UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 CENTRAL REGIONAL LABORATORY

536 SOUTH CLARK STREET

CHICAGO, ILLINOIS 60605

Date: DEC 07 1992

Subject: Review of Region 5 Data for SF 1061 ALLIED PAPER KALAMAZOO RIVER

From: Charles T. Elly, Director Chuck Elly
Region 5 Central Regional Laboratory

To:

Attached are the results for SF 1061 ALLIED PAPER KALAMAZOO RIVER
CRL request number D930001061
for analyses for PCB IN SEDIMENTS
Results are reported for sample designations: 93OO01S01

Results Status:
(X) Acceptable for Use
( ) Data Qualified, but Acceptable for use
( ) Data Unacceptable for Use

( ) Sewer Disposal Criteria Met; Exceptions: none

Comments on Data Quality by Reviewer

Instrument audits are acceptable. MS/MSD were not performed; the method blank was free from aroclor contamination. The sample was analyzed in quadriplicate. The average value was 16.7 ppm aroclor 1242 with an RSD of 7.8 %.

Data are acceptable for use.

Comments by Laboratory Director or Quality Control Coordinator

Review Record for SF 1061 ALLIED PAPER KALAMAZOO RIVER

Erlinda Evangelista E. Evangelista 12/1/92

Team Leader and Date (X) Reviewed ( ) Unreviewed

Chi M. Tang Chi Tang 12/2/92

Section Chief and Date (✓) Reviewed ( ) Unreviewed

James Adams, Jr. James H. Adams, Jr. 12/2/92

QC Coordinator and Date ( ) Reviewed ( ) Unreviewed

Sylvia Griffin 12-7-92

Data Management Coordinator and Date Received

Date Transmitted 12-7-92

Please sign and date this form below and return it with any comments to:

Sylvia Griffin
Data Management Coordinator
Region 5 Central Regional Laboratory
SL - 10C

Received by and Date

Comments:

FORM 1D

ENVIRONMENTAL PROTECTION AGENCY, REGION V

DIVISION: SF SAMPLING DATE: 10/30/92 ARRIVAL DATE: 10/30/92 ANALYSIS DUE DATE: 11/20/92

DATA SET #: 1061 ACTIVITY #: TFA STUDY: Allied Paper

REPORTING UNITS ARE: ug/gm Sample Type: Water, Sediments, Oil, Sludge, Wipes

#	Sample #	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Toxaphene	T-Chlordane	
1.	930001 ~~S~~01	16.7						
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								

Alchaw 11-18-92

LE 12/1/92

D93000 1061

②

ENVIRONMENTAL PROTECTION AGENCY TFA301
FOR THE TEAM: PESTICIDES & PCB'S

DIVISION/BRANCH SUPERFUND SAMPLING DATE 10/30/92 LAB ARRIVAL DATE 10/30/92 DUE DATE 11/20/92

DU NUMBER TFA DATASET NUMBER 1061 STUDY ALFRED PAPER KALAMAZOO RIVER PRIORITY N CONTRACTOR N

CRL LOG NUMBER	SAMPLE DESCRIPTION	SEDIMENTS SOLIDS POLYCHLORINATED BIPHENYLS MG/KG (DRY) PES211422	SEDIMENTS SOLIDS CHLORINATED PESTICIDES MG/KG (DRY) PES211322	SEDIMENTS SOLIDS OIL AND GREASE MG/KG (DRY) PES214322	
930001 S01	5-116724	X			DEXSIL STANDARD 25 PPM 1242 IN DIRT.

PCB/PEST ANALYSIS
SOILS/SEDIMENTS/OILS EXTRACTION SHEET

Page___of_____

DATA SET NO: SF 1061 SITE: Allied Paper MATRIX: Soil
DATE EXTRACTED: 11/6/92 SOXHLET: ✓ SONIC: __ DIL: __ SOLVENT/VOL: Acetone/Hexane 1:1 200ml
DATE CONCENTRATED: 11/12/92 FINAL SOLVENT: Hexane ANALYST: Acetone/Hexane AIC

SAMPLE	TARE (GRAMS)	TARE + SPL (GRAMS)	WEIGHT OF SPL. (grams)	FV of EXTRACT (ML)	% TOTAL SOLIDS	DIL 1	DIL 2	DIL 3	FINAL VOL.* (ML)
930001S01	102.18	107.13	4.93	10ml	98.56	1-10			100
930001S01 Dup1	114.38	119.5	5.12			1-10			
930001S01 Dup2	87.92	92.93	5.01			1-10			
930001S01 Dup3	103.32	108.4	5.08			1-10			
Method Blank	—	—	—						10

* After all dilutions

	Date Prepared	By Whom	Volume Added
PCB MS/MSD Spiking Solution :	not used		
Pest MS/MSD Spiking Solution:			
Surrogate(s):			

CLEAN-UP: not required

SF 1061

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V
CENTRAL REGIONAL LAB
CHICAGO IL

DETERMINATION OF PERCENT SOLIDS IN SOIL SAMPLES

SAMPLE ID	TARE	WET SAMPLE + TARE	DRY SAMPLE + TARE	%SOLIDS
930001S01	1.562	10.174	10.05	98.56
BLANK	1.501	1.502	1.502	~~100.00~~

8.612
8.488

SF 1061 Allied Paper

point	value
1	18.86
2	16.66
3	15.9
4	15.48

DATA POINT	DATA ENTERED	DEVIATION
1	18.86	2.135
2	16.66	-6.499999999999995D-02
3	15.9	-.8250000000000002
4	15.48	-1.245

The number of data points= 4

The sum of the data= 66.9

The mean= 16.725

The standard deviation is= 1.30317880584362

The coefficient of variation is= 7.791801529707741D-02

11/14/92

	SAMPLE NAME	METHOD NAME	DATA FILE	AMOUNT INJECTED	INT.STD. AMOUNT	DILUTION FACTOR	SAMPL WEIG
1	SOLVENT BLANK	ZERO		1.0000	1.0000	1.00	1.0
2	STD 1254 LEVEL 1	ZERO		1.0000	1.0000	1.00	1.0
3	STD 1254 LEVEL 2	ZERO		1.0000	1.0000	1.00	1.0
4	STD 1254 LEVEL 3	ZERO		1.0000	1.0000	1.00	1.0
5	STD 1254 LEVEL 4	ZERO		1.0000	1.0000	1.00	1.0
6	STD 1254 LEVEL 5	ZERO		1.0000	1.0000	1.00	1.0
7	MDL 1	ZERO		1.0000	1.0000	10.00	1.0
8	MDL 2	ZERO		1.0000	1.0000	10.00	1.0
9	MDL 3	ZERO		1.0000	1.0000	10.00	1.0
10	MDL 4	ZERO		1.0000	1.0000	10.00	1.0
11	MDL 5	ZERO		1.0000	1.0000	10.00	1.0
12	MDL 6	ZERO		1.0000	1.0000	10.00	1.0
13	MDL 7	ZERO		1.0000	1.0000	10.00	1.0
14	MDL 8	ZERO		1.0000	1.0000	10.00	1.0
15	STD 1254 LEVEL 3	ZERO		1.0000	1.0000	1.00	1.0
16	BLANK	ZERO		1.0000	1.0000	1.00	1.0
17	BLANK	ZERO		1.0000	1.0000	1.00	1.0
18	BLANK	ZERO		1.0000	1.0000	1.00	1.0
19	BLANK	ZERO		1.0000	1.0000	1.00	1.0
20	BLANK	ZERO		1.0000	1.0000	1.00	1.0
21	BLANK	ZERO		1.0000	1.0000	1.00	1.0
22	BLANK	ZERO		1.0000	1.0000	1.00	1.0
23	STD 1242 LEVEL 1	ZERO		1.0000	1.0000	1.00	1.0
24	STD 1242 LEVEL 2	ZERO		1.0000	1.0000	1.00	1.0
25	STD 1242 LEVEL 3	ZERO		1.0000	1.0000	1.00	1.0
26	STD 1242 LEVEL 4	ZERO		1.0000	1.0000	1.00	1.0
27	STD 1242 LEVEL 5	ZERO		1.0000	1.0000	1.00	1.0
28	930001S01	ZERO		1.0000	1.0000	100.00	4.8
29	930001S01 DUP 1	ZERO		1.0000	1.0000	100.00	5.0
30	930001S01 DUP 2	ZERO		1.0000	1.0000	100.00	4.9
31	930001S01 DUP 3	ZERO		1.0000	1.0000	100.00	4.9
32	STD 1254 LEVEL 3	ZERO		1.0000	1.0000	1.00	1.0
33	METHOD BLANK	ZERO		1.0000	1.0000	10.00	1.0
34	METHOD BLANK	ZERO		1.0000	1.0000	10.00	1.0
35				0.0000	0.0000	0.00	0.0

11/10/92

	SAMPLE NAME	METHOD NAME	DATA FILE	AMOUNT INJECTED	INT.STD. AMOUNT	DILUTION FACTOR	SAMPLE WEIGH
1	NO INJECTION	ZERO		1.0000	1.0000	1.00	1.0C
2	SOLVENT BLANK	ZERO		1.0000	1.0000	1.00	1.0C
3	STD 1254 LEVEL 1	ZERO		1.0000	1.0000	1.00	1.0C
4	STD 1254 LEVEL 2	ZERO		1.0000	1.0000	1.00	1.0C
5	STD 1254 LEVEL 3	ZERO		1.0000	1.0000	1.00	1.0C
6	STD 1254 LEVEL 4	ZERO		1.0000	1.0000	1.00	1.0C
7	STD 1254 LEVEL 5	ZERO		1.0000	1.0000	1.00	1.0C
8	MDL 1	ZERO		1.0000	1.0000	10.00	1.0C
9	MDL 2	ZERO		1.0000	1.0000	10.00	1.0C
10	MDL 3	ZERO		1.0000	1.0000	10.00	1.0C
11	MDL 4	ZERO		1.0000	1.0000	10.00	1.0C
12	MDL 5	ZERO		1.0000	1.0000	10.00	1.0C
13	MDL 6	ZERO		1.0000	1.0000	10.00	1.0C
14	MDL 7	ZERO		1.0000	1.0000	10.00	1.0C
15	MDL 8	ZERO		1.0000	1.0000	10.00	1.0C
16	STD 1254 LEVEL 3	ZERO		1.0000	1.0000	1.00	1.0C
17	BLANK	ZERO		1.0000	1.0000	1.00	1.0C
18	BLANK	ZERO		1.0000	1.0000	1.00	1.0C
19	BLANK	ZERO		1.0000	1.0000	1.00	1.0C
20	BLANK	ZERO		1.0000	1.0000	1.00	1.0C
21	BLANK	ZERO		1.0000	1.0000	1.00	1.0C
22	BLANK	ZERO		1.0000	1.0000	1.00	1.0C
23	BLANK	ZERO		1.0000	1.0000	1.00	1.0C
24	STD 1242 LEVEL 1	ZERO		1.0000	1.0000	1.00	1.0C
25	STD 1242 LEVEL 2	ZERO		1.0000	1.0000	1.00	1.0C
26	STD 1242 LEVEL 3	ZERO		1.0000	1.0000	1.00	1.0C
27	STD 1242 LEVEL 4	ZERO		1.0000	1.0000	1.00	1.0C
28	STD 1242 LEVEL 5	ZERO		1.0000	1.0000	1.00	1.0C
29	930001S01	ZERO		1.0000	1.0000	100.00	4.85
30	930001S01 DUP 1	ZERO		1.0000	1.0000	100.00	5.01
31	930001S01 DUP 2	ZERO		1.0000	1.0000	100.00	4.91
32	930001S01 DUP 3	ZERO		1.0000	1.0000	100.00	4.91
33	STD 1254 LEVEL 3	ZERO		1.0000	1.0000	1.00	1.0C
34	METHOD BLANK	ZERO		1.0000	1.0000	10.00	1.0C
35	METHOD BLANK	ZERO		1.0000	1.0000	10.00	1.0C
36				0.0000	0.0000	0.00	0.0C

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION V CENTRAL REGIONAL LABORATORY - CHICAGO, IL

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INITIAL AND CONTINUING CALIBRATION FORM

Data set: SF1061 Date 11/18/92

GC # 3 COLUMN DB 608 VERSION 94

STANDARD NAME: AROCLOR 1242 (LEVEL 3)

QUANT.

COMPOUND	FILENAME 1MA25 INITIAL AREA	FILENAME 1MA32 CONTINUING AREA-1	RPD
1242A	417246	407020	2.5
1242B	763783	744846	2.5
1242C	1383481	1357184	1.9
1242D	650463	624252	4.1
1242E	392683	390336	0.6

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION V CENTRAL REGIONAL LABORATORY - CHICAGO, IL

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INITIAL AND CONTINUING CALIBRATION FORM

Data set: SF 1061 Date 11/18/92

GC # 3 COLUMN DB-5 VERSION 111

STANDARD NAME: AROCLOR 1242 (LEVEL 3)

QUANT.

COMPOUND	FILENAME 2MA26 INITIAL AREA	FILENAME 2MA33 CONTINUING AREA-1	RPD
1242A	524802	530076	1.0
1242B	316310	317600	0.4
1242C	909708	917542	0.9
1242D	469065	465877	0.7
1242E	442550	779423	55.1

?

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION V CENTRAL REGIONAL LABORATORY - CHICAGO, IL

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INITIAL AND CONTINUING CALIBRATION FORM

DATA SET: SF 1061 Date 11/18/92

GC# 3 COLUMN TYPE: DB 608 VERSION 94

STANDARD NAME: AROCLOR 1242 (LEVEL 3)

COMPOUND	FILENAME 1MA25 INITIAL TIME	FILENAME 1MA32 CONTINUING TIME	RPD
1242A	7.50	7.50	0.00
1242B	8.45	8.45	0.00
1242C	9.27	9.25	0.22
1242D	9.63	9.63	0.00
1242E	12.05	12.03	0.17

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION V CENTRAL REGIONAL LABORATORY - CHICAGO, IL

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INITIAL AND CONTINUING CALIBRATION FORM

DATA SET: SF 1061 Date 11/18/92

GC# 3 COLUMN TYPE: DB-5 VERSION ~~[illegible]~~ 111

STANDARD NAME: AROCLOR 1242 (LEVEL 3)

