



ecology and environment, inc.

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International Specialists in the Environment

DATE	FAR-MA-CA
NO.	9808262628
BY	3.3 FHC
OTHER	EHE

MEMORANDUM

RECEIVED

JUL 14 1990

PREP SECTION

TO: Darrell Sommerhauser, RPM

THRU: Philip Dula, FITOM

FROM: Rob Parsons, E & E/FIT-FASP

DATE: July 10, 1990

SUBJECT: Hastings Ground Water Contaminations Site FASP documentation.
TDD #F-07-8912-003 PAN #FNE0096GA

As per your request, the chromatograms and copies of the log book for the Hastings volatile organic analysis are being supplied to you. Attached with this material you will find a copy of the FASP report to replace the report that was destroyed.

The answer to your question, "Why DCA and PCE were reported on the letter of December 22, 1989?" is quite simple. The FASP was informed that the two compounds could possibly be in the samples from Hastings. A qualitative standard was run to determine the retention time and to confirm the detectors were responding to these compounds. The request for analysis given "verbally" to FASP indicated a qualitative assessment of these compounds. Thus, as indicated on the letter of December 22, 1989, the level of response of the detector is "non-detect". The Agency stance was that, since the compounds were not detected, it was not necessary to include them in the report. The EPA only needed to know if DCA or PCE was present in the samples. If you have further questions about the analysis please feel free to contact the FASP chemists, Anne Melia or Rob Parsons.

Attachments: FASP Report
Chromatograms
Logbook Copy

183934



183934

VOLATILE ORGANIC ANALYSIS
RESULTS
HASTINGS GROUND WATER CONTAMINATION
SITE
HASTINGS, NEBRASKA
TDD # F-07-8912-003
PAN: FNE0096GA

Investigation Date: December 20, 1989
Analytical Team: Rob Parsons
Report Date: January 8, 1990

DISCLAIMER

This report has been prepared by Ecology and Environment, Inc., under EPA contract 68-01-7347. Mention of commercial products does not constitute endorsement by the U.S. Government. Editing and technical content of this report are the responsibility of Ecology and Environment, Inc., Overland Park, Kansas, and do not necessarily reflect the views or policies of the EPA.

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1.0 INTRODUCTION

Two soil samples collected at the Hastings Water Contamination Site (HIPCO) in Hastings, Nebraska, were received at the Ecology and Environment, Inc., Field Analytical Support Program (E & E/FASP) base support facility (BSF) on December 22, 1989. The samples were analyzed as part of a remediation project at the facility. This SI was authorized under Technical Directive Document (TDD) #F-07-8912-003.

The soil samples were analyzed for volatile organics by FASP chemist Rob Parsons. As required by the E & E/FASP, the data are annotated with the data qualifier "F", indicating that FASP methodologies were employed to generate the data. FASP data are not confirmed by mass spectroscopy and, therefore, do not provide the same level of data confidence as Contract Laboratory Program (CLP) data. Therefore, FASP data results are defined as tentatively identified, and qualitative data should be interpreted as estimated quantities. While FASP data are not equivalent to or a replacement for CLP data, the results presented in this report are consistent; all samples were extracted and analyzed utilizing the same procedure.

2.1 FASP METHODOLOGY FOR VOLATILE ORGANICS

All samples were analyzed utilizing SW846, EPA 601 and 602 and current FASP (draft) methods. All FASP method quality control including initial, continuing, and final calibration were met.

A volatile organic standard containing trichloroethene (TCE) and trichloroethane (TCA) was used for instrumental calibration. The detection limit for the analysis of soil was 10 µg/Kg.

All samples were non-detect for TCE, TCA, and all other organic or inorganic compounds not specifically noted.

2.2 VOLATILE ORGANIC ANALYTICAL RESULTS

Table 2-1
Sample Results, Soil
Volatile Organic FASP Analysis
Hastings Water Contamination Site (HIPCO)
Hastings, Nebraska
Sample Activity Series # CS4S2
December 1989
µg/Kg

=====

	001	001Dup	001D
Trichloroethene	10UF	10UF	10UF
Trichloroethane	10UF	10UF	10UF

U = The material was analyzed for but was not detected. The associated numerical value is an instrumental detection limit, adjusted for sample weight, extract volume, and sample dilution.

F = Data has been generated using FASP methodologies. Analytes are tentatively identified and concentrations are quantitative estimates.

D = Sample analyzed is a laboratory (FASP) duplicate.

Dup = Sample analyzed is a field duplicate.

Table 2-2
 Matrix Spike Results, Soil
 Volatile Organic FASP Analysis
 Hastings Water Contamination Site (HIPCO)
 Hastings, Nebraska
 December 1989
 µg/Kg

	Amount Spiked	Matrix Spike Recovery	% Recovery
Trichloroethene	40.4	41.5	103
Trichloroethane	40.4	38.7	96

E & E Job Number _____

Telephone Code Number _____

Site Name Hastings water contamination

site/Hipco

State/City Hastings, Nebraska

TDD F-07-8912-003

PAN FNE00966A

SSID _____

Start/Finish Date 12-20-89 1 12-22-89

Book 1 of 1

12/20/89

VCA

Bob Parsons

FME00965A

Hastings site/HIREC

$\text{TCE} - \left\{ \begin{array}{l} 1000 \text{ ppm mixed STD} \rightarrow 5 \mu\text{L} + 100 \text{ mL H}_2\text{O} \rightarrow 50 \mu\text{L} \\ \text{TCA} - \left\{ \begin{array}{l} \rightarrow 25 \mu\text{L} + 100 \text{ mL H}_2\text{O} \rightarrow 250 \mu\text{L} \\ \rightarrow 50 \mu\text{L} + 100 \text{ mL H}_2\text{O} \rightarrow 500 \mu\text{L} \end{array} \right. \end{array} \right.$

PID: TCE

$$\overline{RF} = 2.3224E-3$$

$$R = .9945$$

$$S = 1.7992E-4$$

$$m = 2.4450E-3$$

$$\% \text{RSD} = 7.7$$

$$b = -1.4344/\text{RSP}$$

E/CID: TCA

$$\overline{RF} = 3.5338E-3$$

$$R = .9961$$

$$S = 2.5415E-4$$

$$m = 3.7053E-3$$

$$\% \text{RSD} = 7.6$$

$$b = -1.9716$$

TCE

$$\overline{RF} = 3.9030E-3$$

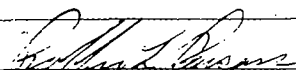
$$R = .9959$$

$$S = 1.7553E-4$$

$$m = 4.0820E-3$$

$$\% \text{RSD} = 4.5$$

$$b = -1.0230$$



12/20/89

FNE0091634

VDA

Rob. Parsons

Hastings site/HIAC

Time sample Compound RC Conc Vol. Weight Wght ARCA

1606 STD PID-TCE 5.08 50ppb 5ml 21035
 (5/6/12/1) ERD-TCA 3.67 14347
 TCE 5.10 11946

936 STD PID-TCE 5.15 50ppb 5ml 20267
 ERD-TCA 3.46 17717
 TCE 5.19 13562

1018 STD PID-TCE 5.17 250ppb 5ml 121570
 ERD-TCA 3.68 77316
 TCE 5.19 68654

1100 STD PID-TCE 5.20 250ppb 5ml 115⁰⁵⁵ ~~76~~ RAP
 ERD-TCA 3.65 78471
 TCE 5.21 66052

1615 STD PID-TCE 4.99 500ppb 5ml 210305
 ERD-TCA 3.66 141950
 TCE 5.02 128672

1655 STD PID-TCE 5.19 500ppb 5ml 201357
 ERD-TCA 3.57 134046
 TCE 5.22 118118

Rob. Parsons

12/21/89

VCR

Rob Parsons

FIVE-00965A

% Difference:

$$\text{PID:TCE } 100 \cdot \frac{2.3435\text{E-3} - 2.3224\text{E-3}}{2.3224\text{E-3}} = 0.9\%$$

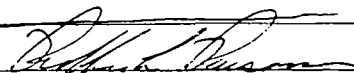
EID:TCA:

$$100 \cdot \frac{3.3698\text{E-3} - 3.3339\text{E-3}}{3.3339\text{E-3}} = 1.1\%$$

TCE:

$$100 \cdot \frac{3.7992\text{E-3} - 3.9030\text{E-3}}{3.9030\text{E-3}} = 2.7\%$$

	Conc. From RF	Conc. Calibration Table
PID-TCE	247.7 ppb	246.5 ppb
EID-TCA	247.3 ppb	255.2 ppb
TCE	256.8 ppb	258.4 ppb



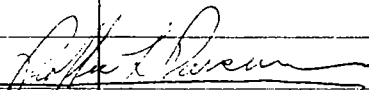
12/21/89
FNEC0966A

VCR

Rob Parsons

Hastings Site/Hipco

Time	Sample	Compound	RT	Conc	Vol Packed	Wght	Area
1435	STD	PID - TCE	5.13	250	5ml		106677
		EICD - TCH	3.59				74189
		TCE	5.16				65804
		— See opposite page for statistical information —					



12-21-89

12/22/89

% Diff: PID: TCE

$$100 \cdot \frac{2.3820E-3 - 2.3774E-3}{2.3774E-3} = 2.6\%$$

EID: TCE

$$100 \cdot \frac{3.3265E-3 - 3.3351E-3}{3.3351E-3} = -6.2\%$$

TCE

$$100 \cdot \frac{3.6180E-3 - 3.9030E-3}{3.9030E-3} = -7.3\%$$

Spike 1 200 ppb @ 4.951 min = 40.4 ppb

TCE: PID

$$\frac{(81382)(2.3774E-3)}{4.951} = 38.2 = 94\%$$

TCE: EID

$$\frac{(5746)(3.3351E-3)}{4.951} = 38.7 = 96\%$$

TCE: EID

$$\frac{(52611)(3.9030E-3)}{4.951} = 41.5 = 103\%$$

Robert R. Rasmussen
 - - - 20

7

MASLOW STEPHEN

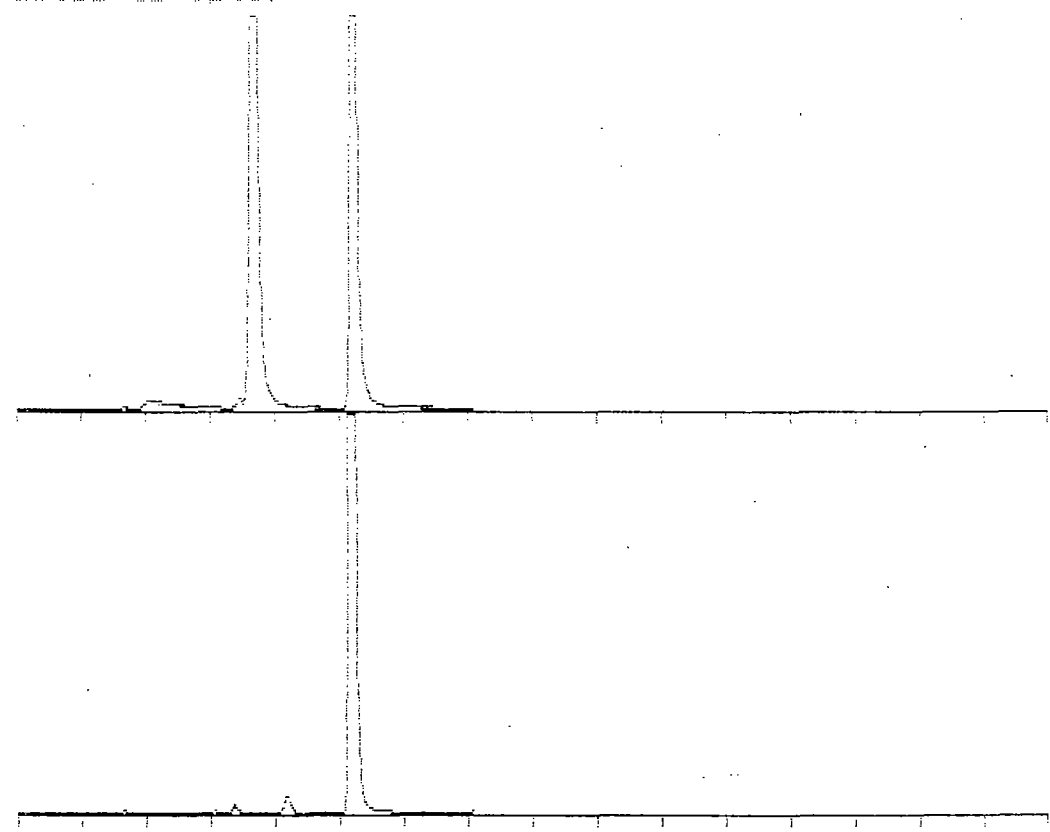
Retiree 05452

Robert Wilson

09-8-8

STD = 250 ppb
TCE - TCA

Output redirected to lpt1:



0-16 Min Scale: 50 Mv Ch.A, 50 Mv Ch.B
tce-tca std 250ppb Processed: 12-22-1989 10:55:23, segment 1, cycle 9
RAW DATA SAVED IN FILE G:TCE_A9.PTS Second Channel Stored in G:UCE_A9.PTS

***** AREA PERCENT REPORT *****

***** 12-22-1989 10:56:01 Version 5.1 *****
* Sample Name: tce-tca std 250ppb Data File: G:TCE_A9 *
* Date: 12-23-1989 78:41:08 Method: AVDA *
* Interface: 16 Cycle#: 9 Operator R.P Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 2 Threshold: .25 Area Threshold: 10 *

* Instrument Type: varian 3400+P&T Column Type: db-624 *
* Solvent Description: *
* Conditions: 400 (hold 4 min) 100 (1 min) 140 (1 min) 200 (1 min) *

```

* misc. information:                               lpt1:
*****
Starting Delay: 0.00                               Run Time: 16.00

```

PK No.	Ret Time	Peak Area	Area %	5 L	Peak Ht.	Normalized %	Area/ Height
1	1.647	1036	0.9608	5	25	0.987	42.3
2	3.045	31	0.0291	6	10	0.030	3.1
3	3.361	415	0.3880	5	77	0.398	5.4
4	4.175	1353	1.2549	6	194	1.259	7.0
5	5.175	104953	97.3673	6	17552	100.000	6.0

```

Total Area: 107791 Area Reject: 0 One sample per 0.102 sec.

```

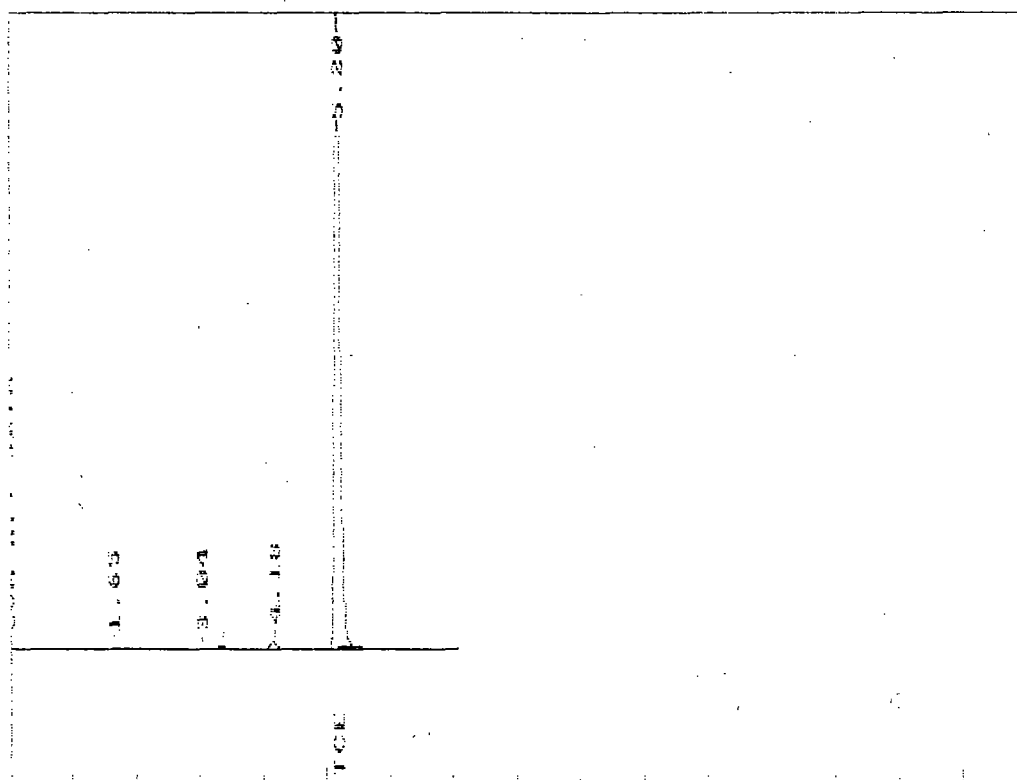
```

***** EXTERNAL STANDARD TABLE *****
***** 12-22-1989 10:56:03 Version 5.1 *****
# Sample Name: tce-tca std 250ppb Data File: 191021.DZ
# Date: 12-22-1989 78:41:06 Method: AVDA 12-21-1989 14:50:49 # 116
# Interface: 16. Cycle#: 7 Operator R.P Channel#: 0 Vial#: N.A.
# Starting Peak Width: 2 Threshold: .25 Area Threshold: 10
*****
# Instrument Type: varian 5400-FT Column Type: db-524
# Solvent Description:
# Conditions: 40C(hold 4 min)-->100/min-->140(hold 2 min)
# Detector 0: PID Detector 1: ELED
# Misc. Information: lpt1:
*****
Starting Delay: 0.00 Ending retention time: 16.00
Area reject: 0 One sample per 0.102 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT BL	REF PEAK	% DELTA RET TIME	CONC/AREA
5	5.175	TCE	242.2697	100.0000%	104953	17552	6.0 6	5	0	2.3084E-03
TOTAL AMOUNT =			242.2697							

Areas, times, and heights stored in: O:\CE\49\AT9
Data File = O:\CE\49\AT9 Printed on 12-22-1999 at 10:55:16
Start time: 0.00 min. Stop time: 15.00 min. Offset: 0 mV.
Low Value: 84 uv High Value: 17651 uv Scale Factor: 1.0



***** AREA PERCENT REPORT *****

***** 12-22-1989 10:57:33 Version 5.1 *****
 * Sample Name: tce-tca std 260ppb Data File: C:\UCE_A9 *
 * Date: 12-23-1989 78:41:08 Method: BVDA *
 * Interface: 16 Cycle#: 9 Operator R.P Channel#: 1 Vial#: N.A. *
 * Starting Peak Width: 5 Threshold: 1 Area Threshold: 10 *

 * Instrument type: varian 3400+P&T Column Type: db-62+ *
 * Solvent Description: *
 * Conditions: 40C(hold 4 min)--->10C/min--->140(hold 2 min) *
 * Detector 0: PID Detector 1: ECD *
 * Misc. information: Int1: *

 Starting Delay: 0.00 Run Time: 16.00

PK No.	Ret Time	Peak Area	Area %	S L	Peak Ht.	Normalized %	Area/ Height
1	1.642	123	0.0543	2	30	0.178	4.3
2	2.122	1054	0.7214	2	78	1.526	10.6
3	3.453	746	0.5106	2	141	1.080	8.3
4	3.660	27011	19.8466	2	8811	41.984	3.3
5	3.689	46142	31.8660	2	9011	66.777	6.1
6	5.236	69099	47.2712	2	9907	100.000	7.0

Total Area: 146176 Area Reject: 0 One sample per 0.102 sec.

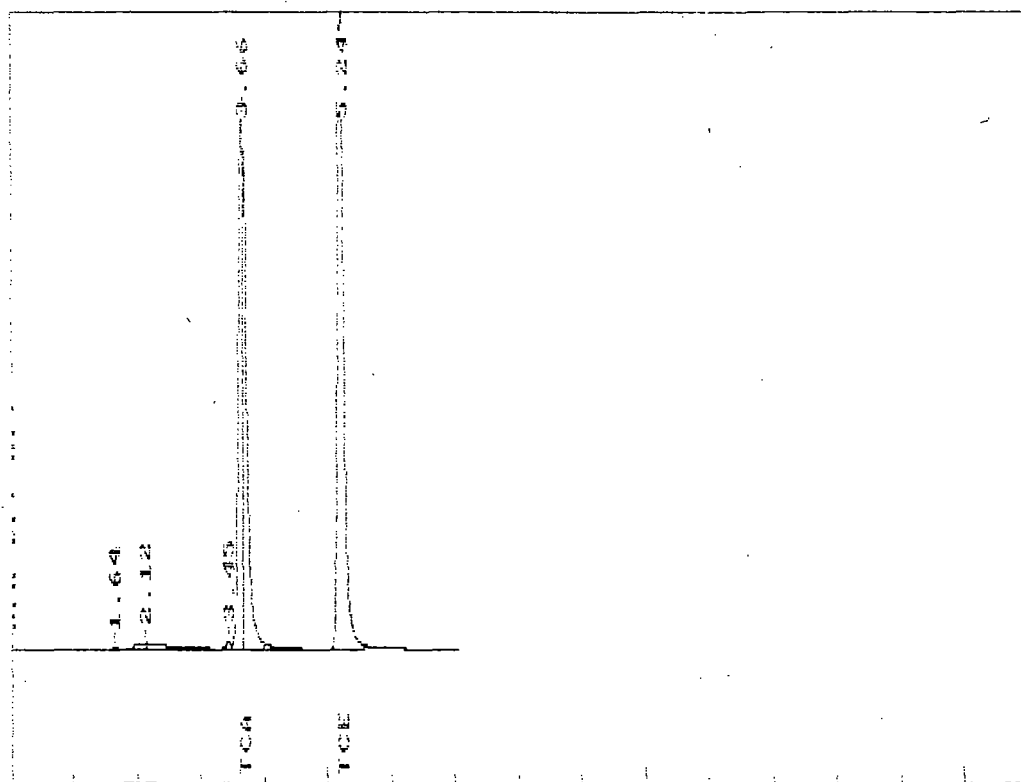
```

***** EXTERNAL STANDARD TABLE *****
***148***** 12-22-1989 10:57:35 Version 3.1 *****
* Sample Name: toa-tca std 250ppb DATA FILE: 010101.E
* Date: 12-23-1989 78:41:02 Method: BVDA 12-21-1989 14:54:42 # 106
* Interface: 16 Cycle#: 0 Operator R.P Channel#: 1 Vial#: N.A.
* Starting Peak Width: 5 Threshold: 1 Area Threshold: 10
*****
* Instrument Type: varian 3400+P&T Column type: db-32#
* Solvent Description:
* Conditions: 40C(hold 4 min)--->10C/min--->140(hold 2 min)
* Detector 0: PID Detector 1: ELCD
* Misc. Information: 1001:
*****
Starting delay: 0.00 Ending retention time: 16.00
Area reject: 0 One sample per 0.102 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

```

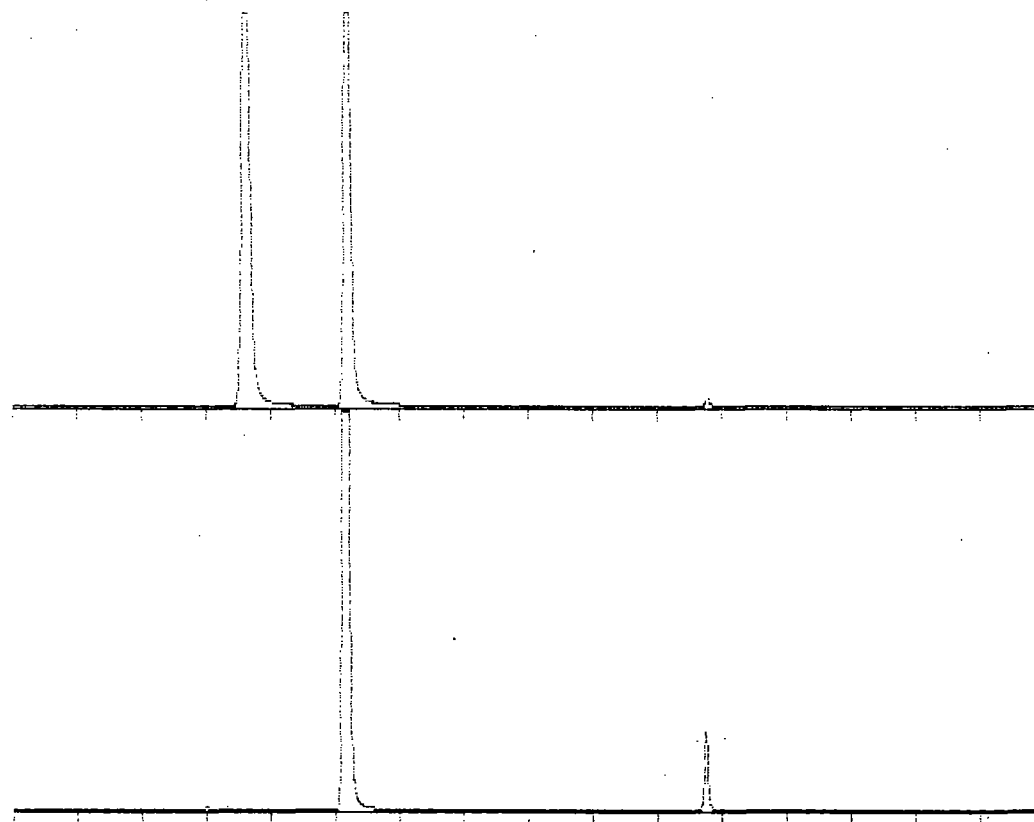
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	REF PEAK	% DELTA RET TIME	CONC/AREA
5	3.689	TCA	151.2514	35.7499%	46142	9011	5.1 2	5	0	3.2780E-03
6	3.236	TCE	271.6311	64.2502%	69099	9907	7.0 2	6	0	3.9339E-03
TOTAL AMOUNT =			423.0825							

Areas, times, and heights stored in: P:\UCE_A9.A13
Data File = G:\UCE_A9.PT5 Printed on 12-22-1989 at 10:57:47
Start time: 0.00 min. Stop time: 16.00 min. Offset: 0 mv.
Low Value: 72 uv High Value: 9981 uv Scale Factor: 1.0



P10 spike
001 4.9517

Output redirected to lpt1:



0-16 Min Scale: 50 Mv Ch.A, 50 Mv Ch.B

SPIKE 001, 200ppb Processed: 12-22-1989 15:53:33, segment 1, cycle 14

RAW DATA SAVED IN FILE G:SPIKE14.PTS Second Channel Stored in G:SPIKE14.PTS

***** AREA PERCENT REPORT *****

***** 12-22-1989 15:54:18 Version 5.1 *****

* Sample Name: SPIKE 001, 200ppb Data File: G:SPIKE14 *

* Date: 12-23-1989 88:28:29 Method: AVDA *

* Interface: 16 Cycle#: 14 Operator R.P Channel#: 0 Vial#: N.A. *

* Starting Peak Width: 2 Threshold: .25 Area Threshold: 10 *

* Instrument Type: varian 3400-F&T Column Type: db-624 *

* Solvent Description: *

```

*          Detector 0: PID          Detector 1: ELCD          *
* Misc. Information:                  lpt1:                  *
*****
Starting Delay: 0.00          Run Time: 16.00

```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/Height
1	2.999	677	0.7905	5	20	0.832	34.7
2	5.160	81382	95.0369	6	13878	100.000	5.9
3	10.751	3573	4.1726	6	954	4.391	3.7

Total Area: 85632 Area Reject: 0 One sample per 0.102 sec.

