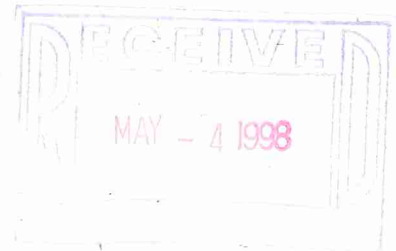


SR-28-0143



GROUNDWATER

APPENDIX



March 12, 1998

Metech Int'l, Inc.
120 Mapleville Main Street
Mapleville, RI 02839


Attn: Michael McGrane

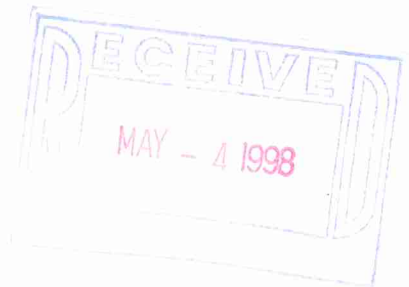
Dear Mike,

Although New England Testing, Inc. performs laboratory analytical work, we do not typically collect samples. In lieu of doing that work ourselves, we sub contract it out to Environmental Sampling Technology, in Needham, Massachusetts. They have been in business for over five years and are considered the top provider of this service in the area. On March 4, 1998, we had them go to your Providence site and collect several samples for PCB analysis. As you requested, their field notes are enclosed.

After reviewing the PCB analysis, you had a question about the detection limit for Arochlor 1221. There is a technical reason that 1221's detection limit is slightly elevated. The chlorine atom is what the detector "sees" in PCB analysis, and 1221 is the lightest arochlor, and has the fewest chlorine atoms. Because of this, detector response for the lower weight arochlors (ie: 1221) is lower than for the heavier ones. With a lower response, comes a higher detection limit. The EPA Contract Laboratory Procedure (CLP) reflects this fact with a higher minimum detection limit. Also please note that our detection limits are approximately 500 times lower than noted in CFR 40 Part 264 appendix 9 (Practical Quantitative Limits for various compounds in groundwater).

Sincerely,


Joseph P. Foley



NEW ENGLAND TESTING LABORATORY, INC.

1254 Douglas Avenue, North Providence, Rhode Island 02904-5392
PROVIDENCE (401) 353-3420 TOLL FREE: 1-888-863-8522

Well PURGING-FIELD WATER QUALITY MEASUREMENTS FORM

Location (Site/Facility Name) METECH Depth to 14.05 of screen
 Well Number MW-6 Date 3/4/98 top bottom
 Field Personnel J. CALVIN J. GIANCINO Pump Intake at (ft. below MP) 9.0
 Sampling Organization ENVIRONMENTAL SAMPLING TECHNOLOGY Purging Device: (pump type) PERISTALTIC
 Identify MP TOP OF PVC RISER

Clock Time	Water Depth below MP	Pump Dial	Purge Rate	Cum. Volume Purged	Temp.	Spec. Cond.	pH	ORP/Eh	DC	Turbidity	Comments
24 HR	ft		ml/min	liters	°C	µS/cm		mv	mg/L	NTU	
1240	7.21	2	850	1.5	—	—	—	—	—	—	
1245	7.25	2	850	5.7	8.42	1008	7.28	-28.3	1.04	61.3	
1250	7.23	2	850	9.9	8.39	967	7.21	-25.2	0.38	12.2	
1255	7.23	2	850	14.1	8.42	965	7.23	-25.4	0.32	13.7	
1300	7.23	2	850	18.3	8.37	966	7.21	-24.4	0.26	8.52	
1305	7.23	2	850	22.5	8.35	967	7.19	-22.5	0.29	—	
1320	7.23	2	850	26.7	8.33	973	7.17	-23.1	0.31	5.10	

1. Pump dial setting (for example: hertz; cycles/min, etc).
 2. µSiemens per cm (same as µmhos/cm) at 25 °C.
 3. Oxidation reduction potential (stand in for Eh).

MW6-GW02 @ 1330

WELL PURGING-FIELD WATER QUALITY MEASUREMENTS FORM

Location (Site/Facility Name) METECH Depth to 16.0 of screen
 Well Number MW-3 Date 3/4/98 (below MP) top bottom
 Field Personnel J. CARLIN & GIANCLOPPA Pump Intake at (ft. below MP)
 Sampling Organization ENV. SAMPLING TECH Purging Device: (pump type) PERISTALTIC PUMP
 Identify MP

Clock Time	Water Depth below MP	Pump Dial	Purge Rate	Cum. Volume Purged	Temp.	Spec. Cond.	pH	ORP/Eh	DC	Turbidity	Comments
24 HR	ft		ml/min	liters	°C	µS/cm		mv	mg/L	NTU	
	9.85	3	950	2.0							
1145	9.92	3	950	6.7	10.14	1215	7.05	-15.9	1.64	30.1	Flow cell Full
1150	9.91	3	950	11.4		1154	7.07	-17.4	1.58	5.62	
1155	9.91	3	950	16.1	9.74	1136	7.12	-19.7	1.46	5.21	
1200	9.91	3	950	20.8	9.70	1116	7.12	-19.6	1.34	4.27	
1205	9.91	3	950	22.5	9.67	1114	7.13	-20.0	1.26	4.28	
1210	9.91	3	950	30.2	9.67	1110	7.13	-20.3	0.92	3.83	
1215	9.91	3	950	34.9	9.70	1108	7.13	-20.3	1.01	3.89	
1220	9.91	3	950	39.6	9.77	1105	7.13	-20.3	0.98	3.91	

Sample ID
 MW3-GW02
 @ 1225

1. Pump dial setting (for example: hertz, cycles/min, etc).
 2. µSiemens per cm (same as µmhos/cm) at 25 °C.
 3. Oxidation reduction potential (stand in for Eh).

Well PURGING-FIELD WATER QUALITY MEASUREMENTS FORM

Location (Site/Facility Name) METECH, Prov RI Depth to (below MP) 14.50 of screen
 Well Number MW-1 Date 3/4/98 top bottom
 Field Personnel V. CALLIN J. GIANCIOPPO Pump Intake at (ft. below MP) 9.0'
 Sampling Organization ENV. SAMPLING TECH Purging Device; (pump type) PELISMATIC
 Identify MP TDPOF PVC

Clock Time	Water Depth below MP ft	Pump Dial	Purge Rate ml/min	Cum. Volume Purged liters	Temp. °C	Spec. Cond. µS/cm	pH	ORP/Eh mv	DC mg/L	Turbidity NTU	Comments
1030	7.21	01	600	1.0	11.05	1572	6.98	-12.5	2.28	—	Flow cell full
1035	7.25	02	600	4.0	11.06	1570	6.94	-10.3	2.24	18.70	
1040	7.30	02	600	7.0	10.81	1504	6.97	-11.9	1.45	9.54	
1045	7.29	02	600	10.0	10.62	1370	7.00	-13.0	1.19	5.09	
1050	7.29	02	600	13.0	10.49	1317	7.01	-14.2	0.76	3.84	
1055	7.29	02	600	16.0	10.39	1304	7.02	-14.3	0.60	3.70	
1100	7.29	02	600	19.0	10.34	1290	7.03	-14.6	0.47	3.30	
1110	7.29	02	600	25.0	10.37	1310	7.03	-14.7	0.74	3.29	
1115	7.29	02	600	31.0	10.35	1300	7.04	-14.9	0.75	3.33	

1. Pump dial setting (for example: hertz, cycles/min, etc).
 2. µSiemens per cm (same as umhos/cm) at 25 °C.
 3. Oxidation reduction potential (stand in for Eh).

MW1-GW-02 @ 1120

WELL PURGING-FIELD WATER QUALITY MEASUREMENTS FORM

Location (Site/Facility Name) MEITECH Depth to (below MP) 14.91 of screen (top/bottom) 10.0'
 Well Number MW-2 Date 3/4/98 Pump Intake at (ft. below MP) 10.0'
 Field Personnel J. CANNON, J. GIANGLIARRO Purging Device: (pump type) RED BLADDER
 Sampling Organization ENV. SAMPLEN Identify MP TOP OF PVC RISER

24 HR	Clock Time	Water Depth below MP	Pump Dial	Purge Rate	Cum. Volume Purged	Temp.	Spec. Cond.	pH	ORP/Eh	DC	Turbidity	Comments
		ft		ml/min	liters	°C	µS/cm		mv	mg/L	NTU	
	0850	6.71	DR7	250	1.0	—	—	—	—	—	—	pump submerged
	0855	6.91	12/12/10	250	2.2	8.68	454.0	6.93	9.08	1.09	13.3	
	0900	6.87	12/12/10	250	3.2	8.43	468.0	6.97	12.2	0.74	14.3	
	0905	6.89	12/12/10	250	4.2	8.45	481.0	7.01	13.9	0.55	14.3	
	0910	6.85	12/12/10	250	5.2	8.39	495.0	7.05	16.1	0.43	10.57	
	0915	6.87	12/12/10	250	6.2	8.33	515.0	7.08	17.4	0.40	10.72	
	0920	6.85	12/12/10	200	7.2	8.31	556.0	7.11	19.2	0.24	10.94	
	0930	6.85	12/12/10	250	9.2	8.35	642	7.09	20.1	0.26	9.98	
	0940	6.89	12/12/10	350	12.2	8.39	643	7.11	19.6	0.29	9.90	
	0950	6.90	12/12/10	350	15.7	8.38	642	7.09	19.5	0.29	9.96	
	0955	6.91	12/12/10	350	19.2	8.35	643	7.11	19.6	0.31	9.95	

1. Pump dial setting (for example: hertz, cycles/min, etc).
2. µSiemens per cm (same as umhos/cm) at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

Sample ID
 MW2 - GW02 @ 1000

REPORT OF ANALYTICAL RESULTS

Case Number: I0305-02

Prepared for:

Metech International
120 Mapleville Main St.
Mapleville, RI 02839
Attn: Mike McGrane

Report Date: MARCH 11, 1998

Reviewed by:

Mark H. Bishop 25

Mark H. Bishop
Laboratory Director

NEW ENGLAND TESTING LABORATORY, INC.

1254 Douglas Avenue, North Providence, Rhode Island 02904-5392
PROVIDENCE (401) 353-3420 TOLL FREE: 1-888-863-8522

SAMPLES SUBMITTED:

The following groundwater samples were submitted to New England Testing Laboratory on 05 MARCH 1998:

“Customer ID #434”

- | | |
|--------------------------|-------------------------|
| 1. MW2-GW02 (Unfiltered) | 9. MW2-GW02 (Filtered) |
| 2. MW1-GW02 (Unfiltered) | 10. MW1-GW02 (Filtered) |
| 3. MW3-GW02 (Unfiltered) | 11. MW3-GW02 (Filtered) |
| 4. MW6-GW02 (Unfiltered) | 12. MW6-GW02 (Filtered) |
| 5. MW5-GW02 (Unfiltered) | 13. MW5-GW02 (Filtered) |
| 6. MW8-GW02 (Unfiltered) | 14. MW8-GW02 (Filtered) |
| 7. MW4-GW02 (Unfiltered) | 15. MW4-GW02 (Filtered) |
| 8. MW7-GW02 (Unfiltered) | 16. MW7-GW02 (Filtered) |

The samples were assigned an internal identification code for laboratory information management purposes. The case number for this sample submission is:

I0305-02

ANALYSIS PERFORMED:

The following table details the analyses performed on the samples at the request of the client:

<u>Sample</u>	<u>Analysis</u>	<u>Method</u>
I0305-02: Samples 1-16	PCBs	8082

Note: This method is documented in:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, USEPA/OSW.

QUALITY ASSURANCE/CONTROL STATEMENTS

All samples were found to be properly preserved/cooled upon receipt. All analyses were performed within EPA designated holding-times. Procedure/calibration checks required by the designated protocols were within control limits.

A laboratory control standard (LCS) was analyzed in parallel with the sample. The recovery for this audit was 80%.

All surrogate recoveries were within limits.

The Preparation Blank was free from contaminants.

ANALYTICAL RESULTS

Sample: MW2-GW02 (Unfiltered)

Case No. I0305-02
Date Extracted: 3/7/98
Date Analyzed: 3/9/98

Subject: PCB's
Method: EPA 8082

<u>Compound</u>	<u>Concentration</u> <u>ug/L (ppb)</u>	<u>Reporting</u> <u>Limit</u>
PCB-1016	N.D.	0.5
PCB-1221	N.D.	3.0
PCB-1232	N.D.	0.5
PCB-1242	N.D.	0.5
PCB-1248	N.D.	0.5
PCB-1254	N.D.	0.5
PCB-1260	N.D.	0.5

Sample: MW1-GW02 (Unfiltered)

Case No. I0305-02
Date Extracted: 3/7/98
Date Analyzed: 3/9/98

Subject: PCB's
Method: EPA 8082

<u>Compound</u>	<u>Concentration</u> <u>ug/L (ppb)</u>	<u>Reporting</u> <u>Limit</u>
PCB-1016	N.D.	0.5
PCB-1221	N.D.	3.0
PCB-1232	N.D.	0.5
PCB-1242	N.D.	0.5
PCB-1248	N.D.	0.5
PCB-1254	N.D.	0.5
PCB-1260	N.D.	0.5

Sample: MW3-GW02 (Unfiltered)

Case No. I0305-02
Date Extracted: 3/7/98
Date Analyzed: 3/9/98

Subject: PCB's
Method: EPA 8082

<u>Compound</u>	<u>Concentration</u> <u>ug/L (ppb)</u>	<u>Reporting</u> <u>Limit</u>
PCB-1016	N.D.	0.5
PCB-1221	N.D.	3.0
PCB-1232	N.D.	0.5
PCB-1242	N.D.	0.5
PCB-1248	N.D.	0.5
PCB-1254	N.D.	0.5
PCB-1260	N.D.	0.5

Sample: MW6-GW02 (Unfiltered)

Case No. I0305-02
Date Extracted: 3/7/98
Date Analyzed: 3/9/98

Subject: PCB's
Method: EPA 8082

<u>Compound</u>	<u>Concentration</u> <u>ug/L (ppb)</u>	<u>Reporting</u> <u>Limit</u>
PCB-1016	N.D.	0.5
PCB-1221	N.D.	3.0
PCB-1232	N.D.	0.5
PCB-1242	N.D.	0.5
PCB-1248	N.D.	0.5
PCB-1254	N.D.	0.5
PCB-1260	N.D.	0.5

Sample: MW5-GW02 (Unfiltered)

Case No. I0305-02
Date Extracted: 3/7/98
Date Analyzed: 3/9/98

Subject: PCB's
Method: EPA 8082

<u>Compound</u>	<u>Concentration</u> <u>ug/L (ppb)</u>	<u>Reporting</u> <u>Limit</u>
PCB-1016	N.D.	0.5
PCB-1221	N.D.	3.0
PCB-1232	N.D.	0.5
PCB-1242	N.D.	0.5
PCB-1248	N.D.	0.5
PCB-1254	N.D.	0.5
PCB-1260	N.D.	0.5

Sample: MW8-GW02 (Unfiltered)

Case No. I0305-02
Date Extracted: 3/7/98
Date Analyzed: 3/9/98

Subject: PCB's
Method: EPA 8082

<u>Compound</u>	<u>Concentration</u> <u>ug/L (ppb)</u>	<u>Reporting</u> <u>Limit</u>
PCB-1016	N.D.	0.5
PCB-1221	N.D.	3.0
PCB-1232	N.D.	0.5
PCB-1242	N.D.	0.5
PCB-1248	N.D.	0.5
PCB-1254	N.D.	0.5
PCB-1260	N.D.	0.5

Sample: MW4-GW02 (Unfiltered)

Case No. I0305-02
Date Extracted: 3/7/98
Date Analyzed: 3/9/98

Subject: PCB's
Method: EPA 8082

<u>Compound</u>	<u>Concentration</u> <u>ug/L (ppb)</u>	<u>Reporting</u> <u>Limit</u>
PCB-1016	N.D.	0.5
PCB-1221	N.D.	3.0
PCB-1232	N.D.	0.5
PCB-1242	N.D.	0.5
PCB-1248	N.D.	0.5
PCB-1254	N.D.	0.5
PCB-1260	N.D.	0.5

Sample: MW7-GW02 (Unfiltered)

Case No. I0305-02
Date Extracted: 3/7/98
Date Analyzed: 3/9/98

Subject: PCB's
Method: EPA 8082

<u>Compound</u>	<u>Concentration</u> <u>ug/L (ppb)</u>	<u>Reporting</u> <u>Limit</u>
PCB-1016	N.D.	0.5
PCB-1221	N.D.	3.0
PCB-1232	N.D.	0.5
PCB-1242	N.D.	0.5
PCB-1248	N.D.	0.5
PCB-1254	N.D.	0.5
PCB-1260	N.D.	0.5

Sample: MW2-GW02 (Filtered)

Case No. I0305-02
Date Extracted: 3/7/98
Date Analyzed: 3/9/98

Subject: PCB's
Method: EPA 8082

<u>Compound</u>	<u>Concentration</u> <u>ug/L (ppb)</u>	<u>Reporting</u> <u>Limit</u>
PCB-1016	N.D.	0.5
PCB-1221	N.D.	3.0
PCB-1232	N.D.	0.5
PCB-1242	N.D.	0.5
PCB-1248	N.D.	0.5
PCB-1254	N.D.	0.5
PCB-1260	N.D.	0.5

Sample: MW1-GW02 (Filtered)

Case No. I0305-02
Date Extracted: 3/7/98
Date Analyzed: 3/9/98

Subject: PCB's
Method: EPA 8082

<u>Compound</u>	<u>Concentration</u> <u>ug/L (ppb)</u>	<u>Reporting</u> <u>Limit</u>
PCB-1016	N.D.	0.5
PCB-1221	N.D.	3.0
PCB-1232	N.D.	0.5
PCB-1242	N.D.	0.5
PCB-1248	N.D.	0.5
PCB-1254	N.D.	0.5
PCB-1260	N.D.	0.5

Sample: MW3-GW02 (Filtered)

Case No. I0305-02
Date Extracted: 3/7/98
Date Analyzed: 3/9/98

Subject: PCB's
Method: EPA 8082

<u>Compound</u>	<u>Concentration</u> <u>ug/L (ppb)</u>	<u>Reporting</u> <u>Limit</u>
PCB-1016	N.D.	0.5
PCB-1221	N.D.	3.0
PCB-1232	N.D.	0.5
PCB-1242	N.D.	0.5
PCB-1248	N.D.	0.5
PCB-1254	N.D.	0.5
PCB-1260	N.D.	0.5

Sample: MW6-GW02 (Filtered)

Case No. I0305-02
Date Extracted: 3/7/98
Date Analyzed: 3/9/98

Subject: PCB's
Method: EPA 8082

<u>Compound</u>	<u>Concentration</u> <u>ug/L (ppb)</u>	<u>Reporting</u> <u>Limit</u>
PCB-1016	N.D.	0.5
PCB-1221	N.D.	3.0
PCB-1232	N.D.	0.5
PCB-1242	N.D.	0.5
PCB-1248	N.D.	0.5
PCB-1254	N.D.	0.5
PCB-1260	N.D.	0.5

Sample: MW5-GW02 (Filtered)

Case No. I0305-02
Date Extracted: 3/7/98
Date Analyzed: 3/9/98

Subject: PCB's
Method: EPA 8082

<u>Compound</u>	<u>Concentration</u> <u>ug/L (ppb)</u>	<u>Reporting</u> <u>Limit</u>
PCB-1016	N.D.	0.5
PCB-1221	N.D.	3.0
PCB-1232	N.D.	0.5
PCB-1242	N.D.	0.5
PCB-1248	N.D.	0.5
PCB-1254	N.D.	0.5
PCB-1260	N.D.	0.5

Sample: MW8-GW02 (Filtered)

Case No. I0305-02
Date Extracted: 3/7/98
Date Analyzed: 3/9/98

Subject: PCB's
Method: EPA 8082

<u>Compound</u>	<u>Concentration</u> <u>ug/L (ppb)</u>	<u>Reporting</u> <u>Limit</u>
PCB-1016	N.D.	0.5
PCB-1221	N.D.	3.0
PCB-1232	N.D.	0.5
PCB-1242	N.D.	0.5
PCB-1248	N.D.	0.5
PCB-1254	N.D.	0.5
PCB-1260	N.D.	0.5

Sample: MW4-GW02 (Filtered)

Case No. I0305-02
Date Extracted: 3/7/98
Date Analyzed: 3/9/98

Subject: PCB's
Method: EPA 8082

<u>Compound</u>	<u>Concentration</u> <u>ug/L (ppb)</u>	<u>Reporting</u> <u>Limit</u>
PCB-1016	N.D.	0.5
PCB-1221	N.D.	3.0
PCB-1232	N.D.	0.5
PCB-1242	N.D.	0.5
PCB-1248	N.D.	0.5
PCB-1254	N.D.	0.5
PCB-1260	N.D.	0.5

Sample: MW7-GW02 (Filtered)

Case No. I0305-02
Date Extracted: 3/7/98
Date Analyzed: 3/9/98

Subject: PCB's
Method: EPA 8082

<u>Compound</u>	<u>Concentration</u> <u>ug/L (ppb)</u>	<u>Reporting</u> <u>Limit</u>
PCB-1016	N.D.	0.5
PCB-1221	N.D.	3.0
PCB-1232	N.D.	0.5
PCB-1242	N.D.	0.5
PCB-1248	N.D.	0.5
PCB-1254	N.D.	0.5
PCB-1260	N.D.	0.5

CUSTODY RECORD

EST INC.

Environmental Sampling Technology
 368 Hillside Avenue
 Needham, MA 02194
 Tel: (781) 455-0003 Fax: (781) 455-8336

CLIENT: New England Testing Labs
 ADDRESS: 1254 Douglas Ave.
North Providence, RI 02904
 PHONE #: (401) 253-3420
 P.O. # _____
 CLIENT CONTACT: Joe Foley
 DESCRIPTION: Customer ID # 434

2025-12

CHAIN OF CUSTODY RECORD

LABORATORY:

NE Testing Lab

ANALYSES

- CONTAINER TYPE
 P — Plastic
 G — Glass
 V — VOA
 B — Bacteria
- SAMPLE TYPE
 1. Wastewater
 2. Groundwater
 3. Drinking Water
 4. Soil
 5. Surface Water
 6. Other _____

SPECIAL INSTRUCTIONS

- RUSH _____ DAY TURNAROUND
- ROUTINE

COMMENTS

LOCATION IDENTIFICATION	SAMPLE TYPE	CONTAINER		SAMPLING		PRESERVATIVE	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
		SIZE	#	DATE	TIME					
MW2-GW02	2	200	bebu	3/4	1000	None	✓	✓	3/4/98	5:50
MW1-GW02	2				1120	None	✓	✓		
MW3-GW02	2				1225	"	✓	✓		
MW6-GW02	2				1330	"	✓	✓		
MW5-GW02	2				1430	"	✓	✓		
MW8-GW02	2				1525	"	✓	✓		
MW4-GW02	2				1605	"	✓	✓		
MW7-GW02	2				1700	"	✓	✓		
Sampler's Signature: <u>Joe Foley</u> Date: <u>3/4/98</u> Time: <u>1700</u> TRANSFERS RELINQUISHED BY: <u>Joe Foley</u> TRANSFERS ACCEPTED BY: <u>Dynna M. Smith</u> NUMBER: 2 ADDITIONAL COMMENTS: * Each set includes - 2 1L Glass, No Pres (Filtered) - 2 1L Glass, No Pres (Unfiltered)										

SAMPLES SUBMITTED:

The following groundwater samples were submitted to New England Testing Laboratory on 05 MARCH 1998:

“Customer ID #434”

1. MW2-GW02
2. MW1-GW02
3. MW3-GW02
4. MW6-GW02
5. MW5-GW02
6. MW8-GW02
7. MW4-GW02
8. MW7-GW02

The samples were assigned an internal identification code for laboratory information management purposes. The case number for this sample submission is:

I0305-01

**Supplemental Report of QA/QC Data
For Case Number: I0305-02**

Prepared for:

Metech International
120 Mapleville Main St.
Mapleville, RI 02839
Attn: Mike McGrane

Report Date: MARCH 26, 1998

Reviewed by:



Mark H. Bishop
Laboratory Director

NEW ENGLAND TESTING LABORATORY, INC.
1254 Douglas Avenue, North Providence, Rhode Island 02904-5392
PROVIDENCE (401) 353-3420 TOLL FREE: 1-888-863-8522

SAMPLES SUBMITTED:

The following groundwater samples were submitted to New England Testing Laboratory on 05 MARCH 1998:

“Customer ID #434”

- | | |
|--------------------------|-------------------------|
| 1. MW2-GW02 (Unfiltered) | 9. MW2-GW02 (Filtered) |
| 2. MW1-GW02 (Unfiltered) | 10. MW1-GW02 (Filtered) |
| 3. MW3-GW02 (Unfiltered) | 11. MW3-GW02 (Filtered) |
| 4. MW6-GW02 (Unfiltered) | 12. MW6-GW02 (Filtered) |
| 5. MW5-GW02 (Unfiltered) | 13. MW5-GW02 (Filtered) |
| 6. MW8-GW02 (Unfiltered) | 14. MW8-GW02 (Filtered) |
| 7. MW4-GW02 (Unfiltered) | 15. MW4-GW02 (Filtered) |
| 8. MW7-GW02 (Unfiltered) | 16. MW7-GW02 (Filtered) |

The samples were assigned an internal identification code for laboratory information management purposes. The case number for this sample submission is:

I0305-02

ANALYSIS PERFORMED:

The following table details the analyses performed on the samples at the request of the client:

<u>Sample</u>	<u>Analysis</u>	<u>Method</u>
I0305-02: Samples 1-16	PCBs	8082

Note: This method is documented in:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, USEPA/OSW.

REPORT OF RESULTS

A report of analytical results was delivered to the client on March 11, 1998. At the clients request this supplemental report was prepared. This supplemental report details QA/QC audits performed during the original analysis and provides chromatograms.

GENERAL QUALITY ASSURANCE/CONTROL NARRATIVE

All samples were found to be properly preserved/cooled upon receipt. All analyses were performed within EPA designated holding-times. Procedure/calibration checks required by the designated protocols were within control limits.

No additional sample was submitted for MS/MSD analysis.

A laboratory control standard (LCS) was analyzed in parallel with the samples. The recovery for this audit was 80%.

The Preparation Blank was free from contaminants.

All surrogate recoveries were within limits. These recoveries are detailed in the following table. EPA CLP Limits are 30% to 150%.

Surrogate Recoveries

Sample Id	DB 608		DB 608		DB 608		DB 1701		DB 1701		DB 1701	
	TCMX ug/ml	DCBP ug/ml	TCMX %	DCBP %	TCMX ug/ml	DCBP ug/ml	TCMX ug/ml	DCBP ug/ml	TCMX %	DCBP ug/ml	TCMX %	DCBP %
305021	380	349	95	87	406	329	101	82	101	82	101	82
305021f	36.6	26.9	92	67	43.2	29.2	108	73	108	73	108	73
305022	36.2	37.7	91	94	43.8	34.6	110	87	110	87	110	87
305022f	34.2	26.2	86	65	43.8	22.7	110	57	110	57	110	57
305023	40.5	37.3	101	93	47.8	40.4	120	101	120	101	120	101
305023f	42.3	36.2	106	91	47.7	37.8	119	95	119	95	119	95
305024	35	30.9	88	77	40	29.8	100	75	100	75	100	75
305024f	39.2	35.9	98	90	46.6	38.4	116	96	116	96	116	96
305025	40.6	32.1	102	80	46.4	32.3	116	81	116	81	116	81
305025f	42.8	39.5	107	99	50.5	41.3	126	103	126	103	126	103
305026	43.1	33.6	108	84	36.8	37.3	92	93	92	93	92	93
305026f	59.1	30.1	148	75	44.2	32.7	111	82	111	82	111	82
305027	40.8	32.8	102	82	43.5	36.9	109	92	109	92	109	92
305027f	37.7	33.9	94	85	41.7	36.7	104	92	104	92	104	92
305028	34.7	35.9	87	90	39.5	39.2	99	98	99	98	99	98
305028f	40.1	46	100	115	50.1	38.4	125	96	125	96	125	96
pbk01	39.7	35.5	99	89	45.8	35.9	115	90	115	90	115	90
lcsw01	33.6	25.3	84	63	39.9	29.5	100	74	100	74	100	74

Chromatographic data is presented in this section. The section is organized into the following subsections:

- Initial Calibration
- Sample Chromatograms
- Overlaid Traces

The initial calibration standards are:

Standard	Concentration, ug/ml
1060-1	2
1060-2	1
1060-3	0.5
1060-4	0.25
1060-5	0.1
1221-1	0.5
1232-1	0.5
1242-1	0.5
1248-1	0.5
1254-1	0.5

Calibration graphs and chromatograms are presented for both the "A" Channel (DB-608) and the "B" Channel (DB-1701).

The file names are the last 5 digits of the case number and the well number. For the filtered sample, the file name is suffixed with the letter "f", e.g. MW1 filtered is 305021f.

In the analysis of samples, chromatograms are inspected for PCB Aroclor patterns. This is best accomplished by overlaying the sample chromatogram and the Aroclor standard chromatogram on the same frame. For illustration, each sample's chromatogram is overlaid with the 0.1 ug/ml Aroclor 1016/1260 mixed standard's for the "A" Channel only. These overlaid traces demonstrate the absence of Aroclor patterns in the samples to a limit of 0.05 ug/ml.

The samples were all 1 liter extractions with final extract volumes of 10 ml, with the exception of sample #1 which had a final volume of 1 ml.

Initial Calibration

Method : c:\conv_gc\chrom\temp\pcb2.met
 Printed : Mar 25, 1998 16:32:50
 Channel : A
 Peak : 1016-1

* - Replicate Not Used

DB 608

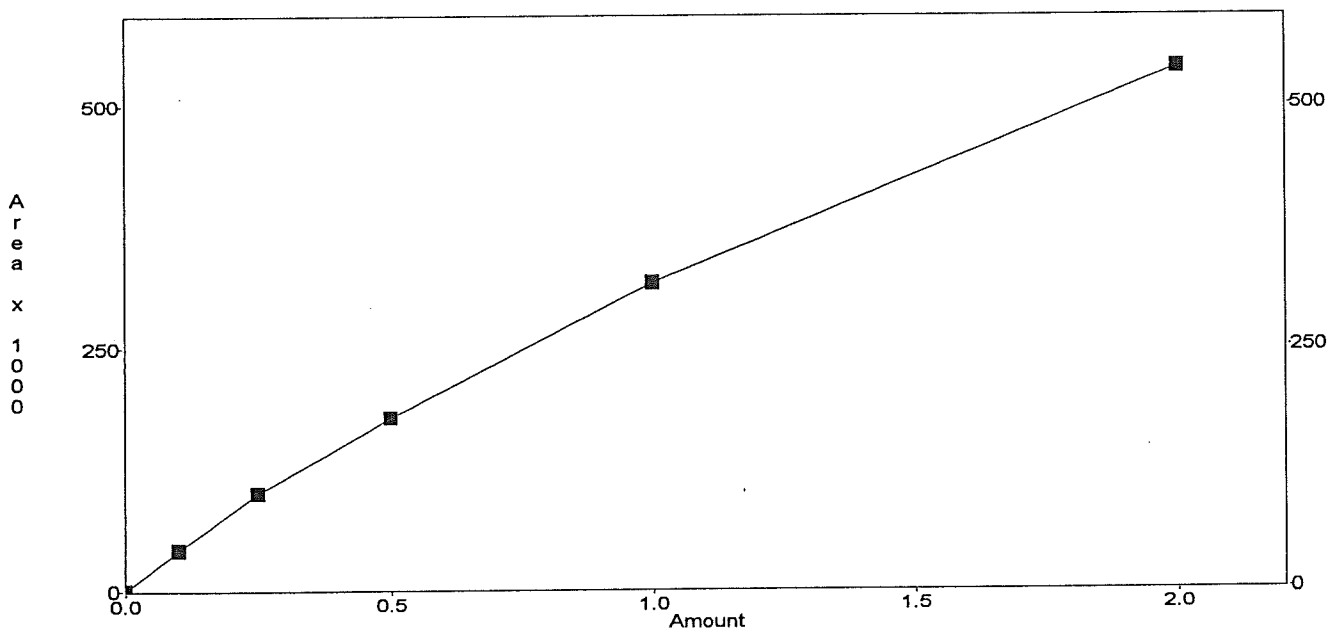
Level	Area	Amount	RF	Rep Area 1	Rep Area 2	Rep Area 3	Rep Area 4	Rep Area 5	Replic STD	Replic %RSD	Old Area
1	539643		2	269821.50			539643				0
2	317711		1	317711.00			317711				0
3	177730		0.5	355460.00			177730				0
4	100307		0.25	401228.00			100307				0
5	41490		0.1	414900.00			41490				0

Calib Flag: Replace

Average RF: 351824
 F StdDev: 59834.5
 F %RSD: 17.007

RF Definition: Area / Amount
 Point to Point

External Standard Curve - Scaling: None



Method : c:\conv_gc\chrom\temp\pcb2.met
 Printed : Mar 25, 1998 16:32:51
 Channel : A
 Peak : 1016-2

* - Replicate Not Used

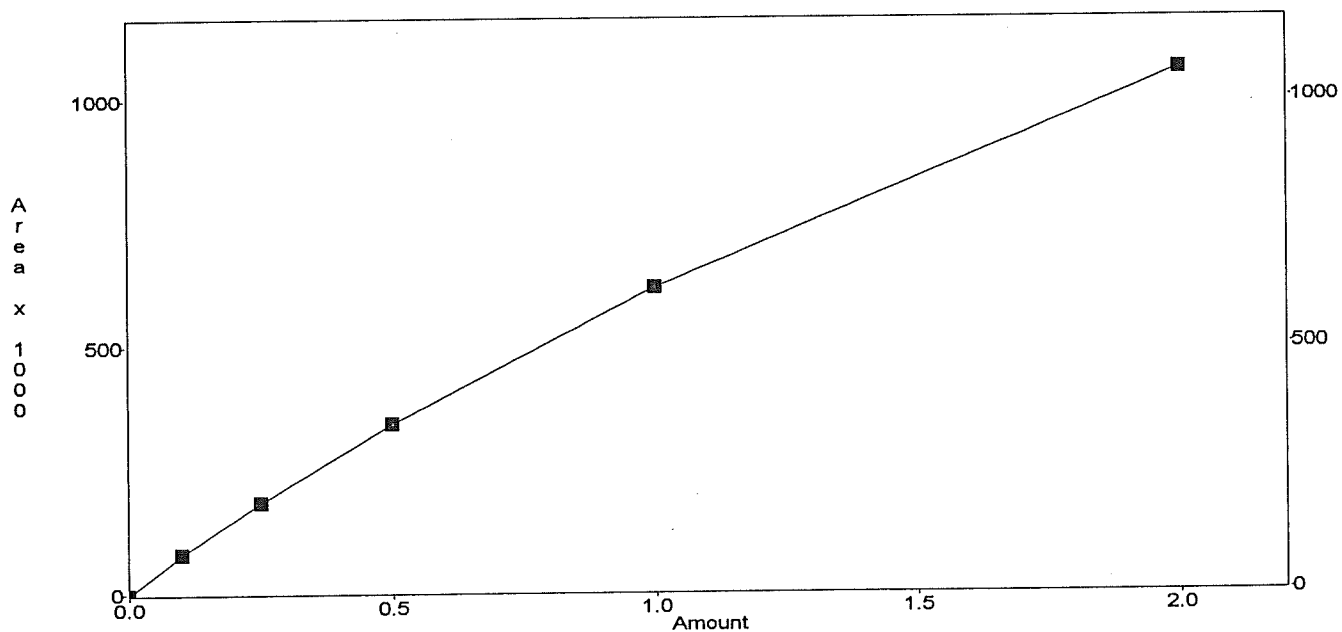
Level	Area	Amount	RF	Rep Area 1	Rep Area 2	Rep Area 3	Rep Area 4	Rep Area 5	Replic STD	Replic %RSD	Old Area
1	1059539		2	529769.50	1059539						0
2	618854		1	618854.00	618854						0
3	342800		0.5	685600.00	342800						0
4	185522		0.25	742088.00	185522						0
5	81191		0.1	811910.00	81191						0

Calib Flag: Replace

Average RF: 677644
 F StdDev: 109049
 F %RSD: 16.092

RF Definition: Area / Amount
 Point to Point

External Standard Curve - Scaling: None



0008

Method : c:\conv_gc\chrom\temp\pcb2.met
 Printed : Mar 25, 1998 16:32:52
 Channel : A
 Peak : 1016-3

* - Replicate Not Used

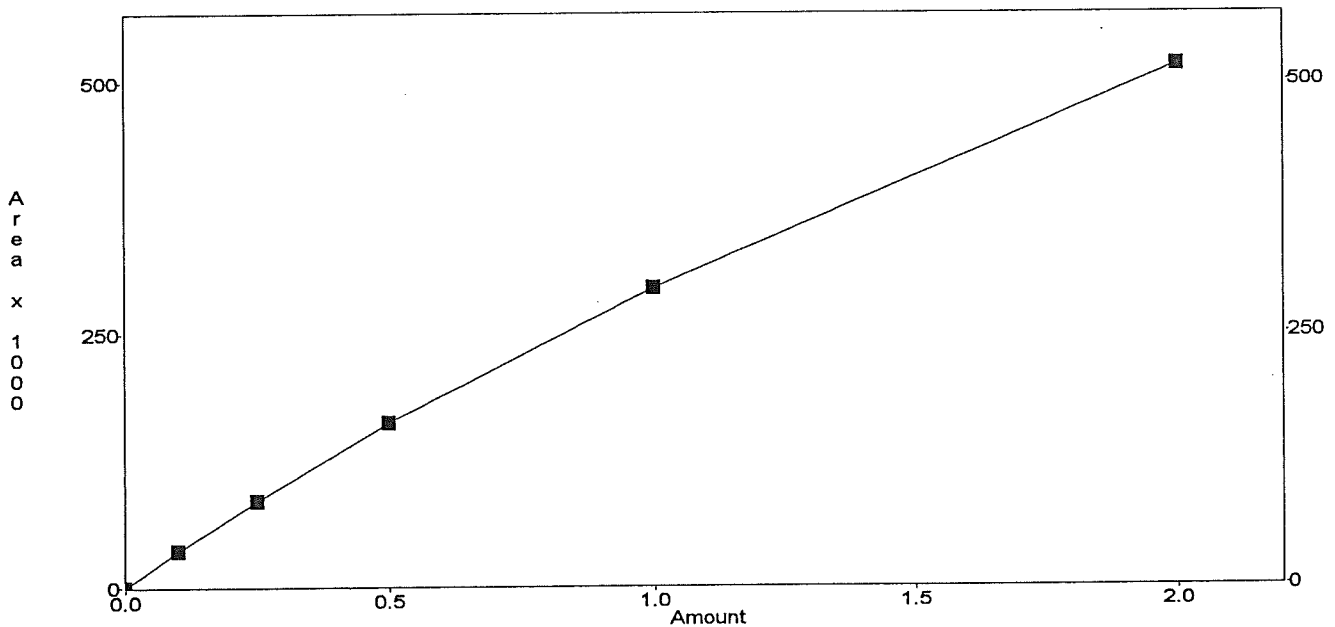
Level	Area	Amount	RF	Rep Area 1	Rep Area 2	Rep Area 3	Rep Area 4	Rep Area 5	Replic STD	Replic %RSD	Old Area
1	517040	2	258520.00	517040							0
2	295260	1	295260.00	295260							0
3	162559	0.5	325118.00	162559							0
4	85308	0.25	341232.00	85308							0
5	36070	0.1	360700.00	36070							0

Calib Flag: Replace

Average RF: 316166
 F StdDev: 40161.7
 F %RSD: 12.703

RF Definition: Area / Amount
 Point to Point

External Standard Curve - Scaling: None



Method : c:\conv_gc\chrom\temp\pcb2.met
 Printed : Mar 25, 1998 16:32:53
 Channel : A
 Peak : 1016-4

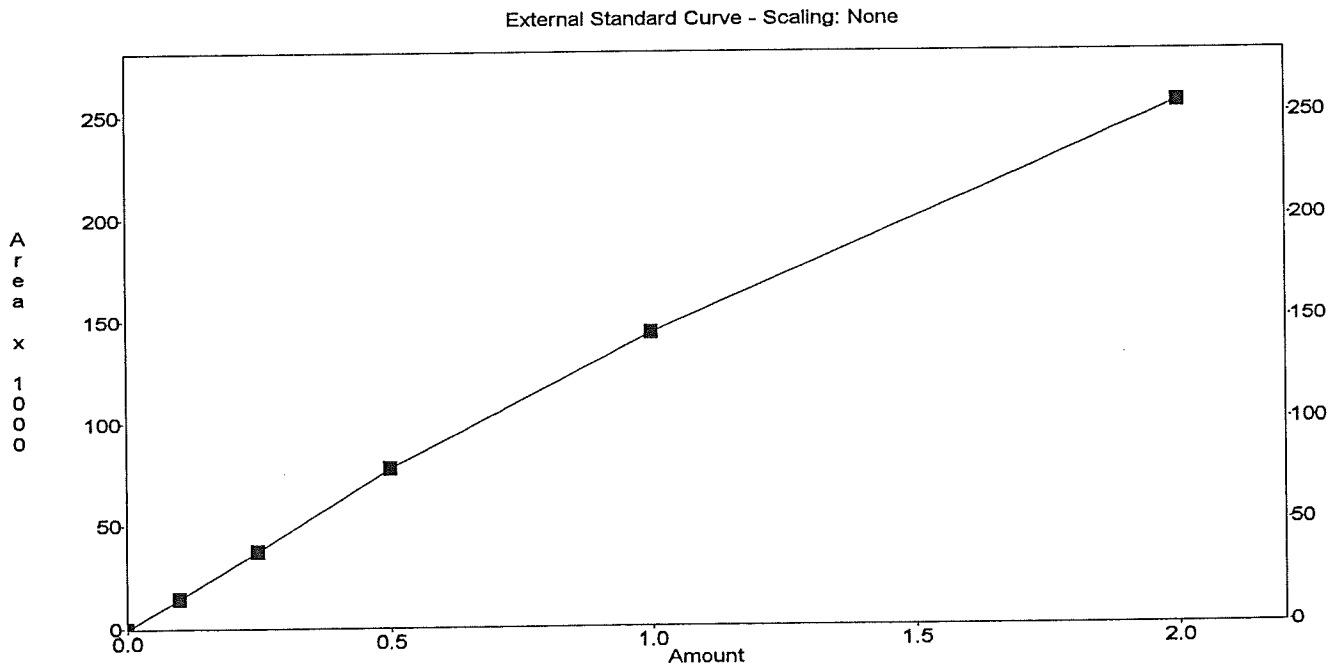
* - Replicate Not Used

Level	Area	Amount	RF	Rep Area 1	Rep Area 2	Rep Area 3	Rep Area 4	Rep Area 5	Replic STD	Replic %RSD	Old Area
1	255922		2	127961.00							0
2	143703		1	143703.00							0
3	77677		0.5	155354.00							0
4	37075		0.25	148300.00							0
5	14217		0.1	142170.00							0

Calib Flag: Replace

Average RF: 143498
 RF StdDev: 10085
 RF %RSD: 7.028

RF Definition: Area / Amount
 Point to Point



0010

Method : c:\conv_gc\chrom\temp\pcb2.met
 Printed : Mar 25, 1998 16:32:54
 Channel : A
 Peak : 1260-1

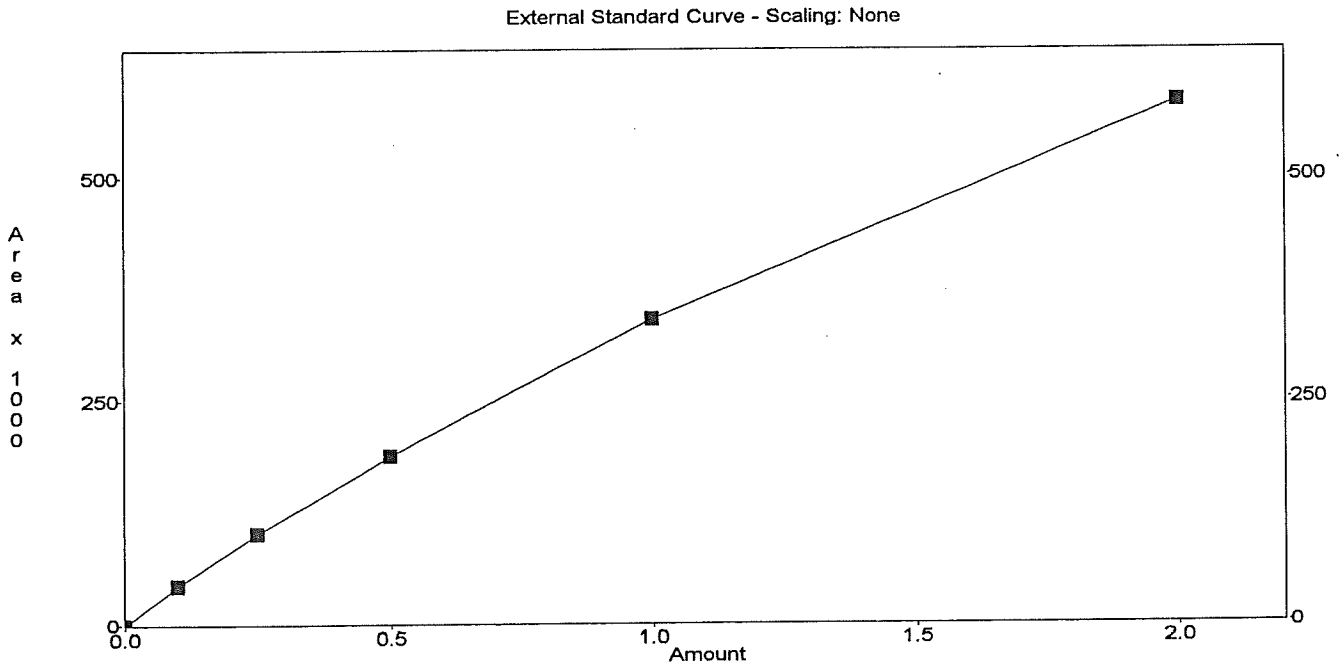
* - Replicate Not Used

Level	Area	Amount	RF	Rep Area 1	Rep Area 2	Rep Area 3	Rep Area 4	Rep Area 5	Replic STD	Replic %RSD	Old Area
1	585597		2	292798.50				585597			0
2	341336		1	341336.00				341336			0
3	189170		0.5	378340.00				189170			0
4	102360		0.25	409440.00				102360			0
5	44025		0.1	440250.00				44025			0

Calib Flag: Replace

Average RF: 372433
 F StdDev: 57689.3
 F %RSD: 15.490

RF Definition: Area / Amount
 Point to Point



0011

Method : c:\conv_gc\chrom\temp\pcb2.met
 Printed : Mar 25, 1998 16:32:55
 Channel : A
 Peak : 1260-2

* - Replicate Not Used

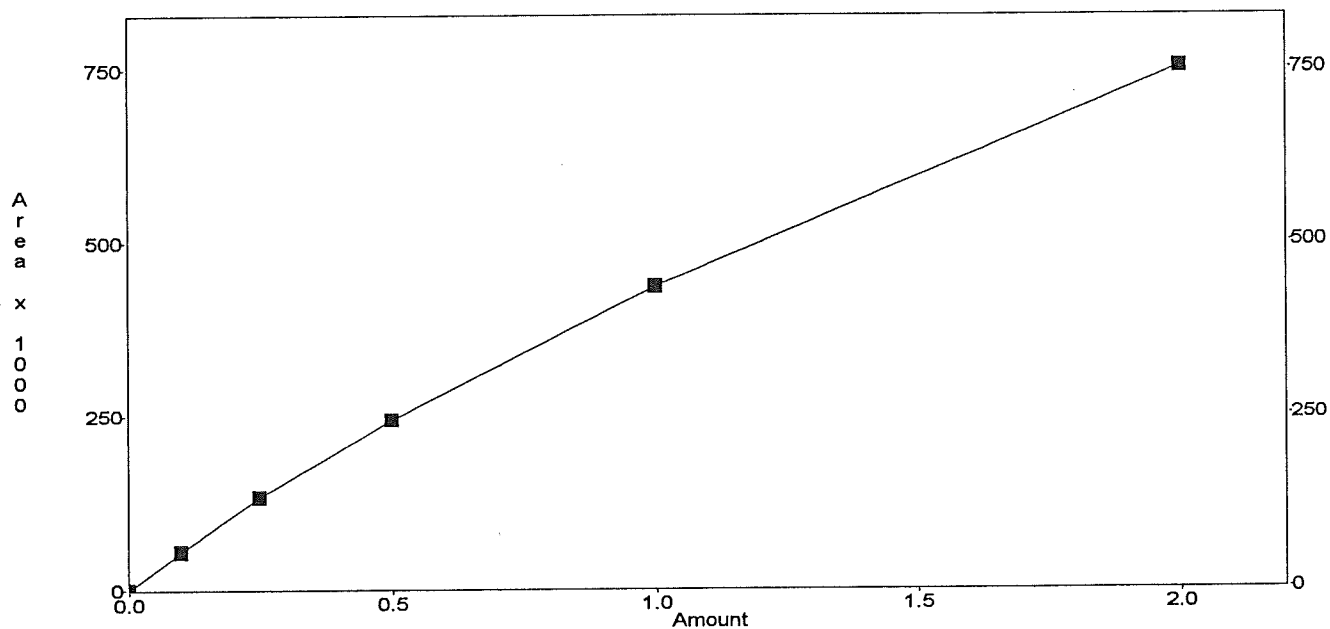
Level	Area	Amount	RF	Rep Area 1	Rep Area 2	Rep Area 3	Rep Area 4	Rep Area 5	Replic STD	Replic %RSD	Old Area
1	753949	2	376974.50	753949							0
2	435277	1	435277.00	435277							0
3	243705	0.5	487410.00	243705							0
4	132771	0.25	531084.00	132771							0
5	54793	0.1	547930.00	54793							0