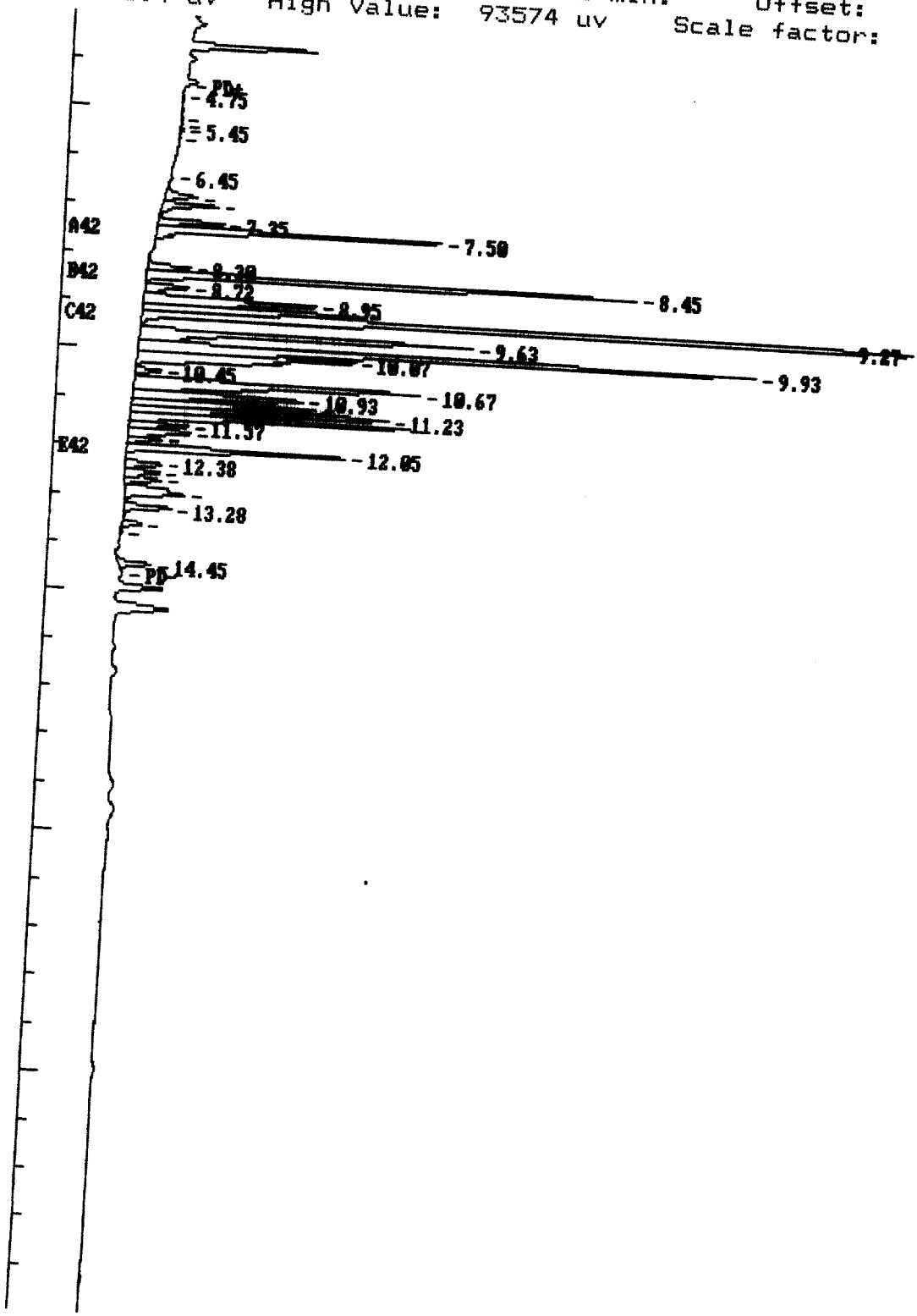
COMPOUND	FILENAME 2MA26 INITIAL TIME	FILENAME 2MA33 CONTINUING TIME	RPD
1242A	7.05	7.05	0.00
1242B	7.42	7.42	0.00
1242C	7.97	7.97	0.00
1242D	9.10	9.10	0.00
1242E	9.93	9.93	0.00

```
*****   EXTERNAL STANDARD TABLE   *****
******************** 11-18-1992 08:56:12 Version 4.1 **********************
* Sample Name: STD 1242 LEVEL 1                    Data File: Q:1MA23       *
* Date: 11-17-1992 17:58:50 Method: Q:MET42  11-18-1992 08:40:26  #  94    *
* Interface: 0   Cycle#:  23   Operator AK  Channel#: 0    Vial#: N.A.     *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100             *
*************************************************************************
* Instrument Type: HP 5890A #3          Column Type: MEGABORE 30 M        *
*              Solvent Description: ULTRA HIGH PURITY NITROGEN             *
* Conditions: INJ. 250 deg C; 350 deg C; OVEN-Temp PROGRAM                 *
*            Detector 0: DB608 QUAN          Detector 1: DB5 CONF          *
* Misc. Information: PCB                                  PCB              *
*************************************************************************
Starting Delay:   3.00                      Ending retention time:   30.00
Area reject:        0                       One sample per   1.000 sec.
Amount injected:       1.00                 Dilution factor:       1.00
Sample Weight:         1.000000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/GM	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
10	7.50	A42	0.0708	19.0009%	114869	21089	5.4	2	10	0	6.1623E-07
12	8.45	B42	0.0685	18.3817%	202981	36207	5.6	2	12	0	3.3737E-07
16	9.27	C42	0.0739	19.8236%	365805	57032	6.4	2	16	0	2.0189E-07
17	9.63	D42	0.0735	19.7398%	156453	24606	6.4	2	17	0	4.7004E-07
29	12.05	E42	0.0859	23.0540%	93188	16173	5.8	2	29	0	9.2163E-07

TOTAL AMOUNT = 0.3725

Data File = Q:1MA23.PTS Printed on 11-18-1992 at 08:56:26
Start time: 3.00 min. Stop time: 29.95 min. Offset: 0 mv.
Low Value: 35504 uv High Value: 93574 uv Scale factor: 1.0



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

********** 11-18-1992 08:57:21 Version 4.1 **********

* Sample Name: STD 1242 LEVEL 2 Data File: Q:1MA24 *

* Date: 11-17-1992 18:35:50 Method: Q:MET42 11-18-1992 08:40:26 # 94 *

* Interface: 0 Cycle#: 24 Operator AK Channel#: 0 Vial#: N.A. *

* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HP 5890A #3 Column Type: MEGABORE 30 M *

* Solvent Description: ULTRA HIGH PURITY NITROGEN *

* Conditions: INJ. 250 deg C; 350 deg C; OVEN-Temp PROGRAM *

* Detector 0: DB608 QUAN Detector 1: DB5 CONF *

* Misc. Information: PCB PCB *

****

Starting Delay: 3.00 Ending retention time: 30.00

Area reject: 0 One sample per 1.000 sec.

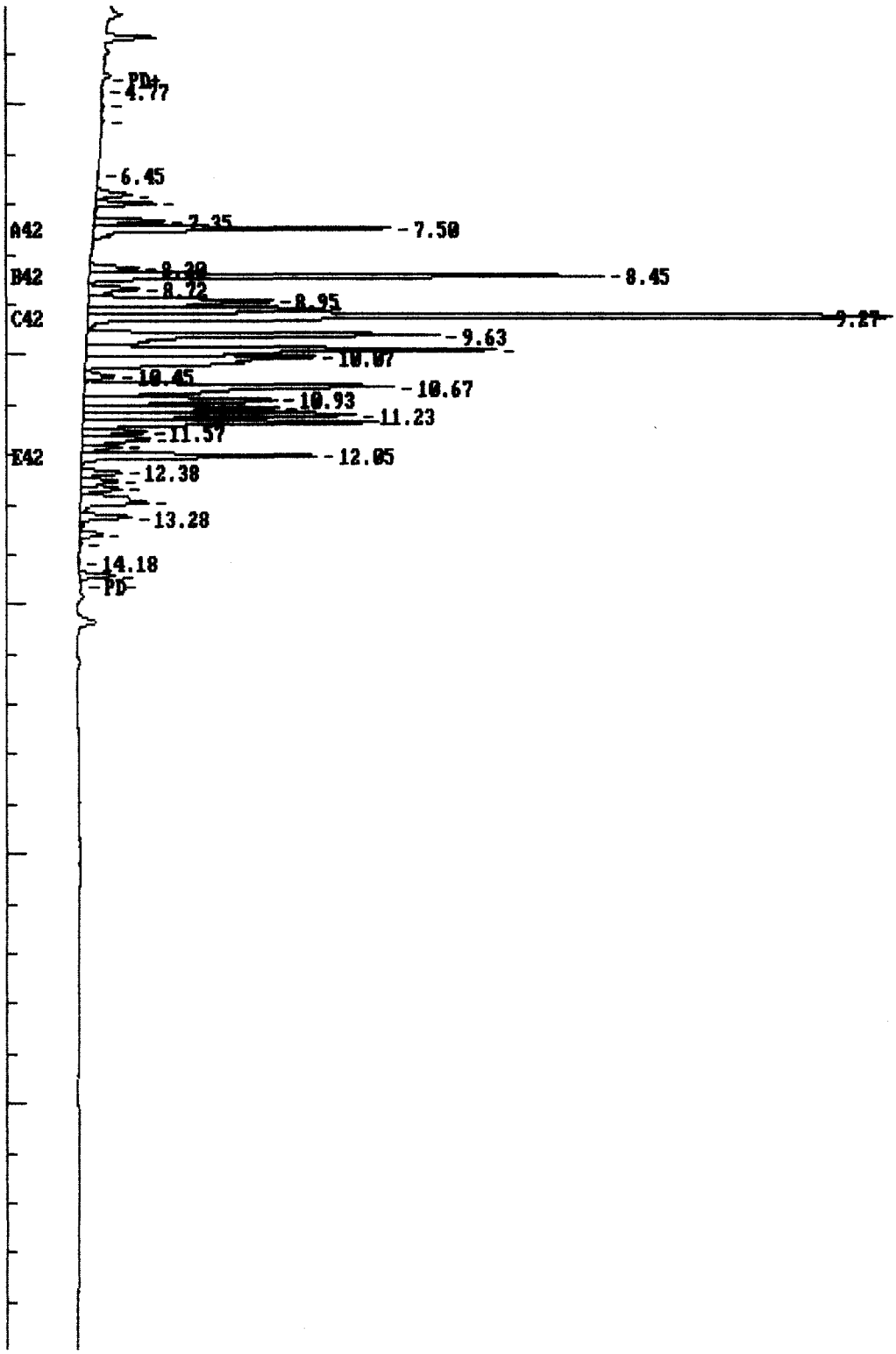
Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/GM	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
8	7.50	A42	0.2191	20.2739%	214433	39231	5.5	2	8	0	1.0217E-06
10	8.45	B42	0.2192	20.2882%	387518	67742	5.7	2	10	0	5.6573E-07
14	9.27	C42	0.2154	19.9290%	689470	106133	6.5	2	14	0	3.1234E-07
15	9.63	D42	0.2133	19.7351%	309229	46437	6.7	2	15	0	6.8964E-07
27	12.05	E42	0.2137	19.7739%	184601	30961	6.0	2	27	0	1.1575E-06

TOTAL AMOUNT = 1.0806

Data File = Q:1MA24.PTS Printed on 11-18-1992 at 08:57:39
Start time: 3.00 min. Stop time: 29.95 min. Offset: 0 mv.
Low Value: 36031 uv High Value: 143659 uv Scale factor: 1.0

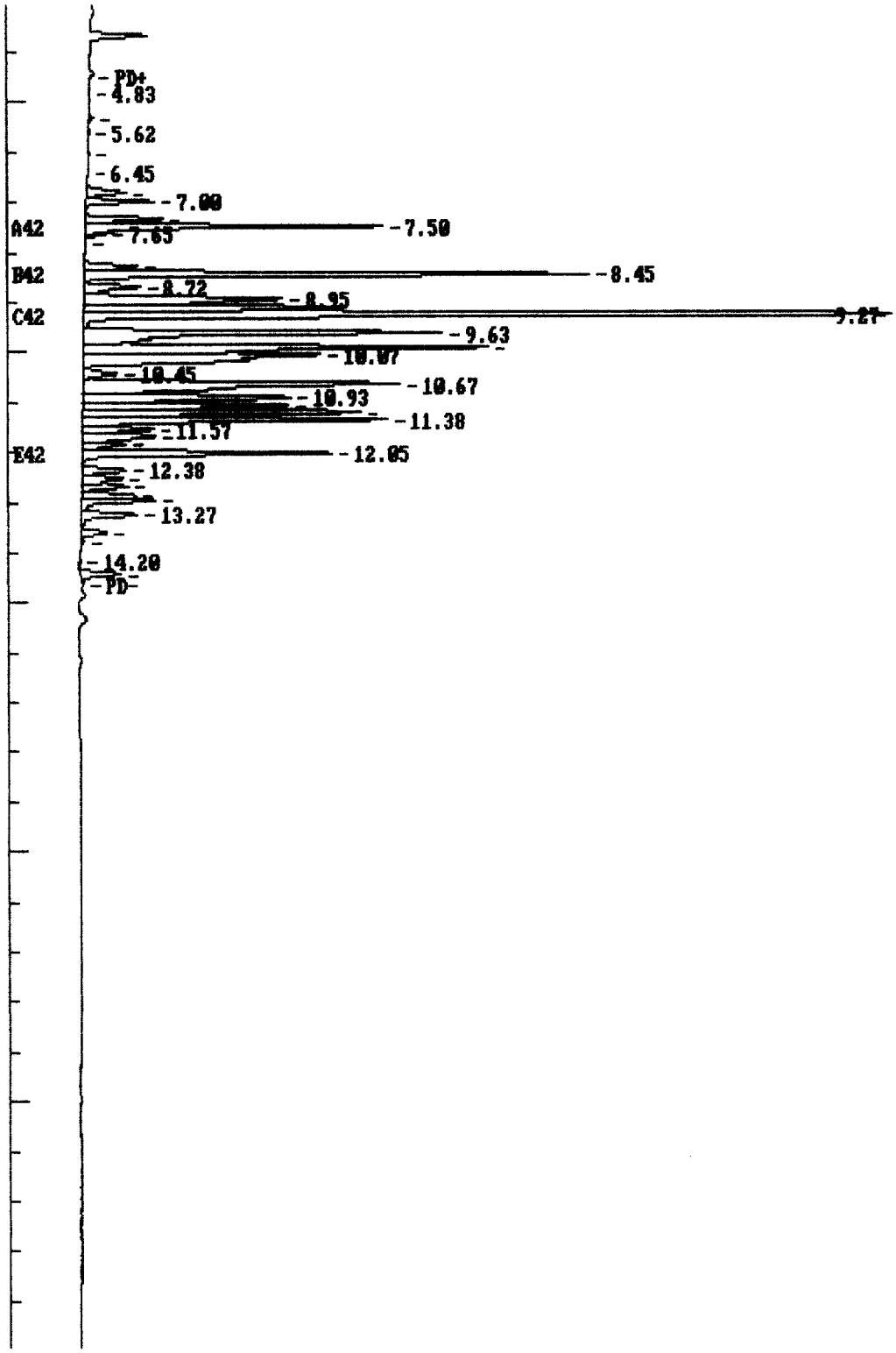


```
*****   EXTERNAL STANDARD TABLE   *****
******************** 11-18-1992 08:58:35 Version 4.1 **********************
* Sample Name: STD 1242 LEVEL 3                    Data File: Q:1MA25       *
* Date: 11-17-1992 19:12:45 Method: Q:MET42  11-18-1992 08:40:26  #  94    *
* Interface: 0   Cycle#:  25   Operator AK  Channel#: 0    Vial#: N.A.     *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100             *
*************************************************************************
* Instrument Type: HP 5890A #3          Column Type: MEGABORE 30 M        *
*              Solvent Description: ULTRA HIGH PURITY NITROGEN             *
* Conditions: INJ. 250 deg C; 350 deg C; OVEN-Temp PROGRAM                 *
*            Detector 0: DB608 QUAN          Detector 1: DB5 CONF          *
* Misc. Information: PCB                                PCB               *
*************************************************************************
Starting Delay:    3.00                      Ending retention time:   30.00
Area reject:        0                        One sample per   1.000 sec.
Amount injected:        1.00                 Dilution factor:        1.00
Sample Weight:          1.000000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/GM	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT BL	REF PEAK	% DELTA RET TIME	CONC/AREA
9	7.50	A42	0.5212	20.0721%	417246	77037	5.4 3	9	0	1.2490E-06
13	8.45	B42	0.5266	20.2824%	763783	130975	5.8 2	13	0	6.8948E-07
17	9.27	C42	0.5188	19.9799%	1383481	210084	6.6 2	17	0	3.7497E-07
18	9.63	D42	0.5253	20.2326%	650463	93093	7.0 2	18	0	8.0761E-07
30	12.05	E42	0.5046	19.4331%	392683	64745	6.1 2	30	0	1.2849E-06

TOTAL AMOUNT = 2.5964

Data File = Q:1MA25.PTS Printed on 11-18-1992 at 08:58:53
Start time: 3.00 min. Stop time: 29.95 min. Offset: 0 mv.
Low Value: 36250 uv High Value: 247920 uv Scale factor: 1.0



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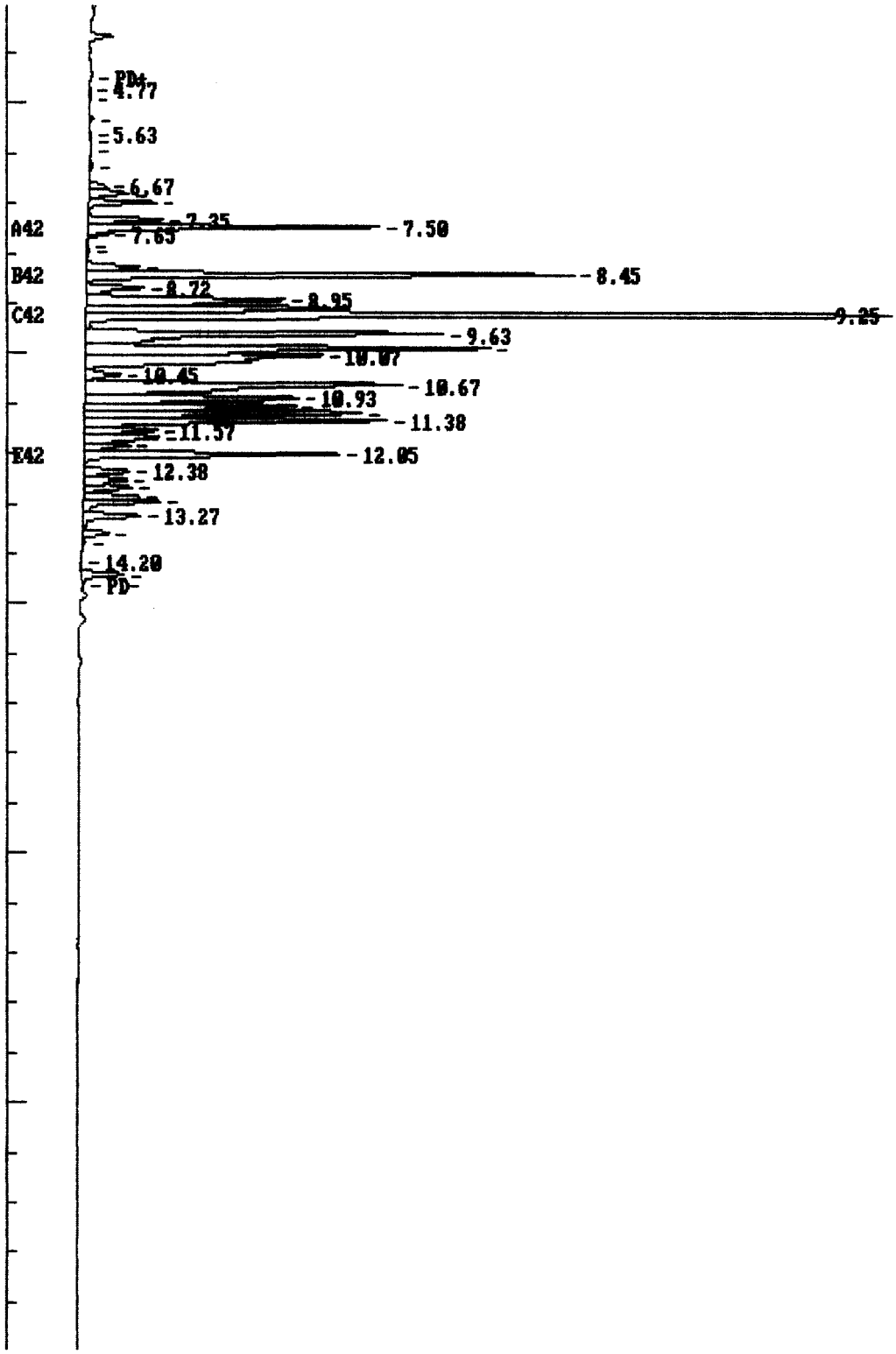
*****   EXTERNAL STANDARD TABLE   *****
******************** 11-18-1992 08:59:48 Version 4.1 **********************
* Sample Name: STD 1242 LEVEL 4                    Data File: Q:1MA26       *
* Date: 11-17-1992 19:49:41 Method: Q:MET42  11-18-1992 08:40:26  #  94    *
* Interface: 0   Cycle#:  26   Operator AK  Channel#: 0    Vial#: N.A.     *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100             *
*************************************************************************
* Instrument Type: HP 5890A #3          Column Type: MEGABORE 30 M        *
*              Solvent Description: ULTRA HIGH PURITY NITROGEN             *
* Conditions: INJ. 250 deg C; 350 deg C; OVEN-Temp PROGRAM                 *
*             Detector 0: DB608 QUAN          Detector 1: DB5 CONF         *
* Misc. Information: PCB                                PCB               *
*************************************************************************
Starting Delay:    3.00                      Ending retention time:    30.00
Area reject:        0                        One sample per   1.000 sec.
Amount injected:        1.00                 Dilution factor:        1.00
Sample Weight:          1.000000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/GM	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
12	7.50	A42	0.7518	20.0049%	572112	106376	5.4	3	12	0	1.3141E-06
17	8.45	B42	0.7487	19.9222%	1035647	177372	5.8	2	17	0	7.2294E-07
21	9.25	C42	0.7575	20.1561%	1929564	293660	6.6	2	21	0	3.9257E-07
22	9.63	D42	0.7522	20.0153%	898553	129952	6.9	2	22	0	8.3713E-07
34	12.05	E42	0.7479	19.9015%	566774	92956	6.1	2	34	0	1.3196E-06

TOTAL AMOUNT = 3.7582

Data File = Q:1MA26.PTS Printed on 11-18-1992 at 09:00:06
Start time: 3.00 min. Stop time: 29.95 min. Offset: 0 mv.
Low Value: 36767 uv High Value: 333849 uv Scale factor: 1.0