```

***** EXTERNAL STANDARD TABLE *****
***** 12-22-1989 15:54:19 Version 5.1 *****
* Sample Name: SPIKE 001, 200ppb          Data File: G:\SPIKE14
* Date: 12-23-1989 09:28:29 Method: AV04 12-21-1989 14:50:49 # 116
* Interface: 16 Cycle#: 14 Operator R.P Channel#: 0 Vial#: N.P.
* Starting Peak Width: 2 Threshold: .25 Area Threshold: 10
*****
* Instrument Type: varian 3400+P&T Column type: db-624
* Solvent Description:
* Conditions: 40C(hold 4 min)--->10C/min--->140(hold 2 min)
* Detector 0: PID Detector 1: ELCD
* Misc. Information:                  lpt1:                  *
*****
Starting Delay: 0.00          Ending retention time: 16.00
Area reject: 0          One sample per 0.102 sec.
Amount injected: 1.00          Dilution factor: 1.00
Sample Weight: -1.00000

```

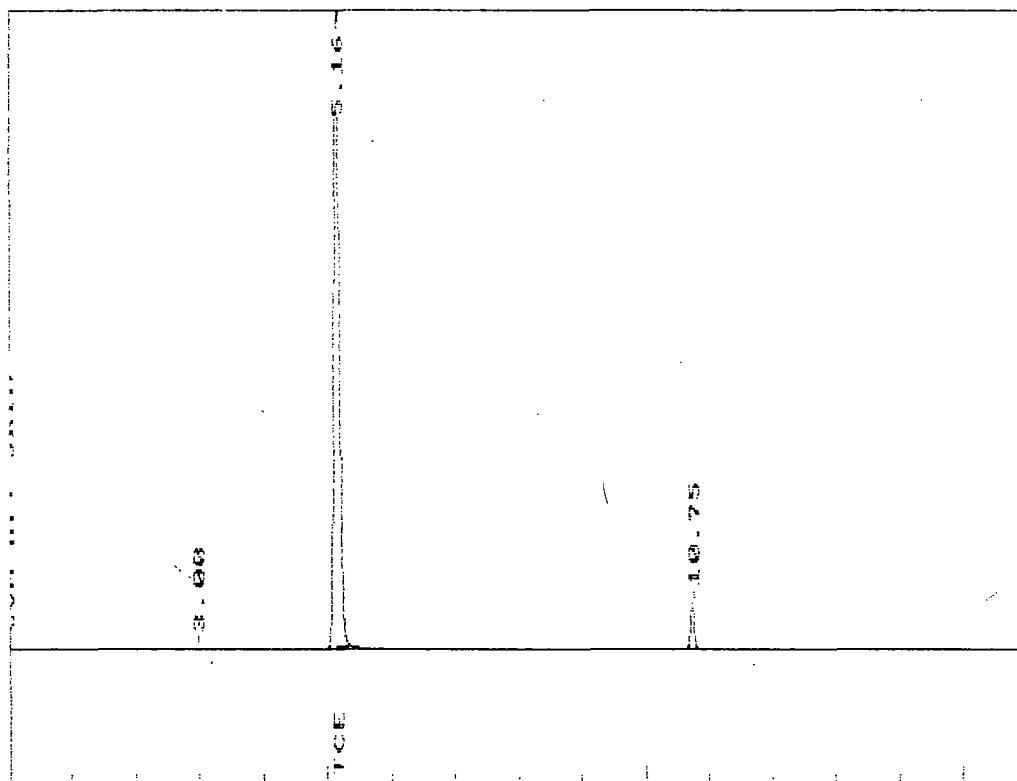
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/HEIGHT	REF PEAK	% DELTA RET TIME	CONC/AREA
2	5.160	TCE	184.6361	100.0000%	81382	13878	5.96	2	0	2.2688E-03
TOTAL AMOUNT =			184.6361							

Areas, times, and heights stored in: G:\SPIKE14.ATB

Data File = G:\SPIKE14.PTS Printed on 12-22-1989 at 15:54:34

Start time: 0.00 min. Stop time: 16.00 min. Offset: 0 mv.

Low Value: 81 uv High Value: 13972 uv Scale factor: 1.0



ELCD Spike
001 4.951g

***** AREA PERCENT REPORT *****

***** 12-22-1999 15:55:53 Version 5.1 *****
 * Sample Name: SPIKE 001, 200ppb Data File: G:\SPIKE14 *
 * Date: 12-23-1999 08:28:29 Method: EVOC *
 * Interface: 16 Cycle#: 14 Operator R.P Channel#: 1 Vial#: N.A. *
 * Starting Peak Width: 5 Threshold: 1 Area Threshold: 10 *

 * Instrument Type: varian 3400+P&T Column Type: db-624 *
 * Solvent Description: *
 * Conditions: 40Cinlet 4 air;---->100/min---->140(hold 2 min) *
 * Detector 0: PIR Detector 1: ELCD *
 * Misc. Information: Inlet: 4 *

 Starting Delay: 0.00 Run Time: 15.00

PK No.	Ret Time	Peak Area	Area %	H L	Peak Ht.	Normalized %	Area/ Height
1	3.621	57466	52.0070	2	7288	100.000	7.9
2	3.188	52611	47.6152	2	8172	91.552	6.4
3	10.780	415	0.3758	2	55	0.723	4.4

Total Area: 110493 Area Reject: 0 One sample per 0.102 sec.


```

*****
***** EXTERNAL STANDARD TABLE *****
***** 12-22-1989 15:55:54 Version 5.1 *****
* Sample Name: SPIKE 001; 200ppb Data File: R:\TPIKE014
* Date: 12-23-1989 88:25:29 Method: BV04 12-21-1989 14:54:42 # 106
* Interface: 16 Cycle#: 14 Operator R.P Channel#: 1 Vial#: N.A.
* Starting Peak Width: 5 Threshold: 1 Area Threshold: 10
*****
* Instrument Type: varian 3400+P&T Column Type: db-624
* Solvent Description:
* Conditions: 40C(hold 4 min)--->100/min--->140(hold 2 min)
* Detector 0: FID Detector 1: ELCD
* Misc. Information: ipti:
*****
Starting Delay: 0.00 Ending retention time: 15.00
Area reject: 0 One sample per 0.102 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	REF PEAK	% DELTA RET TIME	CONC/AREA
1	3.621	TCA	193.2098	48.9772%	57466	7283	7.9 2	1	0	3.3622E-03
2	5.188	TCE	204.5280	51.4226%	52611	8172	6.4 1	2	0	3.8875E-03

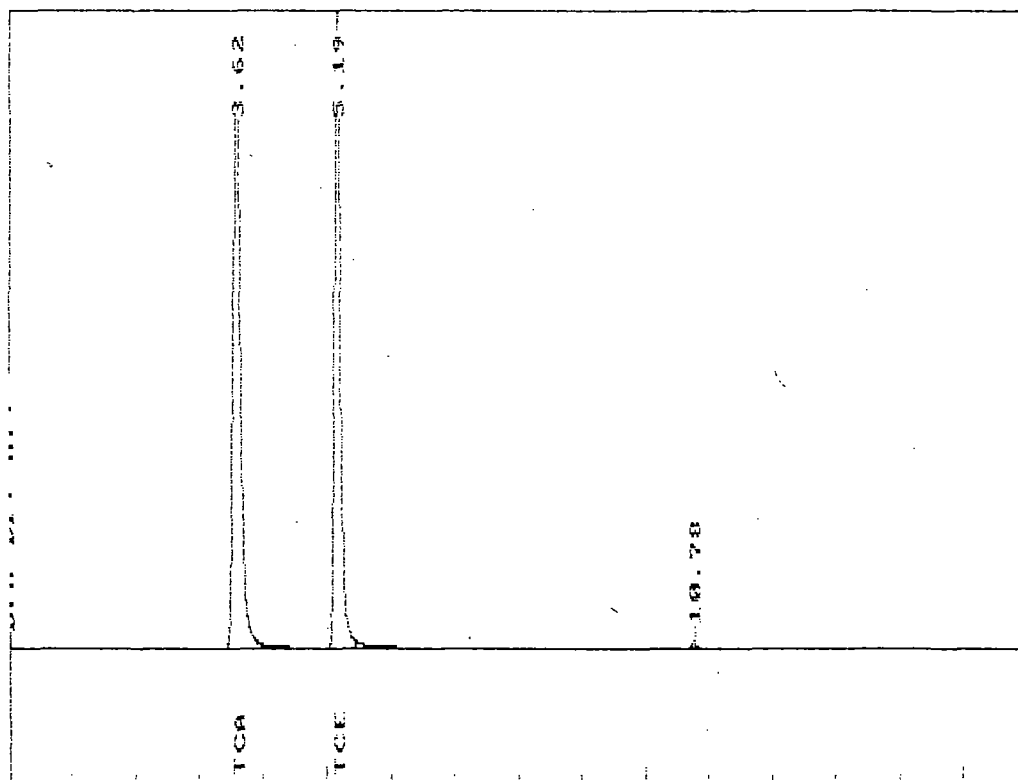
TOTAL AMOUNT = 397.7377

Areas, times, and heights stored in: G:TPIKE14.ATB

Data File = G:TPIKE14.PTS Printed on 12-22-1989 at 15:56:09

Start time: 0.00 min. Stop time: 16.00 min. Offset: 0 mv.

Low Value: 72 uv High Value: 8246 uv Scale factor: 1.0



09-8-4

ms1

Output redirected to lot1:



0-16 Min Scale: 50 Mv Ch.A, 50 Mv Ch.B

METHOD BLANK Processed: 12-22-1989 15:18:06, segment 1, cycle 13

RAW DATA SAVED IN FILE G:BLANK113.PTS Second Channel Stored in G:CLANK113.PTS

***** AREA PERCENT REPORT *****

***** 12-22-1989 15:18:50 Version 5.1 *****

* Sample Name: METHOD BLANK Data File: G:BLANK113 *

* Date: 12-23-1989 87:17:51 Method: AVOA *

* Interface: 16 Cycle#: 13 Operator R.P Channel#: 0 Vial#: N.A. *

* Starting Peak Width: 2 Threshold: .25 Area Threshold: 10 *

* Instrument type: varian 3400+P&T Column Type: db-624 *

* Solvent Description: *

* Detector 0: PID Detector 1: ELCD *

* Misc. Information: Ipt1: *

Starting Delay: 0.00 Run Time: 16.00

PK No.	Ret Time	Peak Area	Area %	S L	Peak Ht.	Normalized %	Area/ Height
1	3.014	145	34.4434	3	17	65.846	8.5
2	5.131	220	52.3092	6	44	100.000	5.0
3	10.722	56	13.2474	6	17	25.325	3.3

Total Area: 420 Area Reject: 0 One sample per 0.102 sec.

***** EXTERNAL STANDARD TABLE *****

***** 12-22-1989 15:18:51 Version 5.1 *****

* Sample Name: METHOD BLANK Data File: G:\BLANK11X *

* Date: 12-23-1989 07:17:51 Method: AVUA 12-21-1989 14:50:49 # 116 *

* Interface: 16 Cycle#: 13 Operator R.P Channel#: 0 Vial#: N.A. *

* Starting Peak Width: 2 Threshold: .25 Area Threshold: 10 *

* Instrument Type: varian 3400+P&T Column Type: db-624 *

* Solvent Description: *

* Conditions: 40C(hold 4 min)-->100/min-->140(hold 2 min) *

* Detector 0: PID Detector 1: ELCD *

* Misc. Information: Ipt1: *

Starting Delay: 0.00 Ending retention time: 16.00

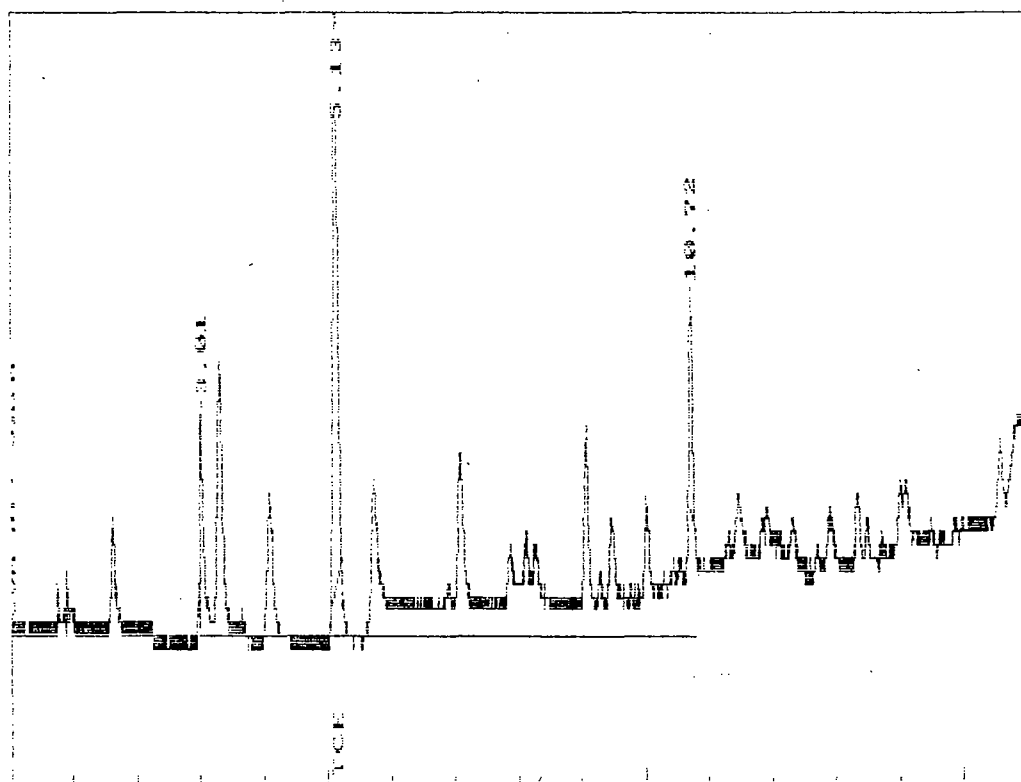
Area reject: 0 One sample per 0.102 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	REF PEAK	% DELTA RET TIME	CONC/AREA
2	5.131	TCE	-13.9074	100.0000%	220	44	5.0	2	0	-6.2903E-02
TOTAL AMOUNT =			-13.9074							

Areas, times, and heights stored in: G:\BLANK113.ATD
Data File = G:\BLANK113.D18 Printed on 12-22-1989 at 15:19:06
Start time: 0.00 min. Stop time: 16.00 min. Offset: 0 mv.
Low Value: 81 uv High Value: 130 uv Scale factor: 1.0



***** AREA PERCENT REPORT *****

***** 12-22-1989 15:20:24 Version 3.1 *****

* Sample Name: METHOD BLANK Data File: 0:CLANK113 *

* Date: 12-23-1989 8:17:15 Method: BVCA *

* Interface: 16 Cycle#: 13 Operator R.P Channel#: 1 Vial#: N.A. *

* Starting Peak Width: 5 Threshold: 1 Area Threshold: 10 *

* Instrument Type: Varian 3400+P&T Column Type: 60-624 *

* Solvent Description: *

* Conditions: 400(hold 4 min)--->100/min--->140(hold 2 min) *

* Detector 0: PID Detector 1: ELCD *

* Misc. Information: Ipt1: *

Starting Delay: 0.00 Run Time: 16.00

PK No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height	
1	5.165	244	100.0000	1	48	100.000	5.1	
Total Area:		244	Area Reject:		0	One sample per 0.102 sec.		

```

***** EXTERNAL STANDARD TABLE *****
***** 12-22-1989 13:20:25 Version 3.1 *****
# Sample Name: METHOD BLANK                               Data File: GIDLANK113
# Date: 12-23-1989 8:11:51 Method: BV0A 12-21-1989 14:04:42 # 106
# Interface: 16 Cycle#: 13 Operator R.P Channel#: 1     Vial#: N.A.
# Starting Peak Width: 5 Threshold: 1 Area Threshold: 10
*****
# Instrument Type: varian 3400+P&T Column type: db-624
# Solvent Description:
# Conditions: 400(hold 4 min)-->100/min-->140(hold 2 min)
# Detector 0: PID Detector 1: PLCD
# Misc. Information: Ipt1:
*****
Starting Delay: 0.00 Ending retention time: 15.00
Area reject: 0 One sample per 0.102 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	REF PEAK	% DELTA RET TIME	CONC/AREA
1	5.165	TCE	-9.2336	100.0000%	244	48	5.11	1	0	-3.7829E-02

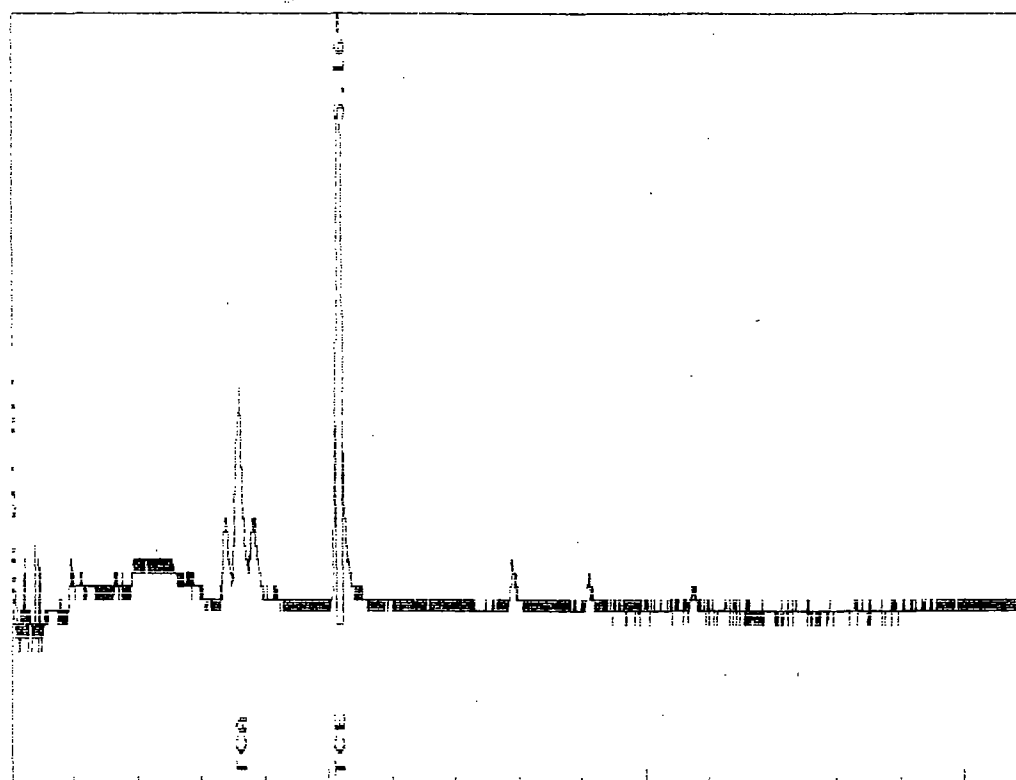
TOTAL AMOUNT = -9.2336