Calib Flag: Replace

Average RF: 475735
 RF StdDev: 70360.5
 RF %RSD: 14.790

RF Definition: Area / Amount
 Point to Point

External Standard Curve - Scaling: None



Method : c:\conv_gc\chrom\temp\pcb2.met
Printed : Mar 25, 1998 16:32:56
Channel : A
Peak : 1260-3

* - Replicate Not Used

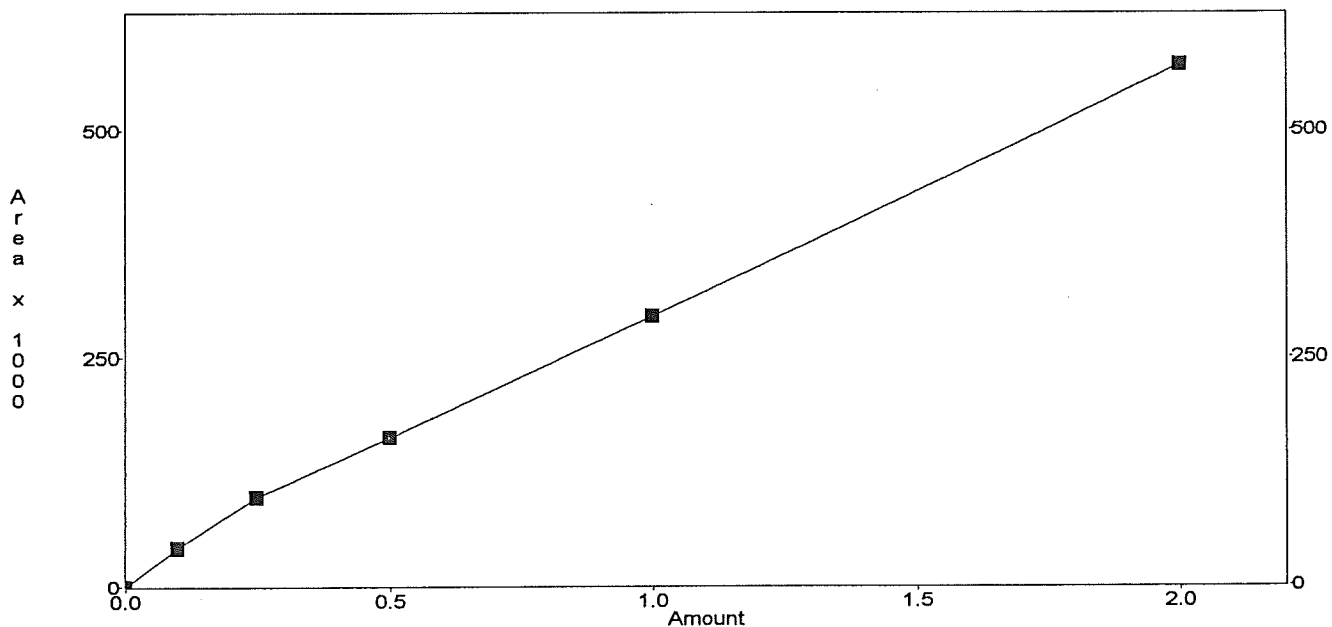
Level	Area	Amount	RF	Rep Area 1	Rep Area 2	Rep Area 3	Rep Area 4	Rep Area 5	Replic STD	Replic %RSD	Old Area
1	572123		2	286061.50	572123						0
2	296287		1	296287.00	296287						0
3	163247		0.5	326494.00	163247						0
4	97421		0.25	389684.00	97421						0
5	42003		0.1	420030.00	42003						0

Calib Flag: Replace

Average RF: 343711
RF StdDev: 58751.7
RF %RSD: 17.093

RF Definition: Area / Amount
Point to Point

External Standard Curve - Scaling: None



0013

Method : c:\conv_gc\chrom\temp\pcb2.met
Printed : Mar 25, 1998 16:32:57
Channel : A
Peak : 1260-4

* - Replicate Not Used

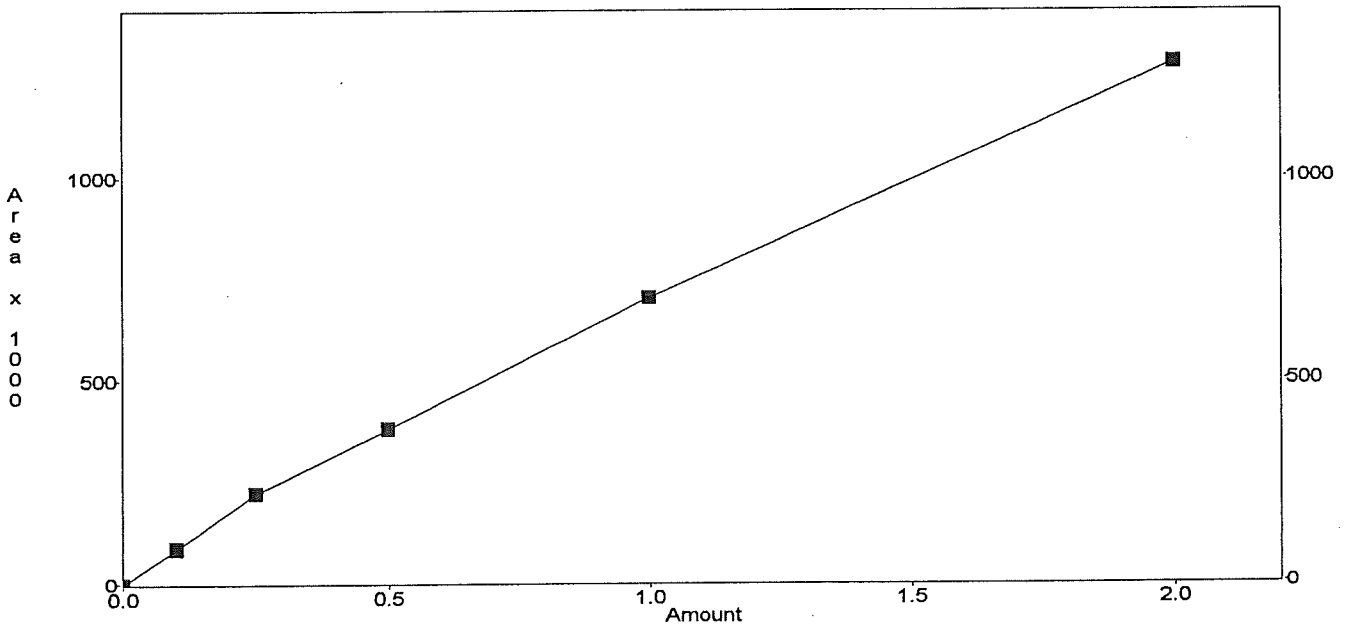
Level	Area	Amount	RF	Rep Area 1	Rep Area 2	Rep Area 3	Rep Area 4	Rep Area 5	Replic STD	Replic %RSD	Old Area
1	1283254	2	641627.00	1283254							0
2	703315	1	703315.00	703315							0
3	379963	0.5	759926.00	379963							0
4	222585	0.25	890340.00	222585							0
5	88330	0.1	883300.00	88330							0

Calib Flag: Replace

Average RF: 775702
RF StdDev: 109754
RF %RSD: 14.149

RF Definition: Area / Amount
point to point

External Standard Curve - Scaling: None



0014

Method : c:\conv_gc\chrom\temp\surr.met
Printed : Mar 26, 1998 12:11:54
Channel : A
Peak : TCMX

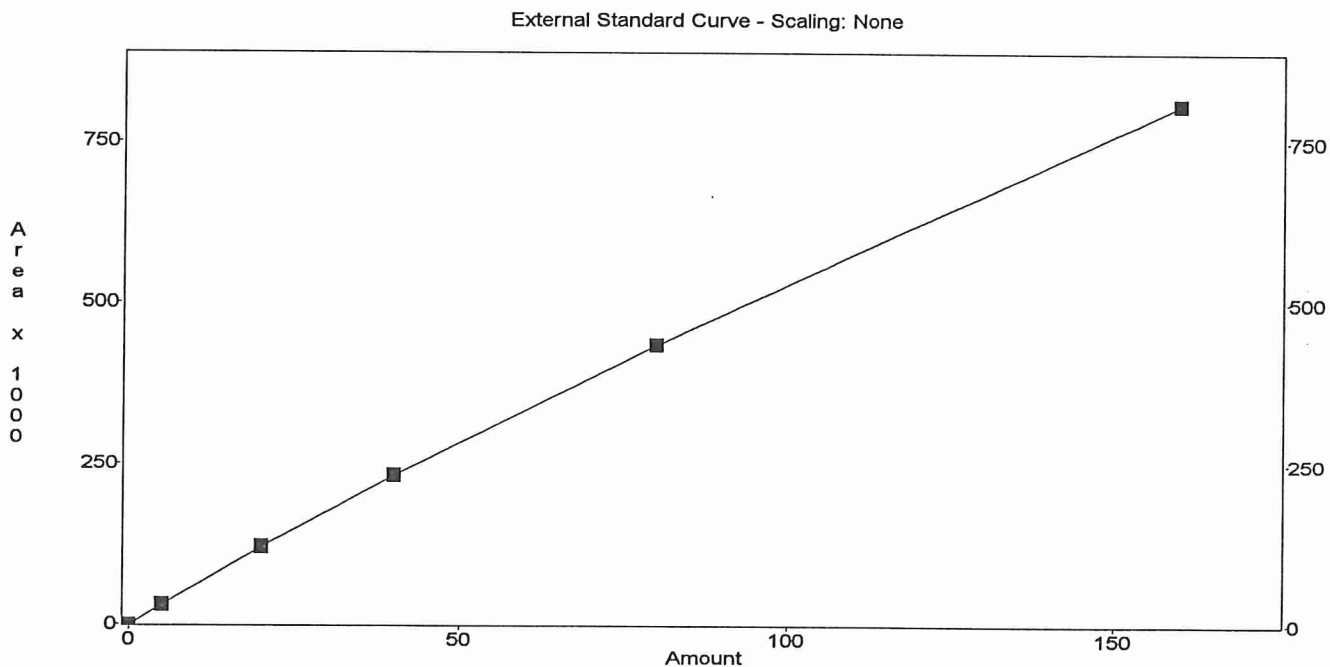
* - Replicate Not Used

Level	Area	Amount	RF	Rep Area 1	Rep Area 2	Rep Area 3	Rep Area 4	Rep Area 5	Replic STD	Replic %RSD	Old Area
1	809662	160	5060.39	809662							0
2	435737	80	5446.71	435737							0
3	233639	40	5840.98	233639							0
4	121597	20	6079.85	121597							0
5	31854	5	6370.80	31854							0

Calib Flag: Replace

Average RF: 5759.74
F StdDev: 517.094
F %RSD: 8.978

RF Definition: Area / Amount
Point to Point



0015

Method : c:\conv_gc\chrom\temp\surr.met
 Printed : Mar 26, 1998 12:11:55
 Channel : A
 Peak : DCBP

* - Replicate Not Used

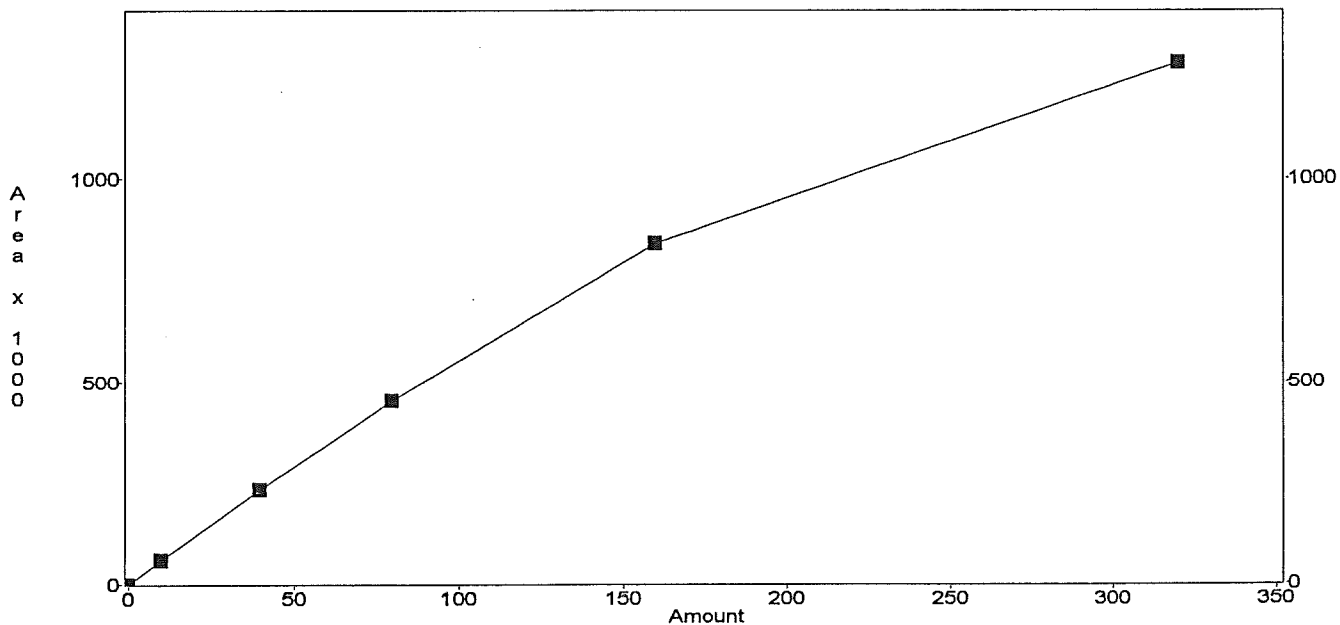
Level	Area	Amount	RF	Rep Area 1	Rep Area 2	Rep Area 3	Rep Area 4	Rep Area 5	Replic STD	Replic %RSD	Old Area
1	1287576	320	4023.68	1287576							0
2	842340	160	5264.63	842340							0
3	454467	80	5680.84	454467							0
4	234146	40	5853.65	234146							0
5	59977	10	5997.70	59977							0

Calib Flag: Replace

Average RF: 5364.1
 F StdDev: 798.133
 F %RSD: 14.879

RF Definition: Area / Amount
 Point to Point

External Standard Curve - Scaling: None



Method : c:\conv_gc\chrom\temp\pcb2.met
 Printed : Mar 25, 1998 18:14:10
 Channel : B
 Peak : 1016-1 **DB1701**

* - Replicate Not Used

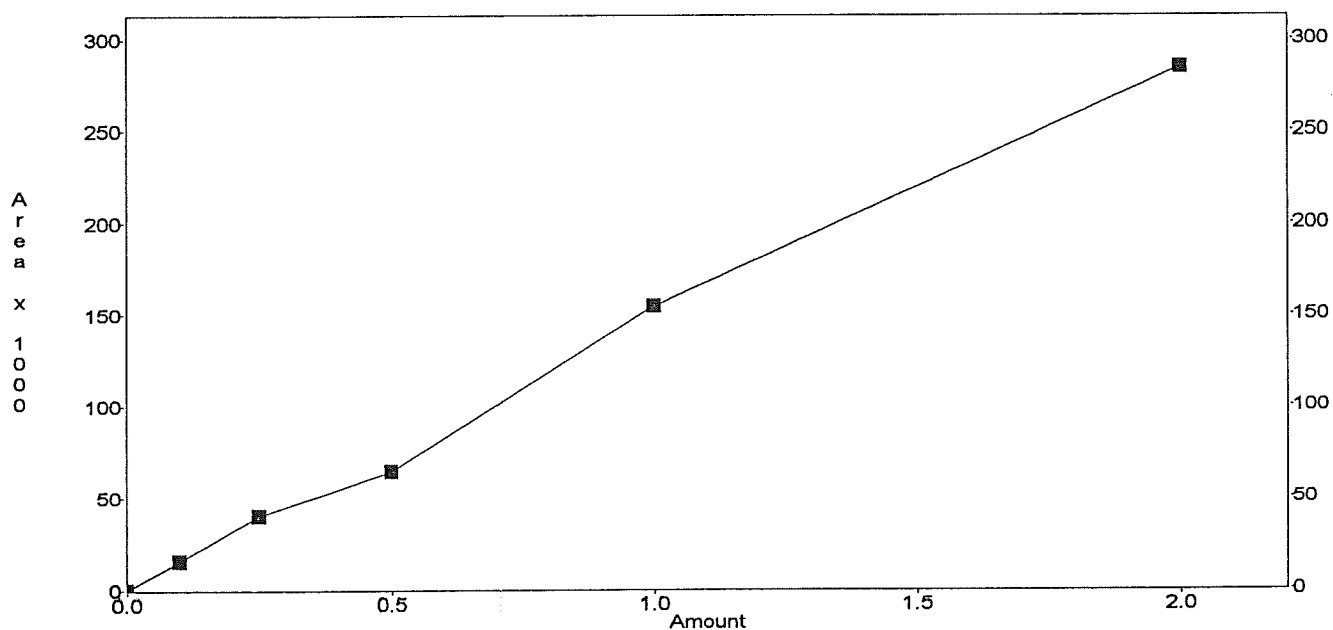
Level	Area	Amount	RF	Rep Area 1	Rep Area 2	Rep Area 3	Rep Area 4	Rep Area 5	Replic STD	Replic %RSD	Old Area
1	285104		2	142552.00	285104						0
2	154703		1	154703.00	154703						0
3	64999		0.5	129998.00	64999						0
4	40604		0.25	162416.00	40604						0
5	15875		0.1	158750.00	15875						0

Calib Flag: Replace

Average RF: 149684
 RF StdDev: 13303.1
 RF %RSD: 8.887

RF Definition: Area / Amount
 Point to Point

External Standard Curve - Scaling: None



Method : c:\conv_gc\chrom\temp\pcb2.met
 Printed : Mar 25, 1998 18:14:11
 Channel : B
 Peak : 1016-2

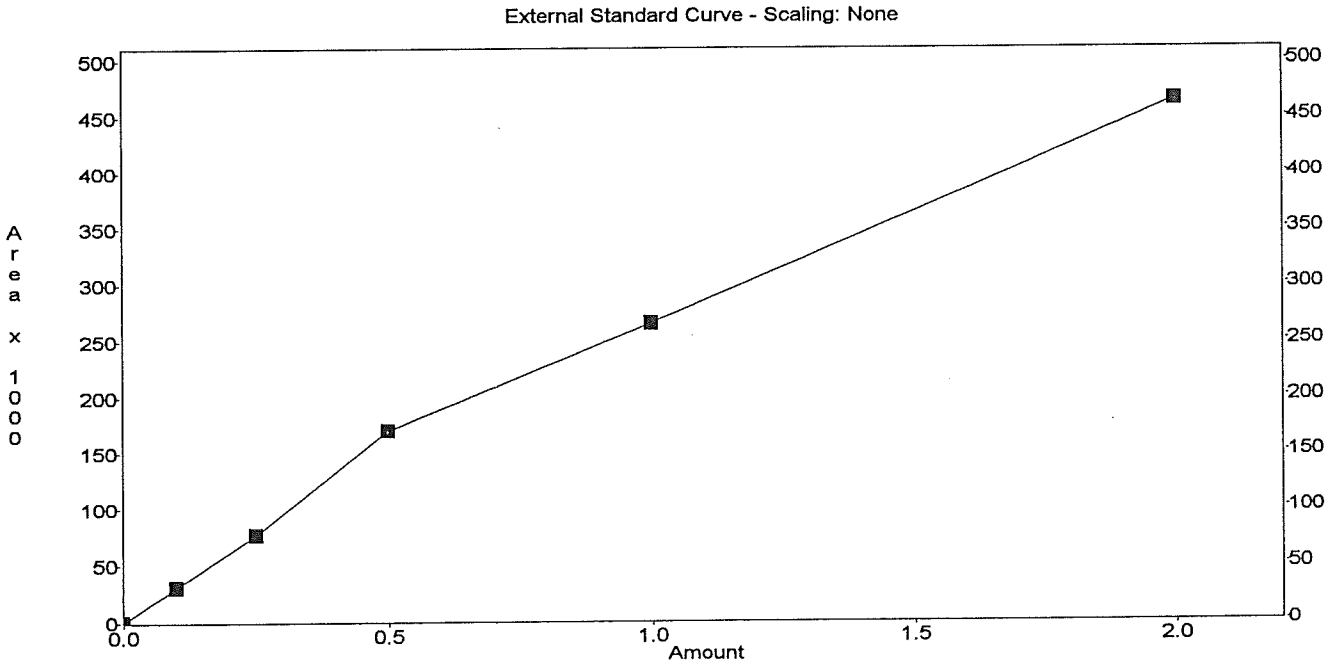
* - Replicate Not Used

Level	Area	Amount	RF	Rep Area 1	Rep Area 2	Rep Area 3	Rep Area 4	Rep Area 5	Replic STD	Replic %RSD	Old Area
1	465034		2	232517.00	465034						0
2	266082		1	266082.00	266082						0
3	170468		0.5	340936.00	170468						0
4	77424		0.25	309696.00	77424						0
5	31409		0.1	314090.00	31409						0

Calib Flag: Replace

Average RF: 292664
 RF StdDev: 43022.1
 RF %RSD: 14.700

RF Definition: Area / Amount
 Point to Point



Method : c:\conv_gc\chrom\temp\pcb2.met
 Printed : Mar 25, 1998 18:14:12
 Channel : B
 Peak : 1016-3

* - Replicate Not Used

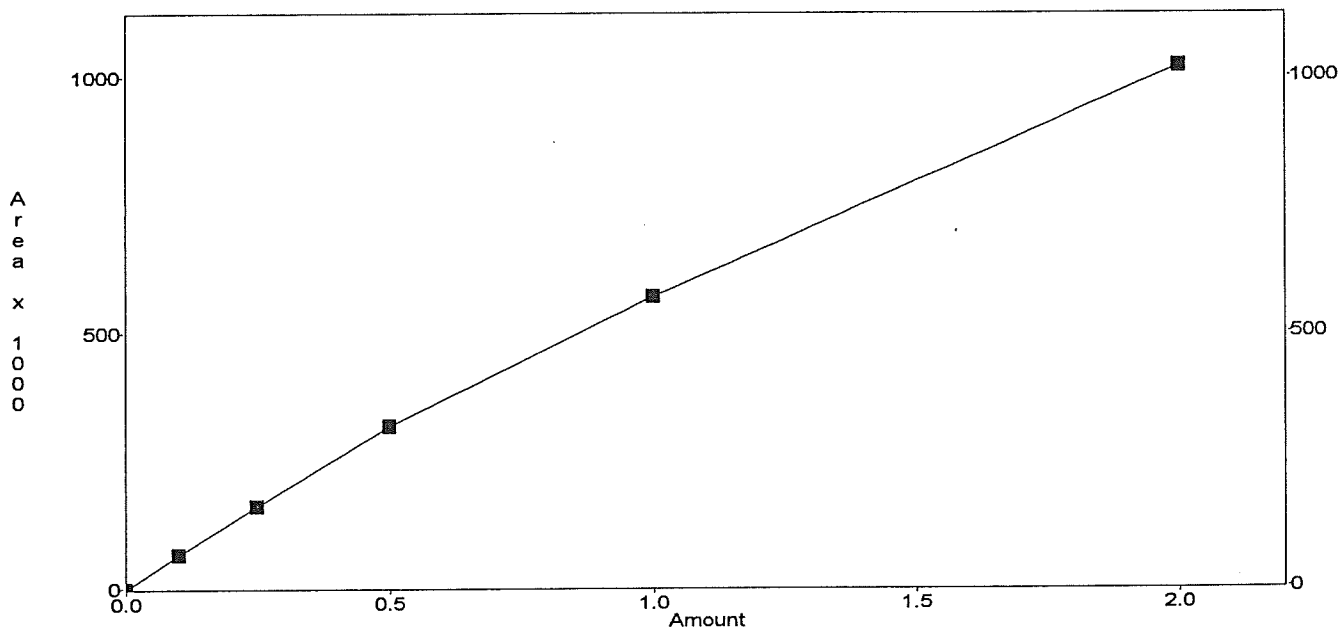
Level	Area	Amount	RF	Rep Area 1	Rep Area 2	Rep Area 3	Rep Area 4	Rep Area 5	Replic STD	Replic %RSD	Old Area
1	1021909		2	510954.50	1021909						0
2	571612		1	571612.00	571612						0
3	316760		0.5	633520.00	316760						0
4	162471		0.25	649884.00	162471						0
5	67556		0.1	675560.00	67556						0

Calib Flag: Replace

Average RF: 608306
 RF StdDev: 66542
 RF %RSD: 10.939

RF Definition: Area / Amount
 Point to Point

External Standard Curve - Scaling: None



Method : c:\conv_gc\chrom\temp\pcb2.met
 Printed : Mar 25, 1998 18:14:14
 Channel : B
 Peak : 1016-4

* - Replicate Not Used

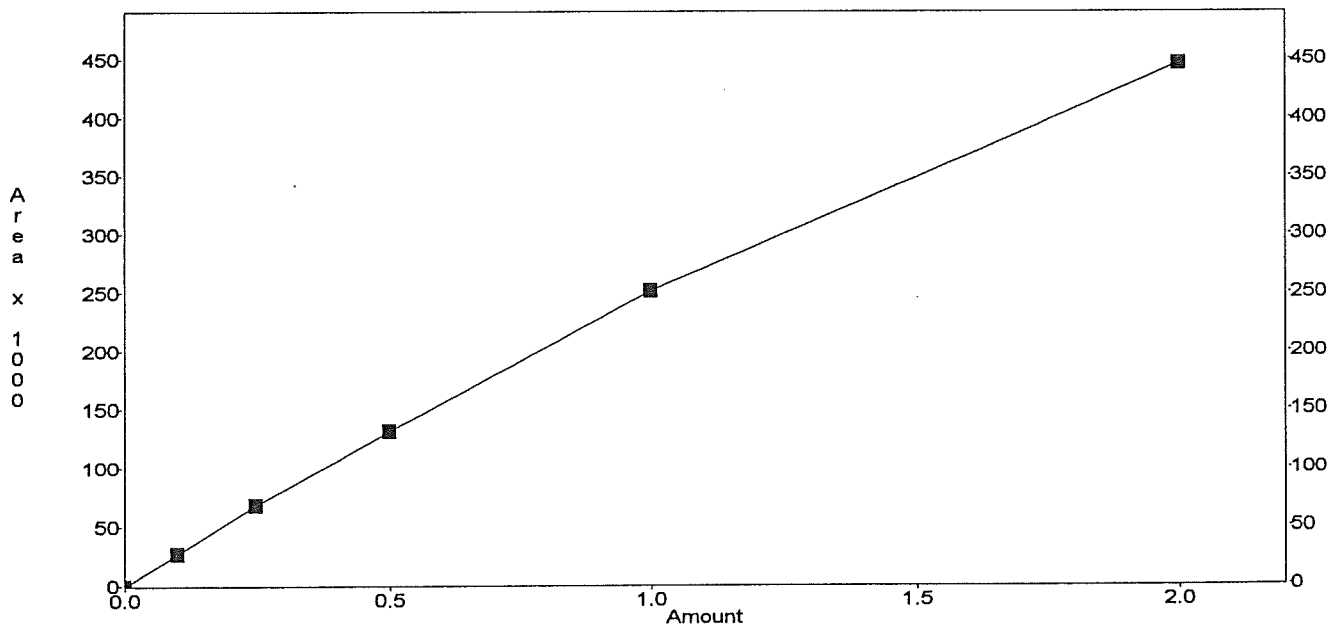
Level	Area	Amount	RF	Rep Area 1	Rep Area 2	Rep Area 3	Rep Area 4	Rep Area 5	Replic STD	Replic %RSD	Old Area
1	446794		2	223397.00	446794						0
2	251475		1	251475.00	251475						0
3	131925		0.5	263850.00	131925						0
4	68853		0.25	275412.00	68853						0
5	27047		0.1	270470.00	27047						0

Calib Flag: Replace

Average RF: 256921
 RF StdDev: 20778.7
 RF %RSD: 8.088

RF Definition: Area / Amount
 Point to Point

External Standard Curve - Scaling: None



0020

Method : c:\conv_gc\chrom\temp\pcb2.met
 Printed : Mar 25, 1998 18:14:15
 Channel : B
 Peak : 1260-1

* - Replicate Not Used

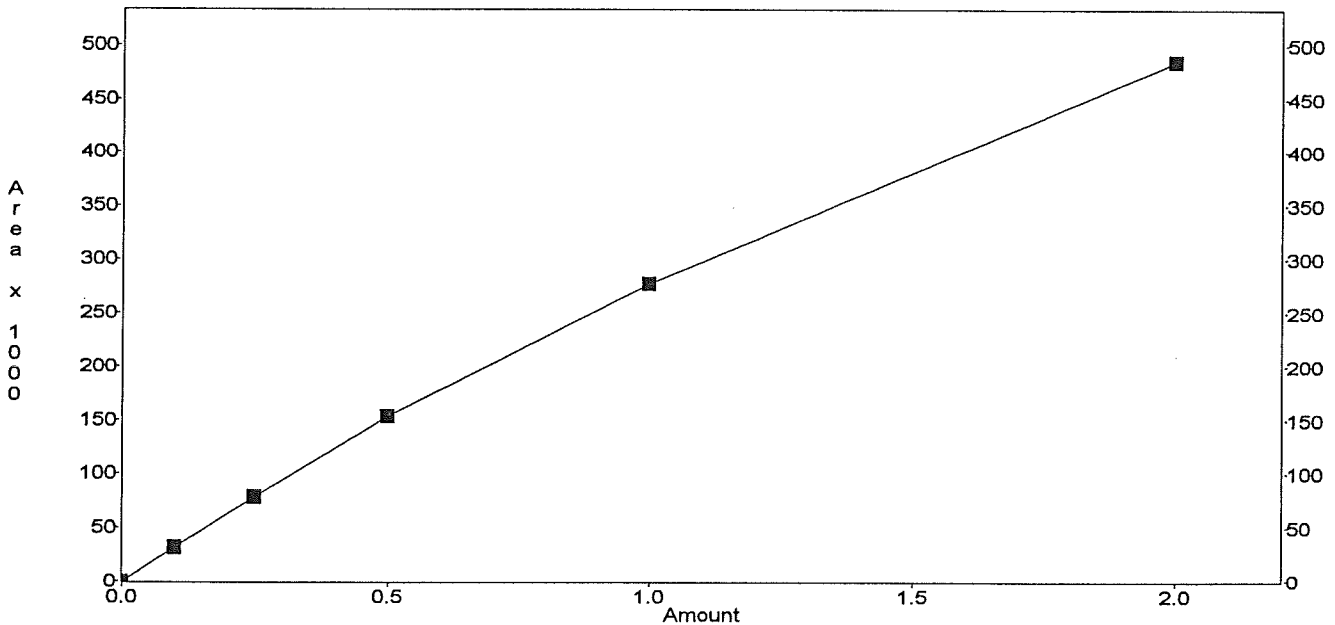
Level	Area	Amount	RF	Rep Area 1	Rep Area 2	Rep Area 3	Rep Area 4	Rep Area 5	Replic STD	Replic %RSD	Old Area
1	485307		2	242653.50	485307						0
2	277244		1	277244.00	277244						0
3	154314		0.5	308628.00	154314						0
4	78712		0.25	314848.00	78712						0
5	31793		0.1	317930.00	31793						0

Calib Flag: Replace

Average RF: 292261
 RF StdDev: 32106.7
 RF %RSD: 10.986

RF Definition: Area / Amount
 Point to Point

External Standard Curve - Scaling: None



Method : c:\conv_gc\chrom\temp\pcb2.met
 Printed : Mar 25, 1998 18:14:16
 Channel : B
 Peak : 1260-2

* - Replicate Not Used

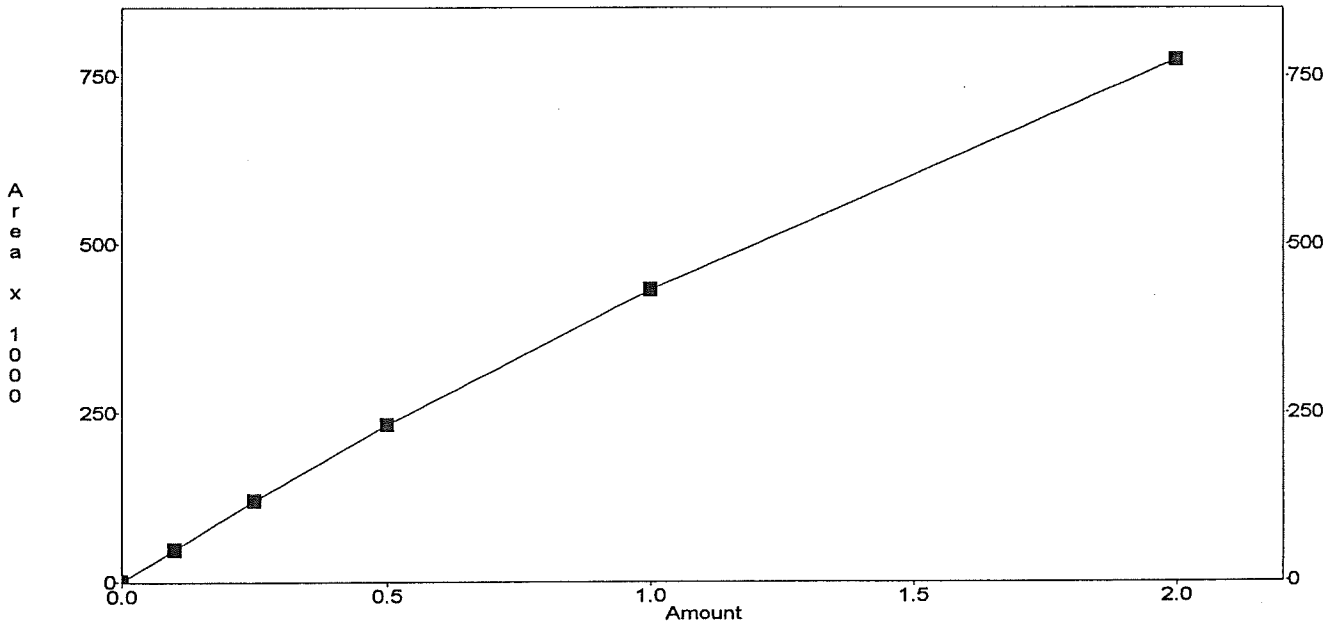
Level	Area	Amount	RF	Rep Area 1	Rep Area 2	Rep Area 3	Rep Area 4	Rep Area 5	Replic STD	Replic %RSD	Old Area
1	774846		2	387423.00	774846						0
2	432261		1	432261.00	432261						0
3	233003		0.5	466006.00	233003						0
4	119797		0.25	479188.00	119797						0
5	47359		0.1	473590.00	47359						0

Calib Flag: Replace

Average RF: 447694
 RF StdDev: 38303.3
 RF %RSD: 8.556

RF Definition: Area / Amount
 Point to Point

External Standard Curve - Scaling: None



Method : c:\conv_gc\chrom\temp\pcb2.met
Printed : Mar 25, 1998 18:14:17
Channel : B
Peak : 1260-3

* - Replicate Not Used

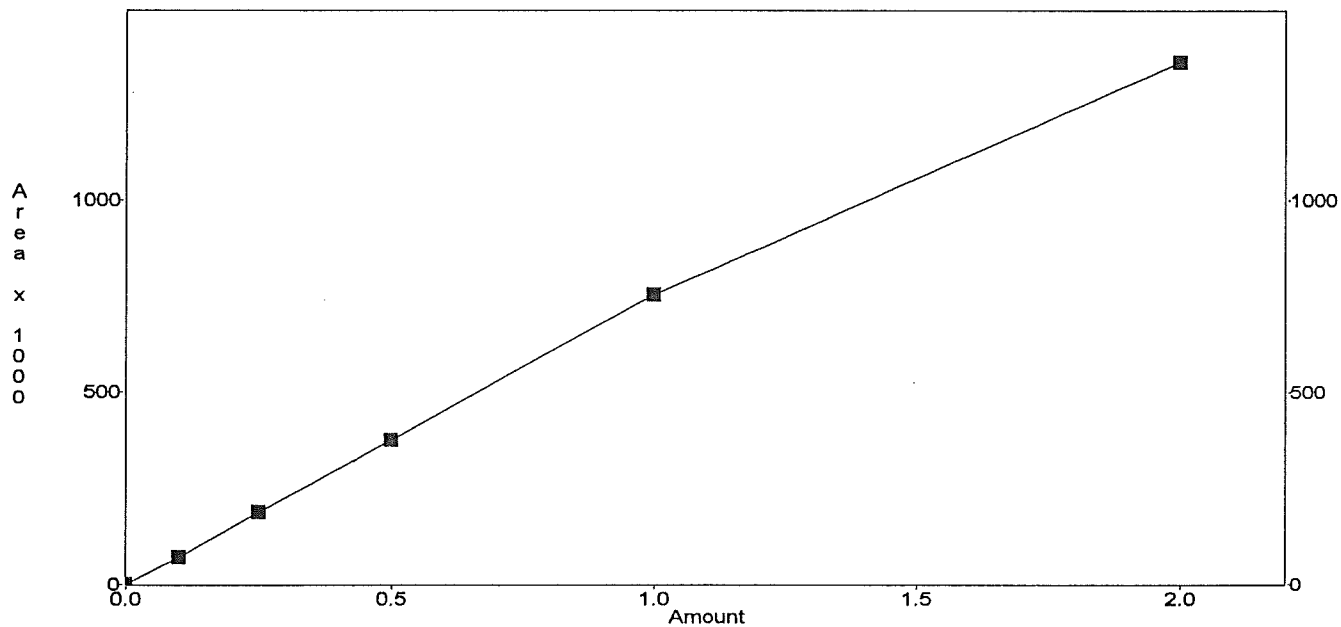
Level	Area	Amount	RF	Rep Area 1	Rep Area 2	Rep Area 3	Rep Area 4	Rep Area 5	Replic STD	Replic %RSD	Old Area
1	1358388	2	679194.00	1358388							0
2	754006	1	754006.00	754006							0
3	375958	0.5	751916.00	375958							0
4	188778	0.25	755112.00	188778							0
5	71095	0.1	710950.00	71095							0

Calib Flag: Replace

Average RF: 730236
RF StdDev: 34026
RF %RSD: 4.660

RF Definition: Area / Amount
point to Point

External Standard Curve - Scaling: None



Method : c:\conv_gc\chrom\temp\pcb2.met
 Printed : Mar 25, 1998 18:14:18
 Channel : B
 Peak : 1260-4

* - Replicate Not Used

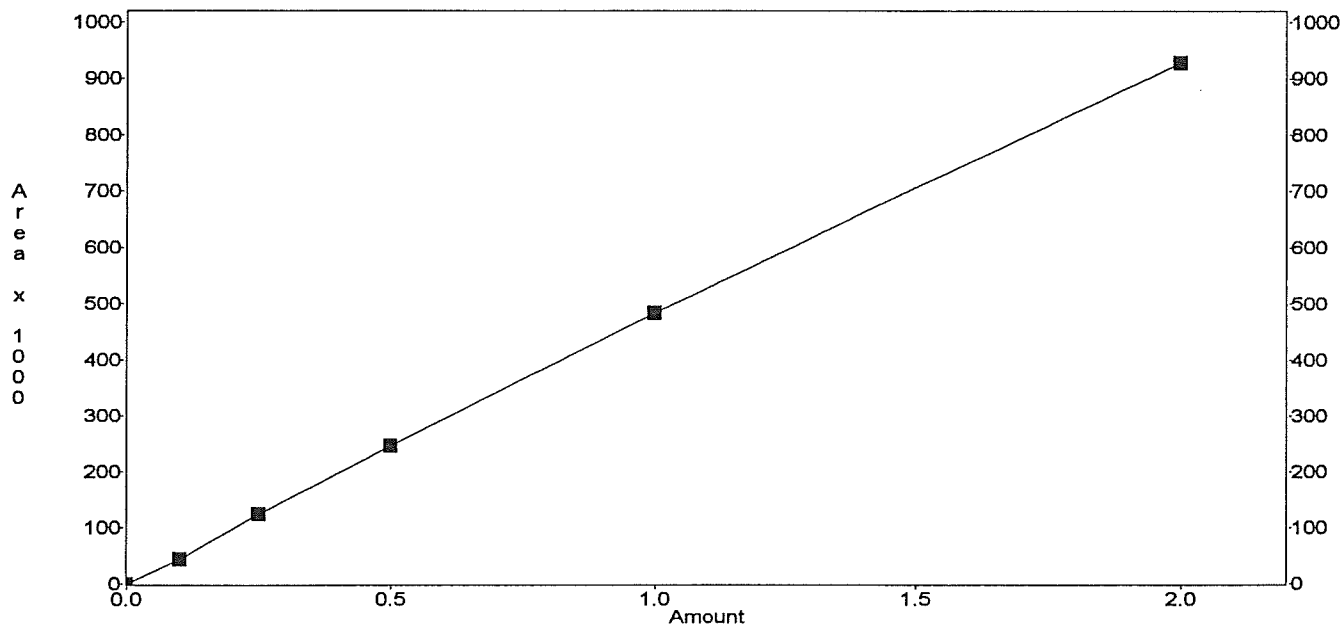
Level	Area	Amount	RF	Rep Area 1	Rep Area 2	Rep Area 3	Rep Area 4	Rep Area 5	Replic STD	Replic %RSD	Old Area
1	929663		2	464831.50	929663						0
2	484905		1	484905.00	484905						0
3	247044		0.5	494088.00	247044						0
4	125560		0.25	502240.00	125560						0
5	44816		0.1	448160.00	44816						0

Calib Flag: Replace

Average RF: 478845
 RF StdDev: 22104
 RF %RSD: 4.616

RF Definition: Area / Amount
 Point to Point

External Standard Curve - Scaling: None



Method : c:\conv_gc\chrom\temp\surr.met
Printed : Mar 26, 1998 12:13:44
Channel : B
Peak : TCMX

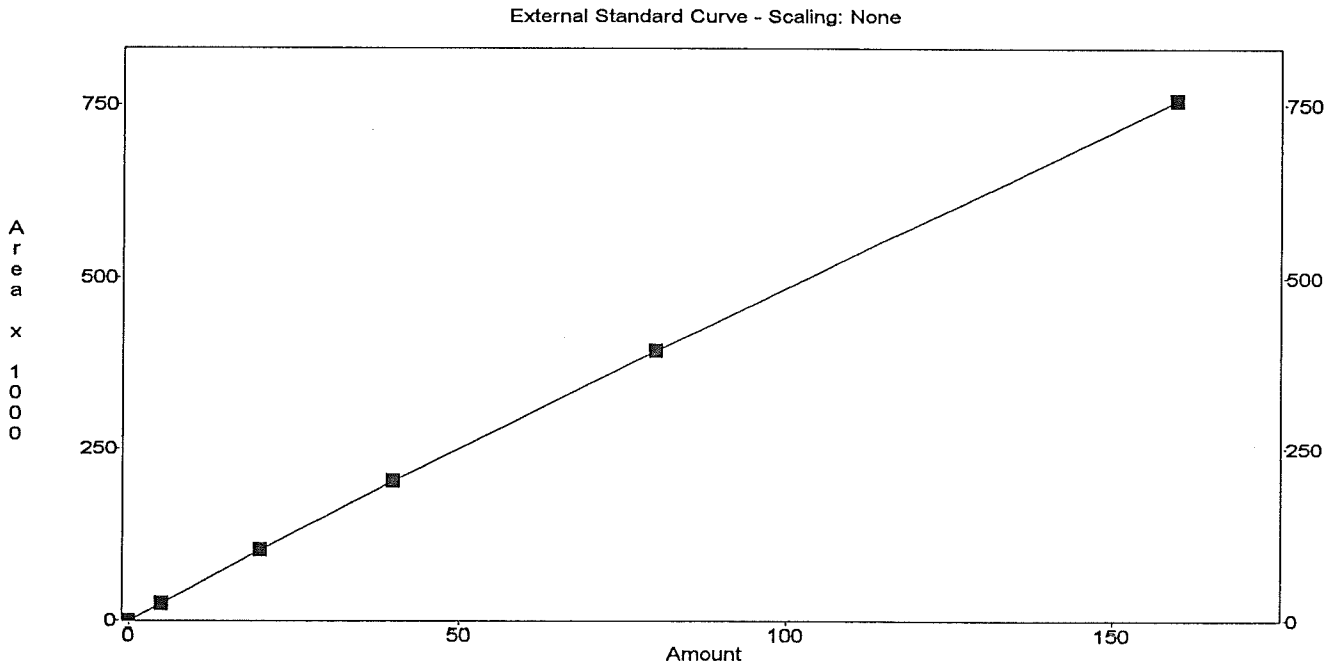
* - Replicate Not Used

Level	Area	Amount	RF	Rep Area 1	Rep Area 2	Rep Area 3	Rep Area 4	Rep Area 5	Replic STD	Replic %RSD	Old Area
1	757873	160	4736.71	757873							0
2	394149	80	4926.86	394149							0
3	203217	40	5080.42	203217							0
4	102610	20	5130.50	102610							0
5	25164	5	5032.80	25164							0

Calib Flag: Replace

Average RF: 4981.46
RF StdDev: 156.147
RF %RSD: 3.135

RF Definition: Area / Amount
Point to Point



0025

Method : c:\conv_gc\chrom\temp\surr.met
Printed : Mar 26, 1998 12:13:45
Channel : B
Peak : DCBP

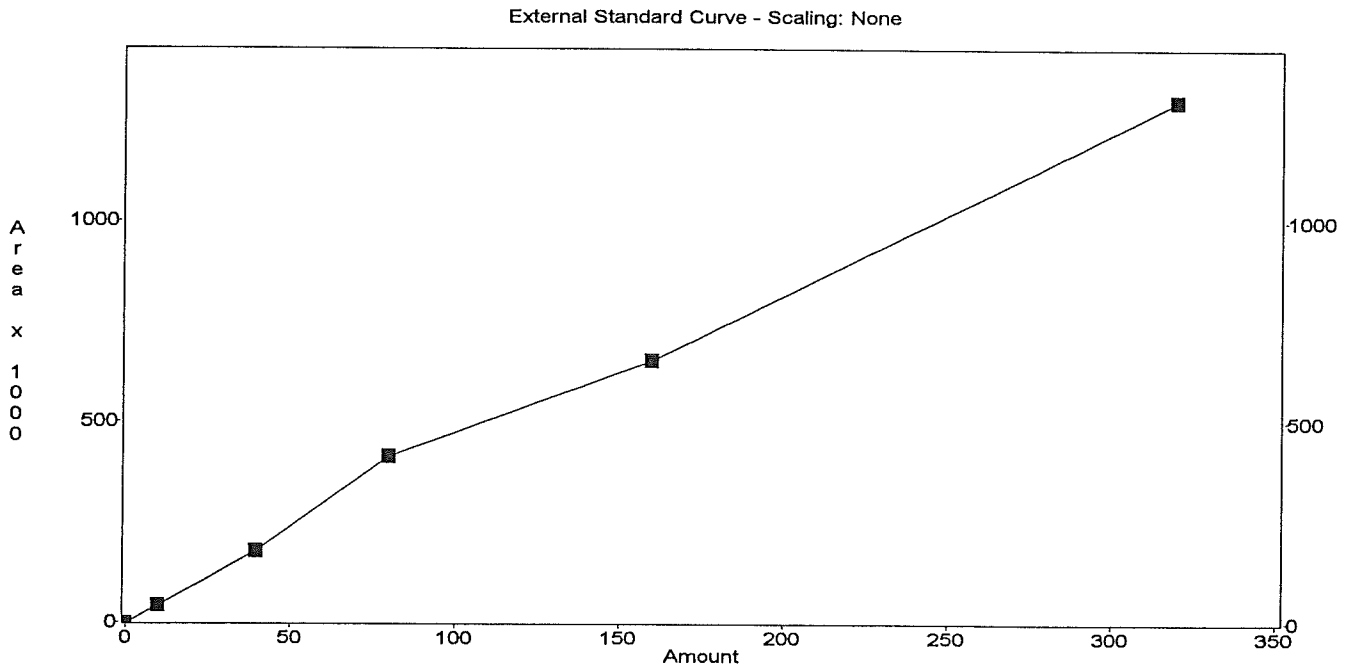
* - Replicate Not Used

Level	Area	Amount	RF	Rep Area 1	Rep Area 2	Rep Area 3	Rep Area 4	Rep Area 5	Replic STD	Replic %RSD	Old Area
1	1301543	320	4067.32	1301543							0
2	654004	160	4087.52	654004							0
3	415049	80	5188.11	415049							0
4	179237	40	4480.92	179237							0
5	44175	10	4417.50	44175							0

