645	PASS	2.04030	PASS
SE	1.0	0.1	0.98077	PASS	2.0	0.2	2.00890	PASS	1.96998	PASS
AG	1.0	0.1	1.01136	PASS	2.0	0.2	2.06146	PASS	1.92472	PASS
CU	1.0	0.1	1.00366	PASS	2.0	0.2	2.00839	PASS	2.00318	PASS
NI	1.0	0.1	1.02128	PASS	2.0	0.2	2.07731	PASS	2.09439	PASS
ZN	1.0	0.1	1.03794	PASS	2.0	0.2	2.10920	PASS	2.08760	PASS

Initial Calibration: CVC27 @ 12:03
Continuing Calibration: CCC27-1 @ 12:19
Continuing Calibration: CCC27-2 @ 13:38

Applicable Samples: 41916,42060,42125,42126,42127,42129,04235,42083,42085,42086.

ICP INTERFERENCE CHECK SAMPLES

LAB NAME: EIS ANALYSIS DATE: 04/28/9

METHOD: TCLP
CONC UNITS: mg/L

	- - - INITIAL CHECK - - -				- - FINAL CHECK - -	
Analyte	True	QC Range (+/-)	Found	QC Status	Found	Status
AS	2.0	0.4	2.39896	N/A	2.40499	N/A
BA	2.0	0.4	1.91676	PASS	1.89188	PASS
CD	2.0	0.4	1.86916	PASS	1.87066	PASS
CR	2.0	0.4	1.82785	PASS	1.84536	PASS
PB	2.0	0.4	1.95661	PASS	1.94023	PASS
SE	2.0	0.4	1.72554	PASS	1.67958	PASS
AG	2.0	0.4	1.88966	PASS	2.01636	PASS
CU	2.0	0.4	1.75193	PASS	1.75179	PASS
NI	2.0	0.4	1.86969	PASS	1.87033	PASS
ZN	2.0	0.4	1.91876	PASS	1.97639	PASS

Initial Check: IF2-1 @ 12:06
Final Check: IF2-2 @ 15:33

INITIAL/CONTINUING CALIBRATION VERIFICATION

LAB NAME: EIS ANALYSIS DATE: 04/28/9

METHOD: TCLP
CONC UNITS: mg/l

	- -INITIAL CALIBRATION- -				- - - - CONTINUING CALIBRATION - - - -					
Analyte	True	QC Range (+/-)	Found	QC Status	True	QC Range (+/-)	#1 Found	QC Status	#2 Found	QC Statu-
AS	1.0	0.1	1.01480	PASS	2.0	0.2	2.03262	PASS	2.01100	PASS
BA	1.0	0.1	1.02671	PASS	2.0	0.2	2.11756	PASS	2.05221	PASS
CD	1.0	0.1	1.00770	PASS	2.0	0.2	2.05369	PASS	2.00696	PASS
CR	1.0	0.1	1.00639	PASS	2.0	0.2	2.06038	PASS	1.99907	PASS
PB	1.0	0.1	1.01485	PASS	2.0	0.2	2.05156	PASS	2.00446	PASS
SE	1.0	0.1	0.97455	PASS	2.0	0.2	2.00310	PASS	1.95635	PASS
AG	1.0	0.1	1.07116	PASS	2.0	0.2	2.18604	PASS	2.04675	PASS
CU	1.0	0.1	0.98875	PASS	2.0	0.2	2.02804	PASS	1.96441	PASS
NI	1.0	0.1	1.02759	PASS	2.0	0.2	2.08069	PASS	2.04114	PASS
ZN	1.0	0.1	1.04257	PASS	2.0	0.2	2.12147	PASS	2.09333	PASS

Initial Calibration: CVC27 @ 14:01
Continuing Calibration: CCC27-1 @ 14:05
Continuing Calibration: CCC27-2 @ 14:57

Applicable Samples: 42084,42088,42089,42090,42091

CALIBRATION/METHOD BLANKS VERIFICATION

LAB NAME: EIS ANALYSIS DATE: 04/28/9

METHOD: TCLP
CONC UNITS: mg/l

	CALIBRATION BLANK #1		CALIBRATION BLANK #2		METHOD BLANK	
Analyte	Found	Status	Found	Status	Found	Statu
AS	-0.00341	PASS	0.00310	PASS	0.00233	PASS
BA	0.00082	PASS	0.00104	PASS	0.00226	PASS
CD	0.00329	PASS	-0.00030	PASS	0.00299	PASS
CR	0.00137	PASS	-0.00201	PASS	-0.00201	PASS
PB	0.00222	PASS	0.00961	PASS	-0.00192	PASS
SE	0.00358	PASS	0.02529	PASS	0.00194	PASS
AG	0.00143	PASS	0.00107	PASS	0.00491	PASS
CU	0.01315	FAIL-H	-0.00267	PASS	0.02928	FAIL-+
NI	0.00509	PASS	0.00173	PASS	-0.00057	PASS
ZN	0.00159	PASS	-0.00021	PASS	0.01830	FAIL-r

Calibration Blank #1: BC-1 at 11:20
Calibration Blank #2: BC-2 at 12:25
Method Blank: BM0416 at 12:28

Applicable Samples: 41916,42060,42125,42126,42127,42129,0423S,42083,42085,42086

CALIBRATION/METHOD BLANKS VERIFICATION

LAB NAME: EIS

ANALYSIS DATE: 04/28/9

METHOD: TCLP
CONC UNITS: mg/l

Analyte	CALIBRATION BLANK #1 Found	Status	CALIBRATION BLANK #2 Found	Status	METHOD BLANK Found	Statu
AS	-0.00117	PASS	0.01319	PASS	0.01629	PASS
BA	0.00069	PASS	0.00086	PASS	0.00138	PASS
CD	0.01000	FAIL-H	0.00154	PASS	0.00956	PASS
CR	0.00786	PASS	0.00100	PASS	0.00302	PASS
PB	0.00874	PASS	-0.01068	PASS	0.00194	PASS
SE	0.00263	PASS	0.00658	PASS	-0.00131	PASS
AG	0.07800	FAIL-H	-0.01241	FAIL-L	-0.01361	FAIL-
CU	-0.01526	FAIL-L	-0.02445	FAIL-L	0.06930	FAIL--
NI	-0.00257	PASS	0.00372	PASS	0.01174	FAIL--
ZN	0.00771	PASS	0.00013	PASS	0.07409	FAIL--

Calibration Blank #1: BC-1 at 13:58
Calibration Blank #2: BC-2 at 14:11
Method Blank: BMS0423 at 14:14

Applicable Samples: 42084,42088,42089,42090,42091

LABORATORY CONTROL SAMPLE

LAB NAME: EIS

ANALYSIS DATE: 04/28/9

METHOD: TCLP
CONC UNITS: mg/l

Analyte	True	QC Range (+/-)	Found	QC Status
AS	1.0	0.2	1.03807	PASS
BA	1.0	0.2	1.03797	PASS
CD	1.0	0.2	1.01997	PASS
CR	1.0	0.2	1.02051	PASS
PB	1.0	0.2	1.01388	PASS
SE	1.0	0.2	0.99562	PASS
AG	1.0	0.2	1.02148	PASS
CU	1.0	0.2	0.99889	PASS
NI	1.0	0.2	1.03533	PASS
ZN	1.0	0.2	1.04606	PASS

Lab Control Sample: LCC27 @ 14:17

Applicable Samples: 42084,42088,42089,42090,42091

INITIAL CALIBRATION DATA
METALS

Instrument: TJA ICAP 61

Laboratory: EIS Environmental Engineers, Inc.

Calibration Date: 4-28-97

Calibration File: 4-28-97

UPPER LINEAR RANGE VERIFICATION

Analysis Date: 4-28-97

EIS Lab # 42083-42091

Standards: 3

	Units: mg/L		
ANALYTE NAME	Found	TRUE	% Recovery
Antimony			
Arsenic			
Barium	10.0	10.0	100
Cadmium	9.91	10.0	99
Chromium	9.86	10.0	99
Copper			
Lead	9.87	10.0	99
Nickel			
Selenium			
Silver	1.97	2.00	98
Zinc			

48

PECISION QA / QC DATA SHEET
METALS

Instrument: TJA ICAP 61

Laboratory: EIS Environmental Engineers, Inc.

Analysis Date: 4-28-97

EIS Lab # 42084

ANALYTE NAME	Initial	Duplicate	% RSD
Antimony			
Arsenic			
Barium	162	162	0
Cadmium	4.86	4.26	9.3
Chromium	28.6	29.5	2.2
Copper			
Lead	205	193	8.5
Nickel			
Selenium			
Silver	<2.0	<2.0	0
Zinc			

QUALITY ASSURANCE DATA SHEET
METALS

Instrument: TJA ICAP 61

Laboratory: EIS Environmental Engineers, Inc.

Analysis Date: 4-28-97

EIS Lab # 42084

ANALYTE NAME	Percent Recovery MS	MSD	% RPD
Antimony			
Arsenic			
Barium	102	100	2.0
Cadmium	90	90	0
Chromium	95	95	0
Copper			
Lead	98	98	0
Nickel			
Selenium			
Silver	85	82	3.6
Zinc			

SERIAL DILUTION
METALS

Instrument: TJA ICAP 61

Laboratory: EIS Environmental Engineers, Inc.

Analysis Date: 4-28-97

EIS Lab # 42687

	Units: mg/l			
ANALYTE NAME	Detection Limit	Sample Result	1/4 Dilution Result	% D
Antimony				
Arsenic				
Barium	0.10	2.31	2.46	-6.5
Cadmium	0.10	<0.1	<0.1	0
Chromium	0.10	0.25	0.27	-9.6
Copper				
Lead	0.50	1.13	1.24	-9.7
Nickel				
Selenium				
Silver	0.10	<0.10	<0.10	0
Zinc				

SERIAL DILUTION
METALS

Instrument: TJA ICAP 61

Laboratory: EIS Environmental Engineers, Inc.

Analysis Date: 4-28-97

EIS Lab # 42091

	Units: mg/l			
ANALYTE NAME	Detection Limit	Sample Result	1/4 Dilution Result	% D
Antimony				
Arsenic				
Barium	0.10	3.26	3.51	-7.7
Cadmium	0.10	<0.10	<0.10	0
Chromium	0.10	0.28	0.31	-11
Copper				
Lead	0.50	1.04	1.11	-6.7
Nickel				
Selenium				
Silver	0.10	<0.10	<0.10	0
Zinc				

Elem	Cu	Ni	Zn
Avge	.01020	.00100	.00107
SDev	.00020	.00164	.00012
%RSD	1.9608	163.71	10.825
#1	.01000	.00060	.00100
#2	.01020	.00280	.00120
#3	.01040	-.00040	.00100

Method: TCLP Standard: CIS2

Elem	As	Ba	Ni
Avge	-.00127	.00000	.00047
SDev	.00150	.00000	.00114
%RSD	118.51	.00000	243.70
#1	-.00120	.00000	.00140
#2	.00020	.00000	.00080
#3	-.00280	.00000	-.00080

INSTRUMENT STANDARDIZATION

Method: TCLP Standard: BC

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Avge	-.00240	-.00013	.00020	.00093	.00067	-.00147	-.00080
SDev	.00220	.00012	.00020	.00046	.00081	.00205	.00040
%RSD	91.667	86.603	100.00	49.487	121.24	139.95	50.000
#1	-.00240	-.00020	.00000	.00120	.00140	-.00320	-.00120
#2	-.00020	.00000	.00020	.00040	-.00020	-.00200	-.00080
#3	-.00460	-.00020	.00040	.00120	.00080	.00080	-.00040

Elem	Cu	Ni	Zn
Avge	.01133	.00087	.00127
SDev	.00012	.00150	.00012
%RSD	1.0189	173.21	9.1161
#1	.01140	-.00060	.00120
#2	.01140	.00080	.00120
#3	.01120	.00240	.00140

INSTRUMENT STANDARDIZATION

Method: TCLP Standard: CIS2

Elem	As	Ba	Ni
Avge	1.7116	3.8331	2.3032
SDev	.0156	.0204	.0174
%RSD	.91232	.53314	.75746
#1	1.6964	3.8198	2.2872
#2	1.7276	3.8566	2.3218
#3	1.7108	3.8228	2.3006

INSTRUMENT STANDARDIZATION

4

Method: TCLP Standard: CISE1

Elem	Cd	Cr	Pb	Se	Ag	Cu	Zn
Avge	2.4333	3.3137	1.3867	1.0265	.62267	4.9971	3.0495
SDev	.0129	.0242	.0124	.0102	.00281	.0277	.0152
%RSD	.53091	.72890	.89435	.98917	.45120	.55523	.49815
#1	2.4306	3.2988	1.3918	1.0234	.62000	4.9764	3.0422
#2	2.4474	3.3416	1.3958	1.0378	.62560	5.0286	3.0670
#3	2.4220	3.3008	1.3726	1.0182	.62240	4.9862	3.0394

Method: TCLP Sample Name: Blank Operator: 06
Run Time: 04/28/97 11:48:19
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	-.00234	.00087	.00468	.00362	.01106	.01492	.00900
SDev	.00421	.00052	.00044	.00092	.00948	.01765	.00401
%RSD	180.02	60.000	9.3140	25.439	85.532	118.35	44.618
#1	-.00117	.00139	.00494	.00262	.00962	-.00130	.01349
#2	.00116	.00035	.00492	.00382	.00240	.01232	.00771
#3	-.00701	.00087	.00418	.00443	.02116	.03372	.00578

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	.01457	-.00232	.00688
SDev	.00173	.00446	.00112
%RSD	11.997	192.44	16.101
#1	.01658	.00145	.00826
#2	.01337	-.00724	.00673
#3	.01377	-.00116	.00630

#1 CALIBRATION BLANK VERIFICATION

Method: TCLP Sample Name: BC-1 Operator: 06
Run Time: 04/28/97 11:51:21
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	.00506	.00052	.00160	-.00000	.00192	-.00519	.00214
SDev	.00242	.00030	.00084	.00184	.00821	.01696	.00134
%RSD	47.929	57.735	52.818	2376e6	426.47	326.98	62.651
#1	.00234	.00035	.00244	-.00040	-.00481	L-.02464	.00064
#2	.00583	.00035	.00159	-.00161	-.00048	.00649	.00256
#3	.00700	.00087	.00076	.00201	.01106	.00260	.00321
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.03000	.01000	.01000	.01000	.03000	.03000	.01000
Low	-.02000	-.01000	-.01000	-.01000	-.02000	-.02000	-.01000

Elem	Cu	Ni	Zn

#1 CALIBRATION BLANK VERIFICATION

Units	mg/l	mg/l	mg/l
Avge	H.01912	.00319	H.01439
SDev	.00129	.00230	.00039
%RSD	6.7438	72.157	2.7245
#1	H.01859	.00058	H.01485
#2	H.01819	.00405	H.01418
#3	H.02059	.00492	H.01416
Errors	LC High	LC Pass	LC High
High	.01000	.01000	.01000
Low	-.01000	-.01000	-.01000

UPPER LINEAR RANGE VERIFICATION

Method: TCLP Sample Name: CISE1 Operator: 06
Run Time: 04/28/97 11:54:30
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	.02884	.00104	9.9070	9.8573	9.8721	9.7840	1.9716
SDev	.02014	.00030	.0732	.0958	.0918	.1654	.0157
%RSD	69.839	28.868	.73913	.97159	.92949	1.6905	.79489
#1	.02430	.00087	9.8290	9.7593	9.7739	9.7056	1.9536
#2	.05086	.00139	9.9742	9.9507	9.9557	9.9741	1.9824
#3	.01135	.00087	9.9178	9.8619	9.8865	9.6725	1.9786
Errors	NOCHECK	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value			10.000	10.000	10.000	10.000	2.0000
Range			.50000	.50000	.50000	.50000	.10000

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	9.8021	.02345	9.9010
SDev	.1009	.00329	.0876
%RSD	1.0296	14.022	.88474
#1	9.7054	.01969	9.8065
#2	9.9068	.02577	9.9796
#3	9.7941	.02490	9.9169
Errors	QC Pass	NOCHECK	QC Pass
Value	10.000		10.000
Range	.50000		.50000

UPPER LINEAR RANGE VERIFICATION

Method: TCLP Sample Name: CIS2 Operator: 06
Run Time: 04/28/97 11:57:36
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	10.050	10.009	-.00001	-.00402	.02020	-.13519	-.03531
SDev	.045	.059	.00667	.00218	.00882	.03805	.00159

UPPER LINEAR RANGE VERIFICATION

%RSD	.44622	.59100	123390.	54.083	43.644	28.146	4.5022
#1	10.073	10.056	.00610	-.00221	.02982	-.09303	-.03365
#2	9.9987	9.9424	.00101	-.00342	.01251	-.16697	-.03545
#3	10.079	10.027	-.00713	-.00644	.01828	-.14556	-.03682
Errors	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	10.000	10.000					
Range	.50000	.50000					

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	.19522	10.023	.00697
SDev	.02885	.058	.01174
%RSD	14.781	.57381	168.47
#1	.22638	10.077	.01956
#2	.18988	9.9626	.00502
#3	.16942	10.028	-.00368
Errors	NOCHECK	QC Pass	NOCHECK
Value		10.000	
Range		.50000	

Method: TCLP Sample Name: Blank Operator: 06
Run Time: 04/28/97 12:00:42
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	.01011	.00417	.00073	.00040	-.00721	-.00259	.00235
SDev	.00526	.00080	.00085	.00244	.01121	.00810	.00206
%RSD	52.011	19.174	116.36	606.22	155.35	312.44	87.834
#1	.01049	.00504	.00155	.00080	-.01058	.00649	.00385
#2	.01517	.00400	-.00014	.00262	.00529	-.00498	.00321
#3	.00467	.00348	.00078	-.00221	-.01635	-.00519	.00000

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	.00856	.00405	.00125
SDev	.00139	.00347	.00100
%RSD	16.238	85.714	79.608
#1	.00936	.00753	.00234
#2	.00936	.00405	.00037
#3	.00695	.00058	.00106

INITIAL CALIBRATION VERIFICATION

Method: TCLP Sample Name: CVC27 Operator: 06
Run Time: 04/28/97 12:03:47
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag

INITIAL CALIBRATION VERIFICATION 7

Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	1.0021	1.0366	1.0054	1.0036	1.0033	.98077	1.0114
SDev	.0210	.0086	.0058	.0058	.0108	.04229	.0037
%RSD	2.0996	.82863	.57198	.57386	1.0794	4.3115	.36614
#1	.98031	1.0319	1.0119	1.0006	.99226	.99698	1.0092
#2	1.0037	1.0313	1.0010	.99996	1.0139	.93278	1.0092
#3	1.0223	1.0465	1.0033	1.0102	1.0038	1.0126	1.0156
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Range	.10000	.10000	.10000	.10000	.10000	.10000	.10000

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	1.0037	1.0213	1.0379
SDev	.0082	.0092	.0045
%RSD	.81649	.90017	.42983
#1	1.0002	1.0178	1.0329
#2	.99778	1.0317	1.0395
#3	1.0130	1.0143	1.0414
Errors	QC Pass	QC Pass	QC Pass
Value	1.0000	1.0000	1.0000
Range	.10000	.10000	.10000

INTERFERENCE CHECK SAMPLE

Method: TCLP Sample Name: IF2-1 Operator: 06
Run Time: 04/28/97 12:06:53
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	Q2.3990	1.9168	1.8692	1.8279	1.9566	1.7255	1.8897
SDev	.0507	.0251	.0158	.0214	.0226	.0056	.0173
%RSD	2.1142	1.3074	.84275	1.1726	1.1527	.32568	.91774
#1	Q2.3776	1.9157	1.8562	1.8277	1.9359	1.7191	1.8830
#2	Q2.4569	1.9423	1.8867	1.8494	1.9807	1.7288	1.9093
#3	Q2.3625	1.8922	1.8646	1.8065	1.9532	1.7288	1.8766
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.8000	1.8500	1.9000	1.8500	1.9000	1.8000	1.9000
Range	.36000	.37000	.38000	.37000	.38000	.36000	.38000

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	1.7519	1.8697	1.9188
SDev	.0247	.0273	.0206
%RSD	1.4107	1.4577	1.0719
#1	1.7479	1.8804	1.9071
#2	1.7784	1.8900	1.9425
#3	1.7295	1.8387	1.9067

II / INTERFERENCE CHECK SAMPLE

8

Errors	QC Pass	QC Pass	QC Pass
Value	1.8500	1.9000	1.9000
Range	.37000	.38000	.38000

Method: TCLP Sample Name: Blank Operator: 06
Run Time: 04/28/97 12:10:05
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	-.00234	.00087	.00167	.00181	.00914	.01556	.00343
SDev	.02527	.00000	.00086	.00126	.00601	.01380	.00196
%RSD	1080.4	.00000	51.796	69.3[illegible]	65.737	88.690	57.314
#1	-.01751	.00087	.00263	.00322	.00240	.00065	.00514
#2	.02684	.00087	.00139	.00141	.01395	.01816	.00386
#3	-.01634	.00087	.00098	.00080	.01106	.02788	.00128

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	.00575	-.00029	.00173
SDev	.00040	.00626	.00064
%RSD	6.9767	2163.[illegible]	36.793
#1	.00615	.00492	.00237
#2	.00535	-.00724	.00109
#3	.00575	.00145	.00172

Method: TCLP Sample Name: CLCDU.1 Operator: 06
Run Time: 04/28/97 12:13:08
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	Q.03104	.00174	.01069	.01831	Q.01202	Q.01427	.01990
SDev	.01751	.00030	.00034	.00181	.01959	.01593	.00064
%RSD	56.417	17.321	3.1558	9.8901	162.92	111.59	3.2327
#1	Q.04893	.00139	Q.01107	.01831	Q.02261	Q.02790	.01926
#2	Q.01393	.00191	.01058	.02012	Q.02405	Q.01816	.02054
#3	Q.03027	.00191	.01042	Q.01650	Q-.01058	Q-.00324	.01990
Errors	QC Fail	NOCHECK	QC Pass	QC Pass	QC Fail	QC Fail	QC Pass
Value	.02000		.01000	.02000	.00600	.01000	.02000
Range	10.000		10.000	10.000	10.000	10.000	10.000

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	Q.05817	.07963	.04514
SDev	.00093	.00379	.00136
%RSD	1.5927	4.7582	3.1438
#1	Q.05870	.08397	Q.04466

#2	0.05870	.07789	.04271
#3	0.05710	.07702	.04206
Errors	QC Fail	QC Pass	QC Pass
Value	.05000	.08000	.04000
Range	10.000	10.000	10.000

Method: TCLP Sample Name: CLCDU.5 Operator: 06
Run Time: 04/28/97 12:16:20
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	0.10035	.00452	0.05152	0.09961	0.01539	0.04801	0.09970
SDev	.00269	.00000	.00050	.00174	.00629	.02509	.00098
%RSD	2.6845	.00000	.97069	1.7496	40.865	52.267	.98363
#1	0.09881	.00452	0.05180	0.10163	0.01251	0.02012	0.09885
#2	0.09878	.00452	0.05182	0.09861	0.01106	0.06876	0.10077
#3	0.10347	.00452	0.05094	0.09861	0.02261	0.05514	0.09949
Errors	QC Fail	NOCHECK	QC Fail	QC Fail	QC Fail	QC Fail	QC Fail
Value	.02000		.01000	.02000	.00600	.01000	.02000
Range	10.000		10.000	10.000	10.000	10.000	10.000

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	0.26449	0.42305	0.26704
SDev	.00106	.01825	.00301
%RSD	.40128	4.3137	1.1274
#1	0.26569	0.40452	0.26732
#2	0.26369	0.44100	0.26390
#3	0.26409	0.42363	0.26990
Errors	QC Fail	QC Fail	QC Fail
Value	.05000	.08000	.04000
Range	10.000	10.000	10.000

#1 CONTINUING CALIBRATION VERIFICATION

Method: TCLP Sample Name: CCC27-1 Operator: 06
Run Time: 04/28/97 12:19:31
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	2.0648	2.1152	2.0387	2.0472	2.0365	2.0089	2.0615
SDev	.0388	.0079	.0088	.0030	.0051	.0136	.0036
%RSD	1.8779	.37436	.42984	.14842	.24883	.67815	.17376
#1	2.0854	2.1223	2.0350	2.0504	2.0413	2.0245	2.0582
#2	2.0200	2.1166	2.0488	2.0468	2.0312	1.9992	2.0653
#3	2.0889	2.1067	2.0325	2.0444	2.0369	2.0031	2.0608

#1 CONTINUING CALIBRATION VERIFICATION

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
Range	.20000	.20000	.20000	.20000	.20000	.20000	.20000

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	2.0084	2.0773	2.1092
SDev	.0046	.0112	.0045
%RSD	.22976	.53932	.21136
#1	2.0131	2.0898	2.1054
#2	2.0083	2.0741	2.1081
#3	2.0039	2.0680	2.1141

Errors	QC Pass	QC Pass	QC Pass
Value	2.0000	2.0000	2.0000
Range	.20000	.20000	.20000

Method: TCLP Sample Name: Blank Operator: 06
Run Time: 04/28/97 12:22:38
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	.01166	.00139	-.00038	.00040	-.00433	.01232	.00514
SDev	.00710	.00000	.00088	.00070	.02209	.00973	.00064
%RSD	60.852	.00000	229.58	173.21	510.27	78.936	12.515
#1	.01983	.00139	.00063	-.00040	.01251	.01233	.00450
#2	.00700	.00139	-.00089	.00080	-.02934	.00260	.00578
#3	.00816	.00139	-.00090	.00080	.00385	.02205	.00514

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	.00160	.00261	.00130
SDev	.00061	.00329	.00100
%RSD	38.188	126.20	77.189
#1	.00214	.00405	.00239
#2	.00174	-.00116	.00109
#3	.00094	.00492	.00042

#2 CALIBRATION BLANK VERIFICATION

Method: TCLP Sample Name: BC-2 Operator: 06
Run Time: 04/28/97 12:25:40
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	.00311	.00104	-.00030	-.00201	.00962	.02529	.00107
SDev	.01052	.00030	.00057	.00126	.00577	.02378	.00098
%RSD	338.61	28.868	186.59	62.450	60.000	94.001	91.661
#1	.01400	.00087	-.00095	-.00161	.01539	.02011	.00193

#2 CALIBRATION BLANK VERIFICATION 11

#2	.00232	.00087	-.00002	-.00342	.00962	H.05124	.00128
#3	-.00700	.00139	.00007	-.00101	.00385	.00454	-.00000
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.03000	.01000	.01000	.01000	.03000	.03000	.01000
Low	-.02000	-.01000	-.01000	-.01000	-.02000	-.02000	-.01000

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	-.00267	.00174	-.00021
SDev	.00106	.00558	.00066
%RSD	39.686	321.46	314.59
#1	-.00147	.00405	-.00089
#2	-.00308	.00579	.00044
#3	-.00348	-.00463	-.00018
Errors	LC Pass	LC Pass	LC Pass
High	.01000	.01000	.01000
Low	-.01000	-.01000	-.01000

METHOD BLANK VERIFICATION

Method: TCLP Sample Name: BM0416 Operator: 06
Run Time: 04/28/97 12:28:42
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	.00234	.00226	.00299	-.00201	-.00192	.00195	.00492
SDev	.01346	.00060	.00158	.00139	.00764	.01072	.00162
%RSD	576.35	26.647	52.890	69.282	396.86	550.60	32.886
#1	.01751	.00296	.00476	-.00282	-.00481	-.00519	.00642
#2	-.00817	.00191	.00172	-.00040	-.00770	-.00324	.00513
#3	-.00233	.00191	.00249	-.00282	.00673	.01427	.00320
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.03000	.01000	.01000	.01000	.03000	.03000	.01000
Low	-.02000	-.01000	-.01000	-.01000	-.02000	-.02000	-.01000

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	H.02928	-.00058	H.01831
SDev	.00023	.00329	.00101
%RSD	.79089	567.89	5.5053
#1	H.02942	-.00203	H.01941
#2	H.02942	.00319	H.01807
#3	H.02902	-.00290	H.01744
Errors	LC High	LC Pass	LC High
High	.01000	.01000	.01000
Low	-.01000	-.01000	-.01000

LABORATORY CONTROL SAMPLE

12

Method: TCLP Sample Name: LCC27 Operator: 06
Run Time: 04/28/97 12:31:50
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	1.0370	1.0616	1.0122	1.0245	1.0024	1.0255	1.0274
SDev	.0135	.0163	.0080	.0110	.0252	.0564	.0110
%RSD	1.3013	1.5394	.78728	1.0710	2.5099	5.5000	1.0681
#1	1.0281	1.0538	1.0057	1.0157	.99081	.97948	1.0201
#2	1.0304	1.0506	1.0098	1.0211	.98504	1.0087	1.0221
#3	1.0526	1.0804	1.0211	1.0368	1.0312	1.0884	1.0400
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Range	.20000	.20000	.20000	.20000	.20000	.20000	.20000

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	1.0194	1.0337	1.0488
SDev	.0157	.0049	.0061
%RSD	1.5397	.47784	.58622
#1	1.0118	1.0378	1.0440
#2	1.0090	1.0282	1.0467
#3	1.0375	1.0352	1.0557
Errors	QC Pass	QC Pass	QC Pass
Value	1.0000	1.0000	1.0000
Range	.20000	.20000	.20000

Method: TCLP Sample Name: Blank Operator: 06
Run Time: 04/28/97 12:34:57
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	.00272	.00104	.00023	-.00080	.00192	.01167	.00343
SDev	.01853	.00030	.00065	.00035	.00441	.02321	.00037
%RSD	681.47	28.868	262.96	57.735	229.13	198.85	10.848
#1	.01400	.00087	-.00013	-.00040	.00096	.00454	.00386
#2	.01283	.00087	-.00012	-.00040	-.00192	.03762	.00321
#3	-.01867	.00139	.00100	-.00101	.00673	-.00714	.00321

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	-.00267	.00087	.00001
SDev	.00040	.00591	.00075
%RSD	15.000	680.69	5882.9
#1	-.00227	-.00376	-.00085
#2	-.00267	-.00116	.00046
#3	-.00308	.00753	.00043

Run Time: 04/28/97 13:17:13
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	-.01052	.00209	.00010	.00262	.00962	.01686	.00062
SDev	.01646	.00030	.00077	.00060	.01000	.01744	.00129
%RSD	156.50	14.434	743.85	23.077	103.92	103.43	207.85
#1	-.00818	.00191	-.00074	.00262	.01539	-.00324	.00062
#2	L-.02802	.00243	.00027	.00322	.01539	.02594	.00190
#3	.00465	.00191	.00078	.00201	-.00192	.02789	-.00067
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.03000	.01000	.01000	.01000	.03000	.03000	.01000
Low	-.02000	-.01000	-.01000	-.01000	-.02000	-.02000	-.01000

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	H.07836	H.01158	H.03007
SDev	.00223	.00565	.00039
%RSD	2.8504	48.798	1.2925
#1	H.08076	H.01187	H.03028
#2	H.07796	.00579	H.03032
#3	H.07636	H.01708	H.02962
Errors	LC High	LC High	LC High
High	.01000	.01000	.01000
Low	-.01000	-.01000	-.01000

Method: TCLP Sample Name: S42083 Operator: 06
Run Time: 04/28/97 13:20:21
Comment:
Mode: CONC Corr. Factor: 49.7364

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	191.07	145.28	-.32674	44.189	41.242	-64.320	-3.1078
SDev	1.86	2.14	.05951	.610	.542	4.083	.0395
%RSD	.97155	1.4752	18.213	1.3798	1.3138	6.3479	1.2703
#1	188.94	143.08	-.27950	43.489	40.739	-62.159	-3.0829
#2	192.56	145.39	-.39358	44.480	41.816	-61.772	-3.0872
#3	191.90	147.36	-.30716	44.600	41.170	-69.030	-3.1533

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	33.186	25.419	312.37
SDev	.627	.779	5.41
%RSD	1.8897	3.0658	1.7315
#1	32.508	24.613	306.18
#2	33.306	25.477	314.80
#3	33.745	26.168	316.14

Method: TCLP Sample Name: S42085 Operator: 06
Run Time: 04/28/97 13:23:22
Comment:
Mode: CONC Corr. Factor: 49.98

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	176.97	178.70	8.2947	43.823	110.75	-49.695	-2.5468
SDev	3.97	1.90	.1555	.702	.59	1.363	.0189
%RSD	2.2345	1.0653	1.8744	1.6015	.53302	2.7431	.74320
#1	174.17	176.80	8.1155	43.068	110.10	-50.117	-2.5509
#2	175.22	178.70	8.3935	43.943	110.89	-50.797	-2.5262
#3	181.52	180.60	8.3751	44.456	111.25	-48.171	-2.5634

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	213.32	114.10	1239.2
SDev	2.67	1.39	16.9
%RSD	1.2505	1.2224	1.3626
#1	210.48	112.78	1221.0
#2	213.71	113.95	1242.3
#3	215.78	115.56	1254.4

Method: TCLP Sample Name: S42086 Operator: 06
Run Time: 04/28/97 13:26:24
Comment:
Mode: CONC Corr. Factor: 49.6426

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	233.70	228.48	16.275	27.223	123.54	-75.847	-4.0871
SDev	5.86	2.03	.131	.261	1.31	1.981	.0550
%RSD	2.5054	.88878	.80330	.95976	1.0644	2.6123	1.3447
#1	228.01	226.29	16.124	26.923	122.04	-75.944	-4.1417
#2	233.39	228.83	16.359	27.343	124.47	-73.818	-4.0878
#3	239.70	230.31	16.340	27.403	124.11	-77.777	-4.0318

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	394.97	167.97	2015.8
SDev	3.65	2.03	26.3
%RSD	.92520	1.2081	1.3045
#1	391.33	165.67	1988.8
#2	394.94	168.73	2017.2
#3	398.64	169.50	2041.3

Method: TCLP Sample Name: S42087 Operator: 06
Run Time: 04/28/97 13:29:25
Comment:

Mode: CONC Corr. Factor: 50

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	134.74	116.31	.44099	12.608	56.178	-45.376	-2.2060
SDev	3.73	2.09	.07294	.172	1.305	.351	.2466
%RSD	2.7660	1.7946	16.539	1.3614	2.3223	.77274	11.178
#1	132.39	114.20	.51790	12.416	54.952	-45.669	-1.9239
#2	132.80	116.34	.43224	12.658	56.034	-44.987	-2.3136
#3	139.04	118.38	.37282	12.749	57.549	-45.473	-2.3805

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	69.719	36.687	313.01
SDev	1.228	.757	5.10
%RSD	1.7528	2.0642	1.6304
#1	68.422	35.819	307.32
#2	69.888	37.035	314.56
#3	70.849	37.209	317.16

SERIAL DILUTION

Method: TCLP Sample Name: X42087 Operator: 06
Run Time: 04/28/97 13:32:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	2.6797	2.3149	.00402	.25014	1.1269	-.96729	-.04015
SDev	.0747	.0504	.00182	.00456	.0297	.03073	.00415
%RSD	2.7865	2.1758	45.161	1.8222	2.6313	3.1254	10.331
#1	2.6058	2.2653	.00253	.24531	1.1077	-.95813	-.03772
#2	2.6781	2.3133	.00349	.25074	1.1120	-1.0009	-.03779
#3	2.7551	2.3660	.00605	.25437	1.1611	-.94254	-.04494

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	1.3284	.70624	5.8919
SDev	.0269	.00807	.1065
%RSD	2.0327	1.1429	1.8072
#1	1.2958	.69726	5.7831
#2	1.3218	.70856	5.8965
#3	1.3496	.71290	5.9960

SERIAL DILUTION 1/4

Method: TCLP Sample Name: XD42087 Operator: 06
Run Time: 04/28/97 13:35:29
Comment:
Mode: CONC Corr. Factor: 4

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	2.0456	2.4592	.00288	.27369	1.2351	-.94899	-.05114
SDev	.0888	.0115	.00219	.00483	.0176	.03943	.00646

SERIAL DILUTION 1/4

22

%RSD	2.3361	.46740	76.212	1.7647	1.4276	4.2628	12.633
#1	2.2207	2.4474	.00530	.26886	1.2505	-.88414	-.05026
#2	3.0234	2.4703	.00104	.27852	1.2390	-1.0009	-.04517
#3	2.8927	2.4599	.00229	.27369	1.2159	-.96197	-.05800

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	1.3464	.76213	6.4926
SDev	.0111	.00723	.0647
%RSD	.82940	.94909	.99698
#1	1.3339	.75633	6.4302
#2	1.3532	.75981	6.5594
#3	1.3389	.77023	6.4882

#2 CONTINUING CALIBRATION VERIFICATION

Method: TCLP Sample Name: CCC27-2 Operator: 06
Run Time: 04/28/97 13:38:33
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	2.0690	2.1293	2.0017	2.0430	2.0403	1.9700	1.9247
SDev	.0565	.0262	.0318	.0356	.0387	.0322	.0206
%RSD	2.7321	1.2287	1.5880	1.7423	1.8981	1.6323	1.0679
#1	2.0038	2.0994	1.9651	2.0021	1.9965	1.9388	1.9046
#2	2.1029	2.1479	2.0217	2.0595	2.0543	1.9680	1.9238
#3	2.1005	2.1406	2.0184	2.0673	2.0701	2.0031	1.9457
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
Range	.20000	.20000	.20000	.20000	.20000	.20000	.20000

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	2.0032	2.0944	2.0876
SDev	.0286	.0375	.0340
%RSD	1.4296	1.7894	1.6294
#1	1.9702	2.0515	2.0484
#2	2.0183	2.1106	2.1086
#3	2.0211	2.1210	2.1059
Errors	QC Pass	QC Pass	QC Pass
Value	2.0000	2.0000	2.0000
Range	.20000	.20000	.20000

Method: TCLP Sample Name: BC-END Operator: 06
Run Time: 04/28/97 13:41:38
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag

Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	.02018	H.02331	H.02119	H.01872	.02501	H.03309	H.07540
SDev	.02028	.00758	.00742	.00720	.01166	.00998	.00670
%RSD	100.49	32.521	35.024	38.485	46.632	30.183	8.8875
#1	H.04311	H.03113	H.02755	H.02470	H.03848	H.03568	H.07004
#2	.00462	H.02278	H.02298	H.01650	.01828	H.04151	H.07326
#3	.01280	H.01600	H.01307	H.01288	.01828	.02205	H.08291
Errors	LC Pass	LC High	LC High	LC High	LC Pass	LC High	LC High
High	.03000	.04000	.01000	.01000	.03000	.03000	.01000
Low	-.02000	-.01000	-.01000	-.01000	-.02000	-.02000	-.01000

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	H.01297	H.02288	H.02492
SDev	.00783	.00874	.00657
%RSD	60.369	38.227	26.350
#1	H.02099	H.03078	H.03188
#2	H.01257	H.02403	H.02404
#3	.00535	H.01361	H.01884
Errors	LC High	LC High	LC High
High	.01000	.01000	.01000
Low	-.01000	-.01000	-.01000

INSTRUMENT STANDARDIZATION

Method: TCLP Standard: BC

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Avge	-.00320	.00040	.00020	.00087	.00187	-.00073	.00547
SDev	.00191	.00000	.00020	.00031	.00083	.00127	.00162
%RSD	59.621	.00000	100.00	35.251	44.607	173.21	29.572
#1	-.00540	.00040	.00020	.00060	.00160	.00000	.00720
#2	-.00220	.00040	.00000	.00080	.00120	-.00220	.00520
#3	-.00200	.00040	.00040	.00120	.00280	.00000	.00400

Elem	Cu	Ni	Zn
Avge	.02220	.00013	.00173
SDev	.00410	.00090	.00023
%RSD	18.485	676.39	13.323
#1	.02640	.00100	.00160
#2	.02200	-.00080	.00200
#3	.01820	.00020	.00160

INSTRUMENT STANDARDIZATION

Method: TCLP Standard: CIS2

Elem	As	Ba	Ni
Avge	1.7143	3.8463	2.3266
SDev	.0383	.0909	.0526
%RSD	2.2368	2.3638	2.2604
#1	1.6700	3.7508	2.2664

#2	1.7372	3.9318	2.3636
#3	1.7356	3.8564	2.3498

INSTRUMENT STANDARDIZATION

Method: TCLP Standard: CISE1

Elem	Cd	Cr	Pb	Se	Ag	Cu	Zn
Avge	2.4013	3.3064	1.3748	1.0119	.57587	4.9570	2.9973
SDev	.0248	.0414	.0105	.0127	.01191	.0720	.0286
%RSD	1.0322	1.2522	.76689	1.2557	2.0676	1.4515	.95456
#1	2.3730	3.2652	1.3634	.99940	.56220	4.8948	2.9644
#2	2.4190	3.3480	1.3842	1.0248	.58400	5.0358	3.0166
#3	2.4120	3.3060	1.3768	1.0114	.58140	4.9404	3.0108

Method: TCLP Sample Name: Blank Operator: 06
Run Time: 04/28/97 13:55:42
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	.02782	.00711	.09219	.09350	.08740	.09876	.04774
SDev	.01006	.00210	.03074	.02617	.03275	.02289	.00596
%RSD	36.143	29.572	33.347	31.339	37.466	23.181	12.495
#1	.03352	.00936	.12546	.11113	.12334	.10205	.05452
#2	.03365	.00676	.08631	.08027	.07963	.11983	.04329
#3	.01621	.00520	.06482	.05909	.05924	.07440	.04541

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	.07322	.01060	.08997
SDev	.03031	.00149	.02907
%RSD	41.400	14.044	32.312
#1	.10497	.00888	.11979
#2	.07011	.01146	.08842
#3	.04458	.01146	.06171

/ CALIBRATION BLANK VERIFICATION

Method: TCLP Sample Name: BC-1 Operator: 06
Run Time: 04/28/97 13:58:44
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	-.00117	.00069	H.01001	.00787	.00874	.00263	H.07800
SDev	.00117	.00030	.00145	.00286	.01103	.00570	.00215
%RSD	99.427	43.301	14.516	36.352	126.20	216.52	2.7518
#1	-.00234	.00052	H.01168	H.01008	.00097	-.00066	H.07847
#2	-.00001	.00104	.00916	.00887	.02137	-.00066	H.07988
#3	-.00117	.00052	.00917	.00464	.00388	.00922	H.07566

#1 CALIBRATION BLANK VERIFICATION 5

Errors	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC High
High	.03000	.01000	.01000	.01000	.03000	.03000	.01000
Low	-.02000	-.01000	-.01000	-.01000	-.02000	-.02000	-.01000

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	L-.01527	-.00258	.00771
SDev	.00223	.00131	.00066
%RSD	14.622	50.918	8.5573
#1	L-.01297	-.00229	.00837
#2	L-.01540	-.00401	.00772
#3	L-.01743	-.00143	.00705

Errors	LC Low	LC Pass	LC Pass
High	.01000	.01000	.01000
Low	-.01000	-.01000	-.01000

INITIAL CALIBRATION VERIFICATION

Method: TCLP Sample Name: CVC27 Operator: 06
Run Time: 04/28/97 14:01:57
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	1.0148	1.0267	1.0077	1.0064	1.0149	.97456	1.0712
SDev	.0105	.0229	.0118	.0200	.0204	.01315	.0151
%RSD	1.0363	2.2276	1.1712	1.9915	2.0096	1.3493	1.4078
#1	1.0156	1.0016	.99519	.98542	.99155	.98114	1.0546
#2	1.0249	1.0323	1.0093	1.0084	1.0294	.95942	1.0749
#3	1.0039	1.0463	1.0186	1.0254	1.0236	.98311	1.0840
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Range	.10000	.10000	.10000	.10000	.10000	.10000	.10000

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	.98876	1.0276	1.0426
SDev	.01872	.0233	.0170
%RSD	1.8937	2.2650	1.6348
#1	.96782	1.0009	1.0238
#2	.99457	1.0439	1.0470
#3	1.0039	1.0379	1.0570
Errors	QC Pass	QC Pass	QC Pass
Value	1.0000	1.0000	1.0000
Range	.10000	.10000	.10000

#1 CONTINUING CALIBRATION VERIFICATION

Method: TCLP Sample Name: CCC27-1 Operator: 06
Run Time: 04/28/97 14:05:02
Comment:

#1 CONTINUING CALIBRATION VERIFICATION
2b

Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	2.0326	2.1176	2.0537	2.0604	2.0516	2.0031	2.1860
SDev	.0250	.0071	.0056	.0036	.0047	.0494	.0106
%RSD	1.2319	.33762	.27261	.17701	.22826	2.4657	.48369
#1	2.0113	2.1254	2.0472	2.0570	2.0462	1.9807	2.1739
#2	2.0602	2.1113	2.0568	2.0642	2.0535	1.9689	2.1928
#3	2.0264	2.1160	2.0571	2.0600	2.0550	2.0597	2.1914
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
Range	.20000	.20000	.20000	.20000	.20000	.20000	.20000

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	2.0280	2.0807	2.1215
SDev	.0031	.0075	.0177
%RSD	.15088	.36019	.83651
#1	2.0313	2.0755	2.1022
#2	2.0252	2.0773	2.1372
#3	2.0276	2.0893	2.1250
Errors	QC Pass	QC Pass	QC Pass
Value	2.0000	2.0000	2.0000
Range	.20000	.20000	.20000

Method: TCLP Sample Name: Blank Operator: 06
Run Time: 04/28/97 14:08:09
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	.03023	.02011	.02037	.01775	.01263	.02831	.00794
SDev	.00727	.00721	.00675	.00773	.00291	.00694	.00563
%RSD	24.035	35.867	33.284	43.033	23.077	24.501	70.856
#1	.03604	.02808	.02799	.02642	.00971	.03490	.01379
#2	.02208	.01820	.01729	.01613	.01263	.02107	.00747
#3	.03258	.01404	.01552	.01129	.01554	.02897	.00256

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	-.00459	.02178	.01032
SDev	.00776	.00847	.00767
%RSD	168.88	38.877	37.762
#1	.00405	.02866	.02898
#2	-.00589	.02436	.01764
#3	-.01094	.01232	.01435

#2 CALIBRATION BLANK

27

Method: TCLP Sample Name: BC-2 Operator: 06
Run Time: 04/28/97 14:11:12
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	.01319	.00087	.00154	.00101	-.01068	.00659	L-.01241
SDev	.00641	.00030	.00088	.00181	.01622	.01726	.00081
%RSD	48.627	34.641	57.318	180.00	151.85	262.02	6.5390
#1	.00582	.00104	.00245	.00101	L-.02525	.01119	L-.01288
#2	.01746	.00104	.00150	.00282	.00680	.02107	L-.01147
#3	.01630	.00052	.00068	-.00081	-.01360	-.01251	L-.01288
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low
High	.03000	.01000	.01000	.01000	.03000	.03000	.01000
Low	-.02000	-.01000	-.01000	-.01000	-.02000	-.02000	-.01000

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	L-.02445	.00373	.00013
SDev	.00047	.00375	.00040
%RSD	1.9139	100.59	299.05
#1	L-.02472	.00544	.00035
#2	L-.02391	-.00057	.00037
#3	L-.02472	.00630	-.00032
Errors	LC Low	LC Pass	LC Pass
High	.01000	.01000	.01000
Low	-.01000	-.01000	-.01000

METHOD BLANK VERIFICATION

Method: TCLP Sample Name: BMS0423 Operator: 06
Run Time: 04/28/97 14:14:23
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	.01629	.00139	.00957	.00303	.00194	-.00131	L-.01362
SDev	.01715	.00030	.00239	.00035	.00445	.02167	.00140
%RSD	105.28	21.651	24.991	11.547	229.13	1649.0	10.314
#1	H.03609	.00156	H.01215	.00282	.00680	.02305	L-.01221
#2	.00582	.00156	.00911	.00282	.00097	-.00856	L-.01362
#3	.00698	.00104	.00744	.00343	-.00194	-.01843	L-.01502
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low
High	.03000	.01000	.01000	.01000	.03000	.03000	.01000
Low	-.02000	-.01000	-.01000	-.01000	-.02000	-.02000	-.01000

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	H.06930	H.01175	H.07410
SDev	.00284	.00668	.00346
%RSD	4.0936	56.835	4.6623

#1	H.07214	.00630	H.07701
#2	H.06930	.00974	H.07500
#3	H.06647	H.01920	H.07028

Errors	LC High	LC High	LC High
High	.01000	.01000	.01000
Low	-.01000	-.01000	-.01000

LABORATORY CONTROL SAMPLE

Method: TCLP Sample Name: LCC27 Operator: 06
Run Time: 04/28/97 14:17:34
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	1.0381	1.0380	1.0200	1.0205	1.0139	.99563	1.0215
SDev	.0132	.0181	.0172	.0185	.0061	.01979	.0025
%RSD	1.2747	1.7470	1.6897	1.8168	.59818	1.9872	.24564
#1	1.0342	1.0172	1.0017	.99933	1.0090	.97324	1.0187
#2	1.0528	1.0463	1.0223	1.0284	1.0119	1.0108	1.0222
#3	1.0272	1.0505	1.0359	1.0338	1.0207	1.0029	1.0236
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Range	.20000	.20000	.20000	.20000	.20000	.20000	.20000

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	.99889	1.0353	1.0461
SDev	.01581	.0166	.0201
%RSD	1.5825	1.6036	1.9192
#1	.98079	1.0173	1.0236
#2	1.0059	1.0499	1.0522
#3	1.0100	1.0388	1.0623
Errors	QC Pass	QC Pass	QC Pass
Value	1.0000	1.0000	1.0000
Range	.20000	.20000	.20000

Method: TCLP Sample Name: Blank Operator: 06
Run Time: 04/28/97 14:20:40
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	.01357	.00901	.00787	.00787	.00971	.01119	.02482
SDev	.01664	.00267	.00374	.00035	.00771	.02613	.00537
%RSD	122.67	29.605	37.915	4.4412	79.373	233.41	21.640
#1	.01743	.01196	.01400	.00766	.00097	.04082	.02013
#2	.02793	.00832	.00890	.00827	.01554	.00132	.02345

#3	-.00467	.00676	.00671	.00764	.01267	-.00854	.03068

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	-.01770	.01146	.00879
SDev	.00200	.01074	.00312
%RSD	11.297	93.675	35.508
#1	-.01540	.02350	.01232
#2	-.01864	.00802	.00769
#3	-.01905	.00287	.00637

MATRIX SPIKE BACKGROUND

Method: TCLP Sample Name: MB42084 Operator: 06
Run Time: 04/28/97 14:23:44
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	1.7126	1.6580	.04834	.31241	2.0331	-.54287	-.01786
SDev	.0485	.0265	.00130	.00213	.0243	.03557	.00259
%RSD	2.8292	1.6006	2.6939	.68016	1.1968	6.5514	14.509
#1	1.6870	1.6376	.04692	.31019	2.0113	-.50206	-.01500
#2	1.6829	1.6485	.04862	.31261	2.0287	-.55934	-.01853
#3	1.7685	1.6880	.04948	.31442	2.0593	-.56722	-.02006

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	2.6646	1.5331	15.085
SDev	.0441	.0168	.179
%RSD	1.6540	1.0654	1.1870
#1	2.6297	1.5374	14.979
#2	2.6514	1.5150	14.984
#3	2.7138	1.5468	15.292

MATRIX SPIKE

Method: TCLP Sample Name: MS42084 Operator: 06
Run Time: 04/28/97 14:26:47
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	2.0375	2.0708	.41076	.68532	2.4153	-.15438	.34414
SDev	.0448	.0157	.00680	.00596	.0118	.00893	.00485
%RSD	2.1986	.75632	1.6549	.86953	.48751	3.8421	1.4081
#1	2.0146	2.0536	.40291	.67866	2.4046	-.16031	.33861
#2	2.0894	2.0744	.41471	.69016	2.4279	-.14845	.34622
#3	2.0087	2.0843	.41466	.68713	2.4133	-.15439	.34760

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	3.0764	1.8141	15.608

SDev	.0245	.0414	.214
%RSD	.79672	2.1563	1.3714
#1	3.0494	1.9244	15.362
#2	3.0824	1.9268	15.708
#3	3.0972	1.9560	15.754

DUPLICATE MATRIX SPIKE

Method: TCLP Sample Name: MDS42084 Operator: 06
Run Time: 04/28/97 14:29:50
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	2.0977	2.0638	.41491	.68975	2.4206	-.19068	.33335
SDev	.0773	.0491	.00435	.01571	.0588	.01402	.00655
%RSD	3.6847	2.3814	1.0494	2.2779	2.4289	7.3655	1.9652
#1	2.0228	2.0120	.41027	.67261	2.3551	-.18796	.32669
#2	2.0868	2.0697	.41556	.69318	2.4381	-.20573	.33357
#3	2.1752	2.1098	.41890	.70347	2.4687	-.17806	.33979

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	3.0717	1.9182	15.713
SDev	.0737	.0378	.289
%RSD	2.4067	1.9683	1.8409
#1	2.9951	1.8838	15.400
#2	3.0773	1.9122	15.769
#3	3.1426	1.9586	15.971

PRECISION QC/QA

Method: TCLP Sample Name: P42084 Operator: 06
Run Time: 04/28/97 14:32:53
Comment:
Mode: CONC Corr. Factor: 49.7018

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	154.00	161.53	4.8638	28.648	205.02	-49.811	-2.5030
SDev	3.72	.48	.1365	.246	2.00	5.141	.1761
%RSD	2.4156	.29562	2.8068	.85920	.97549	10.321	7.0360
#1	156.70	161.26	4.7277	28.438	203.43	-45.887	-2.3004
#2	149.76	161.26	5.0007	28.588	204.37	-53.116	-2.6196
#3	155.54	162.08	4.8629	28.919	207.26	-52.428	-2.5891

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	276.25	153.31	1428.6
SDev	1.47	.18	17.0
%RSD	.53050	.11967	1.1916
#1	275.58	153.49	1410.5
#2	275.42	153.11	1430.7

#3	[illegible]	[illegible]	1444.4

PRECISION QC/QA

Method: TCLP Sample Name: PD42084 Operator: 06
Run Time: 04/28/97 14:35:57
Comment:
Mode: CONC Corr. Factor: 49.7859

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	161.67	161.96	4.2596	29.470	192.82	-51.139	-3.1685
SDev	1.99	1.52	.1493	.182	1.76	1.134	.0589
%RSD	1.2328	.93612	3.5047	.61612	.91206	2.2180	1.8590
#1	159.41	160.34	4.0873	29.299	190.93	-52.025	-3.1047
#2	163.17	162.20	4.3417	29.450	193.11	-49.861	-3.1800
#3	162.42	163.34	4.3498	29.661	194.42	-51.532	-3.2208

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	264.76	145.56	1428.7
SDev	2.82	1.53	15.2
%RSD	1.0662	1.0542	1.0656
#1	261.82	144.59	1414.2
#2	265.01	144.76	1427.3
#3	267.45	147.33	1444.6

Method: TCLP Sample Name: S42088 Operator: 06
Run Time: 04/28/97 14:39:01
Comment:
Mode: CONC Corr. Factor: 49.7067

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	128.75	133.48	-.32602	12.110	28.336	-41.960	-3.0421
SDev	2.00	1.79	.09614	.150	.920	1.379	.0874
%RSD	1.5519	1.3400	29.489	1.2417	3.2457	3.2820	2.8743
#1	126.53	131.47	-.23611	12.110	28.867	-43.209	-3.0510
#2	129.30	134.10	-.42737	12.261	28.867	-40.460	-2.9506
#3	130.41	134.88	-.31457	11.960	27.274	-42.031	-3.1248

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	23.765	51.506	368.91
SDev	.047	1.451	3.76
%RSD	.19576	2.8171	1.0239
#1	23.714	50.822	363.04
#2	23.792	53.172	370.55
#3	23.792	50.523	367.15

Method: TCLP Sample Name: S42089 Operator: 06

Run Time: 04/28/97 14:42:04
Comment:
Mode: CONC Corr. Factor: 49.8008

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	113.44	137.22	-.55381	10.355	28.196	-46.670	-2.9950
SDev	4.39	2.27	.09374	.183	1.016	1.079	.0682
%RSD	3.9582	1.6518	16.927	1.7700	3.6021	2.3110	2.2780
#1	114.32	134.64	-.62545	10.144	27.036	-45.457	-3.0623
#2	113.54	138.89	-.58827	10.476	28.922	-47.030	-2.9968
#3	117.45	138.14	-.44771	10.446	28.632	-47.521	-2.9259

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	18.421	23.219	102.68
SDev	.214	.185	1.17
%RSD	1.1613	.8102	1.1355
#1	18.226	22.491	101.34
#2	18.650	24.203	103.40
#3	18.387	22.962	103.31

Method: TCLP Sample Name: S42090 Operator: 06
Run Time: 04/28/97 14:45:08
Comment:
Mode: CONC Corr. Factor: 49.8256

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	164.43	138.28	.53300	14.862	45.727	-69.845	-3.7097
SDev	1.57	1.35	.01987	.218	.674	1.481	.0219
%RSD	.97765	.97589	3.7280	1.4674	1.4749	2.1199	.59018
#1	163.58	136.73	.55427	14.611	45.267	-68.894	-3.6944
#2	166.25	138.88	.52984	15.003	46.501	-69.090	-3.7348
#3	163.46	139.22	.51490	14.973	45.413	-71.551	-3.6999

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	79.713	113.02	601.60
SDev	.779	1.68	6.89
%RSD	.97520	1.4883	1.1446
#1	79.038	111.08	593.67
#2	80.168	113.95	606.07
#3	80.532	114.04	605.06

Method: TCLP Sample Name: S42091 Operator: 06
Run Time: 04/28/97 14:48:12
Comment:
Mode: CONC Corr. Factor: 49.9201

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l

Avge	132.15	163.42	.96892	13.884	50.298	-48.784	-2.7880
SDev	3.23	2.89	.01783	.168	1.393	1.358	.0163
%RSD	2.4458	1.7709	1.8401	1.2113	2.7697	2.5790	.58403
#1	128.45	160.77	.96229	13.733	49.644	-49.311	-2.7955
#2	133.56	162.98	.95537	13.854	49.353	-47.338	-2.7992
#3	134.43	166.51	.98912	14.065	51.898	-49.704	-2.7693

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	70.685	71.482	421.50
SDev	1.071	1.049	7.07
%RSD	1.5147	1.4673	1.6766
#1	69.699	70.567	414.55
#2	70.928	71.253	421.28
#3	71.823	72.626	428.68

2 SERIAL DILUTION

Method: TCLP Sample Name: X42091 Operator: 06
Run Time: 04/28/97 14:51:17
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	2.6072	3.2601	.02117	.27913	1.0357	-1.0035	-.05466
SDev	.0771	.0580	.00065	.00354	.0297	.0805	.00176
%RSD	2.9257	1.7786	3.0539	1.2701	2.8698	8.0192	3.2253
#1	2.5382	3.1935	.02042	.27509	1.0032	-1.0787	-.05665
#2	2.6802	3.2871	.02159	.28054	1.0425	-.91864	-.05400
#3	2.6033	3.2996	.02149	.28175	1.0615	-1.0135	-.05332

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	1.4017	1.4033	8.4319
SDev	.0267	.0350	.1590
%RSD	1.9039	2.4937	1.8861
#1	1.3741	1.3629	8.2502
#2	1.4144	1.4239	8.4996
#3	1.4197	1.4230	8.5459

2 SERIAL DILUTION

Method: TCLP Sample Name: XD42091 Operator: 06
Run Time: 04/28/97 14:54:20
Comment:
Mode: CONC Corr. Factor: 4

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	2.8536	3.5071	.02441	.30898	1.1071	-1.0635	-.12751
SDev	.0097	.0252	.00847	.00242	.0178	.0888	.00563
%RSD	.34917	.71912	34.681	.78329	1.6079	8.3500	4.4176
#1	2.8536	3.5216	.02332	.31140	1.0877	-1.1398	-.13313

#2 SERIAL DILUTION

#2	2.8489	3.4780	.03337	.30656	1.1110	-.96602	-.12187
#3	2.8575	3.5216	.01655	.30898	1.1227	-1.08845	-.12754

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	1.3893	1.6059	9.4016
SDev	.0058	.0312	.0398
%RSD	.42071	1.9430	.42133
#1	1.3942	1.5726	9.3978
#2	1.3828	1.6109	9.4515
#3	1.3909	1.6345	9.4755

#2 CONTINUING CALIBRATION VERIFICATION

Method: TCLP Sample Name: CCC27-2 Operator: 06
Run Time: 04/28/97 14:57:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	2.0110	2.0522	2.0070	1.9991	2.0045	1.9564	2.0468
SDev	.0412	.0263	.0403	.0320	.0297	.0023	.0194
%RSD	2.0480	1.2837	2.0081	1.6016	1.4829	.11625	.94654
#1	2.0243	2.0328	1.9638	1.9710	1.9719	1.9550	2.0264
#2	1.9648	2.0416	2.0135	1.9922	2.0113	1.9590	2.0489
#3	2.0439	2.0822	2.0436	2.0340	2.0302	1.9550	2.0650
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
Range	.20000	.20000	.20000	.20000	.20000	.20000	.20000

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	1.9644	2.0411	2.0933
SDev	.0271	.0400	.0335
%RSD	1.3791	1.9588	1.5982
#1	1.9417	2.0016	2.0621
#2	1.9571	2.0403	2.0894
#3	1.9944	2.0816	2.1286
Errors	QC Pass	QC Pass	QC Pass
Value	2.0000	2.0000	2.0000
Range	.20000	.20000	.20000

Method: TCLP Sample Name: BC-END Operator: 06
Run Time: 04/28/97 15:00:31
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	.02906	H.02201	H.02028	H.01976	.00680	.02897	H.04284
SDev	.01792	.00585	.00560	.00654	.01335	.01617	.00430

Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	.01176	.00122	.00101	.00225	.00489	-.00725	L-.03037
SDev	.01245	.00030	.00222	.00094	.01017	.03069	.00072
%RSD	105.91	24.744	220.19	41.660	207.85	423.53	2.3619
#1	-.00156	.00157	.00197	.00143	.01076	L-.03691	L-.03109
#2	.02311	.00105	.00258	.00327	.01076	.02439	L-.02966
#3	.01372	.00105	.00153	.00204	.00685	-.00922	L-.03037
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low
High	.03000	.01000	.01000	.01000	.03000	.03000	.01000
Low	-.02000	-.01000	-.01000	-.01000	-.02000	-.02000	-.01000

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	L-.02144	.00028	.00103
SDev	.00024	.00427	.00104
%RSD	1.1032	1500.0	100.92
#1	L-.02117	-.00399	.00195
#2	L-.02158	.00456	.00125
#3	L-.02158	.00028	-.00010
Errors	LC Low	LC Pass	LC Pass
High	.01000	.01000	.01000
Low	-.01000	-.01000	-.01000

#2 INTERFERENCE CHECK SAMPLE

Method: TCLP Sample Name: IF2-2 Operator: 06
Run Time: 04/28/97 15:33:18
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	Q2.4050	1.8919	1.8707	1.8454	1.9402	1.6796	2.0164
SDev	.0445	.0133	.0198	.0247	.0306	.0377	.0218
%RSD	1.8507	.70483	1.0585	1.3382	1.5791	2.2426	1.0814
#1	Q2.3647	1.8820	1.8478	1.8173	1.9050	1.6578	1.9913
#2	Q2.3975	1.8867	1.8828	1.8548	1.9608	1.7231	2.0271
#3	Q2.4528	1.9070	1.8814	1.8640	1.9549	1.6578	2.0307
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.8000	1.8500	1.9000	1.8500	1.9000	1.8000	1.9000
Range	.36000	.37000	.38000	.37000	.38000	.36000	.38000

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	1.7518	1.8703	1.9764
SDev	.0095	.0354	.0264
%RSD	.54063	1.8918	1.3378
#1	1.7418	1.8427	1.9464
#2	1.7529	1.8581	1.9864

2 INTERFERENCE CHECK SAMPLE

#3	1.7607	1.9102	1.9964
Errors	QC Pass	QC Pass	QC Pass
Value	1.8500	1.9000	1.9000
Range	.37000	.38000	.38000

Method: TCLP Sample Name: Blank Operator: 06
Run Time: 04/28/97 15:36:30
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	.02192	.01307	.01463	.01329	.01174	-.00725	-.01987
SDev	.01410	.00326	.00335	.00303	.01448	.02228	.00395
%RSD	64.317	24.980	22.875	22.767	123.32	307.53	19.873
#1	.03602	.01568	.01757	.01677	.00489	.01846	-.01604
#2	.00782	.01411	.01532	.01186	.00196	-.02409	-.01963
#3	.02193	.00941	.01099	.01125	.02837	-.01911	-.02393

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	-.00778	.01367	.01360
SDev	.00240	.00247	.00206
%RSD	30.839	18.042	15.125
#1	-.00601	.01652	.01539
#2	-.00683	.01225	.01405
#3	-.01052	.01225	.01135

Method: TCLP Sample Name: CLCDU.1 Operator: 06
Run Time: 04/28/97 15:39:34
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Ba	Cd	Cr	Pb	Se	Ag
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Avge	Q.03324	.00157	Q.01146	.02106	Q.00783	Q.01121	Q-.01270
SDev	.00708	.00000	.00043	.00000	.00508	.00913	.00041
%RSD	21.315	.00000	3.7359	.00000	64.952	81.477	3.2540
#1	Q.03245	.00157	Q.01175	.02106	Q.00489	Q.01648	Q-.01318
#2	Q.02657	.00157	.01097	.02106	Q.01369	Q.00066	Q-.01246
#3	Q.04068	.00157	Q.01167	.02106	Q.00489	Q.01648	Q-.01247
Errors	QC Fail	NOCHECK	QC Fail	QC Pass	QC Fail	QC Fail	QC Fail
Value	.02000		.01000	.02000	.00600	.01000	.02000
Range	10.000		10.000	10.000	10.000	10.000	10.000

Elem	Cu	Ni	Zn
Units	mg/l	mg/l	mg/l
Avge	Q.03442	.07976	.04302
SDev	.00085	.00598	.00076
%RSD	2.4782	7.5000	1.7714

INITIAL/CONTINUING CALIBRATION VERIFICATION

LAB NAME: EIS ANALYSIS DATE: 05/01/9

METHOD: ASSEU1
CONC UNITS: mg/l

	- -INITIAL CALIBRATION- -				- - - - CONTINUING CALIBRATION - - - -					
Analyte	True	QC Range (+/-)	Found	QC Status	True	QC Range (+/-)	#1 Found	QC Status	#2 Found	QC Status
AS	1.0	0.1	0.90206	PASS	1.0	0.1	0.93826	PASS	0.94010	PASS
SE	1.0	0.1	1.00285	PASS	1.0	0.1	1.01814	PASS	1.00366	PASS

Initial Calibration: CVU27 @ 09:51
Continuing Calibration: CCU27-1 @ 10:02
Continuing Calibration: CCU27-2 @ 10:59

Applicable Samples: 42084,42083,42085,42086,42087,42088,42089,42090,42091

CALIBRATION/METHOD BLANKS VERIFICATION

LAB NAME: EIS

ANALYSIS DATE: 05/01/97

METHOD: ASSEU1
CONC UNITS: mg/l

	CALIBRATION BLANK #1		CALIBRATION BLANK #2		METHOD BLANK	
Analyte	Found	Status	Found	Status	Found	Status
AS	0.00149	PASS	0.00301	PASS	0.00527	PASS
SE	0.00187	PASS	0.00170	PASS	0.00711	PASS

Calibration Blank #1: BC-1 at 09:40
Calibration Blank #2: BC-2 at 10:07
Method Blank: BM0423 at 10:10

Applicable Samples: 42084,42083,42085,42086,42087,42088,42089,42090,42091

LABORATORY CONTROL SAMPLE

LAB NAME: EIS

ANALYSIS DATE: 05/01/9

METHOD: ASSEU1
CONC UNITS: mg/l

Analyte	True	QC Range (+/-)	Found	QC Status
AS	1.0	0.2	0.92782	PASS
SE	1.0	0.2	1.01295	PASS

Lab Control Sample: LCU27 @ 10:13

Applicable Samples: 42084,42083,42085,42086,42087,42088,42089,42090,42091

ICP INTERFERENCE CHECK SAMPLES

LAB NAME: EIS

ANALYSIS DATE: 05/01/97

METHOD: ASSEU1
CONC UNITS: mg/l

	- - - INITIAL CHECK - - -				- - FINAL CHECK - -	
Analyte	True	QC Range (+/-)	Found	QC Status	Found	Status
AS	2.0	0.4	2.04965	PASS	1.97961	PASS
SE	2.0	0.4	1.94129	PASS	1.91593	PASS

Initial Check: IF2-1 @ 09:54
Final Check: IF2-2 @ 11:31

INITIAL CALIBRATION DATA
METALS

Instrument: TJA ICAP 61

Laboratory: EIS Environmental Engineers, Inc.

Calibration Date: 5-1-97

Calibration File: 5-1-97
UPPER LINEAR RANGE VERIFICATION

Analysis Date: 5-1-97

EIS Lab # 42083 - 42091

Standards: 3

ANALYTE NAME	Units: mg/L Found	TRUE	% Recovery
Antimony			
Arsenic	2.06	2.00	103
Barium			
Cadmium			
Chromium			
Copper			
Lead			
Nickel			
Selenium	2.01	2.00	100
Silver			
Zinc			

QUALITY ASSURANCE DATA SHEET
METALS

Instrument: TJA ICAP 61

Laboratory: EIS Environmental Engineers, Inc.

Analysis Date: 5-1-97

EIS Lab # 42084

ANALYTE NAME	Percent Recovery MS	MSD	% RPD
Antimony			
Arsenic	82	95	-15
Barium			
Cadmium			
Chromium			
Copper			
Lead			
Nickel			
Selenium	85	90	-5.7
Silver			
Zinc			

SERIAL DILUTION
METALS

Instrument: TJA ICAP 61

Laboratory: EIS Environmental Engineers, Inc.

Analysis Date: 5-1-97

EIS Lab # 42091

ANALYTE NAME	Units: mg/l Detection Limit	Sample Result	1/4 Dilution Result	% D
Antimony				
Arsenic	0.5	1.58	1.78	-13
Barium				
Cadmium				
Chromium				
Copper				
Lead				
Nickel				
Selenium	0.5	<0.5	<0.5	0
Silver				
Zinc				

PECISION QA / QC DATA SHEET
METALS

Instrument: TJA ICAP 61

Laboratory: EIS Environmental Engineers, Inc.