```

PEAKS NOT FOUND IN THIS RUN
NAME          ADJUSTED RET.TIME.  REFERENCE PEAK
TCA           5.62              TCA

```

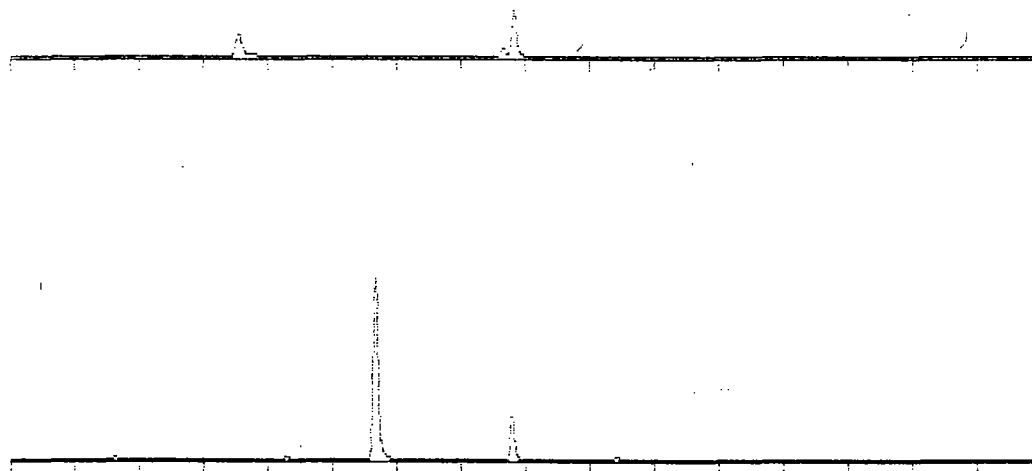
Areas, times, and heights stored in: G:\CLANK113.ATB
Data File = G:\CLANK113.PTS Printed on 12-22-1987 at 15:20:39
Start time: 0.00 min. Stop time: 16.00 min. Offset: 0 mv.
Low Value: 72 uv High Value: 121 uv Scale factor: 1.0



CS452001D hok Dop

09-8-5

Output redirected to lot1:



0-16 Min Scale: 50 Mv Ch.A. 50 Mv Ch.B

HIPCO CS452001D Processed: 12-22-1989 14:38:29, segment 1, cycle 12

RAW DATA SAVED IN FILE G:HIPCO112.PTS Second Channel Stored in G:HIPCO112.PTS

***** AREA PERCENT REPORT *****

***** 12-22-1989 14:39:13 Version 5.1 *****

* Sample Name: HIPCO CS452001D Data File: G:HIPCO112 *

* Date: 12-23-1989 05:58:33 Method: AVDA *

* Interface: 16 Cycle#: 12 Operator R.P Channel#: 0 Vial#: N.A. *

* Starting Peak Width: 2 Threshold: .25 Area Threshold: 10 *

* Instrument Type: varian 3400-P&T Column Type: db-624 *

* Solvent Description: *

* Detector 0: FID Detector 1: ELCD *
 * Misc. Information: lot1: *

 Starting Delay: 0.00 Run Time: 16.00

PK No.	Ret Time	Peak Area	Area %	S L	Peak Ht.	Normalized %	Area/ Height
1	1.627	418	3.9602	5	40	5.047	15.5
2	4.277	60	0.3850	6	14	0.491	4.4
3	5.673	12246	78.4729	6	2228	100.000	5.5
4	7.801	2562	16.4139	6	577	20.917	4.4
5	9.399	120	0.7680	6	29	0.979	4.1

Total Area: 15606 Area Reject: 0 One sample per 0.102 sec.

***** EXTERNAL STANDARD TABLE *****
 ***** 12-22-1989 14:39:14 Version 3.1 *****
 * Sample Name: HIPCO C54620010 Data File: S:\HIPCO112 *
 * Date: 12-23-1989 05:55:33 Method: AV04 12-21-1989 14:50:47 # 116 *
 * Interface: 16 Cycle#: 12 Operator R.P Channel#: 0 Vial#: N.A. *
 * Starting Peak Width: 2 Threshold: .25 Area Threshold: 10 *

 * Instrument Type: varian 3400+P&T Column Type: db-624 *
 * Solvent Description: *
 * Conditions: 400(hold 4 min)--->100/min--->140(hold 2 min) *
 * Detector 0: FID Detector 1: ELCD *
 * Misc. Information: lot1: *

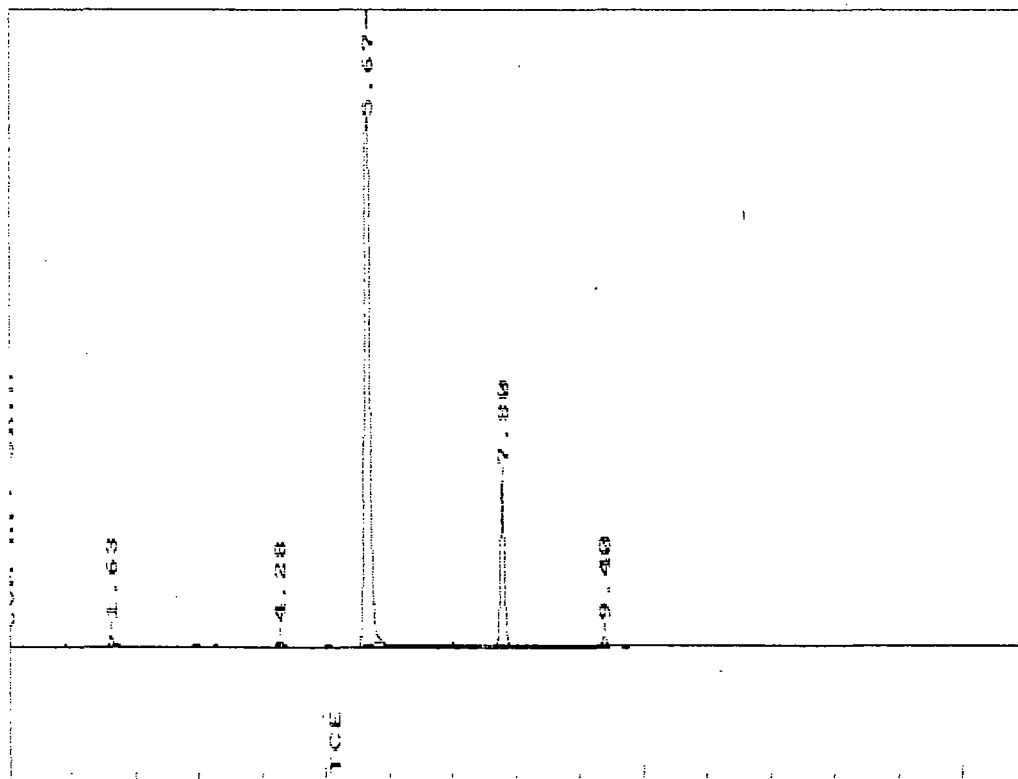
 Starting Delay: 0.00 Ending retention time: 16.00
 Area reject: 0 One sample per 0.102 sec.
 Amount injected: 1.00 Dilution factor: 1.00
 Sample Weight: 4.51900

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	AREA/ HEIGHT	REF PEAK	% DELTA RET TIME	CONC/AREA
-------------	-------------	--------------	-------------------------	--------------------	------	-----------------	-------------	---------------------	-----------

TOTAL AMOUNT = 0.0000

PEAKS NOT FOUND IN THIS RUN
 NAME ADJUSTED RET.TIME. REFERENCE PEAK
 TCE 5.13 TCE

Area, times, and heights stored in: G:\HIPC0112.ATB
Data File = G:\HIPC0112.PYS Printed on 12-22-1989 at 14:39:29
Start time: 0.00 min. Stop time: 16.00 min. Offset: 0 mv.
Low Value: 81 uv High Value: 2320 uv Scale factor: 1.0



***** AREA PERCENT REPORT *****

***** 12-22-1989 14:40:50 Version 5.1 *****

* Sample Name: HIPC0 C54920010 Data File: G:\HIPC0112 *

* Date: 12-23-1989 85:53:33 Method: BV0A *

* Interface: 16 Cycle#: 12 Operator R.P Channel#: 1 Vial#: N.A. *

* Starting Peak Width: 5 Threshold: 1 Area Threshold: 10 *

* Instrument Type: varian 3400+P&I Column Type: db-624 *

* Solvent Description: *

* Conditions: 400(hold 4 min)-->100/min-->140(hold 2 min) *

* Detector 0: PID Detector 1: ELOD *

* Misc. Information: lot#: *

Starting Delay: 0.00 Run Time: 16.00

PK No.	Ret Time	Peak Area	Area %	S L	Peak Rt.	Normalized %	Area/Height
1	3.550	2032	35.0170	2	296	62.169	6.9
2	7.645	503	8.6759	2	107	15.408	4.7
3	7.820	3267	56.3071	2	635	100.000	5.1

Total Area: 5803 Area Reject: 0 One sample per 0.102 sec.

```

***** EXTERNAL STANDARD TABLE *****
***** 12-22-1989 14:40:01 Version 3.1 *****
* Sample Name: HIPC0 08482001D Data File: 8:11PC0112 *
* Date: 12-23-1989 85:58:33 Method: BVDA 12-21-1989 14:54:42 # 106 *
* Interface: 16 Cvcle#: 12 Operator R.P Channel#: 1 Vial#: N.A. *
* Starting Peak Width: 5 Threshold: 1 Area Threshold: 10 *
*****
* Instrument Type: Varian 3400+P&F Column Type: db-624 *
* Solvent Description: *
* Conditions: 400(hold 4 min)-->100/min-->140(hold 2 min) *
* Detector 0: FID Detector 1: ELCD *
* Misc. Information: Ipt1: *
*****
Starting Delay: 0.00 Ending retention time: 16.00
Area reject: 0 One sample per 0.102 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 4.51900

```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ugb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	3.550	TOC	-2.6969	100.0000%	2032	296	6.9 2	1	0	-1.3272E-03

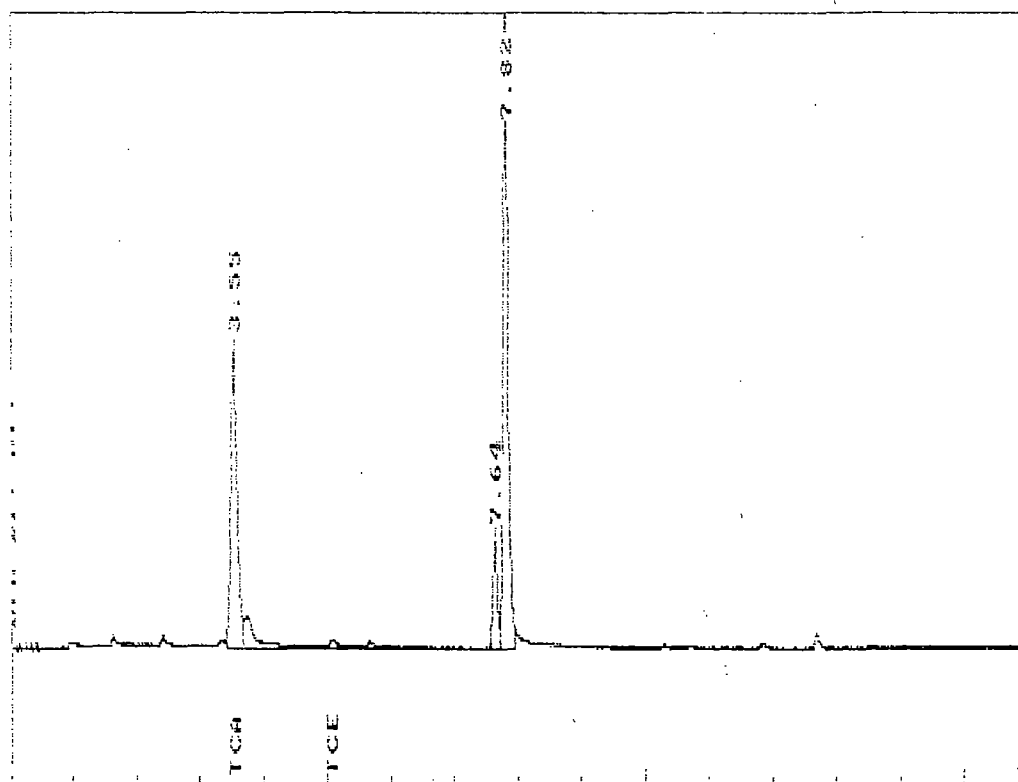
TOTAL AMOUNT = -2.6969

```

PEAKS NOT FOUND IN THIS RUN
NAME      ADJUSTED RET.TIME.  REFERENCE PEAK
TOC      5.06          TOC

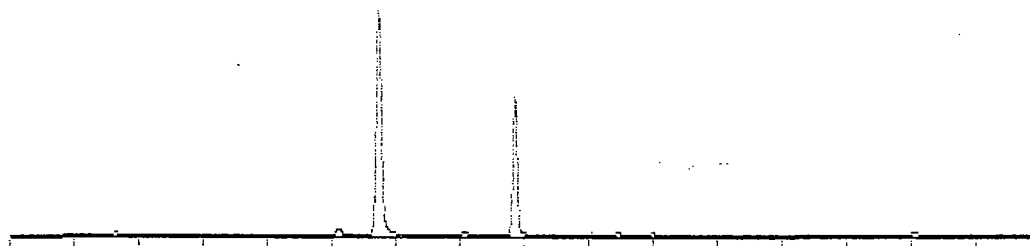
```

Areas, times, and heights stored in: G:\IPCO0112.ATB
Data File = G:\IPCO0112-PR3 Printed on 12-22-1999 at 14:41:00
Start time: 0.00 min. Stop time: 16.00 min. Offset: 0 mv.
Low Value: 71 uv High Value: 709 uv Scale factor: 1.0



05452001

Output redirected to lot1:



0-16 Min Scale: 50 Mv Ch.A, 50 Mv Ch.8

HIPC0 05452-001 Processed: 12-22-1989 11:41:55, segment 1, cycle 10

RAW DATA SAVED IN FILE G:HIPC0110.PT5 Second Channel Stored in G:HIPC0110.PT9

***** AREA PERCENT REPORT *****

***** 12-22-1989 11:42:39 Version 5.1 *****

* Sample Name: HIPC0 05452-001 Data File: G:HIPC0110 *

* Date: 12-23-1989 00:05:22 Method: AVDA *

* Interface: 16 Cycle#: 10 Operator R.P Channel#: 0 Vial#: N.A. *

* Starting Peak Width: 2 Threshold: .25 Area Threshold: 10 *

* Instrument Type: varian 3400+P&T Column Type: db-624 *

* Solvent Description: *

```

*      Detector 0: PID      Detector 1: ELCD      *
* Misc. Information:      Ipt1:      *
*****
Starting Delay: 0.00      Run Time: 16.00

```

PK No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.763	644	2.5961	5	3	4.091	80.5
2	1.640	110	0.4447	6	34	0.701	3.2
3	5.112	390	1.5720	6	74	2.477	5.3
4	5.732	15748	63.4522	6	2786	100.000	5.7
5	7.067	171	0.6875	6	37	1.084	4.6
6	7.857	7598	30.6130	6	1707	48.246	4.5
7	9.457	157	0.6345	6	38	1.000	4.1

Total Area: 24819 Area Reject: 0 One sample per 0.102 sec.

```

***** EXTERNAL STANDARD CABLE *****
***** 12-22-1989 11:42:41 Version 0.1 *****
* Sample Name: HIPCO CS452-001      Data File: S:\HIPCO110
* Date: 12-23-1989 80:05:22 Method: AVDA 12-21-1989 14:50:49 # 116
* Integrate: 16 Cycle#: 10 Operator R.P Channel#: 0 Vial#: N.A.
* Starting Peak Width: 2 Threshold: .25 Area Threshold: 10
*****
* Instrument Type: varian 3400+P&T      Column Type: db-624
* Solvent Description:
* Conditions: 40C(hold 4 min)--->100C/min--->140(hold 2 min)
* Detector 0: PID      Detector 1: ELCD
* Misc. Information:      Ipt1:
*****
Starting Delay: 0.00      Ending retention time: 16.00
Area reject: 0      One sample per 0.102 sec.
Amount injected: 1.00      Dilution factor: 1.00
Sample Weight: 4.90900

```

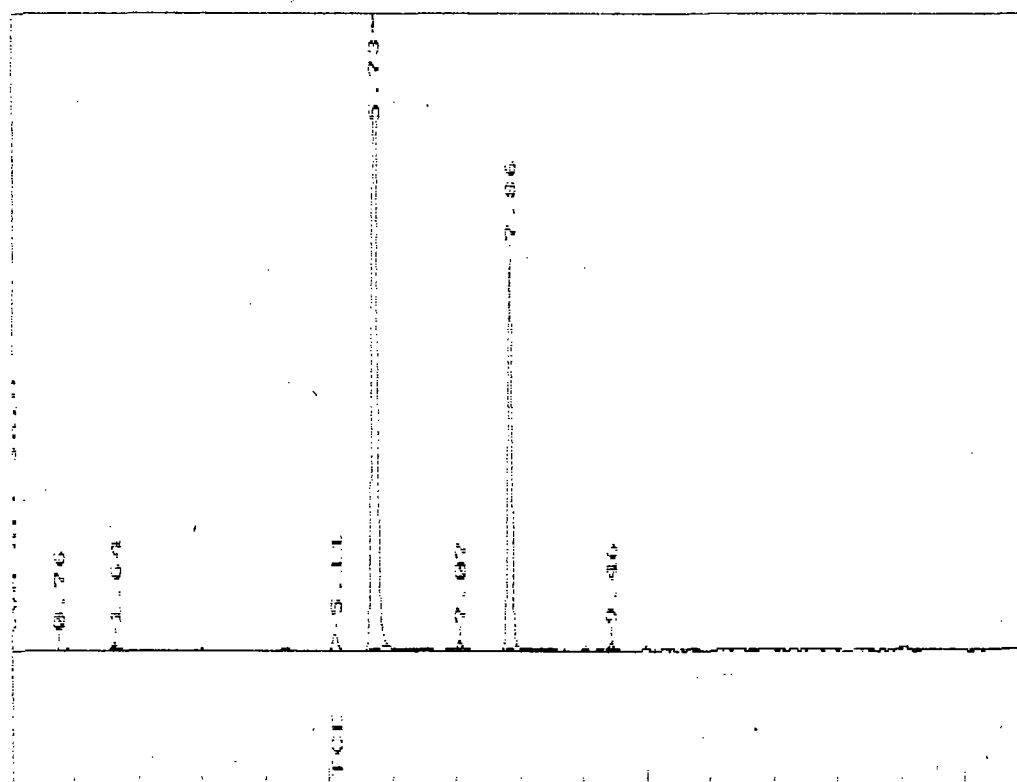
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT BL	REF PEAK	% DELTA RET TIME	CONC/AREA
3	5.112	TCE	-2.7277	100.0000%	390	74	5.3 6	3	0	-6.9914E-03
TOTAL AMOUNT =			-2.7277							

Areas, times, and heights stored in: S:\HIPC0110.ACB

Data File = S:\HIPC0110.FTS Printed on 12-22-1989 At 11:42:55

Start time: 0.00 min. Stop time: 16.00 min. Offset: 0 mv.

Low Value: 83 uv High Value: 2878 uv Scale factor: 1.0



***** AREA PERCENT REPORT *****

***** 12-22-1989 11:44:16 Version 3.1 *****
 * Sample Name: HIPC0 08482-001 Date File: 0:01P00110 *
 * Date: 12-23-1989 00:05:22 Method: BVDA *
 * Interface: 16 Cyclic#: 10 Operator R-P Channel#: 1 Vial#: N.A. *
 * Starting Peak Width: 5 Threshold: 1 Area threshold: 10 *

 * Instrument type: Varian 3400+P&T Column type: db-624 *
 * Solvent Description: *
 * Conditions: 400(hold 4 min)--->100/min--->140(hold 2 min) *
 * Detector 0: FID Detector 1: ELOC *
 * Misc. Information: iot1: *

 Starting Delay: 0.00 Run time: 10.00

PK No.	Ret Time	Peak Area	Area %	S L	Peak Ht.	Normalized %	Area/Height
1	3.573	3419	23.1728	2	482	44.056	7.1
2	5.146	347	2.3497	2	63	4.467	5.5
3	7.699	3228	21.8784	2	699	41.595	4.6
4	7.885	7761	52.5991	2	1521	100.000	5.1

Total Area: 14755 Area Reject: 0 One sample per 0.102 sec.

```

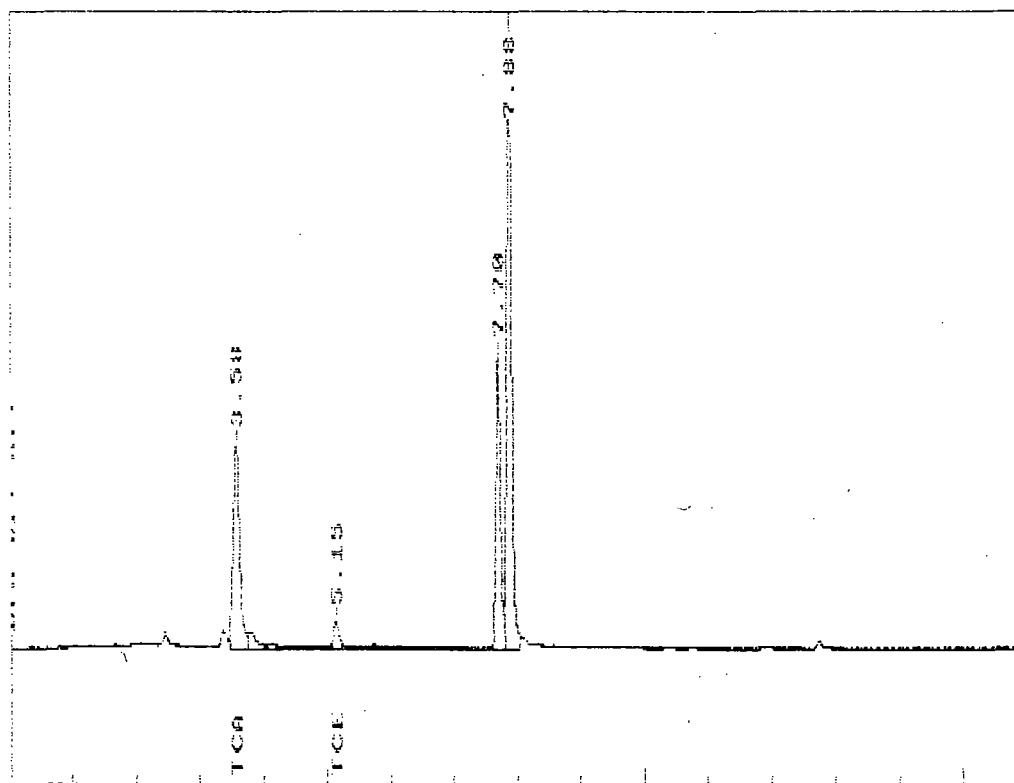
***** EXTERNAL STANDARD TABLE *****
***** 12-22-1989 11:44:18 Verelox 5.1 *****
# Sample Name: HIPCO CS482-001      Data File: 411PC0110
# Date: 12-23-1989 20:05:22 Method: 8V04 12-21-1989 14:54:42 # 106
# Interface: 15 Cycle#: 10 Operator R.P Channel#: 1 Vial#: N.A.
# Starting Peak Width: 5 Threshold: 1 Area Threshold: 10
*****
# Instrument Type: varian 3400+P&T Column Type: do-e24
# Solvent Description:
# Conditions: 40C(hold 4 min)-->100/min-->140(hold 2 min)
# Detector 0: PID Detector 1: EICD
# Misc. Information: Ipt1:
*****
Starting delay: 0.00 Ending retention time: 16.00
Area reject: 0 One sample per 0.102 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 4.90900

```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	REF PEAK	% DELTA RET TIME	CONC/AREA
1	5.975	TCA	-1.4397	44.4306%	3419	482	7.1 2	1	0	-4.1990E-04
2	6.146	TCE	-1.7956	55.5694%	347	63	5.5 2	2	0	-5.1792E-03

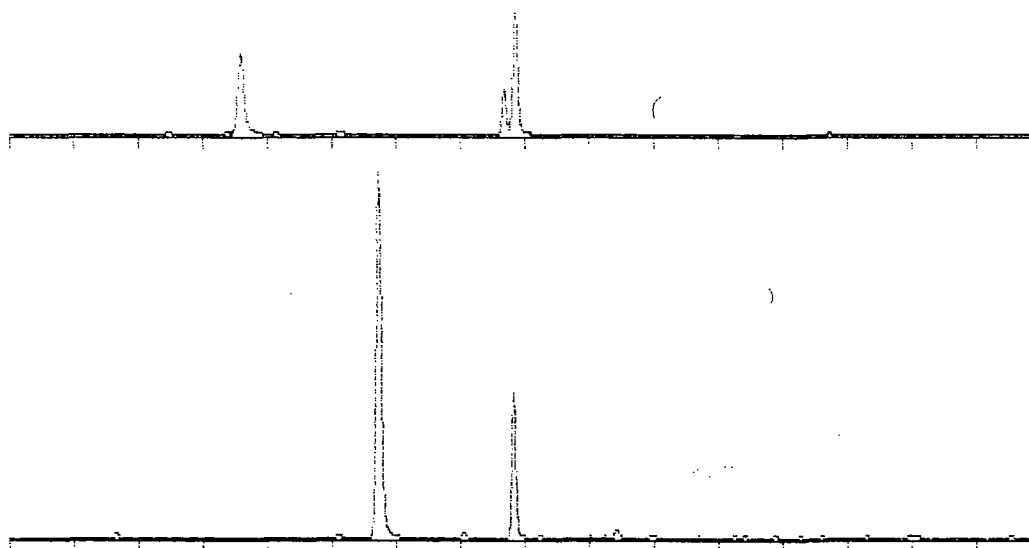
TOTAL AMOUNT = -3.2313

Areas, times, and heights stored in: 8:11PC0110.ATB
Data File = 8:11PC0110.PT3 Printed on 12-22-1989 at 11:44:52
Start time: 0.00 min. Stop time: 16.00 min. Offset: 0 mv.
Low Value: 72 uv High Value: 1596 uv Scale factor: 1.0



CS4S2001Dup Field Duplicate

Output redirected to lot11



0-10 Min Scale: 50 Mv Ch.A, 50 Mv Ch.B

HIPCO CS4S2001Dup Processed: 12-22-1989 12:20:52, segment 1, cycle 11

RAW DATA SAVED IN FILE G:HIPCO111.PTS Second Channel Stored in G:HIPCO111.PTS

***** AREA PERCENT REPORT *****

***** 12-22-1989 12:21:39 Version 5.1 *****

* Sample Name: HIPCO CS4S2001Dup Data File: G:HIPCO111 *

* Date: 12-23-1989 81:23:14 Method: AVDA *

* Interface: 16 Cycle#: 11 Operator R.P Channel#: 0 Vial#: N.A. *

* Starting Peak Width: 2 Threshold: .25 Area Threshold: 10 *

* Instrument Type: varian 3400+P&T Column Type: db-a24 *

* Report Description: *****

```

#          Detector 0: PID          Detector 1: ELCD          #
# Misc. Information:                  lpt1:                  #
*****
Starting Delay:  0.00                Run Time:  16.00

```

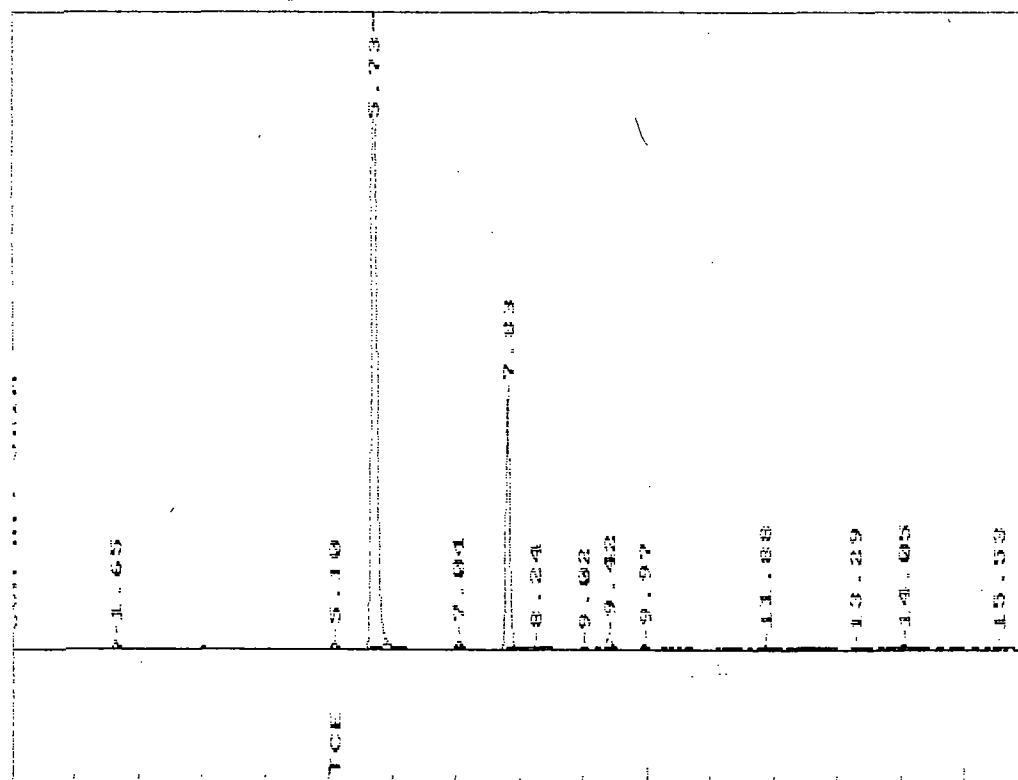
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	1.649	1641	4.4861	5	64	6.345	25.6
2	5.096	212	0.5807	6	43	0.821	4.9
3	5.729	25857	70.7025	6	4545	100.000	5.7
4	7.045	267	0.7307	6	57	1.034	4.7
5	7.527	7661	20.9491	6	1788	29.630	4.3
6	8.243	54	0.1487	6	16	0.210	3.4
7	9.017	35	0.0964	6	12	0.136	3.0
8	9.421	437	1.1940	6	100	1.689	4.4
9	9.969	151	0.4119	6	37	0.583	4.1
10	11.881	44	0.1213	6	15	0.172	3.0
11	13.294	29	0.0781	6	10	0.110	2.9
12	14.050	151	0.4129	6	23	0.584	6.5
13	15.535	32	0.0876	6	10	0.124	3.2

```

Total Area:      365/1      Area Reject:      0      One sample per      0.102 sec.

```


Areas, times, and heights stored in: C:\HIPC0111.PTB
 Data File = C:\HIPC0111.PTB Printed on 12-22-1989 at 12:21:56
 Start time: 0.00 min. Stop time: 15.00 min. Offset: 0 mv.
 Low Value: 82 uv High Value: 4641 uv Scale factor: 1.0



***** AREA PERCENT REPORT *****

***** 12-22-1999 12:23:24 Version 3.1 *****

* Sample Name: HIPC0 C94S2001Duo Data File: 0:1IPC0111 *

* Date: 12-23-1999 01:23:14 Method: 6VDA *

* Interface: 16 Cycle#: 11 Operator R.P Channel#: 1 Vial#: N.A. *

* Starting Peak Width: 5 Threshold: 1 Area Threshold: 10 *

* Instrument type: varian 3400+P&T Column type: db-624 *

* Solvent Description: *

* Conditions: 40C(hold 4 min)--->10C/min--->140C(hold 2 min) *

* Detector 0: PID Detector 1: ELCD *

* Misc. information: Ipt1: *

Starting Delay: 0.00 Run Time: 16.00

PK No.	Ret Time	Peak Area	Area %	S L	Peak Ht.	Normalized %	Area/ Height
1	2.455	233	1.2542	2	50	2.889	4.7
2	3.585	7368	39.6304	2	1026	91.292	7.2
3	5.129	223	1.1976	2	42	2.763	5.3
4	7.662	2697	14.5052	2	572	33.414	4.7
5	7.854	6070	43.4106	2	1549	100.000	5.2

Total Area: 18591 Area Reject: 0 One sample per 0.102 sec.