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*****   EXTERNAL STANDARD TABLE   *****
******************** 11-18-1992 09:01:01 Version 4.1 *********************
* Sample Name: STD 1242 LEVEL 5                  Data File: Q:1MA27       *
* Date: 11-17-1992 20:26:37 Method: Q:MET42  11-18-1992 08:40:26  #  94   *
* Interface: 0   Cycle#:  27   Operator AK  Channel#: 0    Vial#: N.A.    *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100            *
***************************************************************************
* Instrument Type: HP 5890A #3          Column Type: MEGABORE 30 M        *
*              Solvent Description: ULTRA HIGH PURITY NITROGEN            *
* Conditions: INJ. 250 deg C; 350 deg C; OVEN-Temp PROGRAM                *
*             Detector 0: DB608 QUAN          Detector 1: DB5 CONF        *
* Misc. Information: PCB                                PCB               *
***************************************************************************
Starting Delay:    3.00                      Ending retention time:   30.00
Area reject:        0                        One sample per   1.000 sec.
Amount injected:        1.00                 Dilution factor:        1.00
Sample Weight:          1.000000
```
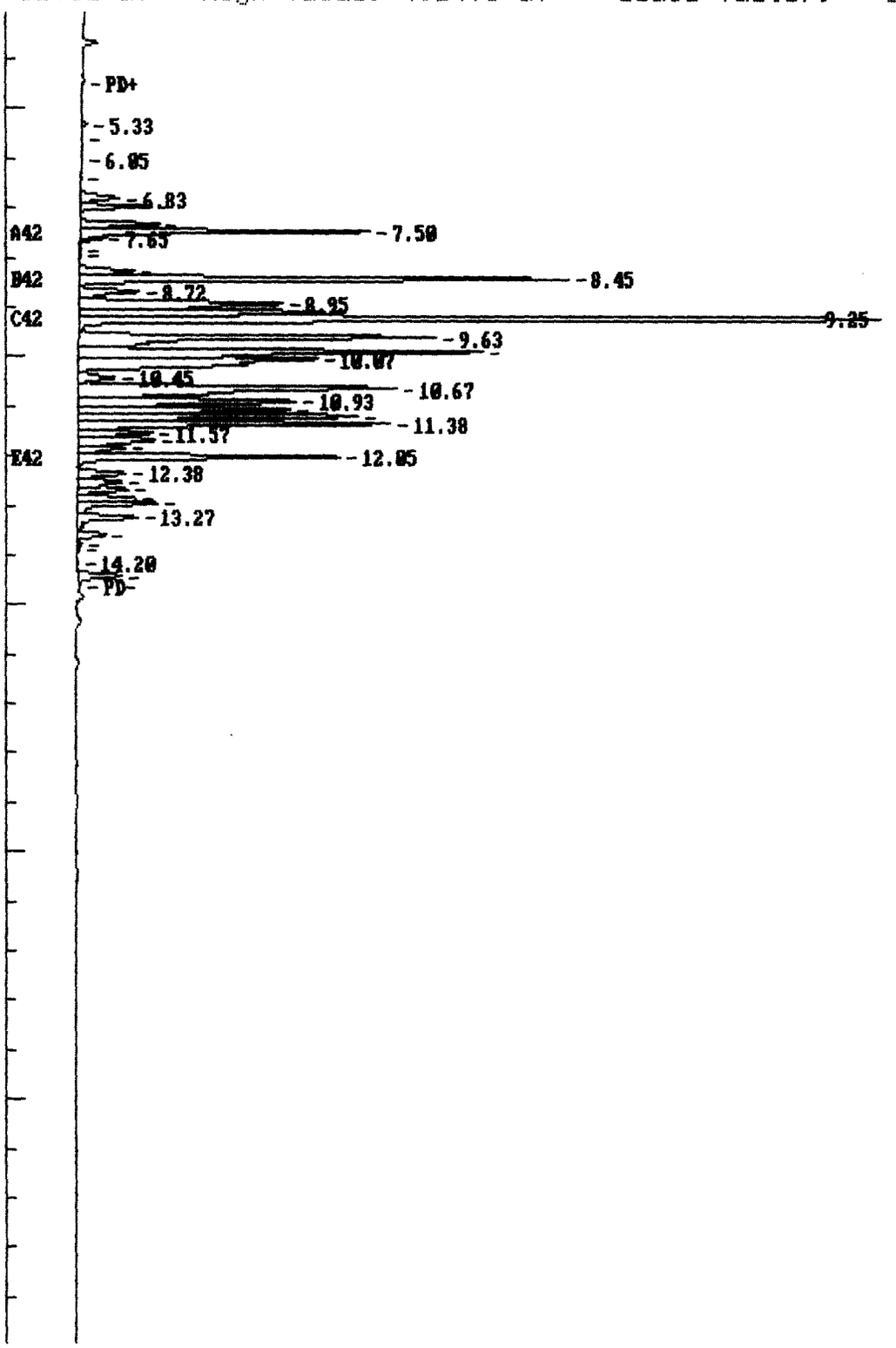
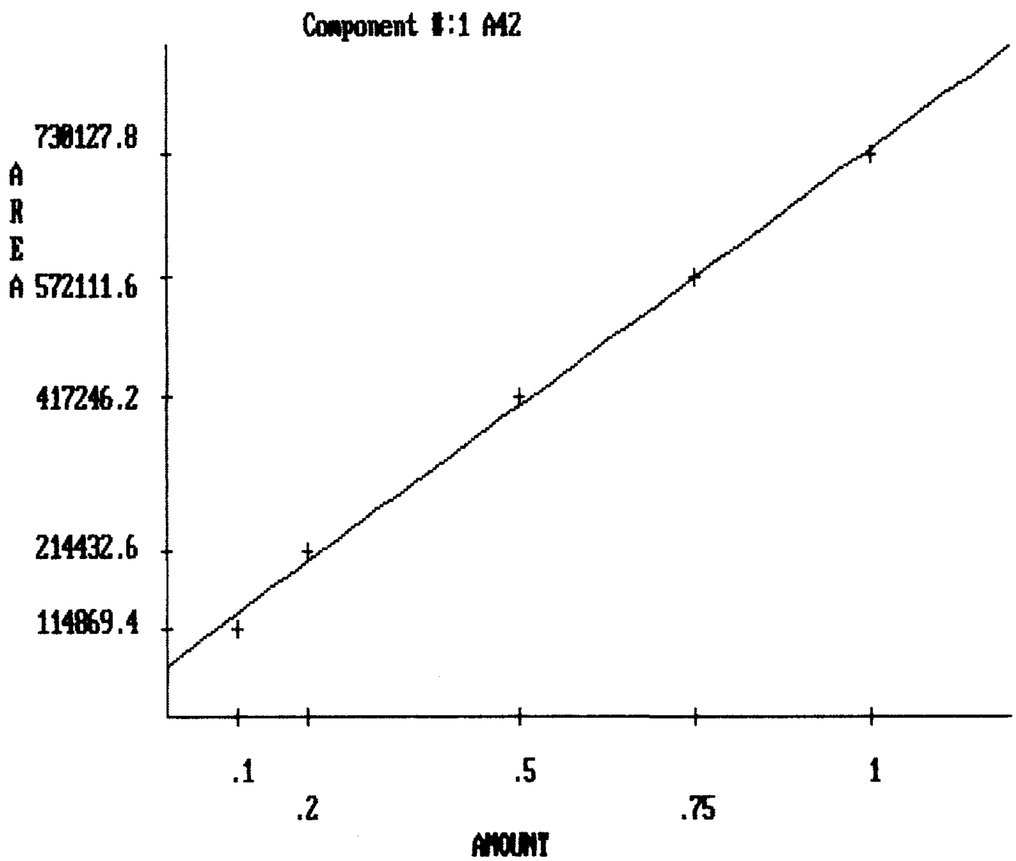

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/GM	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
8	7.50	A42	0.9872	19.9738%	730128	133474	5.5	3	8	0	1.3520E-06
13	8.45	B42	0.9870	19.9698%	1327303	225300	5.9	2	13	0	7.4359E-07
17	9.25	C42	0.9845	19.9207%	2448905	369858	6.6	2	17	0	4.0203E-07
18	9.63	D42	0.9857	19.9438%	1153854	164536	7.0	2	18	0	8.5425E-07
30	12.05	E42	0.9979	20.1919%	745620	120632	6.2	2	30	0	1.3384E-06

TOTAL AMOUNT = 4.9423

Data File = Q:1MA27.PTS Printed on 11-18-1992 at 09:01:19
Start time: 3.00 min. Stop time: 29.95 min. Offset: 0 mv.
Low Value: 36918 uv High Value: 408491 uv Scale factor: 1.0



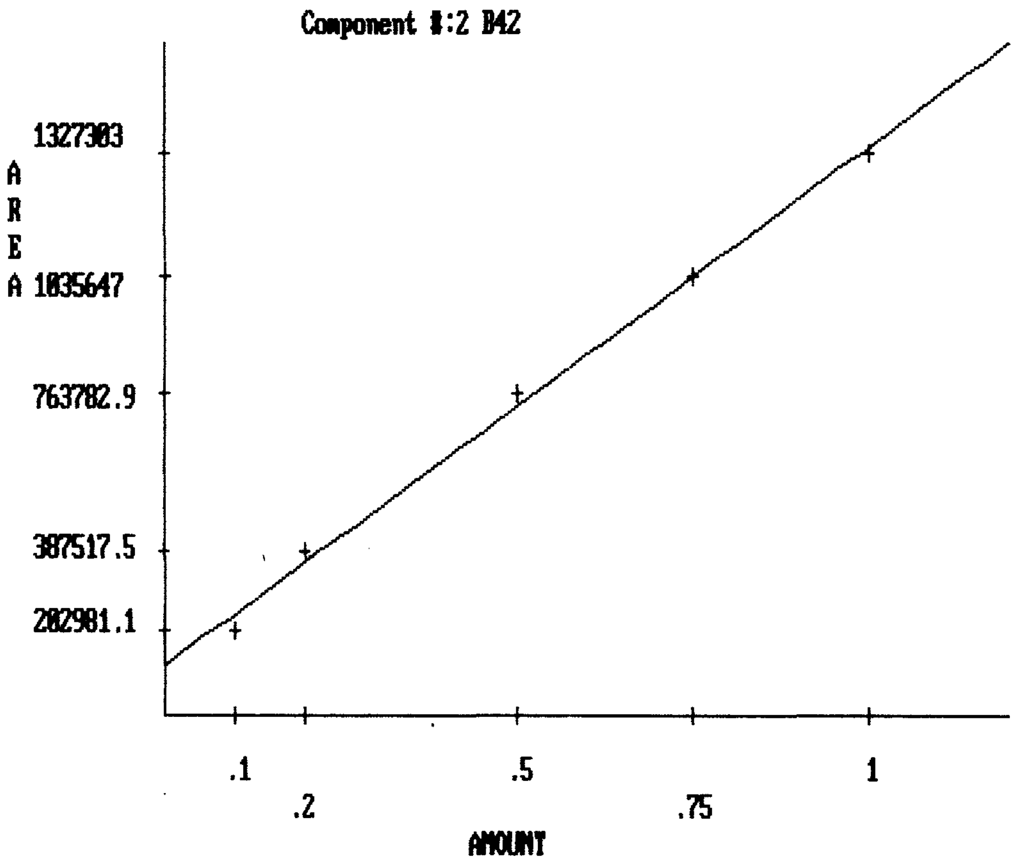
Method MET42
Sample PCB
Operator AK
Run date 11-18-1992 08:40:26 version: 94
Printed on 11-18-1992 AT 09:39:56
Straight Line fit



Component 1 = A42
EXTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA
1	0.1000	114869
2	0.2000	214433
3	0.5000	417246
4	0.7500	572112
5	1.0000	730128

Y = SLOPE * X + INTERCEPT
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD
Area = 6.7140E+05 * Amount + 6.7344E+04
Amount = 1.4894E-06 * Area + -1.0030E-01
Correlation Coefficient = 0.9967



Component 2 = B42

EXTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA
1	0.1000	202981
2	0.2000	387518
3	0.5000	763783
4	0.7500	1035647
5	1.0000	1327303

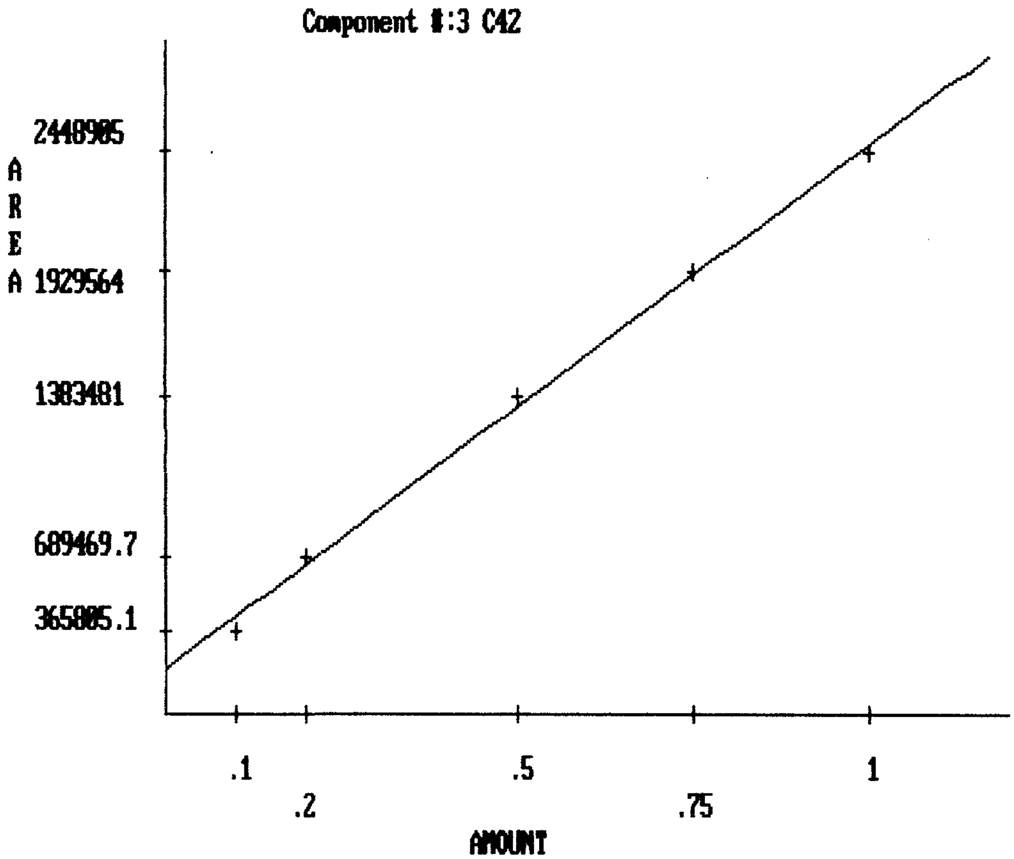
Y = SLOPE * X + INTERCEPT

DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD

Area = 1.2241E+06 * Amount + 1.1916E+05

Amount = 8.1693E-07 * Area + -9.7342E-02

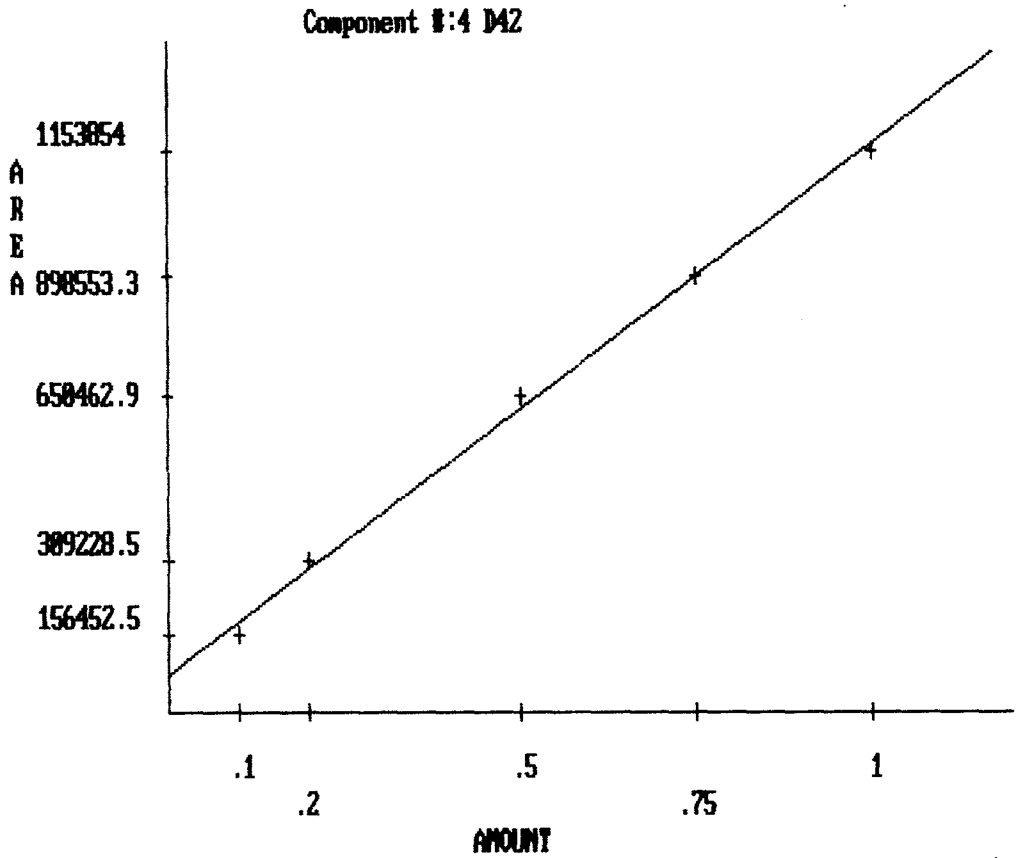
Correlation Coefficient = 0.9960



Component 3 = C42
EXTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA
1	0.1000	365805
2	0.2000	689470
3	0.5000	1383481
4	0.7500	1929564
5	1.0000	2448905

Y = SLOPE * X + INTERCEPT
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD
Area = 2.2874E+06 * Amount + 1.9688E+05
Amount = 4.3718E-07 * Area + -8.6072E-02
Correlation Coefficient = 0.9972



Component 4 = D42

EXTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA
1	0.1000	156453
2	0.2000	309229
3	0.5000	650463
4	0.7500	898553
5	1.0000	1153854

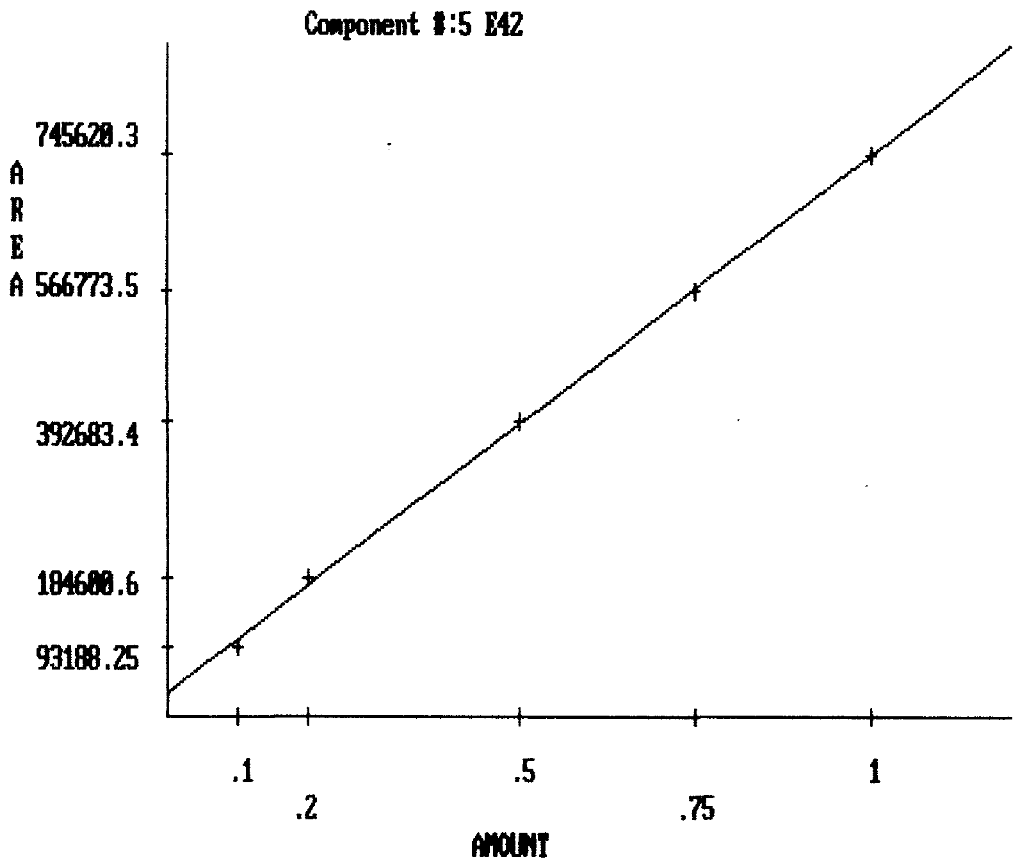
Y = SLOPE * X + INTERCEPT

DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD

Area = 1.0935E+06 * Amount + 7.6040E+04

Amount = 9.1452E-07 * Area + -6.9540E-02

Correlation Coefficient = 0.9969



Component 5 = E42
EXTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA
1	0.1000	93188
2	0.2000	184601
3	0.5000	392683
4	0.7500	566774
5	1.0000	745620

Y = SLOPE * X + INTERCEPT
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD

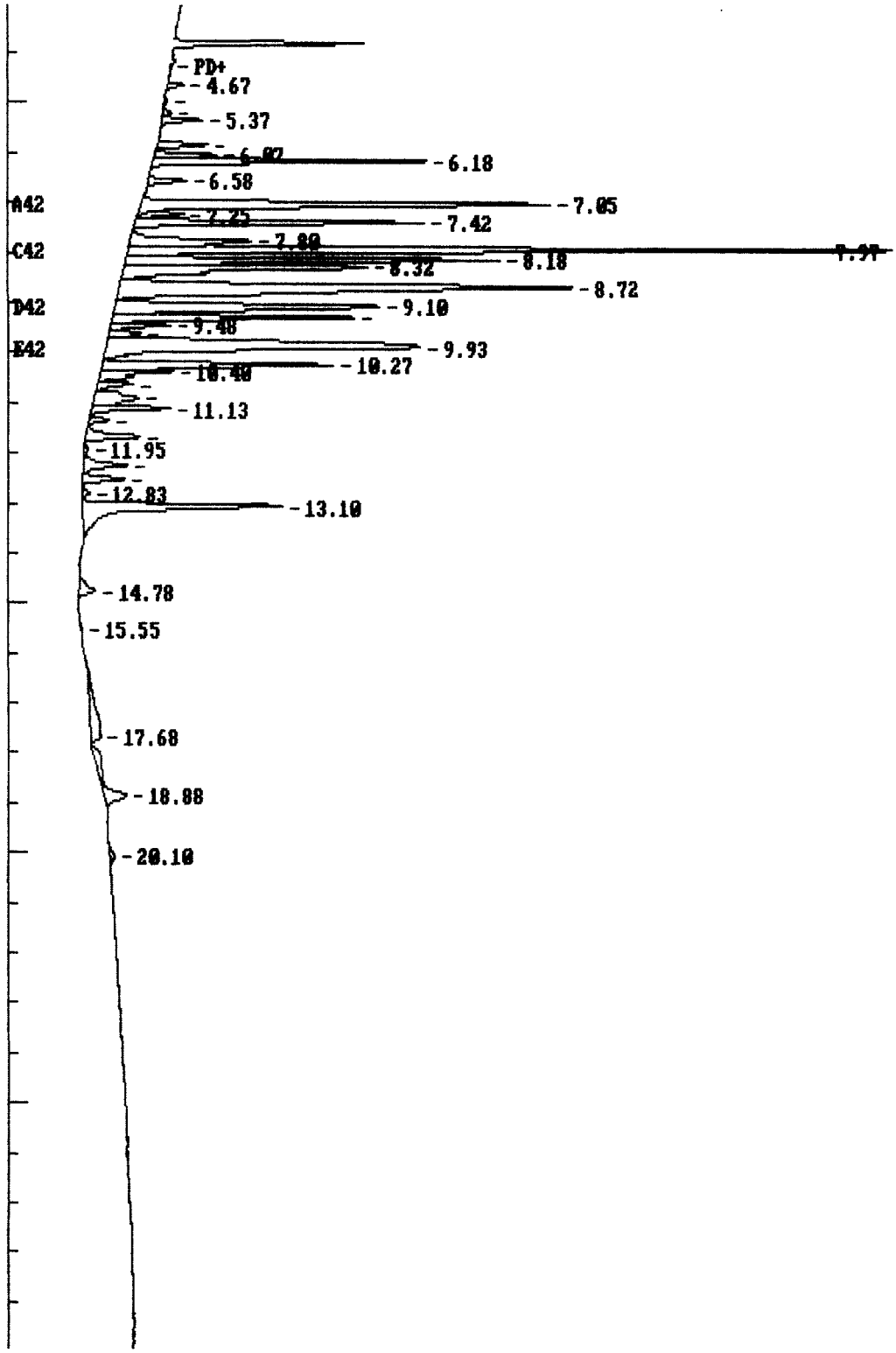
Area = 7.1534E+05 * Amount + 3.1751E+04
Amount = 1.3979E-06 * Area + -4.4387E-02
Correlation Coefficient = 0.9993