Analysis Date: 5-1-97

EIS Lab # 42084

ANALYTE NAME	Initial	Duplicate	% RSD
Antimony			
Arsenic	181	193	4.5
Barium			
Cadmium			
Chromium			
Copper			
Lead			
Nickel			
Selenium	<5.0	<5.0	0
Silver			
Zinc			

INSTRUMENT STANDARDIZATION

Method: ASSEU1 Standard: BC

Elem	As	Se
Avge	-.00020	.00140
SDev	.00131	.00341
%RSD	655.74	243.70
#1	.00120	.00420
#2	-.00040	.00240
#3	-.00140	-.00240

INSTRUMENT STANDARDIZATION

Method: ASSEU1 Standard: CIU21

Elem	As
Avge	4.6477
SDev	.2335
%RSD	5.0230
#1	4.3874
#2	4.7170
#3	4.8386

INSTRUMENT STANDARDIZATION

Method: ASSEU1 Standard: CIU11

Elem	Se
Avge	3.1313
SDev	.0688
%RSD	2.1969
#1	3.0522
#2	3.1642
#3	3.1774

Method: ASSEU1 Sample Name: Blank Operator: 06
Run Time: 05/01/97 09:37:22
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Se
Units	mg/l	mg/l
Avge	-.00057	-.00004
SDev	.00090	.00048
%RSD	156.12	1135.8
#1	-.00086	-.00038
#2	.00043	.00051
#3	-.00129	-.00026

#1 CALIBRATION BLANK VERIFICATION

Method: ASSEU1 Sample Name: BC-1 Operator: 06
Run Time: 05/01/97 09:40:07
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Se

#1 CALIBRATION BLANK VERIFICATION

2

Units	mg/l	mg/l
Avge	.00149	.00187
SDev	.00078	.00166
%RSD	52.349	88.724
#1	.00138	.00358
#2	.00077	.00179
#3	.00232	.00026
Errors	LC Pass	LC Pass
High	.03000	.03000
Low	-.02000	-.02000

UPPER LINEAR RANGE VERIFICATION

Method: ASSEU1 Sample Name: CIU11 Operator: 06
Run Time: 05/01/97 09:42:52
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Se
Units	mg/l	mg/l
Avge	.00958	2.0072
SDev	.00094	.1003
%RSD	9.8530	4.9952
#1	.00904	Q1.8930
#2	.00904	2.0479
#3	.01067	2.0807
Errors	NOCHECK	QC Pass
Value		2.0000
Range		.10000

UPPER LINEAR RANGE VERIFICATION

Method: ASSEU1 Sample Name: CIU21 Operator: 06
Run Time: 05/01/97 09:45:39
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Se
Units	mg/l	mg/l
Avge	2.0589	.01406
SDev	.0634	.00412
%RSD	3.0769	29.303
#1	1.9858	.01879
#2	2.0957	.01214
#3	2.0953	.01125
Errors	QC Pass	NOCHECK
Value	2.0000	
Range	.10000	

Method: ASSEU1 Sample Name: Blank Operator: 06
Run Time: 05/01/97 09:48:26

Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Se
Units	mg/l	mg/l
Avge	.00098	.00013
SDev	.00027	.00066
%RSD	58.750	519.62
#1	.00069	.00026
#2	.00060	-.00026
#3	.00164	.00089

INITIAL CALIBRATION VERIFICATION

Method: ASSEU1 Sample Name: CVU27 Operator: 06
Run Time: 05/01/97 09:51:13
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Se
Units	mg/l	mg/l
Avge	.90206	1.0029
SDev	.03096	.0348
%RSD	3.4321	3.4652
#1	0.86681	.96285
#2	.91457	1.0201
#3	.92481	1.0256
Errors	QC Pass	QC Pass
Value	1.0000	1.0000
Range	.10000	.10000

#1 INTERFERENCE CHECK SAMPLE

Method: ASSEU1 Sample Name: IF2-1 Operator: 06
Run Time: 05/01/97 09:54:00
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Se
Units	mg/l	mg/l
Avge	2.0497	1.9413
SDev	.0522	.0491
%RSD	2.5444	2.5269
#1	1.9896	1.8862
#2	2.0840	1.9803
#3	2.0754	1.9574
Errors	QC Pass	QC Pass
Value	1.8000	1.8000
Range	.36000	.36000

Method: ASSEU1 Sample Name: Blank Operator: 06
Run Time: 05/01/97 [illegible]56:47
Comment:

Mode: CONC Corr. Factor: 1

Elem	As	Se
Units	mg/l	mg/l
Avge	.00126	.00298
SDev	.00078	.00230
%RSD	61.420	77.183
#1	.00052	.00562
#2	.00207	.00192
#3	.00120	.00141

Method: ASSEU1 Sample Name: CLCDU.1 Operator: 06
Run Time: 05/01/97 09:59:34
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Se
Units	mg/l	mg/l
Avge	.02257	Q.00737
SDev	.00125	.00147
%RSD	5.8132	19.948
#1	.02040	Q.00588
#2	.02143	Q.00741
#3	Q.02289	Q.00882
Errors	QC Pass	QC Fail
Value	.02000	.01000
Range	10.000	10.000

#1 CONTINUING CALIBRATION VERIFICATION

Method: ASSEU1 Sample Name: CCU27-1 Operator: 06
Run Time: 05/01/97 10:02:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Se
Units	mg/l	mg/l
Avge	.93827	1.0181
SDev	.03704	.0438
%RSD	3.9475	4.3065
#1	Q.89555	.96809
#2	.95777	1.0366
#3	.96147	1.0498
Errors	QC Pass	QC Pass
Value	1.0000	1.0000
Range	.10000	.10000

Method: ASSEU1 Sample Name: Blank Operator: 06
Run Time: 05/01/97 10:05:15
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Se
Units	mg/l	mg/l
Avge	.00129	.00094
SDev	.00046	.00128
%RSD	35.277	136.59
#1	.00146	-.00051
#2	.00164	.00141
#3	.00077	.00192

#2 CALIBRATION BLANK VERIFICATION

Method: ASSEU1 Sample Name: BC-2 Operator: 06
Run Time: 05/01/97 10:07:58
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Se
Units	mg/l	mg/l
Avge	.00301	.00170
SDev	.00106	.00123
%RSD	35.109	72.068
#1	.00422	.00281
#2	.00258	.00192
#3	.00224	.00038
Errors	LC Pass	LC Pass
High	.03000	.03000
Low	-.02000	-.02000

METHOD BLANK VERIFICATION

Method: ASSEU1 Sample Name: BM0423 Operator: 06
Run Time: 05/01/97 10:10:40
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Se
Units	mg/l	mg/l
Avge	.00528	.00711
SDev	.00277	.00237
%RSD	52.411	33.383
#1	.00843	.00984
#2	.00413	.00550
#3	.00327	.00601
Errors	LC Pass	LC Pass
High	.03000	.03000
Low	-.02000	-.02000

LABORATORY CONTROL SAMPLE

Method: ASSEU1 Sample Name: LCU27 Operator: 06
Run Time: 05/01/97 10:13:24
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Se

LABORATORY CONTROL SAMPLE

Units	mg/l	mg/l
Avge	.92782	1.0130
SDev	.03129	.0386
%RSD	3.3726	3.8154
#1	.89237	.96848
#2	.93953	1.0320
#3	.95158	1.0384
Errors	QC Pass	QC Pass
Value	1.0000	1.0000
Range	.20000	.20000

Method: ASSEU1 Sample Name: Blank Operator: 06
Run Time: 05/01/97 10:16:12
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Se
Units	mg/l	mg/l
Avge	.00014	.00085
SDev	.00108	.00094
%RSD	754.98	110.57
#1	.00129	.00192
#2	-.00000	.00051
#3	-.00086	.00013

MATRIX SPIKE BACKGROUND

Method: ASSEU1 Sample Name: MB42084 Operator: 06
Run Time: 05/01/97 10:18:56
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Se
Units	mg/l	mg/l
Avge	1.9221	.02692
SDev	.0571	.01580
%RSD	2.9687	58.681
#1	1.8592	.04460
#2	1.9365	.01419
#3	1.9705	.02198

MATRIX SPIKE RECOVERY

Method: ASSEU1 Sample Name: MS42084 Operator: 06
Run Time: 05/01/97 10:21:39
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Se
Units	mg/l	mg/l
Avge	~~2.2130~~ 2.2465	.37484
SDev	.0586	.00252
%RSD	2.6476	.67159

MATRIX SPIKE RECOVERY

7

#1	~~2.1459~~	.37203
#2	2.2386 2.2465	.37561
#3	2.2544	.37689

DUPLICATE MATRIX SPIKE RECOVERY

Method: ASSEU1 Sample Name: MDS42084 Operator: 06
Run Time: 05/01/97 10:24:21
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Se
Units	mg/l	mg/l
Avge	~~2.2606~~ 2.2996	.38656
SDev	.0698	.01080
%RSD	3.0881	2.7939
#1	~~2.1829~~	.37650
#2	2.3181 2.2996	.39797
#3	2.2810	.38519

PRECISION QA/QC

Method: ASSEU1 Sample Name: P42084 Operator: 06
Run Time: 05/01/97 10:27:03
Comment:
Mode: CONC Corr. Factor: 99.4036

Elem	As	Se
Units	mg/l	mg/l
Avge	181.40	2.0453
SDev	4.70	.6916
%RSD	2.5889	33.815
#1	176.41	2.8330
#2	182.05	1.7658
#3	185.73	1.5372

PRECISION QA/QC

Method: ASSEU1 Sample Name: PD42084 Operator: 06
Run Time: 05/01/97 10:29:46
Comment:
Mode: CONC Corr. Factor: 99.5718

Elem	As	Se
Units	mg/l	mg/l
Avge	192.65	2.5790
SDev	3.20	1.0060
%RSD	1.6605	39.006
#1	189.38	3.5631
#2	192.80	2.6214
#3	195.77	1.5525

Method: ASSEU1 Sample Name: S42083 Operator: 06
Run Time: 05/01/97 10:32:28
Comment:

Mode: CONC Corr. Factor: 99.4728

Elem	As	Se
Units	mg/l	mg/l
Avge	231.54	.58479
SDev	5.49	.15878
%RSD	2.3731	27.152
#1	227.25	.76276
#2	229.62	.53393
#3	237.73	.45766

Method: ASSEU1 Sample Name: S42085 Operator: 06
Run Time: 05/01/97 10:35:11
Comment:
Mode: CONC Corr. Factor: 99.96

Elem	As	Se
Units	mg/l	mg/l
Avge	213.33	1.8268
SDev	1.96	.7214
%RSD	.91709	39.490
#1	211.51	2.6572
#2	213.08	1.4691
#3	215.40	1.3541

Method: ASSEU1 Sample Name: S42086 Operator: 06
Run Time: 05/01/97 10:37:53
Comment:
Mode: CONC Corr. Factor: 99.2851

Elem	As	Se
Units	mg/l	mg/l
Avge	276.13	1.0066
SDev	2.90	1.0168
%RSD	1.0513	101.01
#1	272.79	2.0556
#2	277.97	.93897
#3	277.64	.02538

Method: ASSEU1 Sample Name: S42087 Operator: 06
Run Time: 05/01/97 10:40:36
Comment:
Mode: CONC Corr. Factor: 100

Elem	As	Se
Units	mg/l	mg/l
Avge	166.11	.71569
SDev	4.49	.36238
%RSD	2.7057	50.634
#1	161.30	.58788
#2	166.85	1.1246

#3	170.19	.43452

Method: ASSEU1 Sample Name: S42088 Operator: 06
Run Time: 05/01/97 10:43:19
Comment:
Mode: CONC Corr. Factor: 99.4135

Elem	As	Se
Units	mg/l	mg/l
Avge	159.54	.60138
SDev	3.75	.06267
%RSD	2.3528	10.422
#1	155.47	.67337
#2	160.26	.57173
#3	162.87	.55903

Method: ASSEU1 Sample Name: S42089 Operator: 06
Run Time: 05/01/97 10:46:02
Comment:
Mode: CONC Corr. Factor: 99.6016

Elem	As	Se
Units	mg/l	mg/l
Avge	143.51	1.9476
SDev	3.32	.9434
%RSD	2.3145	48.441
#1	140.18	2.9532
#2	143.53	1.8075
#3	146.83	1.0820

Method: ASSEU1 Sample Name: S42090 Operator: 06
Run Time: 05/01/97 10:48:45
Comment:
Mode: CONC Corr. Factor: 99.6512

Elem	As	Se
Units	mg/l	mg/l
Avge	198.71	.49669
SDev	4.81	.68595
%RSD	2.4199	138.10
#1	193.33	1.2736
#2	200.23	.24197
#3	202.58	-.02547

Method: ASSEU1 Sample Name: S42091 Operator: 06
Run Time: 05/01/97 10:51:27
Comment:
Mode: CONC Corr. Factor: 99.8403

Elem	As	Se

Units	mg/l	mg/l
Avge	160.16	.96974
SDev	4.60	1.5616
%RSD	2.8723	161.04
#1	155.46	2.4116
#2	160.36	1.1867
#3	164.66	-.68902

SERIAL DILUTION

Method: ASSEU1 Sample Name: X42091 Operator: 06
Run Time: 05/01/97 10:54:11
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Se
Units	mg/l	mg/l
Avge	1.5786	-.00226
SDev	.0545	.00275
%RSD	3.4516	121.71
#1	1.5247	.00077
#2	1.5774	-.00294
#3	1.6336	-.00460

SERIAL DILUTION 1/4

Method: ASSEU1 Sample Name: XD42091 Operator: 06
Run Time: 05/01/97 10:56:56
Comment:
Mode: CONC Corr. Factor: 4

Elem	As	Se
Units	mg/l	mg/l
Avge	1.7799	.01448
SDev	.0532	.01333
%RSD	2.9905	92.058
#1	1.7216	.02965
#2	1.7921	.00920
#3	1.8259	.00460

#2 CONTINUING CALIBRATION VERIFICATION

Method: ASSEU1 Sample Name: CCU27-2 Operator: 06
Run Time: 05/01/97 10:59:42
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Se
Units	mg/l	mg/l
Avge	.94010	1.0037
SDev	.02695	.0341
%RSD	2.8673	3.3960
#1	.90898	.96439
#2	.95571	1.0255
#3	.95562	1.0211

Errors	QC Pass	QC Pass
Value	1.0000	1.0000
Range	.10000	.10000

Method: ASSEU1 Sample Name: BC-END Operator: 06
Run Time: 05/01/97 11:02:23
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Se
Units	mg/l	mg/l
Avge	.00593	.00145
SDev	.00238	.00097
%RSD	60.302	66.811
#1	.00637	.00256
#2	.00379	.00077
#3	.00164	.00102
Errors	LC Pass	LC Pass
High	.03000	.03000
Low	-.02000	-.02000

Method: ASSEU1 Standard: BC

Elem	As	Se
Avge	-.00207	.00040
SDev	.00341	.00231
%RSD	164.90	576.63
#1	.00000	.00200
#2	-.00600	-.00060
#3	-.00020	-.00260

Method: ASSEU1 Standard: CIU21

Elem	As
Avge	4.6605
SDev	.1606
%RSD	3.4450
#1	4.4846
#2	4.6976
#3	4.7992

Method: ASSEU1 Standard: CIU11

Elem	Se
Avge	3.1259
SDev	.0926
%RSD	2.9634
#1	3.0190

#2 INTERFERENCE CHECK SAMPLE

Method: ASSEU1 Sample Name: IF2-2 Operator: 06
Run Time: 05/01/97 11:31:46
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Se
Units	mg/l	mg/l
Avge	1.9796	1.9159
SDev	.0335	.0402
%RSD	1.6934	2.0989
#1	1.9409	1.8698
#2	1.9973	1.9345
#3	2.0006	1.9435
Errors	QC Pass	QC Pass
Value	1.8000	1.8000
Range	.36000	.36000

Method: ASSEU1 Sample Name: CLCDU.1 Operator: 06
Run Time: 05/01/97 11:34:34
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Se
Units	mg/l	mg/l
Avge	0.02225	.01053
SDev	.00082	.00106
%RSD	3.6784	10.113
#1	.02173	.00934
#2	0.02319	0.01139
#3	.02182	.01088
Errors	QC Fail	QC Pass
Value	.02000	.01000
Range	10.000	10.000

Method: ASSEU1 Sample Name: BC-END Operator: 06
Run Time: 05/01/97 11:37:25
Comment:
Mode: CONC Corr. Factor: 1

Elem	As	Se
Units	mg/l	mg/l
Avge	.00217	.00171
SDev	.00031	.00039
%RSD	14.232	22.913
#1	.00183	.00205
#2	.00226	.00179
#3	.00243	.00128

SVOC

Sequence Name: C:\HPCHEM\1\SEQUENCE\4_24_97.S
Comment:
Operator:
Data Path: C:\HPCHEM\1\DATA\4_24_97\
Pre-Seq Cmd:
Post-Seq Cmd:

OK 4-25-97 BD

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1)	Sample	1	MB0423	LLTRIAL	Method Blank 04-23-97
2)	Sample	2	40288	LLTRIAL	Ecology & Environment F106
3)	Sample	3	40289	LLTRIAL	Ecology & Environment F107
4)	Sample	4	40289D	LLTRIAL	Ecology & Environment F107 Duplic
5)	Sample	5	40289MS	LLTRIAL	Matrix Spike E & E F107
6)	Sample	6	40283	LLTRIAL	Ecology & Environment F101
7)	Sample	7	40284	LLTRIAL	Ecology & Environment F102
8)	Sample	8	40287	LLTRIAL	Ecology & Environment F105
9)					

Calibration Table Report
Method: LLTRIAL.M
Title: BNA Initial Calibration
Last Calibration: Thu Mar 27 10:25:39 1997

Concentration ng/ul	0.2	0.5	1.0	2.0	5.0	10	20	40	80		
level #	1	2	3	4	5	6	7	8	9		
data file 8270_	1.D	2.D	3.D	4.D	5.D	6.D	7.D	8.D	9.D		
Compound										Ave	% RSD
1,4-Dichlorobenzene-d4	ISTD										
N-Nitrosodimethylamine	0.597	0.600	0.612	0.720	0.787	0.790	0.791	0.758		0.707	12.6
pyridine		0.797	0.865	0.794	0.702	1.109	1.147	1.124		0.934	20.0
2-Fluorophenol	0.766	0.842	0.825	0.992	1.024	1.080	1.040	0.991		0.945	12.3
bis(2-Chloroethyl)ether	1.398	1.407	1.499	1.391	1.551	1.306	1.618	1.590		1.470	7.5
Aniline	1.398	1.407	1.499	1.617	1.550	1.666	1.618	1.590		1.543	6.5
Phenol-d5	1.183	1.086	1.273	1.306	1.298	1.369	1.308	1.253		1.260	7.0
Phenol	1.265	1.538	1.521	1.522	1.521	1.551	1.505	1.445		1.484	6.3
2-Chlorophenol	0.987	0.987	1.127	1.190	1.169	1.198	1.161	1.105		1.116	7.6
1,3-Dichlorobenzene	1.219	1.380	1.314	1.422	1.390	1.384	1.308	1.224		1.330	5.8
1,4-Dichlorobenzene	1.220	1.355	1.447	1.455	1.430	1.406	1.307	1.234		1.357	6.9
1,2-Dichlorobenzene	1.254	1.268	1.322	1.350	1.325	1.303	1.243	1.162		1.278	4.7
Benzyl alcohol	0.463	0.516	0.512	0.568	0.577	0.635	0.640	0.624		0.567	11.5
bis(2-chloroisopropyl)ether	1.343	1.263	1.121	1.067	1.009	1.029	1.014	1.001		1.106	11.7
2-Methylphenol	1.015	0.931	0.948	1.037	1.028	1.059	0.944			0.995	5.2
Hexachloroethane	0.609	0.618	0.641	0.658	0.669	0.665	0.634	0.588		0.635	4.5
N-Nitroso-di-n-propylamine	0.891	0.818	0.922	0.971	0.944	0.993	0.974	0.941		0.932	6.0
4-Methylphenol	0.937	0.822	0.866	0.884	0.949	0.998	0.950	0.913		0.915	6.1
Naphthalene-d8	ISTD										
Nitrobenzene-d5	0.317	0.339	0.355	0.256	0.243	0.263	0.272			0.292	15.1
Nitrobenzene	0.384	0.390	0.409	0.430	0.420	0.436	0.427	0.399		0.412	4.7
Isophorone	0.616	0.692	0.740	0.803	0.812	0.823	0.802	0.784		0.759	9.5
2-Nitrophenol			0.147	0.190	0.209	0.231	0.222	0.210		0.202	14.9
2,4-Dimethylphenol	0.337	0.323	0.343	0.389	0.396	0.410	0.398	0.380		0.372	8.8
Benzoic acid					0.025	0.080	0.146	0.205	0.181	0.127	58.2
bis(2-Chloroethoxy)methane	0.458	0.479	0.484	0.495	0.489	0.491	0.462	0.452		0.476	3.5
2,4-Dichlorophenol	0.225	0.237	0.266	0.291	0.311	0.322	0.319	0.312		0.285	13.4
1,2,4-Trichlorobenzene	0.319	0.359	0.333	0.371	0.369	0.367	0.339	0.316		0.347	6.5
Naphthalene	0.939	1.009	0.964	1.028	1.026	0.997	0.951	0.883		0.975	5.1
4-Chloroaniline	0.262	0.349		0.420	0.413	0.428	0.416			0.381	17.1
Hexachlorobutadiene	0.228	0.208	0.217	0.192	0.184	0.186	0.179	0.162		0.195	11.2
4-Chloro-3-methylphenol	0.285	0.278	0.312	0.308	0.323	0.365	0.361	0.351		0.323	10.3
2-Methylnaphthalene	0.581	0.575	0.613	0.651	0.647	0.649	0.618	0.571		0.613	5.6
Acenaphthene-d10	ISTD										
Hexachlorocyclopentadiene				0.154	0.232	0.265	0.274	0.273		0.240	21.2
2,4,6-Trichlorophenol	0.210	0.250	0.296	0.309	0.342	0.348	0.348	0.331		0.304	16.6
2,4,5-Trichlorophenol	0.238	0.278	0.312	0.353	0.367	0.389	0.391	0.354		0.335	16.3
2-Fluorobiphenyl	0.956	1.025	1.035	0.765	0.767	0.719	0.689			0.851	17.5
2-Chloronaphthalene	0.957	0.913	0.963	1.032	1.046	0.986	0.959	0.866		0.965	6.1
2-Nitroaniline		0.211	0.220	0.279	0.314	0.380	0.400	0.395		0.314	25.7
Acenaphthylene	1.271	1.365	1.472	1.637	1.662	1.586	1.545	1.411		1.494	9.2
Dimethylphthalate	1.106	1.121	1.148	1.318	1.310	1.299	1.241	1.156		1.212	7.4
2,6-Dinitrotoluene		0.105	0.134	0.204	0.235	0.280	0.296	0.288		0.220	34.7
Acenaphthene	0.926	0.967	0.956	1.083	1.055	1.004	0.961	0.880		0.979	6.8
3-Nitroaniline		0.135	0.183	0.235	0.266	0.300	0.310	0.347		0.254	29.5
2,4-Dinitrophenol					0.070	0.128	0.192	0.230	0.201	0.164	39.3
Dibenzofuran	1.334	1.259	1.330	1.472	1.431	1.398	1.307	1.255		1.348	5.8

Concentration ng/ul	0.2	0.5	1.0	2.0	5.0	10	20	40	80		
level #	1	2	3	4	5	6	7	8	9		
data file 8270_	1.D	2.D	3.D	4.D	5.D	6.D	7.D	8.D	9.D		
Compound										Ave	% RSD
2,4-Dinitrotoluene			0.192	0.288	0.330	0.403	0.429	0.417		0.343	26.9
4-Nitrophenol				0.087	0.168	0.200	0.226	0.218		0.180	31.4
Fluorene	0.924	0.970	1.026	1.151	1.161	1.129	1.085	0.992		1.055	8.5
4-Chlorophenyl-phenylether	0.515	0.559	0.620	0.607	0.609	0.589	0.567	0.534		0.575	6.6
Diethylphthalate	1.139	1.218	1.279	1.364	1.435	1.408	1.400	1.314		1.320	7.8
4-Nitroaniline			0.159	0.238	0.278	0.315	0.333	0.326		0.275	24.4
Phenanthrene-d10	ISTD										
4,6-Dinitro-2-methylphenol					0.131	0.176	0.196	0.198	0.197	0.180	16.0
n-Nitrosodiphenylamine	0.375	0.403	0.418	0.491	0.524	0.527	0.484	0.469		0.461	12.3
Azobenzene	0.759	0.882	0.980	1.110	1.114	1.078	1.002	0.963		0.986	12.3
2,4,6-Tribromophenol		0.049	0.062	0.071	0.089	0.086	0.092	0.097		0.078	22.7
4-Bromophenyl-phenylether	0.201	0.224	0.225	0.237	0.251	0.246	0.230	0.219		0.229	6.9
Hexachlorobenzene	0.313	0.300	0.309	0.296	0.310	0.304	0.273	0.266		0.296	5.9
Pentachlorophenol				0.114	0.154	0.161	0.173	0.173	0.154	0.155	14.1
Phenanthrene	0.979	0.964	0.969	1.142	1.125	1.092	1.010	0.954		1.029	7.5
Anthracene	0.929	0.934	1.022	1.124	1.125	1.126	1.043	0.999		1.038	7.9
Di-n-butylphthalate	1.341	1.289	1.308	1.479	1.574	1.626	1.518	1.489		1.453	8.7
Fluoranthene	1.001	0.999	1.042	1.150	1.193	1.218	1.115	1.063		1.098	7.7
Benzidine					0.251	0.363	0.394	0.384	0.433	0.365	18.8
Chrysene-d12	ISTD										
Pyrene	1.300	1.270	1.510	1.747	1.654	1.701	1.540	1.416		1.517	11.8
Terphenyl-d14	*0.746*	*0.730*	*0.876*	*0.648*	*0.632*	*0.694*	*0.615*			*0.706*	*12.7*
Butylbenzylphthalate	0.459	0.485	0.615	0.722	0.809	0.975	0.919	0.869		0.732	26.7
3,3'-Dichlorobenzidine			0.228	0.239	0.237	0.274	0.278		0.233	0.248	8.8
Benzo[a]anthracene	1.167	0.904	1.136	1.019	1.191	1.229	1.020	0.921		1.073	11.6
Chrysene	1.099	0.919	1.073	1.090	1.034	1.202	0.995	0.907		1.040	9.5
bis(2-Ethylhexyl)phthalate	0.626	0.626	0.878	1.030	1.145	1.370	1.264	1.190		1.016	27.8
Perylene-d12	ISTD										
Di-n-octylphthalate				1.298	1.400	1.664	1.886	1.808		1.611	15.8
Benzo[b]fluoranthene	0.778	0.881	1.008	1.080	0.967	1.118	1.093	1.037		0.995	11.7
Benzo[k]fluoranthene	0.975	1.052	0.932	0.999	1.045	1.083	0.923	0.892		0.988	7.0
Benzo[a]pyrene	0.631	0.805	0.791	1.001	0.946	1.064	0.984	0.881		0.888	15.9
Indeno[1,2,3-cd]pyrene		0.626	0.762	0.744	0.853	0.963	1.012	0.933		0.842	16.4
Dibenz[a,h]anthracene		0.505	0.584	0.562	0.673	0.791	0.794	0.765		0.668	17.9
Benzo[g,h,i]perylene		0.596	0.667	0.643	0.692	0.789	0.776	0.752		0.702	10.3

Fri Apr 25 13:54:35 1997

Compound List Report [illegible] In

Method : C:\HPCHEM\1\METHODS\ELTRIAL.M
Title : BNA Calibration
Last Update : Thu Mar 27 10:25:09 1997
Response via : Initial Calibration
Total Cpnds : 82

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	1,4-Dichlorobenzene-d4	152	9.37	1.000	L	3	A	L
2		N-Nitrosodimethylamine	74	2.87	0.307	L	3	A	B
3		Pyridine	79	2.85	0.305	L	3	A	B
4	S	2-Fluorophenol	112	6.05	0.646	L	3	A	B
5		bis(2-Chloroethyl)ether	93	8.87	0.947	L	3	A	B
6		Aniline	93	8.63	0.921	L	3	A	B
7	S	Phenol-d5	99	8.66	0.924	L	3	A	B
8	CM	Phenol	94	8.70	0.928	L	3	A	B
9	M	2-Chlorophenol	128	8.86	0.946	L	3	A	B
10		1,3-Dichlorobenzene	146	9.21	0.983	L	3	A	B
11	CM	1,4-Dichlorobenzene	146	9.41	1.004	L	3	A	B
12		1,2-Dichlorobenzene	146	9.74	1.040	L	3	A	B
13		Benzyl alcohol	108	9.79	1.045	L	3	A	B
14		bis(2-chloroisopropyl)ether	45	10.16	1.084	L	3	A	B
15		2-Methylphenol	108	10.10	1.078	L	3	A	B
16		Hexachloroethane	117	10.50	1.121	L	3	A	B
17	PM	N-Nitroso-di-n-propylamine	70	10.45	1.115	L	3	A	B
18		4-Methylphenol	108	10.47	1.118	L	3	A	B
19	I	Naphthalene-d8	136	12.25	1.000	L	3	A	L
20	S	Nitrobenzene-d5	82	10.68	0.872	L	3	A	B
21		Nitrobenzene	77	10.72	0.875	L	3	A	B
22		Isophorone	82	11.30	0.923	L	3	A	B
23	C	2-Nitrophenol	139	11.44	0.934	L	3	A	B
24		2,4-Dimethylphenol	107	11.66	0.951	L	3	A	B
25		Benzoic acid	105	11.83	0.966	L	3	A	B
26		bis(2-Chloroethoxy)methane	93	11.87	0.969	L	3	A	B
27	C	2,4-Dichlorophenol	162	11.99	0.978	L	3	A	B
28	M	1,2,4-Trichlorobenzene	180	12.16	0.992	L	3	A	B
29		Naphthalene	128	12.30	1.004	L	3	A	B
30		4-Chloroaniline	127	12.49	1.019	L	3	A	B
31	C	Hexachlorobutadiene	225	12.63	1.031	L	3	A	B
32	CM	4-Chloro-3-methylphenol	107	13.62	1.112	L	3	A	B
33		2-Methylnaphthalene	142	13.83	1.129	L	3	A	B
34	I	Acenaphthene-d10	164	16.06	1.000	L	3	A	L
35	P	Hexachlorocyclopentadiene	237	14.20	0.884	L	3	A	B
36	C	2,4,6-Trichlorophenol	196	14.48	0.901	L	3	A	B
37		2,4,5-Trichlorophenol	196	14.54	0.905	L	3	A	B
38	S	2-Fluorobiphenyl	172	14.69	0.914	L	3	A	B
39		2-Chloronaphthalene	162	14.87	0.926	L	3	A	B
40		2-Nitroaniline	65	15.13	0.942	L	3	A	B
41		Acenaphthylene	152	15.75	0.981	L	3	A	B
42		Dimethylphthalate	163	15.61	0.972	L	3	A	B
43		2,6-Dinitrotoluene	165	15.71	0.978	L	3	A	B
44	CM	Acenaphthene	153	16.13	1.004	L	3	A	B
45		3-Nitroaniline	138	16.03	0.998	L	3	A	B
46	P	2,4-Dinitrophenol	184	16.26	1.012	L	3	A	B
47		Dibenzofuran	168	16.51	1.028	L	3	A	B
48	M	2,4-Dinitrotoluene	165	16.55	1.030	L	3	A	B
49	PM	4-Nitrophenol	109	16.45	1.024	L	3	A	B
50		Fluorene	166	17.24	1.074	L	3	A	B
51		4-Chlorophenyl-phenylether	204	17.31	1.078	L	3	A	B
52		Diethylphthalate	149	17.15	1.068	L	3	A	B
53		4-Nitroaniline	138	17.33	1.079	L	3	A	B
54	I	Phenanthrene-d10	188	19.77	1.000	L	3	A	L
55		4,6-Dinitro-2-methylphenol	198	17.41	0.881	L	3	A	B
56	C	n-Nitrosodiphenylamine	169	17.59	0.889	L	3	A	B
57		Azobenzene	77	17.67	0.893	L	3	A	B
58	S	2,4,6-Tribromophenol	330	17.80	0.900	L	3	A	B
59		4-Bromophenyl-phenylether	248	18.53	0.937	L	3	A	B
60		Hexachlorobenzene	284	18.60	0.941	L	3	A	B
61	CM	Pentachlorophenol	266	19.25	0.973	L	3	A	B
62		Phenanthrene	178	19.84	1.003	L	3	A	B
63		Anthracene	178	19.99	1.011	L	3	A	B
64		Di-n-butylphthalate	149	21.60	1.092	L	3	A	B
65	C	Fluoranthene	202	22.79	1.152	L	3	A	B
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

106

67	I	Chrysene-d12	240	[illegible]	1.000	L	3	A	L
68	M	Pyrene	202	23.25	0.862	L	3	A	B
69	S	Terphenyl-d14	244	23.72	0.900	L	3	A	B
70		Butylbenzylphthalate	149	25.10	0.952	L	3	A	B
71		3,3'-Dichlorobenzidine	252	26.07	1.000	L	3	A	B
72		Benzo[a]anthracene	228	26.34	0.999	L	3	A	B
73		Chrysene	228	26.42	1.002	L	3	A	B
74		bis(2-Ethylhexyl)phthalate	149	26.68	1.012	L	3	A	B
75	I	Perylene-d12	264	29.30	1.000	L	3	A	L
76	S	Di-n-octylphthalate	149	28.04	0.957	L	3	A	B
77		Benzo[b]fluoranthene	252	28.56	0.975	L	3	A	B
78		Benzo[k]fluoranthene	252	28.61	0.977	L	3	A	B
79	C	Benzo[a]pyrene	252	29.18	0.996	L	3	A	B
80		Indeno[1,2,3-cd]pyrene	276	31.64	1.080	L	3	A	B
81		Dibenz[a,h]anthracene	278	31.71	1.082	L	3	A	B
82		Benzo[g,h,i]perylene	276	32.31	1.103	L	3	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

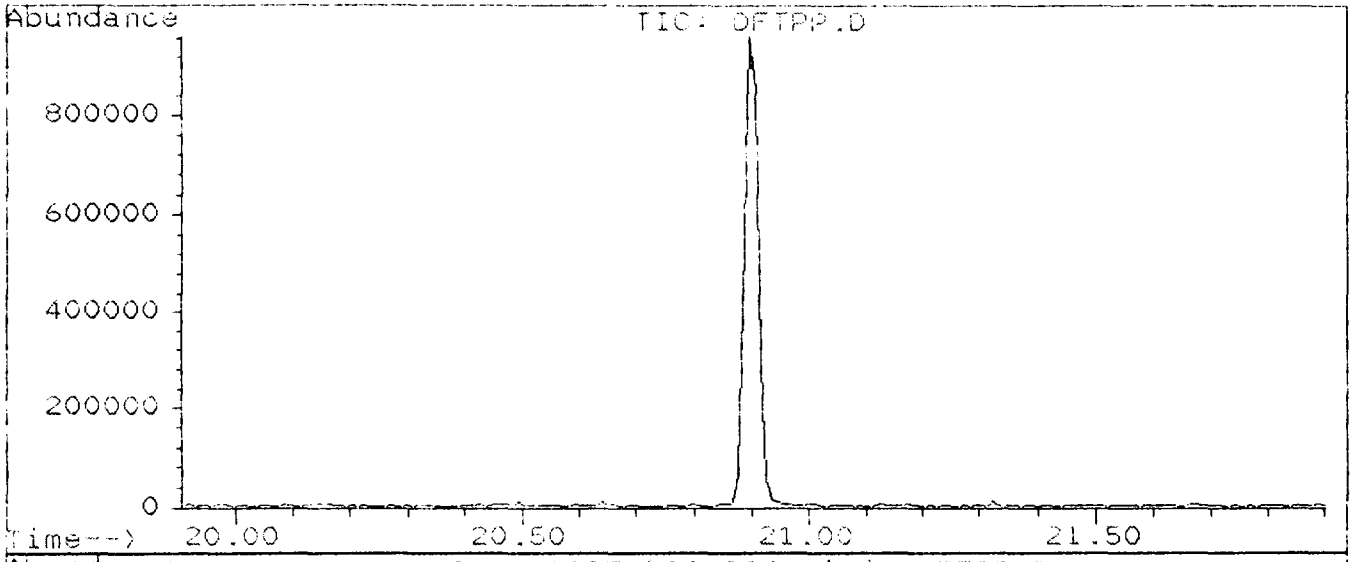
LLTRIAL.M Fri Apr 25 08:07:37 1997 486DX2

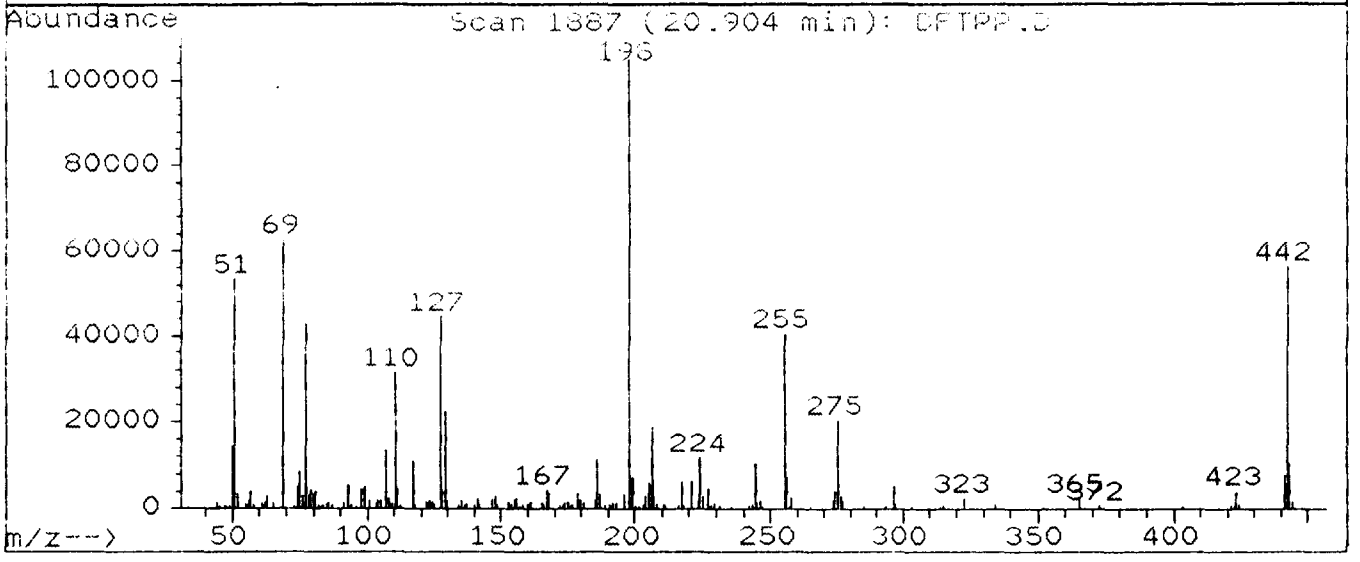
DFTPP

Data File : C:\HPCHEM\1\DATA\4_24_97\DFTPP.D
Acq Time : 24 Apr 97 1:26 pm
Sample : DFTPP 2-19-97
Misc : 5 ng

Operator: BD
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\LLTRIAL.M
Title : BNA Calibration



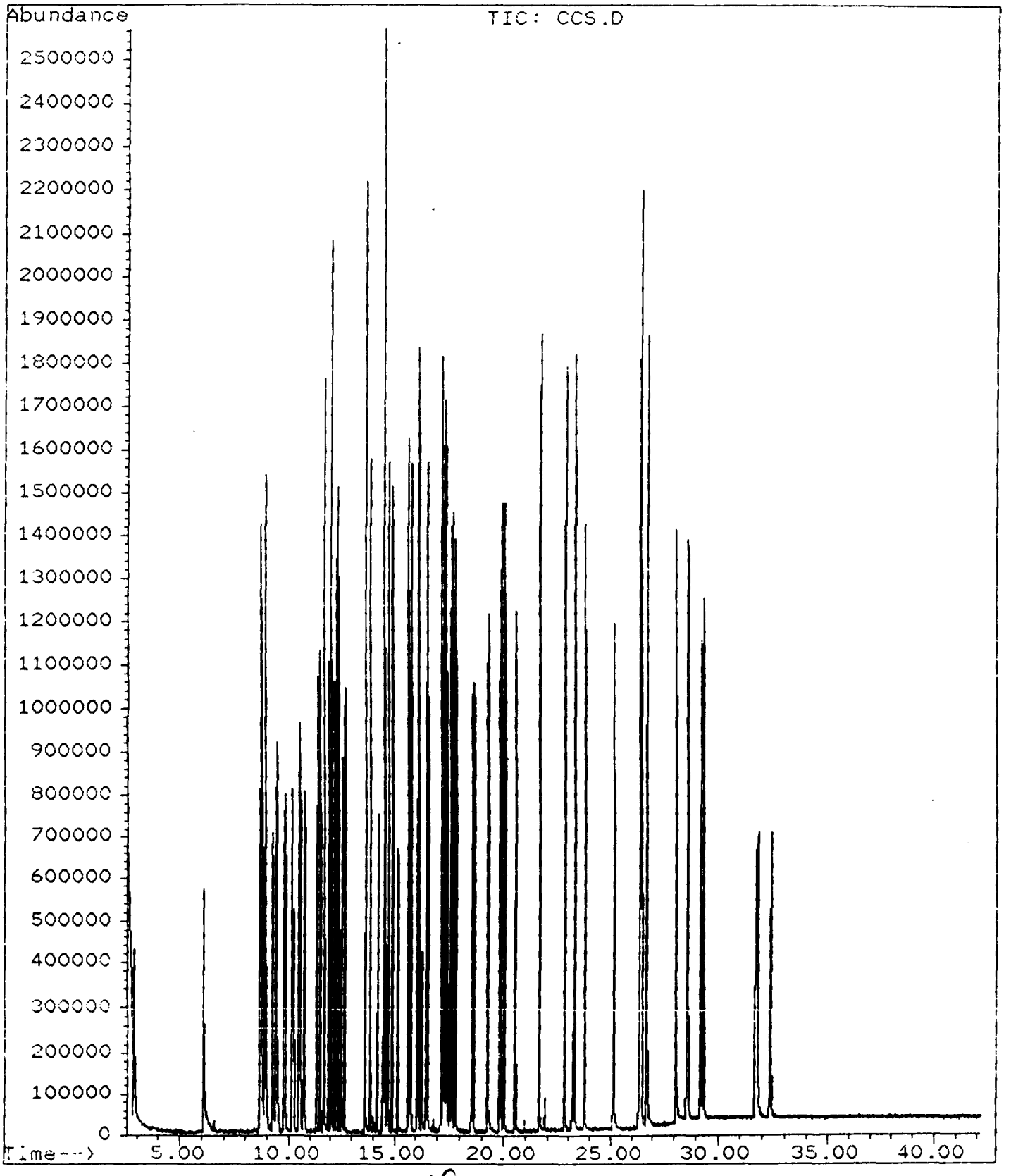


Peak Apex is scan: 1887

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	50.9	53496	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	59.6	62616	PASS
70	69	0	2	0.0	0	PASS
127	198	40	60	42.3	44480	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	105096	PASS
199	198	5	9	7.0	7358	PASS
275	198	10	30	19.3	20280	PASS
365	198	1	100	2.3	2453	PASS
441	443	0	100	75.4	7731	PASS
442	198	40	100	53.5	56176	PASS
443	442	17	23	18.3	10253	PASS

DFTPP.D LLTRIAL.M Thu Apr 24 14:09:33 1997 486DX2

File : C:\HPCHEM\1\DATA\4_24_97\CCS.D
Operator : BC
Acquired : 24 Apr 97 2:19 pm using AcqMethod LLTRIAL
Instrument : 5970 - In
Sample Name: Calibration Check Standard 9-19-97
Misc Info : (5 ng)(10 ng Phenol)
Vial Number: 99



EIS Environmental Engineers

File	C:\HPCHEM\1\DATA\4_24_97\CCS.D
Sample	Calibration Check Standard 9-19-97
Date	24 Apr 97 2:19 pm
Misc	(5 ng)(10 ng Phenol)

DCS RF

CCC SPCC	Compound	%Diff
*	Acenaphthene	-4.8
	Acenaphthylene	-4.7
	Aniline	1.8
	Anthracene	-7.3
	Azobenzene	-0.8
	Benzidine	5.9
	Benzo[a]anthracene	6.0
*	Benzo[a]pyrene	-2.5
	Benzo[b]fluoranthene	3.3
	Benzo[g,h,i]peryiene	-10.0
	Benzo[k]fluoranthene	-5.2
	Benzoic acid	14.9
	Benzyl alcohol	-3.8
	bis(2-Chloroethoxy)methane	-12.4
	bis(2-Chloroethyl)ether	0.5
	bis(2-chloroisopropyl)ether	-54.7
	bis(2-Ethylhexyl)phthalate	8.4
	4-Bromophenyl-phenylether	-9.6
	Butylbenzylphthalate	7.4
*	4-Chloro-3-methylphenol	-3.8
	4-Chloroaniline	0.7
	2-Chloronaphthalene	-4.8
	2-Chlorophenol	-4.5
	4-Chlorophenyl-phenylether	-18.9
	Chrysene	-2.0
	Di-n-butylphthalate	-8.2
*	Di-n-octylphthalate	3.7
	Dibenz[a,h]anthracene	-5.9
	Dibenzofuran	-7.8
	1,2-Dichlorobenzene	-7.1
	1,3-Dichlorobenzene	-4.3
*	1,4-Dichlorobenzene	-5.5
	3,3'-Dichlorobenzidine	27.8
*	2,4-Dichlorophenol	-1.6
	Diethylphthalate	-8.7
	2,4-Dimethylphenol	16.4
	Dimethylphthalate	-10.3
	4,6-Dinitro-2-methylphenol	17.8
**	2,4-Dinitrophenol 0.081	40.4
	2,4-Dinitrotoluene	-11.4
	2,6-Dinitrotoluene	-2.3
*	Fluoranthene	-8.6

DCS
RF

	Fluorene		-11.0
	2-Fluorobiphenyl		-55.2
	2-Fluorophenol		5.2
	Hexachlorobenzene		-13.7
*	Hexachlorobutadiene		3.6
**	Hexachlorocyclopentadiene	0.23	2.2
	Hexachloroethane		5.2
	Indeno[1,2,3-cd]pyrene		-5.1
	Isophorone		3.8
	2-Methylnaphthalene		-2.7
	2-Methylphenol		3.1
	4-Methylphenol		-13.5
	Naphthalene		-7.8
	2-Nitroaniline		7.5
	3-Nitroaniline		-4.0
	4-Nitroaniline		12.6
	Nitrobenzene		0.7
	Nitrobenzene-d5		-24.8
*	2-Nitrophenol		3.9
**	4-Nitrophenol	0.14	26.4
**	N-Nitroso-di-n-propylamine	1.05	-9.2
	N-Nitrosodimethylamine		5.6
*	n-Nitrosodiphenylamine		-17.7
*	Pentachlorophenol		15.5
	Phenanthrene		-11.8
*	Phenol		2.2
	Phenol-d5		-9.8
	Pyrene		1.6
	pyridine		30.1
	Terphenyl-d14		-42.9
	2,4,6-Tribromophenol		-31.8
	1,2,4-Trichlorobenzene		-1.8
	2,4,5-Trichlorophenol		-3.1
*	2,4,6-Trichlorophenol		-9.8

* Calibration Check Compounds (CCC)
The maximum difference is 20%

** System Performance Check Compound (SPCC)
The minimum response factor for semivolatile SPCC's is 0.05

Quantitation Report

Data File : C:\HPCHEM\1\DATA\4_24_97\CCS.D
Acq Time : 24 Apr 97 2:19 pm
Sample : Calibration Check Standard 9-19-97
Misc : (5 ng)(10 ng Phenol)
Quant Time: Apr 24 15:11 1997

Operator: BD
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\LLTRIAL.M
Title : BNA Calibration
Last Update : Thu Apr 24 15:09:37 1997
Response via : Multiple Level Calibration

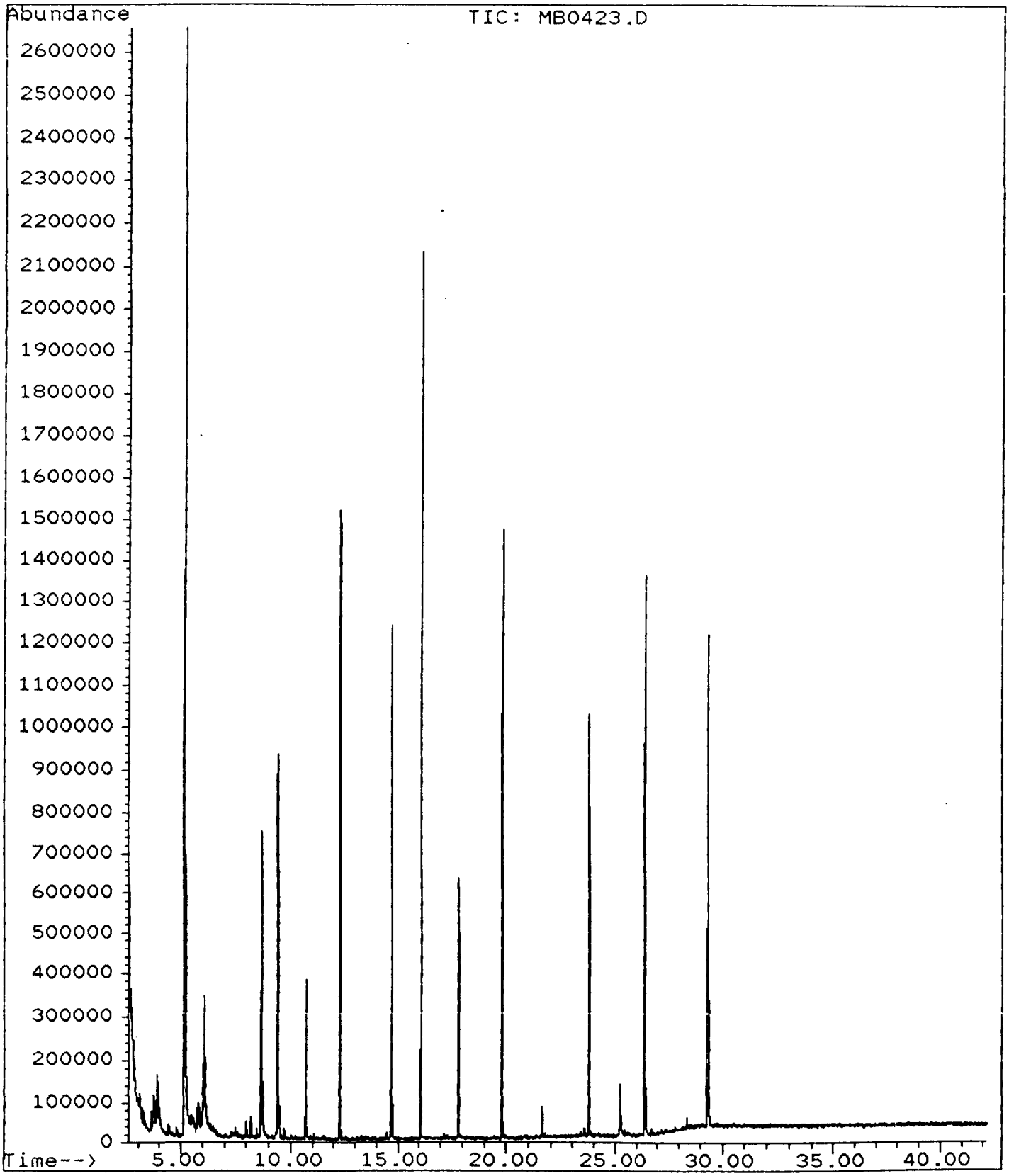
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.38	152	282252	5.00	ng/ul	0.00
19) Naphthalene-d8	12.27	136	952048	5.00	ng/ul	0.02
34) Acenaphthene-d10	16.08	164	653157	5.00	ng/ul	0.02
54) Phenanthrene-d10	19.81	188	956800	5.00	ng/ul	0.03
67) Chrysene-d12	26.38	240	796186	5.00	ng/ul	0.02
75) Perylene-d12	29.33	264	868558	5.00	ng/ul	0.03
System Monitoring Compounds						**%Recovery**
4) 2-Fluorophenol	6.06	112	542720	9.48	ug/l	62.11%
7) Phenol-d5	8.67	99	794772	10.98	ug/l	65.23%
20) Nitrobenzene-d5	10.69	82	319068	6.24	ug/l	64.78%
38) 2-Fluorobiphenyl	14.70	172	722561	7.76	ug/l	60.71%
58) 2,4,6-Tribromophenol	17.83	330	234747	13.18	ug/l	86.82%
69) Terphenyl-d14	23.75	244	730126	7.15	ug/l	51.60%
Target Compounds						**Qvalue**
2) N-Nitrosodimethylamine	2.85	74	205611	4.72	ug/l #	72
3) pyridine	2.85	79	188657	3.49	ug/l #	88
5) bis(2-Chloroethyl)ether	8.88	93	422261	4.97	ug/l #	65
6) Aniline	8.64	93	445816	4.91	ug/L	96
8) Phenol	8.70	94	817790	9.78	ug/l	83
9) 2-Chlorophenol	8.87	128	669556	10.45	ug/l	97
10) 1,3-Dichlorobenzene	9.22	146	391815	5.22	ug/l	95
11) 1,4-Dichlorobenzene	9.42	146	400927	5.27	ug/l	91
12) 1,2-Dichlorobenzene	9.75	146	381427	5.36	ug/l	94
13) Benzyl alcohol	9.80	108	180665	5.19	ug/l #	87
14) bis(2-chloroisopropyl)ethe	10.17	45	444410	7.73	ug/l	87
15) 2-Methylphenol	10.11	108	271989	4.84	ug/l	89
16) Hexachloroethane	10.52	117	172472	4.74	ug/l #	82
17) N-Nitroso-di-n-propylamine	10.45	70	297047	5.46	ug/l	92
18) 4-Methylphenol	10.48	108	302528	5.68	ug/l #	72
21) Nitrobenzene	10.73	77	400003	4.96	ug/l #	82
22) Isophorone	11.31	82	734440	4.81	ug/l	94
23) 2-Nitrophenol	11.46	139	393850	9.61	ug/l	84
24) 2,4-Dimethylphenol	11.66	107	620607	8.36	ug/l	90
25) Benzoic acid	11.81	105	9722	4.26	ug/L #	14
26) bis(2-Chloroethoxy)methane	11.89	93	505049	5.62	ug/l	95
27) 2,4-Dichlorophenol	12.00	162	605433	10.16	ug/l	91
28) 1,2,4-Trichlorobenzene	12.17	180	337899	5.09	ug/l	98
29) Naphthalene	12.31	128	989019	5.39	ug/l	98
30) 4-Chloroaniline	12.51	127	394033	4.97	ug/l	94
31) Hexachlorobutadiene	12.65	225	167809	4.82	ug/l	89
32) 4-Chloro-3-methylphenol	13.63	107	694416	10.38	ug/l	84
33) 2-Methylnaphthalene	13.85	142	609088	5.14	ug/l	94
35) Hexachlorocyclopentadiene	14.21	237	152743	4.89	ug/l	88
36) 2,4,6-Trichlorophenol	14.50	196	481904	10.98	ug/l	95
37) 2,4,5-Trichlorophenol	14.55	196	251836	5.15	ug/l	93
39) 2-Chloronaphthalene	14.89	162	660410	5.24	ug/l	95
40) 2-Nitroaniline	15.16	65	215165	4.63	ug/l #	82
41) Acenaphthylene	15.77	152	1057329	5.23	ug/l	100
42) Dimethylphthalate	15.63	163	896702	5.52	ug/l	95
43) 2,6-Dinitrotoluene	15.73	165	176627	5.11	ug/l	90
44) Acenaphthene	16.16	153	668242	5.24	ug/l	97
45) 3-Nitroaniline	16.05	138	195405	5.20	ug/l #	86
46) 2,4-Dinitrophenol	16.28	184	105849	5.96	ug/l	83
47) Dibenzofuran	16.53	168	946008	5.39	ug/l	94
48) 2,4-Dinitrotoluene	16.57	165	275950	5.57	ug/l	87
49) 4-Nitrophenol	16.47	109	186783	7.36	ug/l #	71
50) Fluorene	17.27	166	785777	5.55	ug/l	98
51) 4-Chlorophenyl-phenylether	17.33	204	443261	5.94	ug/l	89
52) Diethylphthalate	17.16	149	979265	5.43	ug/l	97
53) 4-Nitroaniline 112	17.35	138	167033	4.37	ug/l #	72
55) 4,6-Dinitro-2-methylphenol	17.44	198	274575	8.22	ug/l	87
56) n-Nitrosodiphenylamine	17.61	169	553061	5.89	ug/l m	98

57)	Azobenzene	17.69	77	996387	5.04	ug/L #	88
59)	4-Bromophenyl-phenylether	18.56	248	245442	5.48	ug/l #	76
60)	Hexachlorobenzene	18.63	284	310502	5.68	ug/l	96
61)	Pentachlorophenol	19.27	266	256306	8.45	ug/l	91
62)	Phenanthrene	19.87	178	1107436	5.59	ug/l	99
63)	Anthracene	20.01	178	1094677	5.36	ug/l	98
64)	Di-n-butylphthalate	21.62	149	1585960	5.41	ug/l	97
65)	Fluoranthene	22.80	202	1180341	5.43	ug/l	98
66)	Benzidine	23.19	184	182522	4.71	ug/L	99
68)	Pyrene	23.27	202	1243589	4.92	ug/l	97
70)	Butylbenzylphthalate	25.12	149	647530	4.63	ug/l	92
71)	3,3'-Dichlorobenzidine	26.39	252	171400	3.61	ug/l	96
72)	Benzo[a]anthracene	26.36	228	819299	4.70	ug/l	95
73)	Chrysene	26.45	228	848508	5.10	ug/l	86
74)	bis(2-Ethylhexyl)phthalate	26.70	149	892778	4.58	ug/l	96
76)	Di-n-octylphthalate	28.07	149	1313083	4.82	ug/l	97
77)	Benzo[b]fluoranthene	28.59	252	895255	4.84	ug/l	86
78)	Benzo[k]fluoranthene	28.65	252	893787	5.26	ug/l	90
79)	Benzo[a]pyrene	29.21	252	865810	5.13	ug/l	89
80)	Indeno[1,2,3-cd]pyrene	31.69	276	852021	5.26	ug/l #	58
81)	Dibenz[a,h]anthracene	31.76	278	683263	5.30	ug/l #	72
82)	Benzo[g,h,i]perylene	32.35	276	715120	5.50	ug/l #	58

(#) = qualifier out of range (m) = manual integration
CCS.D LLTRIAL.M Thu Apr 24 15:11:28 1997 486DX2

File : C:\HPCHEM\1\DATA\4_24_97\MB0423.D
Operator : BD
Acquired : 24 Apr 97 3:28 pm using AcqMethod LLTRIAL
Instrument : 5970 - In
Sample Name: Method Blank 04-23-97
Misc Info : 40283,4,7-9(1ul/20mlKD)(20g)(PAH)(SUR 1X)
Vial Number: 1

Method Blank



Quantitation Report

Data File : C:\HPCHEM\1\DATA\4_24_97\MB0423.D
Acq Time : 24 Apr 97 3:28 pm Operator: BD
Sample : Method Blank 04-23-97 Inst : 5970 - In
Misc : 40283,4,7-9(1ul/20mlKD)(20g)(PAH)(SUR 1X Multiplr: 1.00
Quant Time: Apr 24 16:12 1997

Method : C:\HPCHEM\1\METHODS\LLTRIAL.M
Title : BNA Calibration
Last Update : Thu Mar 27 10:25:39 1997
Response via : Multiple Level Calibration

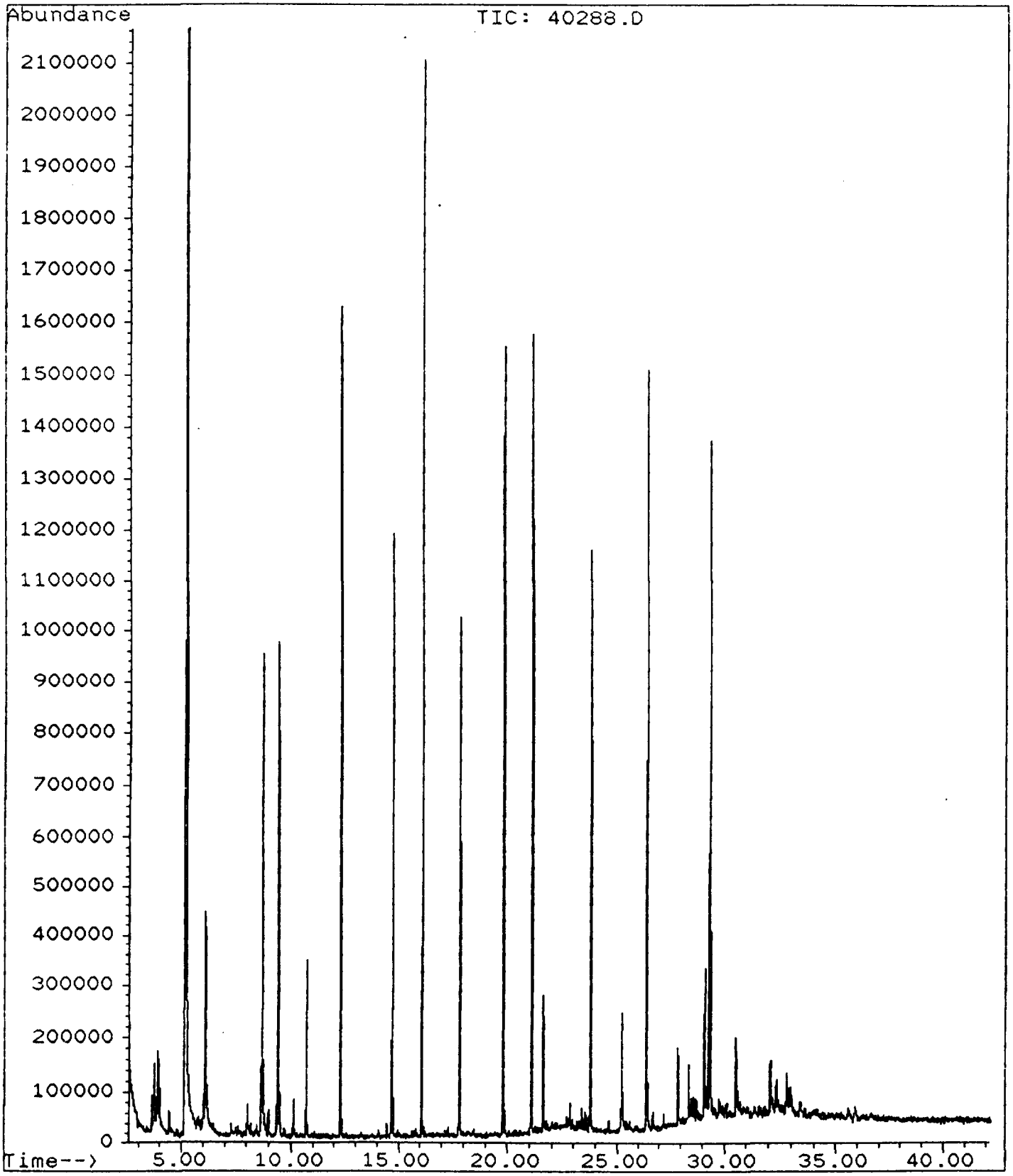
EQL=0.5

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.38	152	345561	5.00	ng/ul		0.01
19) Naphthalene-d8	12.26	136	1101831	5.00	ng/ul		0.00
34) Acenaphthene-d10	16.08	164	711876	5.00	ng/ul		0.02
54) Phenanthrene-d10	19.80	188	1026383	5.00	ng/ul		0.03
67) Chrysene-d12	26.38	240	861489	5.00	ng/ul		0.03
75) Perylene-d12	29.33	264	865810	5.00	ng/ul		0.03
System Monitoring Compounds							%Recovery
4) 2-Fluorophenol	6.07	112	286372	4.01	ug/l		~~26.27%~~ 56
7) Phenol-d5	8.66	99	488435	5.42	ug/l		~~32.18%~~ 66
20) Nitrobenzene-d5	10.69	82	194245	3.29	ug/l		~~34.19%~~ 65
38) 2-Fluorobiphenyl	14.70	172	547465	5.29	ug/l		~~41.37%~~ 57
58) 2,4,6-Tribromophenol	17.83	330	97518	5.45	ug/l		~~35.91%~~ 77
69) Terphenyl-d14	23.75	244	614406	5.50	ug/l		~~89.78%~~ 77
Target Compounds				PPM			Qvalue
3) pyridine	2.83	79	1783	0.60	ug/l	#	1
5) bis(2-Chloroethyl)ether	8.86	93	410	0.30	ug/l	#	22
13) Benzyl alcohol	9.83	108	329	0.11	ug/l	#	1
25) Benzoic acid	12.26	105	2858	~~4.06~~	ug/L	#	1
32) 4-Chloro-3-methylphenol	13.82	107	348	0.08	ug/l	#	18
40) 2-Nitroaniline	15.15	65	333	0.53	ug/l	#	6
42) Dimethylphthalate	16.08	163	100857	0.23	ug/l	#	1
43) 2,6-Dinitrotoluene	16.08	165	98377	~~2.86~~	ug/l	#	36
45) 3-Nitroaniline	16.09	138	301	0.91	ug/l	#	1
49) 4-Nitrophenol	16.62	109	414	~~1.05~~	ug/l	#	1
64) Di-n-butylphthalate	21.62	149	60333	0.06	ug/l		96
70) Butylbenzylphthalate	25.13	149	793	0.03	ug/l	#	54
76) Di-n-octylphthalate	28.07	149	610	0.76	ug/l	#	1

(#) = qualifier out of range (m) = manual integration
MB0423.D LLTRIAL.M Thu Apr 24 16:12:58 1997 486DX2

File : C:\HPCHEM\1\DATA\4_24_97\40288.D
Operator : BD
Acquired : 24 Apr 97 4:19 pm using AcqMethod LLTRIAL
Instrument : 5970 - In
Sample Name: Ecology & Environment F106
Misc Info : (1ul/20 ml KD)(20.20 g)(PAH)(SUR 1X)
Vial Number: 2

F 106



Quantitation Report

Data File : C:\HPCHEM\1\DATA\4_24_97\40288.D
Acq Time : 24 Apr 97 4:19 pm
Sample : Ecology & Environment F106
Misc : (1ul/20 ml KD)(20.20 g)(PAH)(SUR 1X)
Quant Time: Apr 24 17:06 1997

Operator: BD
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\LLTRIAL.M
Title : BNA Calibration
Last Update : Thu Mar 27 10:25:39 1997
Response via : Multiple Level Calibration

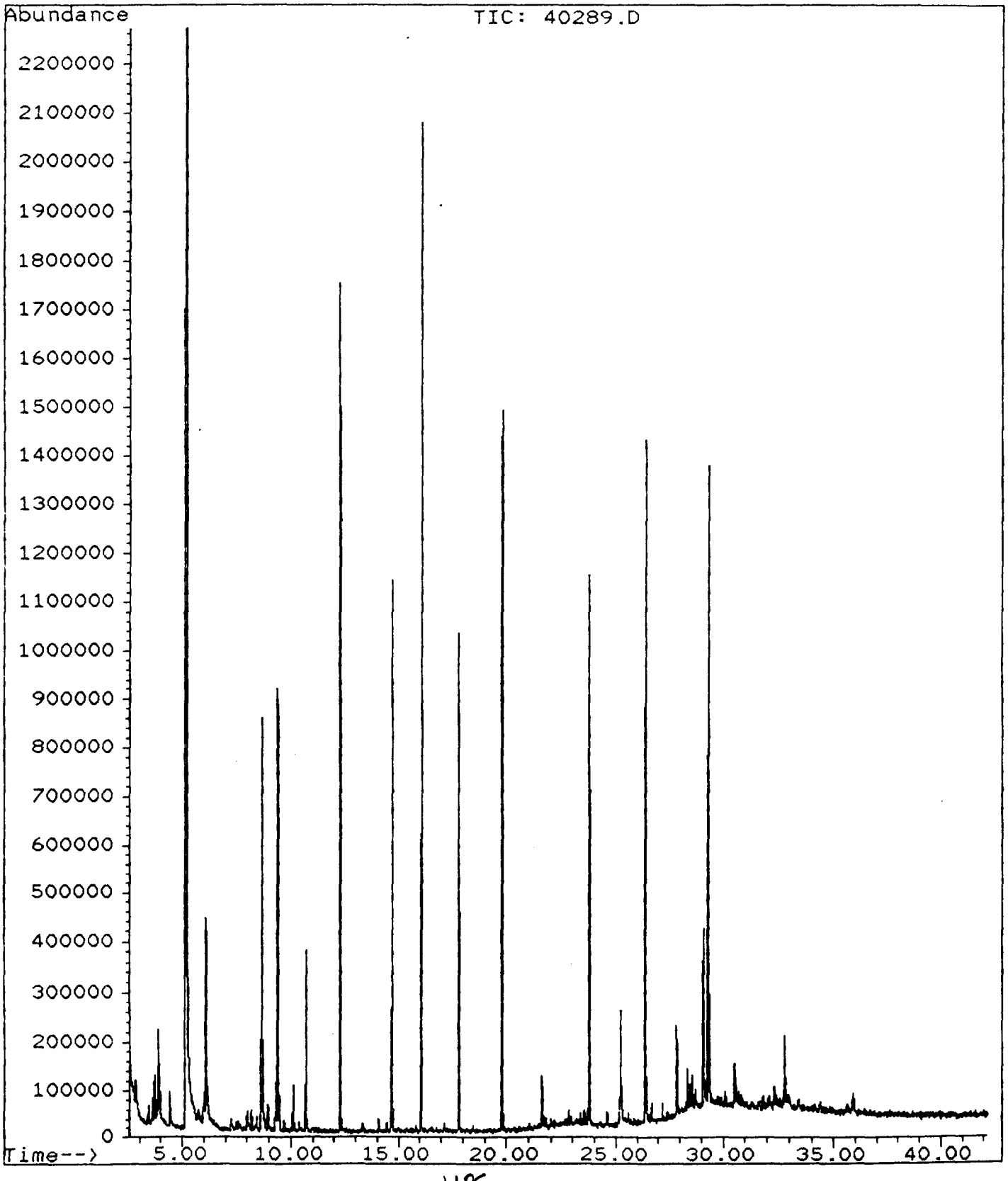
EQL = 0.5 ppm

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.38	152	345913	5.00	ng/ul	0.01
19) Naphthalene-d8	12.26	136	1138612	5.00	ng/ul	0.00
34) Acenaphthene-d10	16.08	164	731597	5.00	ng/ul	0.02
54) Phenanthrene-d10	19.80	188	1067010	5.00	ng/ul	0.02
67) Chrysene-d12	26.38	240	864384	5.00	ng/ul	0.03
75) Perylene-d12	29.32	264	891474	5.00	ng/ul	0.03
System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	6.08	112	393053	5.55	ug/l	~~36.35%~~ 7
7) Phenol-d5	8.67	99	597372	6.66	ug/l	~~39.57%~~ 7
20) Nitrobenzene-d5	10.69	82	177914	2.92	ug/l	~~30.33%~~ 6
38) 2-Fluorobiphenyl	14.70	172	550757	5.17	ug/l	~~40.44%~~ 8
58) 2,4,6-Tribromophenol	17.82	330	167942	8.66	ug/l	~~57.03%~~ 11
69) Terphenyl-d14	23.74	244	647261	5.79	ug/l	~~41.80%~~ 8
Target Compounds				ppm		Qvalue
3) pyridine	2.89	79	3135	0.62	ug/l #	1
5) bis(2-Chloroethyl)ether	9.21	93	297	0.30	ug/l #	22
13) Benzyl alcohol	9.37	108	1301	0.14	ug/l #	1
25) Benzoic acid	11.81	105	320	4.00	ug/L #	1
40) 2-Nitroaniline	15.18	65	310	0.53	ug/l #	21
42) Dimethylphthalate	16.08	163	110180	0.27	ug/l #	1
43) 2,6-Dinitrotoluene	16.08	165	98400	2.80	ug/l #	35
49) 4-Nitrophenol	16.61	109	309	1.05	ug/l #	1
64) Di-n-butylphthalate	21.61	149	198334	0.49	ug/l	99
70) Butylbenzylphthalate	25.12	149	2095	0.04	ug/l #	43
74) bis(2-Ethylhexyl)phthalate	26.70	149	12321	0.00	ug/l	79
76) Di-n-octylphthalate	28.05	149	1042	0.76	ug/l	67
80) Indeno[1,2,3-cd]pyrene	31.68	276	1995	0.11	ug/l #	14
82) Benzo[g,h,i]perylene	32.33	276	656	0.09	ug/l #	40

(#) = qualifier out of range (m) = manual integration
40288.D LLTRIAL.M Thu Apr 24 17:07:10 1997 486DX2

File : C:\HPCHEM\1\DATA\4_24_97\40289.D
Operator : BD
Acquired : 24 Apr 97 5:11 pm using AcqMethod LLTRIAL
Instrument : 5970 - In
Sample Name: Ecology & Environment F107
Misc Info : (1ul/20 ml KD)(20.50 g)(PAH)(SUR 1X)
Vial Number: 3

F107



Quantitation Report

Data File : C:\HPCHEM\1\DATA\4_24_97\40289.D
Acq Time : 24 Apr 97 5:11 pm
Sample : Ecology & Environment F107
Misc : (1ul/20 ml KD)(20.50 g)(PAH)(SUR 1X)
Quant Time: Apr 25 7:43 1997

Operator: BD
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\LLTRIAL.M
Title : 8NA Calibration
Last Update : Thu Mar 27 10:25:39 1997
Response via : Multiple Level Calibration

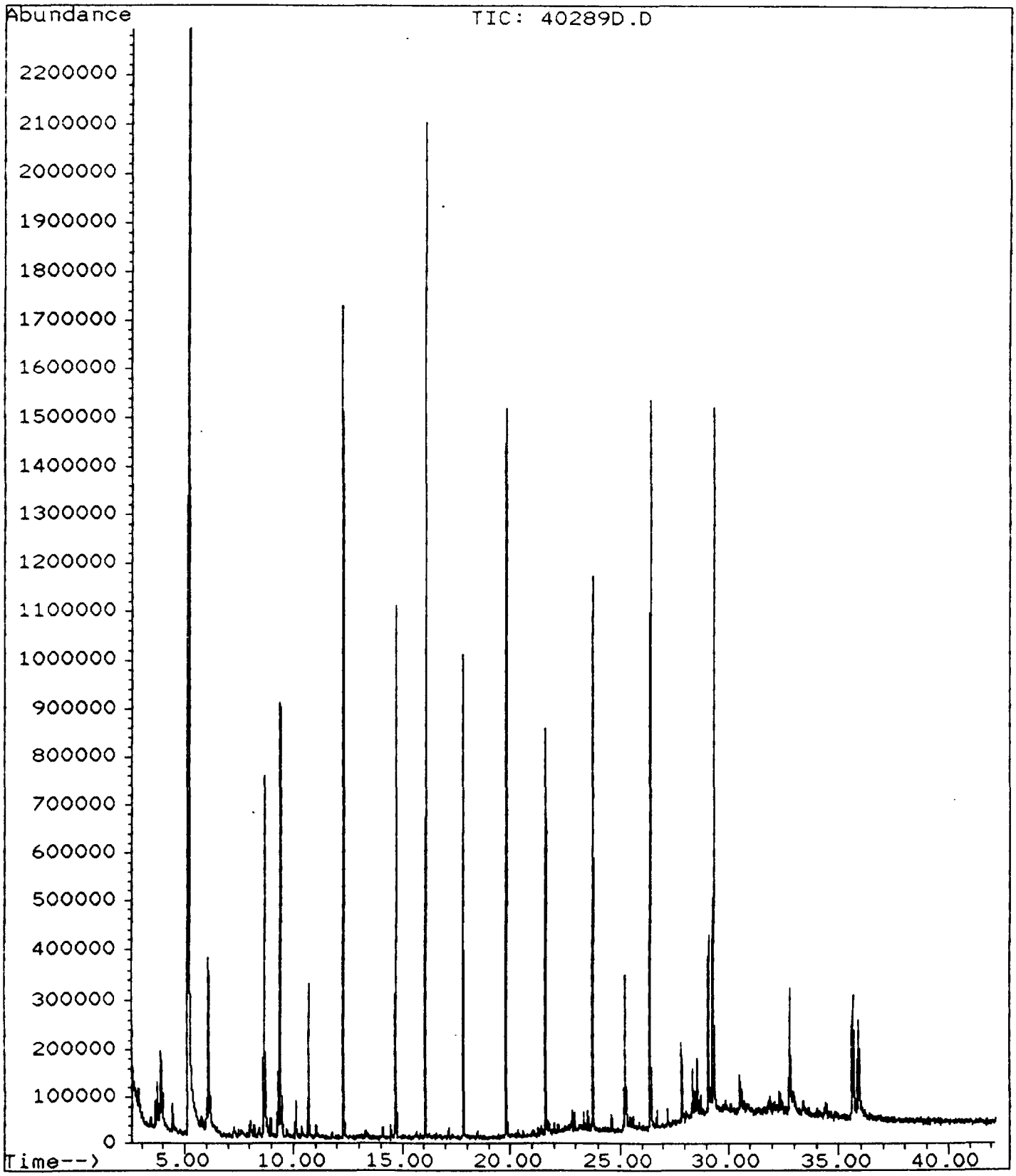
EQL=0.5ppm

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.37	152	336822	5.00	ng/ul	0.00
19) Naphthalene-d8	12.26	136	1117296	5.00	ng/ul	0.00
34) Acenaphthene-d10	16.07	164	717099	5.00	ng/ul	0.01
54) Phenanthrene-d10	19.80	188	1068310	5.00	ng/ul	0.03
67) Chrysene-d12	26.38	240	843693	5.00	ng/ul	0.02
75) Perylene-d12	29.33	264	936262	5.00	ng/ul	0.03
System Monitoring Compounds						**%Recovery**
4) 2-Fluorophenol	6.09	112	381473	5.53	ug/l	36.22%
7) Phenol-d5	8.66	99	569185	6.51	ug/l	38.70%
20) Nitrobenzene-d5	10.68	82	196595	3.29	ug/l	34.13%
38) 2-Fluorobiphenyl	14.69	172	514814	4.91	ug/l	38.43%
58) 2,4,6-Tribromophenol	17.82	330	162471	8.38	ug/l	55.23%
69) Terphenyl-d14	23.74	244	646042	5.93	ug/l	42.79%
Target Compounds				ppm		**Qvalue**
3) pyridine	2.85	79	2815	0.61	ug/l #	1
5) bis(2-Chloroethyl)ether	8.58	93	393	0.30	ug/l #	22
13) Benzyl alcohol	9.37	108	1413	0.14	ug/l #	1
25) Benzoic acid	11.87	105	303	4.00	ug/L #	1
32) 4-Chloro-3-methylphenol	13.61	107	305	0.08	ug/l #	18
40) 2-Nitroaniline	15.16	65	400	0.53	ug/l #	6
43) 2,6-Dinitrotoluene	16.07	165	98513	2.85	ug/l #	34
49) 4-Nitrophenol	16.72	109	304	1.05	ug/l #	1
55) 4,6-Dinitro-2-methylphenol	17.33	198	325	1.07	ug/l #	37
64) Di-n-butylphthalate	21.61	149	77912	0.11	ug/l	95
70) Butylbenzylphthalate	25.12	149	2589	0.04	ug/l #	75
76) Di-n-octylphthalate	27.99	149	771	0.76	ug/l	70
80) Indeno[1,2,3-cd]pyrene	31.66	276	348	0.10	ug/l #	25
82) Benzo[g,h,i]perylene	32.34	276	671	0.09	ug/l #	72

(#) = qualifier out of range (m) = manual integration
40289.D LLTRIAL.M Fri Apr 25 07:43:55 1997 486DX2

File : C:\HPCHEM\1\DATA\4_24_97\40289D.D
Operator : BD
Acquired : 24 Apr 97 6:02 pm using AcqMethod LLTRIAL
Instrument : 5970 - In
Sample Name: Ecology & Environment F107 Duplicate
Misc Info : (1ul/20 ml KD)(20.38 g)(PAH)(SUR 1X)
Vial Number: 4

F107 Duplicate



Quantitation Report

Data File : C:\HPCHEM\1\DATA\4_24_97\40289D.D
Acq Time : 24 Apr 97 6:02 pm
Sample : Ecology & Environment F107 Duplicate
Misc : (1ul/20 ml KD)(20.38 g)(PAH)(SUR 1X)
Quant Time: Apr 25 7:45 1997

Operator: BD
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\LLTRIAL.M
Title : BNA Calibration
Last Update : Thu Mar 27 10:25:39 1997
Response via : Multiple Level Calibration

EQL=0.5 ppm

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.38	152	340358	5.00	ng/ul	0.01
19) Naphthalene-d8	12.26	136	1139276	5.00	ng/ul	0.00
34) Acenaphthene-d10	16.07	164	737380	5.00	ng/ul	0.01
54) Phenanthrene-d10	19.80	188	1071907	5.00	ng/ul	0.03
67) Chrysene-d12	26.38	240	880629	5.00	ng/ul	0.02
75) Perylene-d12	29.32	264	1004300	5.00	ng/ul	0.02

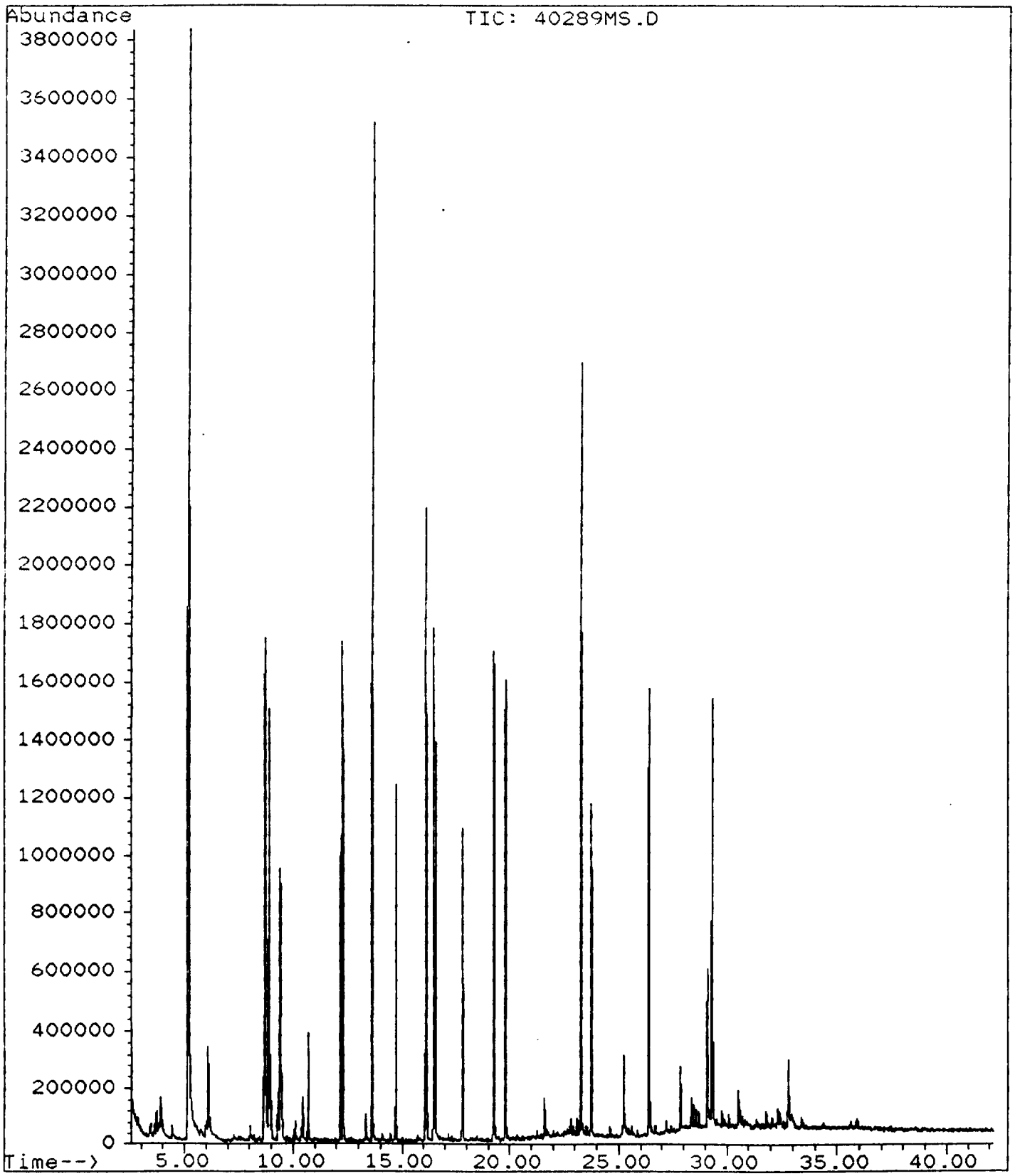
System Monitoring Compounds						%Recovery	
4) 2-Fluorophenol	6.09	112	343135	4.91	ug/l	~~32.15%~~	67
7) Phenol-d5	8.67	99	519465	5.86	ug/l	~~34.84%~~	7
20) Nitrobenzene-d5	10.68	82	173014	2.84	ug/l	~~29.49%~~	5
38) 2-Fluorobiphenyl	14.69	172	492236	4.54	ug/l	~~35.55%~~	7
58) 2,4,6-Tribromophenol	17.82	330	167854	8.62	ug/l	~~56.76%~~	11
69) Terphenyl-d14	23.74	244	666181	5.85	ug/l	~~42.25%~~	8

Target Compounds				ppm			Qvalue
3) pyridine	2.87	79	4897	0.64	ug/l	#	1
5) bis(2-Chloroethyl)ether	8.98	93	336	0.30	ug/l	#	9
13) Benzyl alcohol	9.38	108	1285	0.14	ug/l	#	1
17) N-Nitroso-di-n-propylamine	10.37	70	10044	0.06	ug/l	#	39
25) Benzoic acid	11.79	105	301	4.00	ug/L	#	1
30) 4-Chloroaniline	12.41	127	309	0.02	ug/l	#	44
32) 4-Chloro-3-methylphenol	13.89	107	312	0.08	ug/l	#	18
40) 2-Nitroaniline	15.13	65	297	0.53	ug/l	#	6
42) Dimethylphthalate	16.07	163	97097	0.19	ug/l	#	1
43) 2,6-Dinitrotoluene	16.07	165	101420	2.85	ug/l	#	36
49) 4-Nitrophenol	16.08	109	1761	1.09	ug/l	#	2
53) 4-Nitroaniline	17.38	138	296	0.53	ug/l	#	1
55) 4,6-Dinitro-2-methylphenol	17.82	198	429	1.07	ug/l	#	5
64) Di-n-butylphthalate	21.61	149	686836	2.01	ug/l		98
70) Butylbenzylphthalate	25.12	149	3592	0.05	ug/l	#	77
74) bis(2-Ethylhexyl)phthalate	26.69	149	13215	0.00	ug/l		88
76) Di-n-octylphthalate	28.07	149	5997	0.77	ug/l		73
80) Indeno[1,2,3-cd]pyrene	31.68	276	983	0.10	ug/l	#	25
82) Benzo[g,h,i]perylene	32.37	276	1036	0.09	ug/l	#	48

(#) = qualifier out of range (m) = manual integration
40289D.D LLTRIAL.M Fri Apr 25 07:46:06 1997 486DX2

File : C:\HPCHEM\1\DATA\4_24_97\40289MS.D
Operator : BD
Acquired : 24 Apr 97 6:54 pm using AcqMethod LLTRIAL
Instrument : 5970 - In
Sample Name: Matrix Spike E & E F107
Misc Info : (1ul/20 ml KD)(20.30 g)(PAH)(SUR 1X)
Vial Number: 5

F107 Matrix Spike



Quantitation Report

Data File : C:\HPCHEM\1\DATA\4_24_97\40289MS.D
Acq Time : 24 Apr 97 6:54 pm
Sample : Matrix Spike E & E F107
Misc : (1ul/20 ml KD)(20.30 g)(PAH)(SUR 1X)
Quant Time: Apr 25 7:50 1997

Operator: BD
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\LLTRIAL.M
Title : BNA Calibration
Last Update : Thu Mar 27 10:25:39 1997
Response via : Multiple Level Calibration

EQL = 0.5 ppm

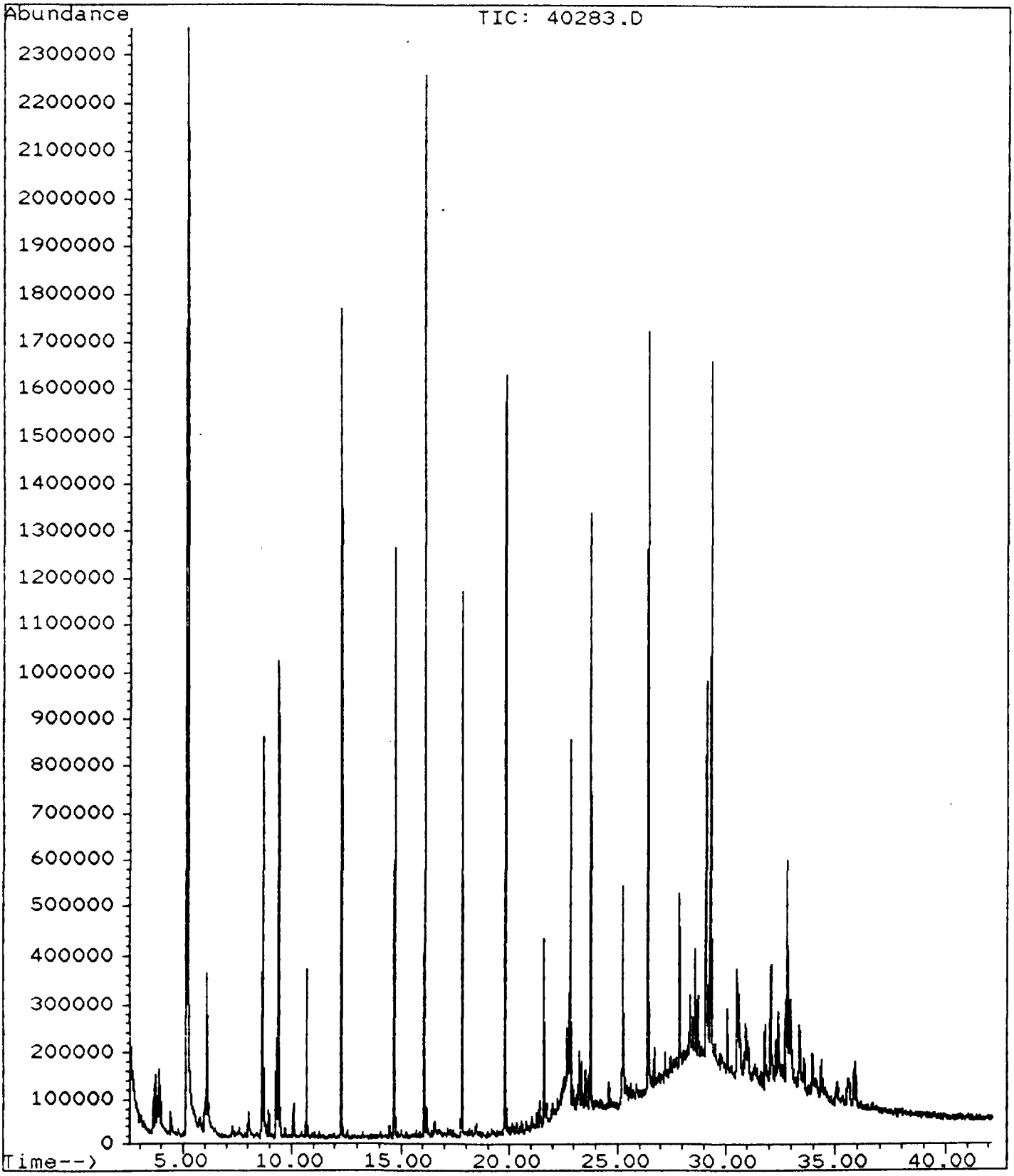
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.37	152	346463	5.00	ng/ul	0.00
19) Naphthalene-d8	12.26	136	1162355	5.00	ng/ul	0.01
34) Acenaphthene-d10	16.08	164	759449	5.00	ng/ul	0.02
54) Phenanthrene-d10	19.80	188	1134104	5.00	ng/ul	0.02
67) Chrysene-d12	26.37	240	896074	5.00	ng/ul	0.01
75) Perylene-d12	29.31	264	1037052	5.00	ng/ul	0.02
System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	6.08	112	346131	4.86	ug/l	31.85%
7) Phenol-d5	8.67	99	561160	6.23	ug/l	37.04%
20) Nitrobenzene-d5	10.68	82	193132	3.10	ug/l	32.24%
38) 2-Fluorobiphenyl	14.69	172	546273	4.92	ug/l	38.51%
58) 2,4,6-Tribromophenol	17.82	330	175755	8.53	ug/l	56.21%
69) Terphenyl-d14	23.74	244	677551	5.85	ug/l	42.23%
Target Compounds				ppm		Qvalue
3) pyridine	2.81	79	6862	0.66	ug/l #	1
5) bis(2-Chloroethyl)ether	8.87	93	24310	0.51	ug/l #	1
8) Phenol	8.70	94	1177280	11.50	ug/l	84
9) 2-Chlorophenol	8.87	128	897991	11.44	ug/l	95
10) 1,3-Dichlorobenzene	9.41	146	373908	3.96	ug/l	94
11) 1,4-Dichlorobenzene	9.41	146	373908	3.90	ug/l	93
12) 1,2-Dichlorobenzene	9.41	146	373908	4.19	ug/l	92
13) Benzyl alcohol	10.13	108	656	0.12	ug/l #	1
17) N-Nitroso-di-n-propylamine	10.44	70	56872	0.77	ug/l	89
25) Benzoic acid	11.79	105	2120	4.04	ug/L #	19
28) 1,2,4-Trichlorobenzene	12.17	180	330265	3.98	ug/l	98
30) 4-Chloroaniline	12.33	127	308	0.02	ug/l #	44
32) 4-Chloro-3-methylphenol	13.63	107	1081270	13.21	ug/l	91
33) 2-Methylnaphthalene	13.63	142	856033	5.98	ug/l #	33
40) 2-Nitroaniline	15.12	65	330	0.53	ug/l #	6
41) Acenaphthylene	16.15	152	273456	0.82	ug/l #	1
42) Dimethylphthalate	16.08	163	112096	0.26	ug/l #	1
43) 2,6-Dinitrotoluene	16.08	165	104958	2.86	ug/l #	35
44) Acenaphthene	16.15	153	578297	3.76	ug/l	99
45) 3-Nitroaniline	16.15	138	437	0.91	ug/l #	1
46) 2,4-Dinitrophenol	16.57	184	354	2.18	ug/l #	1
48) 2,4-Dinitrotoluene	16.57	165	420140	7.10	ug/l	94
49) 4-Nitrophenol	16.47	109	317976	10.29	ug/l #	70
55) 4,6-Dinitro-2-methylphenol	17.82	198	479	1.07	ug/l #	44
61) Pentachlorophenol	19.27	266	413229	10.82	ug/l	80
64) Di-n-butylphthalate	21.61	149	96977	0.15	ug/l	98
68) Pyrene	23.27	202	1954358	7.09	ug/l	95
70) Butylbenzylphthalate	25.12	149	3398	0.04	ug/l #	82
76) Di-n-octylphthalate	28.14	149	324	0.75	ug/l	71
80) Indeno[1,2,3-cd]pyrene	31.66	276	716	0.10	ug/l #	12
82) Benzo[g,h,i]perylene	32.34	276	1163	0.09	ug/l #	39