```

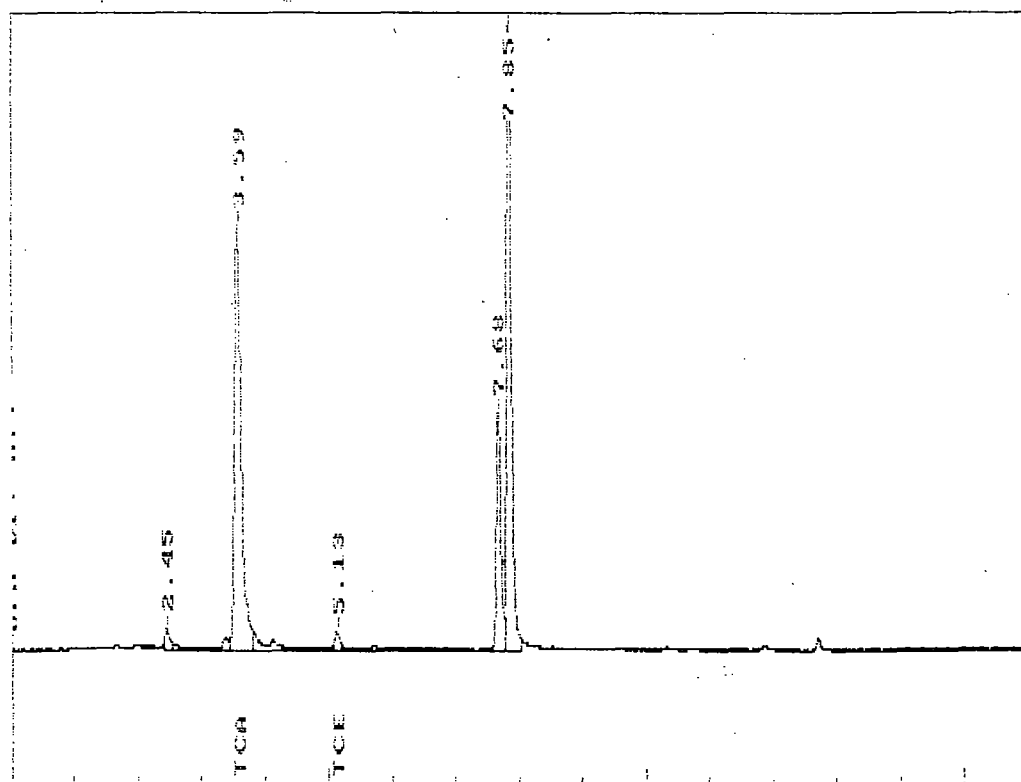
*****
***** EXTERNAL STANDARD TABLE *****
***** 12-22-1989 12:23:25 Version 5.1 *****
* Sample Name: HIPC0 C54520010up Data File: 9:HIPC0111 *
* Date: 12-23-1989 61:23:14 Method: 8V0A 12-21-1989 14:54:42 # 106 *
* Interface: 16 Cycle#: 11 Operator R.P Channel#: 1 Vial#: N.A. *
* Starting Peak Width: 5 Threshold: 1 Area threshold: 10 *
*****
* Instrument Type: varian 3400-P&T Column Type: db-c24 *
* Solvent Description: *
* Conditions: 40C(hold 4 min)--->100C/min--->140C(hold 2 min) *
* Detector 0: PID Detector 1: ELED *
* Misc. Information: lot1: *
*****
Starting Delay: 0.00 Ending retention time: 16.00
Area reject: 0 One sample per 0.102 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 4.51500

```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppm	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT EL	REF PEAK	% DELTA RET TIME	CONC/AREA
2	3.585	TCA	1.6794	-436.4731%	7368	1026	7.2 2	2	0	2.2794E-04
3	5.129	TCE	-2.0641	536.4731%	223	42	5.3 2	3	0	-9.2557E-03

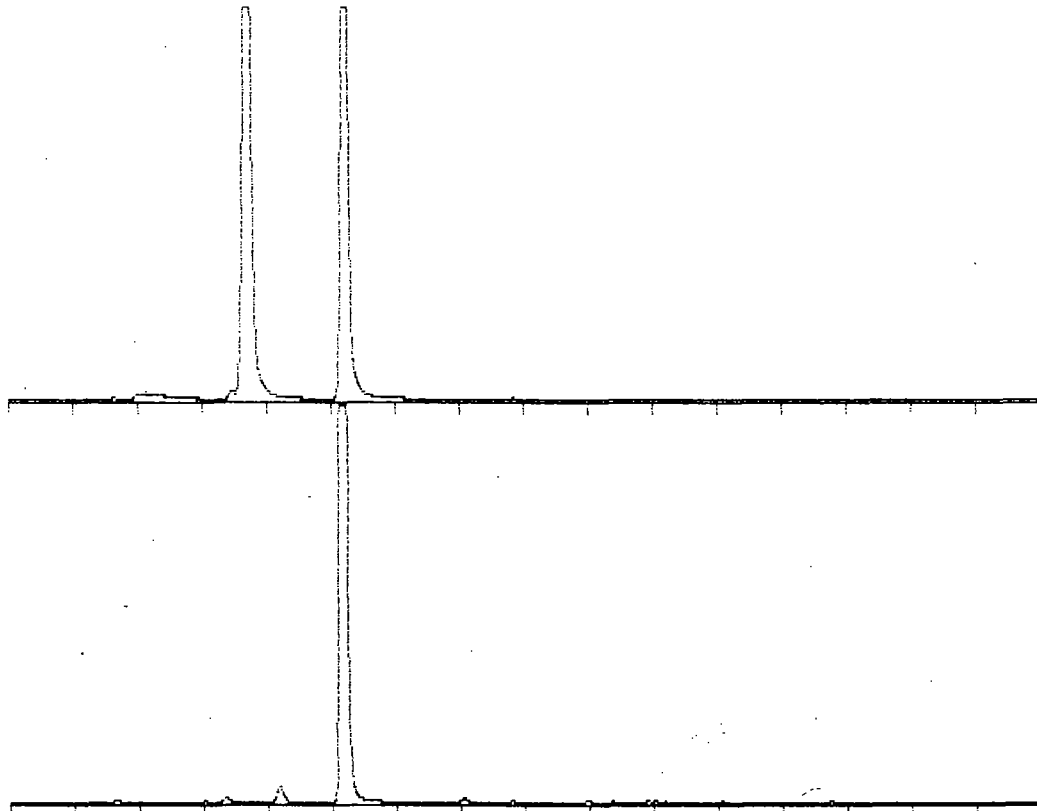
TOTAL AMOUNT = -0.3846

Area, times, and heights stored in: G:\IPC0111.ATB
Data File = G:\IPC0111.FTS Printed on 12-22-1989 At 12:23:40
Start time: 0.00 min. Stop time: 16.00 min. Offset: 0 mv.
Low Value: 72 uv High Value: 1623 uv Scale factor: 1.0



Final STD 250ppb

Output redirected to lpt1:



0-16 Min Scale: 50 Mv Ch.A, 50 Mv Ch.B
FINAL STD 250ppb Processed: 12-22-1989 16:31:08. segment 1, cycle 15
RAW DATA SAVED IN FILE G:F25015.PTS Second Channel Stored in G:G25015.PTS

***** AREA PERCENT REPORT *****

***** 12-22-1989 16:31:55 Version 5.1 *****
* Sample Name: FINAL STD 250ppb Data File: G:F25015 *
* Date: 12-23-1989 89:43:41 Method: AVDA *
* Interface: 16 Cycle#: 15 Operator R.F Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 2 Threshold: .25 Area Threshold: 10 *

* Instrument Type: varian 3400-P&T Column Type: db-624 *
* Solvent Description: *

* Detector 0: PID Detector 1: ELCD *

* Misc. Information: lpt1: * *

Starting Delay: 0.00 Run Time: 16.00

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/Height
1	1.647	1393	1.3198	5	47	1.367	29.6
2	3.342	392	0.3716	6	67	0.385	5.9
3	4.175	1331	1.2609	6	185	1.306	7.2
4	5.171	101938	96.5587	6	17092	100.000	6.0
5	7.046	295	0.2795	6	54	0.289	5.5
6	8.976	101	0.0957	6	27	0.099	3.8
7	10.032	41	0.0388	6	14	0.040	3.0
8	10.169	21	0.0198	6	8	0.021	2.6
9	12.747	58	0.0551	6	16	0.057	3.6

Total Area: 105571 Area Reject: 0 One sample per 0.102 sec.

***** EXTERNAL STANDARD TABLE *****

***** 12-22-1989 16:31:57 Version 5.1 *****

* Sample Name: FINAL STD 250ppb Data File: G:F25015 *

* Date: 12-23-1989 89:43:41 Method: AVDA 12-21-1989 14:50:49 # 116 *

* Interface: 16 Cycle#: 15 Operator R.P Channel#: 0 Vial#: N.A. *

* Starting Peak Width: 2 Threshold: .25 Area Threshold: 10 *

* Instrument Type: varian 3400+P&T Column Type: db-624 *

* Solvent Description: *

* Conditions: 40C(hold 4 min)-->10C/min-->140(hold 2 min) *

* Detector 0: PID Detector 1: ELCD *

* Misc. Information: lpt1: * *

Starting Delay: 0.00 Ending retention time: 16.00

Area reject: 0 One sample per 0.102 sec.

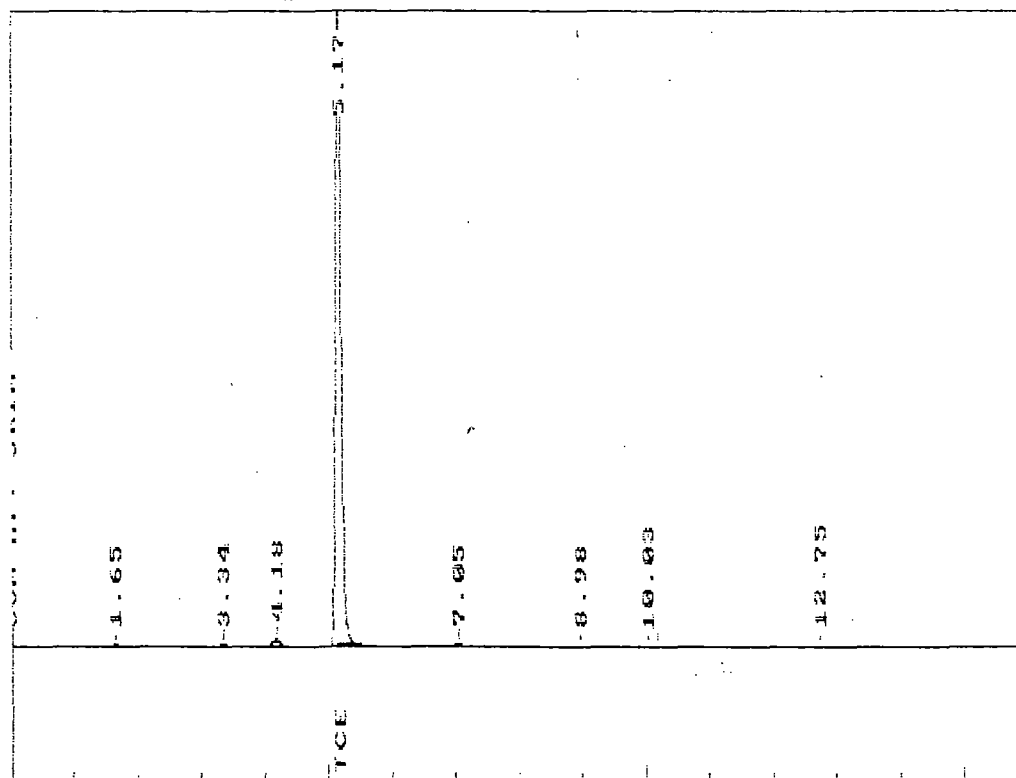
Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/HEIGHT BL	REF PEAK	% DELTA RET TIME	CONC/AREA
4	5.171	TCE	234.8962	100.0000%	101938	17092	6.0 6	4	0	2.3043E-03

TOTAL AMOUNT = 234.8962

Areas, times, and heights stored in: G:\F25015.A\B
 Data File = G:\F25015.PTS Printed on 12-22-1989 at 16:32:12
 Start time: 0.00 min. Stop time: 16.00 min. Offset: 0 mv.
 Low Value: 82 uv High Value: 17190 uv Scale factor: 1.0



***** AREA PERCENT REPORT *****

***** 12-22-1989 16:33:32 Version 3.1 *****
 * Sample Name: FINAL STD 250ppb . Data File: G:G25015 *
 * Date: 12-23-1989 89:43:41 Method: BVDA *
 * Interface: 16 Cycle#: 15 Operator R.P Channel#: 1 Vial#: N.A. *
 * Starting Peak Width: 5 Threshold: 1 Area Threshold: 10 *

 * Instrument Type: varian 3400-P&T Column Type: db-624 *
 * Solvent Description: *
 * Conditions: 40C(hold 4 min)--->10C/min--->140(hold 2 min) *
 * Detector 0: PID Detector 1: ELCD *
 * Misc. Information: 1pt1: *

 Starting Delay: 0.00 Run Time: 16.00

PK No.	Ret Time	Peak Area	Area %	S L	Peak Ht.	Normalized %	Area/ Height
1	1.629	123	0.0915	2	37	0.178	3.3
2	2.060	710	0.5276	2	84	1.024	8.5
3	3.456	581	0.4315	2	111	0.838	5.2
4	3.675	69351	51.5206	2	8271	100.000	8.4
5	5.199	63843	47.4288	2	9617	92.058	6.6

Total Area: 134607 Area Reject: 0 One sample per 0.102 sec.

```

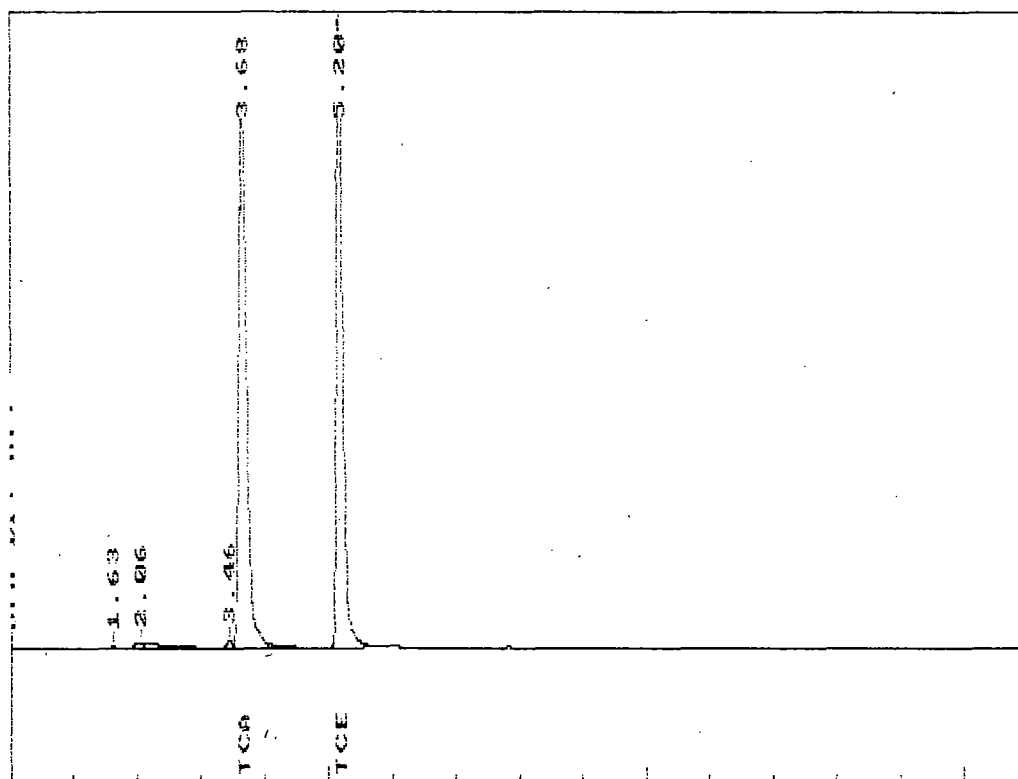
*****
***** EXTERNAL STANDARD TABLE *****
***** 12-22-1989 16:33:34 Version 5.1 *****
* Sample Name: FINAL STD 250ppb Data File: G:\B25015
* Date: 12-23-1989 89:43:41 Method: BVDA 12-21-1989 14:54:42 # 100
* Interface: 16 Cycle#: 15 Operator R.P Channel#: 1 Vial#: N.A.
* Starting Peak Width: 5 Threshold: 1 Area Threshold: 10
*****
* Instrument Type: varian 3400-P&T Column Type: db-624
* Solvent Description:
* Conditions: 400(hold 4 min)--->100/min--->140(hold 2 min)
* Detector 0: PLO Detector 1: ELO
* Misc. Information: Iptir
*****
Starting Delay: 0.00 Ending retention time: 10.00
Area reject: 0 One sample per 0.102 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	REF PEAK	% DELTA RET TIME	CONC/AREA
4	3.675	TCA	237.2445	48.6537%	69351	8271	8.4 2	4	0	3.4209E-03
5	5.199	TCE	250.3743	51.3463%	63845	9617	6.6 2	5	0	3.9217E-03

TOTAL AMOUNT = 487.6189

Areas, times, and heights stored in: G:\025015.ATB
Data File = G:\025015.PTS Printed on 12-22-1989 at 16:33:48
Start time: 0.00 min. Stop time: 16.00 min. Offset: 0 mv.
Low Value: 72 uv High Value: 9691 uv Scale factor: 1.0



12/21/89 Daily calibration check

Reprocessed from calibration table

***** AREA PERCENT REPORT *****

***** 12-31-1989 15:00:33 Version 5.1 *****

* Sample Name: cce-tca std 250ppb Data File: D:\ICE_A8 *

* Date: 12-22-1989 51:52:37 Method: AV04 *

* Interface: 16 Cycles: 8 Operator W.P Channel#: 0 Vial#: N.A. *

* Starting Peak Width: 2 Threshold: .25 Area Threshold: 10 *

* Instrument Type: varian 3400+P&T Column type: db-624 *

* Solvent Description: *

* Conditions: 40C(hold 4 min)--->10C/min--->140(hold 2 min); *

* Detector 0: PID Detector 1: ELCD *

* Misc. Information: lot1: *

Starting Delay: 0.00 Run Time: 15.00

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/Height
1	1.625	1942	1.4417	5	24	1.820	80.9
2	3.305	437	0.3242	6	83	0.409	5.3
3	4.094	23670	17.5748	6	3606	22.188	6.6
4	5.129	106677	79.2077	6	18584	100.000	5.7
5	7.067	305	0.2264	6	59	0.286	5.1
6	7.857	1224	0.9087	6	259	1.147	4.7
7	9.049	120	0.0890	6	32	0.112	3.8
8	9.447	30	0.0224	6	11	0.028	2.8
9	9.996	146	0.1081	6	34	0.137	4.3
10	10.132	57	0.0426	6	17	0.054	3.4
11	12.888	73	0.0544	6	20	0.069	3.7

Total Area: 134660 Area Reject: 0 One sample per 0.102 sec.

```

*****
***** EXTERNAL STANDARD TABLE *****
***** 12-21-1989 15:00:35 Version 5.1 *****
* Sample Name: tce-tca std 230ppb Data File: WILE.D8 *
* Date: 12-22-1989 01:52:39 Method: AVDA 12-21-1989 14:50:49 # 116 *
* Interface: 16 Cycle#: 8 Operator R.P Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 2 Threshold: .25 Area Threshold: 10 *
*****
* Instrument Type: varian 3400+P&T Column Type: db-624 *
* Solvent Description: *
* Conditions: 40C(hold 4 min)-->10C/min-->140(hold 2 min) *
* Detector 0: FID Detector 1: ELCD *
* Misc. Information: 1pt1: *
*****
Starting Delay: 0.00 Ending retention time: 16.00
Area reject: 0 One sample per 0.103 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT SL	REF PEAK	% DELTA RET TIME	CONC/AREA
4	5.129	TCE	246.4833	100.0000%	106677	18584	5.76	4	0	2.3108E-03
TOTAL AMOUNT =			246.4833							

***** AREA PERCENT REPORT *****

***** 12-21-1989 15:02:08 Version 5.1 *****
 * Sample Name: tce-tca std 250ppm Data File: tceuce_ab *
 * Date: 12-22-1989 51:52:37 Method: BVDA *
 * Interface: 16 Cycle#: 8 Operator R.P Channel#: 1 Vial#: N/A. *
 * Starting Peak Width: 5 Threshold: 1 Area Threshold: 10 *

 * Instrument Type: varian S400+P&T Column Type: db-a24 *
 * Solvent Description: *
 * Conditions: 40C(hold 4 min)--->100/min--->140(hold 2 min) *
 * Detector 0: PID Detector 1: ELCD *
 * Misc. Information: lot1: *

 Starting Delay: 0.00 Run Time: 16.00

PK No.	Ret Time	Peak Area	Area %	S L	Peak Ht.	Normalized %	Area/ Height
1	1.923	2313	1.3685	2	483	3.116	4.8
2	2.137	2905	1.7183	2	485	3.915	6.0
3	3.373	6790	4.0167	2	1117	9.152	6.1
4	3.587	74187	43.8902	2	7611	100.000	7.7
5	3.810	15363	9.0889	2	1739	20.708	6.8
6	5.160	66804	38.9295	2	10168	88.697	6.5
7	7.886	1670	0.9878	2	304	2.251	5.5

Total Area: 169034 Area Reject: 0 One sample per 0.102 sec.