Calib Flag: Replace

Average RF: 4448.28
F StdDev: 454.048
F %RSD: 10.207

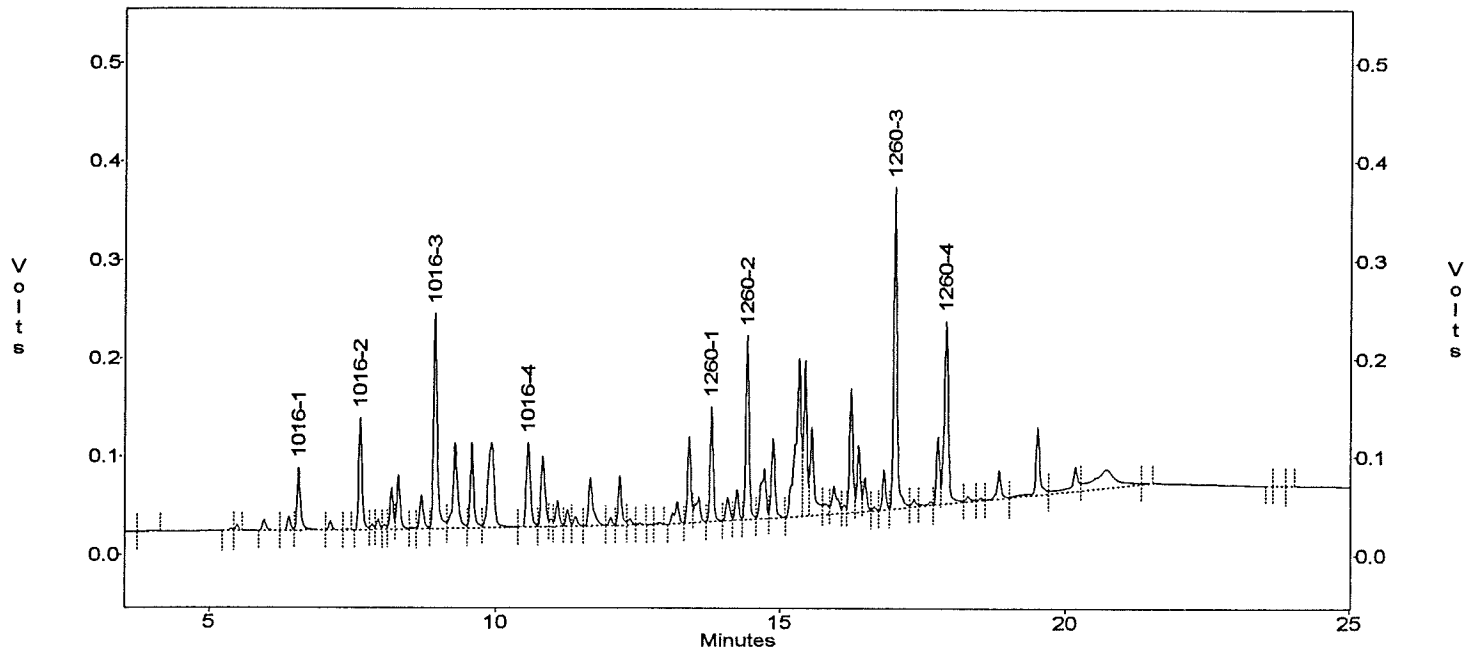
RF Definition: Area / Amount
Point to Point



0026

DB1701
 File : c:\conv_gc\chrom\temp\mar09\1060_1
 Method : c:\conv_gc\chrom\temp\pcb2.met
 Sample ID : 1060-1
 Acquired : Mar 09, 1998 16:37:52

c:\conv_gc\chrom\temp\mar09\1060_1 -- Channel B

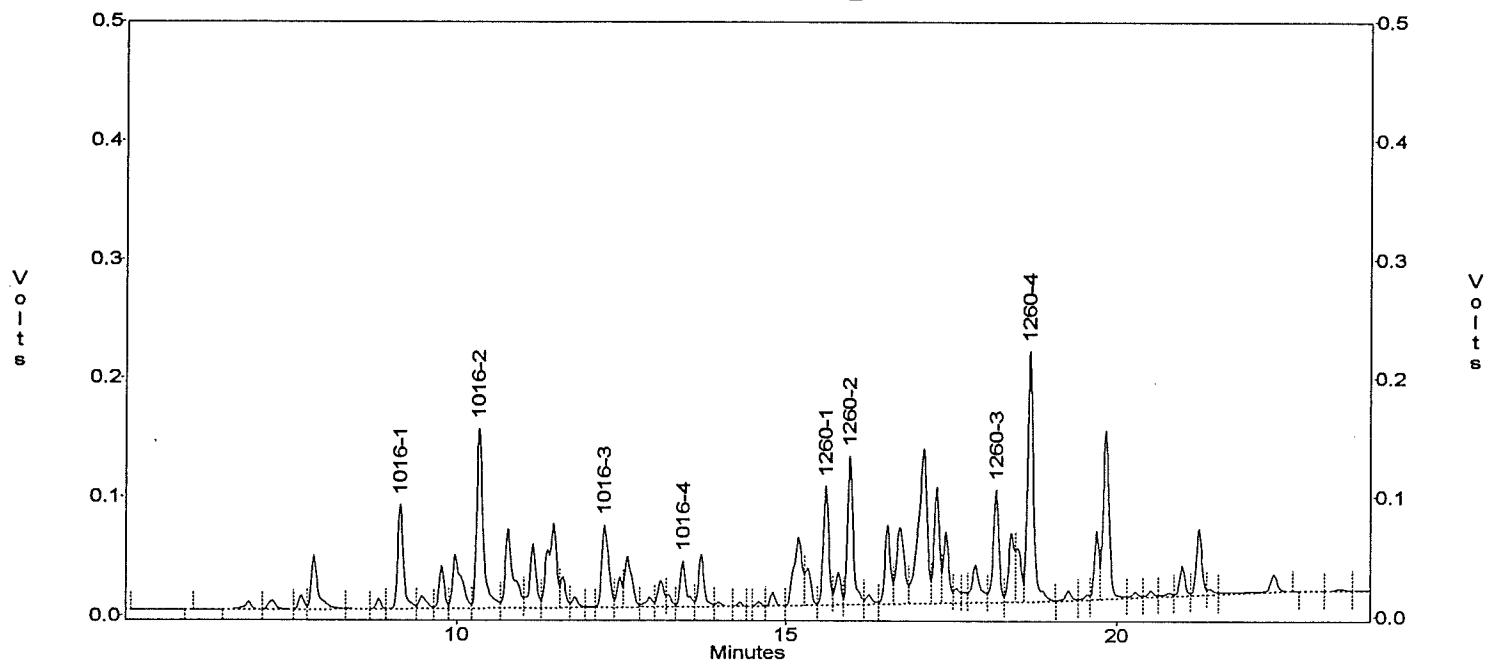


Channel B Results

PEAK #	ANALYTE	RT	AREA	UG/ML
9	1016-1	6.567	285104	2.00
12	1016-2	7.642	465034	2.00
20	1016-3	8.950	1021909	2.00
24	1016-4	10.583	446794	2.00
40	1260-1	13.800	485307	2.00
43	1260-2	14.433	774846	2.00
57	1260-3	17.042	1358388	2.00
61	1260-4	17.950	929663	2.00

DB608
 File : c:\conv_gc\chrom\temp\mar09\1060_1
 Sample ID : 1060-1
 Acquired : Mar 09, 1998 16:37:52

c:\conv_gc\chrom\temp\mar09\1060_1 -- Channel A



Channel A Results

PEAK #	ANALYTE	RT	AREA	UG/ML
27	1016-1	9.150	539643	2.00
31	1016-2	10.333	1059539	2.00
38	1016-3	12.233	517040	2.00
44	1016-4	13.433	255922	2.00
53	1260-1	15.608	585597	2.00
55	1260-2	15.967	753949	2.00
65	1260-3	18.175	572123	2.00
68	1260-4	18.675	1283254	2.00

0028

DB1701

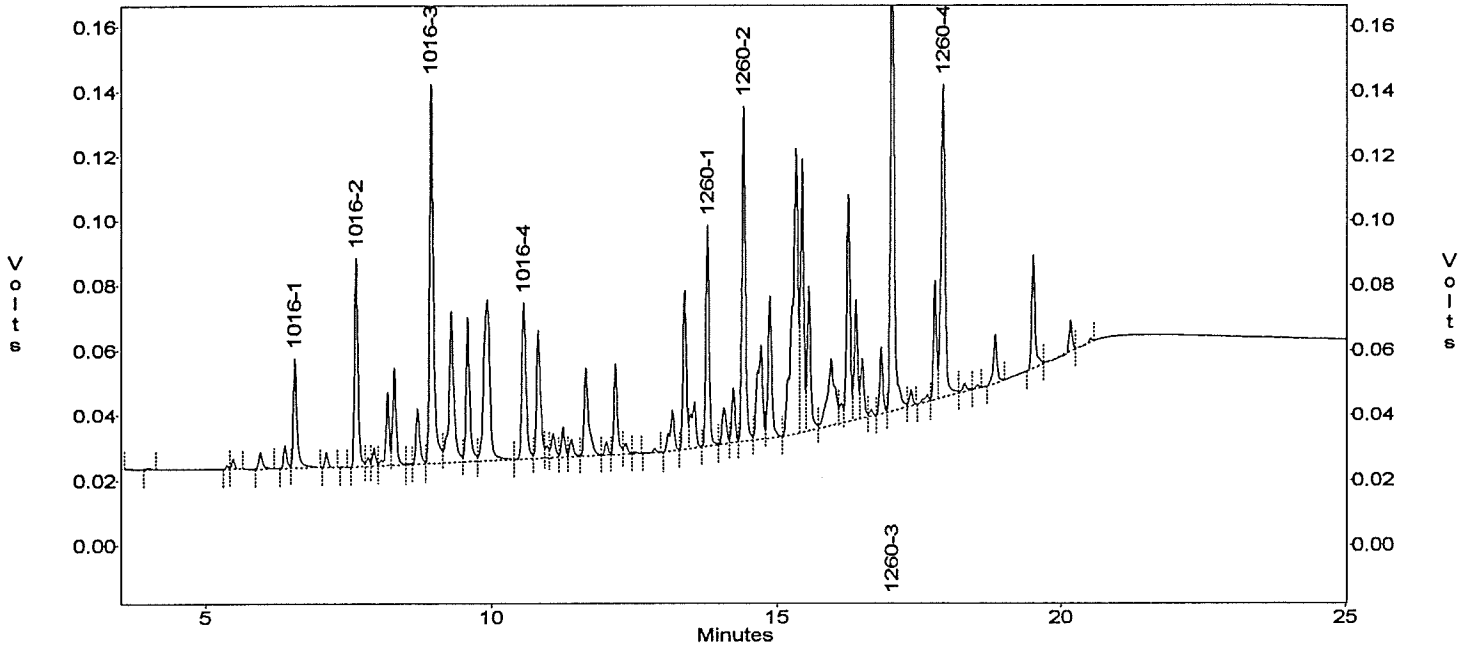
File : c:\conv_gc\chrom\temp\mar09\1060_2

Method : c:\conv_gc\chrom\temp\pcb2.met

Sample ID : 1060-2

Acquired : Mar 09, 1998 17:09:34

c:\conv_gc\chrom\temp\mar09\1060_2 -- Channel B



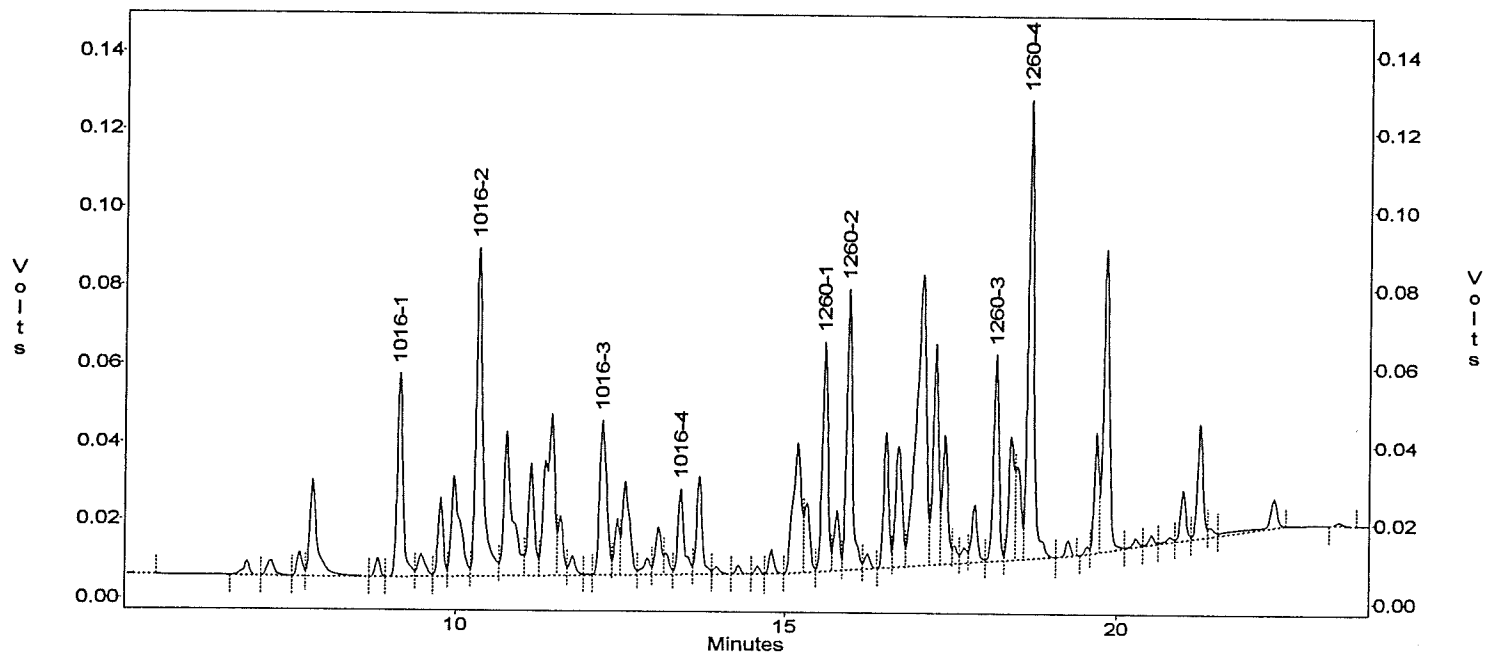
Channel B Results

PEAK #	ANALYTE	RT	AREA	UG/ML
9	1016-1	6.558	154703	1.00
12	1016-2	7.633	266082	1.00
19	1016-3	8.942	571612	1.00
23	1016-4	10.575	251475	1.00
38	1260-1	13.792	277244	1.00
41	1260-2	14.425	432261	1.00
54	1260-3	17.033	754006	1.00
58	1260-4	17.942	484905	1.00

0029

DB608
 File : c:\conv_gc\chrom\temp\mar09\1060_2
 Sample ID : 1060-2
 Acquired : Mar 09, 1998 17:09:34

c:\conv_gc\chrom\temp\mar09\1060_2 -- Channel A



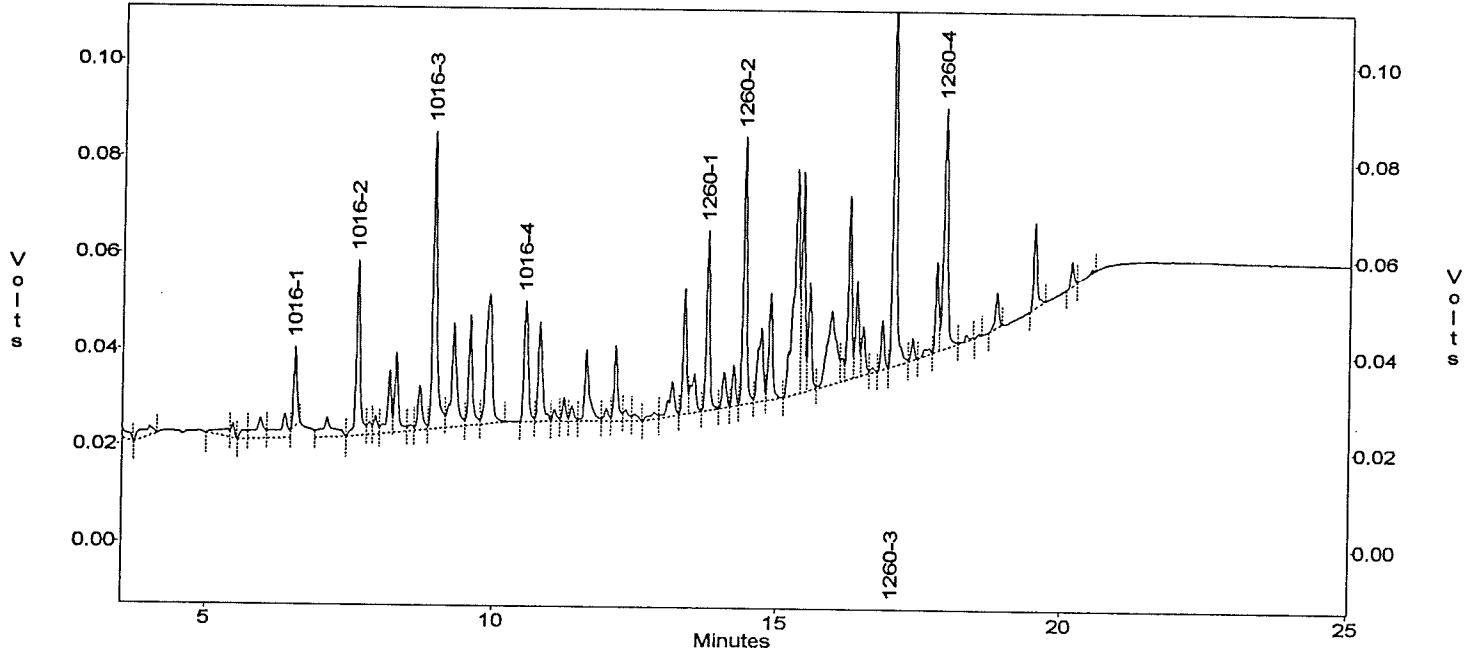
Channel A Results

PEAK #	ANALYTE	RT	AREA	UG/ML
22	1016-1	9.142	317711	1.00
26	1016-2	10.342	618854	1.00
33	1016-3	12.225	295260	1.00
39	1016-4	13.425	143703	1.00
47	1260-1	15.600	341336	1.00
49	1260-2	15.967	435277	1.00
59	1260-3	18.167	296287	1.00
62	1260-4	18.675	703315	1.00

0030

DB1701
 File : c:\conv_gc\chrom\temp\mar09\1060_3
 Method : c:\conv_gc\chrom\temp\pcb2.met
 Sample ID : 1060-3
 Acquired : Mar 09, 1998 17:41:18

c:\conv_gc\chrom\temp\mar09\1060_3 -- Channel B



Channel B Results

PEAK #	ANALYTE	RT	AREA	UG/ML
9	1016-1	6.558	64999	0.50
11	1016-2	7.633	170468	0.50
18	1016-3	8.950	316760	0.50
22	1016-4	10.575	131925	0.50
36	1260-1	13.792	154314	0.50
39	1260-2	14.425	233003	0.50
52	1260-3	17.033	375958	0.50
56	1260-4	17.942	247044	0.50

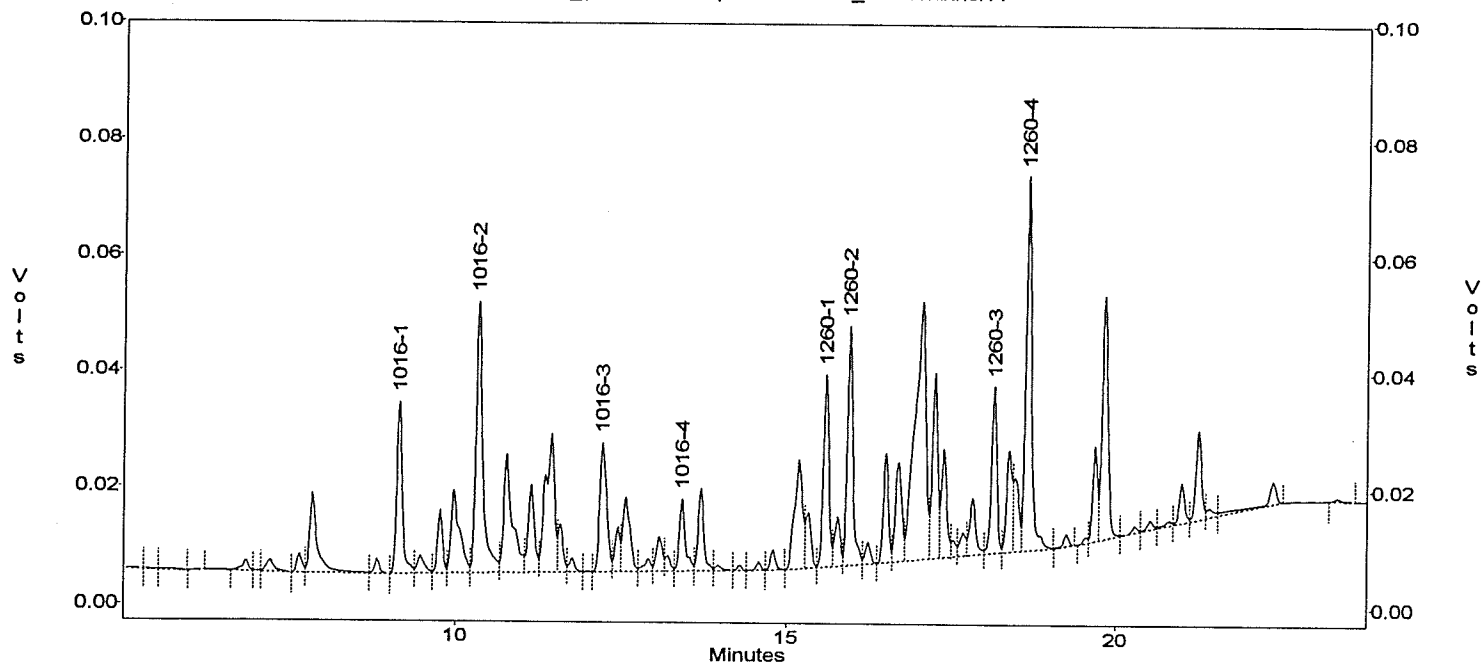
DB608

File : c:\conv_gc\chrom\temp\mar09\1060_3

Sample ID : 1060-3

Acquired : Mar 09, 1998 17:41:18

c:\conv_gc\chrom\temp\mar09\1060_3 -- Channel A



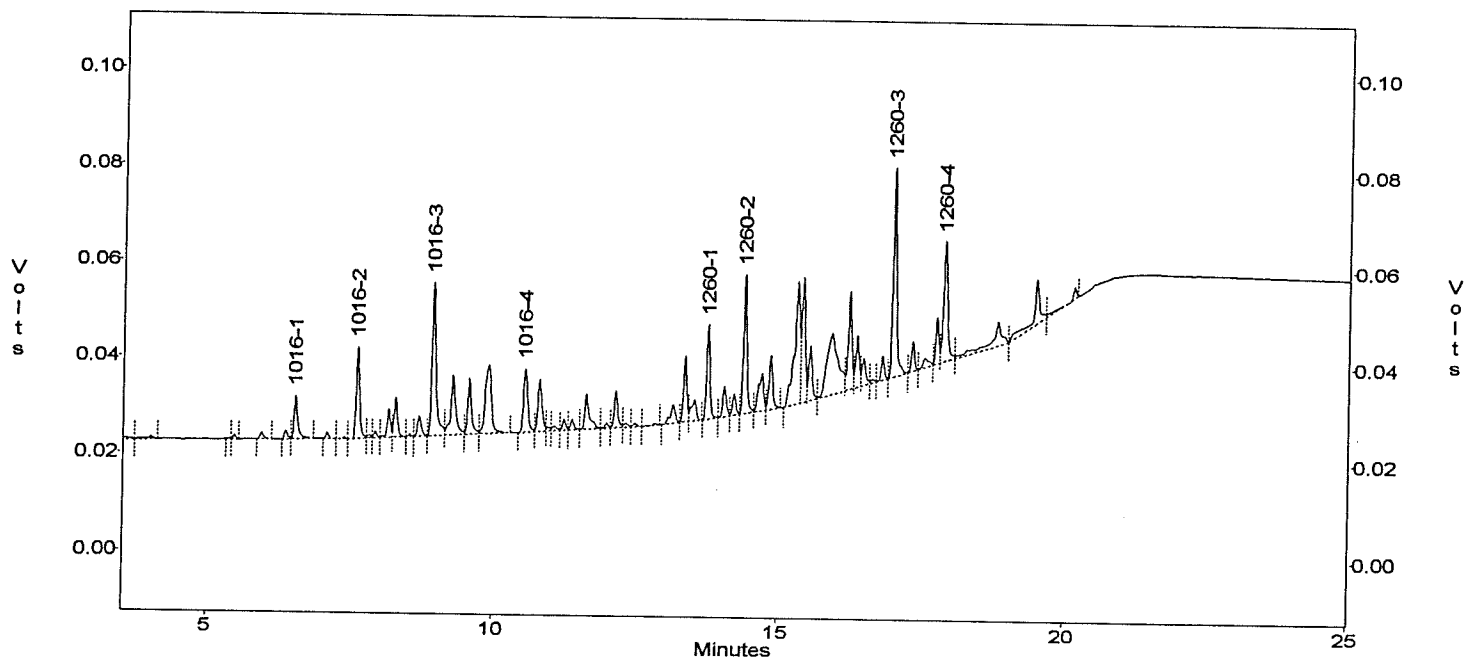
Channel A Results

PEAK #	ANALYTE	RT	AREA	UG/ML
33	1016-1	9.150	177730	0.50
37	1016-2	10.342	342800	0.50
44	1016-3	12.225	162559	0.50
50	1016-4	13.425	77677	0.50
58	1260-1	15.608	189170	0.50
60	1260-2	15.967	243705	0.50
70	1260-3	18.175	163247	0.50
73	1260-4	18.675	379963	0.50

0032

DB1701
 File : c:\conv_gc\chrom\temp\mar09\1060_4
 Method : c:\conv_gc\chrom\temp\pcb2.met
 Sample ID : 1060-4
 Acquired : Mar 09, 1998 18:13:01

c:\conv_gc\chrom\temp\mar09\1060_4 -- Channel B



Channel B Results

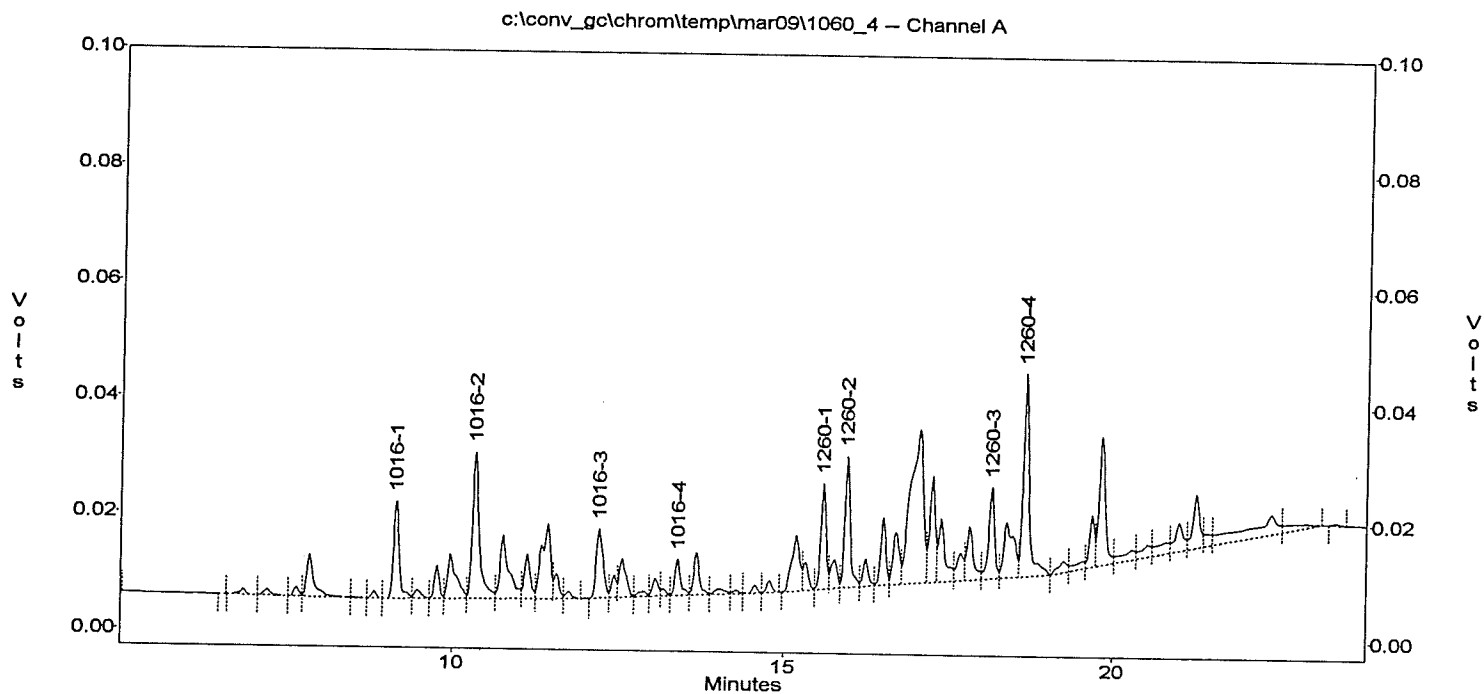
PEAK #	ANALYTE	RT	AREA	UG/ML
9	1016-1	6.558	40604	0.25
12	1016-2	7.633	77424	0.25
19	1016-3	8.950	162471	0.25
23	1016-4	10.575	68853	0.25
38	1260-1	13.792	78712	0.25
41	1260-2	14.425	119797	0.25
53	1260-3	17.033	188778	0.25
57	1260-4	17.933	125560	0.25

DB608

File : c:\conv_gc\chrom\temp\mar09\1060_4

Sample ID : 1060-4

Acquired : Mar 09, 1998 18:13:01



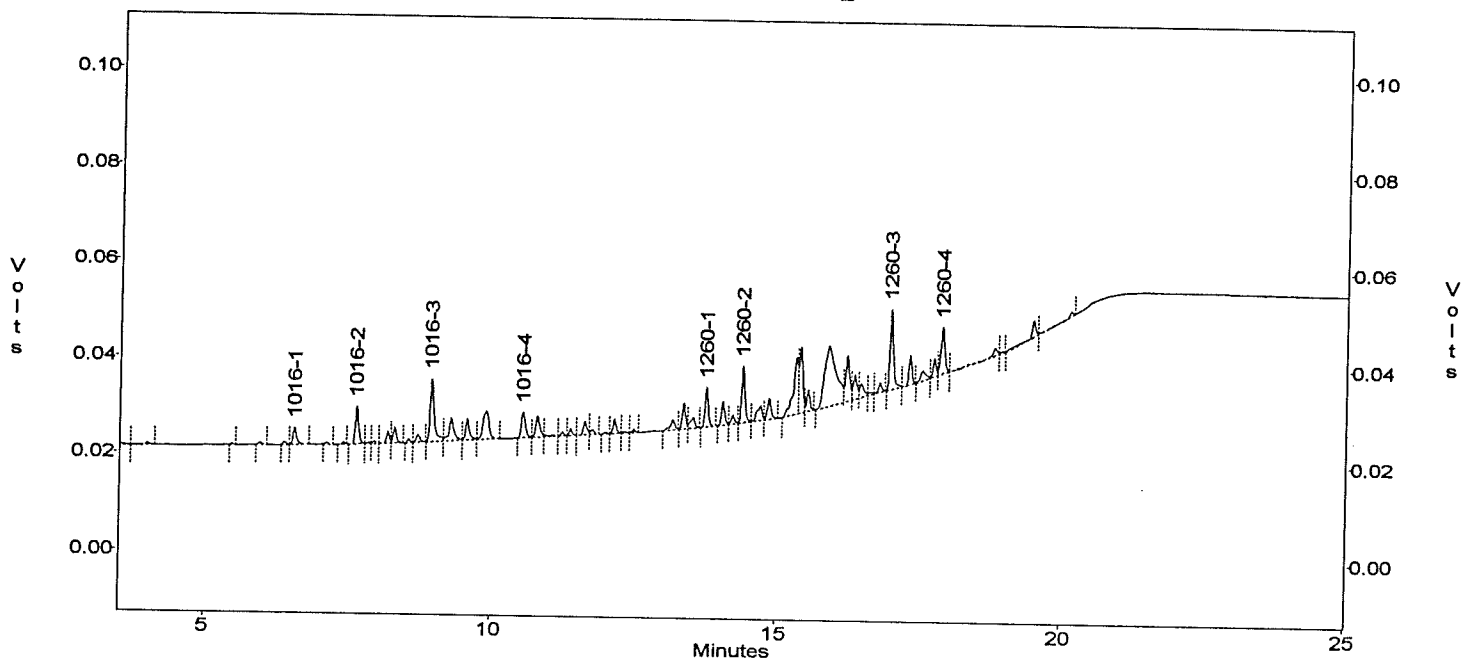
Channel A Results

PEAK #	ANALYTE	RT	AREA	UG/ML
26	1016-1	9.142	100307	0.25
30	1016-2	10.342	185522	0.25
36	1016-3	12.225	85308	0.25
42	1016-4	13.425	37075	0.25
50	1260-1	15.600	102360	0.25
52	1260-2	15.958	132771	0.25
61	1260-3	18.167	97421	0.25
63	1260-4	18.667	222585	0.25

0034

DB1701
 File : c:\conv_gc\chrom\temp\mar09\1060_5
 Method : c:\conv_gc\chrom\temp\pcb2.met
 Sample ID : 1060-5
 Acquired : Mar 09, 1998 18:44:44

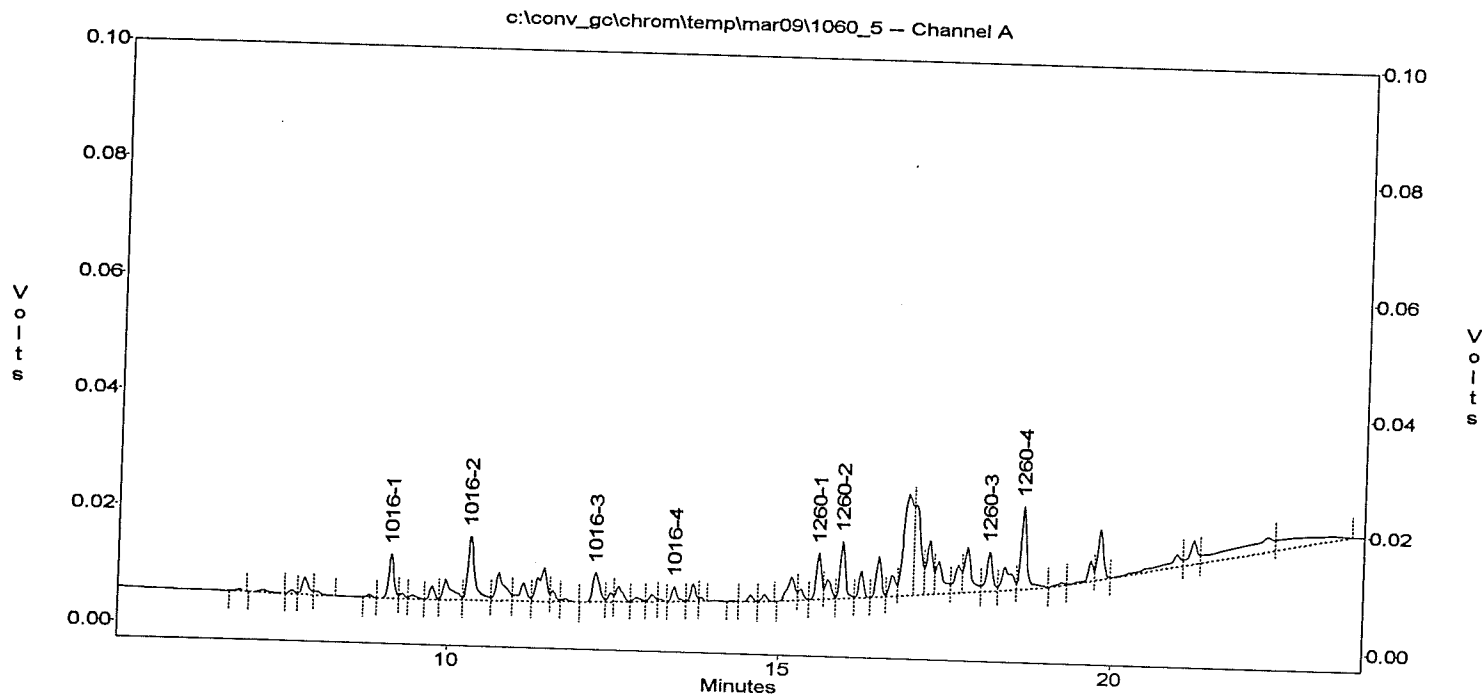
c:\conv_gc\chrom\temp\mar09\1060_5 -- Channel B



Channel B Results

PEAK #	ANALYTE	RT	AREA	UG/ML
8	1016-1	6.550	15875	0.10
11	1016-2	7.625	31409	0.10
18	1016-3	8.942	67556	0.10
22	1016-4	10.567	27047	0.10
36	1260-1	13.783	31793	0.10
39	1260-2	14.417	47359	0.10
51	1260-3	17.025	71095	0.10
55	1260-4	17.933	44816	0.10

DB608
 File : c:\conv_gc\chrom\temp\mar09\1060_5
 Sample ID : 1060-5
 Acquired : Mar 09, 1998 18:44:44

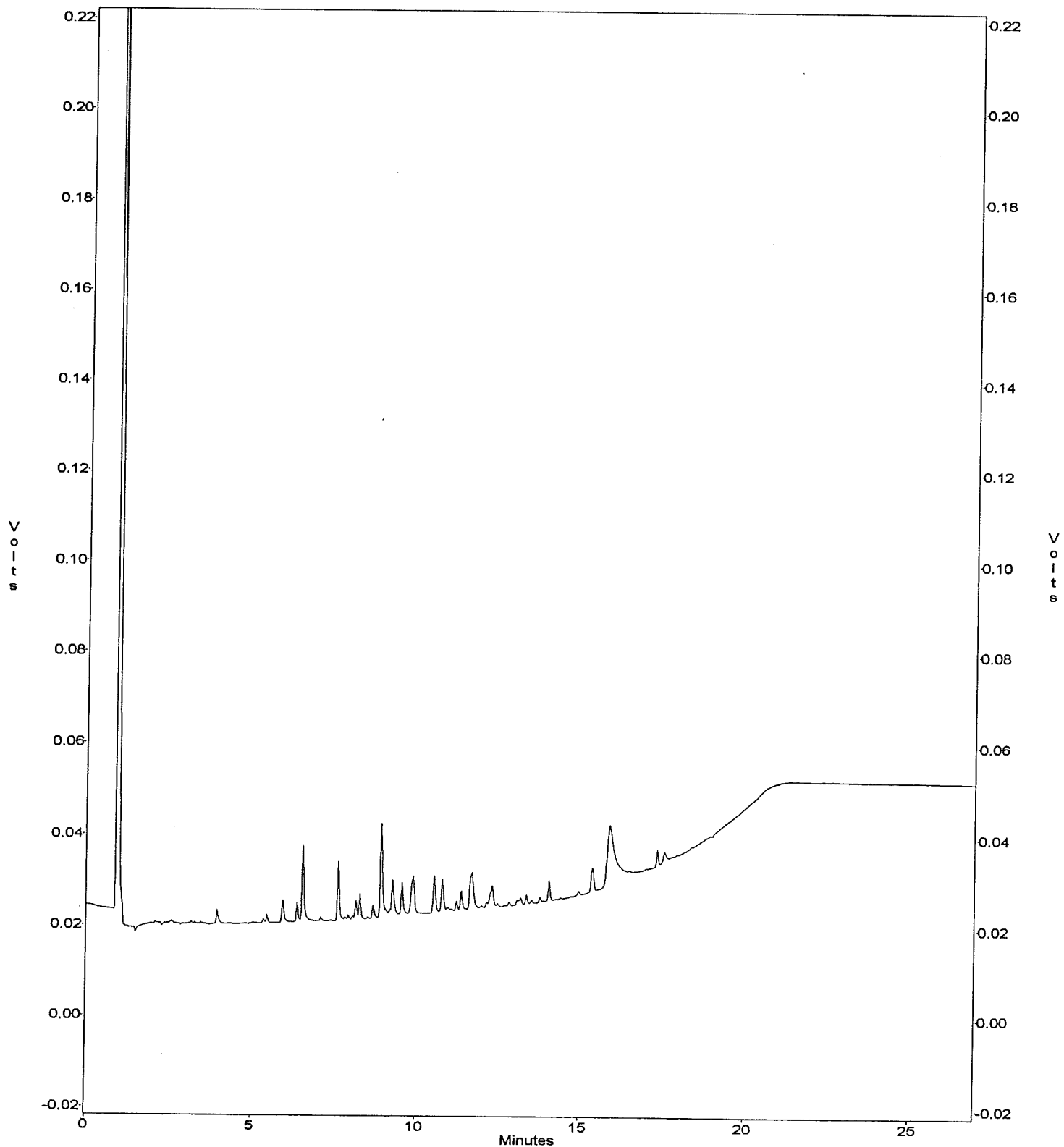


Channel A Results

PEAK #	ANALYTE	RT	AREA	UG/ML
22	1016-1	9.142	41490	0.10
27	1016-2	10.333	81191	0.10
33	1016-3	12.217	36070	0.10
39	1016-4	13.417	14217	0.10
47	1260-1	15.592	44025	0.10
49	1260-2	15.958	54793	0.10
59	1260-3	18.158	42003	0.10
61	1260-4	18.667	88330	0.10

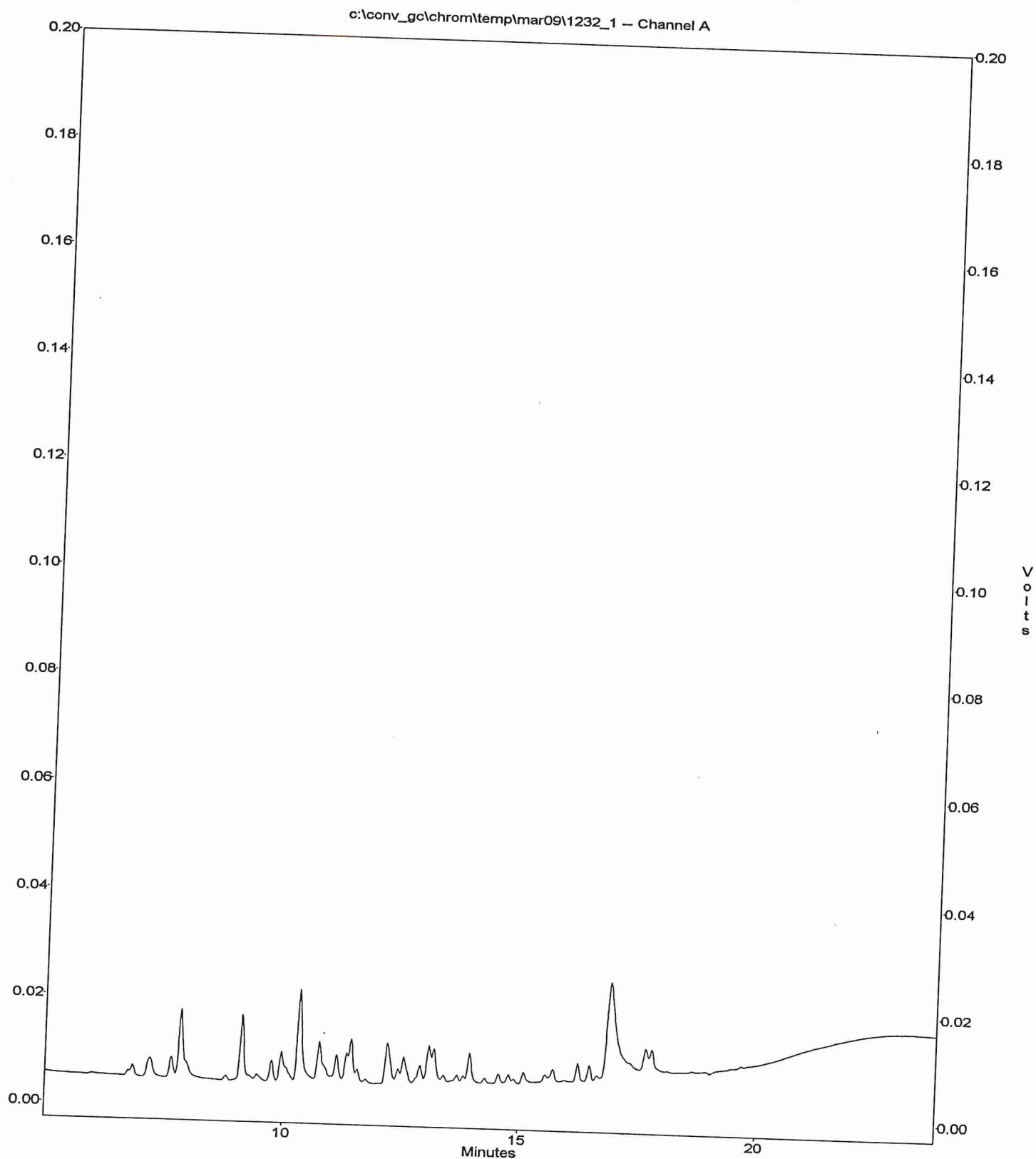
DB1701
File : c:\conv_gc\chrom\temp\mar09\1232_1
Method : c:\conv_gc\chrom\temp\pcb2.met
Sample ID : 1232-1
Acquired : Mar 09, 1998 19:48:08

c:\conv_gc\chrom\temp\mar09\1232_1 - Channel B



0037

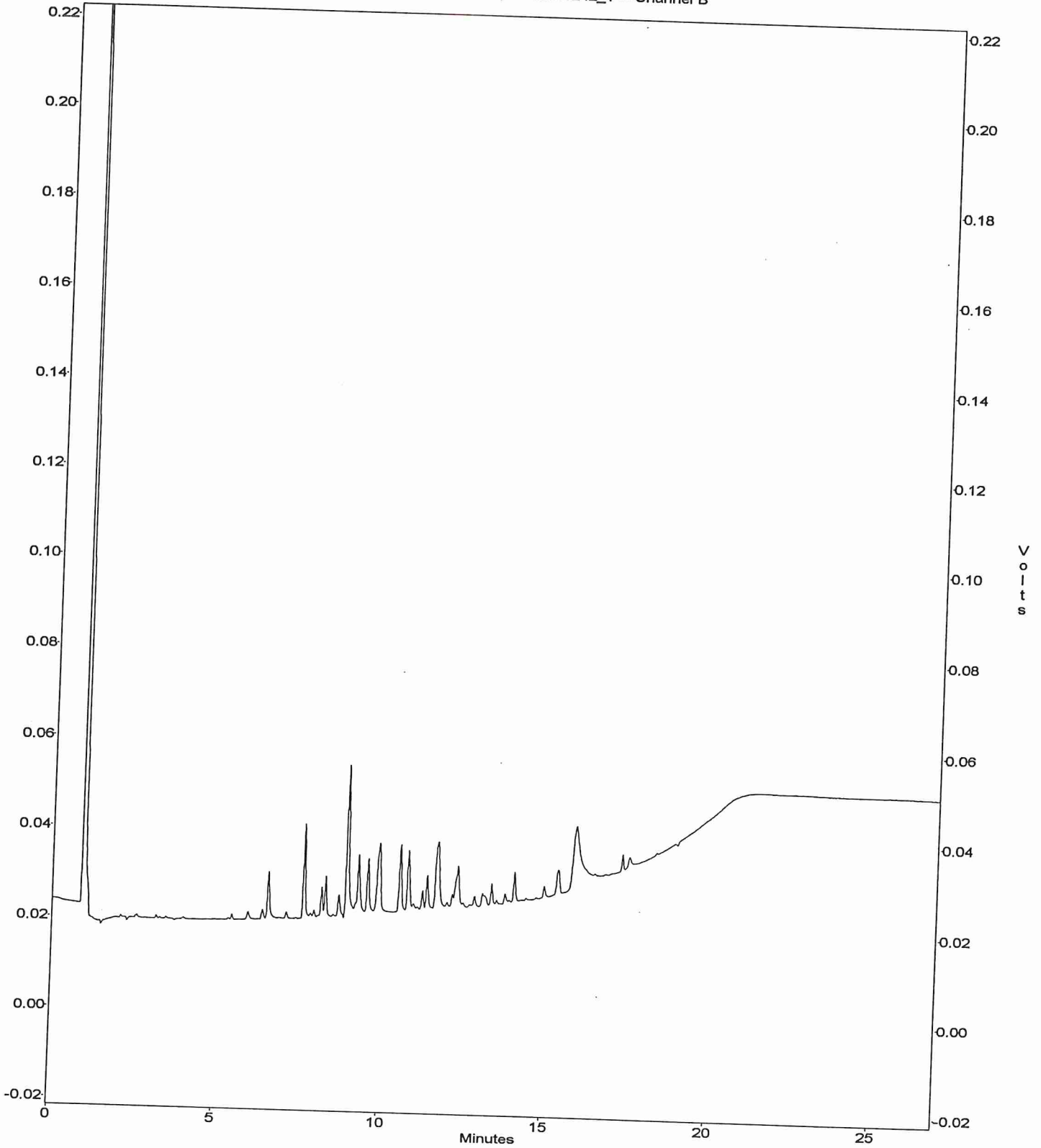
DB608
File : c:\conv_gc\chrom\temp\mar09\1232_1
Sample ID : 1232-1
Acquired : Mar 09, 1998 19:48:08