```
******   EXTERNAL STANDARD TABLE   ******
******************** 11-18-1992 09:13:30 Version 4.1 **********************
* Sample Name: STD 1242 LEVEL 1                    Data File: Q:2MA24       *
* Date: 11-17-1992 18:35:48 Method: Q:CMET42  11-18-1992 08:23:50  #  111 *
* Interface: 0   Cycle#:  24   Operator AK  Channel#: 1    Vial#: N.A.     *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100             *
*************************************************************************
* Instrument Type: HP 5890A #3          Column Type: MEGABORE 30 M        *
*              Solvent Description: ULTRA HIGH PURITY NITROGEN            *
* Conditions: INJ. 250 deg C; 350 deg C; OVEN-Temp PROGRAM                *
*             Detector 0: DB608 QUAN          Detector 1: DB5 CONF        *
* Misc. Information: PCB                                PCB               *
*************************************************************************
Starting Delay:    3.00                      Ending retention time:   30.00
Area reject:        0                        One sample per   1.000 sec.
Amount injected:        1.00                 Dilution factor:        1.00
Sample Weight:          1.000000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/GM	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
9	7.05	A42	0.0728	17.0059%	146932	21040	7.0	3	9	0	4.9515E-07
11	7.42	B42	0.0784	18.3347%	81734	14865	5.5	2	11	0	9.5968E-07
13	7.97	C42	0.0761	17.7898%	252429	39337	6.4	2	13	0	3.0150E-07
17	9.10	D42	0.0736	17.1979%	121875	13613	9.0	2	17	0	6.0370E-07
21	9.93	E42	0.1269	29.6718%	200530	16179	12.4	2	21	0	6.3303E-07

TOTAL AMOUNT = 0.4278

Data File = Q:2MA24.PTS Printed on 11-18-1992 at 09:13:44
Start time: 3.00 min. Stop time: 29.95 min. Offset: 0 mv.
Low Value: 23127 uv High Value: 65043 uv Scale factor: 1.0

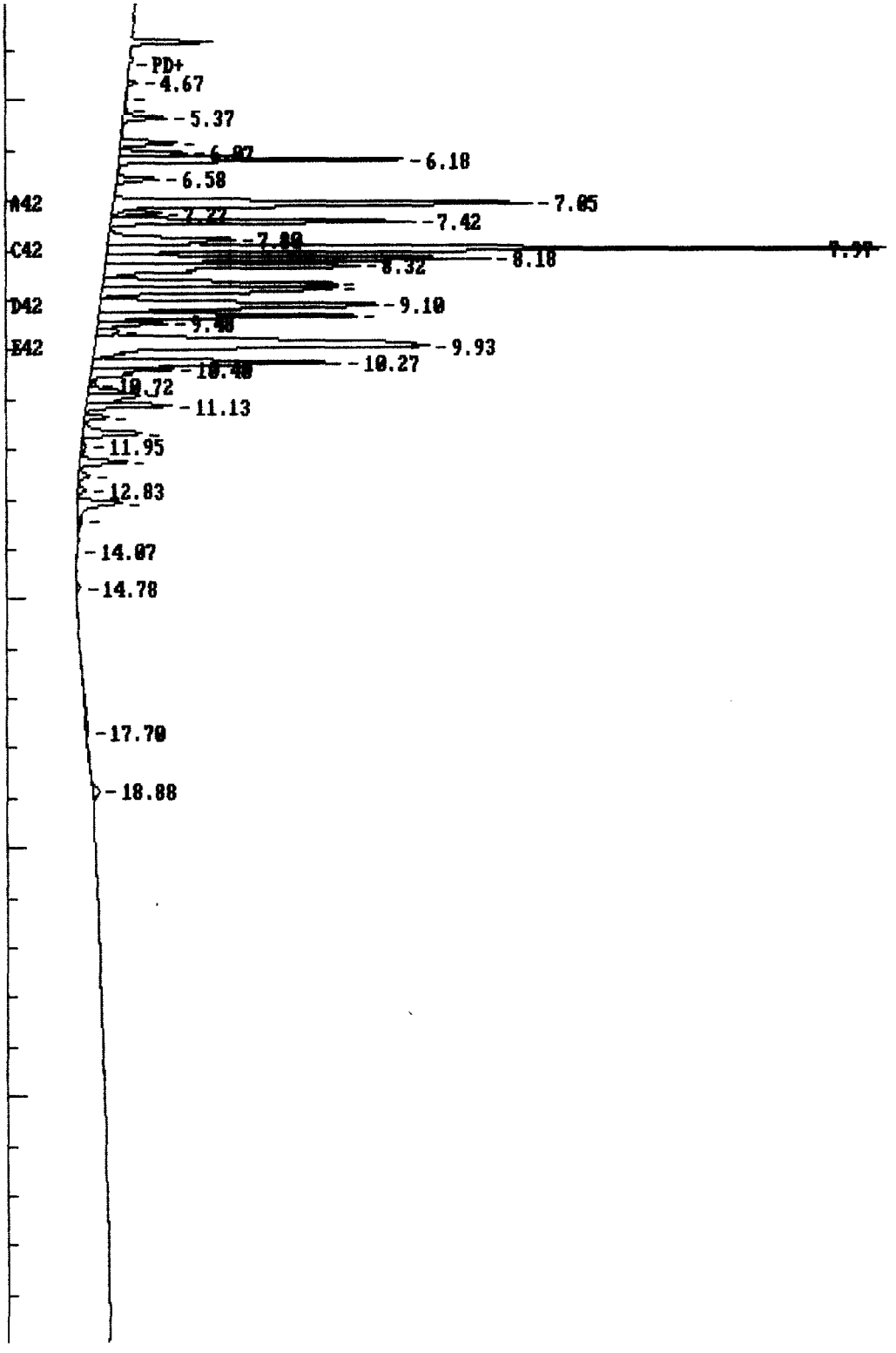


```
*****   EXTERNAL STANDARD TABLE   *****
******************** 11-18-1992 09:14:45 Version 4.1 *********************
* Sample Name: STD 1242 LEVEL 2                  Data File: Q:2MA25       *
* Date: 11-17-1992 19:12:43 Method: Q:CMET42  11-18-1992 08:23:50  #  111 *
* Interface: 0   Cycle#:  25   Operator AK  Channel#: 1    Vial#: N.A.    *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100            *
***************************************************************************
* Instrument Type: HP 5890A #3          Column Type: MEGABORE 30 M        *
*              Solvent Description: ULTRA HIGH PURITY NITROGEN            *
* Conditions: INJ. 250 deg C; 350 deg C; OVEN-Temp PROGRAM                *
*             Detector 0: DB608 QUAN          Detector 1: DB5 CONF        *
* Misc. Information: PCB                                PCB               *
***************************************************************************
Starting Delay:   3.00                      Ending retention time:   30.00
Area reject:        0                       One sample per   1.000 sec.
Amount injected:       1.00                 Dilution factor:       1.00
Sample Weight:         1.000000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/GM	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
9	7.05	A42	0.2129	19.2582%	266514	37798	7.1	3	9	0	7.9883E-07
11	7.42	B42	0.2077	18.7837%	151413	27503	5.5	2	11	0	1.3714E-06
13	7.97	C42	0.2099	18.9876%	452612	70376	6.4	2	13	0	4.6377E-07
18	9.10	D42	0.2103	19.0241%	228482	25088	9.1	2	18	0	9.2047E-07
22	9.93	E42	0.2647	23.9463%	381290	30256	12.6	2	22	0	6.9429E-07

TOTAL AMOUNT = 1.1055

Data File = Q:2MA25.PTS Printed on 11-18-1992 at 09:15:01
Start time: 3.00 min. Stop time: 29.95 min. Offset: 0 mv.
Low Value: 23271 uv High Value: 96504 uv Scale factor: 1.0



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

********** 11-18-1992 09:16:00 Version 4.1 **********

* Sample Name: STD 1242 LEVEL 3 Data File: Q:2MA26 *
* Date: 11-17-1992 19:49:39 Method: Q:CMET42 11-18-1992 08:23:50 # 111 *
* Interface: 0 Cycle#: 26 Operator AK Channel#: 1 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

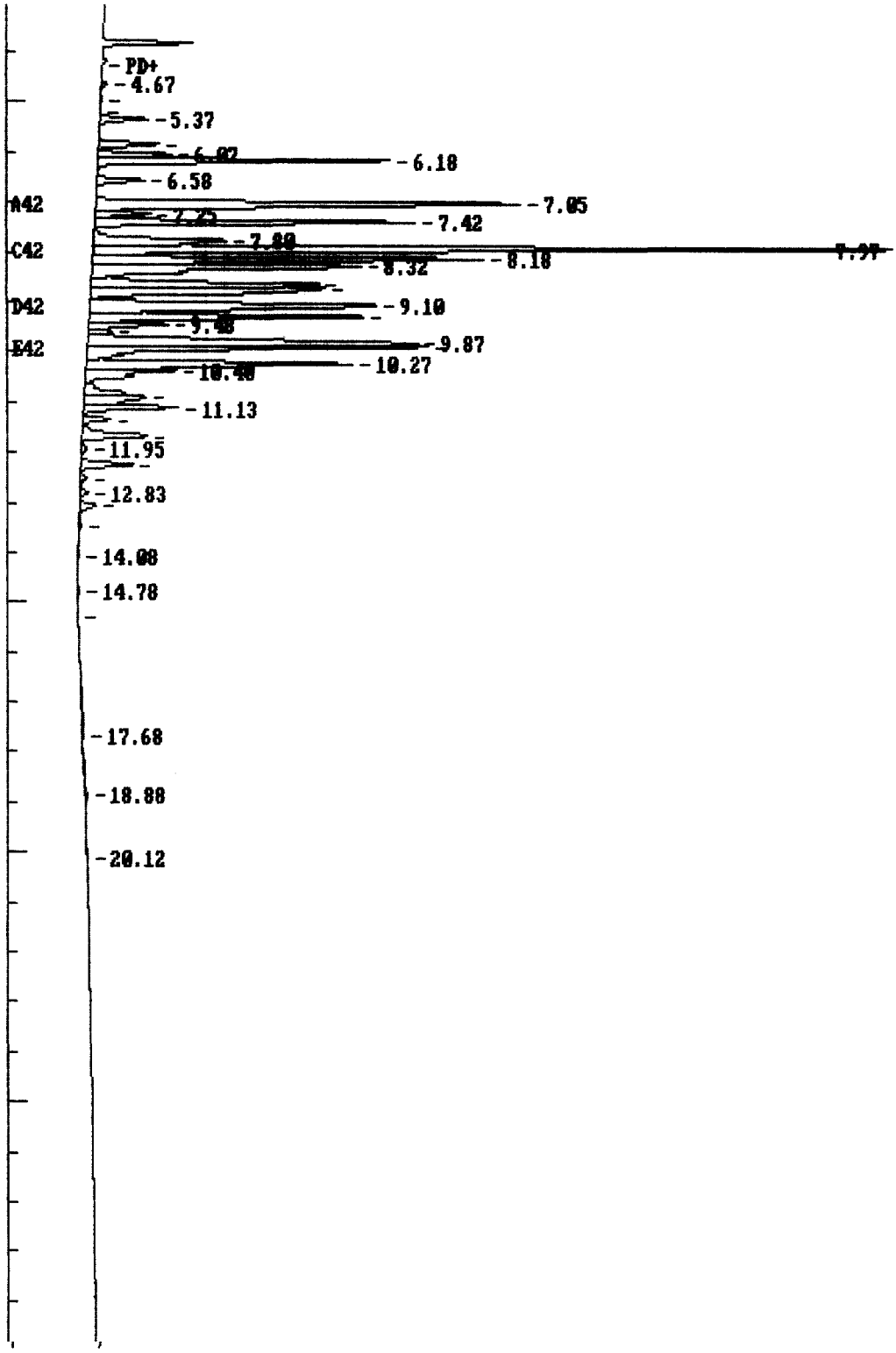
* Instrument Type: HP 5890A #3 Column Type: MEGABORE 30 M *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: INJ. 250 deg C; 350 deg C; OVEN-Temp PROGRAM *
* Detector 0: DB608 QUAN Detector 1: DB5 CONF *
* Misc. Information: PCB PCB *

Starting Delay: 3.00 Ending retention time: 30.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/GM	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT BL	REF PEAK	% DELTA RET TIME	CONC/AREA
9	7.05	A42	0.5156	21.7116%	524802	75025	7.0 2	9	0	9.8247E-07
11	7.42	B42	0.5134	21.6207%	316310	56672	5.6 2	11	0	1.6232E-06
13	7.97	C42	0.5154	21.7042%	909708	141375	6.4 2	13	0	5.6659E-07
18	9.10	D42	0.5189	21.8498%	469065	50646	9.3 2	18	0	1.1062E-06
23	9.93	E42	0.3114	13.1137%	442550	60177	7.4 2	23	0	7.0370E-07

TOTAL AMOUNT = 2.3748

Data File = Q:2MA26.PTS Printed on 11-18-1992 at 09:16:16
Start time: 3.00 min. Stop time: 29.95 min. Offset: 0 mv.
Low Value: 23377 uv High Value: 167543 uv Scale factor: 1.0

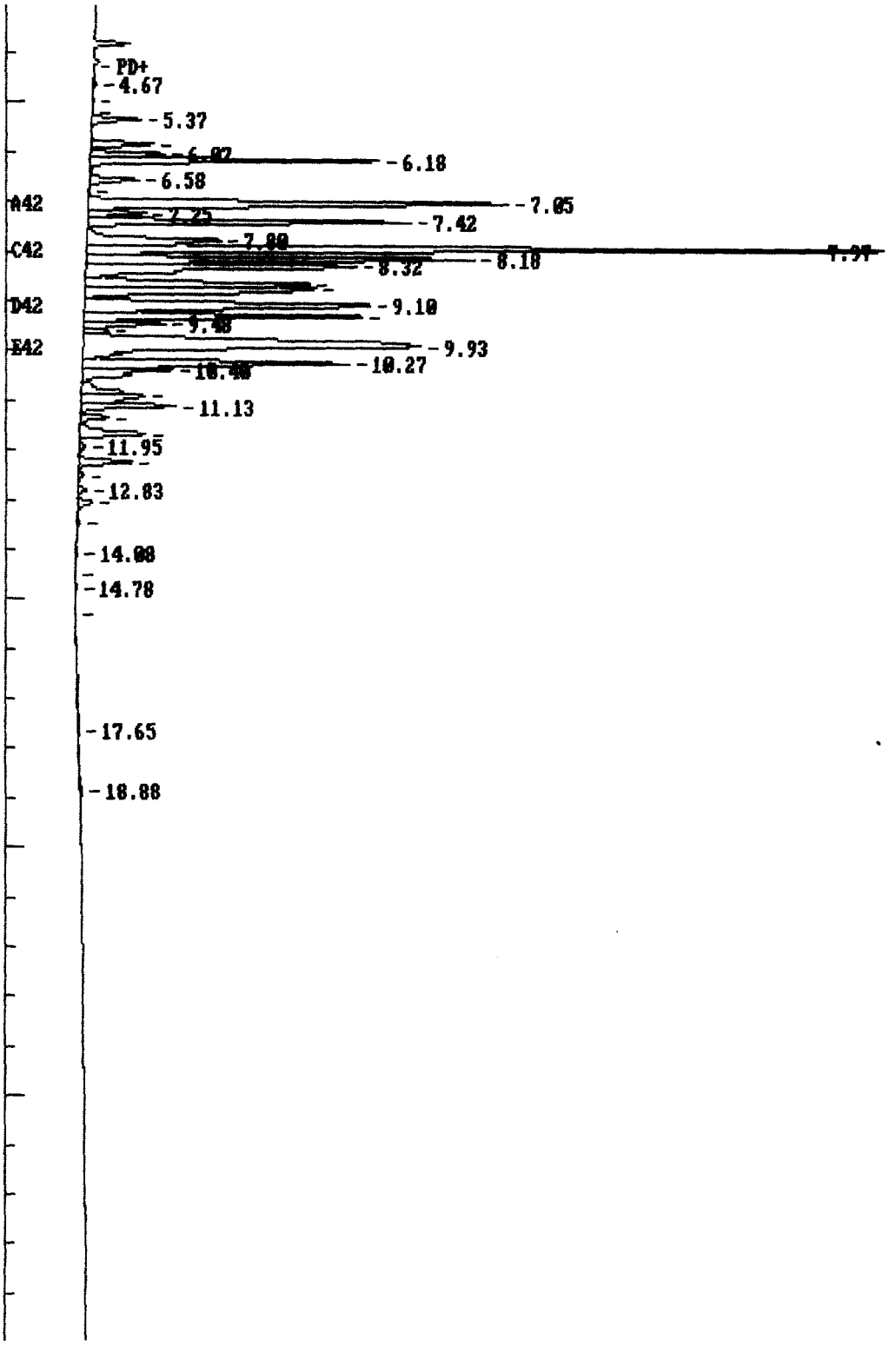


```
*****   EXTERNAL STANDARD TABLE   *****
******************** 11-18-1992 09:17:13 Version 4.1 *********************
* Sample Name: STD 1242 LEVEL 4                  Data File: Q:2MA27       *
* Date: 11-17-1992 20:26:35 Method: Q:CMET42  11-18-1992 08:23:50  #  111 *
* Interface: 0   Cycle#:  27   Operator AK  Channel#: 1    Vial#: N.A.    *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100            *
***************************************************************************
* Instrument Type: HP 5890A #3          Column Type: MEGABORE 30 M        *
*              Solvent Description: ULTRA HIGH PURITY NITROGEN            *
* Conditions: INJ. 250 deg C; 350 deg C; OVEN-Temp PROGRAM                *
*             Detector 0: DB608 QUAN          Detector 1: DB5 CONF        *
* Misc. Information: PCB                                PCB               *
***************************************************************************
Starting Delay:    3.00                      Ending retention time:    30.00
Area reject:         0                       One sample per   1.000 sec.
Amount injected:        1.00                 Dilution factor:        1.00
Sample Weight:          1.000000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/GM	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT BL	REF PEAK	% DELTA RET TIME	CONC/AREA
10	7.05	A42	0.7756	19.7722%	746651	105966	7.0 2	10	0	1.0388E-06
12	7.42	B42	0.7762	19.7883%	458018	81560	5.6 2	12	0	1.6948E-06
14	7.97	C42	0.7734	19.7174%	1295743	201661	6.4 2	14	0	5.9692E-07
19	9.10	D42	0.7744	19.7405%	668245	72149	9.3 2	19	0	1.1588E-06
23	9.93	E42	0.8230	20.9816%	1113737	85342	13.1 2	23	0	7.3899E-07

TOTAL AMOUNT = 3.9227

Data File = Q:2MA27.PTS Printed on 11-18-1992 at 09:17:31
Start time: 3.00 min. Stop time: 29.95 min. Offset: 0 mv.
Low Value: 23561 uv High Value: 227988 uv Scale factor: 1.0