```

***** EXTERNAL STANDARD TABLE *****
***** 12-21-1989 15:02:10 Version 5.1 *****
# Sample Name: tce-tca std 250ppb Data File: 8:UDE_A8 #
# Date: 12-22-1989 11:52:39 Method: FVDA 12-21-1989 14:54:42 # 106 #
# Interface: 16 Cycle#: 8 Operator: R.P Channel#: 1 Visi#: N.A. #
# Starting Peak Width: 3 Threshold: 1 Area Threshold: 10 #
#####
# Instrument Type: varian 3400-PAT Column Type: db-624 #
# Solvent Description: #
# Conditions: 40C(hold 4 min)--->10C/min--->140(hold 2 min) #
# Detector 0: PID Detector 1: FID #
# Misc. Information: #
#####
Starting Delay: 0.00 Ending retention time: 15.00
Area reject: 0 One sample per 0.102 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

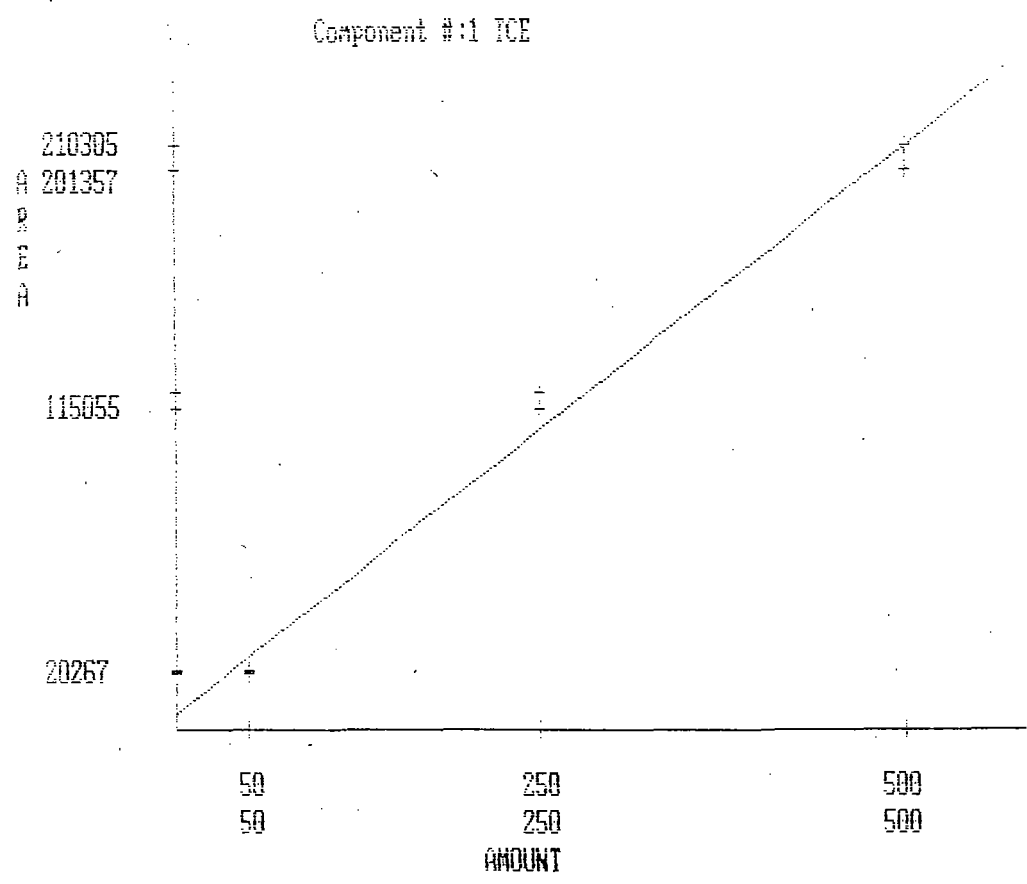
```

PEAK NO.	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	REF PEAK	% DELTA RET TIME	CONC/AREA
4	5.567	TCA	255.1726	49.5878%	74189	9511	7.7 2	4	0	3.4395E-03
5	5.163	TCE	258.3603	50.3122%	65804	10166	6.5 2	5	0	3.9265E-03
TOTAL AMOUNT =			513.5540							

09-8-10

Calibration Plot TCE-TCA

Method AYDA
Sample BTX
Operator K.F.
Run date 12-21-1987 14:50:47 version: 1.0
Printed on 12-21-1988 at 14:56:07
Straight line fit



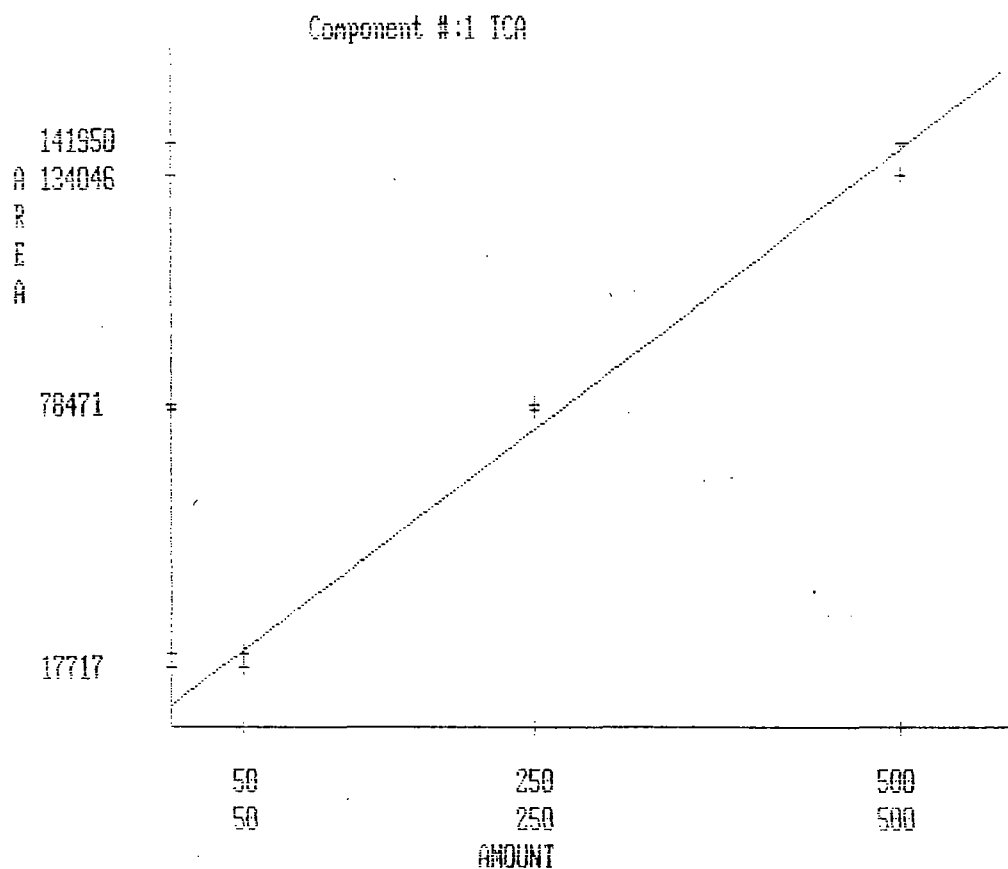
Component 1 = TCE
EXTERNAL STANDARD CALIBRATION

1	50.00	21035
2	50.00	20267
3	250.00	121670
4	250.00	115055
5	500.00	210365
6	500.00	201357

Y = SLOPE * X + INTERCEPT

Area = +1.0877E+02 * Amount + 5.8666E+03
 Amount = 2.4450E-03 * Area + -1.4344E+01
 R squared = 0.9891

Method: GVD
 Sample: 87X
 Operator: R.P.
 Run date: 12-21-1989 14:54:42 version: 106
 Printed on 12-21-1989 AT 14:56:02
 Straight Line fit



Component 1 = TCA
 EXTERNAL STANDARD CALIBRATION

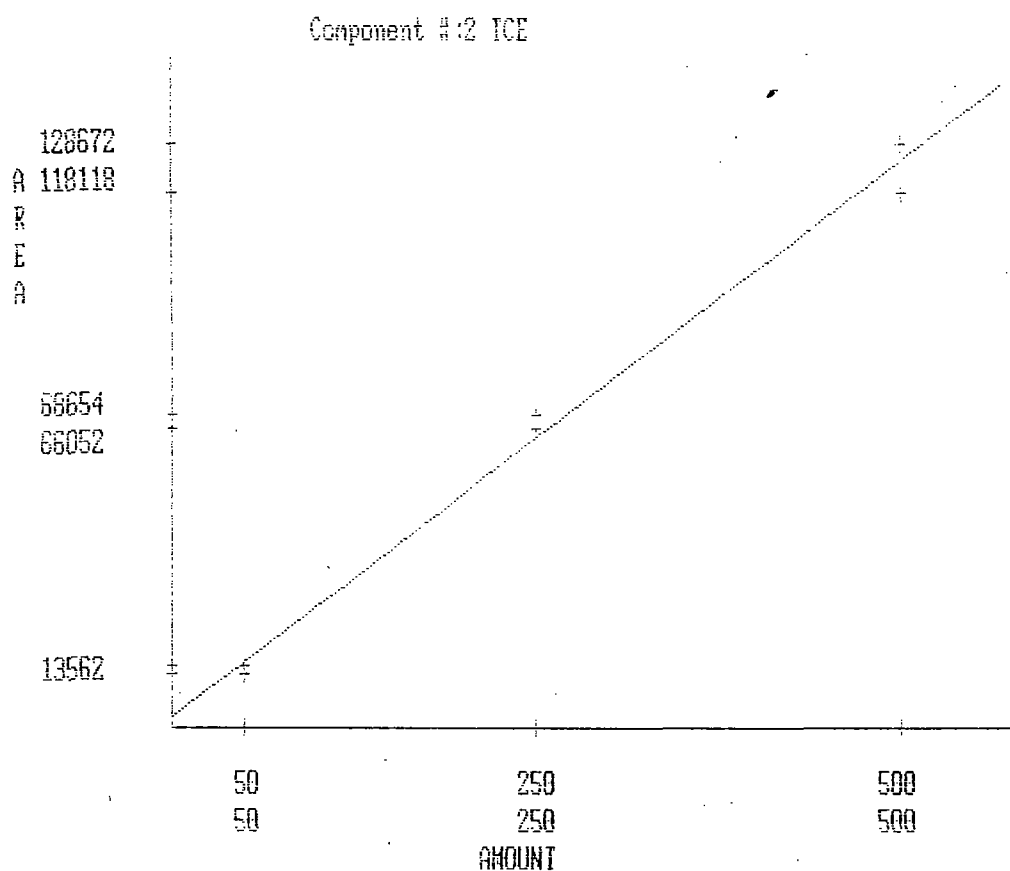
LEVEL AMOUNT

AREA

2	50.00	17717
3	250.00	77316
4	250.00	78471
5	500.00	141950
6	500.00	134046

Y = SLOPE * X + INTERCEPT

Area = 2.6989E+02 * Amount + 5.3212E+03
Amount = 3.7053E-03 * Area + -1.9716E+01
R squared = 0.9922



Component 2 = TCE
EXTERNAL STANDARD CALIBRATION
AREA

LEVEL	AMOUNT	AREA
1	50.00	11946
2	50.00	13562
3	250.00	68654
4	250.00	66052
5	500.00	128672
6	500.00	118118

Y = SLOPE * X + INTERCEPT

R squared = 0.7919

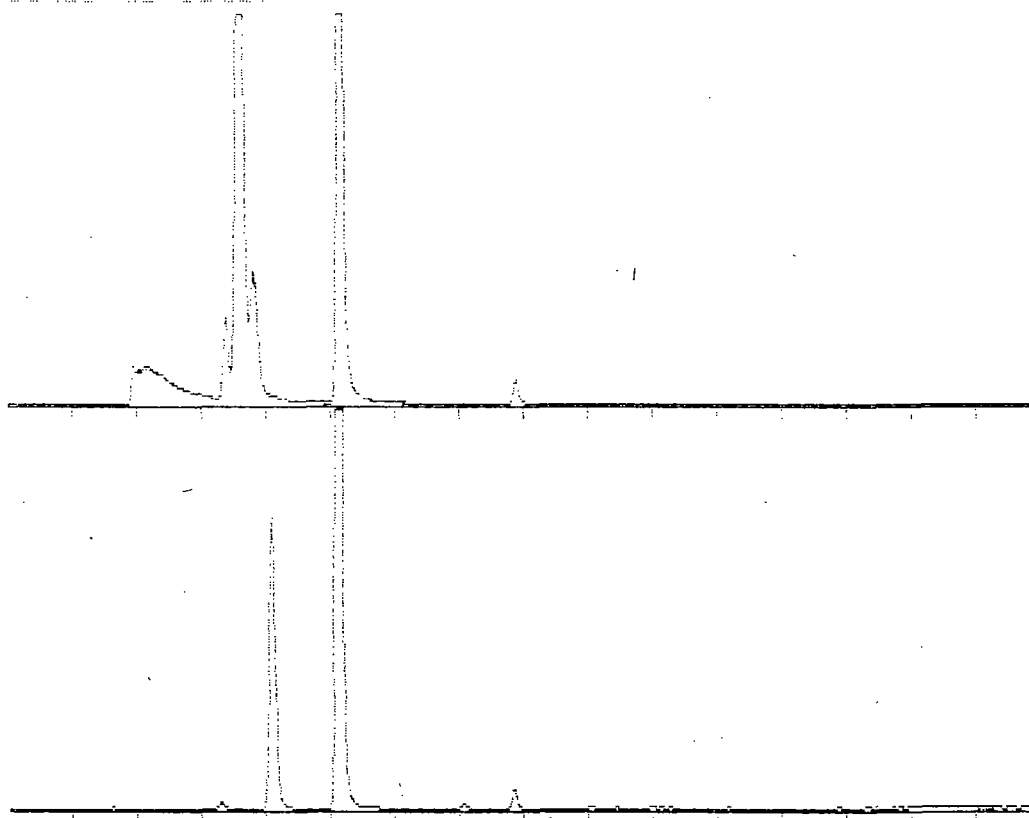
09-8-11

Daily Calibration STD

250 ppb

using RF

Output redirected to lot11



0-10 Min scale: 50 Mv Ch.A, 50 Mv Ch.B

tce-tca std 250ppb Processed: 12-21-1989 14:35:58, segment 1, cycle 8

RAW DATA SAVED IN FILE G:\TCE_A8.PTS Second Channel Stored in G:\TCE_A8.PTS

***** AREA PERCENT REPORT *****

***** 12-21-1989 14:36:42 Version 5.1 *****

* Sample Name: tce-tca std 250ppb Data File: G:\TCE_A8 *

* Date: 12-22-1989 61:52:39 Method: AVDA *

* Interface: 16 Cycle#: 8 Operator R.P Channel#: 0 Vial#: N.A. *

* Starting Peak Width: 2 Threshold: .25 Area Threshold: 10 *

* Instrument type: varian 3400+P&T Column type: gb-624 *

```

*          Detector 0: FID                      Detector 1: ELCD          *
* Misc. Information:                            /pt1:                      *
*****
Starting Delay: 0.00                      Run Time: 16.00

```

PK No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	1.625	1942	1.4417	5	24	1.820	80.9
2	3.305	437	0.3242	6	83	0.409	5.3
3	4.094	23670	17.5748	6	3606	22.188	6.6
4	5.129	106677	79.2077	6	18584	100.000	5.7
5	7.067	305	0.2264	6	50	0.286	5.1
6	7.857	1224	0.9087	6	259	1.147	4.7
7	9.049	120	0.0890	6	32	0.112	3.6
8	9.447	60	0.0224	6	11	0.028	2.8
9	9.996	146	0.1081	6	34	0.137	4.3
10	10.132	67	0.0426	6	17	0.054	3.4
11	12.858	73	0.0544	6	20	0.059	3.7

Total Area: 134660 Area Reject: 0 One sample per 0.102 sec.

***** EXTERNAL STANDARD TABLE *****

***** 12-21-1989 14:36:44 Version 5.1 *****

* Sample Name: hce-tca std 250ppb Date File: 4:IDE AB *

* Date: 12-22-1989 01:52:33 Method: AVDA 12-21-1989 13:46:12 # 115 *

* Interface: 16 Cycle#: 2 Operator R.P Channel#: 0 Vial#: N.A. *

* Starting Peak Width: 2 Threshold: .25 Area Threshold: 10 *

* Instrument Type: varian 3400-P&T Column type: db-524 *

* Solvent Description: *

* Conditions: 400(hold 4 min)-->100/min-->140(hold 2 min) *

* Detector 0: FID Detector 1: ELCD *

* Misc. Information: /pt1: *

Starting Delay: 0.00 Ending retention time: 16.00

Area reject: 0 One sample per 0.102 sec.

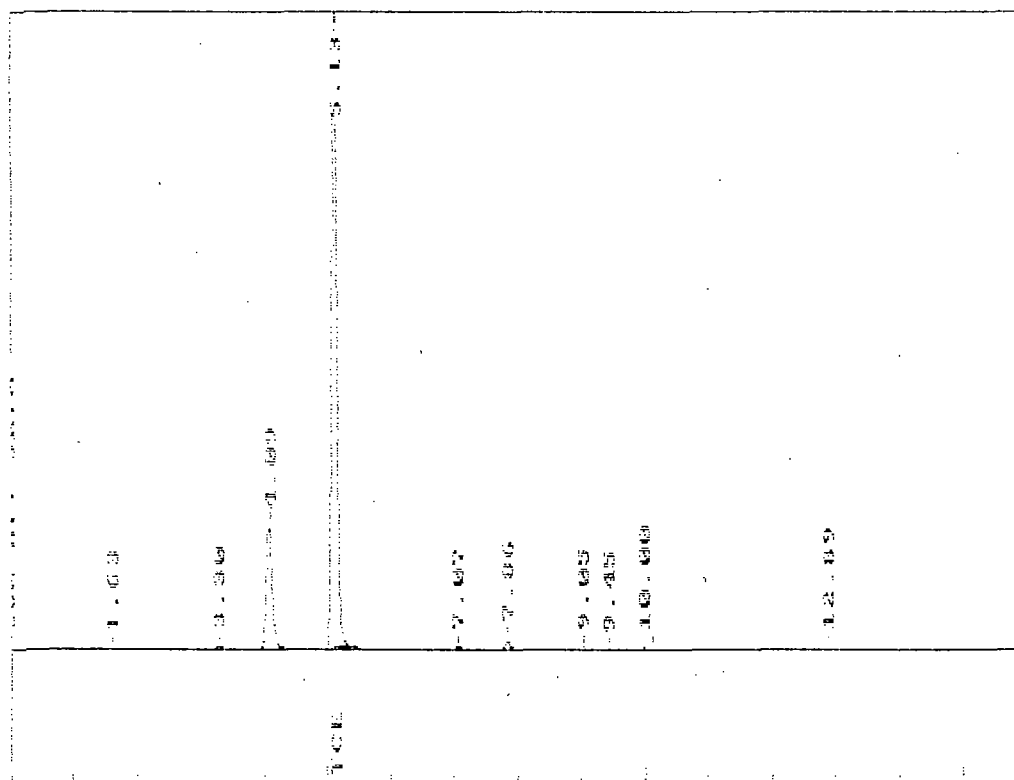
Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT BL	REF PEAK	% DELTA	CONC/AREA
4	5.129	TCE	247.7459	100.0000%	106677	18584	5.7 6	4	0	2.3224E-03

TOTAL AMOUNT = 247.7459

Areas, times, and heights stored in: G:\TCE A8.A10
 Data File = G:\TCE_A8.PTS Printed on 12-21-1989 at 14:36:59
 Start time: 0.00 min. Stop time: 15.00 min. Offset: 0 mv.
 Low Value: 62 uv High Value: 18686 uv Scale factor: 1.0



***** AREA REPORT *****

```

***** 12-21-1989 14:22:21 Version 5.1 *****
# Sample Name: ice-tca std 250ppb                      Data File: 61000_48
# Date: 12-21-1989 01:52:39 Method: EVOA
# Interface: 16 Cycle#: 3 Operator R.P Channel#: 1 Vial#: N.A.
# Starting Peak Width: 5 Threshold: 1 Area Threshold: 10
*****
# Instrument Type: varian 3400-PST Column type: LB-624
# Solvent Description:
# Conditions: 90C(hold 4 min)--->100/min--->140(hold 1 min)
# Detector 1: PID Detector 2: ECD
# Disc. Application:
*****
Starting Delay: 0.00 Run Time: 18.10
  
```

PK No.	Ret Time	Peak Area	Area %	S L	Peak Ht.	Normalized %	Area/ Height
1	1.938	3313	1.3685	2	483	3.118	4.8
2	2.137	2905	1.7193	2	485	3.915	6.0
3	3.373	6790	4.0167	2	1117	9.152	6.1
4	3.587	74189	43.8902	2	9611	100.000	7.7
5	3.810	15363	9.0869	2	1739	20.708	8.8
6	5.163	65804	38.9295	2	10168	88.697	6.8
7	7.386	1670	0.9878	2	304	2.251	5.8
Total Area:		169034	Area Reject:		0	One sample per 0.102 sec.	

```

***** EXTERNAL STANDARD TABLE *****
***** 12-21-1989 14:58:22 Version 5.1 *****
# Sample Name: Ice-ice and 250ppb Date Filed: DUCE AB
# Date: 12-22-1989 61:52:39 Method: SYDA 12-21-1989 14:02:04 # 105
# Interface: 16 Cycle#: 8 Operator R.P Channel#: 1 Vial#: N.A.
# Starting Peak Width: 5 Threshold: 1 Area Threshold: 10
*****
# Instrument Type: varian 3400+P# Column Type: db-52#
# Solvent Description:
# Conditions: 40C(hold 4 min)--->100/min--->140(hold 2 min)
# Detector 0: PID Detector 1: ELOD
# Misc. Information: lot#:
*****
Starting Delay: 0.00 Ending retention time: 15.00
Area reject: 0 One sample per 0.102 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 3.00000

```

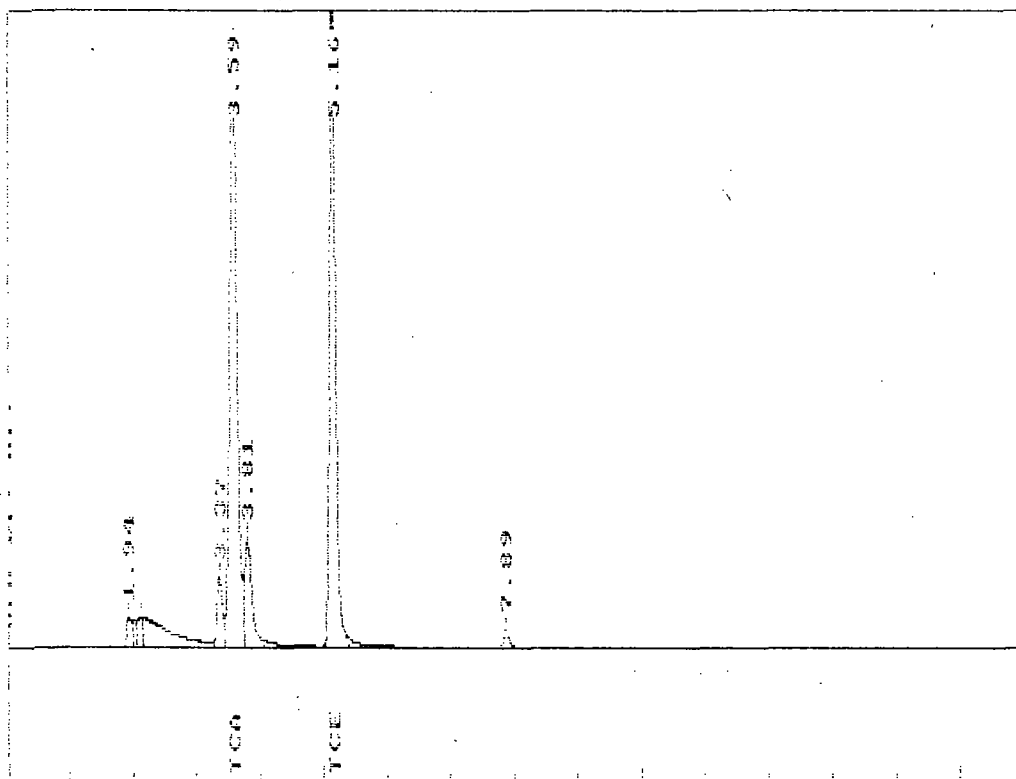
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION Is ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT BL	REF PEAK	% DELTA RET TIME	CONC/AREA
4	5.587	TOA	247.3399	49.0585%	74189	7611	7.7 2	4	0	3.3339E-03
6	5.163	TCE	156.8330	50.9415%	65804	10165	6.5 2	6	0	3.9030E-03

TOTAL AMOUNT = 504.1729

Daily check STD

755 PPM

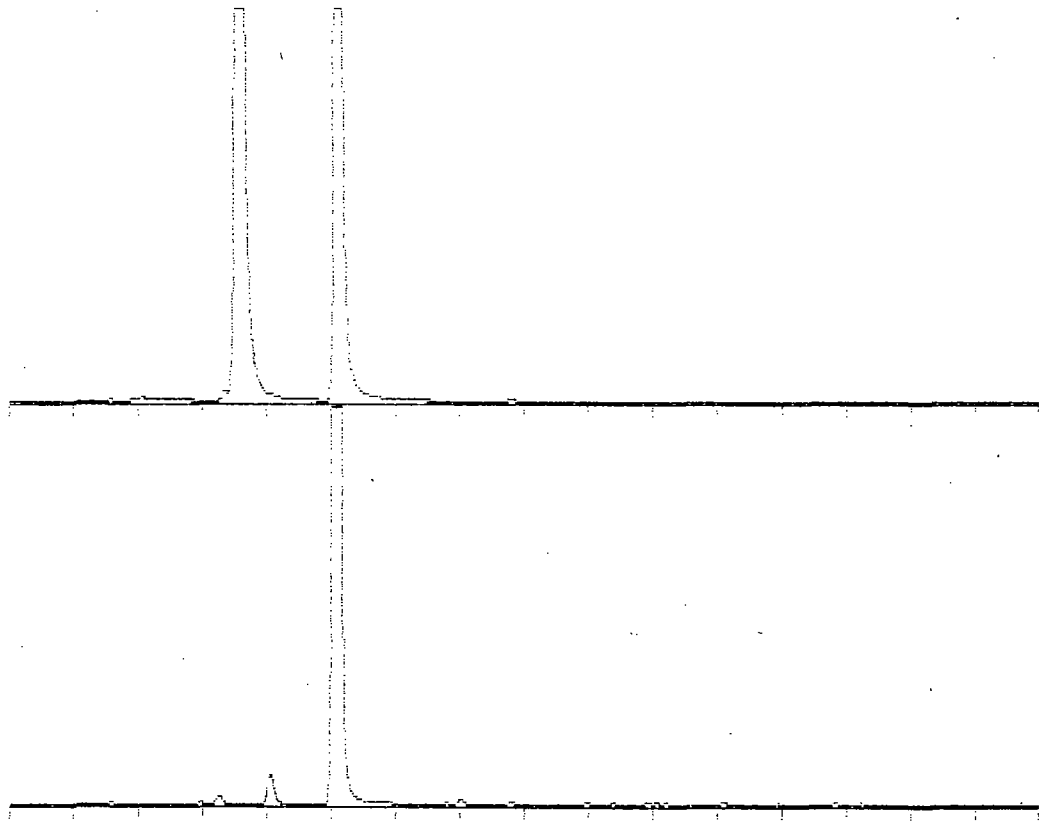
Areas, times, and heights stored in: B:\OLE_48-AVR
Data File = B:\OLE_48.PYS Printed on 12-21-1989 at 14:35:37
Start time: 0.00 min. Stop time: 16.00 min. Offset: 0 mv.
Low Value: 72 uv High Value: 10242 uv Scale factor: 1.0



39-8-12

500 PPB TCE-TCA

Output redirected to lpt1:



0-16 Min Scale: 50 Mv Ch.A, 50 Mv Ch.B
tce-tca std 500ppb Processed: 12-20-1989 16:55:53, segment 1, cycle 7
RAW DATA SAVED IN FILE G:TCE_A7.PTS Second Channel Stored in G:UCE_A7.PTS

***** AREA PERCENT REPORT *****

***** 12-20-1989 16:56:39 Version 5.1 *****
* Sample Name: tce-tca std 500ppb Data File: G:TCE_A7 *
* Date: 12-21-1989 42:33:05 Method: AVOA *
* Interface: Jo Cycle#: 7 Operator R.P Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 2 Threshold: .25 Area Threshold: 10 *

* Instrument Type: varian 3400-P&T Column Type: db-624 *
* Solvent Description: *

* Detector 0: FID Detector 1: ELCD *
 * Misc. Information: Ipt1: * *

 Starting Delay: 0.00 Run Time: 16.00

PK No.	Ret. Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	1.569	2129	1.0238	5	23	1.057	92.6
2	2.946	90	0.0431	6	22	0.045	4.1
3	3.236	610	0.2934	6	108	0.303	5.6
4	4.061	2634	1.2666	6	368	1.308	7.1
5	5.081	201357	96.8204	6	32150	100.000	6.3
6	7.007	400	0.1925	6	70	0.199	5.7
7	7.738	133	0.0640	6	33	0.066	4.0
8	8.979	145	0.0698	6	37	0.072	3.9
9	9.377	39	0.0189	6	16	0.020	3.0
10	9.925	80	0.0386	6	20	0.040	3.4
11	10.089	42	0.0396	6	23	0.041	3.5
12	10.197	49	0.0235	6	15	0.024	3.3
13	11.101	79	0.0380	6	22	0.039	3.5
14	12.611	141	0.0680	6	34	0.070	4.1
Total Area:		207070	Area Percent:		0 One sample per 0.102 sec.		