0038

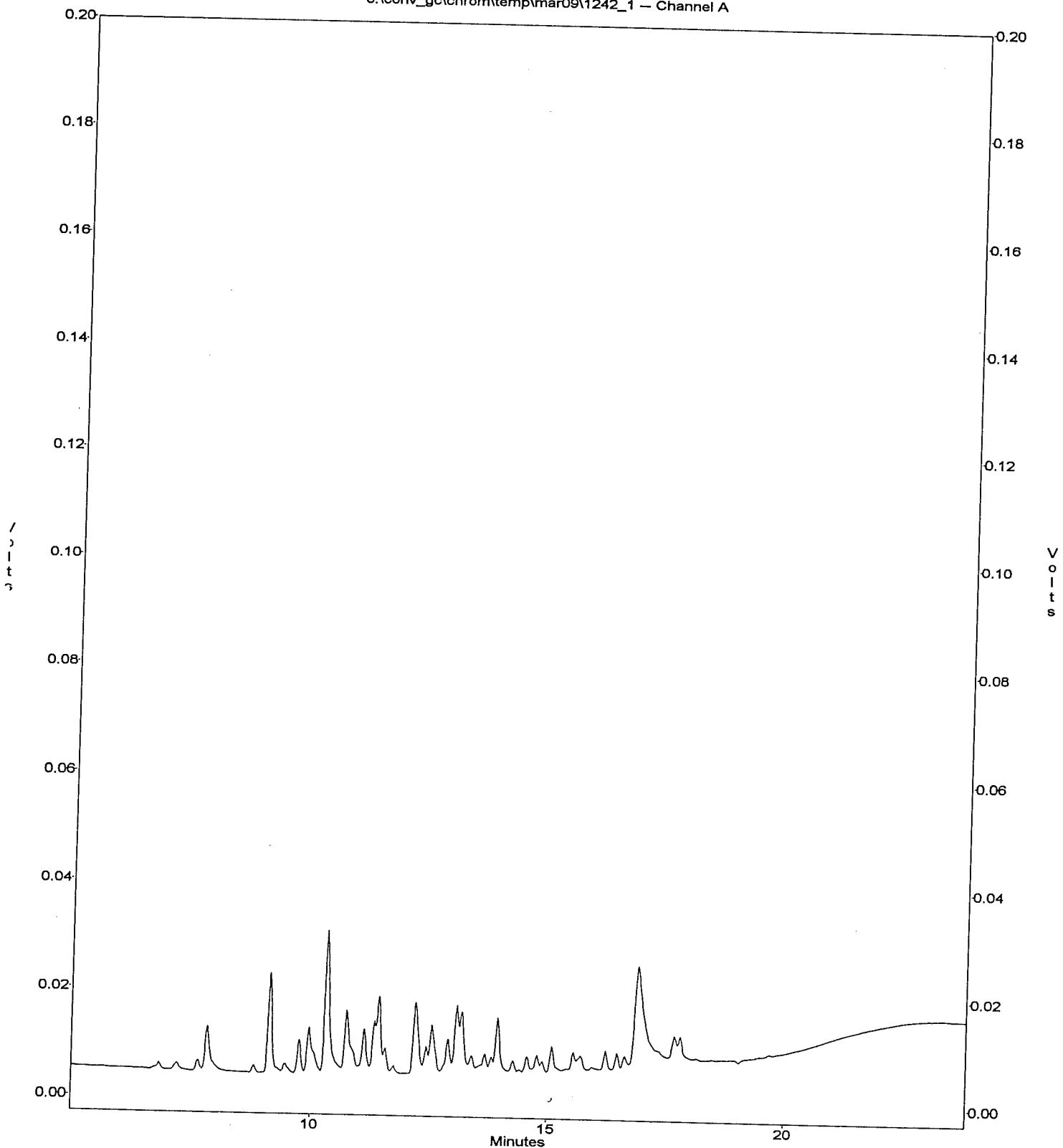
File : c:\conv_gc\chrom\temp\mar09\1242_1
Method : c:\conv_gc\chrom\temp\pcb2.met
Sample ID : 1242-1
Acquired : Mar 09, 1998 20:19:49

c:\conv_gc\chrom\temp\mar09\1242_1 -- Channel B



DB608
File : c:\conv_gc\chrom\temp\mar09\1242_1
Sample ID : 1242-1
Acquired : Mar 09, 1998 20:19:49

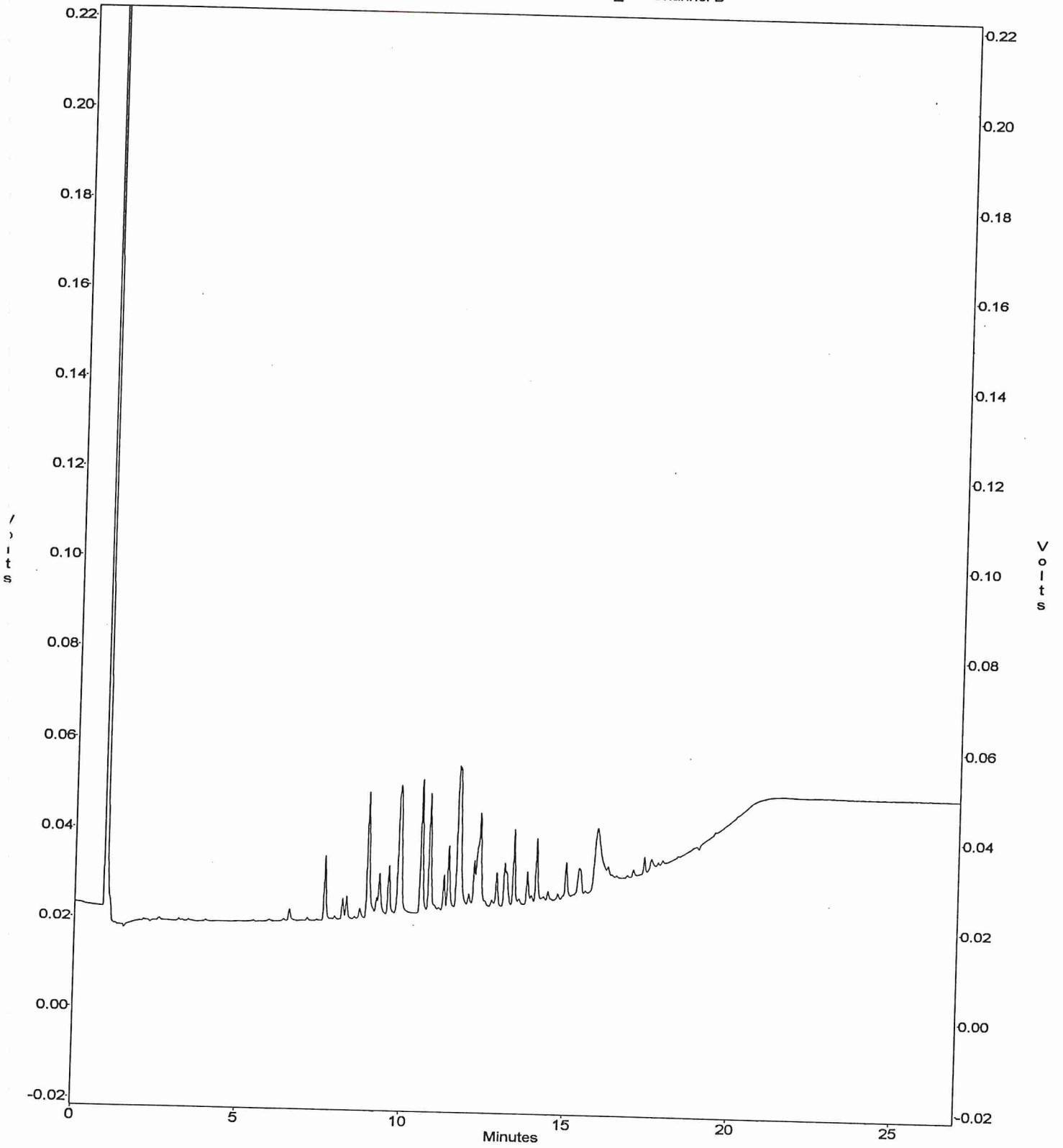
c:\conv_gc\chrom\temp\mar09\1242_1 - Channel A



0040

DB1701
File : c:\conv_gc\chrom\temp\mar09\1248_1
Method : c:\conv_gc\chrom\temp\pcb2.met
Sample ID : 1248-1
Acquired : Mar 09, 1998 20:51:32

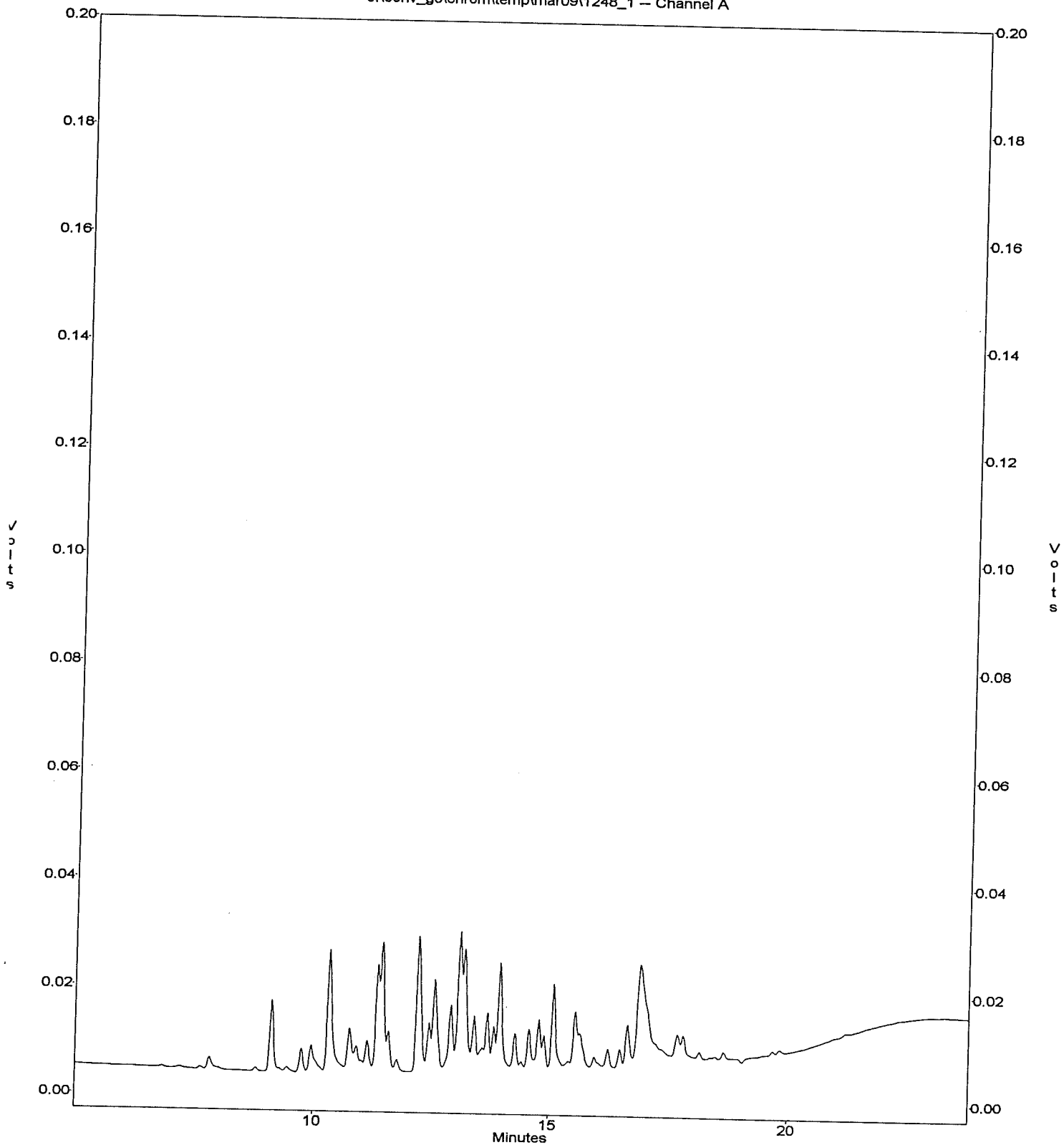
c:\conv_gc\chrom\temp\mar09\1248_1 -- Channel B



0041

DB608
File : c:\conv_gc\chrom\temp\mar09\1248_1
Sample ID : 1248-1
Acquired : Mar 09, 1998 20:51:32

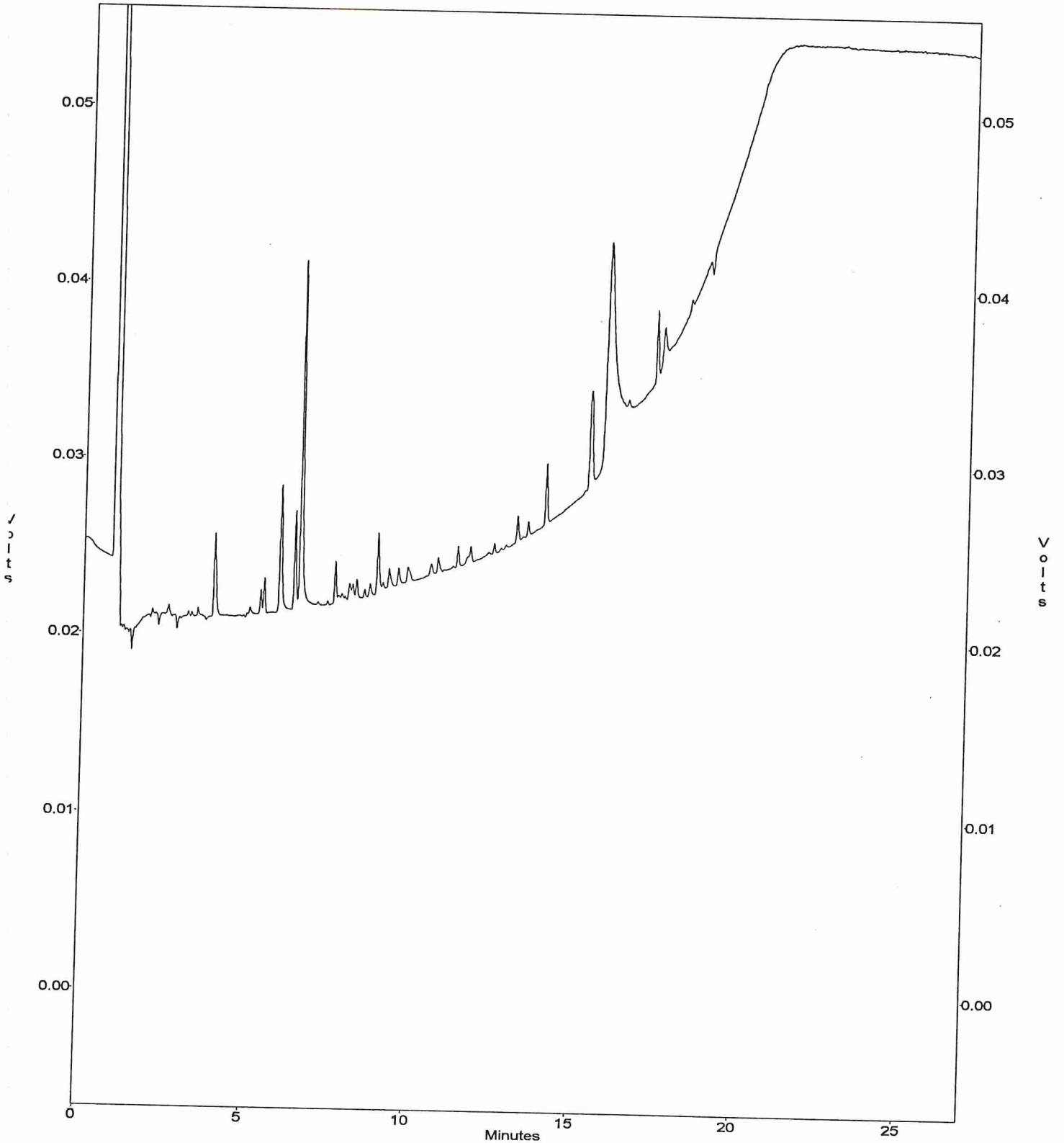
c:\conv_gc\chrom\temp\mar09\1248_1 -- Channel A



0042

DB1701
File : c:\conv_gc\chrom\temp\mar09\1221_1
Method : c:\conv_gc\chrom\temp\pcb2.met
Sample ID : 1221-1
Acquired : Mar 09, 1998 19:16:25

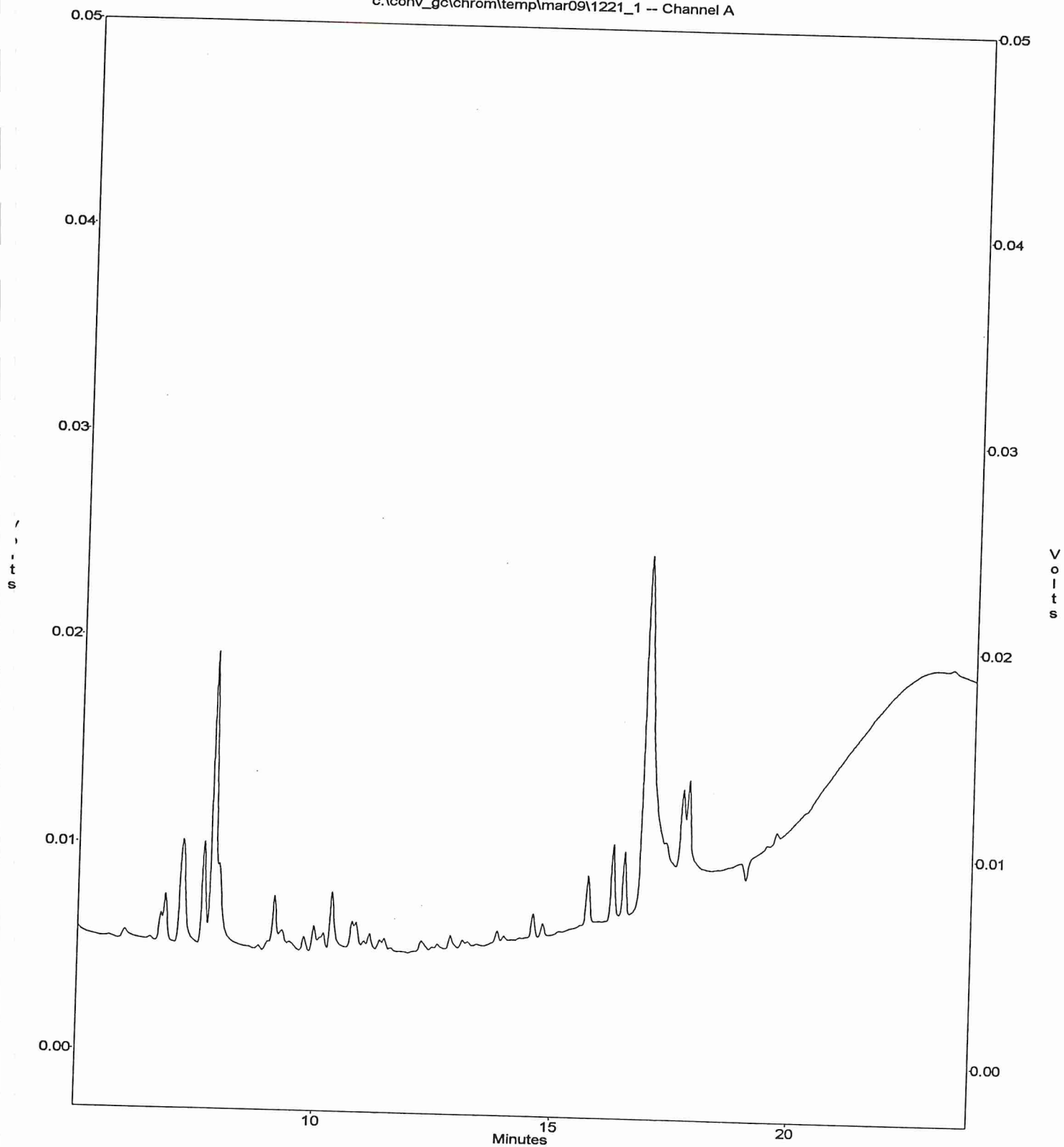
c:\conv_gc\chrom\temp\mar09\1221_1 -- Channel B



0043

DB608
File : c:\conv_gc\chrom\temp\mar09\1221_1
Sample ID : 1221-1
Acquired : Mar 09, 1998 19:16:25

c:\conv_gc\chrom\temp\mar09\1221_1 -- Channel A



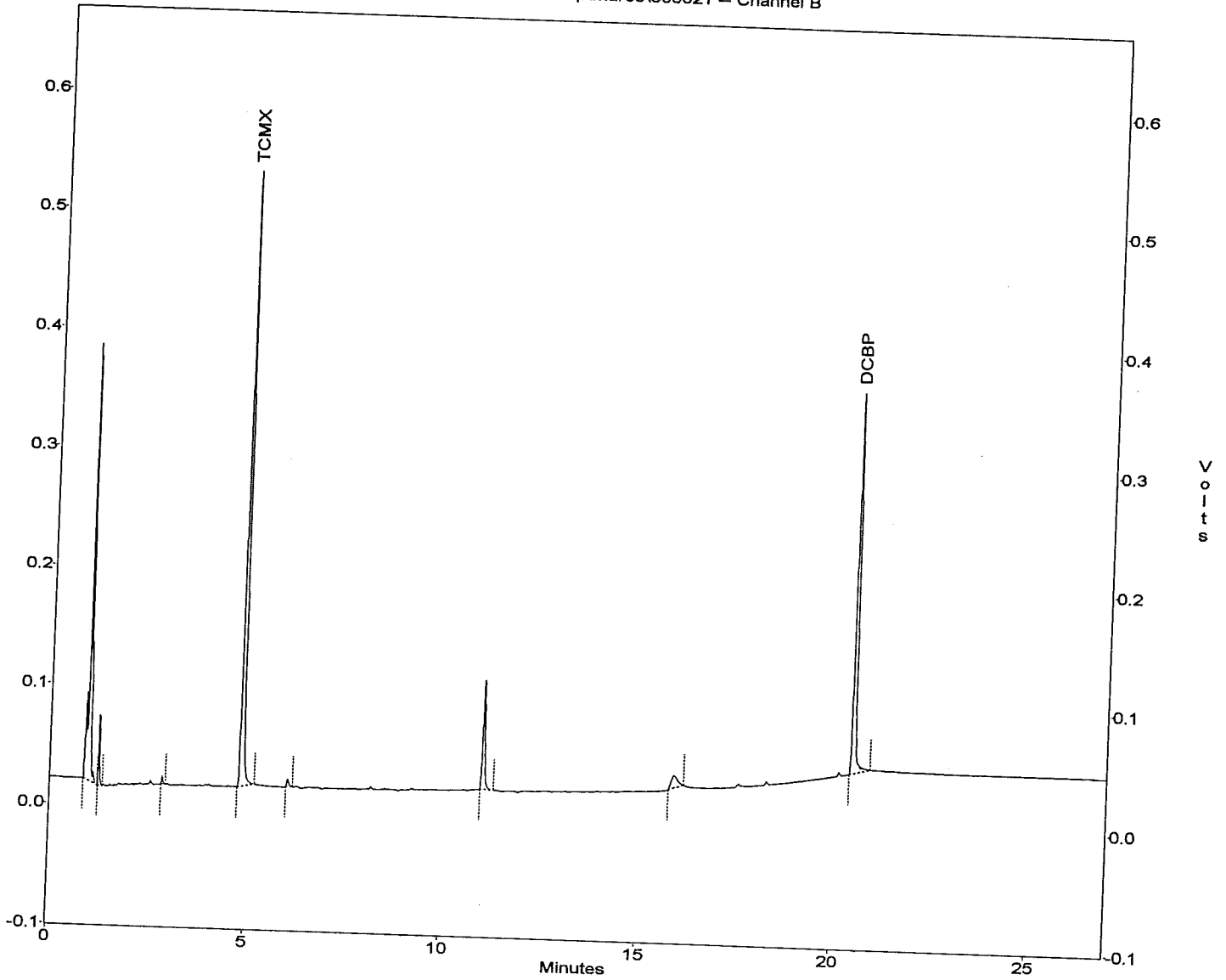
0044

Sample Chromatograms

0045

File : c:\conv_gc\chrom\temp\mar09\305021
Method : c:\conv_gc\chrom\temp\surr.met
Sample ID : 305021
Acquired : Mar 09, 1998 21:54:56

c:\conv_gc\chrom\temp\mar09\305021 -- Channel B



Channel B Results

PEAK #	ANALYTE	RT	AREA	NG/ML
4	TCMX	4.858	1874502	405.60
8	DCBP	20.508	1339469	329.37

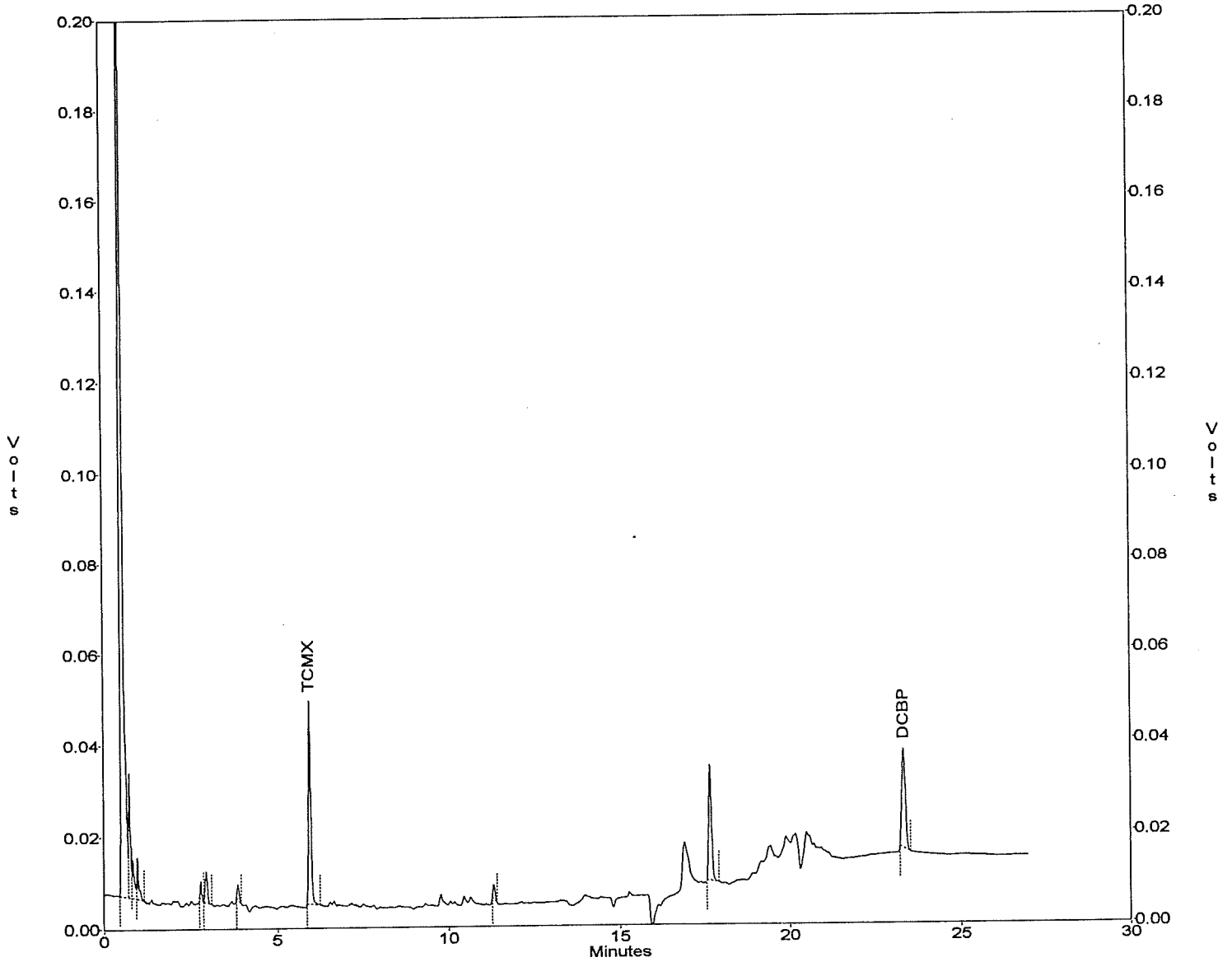
DB608

File : c:\conv_gc\chrom\temp\mar09\305021f

Sample ID : 305021f

Acquired : Mar 10, 1998 02:08:38

c:\conv_gc\chrom\temp\mar09\305021f -- Channel A

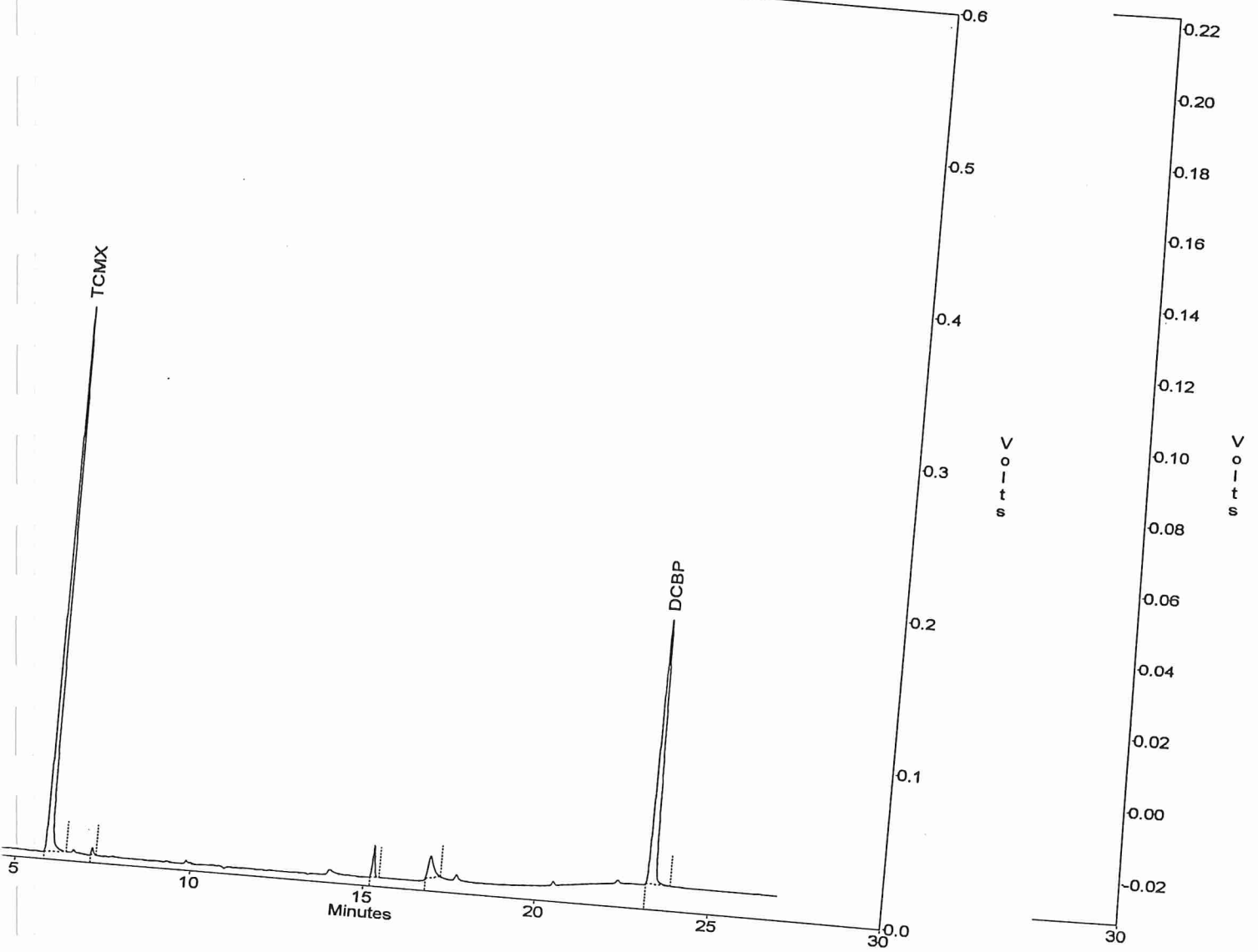


Channel A Results

PEAK #	ANALYTE	RT	AREA	NG/ML
8	TCMX	5.942	214837	36.64
11	DCBP	23.342	157812	26.85

0049

c:\conv_gc\chrom\temp\mar09\305021 -- Channel A



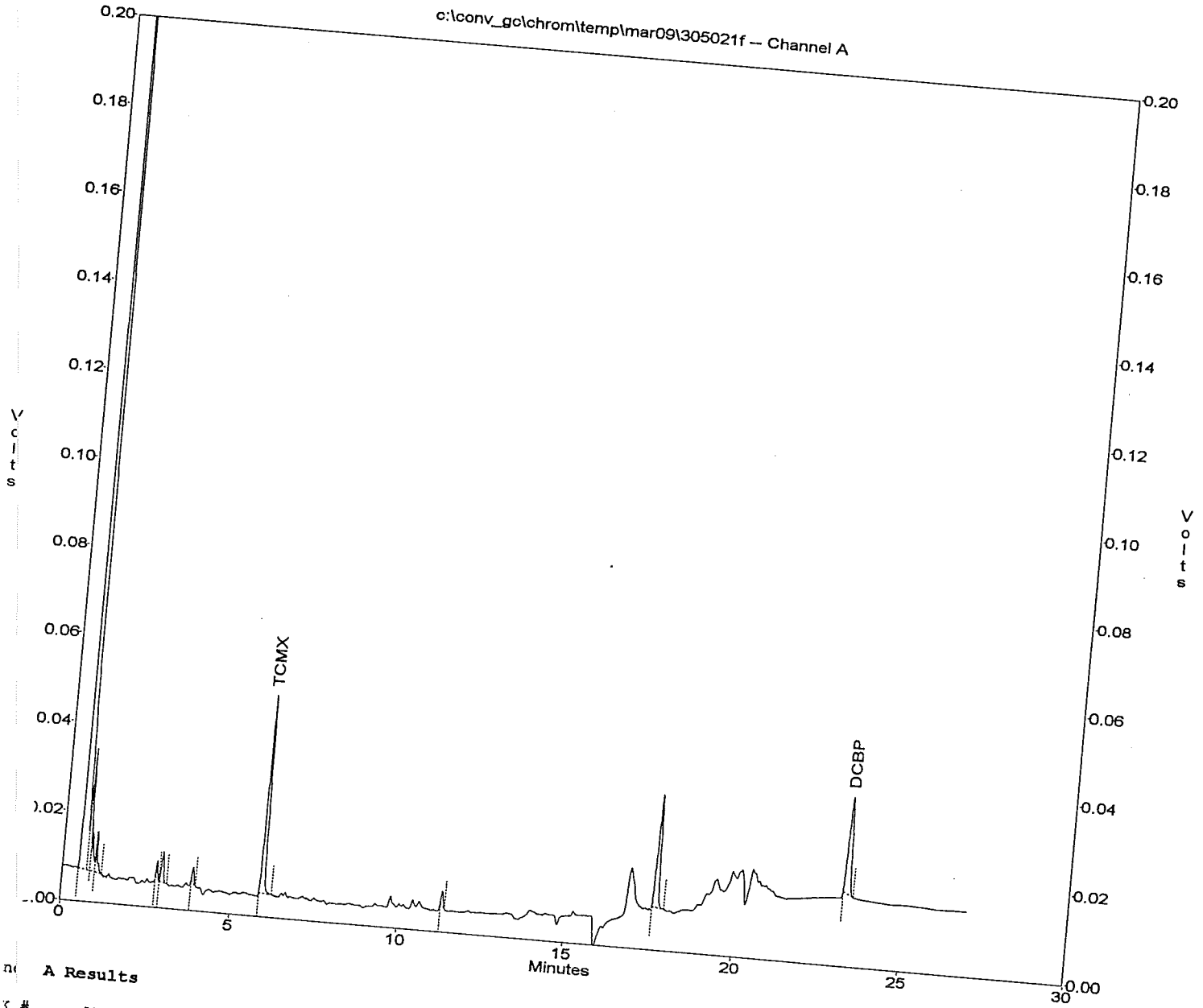
RT	AREA	NG/ML
5.942	1837518	379.91
23.342	1368769	349.18

0047

0048

DB608

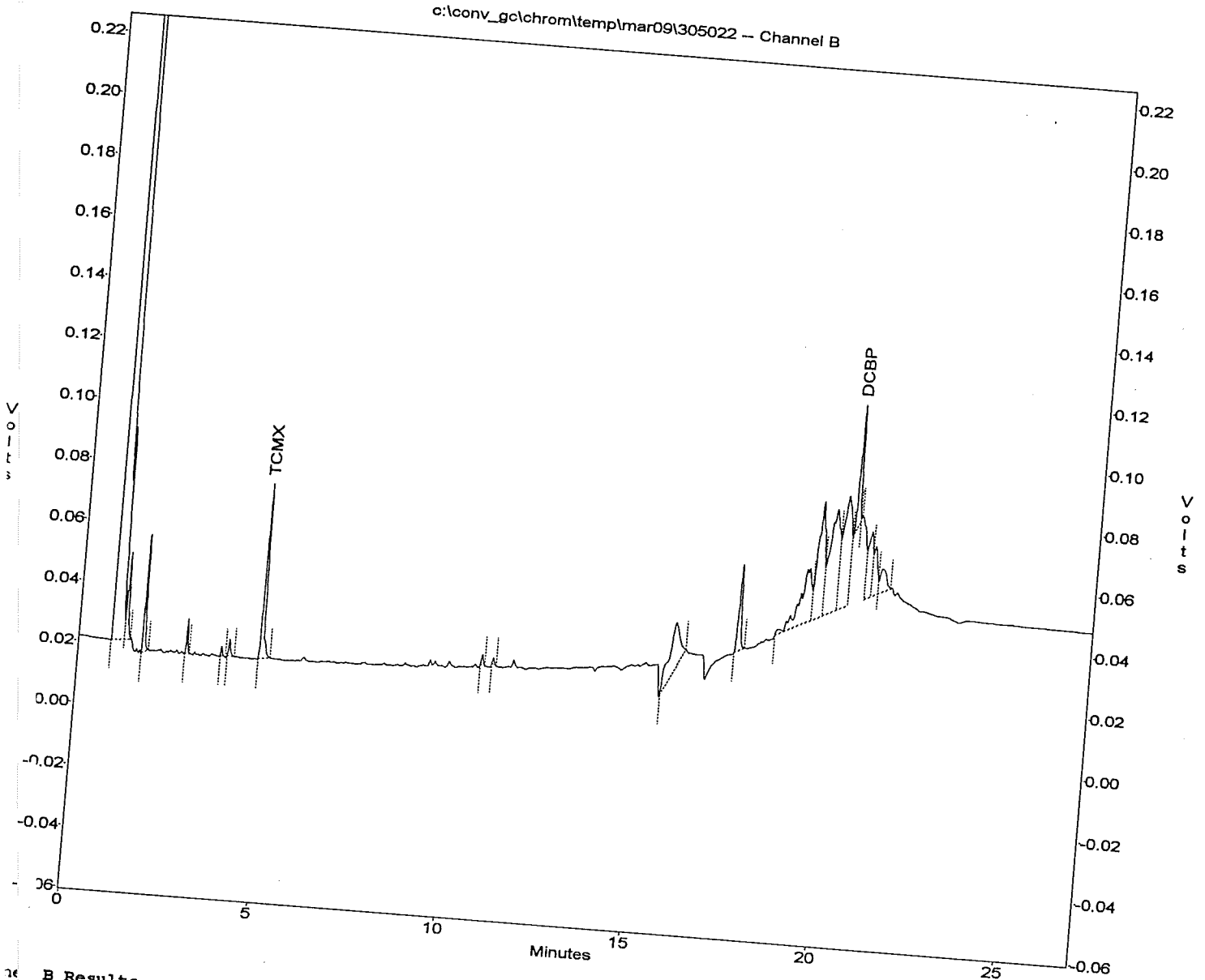
File : c:\conv_gc\chrom\temp\mar09\305021f
Sample ID : 305021f
Acquired : Mar 10, 1998 02:08:38



A Results

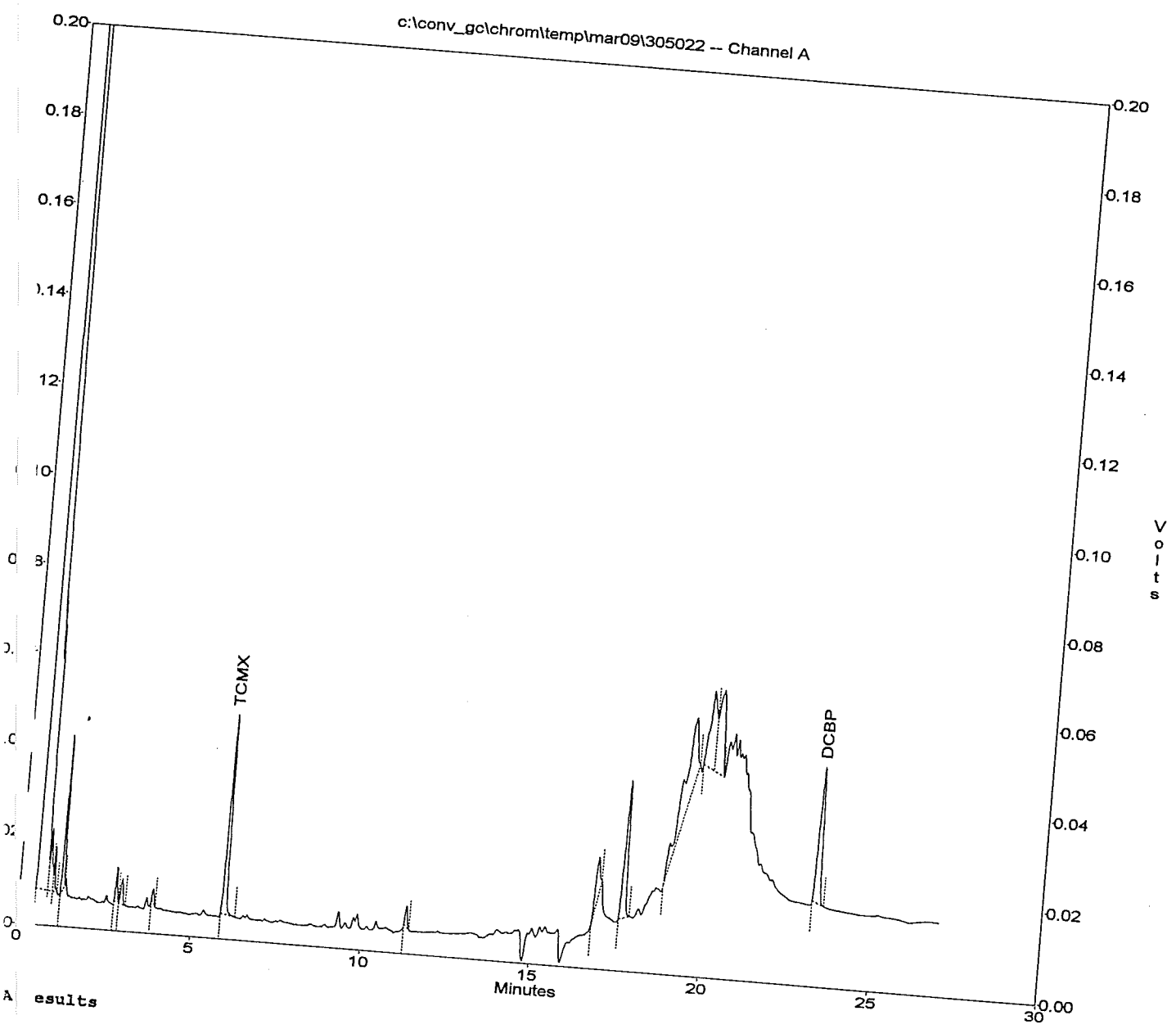
ANALYTE	RT	AREA	NG/ML
TCMX	5.942	214837	36.64
DCBP	23.342	157812	26.85

DB1701
 File : c:\conv_gclchrom\temp\mar09\305022
 Method : c:\conv_gclchrom\temp\surr.met
 Sample ID : 305022
 Acquired : Mar 09, 1998 22:26:38