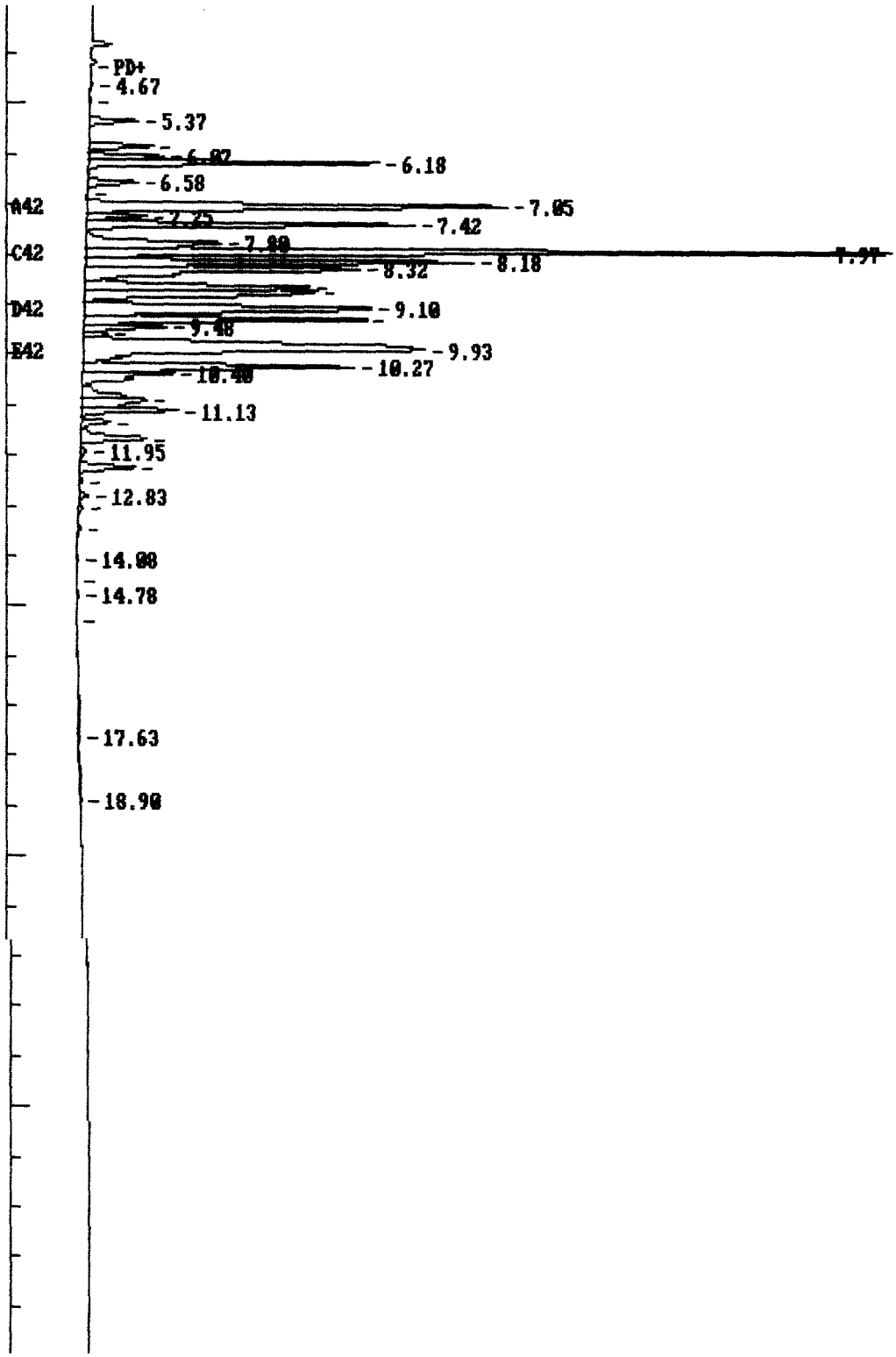


```
*****   EXTERNAL STANDARD TABLE   *****
******************** 11-18-1992 09:18:27 Version 4.1 *********************
* Sample Name: STD 1242 LEVEL 5                    Data File: Q:2MA28       *
* Date: 11-17-1992 21:03:34 Method: Q:CMET42  11-18-1992 08:23:50  #  111 *
* Interface: 0   Cycle#:  28   Operator AK  Channel#: 1    Vial#: N.A.     *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100             *
*************************************************************************
* Instrument Type: HP 5890A #3          Column Type: MEGABORE 30 M        *
*              Solvent Description: ULTRA HIGH PURITY NITROGEN             *
* Conditions: INJ. 250 deg C; 350 deg C; OVEN-Temp PROGRAM                 *
*             Detector 0: DB608 QUAN          Detector 1: DB5 CONF         *
* Misc. Information: PCB                                  PCB              *
*************************************************************************
Starting Delay:    3.00                      Ending retention time:   30.00
Area reject:        0                        One sample per   1.000 sec.
Amount injected:        1.00                 Dilution factor:        1.00
Sample Weight:          1.000000
```

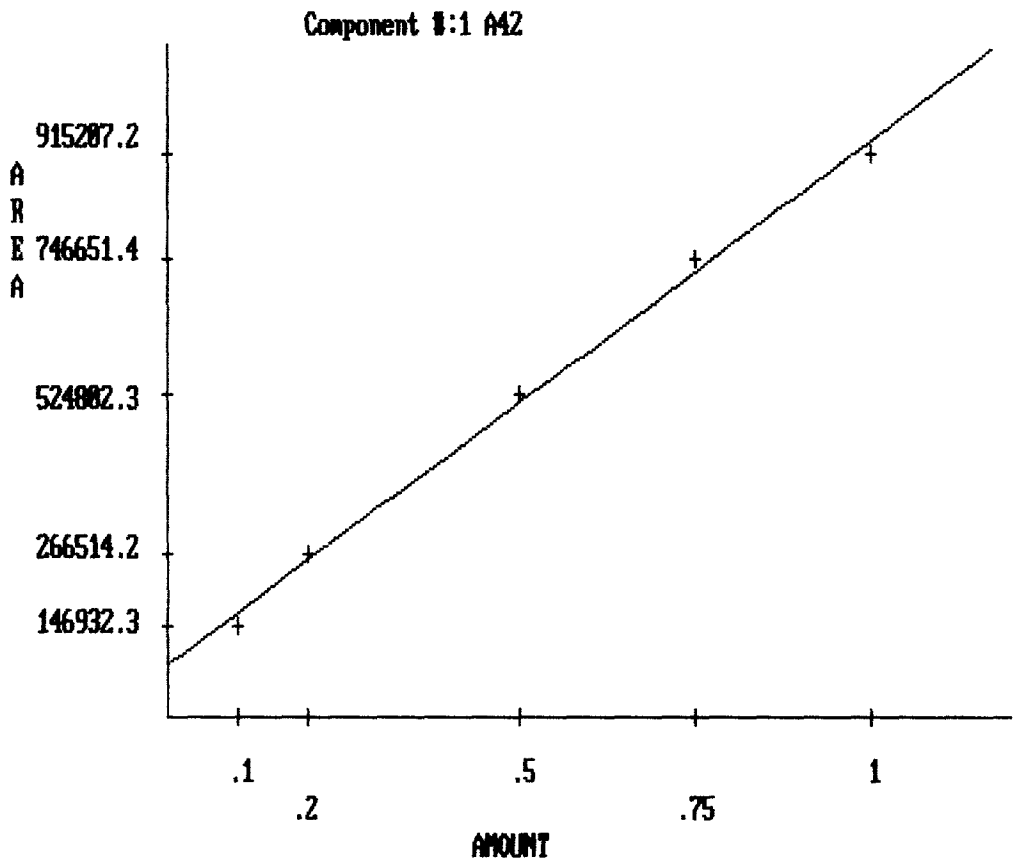
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/GM	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
9	7.05	A42	0.9731	19.7825%	915207	129786	7.1	2	9	0	1.0633E-06
11	7.42	B42	0.9742	19.8045%	564785	101410	5.6	2	11	0	1.7250E-06
13	7.97	C42	0.9751	19.8224%	1597449	249491	6.4	2	13	0	6.1042E-07
18	9.10	D42	0.9729	19.7769%	823014	88834	9.3	2	18	0	1.1821E-06
22	9.93	E42	1.0239	20.8137%	1377202	105625	13.0	2	22	0	7.4344E-07

TOTAL AMOUNT = 4.9192

Data File = Q:2MA28.PTS Printed on 11-18-1992 at 09:18:45
Start time: 3.00 min. Stop time: 29.95 min. Offset: 0 mv.
Low Value: 23694 uv High Value: 275939 uv Scale factor: 1.0



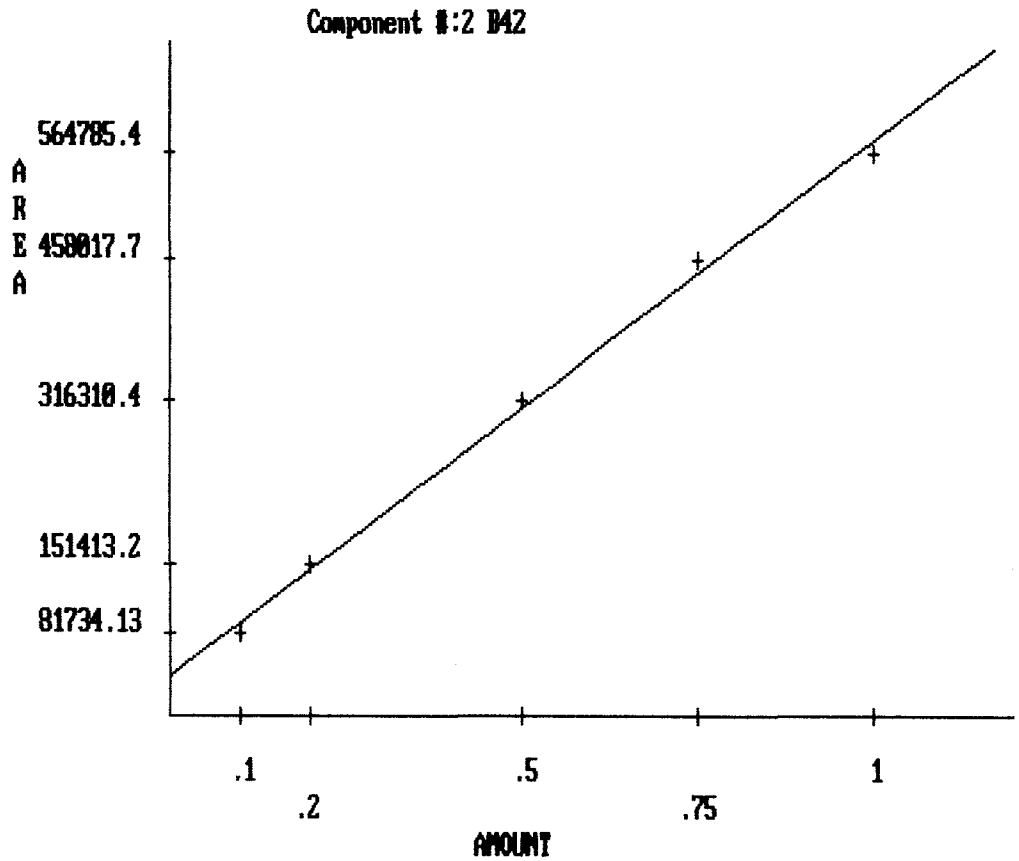
Method CMET42
Sample PCB
Operator AK
Run date 11-18-1992 08:23:50 version: 111
Printed on 11-18-1992 AT 09:47:35
Straight Line fit



Component 1 = A42
EXTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA
1	0.1000	146932
2	0.2000	266514
3	0.5000	524802
4	0.7500	746651
5	1.0000	915207

Y = SLOPE * X + INTERCEPT
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD
Area = 8.5327E+05 * Amount + 8.4853E+04
Amount = 1.1720E-06 * Area + -9.9445E-02
Correlation Coefficient = 0.9955



Component 2 = B42
EXTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA
1	0.1000	81734
2	0.2000	151413
3	0.5000	316310
4	0.7500	458018
5	1.0000	564785

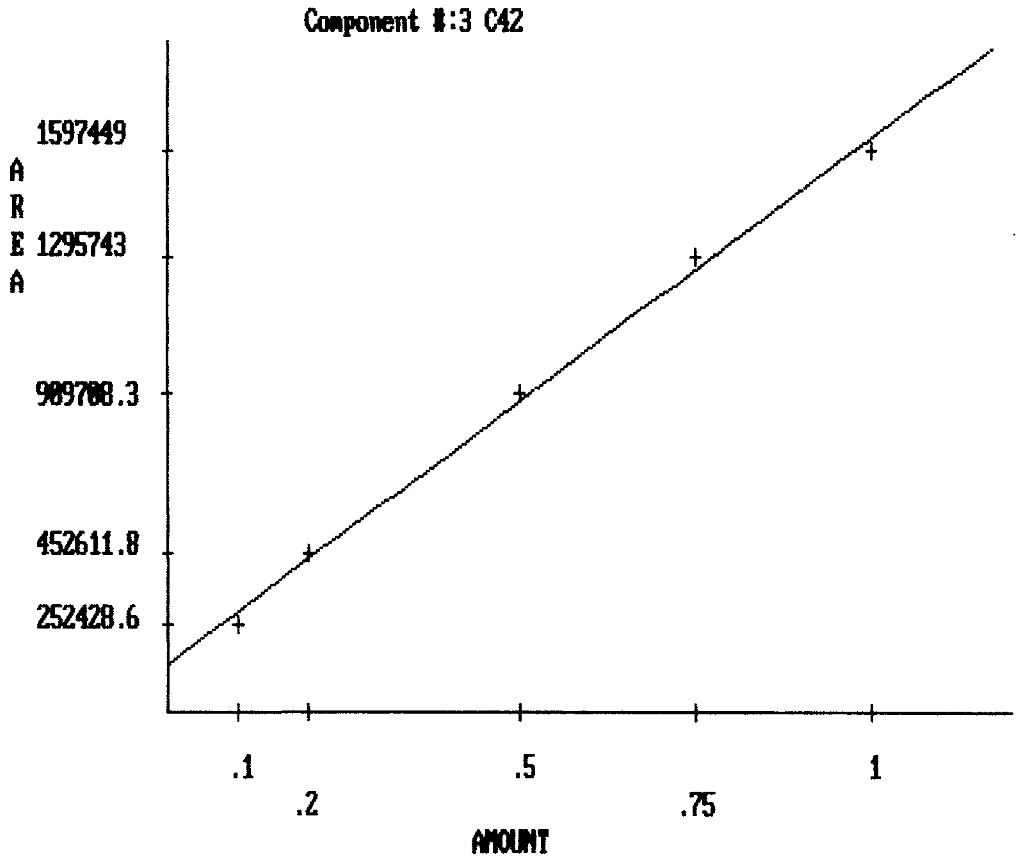
Y = SLOPE * X + INTERCEPT

DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD

Area = 5.3925E+05 * Amount + 3.9436E+04

Amount = 1.8544E-06 * Area + -7.3132E-02

Correlation Coefficient = 0.9964



Component 3 = C42
EXTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA
1	0.1000	252429
2	0.2000	452612
3	0.5000	909708
4	0.7500	1295743
5	1.0000	1597449

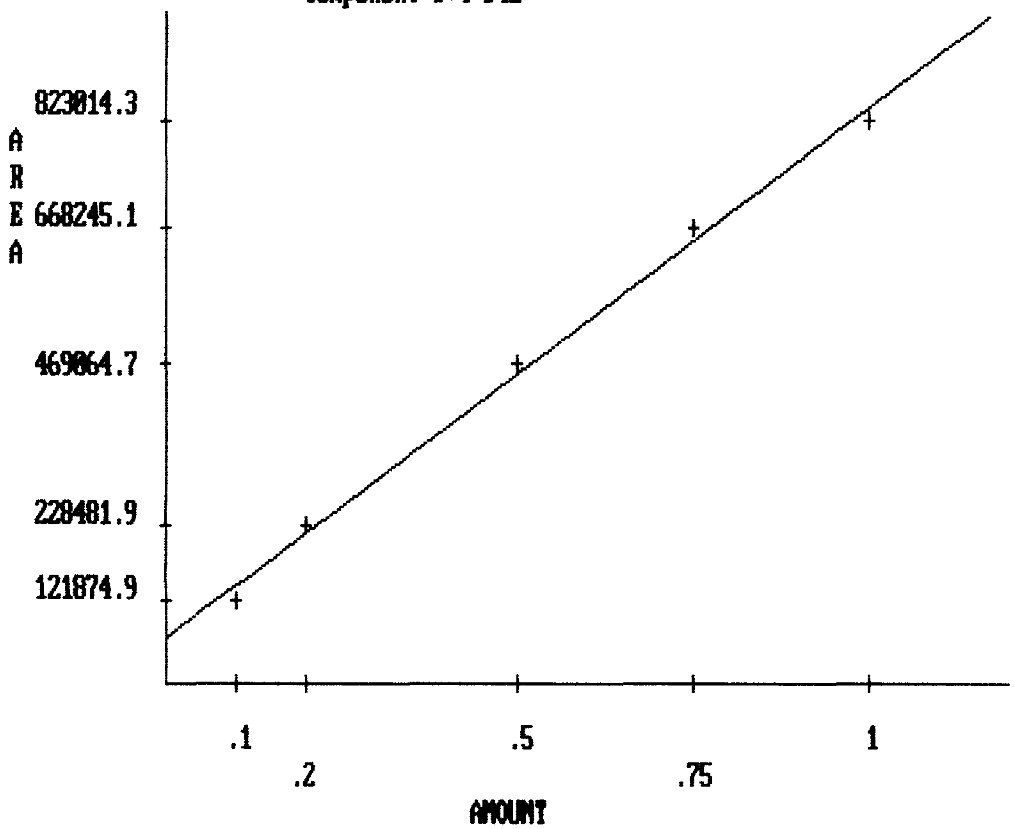
Y = SLOPE * X + INTERCEPT
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD

Area = 1.4961E+06 * Amount + 1.3856E+05
Amount = 6.6839E-07 * Area + -9.2613E-02
Correlation Coefficient = 0.9963

Component #:4 D42

traight Line fit

Component #:4 D42



Component 4 = D42

EXTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA
1	0.1000	121875
2	0.2000	228482
3	0.5000	469065
4	0.7500	668245
5	1.0000	823014