```

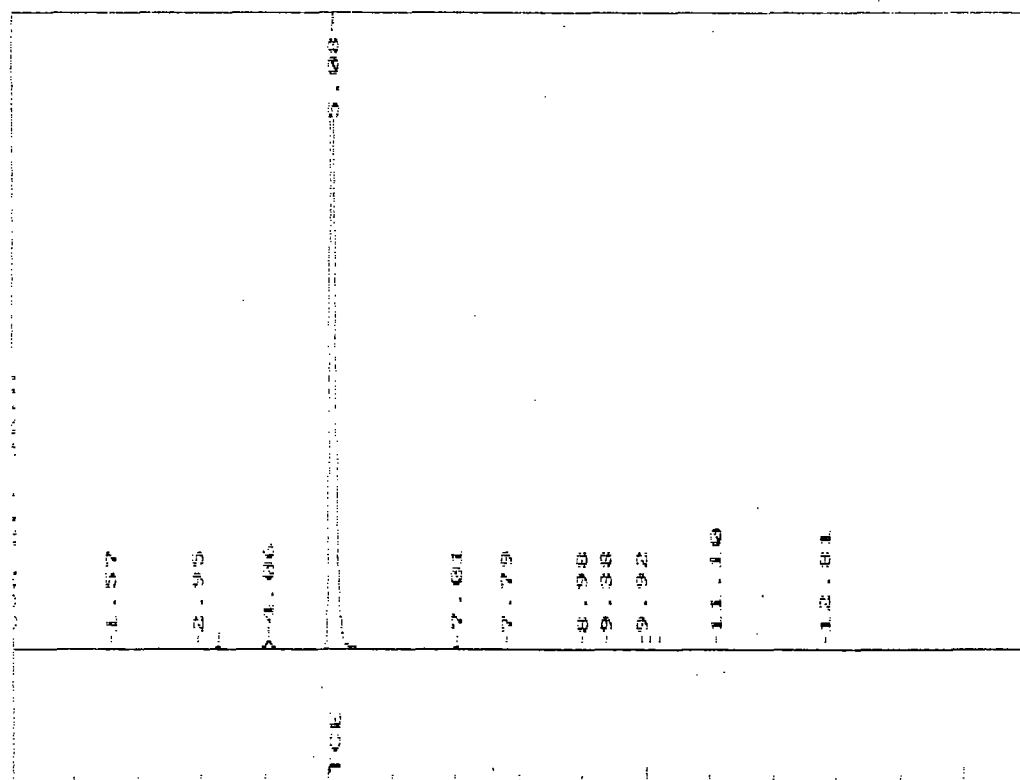
*****
***** EXTERNAL STANDARD TABLE *****
***** 12-20-1989 16:56:40 Version 3.1 *****
# Sample Name: LCC-LCA std 500ppb Data File: DLCE_A7 Y
# Date: 12-21-1989 4:33:03 Method: AV5A 12-20-1989 16:08:42 # 114 #
# Interface: 16 Cycle#: 7 Operator R.P. Channel#: 0 Vial#: N.A. #
# Starting Peak Width: 2 Threshold: .25 Area Threshold: 10 #
*****
# Instrument Type: Varian 3400-PSF Column Type: db-A2# #
# Solvent Description: #
# Conditions: 400(hold 4 min)--->100/min--->140(hold 2 min) #
# Detector 0: PID Detector 1: FID #
# Misc. Information: Lot: #
*****
Starting Delay: 0.00 Ending retention time: 15.00
Area reject: 0 One sample per 0.102 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT BL	REF PEAK	% DELTA RET TIME	CONC/AREA
5	5.081	TCE	201357.4840	100.0000%	201357	32150	6.3 6	5	0	1.0000E+00

TOTAL AMOUNT = 201357.4840

Areas, times, and heights stored in: 0:YOE_A7.ATB
 Data File = YOE_A7-PTS Printed on 12-20-1989 at 16:56:55
 Start time: 0.00 min. Stop time: 16.00 min. Offset: 0 mv.
 Low Value: 82 uv High Value: 32250 uv Scale factor: 1.0



***** AREA PERCENT REPORT *****

***** 12-20-1989 16:58:23 Version 5.1 *****
 * Sample Name: tce-tca std 300pp Data File: 6:UCE_A7 *
 * Date: 12-21-1989 42:33:05 Method: BVDA *
 * Interface: 16 Cycle#: 7 Operator R.P Channel#: 1 Vial#: N.A. *
 * Starting Peak Width: 5 Threshold: 1 Area Threshold: 10 *

 * Instrument Type: varian 3400+FT Column Type: do-624 *
 * Solvent Description: *
 * Conditions: 40C(hold 4 min)-->100/min-->140(hold 2 min) *
 * Detector 0: PID Detector 1: EDCO *
 * Misc. Information: (pt1: 6 2

 Starting Delay: 0.00 Run Time: 16.00

PK No.	Ret Time	Peak Area	Area %	S L	Peak Ht.	Normalized %	Area/ Height
1	1.583	153	0.0608	2	48	0.114	5.2
2	3.354	460	0.2608	2	131	0.452	5.1
3	3.870	134046	52.9974	2	15272	100.000	5.3
4	5.102	118118	46.6913	2	17164	88.118	5.9

Total Area: 252778 Area Reject: 0 One sample per 0.102 sec.

```

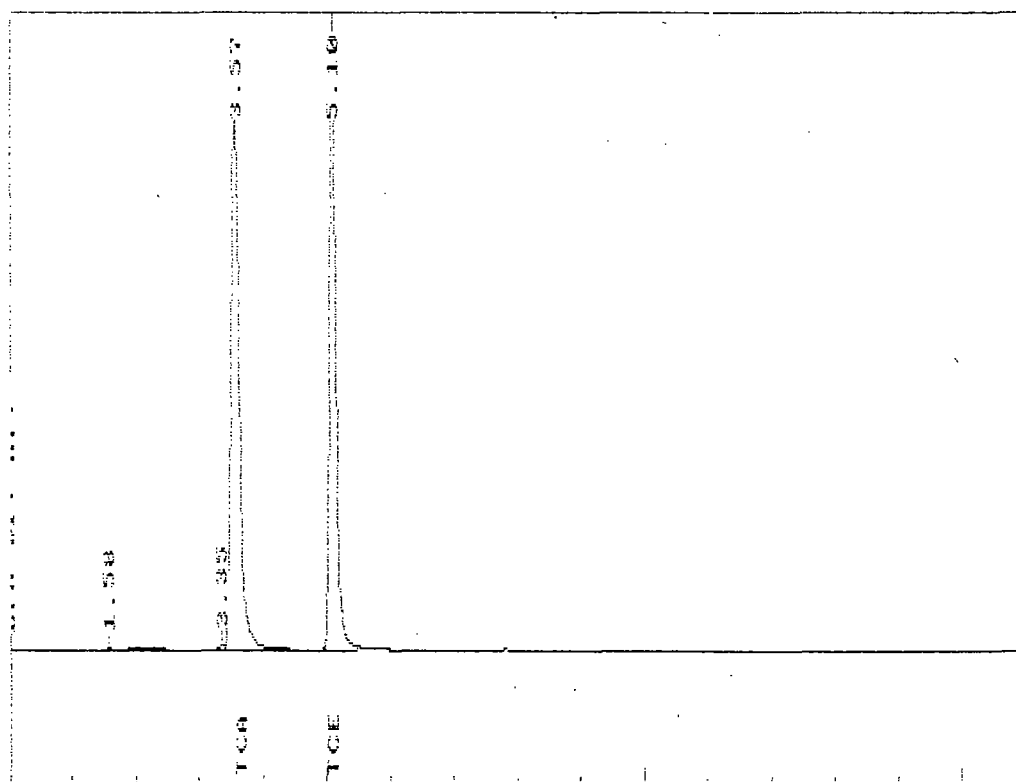
***** EXTERNAL STANDARD TABLE *****
***** 12-20-1989 11:53:24 version 5.1 *****
* Sample Name: Ice-Ice std 500ppb Data File: 9100E.AZ *
* Date: 12-21-1989 42:33:05 Method: bVDA 12-10-1989 15:12:07 * 104 *
* Interface: 16 Cycle#: 7 Operator R.P Channel#: 1 File#: N.A. *
* Starting Peak Width: 5 Threshold: 1 Area Threshold: 10 *
*****
* Instrument Type: varian 3400-P&T Column Type: db-c24 *
* Solvent Description: *
* Conditions: 40C(hold 3 min)-->100/min-->140(hold 2 min) *
* Detector 0: FID Detector 1: ELCD *
* Misc. Information: lotis *
*****
Starting Delay: 0.00 Ending retention time: 16.00
Area reject: 0 One sample per 0.102 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	PEP PEAK	% DELTA RET TIME	CONC/AREA
3	3.570	TCA	134046.5120	53.1582%	134046	15272	8.8 2	0	-2.191	1.0000E+00
4	5.102	TCE	116118.4840	46.8418%	116118	17164	6.7 2	4	0	1.0000E+00

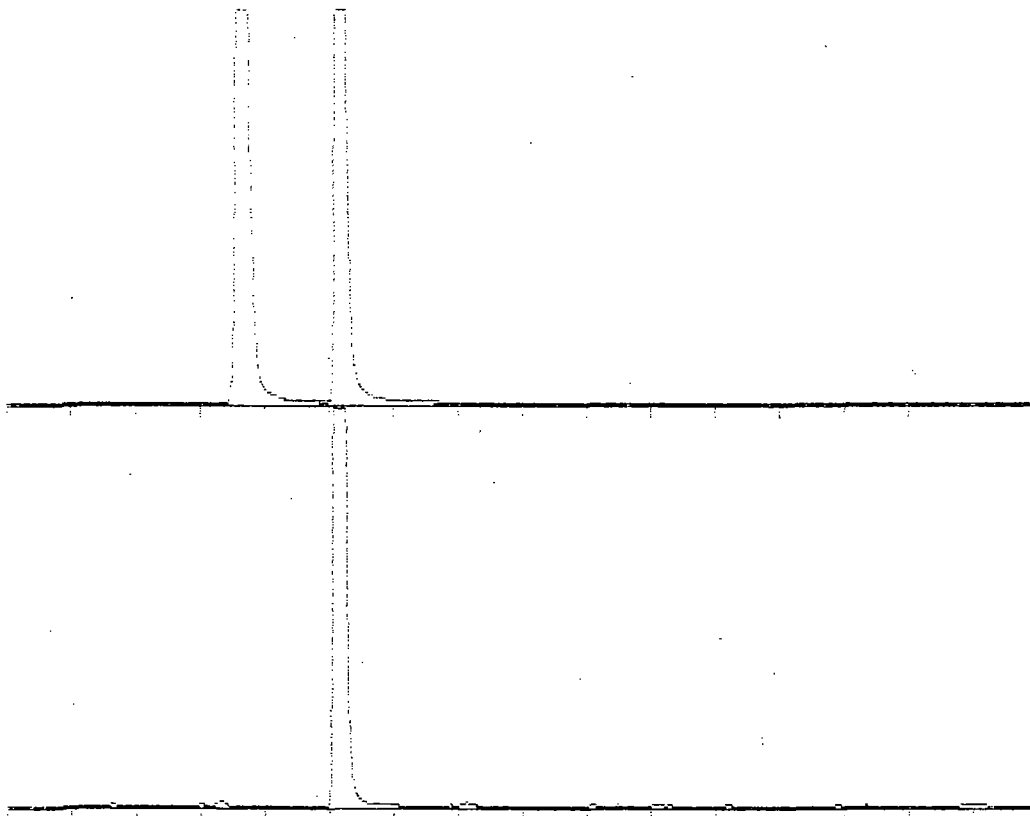
TOTAL AMOUNT = 252164.9970

Areas, times, and heights stored in: G:\UCE A7.A15
Data File = G:\UCE A7.FTS Printed on 12-20-1997 at 15:58:08
Start time: 0.00 min. Stop time: 16.00 min. Offset: 0 mv.
Low Value: 72 uv High Value: 17240 uv Scale Factor: 1.0



500 ppb
TCE-TCA

Output redirected to loc1:
 Output redirected to /p11:
 Output redirected to /t11:
 Output redirected to /t11:



0-15 Min Scale: 50 MV Ch.A, 50 MV Ch.B
 tce-tca std 500ppb Processed: 12-20-1989 16:15:29, segment 1, cycle 0
 RAW DATA SAVED IN FILE G:\ICE_A6.PT8 Second Channel stored in G:\ICE_A6.PT9

***** AREA PERCENT REPORT *****

***** 12-20-1989 16:16:12 Version 5.1 *****
 * Sample Name: tce-tca std 500ppb Data File: G:\ICE_A6 *
 * Date: 12-21-1989 41:12:18 Method: AVDA *
 * Interface: 16 Cycle#: 5 Operator R.P Channel#: 0 Vial#: N.A. *
 * Starting Peak Width: 2 Threshold: 25 Area Threshold: 10 *

PK No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	1.622	1983	0.4307	5	38	0.943	52.2
2	3.356	425	0.1945	5	38	0.202	6.1
3	8.153	210305	98.7349	6	25369	100.000	8.3
4	7.128	115	0.0546	5	20	0.055	5.9
5	9.071	91	0.0425	5	21	0.043	4.4
6	11.183	33	0.0155	5	10	0.015	3.2
7	12.871	70	0.0327	5	19	0.033	3.7

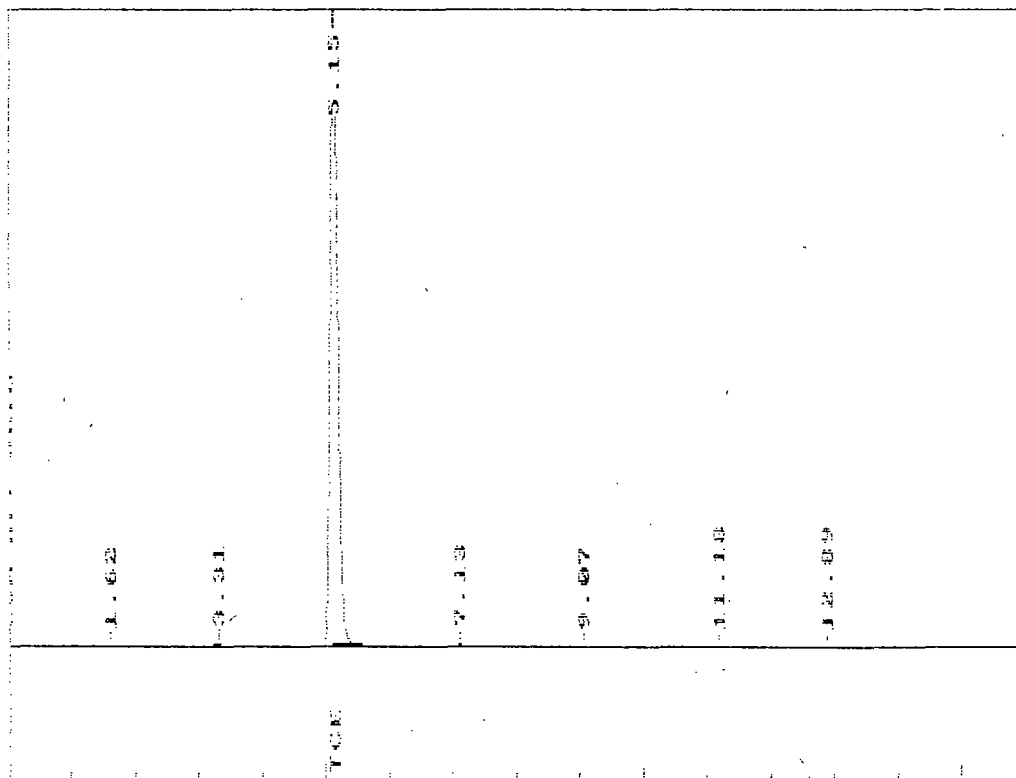
```

***** EXTERNAL STANDARD TABLE *****
*****12-20-1989 16:16:13 Version 5.1 *****
2 Sample Name: lca-lca std 500ppb Data File: NICE Ac
1 Date: 12-20-1989 16:16:13 Method: AV04 12-20-1989 16:08:04 # 114
3 Integrator 16 Cycles: 6 Operator R.F Channel#: 0 Vial#: N.A.
4 Starting Peak Width: 2 Threshold: .25 Area Threshold: 10
*****
5 Instrument Type: varian 3400-P&T Column Type: db-624
6 Solvent Description:
7 Conditions: 40C(hold 4 min)-->100/min-->140(hold 2 min)
8 Detector 0: PID Detector 1: ELCD
9 Use, Information: Ipti:
*****
Starting Delay: 0.00 Ending retention time: 16.00
Area reject: 0 One sample per 0.102 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	HEIGHT BL	REF PEAK	% DELTA RET TIME	CONC/AREA
3	5.153	TDE	210305.0310	100.0000%	210305	35369	9.3 6	3	0	1.0000E+00
TOTAL AMOUNT =			210305.0310							

Areas, times, and heights stored in: G:\DE_P6.A10
Data File = G:\DE_P6-PTS Printed on 12-20-1989 at 16:15:28
Start time: 0.00 min. Stop time: 15.00 min. Offset: 0 mv.
Low Value: 82 uv High Value: 25470 uv Scale factor: 1.0



***** AREA PERCENT REPORT *****

***** 12-20-1989 15:17:47 Version 0.1 *****
 * Sample Name: tce-tca std 500ppb Data File: 0:UCE_A6 *
 * Date: 12-21-1989 41:12:18 Method: 3V04 *
 * Interface: 15 Cycle#: 6 Operator R.F. Channel#: 1 Vial#: N.A. *
 * Starting Peak Width: 8 Threshold: 1 Area Threshold: 10 *

 * Instrument Type: varian 3400+P87 Column Type: db-624 *
 * Solvent Description: *
 * Conditions: 400(hold 4 min)--->100/min--->140(hold 2 min) *
 * Detector 0: FID Detector 1: ELDN *
 * Misc. Information: idt1: *

 Starting Delay: 0.00 Run Time: 15.00

PK No.	Ret Time	Peak Area	Area %	H L	Peak Ht.	Normalized %	Area/ Height
1	3.624	43468	16.0624	2	12008	33.782	3.6
2	3.658	98480	36.3904	2	13443	76.535	7.3
3	3.127	128672	47.5472	2	14235	100.000	9.0

Total Area: 2/0620 Area Reject: 0 One sample per 0.102 sec.

```

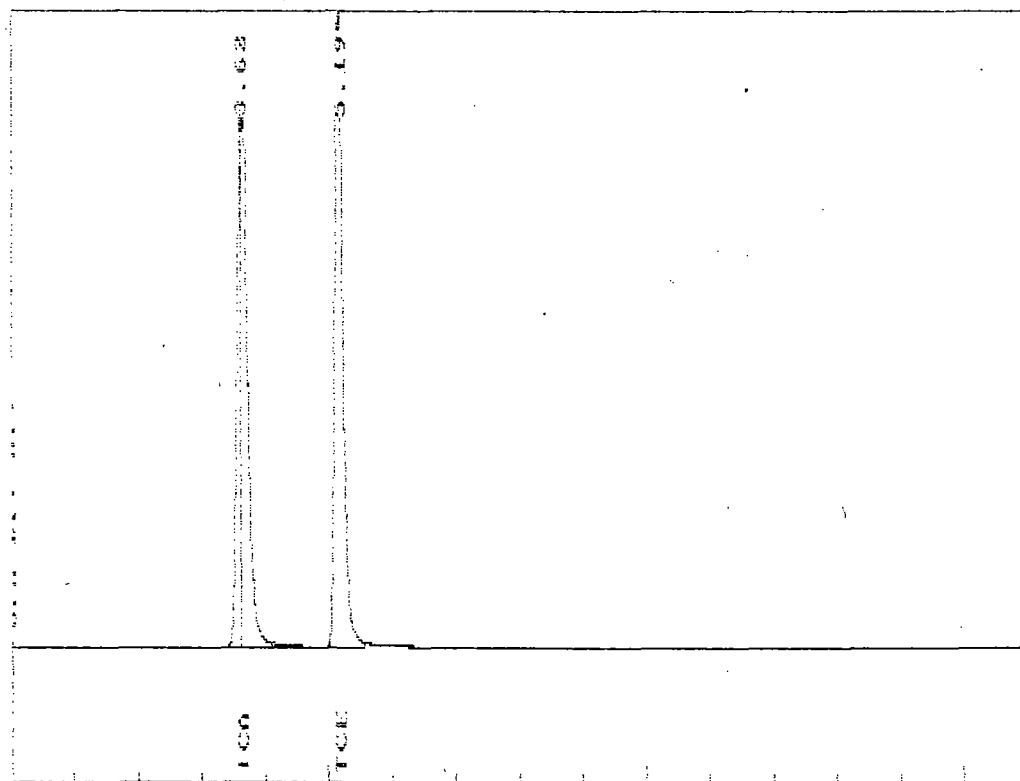
***** EXTERNAL STANDARD TABLE *****
12-20-1989 16:17:40 Version 5.1 *****
# Sample Name: tce-tce std.500ppb Data File: 01006_A6 #
# Date: 12-21-1989 16:17:15 Method: EVOA 12-20-1989 16:13:07 4 104 #
# Interface: 16 Cycle#: 2 Operator: R.F Channel#: 1 Vial#: N.H. #
# Starting Peak Width: 5 Threshold: 1 Area Threshold: 10 #
*****
# Instrument Type: varian 8400-P&F Column type: db-624 #
# Solvent Description: #
# Conditions: 100(hold 4 min)-->100/min-->140(hold 2 min) #
# Detector 0: PID Detector 1: RLID #
# Misc. information: #
*****
Starting Delay: 0.00 Ending retention time: 16.00
Area reject: 0 One sample per 0.100 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

```

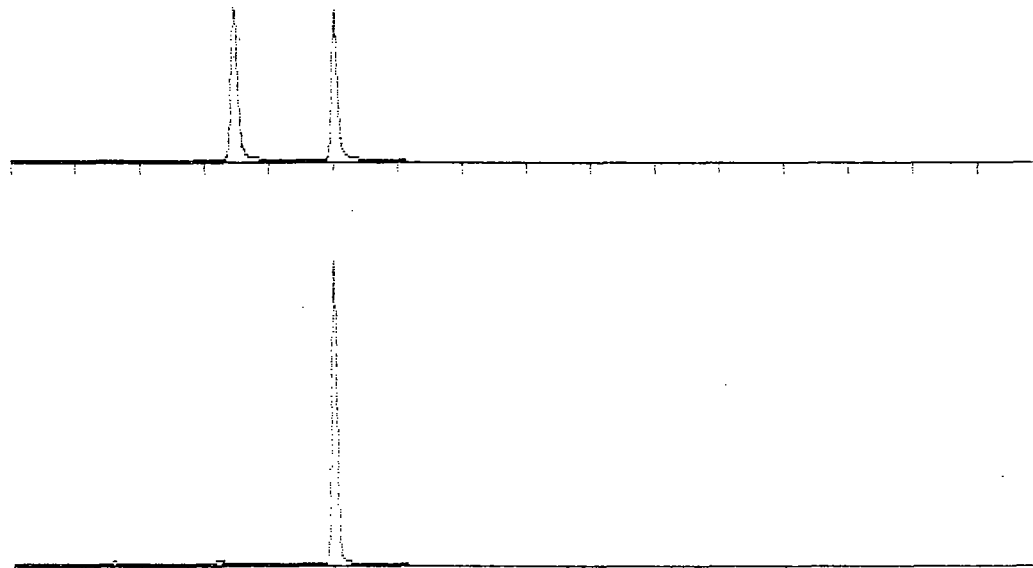
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	REF PEAK	% DELTA RET TIME	CONC/AREA
2	7.658	TCA	58477.7730	43.3541%	98480	13443	7.3 2	2	0	1.0000E+00
3	9.187	TCE	128672.1800	36.6459%	128672	14235	9.0 2	3	0	1.0000E+00

TOTAL AMOUNT = 227151.9530

areas, times, and heights stored in: 0:00E_46.ATB
Data File = 0:00E_46.PTB Printed on 12-20-1989 at 15:19:00
Start time: 0.00 min. Stop time: 16.00 min Offset: 0 mv.
Low Value: 71 uv High Value: 14311 uv Scale Factor: 1.0



50ppb TCA - TCE



0-16 Min Scale: 50 Mv Ch.A. 50 Mv Ch.B

tce-tca std 50ppb Processed: 12-18-1989 16:06:35, segment 1, cycle 1

RAW DATA SAVED IN FILE 9:TCE_A2.P18 Second Channel Stored in C:\DC2_A2.P18

***** AREA PERCENT REPORT *****

***** 12-18-1989 16:06:09 Version 5.1 *****

Sample Name: tce-tca std 50ppb Data File: 6:TCE_A2 *

Date: 12-18-1989 17:02:34 Method: AVDA *

Interface: 16 Cycle#: 2 Operator R.F Channel#: 0 Vial#: N.M. *

Starting Peak Width: 2 Threshold: .25 Area Threshold: 10 *

Instrument Type: varian 3400+P&T Column Type: db-624 *

Solvent Description: *

Conditions: 40C(hold 4 min)--->100/min--->140(hold 2 min) *

Detector 0: PID Detector 1: ELCD *

Misc. Information: lpt1: *

Starting Delay: 0.00 Run Time: 16.00

PK No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	1.576	435	2.0128	5	27	2.067	16.1
2	3.188	136	0.6295	6	33	0.647	4.2
3	4.993	21035	97.3576	6	3757	100.000	5.6

Total Area: 21605 Area Reject: 0 One sample per 0.102 sec.