B Results

#	ANALYTE	RT	AREA	NG/ML
7	TCMX	4.858	221458	43.82
5	DCBP	20.508	154686	34.55

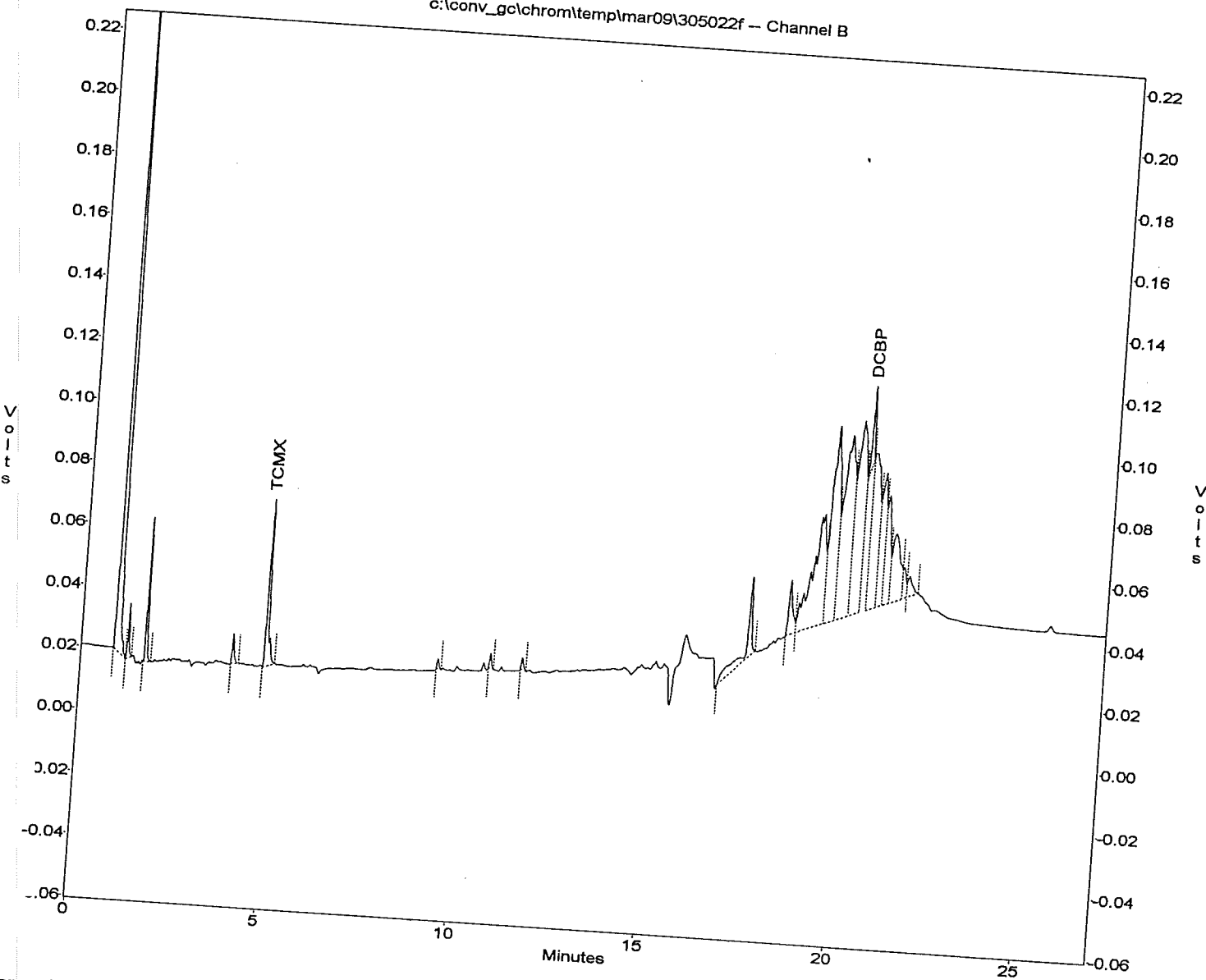


Results

ANALYTE	RT	AREA	NG/ML
TCMX	5.942	212585	36.24
DCBP	23.342	220646	37.67

File : c:\conv_gc\chrom\temp\mar09\305022f
 Method : c:\conv_gc\chrom\temp\surr.met
 Sample ID : 305022f
 Acquired : Mar 10, 1998 02:40:19

c:\conv_gc\chrom\temp\mar09\305022f -- Channel B

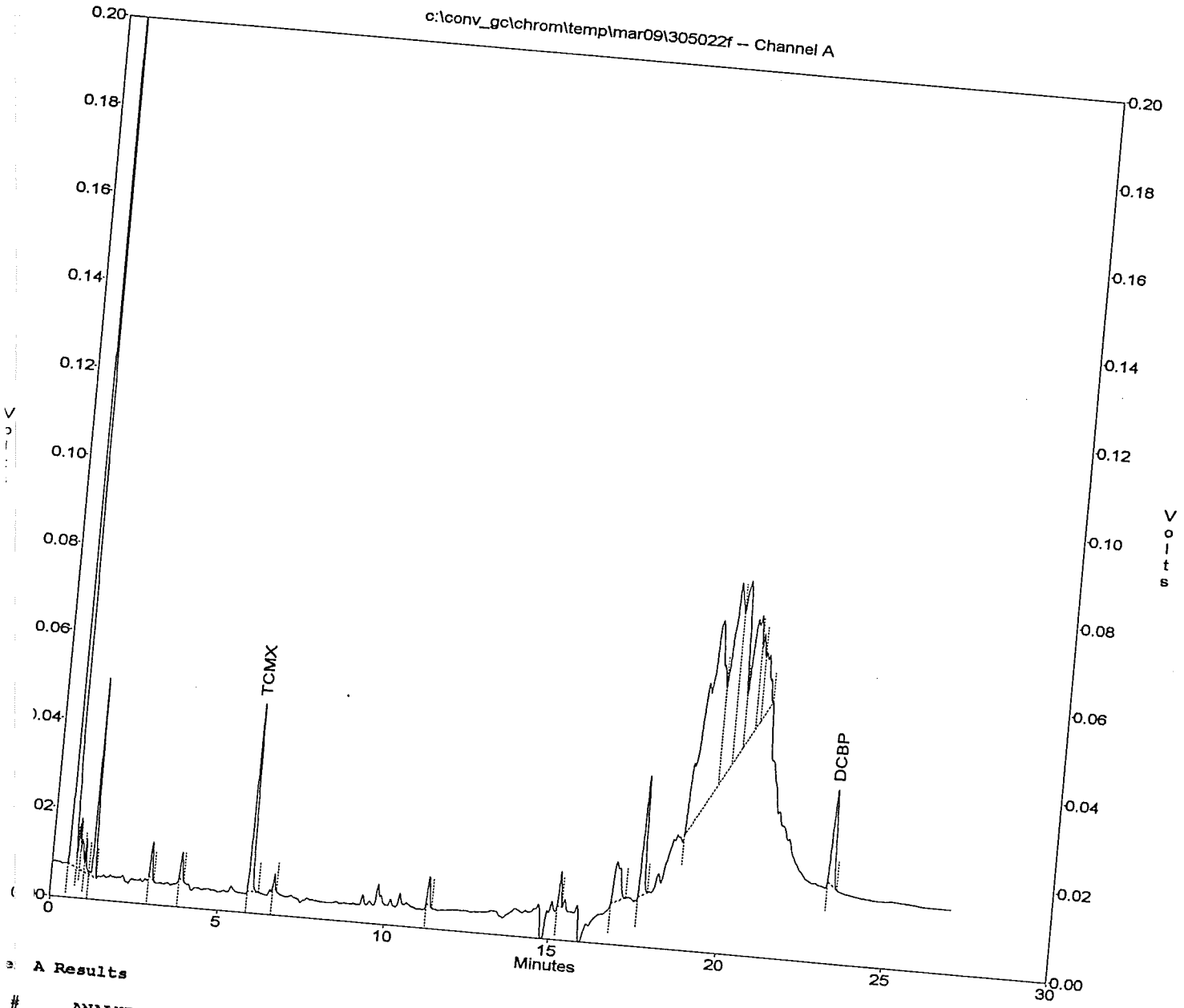


Channel B Results

PK #	ANALYTE	RT	AREA	NG/ML
15	TCMX	4.858	221438	43.82
	DCBP	20.500	101355	22.70

0052

DB608
 File : c:\conv_gc\chrom\temp\mar09\305022f
 Sample ID : 305022f
 Acquired : Mar 10, 1998 02:40:19

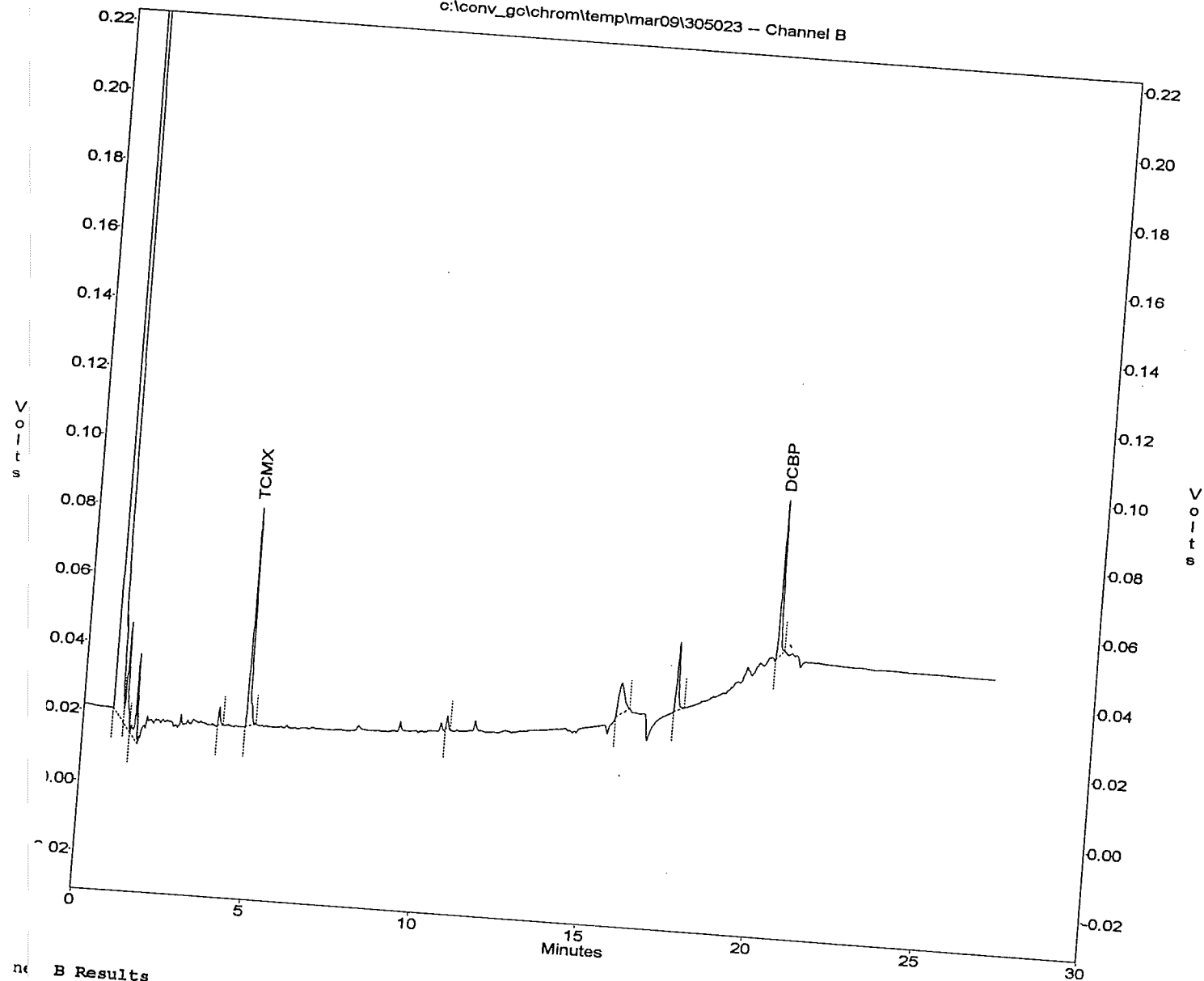


A Results

#	ANALYTE	RT	AREA	NG/ML
	TCMX	5.942	201363	34.24
	DCBP	23.342	154015	26.20

File : c:\conv_gc\chrom\temp\mar09\305023
Method : c:\conv_gc\chrom\temp\surr.met
Sample ID : 305023
Acquired : Mar 09, 1998 22:58:22

c:\conv_gc\chrom\temp\mar09\305023 -- Channel B



Channel B Results

ANALYTE	RT	AREA	NG/ML
TCMX	4.858	240633	47.84
DCBP	20.508	181400	40.37

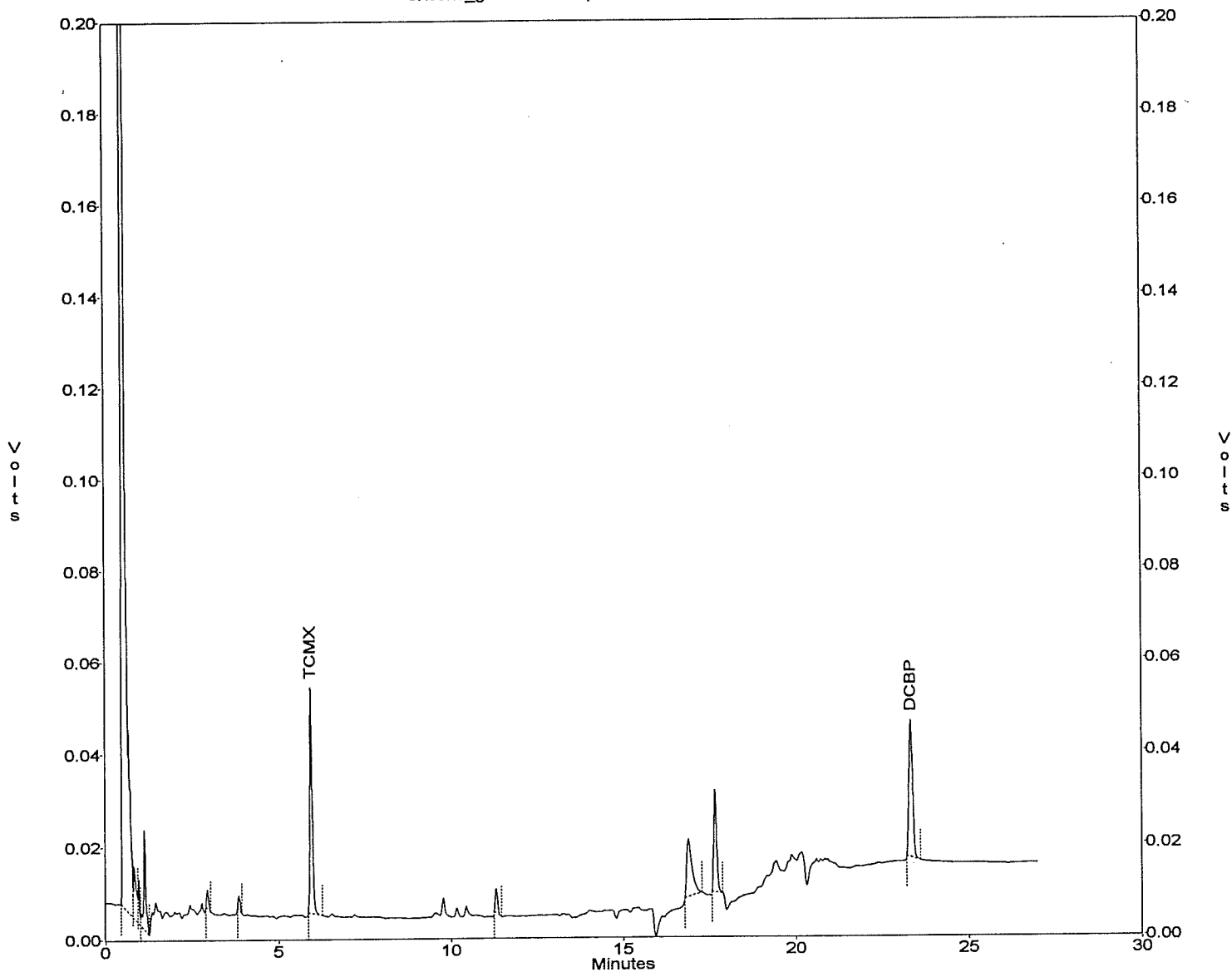
DB608

File : c:\conv_gc\chrom\temp\mar09\305023

Sample ID : 305023

Acquired : Mar 09, 1998 22:58:22

c:\conv_gc\chrom\temp\mar09\305023 -- Channel A



Channel A Results

PEAK #	ANALYTE	RT	AREA	NG/ML
7	TCMX	5.942	236043	40.48
11	DCBP	23.342	218663	37.33

DB1701

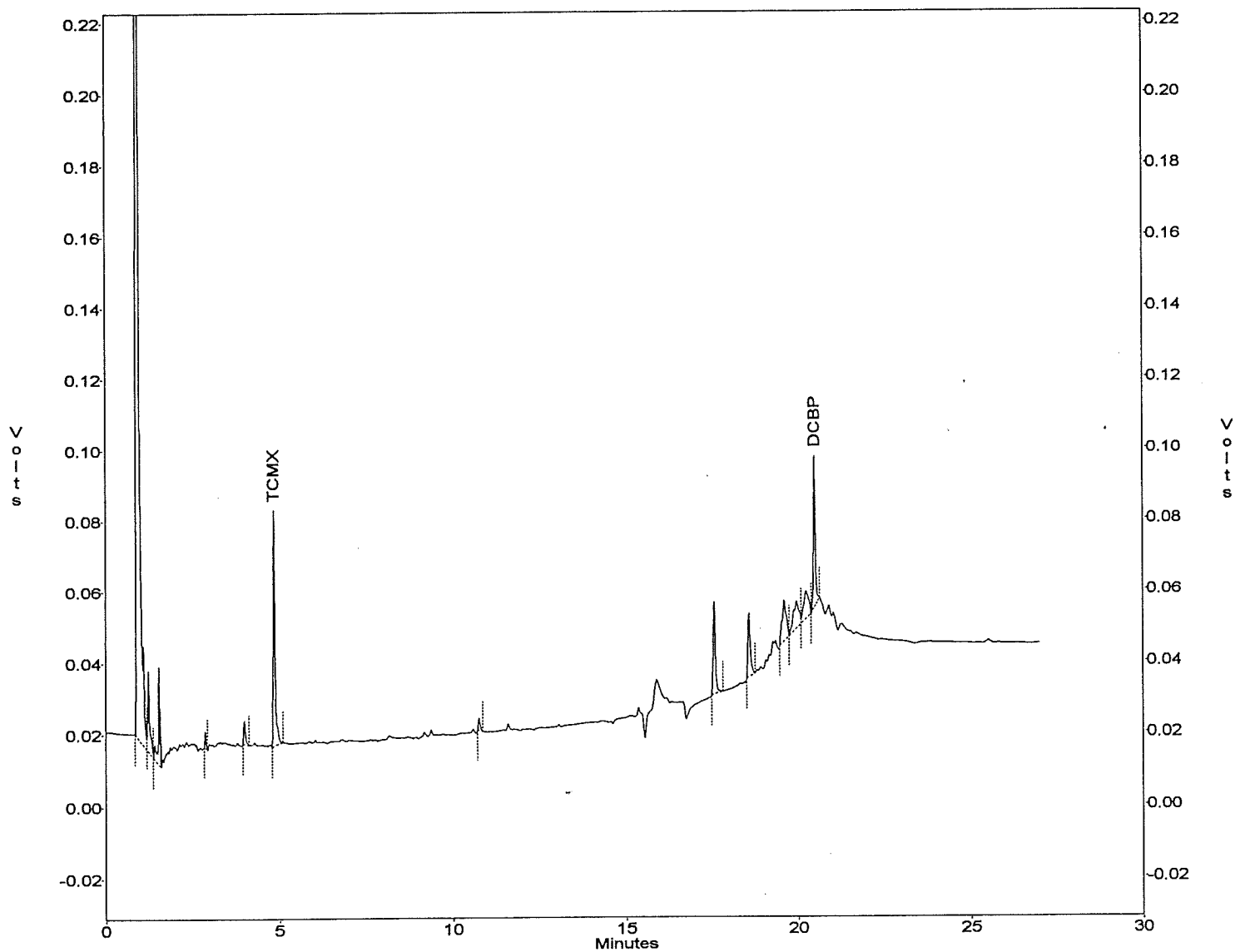
File : c:\conv_gc\chrom\temp\mar09\305023f

Method : c:\conv_gc\chrom\temp\surr.met

Sample ID : 305023f

Acquired : Mar 10, 1998 03:12:04

c:\conv_gc\chrom\temp\mar09\305023f -- Channel B



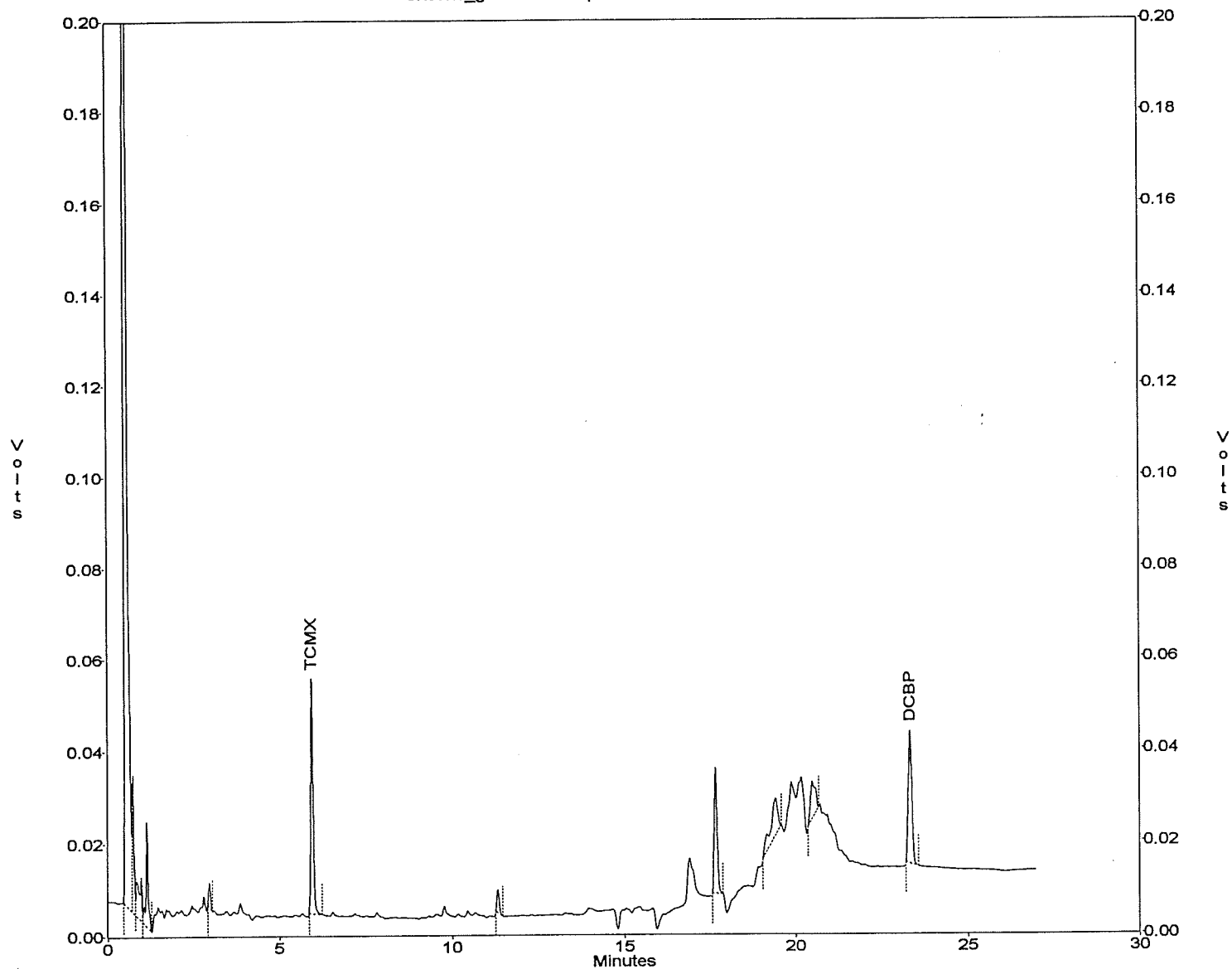
Channel B Results

PEAK #	ANALYTE	RT	AREA	NG/ML
6	TCMX	4.858	239833	47.67
13	DCBP	20.508	169530	37.84

0056

DB608
File : c:\conv_gc\chrom\temp\mar09\305023f
Sample ID : 305023f
Acquired : Mar 10, 1998 03:12:04

c:\conv_gc\chrom\temp\mar09\305023f -- Channel A



Channel A Results

PEAK #	ANALYTE	RT	AREA	NG/ML
6	TCMX	5.942	245068	42.26
11	DCBP	23.342	212325	36.24

0057

DB1701

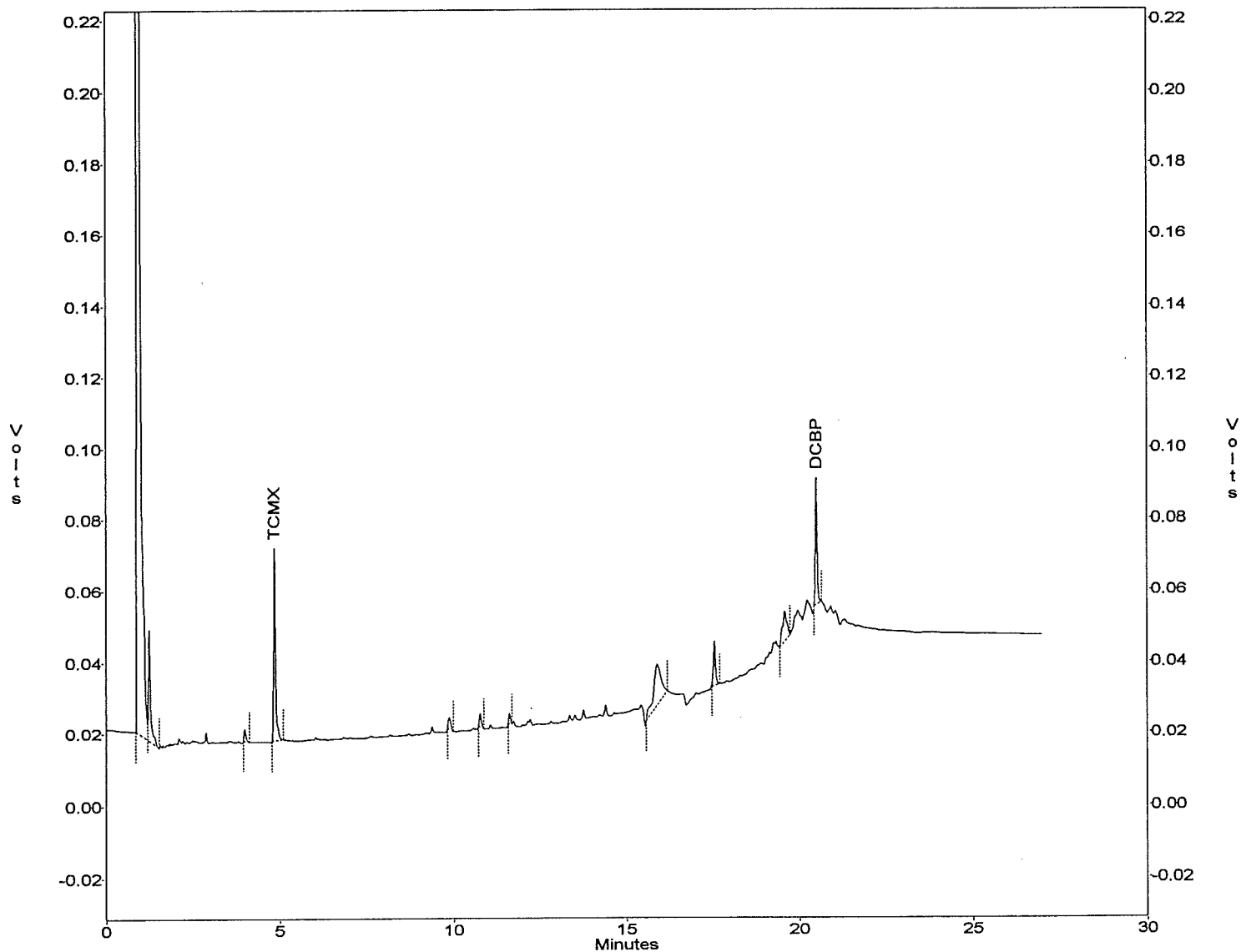
File : c:\conv_gc\chrom\temp\mar09\305024

Method : c:\conv_gc\chrom\temp\surr.met

Sample ID : 305024

Acquired : Mar 09, 1998 23:30:04

c:\conv_gc\chrom\temp\mar09\305024 -- Channel B



Channel B Results

PEAK #	ANALYTE	RT	AREA	NG/ML
4	TCMX	4.858	203340	40.03
11	DCBP	20.508	133341	29.81

0058

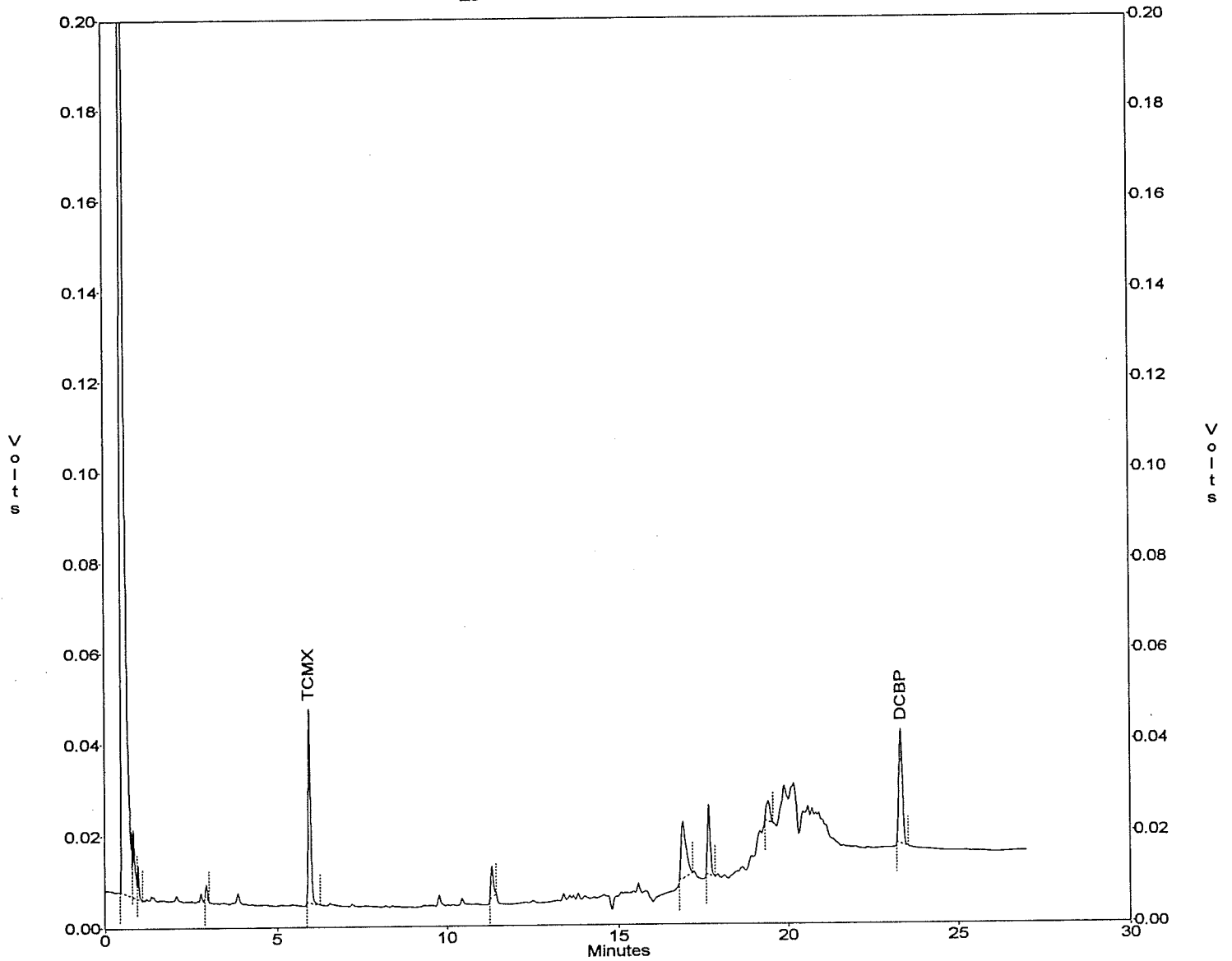
DB608

File : c:\conv_gc\chrom\temp\mar09\305024

Sample ID : 305024

Acquired : Mar 09, 1998 23:30:04

c:\conv_gc\chrom\temp\mar09\305024 -- Channel A



Channel A Results

PEAK #	ANALYTE	RT	AREA	NG/ML
5	TCMX	5.942	205897	35.05
10	DCBP	23.333	181188	30.88

0059

DB1701

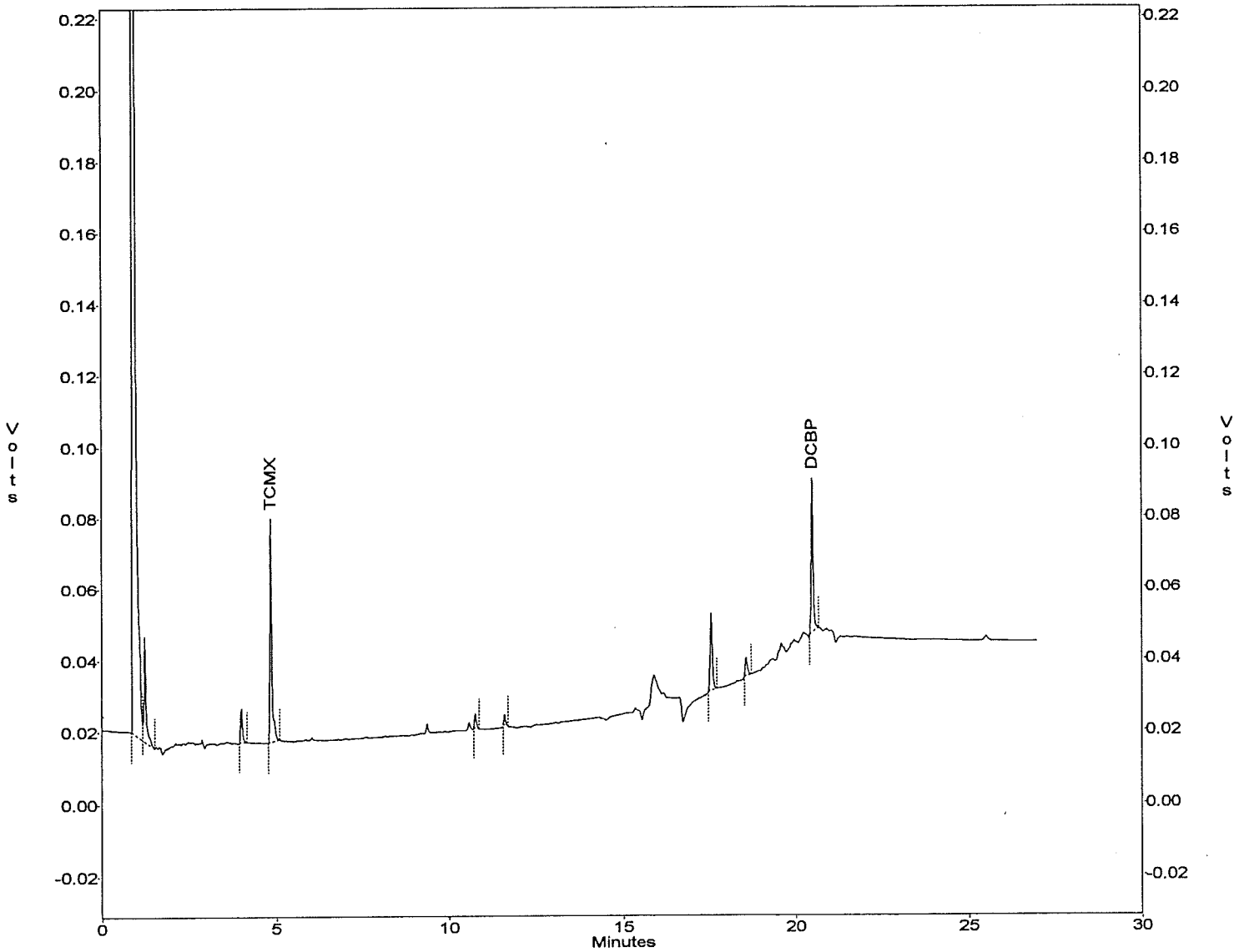
File : c:\conv_gc\chrom\temp\mar09\305024f

Method : c:\conv_gc\chrom\temp\surr.met

Sample ID : 305024f

Acquired : Mar 10, 1998 03:43:45

c:\conv_gc\chrom\temp\mar09\305024f -- Channel B



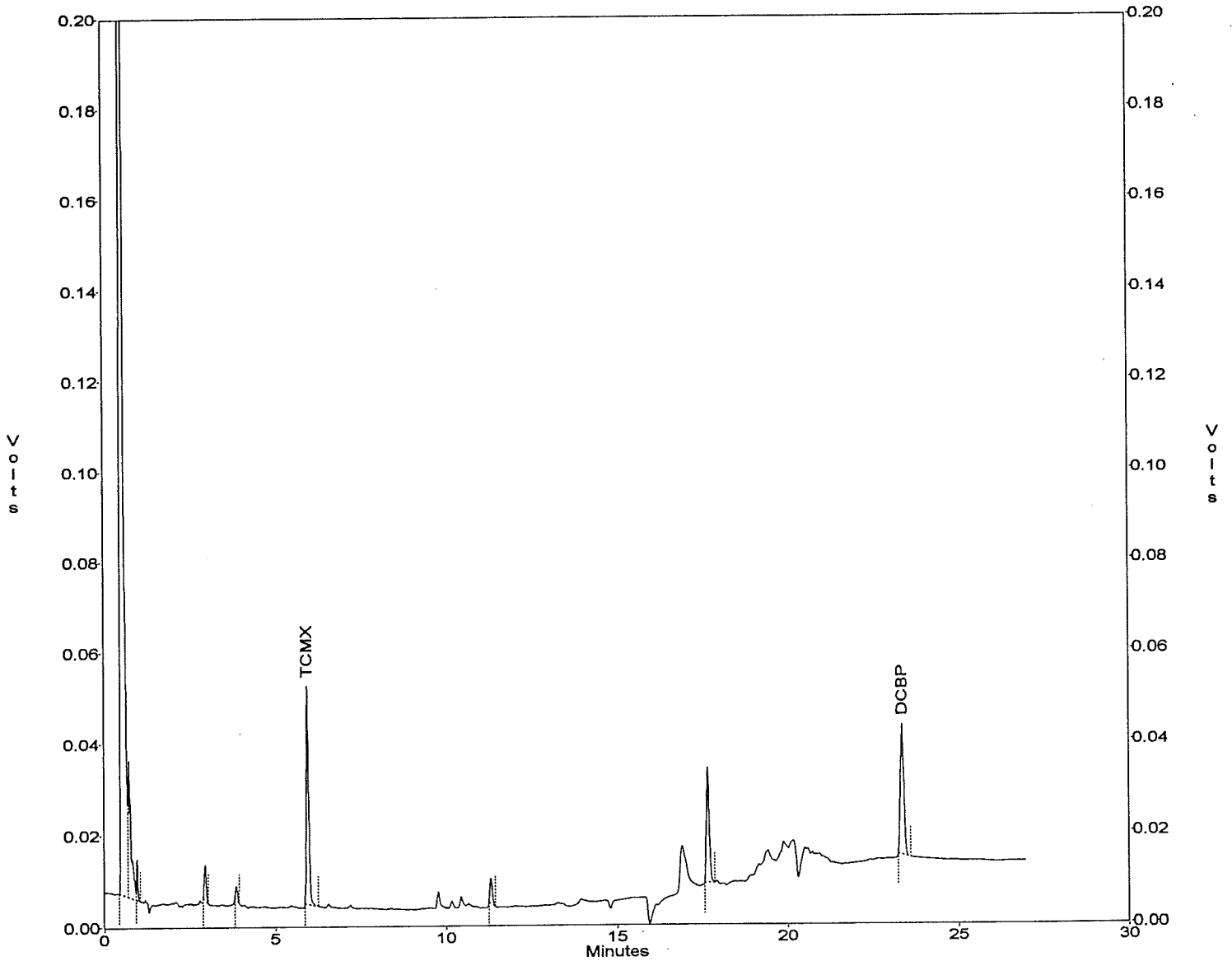
Channel B Results

PEAK #	ANALYTE	RT	AREA	NG/ML
4	TCMX	4.850	234573	46.57
9	DCBP	20.500	171982	38.39

0060

DB608
File : c:\conv_gc\chrom\temp\mar09\305024f
Sample ID : 305024f
Acquired : Mar 10, 1998 03:43:45

c:\conv_gc\chrom\temp\mar09\305024f -- Channel A



Channel A Results

PEAK #	ANALYTE	RT	AREA	NG/ML
6	TCMX	5.942	229115	39.19
9	DCBP	23.333	210277	35.89

0061

DB1701

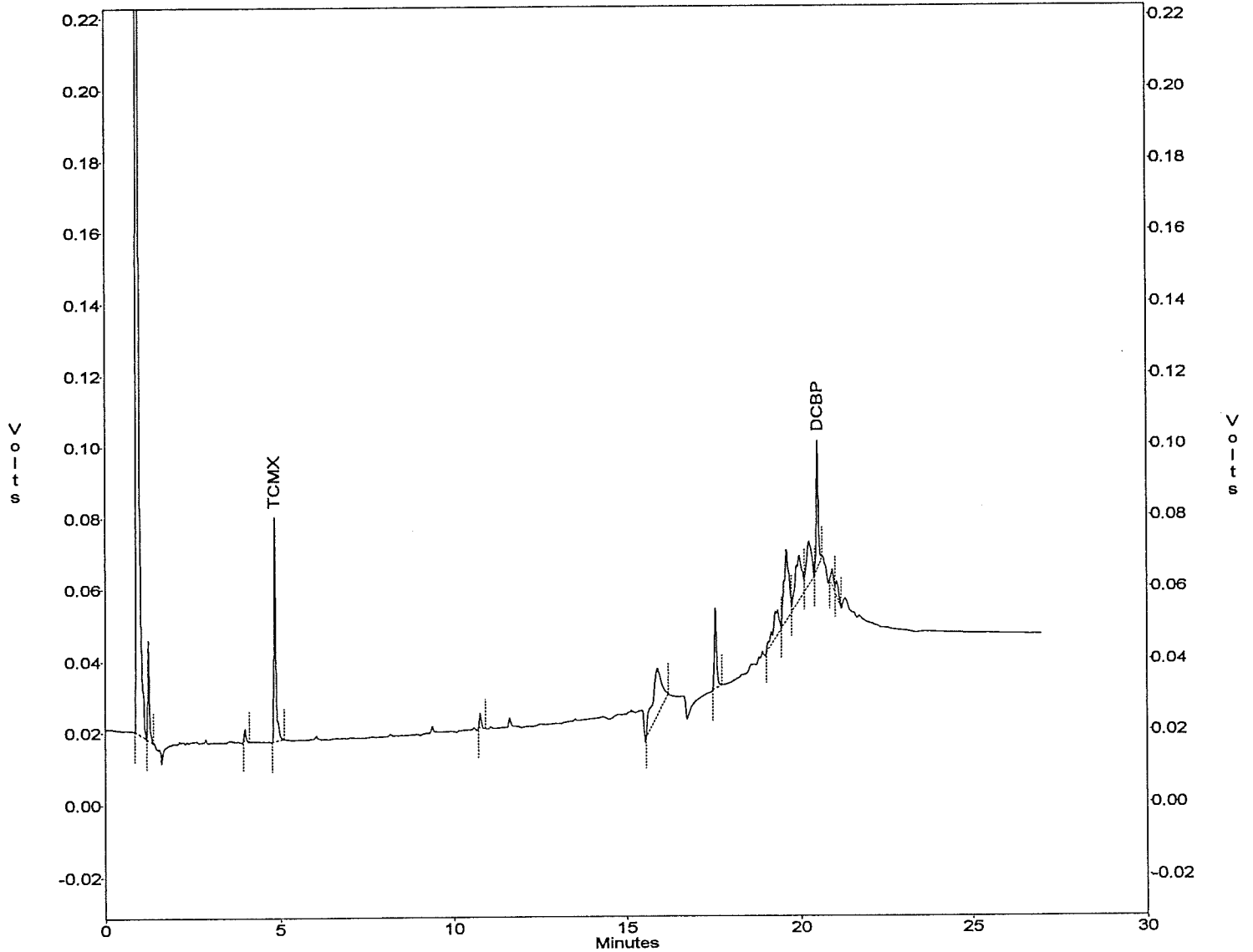
File : c:\conv_gc\chrom\temp\mar09\305025