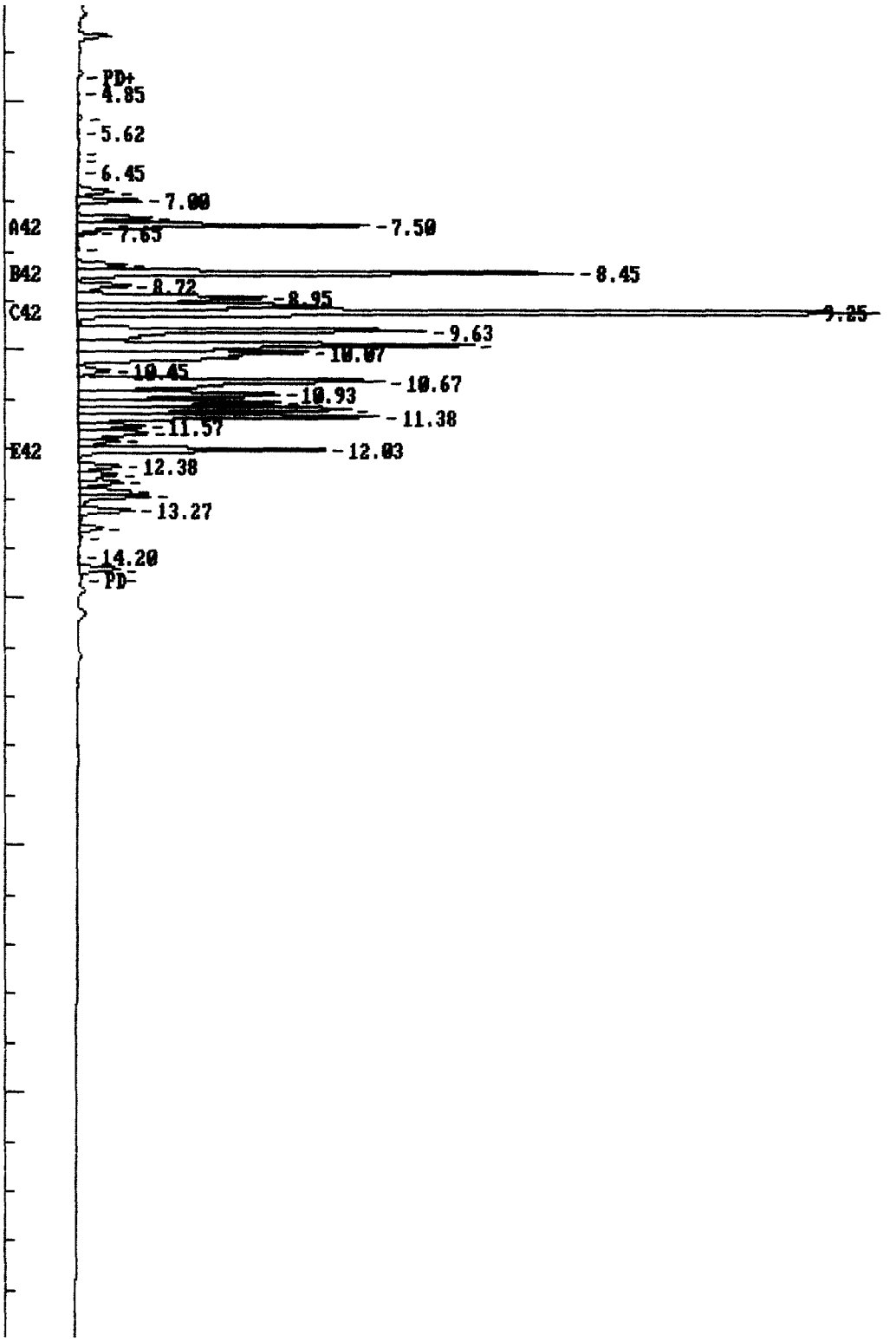
Y = SLOPE * X + INTERCEPT
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD
Area = 7.7966E+05 * Amount + 6.4511E+04
Amount = 1.2826E-06 * Area + -8.2743E-02
Correlation Coefficient = 0.9956

```
*****   EXTERNAL STANDARD TABLE   *****
******************** 11-18-1992 09:07:15 Version 4.1 **********************
* Sample Name: STD 1242 LEVEL 3                    Data File: Q:1MA32       *
* Date: 11-17-1992 23:31:17 Method: Q:MET42  11-18-1992 08:40:26  #  94    *
* Interface: 0   Cycle#:  32   Operator AK  Channel#: 0    Vial#: N.A.     *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100             *
*************************************************************************
* Instrument Type: HP 5890A #3          Column Type: MEGABORE 30 M        *
*              Solvent Description: ULTRA HIGH PURITY NITROGEN             *
* Conditions: INJ. 250 deg C; 350 deg C; OVEN-Temp PROGRAM                 *
*             Detector 0: DB608 QUAN          Detector 1: DB5 CONF         *
* Misc. Information: PCB                                PCB               *
*************************************************************************
Starting Delay:    3.00                      Ending retention time:    30.00
Area reject:        0                        One sample per   1.000 sec.
Amount injected:        1.00                 Dilution factor:        1.00
Sample Weight:          1.000000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/GM	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
10	7.50	A42	0.5059	20.0210%	407020	76297	5.3	3	10	0	1.2430E-06
14	8.45	B42	0.5111	20.2276%	744846	129632	5.7	2	14	0	6.8624E-07
18	9.25	C42	0.5073	20.0740%	1357184	209661	6.5	2	18	0	3.7376E-07
19	9.63	D42	0.5014	19.8401%	624252	91137	6.8	2	19	0	8.0312E-07
31	12.03	E42	0.5013	19.8373%	390336	64362	6.1	2	31	0	1.2842E-06

TOTAL AMOUNT = 2.5270

Data File = Q:1MA32.PTS Printed on 11-18-1992 at 09:07:32
Start time: 3.00 min. Stop time: 29.95 min. Offset: 0 mv.
Low Value: 38010 uv High Value: 248390 uv Scale factor: 1.0

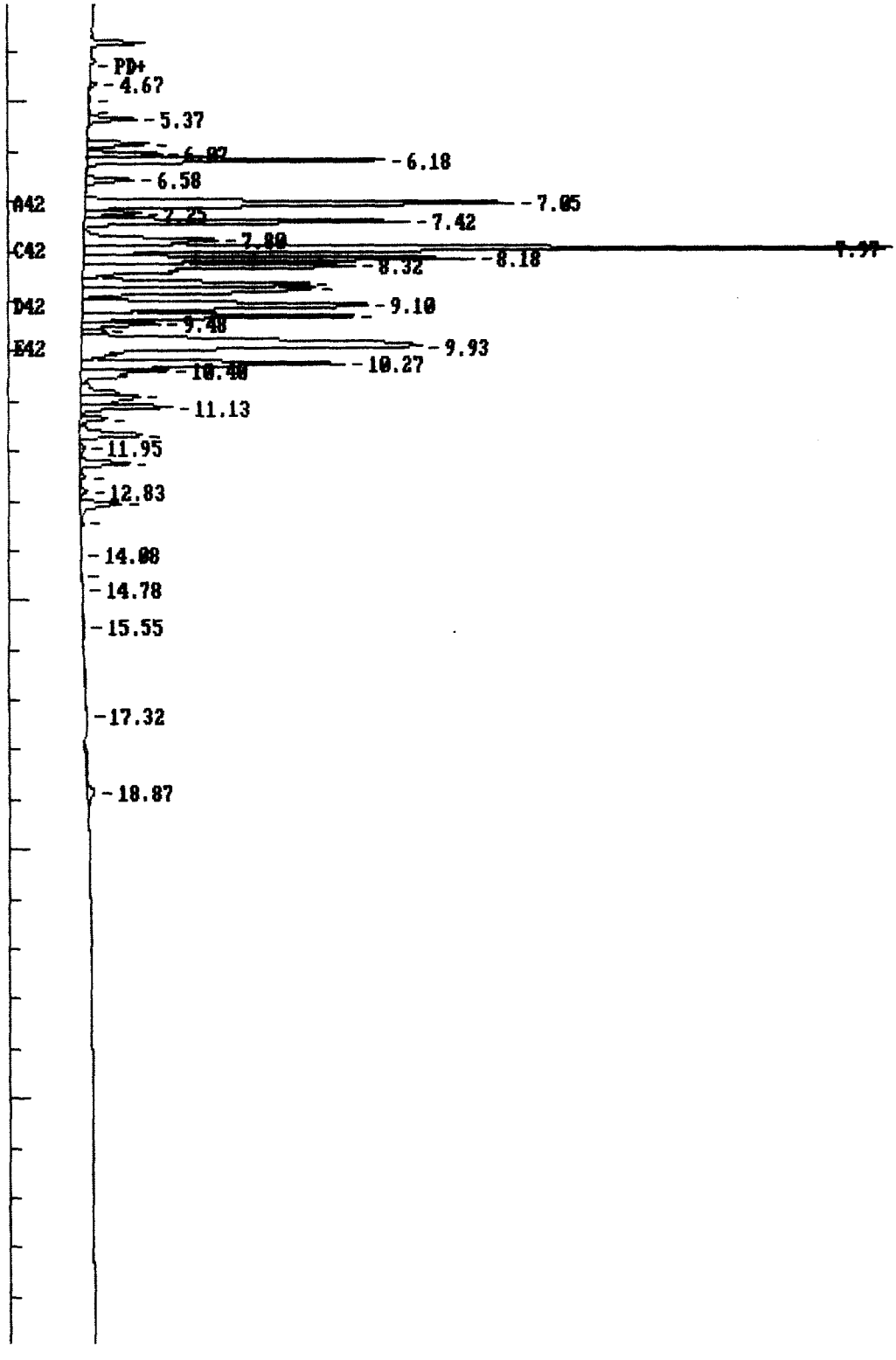


```
*****   EXTERNAL STANDARD TABLE   *****
******************** 11-18-1992 09:24:43 Version 4.1 *********************
* Sample Name: STD 1242 LEVEL 3                  Data File: Q:2MA33       *
* Date: 11-18-1992 00:08:11 Method: Q:CMET42  11-18-1992 08:23:50  #  111 *
* Interface: 0   Cycle#:  33   Operator AK  Channel#: 1    Vial#: N.A.    *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100            *
*************************************************************************
* Instrument Type: HP 5890A #3          Column Type: MEGABORE 30 M        *
*             Solvent Description: ULTRA HIGH PURITY NITROGEN             *
* Conditions: INJ. 250 deg C; 350 deg C; OVEN-Temp PROGRAM                *
*            Detector 0: DB608 QUAN          Detector 1: DB5 CONF         *
* Misc. Information: PCB                                PCB               *
*************************************************************************
Starting Delay:   3.00                      Ending retention time:   30.00
Area reject:        0                       One sample per   1.000 sec.
Amount injected:        1.00                Dilution factor:        1.00
Sample Weight:          1.000000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/GM	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
9	7.05	A42	0.5218	19.7549%	530076	76075	7.0	2	9	0	9.8436E-07
11	7.42	B42	0.5158	19.5298%	317600	57639	5.5	2	11	0	1.6242E-06
13	7.97	C42	0.5207	19.7125%	917542	143548	6.4	2	13	0	5.6745E-07
18	9.10	D42	0.5148	19.4904%	465877	50644	9.2	2	18	0	1.1050E-06
22	9.93	E42	0.5682	21.5125%	779423	60499	12.9	2	22	0	7.2901E-07

TOTAL AMOUNT = 2.6413

Data File = Q:2MA33.PTS Printed on 11-18-1992 at 09:24:59
Start time: 3.00 min. Stop time: 29.95 min. Offset: 0 mv.
Low Value: 26758 uv High Value: 171312 uv Scale factor: 1.0

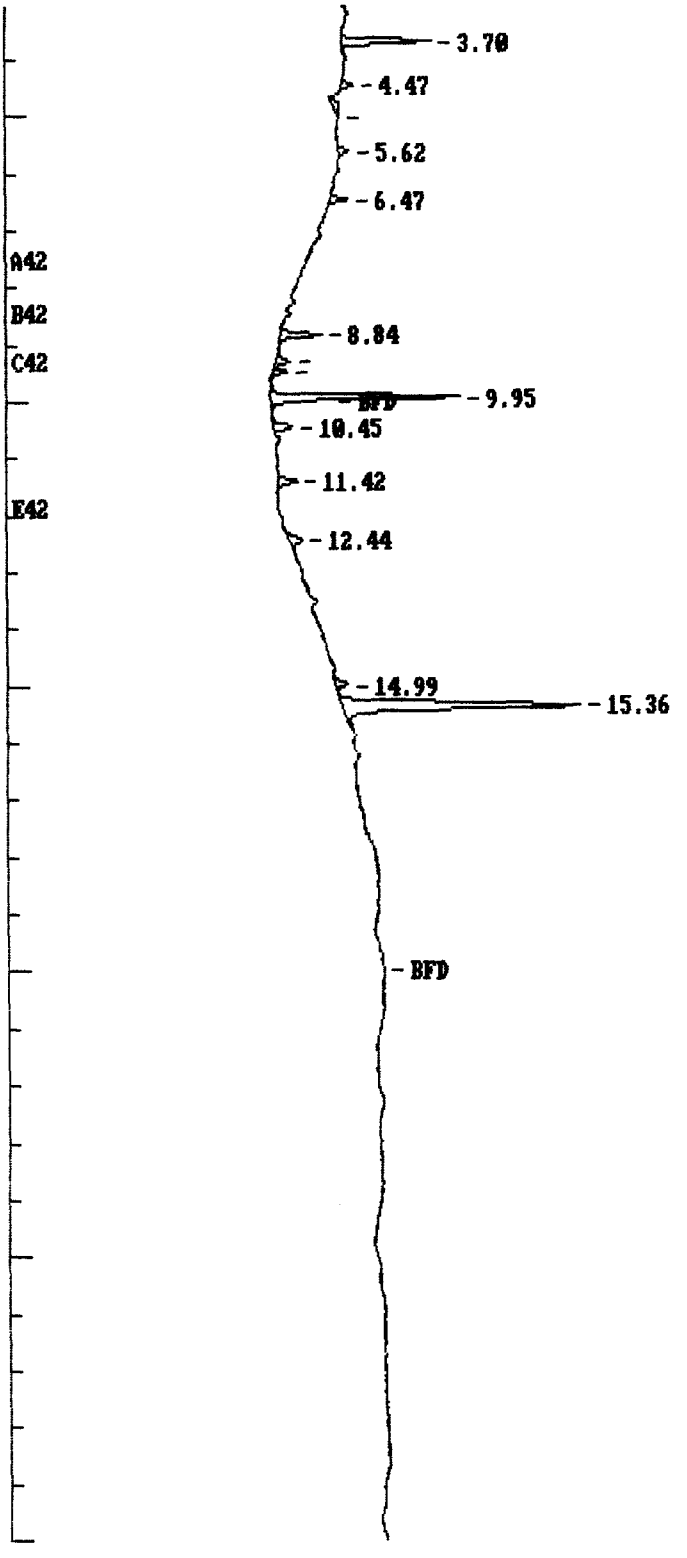


```
******   EXTERNAL STANDARD TABLE   ******
******************** 11-18-1992 13:52:13 Version 4.1 **********************
* Sample Name: METHOD BLANK                        Data File: Q:1MA33       *
* Date: 11-18-1992 00:08:13 Method: MET42 11-18-1992 08:40:26  #  94       *
* Interface: 0   Cycle#:  33   Operator AK  Channel#: 0    Vial#: N.A.     *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100             *
***************************************************************************
* Instrument Type: HP 5890A #3          Column Type: MEGABORE 30 M         *
*             Solvent Description: ULTRA HIGH PURITY NITROGEN              *
* Conditions: INJ. 250 deg C; 350 deg C; OVEN-Temp PROGRAM                 *
*            Detector 0: DB608 QUAN          Detector 1: DB5 CONF          *
* Misc. Information: PCB                                  PCB              *
***************************************************************************
Starting Delay:    3.00                      Ending retention time:    30.00
Area reject:         0                       One sample per    1.002 sec.
Amount injected:        1.00                 Dilution factor:       10.00
Sample Weight:          1.000000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/GM	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT BL	REF PEAK	% DELTA RET TIME	CONC/AREA
7	9.31	C42	-0.8563	55.5138%	1009	164	6.1 2	7	0	-8.4850E-04
8	9.50	D42	-0.6862	44.4862%	1006	171	5.9 2	8	0	-6.8241E-04

TOTAL AMOUNT = -1.5425

Data File = Q:1MA33.PTS Printed on 11-18-1992 at 13:53:21
Start time: 3.00 min. Stop time: 30.00 min. Offset: -30 mv.
Full Range: 10 millivolts

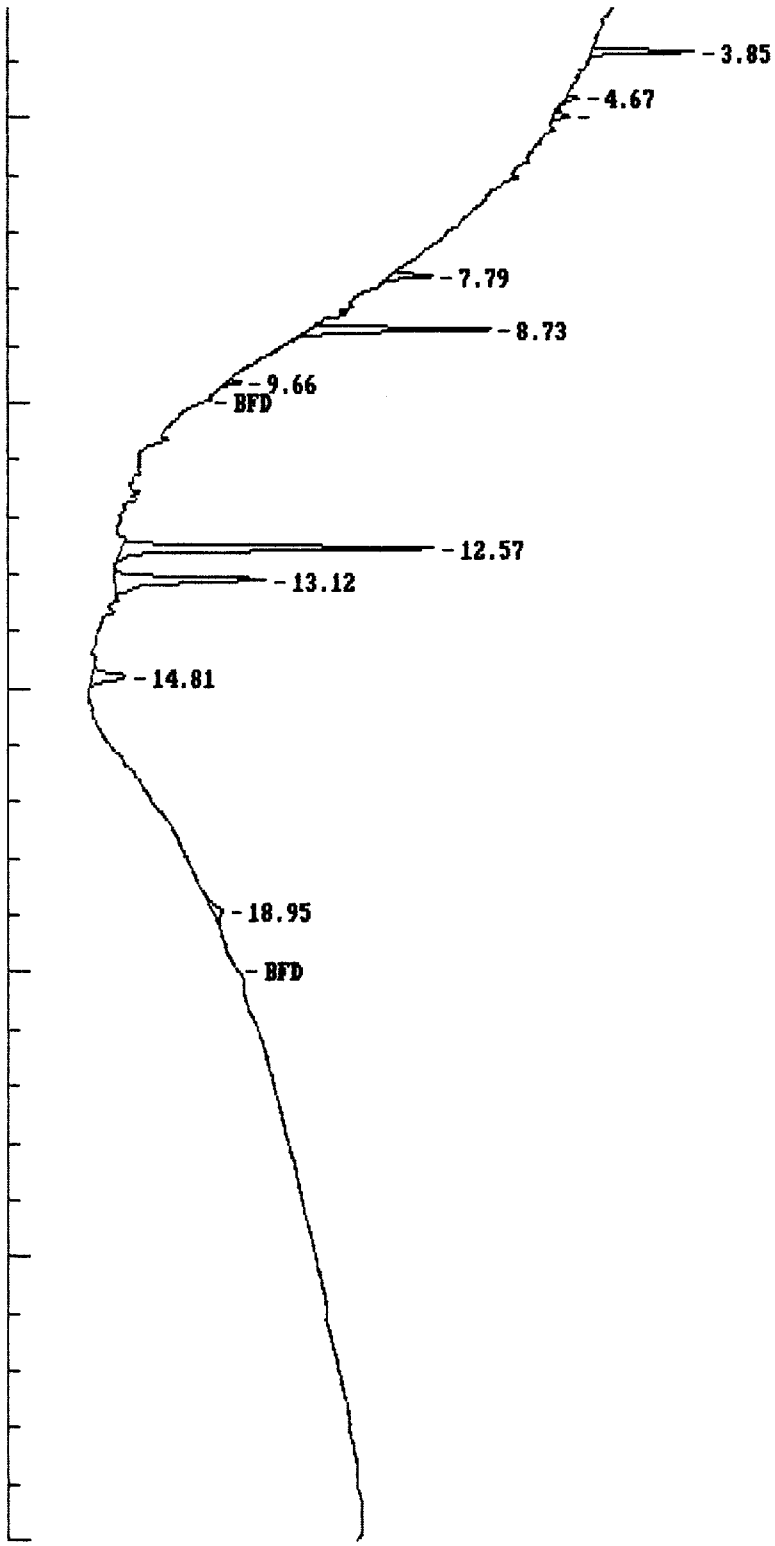


```
******   EXTERNAL STANDARD TABLE   ******
******************** 11-18-1992 13:56:58 Version 4.1 **********************
* Sample Name: METHOD BLANK                        Data File: Q:2MA34       *
* Date: 11-18-1992 00:45:09 Method: CMET42 11-18-1992 08:23:50  #  111     *
* Interface: 0   Cycle#:  34   Operator AK  Channel#: 1    Vial#: N.A.     *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100             *
*************************************************************************
* Instrument Type: HP 5890A #3          Column Type: MEGABORE 30 M         *
*             Solvent Description: ULTRA HIGH PURITY NITROGEN              *
* Conditions: INJ. 250 deg C; 350 deg C; OVEN-Temp PROGRAM                 *
*            Detector 0: DB608 QUAN          Detector 1: DB5 CONF          *
* Misc. Information: PCB                                PCB                *
*************************************************************************
Starting Delay:   3.00                      Ending retention time:   30.00
Area reject:        0                       One sample per   1.002 sec.
Amount injected:        1.00                Dilution factor:       10.00
Sample Weight:          1.000000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/GM	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
4	7.79	C42	-0.9098	100.0000%	2446	464	5.3	1	4	0	-3.7189E-04

TOTAL AMOUNT = -0.9098

Data File = Q:2MA34.PTS Printed on 11-18-1992 at 13:55:48
Start time: 3.00 min. Stop time: 30.00 min. Offset: 0 mv.
Full Range: 10 millivolts



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

********** 11-19-1992 09:32:04 Version 4.1 **********

* Sample Name: 930001S01 Data File: Q:1MA28 *
* Date: 11-17-1992 21:03:36 Method: Q:MET42 11-18-1992 08:40:26 # 94 *
* Interface: 0 Cycle#: 28 Operator AK Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HP 5890A Column Type: MEGABORE 30 M *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: INJ. 250 deg C; 350 deg C; OVEN-Temp PROGRAM *
* Detector 0: DB608 QUAN Detector 1: DB5 CONF *
* Misc. Information: PCB PCB *

****

Starting Delay: 3.00 Ending retention time: 30.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 1.00 Dilution factor: 100.00
Sample Weight: 4.850000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/GM	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
13	7.50	A42	16.1140	17.0810%	592062	108230	5.5	2	13	0	2.7217E-05
16	8.47	B42	17.6928	18.7546%	1169557	194111	6.0	2	16	0	1.5128E-05
20	9.27	C42	19.2244	20.3781%	2329602	374205	6.2	2	20	0	8.2522E-06
21	9.63	D42	18.4240	19.5296%	1053125	151429	7.0	2	21	0	1.7495E-05
33	12.05	E42 *	22.8835	24.2568%	825670	131555	6.3	2	33	0	2.7715E-05