***** EXTERNAL STANDARD TABLE *****

***** 12-18-1989 16:00:10 Version 5.1 *****

1. Sample Name: tce-tca std 50ppb Date File: 0:TCB AX

* Date: 12-18-1989 17:02:34 Method: AVDA 12-18-1989 15:00:44 # 113

* Interface: 16 Cycles: 2 Operator R.P Channel#: 0 Vial#: N.A.

* Smoothing Peak Width: 2 Threshold: .25 Area Threshold: 10

* Instrument Type: varian 3400+P&T Column Type: 2b-6x4

* Solvent Description:

* Conditions: 40C(hold 4 min)-->100/min-->140(hold 2 min)

* Detector 0: PID Detector 1: ELCD

* Misc. Information: 1pt1: *

Starting Delay: 0.00 Ending retention time: 16.00

Area reject: 0 One sample per 0.102 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

PEAK	RET	PEAK	CONCENTRATION in	NORMALIZED	AREA/	REF	% DELTA
NUM	TIME	NAME	ppb	CONC	AREA	HEIGHT	RET TIME

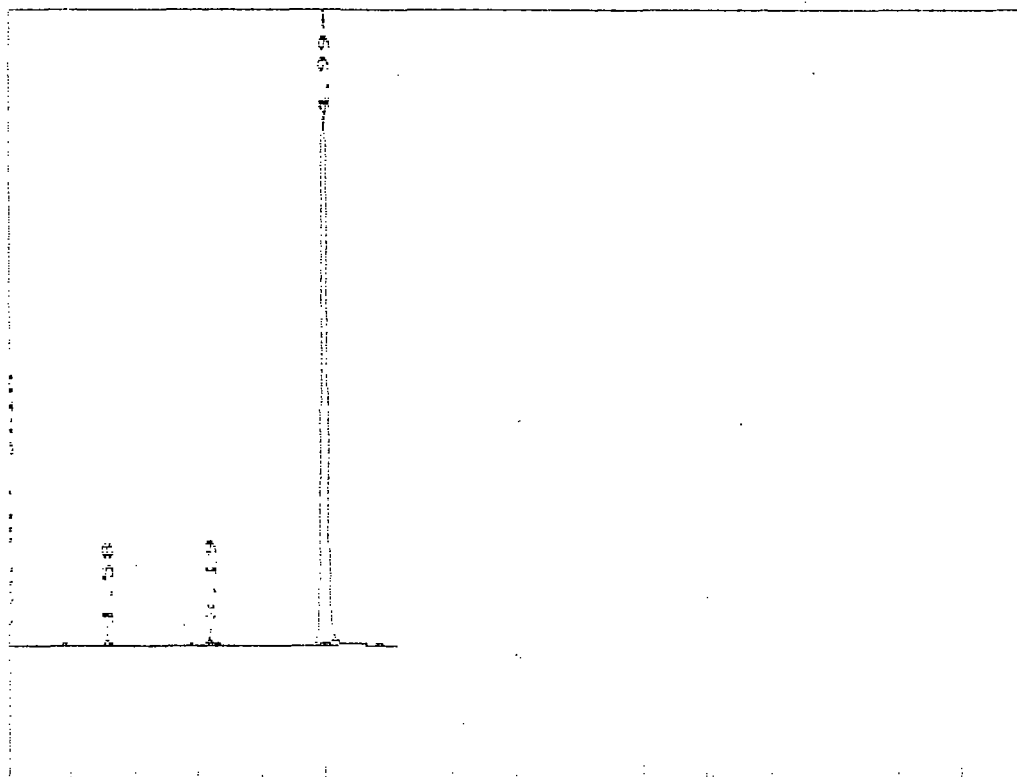
TOTAL AMOUNT = 0.0000

Areas, times, and heights stored in: 5:TCE_A2.AT8

Data File = 5:TCE_A2.PTS Printed on 12-18-1989 At 16:06:22

Start time: 0.00 min. Stop time: 16.00 min. Offset: 0 mv.

Low Value: 37 uv High Value: 3654 uv Scale factor: 1.0



***** AREA PERCENT REPORT *****

***** 12-18-1989 16:07:37 Version: 5.1 *****
 * Sample Name: lce-lca std 90ppb Data File: G:UCE_A2 *
 * Date: 12-18-1989 17:02:34 Method: BMDA *
 * Interface: 16 Cycle#: 2 Operator R.P Channel#: 1 Vial#: N.A. *
 * Starting Peak Width: 5 Threshold: 1 Area Threshold: 10 *
 /*****
 * Instrument Type: varian 3400+P81 Column Type: db-624 *
 * Solvent Description: *
 * Conditions: 40C(hold 4 min)-->10C/min-->140(hold 2 min) *
 * Detector 0: FID Detector 1: ELCD *
 * Misc. Information: 1pt1: *

 Starting Delay: 0.00 Run Time: 16.00

PK No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/Height
1	3.459	14247	54.3926	0	1987	100.000	7.12
2	5.022	11746	45.6074	2	1918	85.848	6.12

Total Area: 26193 Area Reject: 0 One sample per 0.102 sec.

***** EXTERNAL STANDARD TABLE *****

***** 12-18-1989 16:07:38 Version 0.1 *****

* Sample Name: tce-tca std 50ppb Data File: 01UCE A2 *

* Date: 12-18-1989 17:02:34 Method: DVDA 12-05-1989 16:39:58 # 102 *

* Interface: 16 Cycle#: 2 Operator R.P Channel#: 1 Vial#: N.A. *

* Starting Peak Width: 5 Threshold: 1 Area Threshold: 10 *

* Instrument Type: varian 3400-P&T Column Type: db-s24 *

* Solvent Description: *

* Conditions: 40C(hold 4 min)--->10C/min--->140(hold 2 min) *

* Detector 0: FID Detector 1: ELCD *

* Misc. Information: 1pl1: *

Starting delay: 0.00 Ending retention time: 16.00

Area reject: 0 One sample per 0.102 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
-------------	-------------	--------------	-------------------------	--------------------	------	--------	-----------------	----	-------------	---------------------	-----------

TOTAL AMOUNT = 1.0000

PEAKS NOT FOUND IN THIS RUN

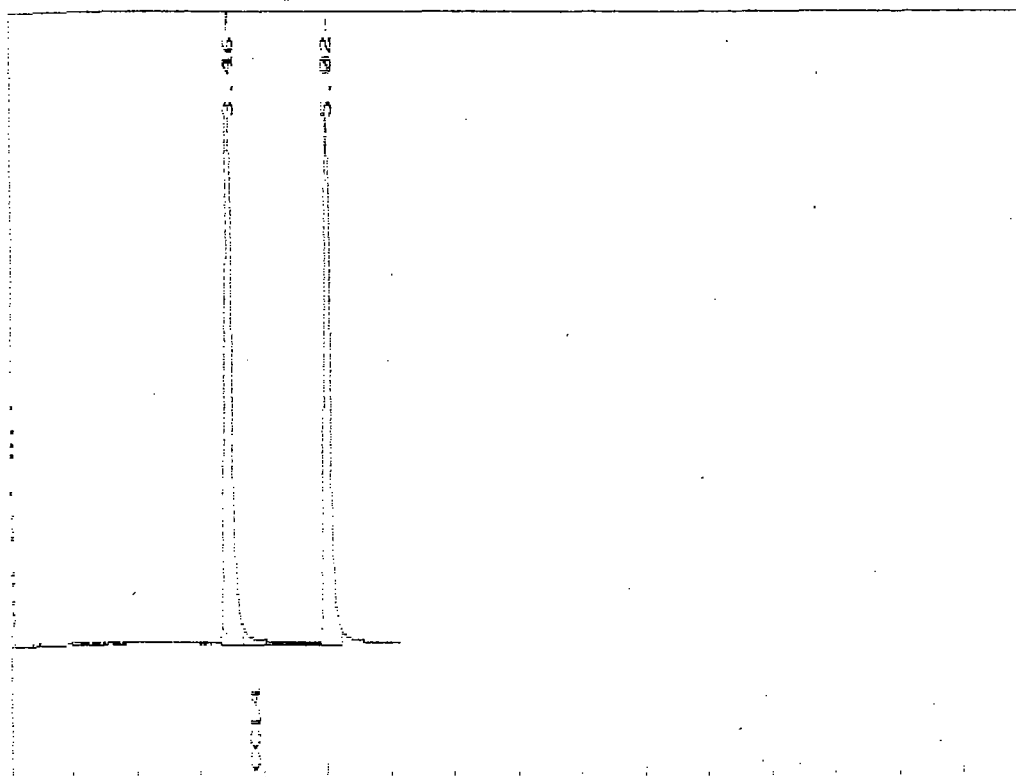
NAME	ADJUSTED RET.TIME.	REFERENCE PEAK
CEL4	3.65	CEL4

Area, times, and heights stored in: G:\UCE_A2.ATB

Data File = G:\UCE_A2.PTS Printed on 12-18-1989 at 16:07:50

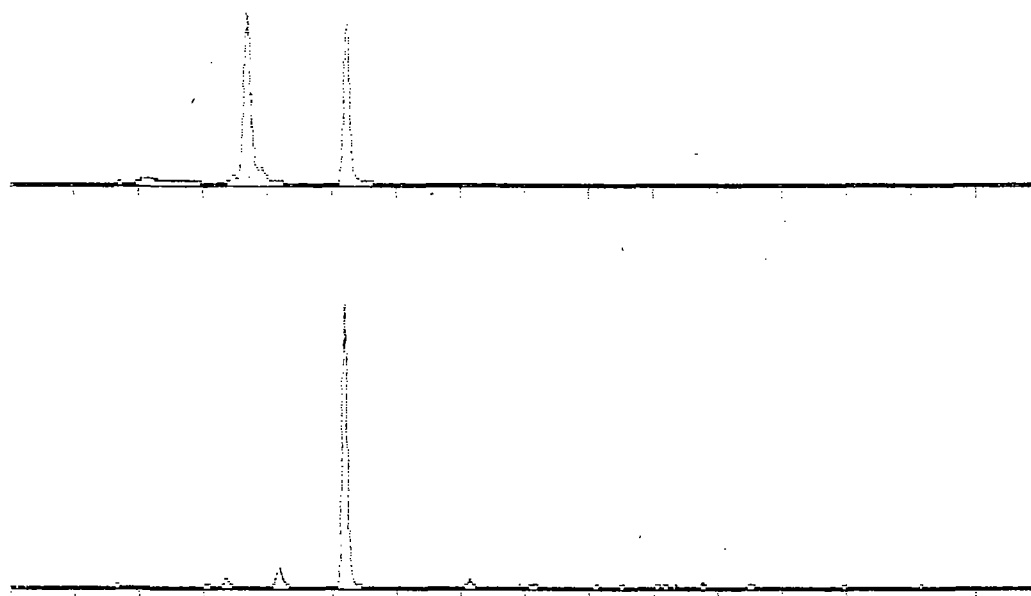
Start time: 0.00 min. Stop time: 16.00 min. Offset: 0 mv.

Low Value: 72 uv High Value: 2060 uv Scale factor: 1.0



50 ppb TCA - TCE

Output redirected to plot



0-15 Min Scale: 50 Mv Ch. A, 50 Mv Ch. B

tce-tca std 50ppb Processed: 12-20-1989 09:36:32, segment 1, cycle 3

RAW DATA SAVED IN FILE G:\TCE_A3.PT5 Second Channel Stored in G:\TCE_A3.PT6

***** AREA PERCENT REPORT *****

***** 12-20-1989 09:37:21 Version 3.1 *****

* Sample name: tce-tca std 50ppb Data File: G:\TCE_A3 *

* Date: 12-21-1989 27:54:49 Method: AVDA *

* Interface: 16 Cycle#: 3 Operator R.P Channel#: 0 Vial#: N.A. *

* Starting Peak Width: 2 Threshold: .25 Area Threshold: 10 *

* Instrument type: varian 3400-P&T Column Type: db-624 *

* Solvent Description: *

* Conditions: 400/hold 4 min 100/hold 1 min 140/hold 2 min *

* Misc. Information:

ipt1:

* *

Starting Delay: 0.00

Run Time: 16.00

PK No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.774	1270	9.1073	5	13	6.267	97.7
2	1.654	53	0.2112	6	17	0.259	3.1
3	3.050	79	0.3153	6	20	0.368	4.0
4	3.357	499	2.0064	6	90	2.462	5.6
5	4.180	1553	6.3642	6	223	7.711	7.0
6	6.193	20267	81.4956	6	3546	100.000	5.7
7	7.131	452	1.8592	6	79	2.281	5.8
8	7.902	28	0.1107	6	8	0.136	3.3
9	9.103	133	0.5152	6	38	0.755	4.0
10	9.505	68	0.2719	6	19	0.334	3.3
11	10.082	104	0.4196	6	25	0.515	4.2
12	10.191	67	0.2711	6	20	0.333	3.4
13	10.759	172	0.6911	6	44	0.848	3.9
14	12.962	85	0.3406	6	22	0.412	3.8

Total Area:

24969

Area Reject:

0 One sample per 0.10% sec.

```

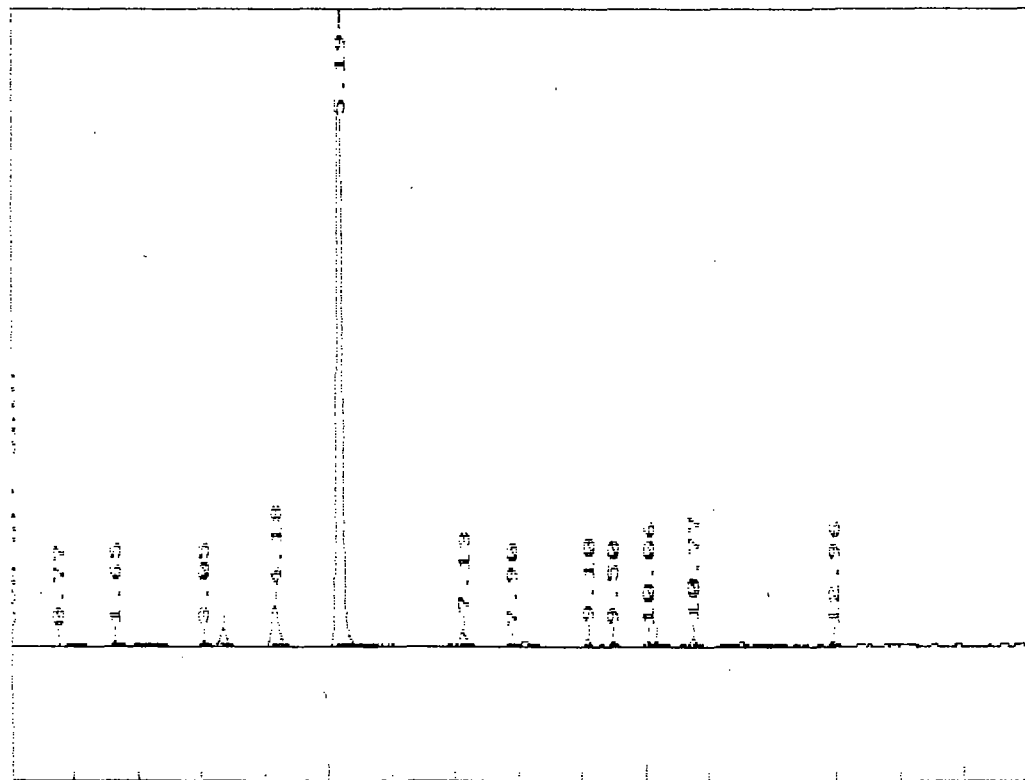
***** EXTERNAL STANDARD TABLE *****
***** 12-20-1989 09:37:23 Version 5.1 *****
* Sample Name: rce-ica std 50ppb          Data File: 01TCE.A3
* Date: 12-21-1989 27:54:49 Method: AV04 12-16-1989 15:00:44 # 113
* Interface: 16 Cycle#: 3 Operator R.P Channel#: 0 Vial#: N.A.
* Starting Peak Width: 2 Threshold: .25 Area Threshold: 10
*****
* Instrument Type: varian 3400+P&T      Column Type: db-624
* Solvent Description:
* Conditions: 40C(hold 4 min)--->10C/min--->140(hold 2 min)
* Detector 0: FID Detector 1: ELCD
* Misc. Information:                    Ipt1:
*****
Starting Delay: 0.00 Ending retention time: 16.00
Area reject: 0 One sample per 0.102 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	REF PEAK	% DELTA	CONC/AREA
-------------	-------------	--------------	-------------------------	--------------------	------	--------	-----------------	-------------	---------	-----------

TOTAL AMOUNT = 0.0000

Areas, times, and heights stored in: 6:TCE_A3.A16
Data File = 6:TCE_A3.PT3 Printed on 12-20-1989 at 09:37:37
Start time: 0.00 min. Stop time: 15.00 min. Offset: 0 mv.
Low Value: 84 uv High Value: 3541 uv Scale factor: 1.0



***** AREA PERCENT REPORT *****

***** 12-20-1989 09:39:04 Version 0.1 *****
 * Sample Name: tce-tca std 50ppb Data File: 0:UCE_A3 *
 * Date: 12-21-1989 27:54:49 Method: BVDA *
 * Interface: 15 Cycle#: 3 Operator R.F Channel#: 1 Vial#: N.A. *
 * Starting Peak Width: 5 Threshold: 1 Area Threshold: 10 *

 * Instrument Type: varian 3400+P&T Column Type: db-s24 *
 * Solvent Description: *
 * Conditions: 400(hold 4 min)-->100/min-->140(hold 2 min) *
 * Detector 0: PID Detector 1: EUCD *
 * Misc. Information: let1: *

 Starting Delay: 0.00 Run Time: 16.00

Pk No.	Ret Time	Peak Area	Area %	S L	Peak Ht.	Normalized %	Area/Height
1	2.137	774	2.2861	2	65	5.705	11.9
2	3.458	599	1.7710	2	100	4.419	6.0
3	3.665	7174	21.1982	2	2009	52.897	3.6
4	3.687	110543	31.1534	2	2164	77.738	4.9
5	3.962	1190	3.5167	2	195	8.775	6.1
6	5.221	13562	40.0747	2	2060	100.000	6.5

Total Area: 33842 Area Reject: 0 One sample per 0.102 sec.

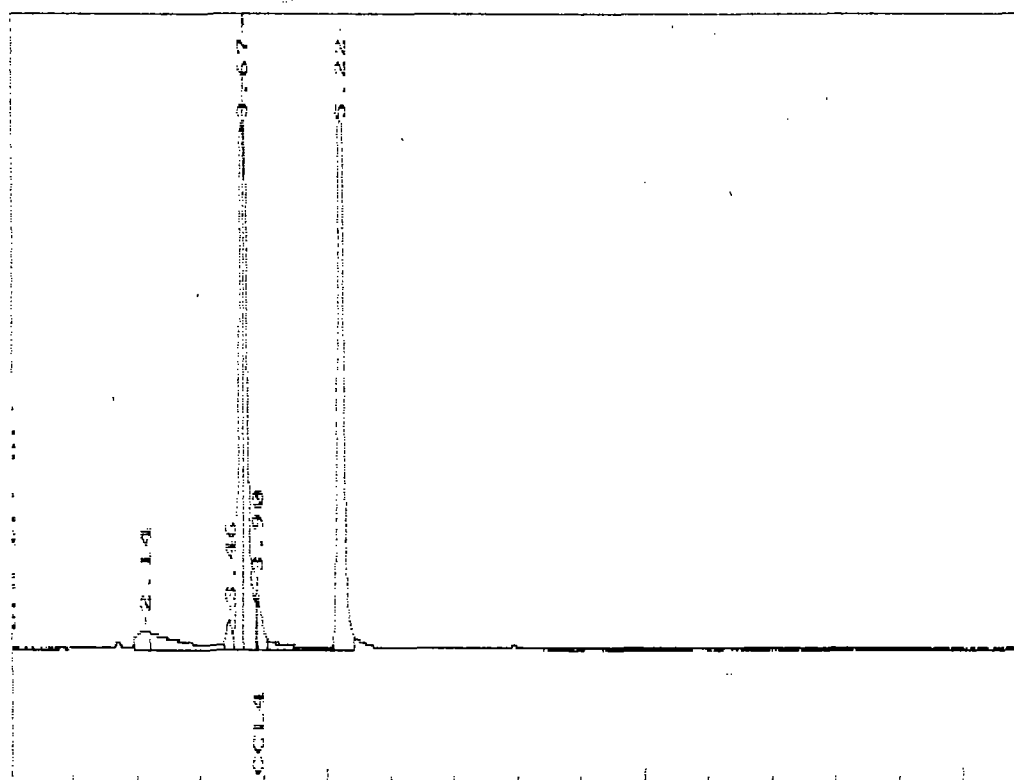
```

***** EXTERNAL STANDARD TABLE *****
***** 12-20-1989 09:39:06 Version 5.1 *****
* Sample Name: ice-ica std 50ppb Data File: 6:UCR AS *
* Date: 12-21-1989 27:54:49 Method: BV0A 12-05-1989 16:29:58 # 102 *
* Interface: 15 Cycle#: 3 Operator R.P Channel#: 1 Vial#: N.A. *
* Starting Peak Width: 5 Threshold: 1 Area Threshold: 10 *
*****
* Instrument Type: varian C400+P&T Column Type: db-624 *
* Solvent Description: *
* Conditions: 40C(hold 4 min)--->10C/min--->140(hold 2 min) *
* Detector 0: PID Detector 1: ELCD *
* disc. Information: lot1: *
*****
Starting Delay: 0.00 Ending retention time: 16.00
Area reject: 0 One sample per 0.102 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	REF PEAK	% DELTA RET TIME	CONC/AREA
5	3.902	CCL4	4.2152	100.0000%	1190	195	6.12	5	0	3.5418E-03
TOTAL AMOUNT =			4.2152							