(#) = qualifier out of range (m) = manual integration
40289MS.D LLTRIAL.M Fri Apr 25 07:50:24 1997 486DX2

CMPD	Target	%R
Acenaphthene	4.0	95
Pyrene	7.5	95

File : C:\HPCHEM\1\DATA\4_24_97\40283.D
Operator : BD
Acquired : 24 Apr 97 7:45 pm using AcqMethod LLTRIAL
Instrument : 5970 - In
Sample Name: Ecology & Environment F101
Misc Info : (1ul/20 ml KD)(20.46 g)(PAH)(SUR 1X)
Vial Number: 6

F101



Quantitation Report

Data File : C:\HPCHEM\1\DATA\4_24_97\40283.D
Acq Time : 24 Apr 97 7:45 pm
Sample : Ecology & Environment F101
Misc : (1ul/20 ml KD)(20.46 g)(PAH)(SUR 1X)
Quant Time: Apr 25 7:38 1997

Operator: BD
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\LLTRIAL.M
Title : BNA Calibration
Last Update : Thu Mar 27 10:25:39 1997
Response via : Multiple Level Calibration

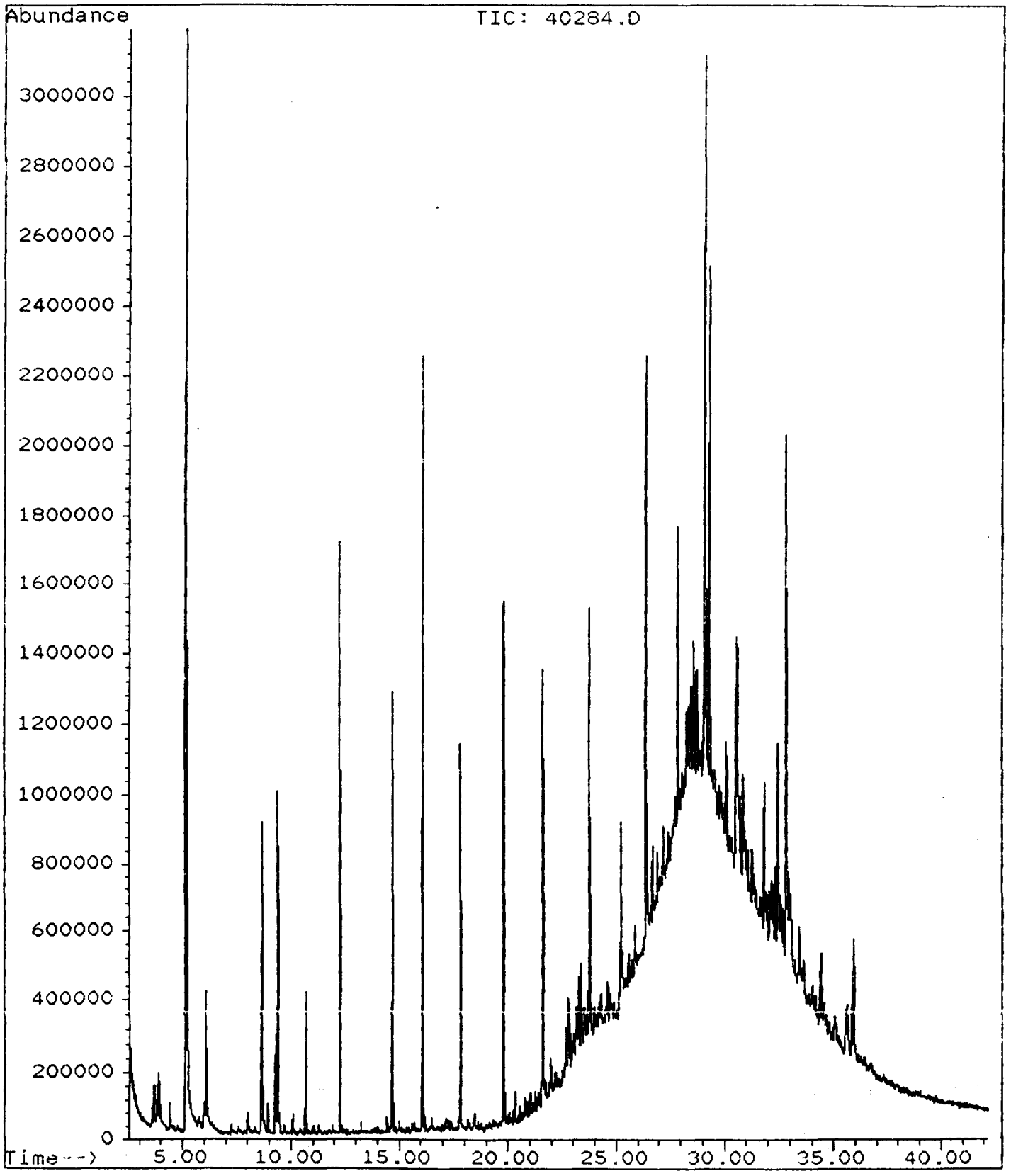
EQL=0.5 ppm

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.37	152	345306	5.00	ng/ul	0.00
19) Naphthalene-d8	12.26	136	1174126	5.00	ng/ul	0.00
34) Acenaphthene-d10	16.08	164	767408	5.00	ng/ul	0.02
54) Phenanthrene-d10	19.80	188	1152248	5.00	ng/ul	0.02
67) Chrysene-d12	26.38	240	990678	5.00	ng/ul	0.02
75) Perylene-d12	29.32	264	1022166	5.00	ng/ul	0.03
System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	6.08	112	313417	4.41	ug/l	28.86%
7) Phenol-d5	8.66	99	546411	6.09	ug/l	36.16%
20) Nitrobenzene-d5	10.68	82	178136	2.84	ug/l	28.46%
38) 2-Fluorobiphenyl	14.69	172	546379	4.87	ug/l	38.09%
58) 2,4,6-Tribromophenol	17.82	330	209017	9.89	ug/l	65.16%
69) Terphenyl-d14	23.74	244	701323	5.46	ug/l	39.42%
Target Compounds				ppm		Qvalue
3) pyridine	2.80	79	8499	0.69	ug/l #	19
5) bis(2-Chloroethyl)ether	8.91	93	332	0.30	ug/l #	22
13) Benzyl alcohol	9.83	108	320	0.11	ug/l #	1
25) Benzoic acid	11.83	105	349	4.00	ug/L #	1
27) 2,4-Dichlorophenol	12.27	162	331	0.03	ug/l #	1
30) 4-Chloroaniline	12.52	127	295	0.02	ug/l #	44
32) 4-Chloro-3-methylphenol	13.42	107	326	0.08	ug/l #	18
40) 2-Nitroaniline	15.12	65	361	0.53	ug/l #	6
42) Dimethylphthalate	16.08	163	115527	0.27	ug/l #	1
43) 2,6-Dinitrotoluene	16.08	165	105098	2.84	ug/l #	35
45) 3-Nitroaniline	16.04	138	304	0.91	ug/l #	1
46) 2,4-Dinitrophenol	16.38	184	626	2.18	ug/l #	30
49) 4-Nitrophenol	16.52	109	312	1.05	ug/l #	40
55) 4,6-Dinitro-2-methylphenol	17.82	198	328	1.07	ug/l #	1
64) Di-n-butylphthalate	21.61	149	138917	0.27	ug/l	96
70) Butylbenzylphthalate	25.11	149	7116	0.06	ug/l #	71
74) bis(2-Ethylhexyl)phthalate	26.69	149	32496	0.08	ug/l #	71
76) Di-n-octylphthalate	28.05	149	3339	0.76	ug/l #	1
77) Benzo[b]fluoranthene	28.59	252	70261	0.24	ug/l	85
80) Indeno[1,2,3-cd]pyrene	31.65	276	22018	0.21	ug/l #	72
81) Dibenz[a,h]anthracene	31.74	278	3956	0.25	ug/l #	38
82) Benzo[g,h,i]perylene	32.33	276	21359	0.22	ug/l #	57

(#) = qualifier out of range (m) = manual integration
40283.D LLTRIAL.M Fri Apr 25 07:38:19 1997 486DX2

File : C:\HPCHEM\1\DATA\4_24_97\40284.D
Operator : BD
Acquired : 24 Apr 97 8:37 pm using AcqMethod LLTRIAL
Instrument : 5970 - In
Sample Name: Ecology & Environment F102
Misc Info : (1ul/20 ml KD)(20.18 g)(PAH)(SUR 1X)
Vial Number: 7

F102



Quantitation Report

Data File : C:\HPCHEM\1\DATA\4_24_97\40284.D
Acq Time : 24 Apr 97 8:37 pm
Sample : Ecology & Environment F102
Misc : (1ul/20 ml KD)(20.18 g)(PAH)(SUR 1X)
Quant Time: Apr 25 15:12 1997

Operator: BD
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\LLTRIAL.M
Title : BNA Calibration
Last Update : Thu Mar 27 10:25:39 1997
Response via : Multiple Level Calibration

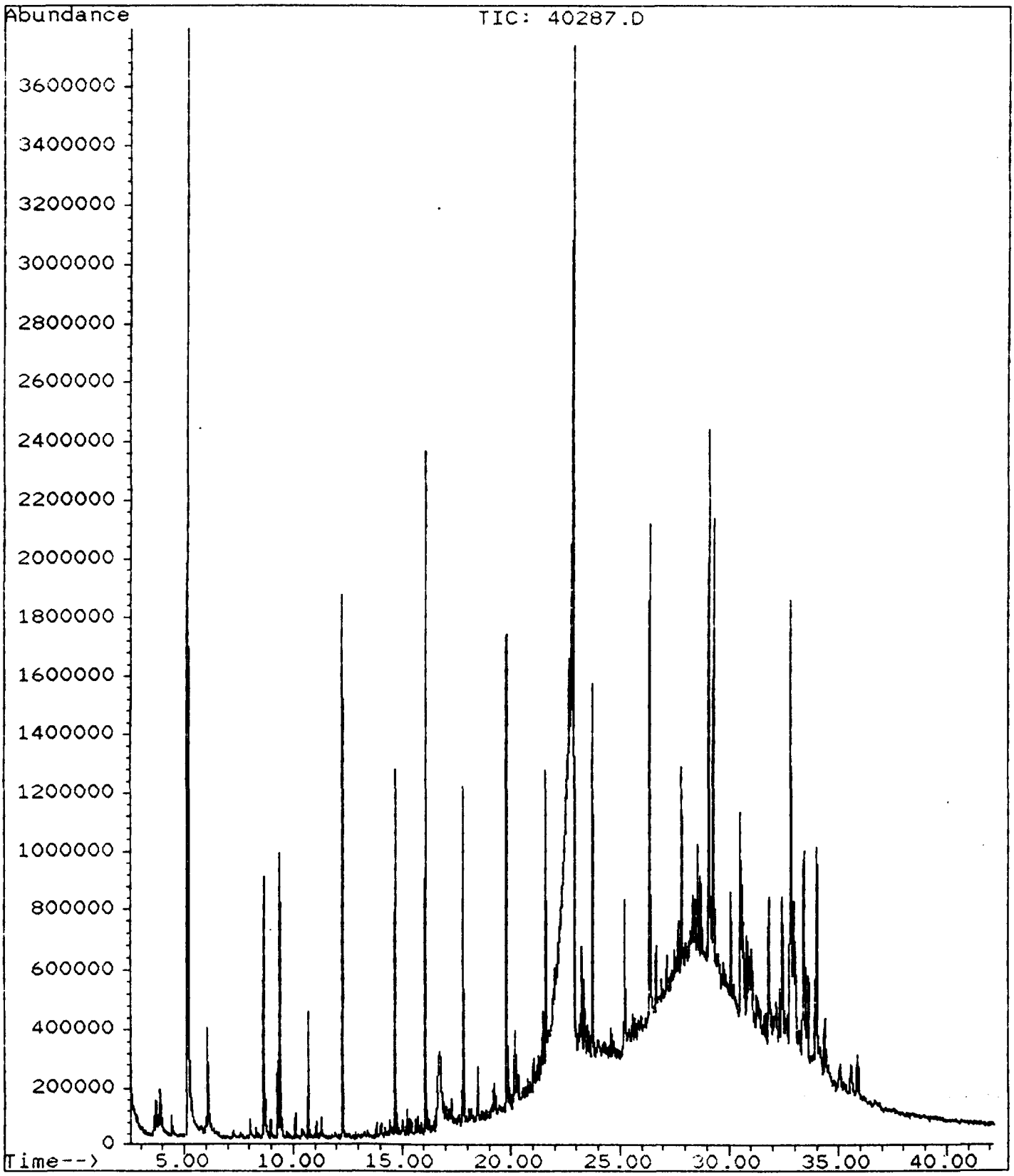
EQL = 0.5 ppm

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.38	152	339208	5.00	ng/ul	0.00
19) Naphthalene-d8	12.26	136	1157749	5.00	ng/ul	0.00
34) Acenaphthene-d10	16.07	164	766879	5.00	ng/ul	0.01
54) Phenanthrene-d10	19.80	188	1146810	5.00	ng/ul	0.02
67) Chrysene-d12	26.37	240	980345	5.00	ng/ul	0.02
75) Perylene-d12	29.32	264	1049621	5.00	ng/ul	0.02
System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	6.07	112	363102	5.22	ug/l	~~34.19%~~ 68
7) Phenol-d5	8.66	99	595515	6.77	ug/l	~~40.25%~~ 80
20) Nitrobenzene-d5	10.68	82	222371	3.59	ug/l	~~37.23%~~ 74
38) 2-Fluorobiphenyl	14.69	172	588196	5.27	ug/l	~~41.25%~~
58) 2,4,6-Tribromophenol	17.81	330	185334	8.87	ug/l	~~58.46%~~ 82
69) Terphenyl-d14	23.74	244	704199	5.54	ug/l	~~40.03%~~ 117
Target Compounds				ppm		Qvalue 80
3) pyridine	2.84	79	7521	0.67	ug/l #	1
5) bis(2-Chloroethyl)ether	8.85	93	298	0.30	ug/l #	22
13) Benzyl alcohol	9.81	108	298	0.11	ug/l #	42
25) Benzoic acid	11.86	105	1044	4.02	ug/L #	1
27) 2,4-Dichlorophenol	11.52	162	296	0.03	ug/l #	21
30) 4-Chloroaniline	12.51	127	2234	0.04	ug/l #	73
32) 4-Chloro-3-methylphenol	13.60	107	305	0.08	ug/l #	4
40) 2-Nitroaniline	15.15	65	340	0.53	ug/l #	6
42) Dimethylphthalate	16.07	163	106471	0.22	ug/l #	1
43) 2,6-Dinitrotoluene	16.07	165	105875	2.86	ug/l #	36
45) 3-Nitroaniline	16.06	138	405	0.91	ug/l #	1
49) 4-Nitrophenol	16.62	109	825	1.06	ug/l #	1
55) 4,6-Dinitro-2-methylphenol	17.81	198	301	1.07	ug/l #	1
64) Di-n-butylphthalate	21.61	149	804830	2.21	ug/l	97
65) Fluoranthene	22.79	202	119999	0.15	ug/l	97
66) Benzidine	23.22	184	3616	2.58	ug/L #	1
70) Butylbenzylphthalate	25.11	149	20818	0.14	ug/l	90
74) bis(2-Ethylhexyl)phthalate	26.69	149	89343	0.32	ug/l #	70
76) Di-n-octylphthalate	28.12	149	7602	0.77	ug/l	81
77) Benzo[b]fluoranthene	28.58	252	104468	0.39	ug/l m	92
80) Indeno[1,2,3-cd]pyrene	31.67	276	55893	0.38	ug/l #	71
81) Dibenz[a,h]anthracene	31.72	278	15264	0.32	ug/l #	37
82) Benzo[g,h,i]perylene	32.34	276	64683	0.49	ug/l #	59

(#) = qualifier out of range (m) = manual integration
40284.D LLTRIAL.M Fri Apr 25 15:13:19 1997 486DX2

File : C:\HPCHEM\1\DATA\4_24_97\40287.D
Operator : BO
Acquired : 24 Apr 97 9:29 pm using AcqMethod LLTRIAL
Instrument : 5970 - In
Sample Name: Ecology & Environment F105
Misc Info : (1ul/20 ml KD)(20.07 g)(PAH)(SUR 1X)
Vial Number: 8

F105



Quantitation Report

Data File : C:\HPCHEM\1\DATA\4_24_97\40287.D
Acq Time : 24 Apr 97 9:29 pm
Sample : Ecology & Environment F105
Misc : (1ul/20 ml KD)(20.07 g)(PAH)(SUR 1X)
Quant Time: Apr 25 15:14 1997

Operator: BD
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\LLTRIAL.M
Title : BNA Calibration
Last Update : Thu Mar 27 10:25:39 1997
Response via : Multiple Level Calibration

EQL=0.5ppm

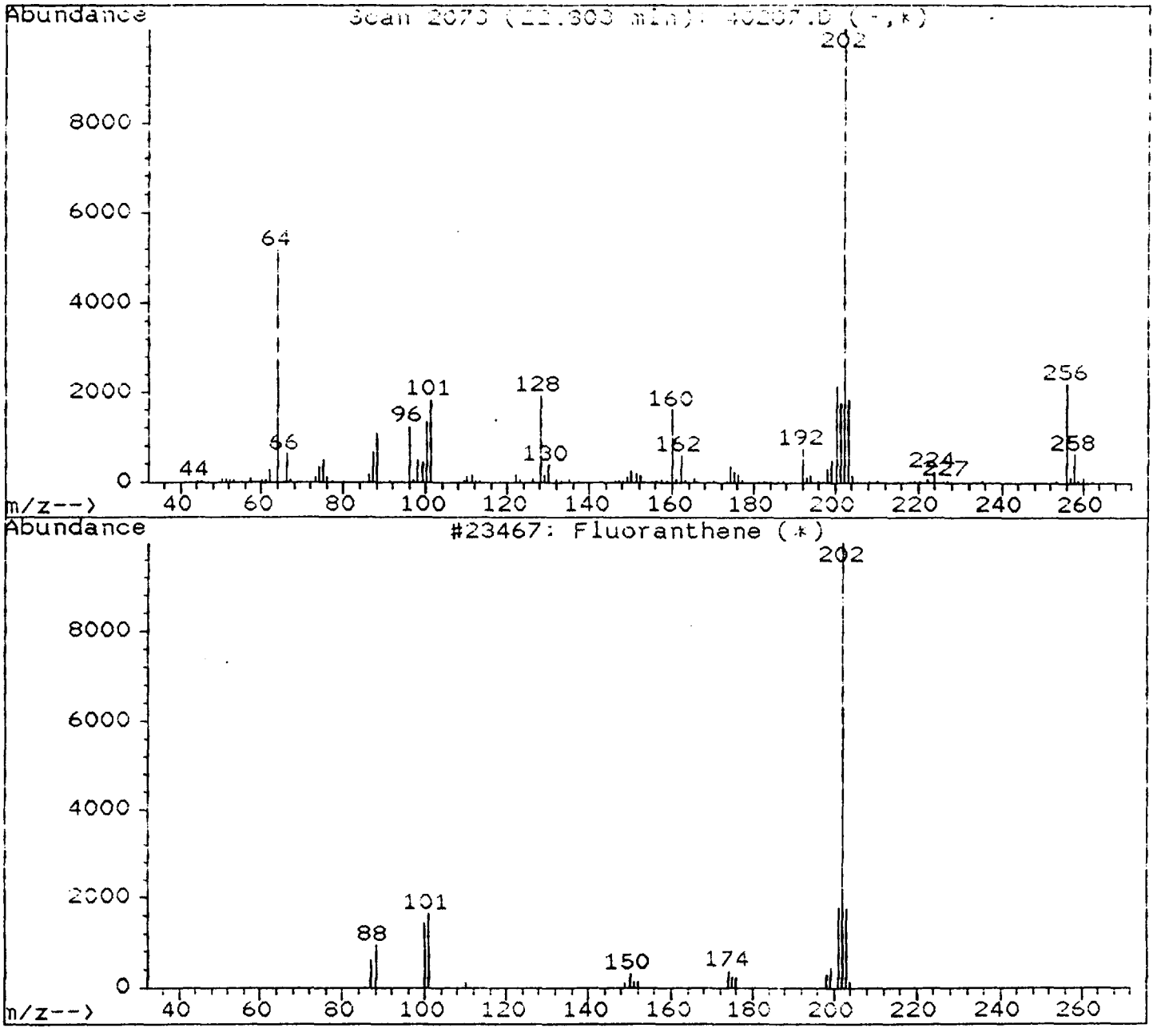
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.38	152	353892	5.00	ng/ul	0.00
19) Naphthalene-d8	12.26	136	1222595	5.00	ng/ul	0.00
34) Acenaphthene-d10	16.07	164	810863	5.00	ng/ul	0.00
54) Phenanthrene-d10	19.80	188	1203050	5.00	ng/ul	0.02
67) Chrysene-d12	26.37	240	1005941	5.00	ng/ul	0.01
75) Perylene-d12	29.31	264	1081655	5.00	ng/ul	0.02

System Monitoring Compounds						%Recovery	
4) 2-Fluorophenol	6.07	112	359304	4.94	ug/l	~~32.38%~~	64
7) Phenol-d5	8.66	99	596050	6.49	ug/l	~~38.56%~~	77
20) Nitrobenzene-d5	10.68	82	233975	3.57	ug/l	~~37.09%~~	74
38) 2-Fluorobiphenyl	14.69	172	587648	4.96	ug/l	~~38.82%~~	78
58) 2,4,6-Tribromophenol	17.82	330	201486	9.18	ug/l	~~60.45%~~	78
69) Terphenyl-d14	23.73	244	706132	5.41	ug/l	39.07%	120

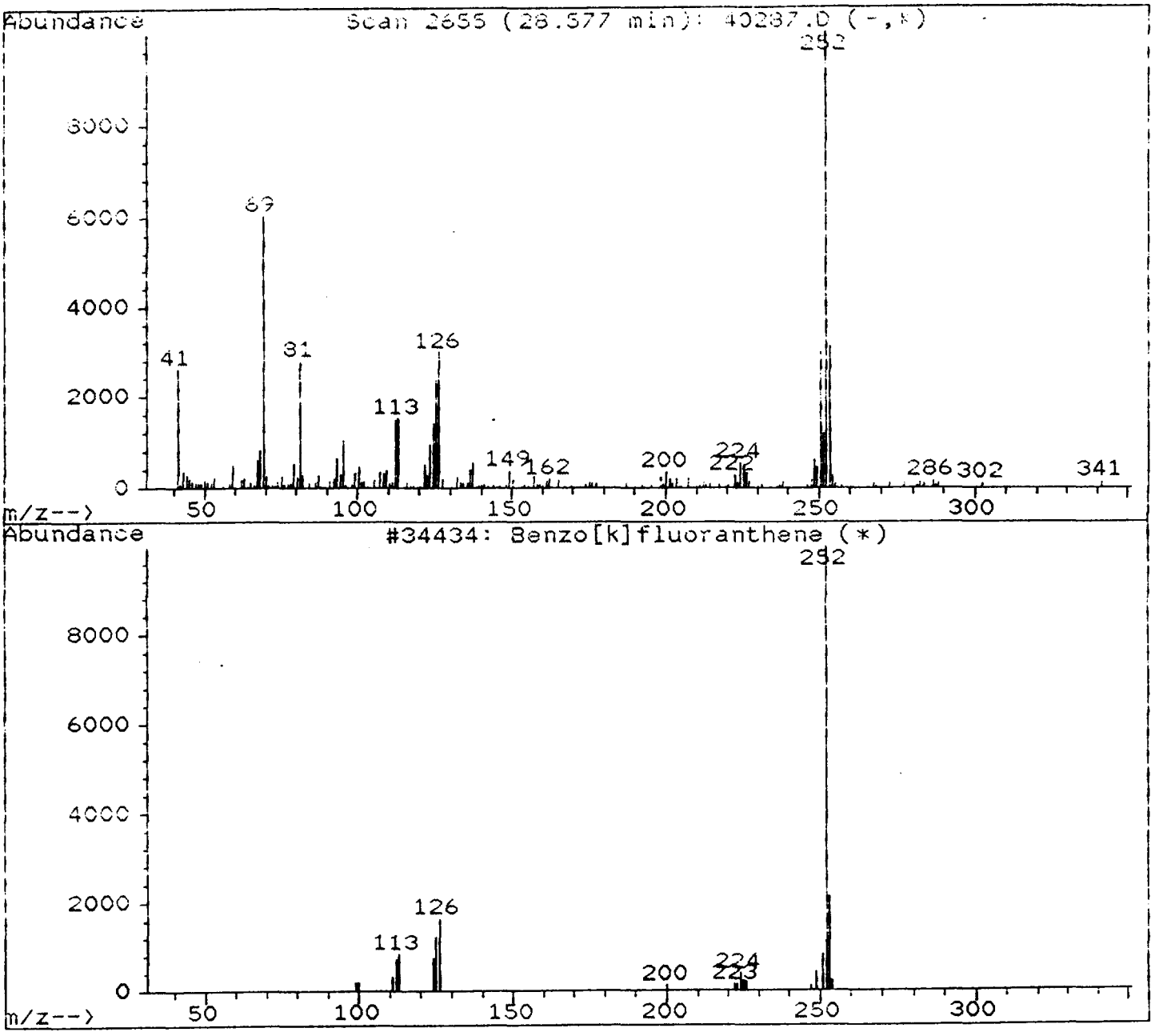
Target Compounds				Conc (ppm)	Units		Qvalue
3) pyridine	2.73	79	5975	0.65	ug/l	#	1
5) bis(2-Chloroethyl)ether	8.90	93	299	0.30	ug/l	#	67
13) Benzyl alcohol	9.84	108	292	0.11	ug/l	#	19
25) Benzoic acid	11.87	105	1368	4.03	ug/L	#	29
30) 4-Chloroaniline	12.50	127	3232	0.05	ug/l	#	65
32) 4-Chloro-3-methylphenol	13.64	107	342	0.08	ug/l	#	31
40) 2-Nitroaniline	15.14	65	432	0.53	ug/l	#	1
42) Dimethylphthalate	16.07	163	111141	0.21	ug/l	#	1
43) 2,6-Dinitrotoluene	16.07	165	115628	2.94	ug/l	#	36
45) 3-Nitroaniline	16.11	138	302	0.91	ug/l	#	1
49) 4-Nitrophenol	16.44	109	2106	1.10	ug/l	#	1
53) 4-Nitroaniline	17.41	138	320	0.53	ug/l	#	50
55) 4,6-Dinitro-2-methylphenol	17.83	198	846	1.08	ug/l	#	1
62) Phenanthrene	19.86	178	146971	0.18	ug/l		96
64) Di-n-butylphthalate	21.62	149	188404	0.39	ug/l		98
65) Fluoranthene	22.80	202	247162	0.62	ug/l		99
66) Benzidine	23.22	184	958	2.56	ug/L	#	1
68) Pyrene	23.26	202	210742	0.18	ug/l		95
70) Butylbenzylphthalate	25.12	149	7973	0.07	ug/l	#	75
74) bis(2-Ethylhexyl)phthalate	26.70	149	87743	0.30	ug/l		86
76) Di-n-octylphthalate	28.06	149	4630	0.77	ug/l		64
77) Benzo[b]fluoranthene	28.58	252	162335	0.63	ug/l	m	93
80) Indeno[1,2,3-cd]pyrene	31.66	276	82318	0.50	ug/l	#	63
81) Dibenz[a,h]anthracene	31.73	278	16706	0.33	ug/l	#	54
82) Benzo[g,h,i]perylene	32.33	276	72861	0.52	ug/l	#	63

(#) = qualifier out of range (m) = manual integration
40287.D LLTRIAL.M Fri Apr 25 15:14:42 1997 486DX2

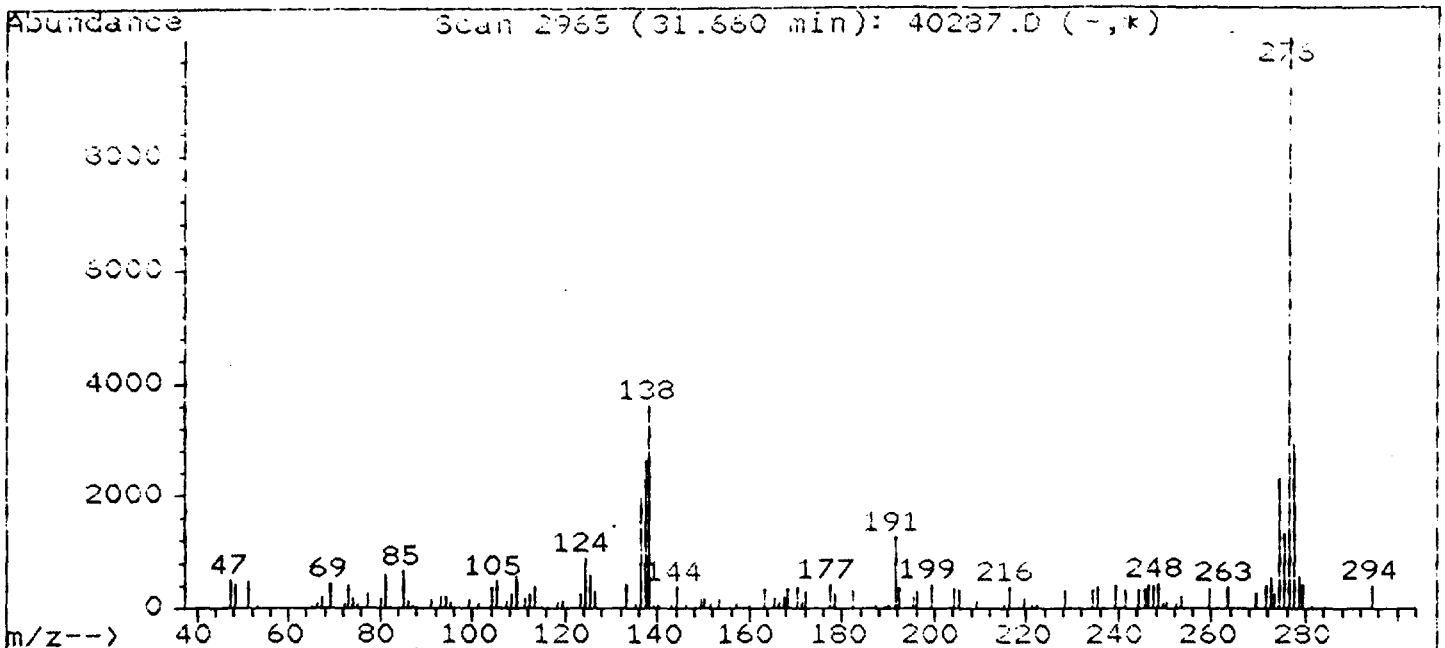
Library Searched : C:\DATABASE\NBS75K.L
Quality : 92
ID : Fluoranthene

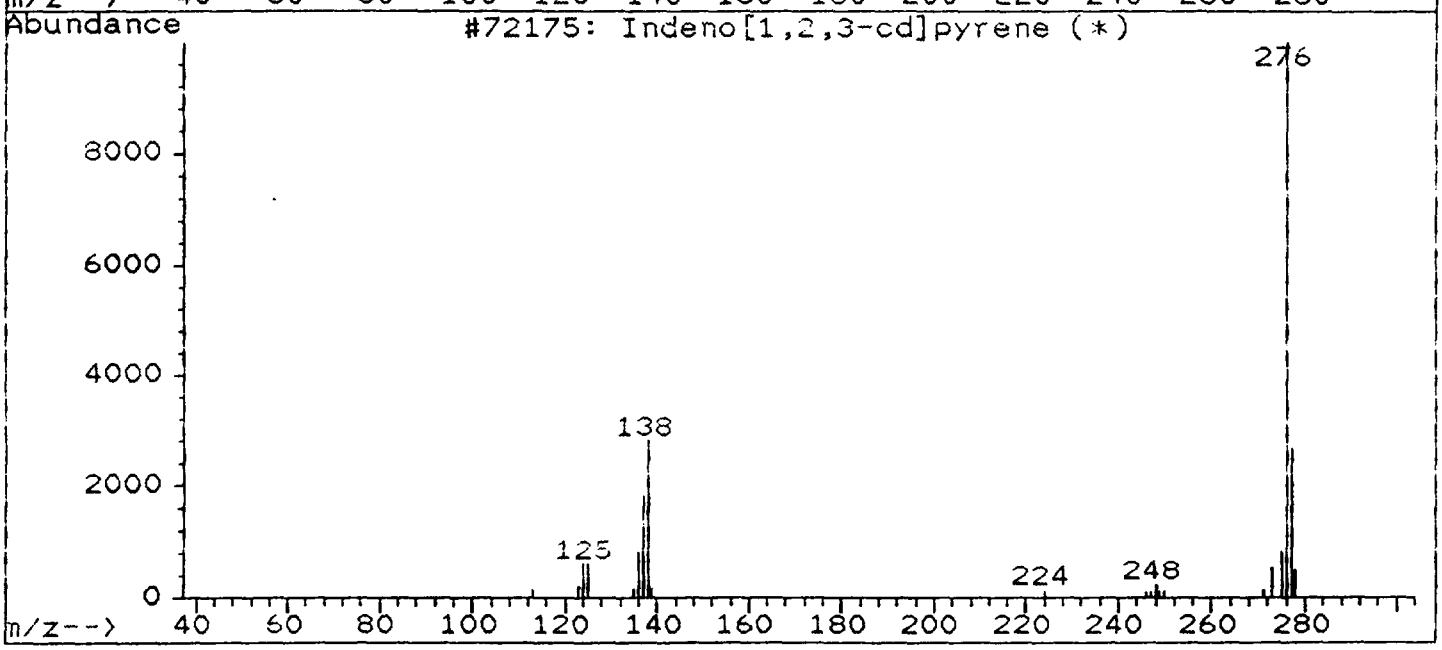


Library Searched : C:\DATABASE\NB075K.L
Quality : 97
ID : Benzo[b]fluoranthene

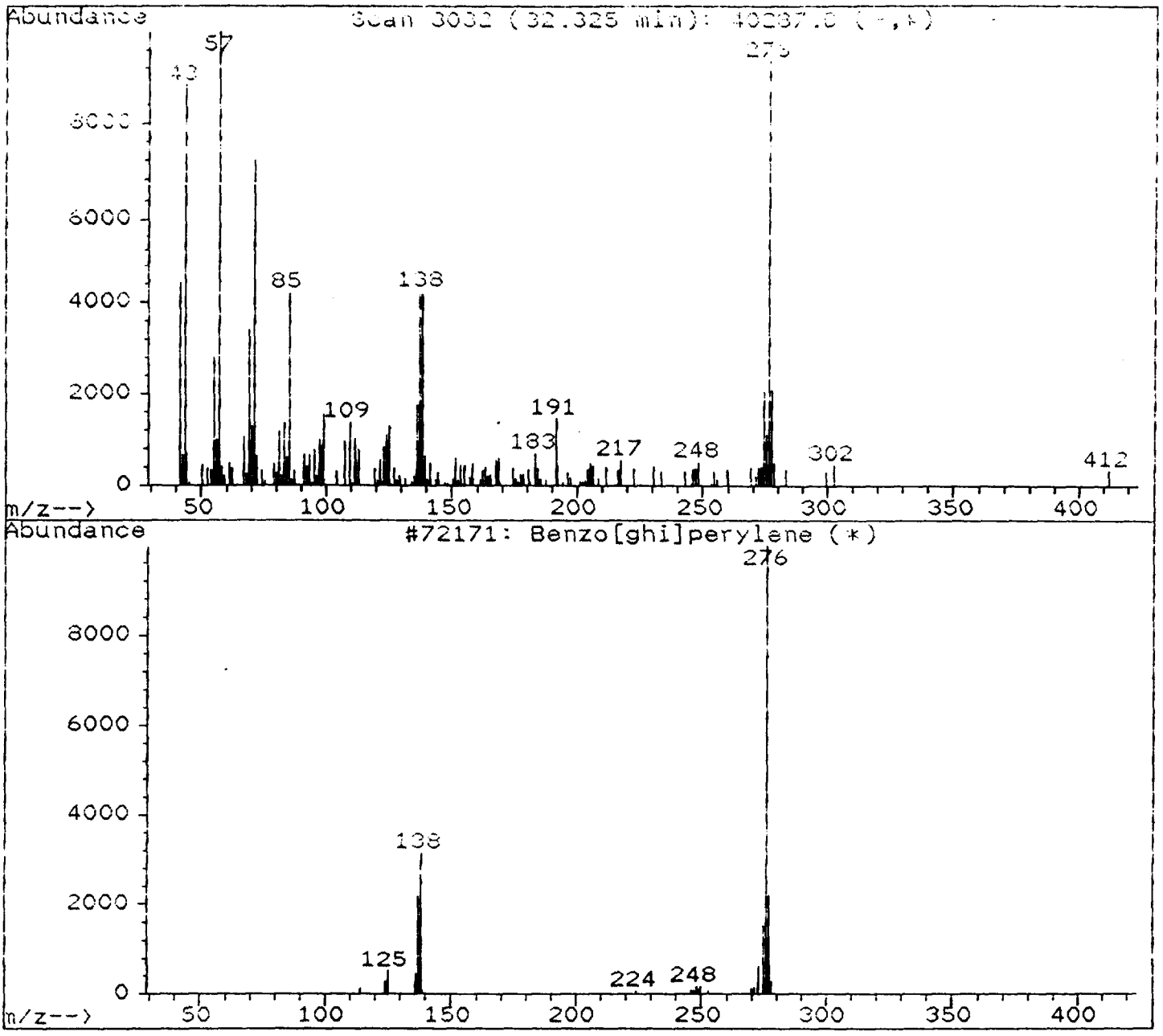


Library Searched : C:\DATA\NIST\...
Quality : 76
ID : Indeno[1,2,3-cd]pyrene





Library Searched : [illegible]
Quality : 87
ID : Benzo[ghi]perylene



TOC

EIS ANALYTICAL SERVICES, INC.
1701 NORTH IRONWOOD DRIVE, SUITE B, SOUTH BEND, IN 46635
PHONE: (219) 277-0707
FAX: (219) 273-5699

FACSIMILE ROUTING SHEET

Date: 6-18-97 **Time:** _____ **Total Pages:** 4 (including this page)

Client: E & E **Fax No.:** 312-578-9345

EIS Project No.: _____ **EIS Quote No.:** _____

To: Lisa Graczyk

From: Andy Pozite

Subject: TOC raw data - Sauget Area Project

INFORMATION:

Your question about possible other Aroclor presence in Sample F102 - there really is not sufficient pattern recognition to make any qualitative or quantitative decisions. Values are too low.

- **Hard copy to follow:** Yes ☐ No ☑
- **If you are experiencing problems receiving this transmission, please call and ask for:** Nila

The materials transmitted are for the exclusive use of the individual or entity to which it is addressed. If the recipient of these materials is not addressee or the employee or agent responsible for delivery of these materials to the addressee, please be aware that dissemination, distribution or copying of this communication is strictly prohibited. If you have received this message in error, please notify us immediately (collect) to arrange for its return.

420 nm

DATE: 4/25/97

TECH: DB

CLIENT

PROJECT EXT. TOC (linear curve)

INSTRUCTIONS

Sample #	Wt	PPM Result		Final Result
[redacted]	.0099	46.557		10967
[redacted]	.1005	Φ		< 30
[redacted]	.0097	46.973		11282
[redacted]	.1019	8.103		185
[redacted]	.1040	Φ		< 30
42084 (F102)	.0042	48.005		26629
42085 (F103)	.0045	32.655		16905
42086 (F104)	.0060	45.387		17626
[redacted]	.0207	38.208		4301
Cont	.0078	20.260		Avg = 96.82 (.052)

** QUANTITATIVE ANALYSIS **

No.	ABS.	CONC.	
ICB 1	0.546	-0.7022	
ICV 2	0.414	20.796	(20.0)
Cal 3	0.417	20.260	
[redacted] 4	0.255	46.557	
[redacted] 5	0.522	-13.097	
[redacted] 6	0.253	46.973	
[redacted] 7	0.492	8.1031	
[redacted] 8	0.547	-0.8014	
A2084 9	0.246	48.005	(F102)
A2085 10	0.341	32.655	(F103)
A2086 11	0.262	45.387	(F104)
[redacted] 12	0.307	38.208	
CCB 13	0.546	-0.7220	
CCV 14	0.412	21.033	

[redacted] CHANGE DATA Y/N ?

STD. No.	CONC.	ABS.
1	0.0000	0.545
2	1.0000	0.528
3	10.000	0.484
4	20.000	0.421
5	40.000	0.295
6	60.000	0.172

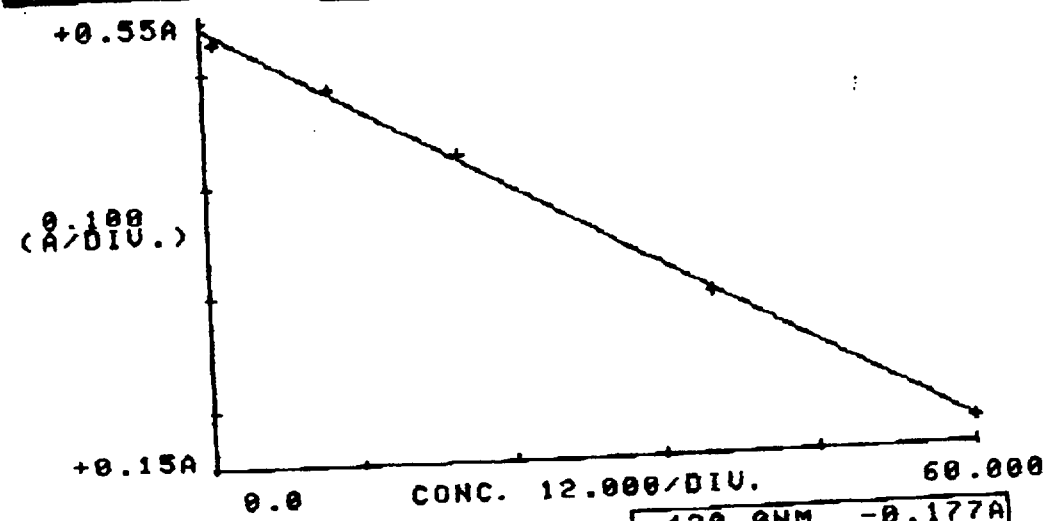
TOC - Soil

$r^2 = 0.9996$

11:12 4/26 '97

420.0NM -0.175A

[redacted] CONC. MAX. CHANGE Y/N ?



420.0NM -0.177A

11:12 4/26 '97

PESTICIDES / PCB

PCB/PESTICIDE METHOD BLANK/SURROGATE RECOVERY SUMMARIES

Method Blank (4-24-97)

No PCB/Pesticide were detected in the Method Blank applicable to the following samples.

F 102	F 104			
F 103				
F 107				

Surrogate Recoveries

Sample ID	TCMX (%R)	DBC(%R)	Dilution
Method Blank	96 / 91	107 / 123	x 1
F 102	108 / 101	83 / 304	x 5
F 103	111 / 102	91 / 137	x 5
F 104	115 / 104	97 / 144	x 5
F 107	82 / 81	93 / 92	x 1

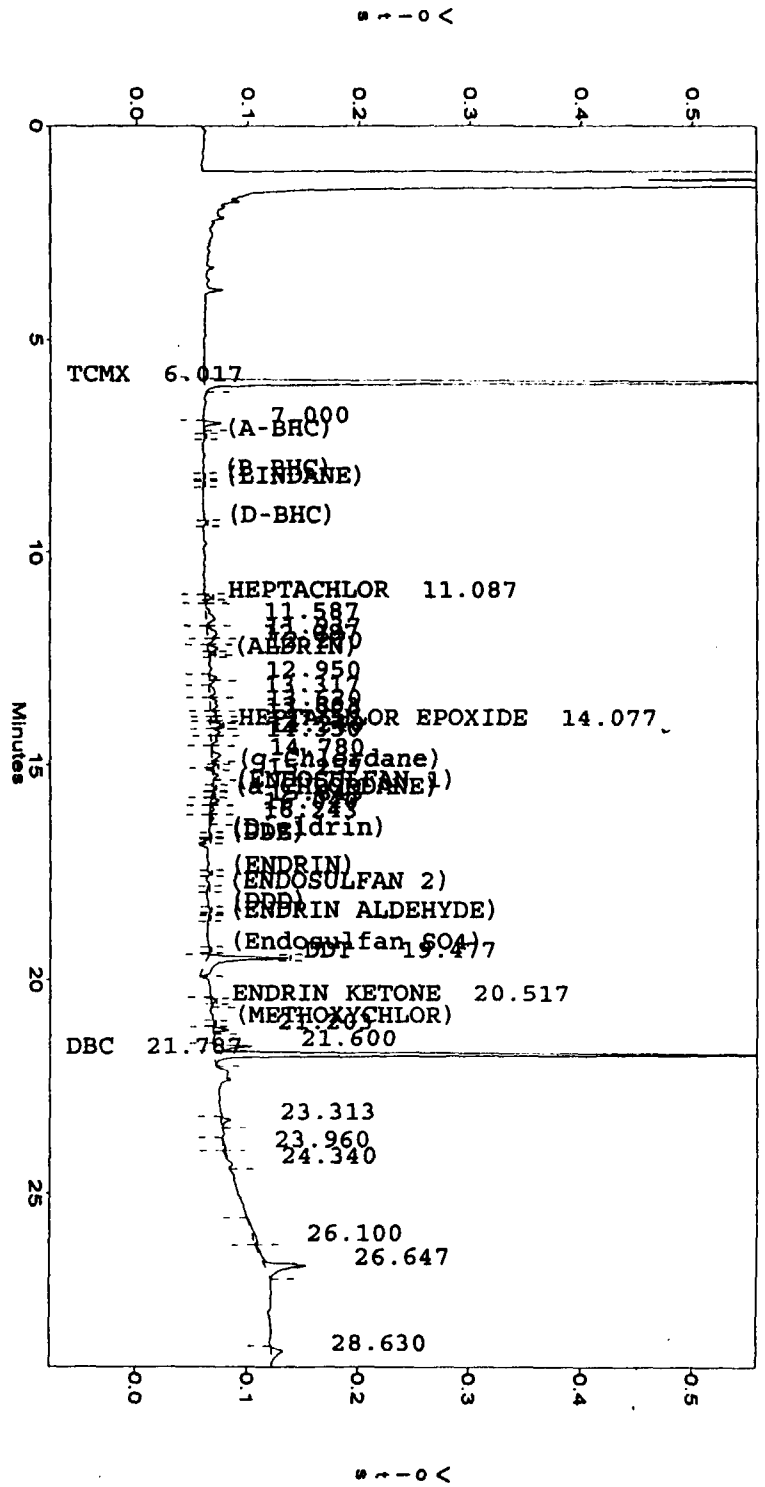
	QC Limit
TCMX = Tetrachloro-m-xylene	30-150
DBC = Dibutyl Chlorendate	30-150

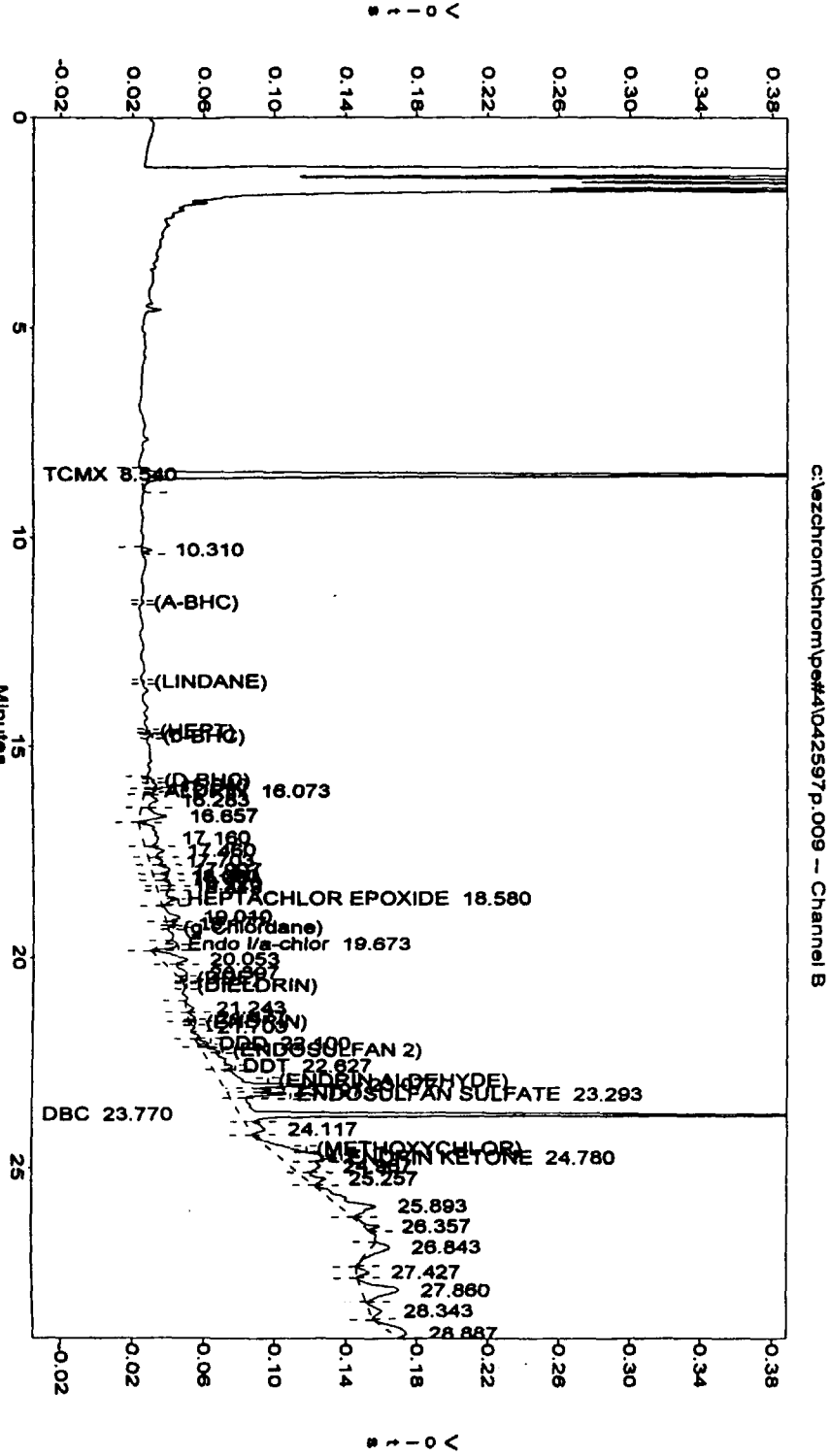
* = Diluted out

FORM:PCB/Pest MB/SURR

File : c:\ezchrom\chrom\pe#4\042597p.009
Method : c:\ezchrom\methods\pestpe#4.met
Sample ID : 74847 sbp
Acquired : Apr 26, 1997 11:27:05
Printed : May 08, 1997 11:32:16
User : System

Method Blank





File : c:\ezchrom\chrom\pe#4\042597p.009
Sample ID : 74847 sbp

Channel A Results

NAME	RT	Area	CONC. ppm
TCMX	6.02	3522728	0.04837
	7.00	68974	0.00000
A-BHC	7.31	0	0.00000
B-BHC	8.25	0	0.00000
LINDANE	8.44	0	0.00000
D-BHC	9.34	0	0.00000
HEPTACHLOR	11.09	34411	0.00041
	11.59	104673	0.00000
	11.94	94078	0.00000
	12.09	29965	0.00000
	12.27	62992	0.00000
ALDRIN	12.41	0	0.00000
	12.95	33944	0.00000
	13.32	54399	0.00000
	13.62	81763	0.00000
	13.80	31000	0.00000
	13.92	32726	0.00000
HEPTACHLOR EPO	14.08	73791	0.00094
	14.24	56536	0.00000
	14.35	52961	0.00000
	14.78	65895	0.00000
g-Chlordane	15.06	0	0.00000
	15.26	29622	0.00000
ENDOSULFAN 1	15.54	0	0.00000
a-CHLORDANE	15.70	0	0.00000
	15.84	35656	0.00000
	16.04	21985	0.00000
	16.24	23255	0.00000
Dieldrin	16.64	0	0.00000
DDE	16.75	0	0.00000
ENDRIN	17.50	0	0.00000
ENDOSULFAN 2	17.87	0	0.00000
DDD	18.34	0	0.00000
ENDRIN ALDEHYD	18.54	0	0.00000
Endosulfan SO4	19.28	0	0.00000
DDT	19.48	557577	0.00899
ENDRIN KETONE	20.52	27676	0.00043
METHOXYCHLOR	21.05	0	0.00000
	21.20	60883	0.00000
	21.60	168676	0.00000
DBC	21.79	2556156	0.05393
	23.31	49678	0.00000
	23.96	22904	0.00000
	24.34	44807	0.00000
	26.10	69914	0.00000
	26.65	344835	0.00000
	28.63	102740	0.00000

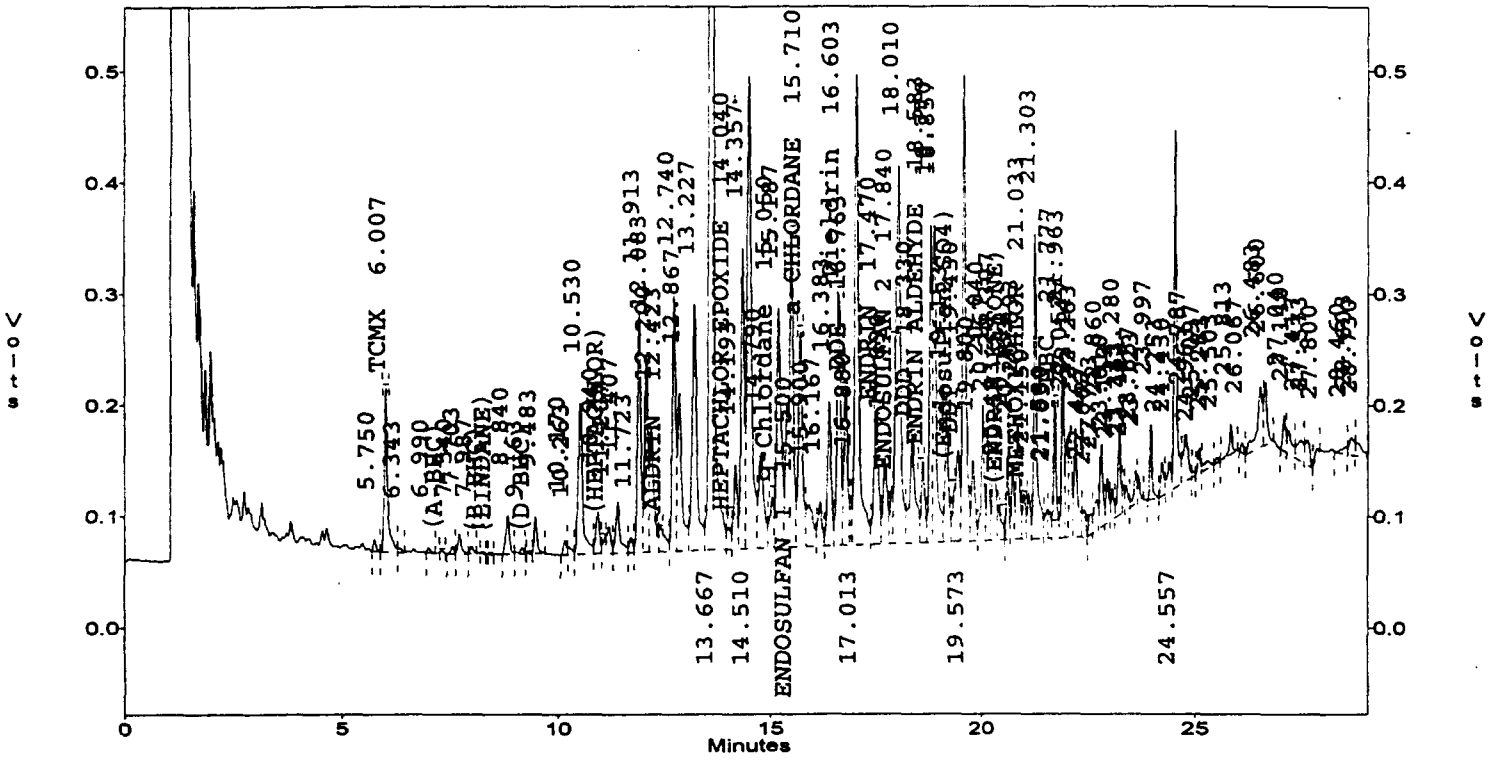
Channel B Results

NAME	RT	Area	CONC. ppm
TCMX	8.54	2414644	0.04571
	10.31	24521	0.00000
A-BHC	11.56	0	0.00000
LINDANE	13.46	0	0.00000
HEPT	14.65	0	0.00000
b-BHC	14.77	0	0.00000
D-BHC	15.82	0	0.00000
	15.94	58663	0.00000
ALDRIN	16.07	36783	0.00053
	16.28	100296	0.00000
	16.66	155485	0.00000
	17.16	225933	0.00000
	17.46	98456	0.00000
	17.70	62553	0.00000
	17.91	97659	0.00000
	18.06	54239	0.00000
	18.22	54520	0.00000
	18.31	45336	0.00000
HEPTACHLOR EPO	18.58	107207	0.00181
	19.01	82151	0.00000
	19.18	21838	0.00000
g-Chlordane	19.26	0	0.00000
Endo I/a-chlor	19.67	87079	0.00174
	20.05	199790	0.00000
	20.40	116240	0.00000
DDE	20.52	0	0.00000
DIELDRIN	20.70	0	0.00000
	21.24	35410	0.00000
	21.48	30460	0.00000
ENDRIN	21.58	0	0.00000
	21.70	20846	0.00000
DDD	22.10	46024	0.00123
ENDOSULFAN 2	22.25	0	0.00000
DDT	22.63	280818	0.00708
ENDRIN ALDEHYD	22.97	0	0.00000
	23.08	532737	0.00000
	23.20	121387	0.00000
ENDOSULFAN SUL	23.29	167435	0.00408
DBC	23.77	2129059	0.06194
	24.12	107516	0.00000
METHOXYCHLOR	24.57	0	0.00000
ENDRIN KETONE	24.78	474351	0.01070
	24.97	199219	0.00000
	25.26	112157	0.00000
	25.89	377512	0.00000
	26.36	59516	0.00000
	26.84	140302	0.00000
	27.43	51470	0.00000
	27.86	326149	0.00000
	28.34	78302	0.00000
	28.89	141127	0.00000

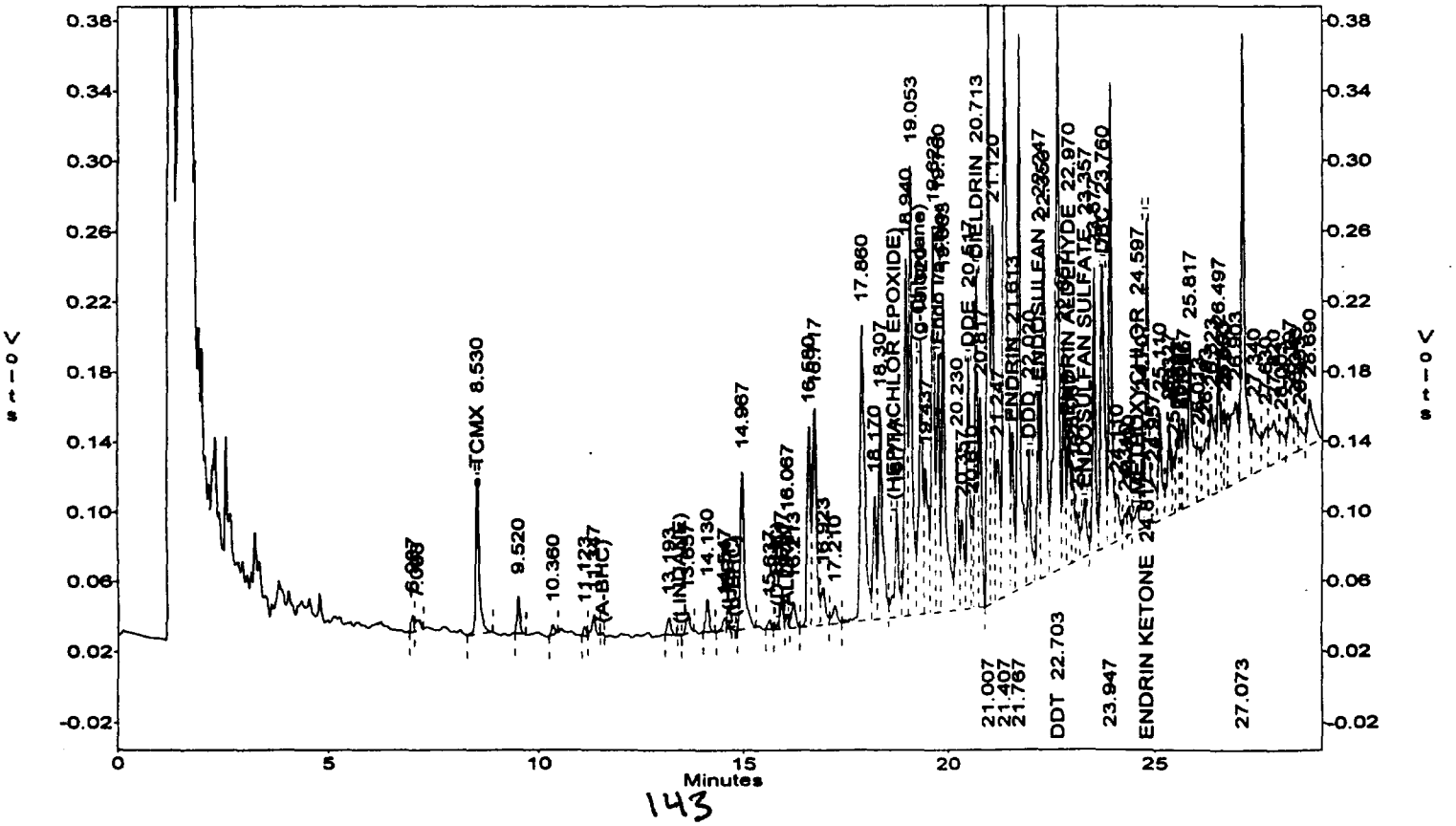
File : c:\ezchrom\chrom\pe#4\042597p.015
Method : c:\ezchrom\methods\pestpe#4.met
Sample ID : 31320 x5
Acquired : Apr 26, 1997 14:57:24
Printed : May 08, 1997 11:33:08
User : System

F 102 Pest

c:\ezchrom\chrom\pe#4\042597p.015 -- Channel A



c:\ezchrom\chrom\pe#4\042597p.015 -- Channel B



File : c:\ezchrom\chrom\pe#4\042597p.015
Sample ID : 31320 x5

F102

Channel A Results

NAME	RT	Area	CONC. ppm
	5.75	46742	0.00000
TCMX	6.01	786967	0.01081
	6.34	24963	0.00000
	6.99	20321	0.00000
A-BHC	7.31	0	0.00000
	7.54	36379	0.00000
	7.70	101889	0.00000
	7.99	34873	0.00000
B-BHC	8.25	0	0.00000
LINDANE	8.44	0	0.00000
	8.84	208792	0.00000
	9.16	33927	0.00000
D-BHC	9.34	0	0.00000
	9.48	163970	0.00000
	10.17	68474	0.00000
	10.26	48999	0.00000
	10.53	1012273	0.00000
	10.94	237693	0.00000
HEPTACHLOR	11.07	0	0.00000
	11.21	228257	0.00000
	11.41	335590	0.00000
	11.72	80350	0.00000
	11.91	1166671	0.00000
	12.08	998597	0.00000
	12.20	798552	0.00000
ALDRIN	12.42	232354	0.00283
	12.74	1270689	0.00000
	12.87	1056323	0.00000
	13.23	1760724	0.00000
	13.67	8073637	0.00000
HEPTACHLOR EPO	14.04	127916	0.00163
	14.19	436346	0.00000
	14.36	1511232	0.00000
	14.51	3140711	0.00000
	14.79	751802	0.00000
g-Chlordane	15.05	298555	0.00377
	15.19	1610987	0.00000
ENDOSULFAN 1	15.50	2354257	0.03323
a-CHLORDANE	15.71	1309874	0.01672
	15.90	411217	0.00000
	16.17	272906	0.00000
	16.38	790842	0.00000
Dieldrin	16.60	1379180	0.01987
DDE	16.76	839845	0.01114
	16.88	156924	0.00000
	17.01	2956533	0.00000
ENDRIN	17.47	946530	0.01325
	17.69	538211	0.00000
ENDOSULFAN 2	17.84	242699	0.00372
	18.01	2698226	0.00000
DDD	18.33	935332	0.01644
ENDRIN ALDEHYD	18.58	441892	0.00817
	18.77	1339876	0.00000
	18.86	1708559	0.00000
	19.15	715073	0.00000
Endosulfan SO4	19.28	0	0.00000
DDT	19.43	713841	0.01150
	19.57	2328302	0.00000

Continued...

Channel B Results

NAME	RT	Area	CONC. ppm
	6.99	42095	0.00000
	7.09	49422	0.00000
TCMX	8.53	533762	0.01010
	9.52	100127	0.00000
	10.36	31100	0.00000
	11.12	25905	0.00000
	11.35	72730	0.00000
A-BHC	11.56	0	0.00000
	13.19	60940	0.00000
LINDANE	13.46	0	0.00000
	13.66	74111	0.00000
	14.13	103000	0.00000
	14.55	49649	0.00000
HEPT	14.65	0	0.00000
b-BHC	14.77	0	0.00000
	14.97	623860	0.00000
	15.64	27098	0.00000
D-BHC	15.82	0	0.00000
	15.92	101066	0.00000
ALDRIN	16.07	42535	0.00061
	16.21	99791	0.00000
	16.58	636439	0.00000
	16.72	856177	0.00000
	16.92	160890	0.00000
	17.21	85881	0.00000
	17.86	1392521	0.00000
	18.17	377030	0.00000
	18.31	818446	0.00000
HEPTACHLOR EPO	18.64	0	0.00000
	18.72	429034	0.00000
	18.94	1031023	0.00000
	19.05	1485109	0.00000
g-Chlordane	19.26	0	0.00000
	19.32	1014672	0.00000
	19.44	622713	0.00000
	19.62	1131716	0.00000
Endo I/a-chlor	19.76	766613	0.01532
	19.88	1241270	0.00000
	20.23	498226	0.00000
	20.36	312266	0.00000
DDE	20.52	710488	0.01310
	20.61	181361	0.00000
DIELDRIN	20.71	923340	0.01688
	20.82	567611	0.00000
	21.01	1576256	0.00000
	21.12	1107608	0.00000
	21.25	599064	0.00000
	21.41	2597186	0.00000
ENDRIN	21.61	462522	0.00900
	21.77	1682307	0.00000
DDD	22.02	456400	0.01222
ENDOSULFAN 2	22.25	474147	0.01018
	22.35	1399864	0.00000
DDT	22.70	2199451	0.05548
	22.86	561246	0.00000
ENDRIN ALDEHYD	22.97	422901	0.01174
	23.07	260444	0.00000
	23.17	141342	0.00000
ENDOSULFAN SUL	23.36	268262	0.00654
	23.58	702313	0.00000
DBC	23.76	1044989	0.03040
	23.95	1210699	0.00000
	24.11	188134	0.00000
	24.31	70430	0.00000
	24.40	85326	0.00000
METHOXYCHLOR	24.60	102011	0.00517

Continued...

File : c:\ezchrom\chrom\pe#4\042597p.015
Sample ID : 31320 x5

F102

Channel A Results

NAME	RT	Area	CONC. ppm
	19.80	466516	0.00000
	20.04	619835	0.00000
	20.17	425376	0.00000
	20.31	674798	0.00000
	20.43	205028	0.00000
ENDRIN KETONE	20.52	0	0.00000
	20.64	285217	0.00000
	20.76	297135	0.00000
	20.89	566205	0.00000
METHOXYCHLOR	21.03	224645	0.00707
	21.15	224001	0.00000
	21.30	1409024	0.00000
	21.58	129263	0.00000
	21.65	110976	0.00000
DBC	21.78	391430	0.00826
	21.96	712640	0.00000
	22.06	392487	0.00000
	22.15	475861	0.00000
	22.26	559145	0.00000
	22.47	142363	0.00000
	22.61	98177	0.00000
	22.75	193847	0.00000
	22.86	380506	0.00000
	23.01	205827	0.00000
	23.11	130064	0.00000
	23.28	358543	0.00000
	23.36	86404	0.00000
	23.44	100458	0.00000
	23.66	144205	0.00000
	23.72	80451	0.00000
	24.00	255308	0.00000
	24.25	150503	0.00000
	24.43	165317	0.00000
	24.56	1336305	0.00000
	24.79	330447	0.00000
	24.96	21553	0.00000
	25.10	85806	0.00000
	25.28	74897	0.00000
	25.50	24000	0.00000
	25.81	119198	0.00000
	26.07	36655	0.00000
	26.48	473006	0.00000
	26.60	309721	0.00000
	27.04	150717	0.00000
	27.14	152651	0.00000
	27.42	193192	0.00000
	27.57	175534	0.00000
	27.80	46074	0.00000
	28.46	57385	0.00000
	28.60	135524	0.00000
	28.73	130769	0.00000

File : c:\ezchrom\chrom\pe#4\042597p.015
Sample ID : 31320 x5

Channel B Results

F102

NAME	RT	Area	CONC. ppm
	24.71	260615	0.00000
ENDRIN KETONE	24.82	836495	0.01888
	24.96	138567	0.00000
	25.11	341059	0.00000
	25.33	303339	0.00000
	25.44	139513	0.00000
	25.53	217312	0.00000
	25.60	169443	0.00000
	25.67	314868	0.00000
	25.82	654467	0.00000
	26.01	188730	0.00000
	26.19	300342	0.00000
	26.32	420117	0.00000
	26.50	415466	0.00000
	26.59	176139	0.00000
	26.65	210725	0.00000
	26.90	620383	0.00000
	27.07	1477641	0.00000
	27.34	338378	0.00000
	27.63	199709	0.00000
	27.82	329608	0.00000
	28.00	130876	0.00000
	28.20	222932	0.00000
	28.34	114843	0.00000
	28.45	110237	0.00000
	28.69	272823	0.00000

Note - Reanalyzed @ higher start temp & different program

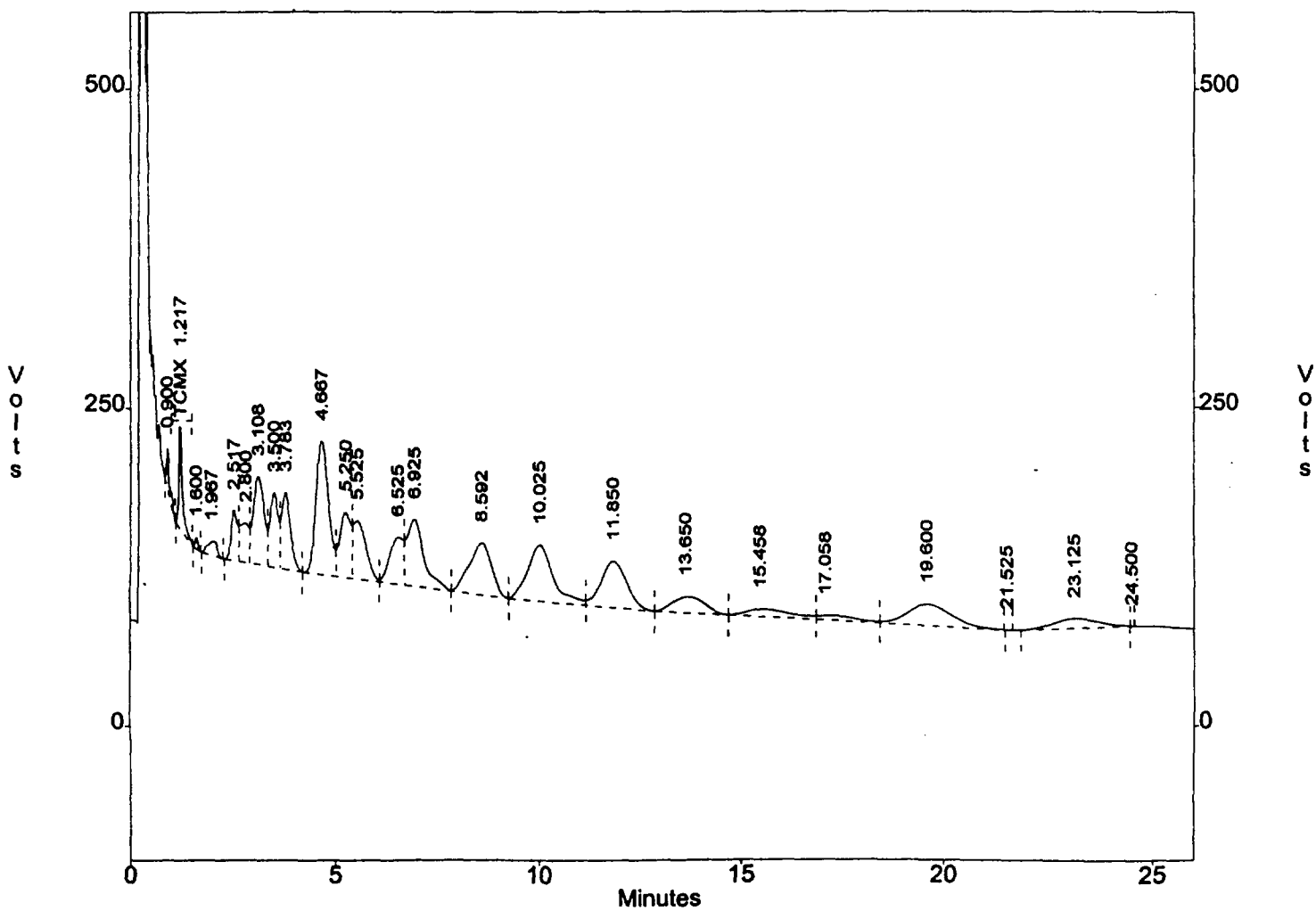
F102 PCB

File : c:\ezchrom\chrom\var1b\0426V1B.028
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 31320 X 5
Acquired : Apr 28, 1997 10:39:42
Printed : Apr 28, 1997 12:38:21

Channel A Results

Name	RT	Area	Conc
TCMX	1.217	482623	10.825
1242		4119408	0.469
1248		4119408	0.431
1254		7543815	0.421
1260		6218960	0.197
1016		4119408	0.366
1221		2894616	1.166
1232		4119408	0.816

c:\ezchrom\chrom\var1b\0426V1B.028 -- Channel A

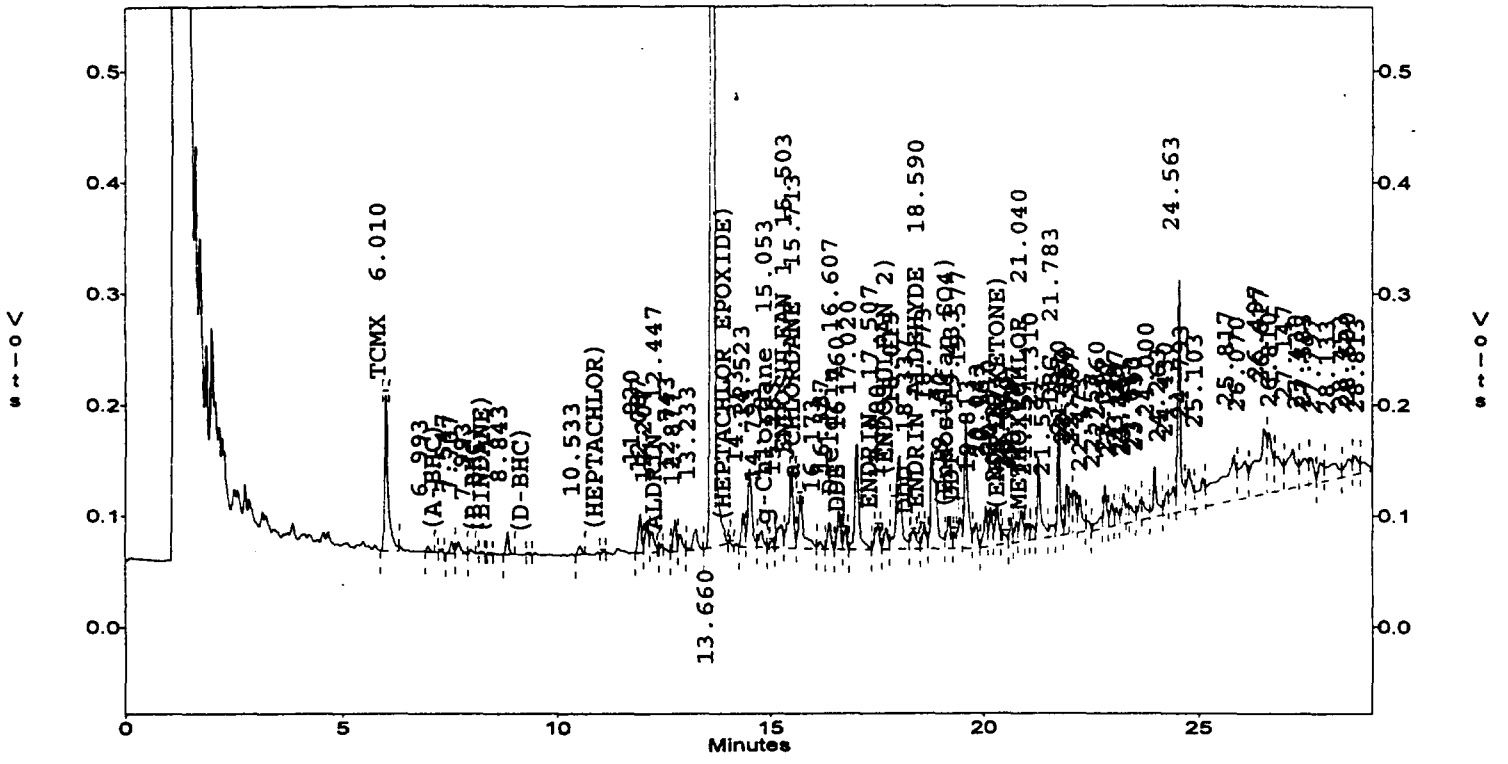


147

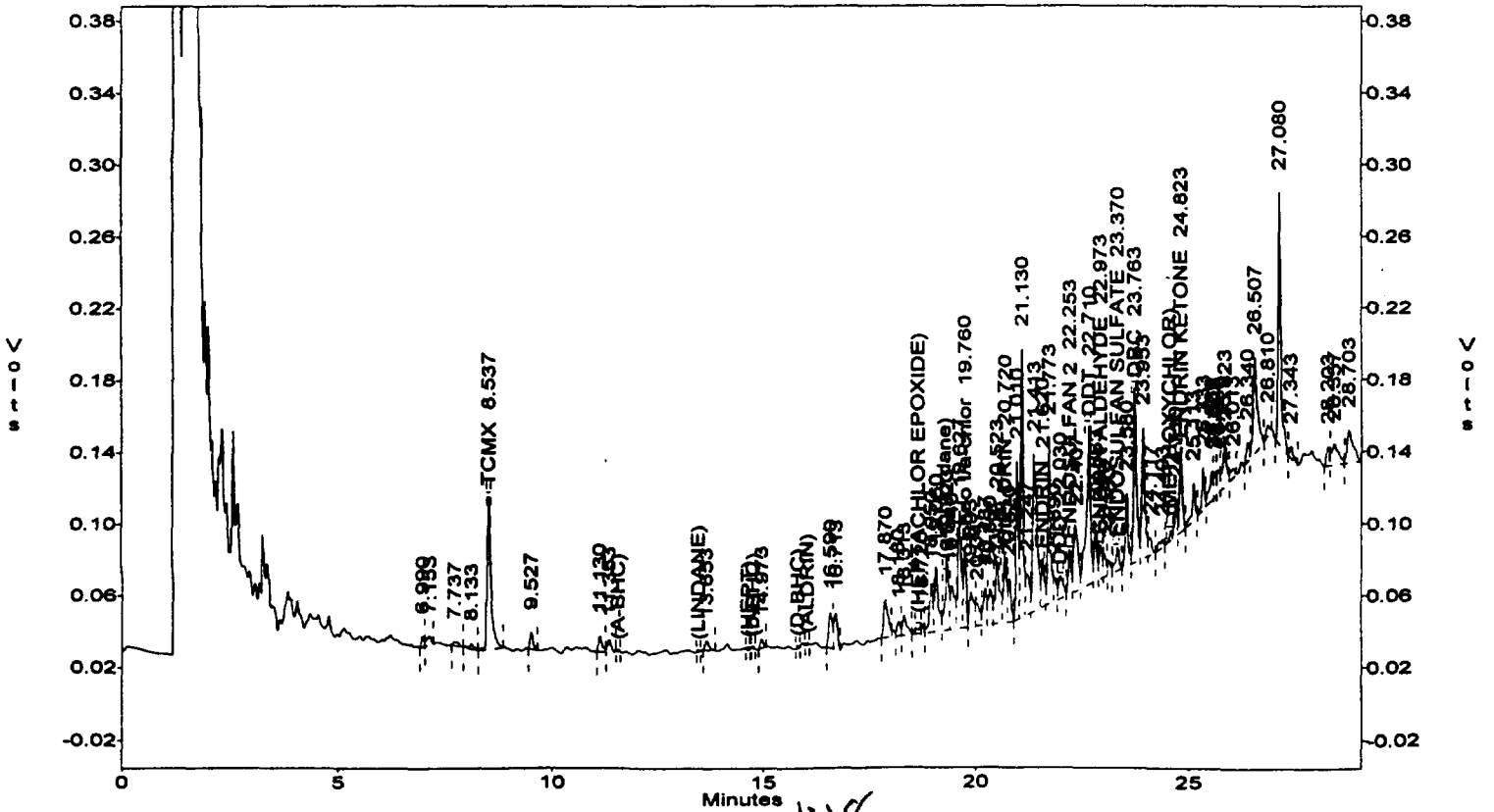
File : c:\ezchrom\chrom\pe#4\042597p.016
Method : c:\ezchrom\methods\pestpe#4.met
Sample ID : 31321 x5
Acquired : Apr 26, 1997 15:32:29
Printed : May 08, 1997 11:40:22
User : System

F103 Pest

c:\ezchrom\chrom\pe#4\042597p.016 -- Channel A



c:\ezchrom\chrom\pe#4\042597p.016 -- Channel B



148

File : c:\ezchrom\chrom\pe#4\042597p.016
Sample ID : 31321 x5

F 103

Channel A Results

NAME	RT	Area	CONC. ppm
TCMX	6.01	808672	0.01110
	6.99	23421	0.00000
A-BHC	7.31	0	0.00000
	7.55	57670	0.00000
	7.71	72716	0.00000
	7.99	20044	0.00000
B-BHC	8.25	0	0.00000
LINDANE	8.44	0	0.00000
	8.84	93694	0.00000
D-BHC	9.34	0	0.00000
	10.53	48244	0.00000
HEPTACHLOR	11.07	0	0.00000
	11.92	189169	0.00000
	12.09	156455	0.00000
	12.21	137305	0.00000
ALDRIN	12.45	45115	0.00055
	12.74	146690	0.00000
	12.88	96633	0.00000
	13.23	147052	0.00000
	13.66	6756779	0.00000
HEPTACHLOR EPO	14.08	0	0.00000
	14.36	158045	0.00000
	14.52	478348	0.00000
	14.79	107149	0.00000
g-Chlordane	15.05	42035	0.00053
	15.26	185367	0.00000
ENDOSULFAN 1	15.50	518915	0.00733
a-CHLORDANE	15.71	416227	0.00531
	16.17	40100	0.00000
	16.39	133219	0.00000
Dieldrin	16.61	189652	0.00273
DDE	16.76	92689	0.00123
	17.02	643134	0.00000
ENDRIN	17.51	157862	0.00221
	17.70	122716	0.00000
ENDOSULFAN 2	17.87	0	0.00000
	18.01	760164	0.00000
DDD	18.34	155096	0.00273
ENDRIN ALDEHYD	18.59	131381	0.00243
	18.77	804305	0.00000
	19.16	193882	0.00000
Endosulfan SO4	19.28	0	0.00000
DDT	19.43	238826	0.00385
	19.58	697896	0.00000
	19.81	147807	0.00000
	20.04	191630	0.00000
	20.17	182496	0.00000
	20.31	221924	0.00000
	20.44	89676	0.00000
ENDRIN KETONE	20.52	0	0.00000
	20.65	88064	0.00000
	20.77	88021	0.00000
	20.90	178674	0.00000
METHOXYCHLOR	21.04	74815	0.00236
	21.16	84160	0.00000
	21.31	413965	0.00000
	21.59	93448	0.00000
DBC	21.78	430975	0.00909

Continued...