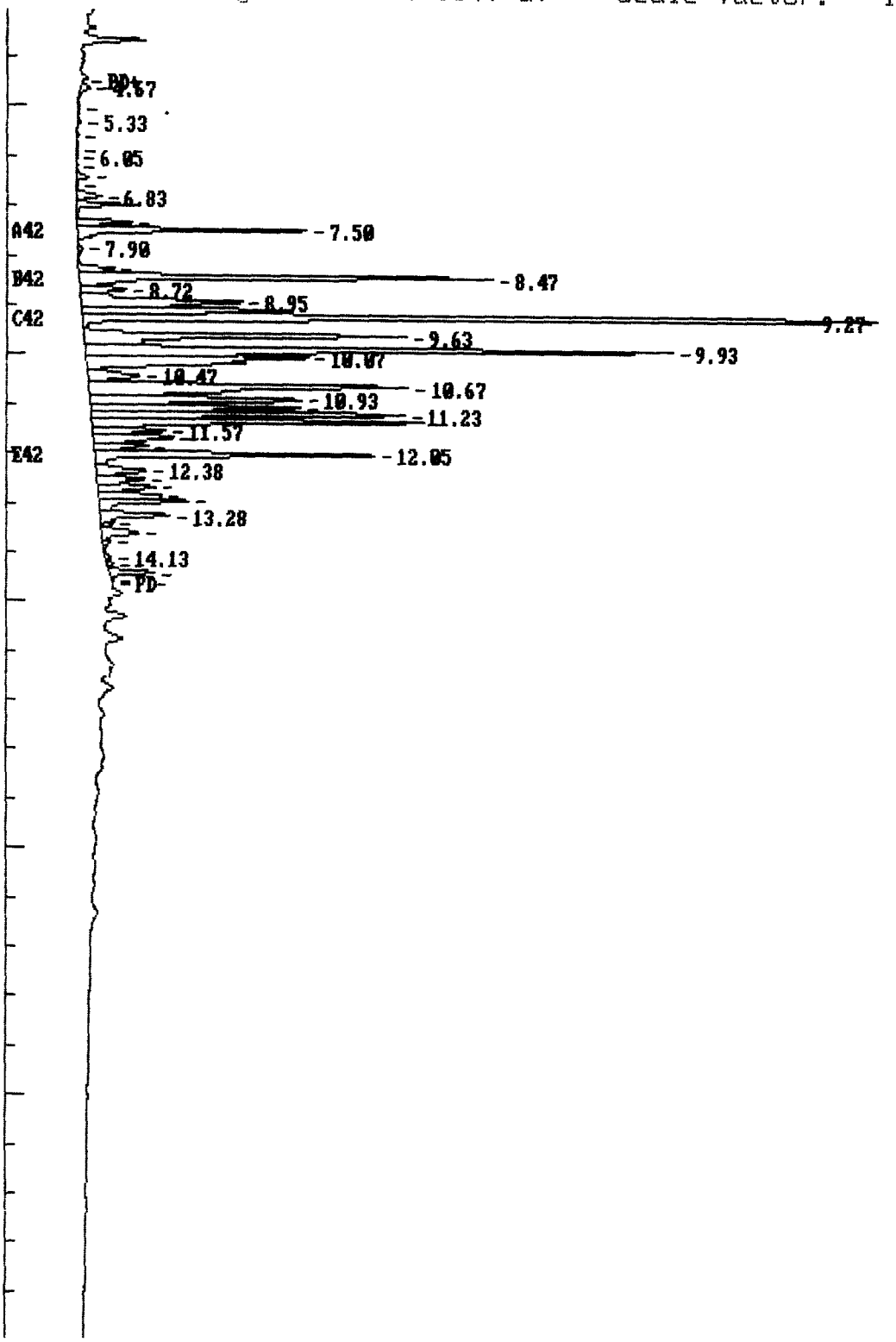
TOTAL AMOUNT = 94.3388

* [redacted]

18.86

[redacted]

Data File = Q:1MA28.PTS Printed on 11-19-1992 at 09:32:18
Start time: 3.00 min. Stop time: 29.95 min. Offset: 0 mv.
Low Value: 32827 uv High Value: 410349 uv Scale factor: 1.0



```
******   EXTERNAL STANDARD TABLE   ******
******************** 11-19-1992 09:37:00 Version 4.1 *********************
* Sample Name: 930001S01                          Data File: Q:2MA29       *
* Date: 11-17-1992 21:40:31 Method: Q:CMET42  11-18-1992 08:23:50  #  111 *
* Interface: 0   Cycle#:  29   Operator AK  Channel#: 1    Vial#: N.A.     *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100             *
*************************************************************************
* Instrument Type: HP 5890A #3          Column Type: MEGABORE 30 M        *
*              Solvent Description: ULTRA HIGH PURITY NITROGEN            *
* Conditions: INJ. 250 deg C; 350 deg C; OVEN-Temp PROGRAM                *
*            Detector 0: DB608 QUAN          Detector 1: DB5 CONF         *
* Misc. Information: PCB                                  PCB             *
*************************************************************************
Starting Delay:    3.00                      Ending retention time:    30.00
Area reject:        0                        One sample per   1.000 sec.
Amount injected:        1.00                 Dilution factor:      100.00
Sample Weight:          4.850000
```

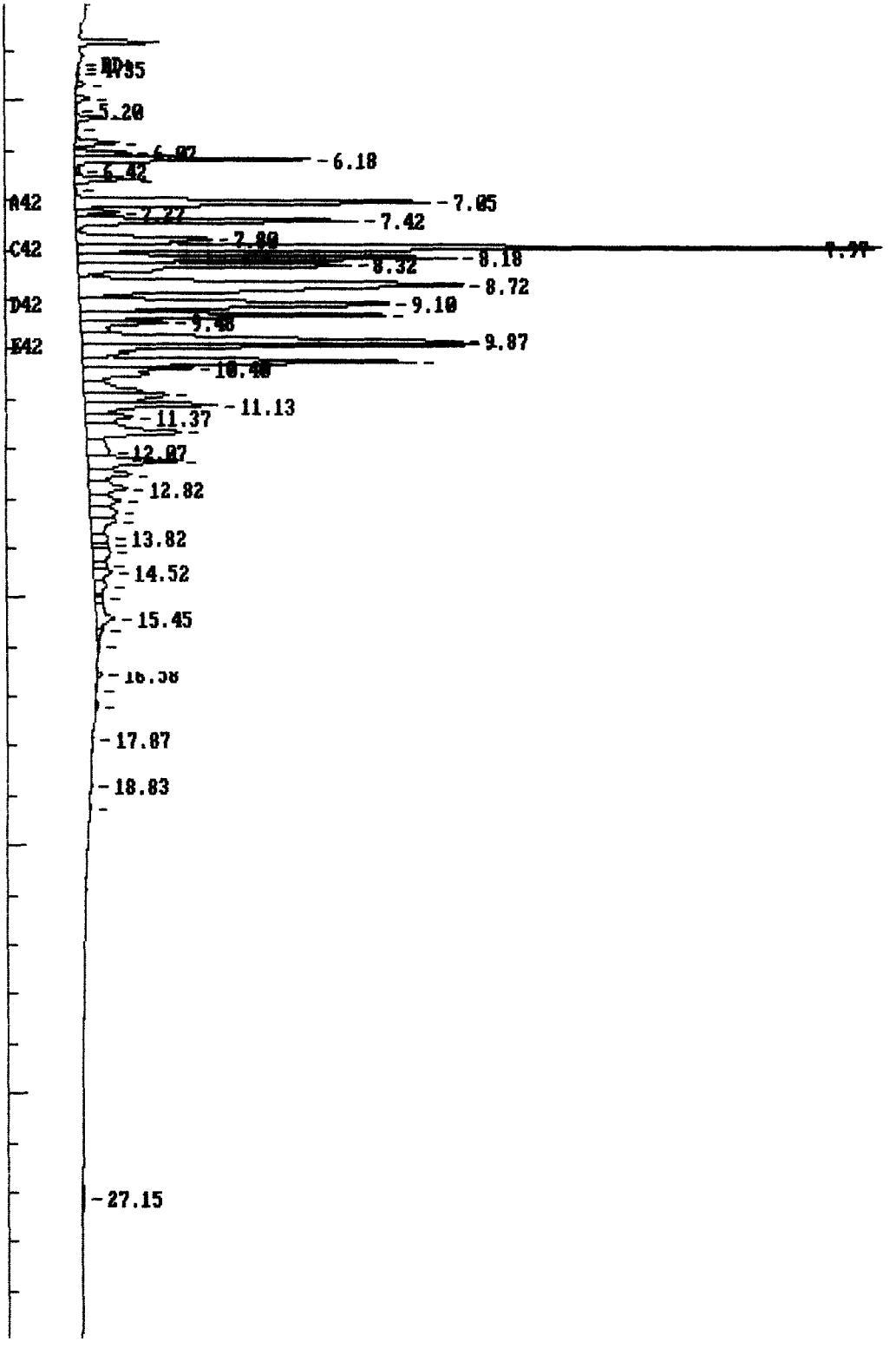
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/GM	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
14	7.05	A42	18.8119	17.9362%	863359	127951	6.7	2	14	0	2.1789E-05
16	7.42	B42	21.0036	20.0259%	588755	101732	5.8	2	16	0	3.5675E-05
18	7.97	C42	23.0634	21.9898%	1812098	289928	6.3	2	18	0	1.2727E-05
22	9.10	D42	26.1531	24.9357%	1053449	111325	9.5	2	22	0	2.4826E-05
26	9.93	E42 *	15.8502	15.1123%	1042492	143121	7.3	2	26	0	1.5204E-05

TOTAL AMOUNT = 104.8823

* RPD for continuing calibration is out

22.27

Data File = Q:2MA29.PTS Printed on 11-19-1992 at 09:37:17
Start time: 3.00 min. Stop time: 29.95 min. Offset: 0 mv.
Low Value: 27388 uv High Value: 318179 uv Scale factor: 1.0



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

********** 11-19-1992 09:33:15 Version 4.1 **********

* Sample Name: 930001S01 DUP 1 Data File: Q:1MA29 *
* Date: 11-17-1992 21:40:32 Method: Q:MET42 11-18-1992 08:40:26 # 94 *
* Interface: 0 Cycle#: 29 Operator AK Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HP 5890A #3 Column Type: MEGABORE 30 M *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: INJ. 250 deg C; 350 deg C; OVEN-Temp PROGRAM *
* Detector 0: DB608 QUAN Detector 1: DB5 CONF *
* Misc. Information: PCB PCB *

****

Starting Delay: 3.00 Ending retention time: 30.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 1.00 Dilution factor: 100.00
Sample Weight: 5.010000

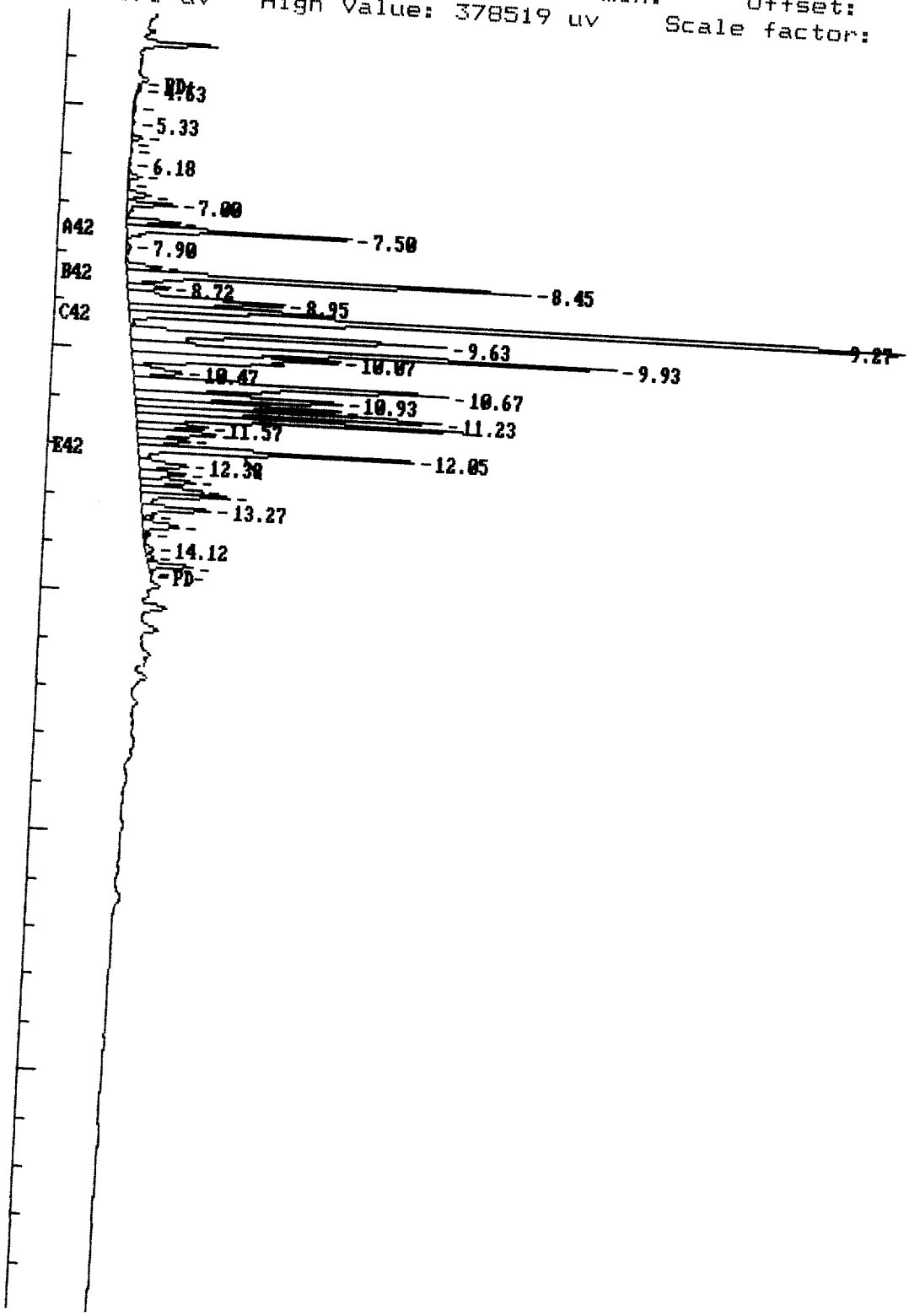
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/GM	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
13	7.50	A42	14.1370	16.9956%	542873	99508	5.5	2	13	0	2.6041E-05
16	8.45	B42	15.5972	18.7510%	1075690	178115	6.0	2	16	0	1.4500E-05
20	9.27	C42	16.9295	20.3527%	2136962	342766	6.2	2	20	0	7.9222E-06
21	9.63	D42	16.2202	19.5000%	964630	139362	6.9	2	21	0	1.6815E-05
33	12.05	E42 *	20.2966	24.4007%	759150	121694	6.2	2	33	0	2.6736E-05

TOTAL AMOUNT = 83.1805

16.66

[redacted]

Data File = Q:1MA29.PTS Printed on 11-19-1992 at 09:33:32
Start time: 3.00 min. Stop time: 29.95 min. Offset: 0 mv.
Low Value: 32173 uv High Value: 378519 uv Scale factor: 1.0



```
*****   EXTERNAL STANDARD TABLE   *****
******************** 11-19-1992 09:38:14 Version 4.1 *********************
* Sample Name: 930001S01 DUP 1                    Data File: Q:2MA30       *
* Date: 11-17-1992 22:17:26 Method: Q:CMET42  11-18-1992 08:23:50  #  111 *
* Interface: 0   Cycle#:  30   Operator AK  Channel#: 1    Vial#: N.A.     *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100             *
*************************************************************************
* Instrument Type: HP 5890A #3          Column Type: MEGABORE 30 M        *
*              Solvent Description: ULTRA HIGH PURITY NITROGEN            *
* Conditions: INJ. 250 deg C; 350 deg C; OVEN-Temp PROGRAM                *
*             Detector 0: DB608 QUAN          Detector 1: DB5 CONF        *
* Misc. Information: PCB                                  PCB             *
*************************************************************************
Starting Delay:   3.00                      Ending retention time:   30.00
Area reject:        0                       One sample per   1.000 sec.
Amount injected:       1.00                 Dilution factor:     100.00
Sample Weight:         5.010000
```

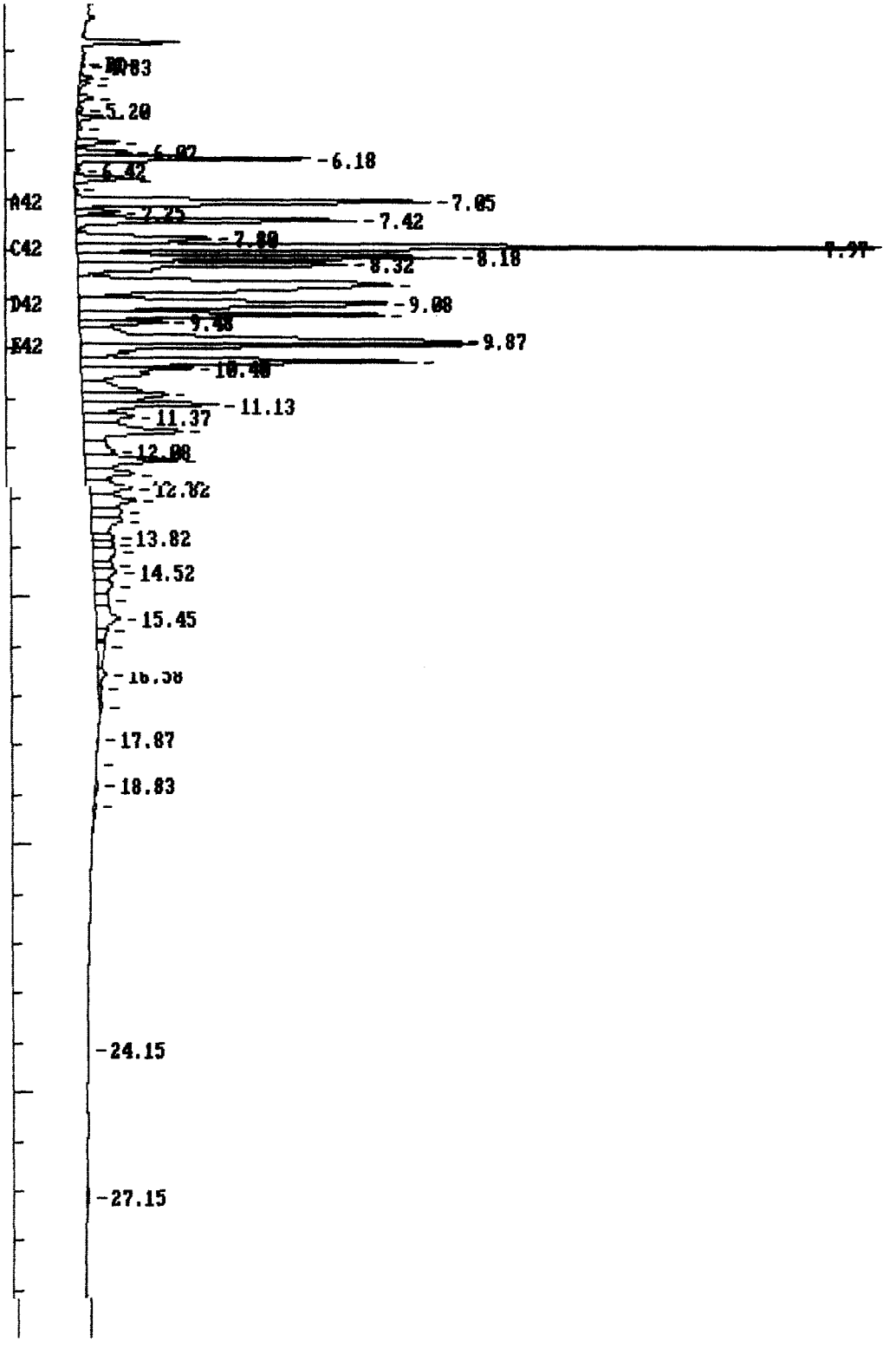
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/GM	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
14	7.05	A42	16.9849	17.8181%	810940	120264	6.7	2	14	0	2.0945E-05
16	7.42	B42	19.1037	20.0408%	555548	95293	5.8	2	16	0	3.4387E-05
18	7.97	C42	20.8885	21.9132%	1704286	273061	6.2	2	18	0	1.2256E-05
22	9.08	D42	23.8311	25.0001%	995373	104491	9.5	2	22	0	2.3942E-05
26	9.93	E42 *	14.5157	15.2278%	988055	134566	7.3	2	26	0	1.4691E-05

TOTAL AMOUNT = 95.3240

20.2

* continuing calibration RPD is out

Data File = Q:2MA30.PTS Printed on 11-19-1992 at 09:38:32
Start time: 3.00 min. Stop time: 29.95 min. Offset: 0 mv.
Low Value: 28539 uv High Value: 302208 uv Scale factor: 1.0



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

********** 11-19-1992 09:34:30 Version 4.1 **********

* Sample Name: 930001S01 DUP 2 Data File: Q:1MA30 *
* Date: 11-17-1992 22:17:28 Method: Q:MET42 11-18-1992 08:40:26 # 94 *
* Interface: 0 Cycle#: 30 Operator AK Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HP 5890A #3 Column Type: MEGABORE 30 M *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: INJ. 250 deg C; 350 deg C; OVEN-Temp PROGRAM *
* Detector 0: DB608 QUAN Detector 1: DB5 CONF *
* Misc. Information: PCB PCB *

****

Starting Delay: 3.00 Ending retention time: 30.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 1.00 Dilution factor: 100.00
Sample Weight: 4.910000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/GM	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
14	7.50	A42	13.5317	17.0015%	513425	93851	5.5	2	14	0	2.6356E-05
17	8.45	B42	14.8617	18.6727%	1012395	168136	6.0	2	17	0	1.4680E-05
21	9.27	C42	16.1816	20.3309%	2014239	322921	6.2	2	21	0	8.0336E-06
22	9.63	D42	15.5552	19.5439%	911189	131573	6.9	2	22	0	1.7071E-05
34	12.05	E42	19.4607	24.4509%	715270	115125	6.2	2	34	0	2.7207E-05