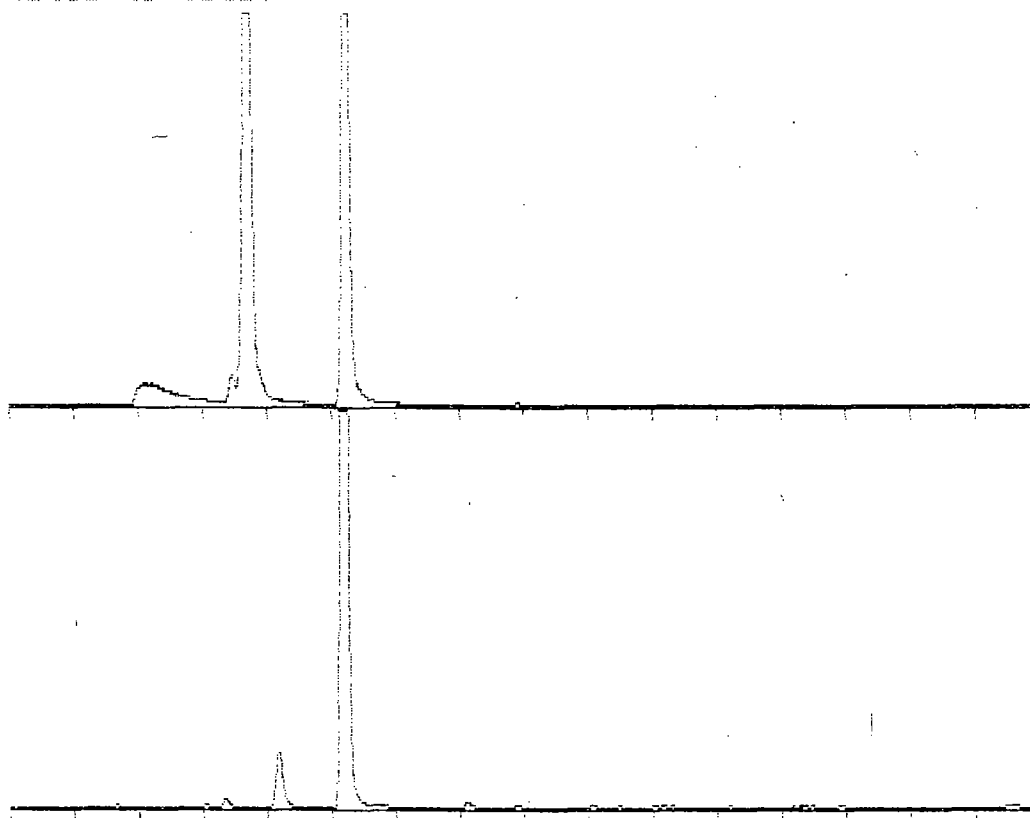
Areas, times, and heights stored in: G:\UCE_A3.ATB
Data File = G:\UCE_A3.PYS Printed on 12-20-1989 at 09:39:19
Start time: 0.00 min. Stop time: 16.00 min. Offset: 0 mv.
Low Value: 71 uv High Value: 2238 uv Scale factor: 1.0



09-8-14

250 ppm
TCE-TCA

Output redirected to lot1:



0-16 Min Scale: 50 Mv Ch.A, 50 Mv Ch.B

tce-tca std 250ppb Processed: 12-20-1989 10:18:55, segment 1, cycle 4

RAW DATA SAVED IN FILE G:TCE_A4.PTS Second Channel Stored in G:UCE_A4.PTS

***** AREA PERCENT REPORT *****

***** 12-20-1989 10:19:38 Version 5.1 *****

* Sample Name: tce-tca std 250ppb Data File: G:TCE_A4 *

* Date: 12-21-1989 29:19:17 Method: AVDA *

* Interface: 16 Cycle#: 4 Operator R.P Channel#: 0 Vial#: N.A. *

* Starting Peak Width: 2 Threshold: .25 Area Threshold: 10 *

* Instrument Type: varian 3400-P&T Column Type: db-624 *

* Solvent Description: *

```

*      Detector 0: PID                      Detector 1: ELCD      *
* Misc. Information:                      Ipt1:      *      *
*****
Starting Delay:    0.00                      Run Time:    16.00

```

PK No.	Ret Time	Peak Area	Area %	E L	Peak Ht.	Normalized %	Area/ Height
1	2.037	1966	1.5111	6	14	1.517	140.4
2	3.045	48	0.0366	6	14	0.039	3.5
3	3.352	515	0.3961	6	37	0.424	5.9
4	4.179	5029	3.8650	6	692	4.136	7.3
5	5.195	121570	93.4379	6	19703	100.000	6.2
6	7.113	353	0.2715	6	59	0.291	6.0
7	7.886	104	0.0800	6	25	0.086	4.3
8	9.078	139	0.1066	6	33	0.114	4.3
9	9.472	40	0.0311	6	12	0.033	3.3
10	10.023	68	0.0677	6	21	0.072	4.2
11	10.158	65	0.0498	6	19	0.053	3.3
12	10.292	44	0.0335	6	13	0.036	3.4
13	11.196	32	0.0242	6	12	0.026	2.7
14	12.910	116	0.0888	6	28	0.095	4.2

```

Total Area:      130108      Area Reject:      0. One sample per 0.102 sec.

```

```

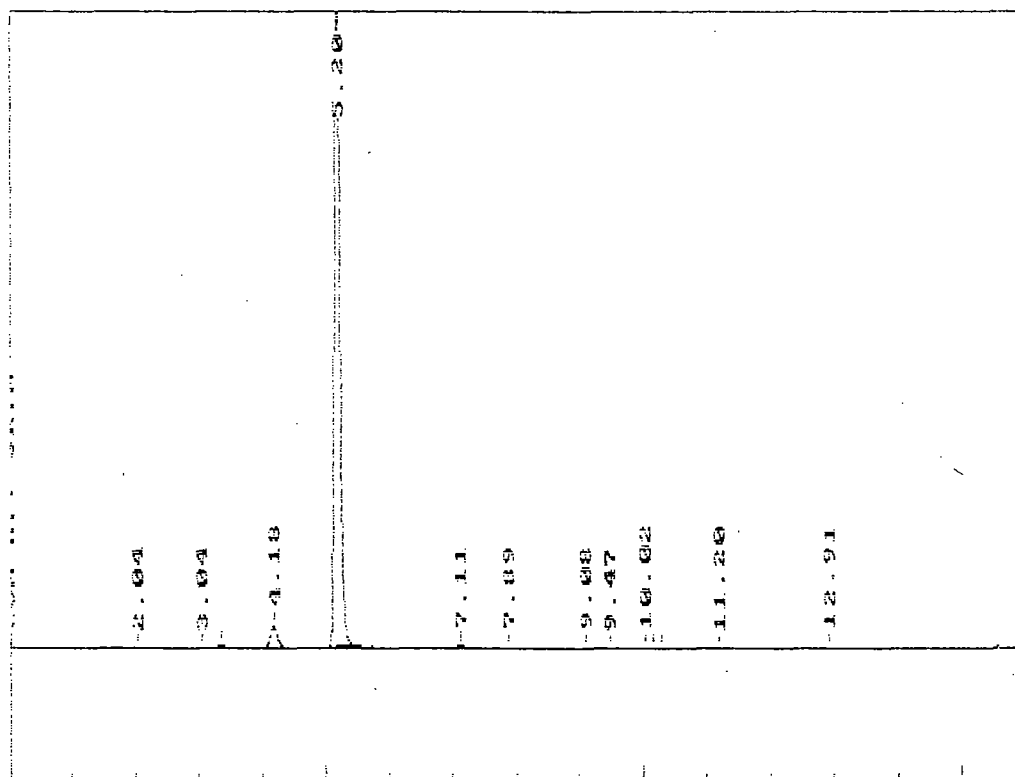
*****
***** EXTERNAL STANDARD TABLE *****
***** 12-20-1989 10:19:40 Version 3.1 *****
* Sample Name: tce-tca std 250ppb          Data File: R10E124
* Date: 12-21-1989 29:19:17 Method: AVOA 12-18-1989 15:00:44 # 115
* Interface: 16 Cycle#: 4 Operator R.P Channel#: 0 Vial#: N.A.
* Starting Peak Width: 2 Threshold: .25 Area Threshold: 10
*****
* Instrument Type: varian 3400-P&T          Column Type: db-624
* Solvent Description:
* Conditions: 40C(hold 4 min)--->10C/min--->140(hold 2 min)
* Detector 0: PID Detector 1: ELCD
* Misc. Information: lot#:
*****
Starting Delay: 0.00 Ending retention time: 16.00
Area reject: 0 One sample per 0.102 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	AREA/ HEIGHT	HEIGHT BL	REF PEAK	% DELTA RET TIME	CONC/AREA
-------------	-------------	--------------	-------------------------	--------------------	------	-----------------	-----------	-------------	---------------------	-----------

TOTAL AMOUNT = 0.0000

Areas, times, and heights stored in: G:\ICE_A4.ATE
Data File = G:\ICE_A4.PTS Printed on 12-20-1989 at 10:19:55
Start time: 0.00 min. Stop time: 16.00 min. Offset: 0 mv.
Low Value: 84 uv High Value: 19803 uv Scale factor: 1.0



***** AREA PERCENT REPORT *****

***** 12-20-1989 10:21:21 Version 5.1 *****
 * Sample Name: tce-tca std 250ppb Data File: 0:UCE_A4 *
 * Date: 12-21-1989 29:19:17 Method: BV04 *
 * Interface: 16 Cycle#: 4 Operator R.P Channel#: 1 Vial#: N.A. *
 * Starting Peak Width: 5 Threshold: 1 Area Threshold: 10 *

 * Instrument Type: varian 3400+P&T Column Type: db-624. *
 * Solvent Description: *
 * Conditions: 40C(hold 4 min)--->10C/min--->140(hold 2 min) *
 * Detector 0: FID Detector 1: ELCD *
 * Misc. Information: 1pt1: *

 Starting Delay: 0.00 Run Time: 16.00

PK No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	2.111	2577	1.7058	2	275	3.333	9.4
2	3.465	2507	1.6600	2	389	3.243	6.5
3	3.681	77316	51.1844	2	9017	100.000	8.6
4	5.214	68654	45.4498	2	9658	88.796	7.1

Total Area: 151055 Area Reject: 0 One sample per 0.102 sec.

```

*****
***** 12-20-1989 10:21:22 Version 3.1 *****
* Sample Name: tce-tca std 250ppb Data File: GIVE A4 *
* Date: 12-21-1989 29:19:17 Method: BVDA 12-08-1989 15:39:58 # 102 *
* Interface: 15 Cycle#: 4 Operator R.P Channel4: j Vial#: N.A. *
* Starting Peak Width: 5 Threshold: 1 Area Threshold: 10 *
*****
* Instrument Type: varian 3400+P&T Column Type: db-624 *
* Solvent Description: *
* Conditions: 40C(hold 4 min)--->10C/min--->140(hold 2 min) *
* Detector 0: PID Detector 1: ELCD *
* Misc. Information: lpt1: *
*****
Starting Delay: 0.00 Ending retention time: 16.00
Area reject: 0 One sample per 0.102 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

```

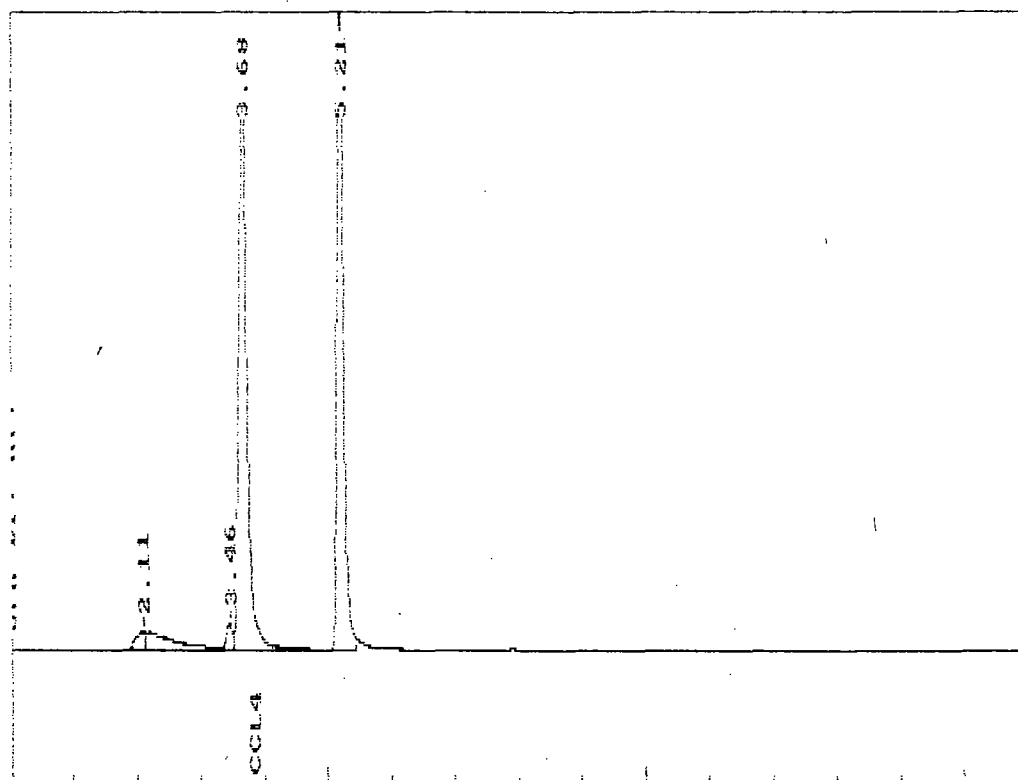
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in opb	NORMALIZED CONC	AREA	AREA/ HEIGHT	HEIGHT BL	REF PEAK	% DELTA RET TIME	CONC/AREA
-------------	-------------	--------------	-------------------------	--------------------	------	-----------------	-----------	-------------	---------------------	-----------

TOTAL AMOUNT = 0.0000

PEAKS NOT FOUND IN THIS RUN

NAME	ADJUSTED RET.TIME.	REFERENCE PEAK
CCL4	3.85	CCL4

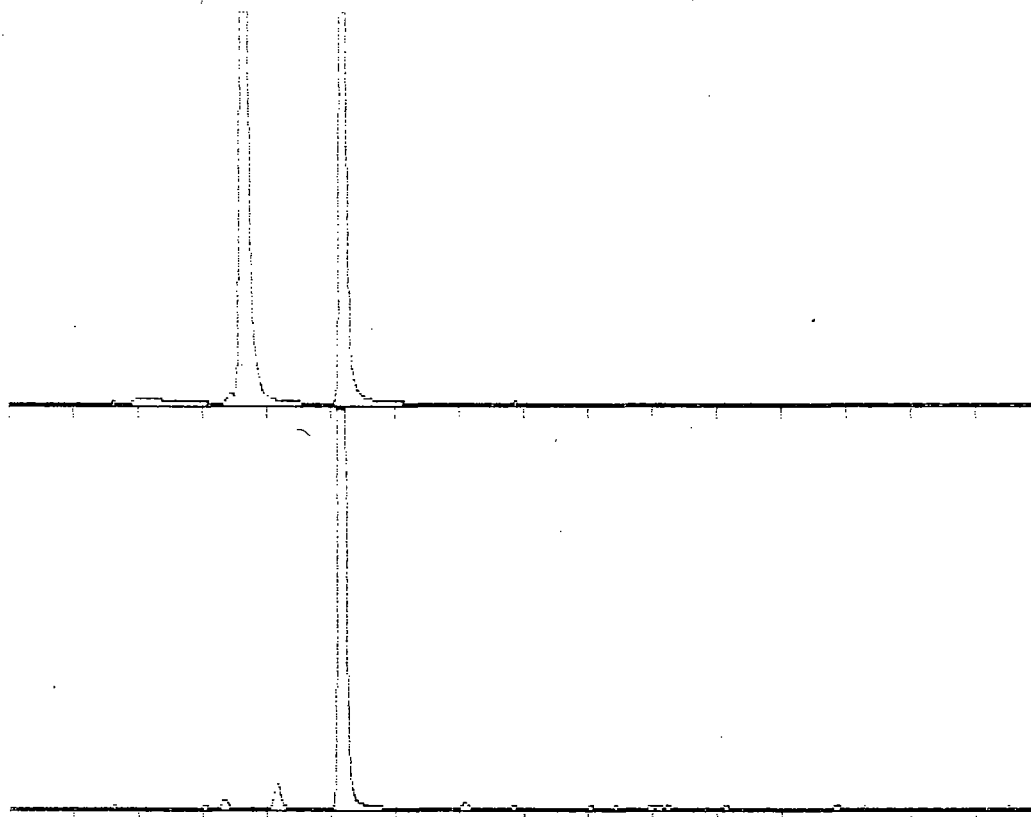
Areas, times, and heights stored in: G:\UCE_A4.ATB
Data File = G:\UCE_A4.PTS Printed on 12-20-1989 at 10:21:56
Start time: 0.00 min. Stop time: 16.00 min. Offset: 0 mv.
Low Value: 72 uv High Value: 9783 uv Scale factor: 1.0



250 ppm TCE-TCA

09-8-13

Output redirected to lpt1:



0-16 Min Scale: 50 Mv Ch.A, 50 Mv Ch.B

tce-tca std 250ppm Processed: 12-20-1989 11:00:44, segment 1, cycle 5

RAW DATA SAVED IN FILE G:\ICE_A5.PTS Second Channel Stored in G:\ICE_A5.PTS

***** AREA PERCENT REPORT *****

***** 12-20-1989 11:01:29 Version 5.1 *****

* Sample Name: tce-tca std 250ppm Data File: G:\ICE_A5 *

* Date: 12-21-1989 30:42:56 Method: AVDA *

* Interface: 16 Cycles#: 5 Operator R.F Channel#: 0 Vials#: N.A. *

* Starting Peak Width: 2 Threshold: .25 Area Threshold: 10 *

* Instrument Type: varian 3400+P&T Column Type: db-624 *

* Solvent Description: *****

```

*          Detector 0: PID          Detector 1: ELCD          *
* Misc. Information:                ipt1:                *
*****
Starting Delay: 0.00                Run Time: 16.00

```

PK No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	1.632	1929	1.5997	5	22	1.677	87.7
2	3.023	66	0.0546	6	18	0.057	3.6
3	3.339	553	0.4586	6	101	0.481	5.5
4	4.136	2130	1.7824	6	311	1.868	6.9
5	5.170	115055	95.4049	6	19799	100.000	5.8
6	7.074	331	0.2746	6	62	0.288	5.3
7	7.845	42	0.0345	6	13	0.036	3.3
8	9.024	123	0.1017	6	31	0.107	3.9
9	9.420	34	0.0285	6	12	0.030	3.0
10	9.969	47	0.0367	6	15	0.041	3.2
11	10.100	64	0.0532	6	20	0.056	3.2
12	10.244	51	0.0427	6	15	0.045	3.3
13	11.138	33	0.0272	6	11	0.028	2.9
14	12.645	119	0.0987	6	30	0.103	4.0
Total Area:		120596	Area Reflect:		0	One sample per 0.102 sec.	

```

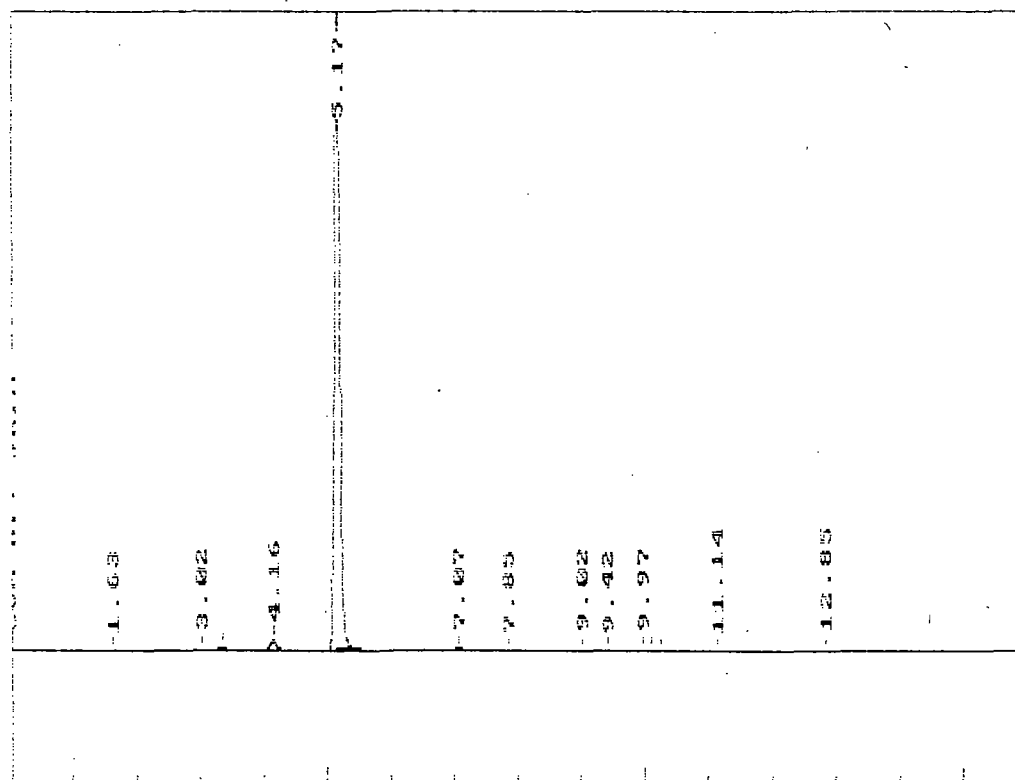
***** EXTERNAL STANDARD TABLE *****
***** 12-20-1989 11:01:30 Version 3.1 *****
* Sample Name: tce-tce std 250ppb Data File: BFILE A5
* Date: 12-21-1989 30:42:55 Method: AVOA 12-18-1989 15:00:44 # 113
* Interface: 16 Cycle#: 3 Operator R.P Channel#: 0 Vial#: N/A.
* Starting Peak Width: 2 Threshold: .25 Area Threshold: 10
*****
* Instrument Type: Varian 3400PST Column Type: cb-624
* Solvent Description:
* Conditions: 40C(hold 4 min)--->10C/min--->140(hold 2 min)
* Detector 0: FID Detector 1: ELL0
* Misc. Information: Ipsi:
*****
Starting Delay: 0.00 Ending retention time: 15.00
Area reject: 0 One sample per 0.102 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample weight: 1.00000

```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	REF PEAK	% DELTA RET TIME	CONC/AREA
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TOTAL AMOUNT = 0.0000

Areas, times, and heights stored in: 6:00E_A5.ATB
Data File = 6:00E_A5.PTS Printed on 12-20-1989 at 11:01:44
Start time: 0.00 min. Stop time: 16.00 min. Offset: 0 mv.
Low Value: 88 uv High Value: 19902 uv Scale factor: 1.0



***** AREA PERCENT REPORT *****

***** 12-20-1989 11:03:11 Version 3.1 *****
 * Sample Name: tce-tca std 250ppb Data File: G:\DCI_A5 *
 * Date: 12-21-1989 30:42:56 Method: BVDA *
 * Interface: i6 Cycle#: 5 Operator R.P Channel#: 1 Vial#: N.A. *
 * Starting Peak Width: 5 Threshold: 1 Area threshold: 10 *

 * Instrument Type: varian 3400+P&T Column Type: db-624 *
 * Solvent Description: *
 * Conditions: 40C(hold 4 min)--->10C/min--->140(hold 2 min) *
 * Detector 0: PID Detector 1: ECD *
 * Misc. Information: Iptl: *

 Starting Delay: 0.00 Run Time: 16.00

PK No.	Ret Time	Peak Area	Area %	S L	Peak Ht.	Normalized %	Area/ Height
1	2.118	977	0.6678	2	74	1.245	13.2
2	3.436	832	0.5682	2	142	1.060	5.9
3	3.650	78471	53.6253	2	9226	100.000	8.5
4	5.192	66052	45.1387	2	10251	84.174	5.4

Total Area: 146331 Area Reject: 0 One sample per 0.102 sec.

```

***** EXTERNAL STANDARD TABLE *****
***** 12-20-1989 11:03:12 Version 5.1 *****
* Sample Name: tce-tca std 250ppb Data File: G:\UCE A5 *
* Date: 12-21-1989 10:42:56 Method: BV04 12-05-1989 16:39:59 # 102 *
* Interface: 15 Cycle#: 5 Operator R.P Channel#: 1 Vial#: N.A. *
* Starting Peak Width: 5 Threshold: 1 Area Threshold: 10 *
*****
* Instrument type: varian 3400+P&T Column Type: db-a24 *
* Solvent Description: *
* Conditions: 400(hold 4 min)--->100/min--->140(hold 2 min) *
* Detector 0: PID Detector 1: ELCD *
* Misc. Information: iprl: *
*****
starting Delay: 0.00 Ending retention time: 16.00
Area reject: 0 One sample per 0.102 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT BL	REF PEAK	% DELTA RET TIME	CONC/AREA
-------------	-------------	--------------	-------------------------	--------------------	------	--------	--------------------	-------------	---------------------	-----------

TOTAL AMOUNT = 0.0000

PEAKS NOT FOUND IN THIS RUN

NAME	ADJUSTED RET. TIME.	REFERENCE PEAK
CCL4	3.85	CCL4

Areas, times, and heights stored in: G:UCE_A5.ATB
Data File = G:UCE_A5.PT5 Printed on 12-20-1989 at 11:03:25
Start time: 0.00 min. Stop time: 16.00 min. Offset: 0 mv.
Low Value: 72 uv High Value: 10327 uv Scale factor: 1.0