Channel B Results

NAME	RT	Area	CONC. ppm
	6.99	24939	0.00000
	7.15	39324	0.00000
	7.74	21055	0.00000
	8.13	23142	0.00000
TCMX	8.54	538382	0.01019
	9.53	43492	0.00000
	11.13	49915	0.00000
	11.35	39283	0.00000
A-BHC	11.56	0	0.00000
LINDANE	13.46	0	0.00000
	13.65	33812	0.00000
HEPT	14.65	0	0.00000
b-BHC	14.77	0	0.00000
	14.97	25152	0.00000
D-BHC	15.82	0	0.00000
ALDRIN	16.04	0	0.00000
	16.59	117933	0.00000
	16.71	117052	0.00000
	17.87	157128	0.00000
	18.18	45926	0.00000
	18.31	78446	0.00000
HEPTACHLOR EPO	18.64	0	0.00000
	18.72	47851	0.00000
	18.95	148071	0.00000
	19.06	237351	0.00000
g-Chlordane	19.26	0	0.00000
	19.32	238873	0.00000
	19.44	185928	0.00000
	19.63	364356	0.00000
Endo I/a-chlor	19.76	202070	0.00404
	19.89	146322	0.00000
	20.05	89472	0.00000
	20.24	119527	0.00000
	20.36	135011	0.00000
DDE	20.52	262766	0.00484
DIELDRIN	20.72	197504	0.00361
	20.82	125878	0.00000
	21.01	363619	0.00000
	21.13	658974	0.00000
	21.25	147826	0.00000
	21.41	634572	0.00000
ENDRIN	21.62	135100	0.00263
	21.77	418742	0.00000
	21.89	66817	0.00000
DDD	22.03	90141	0.00241
ENDOSULFAN 2	22.25	112200	0.00241
	22.41	272807	0.00000
DDT	22.71	605440	0.01527
	22.86	141229	0.00000
ENDRIN ALDEHYD	22.97	94777	0.00263
	23.07	55878	0.00000
	23.18	36703	0.00000
ENDOSULFAN SUL	23.37	76832	0.00187
	23.58	180605	0.00000
DBC	23.76	472269	0.01374
	23.95	369456	0.00000
	24.12	56265	0.00000
	24.40	36093	0.00000
METHOXYCHLOR	24.57	0	0.00000
	24.71	105637	0.00000
ENDRIN KETONE	24.82	208108	0.00470
	25.11	102336	0.00000
	25.33	95658	0.00000
	25.53	99282	0.00000
	25.60	50889	0.00000
	25.68	60735	0.00000

Continued...

F 103

File : c:\ezchrom\chrom\pe#4\042597p.016
Sample ID : 31321 x5

Channel A Results

NAME	RT	Area	CONC. ppm
	21.97	198252	0.00000
	22.06	164131	0.00000
	22.15	198853	0.00000
	22.27	216506	0.00000
	22.47	53570	0.00000
	22.76	103401	0.00000
	22.86	189313	0.00000
	23.02	112897	0.00000
	23.12	82527	0.00000
	23.29	143465	0.00000
	23.37	69346	0.00000
	23.45	102668	0.00000
	23.66	101564	0.00000
	23.73	114747	0.00000
	24.00	265443	0.00000
	24.26	121447	0.00000
	24.43	192722	0.00000
	24.56	937306	0.00000
	24.79	326643	0.00000
	25.10	267513	0.00000
	25.82	1016799	0.00000
	26.07	459246	0.00000
	26.50	916865	0.00000
	26.62	427537	0.00000
	26.81	348320	0.00000
	27.15	536847	0.00000
	27.43	282431	0.00000
	27.58	182553	0.00000
	27.80	144336	0.00000
	28.13	288968	0.00000
	28.45	166412	0.00000
	28.60	144281	0.00000
	28.81	116468	0.00000

F 103

File : c:\ezchrom\chrom\pe#4\042597p.016
Sample ID : 31321 x5

Channel B Results

NAME	RT	Area	CONC. ppm
	25.82	153050	0.00000
	26.01	37419	0.00000
	26.34	50662	0.00000
	26.51	373379	0.00000
	26.81	30585	0.00000
	27.08	628888	0.00000
	27.34	35926	0.00000
	28.20	51676	0.00000
	28.36	135298	0.00000
	28.70	186307	0.00000

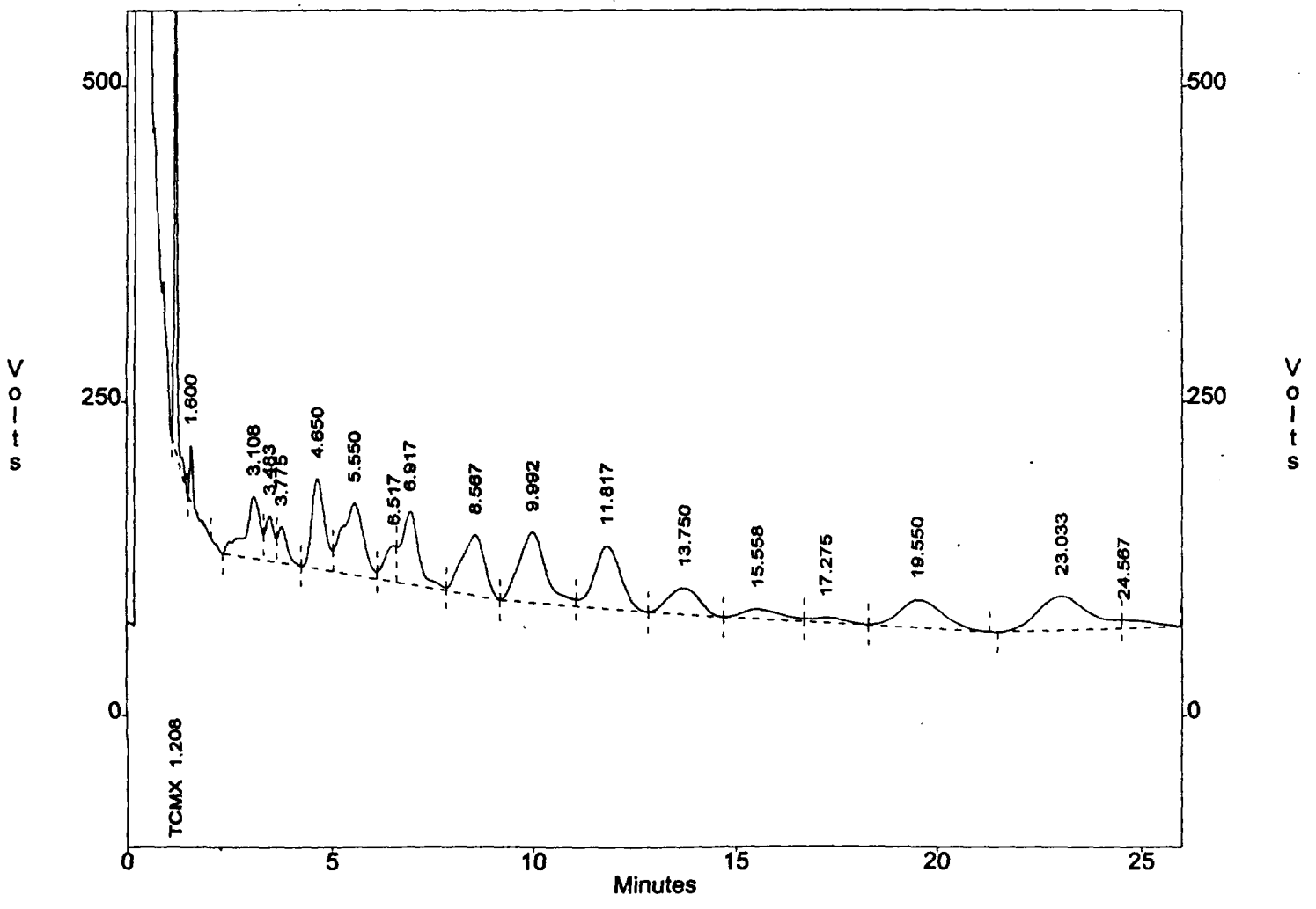
F103 PCB

File : c:\ezchrom\chrom\var1b\0426V1B.029
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 31321
Acquired : Apr 28, 1997 11:06:06
Printed : Apr 28, 1997 12:38:23

Channel A Results

Name	RT	Area	Conc
TCMX	1.208	1934167	43.383
1242		2204495	0.251
1248		2204495	0.231
1254		9024345	0.504
1260		8355308	0.264
1016		2204495	0.196
1221		1467225	0.591
1232		2204495	0.437

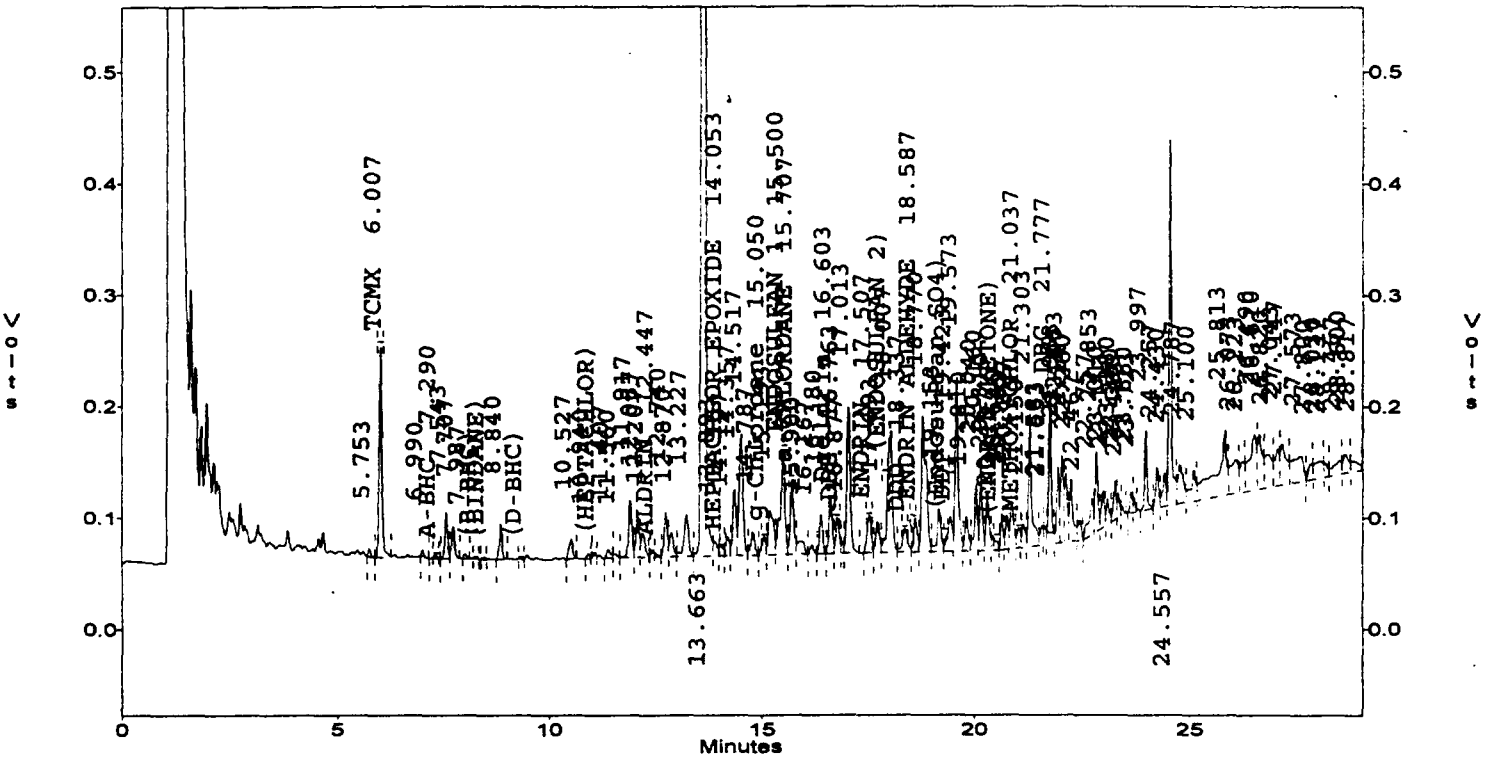
c:\ezchrom\chrom\var1b\0426V1B.029 -- Channel A



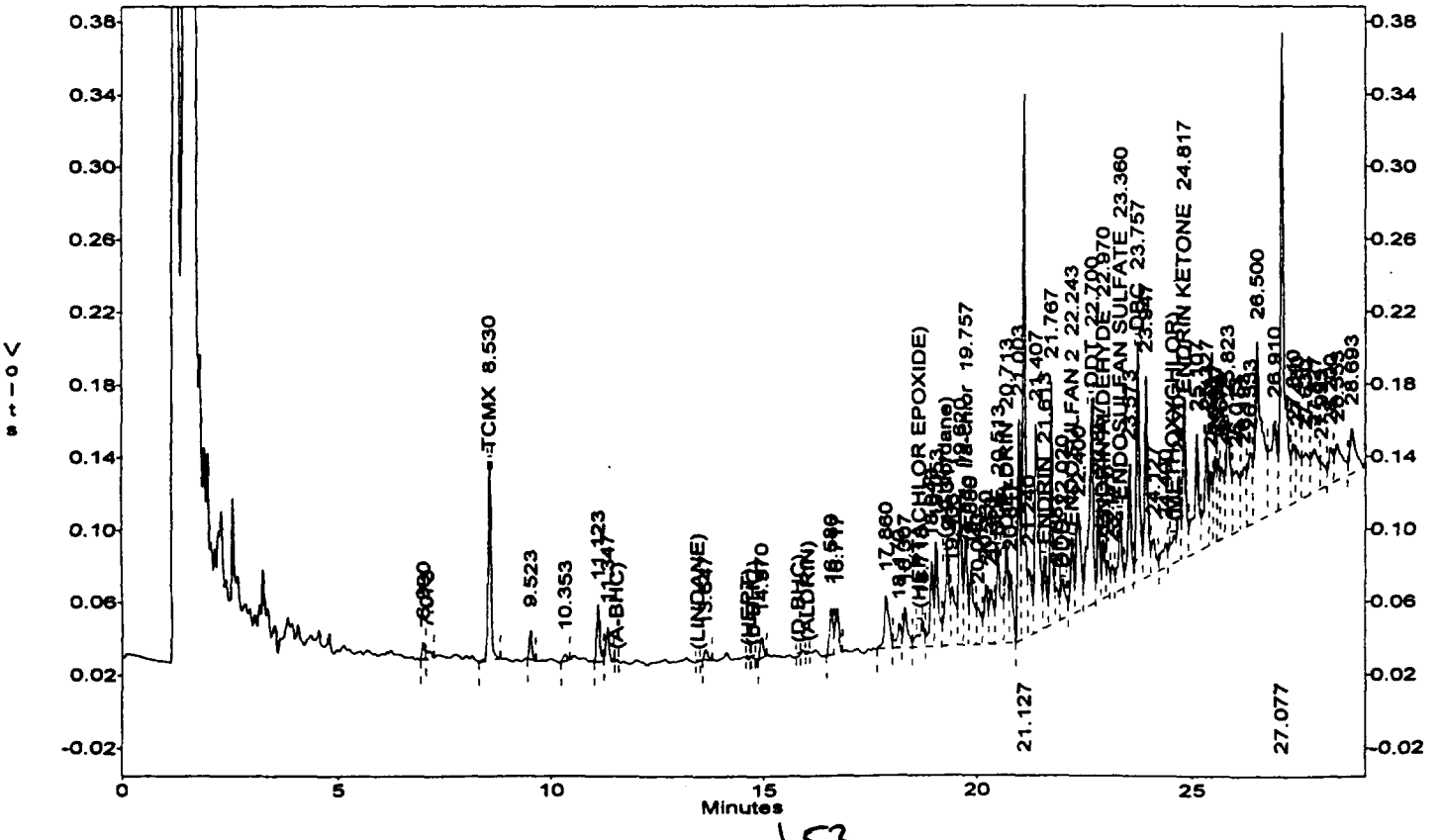
F104 Pest

File : c:\ezchrom\chrom\pe#4\042597p.017
Method : c:\ezchrom\methods\pestpe#4.met
Sample ID : 31322 x5
Acquired : Apr 26, 1997 16:07:34
Printed : May 08, 1997 11:40:33
User : System

c:\ezchrom\chrom\pe#4\042597p.017 – Channel A



c:\ezchrom\chrom\pe#4\042597p.017 – Channel B



153

File : c:\ezchrom\chrom\pe#4\042597p.017
Sample ID : 31322 x5

F104

Channel A Results

NAME	RT	Area	CONC. ppm
	5.75	30266	0.00000
TCMX	6.01	838850	0.01152
	6.99	21499	0.00000
A-BHC	7.29	21071	0.00023
	7.54	185183	0.00000
	7.71	135887	0.00000
	7.99	20233	0.00000
B-BHC	8.25	0	0.00000
LINDANE	8.44	0	0.00000
	8.84	145913	0.00000
D-BHC	9.34	0	0.00000
	10.53	107887	0.00000
	10.94	20668	0.00000
HEPTACHLOR	11.07	0	0.00000
	11.41	50428	0.00000
	11.56	24856	0.00000
	11.92	284429	0.00000
	12.09	201011	0.00000
	12.21	149516	0.00000
ALDRIN	12.45	46648	0.00057
	12.74	209170	0.00000
	12.87	139649	0.00000
	13.23	282400	0.00000
	13.66	7337859	0.00000
	13.89	84962	0.00000
HEPTACHLOR EPO	14.05	56434	0.00072
	14.20	98818	0.00000
	14.36	327452	0.00000
	14.52	708821	0.00000
	14.79	141008	0.00000
g-Chlordane	15.05	98372	0.00124
	15.19	343708	0.00000
ENDOSULFAN 1	15.50	685595	0.00968
a-CHLORDANE	15.71	390251	0.00498
	15.90	132270	0.00000
	16.17	43545	0.00000
	16.38	183944	0.00000
Dieldrin	16.60	262928	0.00379
DDE	16.76	172417	0.00229
	16.88	39222	0.00000
	17.01	743298	0.00000
ENDRIN	17.51	226086	0.00317
	17.69	164990	0.00000
ENDOSULFAN 2	17.87	0	0.00000
	18.01	894936	0.00000
DDD	18.34	175082	0.00308
ENDRIN ALDEHYD	18.59	184129	0.00341
	18.77	962737	0.00000
	19.15	249700	0.00000
Endosulfan SO4	19.28	0	0.00000
DDT	19.42	245652	0.00396
	19.57	821705	0.00000
	19.81	184933	0.00000
	20.04	297772	0.00000
	20.16	312579	0.00000
	20.31	257680	0.00000
	20.44	92541	0.00000
ENDRIN KETONE	20.52	0	0.00000

Continued...

Channel B Results

NAME	RT	Area	CONC. ppm
	6.99	39403	0.00000
	7.07	34748	0.00000
TCMX	8.53	548705	0.01039
	9.52	70571	0.00000
	10.35	22859	0.00000
	11.12	159179	0.00000
	11.35	95918	0.00000
A-BHC	11.56	0	0.00000
LINDANE	13.46	0	0.00000
	13.65	32263	0.00000
HEPT	14.65	0	0.00000
b-BHC	14.77	0	0.00000
	14.97	58164	0.00000
D-BHC	15.82	0	0.00000
ALDRIN	16.04	0	0.00000
	16.58	144235	0.00000
	16.72	152838	0.00000
	17.86	218816	0.00000
	18.17	94849	0.00000
	18.31	149970	0.00000
HEPTACHLOR EPO	18.64	0	0.00000
	18.71	135569	0.00000
	18.94	265894	0.00000
	19.05	336868	0.00000
g-Chlordane	19.26	0	0.00000
	19.32	369585	0.00000
	19.43	245569	0.00000
	19.62	441357	0.00000
Endo I/a-chlor	19.76	320702	0.00641
	19.88	295806	0.00000
	20.04	151350	0.00000
	20.23	202180	0.00000
	20.35	205091	0.00000
DDE	20.51	395936	0.00730
DIELDRIN	20.71	303717	0.00555
	20.82	202762	0.00000
	21.00	502879	0.00000
	21.13	1271870	0.00000
	21.24	238271	0.00000
	21.41	845921	0.00000
ENDRIN	21.61	202369	0.00394
	21.77	587383	0.00000
	21.89	101230	0.00000
DDD	22.02	170910	0.00458
ENDOSULFAN 2	22.24	211056	0.00453
	22.40	412143	0.00000
DDT	22.70	809943	0.02043
	22.86	242507	0.00000
ENDRIN ALDEHYD	22.97	158137	0.00439
	23.07	91458	0.00000
	23.18	83177	0.00000
ENDOSULFAN SUL	23.36	262066	0.00639
	23.57	369936	0.00000
DBC	23.76	495010	0.01440
	23.95	548384	0.00000
	24.13	136913	0.00000
	24.40	124984	0.00000
METHOXYCHLOR	24.57	0	0.00000
	24.71	338038	0.00000
ENDRIN KETONE	24.82	449239	0.01014
	25.11	487056	0.00000
	25.33	365351	0.00000
	25.43	189790	0.00000
	25.53	222593	0.00000
	25.60	182918	0.00000
	25.67	241299	0.00000

Continued...

File : c:\ezchrom\chrom\pe#4\042597p.017
Sample ID : 31322 x5

F104

Channel A Results

NAME	RT	Area	CONC. ppm
	20.64	124445	0.00000
	20.76	139150	0.00000
	20.89	250683	0.00000
METHOXYCHLOR	21.04	99813	0.00314
	21.15	123636	0.00000
	21.30	639369	0.00000
	21.58	86303	0.00000
	21.65	68953	0.00000
DBC	21.78	460353	0.00971
	21.96	289661	0.00000
	22.05	358092	0.00000
	22.15	277070	0.00000
	22.26	322789	0.00000
	22.47	104323	0.00000
	22.76	247252	0.00000
	22.85	323221	0.00000
	23.01	166215	0.00000
	23.11	103985	0.00000
	23.28	144161	0.00000
	23.36	86272	0.00000
	23.44	31930	0.00000
	23.66	68572	0.00000
	23.72	46435	0.00000
	24.00	273110	0.00000
	24.26	172255	0.00000
	24.43	158044	0.00000
	24.56	1350175	0.00000
	24.79	296689	0.00000
	25.10	228901	0.00000
	25.81	992304	0.00000
	26.07	407293	0.00000
	26.22	210844	0.00000
	26.49	584720	0.00000
	26.61	380462	0.00000
	26.82	342894	0.00000
	27.04	245385	0.00000
	27.15	359834	0.00000
	27.57	428526	0.00000
	27.80	93592	0.00000
	28.03	209299	0.00000
	28.14	69487	0.00000
	28.47	163756	0.00000
	28.60	156692	0.00000
	28.82	115960	0.00000

File : c:\ezchrom\chrom\pe#4\042597p.017
Sample ID : 31322 x5

F104

Channel B Results

NAME	RT	Area	CONC. ppm
	25.82	466084	0.00000
	26.01	369120	0.00000
	26.19	275595	0.00000
	26.33	301211	0.00000
	26.50	1113928	0.00000
	26.91	567331	0.00000
	27.08	1580242	0.00000
	27.34	199909	0.00000
	27.43	209696	0.00000
	27.63	264938	0.00000
	27.83	269553	0.00000
	27.99	115225	0.00000
	28.20	141411	0.00000
	28.35	258842	0.00000
	28.69	240378	0.00000

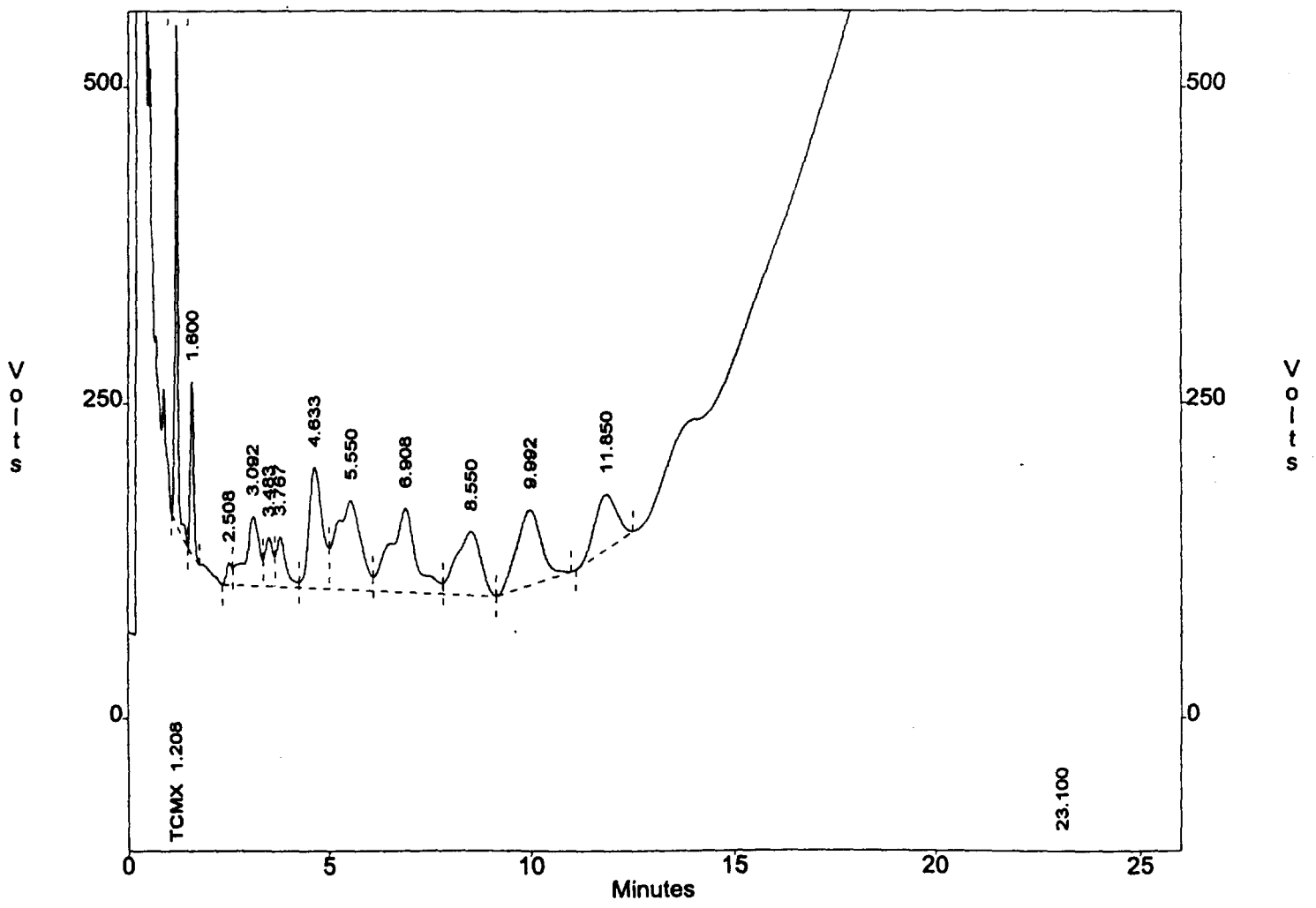
File : c:\ezchrom\chrom\var1b\0426V1B.030
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 31322
Acquired : Apr 28, 1997 11:32:30
Printed : Apr 28, 1997 12:38:25

F104 PCB

Channel A Results

Name	RT	Area	Conc
TCMX	1.208	1895687	42.520
1242		2638720	0.300
1248		2638720	0.276
1254		9333041	0.521
1260		4151999	0.131
1016		2638720	0.234
1221		2210371	0.890
1232		2638720	0.523

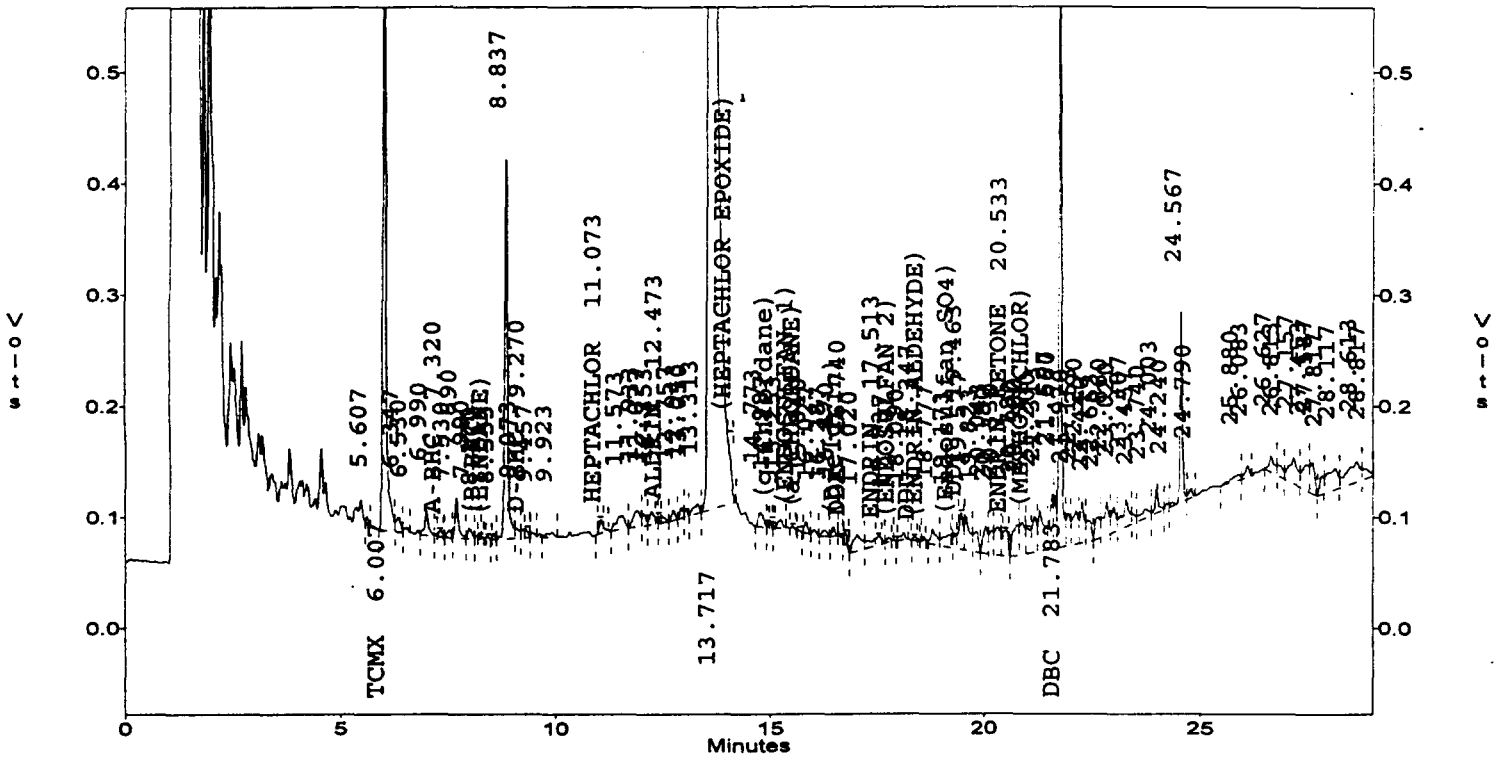
c:\ezchrom\chrom\var1b\0426V1B.030 -- Channel A



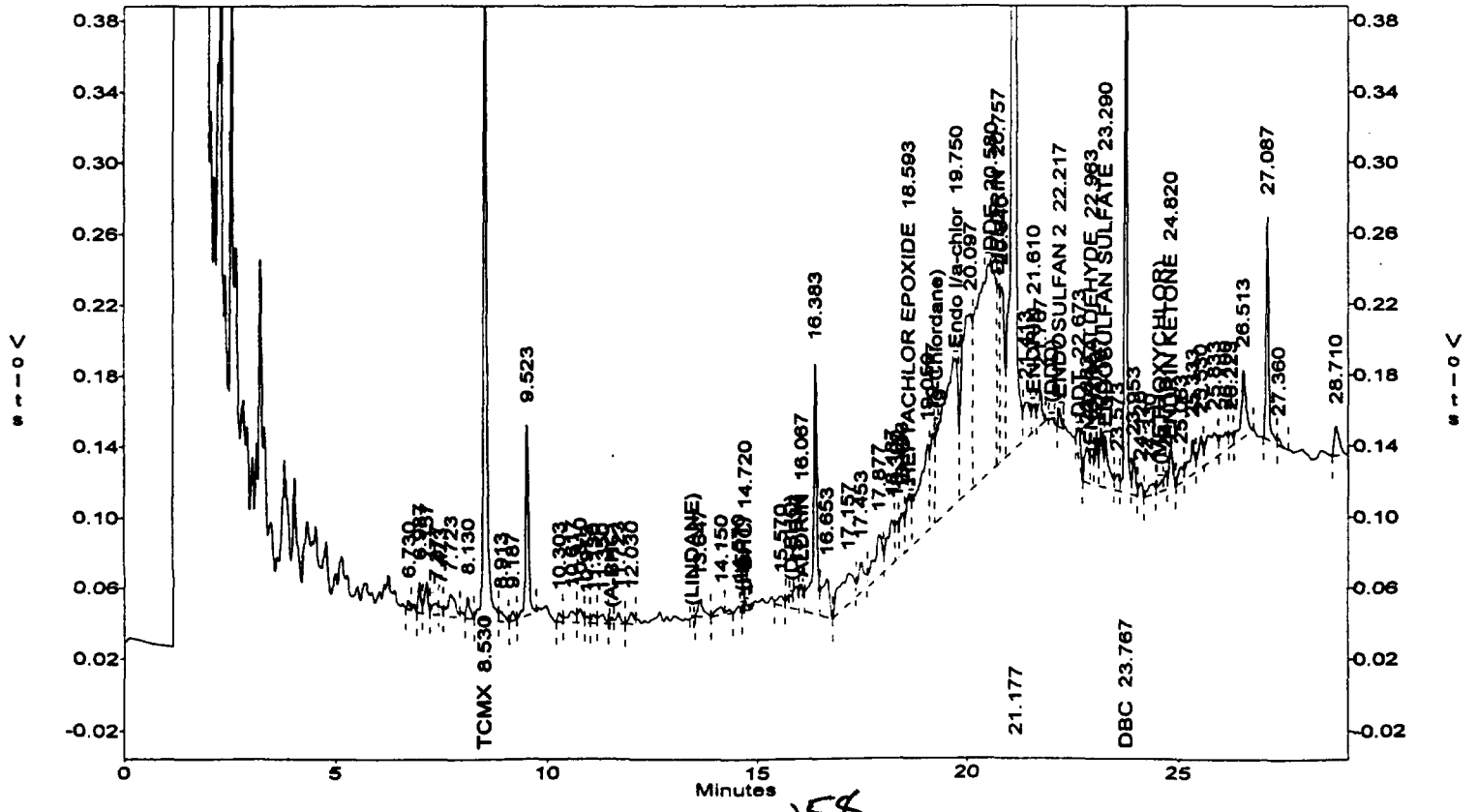
File : c:\ezchrom\chrom\pe#4\042597p.018
Method : c:\ezchrom\methods\pestpe#4.met
Sample ID : 31323
Acquired : Apr 26, 1997 16:42:38
Printed : May 08, 1997 11:40:43
User : System

F107 Pest

c:\ezchrom\chrom\pe#4\042597p.018 -- Channel A



c:\ezchrom\chrom\pe#4\042597p.018 -- Channel B



158

File : c:\ezchrom\chrom\pe#4\042597p.018
Sample ID : 31323

F107

Channel A Results

NAME	RT	Area	CONC. ppm
	5.61	20830	0.00000
TCMX	6.01	3009790	0.04133
	6.35	100516	0.00000
	6.53	33479	0.00000
	6.99	143626	0.00000
A-BHC	7.32	41460	0.00046
	7.53	46100	0.00000
	7.69	205475	0.00000
	7.99	60432	0.00000
	8.17	20268	0.00000
B-BHC	8.25	0	0.00000
LINDANE	8.44	0	0.00000
	8.55	22454	0.00000
	8.84	1707350	0.00000
	9.07	64590	0.00000
D-BHC	9.27	81367	0.00098
	9.46	32025	0.00000
	9.92	52977	0.00000
HEPTACHLOR	11.07	80486	0.00096
	11.57	168853	0.00000
	11.93	164172	0.00000
	12.08	64434	0.00000
	12.25	99902	0.00000
ALDRIN	12.47	57257	0.00070
	12.76	50951	0.00000
	12.94	48821	0.00000
	13.05	34316	0.00000
	13.31	82890	0.00000
	13.72	15109874	0.00000
HEPTACHLOR EPO	14.08	0	0.00000
	14.77	107449	0.00000
	14.99	33449	0.00000
g-Chlordane	15.06	0	0.00000
	15.25	57728	0.00000
ENDOSULFAN 1	15.54	0	0.00000
a-CHLORDANE	15.70	0	0.00000
	15.84	54605	0.00000
	16.03	29443	0.00000
	16.29	44378	0.00000
	16.47	39816	0.00000
Dieldrin	16.64	0	0.00000
DDE	16.74	48882	0.00065
	17.02	193629	0.00000
ENDRIN	17.51	154777	0.00217
	17.74	24388	0.00000
ENDOSULFAN 2	17.87	0	0.00000
	18.09	48338	0.00000
DDD	18.35	26150	0.00046
ENDRIN ALDEHYD	18.54	0	0.00000
	18.78	122380	0.00000
	19.17	161076	0.00000
Endosulfan SO4	19.28	0	0.00000
DDT	19.46	290310	0.00468
	19.58	260819	0.00000
	19.82	148507	0.00000
	20.04	185664	0.00000
	20.18	143012	0.00000
	20.33	241619	0.00000

Continued...

Channel B Results

NAME	RT	Area	CONC. ppm
	6.73	20069	0.00000
	6.99	74763	0.00000
	7.16	98316	0.00000
	7.38	61140	0.00000
	7.47	28906	0.00000
	7.72	158590	0.00000
	8.13	70363	0.00000
TCMX	8.53	2160052	0.04089
	8.91	48679	0.00000
	9.19	29000	0.00000
	9.52	563540	0.00000
	10.30	30948	0.00000
	10.62	80846	0.00000
	10.81	59529	0.00000
	10.97	23233	0.00000
	11.13	30711	0.00000
	11.35	51044	0.00000
A-BHC	11.56	0	0.00000
	11.72	57838	0.00000
	12.03	50061	0.00000
LINDANE	13.46	0	0.00000
	13.65	81049	0.00000
	14.15	54459	0.00000
	14.57	21854	0.00000
HEPT	14.65	0	0.00000
b-BHC	14.72	36027	0.00111
	15.57	56090	0.00000
D-BHC	15.82	0	0.00000
	15.94	163145	0.00000
ALDRIN	16.07	97169	0.00139
	16.38	867943	0.00000
	16.65	267905	0.00000
	17.16	432433	0.00000
	17.45	174436	0.00000
	17.88	332121	0.00000
	18.19	305096	0.00000
	18.30	118101	0.00000
	18.43	180755	0.00000
HEPTACHLOR EPO	18.59	267670	0.00453
	19.05	904087	0.00000
	19.18	366837	0.00000
g-Chlordane	19.26	0	0.00000
Endo I/a-chlor	19.75	2355927	0.04709
	20.10	1725680	0.00000
DDE	20.58	3725199	0.06867
DIELDRIN	20.76	419235	0.00767
	20.84	714342	0.00000
	21.18	7148971	0.00000
	21.41	215052	0.00000
ENDRIN	21.61	98576	0.00192
	21.77	129272	0.00000
DDD	22.03	0	0.00000
ENDOSULFAN 2	22.22	45754	0.00098
DDT	22.67	107545	0.00271
	22.86	151371	0.00000
ENDRIN ALDEHYD	22.96	74146	0.00206
	23.07	131385	0.00000
	23.19	172724	0.00000
ENDOSULFAN SUL	23.29	205386	0.00501
	23.57	64142	0.00000
DBC	23.77	1593155	0.04635
	23.95	106828	0.00000
	24.12	48722	0.00000
	24.33	70371	0.00000
METHOXYCHLOR	24.57	0	0.00000
	24.71	99018	0.00000

Continued...

File : c:\ezchrom\chrom\pe#4\042597p.018
Sample ID : 31323

F107

Channel A Results

NAME	RT	Area	CONC. ppm
ENDRIN KETONE	20.53	225116	0.00351
	20.78	278815	0.00000
	20.90	246549	0.00000
METHOXYCHLOR	21.05	0	0.00000
	21.20	402453	0.00000
	21.31	365528	0.00000
	21.60	251804	0.00000
	21.66	199210	0.00000
DBC	21.78	2212323	0.04667
	21.97	187885	0.00000
	22.15	273822	0.00000
	22.29	251623	0.00000
	22.44	148434	0.00000
	22.66	151761	0.00000
	22.86	253326	0.00000
	23.02	160604	0.00000
	23.31	255527	0.00000
	23.46	47921	0.00000
	23.74	113288	0.00000
	24.00	127897	0.00000
	24.24	22992	0.00000
	24.57	651317	0.00000
	24.79	47935	0.00000
	25.88	81730	0.00000
	26.08	73462	0.00000
	26.63	132059	0.00000
	26.81	90708	0.00000
	27.16	324815	0.00000
	27.45	263666	0.00000
	27.59	205800	0.00000
	27.82	108079	0.00000
	28.12	343701	0.00000
	28.61	405854	0.00000
	28.82	99925	0.00000

File : c:\ezchrom\chrom\pe#4\042597p.018
Sample ID : 31323

F107

Channel B Results

NAME	RT	Area	CONC. ppm
ENDRIN KETONE	24.82	130731	0.00295
	25.06	72681	0.00000
	25.33	169806	0.00000
	25.53	133271	0.00000
	25.83	266707	0.00000
	26.10	122942	0.00000
	26.22	48735	0.00000
	26.51	327223	0.00000
	27.09	552339	0.00000
	27.36	23694	0.00000
	28.71	140421	0.00000

Initial Calibration
Pesticides (PCB)

PESTICIDES
INITIAL CALIBRATION

CG Column: RTX – 5 ID: 30 m x 0.53 mm
Date(s) Analyzed: 4/26/97 4/26/97

Compound	RT of STANDARDS (ug/ml)					MEAN	RT WINDOW(MIN)	
	0.005	0.020	0.050	0.070	0.090	RT	FROM	TO
TCMX*	5.99	6.00	6.01	6.01	6.03	6.01	5.94	6.08
alpha-BHC	7.28	7.29	7.31	7.31	7.33	7.30	7.23	7.37
beta-BHC	8.24	8.25	8.25	8.25	8.26	8.25	8.18	8.32
delta-BHC	9.32	9.33	9.34	9.35	9.37	9.34	9.27	9.41
gamma-BHC	8.42	8.42	8.44	8.45	8.46	8.44	8.37	8.49
Heptachlor	11.05	11.06	11.07	11.07	11.09	11.07	10.97	11.17
Aldrin	12.39	12.40	12.41	12.41	12.43	12.41	12.34	12.48
Heptachlor epoxide	14.06	14.07	14.08	14.08	14.10	14.08	14.01	14.15
Endosulfan I	15.52	15.52	15.54	15.54	15.55	15.53	15.46	15.60
Dieldrin	16.62	16.62	16.64	16.63	16.65	16.63	16.56	16.70
4,4' -DDE	16.73	16.74	16.75	16.75	16.77	16.75	16.68	16.82
Endrin	17.48	17.48	17.50	17.49	17.51	17.49	17.42	17.56
Endosulfan II	17.86	17.86	17.87	17.87	17.88	17.87	17.80	17.94
4,4' -DDD	18.33	18.33	18.34	18.33	18.34	18.33	18.26	18.40
Endosulfan sulfate	19.26	19.27	19.28	19.28	19.29	19.27	19.20	19.34
4,4' -DDT	19.98	19.46	19.47	19.47	19.48	19.57	19.50	19.64
Methoxychlor	21.04	21.04	21.05	21.04	21.04	21.04	20.97	21.11
Endrin ketone	20.51	20.51	20.52	20.52	20.53	20.52	20.45	20.59
Endrin aldehyde	18.53	18.53	18.54	18.54	18.54	18.54	18.47	18.61
alpha-Chlordane	15.68	15.69	15.70	15.70	15.72	15.70	15.63	15.77
gamma-Chlordane	15.04	15.05	15.06	15.06	15.08	15.06	14.99	15.13
DBC**	21.77	21.77	21.78	21.78	21.79	21.78	21.71	21.85

Retention time windows are +/- 0.05 minutes for all compounds that elute before Heptachlor epoxide, +/- 0.07 minutes for all others, except +/- 0.10 minutes for Dibutylchlorendate

* Tetrachloro-m-xylene
** Dibutyl Chlorendate

PESTICIDES
INITIAL CALIBRATION

GC Column: RTX – 50 ID: 30 m x O.53 mm
Date(s) Analyzed: 4/26/97 4/26/97

Compound	RT of STANDARDS					MEAN	RT WINDOW(MIN)	
	0.005	0.020	0.050	0.070	0.090	RT	FROM	TO
TCMX*	8.51	8.52	8.53	8.53	8.53	8.53	8.46	8.60
alpha-BHC	11.54	11.55	11.56	11.56	11.58	11.56	11.49	11.63
beta-BHC	14.76	14.76	14.77	14.77	14.77	14.76	14.69	14.83
delta-BHC	15.80	15.80	15.82	15.81	15.83	15.81	15.74	15.88
gamma-BHC	13.44	13.45	13.43	13.46	13.48	13.45	13.38	13.50
Heptachlor	14.63	14.64	14.65	14.65	14.66	14.64	14.54	14.74
Aldrin	16.02	16.03	16.04	16.04	16.05	16.04	15.97	16.11
Heptachlor epoxide	18.63	18.63	18.64	18.64	18.65	18.64	18.57	18.71
Endosulfan I	19.72	19.72	19.74	19.75	19.76	19.74	19.67	19.81
Dieldrin	20.69	20.69	20.70	20.70	20.71	20.70	20.63	20.77
4,4' -DDE	20.50	20.50	20.52	20.51	20.53	20.51	20.44	20.58
Endrin	21.57	21.57	21.58	21.58	21.59	21.58	21.51	21.65
Endosulfan II	22.24	22.24	22.25	22.25	22.25	22.24	22.17	22.31
4,4' -DDD	22.02	22.02	22.03	22.03	22.03	22.03	21.96	22.10
Endosulfan sulfate	23.33	23.33	23.34	23.34	23.34	23.33	23.26	23.40
4,4' -DDT	22.66	22.66	22.67	22.67	22.67	22.67	22.60	22.74
Methoxychlor	24.56	24.56	24.57	24.56	24.56	24.56	24.49	24.63
Endrin ketone	24.76	24.76	24.77	24.77	24.78	24.77	24.70	24.84
Endrin aldehyde	22.96	22.96	22.97	22.97	22.97	22.97	22.90	23.04
alpha-Chlordane	19.72	19.72	19.74	19.75	19.76	19.74	19.67	19.81
gamma-Chlordane	19.25	19.25	19.26	19.26	19.27	19.26	19.19	19.33
DBC**	23.75	23.75	23.77	23.76	23.76	23.76	23.69	23.83

Retention time windows are +/- 0.05 minutes for all compounds that elute before Heptachlor epoxide, +/- 0.07 minutes for all others, except +/- 0.10 minutes for Dibutylchlorendate

* Tetrachloro-m-xylene
** Dibutyl Chlorendate

PESTICIDES
INITIAL CALIBRATION

GC Column: RTX – 5 ID: 30 m x O.53 mm
Date(s) Analyzed: 4/26/97 4/26/97

COMPOUND	CALIBRATION FACTORS Concentration (ppm)					MEAN	% RSD
	0.005	0.02	0.05	0.07	0.09		
TCMX*	1.26E-08	1.22E-08	1.38E-08	1.42E-08	1.69E-08	1.39E-08	13.20
alpha-BHC	1.04E-08	9.04E-09	1.08E-08	1.21E-08	1.50E-08	1.14E-08	19.59
beta-BHC	2.04E-08	1.97E-08	2.34E-08	2.79E-08	2.53E-08	2.33E-08	14.55
delta-BHC	1.17E-08	9.95E-09	1.11E-08	1.38E-08	1.53E-08	1.24E-08	17.26
gamma-BHC	1.05E-08	9.50E-09	1.05E-08	1.19E-08	1.48E-08	1.14E-08	17.91
Heptachlor	1.08E-08	1.07E-08	1.20E-08	1.25E-08	1.48E-08	1.22E-08	13.96
Aldrin	1.13E-08	1.07E-08	1.21E-08	1.28E-08	1.47E-08	1.23E-08	12.48
Heptachlor epoxide	1.21E-08	1.13E-08	1.28E-08	1.32E-08	1.50E-08	1.29E-08	10.75
Endosulfan I	1.31E-08	1.22E-08	1.44E-08	1.60E-08	1.56E-08	1.43E-08	11.34
Dieldrin	1.38E-08	1.24E-08	1.42E-08	1.66E-08	1.583-E-8	1.42E-08	12.09
4,4' -DDE	1.37E-01	1.21E-08	1.29E-08	1.31E-08	1.49E-08	0.02742	223.61
Endrin	1.34E-08	1.23E-08	1.37E-08	1.54E-08	1.58E-08	1.41E-08	10.37
Endosulfan II	1.46E-08	1.33E-08	1.52E-08	1.73E-08	1.71E-08	1.55E-08	11.03
4,4' -DDD	1.75E-08	1.53E-08	1.72E-08	2.02E-08	1.85E-08	1.77E-08	10.24
Endosulfan sulfate	1.60E-08	1.50E-08	1.73E-08	2.08E-08	1.96E-08	1.77E-08	13.65
4,4' -DDT	1.54E-08	1.41E-08	1.59E-08	1.79E-08	1.80E-08	1.63E-08	10.22
Methoxychlor	2.91E-08	2.70E-08	3.17E-08	3.83E-08	3.37E-08	3.19E-08	13.66
Endrin ketone	1.37E-08	1.30E-08	1.55E-08	1.84E-08	1.99E-08	1.61E-08	18.36
Endrin aldehyde	1.71E-08	1.59E-08	1.91E-08	2.15E-08	1.99E-08	1.87E-08	11.96
alpha-Chlordane	1.20E-08	1.16E-08	1.35E-08	1.26E-08	1.47E-08	1.29E-08	9.73
gamma-Chlordane	1.17E-08	1.11E-08	1.28E-08	1.34E-08	1.48E-08	1.28E-08	11.54
DBC**	1.97E-08	1.87E-08	2.09E-08	2.44E-08	2.27E-08	2.13E-08	10.70

% RSD must be less than or equal 20.0 % for all compounds except surrogates, where % RSD must be less than or equal to 30.0 %. Up to two target compounds, but not surrogates , may have % RSD greater than 20.0 % but less than or equal to 30.0 % .

* Tetrachloro-m-xylene
** Dibutyl Chlorendate

PESTICIDES
INITIAL CALIBRATION

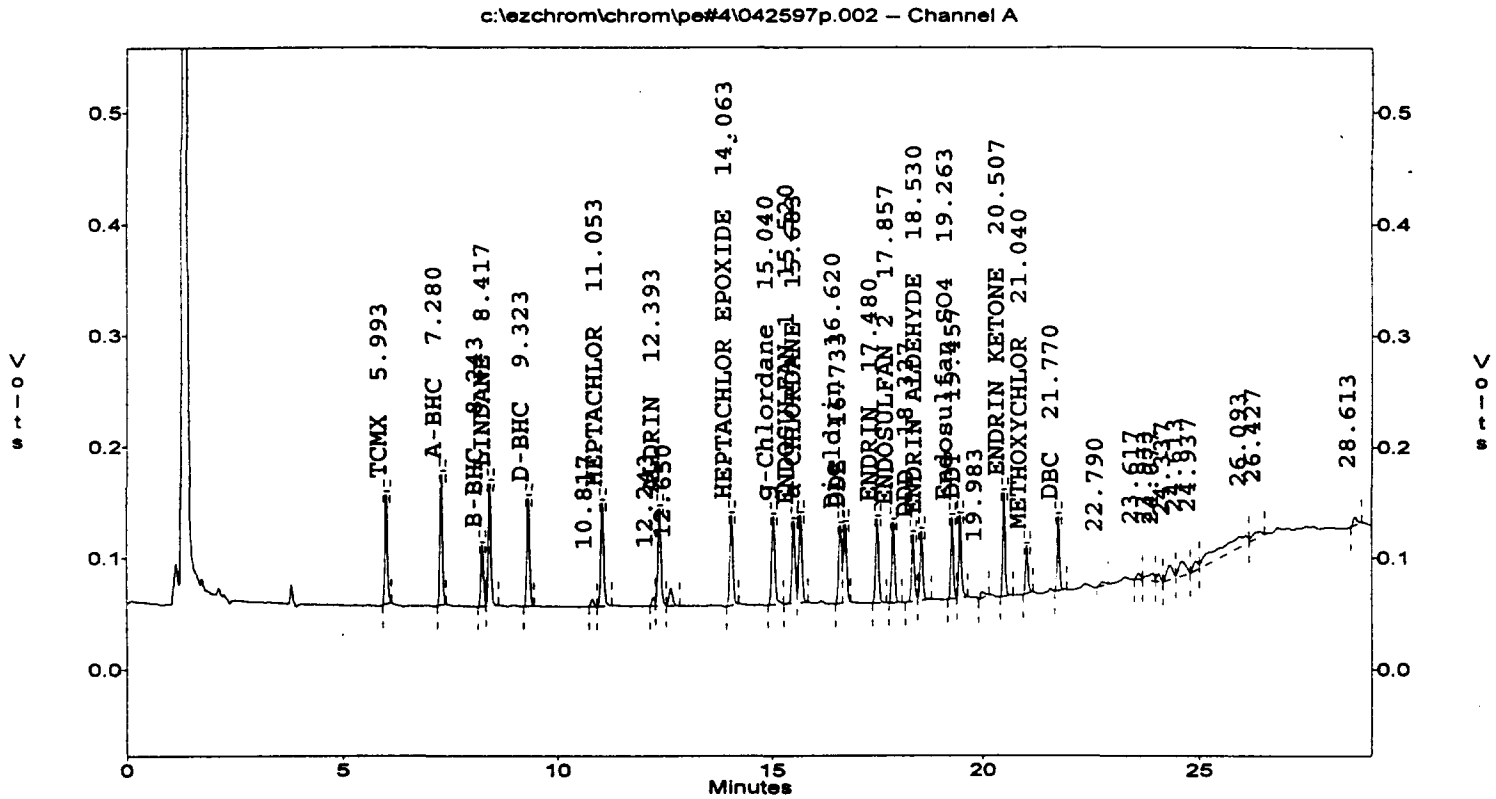
GC Column: RTX – 50 ID: 30 m x O.53 mm
Date(s) Analyzed: 4/26/97 4/26/97

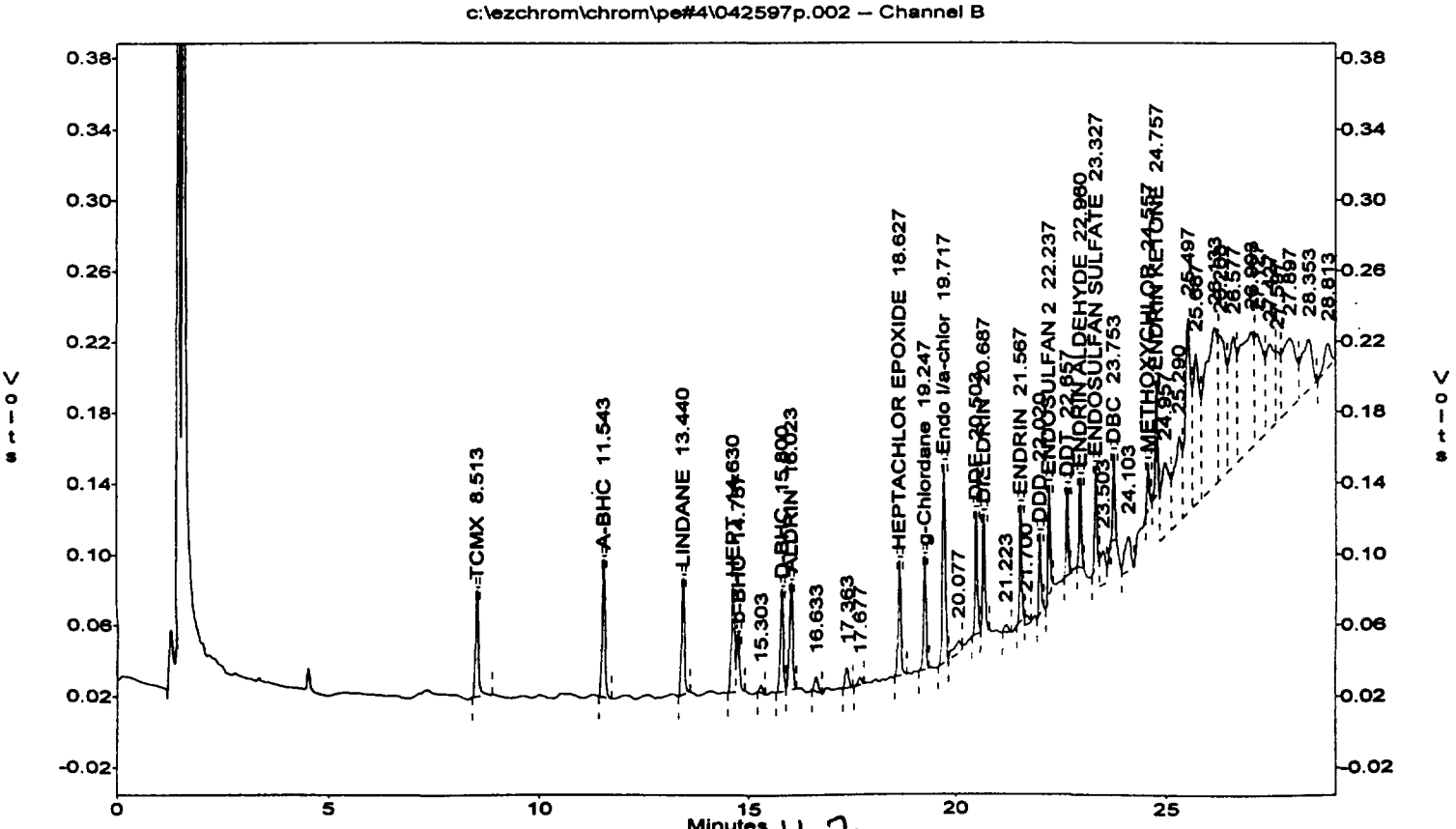
COMPOUND	CALIBRATION FACTORS Concentration (ppm)					MEAN	% RSD
	0.005	0.02	0.05	0.07	0.09		
alpha-BHC	1.33E-08	1.19E-08	1.22E-08	1.28E-08	1.47E-08	1.3E-08	8.54
beta-BHC	3.11E-08	2.92E-08	3.08E-08	3.12E-08	3.20E-08	3.08E-08	3.37
delta-BHC	1.78E-08	1.45E-08	1.49E-08	1.71E-08	1.58E-08	1.6E-08	8.74
gamma-BHC	1.55E-08	1.36E-08	1.38E-08	1.47E-08	1.51E-08	1.45E-08	5.66
Heptachlor	1.59E-08	1.46E-08	1.56E-08	1.71E-08	1.59E-08	1.58E-08	5.66
Aldrin	1.51E-08	1.40E-08	1.38E-08	1.40E-08	1.47E-08	1.43E-08	3.76
Heptachlor epoxide	1.64E-08	1.60E-08	1.66E-08	1.77E-08	1.71E-08	1.68E-08	3.94
Endosulfan I	1.79E-08	1.72E-08	1.88E-08	2.20E-08	2.66E-08	2.05E-08	18.98
Dieldrin	1.83E-08	1.75E-08	1.74E-08	1.86E-08	1.98E-08	1.83E-08	5.17
4,4' -DDE	1.83E-08	1.69E-08	1.76E-08	1.97E-08	2.01E-08	1.85E-08	7.38
Endrin	2.12E-08	1.80E-08	1.80E-08	1.97E-08	2.08E-08	1.95E-08	7.60
Endosulfan II	2.20E-08	1.94E-08	2.07E-08	2.31E-08	2.26E-08	2.16E-08	7.05
4,4' -DDD	3.19E-08	2.43E-08	2.50E-08	2.84E-08	2.56E-08	2.7E-08	11.51
Endosulfan sulfate	2.47E-08	2.12E-08	2.35E-08	2.75E-08	2.50E-08	2.44E-08	9.40
4,4' -DDT	2.96E-08	2.30E-08	2.34E-08	2.67E-08	2.45E-08	2.55E-08	10.77
Methoxychlor	5.23E-08	4.79E-08	4.87E-08	5.76E-08	4.80E-08	5.09E-08	8.17
Endrin ketone	2.17E-08	2.08E-08	2.17E-08	2.51E-08	2.41E-08	2.27E-08	8.02
Endrin aldehyde	2.70E-08	2.48E-08	2.74E-08	3.19E-08	2.87E-08	2.8E-08	9.26
alpha-Chlordane	1.79E-08	1.72E-08	1.88E-08	2.20E-08	2.203E-82	1.9E-08	11.25
gamma-Chlordane	1.80E-08	1.67E-08	1.70E-08	1.82E-08	1.86E-08	1.77E-08	4.53

% RSD must be less than or equal 20.0 % for all compounds except surrogates, where % RSD must be less than or equal to 30.0 %. Up to two target compounds, but not surrogates , may have % RSD greater than 20.0 % but less than or equal to 30.0 % .

* Tetrachloro-m-xylene
** Dibutyl Chlorendate

File : c:\ezchrom\chrom\pe#4\042597p.002
Method : c:\ezchrom\methods\pestpe#4.met
Sample ID : 0.005
Acquired : Apr 26, 1997 07:21:31
Printed : May 08, 1997 11:30:51
User : System





167

File : c:\ezchrom\chrom\pe#4\042597p.002
Sample ID : 0.005

Channel A Results

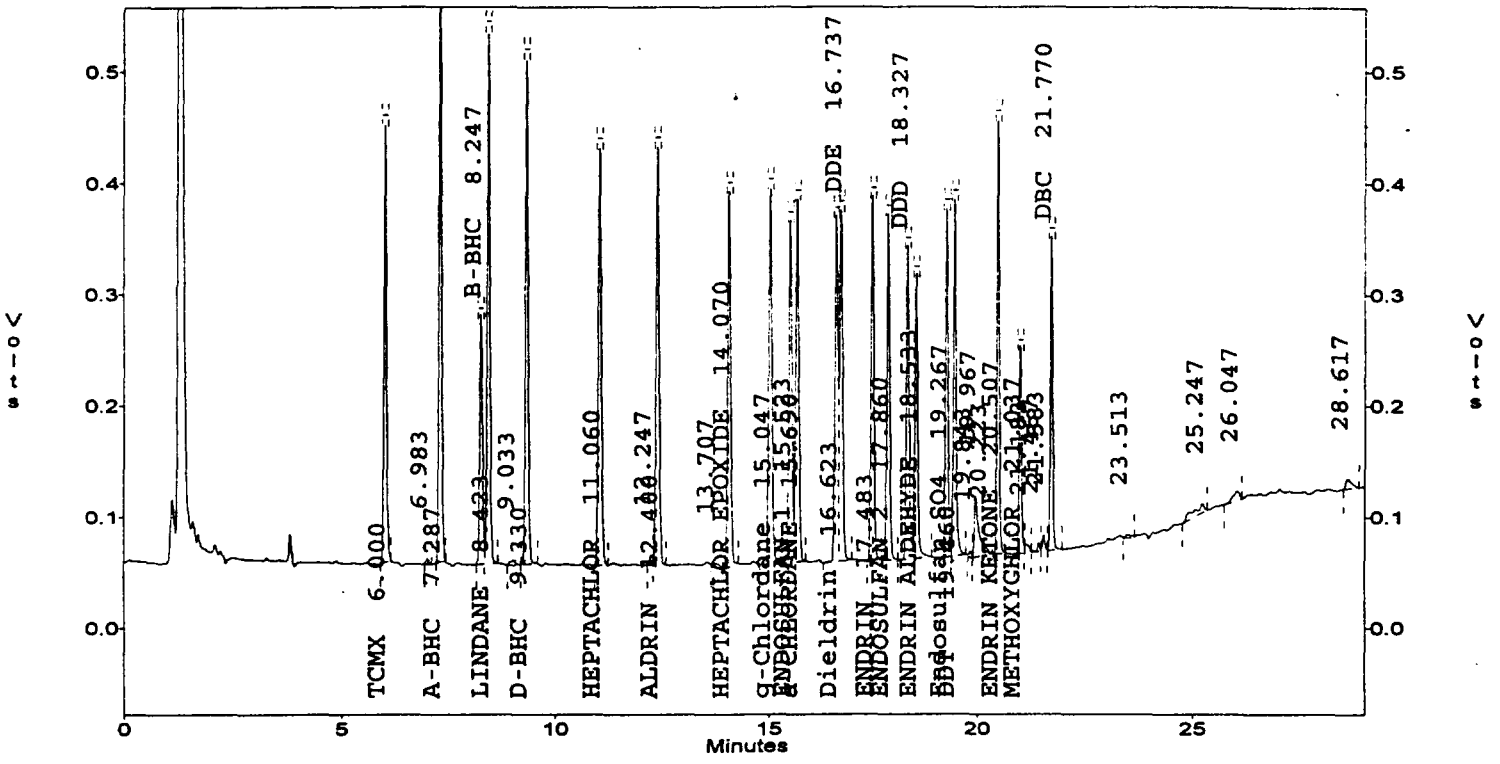
NAME	RT	Area	CONC. ppm
TCMX	5.99	396357	0.00544
A-BHC	7.28	482470	0.00536
B-BHC	8.24	244850	0.00562
LINDANE	8.42	477352	0.00533
D-BHC	9.32	425961	0.00515
	10.82	30718	0.00000
HEPTACHLOR	11.05	465037	0.00557
	12.24	36530	0.00000
ALDRIN	12.39	442390	0.00538
	12.65	96067	0.00000
HEPTACHLOR EPO	14.06	414123	0.00529
g-Chlordane	15.04	428337	0.00541
ENDOSULFAN 1	15.52	382243	0.00540
a-CHLORDANE	15.68	417981	0.00534
Dieldrin	16.62	363273	0.00523
DDE	16.73	364786	0.00484
ENDRIN	17.48	373256	0.00523
ENDOSULFAN 2	17.86	343651	0.00527
DDD	18.33	285304	0.00502
ENDRIN ALDEHYD	18.53	293316	0.00543
Endosulfan SO4	19.26	311713	0.00544
DDT	19.46	324440	0.00523
	19.98	40881	0.00000
ENDRIN KETONE	20.51	364580	0.00568
METHOXYCHLOR	21.04	171751	0.00541
DBC	21.77	253601	0.00535
	22.79	26978	0.00000
	23.62	34501	0.00000
	23.93	75706	0.00000
	24.08	37996	0.00000
	24.34	126582	0.00000
	24.61	155524	0.00000
	24.94	65333	0.00000
	26.09	576975	0.00000
	26.43	86255	0.00000
	28.61	48881	0.00000

Channel B Results

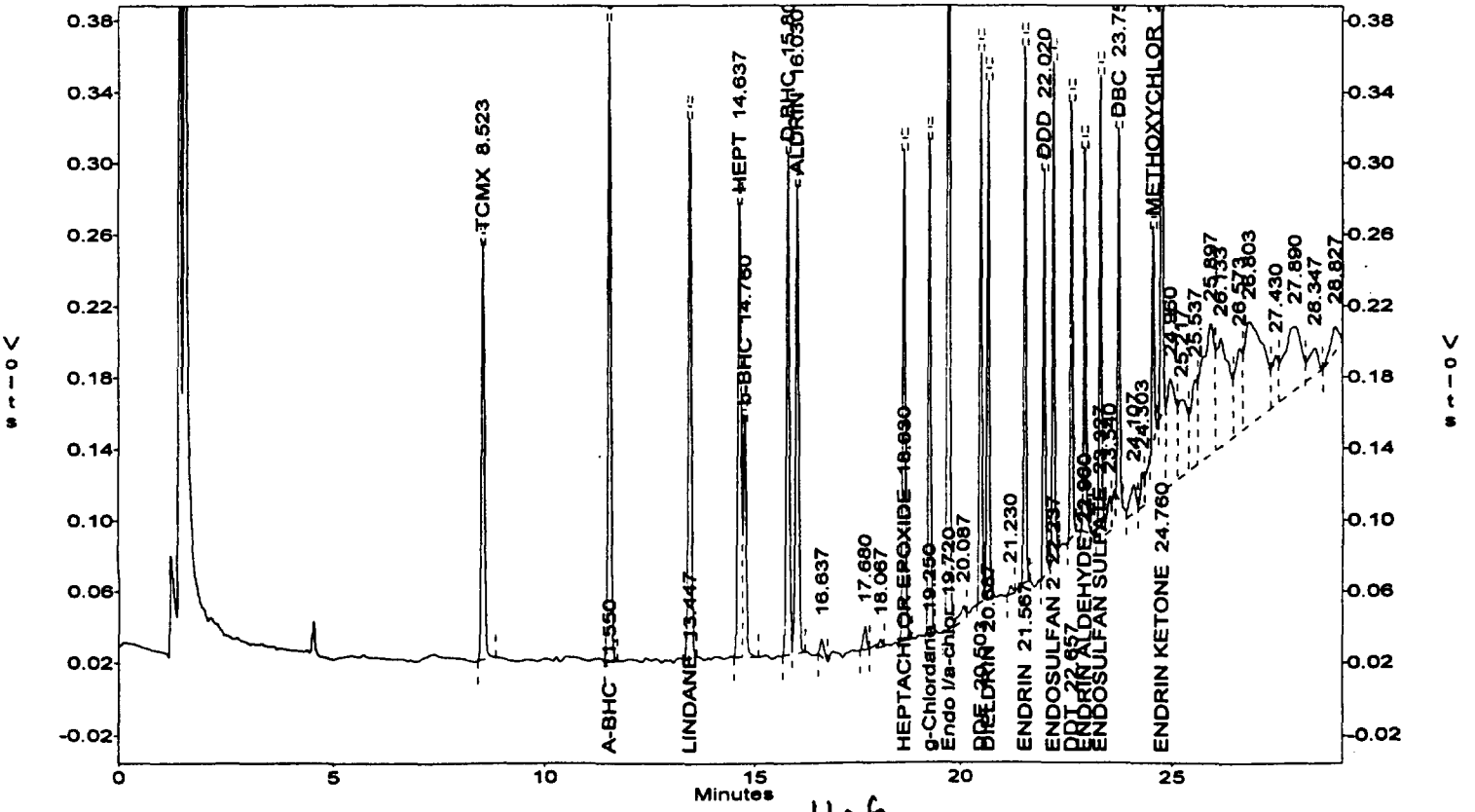
NAME	RT	Area	CONC. ppm
TCMX	8.51	303858	0.00575
A-BHC	11.54	375639	0.00485
LINDANE	13.44	323110	0.00468
HEPT	14.63	314707	0.00497
b-BHC	14.76	160706	0.00495
	15.30	21314	0.00000
D-BHC	15.80	280923	0.00447
ALDRIN	16.02	332243	0.00474
	16.63	51749	0.00000
	17.36	68332	0.00000
	17.68	25260	0.00000
HEPTACHLOR EPO	18.63	305716	0.00517
g-Chlordane	19.25	278110	0.00491
Endo I/a-chlor	19.72	558595	0.01117
	20.08	89540	0.00000
DDE	20.50	272696	0.00503
DIELDRIN	20.69	272893	0.00499
	21.22	27466	0.00000
ENDRIN	21.57	236084	0.00459
	21.70	37228	0.00000
DDD	22.02	156994	0.00420
ENDOSULFAN 2	22.24	227059	0.00488
DDT	22.66	168670	0.00425
ENDRIN ALDEHYD	22.96	185207	0.00514
ENDOSULFAN SUL	23.33	202832	0.00495
	23.50	173155	0.00000
DBC	23.75	169907	0.00494
	24.10	195604	0.00000
METHOXYCHLOR	24.56	95618	0.00484
ENDRIN KETONE	24.76	230055	0.00519
	24.96	540137	0.00000
	25.29	609714	0.00000
	25.50	1052916	0.00000
	25.69	893331	0.00000
	26.13	1814665	0.00000
	26.26	1003237	0.00000
	26.58	931364	0.00000
	26.99	1512600	0.00000
	27.13	851692	0.00000
	27.43	654745	0.00000
	27.60	271116	0.00000
	27.90	896587	0.00000
	28.35	511882	0.00000
	28.81	154998	0.00000

File : c:\ezchrom\chrom\pe#4\042597p.003
Method : c:\ezchrom\methods\pestpe#4.met
Sample ID : 0.02
Acquired : Apr 26, 1997 07:56:35
Printed : May 08, 1997 11:31:00
User : System

c:\ezchrom\chrom\pe#4\042597p.003 -- Channel A



c:\ezchrom\chrom\pe#4\042597p.003 -- Channel B



169

File : c:\ezchrom\chrom\pe#4\042597p.003
Sample ID : 0.02

Channel A Results

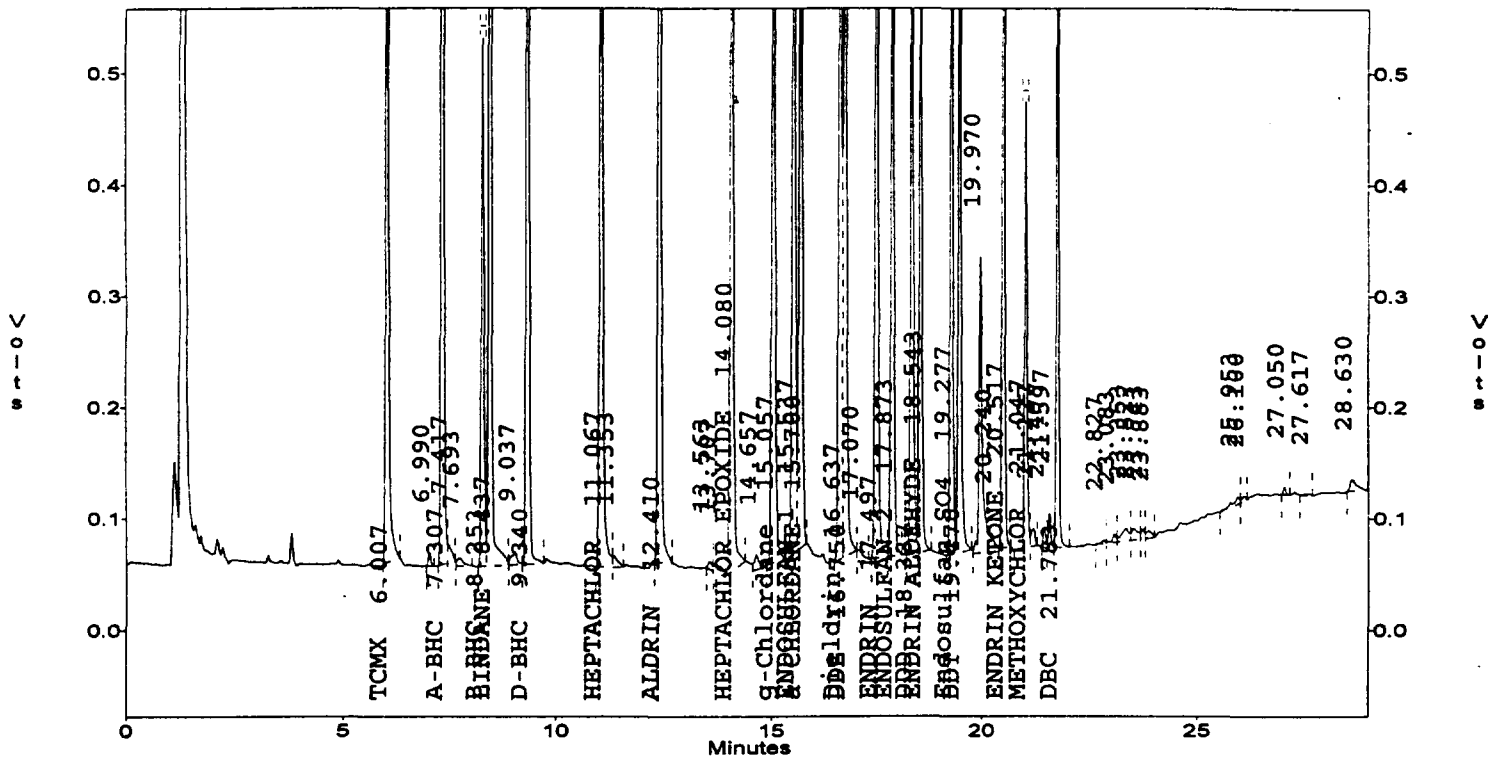
NAME	RT	Area	CONC. ppm
TCMX	6.00	1644640	0.02258
	6.98	20300	0.00000
A-BHC	7.29	2213256	0.02461
B-BHC	8.25	1014224	0.02328
LINDANE	8.42	2105880	0.02351
	9.03	39271	0.00000
D-BHC	9.33	2009902	0.02429
HEPTACHLOR	11.06	1873872	0.02245
	12.25	40458	0.00000
ALDRIN	12.40	1863976	0.02268
	13.71	48374	0.00000
HEPTACHLOR EPO	14.07	1766251	0.02256
g-Chlordane	15.05	1804760	0.02280
ENDOSULFAN 1	15.52	1636543	0.02310
a-CHLORDANE	15.69	1724677	0.02201
Dieldrin	16.62	1608282	0.02317
DDE	16.74	1656801	0.02197
ENDRIN	17.48	1625757	0.02276
ENDOSULFAN 2	17.86	1504405	0.02307
DDD	18.33	1310064	0.02303
ENDRIN ALDEHYD	18.53	1255414	0.02322
Endosulfan SO4	19.27	1337927	0.02336
DDT	19.46	1415689	0.02282
	19.84	24249	0.00000
	19.97	399287	0.00000
	20.22	29955	0.00000
ENDRIN KETONE	20.51	1534379	0.02390
METHOXYCHLOR	21.04	742164	0.02337
	21.18	48403	0.00000
	21.47	33487	0.00000
	21.58	56934	0.00000
DBC	21.77	1067595	0.02252
	23.51	27881	0.00000
	25.25	152536	0.00000
	26.05	93344	0.00000
	28.62	87787	0.00000