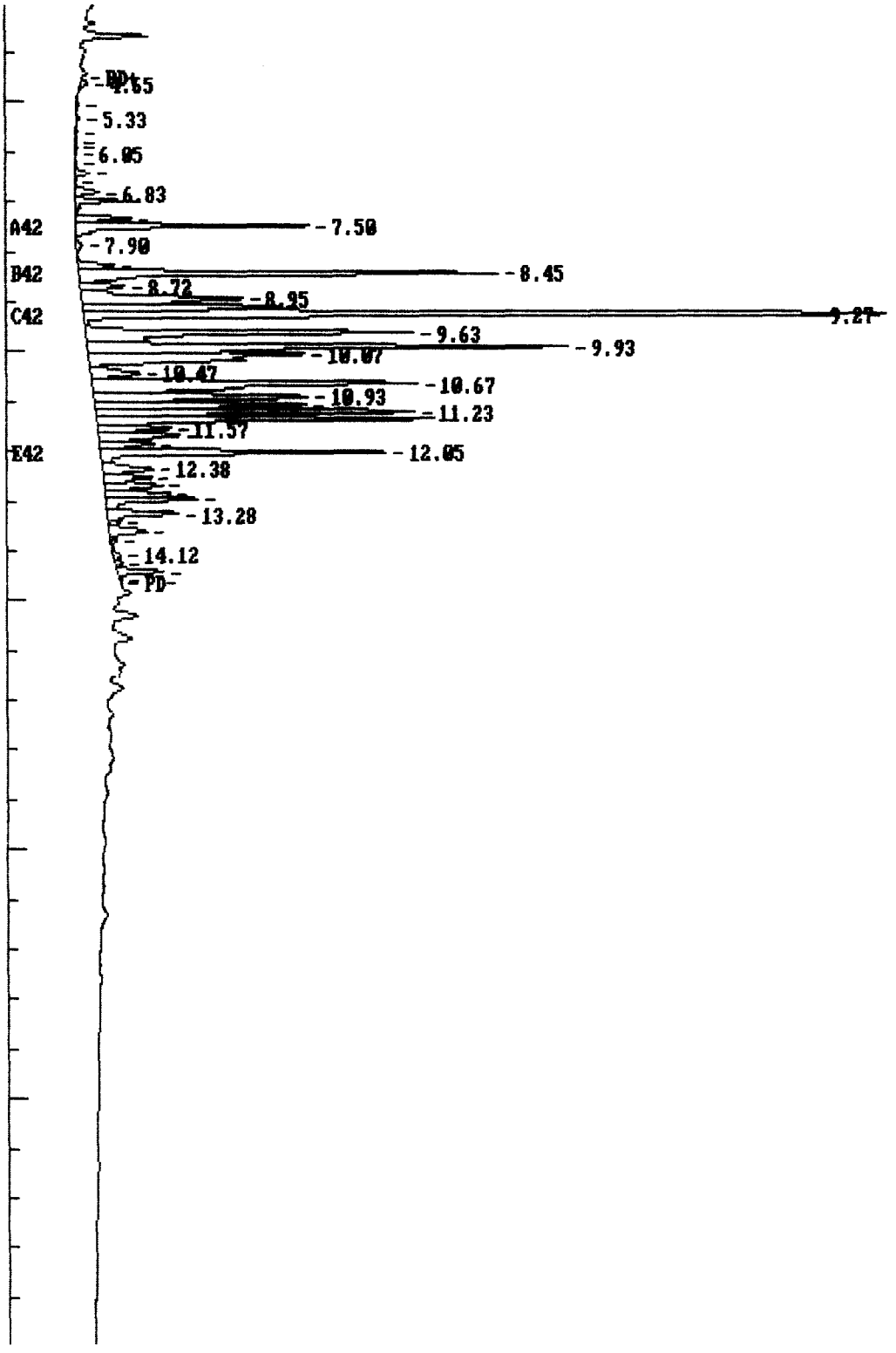
TOTAL AMOUNT = 79.5909

~~150~~ 15.9

AK

[redacted]

Data File = Q:1MA30.PTS Printed on 11-19-1992 at 09:34:47
Start time: 3.00 min. Stop time: 29.95 min. Offset: 0 mv.
Low Value: 31771 uv High Value: 358049 uv Scale factor: 1.0



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

********** 11-19-1992 09:39:29 Version 4.1 **********

* Sample Name: 930001S01 DUP 2 Data File: Q:2MA31 *

* Date: 11-17-1992 22:54:19 Method: Q:CMET42 11-18-1992 08:23:50 # 111 *

* Interface: 0 Cycle#: 31 Operator AK Channel#: 1 Vial#: N.A. *

* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HP 5890A #3 Column Type: MEGABORE 30 M *

* Solvent Description: ULTRA HIGH PURITY NITROGEN *

* Conditions: INJ. 250 deg C; 350 deg C; OVEN-Temp PROGRAM *

* Detector 0: DB608 QUAN Detector 1: DB5 CONF *

* Misc. Information: PCB PCB *

****

Starting Delay: 3.00 Ending retention time: 30.00

Area reject: 0 One sample per 1.000 sec.

Amount injected: 1.00 Dilution factor: 100.00

Sample Weight: 4.910000

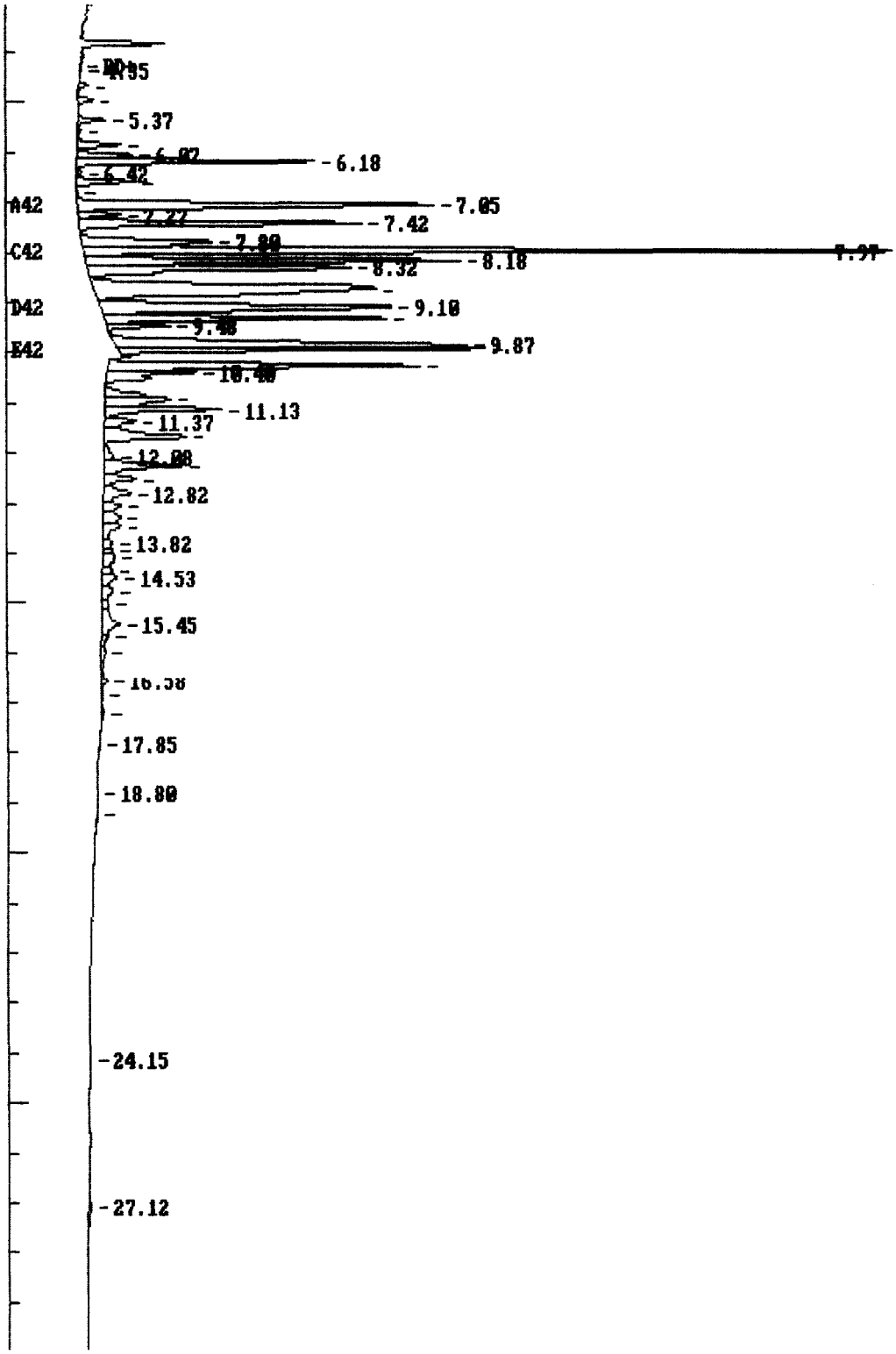
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/GM	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
12	7.05	A42	16.2561	19.2498%	765911	113361	6.8	2	12	0	2.1224E-05
14	7.42	B42	17.7093	20.9707%	508327	89713	5.7	2	14	0	3.4838E-05
16	7.97	C42	19.6939	23.3208%	1585274	256912	6.2	2	16	0	1.2423E-05
20	9.10	D42	19.8996	23.5643%	826289	92386	8.9	2	20	0	2.4083E-05
24	9.93	E42 *	10.8890	12.8943%	735399	116692	6.3	2	24	0	1.4807E-05

TOTAL AMOUNT = 84.4478

* continuing calibration RPD is out

18.39

Data File = Q:2MA31.PTS Printed on 11-19-1992 at 09:39:47
Start time: 3.00 min. Stop time: 29.95 min. Offset: 0 mv.
Low Value: 27358 uv High Value: 286908 uv Scale factor: 1.0



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

********** 11-19-1992 09:35:45 Version 4.1 **********

* Sample Name: 930001S01 DUP 3 Data File: Q:1MA31 *
* Date: 11-17-1992 22:54:21 Method: Q:MET42 11-18-1992 08:40:26 # 94 *
* Interface: 0 Cycle#: 31 Operator AK Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HP 5890A #3 Column Type: MEGABORE 30 M *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: INJ. 250 deg C; 350 deg C; OVEN-Temp PROGRAM *
* Detector 0: DB608 QUAN Detector 1: DB5 CONF *
* Misc. Information: PCB PCB *

****

Starting Delay: 3.00 Ending retention time: 30.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 1.00 Dilution factor: 100.00
Sample Weight: 4.980000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/GM	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
13	7.50	A42	13.1479	16.9652%	506953	92655	5.5	2	13	0	2.5935E-05
16	8.45	B42	14.4472	18.6417%	999858	165429	6.0	2	16	0	1.4449E-05
20	9.27	C42	15.9243	20.5477%	2010842	321860	6.2	2	20	0	7.9192E-06
21	9.63	D42	15.1677	19.5715%	901997	130063	6.9	2	21	0	1.6816E-05
33	12.05	E42 *	18.8120	24.2738%	701906	114636	6.1	2	33	0	2.6801E-05

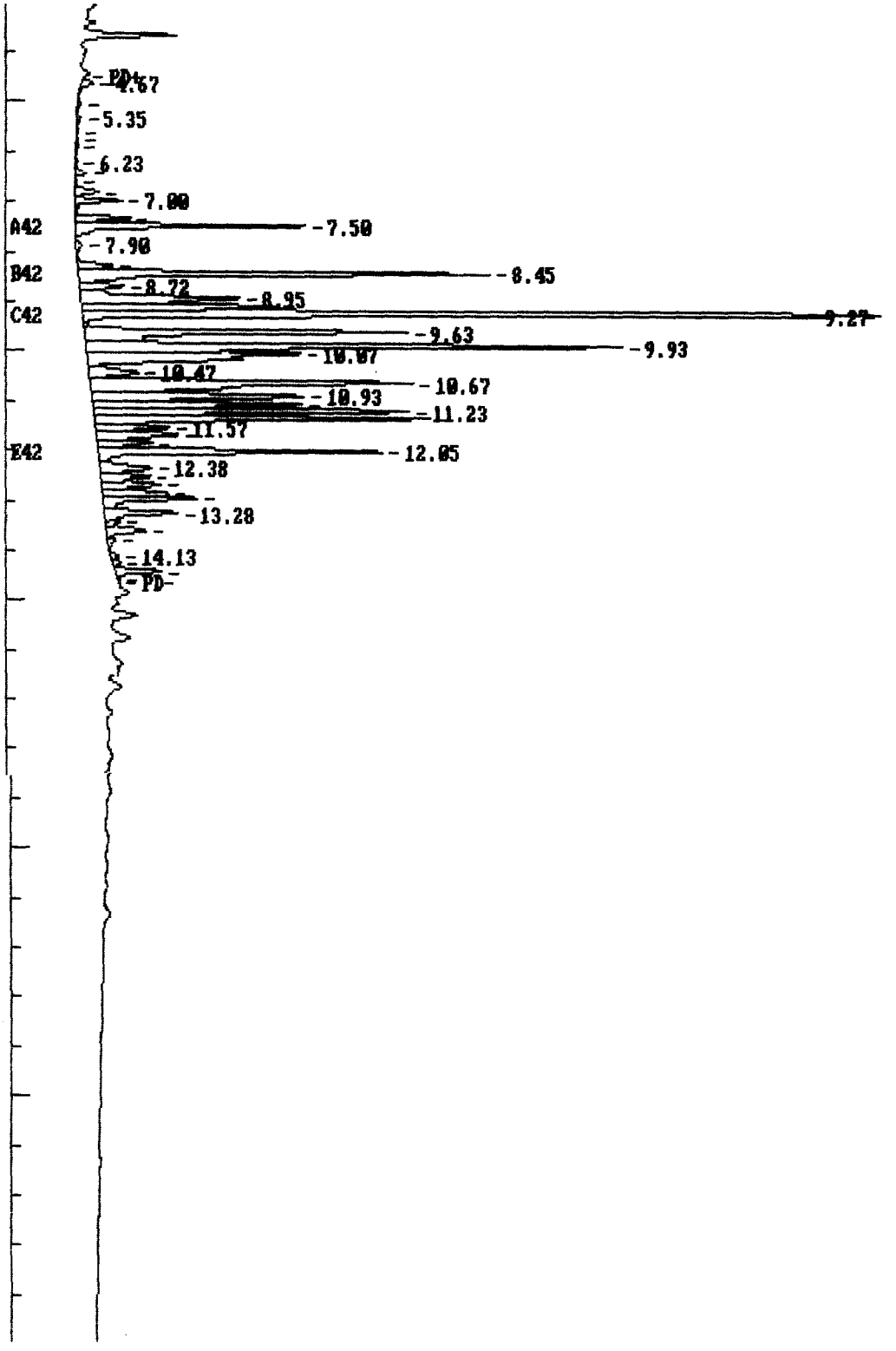
TOTAL AMOUNT = 77.4991

[redacted] 15.48

AK

* [redacted]

Data File = Q:1MA31.PTS Printed on 11-19-1992 at 09:36:02
Start time: 3.00 min. Stop time: 29.95 min. Offset: 0 mv.
Low Value: 32137 uv High Value: 357202 uv Scale factor: 1.0



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

********** 11-19-1992 09:40:46 Version 4.1 **********

* Sample Name: 930001S01 DUP 3 Data File: Q:2MA32 *
* Date: 11-17-1992 23:31:15 Method: Q:CMET42 11-18-1992 08:23:50 # 111 *
* Interface: 0 Cycle#: 32 Operator AK Channel#: 1 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

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* Instrument Type: HP 5890A #3 Column Type: MEGABORE 30 M *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: INJ. 250 deg C; 350 deg C; OVEN-Temp PROGRAM *
* Detector 0: DB608 QUAN Detector 1: DB5 CONF *
* Misc. Information: PCB PCB *

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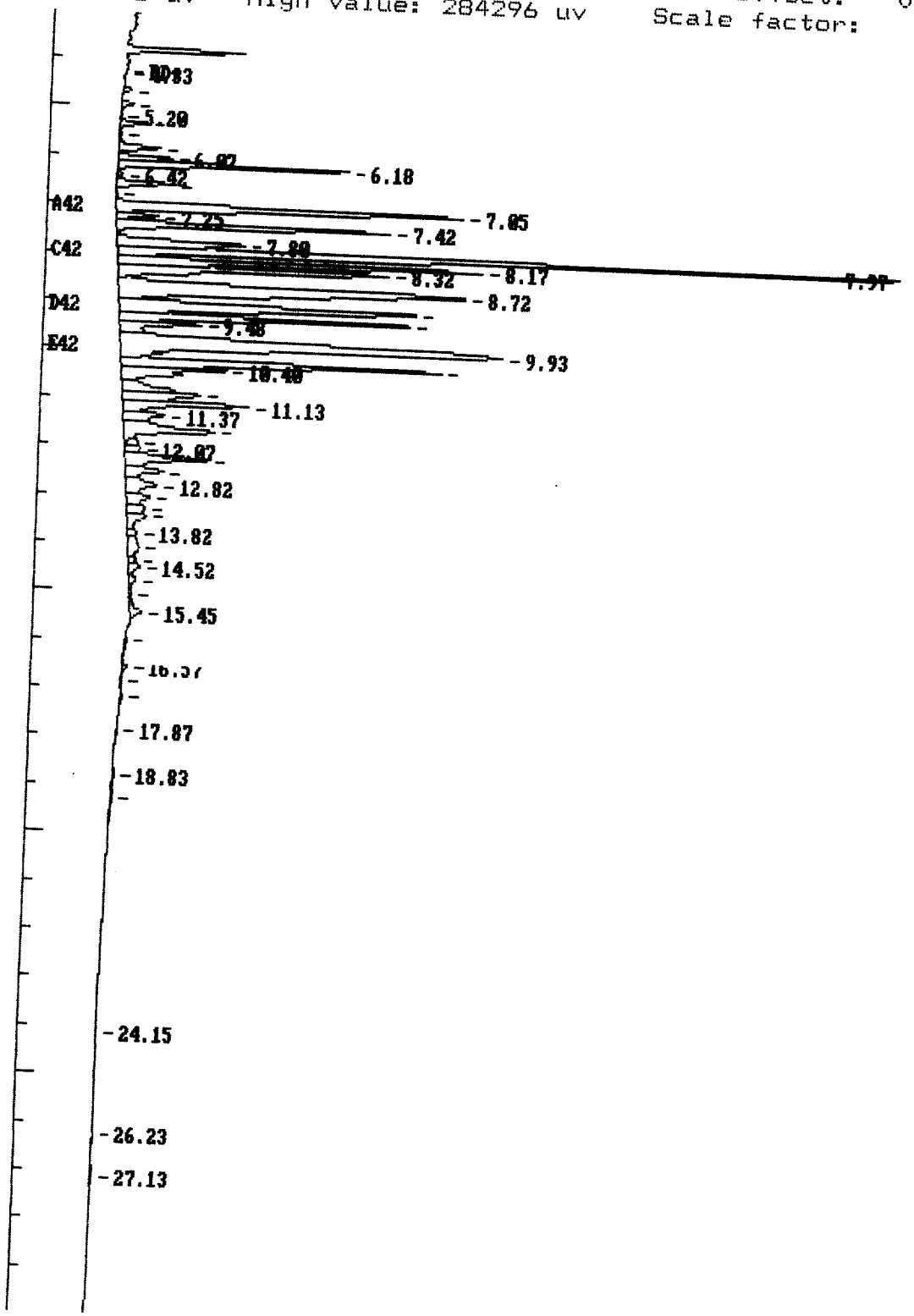
Starting Delay: 3.00 Ending retention time: 30.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 1.00 Dilution factor: 100.00
Sample Weight: 4.980000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/GM	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
13	7.05	A42	15.9378	16.0935%	762096	113342	6.7	2	13	0	2.0913E-05
15	7.42	B42	17.8634	18.0379%	519148	89485	5.8	2	15	0	3.4409E-05
17	7.97	C42	19.4983	19.6888%	1591328	255454	6.2	2	17	0	1.2253E-05
21	9.10	D42	21.8052	22.0182%	911140	97009	9.4	2	21	0	2.3932E-05
24	9.93	E42 *	23.9279	24.1617%	1597260	124682	12.8	2	24	0	1.4981E-05

TOTAL AMOUNT = 99.0326

* continuing calibration RPD's out

18.7

Data File = Q:2MA32.PTS Printed on 11-19-1992 at 09:41:03
Start time: 3.00 min. Stop time: 29.95 min. Offset: 0 mv.
Low Value: 27676 uv High Value: 284296 uv Scale factor: 1.0