Method : c:\conv_gc\chrom\temp\surr.met

Sample ID : 305025

Acquired : Mar 10, 1998 00:01:47

c:\conv_gc\chrom\temp\mar09\305025 — Channel B



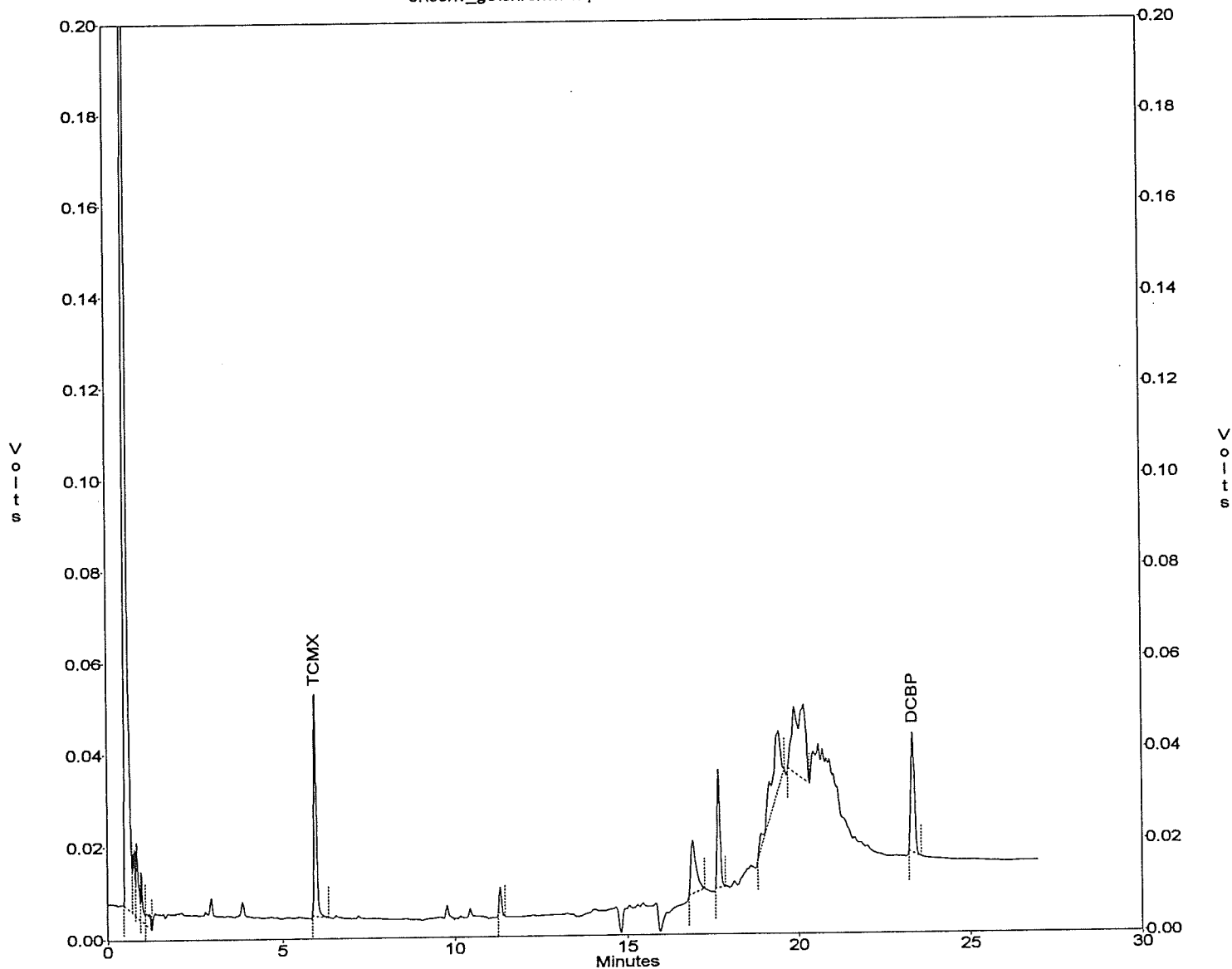
Channel B Results

PEAK #	ANALYTE	RT	AREA	NG/ML
4	TCMX	4.858	233899	46.43
12	DCBP	20.508	144780	32.35

0062

DB608
 File : c:\conv_gc\chrom\temp\mar09\305025
 Sample ID : 305025
 Acquired : Mar 10, 1998 00:01:47

c:\conv_gc\chrom\temp\mar09\305025 -- Channel A

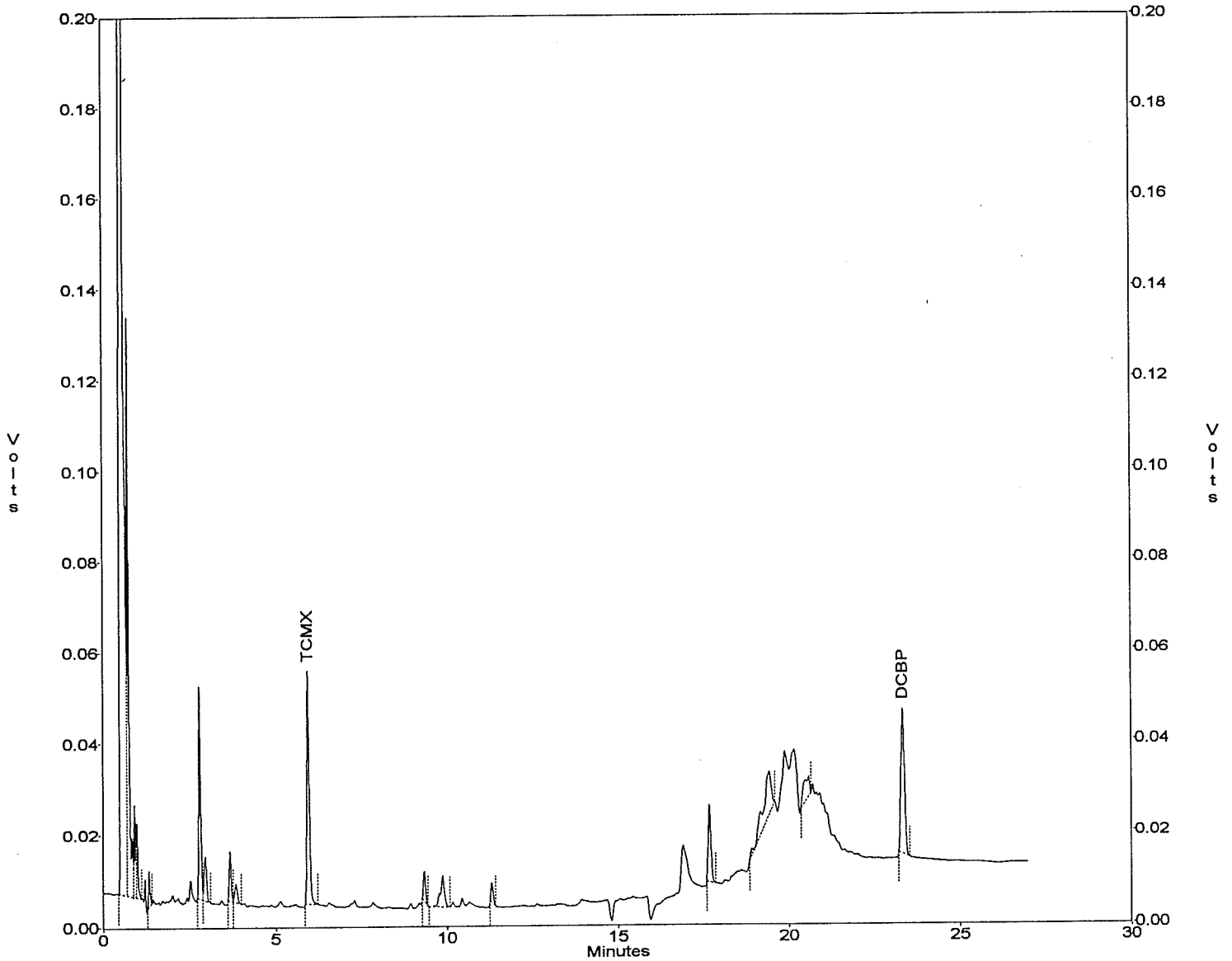


Channel A Results

PEAK #	ANALYTE	RT	AREA	NG/ML
6	TCMX	5.950	236822	40.63
12	DCBP	23.342	188422	32.12

DB608
 File : c:\conv_gc\chrom\temp\mar09\305025f
 Sample ID : 305025f
 Acquired : Mar 10, 1998 04:15:30

c:\conv_gc\chrom\temp\mar09\305025f -- Channel A



Channel A Results

PEAK #	ANALYTE	RT	AREA	NG/ML
10	TCMX	5.942	247719	42.79
17	DCBP	23.342	230994	39.46

0064

DB1701

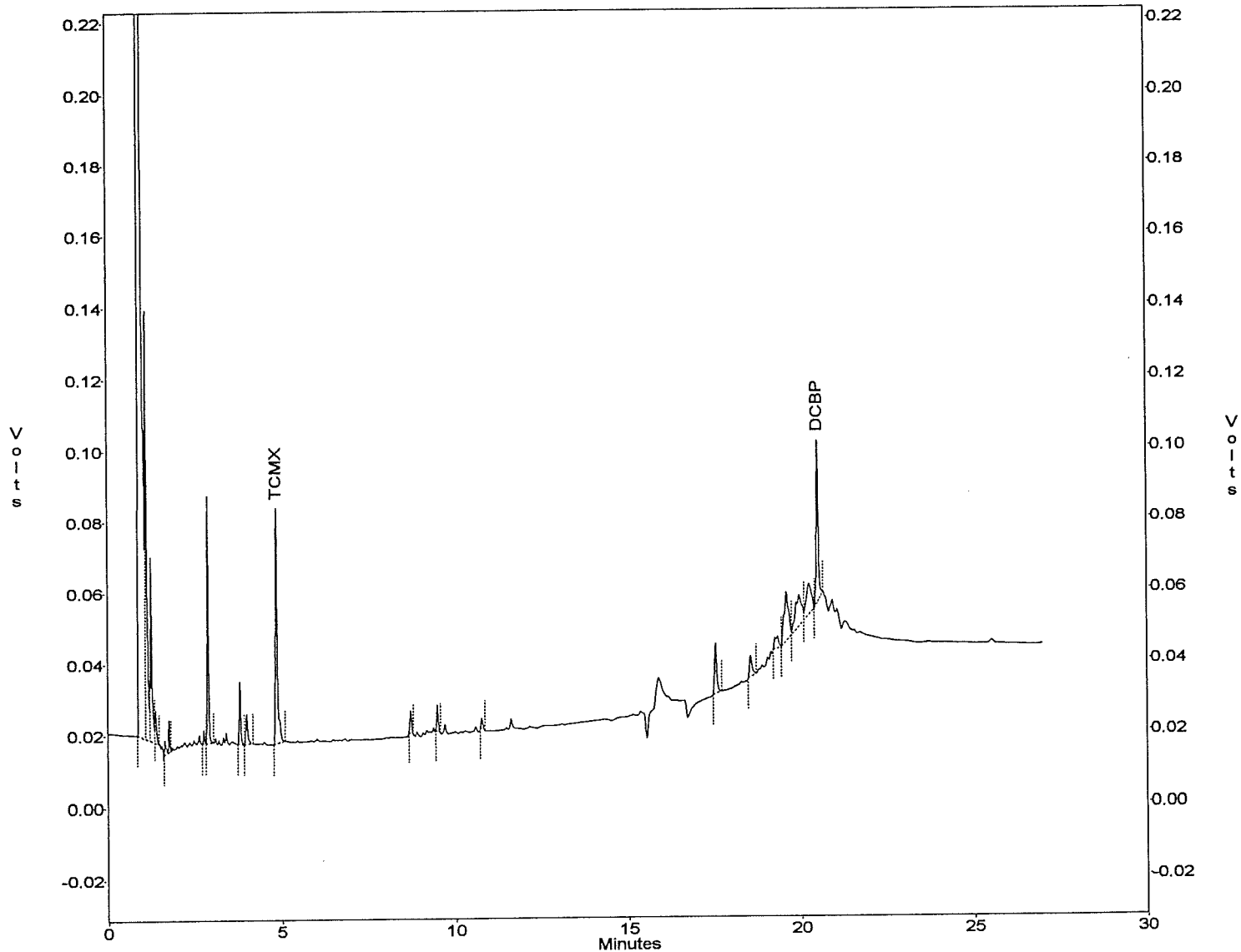
File : c:\conv_gc\chrom\temp\mar09\305025f

Method : c:\conv_gc\chrom\temp\surr.met

Sample ID : 305025f

Acquired : Mar 10, 1998 04:15:30

c:\conv_gc\chrom\temp\mar09\305025f -- Channel B

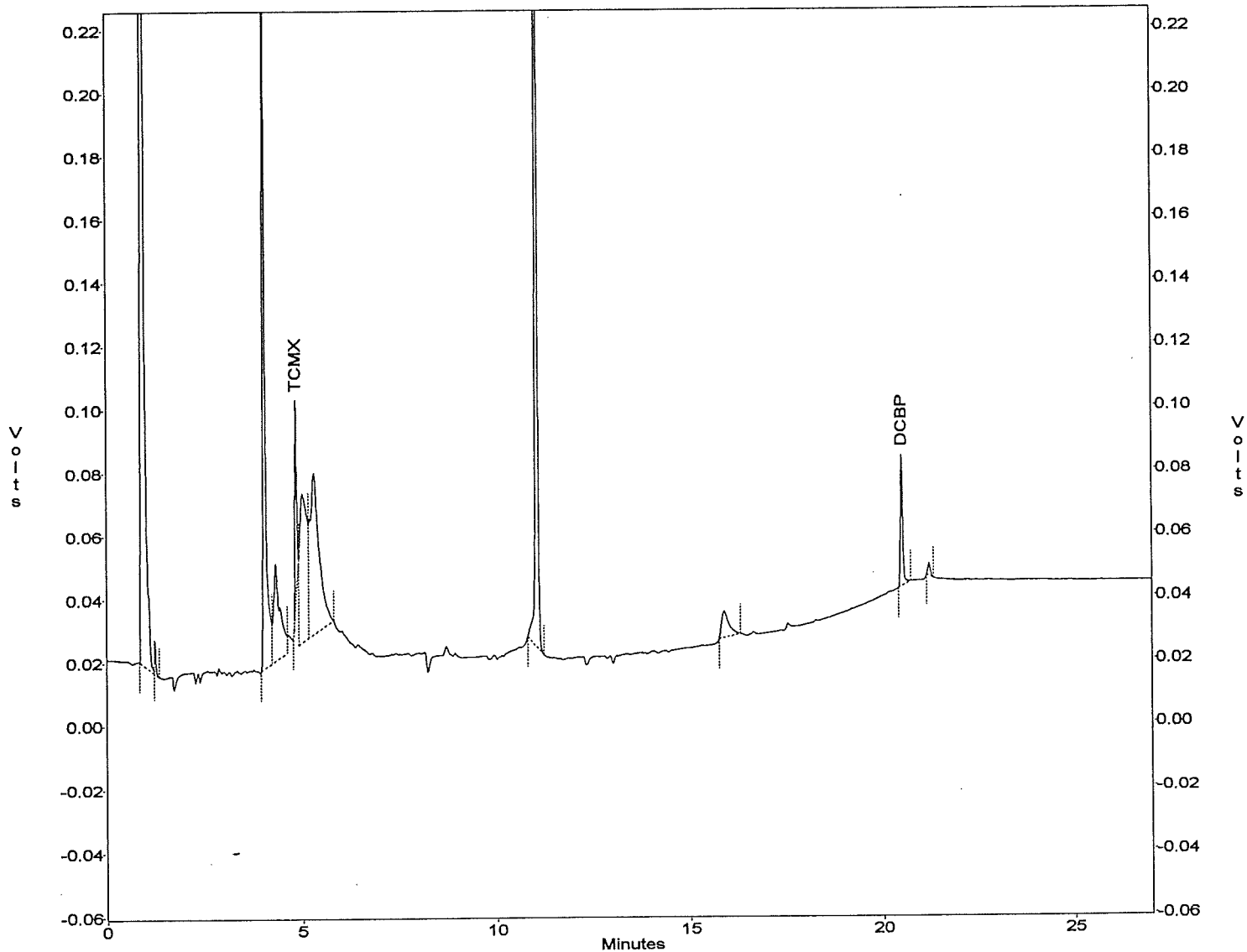


Channel B Results

PEAK #	ANALYTE	RT	AREA	NG/ML
10	TCMX	4.858	253121	50.45
20	DCBP	20.500	187072	41.33

DB1701
 File : c:\conv_gc\chrom\temp\mar09\305026
 Method : c:\conv_gc\chrom\temp\surr.met
 Sample ID : 305026
 Acquired : Mar 10, 1998 00:33:29

c:\conv_gc\chrom\temp\mar09\305026 -- Channel B

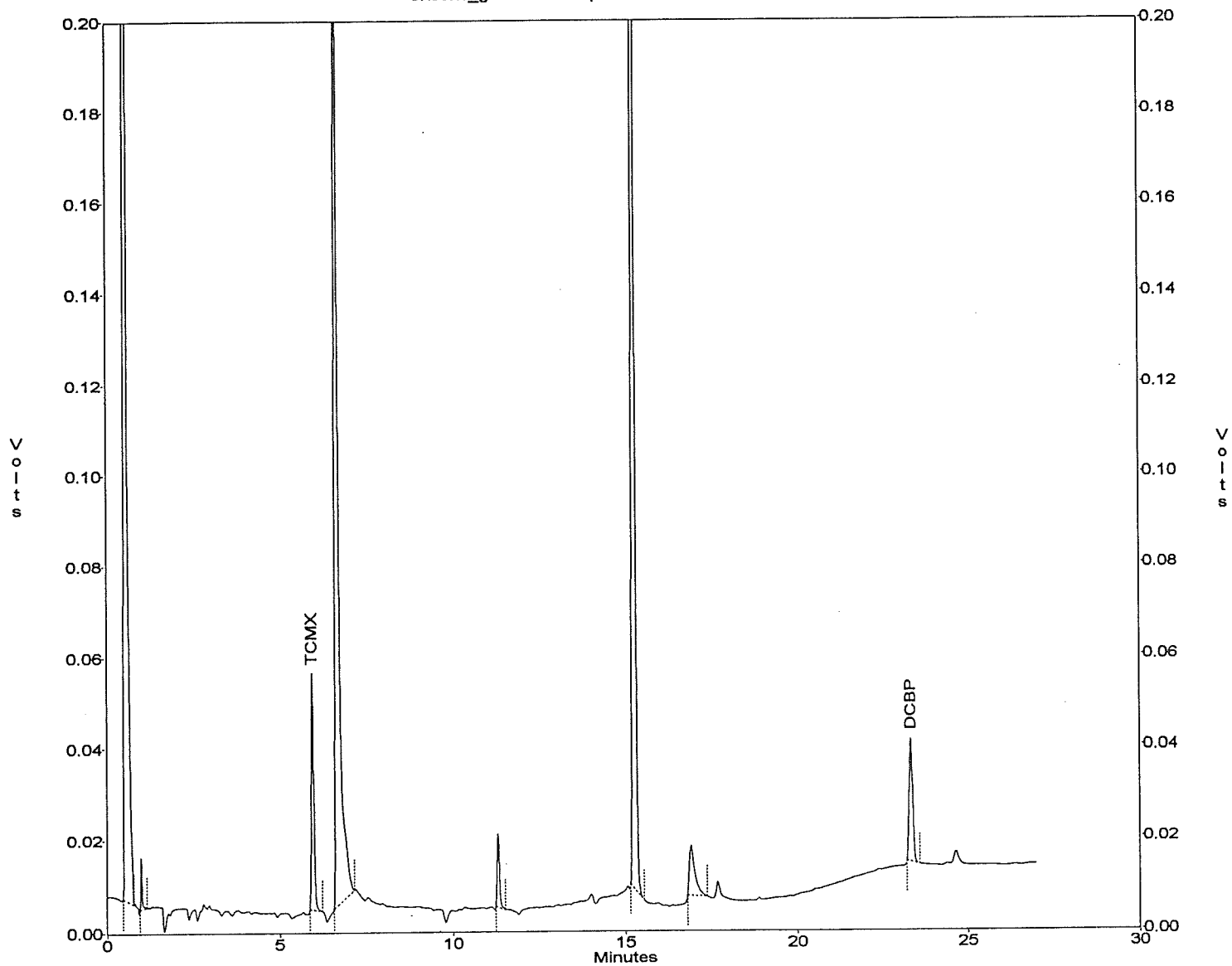


Channel B Results

PEAK #	ANALYTE	RT	AREA	NG/ML
5	TCMX	4.858	187065	36.79
10	DCBP	20.508	167061	37.30

DB608
File : c:\conv_gc\chrom\temp\mar09\305026
Sample ID : 305026
Acquired : Mar 10, 1998 00:33:29

c:\conv_gc\chrom\temp\mar09\305026 -- Channel A



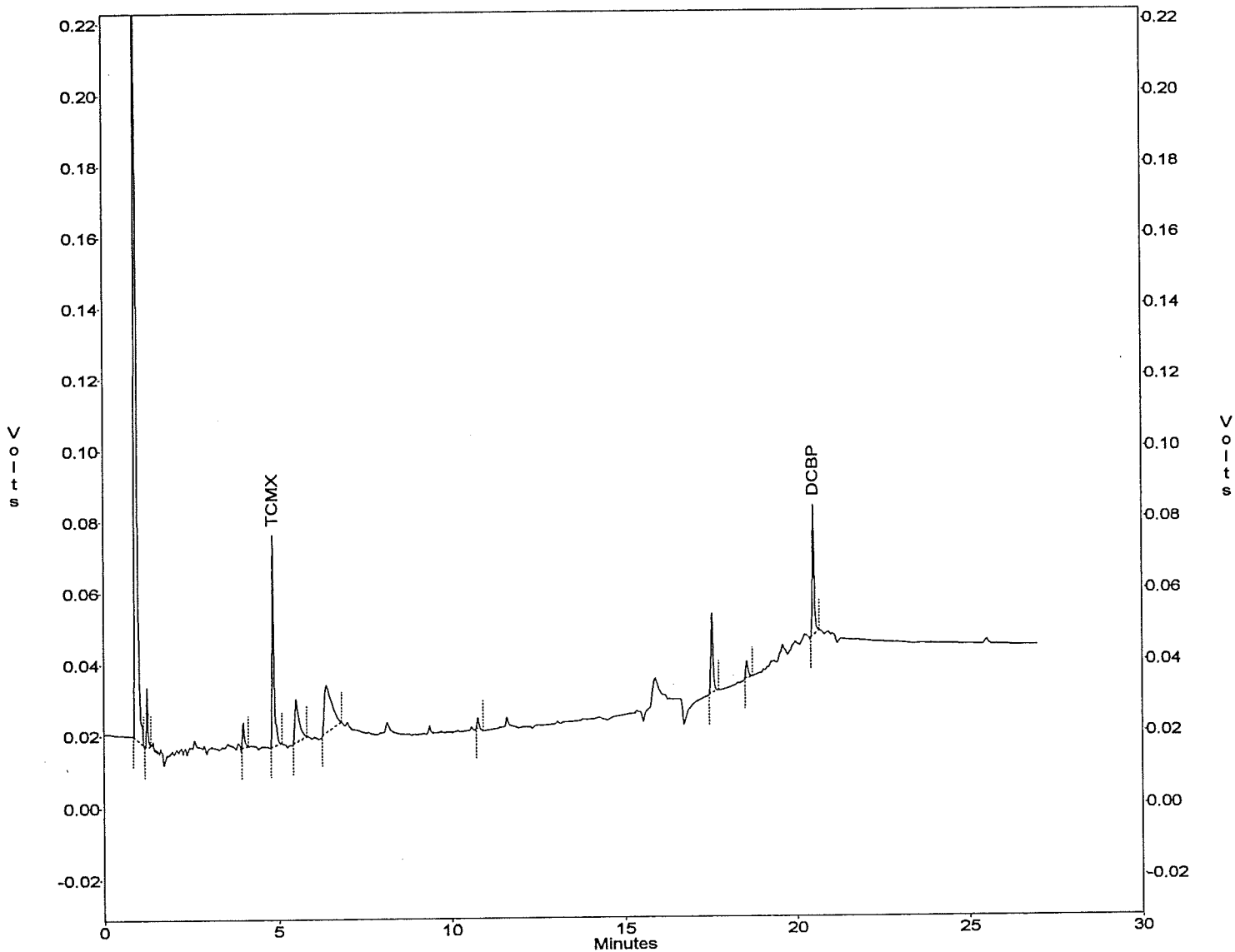
Channel A Results

PEAK #	ANALYTE	RT	AREA	NG/ML
3	TCMX	5.942	249362	43.11
8	DCBP	23.342	197215	33.64

0067

DB1701
File : c:\conv_gc\chrom\temp\mar09\305026f
Method : c:\conv_gc\chrom\temp\surr.met
Sample ID : 305026f
Acquired : Mar 10, 1998 04:47:12

c:\conv_gc\chrom\temp\mar09\305026f -- Channel B

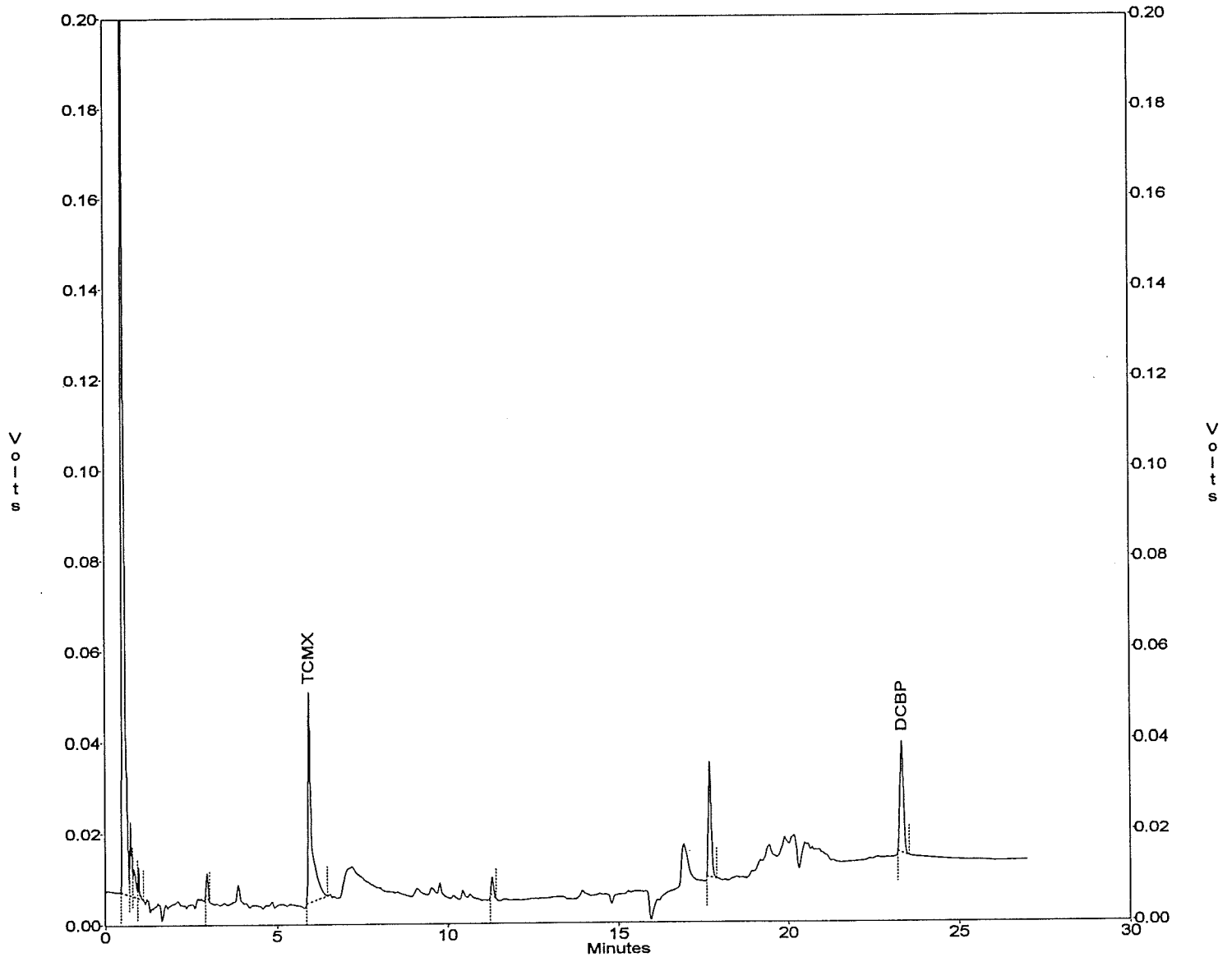


Channel B Results

PEAK #	ANALYTE	RT	AREA	NG/ML
4	TCMX	4.858	223311	44.21
10	DCBP	20.500	146241	32.67

DB608
 File : c:\conv_gc\chrom\temp\mar09\305026f
 Sample ID : 305026f
 Acquired : Mar 10, 1998 04:47:12

c:\conv_gc\chrom\temp\mar09\305026f - Channel A



Channel A Results

PEAK #	ANALYTE	RT	AREA	NG/ML
6	TCMX	5.942	329979	59.07
9	DCBP	23.333	176421	30.06

0069

DB1701

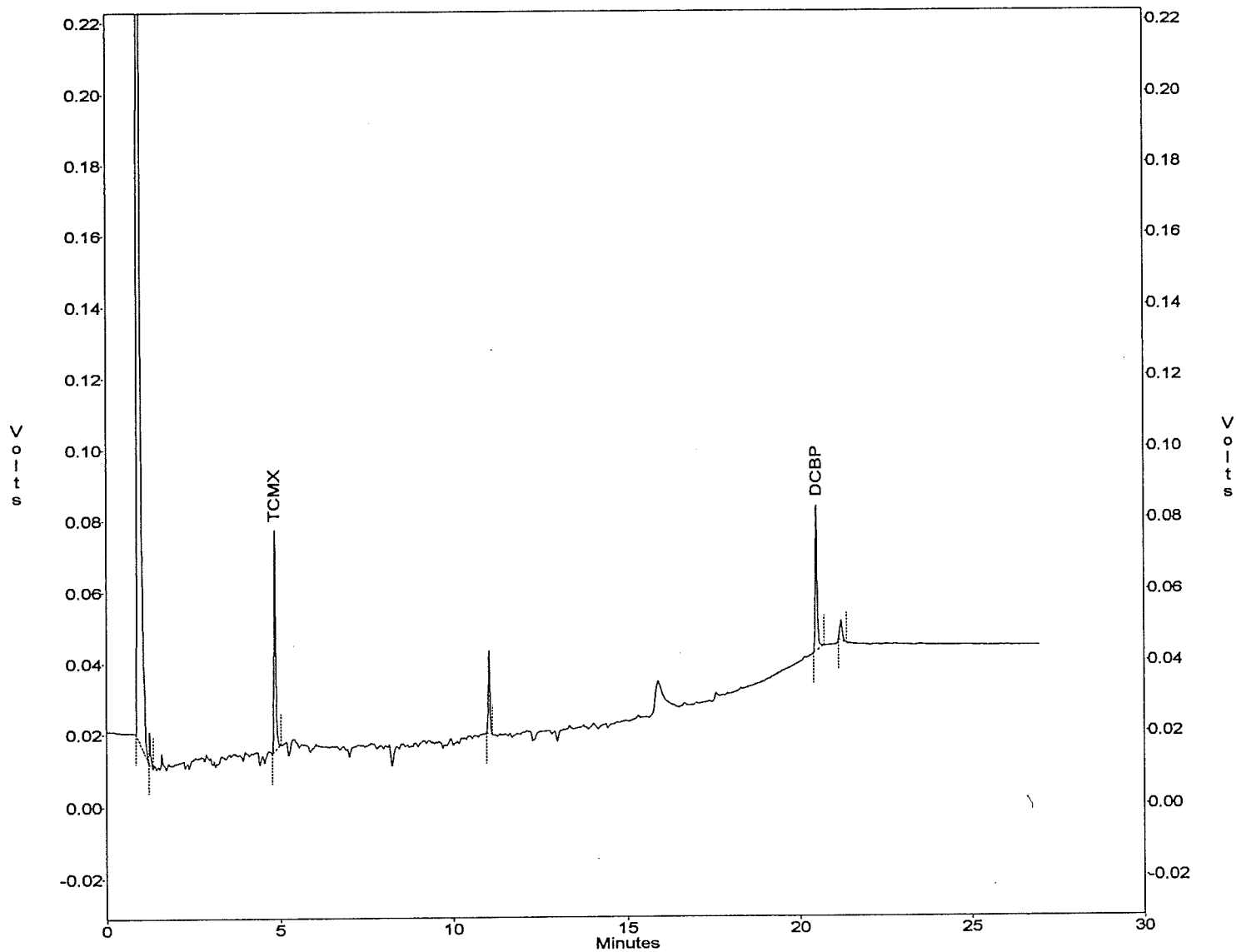
File : c:\conv_gc\chrom\temp\mar09\305027

Method : c:\conv_gc\chrom\temp\surr.met

Sample ID : 305027

Acquired : Mar 10, 1998 01:05:12

c:\conv_gc\chrom\temp\mar09\305027 -- Channel B



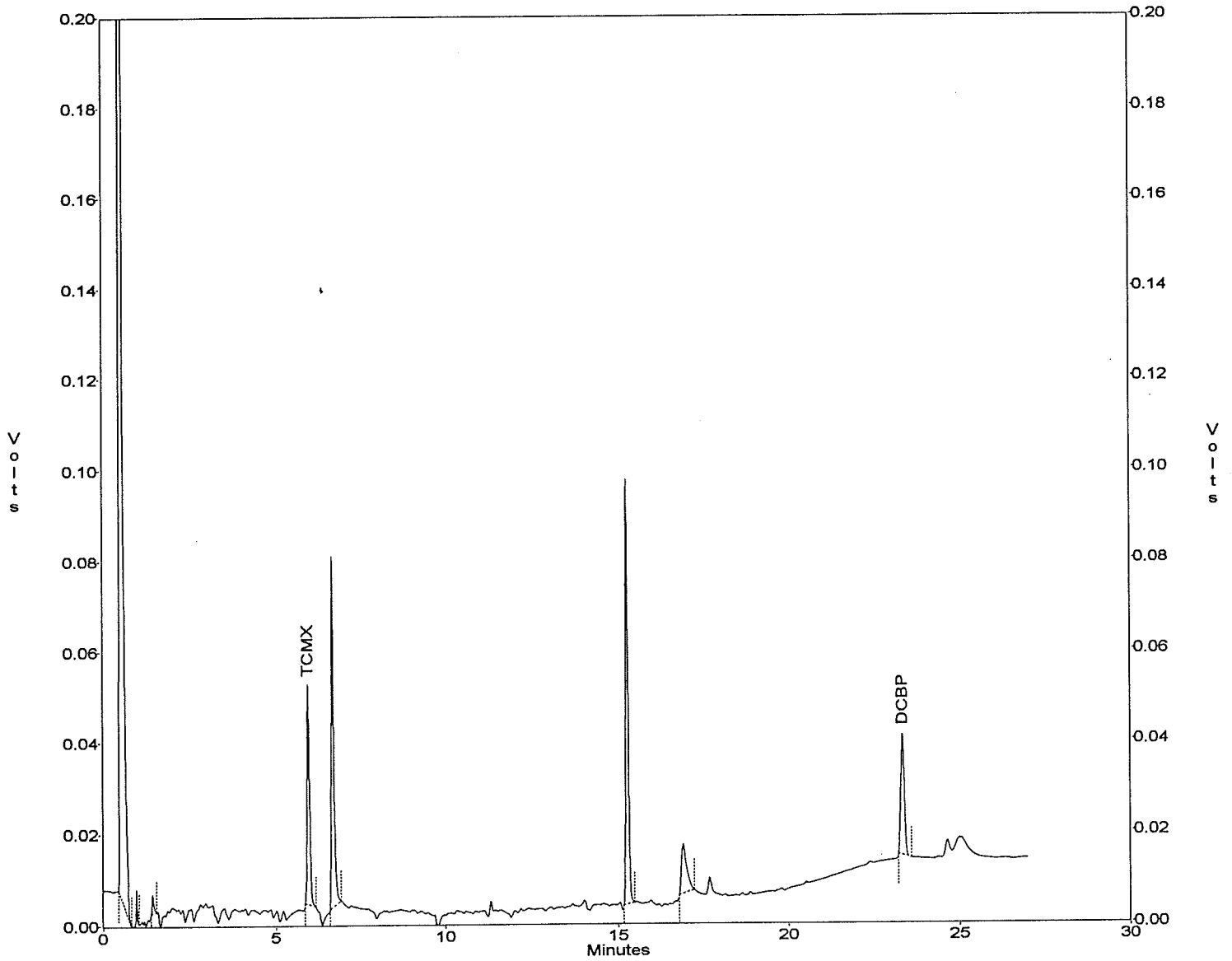
Channel B Results

PEAK #	ANALYTE	RT	AREA	NG/ML
3	TCMX	4.858	219742	43.46
5	DCBP	20.508	165192	36.88

0070

DB608
File : c:\conv_gc\chrom\temp\mar09\305027
Sample ID : 305027
Acquired : Mar 10, 1998 01:05:12

c:\conv_gc\chrom\temp\mar09\305027 -- Channel A



Channel A Results

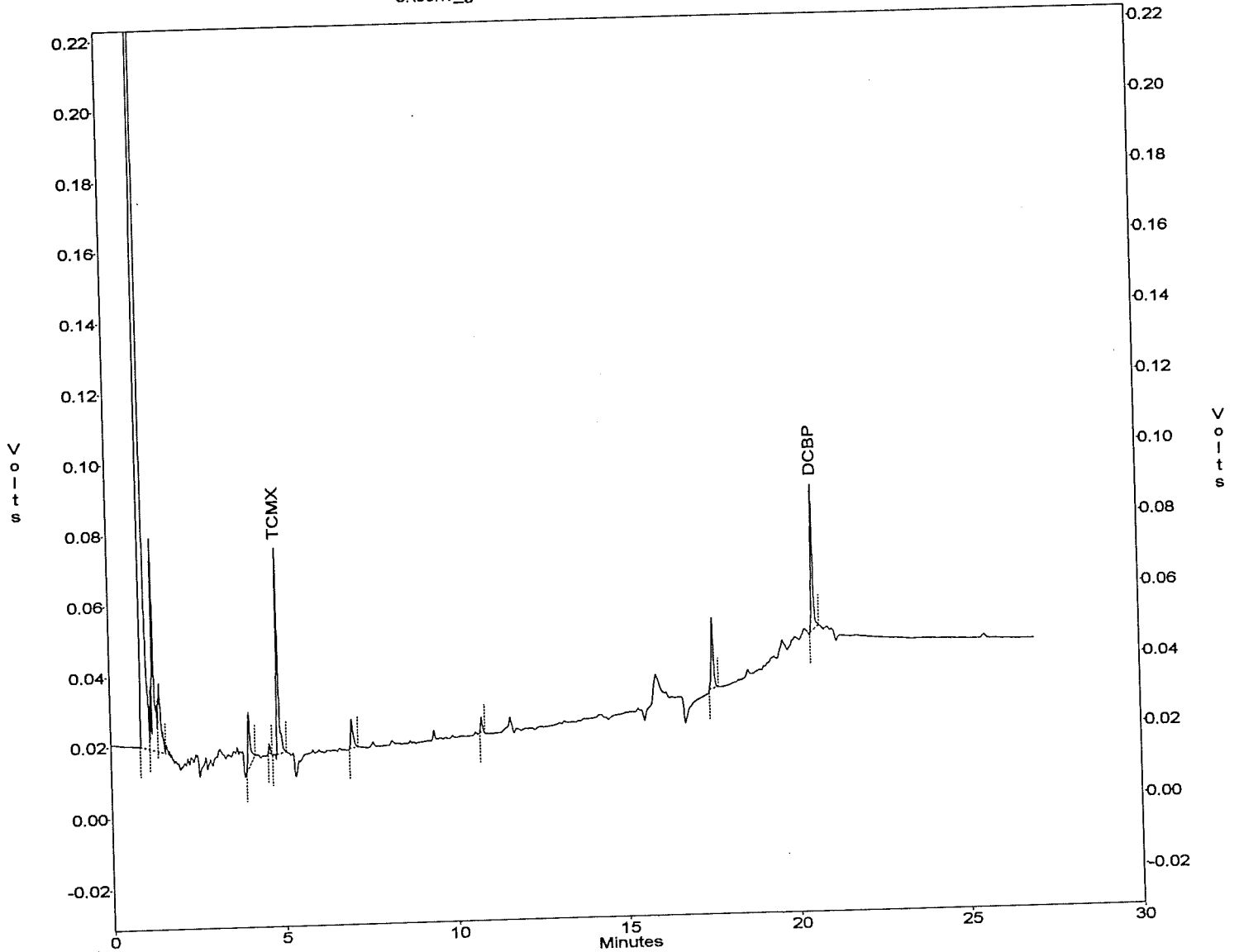
PEAK #	ANALYTE	RT	AREA	NG/ML
4	TCMX	5.942	237625	40.79
8	DCBP	23.342	192303	32.79

0071

DB1701

File : c:\conv_gc\chrom\temp\mar09\305027f
 Method : c:\conv_gc\chrom\temp\surr.met
 Sample ID : 305027f
 Acquired : Mar 10, 1998 05:18:56

c:\conv_gc\chrom\temp\mar09\305027f -- Channel B

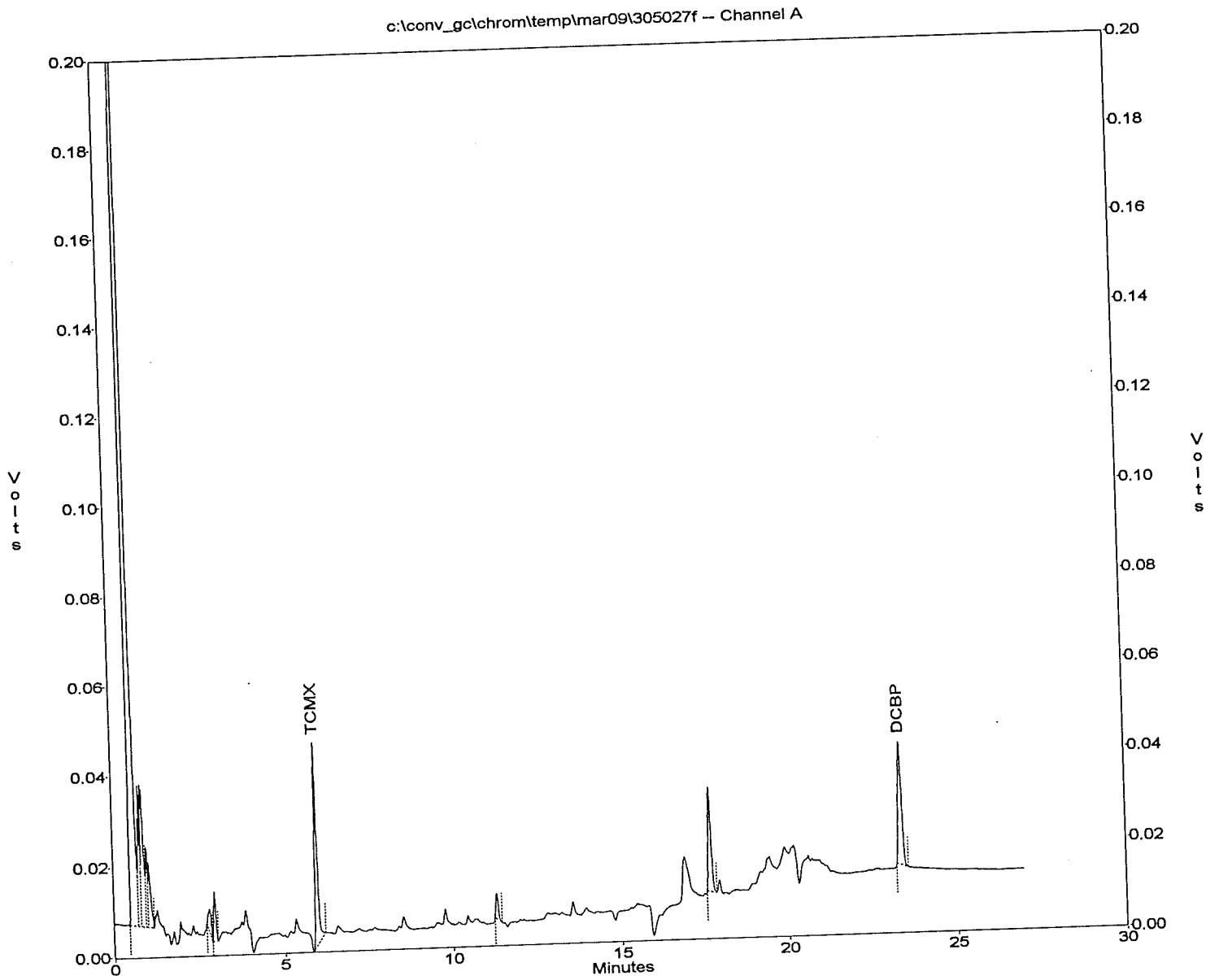


Channel B Results

PEAK #	ANALYTE	RT	AREA	NG/ML
6	TCMX	4.858	211515	41.74
10	DCBP	20.508	164531	36.73

0072

DB608
 File : c:\conv_gc\chrom\temp\mar09\305027f
 Sample ID : 305027f
 Acquired : Mar 10, 1998 05:18:56

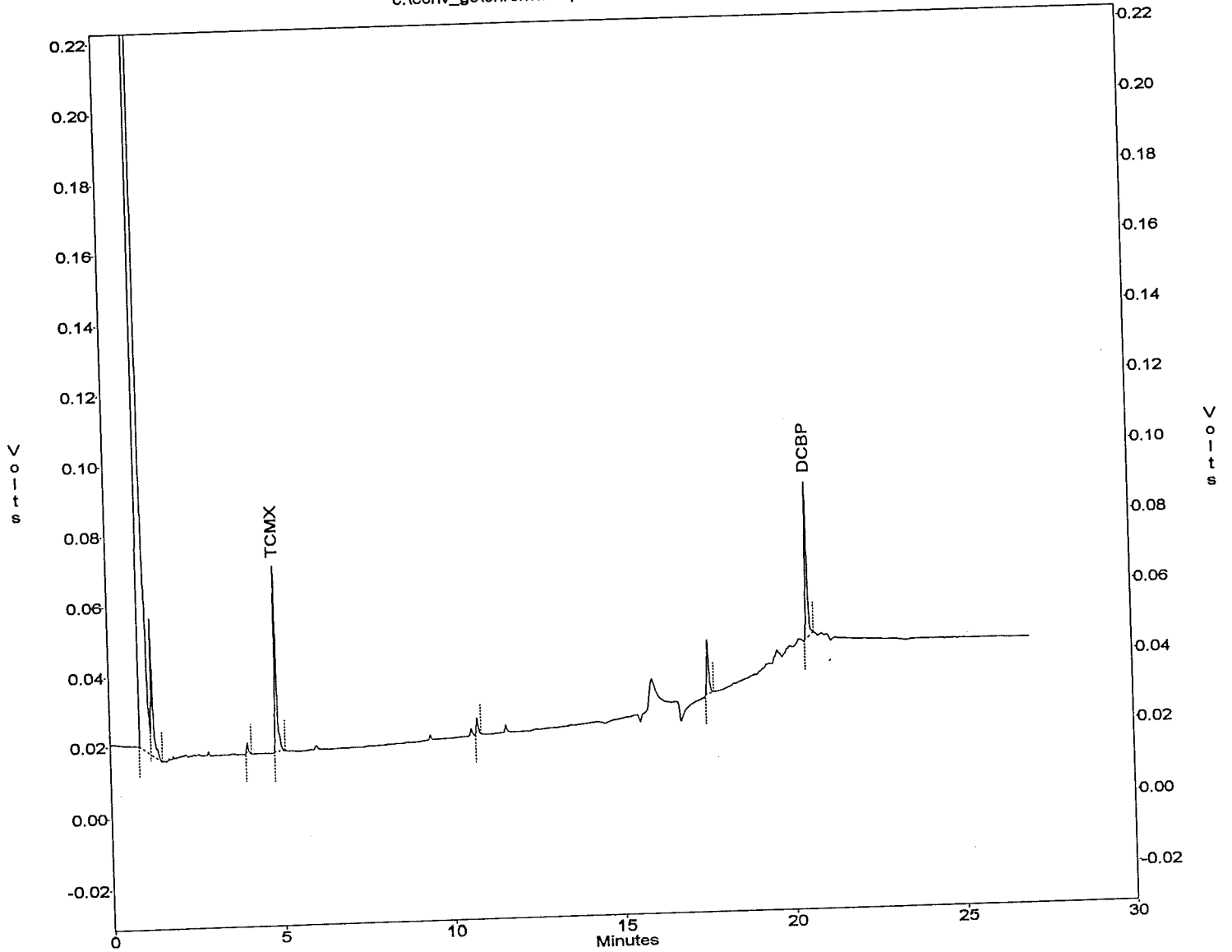


Channel A Results

PEAK #	ANALYTE	RT	AREA	NG/ML
8	TCMX	5.942	220533	37.66
11	DCBP	23.342	198589	33.88

DB1701
 File : c:\conv_gc\chrom\temp\mar09\305028
 Method : c:\conv_gc\chrom\temp\surr.met
 Sample ID : 305028
 Acquired : Mar 10, 1998 01:36:54

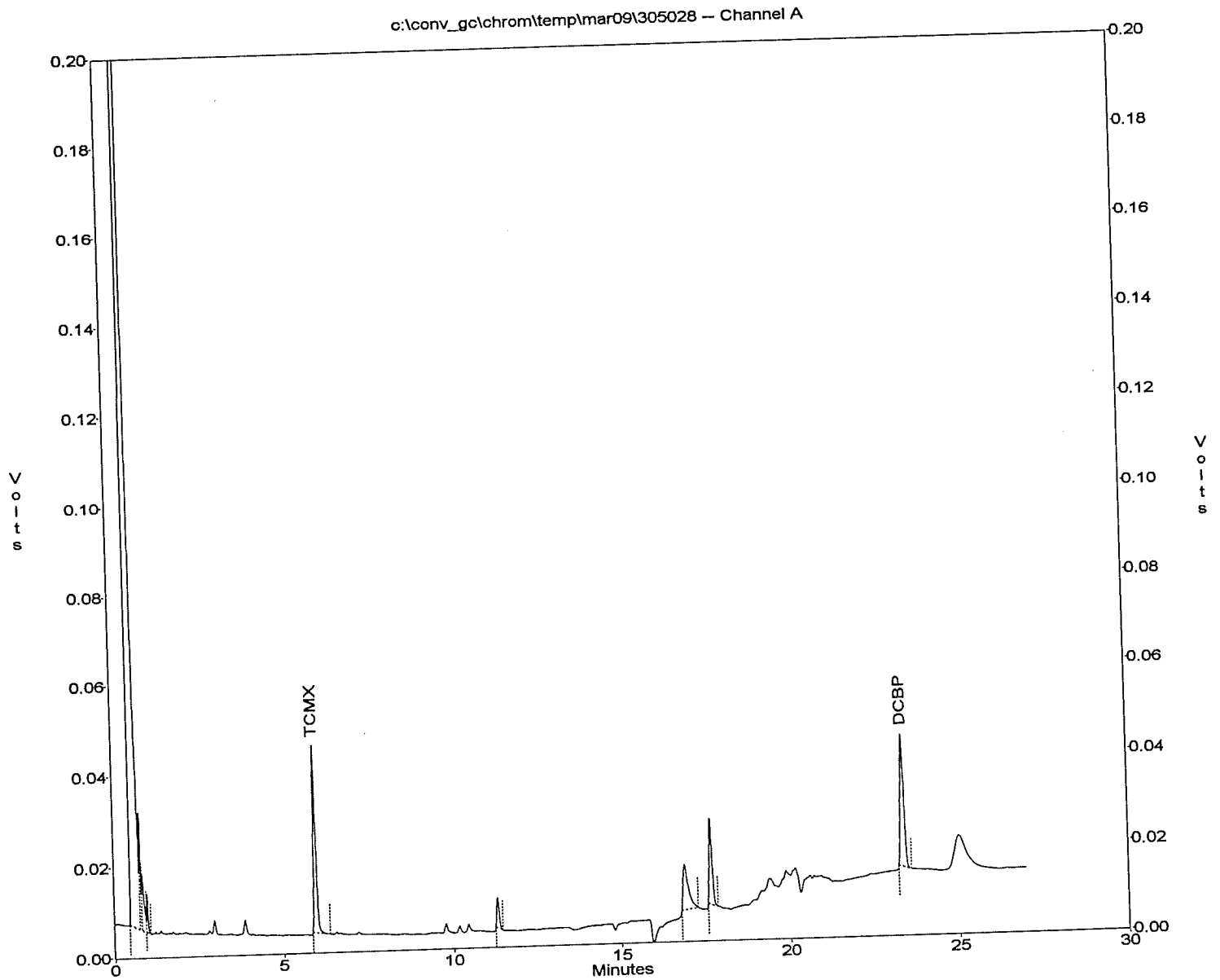
c:\conv_gc\chrom\temp\mar09\305028 -- Channel B