Channel B Results

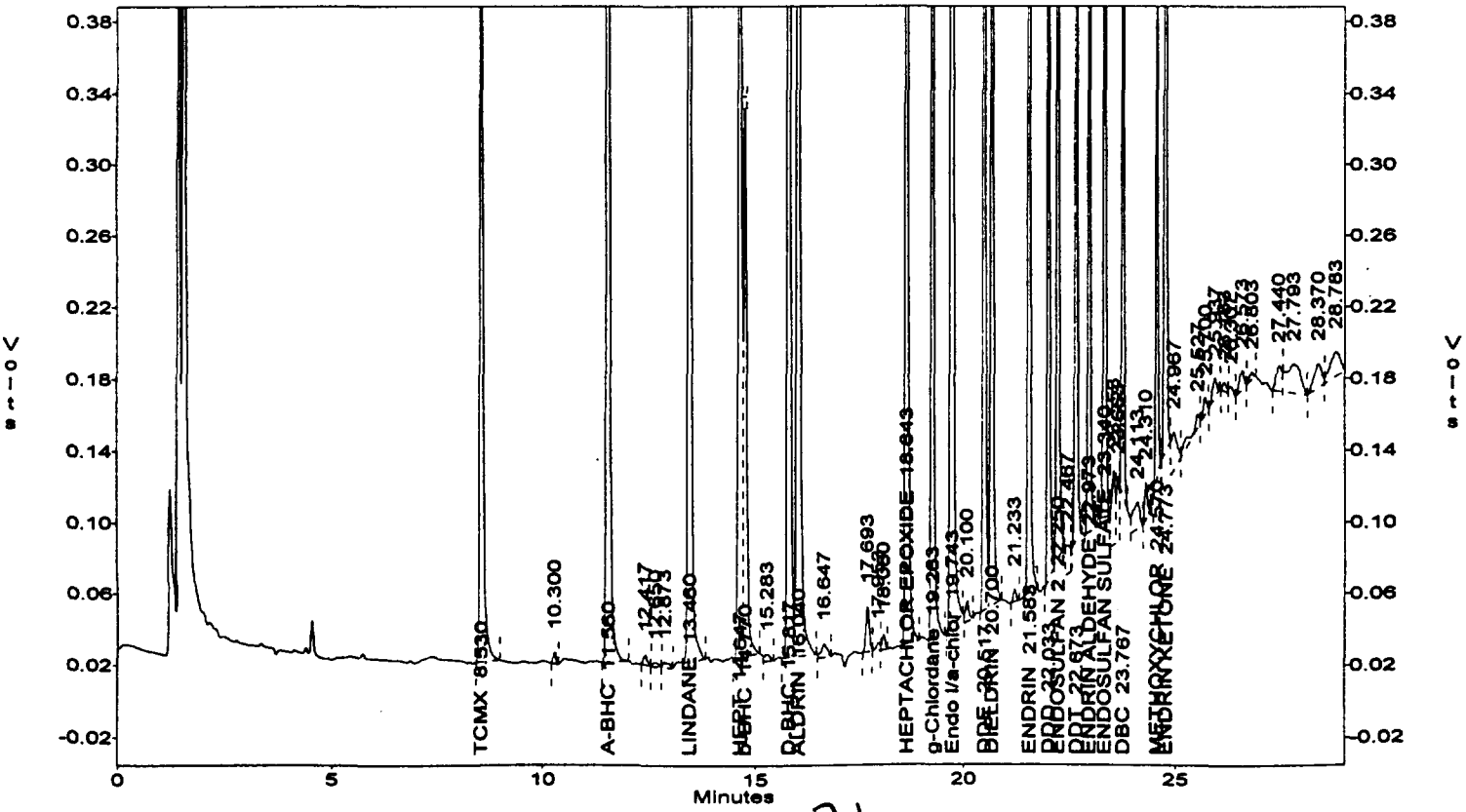
NAME	RT	Area	CONC. ppm
TCMX	8.52	1123924	0.02128
A-BHC	11.55	1685195	0.02174
LINDANE	13.45	1472759	0.02134
HEPT	14.64	1369503	0.02161
b-BHC	14.76	686048	0.02113
D-BHC	15.81	1375629	0.02189
ALDRIN	16.03	1433059	0.02046
	16.64	66935	0.00000
	17.68	71316	0.00000
	18.07	35324	0.00000
HEPTACHLOR EPO	18.63	1250013	0.02114
g-Chlordane	19.25	1196579	0.02113
Endo I/a-chlor	19.72	2323643	0.04644
	20.09	88933	0.00000
DDE	20.50	1186792	0.02188
DIELDRIN	20.69	1142599	0.02089
	21.23	29255	0.00000
ENDRIN	21.57	1110292	0.02160
DDD	22.02	823470	0.02204
ENDOSULFAN 2	22.24	1030985	0.02214
DDT	22.66	870131	0.02195
ENDRIN ALDEHYD	22.96	805513	0.02237
ENDOSULFAN SUL	23.33	909501	0.02219
	23.54	130090	0.00000
DBC	23.75	734590	0.02137
	24.11	159838	0.00000
	24.30	104530	0.00000
METHOXYCHLOR	24.56	417628	0.02116
ENDRIN KETONE	24.76	962268	0.02171
	24.96	855385	0.00000
	25.22	612422	0.00000
	25.54	504228	0.00000
	25.90	1515837	0.00000
	26.13	1214966	0.00000
	26.57	566095	0.00000
	26.80	1768168	0.00000
	27.43	292008	0.00000
	27.89	1017643	0.00000
	28.35	243495	0.00000
	28.83	188949	0.00000

File : c:\ezchrom\chrom\pe#4\042597p.004
Method : c:\ezchrom\methods\pestpe#4.met
Sample ID : 0.05
Acquired : Apr 26, 1997 08:31:41
Printed : May 08, 1997 11:31:09
User : System

c:\ezchrom\chrom\pe#4\042597p.004 -- Channel A



c:\ezchrom\chrom\pe#4\042597p.004 -- Channel B



171

File : c:\ezchrom\chrom\pe#4\042597p.004
Sample ID : 0.05

Channel A Results

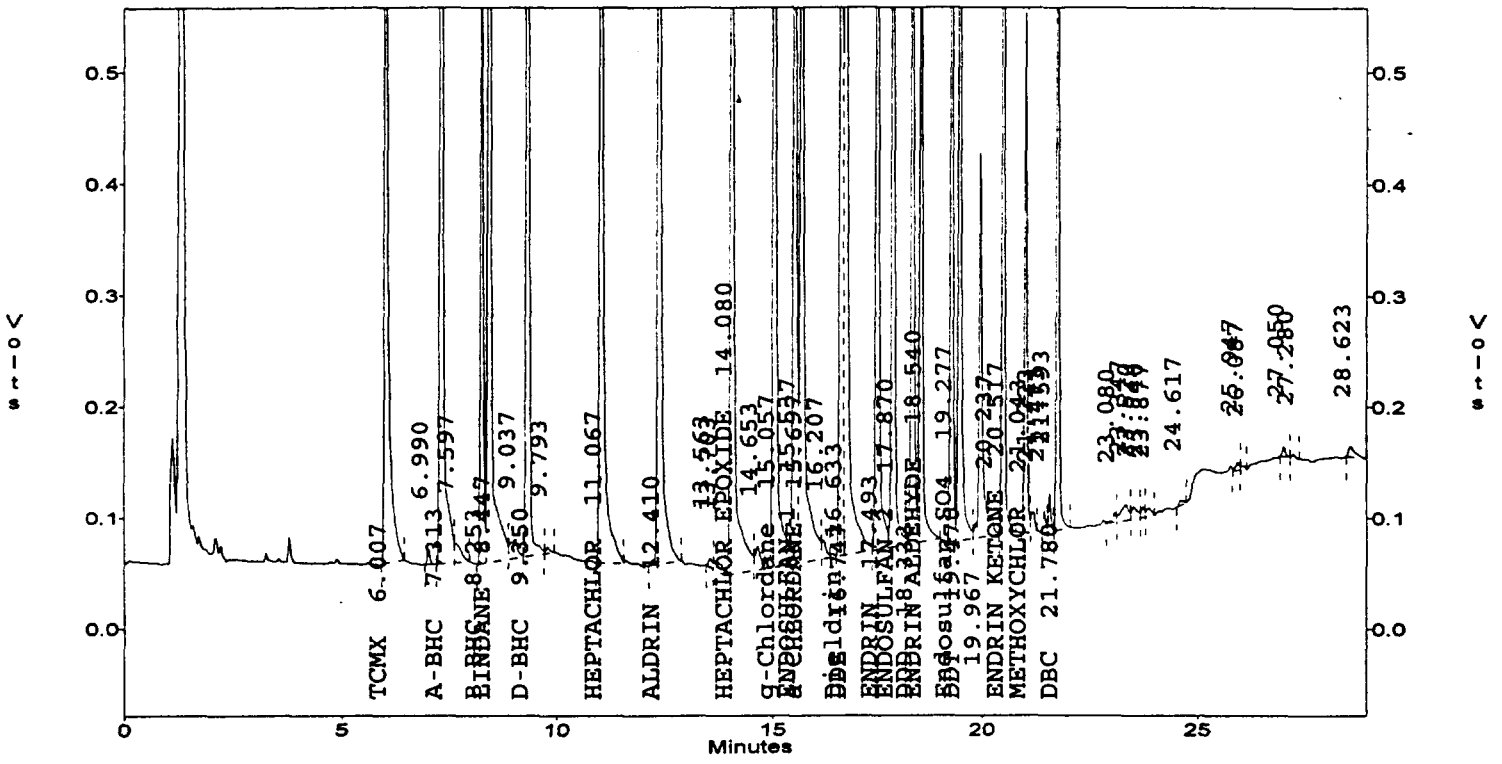
NAME	RT	Area	CONC. ppm
TCMX	6.01	3634616	0.04990
	6.99	49519	0.00000
A-BHC	7.31	4636759	0.05155
	7.42	104074	0.00000
	7.69	69788	0.00000
B-BHC	8.25	2138960	0.04910
LINDANE	8.44	4759379	0.05314
	9.04	113818	0.00000
D-BHC	9.34	4498124	0.05437
HEPTACHLOR	11.07	4175359	0.05001
	11.35	82536	0.00000
ALDRIN	12.41	4124311	0.05019
	13.56	42667	0.00000
	13.71	93810	0.00000
HEPTACHLOR EPO	14.08	3903339	0.04985
	14.66	100885	0.00000
g-Chlordane	15.06	3897019	0.04923
ENDOSULFAN 1	15.54	3468096	0.04896
a-CHLORDANE	15.70	3709388	0.04735
Dieldrin	16.64	3521942	0.05074
DDE	16.75	3881505	0.05147
	17.07	97183	0.00000
ENDRIN	17.50	3654406	0.05116
ENDOSULFAN 2	17.87	3292675	0.05049
DDD	18.34	2913917	0.05123
ENDRIN ALDEHYD	18.54	2612670	0.04832
Endosulfan SO4	19.28	2895977	0.05055
DDT	19.47	3152955	0.05082
	19.97	1509399	0.00000
	20.24	123778	0.00000
ENDRIN KETONE	20.52	3220230	0.05015
METHOXYCHLOR	21.05	1577334	0.04966
	21.23	100662	0.00000
	21.48	70789	0.00000
	21.60	111903	0.00000
DBC	21.78	2389853	0.05042
	22.83	20573	0.00000
	23.08	42878	0.00000
	23.35	138519	0.00000
	23.53	107285	0.00000
	23.74	46360	0.00000
	23.88	59687	0.00000
	25.95	68240	0.00000
	26.10	31151	0.00000
	27.05	28511	0.00000
	27.62	21553	0.00000
	28.63	110427	0.00000

Channel B Results

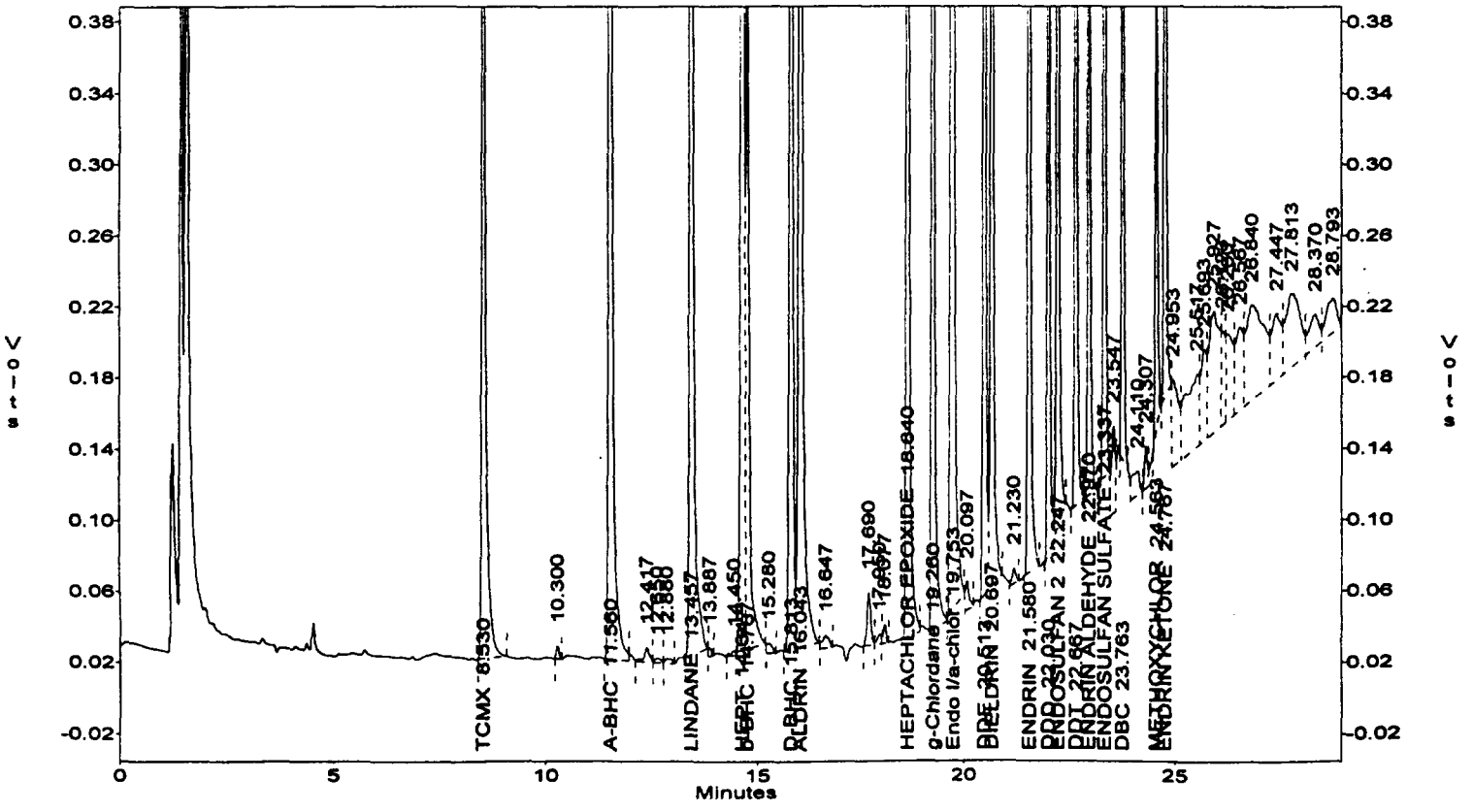
NAME	RT	Area	CONC. ppm
TCMX	8.53	2568346	0.04862
	10.30	27736	0.00000
A-BHC	11.56	4103136	0.05294
	12.42	33969	0.00000
	12.65	21527	0.00000
	12.87	29901	0.00000
LINDANE	13.46	3629461	0.05258
HEPT	14.65	3211852	0.05068
b-BHC	14.77	1625511	0.05007
	15.28	35066	0.00000
D-BHC	15.82	3365396	0.05356
ALDRIN	16.04	3631044	0.05184
	16.65	73185	0.00000
	17.69	146327	0.00000
	17.95	26666	0.00000
	18.08	44690	0.00000
HEPTACHLOR EPO	18.64	3014888	0.05099
g-Chlordane	19.26	2944361	0.05199
Endo I/a-chlor	19.74	5328450	0.10650
	20.10	70036	0.00000
DDE	20.52	2838239	0.05232
DIELDRIN	20.70	2868447	0.05245
	21.23	33468	0.00000
ENDRIN	21.58	2771895	0.05392
DDD	22.03	1997020	0.05346
ENDOSULFAN 2	22.25	2420874	0.05198
	22.47	118709	0.00000
DDT	22.67	2134279	0.05384
ENDRIN ALDEHYD	22.97	1825432	0.05069
ENDOSULFAN SUL	23.34	2122841	0.05179
	23.55	262149	0.00000
	23.66	173325	0.00000
DBC	23.77	1762475	0.05127
	24.11	174748	0.00000
	24.31	87371	0.00000
METHOXYCHLOR	24.57	1025995	0.05198
ENDRIN KETONE	24.77	2303366	0.05198
	24.97	197835	0.00000
	25.53	107925	0.00000
	25.70	56779	0.00000
	25.94	73422	0.00000
	26.15	28291	0.00000
	26.31	29389	0.00000
	26.57	84745	0.00000
	26.80	28216	0.00000
	27.44	127280	0.00000
	27.79	387750	0.00000
	28.37	169369	0.00000
	28.78	233002	0.00000

File : c:\ezchrom\chrom\pe#4\042597p.005
Method : c:\ezchrom\methods\pestpe#4.met
Sample ID : 0.07
Acquired : Apr 26, 1997 09:06:47
Printed : May 08, 1997 11:31:18
User : System

c:\ezchrom\chrom\pe#4\042597p.005 -- Channel A



c:\ezchrom\chrom\pe#4\042597p.005 -- Channel B



File : c:\ezchrom\chrom\pe#4\042597p.005
Sample ID : 0.07

Channel A Results

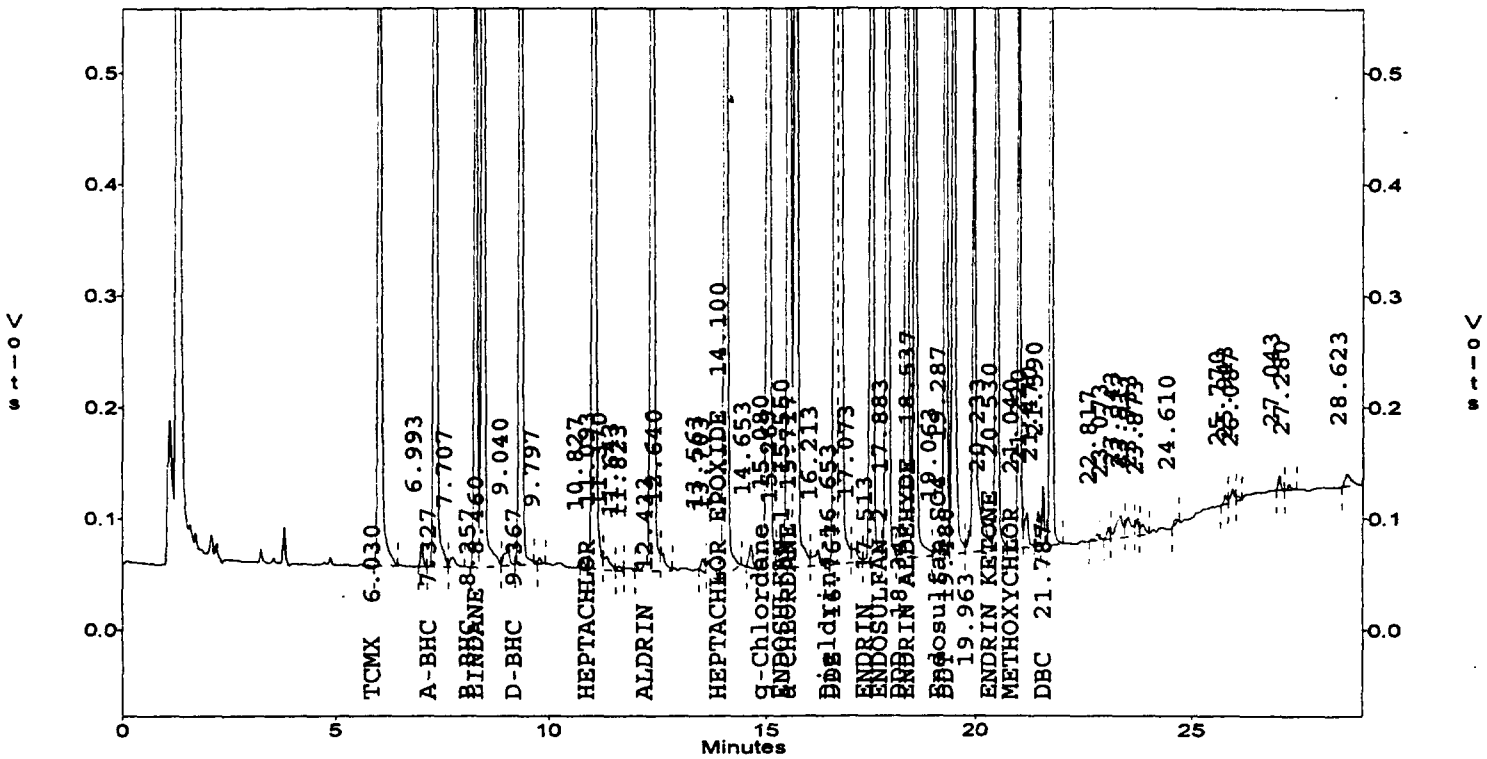
NAME	RT	Area	CONC. ppm
TCMX	6.01	4943440	0.06787
	6.99	59330	0.00000
A-BHC	7.31	5805081	0.06454
	7.60	187288	0.00000
B-BHC	8.25	2511181	0.05764
LINDANE	8.45	5887214	0.06573
	9.04	205696	0.00000
D-BHC	9.35	5076985	0.06137
	9.79	35548	0.00000
HEPTACHLOR	11.07	5584639	0.06690
ALDRIN	12.41	5492339	0.06684
	13.56	47571	0.00000
	13.70	107836	0.00000
HEPTACHLOR EPO	14.08	5291889	0.06759
	14.65	193450	0.00000
g-Chlordane	15.06	5209194	0.06581
ENDOSULFAN 1	15.54	4373632	0.06174
a-CHLORDANE	15.70	5578925	0.07121
	16.21	118537	0.00000
Dieldrin	16.63	4224799	0.06087
DDE	16.75	5360127	0.07108
ENDRIN	17.49	4542497	0.06359
ENDOSULFAN 2	17.87	4040802	0.06196
DDD	18.33	3462018	0.06087
ENDRIN ALDEHYD	18.54	3254298	0.06019
Endosulfan SO4	19.28	3368635	0.05880
DDT	19.47	3910839	0.06303
	19.97	1834667	0.00000
	20.24	90633	0.00000
ENDRIN KETONE	20.52	3797753	0.05914
METHOXYCHLOR	21.04	1829203	0.05759
	21.22	125089	0.00000
	21.47	73860	0.00000
	21.59	126944	0.00000
DBC	21.78	2867932	0.06050
	23.08	47287	0.00000
	23.35	184801	0.00000
	23.52	106431	0.00000
	23.74	49315	0.00000
	23.88	66912	0.00000
	24.62	31510	0.00000
	25.95	45940	0.00000
	26.09	26718	0.00000
	27.05	47774	0.00000
	27.28	20007	0.00000
	28.62	99031	0.00000

Channel B Results

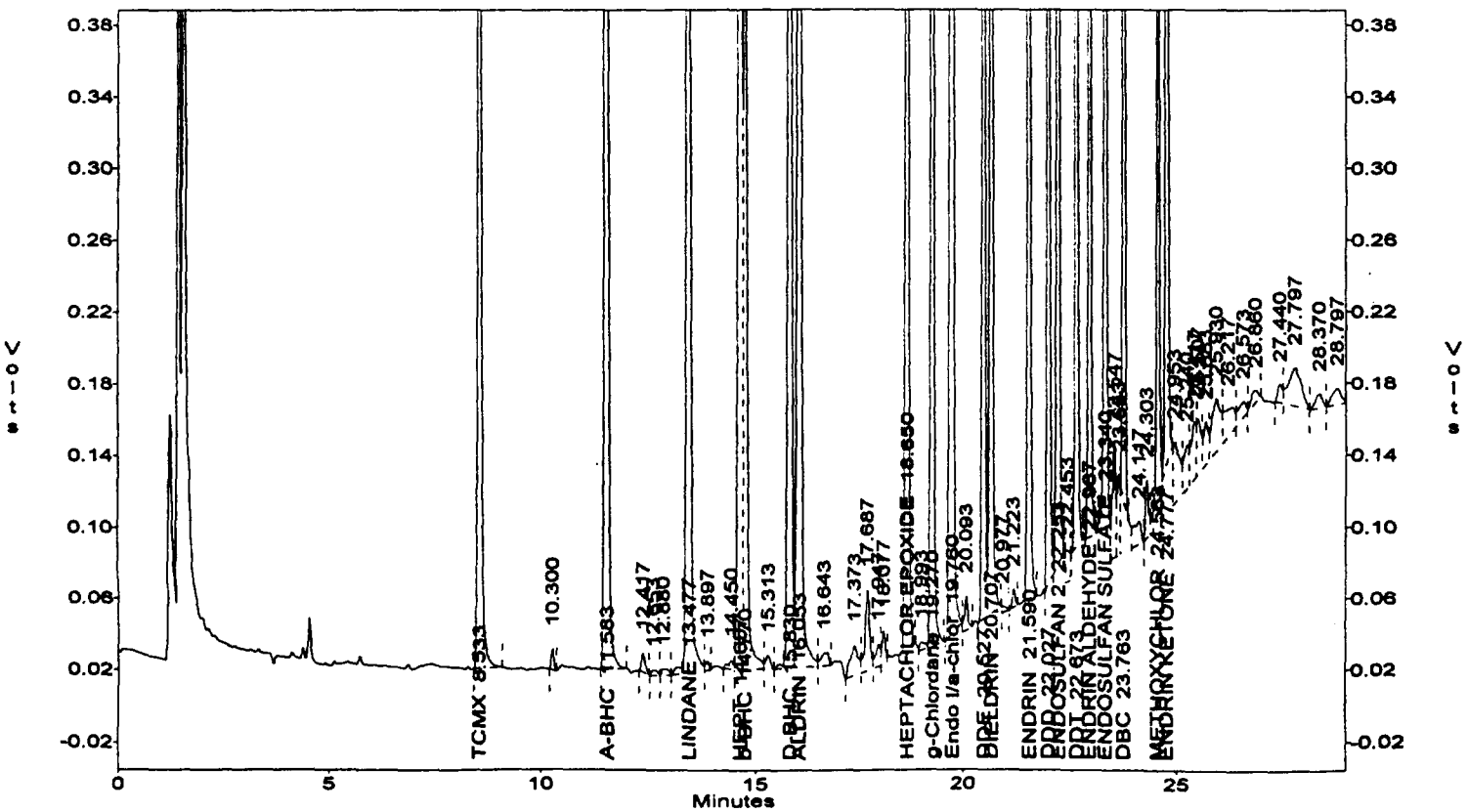
NAME	RT	Area	CONC. ppm
TCMX	8.53	3412752	0.06460
	10.30	33565	0.00000
A-BHC	11.56	5458253	0.07043
	12.42	72002	0.00000
	12.65	26590	0.00000
	12.88	30829	0.00000
LINDANE	13.46	4763096	0.06901
	13.89	24016	0.00000
	14.45	21904	0.00000
HEPT	14.65	4092498	0.06457
b-BHC	14.77	2246309	0.06919
	15.28	49143	0.00000
D-BHC	15.81	4102982	0.06530
ALDRIN	16.04	4986401	0.07120
	16.65	80668	0.00000
	17.69	184714	0.00000
	17.95	35002	0.00000
	18.08	52707	0.00000
HEPTACHLOR EPO	18.64	3961004	0.06699
g-Chlordane	19.26	3848591	0.06796
Endo I/a-chlor	19.75	6354248	0.12701
	20.10	104106	0.00000
DDE	20.51	3561908	0.06566
DIELDRIN	20.70	3762866	0.06880
	21.23	53054	0.00000
ENDRIN	21.58	3550189	0.06906
DDD	22.03	2462199	0.06591
ENDOSULFAN 2	22.25	3026738	0.06499
DDT	22.67	2625146	0.06622
ENDRIN ALDEHYD	22.97	2197155	0.06102
ENDOSULFAN SUL	23.34	2546178	0.06211
	23.55	301273	0.00000
DBC	23.76	2148071	0.06249
	24.11	176243	0.00000
	24.31	111300	0.00000
METHOXYCHLOR	24.56	1214496	0.06153
ENDRIN KETONE	24.77	2790935	0.06298
	24.95	520480	0.00000
	25.52	946637	0.00000
	25.69	502043	0.00000
	25.93	1194974	0.00000
	26.12	359181	0.00000
	26.26	542023	0.00000
	26.57	614096	0.00000
	26.84	1616997	0.00000
	27.45	595431	0.00000
	27.81	1012568	0.00000
	28.37	314210	0.00000
	28.79	355178	0.00000

File : c:\ezchrom\chrom\pe#4\042597p.006
Method : c:\ezchrom\methods\pestpe#4.met
Sample ID : 0.09
Acquired : Apr 26, 1997 09:41:53
Printed : May 08, 1997 11:31:27
User : System

c:\ezchrom\chrom\pe#4\042597p.006 -- Channel A



c:\ezchrom\chrom\pe#4\042597p.006 -- Channel B



File : c:\ezchrom\chrom\pe#4\042597p.006
Sample ID : 0.09

Channel A Results

NAME	RT	Area	CONC. ppm
TCMX	6.03	5340871	0.07333
	6.99	90187	0.00000
A-BHC	7.33	6019057	0.06692
	7.71	77244	0.00000
B-BHC	8.26	3553911	0.08158
LINDANE	8.46	6100099	0.06811
	9.04	144840	0.00000
D-BHC	9.37	5892426	0.07122
	9.80	26733	0.00000
	10.83	27384	0.00000
HEPTACHLOR	11.09	6068550	0.07269
	11.37	125843	0.00000
	11.64	29655	0.00000
	11.82	29913	0.00000
ALDRIN	12.43	6141505	0.07474
	12.64	126723	0.00000
	13.56	66396	0.00000
	13.70	140021	0.00000
HEPTACHLOR EPO	14.10	6002349	0.07666
	14.65	118773	0.00000
g-Chlordane	15.08	6076188	0.07676
	15.27	84728	0.00000
ENDOSULFAN 1	15.55	5767212	0.08141
a-CHLORDANE	15.72	6120475	0.07812
	16.21	137232	0.00000
Dieldrin	16.65	5685827	0.08192
DDE	16.77	6036529	0.08004
	17.07	121789	0.00000
ENDRIN	17.51	5690081	0.07966
ENDOSULFAN 2	17.88	5271248	0.08082
DDD	18.34	4868615	0.08560
ENDRIN ALDEHYD	18.54	4513605	0.08348
	19.06	28354	0.00000
Endosulfan SO4	19.29	4602906	0.08035
DDT	19.48	5006987	0.08070
	19.96	2869880	0.00000
	20.23	201074	0.00000
ENDRIN KETONE	20.53	4749148	0.07396
METHOXYCHLOR	21.04	2670295	0.08407
	21.22	204396	0.00000
	21.47	137861	0.00000
	21.59	203953	0.00000
DBC	21.79	3972654	0.08381
	22.82	37174	0.00000
	23.07	48101	0.00000
	23.34	228283	0.00000
	23.52	163441	0.00000
	23.73	75471	0.00000
	23.87	70868	0.00000
	24.61	22600	0.00000
	25.77	38172	0.00000
	25.94	68620	0.00000
	26.09	23198	0.00000
	27.04	52416	0.00000
	27.28	25872	0.00000
	28.62	113213	0.00000

Channel B Results

NAME	RT	Area	CONC. ppm
TCMX	8.53	4234024	0.08015
	10.30	52777	0.00000
A-BHC	11.58	6127255	0.07906
	12.42	64795	0.00000
	12.65	29444	0.00000
	12.88	37973	0.00000
LINDANE	13.48	5959317	0.08634
	13.90	30124	0.00000
	14.45	40950	0.00000
HEPT	14.66	5648706	0.08913
b-BHC	14.77	2815516	0.08672
	15.31	58625	0.00000
D-BHC	15.83	5692925	0.09061
ALDRIN	16.05	6140993	0.08768
	16.64	92017	0.00000
	17.37	221876	0.00000
	17.69	348241	0.00000
	17.95	97805	0.00000
	18.08	110274	0.00000
HEPTACHLOR EPO	18.65	4960293	0.08389
	18.99	43388	0.00000
g-Chlordane	19.27	4846613	0.08558
Endo I/a-chlor	19.76	6755660	0.13503
	20.09	112927	0.00000
DDE	20.53	4472858	0.08246
DIELDRIN	20.71	4556856	0.08332
	20.98	22830	0.00000
	21.22	49182	0.00000
ENDRIN	21.59	4333670	0.08430
DDD	22.03	3517920	0.09418
ENDOSULFAN 2	22.25	3981549	0.08549
	22.45	115939	0.00000
DDT	22.67	3671135	0.09260
ENDRIN ALDEHYD	22.97	3135238	0.08707
ENDOSULFAN SUL	23.34	3607908	0.08801
	23.55	352497	0.00000
	23.65	213251	0.00000
DBC	23.76	3169996	0.09222
	24.12	165869	0.00000
	24.30	154287	0.00000
METHOXYCHLOR	24.56	1873524	0.09492
ENDRIN KETONE	24.78	3736868	0.08432
	24.95	344672	0.00000
	25.24	210666	0.00000
	25.42	265707	0.00000
	25.51	224426	0.00000
	25.68	182413	0.00000
	25.93	414875	0.00000
	26.22	272952	0.00000
	26.57	126766	0.00000
	26.86	84309	0.00000
	27.44	78676	0.00000
	27.80	451568	0.00000
	28.37	93786	0.00000
	28.80	139793	0.00000

Continuing Calibration
Pesticides (PCB)

PESTICIDES
CALIBRATION VERIFICATION

Concentration: 0.05 µg/ml
Date Analyzed: 4/26/97
Time Analyzed: 10:16

GC Column (1): RTX – 5 ID: 30 m x 0.53mm
Initial Calibration Date(s): 4/26/97

COMPOUNDS	RT	RT Window		Calculated Amount (ng)	Known Amount (ng)	RPD
		From	To			
alpha-BHC	7.31	7.26	7.36	48.5	50.0	5.00
beta-BHC	8.26	8.21	8.31	45.3	50.0	-9.86
gamma-BHC	8.44	8.39	8.49	53.3	50.0	6.39
Endrin	17.50	17.43	17.57	51.0	50.0	1.98
4,4'-DDT	19.48	19.41	19.55	49.4	50.0	-1.21
Methoxychlor	21.05	20.98	21.12	50.9	50.0	1.78

4,4'-DDT % breakdown (1) : 0.00 Endrin % breakdown (1) : 0.00
Combined % breakdown (1) : 0.00

GC Column (2) : RTX - 50 ID : 30 m x 0.53 mm
Initial Calibration Date(s) : 4/26/97

COMPOUNDS	RT	RT Window		Calculated Amount (ng)	Known Amount (ng)	RPD
		From	To			
alpha-BHC	11.57	11.52	11.62	53.7	50.0	7.14
gamma-BHC	13.47	13.42	13.52	53.4	50.0	6.58
beta-BHC	14.78	14.73	14.83	52.1	50.0	4.11
Endrin	21.58	21.51	21.65	52.3	50.0	4.50
4,4'-DDT	22.67	22.60	22.74	50.4	50.0	0.80
Methoxychlor	24.57	24.50	24.64	48.2	50.0	-3.67

4,4'-DDT % breakdown (2) : 0.00 Endrin % breakdown (2) : 0.00
Combined % breakdown (2) : 0.00

PESTICIDES
CALIBRATION VERIFICATION

Concentration: 0.05 µg/ml
Date Analyzed: 4/26/97
Time Analyzed: 17:52

GC Column (1): RTX – 5 ID: 30 m x 0.53mm
Initial Calibration Date(s): 4/26/97

COMPOUNDS	RT	RT Window		Calculated Amount (ng)	Known Amount (ng)	RPD
		From	To			
Tetrachloro-m-xylene	6.01	5.96	6.06	51.6	50.0	3.15
alpha-BHC	7.31	7.26	7.36	51.9	50.0	3.73
beta-BHC	8.26	8.21	8.31	43.8	50.0	-13.22
gamma-BHC	8.43	8.38	8.48	52.9	50.0	5.64
Endrin	17.50	17.43	17.57	49.3	50.0	-1.41
4,4'-DDT	19.47	19.40	19.54	50.8	50.0	1.59
Methoxychlor	21.05	20.98	21.12	46.9	50.0	-6.40
Dibutyl Chlorendate	21.78	21.71	21.85	48.0	50.0	-4.08

4,4'-DDT % breakdown (1) : 0.00 Endrin % breakdown (1) : 0.00
Combined % breakdown (1) : 0.00

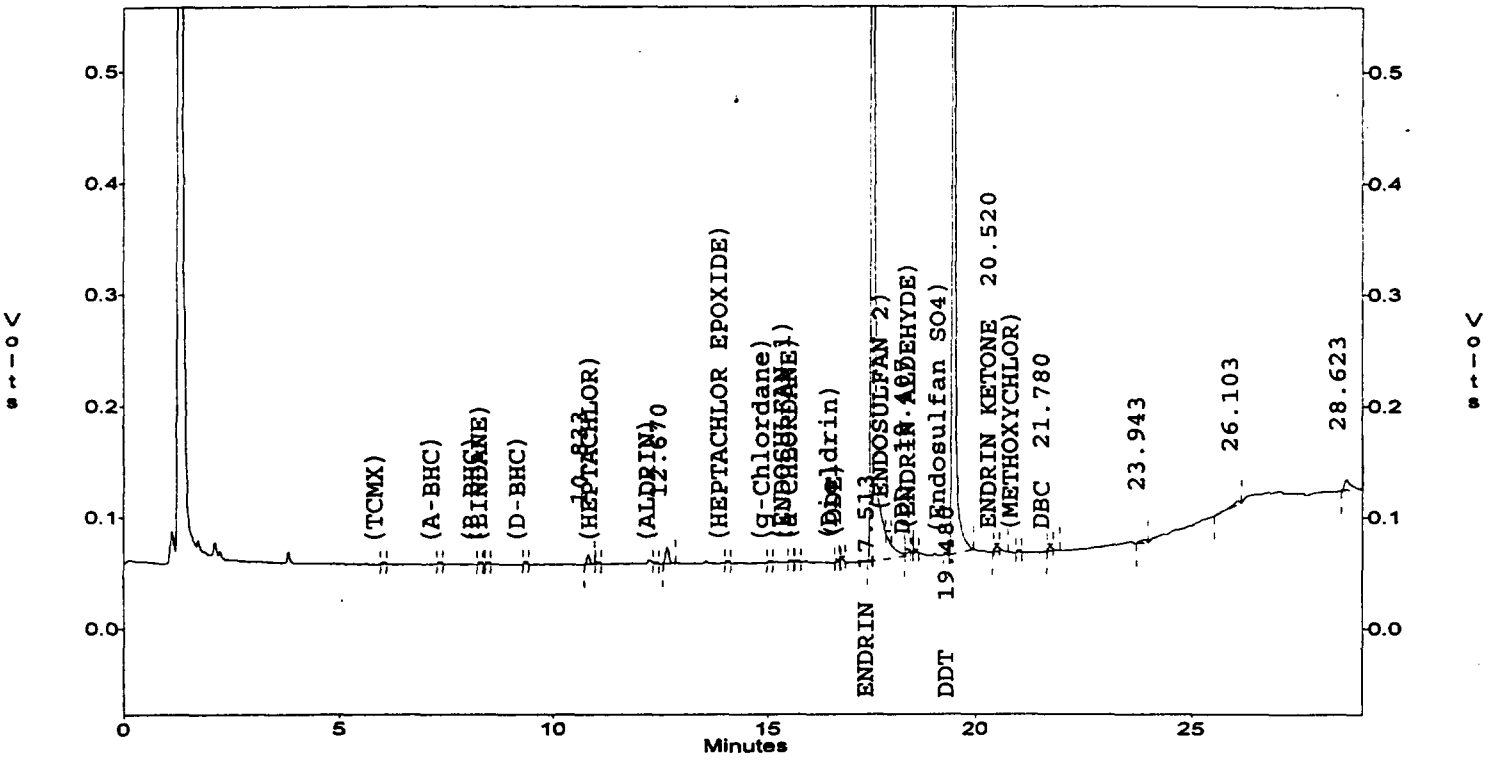
GC Column (2) : RTX - 50 ID : 30 m x 0.53 mm
Initial Calibration Date(s) : 4/26/97

COMPOUNDS	RT	RT Window		Calculated Amount (ng)	Known Amount (ng)	RPD
		From	To			
Tetrachloro-m-xylene	8.53	8.48	8.58	47.8	50.0	-4.50
alpha-BHC	11.56	11.51	11.61	51.8	50.0	3.54
gamma-BHC	13.46	13.41	13.51	53.0	50.0	5.83
beta-BHC	14.77	14.72	14.82	56.3	50.0	11.85
Endrin	21.58	21.51	21.65	53.5	50.0	6.76
4,4'-DDT	22.67	22.60	22.74	54.1	50.0	7.88
Methoxychlor	24.57	24.50	24.64	52.7	50.0	5.26
Dibutyl Chlorendate	23.77	23.70	23.84	53.1	50.0	6.01

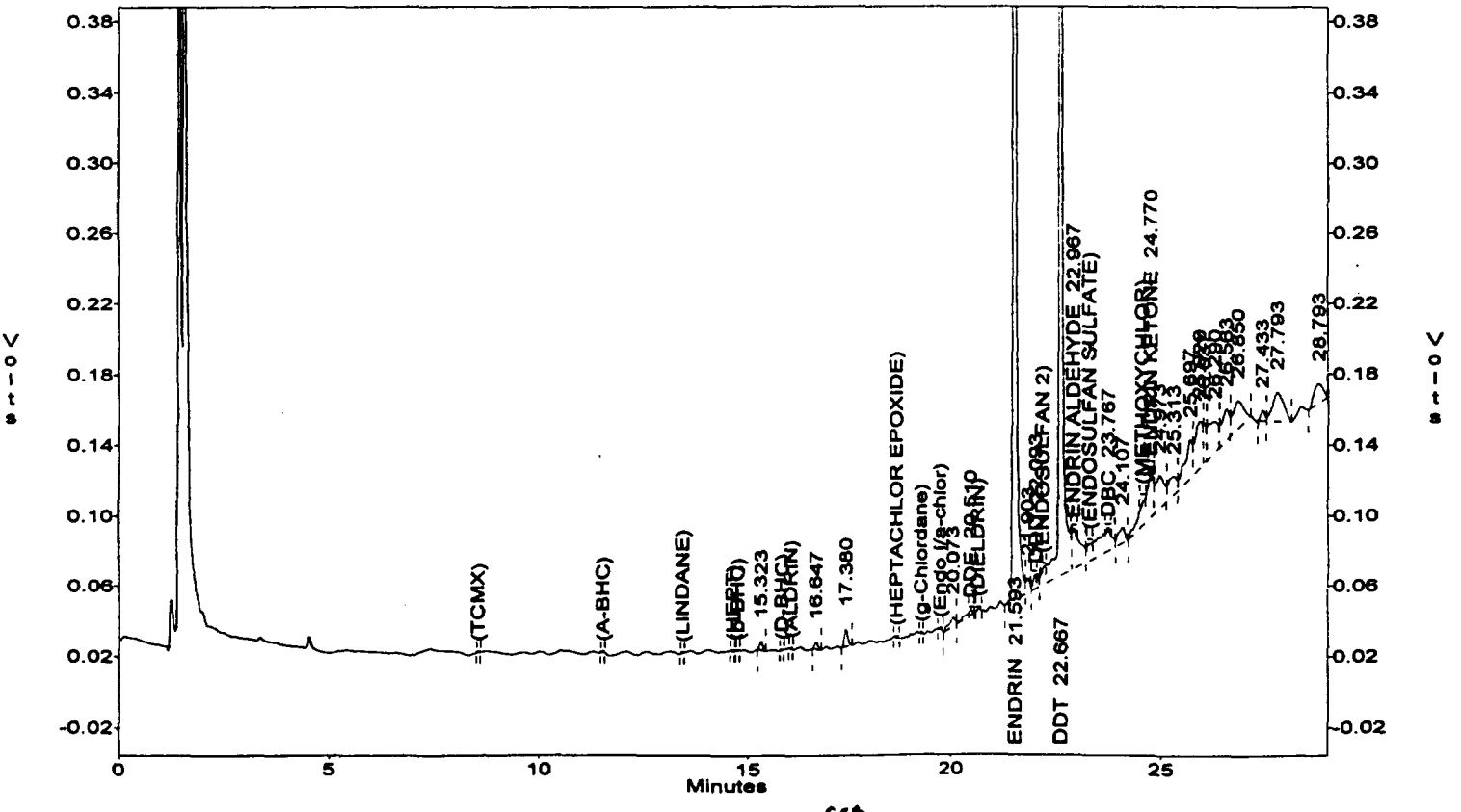
4,4'-DDT % breakdown (2) : 0.00 Endrin % breakdown (2) : 0.00
Combined % breakdown (2) : 0.00

File : c:\ezchrom\chrom\pe#4\042597p.007
Method : c:\ezchrom\methods\pestpe#4.met
Sample ID : breakdown
Acquired : Apr 26, 1997 10:16:57
Printed : May 08, 1997 11:31:35
User : System

c:\ezchrom\chrom\pe#4\042597p.007 -- Channel A



c:\ezchrom\chrom\pe#4\042597p.007 -- Channel B



180

File : c:\ezchrom\chrom\pe#4\042597p.007
Sample ID : breakdown

Channel A Results

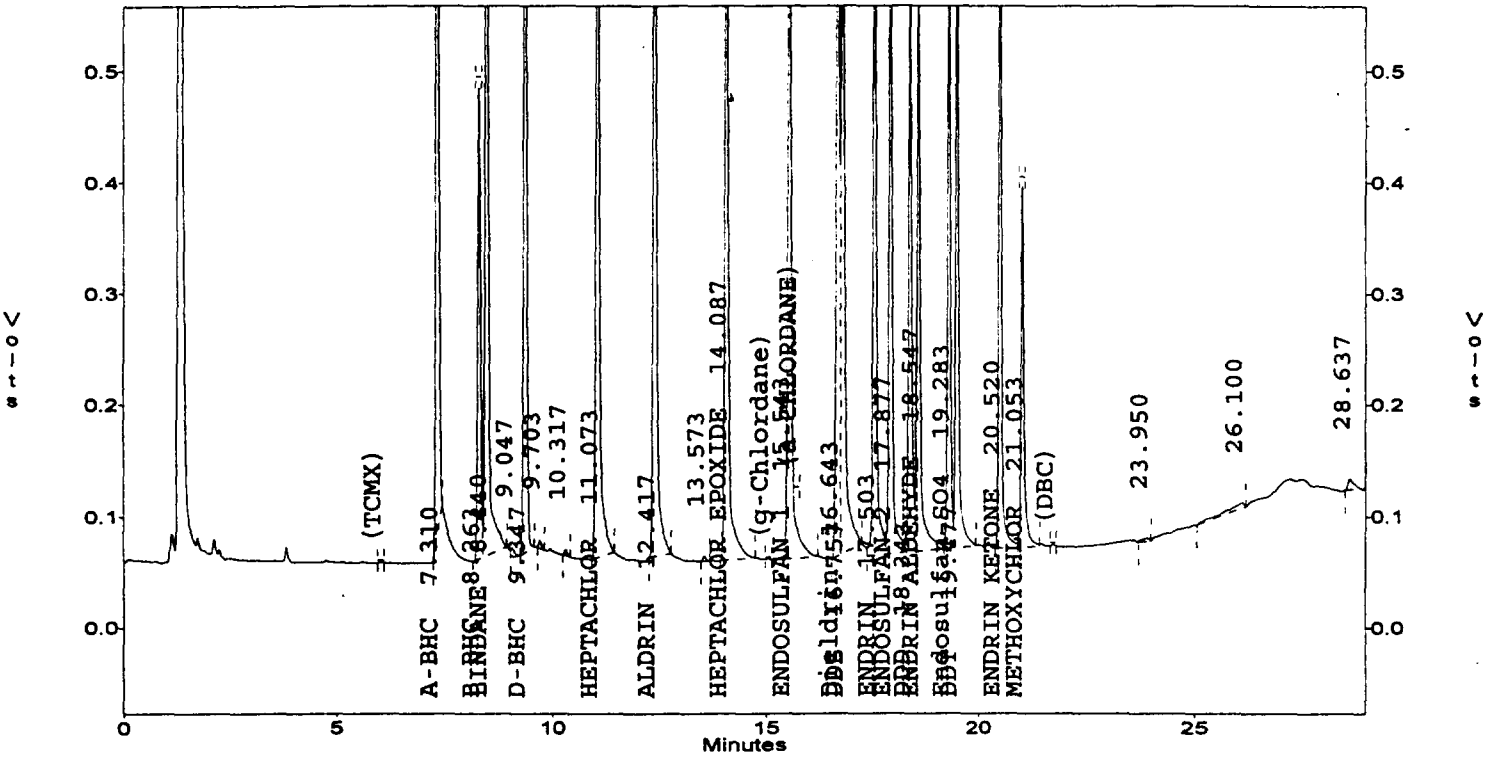
NAME	RT	Area	CONC. ppm
TCMX	6.01	0	0.00000
A-BHC	7.31	0	0.00000
B-BHC	8.25	0	0.00000
LINDANE	8.44	0	0.00000
D-BHC	9.34	0	0.00000
	10.83	41285	0.00000
HEPTACHLOR	11.07	0	0.00000
ALDRIN	12.41	0	0.00000
	12.67	83462	0.00000
HEPTACHLOR EPO	14.08	0	0.00000
g-Chlordane	15.06	0	0.00000
ENDOSULFAN 1	15.54	0	0.00000
a-CHLORDANE	15.70	0	0.00000
Dieldrin	16.64	0	0.00000
DDE	16.75	0	0.00000
ENDRIN	17.51	6527100	0.09138
ENDOSULFAN 2	17.87	0	0.00000
DDD	18.41	32066	0.00056
ENDRIN ALDEHYD	18.54	0	0.00000
Endosulfan SO4	19.28	0	0.00000
DDT	19.48	4952145	0.07981
ENDRIN KETONE	20.52	47468	0.00074
METHOXYCHLOR	21.05	0	0.00000
DBC	21.78	29015	0.00061
	23.94	28060	0.00000
	26.10	51409	0.00000
	28.62	101971	0.00000

Channel B Results

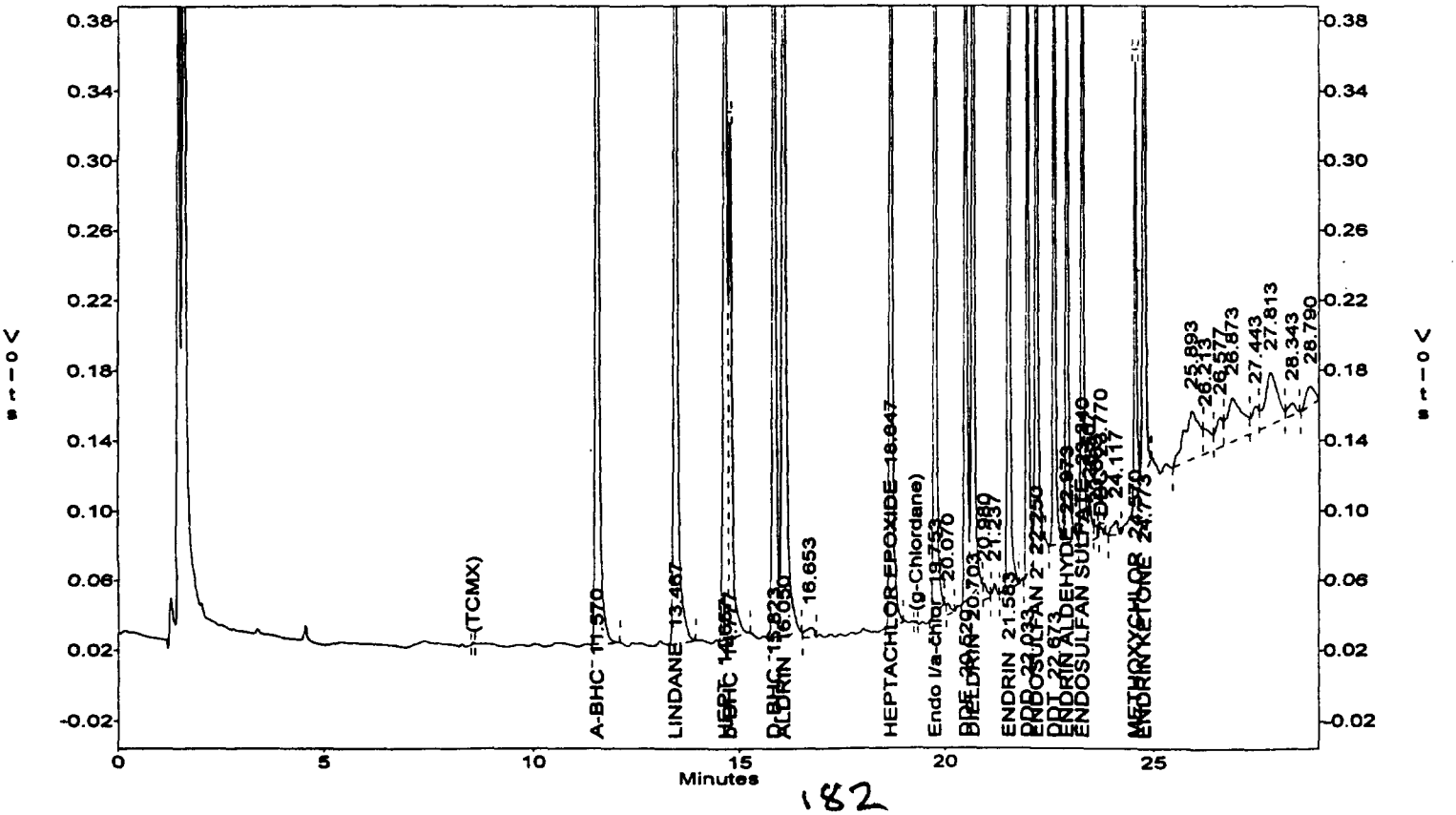
NAME	RT	Area	CONC. ppm
TCMX	8.53	0	0.00000
A-BHC	11.56	0	0.00000
LINDANE	13.46	0	0.00000
HEPT	14.65	0	0.00000
b-BHC	14.77	0	0.00000
	15.32	25994	0.00000
D-BHC	15.82	0	0.00000
ALDRIN	16.04	0	0.00000
	16.65	21992	0.00000
	17.38	59353	0.00000
HEPTACHLOR EPO	18.64	0	0.00000
g-Chlordane	19.26	0	0.00000
Endo I/a-chlor	19.74	0	0.00000
	20.07	56095	0.00000
DDE	20.51	38716	0.00071
DIELDRIN	20.70	0	0.00000
ENDRIN	21.59	4863514	0.09461
	21.90	50435	0.00000
DDD	22.09	69112	0.00185
ENDOSULFAN 2	22.25	0	0.00000
DDT	22.67	4189273	0.10567
ENDRIN ALDEHYD	22.97	304168	0.00845
ENDOSULFAN SUL	23.34	0	0.00000
DBC	23.77	383784	0.01116
	24.11	99937	0.00000
METHOXYCHLOR	24.57	0	0.00000
ENDRIN KETONE	24.77	421145	0.00950
	24.97	268079	0.00000
	25.31	153324	0.00000
	25.70	293120	0.00000
	25.92	329368	0.00000
	26.04	107072	0.00000
	26.29	326908	0.00000
	26.56	223642	0.00000
	26.85	289523	0.00000
	27.43	41959	0.00000
	27.79	305864	0.00000
	28.79	171236	0.00000

File : c:\ezchrom\chrom\pe#4\042597p.008
Method : c:\ezchrom\methods\pestpe#4.met
Sample ID : 0.05 verify
Acquired : Apr 26, 1997 10:52:00
Printed : May 08, 1997 11:31:42
User : System

c:\ezchrom\chrom\pe#4\042597p.008 -- Channel A



c:\ezchrom\chrom\pe#4\042597p.008 -- Channel B



182

File : c:\ezchrom\chrom\pe#4\042597p.008
Sample ID : 0.05 verify

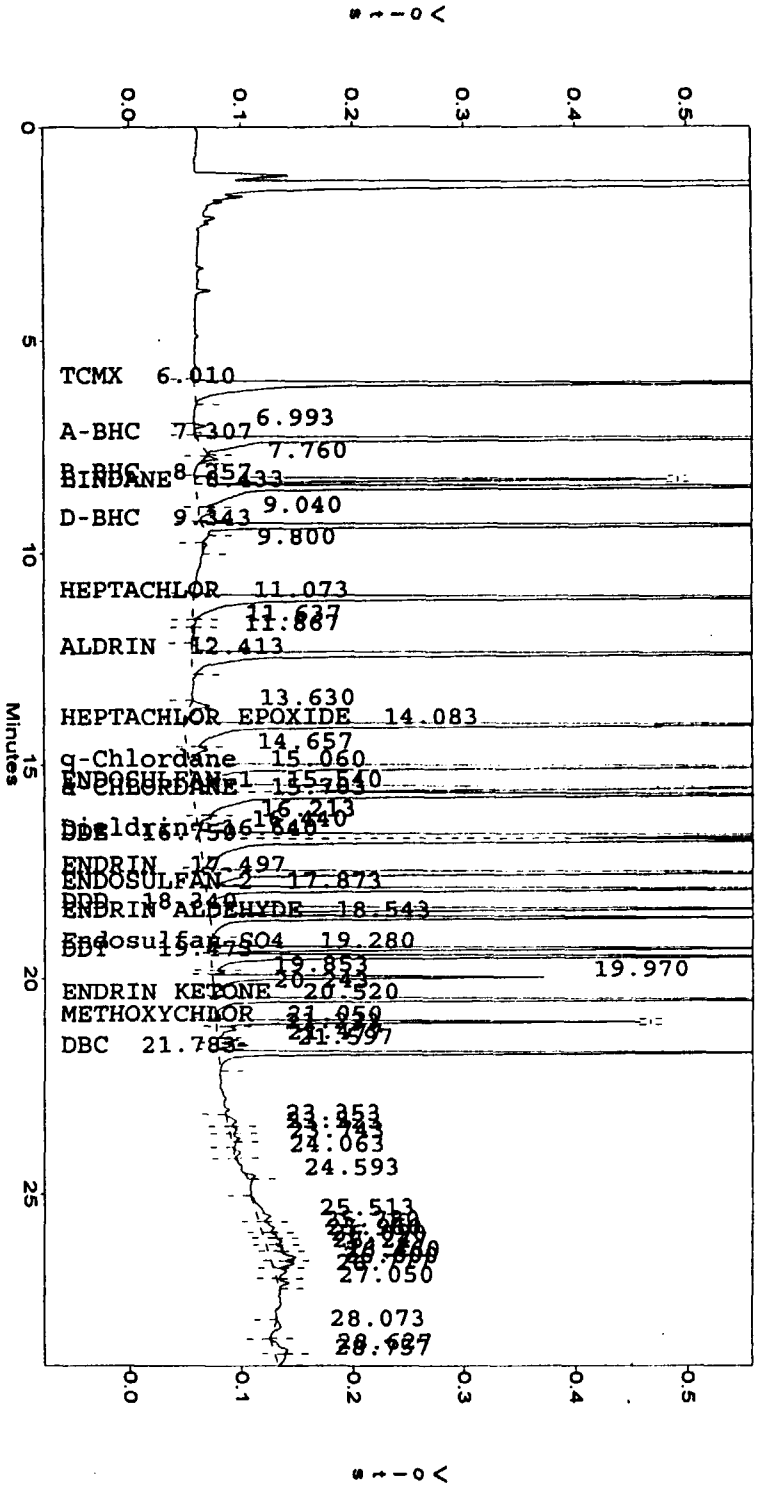
Channel A Results

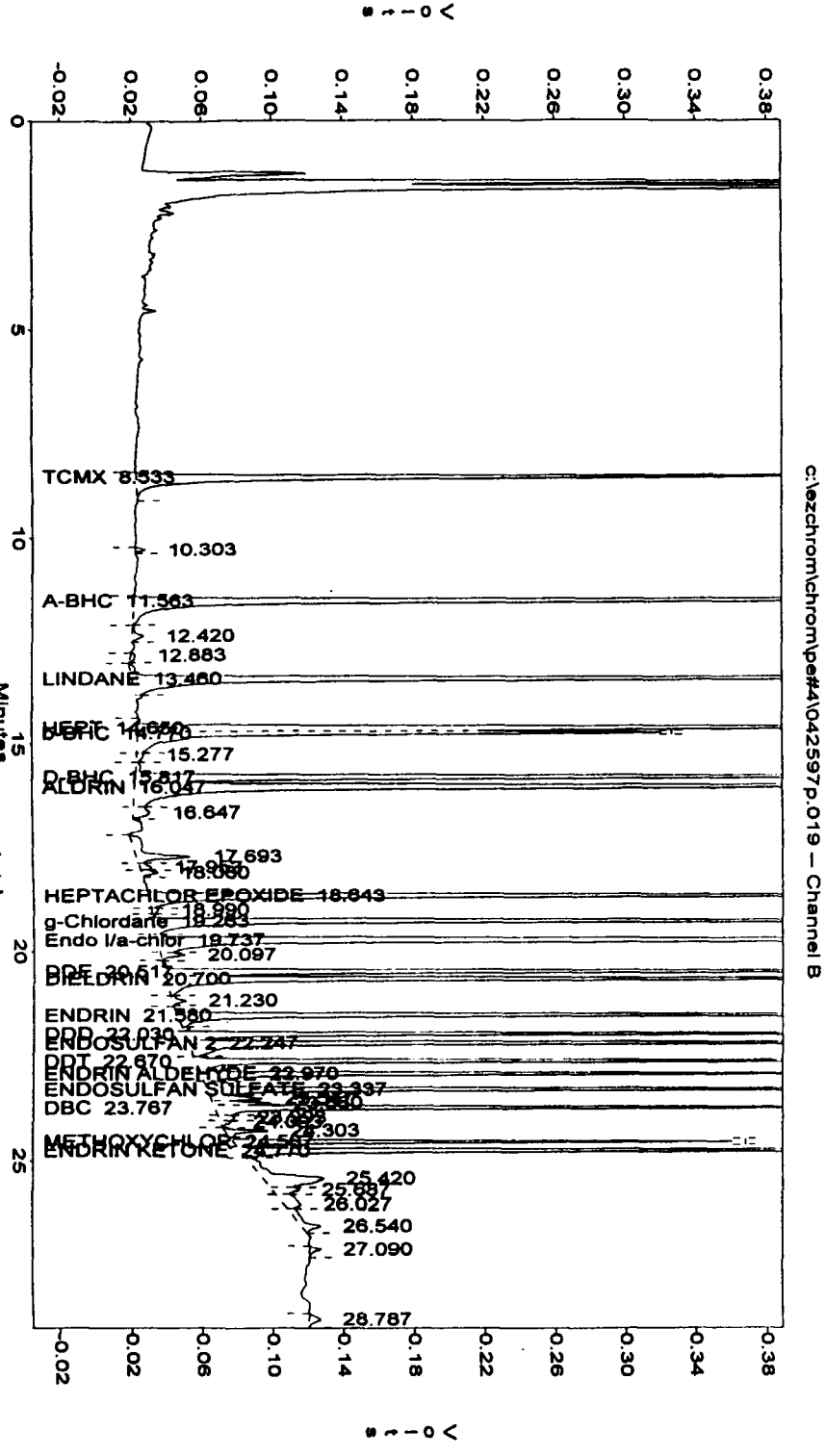
NAME	RT	Area	CONC. ppm
TCMX	6.01	0	0.00000
A-BHC	7.31	4358033	0.04845
B-BHC	8.26	1974177	0.04532
LINDANE	8.44	4782007	0.05339
	9.05	51404	0.00000
D-BHC	9.35	4168968	0.05039
	9.70	31249	0.00000
	10.32	24362	0.00000
HEPTACHLOR	11.07	4385646	0.05253
ALDRIN	12.42	4375844	0.05325
	13.57	21296	0.00000
HEPTACHLOR EPO	14.09	3989001	0.05095
g-Chlordane	15.06	0	0.00000
ENDOSULFAN 1	15.54	3788565	0.05348
a-CHLORDANE	15.70	0	0.00000
Dieldrin	16.64	3497722	0.05039
DDE	16.76	3987602	0.05288
ENDRIN	17.50	3647189	0.05106
ENDOSULFAN 2	17.88	3316791	0.05086
DDD	18.34	2661576	0.04679
ENDRIN ALDEHYD	18.55	2918869	0.05399
Endosulfan SO4	19.28	2686680	0.04690
DDT	19.48	3064883	0.04940
ENDRIN KETONE	20.52	3286829	0.05119
METHOXYCHLOR	21.05	1617608	0.05093
DBC	21.78	0	0.00000
	23.95	31998	0.00000
	26.10	151816	0.00000
	28.64	100767	0.00000

Channel B Results

NAME	RT	Area	CONC. ppm
TCMX	8.53	0	0.00000
A-BHC	11.57	4168332	0.05378
LINDANE	13.47	3686374	0.05341
HEPT	14.66	3177287	0.05013
b-BHC	14.78	1692521	0.05213
D-BHC	15.82	3098915	0.04932
ALDRIN	16.05	3813087	0.05444
	16.65	78767	0.00000
HEPTACHLOR EPO	18.65	2949874	0.04989
g-Chlordane	19.26	0	0.00000
Endo I/a-chlor	19.75	2725484	0.05448
	20.07	47225	0.00000
DDE	20.52	2651992	0.04889
DIELDRIN	20.70	2945828	0.05386
	20.98	66418	0.00000
	21.24	39815	0.00000
ENDRIN	21.58	2688196	0.05229
DDD	22.03	1831284	0.04902
ENDOSULFAN 2	22.25	2333983	0.05012
DDT	22.67	1999237	0.05043
ENDRIN ALDEHYD	22.97	1746773	0.04851
ENDOSULFAN SUL	23.34	2025018	0.04940
	23.51	135779	0.00000
	23.66	44736	0.00000
DBC	23.77	25401	0.00074
	24.12	72039	0.00000
METHOXYCHLOR	24.57	952824	0.04827
ENDRIN KETONE	24.77	2266862	0.05115
	25.89	696943	0.00000
	26.21	183287	0.00000
	26.58	204692	0.00000
	26.87	636194	0.00000
	27.44	166015	0.00000
	27.81	640691	0.00000
	28.34	92979	0.00000
	28.79	162423	0.00000

File : c:\ezchrom\chrom\pe#4\042597p.019
Method : c:\ezchrom\methods\pestpe#4.met
Sample ID : 0.05 pest
Acquired : Apr 26, 1997 17:17:45
Printed : May 08, 1997 11:40:52
User : System





184

File : c:\ezchrom\chrom\pe#4\042597p.019
Sample ID : 0.05 pest

Channel A Results

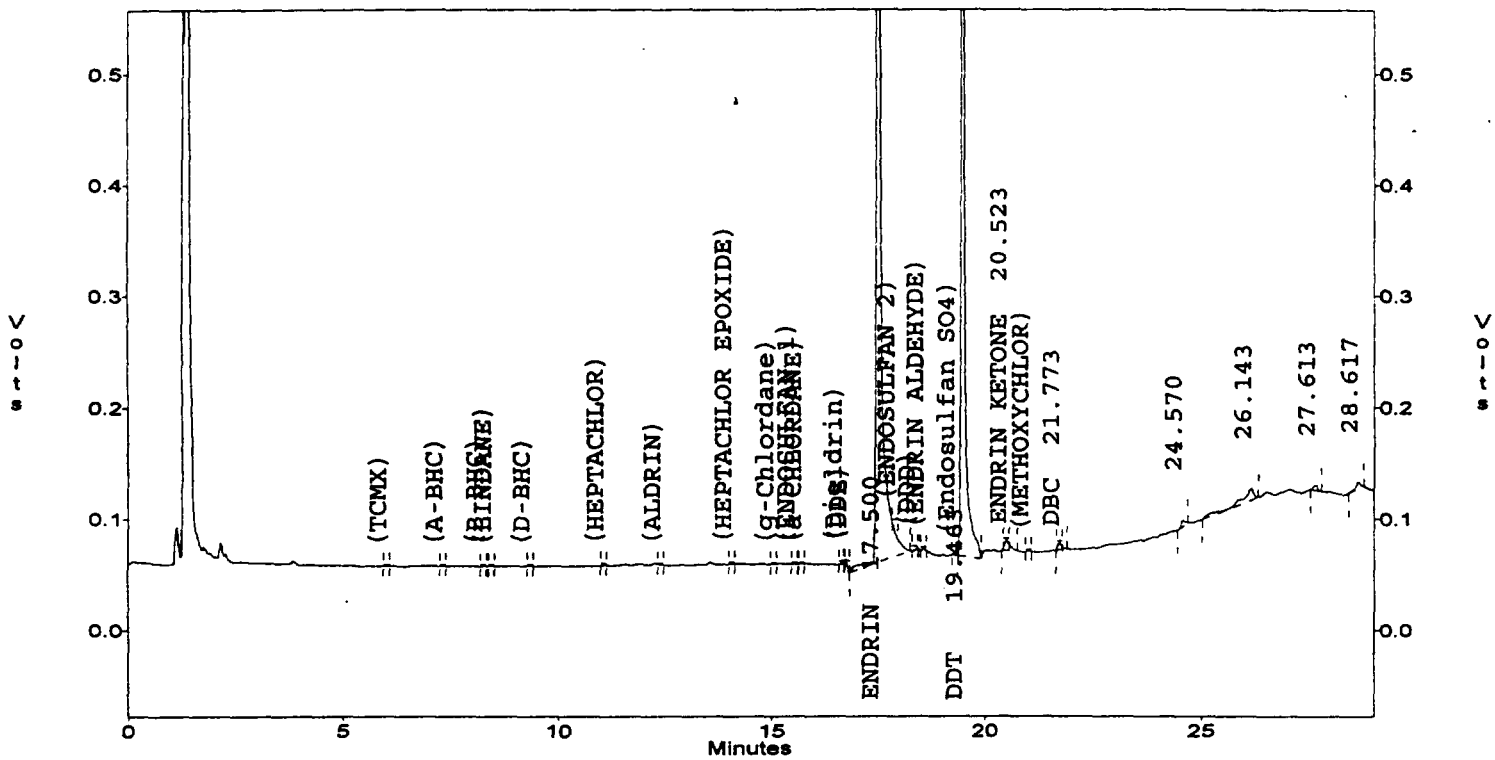
NAME	RT	Area	CONC. ppm
TCMX	6.01	3757226	0.05159
	6.99	43128	0.00000
A-BHC	7.31	4669859	0.05192
	7.76	51560	0.00000
B-BHC	8.26	1907771	0.04379
LINDANE	8.43	4740207	0.05292
	9.04	138552	0.00000
D-BHC	9.34	3954133	0.04780
	9.80	20944	0.00000
HEPTACHLOR	11.07	4489023	0.05377
	11.64	23871	0.00000
	11.87	20946	0.00000
ALDRIN	12.41	4229947	0.05148
	13.63	203146	0.00000
HEPTACHLOR EPO	14.08	4114161	0.05254
	14.66	169833	0.00000
g-Chlordane	15.06	4017307	0.05075
ENDOSULFAN 1	15.54	3348107	0.04726
a-CHLORDANE	15.70	4346102	0.05547
	16.21	92172	0.00000
	16.44	28433	0.00000
Dieldrin	16.64	3215382	0.04633
DDE	16.75	4106160	0.05445
ENDRIN	17.50	3521415	0.04930
ENDOSULFAN 2	17.87	3148095	0.04827
DDD	18.34	2673188	0.04700
ENDRIN ALDEHYD	18.54	2525619	0.04671
Endosulfan SO4	19.28	2620106	0.04574
DDT	19.47	3149095	0.05075
	19.85	40979	0.00000
	19.97	1407070	0.00000
	20.24	62602	0.00000
ENDRIN KETONE	20.52	3011149	0.04689
METHOXYCHLOR	21.05	1490856	0.04694
	21.23	139553	0.00000
	21.48	74293	0.00000
	21.60	102217	0.00000
DBC	21.78	2277334	0.04804
	23.35	74317	0.00000
	23.52	49413	0.00000
	23.74	51995	0.00000
	24.06	37121	0.00000
	24.59	51214	0.00000
	25.51	188306	0.00000
	25.78	132655	0.00000
	25.96	77021	0.00000
	26.09	120955	0.00000
	26.25	105139	0.00000
	26.46	231439	0.00000
	26.60	144322	0.00000
	26.78	102812	0.00000
	27.05	58681	0.00000
	28.07	61266	0.00000
	28.63	154381	0.00000
	28.76	96707	0.00000

Channel B Results

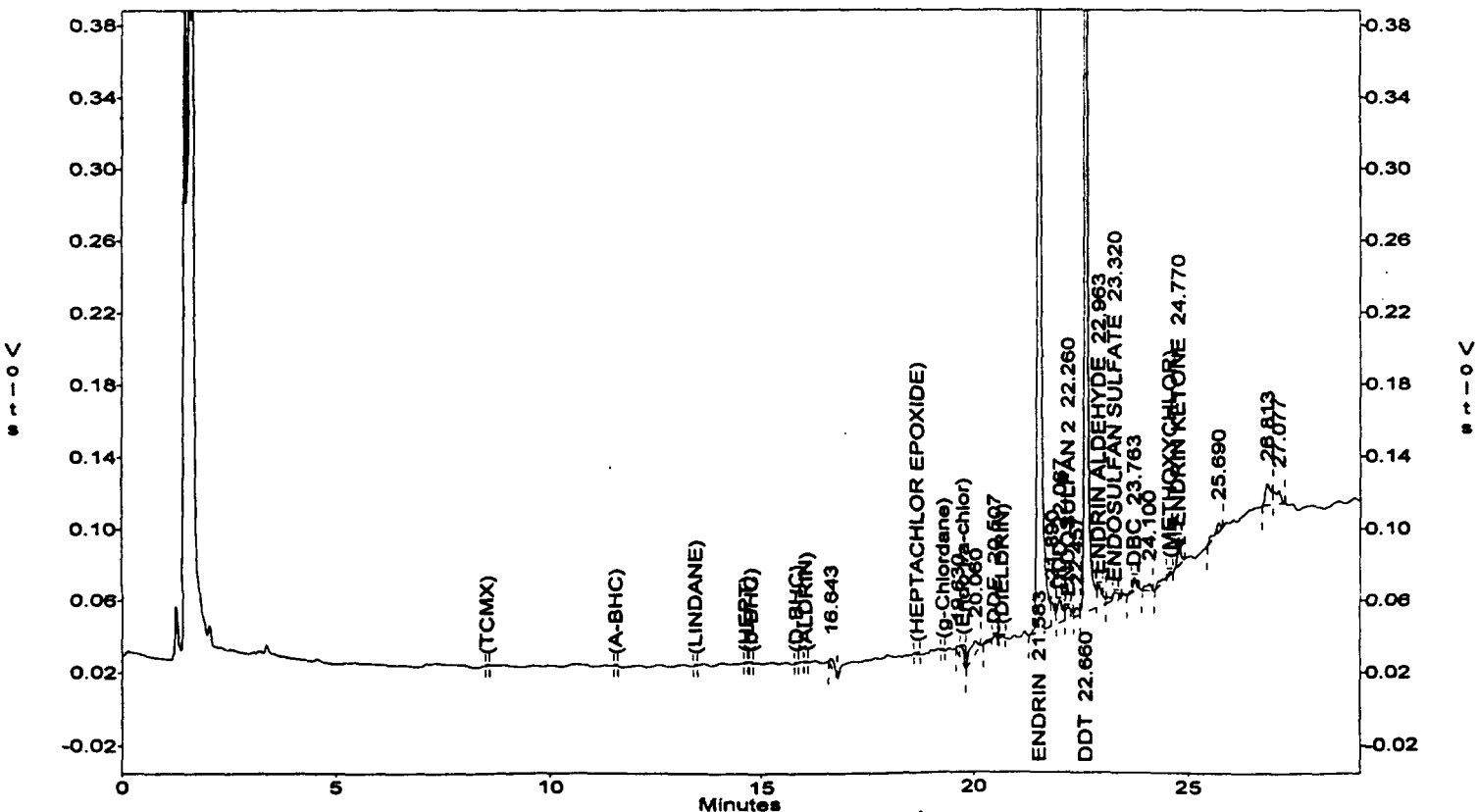
NAME	RT	Area	CONC. ppm
TCMX	8.53	2527325	0.04784
	10.30	25074	0.00000
A-BHC	11.56	4010862	0.05175
	12.42	56709	0.00000
	12.88	25961	0.00000
LINDANE	13.46	3661389	0.05305
HEPT	14.65	3112358	0.04911
b-BHC	14.77	1826966	0.05627
	15.28	40073	0.00000
D-BHC	15.82	3104462	0.04941
ALDRIN	16.05	3863875	0.05517
	16.65	114940	0.00000
	17.69	335754	0.00000
	17.95	48304	0.00000
	18.08	49531	0.00000
HEPTACHLOR EPO	18.64	2960088	0.05006
	18.99	26123	0.00000
g-Chlordane	19.26	2921285	0.05158
Endo I/a-chlor	19.74	5409660	0.10813
	20.10	82622	0.00000
DDE	20.52	2750789	0.05071
DIELDRIN	20.70	2960091	0.05412
	21.23	52159	0.00000
ENDRIN	21.58	2749694	0.05349
DDD	22.03	1897281	0.05079
ENDOSULFAN 2	22.25	2502280	0.05373
DDT	22.67	2145640	0.05412
ENDRIN ALDEHYD	22.97	1754531	0.04872
ENDOSULFAN SUL	23.34	2197383	0.05361
	23.55	164698	0.00000
	23.66	147408	0.00000
DBC	23.77	1824040	0.05306
	23.99	63721	0.00000
	24.09	34109	0.00000
	24.30	116895	0.00000
METHOXYCHLOR	24.57	1041014	0.05274
ENDRIN KETONE	24.77	2250258	0.05078
	25.42	573024	0.00000
	25.69	122736	0.00000
	26.03	175894	0.00000
	26.54	157860	0.00000
	27.09	37200	0.00000
	28.79	60274	0.00000

File : c:\ezchrom\chrom\pe#4\042597p.020
Method : c:\ezchrom\methods\pestpe#4.met
Sample ID : breakdown
Acquired : Apr 26, 1997 17:52:49
Printed : May 08, 1997 11:41:01
User : System

c:\ezchrom\chrom\pe#4\042597p.020 -- Channel A



c:\ezchrom\chrom\pe#4\042597p.020 -- Channel B



186

File : c:\ezchrom\chrom\pe#4\042597p.020
Sample ID : breakdown

Channel A Results

NAME	RT	Area	CONC. ppm
TCMX	6.01	0	0.00000
A-BHC	7.31	0	0.00000
B-BHC	8.25	0	0.00000
LINDANE	8.44	0	0.00000
D-BHC	9.34	0	0.00000
HEPTACHLOR	11.07	0	0.00000
ALDRIN	12.41	0	0.00000
HEPTACHLOR EPO	14.08	0	0.00000
g-Chlordane	15.06	0	0.00000
ENDOSULFAN 1	15.54	0	0.00000
a-CHLORDANE	15.70	0	0.00000
Dieldrin	16.64	0	0.00000
DDE	16.75	0	0.00000
ENDRIN	17.50	6745364	0.09444
ENDOSULFAN 2	17.87	0	0.00000
DDD	18.34	0	0.00000
ENDRIN ALDEHYD	18.54	0	0.00000
Endosulfan SO4	19.28	0	0.00000
DDT	19.46	4863569	0.07839
ENDRIN KETONE	20.52	81741	0.00127
METHOXYCHLOR	21.05	0	0.00000
DBC	21.77	38387	0.00081
	24.57	35120	0.00000
	26.14	225626	0.00000
	27.61	31662	0.00000
	28.62	47155	0.00000

Channel B Results

NAME	RT	Area	CONC. ppm
TCMX	8.53	0	0.00000
A-BHC	11.56	0	0.00000
LINDANE	13.46	0	0.00000
HEPT	14.65	0	0.00000
b-BHC	14.77	0	0.00000
D-BHC	15.82	0	0.00000
ALDRIN	16.04	0	0.00000
	16.64	37787	0.00000
HEPTACHLOR EPO	18.64	0	0.00000
g-Chlordane	19.26	0	0.00000
	19.63	70250	0.00000
Endo I/a-chlor	19.74	0	0.00000
	20.06	110632	0.00000
DDE	20.51	28623	0.00053
DIELDRIN	20.70	0	0.00000
ENDRIN	21.58	5023500	0.09772
	21.89	73365	0.00000
DDD	22.07	110979	0.00297
ENDOSULFAN 2	22.26	64928	0.00139
	22.46	31238	0.00000
DDT	22.66	3471832	0.08758
ENDRIN ALDEHYD	22.96	93535	0.00260
ENDOSULFAN SUL	23.32	66723	0.00163
DBC	23.76	41861	0.00122
	24.10	34395	0.00000
METHOXYCHLOR	24.57	0	0.00000
ENDRIN KETONE	24.77	106350	0.00240
	25.69	52420	0.00000
	26.81	103944	0.00000
	27.08	74879	0.00000

PCB

PCB METHOD BLANK/SURROGATE RECOVERY SUMMARIES

Method Blank (4-24-97)

No PCB patterns were detected in the Method Blank applicable to the following samples.

F102	F108			
F105	F109			
F106				

Surrogate Recoveries

Sample ID	TCMX (%R)	DCB(%R)	Dilution
Method Blank	93		x1
F102	77		x1
F 105	80		x1
F 106	87		x1
F 108	80		x1
F 109	82		x1

	QC Limit
TCMX = Tetrachloro-m-xylene	30-150
DCB = Decachlorobiphenyl	30-150

* = Diluted out

FORM:PCB MB/SURR

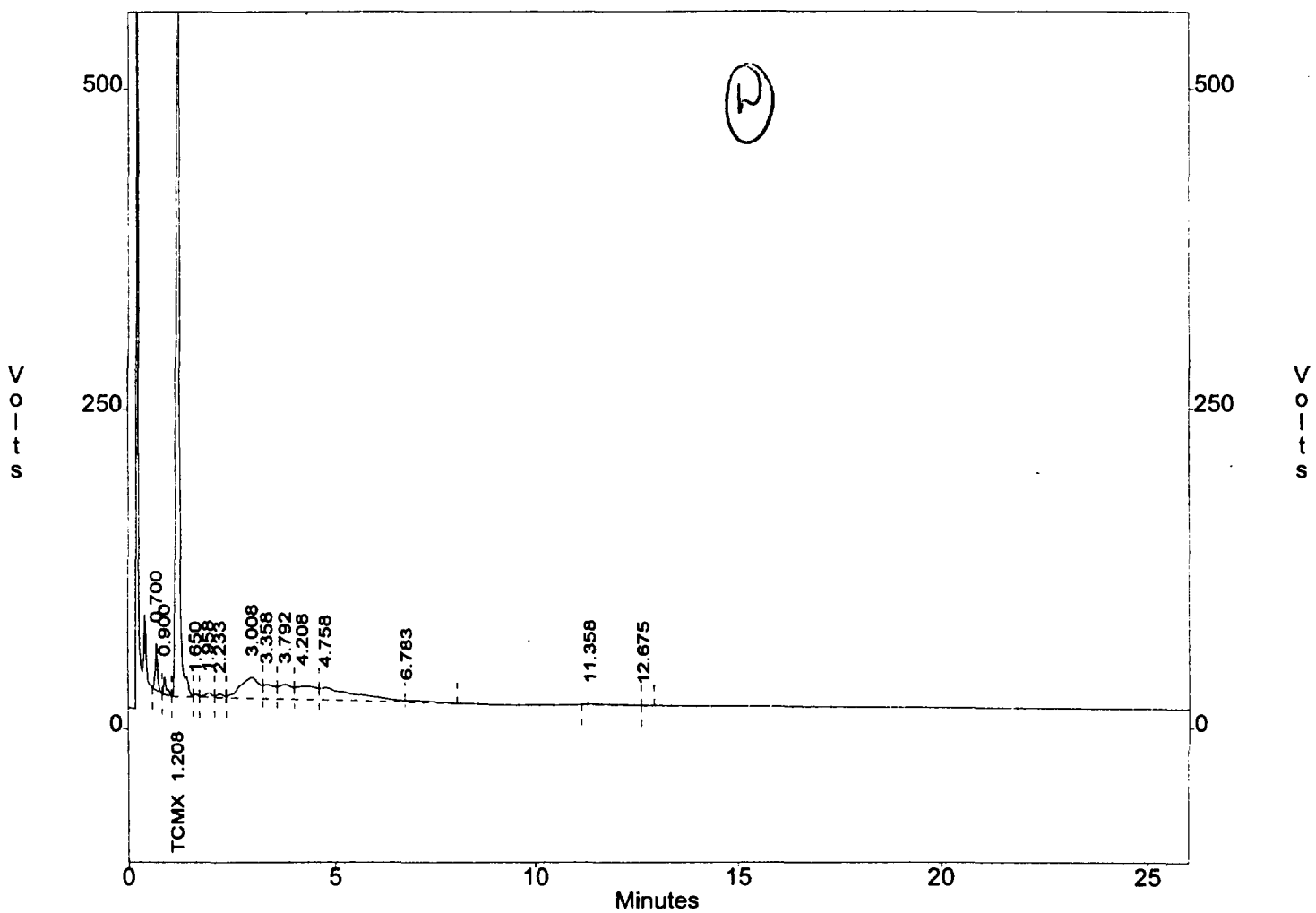
File : c:\ezchrom\chrom\var1b\0424V1B.009
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 74847 SBC
Acquired : Apr 24, 1997 17:22:33
Printed : Apr 25, 1997 07:12:22

Method Blank

Channel A Results

Name	RT	Area	Conc
TCMX	1.208	4152815	93.148
1242		1405217	0.160
1248		1405217	0.147
1254		105127	0.006
1260		32881	0.001
1016		1405217	0.125
1221		611549	0.246
1232		1405217	0.278

c:\ezchrom\chrom\var1b\0424V1B.009 -- Channel A



190

File : c:\ezchrom\chrom\var1b\0424v1b.030
Method : c:\ezchrom\methods\1b\V1bpcb.met
Sample ID : 31315 SC
Acquired : Apr 25, 1997 08:13:24
Printed : Apr 25, 1997 08:39:26

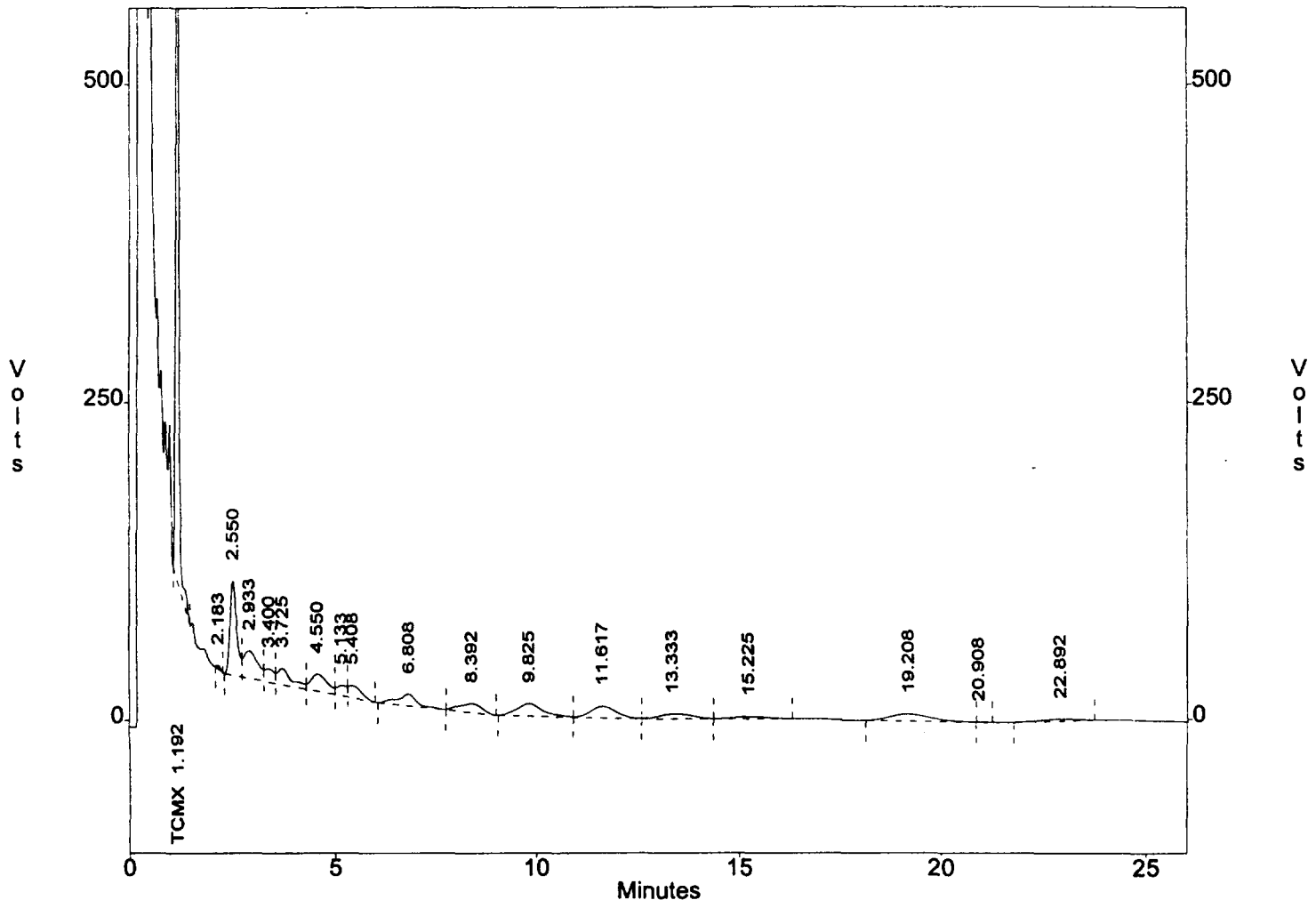
F101

Channel A Results

Name	RT	Area	Conc
TCMX	1.192	3423043	76.779
1242		1800363	0.205
1248		1800363	0.188
1254		1439938	0.080
1260		1532425	0.048
1016		1800363	0.160
1221		1345430	0.542
1232		1800363	0.357

L.1

c:\ezchrom\chrom\var1b\0424v1b.030 -- Channel A



File : c:\ezchrom\chrom\var1b\0424V1B.031
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 31316 SC
Acquired : Apr 25, 1997 08:39:47
Printed : Apr 25, 1997 13:36:16

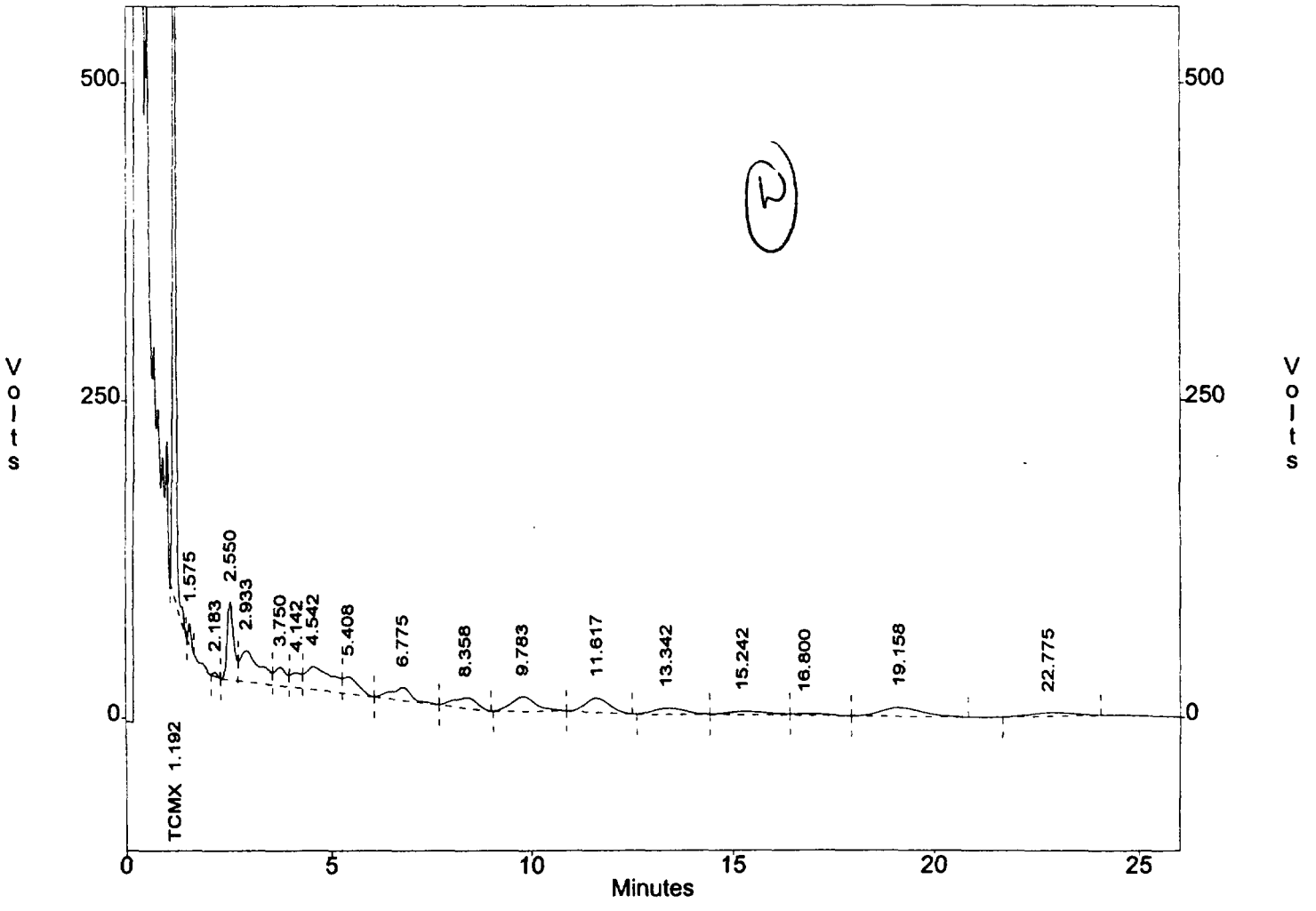
F 105

Channel A Results

Name	RT	Area	Conc
TCMX	1.192	3584755	80.406
1242		2002094	0.228
1248		2002094	0.209
1254		1671291	0.093
1260		1940759	0.061
1016		2002094	0.178
1221		1595691	0.643
1232		2002094	0.397

1pal .1

c:\ezchrom\chrom\var1b\0424V1B.031 -- Channel A



192

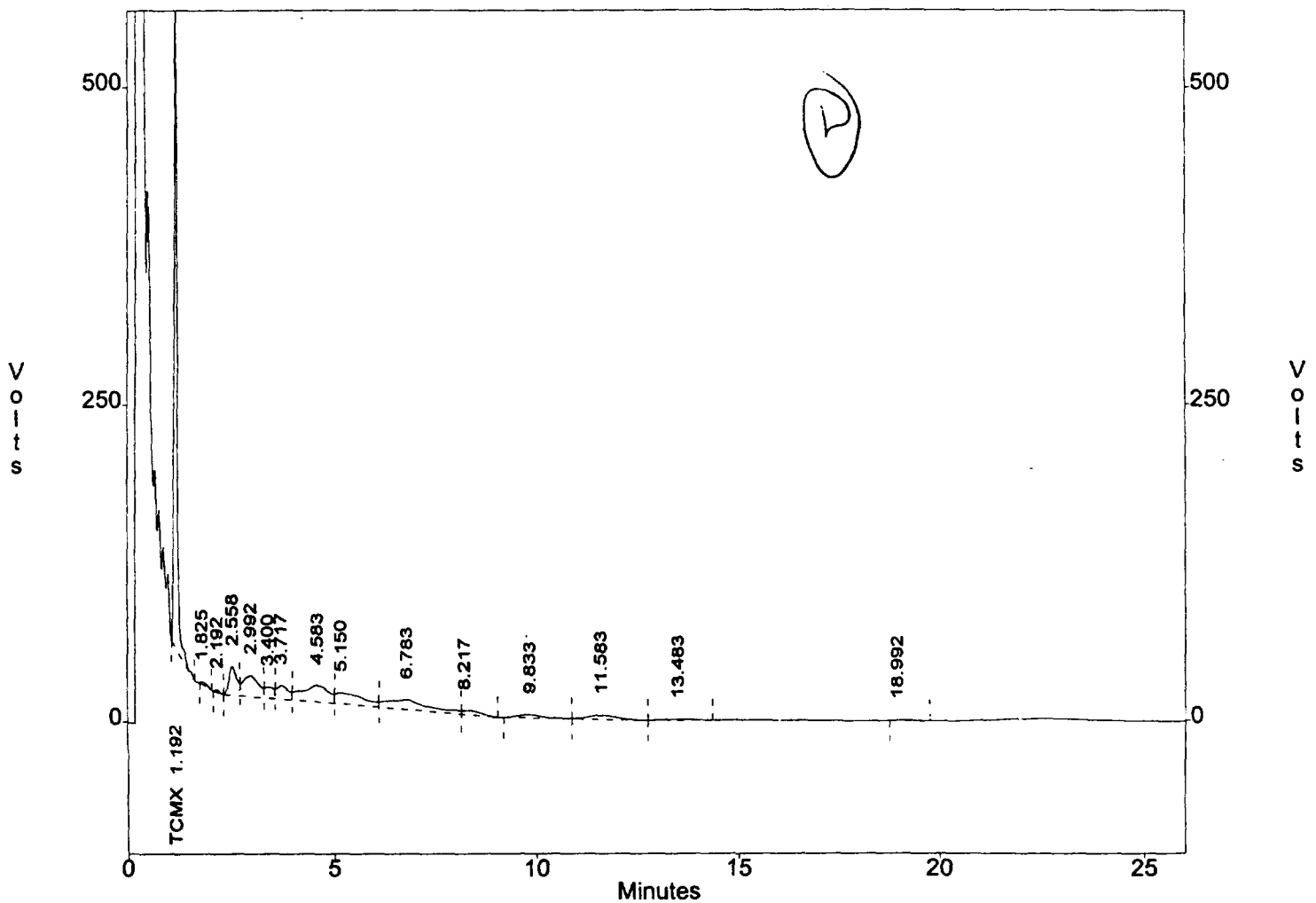
File : c:\ezchrom\chrom\var1b\0424v1b.032
Method : c:\ezchrom\methods\1b\V1bpcb.met
Sample ID : 31317 SC
Acquired : Apr 25, 1997 09:06:10
Printed : Apr 25, 1997 09:32:13

F10b

Channel A Results

Name	RT	Area	Conc
TCMX	1.192	2524150	56.617
1242		1073962	0.122
1248		1073962	0.112
1254		923523	0.052
1260		340044	0.011
1016		1073962	0.095
1221		743954	0.300
1232		1073962	0.213

c:\ezchrom\chrom\var1b\0424v1b.032 -- Channel A



193

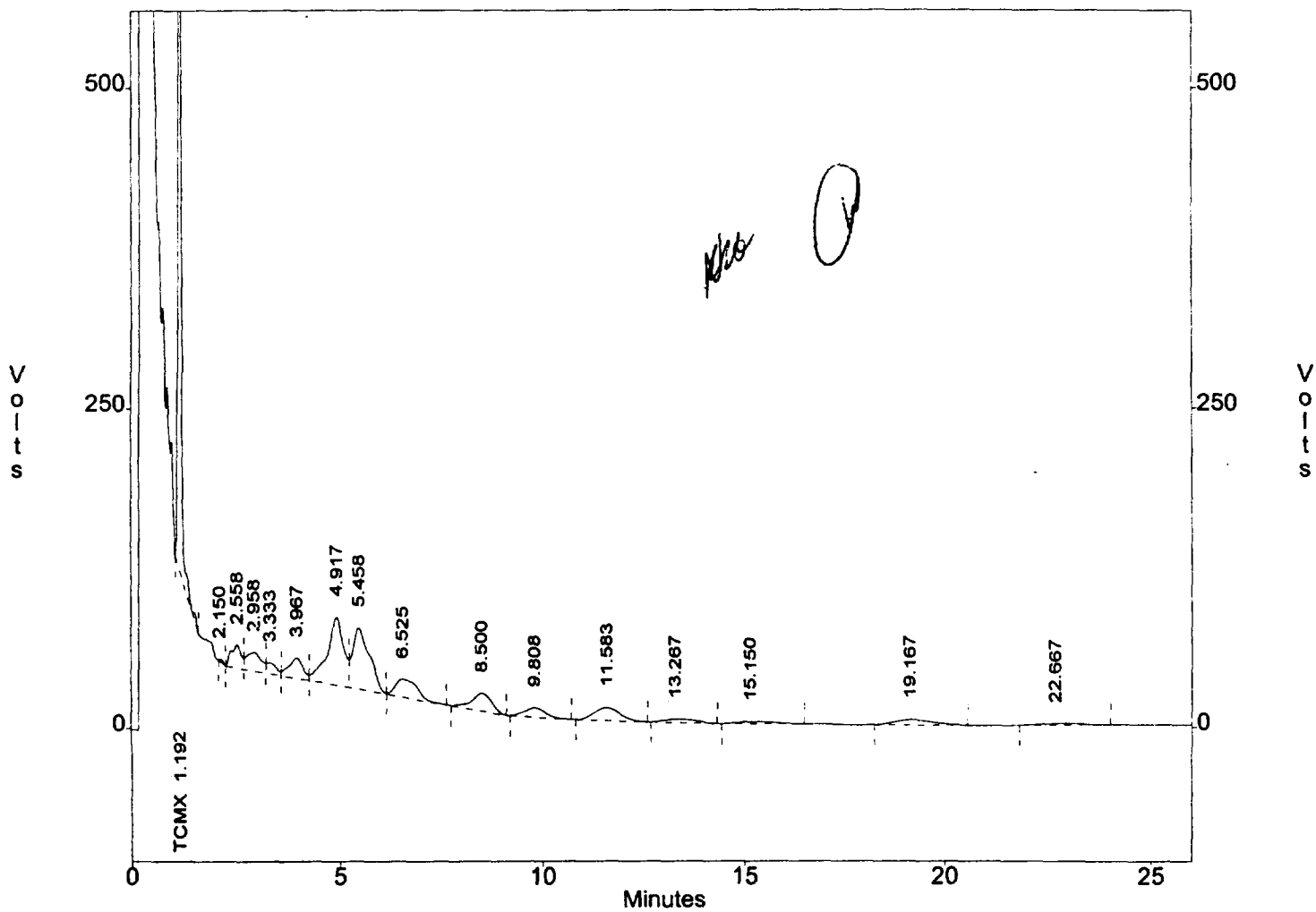
File : c:\ezchrom\chrom\var1b\0424v1b.033
Method : c:\ezchrom\methods\1b\V1bpcb.met
Sample ID : 31318 SC
Acquired : Apr 25, 1997 09:32:33
Printed : Apr 25, 1997 09:58:36

F108

Channel A Results

Name	RT	Area	Conc
TCMX	1.192	3560106	79.853
1242		1172968	0.133
1248		1172968	0.123
1254		1741143	0.097
1260		1253503	0.040
1016		1172968	0.104
1221		667040	0.269
1232		1172968	0.232

c:\ezchrom\chrom\var1b\0424v1b.033 -- Channel A



194

File : c:\ezchrom\chrom\var1b\0424V1B.034
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 31319 SC
Acquired : Apr 25, 1997 09:58:56
Printed : Apr 25, 1997 13:32:06

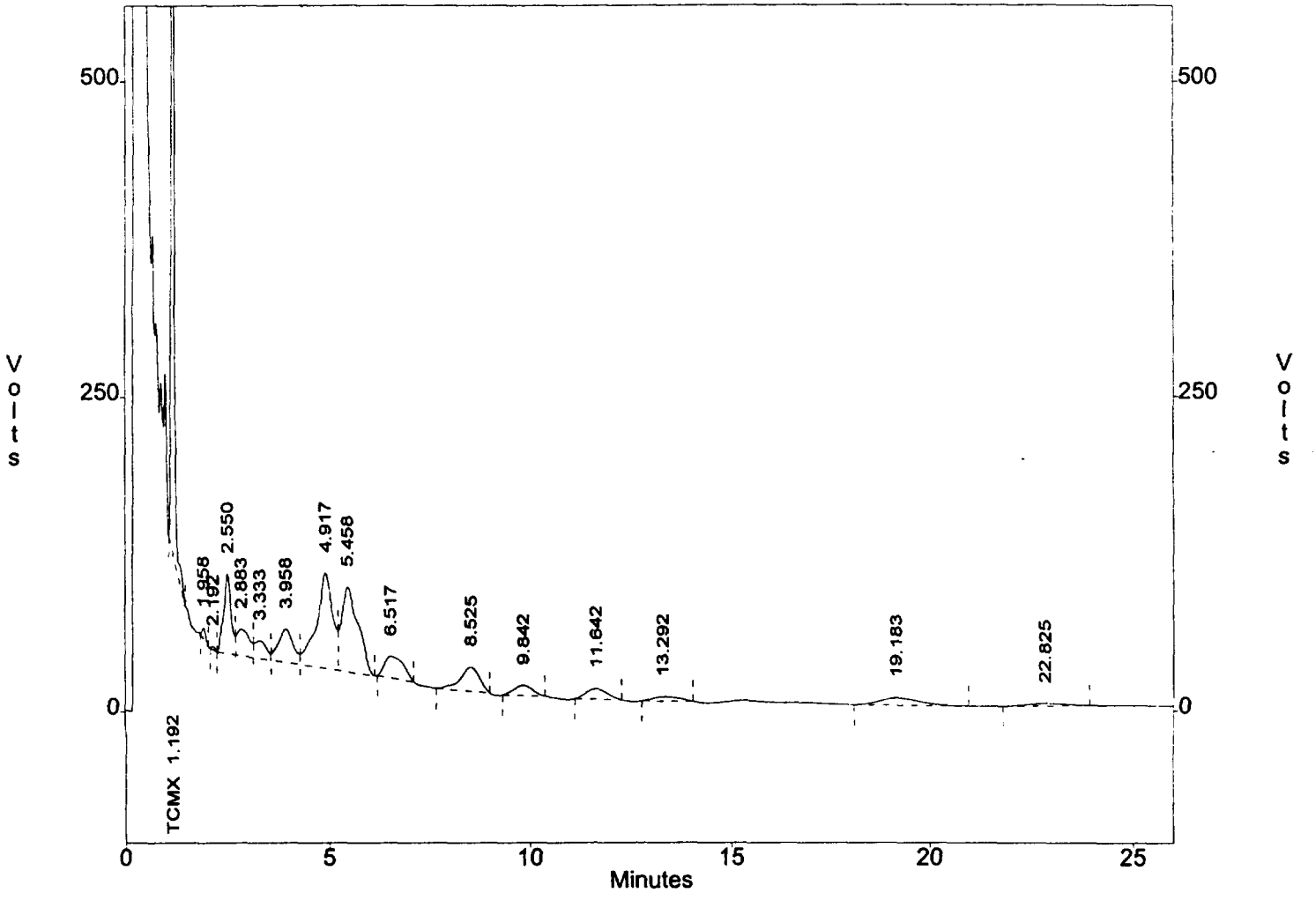
F 109

Channel A Results

Name	RT	Area	Conc
TCMX	1.192	3659964	82.093
1242		2253364	0.256
1248		2253364	0.236
1254		1767357	0.099 - 2 pal
1260		1114211	0.035
1016		2253364	0.200
1221		1325910	0.534
1232		2253364	0.446

(W)

c:\ezchrom\chrom\var1b\0424V1B.034 -- Channel A



195

Initial Calibration

PCB

PCB INITIAL CALIBRATION

Date: 2-7/8-97 Column: DV-1

Arochlor	Calibration Factors µg/ml					Mean	% RSD
	0.05 (0.1)	0.5	1.0	2.0	3.0		
1016	5.2×10^{-8}	6.9×10^{-8}	7.3×10^{-8}	7.9×10^{-8}	8.5×10^{-8}	7.16×10^{-8}	17.5
1221	3.22×10^{-7}	3.84×10^{-7}	4.21×10^{-7}	4.61×10^{-7}	4.6×10^{-7}	4.096×10^{-7}	14.3
1232	1.56×10^{-7}	1.98×10^{-7}	1.99×10^{-7}	2.3×10^{-7}	2.06×10^{-7}	1.978×10^{-7}	13.5
1242	8.1×10^{-8}	1.13×10^{-7}	9.7×10^{-8}	1.03×10^{-7}	1.08×10^{-7}	1.004×10^{-7}	12.3
1248	1.04×10^{-7}	1.0×10^{-7}	1.04×10^{-7}	1.1×10^{-7}	1.13×10^{-7}	1.062×10^{-7}	4.9
1254	6.0×10^{-8}	4.8×10^{-8}	4.9×10^{-8}	5.1×10^{-8}	5.1×10^{-8}	5.18×10^{-8}	9.2
1260	2.8×10^{-8}	3.1×10^{-8}	3.2×10^{-8}	3.2×10^{-8}	3.3×10^{-8}	3.12×10^{-8}	6.2
Surrogate*	0.05	0.5	1.0	2.0	3.0		
	2.3×10^{-8}	2.3×10^{-8}	2.4×10^{-8}	2.4×10^{-8}	2.4×10^{-8}	2.36×10^{-8}	2.3

*Tetrachloro-m-xylene and measured from Arochlor 1260 analysis.

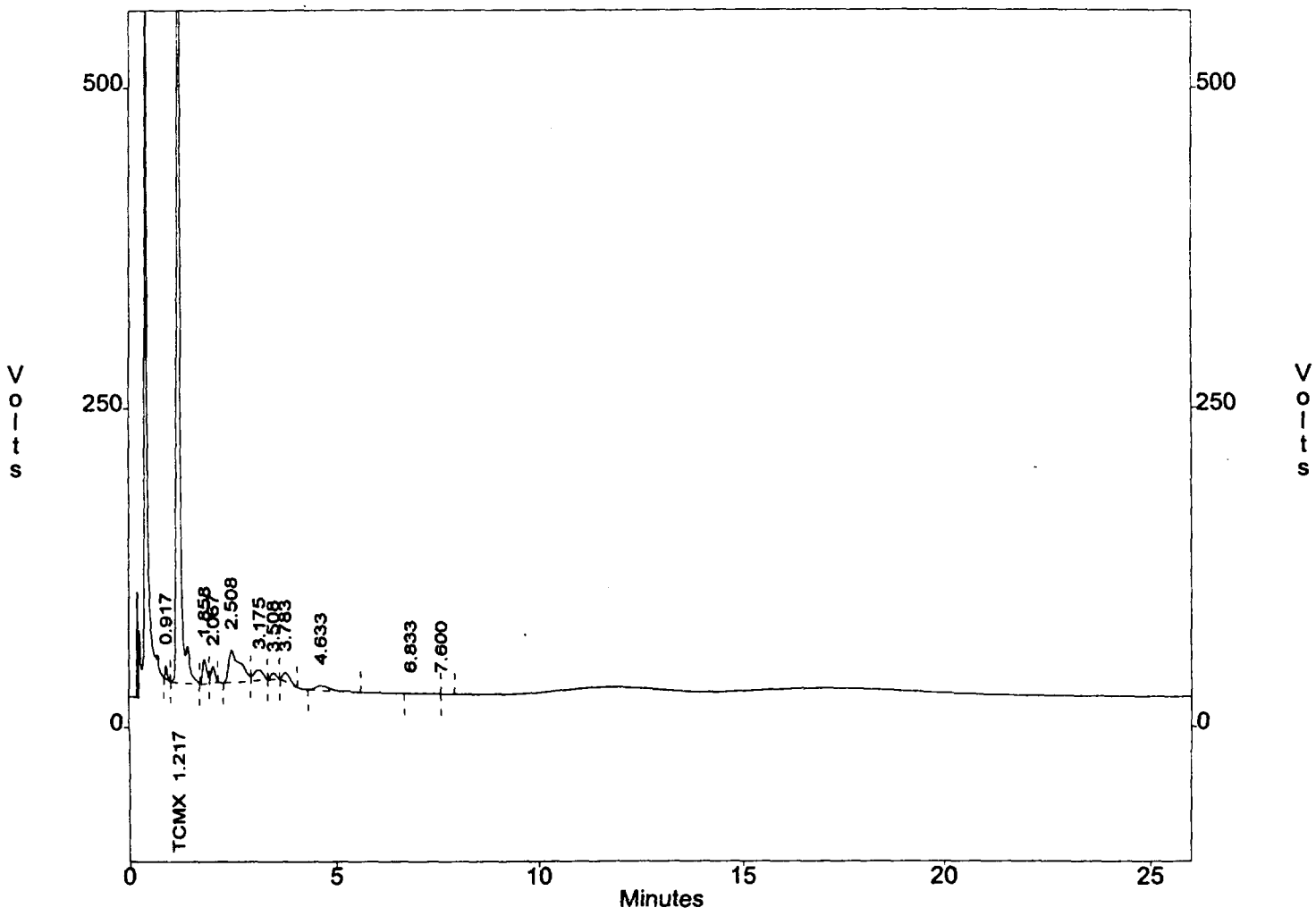
FORM:PCB INITIAL CAL.

File : c:\ezchrom\chrom\var1b\0207V1B.004
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1016 .05
Acquired : Feb 07, 1997 13:04:34
Printed : May 09, 1997 07:18:50

Channel A Results

Name	RT	Area	Conc
TCMX	1.217	4334603	97.225
1242		955336	0.109
1248		955336	0.100
1254		16737	0.001
1260		0	0.000
1016		955336	0.085
1221		5166558	2.081
1232		955336	0.189

c:\ezchrom\chrom\var1b\0207V1B.004 -- Channel A



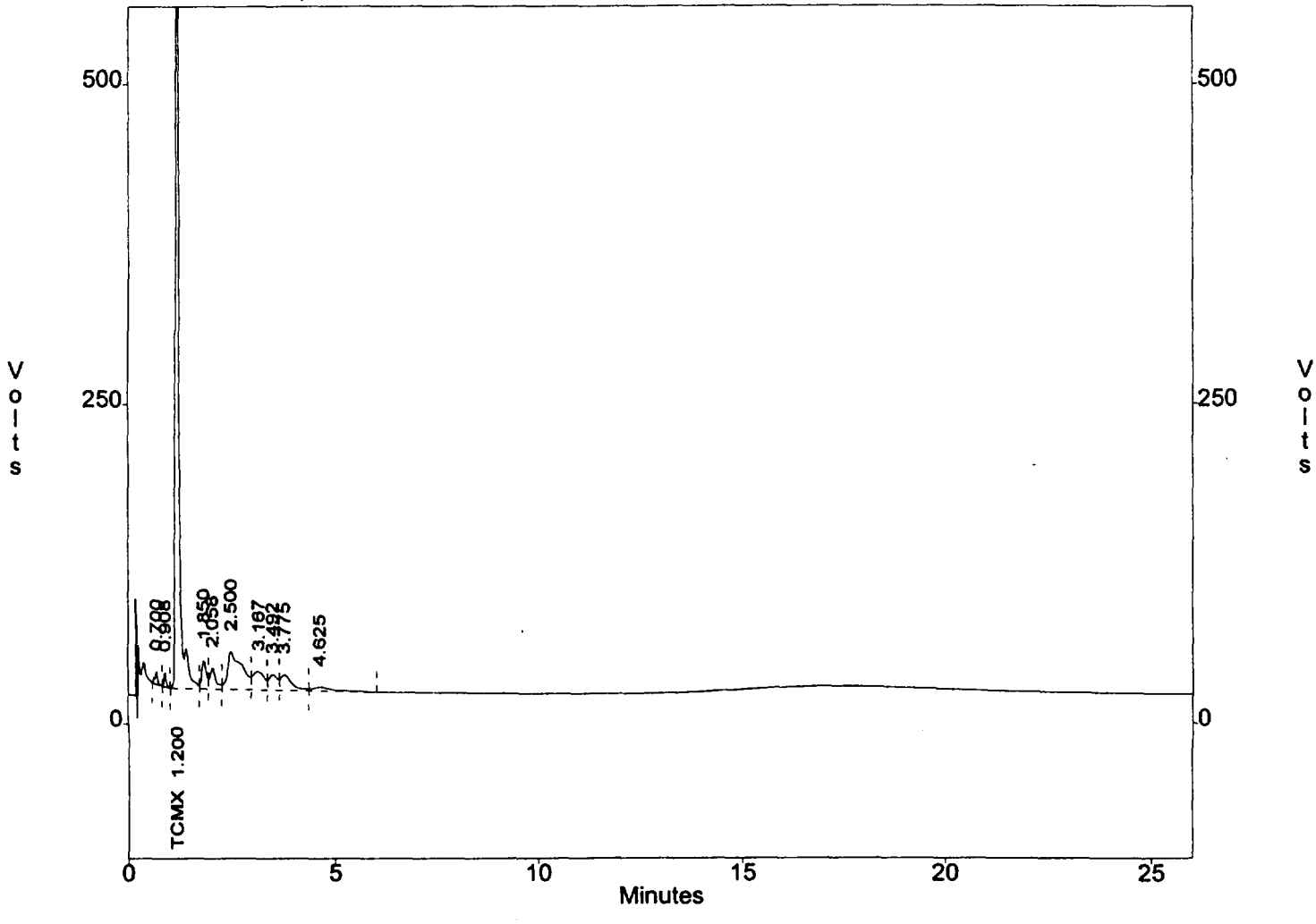
198

File : c:\ezchrom\chrom\var1b\0207V1B.005
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1016 .1
Acquired : Feb 07, 1997 13:30:58
Printed : May 09, 1997 07:18:51

Channel A Results

Name	RT	Area	Conc
TCMX	1.200	4204800	94.314
1242		1714640	0.195
1248		1714640	0.179
1254		0	0.000
1260		0	0.000
1016		1714640	0.152
1221		1317689	0.531
1232		1714640	0.340

c:\ezchrom\chrom\var1b\0207V1B.005 -- Channel A



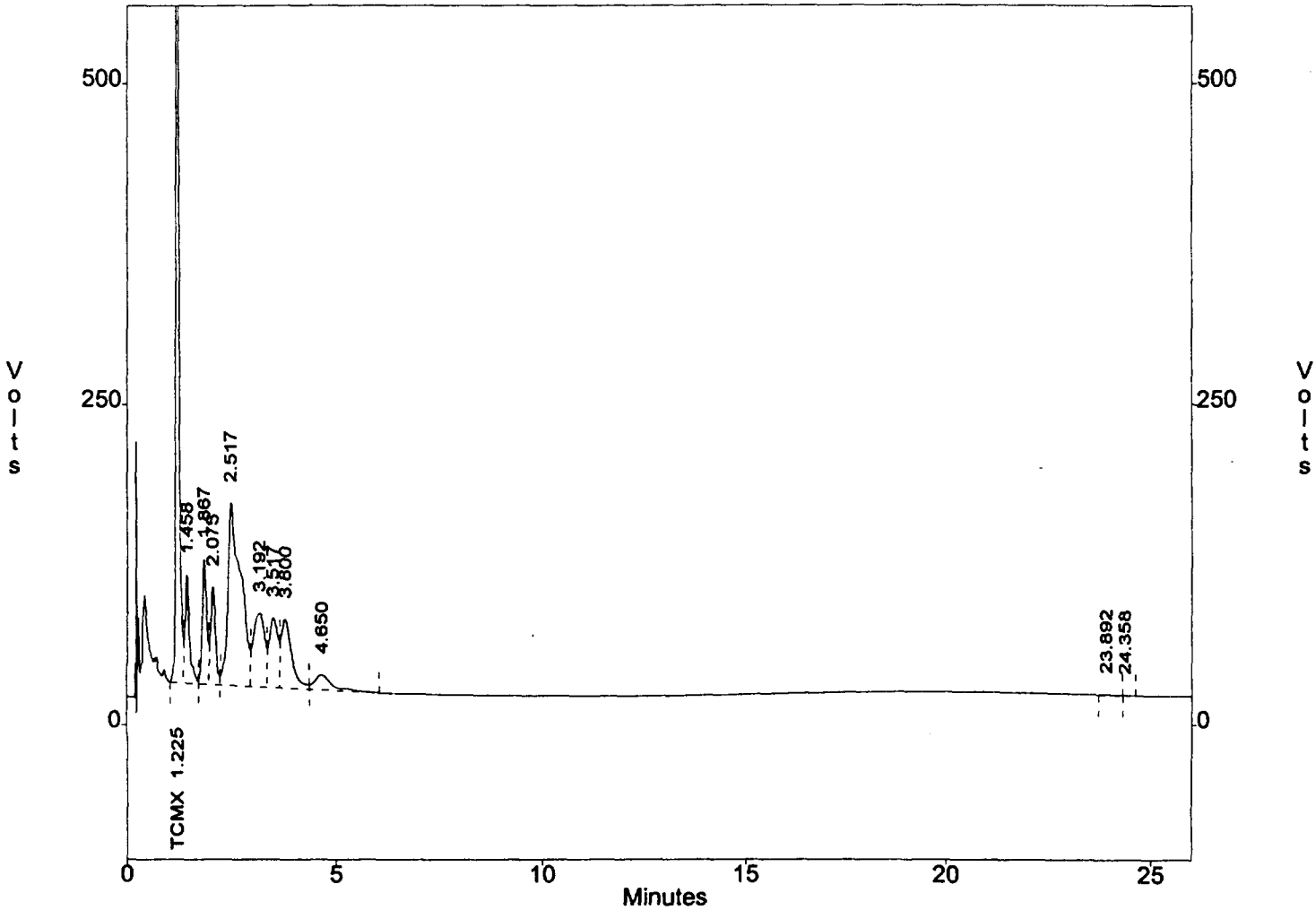
49

File : c:\ezchrom\chrom\var1b\0207V1B.006
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1016 .5
Acquired : Feb 07, 1997 13:57:20
Printed : May 09, 1997 07:18:53

Channel A Results

Name	RT	Area	Conc
TCMX	1.225	4124947	92.523
1242		7198166	0.819
1248		7198166	0.753
1254		0	0.000
1260		0	0.000
1016		7198166	0.639
1221		10257647	4.132
1232		7198166	1.426

c:\ezchrom\chrom\var1b\0207V1B.006 -- Channel A



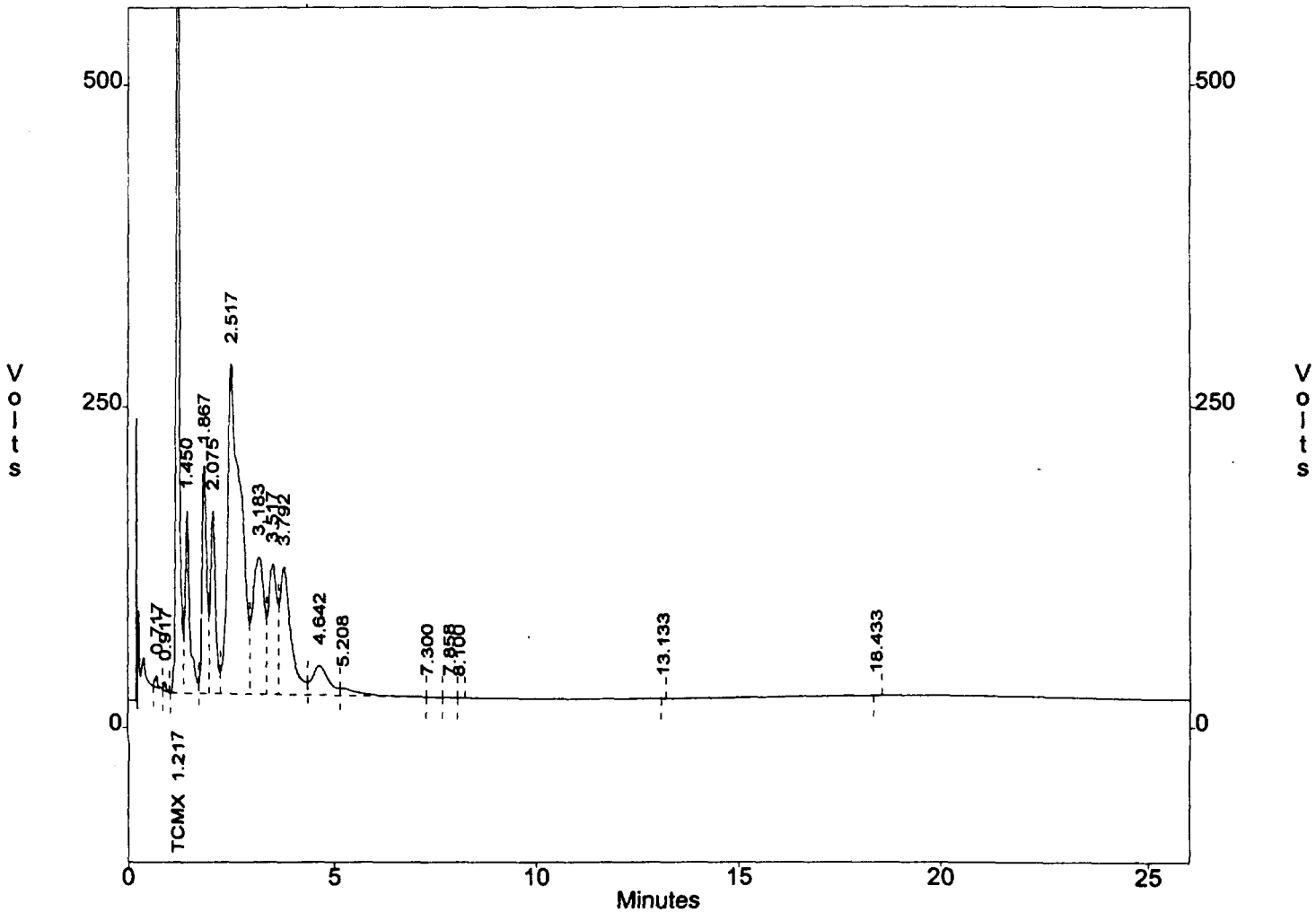
200

File : c:\ezchrom\chrom\var1B\0207V1B.007
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1016 1.0
Acquired : Feb 07, 1997 14:23:43
Printed : May 09, 1997 07:18:54

Channel A Results

Name	RT	Area	Conc
TCMX	1.217	4210525	94.442
1242		13593208	1.547
1248		13593208	1.422
1254		8493	0.000
1260		4164	0.000
1016		13593208	1.208
1221		15621433	6.292
1232		13593208	2.692

c:\ezchrom\chrom\var1b\0207V1B.007 -- Channel A

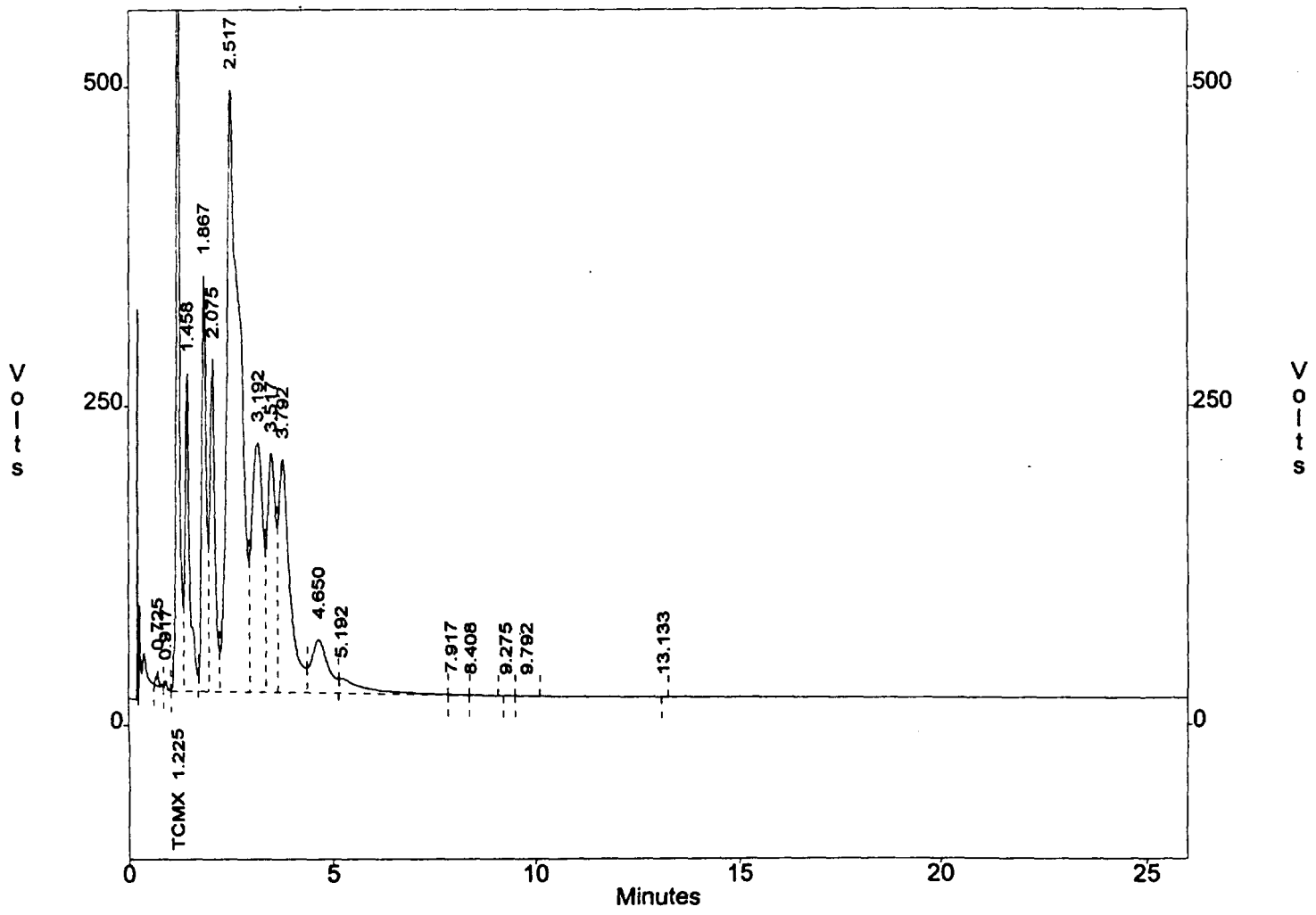


File : c:\ezchrom\chrom\var1b\0207V1B.008
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1016 2.0
Acquired : Feb 07, 1997 14:50:05
Printed : May 09, 1997 07:18:56

Channel A Results

Name	RT	Area	Conc
TCMX	1.225	4330453	97.132
1242		25121100	2.859
1248		25121100	2.628
1254		35256	0.002
1260		13820	0.000
1016		25121100	2.232
1221		25288656	10.186
1232		25121100	4.975

c:\ezchrom\chrom\var1b\0207V1B.008 -- Channel A



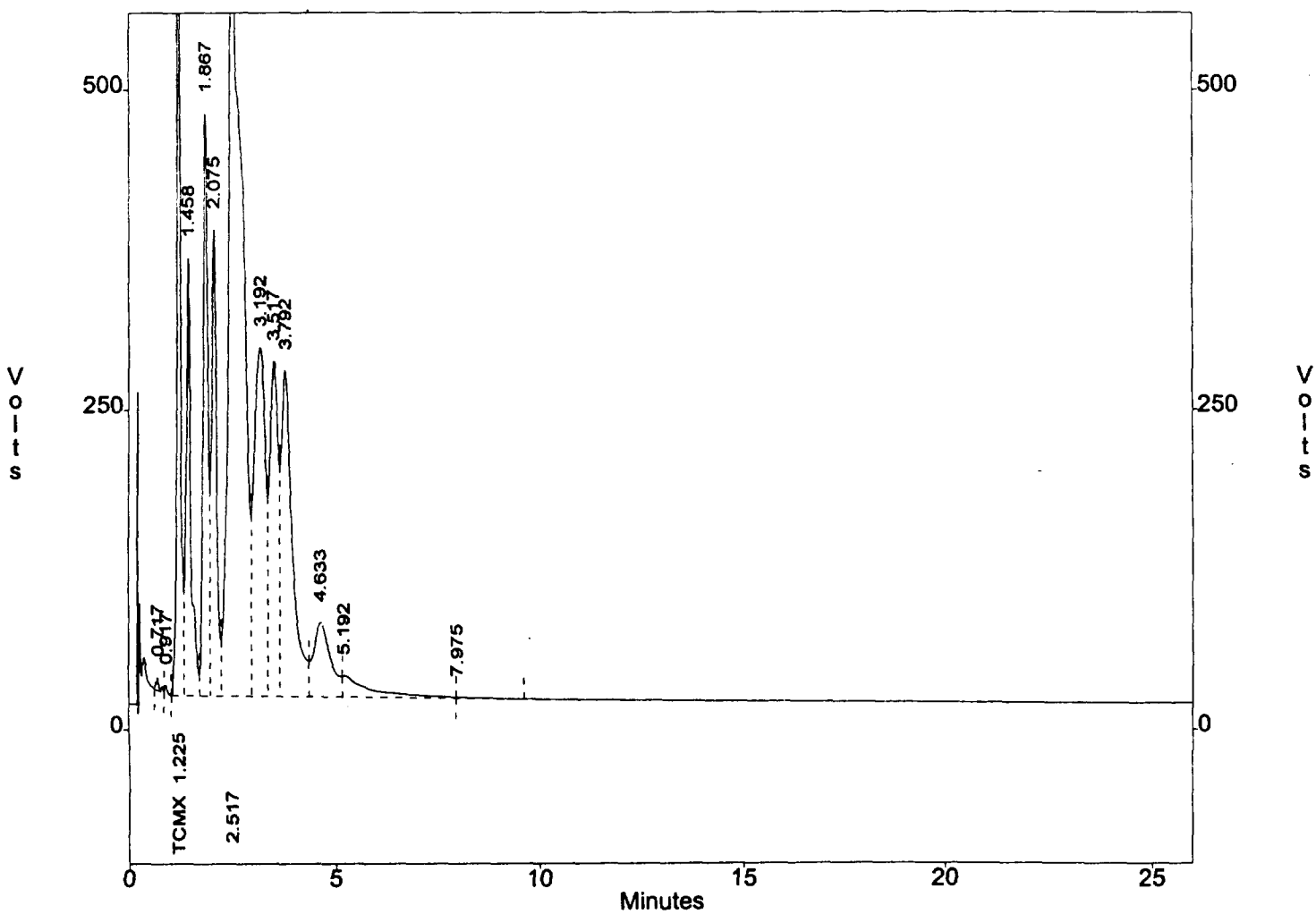
202

File : c:\ezchrom\chrom\var1b\0207V1B.009
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1016 3.0
Acquired : Feb 07, 1997 15:16:28
Printed : May 09, 1997 07:18:58

Channel A Results

Name	RT	Area	Conc
TCMX	1.225	4380401	98.252
1242		35088824	3.993
1248		35088824	3.671
1254		41899	0.002
1260		0	0.000
1016		35088824	3.117
1221		33651416	13.555
1232		35088824	6.949

c:\ezchrom\chrom\var1b\0207V1B.009 -- Channel A



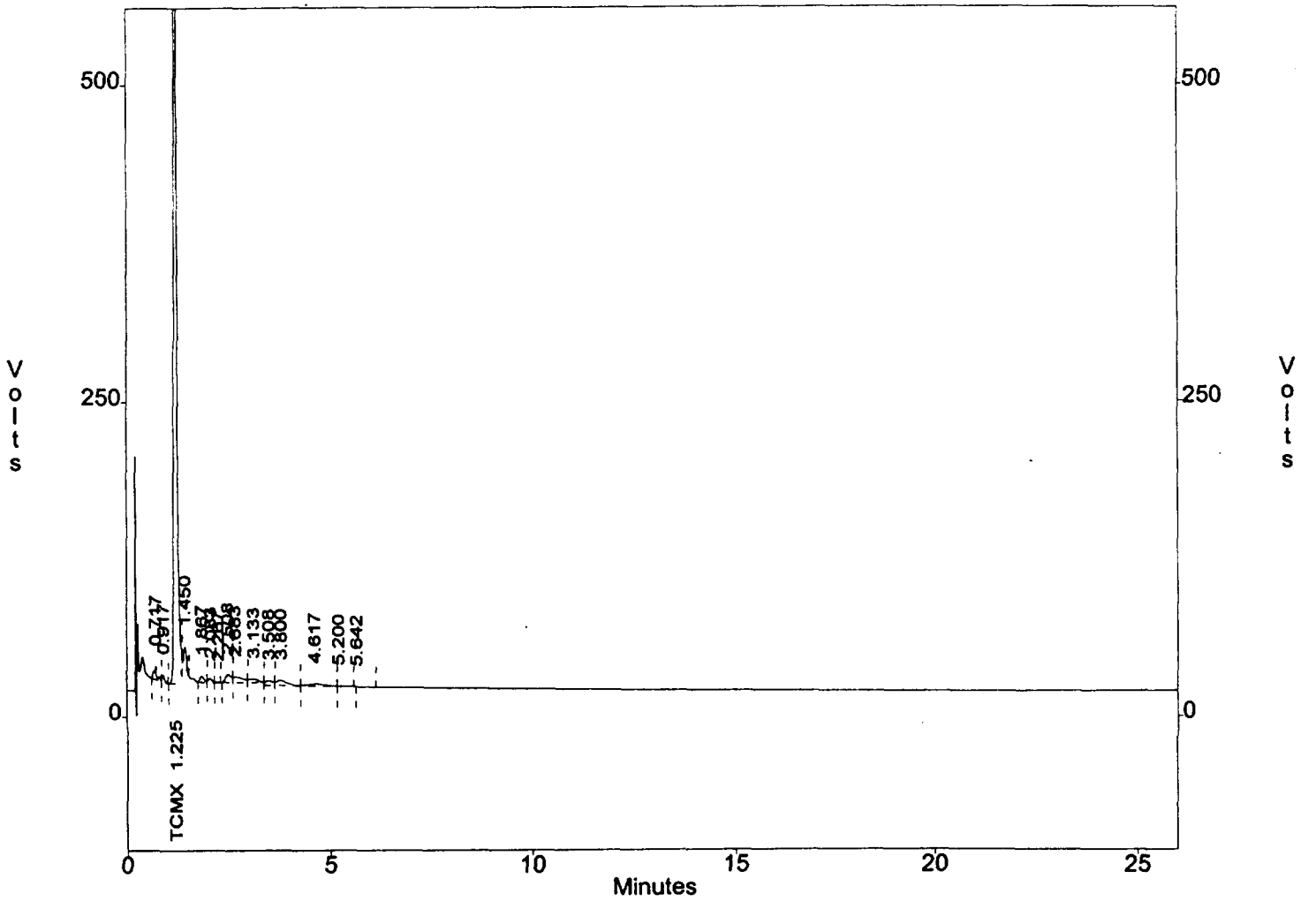
File : c:\ezchrom\chrom\var1b\0207V1B.010
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1221 .05
Acquired : Feb 07, 1997 15:46:08
Printed : May 09, 1997 07:18:59

Channel A Results

Name	RT	Area	Conc
TCMX	1.225	3961535	88.857
1242		361133	0.041
1248		361133	0.038
1254		0	0.000
1260		0	0.000
1016		361133	0.032
1221		4258217	1.715
1232		361133	0.072

1.1

c:\ezchrom\chrom\var1b\0207V1B.010 -- Channel A

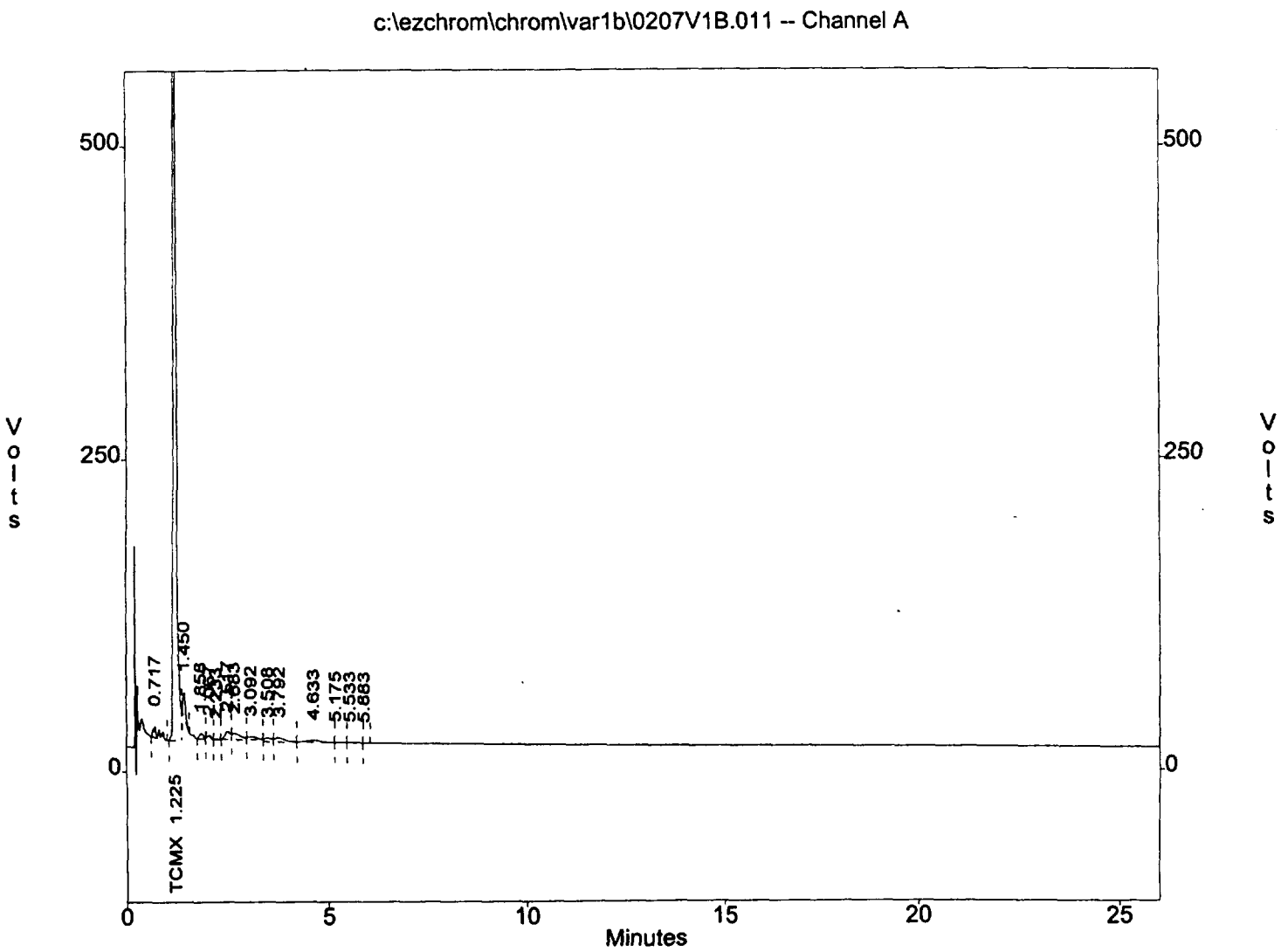


204

File : c:\ezchrom\chrom\var1b\0207V1B.011
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1221 .1
Acquired : Feb 07, 1997 16:12:30
Printed : May 09, 1997 07:19:01

Channel A Results

Name	RT	Area	Conc
TCMX	1.225	4042562	90.675
1242		323091	0.037
1248		323091	0.034
1254		0	0.000
1260		0	0.000
1016		323091	0.029
1221		4352497	1.753
1232		323091	0.064

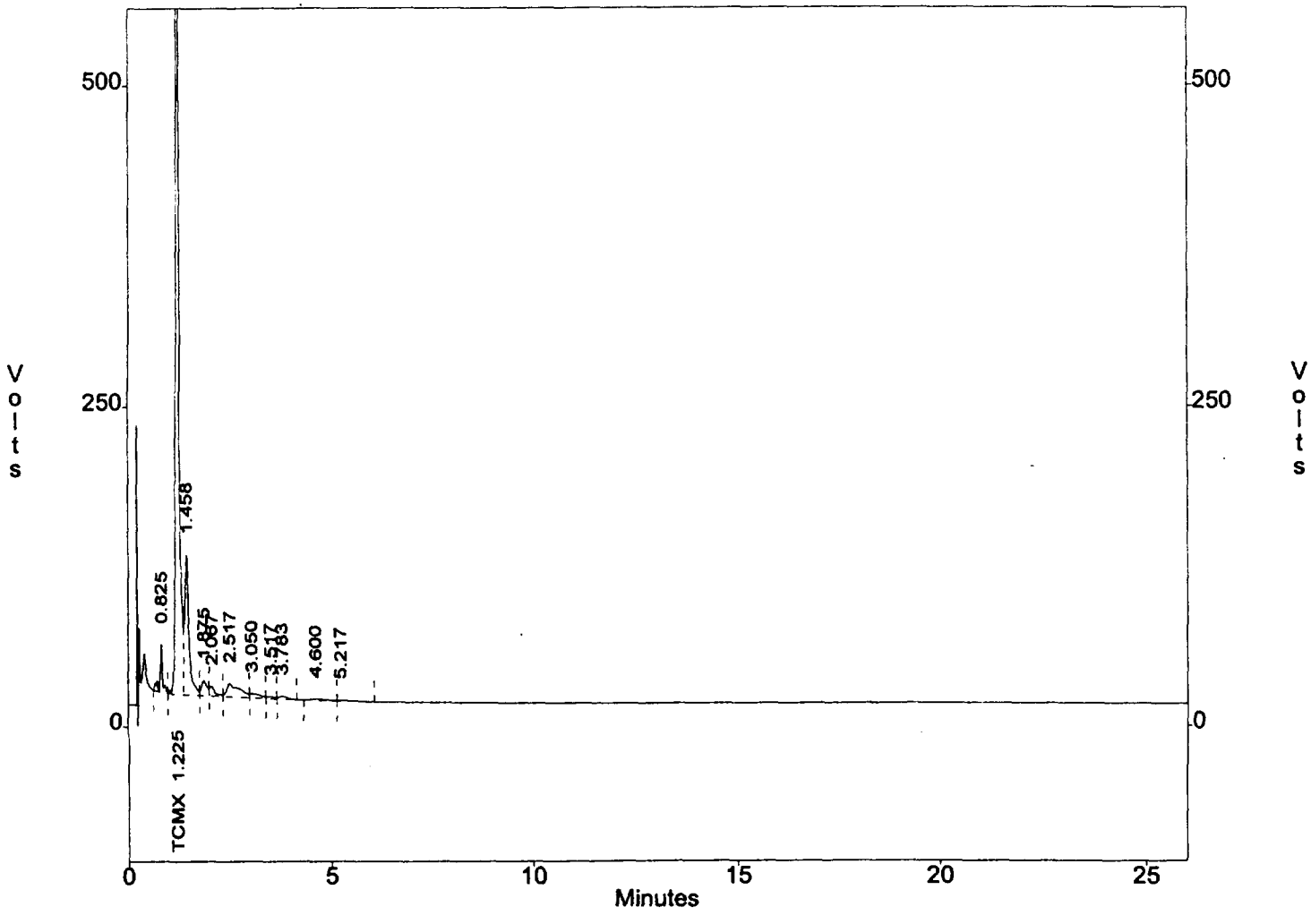


File : c:\ezchrom\chrom\var1b\0207V1B.012
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1221 .5
Acquired : Feb 07, 1997 16:38:53
Printed : May 09, 1997 07:19:02

Channel A Results

Name	RT	Area	Conc
TCMX	1.225	4278954	95.977
1242		528421	0.060
1248		528421	0.055
1254		0	0.000
1260		0	0.000
1016		528421	0.047
1221		5579653	2.247 8.9
1232		528421	0.105

c:\ezchrom\chrom\var1b\0207V1B.012 -- Channel A



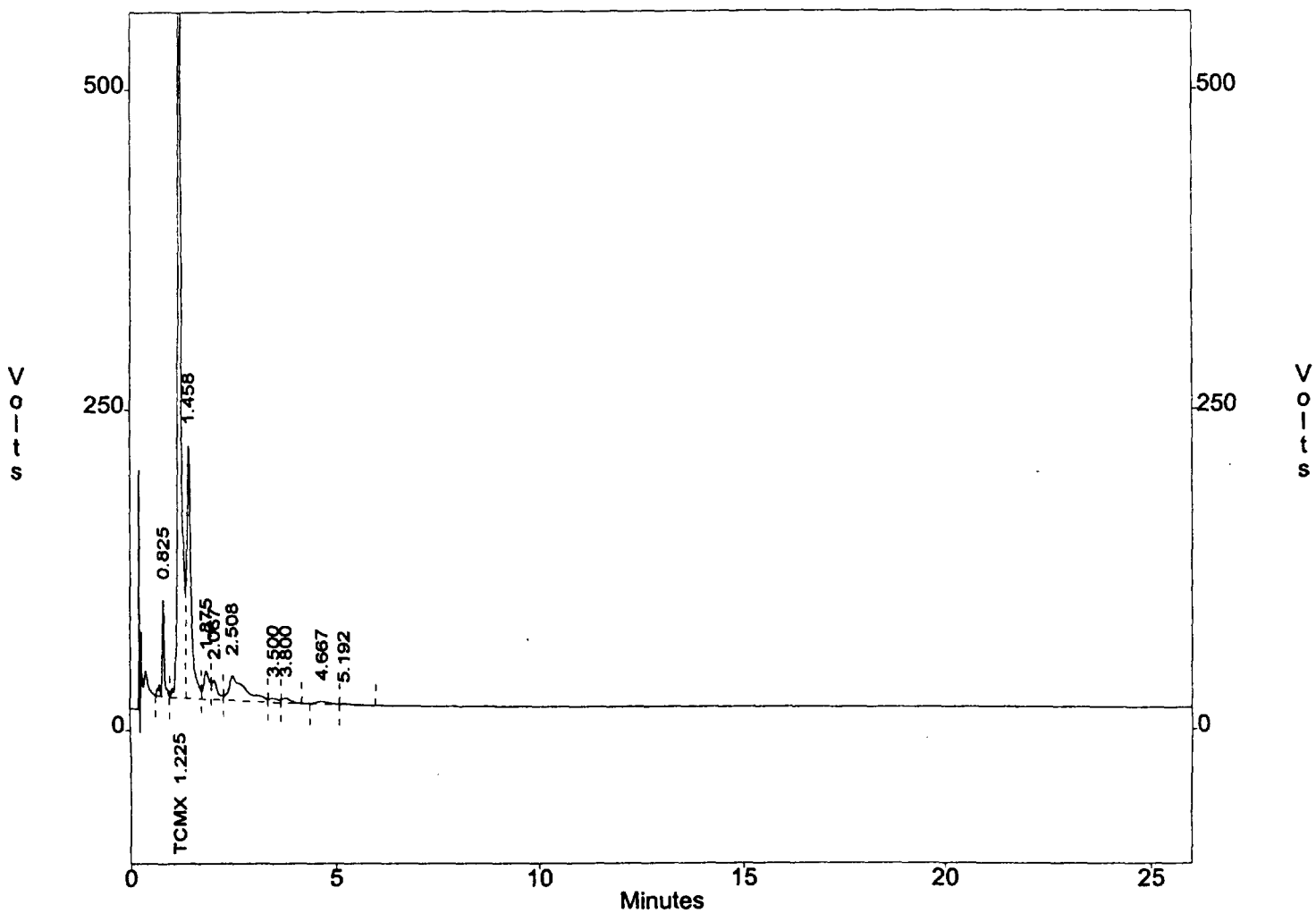
206

File : c:\ezchrom\chrom\var1b\0207V1B.013
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1221 1.0
Acquired : Feb 07, 1997 17:05:16
Printed : May 09, 1997 07:19:04

Channel A Results

Name	RT	Area	Conc
TCMX	1.225	4442540	99.646
1242		977895	0.111
1248		977895	0.102
1254		0	0.000
1260		0	0.000
1016		977895	0.087
1221		6814368	2.745 1.46
1232		977895	0.194

c:\ezchrom\chrom\var1b\0207V1B.013 -- Channel A



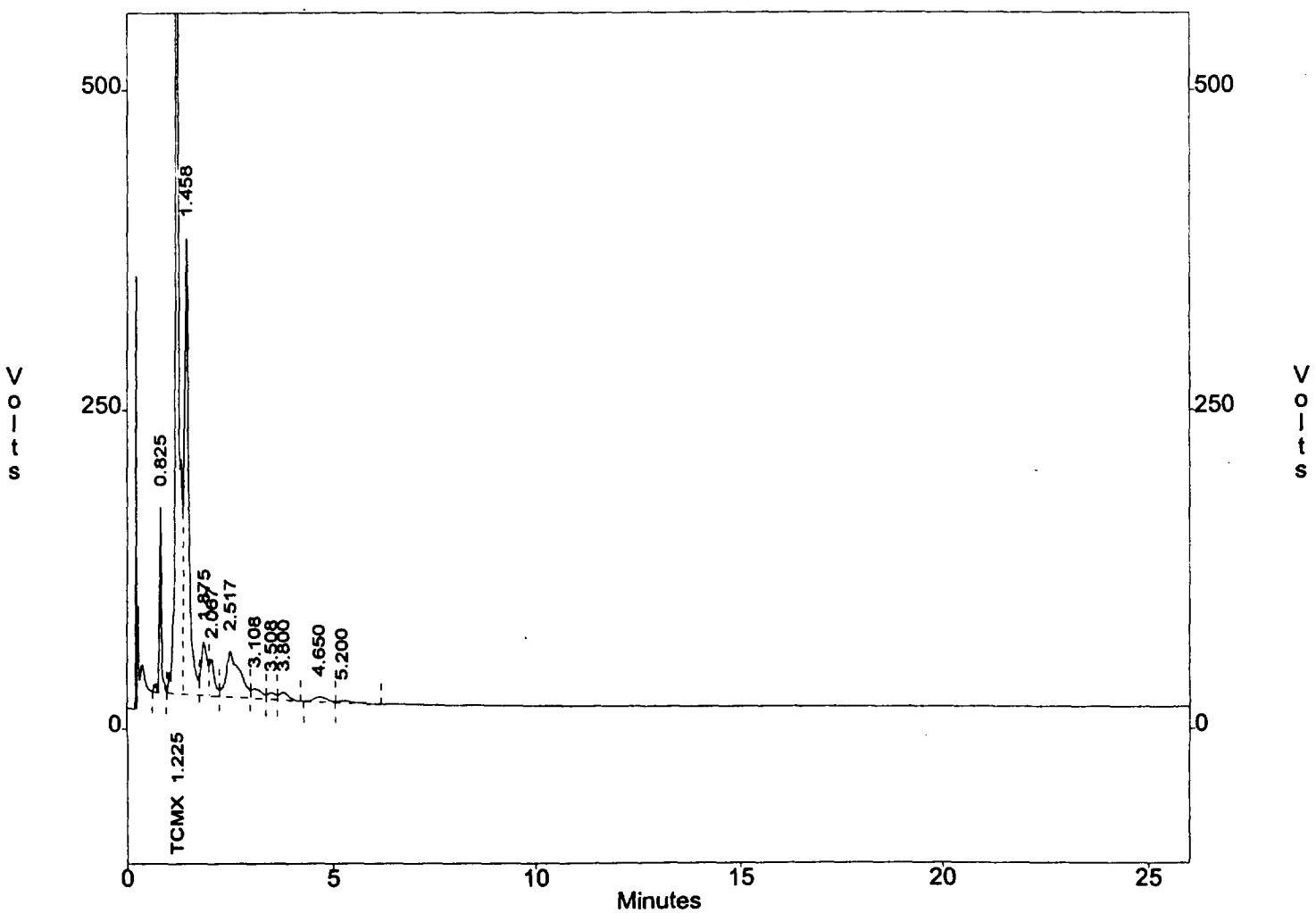
207

File : c:\ezchrom\chrom\var1b\0207V1B.014
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1221 2.0
Acquired : Feb 07, 1997 17:31:39
Printed : May 09, 1997 07:19:06

Channel A Results

Name	RT	Area	Conc
TCMX	1.225	4899438	109.894
1242		1789565	0.204
1248		1789565	0.187
1254		0	0.000
1260		0	0.000
1016		1789565	0.159
1221		9230103	3.718
1232		1789565	0.354

c:\ezchrom\chrom\var1b\0207V1B.014 -- Channel A



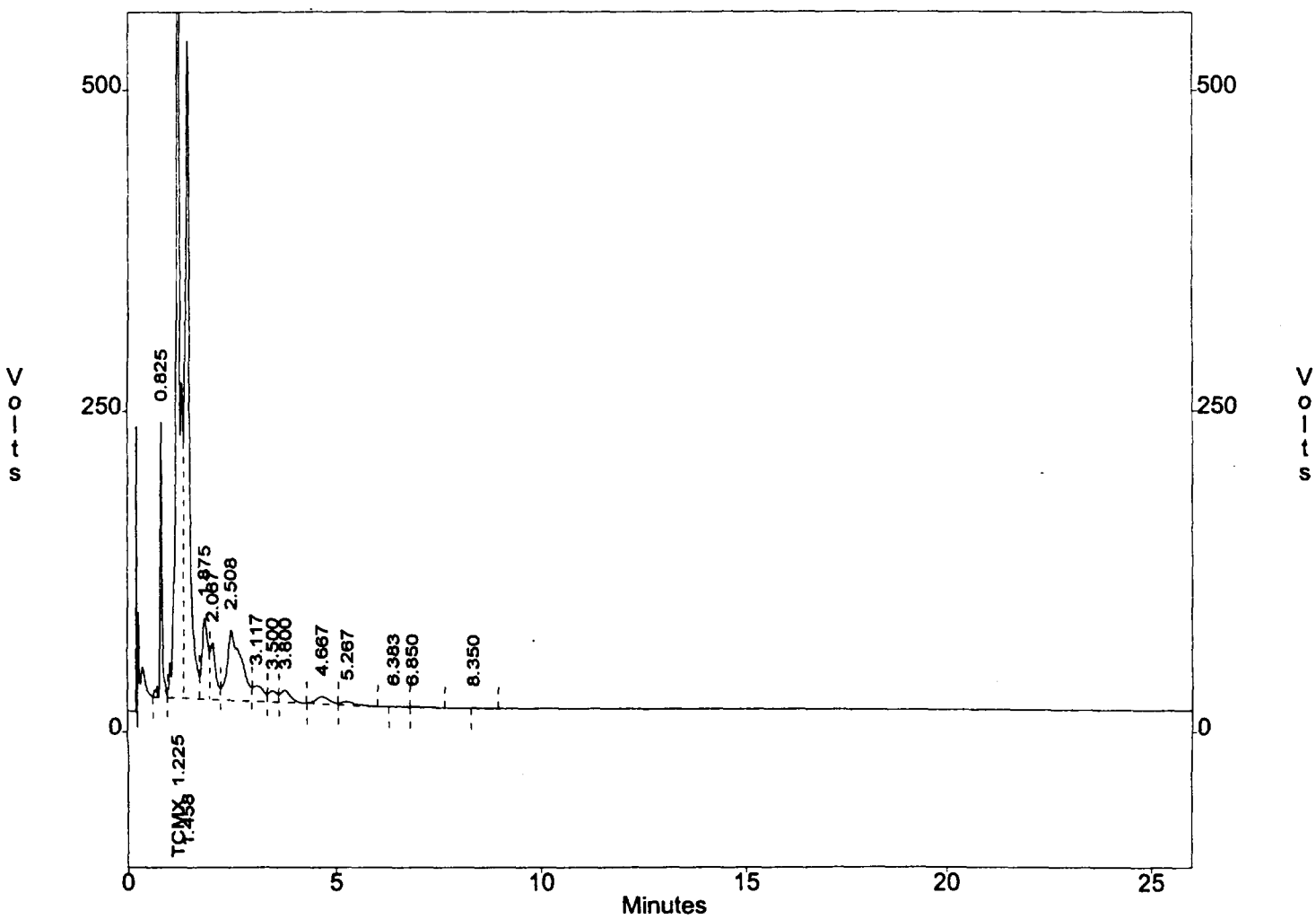
208

File : c:\ezchrom\chrom\var1b\0207V1B.015
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1221 3.0
Acquired : Feb 07, 1997 17:58:01
Printed : May 09, 1997 07:19:07

Channel A Results

Name	RT	Area	Conc
TCMX	1.225	5124871	114.951
1242		2816794	0.321
1248		2816794	0.295
1254		35442	0.002
1260		0	0.000
1016		2816794	0.250
1221		11635937	4.687
1232		2816794	0.558

c:\ezchrom\chrom\var1b\0207V1B.015 -- Channel A



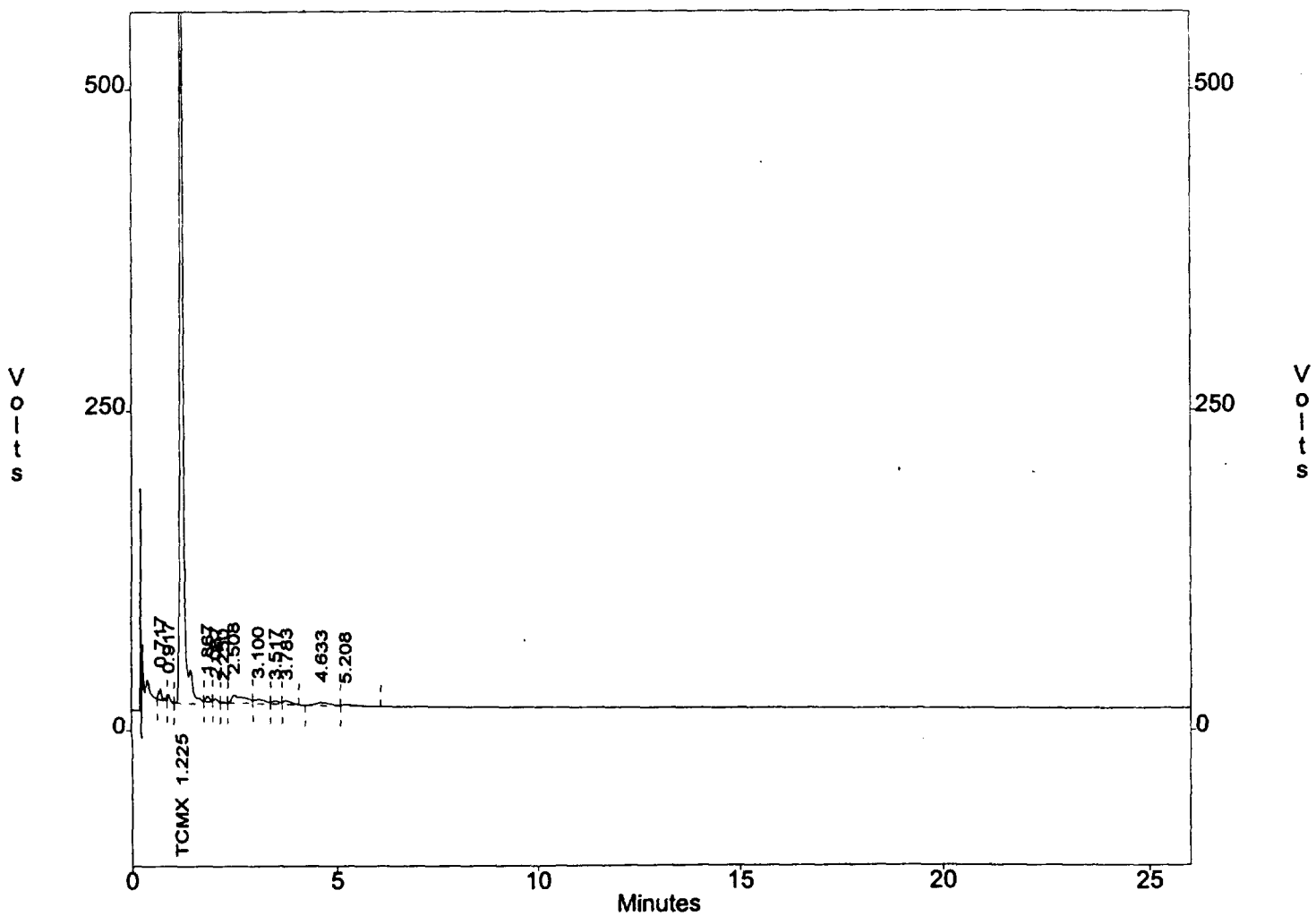
209

File : c:\ezchrom\chrom\var1b\0207V1B.016
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1232 .05
Acquired : Feb 07, 1997 18:24:24
Printed : May 09, 1997 07:19:09