Channel B Results

PEAK #	ANALYTE	RT	AREA	NG/ML
4	TCMX	4.858	200555	39.47
7	DCBP	20.508	175537	39.18

DB608
 File : c:\conv_gc\chrom\temp\mar09\305028
 Sample ID : 305028
 Acquired : Mar 10, 1998 01:36:54



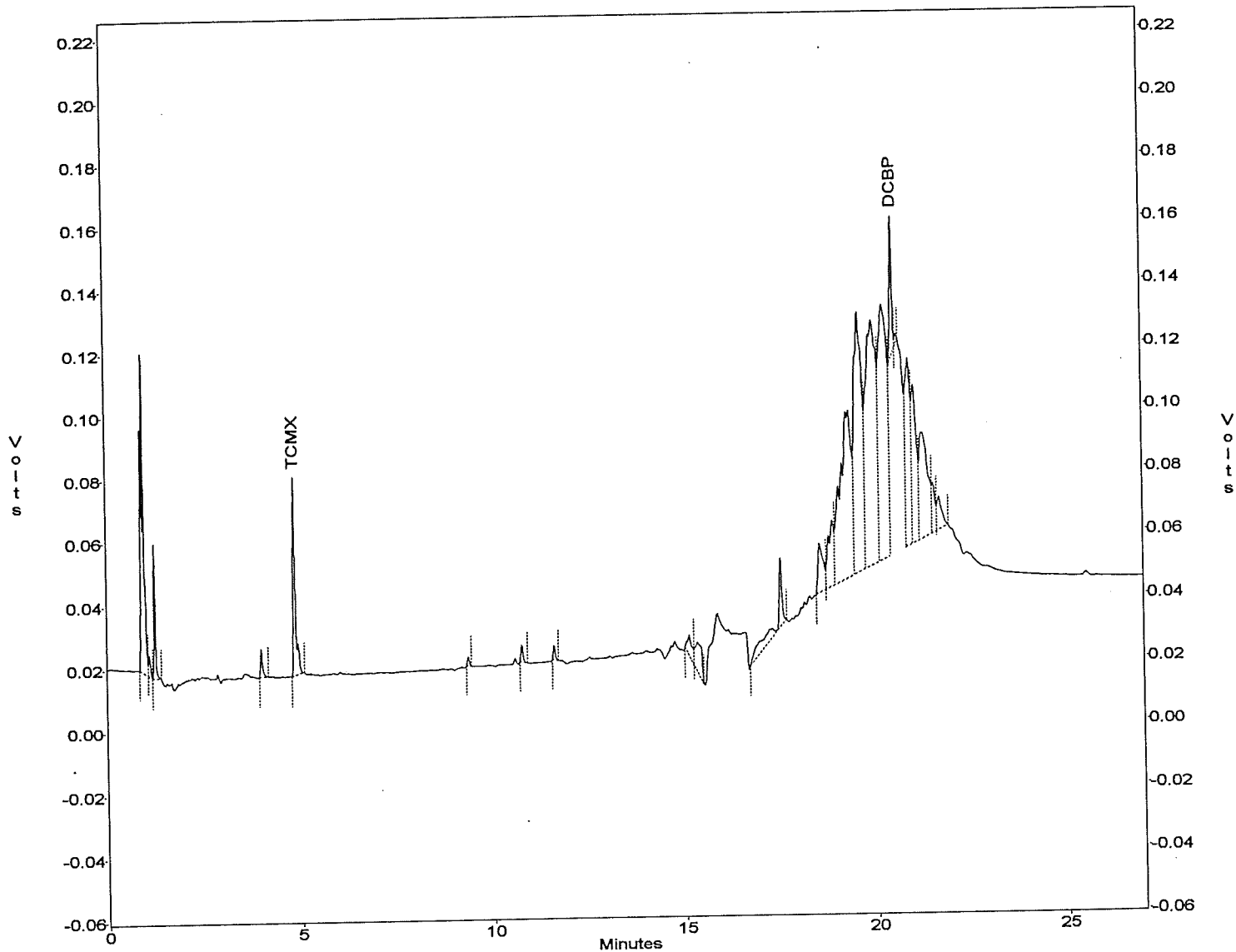
Channel A Results

PEAK #	ANALYTE	RT	AREA	NG/ML
5	TCMX	5.942	203862	34.68
9	DCBP	23.342	210540	35.93

0075

DB1701
 File : c:\conv_gc\chrom\temp\mar09\305028f
 Method : c:\conv_gc\chrom\temp\surr.met
 Sample ID : 305028f
 Acquired : Mar 10, 1998 05:50:38

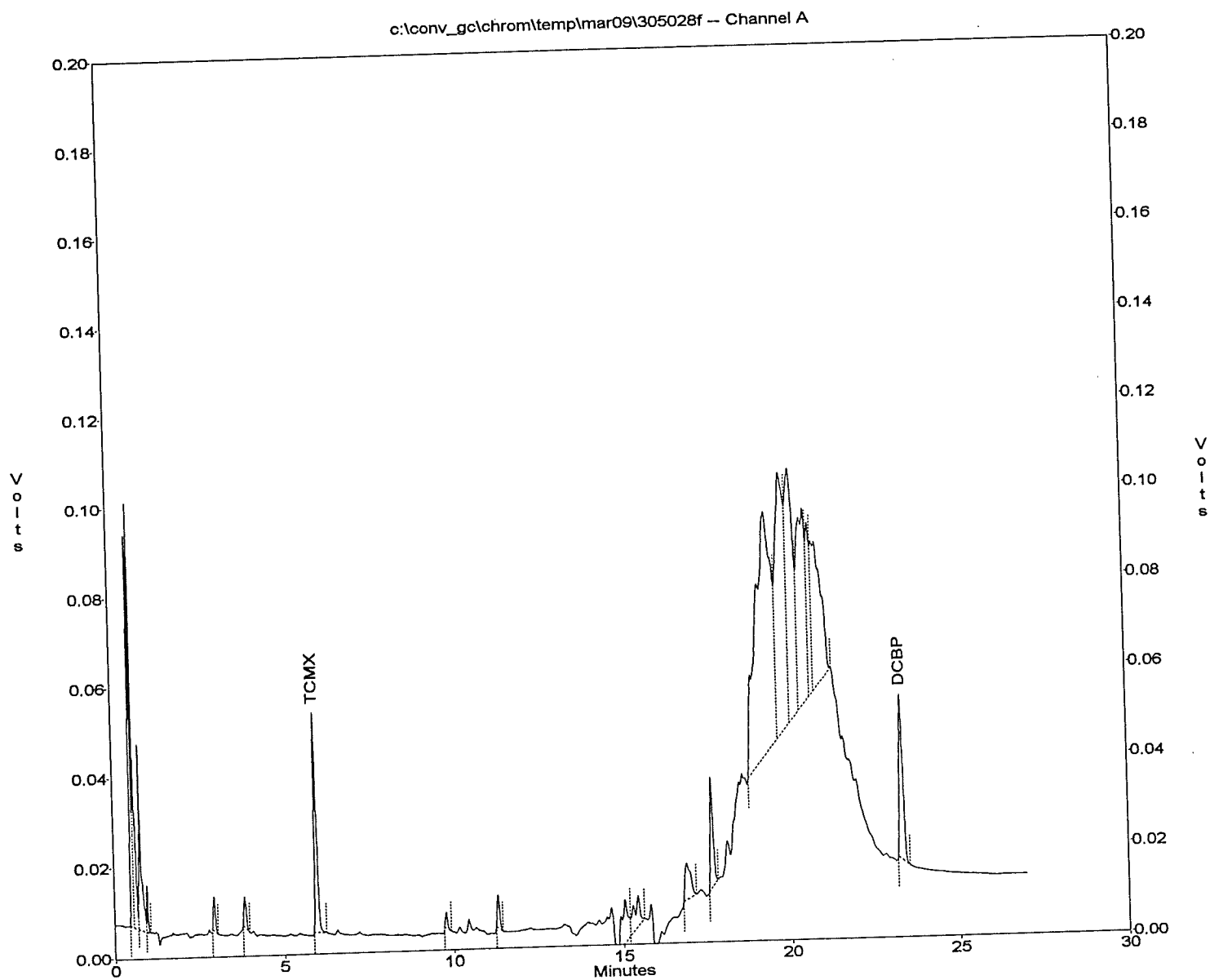
c:\conv_gc\chrom\temp\mar09\305028f -- Channel B



Channel B Results

PEAK #	ANALYTE	RT	AREA	NG/ML
5	TCMX	4.858	251362	50.09
18	DCBP	20.500	172068	38.41

DB608
File : c:\conv_gc\chrom\temp\mar09\305028f
Sample ID : 305028f
Acquired : Mar 10, 1998 05:50:38



Channel A Results

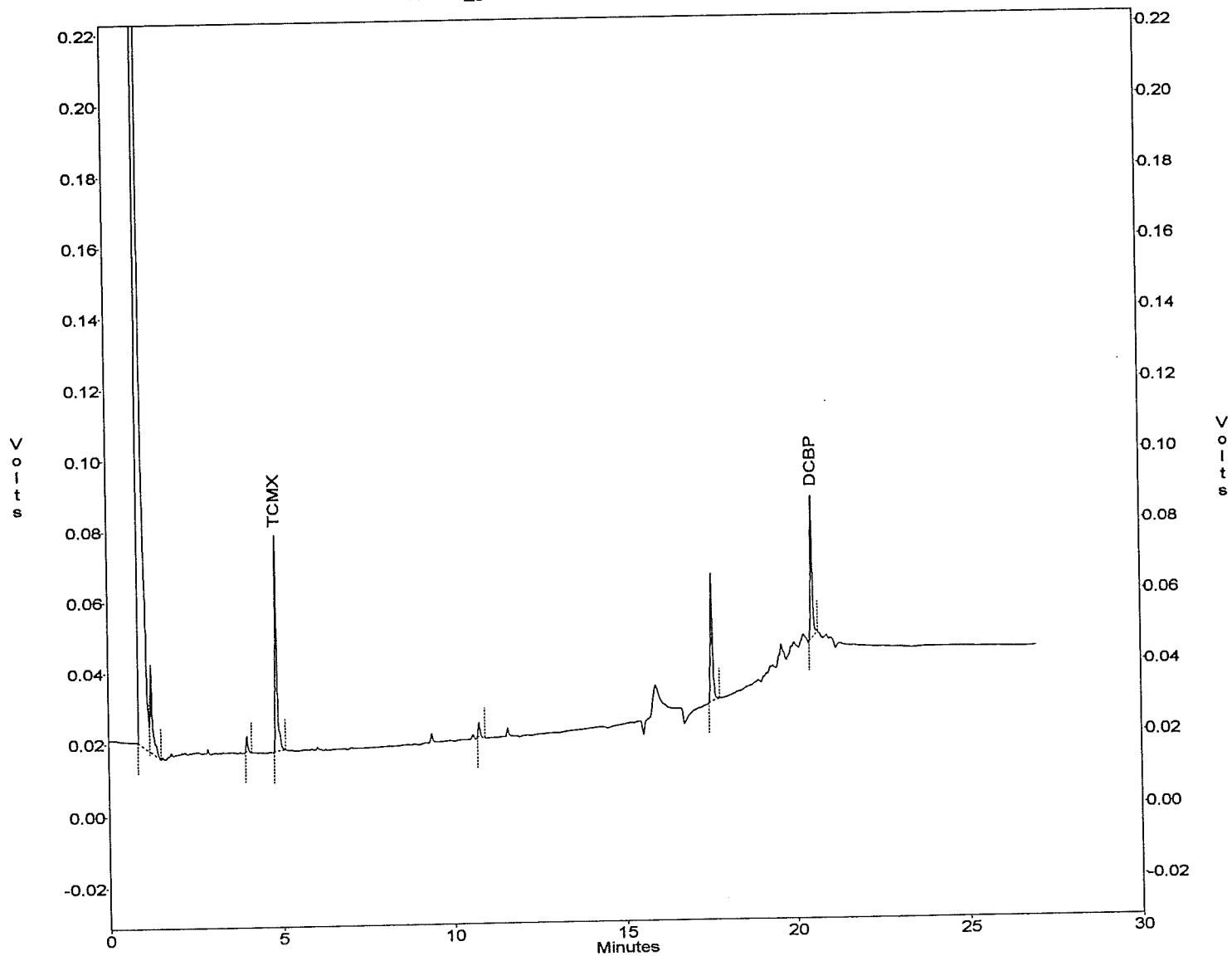
PEAK #	ANALYTE	RT	AREA	NG/ML
7	TCMX	5.942	234290	40.13
20	DCBP	23.333	266946	45.95

0077

DB1701

File : c:\conv_gc\chrom\temp\mar09\pblk01
 Method : c:\conv_gc\chrom\temp\surr.met
 Sample ID : pblk01
 Acquired : Mar 10, 1998 06:22:23

c:\conv_gc\chrom\temp\mar09\pblk01 -- Channel B

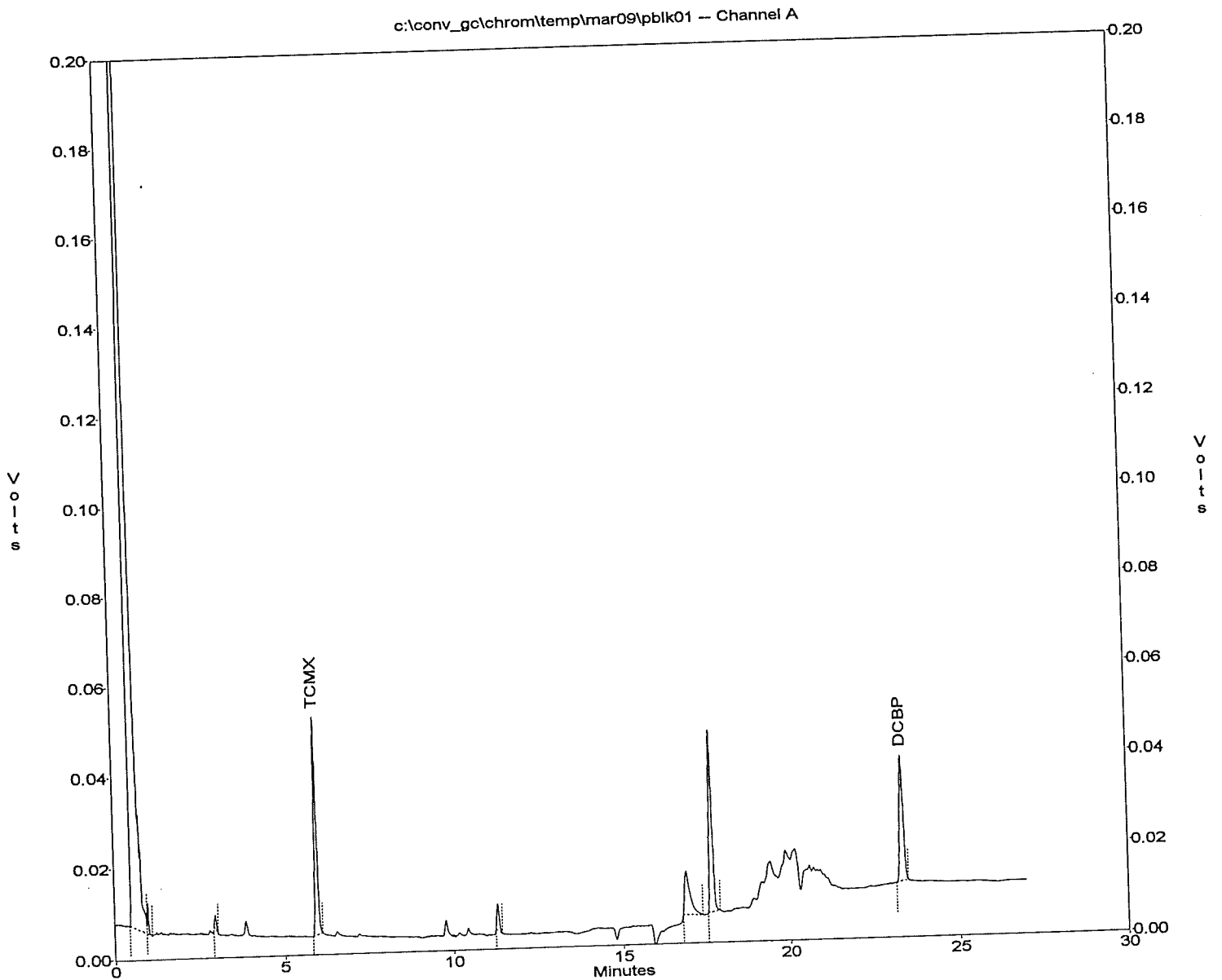


Channel B Results

PEAK #	ANALYTE	RT	AREA	NG/ML
4	TCMX	4.858	231019	45.82
7	DCBP	20.508	160591	35.86

0078

DB608
 File : c:\conv_gc\chrom\temp\mar09\pblk01
 Sample ID : pblk01
 Acquired : Mar 10, 1998 06:22:23



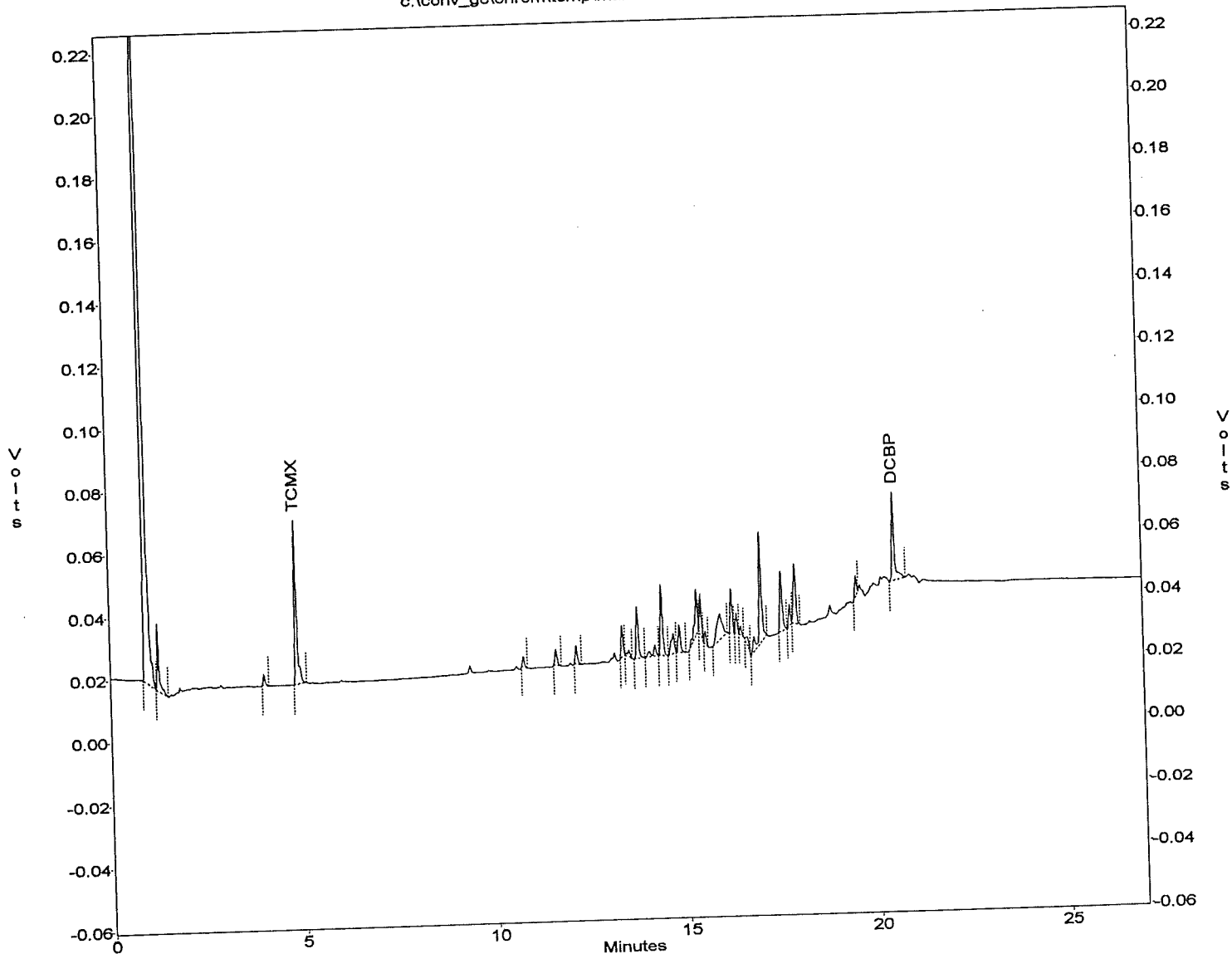
Channel A Results

PEAK #	ANALYTE	RT	AREA	NG/ML
4	TCMX	5.942	231910	39.69
8	DCBP	23.342	207751	35.45

0079

DB1701
 File : c:\conv_gc\chrom\temp\mar09\lcs01
 Method : c:\conv_gc\chrom\temp\surr.met
 Sample ID : lcs01 3/7
 Acquired : Mar 10, 1998 06:54:06

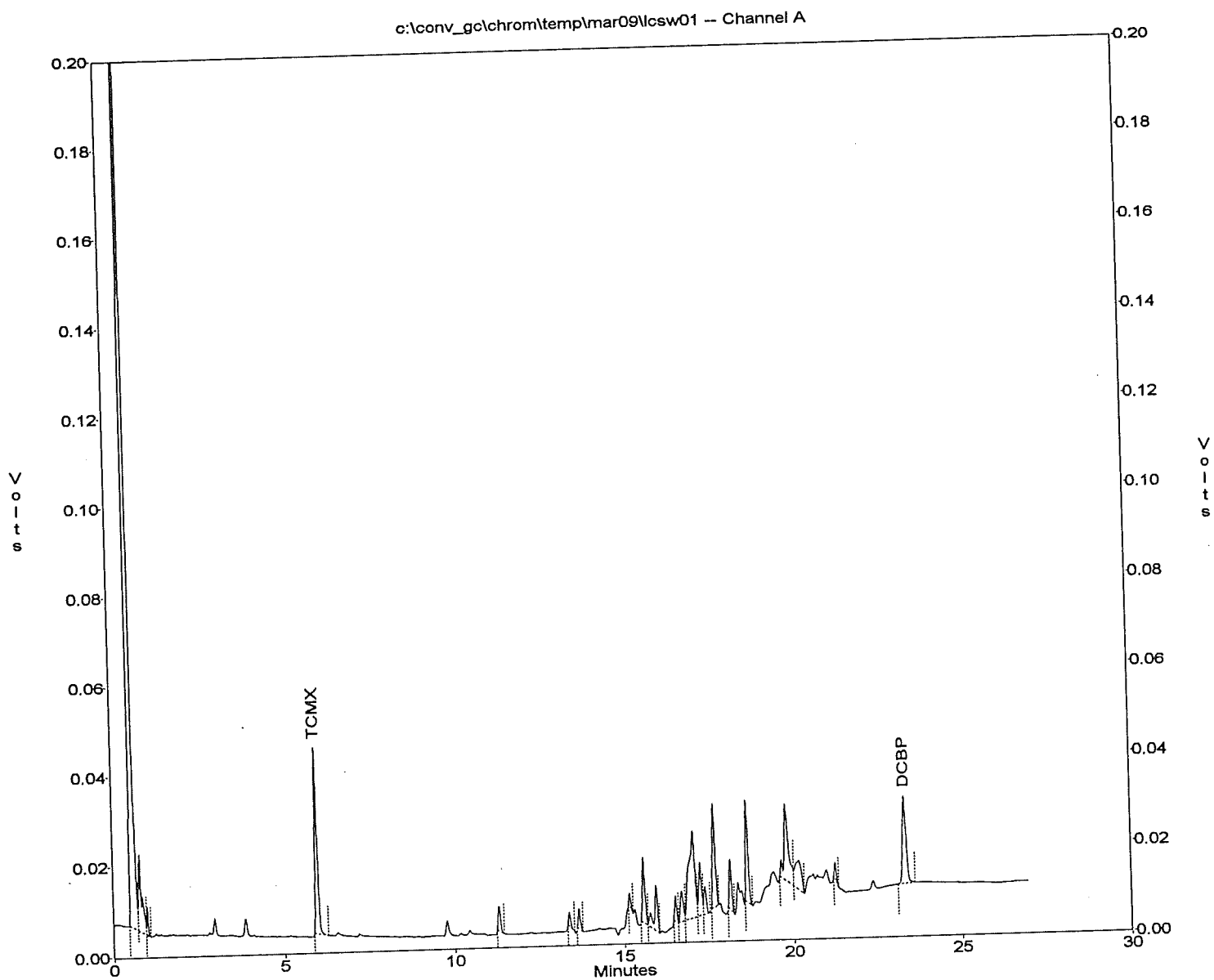
c:\conv_gc\chrom\temp\mar09\lcs01 -- Channel B



Channel B Results

PEAK #	ANALYTE	RT	AREA	NG/ML
4	TCMX	4.858	202477	39.85
28	DCBP	20.500	131938	29.49

DB608
 File : c:\conv_gc\chrom\temp\mar09\lcs01
 Sample ID : lcs01 3/7
 Acquired : Mar 10, 1998 06:54:06

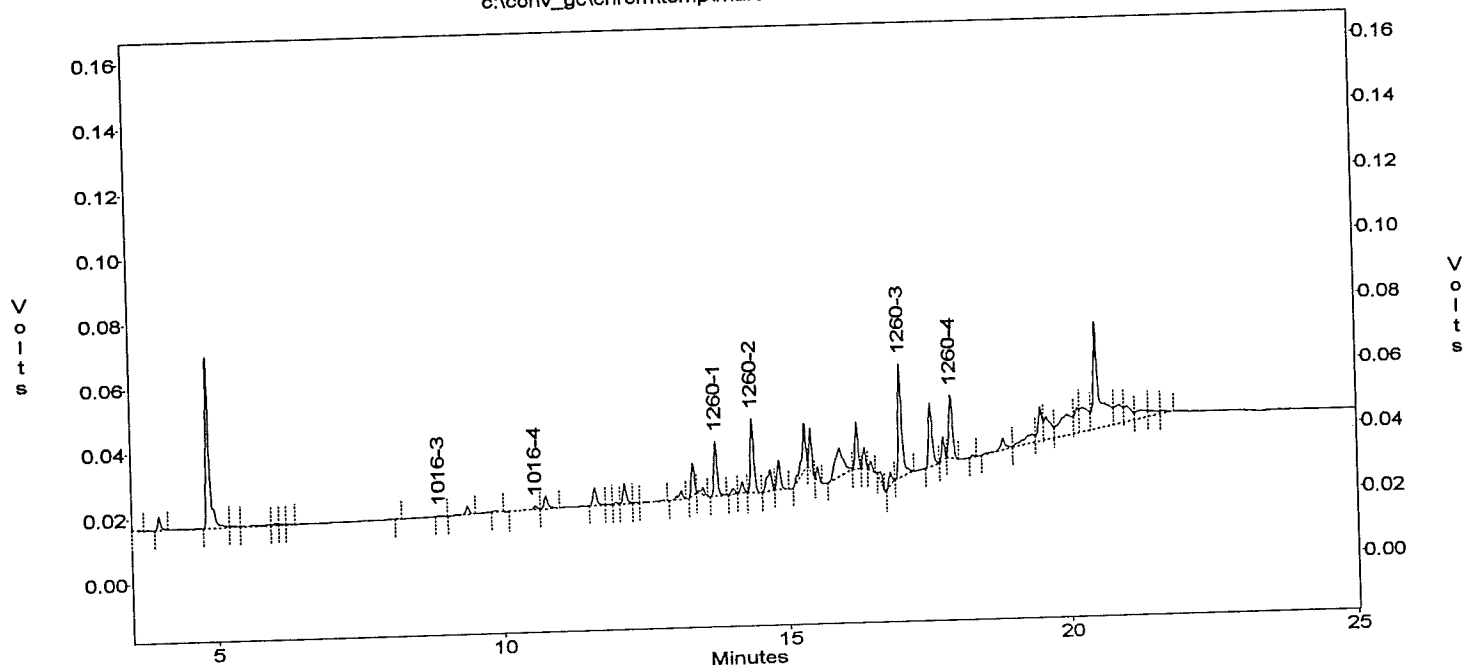


Channel A Results

PEAK #	ANALYTE	RT	AREA	NG/ML
4	TCMX	5.942	197747	33.59
22	DCBP	23.333	148495	25.25

DB1701
 File : c:\conv_gc\chrom\temp\mar09\lcsW01
 Method : c:\conv_gc\chrom\temp\pcb2.met
 Sample ID : lcsW 3/7
 Acquired : Mar 10, 1998 06:54:06

c:\conv_gc\chrom\temp\mar09\lcsW01 -- Channel B



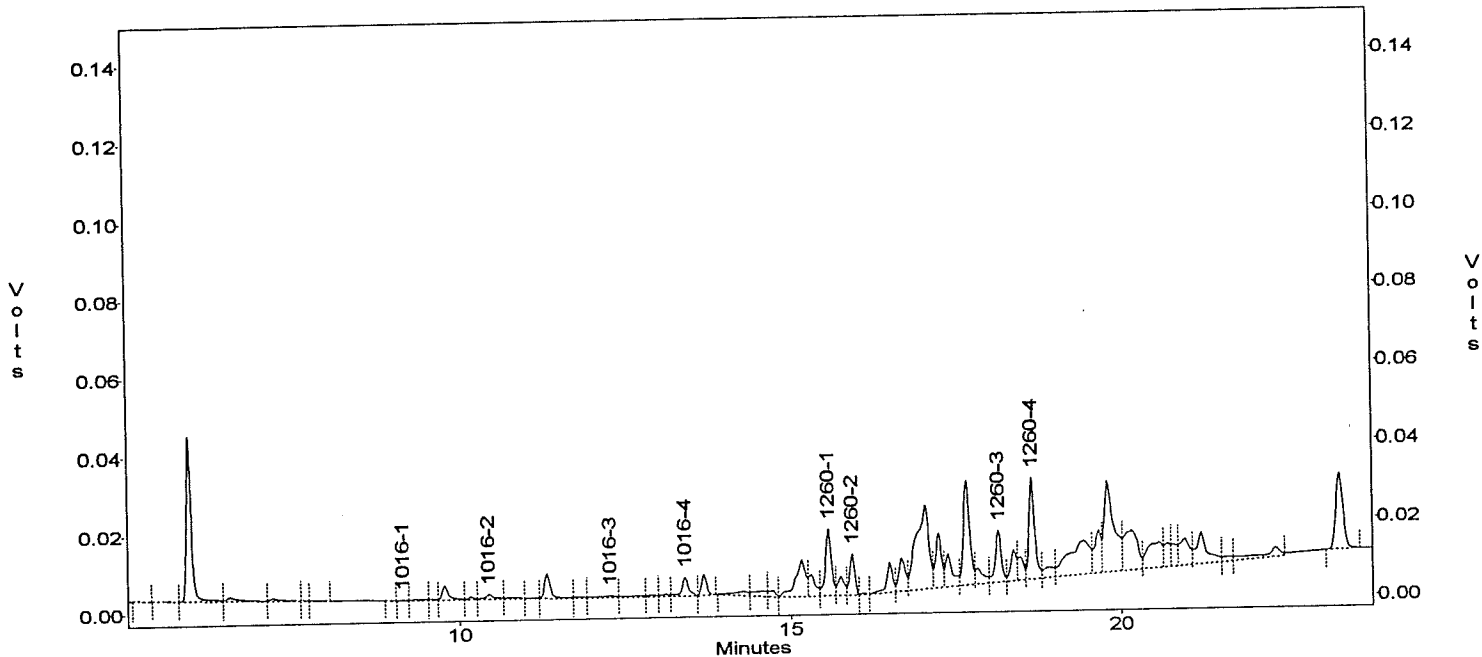
Channel B Results

PEAK #	ANALYTE	RT	AREA	NG/ML
--	1016-1	6.558	0	0.00
--	1016-2	7.633	0	0.00
10	1016-3	8.867	2050	0.00
13	1016-4	10.592	5509	0.02
24	1260-1	13.775	68434	0.22
27	1260-2	14.408	94528	0.20
39	1260-3	17.017	157360	0.21
42	1260-4	17.917	84860	0.17

0.20 ng/ml
 TV = 0.25
 80%

DB608
 File : c:\conv_gc\chrom\temp\mar09\lcs01
 Sample ID : lcs01 3/7
 Acquired : Mar 10, 1998 06:54:06

c:\conv_gc\chrom\temp\mar09\lcs01 -- Channel A



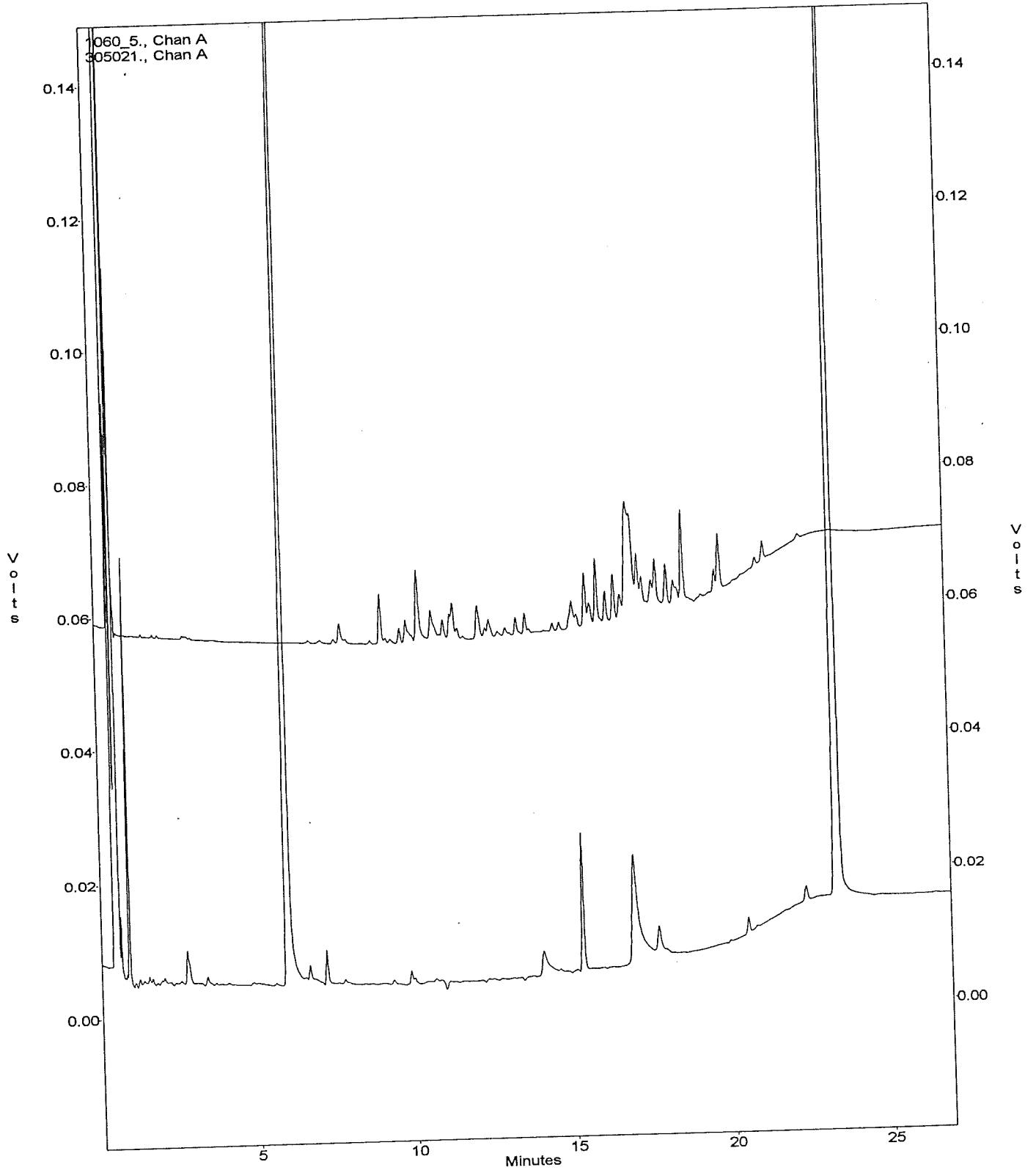
Channel A Results

PEAK #	ANALYTE	RT	AREA	NG/ML
32	1016-1	9.142	1332	0.00
37	1016-2	10.442	12066	0.01
42	1016-3	12.275	6545	0.02
46	1016-4	13.408	32488	0.22
53	1260-1	15.583	109445	0.27
55	1260-2	15.942	55189	0.10
64	1260-3	18.150	83346	0.21
67	1260-4	18.650	156199	0.18

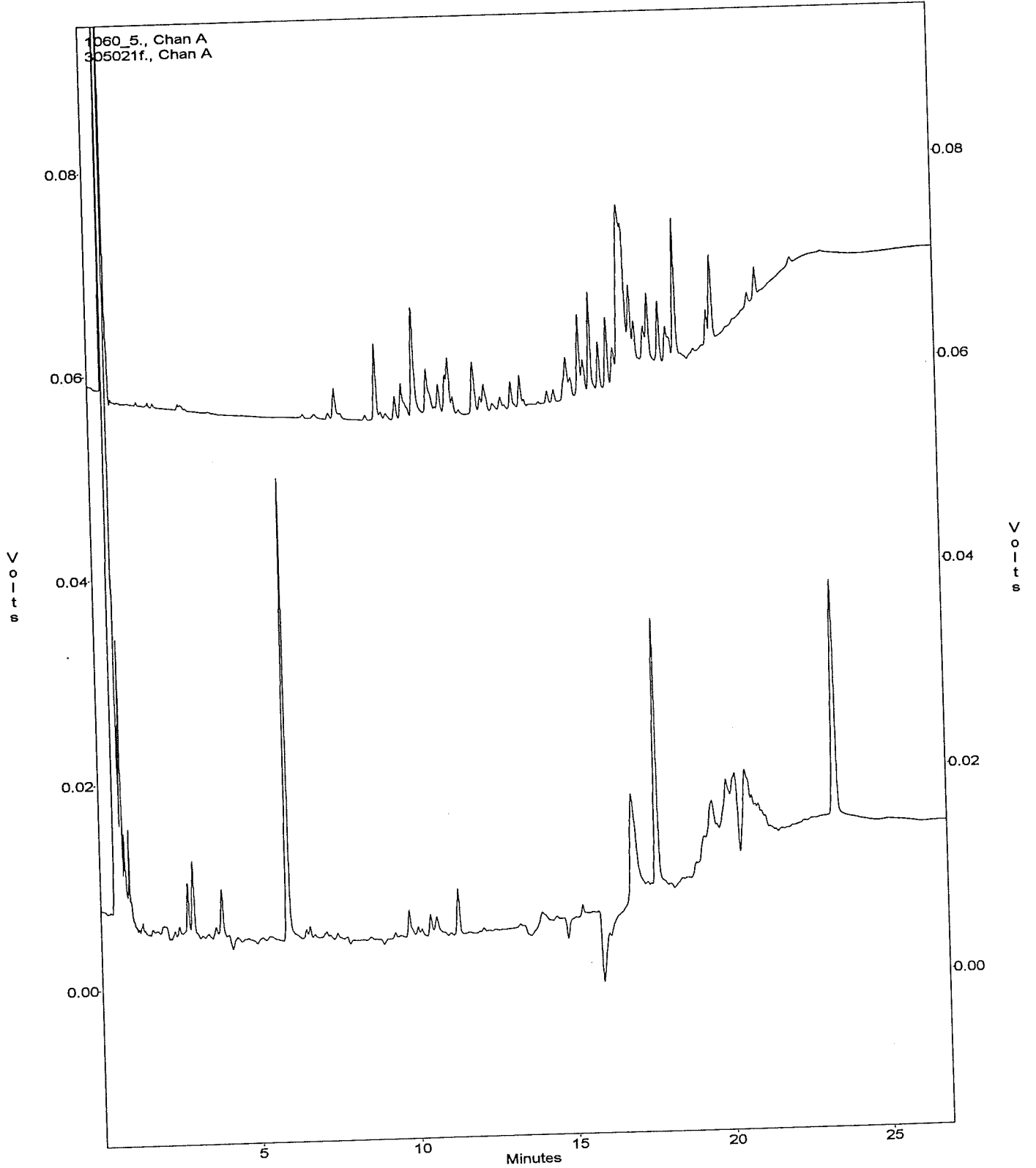
Handwritten notes:
 0.19 mg/ml
 TV = 0.25
 76%