Channel A Results

Name	RT	Area	Conc
TCMX	1.225	4355808	97.701
1242		319881	0.036
1248		319881	0.033
1254		0	0.000
1260		0	0.000
1016		319881	0.028
1221		4607516	1.856
1232		319881	0.063

c:\ezchrom\chrom\var1b\0207V1B.016 -- Channel A

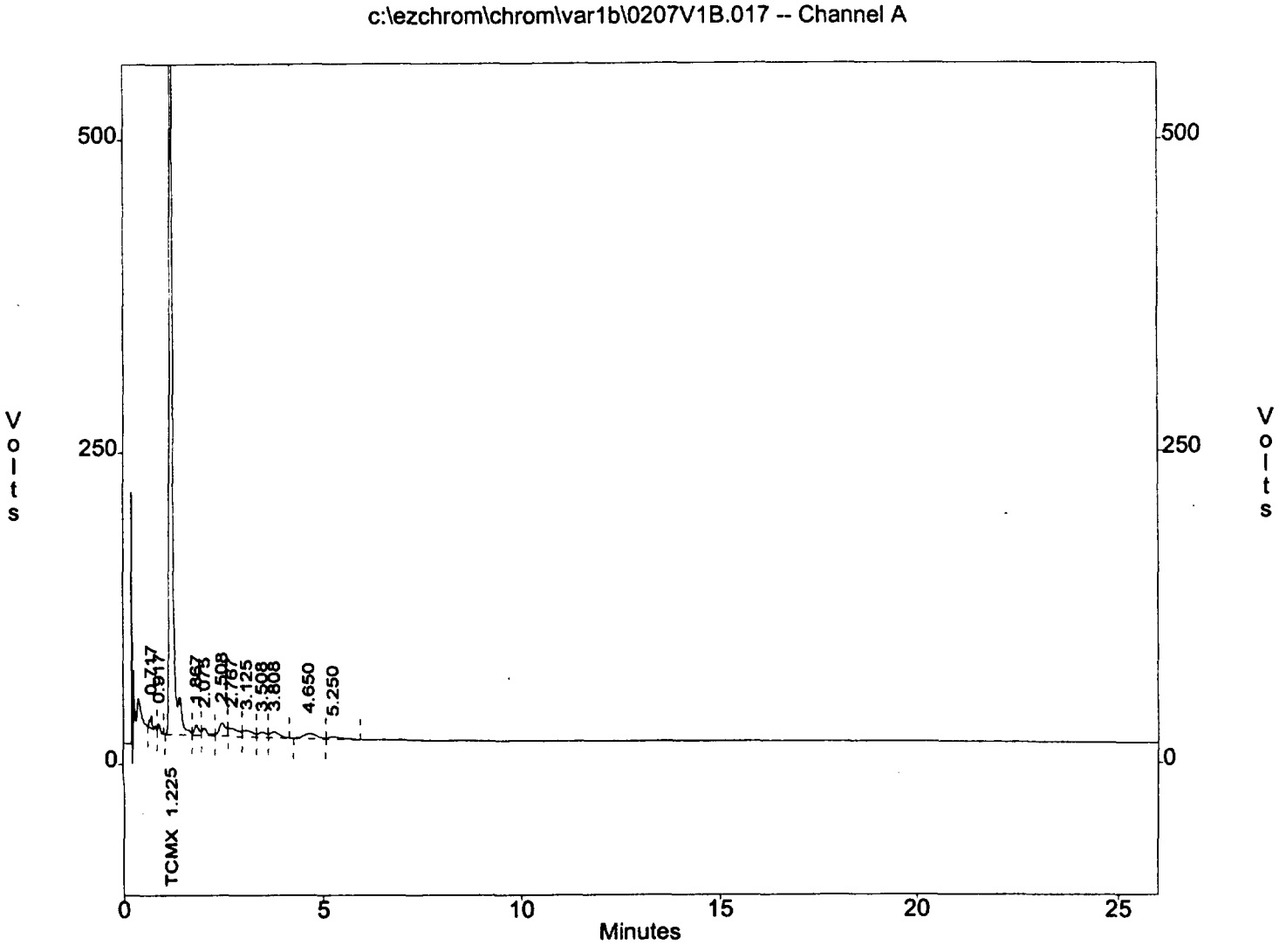


210

File : c:\ezchrom\chrom\var1b\0207V1B.017
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1232 .1
Acquired : Feb 07, 1997 18:50:47
Printed : May 09, 1997 07:19:10

Channel A Results

Name	RT	Area	Conc
TCMX	1.225	4330943	97.143
1242		573476	0.065
1248		573476	0.060
1254		0	0.000
1260		0	0.000
1016		573476	0.051
1221		4773560	1.923
1232		573476	0.114



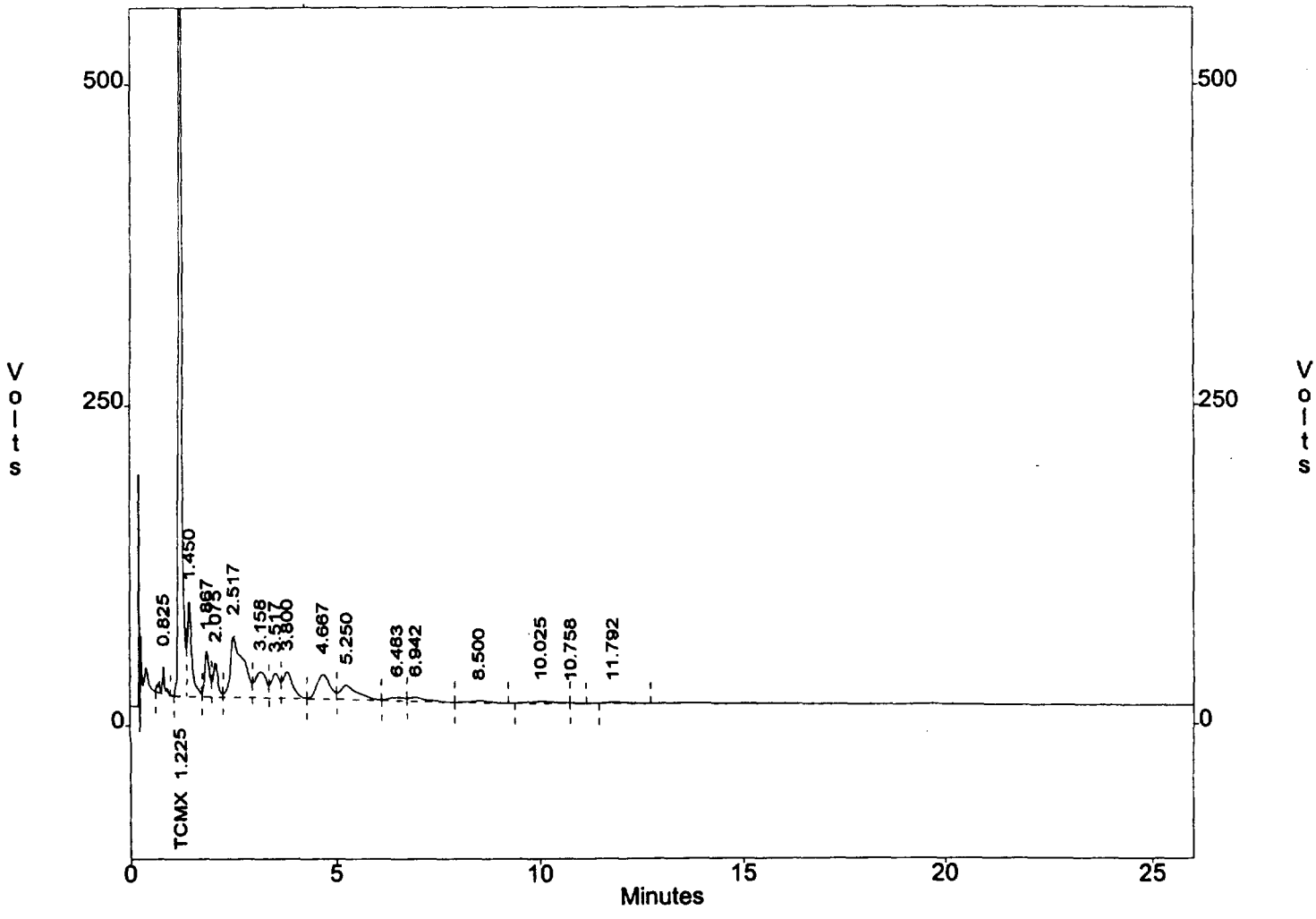
211

File : c:\ezchrom\chrom\var1b\0207V1B.018
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1232 .5
Acquired : Feb 07, 1997 19:17:09
Printed : May 09, 1997 07:19:12

Channel A Results

Name	RT	Area	Conc
TCMX	1.225	4106060	92.099
1242		2521854	0.287
1248		2521854	0.264
1254		334151	0.019
1260		111539	0.004
1016		2521854	0.224
1221		6569237	2.646
1232		2521854	0.499

c:\ezchrom\chrom\var1b\0207V1B.018 -- Channel A



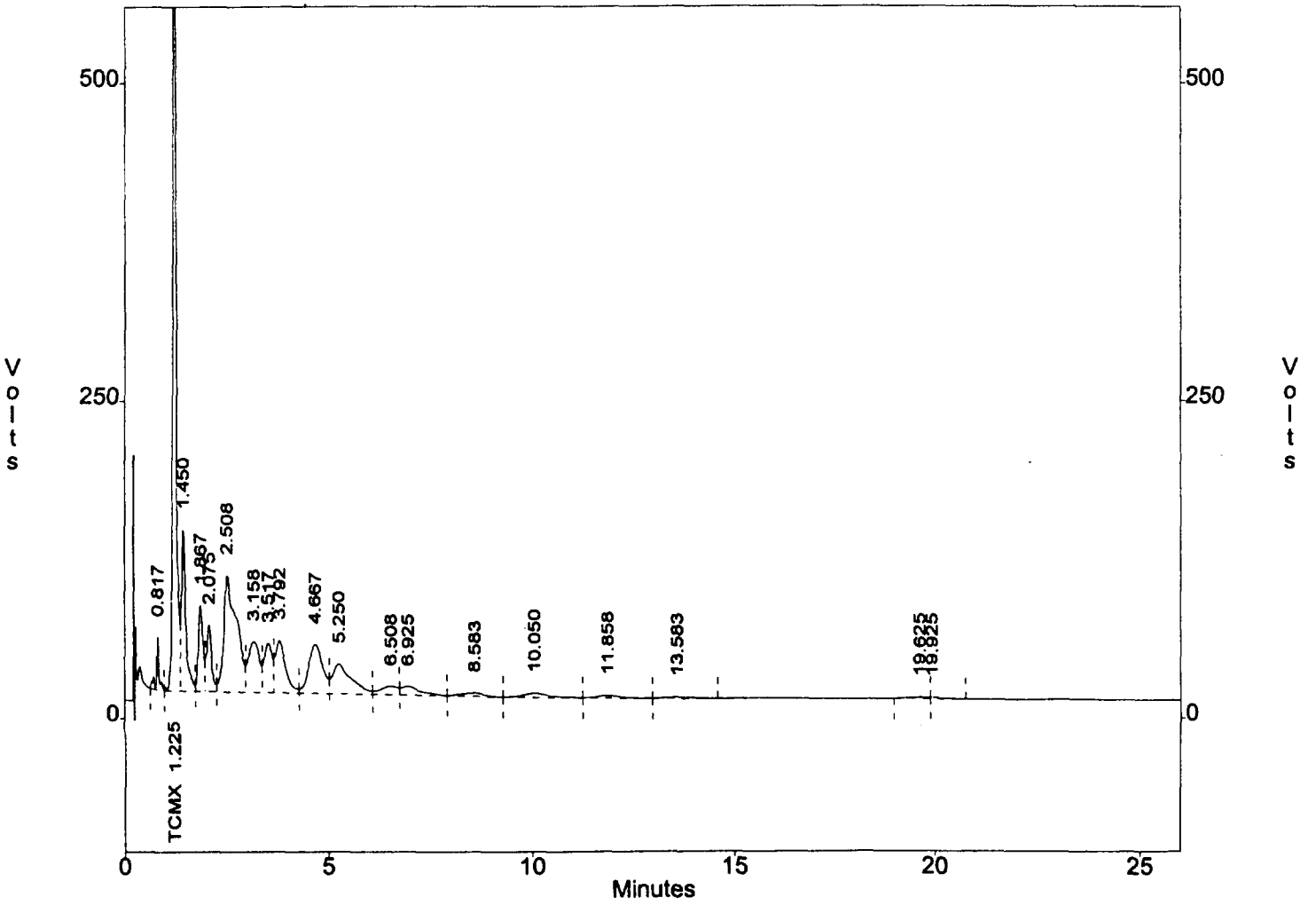
212

File : c:\ezchrom\chrom\var1b\0207V1B.019
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1232 1
Acquired : Feb 07, 1997 19:43:32
Printed : May 09, 1997 07:19:14

Channel A Results

Name	RT	Area	Conc
TCMX	1.225	4298448	96.414
1242		5021066	0.571
1248		5021066	0.525
1254		771186	0.043
1260		350394	0.011
1016		5021066	0.446
1221		9010451	3.629
1232		5021066	0.994

c:\ezchrom\chrom\var1b\0207V1B.019 -- Channel A



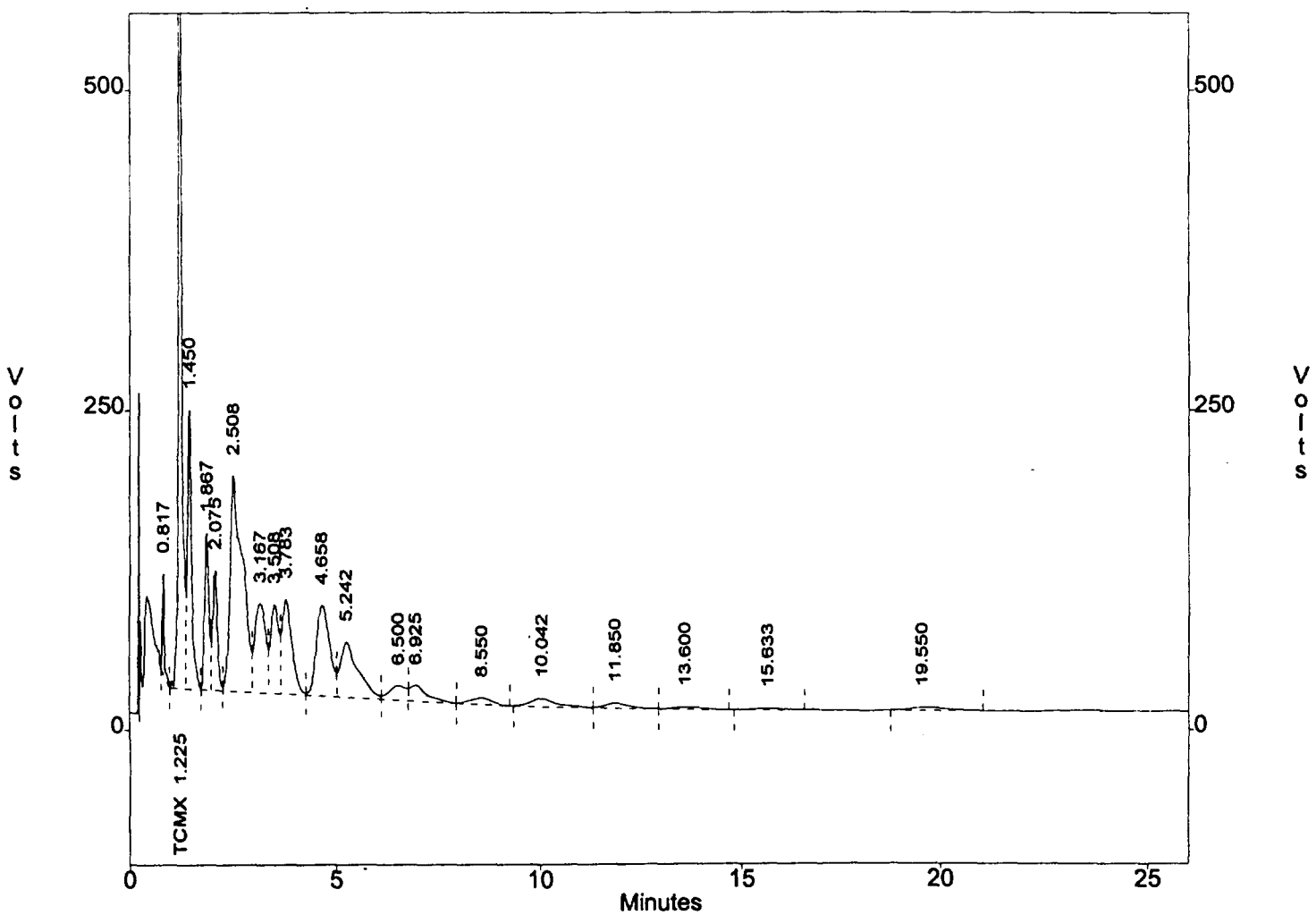
213

File : c:\ezchrom\chrom\var1b\0207V1B.020
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1232 2
Acquired : Feb 07, 1997 20:09:55
Printed : May 09, 1997 07:19:16

Channel A Results

Name	RT	Area	Conc
TCMX	1.225	4327864	97.074
1242		8679545	0.988
1248		8679545	0.908
1254		1332360	0.074
1260		743692	0.024
1016		8679545	0.771
1221		12401976	4.995
1232		8679545	1.719

c:\ezchrom\chrom\var1b\0207V1B.020 -- Channel A



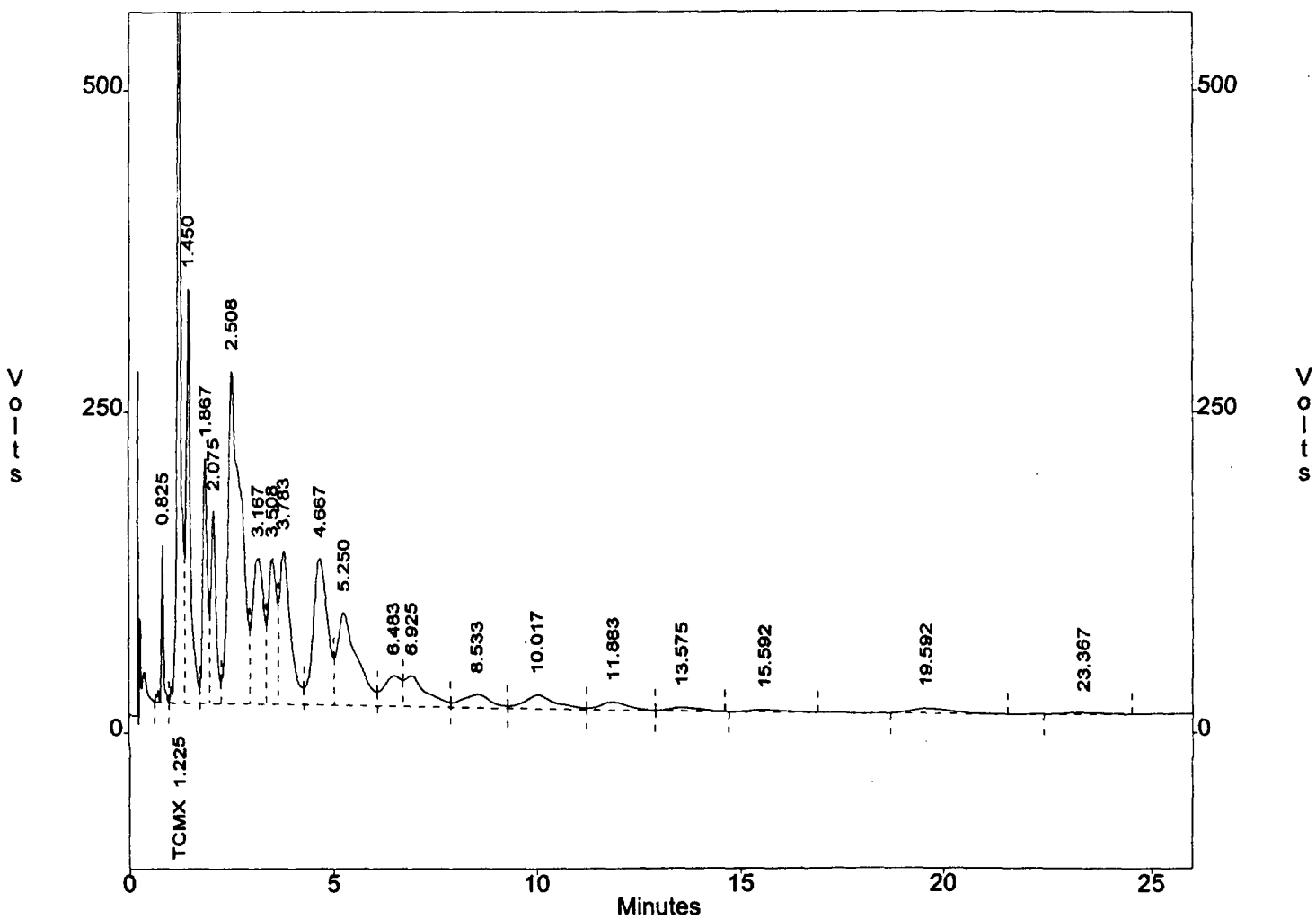
214

File : c:\ezchrom\chrom\var1b\0207V1B.021
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1232 3
Acquired : Feb 07, 1997 20:36:18
Printed : May 09, 1997 07:19:17

Channel A Results

Name	RT	Area	Conc
TCMX	1.225	4735887	106.226
1242		14522163	1.653
1248		14522163	1.519
1254		3015764	0.168
1260		1390863	0.044
1016		14522163	1.290
1221		17928004	7.221
1232		14522163	2.876

c:\ezchrom\chrom\var1b\0207V1B.021 -- Channel A



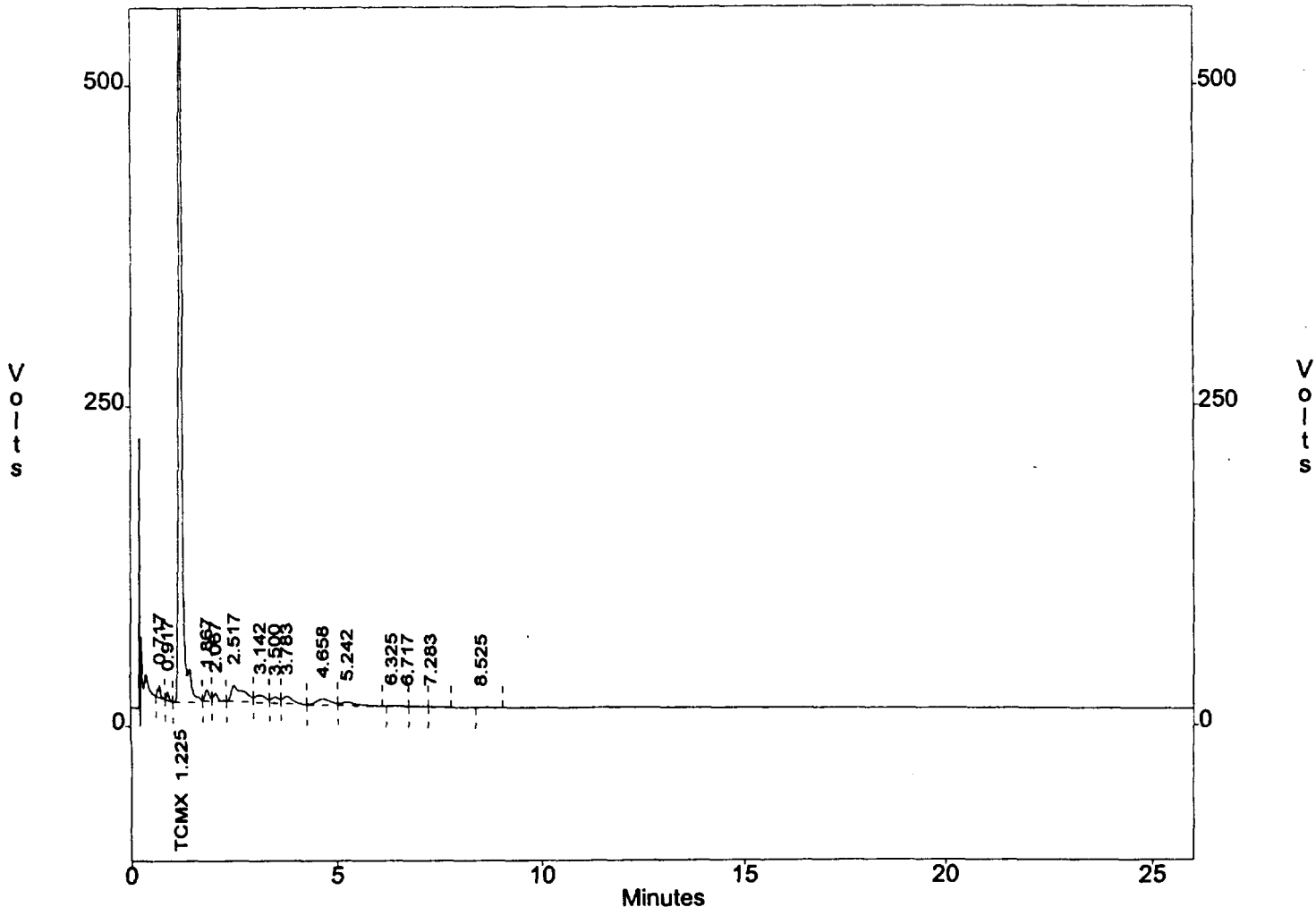
215

File : c:\ezchrom\chrom\var1b\0207V1B.022
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1242 .05
Acquired : Feb 07, 1997 21:02:40
Printed : May 09, 1997 07:19:19

Channel A Results

Name	RT	Area	Conc
TCMX	1.225	4246230	95.243
1242		613027	0.070
1248		613027	0.064
1254		33713	0.002
1260		0	0.000
1016		613027	0.054
1221		4710291	1.897
1232		613027	0.121

c:\ezchrom\chrom\var1b\0207V1B.022 -- Channel A



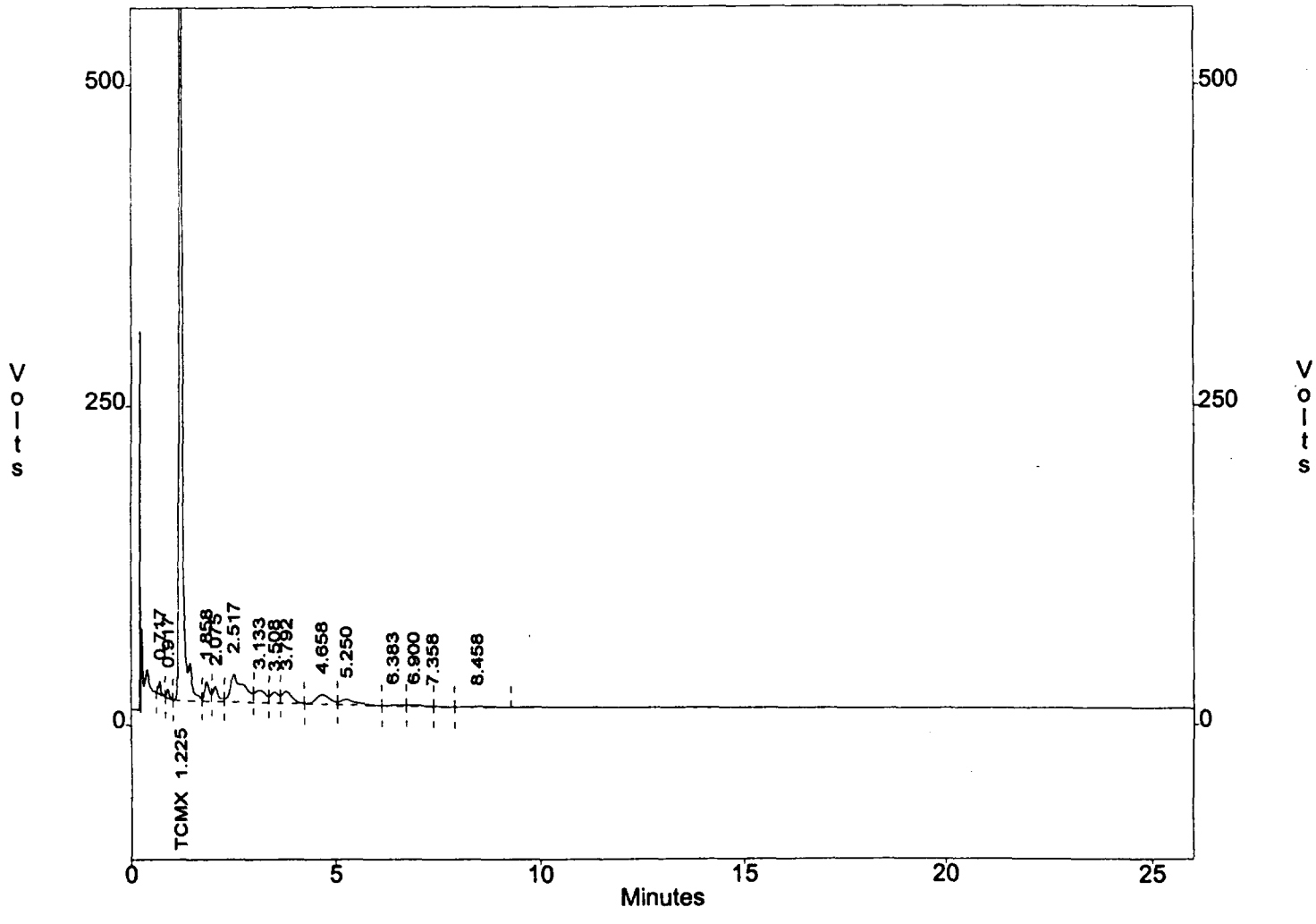
216

File : c:\ezchrom\chrom\var1b\0207V1B.023
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1242 .1
Acquired : Feb 07, 1997 21:29:03
Printed : May 09, 1997 07:19:21

Channel A Results

Name	RT	Area	Conc
TCMX	1.225	4262177	95.601
1242		1143253	0.130
1248		1143253	0.120
1254		84568	0.005
1260		0	0.000
1016		1143253	0.102
1221		5142799	2.071
1232		1143253	0.226

c:\ezchrom\chrom\var1b\0207V1B.023 -- Channel A



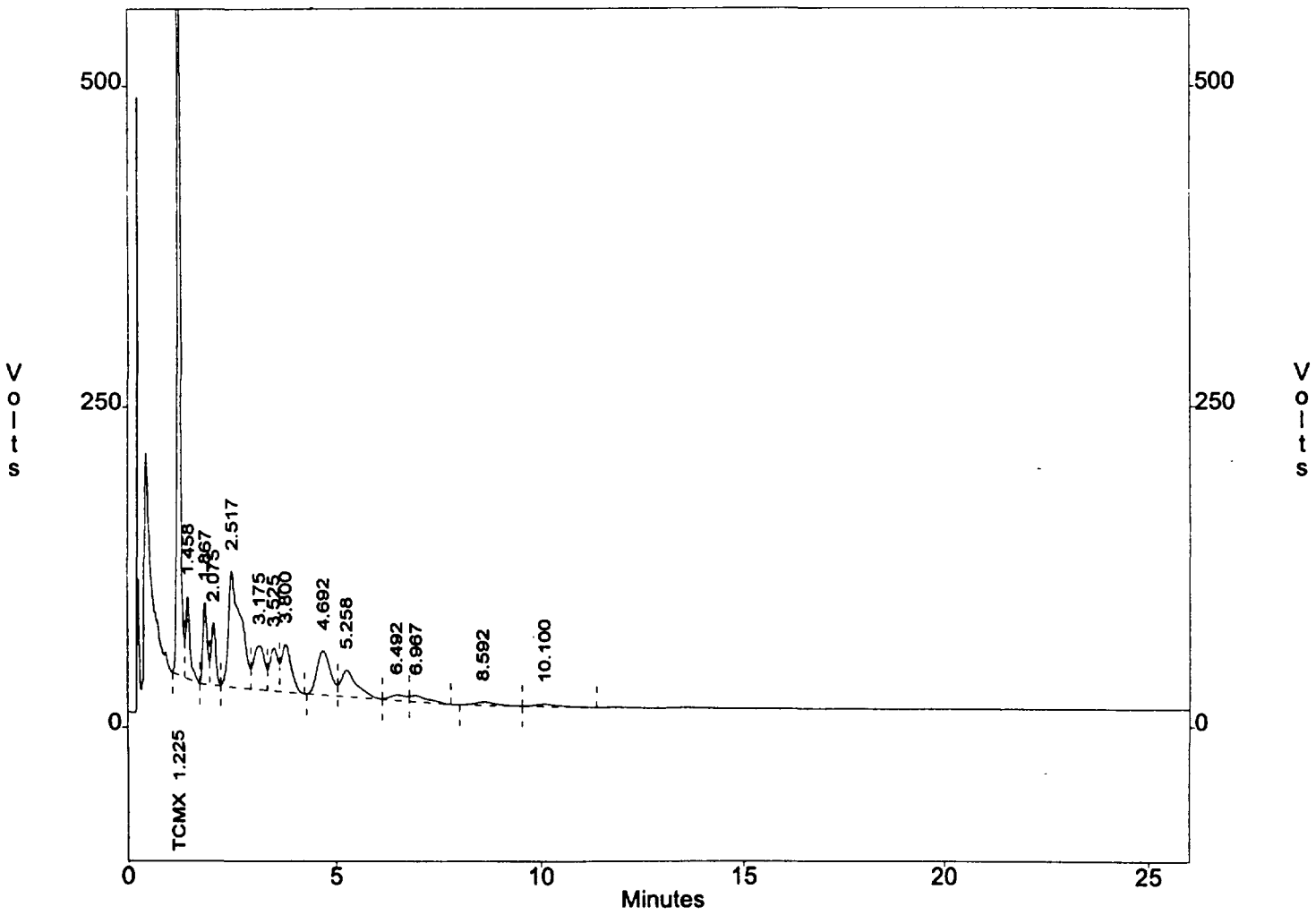
217

File : c:\ezchrom\chrom\var1b\0207V1B.024
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1242 .5
Acquired : Feb 07, 1997 21:55:26
Printed : May 09, 1997 07:19:22

Channel A Results

Name	RT	Area	Conc
TCMX	1.225	4033886	90.480
1242		4400195	0.501
1248		4400195	0.460
1254		453784	0.025
1260		81907	0.003
1016		4400195	0.391
1221		7841727	3.159
1232		4400195	0.871

c:\ezchrom\chrom\var1b\0207V1B.024 -- Channel A



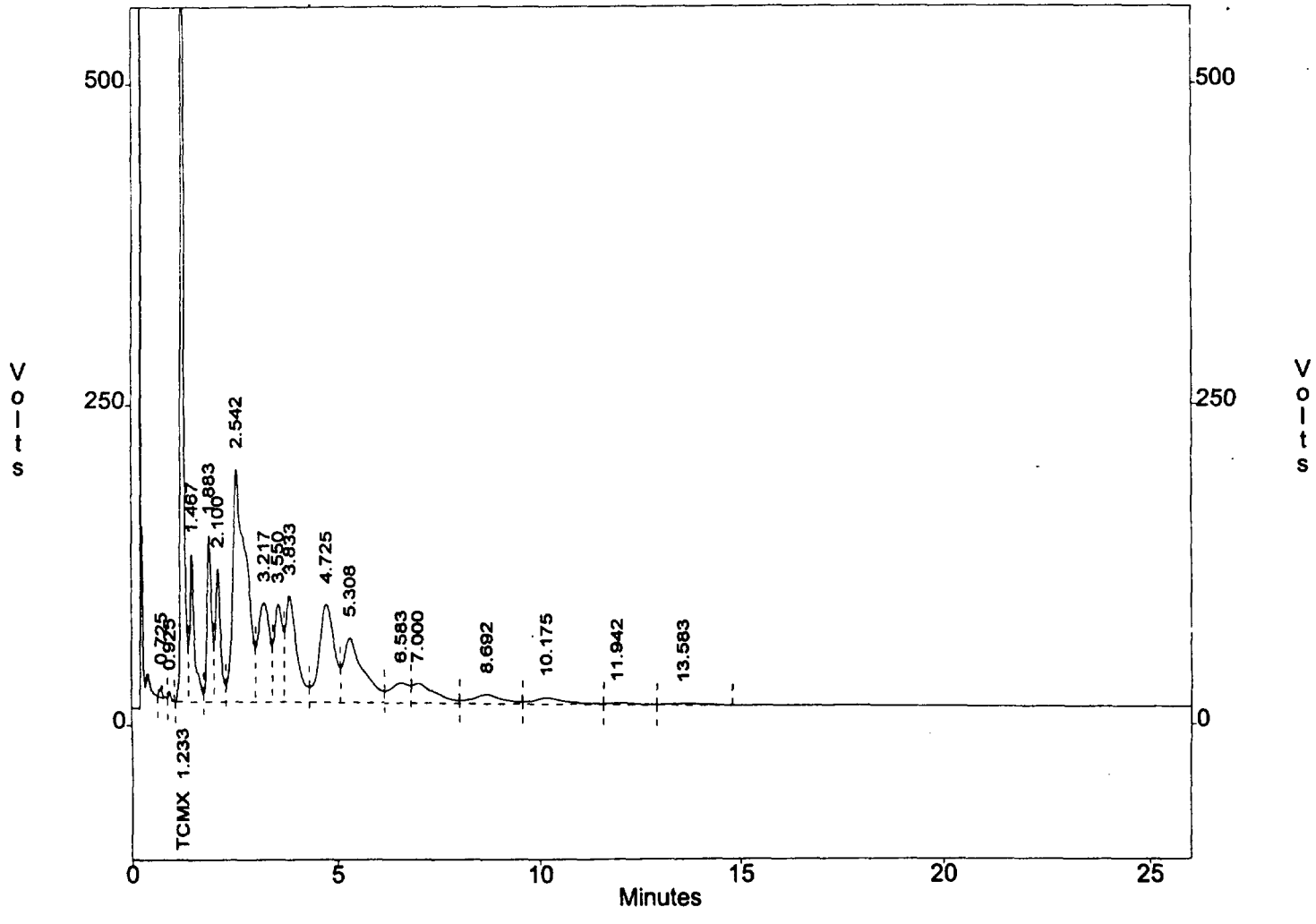
218

File : c:\ezchrom\chrom\var1b\0207V1B.025
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1242 1.0
Acquired : Feb 07, 1997 22:21:48
Printed : May 09, 1997 07:19:24

Channel A Results

Name	RT	Area	Conc
TCMX	1.233	4253997	95.417
1242		10237242	1.165
1248		10237242	1.071
1254		1828511	0.102
1260		400591	0.013
1016		10237242	0.909
1221		12770358	5.144
1232		10237242	2.027

c:\ezchrom\chrom\var1b\0207V1B.025 -- Channel A

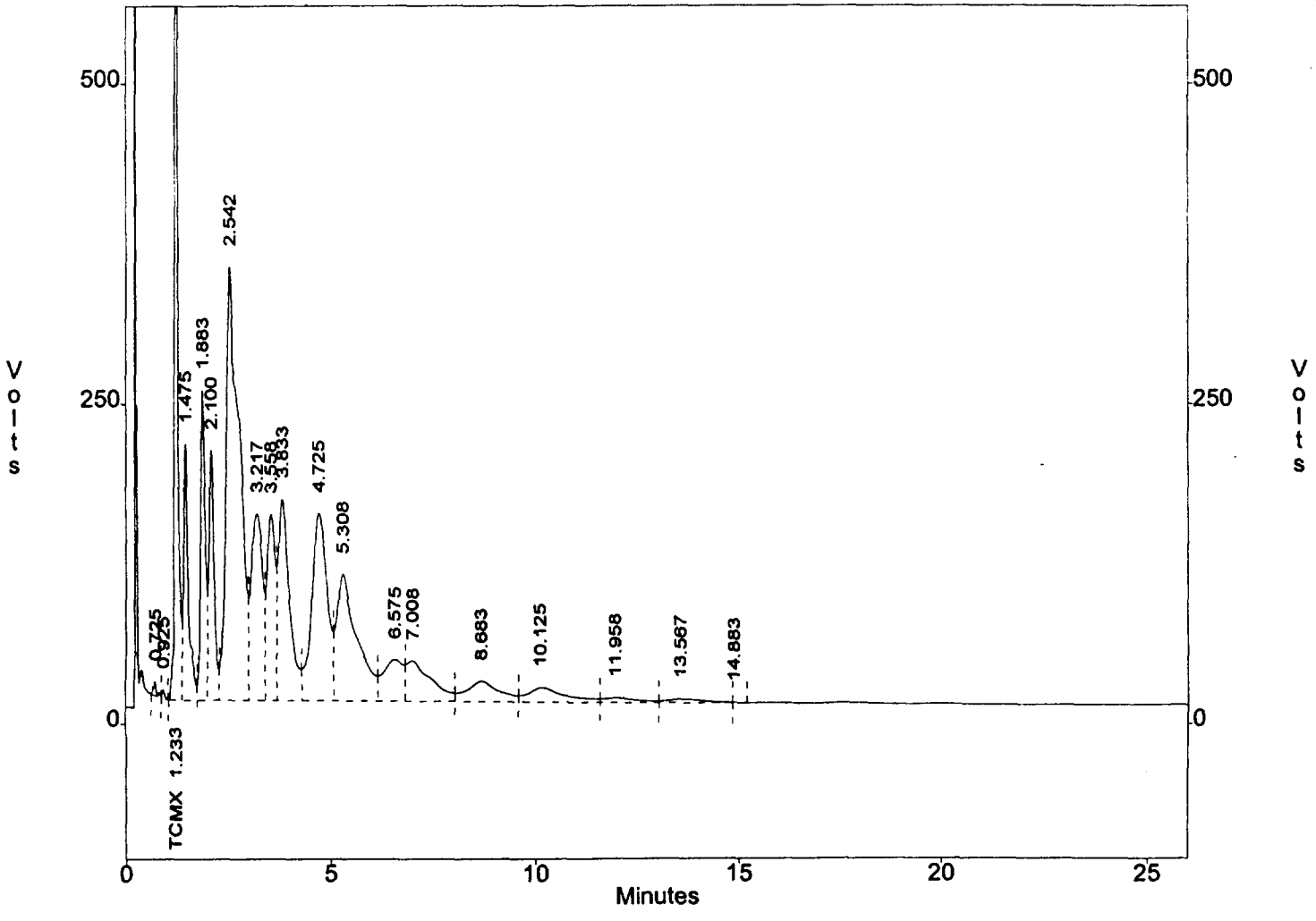


File : c:\ezchrom\chrom\var1b\0207V1B.026
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1242 2.0
Acquired : Feb 07, 1997 22:48:11
Printed : May 09, 1997 07:19:26

Channel A Results

Name	RT	Area	Conc
TCMX	1.233	4408805	98.889
1242		19342054	2.201
1248		19342054	2.023
1254		4260421	0.238
1260		1081669	0.034
1016		19342054	1.718
1221		20267996	8.164
1232		19342054	3.831

c:\ezchrom\chrom\var1b\0207V1B.026 -- Channel A



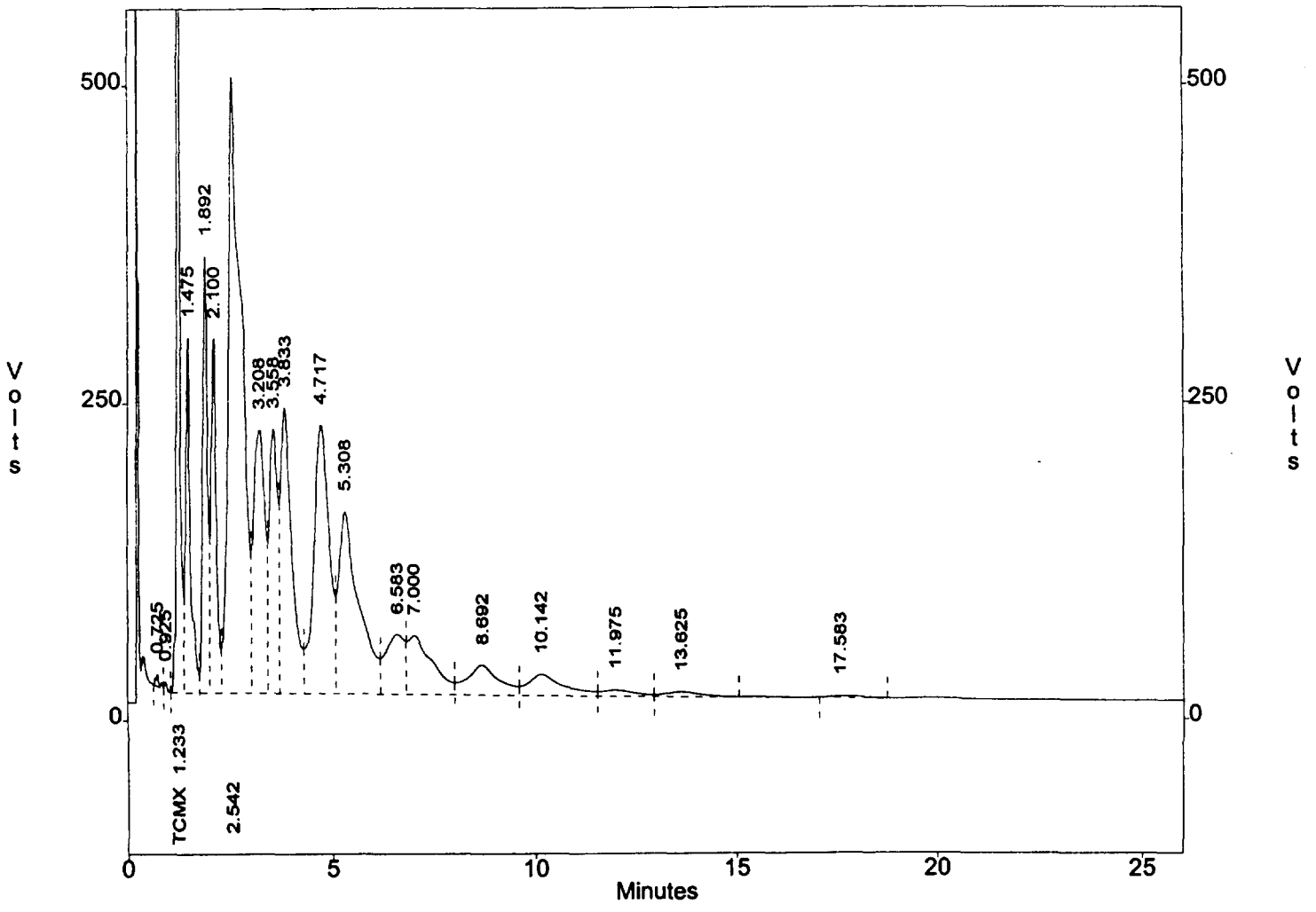
220

File : c:\ezchrom\chrom\var1b\0207V1B.027
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1242 3.0
Acquired : Feb 07, 1997 23:14:34
Printed : May 09, 1997 07:19:27

Channel A Results

Name	RT	Area	Conc
TCMX	1.233	4380088	98.245
1242		27541212	3.134
1248		27541212	2.881
1254		6158022	0.344
1260		1607928	0.051
1016		27541212	2.447
1221		26915902	10.842
1232		27541212	5.454

c:\ezchrom\chrom\var1b\0207V1B.027 -- Channel A



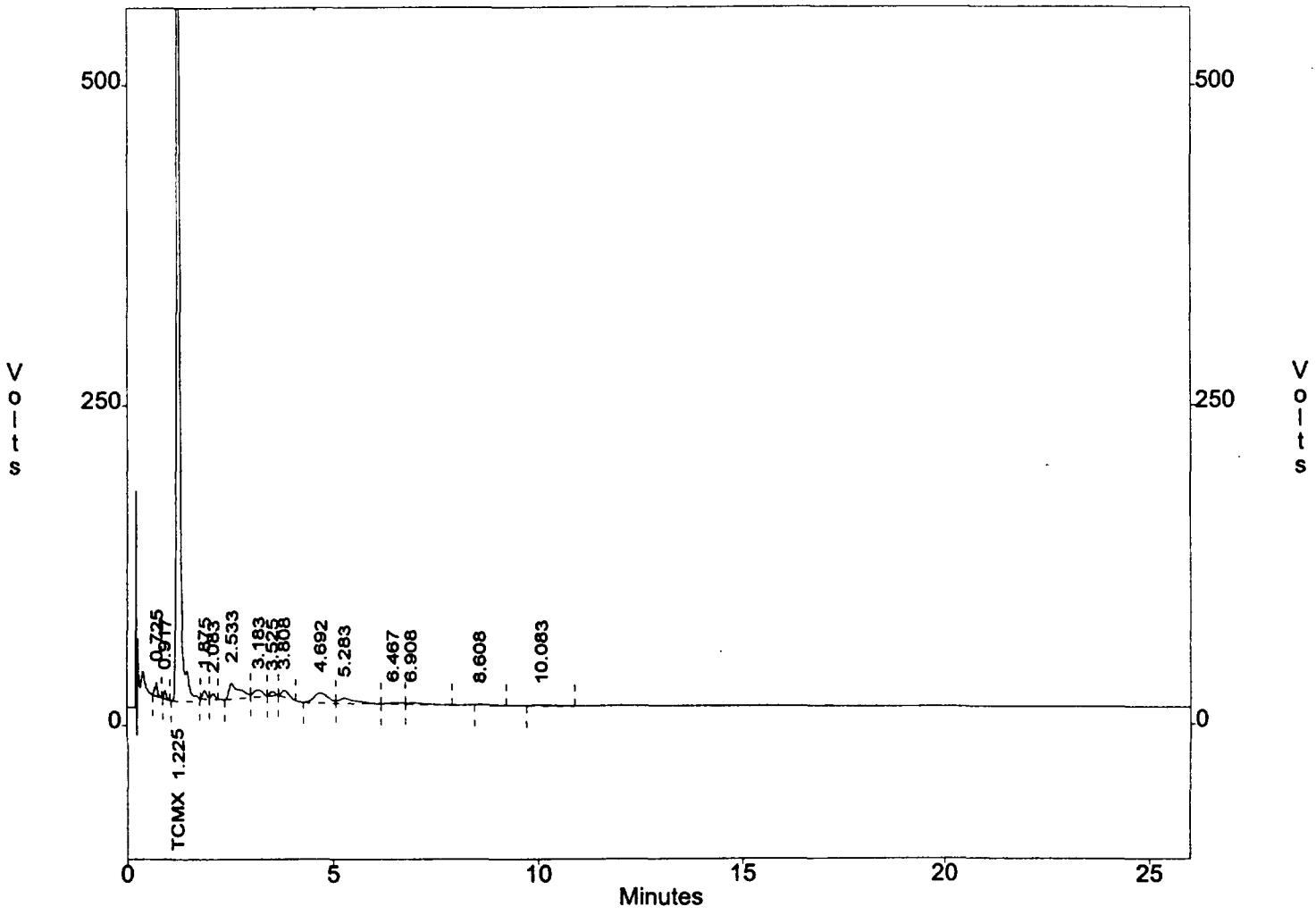
221

File : c:\ezchrom\chrom\var1b\0207V1B.028
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1248 .05
Acquired : Feb 07, 1997 23:40:57
Printed : May 09, 1997 07:19:29

Channel A Results

Name	RT	Area	Conc
TCMX	1.225	4452702	99.874
1242		480768	0.055
1248		480768	0.050
1254		101156	0.006
1260		20837	0.001
1016		480768	0.043
1221		4841941	1.950
1232		480768	0.095

c:\ezchrom\chrom\var1b\0207V1B.028 -- Channel A



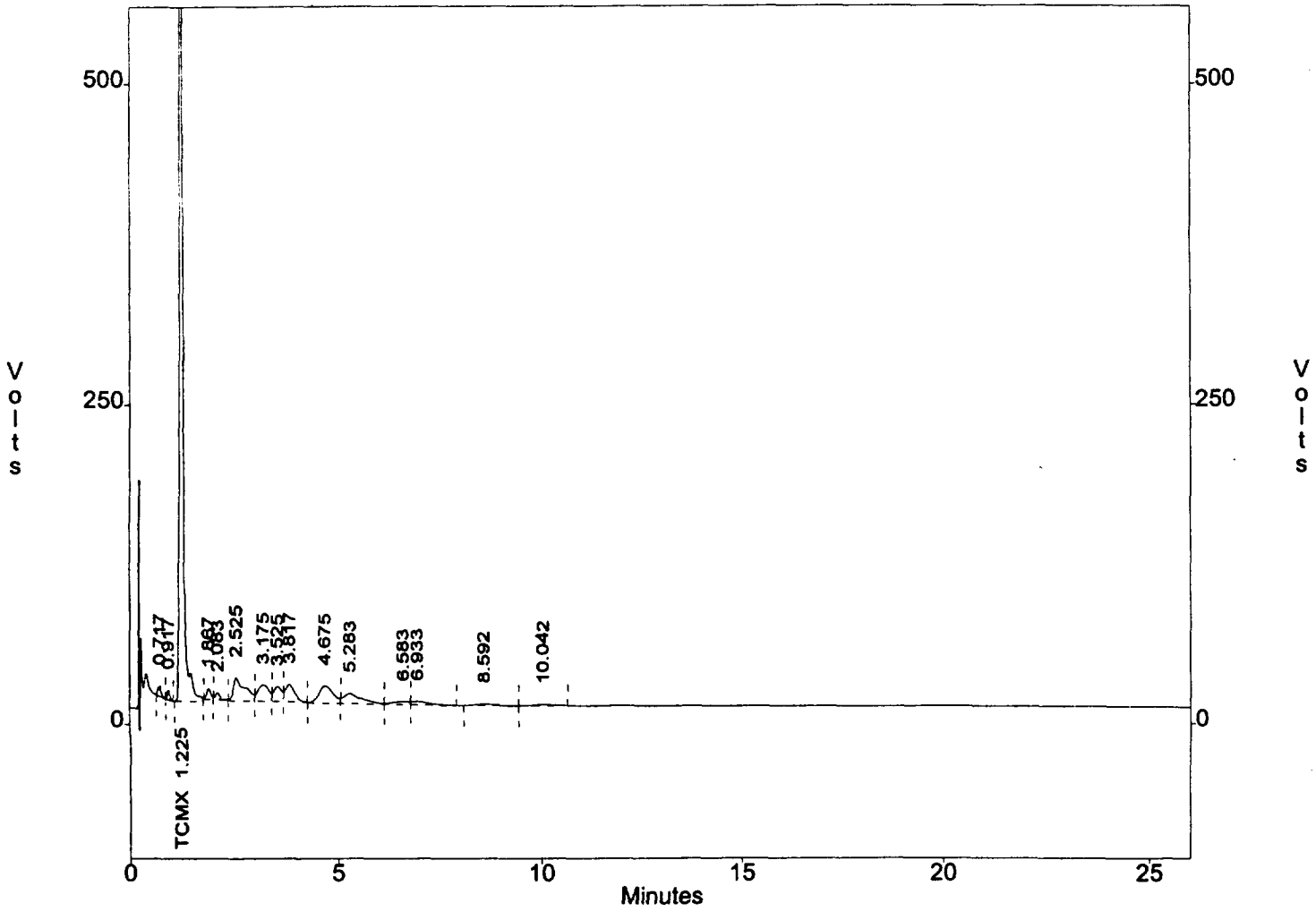
222

File : c:\ezchrom\chrom\var1b\0207V1B.029
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1248 .1
Acquired : Feb 08, 1997 00:07:19
Printed : May 09, 1997 07:19:30

Channel A Results

Name	RT	Area	Conc
TCMX	1.225	4283556	96.080
1242		1041036	0.118
1248		1041036	0.109
1254		236280	0.013
1260		35041	0.001
1016		1041036	0.092
1221		4955548	1.996
1232		1041036	0.206

c:\ezchrom\chrom\var1b\0207V1B.029 -- Channel A



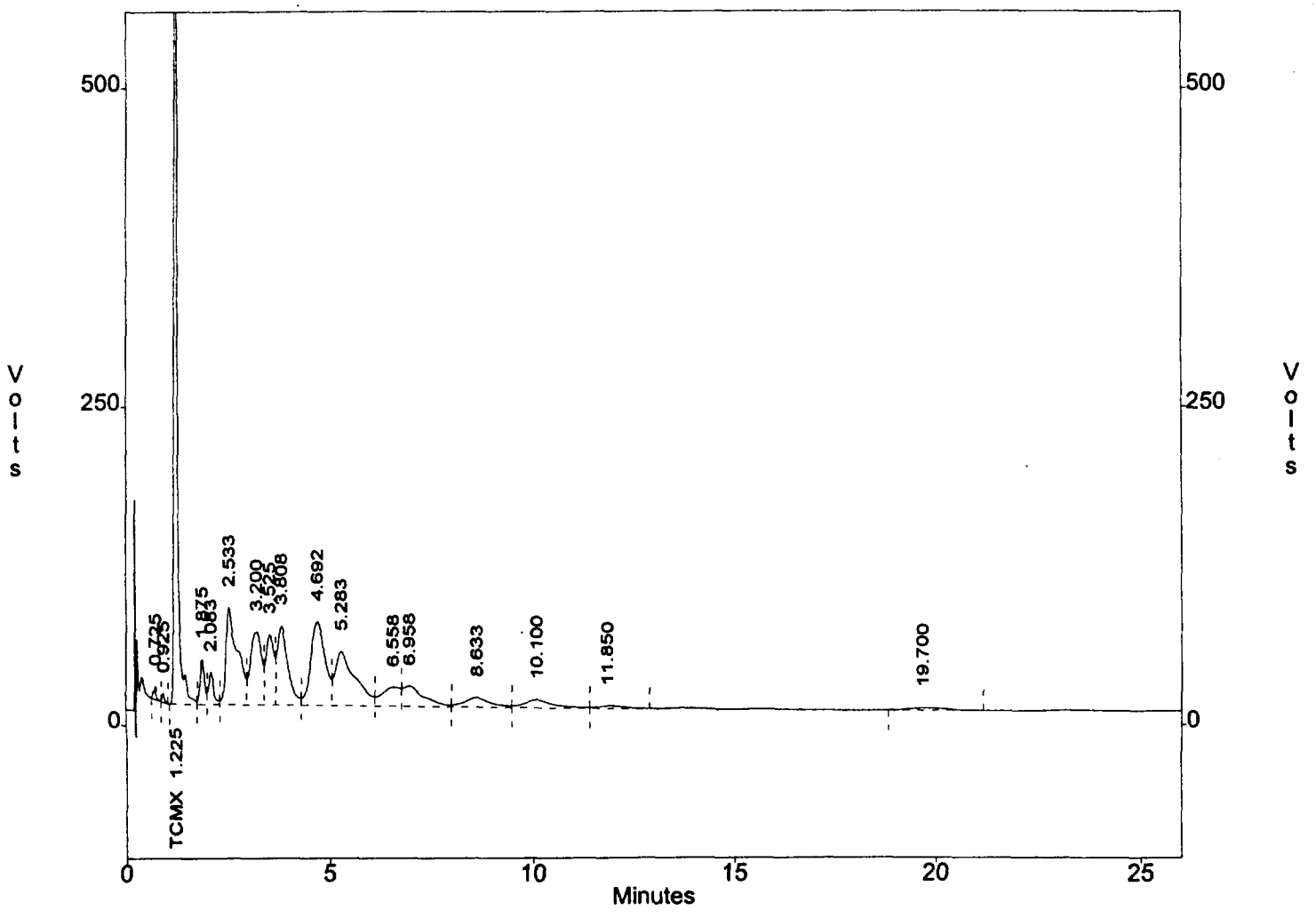
223

File : c:\ezchrom\chrom\var1b\0207V1B.030
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1248 .5
Acquired : Feb 08, 1997 00:33:42
Printed : May 09, 1997 07:19:32

Channel A Results

Name	RT	Area	Conc
TCMX	1.225	4300129	96.452
1242		4953112	0.564
1248		4953112	0.518
1254		1790499	0.100
1260		544898	0.017
1016		4953112	0.440
1221		7373873	2.970
1232		4953112	0.981

c:\ezchrom\chrom\var1b\0207V1B.030 -- Channel A

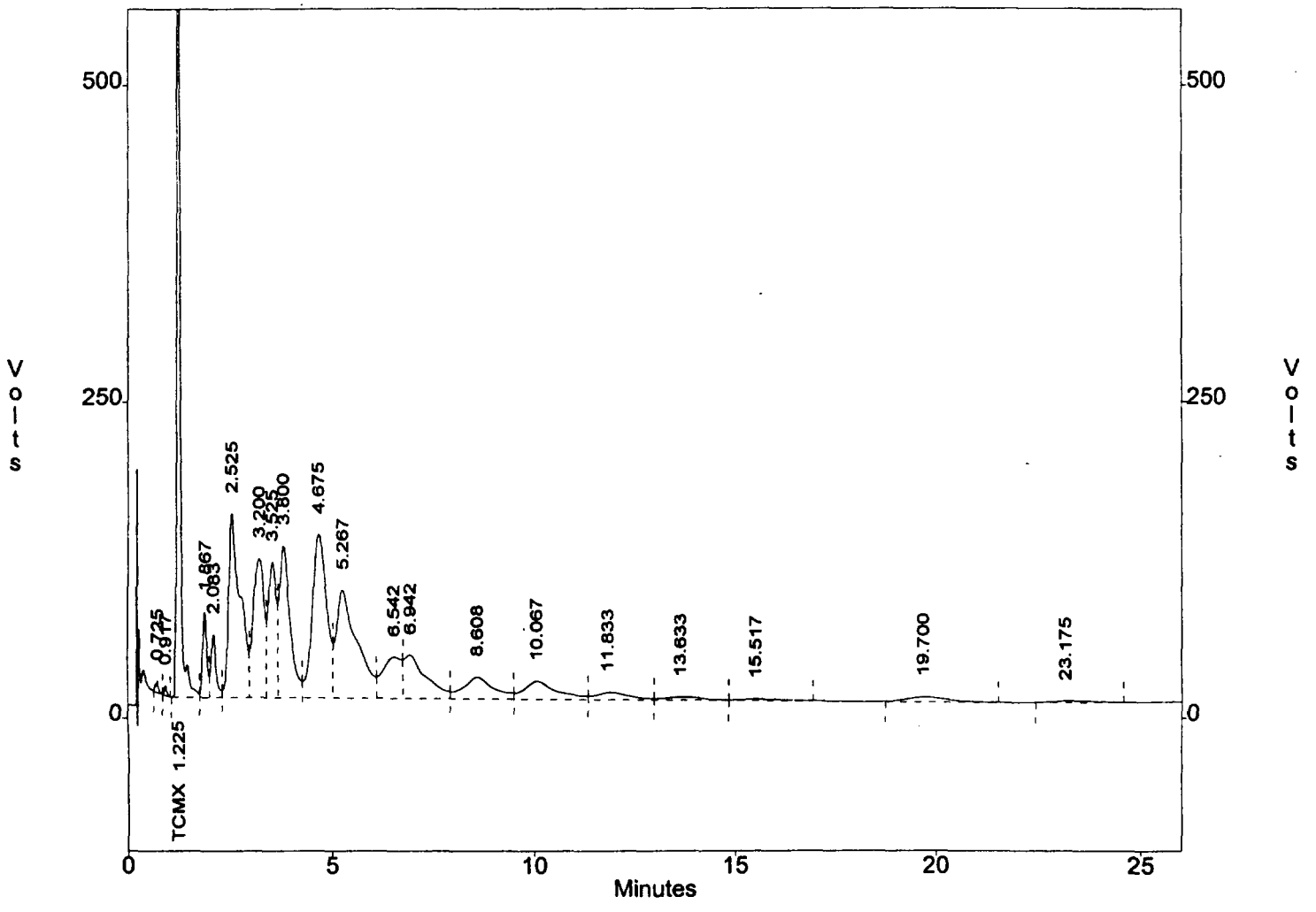


File : c:\ezchrom\chrom\var1b\0207V1B.031
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1248 1.0
Acquired : Feb 08, 1997 01:00:05
Printed : May 09, 1997 07:19:34

Channel A Results

Name	RT	Area	Conc
TCMX	1.225	4245576	95.228
1242		9584051	1.091
1248		9584051	1.003
1254		4504262	0.251
1260		1670348	0.053
1016		9584051	0.851
1221		10117160	4.075
1232		9584051	1.898

c:\ezchrom\chrom\var1b\0207V1B.031 -- Channel A



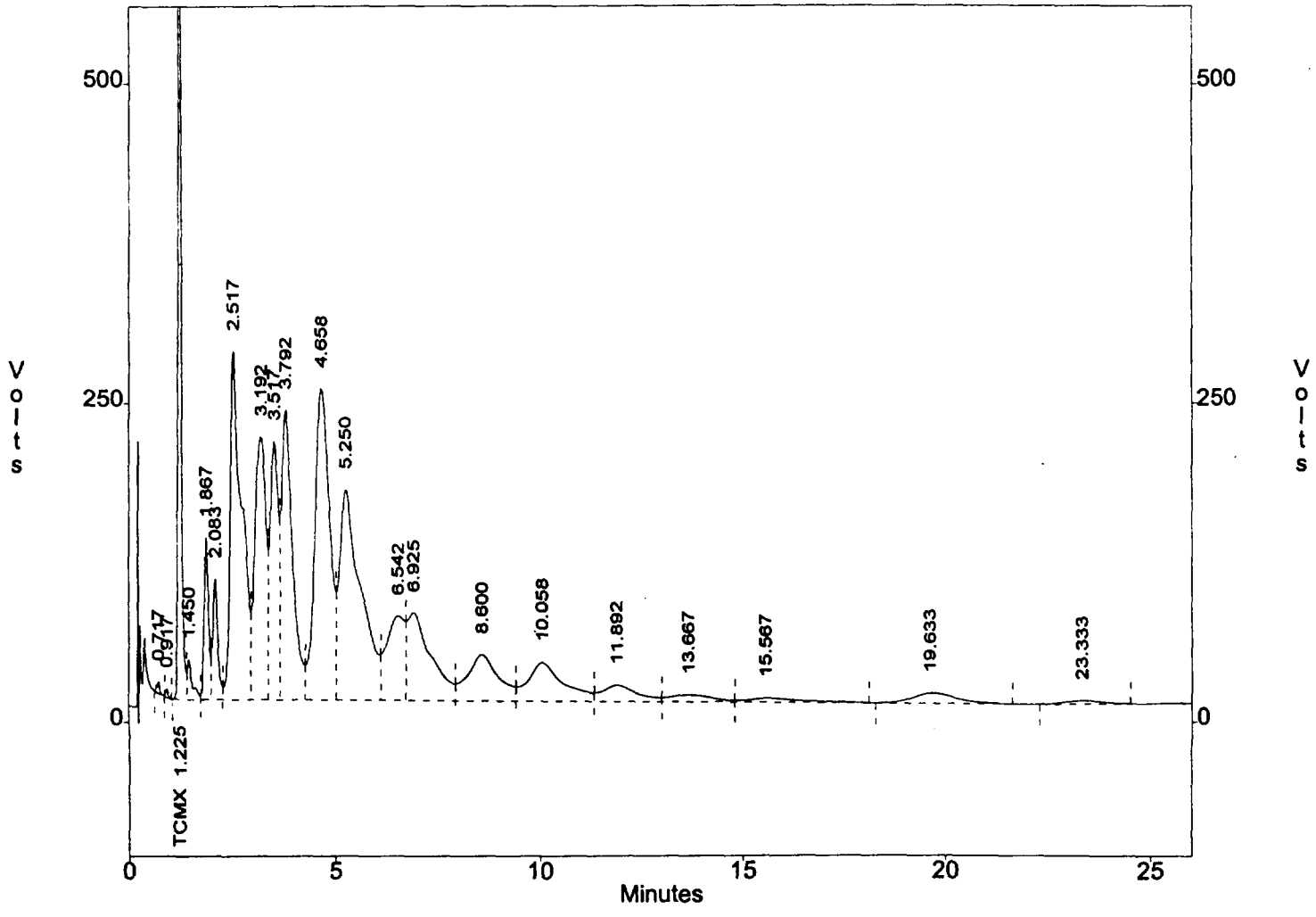
226

File : c:\ezchrom\chrom\var1b\0207V1B.032
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1248 2.0
Acquired : Feb 08, 1997 01:26:28
Printed : May 09, 1997 07:19:35

Channel A Results

Name	RT	Area	Conc
TCMX	1.225	4026440	90.313
1242		18096008	2.059
1248		18096008	1.893
1254		9436075	0.527
1260		3901305	0.123
1016		18096008	1.608
1221		15299914	6.163
1232		18096008	3.584

c:\ezchrom\chrom\var1b\0207V1B.032 -- Channel A



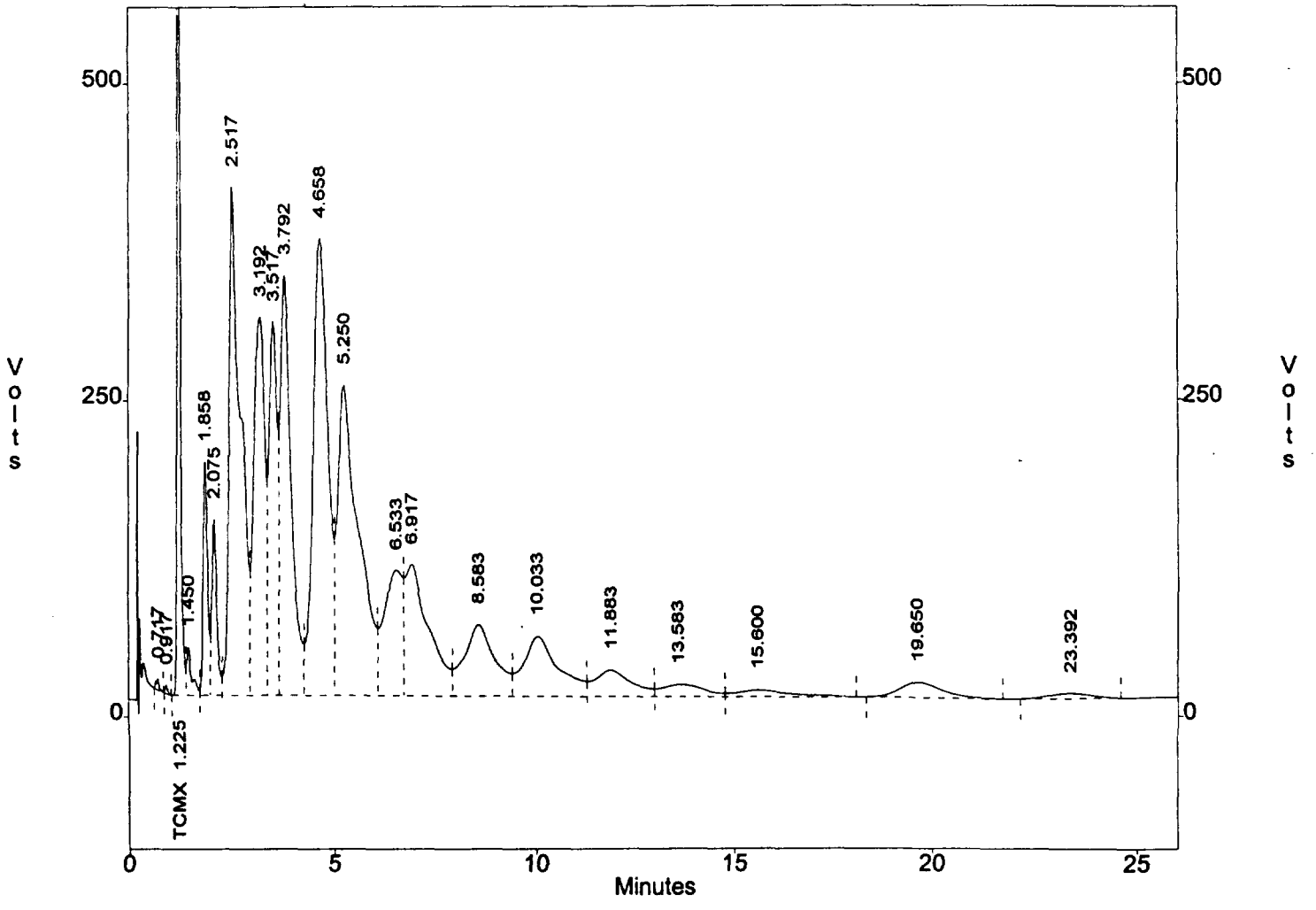
226

File : c:\ezchrom\chrom\var1b\0207V1B.033
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1248 3.0
Acquired : Feb 08, 1997 01:52:51
Printed : May 09, 1997 07:19:37

Channel A Results

Name	RT	Area	Conc
TCMX	1.225	4150784	93.102
1242		26370204	3.001
1248		26370204	2.759
1254		14699443	0.820
1260		6295767	0.199
1016		26370204	2.343
1221		20547870	8.277
1232		26370204	5.222

c:\ezchrom\chrom\var1b\0207V1B.033 -- Channel A



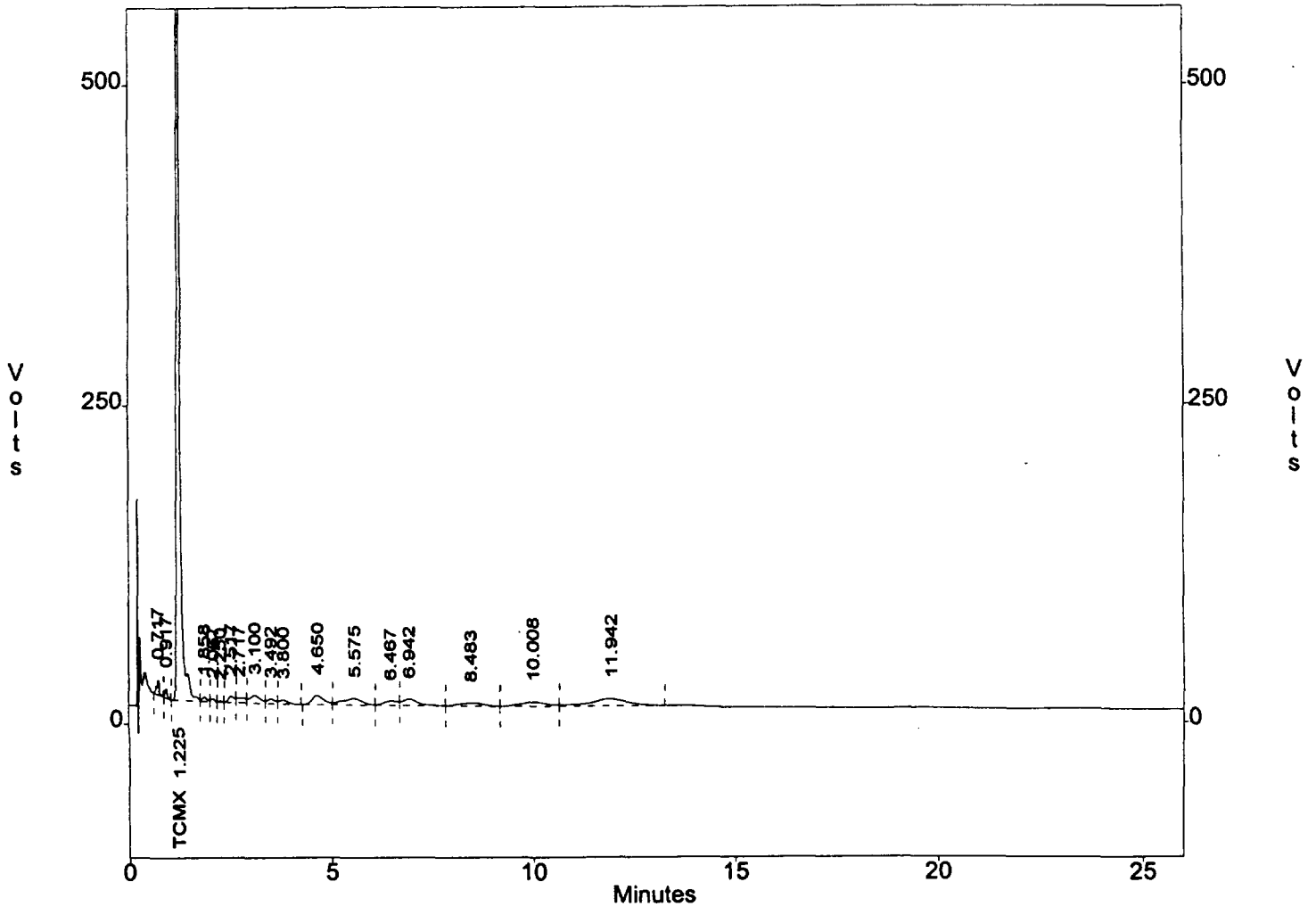
227

File : c:\ezchrom\chrom\var1b\0207V1B.034
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1254 .05
Acquired : Feb 08, 1997 02:19:13
Printed : May 09, 1997 07:19:39

Channel A Results

Name	RT	Area	Conc
TCMX	1.225	4176248	93.673
1242		369617	0.042
1248		369617	0.039
1254		823809	0.046
1260		507539	0.016
1016		369617	0.033
1221		4447244	1.791
1232		369617	0.073

c:\ezchrom\chrom\var1b\0207V1B.034 -- Channel A



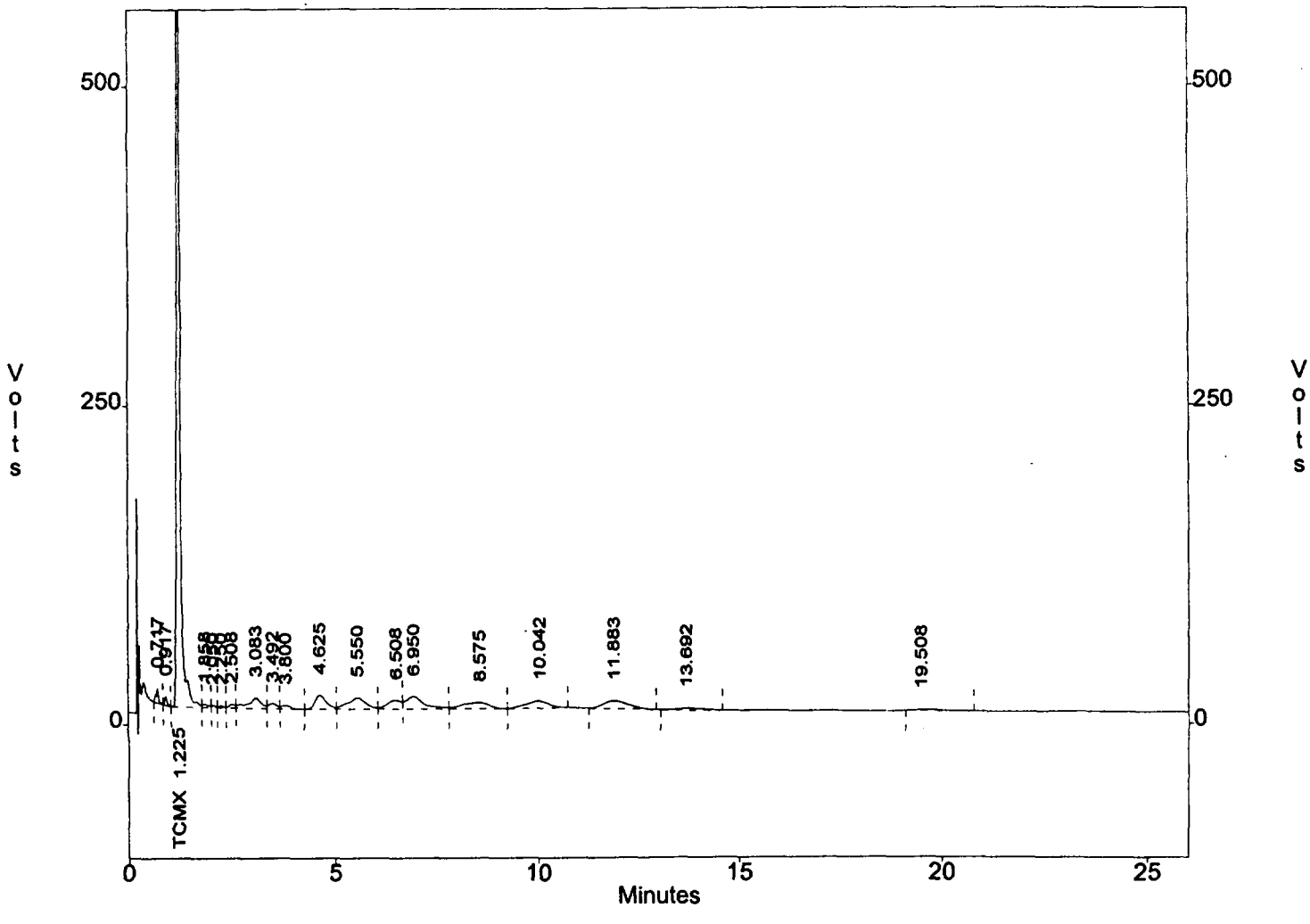
228

File : c:\ezchrom\chrom\var1b\0207V1B.035
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1254 .1
Acquired : Feb 08, 1997 02:45:36
Printed : May 09, 1997 07:19:40

Channel A Results

Name	RT	Area	Conc
TCMX	1.225	4165547	93.433
1242		368802	0.042
1248		368802	0.039
1254		1176485	0.066
1260		601284	0.019
1016		368802	0.033
1221		4434580	1.786
1232		368802	0.073

c:\ezchrom\chrom\var1b\0207V1B.035 -- Channel A



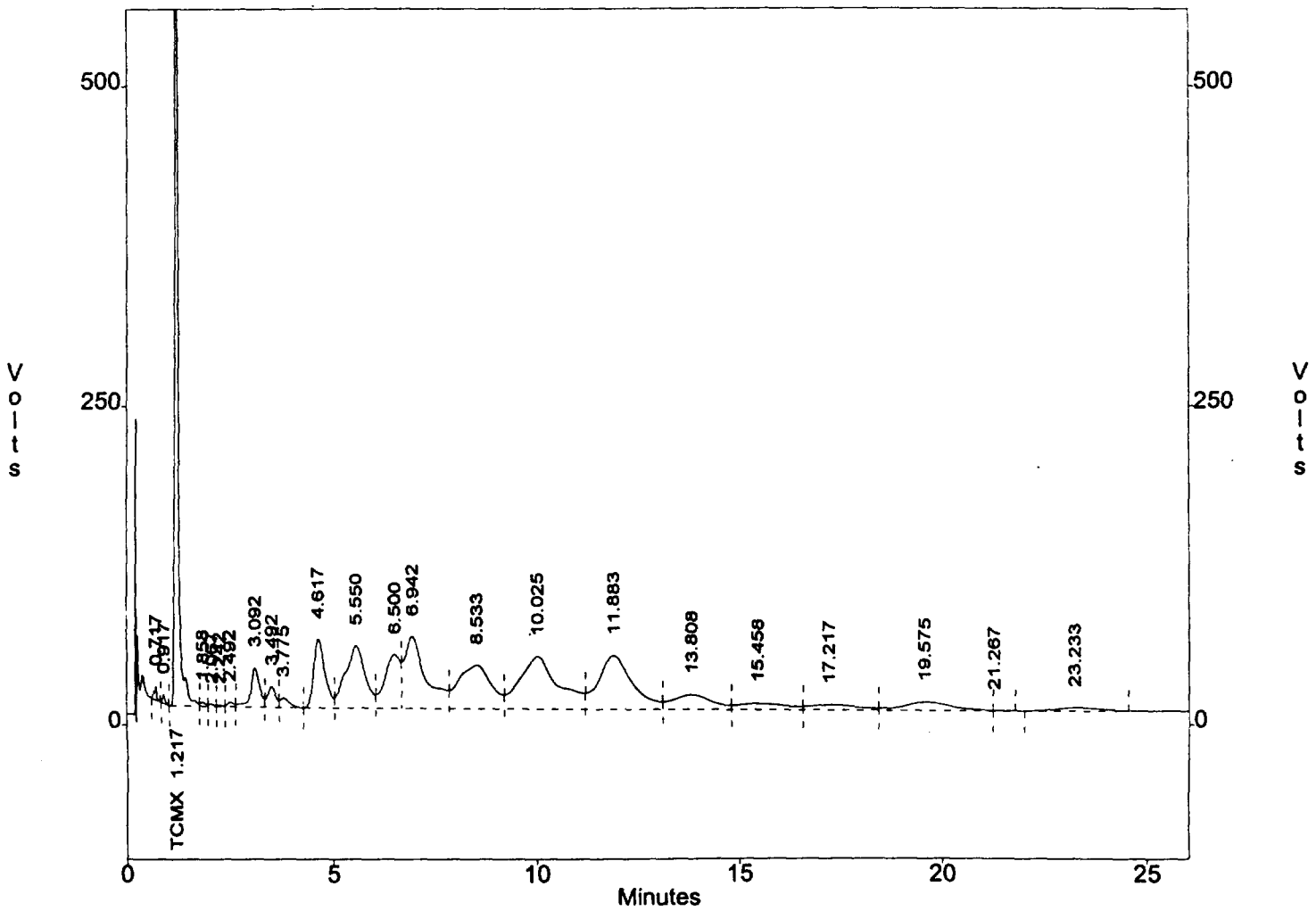
229

File : c:\ezchrom\chrom\var1b\0207V1B.036
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1254 .5
Acquired : Feb 08, 1997 03:11:59
Printed : May 09, 1997 07:19:42

Channel A Results

Name	RT	Area	Conc
TCMX	1.217	4270467	95.787
1242		861360	0.098
1248		861360	0.090
1254		10241192	0.571
1260		7116828	0.225
1016		861360	0.077
1221		4802605	1.934
1232		861360	0.171

c:\ezchrom\chrom\var1b\0207V1B.036 -- Channel A

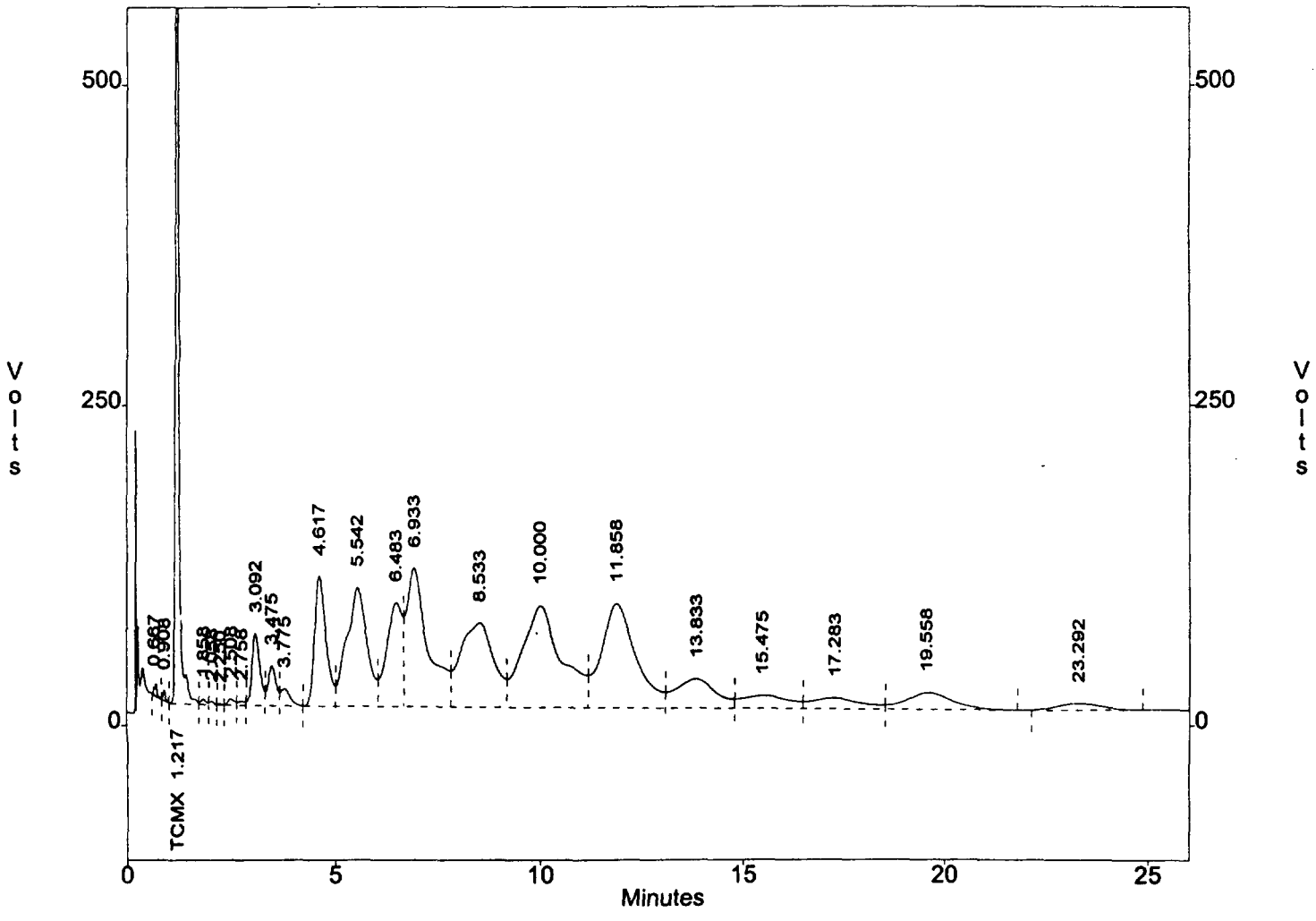


File : c:\ezchrom\chrom\var1b\0207V1B.037
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1254 1.0
Acquired : Feb 08, 1997 03:38:22
Printed : May 09, 1997 07:19:44

Channel A Results

Name	RT	Area	Conc
TCMX	1.217	4266562	95.699
1242		1510020	0.172
1248		1510020	0.158
1254		20028948	1.118
1260		14258084	0.451
1016		1510020	0.134
1221		5161815	2.079
1232		1510020	0.299

c:\ezchrom\chrom\var1b\0207V1B.037 -- Channel A



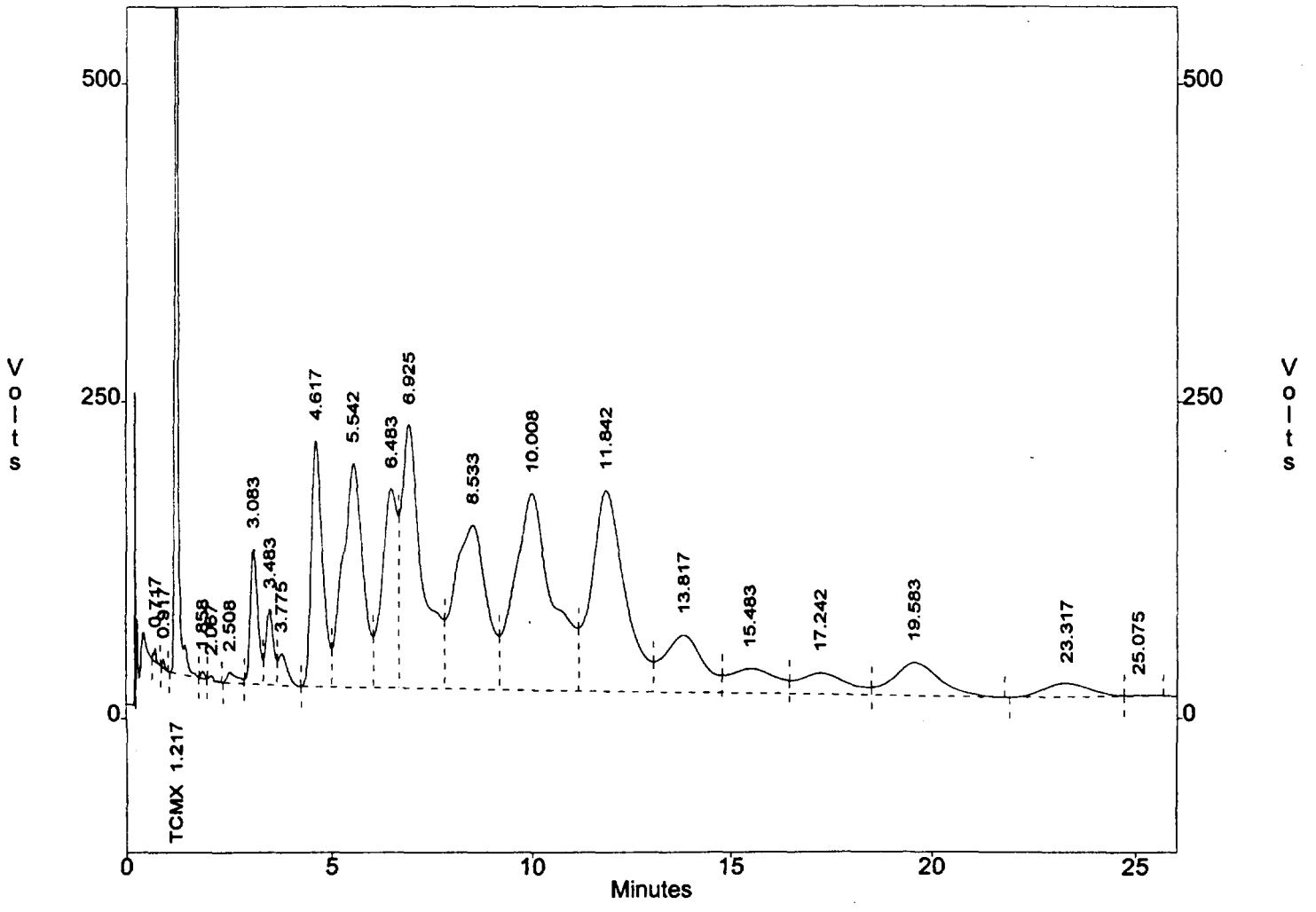
231

File : c:\ezchrom\chrom\var1b\0207V1B.038
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1254 2.0
Acquired : Feb 08, 1997 04:04:45
Printed : May 09, 1997 07:19:45

Channel A Results

Name	RT	Area	Conc
TCMX	1.217	4304086	96.541
1242		2771797	0.315
1248		2771797	0.290
1254		38867008	2.169
1260		27788626	0.879
1016		2771797	0.246
1221		5905108	2.379
1232		2771797	0.549

c:\ezchrom\chrom\var1b\0207V1B.038 -- Channel A



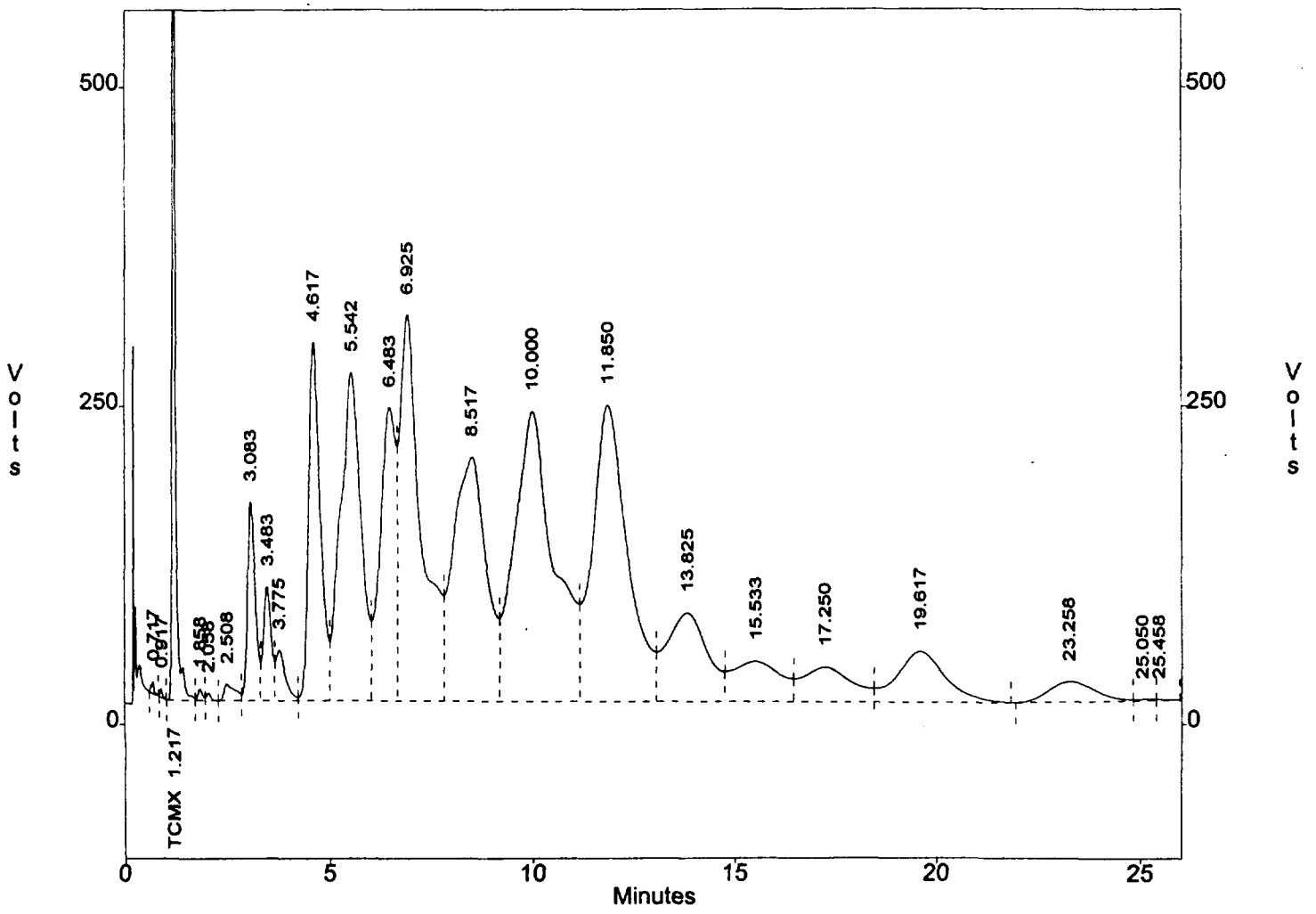
232

File : c:\ezchrom\chrom\var1b\0207V1B.039
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1254 3.0
Acquired : Feb 08, 1997 04:31:08
Printed : May 09, 1997 07:19:47

Channel A Results

Name	RT	Area	Conc
TCMX	1.217	4272782	95.838
1242		4253978	0.484
1248		4253978	0.445
1254		58011208	3.237
1260		42582976	1.347
1016		4253978	0.378
1221		6679748	2.691
1232		4253978	0.842

c:\ezchrom\chrom\var1b\0207V1B.039 -- Channel A



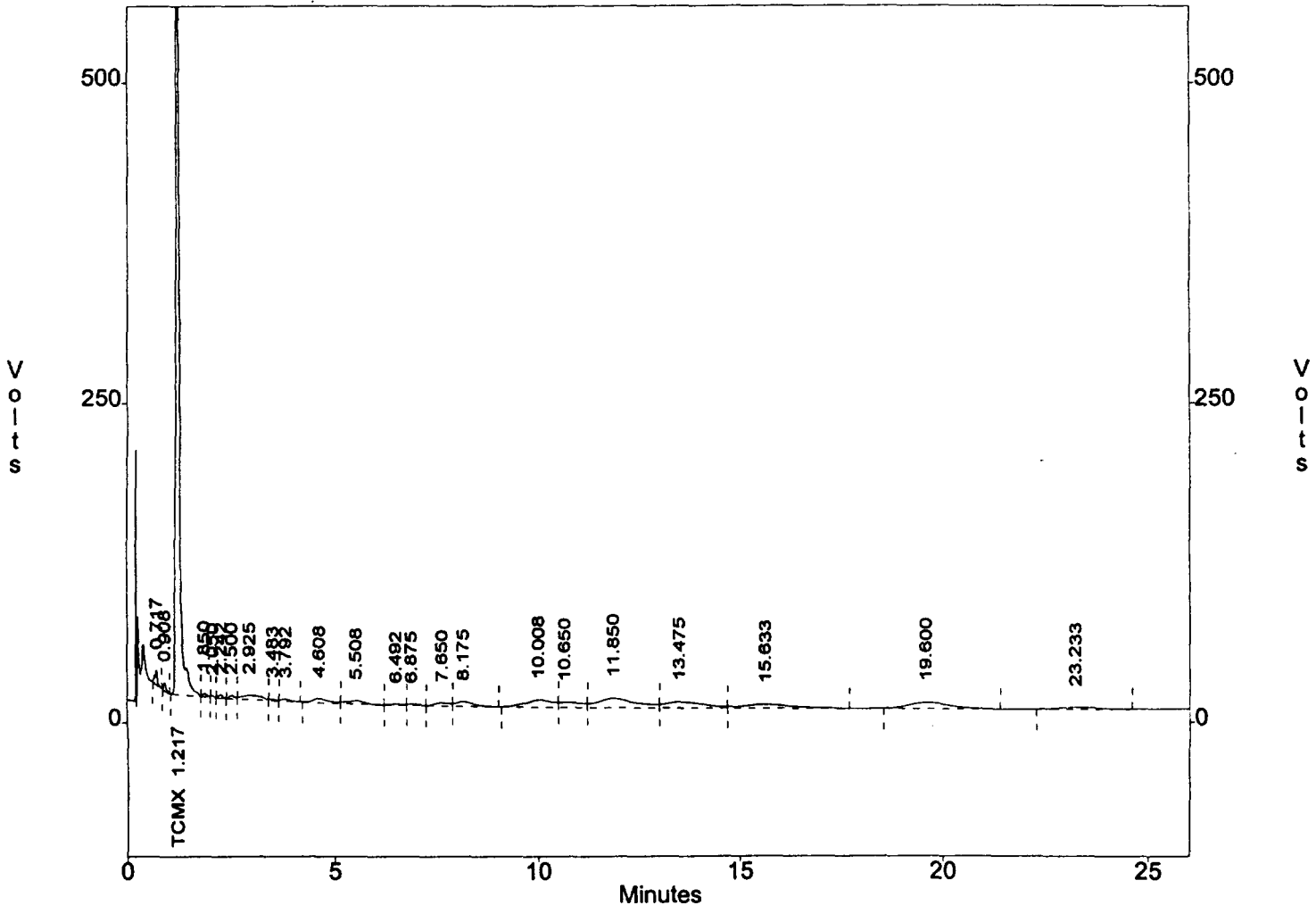
233

File : c:\ezchrom\chrom\var1b\0207V1B.040
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1260 .05
Acquired : Feb 08, 1997 04:57:31
Printed : May 09, 1997 07:19:49

Channel A Results

Name	RT	Area	Conc
TCMX	1.217	4238476	95.069
1242		219040	0.025
1248		219040	0.023
1254		1099763	0.061
1260		1783578	0.056
1016		219040	0.019
1221		4417313	1.779
1232		219040	0.043

c:\ezchrom\chrom\var1b\0207V1B.040 -- Channel A

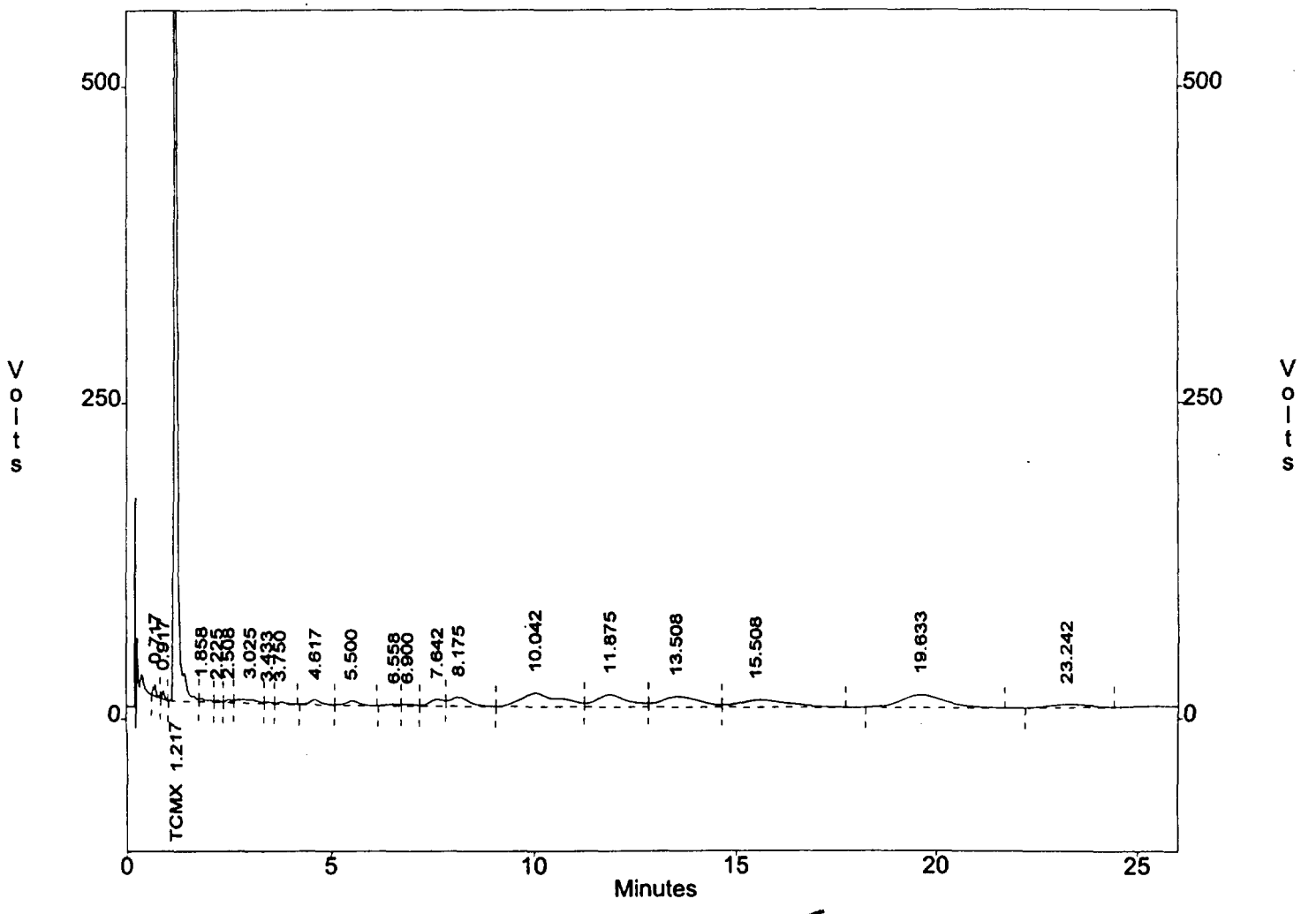


File : c:\ezchrom\chrom\var1b\0207V1B.041
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1260 .1
Acquired : Feb 08, 1997 05:23:54
Printed : May 09, 1997 07:19:51

Channel A Results

Name	RT	Area	Conc
TCMX	1.217	4359754	97.789
1242		195251	0.022
1248		195251	0.020
1254		1669644	0.093
1260		3023917	0.096
1016		195251	0.017
1221		4520909	1.821
1232		195251	0.039

c:\ezchrom\chrom\var1b\0207V1B.041 -- Channel A



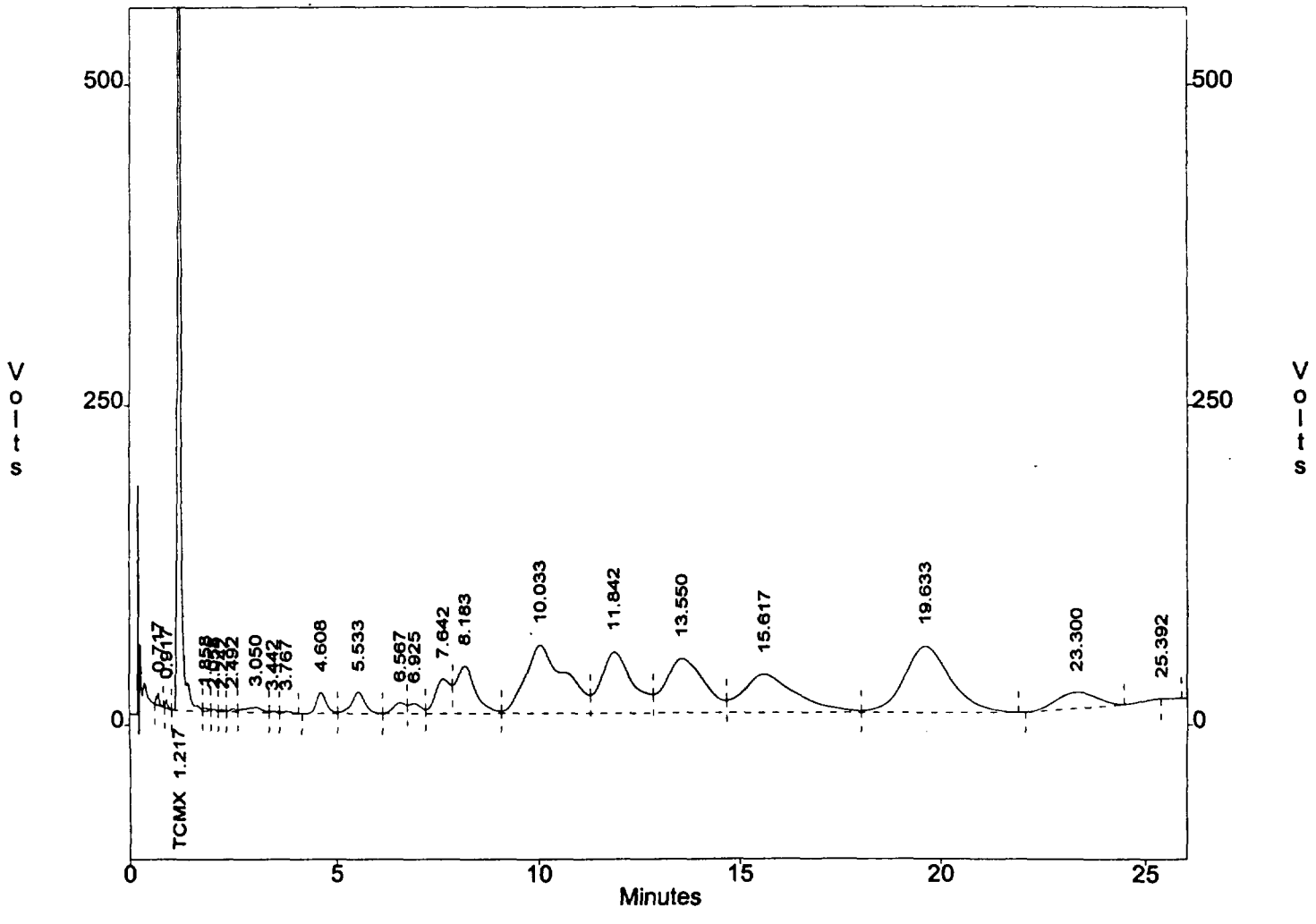
235

File : c:\ezchrom\chrom\var1b\0207V1B.042
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1260 .5
Acquired : Feb 08, 1997 05:50:17
Printed : May 09, 1997 07:19:52

Channel A Results

Name	RT	Area	Conc
TCMX	1.217	4252995	95.395
1242		217078	0.025
1248		217078	0.023
1254		8642375	0.482
1260		16078488	0.509
1016		217078	0.019
1221		4437080	1.787
1232		217078	0.043

c:\ezchrom\chrom\var1b\0207V1B.042 -- Channel A



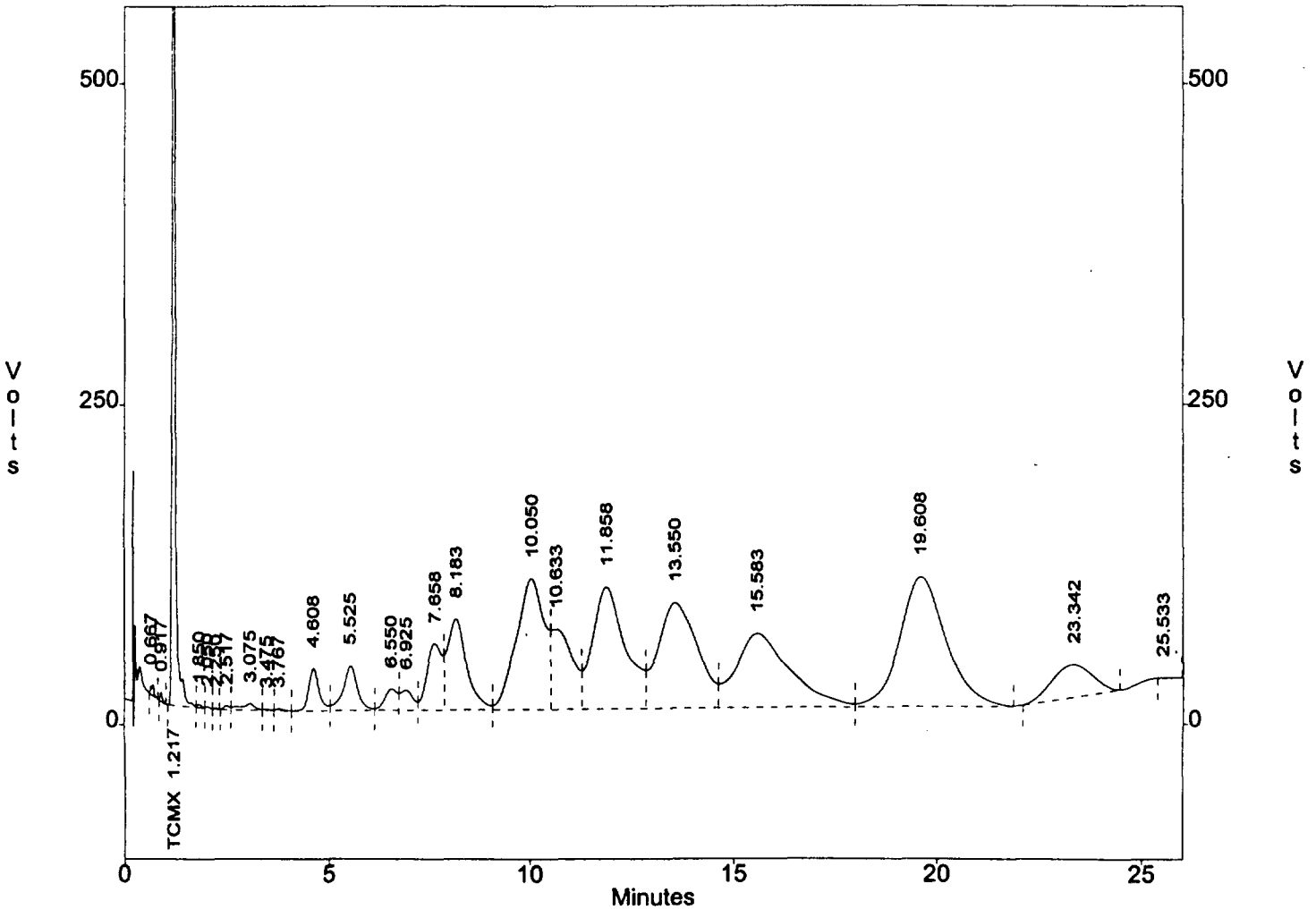
236

File : c:\ezchrom\chrom\var1b\0207V1B.043
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1260 1.0
Acquired : Feb 08, 1997 06:16:40
Printed : May 09, 1997 07:19:54

Channel A Results

Name	RT	Area	Conc
TCMX	1.217	4150234	93.090
1242		209312	0.024
1248		209312	0.022
1254		16822314	0.939
1260		31142868	0.985
1016		209312	0.019
1221		4329059	1.744
1232		209312	0.041

c:\ezchrom\chrom\var1b\0207V1B.043 -- Channel A



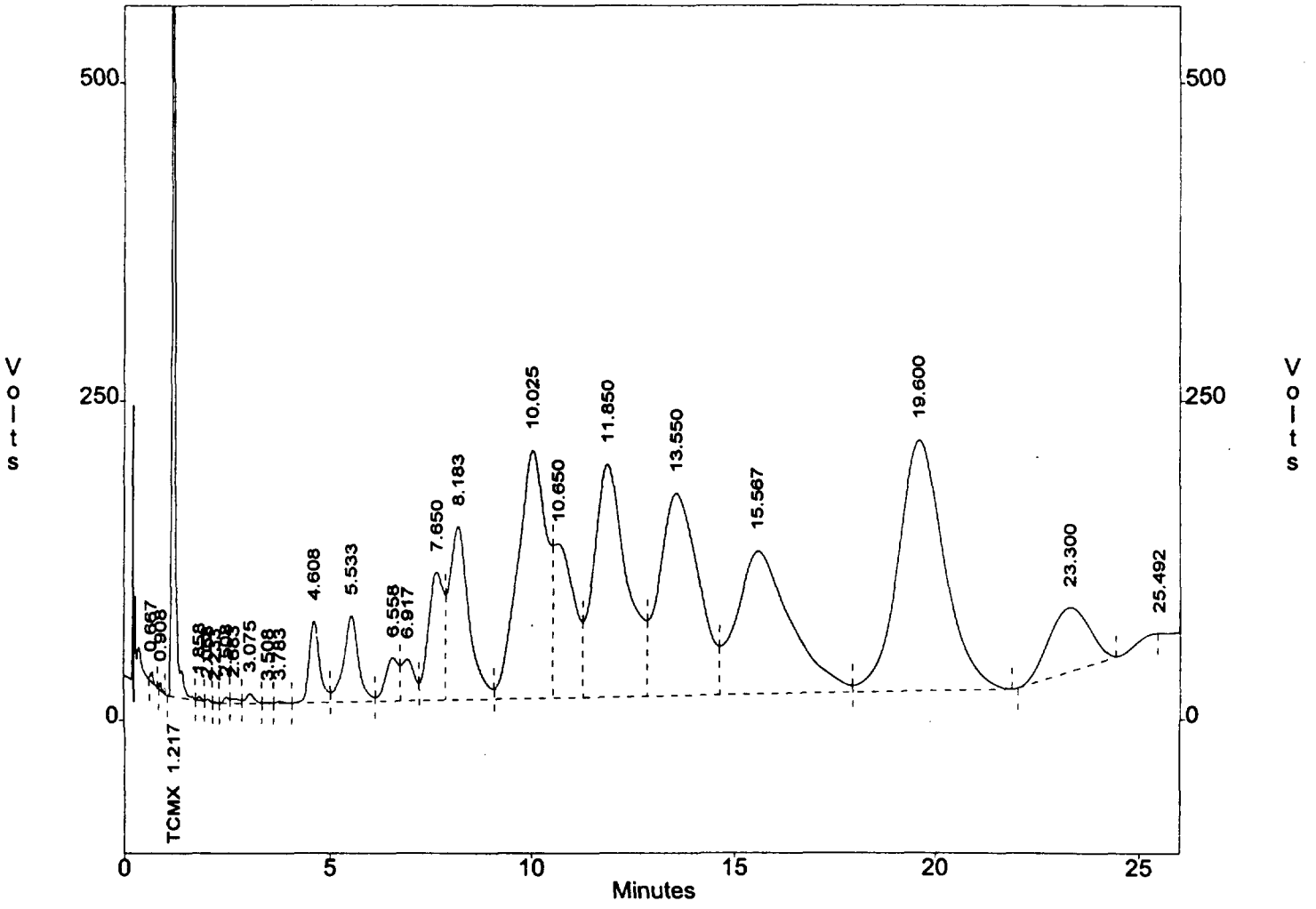
237

File : c:\ezchrom\chrom\var1b\0207V1B.044
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1260 2.0
Acquired : Feb 08, 1997 06:43:02
Printed : May 09, 1997 07:19:56

Channel A Results

Name	RT	Area	Conc
TCMX	1.217	4123903	92.499
1242		263932	0.030
1248		263932	0.028
1254		32819846	1.831
1260		60953392	1.929
1016		263932	0.023
1221		4357920	1.755
1232		263932	0.052

c:\ezchrom\chrom\var1b\0207V1B.044 -- Channel A



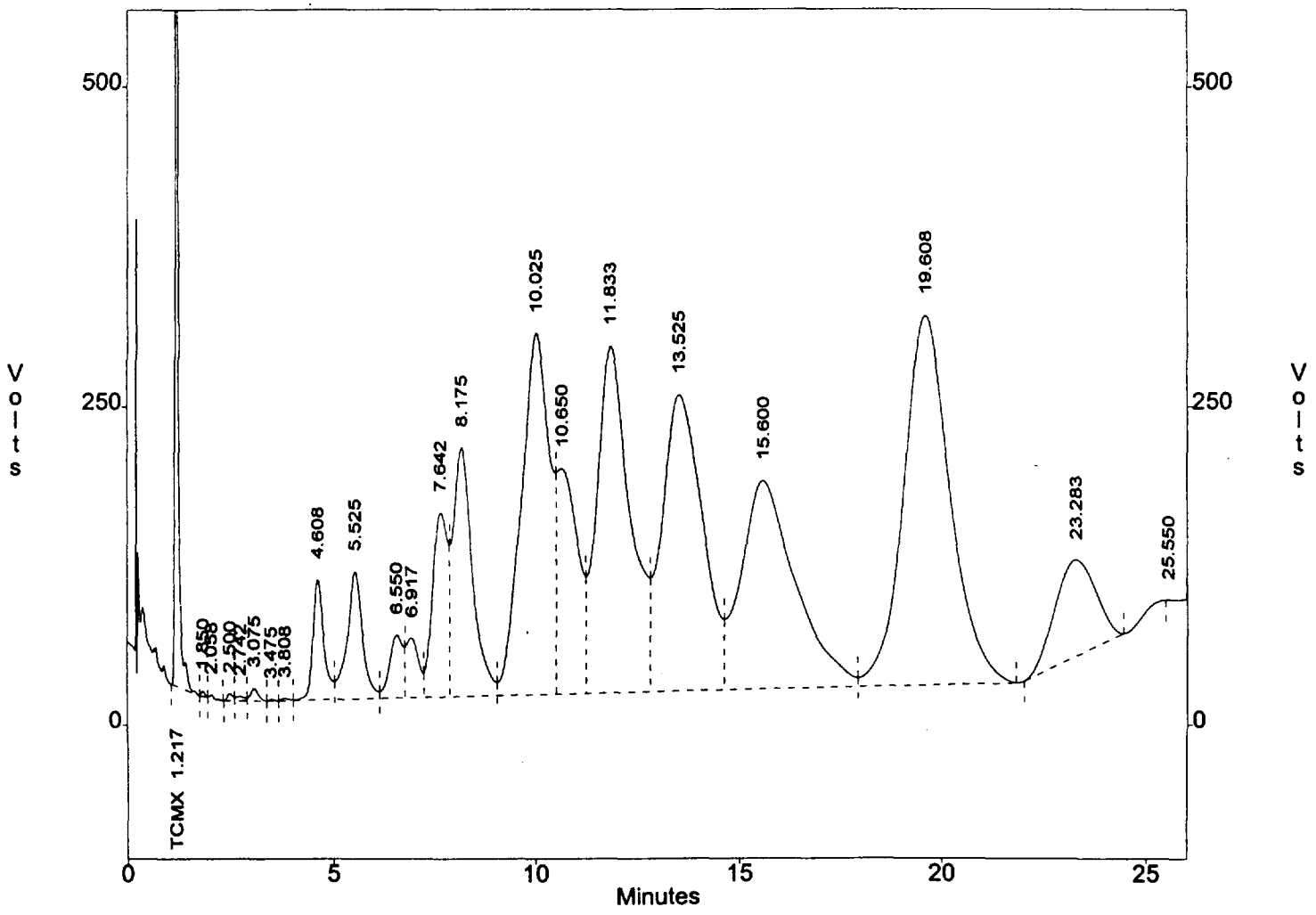
238

File : c:\ezchrom\chrom\var1b\0207V1B.045
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1260 3.0
Acquired : Feb 08, 1997 07:09:25
Printed : May 09, 1997 07:19:58

Channel A Results

Name	RT	Area	Conc
TCMX	1.217	4162750	93.370
1242		306128	0.035
1248		306128	0.032
1254		48257216	2.693
1260		89846736	2.843
1016		306128	0.027
1221		4432570	1.785
1232		306128	0.061

c:\ezchrom\chrom\var1b\0207V1B.045 -- Channel A



239

Continuing Calibration
PCB

PCB CALIBRATION VERIFICATION

Column: DB-1

Arochlor	Date/Time Analyzed	Known (mg)	Found (mg)	Recovery (RPD)
1016				
1221				
1232				
1242	4-24-97 1343	0.25	0.26	4
1248	4-24-97 1410	0.25	0.265	5.8
1254	4-24-97 1510	0.25	0.21	-17
1260	4-24-97 1536	0.25	0.236	-6
1242	4-24-97 2027	1.00	1.041	4
1248	4-24-97 2053	1.00	1.065	6.3
1254	4-25-97 0117	1.00	1.093	9
1260	4-25-97 0144	1.00	1.040	4
1242	4-25-97 1051	1.00	1.14	13

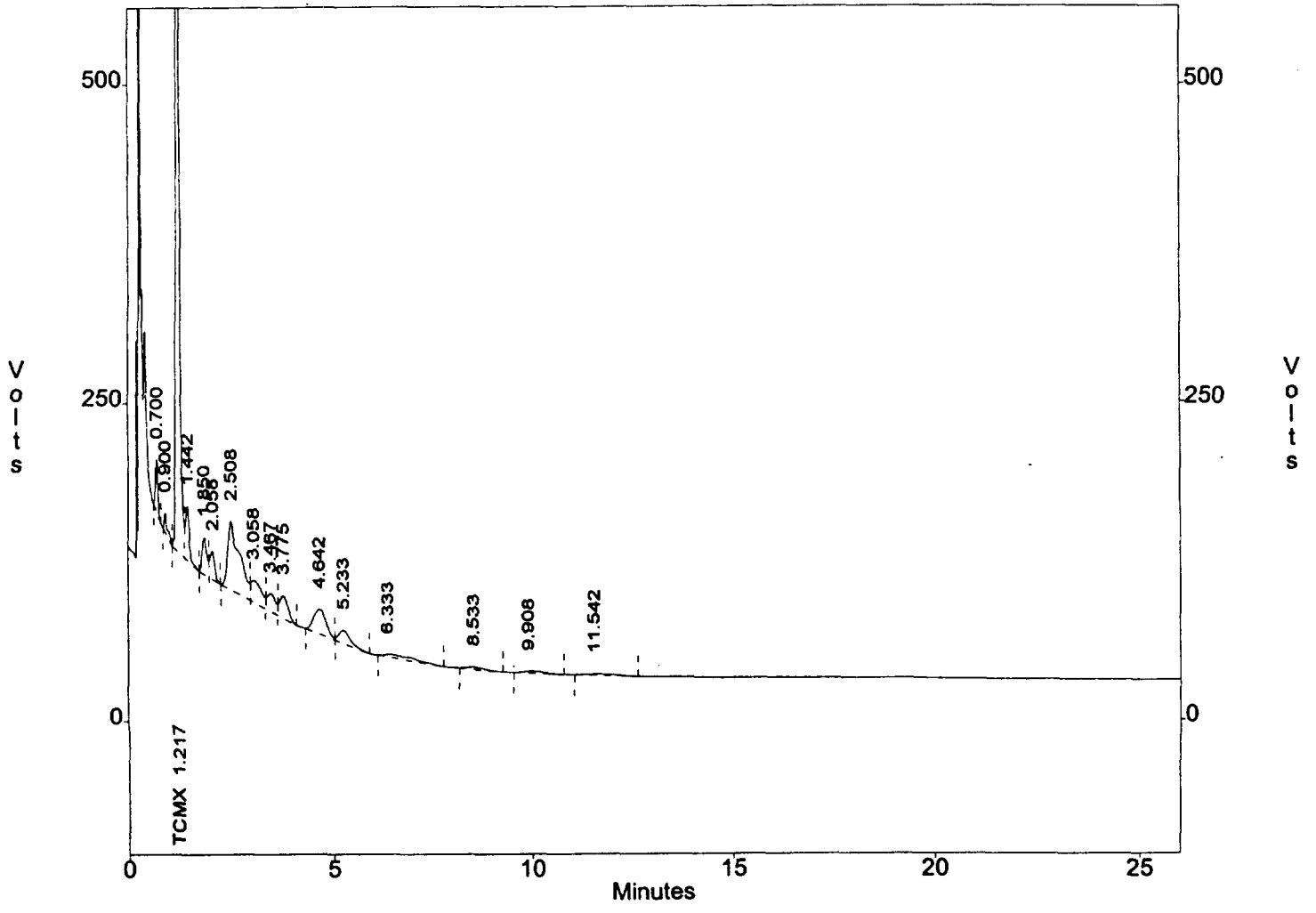
FORM:PCB Cal Ver.

File : c:\ezchrom\chrom\var1b\0424V1B.002
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1242 .25
Acquired : Apr 24, 1997 13:43:41
Printed : May 09, 1997 17:42:02

Channel A Results

Name	RT	Area	Conc
TCMX	1.217	4376164	103.277
1242		2281280	0.260
1248		2281280	0.239
1254		324953	0.018
1260		118276	0.004
1016		2281280	0.203
1221		6493686	2.617
1232		2281280	0.452

c:\ezchrom\chrom\var1b\0424V1B.002 -- Channel A



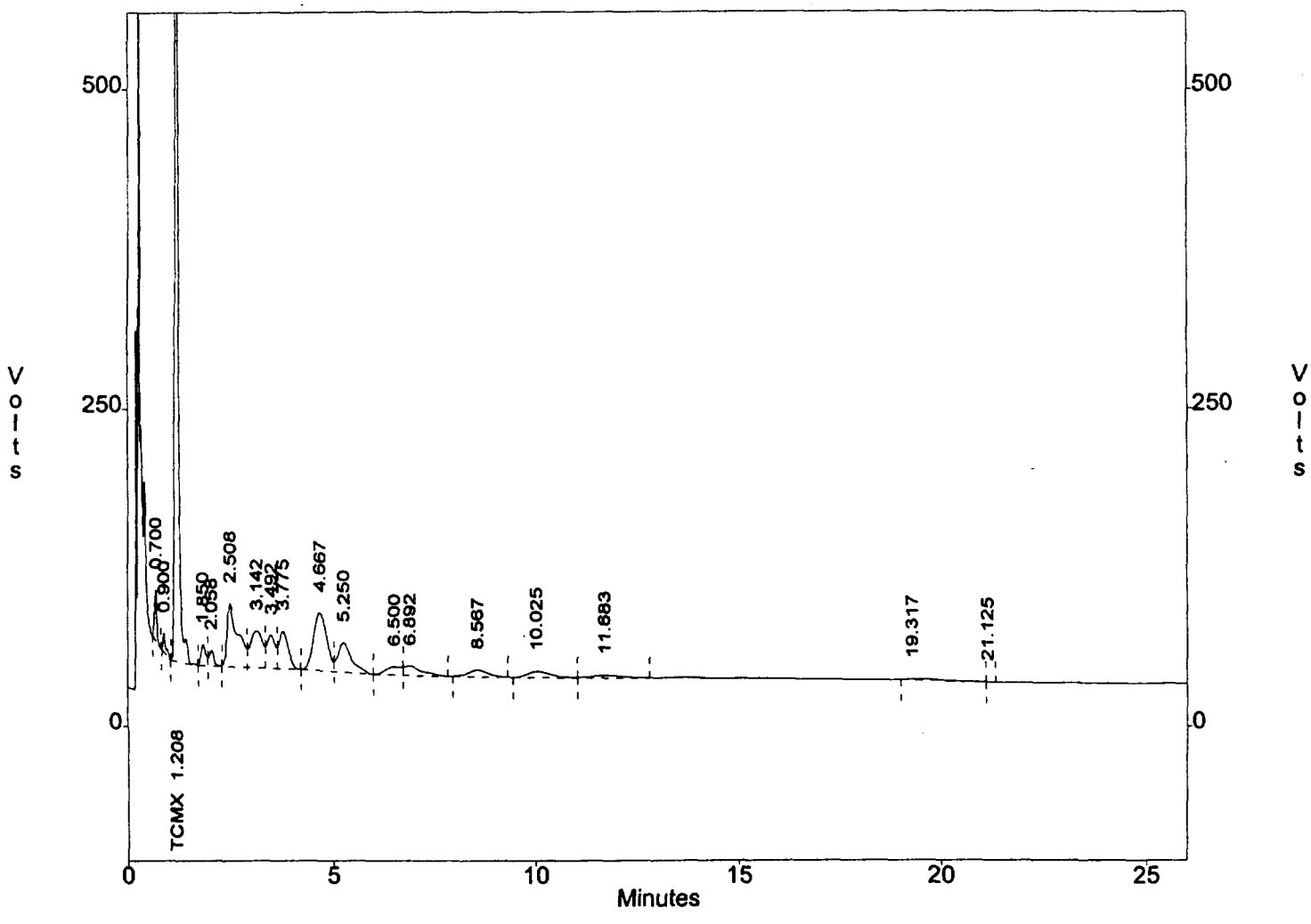
242

File : c:\ezchrom\chrom\var1b\0424V1B.003
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1248 .25
Acquired : Apr 24, 1997 14:10:04
Printed : May 09, 1997 17:42:04

Channel A Results

Name	RT	Area	Conc
TCMX	1.208	4503040	106.272
1242		2529577	0.288
1248		2529577	0.265
1254		920310	0.051
1260		366487	0.012
1016		2529577	0.225
1221		1714603	0.691
1232		2529577	0.501

c:\ezchrom\chrom\var1b\0424V1B.003 -- Channel A



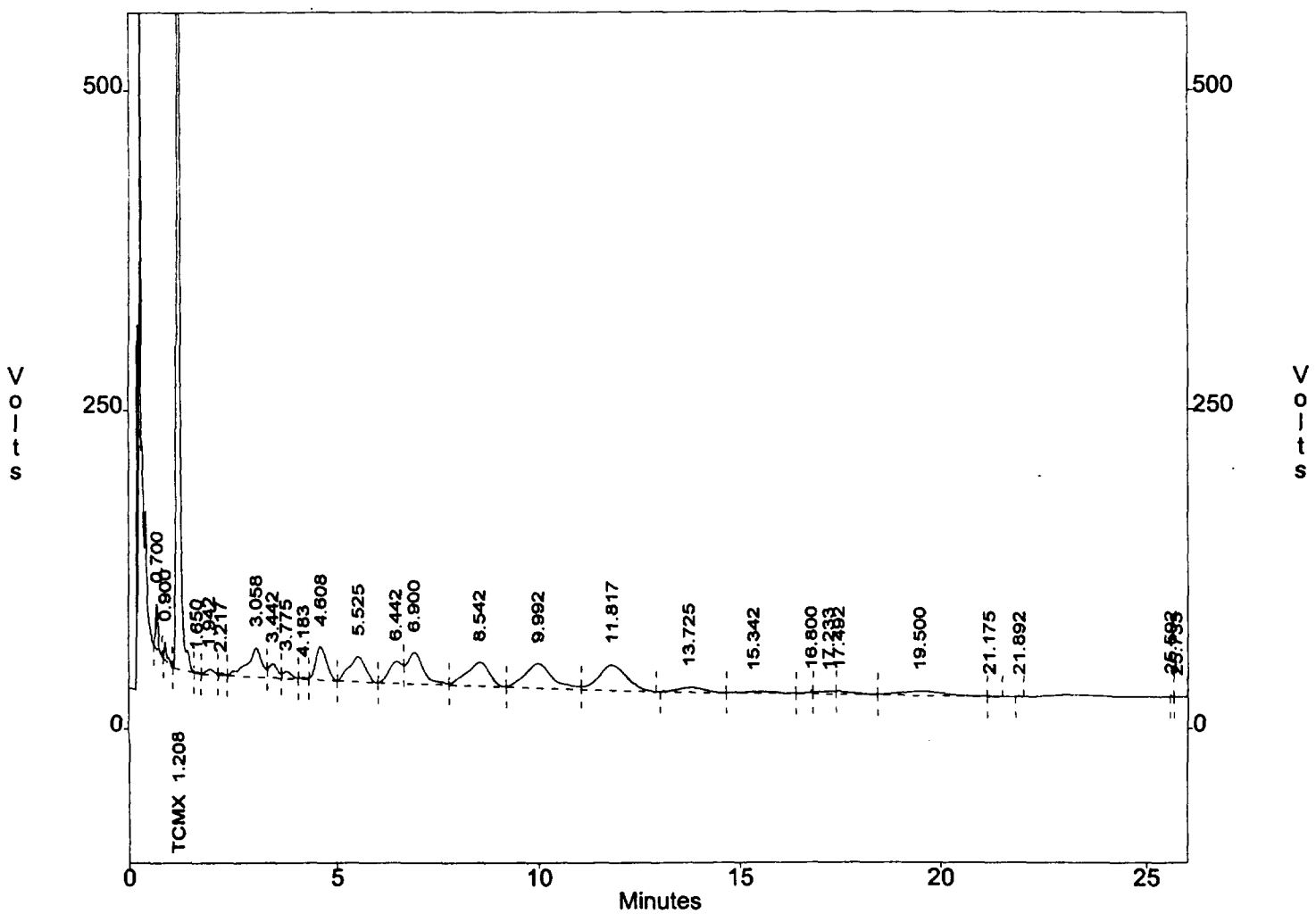
243

File : c:\ezchrom\chrom\var1b\0424V1B.004
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1254 .25
Acquired : Apr 24, 1997 15:10:21
Printed : May 09, 1997 17:42:05

Channel A Results

Name	RT	Area	Conc
TCMX	1.208	4318631	101.920
1242		882343	0.100
1248		882343	0.092
1254		3764798	0.210
1260		2589086	0.082
1016		882343	0.078
1221		634921	0.256
1232		882343	0.175

c:\ezchrom\chrom\var1b\0424V1B.004 -- Channel A



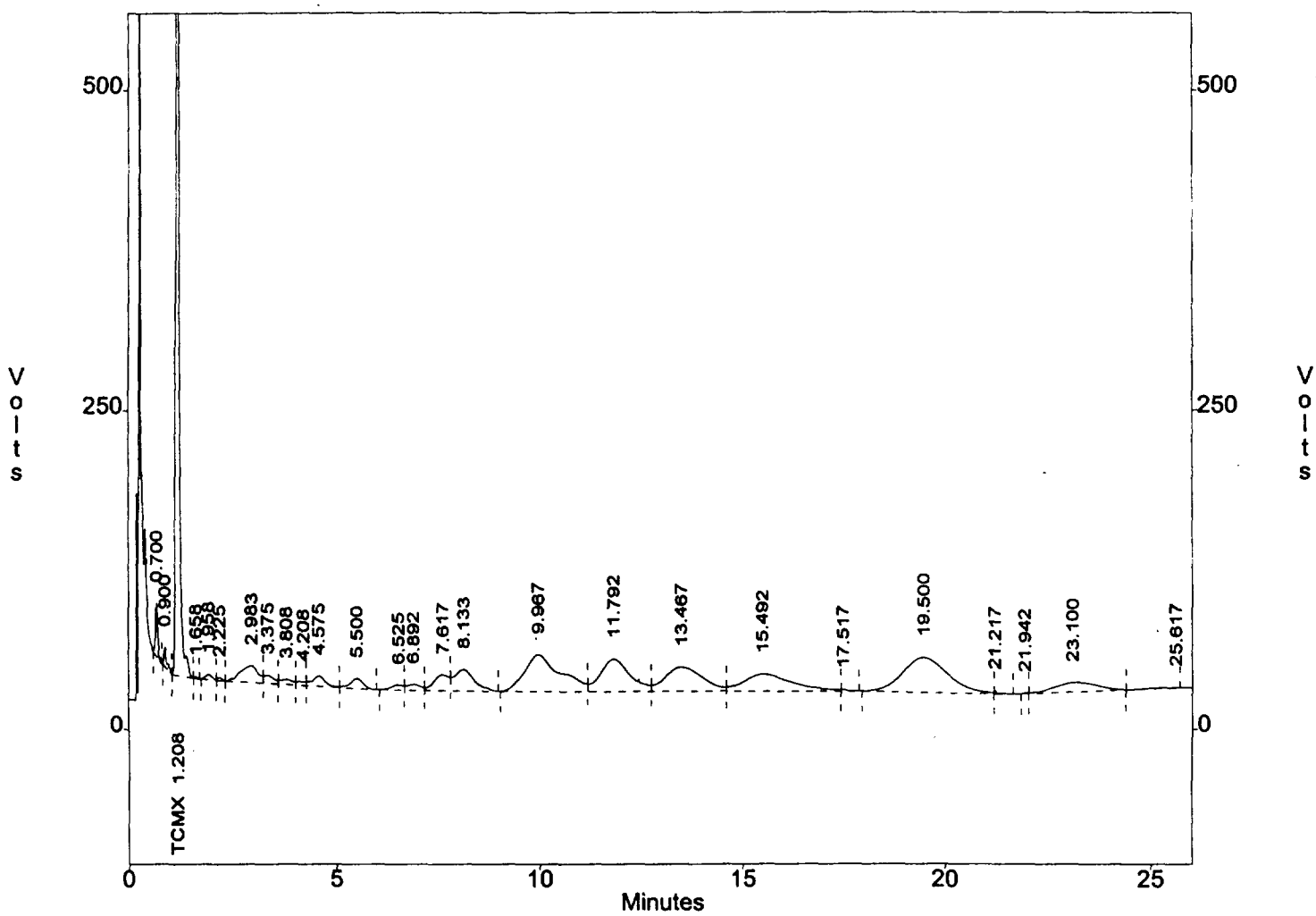
244

File : c:\ezchrom\chrom\var1b\0424V1B.005
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1260 .25
Acquired : Apr 24, 1997 15:36:44
Printed : May 09, 1997 17:42:07

Channel A Results

Name	RT	Area	Conc
TCMX	1.208	4360390	102.905
1242		665819	0.076
1248		665819	0.070
1254		4107965	0.229
1260		7454840	0.236
1016		665819	0.059
1221		456764	0.184
1232		665819	0.132

c:\ezchrom\chrom\var1b\0424V1B.005 -- Channel A



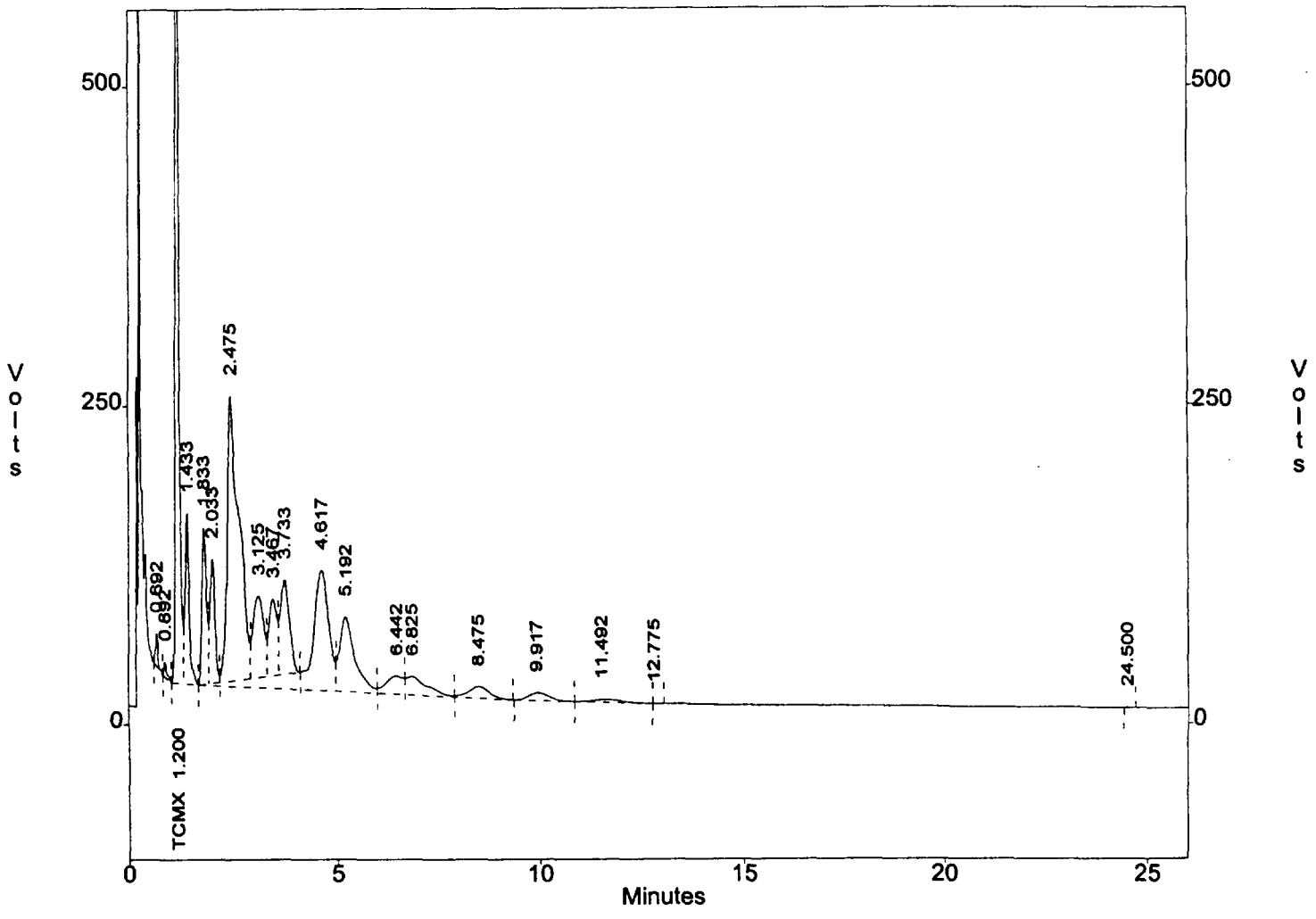
245

File : c:\ezchrom\chrom\var1b\0424V1B.016
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1242 1
Acquired : Apr 24, 1997 20:27:14
Printed : May 09, 1997 17:42:16

Channel A Results

Name	RT	Area	Conc
TCMX	1.200	4732689	111.691
1242		9151538	1.041
1248		9151538	0.957
1254		1587606	0.089
1260		322611	0.010
1016		9151538	0.813
1221		8172902	3.293
1232		9151538	1.812

c:\ezchrom\chrom\var1b\0424V1B.016 -- Channel A



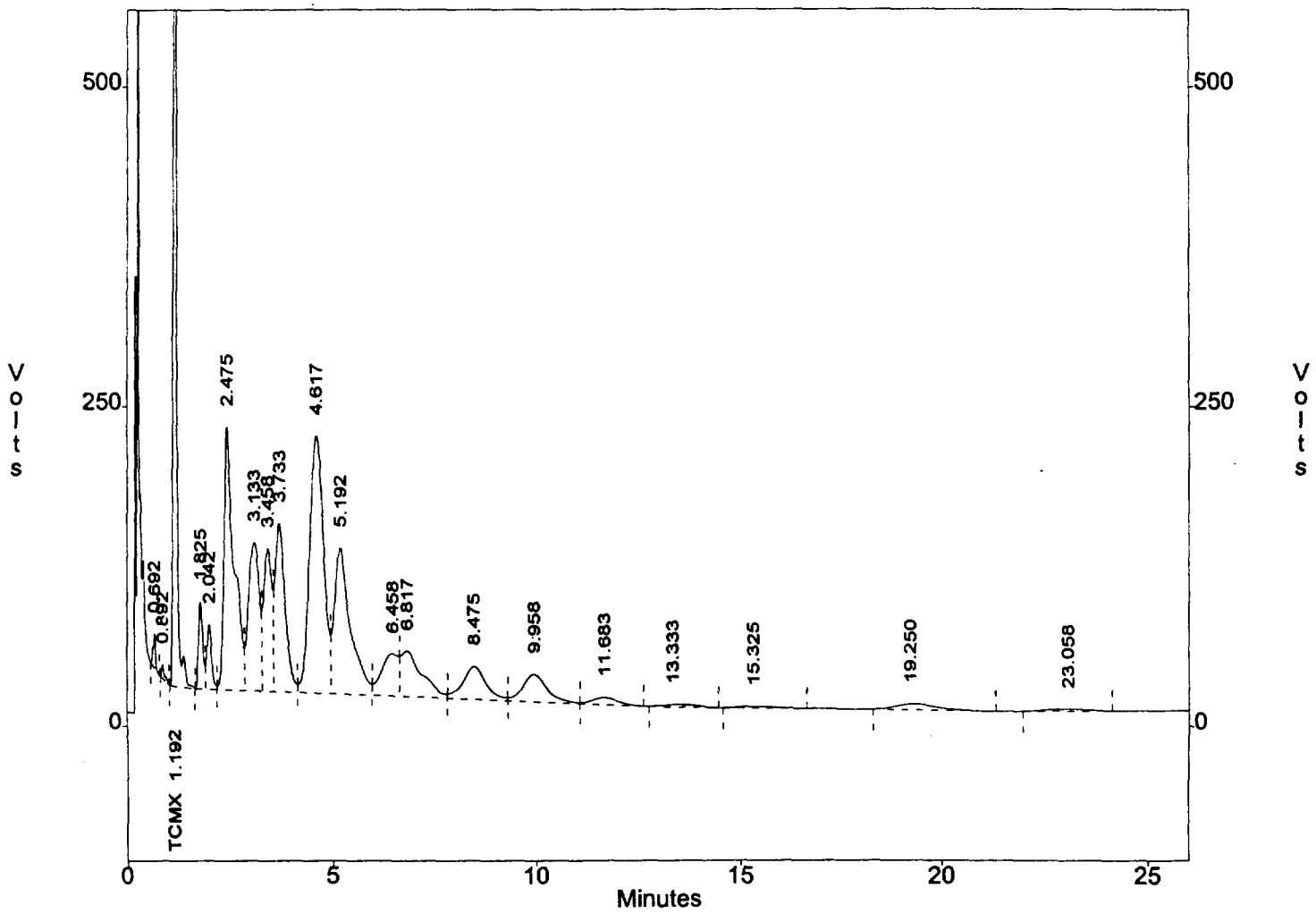
246

File : c:\ezchrom\chrom\var1b\0424V1B.017
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1248 1
Acquired : Apr 24, 1997 20:53:38
Printed : May 09, 1997 17:42:17

Channel A Results

Name	RT	Area	Conc
TCMX	1.192	4794746	113.156
1242		10184874	1.159
1248		10184874	1.065
1254		4457026	0.249
1260		1669894	0.053
1016		10184874	0.905
1221		6472542	2.608
1232		10184874	2.017

c:\ezchrom\chrom\var1b\0424V1B.017 -- Channel A



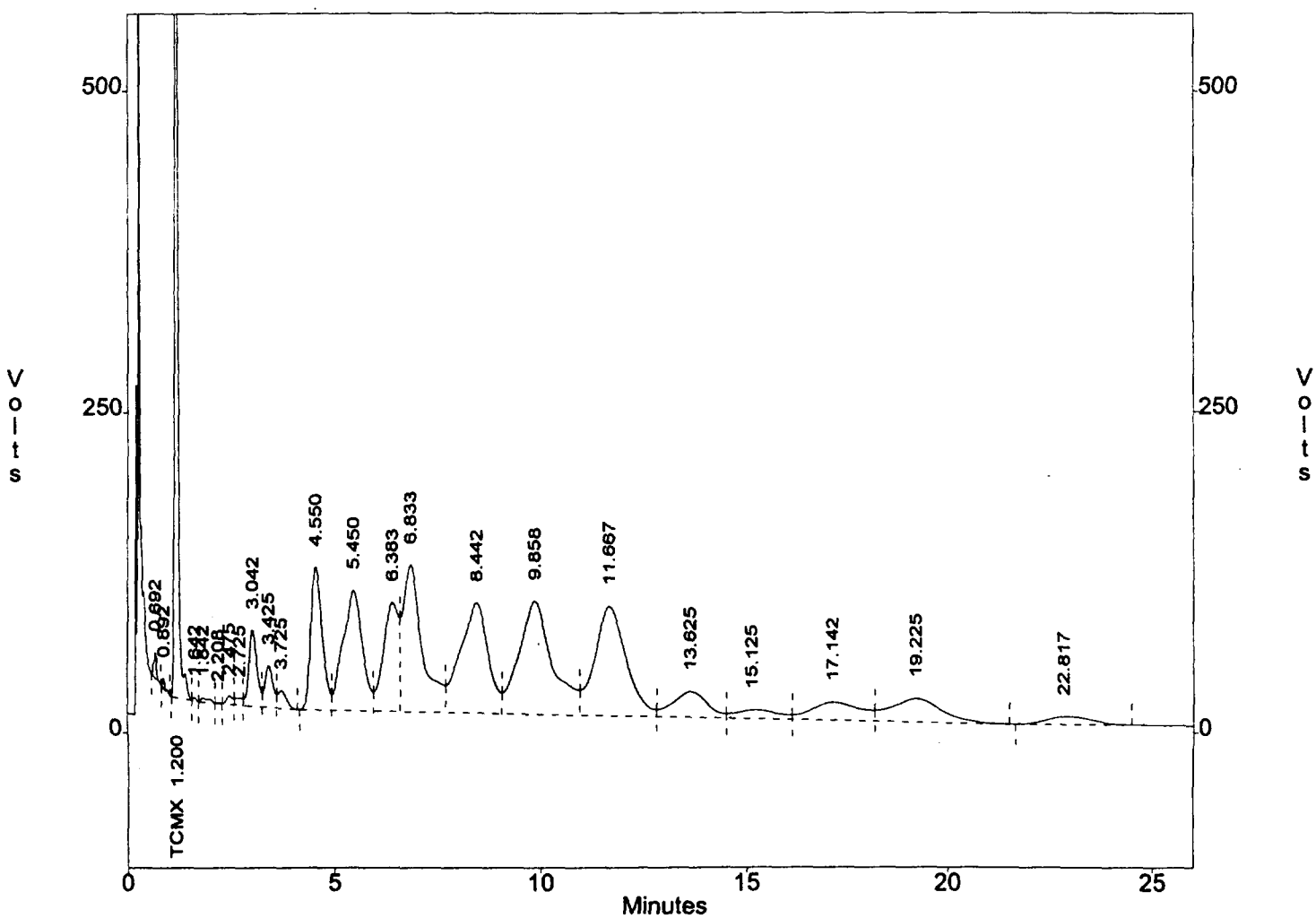
247

File : c:\ezchrom\chrom\var1b\0424V1B.027
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1254 1
Acquired : Apr 25, 1997 01:17:42
Printed : May 09, 1997 17:42:22

Channel A Results

Name	RT	Area	Conc
TCMX	1.200	4591032	108.348
1242		1621521	0.185
1248		1621521	0.170
1254		19589448	1.093
1260		13900878	0.440
1016		1621521	0.144
1221		1004721	0.405
1232		1621521	0.321

c:\ezchrom\chrom\var1b\0424V1B.027 -- Channel A



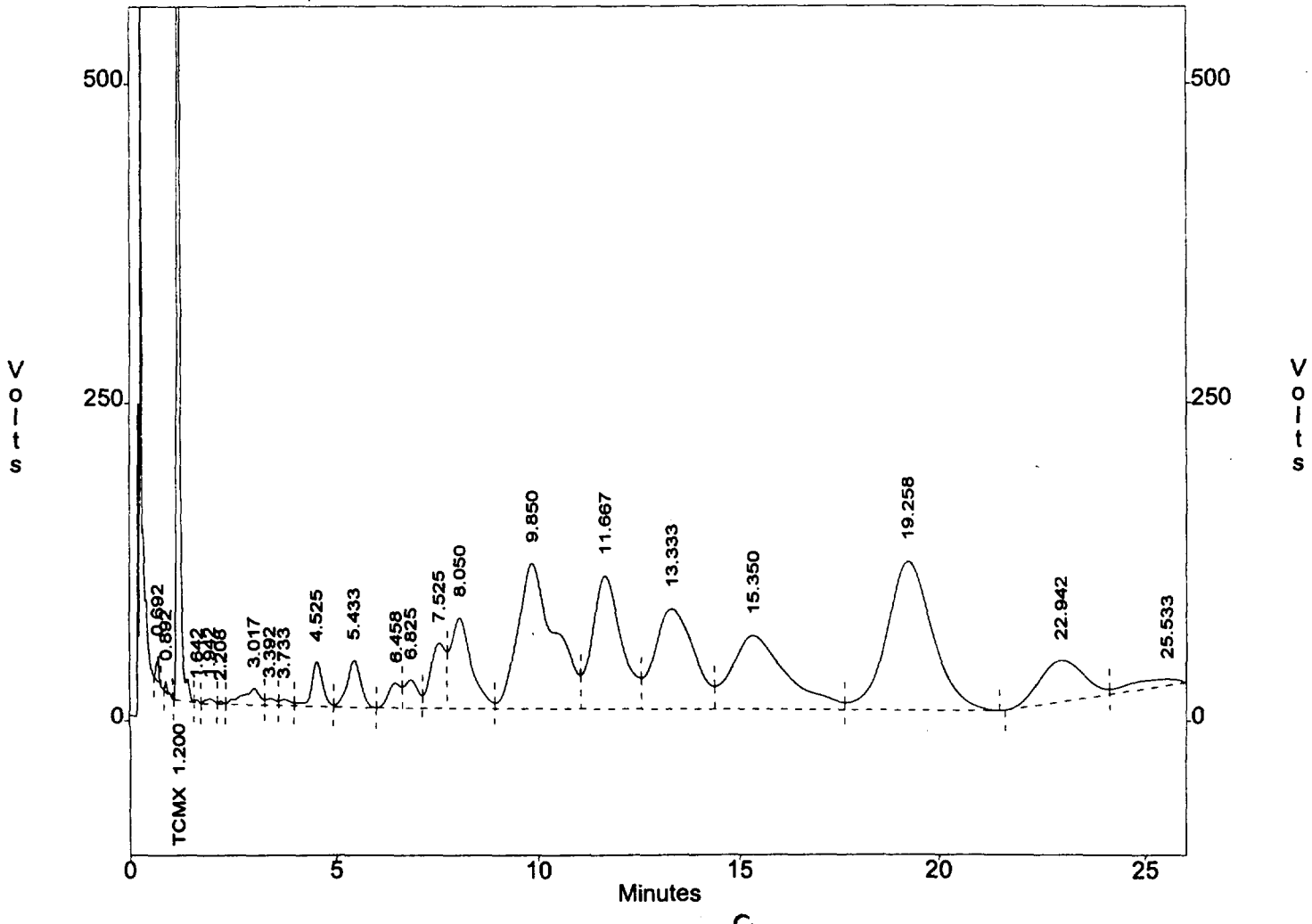
248

File : c:\ezchrom\chrom\var1b\0424V1B.028
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1260 1
Acquired : Apr 25, 1997 01:44:05
Printed : May 09, 1997 17:42:24

Channel A Results

Name	RT	Area	Conc
TCMX	1.200	4538664	107.112
1242		600342	0.068
1248		600342	0.063
1254		17613178	0.983
1260		32872948	1.040
1016		600342	0.053
1221		446411	0.180
1232		600342	0.119

c:\ezchrom\chrom\var1b\0424V1B.028 -- Channel A



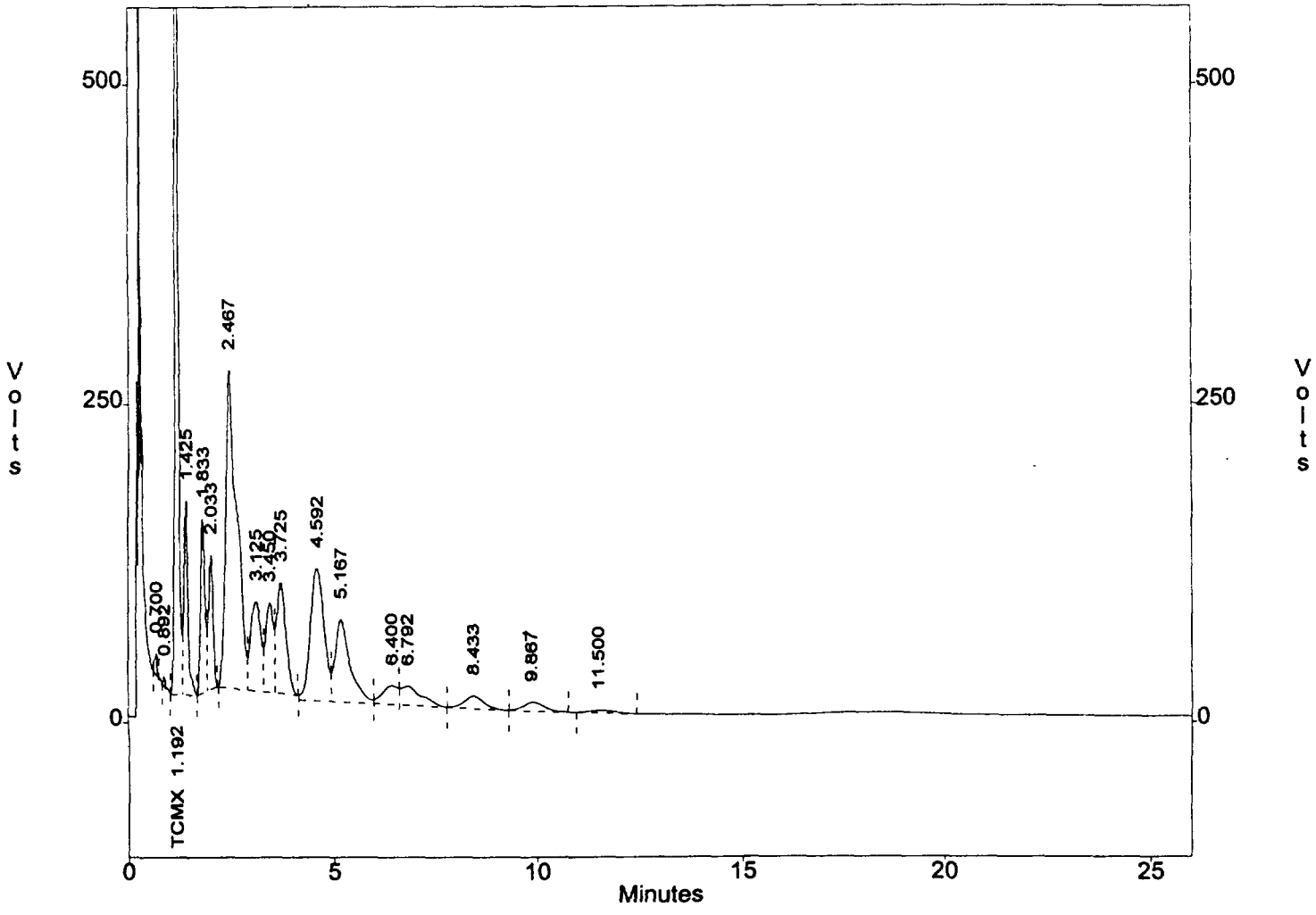
249

File : c:\ezchrom\chrom\var1b\0424V1B.036
Method : c:\ezchrom\methods\1b\v1bpcb.met
Sample ID : 1242 1
Acquired : Apr 25, 1997 10:51:43
Printed : May 09, 1997 17:42:29

Channel A Results

Name	RT	Area	Conc
TCMX	1.192	5260808	124.155
1242		10024742	1.141
1248		10024742	1.049
1254		1620527	0.090
1260		350309	0.011
1016		10024742	0.891
1221		8779614	3.538
1232		10024742	1.985

c:\ezchrom\chrom\var1b\0424V1B.036 -- Channel A



250