Overlaid Traces

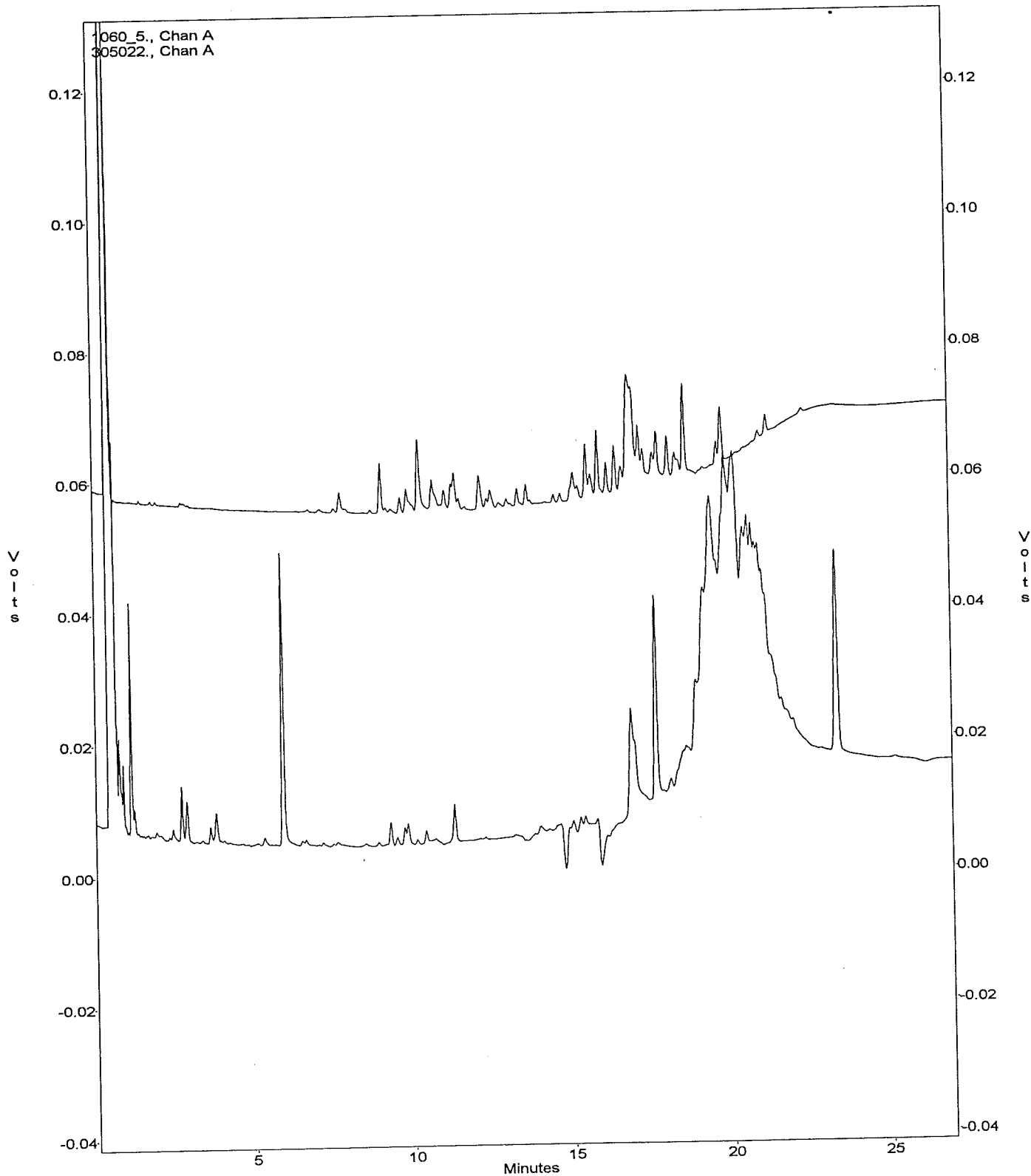
Overlaid Traces



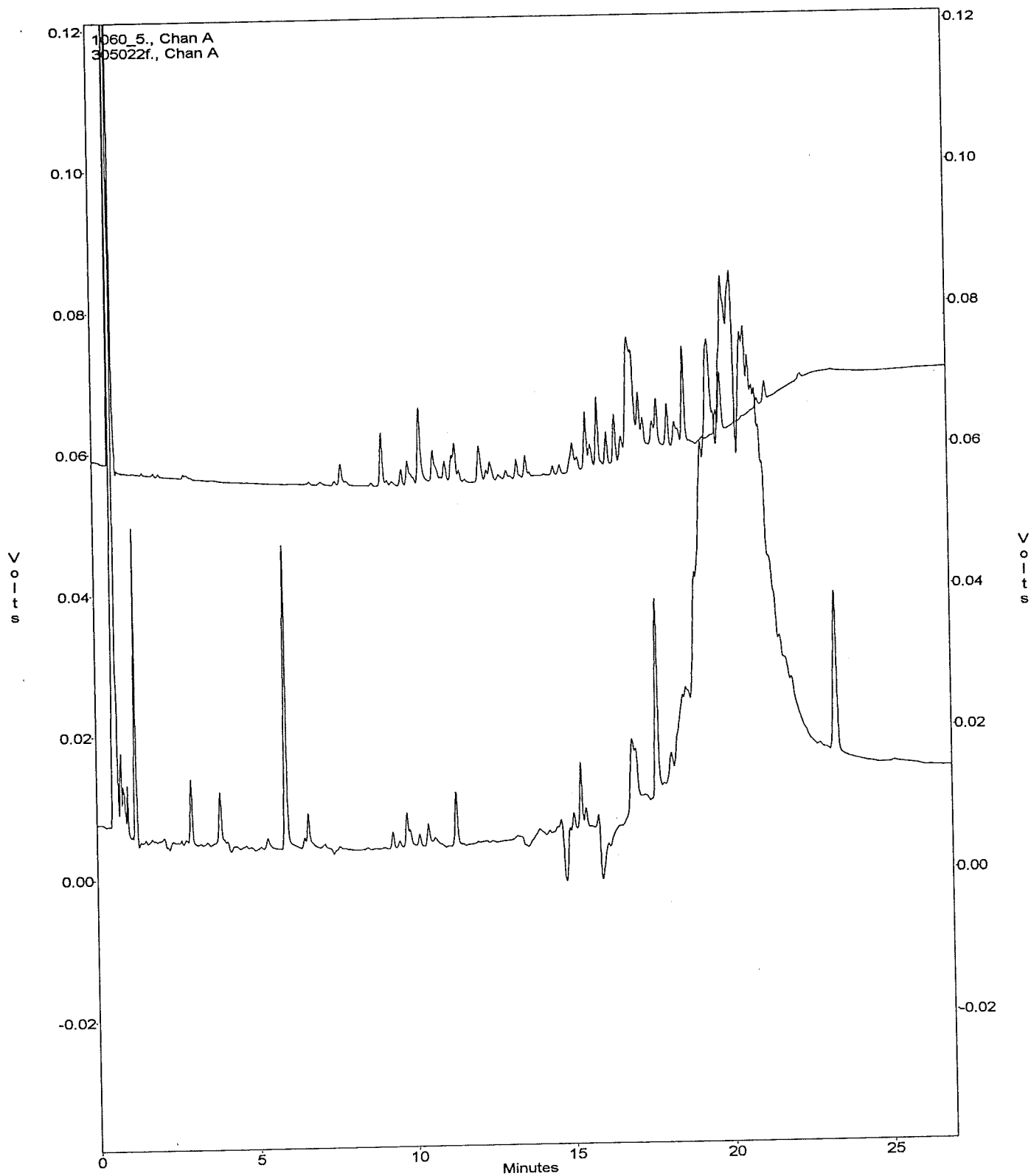
Overlaid Traces



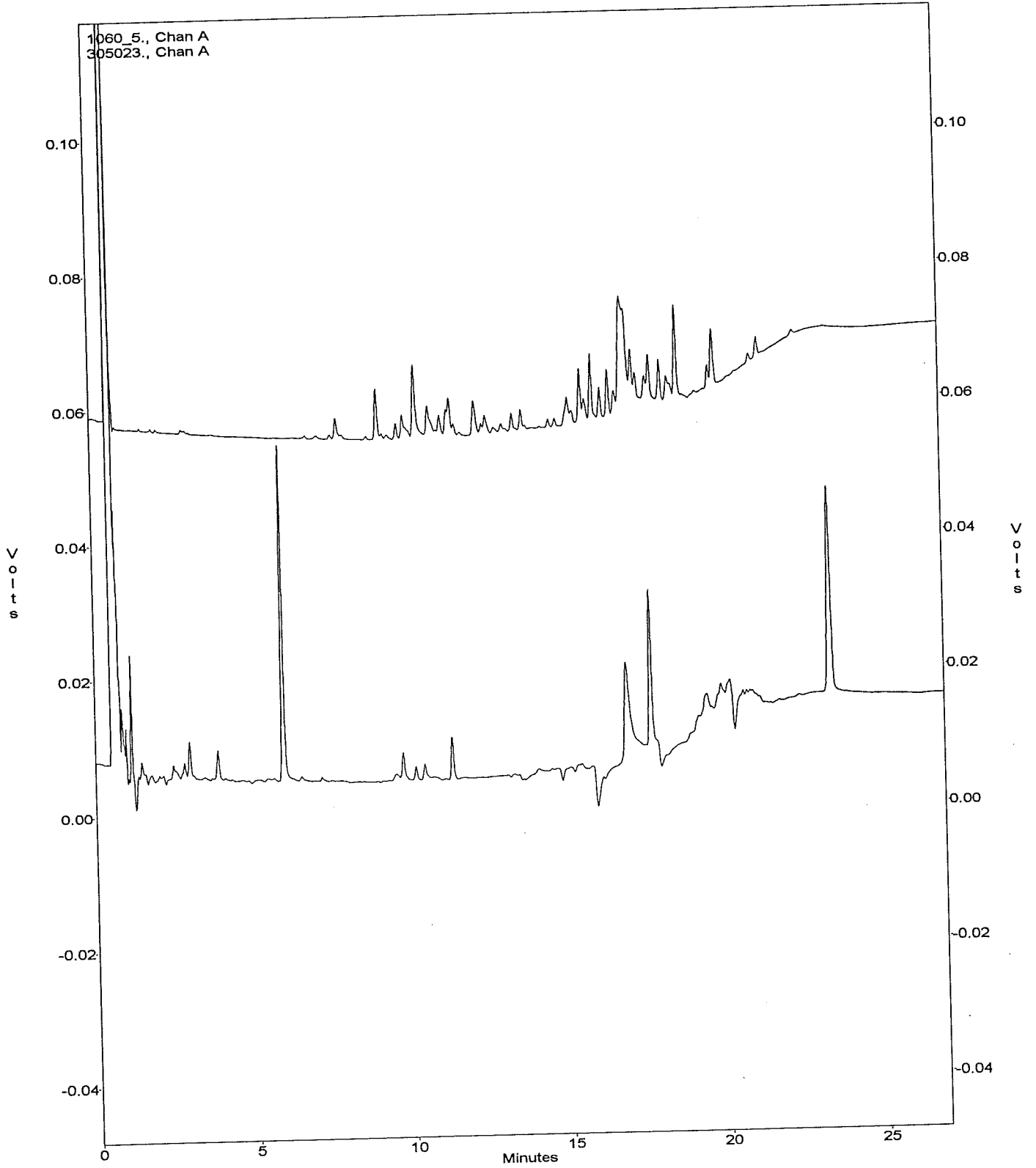
Overlaid Traces



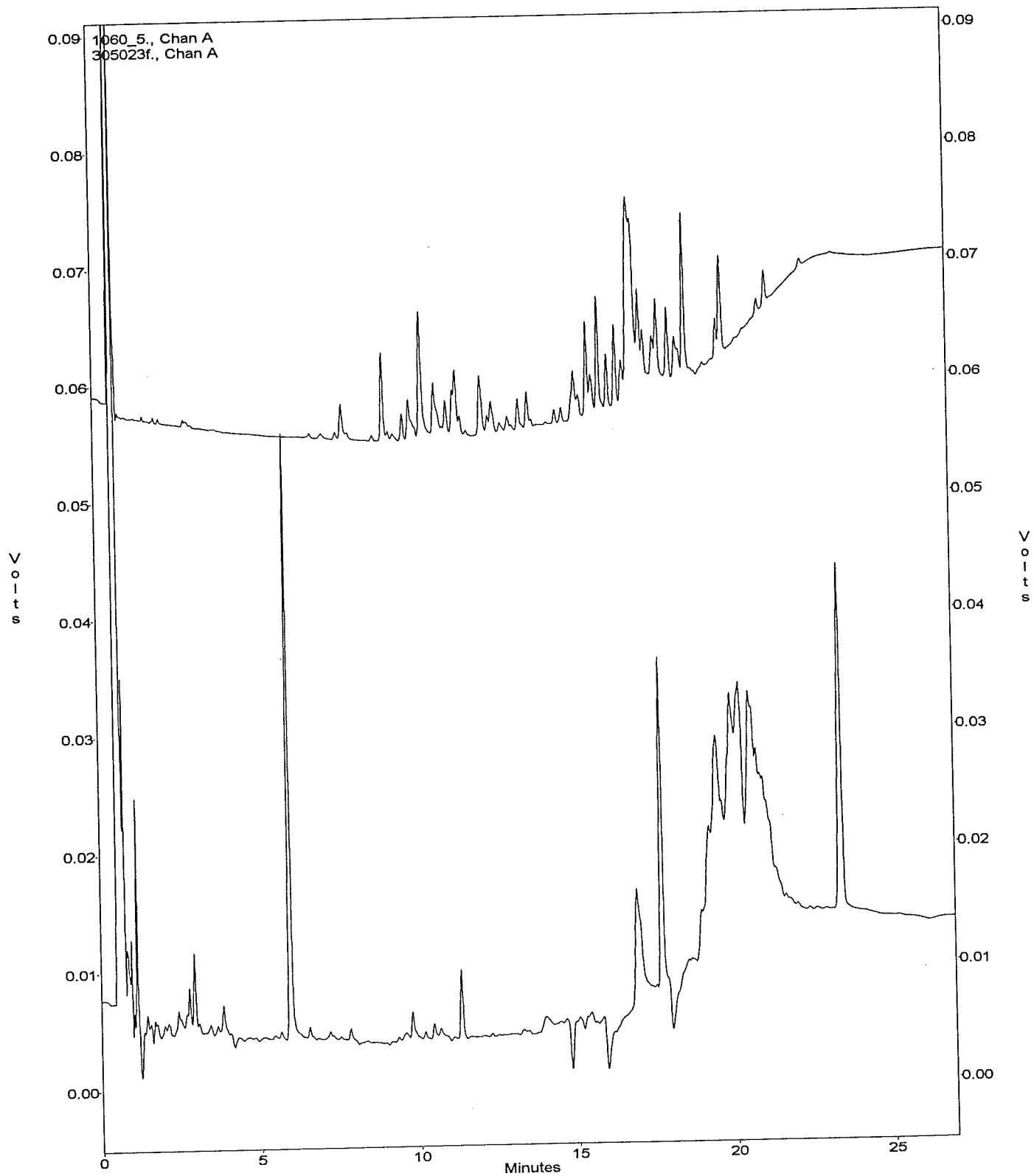
Overlaid Traces



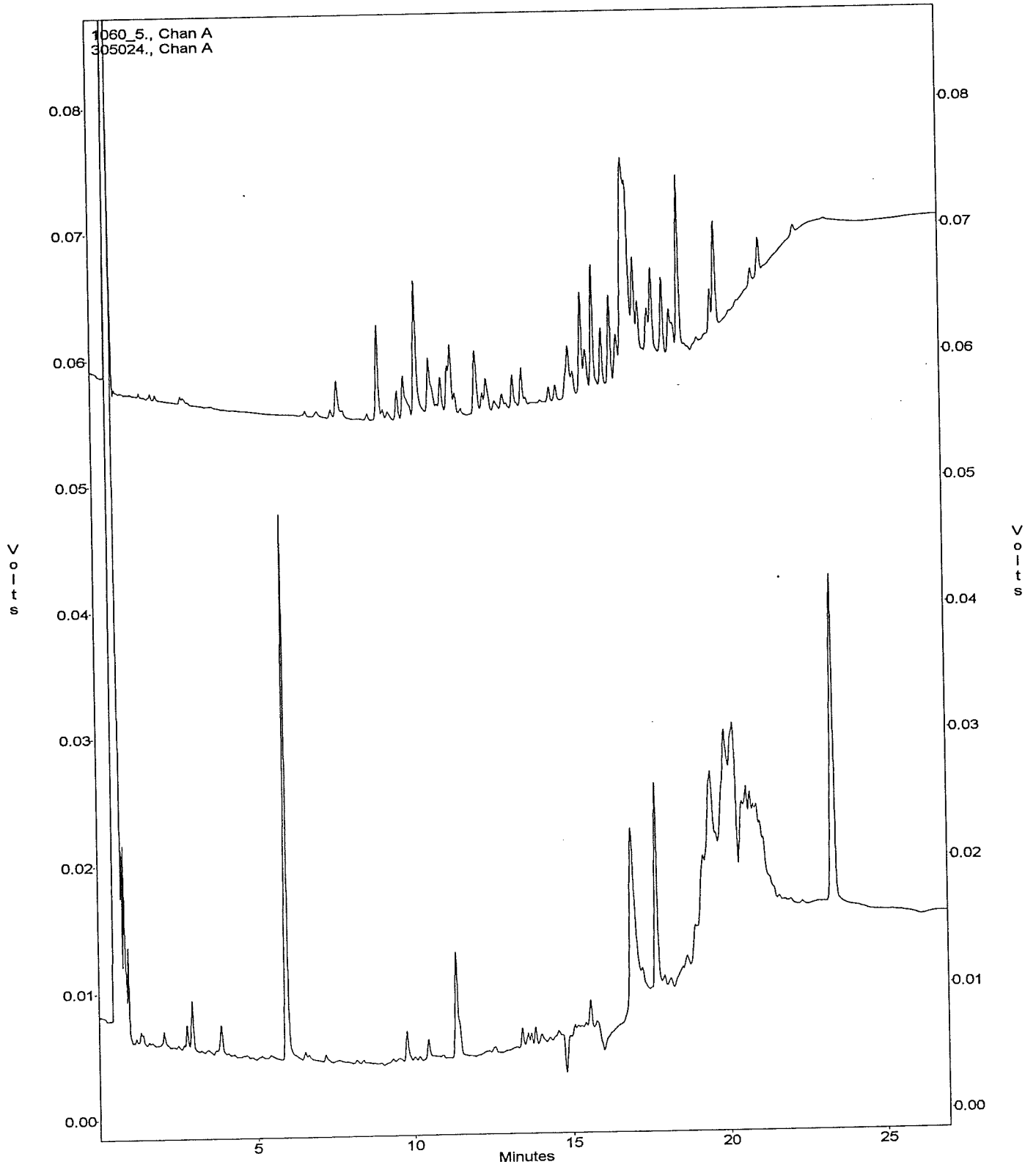
Overlaid Traces



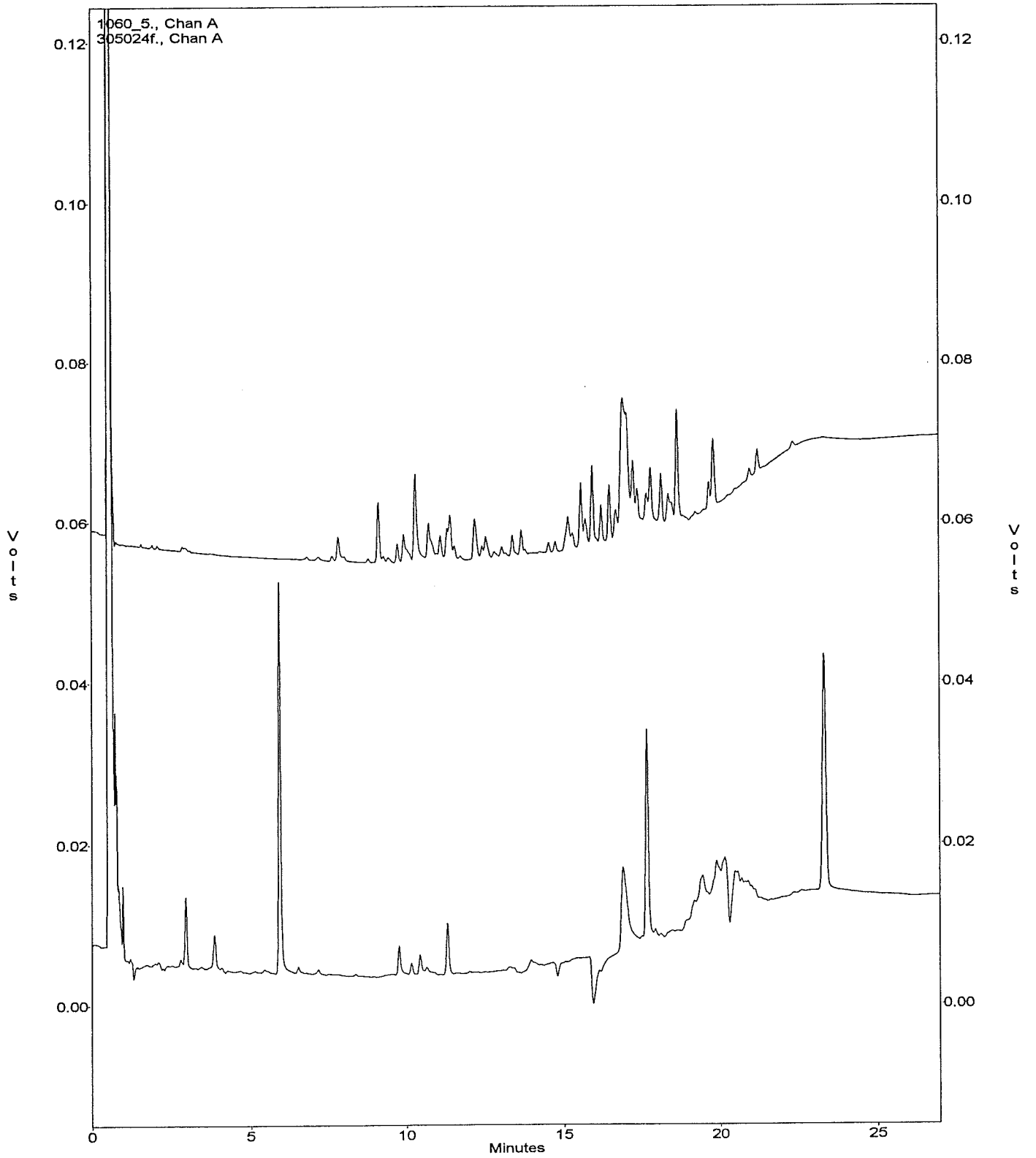
Overlaid Traces



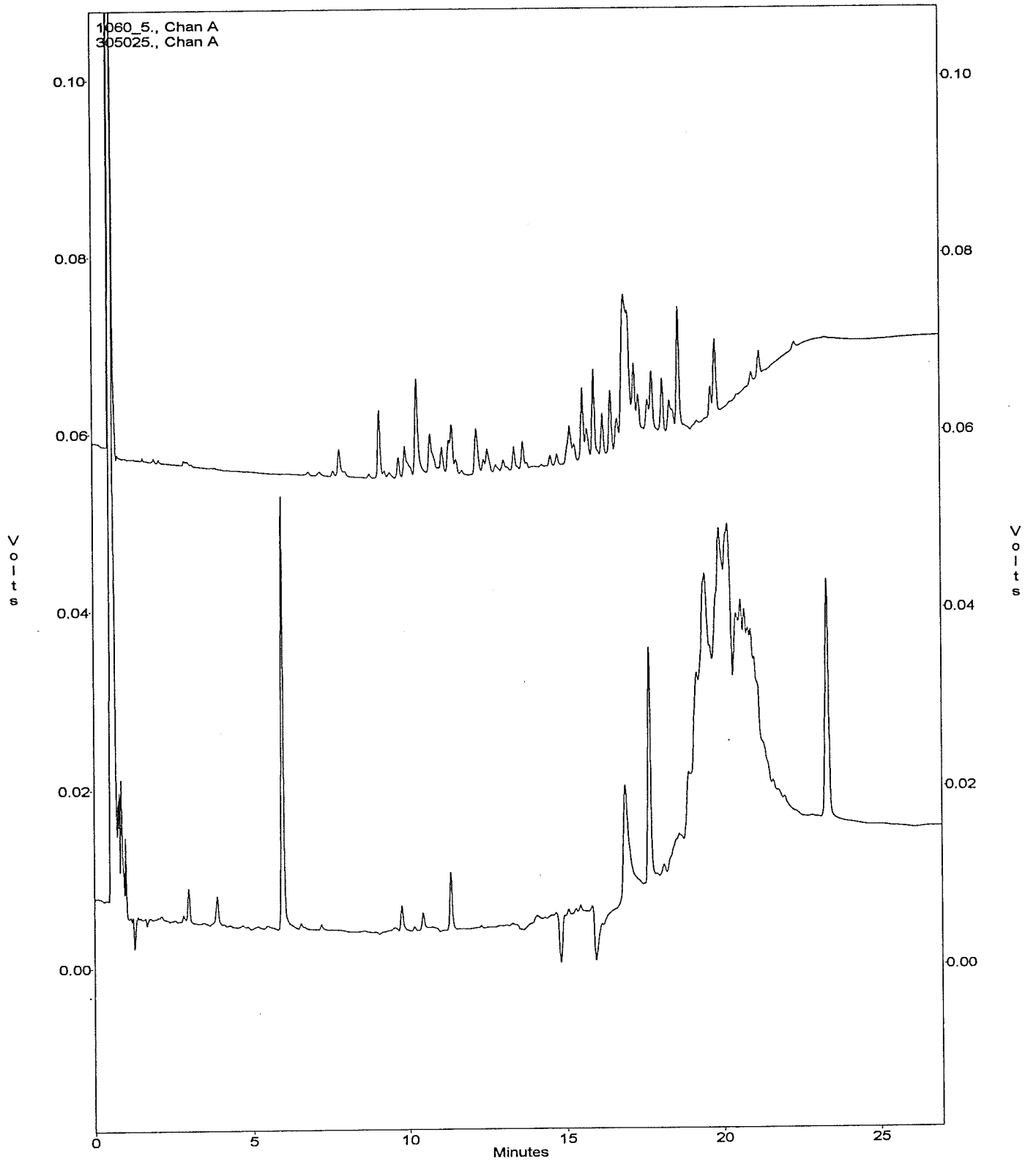
Overlaid Traces



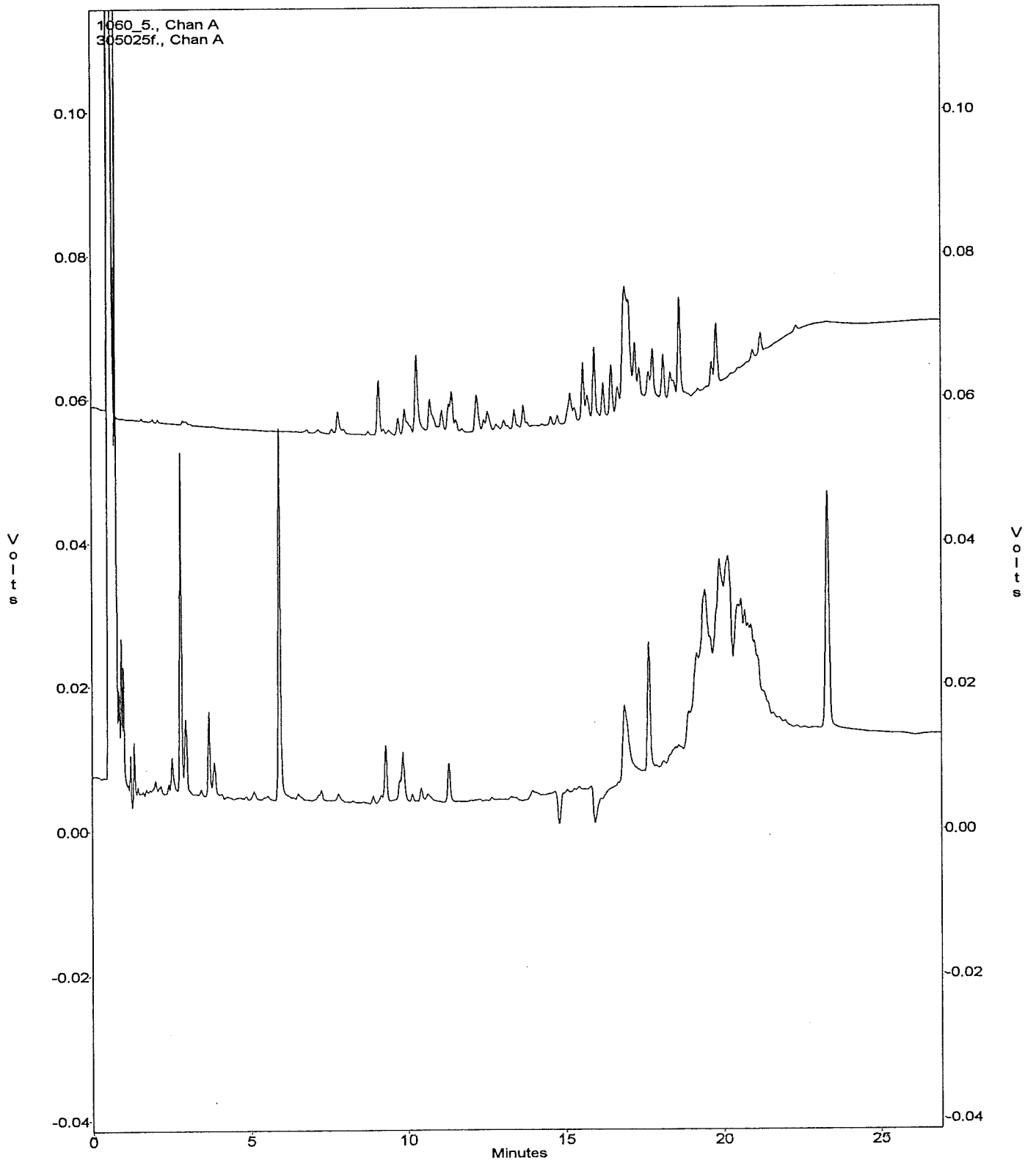
Overlaid Traces



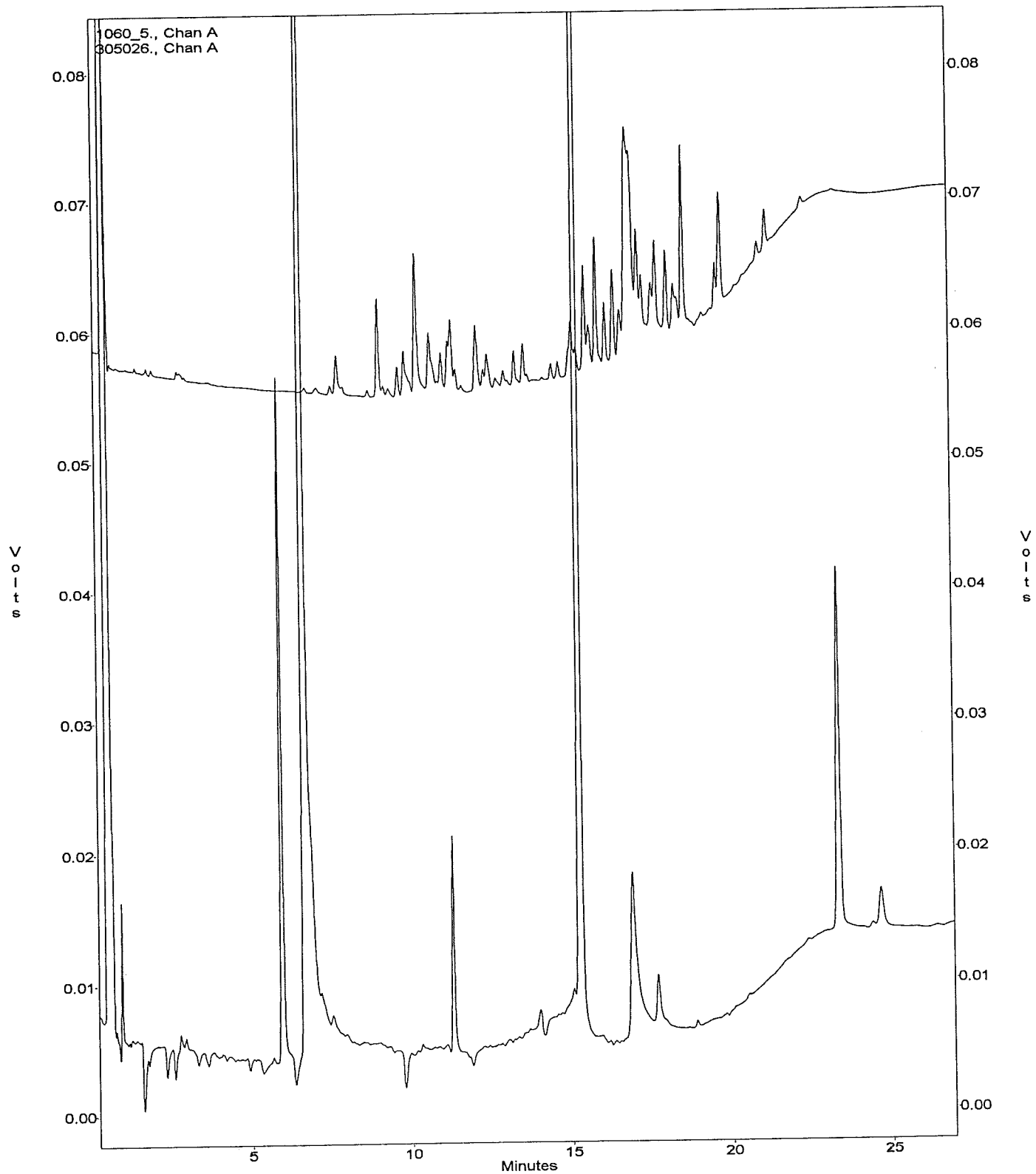
Overlaid Traces



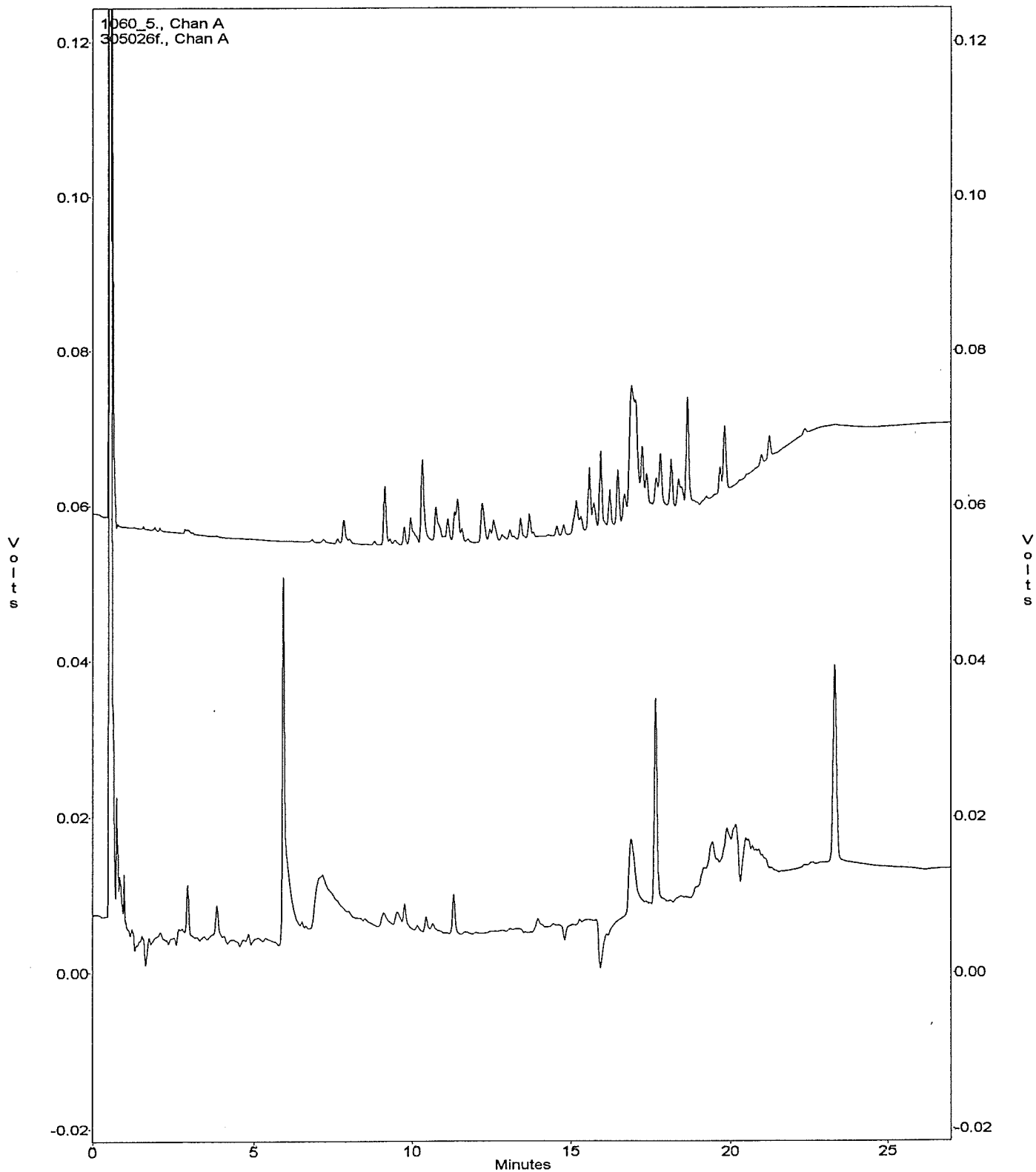
Overlaid Traces



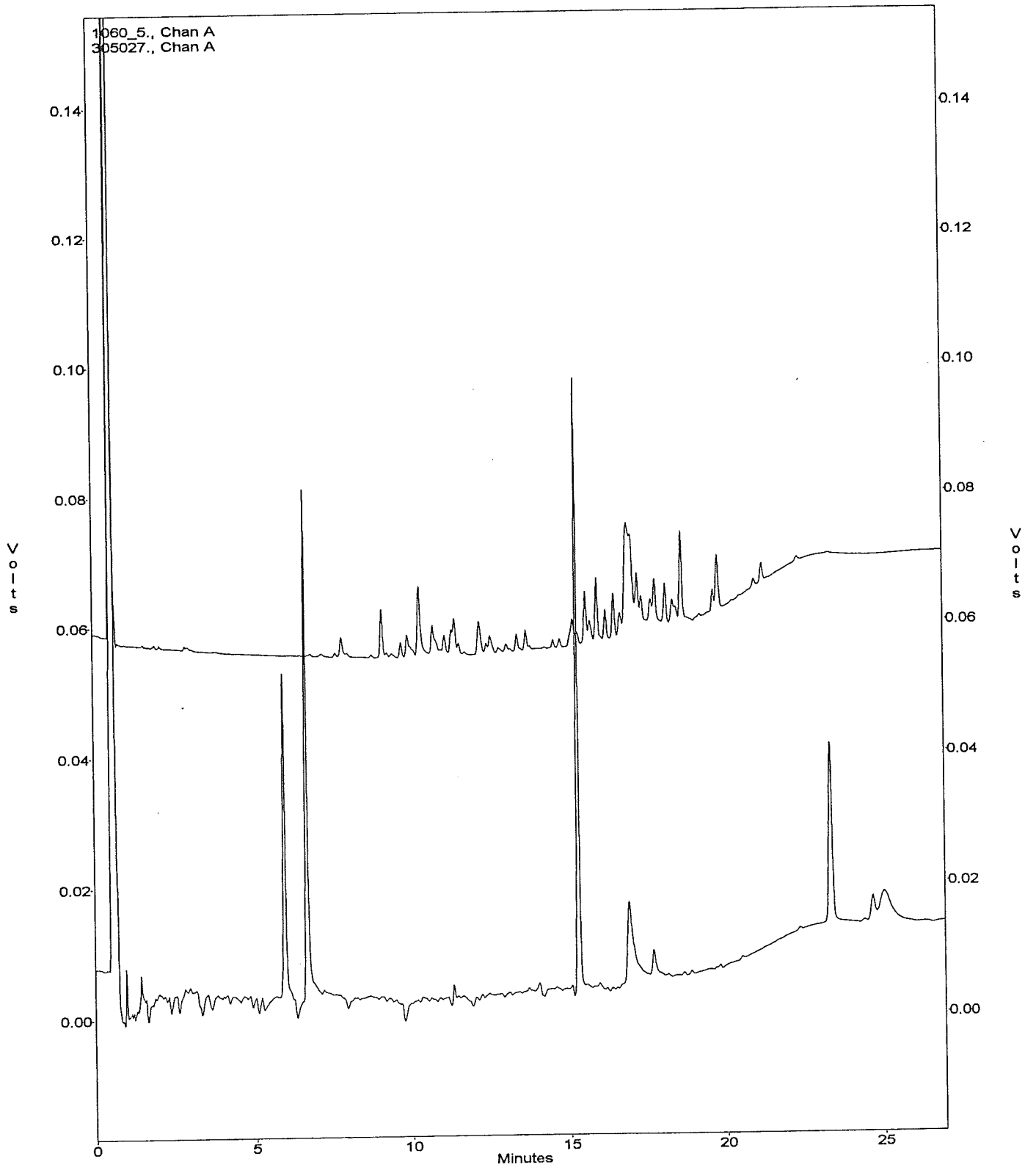
Overlaid Traces



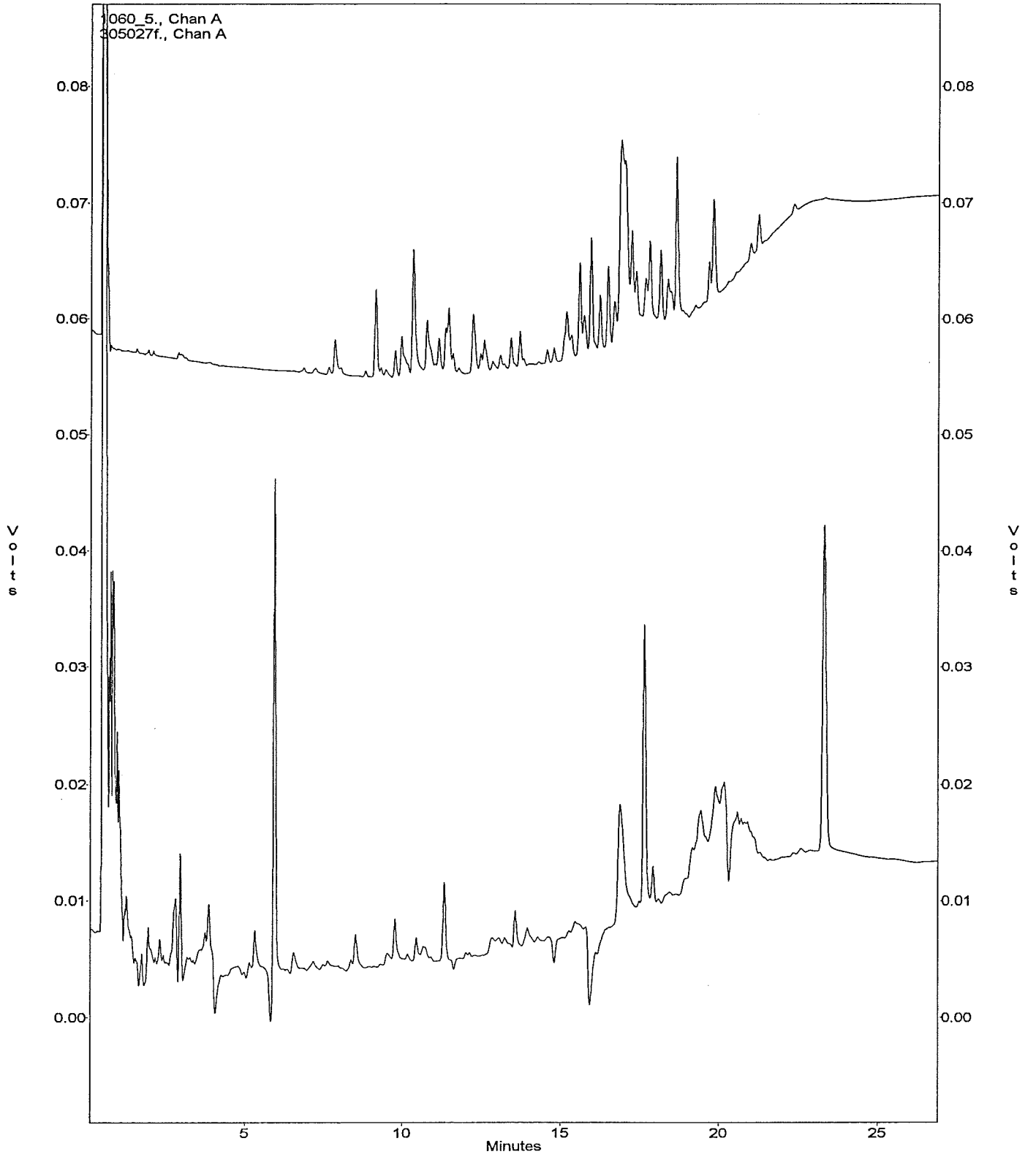
Overlaid Traces



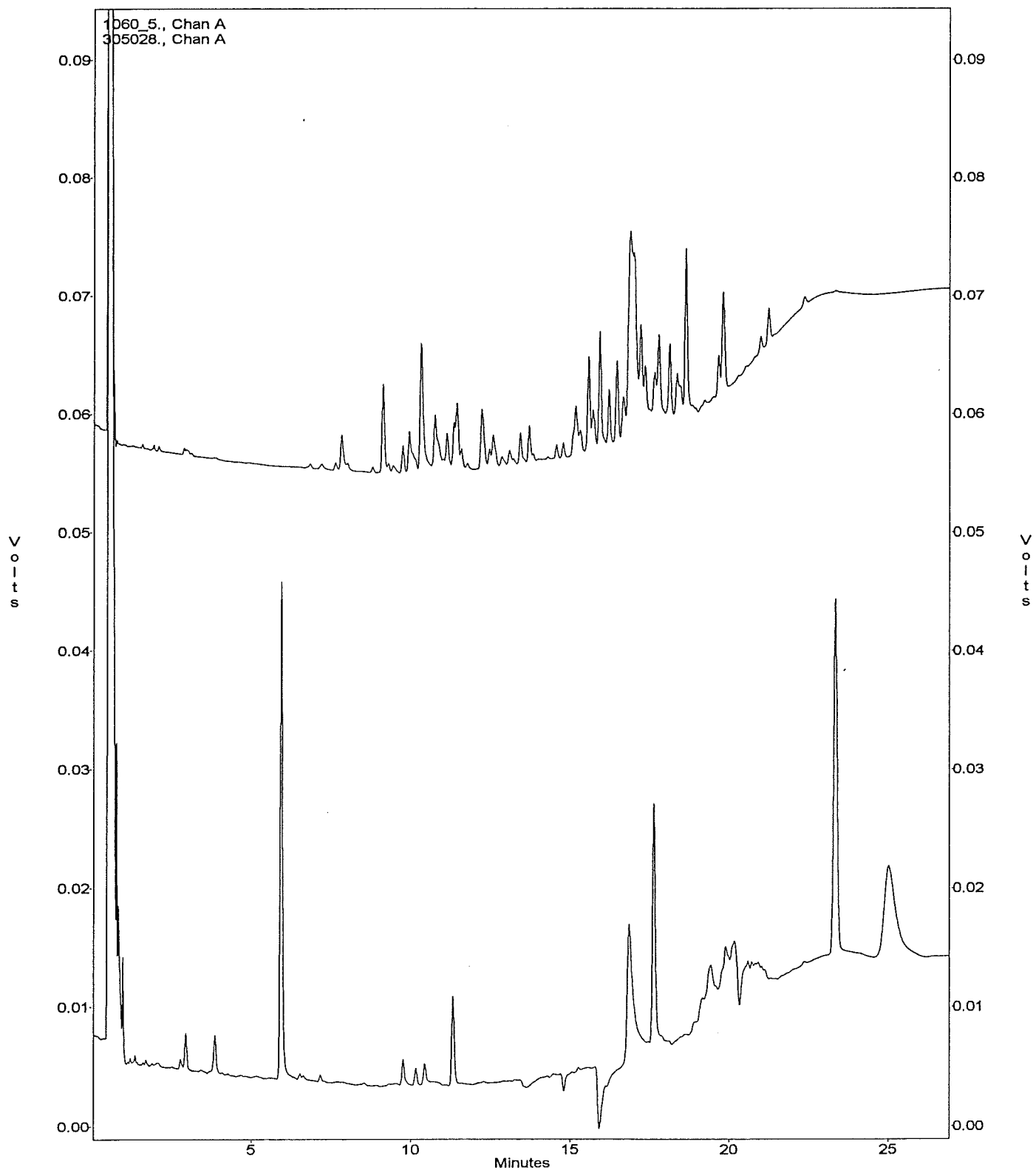
Overlaid Traces



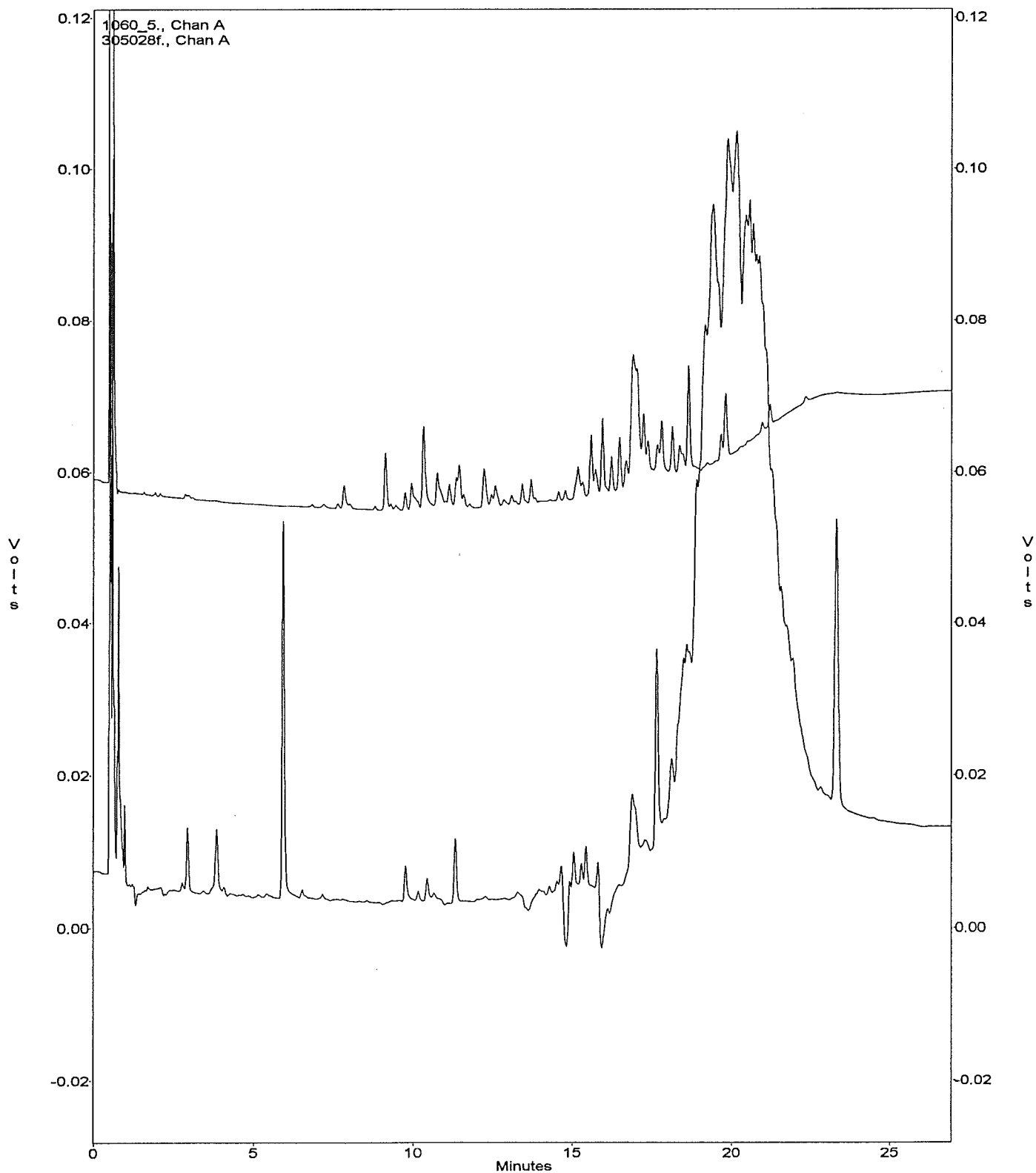
Overlaid Traces



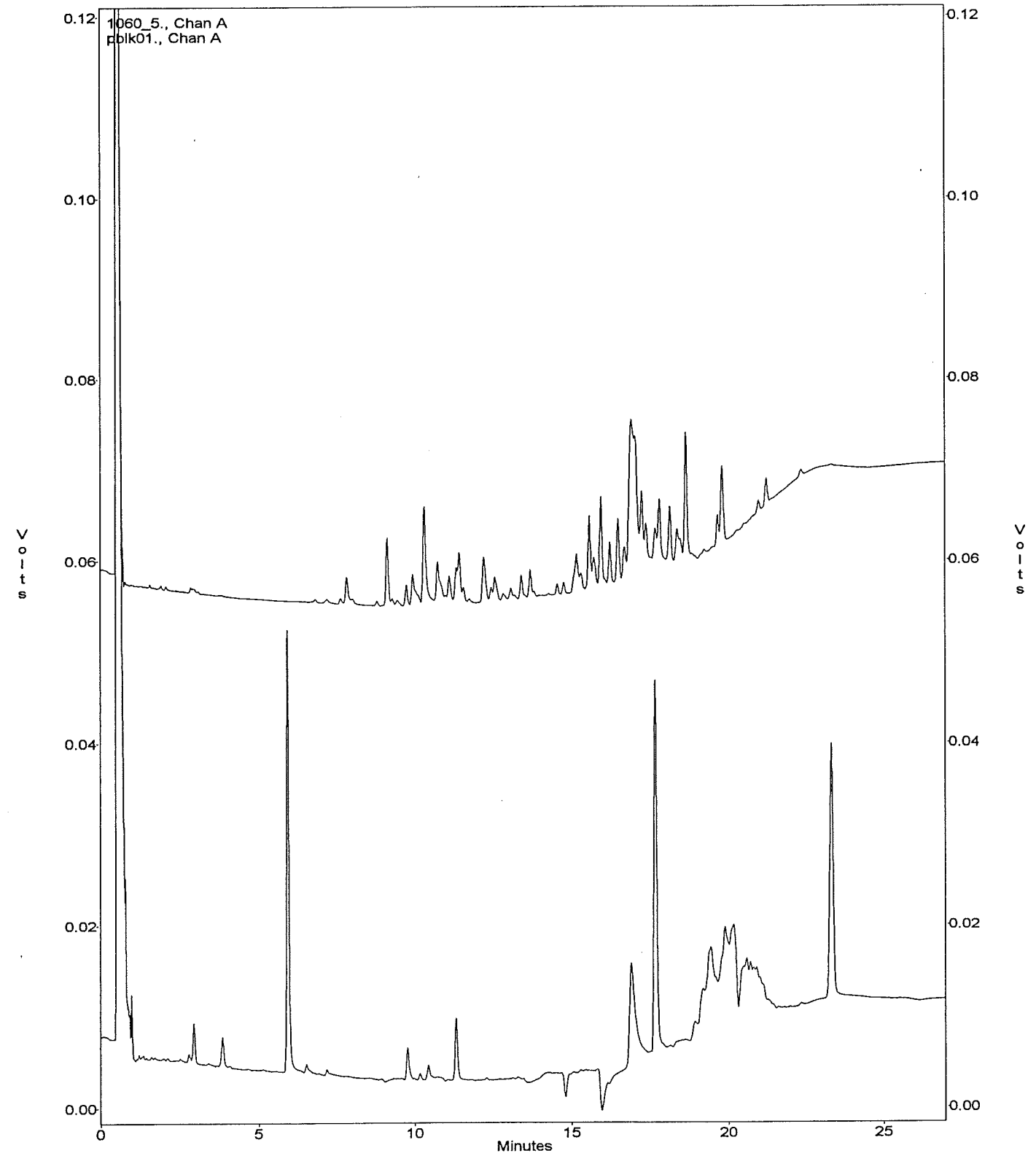
Overlaid Traces



Overlaid Traces



Overlaid Traces



0101

